

# Appendix I

## Laboratory Results



## Appendix I. Laboratory Results

This appendix provides the laboratory results from each sample collected during the Step 1 and Step 2 Sediment RI sampling events and includes the following:

- Appendix I-1 – Laboratory Results Part 1
- Appendix I-2 – Laboratory Results Part 2



# Appendix I-1

## Laboratory Results – Part 1



June 08, 2022

Bernice Kidd  
Jacobs Engineering  
2525 Air Park Drive  
Redding, CA 96001

RE: Project: 3593500 WISHRAM RI-Revised Report  
Pace Project No.: 10605435

Dear Bernice Kidd:

Enclosed are the analytical results for sample(s) received by the laboratory on April 21, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Minneapolis

This report was revised on June 8th, 2022, to include a revised subcontract report from Eurofins.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kongmeng Vang  
kongmeng.vang@pacelabs.com  
(612)607-1700  
Project Manager

Enclosures

cc: Kris Ivarson, Jacobs  
Jennifer Ulrich, Jacobs



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

### Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414  
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab

A2LA Certification #: 2926.01\*  
Alabama Certification #: 40770  
Alaska Contaminated Sites Certification #: 17-009\*  
Alaska DW Certification #: MN00064  
Arizona Certification #: AZ0014\*  
Arkansas DW Certification #: MN00064  
Arkansas WW Certification #: 88-0680  
California Certification #: 2929  
Colorado Certification #: MN00064  
Connecticut Certification #: PH-0256  
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137  
Florida Certification #: E87605\*  
Georgia Certification #: 959  
Hawaii Certification #: MN00064  
Idaho Certification #: MN00064  
Illinois Certification #: 200011  
Indiana Certification #: C-MN-01  
Iowa Certification #: 368  
Kansas Certification #: E-10167  
Kentucky DW Certification #: 90062  
Kentucky WW Certification #: 90062  
Louisiana DEQ Certification #: AI-03086\*  
Louisiana DW Certification #: MN00064  
Maine Certification #: MN00064\*  
Maryland Certification #: 322  
Michigan Certification #: 9909  
Minnesota Certification #: 027-053-137\*  
Minnesota Dept of Ag Approval: via MN 027-053-137  
Minnesota Petrofund Registration #: 1240\*  
Mississippi Certification #: MN00064

Missouri Certification #: 10100  
Montana Certification #: CERT0092  
Nebraska Certification #: NE-OS-18-06  
Nevada Certification #: MN00064  
New Hampshire Certification #: 2081\*  
New Jersey Certification #: MN002  
New York Certification #: 11647\*  
North Carolina DW Certification #: 27700  
North Carolina WW Certification #: 530  
North Dakota Certification (A2LA) #: R-036  
North Dakota Certification (MN) #: R-036  
Ohio DW Certification #: 41244  
Ohio VAP Certification (1700) #: CL101  
Ohio VAP Certification (1800) #: CL110\*  
Oklahoma Certification #: 9507\*  
Oregon Primary Certification #: MN300001  
Oregon Secondary Certification #: MN200001\*  
Pennsylvania Certification #: 68-00563\*  
Puerto Rico Certification #: MN00064  
South Carolina Certification #:74003001  
Tennessee Certification #: TN02818  
Texas Certification #: T104704192\*  
Utah Certification #: MN00064\*  
Vermont Certification #: VT-027053137  
Virginia Certification #: 460163\*  
Washington Certification #: C486\*  
West Virginia DEP Certification #: 382  
West Virginia DW Certification #: 9952 C  
Wisconsin Certification #: 999407970  
Wyoming UST Certification #: via A2LA 2926.01  
USDA Permit #: P330-19-00208  
\*Please Note: Applicable air certifications are denoted with an asterisk (\*).

### Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122

Alabama Certification #: 40660  
Alaska Certification 17-026  
Arizona Certification #: AZ0612  
Arkansas Certification #: 88-0469  
California Certification #: 2932  
Canada Certification #: 1461.01  
Colorado Certification #: TN00003  
Connecticut Certification #: PH-0197  
DOD Certification: #1461.01  
EPA# TN00003  
Florida Certification #: E87487  
Georgia DW Certification #: 923  
Georgia Certification: NELAP  
Idaho Certification #: TN00003  
Illinois Certification #: 200008

Indiana Certification #: C-TN-01  
Iowa Certification #: 364  
Kansas Certification #: E-10277  
Kentucky UST Certification #: 16  
Kentucky Certification #: 90010  
Louisiana Certification #: AI30792  
Louisiana DW Certification #: LA180010  
Maine Certification #: TN0002  
Maryland Certification #: 324  
Massachusetts Certification #: M-TN003  
Michigan Certification #: 9958  
Minnesota Certification #: 047-999-395  
Mississippi Certification #: TN00003  
Missouri Certification #: 340  
Montana Certification #: CERT0086  
Nebraska Certification #: NE-OS-15-05

## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

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### **Pace Analytical Services National**

Nevada Certification #: TN-03-2002-34

New Hampshire Certification #: 2975

New Jersey Certification #: TN002

New Mexico DW Certification

New York Certification #: 11742

North Carolina Aquatic Toxicity Certification #: 41

North Carolina Drinking Water Certification #: 21704

North Carolina Environmental Certificate #: 375

North Dakota Certification #: R-140

Ohio VAP Certification #: CL0069

Oklahoma Certification #: 9915

Oregon Certification #: TN200002

Pennsylvania Certification #: 68-02979

Rhode Island Certification #: LAO00356

South Carolina Certification #: 84004

South Dakota Certification

Tennessee DW/Chem/Micro Certification #: 2006

Texas Certification #: T 104704245-17-14

Texas Mold Certification #: LAB0152

USDA Soil Permit #: P330-15-00234

Utah Certification #: TN00003

Vermont Dept. of Health: ID# VT-2006

Virginia Certification #: VT2006

Virginia Certification #: 460132

Washington Certification #: C847

West Virginia Certification #: 233

Wisconsin Certification #: 998093910

Wyoming UST Certification #: via A2LA 2926.01

A2LA-ISO 17025 Certification #: 1461.01

A2LA-ISO 17025 Certification #: 1461.02

AIHA-LAP/LLC EMLAP Certification #:100789

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10605435001	BNSF-SG01-041922-0-10	Solid	04/19/22 12:00	04/21/22 08:50
10605435002	FD01-041922-0-10	Solid	04/19/22 12:15	04/21/22 08:50
10605435003	BNSF-SG02-041922-0-10	Solid	04/19/22 13:35	04/21/22 08:50

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: 3593500 WISHRAM RI-Revised Report  
Pace Project No.: 10605435

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10605435001	BNSF-SG01-041922-0-10	NWTPH-Dx	EB3	4	PASI-M
		EPA 6020B	RJS	9	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	JNJ	33	PAN
		SM 2540G	CMK	1	PAN
		EPA 9030B	BMD	1	PAN
10605435002	FD01-041922-0-10	NWTPH-Dx	EB3	4	PASI-M
		EPA 6020B	RJS	9	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	JNJ	33	PAN
		SM 2540G	CMK	1	PAN
		EPA 9030B	BMD	1	PAN
10605435003	BNSF-SG02-041922-0-10	NWTPH-Dx	EB3	4	PASI-M
		EPA 6020B	RJS	9	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	JNJ	33	PAN
		SM 2540G	CMK	1	PAN
		EPA 9030B	BMD	1	PAN

PAN = Pace National - Mt. Juliet

PASI-M = Pace Analytical Services - Minneapolis

### REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

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**Date:** June 08, 2022

**BNSF-SG01-041922-0-10 (Lab ID: 10605435001)**

- Semi Volatile Organic Compounds (GC/MS) by Method 8270E - Dilution due to matrix impact during extract concentration procedure

**BNSF-SG02-041922-0-10 (Lab ID: 10605435003)**

- Semi Volatile Organic Compounds (GC/MS) by Method 8270E - Dilution due to matrix impact during extract concentration procedure

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

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**Method:** NWTPH-Dx

**Description:** NWTPH-Dx GCS

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

### General Information:

3 samples were analyzed for NWTPH-Dx by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 810889

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10605529001

P6: Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

- MS (Lab ID: 4301505)
  - Motor Oil Range
- MSD (Lab ID: 4301506)
  - Diesel Fuel Range
  - Motor Oil Range

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

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**Method:** EPA 6020B

**Description:** 6020B MET ICPMS

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

### General Information:

3 samples were analyzed for EPA 6020B by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3050B with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 811306

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10605661001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 4303386)
  - Zinc
- MSD (Lab ID: 4303387)
  - Zinc

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

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**Method:** EPA 7471B

**Description:** 7471B Mercury

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

3 samples were analyzed for EPA 7471B by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 7471B with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

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**Method:** EPA 8270E

**Description:** SVOA (GC/MS) 8270E

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

### General Information:

3 samples were analyzed for EPA 8270E by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 1857248

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): L1486885-01

R1: RPD value was outside control limits.

- MSD (Lab ID: R3788258-2)
  - 1-Methylnaphthalene
  - 3&4-Methylphenol(m&p Cresol)
  - Acenaphthene
  - Acenaphthylene
  - Benzoic acid
  - Dibenzofuran
  - Naphthalene
  - Phenol

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

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**Method:** SM 2540G

**Description:** Total Solids 2540 G-2011

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

3 samples were analyzed for SM 2540G by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

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**Method:** EPA 9030B

**Description:** Wet Chemistry 9034/9030B

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

### General Information:

3 samples were analyzed for EPA 9030B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H3: Sample was received or analysis requested beyond the recognized method holding time.

- BNSF-SG01-041922-0-10 (Lab ID: 10605435001)
- BNSF-SG02-041922-0-10 (Lab ID: 10605435003)
- FD01-041922-0-10 (Lab ID: 10605435002)

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

**Sample: BNSF-SG01-041922-0-10**    **Lab ID: 10605435001**    Collected: 04/19/22 12:00    Received: 04/21/22 08:50    Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Pace Analytical Services - Minneapolis									
Diesel Fuel Range	<b>25.4</b>	mg/kg	22.5	10.4	1	04/22/22 12:48	04/27/22 14:42	68334-30-5	
Motor Oil Range	<b>106</b>	mg/kg	15.0	7.5	1	04/22/22 12:48	04/27/22 14:42		
<b>Surrogates</b>									
n-Triacontane (S)	97	%	50-150		1	04/22/22 12:48	04/27/22 14:42		
o-Terphenyl (S)	103	%	50-150		1	04/22/22 12:48	04/27/22 14:42	84-15-1	
<b>6020B MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3050B									
Pace Analytical Services - Minneapolis									
Arsenic	<b>2.1</b>	mg/kg	0.70	0.15	1	04/26/22 14:58	05/09/22 22:53	7440-38-2	
Cadmium	<b>0.43</b>	mg/kg	0.11	0.044	1	04/26/22 14:58	05/09/22 22:53	7440-43-9	
Chromium	<b>13.8</b>	mg/kg	2.8	0.20	1	04/26/22 14:58	05/09/22 22:53	7440-47-3	
Copper	<b>9.9</b>	mg/kg	1.4	0.34	1	04/26/22 14:58	05/09/22 22:53	7440-50-8	
Lead	<b>7.0</b>	mg/kg	0.70	0.041	1	04/26/22 14:58	05/09/22 22:53	7439-92-1	
Nickel	<b>12.5</b>	mg/kg	0.70	0.28	1	04/26/22 14:58	05/09/22 22:53	7440-02-0	
Selenium	<b>0.18J</b>	mg/kg	0.70	0.12	1	04/26/22 14:58	05/09/22 22:53	7782-49-2	
Silver	<b>0.27J</b>	mg/kg	0.70	0.20	1	04/26/22 14:58	05/09/22 22:53	7440-22-4	
Zinc	<b>94.9</b>	mg/kg	7.0	1.3	1	04/26/22 14:58	05/09/22 22:53	7440-66-6	
<b>7471B Mercury</b>									
Analytical Method: EPA 7471B    Preparation Method: EPA 7471B									
Pace Analytical Services - Minneapolis									
Mercury	<b>0.021J</b>	mg/kg	0.030	0.013	1	04/26/22 18:49	05/10/22 14:17	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>33.8</b>	%	0.10	0.10	1		04/26/22 14:23		N2
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E    Preparation Method: 3546									
Pace National - Mt. Juliet									
Acenaphthene	ND	mg/kg	0.0901	0.0146	2	05/03/22 09:05	05/04/22 12:40	83-32-9	
Acenaphthylene	ND	mg/kg	0.0901	0.0127	2	05/03/22 09:05	05/04/22 12:40	208-96-8	
Anthracene	ND	mg/kg	0.0901	0.0161	2	05/03/22 09:05	05/04/22 12:40	120-12-7	
Benzoic acid	ND	mg/kg	4.52	0.319	2	05/03/22 09:05	05/04/22 12:40	65-85-0	
Benzo(a)anthracene	ND	mg/kg	0.0901	0.0158	2	05/03/22 09:05	05/04/22 12:40	56-55-3	
Benzo(b)fluoranthene	ND	mg/kg	0.0901	0.0168	2	05/03/22 09:05	05/04/22 12:40	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0901	0.0160	2	05/03/22 09:05	05/04/22 12:40	207-08-9	
Benzo(g,h,i)perylene	<b>0.0187J</b>	mg/kg	0.0901	0.0165	2	05/03/22 09:05	05/04/22 12:40	191-24-2	J
Benzo(a)pyrene	<b>0.0185J</b>	mg/kg	0.0901	0.0168	2	05/03/22 09:05	05/04/22 12:40	50-32-8	J
Carbazole	ND	mg/kg	0.901	0.0279	2	05/03/22 09:05	05/04/22 12:40	86-74-8	
Chrysene	ND	mg/kg	0.0901	0.0179	2	05/03/22 09:05	05/04/22 12:40	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0901	0.0250	2	05/03/22 09:05	05/04/22 12:40	53-70-3	
Dibenzofuran	ND	mg/kg	0.901	0.0295	2	05/03/22 09:05	05/04/22 12:40	132-64-9	
Fluoranthene	ND	mg/kg	0.0901	0.0162	2	05/03/22 09:05	05/04/22 12:40	206-44-0	
Fluorene	ND	mg/kg	0.0901	0.0146	2	05/03/22 09:05	05/04/22 12:40	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0901	0.0254	2	05/03/22 09:05	05/04/22 12:40	193-39-5	

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## ANALYTICAL RESULTS

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

**Sample: BNSF-SG01-041922-0-10 Lab ID: 10605435001** Collected: 04/19/22 12:00 Received: 04/21/22 08:50 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
1-Methylnaphthalene	ND	mg/kg	0.0901	0.0115	2	05/03/22 09:05	05/04/22 12:40	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0901	0.0117	2	05/03/22 09:05	05/04/22 12:40	91-57-6	
Naphthalene	ND	mg/kg	0.0901	0.0226	2	05/03/22 09:05	05/04/22 12:40	91-20-3	
Phenanthrene	ND	mg/kg	0.0901	0.0179	2	05/03/22 09:05	05/04/22 12:40	85-01-8	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.901	0.114	2	05/03/22 09:05	05/04/22 12:40	117-81-7	
Di-n-butylphthalate	ND	mg/kg	0.901	0.0308	2	05/03/22 09:05	05/04/22 12:40	84-74-2	
Di-n-octylphthalate	ND	mg/kg	0.901	0.0609	2	05/03/22 09:05	05/04/22 12:40	117-84-0	
Pyrene	ND	mg/kg	0.0901	0.0176	2	05/03/22 09:05	05/04/22 12:40	129-00-0	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.901	0.0281	2	05/03/22 09:05	05/04/22 12:40		
Pentachlorophenol	ND	mg/kg	0.901	0.0242	2	05/03/22 09:05	05/04/22 12:40	87-86-5	
Phenol	ND	mg/kg	0.901	0.0363	2	05/03/22 09:05	05/04/22 12:40	108-95-2	
<b>Surrogates</b>									
2-Fluorophenol (S)	64.6	%	12.0-120		2	05/03/22 09:05	05/04/22 12:40	367-12-4	
Phenol-d5 (S)	67.2	%	10.0-120		2	05/03/22 09:05	05/04/22 12:40	4165-62-2	
Nitrobenzene-d5 (S)	65.4	%	10.0-122		2	05/03/22 09:05	05/04/22 12:40	4165-60-0	
2-Fluorobiphenyl (S)	64.2	%	15.0-120		2	05/03/22 09:05	05/04/22 12:40	321-60-8	
2,4,6-Tribromophenol (S)	96.7	%	10.0-127		2	05/03/22 09:05	05/04/22 12:40	118-79-6	
p-Terphenyl-d14 (S)	88.4	%	10.0-120		2	05/03/22 09:05	05/04/22 12:40	1718-51-0	
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>73.9</b>	%			1	05/03/22 05:57	05/03/22 06:04		
<b>Wet Chemistry 9034/9030B</b>									
Analytical Method: EPA 9030B Preparation Method: 9030B									
Pace National - Mt. Juliet									
Sulfide	ND	mg/kg	101	40.6	1	05/03/22 12:51	05/05/22 18:00	18496-25-8	H3

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

**Sample: FD01-041922-0-10**      **Lab ID: 10605435002**      Collected: 04/19/22 12:15      Received: 04/21/22 08:50      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Pace Analytical Services - Minneapolis									
Diesel Fuel Range	<b>56.9</b>	mg/kg	21.0	9.7	1	04/22/22 12:48	04/27/22 14:53	68334-30-5	
Motor Oil Range	<b>167</b>	mg/kg	14.0	7.0	1	04/22/22 12:48	04/27/22 14:53		
<b>Surrogates</b>									
n-Triacontane (S)	76	%	50-150		1	04/22/22 12:48	04/27/22 14:53		
o-Terphenyl (S)	100	%	50-150		1	04/22/22 12:48	04/27/22 14:53	84-15-1	
<b>6020B MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3050B									
Pace Analytical Services - Minneapolis									
Arsenic	<b>2.0</b>	mg/kg	0.70	0.15	1	04/26/22 14:58	05/09/22 23:00	7440-38-2	
Cadmium	<b>0.43</b>	mg/kg	0.11	0.044	1	04/26/22 14:58	05/09/22 23:00	7440-43-9	
Chromium	<b>14.0</b>	mg/kg	2.8	0.20	1	04/26/22 14:58	05/09/22 23:00	7440-47-3	
Copper	<b>10.7</b>	mg/kg	1.4	0.34	1	04/26/22 14:58	05/09/22 23:00	7440-50-8	
Lead	<b>7.4</b>	mg/kg	0.70	0.041	1	04/26/22 14:58	05/09/22 23:00	7439-92-1	
Nickel	<b>13.0</b>	mg/kg	0.70	0.28	1	04/26/22 14:58	05/09/22 23:00	7440-02-0	
Selenium	<b>0.14J</b>	mg/kg	0.70	0.12	1	04/26/22 14:58	05/09/22 23:00	7782-49-2	
Silver	ND	mg/kg	0.70	0.20	1	04/26/22 14:58	05/09/22 23:00	7440-22-4	
Zinc	<b>100</b>	mg/kg	7.0	1.3	1	04/26/22 14:58	05/09/22 23:00	7440-66-6	
<b>7471B Mercury</b>									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Minneapolis									
Mercury	<b>0.022J</b>	mg/kg	0.026	0.011	1	04/26/22 18:49	05/10/22 14:19	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>28.9</b>	%	0.10	0.10	1		04/26/22 14:23		N2
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
Acenaphthene	ND	mg/kg	0.0451	0.00730	1	05/03/22 09:05	05/04/22 12:19	83-32-9	
Acenaphthylene	ND	mg/kg	0.0451	0.00635	1	05/03/22 09:05	05/04/22 12:19	208-96-8	
Anthracene	ND	mg/kg	0.0451	0.00803	1	05/03/22 09:05	05/04/22 12:19	120-12-7	
Benzoic acid	ND	mg/kg	2.26	0.160	1	05/03/22 09:05	05/04/22 12:19	65-85-0	
Benzo(a)anthracene	ND	mg/kg	0.0451	0.00795	1	05/03/22 09:05	05/04/22 12:19	56-55-3	
Benzo(b)fluoranthene	ND	mg/kg	0.0451	0.00841	1	05/03/22 09:05	05/04/22 12:19	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0451	0.00802	1	05/03/22 09:05	05/04/22 12:19	207-08-9	
Benzo(g,h,i)perylene	ND	mg/kg	0.0451	0.00825	1	05/03/22 09:05	05/04/22 12:19	191-24-2	
Benzo(a)pyrene	ND	mg/kg	0.0451	0.00838	1	05/03/22 09:05	05/04/22 12:19	50-32-8	
Carbazole	ND	mg/kg	0.451	0.0139	1	05/03/22 09:05	05/04/22 12:19	86-74-8	
Chrysene	ND	mg/kg	0.0451	0.00896	1	05/03/22 09:05	05/04/22 12:19	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0451	0.0125	1	05/03/22 09:05	05/04/22 12:19	53-70-3	
Dibenzofuran	ND	mg/kg	0.451	0.0148	1	05/03/22 09:05	05/04/22 12:19	132-64-9	
Fluoranthene	ND	mg/kg	0.0451	0.00814	1	05/03/22 09:05	05/04/22 12:19	206-44-0	
Fluorene	ND	mg/kg	0.0451	0.00734	1	05/03/22 09:05	05/04/22 12:19	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0451	0.0127	1	05/03/22 09:05	05/04/22 12:19	193-39-5	

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### ANALYTICAL RESULTS

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

**Sample: FD01-041922-0-10**      **Lab ID: 10605435002**      Collected: 04/19/22 12:15      Received: 04/21/22 08:50      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E    Preparation Method: 3546									
Pace National - Mt. Juliet									
1-Methylnaphthalene	ND	mg/kg	0.0451	0.00577	1	05/03/22 09:05	05/04/22 12:19	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0451	0.00585	1	05/03/22 09:05	05/04/22 12:19	91-57-6	
Naphthalene	ND	mg/kg	0.0451	0.0113	1	05/03/22 09:05	05/04/22 12:19	91-20-3	
Phenanthrene	ND	mg/kg	0.0451	0.00895	1	05/03/22 09:05	05/04/22 12:19	85-01-8	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.451	0.0571	1	05/03/22 09:05	05/04/22 12:19	117-81-7	
Di-n-butylphthalate	ND	mg/kg	0.451	0.0154	1	05/03/22 09:05	05/04/22 12:19	84-74-2	
Di-n-octylphthalate	ND	mg/kg	0.451	0.0305	1	05/03/22 09:05	05/04/22 12:19	117-84-0	
Pyrene	ND	mg/kg	0.0451	0.00877	1	05/03/22 09:05	05/04/22 12:19	129-00-0	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.451	0.0141	1	05/03/22 09:05	05/04/22 12:19		
Pentachlorophenol	ND	mg/kg	0.451	0.0121	1	05/03/22 09:05	05/04/22 12:19	87-86-5	
Phenol	ND	mg/kg	0.451	0.0181	1	05/03/22 09:05	05/04/22 12:19	108-95-2	
<b>Surrogates</b>									
2-Fluorophenol (S)	34.2	%	12.0-120		1	05/03/22 09:05	05/04/22 12:19	367-12-4	
Phenol-d5 (S)	38.9	%	10.0-120		1	05/03/22 09:05	05/04/22 12:19	4165-62-2	
Nitrobenzene-d5 (S)	33.8	%	10.0-122		1	05/03/22 09:05	05/04/22 12:19	4165-60-0	
2-Fluorobiphenyl (S)	39.1	%	15.0-120		1	05/03/22 09:05	05/04/22 12:19	321-60-8	
2,4,6-Tribromophenol (S)	64.5	%	10.0-127		1	05/03/22 09:05	05/04/22 12:19	118-79-6	
p-Terphenyl-d14 (S)	61.2	%	10.0-120		1	05/03/22 09:05	05/04/22 12:19	1718-51-0	
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G    Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>73.9</b>	%			1	05/03/22 05:40	05/03/22 05:55		
<b>Wet Chemistry 9034/9030B</b>									
Analytical Method: EPA 9030B    Preparation Method: 9030B									
Pace National - Mt. Juliet									
Sulfide	ND	mg/kg	102	40.6	1	05/03/22 12:51	05/05/22 18:00	18496-25-8	H3

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## ANALYTICAL RESULTS

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

**Sample: BNSF-SG02-041922-0-10**    **Lab ID: 10605435003**    Collected: 04/19/22 13:35    Received: 04/21/22 08:50    Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Pace Analytical Services - Minneapolis									
Diesel Fuel Range	<b>53.1</b>	mg/kg	32.2	14.9	1	04/22/22 12:48	04/27/22 15:04	68334-30-5	
Motor Oil Range	<b>291</b>	mg/kg	21.5	10.7	1	04/22/22 12:48	04/27/22 15:04		
<b>Surrogates</b>									
n-Triacontane (S)	74	%	50-150		1	04/22/22 12:48	04/27/22 15:04		
o-Terphenyl (S)	100	%	50-150		1	04/22/22 12:48	04/27/22 15:04	84-15-1	
<b>6020B MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3050B									
Pace Analytical Services - Minneapolis									
Arsenic	<b>3.8</b>	mg/kg	1.0	0.22	1	04/26/22 14:58	05/09/22 23:08	7440-38-2	
Cadmium	<b>0.53</b>	mg/kg	0.16	0.065	1	04/26/22 14:58	05/09/22 23:08	7440-43-9	
Chromium	<b>17.3</b>	mg/kg	4.1	0.29	1	04/26/22 14:58	05/09/22 23:08	7440-47-3	
Copper	<b>19.5</b>	mg/kg	2.1	0.50	1	04/26/22 14:58	05/09/22 23:08	7440-50-8	
Lead	<b>12.3</b>	mg/kg	1.0	0.061	1	04/26/22 14:58	05/09/22 23:08	7439-92-1	
Nickel	<b>16.8</b>	mg/kg	1.0	0.41	1	04/26/22 14:58	05/09/22 23:08	7440-02-0	
Selenium	<b>0.47J</b>	mg/kg	1.0	0.18	1	04/26/22 14:58	05/09/22 23:08	7782-49-2	
Silver	ND	mg/kg	1.0	0.30	1	04/26/22 14:58	05/09/22 23:08	7440-22-4	
Zinc	<b>120</b>	mg/kg	10.3	1.9	1	04/26/22 14:58	05/09/22 23:08	7440-66-6	
<b>7471B Mercury</b>									
Analytical Method: EPA 7471B    Preparation Method: EPA 7471B									
Pace Analytical Services - Minneapolis									
Mercury	<b>0.035J</b>	mg/kg	0.039	0.017	1	04/26/22 18:49	05/10/22 14:20	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>53.9</b>	%	0.10	0.10	1		04/26/22 14:23		N2
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E    Preparation Method: 3546									
Pace National - Mt. Juliet									
Acenaphthene	ND	mg/kg	0.132	0.0214	2	05/03/22 09:05	05/04/22 13:01	83-32-9	
Acenaphthylene	ND	mg/kg	0.132	0.0186	2	05/03/22 09:05	05/04/22 13:01	208-96-8	
Anthracene	ND	mg/kg	0.132	0.0236	2	05/03/22 09:05	05/04/22 13:01	120-12-7	
Benzoic acid	ND	mg/kg	6.63	0.468	2	05/03/22 09:05	05/04/22 13:01	65-85-0	
Benzo(a)anthracene	ND	mg/kg	0.132	0.0232	2	05/03/22 09:05	05/04/22 13:01	56-55-3	
Benzo(b)fluoranthene	ND	mg/kg	0.132	0.0246	2	05/03/22 09:05	05/04/22 13:01	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.132	0.0234	2	05/03/22 09:05	05/04/22 13:01	207-08-9	
Benzo(g,h,i)perylene	ND	mg/kg	0.132	0.0242	2	05/03/22 09:05	05/04/22 13:01	191-24-2	
Benzo(a)pyrene	ND	mg/kg	0.132	0.0246	2	05/03/22 09:05	05/04/22 13:01	50-32-8	
Carbazole	ND	mg/kg	1.32	0.0409	2	05/03/22 09:05	05/04/22 13:01	86-74-8	
Chrysene	ND	mg/kg	0.132	0.0262	2	05/03/22 09:05	05/04/22 13:01	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.132	0.0367	2	05/03/22 09:05	05/04/22 13:01	53-70-3	
Dibenzofuran	ND	mg/kg	1.32	0.0433	2	05/03/22 09:05	05/04/22 13:01	132-64-9	
Fluoranthene	ND	mg/kg	0.132	0.0238	2	05/03/22 09:05	05/04/22 13:01	206-44-0	
Fluorene	ND	mg/kg	0.132	0.0214	2	05/03/22 09:05	05/04/22 13:01	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.132	0.0373	2	05/03/22 09:05	05/04/22 13:01	193-39-5	

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## ANALYTICAL RESULTS

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

**Sample: BNSF-SG02-041922-0-10    Lab ID: 10605435003    Collected: 04/19/22 13:35    Received: 04/21/22 08:50    Matrix: Solid**

**Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.**

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E    Preparation Method: 3546									
Pace National - Mt. Juliet									
1-Methylnaphthalene	ND	mg/kg	0.132	0.0169	2	05/03/22 09:05	05/04/22 13:01	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.132	0.0171	2	05/03/22 09:05	05/04/22 13:01	91-57-6	
Naphthalene	ND	mg/kg	0.132	0.0331	2	05/03/22 09:05	05/04/22 13:01	91-20-3	
Phenanthrene	ND	mg/kg	0.132	0.0262	2	05/03/22 09:05	05/04/22 13:01	85-01-8	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	1.32	0.167	2	05/03/22 09:05	05/04/22 13:01	117-81-7	
Di-n-butylphthalate	ND	mg/kg	1.32	0.0452	2	05/03/22 09:05	05/04/22 13:01	84-74-2	
Di-n-octylphthalate	ND	mg/kg	1.32	0.0893	2	05/03/22 09:05	05/04/22 13:01	117-84-0	
Pyrene	ND	mg/kg	0.132	0.0258	2	05/03/22 09:05	05/04/22 13:01	129-00-0	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	1.32	0.0413	2	05/03/22 09:05	05/04/22 13:01		
Pentachlorophenol	ND	mg/kg	1.32	0.0355	2	05/03/22 09:05	05/04/22 13:01	87-86-5	
Phenol	ND	mg/kg	1.32	0.0532	2	05/03/22 09:05	05/04/22 13:01	108-95-2	
<b>Surrogates</b>									
2-Fluorophenol (S)	75.0	%	12.0-120		2	05/03/22 09:05	05/04/22 13:01	367-12-4	
Phenol-d5 (S)	75.7	%	10.0-120		2	05/03/22 09:05	05/04/22 13:01	4165-62-2	
Nitrobenzene-d5 (S)	75.1	%	10.0-122		2	05/03/22 09:05	05/04/22 13:01	4165-60-0	
2-Fluorobiphenyl (S)	68.7	%	15.0-120		2	05/03/22 09:05	05/04/22 13:01	321-60-8	
2,4,6-Tribromophenol (S)	83.8	%	10.0-127		2	05/03/22 09:05	05/04/22 13:01	118-79-6	
p-Terphenyl-d14 (S)	70.3	%	10.0-120		2	05/03/22 09:05	05/04/22 13:01	1718-51-0	
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G    Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>50.4</b>	%			1	05/03/22 05:40	05/03/22 05:55		
<b>Wet Chemistry 9034/9030B</b>									
Analytical Method: EPA 9030B    Preparation Method: 9030B									
Pace National - Mt. Juliet									
Sulfide	ND	mg/kg	149	59.5	1	05/03/22 12:51	05/05/22 18:00	18496-25-8	H3

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### QUALITY CONTROL DATA

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

QC Batch:	811310	Analysis Method:	EPA 7471B
QC Batch Method:	EPA 7471B	Analysis Description:	7471B Mercury Solids
		Laboratory:	Pace Analytical Services - Minneapolis

Associated Lab Samples: 10605435001, 10605435002, 10605435003

METHOD BLANK: 4303400 Matrix: Solid

Associated Lab Samples: 10605435001, 10605435002, 10605435003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.019	0.0083	05/10/22 14:14	

LABORATORY CONTROL SAMPLE: 4303401

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.48	0.49	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4303402 4303403

Parameter	Units	4303402		4303403		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10605661001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Mercury	mg/kg	ND	0.73	0.7	0.64	0.62	87	87	80-120	4	20

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 3593500 WISHRAM RI-Revised Report  
Pace Project No.: 10605435

QC Batch: 811306 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3050B Analysis Description: 6020B Solids UPD5  
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10605435001, 10605435002, 10605435003

METHOD BLANK: 4303384 Matrix: Solid

Associated Lab Samples: 10605435001, 10605435002, 10605435003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	ND	0.50	0.11	05/09/22 22:45	
Cadmium	mg/kg	ND	0.080	0.031	05/09/22 22:45	
Chromium	mg/kg	ND	2.0	0.14	05/09/22 22:45	
Copper	mg/kg	ND	0.99	0.24	05/09/22 22:45	
Lead	mg/kg	0.047J	0.50	0.029	05/09/22 22:45	
Nickel	mg/kg	ND	0.50	0.20	05/09/22 22:45	
Selenium	mg/kg	ND	0.50	0.085	05/09/22 22:45	
Silver	mg/kg	ND	0.50	0.14	05/09/22 22:45	
Zinc	mg/kg	ND	5.0	0.89	05/09/22 22:45	

LABORATORY CONTROL SAMPLE: 4303385

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	49.1	45.5	93	80-120	
Cadmium	mg/kg	49.1	45.4	92	80-120	
Chromium	mg/kg	49.1	47.7	97	80-120	
Copper	mg/kg	49.1	47.1	96	80-120	
Lead	mg/kg	49.1	45.7	93	80-120	
Nickel	mg/kg	49.1	48.1	98	80-120	
Selenium	mg/kg	49.1	48.8	99	80-120	
Silver	mg/kg	24.6	22.9	93	80-120	
Zinc	mg/kg	49.1	46.3	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4303386 4303387

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		10605661001 Result	Spike Conc.	Spike Conc.	Result							Result
Arsenic	mg/kg	ND	72	73.4	72.0	77.7	100	106	75-125	8	20	
Cadmium	mg/kg	ND	72	73.4	70.8	76.4	98	104	75-125	8	20	
Chromium	mg/kg	ND	72	73.4	83.1	89.9	115	122	75-125	8	20	
Copper	mg/kg	1.6	72	73.4	79.3	86.4	108	116	75-125	9	20	
Lead	mg/kg	0.092J	72	73.4	74.2	79.7	103	109	75-125	7	20	
Nickel	mg/kg	ND	72	73.4	83.7	89.6	116	122	75-125	7	20	
Selenium	mg/kg	ND	72	73.4	74.8	78.5	104	107	75-125	5	20	
Silver	mg/kg	ND	36	36.8	35.0	37.9	97	103	75-125	8	20	
Zinc	mg/kg	2.0J	72	73.4	113	122	154	164	75-125	8	20	M1

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### QUALITY CONTROL DATA

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

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QC Batch:	811326	Analysis Method:	ASTM D2974
QC Batch Method:	ASTM D2974	Analysis Description:	Dry Weight / %M by ASTM D2974
		Laboratory:	Pace Analytical Services - Minneapolis

Associated Lab Samples: 10605435001, 10605435002, 10605435003

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SAMPLE DUPLICATE: 4303422

Parameter	Units	10605661001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	33.1	33.5	1	30	N2

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### QUALITY CONTROL DATA

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

QC Batch:	1857248	Analysis Method:	EPA 8270E
QC Batch Method:	3546	Analysis Description:	SVOA (GC/MS) 8270E
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 10605435001, 10605435002, 10605435003

METHOD BLANK: R3787713-2 Matrix: Solid

Associated Lab Samples: 10605435001, 10605435002, 10605435003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	mg/kg	ND	0.0333	0.00539	05/03/22 15:52	
Acenaphthylene	mg/kg	ND	0.0333	0.00469	05/03/22 15:52	
Anthracene	mg/kg	ND	0.0333	0.00593	05/03/22 15:52	
Benzoic acid	mg/kg	ND	1.67	0.118	05/03/22 15:52	
Benzo(a)anthracene	mg/kg	ND	0.0333	0.00587	05/03/22 15:52	
Benzo(b)fluoranthene	mg/kg	ND	0.0333	0.00621	05/03/22 15:52	
Benzo(k)fluoranthene	mg/kg	ND	0.0333	0.00592	05/03/22 15:52	
Benzo(g,h,i)perylene	mg/kg	ND	0.0333	0.00609	05/03/22 15:52	
Benzo(a)pyrene	mg/kg	ND	0.0333	0.00619	05/03/22 15:52	
Carbazole	mg/kg	ND	0.333	0.0103	05/03/22 15:52	
Chrysene	mg/kg	ND	0.0333	0.00662	05/03/22 15:52	
Dibenz(a,h)anthracene	mg/kg	ND	0.0333	0.00923	05/03/22 15:52	
Dibenzofuran	mg/kg	ND	0.333	0.0109	05/03/22 15:52	
Fluoranthene	mg/kg	ND	0.0333	0.00601	05/03/22 15:52	
Fluorene	mg/kg	ND	0.0333	0.00542	05/03/22 15:52	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.0333	0.00941	05/03/22 15:52	
1-Methylnaphthalene	mg/kg	ND	0.0333	0.00426	05/03/22 15:52	
2-Methylnaphthalene	mg/kg	ND	0.0333	0.00432	05/03/22 15:52	
Naphthalene	mg/kg	ND	0.0333	0.00836	05/03/22 15:52	
Phenanthrene	mg/kg	ND	0.0333	0.00661	05/03/22 15:52	
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.333	0.0422	05/03/22 15:52	
Di-n-butylphthalate	mg/kg	ND	0.333	0.0114	05/03/22 15:52	
Di-n-octylphthalate	mg/kg	ND	0.333	0.0225	05/03/22 15:52	
Pyrene	mg/kg	ND	0.0333	0.00648	05/03/22 15:52	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.333	0.0104	05/03/22 15:52	
Pentachlorophenol	mg/kg	ND	0.333	0.00896	05/03/22 15:52	
Phenol	mg/kg	ND	0.333	0.0134	05/03/22 15:52	
2-Fluorophenol (S)	%	72.7	12.0-120		05/03/22 15:52	
Phenol-d5 (S)	%	74.6	10.0-120		05/03/22 15:52	
Nitrobenzene-d5 (S)	%	72.7	10.0-122		05/03/22 15:52	
2-Fluorobiphenyl (S)	%	68.5	15.0-120		05/03/22 15:52	
2,4,6-Tribromophenol (S)	%	75.7	10.0-127		05/03/22 15:52	
p-Terphenyl-d14 (S)	%	72.7	10.0-120		05/03/22 15:52	

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### QUALITY CONTROL DATA

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

METHOD BLANK: R3788334-1

Matrix: Solid

Associated Lab Samples: 10605435001, 10605435002, 10605435003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	mg/kg	ND	0.0333	0.00539	05/04/22 18:14	
Acenaphthylene	mg/kg	ND	0.0333	0.00469	05/04/22 18:14	
Anthracene	mg/kg	ND	0.0333	0.00593	05/04/22 18:14	
Benzoic acid	mg/kg	ND	1.67	0.118	05/04/22 18:14	
Benzo(a)anthracene	mg/kg	ND	0.0333	0.00587	05/04/22 18:14	
Benzo(b)fluoranthene	mg/kg	ND	0.0333	0.00621	05/04/22 18:14	
Benzo(k)fluoranthene	mg/kg	ND	0.0333	0.00592	05/04/22 18:14	
Benzo(g,h,i)perylene	mg/kg	ND	0.0333	0.00609	05/04/22 18:14	
Benzo(a)pyrene	mg/kg	ND	0.0333	0.00619	05/04/22 18:14	
Carbazole	mg/kg	ND	0.333	0.0103	05/04/22 18:14	
Chrysene	mg/kg	ND	0.0333	0.00662	05/04/22 18:14	
Dibenz(a,h)anthracene	mg/kg	ND	0.0333	0.00923	05/04/22 18:14	
Dibenzofuran	mg/kg	ND	0.333	0.0109	05/04/22 18:14	
Fluoranthene	mg/kg	ND	0.0333	0.00601	05/04/22 18:14	
Fluorene	mg/kg	ND	0.0333	0.00542	05/04/22 18:14	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.0333	0.00941	05/04/22 18:14	
1-Methylnaphthalene	mg/kg	ND	0.0333	0.00426	05/04/22 18:14	
2-Methylnaphthalene	mg/kg	ND	0.0333	0.00432	05/04/22 18:14	
Naphthalene	mg/kg	ND	0.0333	0.00836	05/04/22 18:14	
Phenanthrene	mg/kg	ND	0.0333	0.00661	05/04/22 18:14	
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.333	0.0422	05/04/22 18:14	
Di-n-butylphthalate	mg/kg	ND	0.333	0.0114	05/04/22 18:14	
Di-n-octylphthalate	mg/kg	ND	0.333	0.0225	05/04/22 18:14	
Pyrene	mg/kg	ND	0.0333	0.00648	05/04/22 18:14	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.333	0.0104	05/04/22 18:14	
Pentachlorophenol	mg/kg	ND	0.333	0.00896	05/04/22 18:14	
Phenol	mg/kg	ND	0.333	0.0134	05/04/22 18:14	
2-Fluorophenol (S)	%	67.7	12.0-120		05/04/22 18:14	
Phenol-d5 (S)	%	65.6	10.0-120		05/04/22 18:14	
Nitrobenzene-d5 (S)	%	66.1	10.0-122		05/04/22 18:14	
2-Fluorobiphenyl (S)	%	68.5	15.0-120		05/04/22 18:14	
2,4,6-Tribromophenol (S)	%	70.3	10.0-127		05/04/22 18:14	
p-Terphenyl-d14 (S)	%	61.6	10.0-120		05/04/22 18:14	

LABORATORY CONTROL SAMPLE: R3787713-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	mg/kg	0.666	0.390	58.6	38.0-120	
Acenaphthylene	mg/kg	0.666	0.423	63.5	40.0-120	
Anthracene	mg/kg	0.666	0.418	62.8	42.0-120	
Benzoic acid	mg/kg	1.33	0.179	13.5	10.0-120	
Benzo(a)anthracene	mg/kg	0.666	0.412	61.9	44.0-120	
Benzo(b)fluoranthene	mg/kg	0.666	0.389	58.4	43.0-120	
Benzo(k)fluoranthene	mg/kg	0.666	0.413	62.0	44.0-120	

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### QUALITY CONTROL DATA

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

LABORATORY CONTROL SAMPLE: R3787713-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(g,h,i)perylene	mg/kg	0.666	0.427	64.1	43.0-120	
Benzo(a)pyrene	mg/kg	0.666	0.447	67.1	45.0-120	
Carbazole	mg/kg	0.666	0.398	59.8	48.0-120	
Chrysene	mg/kg	0.666	0.414	62.2	43.0-120	
Dibenz(a,h)anthracene	mg/kg	0.666	0.422	63.4	44.0-120	
Dibenzofuran	mg/kg	0.666	0.401	60.2	44.0-120	
Fluoranthene	mg/kg	0.666	0.402	60.4	44.0-120	
Fluorene	mg/kg	0.666	0.391	58.7	41.0-120	
Indeno(1,2,3-cd)pyrene	mg/kg	0.666	0.411	61.7	45.0-120	
1-Methylnaphthalene	mg/kg	0.666	0.321	48.2	34.0-120	
2-Methylnaphthalene	mg/kg	0.666	0.312	46.8	34.0-120	
Naphthalene	mg/kg	0.666	0.309	46.4	18.0-120	
Phenanthrene	mg/kg	0.666	0.400	60.1	42.0-120	
bis(2-Ethylhexyl)phthalate	mg/kg	0.666	0.471	70.7	41.0-120	
Di-n-butylphthalate	mg/kg	0.666	0.445	66.8	43.0-120	
Di-n-octylphthalate	mg/kg	0.666	0.442	66.4	40.0-120	
Pyrene	mg/kg	0.666	0.408	61.3	41.0-120	
3&4-Methylphenol(m&p Cresol)	mg/kg	0.666	0.464	69.7	42.0-120	
Pentachlorophenol	mg/kg	0.666	0.393	59.0	29.0-120	
Phenol	mg/kg	0.666	0.400	60.1	28.0-120	
2-Fluorophenol (S)	%			60.8	12.0-120	
Phenol-d5 (S)	%			61.7	10.0-120	
Nitrobenzene-d5 (S)	%			52.6	10.0-122	
2-Fluorobiphenyl (S)	%			56.8	15.0-120	
2,4,6-Tribromophenol (S)	%			68.6	10.0-127	
p-Terphenyl-d14 (S)	%			62.5	10.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3788258-1 R3788258-2

Parameter	Units	MS R3788258-1		MSD R3788258-2		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		L1486885-01 Result	Spike Conc.	MS Result	MSD Result							
Acenaphthene	mg/kg	ND	0.862	0.849	0.590	0.417	68.4	49.1	18.0-120	34.4	32	R1
Acenaphthylene	mg/kg	ND	0.862	0.849	0.620	0.435	71.9	51.2	25.0-120	35.1	32	R1
Anthracene	mg/kg	ND	0.862	0.849	0.677	0.555	78.5	65.4	22.0-120	19.7	29	
Benzoic acid	mg/kg	ND	1.72	1.69	1.90	1.20	111	70.6	10.0-152	45.7	40	R1
Benzo(a)anthracene	mg/kg	ND	0.862	0.849	0.705	0.599	81.7	70.6	25.0-120	16.2	29	
Benzo(b)fluoranthene	mg/kg	ND	0.862	0.849	0.678	0.589	78.7	69.3	19.0-122	14.2	31	
Benzo(k)fluoranthene	mg/kg	ND	0.862	0.849	0.688	0.599	79.8	70.6	23.0-120	13.8	30	
Benzo(g,h,i)perylene	mg/kg	ND	0.862	0.849	0.592	0.517	68.7	60.9	10.0-120	13.6	33	
Benzo(a)pyrene	mg/kg	ND	0.862	0.849	0.753	0.653	87.3	76.9	24.0-120	14.1	30	
Carbazole	mg/kg	ND	0.862	0.849	0.698	0.583	81.0	68.7	31.0-120	18.0	24	
Chrysene	mg/kg	ND	0.862	0.849	0.709	0.607	82.2	71.5	21.0-120	15.5	29	
Dibenz(a,h)anthracene	mg/kg	ND	0.862	0.849	0.648	0.548	75.2	64.5	10.0-120	16.8	32	
Dibenzofuran	mg/kg	ND	0.862	0.849	0.606	0.435	70.2	51.2	24.0-120	32.8	30	R1
Fluoranthene	mg/kg	ND	0.862	0.849	0.717	0.592	83.1	69.8	18.0-126	19.0	32	

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### QUALITY CONTROL DATA

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3788258-1			R3788258-2			% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		L1486885-01	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Fluorene	mg/kg	ND	0.862	0.849	0.635	0.469	73.6	55.3	25.0-120	29.9	30			
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.862	0.849	0.627	0.544	72.7	64.0	10.0-120	14.2	32			
1-Methylnaphthalene	mg/kg	ND	0.862	0.849	0.480	0.333	55.7	39.3	10.0-120	36.1	36	R1		
2-Methylnaphthalene	mg/kg	ND	0.862	0.849	0.452	0.313	52.5	36.9	10.0-120	36.3	37			
Naphthalene	mg/kg	ND	0.862	0.849	0.451	0.312	52.3	36.8	10.0-120	36.4	35	R1		
Phenanthrene	mg/kg	ND	0.862	0.849	0.671	0.546	77.8	64.3	17.0-120	20.4	31			
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.862	0.849	0.837	0.701	97.1	82.6	17.0-126	17.7	30			
Di-n-butylphthalate	mg/kg	ND	0.862	0.849	0.796	0.639	92.3	75.2	30.0-120	21.9	29			
Di-n-octylphthalate	mg/kg	ND	0.862	0.849	0.825	0.706	95.7	83.2	21.0-123	15.5	29			
Pyrene	mg/kg	ND	0.862	0.849	0.692	0.587	80.2	69.2	16.0-121	16.3	32			
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.862	0.849	0.734	0.480	85.1	56.5	12.0-123	41.8	38	R1		
Pentachlorophenol	mg/kg	ND	0.862	0.849	0.697	0.595	80.8	70.1	10.0-160	15.8	31			
Phenol	mg/kg	ND	0.862	0.849	0.622	0.406	72.1	47.8	12.0-120	42.0	38	R1		
2-Fluorophenol (S)	%						71.5	54.8	12.0-120					
Phenol-d5 (S)	%						74.5	58.0	10.0-120					
Nitrobenzene-d5 (S)	%						59.2	49.8	10.0-122					
2-Fluorobiphenyl (S)	%						62.9	50.8	15.0-120					
2,4,6-Tribromophenol (S)	%						91.0	82.1	10.0-127					
p-Terphenyl-d14 (S)	%						69.9	76.6	10.0-120					

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### QUALITY CONTROL DATA

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

QC Batch:	810889	Analysis Method:	NWTPH-Dx
QC Batch Method:	EPA 3550	Analysis Description:	NWTPH-Dx GCS
		Laboratory:	Pace Analytical Services - Minneapolis

Associated Lab Samples: 10605435001, 10605435002, 10605435003

METHOD BLANK: 4301503 Matrix: Solid

Associated Lab Samples: 10605435001, 10605435002, 10605435003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Diesel Fuel Range	mg/kg	ND	15.0	6.9	04/26/22 14:52	
Motor Oil Range	mg/kg	ND	10.0	5.0	04/26/22 14:52	
n-Triacontane (S)	%	93	50-150		04/26/22 14:52	
o-Terphenyl (S)	%	94	50-150		04/26/22 14:52	

LABORATORY CONTROL SAMPLE: 4301504

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel Range	mg/kg	50	46.2	92	50-150	
Motor Oil Range	mg/kg	50	48.2	96	50-150	
n-Triacontane (S)	%			97	50-150	
o-Terphenyl (S)	%			95	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4301505 4301506

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10605529001 Result	Spike Conc.	Spike Conc.	Result						
Diesel Fuel Range	mg/kg	305	49.3	50	356	251J	104	-107	50-150	30	P6
Motor Oil Range	mg/kg	1030	49.3	50	789	775	-496	-517	50-150	2	30 P6
n-Triacontane (S)	%						90	69	50-150		
o-Terphenyl (S)	%						109	107	50-150		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

QC Batch: 1856483	Analysis Method: SM 2540G
QC Batch Method: SM 2540 G	Analysis Description: Total Solids 2540 G-2011
	Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10605435001

METHOD BLANK: R3787629-1 Matrix: Solid

Associated Lab Samples: 10605435001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	0.00100			05/03/22 06:04	

LABORATORY CONTROL SAMPLE: R3787629-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	85.0-115	

SAMPLE DUPLICATE: R3787629-3

Parameter	Units	L1487253-02 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	80.9	81.9	1.25	10	

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**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA

Project: 3593500 WISHRAM RI-Revised Report  
Pace Project No.: 10605435

QC Batch: 1856493	Analysis Method: SM 2540G
QC Batch Method: SM 2540 G	Analysis Description: Total Solids 2540 G-2011
	Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10605435002, 10605435003

METHOD BLANK: R3787628-1 Matrix: Solid  
Associated Lab Samples: 10605435002, 10605435003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	0.00100			05/03/22 05:55	

LABORATORY CONTROL SAMPLE: R3787628-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	85.0-115	

SAMPLE DUPLICATE: R3787628-3

Parameter	Units	L1487412-10 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	85.9	85.6	0.273	10	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

QC Batch: 1857987	Analysis Method: EPA 9030B
QC Batch Method: 9030B	Analysis Description: Wet Chemistry 9034/9030B
	Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10605435001, 10605435002, 10605435003

METHOD BLANK: R3788703-1 Matrix: Solid

Associated Lab Samples: 10605435001, 10605435002, 10605435003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/kg	ND	75.0	30.0	05/05/22 18:00	

LABORATORY CONTROL SAMPLE: R3788703-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/kg	100	71.1	71.1	53.8-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3788703-3 R3788703-4

Parameter	Units	R3788703-3		R3788703-4		% Rec Limits	RPD	Max RPD	Qual		
		L1488556-01 Result	MS Spike Conc.	MSD Spike Conc.	MS Result					MSD Result	
Sulfide	mg/kg	ND	100	100	69.5	66.7	69.5	66.7	10.0-136	4.06	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### SAMPLE QUALIFIERS

Sample: 10605435001

[1] Semi Volatile Organic Compounds (GC/MS) by Method 8270E - Dilution due to matrix impact during extract concentration procedure

Sample: 10605435003

[1] Semi Volatile Organic Compounds (GC/MS) by Method 8270E - Dilution due to matrix impact during extract concentration procedure

Sample: L1486885-01

[1] Semi Volatile Organic Compounds (GC/MS) by Method 8270E - Dilution due to matrix impact during extract concentration procedure

### ANALYTE QUALIFIERS

H3 Sample was received or analysis requested beyond the recognized method holding time.

J Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

R1 RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 3593500 WISHRAM RI-Revised Report

Pace Project No.: 10605435

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10605435001	BNSF-SG01-041922-0-10	EPA 3550	810889	NWTPH-Dx	811549
10605435002	FD01-041922-0-10	EPA 3550	810889	NWTPH-Dx	811549
10605435003	BNSF-SG02-041922-0-10	EPA 3550	810889	NWTPH-Dx	811549
10605435001	BNSF-SG01-041922-0-10	EPA 3050B	811306	EPA 6020B	811795
10605435002	FD01-041922-0-10	EPA 3050B	811306	EPA 6020B	811795
10605435003	BNSF-SG02-041922-0-10	EPA 3050B	811306	EPA 6020B	811795
10605435001	BNSF-SG01-041922-0-10	EPA 7471B	811310	EPA 7471B	811726
10605435002	FD01-041922-0-10	EPA 7471B	811310	EPA 7471B	811726
10605435003	BNSF-SG02-041922-0-10	EPA 7471B	811310	EPA 7471B	811726
10605435001	BNSF-SG01-041922-0-10	ASTM D2974	811326		
10605435002	FD01-041922-0-10	ASTM D2974	811326		
10605435003	BNSF-SG02-041922-0-10	ASTM D2974	811326		
10605435001	BNSF-SG01-041922-0-10	3546	1857248	EPA 8270E	1857248
10605435002	FD01-041922-0-10	3546	1857248	EPA 8270E	1857248
10605435003	BNSF-SG02-041922-0-10	3546	1857248	EPA 8270E	1857248
10605435001	BNSF-SG01-041922-0-10	SM 2540 G	1856483	SM 2540G	1856483
10605435002	FD01-041922-0-10	SM 2540 G	1856493	SM 2540G	1856493
10605435003	BNSF-SG02-041922-0-10	SM 2540 G	1856493	SM 2540G	1856493
10605435001	BNSF-SG01-041922-0-10	9030B	1857987	EPA 9030B	1857987
10605435002	FD01-041922-0-10	9030B	1857987	EPA 9030B	1857987
10605435003	BNSF-SG02-041922-0-10	9030B	1857987	EPA 9030B	1857987

### REPORT OF LABORATORY ANALYSIS

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WO#: 10605435



10605435

CHAIN-OF-CUSTODY Analytical Request Document

**Pace Analytical**  
 Billing information:  
 Email To: KRIS IVARSON  
 BERNEICE KIDDO JACOBS, WORK  
 Site Collection Info/Address:  
 BNSE - WISHRAM  
 State: County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET  
 Customer Project Name/Number: 3593500 WISHRAM RI  
 Site/Facility ID #: Purchase Order #: SEE CONTRACT  
 Quote #: TURNAROUND DATE REQUIRED: STANDARD  
 Rush: [ ] Same Day [ ] Next Day  
 [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)  
 Analysis:  
 Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Istomer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Res Cl	# of Ctns
			Date	Time		
BNSF-SC01-04122-0-10	SL	GRAB	4/11/22	1200		7
FDDI-041922-6-10	SL	GRAB	4/11/22	1215		7
BNSF-SGDZ-041922-0-10	SL	GRAB	4/11/22	1335		7

Analyzes	Container Preservative Type **										
	U	U	U	U	U	U	U	U	U	U	U
T. SUPTIDES (SW 9030)	X										
PCB CONCENTRATIONS (SW 9040)	X										
METALS (SW 2020 & TDC (SW 9708))	X										
TOT DDT/DDD (SW 7140)	X										
SVCS & PAHs (SW 8201)	X										
GRAND SIZE (D7920/D6913)	X										

Customer Remarks / Special Conditions / Possible Hazards:  
 Type of Ice Used: Wet Blue Dry None  
 Packing Material Used:  
 Radchem sample(s) screened (<500 cpm): Y N NA  
 Received by/Company: (Signature) Date/Time: 4/20/22/1400  
 Received by/Company: (Signature) Date/Time: [Signature] / PACE  
 Received by/Company: (Signature) Date/Time: [Signature]

LAB USE ONLY - Affix Workorder #

ALL SHADED A

W	U	U	U	U	U	U	U	U	U
---	---	---	---	---	---	---	---	---	---

Lab Profile/Line:

Lab Sample Receipt Checklist:  
 Custody Seals Present/Tactact Y N NA  
 Custody Signatures Present Y N NA  
 Collector Signature Present Y N NA  
 Bottles Intact Y N NA  
 Correct Bottles Y N NA  
 Sufficient Volume Y N NA  
 Samples Received on Ice Y N NA  
 VOA - Headspace Acceptable Y N NA  
 USDA Regulated Soils Y N NA  
 Samples in Holding Time Y N NA  
 Residual Chlorine Present Y N NA  
 Cl Strips: Y N NA  
 Sample pH Acceptable Y N NA  
 pH Strips: Y N NA  
 Sulfide Present  
 Lead Acetate Strips:  
 LAB USE ONLY:  
 Lab Sample # / Comments:

Lab Sample Temperature Info:  
 Temp Blank Received: Y (N) NA  
 Therm ID#: NA  
 Cooler 1 Temp Upon Receipt: 35 °C  
 Cooler 1 Temp Corr. Factor: °C  
 Cooler 1 Corrected Temp: °C  
 Comments:  
 Trip Blank Received: Y N NA  
 HCL MeOH TSP Other  
 Non Conformance(s): YES / NO Page: 1 of 1

SHORT HOLD'S PRESENT (<72 hours): Y N N/A	Lab Tracking #: 2743840	Client: Courier	Pace Courier
Samples received via: FEDEX UPS	MTJL LAB USE ONLY	Table #: 04/21/22 6:50	Actturn:
Date/Time: 04/21/22 6:50	Prelogin: PM: PM:	Template: Prelogin: PM: PM:	Prelogin: PM: PM:



DC#\_Title: ENV-FRM-MIN4-0149 v03\_Sample Condition Upon Receipt (SCUR) - ESI

Effective Date: 04/12/2022

Sample Condition Upon Receipt - ESI Tech Specs

Client Name:

Project #:

WO#: 10605435

PM: KV

Due Date: 05/12/22

CLIENT: BNSF\_Jacobs

Courier: BNSF Jacobs
Fed Ex UPS USPS Client
Pace Speedee Commercial

Tracking Number: 5150 160 5740
See Exceptions ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? Yes No
Seals Intact? Yes No
Biological Tissue Frozen? Yes No N/A

Packing Material: Bubble Wrap Bubble Bags None Other: ziplocks
Temp Blank? Yes No

Thermometer: T1(0461) T2(1336) T3(0459) T4(0254) T5(0489) T6(0235) T7(0042)
Type of Ice: Wet Blue None Dry Melted

Temp should be above freezing to 6°C Cooler Temp Read w/temp blank: °C
Average Corrected Temp (no temp blank only): 3.5 °C
Correction Factor: Cooler Temp Corrected w/temp blank: °C
See Exceptions ENV-FRM-MIN4-0142 1 Container

USDA Regulated Soil: ( N/A, water sample/Other: )
Date/Initials of Person Examining Contents: KN 4/12/22
Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? Yes No
Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No
If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MIN4-0154) and include with SCUR/COC paperwork.

Table with 2 columns: Question and Answer/Comments. Contains 14 numbered rows of inspection questions and their corresponding responses.

Temp Log: Temp must be maintained at <6°C during login, record temp every 20 mins
Opened Time: 16:20 Temp: Corrected Temp: 3.5
Time: 16:40 put in cooler
Time: Temp: Corrected Temp:

CLIENT NOTIFICATION/RESOLUTION
Field Data Required? Yes No
Person Contacted: Date/Time:
Comments/Resolution:

Project Manager Review: [Signature] Date: 5/11/22
Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers)

Labeled by: KN (2)







8270 SVOC List

*Semi-volatile Organic Compounds and Polycyclic*

3&4-Methylphenol
Benzoic acid
Bis(2-ethylhexyl) phthalate
Carbazole
Dibenzofuran
Di-n-butyl phthalate
Di-n-octyl phthalate
Pentachlorophenol
Phenol
1-Methylnaphthalene
2-Methylnaphthalene
Acenaphthene
Acenaphthylene
Anthracene
Benz(a)anthracene
Benzo(a)pyrene
Benzo(ghi)perylene
Chrysene
Dibenz(ah)anthracene
Fluoranthene
Fluorene
Indeno(1,23-cd)pyrene
Naphthalene
Phenanthrene
Pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene

L148 7377

## ANALYTICAL REPORT

Eurofins Seattle  
5755 8th Street East  
Tacoma, WA 98424  
Tel: (253)922-2310

Laboratory Job ID: 580-112980-1  
Client Project/Site: D3593500 10605435  
Revision: 1

For:  
Pace Analytical Services, LLC  
1700 Elm Street  
Minneapolis, Minnesota 55414

Attn: Kongmeng Vang



Authorized for release by:  
5/26/2022 1:41:40 PM

Pauline Matlock, Project Manager  
(253)922-2310  
[Pauline.Matlock@et.eurofinsus.com](mailto:Pauline.Matlock@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

10605435

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions . . . . .	4
Client Sample Results . . . . .	5
QC Sample Results . . . . .	11
Chronicle . . . . .	13
Certification Summary . . . . .	15
Sample Summary . . . . .	16
Chain of Custody . . . . .	17
Receipt Checklists . . . . .	18

# Case Narrative

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

**Job ID: 580-112980-1**

**Laboratory: Eurofins Seattle**

## Narrative

**Job Narrative  
580-112980-1**

### Comments

No additional comments.

### Revision

The report being provided is a revision of the original report sent on 5/9/2022. The report (revision 1) is being revised due to: Client needs TOC reported by dry weight.

### Receipt

The samples were received on 4/23/2022 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.0° C.

### Receipt Exceptions

The Sample ID on the container label for the following sample did not match the information listed on the Chain-of-Custody (COC): BNSF-SG01-041922-0-10 (580-112980-1). The container labels list BNSF-SG01-041922-0-10 while the COC lists BNSF-SC01-041922-0-10. The sample was logged per the container label as this matches the nomenclature of another sample in the login.

### General Chemistry

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batches 580-389340 and 580-389473 and analytical batch 580-389474 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



# Definitions/Glossary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Client Sample Results

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

**Client Sample ID: BNSF-SG01-041922-0-10**

**Lab Sample ID: 580-112980-1**

Date Collected: 04/19/22 12:00

Matrix: Solid

Date Received: 04/23/22 09:20

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	75.4		0.1	0.1	%			04/29/22 17:15	1
Percent Moisture	24.6		0.1	0.1	%			04/29/22 17:15	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605435

Job ID: 580-112980-1

**Client Sample ID: BNSF-SG01-041922-0-10**

**Lab Sample ID: 580-112980-1**

Date Collected: 04/19/22 12:00

Matrix: Solid

Date Received: 04/23/22 09:20

Percent Solids: 75.4

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	4700		2700	130	mg/Kg	☼		05/03/22 14:34	1

### General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		33	11	mg/Kg	☼	05/04/22 20:02	05/04/22 20:09	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Client Sample Results

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

**Client Sample ID: FD01-041922-0-10**

**Lab Sample ID: 580-112980-2**

Date Collected: 04/19/22 12:15

Matrix: Solid

Date Received: 04/23/22 09:20

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	67.6		0.1	0.1	%			04/29/22 17:15	1
Percent Moisture	32.4		0.1	0.1	%			04/29/22 17:15	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605435

Job ID: 580-112980-1

**Client Sample ID: FD01-041922-0-10**

**Lab Sample ID: 580-112980-2**

Date Collected: 04/19/22 12:15

Matrix: Solid

Date Received: 04/23/22 09:20

Percent Solids: 67.6

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	5500		3000	140	mg/Kg	☼		05/03/22 14:39	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	15	J	37	13	mg/Kg	☼	05/04/22 20:02	05/04/22 20:09	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Client Sample Results

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

**Client Sample ID: BNSF-SG02-041922-0-10**

**Lab Sample ID: 580-112980-3**

Date Collected: 04/19/22 13:35

Matrix: Solid

Date Received: 04/23/22 09:20

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	57.7		0.1	0.1	%			04/29/22 17:15	1
Percent Moisture	42.3		0.1	0.1	%			04/29/22 17:15	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605435

Job ID: 580-112980-1

**Client Sample ID: BNSF-SG02-041922-0-10**

**Lab Sample ID: 580-112980-3**

Date Collected: 04/19/22 13:35

Matrix: Solid

Date Received: 04/23/22 09:20

Percent Solids: 57.7

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	23000		3500	170	mg/Kg	☼		05/03/22 14:43	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	40	J F1	43	15	mg/Kg	☼	05/04/22 20:02	05/04/22 20:09	1

- 1
- 2
- 3
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- 10
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# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605435

Job ID: 580-112980-1

## Method: 9060A - Organic Carbon, Total (TOC)

**Lab Sample ID: MB 580-389420/39**  
**Matrix: Solid**  
**Analysis Batch: 389420**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/03/22 16:35	1

**Lab Sample ID: MB 580-389420/5**  
**Matrix: Solid**  
**Analysis Batch: 389420**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/03/22 13:32	1

**Lab Sample ID: MB 580-389420/75**  
**Matrix: Solid**  
**Analysis Batch: 389420**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/03/22 19:17	1

**Lab Sample ID: LCS 580-389420/40**  
**Matrix: Solid**  
**Analysis Batch: 389420**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120

**Lab Sample ID: LCS 580-389420/6**  
**Matrix: Solid**  
**Analysis Batch: 389420**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120

**Lab Sample ID: LCS 580-389420/76**  
**Matrix: Solid**  
**Analysis Batch: 389420**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	114000		mg/Kg		95	80 - 120

**Lab Sample ID: LCSD 580-389420/41**  
**Matrix: Solid**  
**Analysis Batch: 389420**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	116000		mg/Kg		97	80 - 120	1	20



# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605435

Job ID: 580-112980-1

## Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCSD 580-389420/7  
 Matrix: Solid  
 Analysis Batch: 389420

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	114000		mg/Kg		95	80 - 120	1	20

Lab Sample ID: LCSD 580-389420/77  
 Matrix: Solid  
 Analysis Batch: 389420

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	114000		mg/Kg		95	80 - 120	1	20

## Method: EPA 350.1 - Ammonia

Lab Sample ID: MB 580-389340/1-B  
 Matrix: Solid  
 Analysis Batch: 389474

Client Sample ID: Method Blank  
 Prep Type: Soluble  
 Prep Batch: 389473

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		25	8.8	mg/Kg		05/04/22 20:02	05/04/22 20:09	1

Lab Sample ID: LCS 580-389340/2-B  
 Matrix: Solid  
 Analysis Batch: 389474

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble  
 Prep Batch: 389473

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	50.0	48.3		mg/Kg		97	90 - 110

Lab Sample ID: 580-112980-3 MS  
 Matrix: Solid  
 Analysis Batch: 389474

Client Sample ID: BNSF-SG02-041922-0-10  
 Prep Type: Soluble  
 Prep Batch: 389473

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	40	J F1	83.9	102	F1	mg/Kg	⊛	75	90 - 110

Lab Sample ID: 580-112980-3 MSD  
 Matrix: Solid  
 Analysis Batch: 389474

Client Sample ID: BNSF-SG02-041922-0-10  
 Prep Type: Soluble  
 Prep Batch: 389473

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia as N	40	J F1	86.2	109	F1	mg/Kg	⊛	80	90 - 110	6	20

Lab Sample ID: 580-112980-3 DU  
 Matrix: Solid  
 Analysis Batch: 389474

Client Sample ID: BNSF-SG02-041922-0-10  
 Prep Type: Soluble  
 Prep Batch: 389473

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia as N	40	J F1	37.4	J	mg/Kg	⊛	6	20

# Lab Chronicle

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

**Client Sample ID: BNSF-SG01-041922-0-10**

**Lab Sample ID: 580-112980-1**

Date Collected: 04/19/22 12:00

Matrix: Solid

Date Received: 04/23/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	389004	04/29/22 17:15	JSM	FGS SEA

**Client Sample ID: BNSF-SG01-041922-0-10**

**Lab Sample ID: 580-112980-1**

Date Collected: 04/19/22 12:00

Matrix: Solid

Date Received: 04/23/22 09:20

Percent Solids: 75.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	389420	05/03/22 14:34	FCG	FGS SEA
Soluble	Leach	DI Leach			389340	05/03/22 18:46	MLT	FGS SEA
Soluble	Prep	Distill/Ammonia			389473	05/04/22 20:02	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	389474	05/04/22 20:09	MLT	FGS SEA

**Client Sample ID: FD01-041922-0-10**

**Lab Sample ID: 580-112980-2**

Date Collected: 04/19/22 12:15

Matrix: Solid

Date Received: 04/23/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	389004	04/29/22 17:15	JSM	FGS SEA

**Client Sample ID: FD01-041922-0-10**

**Lab Sample ID: 580-112980-2**

Date Collected: 04/19/22 12:15

Matrix: Solid

Date Received: 04/23/22 09:20

Percent Solids: 67.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	389420	05/03/22 14:39	FCG	FGS SEA
Soluble	Leach	DI Leach			389340	05/03/22 18:46	MLT	FGS SEA
Soluble	Prep	Distill/Ammonia			389473	05/04/22 20:02	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	389474	05/04/22 20:09	MLT	FGS SEA

**Client Sample ID: BNSF-SG02-041922-0-10**

**Lab Sample ID: 580-112980-3**

Date Collected: 04/19/22 13:35

Matrix: Solid

Date Received: 04/23/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	389004	04/29/22 17:15	JSM	FGS SEA

**Client Sample ID: BNSF-SG02-041922-0-10**

**Lab Sample ID: 580-112980-3**

Date Collected: 04/19/22 13:35

Matrix: Solid

Date Received: 04/23/22 09:20

Percent Solids: 57.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	389420	05/03/22 14:43	FCG	FGS SEA
Soluble	Leach	DI Leach			389340	05/03/22 18:46	MLT	FGS SEA
Soluble	Prep	Distill/Ammonia			389473	05/04/22 20:02	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	389474	05/04/22 20:09	MLT	FGS SEA

# Lab Chronicle

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

**Laboratory References:**

FGS SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

- 1
- 2
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# Accreditation/Certification Summary

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605435

Job ID: 580-112980-1

## Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2954	07-07-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids
9060A		Solid	Total Organic Carbon - Duplicates
EPA 350.1	Distill/Ammonia	Solid	Ammonia as N

Oregon	NELAP	4167	07-07-22
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Solids

Washington	State	C788	07-13-22
------------	-------	------	----------

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids
9060A		Solid	Total Organic Carbon - Duplicates

# Sample Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-112980-1	BNSF-SG01-041922-0-10	Solid	04/19/22 12:00	04/23/22 09:20
580-112980-2	FD01-041922-0-10	Solid	04/19/22 12:15	04/23/22 09:20
580-112980-3	BNSF-SG02-041922-0-10	Solid	04/19/22 13:35	04/23/22 09:20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Chain of Custody

PASI Minnesota Laboratory



580-112980 Chain of Custody



Workorder: 10605435

Workorder Name: 3593500 WISHRAM RI

Results Requested By: 5/12/2022

Report / Invoice To: Kongmeng Vang  
 Subcontract To: Eurofins Frontier Global Sciences  
 P.O. \_\_\_\_\_  
 1700 Elm Street  
 Minneapolis, MN 55414  
 Phone (612)607-1700  
 Email: kongmeng.vang@pacelabs.com  
 5755 8th Street East  
 Tacoma, WA 98424

State of Sample Origin: WA

JCFU

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers								SO Total Organic Carbon	LAB USE ONLY					
					Unpreserved														
1	BNSF-SC01-041922-0-10	4/19/2022 12:00	10605435001	Solid	1														
2	FD01-041922-0-10	4/19/2022 12:15	10605435002	Solid	1														
3	BNSF-SG02-041922-0-10	4/19/2022 13:35	10605435003	Solid	1														
4																			
5																			

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	<i>[Signature]</i>	4/19/22 12:00	<i>[Signature]</i>	4/22/22 08:20	
2					
3					

Cooler Temperature on Receipt: \_\_\_\_\_ °C  
 Custody Seal Y or N: \_\_\_\_\_  
 Received on Ice Y or N: \_\_\_\_\_  
 Samples Intact Y or N: \_\_\_\_\_

*Fed Po*  
*Sm B Wet/Bub*  
*A3 = 1.0 p. 2*



# Login Sample Receipt Checklist

Client: Pace Analytical Services, LLC

Job Number: 580-112980-1

**Login Number: 112980**

**List Source: Eurofins Seattle**

**List Number: 1**

**Creator: Presley, Kim A**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Date: 5/11/2022

CLIENT: Pace Analytical - Minneapolis  
Project: 10605435 3593500 WISHRAM RI  
Lab Order: S2204331

**CASE NARRATIVE**  
Report ID: S2204331001

Entire Report Reviewed by: *John M. Jacobs*  
John Jacobs, Project Manager

This report contains:

- Case Narrative - 2 pages
- Sample Analysis Report - 12 pages
- Data Sheets- 3 pages
- Original COC - 1 page

-----  
Samples BNSF-SC01-041922-0-10, BNSF-SG02-041922-0-10 and FD01-041922-0-10 were received on April 25, 2022. .

All samples were received and analyzed within the EPA recommended holding times, except those noted below in this case narrative. Samples were analyzed using the methods outlined in the following references:

- U.S.E.P.A. 600 "Methods for Chemical Analysis of Water and Wastes", 1993
- "Standard Methods For The Examination of Water and Wastewater", 20th ed., 1998
- Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition
- Methods indicated with the Monday, March 12, 2007 Federal Register, 40 CFR Part 122, 136 et al.
- US EPA Methods from Technology Transfer Network Ambient Monitoring Technology Information Center, 2009

All Quality objectives were achieved except as noted below:





Date: 5/11/2022

## Definitions

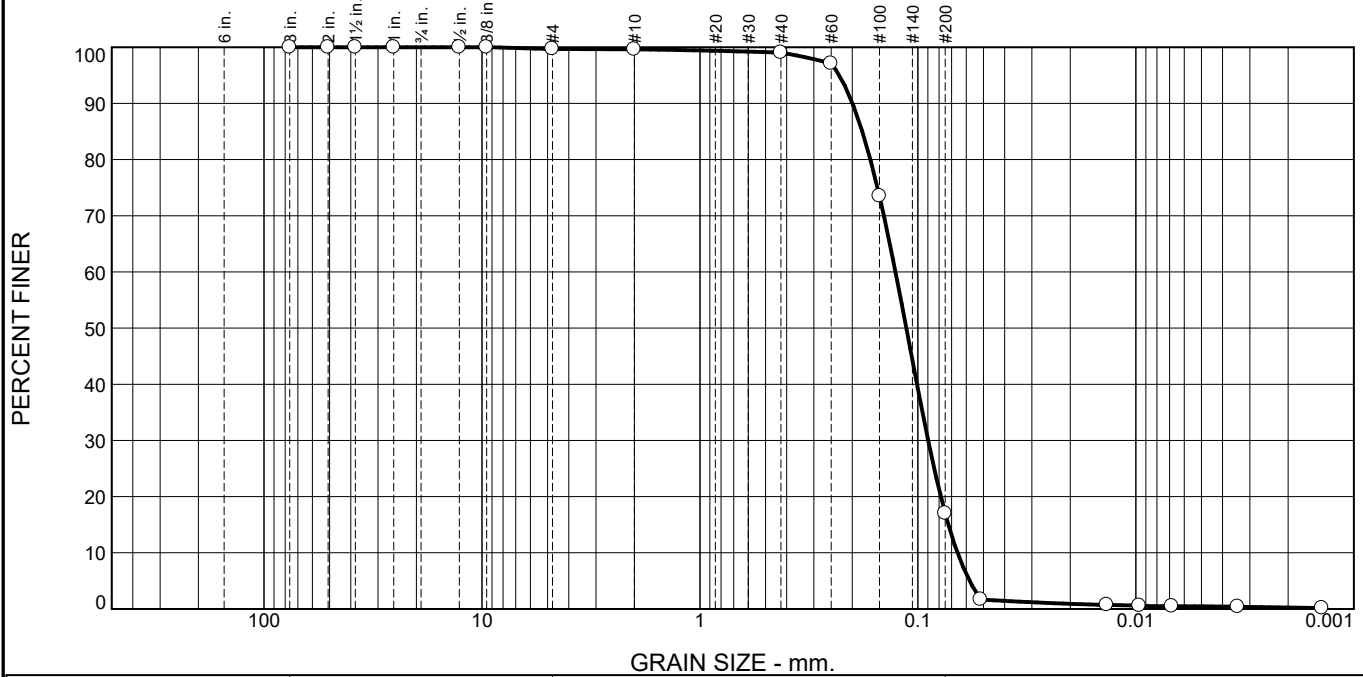
RL Reporting Limit

---

## Qualifiers

- \* Value exceeds Maximum Contaminant Level
- A Check MSA specifications
- B Analyte detected in the associated Method Blank
- C Calculated Value
- D Report limit raised due to dilution
- E Value above quantitation range
- G Analyzed at Pace Gillette, WY laboratory
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by another laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- U Analyte below method detection limit
- X Matrix Effect

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.3	0.1	0.6	82.0	16.5	0.5

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375"	100.0		
#4	99.7		
#10	99.6		
#40	99.0		
#60	97.1		
#100	73.5		
#200	17.0		
0.0515 mm.	1.7		
0.0136 mm.	0.7		
0.0097 mm.	0.6		
0.0068 mm.	0.5		
0.0034 mm.	0.4		
0.0014 mm.	0.1		

\* (no specification provided)

**Material Description**

silty sand

**Atterberg Limits (ASTM D 4318)**

PL= NP      LL= NV      PI=

**Classification**

USCS (D 2487)= SM      AASHTO (M 145)= A-2-4(0)

**Coefficients**

D<sub>90</sub>= 0.1996      D<sub>85</sub>= 0.1800      D<sub>60</sub>= 0.1267  
 D<sub>50</sub>= 0.1131      D<sub>30</sub>= 0.0897      D<sub>15</sub>= 0.0725  
 D<sub>10</sub>= 0.0658      C<sub>u</sub>= 1.93      C<sub>c</sub>= 0.96

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
 SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

---

Date Received: 4/25/2022      Date Tested: 5/5/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: BNSF-SC01-041922-0-10  
 Sample Number: S2204331-001A

Date Sampled: 4/19/2022

**Pace Analytical Services, Inc.**

Client: Pace Analytical - Minneapolis  
 Project: 10605435 3593500 WISHRAM RI

**Sheridan, Wyoming**

Project No: S2204331

Figure



**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 17.0

Weight of hydrometer sample =71.45

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	13.5	7.0	0.0137	13.5	14.1	0.0515	1.7
15.00	19.5	9.5	3.0	0.0137	9.5	14.7	0.0136	0.7
30.00	19.5	9.0	2.5	0.0137	9.0	14.8	0.0097	0.6
60.00	19.5	8.5	2.0	0.0137	8.5	14.9	0.0068	0.5
240.00	20.0	8.0	1.6	0.0136	8.0	15.0	0.0034	0.4
1440.00	20.0	7.0	0.6	0.0136	7.0	15.1	0.0014	0.1

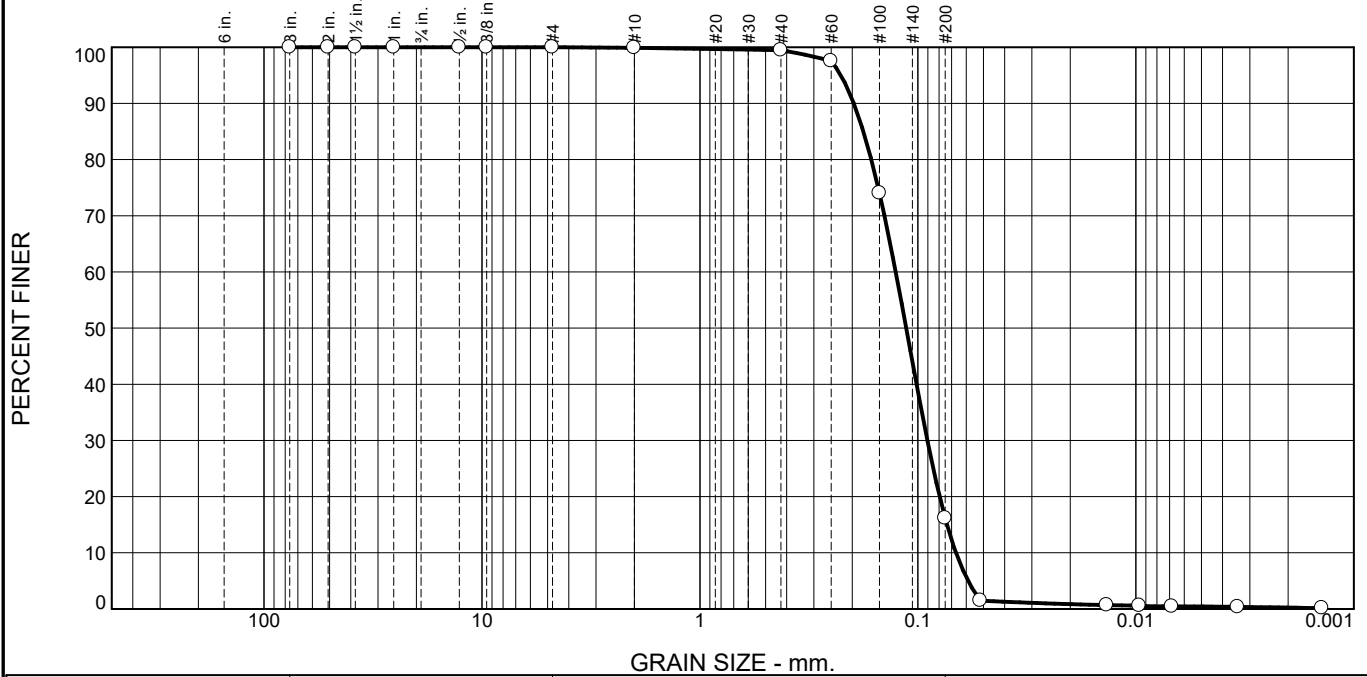
**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.3	0.3	0.1	0.6	82.0	82.7	16.5	0.5	17.0

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0579	0.0658	0.0725	0.0785	0.0897	0.1010	0.1131	0.1267	0.1651	0.1800	0.1996	0.2294

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.31	1.93	0.96

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	0.4	83.3	15.8	0.4

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375	100.0		
#4	100.0		
#10	99.9		
#40	99.5		
#60	97.6		
#100	74.0		
#200	16.2		
0.0517 mm.	1.5		
0.0136 mm.	0.7		
0.0097 mm.	0.6		
0.0068 mm.	0.5		
0.0034 mm.	0.4		
0.0014 mm.	0.1		

**Material Description**

silty sand

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= SM                      AASHTO (M 145)= A-2-4(0)

**Coefficients**

D<sub>90</sub>= 0.1969                      D<sub>85</sub>= 0.1779                      D<sub>60</sub>= 0.1264  
D<sub>50</sub>= 0.1132                      D<sub>30</sub>= 0.0904                      D<sub>15</sub>= 0.0736  
D<sub>10</sub>= 0.0669                      C<sub>u</sub>= 1.89                      C<sub>c</sub>= 0.97

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

---

Date Received: 4/25/2022                      Date Tested: 5/5/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

\* (no specification provided)

Location: FD01-041922-0-10                      Date Sampled: 4/19/2022  
Sample Number: S2204331-002A

<b>Pace Analytical Services, Inc.</b>	Client: Pace Analytical - Minneapolis
<b>Sheridan, Wyoming</b>	Project: 10605435 3593500 WISHRAM RI
<b>Sheridan, Wyoming</b>	Project No: S2204331                      Figure

GRAIN SIZE DISTRIBUTION TEST DATA

5/5/2022

Client: Pace Analytical - Minneapolis  
Project: 10605435 3593500 WISHRAM RI  
Project Number: S2204331  
Location: FD01-041922-0-10  
Sample Number: S2204331-002A  
Material Description: silty sand  
Sample Date: 4/19/2022 12:15  
Date Received: 4/25/2022 PL: NP  
USCS Classification: SM  
Grain Size Test Method: ASTM D 422

LL: NV  
AASHTO Classification: A-2-4(0)

Testing Remarks: SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

Tested By: Steve Holzerland Test Date: 5/5/2022  
Checked By: John Jacobs Title: Project Manager 2

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer		
146.89	0.00	3"	0.00	0.00	100.0		
		2"	0.00	0.00	100.0		
		1.5"	0.00	0.00	100.0		
		1"	0.00	0.00	100.0		
		0.5"	0.00	0.00	100.0		
		0.375"	0.00	0.00	100.0		
		#4	0.00	0.00	100.0		
		#10	0.17	0.00	99.9		
		71.50	0.00	#40	0.30	0.00	99.5
				#60	1.37	0.00	97.6
#100	16.83			0.00	74.0		
#200	41.43			0.00	16.2		

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 16.2

Weight of hydrometer sample =71.50

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	13.0	6.5	0.0137	13.0	14.2	0.0517	1.5
15.00	19.5	9.5	3.0	0.0137	9.5	14.7	0.0136	0.7
30.00	19.5	9.0	2.5	0.0137	9.0	14.8	0.0097	0.6
60.00	19.5	8.5	2.0	0.0137	8.5	14.9	0.0068	0.5
240.00	20.0	8.0	1.6	0.0136	8.0	15.0	0.0034	0.4
1440.00	20.0	7.0	0.6	0.0136	7.0	15.1	0.0014	0.1

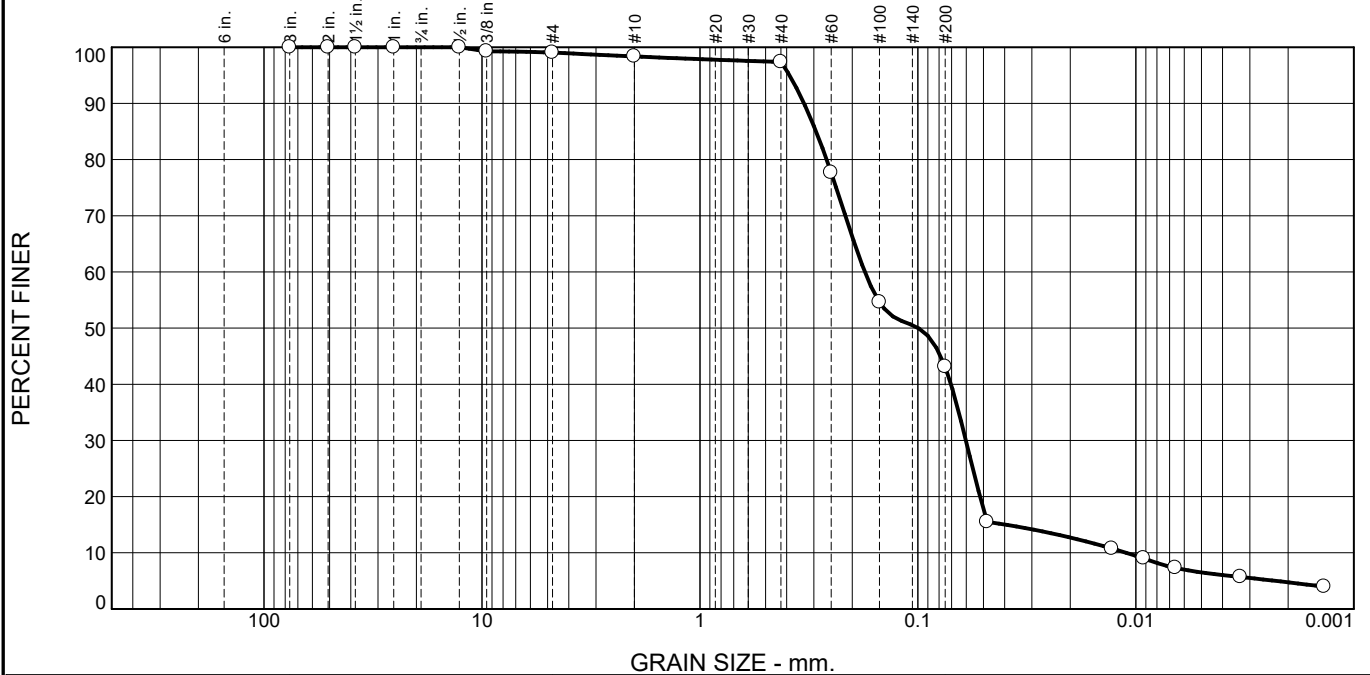
**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.1	0.4	83.3	83.8	15.8	0.4	16.2

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0589	0.0669	0.0736	0.0795	0.0904	0.1014	0.1132	0.1264	0.1635	0.1779	0.1969	0.2256

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.28	1.89	0.97

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.9	0.7	1.0	54.3	36.6	6.5

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375	99.3		
#4	99.1		
#10	98.4		
#40	97.4		
#60	77.7		
#100	54.6		
#200	43.1		
0.0481 mm.	15.5		
0.0129 mm.	10.8		
0.0092 mm.	9.0		
0.0066 mm.	7.3		
0.0033 mm.	5.7		
0.0014 mm.	4.0		

\* (no specification provided)

**Material Description**

silty sand

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= SM                      AASHTO (M 145)= A-4(0)

**Coefficients**

D<sub>90</sub>= 0.3328                      D<sub>85</sub>= 0.2932                      D<sub>60</sub>= 0.1751  
D<sub>50</sub>= 0.0997                      D<sub>30</sub>= 0.0602                      D<sub>15</sub>= 0.0396  
D<sub>10</sub>= 0.0111                      C<sub>u</sub>= 15.78                      C<sub>c</sub>= 1.87

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

Date Received: 4/25/2022                      Date Tested: 5/5/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: BNSF-SG02-041922-0-10  
Sample Number: S2204331-003A

Date Sampled: 4/19/2022

**Pace Analytical Services, Inc.**  
**Sheridan, Wyoming**

Client: Pace Analytical - Minneapolis  
Project: 10605435 3593500 WISHRAM RI

Project No: S2204331

Figure





**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 43.1

Weight of hydrometer sample =50.17

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	24.5	18.0	0.0137	24.5	12.3	0.0481	15.5
15.00	19.5	19.0	12.5	0.0137	19.0	13.2	0.0129	10.8
30.00	19.5	17.0	10.5	0.0137	17.0	13.5	0.0092	9.0
60.00	19.5	15.0	8.5	0.0137	15.0	13.8	0.0066	7.3
240.00	20.0	13.0	6.6	0.0136	13.0	14.2	0.0033	5.7
1440.00	20.0	11.0	4.6	0.0136	11.0	14.5	0.0014	4.0

**Fractional Components**

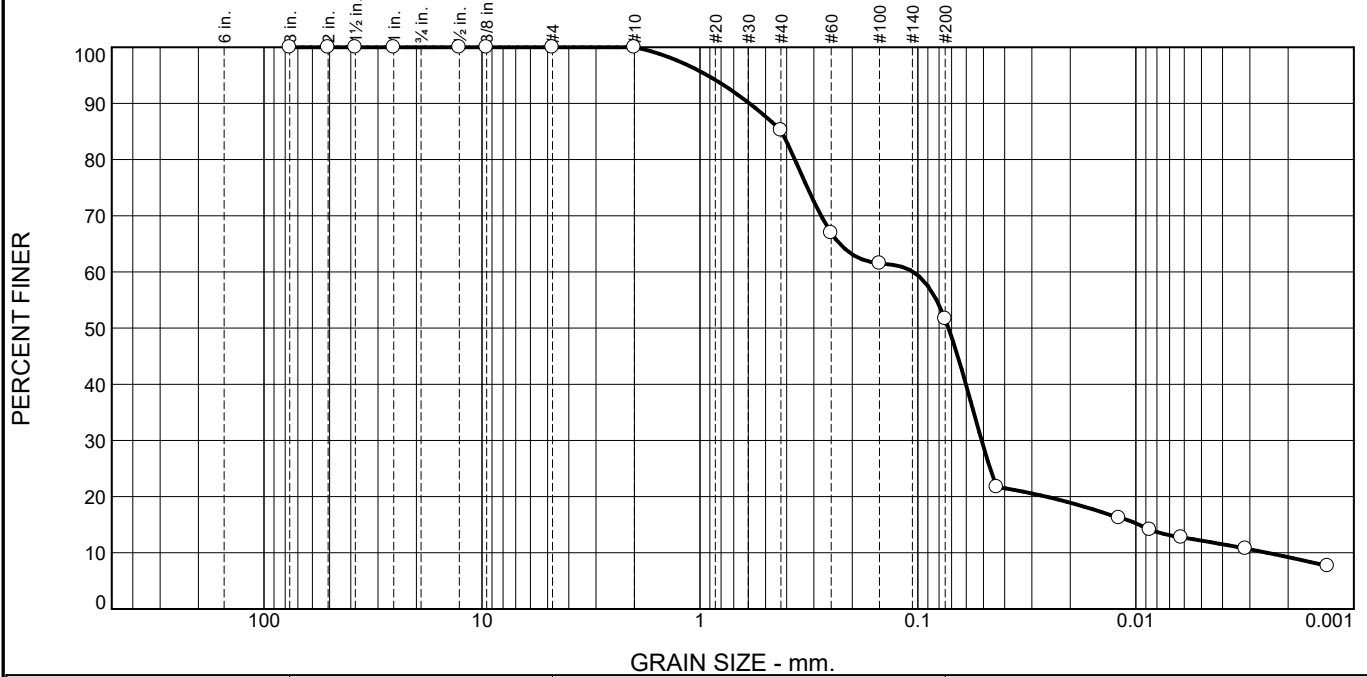
Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.9	0.9	0.7	1.0	54.3	56.0	36.6	6.5	43.1

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0023	0.0111	0.0396	0.0519	0.0602	0.0705	0.0997	0.1751	0.2623	0.2932	0.3328	0.3881

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.67	15.78	1.87

Pace Analytical Services, Inc.

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	14.8	33.5	39.5	12.2

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375	100.0		
#4	100.0		
#10	100.0		
#40	85.2		
#60	67.0		
#100	61.5		
#200	51.7		
0.0436 mm.	21.7		
0.0120 mm.	16.2		
0.0086 mm.	14.1		
0.0062 mm.	12.8		
0.0031 mm.	10.8		
0.0013 mm.	7.7		

\* (no specification provided)

**Material Description**

sandy silt

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= ML                      AASHTO (M 145)= A-4(0)

**Coefficients**

D<sub>90</sub>= 0.5928                      D<sub>85</sub>= 0.4221                      D<sub>60</sub>= 0.1050  
D<sub>50</sub>= 0.0723                      D<sub>30</sub>= 0.0510                      D<sub>15</sub>= 0.0097  
D<sub>10</sub>= 0.0025                      C<sub>u</sub>= 42.06                      C<sub>c</sub>= 9.93

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

---

Date Received: \_\_\_\_\_ Date Tested: 5/5/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: LCS Sample Number: LCS	Date Sampled:
<b>Pace Analytical Services, Inc.</b>  <b>Sheridan, Wyoming</b>	Client: Project:  Project No:
	Figure

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/5/2022

**Location:** LCS

**Sample Number:** LCS

**Material Description:** sandy silt

**PL:** NP                      **LL:** NV

**USCS Classification:** ML

**AASHTO Classification:** A-4(0)

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5/5/2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
75.00	0.00	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1.5"	0.00	0.00	100.0
		1"	0.00	0.00	100.0
		0.5"	0.00	0.00	100.0
		0.375	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#10	0.00	0.00	100.0
		#40	11.08	0.00	85.2
		#60	13.70	0.00	67.0
75.00	0.00	#100	4.08	0.00	61.5
		#200	7.40	0.00	51.7

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 51.7

Weight of hydrometer sample = 75.0

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	38.0	31.5	0.0137	38.0	10.1	0.0436	21.7
15.00	19.5	30.0	23.5	0.0137	30.0	11.4	0.0120	16.2
30.00	19.5	27.0	20.5	0.0137	27.0	11.9	0.0086	14.1
60.00	19.5	25.0	18.5	0.0137	25.0	12.2	0.0062	12.8
240.00	20.0	22.0	15.6	0.0136	22.0	12.7	0.0031	10.8
1440.00	20.0	17.5	11.1	0.0136	17.5	13.4	0.0013	7.7

Pace Analytical Services, Inc.

**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	14.8	33.5	48.3	39.5	12.2	51.7

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
	0.0025	0.0097	0.0258	0.0510	0.0602	0.0723	0.1050	0.3669	0.4221	0.5928	0.9236

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.79	42.06	9.93

Pace Analytical Services, Inc.

# Internal Transfer Chain of Custody



Samples Pre-Logged into eCOC.

State Of Origin: WA  
 Cert. Needed:  Yes  No

Owner Received Date: 4/21/2022 Results Requested By: 5/12/2022



Kongmeng Vang  
 Pace Analytical Minnesota  
 1700 Elm Street  
 Minneapolis, MN 55414  
 Phone (612)607-1700

Pace Analytical Sheridan WY  
 1673 Terra Avenue  
 Sheridan, WY 82801  
 Phone (307) 672-8945

Report To: Submitted To Requested Analysis

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved	Preserved Containers	ASTM D6913/ASTM 7928 Grain Size	Hydrometer	LAB USE ONLY
1	BNSF-SC01-041922-0-10	PS	4/19/2022 12:00	10605435001	Solid	1		X		S220431-001
2	FD01-041922-0-10	PS	4/19/2022 12:15	10605435002	Solid	1		X		002
3	BNSF-SG02-041922-0-10	PS	4/19/2022 13:35	10605435003	Solid	1		X		003
4										
5										

Transfers	Released By	Date/Time	Received By	Date/Time	Received on Ice	Samples Intact
1	CSM/pace	4-22-2022 14:50	CUSTODIAN	4/25/22		ID40A
2						
3						

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

LC5 = 25g ASTM grade sand + 50g lab qc soil

Sieve/Hydrometer

3/8" .51

Sample #	Initial Wt (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)
5-2-22	141.50	146.89	70.25					
Sieve #	Retained (g)	Retained (g)	Retained (g)	Retained (g)	Retained (g)	Retained (g)	Retained (g)	Retained (g)
4	.42	0	.15					
10	.11	.17	.49					
40	.42	.30	.50					
60	1.38	1.37	10.05					
100	16.94	16.83	11.77					
200	40.50	41.43	5.86					
Sample Wt	71.45	71.50	50.17					
Start Time	11:02	11:04	11:06					
Minutes	13.5	13	24.5					
1	13.5	13	19.5					
15	9.5	9.5	19					
30	9	9	17					
60	8.5	8.5	15					
240	8	8	13					
1440	7	7	11					

③ ④ ③

H/drometer No. 32982  
 Hydrometer No. 05169100

- 1 Sod. Hex / Sod. carb. see solution prep. log copy
- 2 No. 10 Sieve (2.00 mm) W.S. Tyler Incorporated
- 3 Amerex Instruments Inc Gyromax 818 orbital shaker  
SN: A114 1010 501-40
- 4 No. 200 sieve Fisher Brand SN: 211912174
- 5 VWR Scientific Inc convection oven
- 6 Geosystem Soils Test Software version 5
- 7 Ro-Tap RX-29 SN: 16763
8. No 4 sieve soil test Inc. 4.75 mm
- 9 3/8" sieve soil test, Inc. 9.5 mm
- 10 1/2" sieve Gilson Company 16.0 mm
11. Hydrometer: Fisher Brand / ERTCO no. 32982  
ASTM 152 H
12. Thermometer: Fisher Brand / ERTCO SN: 05169100



Solution Preparation Log

Initials	Date	Solution	Chemical	Preparation			pH	Solution Lot #
				Lot #	Amount	DI Volume		
SH	Prep: 4-6-22 Expire: 10-6-22	CEC	Ammonium Acetate	203214	711g	10L	7.30	NH4Acet 040622
CH	Prep: 4/10/22 Expire: 10/10/22	0.1 HCl	HCl	1820941	144.2ml 110.20ml	14L	-	0.1HCl-041022
SH	Prep: 4-11-22 Expire: 10-11-22	CEC	Sodium Acetate	201280	272g	2L	8.45	NACE 041122
CH	Prep: 4-12-22 Expire: 10-12-22	IM KCl	KCl	10227405	260.75g	3.5L	-	IMKCl-041222
SH	Prep: 4-13-22 Expire: 10-13-22	MT	Sodium carb. Sodium Hex	40423850 40423850	198.50 892.50	25L	-	MA041322
CH	Prep: 4/13/22 Expire: 10/13/22	IMKCl	KCl	10232819	260.75	3.5L	-	IMKCl-041322
CH	Prep: 4/14/22 Expire: 10/14/22	ACCA / CEC	Ammon. Acetate	203214	711.00g	10L	7.07	NH4Ac-041422
CH	Prep: 4/15/22 Expire: 10/15/22	MIXED acid AS	HCl Sulfuric	195225 191072	17mls 141mls	2L	-	MIXED acid 041522



# Analytical Data Package

**Prepared by:**

**Pace Analytical Services**

**Pace Project No.: 10605435**



## Organic

### GC-FID DRO

Surrogate Recovery Summary (Form 2) .....	1
Laboratory Control Spike/Laboratory Control Spike Duplicate Summary (Form 3) .....	2
Matrix Spike/Matrix Spike Duplicate Summary (Form 3) .....	3
Method Blank Association Summary (Form 4) .....	5
Analytical Results with Raw Data (Form 1) .....	6
Initial Calibration Summary (Form 6) .....	36
Raw Data for Initial Calibration Standards .....	39
Continuing Calibration Summary (Form 7) .....	201
Raw Data for Continuing Calibration Standards .....	208
Raw Data QC .....	306
Preparation Logs Raw Data .....	332
Instrument Run Log .....	334

## InOrganic

### ICPMS

Analytical Results (Form 1-IN) .....	338
Initial & Continuing Calibration Verification (Form 2A-IN) .....	341
CRDL Check Standard (Form 2B-IN) .....	345
Blanks (Form 3-IN) .....	348
Interference Check Sample (Form 4B-IN) .....	351
Matrix Spike Recovery (Form 5A-IN) .....	353
Post Digestion Spike Recovery (Form 5B-IN) .....	355
Duplicates (Form 6-IN) .....	356
Laboratory Control Spike (Form 7-IN) .....	357
Serial Dilution (Form 8-IN) .....	358
Method Detection Limits (Form 9-IN) .....	359
Linear Ranges (Form 11-IN) .....	361
Preparation Log (Form 12-IN) .....	362
Analysis Run Log (Form 13-IN) .....	363
Tune (Form 14-IN) .....	365
Internal Standard Relative Intensity Summary (Form 15-IN) .....	369
ICPMS Raw Data (Multiple Schedules/Sample) .....	371
Preparation Logs Raw Data .....	753

### Mercury

Analytical Results (Form 1-IN) .....	754
Initial & Continuing Calibration Verification (Form 2A-IN) .....	757
CRDL Check Standard (Form 2B-IN) .....	759
Blanks (Form 3-IN) .....	763
Matrix Spike Recovery (Form 5A-IN) .....	765
Duplicates (Form 6-IN) .....	767



Laboratory Control Spike (Form 7-IN) .....	768
Method Detection Limits (Form 9-IN) .....	769
Preparation Log (Form 12-IN) .....	771
Analysis Run Log (Form 13-IN) .....	772
Mercury Raw Data .....	773
Preparation Logs Raw Data .....	782
<b>Gravimetric</b>	
Analytical Results (Form 1-IN) .....	783
Duplicates (Form 6-IN) .....	786
Method Detection Limits (Form 9-IN) .....	787
Preparation Log (Form 12-IN) .....	788
Analysis Run Log (Form 13-IN) .....	789
Percent Moisture Determination Raw Data .....	790

GC-FID DRO - FORM II SVOA-1  
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Minnesota      SDG No.: 10605435      Contract: 3593500 WISHRAM RI

Instrument ID: 10GCSF

LAB SAMPLE ID	SAMPLE NAME	NTCS	OTER
4301503	4301503BLANK	93	94
4301504	4301504LCS	97	95
10605435001	BNSF-SG01-041922-0-10	97	103
10605435002	FD01-041922-0-10	76	100
10605435003	BNSF-SG02-041922-0-10	74	100

QC LIMITS

(50-150)

(50-150)

(NTCS) = n-Triacontane (S)

(OTER) = o-Terphenyl (S)

\* Values outside of QC Limits

GC-FID DRO - FORM III SVOA-1  
SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Minnesota

Lab Sample ID: 4301504LCS

Date Extracted: 04/22/2022

Date Analyzed (1): 04/26/2022

Instrument: 10GCSF

LCS Lot No: 358262

Lab File ID: 042622F.B\0426F0000026B.D

SDG No.: 10605435

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
Diesel Fuel Range	50.0	46.2	92	50-150
Motor Oil Range	50.0	48.2	96	50-150

Spike Recovery: 0 out of 2 outside limits.

GC-FID DRO - FORM III SVOA-1  
SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Minnesota

Matrix Spike - Sample No: 4301505MS

Date Extracted: 04/22/2022

Date Analyzed (1): 04/26/2022

Instrument: 10GCSF

Lab File ID: 042622F.B\0426F0000028B.D

Parent Sample ID: 10605529001

SDG No.: 10605435

COMPOUND	SPIKE ADDED (mg/kg)	SAMPLE CONCENTRATION (mg/kg)	MS CONCENTRATION (mg/kg)	MS %REC	QC LIMITS REC.
Diesel Fuel Range	49.3	305	356	104	50-150
Motor Oil Range	49.3	1030	789	-496	50-150

Spike Recovery: 1 out of 2 outside limits.

GC-FID DRO - FORM III SVOA-2  
SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 10GCSF Matrix Spike Duplicate - Sample No: 4301506MSD  
Lab File ID (2): 042622F.B\0426F0000029B.D Date Analyzed (2): 04/26/2022

COMPOUND	SPIKE ADDED (mg/kg)	MSD CONCENTRATION (mg/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Diesel Fuel Range	50.0	251J	-107		0-30	50-150
Motor Oil Range	50.0	775	-517	2	0-30	50-150

RPD: 0 out of 1 outside limits.

Spike Recovery: 2 out of 2 outside limits.



GC-FID DRO - FORM IV SVOA-1  
SEMI-VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

4301503BLANK

Lab Name: Pace Analytical - Minnesota SDG No.: 10605435 Contract: 3593500 WISHRAM RI  
Instrument ID: 10GCSF Matrix: Solid Lab Sample ID: 4301503  
Lab File ID: 042622F.B\0426F0000025B.D Date Analyzed: 04/26/2022 Time: 14:52

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
4301504LCS	4301504	042622F.B\0426F0000026B.	04/26/2022 15:02
BNSF-SG01-041922-0-10	10605435001	042722F.B\0427F0000017.D	04/27/2022 14:42
FD01-041922-0-10	10605435002	042722F.B\0427F0000018.D	04/27/2022 14:53
BNSF-SG02-041922-0-10	10605435003	042722F.B\0427F0000019.D	04/27/2022 15:04

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BNSF-SG01-041922-0-10

Lab Name: Pace Analytical - Minnesota Contract: 3593500 WISHRAM RI  
Date Received: 04/21/2022 08:50 Matrix: Solid SDG No.: 10605435  
Date Extracted: 04/22/2022 12:48 Lab Sample ID: 10605435001  
Date Analyzed: 04/27/2022 14:42 Lab File ID: 042722F.B\0427F0000017.D  
Initial wt/vol: 10.06 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: 33.8%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	25.4	
	Motor Oil Range	106	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000017.D  
 Lab Smp Id: 10605435001 Client Smp ID: BNSF-SG01-041922-0-  
 Inj Date : 27-APR-2022 14:42  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : 10605435001  
 Misc Info : 39195  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 28-Apr-2022 09:09 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 12  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10MNLABS0070

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.060	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	33.759	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
\$ 2	o-Terphenyl (S)					CAS #:
2.527	2.524	0.003	283277	51.2942	7.70	(M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.058	4.057	0.001	231564	48.5389	7.28	(M) BA
S 10	Motor Oil Range					CAS #:
3.471	- 5.370		2930823	705.862	106	(M) RNG
S 11	Motor Oil Range SG					CAS #:
3.471	- 5.370		2930823	705.862	106	(M) RNG
S 8	Diesel Fuel Range					CAS #:
1.200	- 3.470		1042132	169.170	25.4	(M) RNG
S 9	Diesel Fuel Range SG					CAS #:
1.200	- 3.470		1042132	169.170	25.4	(M) RNG

QC Flag Legend

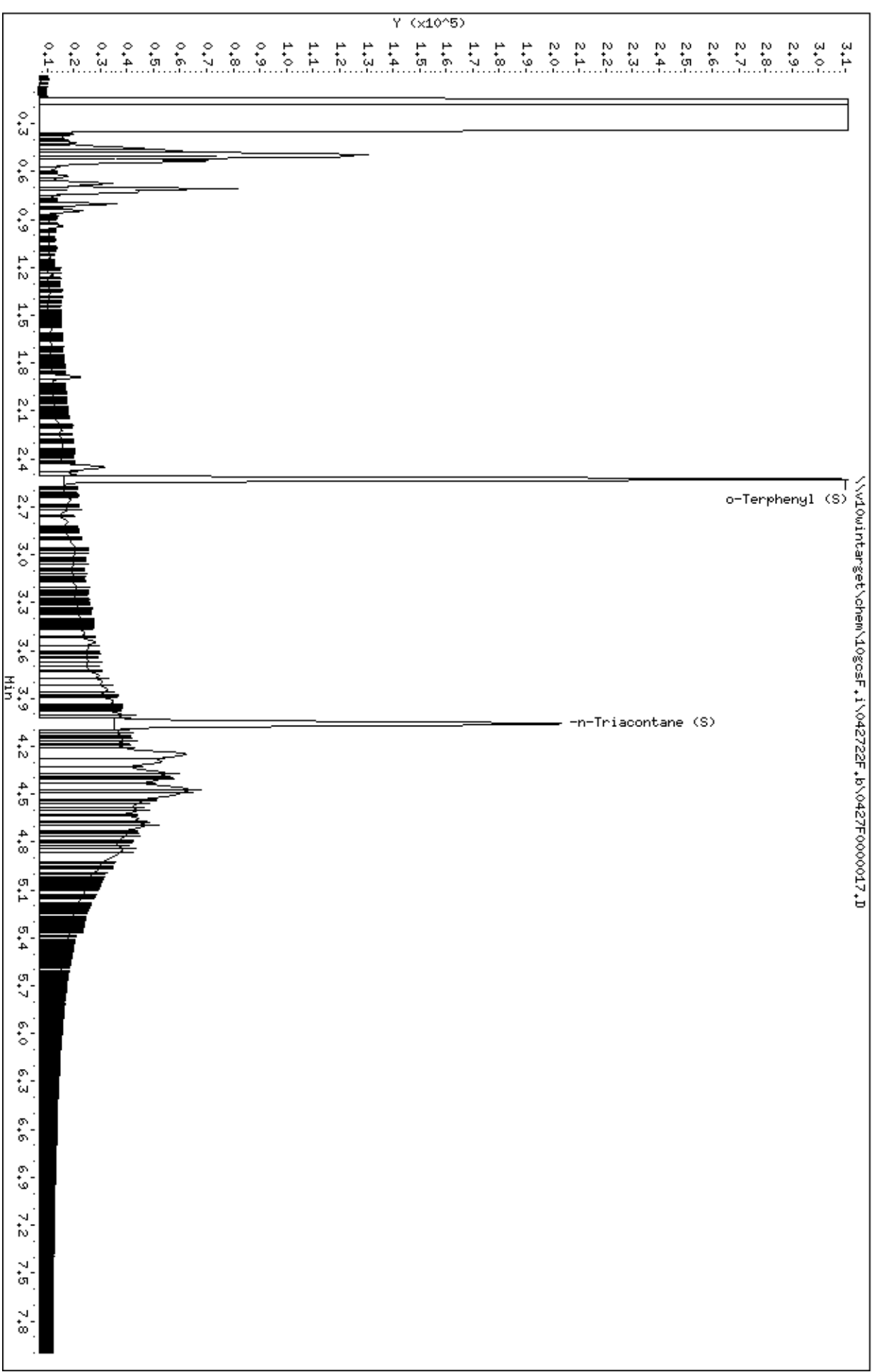
M - Compound response manually integrated.

Review Codes Legend

- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.

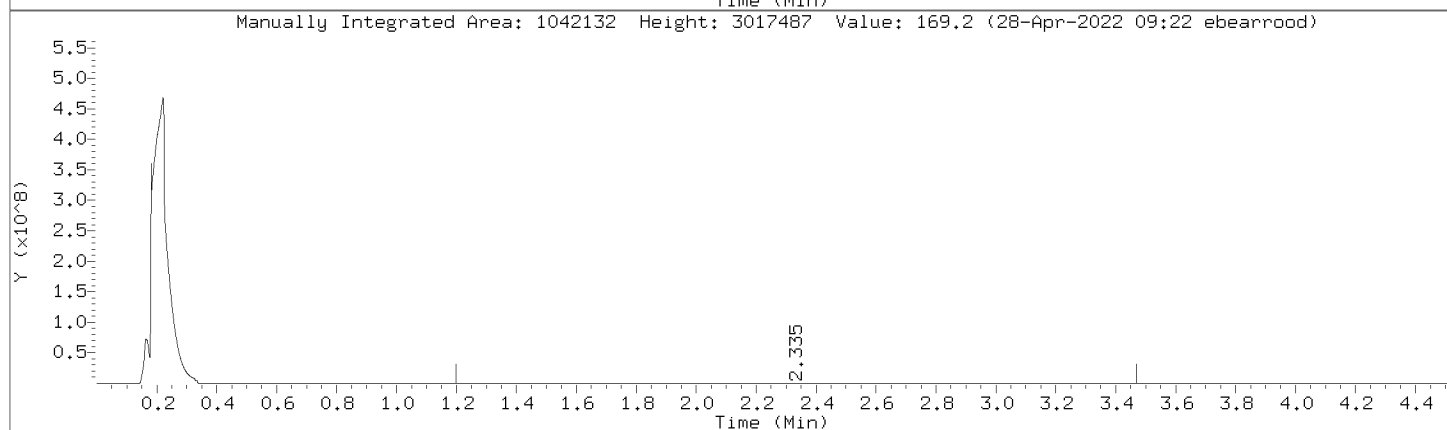
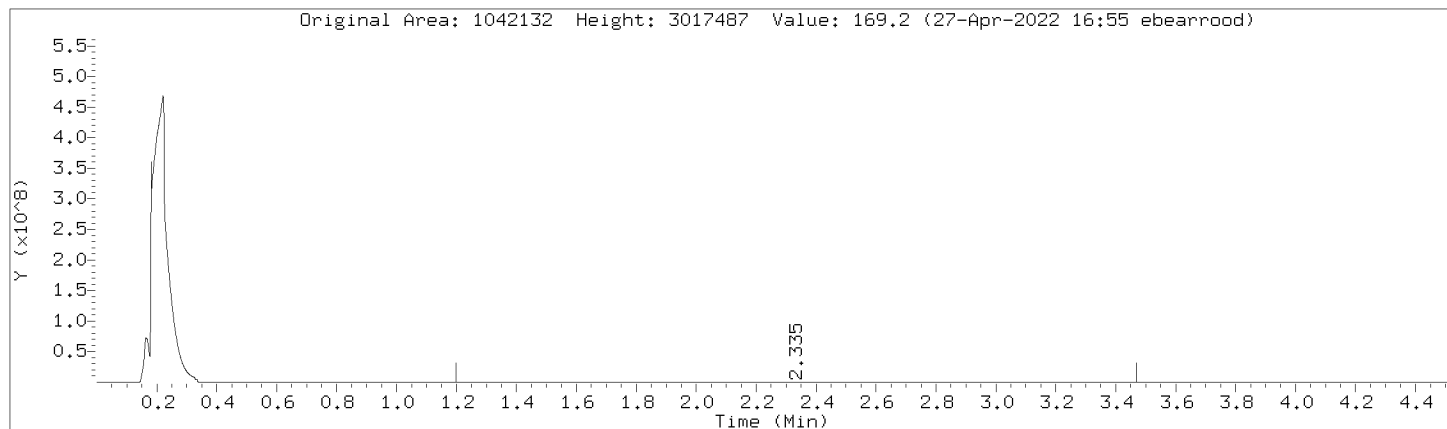
Data File: \\v10win\target\chem\10goscF.i\042722F.b\0427F0000017.D  
Date : 27-APR-2022 14:42  
Client ID: BNSF-SG01-041922-0-  
Sample Info: 10605435001  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21250010

Instrument: 10goscF.i  
Operator: EBS  
Column diameter: 0.32



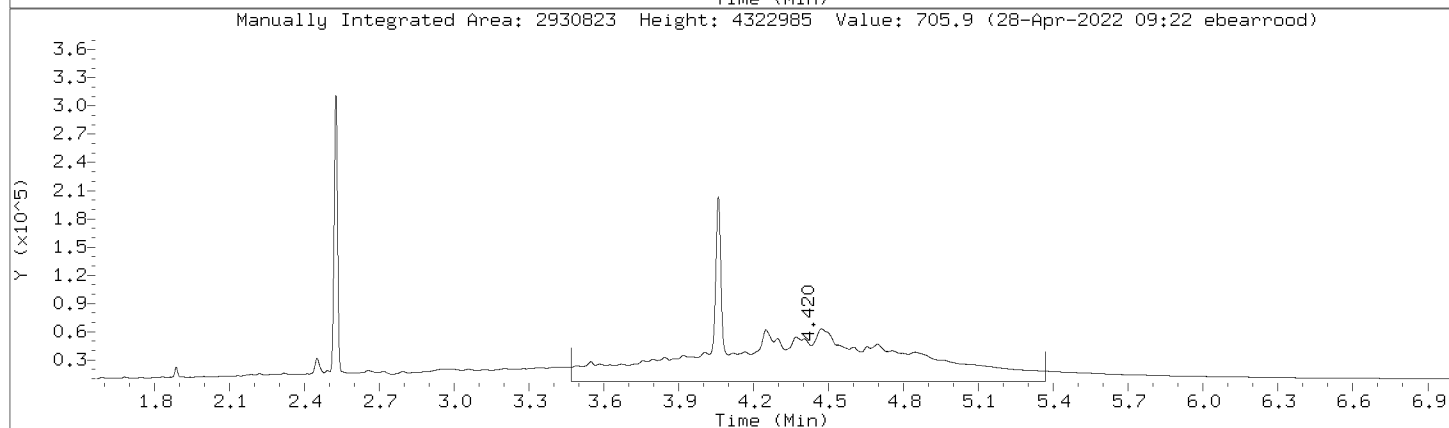
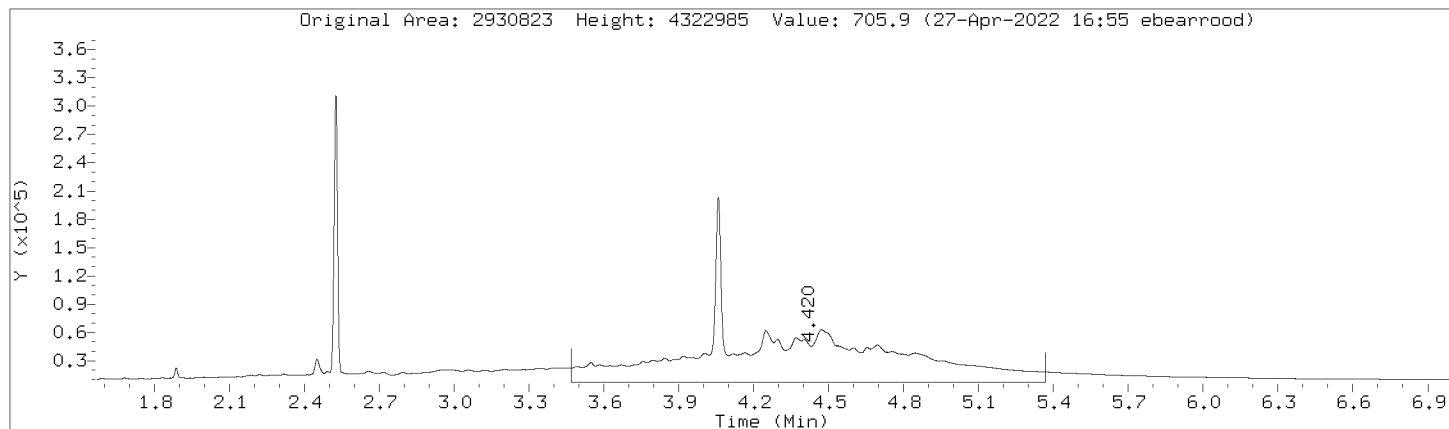
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Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: 10605435001

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



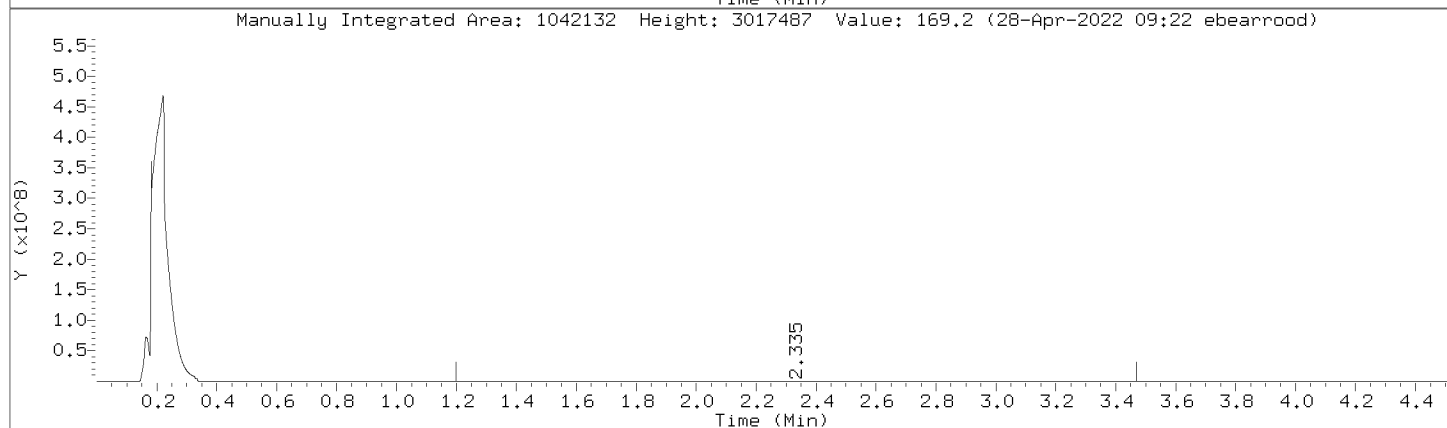
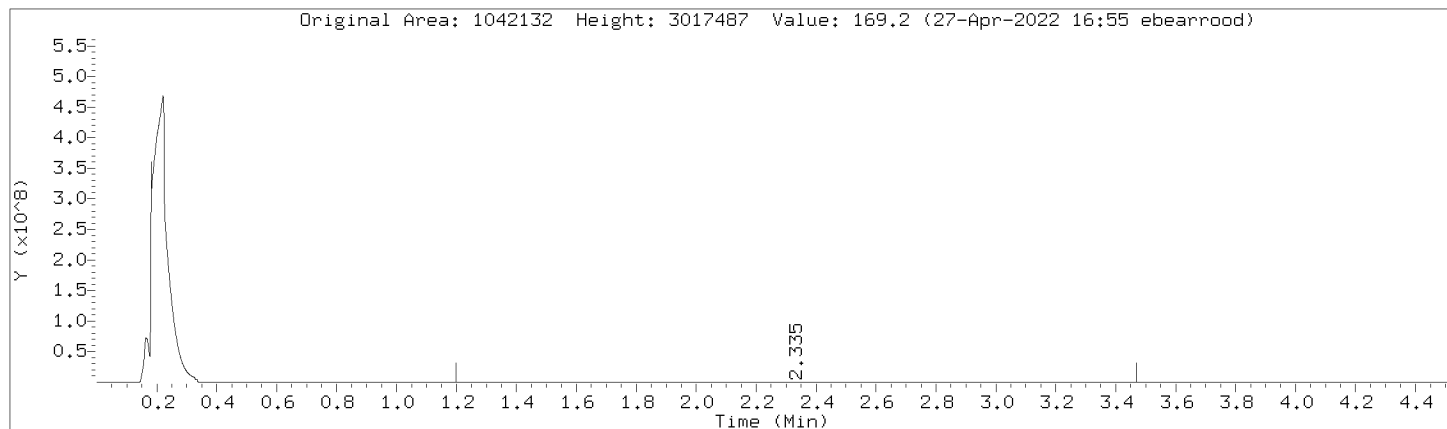
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Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: 10605435001

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: 10605435001

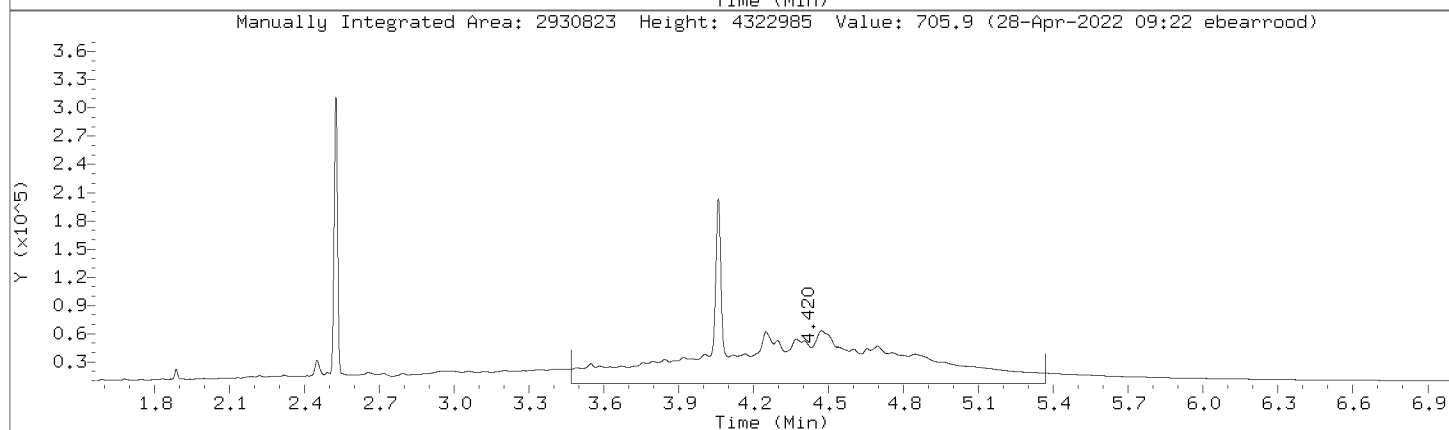
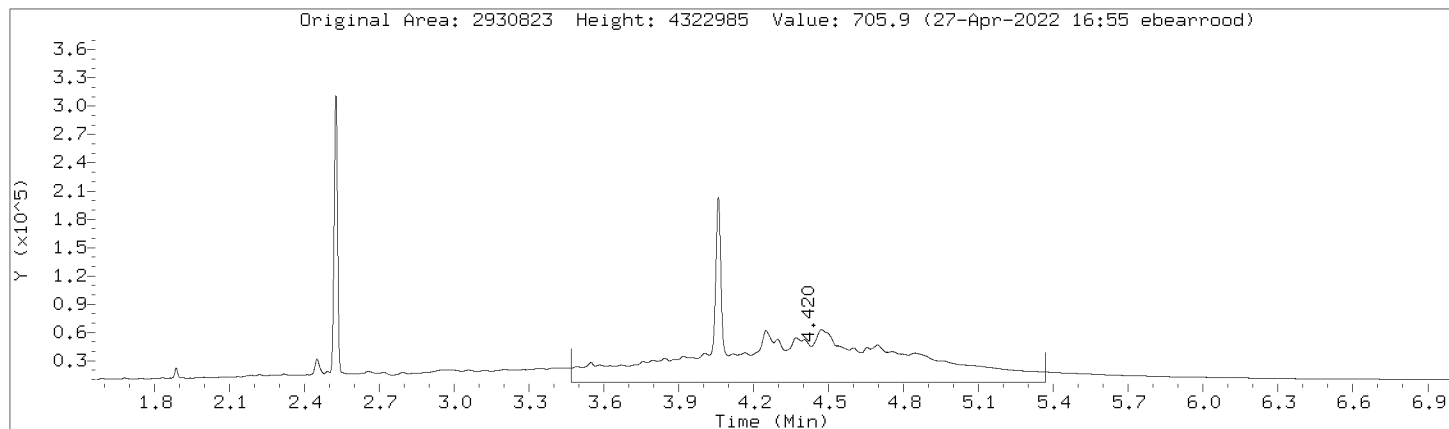
Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:





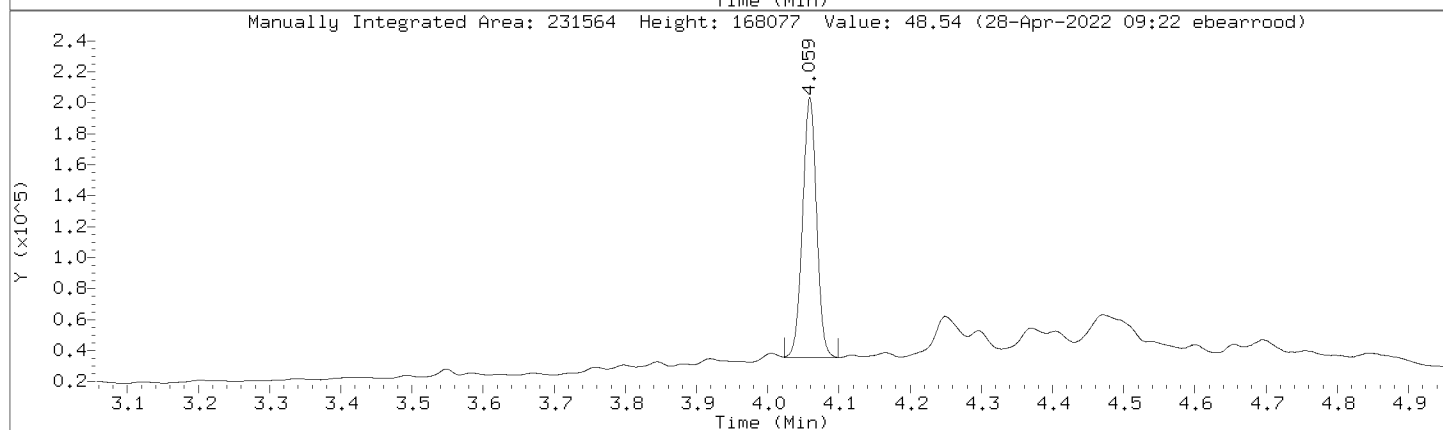
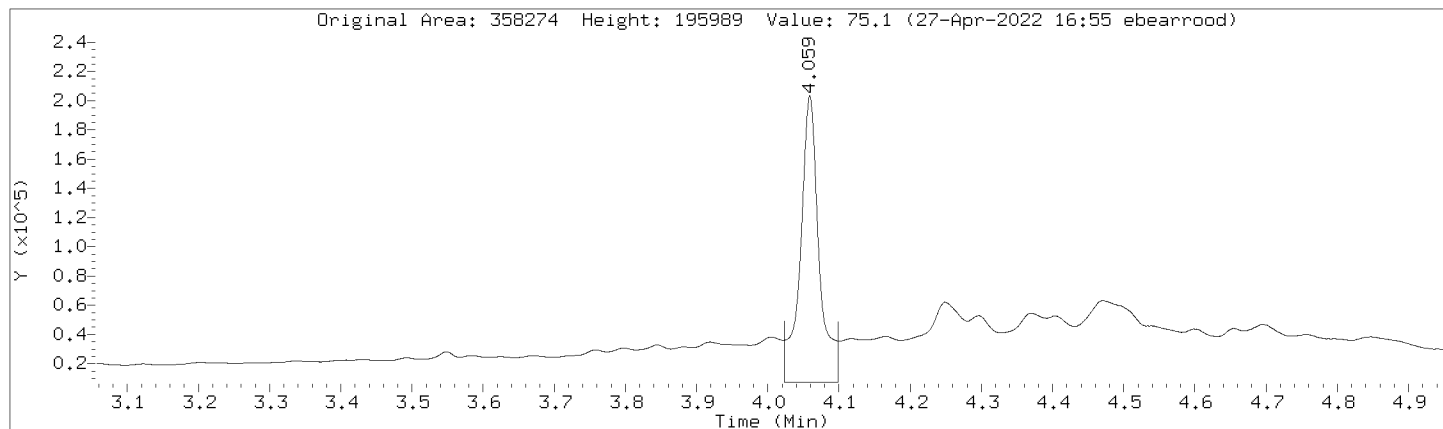
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Instrument: 10gcsF.i  
Lab Sample ID: 10605435001

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



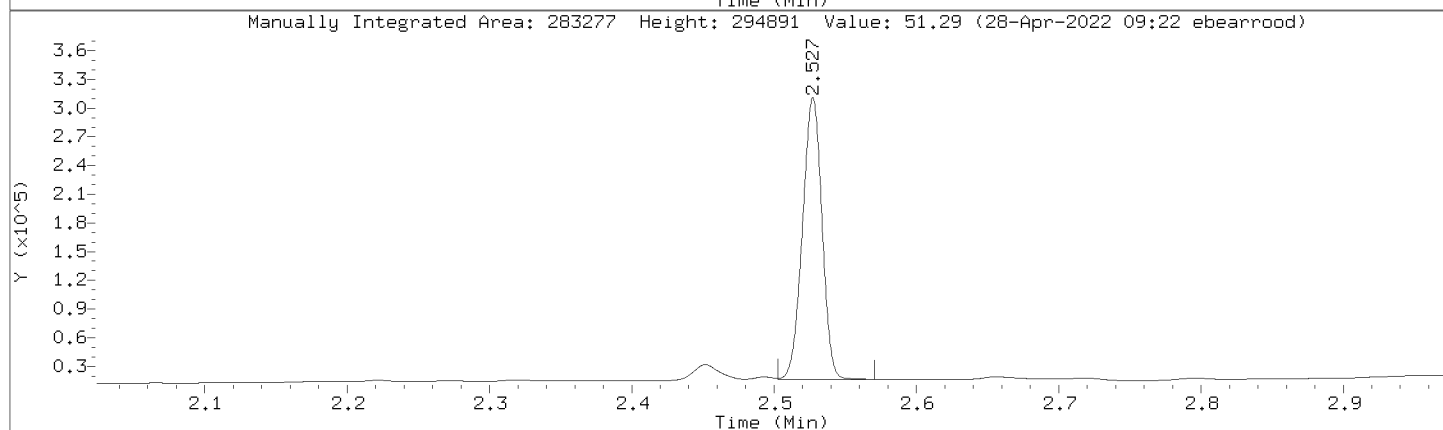
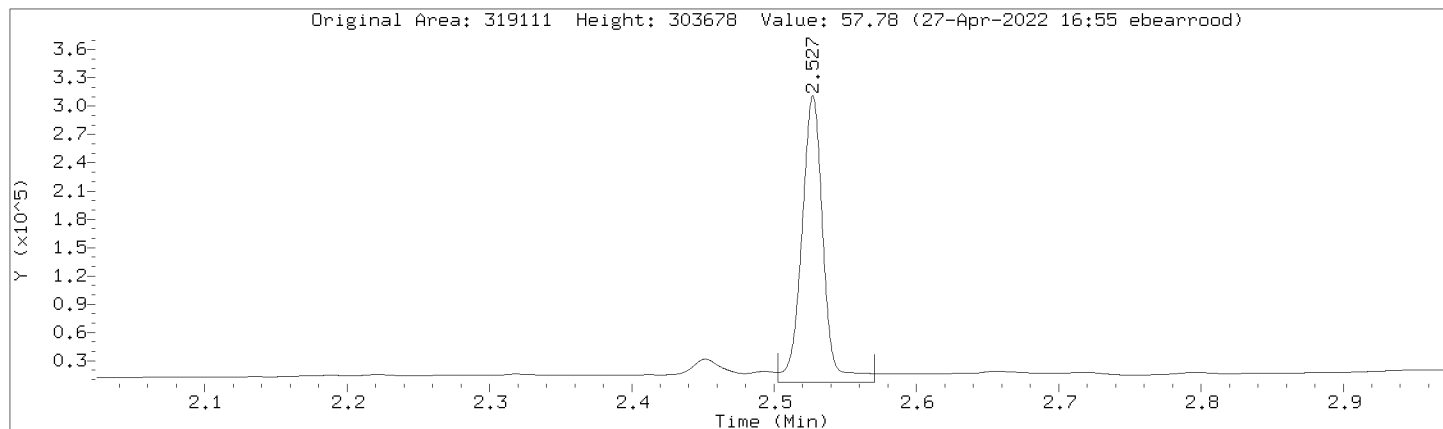
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Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: 10605435001

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000017.D  
 Injection Date: 27-APR-2022 14:42  
 Instrument: 10gcsF.i  
 Lab Sample ID: 10605435001

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	1042132	1042132
Motor Oil Range	2930823	2930823
Diesel Fuel Range SG	1042132	1042132
Motor Oil Range SG	2930823	2930823
n-Triacontane (S)	358274	231564
o-Terphenyl (S)	319111	283277

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

FD01-041922-0-10

Lab Name: Pace Analytical - Minnesota Contract: 3593500 WISHRAM RI  
Date Received: 04/21/2022 08:50 Matrix: Solid SDG No.: 10605435  
Date Extracted: 04/22/2022 12:48 Lab Sample ID: 10605435002  
Date Analyzed: 04/27/2022 14:53 Lab File ID: 042722F.B\0427F0000018.D  
Initial wt/vol: 10.05 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: 28.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	56.9	
	Motor Oil Range	167	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000018.D  
 Lab Smp Id: 10605435002 Client Smp ID: FD01-041922-0-10  
 Inj Date : 27-APR-2022 14:53  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : 10605435002  
 Misc Info : 39195  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 28-Apr-2022 09:09 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 13  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10MNLABS0070

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.050	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	28.893	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
\$ 2	o-Terphenyl (S)					CAS #:
2.526	2.524	0.002	276214	50.0153	7.00	(M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.059	4.057	0.002	180325	37.7985	5.29	(M) BA
S 10	Motor Oil Range					CAS #:
3.471	- 5.370		4872497	1192.71	167	(M) RNG
S 11	Motor Oil Range SG					CAS #:
3.471	- 5.370		4872497	1192.71	167	(M) RNG
S 8	Diesel Fuel Range					CAS #:
1.200	- 3.470		2097382	406.309	56.8	(M) RNG
S 9	Diesel Fuel Range SG					CAS #:
1.200	- 3.470		2097382	406.309	56.8	(M) RNG

QC Flag Legend

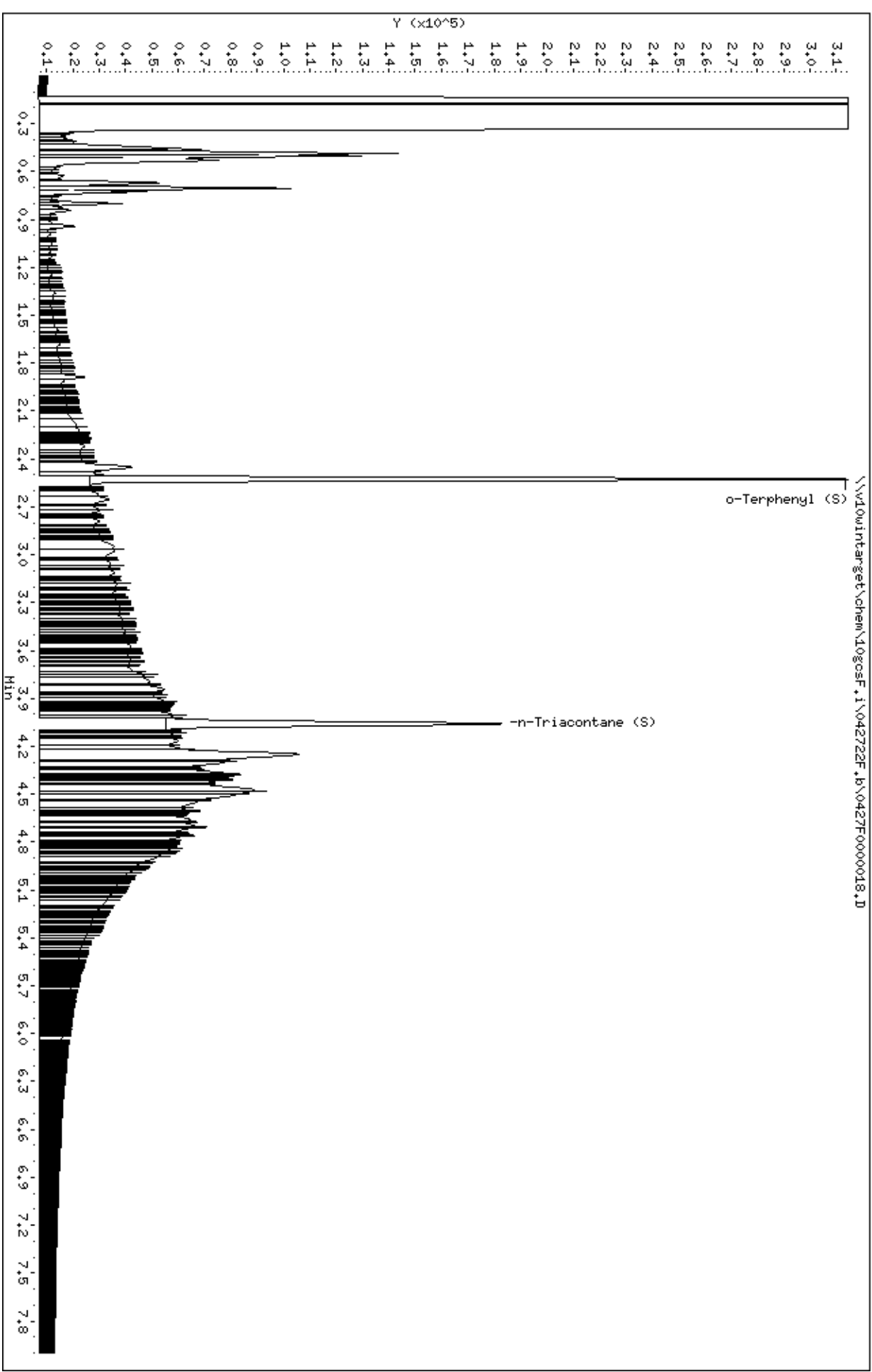
M - Compound response manually integrated.

Review Codes Legend

- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.

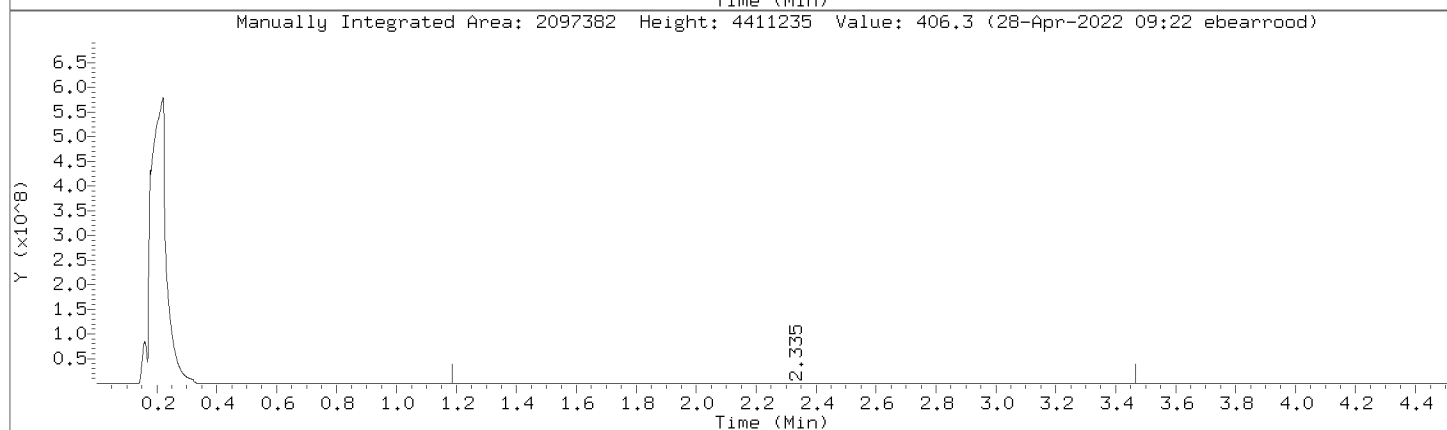
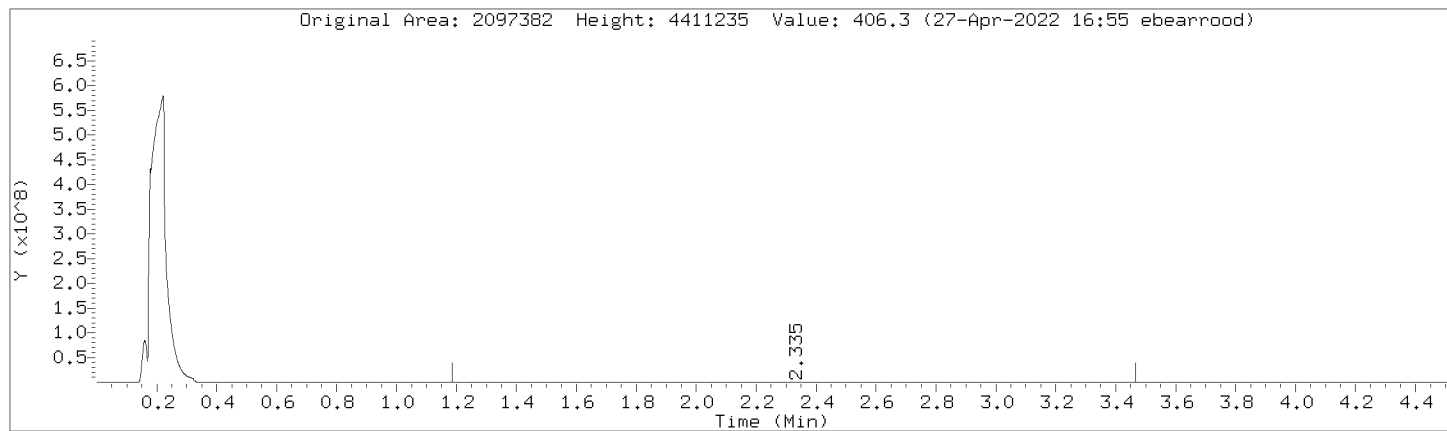
Data File: \\v10win\target\chem\10goscF.i\042722F.b\0427F0000018.D  
Date : 27-APR-2022 14:53  
Client ID: FD01-041922-0-10  
Sample Info: 10605435002  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21250010

Instrument: 10goscF.i  
Operator: EB3  
Column diameter: 0.32



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000018.D  
Injection Date: 27-APR-2022 14:53  
Instrument: 10gcsF.i  
Lab Sample ID: 10605435002

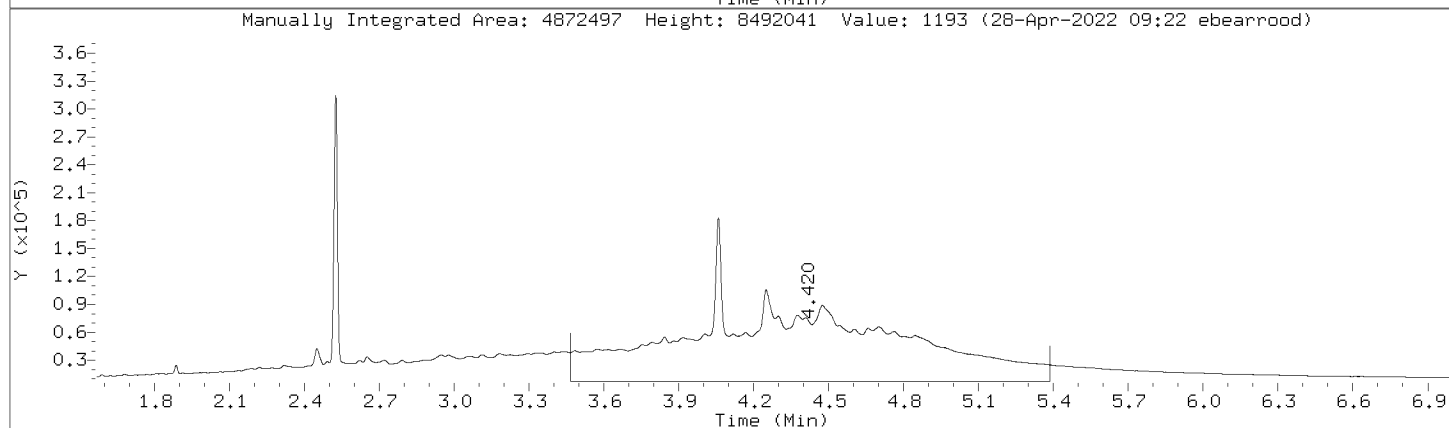
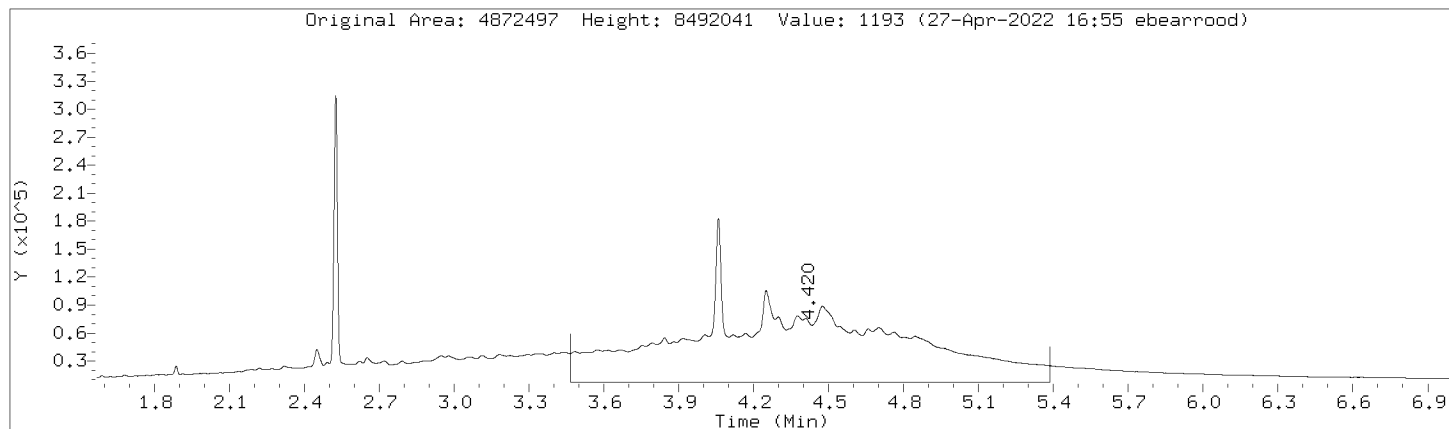
Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:





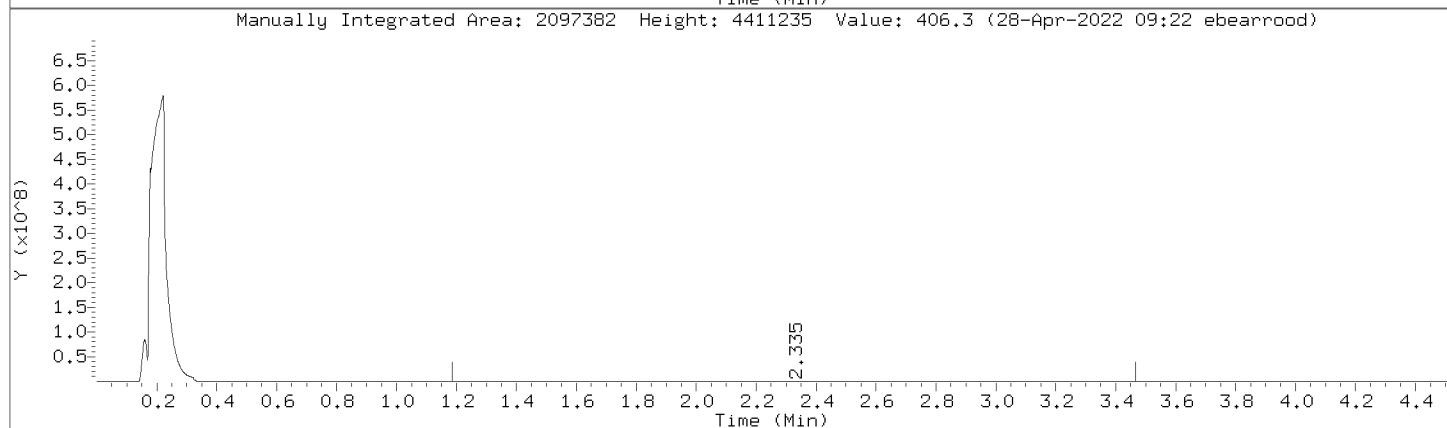
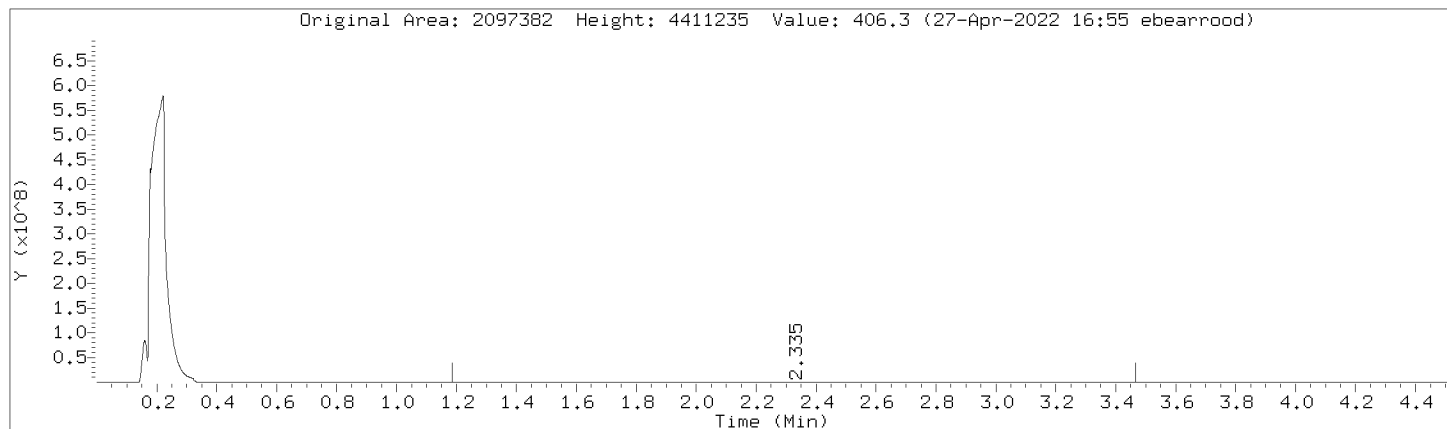
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Instrument: 10gcsF.i  
Lab Sample ID: 10605435002

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



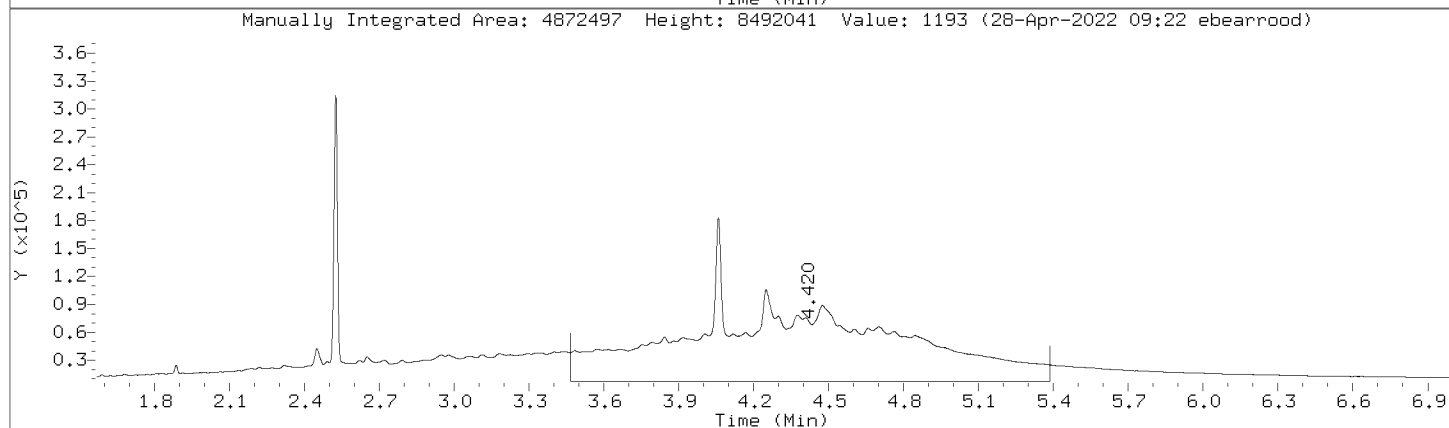
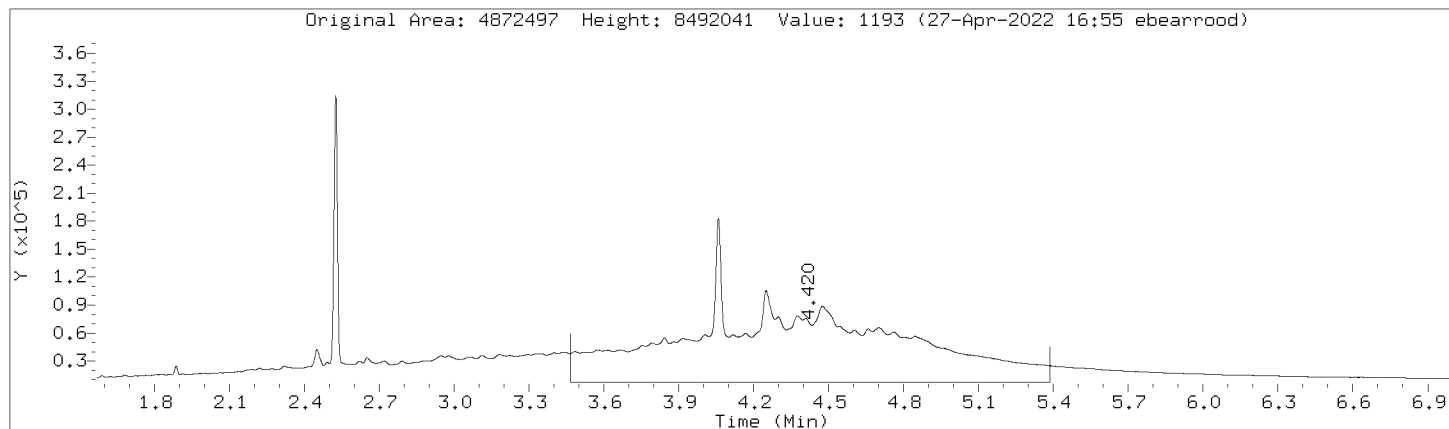
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Injection Date: 27-APR-2022 14:53  
Instrument: 10gcsF.i  
Lab Sample ID: 10605435002

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



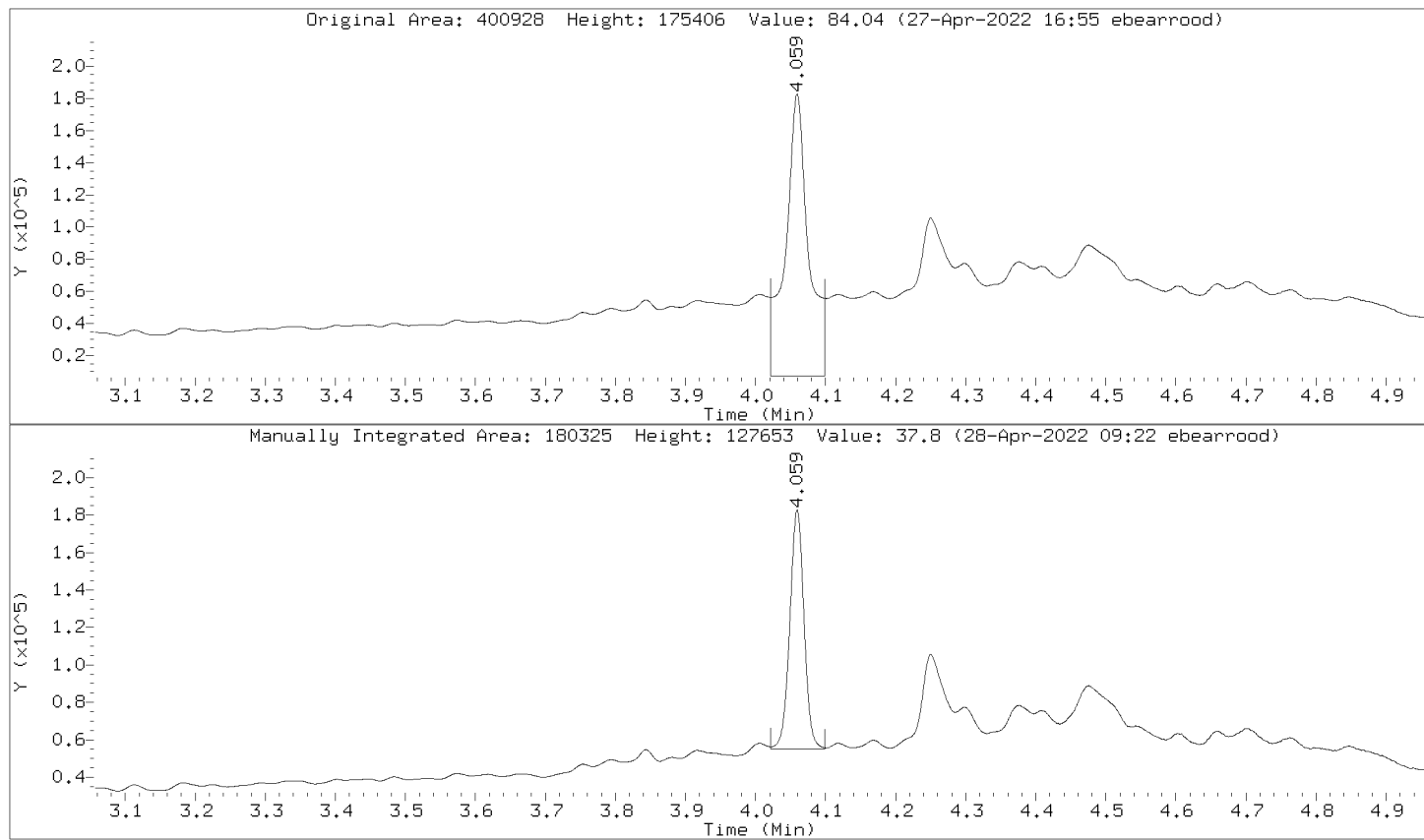
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Injection Date: 27-APR-2022 14:53  
Instrument: 10gcsF.i  
Lab Sample ID: 10605435002

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



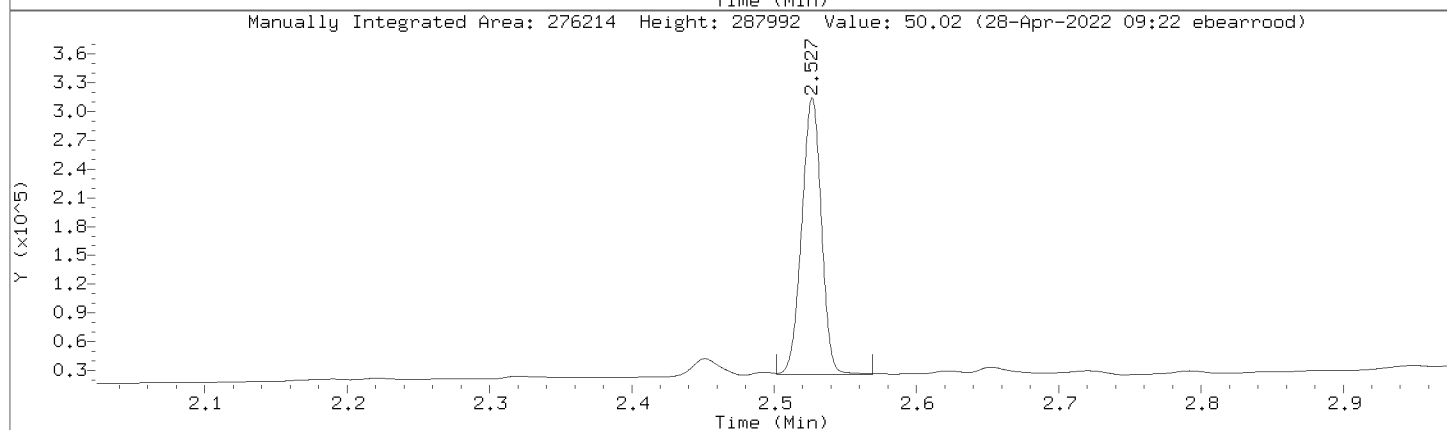
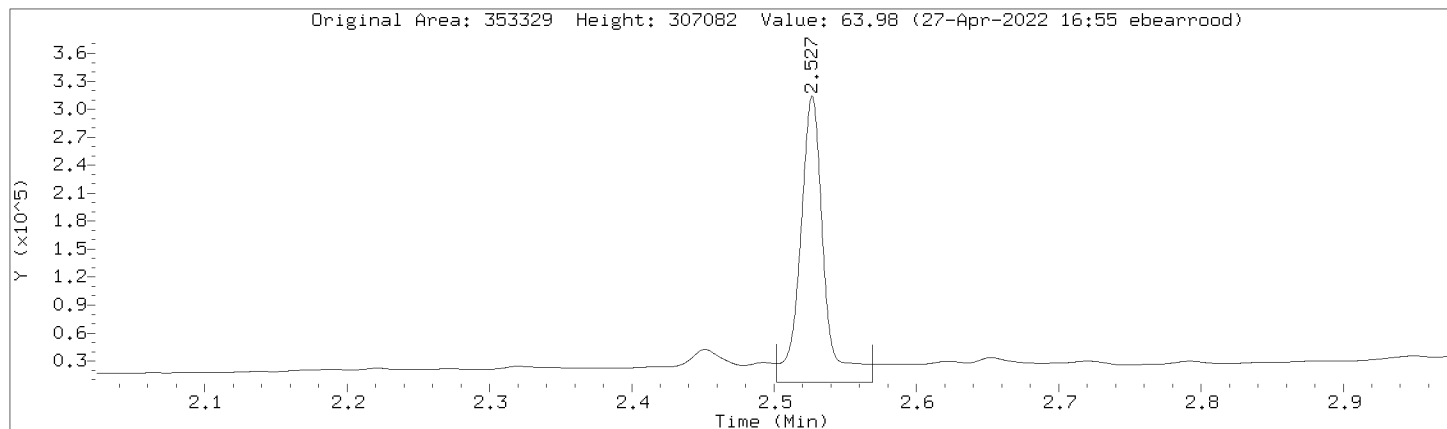
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Injection Date: 27-APR-2022 14:53  
Instrument: 10gcsF.i  
Lab Sample ID: 10605435002

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000018.D  
 Injection Date: 27-APR-2022 14:53  
 Instrument: 10gcsF.i  
 Lab Sample ID: 10605435002

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	2097382	2097382
Motor Oil Range	4872497	4872497
Diesel Fuel Range SG	2097382	2097382
Motor Oil Range SG	4872497	4872497
n-Triacontane (S)	400928	180325
o-Terphenyl (S)	353329	276214

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BNSF-SG02-041922-0-10

Lab Name: Pace Analytical - Minnesota Contract: 3593500 WISHRAM RI  
Date Received: 04/21/2022 08:50 Matrix: Solid SDG No.: 10605435  
Date Extracted: 04/22/2022 12:48 Lab Sample ID: 10605435003  
Date Analyzed: 04/27/2022 15:04 Lab File ID: 042722F.B\0427F0000019.D  
Initial wt/vol: 10.09 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: 53.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	53.1	
	Motor Oil Range	291	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000019.D  
 Lab Smp Id: 10605435003 Client Smp ID: BNSF-SG02-041922-0-  
 Inj Date : 27-APR-2022 15:04  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : 10605435003  
 Misc Info : 39195  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 28-Apr-2022 09:09 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 14  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10MNLABS0070

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.090	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	53.858	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
\$ 2	o-Terphenyl (S)					CAS #:
2.526	2.524	0.002	277262	50.2051	10.8	(M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.061	4.057	0.004	175558	36.7993	7.90	(M) BA
S 10	Motor Oil Range					CAS #:
3.471	- 5.370		5510499	1352.68	290	(M) RNG
S 11	Motor Oil Range SG					CAS #:
3.471	- 5.370		5510499	1352.68	290	(M) RNG
S 8	Diesel Fuel Range					CAS #:
1.200	- 3.470		1389219	247.169	53.1	(M) RNG
S 9	Diesel Fuel Range SG					CAS #:
1.200	- 3.470		1389219	247.169	53.1	(M) RNG

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

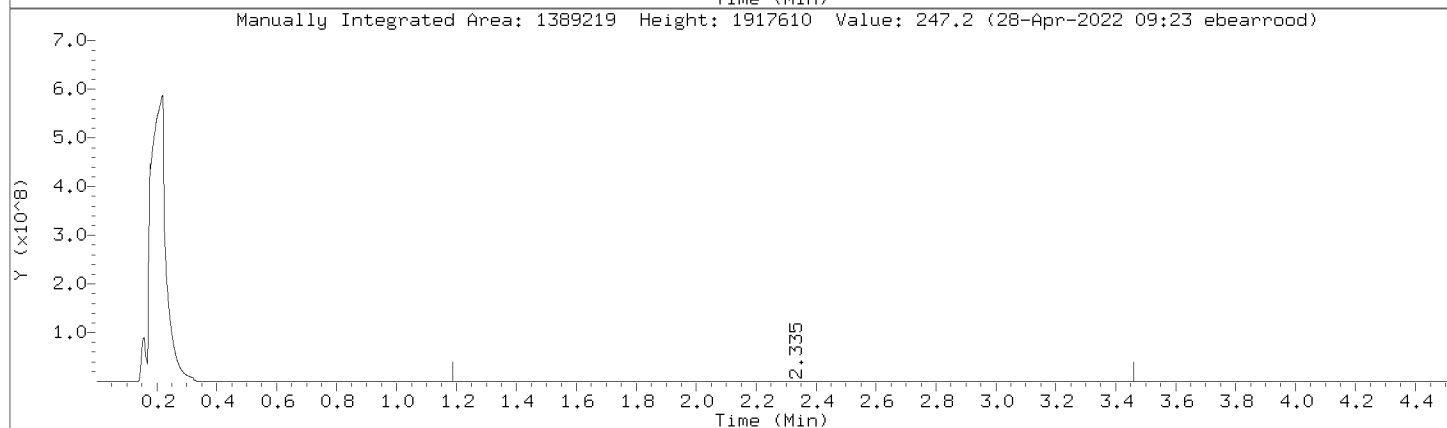
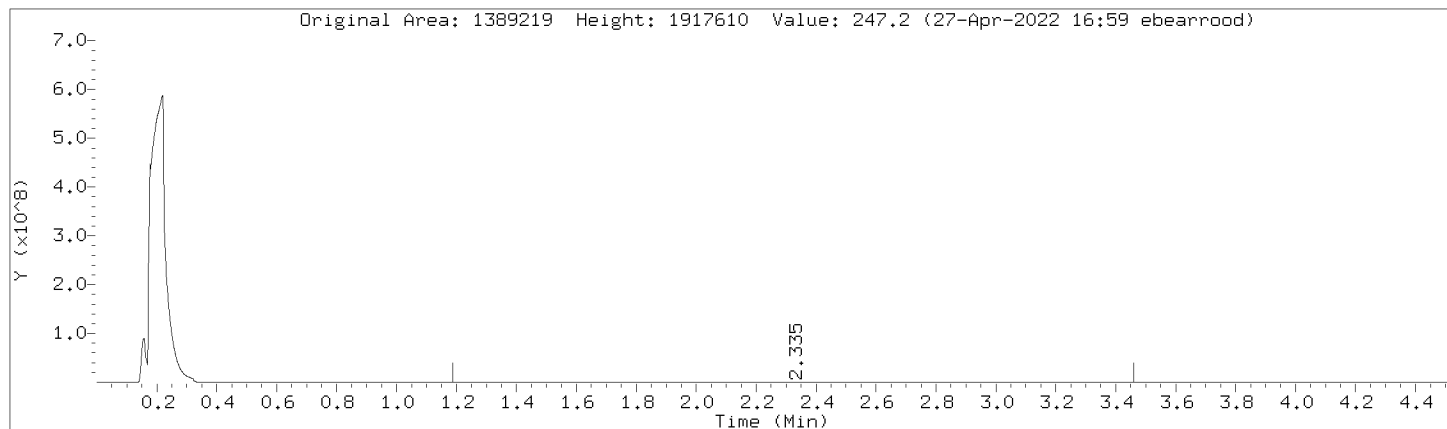
- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.





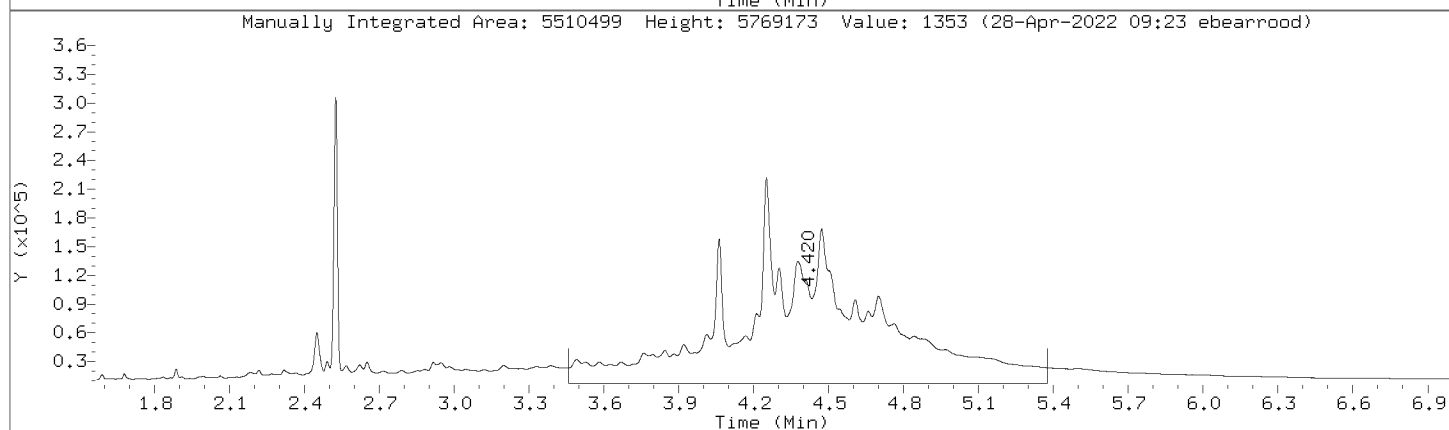
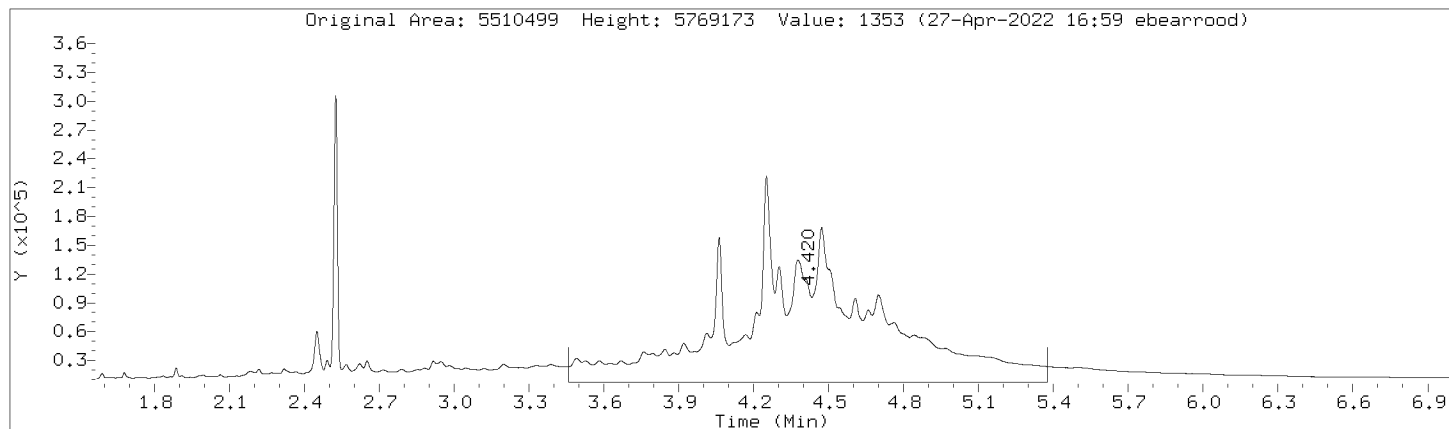
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Instrument: 10gcsF.i  
Lab Sample ID: 10605435003

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



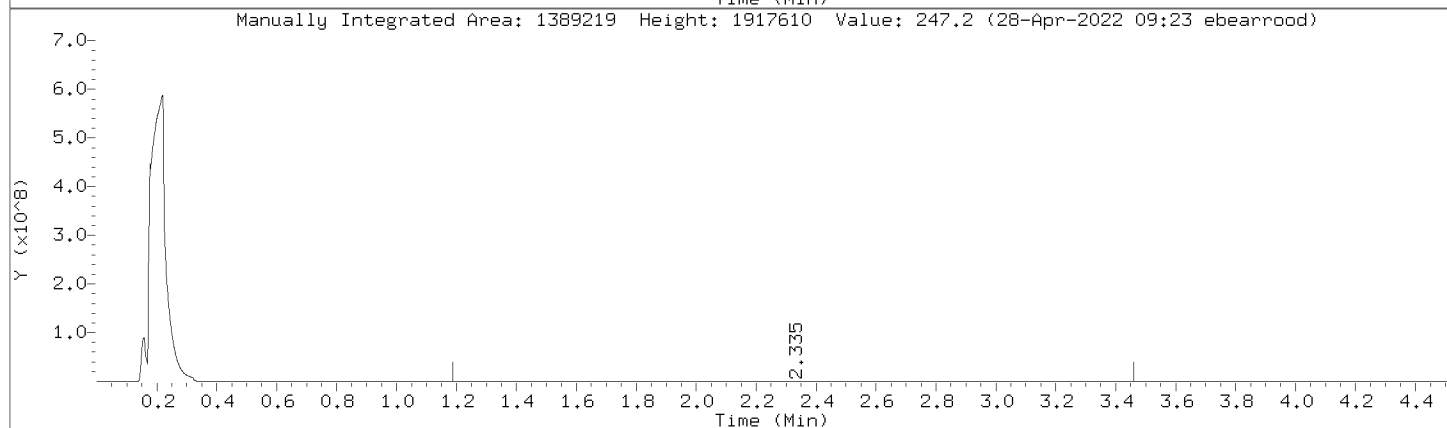
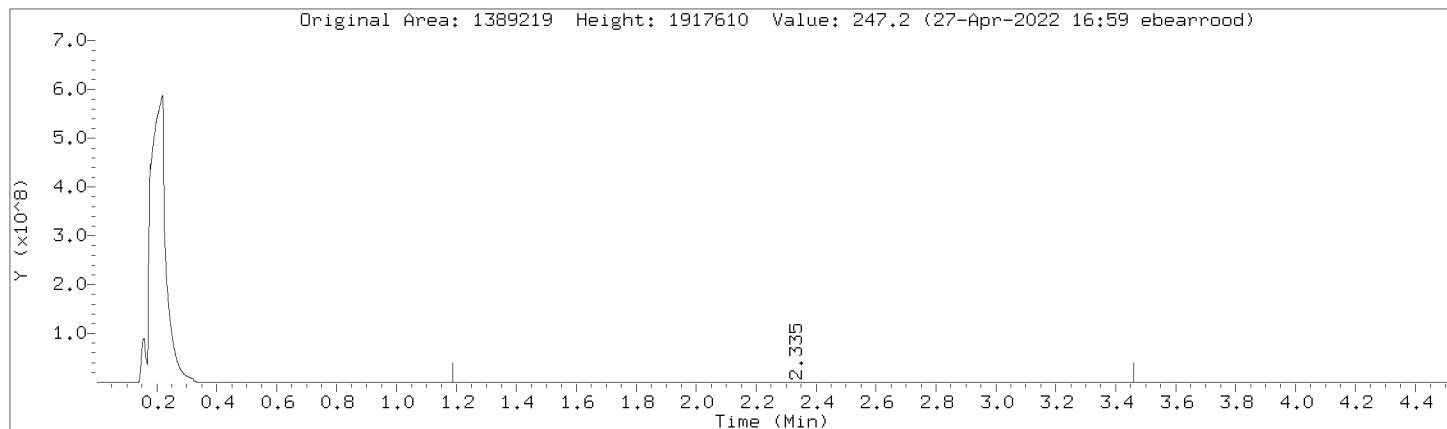
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000019.D  
Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: 10605435003

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



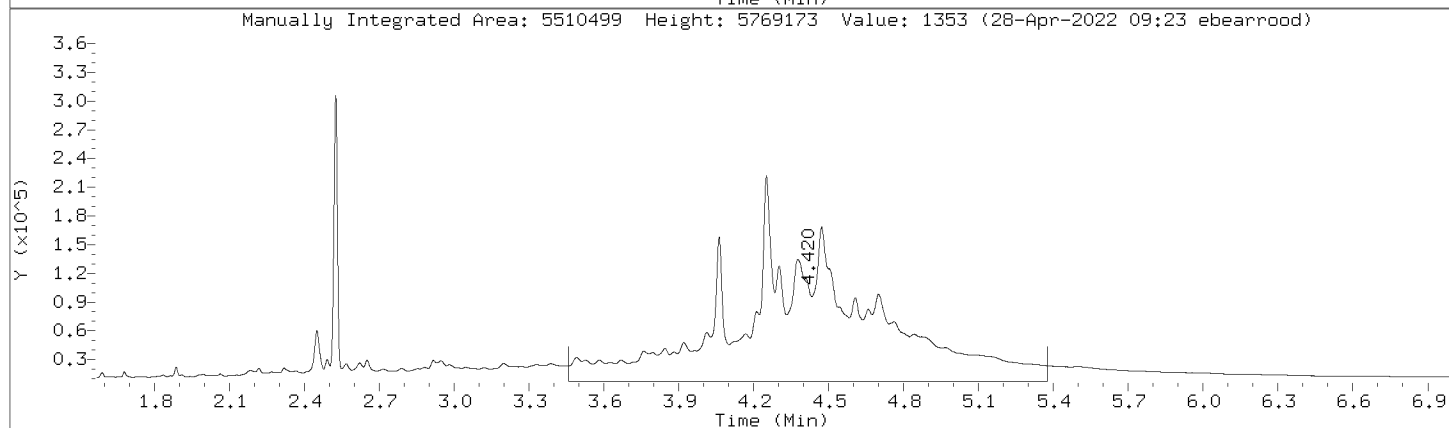
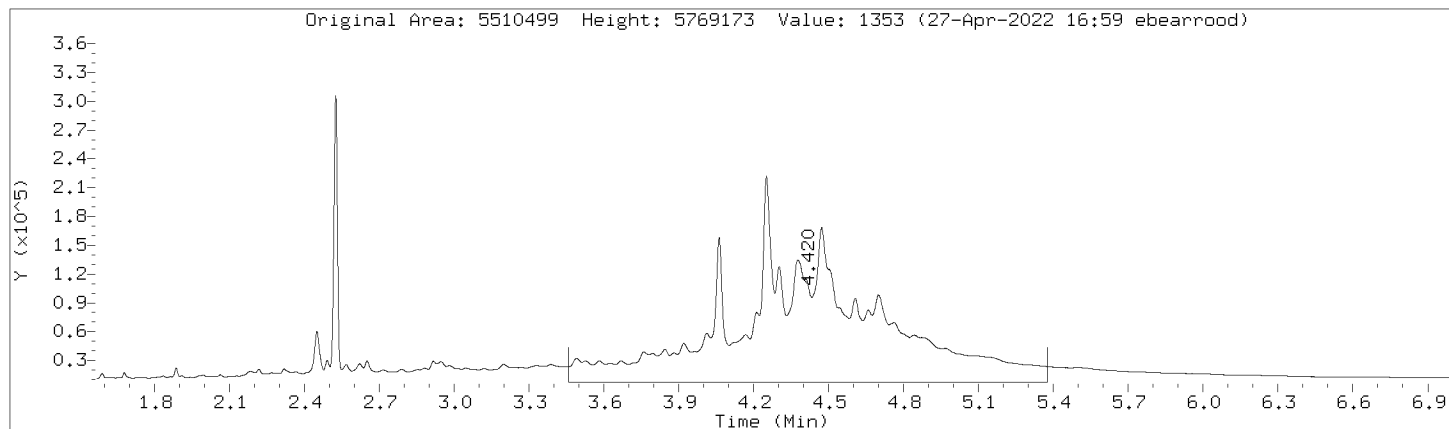
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000019.D  
Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: 10605435003

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



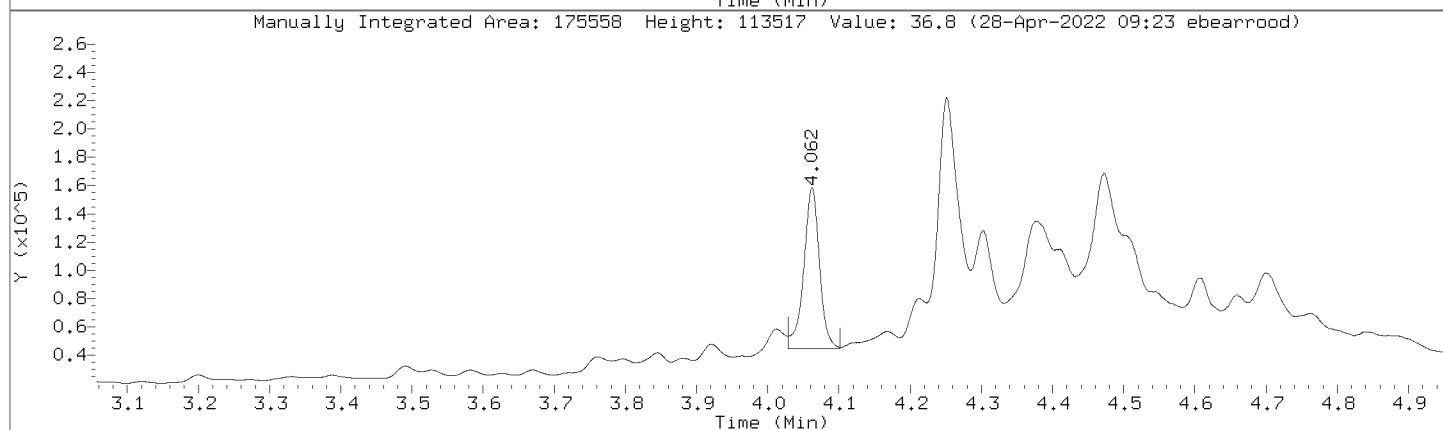
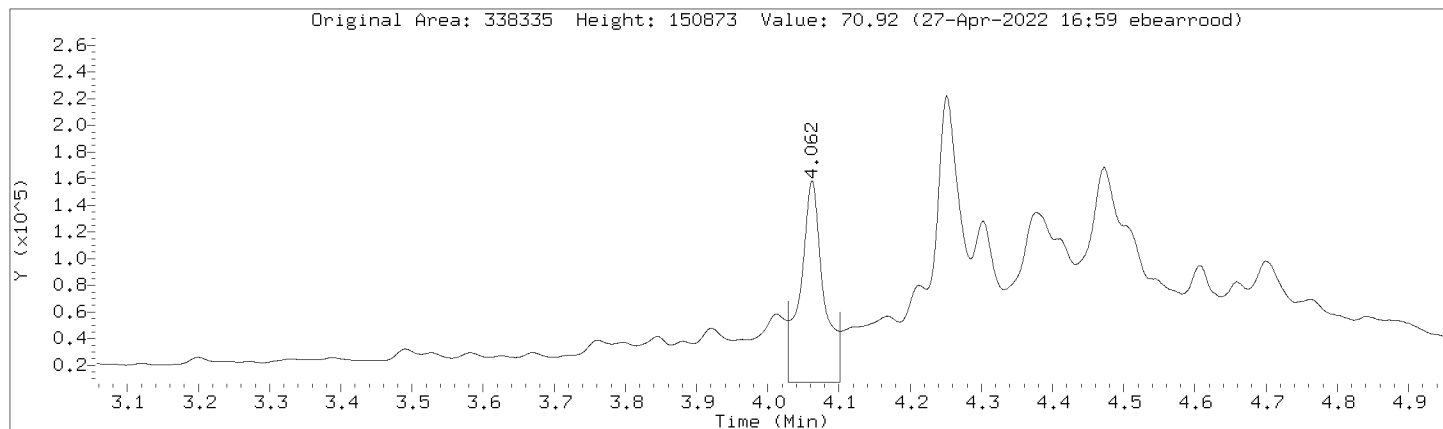
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Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: 10605435003

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



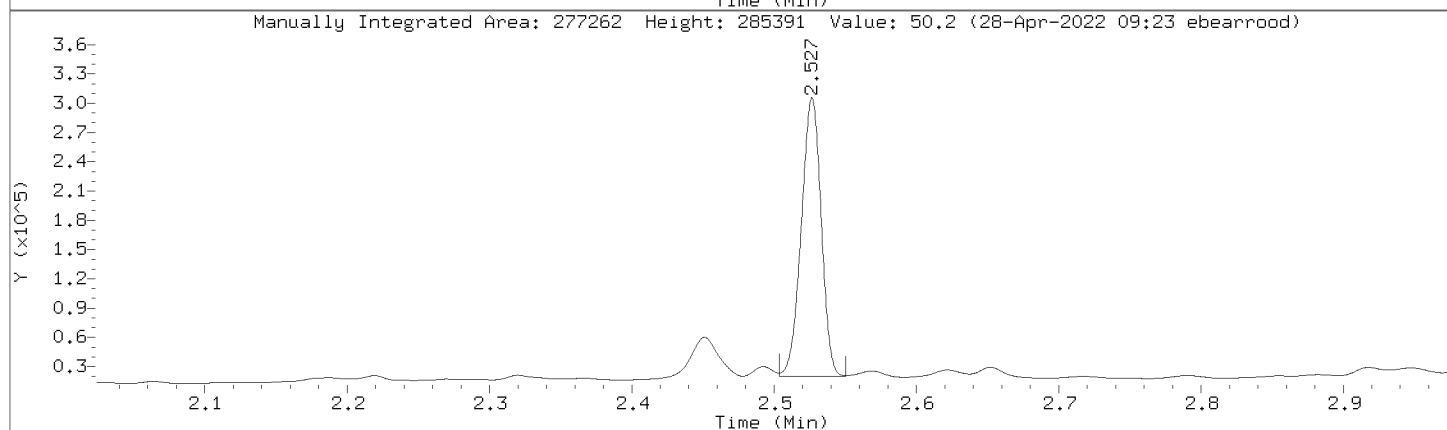
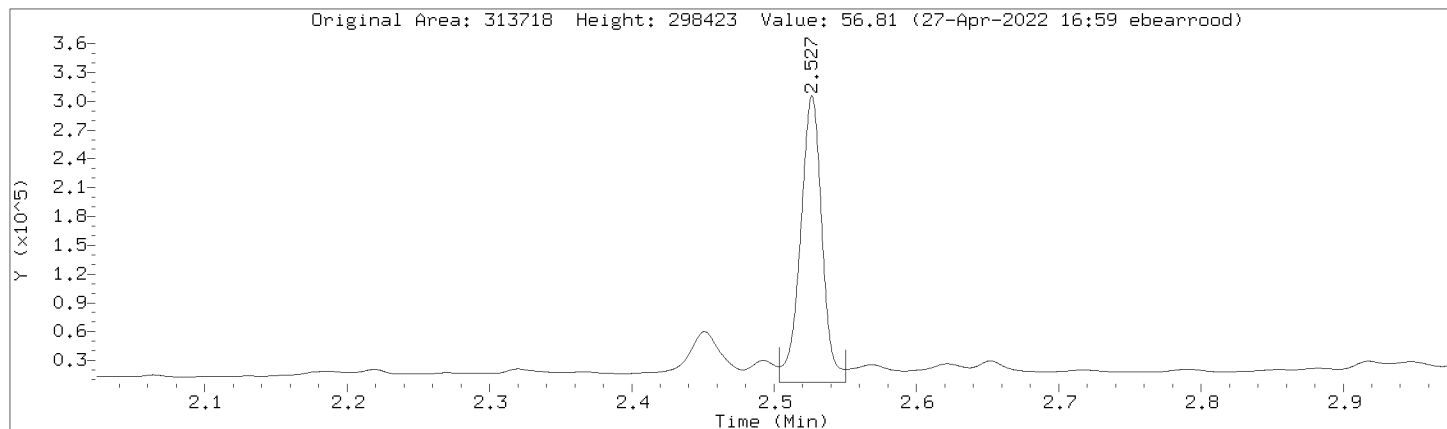
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Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: 10605435003

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000019.D  
 Injection Date: 27-APR-2022 15:04  
 Instrument: 10gcsF.i  
 Lab Sample ID: 10605435003

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	1389219	1389219
Motor Oil Range	5510499	5510499
Diesel Fuel Range SG	1389219	1389219
Motor Oil Range SG	5510499	5510499
n-Triacontane (S)	338335	175558
o-Terphenyl (S)	313718	277262

GC-FID DRO - FORM VI SVOA-1  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10605435  
 Calibration Date(s): 04/26/2022 04/26/2022 Calibration Time(s): 07:55 09:36

**LAB FILE ID**

CAL1 = 042622F.B\0426F0000004.D CAL2 = 042622F.B\0426F0000005.D CAL3 = 042622F.B\0426F0000006.D  
 CAL4 = 042622F.B\0426F0000007.D CAL5 = 042622F.B\0426F0000008.D CAL6 = 042622F.B\0426F0000009.D  
 CAL7 = 042622F.B\0426F0000010.D CAL8 = 042622F.B\0426F0000011.D CAL9 = 042622F.B\0426F0000012.D  
 CAL10 = 042622F.B\0426F0000013.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Diesel Fuel Range	Linear	48885.1666	31188.7000	15237.3600	9956.8600	7151.1800	5544.3880
Motor Oil Range	Linear	23267.1666	15310.5000	8810.1200	6215.7600	5040.6600	4366.9240
n-Triacontane (S)	Averaged	4361.6666	4654.0000	4816.4000	4825.4000	4806.2000	4824.9200
o-Terphenyl (S)	Averaged	5008.3333	5272.0000	5561.6000	5560.0000	5521.3000	5560.0400

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.



GC-FID DRO - FORM VI SVOA-2  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10605435  
 Calibration Date(s): 04/26/2022 04/26/2022 Calibration Time(s): 07:55 09:36

**LAB FILE ID**

CAL1 = 042622F.B\0426F0000004.D CAL2 = 042622F.B\0426F0000005.D CAL3 = 042622F.B\0426F0000006.D  
 CAL4 = 042622F.B\0426F0000007.D CAL5 = 042622F.B\0426F0000008.D CAL6 = 042622F.B\0426F0000009.D  
 CAL7 = 042622F.B\0426F0000010.D CAL8 = 042622F.B\0426F0000011.D CAL9 = 042622F.B\0426F0000012.D  
 CAL10 = 042622F.B\0426F0000013.D

COMPOUND	CURVE TYPE	CAL7	CAL8	CAL9	CAL10
Diesel Fuel Range	Linear	5089.0980	4796.4940	4636.6090	4507.7042
Motor Oil Range	Linear	4253.2080	4126.7940	4045.8670	4015.6790
n-Triacontane (S)	Averaged	4887.5800	4898.9400	4855.3950	4776.3975
o-Terphenyl (S)	Averaged	5679.3000	5679.7500	5682.4800	5701.0950

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VI SVOA-3  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10605435  
 Calibration Date(s): 04/26/2022 04/26/2022 Calibration Time(s): 07:55 09:36

**LAB FILE ID**

CAL1 = 042622F.B\0426F0000004.D CAL2 = 042622F.B\0426F0000005.D CAL3 = 042622F.B\0426F0000006.D  
 CAL4 = 042622F.B\0426F0000007.D CAL5 = 042622F.B\0426F0000008.D CAL6 = 042622F.B\0426F0000009.D  
 CAL7 = 042622F.B\0426F0000010.D CAL8 = 042622F.B\0426F0000011.D CAL9 = 042622F.B\0426F0000012.D  
 CAL10 = 042622F.B\0426F0000013.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Diesel Fuel Range	Linear		0.99994	289335.750	4449.93206	
Motor Oil Range	Linear		0.99999	115660.591	3988.26194	
n-Triacontane (S)	Averaged	3.33278			4770.68992	
o-Terphenyl (S)	Averaged	3.99581			5522.58983	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000003.D  
 Lab Smp Id: DMO-RTM,357103:2 Client Smp ID: DMO-RTM,357103:2  
 Inj Date : 26-APR-2022 07:44  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-rtm,357103:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			RESPONSE	CAS #:	
=====	=====	=====	(ug/mL)	(ug/mL)	=====
S 1	DRO by AK 102				
0.765	- 3.430		2104579 336.809	337	
-----					
\$ 2	o-Terphenyl (S)				
2.582	2.582 0.000		328 0.05939	0.0594	(R)
-----					
\$ 3	n-Triacontane (S)				
4.063	4.064 -0.001		148 0.03102	0.0310	(R)
-----					
S 4	Residual Range Organics AK103				
3.431	- 4.840		1983460 583.153	583	
-----					
S 5	TPH-DRO (C10-C28)				
0.765	- 3.980		3380030 497.351	497	
-----					
S 6	Motor Oil Range (C24-C36)				
3.300	- 4.840		2603963 747.393	747	
-----					
S 7	C10-C36				
0.765	- 4.840		4088040 860.716	861	
-----					
S 8	Diesel Fuel Range				
1.210	- 3.480		1486051 268.929	269	
-----					
S 9	Diesel Fuel Range SG				
1.210	- 3.480		1486051 268.929	269	
-----					
S 10	Motor Oil Range				
3.481	- 5.350		2577456 617.260	617	
-----					
S 11	Motor Oil Range SG				
3.481	- 5.350		2577456 617.260	617	
-----					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Date : 26-APR-2022 07:44

Client ID: DM0-RTM,357103;2

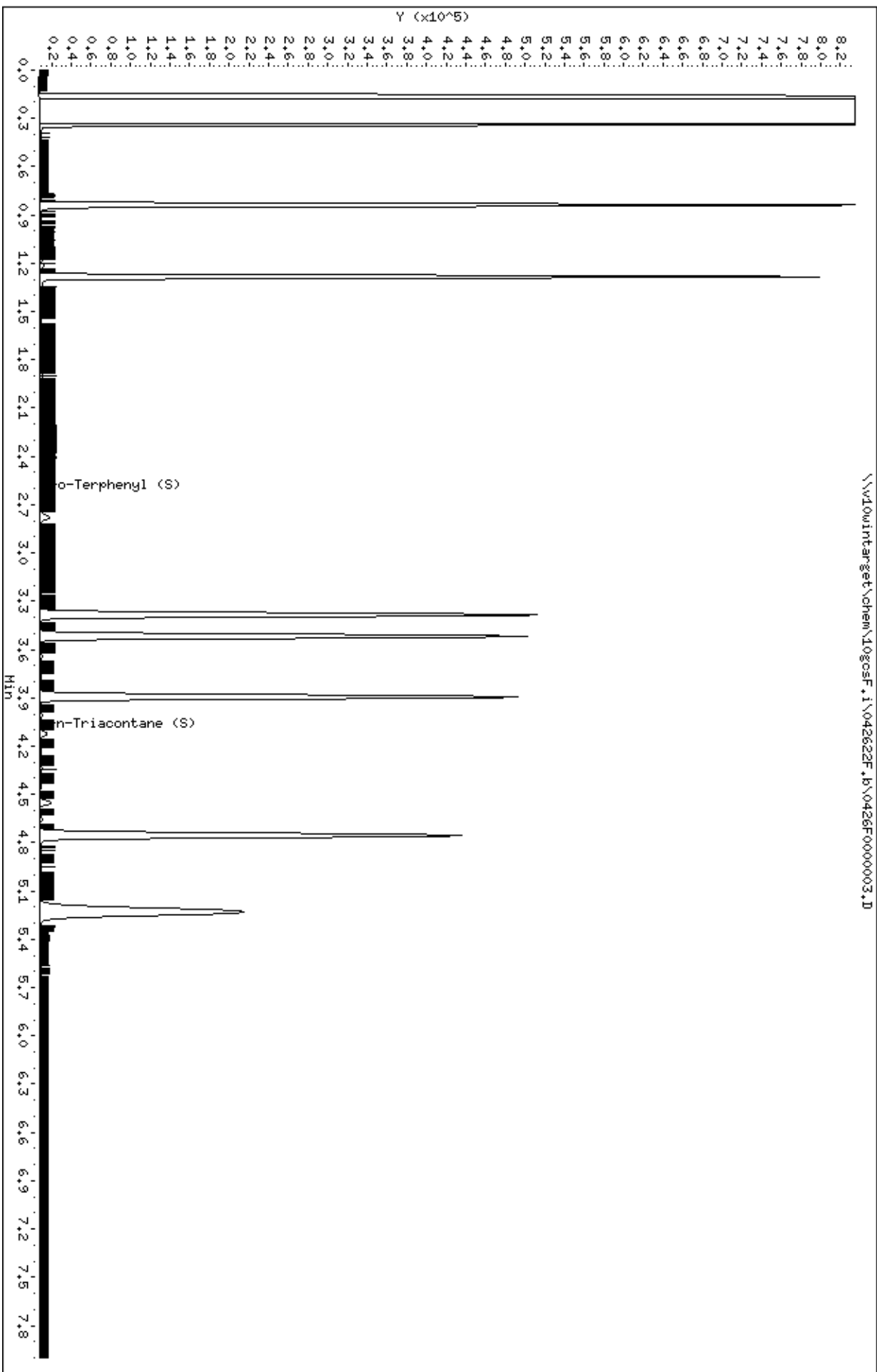
Sample Info: DM0-RTM,357103;2

Instrument: 10goscF.1

Operator: EB3

Column diameter: 0.32

Column phase: DB-5-US21250010



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000003.D  
Injection Date: 26-APR-2022 07:44  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-RTM,357103:2  
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1983460	1983460
DRO by AK 102	2104579	2104579
TPH-DRO (C10-C28)	3380030	3380030
Motor Oil Range (C24-C36)	2603963	2603963
Diesel Fuel Range	1486051	1486051
Motor Oil Range	2577456	2577456
Diesel Fuel Range SG	1486051	1486051
Motor Oil Range SG	2577456	2577456
C10-C36	4088040	4088040
n-Triacontane (S)	148	148
o-Terphenyl (S)	328	328

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000004.D  
 Lab Smp Id: DMO-CAL1,362369:2 Client Smp ID: DMO-CAL1,362369:2  
 Inj Date : 26-APR-2022 07:55  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-call,362369:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 3 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT (ug/mL)	
S 1	0.765	- 3.430	324590	6.00000	0.673 (M) RNG
-----					
\$ 2	2.585	2.582 0.003	3005	0.60000	0.544 (M) BA
-----					
\$ 3	4.065	4.064 0.001	2617	0.60000	0.548 (MH) BA
-----					
S 4	3.431	- 4.840	111185	6.00000	5.75 (M) RNG
-----					
S 5	0.765	- 3.980	366711	6.00000	1.10 (M) RNG
-----					
S 6	3.300	- 4.840	123721	6.00000	4.64 (M) RNG
-----					
S 7	0.765	- 4.840	435776	12.0000	5.18 (M) RNG
-----					
S 8	1.210	- 3.480	293311	6.00000	0.893 (M) RNG
-----					
S 9	1.210	- 3.480	293311	6.00000	0.893 (M) RNG
-----					
S 10	3.481	- 5.350	139603	6.00000	6.00 (M) RNG
-----					
S 11	3.481	- 5.350	139603	6.00000	6.00 (M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.  
H - Operator selected an alternate compound hit.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.



Date : 26-APR-2022 07:55

Client ID: DMO-CAL1,362369;2

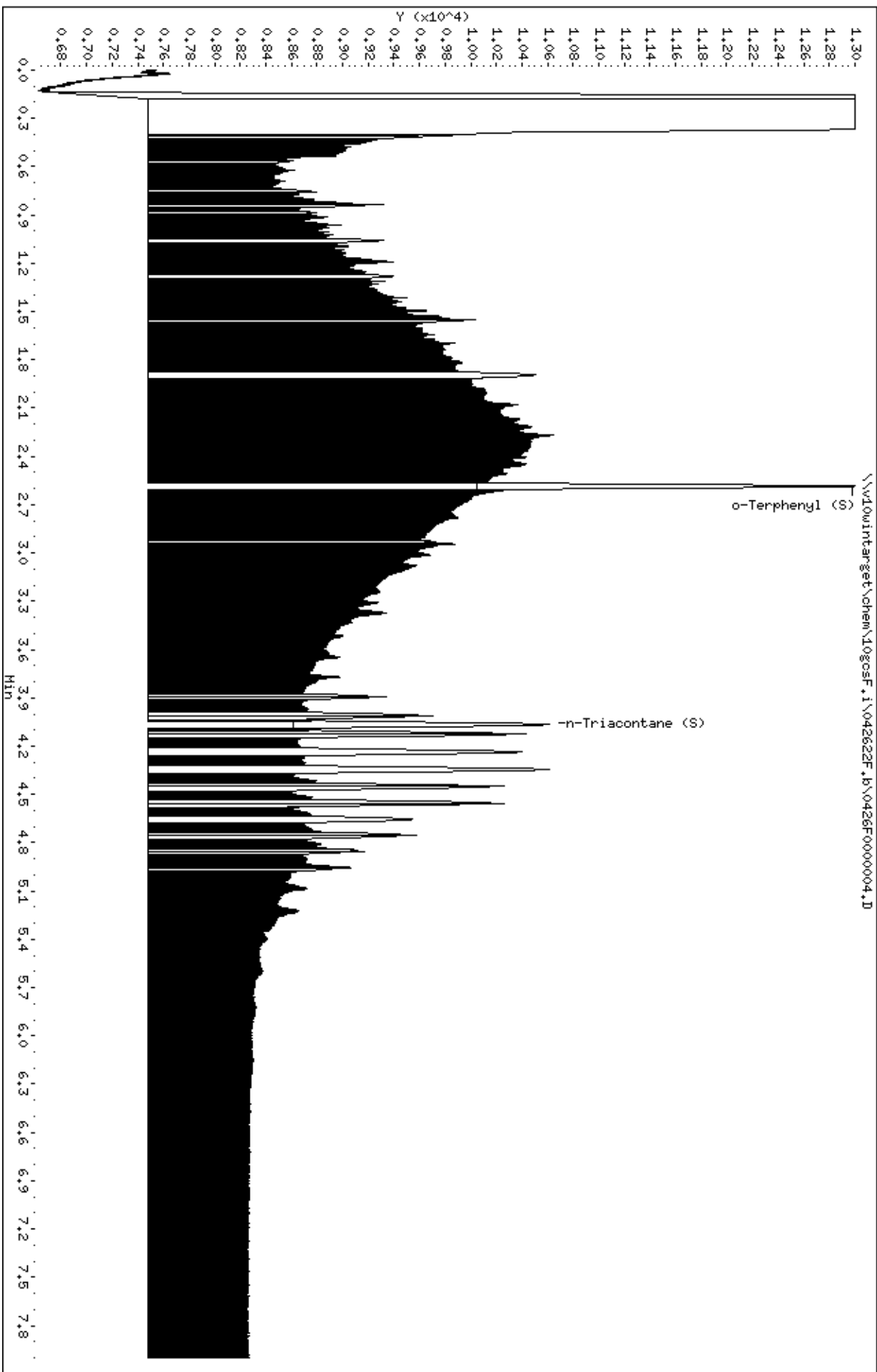
Sample Info: DMO-CAL1,362369;2

Instrument: 10goscF.1

Operator: EB3

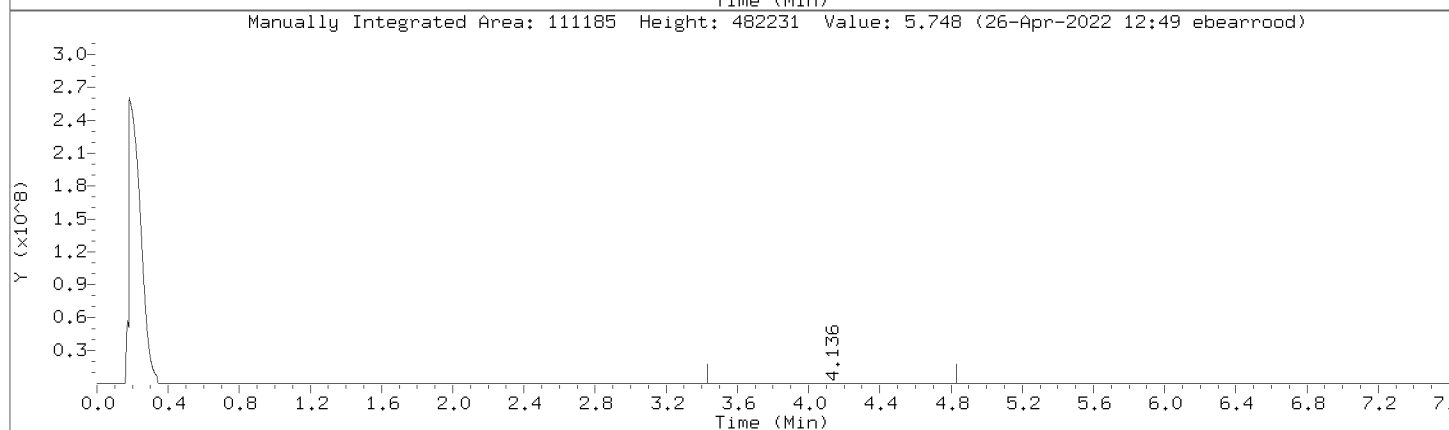
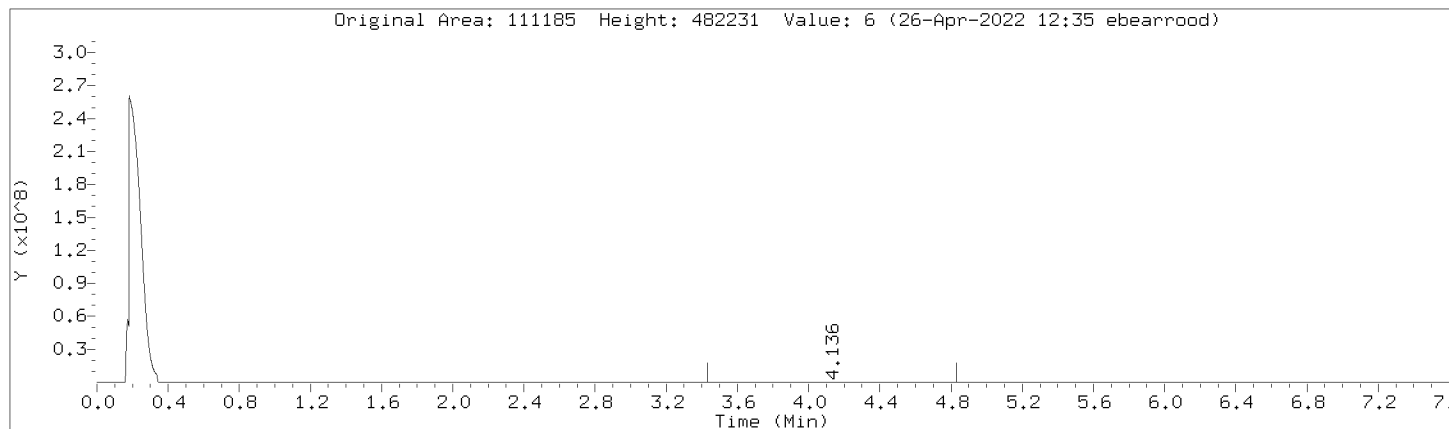
Column diameter: 0.32

Column phase: DB-5-US21250010



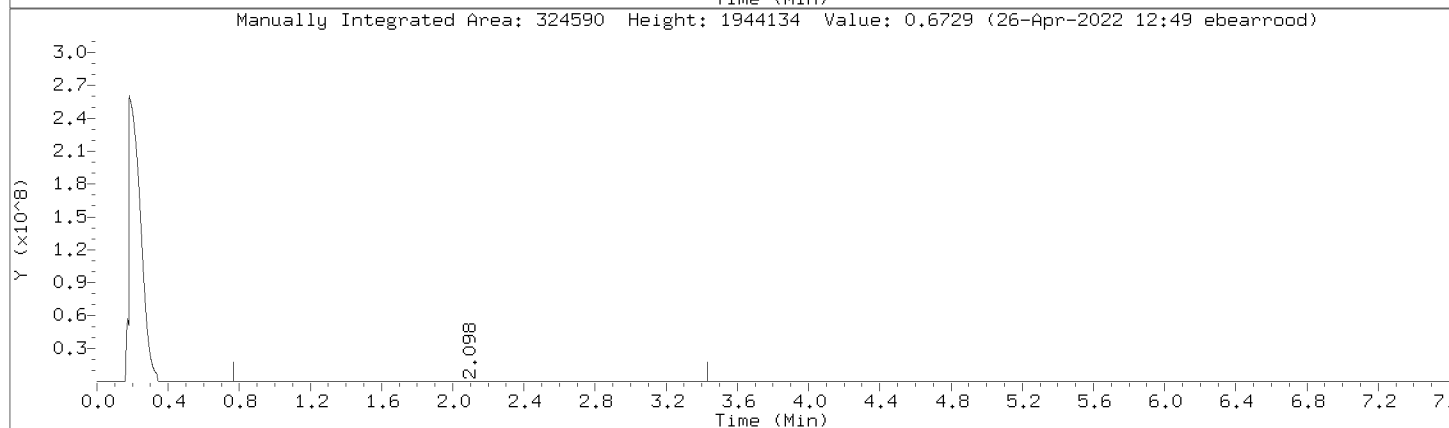
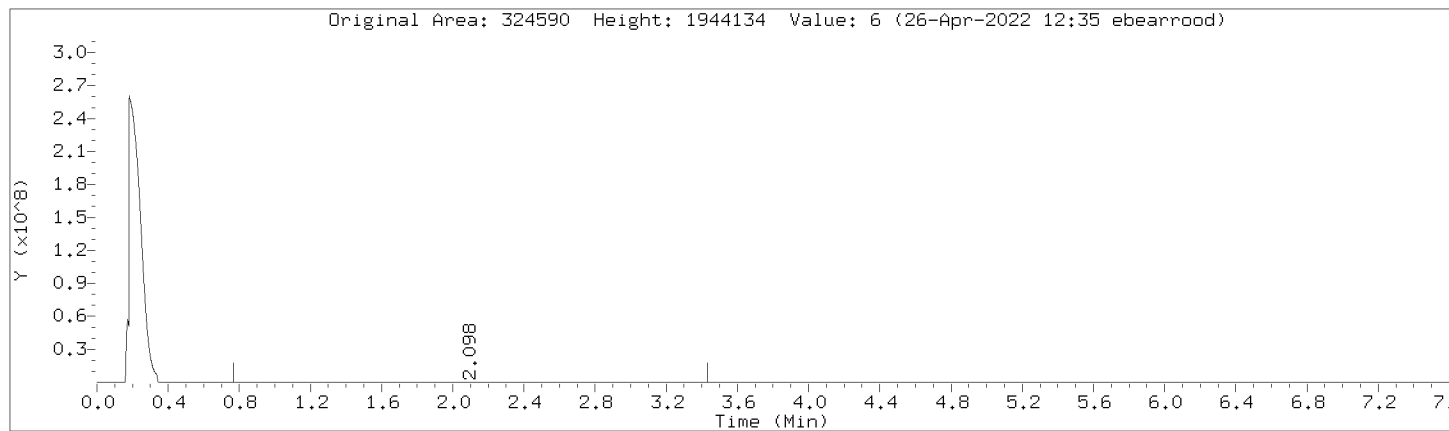
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



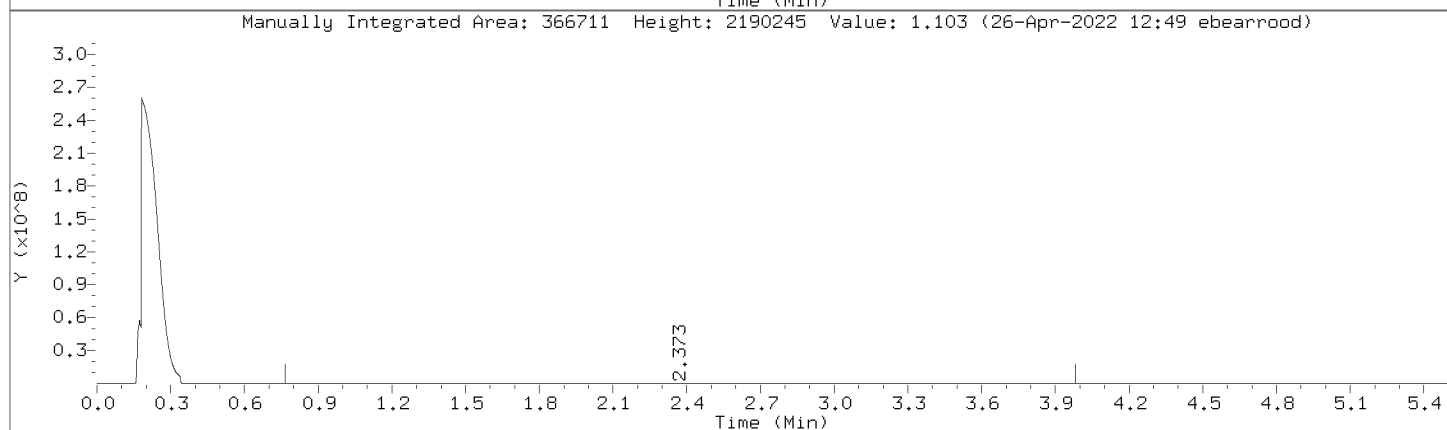
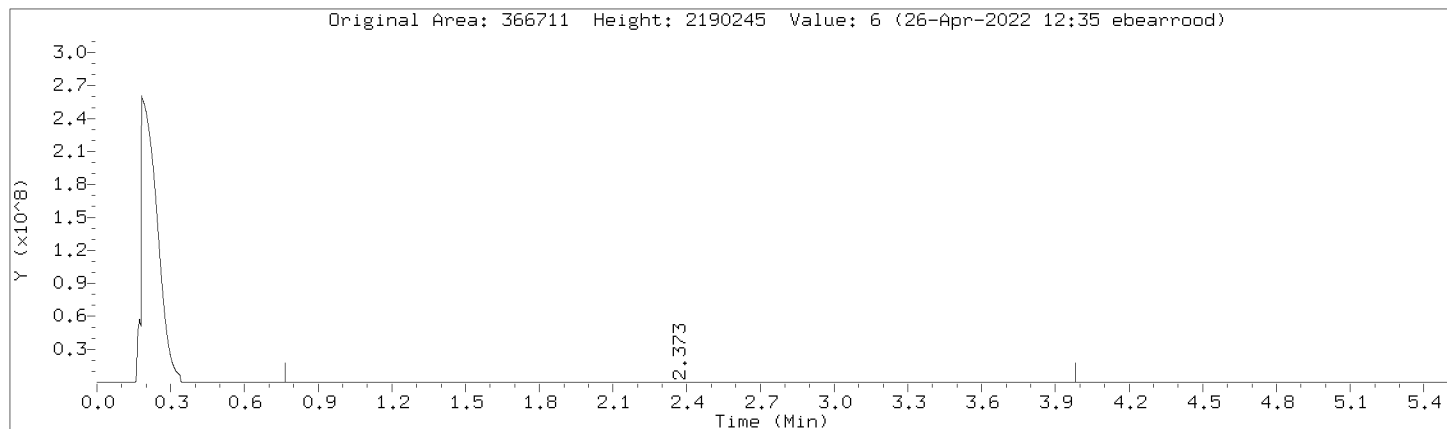
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



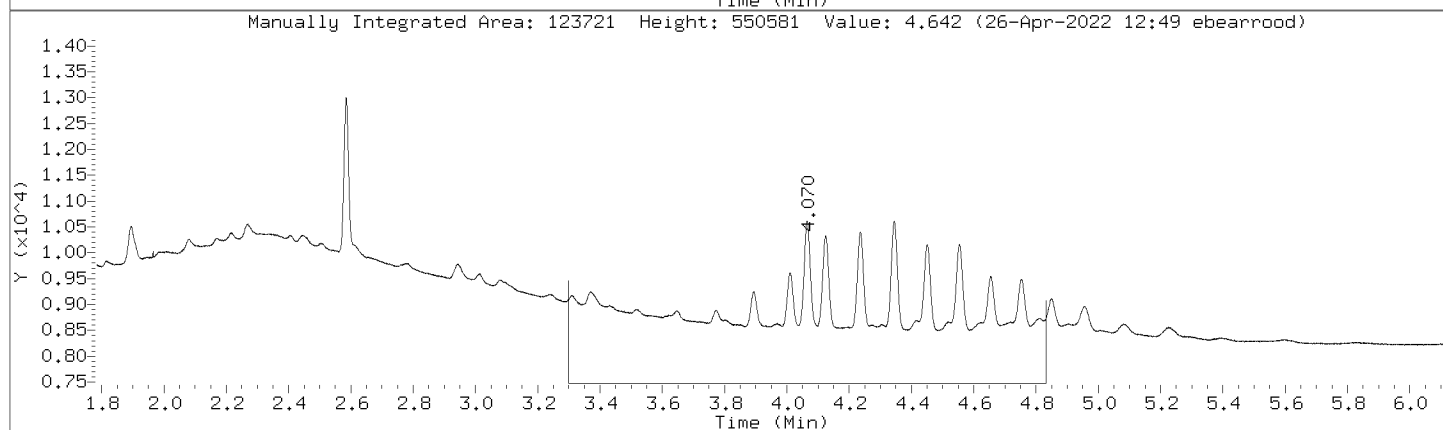
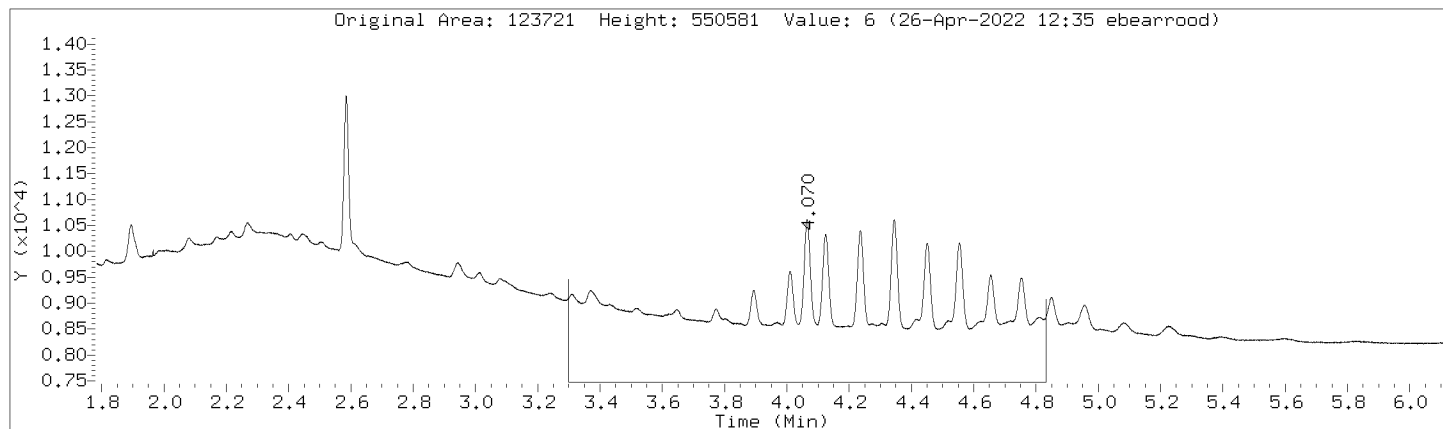
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



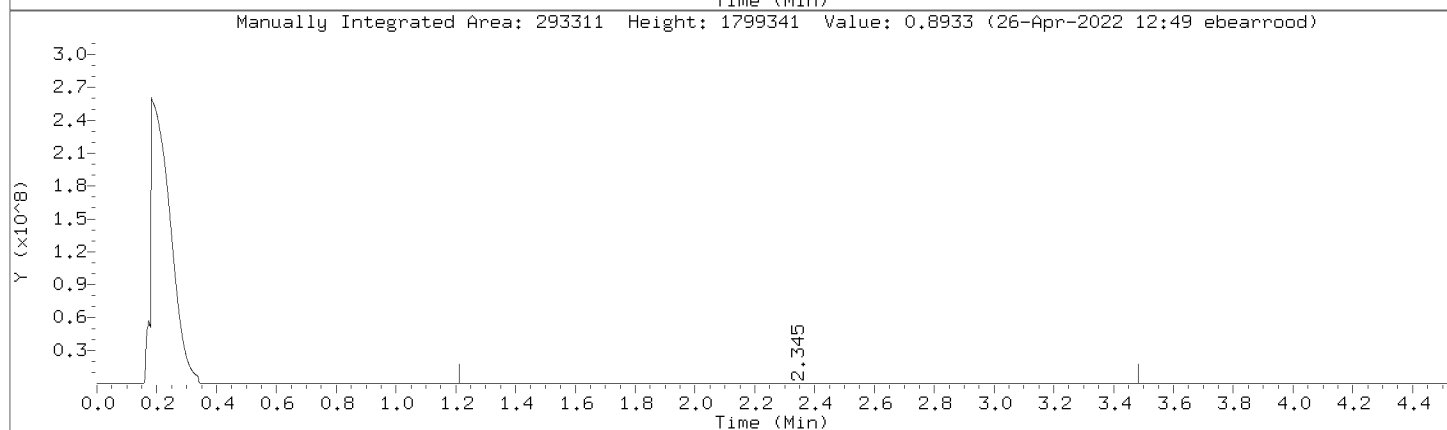
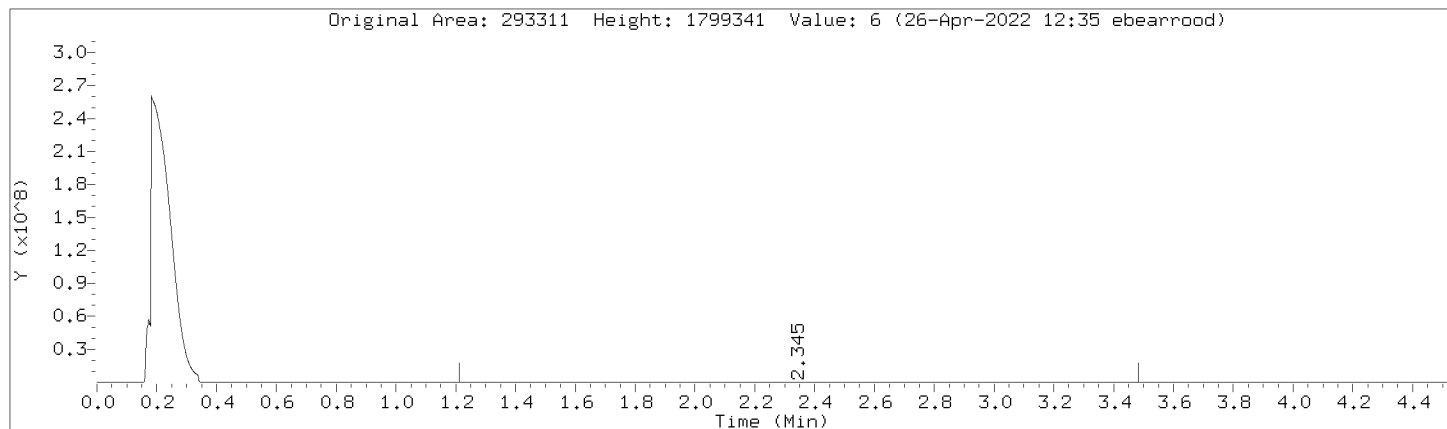
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



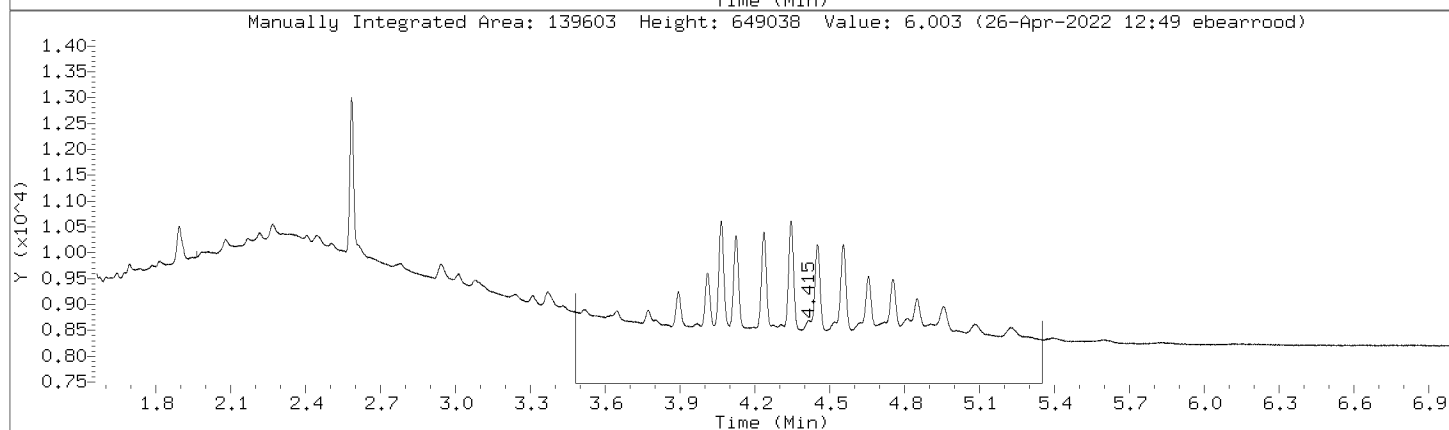
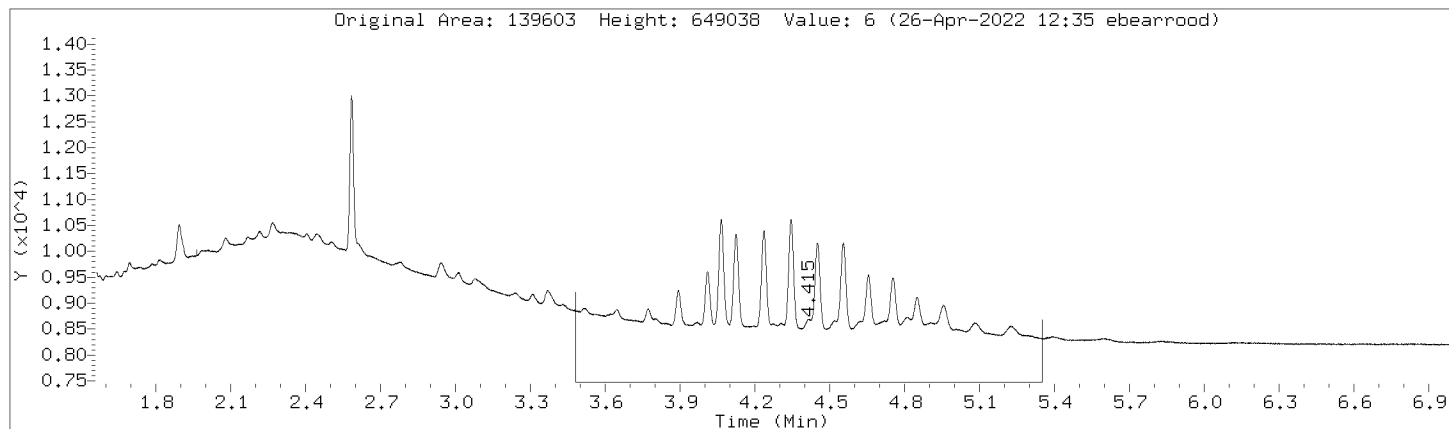
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



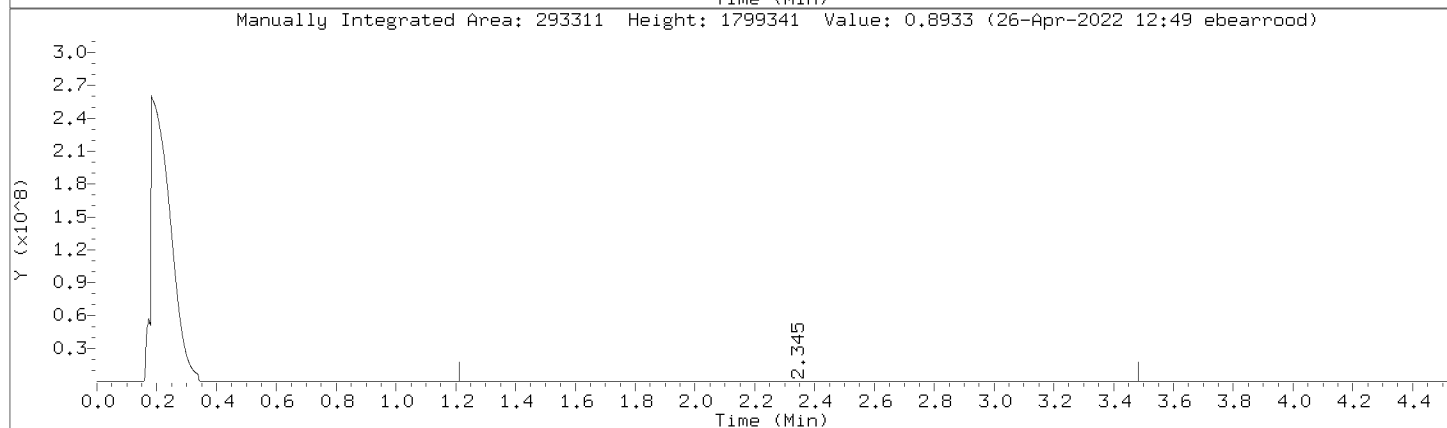
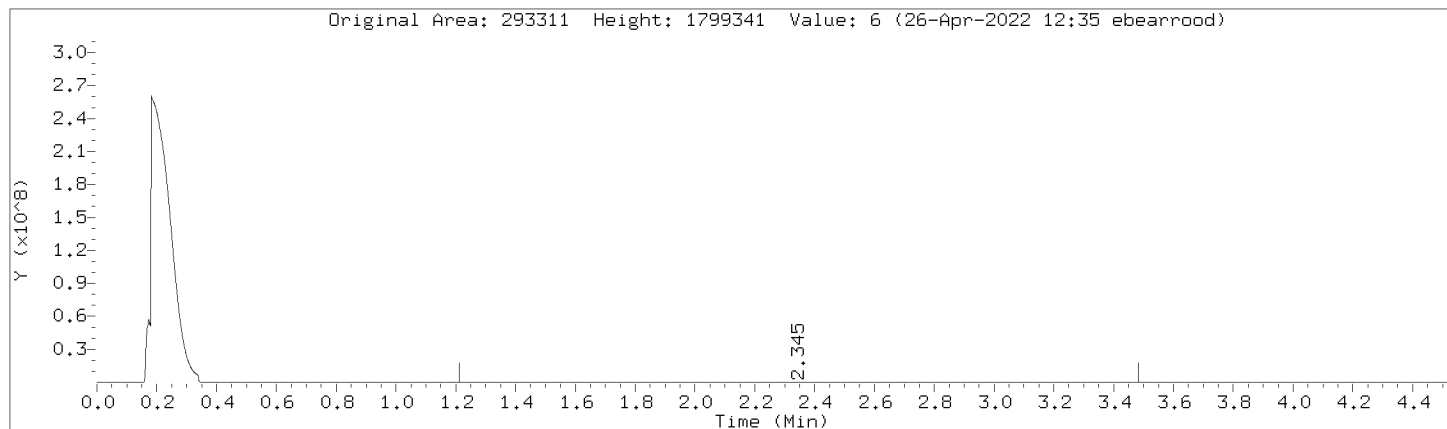
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000004.D  
Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

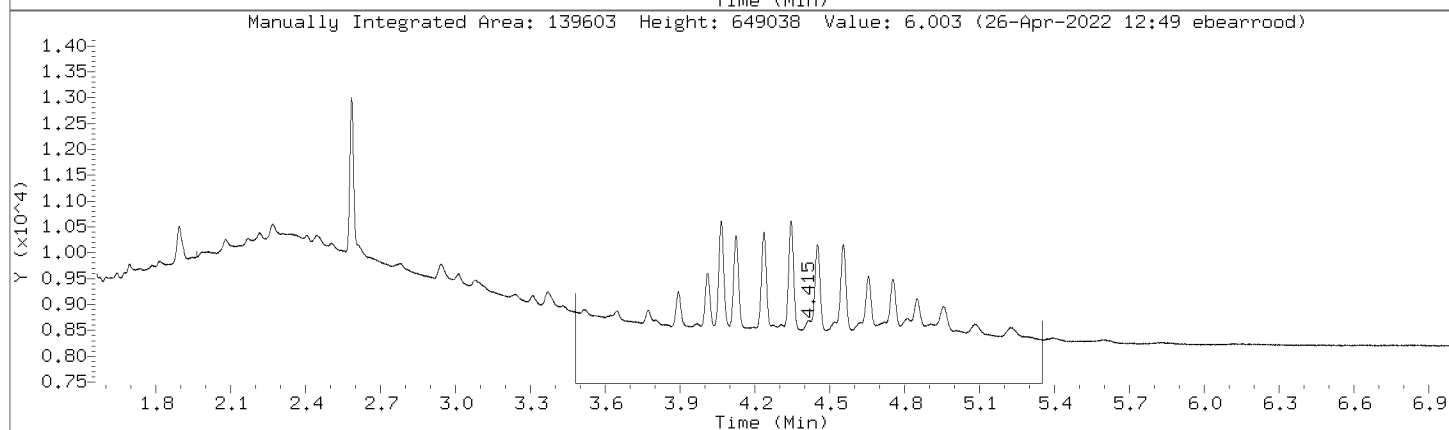
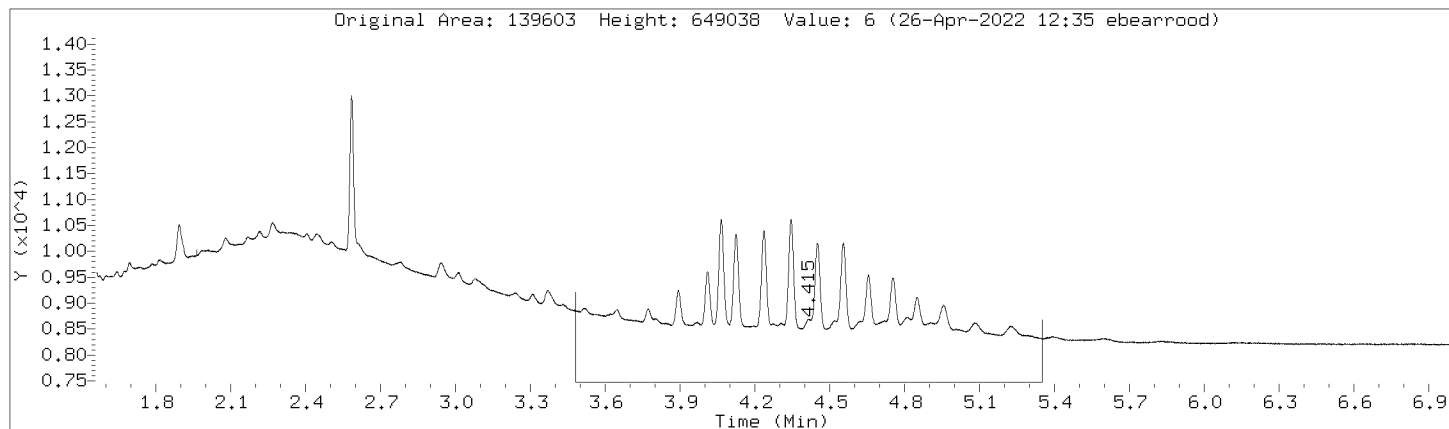
Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:





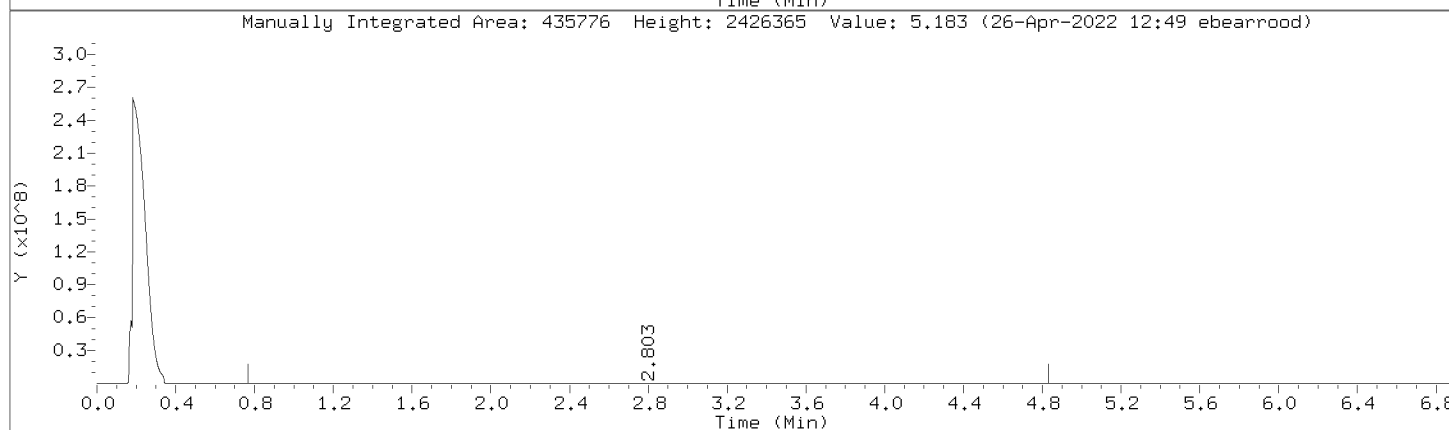
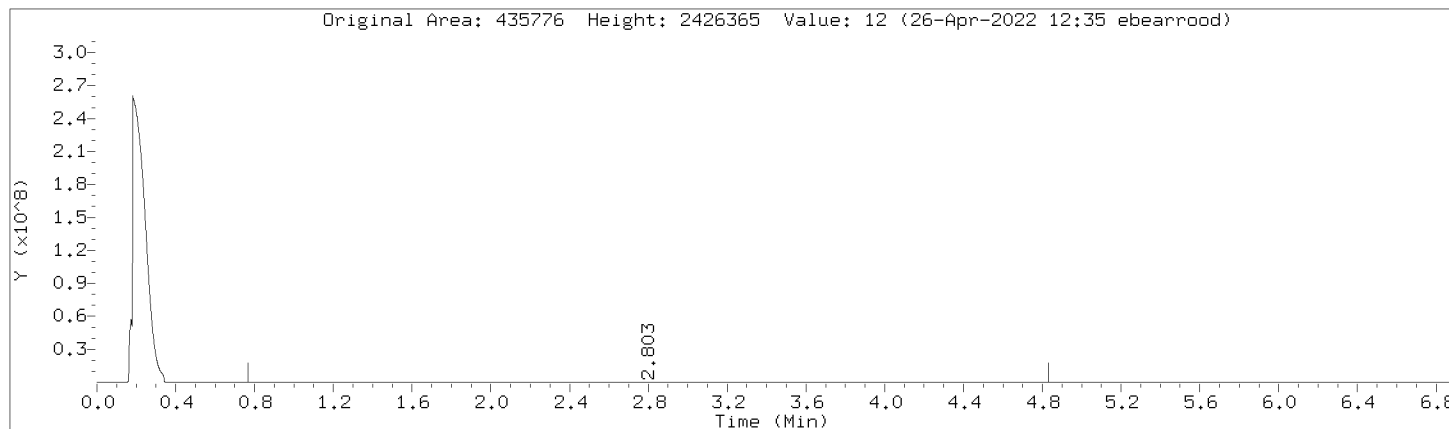
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



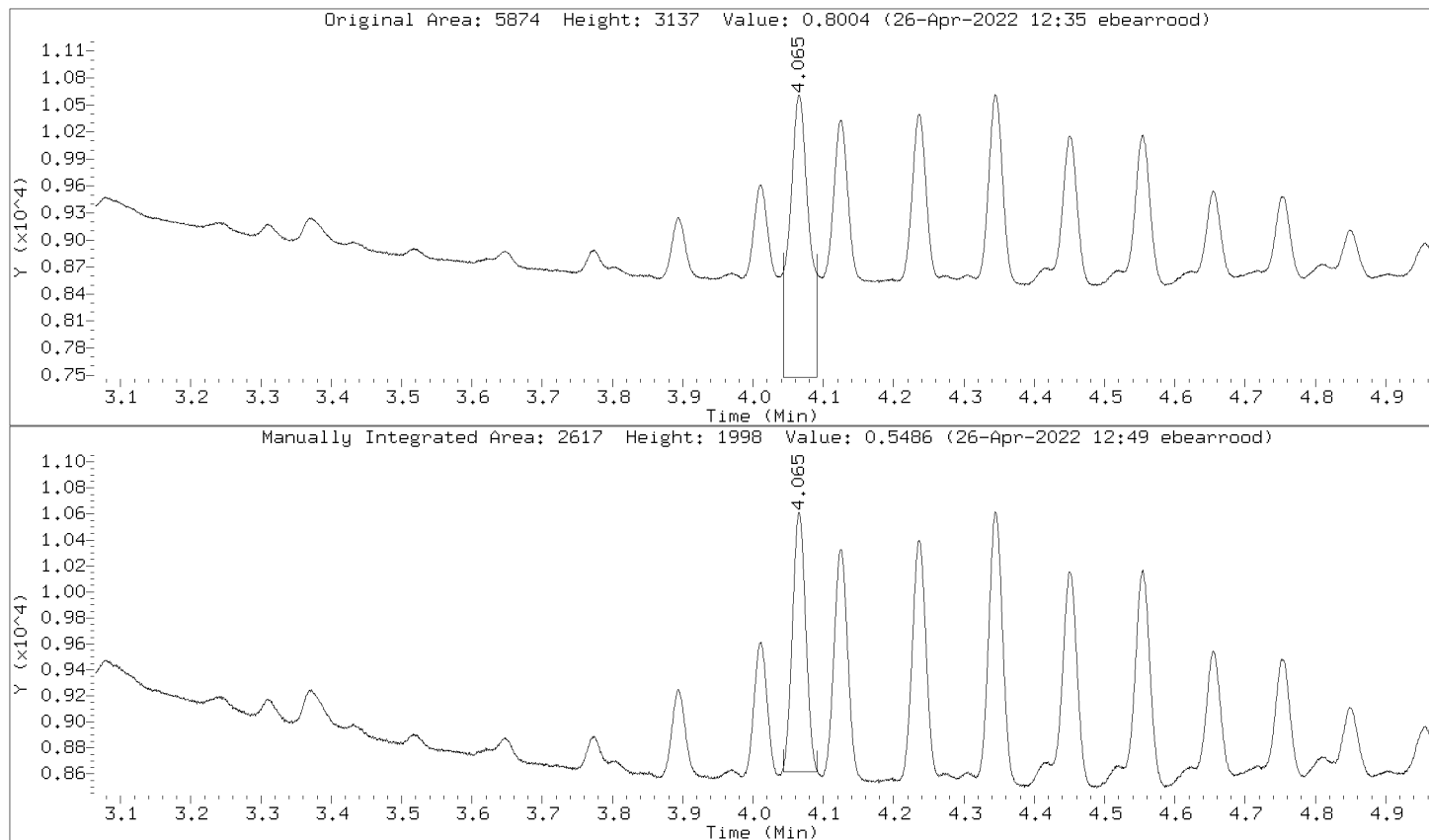
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



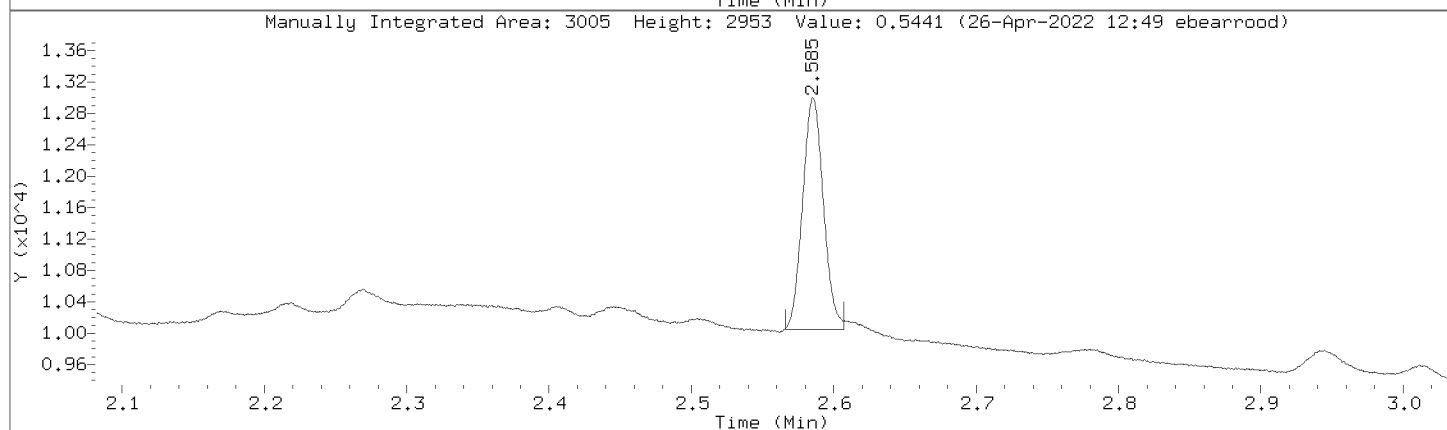
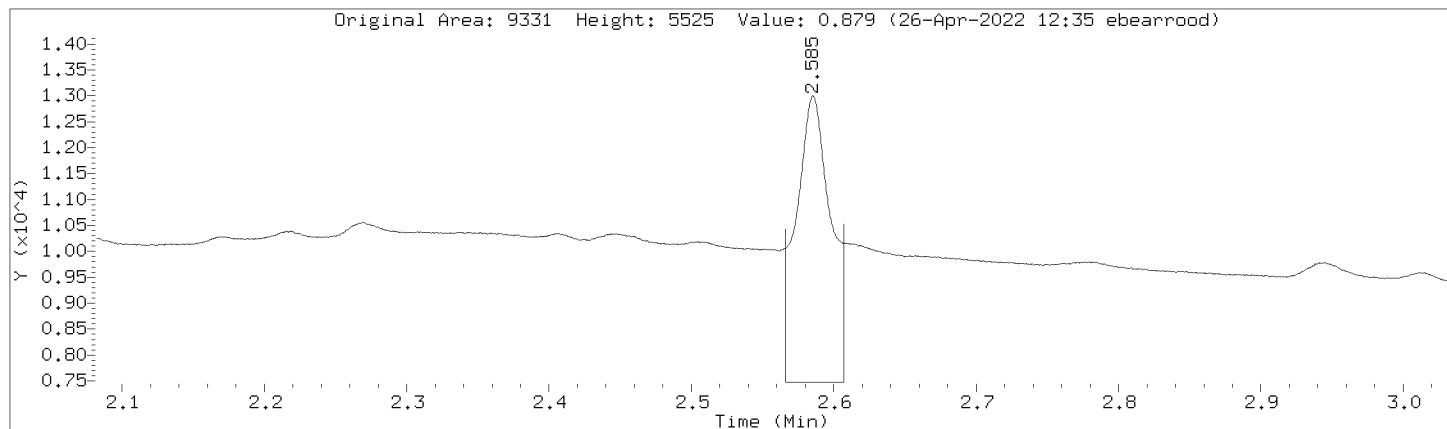
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000004.D  
 Injection Date: 26-APR-2022 07:55  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL1,362369:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	111185	111185
DRO by AK 102	324590	324590
TPH-DRO (C10-C28)	366711	366711
Motor Oil Range (C24-C36)	123721	123721
Diesel Fuel Range	293311	293311
Motor Oil Range	139603	139603
Diesel Fuel Range SG	293311	293311
Motor Oil Range SG	139603	139603
C10-C36	435776	435776
n-Triacontane (S)	5874	2617
o-Terphenyl (S)	9331	3005

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
 Lab Smp Id: DMO-CAL2,362370:2 Client Smp ID: DMO-CAL2,362370:2  
 Inj Date : 26-APR-2022 08:06  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal2,362370:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 4 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		347386 10.0000	4.98	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.586	2.582 0.004		5272 1.00000	0.955	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.063	4.064 -0.001		4654 1.00000	0.976	(MH) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		122854 10.0000	9.35	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		392406 10.0000	5.33	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		135827 10.0000	8.27	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		470241 20.0000	13.2	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		311887 10.0000	5.07	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		311887 10.0000	5.07	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		153105 10.0000	9.39	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		153105 10.0000	9.39	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.  
H - Operator selected an alternate compound hit.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 08:06

Client ID: DMO-CAL2,362370:2

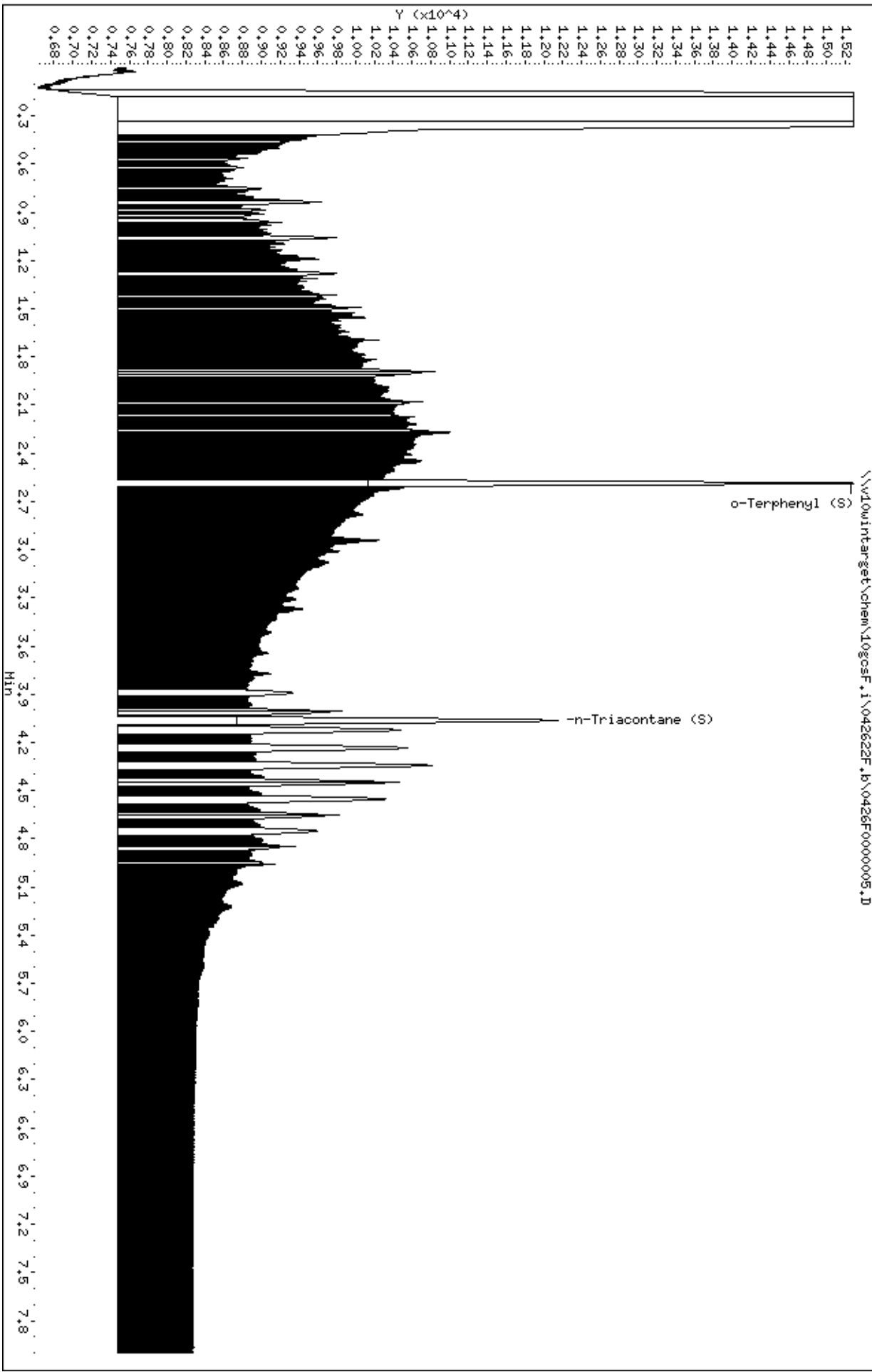
Sample Info: DMO-CAL2,362370:2

Instrument: 10gosc.f.1

Operator: EB3

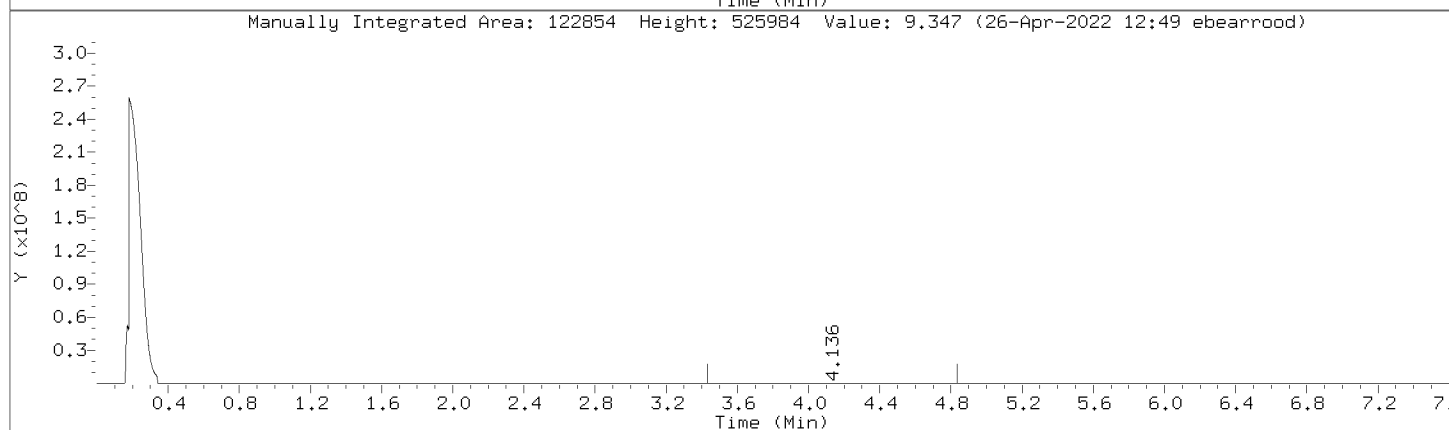
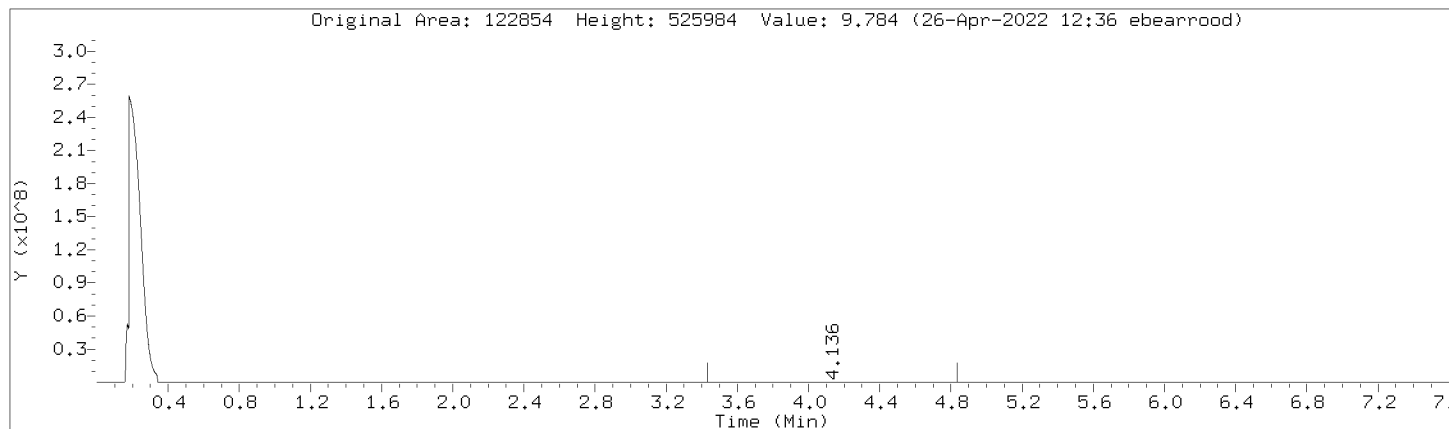
Column diameter: 0.32

Column phase: DB-5-MS21250010



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

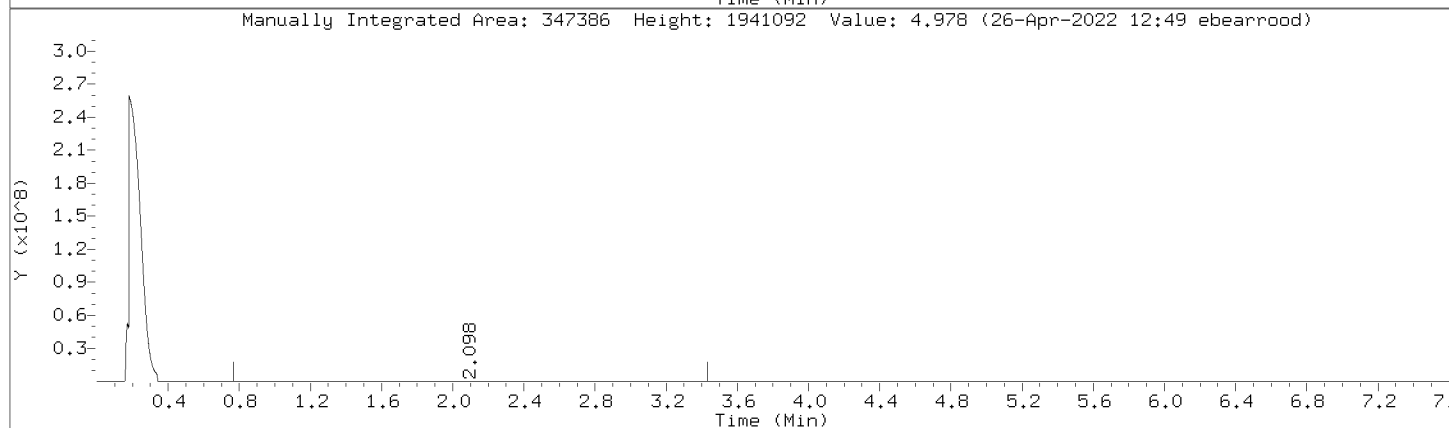
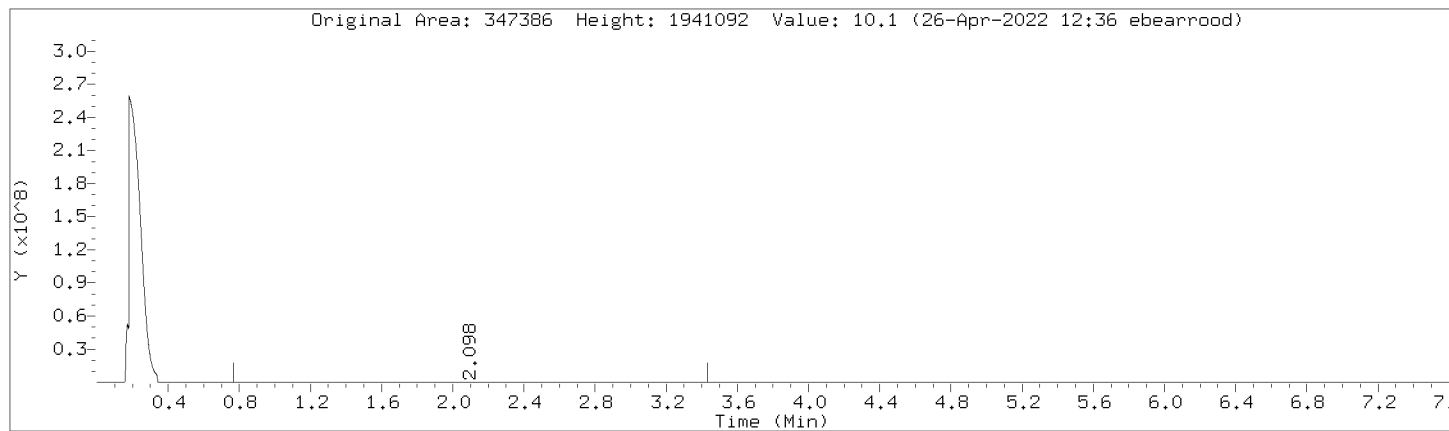
Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:





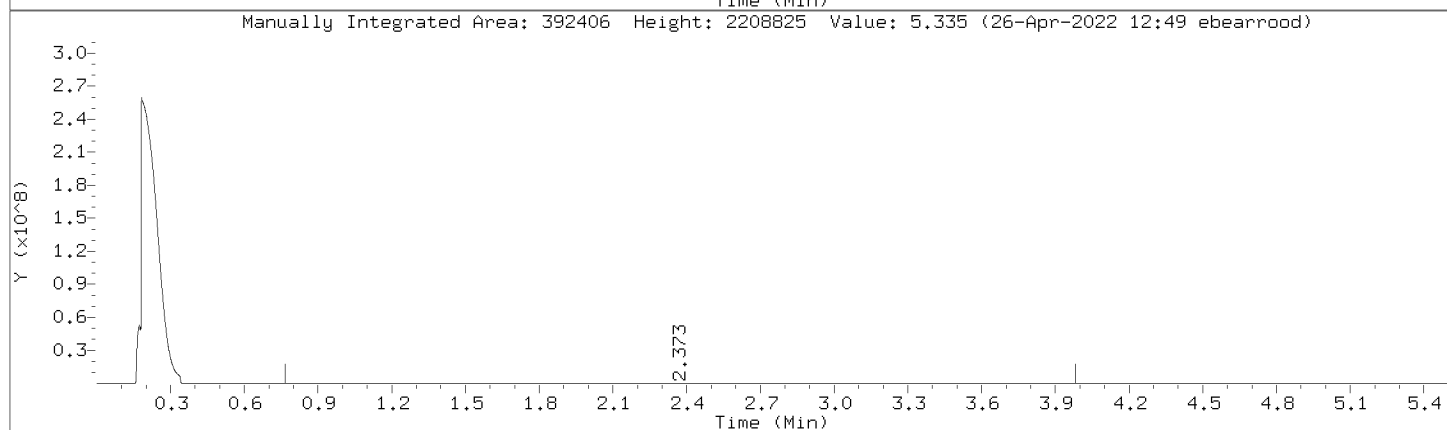
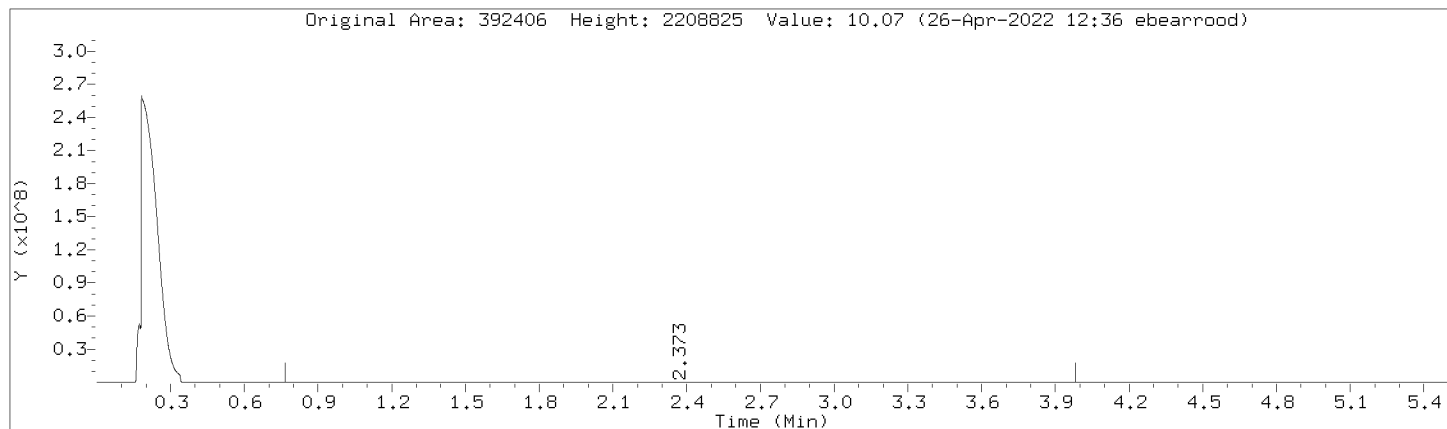
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



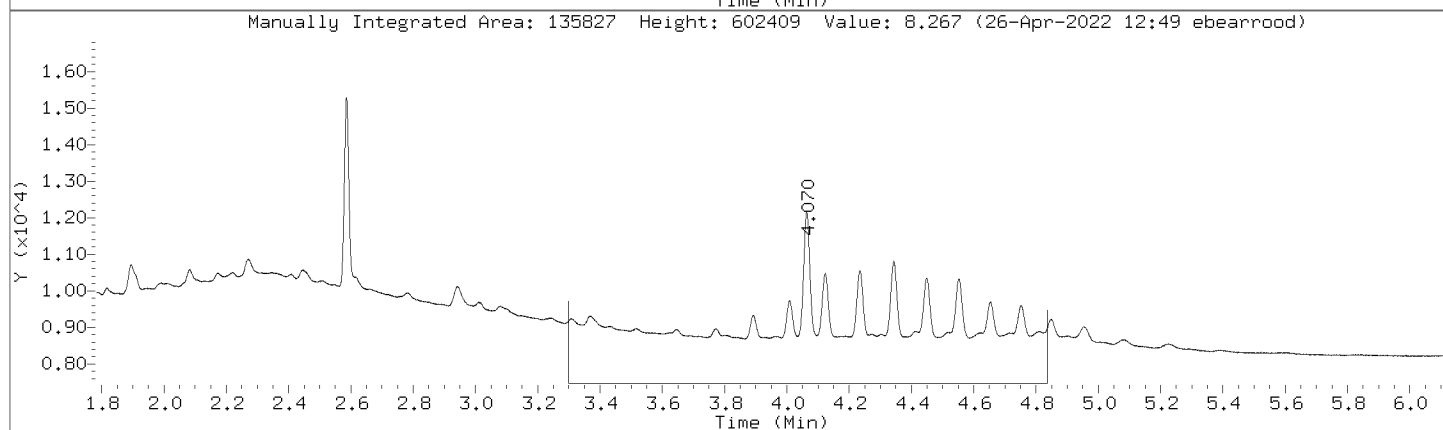
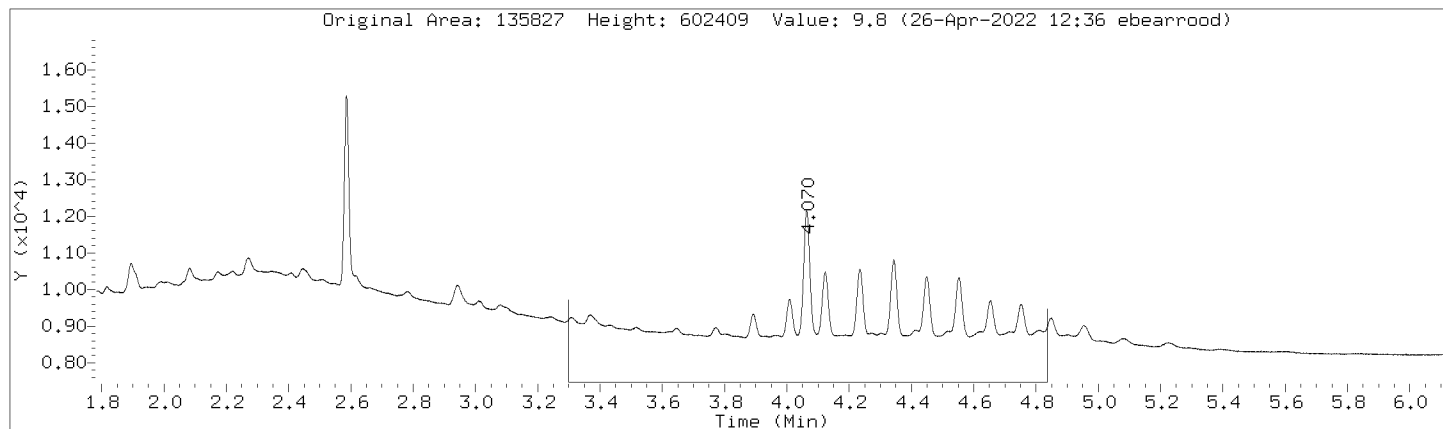
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



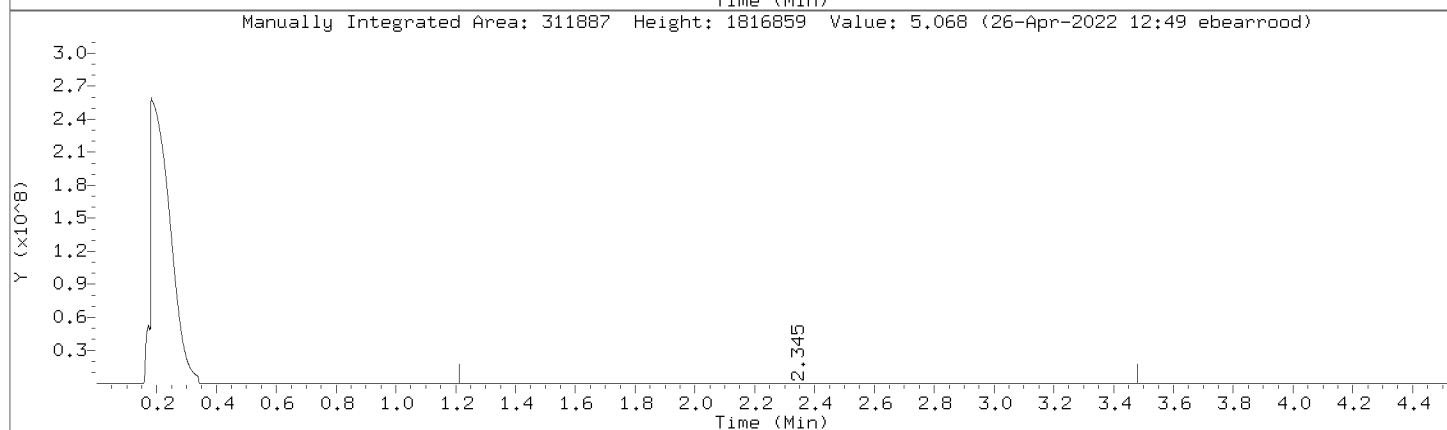
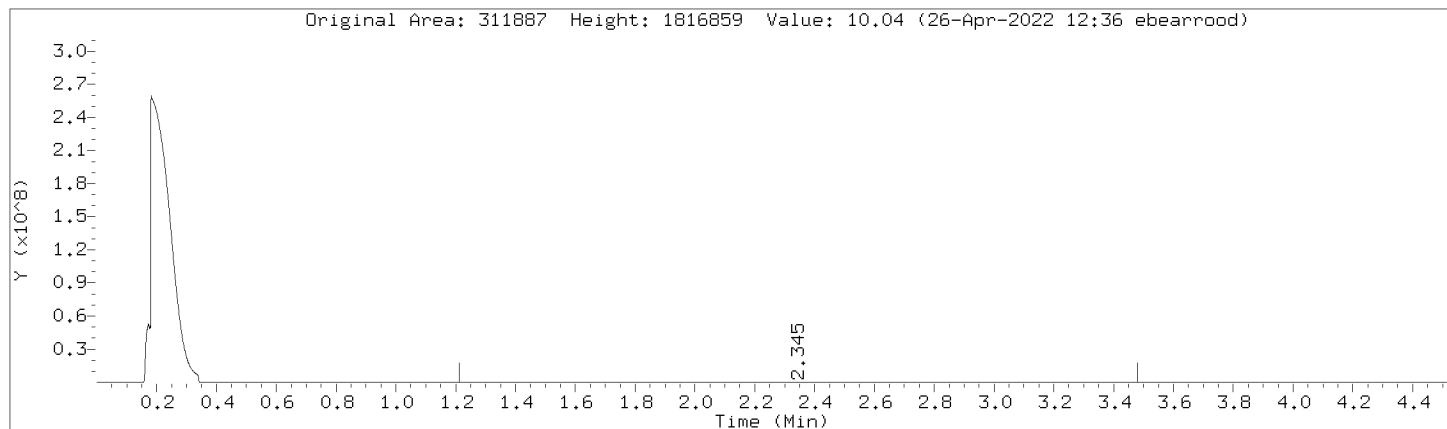
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



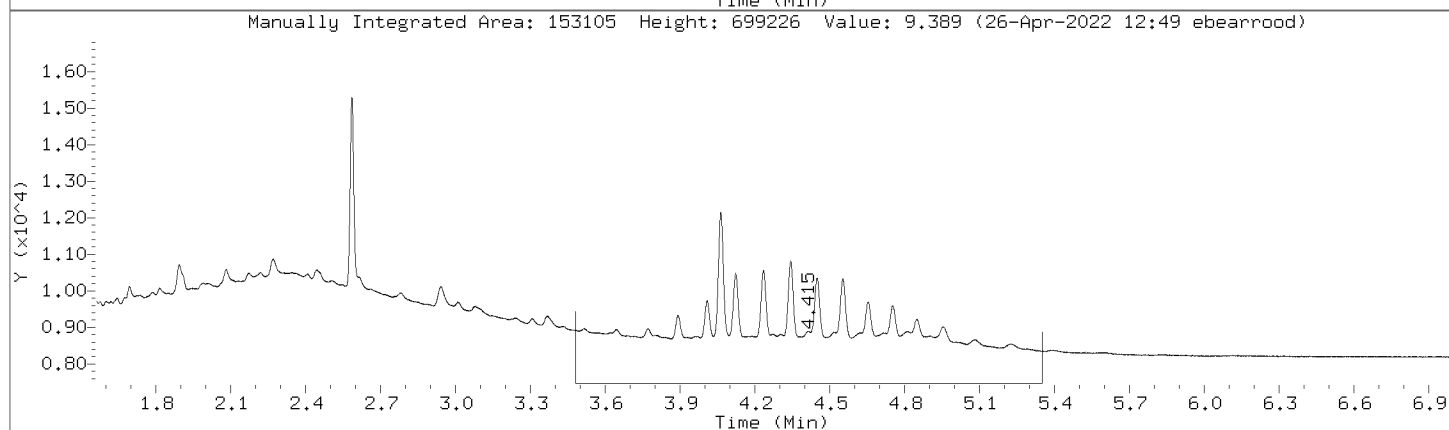
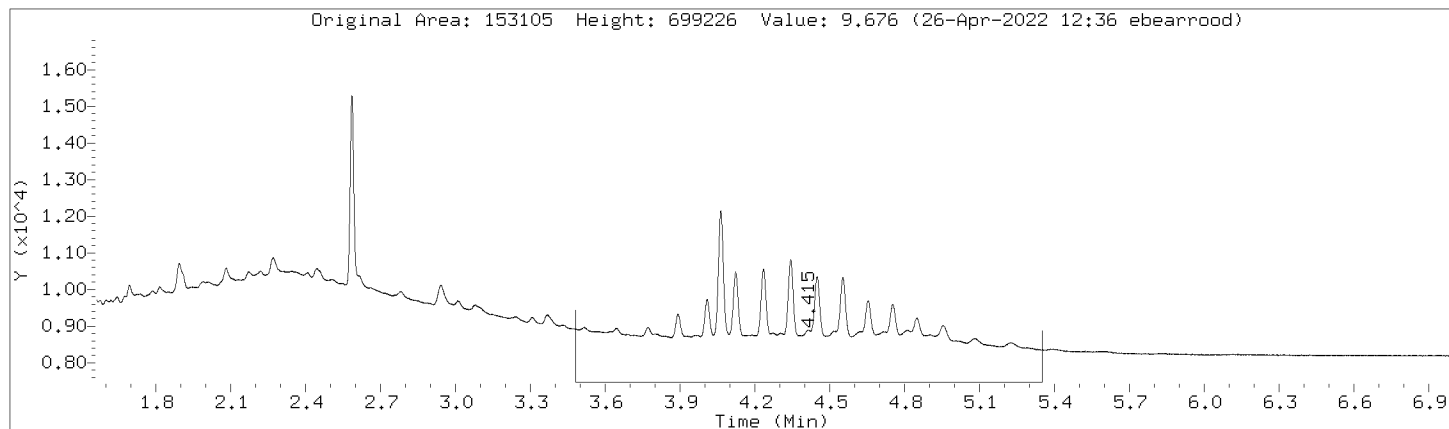
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



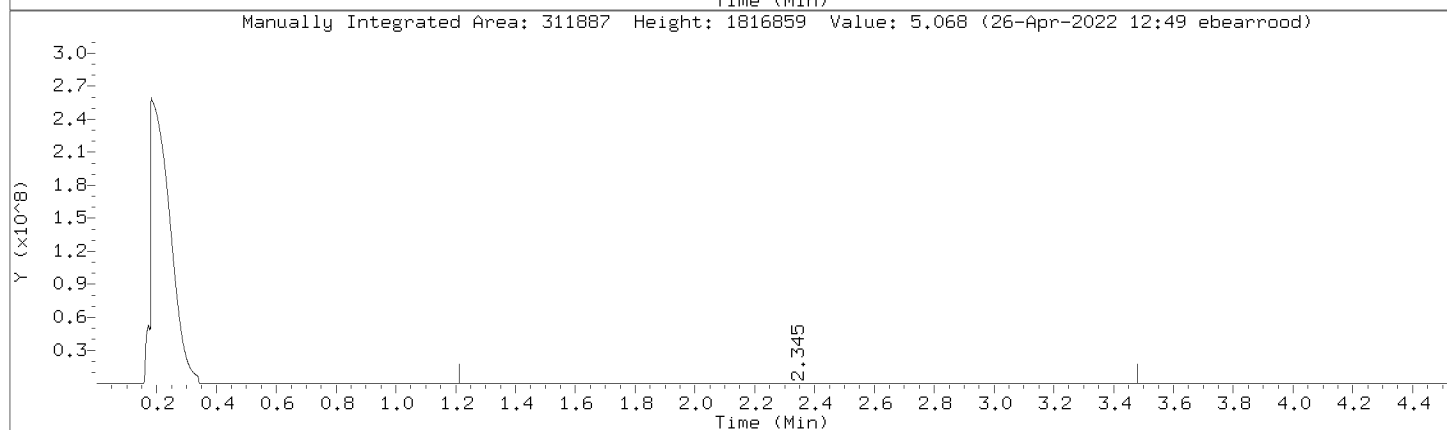
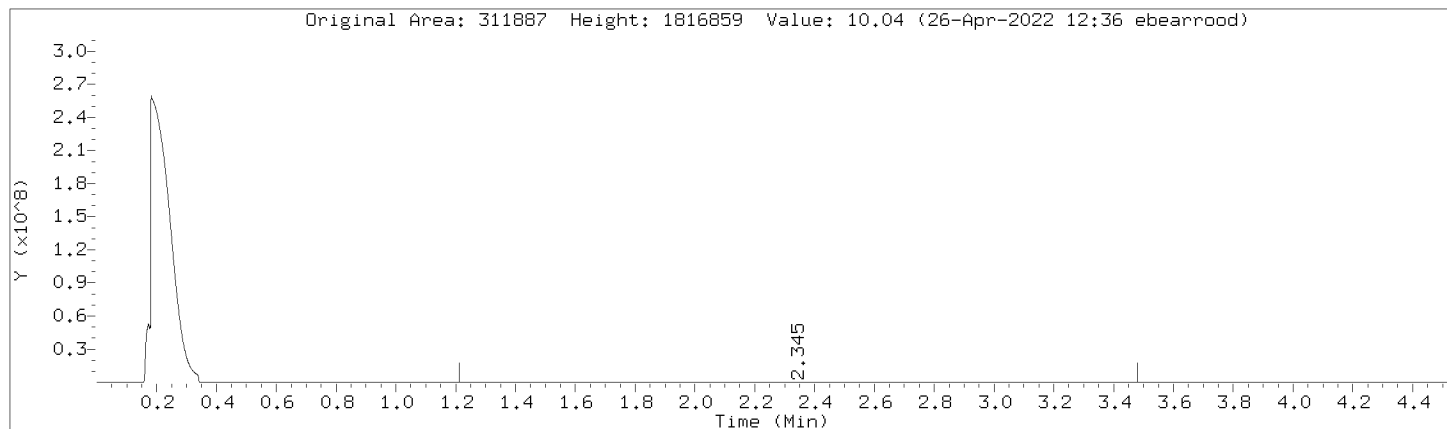
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



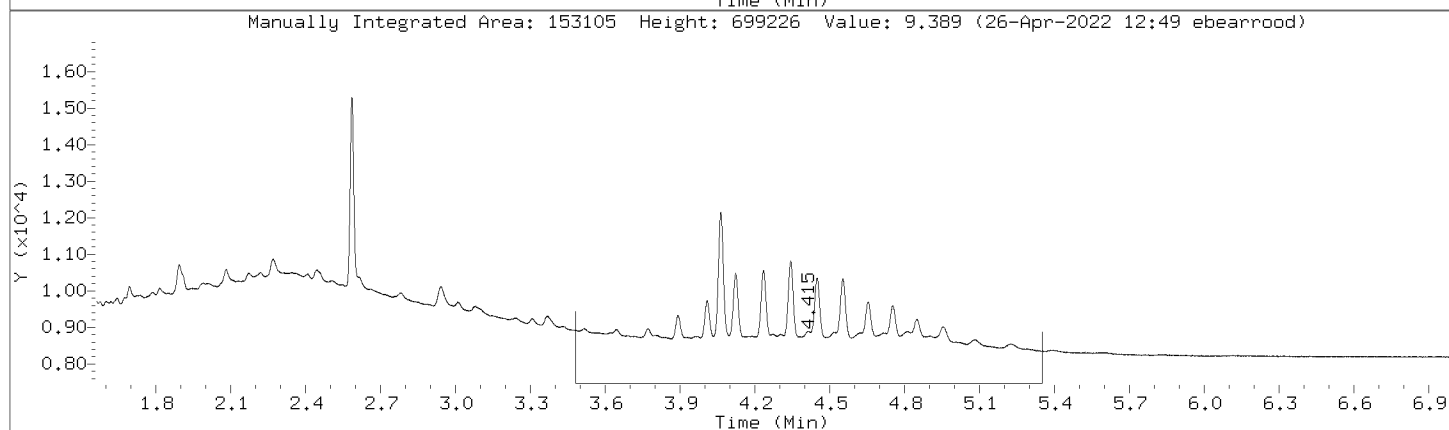
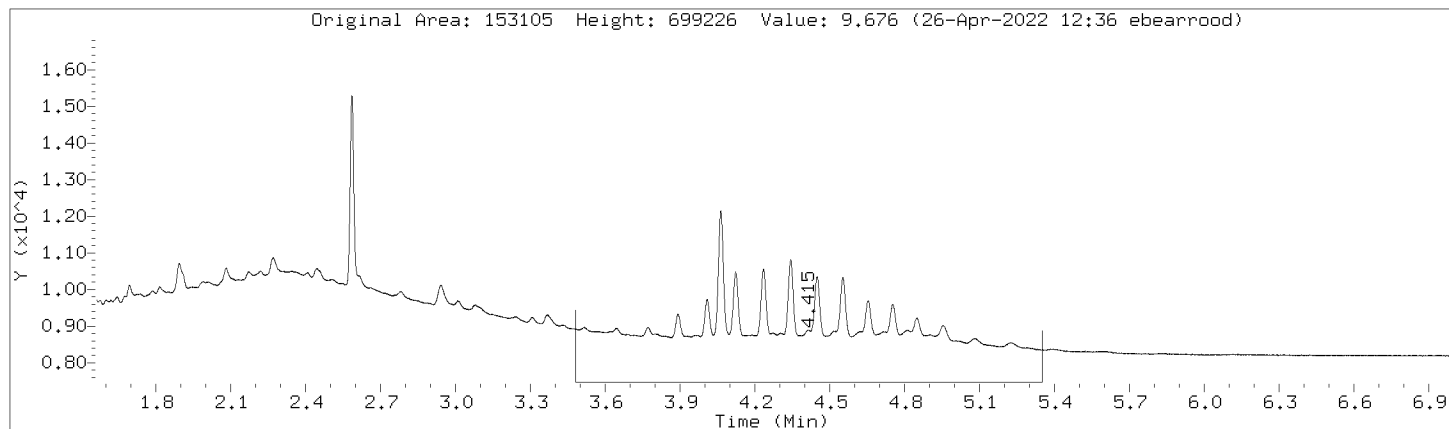
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



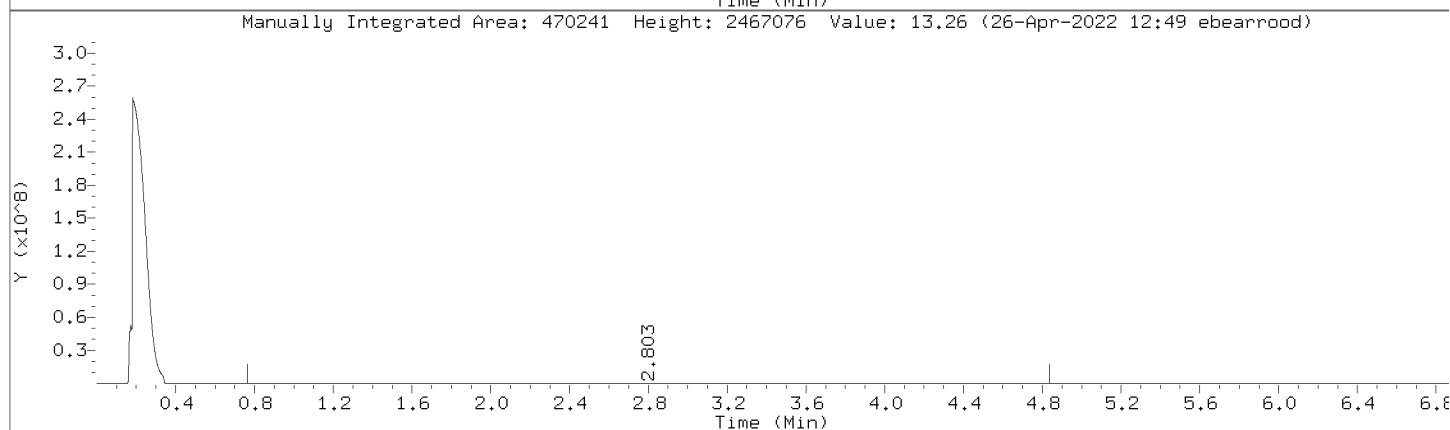
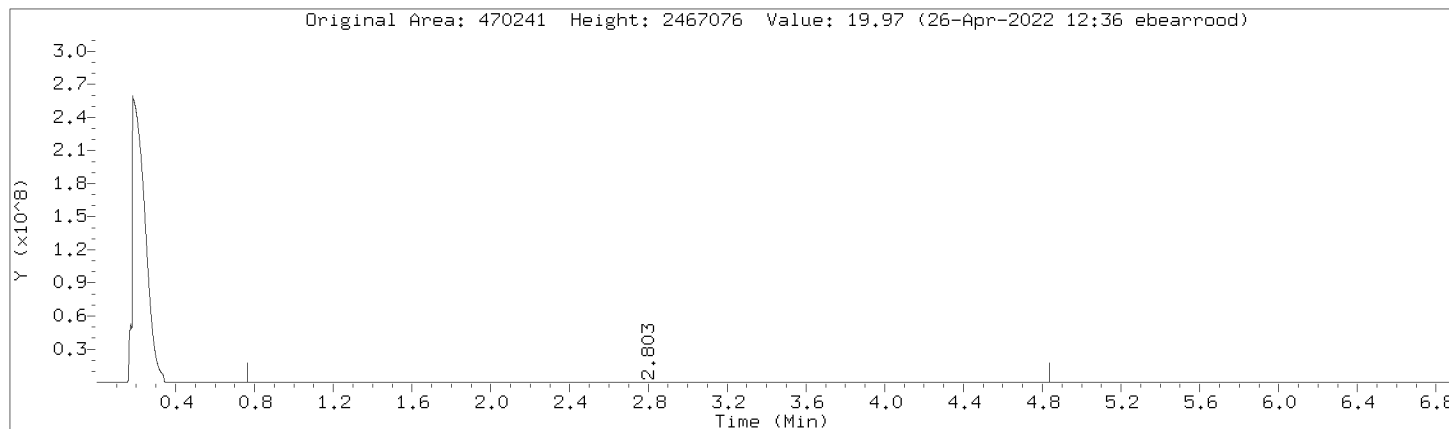
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

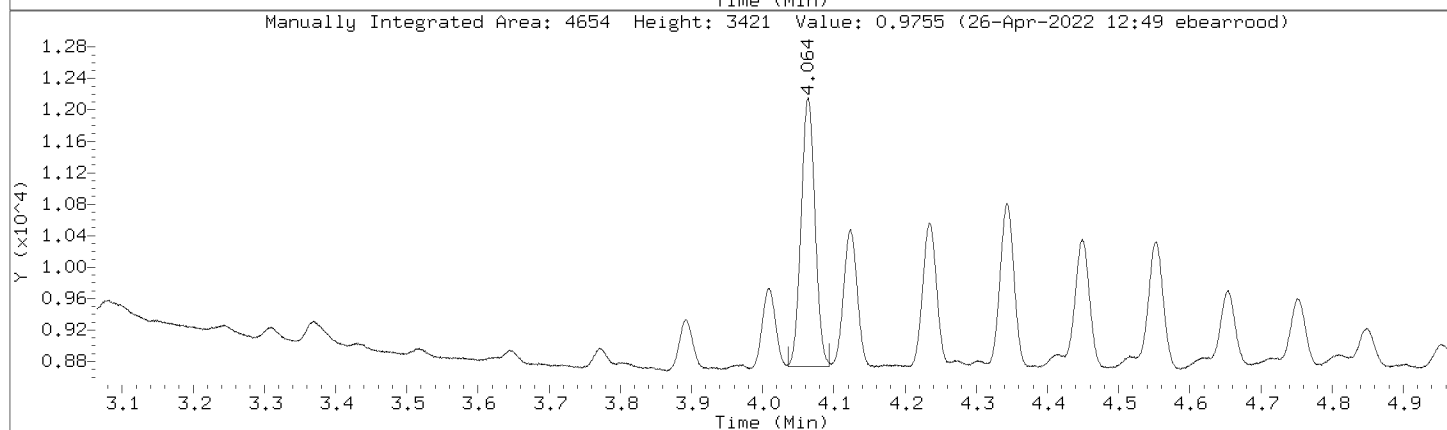
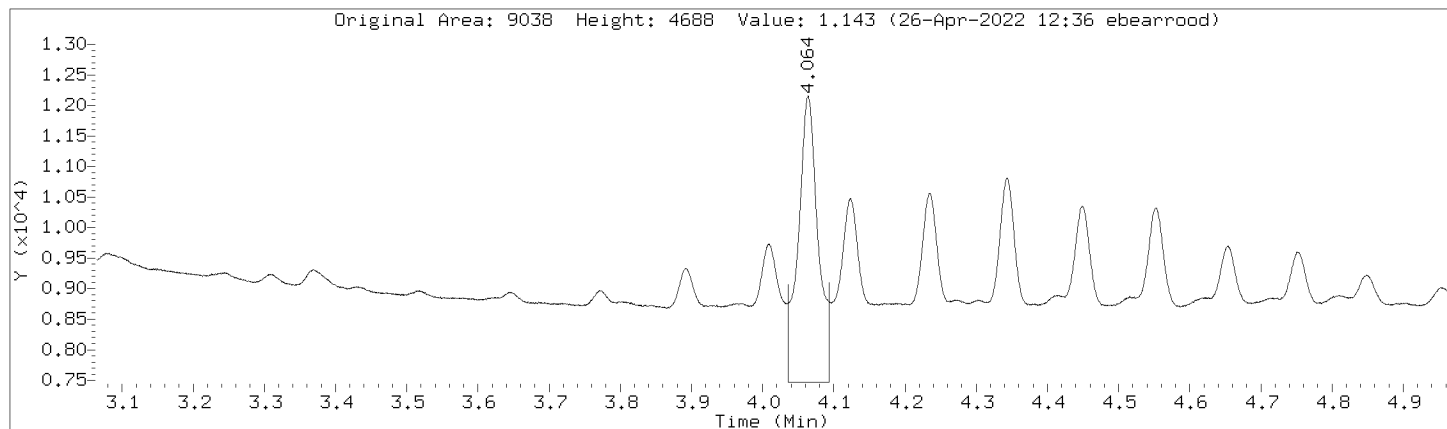
Compound: C10-C36      Review Code: RNG  
CAS Number:





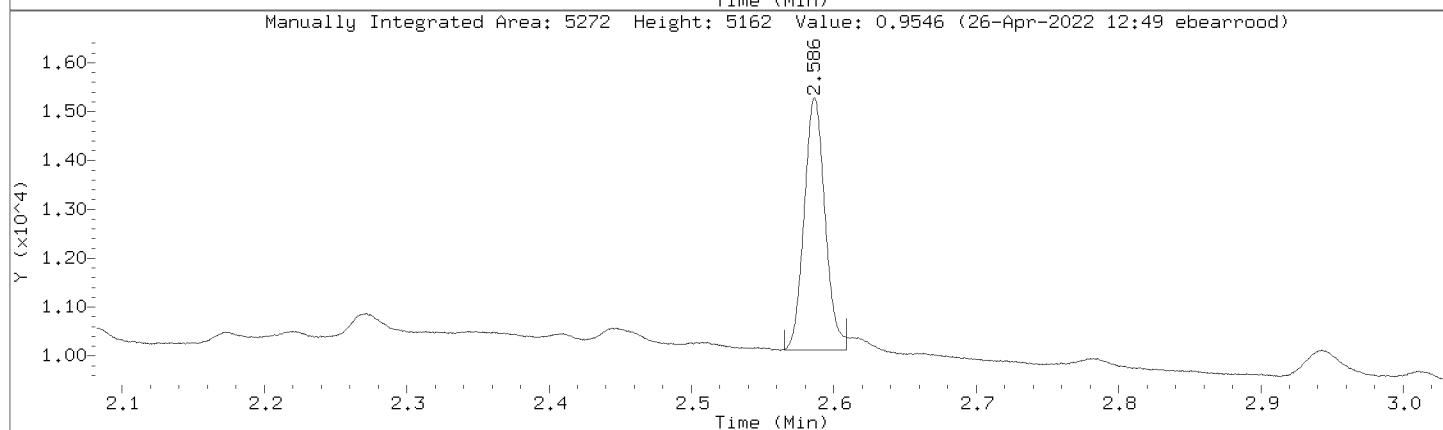
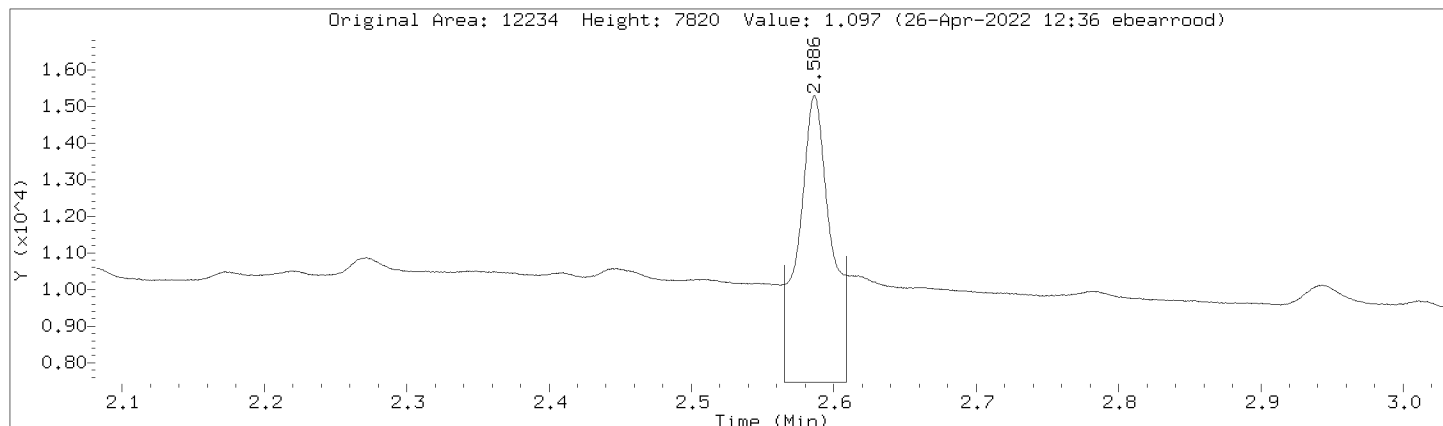
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
 Injection Date: 26-APR-2022 08:06  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL2,362370:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	122854	122854
DRO by AK 102	347386	347386
TPH-DRO (C10-C28)	392406	392406
Motor Oil Range (C24-C36)	135827	135827
Diesel Fuel Range	311887	311887
Motor Oil Range	153105	153105
Diesel Fuel Range SG	311887	311887
Motor Oil Range SG	153105	153105
C10-C36	470241	470241
n-Triacontane (S)	9038	4654
o-Terphenyl (S)	12234	5272

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
 Lab Smp Id: DMO-CAL3,362371:2 Client Smp ID: DMO-CAL3,362371:2  
 Inj Date : 26-APR-2022 08:18  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal3,362371:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 5 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		430132 25.0000	25.0	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.585	2.582 0.003		13904 2.50000	2.63	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.064	4.064 0.000		12041 2.50000	2.61	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		176198 25.0000	25.1	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		487019 25.0000	25.0	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		191144 25.0000	25.1	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		606474 50.0000	50.0	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		380934 25.0000	25.0	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		380934 25.0000	25.0	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		220253 25.0000	25.1	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		220253 25.0000	25.1	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 08:18

Client ID: DMO-CAL3,362371:2

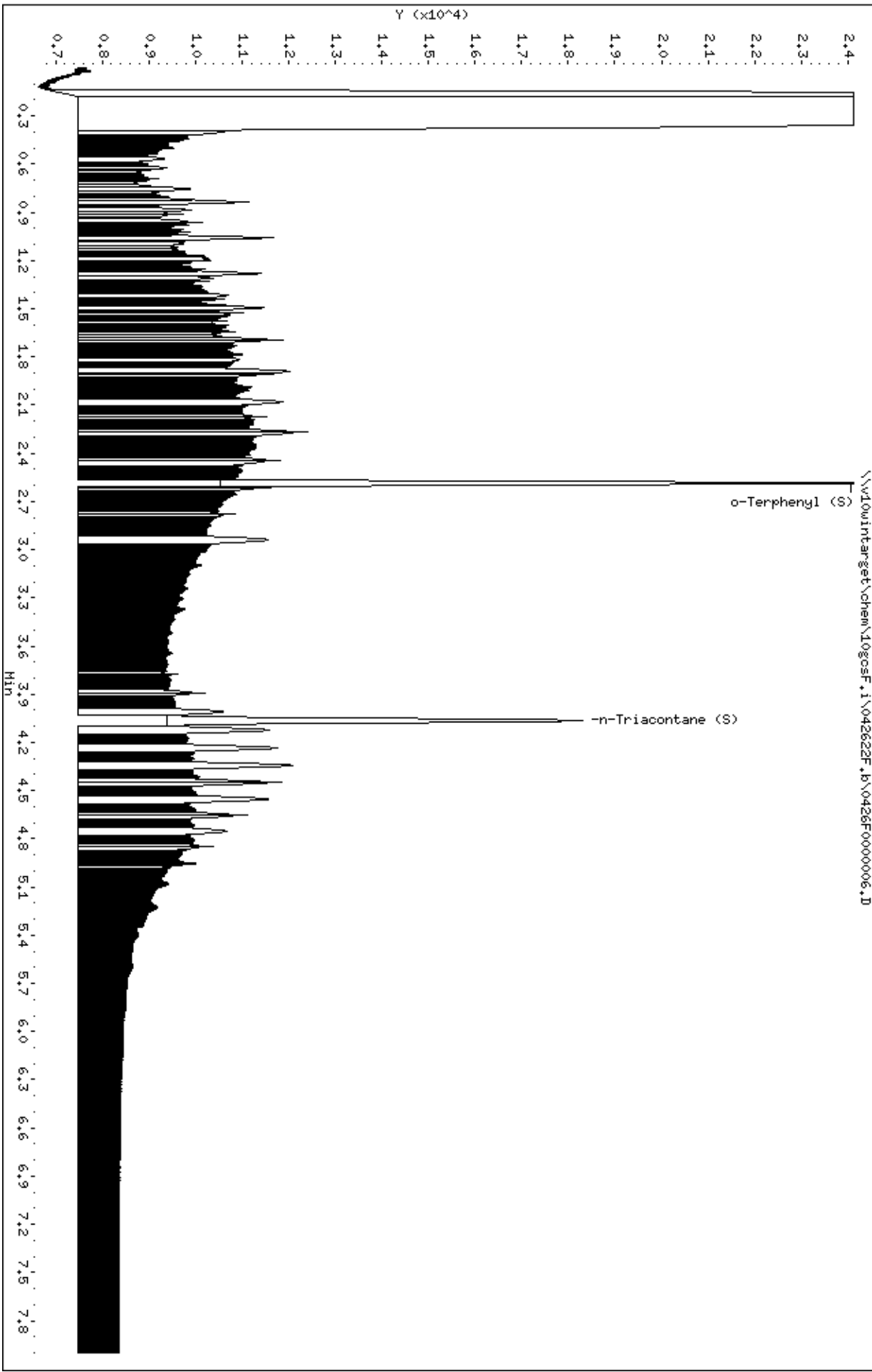
Sample Info: DMO-CAL3,362371:2

Instrument: 10gocsf.1

Operator: EB3

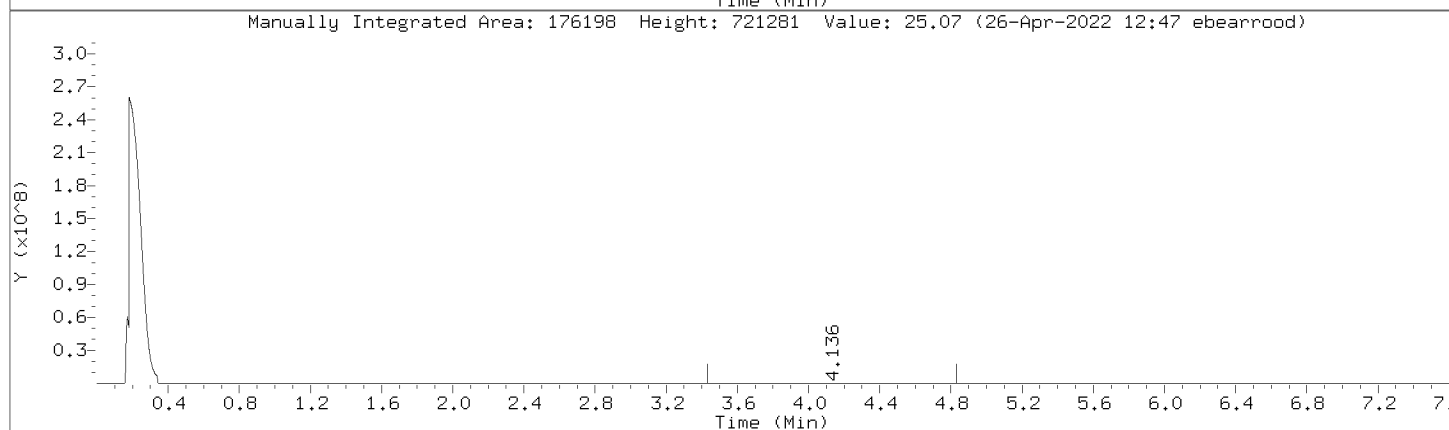
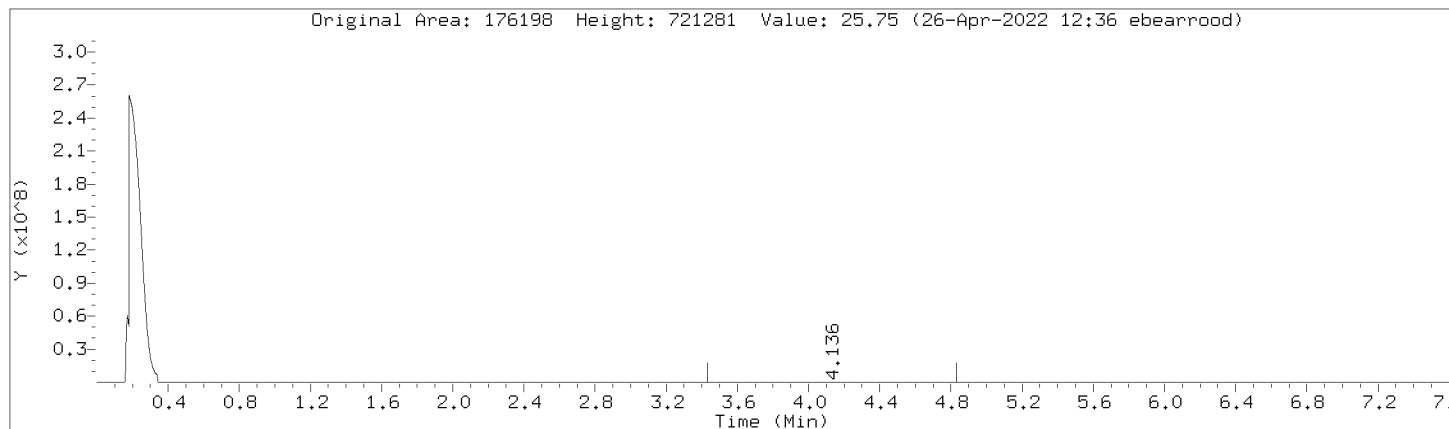
Column diameter: 0.32

Column phase: DB-5-MS21250010



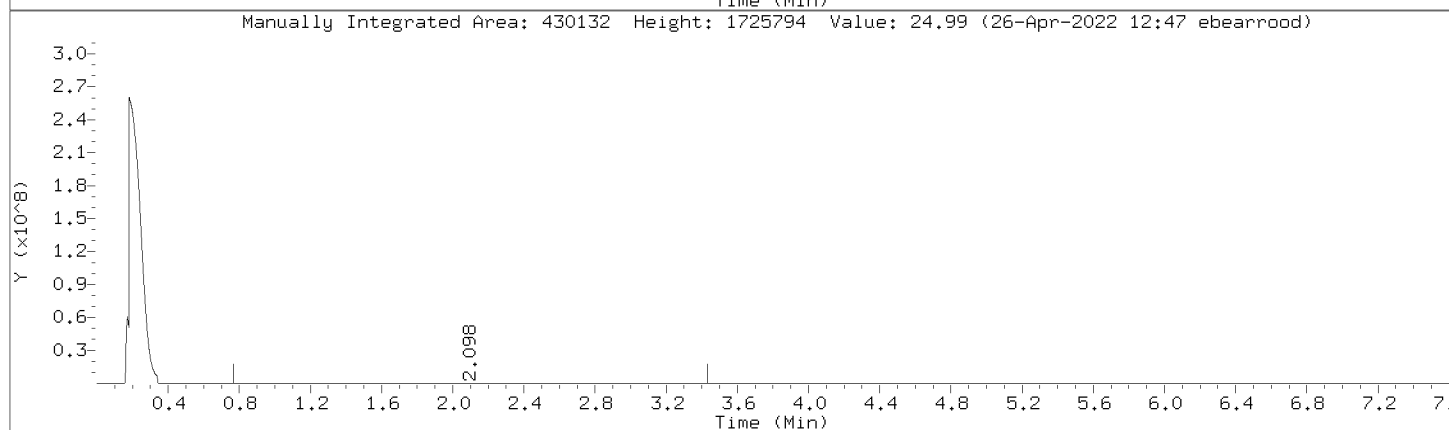
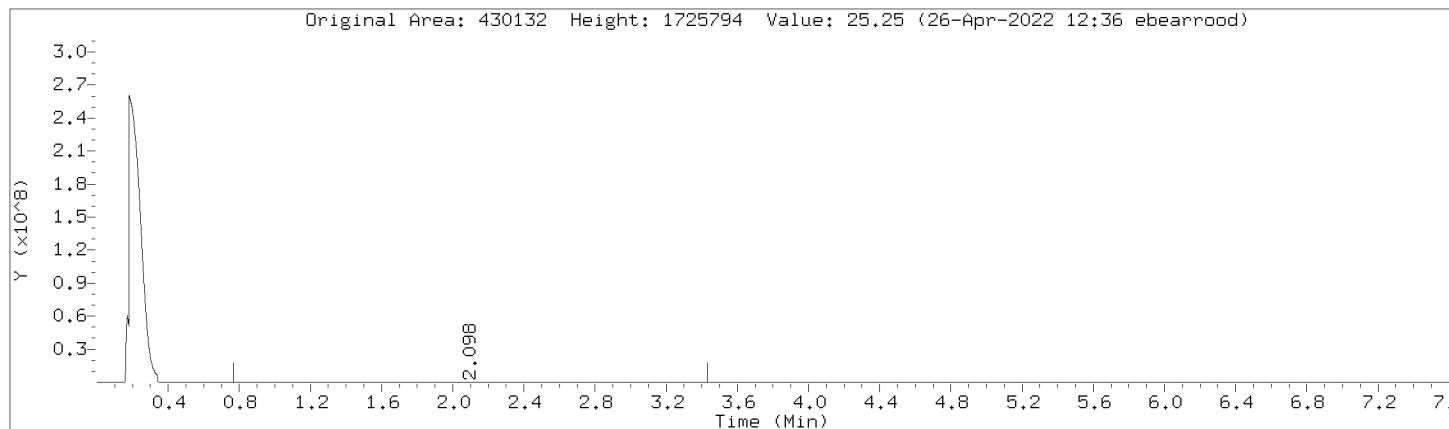
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



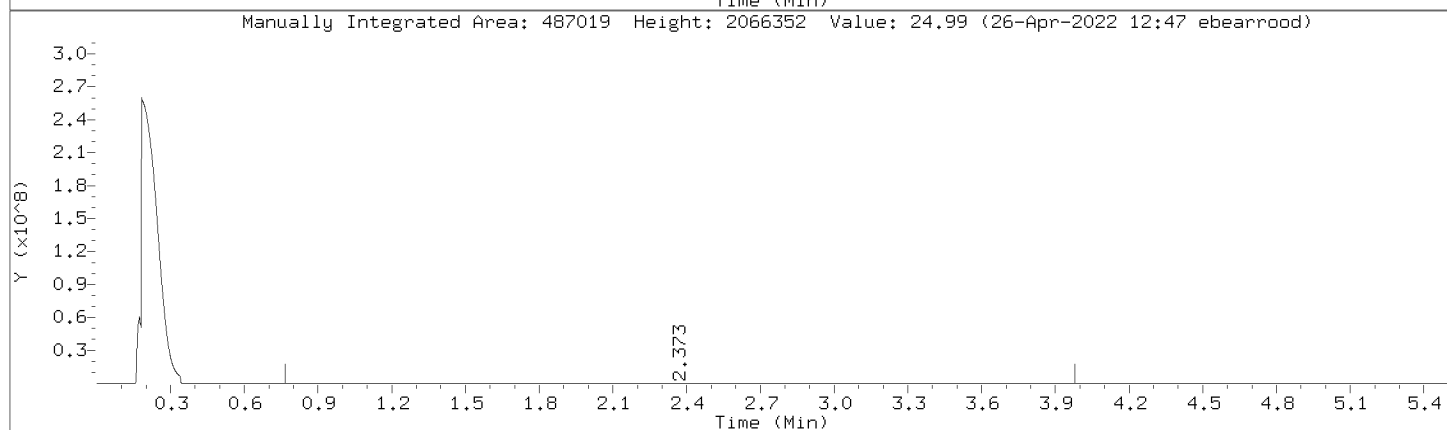
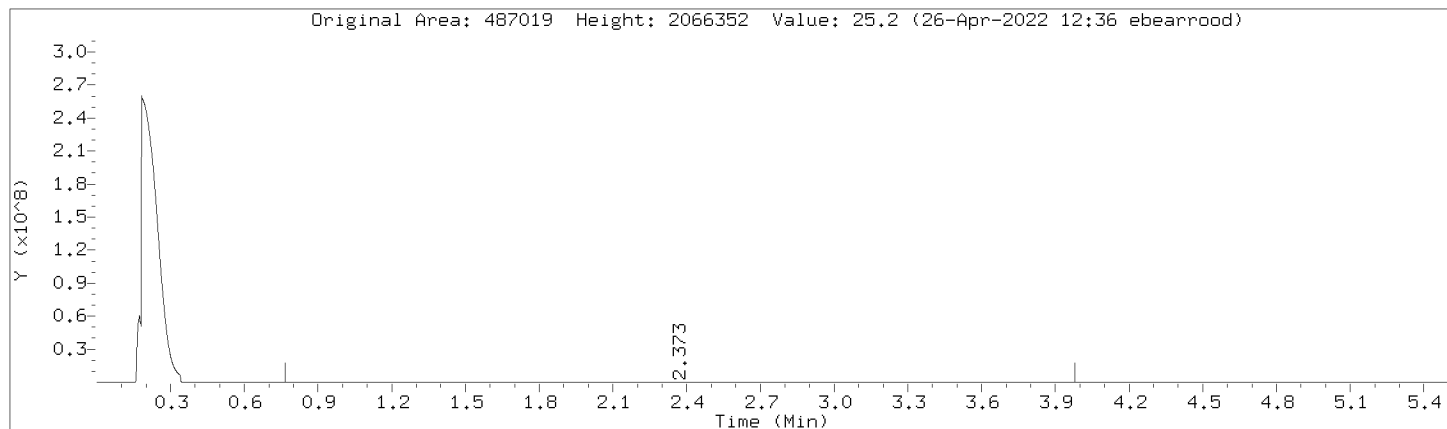
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

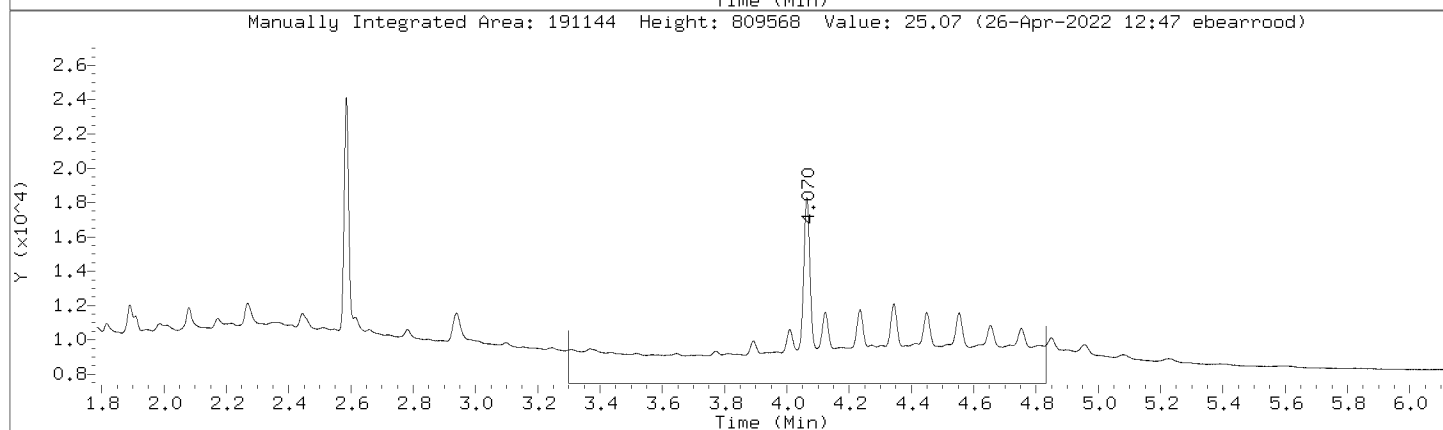
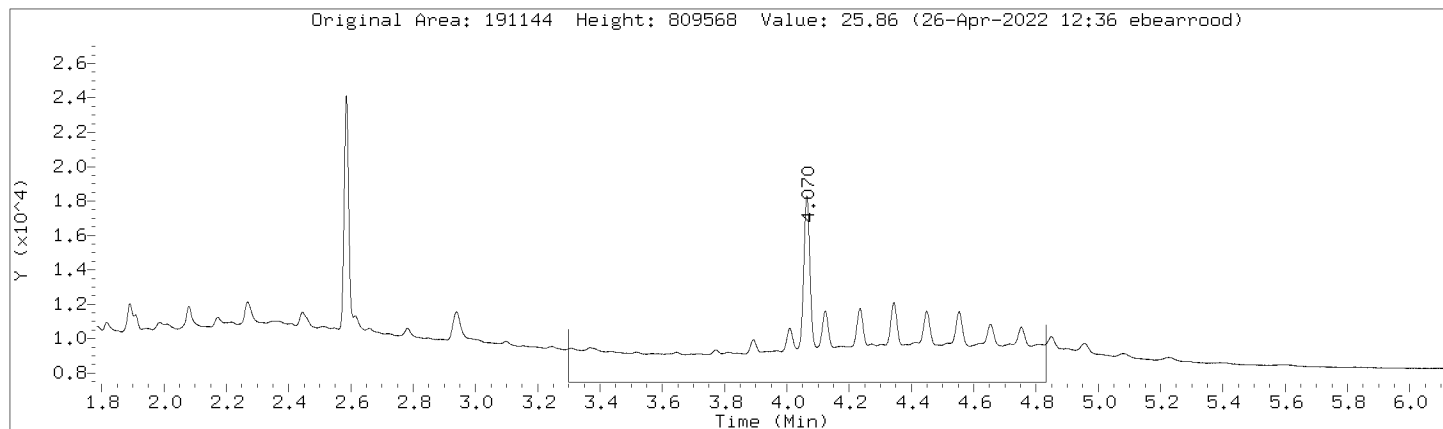
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:





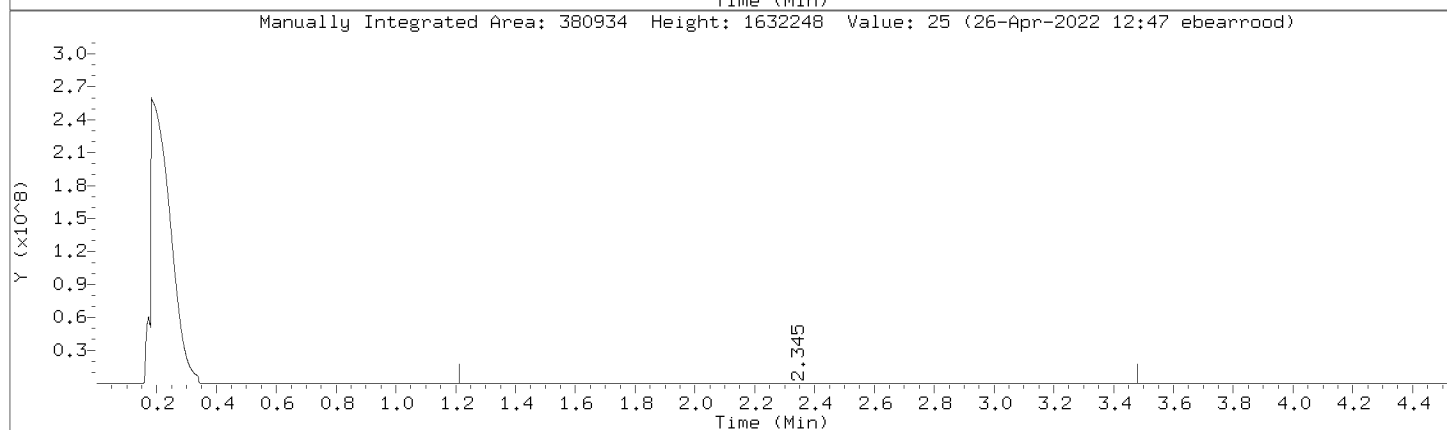
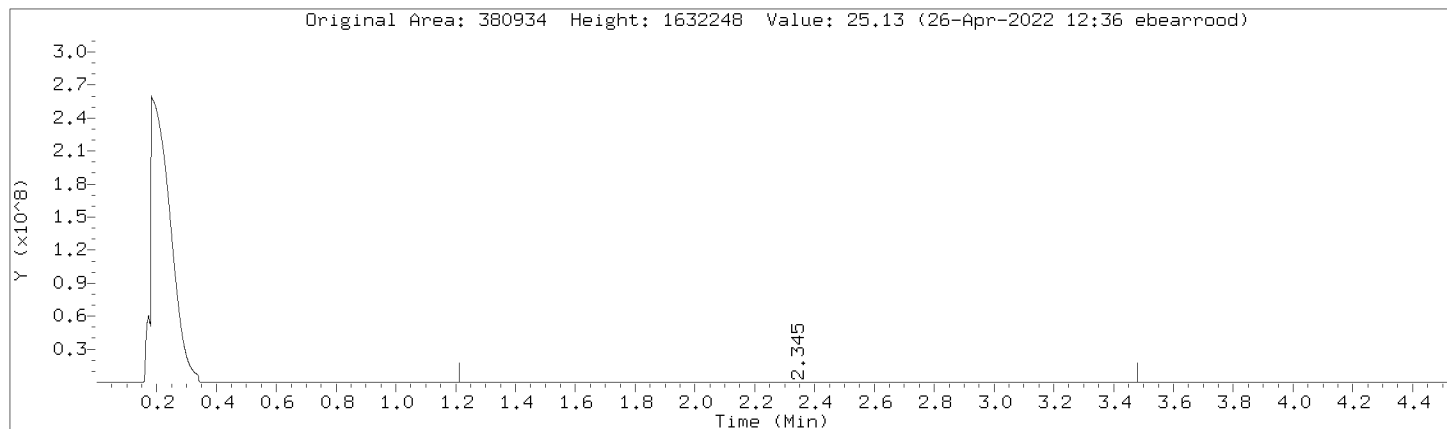
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



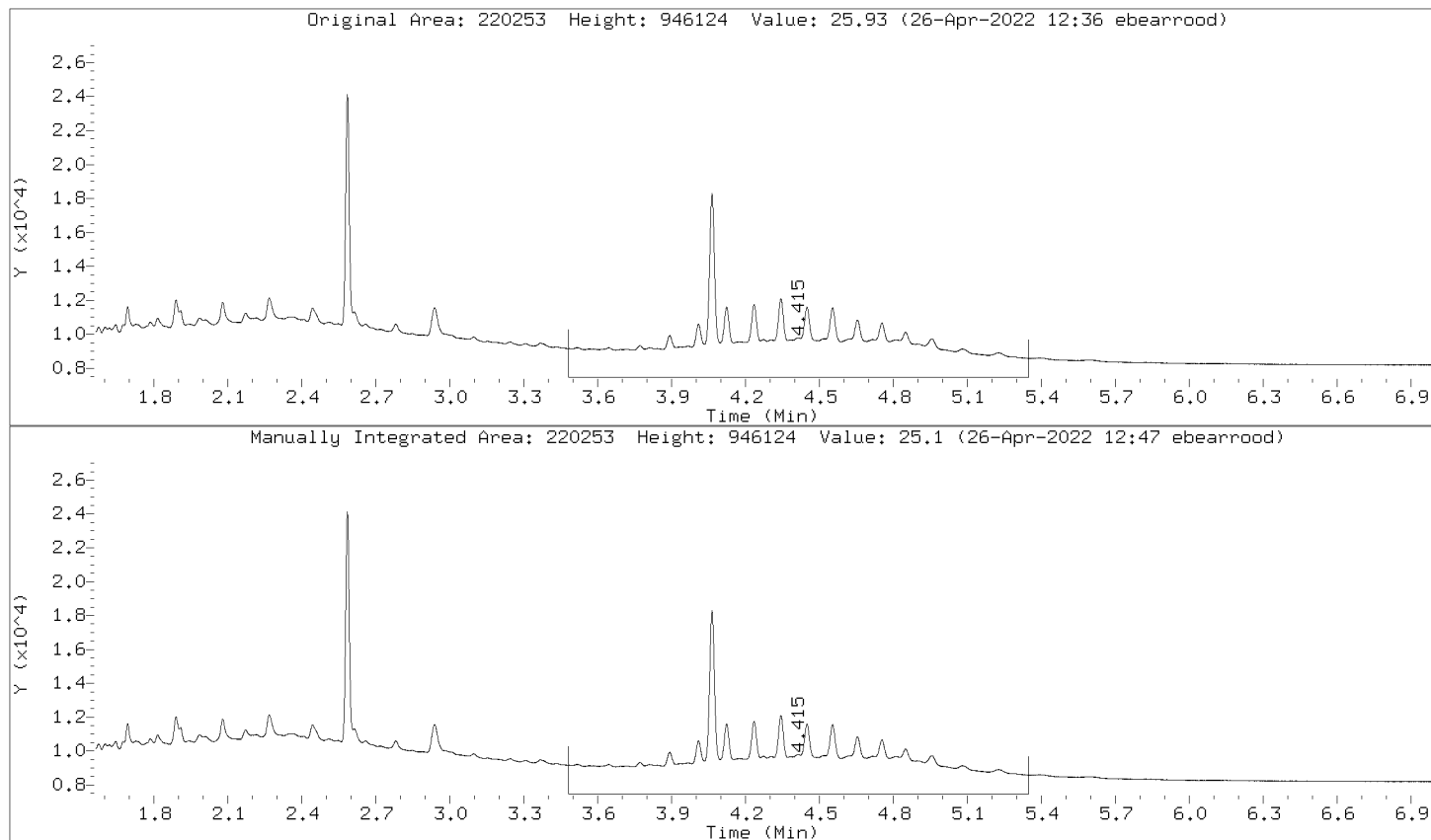
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



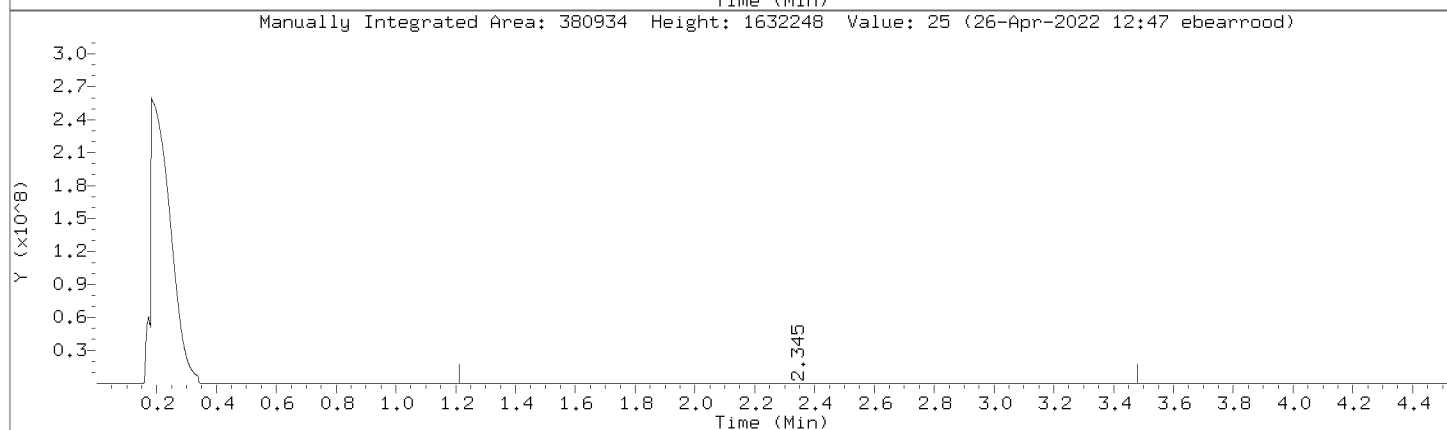
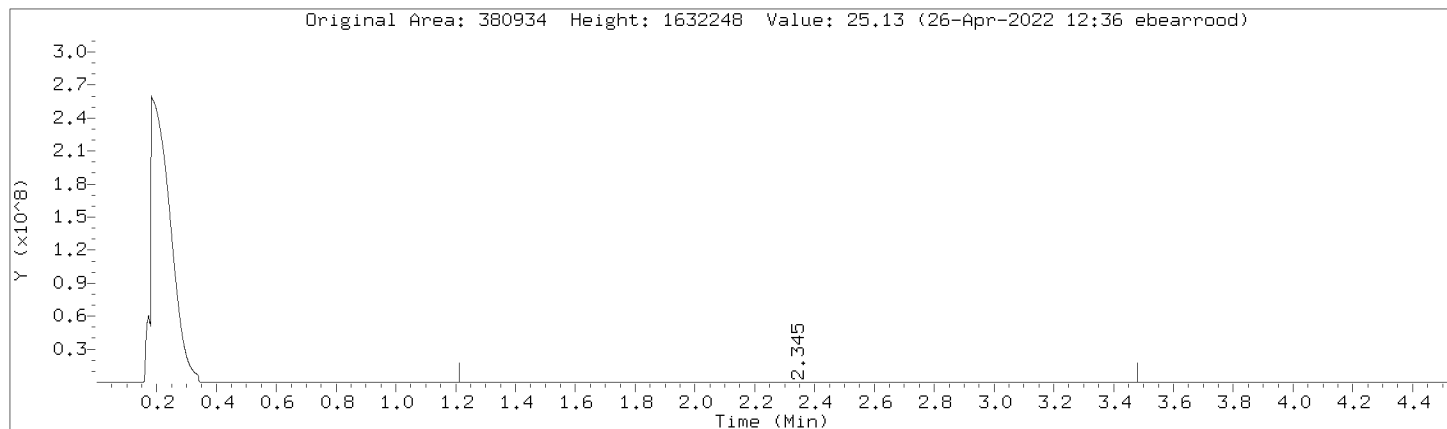
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



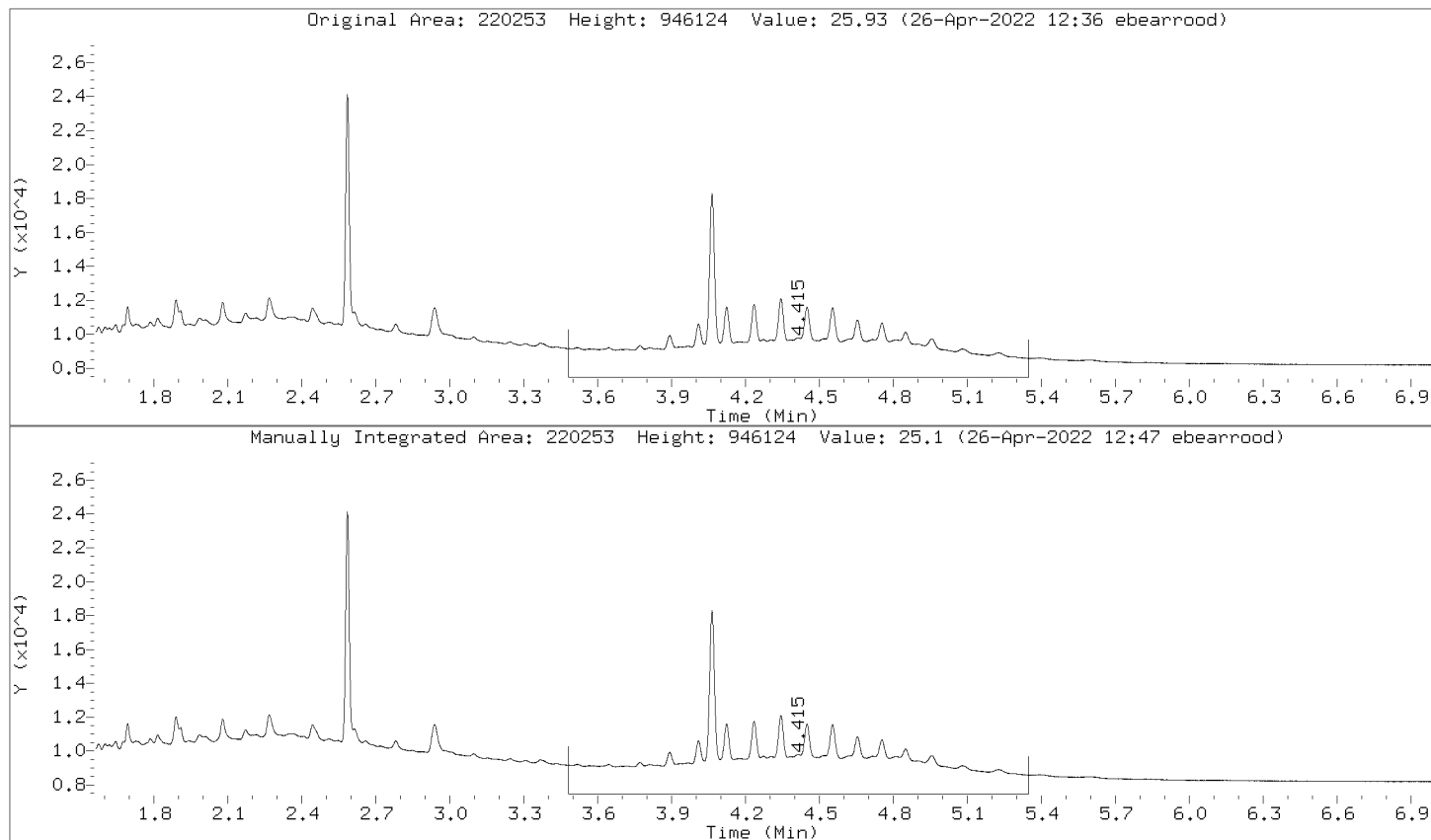
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



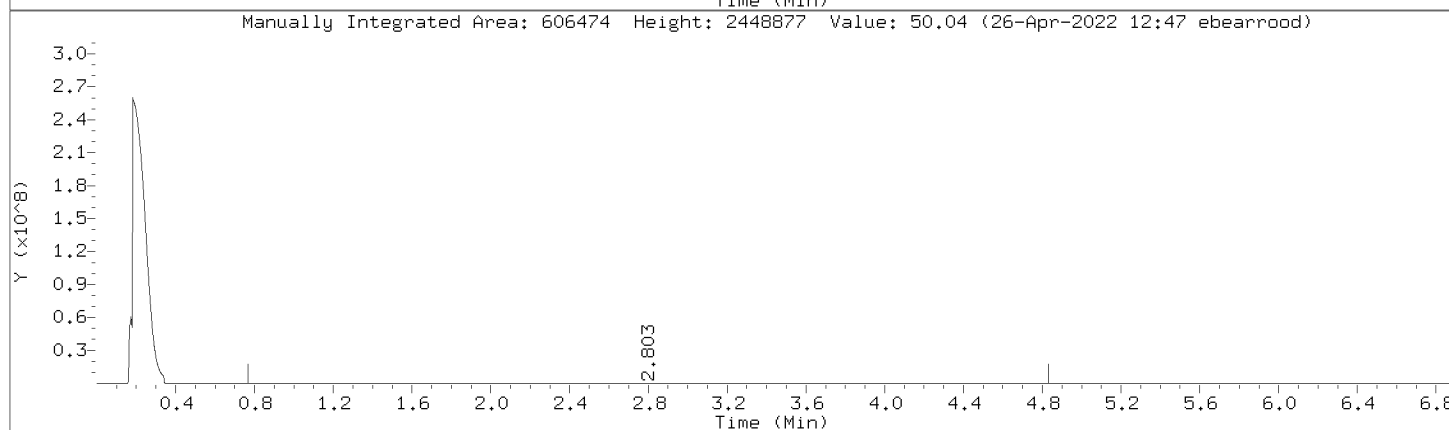
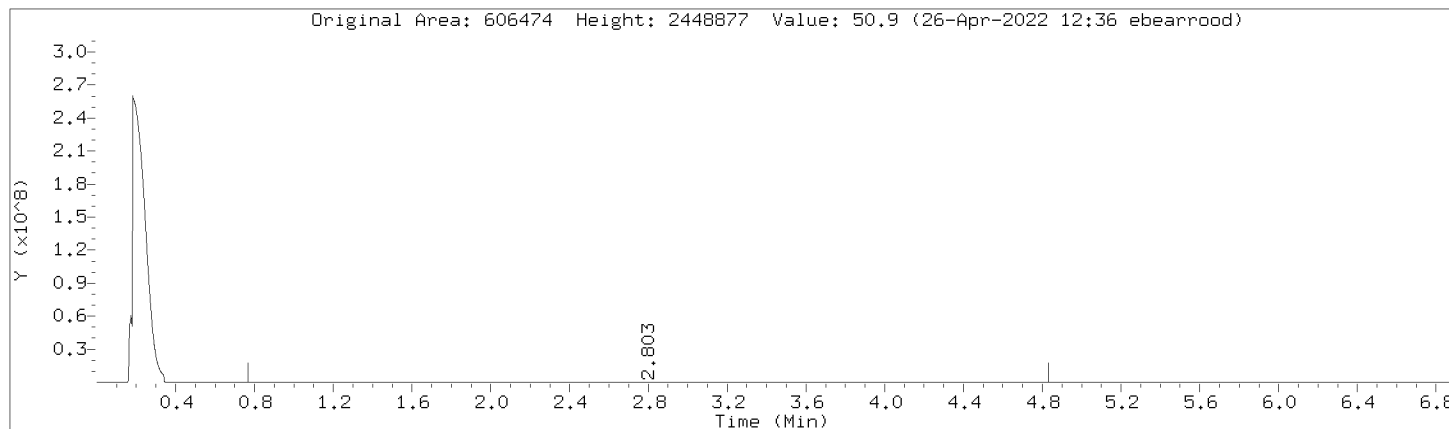
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



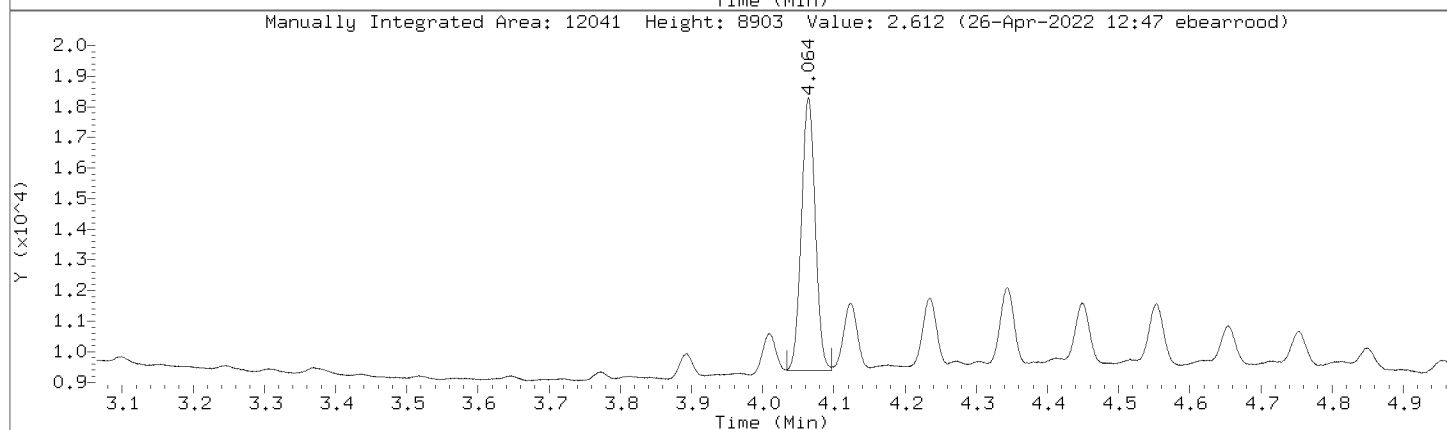
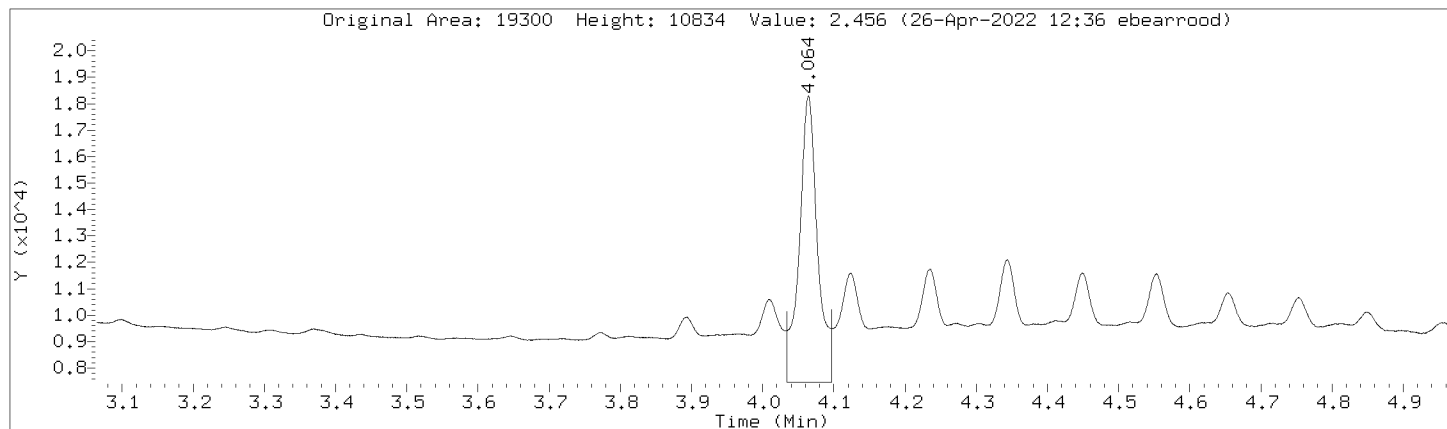
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



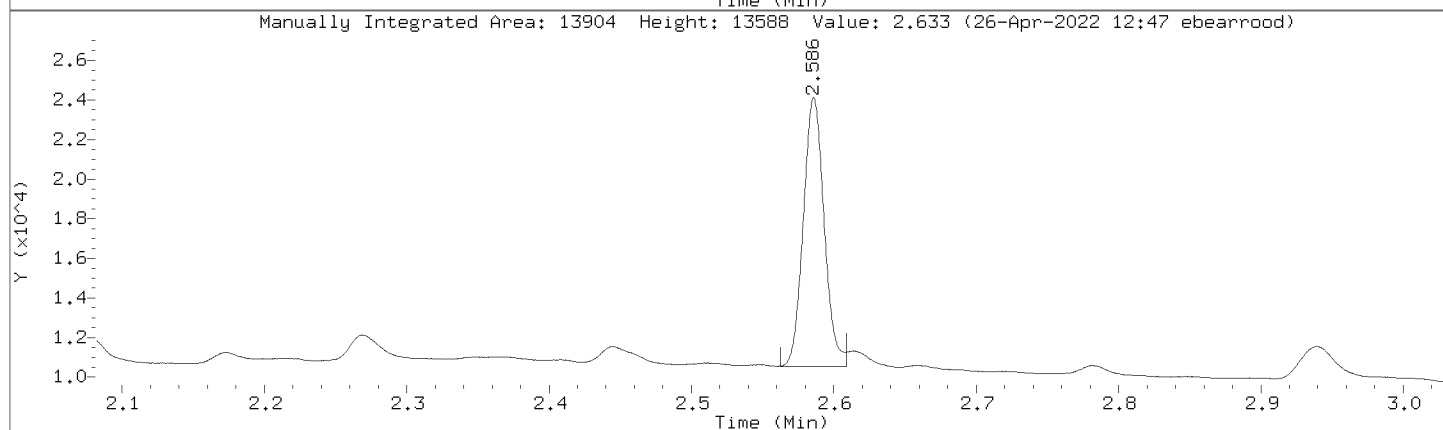
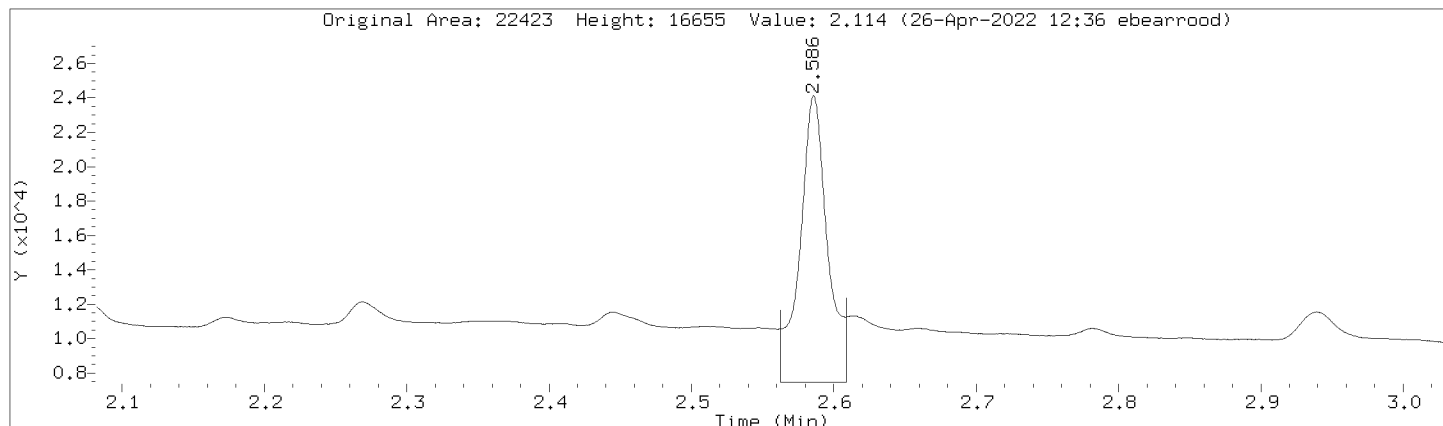
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
 Injection Date: 26-APR-2022 08:18  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL3,362371:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	176198	176198
DRO by AK 102	430132	430132
TPH-DRO (C10-C28)	487019	487019
Motor Oil Range (C24-C36)	191144	191144
Diesel Fuel Range	380934	380934
Motor Oil Range	220253	220253
Diesel Fuel Range SG	380934	380934
Motor Oil Range SG	220253	220253
C10-C36	606474	606474
n-Triacontane (S)	19300	12041
o-Terphenyl (S)	22423	13904



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000007.D  
 Lab Smp Id: DMO-CAL4,362372:2 Client Smp ID: DMO-CAL4,362372:2  
 Inj Date : 26-APR-2022 08:29  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal4,362372:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 6 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		568966 50.0000	50.0	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.587	2.582 0.005		27800 5.00000	5.20	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.063	4.064 -0.001		24127 5.00000	5.17	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		251014 50.0000	49.5	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		645591 50.0000	50.0	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		272245 50.0000	49.7	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		819980 100.000	99.7	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		497843 50.0000	50.0	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		497843 50.0000	50.0	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		310788 50.0000	49.5	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		310788 50.0000	49.5	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 08:29

Client ID: DMO-CAL4,362372:2

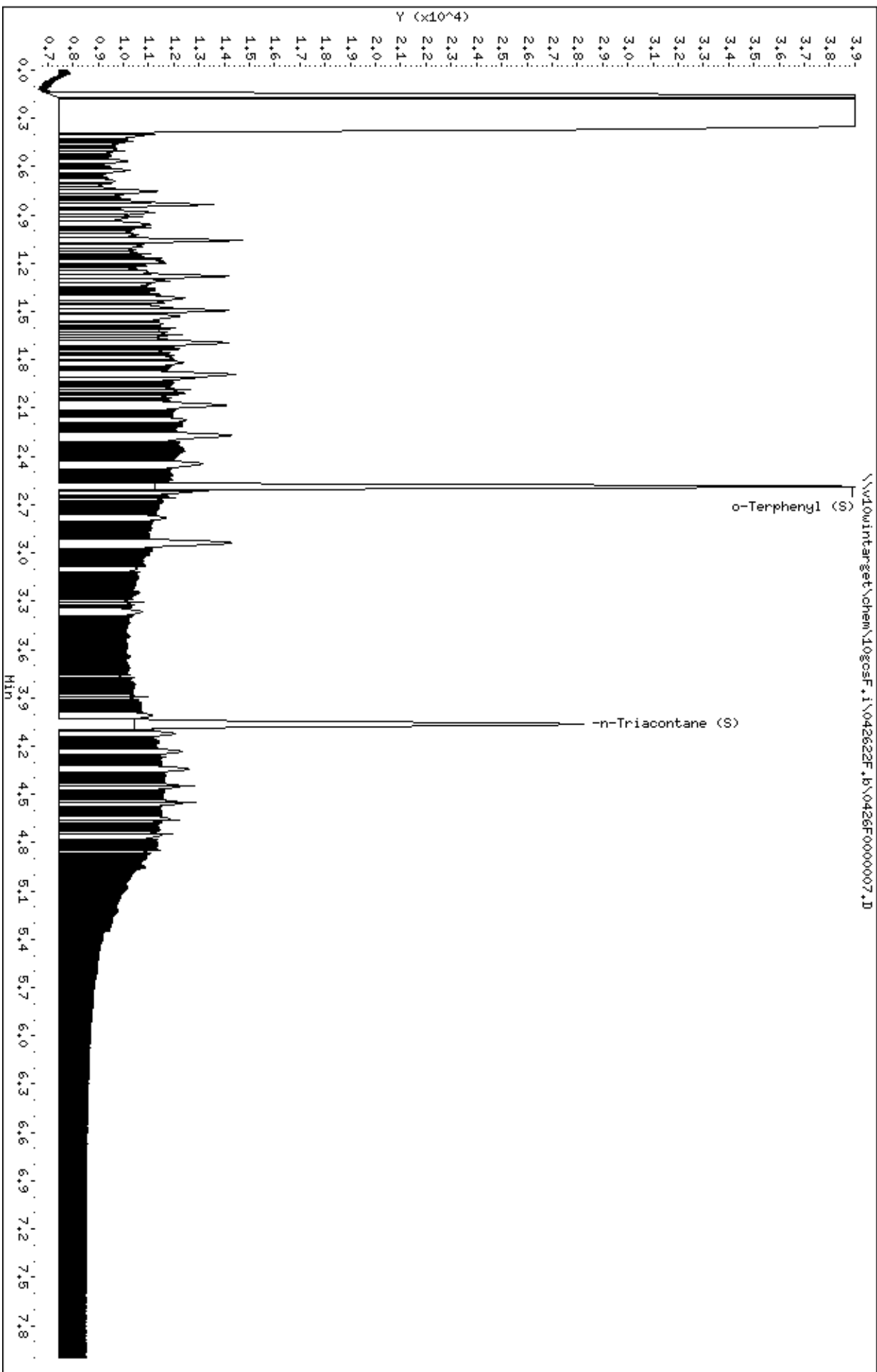
Sample Info: DMO-CAL4,362372:2

Instrument: 10gocsf.1

Operator: EB3

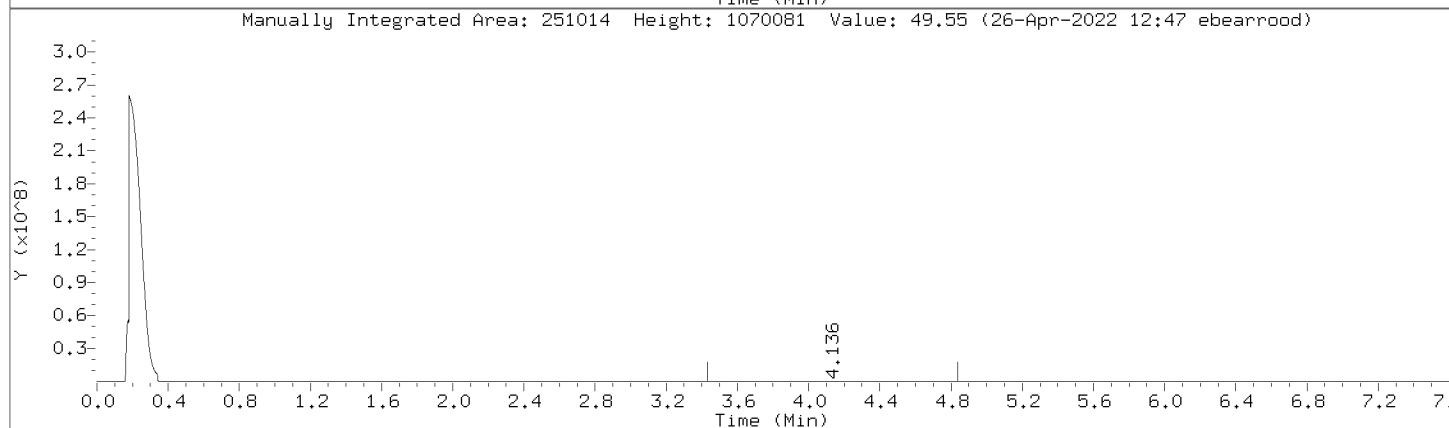
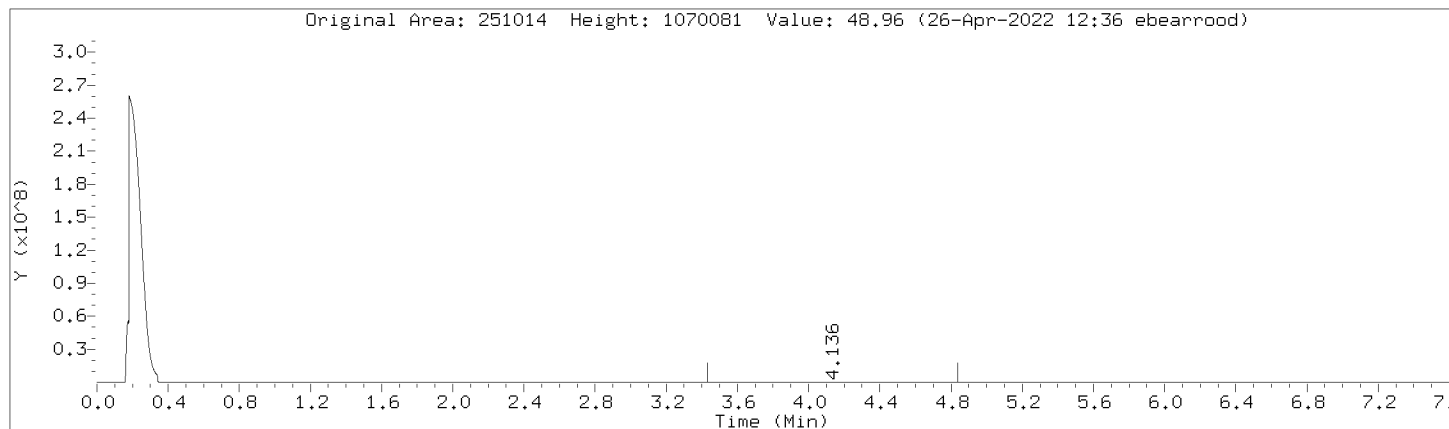
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Column phase: DB-5-US21250010



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Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000007.D

Injection Date: 26-APR-2022 08:29

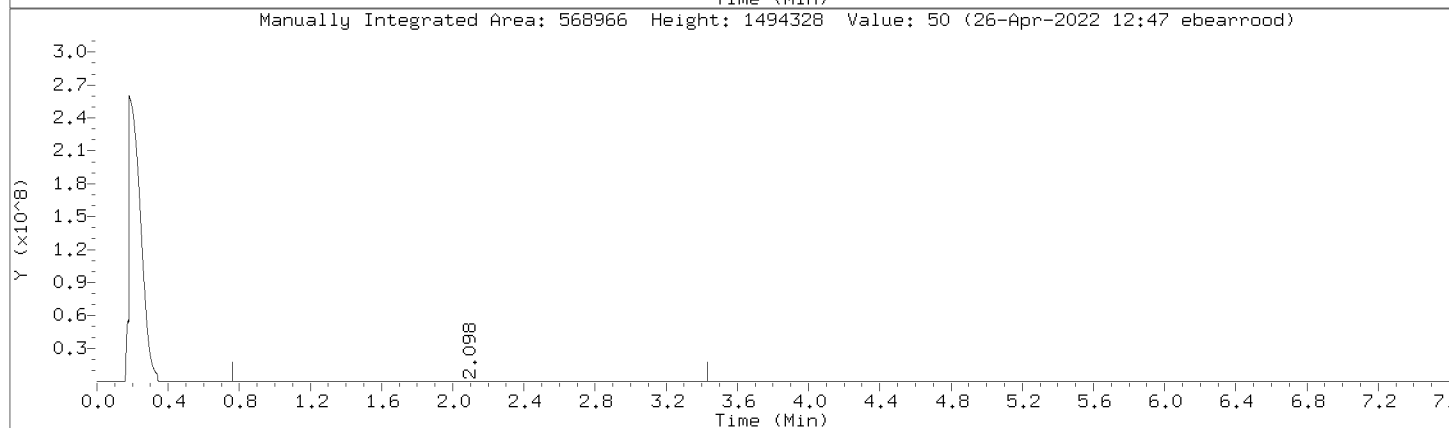
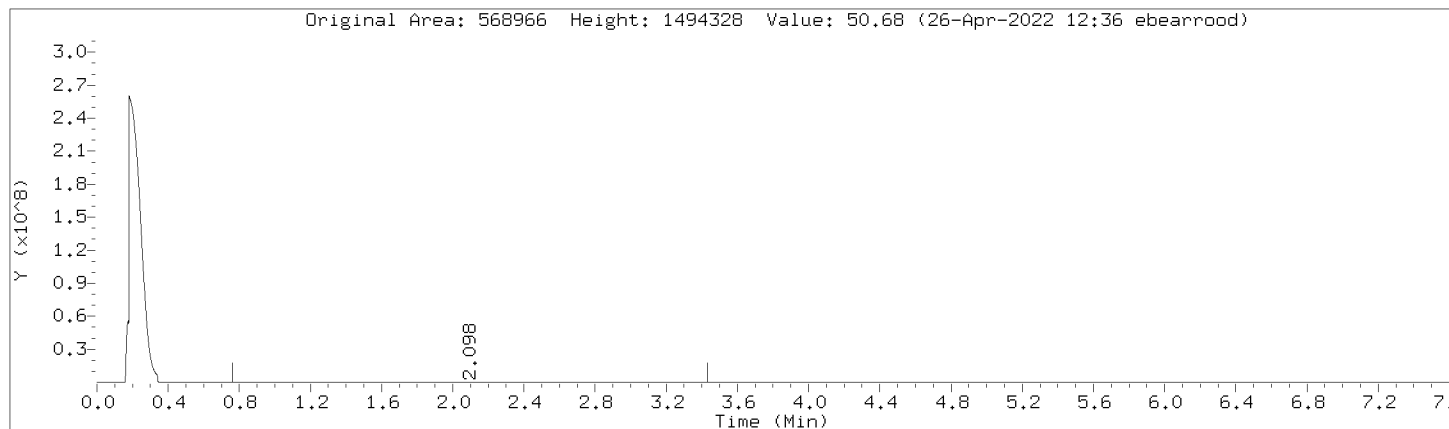
Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL4,362372:2

Compound: DRO by AK 102

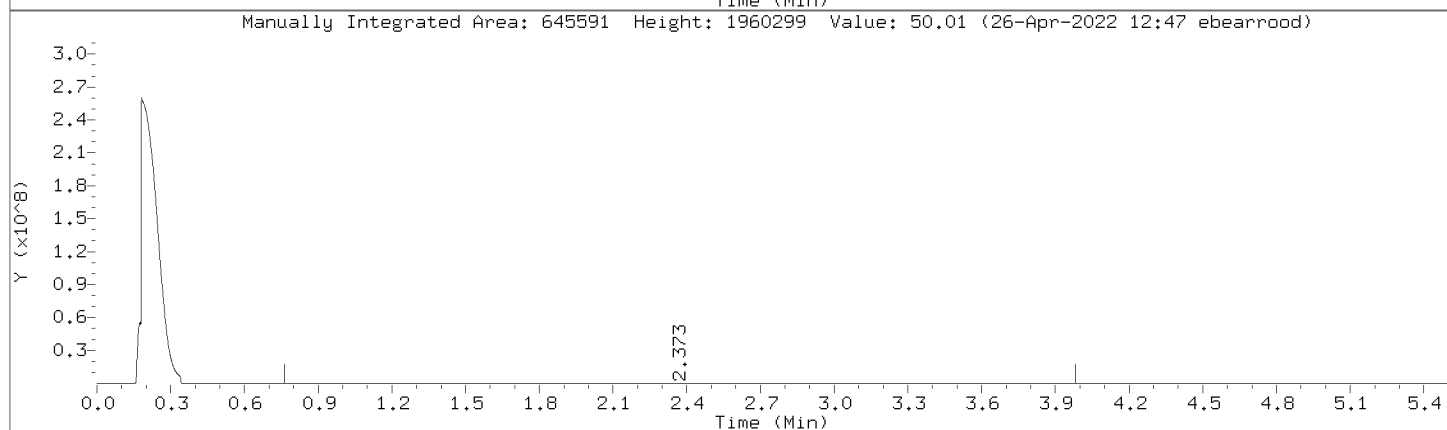
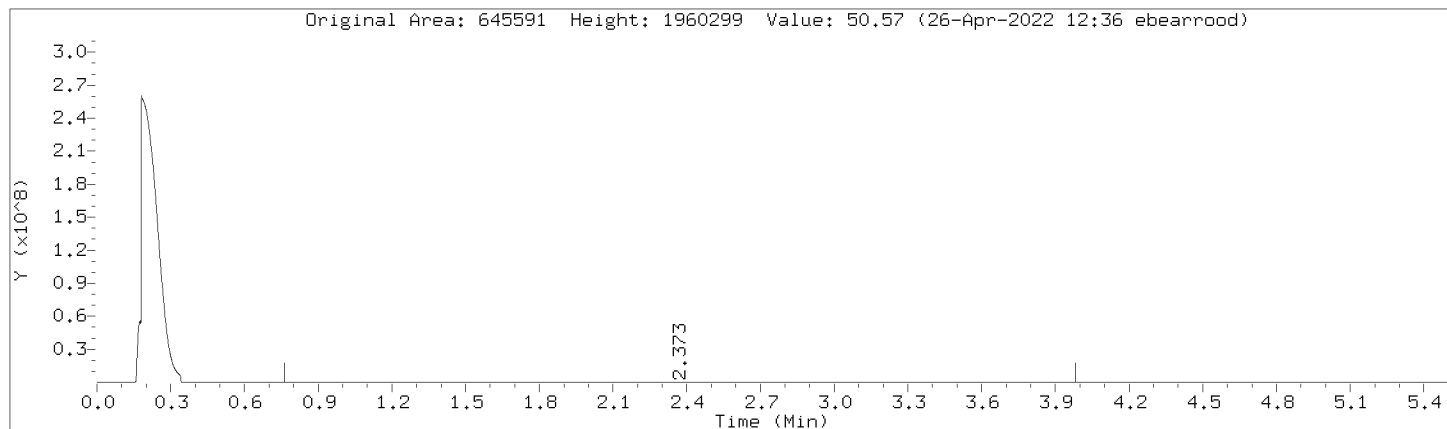
Review Code: RNG

CAS Number:



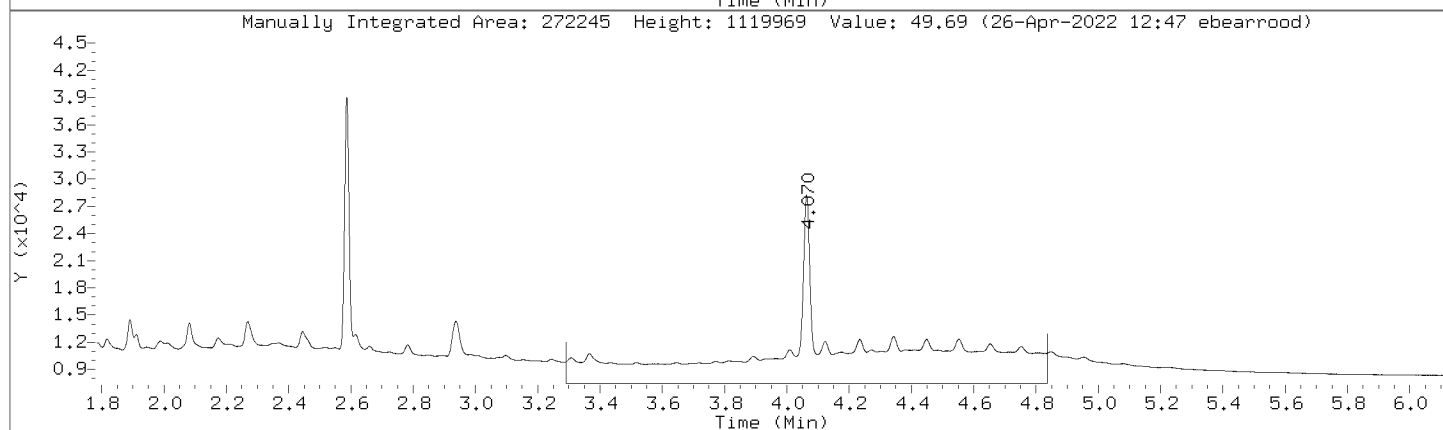
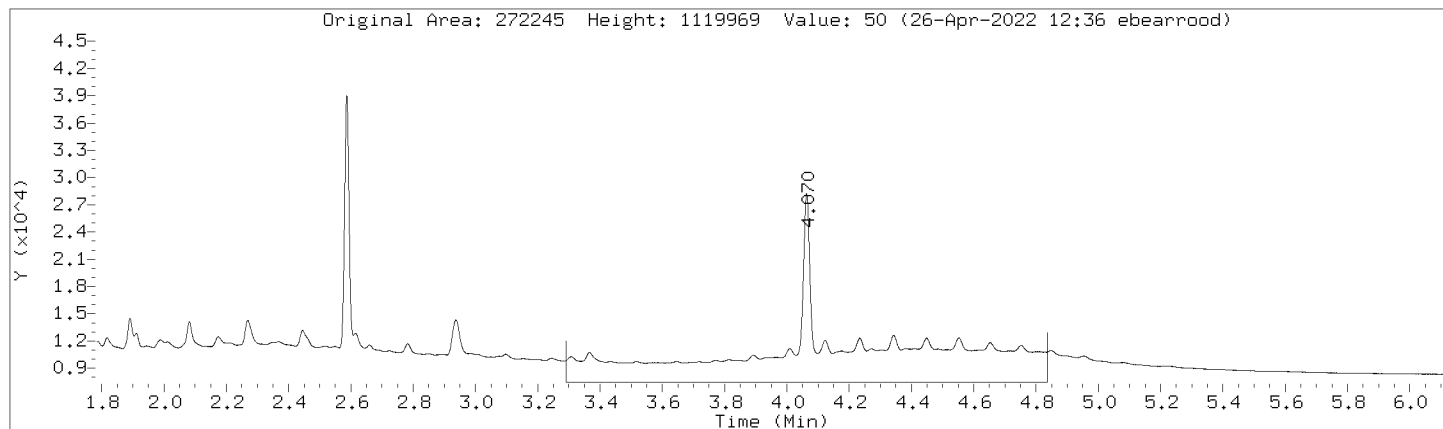
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Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



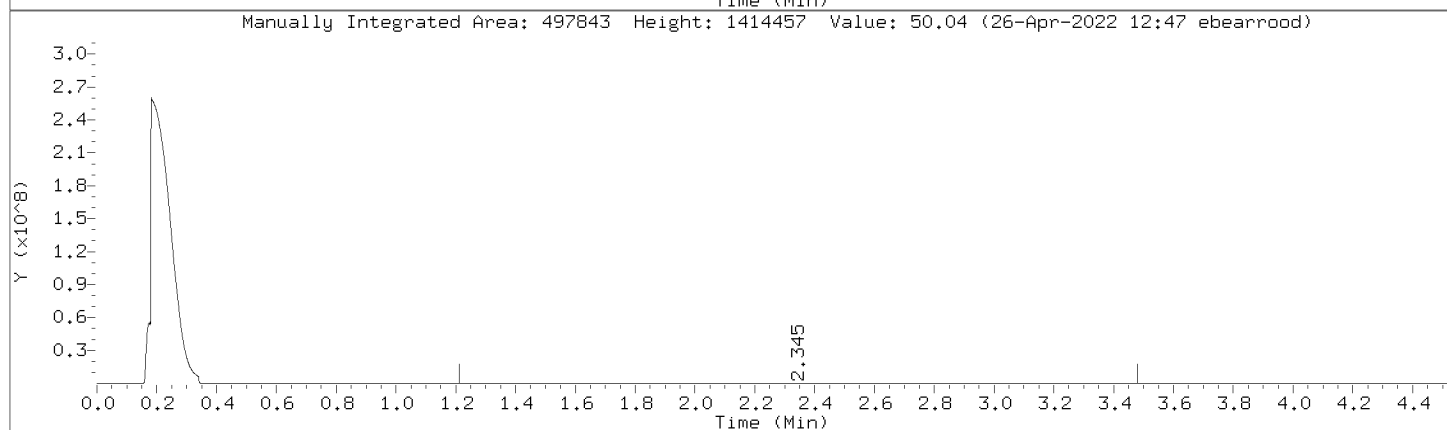
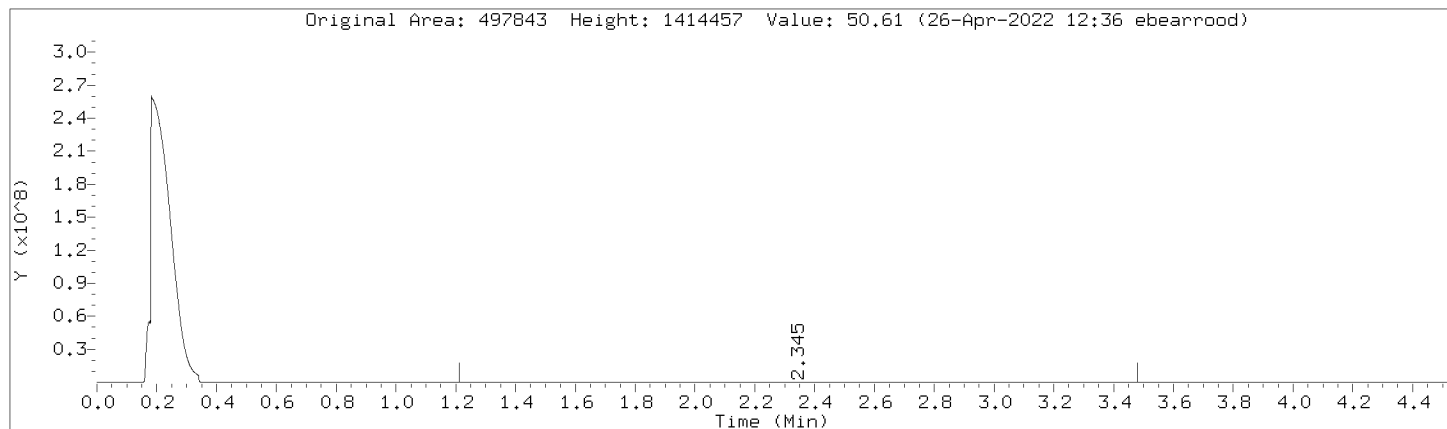
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Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



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Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

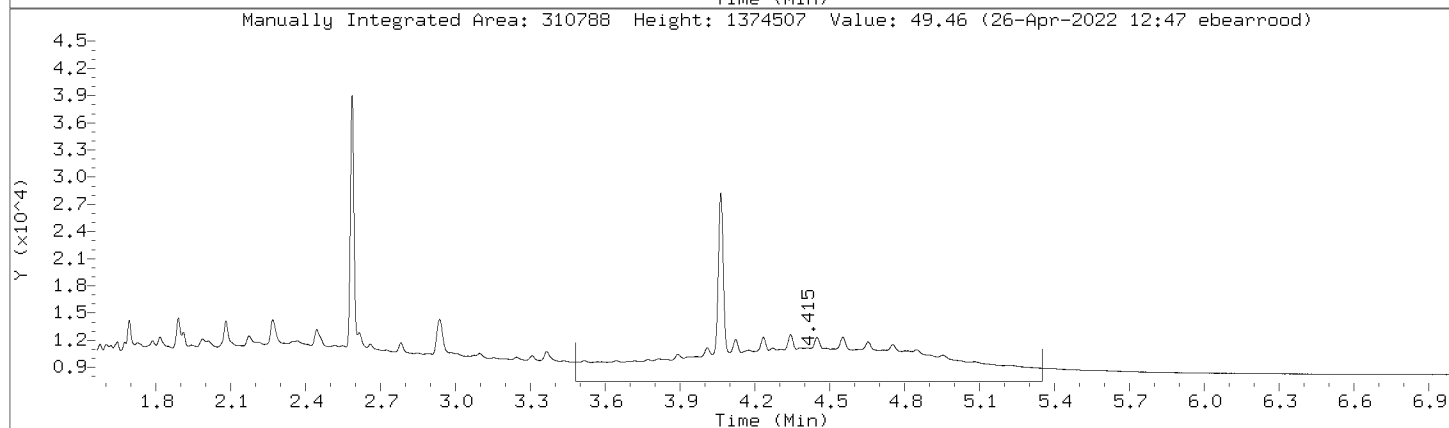
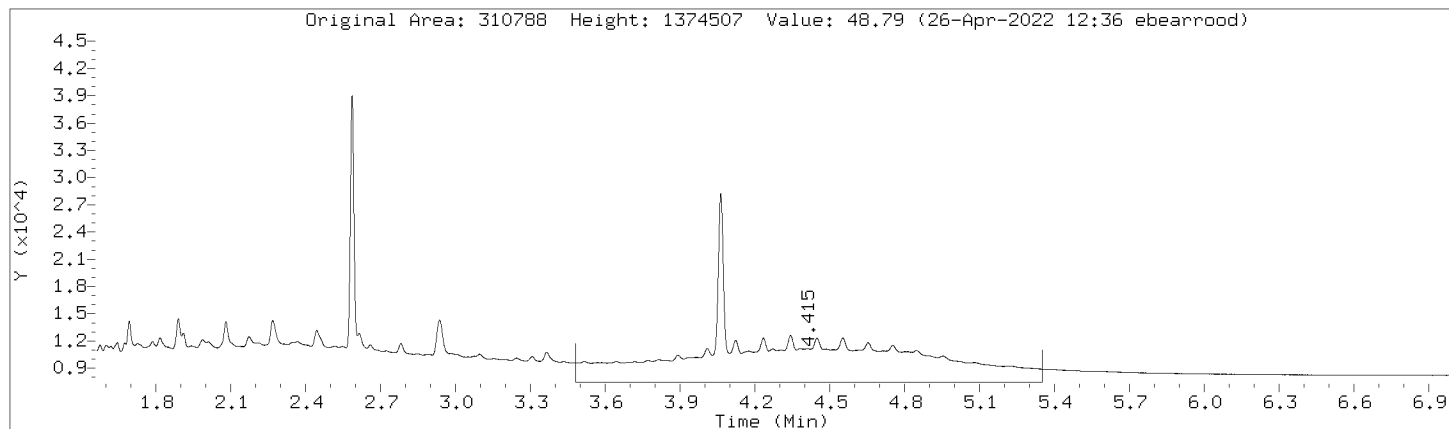
Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:





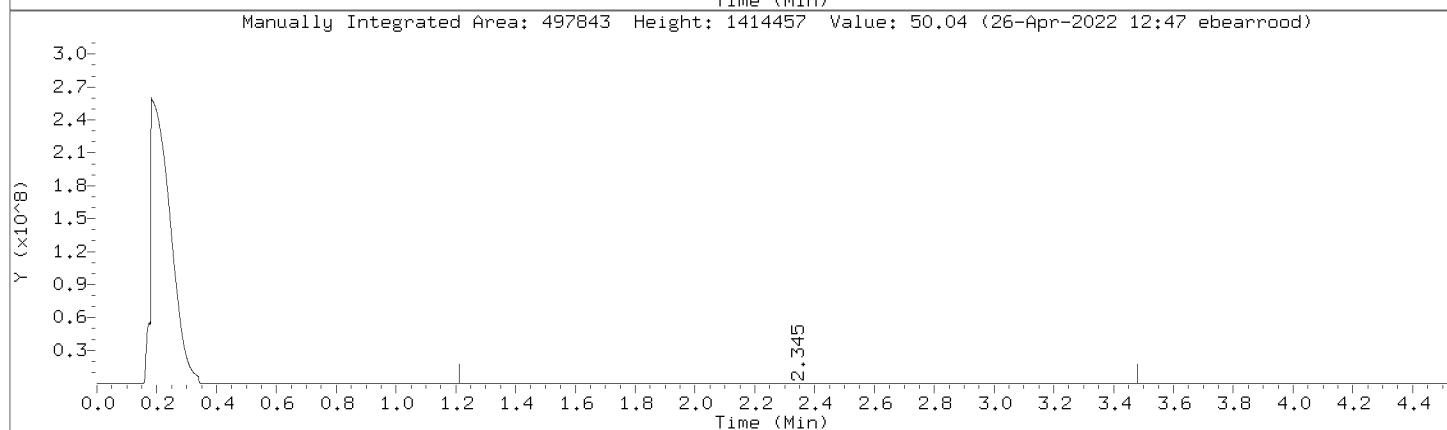
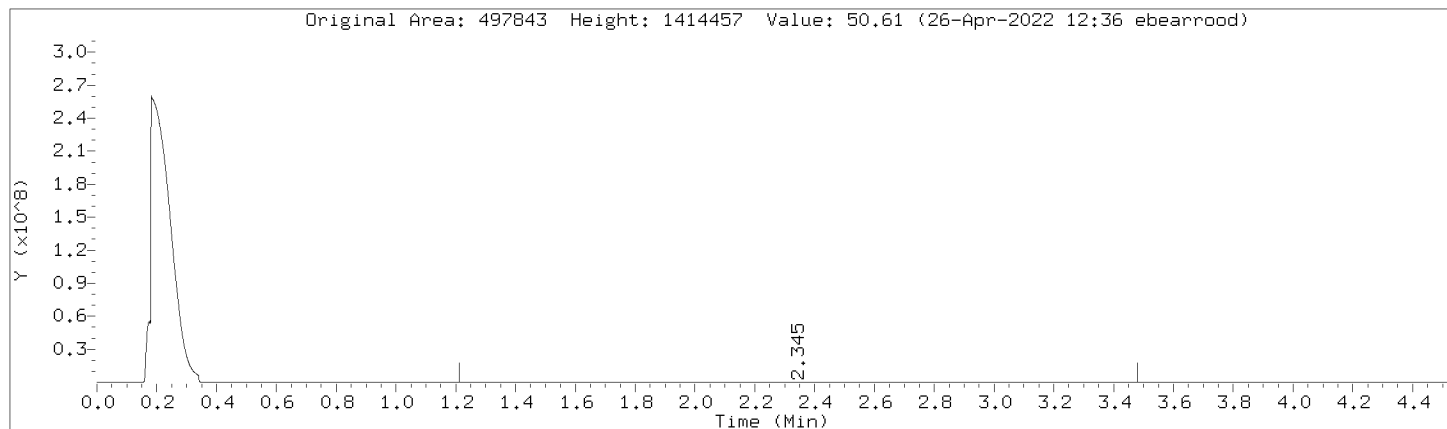
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



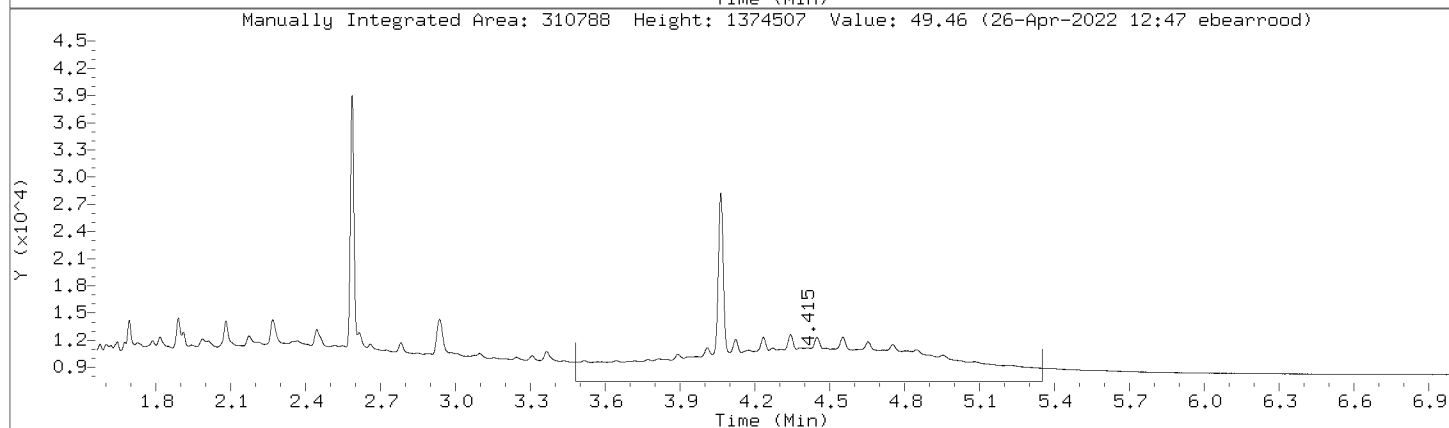
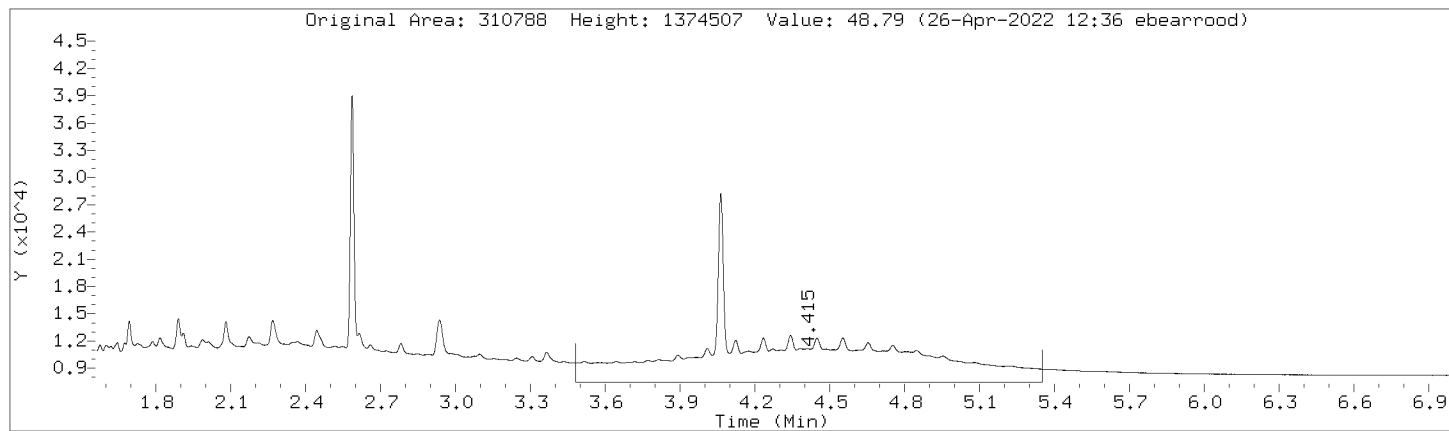
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



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Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



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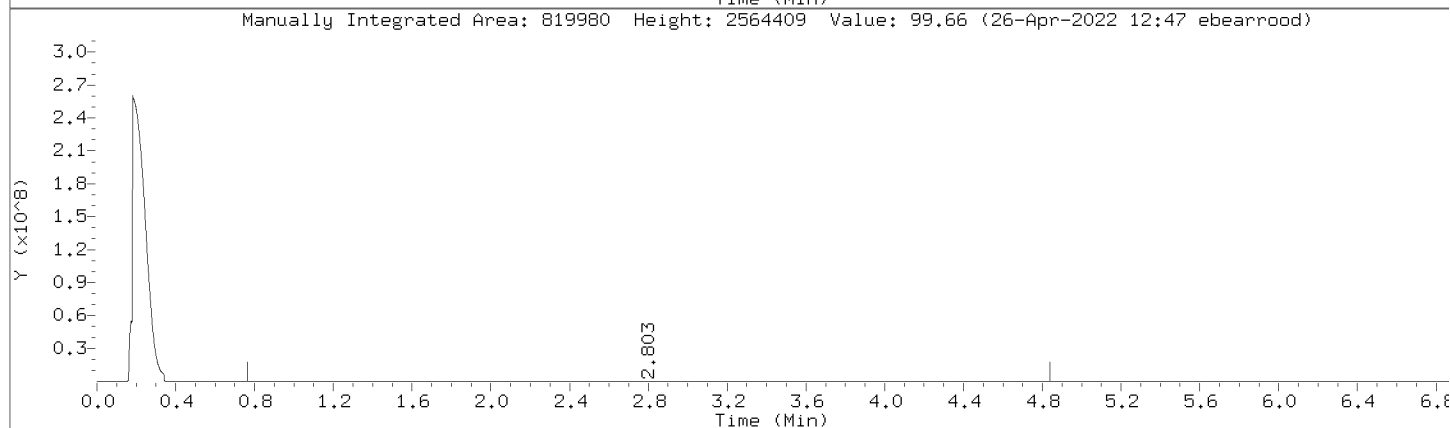
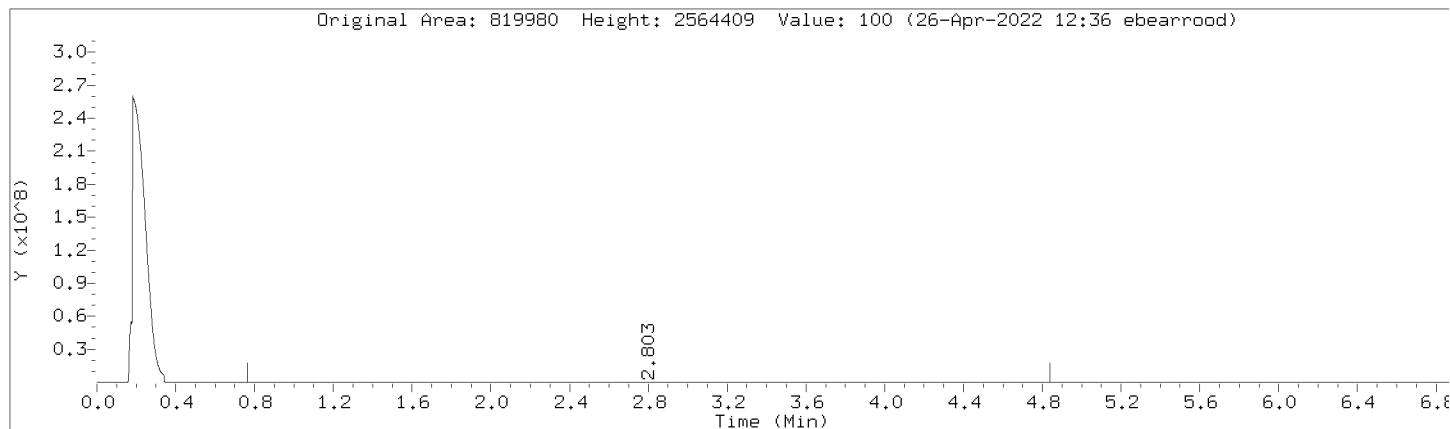
Injection Date: 26-APR-2022 08:29

Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL4,362372:2

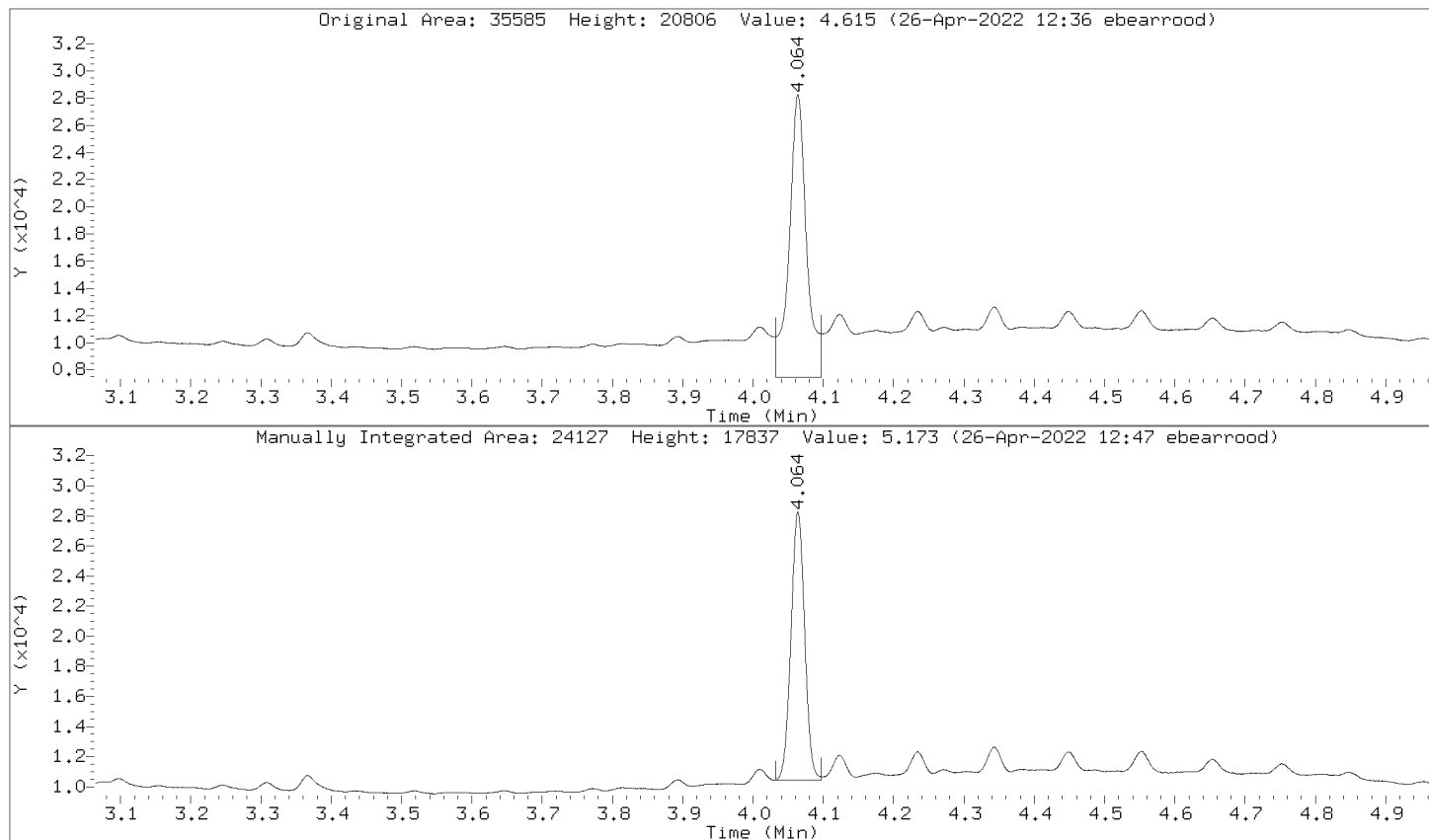
Compound: C10-C36      Review Code: RNG

CAS Number:



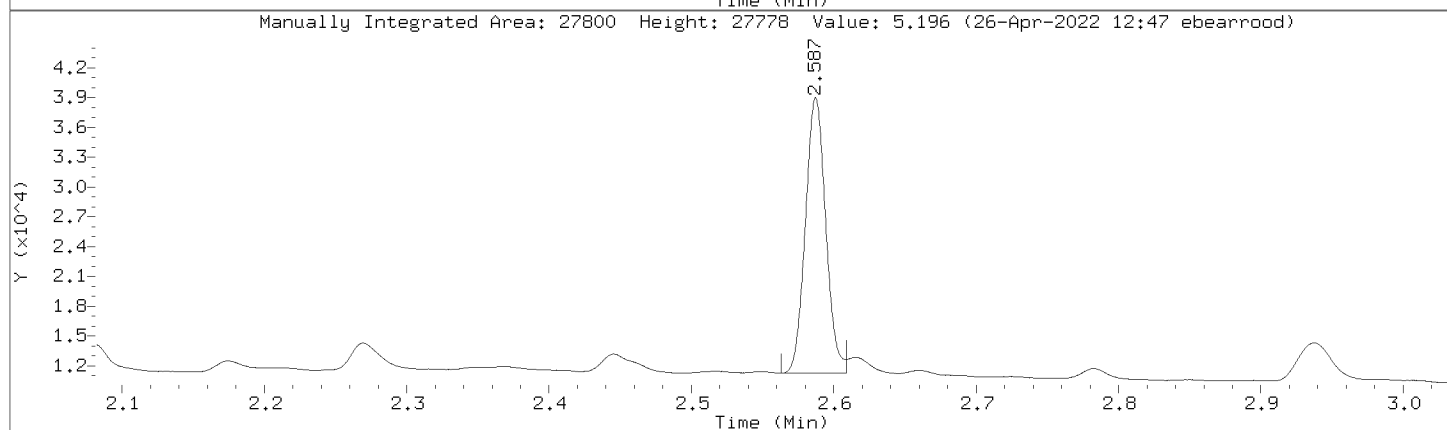
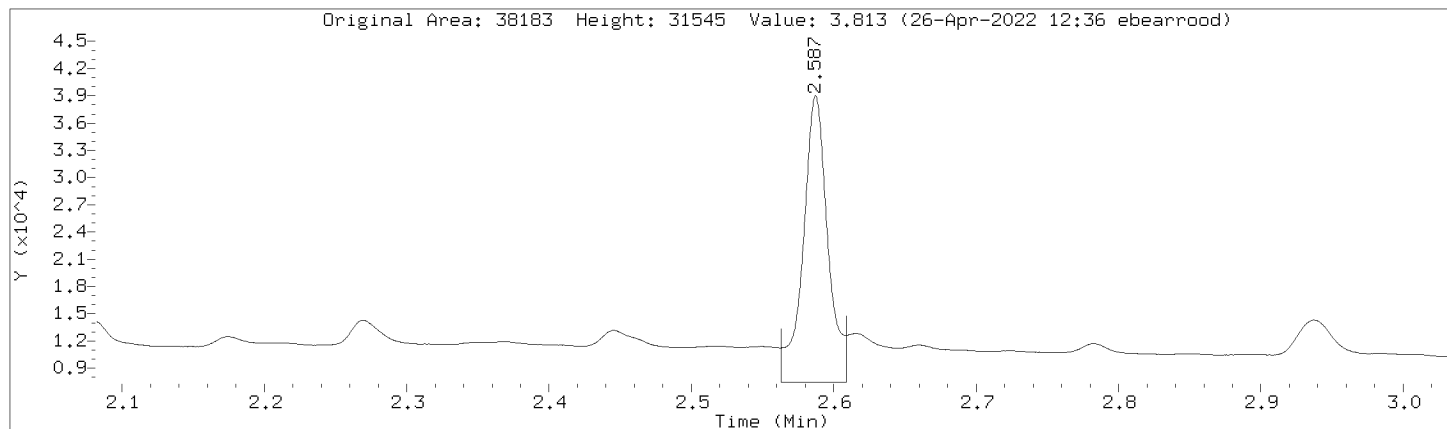
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Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000007.D  
 Injection Date: 26-APR-2022 08:29  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL4,362372:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	251014	251014
DRO by AK 102	568966	568966
TPH-DRO (C10-C28)	645591	645591
Motor Oil Range (C24-C36)	272245	272245
Diesel Fuel Range	497843	497843
Motor Oil Range	310788	310788
Diesel Fuel Range SG	497843	497843
Motor Oil Range SG	310788	310788
C10-C36	819980	819980
n-Triacontane (S)	35585	24127
o-Terphenyl (S)	38183	27800

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000008.D  
 Lab Smp Id: DMO-CAL5,362373:2 Client Smp ID: DMO-CAL5,362373:2  
 Inj Date : 26-APR-2022 08:40  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal5,362373:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 7 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		828225 100.000	99.5	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.586	2.582 0.004		55213 10.0000	10.2	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.064	4.064 0.000		48062 10.0000	10.2	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		406861 100.000	99.7	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		941615 100.000	99.5	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		431645 100.000	99.4	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		1235509 200.000	199	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		715118 100.000	99.5	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		715118 100.000	99.5	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		504066 100.000	99.8	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		504066 100.000	99.8	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.



Date : 26-APR-2022 08:40

Client ID: DM0-CAL5.362373;2

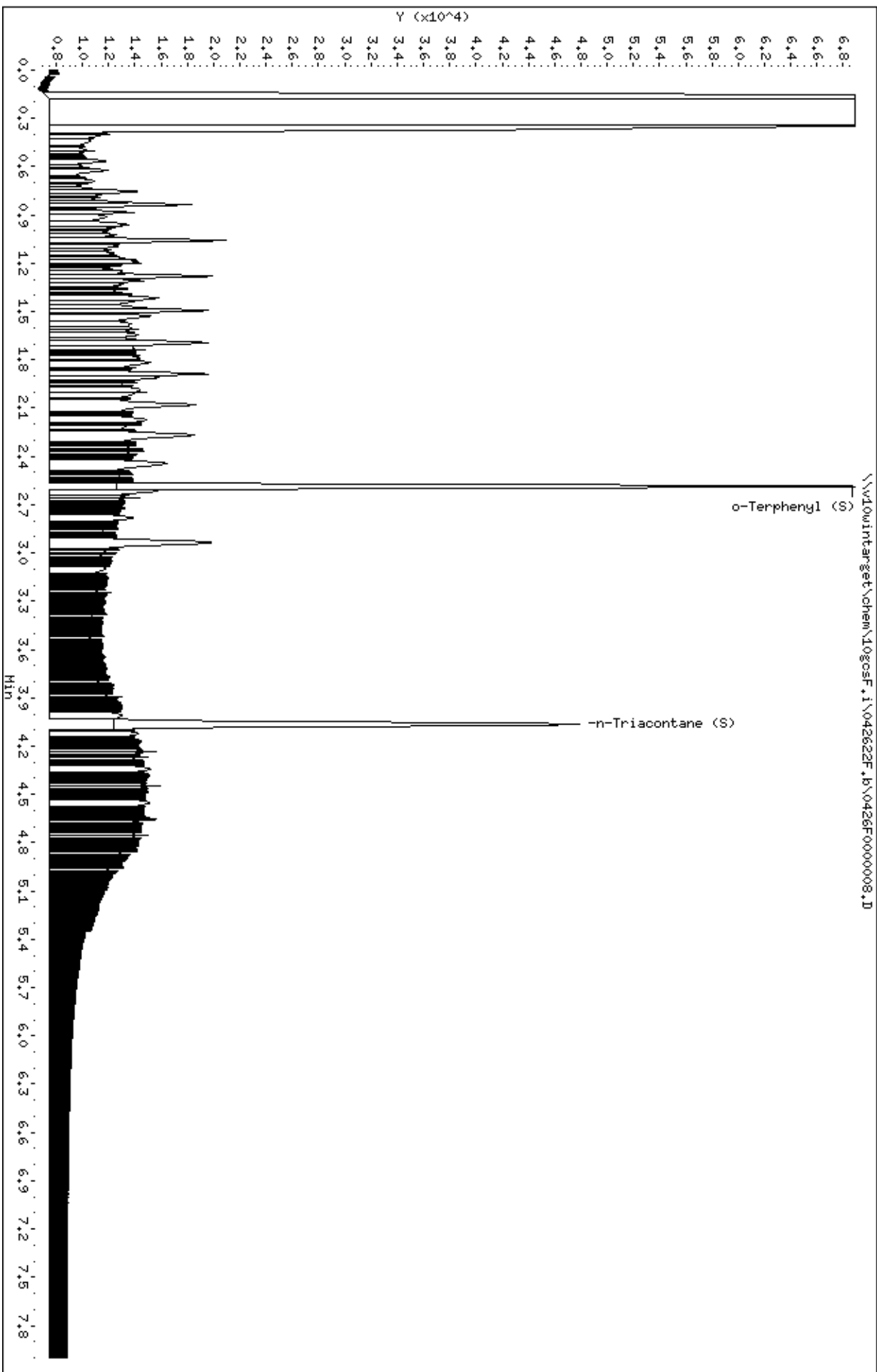
Sample Info: DM0-CAL5.362373;2

Instrument: 10gocsf.1

Operator: EB3

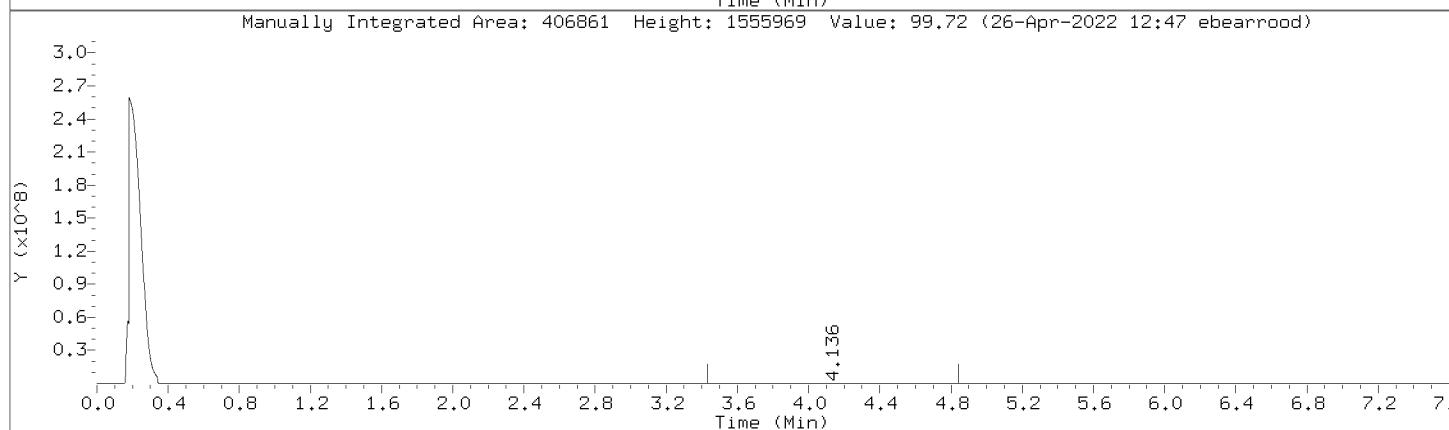
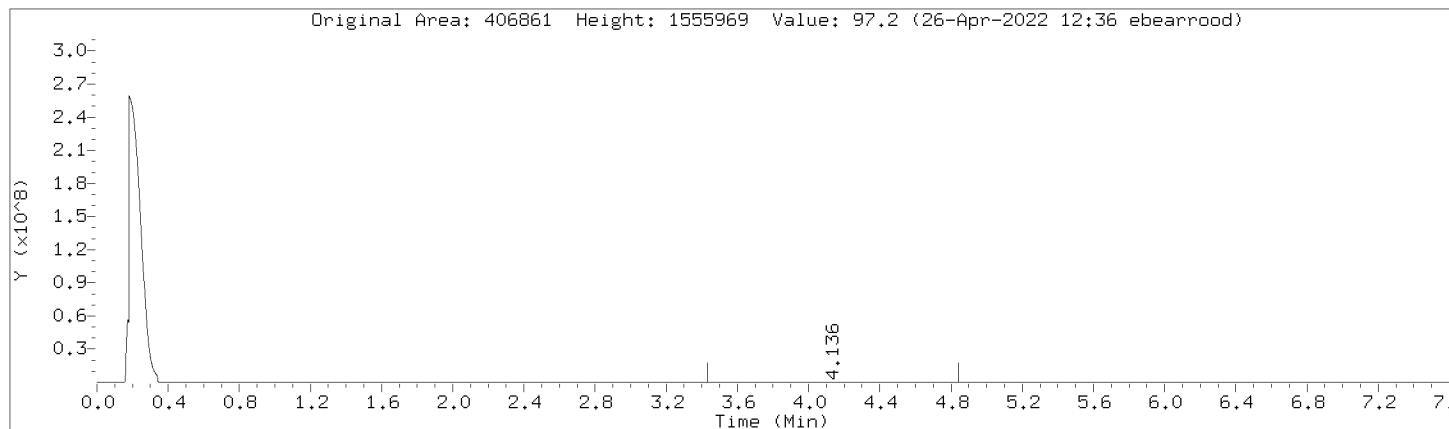
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Column phase: DB-5-MS21250010



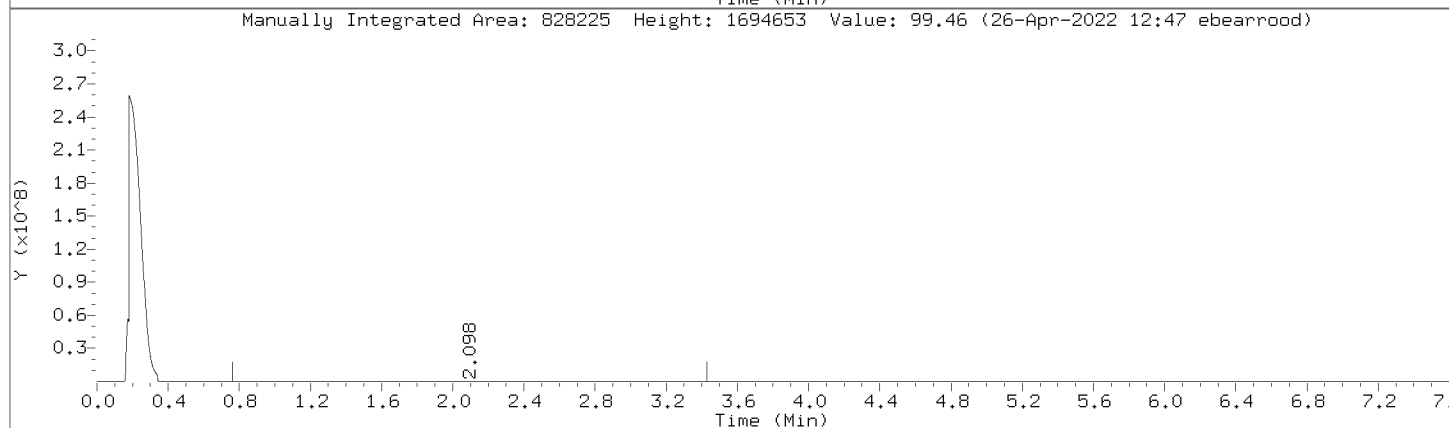
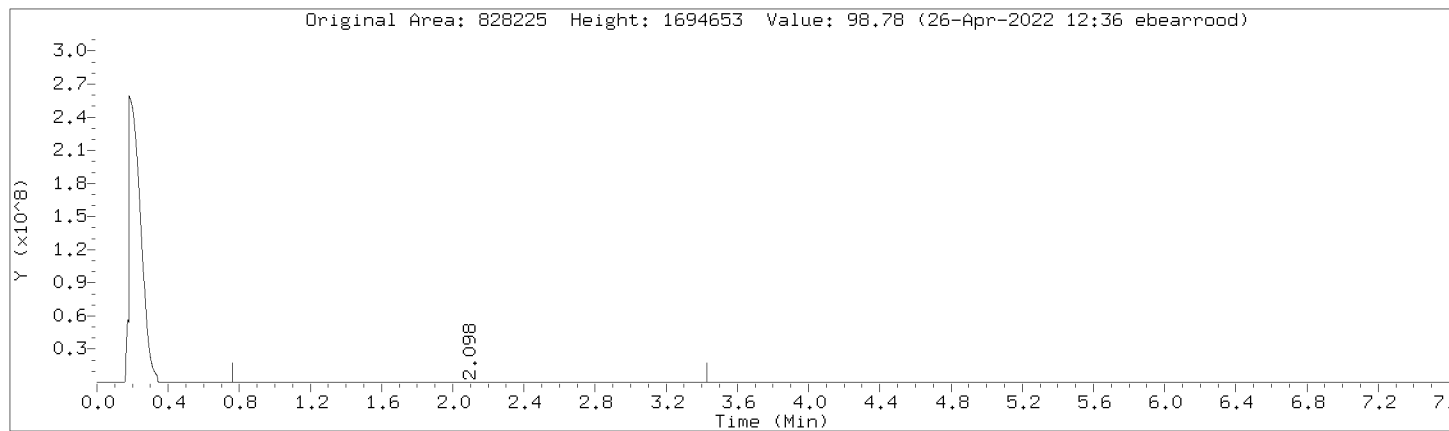
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Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



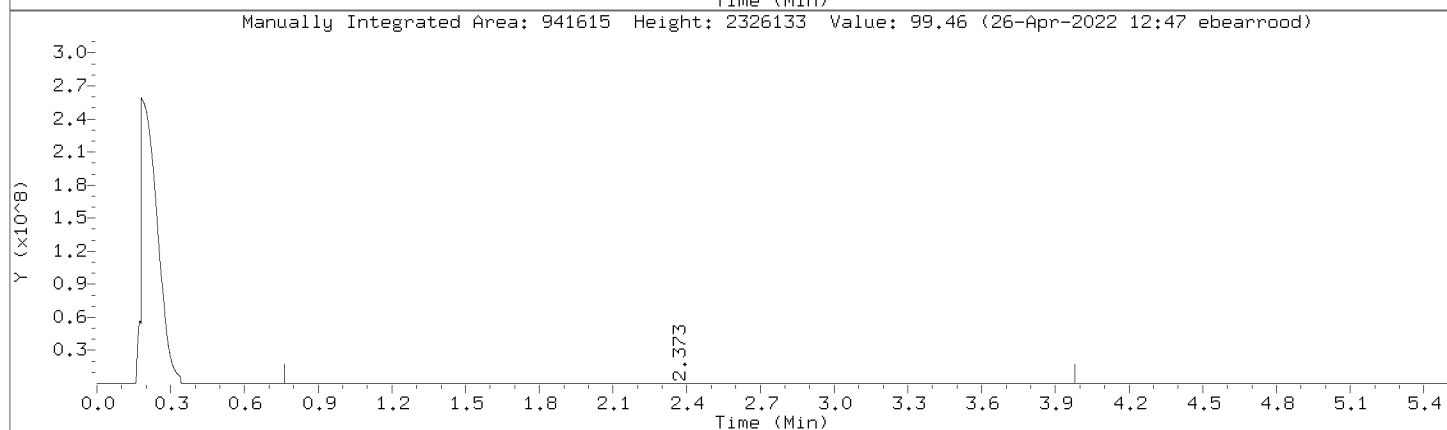
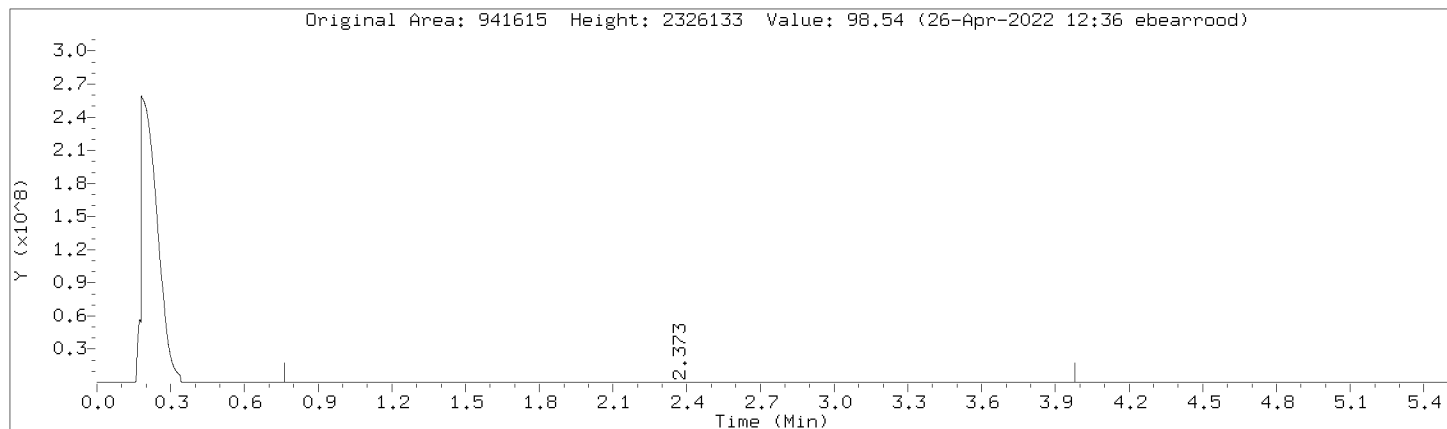
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Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000008.D  
Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

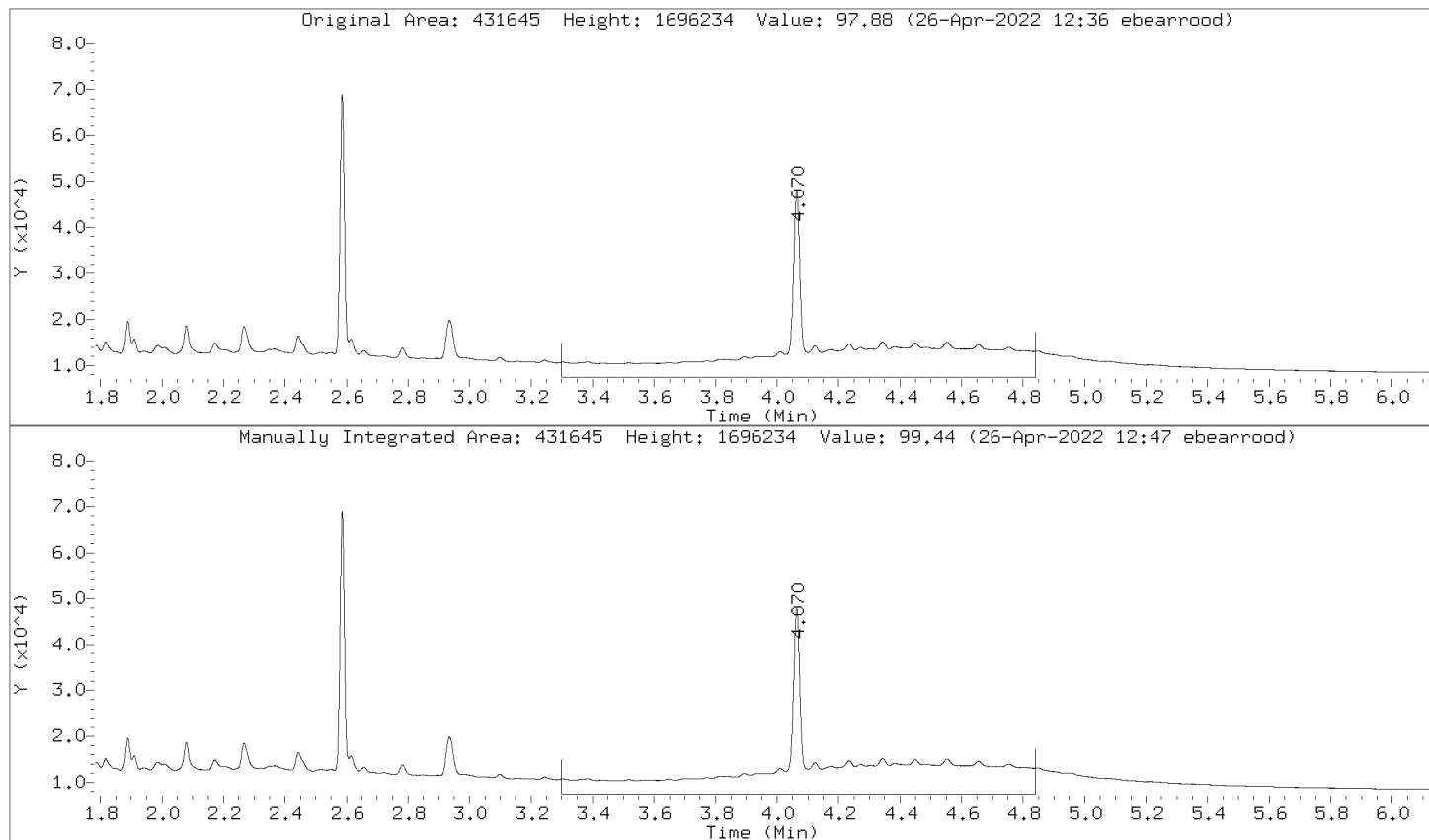
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



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Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

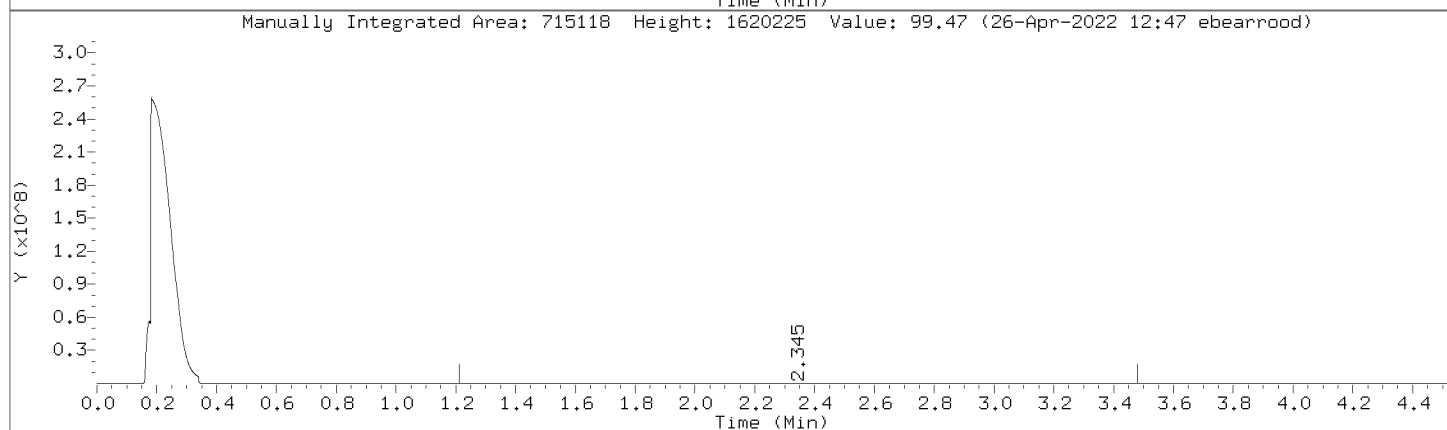
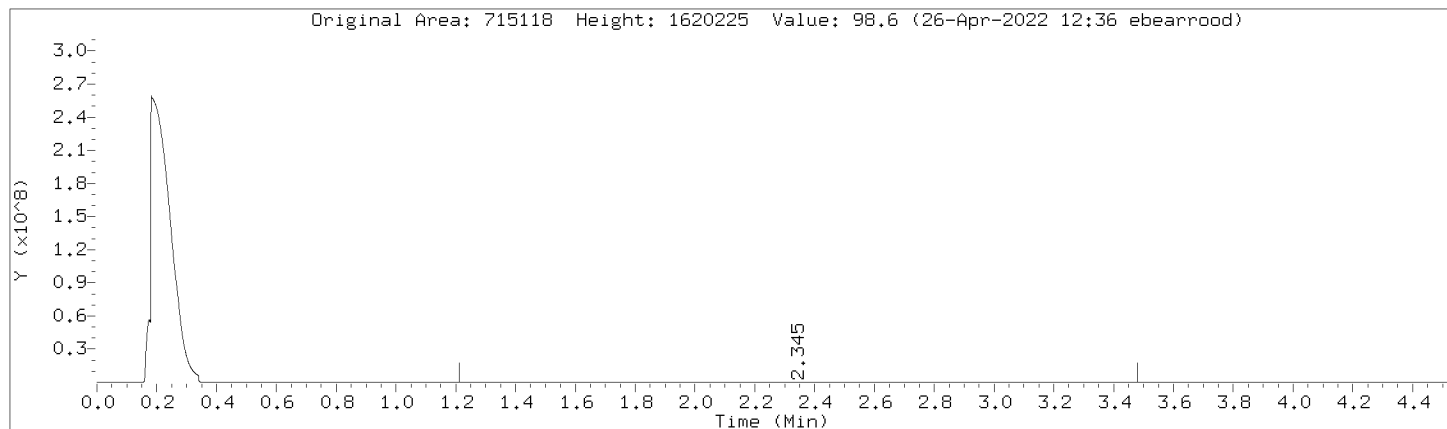
Compound: Motor Oil Range (C24-C36)  
CAS Number:

Review Code: RNG



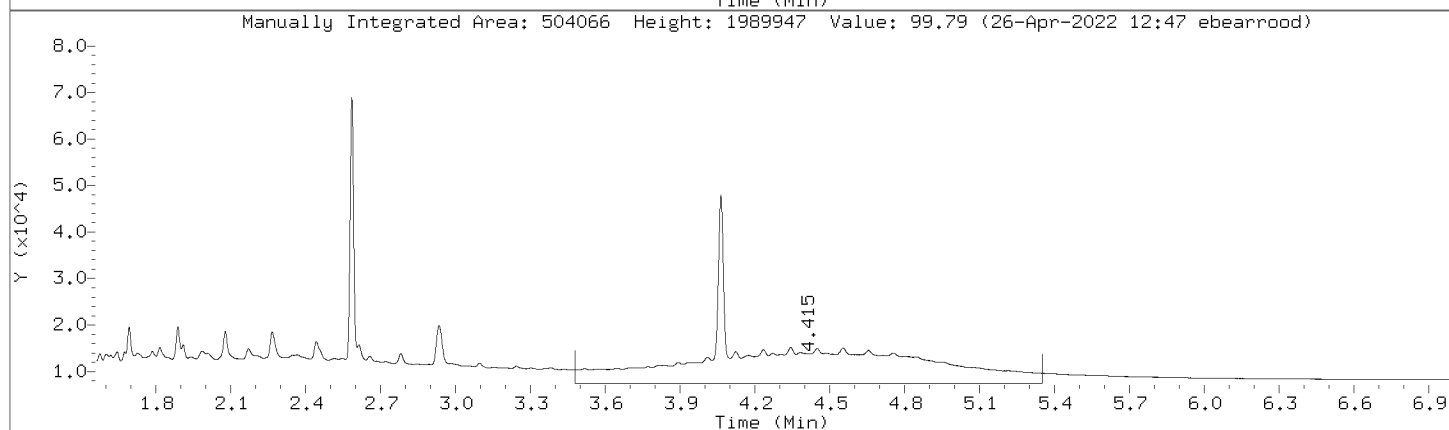
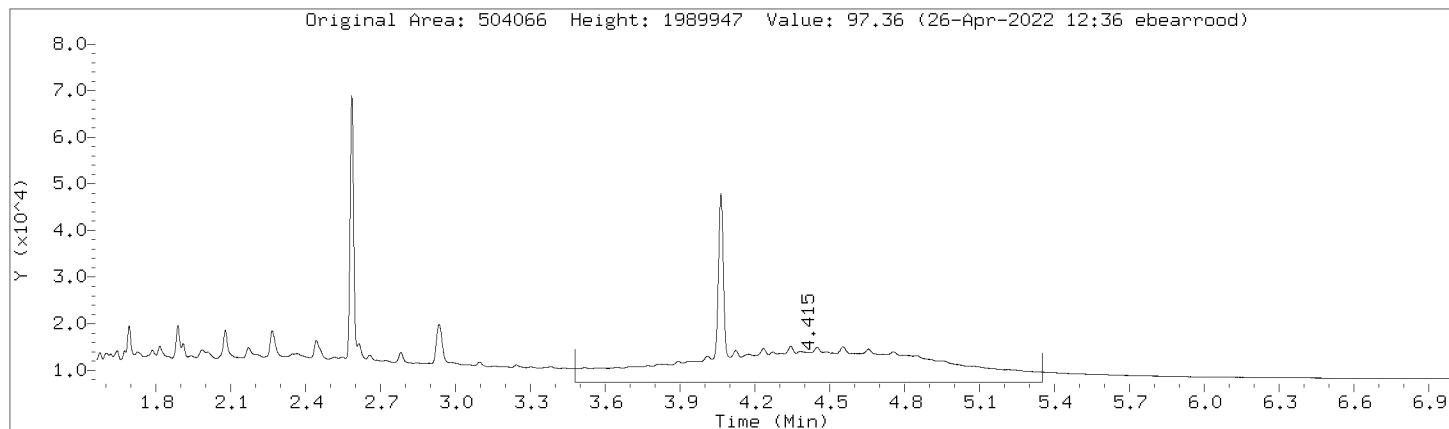
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Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



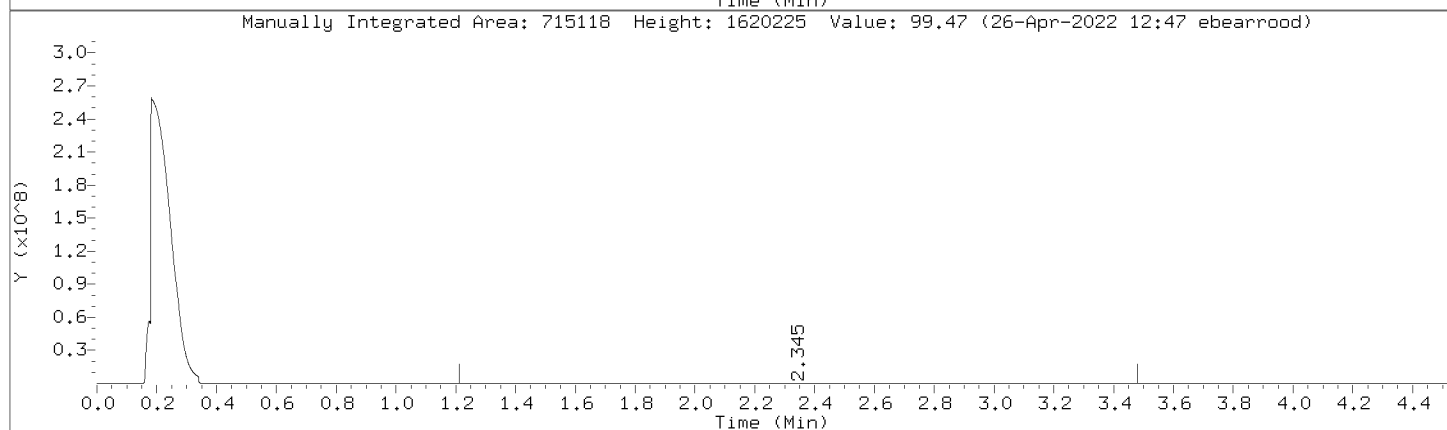
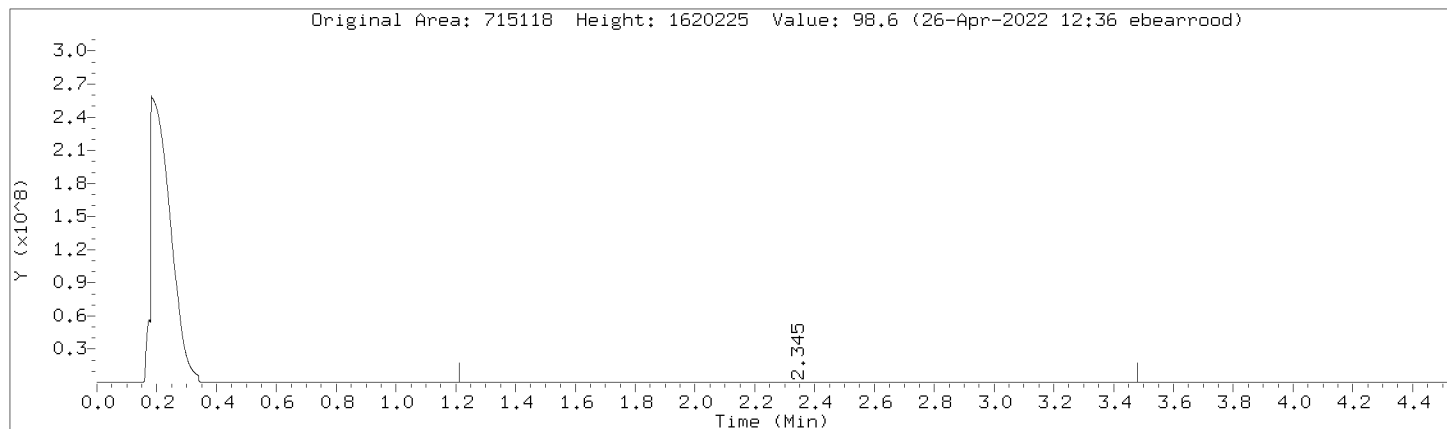
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Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000008.D  
Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

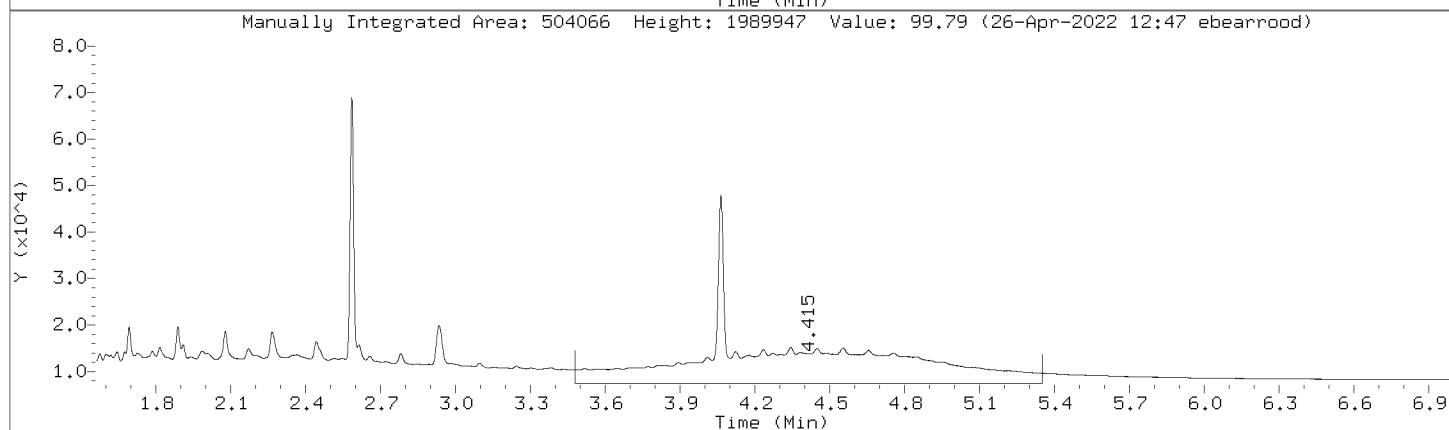
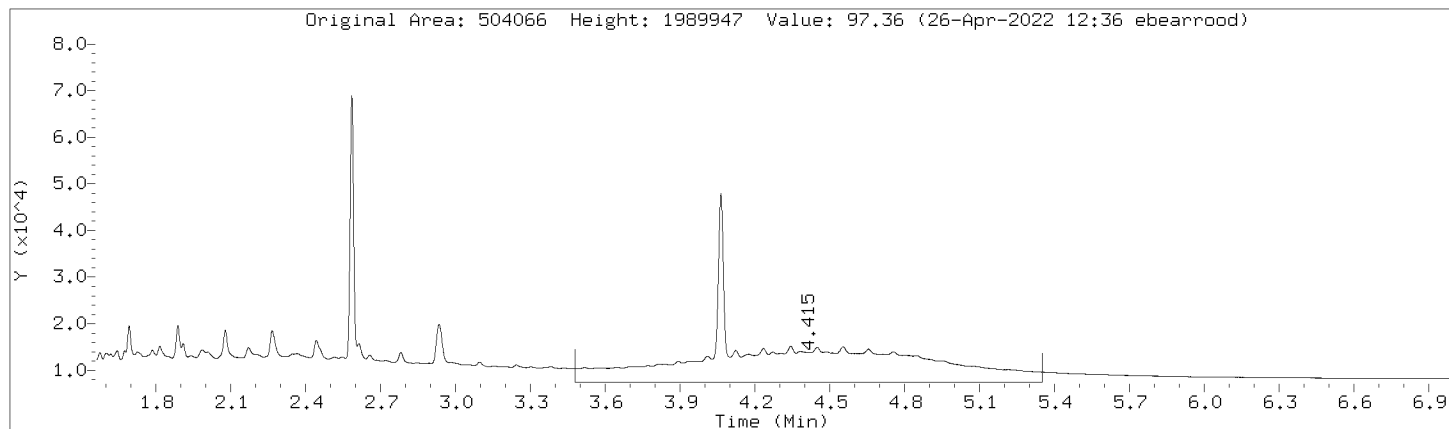
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CAS Number:





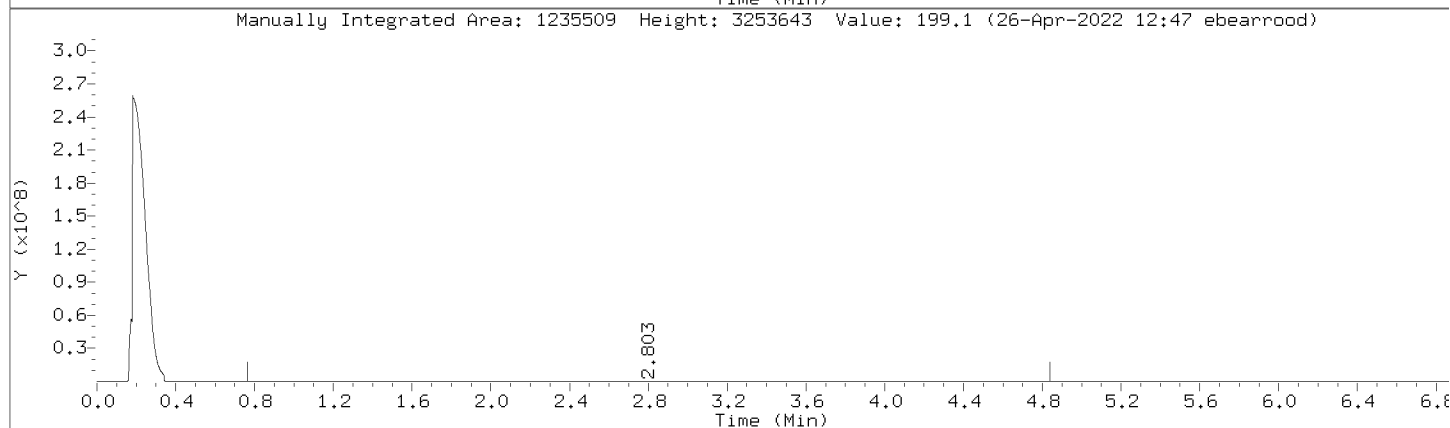
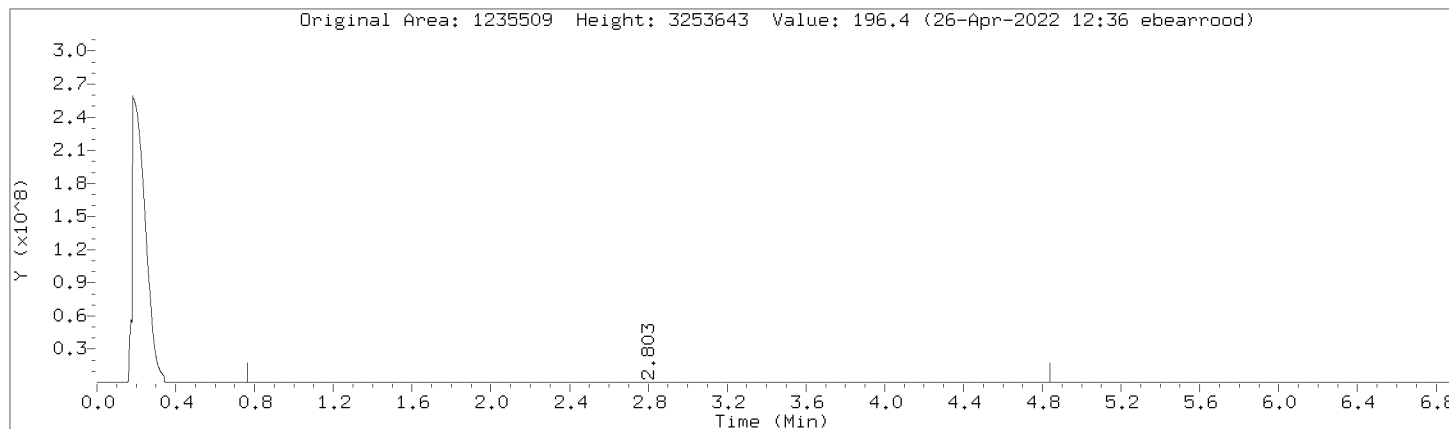
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Lab Sample ID: DMO-CAL5,362373:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



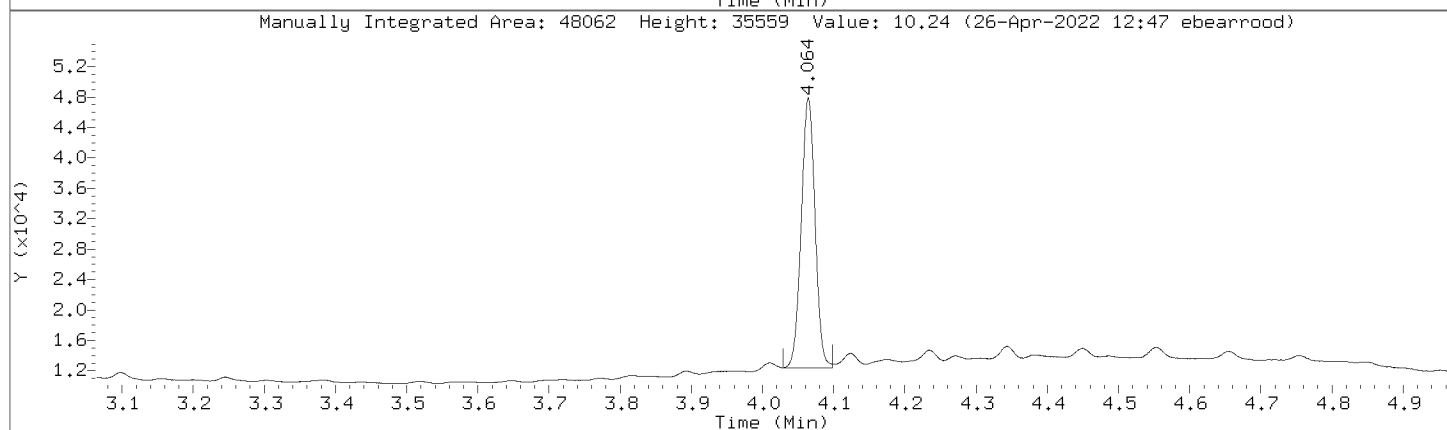
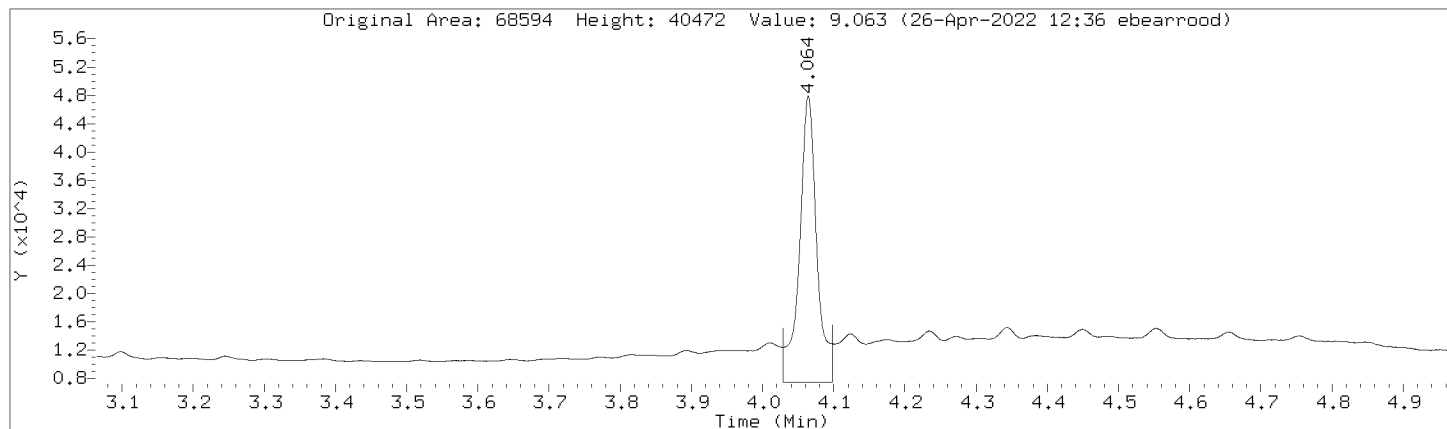
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Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



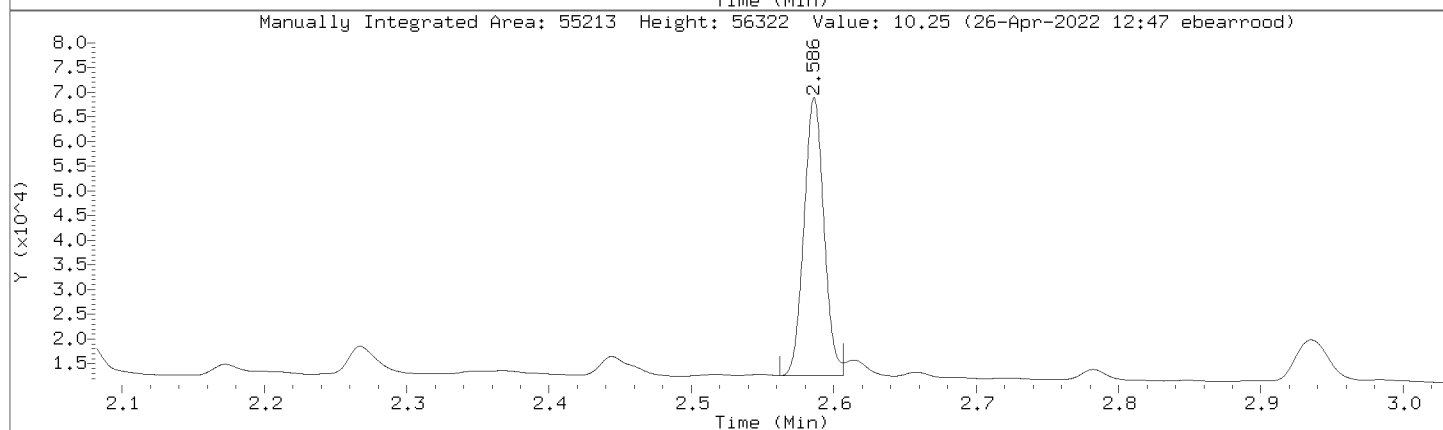
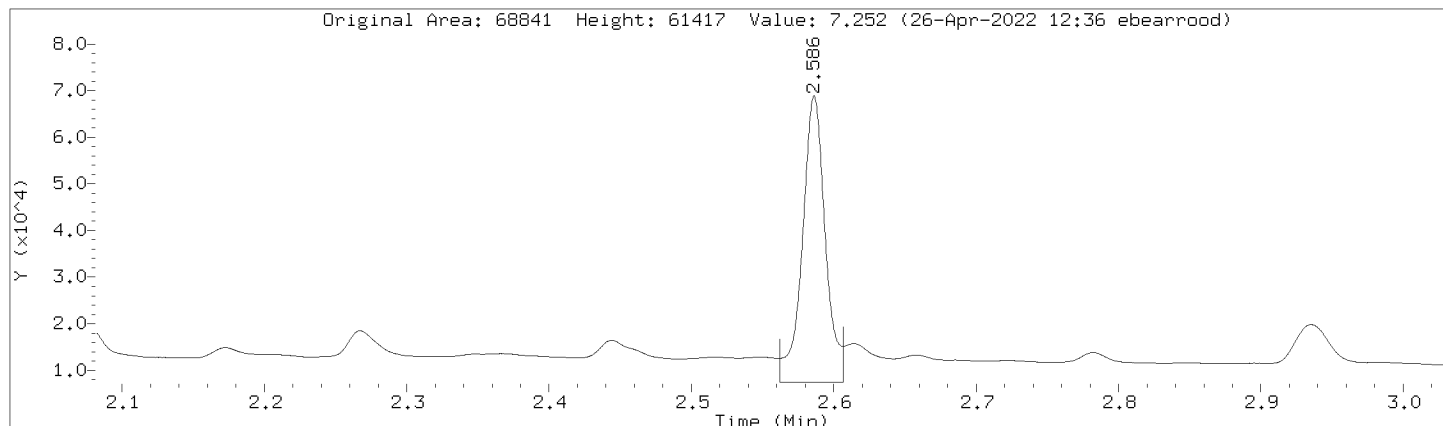
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Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000008.D  
 Injection Date: 26-APR-2022 08:40  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL5,362373:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	406861	406861
DRO by AK 102	828225	828225
TPH-DRO (C10-C28)	941615	941615
Motor Oil Range (C24-C36)	431645	431645
Diesel Fuel Range	715118	715118
Motor Oil Range	504066	504066
Diesel Fuel Range SG	715118	715118
Motor Oil Range SG	504066	504066
C10-C36	1235509	1235509
n-Triacontane (S)	68594	48062
o-Terphenyl (S)	68841	55213

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000009.D  
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 Inj Date : 26-APR-2022 08:51  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal6,362374:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 8 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		1627220 250.000	250	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.588	2.582 0.006		139001 25.0000	25.7	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.064	4.064 0.000		120623 25.0000	25.6	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		882204 250.000	250	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		1857730 250.000	250	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		925451 250.000	250	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		2509425 500.000	500	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		1386097 250.000	250	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		1386097 250.000	250	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		1091731 250.000	250	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		1091731 250.000	250	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 08:51

Client ID: DM0-CAL6.362374;2

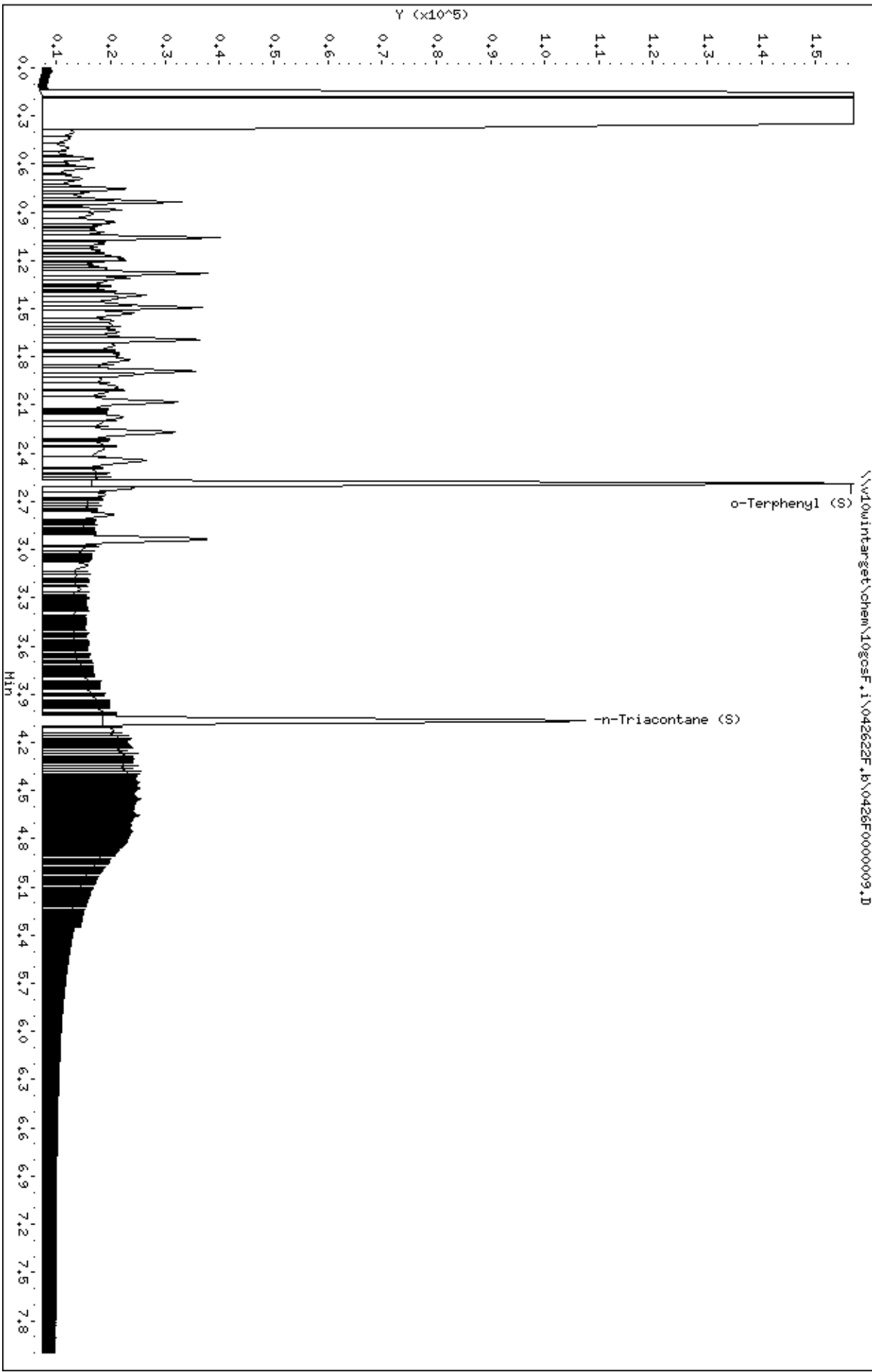
Sample Info: DM0-CAL6.362374;2

Instrument: 10gocsf.1

Operator: EB3

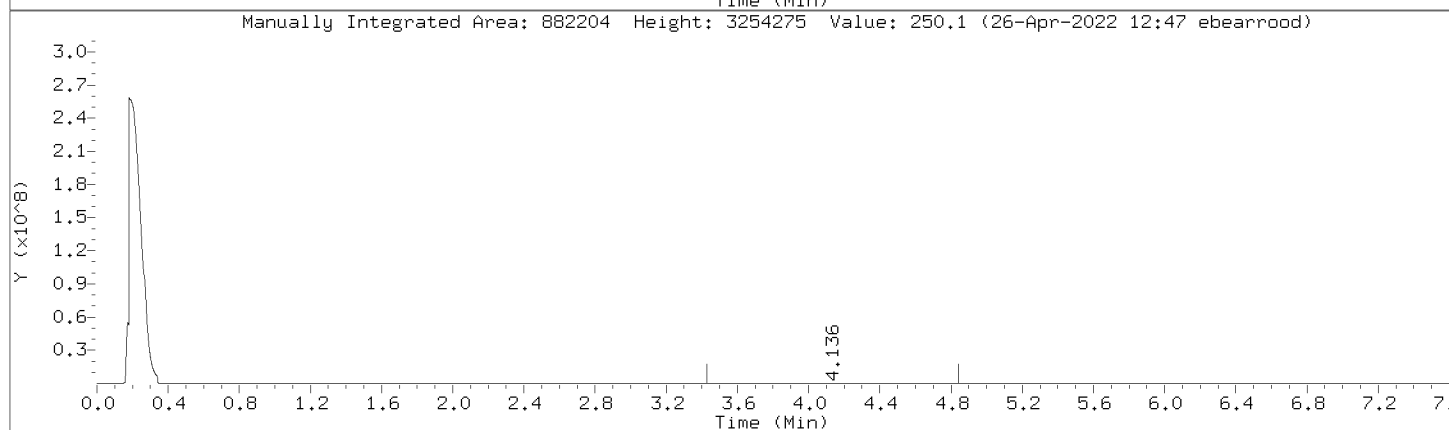
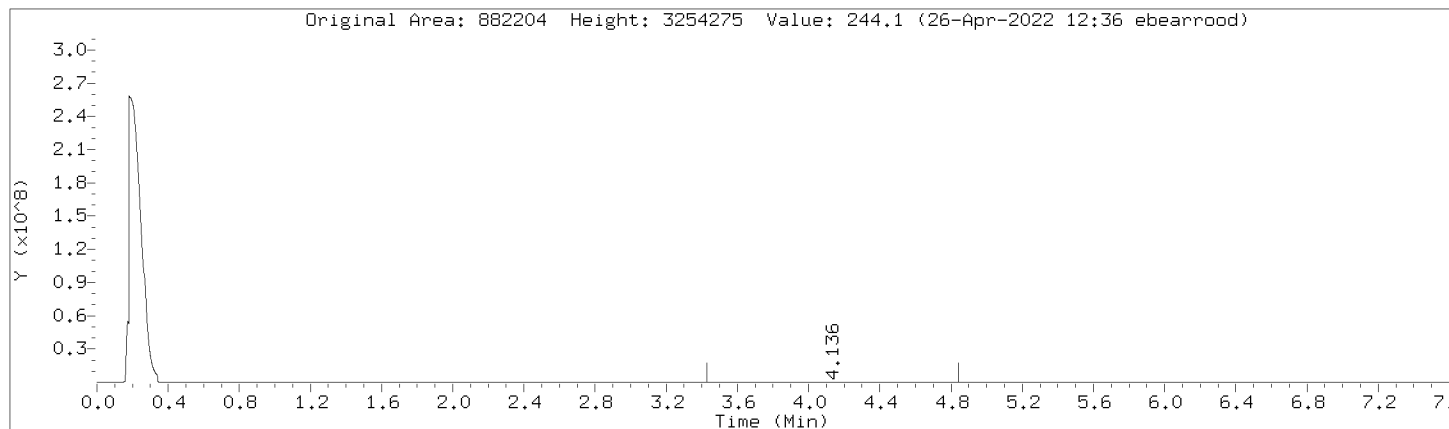
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Column phase: DB-5-US21250010



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000009.D  
Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

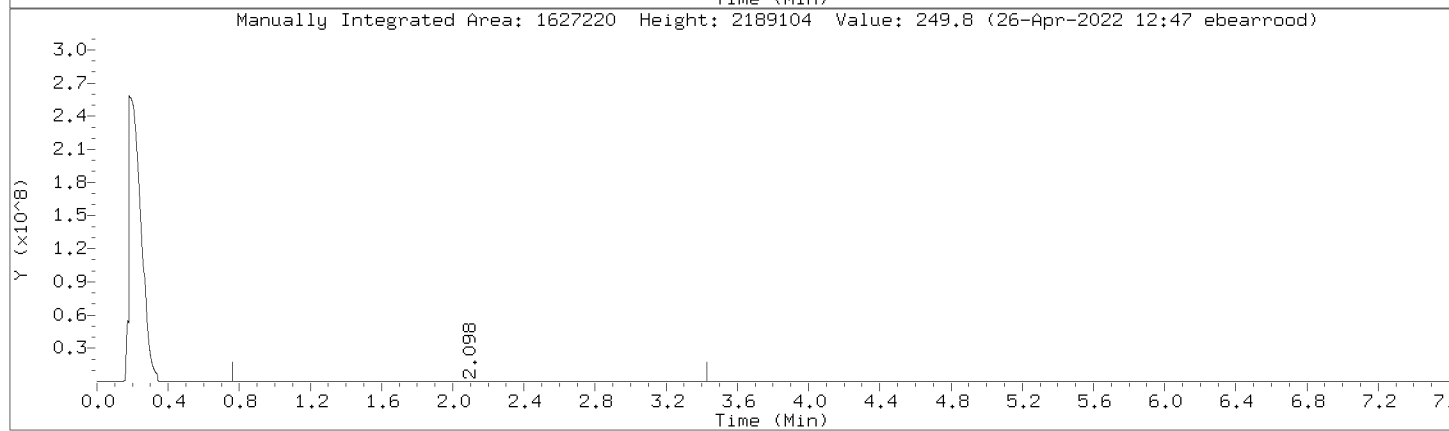
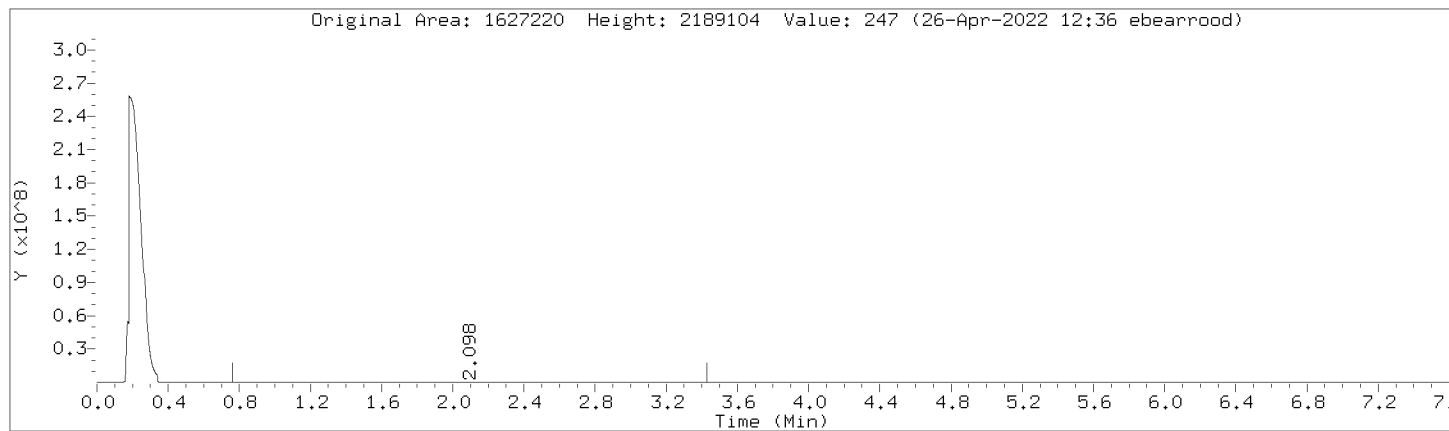
Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:





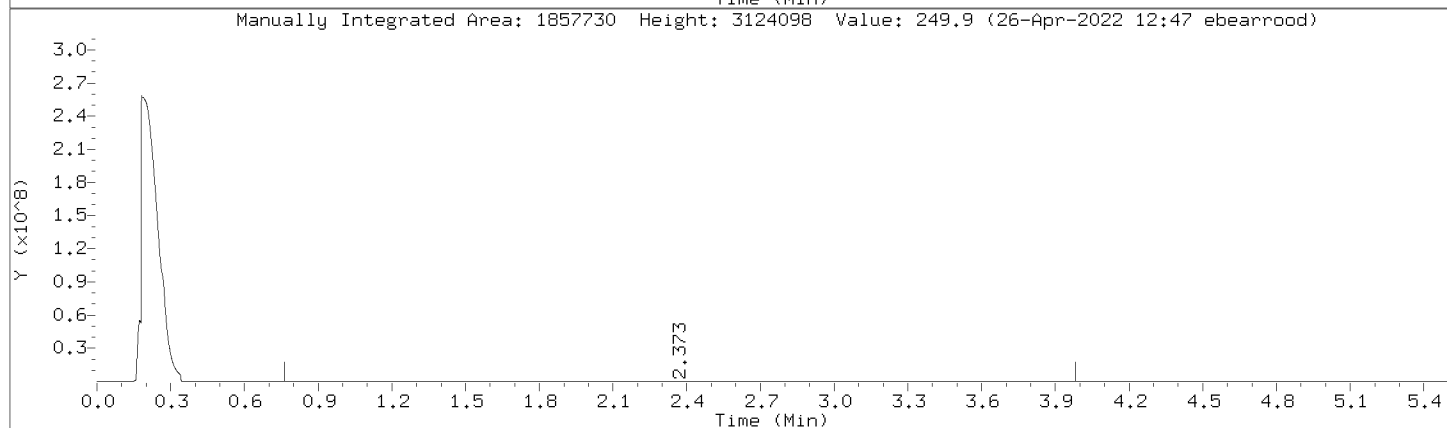
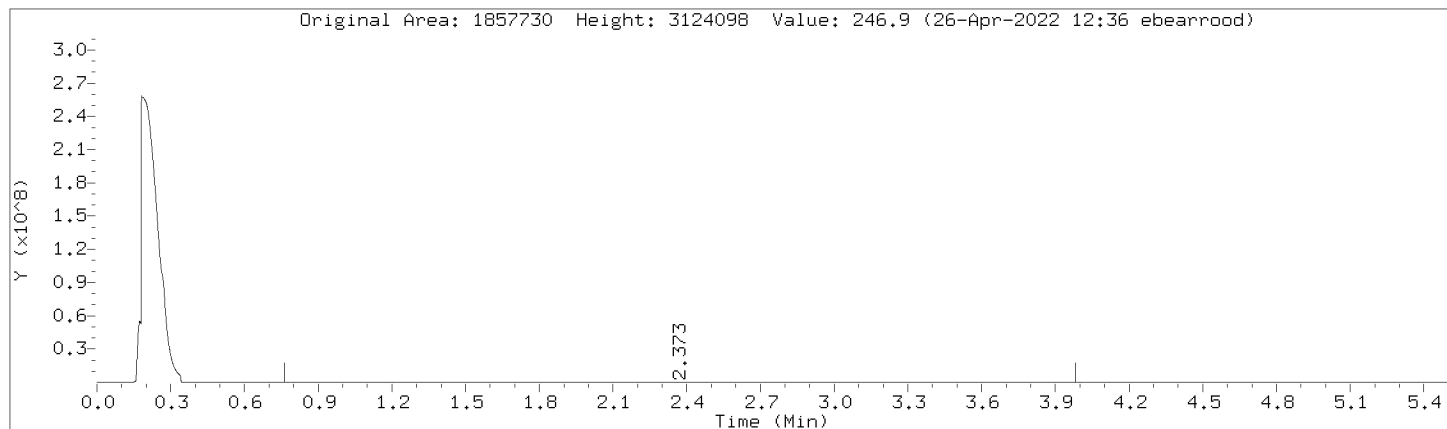
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



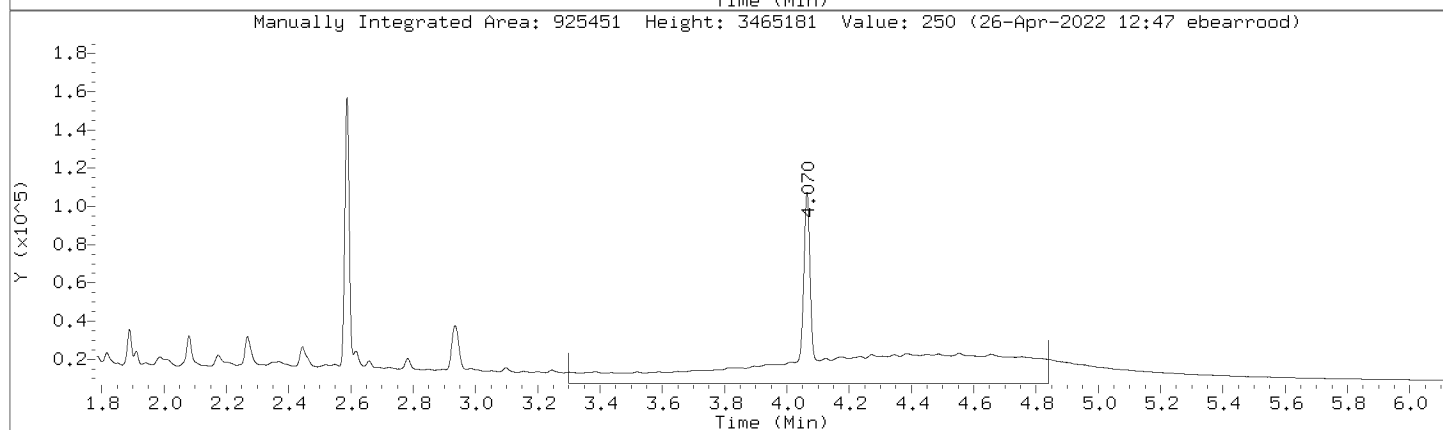
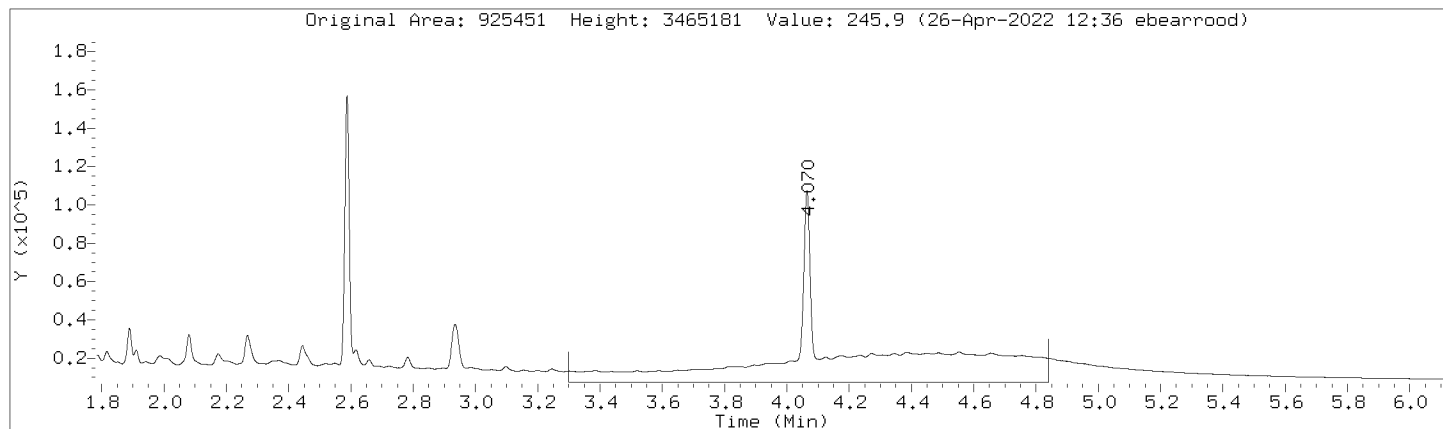
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



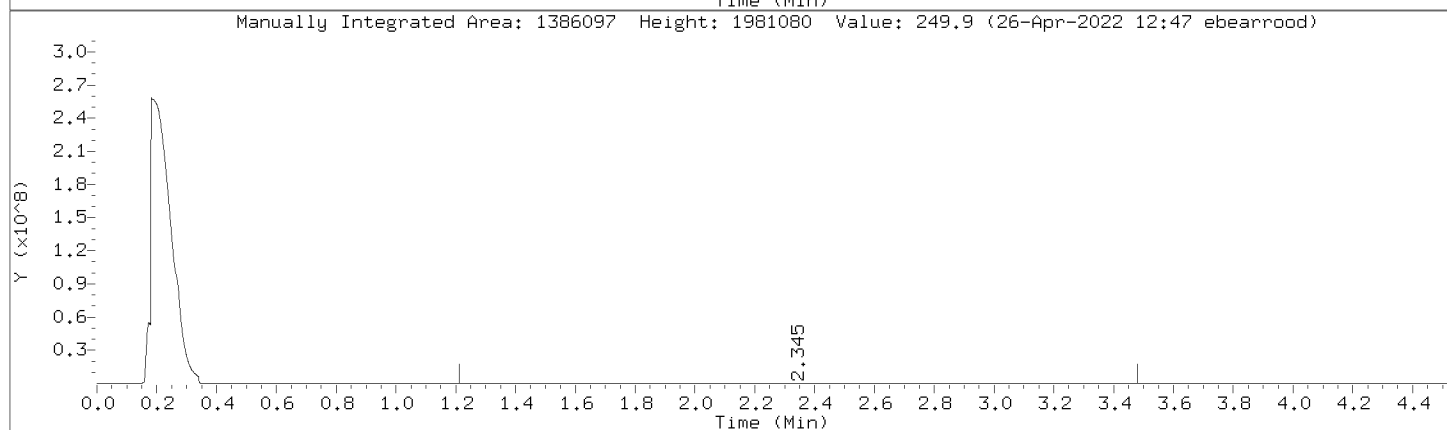
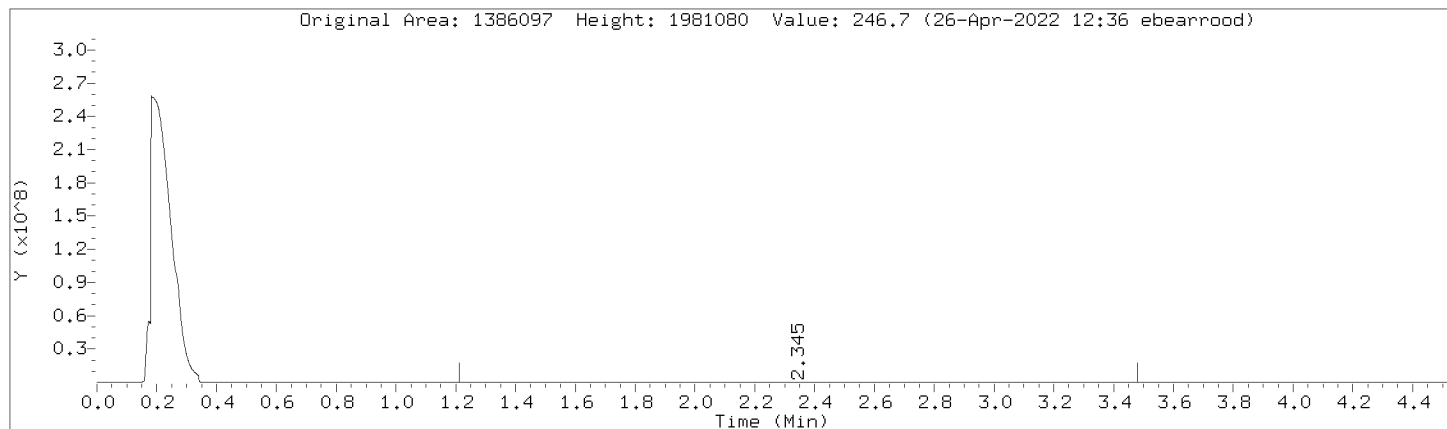
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



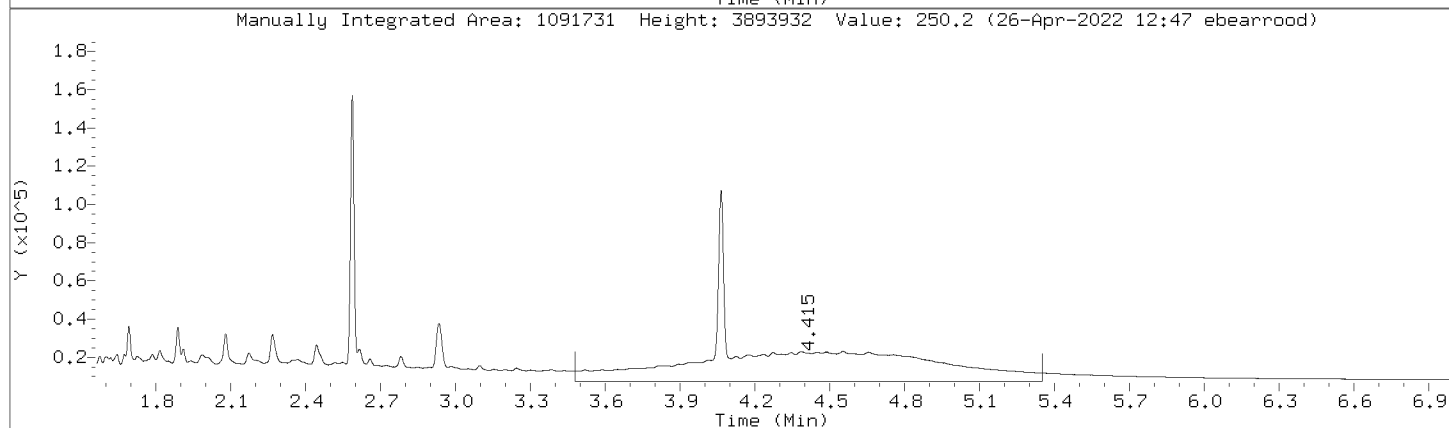
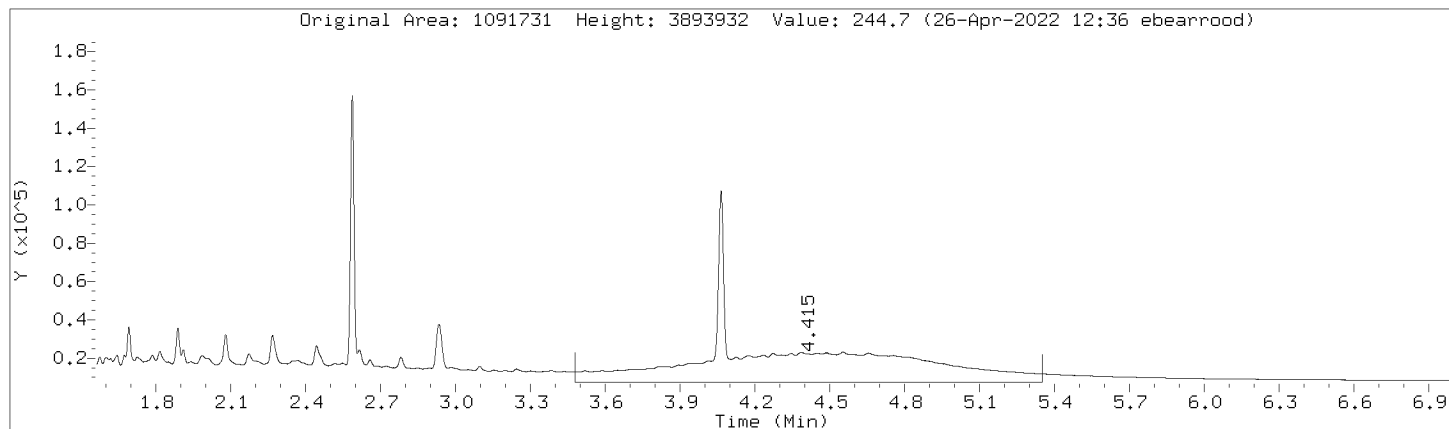
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



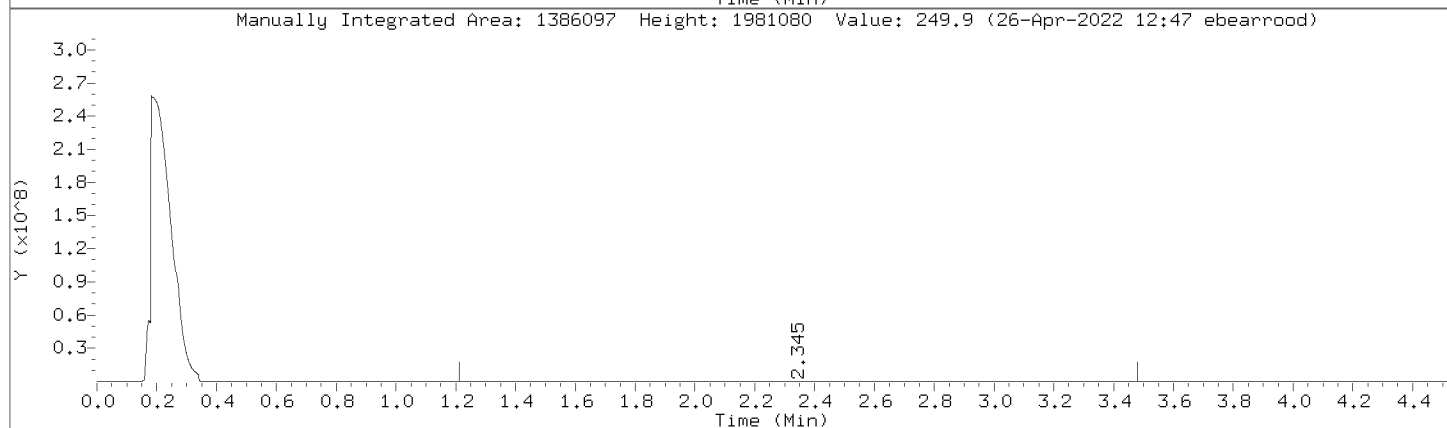
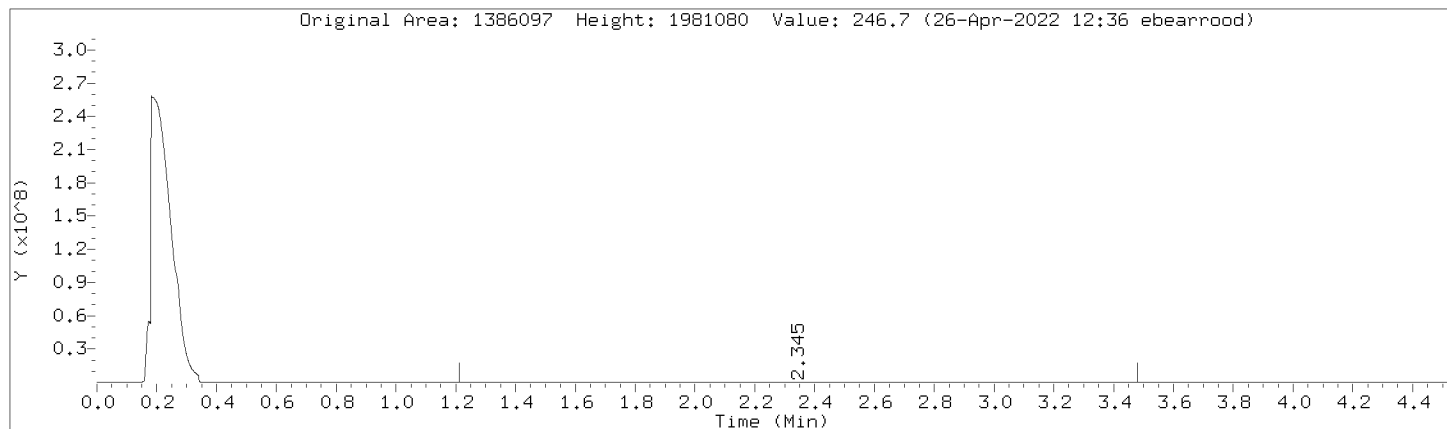
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



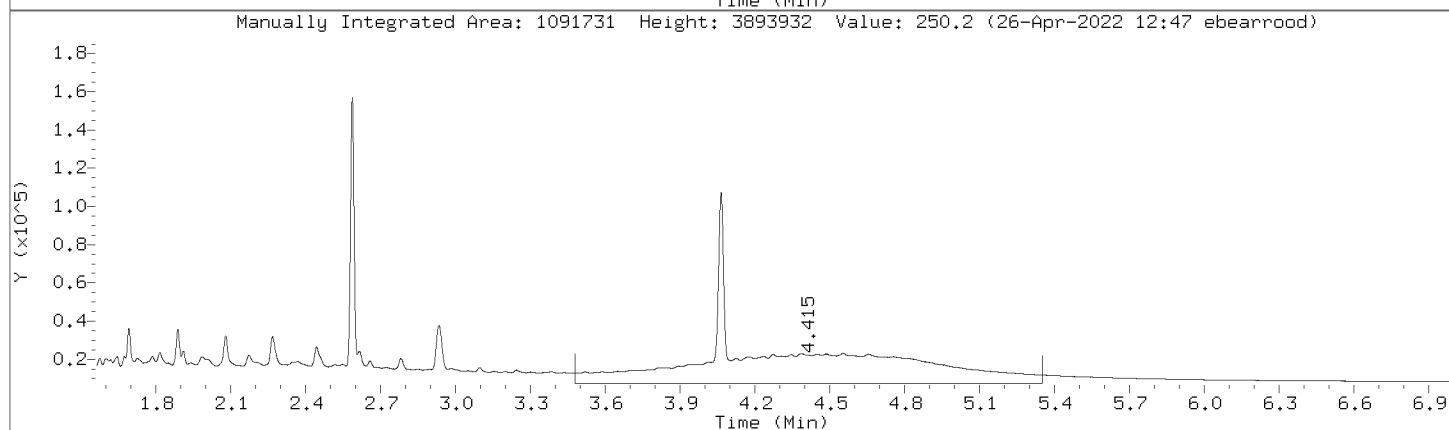
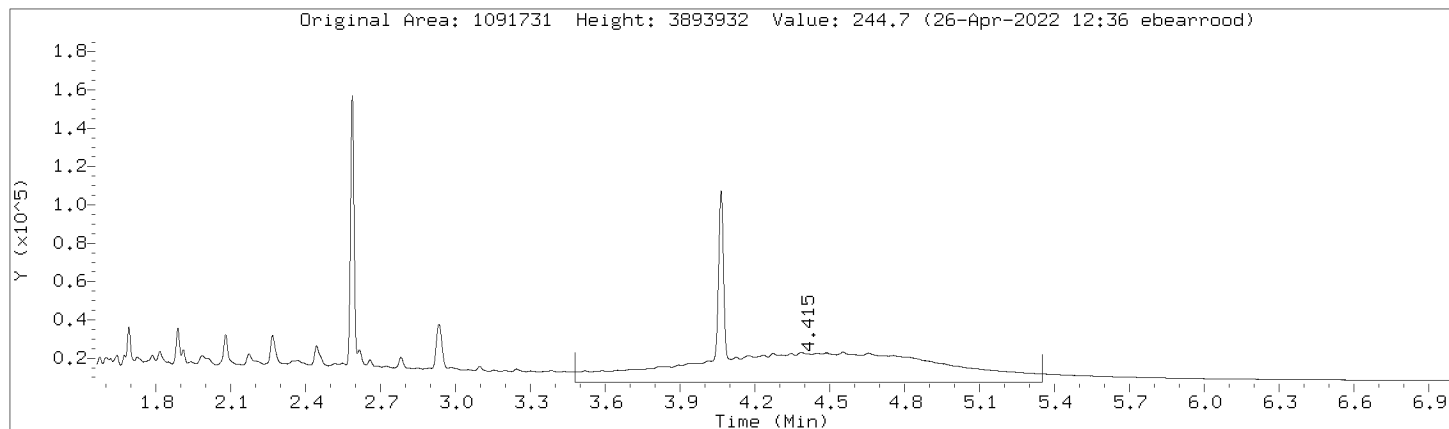
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



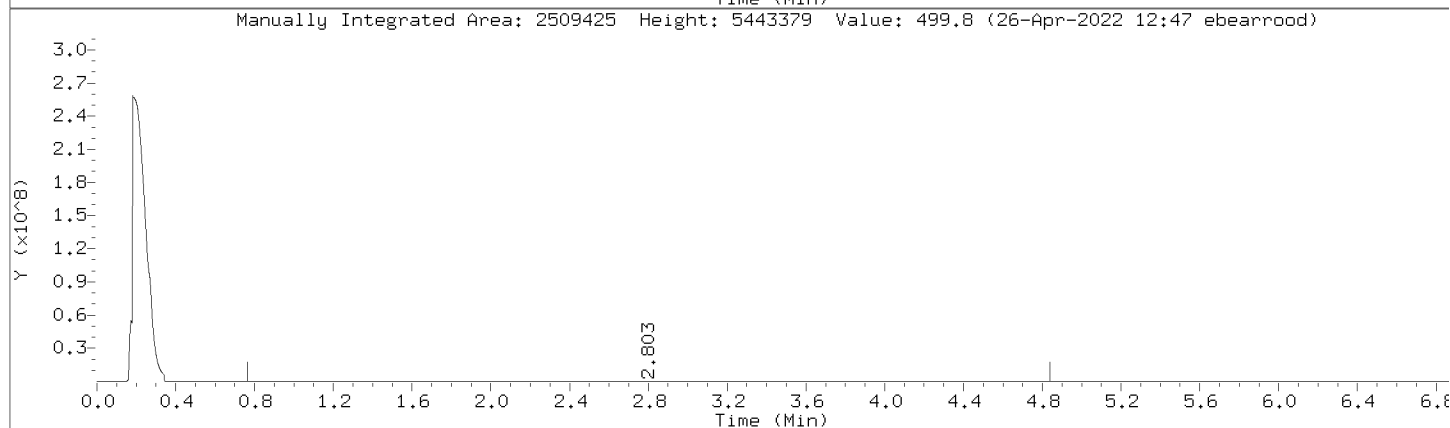
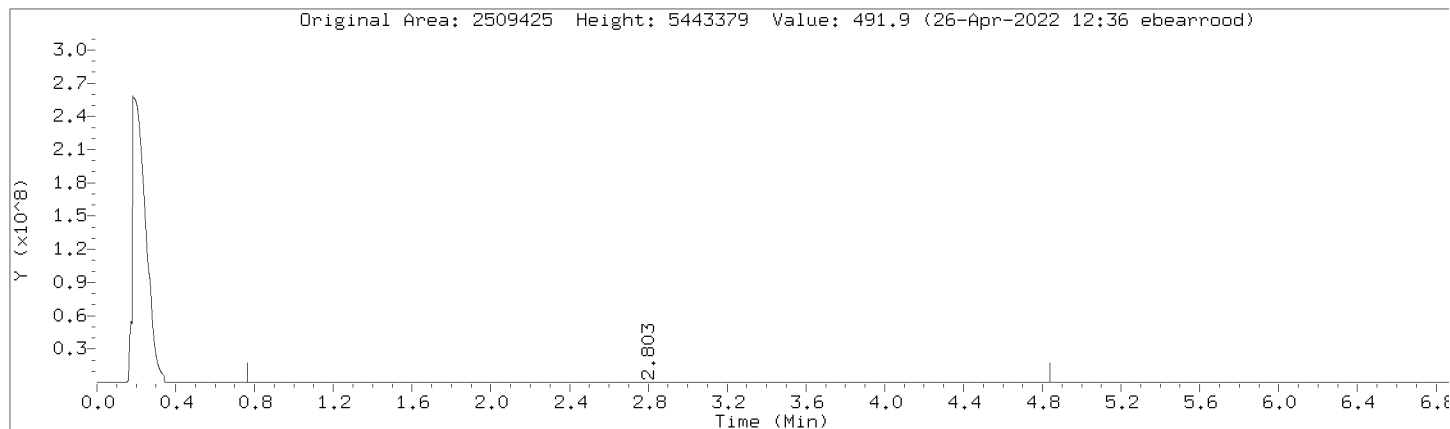
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000009.D  
Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

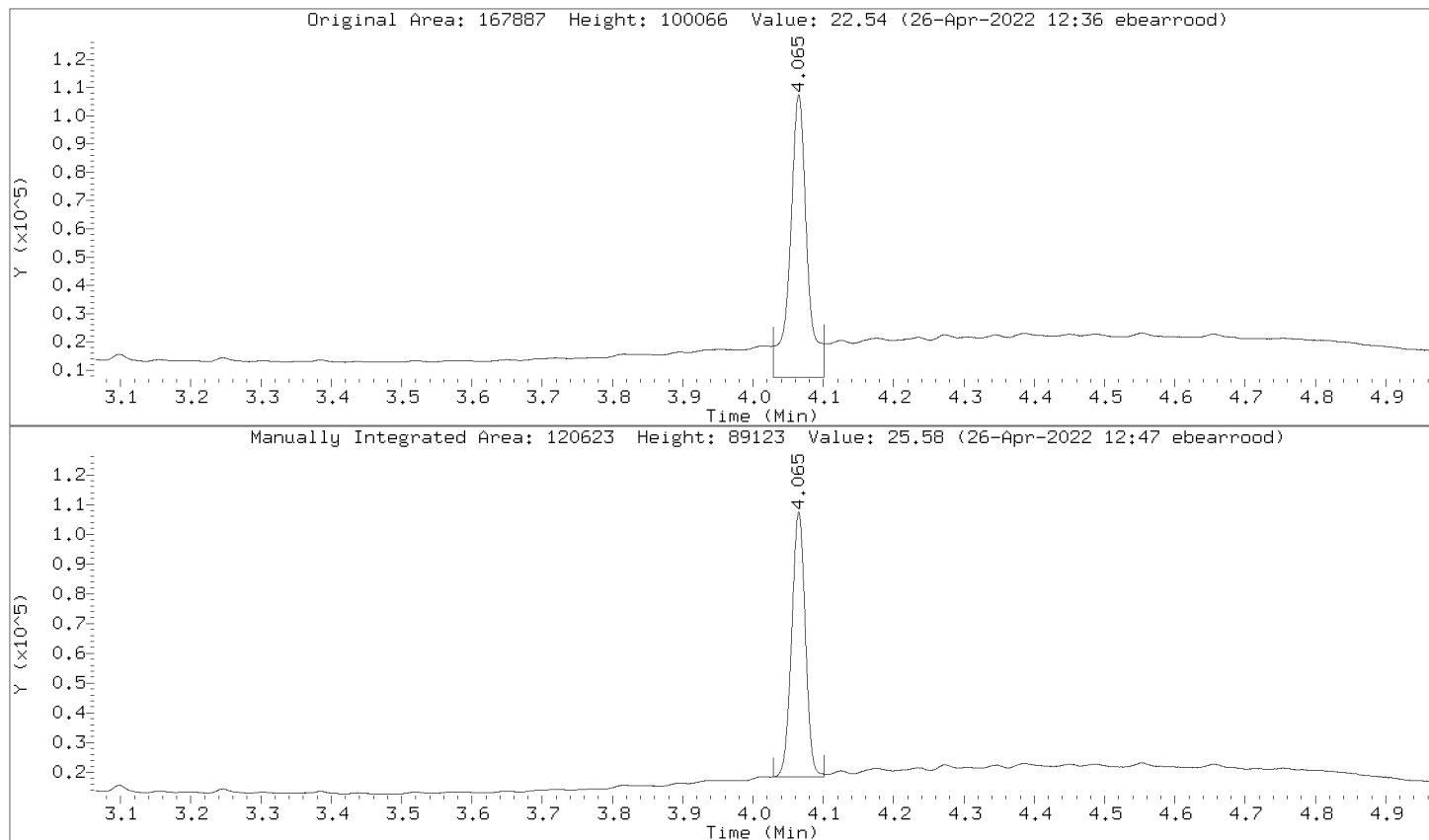
Compound: C10-C36      Review Code: RNG  
CAS Number:





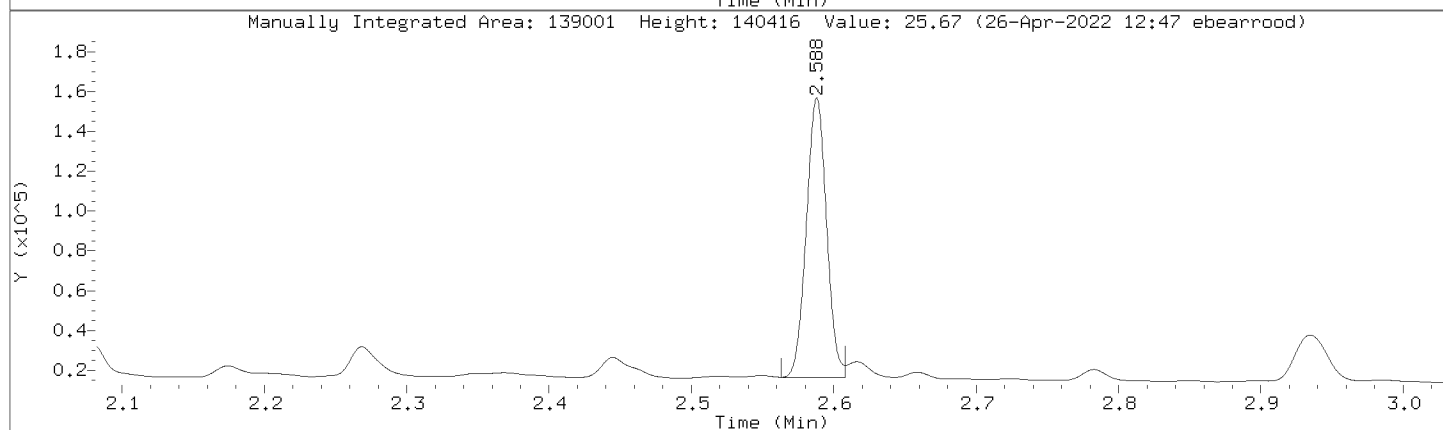
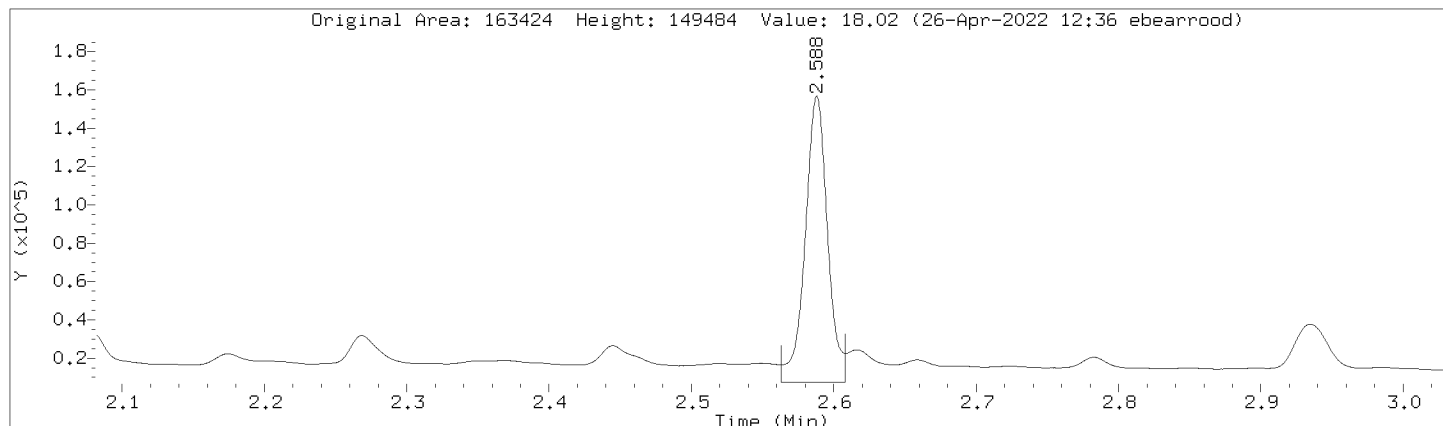
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000009.D  
 Injection Date: 26-APR-2022 08:51  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL6,362374:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	882204	882204
DRO by AK 102	1627220	1627220
TPH-DRO (C10-C28)	1857730	1857730
Motor Oil Range (C24-C36)	925451	925451
Diesel Fuel Range	1386097	1386097
Motor Oil Range	1091731	1091731
Diesel Fuel Range SG	1386097	1386097
Motor Oil Range SG	1091731	1091731
C10-C36	2509425	2509425
n-Triacontane (S)	167887	120623
o-Terphenyl (S)	163424	139001

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AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000010.D  
 Lab Smp Id: DMO-CAL7,362375:2 Client Smp ID: DMO-CAL7,362375:2  
 Inj Date : 26-APR-2022 09:02  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal7,362375:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 9 Calibration Sample, Level: 7  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		3002656 500.000	501	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.586	2.582 0.004		283965 50.0000	52.1	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.064	4.064 0.000		244379 50.0000	51.6	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		1725450 500.000	503	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		3435856 500.000	502	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		1783702 500.000	502	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		4728106 1000.00	1000	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		2544549 500.000	502	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		2544549 500.000	502	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		2126604 500.000	503	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		2126604 500.000	503	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 09:02

Client ID: DMO-CAL7.362375;2

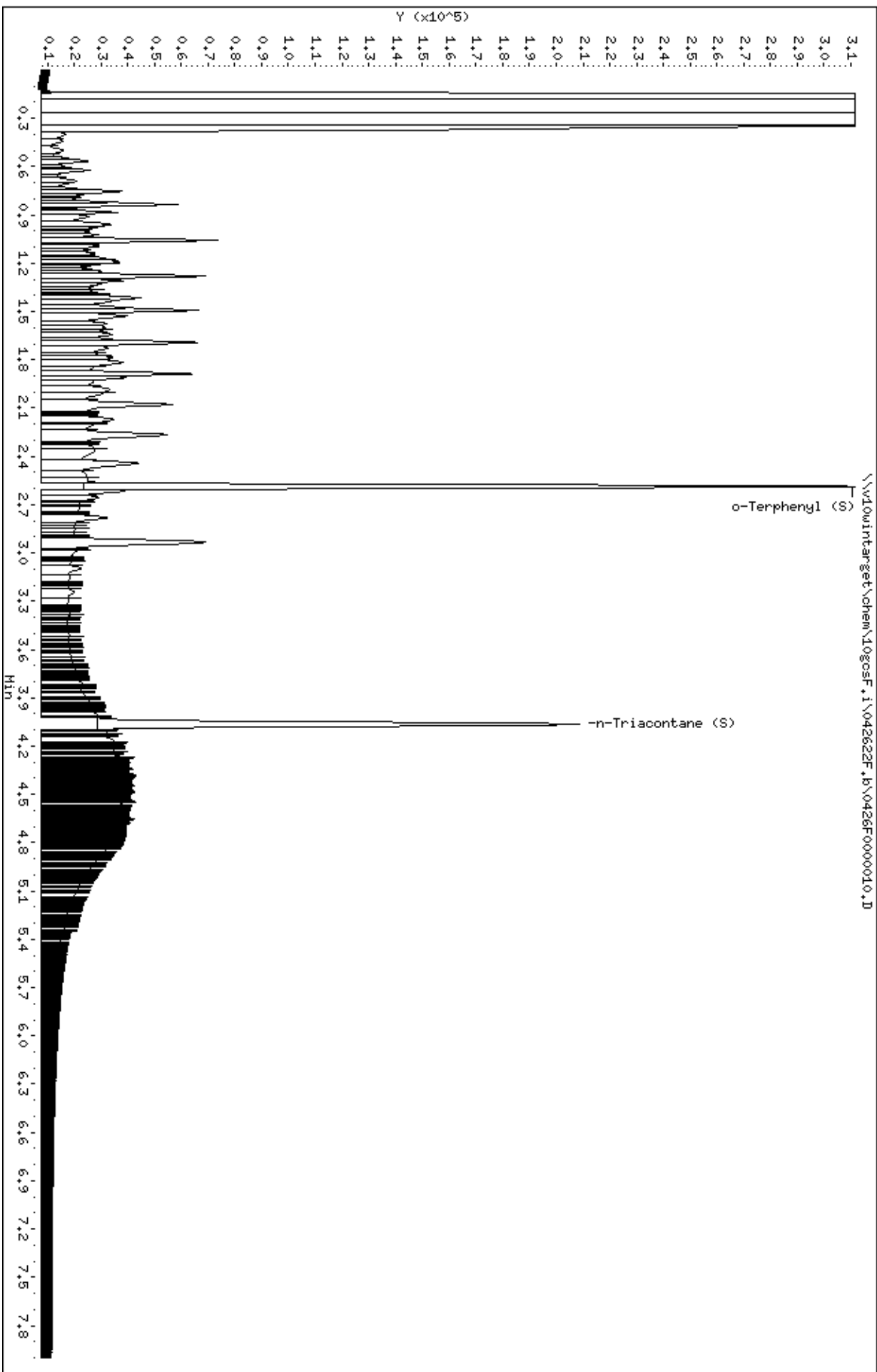
Sample Info: DMO-CAL7.362375;2

Instrument: 10gosc.f.1

Operator: EB3

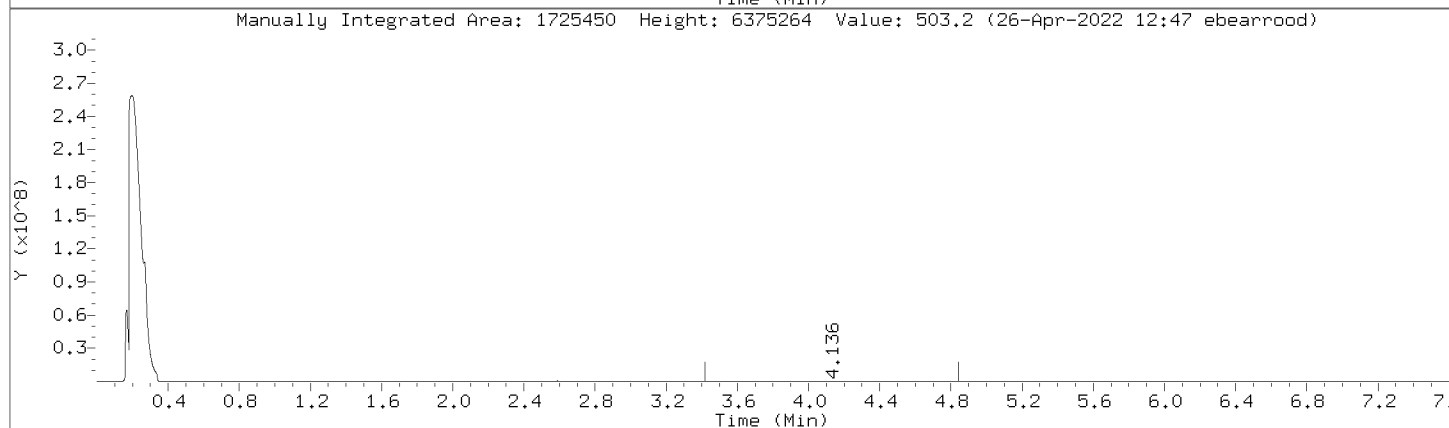
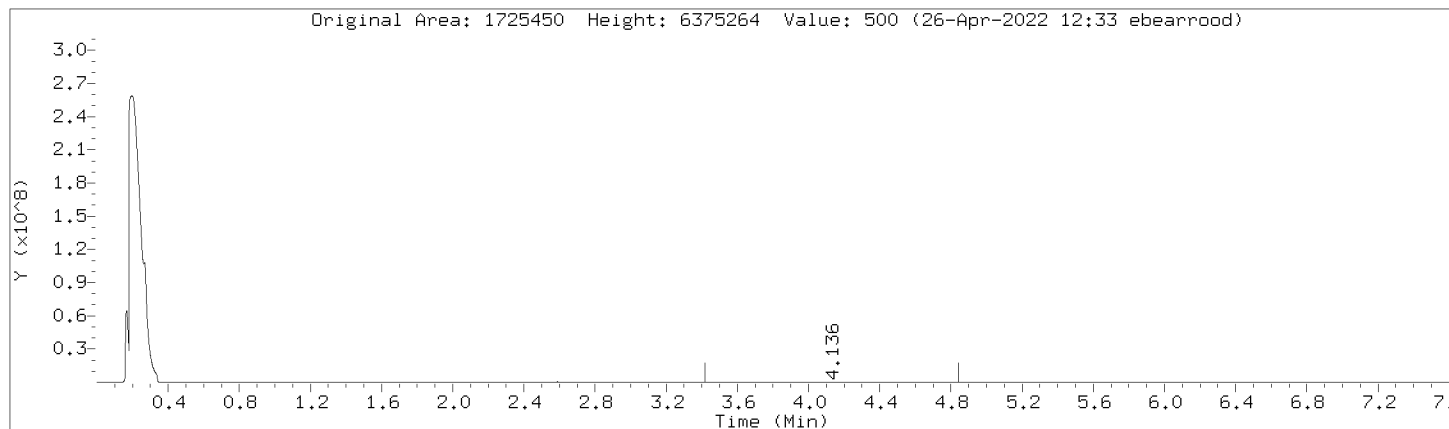
Column diameter: 0.32

Column phase: DB-5-MS21250010



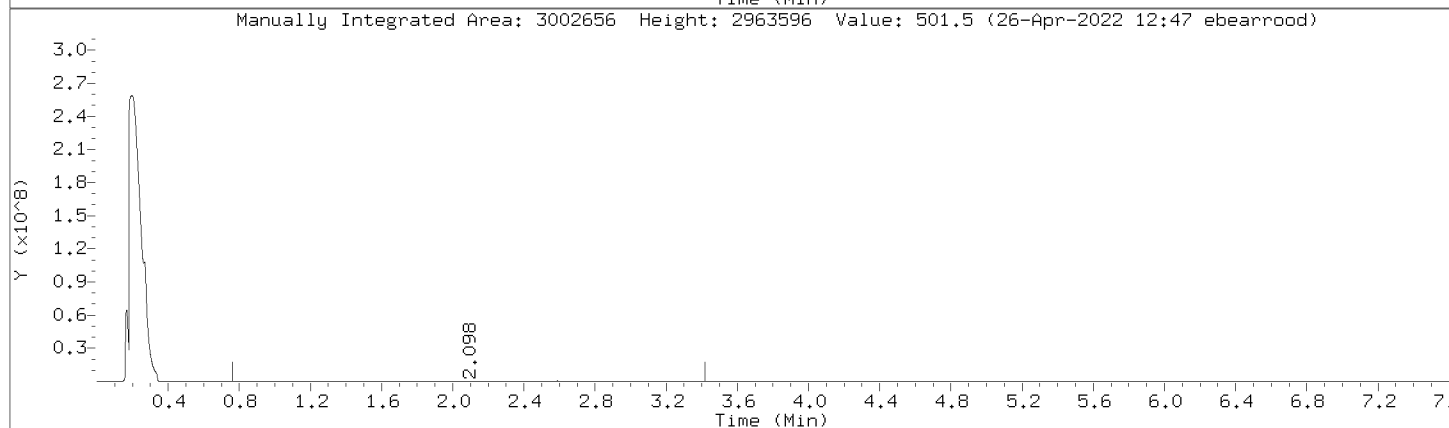
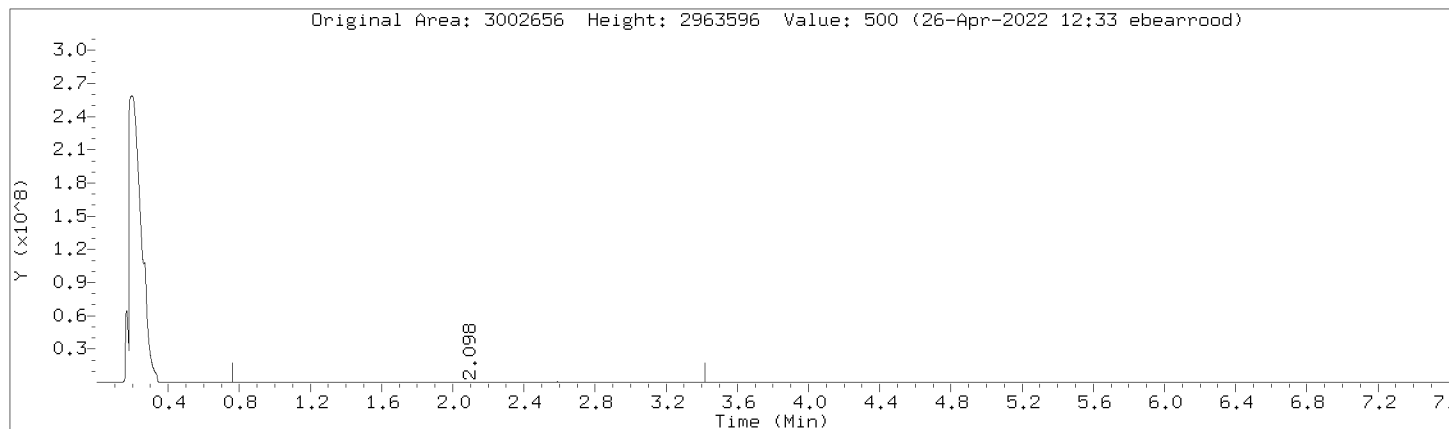
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Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



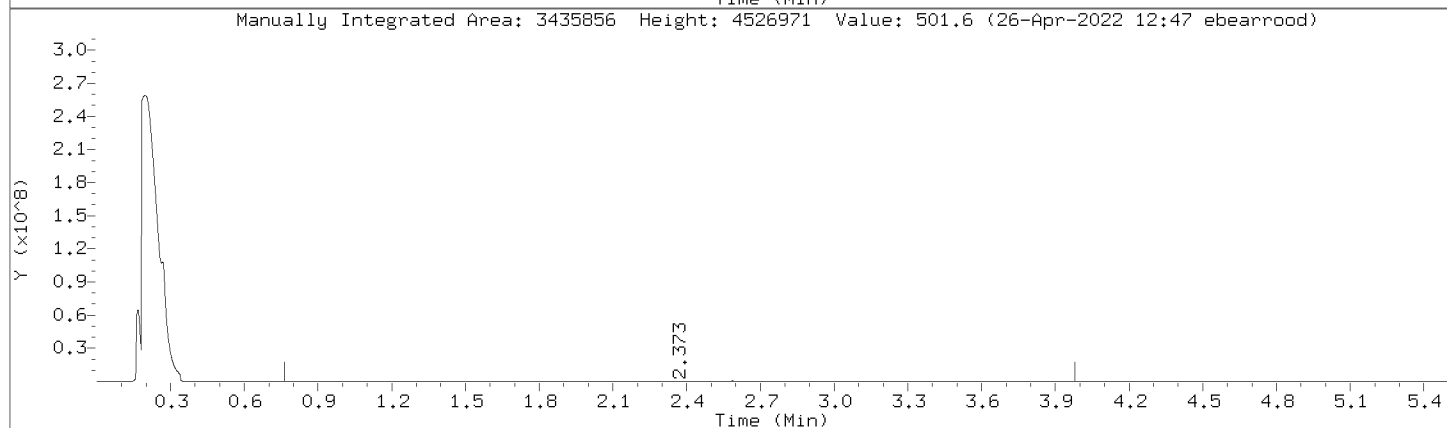
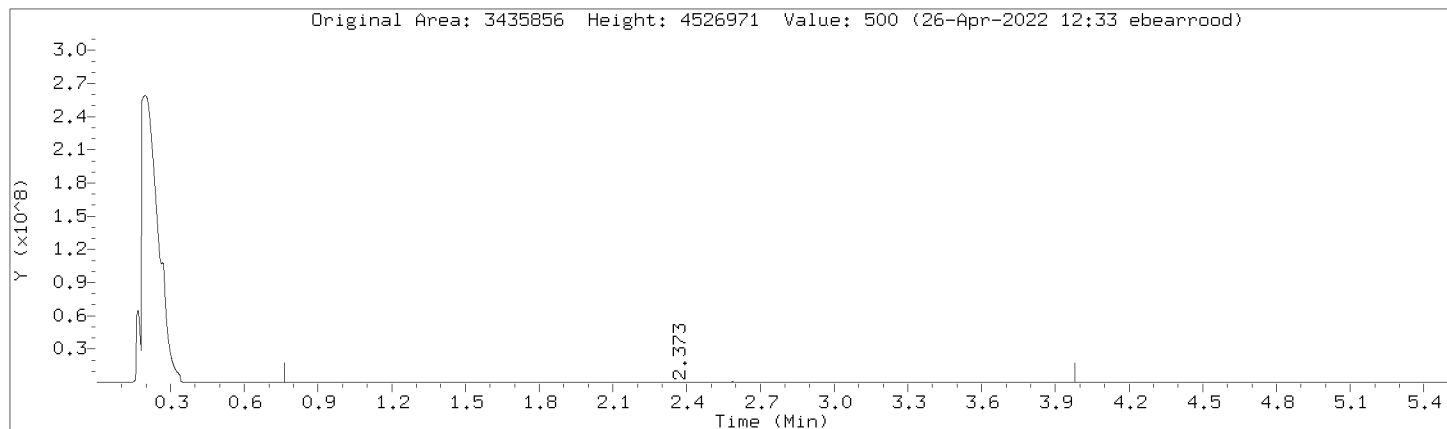
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000010.D  
Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

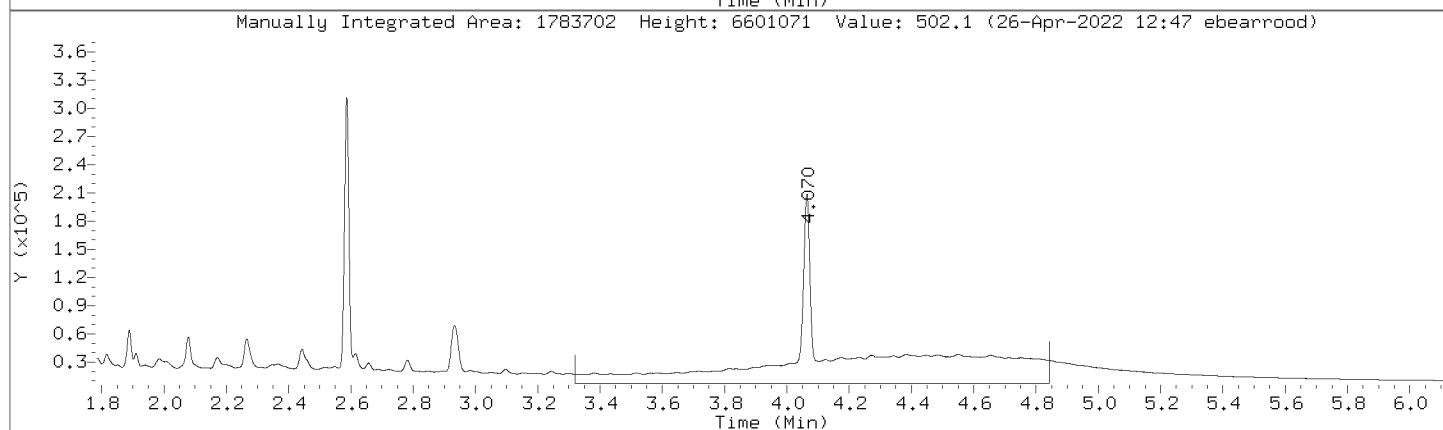
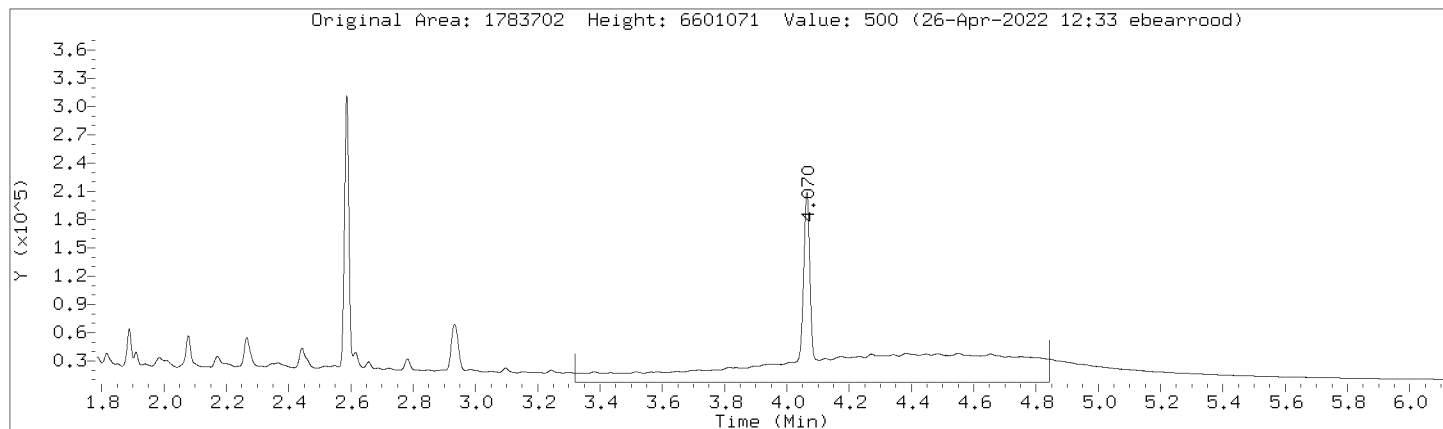
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:





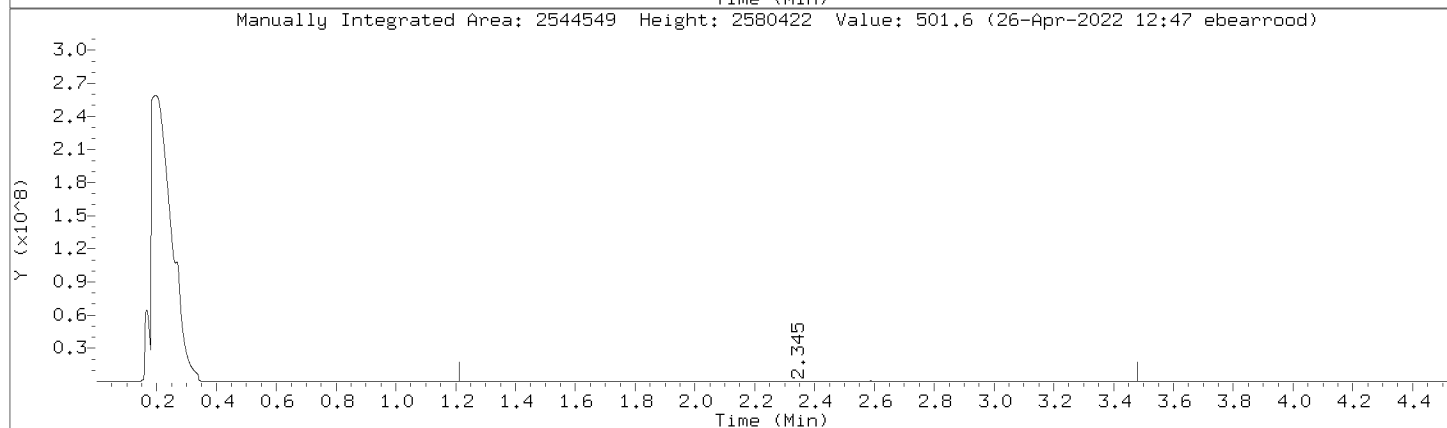
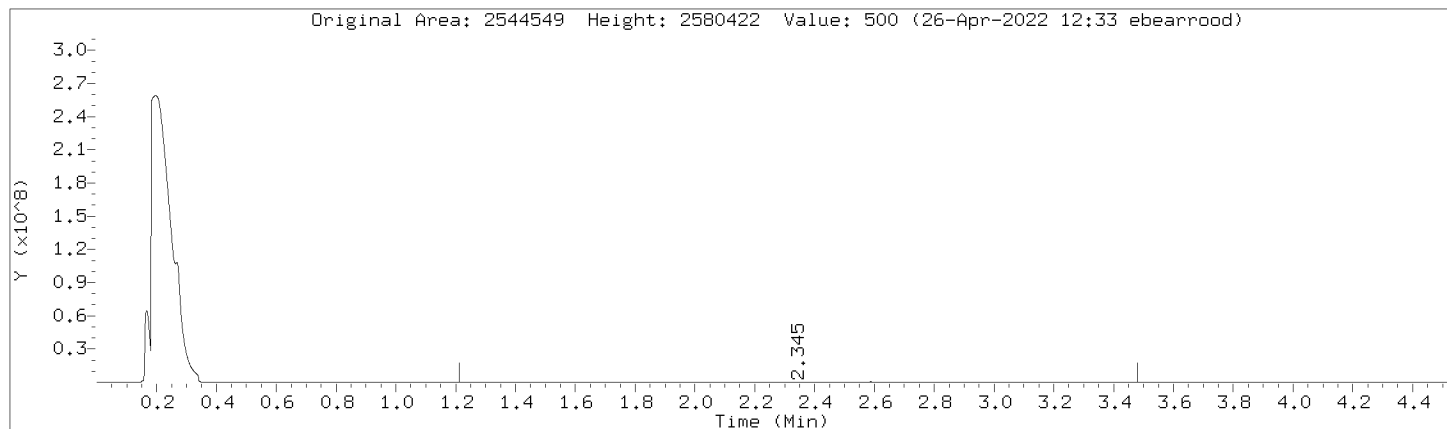
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Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



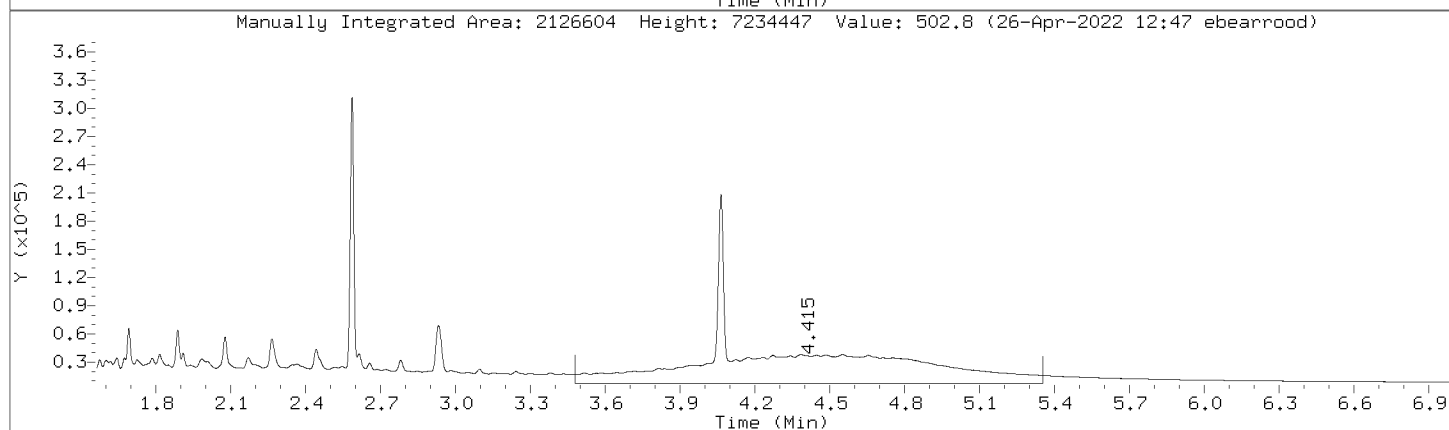
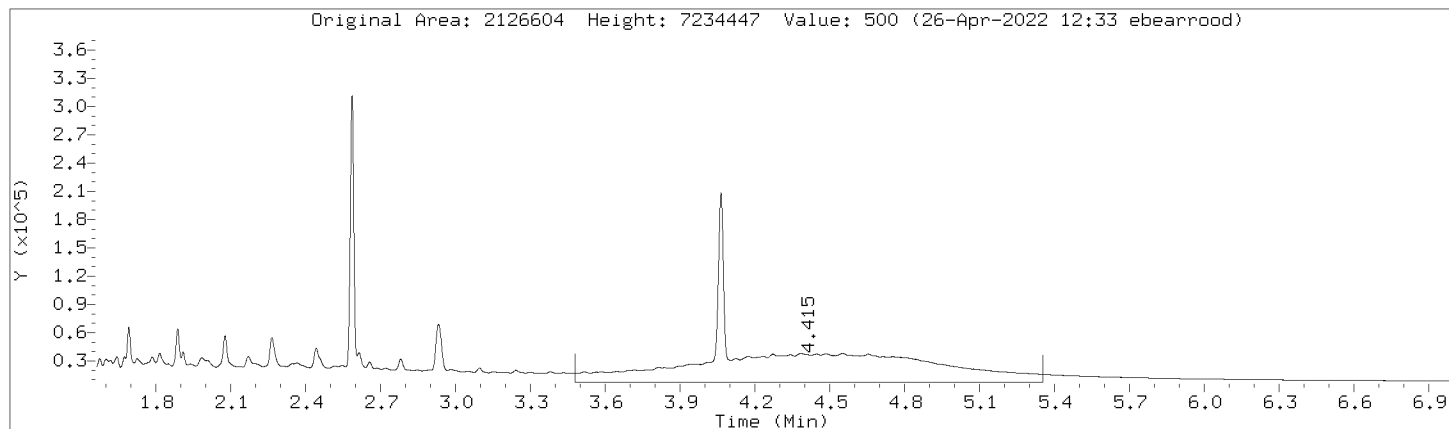
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Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



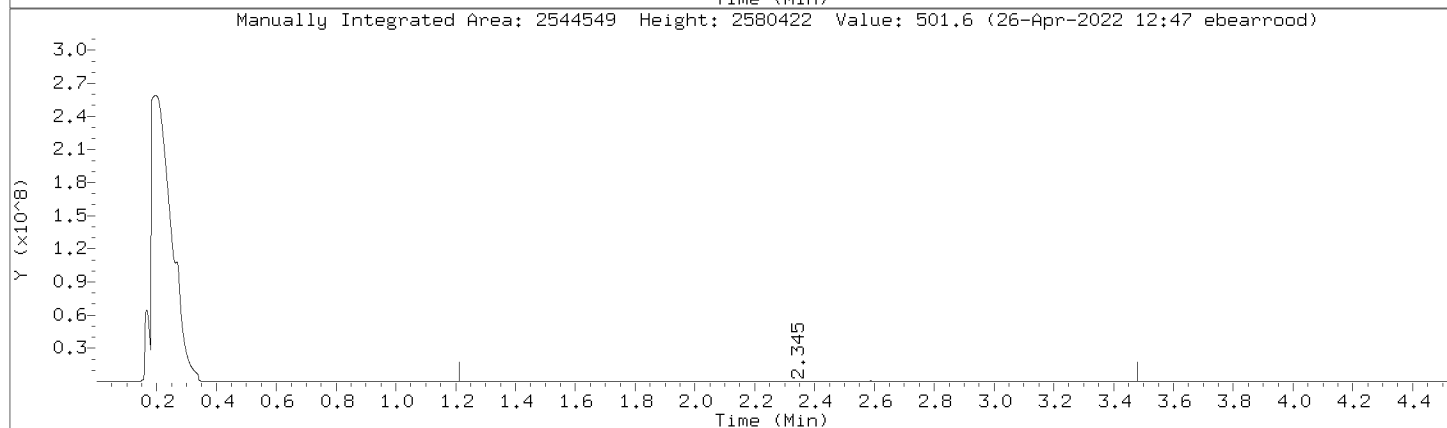
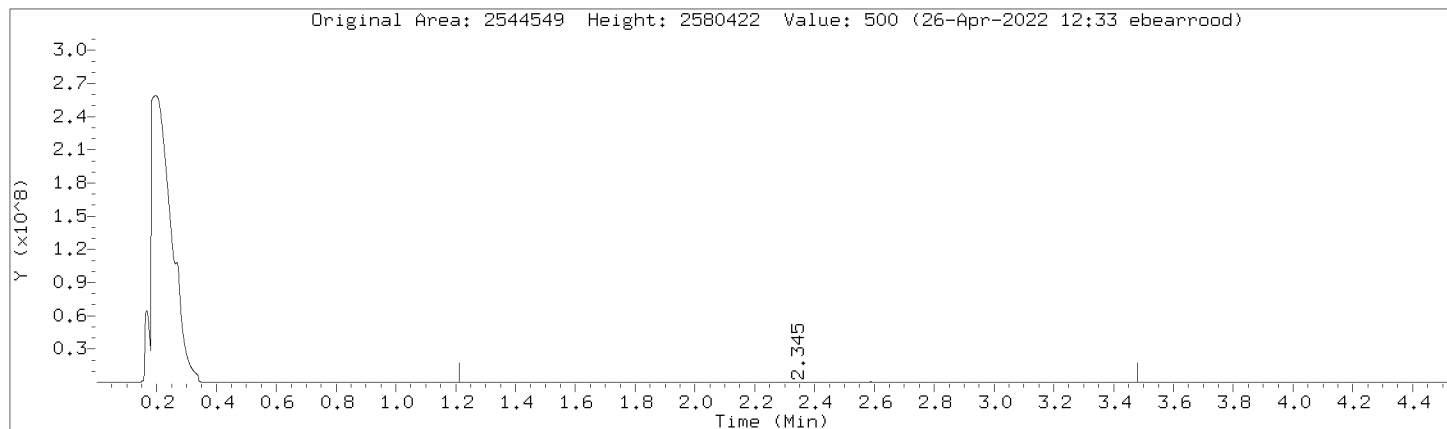
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Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



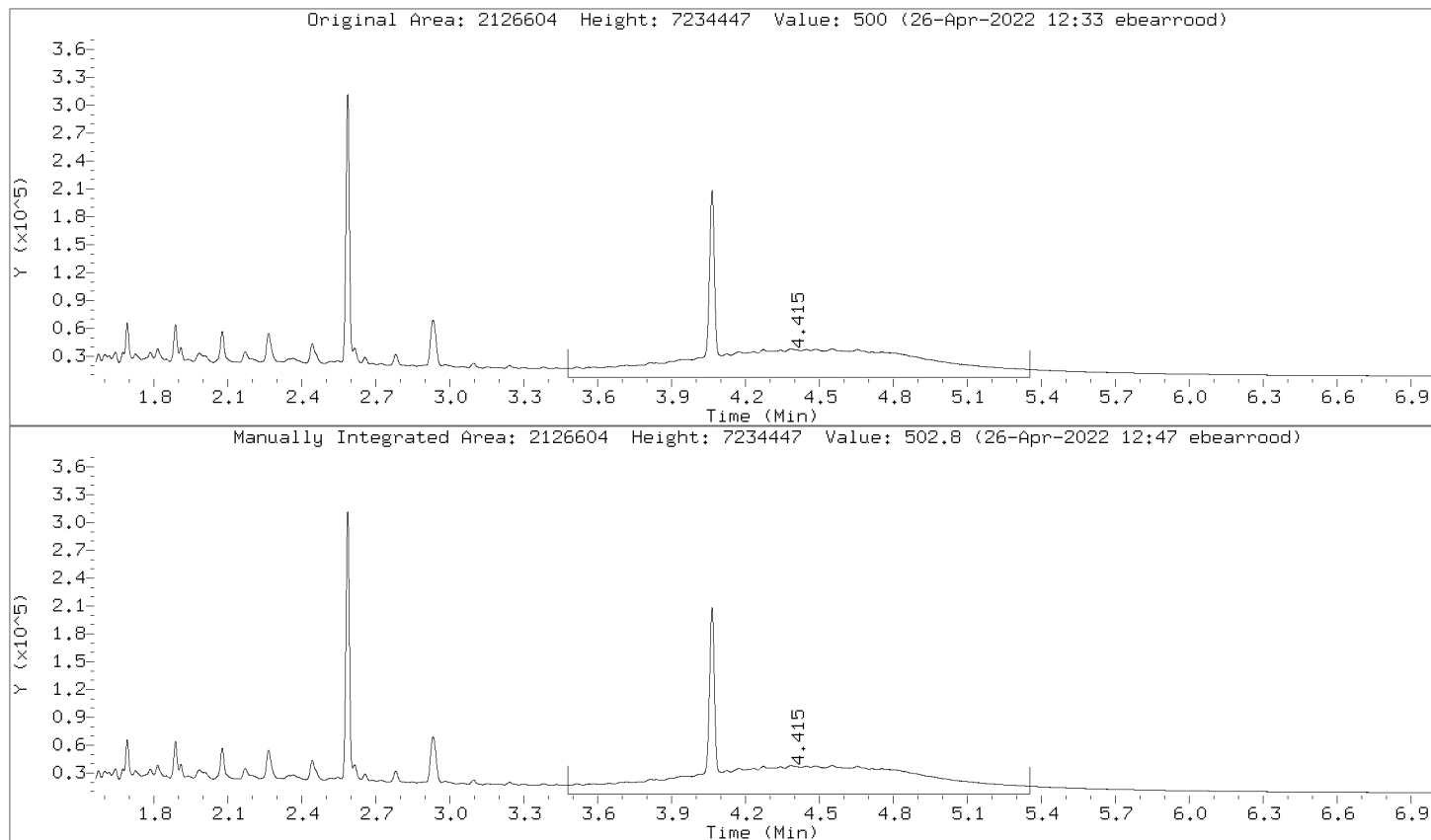
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Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



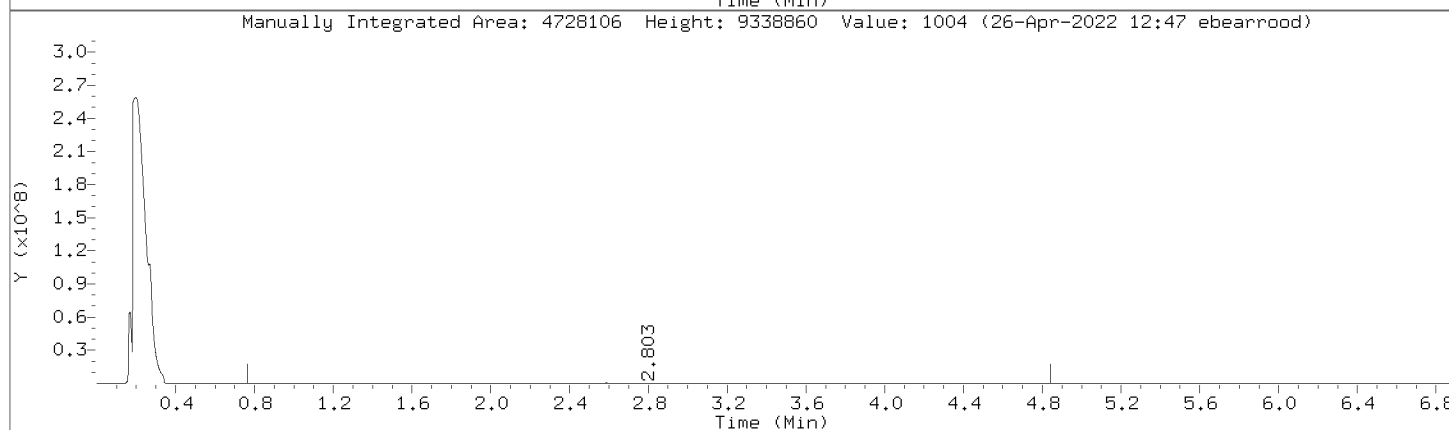
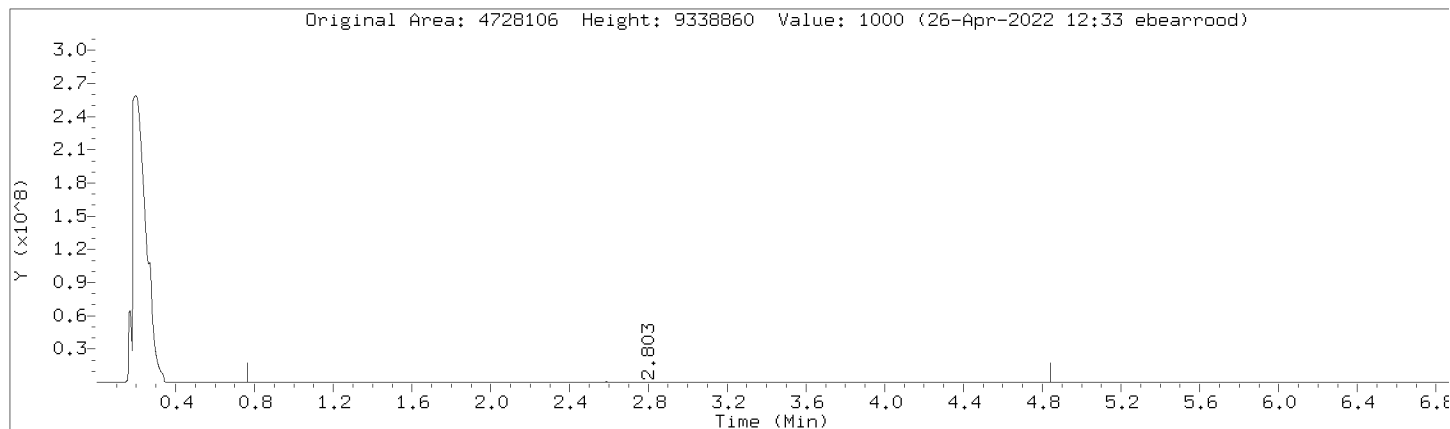
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Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



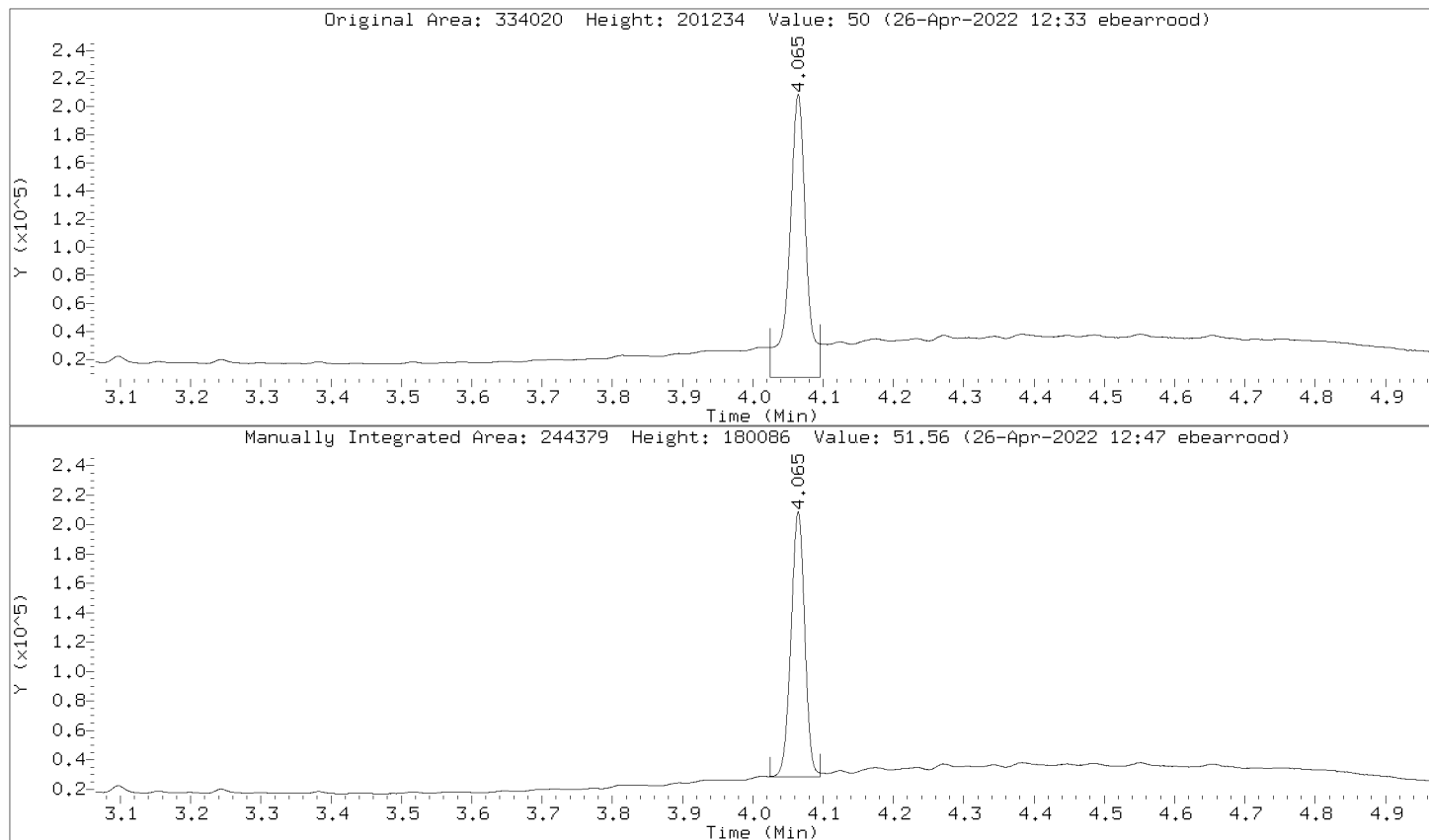
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



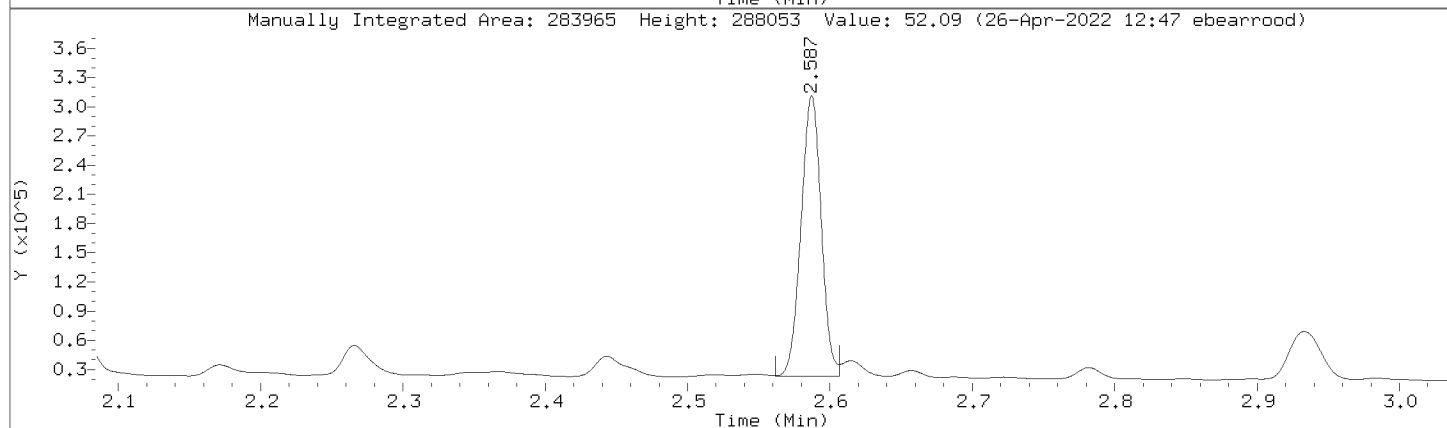
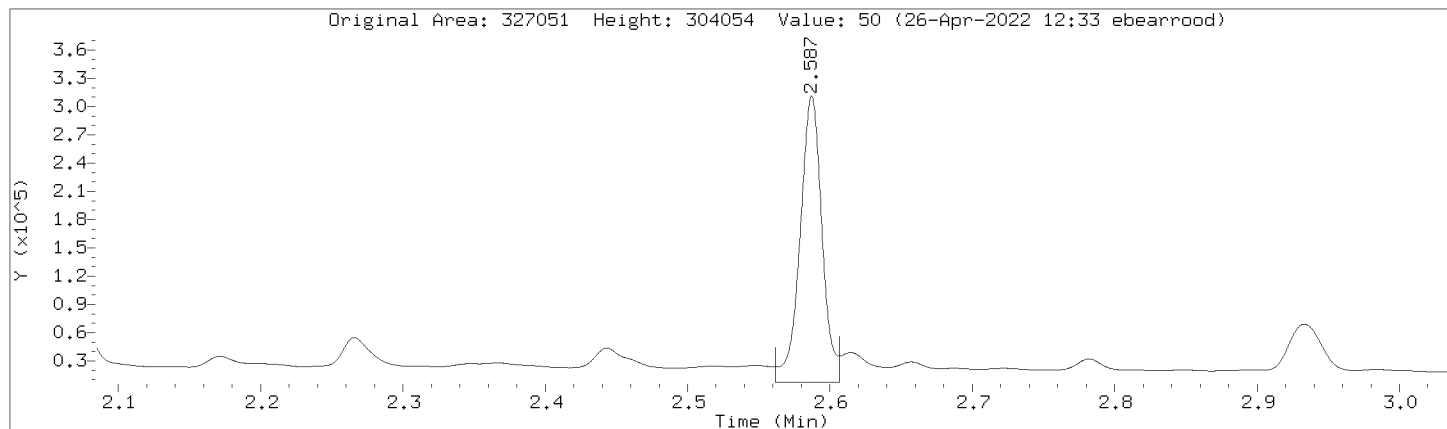
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000010.D  
Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000010.D  
 Injection Date: 26-APR-2022 09:02  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL7,362375:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1725450	1725450
DRO by AK 102	3002656	3002656
TPH-DRO (C10-C28)	3435856	3435856
Motor Oil Range (C24-C36)	1783702	1783702
Diesel Fuel Range	2544549	2544549
Motor Oil Range	2126604	2126604
Diesel Fuel Range SG	2544549	2544549
Motor Oil Range SG	2126604	2126604
C10-C36	4728106	4728106
n-Triacontane (S)	334020	244379
o-Terphenyl (S)	327051	283965



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000011.D  
 Lab Smp Id: DMO-CAL8,362376:2 Client Smp ID: DMO-CAL8,362376:2  
 Inj Date : 26-APR-2022 09:13  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal8,362376:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 10 Calibration Sample, Level: 8  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		5684961 1000.00	1000	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.588	2.582 0.006		567975 100.000	104	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.070	4.064 0.006		489894 100.000	103	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		3340334 1000.00	1000	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		6506472 1000.00	999	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		3472644 1000.00	1000	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		9025295 2000.00	2000	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		4796494 1000.00	999	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		4796494 1000.00	999	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		4126794 1000.00	1000	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		4126794 1000.00	1000	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 09:13

Client ID: DMO-CAL8,362376;2

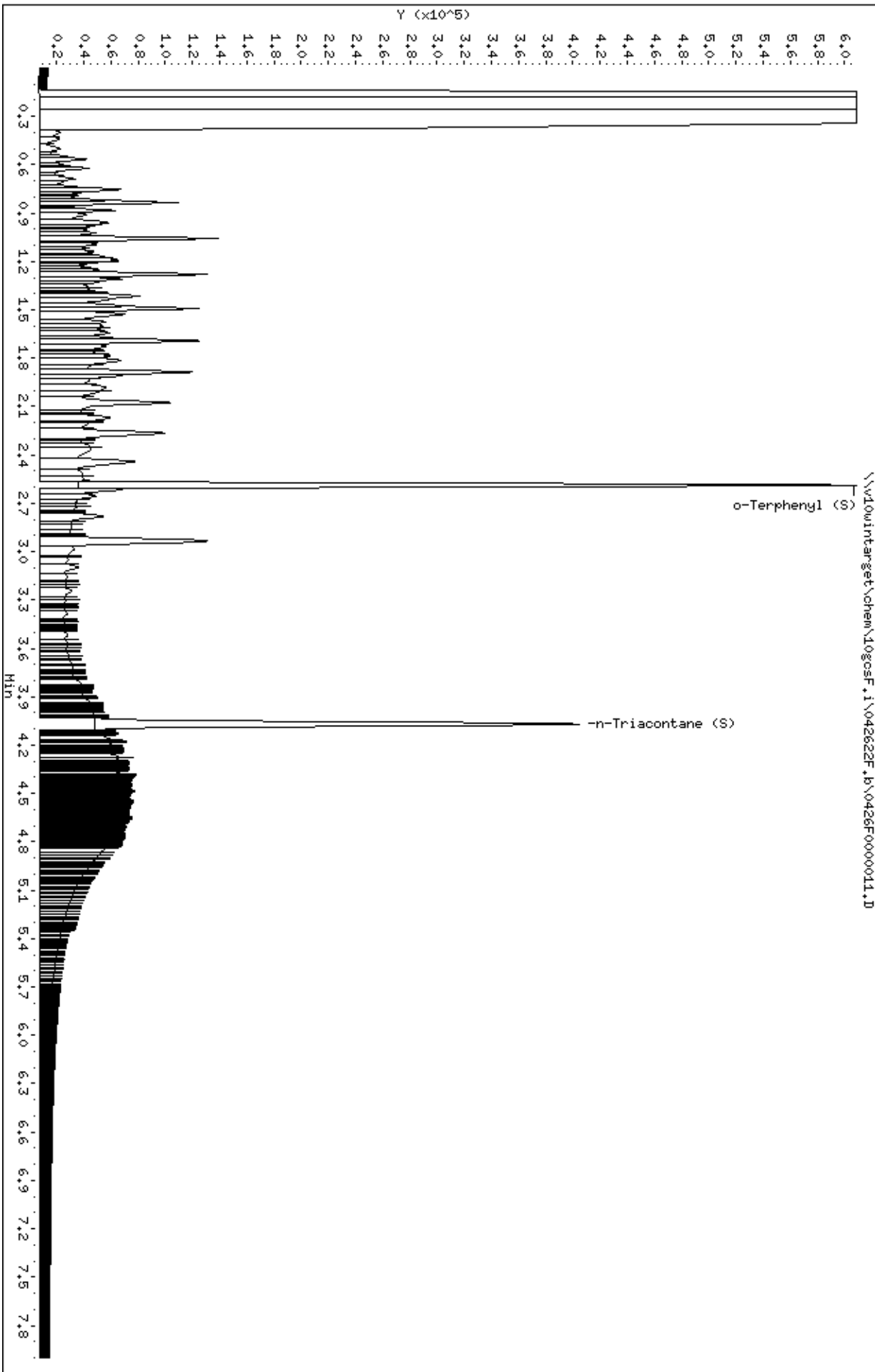
Sample Info: DMO-CAL8,362376;2

Instrument: 10gocsf.1

Operator: EB3

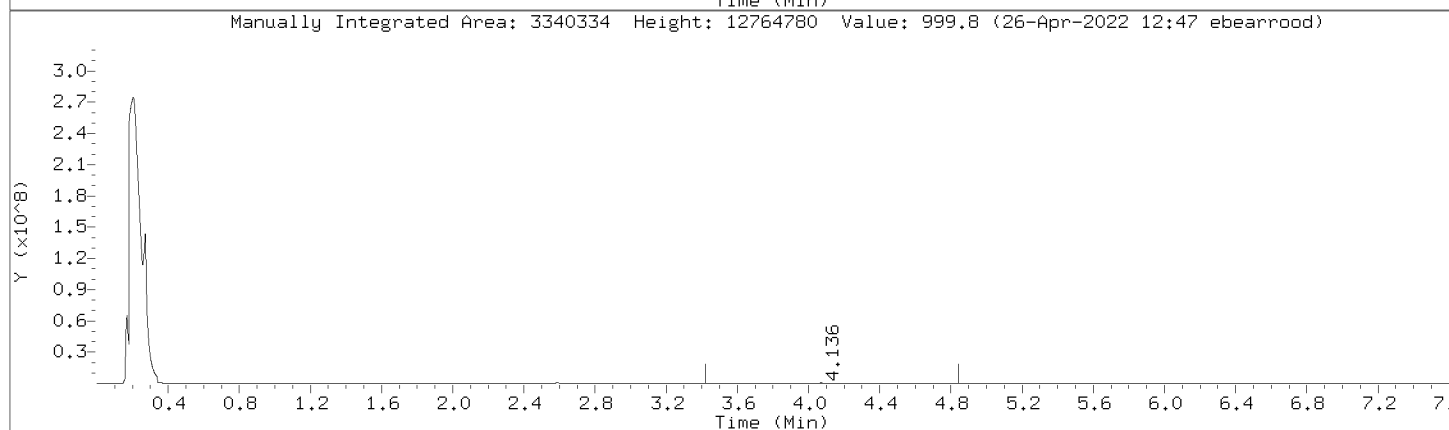
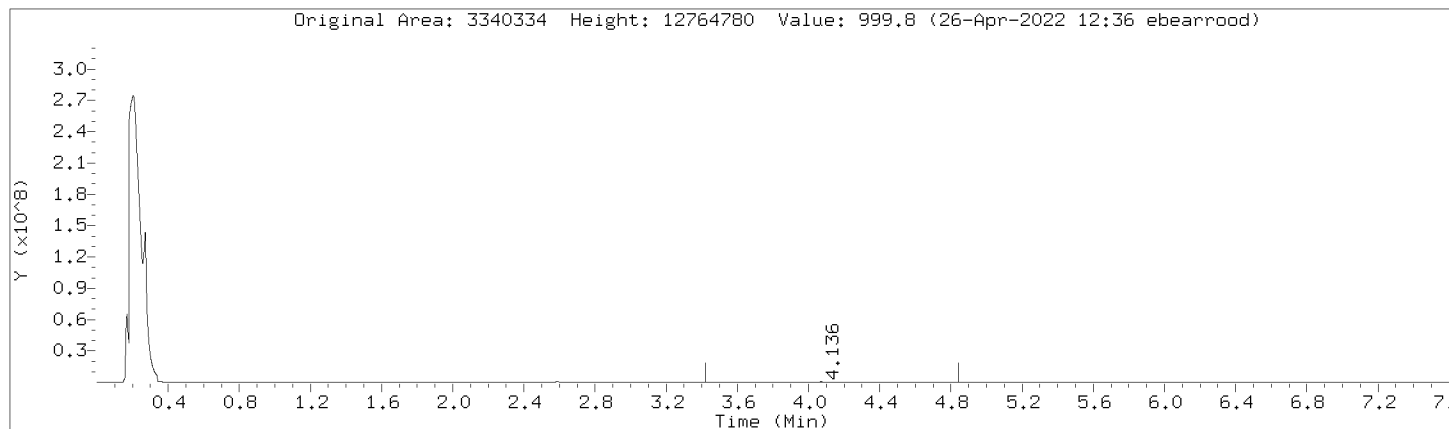
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Column phase: DB-5-MS21250010



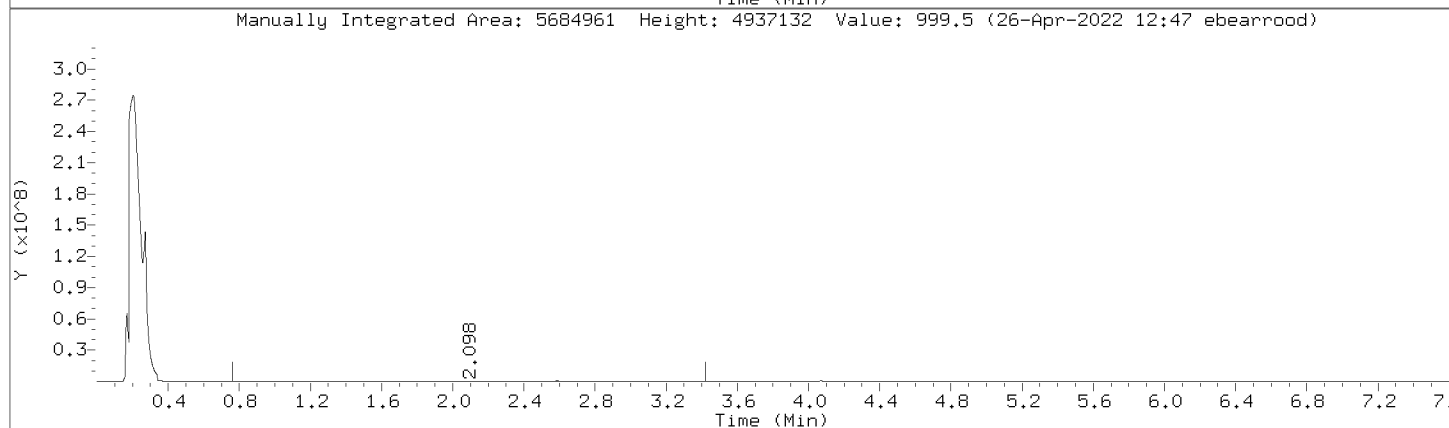
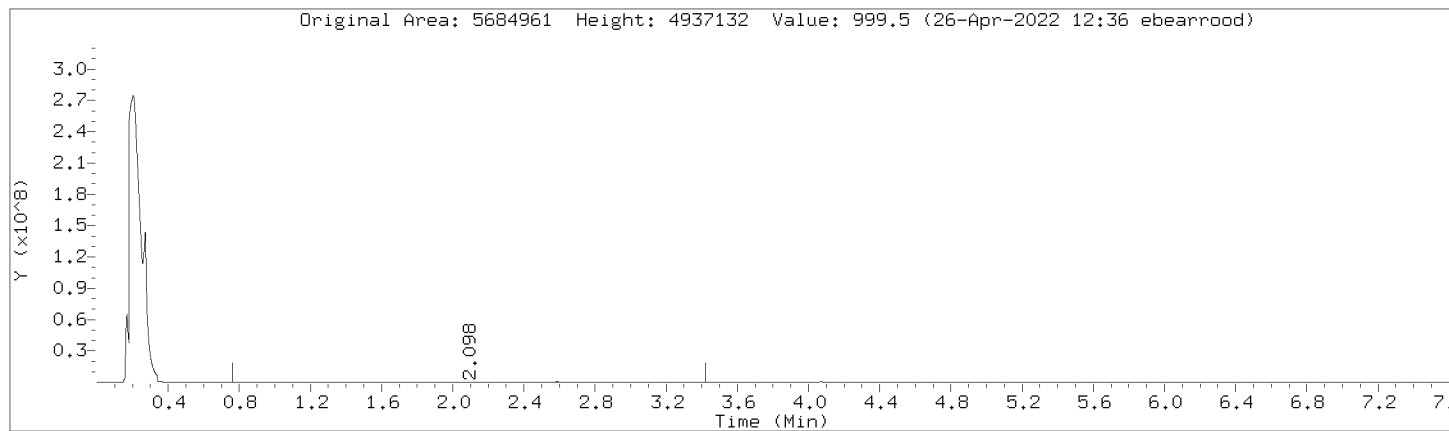
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Injection Date: 26-APR-2022 09:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



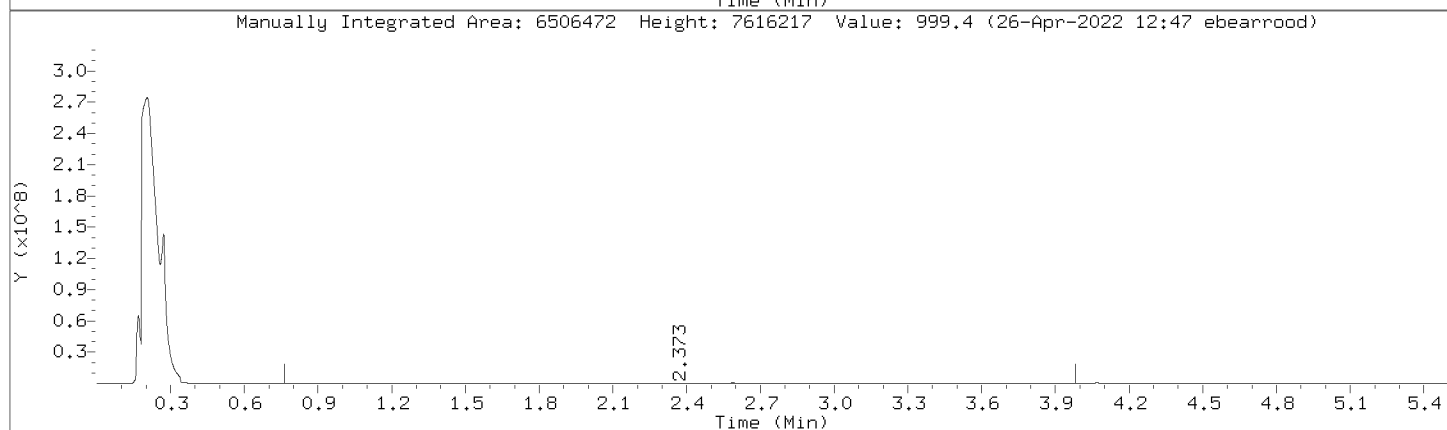
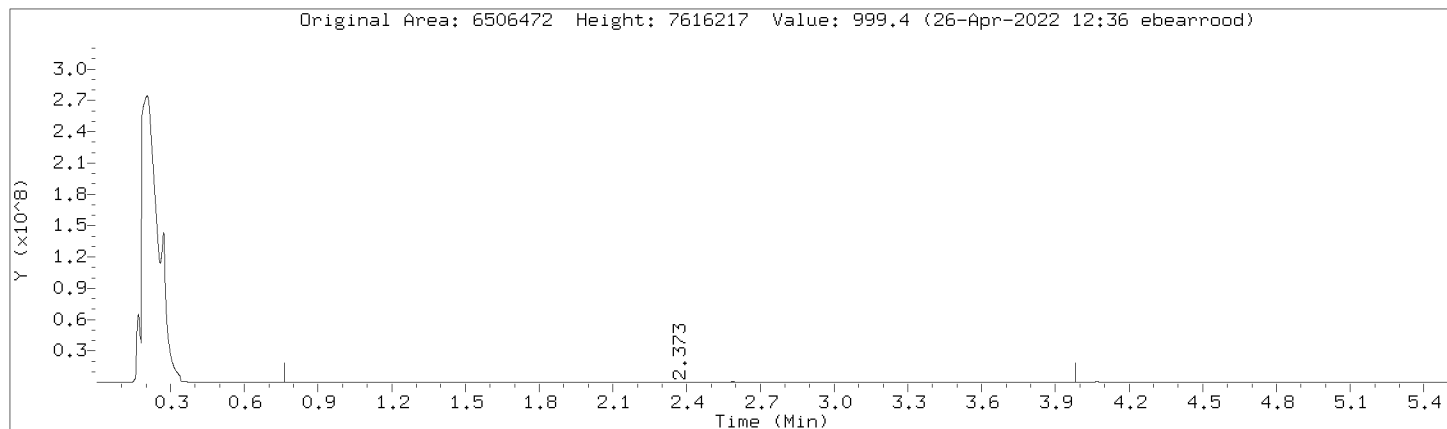
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



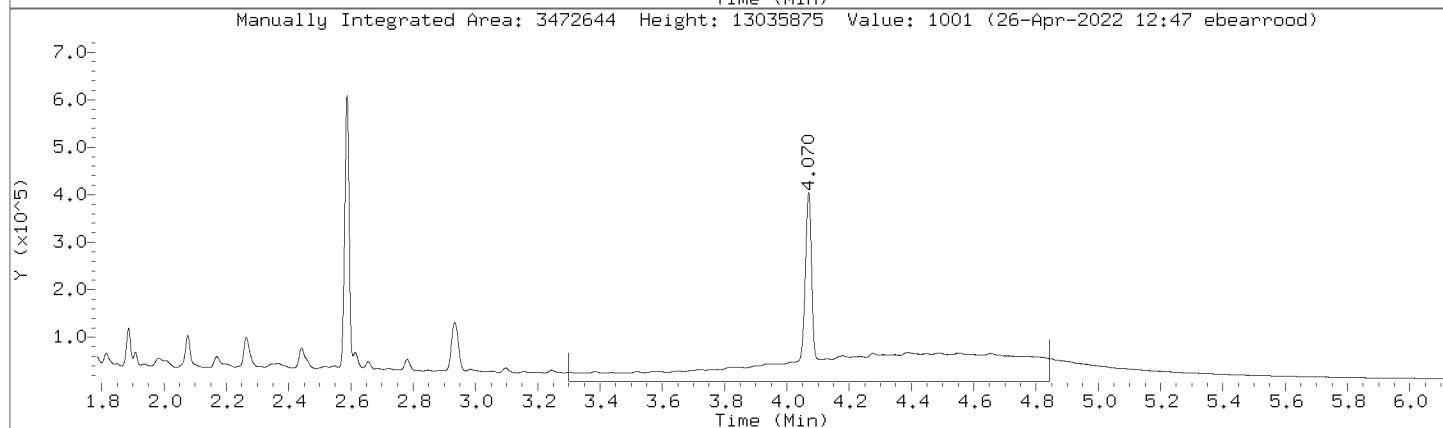
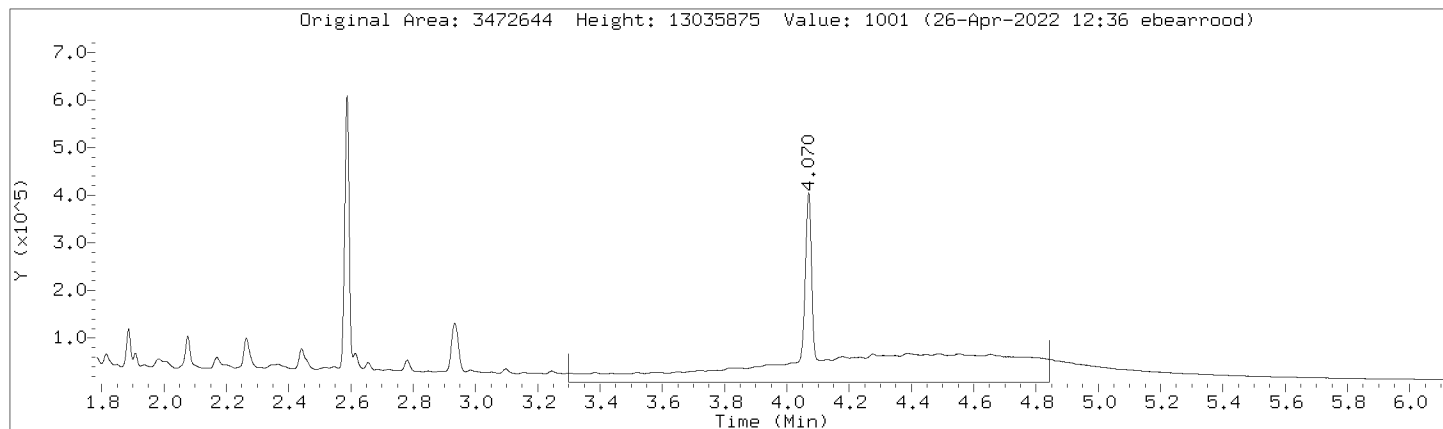
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



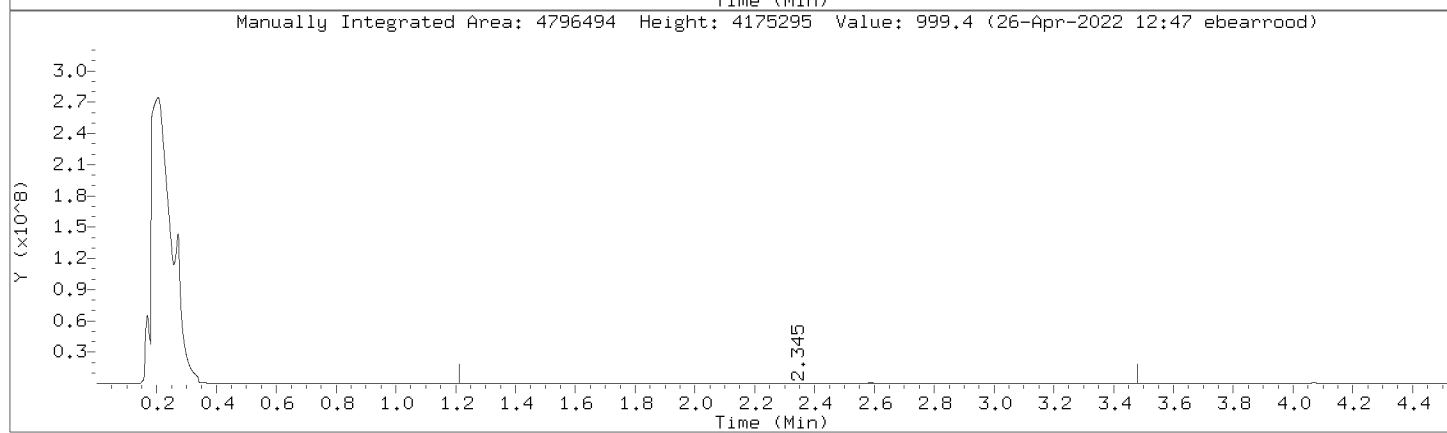
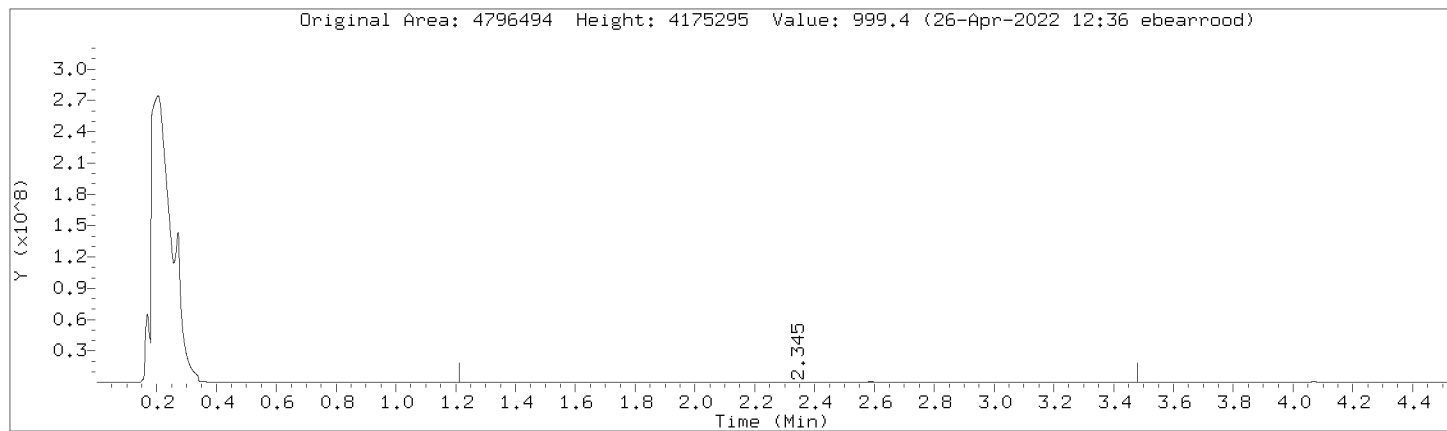
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Injection Date: 26-APR-2022 09:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000011.D  
Injection Date: 26-APR-2022 09:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

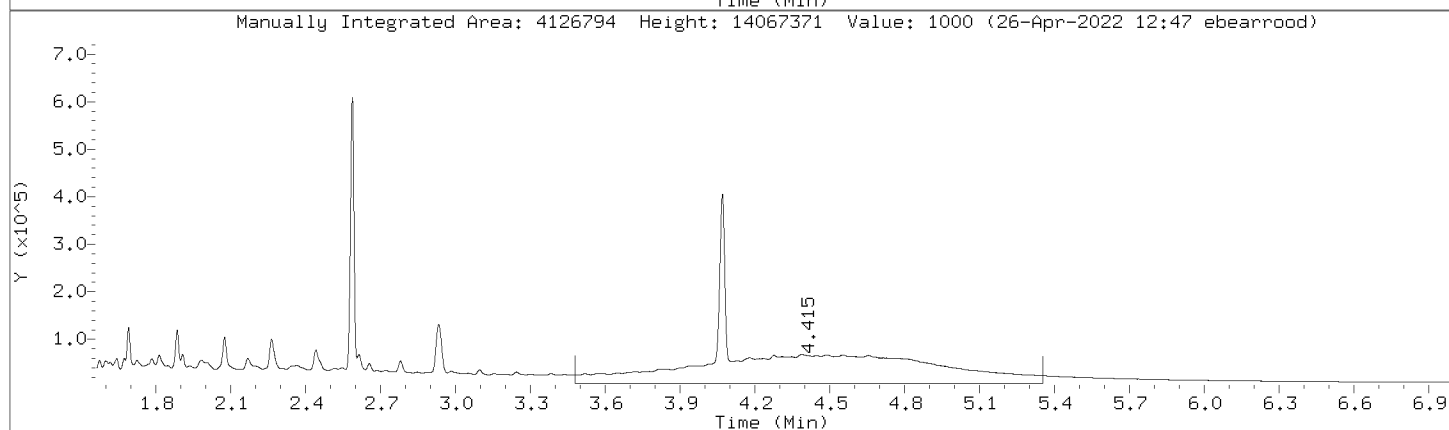
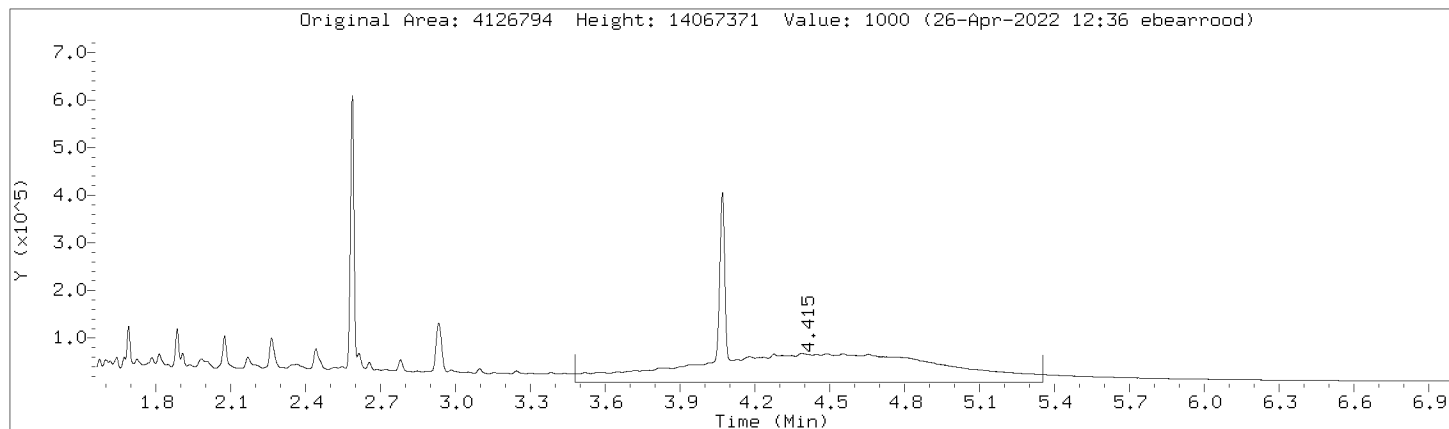
Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:





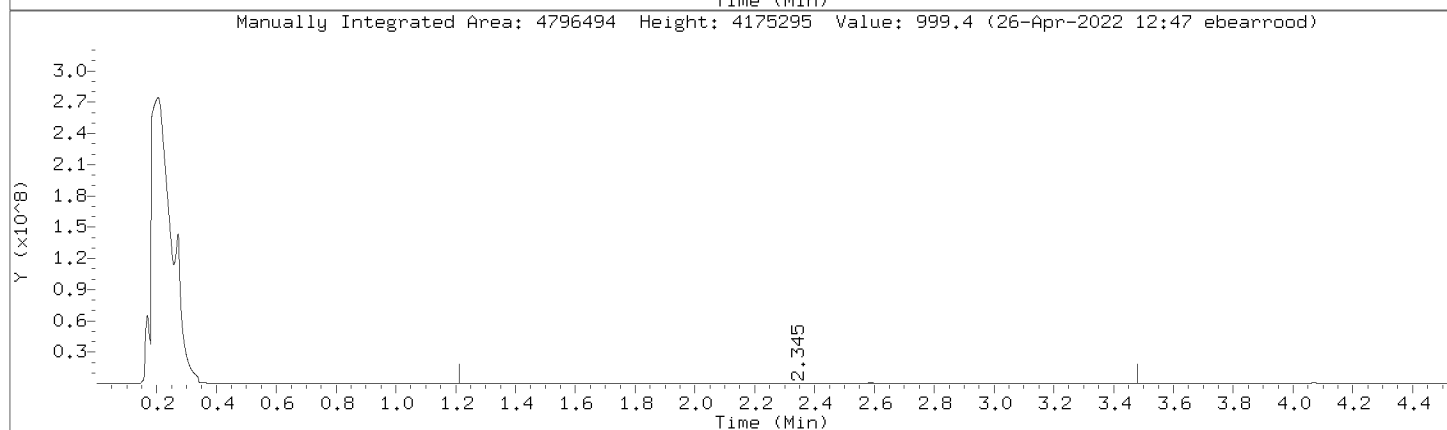
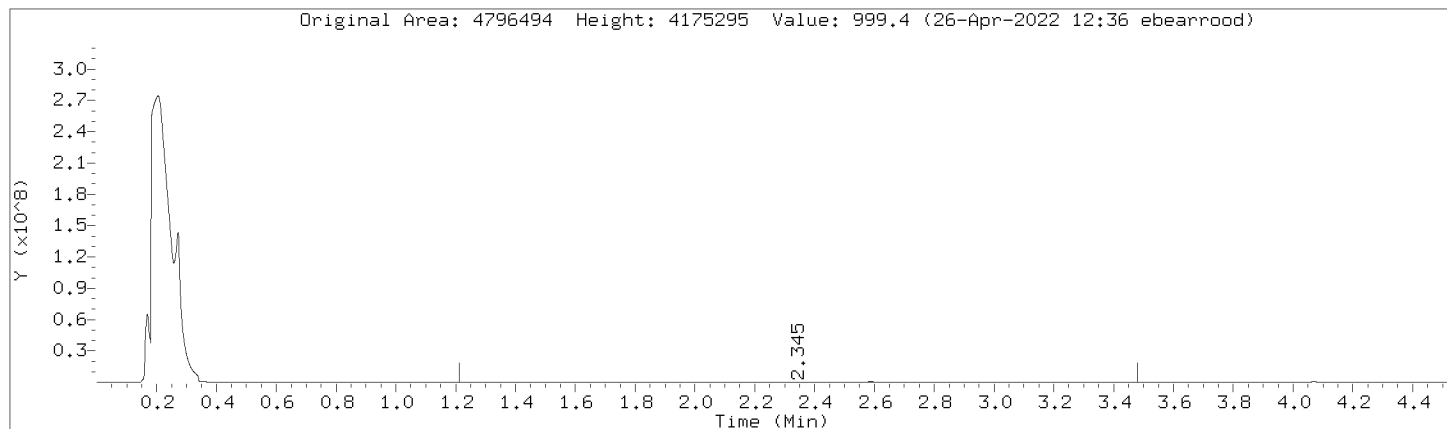
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Lab Sample ID: DMO-CAL8,362376:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



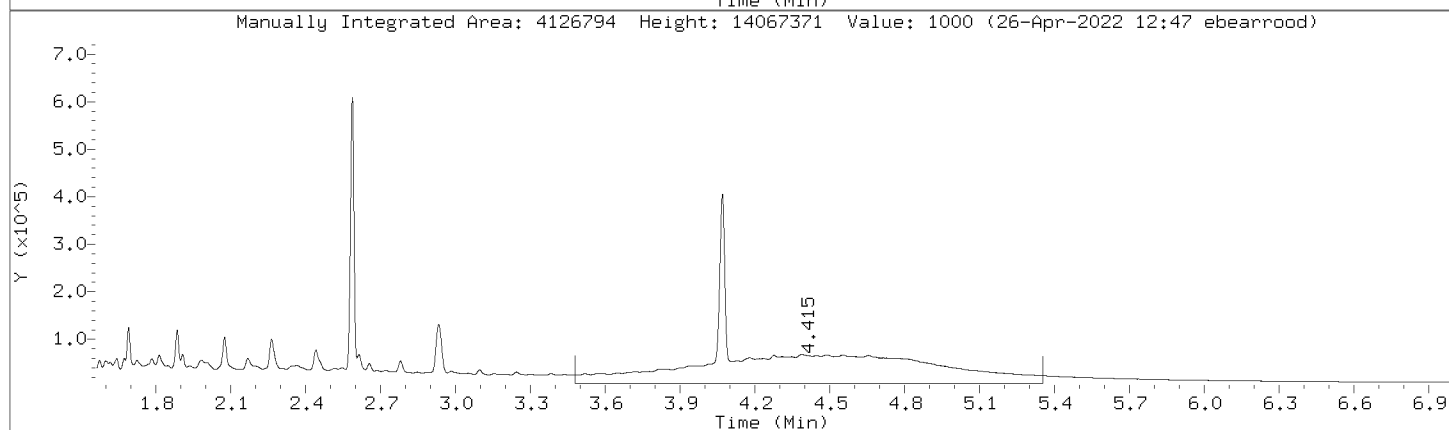
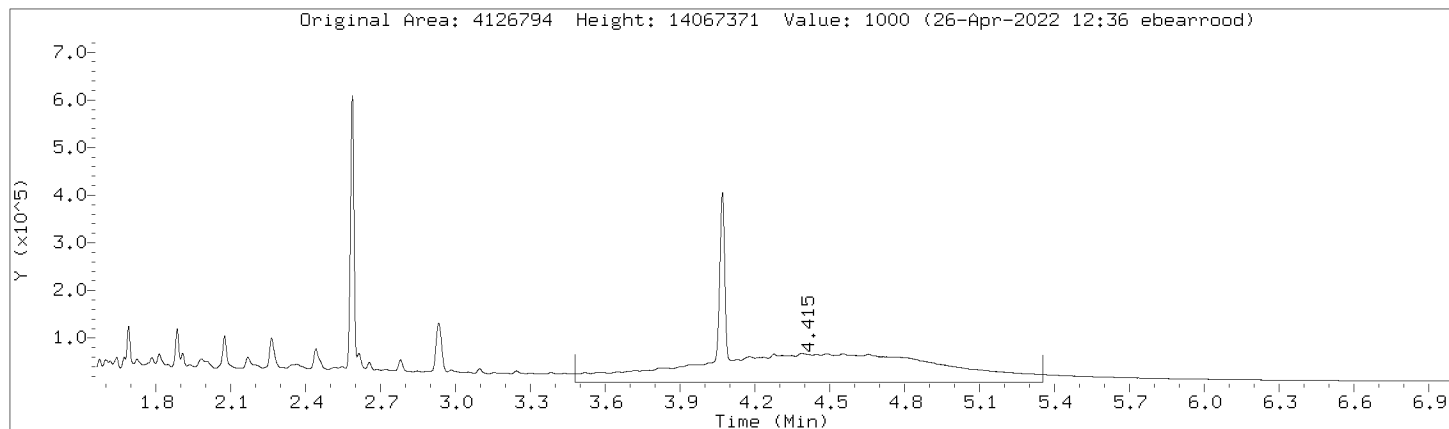
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



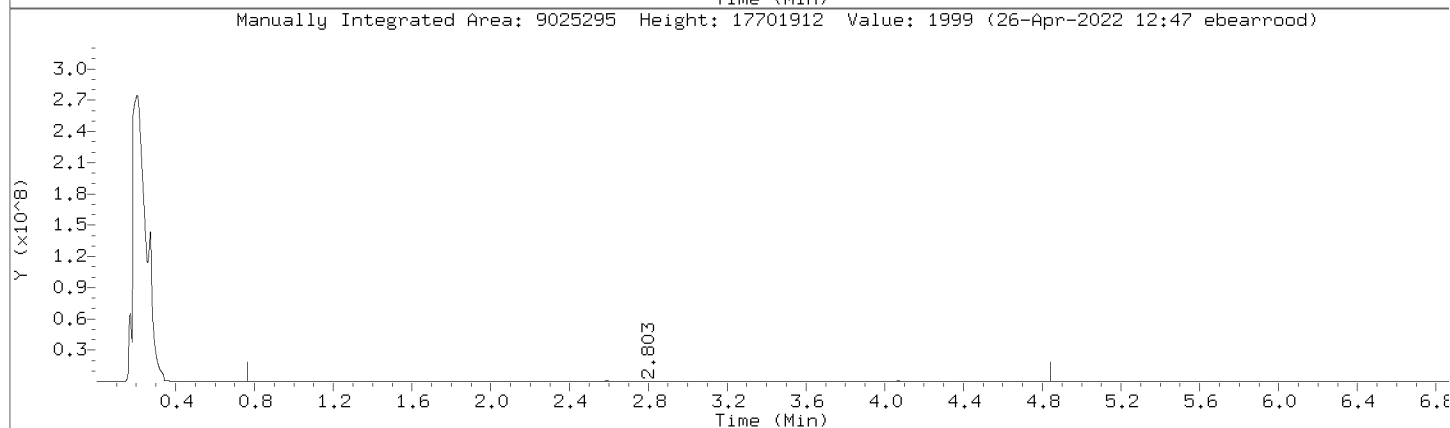
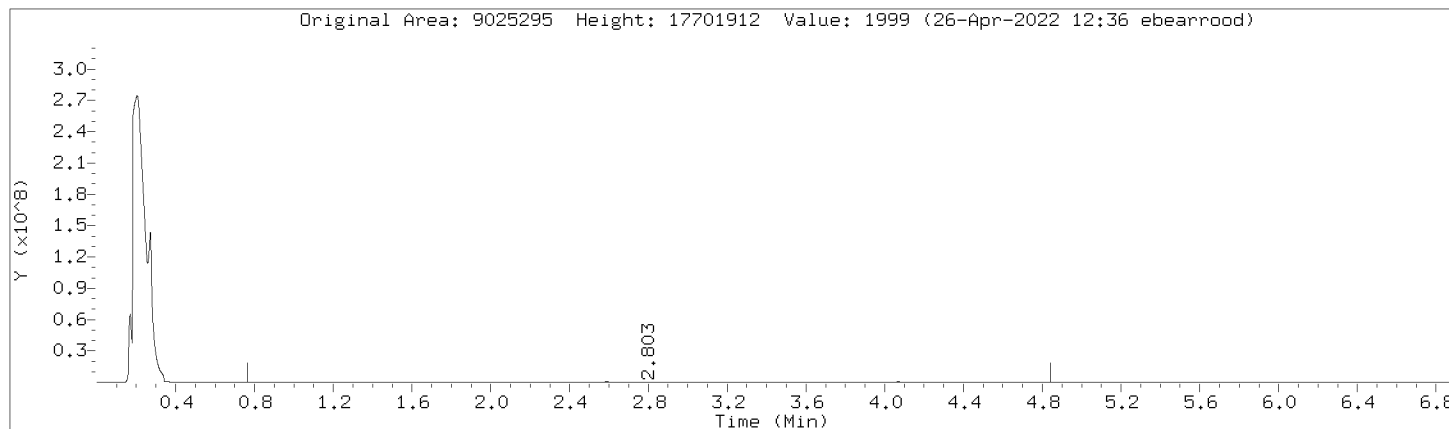
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Lab Sample ID: DMO-CAL8,362376:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



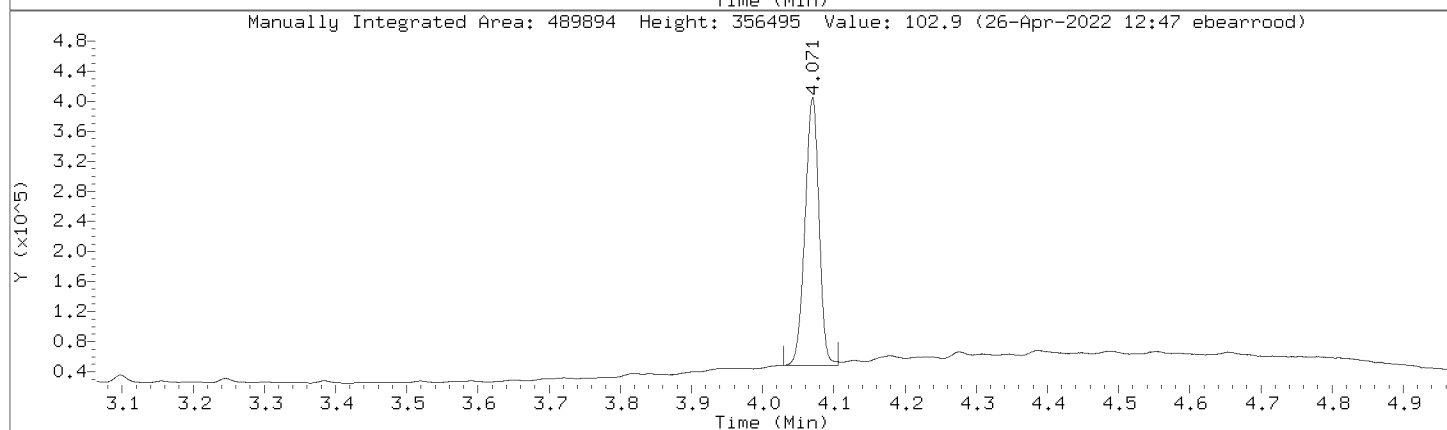
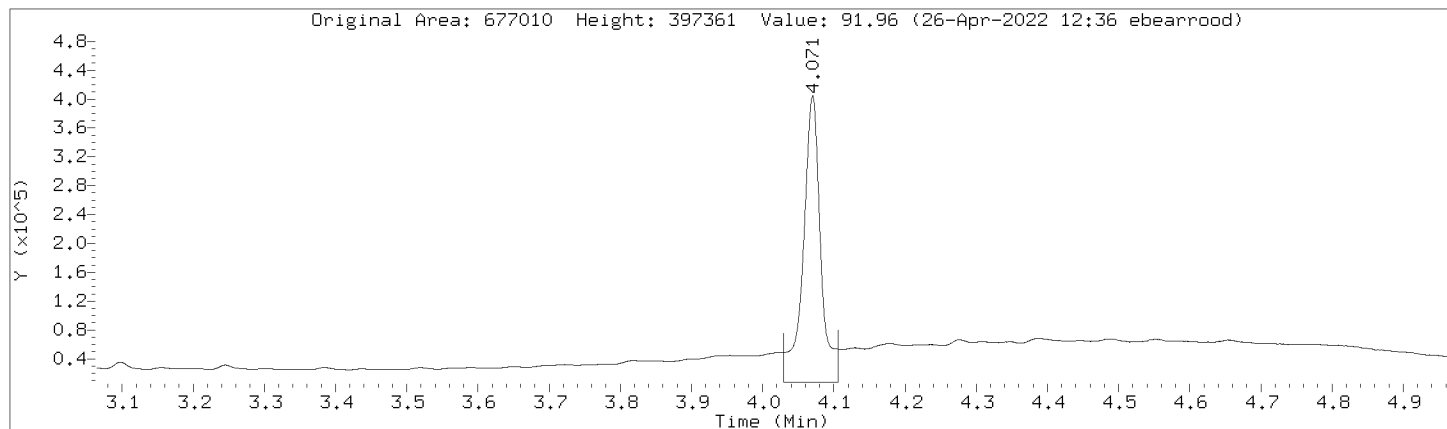
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Injection Date: 26-APR-2022 09:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



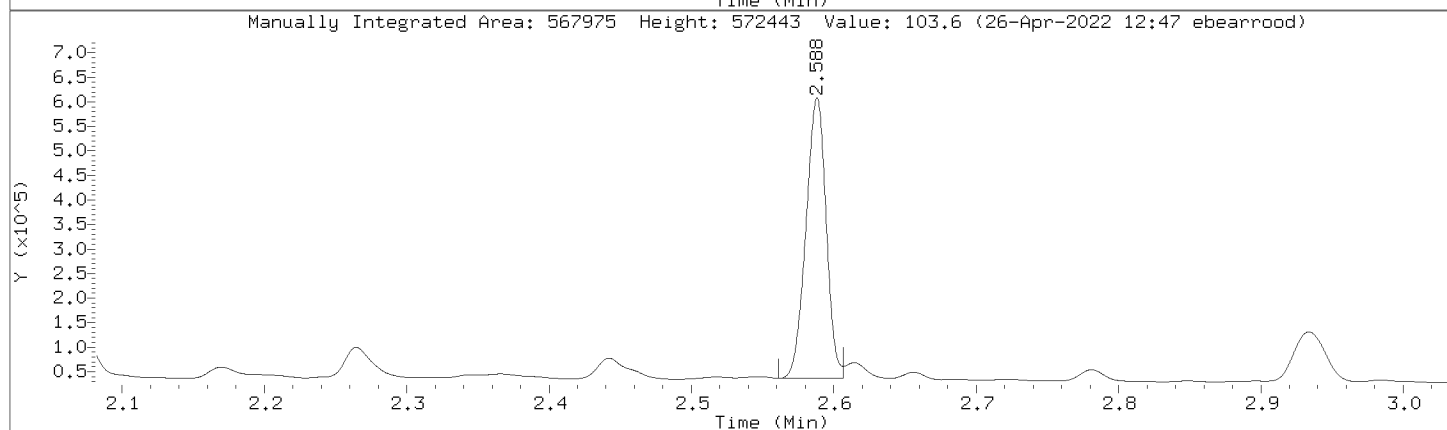
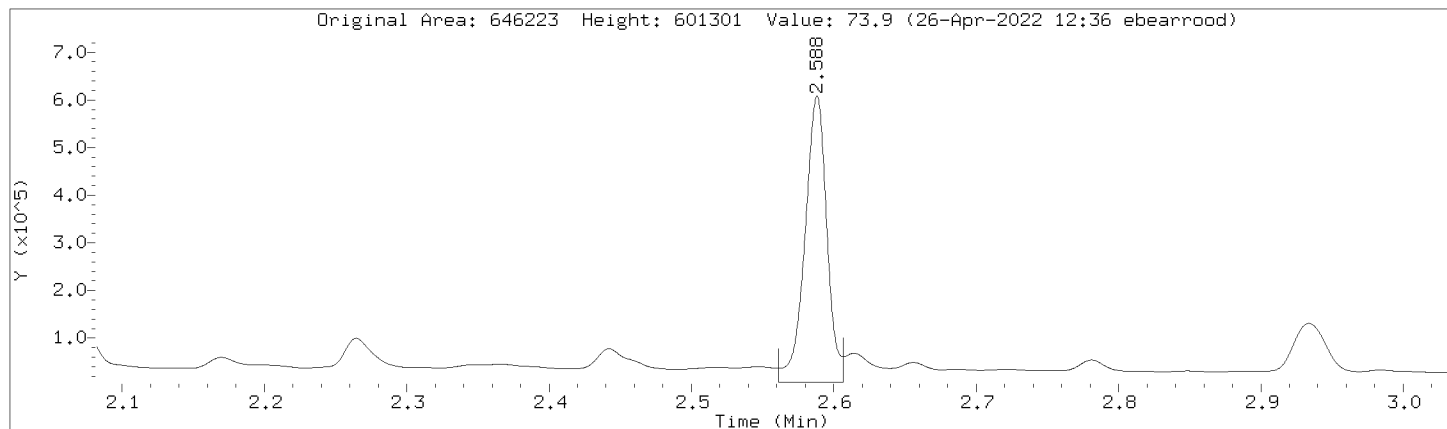
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Injection Date: 26-APR-2022 09:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000011.D  
 Injection Date: 26-APR-2022 09:13  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL8,362376:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	3340334	3340334
DRO by AK 102	5684961	5684961
TPH-DRO (C10-C28)	6506472	6506472
Motor Oil Range (C24-C36)	3472644	3472644
Diesel Fuel Range	4796494	4796494
Motor Oil Range	4126794	4126794
Diesel Fuel Range SG	4796494	4796494
Motor Oil Range SG	4126794	4126794
C10-C36	9025295	9025295
n-Triacontane (S)	677010	489894
o-Terphenyl (S)	646223	567975

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000012.D  
 Lab Smp Id: DMO-CAL9,362377:2 Client Smp ID: DMO-CAL9,362377:2  
 Inj Date : 26-APR-2022 09:25  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal9,362377:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 11 Calibration Sample, Level: 9  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		11015439 2000.00	2000	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.590	2.582 0.008		1136496 200.000	206	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.071	4.064 0.007		971079 200.000	204	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		6616190 2000.00	2000	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		12612399 2000.00	2000	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		6819738 2000.00	2000	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		17631630 4000.00	4000	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		9273218 2000.00	2000	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		9273218 2000.00	2000	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		8091734 2000.00	2000	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		8091734 2000.00	2000	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

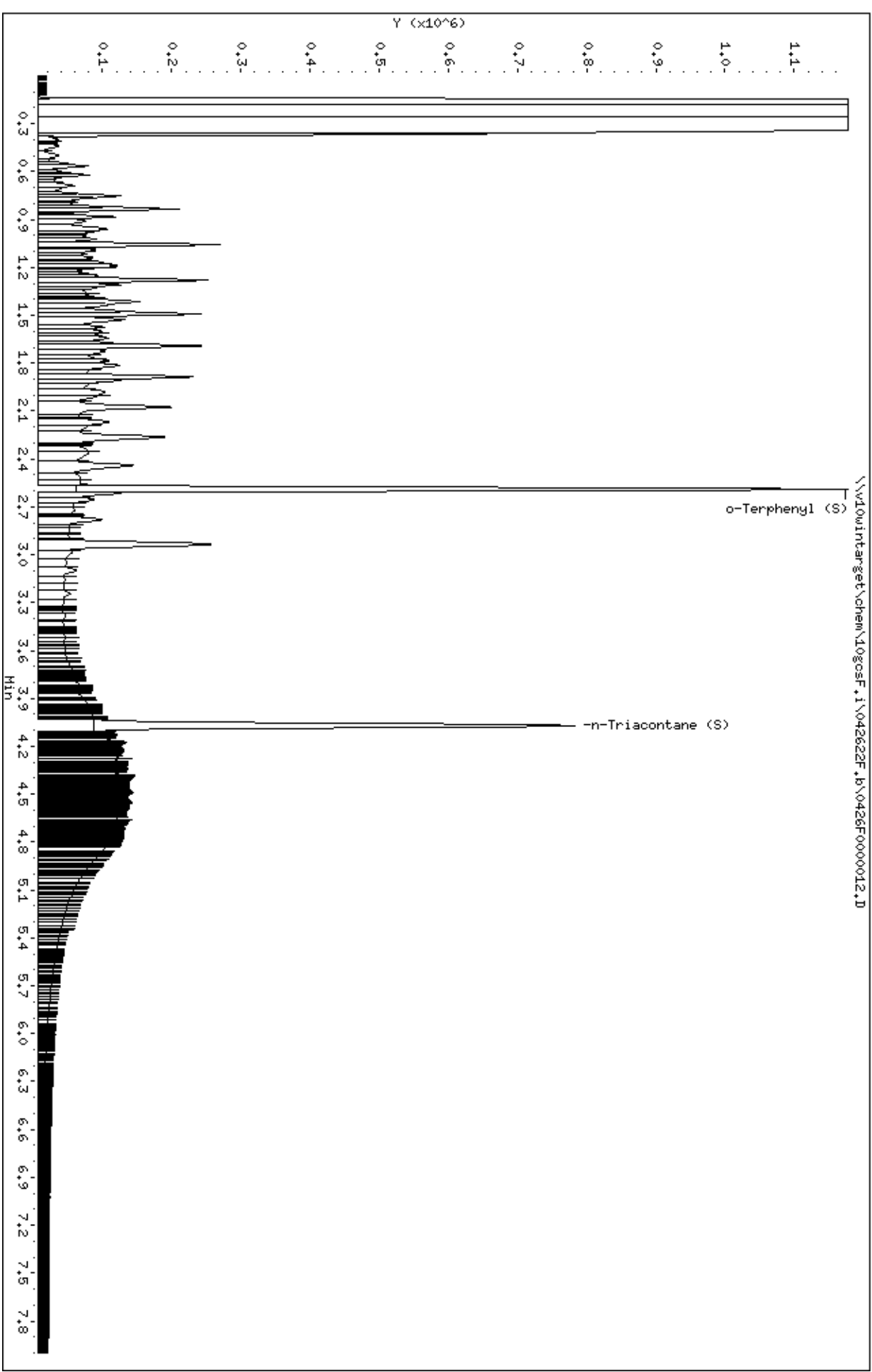
RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.



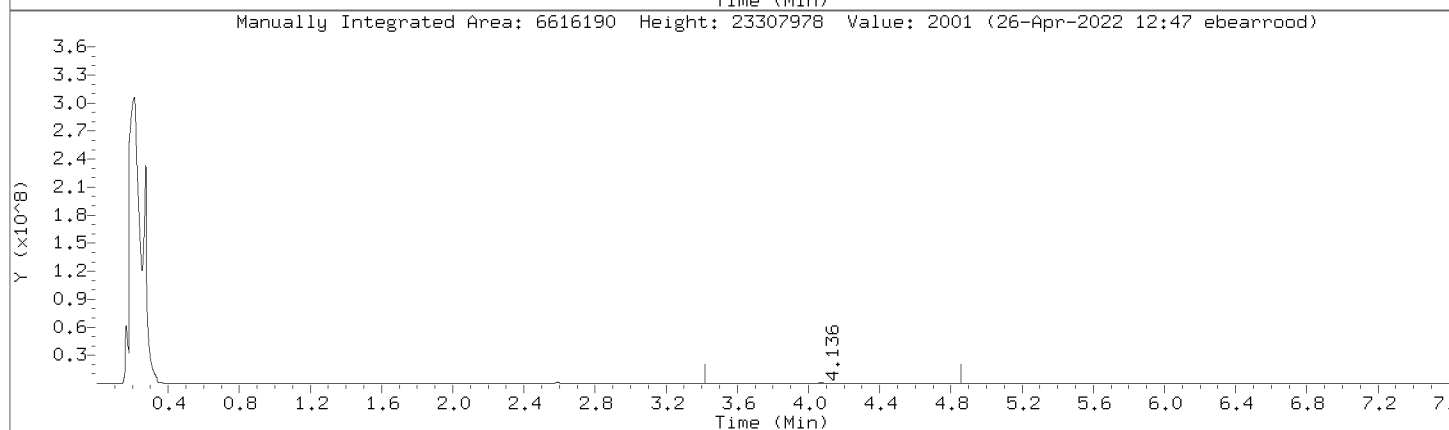
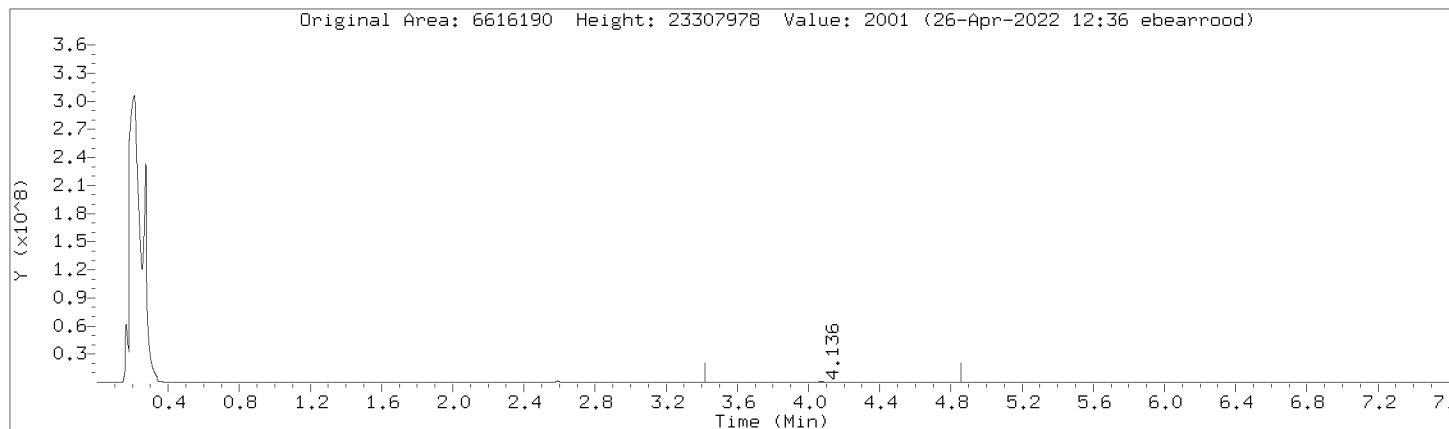
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Client ID: DM0-CAL9,362377:2  
Sample Info: DM0-CAL9,362377:2  
Column phase: DB-5-USA21250010

Instrument: 10gocsf.1  
Operator: EB3  
Column diameter: 0.32



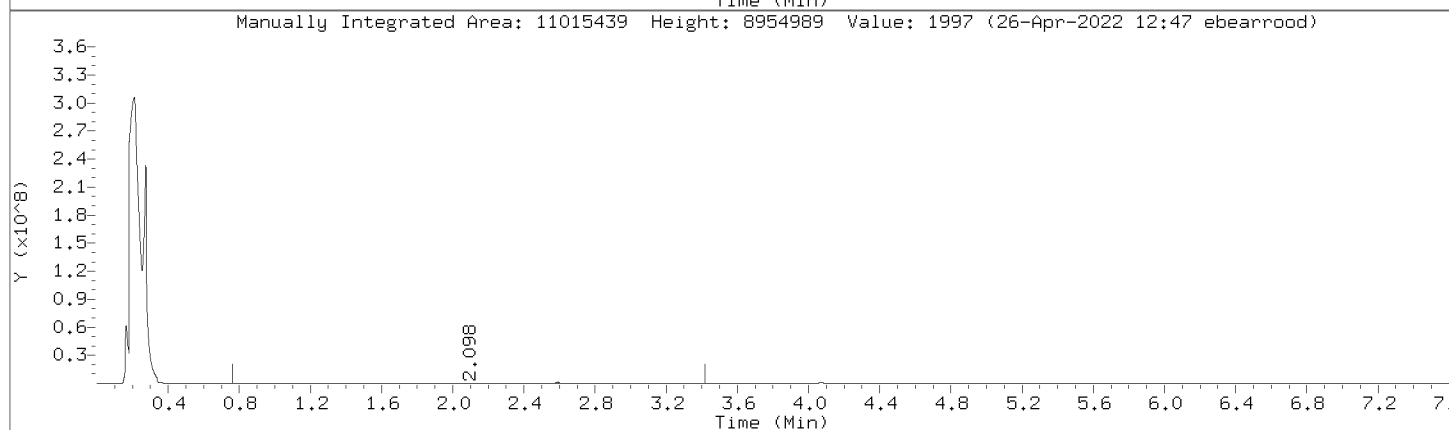
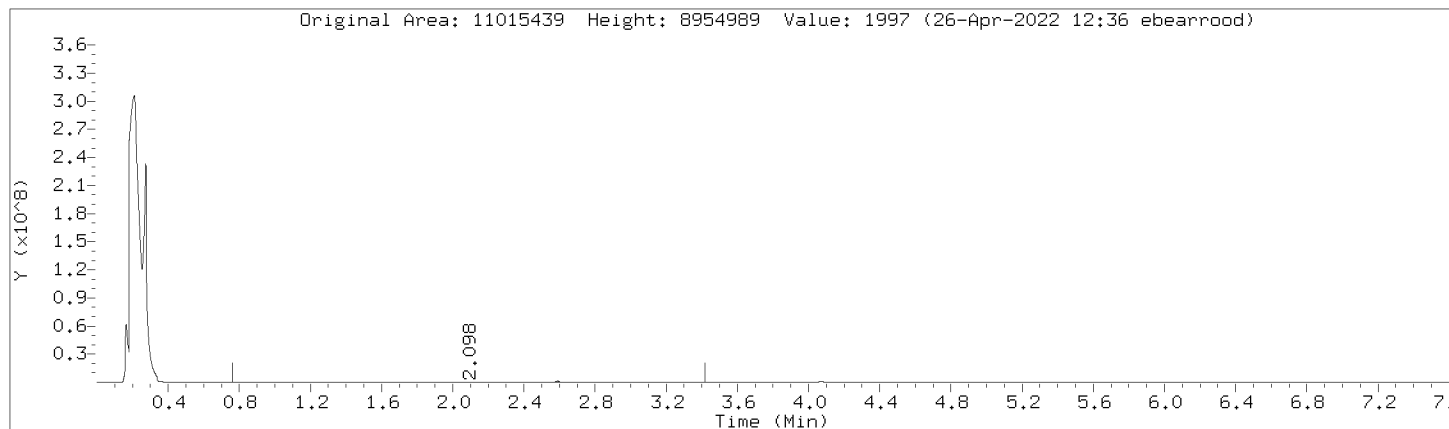
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Lab Sample ID: DMO-CAL9,362377:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



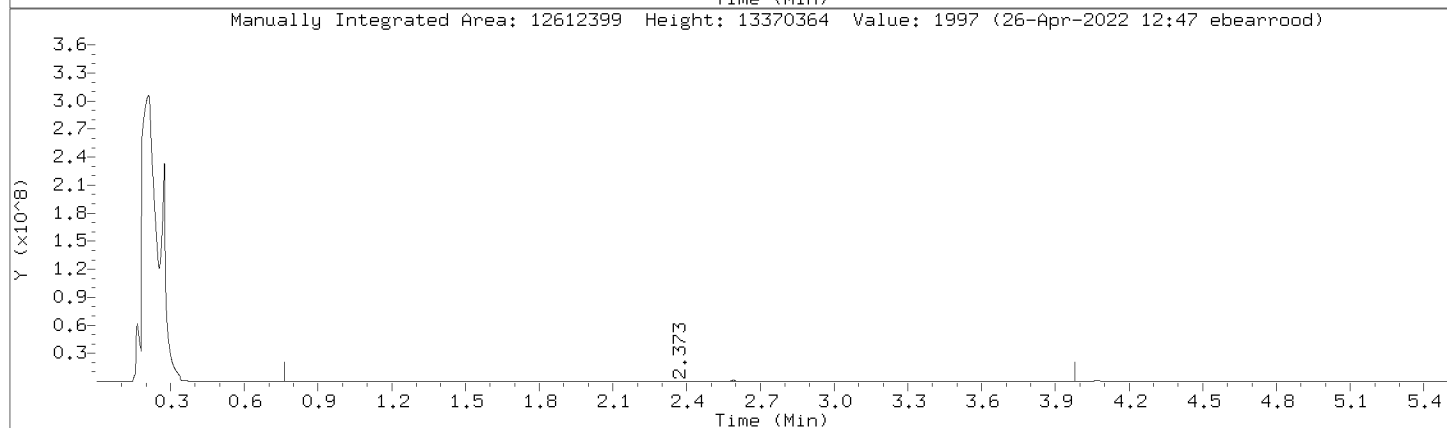
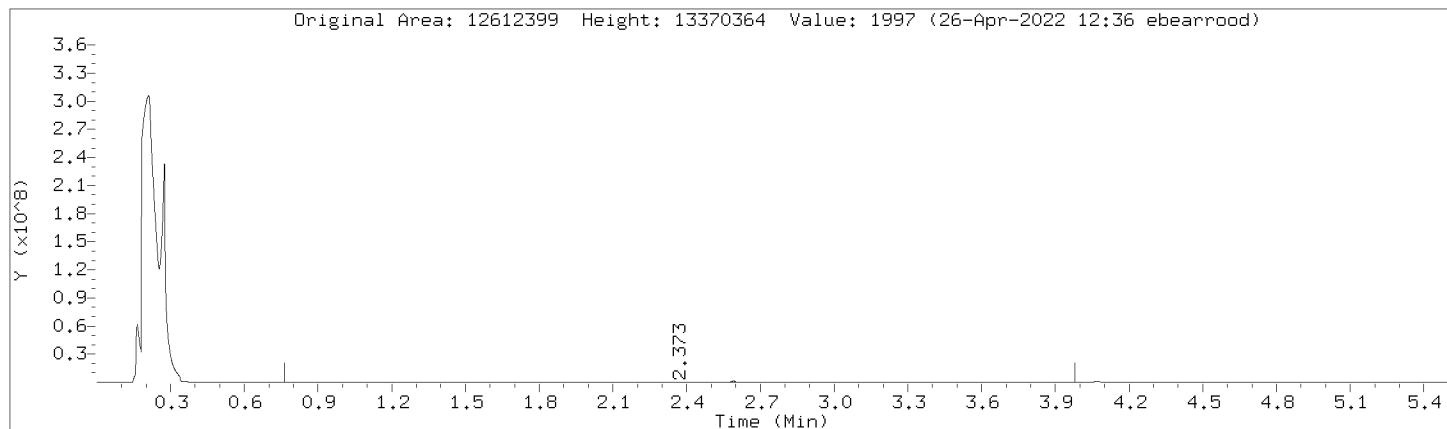
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



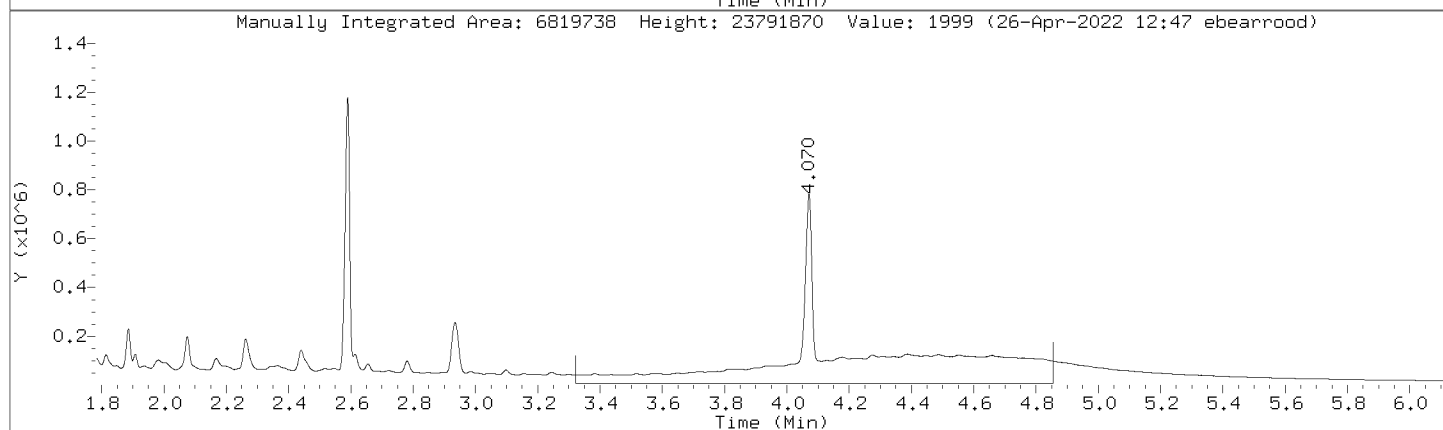
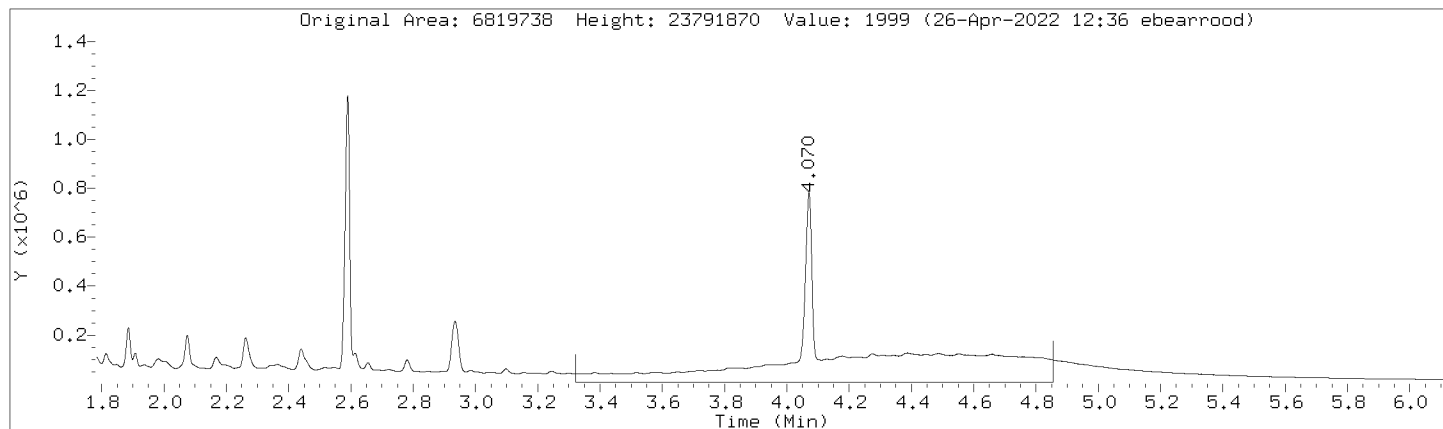
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Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



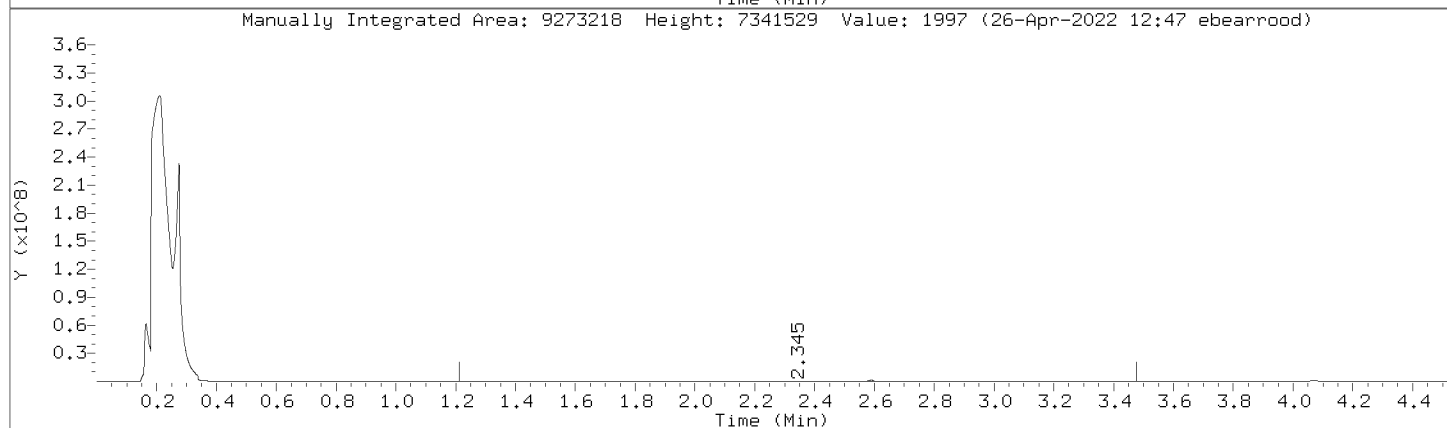
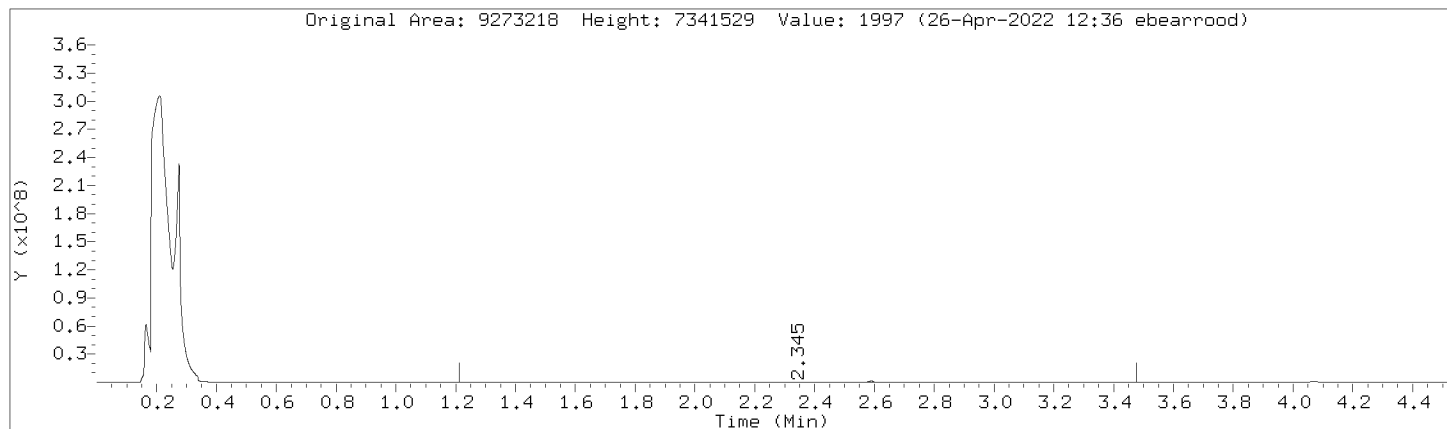
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Lab Sample ID: DMO-CAL9,362377:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



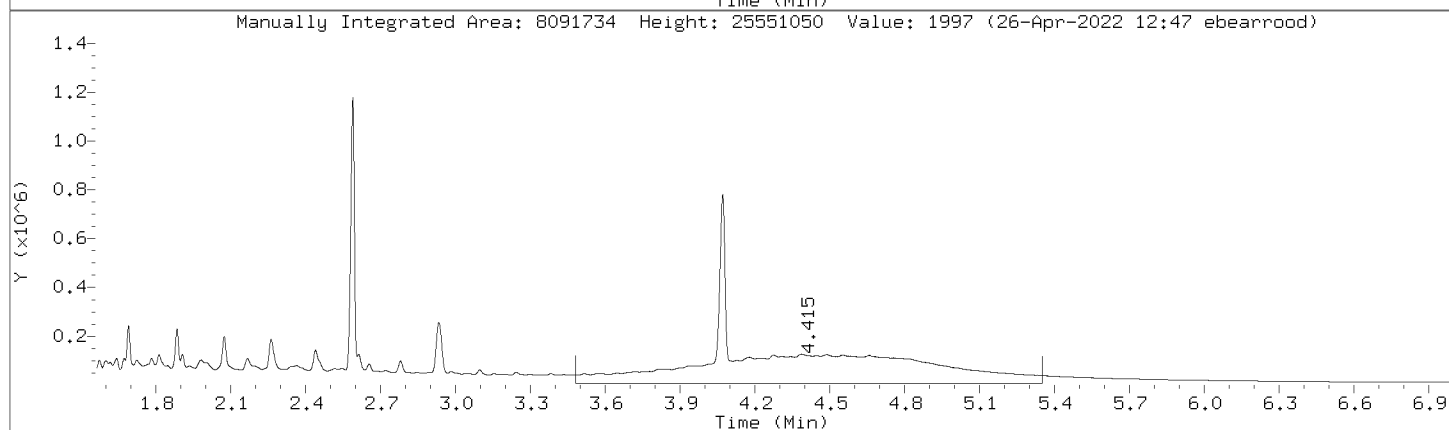
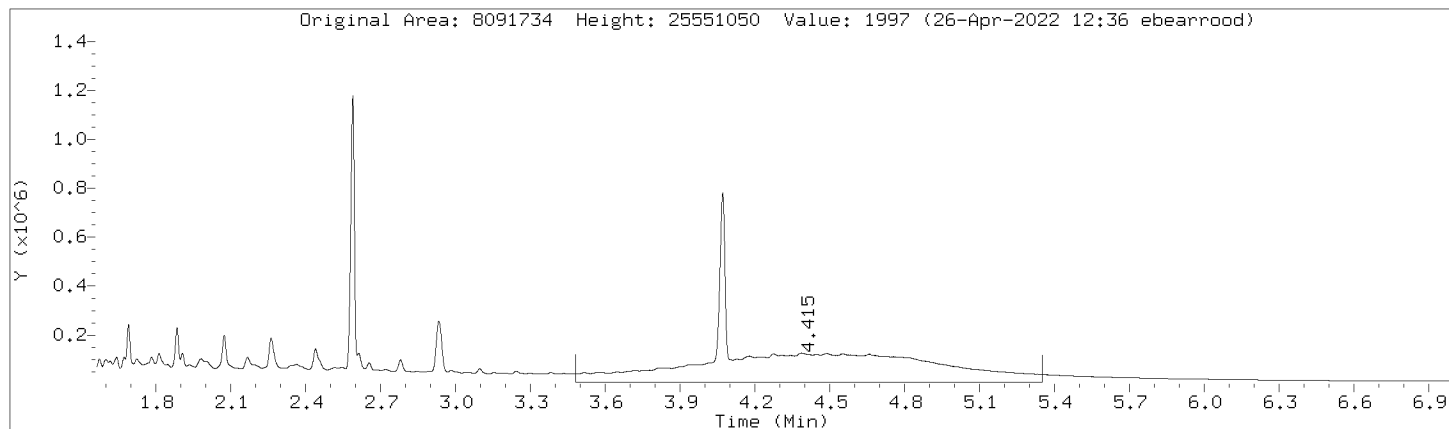
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Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



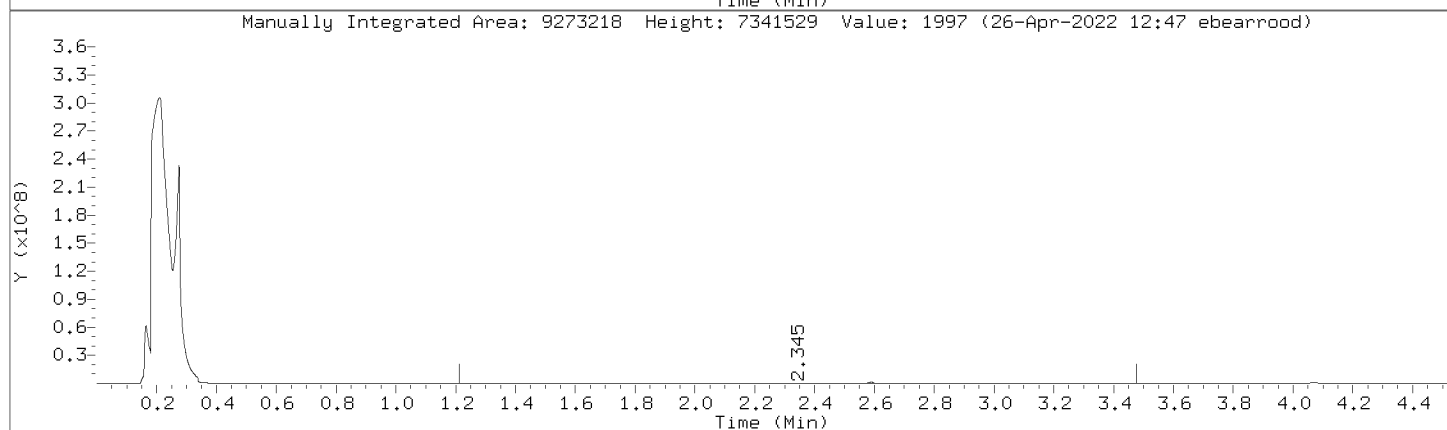
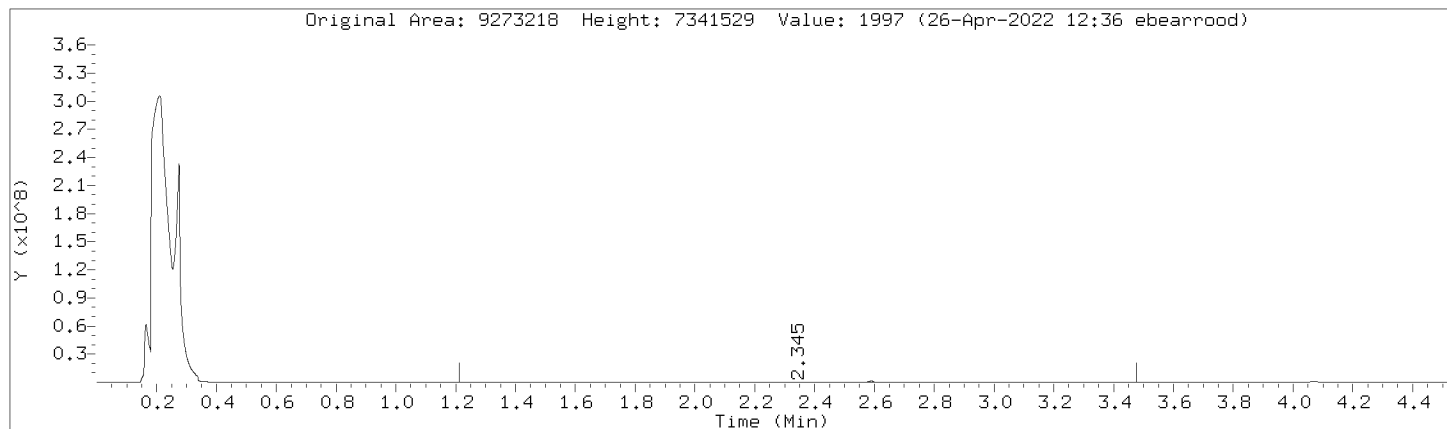
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Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000012.D  
Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

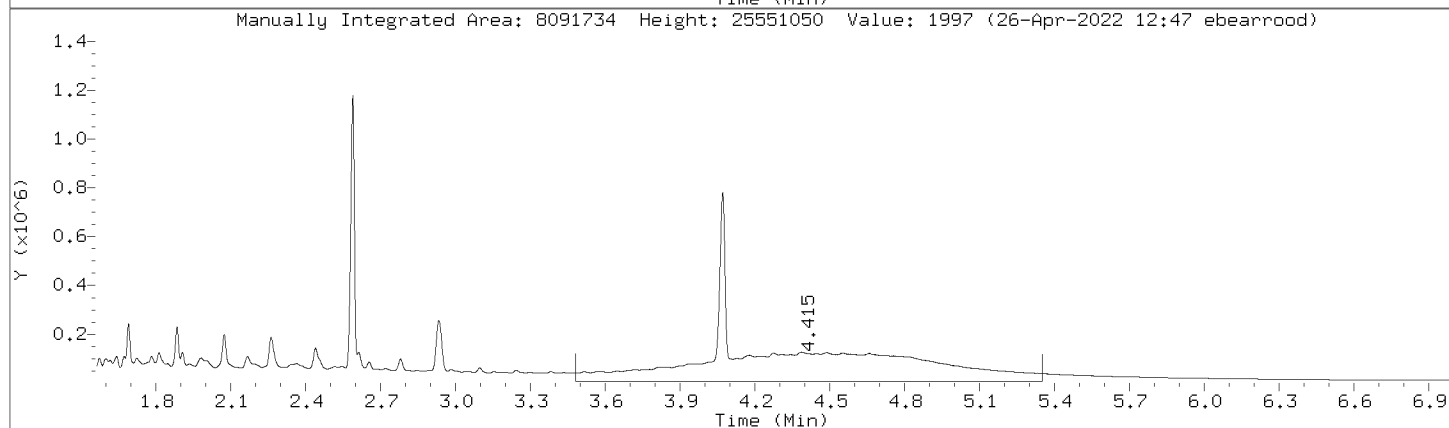
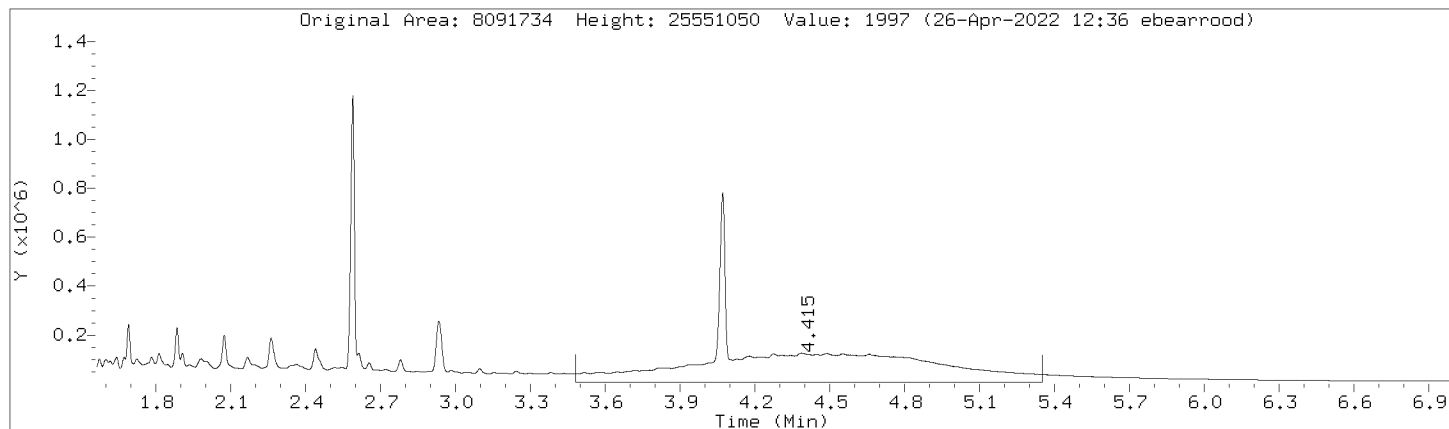
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CAS Number:





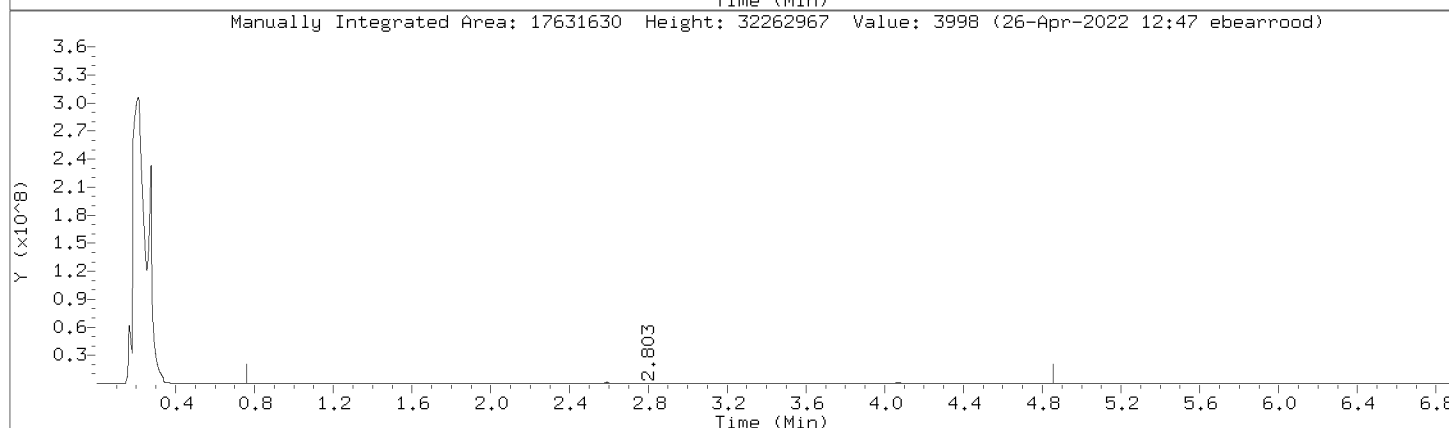
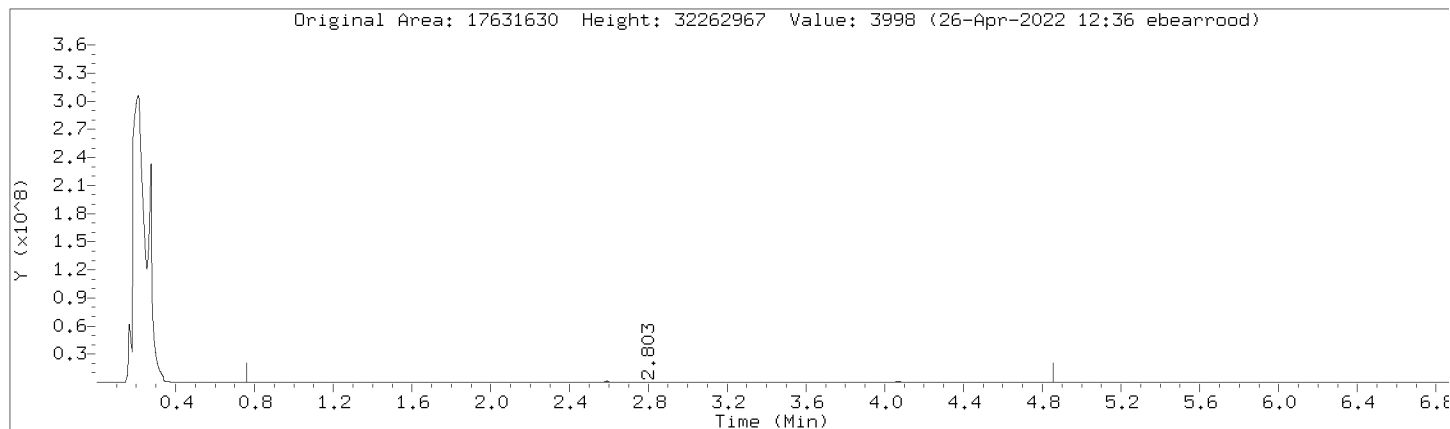
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



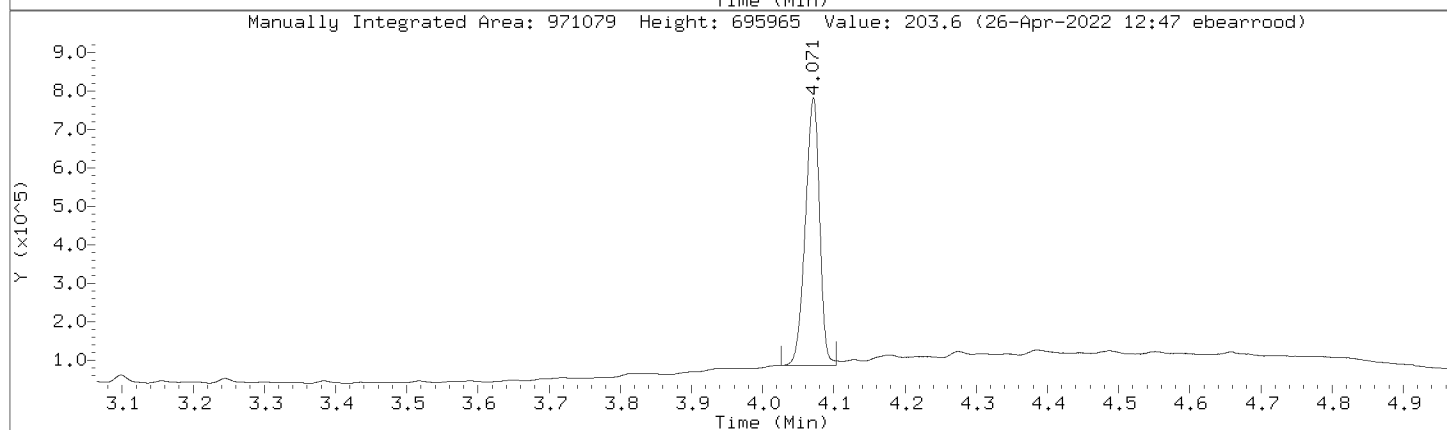
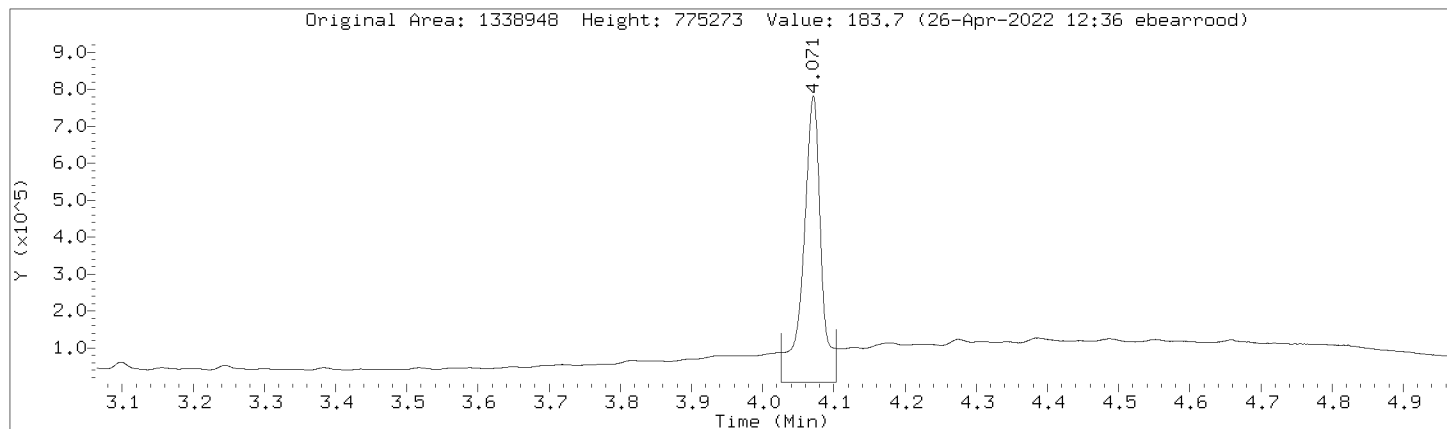
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Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



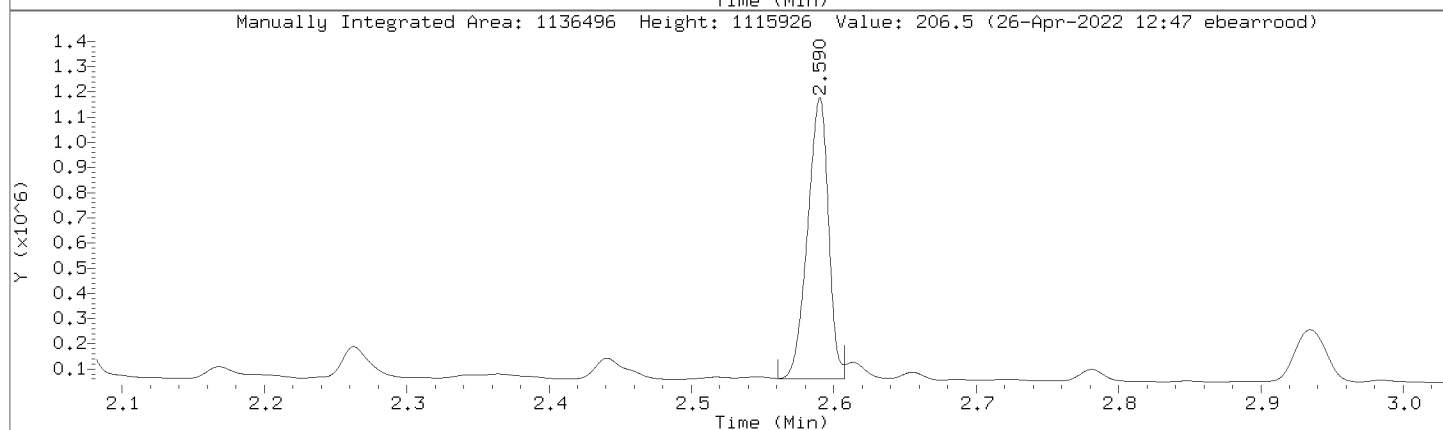
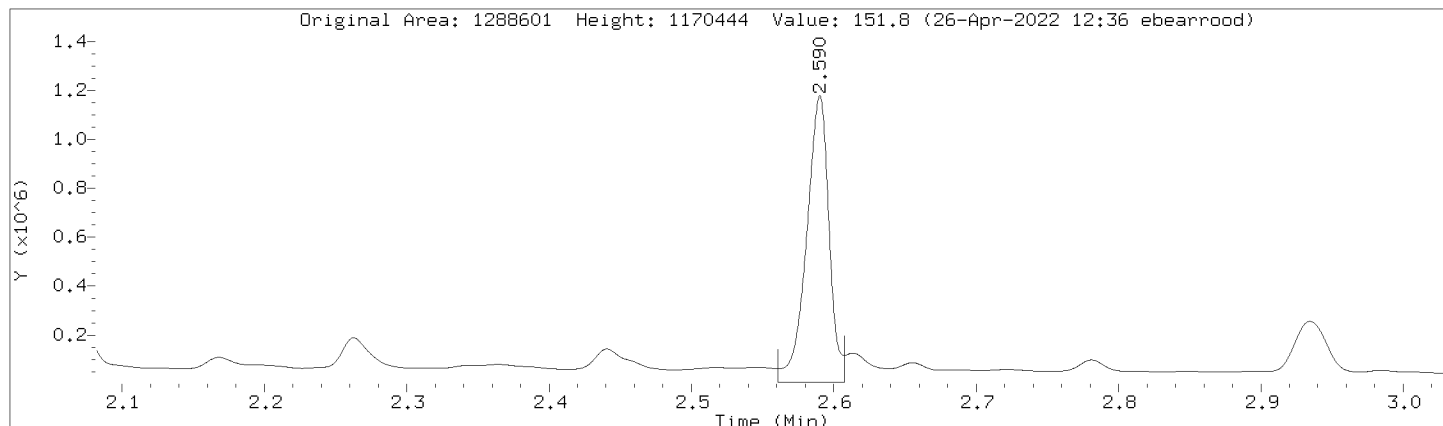
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Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000012.D  
 Injection Date: 26-APR-2022 09:25  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL9,362377:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	6616190	6616190
DRO by AK 102	11015439	11015439
TPH-DRO (C10-C28)	12612399	12612399
Motor Oil Range (C24-C36)	6819738	6819738
Diesel Fuel Range	9273218	9273218
Motor Oil Range	8091734	8091734
Diesel Fuel Range SG	9273218	9273218
Motor Oil Range SG	8091734	8091734
C10-C36	17631630	17631630
n-Triacontane (S)	1338948	971079
o-Terphenyl (S)	1288601	1136496

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
 Lab Smp Id: DMO-CAL10,362378:2 Client Smp ID: DMO-CAL10,362378:2  
 Inj Date : 26-APR-2022 09:36  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal10,362378:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 12 Calibration Sample, Level: 10  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT (ug/mL)	
S 1	0.765	- 3.430	21431795	4000.00	3990 (M) RNG
-----					
\$ 2	2.595	2.582 0.013	2280438	400.000	413 (AM) BA
-----					
\$ 3	4.079	4.064 0.015	1910559	400.000	400 (AM) BA
-----					
S 4	3.431	- 4.840	13042412	4000.00	3990 (M) RNG
-----					
S 5	0.765	- 3.980	24573747	4000.00	3990 (M) RNG
-----					
S 6	3.300	- 4.840	13443188	4000.00	3990 (M) RNG
-----					
S 7	0.765	- 4.840	34474208	8000.00	7980 (M) RNG
-----					
S 8	1.210	- 3.480	18030817	4000.00	3990 (M) RNG
-----					
S 9	1.210	- 3.480	18030817	4000.00	3990 (M) RNG
-----					
S 10	3.481	- 5.350	16062716	4000.00	4000 (M) RNG
-----					
S 11	3.481	- 5.350	16062716	4000.00	4000 (M) RNG
-----					

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Review Codes Legend

- RNG: Indicates that the analyst integrated a surrogate within the range.
- BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 09:36

Client ID: DM0-CALL0,362378:2

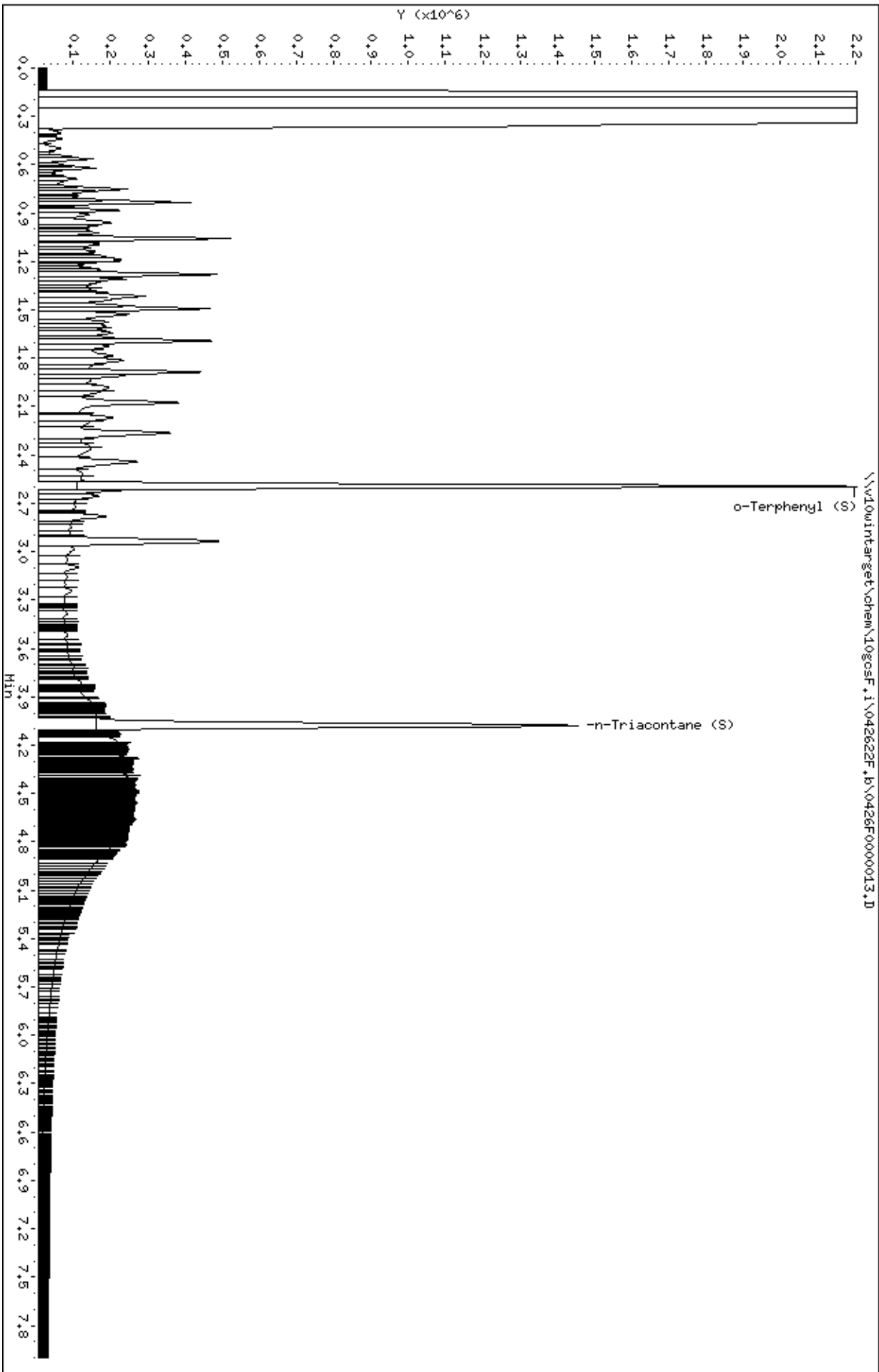
Sample Info: DM0-CALL0,362378:2

Instrument: 10gocsf.1

Operator: EB3

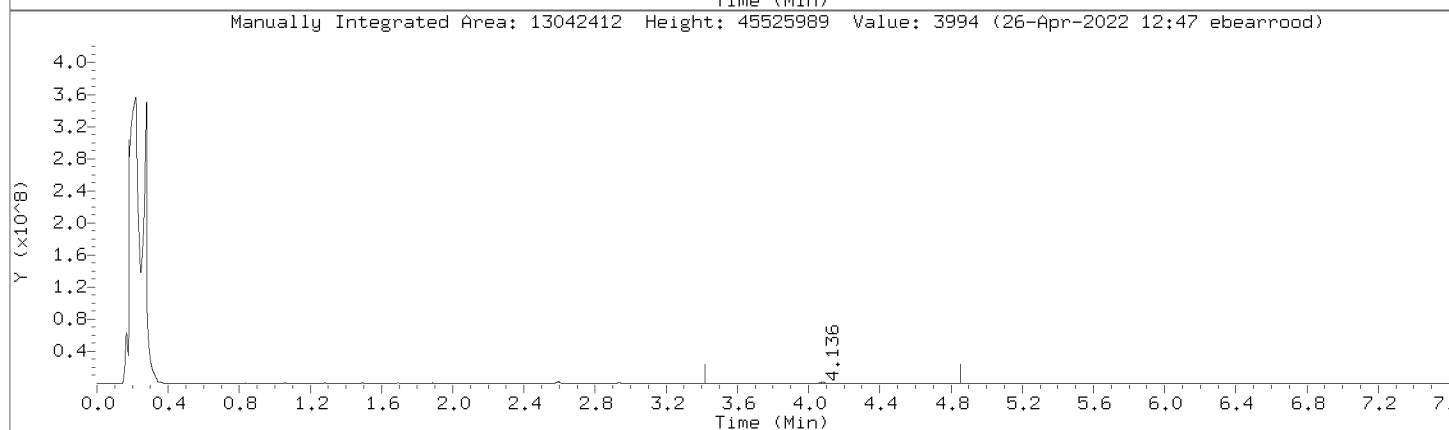
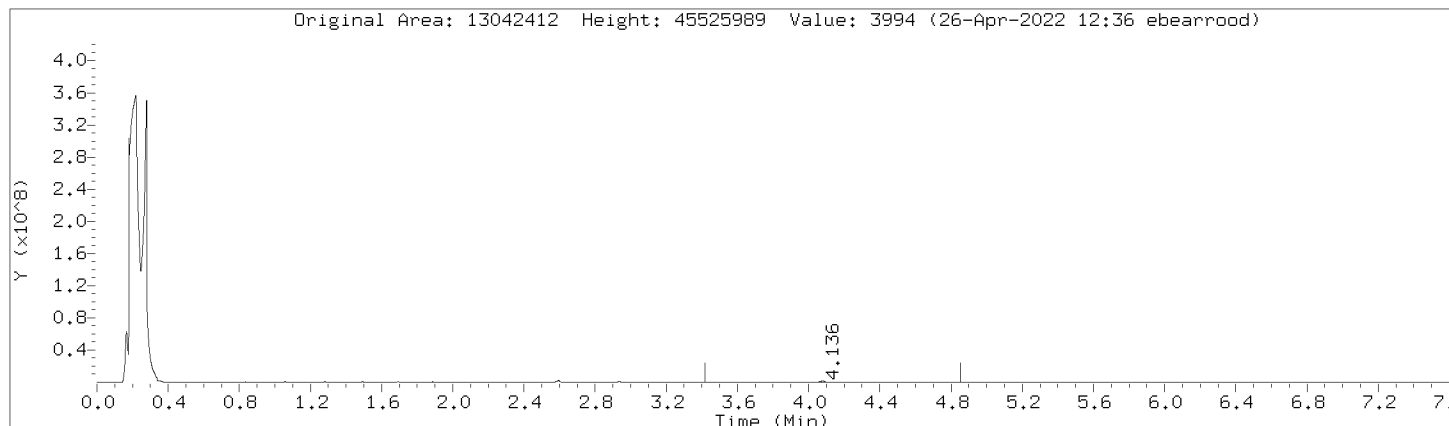
Column diameter: 0.32

Column phase: DB-5-MS21250010



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

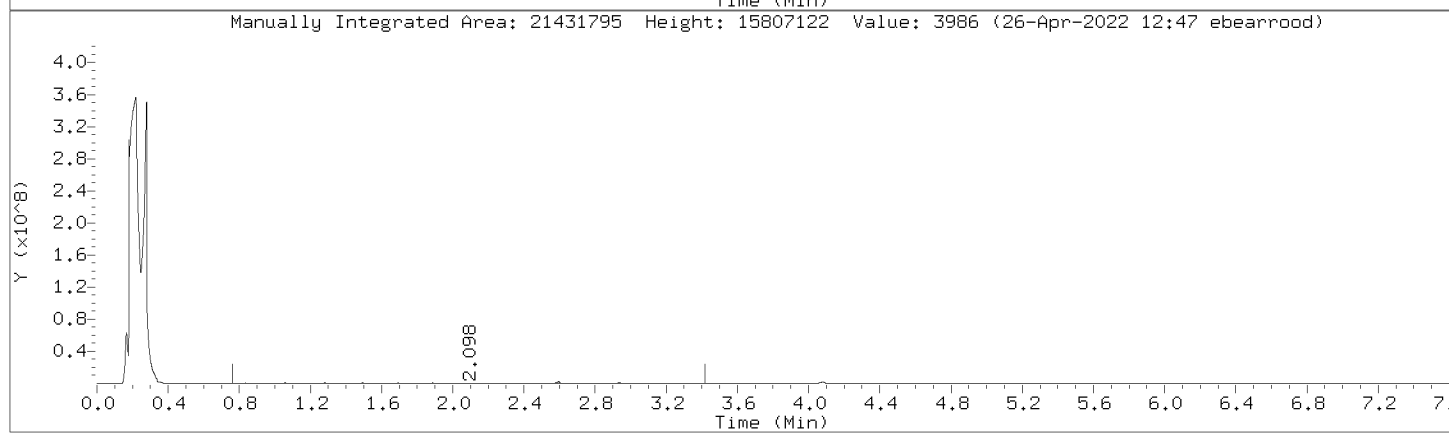
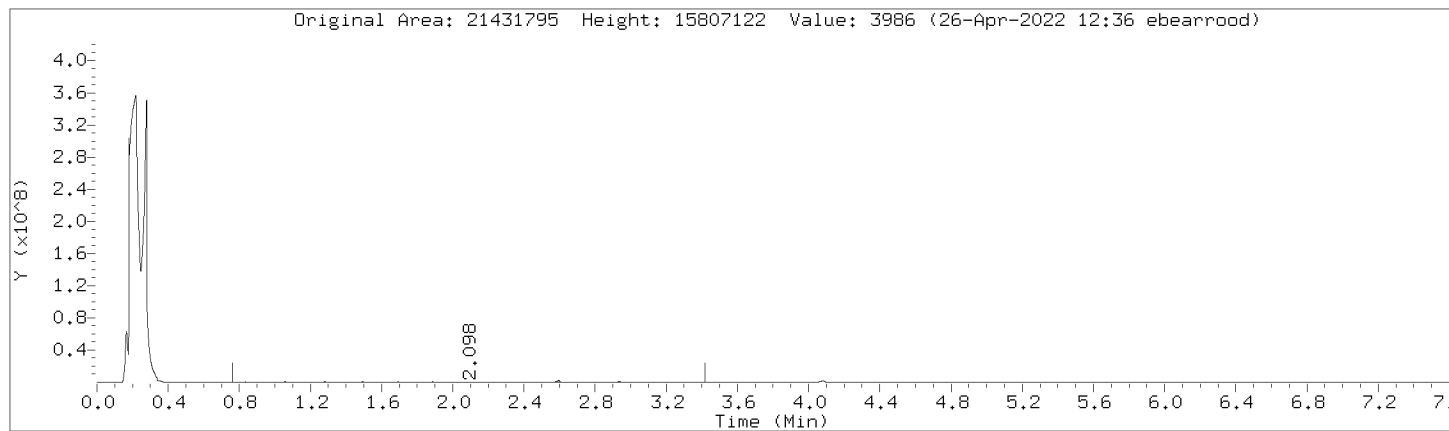
Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:





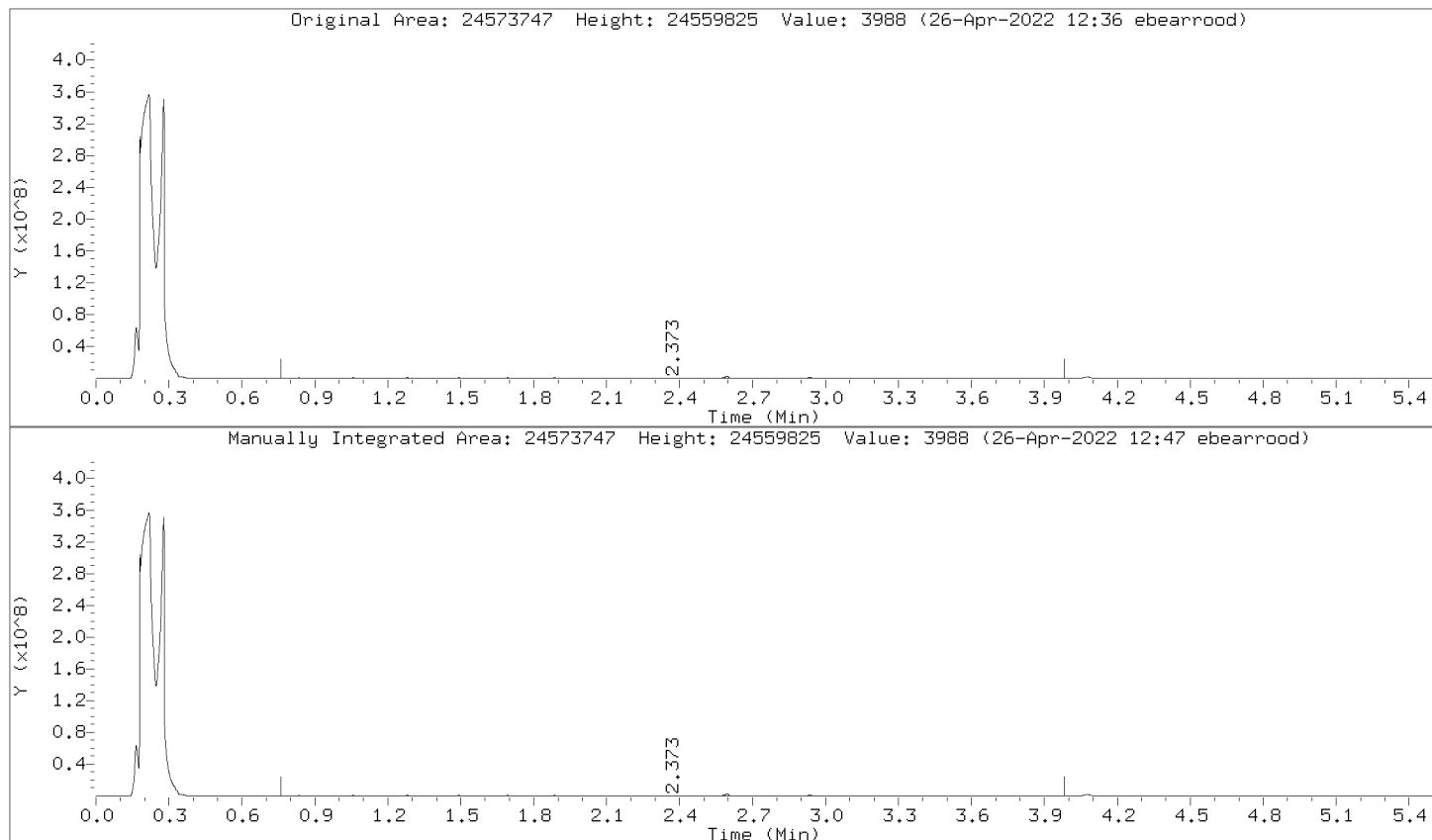
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

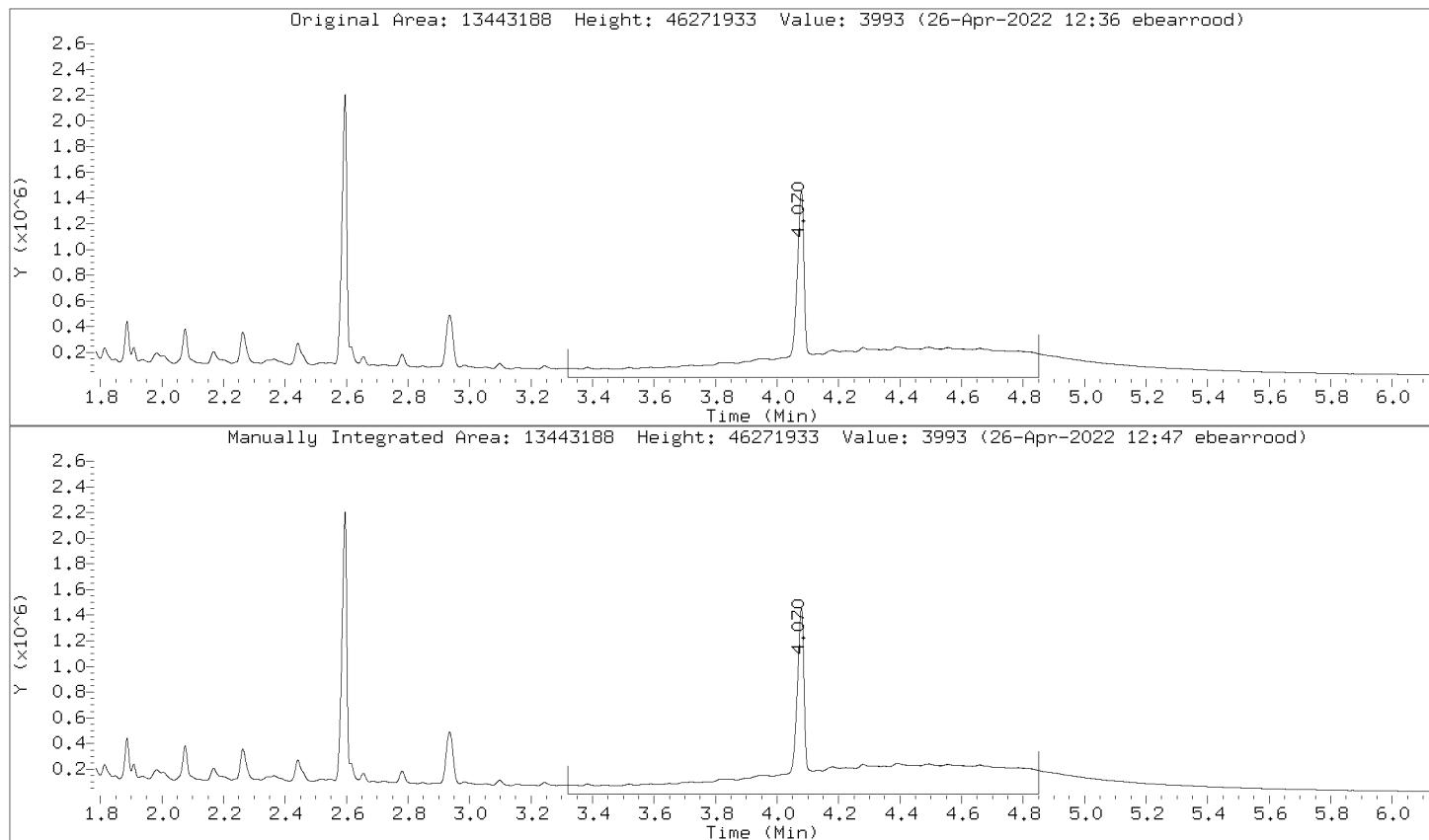
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

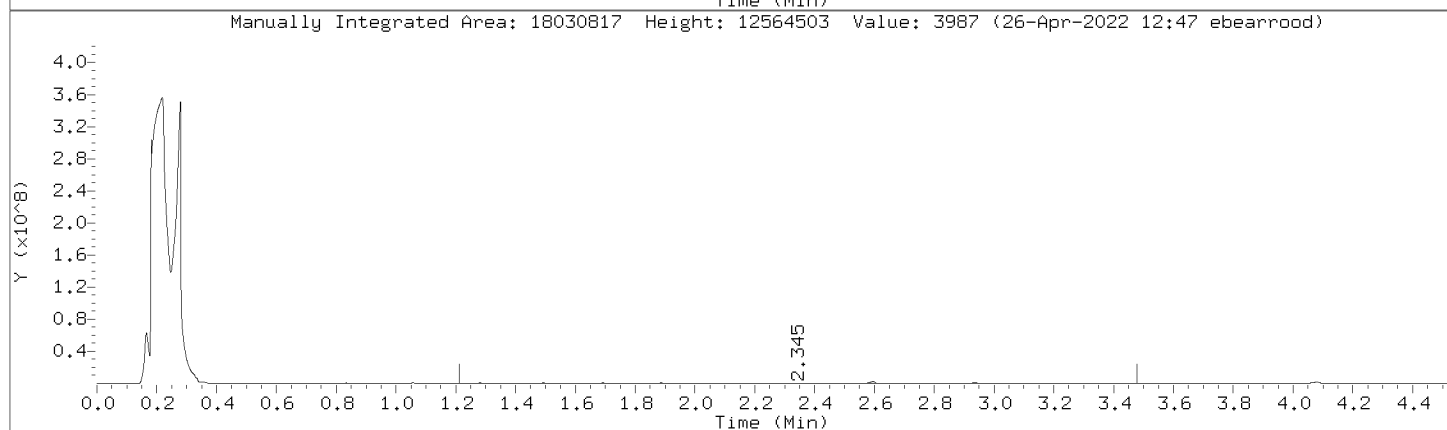
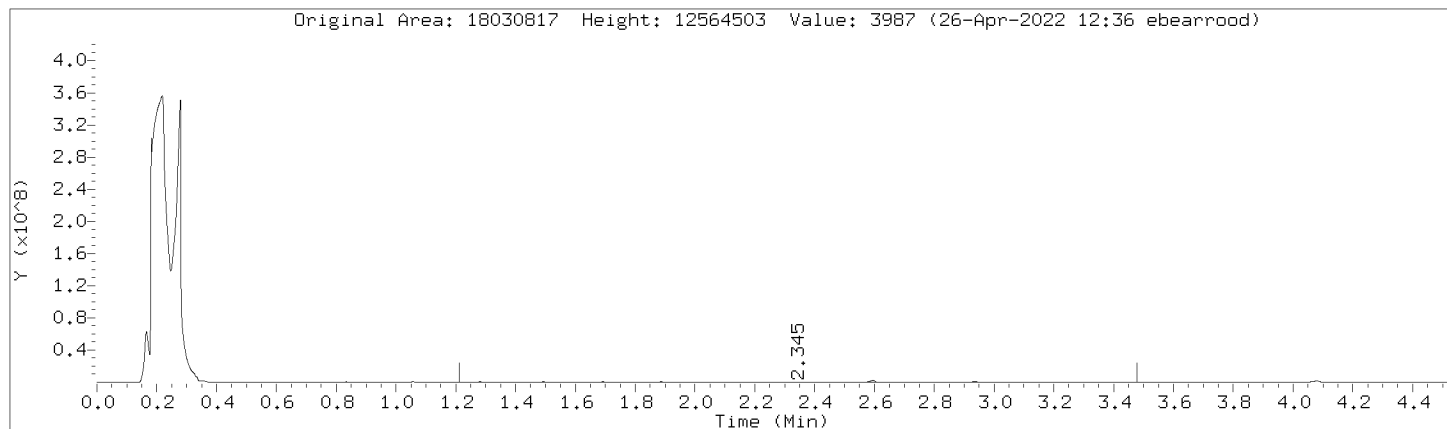
Compound: Motor Oil Range (C24-C36)  
CAS Number:

Review Code: RNG



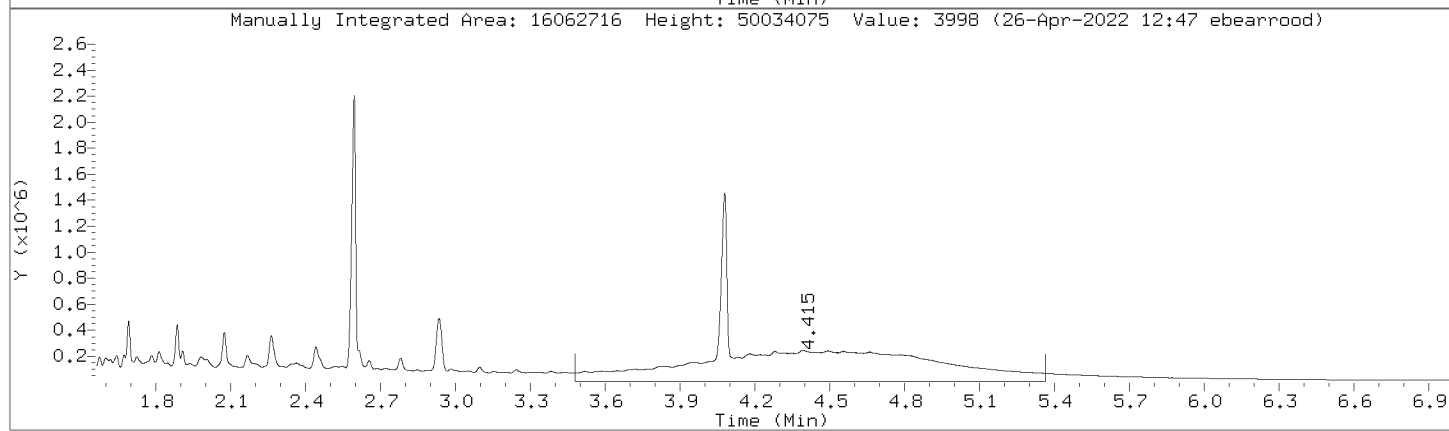
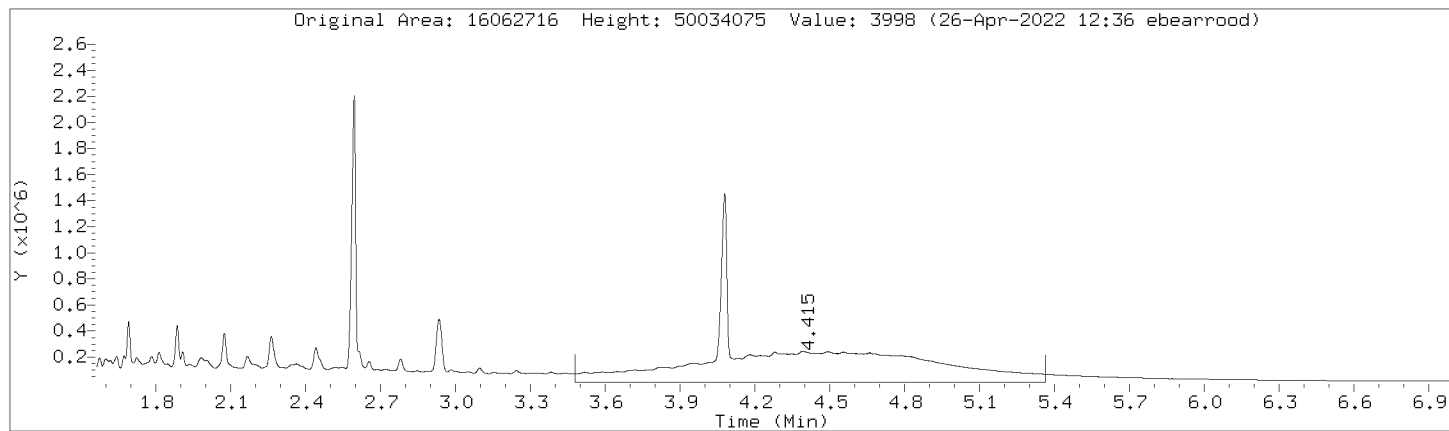
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



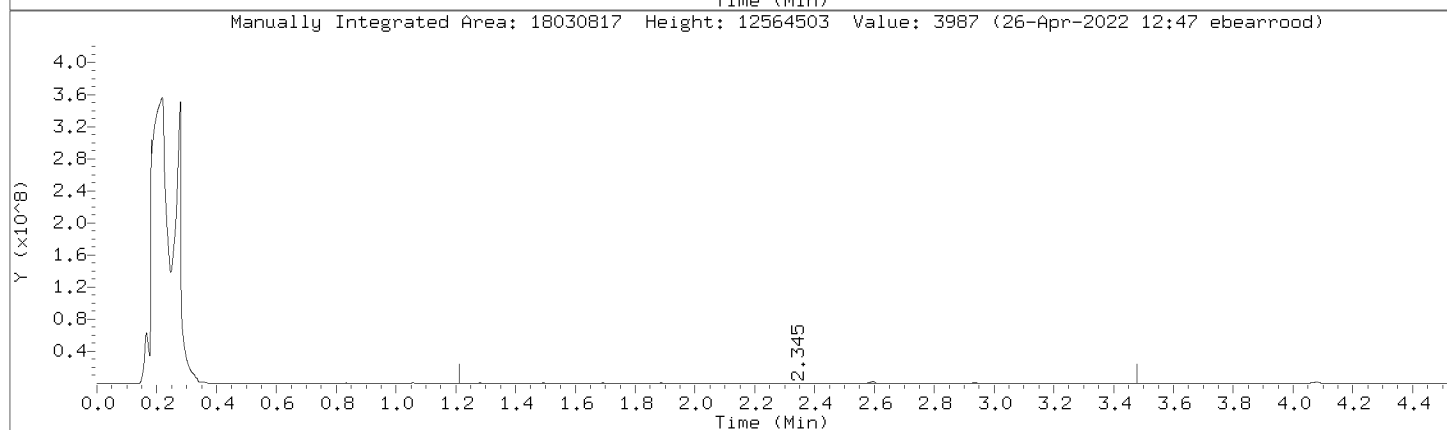
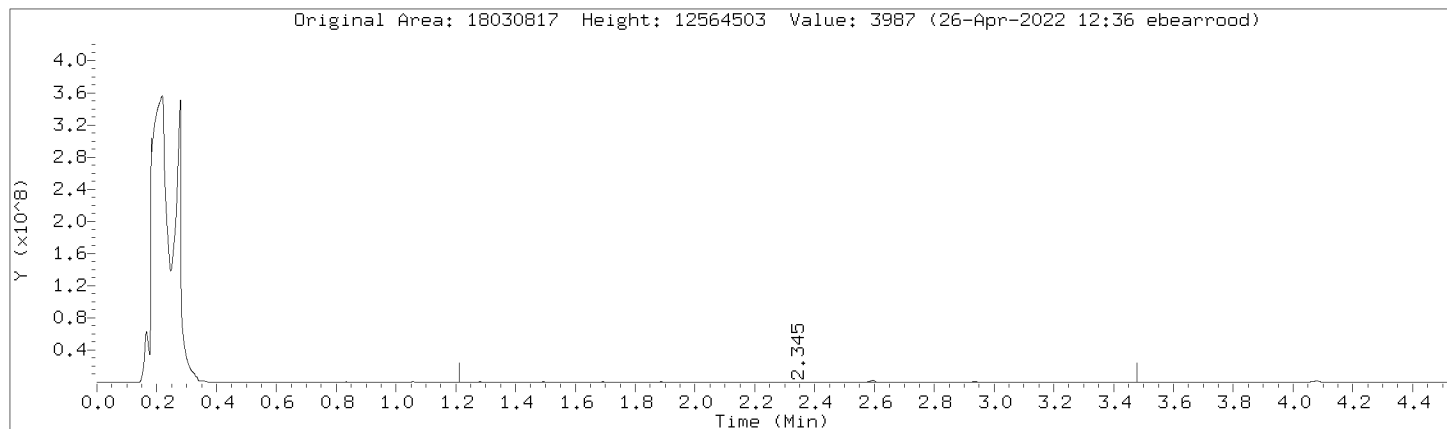
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Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



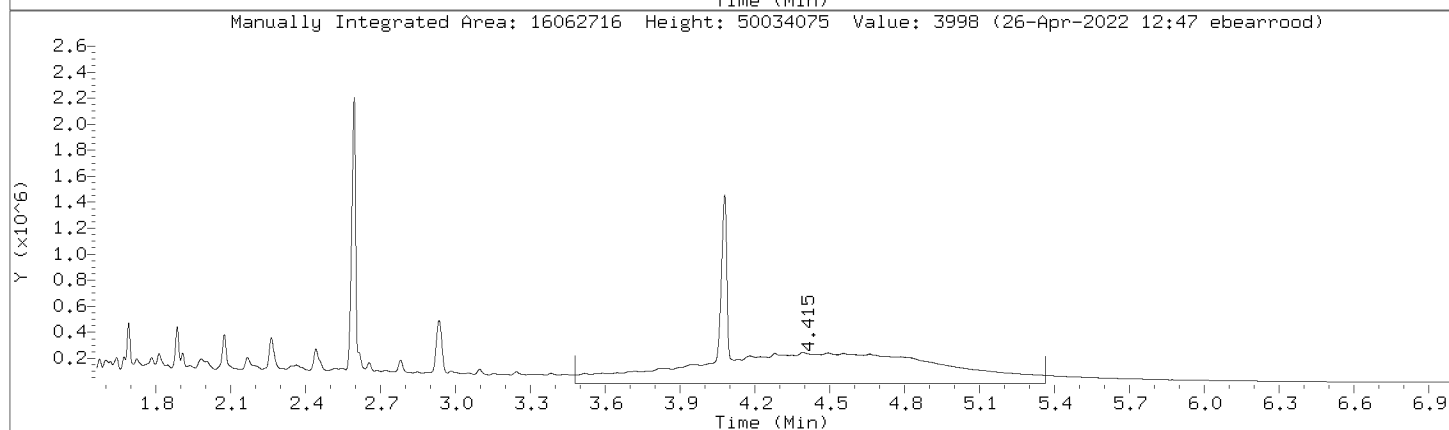
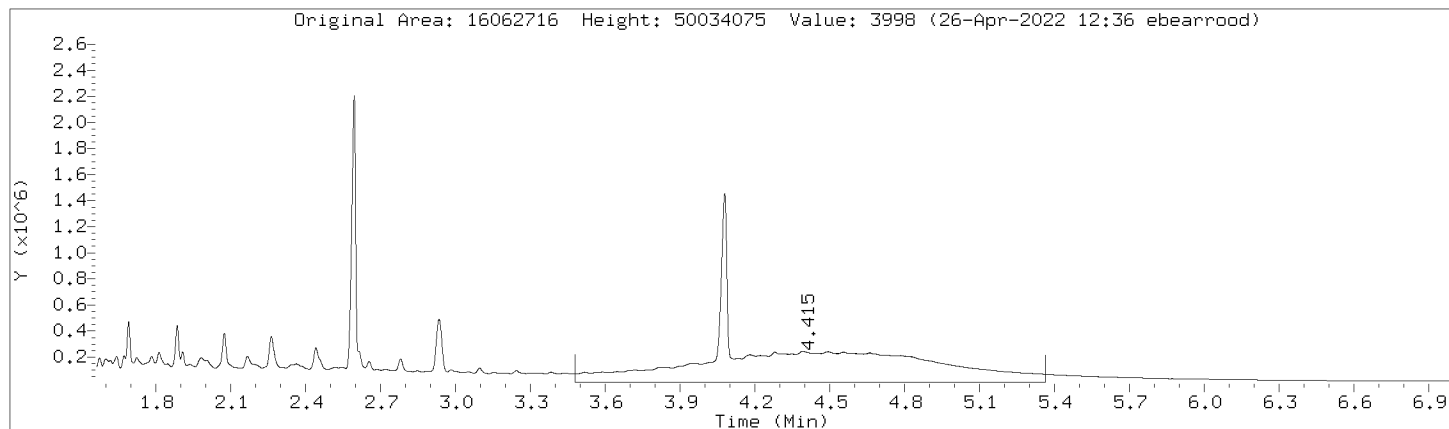
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Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



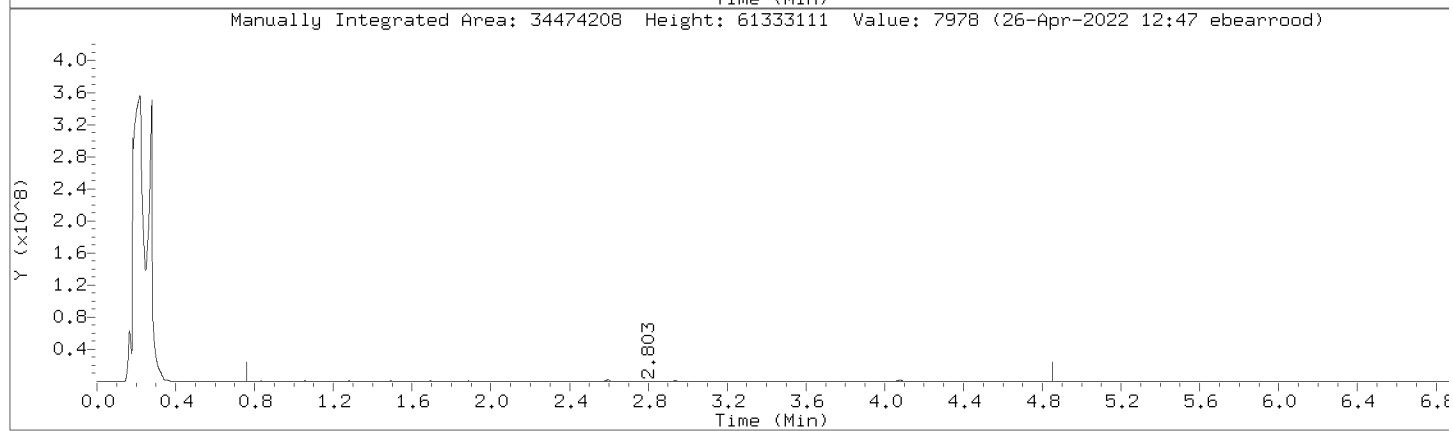
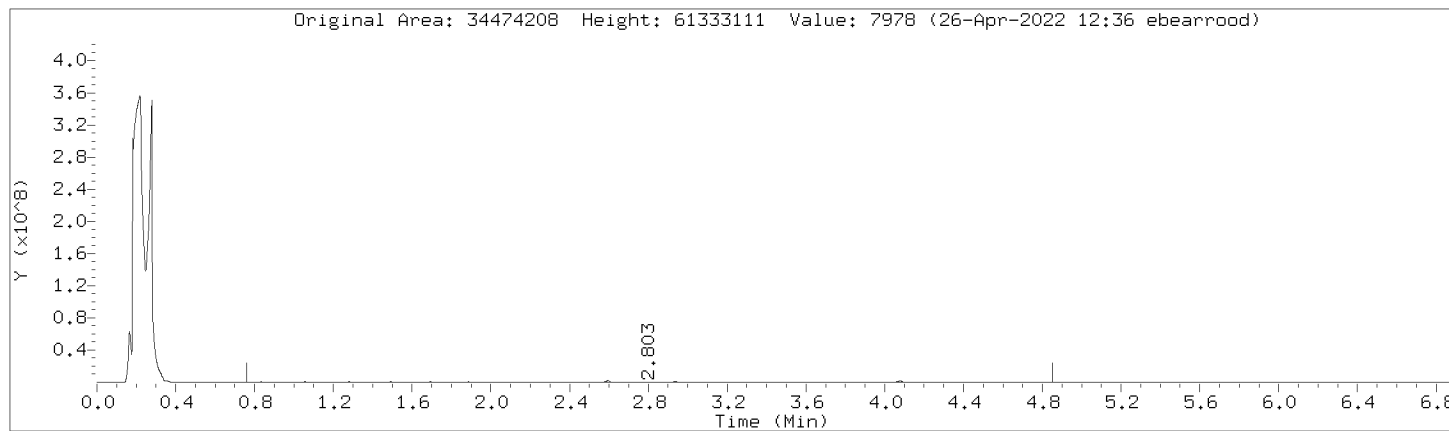
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

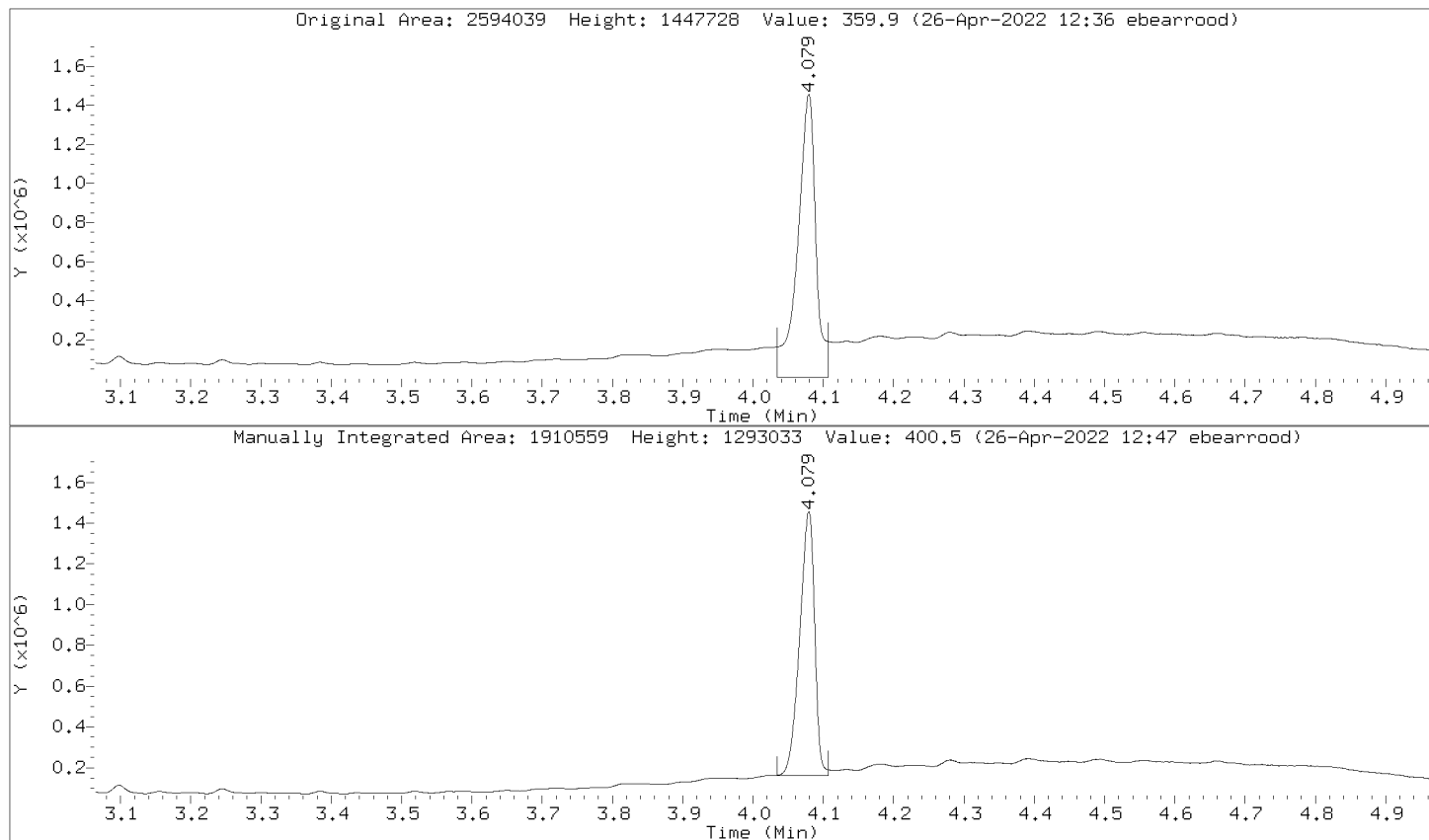
Compound: C10-C36      Review Code: RNG  
CAS Number:





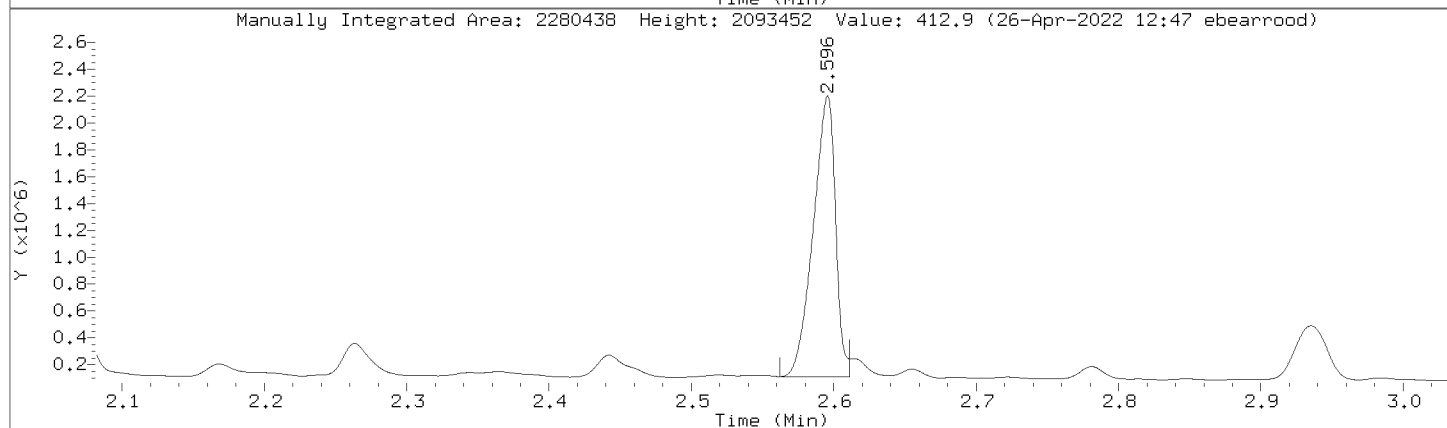
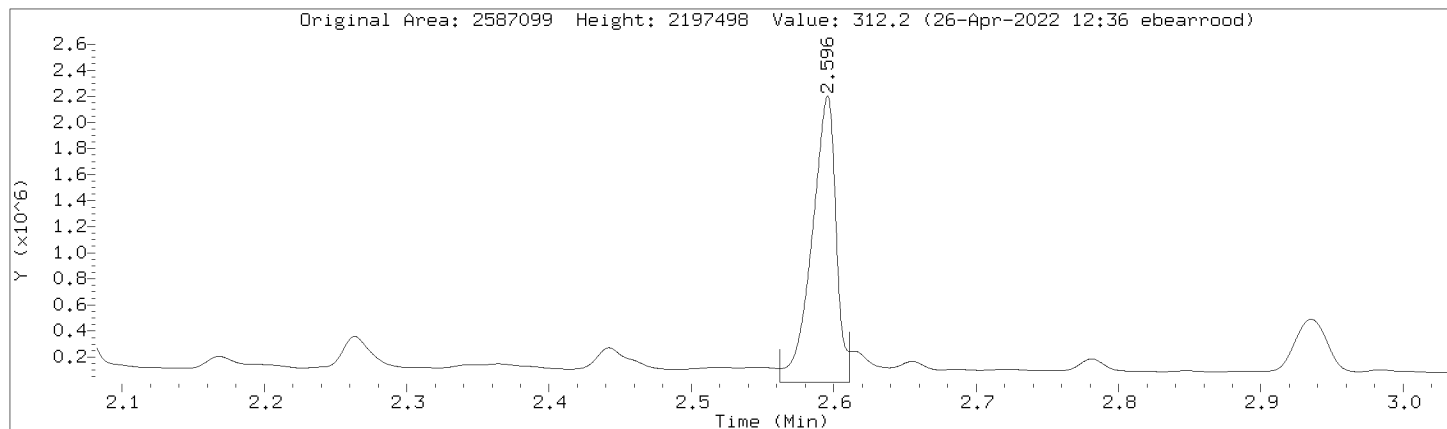
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Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
 Injection Date: 26-APR-2022 09:36  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL10,362378:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	13042412	13042412
DRO by AK 102	21431795	21431795
TPH-DRO (C10-C28)	24573747	24573747
Motor Oil Range (C24-C36)	13443188	13443188
Diesel Fuel Range	18030817	18030817
Motor Oil Range	16062716	16062716
Diesel Fuel Range SG	18030817	18030817
Motor Oil Range SG	16062716	16062716
C10-C36	34474208	34474208
n-Triacontane (S)	2594039	1910559
o-Terphenyl (S)	2587099	2280438

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
 Lab Smp Id: PBLK,349203:2 Client Smp ID: PBLK,349203:2  
 Inj Date : 26-APR-2022 10:09  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : pblk,349203:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 14  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			RESPONSE	CAS #:	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		298065		(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.580	2.582 -0.002		285209 51.6441	51.6	(RM) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.064	4.064 0.000		231254 48.4739	48.5	(RM) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		89594		(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		336474		(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		102242		(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		387659		(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		272174		(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		272174		(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		117872 0.55448	0.554	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		117872 0.55448	0.554	(M) RNG
-----					

QC Flag Legend

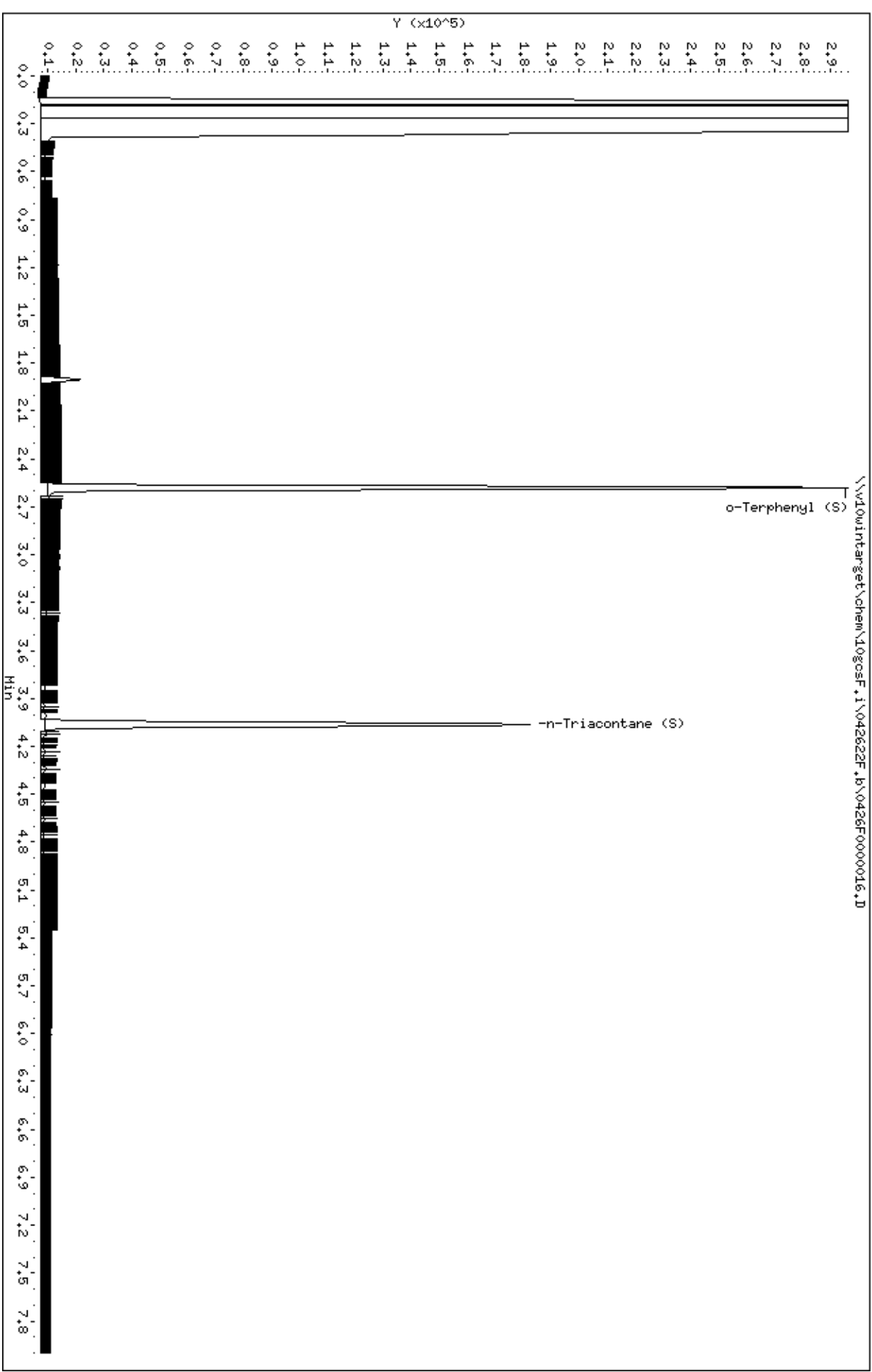
R - Spike/Surrogate failed recovery limits.  
M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.

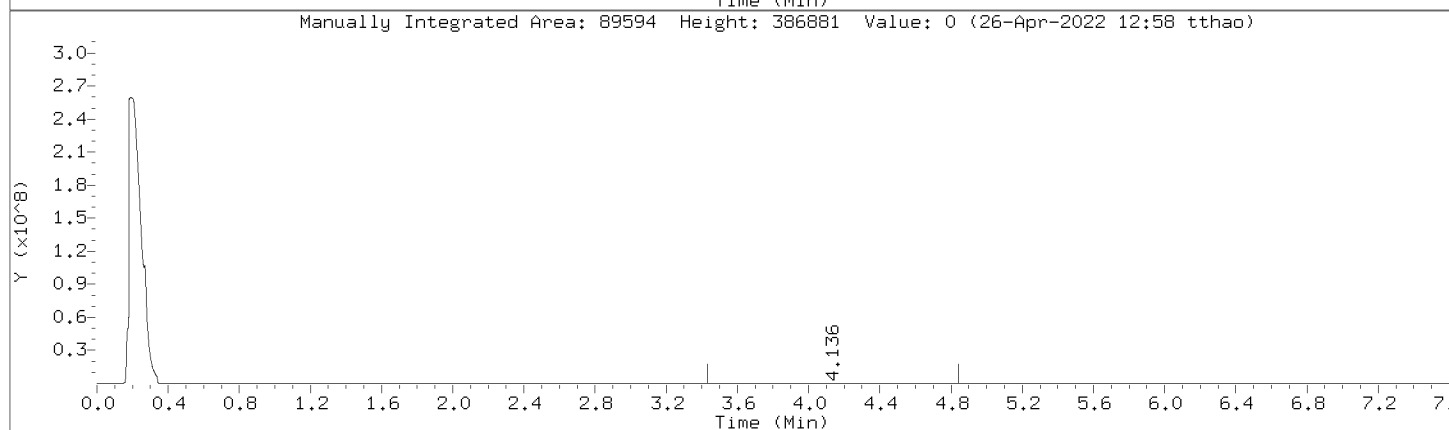
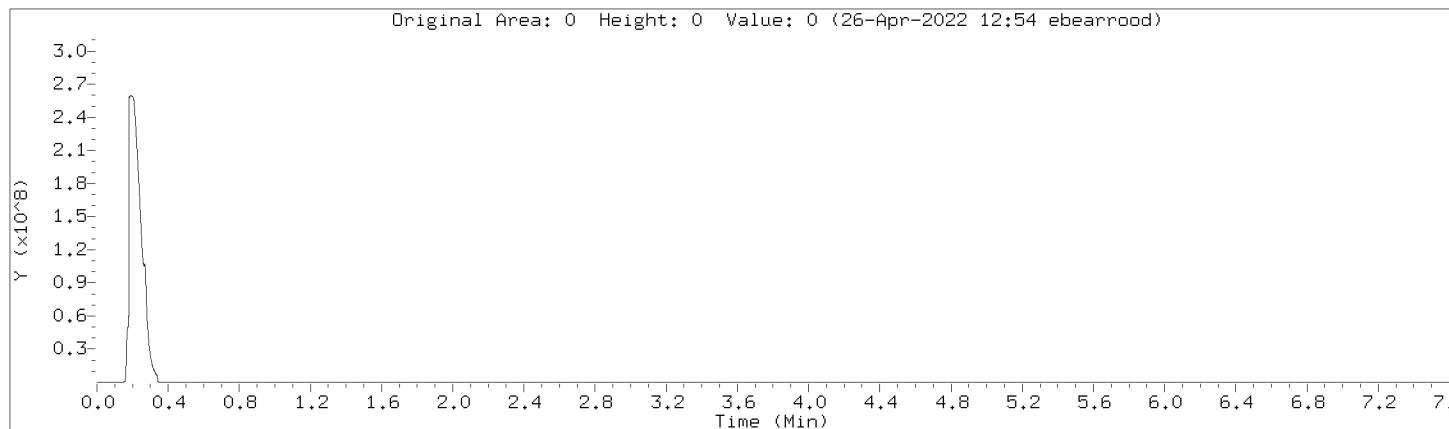
Data File: \\vd0win\target\chem\10gocsf.1\042622F.1\0426F0000016.D  
Date: 26-APR-2022 10:09  
Client ID: PBLK,349203;2  
Sample Info: PBLK,349203;2  
Column phase: DB-5-MS21250010

Instrument: 10gocsf.1  
Operator: EB3  
Column diameter: 0.32



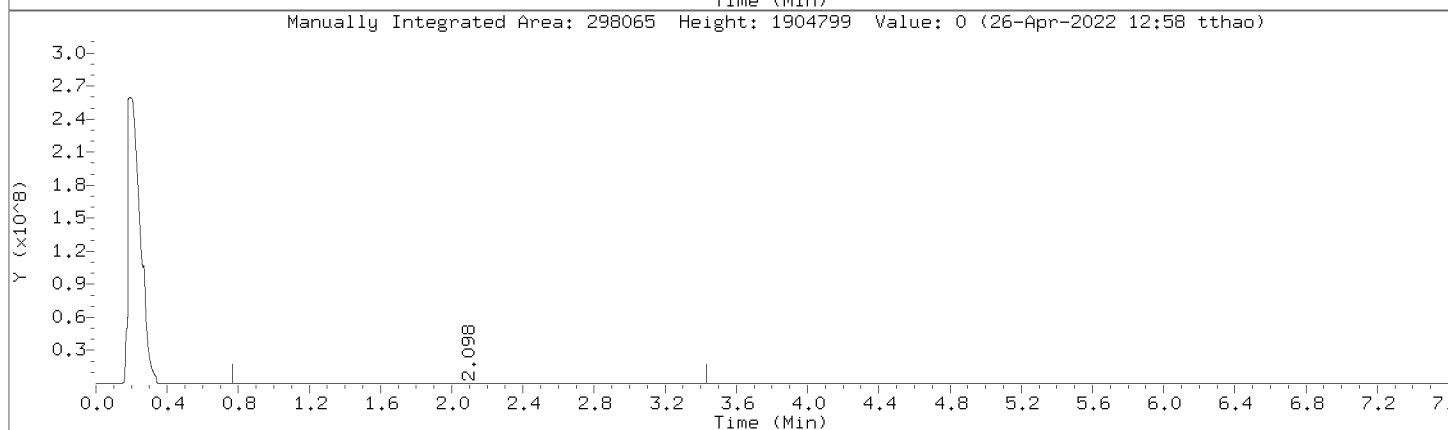
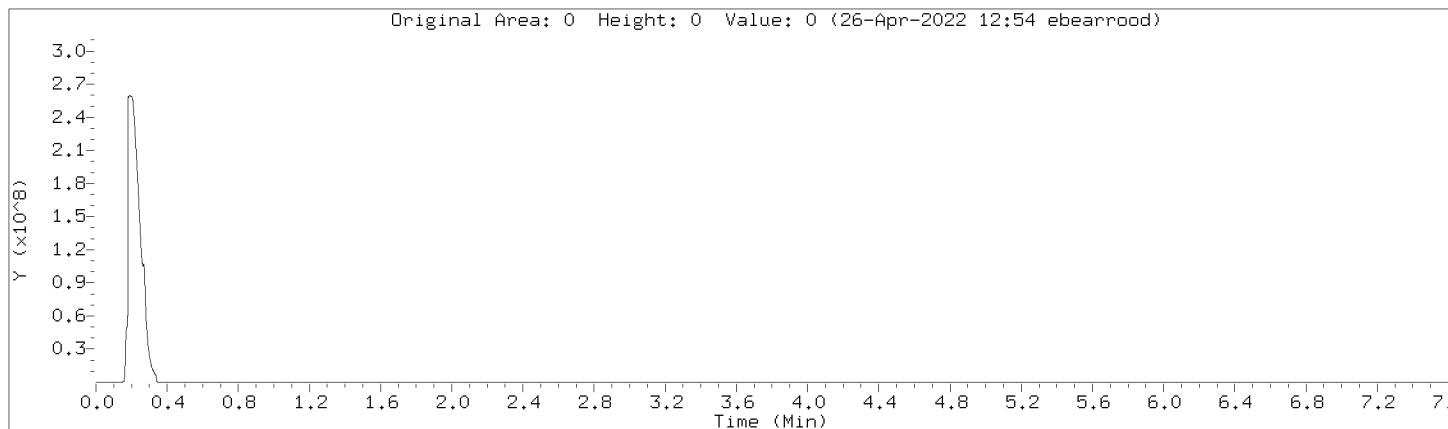
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



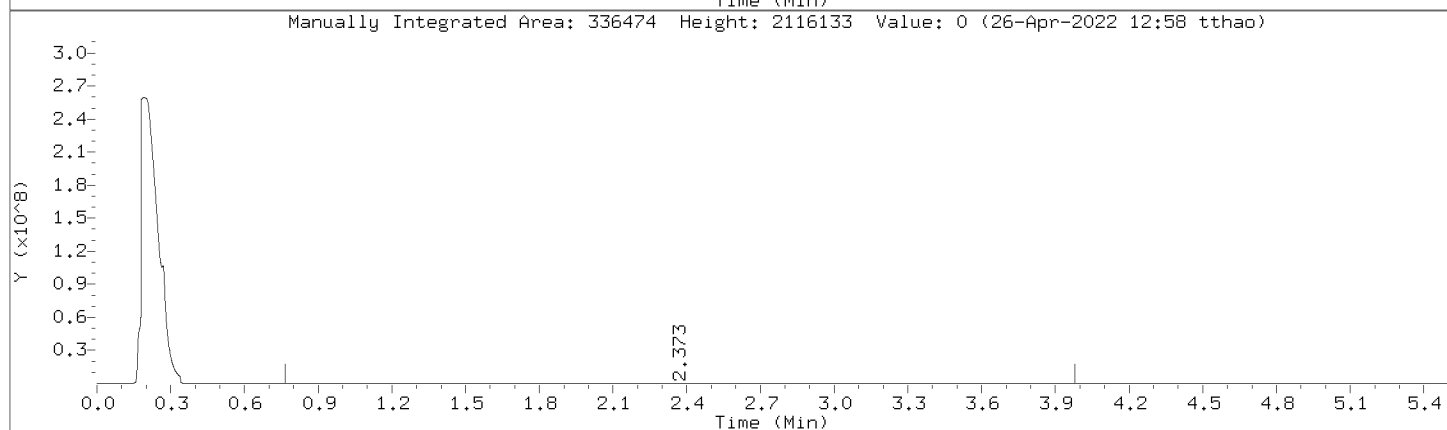
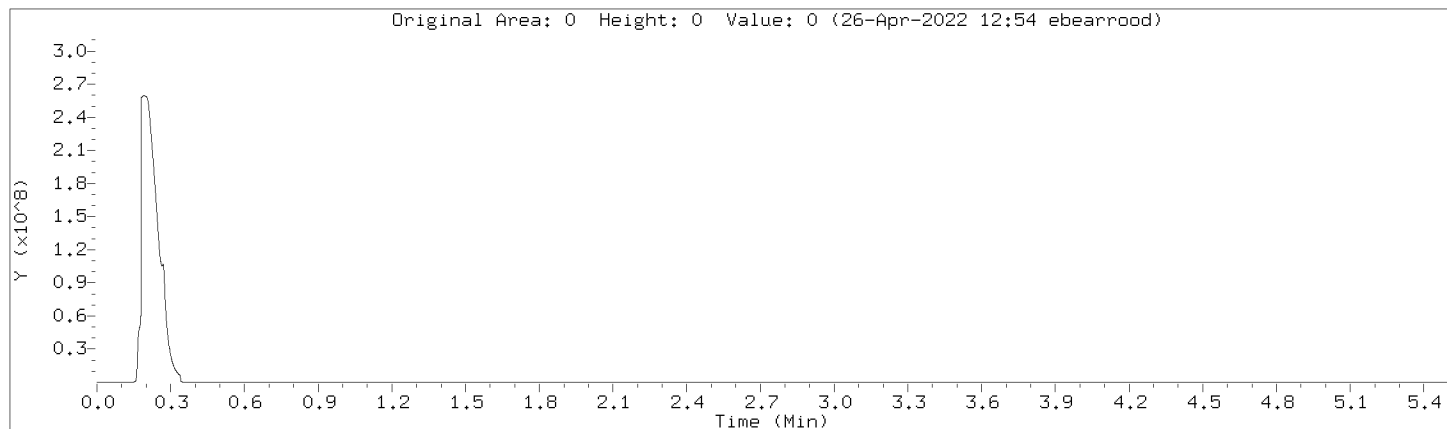
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Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

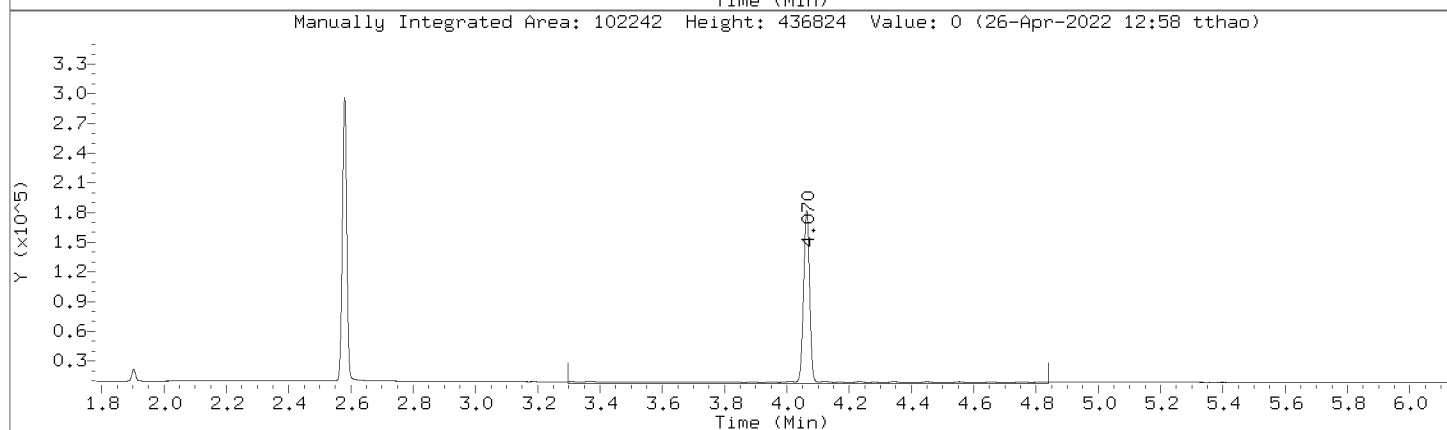
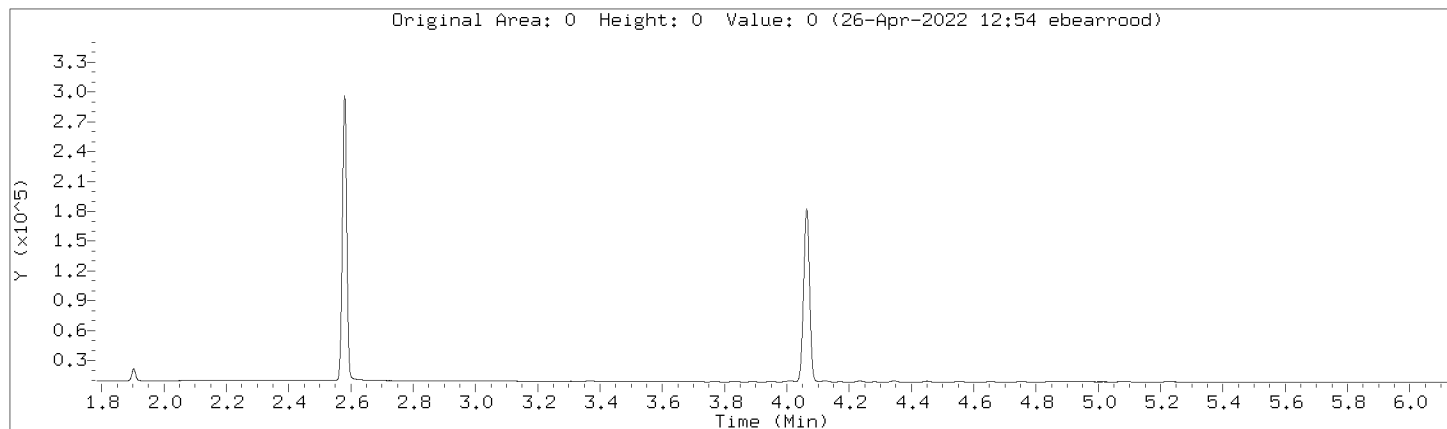
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:





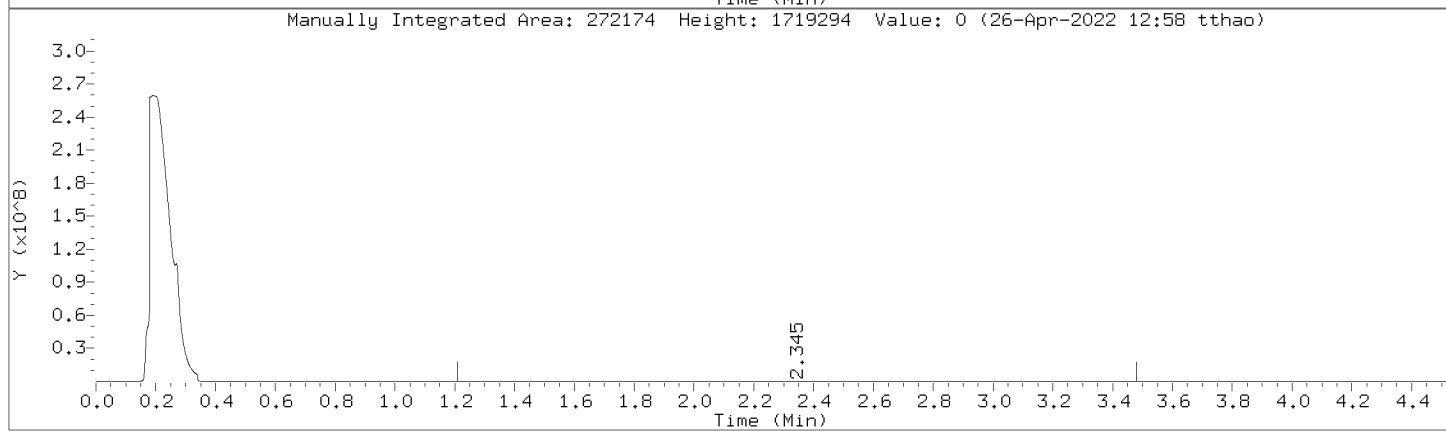
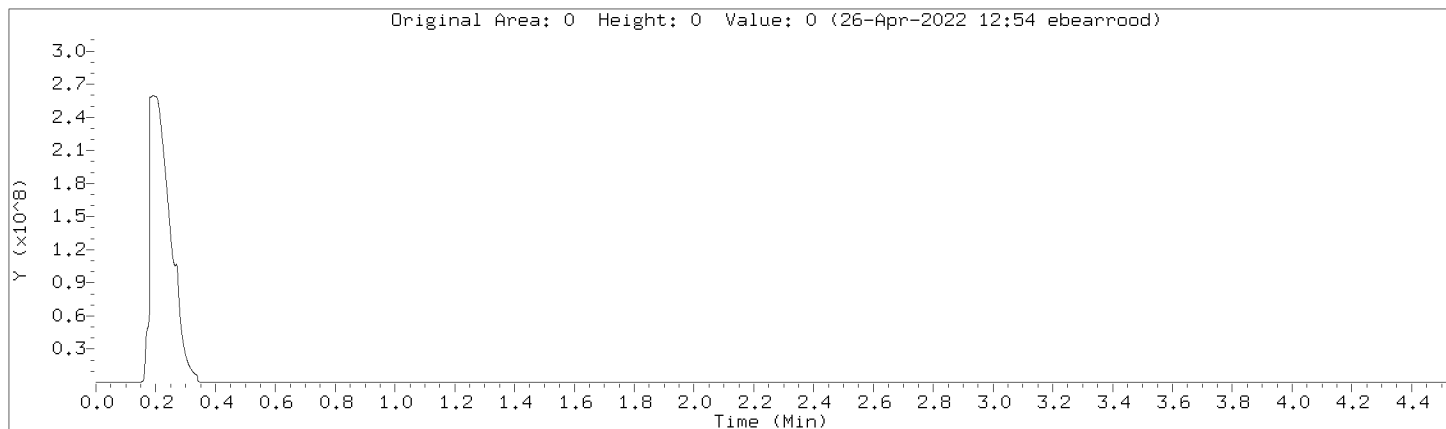
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



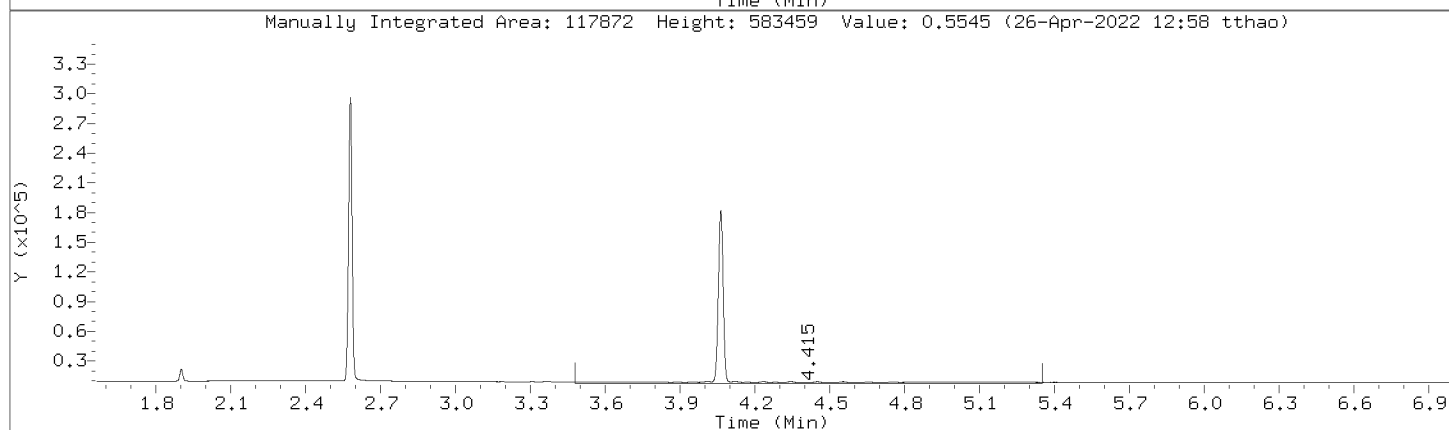
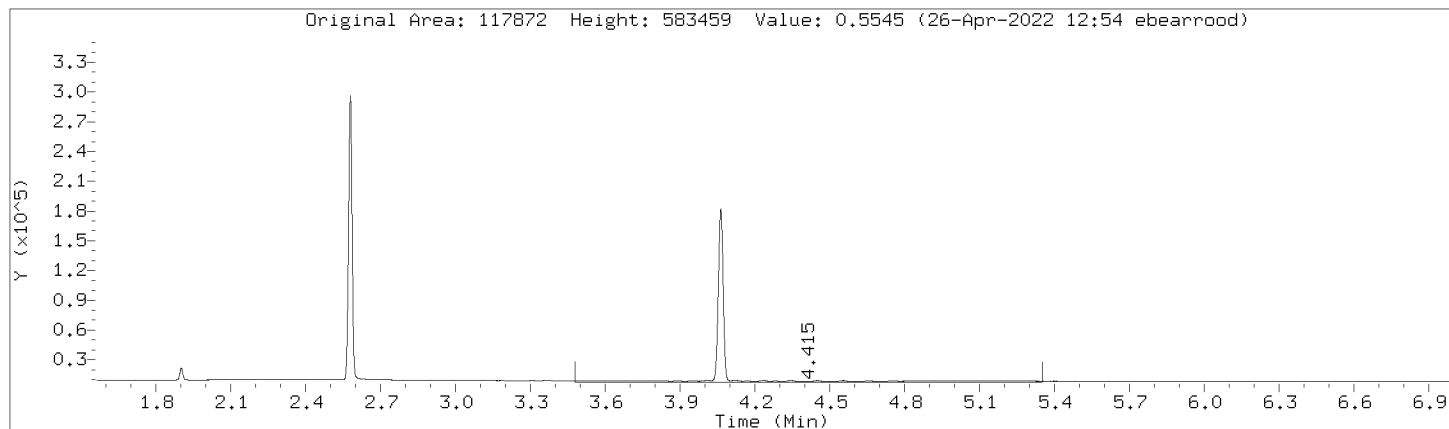
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Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



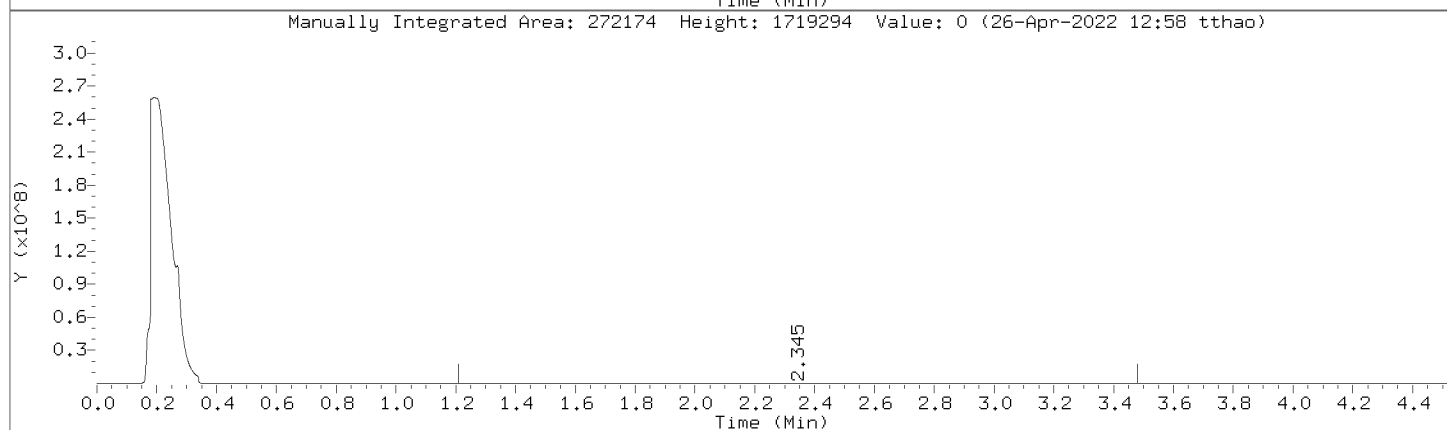
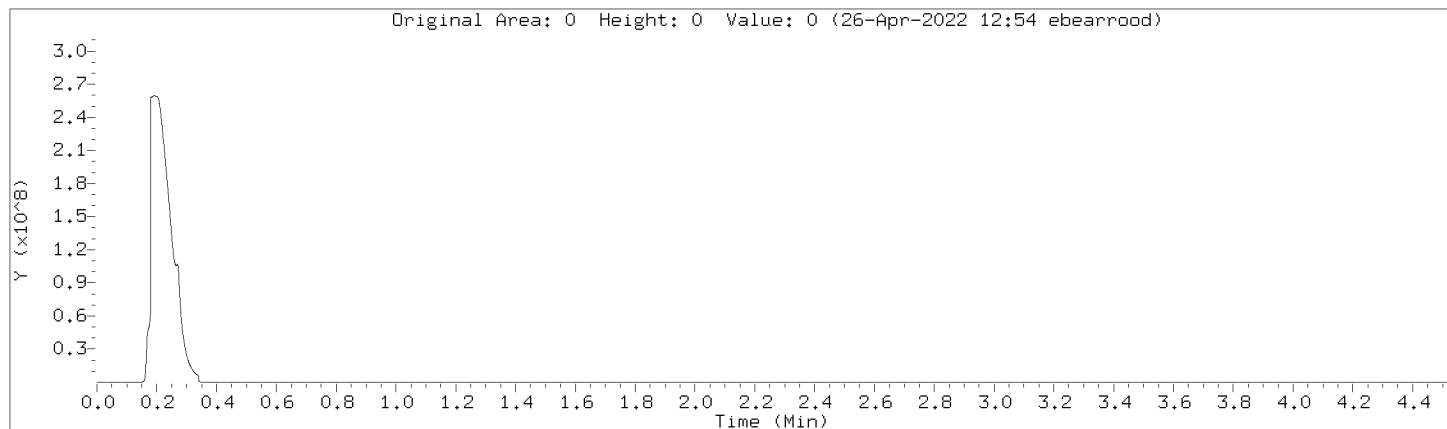
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Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D

Injection Date: 26-APR-2022 10:09

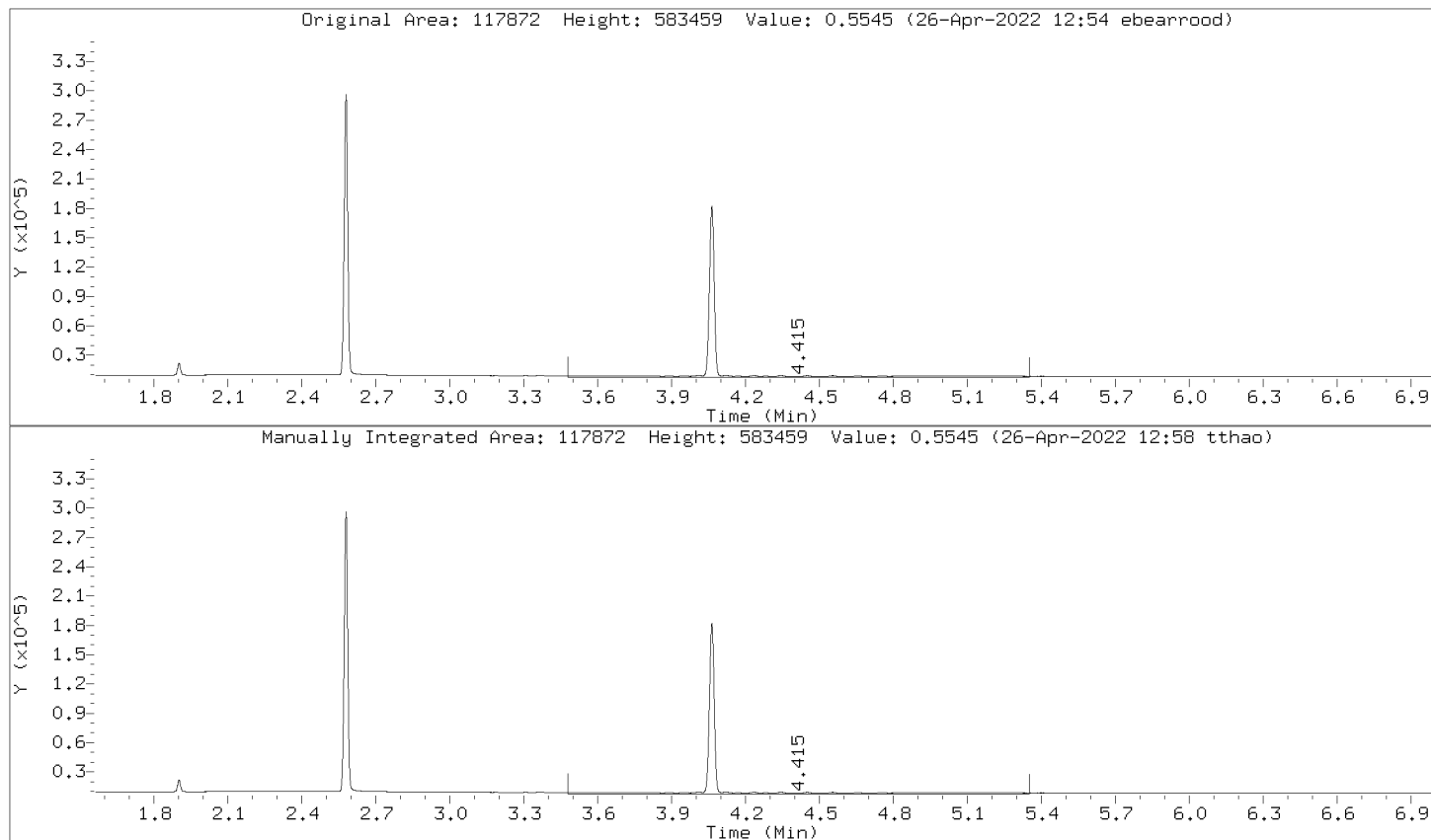
Instrument: 10gcsF.i

Lab Sample ID: PBLK,349203:2

Compound: Motor Oil Range SG

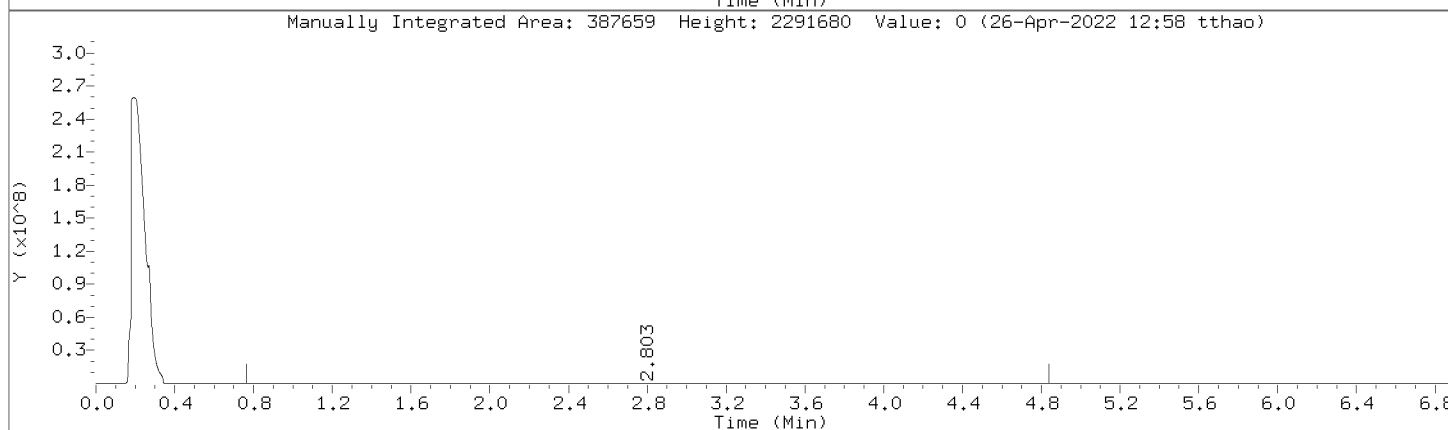
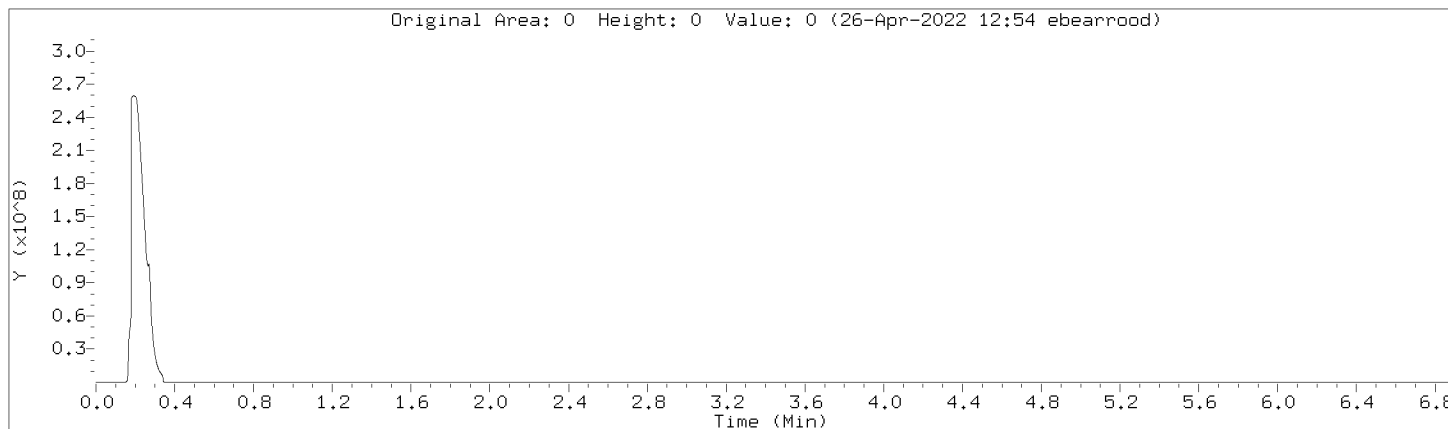
Review Code: RNG

CAS Number:



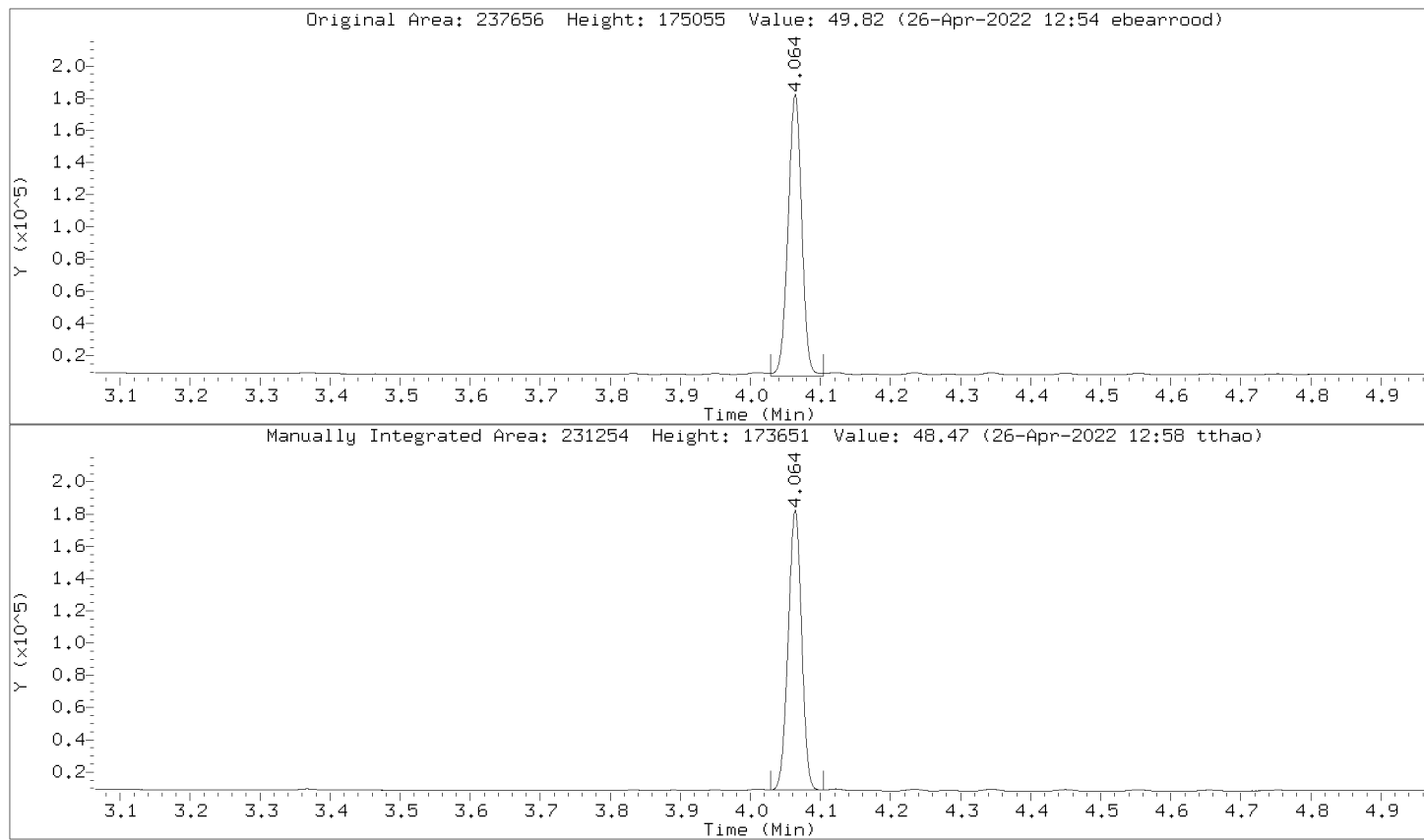
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Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



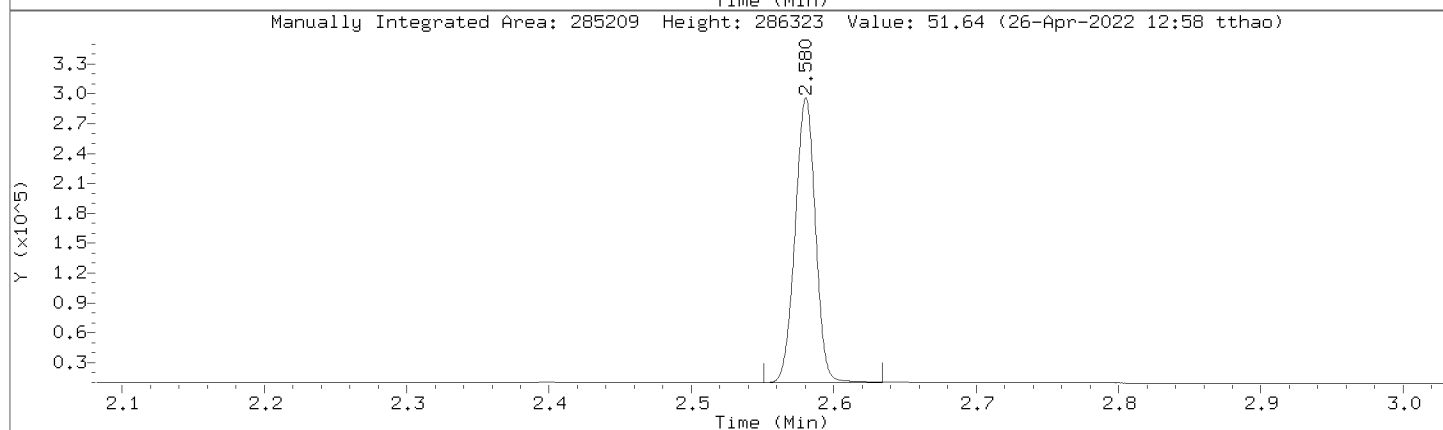
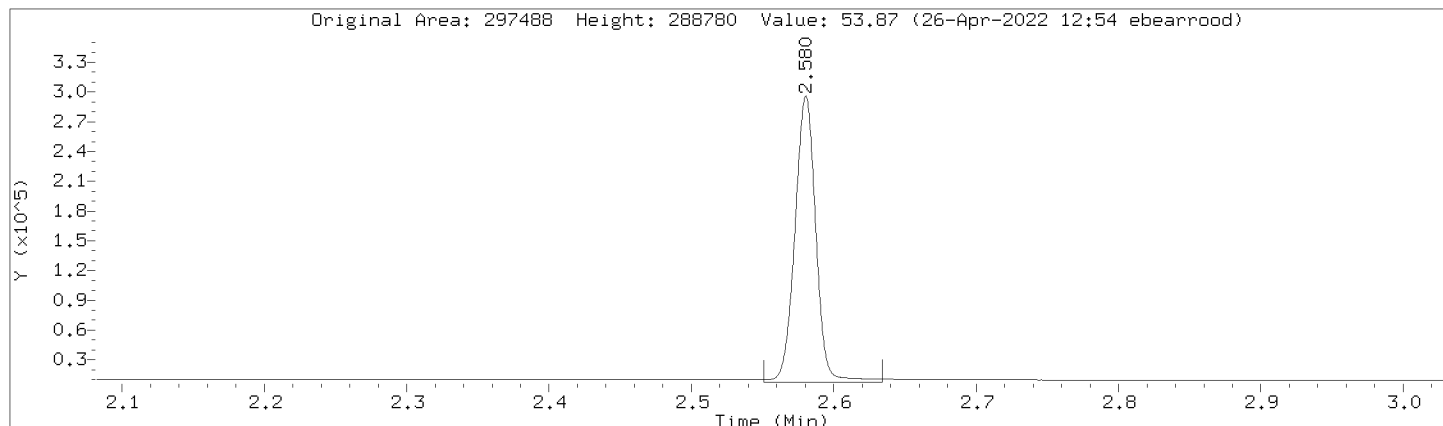
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Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
 Injection Date: 26-APR-2022 10:09  
 Instrument: 10gcsF.i  
 Lab Sample ID: PBLK,349203:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	0	89594
DRO by AK 102	0	298065
TPH-DRO (C10-C28)	0	336474
Motor Oil Range (C24-C36)	0	102242
Diesel Fuel Range	0	272174
Motor Oil Range	117872	117872
Diesel Fuel Range SG	0	272174
Motor Oil Range SG	117872	117872
C10-C36	0	387659
n-Triacontane (S)	237656	231254
o-Terphenyl (S)	297488	285209



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000003.D  
 Lab Smp Id: DMO-RTM,362403:2 Client Smp ID: DMO-RTM,362403:2  
 Inj Date : 27-APR-2022 12:04  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-rtm,362403:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 27-Apr-2022 16:52 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 77  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			ON-COL RESPONSE (ug/mL)	FINAL (ug/mL)	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.755	- 3.420		2109841 337.803	338	
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.534	2.529 0.005		601 0.10883	0.109	(R)
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.071	4.058 0.013		95 0.01991	0.0199	(R)
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.421	- 4.880		1963660 577.047	577	
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.755	- 4.000		3389142 498.851	499	
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.280	- 4.880		2585552 741.879	742	
-----					
S 7	C10-C36			CAS #:	
0.755	- 4.880		4073501 857.310	857	
-----					
S 8	Diesel Fuel Range			CAS #:	
1.200	- 3.470		1479255 267.402	267	
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.200	- 3.470		1479255 267.402	267	
-----					
S 10	Motor Oil Range			CAS #:	
3.471	- 5.370		2527976 604.854	605	
-----					
S 11	Motor Oil Range SG			CAS #:	
3.471	- 5.370		2527976 604.854	605	
-----					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Date : 27-APR-2022 12:04

Client ID: DM0-RTM,362403;2

Sample Info: DM0-RTM,362403;2

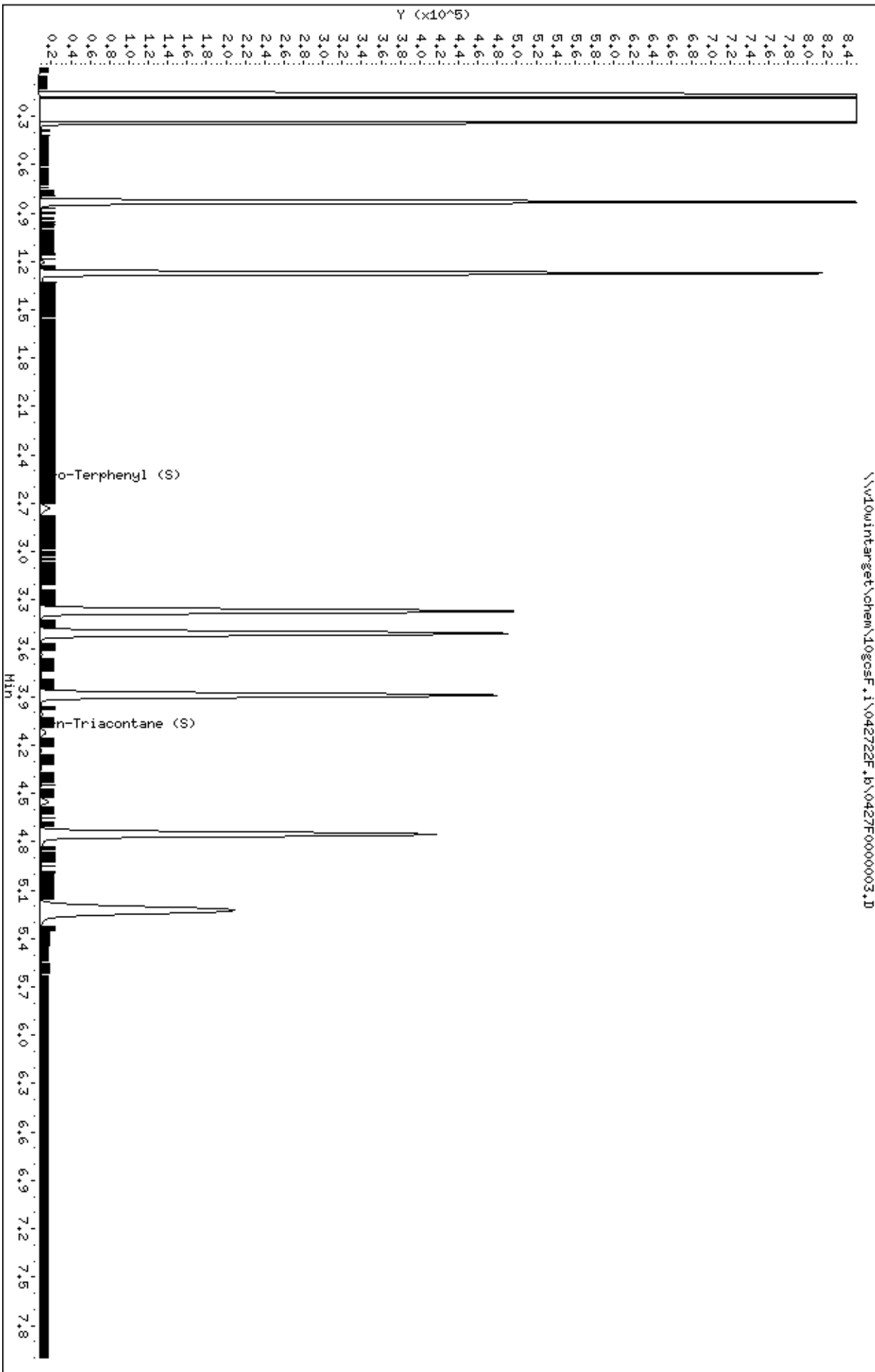
Instrument: 10gocsf.1

Operator: EB3

Column diameter: 0.32

Column phase: DB-5-MS21250010

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Injection Date: 27-APR-2022 12:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-RTM,362403:2  
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1963660	1963660
DRO by AK 102	2109841	2109841
TPH-DRO (C10-C28)	3389142	3389142
Motor Oil Range (C24-C36)	2585552	2585552
Diesel Fuel Range	1479255	1479255
Motor Oil Range	2527976	2527976
Diesel Fuel Range SG	1479255	1479255
Motor Oil Range SG	2527976	2527976
C10-C36	4073501	4073501
n-Triacontane (S)	95	95
o-Terphenyl (S)	601	601

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO INITIAL CALIBRATION DATA

SAMPLE NO.

29831781ICV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 04/26/2022 Time: 09:58

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 04/26/2022 04/26/2022

Lab File ID: 042622F.B\0426F0000015.D

Init. Calib. Time(s): 07:55 09:36

SDG No.: 10605435

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	552.1662	0.0100	10.4332	15.0000
Motor Oil Range	Linear	500	538.4717	0.0100	7.6944	15.0000
n-Triacontane (S)	Averaged	4770.689	4707.140	0.0100	-1.3321	15.0000
o-Terphenyl (S)	Averaged	5522.589	5788.280	0.0100	4.8110	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29833377CCV

Lab Name: Pace Analytical - Minnesota Calibration Date: 04/26/2022 Time: 13:36  
 Instrument ID: 10GCSF GC Column: FID Init. Calib. Date(s): 04/26/2022 04/26/2022  
 Lab File ID: 042622F.B\0426F0000018.D Init. Calib. Time(s): 07:55 09:36  
 SDG No.: 10605435

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	490.1963	0.0100	-1.9607	15.0000
Motor Oil Range	Linear	500	481.5424	0.0100	-3.6915	15.0000
n-Triacontane (S)	Averaged	4770.689	4743.600	0.0100	-0.5678	15.0000
o-Terphenyl (S)	Averaged	5522.589	5725.060	0.0100	3.6662	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29834712CCV

Lab Name: Pace Analytical - Minnesota Calibration Date: 04/26/2022 Time: 14:41  
 Instrument ID: 10GCSF GC Column: FID Init. Calib. Date(s): 04/26/2022 04/26/2022  
 Lab File ID: 042622F.B\0426F0000024.D Init. Calib. Time(s): 07:55 09:36  
 SDG No.: 10605435

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	495.3285	0.0100	-0.9343	15.0000
Motor Oil Range	Linear	500	488.9988	0.0100	-2.2002	15.0000
n-Triacontane (S)	Averaged	4770.689	4802.540	0.0100	0.6676	15.0000
o-Terphenyl (S)	Averaged	5522.589	5775.740	0.0100	4.5839	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29837484CCV

Lab Name: Pace Analytical - Minnesota Calibration Date: 04/26/2022 Time: 15:45  
 Instrument ID: 10GCSF GC Column: FID Init. Calib. Date(s): 04/26/2022 04/26/2022  
 Lab File ID: 042622F.B\0426F0000030.D Init. Calib. Time(s): 07:55 09:36  
 SDG No.: 10605435

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	497.4346	0.0100	-0.5131	15.0000
Motor Oil Range	Linear	500	506.5874	0.0100	1.3175	15.0000
n-Triacontane (S)	Averaged	4770.689	4851.860	0.0100	1.7014	15.0000
o-Terphenyl (S)	Averaged	5522.589	5849.660	0.0100	5.9224	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.



GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29844917CCV

Lab Name: Pace Analytical - Minnesota Calibration Date: 04/27/2022 Time: 12:15  
Instrument ID: 10GCSF GC Column: FID Init. Calib. Date(s): 04/26/2022 04/26/2022  
Lab File ID: 042722F.B\0427F0000004.D Init. Calib. Time(s): 07:55 09:36  
SDG No.: 10605435

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	503.0167	0.0100	0.6033	15.0000
Motor Oil Range	Linear	500	489.1442	0.0100	-2.1711	15.0000
n-Triacontane (S)	Averaged	4770.689	4860.540	0.0100	1.8834	15.0000
o-Terphenyl (S)	Averaged	5522.589	5905.480	0.0100	6.9332	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29847694CCV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 04/27/2022 Time: 13:57

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 04/26/2022 04/26/2022

Lab File ID: 042722F.B\0427F0000013.D

Init. Calib. Time(s): 07:55 09:36

SDG No.: 10605435

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	498.4957	0.0100	-0.3008	15.0000
Motor Oil Range	Linear	500	489.6692	0.0100	-2.0661	15.0000
n-Triacontane (S)	Averaged	4770.689	4824.000	0.0100	1.1175	15.0000
o-Terphenyl (S)	Averaged	5522.589	5825.120	0.0100	5.4780	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29847766CCV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 04/27/2022 Time: 15:38

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 04/26/2022 04/26/2022

Lab File ID: 042722F.B\0427F0000022.D

Init. Calib. Time(s): 07:55 09:36

SDG No.: 10605435

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	515.2007	0.0100	3.0401	15.0000
Motor Oil Range	Linear	500	503.9604	0.0100	0.7921	15.0000
n-Triacontane (S)	Averaged	4770.689	4913.720	0.0100	2.9981	15.0000
o-Terphenyl (S)	Averaged	5522.589	6015.960	0.0100	8.9337	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000015.D  
 Lab Smp Id: DMO-ICV,355155:2 Client Smp ID: DMO-ICV,355155:2  
 Inj Date : 26-APR-2022 09:58  
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 Smp Info : dmo-icv,355155:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 13 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		3245998 500.000	552	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.582	2.582 0.000		289414 50.0000	52.4	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.064	4.064 0.000		235357 50.0000	49.3	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		1833034 500.000	537	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		3702121 500.000	550	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		1909006 500.000	539	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		5079033 1000.00	1090	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		2746438 500.000	552	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		2746438 500.000	552	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		2263227 500.000	538	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		2263227 500.000	538	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 09:58

Client ID: DM0-ICV,355155;2

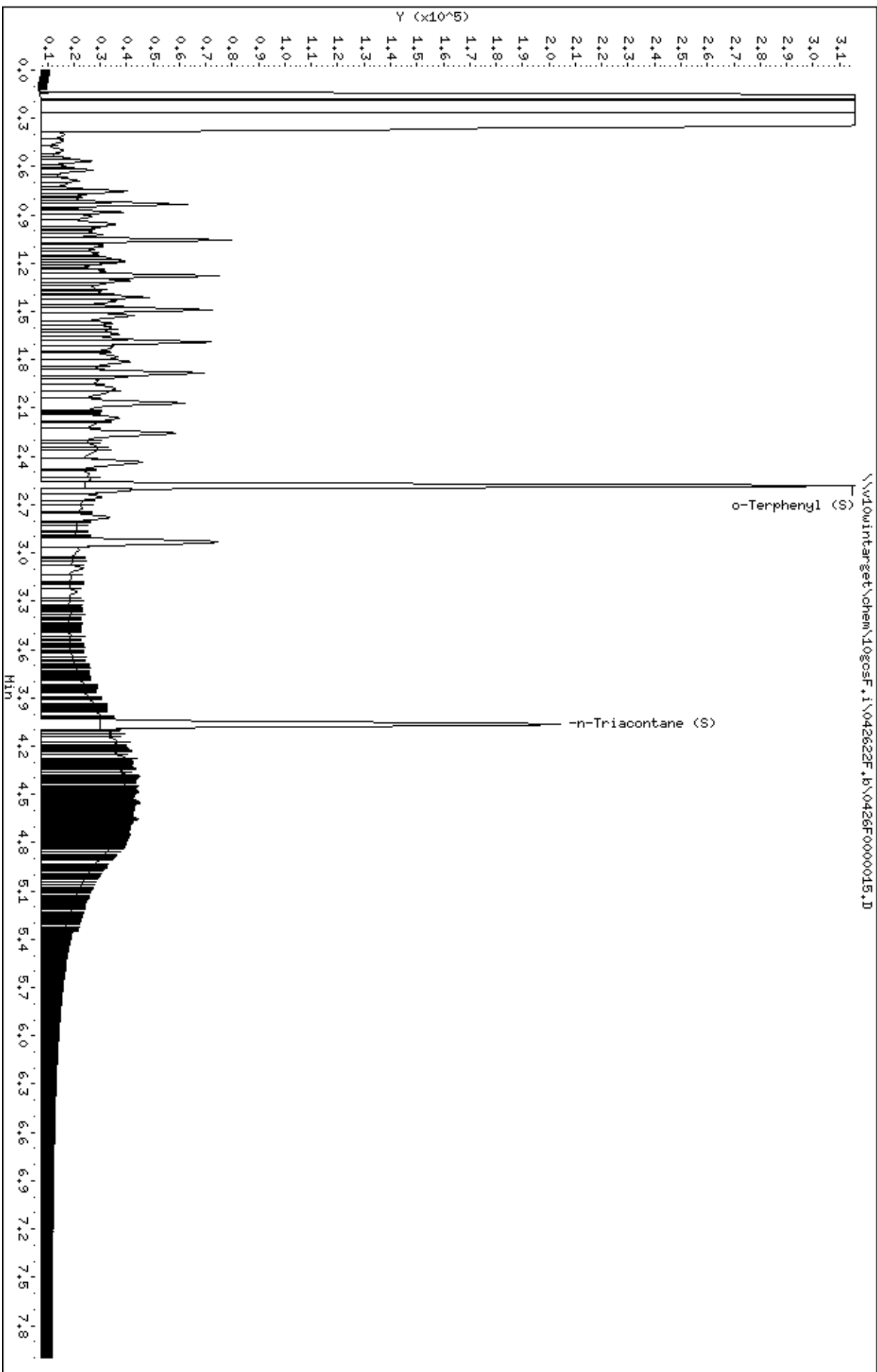
Sample Info: DM0-ICV,355155;2

Instrument: 10goscF.1

Operator: EB3

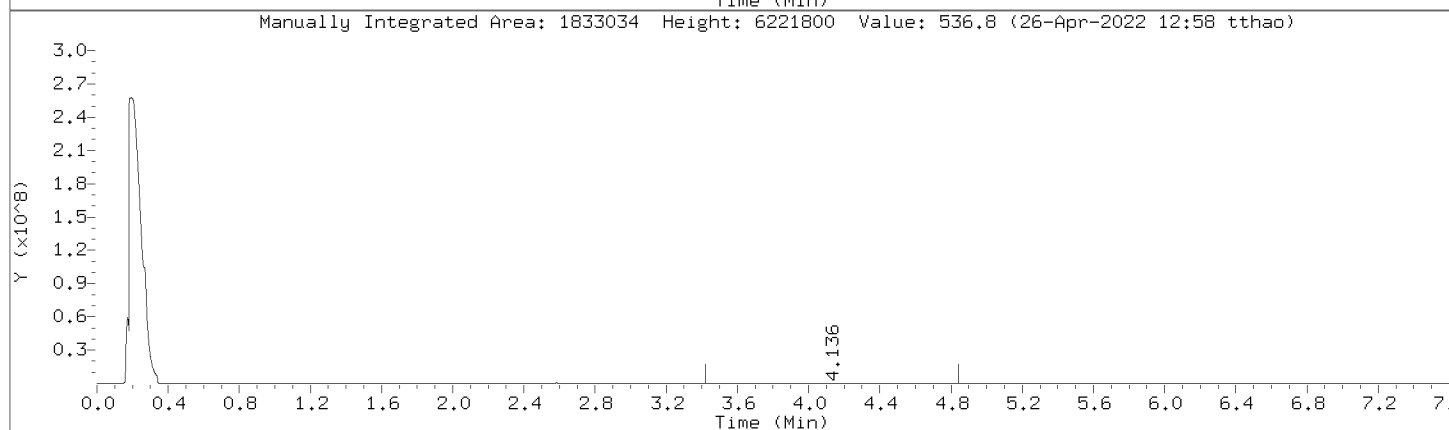
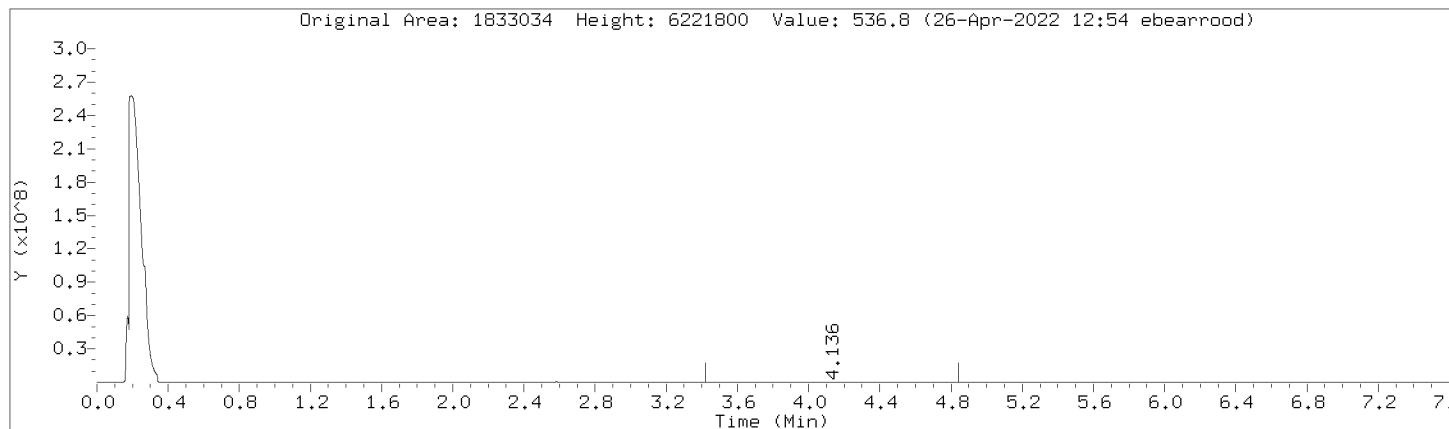
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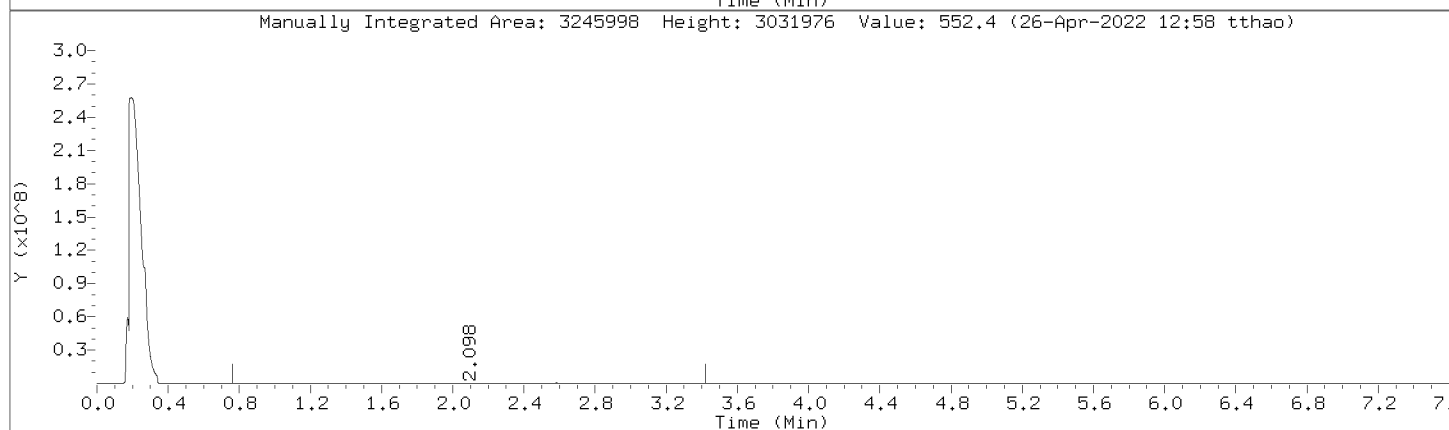
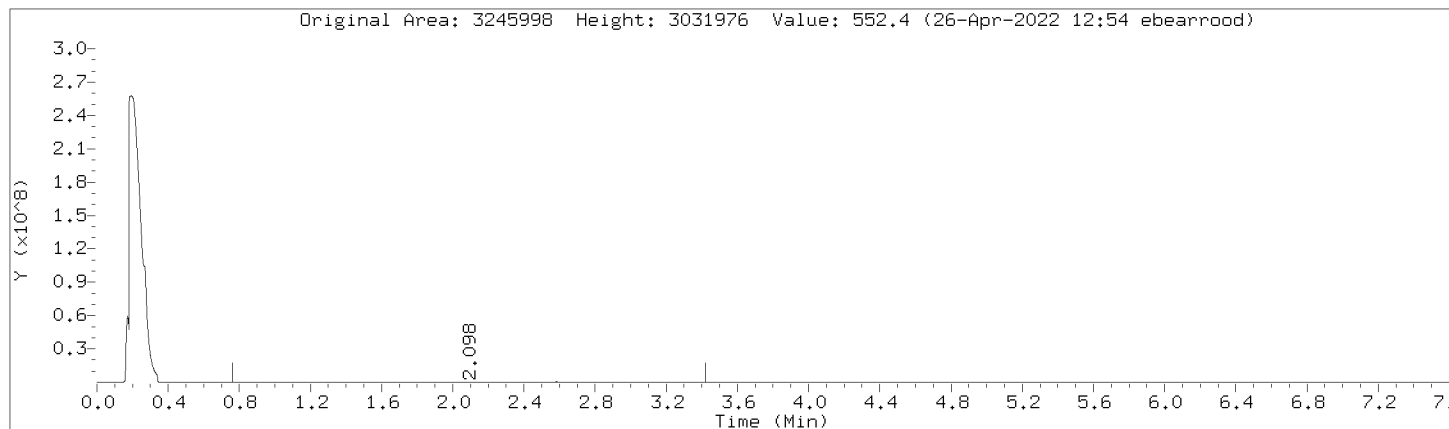
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000015.D  
Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

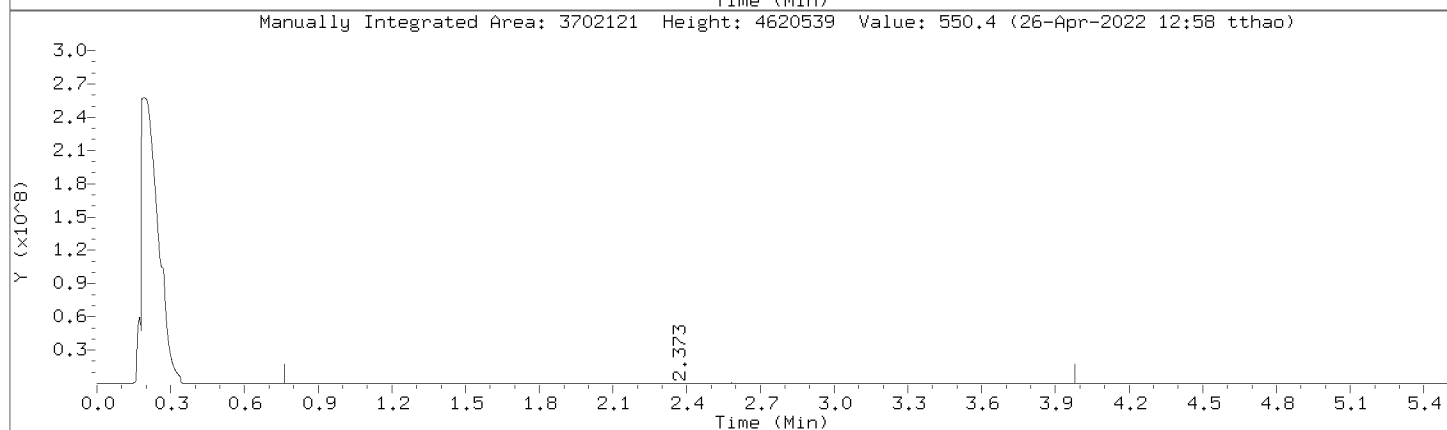
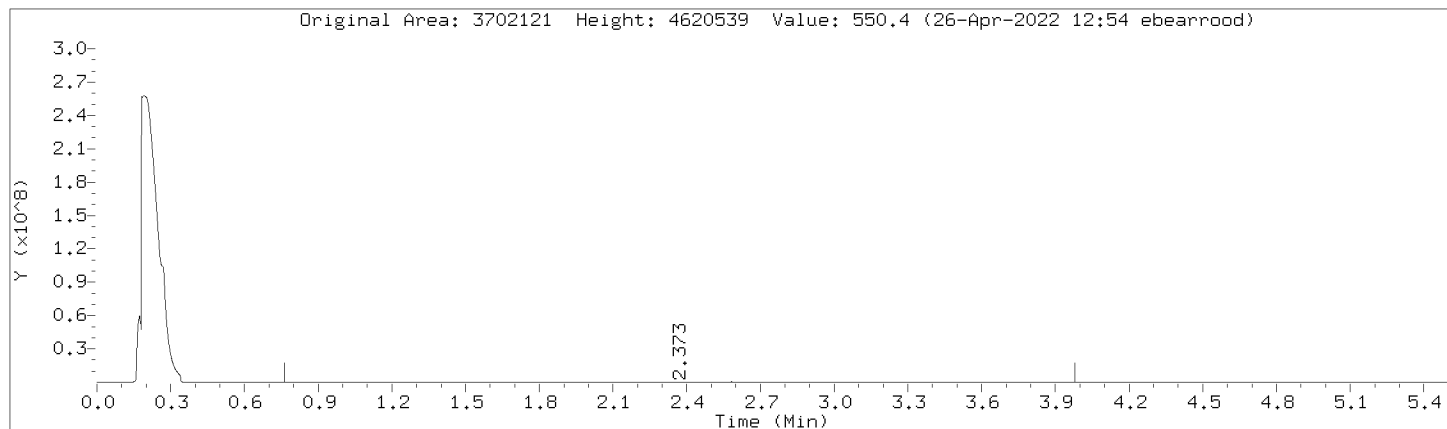
Compound: DRO by AK 102      Review Code: RNG  
CAS Number:





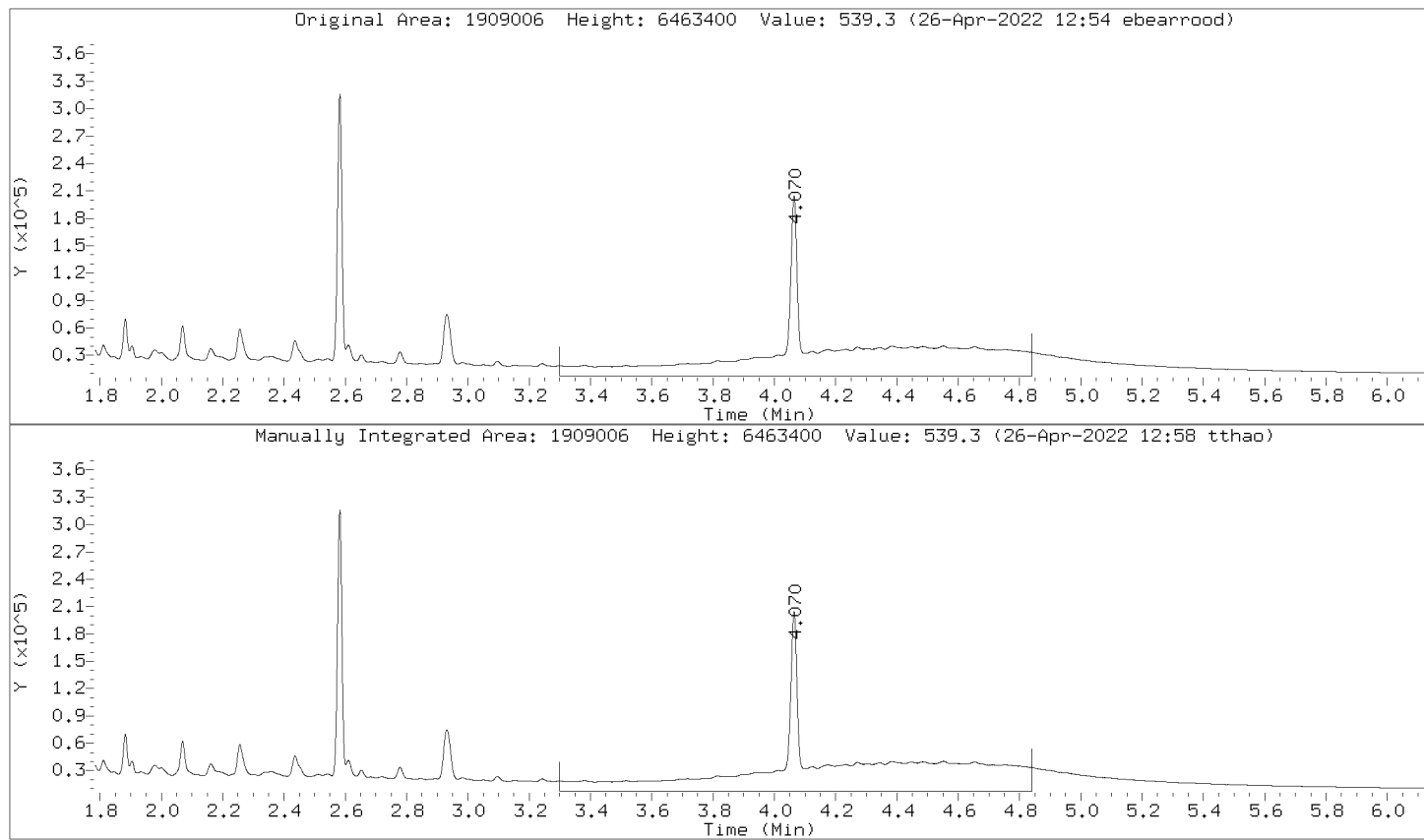
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



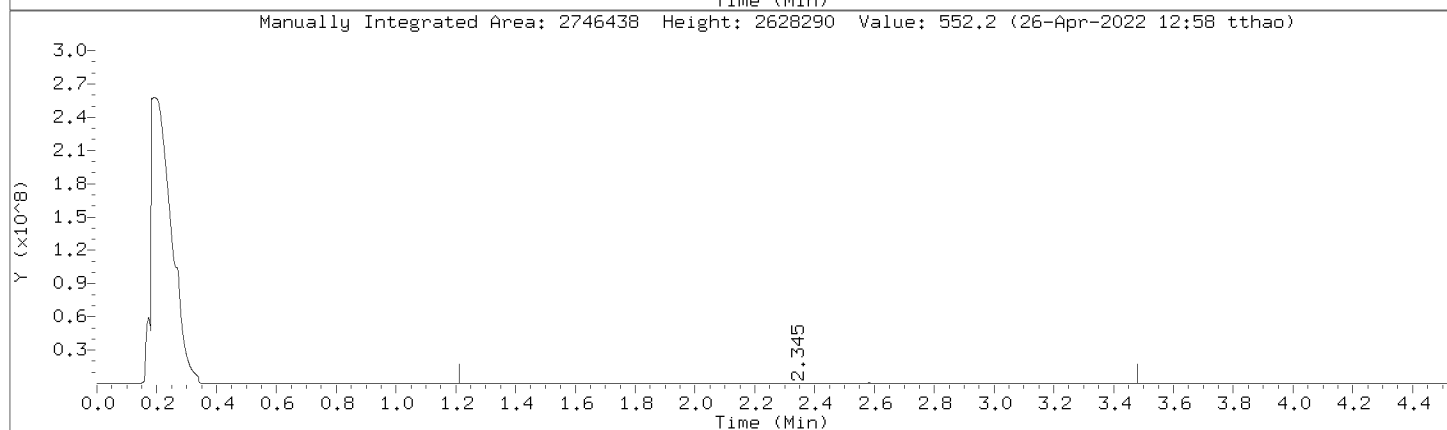
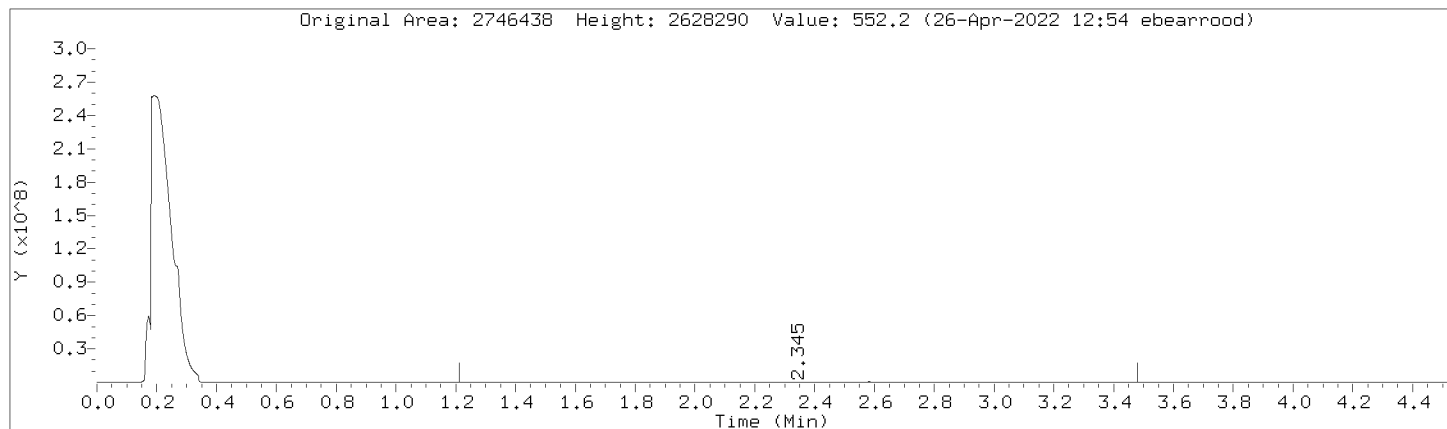
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



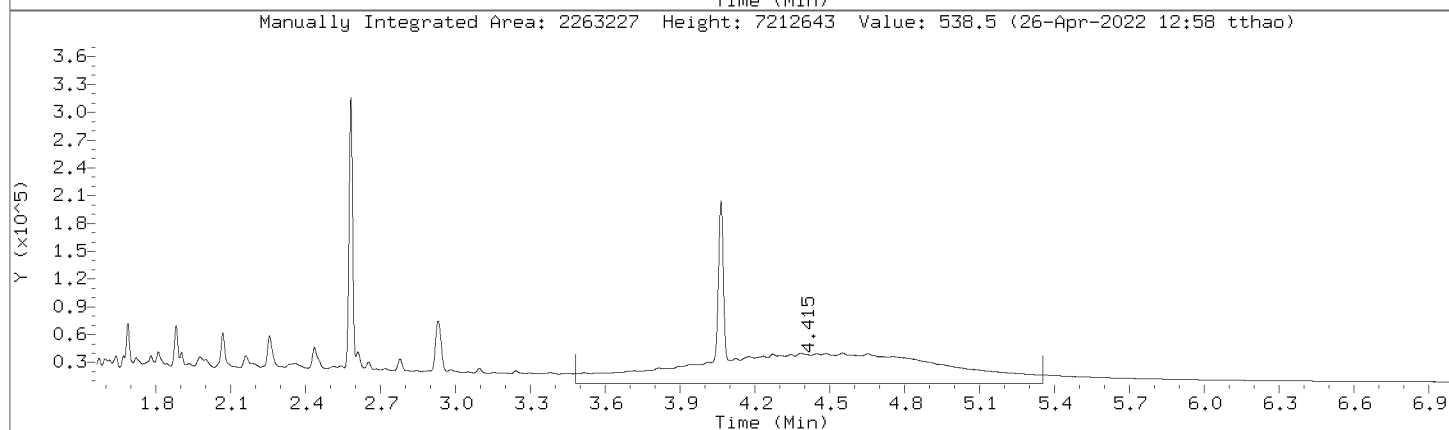
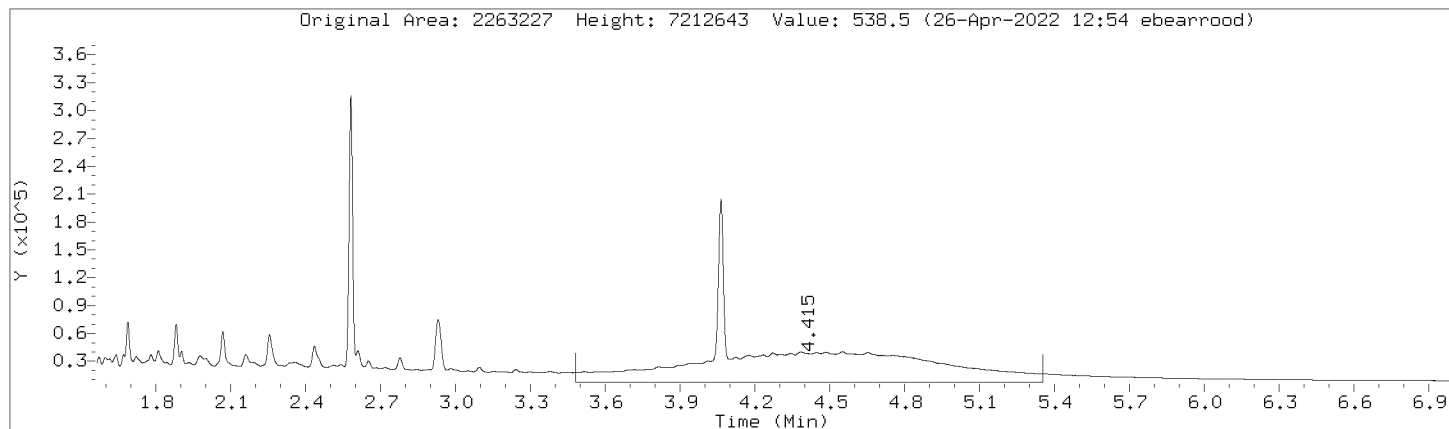
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



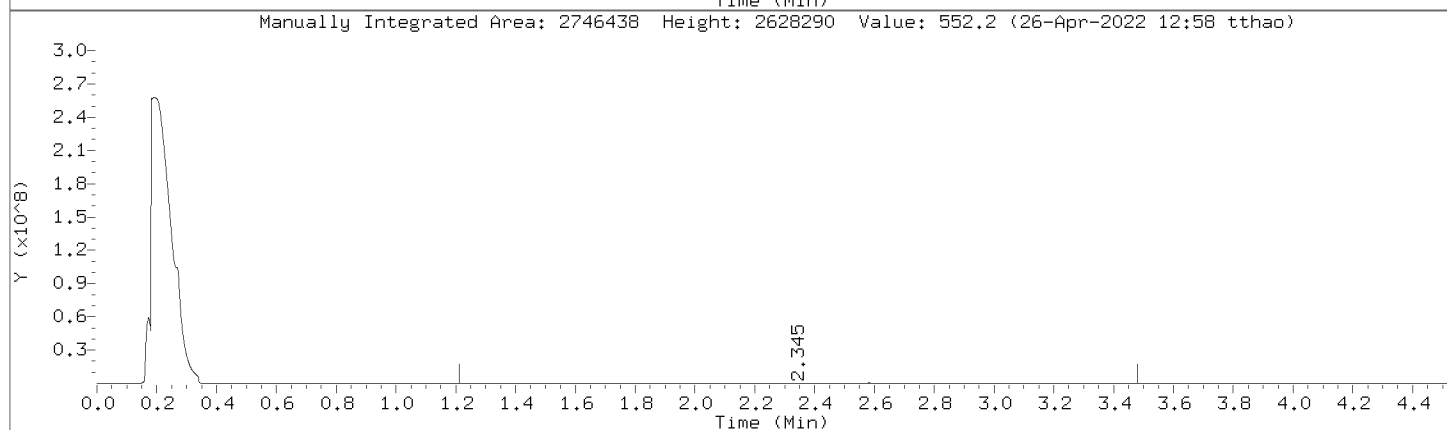
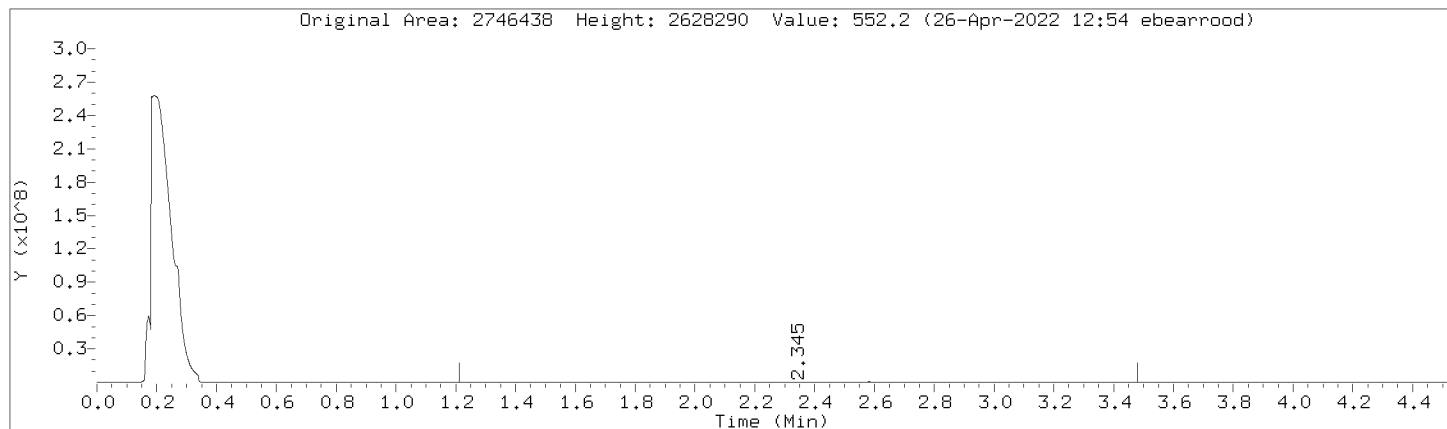
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



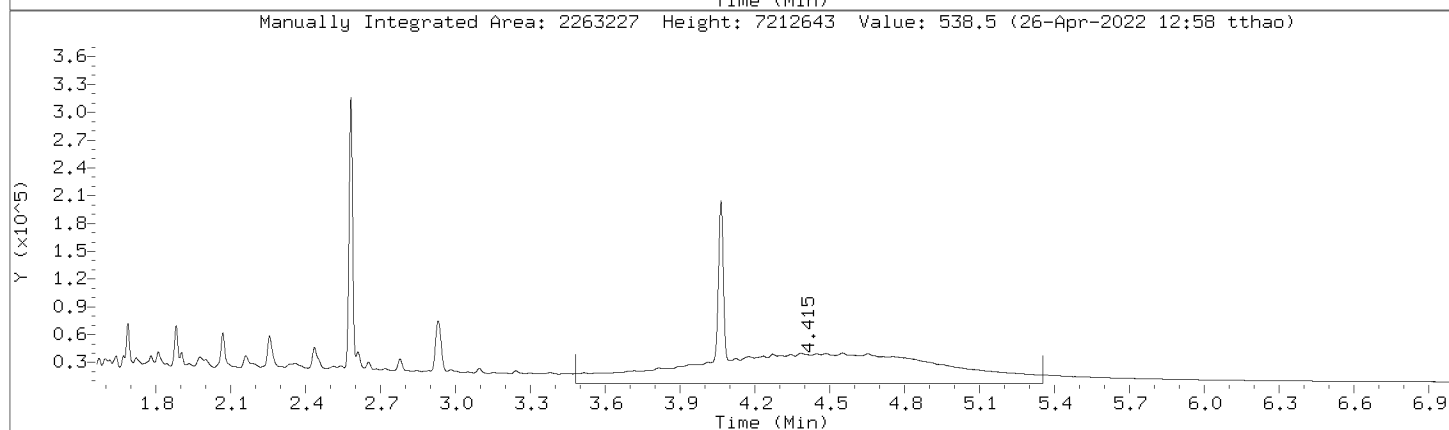
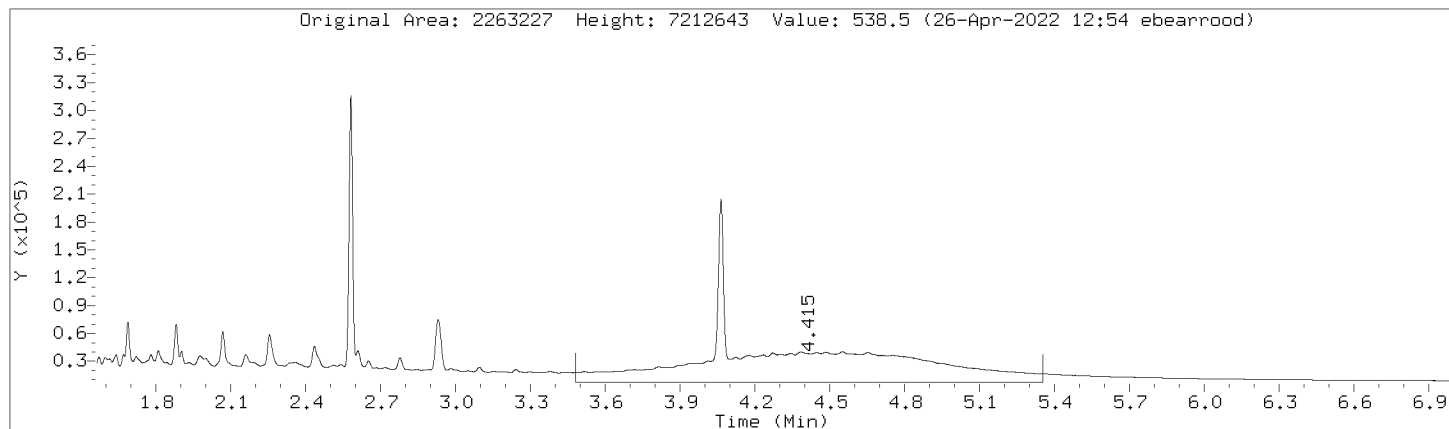
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



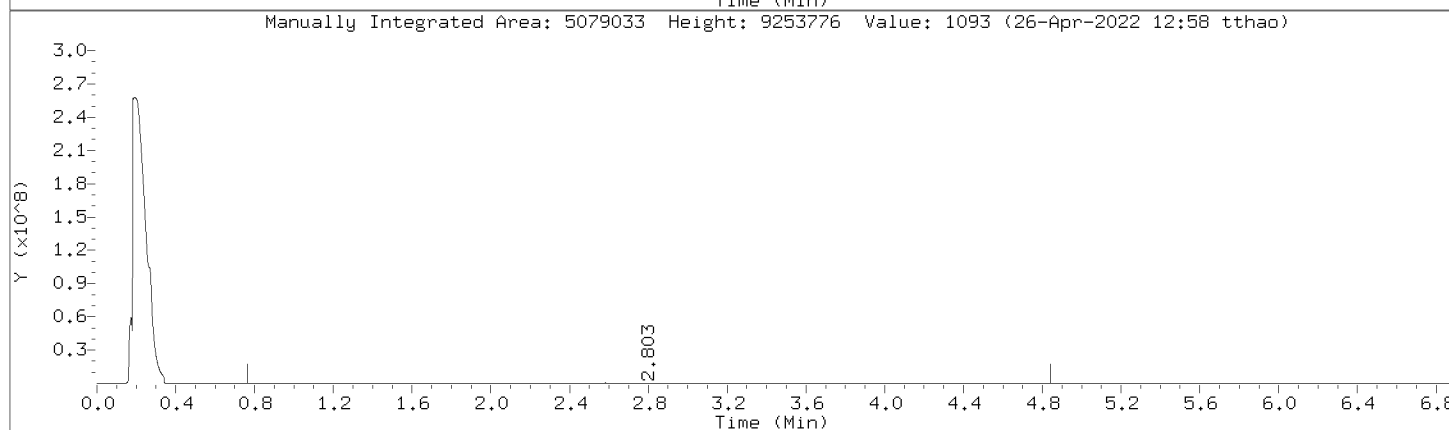
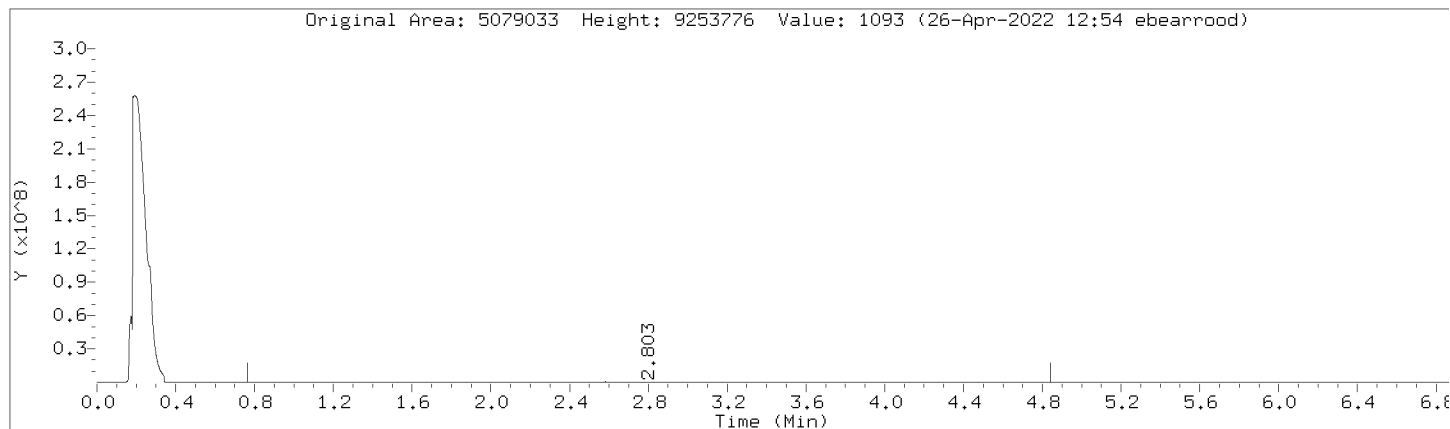
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



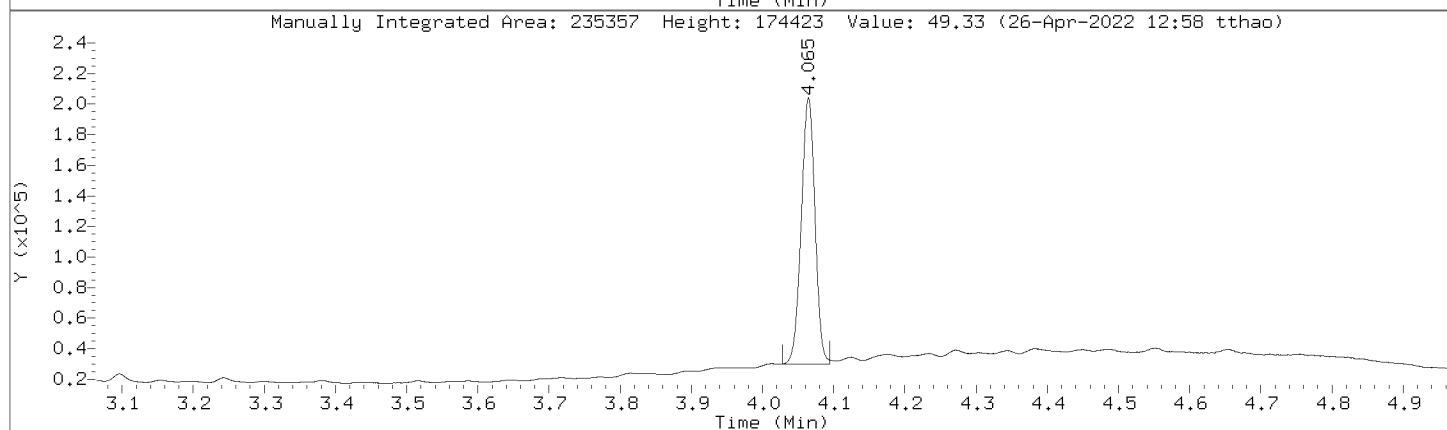
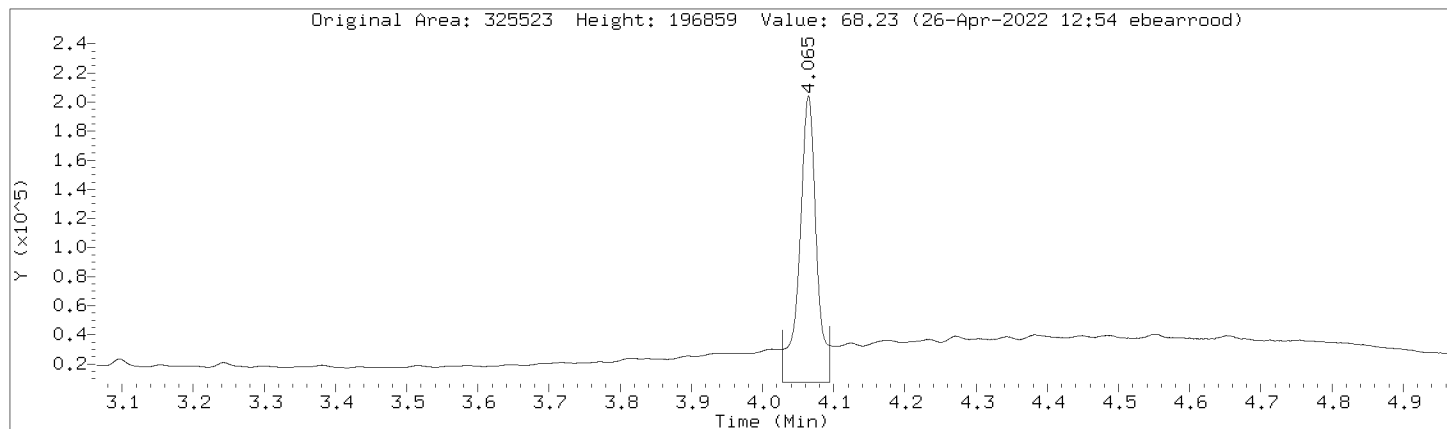
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000015.D  
Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

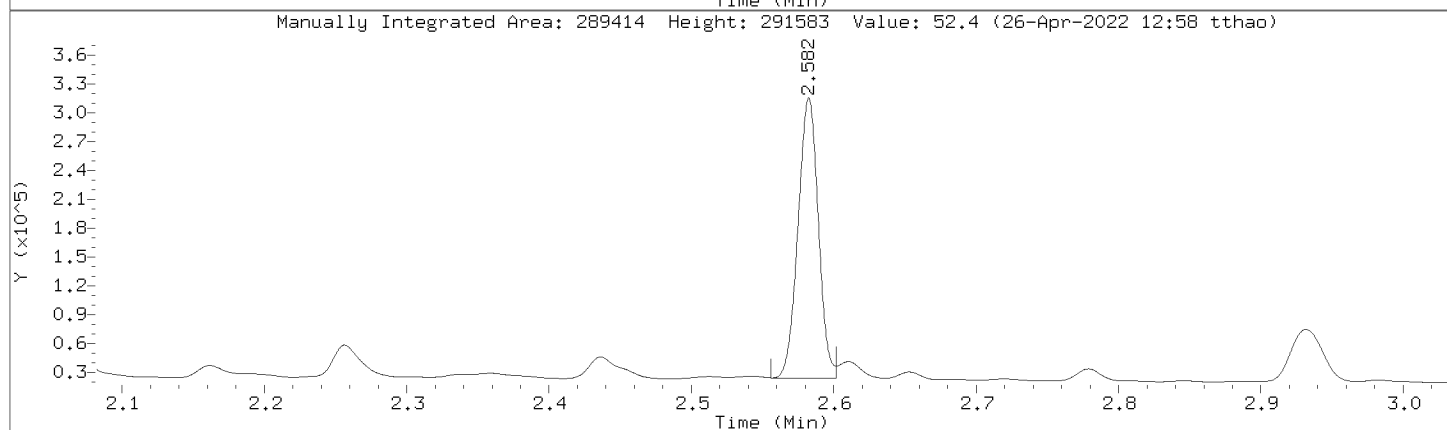
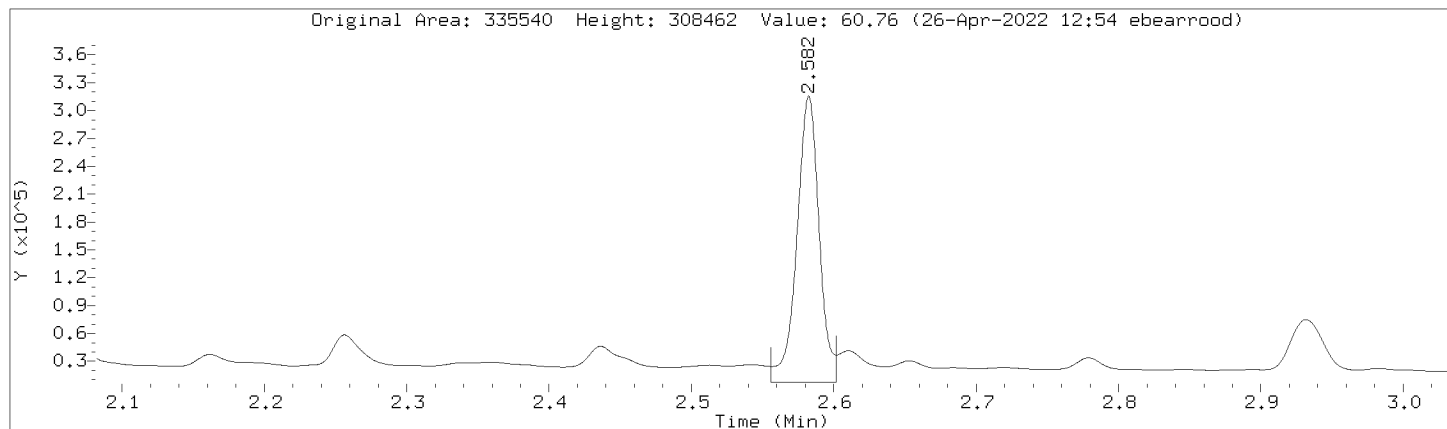
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000015.D  
 Injection Date: 26-APR-2022 09:58  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-ICV,355155:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1833034	1833034
DRO by AK 102	3245998	3245998
TPH-DRO (C10-C28)	3702121	3702121
Motor Oil Range (C24-C36)	1909006	1909006
Diesel Fuel Range	2746438	2746438
Motor Oil Range	2263227	2263227
Diesel Fuel Range SG	2746438	2746438
Motor Oil Range SG	2263227	2263227
C10-C36	5079033	5079033
n-Triacontane (S)	325523	235357
o-Terphenyl (S)	335540	289414

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000018.D  
 Lab Smp Id: DMO-CCV,362365:2 Client Smp ID: DMO-CCV,362365:2  
 Inj Date : 26-APR-2022 13:36  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,362365:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 15:01 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 2 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		2923086 500.000	491	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.581	2.572 0.009		286253 50.0000	51.8	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.070	4.071 -0.001		237180 50.0000	49.7	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		1642080 500.000	478	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		3332626 500.000	490	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		1707415 500.000	479	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		4565167 1000.00	972	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		2470676 500.000	490	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		2470676 500.000	490	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		2036178 500.000	482	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		2036178 500.000	482	(M) RNG
-----					

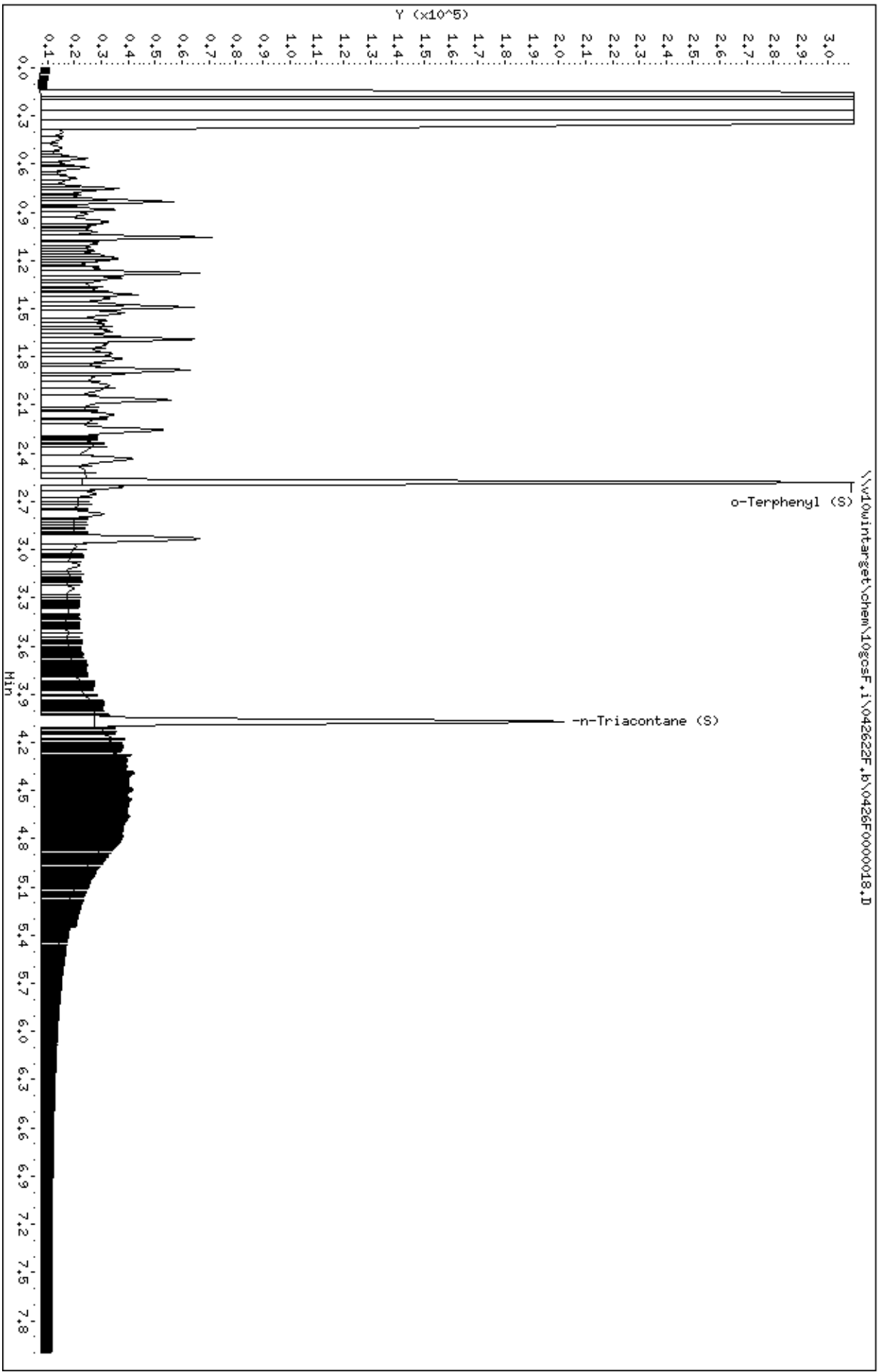
QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

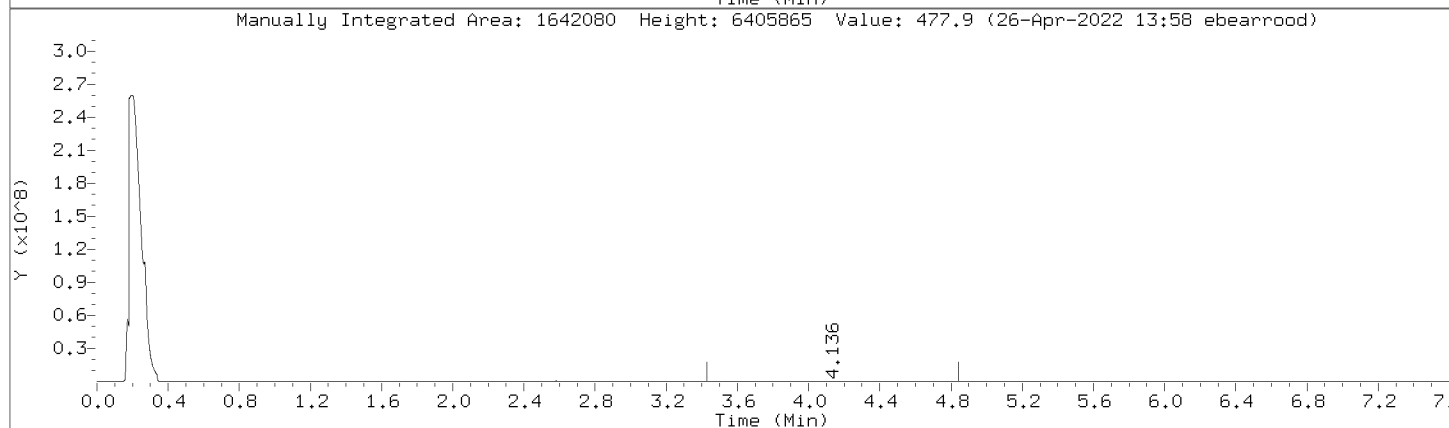
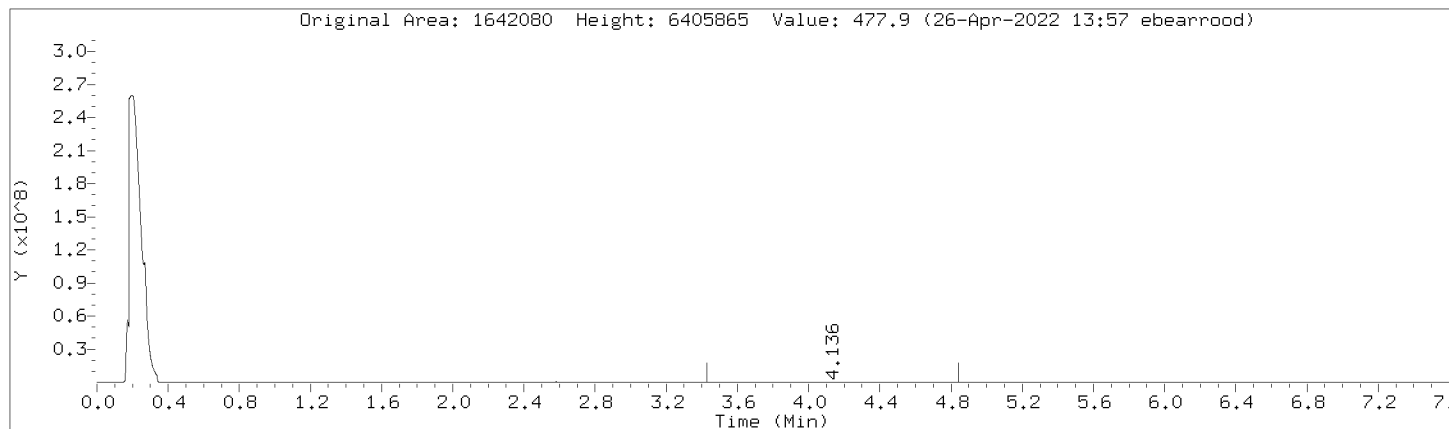
RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.



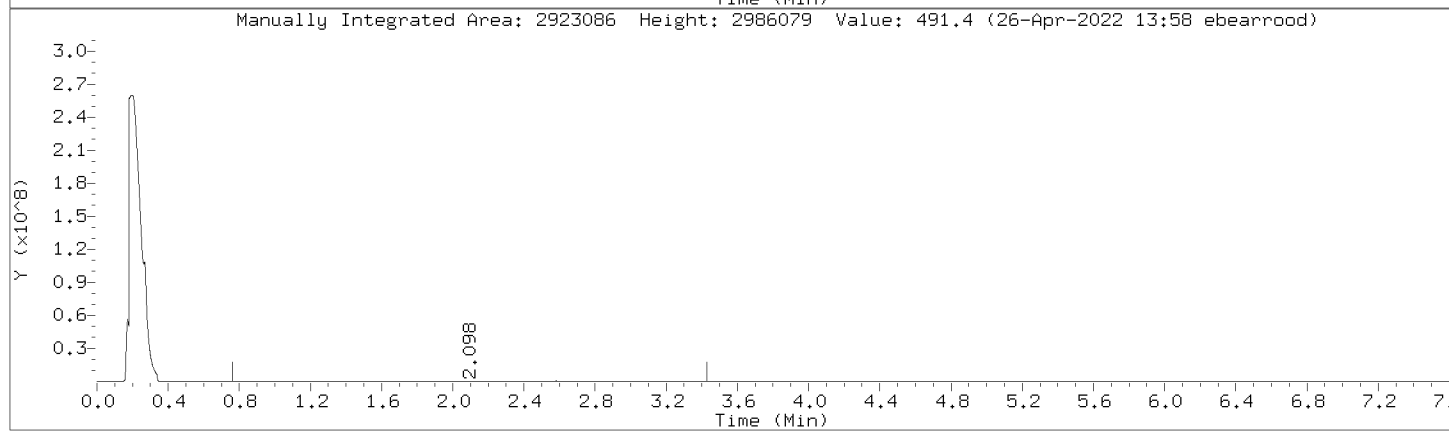
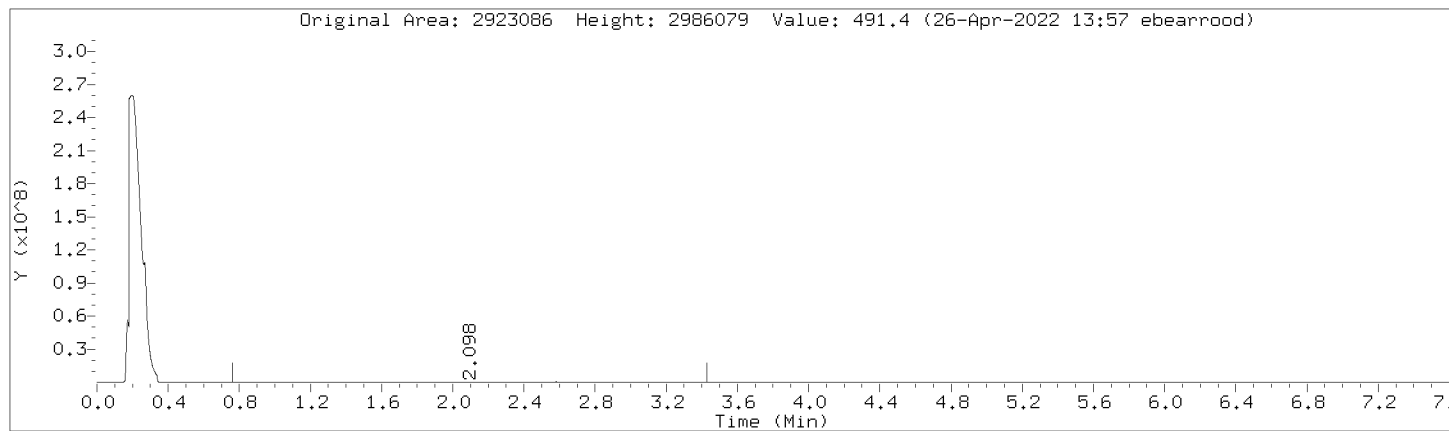
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000018.D  
Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000018.D  
Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000018.D

Injection Date: 26-APR-2022 13:36

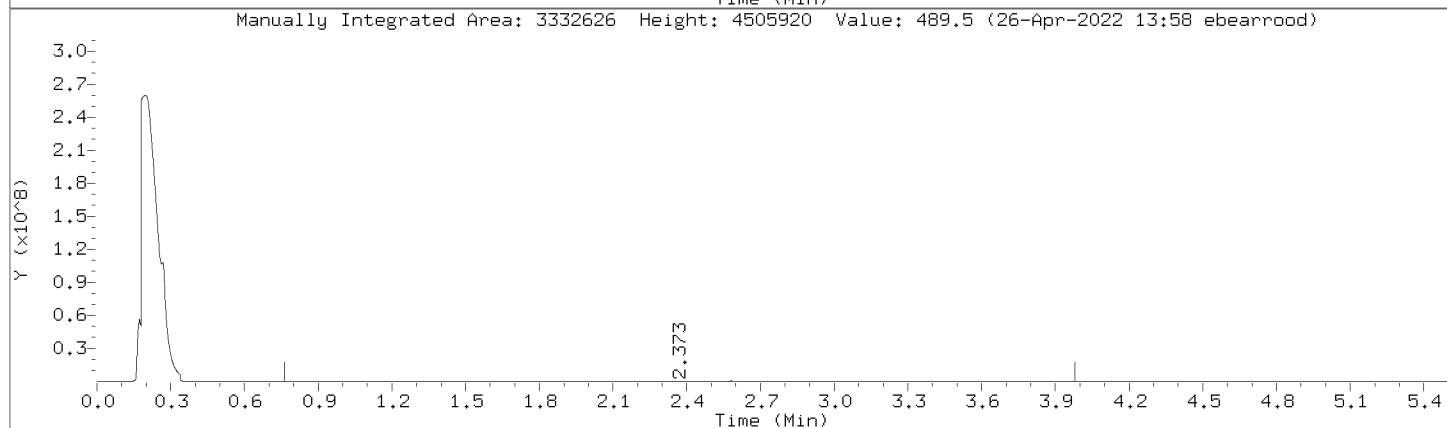
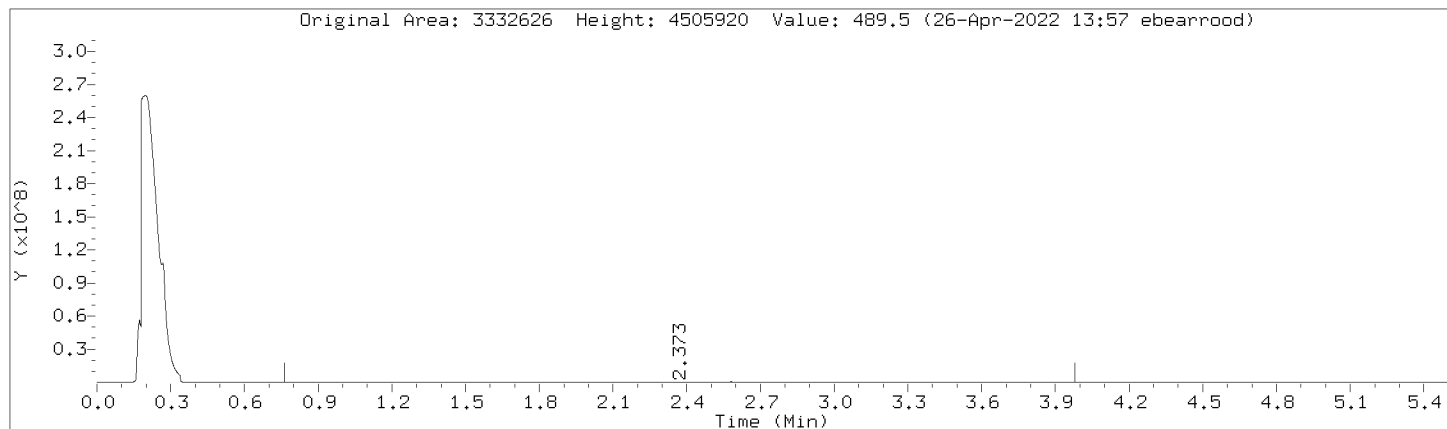
Instrument: 10gcsF.i

Lab Sample ID: DMO-CCV,362365:2

Compound: TPH-DRO (C10-C28)

Review Code: RNG

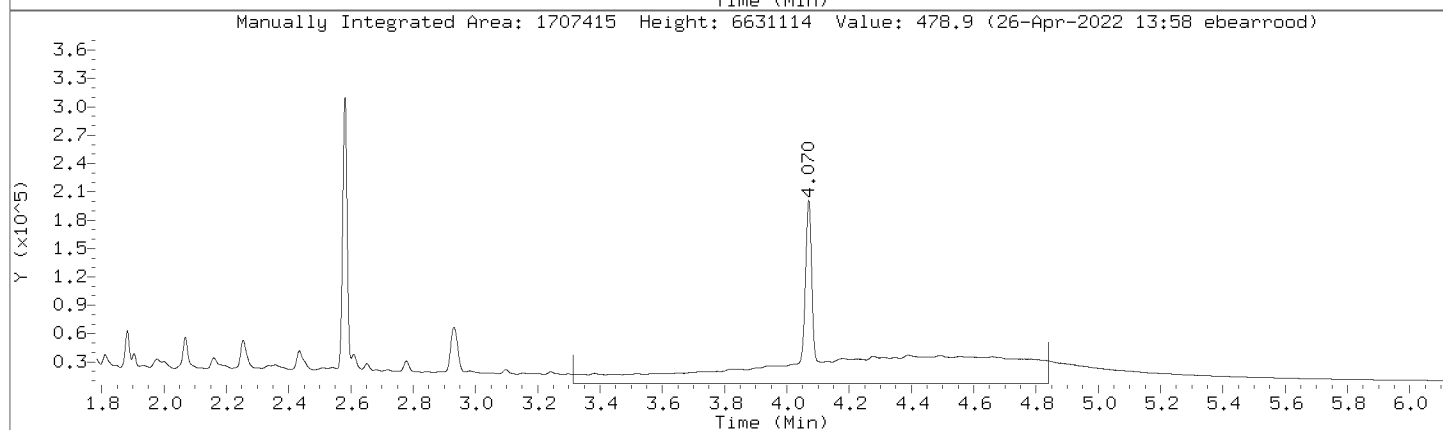
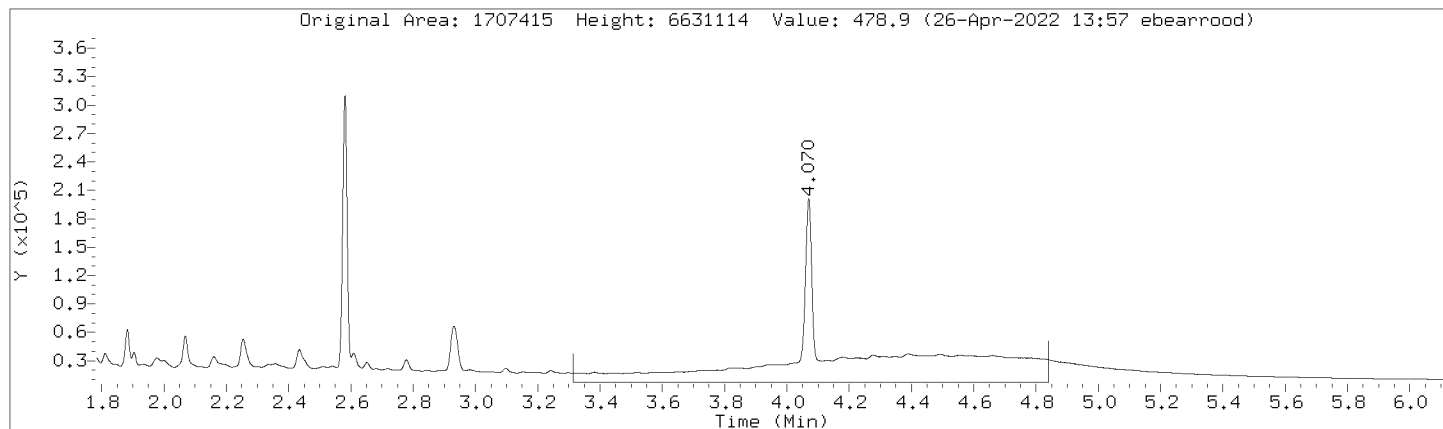
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000018.D  
Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range (C24-C36)  
CAS Number:

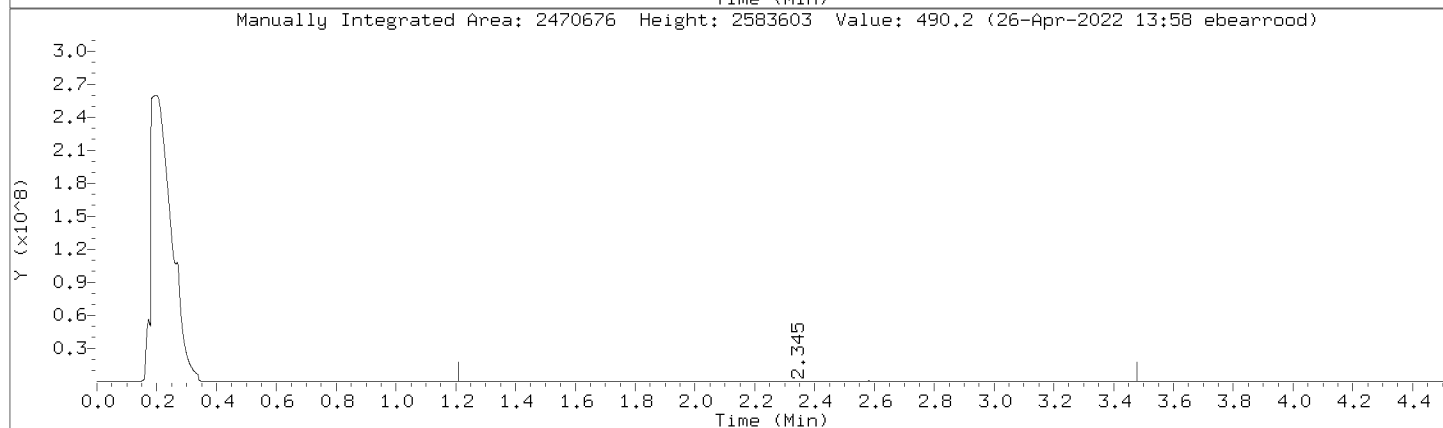
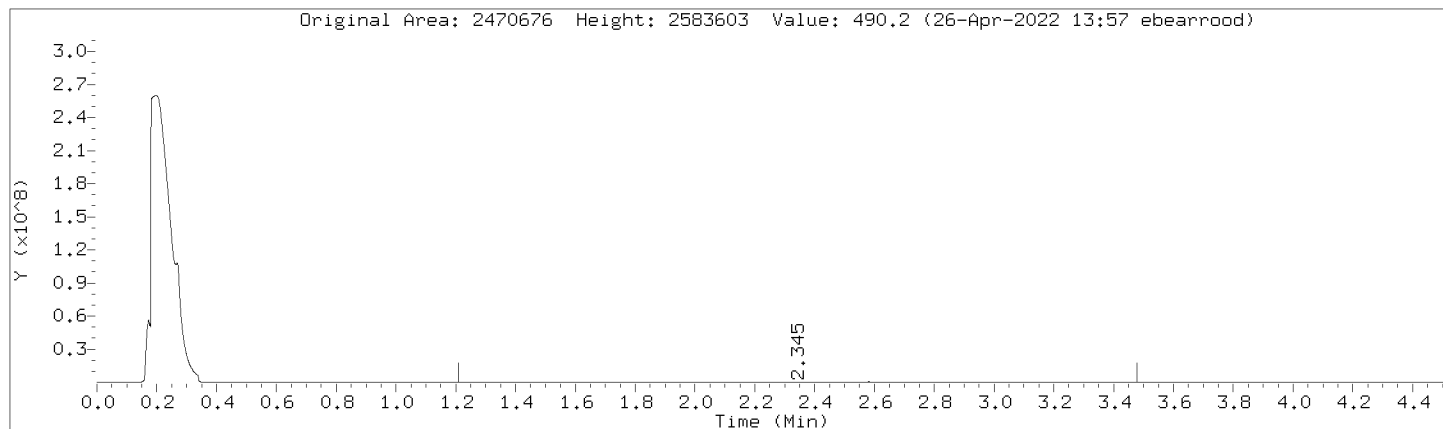
Review Code: RNG





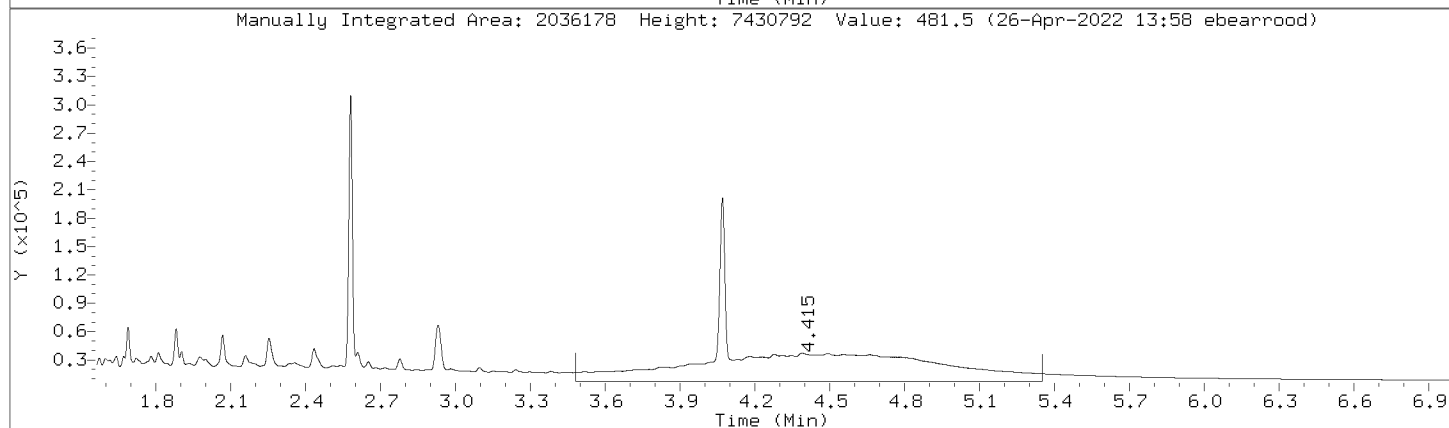
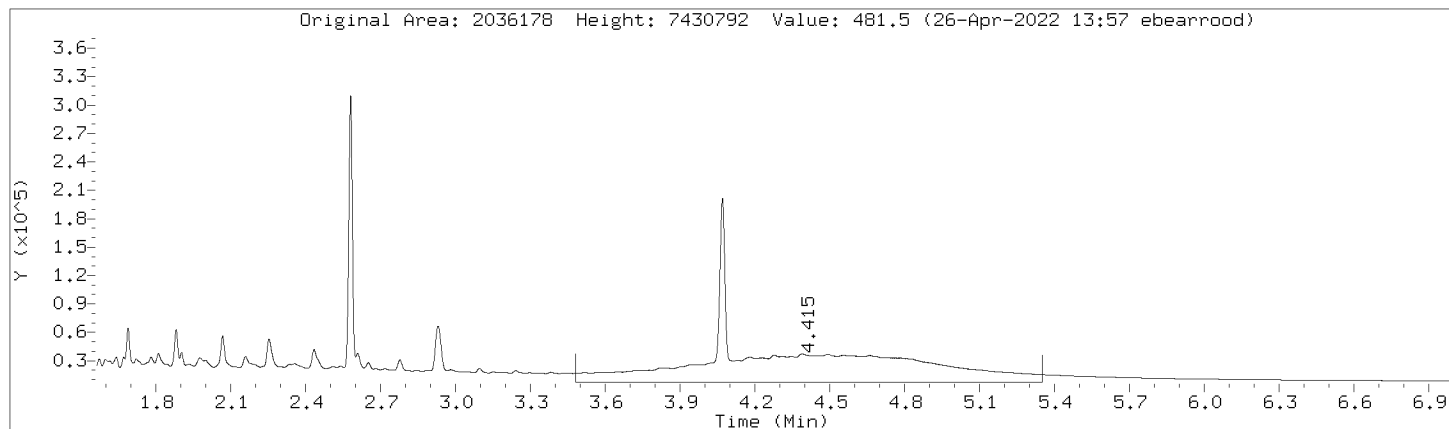
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Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



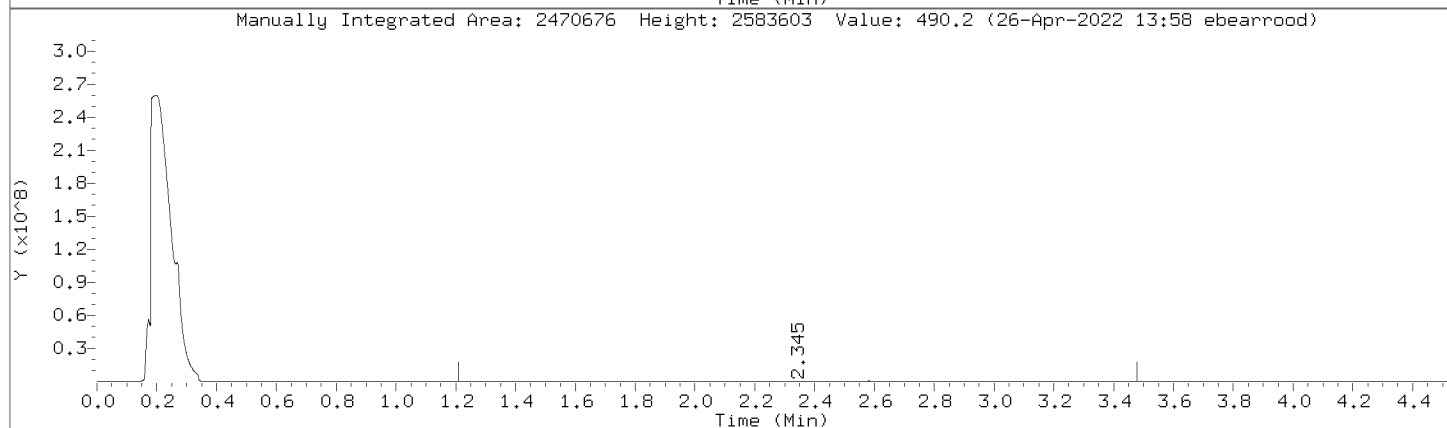
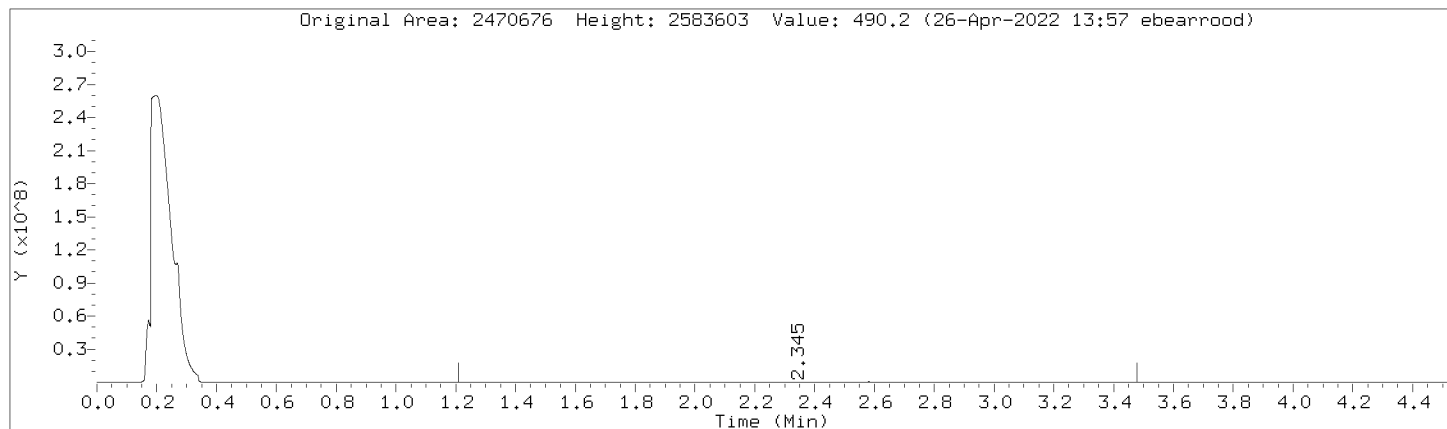
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Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



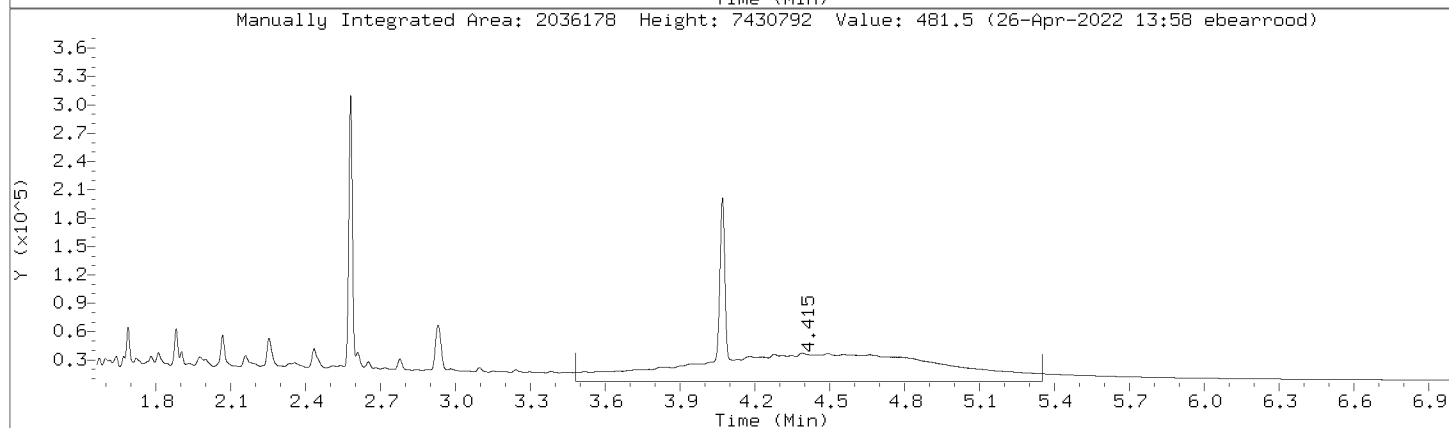
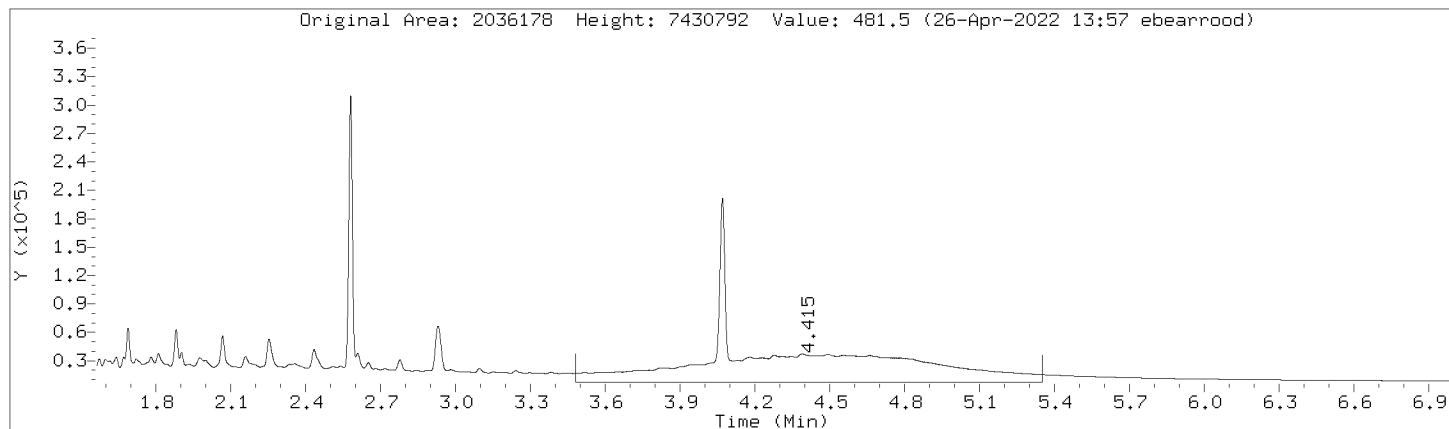
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Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



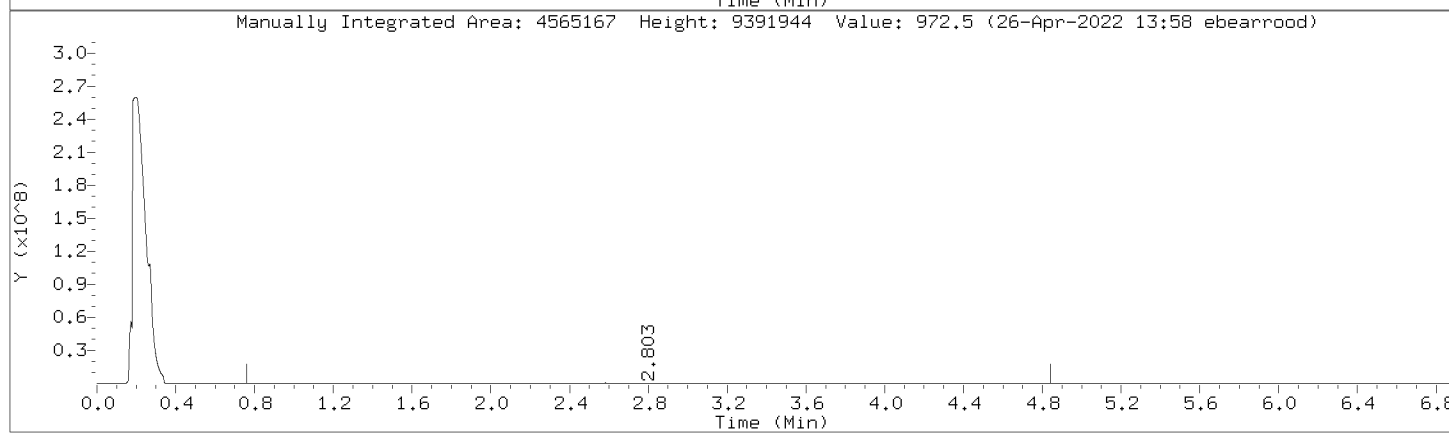
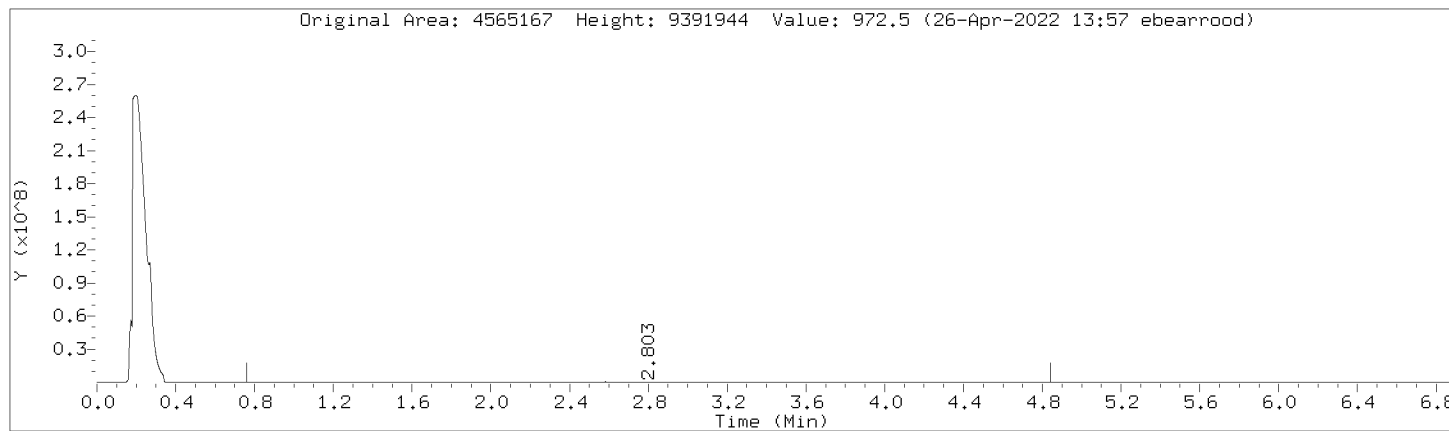
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Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



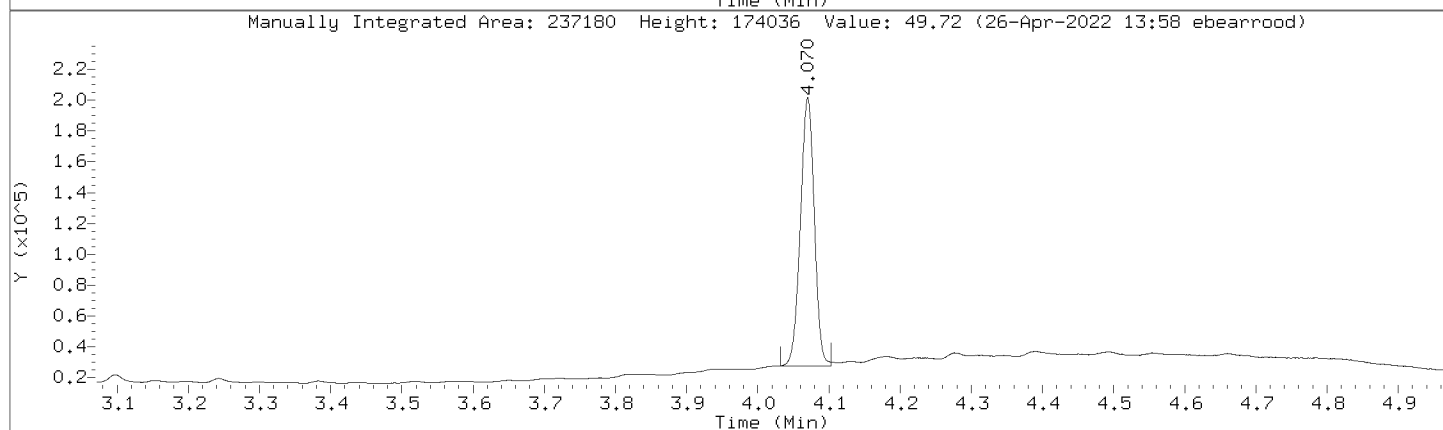
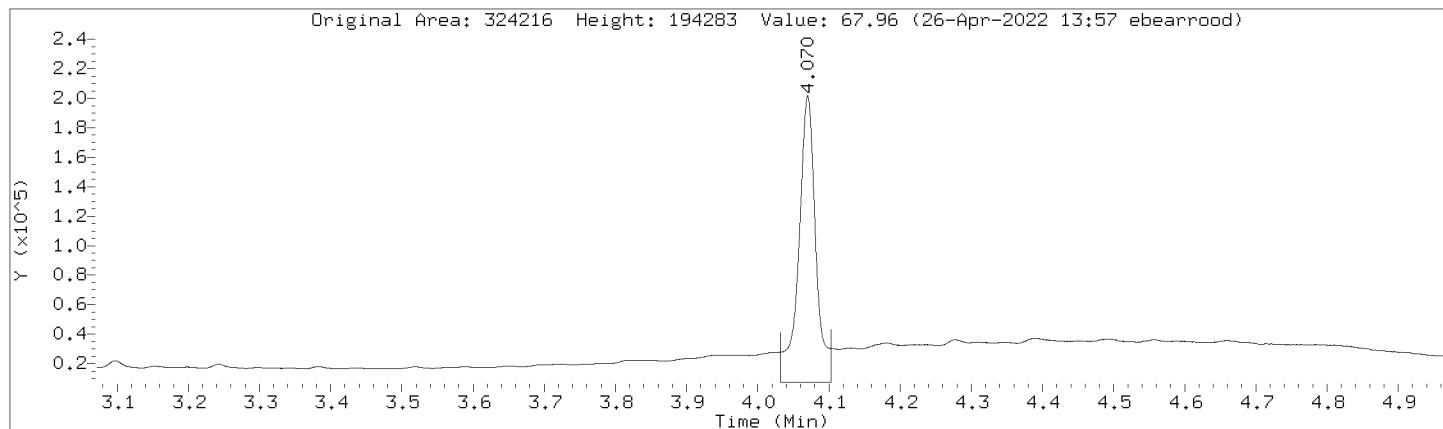
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Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



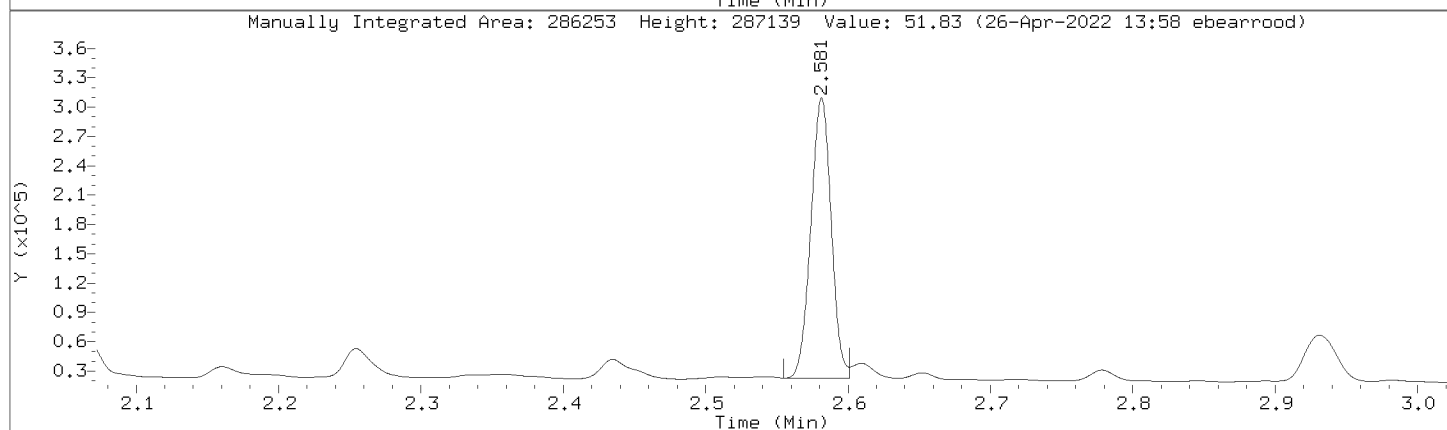
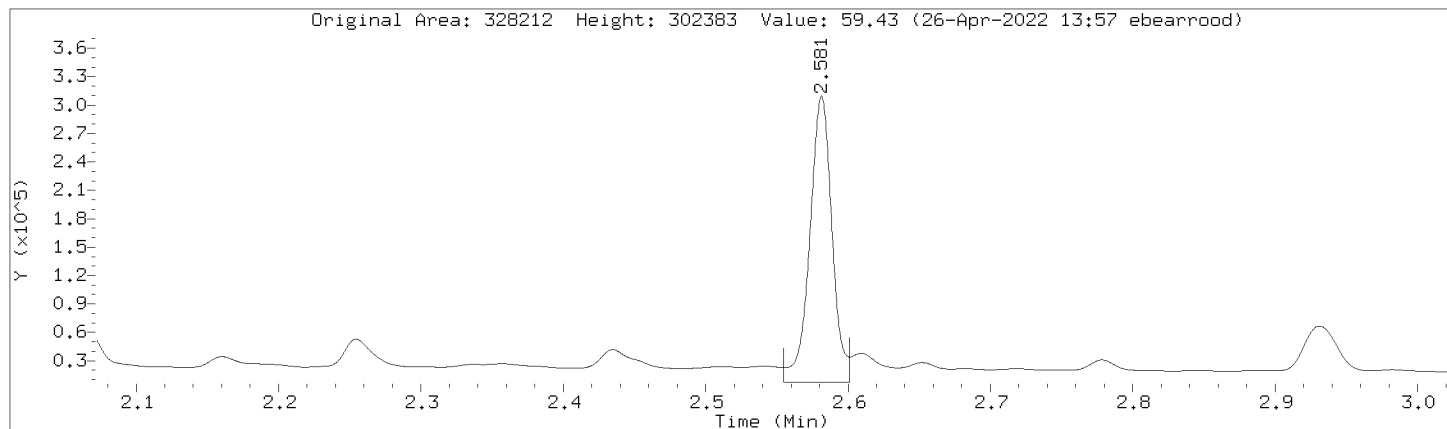
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Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000018.D  
 Injection Date: 26-APR-2022 13:36  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,362365:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1642080	1642080
DRO by AK 102	2923086	2923086
TPH-DRO (C10-C28)	3332626	3332626
Motor Oil Range (C24-C36)	1707415	1707415
Diesel Fuel Range	2470676	2470676
Motor Oil Range	2036178	2036178
Diesel Fuel Range SG	2470676	2470676
Motor Oil Range SG	2036178	2036178
C10-C36	4565167	4565167
n-Triacontane (S)	324216	237180
o-Terphenyl (S)	328212	286253

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000024.D  
 Lab Smp Id: DMO-CCV,362365:2 Client Smp ID: DMO-CCV,362365:2  
 Inj Date : 26-APR-2022 14:41  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,362365:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 16:13 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 2 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		2945001 500.000	496	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.572	2.568 0.004		288787 50.0000	52.3	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.071	4.072 -0.001		240127 50.0000	50.3	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		1666526 500.000	485	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		3363024 500.000	494	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		1726166 500.000	484	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		4611528 1000.00	983	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		2493514 500.000	495	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		2493514 500.000	495	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		2065916 500.000	489	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		2065916 500.000	489	(M) RNG
-----					



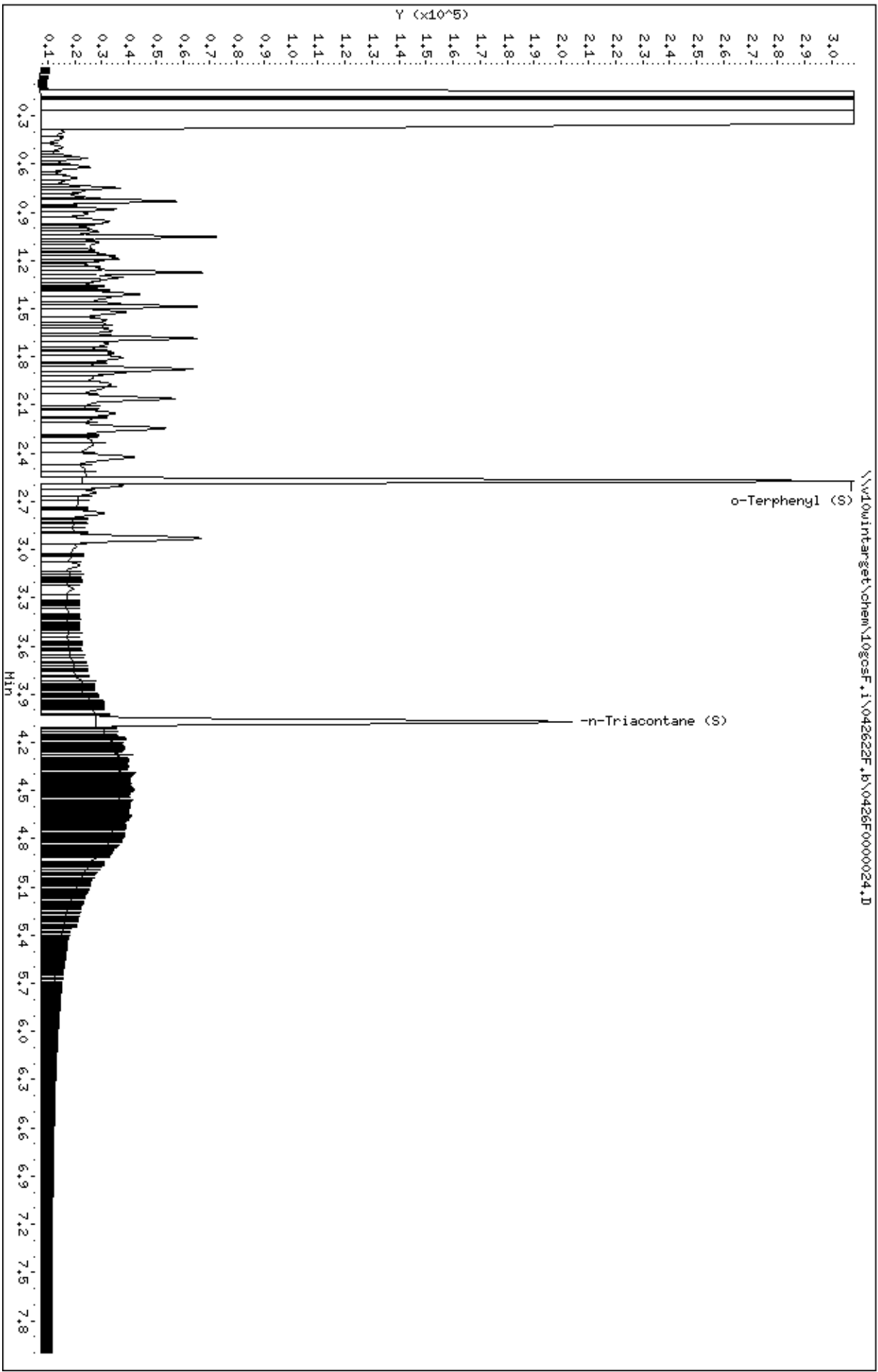
QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

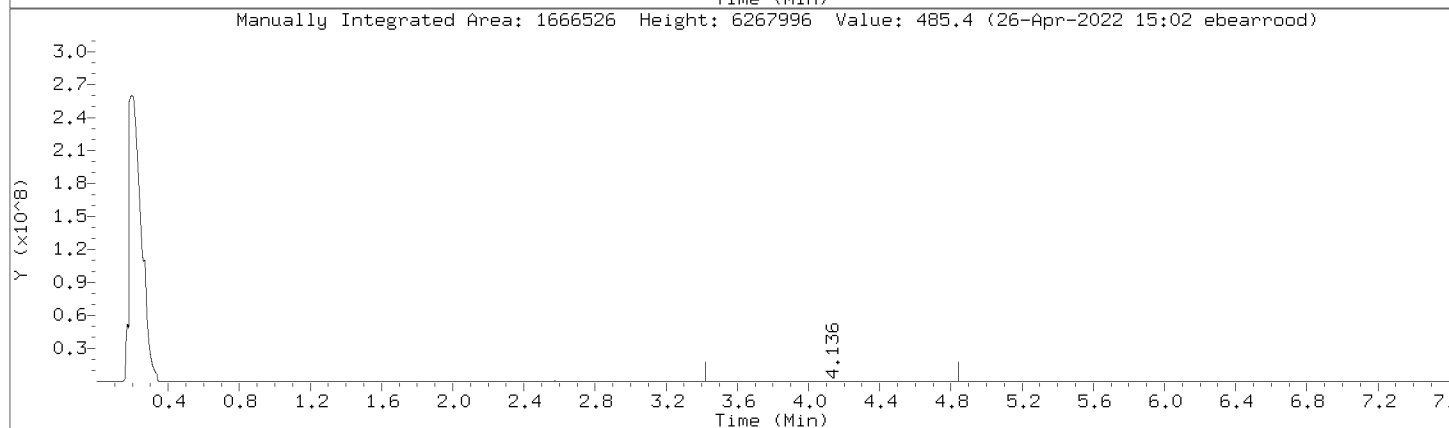
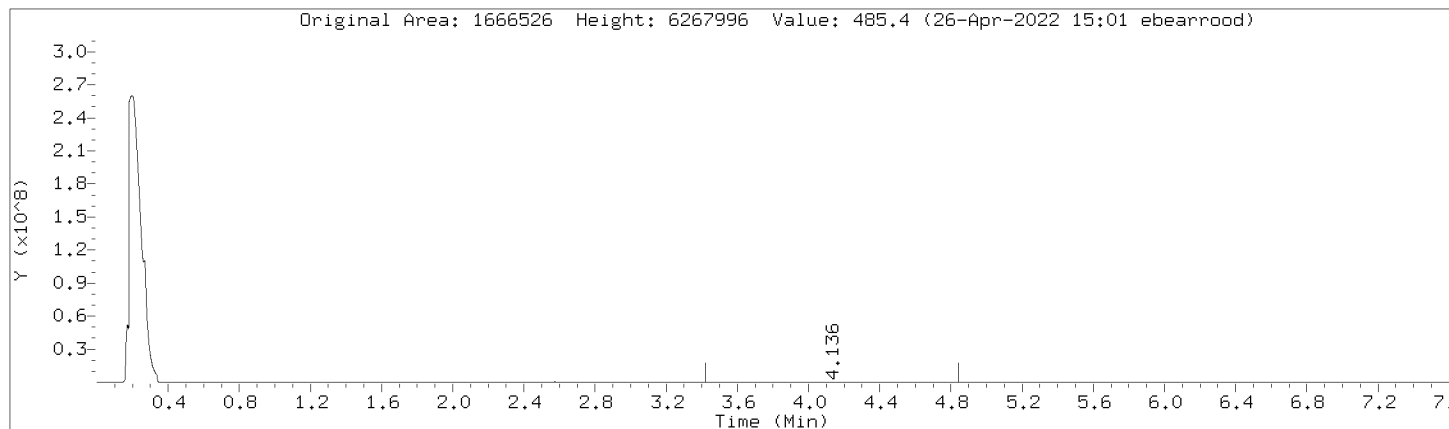
RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000024.D  
Injection Date: 26-APR-2022 14:41  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000024.D

Injection Date: 26-APR-2022 14:41

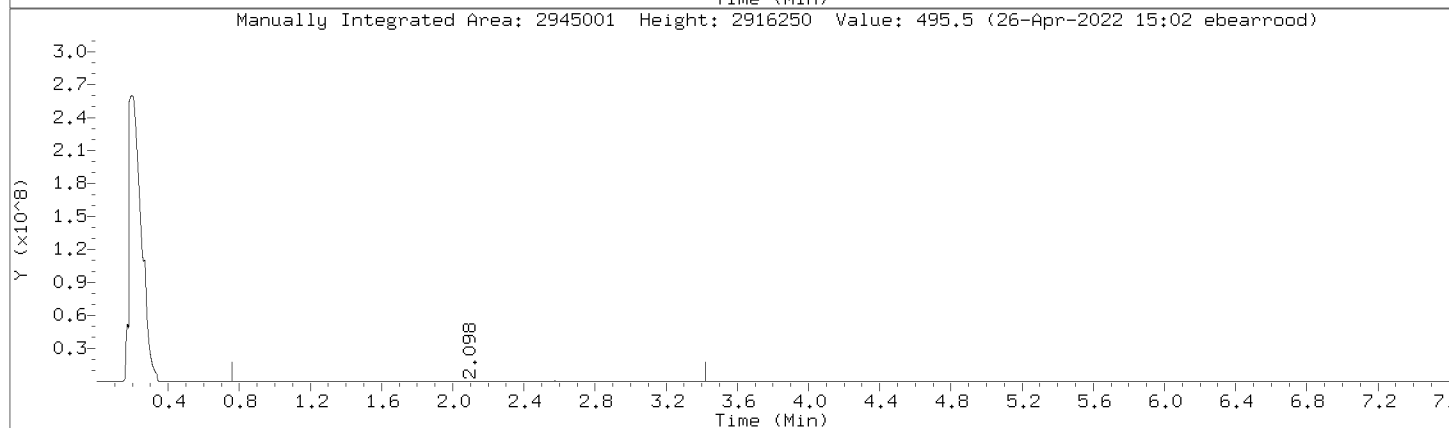
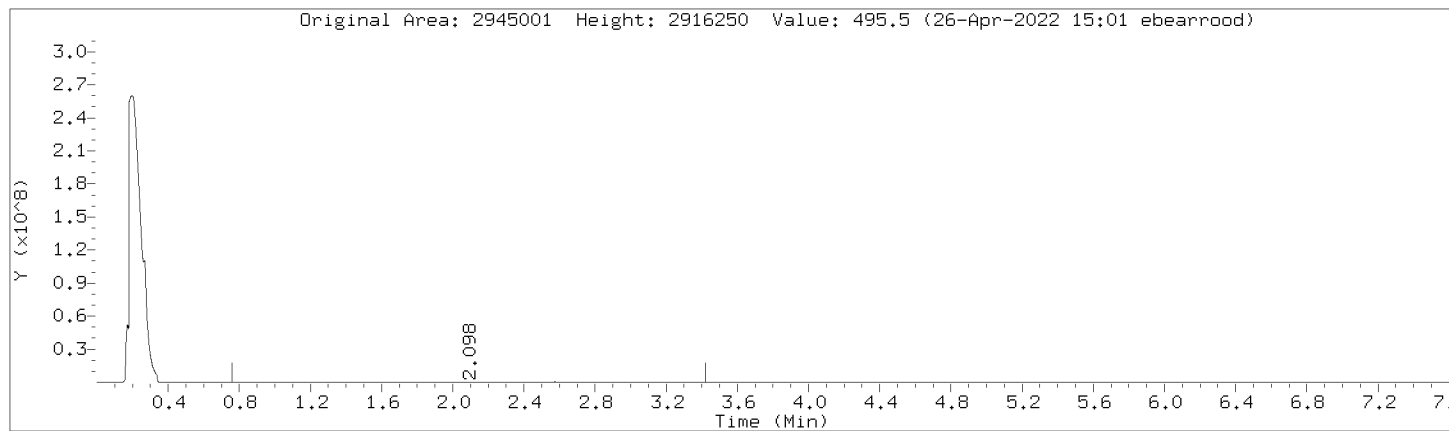
Instrument: 10gcsF.i

Lab Sample ID: DMO-CCV,362365:2

Compound: DRO by AK 102

Review Code: RNG

CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000024.D

Injection Date: 26-APR-2022 14:41

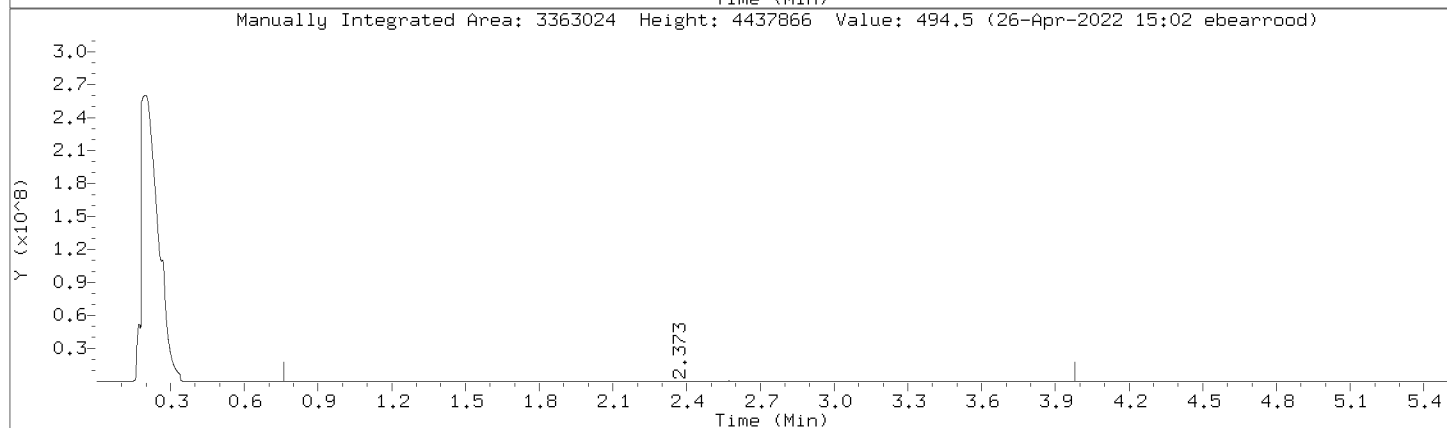
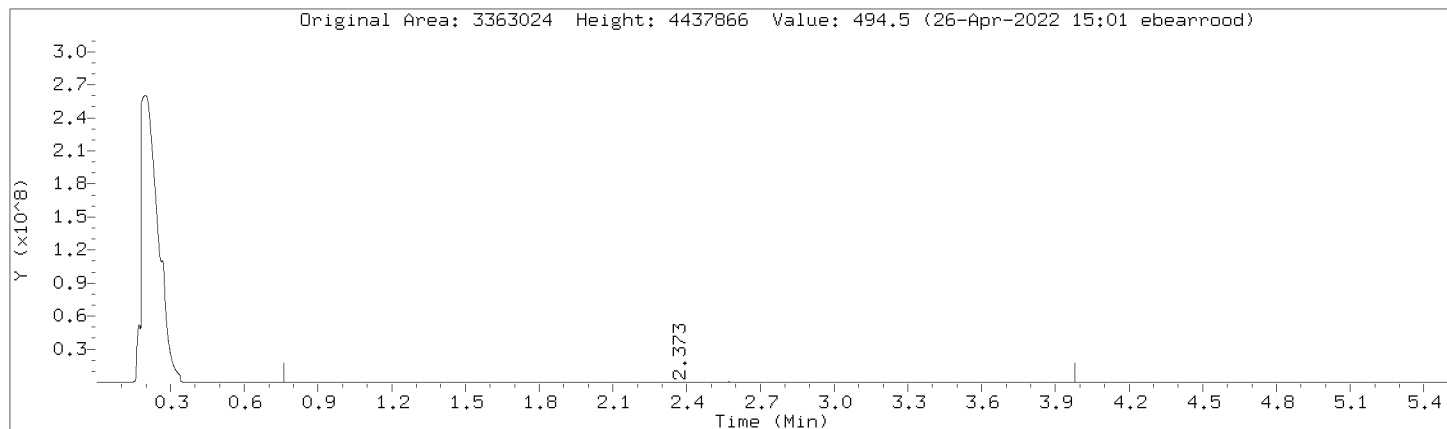
Instrument: 10gcsF.i

Lab Sample ID: DMO-CCV,362365:2

Compound: TPH-DRO (C10-C28)

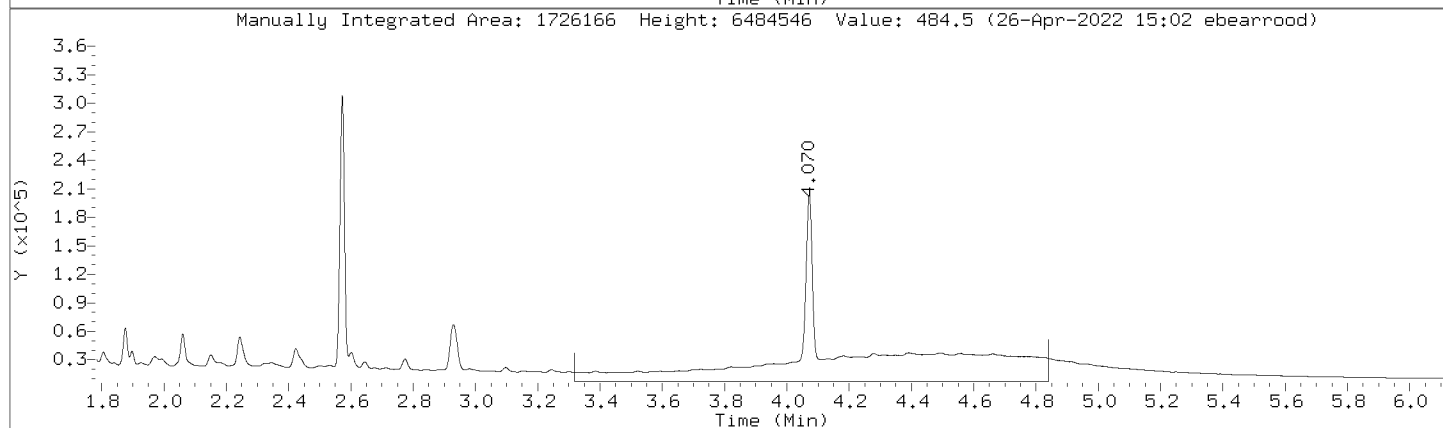
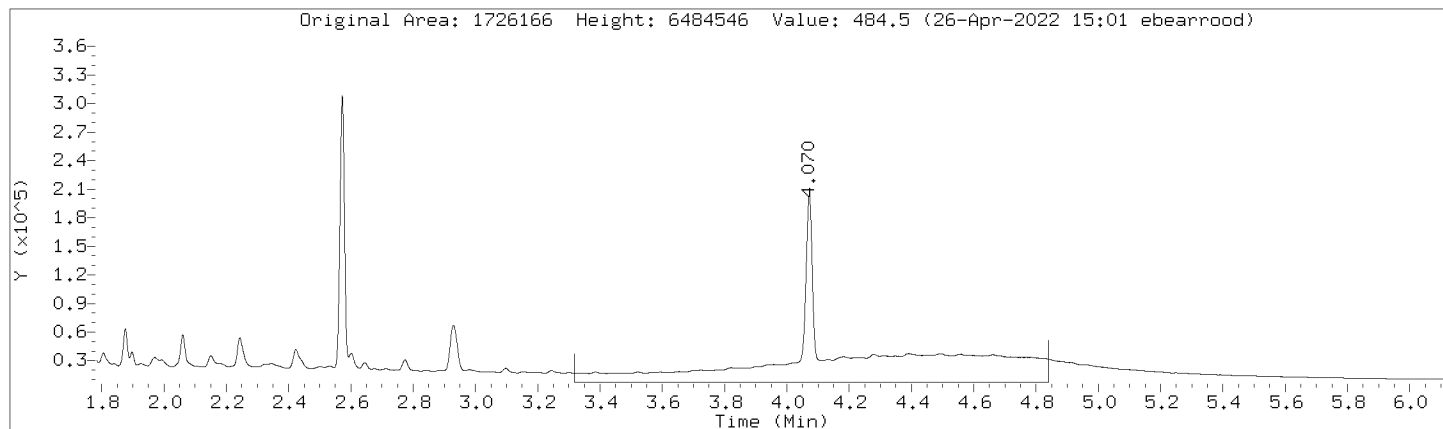
Review Code: RNG

CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000024.D  
Injection Date: 26-APR-2022 14:41  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000024.D

Injection Date: 26-APR-2022 14:41

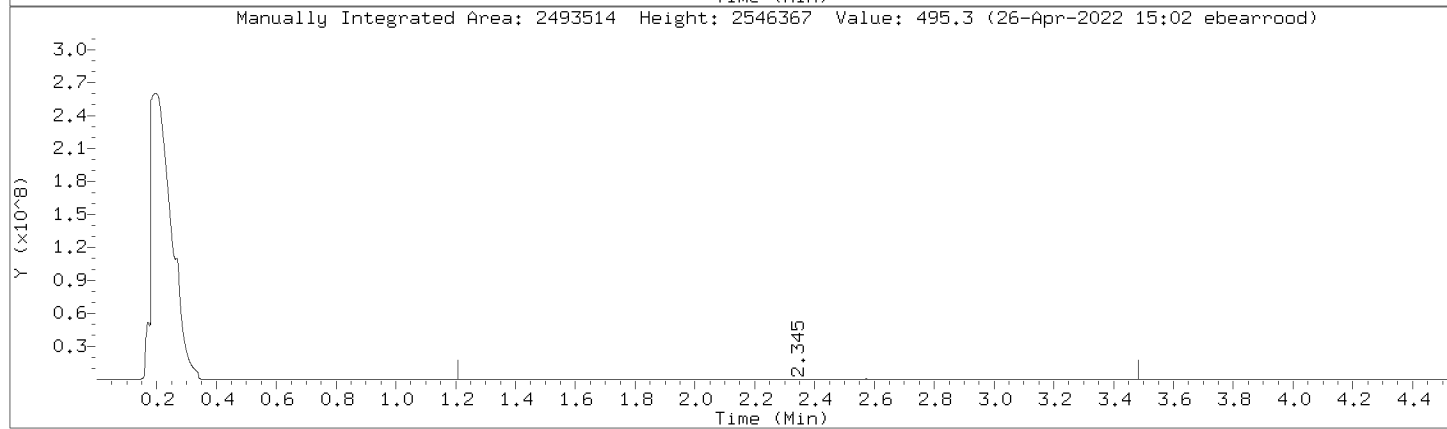
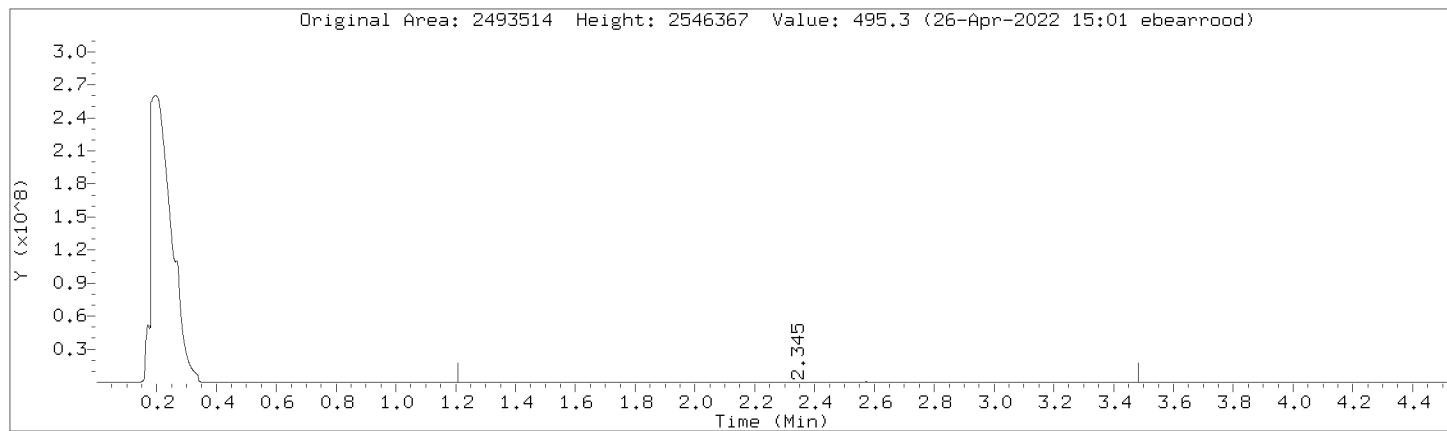
Instrument: 10gcsF.i

Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range

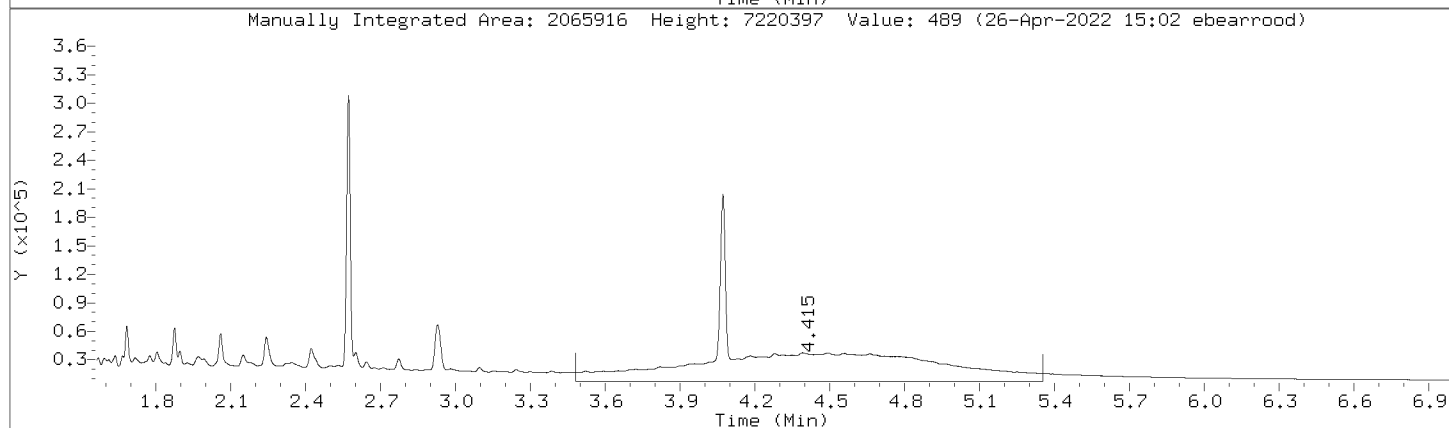
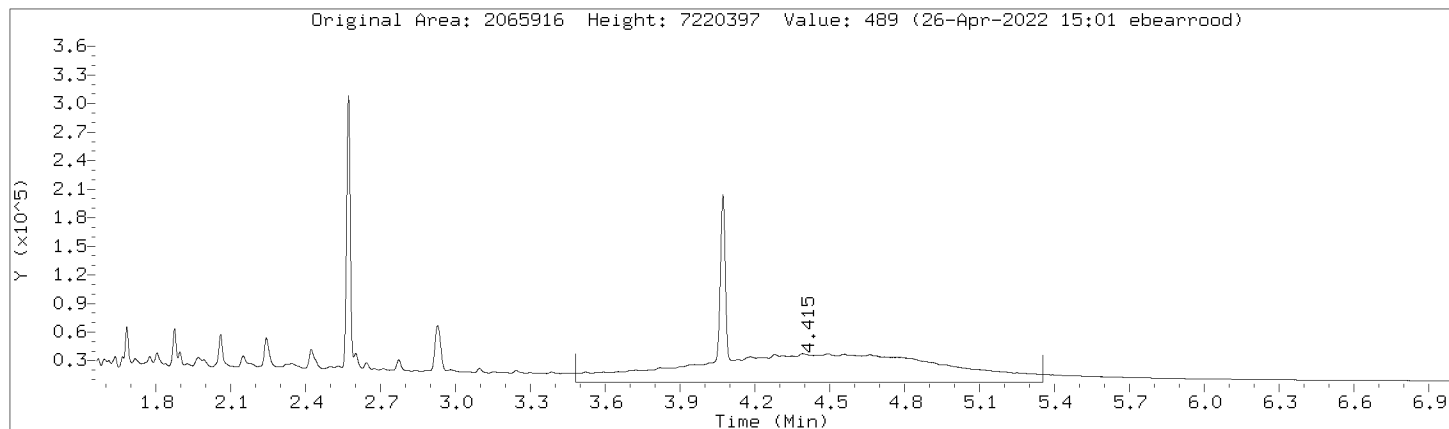
Review Code: RNG

CAS Number:



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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000024.D

Injection Date: 26-APR-2022 14:41

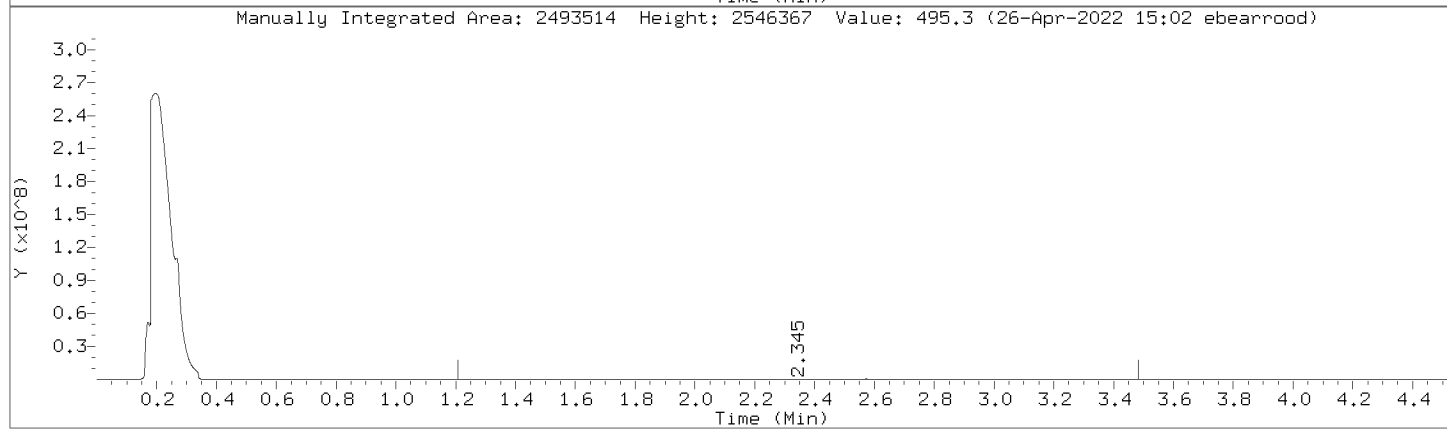
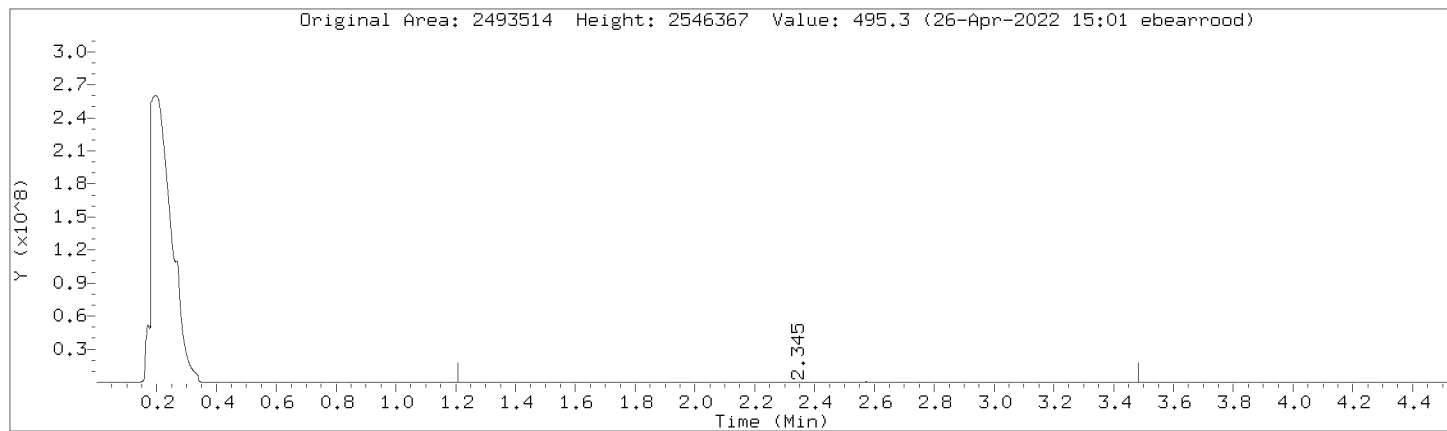
Instrument: 10gcsF.i

Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range SG

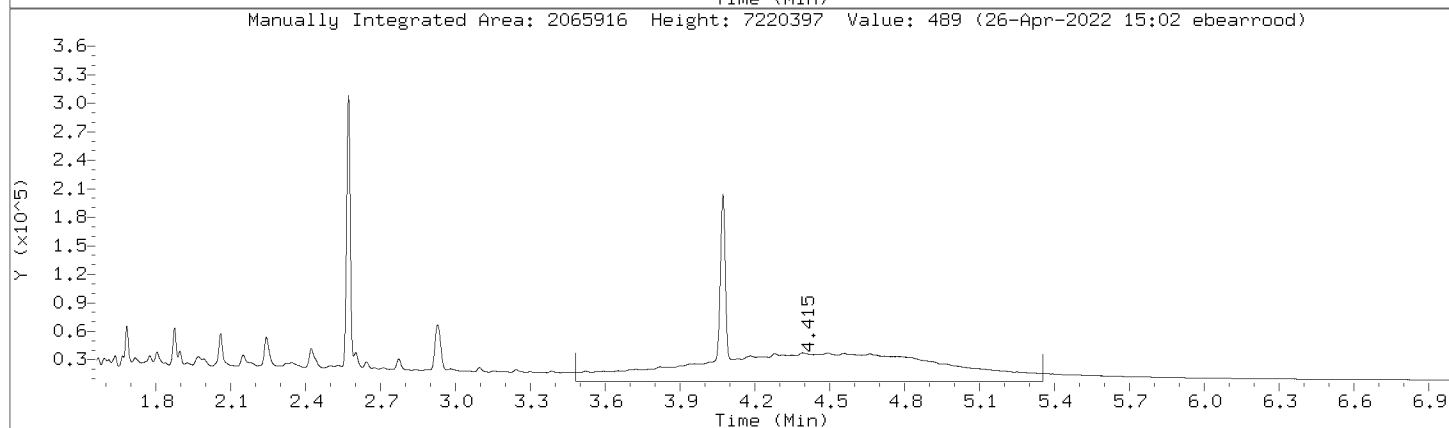
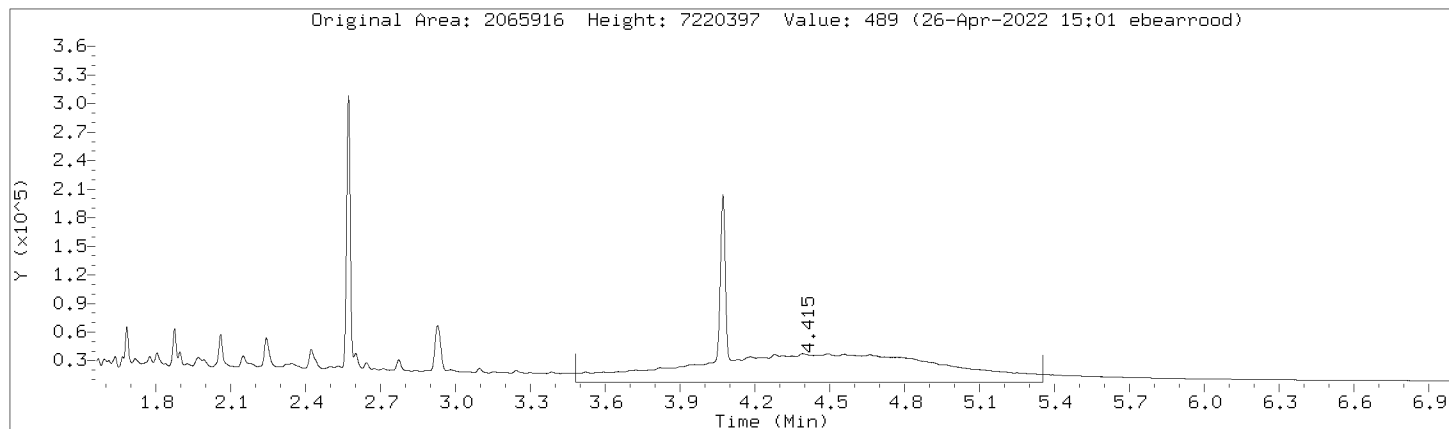
Review Code: RNG

CAS Number:



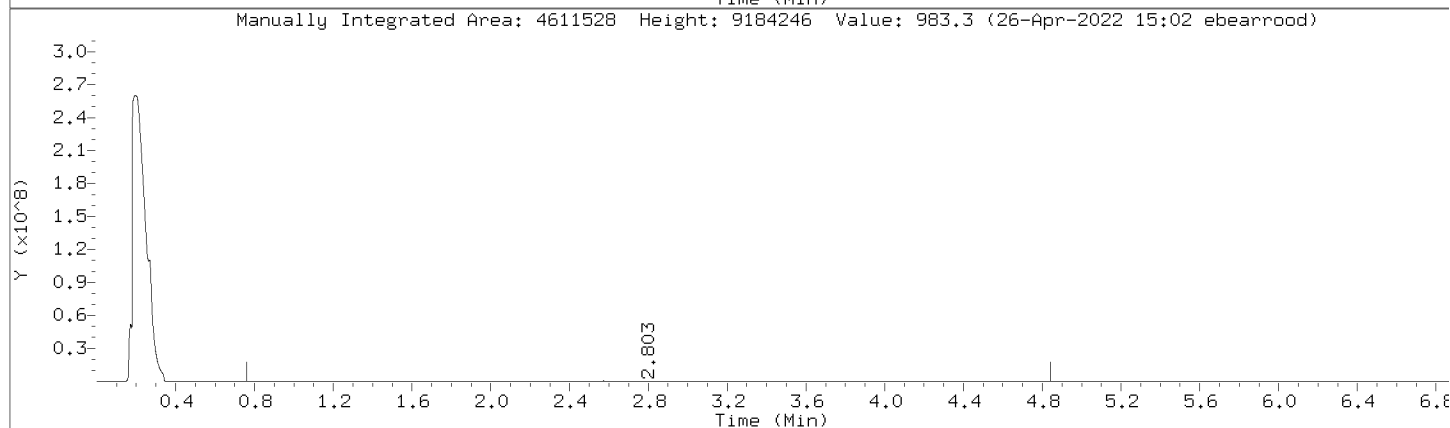
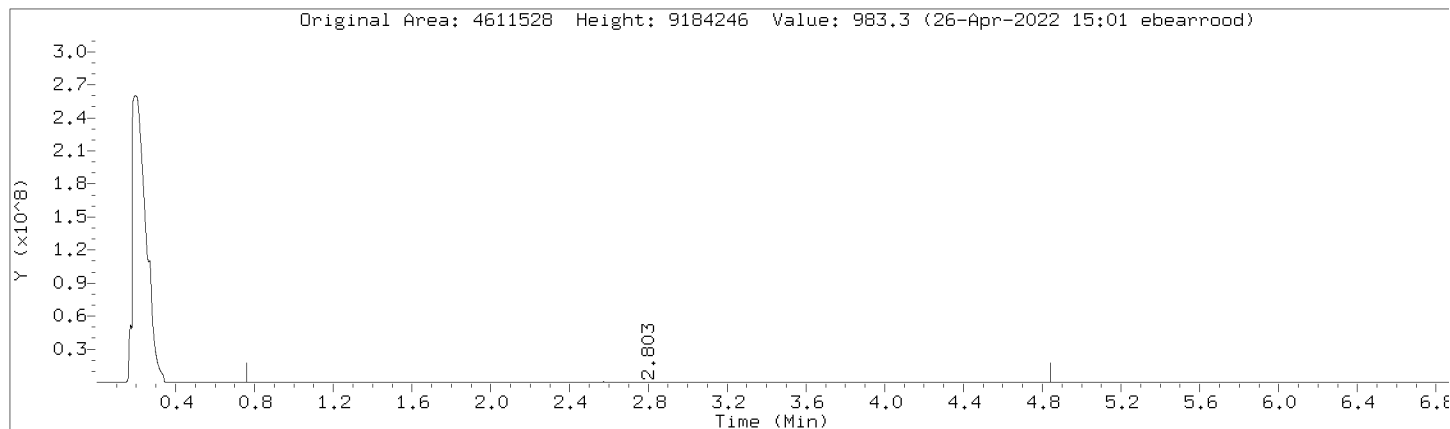
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000024.D  
Injection Date: 26-APR-2022 14:41  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



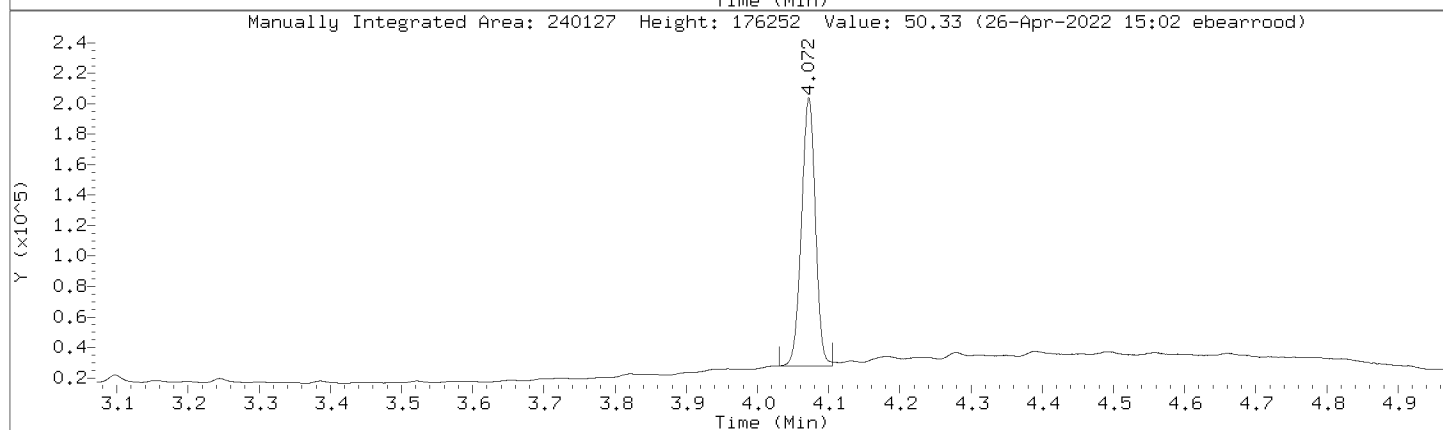
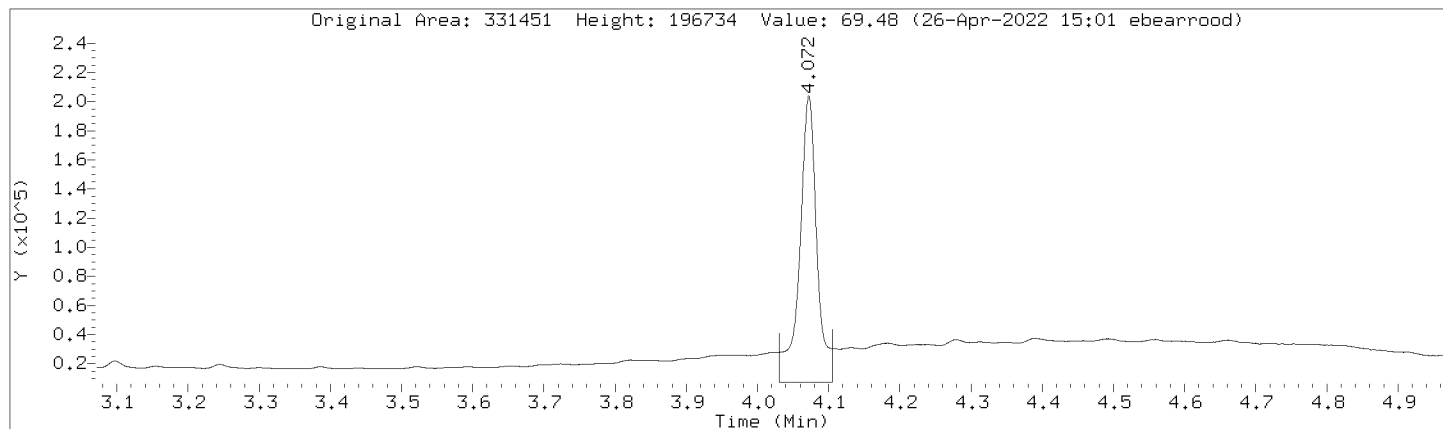
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000024.D  
Injection Date: 26-APR-2022 14:41  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



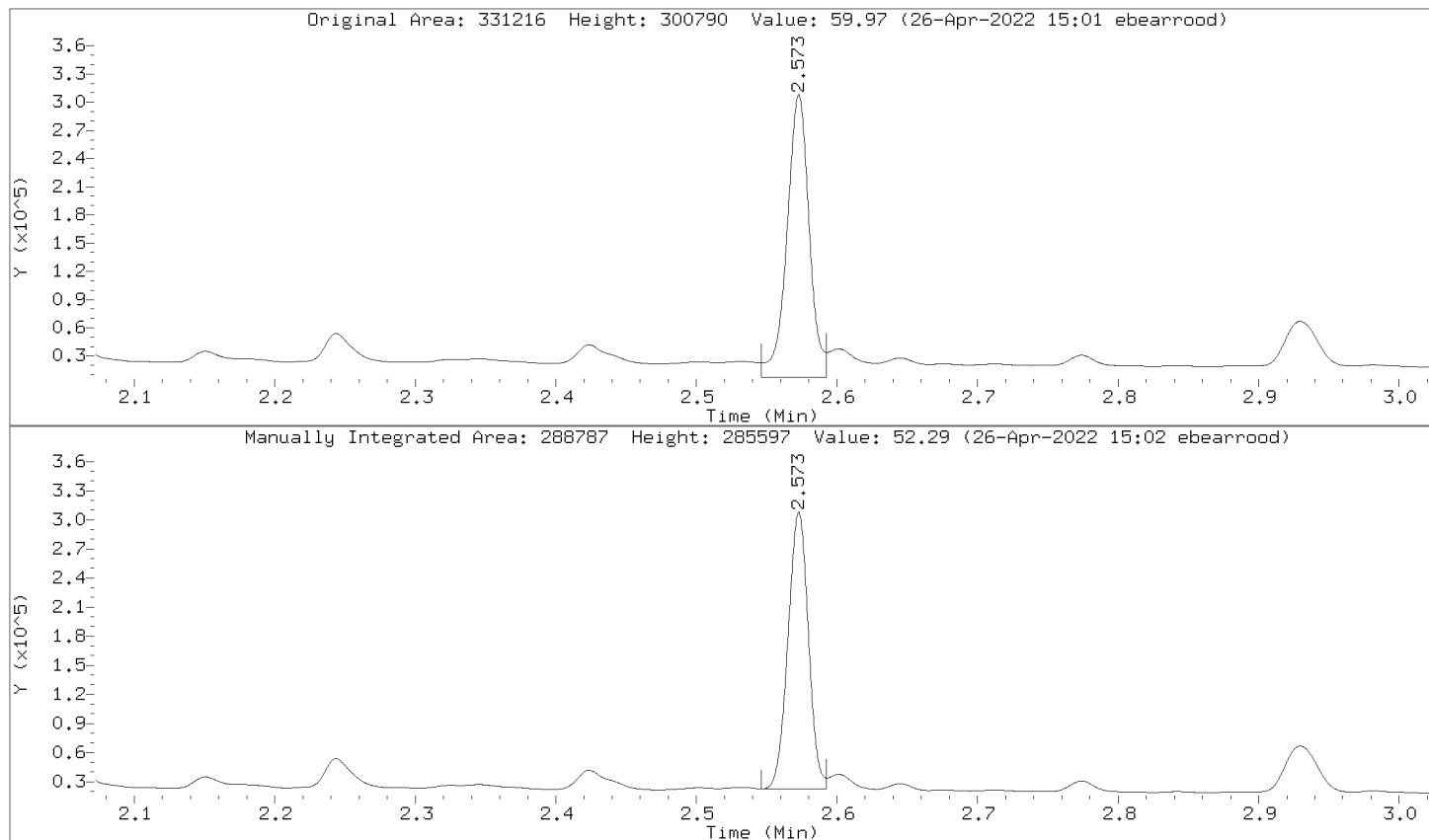
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Injection Date: 26-APR-2022 14:41  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000024.D  
 Injection Date: 26-APR-2022 14:41  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,362365:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1666526	1666526
DRO by AK 102	2945001	2945001
TPH-DRO (C10-C28)	3363024	3363024
Motor Oil Range (C24-C36)	1726166	1726166
Diesel Fuel Range	2493514	2493514
Motor Oil Range	2065916	2065916
Diesel Fuel Range SG	2493514	2493514
Motor Oil Range SG	2065916	2065916
C10-C36	4611528	4611528
n-Triacontane (S)	331451	240127
o-Terphenyl (S)	331216	288787

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000030.D  
 Lab Smp Id: DMO-CCV,362365:2 Client Smp ID: DMO-CCV,362365:2  
 Inj Date : 26-APR-2022 15:45  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,362365:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 27-Apr-2022 09:26 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 2 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		2954039 500.000	497	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.568	2.535 0.033		292483 50.0000	53.0	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.072	4.071 0.001		242593 50.0000	50.8	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		1711593 500.000	499	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		3375733 500.000	497	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		1792541 500.000	504	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		4665632 1000.00	996	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		2502886 500.000	497	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		2502886 500.000	497	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		2136064 500.000	506	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		2136064 500.000	506	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 15:45

Client ID: DMO-CCV,362365;2

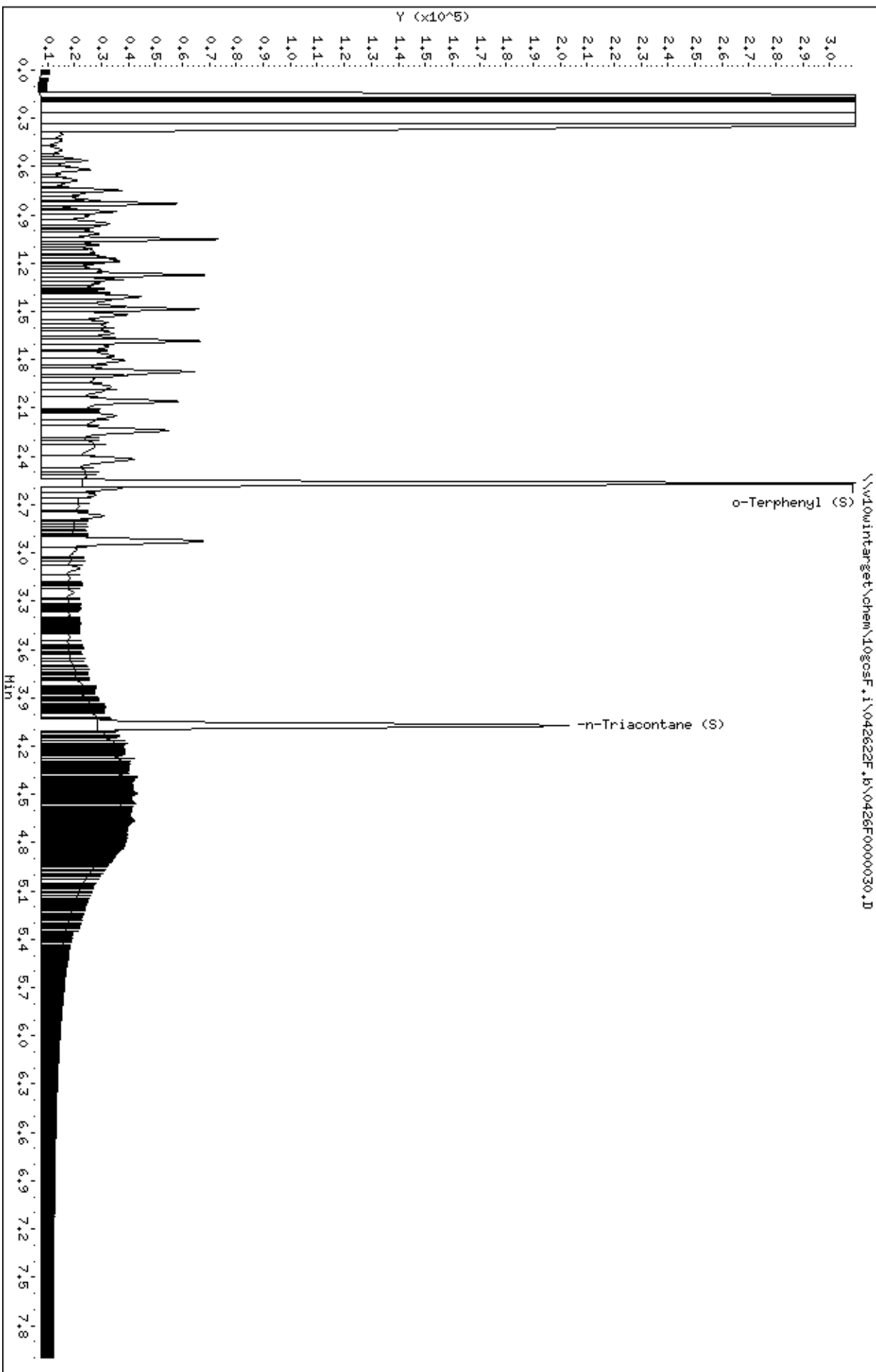
Sample Info: DMO-CCV,362365;2

Instrument: 10gosc.f.1

Operator: EB3

Column diameter: 0.32

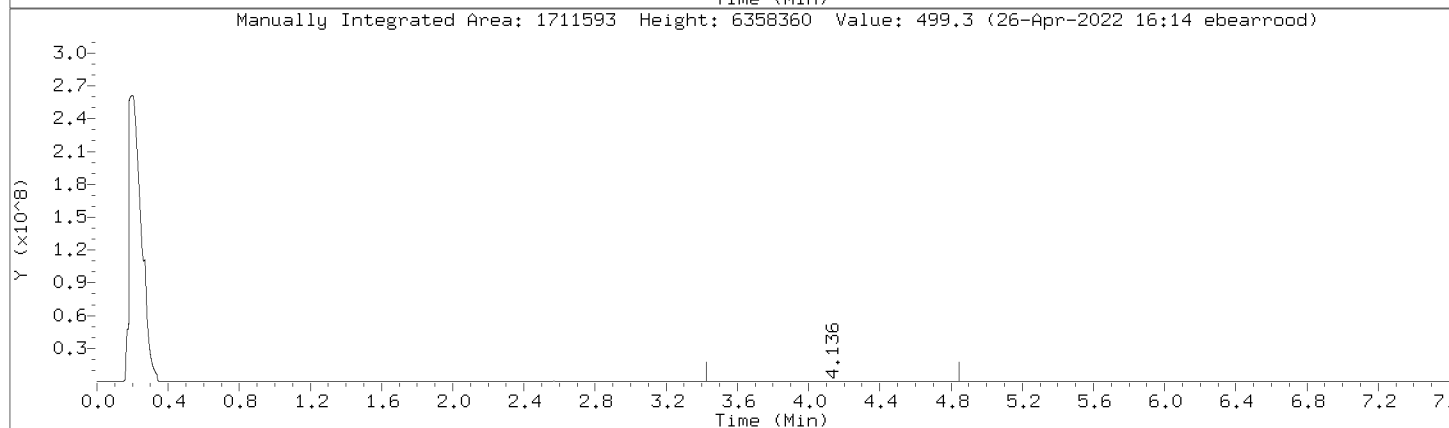
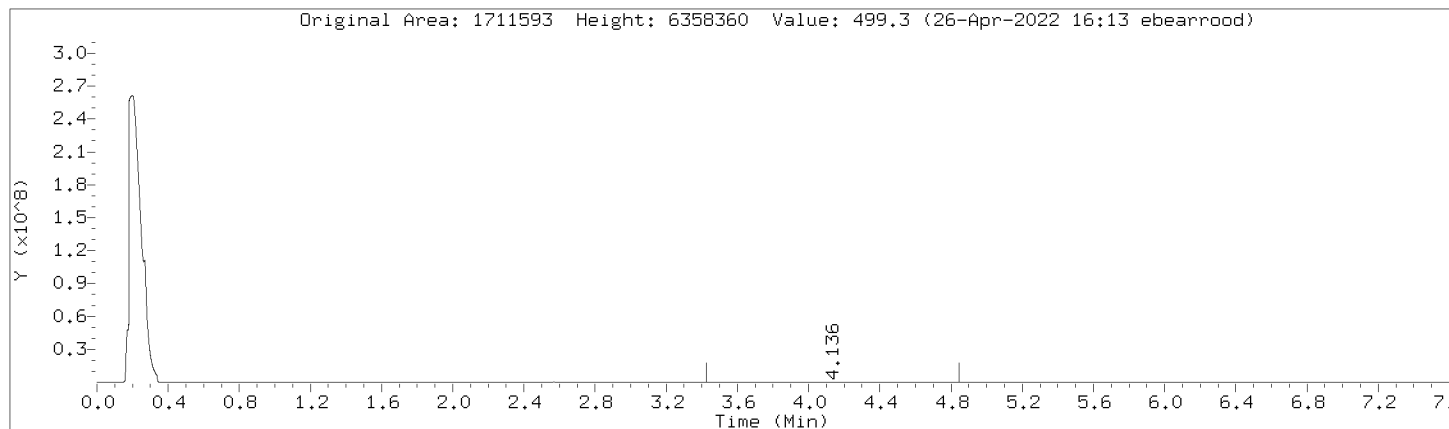
Column phase: DB-5-MS21250010





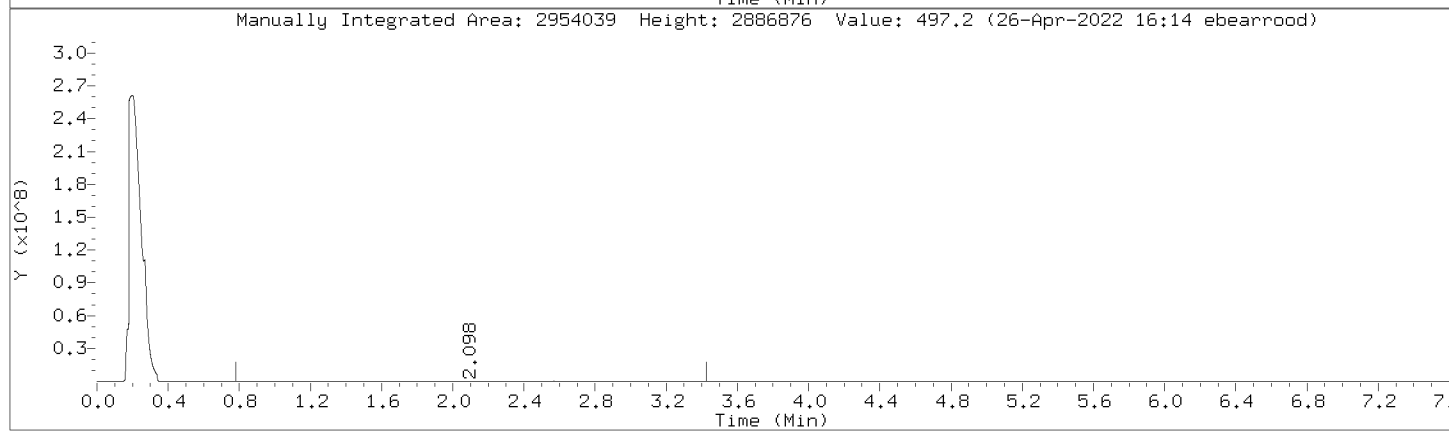
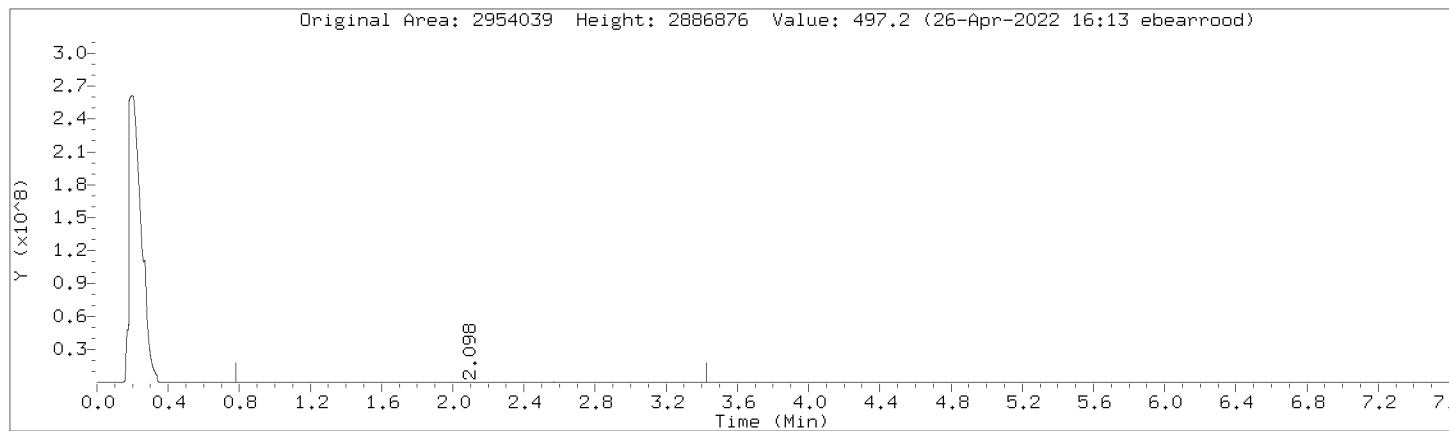
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000030.D  
Injection Date: 26-APR-2022 15:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



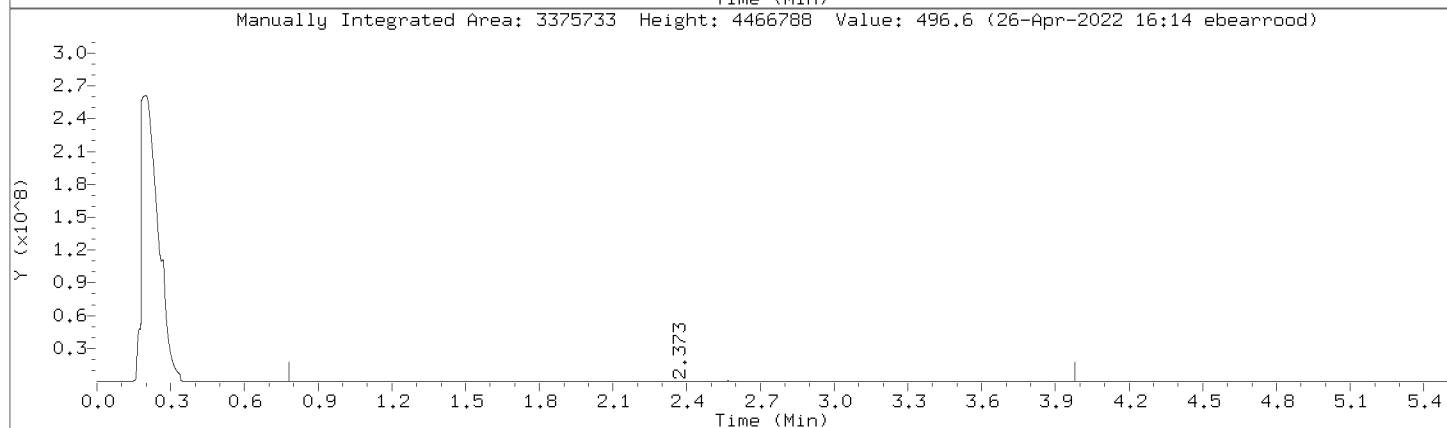
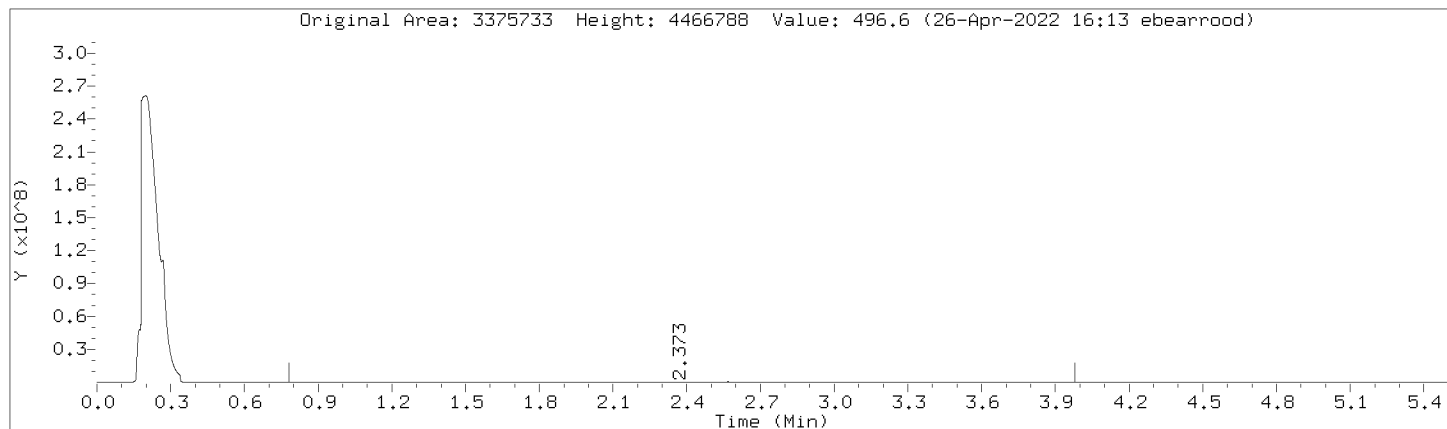
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000030.D  
Injection Date: 26-APR-2022 15:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



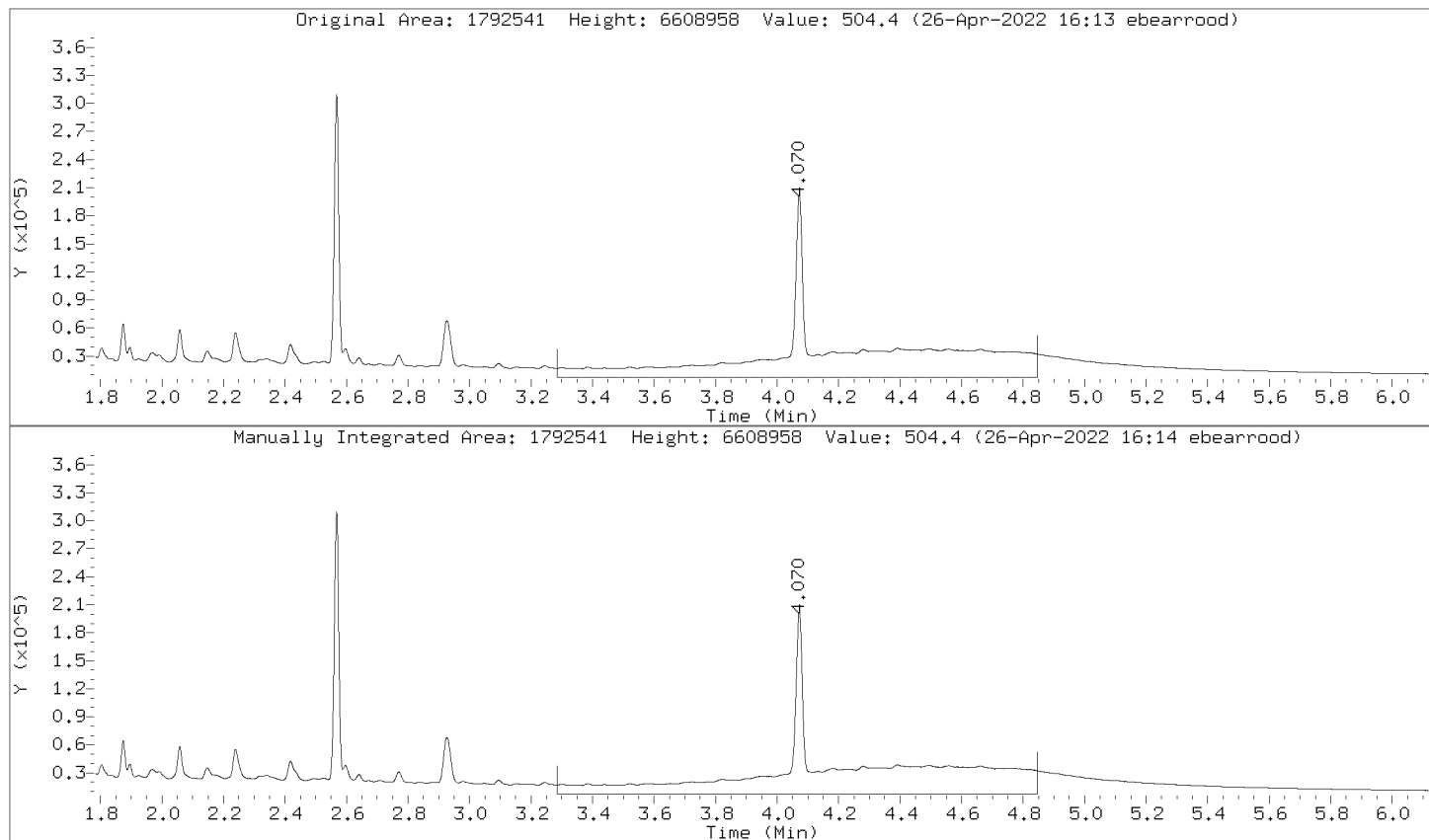
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Injection Date: 26-APR-2022 15:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000030.D  
Injection Date: 26-APR-2022 15:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000030.D

Injection Date: 26-APR-2022 15:45

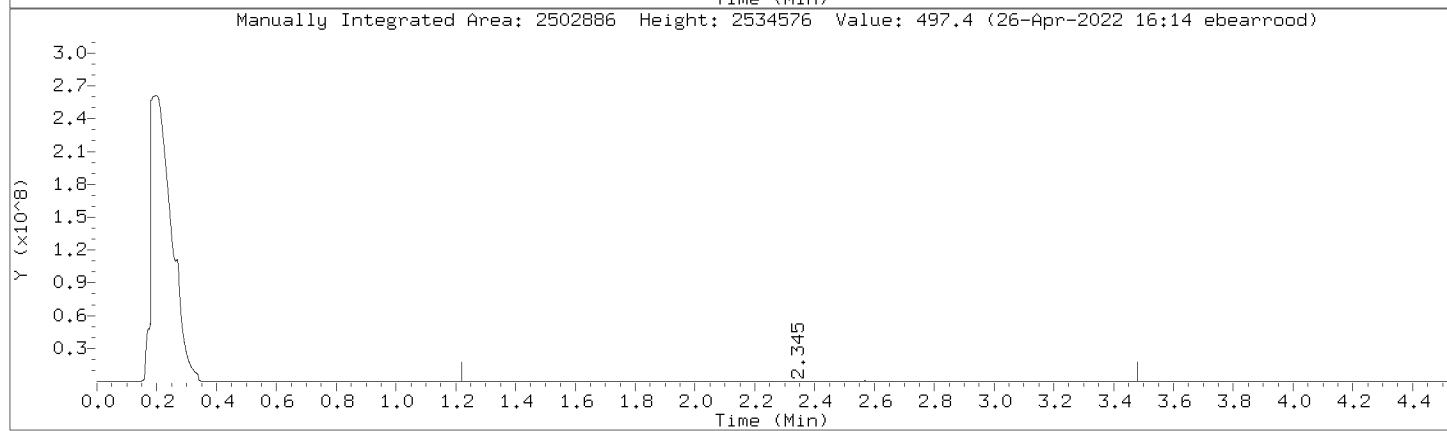
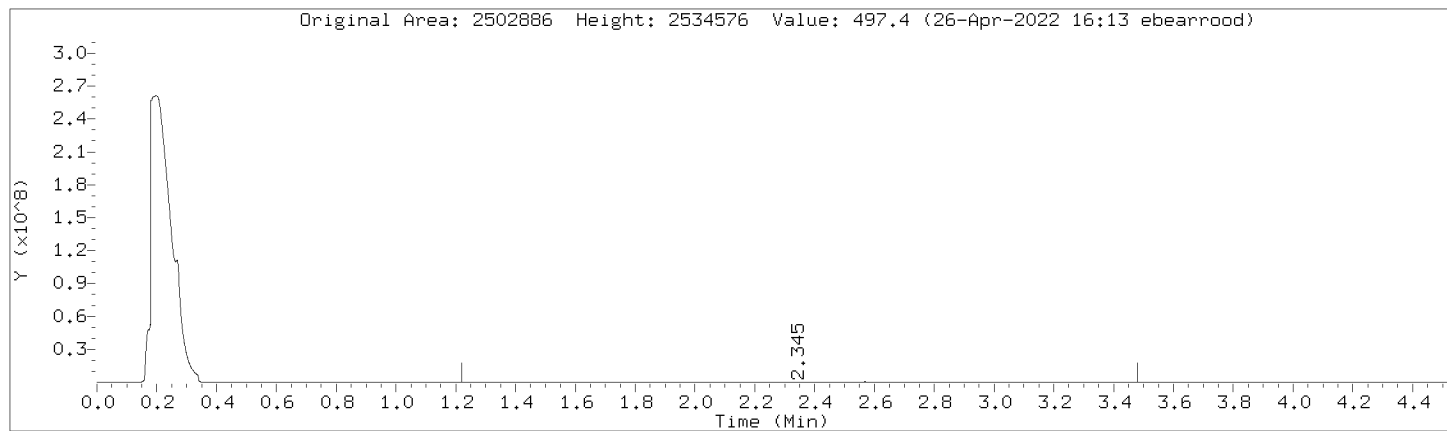
Instrument: 10gcsF.i

Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range

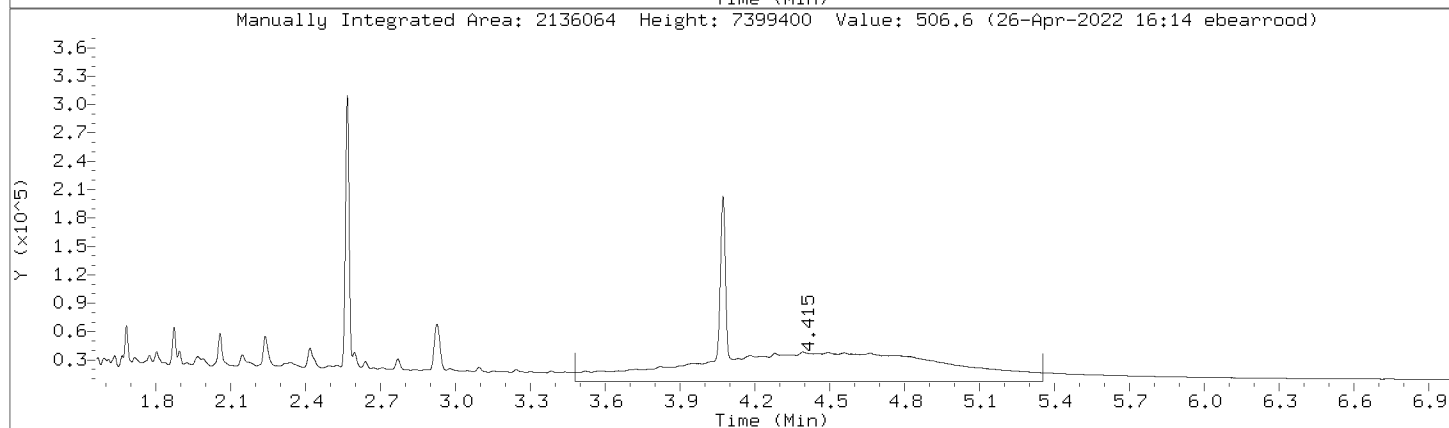
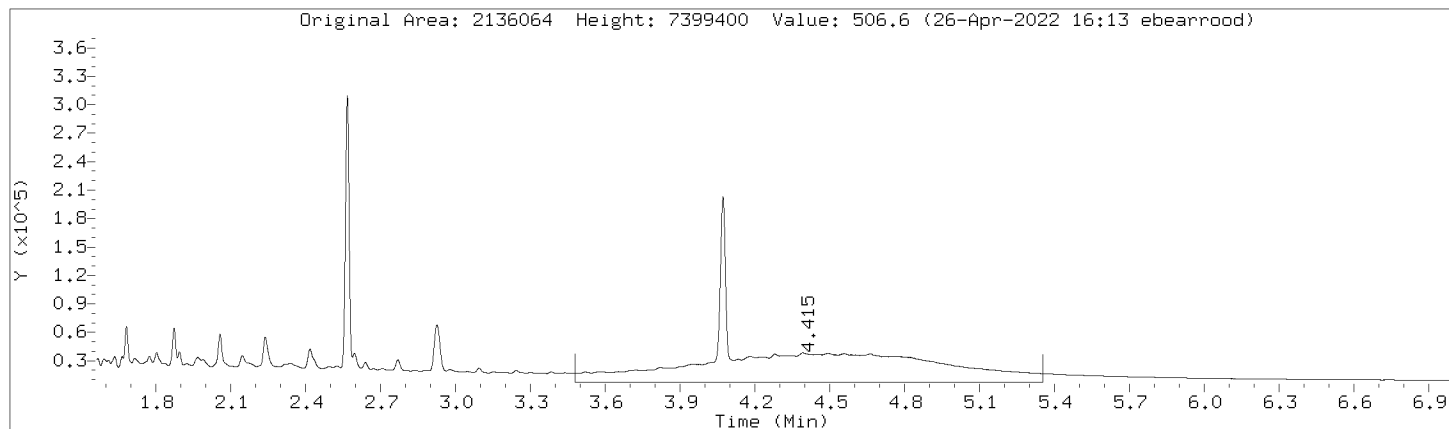
Review Code: RNG

CAS Number:



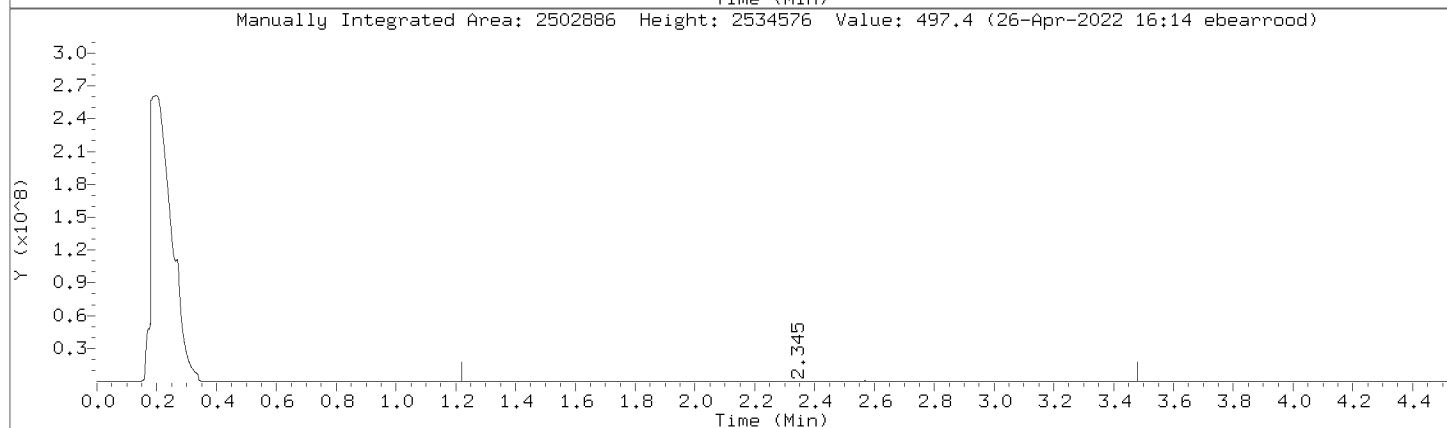
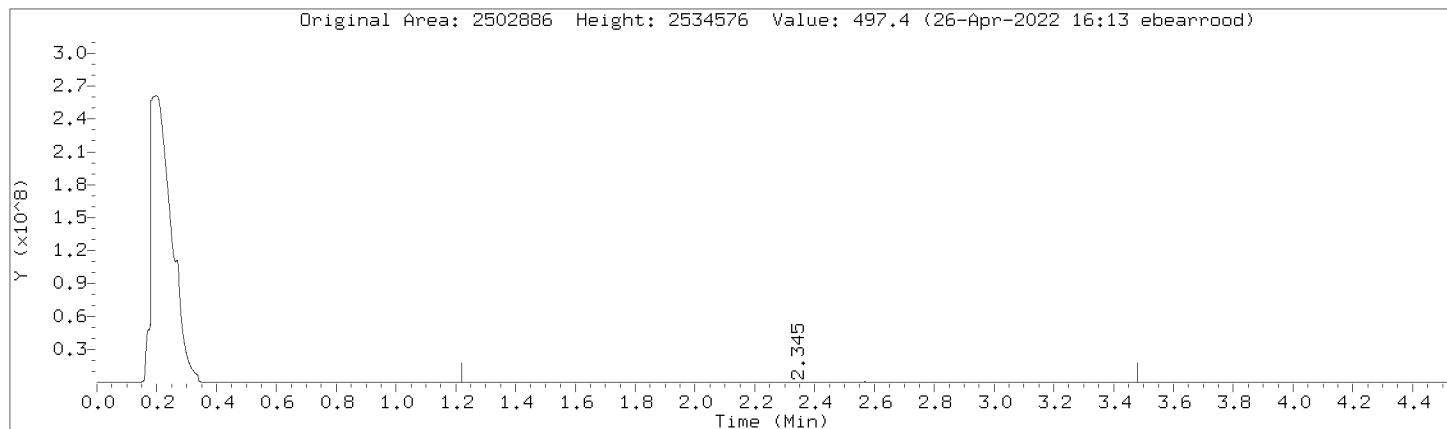
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000030.D  
Injection Date: 26-APR-2022 15:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



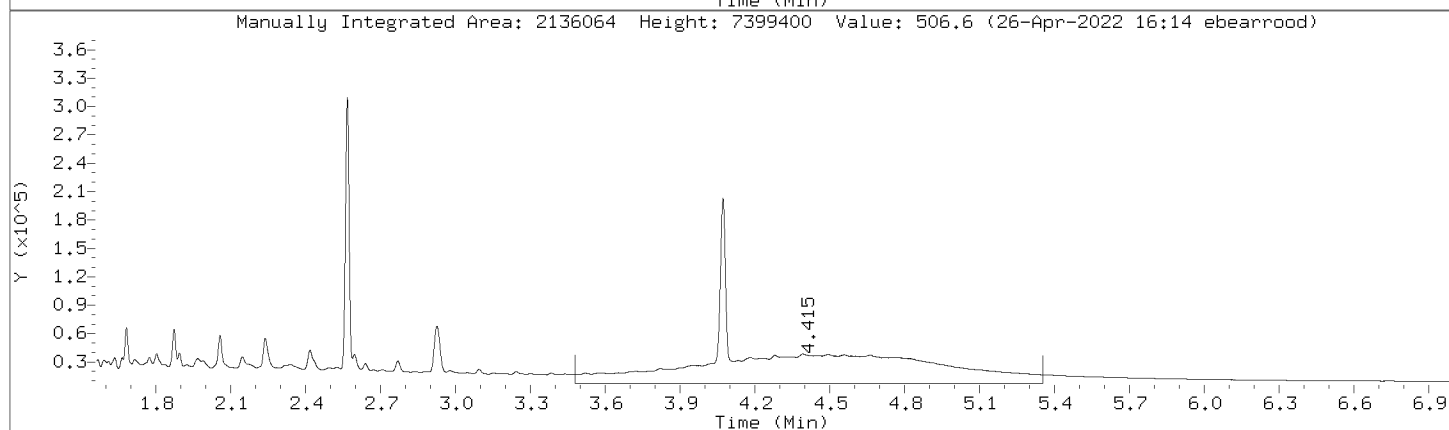
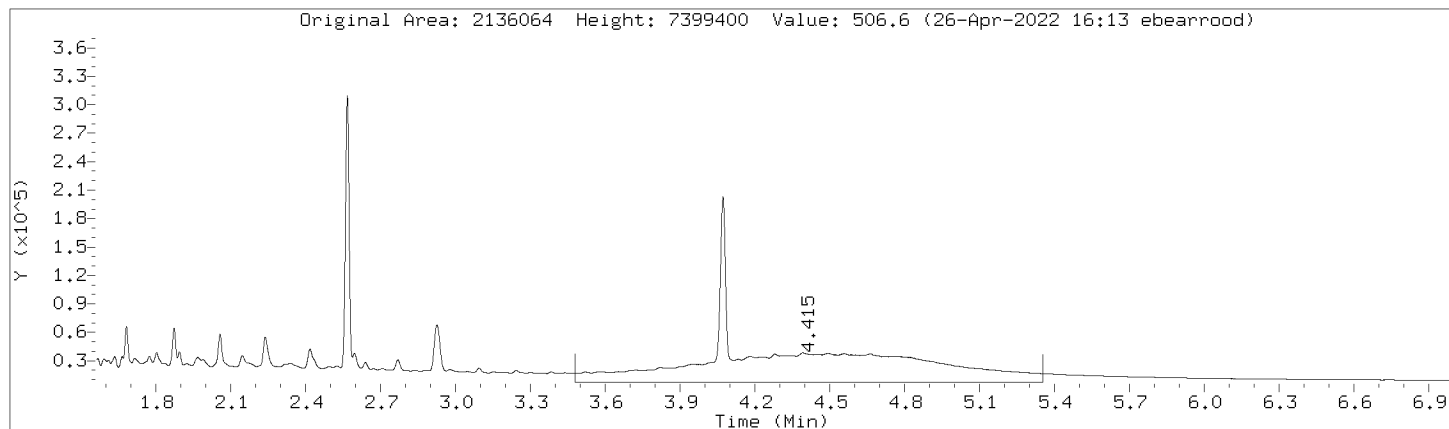
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000030.D  
Injection Date: 26-APR-2022 15:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000030.D  
Injection Date: 26-APR-2022 15:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000030.D

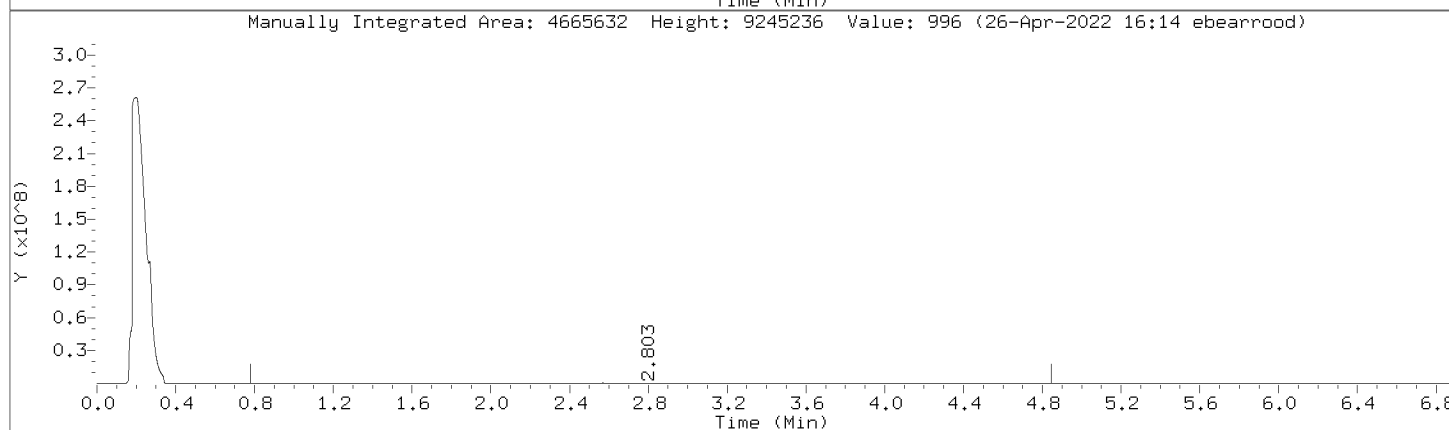
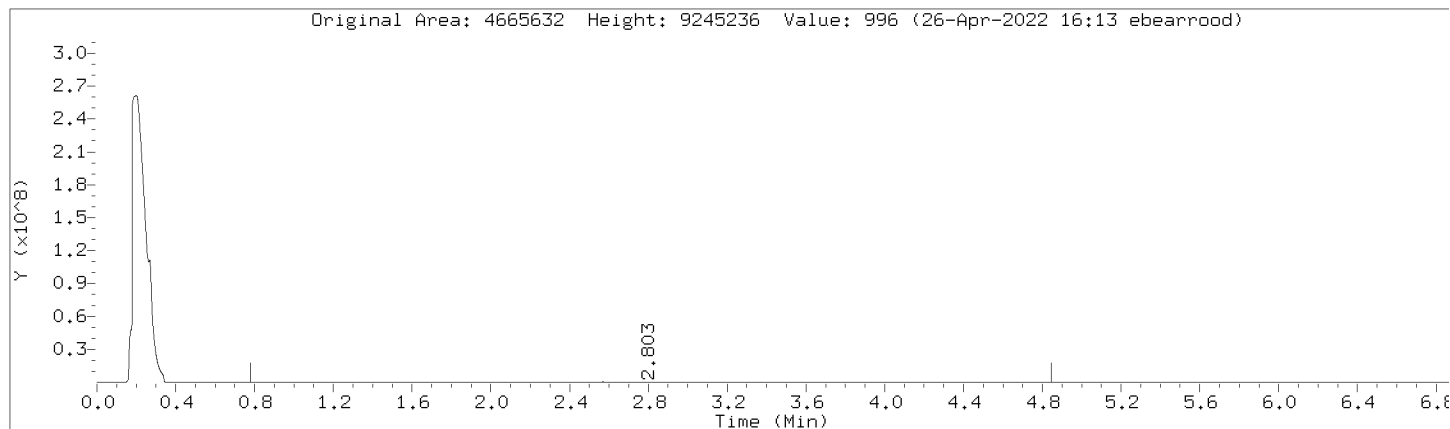
Injection Date: 26-APR-2022 15:45

Instrument: 10gcsF.i

Lab Sample ID: DMO-CCV,362365:2

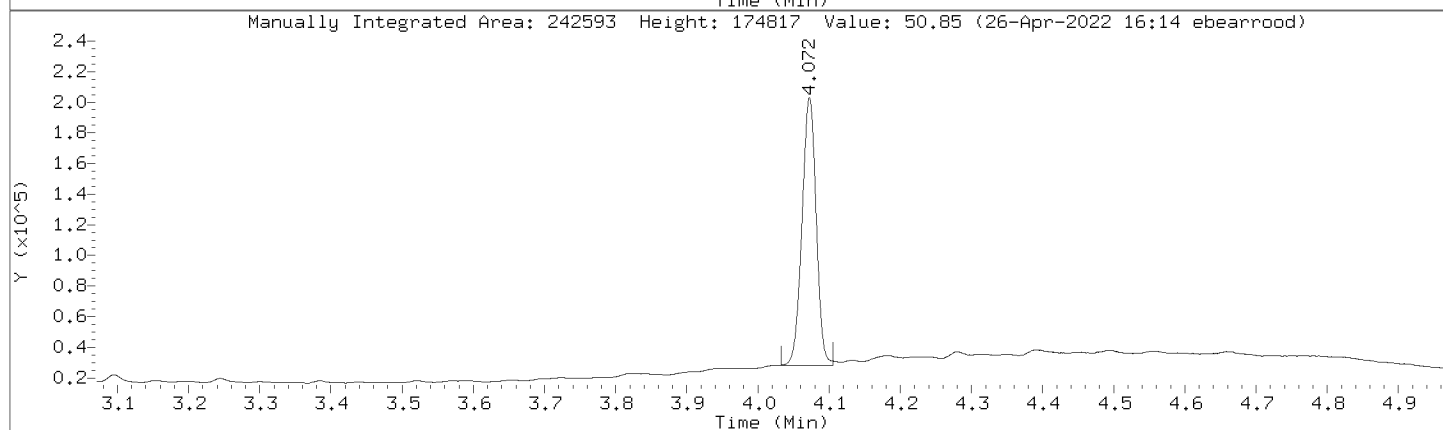
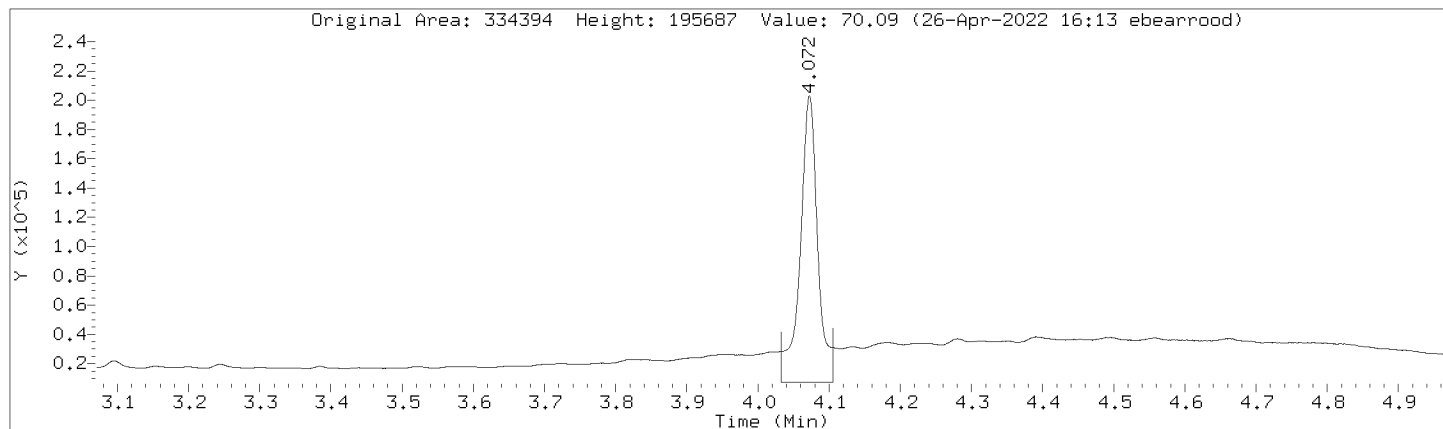
Compound: C10-C36      Review Code: RNG

CAS Number:



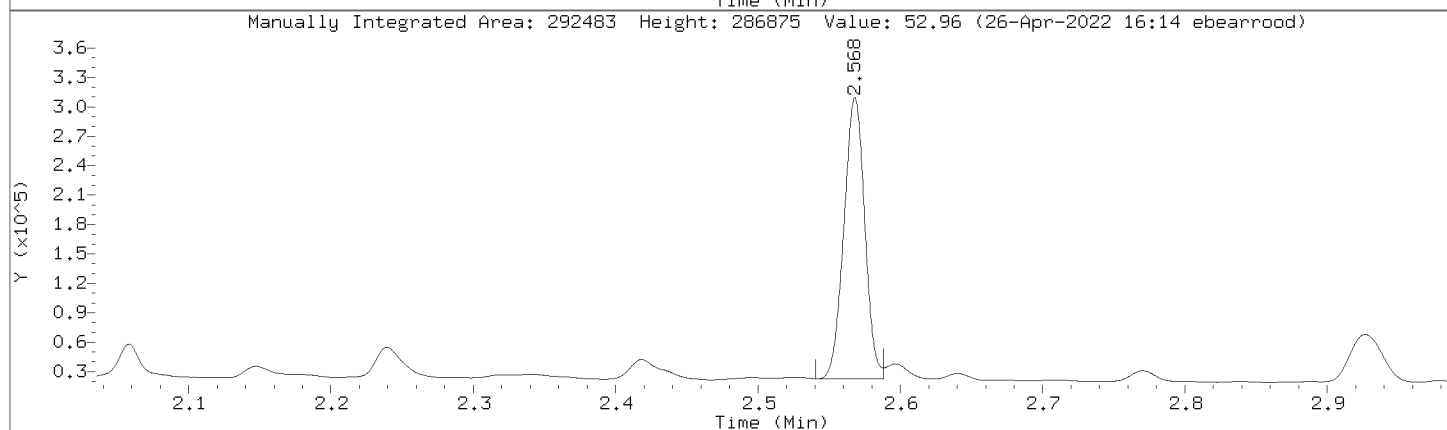
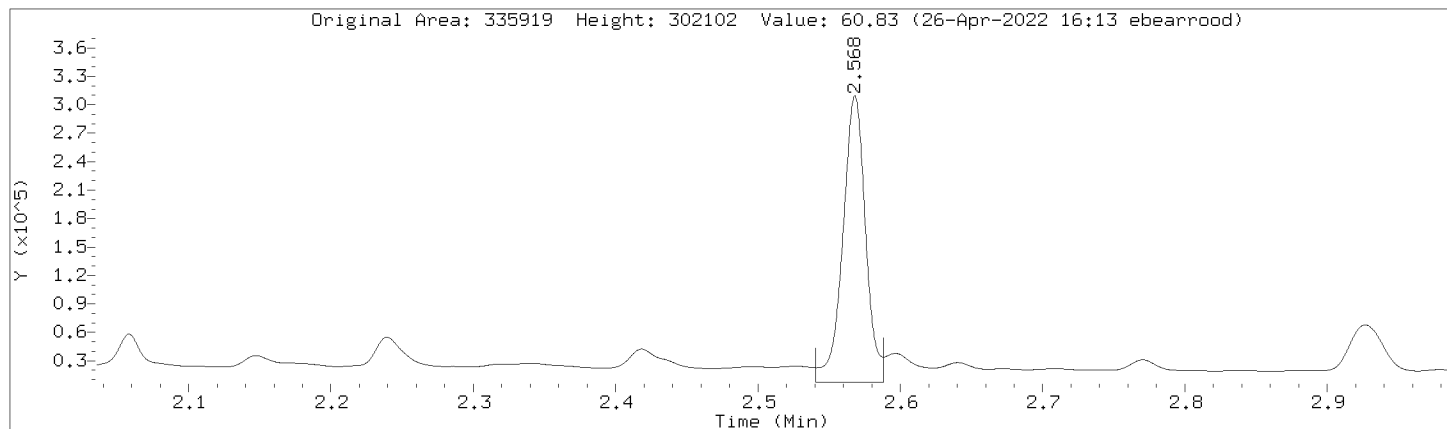
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000030.D  
Injection Date: 26-APR-2022 15:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000030.D  
 Injection Date: 26-APR-2022 15:45  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,362365:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1711593	1711593
DRO by AK 102	2954039	2954039
TPH-DRO (C10-C28)	3375733	3375733
Motor Oil Range (C24-C36)	1792541	1792541
Diesel Fuel Range	2502886	2502886
Motor Oil Range	2136064	2136064
Diesel Fuel Range SG	2502886	2502886
Motor Oil Range SG	2136064	2136064
C10-C36	4665632	4665632
n-Triacontane (S)	334394	242593
o-Terphenyl (S)	335919	292483

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000004.D  
 Lab Smp Id: DMO-CCV,362365:2 Client Smp ID: DMO-CCV,362365:2  
 Inj Date : 27-APR-2022 12:15  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,362365:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 27-Apr-2022 16:52 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 2 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	(ug/mL)	(ug/mL)	=====
S 1	DRO by AK 102			CAS #:	
0.755	- 3.420		2983328 500.000	503	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.534	2.529 0.005		295274 50.0000	53.5	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.065	4.058 0.007		243027 50.0000	50.9	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.421	- 4.880		1725166 500.000	503	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.755	- 4.000		3425126 500.000	505	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.280	- 4.880		1799984 500.000	507	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.755	- 4.880		4716919 1000.00	1010	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.200	- 3.470		2527726 500.000	503	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.200	- 3.470		2527726 500.000	503	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.471	- 5.370		2066496 500.000	489	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.471	- 5.370		2066496 500.000	489	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 12:15

Client ID: DMO-CCV,362365;2

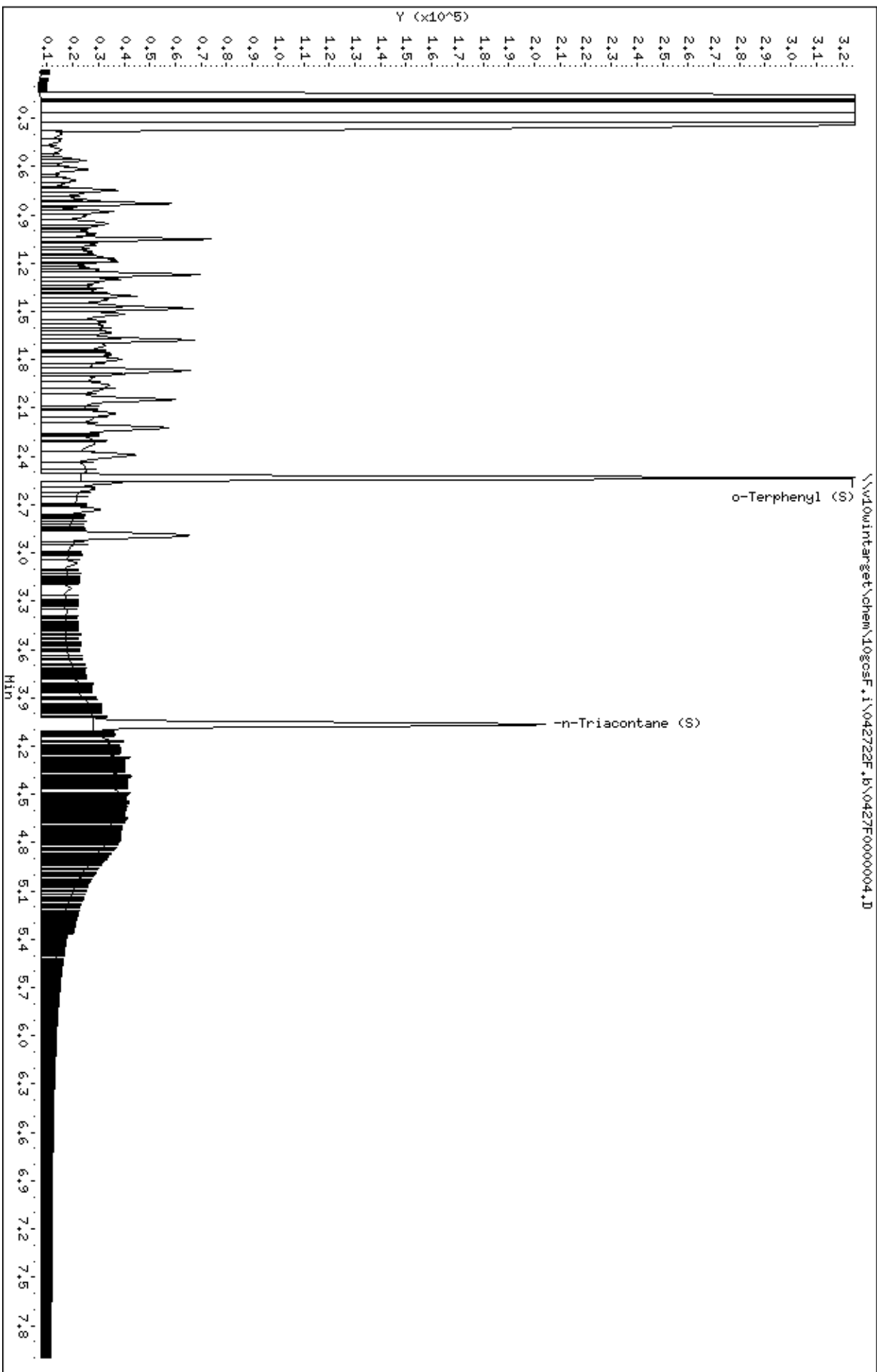
Sample Info: DMO-CCV,362365;2

Instrument: 10gocsf.1

Operator: EB3

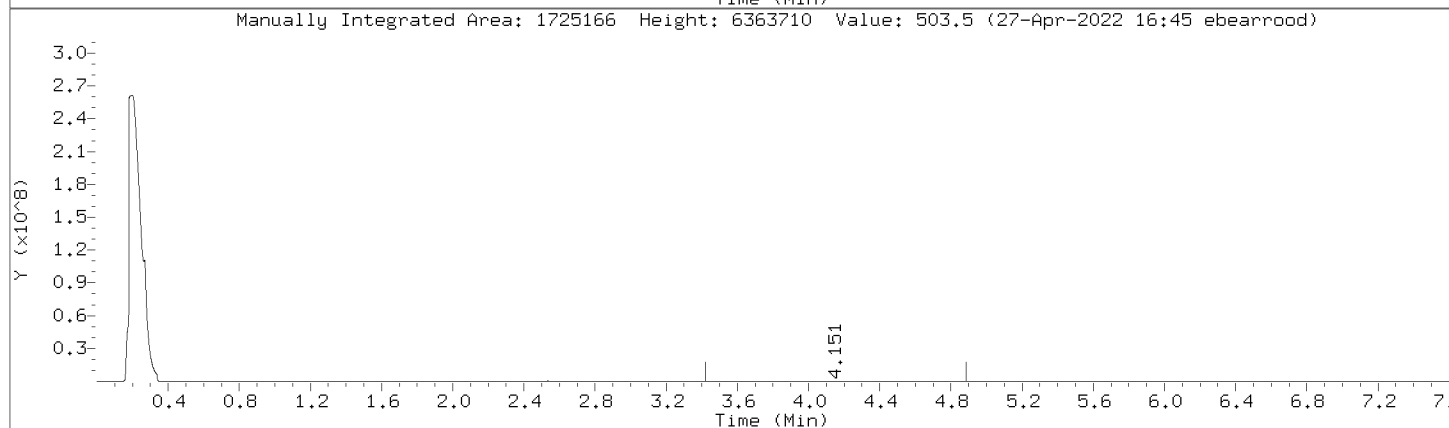
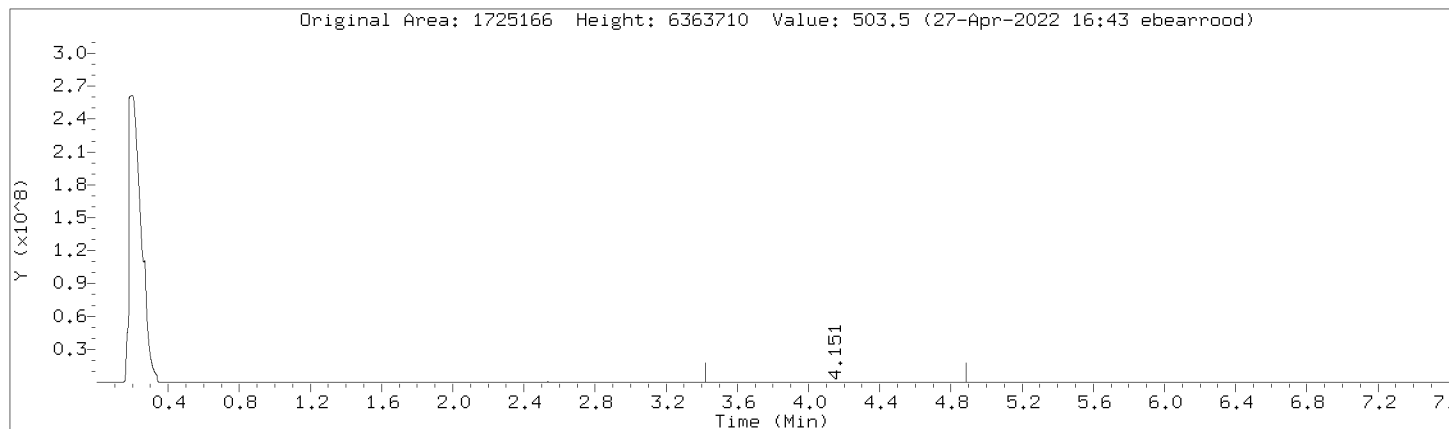
Column diameter: 0.32

Column phase: DB-5-MS21250010



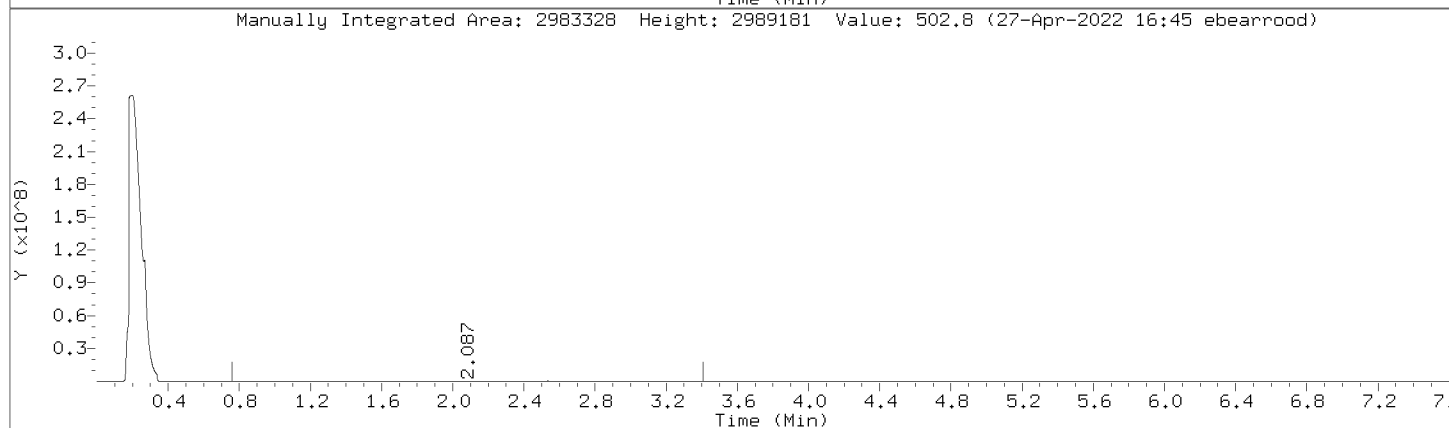
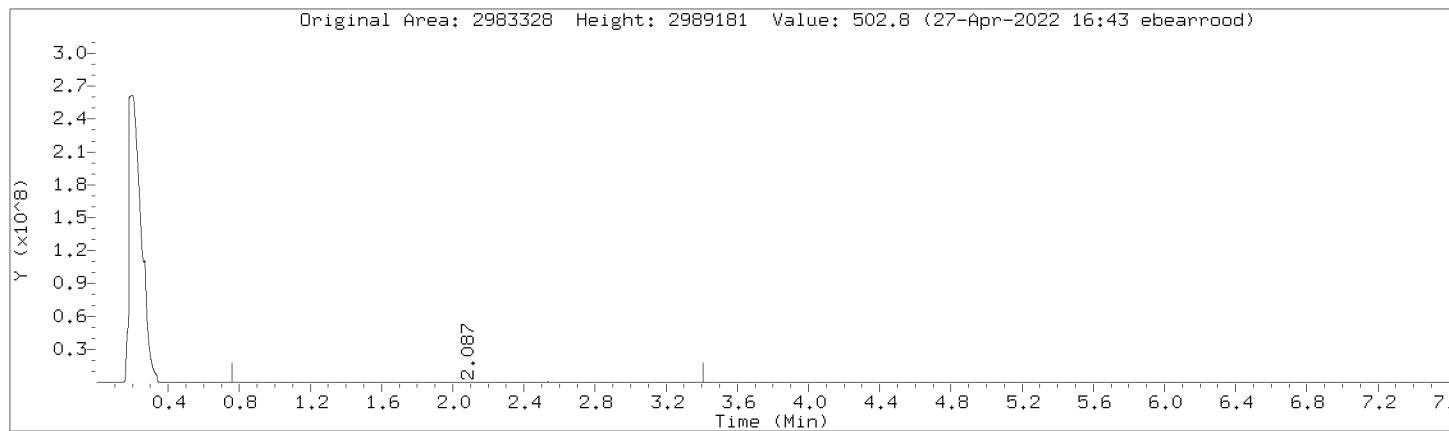
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000004.D  
Injection Date: 27-APR-2022 12:15  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000004.D  
Injection Date: 27-APR-2022 12:15  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000004.D

Injection Date: 27-APR-2022 12:15

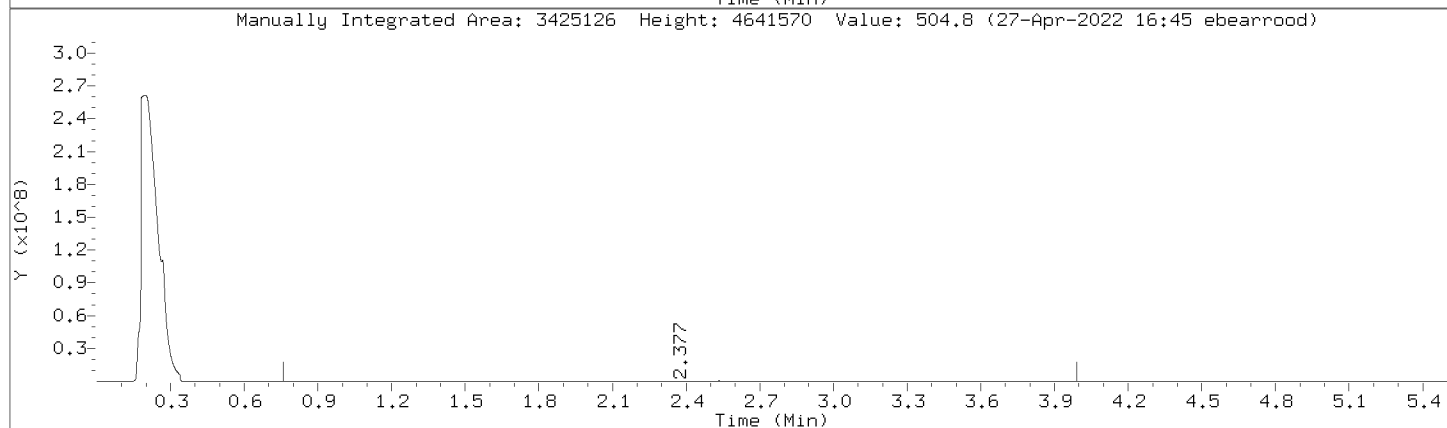
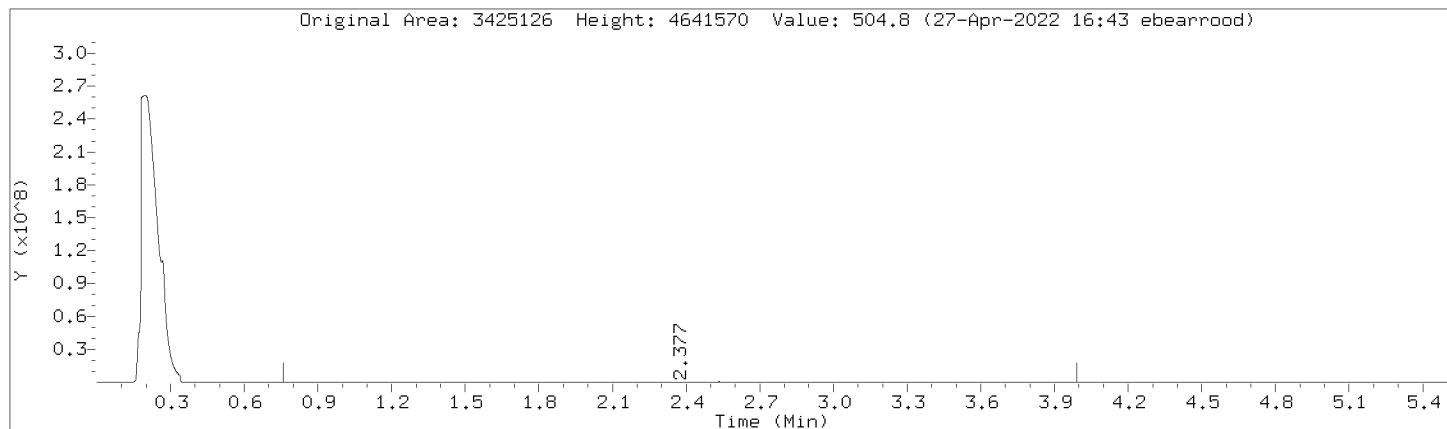
Instrument: 10gcsF.i

Lab Sample ID: DMO-CCV,362365:2

Compound: TPH-DRO (C10-C28)

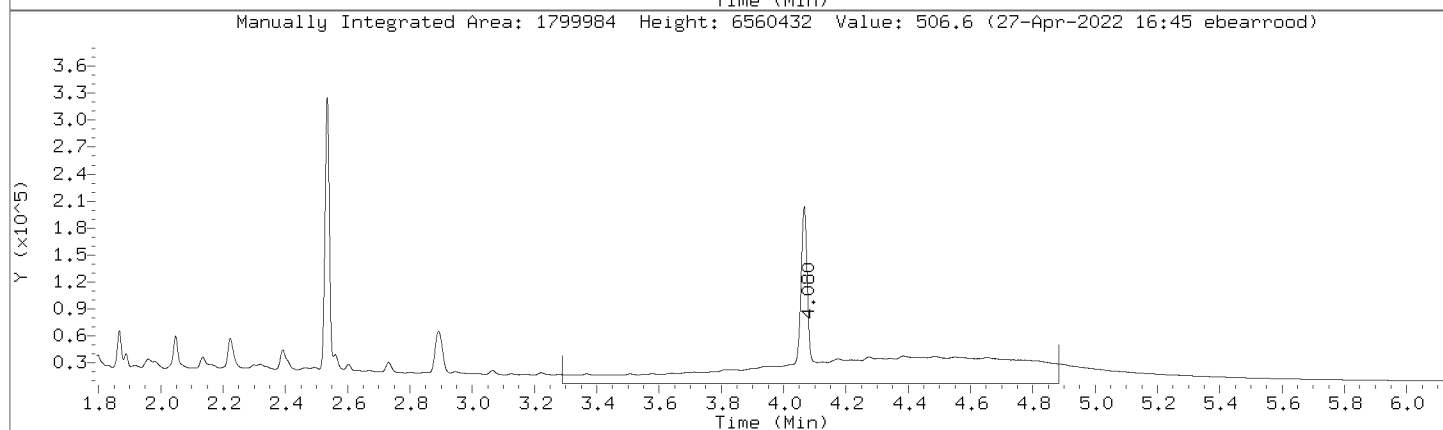
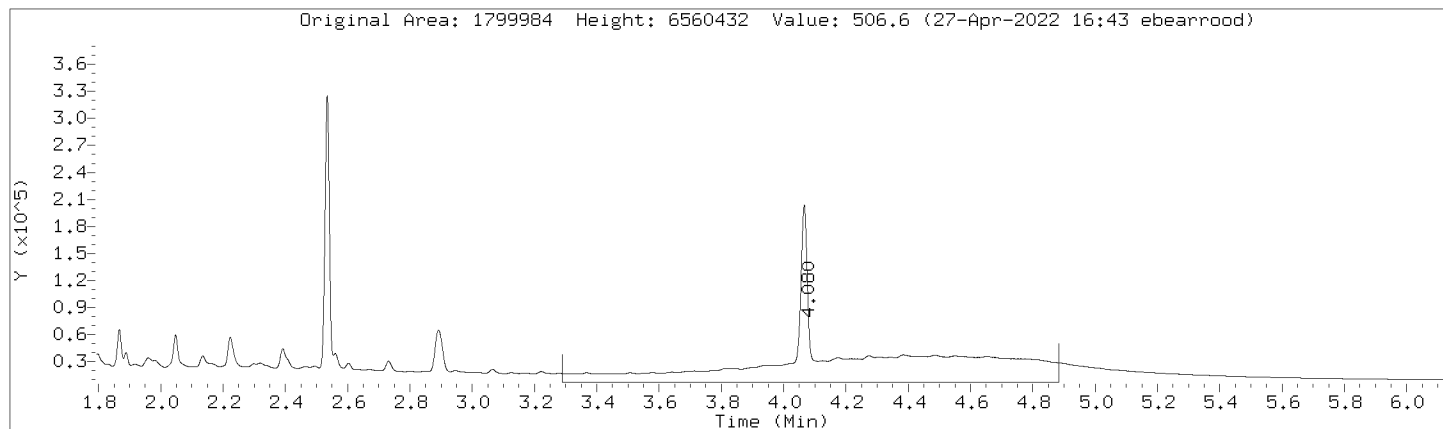
Review Code: RNG

CAS Number:



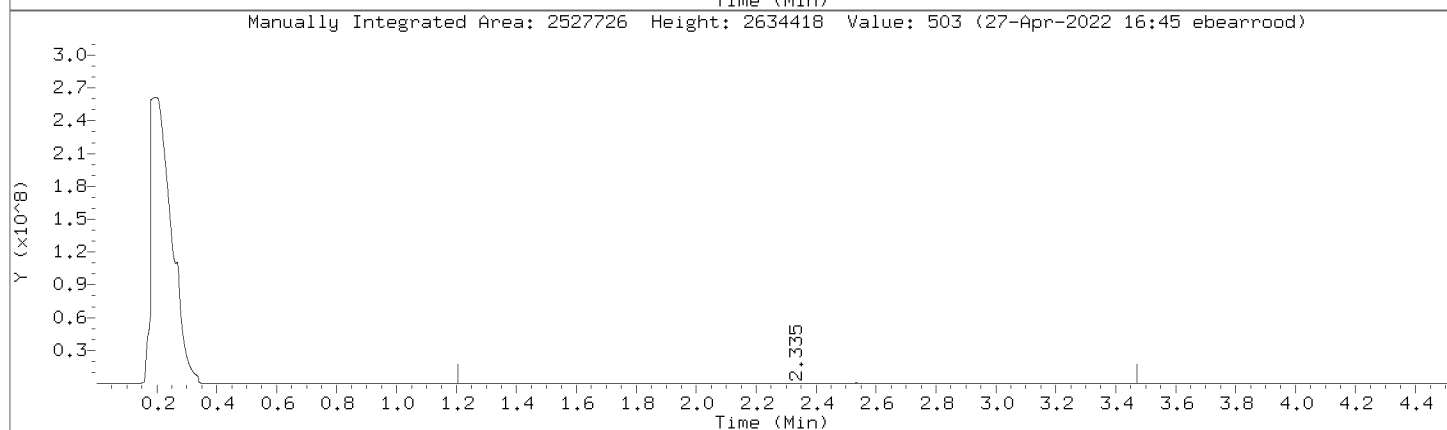
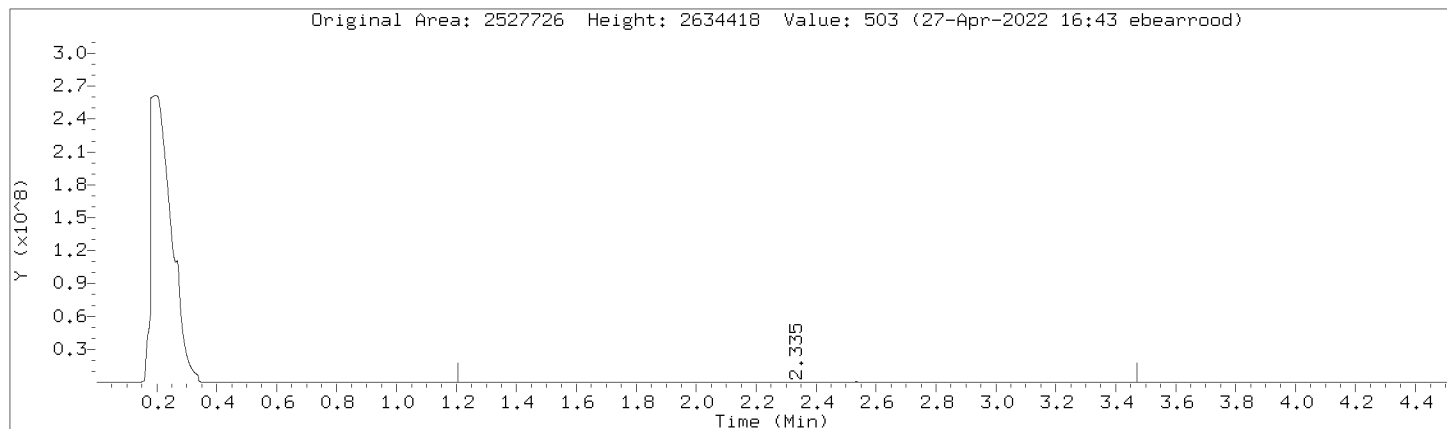
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000004.D  
Injection Date: 27-APR-2022 12:15  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



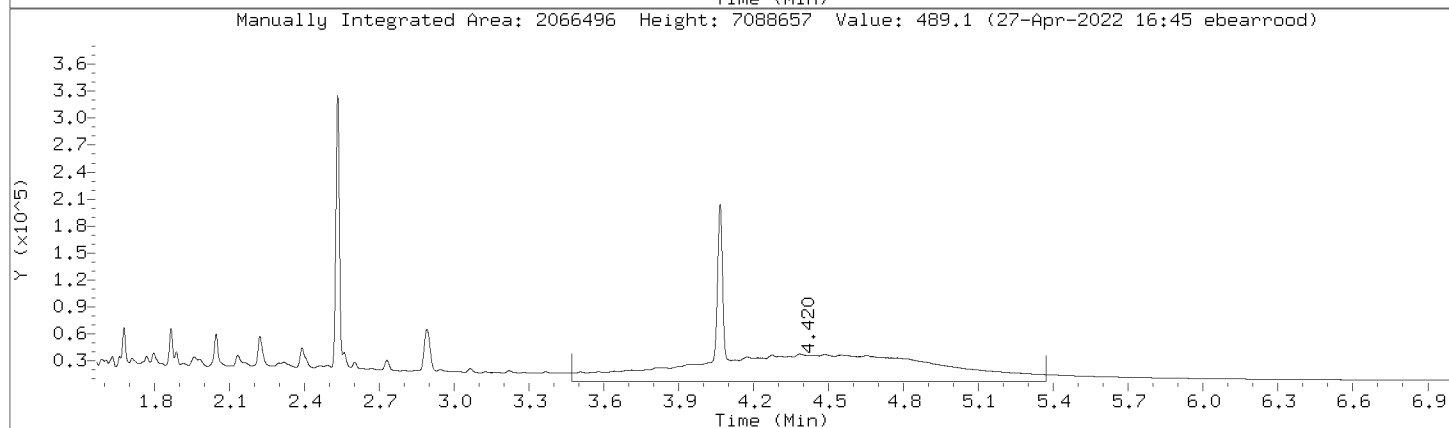
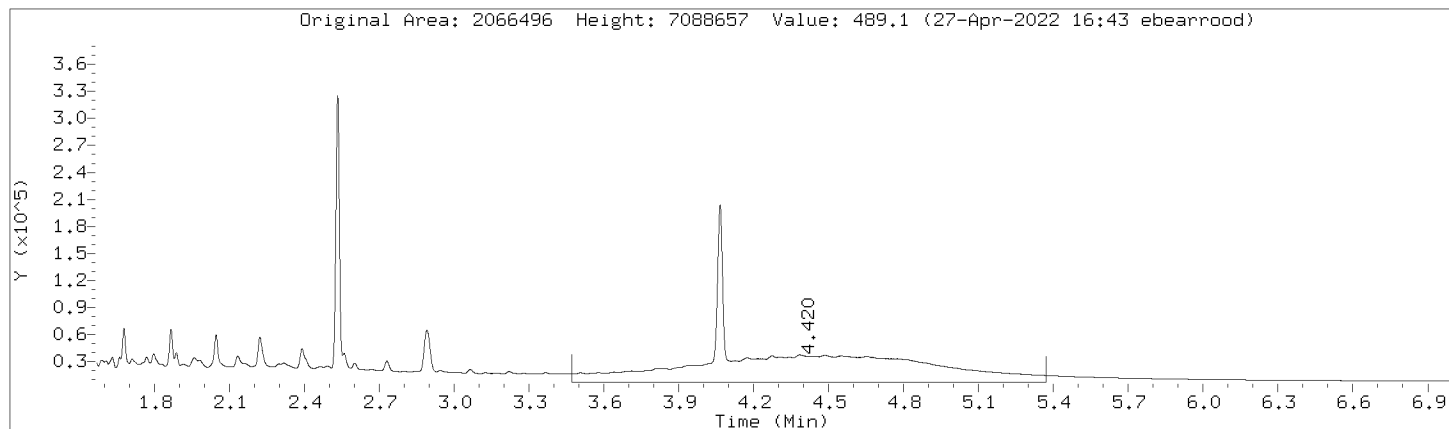
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000004.D  
Injection Date: 27-APR-2022 12:15  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



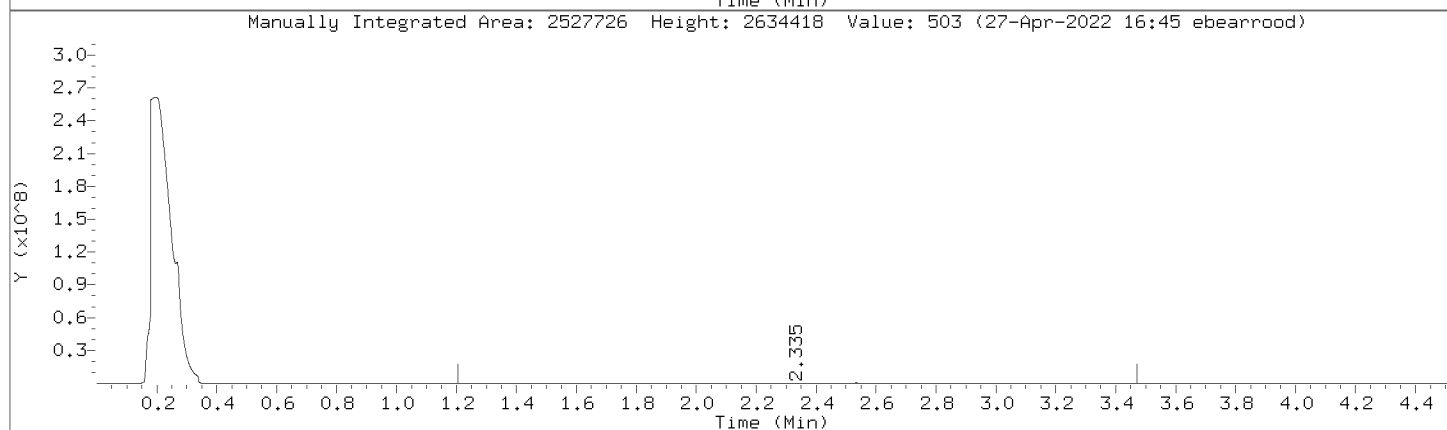
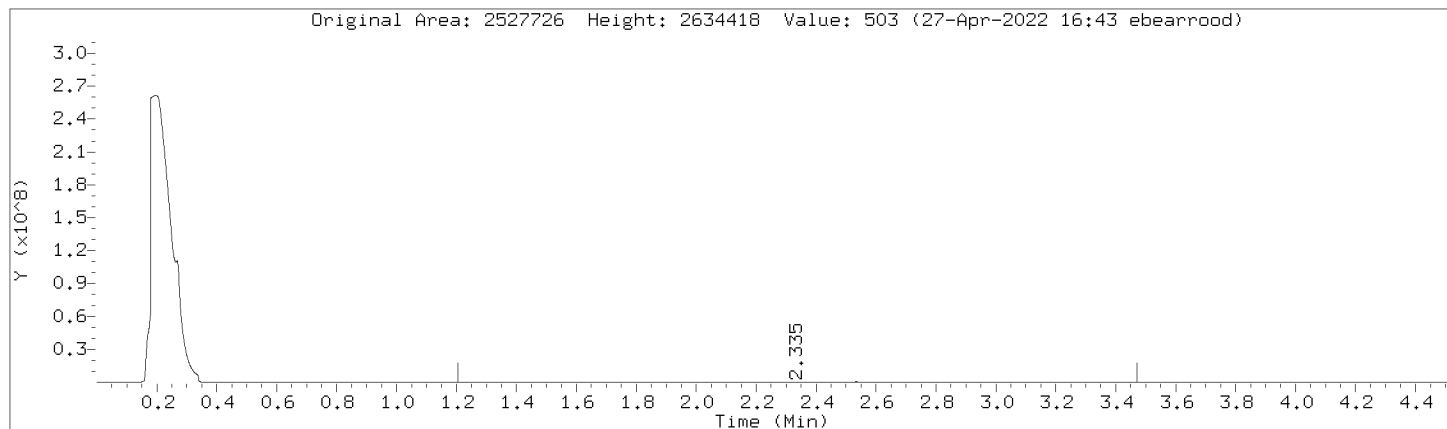
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000004.D  
Injection Date: 27-APR-2022 12:15  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



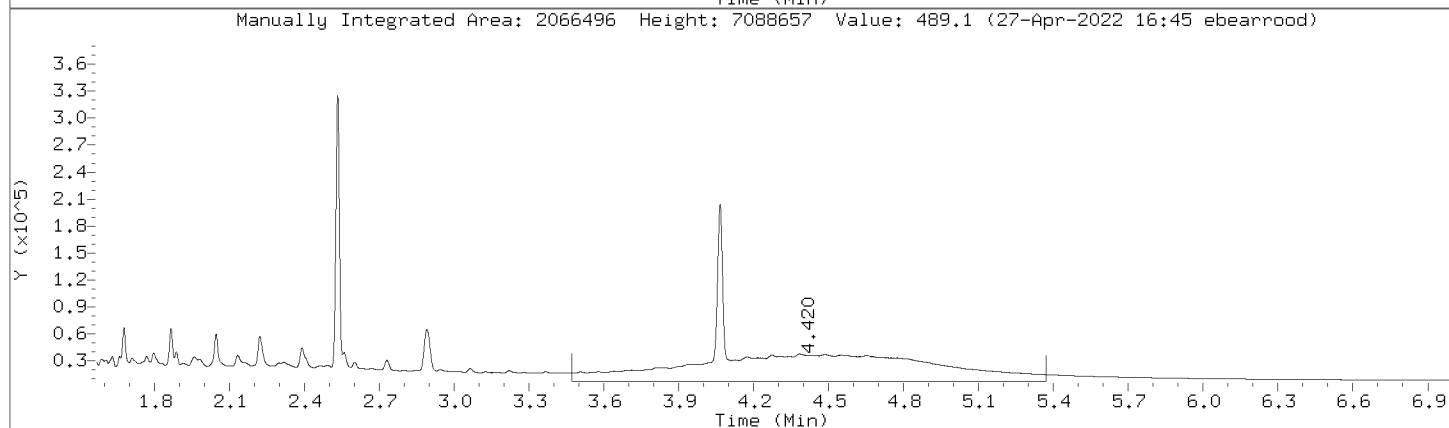
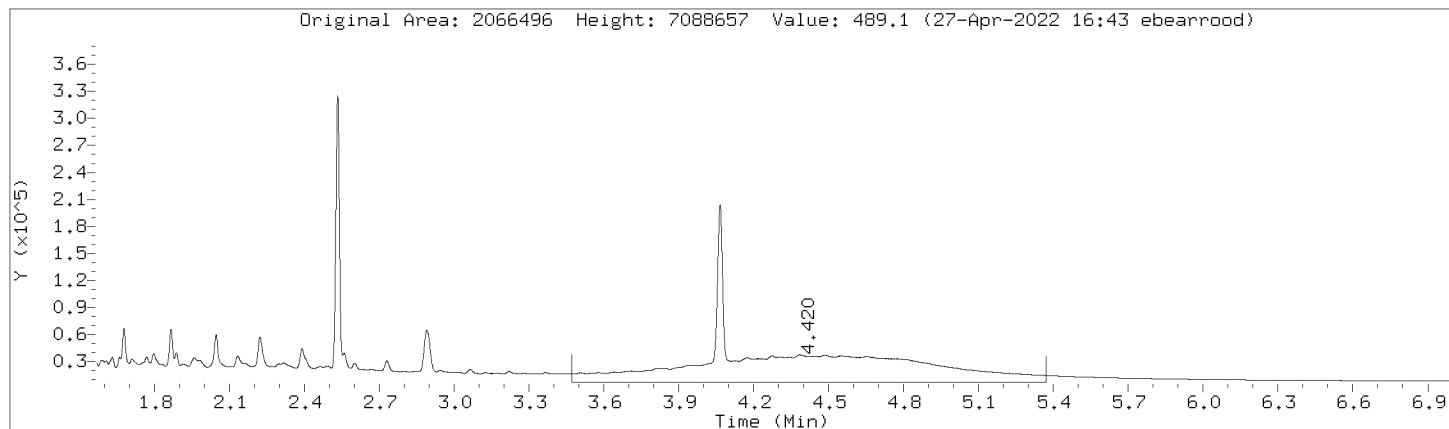
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000004.D  
Injection Date: 27-APR-2022 12:15  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



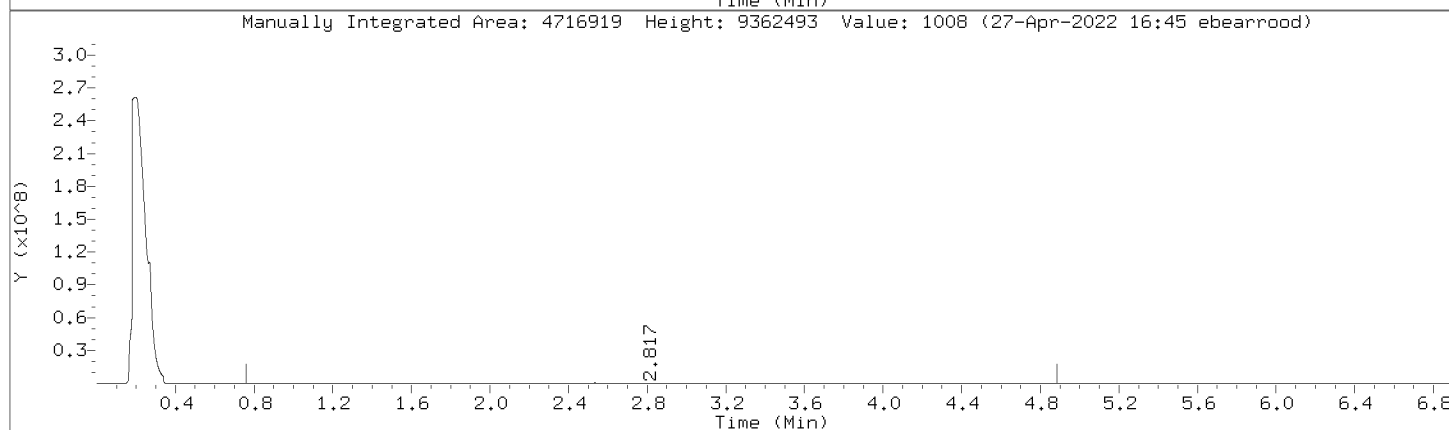
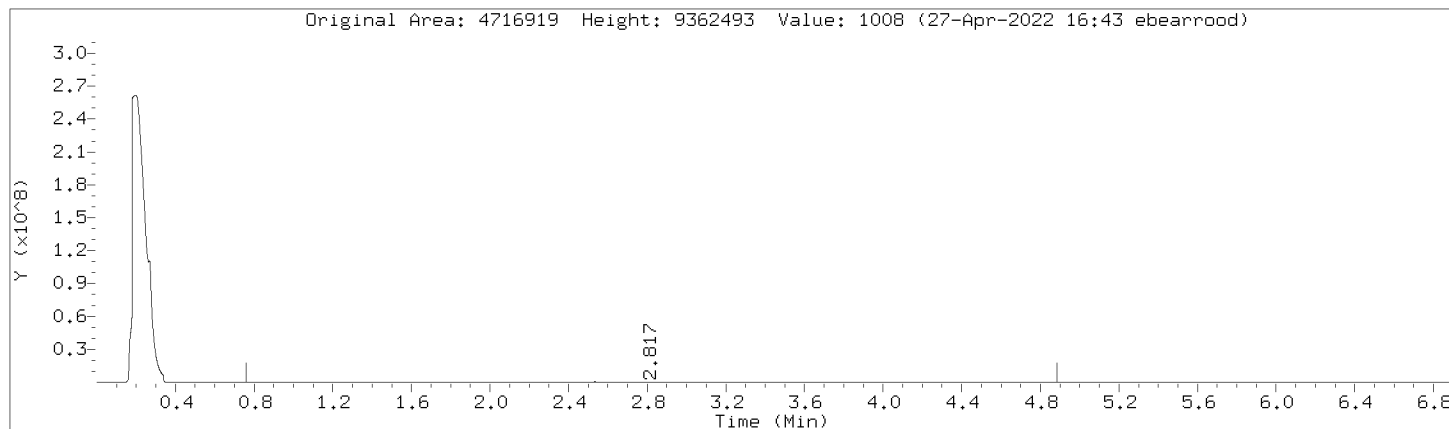
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000004.D  
Injection Date: 27-APR-2022 12:15  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



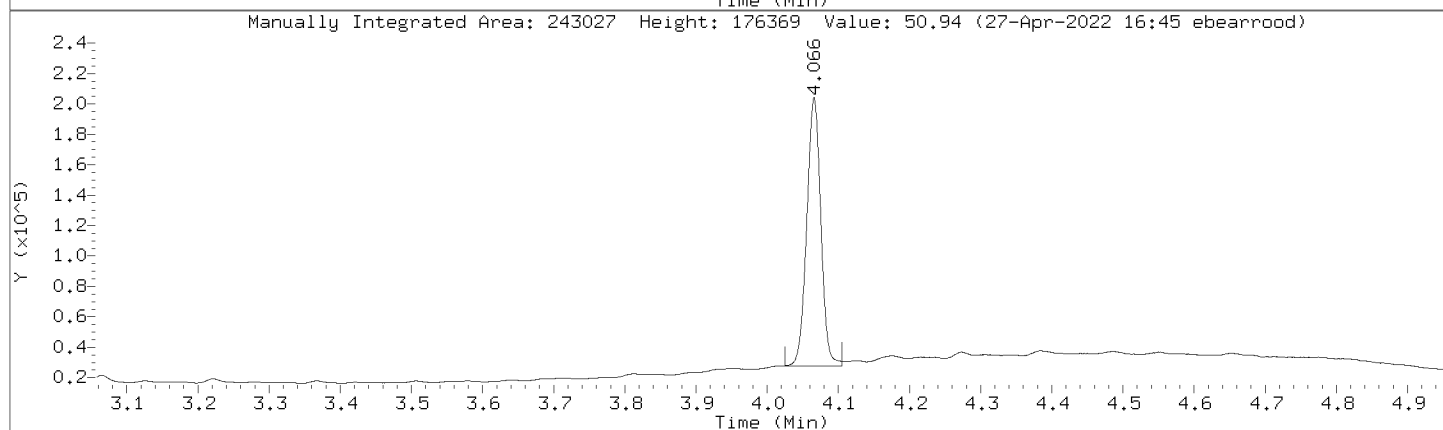
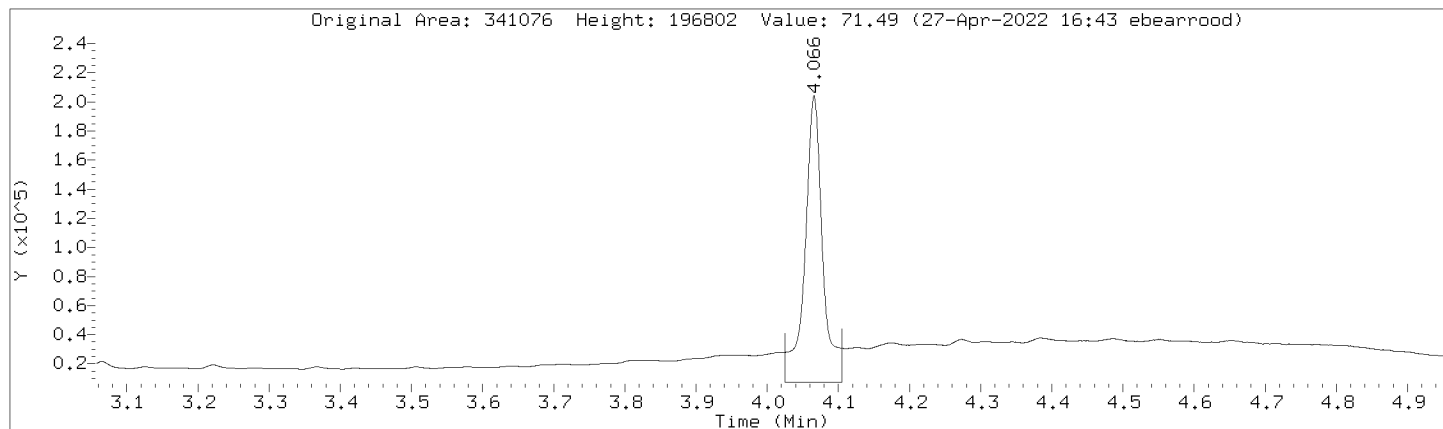
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Injection Date: 27-APR-2022 12:15  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000004.D  
Injection Date: 27-APR-2022 12:15  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

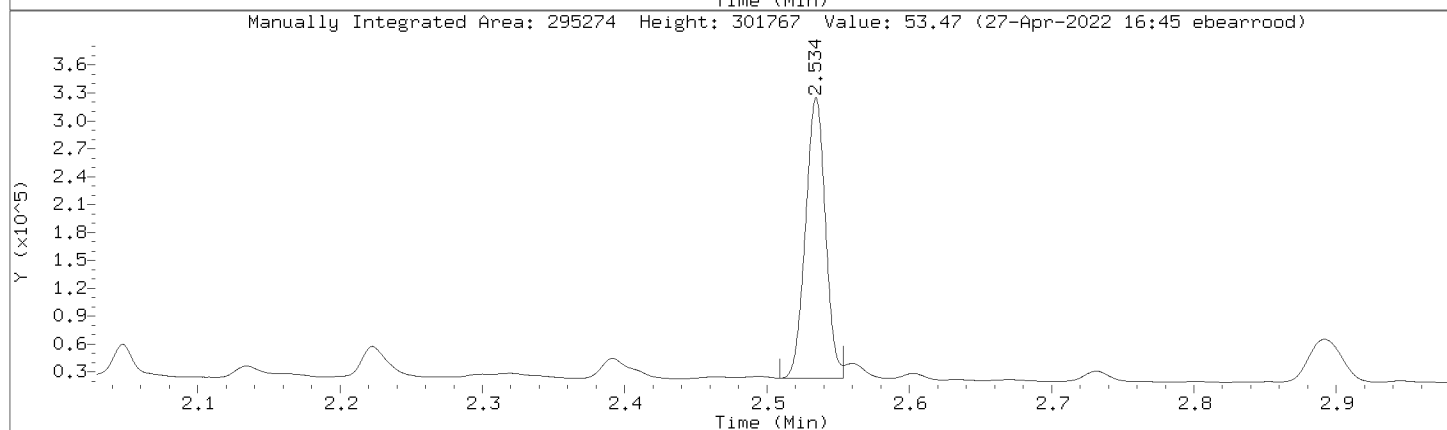
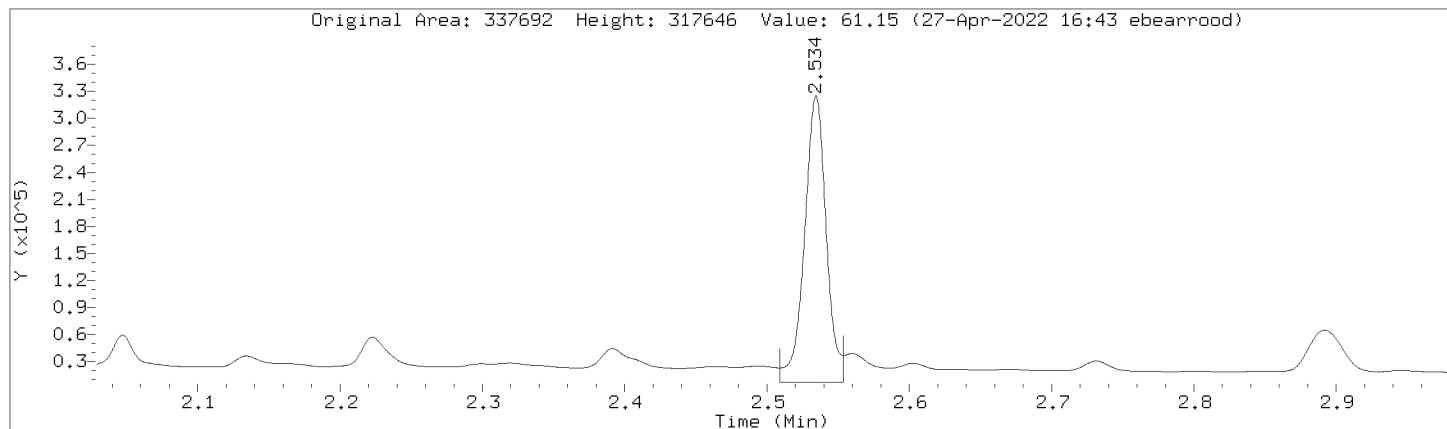
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000004.D  
 Injection Date: 27-APR-2022 12:15  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,362365:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1725166	1725166
DRO by AK 102	2983328	2983328
TPH-DRO (C10-C28)	3425126	3425126
Motor Oil Range (C24-C36)	1799984	1799984
Diesel Fuel Range	2527726	2527726
Motor Oil Range	2066496	2066496
Diesel Fuel Range SG	2527726	2527726
Motor Oil Range SG	2066496	2066496
C10-C36	4716919	4716919
n-Triacontane (S)	341076	243027
o-Terphenyl (S)	337692	295274

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AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000013.D  
 Lab Smp Id: DMO-CCV,362365:2 Client Smp ID: DMO-CCV,362365:2  
 Inj Date : 27-APR-2022 13:57  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,362365:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 28-Apr-2022 09:09 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 2 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.755	- 3.420		2966718 500.000	500	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.529	2.524 0.005		291256 50.0000	52.7	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.058	4.057 0.001		241200 50.0000	50.6	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.421	- 4.880		1724784 500.000	503	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.755	- 4.000		3403605 500.000	501	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.280	- 4.880		1802908 500.000	508	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.755	- 4.880		4691502 1000.00	1000	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.200	- 3.470		2507608 500.000	498	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.200	- 3.470		2507608 500.000	498	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.471	- 5.370		2068590 500.000	490	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.471	- 5.370		2068590 500.000	490	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:57

Client ID: DM0-CCV,362365;2

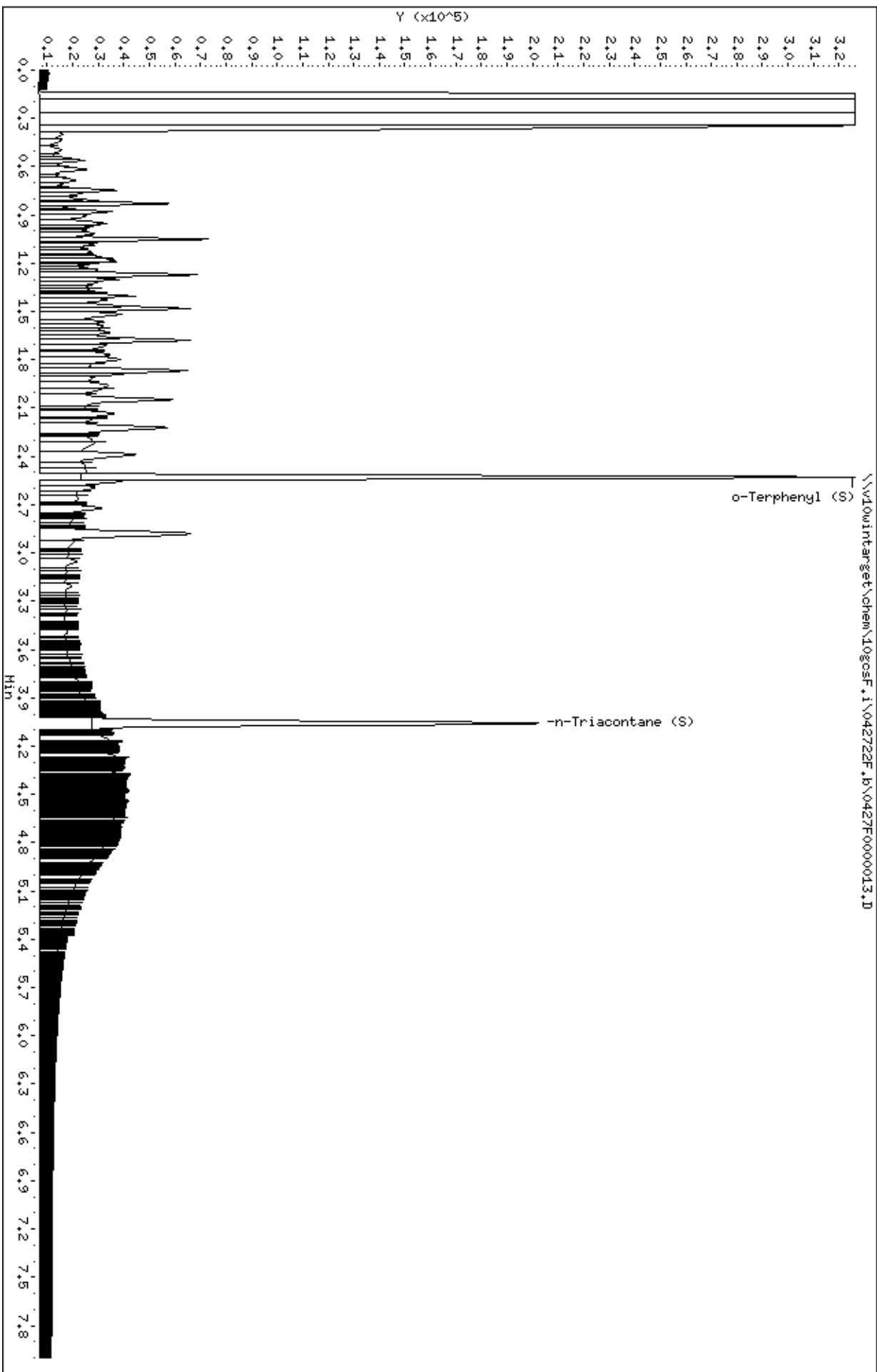
Sample Info: DM0-CCV,362365;2

Column phase: DB-5-MS21250010

Instrument: 10goscF.1

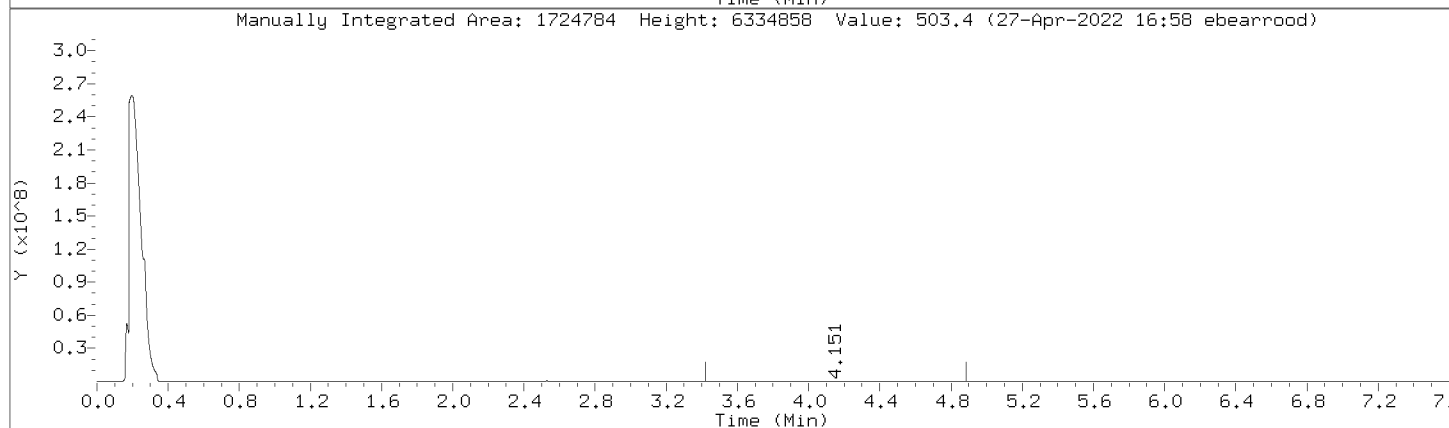
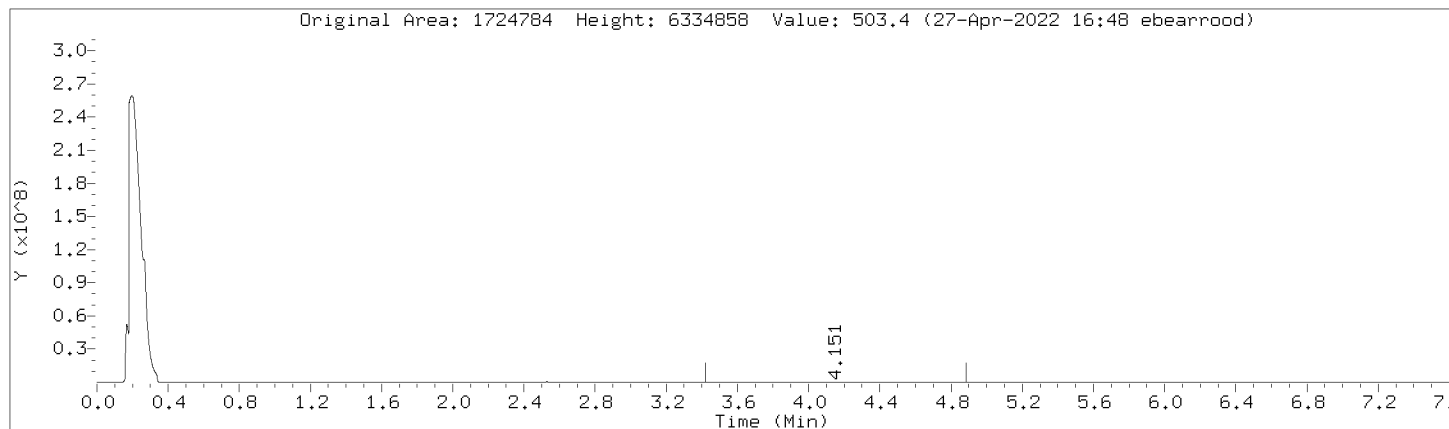
Operator: EB3

Column diameter: 0.32



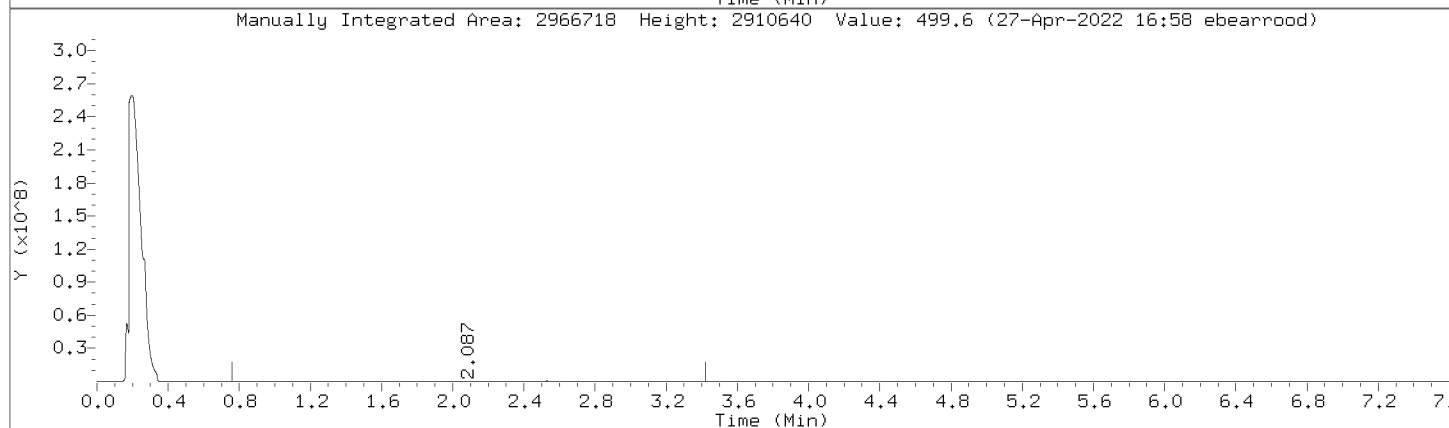
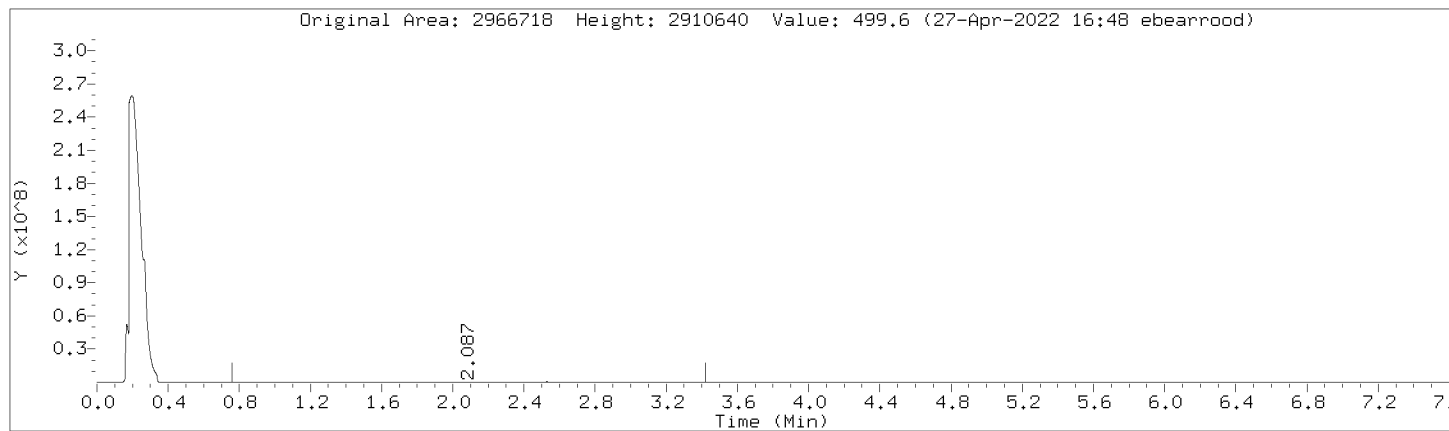
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



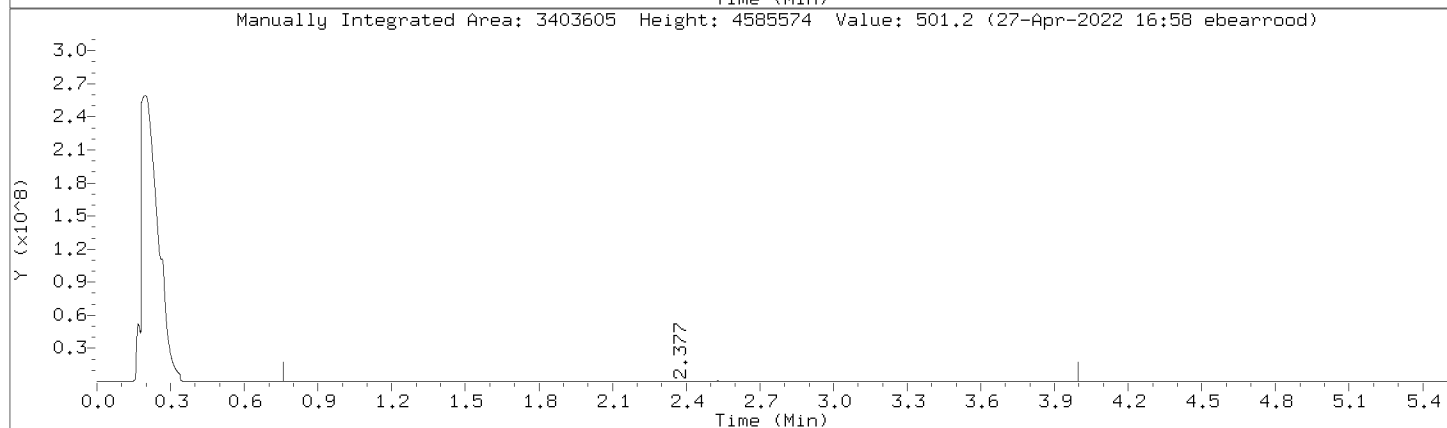
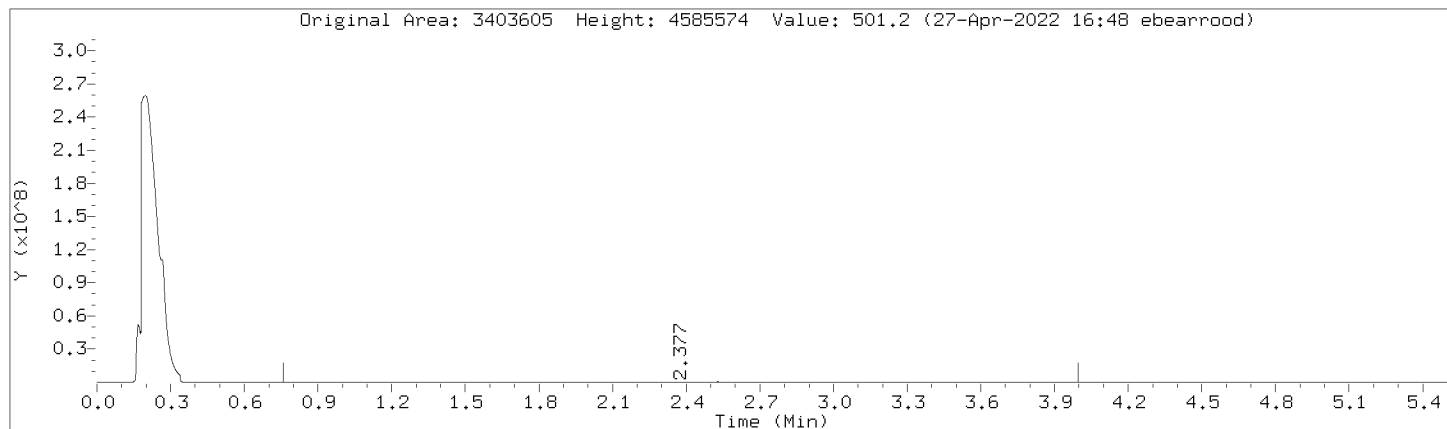
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



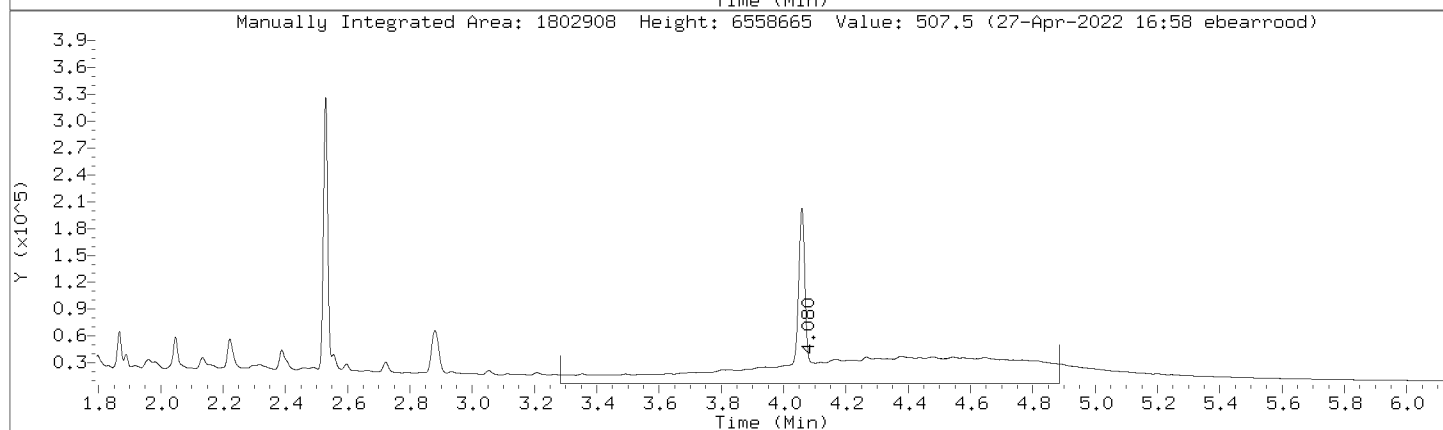
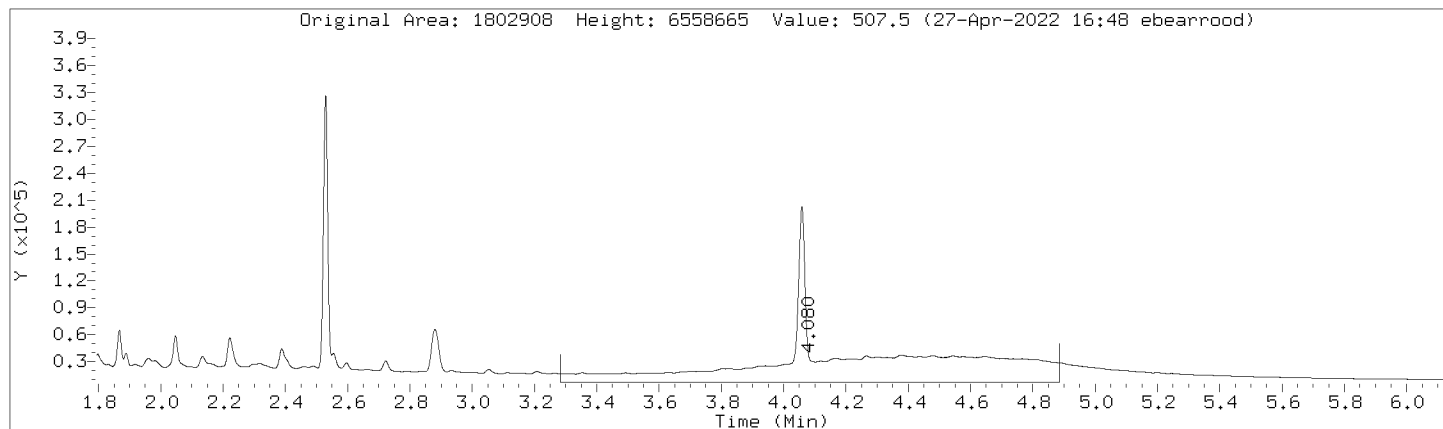
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

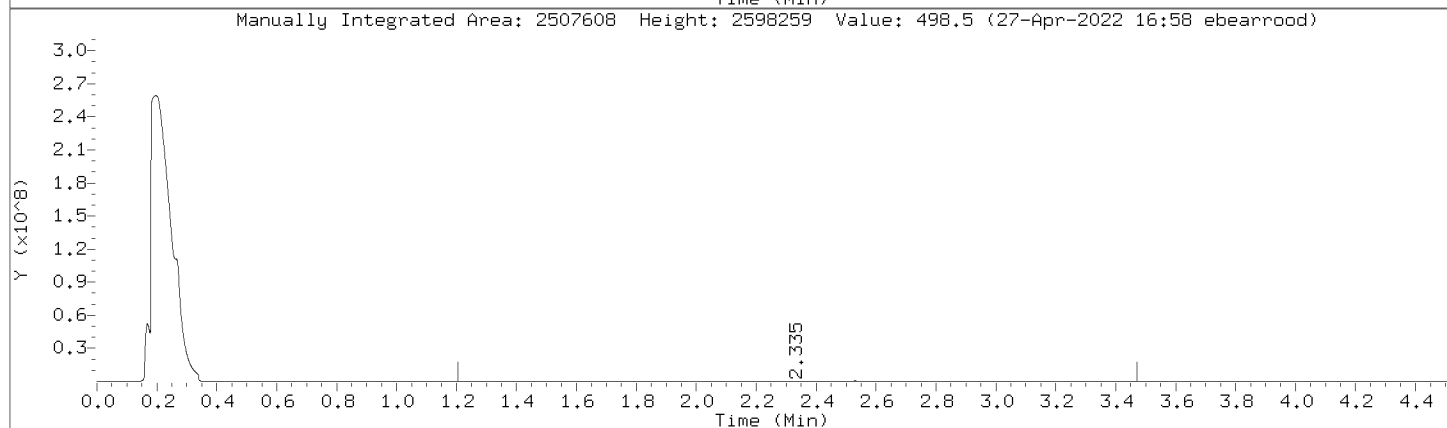
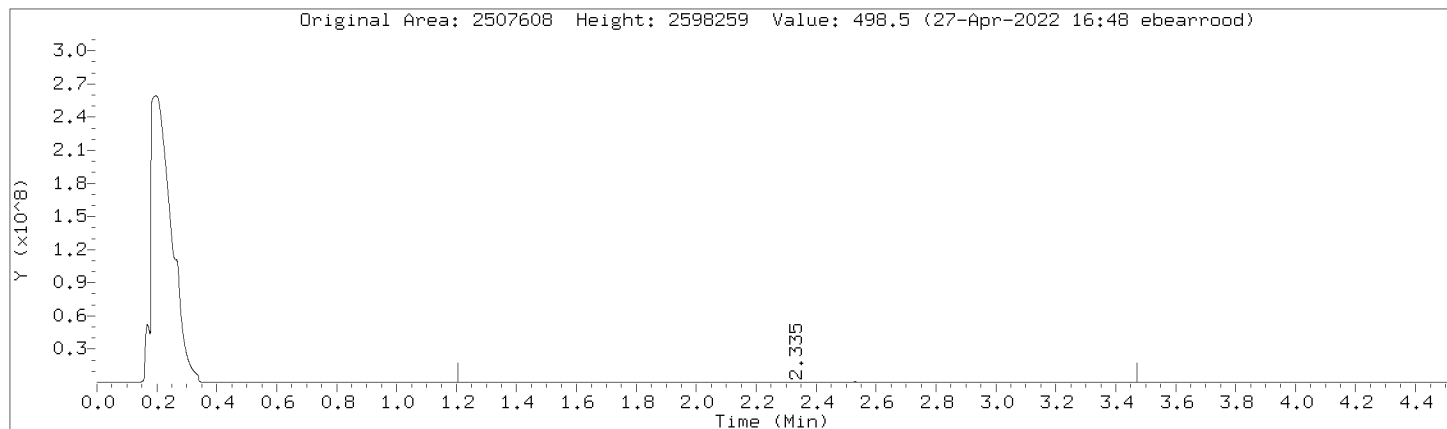
Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:





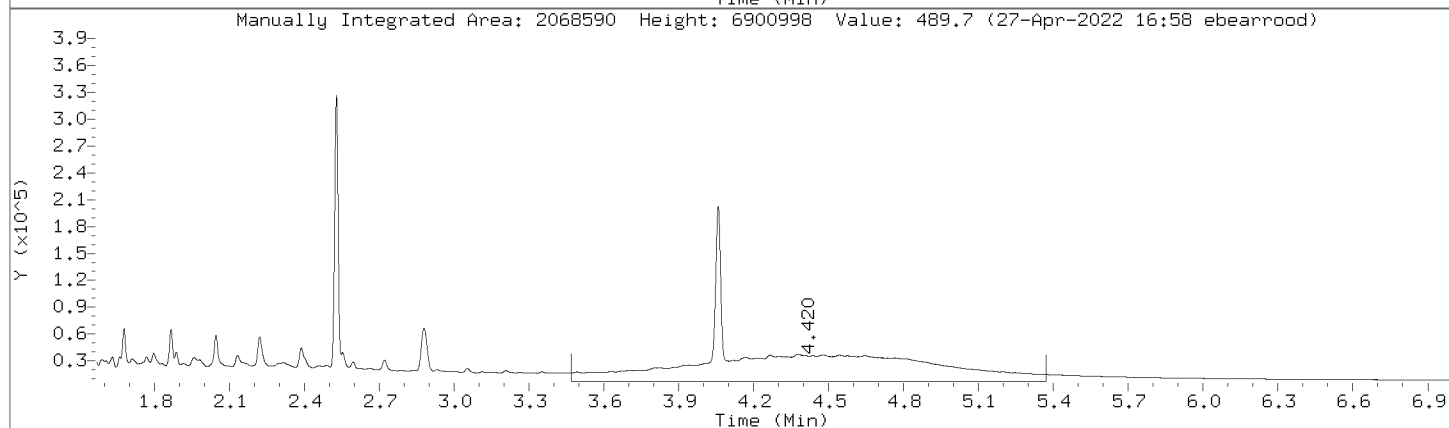
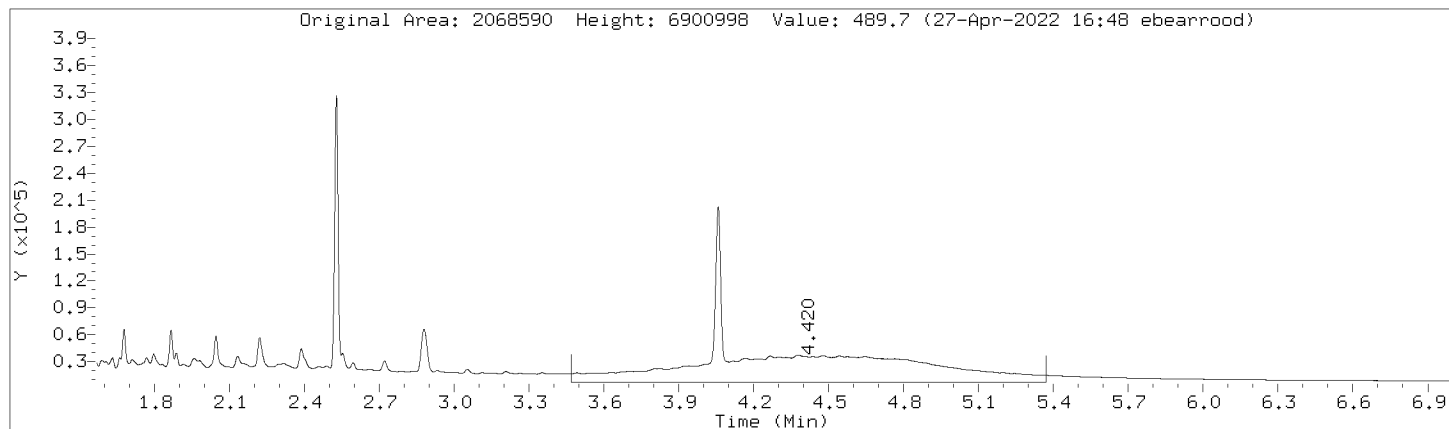
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



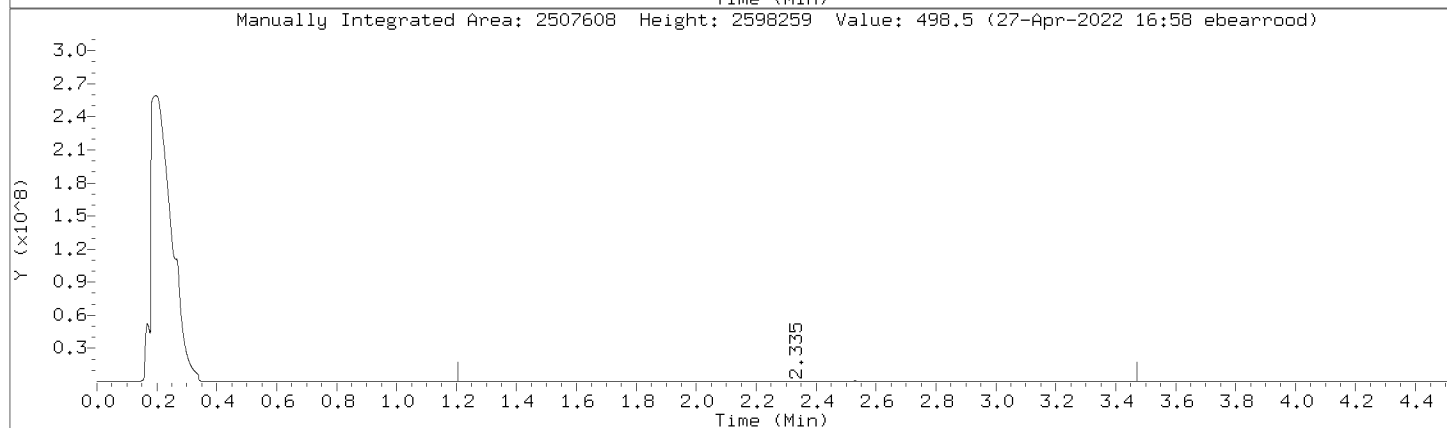
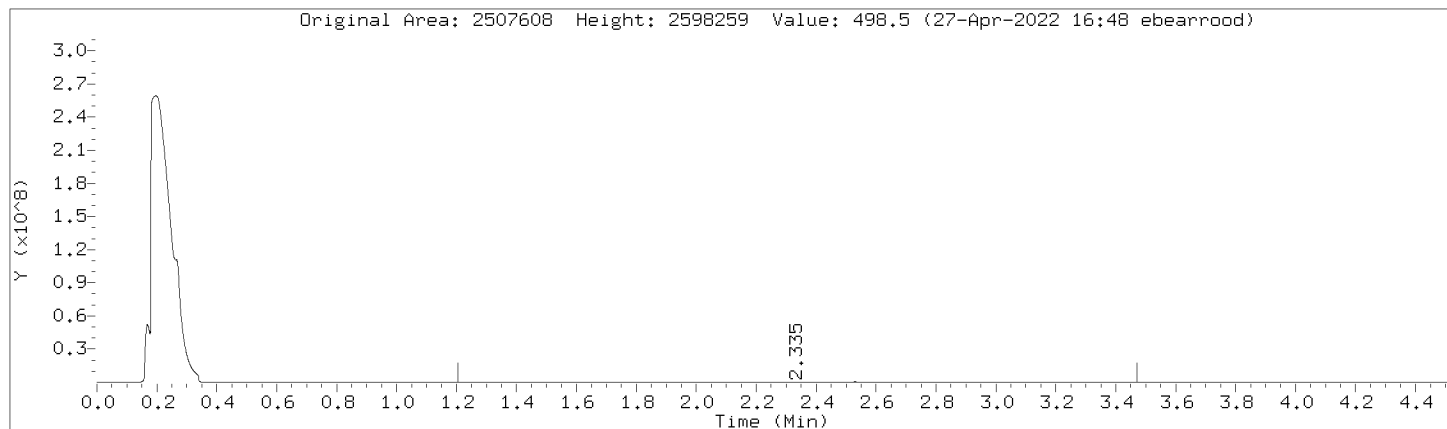
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



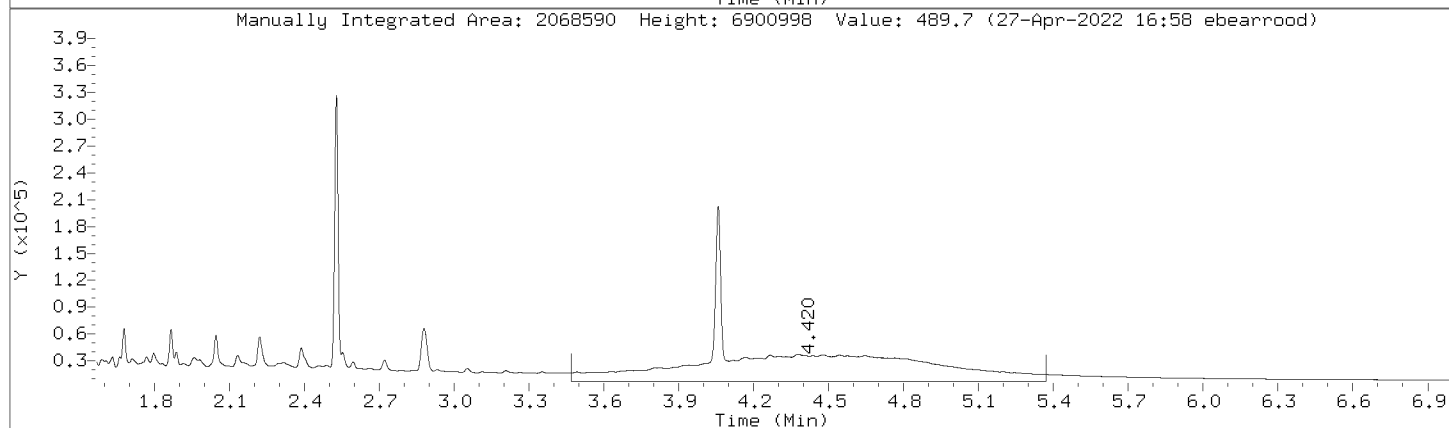
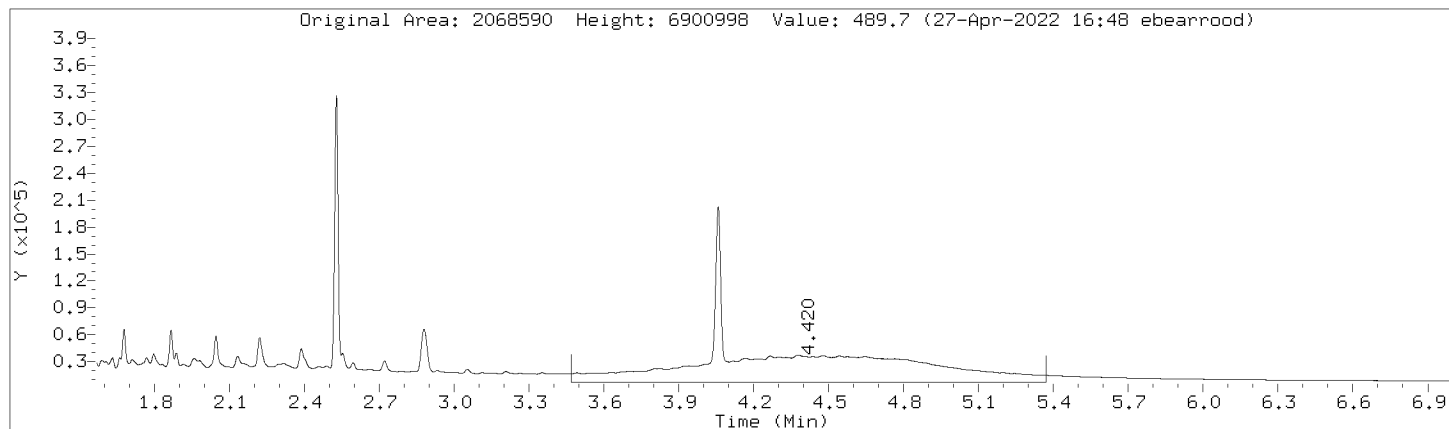
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



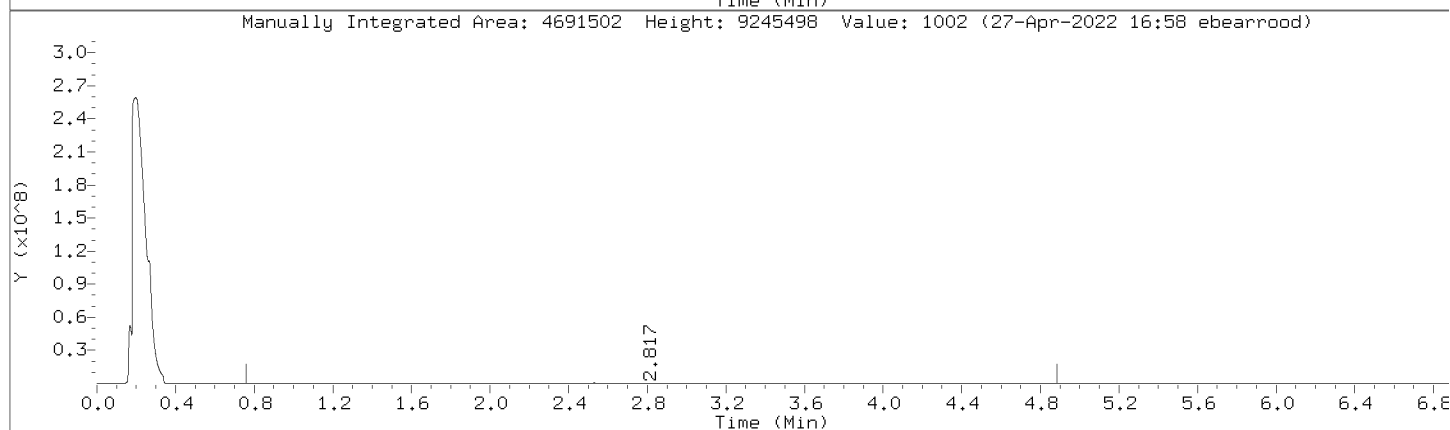
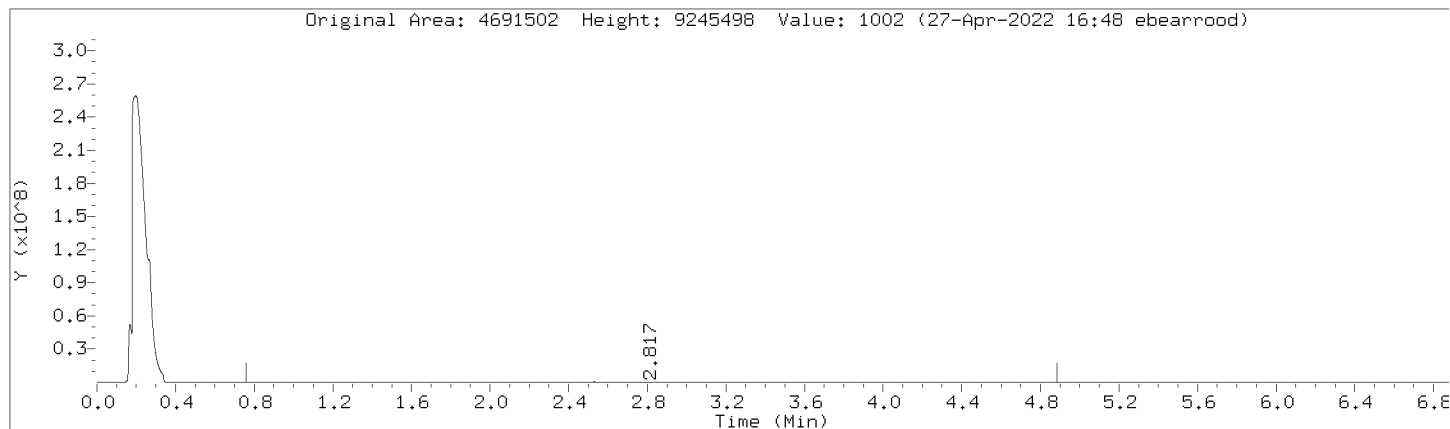
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



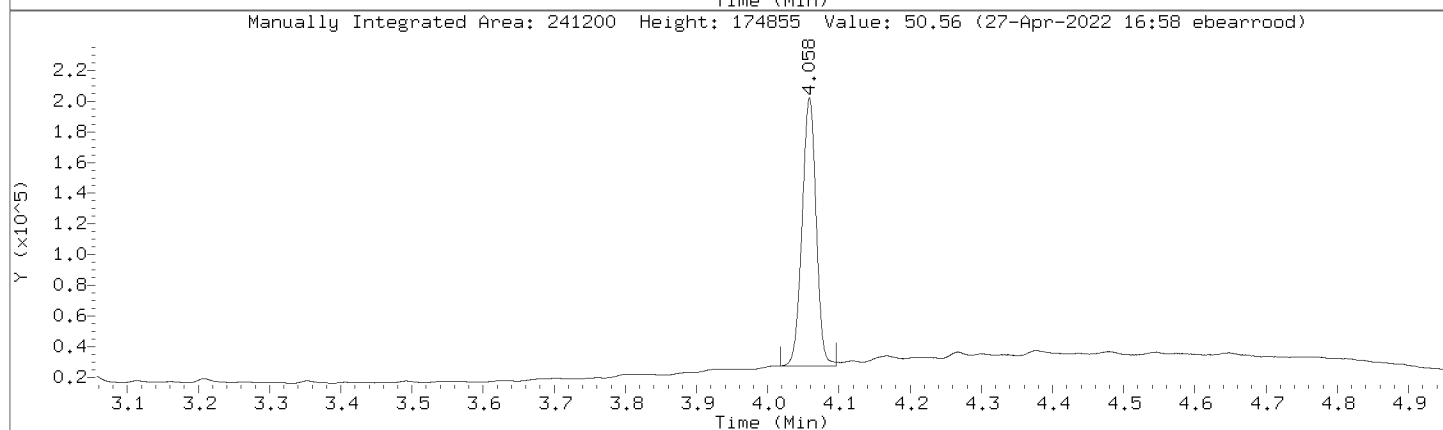
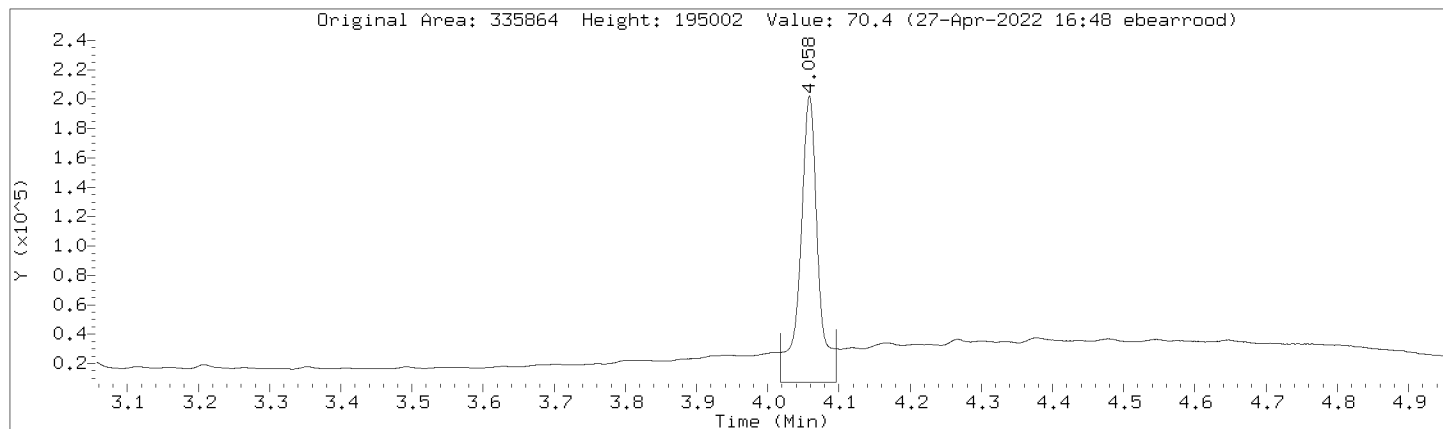
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



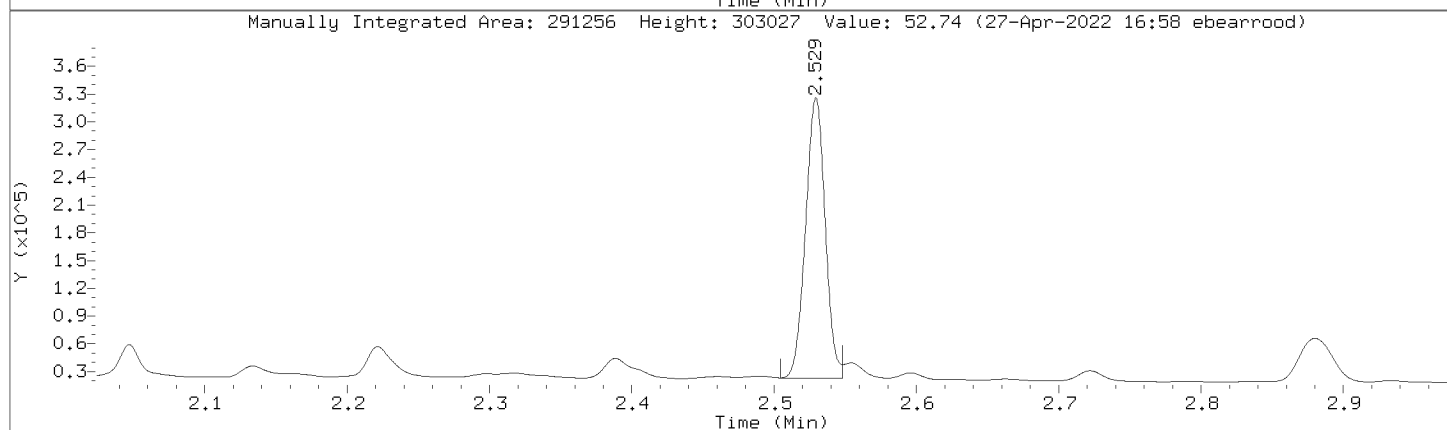
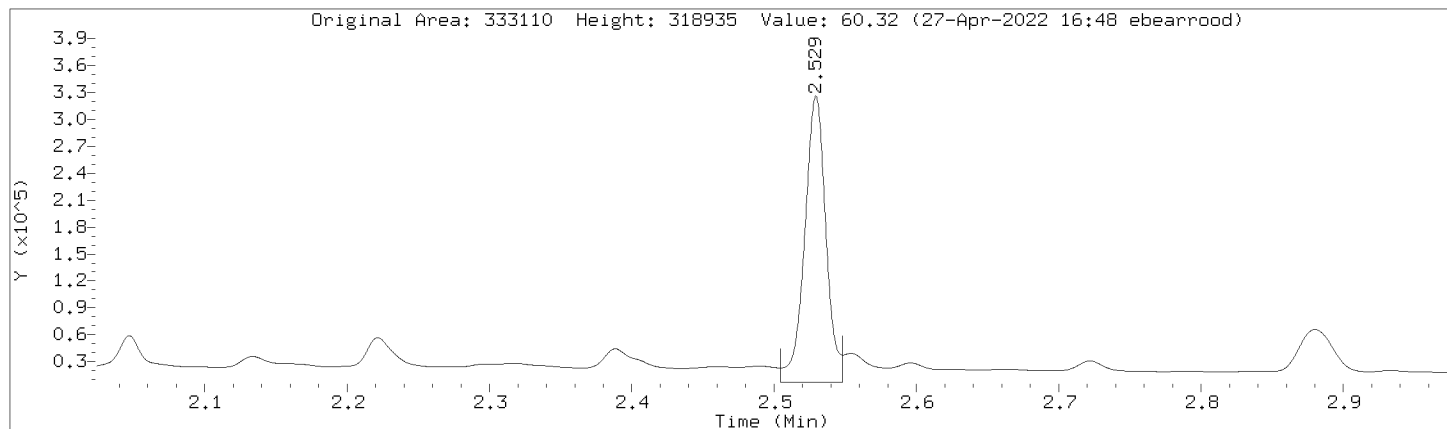
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000013.D  
 Injection Date: 27-APR-2022 13:57  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,362365:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1724784	1724784
DRO by AK 102	2966718	2966718
TPH-DRO (C10-C28)	3403605	3403605
Motor Oil Range (C24-C36)	1802908	1802908
Diesel Fuel Range	2507608	2507608
Motor Oil Range	2068590	2068590
Diesel Fuel Range SG	2507608	2507608
Motor Oil Range SG	2068590	2068590
C10-C36	4691502	4691502
n-Triacontane (S)	335864	241200
o-Terphenyl (S)	333110	291256

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
 Lab Smp Id: DMO-CCV,362365:2 Client Smp ID: DMO-CCV,362365:2  
 Inj Date : 27-APR-2022 15:38  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,362365:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 28-Apr-2022 09:09 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 2 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.755	- 3.420		3057152 500.000	517	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.527	2.524 0.003		300798 50.0000	54.5	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.060	4.057 0.003		245686 50.0000	51.5	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.421	- 4.880		1758466 500.000	514	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.755	- 4.000		3498048 500.000	517	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.280	- 4.880		1839665 500.000	518	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.755	- 4.880		4818084 1000.00	1030	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.200	- 3.470		2581944 500.000	515	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.200	- 3.470		2581944 500.000	515	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.471	- 5.370		2125587 500.000	504	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.471	- 5.370		2125587 500.000	504	(M) RNG
-----					



QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 15:38

Client ID: DM0-CCV,362365;2

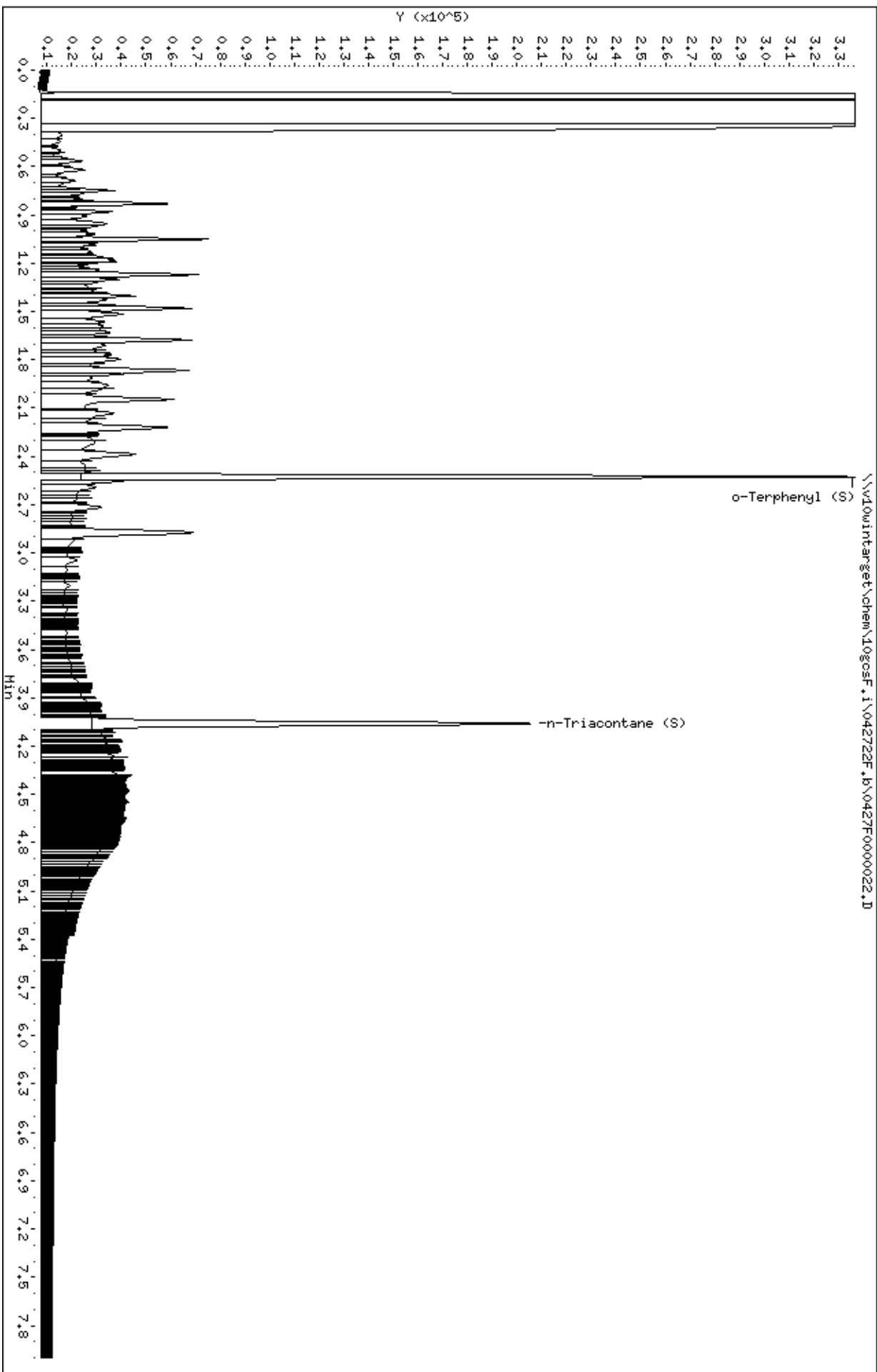
Sample Info: DM0-CCV,362365;2

Column phase: DB-5-MS21250010

Instrument: logosf.i

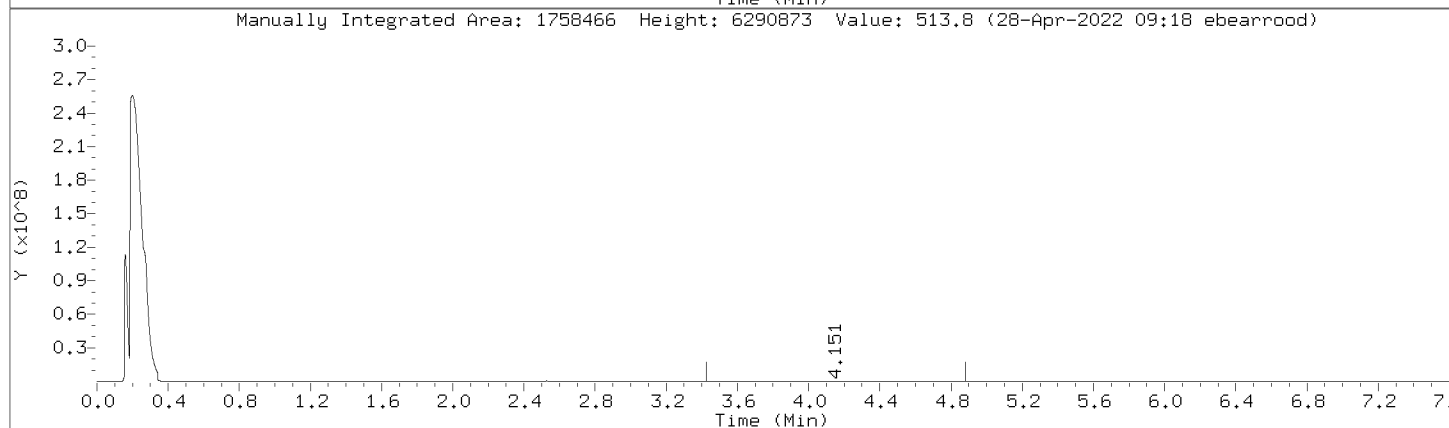
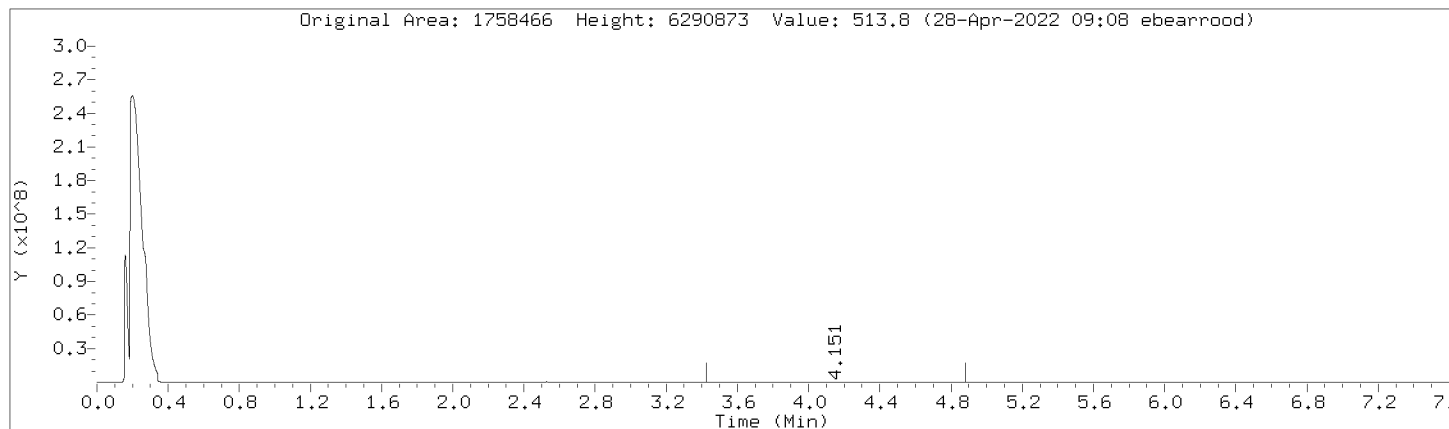
Operator: EB3

Column diameter: 0.32



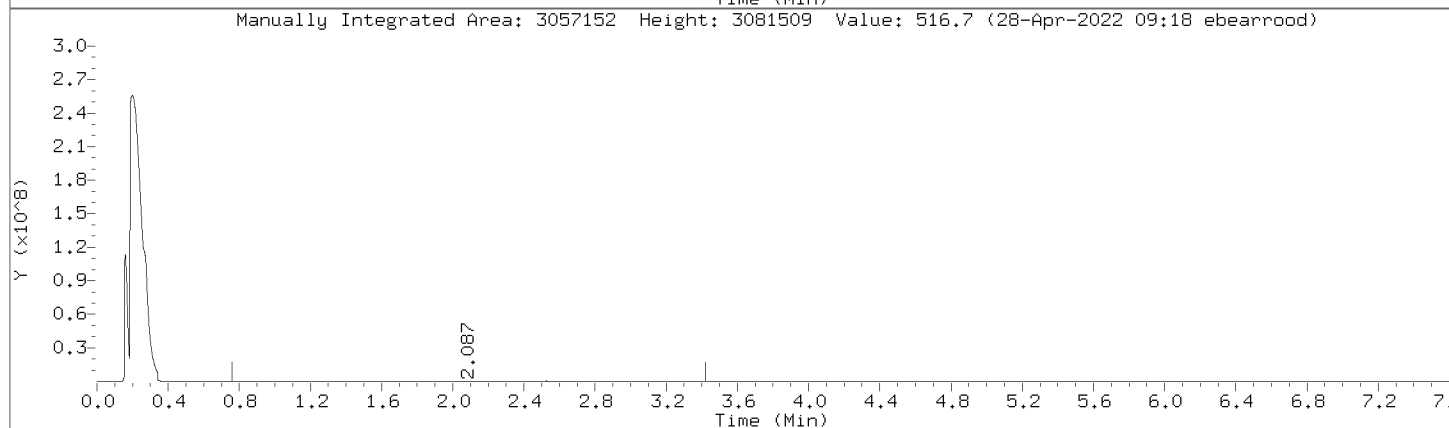
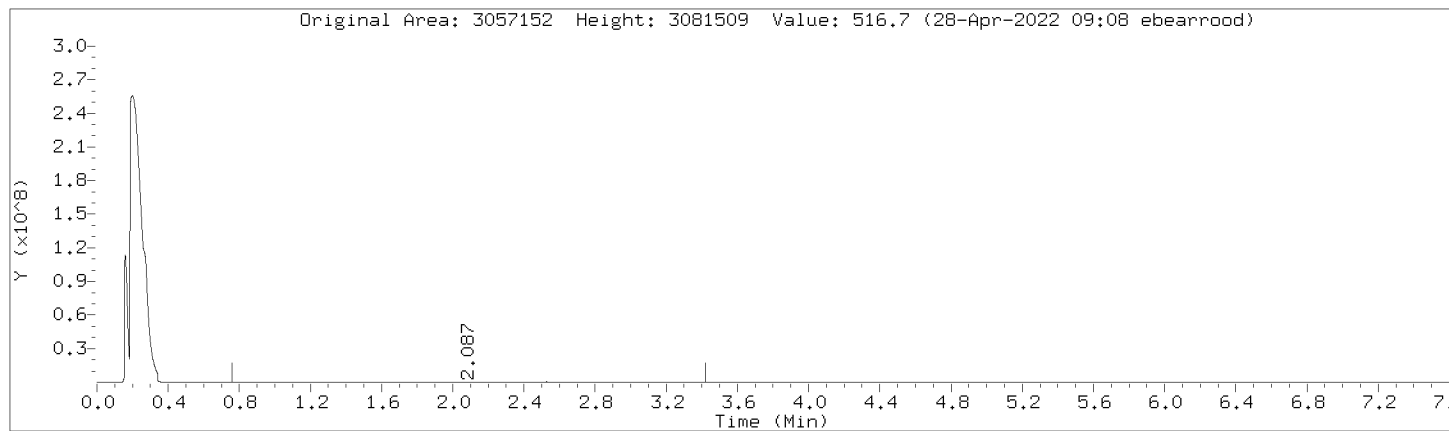
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



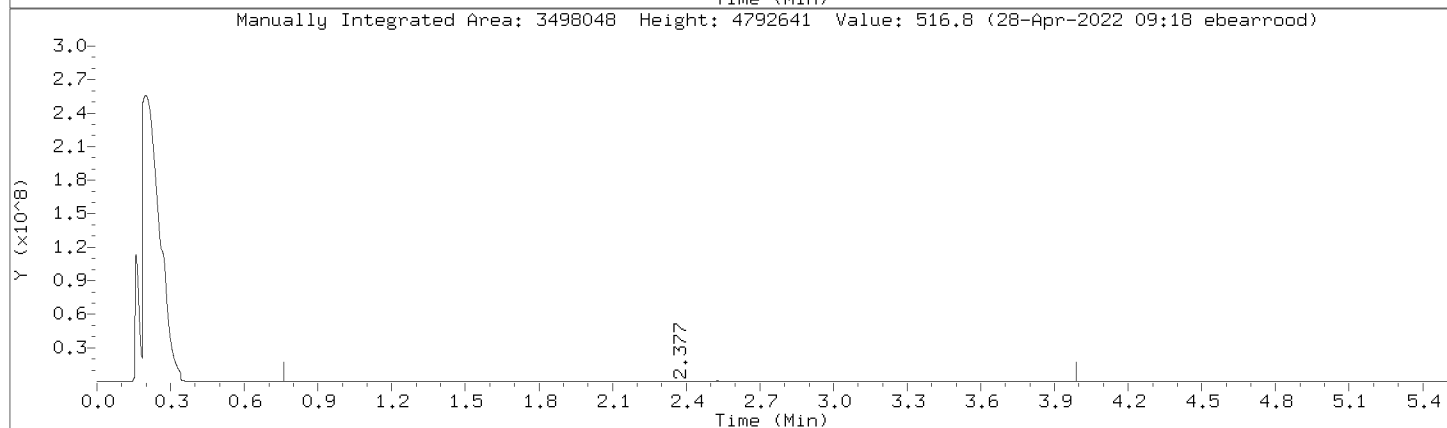
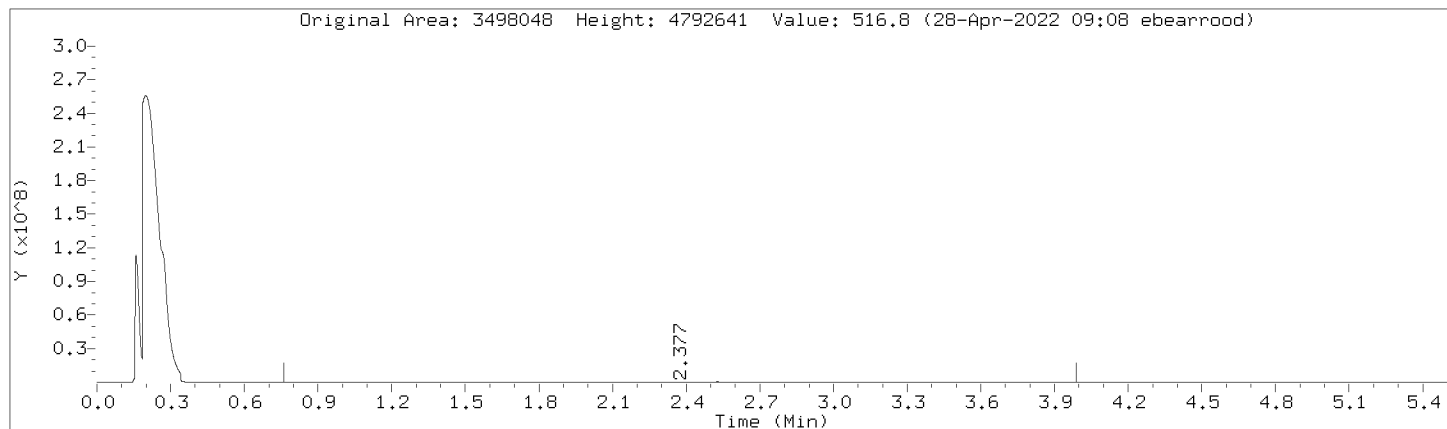
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



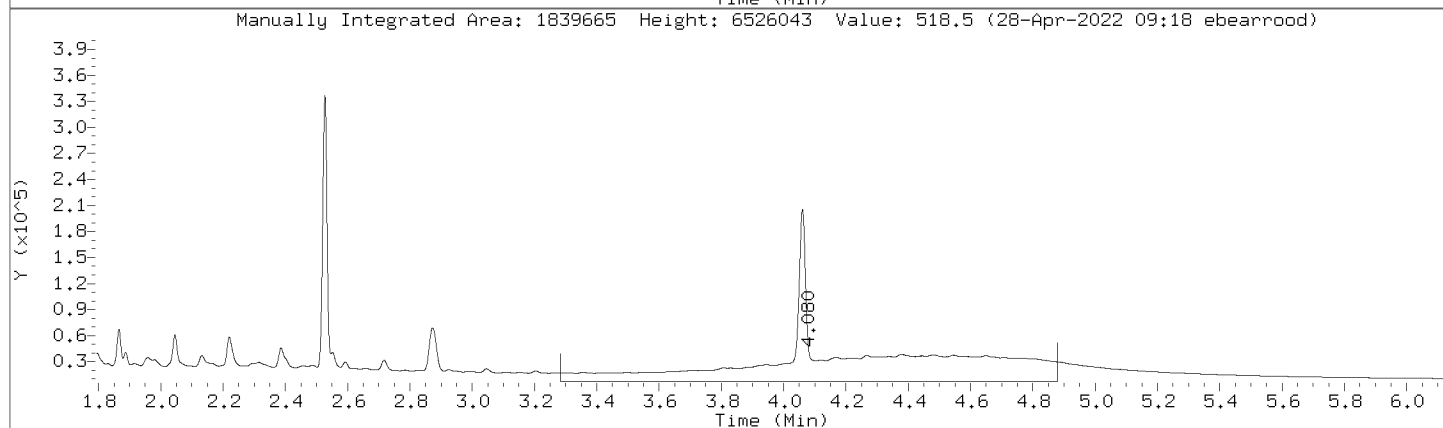
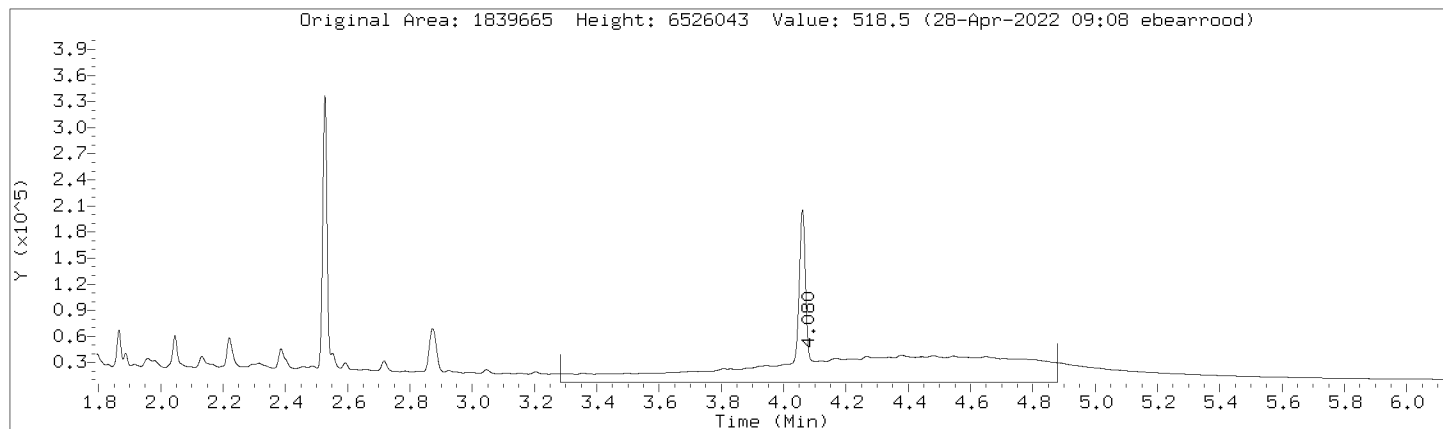
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



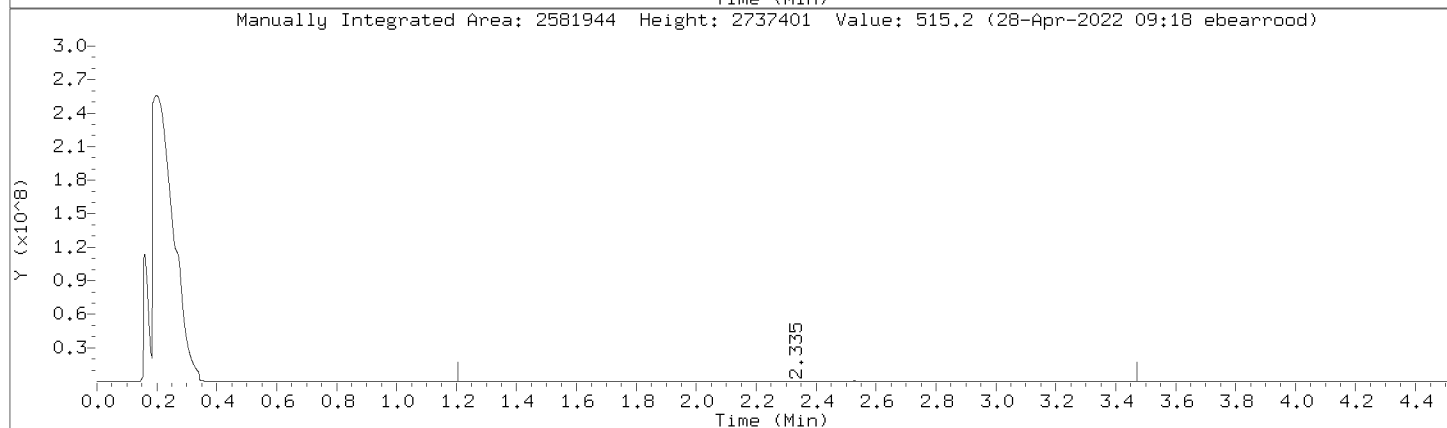
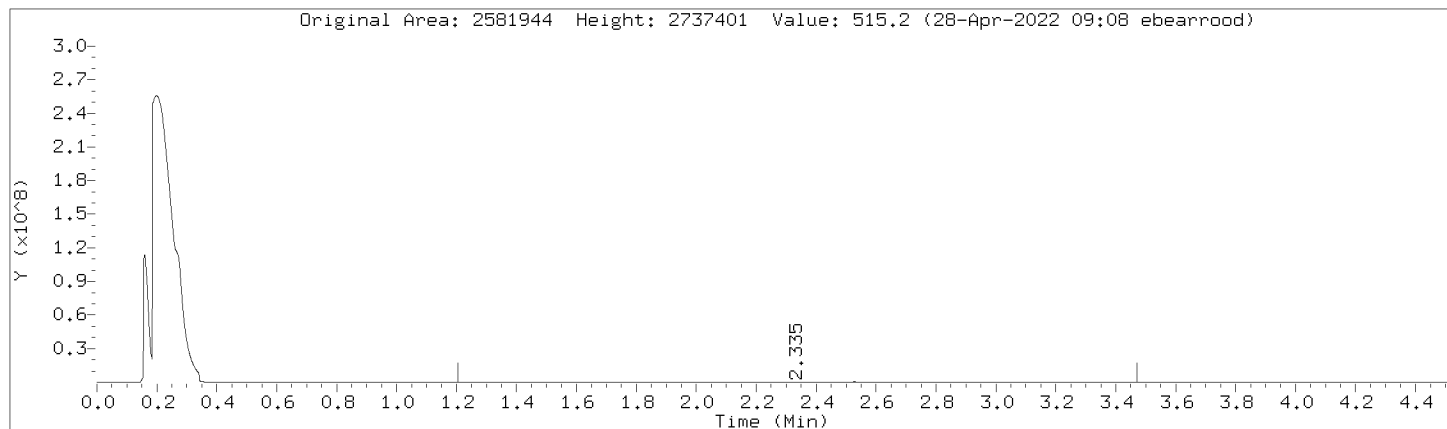
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



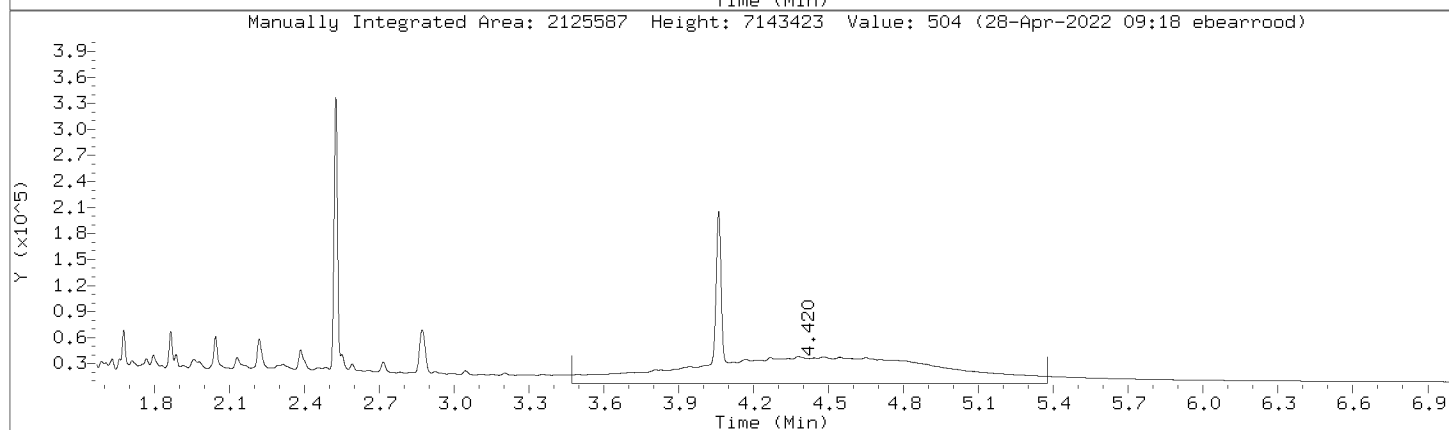
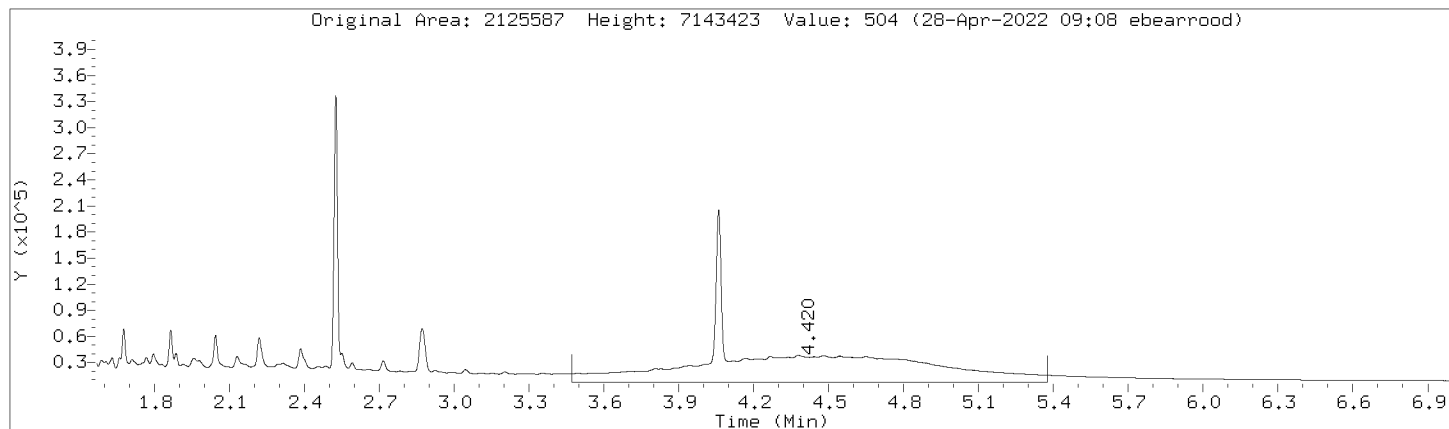
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

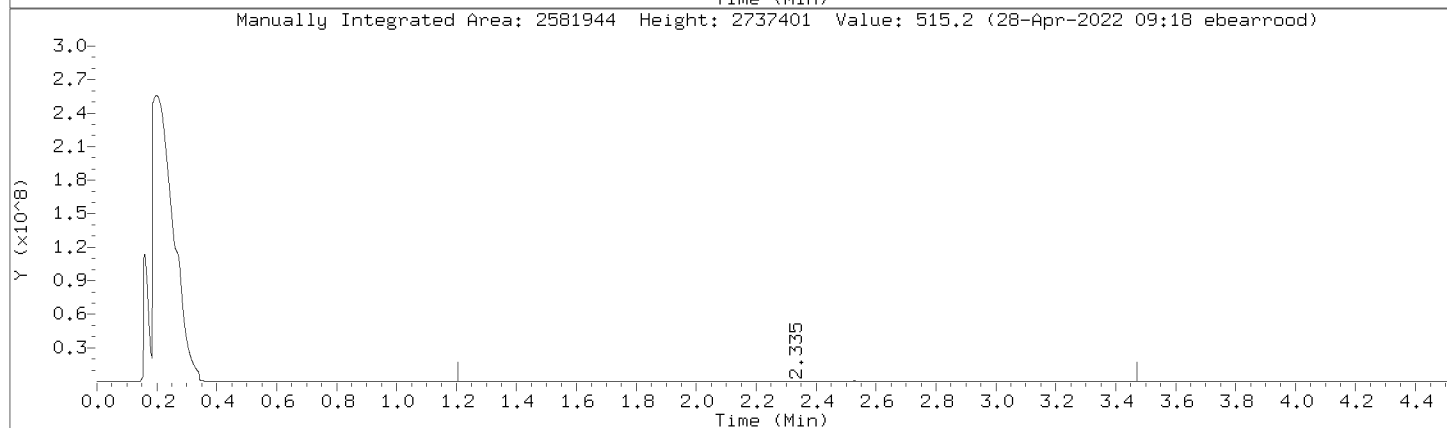
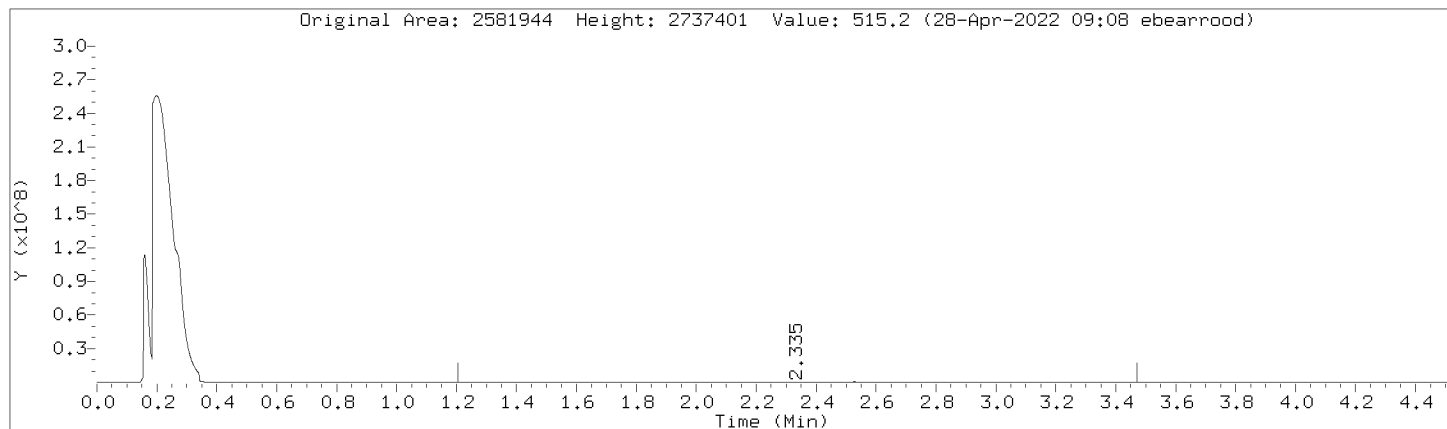
Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





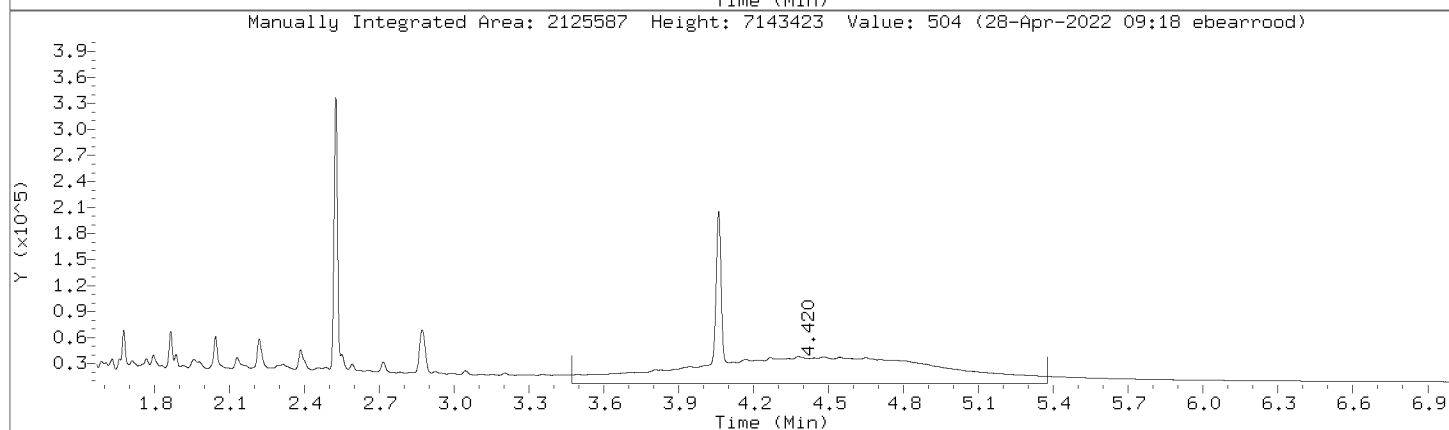
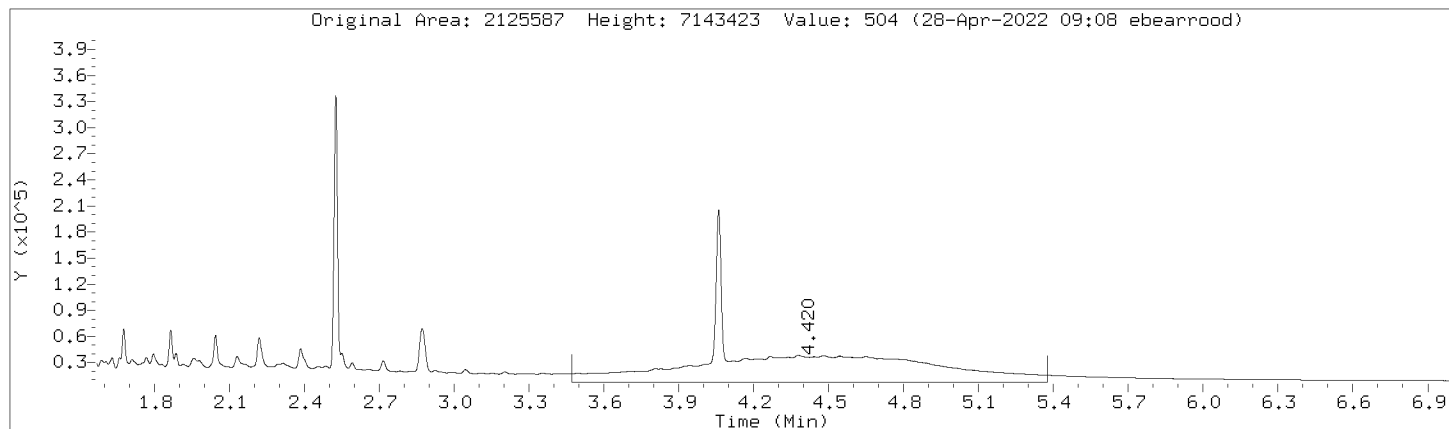
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Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



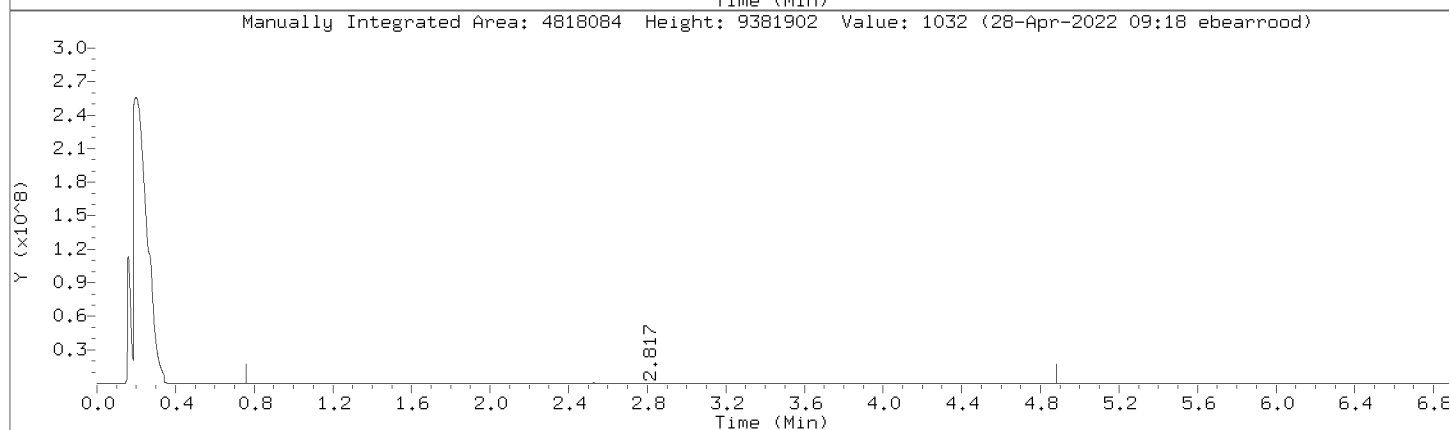
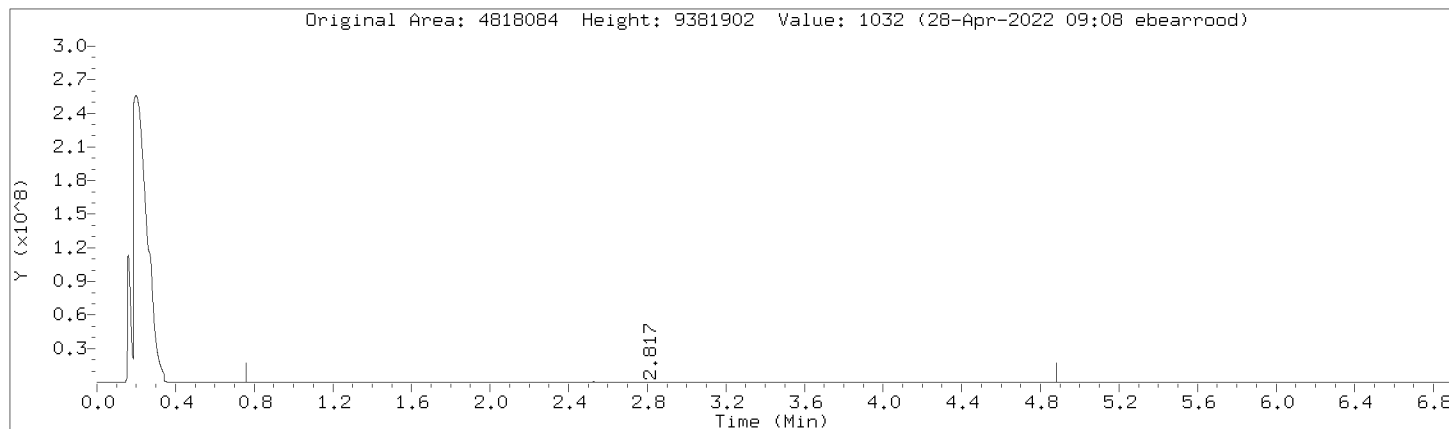
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Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



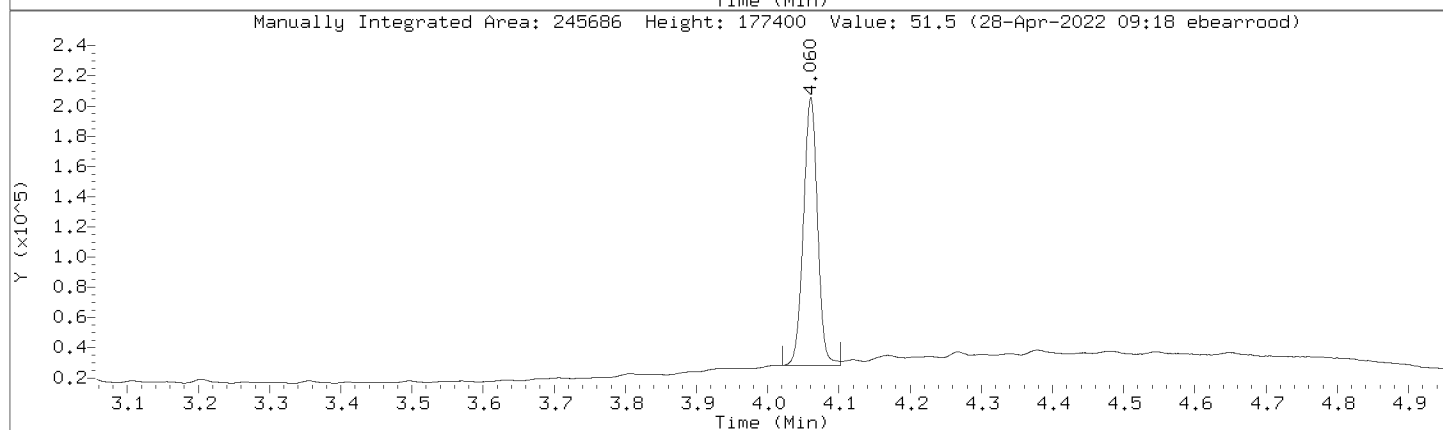
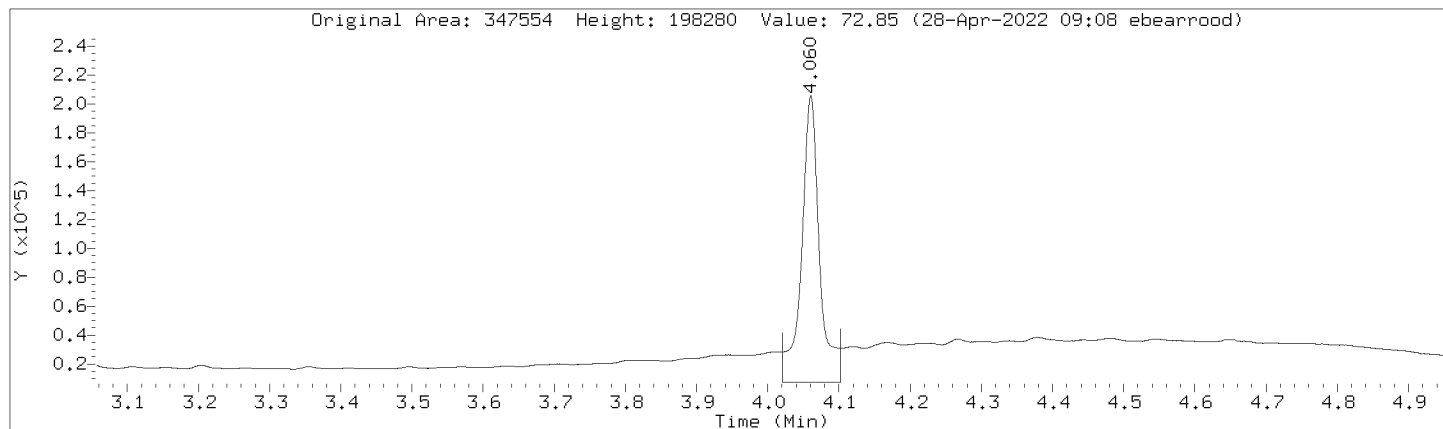
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Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



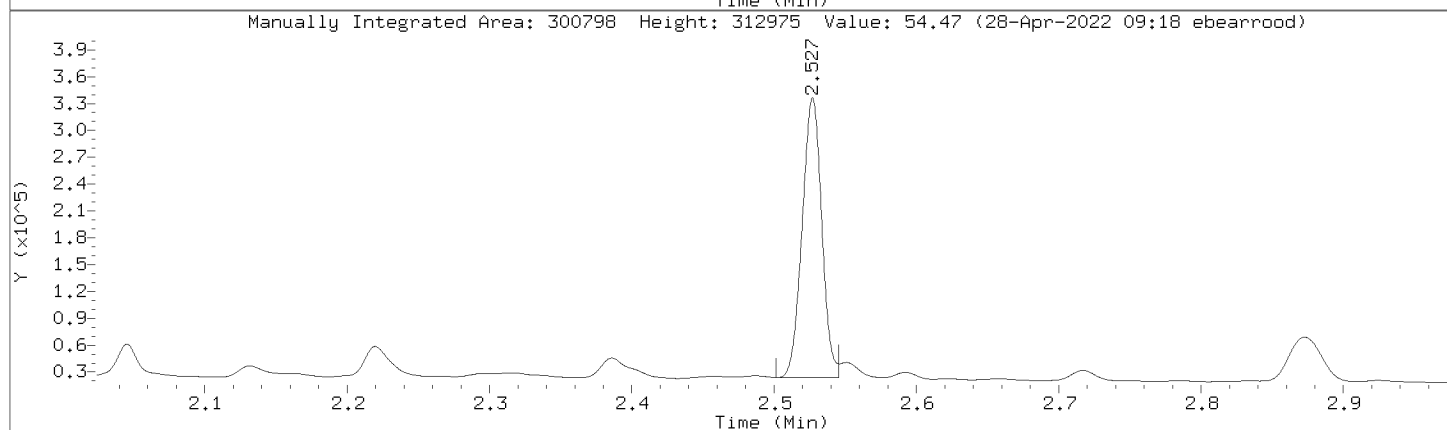
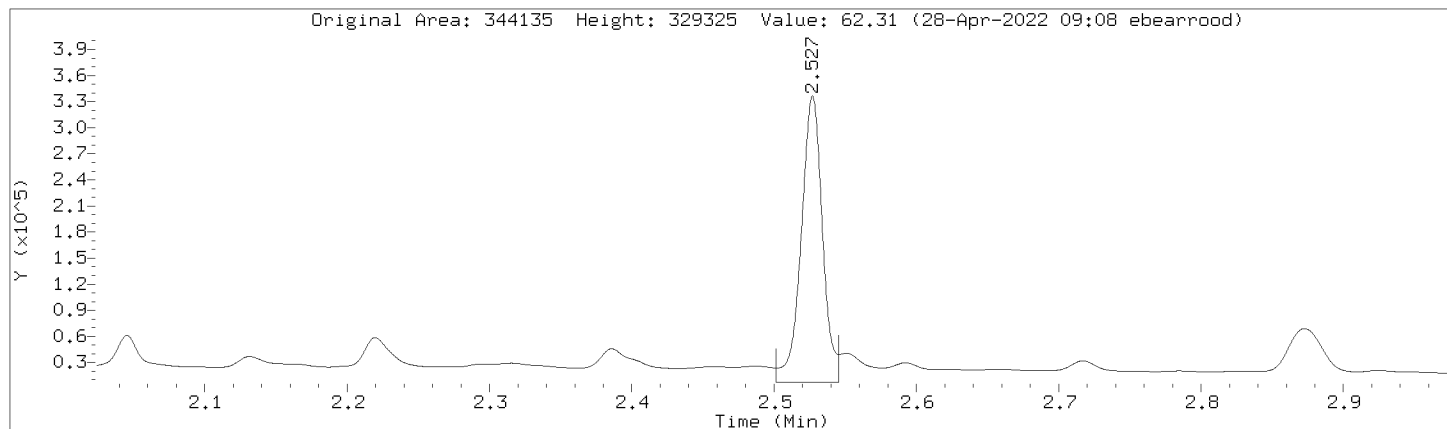
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Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
 Injection Date: 27-APR-2022 15:38  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,362365:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1758466	1758466
DRO by AK 102	3057152	3057152
TPH-DRO (C10-C28)	3498048	3498048
Motor Oil Range (C24-C36)	1839665	1839665
Diesel Fuel Range	2581944	2581944
Motor Oil Range	2125587	2125587
Diesel Fuel Range SG	2581944	2581944
Motor Oil Range SG	2125587	2125587
C10-C36	4818084	4818084
n-Triacontane (S)	347554	245686
o-Terphenyl (S)	344135	300798

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BLANK

Lab Name: Pace Analytical - Minnesota  
Date Received: \_\_\_\_\_  
Date Extracted: 04/22/2022 12:48  
Date Analyzed: 04/26/2022 14:52  
Initial wt/vol: 10 g Final wt/vol: 1 mL Dilution: 1

Contract: 3593500 WISHRAM RI  
Matrix: Solid SDG No.: 10605435  
Lab Sample ID: 4301503  
Lab File ID: 042622F.B\0426F0000025B.D  
Instrument: 10GCSF Percent Moisture: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	ND	U
	Motor Oil Range	ND	U

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000025b.D  
 Lab Smp Id: 4301503 Client Smp ID: MB  
 Inj Date : 26-APR-2022 14:52  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : 4301503  
 Misc Info : 39195  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 16:13 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 8 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: SOIL

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE	ON-COL (ug/mL)	FINAL (mg/Kg)	REVIEW CODE
S 1						CAS #:
Compound Not Detected. RNG						
\$ 2						CAS #:
2.567	2.568	-0.001	259390	46.9689	4.70	(M) BA
\$ 3						CAS #:
4.069	4.072	-0.003	222853	46.7130	4.67	(M) BA
S 4						CAS #:
3.431	- 4.840		100595	2.48248	0.248	(M) RNG
S 5						CAS #:
0.765	- 3.980		361285	0.20954	0.0210	(M) RNG
S 6						CAS #:
3.300	- 4.840		114060	1.74881	0.175	(M) RNG

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			ON-COL RESPONSE (ug/mL)	FINAL (mg/Kg)	
S 7	C10-C36			CAS #:	
Compound Not Detected.					RNG
S 8	Diesel Fuel Range			CAS #:	
Compound Not Detected.					RNG
S 9	Diesel Fuel Range SG			CAS #:	
Compound Not Detected.					RNG
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		125655 2.50596	0.250	(M) RNG
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		125655 2.50596	0.250	(M) RNG

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

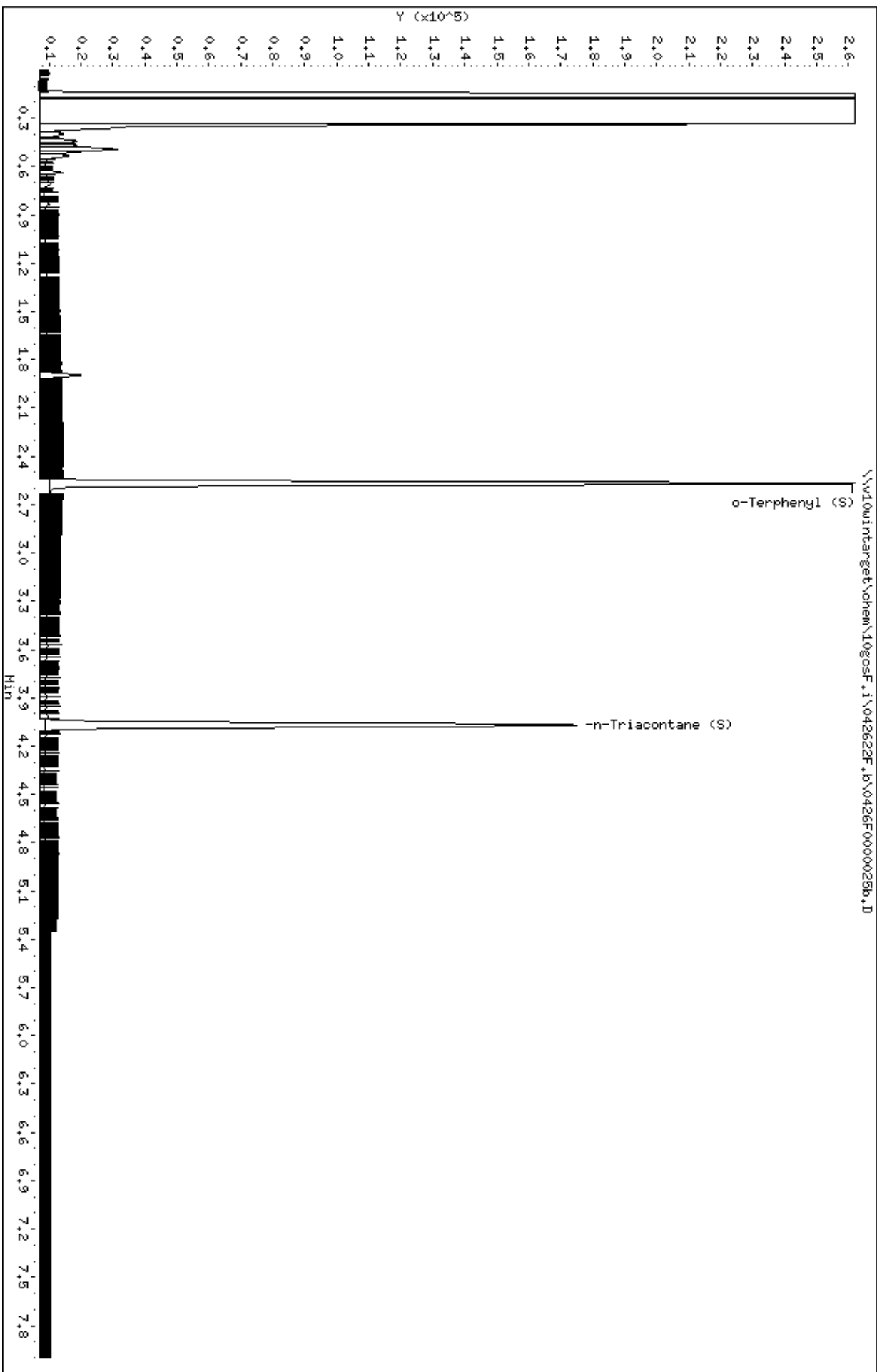
RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.



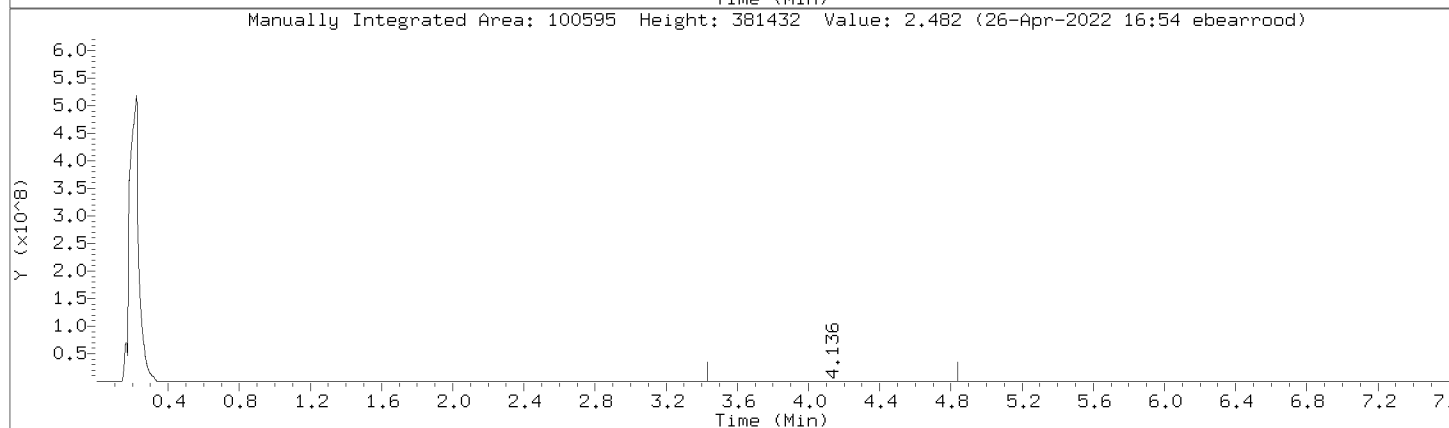
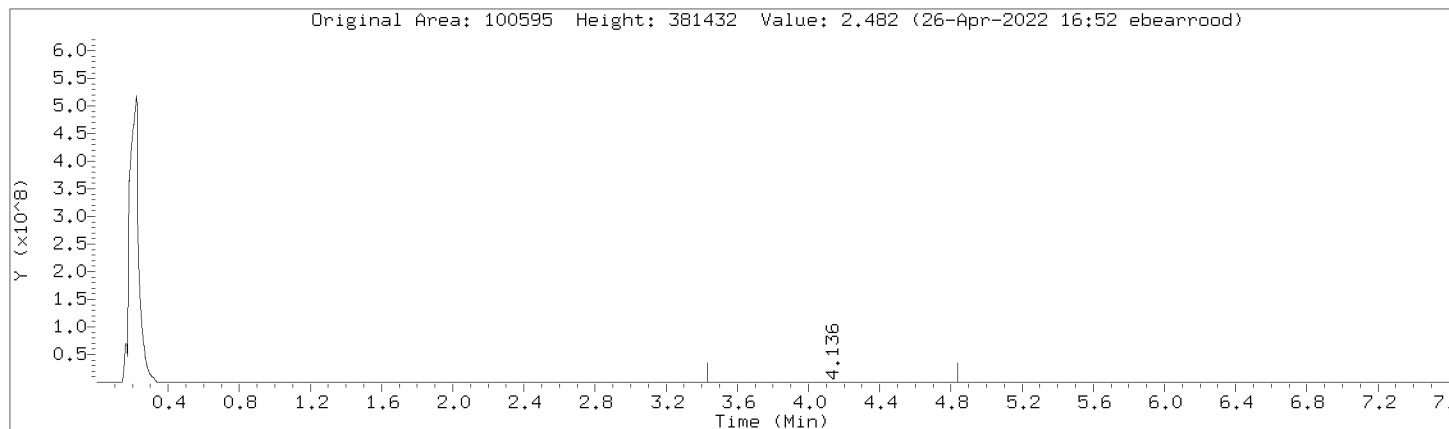
Data File: \\vdowintarget\chem\10gosf.i\042622f.b\0426f0000025b.D  
Date: 26-APR-2022 14:52  
Client ID: HB  
Sample Info: 4301503  
Volume Injected (uL): 1.0  
Column Phase: DB-5-MS21250010

Instrument: 10gosf.i  
Operator: EB3  
Column diameter: 0.32



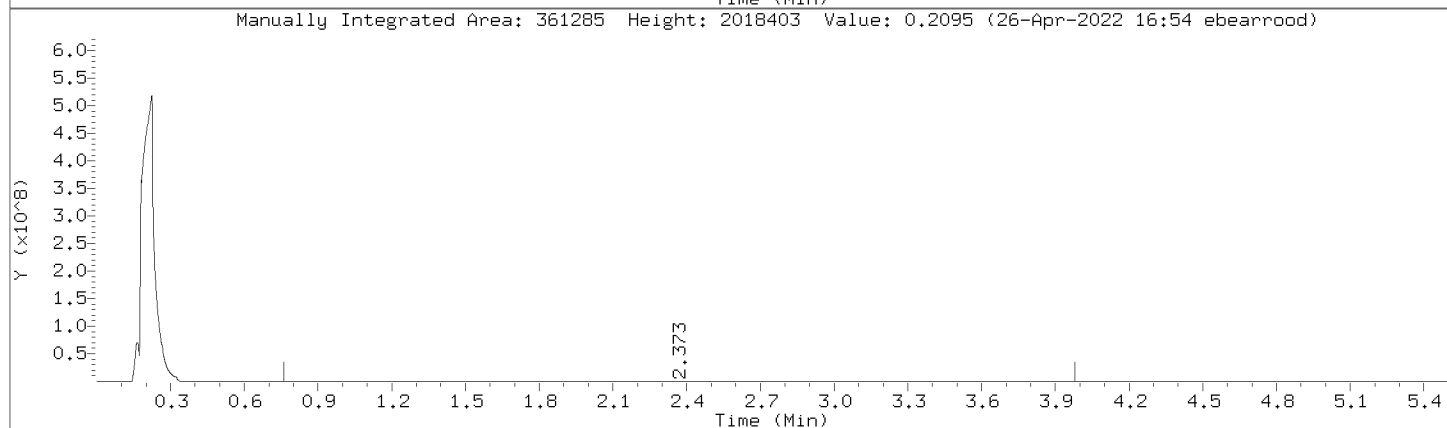
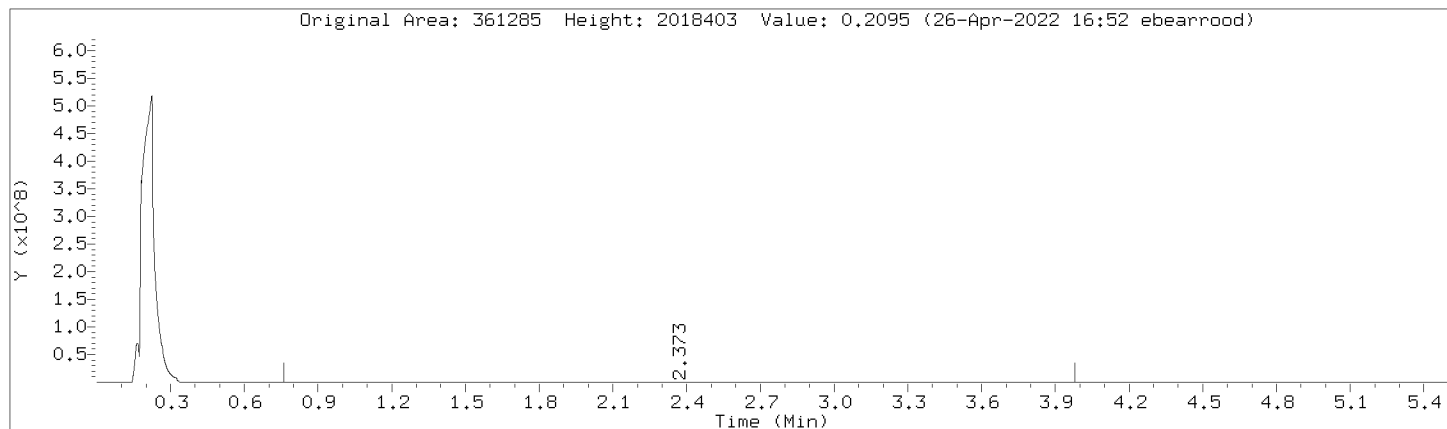
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Injection Date: 26-APR-2022 14:52  
Instrument: 10gcsF.i  
Lab Sample ID: 4301503

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



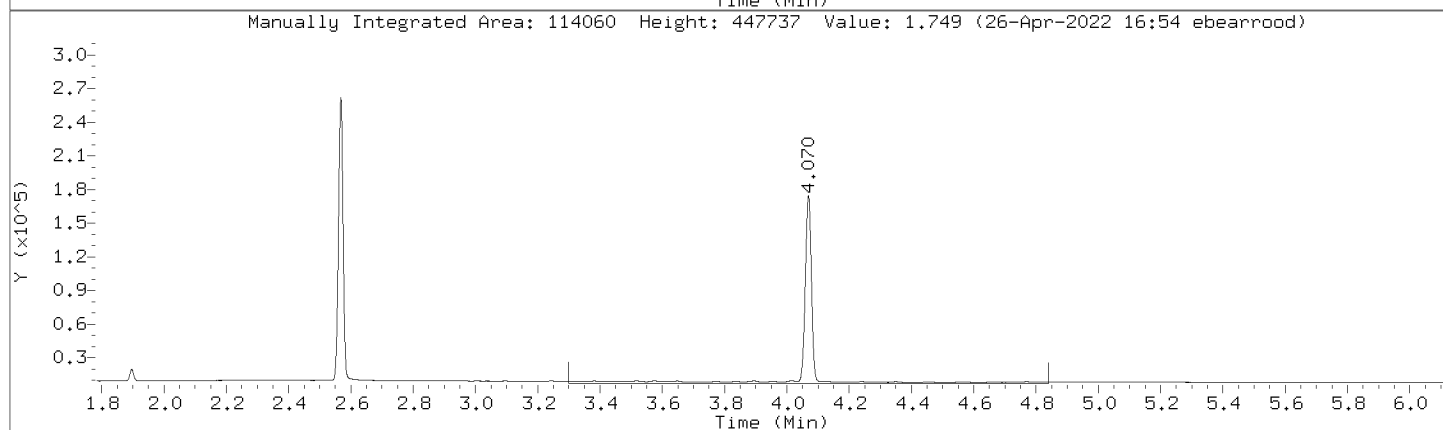
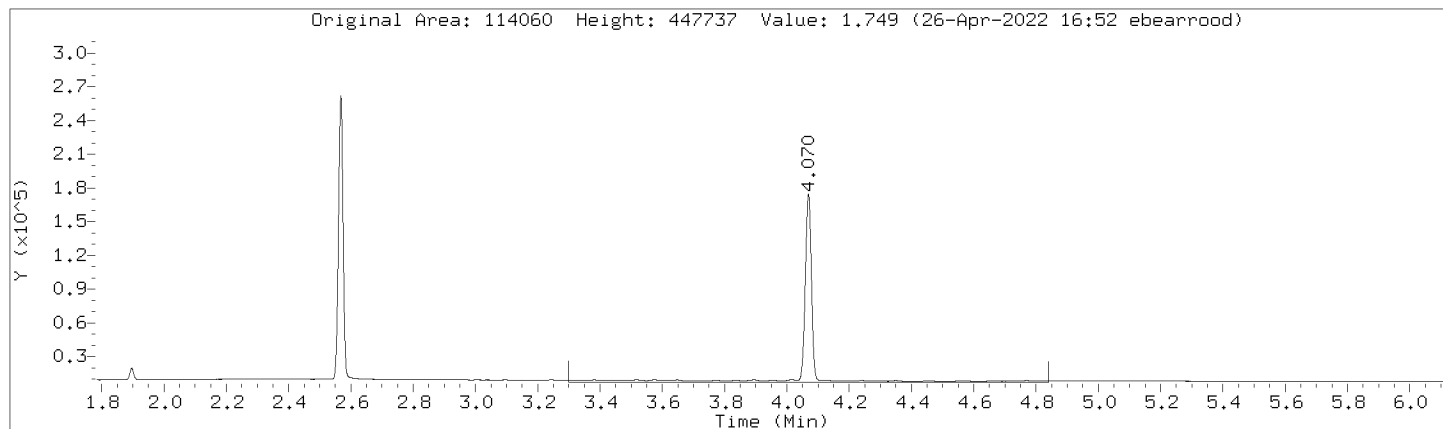
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000025b.D  
Injection Date: 26-APR-2022 14:52  
Instrument: 10gcsF.i  
Lab Sample ID: 4301503

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



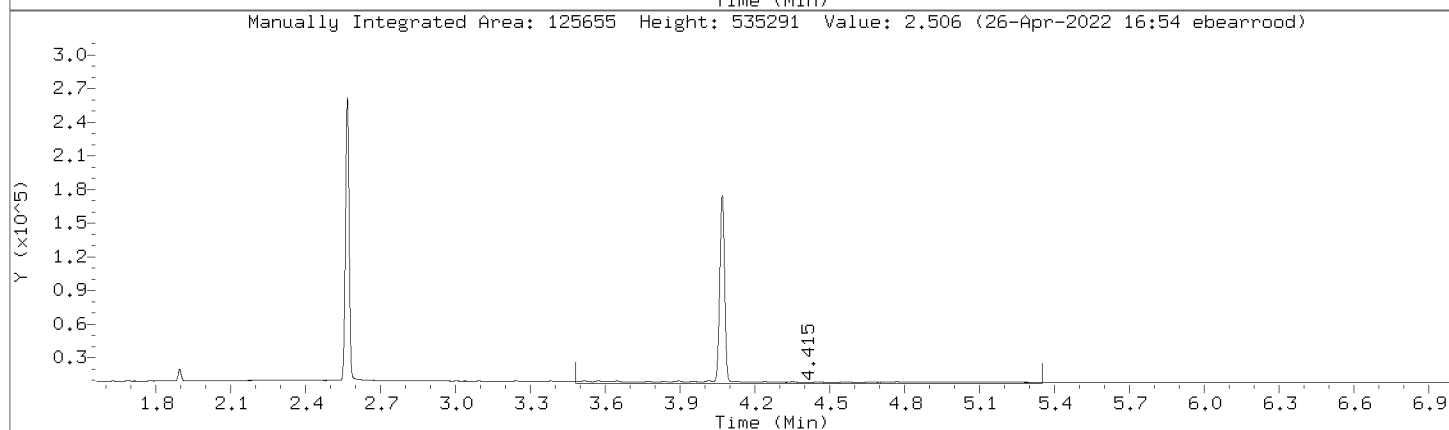
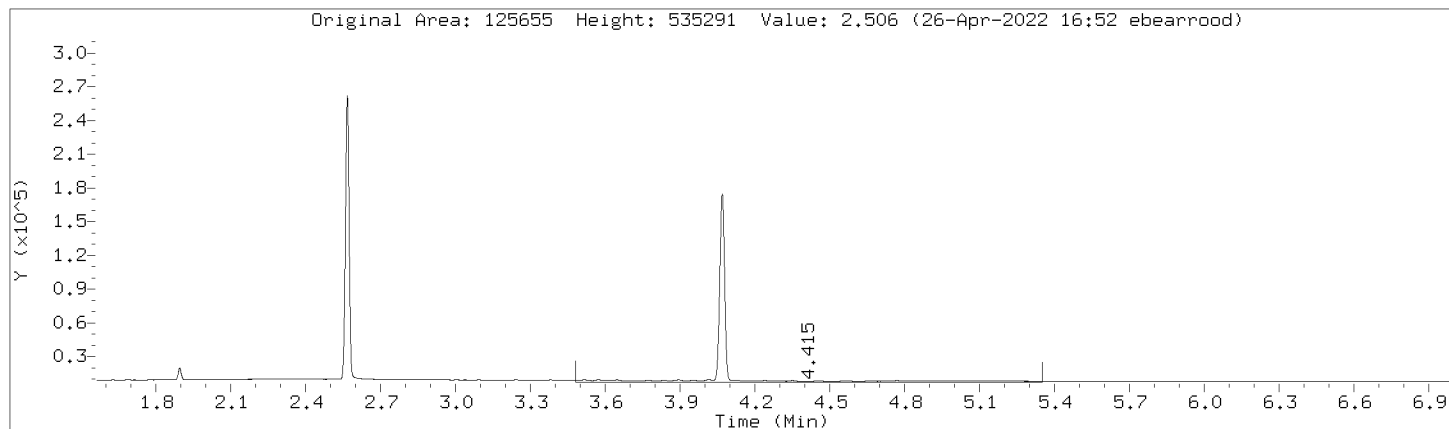
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000025b.D  
Injection Date: 26-APR-2022 14:52  
Instrument: 10gcsF.i  
Lab Sample ID: 4301503

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



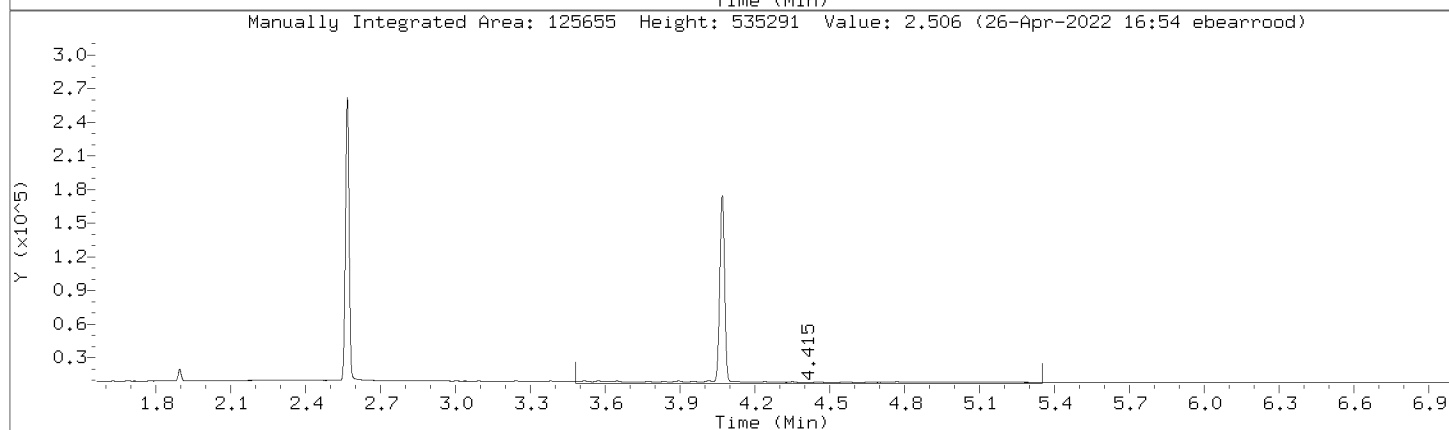
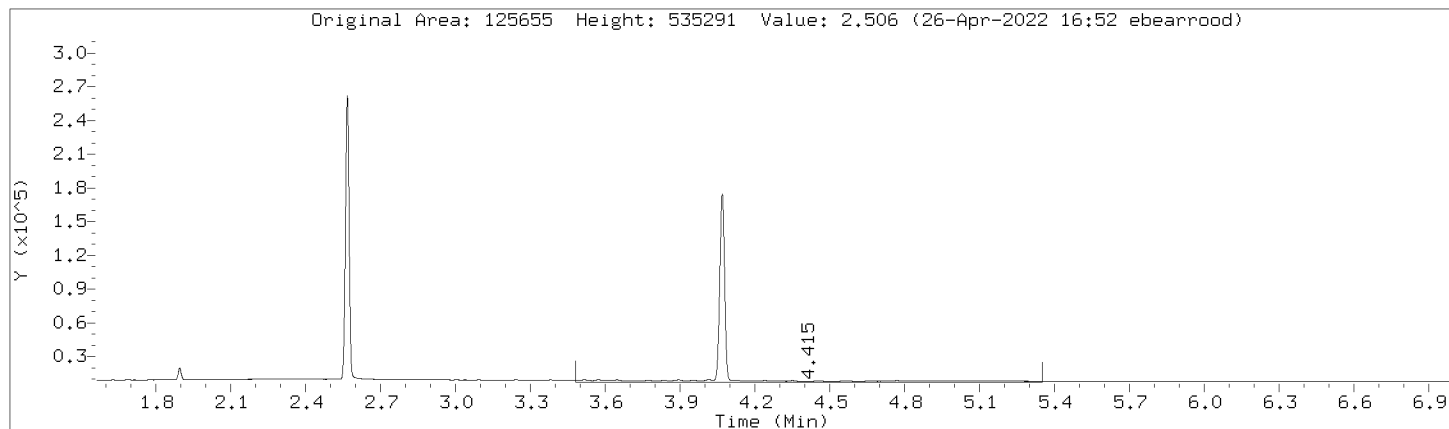
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000025b.D  
Injection Date: 26-APR-2022 14:52  
Instrument: 10gcsF.i  
Lab Sample ID: 4301503

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



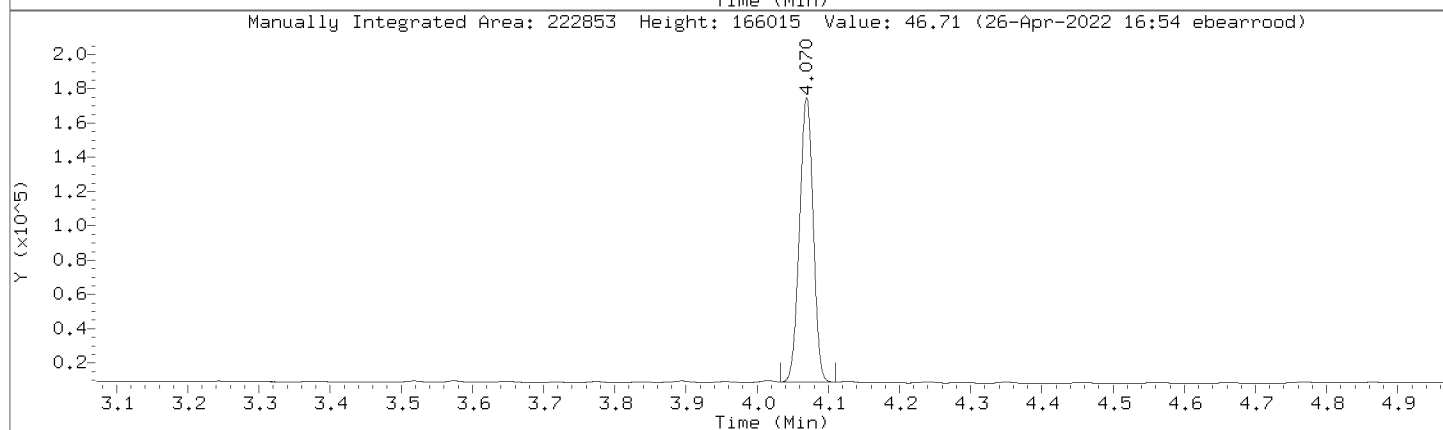
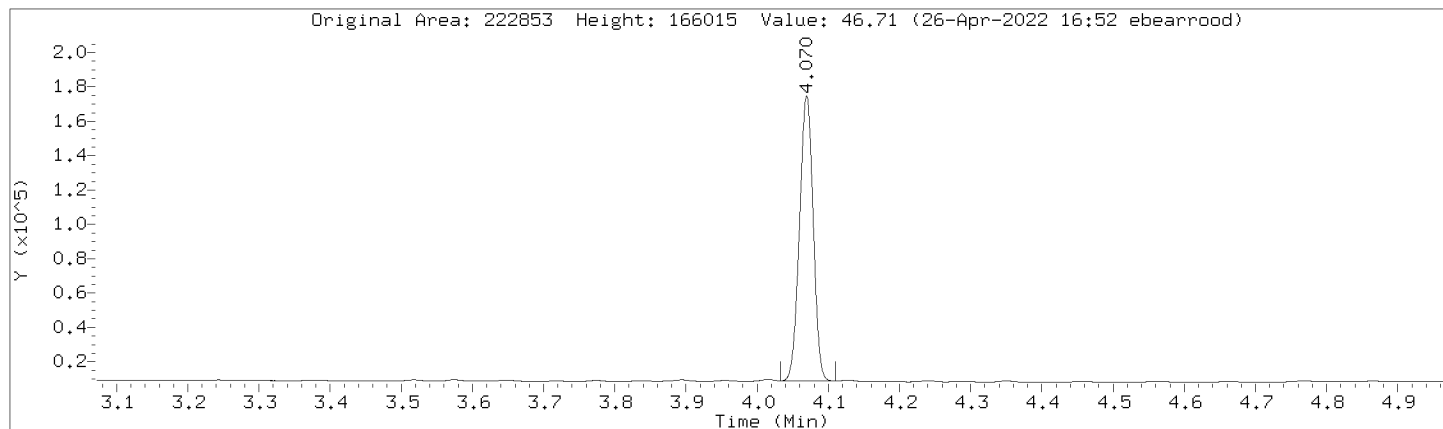
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Injection Date: 26-APR-2022 14:52  
Instrument: 10gcsF.i  
Lab Sample ID: 4301503

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



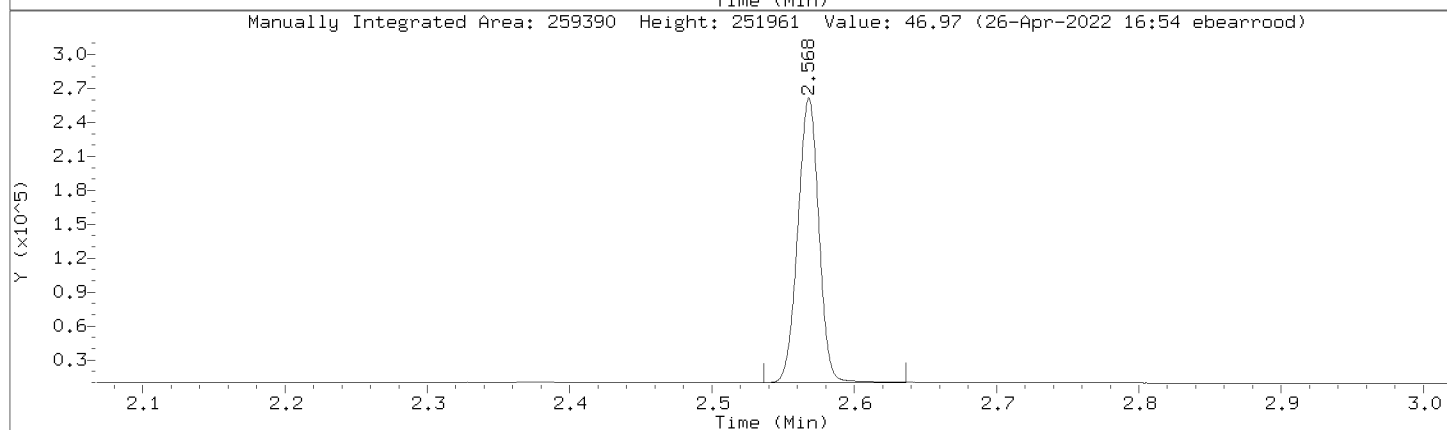
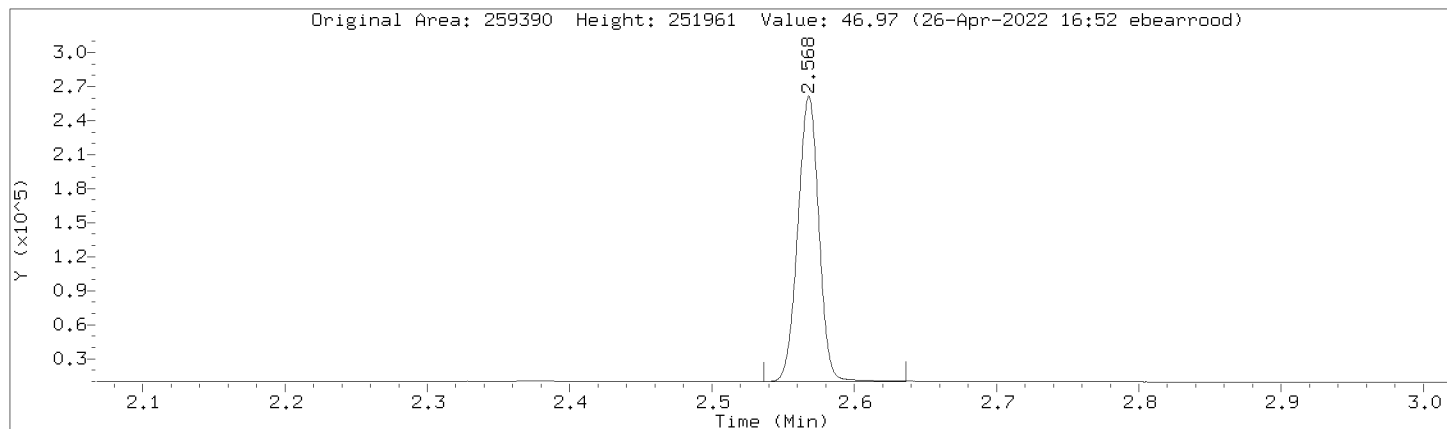
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Injection Date: 26-APR-2022 14:52  
Instrument: 10gcsF.i  
Lab Sample ID: 4301503

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000025b.D  
 Injection Date: 26-APR-2022 14:52  
 Instrument: 10gcsF.i  
 Lab Sample ID: 4301503

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	100595	100595
DRO by AK 102	0	0
TPH-DRO (C10-C28)	361285	361285
Motor Oil Range (C24-C36)	114060	114060
Diesel Fuel Range	0	0
Motor Oil Range	125655	125655
Diesel Fuel Range SG	0	0
Motor Oil Range SG	125655	125655
C10-C36	0	0
n-Triacontane (S)	222853	222853
o-Terphenyl (S)	259390	259390



GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

LCS

Lab Name: Pace Analytical - Minnesota  
Date Received: \_\_\_\_\_  
Date Extracted: 04/22/2022 12:48  
Date Analyzed: 04/26/2022 15:02  
Initial wt/vol: 10 g Final wt/vol: 1 mL Dilution: 1

Contract: 3593500 WISHRAM RI  
Matrix: Solid SDG No.: 10605435  
Lab Sample ID: 4301504  
Lab File ID: 042622F.B\0426F0000026B.D  
Instrument: 10GCSF Percent Moisture: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	46.2	
	Motor Oil Range	48.2	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000026b.D  
 Lab Smp Id: 4301504 Client Smp ID: MBLCS  
 Inj Date : 26-APR-2022 15:02  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : 4301504  
 Misc Info : 39195  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 16:13 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 9 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: SOIL

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
S 1	DRO by AK 102					CAS #:
0.765	- 3.430		2713756	451.847		45.2 (M) RNG
\$ 2	o-Terphenyl (S)					CAS #:
2.567	2.568 -0.001		262883	47.6014		4.76 (M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.071	4.072 -0.001		231197	48.4620		4.85 (M) BA
S 4	Residual Range Organics AK103					CAS #:
3.431	- 4.840		1645421	478.903		47.9 (M) RNG
S 5	TPH-DRO (C10-C28)					CAS #:
0.765	- 3.980		3129916	456.161		45.6 (M) RNG
S 6	Motor Oil Range (C24-C36)					CAS #:
3.300	- 4.840		1706757	478.709		47.9 (M) RNG
S 7	C10-C36					CAS #:
0.765	- 4.840		4359177	924.229		92.4 (M) RNG

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			ON-COL RESPONSE (ug/mL)	FINAL (mg/Kg)	
S 8 Diesel Fuel Range				CAS #:	
1.210	- 3.480		2344503 461.842	46.2	(M) RNG
-----					
S 9 Diesel Fuel Range SG				CAS #:	
1.210	- 3.480		2344503 461.842	46.2	(M) RNG
-----					
S 10 Motor Oil Range				CAS #:	
3.481	- 5.350		2037057 481.763	48.2	(M) RNG
-----					
S 11 Motor Oil Range SG				CAS #:	
3.481	- 5.350		2037057 481.763	48.2	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

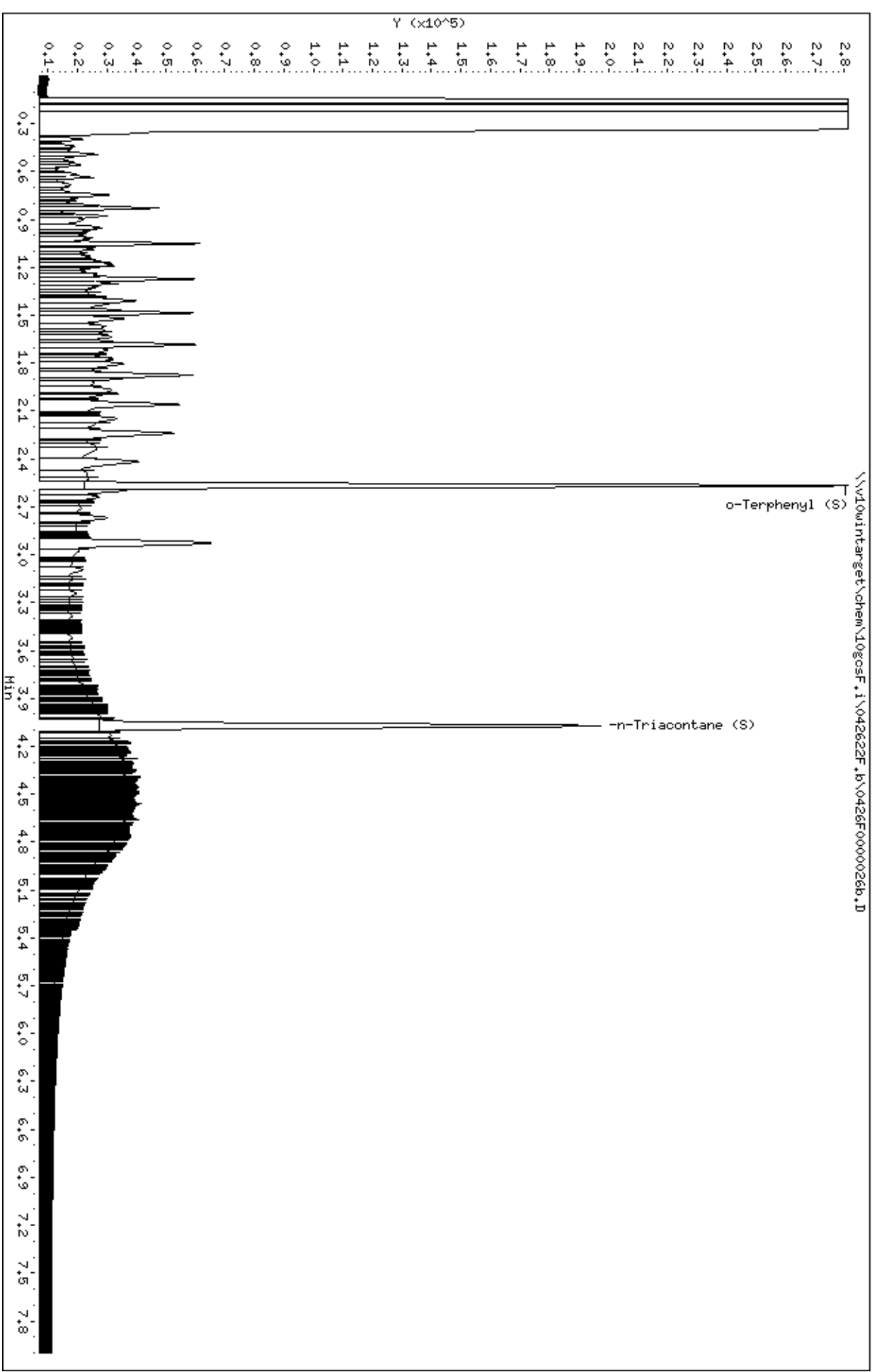
Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

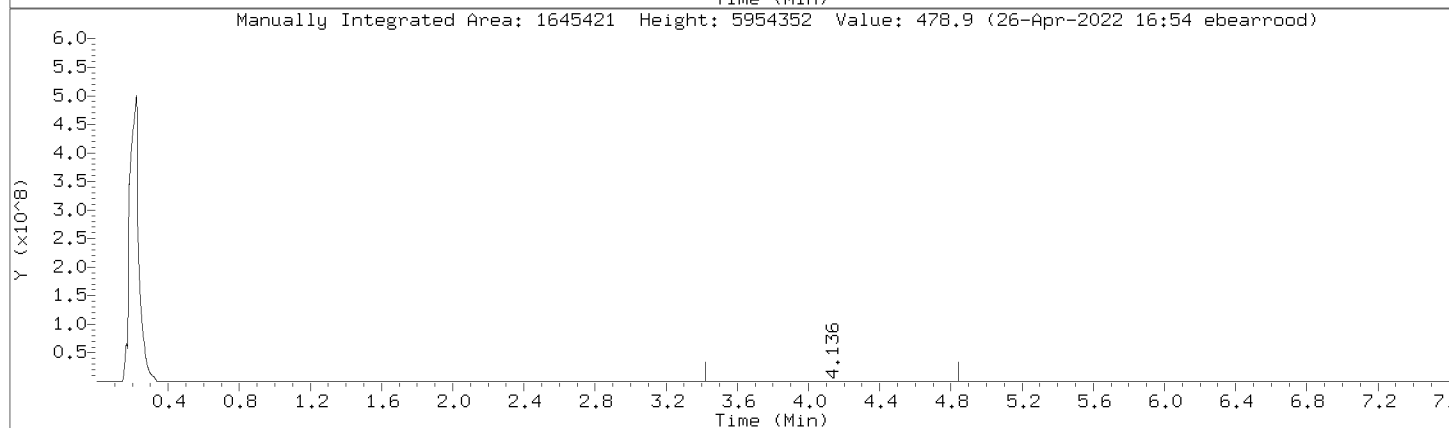
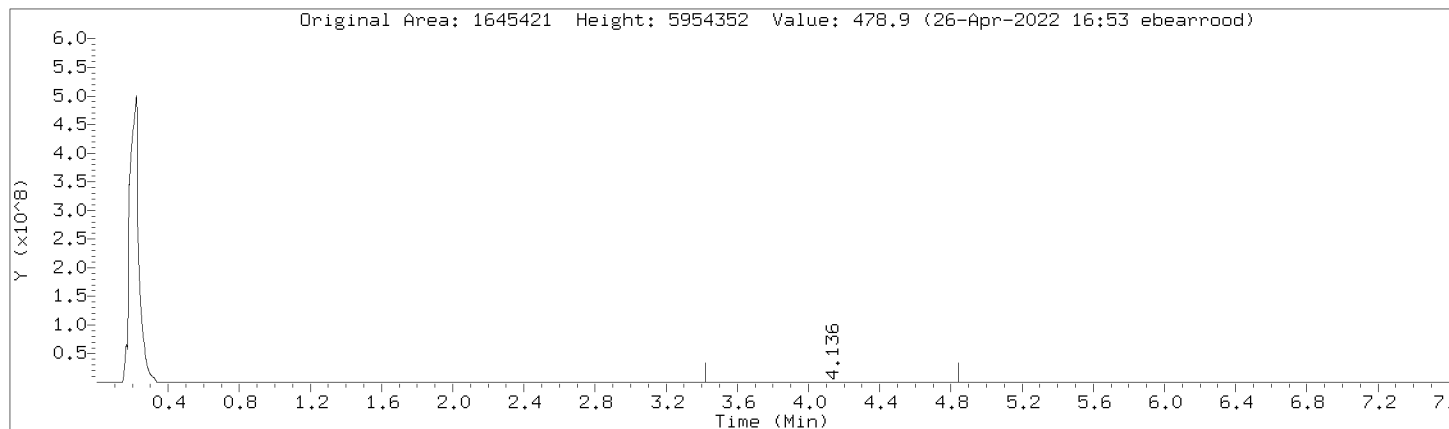
Data File: \\vdowintarget\chem\10gcsf.i\042622f.b\0426f0000026b.D  
Date: 26-APR-2022 15:02  
Client ID: HBLCS  
Sample Info: 4301504  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21250010

Instrument: 10gcsf.i  
Operator: EB3  
Column diameter: 0.32



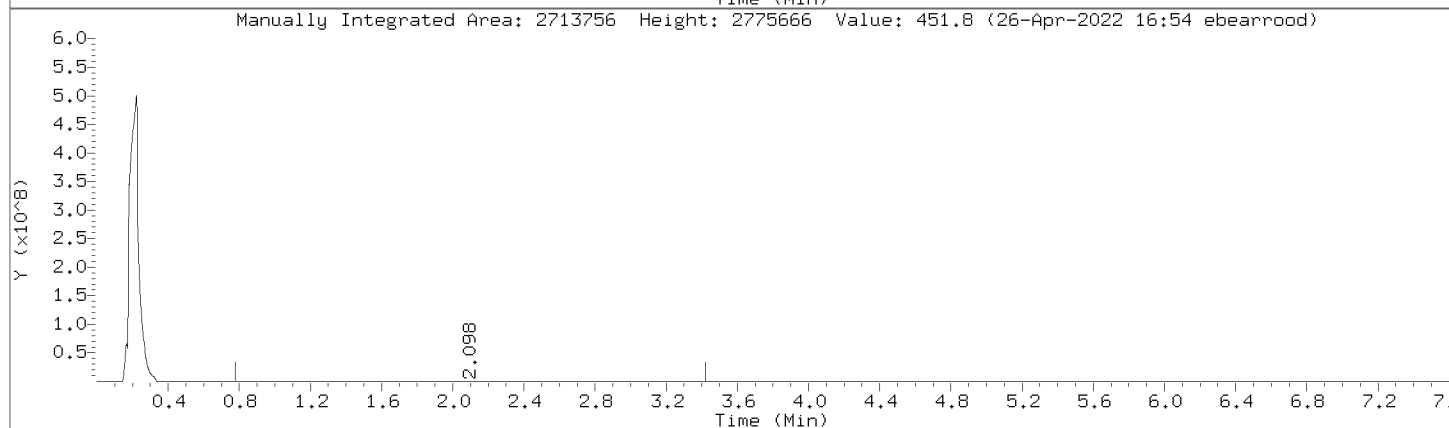
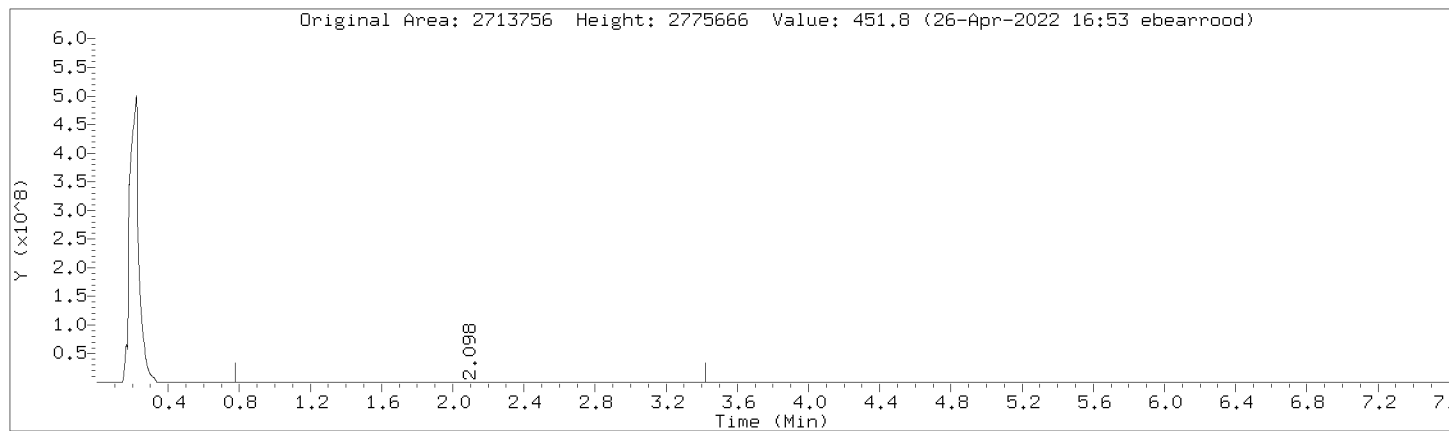
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Injection Date: 26-APR-2022 15:02  
Instrument: 10gcsF.i  
Lab Sample ID: 4301504

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



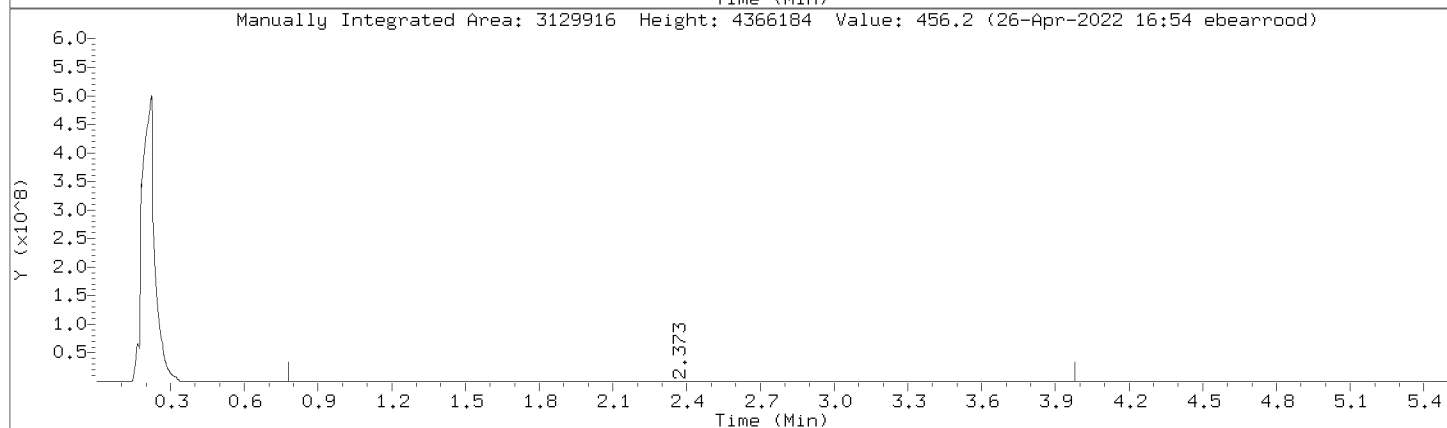
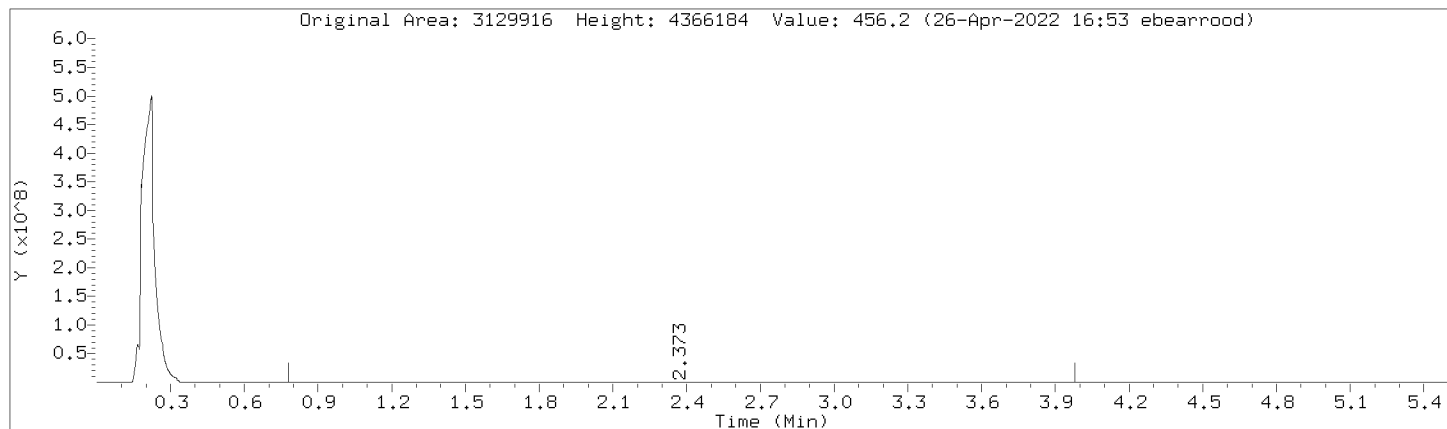
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Injection Date: 26-APR-2022 15:02  
Instrument: 10gcsF.i  
Lab Sample ID: 4301504

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



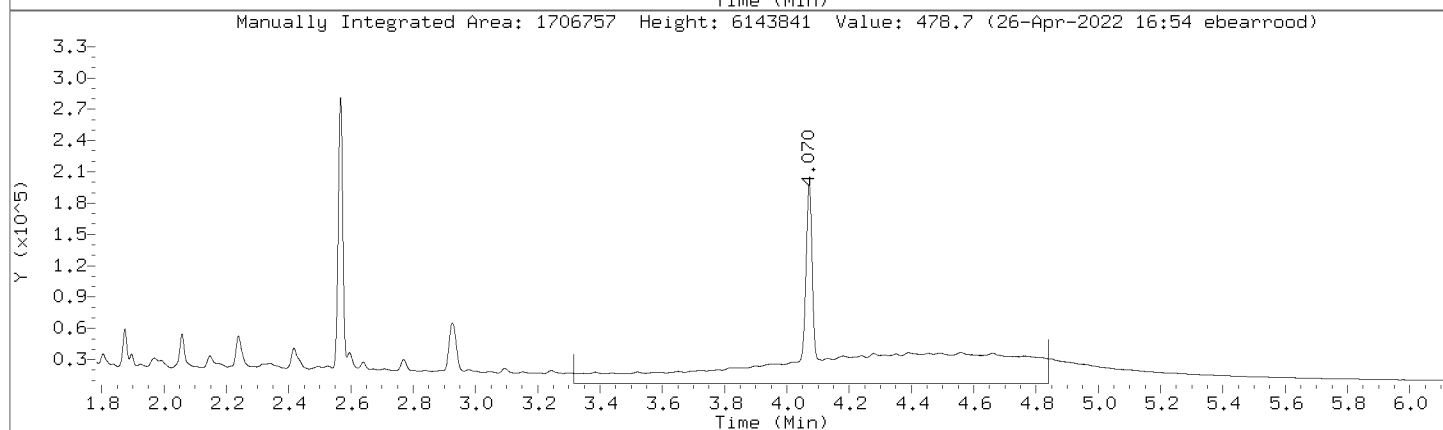
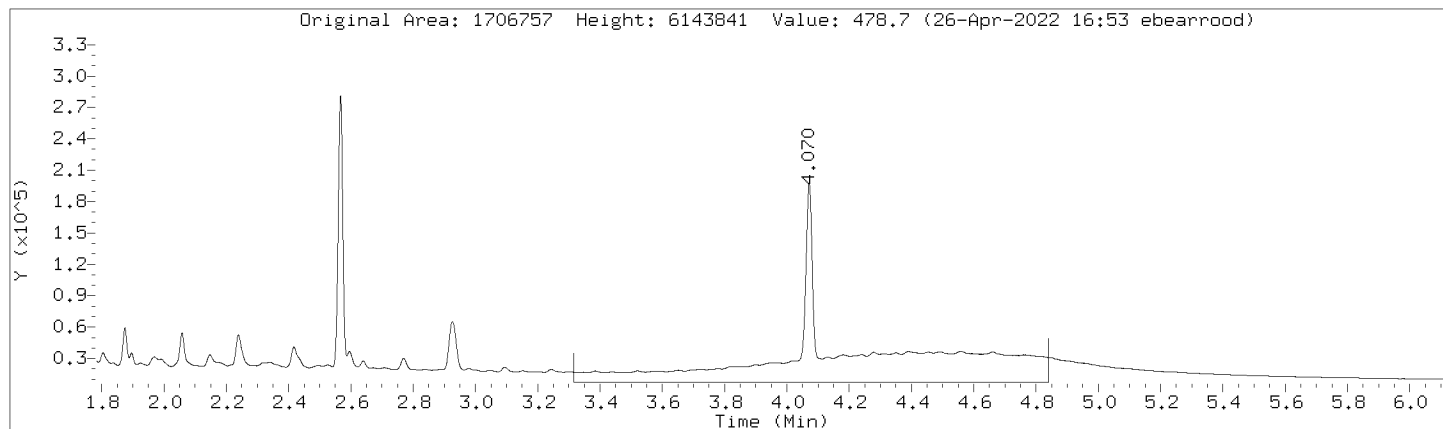
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000026b.D  
Injection Date: 26-APR-2022 15:02  
Instrument: 10gcsF.i  
Lab Sample ID: 4301504

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000026b.D  
Injection Date: 26-APR-2022 15:02  
Instrument: 10gcsF.i  
Lab Sample ID: 4301504

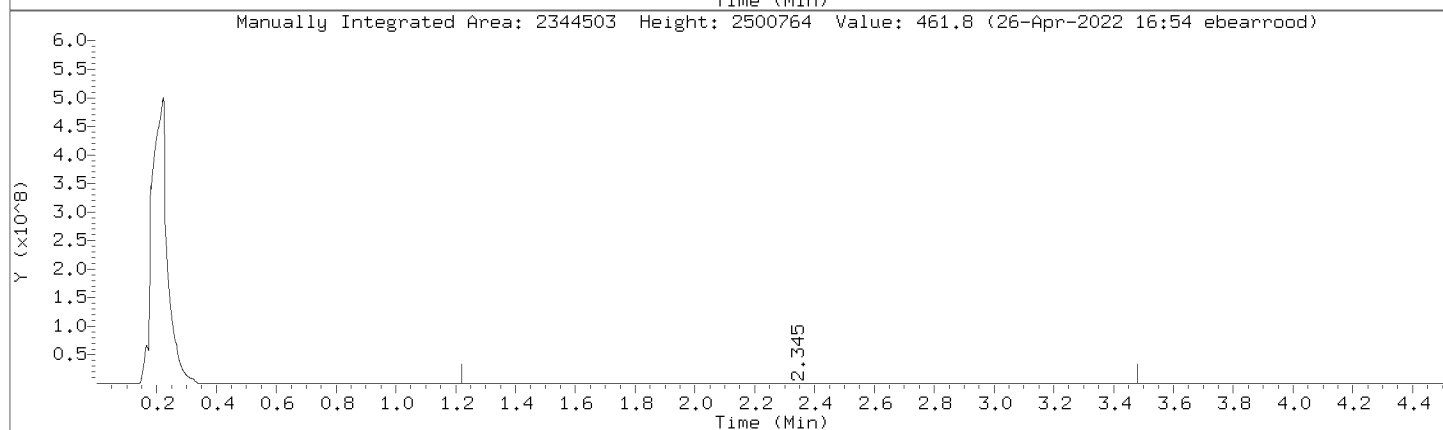
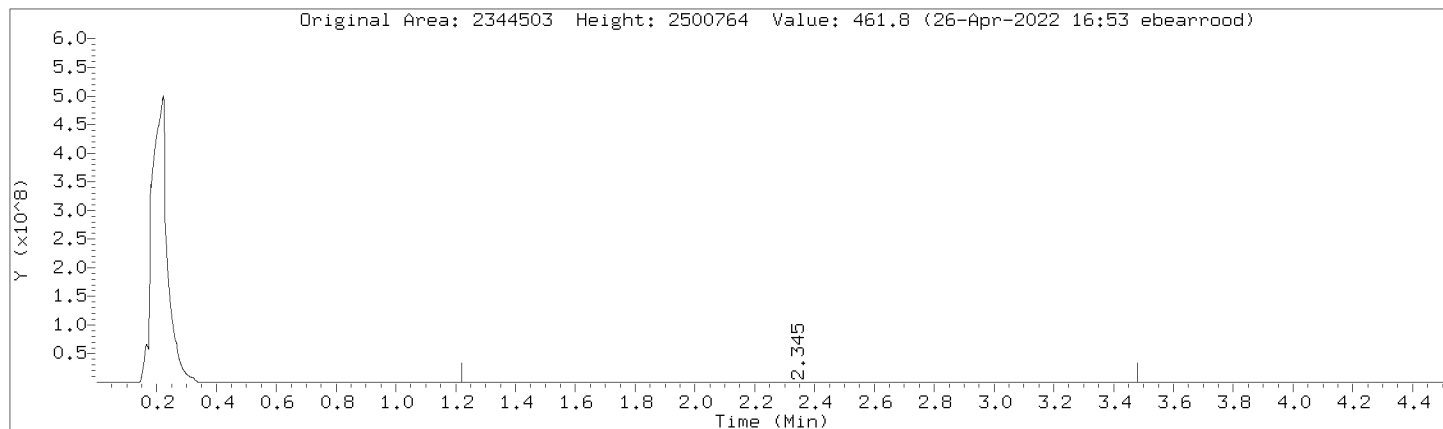
Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:





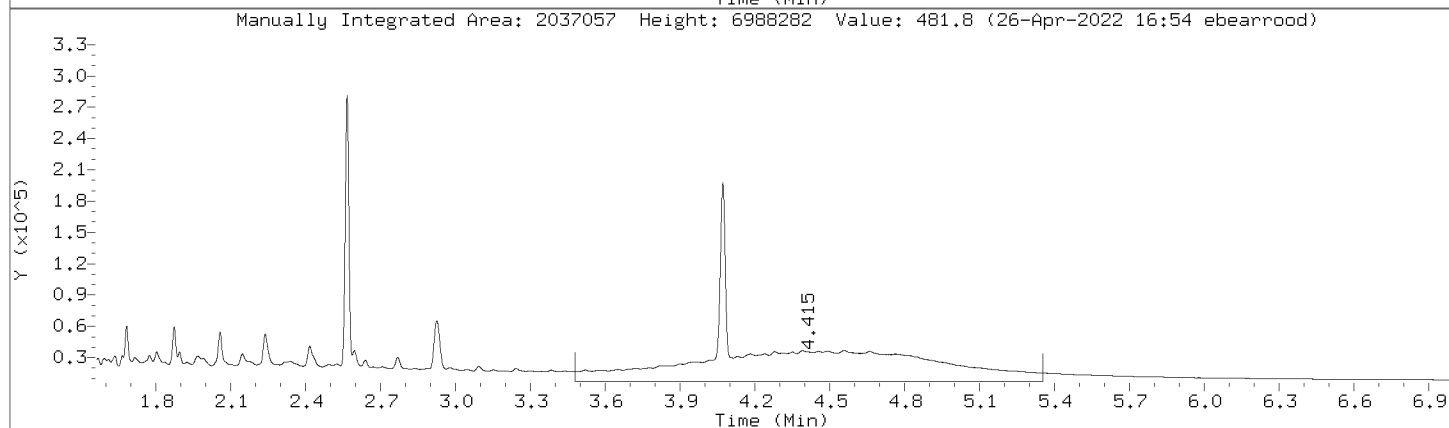
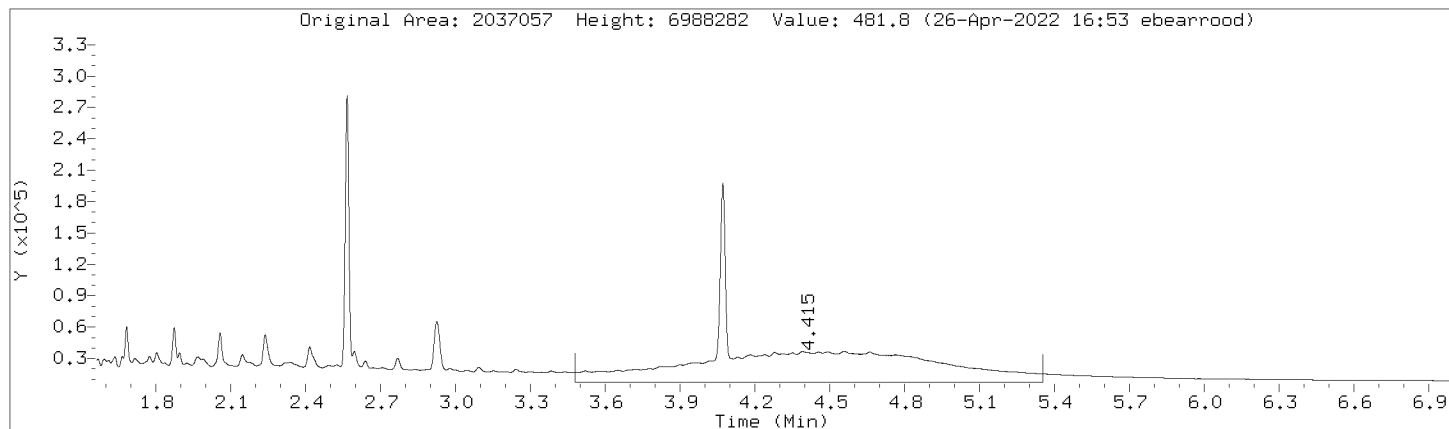
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Injection Date: 26-APR-2022 15:02  
Instrument: 10gcsF.i  
Lab Sample ID: 4301504

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



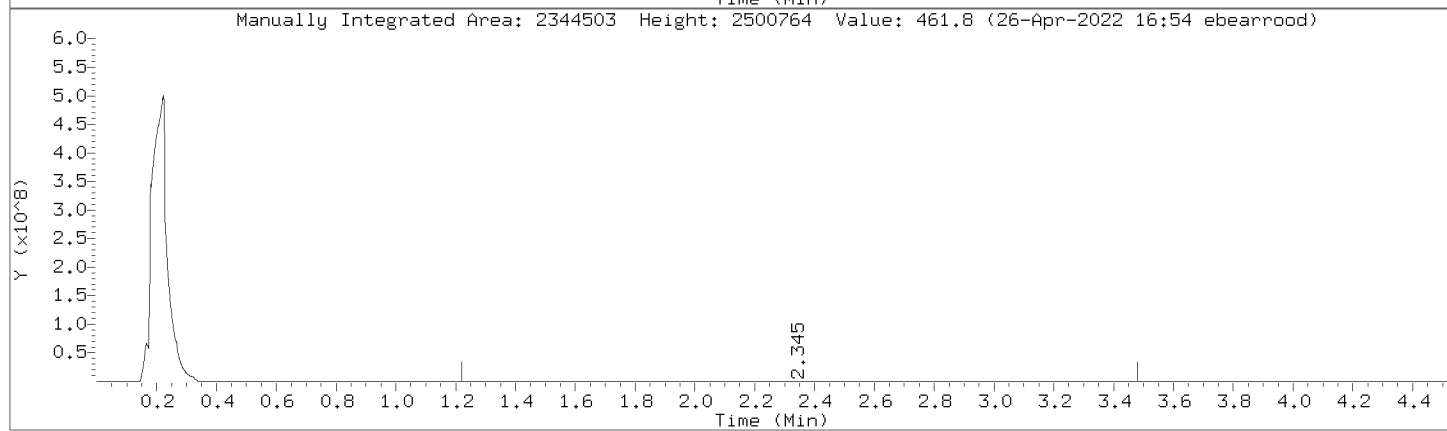
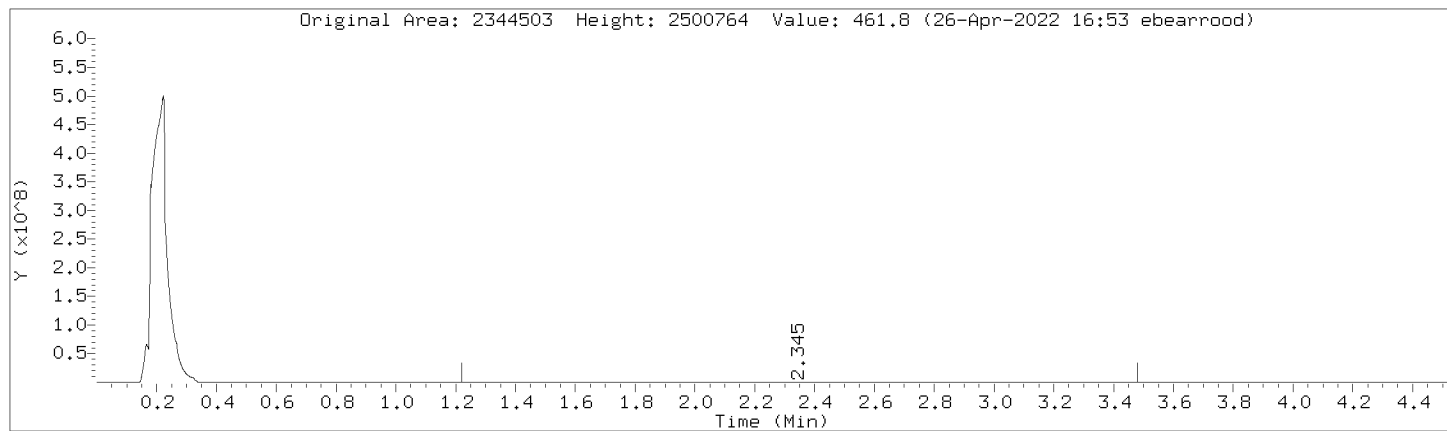
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000026b.D  
Injection Date: 26-APR-2022 15:02  
Instrument: 10gcsF.i  
Lab Sample ID: 4301504

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



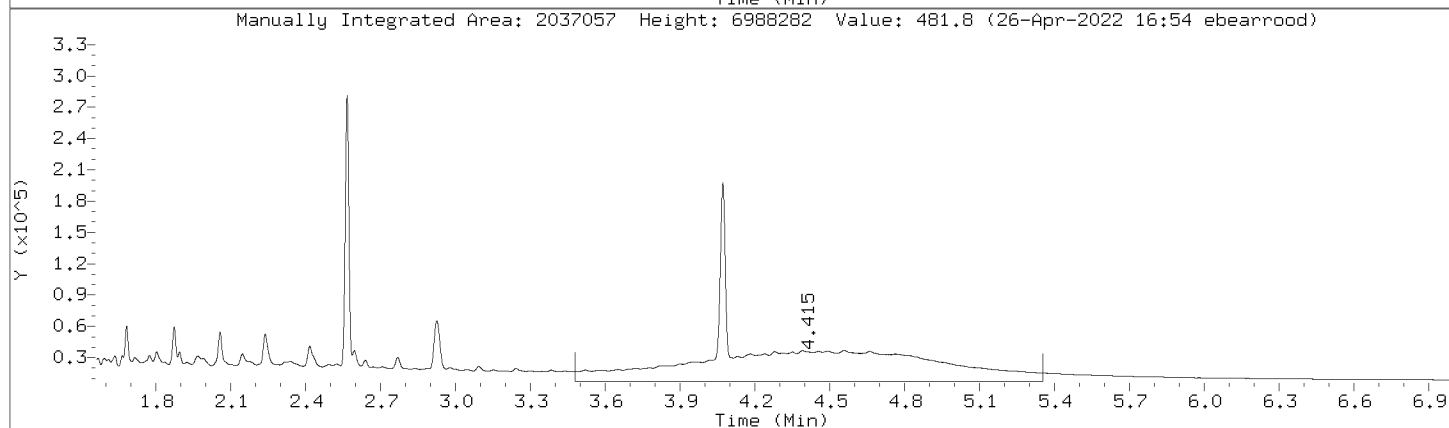
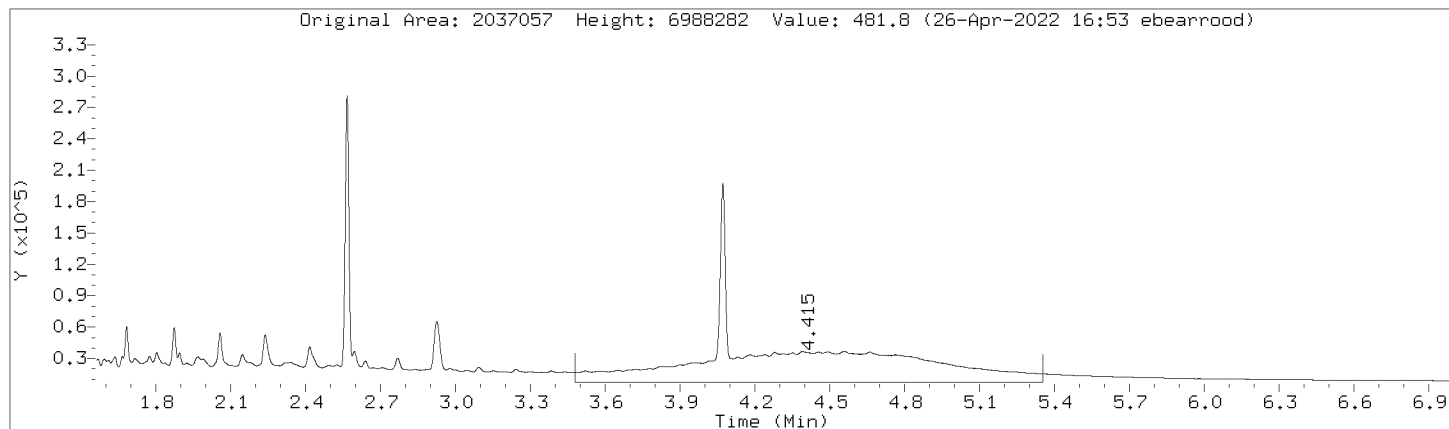
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Injection Date: 26-APR-2022 15:02  
Instrument: 10gcsF.i  
Lab Sample ID: 4301504

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



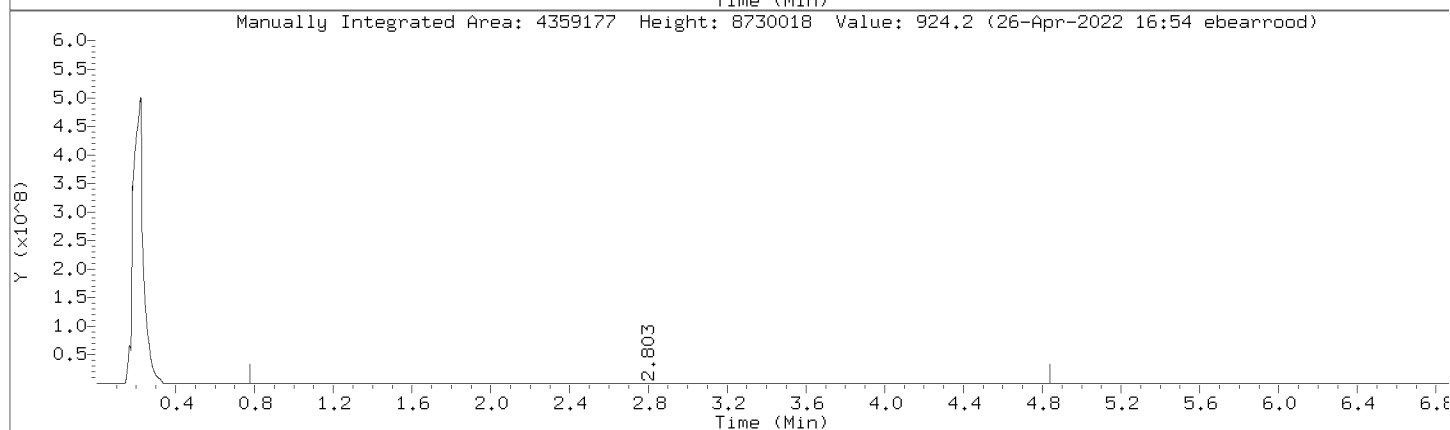
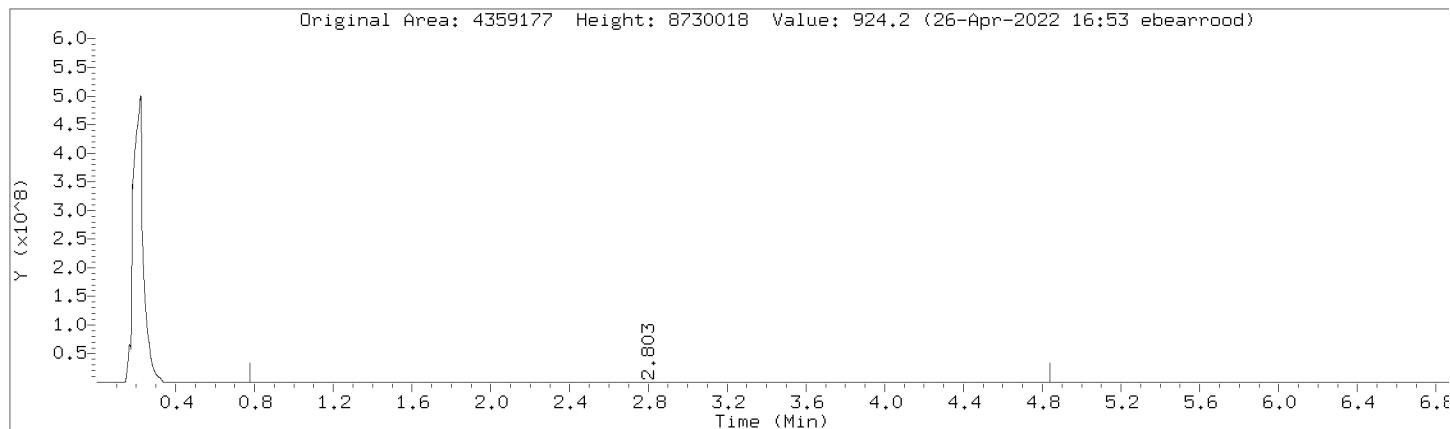
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000026b.D  
Injection Date: 26-APR-2022 15:02  
Instrument: 10gcsF.i  
Lab Sample ID: 4301504

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



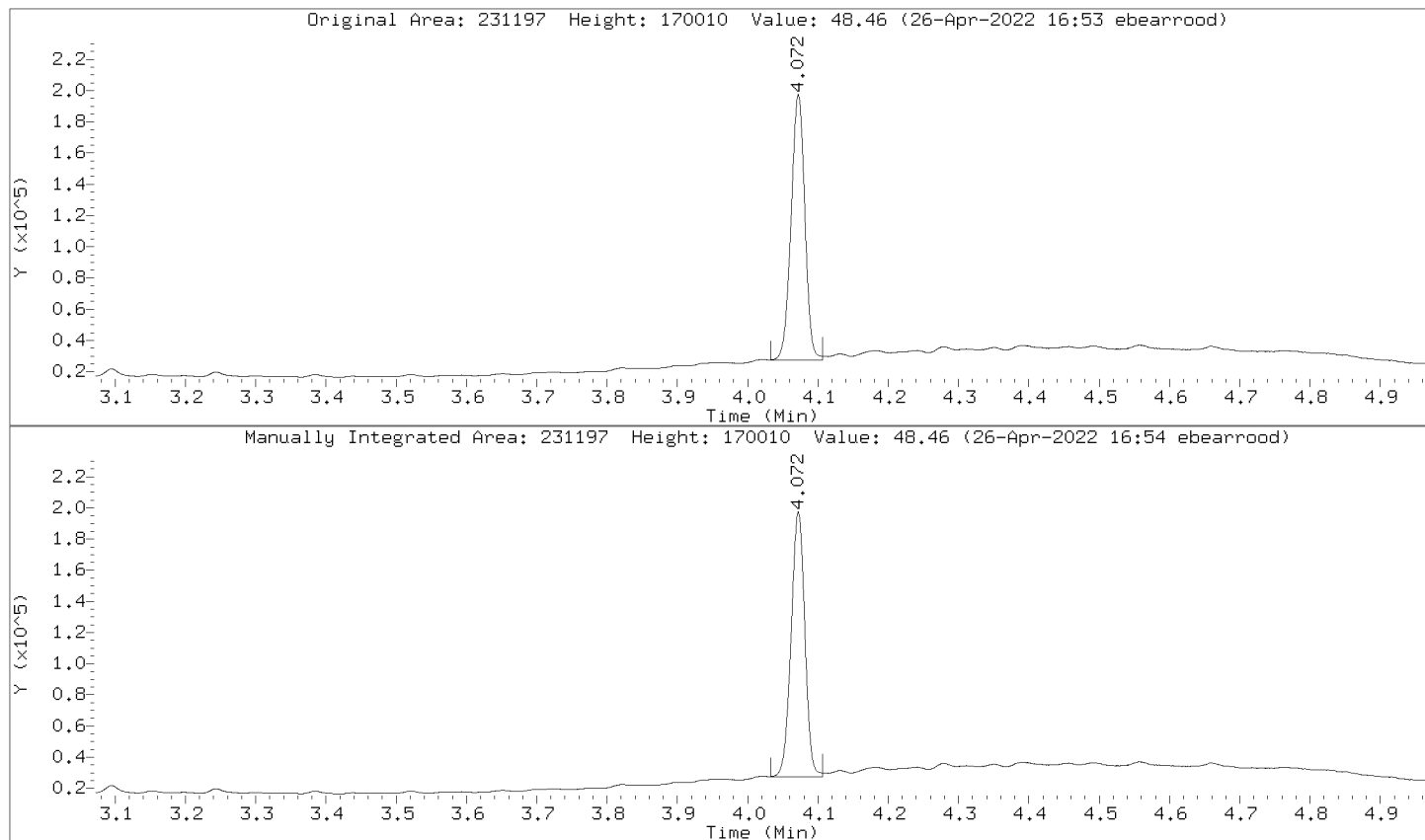
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000026b.D  
Injection Date: 26-APR-2022 15:02  
Instrument: 10gcsF.i  
Lab Sample ID: 4301504

Compound: C10-C36      Review Code: RNG  
CAS Number:



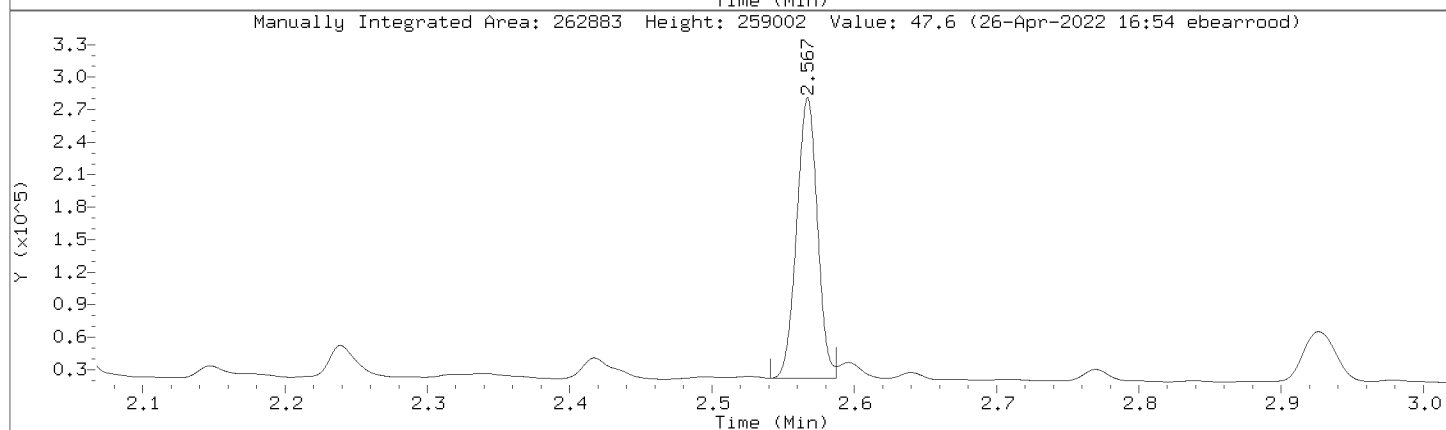
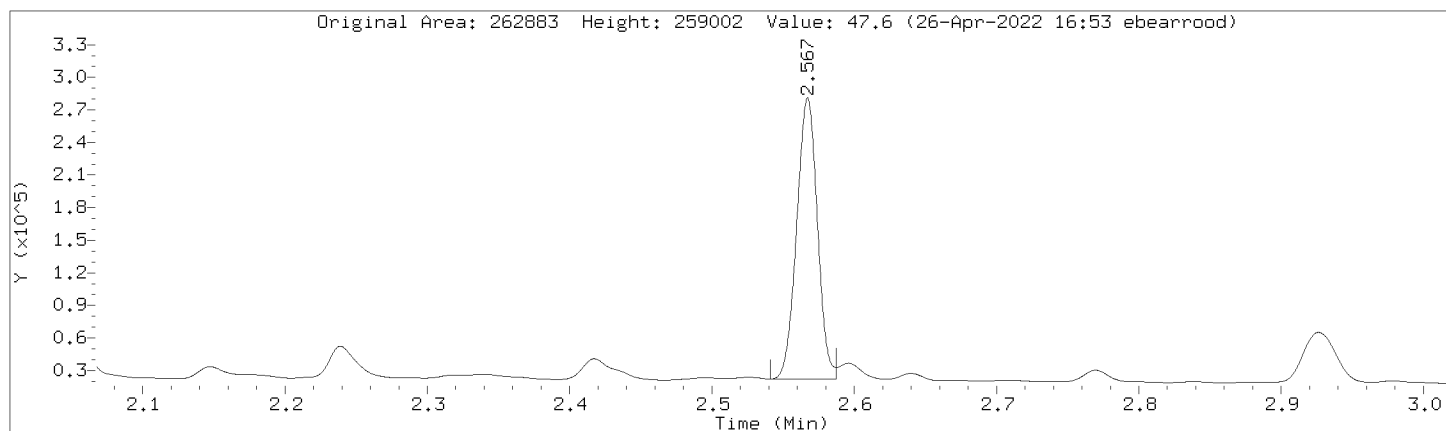
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000026b.D  
Injection Date: 26-APR-2022 15:02  
Instrument: 10gcsF.i  
Lab Sample ID: 4301504

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000026b.D  
 Injection Date: 26-APR-2022 15:02  
 Instrument: 10gcsF.i  
 Lab Sample ID: 4301504

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1645421	1645421
DRO by AK 102	2713756	2713756
TPH-DRO (C10-C28)	3129916	3129916
Motor Oil Range (C24-C36)	1706757	1706757
Diesel Fuel Range	2344503	2344503
Motor Oil Range	2037057	2037057
Diesel Fuel Range SG	2344503	2344503
Motor Oil Range SG	2037057	2037057
C10-C36	4359177	4359177
n-Triacontane (S)	231197	231197
o-Terphenyl (S)	262883	262883

# Prep Log Report

Batch Information: OEXT 64400 810889 NWDROS

Template Version: ENV-EPL-MIN4-0072-Rev.00 (03Jan2021)

Prep Method	EPA 3550	Analysis Method	NWTPH-Dx	Prepared By	KG2	Extracted Date/Time	04/22/2022 12:48:24:912
Instrument	10BALW	Calibrated	Yes	Sonicator Tune Date	04/22/2022 08:16:17:149	Spiked By	KG2
Dispenser ID 1	0617	Dispenser ID 2		Syringe ID 1	WaterBath	Syringe ID 2	
Syringe ID 3		Pipette ID 1	PP1-42	Conc. Method	362471	Concentrated By	JWS2
Concentration	04/25/2022 08:57:12:464	Methylene Chloride	362509	MeCl/Acetone 80:20	None Added	Ottawa Sand	357927
Date/Time	355640-05	Glass Wool	361057	Gravity Filters	Shares QC's with OEXT 64395	Vial Lot #	17111293
Sodium Sulfate	RS	Reviewed By Date	04/25/2022 13:43	Batch Notes	810822 8015DSD10		

## Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	Matrix	Sample ID Verified By	Spike Verified	Container Wt (g)	Container Wt (g)	Initial Amount (g)	Final Volume (mL)	Sonicator ID	Water Bath ID	Water Bath Thermo ID	Correction Factor
NWDROS_P	BLANK	4301503	Y	Solid	scanner	GY1			10	1	100P37	100P29	210745396	1
NWDROS_P	LCS	4301504	Y	Solid	scanner	GY1			10	1	100P04	100P29	210745396	1
NWDROS_P	PS	10605435001	Y	Solid	scanner	GY1			10.06	1	100P37	100P29	210745396	1
NWDROS_P	PS	10605435002	Y	Solid	scanner	GY1			10.05	1	100P04	100P29	210745396	1
NWDROS_P	PS	10605435003	Y	Solid	scanner	GY1			10.09	1	100P04	100P29	210745396	1
NWDROS_P	PS	10605529001	Y	Solid	scanner	GY1			10.03	1	100P04	100P29	210745396	1
NWDROS_P	MS	4301505	Y	Solid	scanner	GY1			10.15	1	100P01	100P29	210745396	1
NWDROS_P	MSD	4301506	Y	Solid	scanner	GY1			10.01	1	100P37	100P29	210745396	1

QC Rule	Sample Type	Lab Sample ID	Water Bath Temp   Corr (C)	Sample Notes	DMSO-SPK (uL)	ntcs-SS (uL)	oter-SS (uL)
NWDROS_P	BLANK	4301503	97.00   98.00			358162 (10)	352759 (25)
NWDROS_P	LCS	4301504	97.00   98.00		358262 (250)	358162 (10)	352759 (25)
NWDROS_P	PS	10605435001	97.00   98.00	1*		358163 (10)	352759 (25)
NWDROS_P	PS	10605435002	97.00   98.00	1*		358163 (10)	352759 (25)





# Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Water Bath Temp   Corr (C)	Sample Notes	DMSO-SPK (uL)	Antics-SS (uL)	Other-SS (uL)
10605435	NWDROS_P PS	10605435003	97.00   98.00	1*		358163 (10)	352759 (25)
	NWDROS_P PS	10605529001	97.00   98.00			358162 (10)	352759 (25)
	NWDROS_P MS	4301505	97.00   98.00		358262 (250)	358162 (10)	352759 (25)
	NWDROS_P MSD	4301506	97.00   98.00		358262 (250)	358162 (10)	352759 (25)

**Sample Notes:**

1\*: wet sample, decanted

**Standard Notes:**

352759: received 2/21/22, opened 04/21/22 GY1

358162: Received 3/25/22, opened 04/21/22 GY1

358163: Received 3/25/22, opened 04/22/22 GY1

## Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21250010 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0426F0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042622_	4/26/22 07:22	EB3	
0426F0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042622_	4/26/22 07:33	EB3	
0426F0000003.D	DMO-RTM,357103	/39180	Sample	1		GCSFAKNW8015-042622_	4/26/22 07:44	EB3	
0426F0000004.D	DMO-CAL1,362369	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 07:55	EB3	
0426F0000005.D	DMO-CAL2,362370	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 08:06	EB3	
0426F0000006.D	DMO-CAL3,362371	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 08:18	EB3	Pass 40% for all target analytes
0426F0000007.D	DMO-CAL4,362372	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 08:29	EB3	
0426F0000008.D	DMO-CAL5,362373	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 08:40	EB3	
0426F0000009.D	DMO-CAL6,362374	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 08:51	EB3	
0426F0000010.D	DMO-CAL7,362375	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 09:02	EB3	
0426F0000011.D	DMO-CAL8,362376	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 09:13	EB3	
0426F0000012.D	DMO-CAL9,362377	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 09:25	EB3	
0426F0000013.D	DMO-CAL10,362378	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 09:36	EB3	ICAL passing
0426F0000014.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042622_	4/26/22 09:47	EB3	ran to eliminate the possibility of carryover
0426F0000015.D	DMO-ICV,355155	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 09:58	EB3	Pass 15% for all ranges
0426F0000016.D	PBLK,349203	/39180	Sample	1		GCSFAKNW8015-042622_	4/26/22 10:09	EB3	Clean for all ranges
0426F0000017.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042622_	4/26/22 13:26	EB3	ran to stabilize baseline
0426F0000018.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 13:36	EB3	Pass 15% for all ranges
0426F0000019.D	4298684	L/39151	Blank	1		GCSFAKNW8015-042622_	4/26/22 13:47	EB3	ok
0426F0000020.D	4298685	L/39151	LCS	1		GCSFAKNW8015-042622_	4/26/22 13:58	EB3	pass
0426F0000021.D	4298686	L/39151	LCSD	1		GCSFAKNW8015-042622_	4/26/22 14:09	EB3	pass
0426F0000022.D	10603288001	L/39151	Sample	1		GCSFAKNW8015-042622_	4/26/22 14:19	EB3	
0426F0000023.D	AK LCS CHK	/	LCS	1		GCSFAKNW8015-042622_	4/26/22 14:30	EB3	
0426F0000024.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 14:41	EB3	Pass 15% for all ranges
0426F0000025B.	4301503	S/39195	Blank	1		GCSFAKNW8015-042622_	4/26/22 14:52	EB3	ok
0426F0000025.D	4301183	S/39192	Blank	1		GCSFAKNW8015-042622_	4/26/22 14:52	EB3	ok
0426F0000026B.	4301504	S/39195	LCS	1		GCSFAKNW8015-042622_	4/26/22 15:02	EB3	pass
0426F0000026.D	4301184	S/39192	LCS	1		GCSFAKNW8015-042622_	4/26/22 15:02	EB3	pass
0426F0000027B.	10605529001	S/39195	Sample	20		GCSFAKNW8015-042622_	4/26/22 15:13	EB3	
0426F0000027.D	10605172001	S/39192	Sample	20		GCSFAKNW8015-042622_	4/26/22 15:13	EB3	
0426F0000028B.	4301505	S/39195	MS	20		GCSFAKNW8015-042622_	4/26/22 15:24	EB3	
0426F0000028.D	4301185	S/39192	MS	20		GCSFAKNW8015-042622_	4/26/22 15:24	EB3	
0426F0000029B.	4301506	S/39195	MSD	20		GCSFAKNW8015-042622_	4/26/22 15:35	EB3	
0426F0000029.D	4301186	S/39192	MSD	20		GCSFAKNW8015-042622_	4/26/22 15:35	EB3	
0426F0000030.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 15:45	EB3	Pass 15% for all ranges
0426F0000031.D	4301183	S/39192	Blank	1		GCSFAKNW8015-042622_	4/26/22 15:56	EB3	ok
0426F0000032.D	10605330003	S/39192	Sample	20		GCSFAKNW8015-042622_	4/26/22 16:07	EB3	rr 100X
0426F0000033.D	10605330001	S/39192	Sample	20		GCSFAKNW8015-042622_	4/26/22 16:18	EB3	
0426F0000034.D	10605330002	S/39192	Sample	1		GCSFAKNW8015-042622_	4/26/22 16:28	EB3	rr 20X
0426F0000035.D	10605435001	S/39195	Sample	10		GCSFAKNW8015-042622_	4/26/22 16:39	EB3	rr 1X
0426F0000036.D	10605435002	S/39195	Sample	10		GCSFAKNW8015-042622_	4/26/22 16:50	EB3	rr 1X
0426F0000037.D	10605435003	S/39195	Sample	10		GCSFAKNW8015-042622_	4/26/22 17:01	EB3	rr 1X
0426F0000038.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 17:11	EB3	Pass 15% for all ranges
0426F0000039.D	4297942	L/39196	Blank	1		GCSFAKNW8015-042622_	4/26/22 17:22	EB3	ok
0426F0000040.D	4297943	L/39196	LCS	1		GCSFAKNW8015-042622_	4/26/22 17:33	EB3	pass
0426F0000041.D	4297944	L/39196	LCSD	1		GCSFAKNW8015-042622_	4/26/22 17:44	EB3	pass

### Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21250010 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0426F0000042.D	10604705001	L/39196	Sample	1		GCSFAKNW8015-042622_	4/26/22 17:54	EB3	
0426F0000043.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 18:05	EB3	Pass 15% for all ranges
0426F0000044.D	4296980	S/39197	Blank	1		GCSFAKNW8015-042622_	4/26/22 18:16	EB3	ok
0426F0000045.D	4296981	S/39197	LCS	1		GCSFAKNW8015-042622_	4/26/22 18:27	EB3	pass
0426F0000046.D	10604857002	S/39197	Sample	1		GCSFAKNW8015-042622_	4/26/22 18:37	EB3	
0426F0000047.D	4297058	S/39197	MS	1		GCSFAKNW8015-042622_	4/26/22 18:48	EB3	
0426F0000048.D	4297059	S/39197	MSD	1		GCSFAKNW8015-042622_	4/26/22 18:59	EB3	
0426F0000049.D	10604859002	S/39197	Sample	10		GCSFAKNW8015-042622_	4/26/22 19:10	EB3	rr 100X
0426F0000050.D	10604859003	S/39197	Sample	10		GCSFAKNW8015-042622_	4/26/22 19:21	EB3	
0426F0000051.D	10604858002	S/39197	Sample	10		GCSFAKNW8015-042622_	4/26/22 19:31	EB3	
0426F0000052.D	10604859001	S/39197	Sample	1		GCSFAKNW8015-042622_	4/26/22 19:42	EB3	rr 10X
0426F0000053.D	10604857001	S/39197	Sample	1		GCSFAKNW8015-042622_	4/26/22 19:53	EB3	
0426F0000054.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 20:04	EB3	Pass 15% for all ranges
0426F0000055.D	4296980	S/39197	Blank	1		GCSFAKNW8015-042622_	4/26/22 20:14	EB3	ok
0426F0000056.D	10604858001	S/39197	Sample	1		GCSFAKNW8015-042622_	4/26/22 20:25	EB3	
0426F0000057.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 20:36	EB3	Pass 15% for all ranges
0426F0000058.D	PBLK,4296980	/	Sample	1		GCSFAKNW8015-042622_	4/26/22 20:46	EB3	clean

**Check Maintenance Items Performed:**

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\V10WINTARGET\CHEM\10GCSF.I\042622F.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 05/09/2022 17:02

ReviewedBy/Date:

**Instrument Run Log**

 Instrument: 10GCSF  
 Column: DB-5-US21250010 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0427F0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042622_	4/27/22 11:41	EB3	
0427F0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042622_	4/27/22 11:53	EB3	
0427F0000003.D	DMO-RTM,362403	/39180	Sample	1		GCSFAKNW8015-042622_	4/27/22 12:04	EB3	
0427F0000004.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/27/22 12:15	EB3	Pass 15% for all ranges
0427F0000005.D	4295161	L/39115	Blank	1		GCSFAKNW8015-042622_	4/27/22 12:26	EB3	ok
0427F0000006.D	10604482006	L/39115	Sample	1		GCSFAKNW8015-042622_	4/27/22 12:38	EB3	8015W MDL - passing
0427F0000007.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/27/22 12:49	EB3	Pass 15% for all ranges
0427F0000008.D	4295166	L/39113	Blank	1		GCSFAKNW8015-042622_	4/27/22 13:00	EB3	ok
0427F0000008B.	4295167	L/39114	Blank	1		GCSFAKNW8015-042622_	4/27/22 13:00	EB3	ok
0427F0000009.D	10604482010	L/39113	Sample	1		GCSFAKNW8015-042622_	4/27/22 13:11	EB3	AK W MDL - passing
0427F0000009B.	10604482014	L/39114	Sample	1		GCSFAKNW8015-042622_	4/27/22 13:11	EB3	NW W MDL - passing
0427F0000010.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/27/22 13:23	EB3	Pass 15% for all ranges
0427F0000011.D	4295299	S/39116	Blank	1		GCSFAKNW8015-042622_	4/27/22 13:34	EB3	ok
0427F0000011B.	4295310	S/39118	Blank	1		GCSFAKNW8015-042622_	4/27/22 13:34	EB3	ok
0427F0000011C.	4295311	S/39117	Blank	1		GCSFAKNW8015-042622_	4/27/22 13:34	EB3	ok
0427F0000012.D	10604453010	S/39116	Sample	1		GCSFAKNW8015-042622_	4/27/22 13:45	EB3	8015 S MDL - failing high
0427F0000012B.	10604453006	S/39118	Sample	1		GCSFAKNW8015-042622_	4/27/22 13:45	EB3	AK S MDL - failing high
0427F0000012C.	10604453014	S/39117	Sample	1		GCSFAKNW8015-042622_	4/27/22 13:45	EB3	NW S MDL - failing high
0427F0000013.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/27/22 13:57	EB3	Pass 15% for all ranges
0427F0000014.D	4301183	S/39192	Blank	1		GCSFAKNW8015-042622_	4/27/22 14:08	EB3	ok
0427F0000015.D	10605330003	S/39192	Sample	100		GCSFAKNW8015-042622_	4/27/22 14:19	EB3	
0427F0000016.D	10605330002	S/39192	Sample	20		GCSFAKNW8015-042622_	4/27/22 14:30	EB3	
0427F0000017.D	10605435001	S/39195	Sample	1		GCSFAKNW8015-042622_	4/27/22 14:42	EB3	
0427F0000018.D	10605435002	S/39195	Sample	1		GCSFAKNW8015-042622_	4/27/22 14:53	EB3	
0427F0000019.D	10605435003	S/39195	Sample	1		GCSFAKNW8015-042622_	4/27/22 15:04	EB3	
0427F0000020.D	10604859002	S/39197	Sample	100		GCSFAKNW8015-042622_	4/27/22 15:15	EB3	
0427F0000021.D	10604859001	S/39197	Sample	10		GCSFAKNW8015-042622_	4/27/22 15:27	EB3	
0427F0000022.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/27/22 15:38	EB3	Pass 15% for all ranges
0427F0000023.D	4303622	S/39215	Blank	1		GCSFAKNW8015-042622_	4/27/22 15:49	EB3	ok
0427F0000023B.	4303626	S/39216	Sample	1		GCSFAKNW8015-042622_	4/27/22 15:49	EB3	ok
0427F0000024.D	4303623	S/39215	LCS	1		GCSFAKNW8015-042622_	4/27/22 16:00	EB3	pass
0427F0000024B.	4303627	S/39216	Sample	1		GCSFAKNW8015-042622_	4/27/22 16:00	EB3	pass
0427F0000025.D	10605661001	S/39215	Sample	10		GCSFAKNW8015-042622_	4/27/22 16:12	EB3	rr 1X
0427F0000026.D	4303624	S/39215	MS	10		GCSFAKNW8015-042622_	4/27/22 16:23	EB3	rr 1X
0427F0000027.D	4303625	S/39215	MSD	10		GCSFAKNW8015-042622_	4/27/22 16:34	EB3	rr 1X
0427F0000028.D	10605661002	S/39215	Sample	10		GCSFAKNW8015-042622_	4/27/22 16:45	EB3	rr 1X
0427F0000029.D	10605699001	S/39216	Sample	1		GCSFAKNW8015-042622_	4/27/22 16:57	EB3	
0427F0000030.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/27/22 17:08	EB3	Pass 15% for all ranges
0427F0000031.D	PBLK,4303622	/	Sample	1		GCSFAKNW8015-042622_	4/27/22 17:19	EB3	clean

**Instrument Run Log**Instrument: 10GCSF  
Column: DB-5-US21250010 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

Surrogate Lot: See extract sheet  
ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
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## Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\W10WINTARGET\CHEM\10GCSF.I\042722F.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 04/28/2022 11:04

ReviewedBy/Date:

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-SG01-041922-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI  
 Lab Sample ID: 10605435001 Percent Moisture: 33.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-38-2	Arsenic	2.1		mg/kg	1	05/09/2022 22:53
7440-43-9	Cadmium	0.43		mg/kg	1	05/09/2022 22:53
7440-47-3	Chromium	13.8		mg/kg	1	05/09/2022 22:53
7440-50-8	Copper	9.9		mg/kg	1	05/09/2022 22:53
7439-92-1	Lead	7.0		mg/kg	1	05/09/2022 22:53
7440-02-0	Nickel	12.5		mg/kg	1	05/09/2022 22:53
7782-49-2	Selenium	0.18	J	mg/kg	1	05/09/2022 22:53
7440-22-4	Silver	0.27	J	mg/kg	1	05/09/2022 22:53
7440-66-6	Zinc	94.9		mg/kg	1	05/09/2022 22:53

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

FD01-041922-0-10
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Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI  
 Lab Sample ID: 10605435002 Percent Moisture: 28.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-38-2	Arsenic	2.0		mg/kg	1	05/09/2022 23:00
7440-43-9	Cadmium	0.43		mg/kg	1	05/09/2022 23:00
7440-47-3	Chromium	14.0		mg/kg	1	05/09/2022 23:00
7440-50-8	Copper	10.7		mg/kg	1	05/09/2022 23:00
7439-92-1	Lead	7.4		mg/kg	1	05/09/2022 23:00
7440-02-0	Nickel	13.0		mg/kg	1	05/09/2022 23:00
7782-49-2	Selenium	0.14	J	mg/kg	1	05/09/2022 23:00
7440-22-4	Silver	ND	U	mg/kg	1	05/09/2022 23:00
7440-66-6	Zinc	100		mg/kg	1	05/09/2022 23:00

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-SG02-041922-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI  
 Lab Sample ID: 10605435003 Percent Moisture: 53.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-38-2	Arsenic	3.8		mg/kg	1	05/09/2022 23:08
7440-43-9	Cadmium	0.53		mg/kg	1	05/09/2022 23:08
7440-47-3	Chromium	17.3		mg/kg	1	05/09/2022 23:08
7440-50-8	Copper	19.5		mg/kg	1	05/09/2022 23:08
7439-92-1	Lead	12.3		mg/kg	1	05/09/2022 23:08
7440-02-0	Nickel	16.8		mg/kg	1	05/09/2022 23:08
7782-49-2	Selenium	0.47	J	mg/kg	1	05/09/2022 23:08
7440-22-4	Silver	ND	U	mg/kg	1	05/09/2022 23:08
7440-66-6	Zinc	120		mg/kg	1	05/09/2022 23:08



FORM II INORGANIC-1  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Initial Calibration Verification Source: 364940

Continuing Calibration Verification Source: 364940

Concentration Units: ug/L Instrument ID: 10ICMC

Analyte	Initial Calibration Verification				Continuing Calibration Verification						
	05/09/2022 14:44				05/09/2022 15:07			05/09/2022 22:34			Control Limit
	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Arsenic	80	80.5	100.6	90-110	80	79.5	99.4	80	78.2	97.8	90-110
Cadmium	80	81.2	101.5	90-110	80	80.7	100.9	80	77.8	97.2	90-110
Chromium	80	81.9	102.3	90-110	80	81.5	101.9	80	80.5	100.6	90-110
Copper	80	83.8	104.8	90-110	80	83.5	104.4	80	81.8	102.3	90-110
Lead	80	83.5	104.4	90-110	80	82.5	103.1	80	80.3	100.4	90-110
Nickel	80	84.4	105.4	90-110	80	84.0	105.1	80	82.1	102.6	90-110
Selenium	80	81.8	102.2	90-110	80	82.4	103.0	80	80.0	100.0	90-110
Silver	40	40.8	101.9	90-110	40	40.5	101.2	40	39.6	98.9	90-110
Zinc	80	83.3	104.1	90-110	80	82.5	103.1	80	79.8	99.8	90-110

FORM II INORGANIC-2  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Initial Calibration Verification Source: \_\_\_\_\_

Continuing Calibration Verification Source: 364940

Concentration Units: ug/L Instrument ID: 10ICMC

Analyte	Continuing Calibration Verification						Control Limit
	05/09/2022 23:15			05/09/2022 23:49			
	True	Found	%R	True	Found	%R	
Arsenic	80	79.1	98.9	80	78.5	98.2	90-110
Cadmium	80	79.6	99.5	80	79.0	98.7	90-110
Chromium	80	82.6	103.3	80	81.4	101.8	90-110
Copper	80	82.5	103.1	80	82.1	102.7	90-110
Lead	80	81.4	101.7	80	81.0	101.2	90-110
Nickel	80	83.1	103.9	80	82.2	102.7	90-110
Selenium	80	79.1	98.9	80	79.2	99.0	90-110
Silver	40	40.5	101.3	40	40.2	100.5	90-110
Zinc	80	80.6	100.7	80	80.2	100.2	90-110

FORM II INORGANIC-1  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Initial Calibration Verification Source: 365170

Continuing Calibration Verification Source: 365170

Concentration Units: ug/L Instrument ID: 10ICMC

Analyte	Initial Calibration Verification				Continuing Calibration Verification						
	05/10/2022 09:13				05/10/2022 09:38			05/10/2022 10:24			Control Limit
	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Arsenic	80	81.0	101.3	90-110	80	80.3	100.4	80	80.6	100.8	90-110
Cadmium	80	81.4	101.8	90-110	80	81.3	101.6	80	80.6	100.7	90-110
Chromium	80	82.6	103.2	90-110	80	82.6	103.3	80	82.0	102.5	90-110
Copper	80	84.4	105.5	90-110	80	84.4	105.5	80	84.3	105.4	90-110
Lead	80	82.7	103.4	90-110	80	81.7	102.2	80	82.3	102.9	90-110
Nickel	80	84.2	105.3	90-110	80	84.7	105.9	80	84.0	105.0	90-110
Selenium	80	81.9	102.3	90-110	80	82.1	102.6	80	82.3	102.9	90-110
Silver	40	41.2	103.0	90-110	40	41.3	103.2	40	40.5	101.2	90-110
Zinc	80	83.0	103.7	90-110	80	82.7	103.4	80	83.0	103.8	90-110

FORM II INORGANIC-2  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Initial Calibration Verification Source: \_\_\_\_\_

Continuing Calibration Verification Source: 365170

Concentration Units: ug/L Instrument ID: 10ICMC

Analyte	Continuing Calibration Verification			
	05/10/2022 10:59			Control Limit
	True	Found	%R	
Arsenic	80	79.4	99.2	90-110
Cadmium	80	79.7	99.6	90-110
Chromium	80	81.7	102.1	90-110
Copper	80	82.8	103.5	90-110
Lead	80	81.1	101.4	90-110
Nickel	80	82.8	103.5	90-110
Selenium	80	82.1	102.6	90-110
Silver	40	40.2	100.6	90-110
Zinc	80	81.5	101.8	90-110

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

CRDL Check Standard Source: 364939 Analysis Date/Time: 05/09/2022 14:55

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Arsenic	0.5	0.50	100.6	80-120
Cadmium	0.08	0.088	110.0	80-120
Chromium	2.0	2.1	103.2	80-120
Copper	1.0	1.1	109.1	80-120
Lead	0.5	0.54	108.8	80-120
Nickel	0.5	0.58	115.2	80-120
Selenium	0.5	0.53	106.8	80-120
Silver	0.5	0.40	80.8	80-120
Zinc	5.0	5.3	106.7	80-120

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

CRDL Check Standard Source: 364939 Analysis Date/Time: 05/09/2022 22:42

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Arsenic	0.5	0.48	95.8	80-120
Cadmium	0.08	0.090	112.5	80-120
Chromium	2.0	2.0	100.5	80-120
Copper	1.0	1.1	109.8	80-120
Lead	0.5	0.53	106.4	80-120
Nickel	0.5	0.56	111.4	80-120
Selenium	0.5	0.46	91.8	80-120
Silver	0.5	0.45	90.8	80-120
Zinc	5.0	5.5	110.9	80-120

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

CRDL Check Standard Source: 365169 Analysis Date/Time: 05/10/2022 09:27

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Arsenic	0.5	0.50	99.6	80-120
Cadmium	0.08	0.080	100.0	80-120
Chromium	2.0	2.0	101.6	80-120
Copper	1.0	1.1	110.5	80-120
Lead	0.5	0.52	103.0	80-120
Nickel	0.5	0.45	89.6	80-120
Selenium	0.5	0.53	105.2	80-120
Silver	0.5	0.41	81.4	80-120
Zinc	5.0	5.3	106.5	80-120

FORM III INORGANIC-1  
BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract : 3593500 WISHRAM RI

Method Blank Matrix: Solid Instrument ID: 10ICMC

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	05/09/2022 14:52	C	05/09/2022 15:16	C	05/09/2022 22:38	C	05/09/2022 23:19	C	4303384	C
Arsenic	0.11	U	0.11	U	0.11	U	0.11	U	ND	U
Cadmium	0.031	U	0.031	U	0.031	U	0.031	U	ND	U
Chromium	0.14	U	0.14	U	0.14	U	0.14	U	ND	U
Copper	0.24	U	0.24	U	0.24	U	0.24	U	ND	U
Lead	0.029	U	0.029	U	0.056	J	0.029	U	0.047	J
Nickel	0.20	U	0.20	U	0.20	U	0.20	U	ND	U
Selenium	0.086	U	0.086	U	0.086	U	0.086	U	ND	U
Silver	0.14	U	0.14	U	0.16	J	0.14	U	ND	U
Zinc	0.90	U	0.90	U	0.90	U	0.90	U	ND	U



FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract : 3593500 WISHRAM RI

Method Blank Matrix: \_\_\_\_\_ Instrument ID: 10ICMC

Method Blank Concentration Units: \_\_\_\_\_

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	05/09/2022 23:53	C		C		C
Arsenic			0.11	U				
Cadmium			0.031	U				
Chromium			0.14	U				
Copper			0.24	U				
Lead			0.029	U				
Nickel			0.20	U				
Selenium			0.086	U				
Silver			0.15	J				
Zinc			0.90	U				

FORM III INORGANIC-1  
BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract : 3593500 WISHRAM RI

Method Blank Matrix: \_\_\_\_\_ Instrument ID: 10ICMC

Method Blank Concentration Units: \_\_\_\_\_

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)					
	05/10/2022 09:23	C	05/10/2022 09:42	C	05/10/2022 10:29	C	05/10/2022 11:03	C
Arsenic	0.11	U	0.11	U	0.11	U	0.11	U
Cadmium	0.031	U	0.031	U	0.031	U	0.031	U
Chromium	0.14	U	0.14	U	0.14	U	0.14	U
Copper	0.24	U	0.24	U	0.24	U	0.24	U
Lead	0.029	U	0.029	U	0.029	U	0.029	U
Nickel	0.20	U	0.20	U	0.20	U	0.20	U
Selenium	0.086	U	0.086	U	0.086	U	0.086	U
Silver	0.14	U	0.14	U	0.14	U	0.14	U
Zinc	0.90	U	0.90	U	0.90	U	0.90	U

FORM IV INORGANIC-1  
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Instrument ID: 10ICMC Solution A Run Date: 05/09/2022 14:59

ICS Source: 364938,364937 Solution AB Run Date: 05/09/2022 15:03

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	25000	27500	25297.225	101.2	27470.471	99.9	80-120
Arsenic		100	0.03		99.509	99.5	80-120
Cadmium		100	0.023		100.569	100.6	80-120
Calcium	25000	27500	24949.281	99.8	27596.125	100.3	80-120
Chromium		100	0.241		101.081	101.1	80-120
Copper		100	0.074		100.457	100.5	80-120
Iron	25000	26250	25760.547	103	26703.081	101.7	80-120
Lead		100	0.009		99.373	99.4	80-120
Magnesium	25000	27500	25396.101	101.6	27512.366	100	80-120
Molybdenum	500	600	515.335	103.1	612.622	102.1	80-120
Nickel		100	0.066		103.14	103.1	80-120
Potassium	25000	27500	25397.431	101.6	27751.162	100.9	80-120
Selenium		100	0.052		101.105	101.1	80-120
Silver		50	0.039		49.009	98	80-120
Sodium	25000	27500	25625.218	102.5	27821.734	101.2	80-120
Titanium	500	600	500.43	100.1	598.402	99.7	80-120
Zinc		100	0.149		100.651	100.7	80-120

FORM IV INORGANIC-1  
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Instrument ID: 10ICMC

Solution A Run Date: 05/10/2022 09:31

ICS Source: 365168,365167

Solution AB Run Date: 05/10/2022 09:35

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	25000	27500	25304.338	101.2	27128.943	98.7	80-120
Arsenic		100	0.035		100.041	100	80-120
Cadmium		100	0		100.554	100.6	80-120
Calcium	25000	27500	25023.755	100.1	27277.092	99.2	80-120
Chromium		100	0.25		99.967	100	80-120
Copper		100	0.077		100.873	100.9	80-120
Iron	25000	26250	25707.235	102.8	26292.574	100.2	80-120
Lead		100	0.002		98.841	98.8	80-120
Magnesium	25000	27500	25226.267	100.9	27078.144	98.5	80-120
Molybdenum	500	600	527.163	105.4	622.214	103.7	80-120
Nickel		100	-0.068		102.596	102.6	80-120
Potassium	25000	27500	25488.37	102	27317.712	99.3	80-120
Selenium		100	0.051		101.198	101.2	80-120
Silver		50	0.038		49.611	99.2	80-120
Sodium	25000	27500	25527.407	102.1	27398.406	99.6	80-120
Titanium	500	600	510.236	102	604.438	100.7	80-120
Zinc		100	0.228		100.866	100.9	80-120

FORM V INORGANIC-1  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4303386MS
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Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Matrix: Solid Basis: Dry Parent Sample ID: 10605661001

Percent Moisture: 33.1

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Arsenic	mg/kg	75-125	72.0	ND	72.0	100
Cadmium	mg/kg	75-125	70.8	ND	72.0	98
Chromium	mg/kg	75-125	83.1	ND	72.0	115
Copper	mg/kg	75-125	79.3	1.6	72.0	108
Lead	mg/kg	75-125	74.2	0.092J	72.0	103
Nickel	mg/kg	75-125	83.7	ND	72.0	116
Selenium	mg/kg	75-125	74.8	ND	72.0	104
Silver	mg/kg	75-125	35.0	ND	36.0	97
Zinc	mg/kg	75-125	113	2.0J	72.0	154*

\* Spike Recovery outside QC Limits

FORM V INORGANIC-2  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4303387MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Matrix: Solid Basis: Dry Parent Sample ID: 10605661001

Percent Moisture: 33.1

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Arsenic	mg/kg	75-125	77.7	ND	73.4	106
Cadmium	mg/kg	75-125	76.4	ND	73.4	104
Chromium	mg/kg	75-125	89.9	ND	73.4	122
Copper	mg/kg	75-125	86.4	1.6	73.4	116
Lead	mg/kg	75-125	79.7	0.092J	73.4	109
Nickel	mg/kg	75-125	89.6	ND	73.4	122
Selenium	mg/kg	75-125	78.5	ND	73.4	107
Silver	mg/kg	75-125	37.9	ND	36.8	103
Zinc	mg/kg	75-125	122	2.0J	73.4	164*

\* Spike Recovery outside QC Limits

FORM V INORGANIC-1  
POST-DIGESTION SPIKE SAMPLE RECOVERY

SAMPLE NO.

4305431PDS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Matrix: Solid Parent Sample ID: 10605661001

Analyte	Units	Control Limit %R	DF	Spiked Sample Result (SSR)	DF	Sample Result (SR)	Spike Added (SA)	%R
Arsenic	ug/L	80-120	1	84.6	1	2.2U	80	105.7
Cadmium	ug/L	80-120	1	85.4	1	0.63U	80	106.7
Chromium	ug/L	80-120	1	87.7	1	2.8U	80	109.6
Copper	ug/L	80-120	1	88.4	1	4.8U	80	110.5
Lead	ug/L	80-120	1	86.2	1	0.59U	80	107.8
Nickel	ug/L	80-120	1	89.0	1	4.0U	80	111.3
Selenium	ug/L	80-120	1	86.5	1	1.7U	80	108.1
Silver	ug/L	80-120	1	31.3	1	2.9U	40	78.3*
Zinc	ug/L	80-120	1	87.3J	1	18.0U	80	109.1

FORM VI INORGANIC-1  
DUPLICATES

SAMPLE NO.

4303387MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 33.1 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Arsenic	20	72.0	77.7	8
Cadmium	20	70.8	76.4	8
Chromium	20	83.1	89.9	8
Copper	20	79.3	86.4	9
Lead	20	74.2	79.7	7
Nickel	20	83.7	89.6	7
Selenium	20	74.8	78.5	5
Silver	20	35.0	37.9	8
Zinc	20	113	122	8



FORM VII INORGANIC-1  
LABORATORY CONTROL SAMPLE

SAMPLE NO.

4303385LCS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Arsenic	mg/kg	49.1	45.5	93	80	120
Cadmium	mg/kg	49.1	45.4	92	80	120
Chromium	mg/kg	49.1	47.7	97	80	120
Copper	mg/kg	49.1	47.1	96	80	120
Lead	mg/kg	49.1	45.7	93	80	120
Nickel	mg/kg	49.1	48.1	98	80	120
Selenium	mg/kg	49.1	48.8	99	80	120
Silver	mg/kg	24.6	22.9	93	80	120
Zinc	mg/kg	49.1	46.3	94	80	120

FORM VIII INORGANIC-1  
SERIAL DILUTIONS

4305432SD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RIMatrix: Solid Parent Sample ID: 10605661001

Analyte	Units	Initial Sample Result	Serial Dilution Result	% Difference	Control Limit %D
Arsenic	ug/L	2.2U	10.9U		10
Cadmium	ug/L	0.63U	3.1U		10
Chromium	ug/L	2.8U	14.0U		10
Copper	ug/L	4.8U	24.2U		10
Lead	ug/L	0.59U	2.9U		10
Nickel	ug/L	4.0U	19.9U		10
Selenium	ug/L	1.7U	8.6U		10
Silver	ug/L	2.9U	14.5U		10
Zinc	ug/L	18.0U	89.9U		10

\* Indicates that the % Difference exceeds the control limit.  
No difference is calculated if either result is a non-detect.

FORM IX INORGANIC-1  
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Preparation Method: None Instrument ID: 10ICMC

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Arsenic	0.50	0.11	04/01/2022
Cadmium	0.080	0.031	04/01/2022
Chromium	2.0	0.14	04/01/2022
Copper	1.0	0.24	04/01/2022
Lead	0.50	0.029	04/01/2022
Nickel	0.50	0.20	04/01/2022
Selenium	0.50	0.086	04/01/2022
Silver	0.50	0.14	04/01/2022
Zinc	5.0	0.90	04/01/2022

FORM IX INORGANIC-2  
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Preparation Method: EPA 3050B Instrument ID: 10ICMC

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Arsenic	0.50	0.11	07/19/2021
Cadmium	0.080	0.031	07/19/2021
Chromium	2.0	0.14	07/19/2021
Copper	1.0	0.24	07/19/2021
Lead	0.50	0.029	07/19/2021
Nickel	0.50	0.20	07/19/2021
Selenium	0.50	0.086	07/19/2021
Silver	0.50	0.14	07/19/2021
Zinc	5.0	0.90	07/19/2021

FORM XI - INORGANIC-1  
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract : 3593500 WISHRAM RI

Instrument ID: 10ICMC Effective Date:05/06/2022

<b>Analyte</b>	<b>Concentration (ug/L)</b>
Arsenic	450
Cadmium	450
Chromium	450
Copper	450
Lead	450
Nickel	450
Selenium	450
Silver	225
Zinc	450

FORM XII INORGANIC-1  
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Preparation Method: EPA 3050B Batch: MPRP 123798

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
4303384	4303384	04/26/2022	1.006	50
4303385	4303385	04/26/2022	1.018	50
4303386	4303386	04/26/2022	1.038	50
4303387	4303387	04/26/2022	1.018	50
10605435001	BNSF-SG01-041922-0-10	04/26/2022	1.082	50
10605435002	FD01-041922-0-10	04/26/2022	1.001	50
10605435003	BNSF-SG02-041922-0-10	04/26/2022	1.051	50

FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Instrument ID: 10ICMC Analysis Method: EPA 6020B

Start Date: 05/09/2022 14:05 End Date: 05/09/2022 23:53

Sample Name	Lab Sample ID	D/F	Date	Time	Ag	As	Cd	Cr	Cu	Ni	Pb	Se	Zn
29929122CAL0	29929122CAL0	1	05/09/2022	14:05	X	X	X	X	X	X	X	X	X
29929123CAL1	29929123CAL1	1	05/09/2022	14:09	X	X	X	X	X	X	X	X	X
29929124CAL2	29929124CAL2	1	05/09/2022	14:13	X	X	X	X	X	X	X	X	X
29929125CAL3	29929125CAL3	1	05/09/2022	14:17	X	X	X	X	X	X	X	X	X
29929126CAL4	29929126CAL4	1	05/09/2022	14:21	X	X	X	X	X	X	X	X	X
29929127CAL5	29929127CAL5	1	05/09/2022	14:25	X	X	X	X	X	X	X	X	X
29929128CAL6	29929128CAL6	1	05/09/2022	14:29	X	X	X	X	X	X	X	X	X
29929129CAL7	29929129CAL7	1	05/09/2022	14:35	X	X	X	X	X	X	X	X	X
29929130ICV	29929130ICV	1	05/09/2022	14:44	X	X	X	X	X	X	X	X	X
29929131ICB	29929131ICB	1	05/09/2022	14:52	X	X	X	X	X	X	X	X	X
29929132CRDL	29929132CRDL	1	05/09/2022	14:55	X	X	X	X	X	X	X	X	X
29929133ICSA	29929133ICSA	1	05/09/2022	14:59	X	X	X	X	X	X	X	X	X
29929134ICSAB	29929134ICSAB	1	05/09/2022	15:03	X	X	X	X	X	X	X	X	X
29929135CCV	29929135CCV	1	05/09/2022	15:07	X	X	X	X	X	X	X	X	X
29929136CCB	29929136CCB	1	05/09/2022	15:16	X	X	X	X	X	X	X	X	X
29929251CCV	29929251CCV	1	05/09/2022	22:34	X	X	X	X	X	X	X	X	X
29929252CCB	29929252CCB	1	05/09/2022	22:38	X	X	X	X	X	X	X	X	X
29929253CRDL	29929253CRDL	1	05/09/2022	22:42	X	X	X	X	X	X	X	X	X
4303384BLANK	4303384	1	05/09/2022	22:45	X	X	X	X	X	X	X	X	X
4303385LCS	4303385	1	05/09/2022	22:49	X	X	X	X	X	X	X	X	X
BNSF-SG01-041922-0-10	10605435001	1	05/09/2022	22:53	X	X	X	X	X	X	X	X	X
FD01-041922-0-10	10605435002	1	05/09/2022	23:00	X	X	X	X	X	X	X	X	X
BNSF-SG02-041922-0-10	10605435003	1	05/09/2022	23:08	X	X	X	X	X	X	X	X	X
29929254CCV	29929254CCV	1	05/09/2022	23:15	X	X	X	X	X	X	X	X	X
29929255CCB	29929255CCB	1	05/09/2022	23:19	X	X	X	X	X	X	X	X	X
10605661001	10605661001	1	05/09/2022	23:23	X	X	X	X	X	X	X	X	X
4305431PDS	4305431	1	05/09/2022	23:27	X	X	X	X	X	X	X	X	X
4305432SD	4305432	5	05/09/2022	23:30	X	X	X	X	X	X	X	X	X
29929256CCV	29929256CCV	1	05/09/2022	23:49	X	X	X	X	X	X	X	X	X
29929257CCB	29929257CCB	1	05/09/2022	23:53	X	X	X	X	X	X	X	X	X

FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Instrument ID: 10ICMC Analysis Method: EPA 6020B

Start Date: 05/10/2022 08:38 End Date: 05/10/2022 11:03

Sample Name	Lab Sample ID	D/F	Date	Time	Ag	As	Cd	Cr	Cu	Ni	Pb	Se	Zn
29935268CAL0	29935268CAL0	1	05/10/2022	08:38	X	X	X	X	X	X	X	X	X
29935269CAL1	29935269CAL1	1	05/10/2022	08:42	X	X	X	X	X	X	X	X	X
29935270CAL2	29935270CAL2	1	05/10/2022	08:46	X	X	X	X	X	X	X	X	X
29935271CAL3	29935271CAL3	1	05/10/2022	08:50	X	X	X	X	X	X	X	X	X
29935272CAL4	29935272CAL4	1	05/10/2022	08:54	X	X	X	X	X	X	X	X	X
29935273CAL5	29935273CAL5	1	05/10/2022	08:58	X	X	X	X	X	X	X	X	X
29935274CAL6	29935274CAL6	1	05/10/2022	09:03	X	X	X	X	X	X	X	X	X
29935275CAL7	29935275CAL7	1	05/10/2022	09:08	X	X	X	X	X	X	X	X	X
29935276ICV	29935276ICV	1	05/10/2022	09:13	X	X	X	X	X	X	X	X	X
29935277ICB	29935277ICB	1	05/10/2022	09:23	X	X	X	X	X	X	X	X	X
29935278CRDL	29935278CRDL	1	05/10/2022	09:27	X	X	X	X	X	X	X	X	X
29935279ICSA	29935279ICSA	1	05/10/2022	09:31	X	X	X	X	X	X	X	X	X
29935280ICSAB	29935280ICSAB	1	05/10/2022	09:35	X	X	X	X	X	X	X	X	X
29935281CCV	29935281CCV	1	05/10/2022	09:38	X	X	X	X	X	X	X	X	X
29935282CCB	29935282CCB	1	05/10/2022	09:42	X	X	X	X	X	X	X	X	X
29935283CCV	29935283CCV	1	05/10/2022	10:24	X	X	X	X	X	X	X	X	X
29935284CCB	29935284CCB	1	05/10/2022	10:29	X	X	X	X	X	X	X	X	X
4303386MS	4303386	1	05/10/2022	10:51	X	X	X	X	X	X	X	X	X
4303387MSD	4303387	1	05/10/2022	10:55	X	X	X	X	X	X	X	X	X
29935285CCV	29935285CCV	1	05/10/2022	10:59	X	X	X	X	X	X	X	X	X
29935286CCB	29935286CCB	1	05/10/2022	11:03	X	X	X	X	X	X	X	X	X



# US EPA 200.8/6020 Tune Check Report

Acq/Data Batch  
Report Comment  
Instrument Name

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ICMC RJS  
G8403A SG19304531

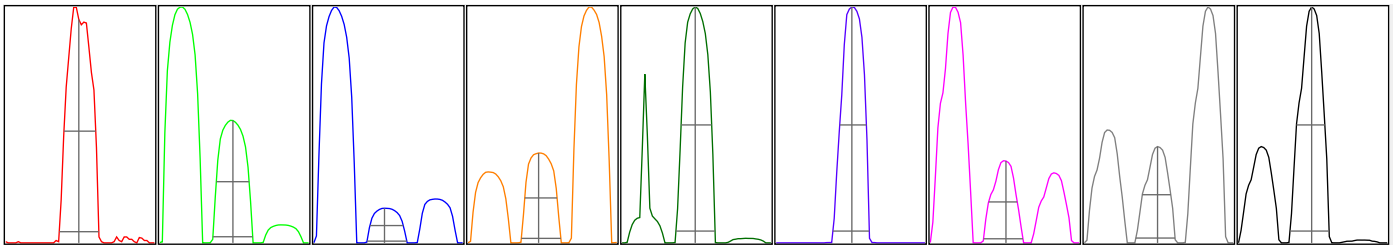
[He]

## Sensitivity

Mass	Count	RSD%	RSD%(Rqd)	RSD%(Flag)	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	23	3.837	5.000		22	23	24	23	23
24	12877	0.552	5.000		12983	12911	12859	12808	12826
25	1916	0.799	5.000		1941	1911	1920	1902	1908
26	2381	0.353	5.000		2385	2389	2385	2368	2378
59	8246	0.692	5.000		8182	8247	8258	8333	8212
115	294529	1.479	5.000		289294	291711	298077	293794	299770
206	8579	1.835	5.000		8386	8493	8572	8640	8805
207	7243	1.784	5.000		7045	7197	7266	7337	7370
208	17684	2.114	5.000		17182	17475	17703	17920	18139

Integration Time [sec] 0.1

## Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Required)	W-5% (Flag)
9	37.70	9.00	8.90 - 9.10		0.785	0.900	
24	20673.90	24.00	23.90 - 24.10		0.790	0.900	
25	3039.58	24.95	24.90 - 25.10		0.789	0.900	
26	3849.70	25.95	25.90 - 26.10		0.784	0.900	
59	14130.25	59.00	58.90 - 59.10		0.776	0.900	
115	566056.72	115.05	114.90 - 115.10		0.723	0.900	
206	16072.39	206.05	205.90 - 206.10		0.782	0.900	
207	13751.16	207.00	206.90 - 207.10		0.778	0.900	
208	33673.06	208.00	207.90 - 208.10		0.776	0.900	

Integration Time [sec] 0.1 Acquisition Time [sec] 212.5 Y Axis Linear

## Tune Parameters

### Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.78 L/min	Dilution Gas	0.15 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	7.0 mm	S/C Temp	2 °C		

### Lens Parameters

Extract 1	0.0 V	Omega Lens	14.2 V	Deflect	1.2 V
Extract 2	-185.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-100 V	Cell Exit	-70 V		

### Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

# US EPA 200.8/6020 Tune Check Report

Acq/Data Batch  
Report Comment  
Instrument Name

D:\DATA\050922.b  
ICMC RJS  
G8403A SG19304531

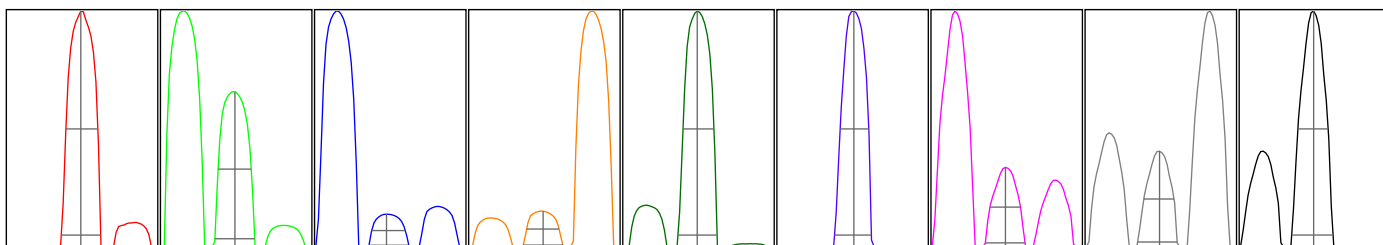
[H2]

## Sensitivity

Mass	Count	RSD%	RSD%(Rqd)	RSD%(Flag)	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	300	1.257	5.000		304	300	294	301	301
24	126375	0.294	5.000		126140	126078	126475	126199	126981
25	17589	0.353	5.000		17631	17542	17546	17549	17678
26	21133	0.247	5.000		21209	21068	21119	21153	21116
59	11050	0.755	5.000		11104	11123	11103	10982	10940
115	717608	0.975	5.000		721540	709184	724815	711069	721432
206	10133	0.515	5.000		10177	10177	10056	10150	10105
207	8496	0.621	5.000		8556	8546	8464	8479	8435
208	20905	0.461	5.000		21055	20912	20788	20898	20874

Integration Time [sec] 0.1

## Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Required)	W-5% (Flag)
9	501.14	9.00	8.90 - 9.10		0.783	0.900	
24	200818.53	24.00	23.90 - 24.10		0.790	0.900	
25	27779.37	24.95	24.90 - 25.10		0.790	0.900	
26	34363.38	26.00	25.90 - 26.10		0.785	0.900	
59	18751.00	59.00	58.90 - 59.10		0.777	0.900	
115	1321895.44	115.05	114.90 - 115.10		0.731	0.900	
206	18193.49	206.00	205.90 - 206.10		0.789	0.900	
207	15266.90	207.00	206.90 - 207.10		0.785	0.900	
208	37608.69	208.00	207.90 - 208.10		0.821	0.900	

Integration Time [sec] 0.1 Acquisition Time [sec] 212.5 Y Axis Linear

## Tune Parameters

### Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.78 L/min	Dilution Gas	0.15 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	7.0 mm	S/C Temp	2 °C		

### Lens Parameters

Extract 1	0.0 V	Omega Lens	13.7 V	Deflect	3.8 V
Extract 2	-180.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-100 V	Cell Exit	-70 V		

### Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	3.5 mL/min	OctP RF	200 V		

# US EPA 200.8/6020 Tune Check Report

Acq/Data Batch  
Report Comment  
Instrument Name

D:\DATA\051022.b  
ICMC RJS  
G8403A SG19304531

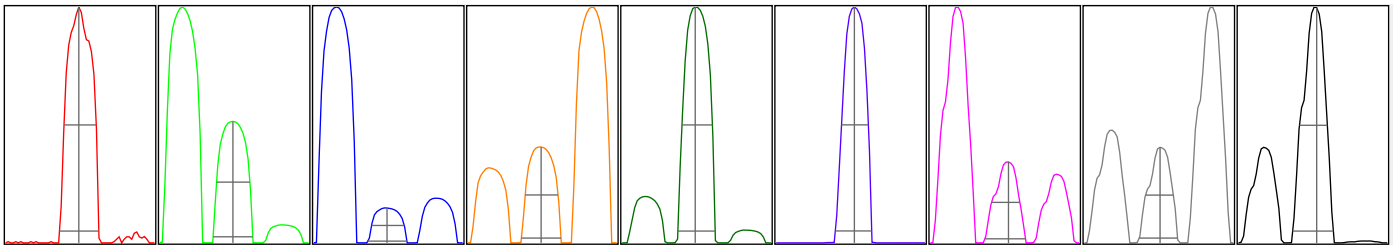
[He]

## Sensitivity

Mass	Count	RSD%	RSD%(Rqd)	RSD%(Flag)	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	23	1.770	5.000		23	23	23	23	23
24	12156	0.900	5.000		12306	12157	12177	12139	11999
25	1762	0.599	5.000		1774	1772	1758	1755	1751
26	2261	0.561	5.000		2282	2252	2263	2255	2253
59	7995	0.628	5.000		7945	8009	8021	8057	7941
115	296075	1.443	5.000		289275	295589	296221	300371	298918
206	8074	2.386	5.000		7766	8023	8153	8167	8264
207	6684	2.813	5.000		6403	6588	6781	6779	6870
208	16459	2.824	5.000		15698	16384	16579	16746	16886

Integration Time [sec] 0.1

## Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Required)	W-5% (Flag)
9	39.05	9.00	8.90 - 9.10		0.781	0.900	
24	19283.75	24.00	23.90 - 24.10		0.787	0.900	
25	2847.25	25.00	24.90 - 25.10		0.777	0.900	
26	3647.04	26.00	25.90 - 26.10		0.786	0.900	
59	13759.09	59.00	58.90 - 59.10		0.740	0.900	
115	569760.83	115.10	114.90 - 115.10		0.722	0.900	
206	15297.31	206.10	205.90 - 206.10		0.807	0.900	
207	12972.27	207.05	206.90 - 207.10		0.762	0.900	
208	31892.80	208.10	207.90 - 208.10		0.807	0.900	

Integration Time [sec] 0.1 Acquisition Time [sec] 212.5 Y Axis Linear

## Tune Parameters

### Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.78 L/min	Dilution Gas	0.15 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	7.0 mm	S/C Temp	2 °C		

### Lens Parameters

Extract 1	0.0 V	Omega Lens	13.2 V	Deflect	1.0 V
Extract 2	-175.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-100 V	Cell Exit	-70 V		

### Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

# US EPA 200.8/6020 Tune Check Report

Acq/Data Batch  
Report Comment  
Instrument Name

D:\DATA\051022.b  
ICMC RJS  
G8403A SG19304531

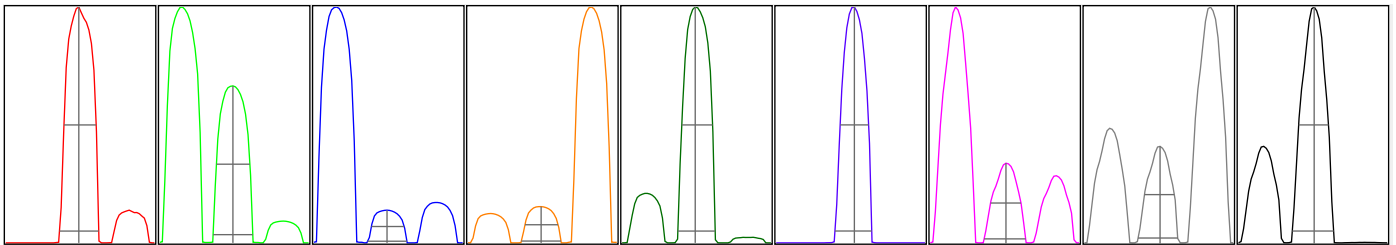
[H2]

## Sensitivity

Mass	Count	RSD%	RSD%(Rqd)	RSD%(Flag)	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	285	1.525	5.000		285	283	279	291	286
24	132286	0.379	5.000		132389	132281	132197	131578	132983
25	17974	0.187	5.000		18021	17991	17936	17950	17971
26	22333	0.111	5.000		22306	22327	22314	22366	22350
59	10350	0.779	5.000		10305	10245	10435	10341	10425
115	679404	1.481	5.000		667644	671258	692072	680412	685636
206	8557	1.475	5.000		8492	8369	8640	8679	8605
207	7063	1.820	5.000		6963	6892	7155	7186	7120
208	17301	1.655	5.000		17137	16896	17355	17580	17539

Integration Time [sec] 0.1

## Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Required)	W-5% (Flag)
9	471.73	9.00	8.90 - 9.10		0.779	0.900	
24	208682.73	24.00	23.90 - 24.10		0.788	0.900	
25	28942.89	25.00	24.90 - 25.10		0.780	0.900	
26	35723.10	26.00	25.90 - 26.10		0.787	0.900	
59	17688.83	59.00	58.90 - 59.10		0.741	0.900	
115	1265000.72	115.10	114.90 - 115.10		0.730	0.900	
206	15313.19	206.05	205.90 - 206.10		0.824	0.900	
207	12905.32	207.05	206.90 - 207.10		0.786	0.900	
208	31465.93	208.05	207.90 - 208.10		0.820	0.900	

Integration Time [sec] 0.1 Acquisition Time [sec] 212.5 Y Axis Linear

## Tune Parameters

### Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.78 L/min	Dilution Gas	0.15 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	7.0 mm	S/C Temp	2 °C		

### Lens Parameters

Extract 1	0.0 V	Omega Lens	12.7 V	Deflect	2.8 V
Extract 2	-165.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-95 V	Cell Exit	-70 V		

### Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	3.5 mL/min	OctP RF	200 V		

FORM XV INORGANIC-1  
INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Minnesota      SDG No. : 10605435    Contract: 3593500 WISHRAM RI

Instrument ID: 10ICMC      Start Date: 05/09/2022 14:05      End Date: 05/09/2022 23:53

Sample Name	Time	Ge-72	Ge-72-IS1	In-115	Ir-193-IS	Sc-45-IS	Sc-45-IS1	Tb-159
29929122CAL0	14:05	100.0	100.0	100.0	100.0	100.0	100.0	100.0
29929123CAL1	14:09	98.4	98.3	98.1	97.6	98.0	98.4	98.6
29929124CAL2	14:13	97.5	97.6	98.0	96.8	97.1	97.1	98.1
29929125CAL3	14:17	98.0	97.1	98.6	97.7	96.7	96.9	98.9
29929126CAL4	14:21	95.2	95.6	95.3	95.1	93.8	94.5	97.6
29929127CAL5	14:25	94.1	96.2	93.6	94.5	92.2	95.3	96.5
29929128CAL6	14:29	94.5	97.8	92.6	93.6	92.9	97.9	96.8
29929129CAL7	14:35	96.9	101.8	95.6	97.7	95.9	103.3	100.1
29929130ICV	14:44	100.6	100.6	100.5	99.4	99.1	99.8	100.6
29929131ICB	14:52	97.4	100.6	98.2	97.6	96.8	100.2	98.7
29929132CRDL	14:55	100.6	99.7	100.5	99.8	99.7	99.4	100.6
29929133ICSA	14:59	94.5	97.4	94.5	96.1	93.9	95.8	98.3
29929134ICSAB	15:03	96.1	99.9	94.9	96.0	94.1	98.5	98.7
29929135CCV	15:07	100.5	100.4	101.2	101.6	98.8	99.4	102.4
29929136CCB	15:16	100.5	103.5	102.1	104.2	98.2	102.3	103.5
29929251CCV	22:34	103.3	104.0	105.1	103.6	100.1	101.8	104.4
29929252CCB	22:38	101.1	98.6	104.0	103.3	97.9	96.5	103.4
29929253CRDL	22:42	101.8	105.1	104.3	103.8	98.6	103.0	104.9
4303384	22:45	97.5	101.5	100.5	101.2	94.6	99.1	101.3
4303385	22:49	99.2	102.3	101.0	101.6	95.5	99.3	103.5
BNSF-SG01-041922-0-	22:53	99.5	103.5	100.6	102.1	95.9	101.9	103.3
FD01-041922-0-10	23:00	99.5	103.3	101.1	102.5	96.2	101.7	103.3
BNSF-SG02-041922-0-	23:08	99.3	103.4	101.8	103.0	96.5	102.1	103.6
29929254CCV	23:15	101.4	104.5	102.4	102.1	96.2	101.7	102.4
29929255CCB	23:19	101.5	104.3	104.0	104.5	97.5	101.3	105.2
10605661001	23:23	98.3	102.5	101.0	103.0	94.5	99.8	102.4
4305431	23:27	99.7	101.6	101.1	101.5	94.7	98.5	102.8
4305432	23:30	98.5	102.1	101.7	102.5	94.4	99.0	102.5
29929256CCV	23:49	100.4	103.0	102.1	102.8	95.6	100.0	102.9
29929257CCB	23:53	99.4	103.2	102.9	103.7	95.0	100.0	103.6

FORM XV INORGANIC-1  
INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Minnesota      SDG No. : 10605435    Contract: 3593500 WISHRAM RI

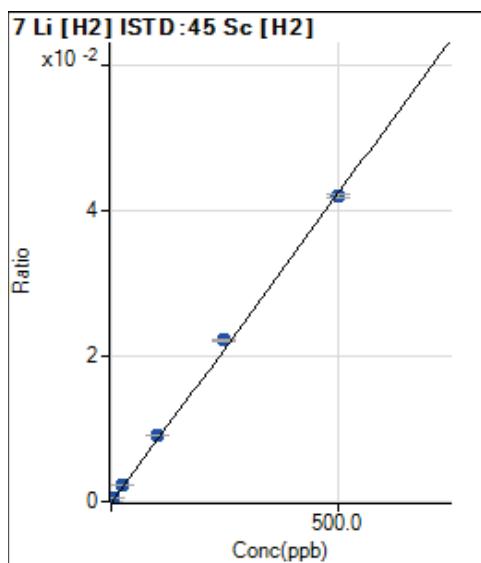
Instrument ID: 10ICMC      Start Date: 05/10/2022 08:38      End Date: 05/10/2022 11:03

Sample Name	Time	GE-72	Ge-72-IS1	In-115	Ir-193-IS	Sc-45-IS	Sc-45-IS1	Tb-159
29935268CAL0	08:38	100.0	100.0	100.0	100.0	100.0	100.0	100.0
29935269CAL1	08:42	99.7	98.8	99.1	99.0	100.5	99.3	98.7
29935270CAL2	08:46	99.2	99.6	98.6	98.8	99.5	99.2	99.1
29935271CAL3	08:50	98.5	98.3	98.4	97.7	98.4	97.3	98.1
29935272CAL4	08:54	98.4	97.6	97.0	97.5	97.3	97.1	98.0
29935273CAL5	08:58	96.3	97.9	94.5	96.6	95.9	97.7	97.5
29935274CAL6	09:03	96.8	99.7	94.7	98.8	96.7	100.0	99.0
29935275CAL7	09:08	97.0	101.6	94.9	98.0	97.8	103.7	99.8
29935276ICV	09:13	102.3	102.6	101.2	102.8	101.9	102.1	102.5
29935277ICB	09:23	100.4	100.7	101.3	103.0	100.3	100.3	101.5
29935278CRDL	09:27	100.3	101.9	100.7	100.9	100.7	101.4	100.2
29935279ICSA	09:31	96.9	101.1	95.0	97.0	97.3	99.5	98.4
29935280ICSAB	09:35	99.2	102.1	95.9	97.8	99.4	101.2	99.1
29935281CCV	09:38	102.2	102.7	101.1	101.9	102.1	102.2	102.0
29935282CCB	09:42	102.4	104.3	102.0	102.8	102.3	103.0	102.5
29935283CCV	10:24	99.9	99.8	99.7	101.0	100.1	99.8	100.1
29935284CCB	10:29	98.6	100.9	98.4	100.5	98.7	100.4	99.0
4303386	10:51	96.4	97.3	95.5	98.6	96.0	96.8	98.6
4303387	10:55	96.8	98.0	96.4	99.1	96.4	97.4	99.8
29935285CCV	10:59	101.3	101.1	101.3	102.9	99.9	99.2	102.7
29935286CCB	11:03	98.8	100.4	99.7	101.5	97.8	99.3	100.1

Calibration for 251\_CC.V.d

Batch Folder: D:\DATA\050922B\  
 Analysis File: 050922B.batch.bin  
 DA Date-Time: 05/10/22 05:40:26  
 Calibration Title:  
 Calibration Method: External Calibration  
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	005CALB.d	CAL0	05/09/22 14:05:28
2	006CALS.d	CAL1	05/09/22 14:09:47
3	007CALS.d	CAL2	05/09/22 14:13:45
4	008CALS.d	CAL3	05/09/22 14:17:42
5	009CALS.d	CAL4	05/09/22 14:21:40
6	010CALS.d	CAL5	05/09/22 14:25:35
7	011CALS.d	CAL6	05/09/22 14:29:26
8	012CALS.d	CAL7	05/09/22 14:35:20



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	73.33	0.0000	P	11.2	
2	<input type="checkbox"/>	0.500	0.549	276.00	0.0001	P	2.3	9.8
3	<input type="checkbox"/>	5.000	5.441	2064.64	0.0005	P	0.6	8.8
4	<input type="checkbox"/>	25.000	27.399	10086.01	0.0024	P	1.6	9.6
5	<input type="checkbox"/>	100.000	105.885	37809.61	0.0090	P	0.0	5.9
6	<input type="checkbox"/>	250.000	260.351	93667.13	0.0222	P	0.5	4.1
7	<input type="checkbox"/>	500.000	493.523	182446.48	0.0421	P	0.7	-1.3
8	<input type="checkbox"/>			153.00	0.0000	P	6.1	

$y = 8.5282E-005 * x + 1.6578E-005$

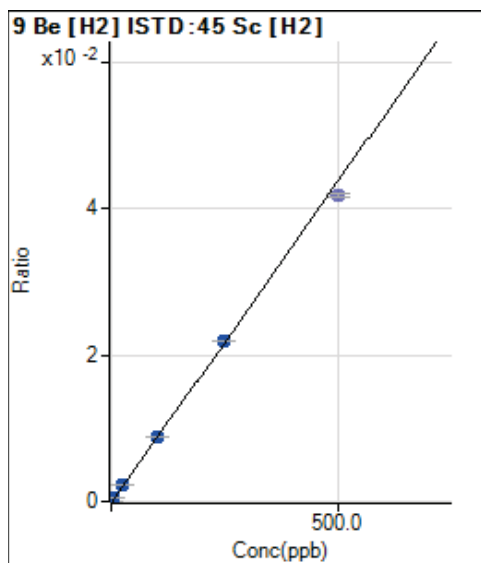
R = 0.9996

DL = 0.06532 ppb

BEC = 0.1944 ppb

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	21.17	0.0000	P	40.7	
2	<input type="checkbox"/>	0.200	0.212	101.83	0.0000	P	6.0	5.8
3	<input type="checkbox"/>	5.000	5.267	2009.13	0.0005	P	3.7	5.3
4	<input type="checkbox"/>	25.000	26.452	9986.62	0.0023	P	0.9	5.8
5	<input type="checkbox"/>	100.000	101.366	37256.48	0.0089	P	0.7	1.4
6	<input type="checkbox"/>	250.000	249.303	92391.59	0.0219	P	0.3	-0.3
7	<input checked="" type="checkbox"/>	500.000		181239.70	0.0418	P	0.9	
8	<input type="checkbox"/>			91.83	0.0000	P	6.3	

$y = 8.7895E-005 * x + 4.7840E-006$

R = 1.0000

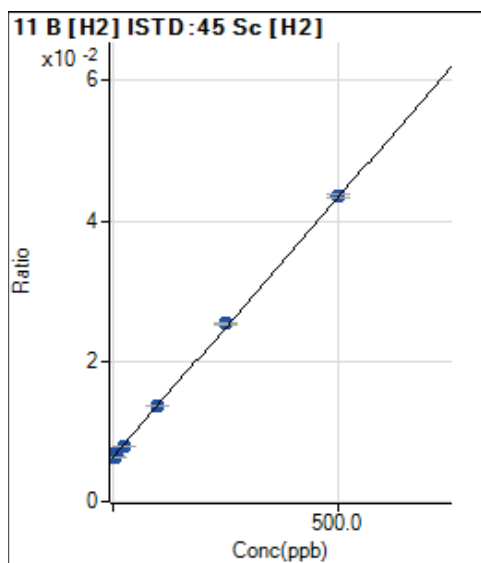
DL = 0.06642 ppb

BEC = 0.05443 ppb

Weight: <None>

Min Conc: <None>





	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	28845.41	0.0065	P	0.2	
2	<input type="checkbox"/>	10.000	7.682	30867.05	0.0071	P	1.0	-23.2
3	<input type="checkbox"/>	5.000	-1.901	27401.24	0.0064	P	1.0	-138.
4	<input type="checkbox"/>	25.000	17.522	33516.33	0.0078	P	0.6	-29.9
5	<input type="checkbox"/>	100.000	96.322	57120.85	0.0137	P	0.3	-3.7
6	<input type="checkbox"/>	250.000	253.736	106856.80	0.0253	P	0.2	1.5
7	<input type="checkbox"/>	500.000	499.357	188819.52	0.0436	P	0.7	-0.1
8	<input type="checkbox"/>			21510.59	0.0047	P	0.9	

$y = 7.4209E-005 * x + 0.0065$

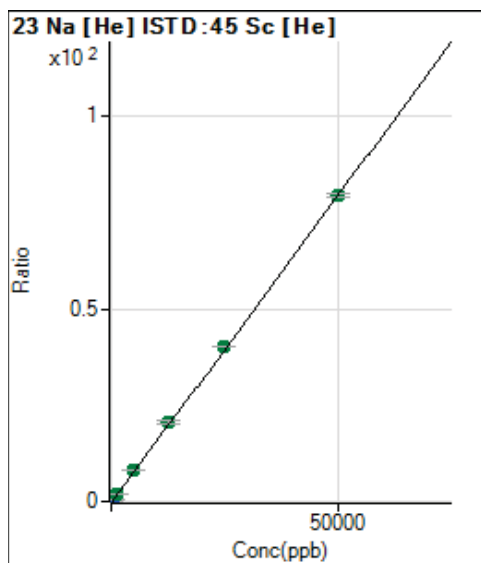
R = 0.9998

DL = 0.6058 ppb

BEC = 87.85 ppb

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	12210.05	0.0203	P	0.4	
2	<input type="checkbox"/>	50.000	54.122	62990.42	0.1067	P	0.5	8.2
3	<input type="checkbox"/>	250.000	262.066	256580.53	0.4389	P	0.5	4.8
4	<input type="checkbox"/>	1250.000	1316.713	1235872.40	2.1235	A	1.2	5.3
5	<input type="checkbox"/>	5000.000	5101.526	4612466.70	8.1692	A	0.4	2.0
6	<input type="checkbox"/>	12500.00	12852.60	11399108.16	20.5503	A	4.5	2.8
7	<input type="checkbox"/>	25000.00	25232.60	22566006.33	40.3255	A	0.7	0.9
8	<input type="checkbox"/>	50000.00	49783.66	45936382.65	79.5420	A	1.4	-0.4

$y = 0.0016 * x + 0.0203$

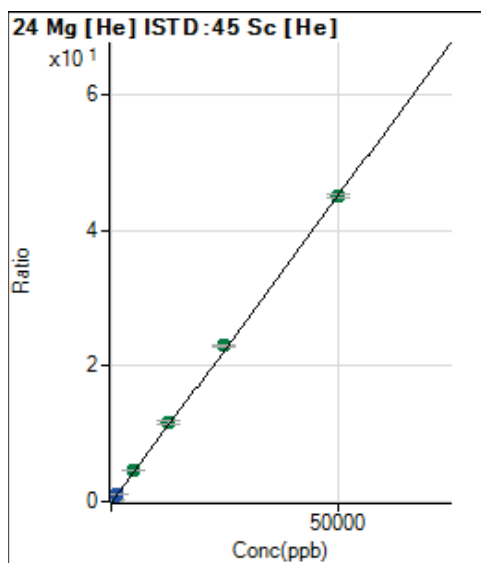
R = 1.0000

DL = 0.1512 ppb

BEC = 12.69 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	4910.85	0.0082	P	0.9	
2	<input type="checkbox"/>	30.000	31.289	21547.28	0.0365	P	1.2	4.3
3	<input type="checkbox"/>	250.000	265.085	145207.48	0.2484	P	0.2	6.0
4	<input type="checkbox"/>	1250.000	1316.405	699045.59	1.2011	P	1.3	5.3
5	<input type="checkbox"/>	5000.000	5095.986	2612084.23	4.6263	A	0.5	1.9
6	<input type="checkbox"/>	12500.00	12914.63	6496482.40	11.7117	A	4.5	3.3
7	<input type="checkbox"/>	25000.00	25314.28	12841915.23	22.9486	A	0.9	1.3
8	<input type="checkbox"/>	50000.00	49727.86	26029896.28	45.0729	A	1.5	-0.5

$y = 9.0623E-004 * x + 0.0082$

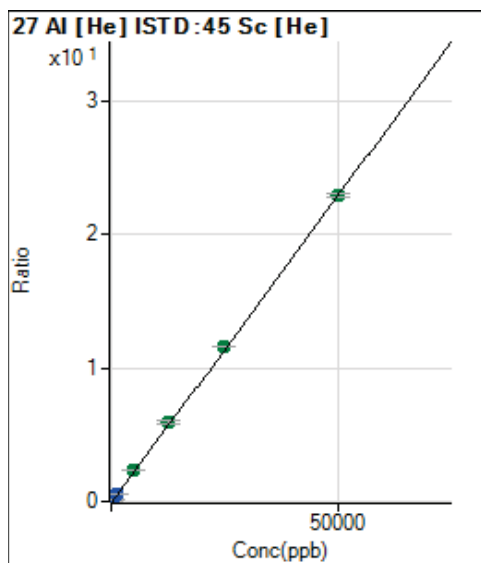
R = 0.9999

DL = 0.2511 ppb

BEC = 8.999 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	80.00	0.0001	P	9.1	
2	<input type="checkbox"/>	30.000	33.317	9147.14	0.0155	P	0.3	11.1
3	<input type="checkbox"/>	250.000	262.955	70975.99	0.1214	P	0.4	5.2
4	<input type="checkbox"/>	1250.000	1313.398	352608.75	0.6059	P	1.1	5.1
5	<input type="checkbox"/>	5000.000	5067.684	1319707.17	2.3373	A	0.6	1.4
6	<input type="checkbox"/>	12500.00	12813.08	3277874.42	5.9095	A	4.6	2.5
7	<input type="checkbox"/>	25000.00	25225.51	6510387.00	11.6341	A	0.7	0.9
8	<input type="checkbox"/>	50000.00	49800.54	13264396.33	22.9680	A	1.2	-0.4

$y = 4.6120E-004 * x + 1.3283E-004$

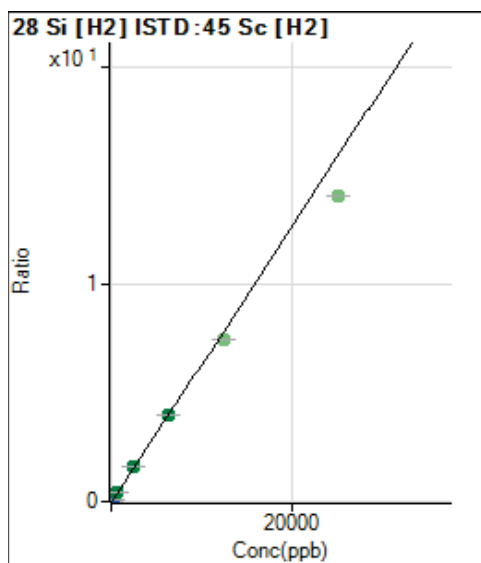
R = 1.0000

DL = 0.07885 ppb

BEC = 0.288 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	14027.27	0.0032	P	1.2	
2	<input type="checkbox"/>	100.000	105.789	308859.66	0.0709	P	1.1	5.8
3	<input type="checkbox"/>	125.000	130.225	371997.50	0.0866	P	0.8	4.2
4	<input type="checkbox"/>	625.000	656.272	1815510.84	0.4236	A	0.4	5.0
5	<input type="checkbox"/>	2500.000	2520.205	6760479.67	1.6176	A	0.8	0.8
6	<input type="checkbox"/>	6250.000	6238.594	16859747.33	3.9995	A	1.0	-0.2
7	<input checked="" type="checkbox"/>	12500.00		32409836.67	7.4796	A	0.7	
8	<input checked="" type="checkbox"/>	25000.00		64374644.00	14.0891	A	0.2	

$y = 6.4059E-004 * x + 0.0032$

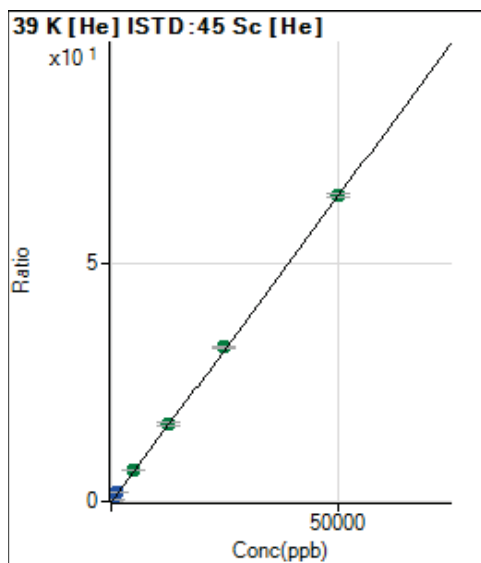
R = 1.0000

DL = 0.1796 ppb

BEC = 4.949 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	73846.83	0.1226	P	1.1	
2	<input type="checkbox"/>	100.000	107.263	154024.65	0.2610	P	0.8	7.3
3	<input type="checkbox"/>	250.000	260.875	268384.51	0.4591	P	0.8	4.4
4	<input type="checkbox"/>	1250.000	1298.132	1045778.84	1.7969	P	0.5	3.9
5	<input type="checkbox"/>	5000.000	5016.012	3721940.78	6.5919	A	0.6	0.3
6	<input type="checkbox"/>	12500.00	12678.78	9139026.53	16.4749	A	4.3	1.4
7	<input type="checkbox"/>	25000.00	25088.51	18175589.31	32.4801	A	1.0	0.4
8	<input type="checkbox"/>	50000.00	49908.17	37244505.28	64.4908	A	1.3	-0.2

$y = 0.0013 * x + 0.1226$

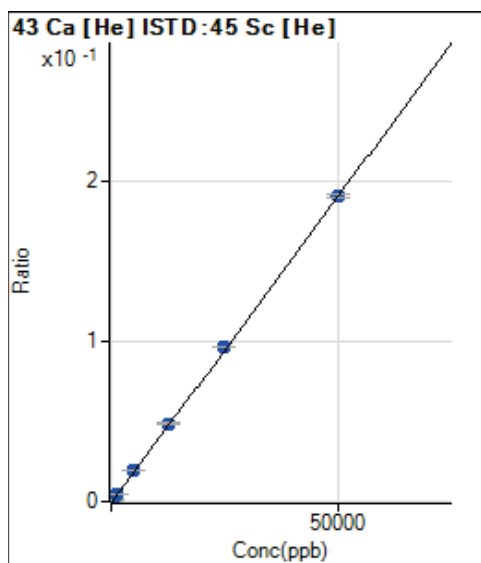
R = 1.0000

DL = 3.028 ppb

BEC = 95.09 ppb

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	13.85	0.0000	P	15.1	
2	<input type="checkbox"/>	100.000	112.544	268.28	0.0005	P	2.8	12.5
3	<input type="checkbox"/>	250.000	258.579	593.05	0.0010	P	4.2	3.4
4	<input type="checkbox"/>	1250.000	1304.183	2923.72	0.0050	P	0.4	4.3
5	<input type="checkbox"/>	5000.000	5041.903	10927.96	0.0194	P	0.3	0.8
6	<input type="checkbox"/>	12500.00	12719.42	27069.85	0.0488	P	3.8	1.8
7	<input type="checkbox"/>	25000.00	25175.34	54030.54	0.0966	P	0.4	0.7
8	<input type="checkbox"/>	50000.00	49851.86	110399.49	0.1912	P	1.6	-0.3

$y = 3.8342E-006 * x + 2.3007E-005$

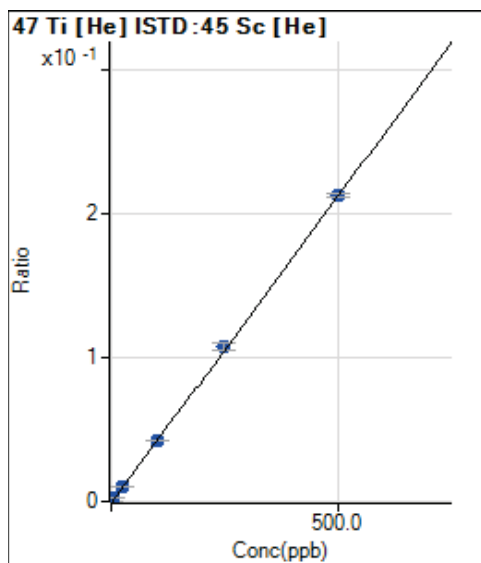
R = 1.0000

DL = 2.715 ppb

BEC = 6 ppb

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2.00	0.0000	P	0.4	
2	<input type="checkbox"/>	1.000	1.076	272.33	0.0005	P	7.9	7.6
3	<input type="checkbox"/>	5.000	4.970	1239.39	0.0021	P	5.8	-0.6
4	<input type="checkbox"/>	25.000	24.924	6179.97	0.0106	P	2.2	-0.3
5	<input type="checkbox"/>	100.000	99.487	23927.38	0.0424	P	0.6	-0.5
6	<input type="checkbox"/>	250.000	252.276	59612.97	0.1075	P	4.0	0.9
7	<input type="checkbox"/>	500.000	498.969	118930.55	0.2125	P	0.8	-0.2
8	<input type="checkbox"/>			632.01	0.0011	P	5.8	

$y = 4.2593E-004 * x + 3.3213E-006$

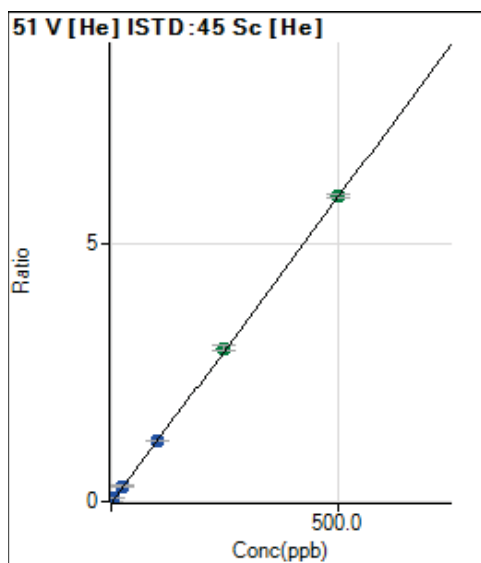
R = 1.0000

DL = 8.411E-05 ppb

BEC = 0.007798 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	-635.52	-0.0011	P	-81.	
2	<input type="checkbox"/>	1.000	0.994	6334.81	0.0107	P	9.8	-0.6
3	<input type="checkbox"/>	5.000	4.917	33465.72	0.0572	P	2.8	-1.7
4	<input type="checkbox"/>	25.000	25.379	174546.33	0.2999	P	2.1	1.5
5	<input type="checkbox"/>	100.000	98.931	661766.09	1.1721	P	0.1	-1.1
6	<input type="checkbox"/>	250.000	251.171	1651789.23	2.9773	A	3.9	0.5
7	<input type="checkbox"/>	500.000	499.610	3314632.13	5.9233	A	1.0	-0.1
8	<input type="checkbox"/>			228.39	0.0004	P	238.	

$y = 0.0119 * x - 0.0011$

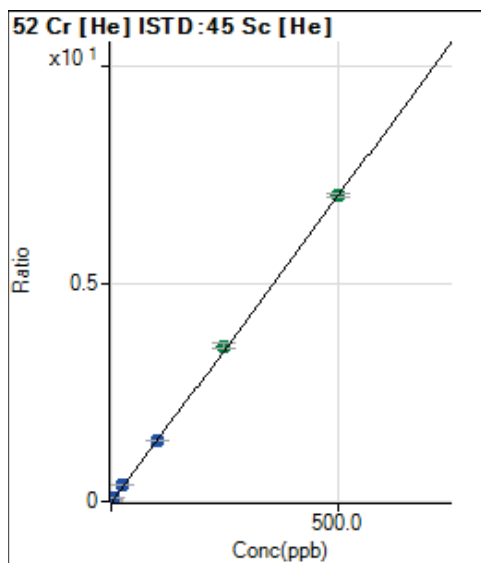
R = 1.0000

DL = 0.2184 ppb

BEC = -0.08899 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2482.89	0.0041	P	3.6	
2	<input type="checkbox"/>	2.000	2.081	19753.32	0.0335	P	1.3	4.0
3	<input type="checkbox"/>	5.000	5.042	43982.33	0.0752	P	0.8	0.8
4	<input type="checkbox"/>	25.000	25.609	212625.61	0.3653	P	0.3	2.4
5	<input type="checkbox"/>	100.000	99.521	794884.58	1.4078	P	0.2	-0.5
6	<input type="checkbox"/>	250.000	252.976	1981708.25	3.5723	A	4.2	1.2
7	<input type="checkbox"/>	500.000	498.577	3937521.08	7.0364	A	0.9	-0.3
8	<input type="checkbox"/>			4817.47	0.0083	P	3.5	

$y = 0.0141 * x + 0.0041$

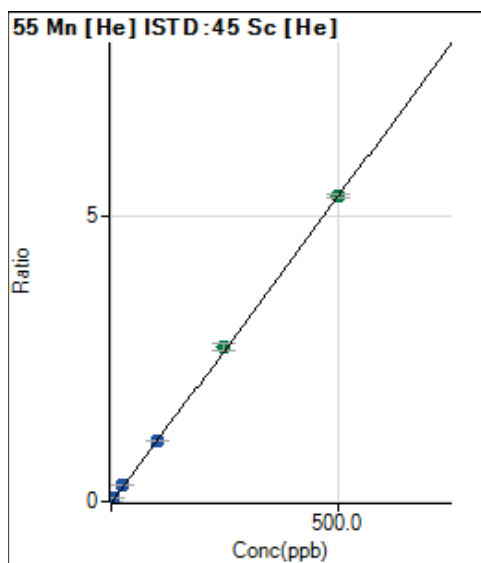
R = 1.0000

DL = 0.03193 ppb

BEC = 0.2923 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	286.00	0.0005	P	17.5	
2	<input type="checkbox"/>	0.500	0.530	3632.46	0.0062	P	2.6	6.1
3	<input type="checkbox"/>	5.000	5.079	32069.05	0.0549	P	1.0	1.6
4	<input type="checkbox"/>	25.000	25.674	160249.07	0.2753	P	0.5	2.7
5	<input type="checkbox"/>	100.000	99.525	601876.89	1.0660	P	0.1	-0.5
6	<input type="checkbox"/>	250.000	253.033	1502954.08	2.7095	A	4.5	1.2
7	<input type="checkbox"/>	500.000	498.544	2987060.08	5.3379	A	0.9	-0.3
8	<input type="checkbox"/>			4512.04	0.0078	P	0.6	

$y = 0.0107 * x + 4.7511E-004$

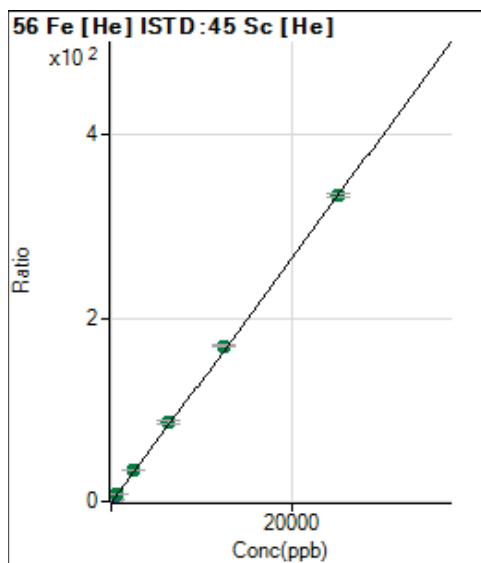
R = 1.0000

DL = 0.02331 ppb

BEC = 0.04438 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	11824.80	0.0196	P	1.6	
2	<input type="checkbox"/>	50.000	53.304	433700.05	0.7348	P	0.1	6.6
3	<input type="checkbox"/>	125.000	129.841	1029938.15	1.7618	P	0.3	3.9
4	<input type="checkbox"/>	625.000	651.669	5100200.33	8.7634	A	0.8	4.3
5	<input type="checkbox"/>	2500.000	2532.130	19193714.67	33.9943	A	0.1	1.3
6	<input type="checkbox"/>	6250.000	6434.642	47904225.33	86.3560	A	4.3	3.0
7	<input type="checkbox"/>	12500.00	12630.17	94842410.67	169.484	A	0.8	1.0
8	<input type="checkbox"/>	25000.00	24884.84	192838704.0	333.910	A	1.3	-0.5

$y = 0.0134 * x + 0.0196$

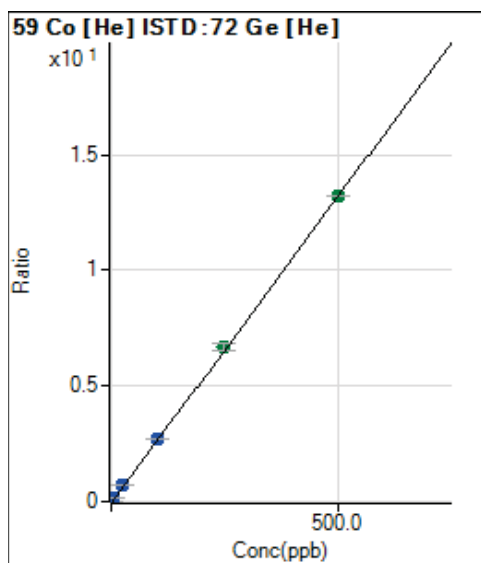
R = 1.0000

DL = 0.06849 ppb

BEC = 1.464 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	57.33	0.0001	P	12.0	
2	<input type="checkbox"/>	0.500	0.549	7197.79	0.0147	P	1.4	9.7
3	<input type="checkbox"/>	5.000	5.240	67638.48	0.1391	P	0.4	4.8
4	<input type="checkbox"/>	25.000	26.215	339804.48	0.6956	P	0.1	4.9
5	<input type="checkbox"/>	100.000	100.914	1271395.58	2.6774	P	0.4	0.9
6	<input type="checkbox"/>	250.000	252.986	3144966.83	6.7118	A	4.5	1.2
7	<input type="checkbox"/>	500.000	498.261	6232114.50	13.2189	A	0.5	-0.3
8	<input type="checkbox"/>			9395.05	0.0194	P	3.1	

$y = 0.0265 * x + 1.1496E-004$

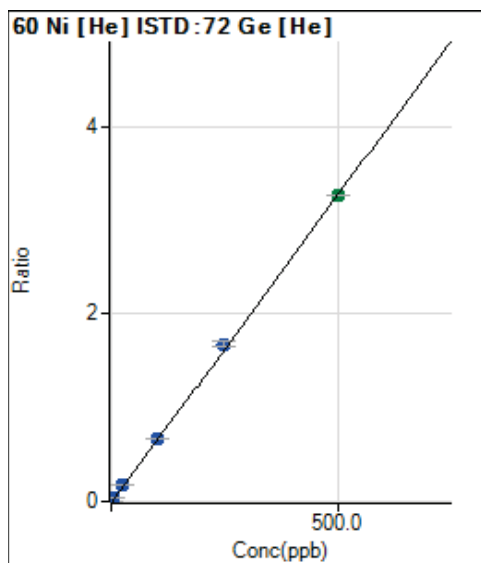
R = 1.0000

DL = 0.001565 ppb

BEC = 0.004333 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	206.00	0.0004	P	10.4	
2	<input type="checkbox"/>	0.500	0.561	2013.48	0.0041	P	2.4	12.3
3	<input type="checkbox"/>	5.000	5.326	17224.18	0.0354	P	1.7	6.5
4	<input type="checkbox"/>	25.000	26.335	84775.29	0.1735	P	0.4	5.3
5	<input type="checkbox"/>	100.000	102.254	319406.52	0.6726	P	0.5	2.3
6	<input type="checkbox"/>	250.000	255.637	787770.39	1.6809	P	3.8	2.3
7	<input type="checkbox"/>	500.000	496.661	1539494.75	3.2654	A	0.4	-0.7
8	<input type="checkbox"/>			4245.97	0.0088	P	2.9	

$y = 0.0066 * x + 4.1320E-004$

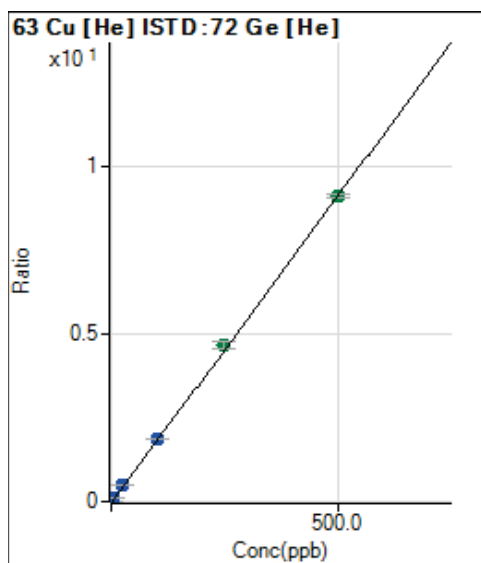
R = 0.9999

DL = 0.01968 ppb

BEC = 0.06285 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	327.34	0.0007	P	11.4	
2	<input type="checkbox"/>	1.000	1.060	9862.69	0.0201	P	1.0	6.0
3	<input type="checkbox"/>	5.000	5.241	47064.43	0.0968	P	0.6	4.8
4	<input type="checkbox"/>	25.000	26.338	236345.47	0.4838	P	0.3	5.4
5	<input type="checkbox"/>	100.000	101.451	884092.58	1.8618	P	0.4	1.5
6	<input type="checkbox"/>	250.000	254.727	2189904.83	4.6736	A	4.5	1.9
7	<input type="checkbox"/>	500.000	497.277	4301117.17	9.1231	A	0.6	-0.5
8	<input type="checkbox"/>			3367.73	0.0070	P	5.2	

$y = 0.0183 * x + 6.5633E-004$

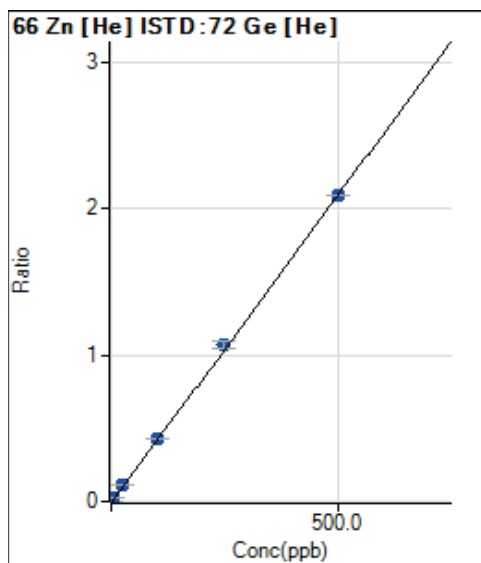
R = 0.9999

DL = 0.01226 ppb

BEC = 0.03578 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	217.33	0.0004	P	10.4	
2	<input type="checkbox"/>	5.000	5.452	11461.21	0.0234	P	0.9	9.0
3	<input type="checkbox"/>	5.000	5.188	10819.38	0.0223	P	2.3	3.8
4	<input type="checkbox"/>	25.000	26.106	53842.59	0.1102	P	0.2	4.4
5	<input type="checkbox"/>	100.000	101.349	202596.81	0.4266	P	0.3	1.3
6	<input type="checkbox"/>	250.000	254.735	502193.46	1.0717	P	4.2	1.9
7	<input type="checkbox"/>	500.000	497.301	986155.33	2.0917	P	0.6	-0.5
8	<input type="checkbox"/>			3273.71	0.0068	P	1.4	

$y = 0.0042 * x + 4.3576E-004$

R = 0.9999

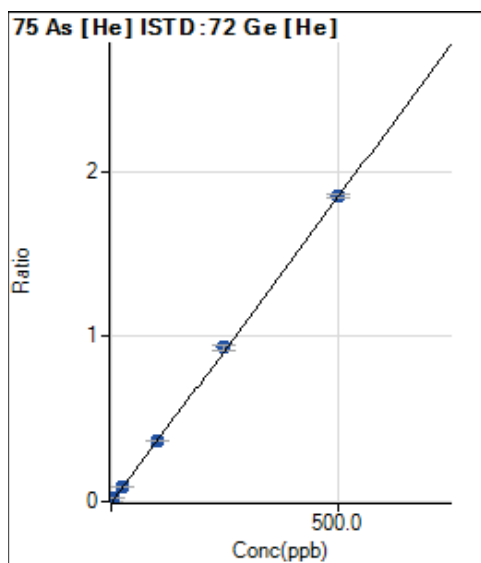
DL = 0.03236 ppb

BEC = 0.1036 ppb

Weight: <None>

Min Conc: <None>





	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	170.00	0.0003	P	7.0	
2	<input type="checkbox"/>	0.500	0.478	1037.54	0.0021	P	2.1	-4.4
3	<input type="checkbox"/>	5.000	4.999	9187.58	0.0189	P	0.7	0.0
4	<input type="checkbox"/>	25.000	25.063	45617.25	0.0934	P	0.1	0.3
5	<input type="checkbox"/>	100.000	98.950	174591.19	0.3677	P	0.2	-1.0
6	<input type="checkbox"/>	250.000	251.546	437733.55	0.9341	P	4.2	0.6
7	<input type="checkbox"/>	500.000	499.434	874230.65	1.8543	P	0.7	-0.1
8	<input type="checkbox"/>			447.01	0.0009	P	11.3	

$y = 0.0037 * x + 3.4095E-004$

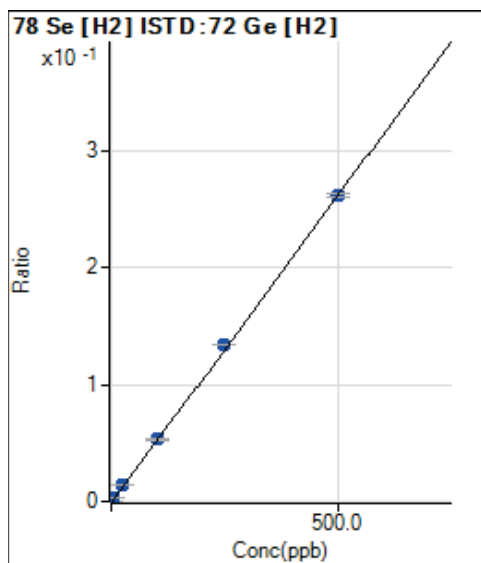
R = 1.0000

DL = 0.01927 ppb

BEC = 0.09185 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	41.00	0.0000	P	20.3	
2	<input type="checkbox"/>	0.500	0.531	468.68	0.0003	P	4.4	6.2
3	<input type="checkbox"/>	5.000	5.010	4052.91	0.0027	P	1.8	0.2
4	<input type="checkbox"/>	25.000	25.726	20534.92	0.0136	P	0.9	2.9
5	<input type="checkbox"/>	100.000	100.566	78935.97	0.0529	P	0.8	0.6
6	<input type="checkbox"/>	250.000	254.277	200839.18	0.1338	P	0.5	1.7
7	<input type="checkbox"/>	500.000	497.712	399569.19	0.2618	P	0.8	-0.5
8	<input type="checkbox"/>			143.33	0.0001	P	10.6	

$y = 5.2602E-004 * x + 2.6295E-005$

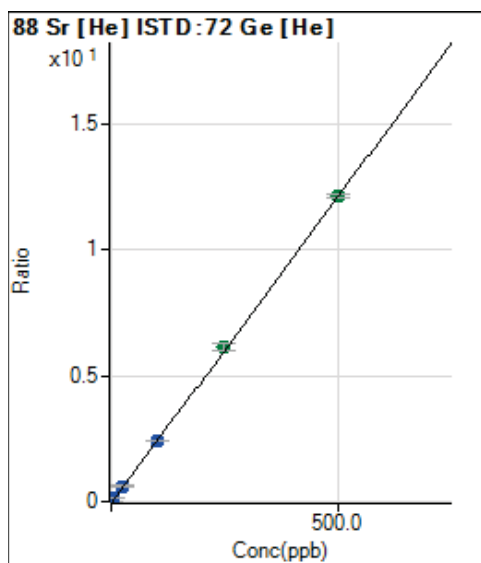
R = 0.9999

DL = 0.03046 ppb

BEC = 0.04999 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	150.00	0.0003	P	27.2	
2	<input type="checkbox"/>	0.500	0.507	6194.73	0.0126	P	2.5	1.3
3	<input type="checkbox"/>	5.000	5.075	60187.78	0.1238	P	0.8	1.5
4	<input type="checkbox"/>	25.000	25.483	303062.00	0.6204	P	0.6	1.9
5	<input type="checkbox"/>	100.000	100.033	1156045.48	2.4345	P	0.2	0.0
6	<input type="checkbox"/>	250.000	252.473	2878802.04	6.1439	A	4.5	1.0
7	<input type="checkbox"/>	500.000	498.732	5721647.83	12.1362	A	0.6	-0.3
8	<input type="checkbox"/>			6618.25	0.0137	P	4.3	

$y = 0.0243 * x + 3.0081E-004$

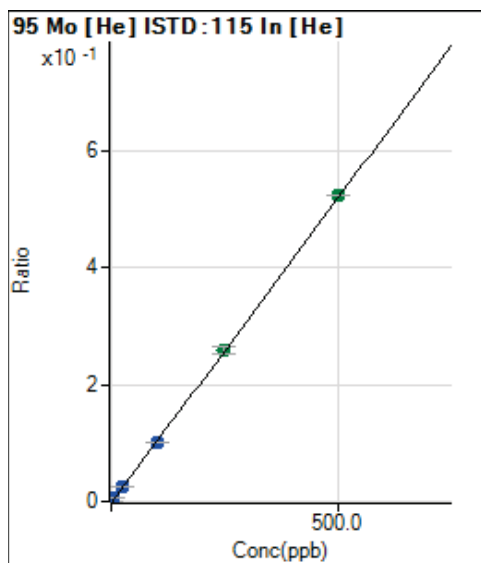
R = 1.0000

DL = 0.0101 ppb

BEC = 0.01236 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	11.33	0.0000	P	53.8	
2	<input type="checkbox"/>	0.500	0.486	3070.34	0.0005	P	1.7	-2.7
3	<input type="checkbox"/>	5.000	4.773	29992.80	0.0050	P	2.0	-4.5
4	<input type="checkbox"/>	25.000	24.442	154472.50	0.0256	P	1.6	-2.2
5	<input type="checkbox"/>	100.000	96.359	588629.44	0.1007	P	0.5	-3.6
6	<input type="checkbox"/>	250.000	247.545	1482994.04	0.2588	A	5.1	-1.0
7	<input type="checkbox"/>	500.000	501.986	2979856.50	0.5248	A	0.2	0.4
8	<input type="checkbox"/>			819.36	0.0001	P	13.0	

$y = 0.0010 * x + 1.8477E-006$

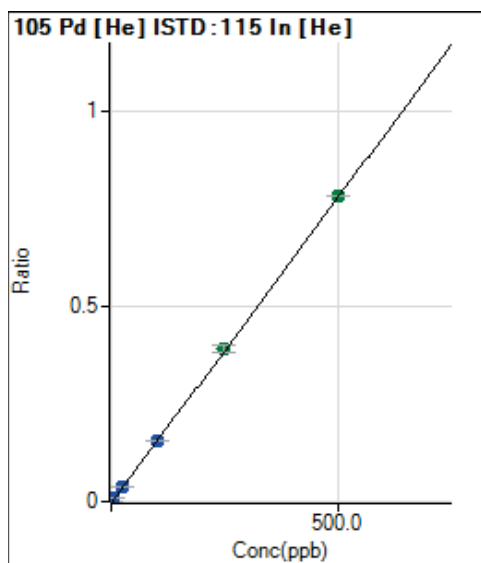
R = 1.0000

DL = 0.002851 ppb

BEC = 0.001767 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	193.33	0.0000	P	21.6	
2	<input type="checkbox"/>	0.500	0.510	4987.59	0.0008	P	2.6	1.9
3	<input type="checkbox"/>	5.000	5.080	47967.86	0.0080	P	0.3	1.6
4	<input type="checkbox"/>	25.000	25.445	240915.66	0.0399	P	0.7	1.8
5	<input type="checkbox"/>	100.000	98.952	905057.59	0.1549	P	0.5	-1.0
6	<input type="checkbox"/>	250.000	250.203	2244312.52	0.3916	A	4.6	0.1
7	<input type="checkbox"/>	500.000	500.085	4444071.81	0.7827	A	0.6	0.0
8	<input type="checkbox"/>			1123.39	0.0002	P	4.6	

$y = 0.0016 * x + 3.1530E-005$

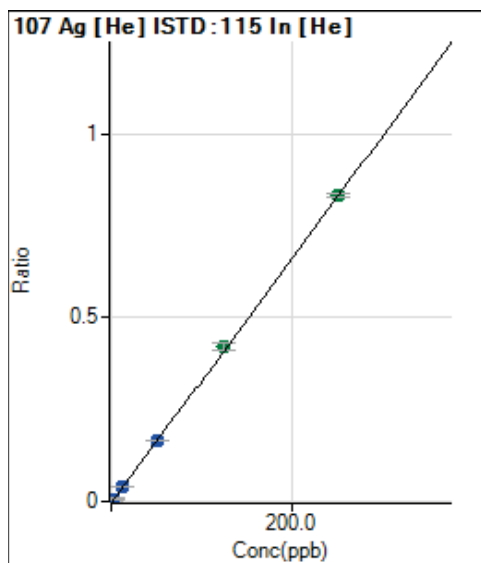
R = 1.0000

DL = 0.01302 ppb

BEC = 0.02015 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	98.33	0.0000	P	32.5	
2	<input type="checkbox"/>	0.500	0.388	7888.93	0.0013	P	4.0	-22.4
3	<input type="checkbox"/>	2.500	2.247	45185.72	0.0075	P	5.9	-10.1
4	<input type="checkbox"/>	12.500	12.564	253704.23	0.0420	P	1.1	0.5
5	<input type="checkbox"/>	50.000	49.735	970414.70	0.1661	P	0.8	-0.5
6	<input type="checkbox"/>	125.000	126.225	2415735.12	0.4215	A	4.3	1.0
7	<input type="checkbox"/>	250.000	249.440	4729247.12	0.8329	A	0.7	-0.2
8	<input type="checkbox"/>			1696.79	0.0003	P	4.1	

$y = 0.0033 * x + 1.6037E-005$

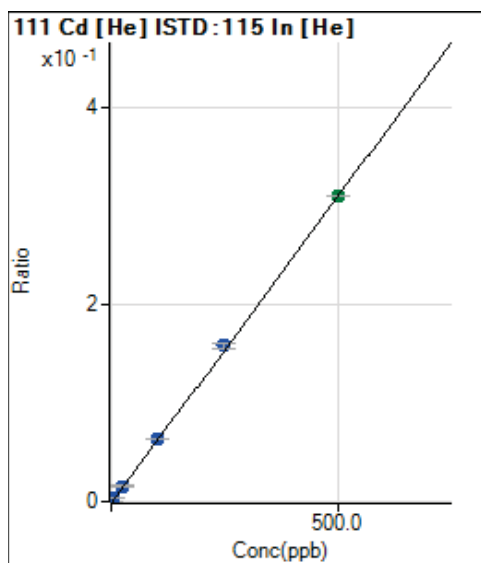
R = 1.0000

DL = 0.00469 ppb

BEC = 0.004803 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	21.67	0.0000	P	7.0	
2	<input type="checkbox"/>	0.080	0.083	331.79	0.0001	P	6.0	3.5
3	<input type="checkbox"/>	5.000	5.012	18800.10	0.0031	P	0.6	0.2
4	<input type="checkbox"/>	25.000	25.431	95873.36	0.0159	P	0.6	1.7
5	<input type="checkbox"/>	100.000	100.749	367068.05	0.0628	P	0.3	0.7
6	<input type="checkbox"/>	250.000	253.796	906982.39	0.1583	P	4.3	1.5
7	<input type="checkbox"/>	500.000	497.930	1762830.29	0.3105	A	0.4	-0.4
8	<input type="checkbox"/>			303.52	0.0001	P	26.0	

$y = 6.2353E-004 * x + 3.5344E-006$

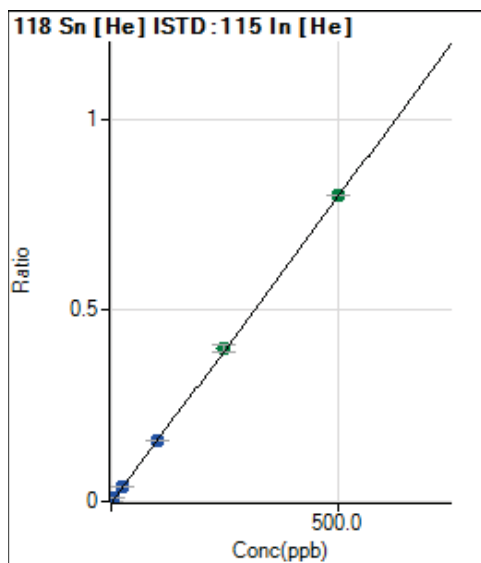
R = 1.0000

DL = 0.001194 ppb

BEC = 0.005668 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	141.67	0.0000	P	14.4	
2	<input type="checkbox"/>	0.500	0.483	4797.52	0.0008	P	6.1	-3.4
3	<input type="checkbox"/>	5.000	4.793	46302.99	0.0077	P	0.7	-4.1
4	<input type="checkbox"/>	25.000	24.616	238647.66	0.0395	P	1.0	-1.5
5	<input type="checkbox"/>	100.000	98.126	919138.97	0.1573	P	0.3	-1.9
6	<input type="checkbox"/>	250.000	251.079	2306480.75	0.4025	A	4.7	0.4
7	<input type="checkbox"/>	500.000	499.857	4549410.45	0.8013	A	0.3	0.0
8	<input type="checkbox"/>			8497.63	0.0014	P	0.6	

$y = 0.0016 * x + 2.3113E-005$

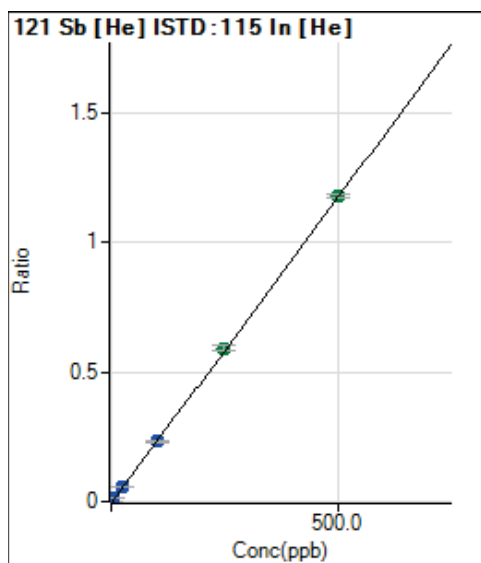
R = 1.0000

DL = 0.006243 ppb

BEC = 0.01442 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	38.33	0.0000	P	61.6	
2	<input type="checkbox"/>	0.500	0.510	7273.63	0.0012	P	3.5	1.9
3	<input type="checkbox"/>	5.000	4.836	68612.45	0.0114	P	0.8	-3.3
4	<input type="checkbox"/>	25.000	24.679	352101.62	0.0583	P	1.0	-1.3
5	<input type="checkbox"/>	100.000	97.914	1350173.00	0.2311	P	0.3	-2.1
6	<input type="checkbox"/>	250.000	251.224	3397831.62	0.5929	A	4.6	0.5
7	<input type="checkbox"/>	500.000	499.823	6697498.65	1.1796	A	0.9	0.0
8	<input type="checkbox"/>			2723.62	0.0005	P	11.9	

$y = 0.0024 * x + 6.2534E-006$

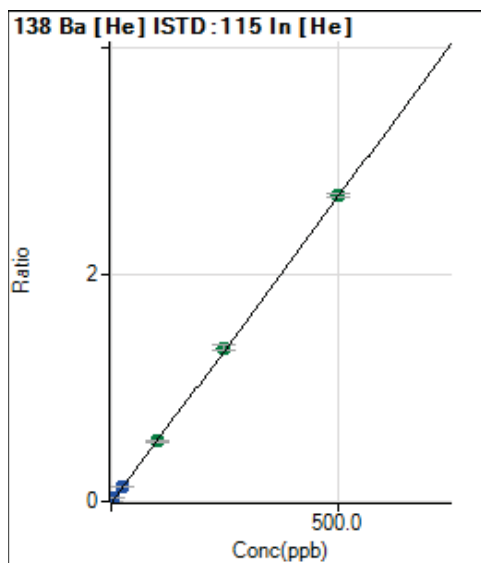
R = 1.0000

DL = 0.004897 ppb

BEC = 0.00265 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	75.00	0.0000	P	6.6	
2	<input type="checkbox"/>	0.300	0.309	10113.78	0.0017	P	1.7	3.0
3	<input type="checkbox"/>	5.000	4.873	158188.03	0.0263	P	0.8	-2.5
4	<input type="checkbox"/>	25.000	24.737	807527.46	0.1336	P	1.3	-1.1
5	<input type="checkbox"/>	100.000	97.934	3090003.18	0.5289	A	0.3	-2.1
6	<input type="checkbox"/>	250.000	250.789	7762084.05	1.3543	A	4.2	0.3
7	<input type="checkbox"/>	500.000	500.033	15331241.44	2.7002	A	0.9	0.0
8	<input type="checkbox"/>			3650.53	0.0006	P	12.5	

$y = 0.0054 * x + 1.2234E-005$

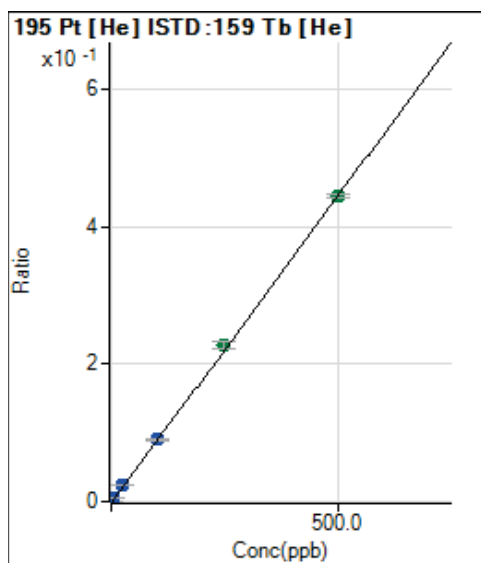
R = 1.0000

DL = 0.0004487 ppb

BEC = 0.002266 ppb

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	210.00	0.0000	P	18.3	
2	<input type="checkbox"/>	0.500	0.528	6947.82	0.0005	P	2.7	5.6
3	<input type="checkbox"/>	5.000	5.036	64211.26	0.0045	P	1.2	0.7
4	<input type="checkbox"/>	25.000	25.616	328308.22	0.0229	P	1.2	2.5
5	<input type="checkbox"/>	100.000	100.454	1269941.67	0.0899	P	0.9	0.5
6	<input type="checkbox"/>	250.000	254.798	3179974.42	0.2281	A	4.4	1.9
7	<input type="checkbox"/>	500.000	497.479	6236672.83	0.4453	A	1.2	-0.5
8	<input type="checkbox"/>			968.04	0.0001	P	24.2	

$y = 8.9500E-004 * x + 1.4506E-005$

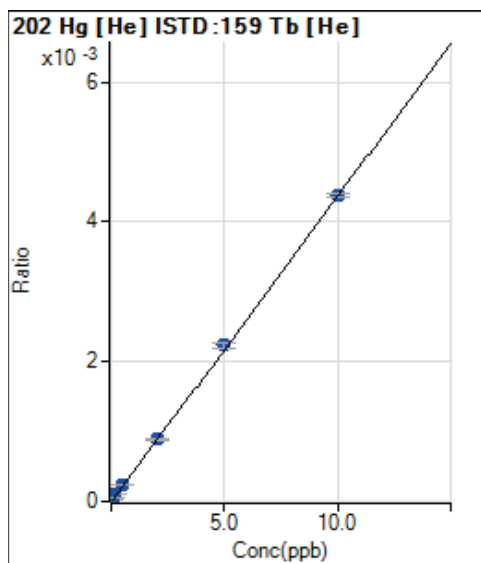
R = 0.9999

DL = 0.008887 ppb

BEC = 0.01621 ppb

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	226.33	0.0000	P	4.9	
2	<input type="checkbox"/>	0.200	0.226	1632.77	0.0001	P	1.0	12.9
3	<input type="checkbox"/>	0.100	0.100	842.03	0.0001	P	7.3	-0.2
4	<input type="checkbox"/>	0.500	0.497	3334.75	0.0002	P	2.4	-0.7
5	<input type="checkbox"/>	2.000	1.996	12556.91	0.0009	P	1.8	-0.2
6	<input type="checkbox"/>	5.000	5.062	31115.52	0.0022	P	4.1	1.2
7	<input type="checkbox"/>	10.000	9.969	61338.09	0.0044	P	1.5	-0.3
8	<input type="checkbox"/>			492.68	0.0000	P	4.7	

$y = 4.3769E-004 * x + 1.5641E-005$

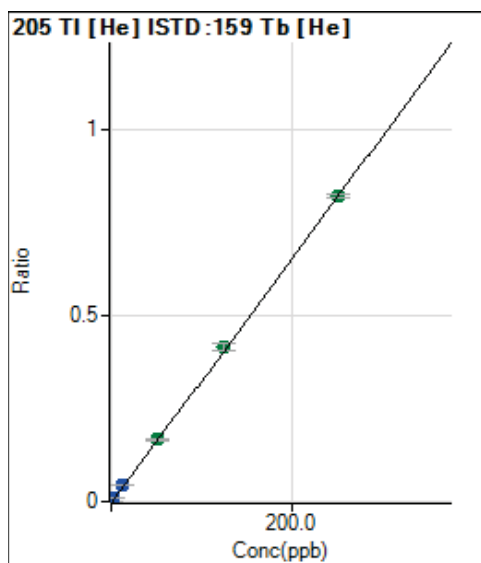
R = 1.0000

DL = 0.00524 ppb

BEC = 0.03573 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	485.01	0.0000	P	13.4	
2	<input type="checkbox"/>	0.100	0.095	4957.63	0.0003	P	4.9	-4.8
3	<input type="checkbox"/>	2.500	2.536	119209.77	0.0084	P	3.3	1.4
4	<input type="checkbox"/>	12.500	13.180	622523.51	0.0435	P	1.4	5.4
5	<input type="checkbox"/>	50.000	50.600	2357158.98	0.1669	A	1.9	1.2
6	<input type="checkbox"/>	125.000	126.635	5823185.96	0.4177	A	4.7	1.3
7	<input type="checkbox"/>	250.000	249.028	11503623.58	0.8213	A	1.3	-0.4
8	<input type="checkbox"/>			4477.50	0.0003	P	26.9	

$y = 0.0033 * x + 3.3515E-005$

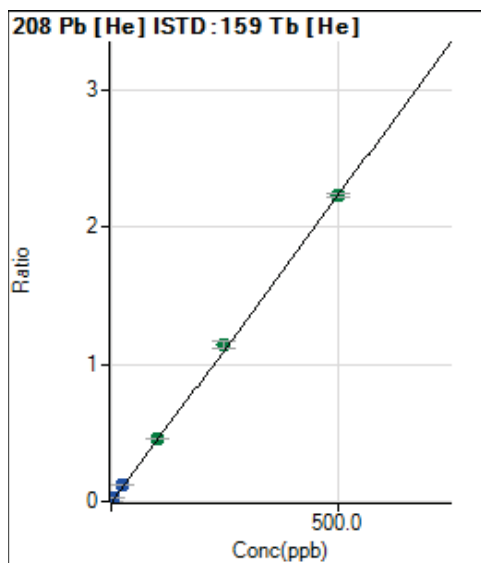
R = 1.0000

DL = 0.00409 ppb

BEC = 0.01016 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2803.48	0.0002	P	0.5	
2	<input type="checkbox"/>	0.500	0.545	37697.53	0.0026	P	1.5	9.0
3	<input type="checkbox"/>	5.000	5.159	331785.14	0.0234	P	0.6	3.2
4	<input type="checkbox"/>	25.000	26.230	1688614.86	0.1180	P	0.5	4.9
5	<input type="checkbox"/>	100.000	101.443	6436804.28	0.4558	A	0.5	1.4
6	<input type="checkbox"/>	250.000	254.204	15920672.57	1.1418	A	4.5	1.7
7	<input type="checkbox"/>	500.000	497.546	31300822.24	2.2347	A	1.1	-0.5
8	<input type="checkbox"/>			20979.78	0.0014	P	6.1	

$y = 0.0045 * x + 1.9376E-004$

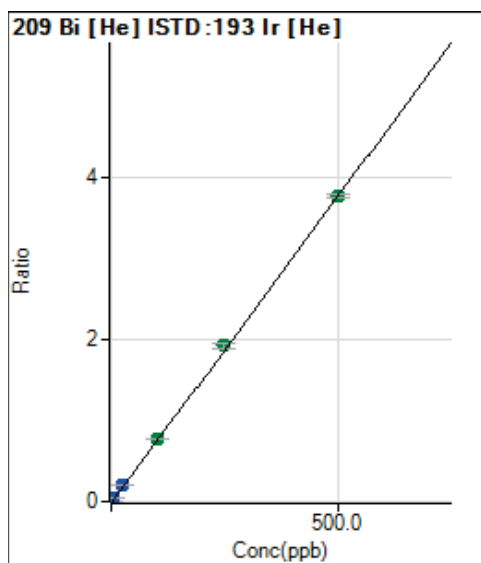
R = 0.9999

DL = 0.0005889 ppb

BEC = 0.04314 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2210.22	0.0003	P	9.5	
2	<input type="checkbox"/>	0.500	0.525	30886.34	0.0043	P	2.0	5.0
3	<input type="checkbox"/>	5.000	5.077	277495.07	0.0387	P	0.3	1.5
4	<input type="checkbox"/>	25.000	26.299	1441746.91	0.1994	P	1.2	5.2
5	<input type="checkbox"/>	100.000	101.635	5421596.58	0.7696	A	1.2	1.6
6	<input type="checkbox"/>	250.000	253.471	13410106.88	1.9188	A	3.9	1.4
7	<input type="checkbox"/>	500.000	497.872	26129140.44	3.7686	A	1.6	-0.4
8	<input type="checkbox"/>			5691.35	0.0008	P	18.1	

$y = 0.0076 * x + 2.9837E-004$

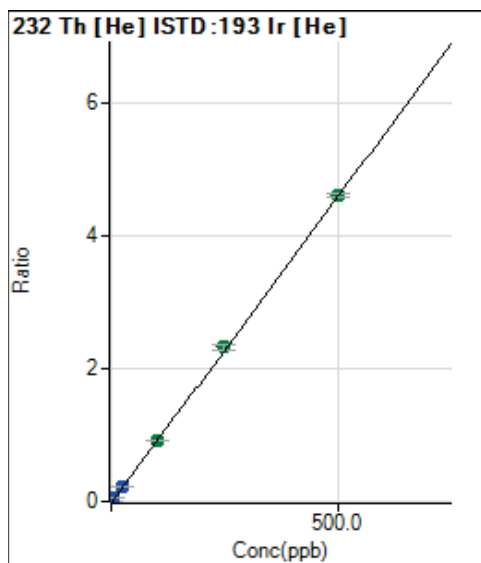
R = 1.0000

DL = 0.01125 ppb

BEC = 0.03942 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	1001.72	0.0001	P	3.5	
2	<input type="checkbox"/>	0.500	0.484	33309.20	0.0046	P	0.8	-3.2
3	<input type="checkbox"/>	5.000	4.764	316382.57	0.0442	P	0.8	-4.7
4	<input type="checkbox"/>	25.000	24.932	1666997.94	0.2305	P	0.4	-0.3
5	<input type="checkbox"/>	100.000	99.056	6448923.24	0.9154	A	0.8	-0.9
6	<input type="checkbox"/>	250.000	251.277	16228392.68	2.3218	A	3.5	0.5
7	<input type="checkbox"/>	500.000	499.556	32003298.69	4.6158	A	1.3	-0.1
8	<input type="checkbox"/>			18122.75	0.0025	P	8.6	

$y = 0.0092 * x + 1.3525E-004$

R = 1.0000

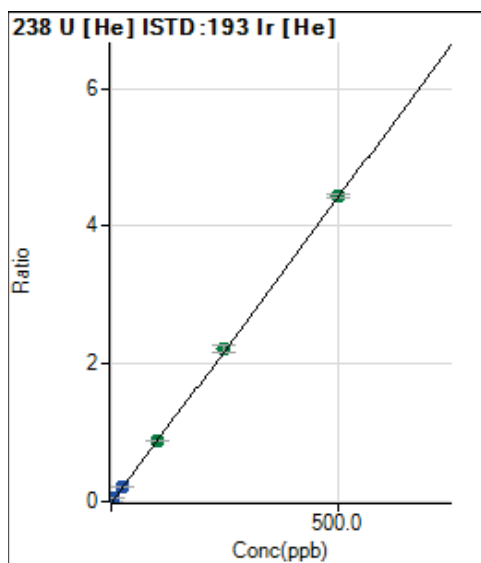
DL = 0.001538 ppb

BEC = 0.01464 ppb

Weight: <None>

Min Conc: <None>





	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	965.04	0.0001	P	4.6	
2	<input type="checkbox"/>	0.500	0.510	33670.39	0.0047	P	2.7	2.0
3	<input type="checkbox"/>	5.000	4.982	317705.60	0.0443	P	0.5	-0.4
4	<input type="checkbox"/>	25.000	25.314	1625305.50	0.2247	P	0.3	1.3
5	<input type="checkbox"/>	100.000	99.368	6212261.37	0.8818	A	0.8	-0.6
6	<input type="checkbox"/>	250.000	249.899	15496221.44	2.2174	A	4.0	0.0
7	<input type="checkbox"/>	500.000	500.161	30768874.54	4.4378	A	1.5	0.0
8	<input type="checkbox"/>			5652.97	0.0008	P	17.0	

$y = 0.0089 * x + 1.3030E-004$

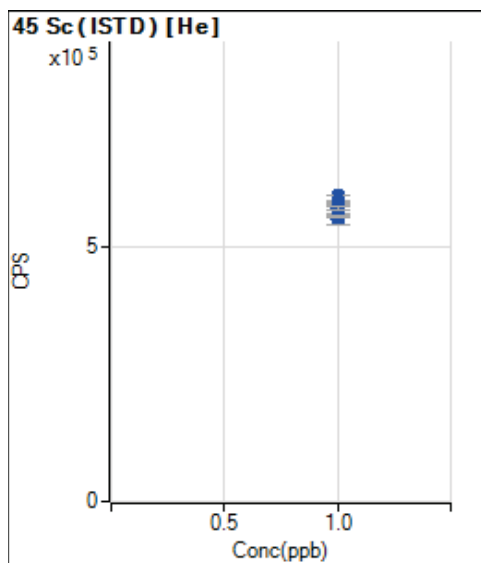
R = 1.0000

DL = 0.002006 ppb

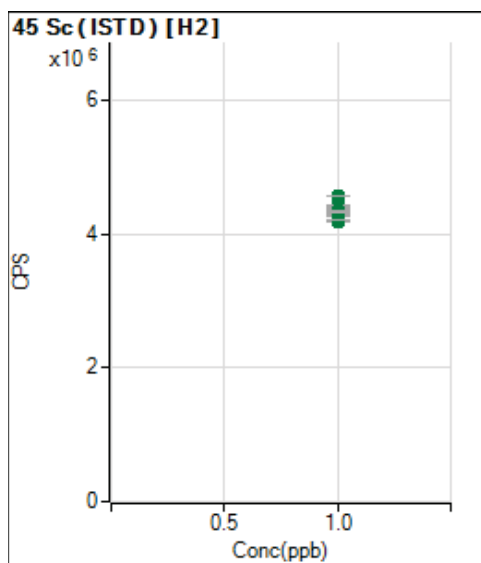
BEC = 0.01469 ppb

Weight: <None>

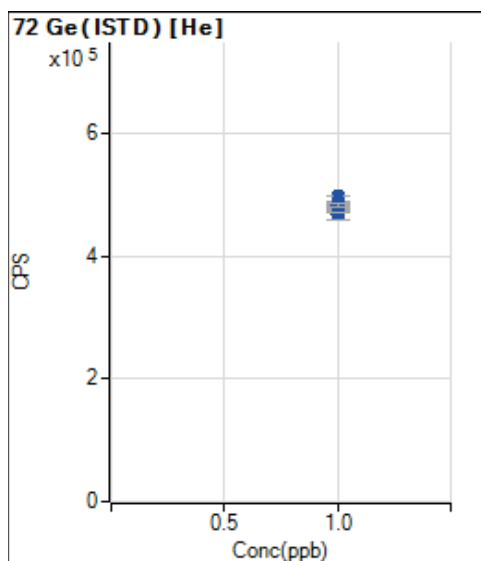
Min Conc: <None>



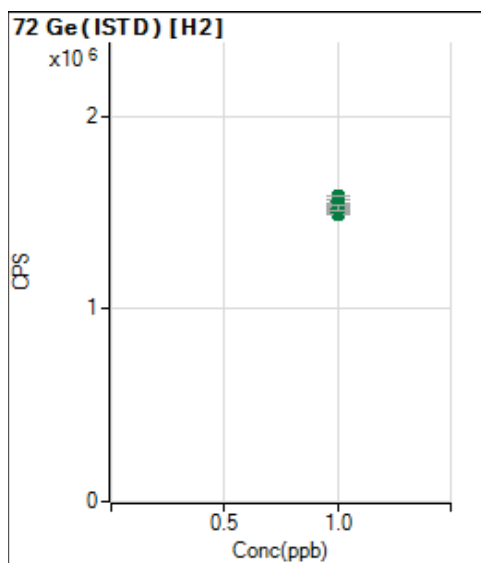
	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		602180.29		P	0.4	
2	<input type="checkbox"/>	1.000		590196.88		P	0.5	
3	<input type="checkbox"/>	1.000		584609.83		P	0.6	
4	<input type="checkbox"/>	1.000		582009.92		P	0.7	
5	<input type="checkbox"/>	1.000		564614.31		P	0.3	
6	<input type="checkbox"/>	1.000		555345.31		P	3.9	
7	<input type="checkbox"/>	1.000		559616.81		P	0.7	
8	<input type="checkbox"/>	1.000		577557.98		P	0.9	



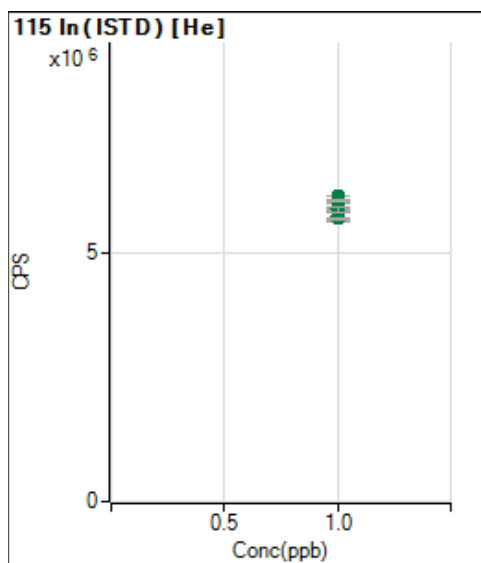
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		4424594.50		A	0.3	
2	<input type="checkbox"/>	1.000		4354265.00		A	0.9	
3	<input type="checkbox"/>	1.000		4296243.00		A	0.8	
4	<input type="checkbox"/>	1.000		4286310.00		A	0.7	
5	<input type="checkbox"/>	1.000		4179409.67		A	0.3	
6	<input type="checkbox"/>	1.000		4215473.67		A	0.1	
7	<input type="checkbox"/>	1.000		4333191.00		A	0.4	
8	<input type="checkbox"/>	1.000		4569077.00		A	0.6	



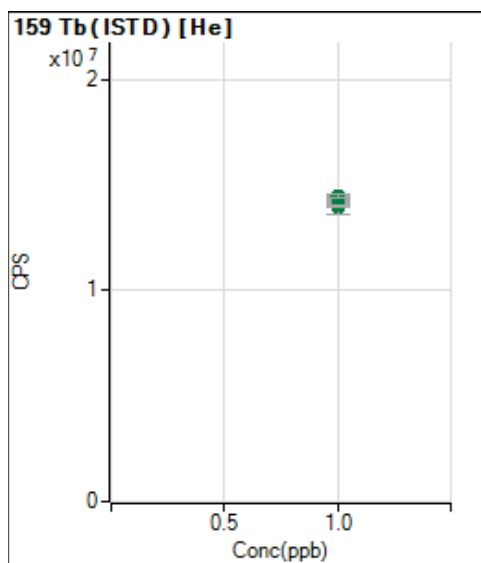
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		498652.22		P	0.3	
2	<input type="checkbox"/>	1.000		490603.75		P	0.1	
3	<input type="checkbox"/>	1.000		486152.98		P	0.7	
4	<input type="checkbox"/>	1.000		488508.14		P	0.1	
5	<input type="checkbox"/>	1.000		474867.88		P	0.2	
6	<input type="checkbox"/>	1.000		469117.87		P	3.9	
7	<input type="checkbox"/>	1.000		471459.16		P	0.3	
8	<input type="checkbox"/>	1.000		483349.63		P	0.9	



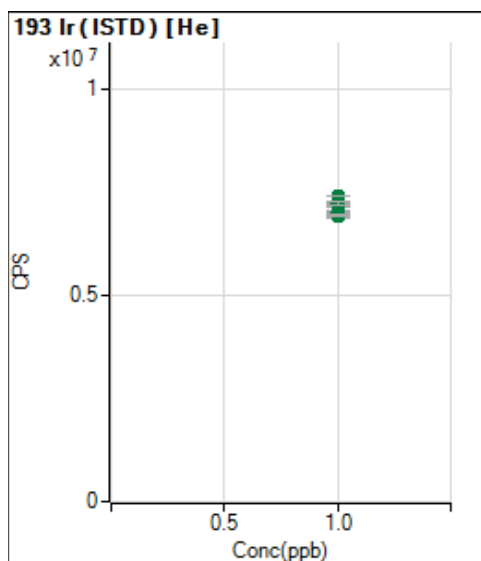
	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	1.000		1559776.58		A	1.7	
2	<input type="checkbox"/>	1.000		1532684.71		A	1.5	
3	<input type="checkbox"/>	1.000		1522692.00		A	0.7	
4	<input type="checkbox"/>	1.000		1514438.12		A	1.3	
5	<input type="checkbox"/>	1.000		1491397.71		A	0.4	
6	<input type="checkbox"/>	1.000		1501215.79		A	1.2	
7	<input type="checkbox"/>	1.000		1526085.54		A	1.3	
8	<input type="checkbox"/>	1.000		1588444.66		A	0.2	



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	1.000		6130191.13		A	0.2	
2	<input type="checkbox"/>	1.000		6016673.43		A	0.4	
3	<input type="checkbox"/>	1.000		6008811.67		A	0.4	
4	<input type="checkbox"/>	1.000		6044773.65		A	0.4	
5	<input type="checkbox"/>	1.000		5842761.83		A	0.5	
6	<input type="checkbox"/>	1.000		5738128.98		A	4.2	
7	<input type="checkbox"/>	1.000		5677817.45		A	0.3	
8	<input type="checkbox"/>	1.000		5863001.84		A	1.9	



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		14468615.62		A	0.5	
2	<input type="checkbox"/>	1.000		14267676.04		A	0.2	
3	<input type="checkbox"/>	1.000		14200629.79		A	0.5	
4	<input type="checkbox"/>	1.000		14311656.87		A	0.7	
5	<input type="checkbox"/>	1.000		14122981.87		A	0.2	
6	<input type="checkbox"/>	1.000		13962002.71		A	4.5	
7	<input type="checkbox"/>	1.000		14007444.79		A	0.6	
8	<input type="checkbox"/>	1.000		14477038.95		A	0.7	



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		7406368.85		A	0.3	
2	<input type="checkbox"/>	1.000		7230607.60		A	0.7	
3	<input type="checkbox"/>	1.000		7166060.52		A	0.5	
4	<input type="checkbox"/>	1.000		7232512.19		A	0.5	
5	<input type="checkbox"/>	1.000		7045397.61		A	0.6	
6	<input type="checkbox"/>	1.000		6995688.44		A	3.8	
7	<input type="checkbox"/>	1.000		6933892.40		A	0.7	
8	<input type="checkbox"/>	1.000		7234135.73		A	1.5	

Sample Name CAL0  
 Sample Type CalBlk  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 005CALB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:05:28  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.000000	N/A	73.333
Be	9	2	H2	0.000000	N/A	21.167
B	11	2	H2	0.000000	N/A	28845.407
Na	23	1	He	0.000000	N/A	12210.050
Mg	24	1	He	0.000000	N/A	4910.850
Al	27	1	He	0.000000	N/A	80.000
Si	28	2	H2	0.000000	N/A	14027.270
K	39	1	He	0.000000	N/A	73846.830
Ca	43	1	He	0.000000	N/A	13.850
Ti	47	1	He	0.000000	N/A	2.000
V	51	1	He	0.000000	N/A	-635.523
Cr	52	1	He	0.000000	N/A	2482.887
Mn	55	1	He	0.000000	N/A	286.000
Fe	56	1	He	0.000000	N/A	11824.803
Co	59	1	He	0.000000	N/A	57.333
Ni	60	1	He	0.000000	N/A	206.000
Cu	63	1	He	0.000000	N/A	327.337
Zn	66	1	He	0.000000	N/A	217.333
As	75	1	He	0.000000	N/A	170.000
Se	78	2	H2	0.000000	N/A	41.000
Sr	88	1	He	0.000000	N/A	150.000
Mo	95	1	He	0.000000	N/A	11.333
Pd	105	1	He	0.000000	N/A	193.333
Ag	107	1	He	0.000000	N/A	98.333
Cd	111	1	He	0.000000	N/A	21.667
Sn	118	1	He	0.000000	N/A	141.667
Sb	121	1	He	0.000000	N/A	38.333
Ba	138	1	He	0.000000	N/A	75.000
Pt	195	1	He	0.000000	N/A	210.000
Hg	202	1	He	0.000000	N/A	226.333
Tl	205	1	He	0.000000	N/A	485.013
Pb	208	1	He	0.000000	N/A	2803.477
Bi	209	1	He	0.000000	N/A	2210.223
Th	232	1	He	0.000000	N/A	1001.717
U	238	1	He	0.000000	N/A	965.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100	602180.287
Sc	45	2	H2	100	4424594.500
Ge	72	1	He	100	498652.220
Ge	72	2	H2	100	1559776.583
In	115	1	He	100	6130191.130
Tb	159	1	He	100	14468615.617
Ir	193	1	He	100	7406368.850

Sample Name CAL1  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 006CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:09:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.548858	3.1	276.000
Be	9	2	H2	0.211647	7.5	101.833
B	11	2	H2	7.681650	12.8	30867.050
Na	23	1	He	54.122238	0.6	62990.417
Mg	24	1	He	31.288782	1.6	21547.277
Al	27	1	He	33.316766	0.3	9147.140
Si	28	2	H2	105.789420	1.1	308859.660
K	39	1	He	107.263077	1.4	154024.653
Ca	43	1	He	112.543696	2.9	268.283
Ti	47	1	He	1.075626	8.0	272.333
V	51	1	He	0.993868	8.9	6334.807
Cr	52	1	He	2.080667	1.5	19753.317
Mn	55	1	He	0.530446	2.8	3632.463
Fe	56	1	He	53.304274	0.1	433700.053
Co	59	1	He	0.548671	1.4	7197.793
Ni	60	1	He	0.561446	2.7	2013.480
Cu	63	1	He	1.060083	1.1	9862.690
Zn	66	1	He	5.451692	0.9	11461.210
As	75	1	He	0.477842	2.5	1037.540
Se	78	2	H2	0.531223	4.8	468.677
Sr	88	1	He	0.506532	2.6	6194.730
Mo	95	1	He	0.486344	1.7	3070.340
Pd	105	1	He	0.509532	2.7	4987.587
Ag	107	1	He	0.387885	4.0	7888.933
Cd	111	1	He	0.082772	6.5	331.787
Sn	118	1	He	0.483107	6.3	4797.523
Sb	121	1	He	0.509547	3.5	7273.630
Ba	138	1	He	0.309008	1.7	10113.783
Pt	195	1	He	0.527874	2.8	6947.823
Hg	202	1	He	0.225724	1.2	1632.770
Tl	205	1	He	0.095206	5.5	4957.627
Pb	208	1	He	0.545190	1.6	37697.530
Bi	209	1	He	0.524999	2.2	30886.340
Th	232	1	He	0.483968	0.8	33309.203
U	238	1	He	0.510221	2.7	33670.387

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.00999629	590196.877
Sc	45	2	H2	98.41048710	4354265.000
Ge	72	1	He	98.38595524	490603.750
Ge	72	2	H2	98.26309270	1532684.710
In	115	1	He	98.14821929	6016673.433
Tb	159	1	He	98.61120384	14267676.040
Ir	193	1	He	97.62689040	7230607.600

Sample Name CAL2  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 007CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:13:45  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.440821	0.6	2064.640
Be	9	2	H2	5.266736	3.8	2009.133
B	11	2	H2	-1.900727		27401.237
Na	23	1	He	262.066388	0.5	256580.530
Mg	24	1	He	265.084845	0.2	145207.483
Al	27	1	He	262.954770	0.4	70975.993
Si	28	2	H2	130.224544	0.8	371997.500
K	39	1	He	260.875209	1.1	268384.507
Ca	43	1	He	258.579353	4.3	593.050
Ti	47	1	He	4.969874	5.8	1239.387
V	51	1	He	4.916773	2.8	33465.717
Cr	52	1	He	5.041745	0.8	43982.327
Mn	55	1	He	5.079291	1.1	32069.050
Fe	56	1	He	129.840850	0.3	1029938.147
Co	59	1	He	5.239943	0.4	67638.483
Ni	60	1	He	5.326198	1.7	17224.183
Cu	63	1	He	5.241354	0.6	47064.430
Zn	66	1	He	5.188336	2.3	10819.383
As	75	1	He	4.999264	0.8	9187.580
Se	78	2	H2	5.009679	1.8	4052.907
Sr	88	1	He	5.075275	0.8	60187.777
Mo	95	1	He	4.772646	2.0	29992.797
Pd	105	1	He	5.080462	0.3	47967.857
Ag	107	1	He	2.247178	5.9	45185.720
Cd	111	1	He	5.012201	0.6	18800.097
Sn	118	1	He	4.792984	0.7	46302.987
Sb	121	1	He	4.835607	0.8	68612.453
Ba	138	1	He	4.872917	0.8	158188.027
Pt	195	1	He	5.036175	1.2	64211.260
Hg	202	1	He	0.099760	9.9	842.027
Tl	205	1	He	2.535550	3.3	119209.773
Pb	208	1	He	5.159381	0.6	331785.137
Bi	209	1	He	5.076771	0.3	277495.073
Th	232	1	He	4.763917	0.8	316382.567
U	238	1	He	4.982280	0.5	317705.597

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.08219386	584609.833
Sc	45	2	H2	97.09913529	4296243.000
Ge	72	1	He	97.49339529	486152.980
Ge	72	2	H2	97.62244282	1522692.003
In	115	1	He	98.01997261	6008811.667
Tb	159	1	He	98.14781293	14200629.790
Ir	193	1	He	96.75538263	7166060.520

Sample Name CAL3  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 008CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:17:42  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	27.399036	1.6	10086.013
Be	9	2	H2	26.452381	0.9	9986.620
B	11	2	H2	17.521633	3.4	33516.327
Na	23	1	He	1316.712965	1.2	1235872.403
Mg	24	1	He	1316.404848	1.3	699045.587
Al	27	1	He	1313.397691	1.1	352608.750
Si	28	2	H2	656.271799	0.4	1815510.837
K	39	1	He	1298.131977	0.5	1045778.840
Ca	43	1	He	1304.182968	0.4	2923.720
Ti	47	1	He	24.924384	2.2	6179.967
V	51	1	He	25.379146	2.1	174546.330
Cr	52	1	He	25.609310	0.3	212625.613
Mn	55	1	He	25.673857	0.5	160249.070
Fe	56	1	He	651.669153	0.8	5100200.333
Co	59	1	He	26.215024	0.1	339804.477
Ni	60	1	He	26.335387	0.4	84775.293
Cu	63	1	He	26.337533	0.3	236345.473
Zn	66	1	He	26.105951	0.2	53842.590
As	75	1	He	25.063328	0.1	45617.247
Se	78	2	H2	25.725884	0.9	20534.920
Sr	88	1	He	25.482640	0.6	303062.003
Mo	95	1	He	24.441813	1.6	154472.500
Pd	105	1	He	25.445294	0.7	240915.663
Ag	107	1	He	12.564267	1.1	253704.227
Cd	111	1	He	25.431122	0.6	95873.360
Sn	118	1	He	24.615699	1.0	238647.660
Sb	121	1	He	24.679399	1.0	352101.623
Ba	138	1	He	24.737148	1.3	807527.463
Pt	195	1	He	25.616166	1.2	328308.220
Hg	202	1	He	0.496675	2.5	3334.753
Tl	205	1	He	13.180305	1.4	622523.507
Pb	208	1	He	26.229706	0.5	1688614.857
Bi	209	1	He	26.298985	1.2	1441746.907
Th	232	1	He	24.931631	0.4	1666997.943
U	238	1	He	25.313525	0.3	1625305.497

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.65044332	582009.917
Sc	45	2	H2	96.87464015	4286310.000
Ge	72	1	He	97.96569975	488508.137
Ge	72	2	H2	97.09327217	1514438.123
In	115	1	He	98.60660978	6044773.647
Tb	159	1	He	98.91517787	14311656.873
Ir	193	1	He	97.65260592	7232512.187



Sample Name CAL4  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 009CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:21:40  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	105.884674	0.0	37809.613
Be	9	2	H2	101.365674	0.7	37256.480
B	11	2	H2	96.321687	0.6	57120.847
Na	23	1	He	5101.525707	0.4	4612466.703
Mg	24	1	He	5095.986393	0.5	2612084.233
Al	27	1	He	5067.684366	0.6	1319707.167
Si	28	2	H2	2520.204995	0.8	6760479.667
K	39	1	He	5016.012147	0.6	3721940.777
Ca	43	1	He	5041.902588	0.3	10927.957
Ti	47	1	He	99.486796	0.6	23927.377
V	51	1	He	98.930971	0.1	661766.090
Cr	52	1	He	99.520928	0.2	794884.583
Mn	55	1	He	99.524843	0.1	601876.893
Fe	56	1	He	2532.129626	0.1	19193714.667
Co	59	1	He	100.914367	0.4	1271395.580
Ni	60	1	He	102.253634	0.5	319406.520
Cu	63	1	He	101.451397	0.4	884092.583
Zn	66	1	He	101.349397	0.3	202596.813
As	75	1	He	98.950218	0.2	174591.187
Se	78	2	H2	100.566217	0.8	78935.973
Sr	88	1	He	100.032888	0.2	1156045.477
Mo	95	1	He	96.358710	0.5	588629.437
Pd	105	1	He	98.951561	0.5	905057.590
Ag	107	1	He	49.734632	0.8	970414.700
Cd	111	1	He	100.749473	0.3	367068.047
Sn	118	1	He	98.125942	0.3	919138.973
Sb	121	1	He	97.914382	0.3	1350173.000
Ba	138	1	He	97.933780	0.3	3090003.180
Pt	195	1	He	100.454017	0.9	1269941.667
Hg	202	1	He	1.995657	1.8	12556.913
Tl	205	1	He	50.600293	1.9	2357158.977
Pb	208	1	He	101.442549	0.5	6436804.283
Bi	209	1	He	101.635293	1.2	5421596.583
Th	232	1	He	99.055985	0.8	6448923.237
U	238	1	He	99.368261	0.8	6212261.367

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.76167279	564614.310
Sc	45	2	H2	94.45859200	4179409.667
Ge	72	1	He	95.23027425	474867.877
Ge	72	2	H2	95.61611104	1491397.710
In	115	1	He	95.31125054	5842761.827
Tb	159	1	He	97.61114848	14122981.873
Ir	193	1	He	95.12620488	7045397.607

Sample Name CAL5  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 010CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:25:35  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	260.351395	0.5	93667.130
Be	9	2	H2	249.303148	0.3	92391.587
B	11	2	H2	253.735684	0.3	106856.797
Na	23	1	He	12852.60562	4.6	11399108.163
Mg	24	1	He	12914.63069	4.5	6496482.400
Al	27	1	He	12813.08500	4.6	3277874.417
Si	28	2	H2	6238.593700	1.0	16859747.333
K	39	1	He	12678.78627	4.4	9139026.530
Ca	43	1	He	12719.42107	3.8	27069.847
Ti	47	1	He	252.275672	4.0	59612.973
V	51	1	He	251.171388	3.9	1651789.233
Cr	52	1	He	252.975617	4.2	1981708.250
Mn	55	1	He	253.032943	4.5	1502954.083
Fe	56	1	He	6434.641702	4.3	47904225.333
Co	59	1	He	252.986340	4.5	3144966.833
Ni	60	1	He	255.637206	3.8	787770.393
Cu	63	1	He	254.726732	4.5	2189904.833
Zn	66	1	He	254.734822	4.2	502193.460
As	75	1	He	251.545944	4.2	437733.553
Se	78	2	H2	254.276589	0.5	200839.183
Sr	88	1	He	252.473139	4.5	2878802.043
Mo	95	1	He	247.545263	5.1	1482994.043
Pd	105	1	He	250.202646	4.6	2244312.523
Ag	107	1	He	126.224917	4.3	2415735.120
Cd	111	1	He	253.796010	4.3	906982.393
Sn	118	1	He	251.078625	4.7	2306480.747
Sb	121	1	He	251.223589	4.6	3397831.617
Ba	138	1	He	250.789055	4.2	7762084.047
Pt	195	1	He	254.798219	4.4	3179974.417
Hg	202	1	He	5.062157	4.1	31115.523
Tl	205	1	He	126.635362	4.7	5823185.957
Pb	208	1	He	254.204254	4.5	15920672.573
Bi	209	1	He	253.470958	3.9	13410106.883
Th	232	1	He	251.277089	3.5	16228392.677
U	238	1	He	249.899354	4.0	15496221.437

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.22243331	555345.313
Sc	45	2	H2	95.27367234	4215473.667
Ge	72	1	He	94.07716397	469117.867
Ge	72	2	H2	96.24556529	1501215.790
In	115	1	He	93.60440571	5738128.977
Tb	159	1	He	96.49853915	13962002.707
Ir	193	1	He	94.45503698	6995688.437

Sample Name CAL6  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 011CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:29:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	493.522959	0.7	182446.483
Be	9	2	H2	475.820038	0.9	181239.703
B	11	2	H2	499.357113	0.8	188819.517
Na	23	1	He	25232.60071	0.7	22566006.327
Mg	24	1	He	25314.28327	0.9	12841915.227
Al	27	1	He	25225.51825	0.7	6510387.000
Si	28	2	H2	11671.21907	0.7	32409836.667
K	39	1	He	25088.51065	1.0	18175589.313
Ca	43	1	He	25175.34445	0.4	54030.537
Ti	47	1	He	498.968736	0.8	118930.547
V	51	1	He	499.609999	1.0	3314632.133
Cr	52	1	He	498.576800	0.9	3937521.083
Mn	55	1	He	498.544044	0.9	2987060.083
Fe	56	1	He	12630.17383	0.8	94842410.667
Co	59	1	He	498.260757	0.5	6232114.500
Ni	60	1	He	496.660577	0.4	1539494.750
Cu	63	1	He	497.276944	0.6	4301117.167
Zn	66	1	He	497.301012	0.6	986155.330
As	75	1	He	499.433847	0.7	874230.647
Se	78	2	H2	497.712040	0.8	399569.187
Sr	88	1	He	498.731961	0.6	5721647.830
Mo	95	1	He	501.985823	0.2	2979856.500
Pd	105	1	He	500.085286	0.6	4444071.810
Ag	107	1	He	249.440154	0.7	4729247.117
Cd	111	1	He	497.930422	0.4	1762830.290
Sn	118	1	He	499.856801	0.3	4549410.450
Sb	121	1	He	499.822994	0.9	6697498.650
Ba	138	1	He	500.033125	0.9	15331241.437
Pt	195	1	He	497.478889	1.2	6236672.833
Hg	202	1	He	9.969444	1.5	61338.087
Tl	205	1	He	249.027891	1.3	11503623.580
Pb	208	1	He	497.546239	1.1	31300822.243
Bi	209	1	He	497.871721	1.6	26129140.443
Th	232	1	He	499.556054	1.3	32003298.690
U	238	1	He	500.161162	1.5	30768874.543

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.93177238	559616.813
Sc	45	2	H2	97.93419487	4333191.000
Ge	72	1	He	94.54668760	471459.157
Ge	72	2	H2	97.84000860	1526085.543
In	115	1	He	92.62056151	5677817.447
Tb	159	1	He	96.81261263	14007444.790
Ir	193	1	He	93.62067346	6933892.397

Sample Name CAL7  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 012CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:35:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.198348	12.0	153.000
Be	9	2	H2	0.174235	8.2	91.833
B	11	2	H2	-24.411234		21510.587
Na	23	1	He	49783.66338	1.4	45936382.650
Mg	24	1	He	49727.86573	1.5	26029896.277
Al	27	1	He	49800.54947	1.2	13264396.333
Si	28	2	H2	21989.18520	0.2	64374644.000
K	39	1	He	49908.17468	1.3	37244505.277
Ca	43	1	He	49851.85968	1.6	110399.490
Ti	47	1	He	2.562266	5.8	632.013
V	51	1	He	0.122482	65.1	228.387
Cr	52	1	He	0.299069	6.9	4817.467
Mn	55	1	He	0.685334	0.7	4512.040
Fe	56	1	He	24884.84215	1.3	192838704.000
Co	59	1	He	0.728429	3.2	9395.047
Ni	60	1	He	1.273581	3.0	4245.967
Cu	63	1	He	0.344116	5.8	3367.733
Zn	66	1	He	1.506973	1.5	3273.710
As	75	1	He	0.157366	17.9	447.010
Se	78	2	H2	0.121560	15.0	143.333
Sr	88	1	He	0.550446	4.4	6618.247
Mo	95	1	He	0.131946	13.2	819.360
Pd	105	1	He	0.102333	5.5	1123.387
Ag	107	1	He	0.081898	4.3	1696.787
Cd	111	1	He	0.077366	27.9	303.523
Sn	118	1	He	0.889810	0.6	8497.630
Sb	121	1	He	0.194245	12.1	2723.623
Ba	138	1	He	0.113025	12.8	3650.527
Pt	195	1	He	0.058516	30.9	968.040
Hg	202	1	He	0.042034	8.7	492.677
Tl	205	1	He	0.083608	30.2	4477.500
Pb	208	1	He	0.279530	7.1	20979.780
Bi	209	1	He	0.064552	29.2	5691.347
Th	232	1	He	0.256530	9.1	18122.750
U	238	1	He	0.073404	20.4	5652.967

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.91113981	577557.977
Sc	45	2	H2	103.2654404	4569077.000
Ge	72	1	He	96.93120922	483349.627
Ge	72	2	H2	101.8379606	1588444.663
In	115	1	He	95.64141991	5863001.840
Tb	159	1	He	100.0582179	14477038.950
Ir	193	1	He	97.67452679	7234135.727

Sample Name ICV  
 Sample Type ICV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 013\_ICV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:40:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	92.533945	11.9	32480.667
Be	9	2	H2	89.582184	12.4	32346.920
B	11	2	H2	69.647022	26.0	48017.393
Na	23	1	He	1043.742268	3.1	1007872.773
Mg	24	1	He	1043.127460	3.5	569436.137
Al	27	1	He	1045.320318	2.7	288025.457
Si	28	2	H2	567.700883	12.0	1506610.083
K	39	1	He	1050.408399	3.1	882392.617
Ca	43	1	He	1047.482914	2.6	2412.803
Ti	47	1	He	80.750006	1.9	20547.620
V	51	1	He	80.807925	2.7	571694.447
Cr	52	1	He	82.129841	2.2	694405.437
Mn	55	1	He	80.460557	1.9	514838.687
Fe	56	1	He	527.285944	2.6	4237480.083
Co	59	1	He	84.016790	1.7	1117638.877
Ni	60	1	He	84.634471	2.1	279160.903
Cu	63	1	He	84.312439	2.0	775807.207
Zn	66	1	He	83.026179	1.5	175282.627
As	75	1	He	80.880017	2.1	150703.733
Se	78	2	H2	89.522816	11.6	69146.757
Sr	88	1	He	82.299046	2.2	1004224.253
Mo	95	1	He	77.354157	1.7	502475.033
Pd	105	1	He	82.233520	1.6	799835.743
Ag	107	1	He	40.449166	0.5	839342.253
Cd	111	1	He	80.999047	1.6	313812.657
Sn	118	1	He	78.005190	2.0	776983.817
Sb	121	1	He	78.779879	1.2	1155213.133
Ba	138	1	He	78.839403	1.3	2645300.897
Pt	195	1	He	83.835970	2.4	1108947.873
Hg	202	1	He	3.948548	2.7	25767.500
Tl	205	1	He	42.752495	2.4	2083857.727
Pb	208	1	He	83.753987	2.0	5561094.713
Bi	209	1	He	82.073658	1.3	4703227.740
Th	232	1	He	78.453944	1.4	5486572.210
U	238	1	He	79.264978	1.1	5323140.340

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.21679490	597463.980
Sc	45	2	H2	93.63230159	4142849.667
Ge	72	1	He	100.5662617	501475.897
Ge	72	2	H2	94.91307766	1480431.960
In	115	1	He	101.3622170	6213697.640
Tb	159	1	He	102.1582748	14780888.113
Ir	193	1	He	102.1849100	7568191.347

Sample Name ICV  
 Sample Type ICV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 014\_ICV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:44:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.951019	1.8	32072.623
Be	9	2	H2	81.859602	2.0	31800.433
B	11	2	H2	55.997123	3.6	47151.513
Na	23	1	He	1035.105313	0.8	998919.960
Mg	24	1	He	1037.593415	0.7	566068.807
Al	27	1	He	1042.252503	0.9	286966.387
Si	28	2	H2	516.338094	1.6	1474953.500
K	39	1	He	1044.148095	0.4	876943.813
Ca	43	1	He	1039.890595	0.7	2393.440
Ti	47	1	He	80.106807	1.4	20365.710
V	51	1	He	80.471624	1.9	568871.647
Cr	52	1	He	81.873645	1.1	691681.607
Mn	55	1	He	80.017383	0.6	511579.123
Fe	56	1	He	522.730098	0.7	4197743.417
Co	59	1	He	83.592723	0.2	1112960.623
Ni	60	1	He	84.355646	0.4	278494.233
Cu	63	1	He	83.828533	0.2	772044.230
Zn	66	1	He	83.314681	0.4	176039.707
As	75	1	He	80.466073	0.4	150068.540
Se	78	2	H2	81.790089	2.1	67566.970
Sr	88	1	He	81.609754	0.8	996715.037
Mo	95	1	He	77.637397	0.7	500226.000
Pd	105	1	He	82.133455	0.8	792363.610
Ag	107	1	He	40.755872	1.9	838716.293
Cd	111	1	He	81.225606	0.7	312134.377
Sn	118	1	He	77.463805	0.4	765371.630
Sb	121	1	He	78.541677	0.3	1142369.957
Ba	138	1	He	78.963370	0.4	2627896.313
Pt	195	1	He	82.923805	0.3	1080595.500
Hg	202	1	He	4.013736	1.1	25802.577
Tl	205	1	He	42.767946	0.0	2053664.813
Pb	208	1	He	83.480604	0.1	5460421.273
Bi	209	1	He	82.895524	1.0	4623194.827
Th	232	1	He	78.866340	1.2	5367707.420
U	238	1	He	79.916570	1.1	5223147.733

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.11402612	596845.127
Sc	45	2	H2	99.84476920	4417726.167
Ge	72	1	He	100.6362416	501824.853
Ge	72	2	H2	100.6259150	1569539.460
In	115	1	He	100.5310082	6162742.953
Tb	159	1	He	100.6118904	14557147.697
Ir	193	1	He	99.44834073	7365510.930

Sample Name ICB  
 Sample Type ICB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 015\_ICB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:48:17  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.189945	10.2	146.167
Be	9	2	H2	0.140247	19.6	76.333
B	11	2	H2	-32.354266		18367.953
Na	23	1	He	2.978759	14.4	15050.977
Mg	24	1	He	-4.346235		2535.243
Al	27	1	He	1.897276	44.2	606.017
Si	28	2	H2	1.857278	3.4	19446.027
K	39	1	He	-1.708492		72406.657
Ca	43	1	He	0.394043	344.2	14.733
Ti	47	1	He	0.045574	38.6	13.667
V	51	1	He	0.056374	91.4	-232.163
Cr	52	1	He	0.066666	59.5	3044.327
Mn	55	1	He	0.062529	37.1	688.020
Fe	56	1	He	1.196807	30.2	21461.263
Co	59	1	He	0.069293	34.8	984.037
Ni	60	1	He	0.074778	40.4	456.010
Cu	63	1	He	0.076344	34.5	1036.710
Zn	66	1	He	0.044188	66.6	313.337
As	75	1	He	0.061129	30.8	286.333
Se	78	2	H2	0.040819	34.1	75.333
Sr	88	1	He	0.057394	42.9	855.040
Mo	95	1	He	0.065925	31.3	440.673
Pd	105	1	He	0.095737	13.1	1130.053
Ag	107	1	He	0.152033	20.7	3262.083
Cd	111	1	He	0.063516	39.3	268.590
Sn	118	1	He	0.061362	32.8	756.697
Sb	121	1	He	0.064505	38.0	986.717
Ba	138	1	He	0.060094	35.2	2096.860
Pt	195	1	He	0.059492	45.2	999.380
Hg	202	1	He	0.025910	32.8	398.010
Tl	205	1	He	0.078519	23.5	4312.427
Pb	208	1	He	0.073221	37.5	7705.910
Bi	209	1	He	0.056033	52.5	5414.627
Th	232	1	He	0.061156	35.6	5249.500
U	238	1	He	0.055404	44.5	4659.277

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.84264513	601232.727
Sc	45	2	H2	100.8020961	4460084.000
Ge	72	1	He	101.1756436	504514.593
Ge	72	2	H2	100.9607544	1574762.207
In	115	1	He	101.6482391	6231231.340
Tb	159	1	He	101.9100105	14744967.697
Ir	193	1	He	101.3460374	7506061.347

Sample Name ICB  
 Sample Type ICB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 016\_ICB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:52:02  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.140704	16.2	126.667
Be	9	2	H2	0.109001	3.1	63.667
B	11	2	H2	-34.524961		17539.477
Na	23	1	He	1.252719	29.4	12980.720
Mg	24	1	He	-5.363311		1913.477
Al	27	1	He	0.601727	5.3	239.000
Si	28	2	H2	1.182006	4.9	17407.500
K	39	1	He	1.429688	323.8	72463.353
Ca	43	1	He	2.503749	48.5	19.067
Ti	47	1	He	0.040533	116.8	11.667
V	51	1	He	0.070699	80.6	-118.167
Cr	52	1	He	0.017135	98.4	2541.560
Mn	55	1	He	0.014206	14.7	365.343
Fe	56	1	He	0.496314	8.0	15329.397
Co	59	1	He	0.018822	12.2	298.667
Ni	60	1	He	0.017552	12.2	256.667
Cu	63	1	He	0.023499	36.4	526.010
Zn	66	1	He	0.007432	44.0	226.667
As	75	1	He	0.007972	50.2	179.833
Se	78	2	H2	0.026314	16.2	63.000
Sr	88	1	He	0.016062	18.1	336.673
Mo	95	1	He	0.018954	10.6	130.667
Pd	105	1	He	0.042206	14.5	588.350
Ag	107	1	He	0.037697	8.8	853.367
Cd	111	1	He	0.016203	13.2	82.310
Sn	118	1	He	0.013870	44.0	273.337
Sb	121	1	He	0.015649	7.4	260.003
Ba	138	1	He	0.015289	8.6	571.683
Pt	195	1	He	0.014197	21.9	389.343
Hg	202	1	He	0.009580	38.4	282.667
Tl	205	1	He	0.017531	7.6	1303.407
Pb	208	1	He	0.018218	29.8	3938.587
Bi	209	1	He	0.009702	43.8	2690.323
Th	232	1	He	0.014516	9.7	1950.160
U	238	1	He	0.012330	10.6	1733.467

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.80585082	582945.750
Sc	45	2	H2	100.1721287	4432210.500
Ge	72	1	He	97.36900399	485532.700
Ge	72	2	H2	100.6067963	1569241.250
In	115	1	He	98.23388660	6021925.003
Tb	159	1	He	98.68596046	14278492.287
Ir	193	1	He	97.64956516	7232286.977



Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 017CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:55:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.656879	1.1	319.167
Be	9	2	H2	0.275880	11.5	127.500
B	11	2	H2	-25.147787		20449.790
Na	23	1	He	53.398459	1.9	63390.483
Mg	24	1	He	25.725694	2.2	18895.387
Al	27	1	He	32.659161	1.7	9123.797
Si	28	2	H2	105.583078	2.8	311159.427
K	39	1	He	103.640531	1.4	153898.170
Ca	43	1	He	101.396465	2.8	247.250
Ti	47	1	He	1.087013	3.8	280.000
V	51	1	He	1.016243	4.0	6601.957
Cr	52	1	He	2.063255	1.2	19949.643
Mn	55	1	He	0.537481	2.9	3740.490
Fe	56	1	He	52.984929	0.7	438663.510
Co	59	1	He	0.546568	1.6	7327.853
Ni	60	1	He	0.575577	4.1	2104.160
Cu	63	1	He	1.091498	1.5	10368.383
Zn	66	1	He	5.333689	0.9	11464.533
As	75	1	He	0.503309	1.9	1107.707
Se	78	2	H2	0.534412	4.5	478.010
Sr	88	1	He	0.537741	2.9	6711.633
Mo	95	1	He	0.506287	3.1	3271.057
Pd	105	1	He	0.558820	6.7	5579.480
Ag	107	1	He	0.403962	5.1	8407.570
Cd	111	1	He	0.088094	1.9	360.090
Sn	118	1	He	0.488754	2.9	4967.593
Sb	121	1	He	0.518536	2.5	7575.437
Ba	138	1	He	0.313535	4.5	10502.417
Pt	195	1	He	0.527792	1.9	7085.897
Hg	202	1	He	0.227174	2.0	1674.777
Tl	205	1	He	0.098635	5.8	5224.413
Pb	208	1	He	0.543603	2.0	38349.883
Bi	209	1	He	0.524849	1.7	31578.053
Th	232	1	He	0.491147	2.3	34547.407
U	238	1	He	0.500764	1.8	33809.020

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.71326859	600453.647
Sc	45	2	H2	99.36293597	4396407.000
Ge	72	1	He	100.5503601	501396.603
Ge	72	2	H2	99.72146117	1555432.000
In	115	1	He	100.4685309	6158912.973
Tb	159	1	He	100.6013821	14555627.283
Ir	193	1	He	99.82933323	7393728.640

Sample Name ICSA  
 Sample Type ICSA  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 018ICSA.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:59:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.209660	12.6	146.000
Be	9	2	H2	0.073975	33.1	47.833
B	11	2	H2	-36.128869		16262.220
Na	23	1	He	25625.21842	0.8	23158332.153
Mg	24	1	He	25396.10112	0.9	13019222.307
Al	27	1	He	25297.22479	0.7	6597710.500
Si	28	2	H2	3.211484	10.0	22147.527
K	39	1	He	25397.43148	0.9	18592540.970
Ca	43	1	He	24949.28142	0.8	54108.643
Ti	47	1	He	500.430247	0.8	120535.887
V	51	1	He	0.019191	637.8	-466.760
Cr	52	1	He	0.240923	5.4	4253.297
Mn	55	1	He	0.053515	4.9	592.677
Fe	56	1	He	25760.54658	0.6	195469685.333
Co	59	1	He	0.061884	4.9	828.027
Ni	60	1	He	0.066042	15.8	399.343
Cu	63	1	He	0.074014	3.6	949.367
Zn	66	1	He	0.149320	6.9	501.343
As	75	1	He	0.030075	2.0	213.333
Se	78	2	H2	0.051896	21.4	81.333
Sr	88	1	He	0.247485	3.8	2980.327
Mo	95	1	He	515.335273	0.1	3121153.500
Pd	105	1	He	0.024190	29.7	401.677
Ag	107	1	He	0.038564	15.3	838.367
Cd	111	1	He	0.023051	43.3	103.547
Sn	118	1	He	0.017720	12.8	298.343
Sb	121	1	He	0.017093	8.6	270.007
Ba	138	1	He	0.017338	6.4	613.353
Pt	195	1	He	0.003762	37.0	254.000
Hg	202	1	He	0.005305	56.7	255.333
Tl	205	1	He	0.016442	14.8	1246.733
Pb	208	1	He	0.008800	41.6	3315.180
Bi	209	1	He	0.003591	90.1	2316.917
Th	232	1	He	0.014049	6.8	1886.820
U	238	1	He	0.007808	47.4	1420.093

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.91037244	565509.750
Sc	45	2	H2	95.75847760	4236924.333
Ge	72	1	He	94.52603192	471356.157
Ge	72	2	H2	97.36735800	1518713.250
In	115	1	He	94.49983777	5793020.673
Tb	159	1	He	98.25676427	14216393.540
Ir	193	1	He	96.10122995	7117611.560

Sample Name ICSAB  
 Sample Type ICSB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 019ICSB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:03:21  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	100.230343	1.5	37331.267
Be	9	2	H2	99.288752	1.4	38061.147
B	11	2	H2	65.068185	3.9	49463.870
Na	23	1	He	27821.73445	3.0	25192643.790
Mg	24	1	He	27512.36628	2.8	14132328.540
Al	27	1	He	27470.47145	2.9	7178798.833
Si	28	2	H2	1262.988914	1.5	3540392.333
K	39	1	He	27751.16189	3.1	20349103.450
Ca	43	1	He	27596.12544	3.3	59963.667
Ti	47	1	He	598.402133	2.8	144424.877
V	51	1	He	100.699299	3.3	675952.013
Cr	52	1	He	101.080780	3.0	810167.730
Mn	55	1	He	99.707164	3.0	605116.983
Fe	56	1	He	26703.08122	3.4	203005525.333
Co	59	1	He	102.116460	1.9	1297304.543
Ni	60	1	He	103.140468	1.8	324873.957
Cu	63	1	He	100.457360	2.2	882719.627
Zn	66	1	He	100.651451	2.0	202887.580
As	75	1	He	99.508576	2.5	177030.343
Se	78	2	H2	101.104581	0.5	82877.890
Sr	88	1	He	100.125758	2.5	1166697.770
Mo	95	1	He	612.622253	2.4	3723987.833
Pd	105	1	He	98.886014	2.0	900088.163
Ag	107	1	He	49.009006	2.6	951652.743
Cd	111	1	He	100.568876	2.3	364630.600
Sn	118	1	He	99.541723	2.5	927845.873
Sb	121	1	He	99.782283	2.3	1369264.720
Ba	138	1	He	99.697275	2.2	3130404.850
Pt	195	1	He	100.602350	2.9	1285193.587
Hg	202	1	He	4.085474	3.6	25741.120
Tl	205	1	He	49.484671	3.0	2329445.277
Pb	208	1	He	99.373062	2.5	6372217.977
Bi	209	1	He	108.628280	2.5	5843667.620
Th	232	1	He	111.345992	2.5	7310339.270
U	238	1	He	100.290862	2.5	6322995.530

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.14888739	566946.040
Sc	45	2	H2	98.52752608	4359443.500
Ge	72	1	He	96.05495923	478980.187
Ge	72	2	H2	99.86412028	1557657.163
In	115	1	He	94.88120446	5816399.180
Tb	159	1	He	98.68303170	14278068.537
Ir	193	1	He	95.95942348	7107108.850

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 020\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:07:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.519009	0.6	31774.837
Be	9	2	H2	81.419459	0.3	31496.297
B	11	2	H2	44.073978	1.6	43058.200
Na	23	1	He	1038.441184	1.8	998433.267
Mg	24	1	He	1033.542191	1.9	561807.400
Al	27	1	He	1028.520755	1.3	282163.117
Si	28	2	H2	514.401407	0.8	1463215.833
K	39	1	He	1031.162260	2.0	863753.603
Ca	43	1	He	1035.539939	2.6	2374.567
Ti	47	1	He	79.503576	1.1	20139.730
V	51	1	He	79.912205	1.5	562873.643
Cr	52	1	He	81.514369	1.2	686174.420
Mn	55	1	He	79.834054	1.0	508581.980
Fe	56	1	He	528.720213	1.2	4230368.667
Co	59	1	He	83.243549	0.5	1107029.750
Ni	60	1	He	84.043770	0.8	277141.773
Cu	63	1	He	83.537460	0.5	768474.357
Zn	66	1	He	82.507651	0.7	174133.073
As	75	1	He	79.543194	0.6	148177.767
Se	78	2	H2	82.376089	1.0	67912.983
Sr	88	1	He	81.300009	1.1	991750.770
Mo	95	1	He	77.052606	0.8	499579.407
Pd	105	1	He	81.562606	0.3	791828.870
Ag	107	1	He	40.475515	2.1	838202.540
Cd	111	1	He	80.704627	0.6	312083.900
Sn	118	1	He	76.971505	0.6	765270.793
Sb	121	1	He	78.395818	0.2	1147397.093
Ba	138	1	He	78.838183	0.9	2640165.583
Pt	195	1	He	82.158616	0.5	1089372.123
Hg	202	1	He	3.912954	0.3	25599.863
Tl	205	1	He	42.360373	0.2	2069705.073
Pb	208	1	He	82.482527	0.5	5489646.013
Bi	209	1	He	82.045243	1.1	4674929.413
Th	232	1	He	77.575109	0.6	5394409.710
U	238	1	He	78.305265	0.9	5228886.900

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.76499887	594743.353
Sc	45	2	H2	99.40419022	4398232.333
Ge	72	1	He	100.5220405	501255.387
Ge	72	2	H2	100.4152062	1566252.873
In	115	1	He	101.1621748	6201434.667
Tb	159	1	He	102.3734215	14812016.863
Ir	193	1	He	101.6003990	7524900.307

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 021\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:10:53  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.152794	6.7	132.000
Be	9	2	H2	0.117421	14.0	67.333
B	11	2	H2	-42.486569		15008.260
Na	23	1	He	9.387200	24.5	21041.717
Mg	24	1	He	0.461333	499.4	5117.620
Al	27	1	He	7.679286	30.7	2194.510
Si	28	2	H2	0.235328	32.7	14806.030
K	39	1	He	7.303180	27.1	78740.400
Ca	43	1	He	6.538046	40.6	28.683
Ti	47	1	He	0.183552	28.0	48.667
V	51	1	He	0.098723	83.2	71.440
Cr	52	1	He	0.044668	62.0	2836.283
Mn	55	1	He	0.051059	33.8	610.013
Fe	56	1	He	7.917151	28.1	75136.790
Co	59	1	He	0.057331	40.8	818.027
Ni	60	1	He	0.050737	38.3	373.340
Cu	63	1	He	0.067828	32.2	950.037
Zn	66	1	He	0.052376	45.2	328.003
As	75	1	He	0.040694	31.9	245.833
Se	78	2	H2	0.018831	47.6	57.000
Sr	88	1	He	0.049257	42.7	750.030
Mo	95	1	He	0.208614	27.3	1372.740
Pd	105	1	He	0.080696	9.8	983.377
Ag	107	1	He	0.166468	21.4	3567.167
Cd	111	1	He	0.051813	45.0	223.753
Sn	118	1	He	0.049250	24.6	636.687
Sb	121	1	He	0.052346	22.4	810.027
Ba	138	1	He	0.053252	33.4	1871.820
Pt	195	1	He	0.049596	33.9	864.033
Hg	202	1	He	0.029329	19.7	417.343
Tl	205	1	He	0.077580	20.5	4244.073
Pb	208	1	He	0.058901	27.0	6722.363
Bi	209	1	He	0.055710	35.9	5374.553
Th	232	1	He	0.060331	27.7	5169.443
U	238	1	He	0.047516	36.6	4119.057

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.02830982	596328.960
Sc	45	2	H2	100.7612147	4458275.167
Ge	72	1	He	100.2049671	499674.293
Ge	72	2	H2	101.0267870	1575792.167
In	115	1	He	101.6348205	6230408.753
Tb	159	1	He	101.2989033	14656548.947
Ir	193	1	He	100.8302904	7467863.223

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 022\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:16:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.095759	15.1	112.000
Be	9	2	H2	0.063270	23.6	46.833
B	11	2	H2	-46.156535		14005.303
Na	23	1	He	1.717901	31.5	13619.617
Mg	24	1	He	-5.402396		1928.473
Al	27	1	He	1.396381	29.8	459.673
Si	28	2	H2	-0.153547		13905.183
K	39	1	He	0.631294	130.7	73034.517
Ca	43	1	He	2.691495	26.2	19.717
Ti	47	1	He	0.046432	40.3	13.667
V	51	1	He	0.064553	120.7	-171.583
Cr	52	1	He	0.018582	25.6	2594.237
Mn	55	1	He	0.006038	69.7	319.337
Fe	56	1	He	1.698314	25.8	25101.150
Co	59	1	He	0.012861	34.6	228.667
Ni	60	1	He	0.011196	84.0	244.000
Cu	63	1	He	0.013089	36.8	449.343
Zn	66	1	He	0.008025	140.0	235.333
As	75	1	He	-0.002893		165.500
Se	78	2	H2	0.000961	1058.4	43.333
Sr	88	1	He	0.009627	48.2	268.337
Mo	95	1	He	0.044913	22.4	305.340
Pd	105	1	He	0.034986	14.6	540.013
Ag	107	1	He	0.017850	13.7	473.347
Cd	111	1	He	0.011663	26.4	67.613
Sn	118	1	He	0.006024	79.7	205.003
Sb	121	1	He	0.012019	45.5	216.670
Ba	138	1	He	0.012336	26.0	493.350
Pt	195	1	He	0.010663	25.5	360.010
Hg	202	1	He	0.011697	35.0	311.000
Tl	205	1	He	0.010965	4.4	1043.383
Pb	208	1	He	0.013100	19.6	3781.910
Bi	209	1	He	0.008951	39.2	2827.017
Th	232	1	He	0.010210	20.9	1771.803
U	238	1	He	0.008981	26.7	1620.117

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.24455340	591609.333
Sc	45	2	H2	102.3032468	4526503.833
Ge	72	1	He	100.5033421	501162.147
Ge	72	2	H2	103.5446984	1615065.960
In	115	1	He	102.0831000	6257889.143
Tb	159	1	He	103.4999547	14975010.613
Ir	193	1	He	104.2469866	7720916.343

Sample Name LDR-800-364507  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 023SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:22:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.123426	2.1	117.500
Be	9	2	H2	0.056311	23.2	42.167
B	11	2	H2	-45.876871		13501.513
Na	23	1	He	4.182347	11.9	15573.240
Mg	24	1	He	-5.102873		2040.153
Al	27	1	He	8.044041	2.4	2219.837
Si	28	2	H2	2.929607	151.8	21954.060
K	39	1	He	1.633845	70.8	72051.223
Ca	43	1	He	19.135529	3.7	55.667
Ti	47	1	He	0.054375	61.7	15.333
V	51	1	He	0.042901	111.1	-315.483
Cr	52	1	He	0.034793	52.7	2665.583
Mn	55	1	He	785.739492	0.6	4859265.333
Fe	56	1	He	1.145003	24.3	20225.433
Co	59	1	He	0.052817	4.0	742.020
Ni	60	1	He	808.000234	0.5	2599854.333
Cu	63	1	He	828.049644	0.7	7434913.000
Zn	66	1	He	808.649339	0.5	1664546.377
As	75	1	He	731.967540	0.2	1330015.957
Se	78	2	H2	788.281843	0.7	644534.607
Sr	88	1	He	0.088676	7.1	1203.390
Mo	95	1	He	0.036664	22.2	248.000
Pd	105	1	He	0.029709	23.4	481.677
Ag	107	1	He	0.016223	8.3	433.343
Cd	111	1	He	0.005145	28.5	41.620
Sn	118	1	He	0.003941	29.5	181.667
Sb	121	1	He	0.006846	2.7	138.333
Ba	138	1	He	741.870276	0.6	24727968.797
Pt	195	1	He	0.003940	91.4	267.337
Hg	202	1	He	0.004990	86.1	264.333
Tl	205	1	He	0.006641	12.3	821.700
Pb	208	1	He	809.206558	0.9	53889361.277
Bi	209	1	He	0.012264	28.5	2997.063
Th	232	1	He	0.009520	19.4	1710.130
U	238	1	He	0.004713	40.3	1318.413

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.92231808	577625.290
Sc	45	2	H2	97.97608195	4335044.333
Ge	72	1	He	98.14886415	489421.490
Ge	72	2	H2	99.65297914	1554363.833
In	115	1	He	100.6900550	6172492.823
Tb	159	1	He	102.4828480	14827849.363
Ir	193	1	He	103.4678852	7663213.220

Sample Name BLANK-364936  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 024\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:26:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.079156	42.0	97.833
Be	9	2	H2	0.043093	10.9	36.167
B	11	2	H2	-46.704298		12831.937
Na	23	1	He	-0.311376		11432.783
Mg	24	1	He	-6.339713		1393.413
Al	27	1	He	0.176967	40.8	124.000
Si	28	2	H2	-0.004740		13299.343
K	39	1	He	-0.629983		70410.210
Ca	43	1	He	0.578783	175.8	14.583
Ti	47	1	He	-0.001020		1.667
V	51	1	He	0.021466	376.2	-463.070
Cr	52	1	He	0.002660	504.4	2404.870
Mn	55	1	He	0.201026	24.5	1519.417
Fe	56	1	He	0.561246	20.7	15698.983
Co	59	1	He	0.005407	9.0	126.000
Ni	60	1	He	0.198623	28.3	838.693
Cu	63	1	He	0.202561	24.9	2133.500
Zn	66	1	He	0.190349	39.5	603.347
As	75	1	He	0.370240	14.5	836.693
Se	78	2	H2	0.108353	19.4	123.667
Sr	88	1	He	0.000276	522.8	150.000
Mo	95	1	He	0.009197	29.8	70.000
Pd	105	1	He	0.021531	24.4	398.343
Ag	107	1	He	0.003125	29.9	161.667
Cd	111	1	He	0.002558	50.8	31.323
Sn	118	1	He	-0.000800		133.333
Sb	121	1	He	0.006254	52.4	128.333
Ba	138	1	He	0.173509	23.0	5796.317
Pt	195	1	He	0.001054	135.4	226.000
Hg	202	1	He	0.000659	156.5	233.000
Tl	205	1	He	0.002898	18.5	630.020
Pb	208	1	He	0.216985	18.1	17087.700
Bi	209	1	He	-0.002474		2096.873
Th	232	1	He	0.000109	844.6	1021.713
U	238	1	He	-0.000707		930.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.98278557	577989.413
Sc	45	2	H2	95.19950170	4212191.917
Ge	72	1	He	97.76895475	487527.063
Ge	72	2	H2	95.69633898	1492649.087
In	115	1	He	99.62456858	6107176.467
Tb	159	1	He	101.0927185	14626716.863
Ir	193	1	He	101.2481627	7498812.387



Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 025\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:29:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.481028	0.2	31690.983
Be	9	2	H2	81.570620	1.2	31484.603
B	11	2	H2	35.882263	2.6	40295.820
Na	23	1	He	1020.786689	0.7	975783.917
Mg	24	1	He	1014.288364	0.6	548137.440
Al	27	1	He	1015.005402	0.7	276779.217
Si	28	2	H2	508.201119	0.4	1442593.123
K	39	1	He	1020.818622	0.4	850706.863
Ca	43	1	He	1012.505221	1.1	2308.297
Ti	47	1	He	78.781581	0.4	19836.330
V	51	1	He	79.601766	0.9	557314.910
Cr	52	1	He	80.916471	0.2	677046.917
Mn	55	1	He	79.044020	0.2	500491.133
Fe	56	1	He	514.091136	0.3	4088814.167
Co	59	1	He	82.460977	0.7	1092612.750
Ni	60	1	He	83.441786	0.3	274155.883
Cu	63	1	He	82.894998	0.6	759781.687
Zn	66	1	He	81.446279	0.9	171266.833
As	75	1	He	79.395429	0.4	147363.733
Se	78	2	H2	81.579892	1.1	67024.507
Sr	88	1	He	80.540680	0.5	978920.870
Mo	95	1	He	76.771447	0.3	496261.813
Pd	105	1	He	81.321056	0.4	787104.257
Ag	107	1	He	40.312809	1.1	832367.357
Cd	111	1	He	80.184212	0.4	309142.317
Sn	118	1	He	76.390589	1.0	757219.390
Sb	121	1	He	77.575467	0.5	1131975.453
Ba	138	1	He	77.773135	0.4	2596717.773
Pt	195	1	He	82.595375	0.8	1082409.000
Hg	202	1	He	3.888356	1.1	25144.993
Tl	205	1	He	42.340692	0.4	2044712.677
Pb	208	1	He	82.859526	0.3	5450637.263
Bi	209	1	He	81.036874	0.9	4590991.287
Th	232	1	He	76.949985	0.5	5320099.090
U	238	1	He	78.288134	0.3	5197565.860

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.15790327	591087.543
Sc	45	2	H2	99.18585759	4388572.000
Ge	72	1	He	100.1538941	499419.617
Ge	72	2	H2	100.0634411	1560766.123
In	115	1	He	100.8570654	6182730.880
Tb	159	1	He	101.1848893	14640052.697
Ir	193	1	He	101.0121749	7481334.263

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 026\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:34:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.090366	26.4	106.167
Be	9	2	H2	0.064007	12.5	45.500
B	11	2	H2	-50.017930		12270.137
Na	23	1	He	-1.038517		10830.657
Mg	24	1	He	-6.437711		1350.070
Al	27	1	He	0.254830	32.4	145.667
Si	28	2	H2	-0.226182		13222.540
K	39	1	He	-0.329718		71083.480
Ca	43	1	He	0.328343	175.5	14.117
Ti	47	1	He	0.017700	91.0	6.333
V	51	1	He	0.082392	67.3	-44.740
Cr	52	1	He	0.014549	41.6	2517.557
Mn	55	1	He	0.046451	47.1	566.013
Fe	56	1	He	0.411956	16.7	14639.343
Co	59	1	He	0.015999	31.2	264.003
Ni	60	1	He	0.049873	32.8	362.673
Cu	63	1	He	0.053916	38.2	805.363
Zn	66	1	He	0.036618	67.8	288.667
As	75	1	He	0.096674	31.4	342.503
Se	78	2	H2	0.035152	44.9	69.667
Sr	88	1	He	0.011004	48.2	278.340
Mo	95	1	He	0.024151	23.4	166.667
Pd	105	1	He	0.033180	13.8	513.347
Ag	107	1	He	0.058741	11.2	1305.073
Cd	111	1	He	0.014488	39.6	77.303
Sn	118	1	He	0.012118	45.2	261.670
Sb	121	1	He	0.015149	43.3	258.337
Ba	138	1	He	0.045107	37.3	1573.443
Pt	195	1	He	0.009861	40.8	345.340
Hg	202	1	He	0.009858	28.6	295.333
Tl	205	1	He	0.028961	15.1	1910.153
Pb	208	1	He	0.053114	35.0	6402.300
Bi	209	1	He	0.010763	45.2	2887.050
Th	232	1	He	0.016149	13.2	2161.870
U	238	1	He	0.007057	63.1	1466.763

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.60079374	581710.937
Sc	45	2	H2	98.78092406	4370655.333
Ge	72	1	He	98.14692960	489411.843
Ge	72	2	H2	99.90199985	1558248.000
In	115	1	He	100.3115332	6149288.717
Tb	159	1	He	102.2955374	14800748.113
Ir	193	1	He	102.5903690	7598221.137

Sample Name 4315068\_B70055Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 027SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:38:24  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.122652	2.0	116.167
Be	9	2	H2	0.049367	18.1	39.167
B	11	2	H2	-47.660922		12813.080
Na	23	1	He	1.316852	13.8	12985.720
Mg	24	1	He	-3.619305		2828.627
Al	27	1	He	5.680716	7.4	1597.087
Si	28	2	H2	3.001009	6.3	21876.703
K	39	1	He	0.511214	193.6	71538.947
Ca	43	1	He	8.143314	7.6	31.467
Ti	47	1	He	0.085302	29.8	23.000
V	51	1	He	0.050093	52.5	-267.930
Cr	52	1	He	0.154236	10.1	3654.473
Mn	55	1	He	0.070787	6.9	715.353
Fe	56	1	He	2.013978	3.0	27072.310
Co	59	1	He	0.022443	10.0	346.007
Ni	60	1	He	0.069366	20.7	423.343
Cu	63	1	He	0.121943	10.8	1409.407
Zn	66	1	He	0.435547	2.8	1104.713
As	75	1	He	0.089625	8.6	328.167
Se	78	2	H2	0.022634	21.6	58.000
Sr	88	1	He	0.028970	16.0	490.010
Mo	95	1	He	0.028923	3.2	197.333
Pd	105	1	He	0.034388	16.7	525.013
Ag	107	1	He	0.034503	14.0	806.700
Cd	111	1	He	0.015533	23.4	81.297
Sn	118	1	He	0.029885	24.7	436.677
Sb	121	1	He	0.023064	33.0	373.343
Ba	138	1	He	0.060385	18.8	2080.183
Pt	195	1	He	0.016970	21.4	433.343
Hg	202	1	He	0.002560	100.2	244.667
Tl	205	1	He	0.015811	4.1	1250.077
Pb	208	1	He	0.053595	21.6	6340.607
Bi	209	1	He	0.015041	32.1	3100.420
Th	232	1	He	0.013601	20.5	1961.837
U	238	1	He	0.008610	48.6	1553.443

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.35474671	580229.290
Sc	45	2	H2	97.10843181	4296654.333
Ge	72	1	He	97.70355713	487200.957
Ge	72	2	H2	97.44322357	1519896.583
In	115	1	He	100.3123438	6149338.403
Tb	159	1	He	100.8679936	14594202.280
Ir	193	1	He	101.5652997	7522300.723

Sample Name 4315069\_B70055Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 028SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:42:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	111.201609	0.7	40874.880
Be	9	2	H2	108.614872	0.3	41096.540
B	11	2	H2	63.486255	0.8	48320.683
Na	23	1	He	2166.036470	0.2	2014293.773
Mg	24	1	He	2142.292475	0.3	1128393.417
Al	27	1	He	2136.915610	0.1	570500.623
Si	28	2	H2	545.533415	0.3	1517235.170
K	39	1	He	2149.742751	0.4	1675763.100
Ca	43	1	He	2131.034092	1.3	4742.837
Ti	47	1	He	105.370577	0.6	25978.170
V	51	1	He	105.582984	0.7	724049.487
Cr	52	1	He	108.738649	0.4	890109.460
Mn	55	1	He	106.073479	0.3	657573.040
Fe	56	1	He	2164.812630	0.6	16822745.667
Co	59	1	He	110.015208	0.7	1437215.043
Ni	60	1	He	111.470024	0.3	361032.397
Cu	63	1	He	108.981053	0.3	984751.397
Zn	66	1	He	108.480500	0.7	224845.293
As	75	1	He	105.502251	0.3	193015.513
Se	78	2	H2	108.076390	1.4	87160.897
Sr	88	1	He	106.812379	0.3	1279959.800
Mo	95	1	He	103.753931	0.5	655803.560
Pd	105	1	He	21.506093	1.0	203681.583
Ag	107	1	He	51.641146	1.1	1042581.913
Cd	111	1	He	106.899350	0.2	402989.663
Sn	118	1	He	102.209999	0.2	990624.777
Sb	121	1	He	104.759776	0.0	1494720.917
Ba	138	1	He	104.661217	0.1	3416923.803
Pt	195	1	He	21.749057	1.2	284492.553
Hg	202	1	He	-0.000891		222.667
Tl	205	1	He	111.102954	0.7	5351681.797
Pb	208	1	He	108.489501	1.0	7118505.573
Bi	209	1	He	105.701413	0.9	5911476.580
Th	232	1	He	107.384656	0.8	7329514.683
U	238	1	He	104.850526	1.0	6872268.650

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.11589244	578790.957
Sc	45	2	H2	97.24321629	4302618.000
Ge	72	1	He	98.74778658	492408.030
Ge	72	2	H2	98.23912003	1532310.790
In	115	1	He	98.61975701	6045579.597
Tb	159	1	He	100.9441959	14605227.697
Ir	193	1	He	99.73359639	7386638.017

Sample Name 10607364001\_B70055Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 029SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:45:53  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.043286	12.5	771.353
Be	9	2	H2	0.116681	28.6	60.500
B	11	2	H2	-48.845675		11707.190
Na	23	1	He	17836.37007	0.7	15987773.510
Mg	24	1	He	2891.270098	0.7	1473826.540
Al	27	1	He	18.151407	1.1	4768.767
Si	28	2	H2	376.620989	11.7	987886.937
K	39	1	He	6626.683162	0.5	4861302.637
Ca	43	1	He	116275.4141	0.6	250011.547
Ti	47	1	He	0.099680	28.1	25.667
V	51	1	He	0.667666	6.2	3847.667
Cr	52	1	He	0.168900	5.0	3647.800
Mn	55	1	He	17.403803	0.9	104749.313
Fe	56	1	He	2.058647	2.2	26499.950
Co	59	1	He	0.053181	7.8	718.020
Ni	60	1	He	0.112539	8.1	542.677
Cu	63	1	He	0.320532	1.8	3076.337
Zn	66	1	He	0.265264	5.1	730.020
As	75	1	He	0.429708	2.1	911.197
Se	78	2	H2	0.670880	10.3	544.677
Sr	88	1	He	592.366313	1.1	6784018.440
Mo	95	1	He	171.632574	0.5	1050346.690
Pd	105	1	He	0.414351	4.6	3980.593
Ag	107	1	He	0.194104	24.7	3883.927
Cd	111	1	He	0.048290	11.0	196.950
Sn	118	1	He	0.036570	21.9	478.343
Sb	121	1	He	0.064344	9.8	925.043
Ba	138	1	He	6.210986	1.4	196392.443
Pt	195	1	He	0.006836	16.3	294.000
Hg	202	1	He	0.028694	12.3	402.010
Tl	205	1	He	0.033327	22.1	2043.513
Pb	208	1	He	0.031494	12.4	4777.030
Bi	209	1	He	0.017201	46.9	3020.397
Th	232	1	He	0.059786	7.0	4847.603
U	238	1	He	0.840639	1.0	53508.170

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.12033385	560752.293
Sc	45	2	H2	92.03854161	4072332.250
Ge	72	1	He	94.38057316	470630.823
Ge	72	2	H2	92.74669625	1446641.250
In	115	1	He	95.48302191	5853291.740
Tb	159	1	He	98.50750238	14252671.873
Ir	193	1	He	95.20242302	7051042.603

Sample Name 4315629\_B70055Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 030SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:49:38  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	80.895405	1.8	30624.480
Be	9	2	H2	77.858100	1.1	30327.093
B	11	2	H2	25.890104	6.7	37379.353
Na	23	1	He	19666.37421	0.5	17861775.983
Mg	24	1	He	4749.809520	0.7	2450518.717
Al	27	1	He	1913.339313	0.4	501488.387
Si	28	2	H2	1327.736504	1.6	3780533.083
K	39	1	He	8476.432710	0.8	6281767.197
Ca	43	1	He	117858.7489	0.3	256790.873
Ti	47	1	He	77.378851	1.5	18730.217
V	51	1	He	79.359611	0.8	534113.823
Cr	52	1	He	78.654823	0.5	632724.207
Mn	55	1	He	94.964940	0.3	577980.480
Fe	56	1	He	975.474001	0.8	7448270.333
Co	59	1	He	80.056901	1.0	1018311.250
Ni	60	1	He	81.482071	1.0	257001.990
Cu	63	1	He	78.963589	0.6	694799.603
Zn	66	1	He	79.204150	1.1	159893.890
As	75	1	He	79.417047	1.1	141502.407
Se	78	2	H2	82.763955	0.6	68715.363
Sr	88	1	He	668.271242	0.6	7796294.463
Mo	95	1	He	250.767057	1.4	1562330.000
Pd	105	1	He	75.936542	1.9	708424.237
Ag	107	1	He	21.096173	2.9	419884.317
Cd	111	1	He	78.340543	1.3	291110.060
Sn	118	1	He	75.705333	1.1	723294.963
Sb	121	1	He	75.471035	1.4	1061447.743
Ba	138	1	He	82.617321	1.3	2658656.107
Pt	195	1	He	77.340714	1.4	1005365.543
Hg	202	1	He	0.026946	7.2	398.343
Tl	205	1	He	39.216083	1.6	1878547.630
Pb	208	1	He	78.232821	1.6	5104881.023
Bi	209	1	He	76.778370	0.6	4229188.270
Th	232	1	He	7.082111	0.5	476964.617
U	238	1	He	78.687626	0.6	5079582.530

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.36133816	568225.377
Sc	45	2	H2	100.0971689	4428893.833
Ge	72	1	He	96.14666510	479437.480
Ge	72	2	H2	101.1376550	1577521.460
In	115	1	He	97.21063308	5959197.607
Tb	159	1	He	100.3629003	14521122.280
Ir	193	1	He	98.21375297	7274072.807

Sample Name 4315630\_B70055Dx25  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 031SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:53:22  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.496969	6.4	268.333
Be	9	2	H2	0.099365	7.9	61.500
B	11	2	H2	-56.535071		10574.523
Na	23	1	He	3660.379485	2.0	3449478.283
Mg	24	1	He	590.104530	1.8	319207.527
Al	27	1	He	5.515243	10.5	1572.090
Si	28	2	H2	69.863828	1.2	218068.637
K	39	1	He	1354.387864	1.8	1099118.420
Ca	43	1	He	23623.70885	1.6	53269.233
Ti	47	1	He	0.042798	19.7	12.667
V	51	1	He	0.156266	51.7	471.587
Cr	52	1	He	0.077319	15.4	3064.993
Mn	55	1	He	3.620795	2.2	23069.470
Fe	56	1	He	1.191683	12.1	20938.337
Co	59	1	He	0.022984	18.7	362.010
Ni	60	1	He	0.073465	9.4	448.010
Cu	63	1	He	0.100243	10.3	1247.393
Zn	66	1	He	0.422281	0.3	1106.043
As	75	1	He	0.098870	19.4	353.837
Se	78	2	H2	0.133893	4.9	157.333
Sr	88	1	He	117.603554	1.0	1431255.653
Mo	95	1	He	34.059737	1.0	222712.403
Pd	105	1	He	0.119298	3.5	1365.080
Ag	107	1	He	0.177383	30.8	3798.913
Cd	111	1	He	0.020469	22.0	101.910
Sn	118	1	He	0.021981	29.4	365.010
Sb	121	1	He	0.026399	15.2	428.343
Ba	138	1	He	1.250130	1.0	42301.290
Pt	195	1	He	0.007252	46.6	314.670
Hg	202	1	He	-0.001381		225.667
Tl	205	1	He	0.064116	27.6	3667.223
Pb	208	1	He	0.019698	30.8	4231.950
Bi	209	1	He	0.012822	61.3	2993.730
Th	232	1	He	0.009093	37.6	1660.123
U	238	1	He	0.170969	3.3	12496.080

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.65511586	588059.857
Sc	45	2	H2	102.8456732	4550504.000
Ge	72	1	He	100.2953501	500124.990
Ge	72	2	H2	104.2858246	1626625.873
In	115	1	He	102.0292529	6254588.217
Tb	159	1	He	103.7650313	15013363.523
Ir	193	1	He	102.4731079	7589536.347

Sample Name 4315070\_B70055Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 032SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:57:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	23.936376	10.7	8354.967
Be	9	2	H2	21.578327	11.8	7713.633
B	11	2	H2	-31.331197		17024.223
Na	23	1	He	18012.23350	0.4	16661764.333
Mg	24	1	He	3230.567619	0.7	1698937.110
Al	27	1	He	397.500296	0.6	106166.597
Si	28	2	H2	499.619348	10.8	1312153.167
K	39	1	He	6928.726222	0.8	5242353.570
Ca	43	1	He	115309.4977	0.8	255870.830
Ti	47	1	He	18.973090	2.2	4678.747
V	51	1	He	20.107962	2.0	137383.210
Cr	52	1	He	19.718758	0.9	163338.650
Mn	55	1	He	36.160087	0.8	224309.270
Fe	56	1	He	389.087670	0.4	3032458.000
Co	59	1	He	20.151619	1.2	258465.963
Ni	60	1	He	20.261476	1.3	64580.823
Cu	63	1	He	19.969253	1.7	177384.530
Zn	66	1	He	20.365450	1.9	41606.007
As	75	1	He	19.988674	1.8	36030.360
Se	78	2	H2	23.175322	11.4	17732.217
Sr	88	1	He	608.001249	2.0	7151253.230
Mo	95	1	He	190.366320	0.9	1203944.957
Pd	105	1	He	4.161525	2.1	39592.040
Ag	107	1	He	8.778364	5.2	177468.170
Cd	111	1	He	19.323377	0.3	72902.143
Sn	118	1	He	18.755165	1.7	182009.443
Sb	121	1	He	19.193128	1.5	274056.840
Ba	138	1	He	25.225933	1.1	824123.270
Pt	195	1	He	3.888772	2.1	51551.013
Hg	202	1	He	0.023980	16.7	385.343
Tl	205	1	He	20.249219	0.9	985425.270
Pb	208	1	He	19.559899	1.0	1298475.637
Bi	209	1	He	19.314834	0.9	1085003.580
Th	232	1	He	19.800265	1.4	1356046.177
U	238	1	He	20.297569	1.1	1334855.500

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.09770575	578681.440
Sc	45	2	H2	92.40382178	4088494.417
Ge	72	1	He	96.93202341	483353.687
Ge	72	2	H2	93.63977287	1460571.250
In	115	1	He	98.67218604	6048793.597
Tb	159	1	He	101.9338062	14748410.613
Ir	193	1	He	99.99961740	7406340.513



Sample Name 4315071\_B70055Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 033SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:00:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	21.307906	1.7	8044.633
Be	9	2	H2	19.092768	1.5	7382.633
B	11	2	H2	-37.434382		16412.050
Na	23	1	He	16934.98364	0.6	15461556.853
Mg	24	1	He	3047.569103	0.5	1582028.207
Al	27	1	He	385.345492	1.0	101580.973
Si	28	2	H2	433.865487	1.2	1233110.793
K	39	1	He	6511.454401	1.2	4866650.657
Ca	43	1	He	107975.1424	0.9	236471.413
Ti	47	1	He	18.981220	2.1	4619.727
V	51	1	He	19.579125	1.5	132003.553
Cr	52	1	He	19.326667	0.6	158047.040
Mn	55	1	He	34.770146	1.0	212884.333
Fe	56	1	He	383.335842	0.7	2948801.667
Co	59	1	He	19.521233	1.3	250482.543
Ni	60	1	He	21.530605	1.5	68641.197
Cu	63	1	He	19.353265	1.3	171987.323
Zn	66	1	He	19.362718	0.9	39582.363
As	75	1	He	19.398702	1.6	34985.300
Se	78	2	H2	20.973266	0.7	17343.073
Sr	88	1	He	564.628363	1.5	6643730.320
Mo	95	1	He	177.917775	0.6	1122887.750
Pd	105	1	He	4.053004	0.9	38480.690
Ag	107	1	He	8.680671	3.9	175106.190
Cd	111	1	He	18.901525	0.9	71167.907
Sn	118	1	He	18.368804	1.5	177890.357
Sb	121	1	He	18.772850	2.0	267506.713
Ba	138	1	He	24.261457	1.0	790971.863
Pt	195	1	He	3.776566	0.7	50259.403
Hg	202	1	He	0.021094	15.6	368.340
Tl	205	1	He	19.501492	0.6	952716.157
Pb	208	1	He	18.881796	0.9	1258414.343
Bi	209	1	He	18.850581	0.9	1051491.913
Th	232	1	He	19.384777	0.8	1318341.203
U	238	1	He	19.767922	0.9	1290992.950

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.84404576	571132.147
Sc	45	2	H2	99.14285930	4386669.500
Ge	72	1	He	96.96680651	483527.133
Ge	72	2	H2	100.5440281	1568262.207
In	115	1	He	98.47029114	6036417.053
Tb	159	1	He	102.3281051	14805460.197
Ir	193	1	He	99.30100978	7354599.057

Sample Name 10607364001\_B70055Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 034SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:04:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.537026	6.0	274.833
Be	9	2	H2	0.083289	10.8	53.333
B	11	2	H2	-58.186315		9699.773
Na	23	1	He	4409.607737	1.0	4095114.213
Mg	24	1	He	709.949785	1.1	377706.777
Al	27	1	He	5.715006	4.8	1605.090
Si	28	2	H2	88.257388	1.2	263080.250
K	39	1	He	1642.034415	0.6	1298822.613
Ca	43	1	He	28585.54419	0.9	63553.170
Ti	47	1	He	0.042168	34.0	12.333
V	51	1	He	0.188696	33.5	686.137
Cr	52	1	He	0.093348	15.4	3153.683
Mn	55	1	He	4.315580	1.5	27060.300
Fe	56	1	He	1.004032	19.2	19195.313
Co	59	1	He	0.026620	35.4	404.007
Ni	60	1	He	0.076740	21.5	451.343
Cu	63	1	He	0.106996	8.3	1288.060
Zn	66	1	He	0.075935	20.3	371.340
As	75	1	He	0.104055	18.3	357.670
Se	78	2	H2	0.156878	4.9	171.667
Sr	88	1	He	144.289411	0.4	1726655.703
Mo	95	1	He	41.452685	1.2	266979.550
Pd	105	1	He	0.125069	10.9	1400.083
Ag	107	1	He	0.138539	26.8	2948.677
Cd	111	1	He	0.022086	42.8	106.610
Sn	118	1	He	0.019000	44.8	330.007
Sb	121	1	He	0.026238	34.1	420.013
Ba	138	1	He	1.513139	1.4	50409.860
Pt	195	1	He	0.004140	18.1	268.667
Hg	202	1	He	-0.001213		223.000
Tl	205	1	He	0.021028	32.8	1516.770
Pb	208	1	He	0.014369	56.7	3810.233
Bi	209	1	He	0.013491	64.3	2970.387
Th	232	1	He	0.027098	27.0	2860.347
U	238	1	He	0.207321	1.9	14616.653

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.27157007	579728.417
Sc	45	2	H2	99.58596582	4406275.167
Ge	72	1	He	98.61321316	491736.977
Ge	72	2	H2	101.1386513	1577537.000
In	115	1	He	100.4878570	6160097.700
Tb	159	1	He	101.9738872	14754209.780
Ir	193	1	He	100.1954313	7420843.220

Sample Name 4315629\_B70055Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 035SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:08:19  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	80.365541	0.4	30122.303
Be	9	2	H2	77.031989	0.2	29706.537
B	11	2	H2	22.819009	3.1	36007.870
Na	23	1	He	6345.282685	0.8	5802315.537
Mg	24	1	He	2590.448261	0.4	1345871.333
Al	27	1	He	1869.343952	0.3	492641.907
Si	28	2	H2	1043.358927	0.7	2944273.083
K	39	1	He	3512.102256	0.3	2657995.480
Ca	43	1	He	30821.06127	0.6	67529.647
Ti	47	1	He	77.237888	1.2	18797.297
V	51	1	He	76.680672	0.6	518895.310
Cr	52	1	He	77.524219	0.6	627076.460
Mn	55	1	He	81.028278	0.4	495895.827
Fe	56	1	He	958.405117	0.9	7358086.000
Co	59	1	He	78.500493	0.9	1013670.103
Ni	60	1	He	79.839209	0.7	255652.017
Cu	63	1	He	78.331786	1.2	699679.853
Zn	66	1	He	77.429309	1.2	158685.783
As	75	1	He	76.326931	1.1	138068.093
Se	78	2	H2	78.924141	1.1	64958.810
Sr	88	1	He	221.945136	1.2	2628639.753
Mo	95	1	He	119.055304	1.8	748217.413
Pd	105	1	He	77.823643	1.6	732369.520
Ag	107	1	He	22.149708	2.8	444703.900
Cd	111	1	He	76.734256	1.0	287642.663
Sn	118	1	He	76.512447	0.9	737419.050
Sb	121	1	He	76.199603	0.6	1081132.330
Ba	138	1	He	77.029342	0.7	2500753.453
Pt	195	1	He	77.820727	0.9	1022522.250
Hg	202	1	He	-0.001750		218.333
Tl	205	1	He	38.944138	1.0	1885593.773
Pb	208	1	He	77.636515	0.7	5120320.837
Bi	209	1	He	76.218696	0.7	4252939.623
Th	232	1	He	6.658918	0.8	454326.347
U	238	1	He	76.138416	0.3	4978786.070

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.87702315	571330.730
Sc	45	2	H2	99.09155893	4384399.667
Ge	72	1	He	97.61005509	486734.707
Ge	72	2	H2	100.2452248	1563601.543
In	115	1	He	98.06929945	6011835.497
Tb	159	1	He	101.4449147	14677674.780
Ir	193	1	He	99.48919242	7368536.557

Sample Name 4315630\_B70055Dx100  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 036SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:12:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.213804	15.7	152.000
Be	9	2	H2	0.086355	27.7	54.000
B	11	2	H2	-59.407663		9222.310
Na	23	1	He	903.783341	0.3	850339.260
Mg	24	1	He	143.761711	0.6	80411.920
Al	27	1	He	3.608481	17.5	1044.040
Si	28	2	H2	18.079790	1.9	64445.833
K	39	1	He	332.187182	0.8	320090.793
Ca	43	1	He	5779.482726	1.1	12885.163
Ti	47	1	He	0.056848	42.4	16.000
V	51	1	He	0.136889	43.2	330.723
Cr	52	1	He	0.122064	26.5	3395.070
Mn	55	1	He	0.935322	1.4	6092.620
Fe	56	1	He	1.367934	21.1	22070.087
Co	59	1	He	0.055868	40.6	787.360
Ni	60	1	He	0.093947	26.7	508.010
Cu	63	1	He	0.091132	23.9	1147.387
Zn	66	1	He	0.131566	10.0	487.343
As	75	1	He	0.062570	36.8	282.500
Se	78	2	H2	0.051518	3.4	83.333
Sr	88	1	He	29.256434	0.7	350919.473
Mo	95	1	He	8.375647	0.7	54598.730
Pd	105	1	He	0.080162	15.7	978.380
Ag	107	1	He	0.179500	25.1	3837.243
Cd	111	1	He	0.046180	39.5	201.503
Sn	118	1	He	0.058332	31.0	726.690
Sb	121	1	He	0.057822	46.4	890.043
Ba	138	1	He	0.349660	6.2	11846.803
Pt	195	1	He	0.043634	52.1	790.030
Hg	202	1	He	-0.008751		174.333
Tl	205	1	He	0.078227	28.5	4300.763
Pb	208	1	He	0.051890	41.9	6297.277
Bi	209	1	He	0.050300	53.3	5051.110
Th	232	1	He	0.013708	34.0	1948.497
U	238	1	He	0.083116	25.5	6455.033

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.45938481	580859.400
Sc	45	2	H2	98.75233010	4369390.167
Ge	72	1	He	98.80906041	492713.573
Ge	72	2	H2	100.0649347	1560789.420
In	115	1	He	101.6910639	6233856.580
Tb	159	1	He	102.0169431	14760439.363
Ir	193	1	He	100.4891285	7442595.513

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 037\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:15:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.842175	2.5	31216.187
Be	9	2	H2	82.284755	2.3	31152.753
B	11	2	H2	24.757280	11.5	35969.617
Na	23	1	He	1025.658859	1.1	962173.370
Mg	24	1	He	1025.360671	1.5	543760.240
Al	27	1	He	1016.948146	1.2	272155.377
Si	28	2	H2	514.050308	2.9	1430979.790
K	39	1	He	1029.064918	1.6	841058.530
Ca	43	1	He	1016.564435	2.2	2274.403
Ti	47	1	He	80.199627	1.3	19818.633
V	51	1	He	80.571309	0.7	553659.693
Cr	52	1	He	82.318709	1.1	675947.957
Mn	55	1	He	80.323516	0.9	499146.803
Fe	56	1	He	522.530242	1.5	4078375.250
Co	59	1	He	83.328940	0.9	1093662.873
Ni	60	1	He	84.602016	1.0	275331.227
Cu	63	1	He	83.703486	0.9	759924.020
Zn	66	1	He	82.449325	0.7	171740.530
As	75	1	He	79.744110	0.9	146607.780
Se	78	2	H2	82.948907	2.3	67546.193
Sr	88	1	He	81.571545	0.8	982067.147
Mo	95	1	He	78.087009	1.2	499711.417
Pd	105	1	He	82.447030	0.4	790051.630
Ag	107	1	He	40.814901	0.9	834317.800
Cd	111	1	He	81.440855	0.7	310849.730
Sn	118	1	He	77.854219	1.2	763994.180
Sb	121	1	He	78.659933	1.0	1136309.307
Ba	138	1	He	79.092530	0.6	2614390.483
Pt	195	1	He	83.298424	0.7	1101419.750
Hg	202	1	He	3.910535	1.2	25512.680
Tl	205	1	He	42.378393	0.3	2064887.730
Pb	208	1	He	83.119050	1.0	5516537.287
Bi	209	1	He	81.528335	1.7	4661824.620
Th	232	1	He	77.297669	1.5	5394026.377
U	238	1	He	78.754721	1.9	5277169.503

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.34422605	580165.937
Sc	45	2	H2	97.32031187	4306029.167
Ge	72	1	He	99.21135750	494719.637
Ge	72	2	H2	99.21060254	1547463.747
In	115	1	He	99.85298941	6121179.100
Tb	159	1	He	102.0930935	14771457.280
Ir	193	1	He	101.9769921	7552792.183

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 038\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:19:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.093694	33.7	106.000
Be	9	2	H2	0.066323	10.8	45.833
B	11	2	H2	-61.440315		8464.700
Na	23	1	He	0.485623	7.5	12054.940
Mg	24	1	He	-7.097343		986.707
Al	27	1	He	0.051596	89.0	89.667
Si	28	2	H2	-0.387003		12623.363
K	39	1	He	-2.832151		68114.723
Ca	43	1	He	1.030683	121.3	15.467
Ti	47	1	He	0.004431	154.5	3.000
V	51	1	He	0.059903	9.8	-197.963
Cr	52	1	He	0.009928	33.8	2440.873
Mn	55	1	He	-0.002136		259.337
Fe	56	1	He	0.205393	14.7	12825.627
Co	59	1	He	0.011981	33.0	210.667
Ni	60	1	He	0.035238	16.0	313.337
Cu	63	1	He	0.011328	36.9	420.010
Zn	66	1	He	0.009618	34.6	231.333
As	75	1	He	-0.010476		146.667
Se	78	2	H2	0.015807	51.0	53.667
Sr	88	1	He	0.013821	42.4	310.007
Mo	95	1	He	0.020702	23.3	142.667
Pd	105	1	He	0.035643	23.2	530.013
Ag	107	1	He	0.139956	13.2	2933.663
Cd	111	1	He	0.008149	29.2	52.310
Sn	118	1	He	0.005469	44.9	193.333
Sb	121	1	He	0.010132	36.0	183.333
Ba	138	1	He	0.011008	13.8	435.010
Pt	195	1	He	0.004461	82.3	270.003
Hg	202	1	He	0.012054	25.4	304.667
Tl	205	1	He	0.053762	21.3	3077.057
Pb	208	1	He	0.009861	40.4	3468.537
Bi	209	1	He	0.005270	156.9	2553.643
Th	232	1	He	0.015588	18.9	2105.187
U	238	1	He	0.003688	60.7	1230.070

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.09433459	572639.337
Sc	45	2	H2	97.61850116	4319222.833
Ge	72	1	He	97.39236228	485649.177
Ge	72	2	H2	99.37748841	1550066.793
In	115	1	He	98.89985529	6062750.157
Tb	159	1	He	100.6864340	14567933.117
Ir	193	1	He	101.7833327	7538449.053

Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 039CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:23:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.570844	2.3	287.333
Be	9	2	H2	0.271905	2.2	126.333
B	11	2	H2	-52.504848		11549.237
Na	23	1	He	52.854507	1.4	60903.560
Mg	24	1	He	24.353503	2.5	17583.807
Al	27	1	He	32.064853	1.2	8679.193
Si	28	2	H2	101.287359	1.6	299632.560
K	39	1	He	100.974278	2.2	147084.943
Ca	43	1	He	106.488069	3.3	250.833
Ti	47	1	He	1.048752	6.0	261.667
V	51	1	He	1.028809	5.0	6483.270
Cr	52	1	He	2.081237	2.1	19472.913
Mn	55	1	He	0.520767	2.4	3520.437
Fe	56	1	He	54.249322	1.2	434816.947
Co	59	1	He	0.537740	1.8	7081.740
Ni	60	1	He	0.553705	1.5	1996.143
Cu	63	1	He	1.062731	2.1	9923.397
Zn	66	1	He	5.608081	0.6	11828.840
As	75	1	He	0.473067	1.4	1032.707
Se	78	2	H2	0.553649	4.1	495.677
Sr	88	1	He	0.510503	3.0	6264.753
Mo	95	1	He	0.488506	1.5	3159.030
Pd	105	1	He	0.504872	3.2	5064.287
Ag	107	1	He	0.435366	9.6	9056.313
Cd	111	1	He	0.088352	8.0	361.100
Sn	118	1	He	0.475057	1.0	4835.877
Sb	121	1	He	0.512393	0.9	7492.060
Ba	138	1	He	0.308434	1.3	10340.583
Pt	195	1	He	0.510475	2.3	6943.153
Hg	202	1	He	0.212623	2.7	1601.097
Tl	205	1	He	0.105804	6.1	5632.907
Pb	208	1	He	0.524924	1.4	37578.997
Bi	209	1	He	0.498324	2.5	30936.543
Th	232	1	He	0.489556	1.9	35408.047
U	238	1	He	0.491411	1.2	34133.213

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.60464419	581734.123
Sc	45	2	H2	99.53051818	4403821.833
Ge	72	1	He	98.76452369	492491.490
Ge	72	2	H2	100.1029502	1561382.377
In	115	1	He	100.5461366	6163670.353
Tb	159	1	He	101.8139059	14731062.697
Ir	193	1	He	102.6341095	7601460.720

Sample Name 4314160\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 040SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:27:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.077382	37.3	101.667
Be	9	2	H2	0.033336	19.3	33.833
B	11	2	H2	-61.165804		8686.663
Na	23	1	He	4.865910	8.5	16287.280
Mg	24	1	He	-4.142751		2555.243
Al	27	1	He	13.605963	1.2	3720.800
Si	28	2	H2	2.902767	1.4	22064.317
K	39	1	He	-0.432540		70884.173
Ca	43	1	He	9.470601	13.5	34.450
Ti	47	1	He	0.077058	32.5	21.000
V	51	1	He	0.046063	146.4	-295.710
Cr	52	1	He	0.251226	7.1	4451.353
Mn	55	1	He	0.059536	4.4	646.020
Fe	56	1	He	4.790401	1.8	48722.747
Co	59	1	He	0.011341	2.2	203.333
Ni	60	1	He	0.091641	9.2	496.677
Cu	63	1	He	0.099118	3.5	1210.053
Zn	66	1	He	1.458975	0.7	3213.033
As	75	1	He	-0.007478		153.167
Se	78	2	H2	0.001504	420.1	42.333
Sr	88	1	He	0.029940	7.5	503.347
Mo	95	1	He	0.050437	3.0	336.677
Pd	105	1	He	0.008855	22.0	280.010
Ag	107	1	He	0.054433	12.8	1220.063
Cd	111	1	He	0.004371	33.2	38.607
Sn	118	1	He	0.033433	17.2	473.343
Sb	121	1	He	0.011886	13.1	211.667
Ba	138	1	He	0.047628	2.4	1661.777
Pt	195	1	He	0.011130	12.1	360.677
Hg	202	1	He	-0.005251		196.667
Tl	205	1	He	0.012061	5.5	1080.053
Pb	208	1	He	0.001352	404.3	2945.153
Bi	209	1	He	0.001689	31.7	2346.920
Th	232	1	He	0.001528	41.9	1126.723
U	238	1	He	-0.001463		885.037

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.42556604	580655.750
Sc	45	2	H2	99.14310791	4386680.500
Ge	72	1	He	98.05873520	488972.060
Ge	72	2	H2	100.2493226	1563665.460
In	115	1	He	100.6170629	6168018.270
Tb	159	1	He	101.8616558	14737971.447
Ir	193	1	He	101.8401785	7542659.263



Sample Name 4314161\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 041SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:30:49  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	111.810231	0.4	41155.777
Be	9	2	H2	108.093469	0.3	40956.160
B	11	2	H2	49.776304	0.9	44004.420
Na	23	1	He	2151.830848	0.7	1996778.307
Mg	24	1	He	2131.439103	0.6	1120254.383
Al	27	1	He	2133.362962	0.6	568317.123
Si	28	2	H2	553.096061	0.5	1540223.750
K	39	1	He	2141.037352	0.9	1665609.247
Ca	43	1	He	2153.455744	1.7	4781.910
Ti	47	1	He	106.926591	1.2	26305.070
V	51	1	He	107.261574	0.4	733961.177
Cr	52	1	He	109.653617	0.6	895610.127
Mn	55	1	He	106.793275	0.2	660589.813
Fe	56	1	He	2184.753489	0.6	16940962.000
Co	59	1	He	110.295443	0.4	1442466.790
Ni	60	1	He	112.030141	0.3	363241.720
Cu	63	1	He	108.736116	0.3	983601.190
Zn	66	1	He	109.641984	0.4	227497.197
As	75	1	He	106.961140	0.6	195892.910
Se	78	2	H2	110.943852	0.7	90292.040
Sr	88	1	He	107.986054	0.9	1295439.460
Mo	95	1	He	105.609574	0.3	670645.603
Pd	105	1	He	21.978830	1.3	209118.083
Ag	107	1	He	52.136717	2.0	1057407.430
Cd	111	1	He	107.823566	0.7	408362.523
Sn	118	1	He	105.174741	0.5	1024119.983
Sb	121	1	He	107.234583	0.6	1537146.277
Ba	138	1	He	105.344293	0.6	3455228.177
Pt	195	1	He	22.007429	0.6	290085.730
Hg	202	1	He	-0.000292		228.333
Tl	205	1	He	110.785974	0.3	5377374.503
Pb	208	1	He	108.519116	0.6	7175125.620
Bi	209	1	He	106.085636	0.7	6023929.287
Th	232	1	He	106.723313	0.7	7396079.680
U	238	1	He	103.916989	0.7	6915531.770

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.90741390	577535.540
Sc	45	2	H2	97.37852060	4308604.667
Ge	72	1	He	98.85401693	492937.750
Ge	72	2	H2	99.14297832	1546408.960
In	115	1	He	99.08187022	6073908.020
Tb	159	1	He	101.7167070	14716999.363
Ir	193	1	He	101.2596055	7499659.887

Sample Name 60398600002\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 042SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:34:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	7.081621	0.9	2729.250
Be	9	2	H2	0.106917	21.2	62.333
B	11	2	H2	-15.583411		23587.340
Na	23	1	He	9931.636421	1.7	9007222.990
Mg	24	1	He	17894.62889	2.0	9199972.570
Al	27	1	He	132.282285	2.7	34672.043
Si	28	2	H2	4529.401643	1.6	12775062.333
K	39	1	He	8671.005374	1.6	6410950.737
Ca	43	1	He	84403.49588	1.6	183521.567
Ti	47	1	He	2.870821	8.2	695.360
V	51	1	He	0.551077	6.9	3107.167
Cr	52	1	He	0.707395	5.4	7994.883
Mn	55	1	He	2.969733	2.4	18297.440
Fe	56	1	He	75.957405	1.5	589047.603
Co	59	1	He	0.542343	3.2	6979.683
Ni	60	1	He	1.575057	2.2	5182.933
Cu	63	1	He	0.290855	3.3	2884.293
Zn	66	1	He	3.700867	3.4	7700.060
As	75	1	He	0.192595	3.2	508.177
Se	78	2	H2	0.766169	5.7	671.020
Sr	88	1	He	243.247718	2.1	2848880.583
Mo	95	1	He	4.097313	1.2	25350.510
Pd	105	1	He	0.197495	1.4	2015.160
Ag	107	1	He	0.204559	26.3	4130.673
Cd	111	1	He	0.046786	5.4	193.437
Sn	118	1	He	0.078054	15.3	876.700
Sb	121	1	He	0.112595	7.6	1608.440
Ba	138	1	He	44.312841	1.4	1415543.467
Pt	195	1	He	0.011934	17.3	364.677
Hg	202	1	He	-0.006131		187.667
Tl	205	1	He	0.098858	16.4	5204.417
Pb	208	1	He	0.142289	3.5	12058.787
Bi	209	1	He	0.039813	6.7	4377.480
Th	232	1	He	0.087551	10.6	6890.233
U	238	1	He	1.134532	0.9	74435.270

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.17249272	567088.187
Sc	45	2	H2	99.41282378	4398614.333
Ge	72	1	He	96.52654308	481331.750
Ge	72	2	H2	100.2748229	1564063.207
In	115	1	He	96.49964165	5915612.473
Tb	159	1	He	100.0907884	14481751.450
Ir	193	1	He	98.57008764	7300464.267

Sample Name 4315278\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 043SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:38:18  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	86.564396	1.6	31934.500
Be	9	2	H2	79.186852	0.7	30062.397
B	11	2	H2	66.349386	1.8	49390.450
Na	23	1	He	11817.21332	0.8	10578337.757
Mg	24	1	He	19639.49717	1.1	9967860.267
Al	27	1	He	2101.009324	1.2	542507.503
Si	28	2	H2	5438.244446	0.8	15049980.667
K	39	1	He	10551.18793	1.0	7686383.427
Ca	43	1	He	85936.34809	0.6	184464.797
Ti	47	1	He	83.574148	1.2	19928.787
V	51	1	He	82.122704	0.8	544538.997
Cr	52	1	He	82.649823	0.4	654897.790
Mn	55	1	He	83.470255	0.2	500525.647
Fe	56	1	He	1080.345722	0.3	8125498.167
Co	59	1	He	81.377800	0.7	1029745.190
Ni	60	1	He	83.354670	0.6	261549.873
Cu	63	1	He	80.205757	1.2	702038.770
Zn	66	1	He	84.197341	1.2	169073.960
As	75	1	He	81.342061	1.2	144173.610
Se	78	2	H2	81.670259	0.4	66331.690
Sr	88	1	He	321.455356	0.8	3730870.570
Mo	95	1	He	85.176799	1.4	520680.790
Pd	105	1	He	79.726409	1.1	729771.160
Ag	107	1	He	22.001937	2.2	429633.303
Cd	111	1	He	81.296535	1.3	296405.420
Sn	118	1	He	80.106014	1.3	750918.763
Sb	121	1	He	80.024549	1.1	1104286.883
Ba	138	1	He	124.354555	0.9	3926511.193
Pt	195	1	He	81.056142	0.6	1043132.563
Hg	202	1	He	-0.007820		175.667
Tl	205	1	He	40.796449	0.8	1934704.607
Pb	208	1	He	81.124147	1.2	5240265.180
Bi	209	1	He	78.037930	1.7	4272495.460
Th	232	1	He	8.165365	1.2	546448.520
U	238	1	He	82.034465	1.6	5263245.757

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.96194440	559798.503
Sc	45	2	H2	97.55329744	4316337.833
Ge	72	1	He	95.65116278	476966.647
Ge	72	2	H2	98.92615774	1543027.043
In	115	1	He	95.38780166	5847454.557
Tb	159	1	He	99.36327992	14376491.037
Ir	193	1	He	97.63181575	7230972.390

Sample Name 4315279\_B70041Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 044SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:42:03  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.584971	5.9	658.683
Be	9	2	H2	0.086658	16.8	53.833
B	11	2	H2	-53.865497		10947.960
Na	23	1	He	2025.516605	0.7	1855829.137
Mg	24	1	He	3657.916604	0.8	1894225.337
Al	27	1	He	31.504025	18.1	8364.063
Si	28	2	H2	923.412313	1.7	2581483.833
K	39	1	He	1754.174521	0.5	1359538.420
Ca	43	1	He	17109.82079	0.4	37408.193
Ti	47	1	He	0.537685	36.7	132.337
V	51	1	He	0.139690	71.0	343.660
Cr	52	1	He	0.188999	9.8	3869.187
Mn	55	1	He	0.594527	3.3	3899.197
Fe	56	1	He	15.765717	1.2	131768.643
Co	59	1	He	0.124440	3.1	1652.097
Ni	60	1	He	0.341182	3.7	1284.727
Cu	63	1	He	0.062446	6.2	871.363
Zn	66	1	He	0.795435	6.8	1828.123
As	75	1	He	0.042234	20.5	240.667
Se	78	2	H2	0.162313	2.9	173.000
Sr	88	1	He	49.037574	0.7	577229.860
Mo	95	1	He	0.815983	0.9	5178.287
Pd	105	1	He	0.060560	11.6	765.030
Ag	107	1	He	0.170318	20.1	3540.483
Cd	111	1	He	0.013679	3.7	73.067
Sn	118	1	He	0.021475	40.7	348.343
Sb	121	1	He	0.024175	15.8	383.343
Ba	138	1	He	8.694774	0.6	284459.263
Pt	195	1	He	0.007399	61.4	307.337
Hg	202	1	He	-0.007120		182.333
Tl	205	1	He	0.067532	24.0	3727.237
Pb	208	1	He	0.029835	12.4	4770.347
Bi	209	1	He	0.010895	59.8	2803.693
Th	232	1	He	0.012253	3.3	1831.823
U	238	1	He	0.228807	3.6	15924.880

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.66070144	570028.083
Sc	45	2	H2	98.10956310	4340950.333
Ge	72	1	He	96.98813734	483633.500
Ge	72	2	H2	99.32605711	1549264.580
In	115	1	He	98.80475526	6056920.343
Tb	159	1	He	100.6148883	14557581.447
Ir	193	1	He	99.53245478	7371740.727

Sample Name 4314162\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 045SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:45:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	113.775253	1.4	41529.137
Be	9	2	H2	105.062053	1.1	39477.743
B	11	2	H2	94.558936	2.1	57838.573
Na	23	1	He	12084.17697	0.6	10777066.507
Mg	24	1	He	19978.45314	0.6	10102356.517
Al	27	1	He	2234.008336	0.6	574719.460
Si	28	2	H2	5132.892192	0.7	14063014.667
K	39	1	He	10812.39900	0.2	7846091.343
Ca	43	1	He	87679.10261	0.4	187513.737
Ti	47	1	He	107.575362	0.9	25557.103
V	51	1	He	107.472670	0.7	710195.780
Cr	52	1	He	108.566613	0.4	856359.877
Mn	55	1	He	107.327682	0.5	641136.523
Fe	56	1	He	2223.996543	0.4	16653965.000
Co	59	1	He	107.158672	0.7	1349752.253
Ni	60	1	He	108.329635	0.2	338299.143
Cu	63	1	He	104.916028	0.2	914065.647
Zn	66	1	He	109.561651	0.7	218945.413
As	75	1	He	106.458002	0.6	187782.740
Se	78	2	H2	110.005544	0.1	88458.467
Sr	88	1	He	352.299307	0.3	4070135.043
Mo	95	1	He	111.855270	0.5	678438.560
Pd	105	1	He	21.547021	0.4	195822.297
Ag	107	1	He	51.904279	1.2	1005572.690
Cd	111	1	He	107.369748	0.2	388410.100
Sn	118	1	He	105.474958	0.3	980963.917
Sb	121	1	He	107.413197	0.2	1470664.250
Ba	138	1	He	151.511096	0.4	4746587.013
Pt	195	1	He	21.586328	0.7	280007.167
Hg	202	1	He	-0.004341		199.000
Tl	205	1	He	109.389104	1.0	5224728.463
Pb	208	1	He	106.268308	0.3	6914370.367
Bi	209	1	He	104.027827	0.8	5732293.457
Th	232	1	He	108.700300	1.0	7309865.517
U	238	1	He	107.148829	1.7	6918865.520

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.61963164	557737.163
Sc	45	2	H2	96.57464655	4273036.500
Ge	72	1	He	95.20941736	474763.873
Ge	72	2	H2	97.96111034	1527974.460
In	115	1	He	94.63537188	5801329.173
Tb	159	1	He	100.0941520	14482238.117
Ir	193	1	He	98.26808688	7278096.977

Sample Name 4314163\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 046SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:49:32  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	114.685160	0.6	41539.490
Be	9	2	H2	105.909645	0.2	39489.440
B	11	2	H2	96.431826	0.3	57982.623
Na	23	1	He	12171.75786	2.3	10680656.090
Mg	24	1	He	20136.40522	2.3	10018440.267
Al	27	1	He	2276.939667	2.7	576308.167
Si	28	2	H2	5091.748938	0.8	13842950.000
K	39	1	He	10869.93281	2.7	7760115.300
Ca	43	1	He	87663.26571	3.2	184437.503
Ti	47	1	He	109.323952	3.0	25552.100
V	51	1	He	109.788189	2.2	713875.640
Cr	52	1	He	110.719445	2.4	859238.583
Mn	55	1	He	109.590510	3.0	644046.353
Fe	56	1	He	2280.127811	3.1	16797292.000
Co	59	1	He	109.352327	2.8	1353494.500
Ni	60	1	He	110.805942	2.7	340028.193
Cu	63	1	He	107.158368	2.5	917445.167
Zn	66	1	He	111.983465	2.4	219912.947
As	75	1	He	108.567305	2.5	188188.747
Se	78	2	H2	109.917780	0.7	87741.100
Sr	88	1	He	355.599488	2.6	4037153.377
Mo	95	1	He	113.504339	1.8	678193.977
Pd	105	1	He	21.825240	1.3	195409.517
Ag	107	1	He	53.231314	2.2	1015883.760
Cd	111	1	He	109.271830	2.1	389394.530
Sn	118	1	He	107.124961	2.3	981413.190
Sb	121	1	He	108.940649	2.4	1469259.820
Ba	138	1	He	153.250320	2.0	4729466.490
Pt	195	1	He	21.734197	2.3	278514.553
Hg	202	1	He	-0.004480		195.667
Tl	205	1	He	110.851830	3.2	5230132.320
Pb	208	1	He	107.990875	2.9	6940946.147
Bi	209	1	He	105.331132	2.9	5768400.747
Th	232	1	He	110.531949	2.4	7388058.640
U	238	1	He	108.072469	1.9	6937226.773

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.16475893	548976.207
Sc	45	2	H2	95.82586607	4239906.000
Ge	72	1	He	93.59821827	466729.593
Ge	72	2	H2	97.24804882	1516852.293
In	115	1	He	93.24936931	5716364.567
Tb	159	1	He	98.92265956	14312739.370
Ir	193	1	He	97.69672898	7235780.103

Sample Name 60398600002\_B70041Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 047SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:53:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.968835	1.3	430.677
Be	9	2	H2	0.133797	13.2	71.833
B	11	2	H2	-59.507956		9131.087
Na	23	1	He	1035.180558	0.7	952706.157
Mg	24	1	He	1865.212369	0.6	966735.923
Al	27	1	He	15.415523	3.4	4122.600
Si	28	2	H2	474.086961	0.4	1332194.000
K	39	1	He	904.033315	0.7	733456.867
Ca	43	1	He	8725.126179	0.3	19054.753
Ti	47	1	He	0.313803	36.6	78.000
V	51	1	He	0.071958	40.0	-115.300
Cr	52	1	He	0.149358	5.5	3545.773
Mn	55	1	He	0.346665	7.2	2382.870
Fe	56	1	He	9.589567	0.2	84413.647
Co	59	1	He	0.087624	5.8	1184.720
Ni	60	1	He	0.212370	0.8	878.697
Cu	63	1	He	0.061288	12.2	864.697
Zn	66	1	He	0.427463	4.4	1084.710
As	75	1	He	0.042762	17.5	242.667
Se	78	2	H2	0.106241	15.1	127.667
Sr	88	1	He	25.086248	0.6	296611.270
Mo	95	1	He	0.455621	3.0	2914.973
Pd	105	1	He	0.036263	4.7	538.347
Ag	107	1	He	0.198145	28.2	4130.673
Cd	111	1	He	0.037449	17.3	163.810
Sn	118	1	He	0.053122	20.8	660.023
Sb	121	1	He	0.044412	16.5	676.690
Ba	138	1	He	4.507474	1.7	148462.570
Pt	195	1	He	0.006941	46.1	304.673
Hg	202	1	He	-0.010829		160.333
Tl	205	1	He	0.059623	17.7	3383.800
Pb	208	1	He	0.044855	3.1	5813.850
Bi	209	1	He	0.039560	20.7	4454.173
Th	232	1	He	0.053883	9.8	4717.560
U	238	1	He	0.137922	4.8	10090.653

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.52171649	569191.143
Sc	45	2	H2	98.11866752	4341353.167
Ge	72	1	He	97.39438507	485659.263
Ge	72	2	H2	99.63638489	1554105.000
In	115	1	He	99.45381980	6096709.240
Tb	159	1	He	101.6819220	14711966.447
Ir	193	1	He	100.6385072	7453659.053

Sample Name 4315278\_B70041Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 048SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:57:03  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	91.673057	14.1	30751.240
Be	9	2	H2	88.186592	13.4	30460.190
B	11	2	H2	34.529367	50.8	35638.507
Na	23	1	He	3044.693718	0.0	2727448.707
Mg	24	1	He	3848.627182	0.4	1952392.470
Al	27	1	He	2034.821820	0.4	524184.727
Si	28	2	H2	1592.751923	14.4	4016011.917
K	39	1	He	2903.732125	0.6	2160006.740
Ca	43	1	He	10616.10236	0.3	22745.530
Ti	47	1	He	83.186466	1.2	19790.253
V	51	1	He	82.653724	0.1	546780.657
Cr	52	1	He	84.057998	0.2	664439.707
Mn	55	1	He	83.056356	0.3	496866.543
Fe	56	1	He	1050.020059	0.4	7879207.167
Co	59	1	He	82.936395	0.2	1053626.083
Ni	60	1	He	84.958280	0.3	267630.170
Cu	63	1	He	83.579491	0.3	734486.457
Zn	66	1	He	83.582363	0.4	168513.067
As	75	1	He	81.072463	0.2	144270.500
Se	78	2	H2	88.904114	12.8	66172.247
Sr	88	1	He	106.564955	0.2	1241805.580
Mo	95	1	He	81.986701	0.8	510877.103
Pd	105	1	He	83.120095	0.5	775536.473
Ag	107	1	He	31.548402	0.8	627959.927
Cd	111	1	He	82.118380	0.5	305192.783
Sn	118	1	He	80.959431	1.1	773578.583
Sb	121	1	He	81.009012	0.6	1139483.133
Ba	138	1	He	84.401509	1.3	2716419.333
Pt	195	1	He	84.107037	0.9	1091068.750
Hg	202	1	He	-0.010458		160.333
Tl	205	1	He	41.664718	0.9	1991666.847
Pb	208	1	He	83.587676	0.8	5442750.390
Bi	209	1	He	81.405789	0.8	4555302.223
Th	232	1	He	7.473024	1.1	511229.083
U	238	1	He	80.441209	1.2	5274984.193

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.74278191	558478.750
Sc	45	2	H2	89.76699258	3971825.417
Ge	72	1	He	96.02549247	478833.250
Ge	72	2	H2	91.67639318	1429946.913
In	115	1	He	97.22509609	5960084.217
Tb	159	1	He	100.1605256	14491841.450
Ir	193	1	He	99.77573072	7389758.640



Sample Name 4315279\_B70041Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 049SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:00:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.334592	3.7	195.000
Be	9	2	H2	0.098236	6.5	58.000
B	11	2	H2	-65.664847		7117.177
Na	23	1	He	204.637882	0.8	197037.190
Mg	24	1	He	365.262210	1.2	192501.423
Al	27	1	He	4.949573	8.8	1370.737
Si	28	2	H2	92.043530	0.5	268590.270
K	39	1	He	173.696905	1.2	196755.493
Ca	43	1	He	1680.112316	1.8	3669.253
Ti	47	1	He	0.151279	119.7	38.337
V	51	1	He	0.087448	101.6	-9.580
Cr	52	1	He	0.095132	9.4	3101.670
Mn	55	1	He	0.102349	14.3	891.367
Fe	56	1	He	2.562200	5.8	30656.463
Co	59	1	He	0.048697	19.1	682.683
Ni	60	1	He	0.067930	7.3	417.343
Cu	63	1	He	0.040298	21.7	677.350
Zn	66	1	He	0.174624	6.4	568.010
As	75	1	He	0.035442	33.4	229.333
Se	78	2	H2	0.029232	30.4	64.667
Sr	88	1	He	4.827533	1.9	57172.173
Mo	95	1	He	0.134860	6.1	867.363
Pd	105	1	He	0.048096	13.0	648.353
Ag	107	1	He	0.189165	29.2	3932.280
Cd	111	1	He	0.032979	28.0	146.177
Sn	118	1	He	0.044499	26.9	573.350
Sb	121	1	He	0.027044	29.7	425.010
Ba	138	1	He	0.908654	0.2	29877.350
Pt	195	1	He	0.012791	31.6	382.677
Hg	202	1	He	-0.011872		154.000
Tl	205	1	He	0.079419	20.2	4355.773
Pb	208	1	He	0.032330	14.0	4997.047
Bi	209	1	He	0.036262	24.2	4287.453
Th	232	1	He	0.019407	35.3	2353.573
U	238	1	He	0.046718	18.9	4077.350

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.25612936	567591.830
Sc	45	2	H2	97.70409092	4323009.833
Ge	72	1	He	97.35683051	485471.997
Ge	72	2	H2	99.39306478	1550309.750
In	115	1	He	99.07906329	6073735.950
Tb	159	1	He	101.9097974	14744936.863
Ir	193	1	He	101.0896476	7487072.177

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 050\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:04:32  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.554389	0.7	31052.017
Be	9	2	H2	81.384141	1.2	30752.950
B	11	2	H2	16.934233	6.3	33407.760
Na	23	1	He	1030.051327	0.4	953195.793
Mg	24	1	He	1024.456962	0.2	535961.070
Al	27	1	He	1020.443121	0.8	269404.020
Si	28	2	H2	512.258973	0.6	1423443.837
K	39	1	He	1032.644442	0.4	832353.660
Ca	43	1	He	1010.255214	2.3	2230.003
Ti	47	1	He	79.035561	1.2	19267.240
V	51	1	He	80.799043	1.0	547708.640
Cr	52	1	He	82.674906	0.6	669696.400
Mn	55	1	He	81.030431	0.5	496728.167
Fe	56	1	He	527.762536	0.5	4063646.083
Co	59	1	He	84.245481	0.2	1088465.540
Ni	60	1	He	84.859891	0.2	271867.783
Cu	63	1	He	84.473289	0.4	754961.227
Zn	66	1	He	82.508190	0.5	169177.250
As	75	1	He	79.945565	0.5	144686.993
Se	78	2	H2	82.413149	1.2	66976.670
Sr	88	1	He	82.035673	0.6	972242.250
Mo	95	1	He	77.647542	0.2	497116.313
Pd	105	1	He	82.468488	0.9	790550.953
Ag	107	1	He	40.800129	1.5	834343.840
Cd	111	1	He	81.183691	0.6	309994.407
Sn	118	1	He	77.782263	0.8	763620.850
Sb	121	1	He	78.549101	0.3	1135196.753
Ba	138	1	He	78.590990	0.2	2598879.910
Pt	195	1	He	83.559410	0.5	1098368.750
Hg	202	1	He	3.947354	0.7	25600.200
Tl	205	1	He	42.651454	0.4	2065943.617
Pb	208	1	He	83.409560	0.5	5503301.923
Bi	209	1	He	81.995896	0.9	4687677.533
Th	232	1	He	77.717502	1.2	5422061.583
U	238	1	He	78.783342	1.5	5278122.423

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.03326096	572271.563
Sc	45	2	H2	97.10217135	4296377.333
Ge	72	1	He	97.65971228	486982.323
Ge	72	2	H2	98.98177447	1543894.540
In	115	1	He	99.89102085	6123510.500
Tb	159	1	He	101.4890908	14684066.447
Ir	193	1	He	101.9404188	7550083.427

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 051\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:08:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.144037	17.0	124.500
Be	9	2	H2	0.091073	1.1	55.167
B	11	2	H2	-67.769846		6428.203
Na	23	1	He	-0.384918		11192.607
Mg	24	1	He	-6.449750		1315.070
Al	27	1	He	0.137485	44.7	111.667
Si	28	2	H2	-0.305815		12830.863
K	39	1	He	-4.249888		66667.993
Ca	43	1	He	1.541698	66.7	16.500
Ti	47	1	He	0.007270	83.3	3.667
V	51	1	He	0.101908	29.7	89.417
Cr	52	1	He	0.019839	87.6	2506.220
Mn	55	1	He	0.003783	81.4	293.333
Fe	56	1	He	0.183336	16.6	12575.443
Co	59	1	He	0.015548	13.9	254.000
Ni	60	1	He	0.018834	67.4	258.667
Cu	63	1	He	0.004535	117.9	356.673
Zn	66	1	He	-0.000036		210.000
As	75	1	He	-0.003448		158.167
Se	78	2	H2	-0.003094		38.000
Sr	88	1	He	0.008826	25.0	248.337
Mo	95	1	He	0.024179	13.0	164.000
Pd	105	1	He	0.034021	31.5	515.013
Ag	107	1	He	0.144059	15.3	3007.013
Cd	111	1	He	0.010786	30.0	61.970
Sn	118	1	He	0.012037	47.0	256.670
Sb	121	1	He	0.014344	12.5	243.337
Ba	138	1	He	0.014165	11.7	536.680
Pt	195	1	He	0.005119	44.6	280.000
Hg	202	1	He	0.007461	75.6	276.667
Tl	205	1	He	0.057677	19.5	3277.103
Pb	208	1	He	0.011175	21.3	3575.213
Bi	209	1	He	0.007849	65.1	2710.327
Th	232	1	He	0.019049	15.3	2355.237
U	238	1	He	0.005649	35.2	1366.750

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.53958600	569298.750
Sc	45	2	H2	97.49356315	4313694.833
Ge	72	1	He	96.61850163	481790.303
Ge	72	2	H2	98.75588485	1540371.167
In	115	1	He	98.81515999	6057558.173
Tb	159	1	He	101.3739565	14667408.113
Ir	193	1	He	102.2662533	7574215.930

Sample Name 60398600003\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 052SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:12:02  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.542252	2.1	1005.700
Be	9	2	H2	0.103923	21.6	60.000
B	11	2	H2	545.786213	0.7	202616.847
Na	23	1	He	35743.12397	0.8	31494651.197
Mg	24	1	He	41644.79311	0.7	20815451.357
Al	27	1	He	27.053728	1.4	6953.290
Si	28	2	H2	3668.522137	0.4	10140000.000
K	39	1	He	4130.902893	0.8	3005522.247
Ca	43	1	He	251015.8999	0.9	530737.890
Ti	47	1	He	0.203724	15.9	49.667
V	51	1	He	0.115657	49.4	172.643
Cr	52	1	He	0.466023	0.8	5898.533
Mn	55	1	He	0.562317	1.9	3581.787
Fe	56	1	He	9.856820	1.4	83755.437
Co	59	1	He	0.096987	4.2	1239.390
Ni	60	1	He	0.308402	3.8	1125.380
Cu	63	1	He	0.121475	1.4	1330.067
Zn	66	1	He	3.728773	0.4	7430.577
As	75	1	He	0.144289	2.7	404.177
Se	78	2	H2	2.302697	3.7	1896.460
Sr	88	1	He	430.906171	1.3	4834401.597
Mo	95	1	He	0.305817	2.5	1834.793
Pd	105	1	He	0.316737	2.4	3008.680
Ag	107	1	He	0.060402	13.1	1241.730
Cd	111	1	He	0.009603	5.0	54.340
Sn	118	1	He	0.030957	1.2	415.010
Sb	121	1	He	0.049324	3.3	700.023
Ba	138	1	He	57.616234	0.8	1775330.913
Pt	195	1	He	0.009569	10.7	326.673
Hg	202	1	He	-0.001638		211.333
Tl	205	1	He	0.034378	2.8	2080.183
Pb	208	1	He	0.021396	3.9	4105.263
Bi	209	1	He	0.006299	3.1	2456.947
Th	232	1	He	0.016654	14.2	2053.513
U	238	1	He	1.954930	0.7	124080.350

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.57601505	551452.710
Sc	45	2	H2	97.38930124	4309081.667
Ge	72	1	He	92.46295410	461068.573
Ge	72	2	H2	98.24688567	1532431.917
In	115	1	He	93.08085907	5706034.567
Tb	159	1	He	97.88620647	14162778.957
Ir	193	1	He	95.86516065	7100127.397

Sample Name 60398600003\_B70041Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 053SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:15:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.414409	5.0	228.167
Be	9	2	H2	0.083172	9.1	53.167
B	11	2	H2	2.424220	22.1	29443.730
Na	23	1	He	3718.475536	0.3	3441175.990
Mg	24	1	He	4370.511623	0.6	2291533.350
Al	27	1	He	4.393657	3.2	1246.720
Si	28	2	H2	385.368733	0.8	1098913.377
K	39	1	He	423.533505	0.8	386202.663
Ca	43	1	He	25676.34546	0.7	56856.113
Ti	47	1	He	0.051865	44.8	14.667
V	51	1	He	0.016530	480.3	-495.253
Cr	52	1	He	0.128829	14.0	3429.743
Mn	55	1	He	0.063700	11.8	668.020
Fe	56	1	He	1.813490	1.8	25387.313
Co	59	1	He	0.019310	13.1	306.003
Ni	60	1	He	0.058762	6.6	390.010
Cu	63	1	He	1.352967	1.5	12427.983
Zn	66	1	He	1.292318	3.2	2863.627
As	75	1	He	0.027706	13.7	216.500
Se	78	2	H2	0.242102	8.1	241.667
Sr	88	1	He	43.206456	0.4	513026.253
Mo	95	1	He	0.053089	11.7	353.343
Pd	105	1	He	0.052086	12.0	696.690
Ag	107	1	He	0.026252	23.8	638.357
Cd	111	1	He	0.003165	29.0	33.937
Sn	118	1	He	0.013423	8.2	275.003
Sb	121	1	He	0.010405	24.3	190.000
Ba	138	1	He	5.703792	0.7	189892.410
Pt	195	1	He	-0.000126		213.333
Hg	202	1	He	-0.005684		195.000
Tl	205	1	He	0.010159	3.8	993.380
Pb	208	1	He	0.053396	9.2	6425.630
Bi	209	1	He	0.002435	115.5	2376.923
Th	232	1	He	0.003709	28.5	1271.743
U	238	1	He	0.191071	1.3	13697.277

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.88188556	577381.813
Sc	45	2	H2	99.33561896	4395198.333
Ge	72	1	He	97.82848187	487823.897
Ge	72	2	H2	100.8275170	1572684.000
In	115	1	He	100.5269392	6162493.513
Tb	159	1	He	102.4428160	14822057.280
Ir	193	1	He	101.3019902	7502799.053

Sample Name 60398600004\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 054SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:19:31  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.519723	2.8	997.197
Be	9	2	H2	0.102316	18.2	59.333
B	11	2	H2	573.946900	1.1	211597.267
Na	23	1	He	37176.62387	0.8	32871378.677
Mg	24	1	He	43487.61789	0.9	21811720.507
Al	27	1	He	18.932870	1.2	4905.167
Si	28	2	H2	3857.072975	0.7	10659222.333
K	39	1	He	4309.614668	0.3	3143541.933
Ca	43	1	He	261507.3125	0.3	554850.050
Ti	47	1	He	0.249654	10.3	60.667
V	51	1	He	0.136039	41.4	309.297
Cr	52	1	He	0.593110	2.5	6910.973
Mn	55	1	He	0.701672	2.2	4420.013
Fe	56	1	He	9.624219	0.8	82321.333
Co	59	1	He	0.101171	7.4	1298.063
Ni	60	1	He	1.234598	1.3	3955.877
Cu	63	1	He	0.151578	1.0	1594.090
Zn	66	1	He	3.001921	1.6	6057.280
As	75	1	He	0.161111	3.6	435.510
Se	78	2	H2	2.355590	3.7	1939.467
Sr	88	1	He	447.667747	0.1	5052579.300
Mo	95	1	He	0.338415	0.2	2058.823
Pd	105	1	He	0.342094	3.4	3282.077
Ag	107	1	He	0.018118	16.4	443.343
Cd	111	1	He	0.008727	25.4	51.963
Sn	118	1	He	0.040554	4.9	510.013
Sb	121	1	He	0.084326	4.7	1188.393
Ba	138	1	He	59.523864	0.7	1860708.567
Pt	195	1	He	0.007720	23.8	306.003
Hg	202	1	He	-0.000659		219.333
Tl	205	1	He	0.023481	10.3	1585.113
Pb	208	1	He	0.026999	12.6	4501.990
Bi	209	1	He	0.002166	225.1	2266.907
Th	232	1	He	0.009943	12.7	1636.787
U	238	1	He	2.011932	1.0	129585.050

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.89259688	553359.103
Sc	45	2	H2	97.38090123	4308710.000
Ge	72	1	He	93.01301549	463811.467
Ge	72	2	H2	98.23520131	1532249.667
In	115	1	He	94.43032819	5788759.603
Tb	159	1	He	98.76689716	14290202.707
Ir	193	1	He	97.29962418	7206369.057

Sample Name 60398600004\_B70041Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 055SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:23:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.366151	1.3	203.000
Be	9	2	H2	0.058070	20.5	42.000
B	11	2	H2	6.434761	3.0	29712.587
Na	23	1	He	3872.484782	0.7	3526041.407
Mg	24	1	He	4551.731304	1.0	2348270.537
Al	27	1	He	3.126284	1.3	894.697
Si	28	2	H2	402.738011	0.5	1109033.873
K	39	1	He	441.056366	0.8	392876.233
Ca	43	1	He	26755.30240	0.9	58299.630
Ti	47	1	He	0.029368	23.8	9.000
V	51	1	He	-0.060600		-1010.250
Cr	52	1	He	0.142067	3.0	3481.090
Mn	55	1	He	0.081797	8.3	767.357
Fe	56	1	He	1.542217	2.5	22913.257
Co	59	1	He	0.013533	32.4	228.667
Ni	60	1	He	0.167504	3.1	730.020
Cu	63	1	He	0.025821	16.0	544.677
Zn	66	1	He	0.351189	1.6	922.030
As	75	1	He	0.025981	19.3	210.833
Se	78	2	H2	0.247334	4.2	237.333
Sr	88	1	He	44.758880	0.6	525190.863
Mo	95	1	He	0.049349	17.2	324.007
Pd	105	1	He	0.032557	15.1	500.013
Ag	107	1	He	0.011006	27.4	320.007
Cd	111	1	He	0.002698	64.1	31.607
Sn	118	1	He	0.010282	17.8	240.000
Sb	121	1	He	0.010633	5.5	190.000
Ba	138	1	He	5.916965	0.8	193738.990
Pt	195	1	He	-0.001313		195.333
Hg	202	1	He	-0.010847		159.667
Tl	205	1	He	0.003562	41.6	663.357
Pb	208	1	He	-0.000300		2820.147
Bi	209	1	He	0.002221	194.2	2346.920
Th	232	1	He	-0.000492		973.380
U	238	1	He	0.203602	0.7	14423.067

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.35220413	568170.373
Sc	45	2	H2	95.97615856	4246555.833
Ge	72	1	He	96.67587896	482076.417
Ge	72	2	H2	97.27400852	1517257.207
In	115	1	He	98.87142246	6061007.170
Tb	159	1	He	101.2994418	14656626.863
Ir	193	1	He	100.5488153	7447016.137

Sample Name 60398600001\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 056SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:27:00  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.862613	1.5	1854.947
Be	9	2	H2	0.076685	30.8	49.500
B	11	2	H2	18.997333	12.0	34101.813
Na	23	1	He	33089.17251	0.5	29095688.737
Mg	24	1	He	29740.93672	0.4	14835447.280
Al	27	1	He	33.461116	0.5	8565.123
Si	28	2	H2	4831.777927	1.4	13326484.333
K	39	1	He	2149.882003	0.5	1593266.693
Ca	43	1	He	59380.79962	0.4	125298.827
Ti	47	1	He	0.336385	4.2	80.667
V	51	1	He	1.957955	3.2	12194.427
Cr	52	1	He	0.747918	1.6	8073.573
Mn	55	1	He	0.363805	3.1	2404.870
Fe	56	1	He	10.893581	0.4	91235.880
Co	59	1	He	0.043560	6.5	587.347
Ni	60	1	He	1.550636	3.7	4901.503
Cu	63	1	He	0.718107	1.9	6391.423
Zn	66	1	He	5.476297	1.2	10843.393
As	75	1	He	0.668761	0.2	1304.727
Se	78	2	H2	1.129962	3.1	949.697
Sr	88	1	He	154.044563	0.4	1732249.610
Mo	95	1	He	9.975603	0.7	59732.610
Pd	105	1	He	0.120070	3.8	1256.737
Ag	107	1	He	0.009410	21.7	271.673
Cd	111	1	He	0.035846	10.2	148.247
Sn	118	1	He	0.103639	10.9	1083.383
Sb	121	1	He	1.496053	1.8	20254.773
Ba	138	1	He	48.285696	1.1	1493170.500
Pt	195	1	He	0.006835	6.8	293.333
Hg	202	1	He	-0.002860		204.667
Tl	205	1	He	0.014426	9.2	1153.393
Pb	208	1	He	0.035249	8.0	5005.390
Bi	209	1	He	0.005473	105.0	2436.947
Th	232	1	He	0.006789	17.9	1421.757
U	238	1	He	10.409227	1.1	664179.547

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.38101144	550278.437
Sc	45	2	H2	97.22376818	4301757.500
Ge	72	1	He	92.66945674	462098.303
Ge	72	2	H2	98.14155264	1530788.957
In	115	1	He	93.41154202	5726306.063
Tb	159	1	He	98.28831820	14220958.957
Ir	193	1	He	96.97321312	7182193.850



Sample Name 60398600001\_B70041Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 057SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:30:45  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.574072	4.3	281.167
Be	9	2	H2	0.049804	47.4	39.333
B	11	2	H2	-57.451408		9678.923
Na	23	1	He	3442.582341	0.4	3122082.973
Mg	24	1	He	3104.138568	0.4	1595884.767
Al	27	1	He	7.448079	6.5	2017.810
Si	28	2	H2	501.029141	0.7	1390585.667
K	39	1	He	219.889045	0.5	229792.693
Ca	43	1	He	6094.575138	1.0	13231.377
Ti	47	1	He	0.050295	21.6	14.000
V	51	1	He	0.240618	35.6	1017.370
Cr	52	1	He	0.128016	19.1	3354.397
Mn	55	1	He	0.044809	12.0	540.010
Fe	56	1	He	1.811663	1.2	24857.757
Co	59	1	He	0.007335	25.2	148.000
Ni	60	1	He	0.171091	7.5	735.353
Cu	63	1	He	0.077311	8.0	992.037
Zn	66	1	He	0.674469	0.6	1564.757
As	75	1	He	0.077360	11.6	300.333
Se	78	2	H2	0.101342	13.3	122.333
Sr	88	1	He	15.538378	0.9	180955.420
Mo	95	1	He	1.028691	2.4	6458.820
Pd	105	1	He	0.015563	26.2	335.010
Ag	107	1	He	0.009437	32.3	285.007
Cd	111	1	He	0.005520	50.4	41.837
Sn	118	1	He	0.015410	15.3	286.673
Sb	121	1	He	0.159086	7.3	2288.543
Ba	138	1	He	4.841453	0.6	156806.673
Pt	195	1	He	-0.001394		191.333
Hg	202	1	He	-0.008438		172.333
Tl	205	1	He	0.002376	60.9	596.683
Pb	208	1	He	0.006093	35.3	3190.177
Bi	209	1	He	0.002162	100.9	2303.583
Th	232	1	He	-0.000394		963.380
U	238	1	He	1.052734	0.8	69312.197

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.93742303	565672.643
Sc	45	2	H2	96.96807997	4290444.333
Ge	72	1	He	95.90271819	478221.033
Ge	72	2	H2	98.59636970	1537883.087
In	115	1	He	97.79407590	5994963.767
Tb	159	1	He	99.74605381	14431873.120
Ir	193	1	He	98.81882626	7318886.767

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 058\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:34:30  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	85.034770	0.5	31000.237
Be	9	2	H2	82.085591	0.8	30792.020
B	11	2	H2	17.194621	1.3	33247.413
Na	23	1	He	1026.242821	0.7	954336.417
Mg	24	1	He	1024.031666	0.8	538352.947
Al	27	1	He	1013.777209	1.1	268945.353
Si	28	2	H2	512.802410	0.6	1414567.500
K	39	1	He	1015.724910	0.9	823848.713
Ca	43	1	He	1016.632176	1.7	2254.993
Ti	47	1	He	79.255482	1.7	19413.763
V	51	1	He	80.177768	0.9	546110.113
Cr	52	1	He	81.512696	1.0	663517.603
Mn	55	1	He	79.480441	0.6	489591.813
Fe	56	1	He	517.378649	0.7	4003173.417
Co	59	1	He	83.512964	0.7	1076894.170
Ni	60	1	He	84.349064	1.0	269705.800
Cu	63	1	He	83.865191	0.7	748067.857
Zn	66	1	He	81.908682	0.5	167623.413
As	75	1	He	79.028077	0.4	142750.367
Se	78	2	H2	81.737933	1.0	65578.173
Sr	88	1	He	80.903880	0.5	956979.883
Mo	95	1	He	76.447341	1.5	486473.103
Pd	105	1	He	81.140356	1.5	773128.373
Ag	107	1	He	40.290626	2.3	818952.957
Cd	111	1	He	80.391643	1.2	305123.423
Sn	118	1	He	76.872160	0.7	750161.860
Sb	121	1	He	77.627281	1.7	1115094.253
Ba	138	1	He	77.760798	0.8	2556000.120
Pt	195	1	He	81.744573	1.7	1073187.003
Hg	202	1	He	3.870143	1.8	25072.517
Tl	205	1	He	42.088997	1.4	2036267.573
Pb	208	1	He	82.200378	1.7	5416921.147
Bi	209	1	He	81.436182	0.7	4575590.767
Th	232	1	He	77.350666	0.3	5303647.007
U	238	1	He	78.371938	0.5	5160150.133

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.49525218	575053.583
Sc	45	2	H2	96.39386162	4265037.500
Ge	72	1	He	97.46846676	486028.673
Ge	72	2	H2	97.71947574	1524205.500
In	115	1	He	99.29588775	6087027.703
Tb	159	1	He	101.3763295	14667751.447
Ir	193	1	He	100.1789422	7419621.973

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 059\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:38:15  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.087880	20.5	103.500
Be	9	2	H2	0.083117	13.6	52.000
B	11	2	H2	-68.593790		6145.083
Na	23	1	He	3.114266	3.3	14383.670
Mg	24	1	He	-4.201729		2476.893
Al	27	1	He	0.598679	17.8	233.000
Si	28	2	H2	-0.405636		12515.943
K	39	1	He	-2.050168		68349.103
Ca	43	1	He	24.363306	117.7	66.173
Ti	47	1	He	0.048478	55.0	13.667
V	51	1	He	0.053108	145.9	-241.200
Cr	52	1	He	0.060696	9.2	2836.283
Mn	55	1	He	0.046101	36.4	552.010
Fe	56	1	He	0.405894	19.7	14288.993
Co	59	1	He	0.059900	21.6	820.030
Ni	60	1	He	0.064027	26.4	401.343
Cu	63	1	He	0.055904	21.3	809.360
Zn	66	1	He	0.048913	15.9	308.667
As	75	1	He	0.041848	36.6	238.833
Se	78	2	H2	0.013719	14.2	51.333
Sr	88	1	He	0.065353	17.6	910.040
Mo	95	1	He	0.059293	25.4	382.673
Pd	105	1	He	0.042877	3.2	591.687
Ag	107	1	He	0.176041	15.9	3622.170
Cd	111	1	He	0.051118	19.2	212.263
Sn	118	1	He	0.045421	27.9	575.017
Sb	121	1	He	0.058015	25.5	858.370
Ba	138	1	He	0.054250	11.7	1830.143
Pt	195	1	He	0.051609	19.2	880.700
Hg	202	1	He	0.016448	43.6	331.337
Tl	205	1	He	0.070238	15.6	3847.263
Pb	208	1	He	0.053566	15.5	6302.260
Bi	209	1	He	0.049732	23.3	5034.400
Th	232	1	He	0.057062	14.7	4942.653
U	238	1	He	0.045502	18.4	3983.990

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.59255629	569617.727
Sc	45	2	H2	97.18854838	4300199.167
Ge	72	1	He	96.49546130	481176.760
Ge	72	2	H2	98.24531494	1532407.417
In	115	1	He	97.85576631	5998745.507
Tb	159	1	He	100.2527770	14505188.950
Ir	193	1	He	100.7220305	7459845.093

Sample Name 4314465\_B70047Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 060SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:41:59  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.074670	25.5	99.833
Be	9	2	H2	0.045778	10.7	38.333
B	11	2	H2	-67.807627		6472.883
Na	23	1	He	4.927160	5.4	16103.763
Mg	24	1	He	-2.980953		3120.343
Al	27	1	He	6.082357	3.1	1680.760
Si	28	2	H2	2.707798	1.3	21347.280
K	39	1	He	-2.461291		68343.997
Ca	43	1	He	8.807304	18.3	32.483
Ti	47	1	He	0.053755	39.6	15.000
V	51	1	He	0.102866	60.1	93.600
Cr	52	1	He	0.237653	2.0	4276.637
Mn	55	1	He	0.050953	17.8	584.017
Fe	56	1	He	2.429881	2.7	29885.927
Co	59	1	He	0.012939	2.7	219.333
Ni	60	1	He	0.024185	26.9	274.000
Cu	63	1	He	0.024110	15.3	526.010
Zn	66	1	He	0.899267	1.6	2018.813
As	75	1	He	0.008055	130.7	177.500
Se	78	2	H2	-0.005842		35.667
Sr	88	1	He	0.025559	3.6	441.677
Mo	95	1	He	0.023945	7.3	162.667
Pd	105	1	He	0.020865	20.9	388.343
Ag	107	1	He	0.053849	12.0	1185.063
Cd	111	1	He	0.008464	36.4	53.303
Sn	118	1	He	0.013761	5.9	273.340
Sb	121	1	He	0.016842	13.9	278.337
Ba	138	1	He	0.030274	8.9	1063.387
Pt	195	1	He	0.012494	15.9	372.010
Hg	202	1	He	0.005329	28.8	260.333
Tl	205	1	He	0.016084	12.8	1253.403
Pb	208	1	He	0.010664	4.3	3500.200
Bi	209	1	He	0.010155	30.2	2803.683
Th	232	1	He	0.010712	9.6	1750.137
U	238	1	He	0.003502	43.3	1205.070

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.00689511	572112.793
Sc	45	2	H2	98.36693509	4352338.000
Ge	72	1	He	95.99991085	478705.687
Ge	72	2	H2	98.52384329	1536751.837
In	115	1	He	98.71228386	6051251.670
Tb	159	1	He	100.1069700	14484092.700
Ir	193	1	He	100.8733670	7471053.637

Sample Name 4314466\_B70047Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 061SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:45:44  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	110.712529	1.1	39601.000
Be	9	2	H2	106.316303	0.6	39146.060
B	11	2	H2	43.184334	3.1	40713.080
Na	23	1	He	2117.693588	0.6	1910259.400
Mg	24	1	He	2118.436558	0.5	1082248.810
Al	27	1	He	2104.393599	0.9	544882.683
Si	28	2	H2	541.467171	0.9	1465524.127
K	39	1	He	2075.009738	0.7	1571110.653
Ca	43	1	He	2101.804897	2.2	4536.713
Ti	47	1	He	104.198405	1.0	24914.690
V	51	1	He	103.675397	0.7	689531.263
Cr	52	1	He	107.260200	0.5	851560.020
Mn	55	1	He	104.258076	0.2	626839.833
Fe	56	1	He	2137.064086	0.7	16106817.000
Co	59	1	He	108.873508	0.6	1372124.540
Ni	60	1	He	109.884454	0.5	343343.133
Cu	63	1	He	107.820623	0.4	939896.543
Zn	66	1	He	108.247252	0.6	216444.257
As	75	1	He	104.318730	1.0	184113.960
Se	78	2	H2	108.285934	0.6	85520.130
Sr	88	1	He	105.610290	0.8	1220895.530
Mo	95	1	He	102.813701	1.8	635160.710
Pd	105	1	He	21.581857	1.7	199783.890
Ag	107	1	He	51.346991	0.5	1013343.970
Cd	111	1	He	105.387667	1.4	388320.460
Sn	118	1	He	101.510429	2.0	961584.727
Sb	121	1	He	104.453642	1.2	1456726.387
Ba	138	1	He	102.635688	1.6	3275121.827
Pt	195	1	He	21.613163	0.8	278491.773
Hg	202	1	He	0.003331	5.0	246.000
Tl	205	1	He	109.563990	1.2	5198593.467
Pb	208	1	He	107.306642	0.9	6935706.093
Bi	209	1	He	103.815399	1.4	5783112.413
Th	232	1	He	104.702289	1.3	7118151.767
U	238	1	He	101.556263	1.2	6630154.280

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.21950846	561349.503
Sc	45	2	H2	94.63149108	4187059.750
Ge	72	1	He	95.26443433	475038.217
Ge	72	2	H2	96.20709824	1500615.790
In	115	1	He	96.40430808	5909768.343
Tb	159	1	He	99.43404516	14386729.787
Ir	193	1	He	99.34522569	7357873.850

Sample Name 10606718001\_B70047Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 062SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:49:29  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	149.605293	0.3	53134.150
Be	9	2	H2	0.150273	9.1	74.833
B	11	2	H2	1974.316017	0.4	636477.437
Na	23	1	He	127056.9403	0.5	109545478.367
Mg	24	1	He	9610.706420	0.5	4705083.263
Al	27	1	He	278.661179	0.3	69435.110
Si	28	2	H2	2163.491353	1.2	5777390.333
K	39	1	He	6750.609085	0.4	4765157.117
Ca	43	1	He	27620.84454	0.5	57170.457
Ti	47	1	He	4.550135	1.8	1047.707
V	51	1	He	8.968763	2.0	56834.907
Cr	52	1	He	2.586701	0.3	21916.340
Mn	55	1	He	189.104286	0.1	1092935.000
Fe	56	1	He	3429.588701	0.2	24846288.667
Co	59	1	He	24.456205	0.7	295012.593
Ni	60	1	He	7.681074	1.5	23143.687
Cu	63	1	He	23.995842	0.2	200417.470
Zn	66	1	He	998.243737	0.4	1908602.250
As	75	1	He	2.060087	1.8	3631.627
Se	78	2	H2	0.441076	4.5	383.010
Sr	88	1	He	95.735572	0.3	1059199.177
Mo	95	1	He	536.738104	0.8	3125909.583
Pd	105	1	He	0.101636	4.0	1061.717
Ag	107	1	He	0.268183	30.0	5074.343
Cd	111	1	He	0.142924	5.2	516.043
Sn	118	1	He	2.907033	1.0	26086.023
Sb	121	1	He	14.270042	0.8	187636.387
Ba	138	1	He	16.495238	0.3	496282.073
Pt	195	1	He	0.311748	18.3	4066.643
Hg	202	1	He	0.140329	2.1	1068.710
Tl	205	1	He	0.062613	23.0	3325.457
Pb	208	1	He	8.944045	1.3	559678.700
Bi	209	1	He	0.196289	6.5	12546.157
Th	232	1	He	0.116348	5.8	8511.173
U	238	1	He	0.327326	2.1	21349.310

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.62654019	539713.357
Sc	45	2	H2	94.00027505	4159131.000
Ge	72	1	He	91.16864455	454614.470
Ge	72	2	H2	95.07349872	1482934.170
In	115	1	He	90.87263194	5570666.023
Tb	159	1	He	95.84078503	13866834.790
Ir	193	1	He	94.99126750	7035403.647

Sample Name 4315307\_B70047Dx25  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 063SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:53:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	31.344686	1.7	11414.787
Be	9	2	H2	0.069872	19.3	46.333
B	11	2	H2	359.333678	1.9	140834.270
Na	23	1	He	26030.17984	0.7	23343182.150
Mg	24	1	He	1970.925073	0.6	1006831.677
Al	27	1	He	65.931053	1.0	17137.150
Si	28	2	H2	443.751345	2.0	1219780.333
K	39	1	He	1385.421574	0.5	1071481.367
Ca	43	1	He	5625.497310	0.3	12116.447
Ti	47	1	He	1.008967	8.3	243.000
V	51	1	He	1.647842	5.3	10372.707
Cr	52	1	He	12.400582	0.5	100460.840
Mn	55	1	He	39.583373	0.1	238069.630
Fe	56	1	He	745.443255	0.8	5623509.833
Co	59	1	He	5.074423	0.4	63991.450
Ni	60	1	He	6.042062	1.3	19059.787
Cu	63	1	He	5.210021	0.8	45702.790
Zn	66	1	He	201.717460	0.5	403074.627
As	75	1	He	0.441158	0.6	939.697
Se	78	2	H2	0.126272	7.6	139.667
Sr	88	1	He	19.724183	0.8	228083.440
Mo	95	1	He	105.235872	0.6	647221.210
Pd	105	1	He	0.029806	17.9	460.010
Ag	107	1	He	0.063012	9.9	1331.743
Cd	111	1	He	0.049732	13.8	203.173
Sn	118	1	He	0.627711	1.6	6054.697
Sb	121	1	He	2.834056	1.5	39380.423
Ba	138	1	He	3.274664	1.4	104095.440
Pt	195	1	He	0.049767	19.7	848.030
Hg	202	1	He	0.022747	19.3	367.677
Tl	205	1	He	0.029255	21.8	1866.823
Pb	208	1	He	1.827048	0.9	120632.433
Bi	209	1	He	0.055475	28.1	5244.490
Th	232	1	He	0.040592	24.4	3725.583
U	238	1	He	0.084728	8.6	6443.337

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.18538524	561144.020
Sc	45	2	H2	95.92869282	4244455.667
Ge	72	1	He	95.24447051	474938.667
Ge	72	2	H2	96.52780144	1505618.043
In	115	1	He	95.96063823	5882570.533
Tb	159	1	He	99.26699395	14362559.790
Ir	193	1	He	98.69029666	7309367.390

Sample Name 4314467\_B70047Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 064SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:57:01  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	174.724522	1.0	62996.187
Be	9	2	H2	21.319534	1.5	7933.410
B	11	2	H2	2053.848262	0.8	671171.897
Na	23	1	He	130821.7308	0.5	113988184.967
Mg	24	1	He	10278.18447	0.3	5084773.150
Al	27	1	He	699.999548	0.6	176157.473
Si	28	2	H2	2386.745657	0.7	6469968.667
K	39	1	He	7356.668195	0.4	5241987.837
Ca	43	1	He	28872.33798	0.4	60393.373
Ti	47	1	He	26.183367	1.6	6084.600
V	51	1	He	30.399421	1.0	196038.520
Cr	52	1	He	24.553504	0.3	191141.637
Mn	55	1	He	215.043452	0.5	1255987.000
Fe	56	1	He	3898.180930	0.2	28538608.000
Co	59	1	He	46.663095	0.3	566212.480
Ni	60	1	He	29.798584	0.5	89777.037
Cu	63	1	He	45.993607	0.3	386167.363
Zn	66	1	He	1034.814922	0.8	1990310.583
As	75	1	He	23.948220	0.4	40812.487
Se	78	2	H2	17.950721	1.5	14168.963
Sr	88	1	He	119.339665	0.7	1328179.463
Mo	95	1	He	571.039878	0.6	3326107.583
Pd	105	1	He	1.203541	5.0	10672.653
Ag	107	1	He	9.720261	3.6	180904.523
Cd	111	1	He	21.508560	0.9	74736.057
Sn	118	1	He	23.971551	0.7	214208.617
Sb	121	1	He	34.795312	1.0	457523.560
Ba	138	1	He	38.277937	0.8	1151648.890
Pt	195	1	He	2.949133	0.5	37070.860
Hg	202	1	He	0.143037	7.7	1092.710
Tl	205	1	He	21.382778	0.7	985443.320
Pb	208	1	He	29.938032	0.4	1880685.750
Bi	209	1	He	20.475811	1.1	1090215.710
Th	232	1	He	19.942193	0.2	1294739.460
U	238	1	He	21.447611	1.4	1336941.283

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.57571606	545429.107
Sc	45	2	H2	95.44457689	4223035.500
Ge	72	1	He	91.71399390	457333.867
Ge	72	2	H2	95.92984721	1496291.293
In	115	1	He	90.88400494	5571363.210
Tb	159	1	He	96.53833218	13967760.207
Ir	193	1	He	94.80902282	7021905.933



Sample Name 4314468\_B70047Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 065SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:00:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	165.382984	0.2	59743.433
Be	9	2	H2	20.857314	0.9	7776.497
B	11	2	H2	1943.235432	0.7	637694.123
Na	23	1	He	122001.6940	0.5	107782525.060
Mg	24	1	He	9590.305804	0.7	4810765.763
Al	27	1	He	665.146845	0.4	169719.087
Si	28	2	H2	2259.126145	0.8	6136155.167
K	39	1	He	6888.686908	0.2	4981164.613
Ca	43	1	He	26853.15554	0.3	56952.237
Ti	47	1	He	25.002410	1.0	5891.187
V	51	1	He	28.690656	1.0	187563.973
Cr	52	1	He	23.219717	0.2	183397.420
Mn	55	1	He	199.301656	0.2	1180260.663
Fe	56	1	He	3630.018622	0.2	26945980.667
Co	59	1	He	44.301801	0.5	544204.857
Ni	60	1	He	28.332947	0.1	86426.943
Cu	63	1	He	43.210748	0.5	367303.333
Zn	66	1	He	974.261009	0.5	1897049.833
As	75	1	He	22.886588	0.4	39492.493
Se	78	2	H2	17.654845	1.3	14040.830
Sr	88	1	He	111.702500	0.7	1258577.117
Mo	95	1	He	535.747588	0.7	3139925.500
Pd	105	1	He	1.438956	0.9	12802.600
Ag	107	1	He	9.652929	1.8	180805.200
Cd	111	1	He	20.754687	0.3	72567.107
Sn	118	1	He	22.990342	1.4	206708.427
Sb	121	1	He	33.145667	1.5	438530.867
Ba	138	1	He	36.125989	0.9	1093657.380
Pt	195	1	He	2.889555	1.0	36144.193
Hg	202	1	He	0.125428	4.7	980.373
Tl	205	1	He	20.828339	0.7	955100.090
Pb	208	1	He	28.542917	0.5	1784207.383
Bi	209	1	He	19.912651	0.3	1057283.653
Th	232	1	He	19.466480	0.4	1260186.100
U	238	1	He	20.815269	0.5	1293924.487

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.83626712	553019.897
Sc	45	2	H2	95.62196791	4230884.333
Ge	72	1	He	92.84811366	462989.180
Ge	72	2	H2	96.65567488	1507612.583
In	115	1	He	91.44911245	5606005.380
Tb	159	1	He	96.05455231	13897763.957
Ir	193	1	He	94.53177841	7001372.190

Sample Name 10606718001\_B70047Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 066SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:04:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	15.675227	1.7	5816.450
Be	9	2	H2	0.055493	31.4	41.500
B	11	2	H2	160.422833	0.3	79177.767
Na	23	1	He	12709.33459	2.2	11647997.747
Mg	24	1	He	954.965348	2.1	500734.340
Al	27	1	He	29.221828	2.4	7801.043
Si	28	2	H2	215.624672	1.2	607219.520
K	39	1	He	671.688788	3.4	566786.447
Ca	43	1	He	2681.727594	2.3	5906.867
Ti	47	1	He	0.437755	13.2	108.667
V	51	1	He	0.934066	3.3	5745.733
Cr	52	1	He	0.294426	8.2	4742.113
Mn	55	1	He	18.674395	2.5	114865.687
Fe	56	1	He	336.442623	2.1	2598771.417
Co	59	1	He	2.417713	2.0	30998.823
Ni	60	1	He	0.776650	1.2	2662.917
Cu	63	1	He	2.400481	1.9	21561.280
Zn	66	1	He	97.683696	2.1	198380.687
As	75	1	He	0.209286	7.8	539.010
Se	78	2	H2	0.120574	9.8	137.000
Sr	88	1	He	9.310039	1.2	109449.057
Mo	95	1	He	50.452436	2.4	316559.177
Pd	105	1	He	0.005550	55.6	241.667
Ag	107	1	He	0.158244	29.4	3280.440
Cd	111	1	He	0.018376	6.7	90.020
Sn	118	1	He	0.290637	1.3	2935.333
Sb	121	1	He	1.360214	2.5	19301.737
Ba	138	1	He	1.555354	2.7	50475.163
Pt	195	1	He	0.011546	28.2	359.343
Hg	202	1	He	0.000092	2716.9	226.333
Tl	205	1	He	0.054003	25.5	3063.730
Pb	208	1	He	0.867131	3.1	59030.853
Bi	209	1	He	0.020706	21.6	3323.827
Th	232	1	He	0.023348	3.2	2561.940
U	238	1	He	0.031354	4.7	2982.040

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.21931765	573391.960
Sc	45	2	H2	97.12832064	4297534.333
Ge	72	1	He	96.77393060	482565.353
Ge	72	2	H2	97.94517045	1527725.833
In	115	1	He	97.92650635	6003082.007
Tb	159	1	He	99.83859031	14445261.870
Ir	193	1	He	98.54619208	7298694.473

Sample Name 4315307\_B70047Dx250  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 067SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:08:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.292058	1.8	1276.387
Be	9	2	H2	0.044985	15.1	37.500
B	11	2	H2	-12.935670		23865.610
Na	23	1	He	2491.894184	1.0	2275121.787
Mg	24	1	He	181.449250	2.0	98146.847
Al	27	1	He	7.457717	4.9	2031.477
Si	28	2	H2	41.391372	0.6	127436.500
K	39	1	He	128.935368	1.9	164307.097
Ca	43	1	He	517.615963	1.5	1141.830
Ti	47	1	He	0.098163	26.7	25.667
V	51	1	He	0.109764	115.6	142.197
Cr	52	1	He	0.224426	7.4	4145.263
Mn	55	1	He	3.670964	1.2	22622.130
Fe	56	1	He	66.688587	1.2	520012.103
Co	59	1	He	0.483940	2.2	6193.330
Ni	60	1	He	0.213440	10.5	868.693
Cu	63	1	He	0.478113	1.4	4507.377
Zn	66	1	He	18.995676	0.9	38402.547
As	75	1	He	0.056880	10.8	264.000
Se	78	2	H2	0.045078	23.7	76.333
Sr	88	1	He	1.808543	2.5	21184.140
Mo	95	1	He	9.748315	1.4	60872.593
Pd	105	1	He	0.005884	32.9	243.333
Ag	107	1	He	0.041001	0.8	913.373
Cd	111	1	He	0.008672	27.4	53.373
Sn	118	1	He	0.074192	5.9	848.367
Sb	121	1	He	0.268290	3.8	3818.893
Ba	138	1	He	0.298203	1.5	9690.143
Pt	195	1	He	-0.000340		202.667
Hg	202	1	He	-0.010182		159.667
Tl	205	1	He	0.011451	21.1	1016.717
Pb	208	1	He	0.170681	1.9	13706.080
Bi	209	1	He	0.009178	62.7	2656.983
Th	232	1	He	0.008869	32.6	1570.107
U	238	1	He	0.005979	57.3	1323.417

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.44075734	568703.623
Sc	45	2	H2	97.02571614	4292994.500
Ge	72	1	He	95.88776054	478146.447
Ge	72	2	H2	97.95748803	1527917.960
In	115	1	He	97.41884910	5971961.647
Tb	159	1	He	98.64851734	14273074.787
Ir	193	1	He	97.59427207	7228191.767

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 068\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:12:03  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	86.093267	0.2	31443.483
Be	9	2	H2	82.553486	0.3	31025.157
B	11	2	H2	28.656076	1.1	36942.947
Na	23	1	He	1068.872594	1.6	982113.343
Mg	24	1	He	1030.639503	0.6	535564.290
Al	27	1	He	1024.704431	0.2	268721.550
Si	28	2	H2	515.273944	0.7	1423925.083
K	39	1	He	1030.562801	0.6	825269.467
Ca	43	1	He	1009.231983	3.0	2212.797
Ti	47	1	He	79.944557	0.5	19358.020
V	51	1	He	81.109544	0.1	546137.547
Cr	52	1	He	82.651328	0.2	665028.853
Mn	55	1	He	80.767392	0.5	491805.740
Fe	56	1	He	525.054492	0.4	4015800.417
Co	59	1	He	83.991438	0.8	1075783.793
Ni	60	1	He	84.342514	0.3	267868.240
Cu	63	1	He	84.102094	0.2	745121.227
Zn	66	1	He	82.551706	0.6	167798.057
As	75	1	He	79.525427	0.3	142678.947
Se	78	2	H2	82.138800	1.4	65503.870
Sr	88	1	He	81.087062	0.3	952675.273
Mo	95	1	He	77.472296	1.3	486732.217
Pd	105	1	He	81.986302	1.0	771302.123
Ag	107	1	He	40.561371	2.9	813919.570
Cd	111	1	He	80.676799	1.2	302310.780
Sn	118	1	He	76.993193	1.7	741749.493
Sb	121	1	He	78.358796	1.3	1111302.797
Ba	138	1	He	78.635576	1.2	2551833.870
Pt	195	1	He	82.794813	0.6	1064829.873
Hg	202	1	He	3.907171	0.8	24794.343
Tl	205	1	He	42.138414	0.7	1997031.690
Pb	208	1	He	82.364999	0.6	5317209.217
Bi	209	1	He	81.548064	0.7	4491158.683
Th	232	1	He	77.389176	0.5	5201457.630
U	238	1	He	78.768483	0.8	5083945.757

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.39903783	568452.397
Sc	45	2	H2	96.57224332	4272930.167
Ge	72	1	He	96.81167568	482753.570
Ge	72	2	H2	97.13494480	1515088.123
In	115	1	He	98.03273599	6009594.087
Tb	159	1	He	99.29945211	14367256.037
Ir	193	1	He	98.20190510	7273195.310

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 069\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:15:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.213004	22.0	149.167
Be	9	2	H2	0.054179	20.6	41.000
B	11	2	H2	-60.402348		8747.693
Na	23	1	He	8.136649	22.9	18716.850
Mg	24	1	He	-6.491554		1278.403
Al	27	1	He	0.246714	85.2	138.333
Si	28	2	H2	-0.721816		11629.230
K	39	1	He	-1.992745		67588.897
Ca	43	1	He	1.588180	124.3	16.367
Ti	47	1	He	0.021394	19.2	7.000
V	51	1	He	0.070465	26.8	-122.430
Cr	52	1	He	0.031424	49.5	2569.563
Mn	55	1	He	0.034086	49.7	472.010
Fe	56	1	He	0.229446	50.2	12780.280
Co	59	1	He	0.025213	51.6	371.337
Ni	60	1	He	0.015432	34.3	244.667
Cu	63	1	He	0.016867	95.2	458.013
Zn	66	1	He	0.041948	52.2	290.667
As	75	1	He	0.016937	69.8	191.833
Se	78	2	H2	0.029696	39.6	64.000
Sr	88	1	He	0.017691	57.3	346.673
Mo	95	1	He	0.040085	41.6	260.003
Pd	105	1	He	0.026203	32.7	431.677
Ag	107	1	He	0.159336	22.3	3260.417
Cd	111	1	He	0.018546	70.8	89.617
Sn	118	1	He	0.024112	82.4	366.677
Sb	121	1	He	0.022906	44.2	358.343
Ba	138	1	He	0.018906	66.8	678.360
Pt	195	1	He	0.015515	62.1	403.340
Hg	202	1	He	0.009205	33.0	280.000
Tl	205	1	He	0.057331	29.1	3163.750
Pb	208	1	He	0.012212	90.4	3535.220
Bi	209	1	He	0.016558	75.8	3090.427
Th	232	1	He	0.027548	35.8	2842.013
U	238	1	He	0.014274	100.3	1870.180

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.49242562	562992.957
Sc	45	2	H2	97.06093217	4294552.667
Ge	72	1	He	95.34204620	475425.230
Ge	72	2	H2	97.83518419	1526010.293
In	115	1	He	97.18171147	5957424.657
Tb	159	1	He	98.44840608	14244121.457
Ir	193	1	He	98.66912398	7307799.263

Sample Name 4312078\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 070SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:19:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.211729	11.7	149.667
Be	9	2	H2	0.056163	21.1	42.000
B	11	2	H2	-61.095962		8580.930
Na	23	1	He	23.965230	5.9	33328.923
Mg	24	1	He	7.361345	7.0	8439.113
Al	27	1	He	13.520456	2.0	3624.777
Si	28	2	H2	8.708718	0.9	37813.070
K	39	1	He	2.453035	60.3	71606.003
Ca	43	1	He	57.252147	2.5	138.050
Ti	47	1	He	0.249355	11.3	62.333
V	51	1	He	-0.003519		-624.447
Cr	52	1	He	2.700630	0.4	24028.313
Mn	55	1	He	0.406302	3.9	2746.267
Fe	56	1	He	48.968907	0.6	385156.687
Co	59	1	He	0.048994	22.6	675.353
Ni	60	1	He	1.470721	2.1	4814.810
Cu	63	1	He	0.232479	2.2	2350.197
Zn	66	1	He	3.516193	1.9	7270.503
As	75	1	He	0.021350	33.3	200.667
Se	78	2	H2	0.032785	17.6	67.000
Sr	88	1	He	0.128656	11.3	1638.440
Mo	95	1	He	0.046301	13.4	303.337
Pd	105	1	He	0.013171	76.1	315.003
Ag	107	1	He	0.058297	14.0	1271.733
Cd	111	1	He	0.036749	21.5	159.613
Sn	118	1	He	0.127499	8.2	1373.413
Sb	121	1	He	0.029170	14.3	453.347
Ba	138	1	He	1.503888	0.7	49103.620
Pt	195	1	He	0.016586	39.8	422.010
Hg	202	1	He	-0.000195		224.000
Tl	205	1	He	0.031840	12.2	1993.500
Pb	208	1	He	0.062252	6.0	6814.030
Bi	209	1	He	0.041346	21.5	4524.193
Th	232	1	He	0.028900	24.0	2975.373
U	238	1	He	0.018056	30.9	2148.537

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.52261600	569196.560
Sc	45	2	H2	97.67967814	4321929.667
Ge	72	1	He	95.77818183	477600.030
Ge	72	2	H2	98.67952498	1539180.123
In	115	1	He	98.48402937	6037259.233
Tb	159	1	He	99.52333034	14399648.117
Ir	193	1	He	100.0461004	7409783.220

Sample Name 4312079\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 071SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:23:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	114.423830	0.7	41981.707
Be	9	2	H2	110.578238	0.4	41763.003
B	11	2	H2	51.763373	2.4	44496.523
Na	23	1	He	2216.597414	0.1	2036660.907
Mg	24	1	He	2179.186442	0.4	1134173.160
Al	27	1	He	2170.077351	0.5	572501.897
Si	28	2	H2	554.700981	0.9	1539703.417
K	39	1	He	2178.997069	0.1	1677494.190
Ca	43	1	He	2189.618536	1.3	4815.000
Ti	47	1	He	107.504885	0.4	26190.883
V	51	1	He	108.519374	0.5	735402.857
Cr	52	1	He	111.063441	0.3	898310.190
Mn	55	1	He	107.953755	0.3	661307.627
Fe	56	1	He	2223.803224	0.2	17076691.333
Co	59	1	He	113.607570	0.2	1455424.210
Ni	60	1	He	114.882011	0.4	364872.283
Cu	63	1	He	112.778727	0.6	999322.043
Zn	66	1	He	112.473155	0.3	228598.387
As	75	1	He	108.168823	0.3	194057.343
Se	78	2	H2	111.700145	0.7	89988.850
Sr	88	1	He	110.008875	0.6	1292736.830
Mo	95	1	He	106.078113	1.6	662779.730
Pd	105	1	He	22.210531	1.6	207925.527
Ag	107	1	He	51.538999	0.9	1028610.220
Cd	111	1	He	109.543018	0.8	408226.637
Sn	118	1	He	104.871440	0.8	1004774.620
Sb	121	1	He	106.654994	0.5	1504352.167
Ba	138	1	He	107.068980	0.7	3455573.697
Pt	195	1	He	22.114627	1.3	287565.217
Hg	202	1	He	-0.000531		223.667
Tl	205	1	He	113.184149	0.8	5419667.000
Pb	208	1	He	110.640131	1.0	7216626.247
Bi	209	1	He	108.088879	0.8	6004615.747
Th	232	1	He	109.663607	1.4	7434658.430
U	238	1	He	106.223118	1.2	6915506.150

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.97913100	571945.603
Sc	45	2	H2	97.06667658	4294806.833
Ge	72	1	He	96.83564896	482873.113
Ge	72	2	H2	98.14197214	1530795.500
In	115	1	He	97.49458491	5976604.397
Tb	159	1	He	100.3432342	14518276.863
Ir	193	1	He	99.07016117	7337501.557

Sample Name 10604943026\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 072SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:27:02  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.636428	1.8	1057.207
Be	9	2	H2	0.107937	11.2	62.500
B	11	2	H2	-39.842345		15601.197
Na	23	1	He	8893.690946	1.5	7975154.673
Mg	24	1	He	12581.42964	1.4	6396097.613
Al	27	1	He	41.542275	1.7	10816.253
Si	28	2	H2	1097.647646	0.6	3092992.333
K	39	1	He	1626.106041	1.4	1244428.627
Ca	43	1	He	36505.62781	1.5	78476.653
Ti	47	1	He	0.216988	20.1	53.667
V	51	1	He	0.422006	31.9	2205.923
Cr	52	1	He	0.405764	5.7	5519.723
Mn	55	1	He	6.527635	1.6	39441.600
Fe	56	1	He	44.973269	2.5	349241.103
Co	59	1	He	0.339270	2.6	4333.990
Ni	60	1	He	50.290295	2.2	157387.330
Cu	63	1	He	115.943819	1.9	1011632.837
Zn	66	1	He	159.365298	1.3	318875.813
As	75	1	He	0.708289	1.3	1412.737
Se	78	2	H2	0.249540	3.9	246.000
Sr	88	1	He	125.614620	1.6	1453555.083
Mo	95	1	He	1.221462	4.4	7461.973
Pd	105	1	He	0.107528	9.0	1166.727
Ag	107	1	He	0.279025	12.4	5526.150
Cd	111	1	He	0.116566	15.1	445.000
Sn	118	1	He	7.752263	0.4	72659.063
Sb	121	1	He	3.585611	2.2	49418.847
Ba	138	1	He	20.076605	1.5	632724.443
Pt	195	1	He	0.022652	20.4	493.343
Hg	202	1	He	-0.004973		190.667
Tl	205	1	He	0.158269	4.4	7869.057
Pb	208	1	He	0.573557	3.9	39232.617
Bi	209	1	He	0.080862	10.7	6531.740
Th	232	1	He	0.116890	7.5	8721.313
U	238	1	He	0.240859	5.0	16266.957

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.10667183	560670.023
Sc	45	2	H2	98.97287386	4379148.333
Ge	72	1	He	95.37152366	475572.220
Ge	72	2	H2	100.1100290	1561492.790
In	115	1	He	95.20707439	5836375.630
Tb	159	1	He	97.94852526	14171795.623
Ir	193	1	He	96.88154090	7175404.267



Sample Name 4315177\_B70039Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 073SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:30:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.659609	5.7	321.500
Be	9	2	H2	0.063194	13.2	45.667
B	11	2	H2	-62.376370		8344.967
Na	23	1	He	1761.603155	1.2	1649180.550
Mg	24	1	He	2490.343894	1.3	1317960.033
Al	27	1	He	9.982567	4.7	2756.260
Si	28	2	H2	218.251465	1.4	631154.750
K	39	1	He	316.110381	1.5	308599.233
Ca	43	1	He	7151.005206	0.9	15968.480
Ti	47	1	He	0.051446	33.2	14.667
V	51	1	He	0.162076	73.9	499.680
Cr	52	1	He	0.139103	9.8	3540.440
Mn	55	1	He	1.293799	2.4	8336.393
Fe	56	1	He	8.833467	4.0	80390.327
Co	59	1	He	0.081335	20.7	1113.383
Ni	60	1	He	10.040802	0.4	32530.840
Cu	63	1	He	23.185595	0.7	208638.437
Zn	66	1	He	32.025360	0.9	66173.787
As	75	1	He	0.156381	11.8	451.343
Se	78	2	H2	0.044534	27.3	78.333
Sr	88	1	He	24.681135	0.6	294293.850
Mo	95	1	He	0.267038	5.2	1727.443
Pd	105	1	He	0.037376	8.5	553.350
Ag	107	1	He	0.075352	12.0	1645.110
Cd	111	1	He	0.024695	42.1	116.353
Sn	118	1	He	1.545963	2.6	15373.650
Sb	121	1	He	0.695846	4.2	10132.080
Ba	138	1	He	3.884546	0.2	129013.143
Pt	195	1	He	0.005190	70.9	280.667
Hg	202	1	He	-0.008569		174.333
Tl	205	1	He	0.041345	42.5	2486.947
Pb	208	1	He	0.114241	13.0	10364.927
Bi	209	1	He	0.020381	73.0	3333.837
Th	232	1	He	0.028429	44.0	2930.387
U	238	1	He	0.047229	32.3	4047.370

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.63708242	581929.460
Sc	45	2	H2	99.77809265	4414776.000
Ge	72	1	He	98.21870641	489769.760
Ge	72	2	H2	100.8997551	1573810.753
In	115	1	He	100.2683630	6146642.300
Tb	159	1	He	101.4081167	14672350.613
Ir	193	1	He	99.62122689	7378315.517

Sample Name 4312080\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 074SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:34:31  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	109.485879	0.4	40497.860
Be	9	2	H2	105.148692	0.2	40035.370
B	11	2	H2	65.745975	1.3	49350.007
Na	23	1	He	10435.73378	1.1	9490772.567
Mg	24	1	He	13843.95740	1.4	7138803.643
Al	27	1	He	2112.560298	1.2	554120.023
Si	28	2	H2	1577.989491	0.2	4390276.833
K	39	1	He	3613.893132	1.1	2720241.000
Ca	43	1	He	36414.98326	1.1	79411.263
Ti	47	1	He	103.711392	1.3	25121.687
V	51	1	He	106.122754	0.6	715020.773
Cr	52	1	He	107.761862	1.4	866664.373
Mn	55	1	He	110.075395	1.0	670426.017
Fe	56	1	He	2183.138361	0.8	16668648.000
Co	59	1	He	107.017660	0.8	1370299.793
Ni	60	1	He	155.234414	0.9	492710.397
Cu	63	1	He	214.574199	1.1	1900032.707
Zn	66	1	He	253.456413	0.9	514611.503
As	75	1	He	105.475741	0.8	189132.907
Se	78	2	H2	106.254564	0.4	86600.160
Sr	88	1	He	223.344469	0.9	2623070.953
Mo	95	1	He	106.328257	1.2	655162.393
Pd	105	1	He	21.078486	1.1	194611.950
Ag	107	1	He	49.966512	0.5	983480.220
Cd	111	1	He	106.575796	1.0	391666.987
Sn	118	1	He	110.334174	0.4	1042507.093
Sb	121	1	He	107.832583	1.2	1499849.200
Ba	138	1	He	122.740919	1.0	3906383.173
Pt	195	1	He	21.174420	0.9	273423.927
Hg	202	1	He	0.001438	333.1	234.667
Tl	205	1	He	108.378852	1.0	5153257.943
Pb	208	1	He	106.327295	0.9	6887026.673
Bi	209	1	He	102.859691	0.6	5671851.793
Th	232	1	He	106.976218	0.6	7199347.183
U	238	1	He	104.455085	0.4	6750297.813

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.43854704	568690.313
Sc	45	2	H2	97.85366772	4329628.000
Ge	72	1	He	96.78863958	482638.700
Ge	72	2	H2	99.28457959	1548617.623
In	115	1	He	96.14628328	5893950.930
Tb	159	1	He	99.64762523	14417631.867
Ir	193	1	He	98.33057814	7282725.310

Sample Name 4312081\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 075SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:38:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	108.265343	0.5	39539.500
Be	9	2	H2	104.131583	0.2	39145.717
B	11	2	H2	64.533303	0.9	48339.247
Na	23	1	He	10277.84374	0.8	9219276.740
Mg	24	1	He	13635.90552	1.2	6935319.063
Al	27	1	He	2094.149246	0.8	541768.873
Si	28	2	H2	1562.645320	0.1	4292622.000
K	39	1	He	3570.023716	0.8	2651231.837
Ca	43	1	He	35978.27848	1.1	77384.140
Ti	47	1	He	104.355593	0.3	24931.683
V	51	1	He	105.520051	0.6	701198.430
Cr	52	1	He	106.518350	0.6	844964.627
Mn	55	1	He	108.844329	0.4	653845.500
Fe	56	1	He	2164.992532	0.1	16303587.000
Co	59	1	He	106.660384	0.7	1345778.580
Ni	60	1	He	153.576458	0.9	480330.113
Cu	63	1	He	211.286581	0.1	1843660.707
Zn	66	1	He	252.588155	0.3	505365.883
As	75	1	He	105.085394	0.5	185682.763
Se	78	2	H2	106.142207	0.7	85722.010
Sr	88	1	He	222.669528	0.8	2576957.513
Mo	95	1	He	105.417461	0.8	642167.040
Pd	105	1	He	21.128662	1.6	192850.390
Ag	107	1	He	49.403588	0.5	961294.700
Cd	111	1	He	105.525184	0.9	383390.070
Sn	118	1	He	109.955226	0.5	1027081.730
Sb	121	1	He	107.782753	0.5	1482145.657
Ba	138	1	He	121.962371	0.5	3837496.610
Pt	195	1	He	21.081256	0.5	268988.770
Hg	202	1	He	-0.002323		208.333
Tl	205	1	He	107.849186	0.6	5067224.507
Pb	208	1	He	105.315110	0.7	6740445.733
Bi	209	1	He	101.591626	1.2	5531201.793
Th	232	1	He	105.790268	0.7	7029293.020
U	238	1	He	103.244297	0.2	6587906.570

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.14026752	560872.330
Sc	45	2	H2	96.61328286	4274746.000
Ge	72	1	He	95.37335526	475581.353
Ge	72	2	H2	98.38659051	1534611.000
In	115	1	He	95.04913571	5826693.687
Tb	159	1	He	98.45843641	14245572.707
Ir	193	1	He	97.08821833	7190711.560

Sample Name 10604943027\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 076SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:42:01  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.567622	1.4	1026.703
Be	9	2	H2	0.128706	15.8	70.167
B	11	2	H2	-43.964138		14194.813
Na	23	1	He	8589.086973	0.4	7775400.713
Mg	24	1	He	12199.04629	0.3	6260661.157
Al	27	1	He	34.972886	1.3	9203.173
Si	28	2	H2	1090.036552	0.5	3057229.250
K	39	1	He	1569.162741	0.6	1214648.837
Ca	43	1	He	35471.13786	0.3	76977.433
Ti	47	1	He	0.149849	8.2	38.000
V	51	1	He	0.354923	38.9	1787.333
Cr	52	1	He	0.538066	3.7	6628.177
Mn	55	1	He	8.777053	0.6	53444.440
Fe	56	1	He	35.341865	0.8	279467.417
Co	59	1	He	0.327733	7.5	4226.623
Ni	60	1	He	68.339150	0.5	215717.333
Cu	63	1	He	102.256837	0.4	900221.503
Zn	66	1	He	91.990489	0.6	185788.040
As	75	1	He	0.656874	3.5	1333.397
Se	78	2	H2	0.200822	11.7	205.333
Sr	88	1	He	121.839150	0.9	1422413.677
Mo	95	1	He	1.150130	1.9	7170.487
Pd	105	1	He	0.095176	11.7	1075.050
Ag	107	1	He	0.242169	20.9	4914.257
Cd	111	1	He	0.067347	31.0	271.377
Sn	118	1	He	0.131336	13.1	1391.750
Sb	121	1	He	2.972689	1.6	41812.403
Ba	138	1	He	18.966492	0.6	609895.150
Pt	195	1	He	0.009166	31.8	324.670
Hg	202	1	He	-0.006345		184.000
Tl	205	1	He	0.136574	12.1	6920.213
Pb	208	1	He	0.402703	4.2	28640.277
Bi	209	1	He	0.051272	43.3	4957.737
Th	232	1	He	0.080306	18.0	6339.957
U	238	1	He	0.187542	10.5	12974.917

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.97544819	565901.623
Sc	45	2	H2	98.50872586	4358611.667
Ge	72	1	He	96.20543151	479730.520
Ge	72	2	H2	99.71513014	1555333.250
In	115	1	He	97.12907477	5954197.927
Tb	159	1	He	98.87188299	14305392.703
Ir	193	1	He	97.70302982	7236246.767

Sample Name 10604943028\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 077SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:45:46  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.420111	1.6	977.530
Be	9	2	H2	0.095634	7.7	57.833
B	11	2	H2	-44.574623		14079.707
Na	23	1	He	8390.196111	1.4	7683866.970
Mg	24	1	He	12001.06893	1.5	6230598.450
Al	27	1	He	45.595313	1.6	12113.913
Si	28	2	H2	1099.642219	1.1	3102170.417
K	39	1	He	1520.747783	1.5	1193014.357
Ca	43	1	He	35037.85871	1.4	76920.587
Ti	47	1	He	0.175263	22.2	44.667
V	51	1	He	0.320106	14.0	1567.220
Cr	52	1	He	0.343962	0.8	5138.247
Mn	55	1	He	18.486313	1.0	113576.883
Fe	56	1	He	64.046107	1.2	503191.553
Co	59	1	He	0.436395	3.6	5635.770
Ni	60	1	He	235.629236	1.2	746973.833
Cu	63	1	He	180.470151	1.5	1596361.047
Zn	66	1	He	940.300320	1.6	1906449.377
As	75	1	He	0.602886	3.8	1243.057
Se	78	2	H2	0.192555	7.4	200.000
Sr	88	1	He	121.615452	1.2	1426889.770
Mo	95	1	He	1.127207	0.5	7035.753
Pd	105	1	He	0.105256	12.0	1170.057
Ag	107	1	He	0.086363	10.0	1813.463
Cd	111	1	He	0.087992	3.2	348.070
Sn	118	1	He	2.537507	2.3	24381.307
Sb	121	1	He	6.427332	1.1	90452.247
Ba	138	1	He	20.931916	0.6	673835.223
Pt	195	1	He	0.011446	16.1	356.010
Hg	202	1	He	-0.002056		212.000
Tl	205	1	He	0.145995	3.8	7405.470
Pb	208	1	He	1.579458	1.2	104807.030
Bi	209	1	He	0.045029	20.4	4624.237
Th	232	1	He	0.044984	10.9	3985.647
U	238	1	He	0.192887	2.6	13333.590

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.07926712	572548.603
Sc	45	2	H2	99.08977346	4384320.667
Ge	72	1	He	96.69562151	482174.863
Ge	72	2	H2	100.5130033	1567778.290
In	115	1	He	97.23711512	5960821.007
Tb	159	1	He	99.41568643	14384073.533
Ir	193	1	He	97.76824397	7241076.767

Sample Name 10604943029\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 078SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:49:31  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.396006	2.0	959.197
Be	9	2	H2	0.080502	4.8	51.500
B	11	2	H2	-45.154392		13756.747
Na	23	1	He	10332.91920	10.1	8574407.163
Mg	24	1	He	13417.01363	10.1	6313056.157
Al	27	1	He	60.479921	10.5	14538.070
Si	28	2	H2	956.883123	0.8	2675112.083
K	39	1	He	1680.556929	10.0	1188712.510
Ca	43	1	He	38412.17132	9.8	76443.433
Ti	47	1	He	0.201046	20.7	46.000
V	51	1	He	0.224119	9.6	831.873
Cr	52	1	He	0.495876	15.0	5770.483
Mn	55	1	He	1.210154	9.9	6971.677
Fe	56	1	He	30.934677	10.2	225589.813
Co	59	1	He	0.069012	14.9	852.030
Ni	60	1	He	4.995183	11.3	14584.640
Cu	63	1	He	39.919426	10.5	321630.520
Zn	66	1	He	45.892757	9.9	84907.103
As	75	1	He	0.432793	9.8	855.863
Se	78	2	H2	0.172481	19.5	181.000
Sr	88	1	He	135.030065	9.1	1443133.833
Mo	95	1	He	1.209583	9.5	6913.027
Pd	105	1	He	0.099820	20.9	1021.713
Ag	107	1	He	0.038896	13.6	796.700
Cd	111	1	He	0.043357	24.3	165.753
Sn	118	1	He	0.107588	13.1	1066.713
Sb	121	1	He	0.211700	11.1	2760.303
Ba	138	1	He	21.847912	10.2	643805.233
Pt	195	1	He	0.008143	43.6	286.670
Hg	202	1	He	-0.004755		179.000
Tl	205	1	He	0.030321	14.4	1758.467
Pb	208	1	He	0.176556	11.3	13005.817
Bi	209	1	He	0.032897	15.8	3643.893
Th	232	1	He	0.027020	16.0	2556.943
U	238	1	He	0.365199	10.8	22354.313

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	86.69614812	522067.113
Sc	45	2	H2	98.13084566	4341892.000
Ge	72	1	He	88.55030131	441558.043
Ge	72	2	H2	99.29235314	1548738.873
In	115	1	He	89.56236122	5490343.923
Tb	159	1	He	91.53509790	13243861.470
Ir	193	1	He	90.12713182	6675147.817

Sample Name 10604943029\_B70039Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 079SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:53:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.377466	7.3	211.667
Be	9	2	H2	0.048678	13.8	39.333
B	11	2	H2	-68.810007		6132.743
Na	23	1	He	955.927353	0.6	884627.877
Mg	24	1	He	1233.049623	0.6	643552.113
Al	27	1	He	7.433726	2.0	2036.147
Si	28	2	H2	95.282662	0.4	278671.263
K	39	1	He	152.195706	0.6	182346.990
Ca	43	1	He	3520.314836	1.3	7730.517
Ti	47	1	He	0.022316	28.1	7.333
V	51	1	He	-0.026684		-784.533
Cr	52	1	He	0.092883	11.5	3106.337
Mn	55	1	He	0.130537	4.3	1070.710
Fe	56	1	He	3.363998	0.8	37034.063
Co	59	1	He	0.012202	10.9	212.667
Ni	60	1	He	0.472041	2.7	1704.103
Cu	63	1	He	3.702757	0.7	33238.487
Zn	66	1	He	4.408907	2.5	9196.267
As	75	1	He	0.048955	5.6	253.333
Se	78	2	H2	0.019737	54.8	57.000
Sr	88	1	He	12.344904	1.6	145726.320
Mo	95	1	He	0.126945	4.7	811.360
Pd	105	1	He	0.017142	32.1	351.677
Ag	107	1	He	0.020867	10.4	516.680
Cd	111	1	He	0.003782	41.5	35.520
Sn	118	1	He	0.023371	27.5	365.010
Sb	121	1	He	0.024764	3.1	390.010
Ba	138	1	He	1.989141	1.7	64831.217
Pt	195	1	He	0.000476	564.6	214.667
Hg	202	1	He	-0.012171		148.333
Tl	205	1	He	0.006542	47.7	791.697
Pb	208	1	He	0.018853	5.7	4003.603
Bi	209	1	He	0.003871	79.6	2383.593
Th	232	1	He	0.004367	45.2	1276.743
U	238	1	He	0.030908	8.4	2942.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.94666564	571750.103
Sc	45	2	H2	98.09264253	4340201.667
Ge	72	1	He	97.19411122	484660.593
Ge	72	2	H2	99.67605403	1554723.750
In	115	1	He	98.34277885	6028600.307
Tb	159	1	He	99.37961701	14378854.787
Ir	193	1	He	98.19863652	7272953.227

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 080\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:57:00  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	90.466740	11.2	30918.903
Be	9	2	H2	87.471055	11.3	30761.800
B	11	2	H2	19.751091	55.2	31953.640
Na	23	1	He	1041.427527	0.6	954964.673
Mg	24	1	He	1039.304790	0.6	538810.017
Al	27	1	He	1027.144962	0.3	268748.437
Si	28	2	H2	547.876501	10.8	1416621.373
K	39	1	He	1041.424946	0.5	831324.130
Ca	43	1	He	1048.220126	1.7	2292.457
Ti	47	1	He	81.455433	0.7	19679.780
V	51	1	He	81.833127	0.3	549768.873
Cr	52	1	He	83.665000	0.1	671627.770
Mn	55	1	He	81.323998	0.5	494071.917
Fe	56	1	He	527.863177	0.4	4028111.000
Co	59	1	He	84.985007	0.7	1084838.670
Ni	60	1	He	85.322390	0.4	270066.197
Cu	63	1	He	85.335576	0.7	753510.210
Zn	66	1	He	83.574992	0.2	169306.443
As	75	1	He	81.075876	0.2	144970.053
Se	78	2	H2	88.250137	11.1	66595.813
Sr	88	1	He	83.082936	0.3	972851.467
Mo	95	1	He	78.167726	0.6	489107.353
Pd	105	1	He	83.609922	1.1	783327.567
Ag	107	1	He	41.022124	1.9	819868.060
Cd	111	1	He	82.136931	0.3	306533.473
Sn	118	1	He	77.712333	1.2	745637.150
Sb	121	1	He	79.139509	0.8	1117811.130
Ba	138	1	He	80.179132	0.9	2591300.690
Pt	195	1	He	84.626140	0.4	1076598.747
Hg	202	1	He	3.955043	1.6	24824.410
Tl	205	1	He	43.157116	1.0	2023178.460
Pb	208	1	He	84.356595	0.1	5386662.130
Bi	209	1	He	82.522086	0.4	4558819.933
Th	232	1	He	77.660538	0.4	5235743.360
U	238	1	He	79.207417	0.9	5127729.717

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.18457382	567160.937
Sc	45	2	H2	91.03084098	4027745.583
Ge	72	1	He	96.48671506	481133.147
Ge	72	2	H2	92.50233711	1442829.793
In	115	1	He	97.62913928	5984852.837
Tb	159	1	He	98.22195617	14211357.290
Ir	193	1	He	98.50298328	7295494.270



Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 081\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:00:45  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.143761	34.4	124.500
Be	9	2	H2	0.079529	25.1	50.833
B	11	2	H2	-72.300688		4981.987
Na	23	1	He	1.797520	8.8	13129.187
Mg	24	1	He	-5.460537		1818.460
Al	27	1	He	0.711275	18.0	261.333
Si	28	2	H2	-0.641115		11914.110
K	39	1	He	-2.693578		67582.167
Ca	43	1	He	3.740458	17.7	21.183
Ti	47	1	He	0.048811	30.2	13.667
V	51	1	He	0.025372	179.5	-427.760
Cr	52	1	He	0.075071	6.2	2938.970
Mn	55	1	He	0.058932	15.9	627.350
Fe	56	1	He	0.474179	14.4	14745.450
Co	59	1	He	0.064807	17.7	882.697
Ni	60	1	He	0.067987	20.2	414.010
Cu	63	1	He	0.057865	26.1	826.693
Zn	66	1	He	0.079173	22.6	370.007
As	75	1	He	0.047137	28.0	248.333
Se	78	2	H2	0.029827	8.6	65.333
Sr	88	1	He	0.067205	22.6	931.700
Mo	95	1	He	0.064807	20.0	418.677
Pd	105	1	He	0.043971	18.1	603.350
Ag	107	1	He	0.189972	17.7	3912.260
Cd	111	1	He	0.056017	19.1	231.257
Sn	118	1	He	0.058880	17.7	706.690
Sb	121	1	He	0.060296	11.1	893.370
Ba	138	1	He	0.058759	14.7	1981.830
Pt	195	1	He	0.056793	14.9	937.370
Hg	202	1	He	0.015000	15.9	318.667
Tl	205	1	He	0.073023	18.1	3935.623
Pb	208	1	He	0.051866	15.8	6122.240
Bi	209	1	He	0.058898	17.9	5507.910
Th	232	1	He	0.064310	12.7	5399.490
U	238	1	He	0.051346	18.0	4335.770

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.18623445	567170.937
Sc	45	2	H2	97.57447829	4317275.000
Ge	72	1	He	96.55170491	481457.220
Ge	72	2	H2	99.75221323	1555911.663
In	115	1	He	98.08108419	6012557.923
Tb	159	1	He	99.18134881	14350168.123
Ir	193	1	He	100.0409557	7409402.183

Sample Name 10604943037\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 082SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:04:30  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.552041	3.7	1013.533
Be	9	2	H2	0.049861	16.3	39.667
B	11	2	H2	-47.196645		13056.627
Na	23	1	He	9443.322911	1.7	8537742.580
Mg	24	1	He	12062.48151	2.2	6183237.200
Al	27	1	He	148.021803	2.1	38662.510
Si	28	2	H2	948.428674	1.2	2642925.250
K	39	1	He	1536.790930	1.1	1189737.847
Ca	43	1	He	34802.23575	1.4	75441.063
Ti	47	1	He	0.192820	7.5	48.333
V	51	1	He	0.235431	42.9	986.917
Cr	52	1	He	0.300085	4.3	4722.773
Mn	55	1	He	3.906363	2.2	23907.483
Fe	56	1	He	91.202874	1.5	702811.727
Co	59	1	He	0.258904	4.6	3328.390
Ni	60	1	He	0.799341	8.4	2700.927
Cu	63	1	He	155.659562	1.0	1361633.333
Zn	66	1	He	77.431330	1.3	155437.377
As	75	1	He	0.384046	1.4	842.193
Se	78	2	H2	0.123578	19.4	141.667
Sr	88	1	He	123.982587	1.0	1438399.870
Mo	95	1	He	1.093523	1.8	6750.287
Pd	105	1	He	0.102365	5.6	1130.053
Ag	107	1	He	0.076490	17.9	1598.440
Cd	111	1	He	0.033859	19.8	145.120
Sn	118	1	He	0.195366	4.8	1981.823
Sb	121	1	He	0.191881	7.2	2705.287
Ba	138	1	He	19.945874	0.5	635087.697
Pt	195	1	He	0.010317	53.4	338.670
Hg	202	1	He	0.004905	67.5	254.000
Tl	205	1	He	0.023570	28.3	1586.777
Pb	208	1	He	0.580300	1.8	40009.807
Bi	209	1	He	0.148316	6.2	10187.400
Th	232	1	He	0.025530	22.3	2658.627
U	238	1	He	0.325779	1.5	21658.147

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.88061612	565330.563
Sc	45	2	H2	97.81150943	4327762.667
Ge	72	1	He	95.61100052	476766.377
Ge	72	2	H2	99.47815987	1551637.043
In	115	1	He	96.17539254	5895735.383
Tb	159	1	He	98.77507863	14291386.453
Ir	193	1	He	96.81535912	7170502.600

Sample Name 10604943038\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 083SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:08:14  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.385899	1.9	964.863
Be	9	2	H2	0.056768	26.2	42.833
B	11	2	H2	-48.408960		12834.270
Na	23	1	He	9222.885629	0.7	8485043.413
Mg	24	1	He	12126.56877	0.8	6325406.783
Al	27	1	He	87.253376	0.3	23222.000
Si	28	2	H2	960.291411	0.1	2711320.083
K	39	1	He	1513.671118	0.5	1193404.540
Ca	43	1	He	34647.02045	0.8	76421.043
Ti	47	1	He	0.240829	28.6	61.000
V	51	1	He	0.246783	44.0	1079.257
Cr	52	1	He	0.394650	5.6	5573.743
Mn	55	1	He	1.099177	0.7	7041.707
Fe	56	1	He	24.241594	1.8	198363.080
Co	59	1	He	0.075616	2.4	1028.040
Ni	60	1	He	0.740331	3.3	2558.900
Cu	63	1	He	32.561494	0.2	289834.863
Zn	66	1	He	48.166076	0.1	98384.490
As	75	1	He	0.383702	3.7	855.527
Se	78	2	H2	0.157853	4.4	171.000
Sr	88	1	He	122.184904	0.7	1441223.050
Mo	95	1	He	1.117871	1.3	7007.073
Pd	105	1	He	0.096932	14.3	1096.720
Ag	107	1	He	0.026049	14.0	616.683
Cd	111	1	He	0.024987	9.6	114.407
Sn	118	1	He	0.114472	1.0	1236.733
Sb	121	1	He	0.182938	3.4	2621.933
Ba	138	1	He	20.074022	0.7	648958.010
Pt	195	1	He	0.006784	25.3	300.670
Hg	202	1	He	-0.002490		212.667
Tl	205	1	He	0.017122	3.0	1315.077
Pb	208	1	He	0.066700	4.9	7209.083
Bi	209	1	He	0.054188	2.5	5214.450
Th	232	1	He	0.014237	7.4	1963.503
U	238	1	He	0.326681	5.2	22287.560

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.51566743	575176.520
Sc	45	2	H2	99.10424559	4384961.000
Ge	72	1	He	97.19856055	484682.780
Ge	72	2	H2	100.2613222	1563852.627
In	115	1	He	97.64747237	5985976.690
Tb	159	1	He	101.0126630	14615133.947
Ir	193	1	He	99.37604655	7360156.557

Sample Name 10604943039\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 084SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:11:59  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.290324	4.5	916.697
Be	9	2	H2	0.045475	32.0	38.000
B	11	2	H2	-47.635383		12911.167
Na	23	1	He	9615.489514	0.8	8798616.743
Mg	24	1	He	12321.30547	0.7	6392769.280
Al	27	1	He	81.904349	1.3	21686.370
Si	28	2	H2	952.981025	0.9	2654769.000
K	39	1	He	1546.026089	1.6	1210863.630
Ca	43	1	He	35050.09060	1.3	76895.320
Ti	47	1	He	0.161745	6.2	41.333
V	51	1	He	0.151710	40.5	422.397
Cr	52	1	He	0.445369	2.9	5952.557
Mn	55	1	He	1.215971	1.4	7720.723
Fe	56	1	He	88.776443	1.1	692678.040
Co	59	1	He	0.120963	3.0	1605.427
Ni	60	1	He	1.654848	1.4	5454.367
Cu	63	1	He	74.941614	1.2	664257.997
Zn	66	1	He	75.960740	1.2	154479.913
As	75	1	He	0.387570	5.4	859.360
Se	78	2	H2	0.139857	14.8	154.667
Sr	88	1	He	121.348253	1.2	1426192.167
Mo	95	1	He	1.071631	2.5	6682.920
Pd	105	1	He	0.093087	2.8	1055.050
Ag	107	1	He	0.020547	20.1	503.350
Cd	111	1	He	0.030021	6.5	132.463
Sn	118	1	He	0.074184	15.8	845.033
Sb	121	1	He	0.192748	2.0	2745.297
Ba	138	1	He	19.394187	1.6	623582.397
Pt	195	1	He	0.005673	36.2	280.667
Hg	202	1	He	-0.003154		204.333
Tl	205	1	He	0.008210	22.3	868.370
Pb	208	1	He	0.173541	1.4	13944.527
Bi	209	1	He	0.055124	5.2	5197.773
Th	232	1	He	0.010907	21.4	1715.130
U	238	1	He	0.342306	1.3	23008.780

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.01060717	572135.147
Sc	45	2	H2	97.77995851	4326366.667
Ge	72	1	He	96.85900793	482989.593
Ge	72	2	H2	99.31329118	1549065.460
In	115	1	He	97.12834097	5954152.943
Tb	159	1	He	99.03801270	14329429.373
Ir	193	1	He	98.08326563	7264408.433

Sample Name 10604943040\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 085SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:15:44  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.515877	1.4	998.697
Be	9	2	H2	0.053090	6.6	40.833
B	11	2	H2	-47.807086		12839.103
Na	23	1	He	9837.320294	1.1	8939632.157
Mg	24	1	He	12552.75071	1.1	6467950.943
Al	27	1	He	76.383204	1.6	20090.143
Si	28	2	H2	965.947496	0.5	2687121.000
K	39	1	He	1580.774007	0.8	1228083.890
Ca	43	1	He	35737.20689	1.3	77865.533
Ti	47	1	He	0.180597	21.1	45.667
V	51	1	He	0.158881	48.2	472.707
Cr	52	1	He	0.376650	5.2	5360.327
Mn	55	1	He	1.234829	2.0	7780.743
Fe	56	1	He	90.311799	1.1	699641.397
Co	59	1	He	0.122848	7.1	1611.427
Ni	60	1	He	1.728420	0.7	5625.767
Cu	63	1	He	74.990343	1.1	657521.313
Zn	66	1	He	85.951932	1.2	172884.353
As	75	1	He	0.388399	3.3	851.693
Se	78	2	H2	0.140964	8.8	155.000
Sr	88	1	He	124.525713	1.4	1447711.593
Mo	95	1	He	1.109194	0.8	6853.667
Pd	105	1	He	0.093862	14.4	1051.717
Ag	107	1	He	0.013975	14.0	370.010
Cd	111	1	He	0.042489	6.3	177.100
Sn	118	1	He	0.089016	2.4	978.377
Sb	121	1	He	0.195313	8.1	2755.293
Ba	138	1	He	19.590081	1.4	624289.940
Pt	195	1	He	0.004794	19.5	269.333
Hg	202	1	He	-0.001644		213.667
Tl	205	1	He	0.013631	6.4	1123.393
Pb	208	1	He	0.181152	3.4	14423.027
Bi	209	1	He	0.054409	6.7	5111.090
Th	232	1	He	0.015940	17.3	2033.517
U	238	1	He	0.359930	2.3	23922.173

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.36017849	568218.393
Sc	45	2	H2	97.65065853	4320645.667
Ge	72	1	He	95.81072422	477762.303
Ge	72	2	H2	98.87275800	1542194.127
In	115	1	He	96.26391197	5901161.793
Tb	159	1	He	98.98761625	14322137.703
Ir	193	1	He	97.18585390	7197942.810

Sample Name 10604943041\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 086SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:19:28  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.504506	2.6	991.197
Be	9	2	H2	0.041098	47.7	36.167
B	11	2	H2	-47.288778		12962.877
Na	23	1	He	10007.53549	0.5	9110657.777
Mg	24	1	He	13100.88328	0.1	6762553.230
Al	27	1	He	52.704496	1.3	13911.807
Si	28	2	H2	1059.582468	0.7	2936711.167
K	39	1	He	1637.427823	0.7	1271882.380
Ca	43	1	He	37494.46344	0.5	81844.977
Ti	47	1	He	0.162723	18.5	41.333
V	51	1	He	0.242312	4.3	1034.953
Cr	52	1	He	0.376901	3.1	5372.997
Mn	55	1	He	2.734438	1.7	16933.803
Fe	56	1	He	68.877522	0.2	537220.417
Co	59	1	He	0.146307	2.4	1910.133
Ni	60	1	He	22.380428	0.1	70520.030
Cu	63	1	He	177.013044	1.1	1552441.750
Zn	66	1	He	2706.609203	0.2	5440519.833
As	75	1	He	0.386932	3.1	849.527
Se	78	2	H2	0.141334	6.1	154.667
Sr	88	1	He	131.174780	0.2	1525804.507
Mo	95	1	He	1.151296	2.9	7066.440
Pd	105	1	He	0.096673	5.8	1071.717
Ag	107	1	He	0.016056	20.6	408.343
Cd	111	1	He	0.212601	4.9	797.753
Sn	118	1	He	0.056175	15.8	663.357
Sb	121	1	He	0.546862	2.1	7602.110
Ba	138	1	He	20.482732	0.7	648437.480
Pt	195	1	He	0.005692	32.7	280.000
Hg	202	1	He	-0.007641		175.667
Tl	205	1	He	0.015785	10.3	1221.733
Pb	208	1	He	1.771134	0.2	116365.357
Bi	209	1	He	0.024637	9.6	3493.873
Th	232	1	He	0.010169	7.4	1651.787
U	238	1	He	0.327424	0.3	21875.237

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.52548059	569213.810
Sc	45	2	H2	97.33143907	4306521.500
Ge	72	1	He	95.85305900	477973.407
Ge	72	2	H2	98.50364766	1536436.830
In	115	1	He	95.62182536	5861800.657
Tb	159	1	He	98.70794196	14281672.707
Ir	193	1	He	97.30514591	7206778.017

Sample Name 10604943042\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 087SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:23:13  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.485390	4.7	987.533
Be	9	2	H2	0.048252	16.6	39.000
B	11	2	H2	-48.547576		12602.073
Na	23	1	He	9725.218547	0.7	8838363.617
Mg	24	1	He	12775.67877	0.6	6583248.237
Al	27	1	He	204.259265	0.8	53602.707
Si	28	2	H2	1021.070905	0.4	2839840.167
K	39	1	He	1589.562895	0.8	1234569.590
Ca	43	1	He	36575.14725	0.9	79696.307
Ti	47	1	He	0.256829	14.7	64.000
V	51	1	He	0.320176	15.0	1559.907
Cr	52	1	He	0.502117	5.1	6367.397
Mn	55	1	He	3.245236	1.1	20011.670
Fe	56	1	He	259.580653	0.7	1990162.957
Co	59	1	He	0.130506	1.5	1707.437
Ni	60	1	He	2.525759	2.7	8120.950
Cu	63	1	He	198.148576	1.0	1735203.710
Zn	66	1	He	118.727220	0.9	238505.223
As	75	1	He	0.424600	3.9	914.863
Se	78	2	H2	0.135747	22.5	150.333
Sr	88	1	He	127.042033	1.2	1475562.893
Mo	95	1	He	1.118930	2.2	6919.027
Pd	105	1	He	0.088683	11.0	1006.710
Ag	107	1	He	0.013440	15.1	360.010
Cd	111	1	He	0.054635	14.3	221.753
Sn	118	1	He	0.187432	2.9	1911.813
Sb	121	1	He	0.260682	1.2	3670.517
Ba	138	1	He	19.270545	1.8	614633.063
Pt	195	1	He	0.014838	9.3	395.343
Hg	202	1	He	-0.001416		213.667
Tl	205	1	He	0.017837	4.7	1313.413
Pb	208	1	He	0.802071	0.8	53999.633
Bi	209	1	He	0.061453	2.2	5494.553
Th	232	1	He	0.013845	13.0	1893.493
U	238	1	He	0.352606	4.4	23447.920

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.36272202	568233.710
Sc	45	2	H2	97.65425208	4320804.667
Ge	72	1	He	95.72143286	477317.050
Ge	72	2	H2	98.51866605	1536671.083
In	115	1	He	96.35691223	5906862.887
Tb	159	1	He	98.32296215	14225971.457
Ir	193	1	He	97.16175302	7196157.810

Sample Name 10604943043\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 088SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:26:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.468209	0.9	997.197
Be	9	2	H2	0.032360	4.3	33.500
B	11	2	H2	-49.636061		12454.120
Na	23	1	He	9464.780071	0.9	8740342.370
Mg	24	1	He	12405.04300	1.1	6495060.317
Al	27	1	He	76.919719	0.9	20559.117
Si	28	2	H2	1011.933809	0.3	2860680.833
K	39	1	He	1564.188433	0.7	1235557.897
Ca	43	1	He	35373.46610	0.8	78319.410
Ti	47	1	He	0.156282	11.2	40.333
V	51	1	He	0.281115	21.2	1316.327
Cr	52	1	He	0.724647	2.4	8281.687
Mn	55	1	He	2.389028	1.5	15041.070
Fe	56	1	He	91.772520	0.9	722250.833
Co	59	1	He	0.276547	3.0	3611.790
Ni	60	1	He	22.666664	0.9	72417.227
Cu	63	1	He	174.760812	1.5	1554018.877
Zn	66	1	He	1717.729847	0.3	3501239.750
As	75	1	He	0.418317	0.8	917.863
Se	78	2	H2	0.132657	18.4	149.333
Sr	88	1	He	122.650789	0.6	1446639.823
Mo	95	1	He	1.080814	1.0	6741.610
Pd	105	1	He	0.084779	9.2	978.377
Ag	107	1	He	0.018068	10.7	455.010
Cd	111	1	He	0.209687	6.0	799.810
Sn	118	1	He	0.507263	3.6	4980.923
Sb	121	1	He	0.394828	2.1	5587.833
Ba	138	1	He	19.423160	0.2	624824.833
Pt	195	1	He	0.005905	43.7	289.333
Hg	202	1	He	-0.007339		181.667
Tl	205	1	He	0.013311	17.8	1131.727
Pb	208	1	He	0.860072	2.1	59275.280
Bi	209	1	He	0.262028	3.9	16787.587
Th	232	1	He	0.011662	8.0	1788.473
U	238	1	He	0.322709	0.9	22033.783

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.87993431	577370.063
Sc	45	2	H2	99.25377719	4391577.167
Ge	72	1	He	97.19722562	484676.123
Ge	72	2	H2	99.74780854	1555842.960
In	115	1	He	97.16526619	5956416.530
Tb	159	1	He	101.0035917	14613821.447
Ir	193	1	He	99.37339118	7359959.890



Sample Name 10604943044\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 089SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:30:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.277512	2.3	910.197
Be	9	2	H2	0.031675	38.7	32.667
B	11	2	H2	-49.940657		12147.370
Na	23	1	He	9494.326699	0.5	8717172.370
Mg	24	1	He	12234.33377	0.6	6368940.530
Al	27	1	He	74.609415	0.1	19828.803
Si	28	2	H2	958.759484	0.8	2665550.833
K	39	1	He	1546.593973	0.9	1215386.937
Ca	43	1	He	34906.93233	0.2	76842.727
Ti	47	1	He	0.122908	39.6	32.000
V	51	1	He	0.281266	25.9	1306.207
Cr	52	1	He	0.435981	1.7	5896.537
Mn	55	1	He	2.779373	0.5	17353.627
Fe	56	1	He	122.936436	0.3	958129.480
Co	59	1	He	0.159950	5.8	2108.830
Ni	60	1	He	2.370502	1.8	7742.073
Cu	63	1	He	107.820949	0.6	957550.460
Zn	66	1	He	335.049118	0.3	682094.920
As	75	1	He	0.394219	2.5	873.197
Se	78	2	H2	0.129160	16.4	145.000
Sr	88	1	He	123.377984	0.5	1453087.320
Mo	95	1	He	1.139288	0.7	7087.780
Pd	105	1	He	0.082979	12.1	958.373
Ag	107	1	He	0.010069	21.3	295.007
Cd	111	1	He	0.108487	9.2	422.737
Sn	118	1	He	0.217986	3.4	2213.527
Sb	121	1	He	0.257140	4.0	3642.170
Ba	138	1	He	19.449162	0.6	624026.580
Pt	195	1	He	0.005548	10.5	280.000
Hg	202	1	He	-0.007286		179.000
Tl	205	1	He	0.013246	4.1	1110.060
Pb	208	1	He	0.276666	2.5	20652.920
Bi	209	1	He	0.024671	6.2	3520.540
Th	232	1	He	0.009476	18.2	1616.777
U	238	1	He	0.328331	0.5	22085.507

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.32705781	574040.750
Sc	45	2	H2	97.58873195	4317905.667
Ge	72	1	He	97.05448685	483964.353
Ge	72	2	H2	98.63020959	1538410.913
In	115	1	He	96.91492713	5941070.267
Tb	159	1	He	99.37864364	14378713.953
Ir	193	1	He	97.98095504	7256830.933

Sample Name 10604943045\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 090SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:34:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.389130	1.3	950.863
Be	9	2	H2	0.025535	41.7	30.333
B	11	2	H2	-50.024986		12114.007
Na	23	1	He	9370.464261	0.6	8559059.873
Mg	24	1	He	12244.18750	0.5	6341166.573
Al	27	1	He	207.348021	0.2	54685.923
Si	28	2	H2	966.032335	0.6	2684274.833
K	39	1	He	1536.556375	0.1	1201747.247
Ca	43	1	He	35041.17538	0.2	76738.950
Ti	47	1	He	0.219658	23.9	55.333
V	51	1	He	0.153620	59.4	434.907
Cr	52	1	He	0.457727	3.6	6041.263
Mn	55	1	He	2.029707	2.1	12680.187
Fe	56	1	He	57.345997	0.4	450607.117
Co	59	1	He	0.147793	2.0	1938.803
Ni	60	1	He	1.394547	1.2	4602.740
Cu	63	1	He	53.182799	0.4	469011.980
Zn	66	1	He	63.601478	0.4	128698.243
As	75	1	He	0.394244	2.0	866.863
Se	78	2	H2	0.136112	13.3	150.333
Sr	88	1	He	126.718542	0.5	1481458.520
Mo	95	1	He	1.098718	1.5	6825.643
Pd	105	1	He	0.081626	10.2	945.040
Ag	107	1	He	0.006385	35.3	221.667
Cd	111	1	He	0.033369	8.1	144.440
Sn	118	1	He	0.233741	6.0	2360.223
Sb	121	1	He	0.186886	2.9	2653.610
Ba	138	1	He	22.482771	1.0	720340.770
Pt	195	1	He	0.006376	29.8	290.000
Hg	202	1	He	-0.008450		171.333
Tl	205	1	He	0.008788	1.4	896.707
Pb	208	1	He	0.152621	3.2	12613.997
Bi	209	1	He	0.156157	1.7	10624.443
Th	232	1	He	0.003838	31.8	1225.070
U	238	1	He	0.329202	2.0	21900.187

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.83342103	571068.167
Sc	45	2	H2	97.53756342	4315641.667
Ge	72	1	He	96.34035587	480403.323
Ge	72	2	H2	98.49939256	1536370.460
In	115	1	He	96.77855465	5932710.373
Tb	159	1	He	99.16591022	14347934.373
Ir	193	1	He	96.90979361	7177496.767

Sample Name 10604943045\_B70039Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 091SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:38:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.321767	1.2	193.000
Be	9	2	H2	0.008708	32.7	24.333
B	11	2	H2	-73.469234		4679.390
Na	23	1	He	950.793646	1.1	893360.430
Mg	24	1	He	1233.620043	1.1	653663.543
Al	27	1	He	22.960232	2.6	6223.640
Si	28	2	H2	95.695142	0.7	282672.587
K	39	1	He	150.872473	1.6	184137.320
Ca	43	1	He	3490.518480	1.0	7782.060
Ti	47	1	He	0.039414	56.7	11.667
V	51	1	He	0.074956	46.1	-96.303
Cr	52	1	He	0.089282	0.5	3124.340
Mn	55	1	He	0.232276	4.6	1719.440
Fe	56	1	He	6.348434	1.5	60843.187
Co	59	1	He	0.016753	11.5	274.667
Ni	60	1	He	2.466533	2.2	8161.633
Cu	63	1	He	5.452878	2.1	49421.530
Zn	66	1	He	7.435421	4.3	15559.687
As	75	1	He	0.050105	6.1	258.667
Se	78	2	H2	0.003864	291.5	44.333
Sr	88	1	He	12.565302	1.2	150233.320
Mo	95	1	He	0.129889	6.1	841.360
Pd	105	1	He	0.011592	60.0	303.340
Ag	107	1	He	0.004981	40.8	200.000
Cd	111	1	He	0.005041	19.3	40.850
Sn	118	1	He	0.040532	12.0	538.350
Sb	121	1	He	0.024136	8.6	386.677
Ba	138	1	He	2.224207	1.7	73509.423
Pt	195	1	He	-0.001861		188.667
Hg	202	1	He	-0.011774		154.000
Tl	205	1	He	-0.000148		485.010
Pb	208	1	He	0.042296	5.3	5633.817
Bi	209	1	He	0.019307	8.1	3280.477
Th	232	1	He	-0.000014		996.717
U	238	1	He	0.031527	4.9	3025.380

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.39730097	580485.543
Sc	45	2	H2	99.09512611	4384557.500
Ge	72	1	He	98.44560603	490901.200
Ge	72	2	H2	100.3868340	1565810.330
In	115	1	He	99.75014248	6114874.387
Tb	159	1	He	101.4923046	14684531.447
Ir	193	1	He	99.64898170	7380371.140

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 092\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:41:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.830462	0.7	30860.950
Be	9	2	H2	81.690171	0.4	30579.770
B	11	2	H2	8.292056	1.2	30365.713
Na	23	1	He	1032.739223	0.7	953687.590
Mg	24	1	He	1032.948661	0.7	539260.550
Al	27	1	He	1022.697881	0.4	269441.343
Si	28	2	H2	511.489271	0.2	1408007.670
K	39	1	He	1029.531517	0.7	828313.243
Ca	43	1	He	1012.312611	0.4	2229.830
Ti	47	1	He	79.326108	0.4	19297.943
V	51	1	He	80.585312	0.4	545123.103
Cr	52	1	He	82.268562	0.6	665010.253
Mn	55	1	He	80.065308	0.6	489790.877
Fe	56	1	He	521.423958	0.2	4006685.500
Co	59	1	He	83.384404	0.5	1073140.790
Ni	60	1	He	84.325617	0.1	269101.750
Cu	63	1	He	83.502925	0.3	743374.957
Zn	66	1	He	82.198658	0.4	167887.453
As	75	1	He	79.532382	0.5	143379.960
Se	78	2	H2	82.484057	1.4	65773.110
Sr	88	1	He	81.588480	0.4	963190.117
Mo	95	1	He	77.979781	0.6	489272.907
Pd	105	1	He	82.717879	1.0	777079.287
Ag	107	1	He	40.792851	1.3	817525.223
Cd	111	1	He	81.086716	0.9	303436.920
Sn	118	1	He	77.210694	0.3	742864.937
Sb	121	1	He	78.156109	0.6	1106986.807
Ba	138	1	He	78.626928	0.3	2548106.890
Pt	195	1	He	82.906587	0.6	1065130.957
Hg	202	1	He	3.886067	1.4	24635.720
Tl	205	1	He	42.404794	0.6	2007496.483
Pb	208	1	He	82.965610	0.2	5350157.030
Bi	209	1	He	80.397234	1.4	4505813.580
Th	232	1	He	76.419081	1.2	5226738.360
U	238	1	He	77.614192	1.0	5097652.110

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.83722665	571091.083
Sc	45	2	H2	96.19140993	4256079.833
Ge	72	1	He	97.27747126	485076.270
Ge	72	2	H2	97.12251781	1514894.290
In	115	1	He	97.89581889	6001200.807
Tb	159	1	He	99.19160088	14351651.457
Ir	193	1	He	99.93584629	7401617.390

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 093\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:45:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.096948	28.1	107.500
Be	9	2	H2	0.049454	9.5	39.500
B	11	2	H2	-76.279498		3714.957
Na	23	1	He	1.669145	36.9	13154.203
Mg	24	1	He	-5.233475		1956.810
Al	27	1	He	0.545385	11.8	220.333
Si	28	2	H2	-0.637277		11949.473
K	39	1	He	-1.891153		68923.450
Ca	43	1	He	2.632288	55.1	18.967
Ti	47	1	He	0.044059	28.2	12.667
V	51	1	He	0.071719	78.3	-116.387
Cr	52	1	He	0.061062	30.1	2857.617
Mn	55	1	He	0.039700	20.7	516.010
Fe	56	1	He	0.349260	20.5	13945.990
Co	59	1	He	0.055423	15.8	764.690
Ni	60	1	He	0.039536	22.6	324.670
Cu	63	1	He	0.049062	17.0	750.690
Zn	66	1	He	0.117927	27.0	449.343
As	75	1	He	0.039030	3.8	234.333
Se	78	2	H2	0.008794	110.5	47.667
Sr	88	1	He	0.054806	16.1	788.363
Mo	95	1	He	0.054597	12.8	357.340
Pd	105	1	He	0.039210	25.6	563.350
Ag	107	1	He	0.197072	17.4	4087.310
Cd	111	1	He	0.046546	12.1	197.270
Sn	118	1	He	0.047696	15.3	603.350
Sb	121	1	He	0.045963	15.3	695.023
Ba	138	1	He	0.048235	21.8	1651.783
Pt	195	1	He	0.049476	10.5	856.033
Hg	202	1	He	0.016033	54.5	329.673
Tl	205	1	He	0.067155	20.3	3710.560
Pb	208	1	He	0.041327	2.9	5525.470
Bi	209	1	He	0.048628	14.7	4954.357
Th	232	1	He	0.057199	9.7	4935.987
U	238	1	He	0.044376	19.9	3895.637

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.23242945	573470.917
Sc	45	2	H2	97.77650810	4326214.000
Ge	72	1	He	96.72627882	482327.737
Ge	72	2	H2	98.74446249	1540193.003
In	115	1	He	98.88863236	6062062.170
Tb	159	1	He	100.6779990	14566712.697
Ir	193	1	He	100.4267582	7437976.140

Sample Name 10604943030\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 094SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:49:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.679832	3.3	1062.707
Be	9	2	H2	0.034325	24.3	33.833
B	11	2	H2	-49.935494		12199.580
Na	23	1	He	9763.491813	0.4	8877408.200
Mg	24	1	He	12481.81360	0.7	6434917.820
Al	27	1	He	346.017359	0.6	90795.053
Si	28	2	H2	979.391332	1.0	2733961.333
K	39	1	He	1577.152850	0.4	1226073.707
Ca	43	1	He	35812.13521	0.3	78072.720
Ti	47	1	He	0.319798	10.5	79.333
V	51	1	He	0.242314	46.4	1035.083
Cr	52	1	He	0.445730	0.9	5917.877
Mn	55	1	He	6.237365	0.4	38233.107
Fe	56	1	He	214.947111	0.8	1650664.083
Co	59	1	He	0.351111	2.1	4527.387
Ni	60	1	He	3.189866	1.5	10266.297
Cu	63	1	He	342.322842	0.3	3015407.167
Zn	66	1	He	293.748440	0.3	593301.623
As	75	1	He	0.411071	0.6	896.363
Se	78	2	H2	0.148905	6.7	161.667
Sr	88	1	He	126.560567	0.3	1478763.727
Mo	95	1	He	1.110369	0.8	6872.337
Pd	105	1	He	0.102558	7.2	1135.057
Ag	107	1	He	0.066393	10.0	1405.083
Cd	111	1	He	0.055772	3.7	226.430
Sn	118	1	He	1.119270	1.3	10740.850
Sb	121	1	He	0.241012	3.2	3398.777
Ba	138	1	He	21.802951	0.7	695962.490
Pt	195	1	He	0.014439	3.6	394.010
Hg	202	1	He	0.006393	60.8	264.667
Tl	205	1	He	0.019949	18.0	1425.090
Pb	208	1	He	10.979436	0.6	711053.950
Bi	209	1	He	0.344907	0.4	21193.960
Th	232	1	He	0.024264	1.9	2618.623
U	238	1	He	0.359119	0.6	24162.507

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.40531004	568490.167
Sc	45	2	H2	97.99618172	4335933.667
Ge	72	1	He	96.28466642	480125.627
Ge	72	2	H2	99.03744783	1544762.920
In	115	1	He	96.41633990	5910505.917
Tb	159	1	He	99.28263698	14364823.120
Ir	193	1	He	98.37035810	7285671.560

Sample Name 10604943031\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 095SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:53:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.717918	3.8	1075.873
Be	9	2	H2	0.030049	16.8	32.167
B	11	2	H2	-49.629150		12286.150
Na	23	1	He	9935.504429	0.9	8881507.990
Mg	24	1	He	13007.09960	0.8	6592711.153
Al	27	1	He	735.918227	0.8	189770.900
Si	28	2	H2	1026.452196	0.5	2861868.167
K	39	1	He	1638.049846	0.2	1249342.873
Ca	43	1	He	37315.38548	0.6	79979.780
Ti	47	1	He	0.681299	11.3	164.000
V	51	1	He	0.254272	34.4	1095.210
Cr	52	1	He	0.556294	3.1	6689.537
Mn	55	1	He	27.210591	0.4	163088.747
Fe	56	1	He	497.759686	0.2	3743810.667
Co	59	1	He	0.441486	1.7	5578.410
Ni	60	1	He	70.144770	0.8	217683.760
Cu	63	1	He	629.078931	0.1	5443263.333
Zn	66	1	He	612.193905	0.2	1214437.127
As	75	1	He	0.491784	4.7	1021.873
Se	78	2	H2	0.154357	11.2	165.333
Sr	88	1	He	133.676017	0.8	1534322.687
Mo	95	1	He	1.161313	0.1	7081.777
Pd	105	1	He	0.101815	5.8	1111.723
Ag	107	1	He	0.063420	0.6	1326.740
Cd	111	1	He	0.152217	3.4	573.400
Sn	118	1	He	5.067160	0.6	47438.470
Sb	121	1	He	0.407600	4.4	5637.847
Ba	138	1	He	24.385412	1.1	767012.697
Pt	195	1	He	0.006299	12.6	285.333
Hg	202	1	He	-0.001171		214.333
Tl	205	1	He	0.026481	14.7	1711.793
Pb	208	1	He	3.155050	0.3	203404.220
Bi	209	1	He	0.973388	1.9	54679.850
Th	232	1	He	0.012773	5.4	1806.810
U	238	1	He	0.379622	1.3	24957.343

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.81653778	558922.893
Sc	45	2	H2	97.89856072	4331614.333
Ge	72	1	He	94.58464391	471648.427
Ge	72	2	H2	98.64407418	1538627.170
In	115	1	He	95.00315786	5823875.157
Tb	159	1	He	97.87619054	14161329.790
Ir	193	1	He	96.32273130	7134016.767

Sample Name 10604943032\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 096SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:56:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.297058	2.9	919.197
Be	9	2	H2	0.022327	42.4	29.167
B	11	2	H2	-51.912814		11537.563
Na	23	1	He	9753.191170	7.1	8481301.333
Mg	24	1	He	12747.99645	7.0	6285700.740
Al	27	1	He	81.382585	6.5	20484.343
Si	28	2	H2	960.682244	2.0	2676197.000
K	39	1	He	1600.105088	7.4	1188703.470
Ca	43	1	He	36349.04248	7.1	75786.373
Ti	47	1	He	0.301775	8.2	72.000
V	51	1	He	0.220227	59.4	875.807
Cr	52	1	He	0.722534	9.7	7783.413
Mn	55	1	He	1.001250	5.4	6091.280
Fe	56	1	He	19.155106	6.9	150453.630
Co	59	1	He	0.065446	4.9	852.030
Ni	60	1	He	20.418317	6.7	61911.333
Cu	63	1	He	61.032682	6.8	515093.033
Zn	66	1	He	122.153047	7.4	236325.843
As	75	1	He	0.411623	8.6	859.527
Se	78	2	H2	0.149599	8.3	160.667
Sr	88	1	He	128.451541	7.1	1437157.060
Mo	95	1	He	1.134395	6.9	6808.310
Pd	105	1	He	0.091447	8.2	1001.713
Ag	107	1	He	0.023558	6.4	543.350
Cd	111	1	He	0.029866	21.2	126.440
Sn	118	1	He	10.236419	7.0	94176.113
Sb	121	1	He	0.235966	3.6	3232.070
Ba	138	1	He	20.771265	6.6	643081.553
Pt	195	1	He	0.005056	48.1	264.003
Hg	202	1	He	-0.003698		192.667
Tl	205	1	He	0.011383	10.0	983.383
Pb	208	1	He	0.516042	8.9	34569.173
Bi	209	1	He	0.087547	7.4	6725.153
Th	232	1	He	0.008866	15.7	1520.107
U	238	1	He	0.339556	7.4	21970.297

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.56243931	545349.157
Sc	45	2	H2	97.80088322	4327292.500
Ge	72	1	He	92.47352393	461121.280
Ge	72	2	H2	98.20517820	1531781.373
In	115	1	He	93.75313006	5747246.063
Tb	159	1	He	95.47664056	13814148.127
Ir	193	1	He	94.66810243	7011468.850



Sample Name 10604943033\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 097SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:00:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.532075	5.6	1013.203
Be	9	2	H2	0.019211	46.6	28.167
B	11	2	H2	-51.047334		11904.513
Na	23	1	He	9440.815996	0.6	8600354.457
Mg	24	1	He	12084.16258	0.9	6241651.160
Al	27	1	He	379.371170	0.7	99725.547
Si	28	2	H2	944.005930	3.7	2649547.583
K	39	1	He	1534.993322	1.1	1197356.910
Ca	43	1	He	34645.35564	0.7	75669.793
Ti	47	1	He	0.342614	13.4	85.000
V	51	1	He	0.282164	25.3	1301.953
Cr	52	1	He	0.392736	2.9	5503.050
Mn	55	1	He	6.584364	0.5	40419.593
Fe	56	1	He	196.837466	0.9	1515395.793
Co	59	1	He	0.358084	2.0	4602.073
Ni	60	1	He	2.738271	0.8	8813.350
Cu	63	1	He	347.396736	1.1	3050422.500
Zn	66	1	He	196.368116	0.5	395443.937
As	75	1	He	0.391895	5.7	859.360
Se	78	2	H2	0.105755	4.9	127.667
Sr	88	1	He	125.010777	1.1	1456038.677
Mo	95	1	He	1.061778	2.6	6632.893
Pd	105	1	He	0.092463	9.4	1051.713
Ag	107	1	He	0.020702	8.3	508.347
Cd	111	1	He	0.041861	5.5	176.807
Sn	118	1	He	0.728447	3.2	7105.207
Sb	121	1	He	0.201441	1.0	2873.650
Ba	138	1	He	21.342008	1.7	687529.313
Pt	195	1	He	0.005175	41.7	277.333
Hg	202	1	He	-0.007993		176.000
Tl	205	1	He	0.007106	25.7	825.037
Pb	208	1	He	2.272358	0.8	150740.723
Bi	209	1	He	0.354553	1.0	21931.840
Th	232	1	He	0.005002	19.0	1335.080
U	238	1	He	0.328436	0.5	22391.010

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.58278292	569558.873
Sc	45	2	H2	98.58623956	4362041.333
Ge	72	1	He	95.98398860	478626.290
Ge	72	2	H2	99.85074785	1557448.583
In	115	1	He	97.31968313	5965882.583
Tb	159	1	He	100.1921400	14496415.617
Ir	193	1	He	99.30369891	7354798.223

Sample Name 10604943033\_B70039Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 098SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:04:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.327231	10.9	192.667
Be	9	2	H2	0.007785	193.3	23.667
B	11	2	H2	-75.131750		4088.220
Na	23	1	He	991.783738	7.0	890338.193
Mg	24	1	He	1261.952790	6.5	639222.830
Al	27	1	He	41.618067	7.4	10722.860
Si	28	2	H2	95.001746	0.5	277329.320
K	39	1	He	160.073963	10.1	182649.300
Ca	43	1	He	3608.403334	6.5	7691.283
Ti	47	1	He	0.057156	18.2	15.333
V	51	1	He	0.083230	61.6	-25.643
Cr	52	1	He	0.103485	21.4	3100.337
Mn	55	1	He	0.723037	8.8	4557.390
Fe	56	1	He	21.279224	6.6	169376.680
Co	59	1	He	0.046013	18.8	628.013
Ni	60	1	He	0.304120	9.0	1138.047
Cu	63	1	He	36.234313	6.0	313893.180
Zn	66	1	He	20.940537	5.9	41750.410
As	75	1	He	0.055931	25.7	258.500
Se	78	2	H2	-0.000280		40.333
Sr	88	1	He	12.847891	5.9	147638.540
Mo	95	1	He	0.132892	6.4	823.363
Pd	105	1	He	0.015330	51.4	323.340
Ag	107	1	He	0.012211	22.7	331.677
Cd	111	1	He	0.007939	25.1	49.850
Sn	118	1	He	0.093915	9.3	1015.050
Sb	121	1	He	0.024311	7.1	373.343
Ba	138	1	He	2.195442	6.4	69409.907
Pt	195	1	He	0.000635	385.2	212.000
Hg	202	1	He	-0.008687		167.000
Tl	205	1	He	0.000054	1094.8	476.680
Pb	208	1	He	0.244944	4.7	18238.187
Bi	209	1	He	0.041244	9.5	4360.797
Th	232	1	He	0.000905	83.1	1025.050
U	238	1	He	0.034894	13.8	3133.737

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.38518856	556325.393
Sc	45	2	H2	97.89406313	4331415.333
Ge	72	1	He	94.78642917	472654.633
Ge	72	2	H2	99.05349158	1545013.167
In	115	1	He	95.59301587	5860034.580
Tb	159	1	He	97.56979746	14116998.953
Ir	193	1	He	96.50665800	7147639.057

Sample Name 10604943034\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 099SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:08:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.627827	0.0	1014.703
Be	9	2	H2	0.029229	16.1	31.000
B	11	2	H2	-50.311152		11742.220
Na	23	1	He	9855.434764	0.3	8863937.787
Mg	24	1	He	12542.31584	0.2	6396138.237
Al	27	1	He	326.722805	0.5	84809.160
Si	28	2	H2	996.141131	1.4	2703267.167
K	39	1	He	1605.242708	0.5	1233177.223
Ca	43	1	He	36139.99650	0.7	77934.927
Ti	47	1	He	0.285829	5.7	70.333
V	51	1	He	0.203634	45.7	764.087
Cr	52	1	He	0.639992	2.5	7394.547
Mn	55	1	He	5.491052	1.4	33325.807
Fe	56	1	He	163.652595	0.4	1245805.830
Co	59	1	He	0.331250	3.0	4220.623
Ni	60	1	He	1.208403	2.2	3961.887
Cu	63	1	He	237.515177	0.3	2065926.460
Zn	66	1	He	90.034266	0.2	179700.170
As	75	1	He	0.410016	1.2	883.197
Se	78	2	H2	0.123441	16.7	137.333
Sr	88	1	He	130.722879	0.9	1508147.890
Mo	95	1	He	1.120739	1.1	6927.033
Pd	105	1	He	0.087757	6.3	996.710
Ag	107	1	He	0.013211	9.2	355.010
Cd	111	1	He	0.047174	15.5	194.420
Sn	118	1	He	0.609333	2.9	5901.290
Sb	121	1	He	0.190710	0.7	2693.610
Ba	138	1	He	22.260101	0.4	709616.760
Pt	195	1	He	0.010339	5.0	338.677
Hg	202	1	He	-0.006778		180.667
Tl	205	1	He	0.015545	19.0	1208.397
Pb	208	1	He	0.320768	1.3	23296.260
Bi	209	1	He	0.321273	0.9	19688.143
Th	232	1	He	0.006197	11.5	1388.420
U	238	1	He	0.337547	1.1	22537.947

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.38208713	562328.520
Sc	45	2	H2	95.28350564	4215908.750
Ge	72	1	He	95.07117806	474074.540
Ge	72	2	H2	96.48709305	1504983.083
In	115	1	He	96.28853703	5902671.357
Tb	159	1	He	98.51962344	14254425.623
Ir	193	1	He	97.37238538	7211758.020

Sample Name 10604943035\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 100SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:11:52  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.192781	4.1	888.193
Be	9	2	H2	0.013433	55.3	26.000
B	11	2	H2	-53.643686		11071.383
Na	23	1	He	9168.194574	1.8	8253865.917
Mg	24	1	He	12065.25986	2.1	6158230.950
Al	27	1	He	49.476184	2.7	12915.917
Si	28	2	H2	936.388227	1.6	2629961.500
K	39	1	He	1519.512701	2.0	1172035.533
Ca	43	1	He	34531.99882	2.0	74531.983
Ti	47	1	He	0.142431	7.2	36.000
V	51	1	He	0.138133	43.4	326.827
Cr	52	1	He	0.576820	2.3	6900.970
Mn	55	1	He	0.786424	2.8	5005.537
Fe	56	1	He	11.629099	2.2	98869.040
Co	59	1	He	0.045505	3.8	626.687
Ni	60	1	He	0.650812	4.3	2223.510
Cu	63	1	He	11.075504	2.1	96628.927
Zn	66	1	He	25.434402	2.3	50909.367
As	75	1	He	0.371362	4.0	815.020
Se	78	2	H2	0.099381	12.1	121.333
Sr	88	1	He	121.821508	1.8	1405468.570
Mo	95	1	He	1.060133	3.2	6508.837
Pd	105	1	He	0.086526	14.0	978.377
Ag	107	1	He	0.005758	13.3	206.667
Cd	111	1	He	0.029665	6.4	129.160
Sn	118	1	He	0.032100	24.0	436.677
Sb	121	1	He	0.178015	2.7	2500.247
Ba	138	1	He	19.514845	2.0	617928.843
Pt	195	1	He	0.008720	27.9	316.670
Hg	202	1	He	-0.012289		145.667
Tl	205	1	He	0.019432	3.7	1386.753
Pb	208	1	He	0.050407	2.6	5967.203
Bi	209	1	He	0.016406	6.7	3007.077
Th	232	1	He	0.006461	13.6	1388.417
U	238	1	He	0.322078	3.2	21262.443

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.48765518	562964.230
Sc	45	2	H2	98.58411507	4361947.333
Ge	72	1	He	95.09350959	474185.897
Ge	72	2	H2	99.01185890	1544363.790
In	115	1	He	95.66443963	5864412.993
Tb	159	1	He	98.17759288	14204938.537
Ir	193	1	He	96.10360687	7117787.603

Sample Name 10604943036\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 101SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:15:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.372690	2.0	952.363
Be	9	2	H2	0.020936	41.0	28.833
B	11	2	H2	-52.431507		11433.653
Na	23	1	He	9402.730021	0.2	8629065.083
Mg	24	1	He	12166.17516	0.1	6330523.450
Al	27	1	He	93.906240	0.5	24925.423
Si	28	2	H2	961.828516	0.9	2693894.750
K	39	1	He	1541.521307	0.5	1211061.153
Ca	43	1	He	35008.17520	0.5	77027.793
Ti	47	1	He	0.155944	16.7	40.000
V	51	1	He	0.239013	65.0	1020.303
Cr	52	1	He	0.751356	3.0	8446.453
Mn	55	1	He	2.160810	1.8	13546.277
Fe	56	1	He	52.614840	0.3	416315.937
Co	59	1	He	0.154760	1.5	2024.147
Ni	60	1	He	0.706080	2.1	2424.210
Cu	63	1	He	93.180672	0.3	820069.207
Zn	66	1	He	45.303527	0.8	91571.813
As	75	1	He	0.386013	0.5	850.697
Se	78	2	H2	0.127001	10.0	143.667
Sr	88	1	He	124.431875	0.4	1452203.883
Mo	95	1	He	1.092440	0.8	6789.637
Pd	105	1	He	0.079261	8.5	923.373
Ag	107	1	He	0.007648	14.8	246.667
Cd	111	1	He	0.034278	11.5	147.777
Sn	118	1	He	0.092469	5.4	1016.713
Sb	121	1	He	0.181137	6.5	2573.597
Ba	138	1	He	20.068930	0.3	643303.467
Pt	195	1	He	0.004246	13.4	263.333
Hg	202	1	He	-0.009796		163.333
Tl	205	1	He	0.012816	6.8	1090.057
Pb	208	1	He	0.155079	2.2	12804.077
Bi	209	1	He	0.082427	5.9	6685.143
Th	232	1	He	0.005151	27.6	1325.080
U	238	1	He	0.328264	1.1	22060.490

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.27966392	573755.353
Sc	45	2	H2	98.31718665	4350136.833
Ge	72	1	He	96.17216049	479564.613
Ge	72	2	H2	98.85333449	1541891.163
In	115	1	He	96.82077085	5935298.307
Tb	159	1	He	99.41366196	14383780.620
Ir	193	1	He	97.88602269	7249799.893

Sample Name 4312082\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 102SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:19:22  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	111.162480	0.2	40265.407
Be	9	2	H2	106.790173	1.1	39816.797
B	11	2	H2	59.950891	1.0	46504.197
Na	23	1	He	11655.31477	3.2	10295426.307
Mg	24	1	He	14434.47020	3.3	7230152.600
Al	27	1	He	2247.466190	3.0	572661.293
Si	28	2	H2	1489.575227	0.5	4059171.500
K	39	1	He	3721.215035	3.5	2718753.607
Ca	43	1	He	37666.15019	2.9	79794.390
Ti	47	1	He	106.317442	3.2	25016.520
V	51	1	He	109.443810	2.5	716399.450
Cr	52	1	He	111.162402	3.0	868442.520
Mn	55	1	He	108.687136	3.3	643033.083
Fe	56	1	He	2246.763050	3.2	16663040.000
Co	59	1	He	110.429309	3.3	1368922.500
Ni	60	1	He	111.554247	2.8	342878.543
Cu	63	1	He	201.932292	3.0	1731247.083
Zn	66	1	He	152.981655	3.1	300805.000
As	75	1	He	107.524788	3.4	186656.973
Se	78	2	H2	106.660296	1.5	85084.027
Sr	88	1	He	234.480300	3.2	2666146.527
Mo	95	1	He	108.486970	3.5	645100.997
Pd	105	1	He	21.433957	2.5	191003.780
Ag	107	1	He	51.092019	3.6	970378.057
Cd	111	1	He	109.714359	3.2	389117.517
Sn	118	1	He	105.255537	3.4	959712.563
Sb	121	1	He	107.745841	3.4	1446261.697
Ba	138	1	He	128.571960	3.4	3948893.067
Pt	195	1	He	21.486351	1.6	270008.707
Hg	202	1	He	-0.005107		188.000
Tl	205	1	He	112.115329	1.2	5188007.217
Pb	208	1	He	109.079241	1.8	6875507.030
Bi	209	1	He	105.550327	2.6	5679038.873
Th	232	1	He	108.634827	3.2	7132815.727
U	238	1	He	106.756385	2.5	6731794.273

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.78954081	552738.520
Sc	45	2	H2	95.82640473	4239929.833
Ge	72	1	He	93.76625456	467567.510
Ge	72	2	H2	97.16796235	1515603.123
In	115	1	He	92.83451694	5690933.323
Tb	159	1	He	96.98022541	14031696.040
Ir	193	1	He	95.97944009	7108591.353

Sample Name 10604943036\_B70039Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 103SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:23:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.382606	8.0	209.833
Be	9	2	H2	0.062081	13.0	43.667
B	11	2	H2	-74.825783		4122.063
Na	23	1	He	977.894649	0.6	889715.483
Mg	24	1	He	1261.985751	0.8	647636.867
Al	27	1	He	15.652174	4.2	4133.910
Si	28	2	H2	102.155574	2.3	292605.937
K	39	1	He	158.339451	2.1	183773.103
Ca	43	1	He	3591.337184	0.1	7755.847
Ti	47	1	He	0.104794	23.2	27.000
V	51	1	He	-0.011500		-668.783
Cr	52	1	He	0.183155	8.9	3771.830
Mn	55	1	He	0.329269	5.9	2249.517
Fe	56	1	He	8.691352	4.1	76626.633
Co	59	1	He	0.048175	39.5	668.687
Ni	60	1	He	0.141633	14.1	645.350
Cu	63	1	He	9.833985	0.7	86925.103
Zn	66	1	He	5.523330	1.2	11360.460
As	75	1	He	0.065454	33.5	280.333
Se	78	2	H2	-0.000670		39.667
Sr	88	1	He	12.745293	0.9	149039.480
Mo	95	1	He	0.171501	9.9	1084.043
Pd	105	1	He	0.020250	24.0	378.343
Ag	107	1	He	0.231466	33.3	4720.887
Cd	111	1	He	0.027872	56.0	125.137
Sn	118	1	He	0.057344	39.1	688.357
Sb	121	1	He	0.076192	21.2	1113.393
Ba	138	1	He	2.125563	2.2	68763.787
Pt	195	1	He	0.003440	114.0	252.000
Hg	202	1	He	-0.013593		139.000
Tl	205	1	He	0.044448	47.6	2578.637
Pb	208	1	He	0.165241	13.1	13416.017
Bi	209	1	He	0.030178	63.0	3837.313
Th	232	1	He	0.053631	33.3	4595.893
U	238	1	He	0.046414	37.8	3949.003

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.37786691	562303.107
Sc	45	2	H2	96.38503972	4264647.167
Ge	72	1	He	96.27936213	480099.177
Ge	72	2	H2	97.94233907	1527681.670
In	115	1	He	97.62243661	5984441.950
Tb	159	1	He	99.12388823	14341854.373
Ir	193	1	He	98.43311098	7290319.270

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 104\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:26:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.829290	0.8	30545.823
Be	9	2	H2	81.393755	0.6	30158.087
B	11	2	H2	6.356082	2.9	29451.580
Na	23	1	He	1021.661039	1.6	938791.810
Mg	24	1	He	1019.055442	1.5	529371.217
Al	27	1	He	1012.532180	1.4	265419.980
Si	28	2	H2	508.469105	0.2	1385516.880
K	39	1	He	1016.059522	1.6	814323.763
Ca	43	1	He	1007.506148	3.2	2207.953
Ti	47	1	He	78.306272	0.7	18955.840
V	51	1	He	79.151376	1.5	532710.417
Cr	52	1	He	81.325572	1.7	654093.710
Mn	55	1	He	78.959229	1.9	480569.053
Fe	56	1	He	515.529159	1.9	3941261.333
Co	59	1	He	82.163879	1.2	1056508.333
Ni	60	1	He	83.277283	1.2	265528.820
Cu	63	1	He	82.725550	1.5	735800.060
Zn	66	1	He	80.836226	0.9	164968.860
As	75	1	He	78.740778	1.0	141834.073
Se	78	2	H2	82.048745	0.6	64864.000
Sr	88	1	He	80.120086	0.6	945102.510
Mo	95	1	He	76.986125	1.7	483730.270
Pd	105	1	He	81.425239	1.6	766076.550
Ag	107	1	He	40.462562	3.0	811990.690
Cd	111	1	He	80.001310	1.7	299811.257
Sn	118	1	He	76.446063	2.0	736566.630
Sb	121	1	He	77.377585	1.7	1097520.400
Ba	138	1	He	77.333091	0.8	2510096.263
Pt	195	1	He	81.391576	1.8	1051042.250
Hg	202	1	He	3.872259	2.7	24672.443
Tl	205	1	He	41.826022	1.3	1990360.283
Pb	208	1	He	81.866041	1.8	5306402.810
Bi	209	1	He	80.512519	0.9	4478793.473
Th	232	1	He	76.398270	1.2	5186384.613
U	238	1	He	77.416849	1.2	5046763.883

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.38082291	568342.710
Sc	45	2	H2	95.21239366	4212762.333
Ge	72	1	He	97.20593509	484719.553
Ge	72	2	H2	96.29028345	1501913.293
In	115	1	He	98.05465179	6010937.567
Tb	159	1	He	99.71987644	14428085.617
Ir	193	1	He	99.18942510	7346334.683



Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 105\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:30:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.130630	30.5	107.833
Be	9	2	H2	0.087887	27.4	48.500
B	11	2	H2	-76.756702		3210.513
Na	23	1	He	2.470313	66.9	13681.387
Mg	24	1	He	-3.621713		2751.957
Al	27	1	He	0.650283	71.1	244.337
Si	28	2	H2	-0.354071		11455.120
K	39	1	He	-2.558870		67408.180
Ca	43	1	He	7.887519	76.1	30.067
Ti	47	1	He	0.031021	91.5	9.333
V	51	1	He	0.058444	158.8	-204.507
Cr	52	1	He	0.036260	95.8	2617.577
Mn	55	1	He	0.034131	59.9	474.677
Fe	56	1	He	0.523851	59.5	15060.573
Co	59	1	He	0.045702	60.4	630.020
Ni	60	1	He	0.041378	63.8	325.337
Cu	63	1	He	0.057308	60.4	810.693
Zn	66	1	He	0.067962	31.9	342.670
As	75	1	He	0.031070	77.3	216.667
Se	78	2	H2	0.005847	96.2	41.000
Sr	88	1	He	0.058633	52.3	820.037
Mo	95	1	He	0.042191	45.4	272.670
Pd	105	1	He	0.030452	18.7	470.017
Ag	107	1	He	0.193801	24.1	3935.603
Cd	111	1	He	0.044779	57.1	186.620
Sn	118	1	He	0.042012	58.9	536.683
Sb	121	1	He	0.044375	60.0	658.360
Ba	138	1	He	0.042272	63.8	1426.770
Pt	195	1	He	0.023852	75.0	508.683
Hg	202	1	He	0.009250	74.5	279.667
Tl	205	1	He	0.071941	35.2	3843.960
Pb	208	1	He	0.032789	78.1	4840.397
Bi	209	1	He	0.039426	74.0	4350.873
Th	232	1	He	0.049037	48.4	4289.160
U	238	1	He	0.032726	80.8	3067.140

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.80379472	564867.960
Sc	45	2	H2	88.69112563	3924222.667
Ge	72	1	He	95.25731781	475002.730
Ge	72	2	H2	89.69555928	1399050.330
In	115	1	He	96.82308970	5935440.457
Tb	159	1	He	98.21845146	14210850.207
Ir	193	1	He	98.40531391	7288260.517

Sample Name 4310629\_B70030Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 106SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:34:21  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.083942	29.6	102.333
Be	9	2	H2	0.030018	9.6	32.000
B	11	2	H2	-76.772632		3544.583
Na	23	1	He	11.395076	8.8	21649.067
Mg	24	1	He	-1.013610		4067.260
Al	27	1	He	7.990932	6.6	2147.823
Si	28	2	H2	3.079680	3.0	22174.467
K	39	1	He	-0.473872		68672.103
Ca	43	1	He	21.323390	22.9	58.883
Ti	47	1	He	0.091420	47.2	23.667
V	51	1	He	0.054579	86.0	-233.413
Cr	52	1	He	0.169814	16.7	3666.470
Mn	55	1	He	0.116541	6.6	969.370
Fe	56	1	He	2.895945	9.1	32903.593
Co	59	1	He	0.032262	42.4	459.343
Ni	60	1	He	0.059980	49.9	382.670
Cu	63	1	He	0.075874	42.5	970.037
Zn	66	1	He	1.501345	0.7	3207.030
As	75	1	He	0.015628	80.9	189.333
Se	78	2	H2	-0.016017		27.333
Sr	88	1	He	0.058739	48.0	818.367
Mo	95	1	He	0.031559	37.7	208.000
Pd	105	1	He	0.015634	44.4	335.010
Ag	107	1	He	0.052381	18.4	1143.390
Cd	111	1	He	0.026015	46.3	117.963
Sn	118	1	He	0.240957	13.3	2451.903
Sb	121	1	He	0.028837	48.5	443.343
Ba	138	1	He	0.058796	27.6	1971.830
Pt	195	1	He	0.012506	57.6	366.673
Hg	202	1	He	-0.005795		187.333
Tl	205	1	He	0.027250	37.1	1760.140
Pb	208	1	He	0.020302	70.6	4066.947
Bi	209	1	He	0.026443	42.6	3633.910
Th	232	1	He	0.021606	57.7	2433.600
U	238	1	He	0.015756	89.5	1958.520

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.47619350	562895.210
Sc	45	2	H2	97.44554369	4311570.167
Ge	72	1	He	95.29577347	475194.490
Ge	72	2	H2	98.04353647	1529260.123
In	115	1	He	97.84514190	5998094.210
Tb	159	1	He	98.96716681	14319178.953
Ir	193	1	He	98.72278842	7311773.850

Sample Name 4310630\_B70030Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 107SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:38:05  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	109.508179	1.4	39155.170
Be	9	2	H2	106.512224	0.7	39202.367
B	11	2	H2	33.807501	4.4	37784.353
Na	23	1	He	2108.544208	1.2	1900000.490
Mg	24	1	He	2099.408132	1.2	1071418.003
Al	27	1	He	2077.343937	1.2	537313.230
Si	28	2	H2	530.231944	1.4	1434779.250
K	39	1	He	2089.110818	1.4	1579635.447
Ca	43	1	He	2055.680247	1.3	4433.130
Ti	47	1	He	102.711896	1.8	24532.367
V	51	1	He	104.184710	1.9	692146.227
Cr	52	1	He	106.813741	1.5	847098.440
Mn	55	1	He	103.624905	1.7	622340.687
Fe	56	1	He	2125.051881	1.6	15998866.667
Co	59	1	He	107.996141	1.1	1363016.127
Ni	60	1	He	109.425526	0.9	342399.727
Cu	63	1	He	106.884025	1.0	933059.957
Zn	66	1	He	106.878538	1.3	214009.887
As	75	1	He	103.182518	1.2	182370.813
Se	78	2	H2	106.207598	0.8	83636.570
Sr	88	1	He	105.206234	1.6	1217913.443
Mo	95	1	He	100.918018	0.8	619192.293
Pd	105	1	He	21.086165	1.7	193848.207
Ag	107	1	He	49.610907	1.6	972269.570
Cd	111	1	He	104.891398	0.8	383844.777
Sn	118	1	He	100.261167	0.5	943299.177
Sb	121	1	He	102.445411	0.5	1418913.000
Ba	138	1	He	102.766604	0.4	3256878.700
Pt	195	1	He	21.275792	1.1	270639.710
Hg	202	1	He	-0.002138		208.667
Tl	205	1	He	108.705394	1.1	5091429.087
Pb	208	1	He	106.491316	1.0	6794572.347
Bi	209	1	He	103.957927	1.3	5628291.377
Th	232	1	He	104.684391	1.5	6916868.023
U	238	1	He	102.231958	0.8	6486760.320

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.12833201	560800.457
Sc	45	2	H2	94.59535595	4185460.917
Ge	72	1	He	95.40581409	475743.210
Ge	72	2	H2	95.94451256	1496520.040
In	115	1	He	95.73596894	5868797.877
Tb	159	1	He	98.15658767	14201899.373
Ir	193	1	He	96.55149558	7150959.893

Sample Name 10606170001\_B70030Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 108SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:41:50  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	7.288612	1.5	2640.900
Be	9	2	H2	0.142152	4.1	71.500
B	11	2	H2	1053.228847	0.5	350433.343
Na	23	1	He	55764.23190	0.5	48241745.947
Mg	24	1	He	22727.19838	0.2	11156565.247
Al	27	1	He	82.266023	2.0	20615.003
Si	28	2	H2	2654.680486	0.6	7050827.667
K	39	1	He	7470.646601	0.4	5283579.713
Ca	43	1	He	50881.19655	0.5	105647.543
Ti	47	1	He	6.282279	1.8	1450.740
V	51	1	He	2.456071	1.3	15198.920
Cr	52	1	He	1.926545	2.6	16945.147
Mn	55	1	He	2066.084991	0.9	11977106.000
Fe	56	1	He	3567.063555	0.5	25925604.667
Co	59	1	He	0.385128	4.8	4753.453
Ni	60	1	He	1.184542	2.1	3773.167
Cu	63	1	He	0.747001	4.1	6606.850
Zn	66	1	He	8.259155	0.3	16183.020
As	75	1	He	4.533926	1.1	7901.490
Se	78	2	H2	0.154260	9.5	159.667
Sr	88	1	He	478.547884	0.5	5358621.587
Mo	95	1	He	3.867979	1.1	22918.397
Pd	105	1	He	0.351885	5.9	3298.750
Ag	107	1	He	0.263904	30.1	5074.343
Cd	111	1	He	0.096104	14.8	359.217
Sn	118	1	He	0.093606	17.8	980.047
Sb	121	1	He	0.151657	9.5	2061.833
Ba	138	1	He	70.044888	0.8	2142767.417
Pt	195	1	He	0.010082	35.9	326.673
Hg	202	1	He	-0.003537		196.000
Tl	205	1	He	0.074656	28.3	3878.963
Pb	208	1	He	0.295314	4.8	21123.193
Bi	209	1	He	0.041002	49.4	4274.123
Th	232	1	He	0.117886	10.1	8597.907
U	238	1	He	0.428480	2.3	27617.767

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.91897033	541474.313
Sc	45	2	H2	93.53337539	4138472.583
Ge	72	1	He	92.28316948	460172.073
Ge	72	2	H2	95.23477972	1485449.793
In	115	1	He	92.41168330	5665012.813
Tb	159	1	He	96.08914157	13902768.543
Ir	193	1	He	94.83956811	7024168.230

Sample Name 10606170001\_B70030Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 109SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:45:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.873038	3.7	385.840
Be	9	2	H2	0.060123	23.1	42.667
B	11	2	H2	41.224636	1.9	40600.610
Na	23	1	He	5783.733061	5.4	4991645.030
Mg	24	1	He	2349.380587	5.2	1152283.603
Al	27	1	He	10.496499	4.7	2684.257
Si	28	2	H2	258.136071	0.6	714342.667
K	39	1	He	779.938095	5.5	608522.843
Ca	43	1	He	5185.674129	5.0	10733.330
Ti	47	1	He	0.744715	19.2	172.000
V	51	1	He	0.353061	1.6	1690.190
Cr	52	1	He	0.270014	3.8	4285.310
Mn	55	1	He	209.523131	5.2	1209656.960
Fe	56	1	He	367.620508	5.0	2670156.000
Co	59	1	He	0.065681	6.0	860.027
Ni	60	1	He	0.147219	14.4	636.683
Cu	63	1	He	0.165958	4.9	1713.443
Zn	66	1	He	1.198016	5.1	2526.893
As	75	1	He	0.470324	3.6	963.863
Se	78	2	H2	0.009463	107.4	47.667
Sr	88	1	He	48.369492	4.9	543368.247
Mo	95	1	He	0.406528	5.3	2448.883
Pd	105	1	He	0.045975	9.9	593.353
Ag	107	1	He	0.065484	1.4	1348.413
Cd	111	1	He	0.024689	23.4	109.557
Sn	118	1	He	0.056472	8.1	651.687
Sb	121	1	He	0.039957	20.2	581.683
Ba	138	1	He	6.970210	5.4	215987.890
Pt	195	1	He	0.004698	35.7	257.333
Hg	202	1	He	-0.010391		152.000
Tl	205	1	He	0.037421	26.4	2166.873
Pb	208	1	He	0.050498	11.3	5778.850
Bi	209	1	He	0.024889	36.1	3410.507
Th	232	1	He	0.037519	20.2	3373.817
U	238	1	He	0.060843	9.3	4684.233

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.69770603	540141.903
Sc	45	2	H2	95.79992396	4238758.167
Ge	72	1	He	92.72196027	462360.113
Ge	72	2	H2	97.72131895	1524234.250
In	115	1	He	93.76290028	5747844.997
Tb	159	1	He	94.82970873	13720546.047
Ir	193	1	He	94.13266520	6971812.393

Sample Name 10606599001\_B70030Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 110SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:49:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	25.358537	1.8	9771.980
Be	9	2	H2	0.075460	31.3	51.167
B	11	2	H2	201.727741	1.9	96364.120
Na	23	1	He	213508.4140	1.8	189510643.840
Mg	24	1	He	41932.47728	2.0	21118023.850
Al	27	1	He	68.220717	2.1	17554.970
Si	28	2	H2	9797.339179	1.5	28157778.667
K	39	1	He	45815.37691	1.5	32901743.680
Ca	43	1	He	106885.0447	1.5	227733.397
Ti	47	1	He	0.325840	4.7	79.000
V	51	1	He	4.618389	1.6	29845.130
Cr	52	1	He	0.573740	2.4	6787.583
Mn	55	1	He	94.545211	2.2	562637.480
Fe	56	1	He	139.195463	2.0	1048602.207
Co	59	1	He	1.143872	2.3	14145.530
Ni	60	1	He	10.688241	1.8	32820.827
Cu	63	1	He	0.390235	2.2	3631.130
Zn	66	1	He	49.420400	2.1	96704.807
As	75	1	He	4.724272	2.0	8302.047
Se	78	2	H2	29.881067	1.3	25106.120
Sr	88	1	He	478.095409	1.8	5402540.543
Mo	95	1	He	53.210432	1.5	311591.937
Pd	105	1	He	0.346222	3.6	3210.390
Ag	107	1	He	0.061283	13.4	1235.067
Cd	111	1	He	0.011327	66.7	58.910
Sn	118	1	He	0.076848	10.4	818.363
Sb	121	1	He	1.367046	3.9	18098.433
Ba	138	1	He	106.399746	2.2	3217694.013
Pt	195	1	He	0.037340	13.4	660.683
Hg	202	1	He	-0.006471		176.333
Tl	205	1	He	0.334183	2.9	15651.000
Pb	208	1	He	0.256065	5.3	18518.377
Bi	209	1	He	0.007744	58.0	2483.603
Th	232	1	He	0.050902	18.4	4207.397
U	238	1	He	0.670957	2.2	42333.840

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.29878808	555805.107
Sc	45	2	H2	101.3547041	4484534.667
Ge	72	1	He	93.15492335	464519.093
Ge	72	2	H2	102.2432590	1594766.413
In	115	1	He	91.38689394	5602191.267
Tb	159	1	He	95.28982241	13787118.127
Ir	193	1	He	93.99062816	6961292.607

Sample Name 4315140\_B70030Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 111SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:53:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.518728	2.0	2183.490
Be	9	2	H2	0.053132	37.9	42.333
B	11	2	H2	-15.587391		24033.537
Na	23	1	He	44500.85157	1.2	41682418.550
Mg	24	1	He	8725.490662	0.9	4640230.347
Al	27	1	He	15.746637	0.1	4335.300
Si	28	2	H2	2028.731907	0.5	5838510.833
K	39	1	He	9434.547228	1.0	7205085.517
Ca	43	1	He	21882.60514	1.0	49199.473
Ti	47	1	He	0.093675	13.9	25.333
V	51	1	He	0.974976	13.8	6160.910
Cr	52	1	He	0.186744	1.4	3961.210
Mn	55	1	He	19.553000	0.8	122997.007
Fe	56	1	He	29.429395	1.0	242992.713
Co	59	1	He	0.237861	4.4	3160.350
Ni	60	1	He	2.201373	0.9	7321.190
Cu	63	1	He	0.135062	4.7	1541.420
Zn	66	1	He	10.449780	2.6	21827.710
As	75	1	He	0.943069	0.2	1889.620
Se	78	2	H2	5.892255	1.5	4969.863
Sr	88	1	He	94.787401	0.8	1134613.810
Mo	95	1	He	10.510843	1.0	65821.160
Pd	105	1	He	0.064322	6.9	791.697
Ag	107	1	He	0.026706	6.3	630.020
Cd	111	1	He	0.003660	34.6	34.820
Sn	118	1	He	0.023948	11.7	368.343
Sb	121	1	He	0.271384	6.9	3873.903
Ba	138	1	He	21.022050	1.5	679911.683
Pt	195	1	He	0.005063	37.2	273.333
Hg	202	1	He	-0.012446		146.333
Tl	205	1	He	0.071973	3.7	3888.933
Pb	208	1	He	0.057806	7.8	6508.967
Bi	209	1	He	0.001983	69.0	2270.230
Th	232	1	He	0.005133	9.3	1323.413
U	238	1	He	0.132530	2.1	9463.510

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.35242024	586237.083
Sc	45	2	H2	101.2934367	4481823.833
Ge	72	1	He	98.63776133	491859.387
Ge	72	2	H2	101.9262722	1589822.127
In	115	1	He	97.69498013	5988889.007
Tb	159	1	He	99.23387629	14357768.123
Ir	193	1	He	97.81570591	7244591.973

Sample Name 4310631\_B70030Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 112SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:56:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	127.220753	0.6	51329.960
Be	9	2	H2	102.408436	1.4	42539.170
B	11	2	H2	313.347497	0.5	140643.343
Na	23	1	He	224875.7955	0.3	211462516.847
Mg	24	1	He	45569.51327	0.8	24312771.307
Al	27	1	He	2153.746440	1.0	584747.917
Si	28	2	H2	10560.05860	0.5	31970022.667
K	39	1	He	49582.52952	0.8	37714160.270
Ca	43	1	He	113261.8096	1.0	255633.953
Ti	47	1	He	105.802204	1.0	26527.463
V	51	1	He	113.630733	1.0	792499.333
Cr	52	1	He	108.229515	0.7	901002.000
Mn	55	1	He	200.452627	0.7	1263513.670
Fe	56	1	He	2259.043810	0.8	17853354.667
Co	59	1	He	108.798810	1.2	1422640.710
Ni	60	1	He	118.160140	1.1	383044.760
Cu	63	1	He	105.391150	1.2	953192.687
Zn	66	1	He	137.561844	1.0	285328.873
As	75	1	He	112.528055	1.2	206045.520
Se	78	2	H2	139.007858	1.1	122323.143
Sr	88	1	He	594.811421	1.3	7133643.640
Mo	95	1	He	163.148308	0.9	997390.333
Pd	105	1	He	19.901539	1.3	182310.987
Ag	107	1	He	48.948750	0.7	955938.993
Cd	111	1	He	105.693956	1.0	385375.140
Sn	118	1	He	104.425117	0.9	978902.330
Sb	121	1	He	107.190437	0.7	1479276.020
Ba	138	1	He	214.689378	0.5	6779392.190
Pt	195	1	He	20.894322	1.2	267645.020
Hg	202	1	He	-0.001935		211.333
Tl	205	1	He	104.098973	0.8	4910114.927
Pb	208	1	He	103.690798	1.1	6662298.333
Bi	209	1	He	101.598774	0.7	5493050.750
Th	232	1	He	107.773660	0.8	7111381.143
U	238	1	He	106.464351	1.0	6745789.900

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.75587749	588666.623
Sc	45	2	H2	106.7685034	4724073.333
Ge	72	1	He	98.84869191	492911.197
Ge	72	2	H2	107.2141207	1672300.750
In	115	1	He	95.39311895	5847780.517
Tb	159	1	He	98.84602530	14301651.453
Ir	193	1	He	96.41345839	7140736.350



Sample Name 4310632\_B70030Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 113SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:00:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	123.577631	0.6	50964.097
Be	9	2	H2	99.529022	0.2	42260.223
B	11	2	H2	297.885858	1.0	138203.227
Na	23	1	He	208523.2048	0.3	203666910.300
Mg	24	1	He	42323.16735	0.8	23455169.650
Al	27	1	He	2063.368396	0.5	581915.353
Si	28	2	H2	9977.884101	0.6	30875960.000
K	39	1	He	46165.99930	0.5	36479750.293
Ca	43	1	He	105627.8326	0.8	247636.350
Ti	47	1	He	102.443011	1.1	26679.753
V	51	1	He	108.152198	1.1	783454.370
Cr	52	1	He	103.542046	1.0	895430.400
Mn	55	1	He	189.694038	0.9	1241979.503
Fe	56	1	He	2167.531413	1.0	17793238.000
Co	59	1	He	105.120342	1.5	1419830.540
Ni	60	1	He	113.657693	1.6	380588.530
Cu	63	1	He	101.619423	1.2	949398.020
Zn	66	1	He	132.969703	1.1	284903.757
As	75	1	He	108.244162	0.9	204750.120
Se	78	2	H2	133.533423	0.7	119659.323
Sr	88	1	He	556.831866	0.9	6898545.317
Mo	95	1	He	157.058696	0.8	982179.897
Pd	105	1	He	19.341700	1.0	181252.730
Ag	107	1	He	47.472315	0.7	948276.157
Cd	111	1	He	102.870463	1.1	383677.927
Sn	118	1	He	100.735963	0.7	965984.100
Sb	121	1	He	103.433760	0.5	1460161.227
Ba	138	1	He	204.501902	0.8	6605499.070
Pt	195	1	He	20.177227	0.5	263224.827
Hg	202	1	He	-0.001269		219.667
Tl	205	1	He	100.012614	1.7	4803614.093
Pb	208	1	He	99.919231	1.2	6537909.017
Bi	209	1	He	99.380115	1.3	5413121.167
Th	232	1	He	104.408219	1.2	6940379.900
U	238	1	He	103.042794	0.6	6577822.403

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.5357737	611428.413
Sc	45	2	H2	109.1220826	4828209.667
Ge	72	1	He	102.1065844	509156.750
Ge	72	2	H2	109.1760175	1702901.957
In	115	1	He	97.57699566	5981656.333
Tb	159	1	He	100.6606800	14564206.867
Ir	193	1	He	97.13379847	7194087.393

Sample Name 10606599001\_B70030Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 114SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:04:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.063568	4.1	1323.223
Be	9	2	H2	0.101678	8.3	65.333
B	11	2	H2	-43.824944		15561.653
Na	23	1	He	22758.21325	0.9	22812920.493
Mg	24	1	He	4431.903856	1.4	2524123.973
Al	27	1	He	12.235883	2.4	3622.777
Si	28	2	H2	1036.355437	1.1	3177145.750
K	39	1	He	4801.171497	0.5	3960610.773
Ca	43	1	He	10998.62671	0.5	26463.973
Ti	47	1	He	0.065795	13.8	19.667
V	51	1	He	0.550807	18.1	3437.060
Cr	52	1	He	0.130715	8.5	3742.493
Mn	55	1	He	9.818314	0.7	66226.323
Fe	56	1	He	15.209719	1.8	140315.613
Co	59	1	He	0.152437	6.8	2187.507
Ni	60	1	He	1.155162	2.0	4210.620
Cu	63	1	He	0.130139	5.9	1600.757
Zn	66	1	He	5.303731	0.2	11958.263
As	75	1	He	0.514548	4.5	1183.883
Se	78	2	H2	2.940565	1.4	2650.913
Sr	88	1	He	48.263302	0.5	617760.393
Mo	95	1	He	5.299157	0.4	35592.980
Pd	105	1	He	0.039548	2.9	600.020
Ag	107	1	He	0.194369	25.2	4272.387
Cd	111	1	He	0.026929	24.9	130.593
Sn	118	1	He	0.040133	12.2	561.683
Sb	121	1	He	0.161798	11.1	2493.580
Ba	138	1	He	10.418693	0.6	361399.930
Pt	195	1	He	0.007580	41.2	324.007
Hg	202	1	He	-0.010665		167.000
Tl	205	1	He	0.086442	21.1	4852.620
Pb	208	1	He	0.047827	23.9	6220.583
Bi	209	1	He	0.031089	40.4	4024.033
Th	232	1	He	0.058575	14.2	5101.043
U	238	1	He	0.092917	10.3	7198.717

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	104.1526915	627186.977
Sc	45	2	H2	107.6568560	4763379.333
Ge	72	1	He	105.4606341	525881.793
Ge	72	2	H2	108.0230024	1684917.497
In	115	1	He	104.7639519	6422230.490
Tb	159	1	He	105.1481686	15213484.357
Ir	193	1	He	101.8047389	7540034.473

Sample Name 4315140\_B70030Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 115SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:08:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.770305	2.1	391.173
Be	9	2	H2	0.063231	11.9	49.167
B	11	2	H2	-69.492340		6471.883
Na	23	1	He	4482.817456	1.6	4488542.120
Mg	24	1	He	863.791950	1.2	494392.063
Al	27	1	He	4.005088	11.6	1237.720
Si	28	2	H2	198.644014	3.5	619487.647
K	39	1	He	942.213405	1.5	836234.023
Ca	43	1	He	2164.930893	2.9	5202.977
Ti	47	1	He	0.029767	65.6	10.000
V	51	1	He	0.203339	24.7	847.030
Cr	52	1	He	0.095098	27.9	3415.743
Mn	55	1	He	2.039982	2.5	13948.673
Fe	56	1	He	4.157104	8.4	47141.230
Co	59	1	He	0.050573	31.4	762.023
Ni	60	1	He	0.240226	9.6	1042.710
Cu	63	1	He	0.107924	21.1	1379.407
Zn	66	1	He	1.191318	1.2	2850.290
As	75	1	He	0.112088	17.2	396.173
Se	78	2	H2	0.569355	5.5	545.010
Sr	88	1	He	9.323588	2.4	118901.977
Mo	95	1	He	1.042168	1.4	7063.100
Pd	105	1	He	0.007675	77.4	281.670
Ag	107	1	He	0.054451	12.0	1280.067
Cd	111	1	He	0.023701	49.9	118.393
Sn	118	1	He	0.035279	59.5	515.017
Sb	121	1	He	0.049095	20.1	790.027
Ba	138	1	He	2.046916	0.8	71612.717
Pt	195	1	He	0.003210	74.1	262.667
Hg	202	1	He	-0.010927		164.333
Tl	205	1	He	0.036349	44.4	2313.573
Pb	208	1	He	0.029023	46.3	4895.370
Bi	209	1	He	0.019970	75.0	3380.510
Th	232	1	He	0.029692	47.0	3078.753
U	238	1	He	0.032733	47.3	3162.110

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.7995929	625060.687
Sc	45	2	H2	107.4410208	4753829.500
Ge	72	1	He	104.9661565	523416.070
Ge	72	2	H2	107.3584228	1674551.540
In	115	1	He	105.5707897	6471691.187
Tb	159	1	He	104.5648227	15129082.273
Ir	193	1	He	101.7125378	7533205.720

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 116\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:11:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	85.019975	4.1	33493.847
Be	9	2	H2	82.162520	4.2	33305.493
B	11	2	H2	9.498767	45.9	33292.007
Na	23	1	He	1052.559414	0.6	1049049.673
Mg	24	1	He	1024.253004	0.8	577281.607
Al	27	1	He	1015.517767	0.3	288827.250
Si	28	2	H2	513.898817	4.3	1531758.043
K	39	1	He	1032.812619	0.4	896826.157
Ca	43	1	He	1007.312622	1.4	2395.290
Ti	47	1	He	79.376695	0.6	20845.377
V	51	1	He	79.518858	1.2	580676.450
Cr	52	1	He	81.207859	0.4	708704.623
Mn	55	1	He	78.912964	0.3	521153.300
Fe	56	1	He	516.164000	0.3	4281835.000
Co	59	1	He	83.253703	0.6	1142448.083
Ni	60	1	He	83.795792	0.7	285132.303
Cu	63	1	He	83.337324	0.5	791073.770
Zn	66	1	He	81.728014	0.4	177989.967
As	75	1	He	79.792428	0.3	153381.093
Se	78	2	H2	82.076944	2.9	70449.350
Sr	88	1	He	80.156904	0.9	1008987.143
Mo	95	1	He	77.818156	0.8	511678.580
Pd	105	1	He	82.222705	0.3	809529.363
Ag	107	1	He	40.941596	1.1	859879.417
Cd	111	1	He	80.452352	0.7	315510.720
Sn	118	1	He	76.481676	0.7	771161.943
Sb	121	1	He	77.518208	0.8	1150588.523
Ba	138	1	He	78.082200	0.6	2651890.587
Pt	195	1	He	82.233582	0.3	1095821.373
Hg	202	1	He	3.850556	0.2	25321.323
Tl	205	1	He	41.588474	0.5	2042178.250
Pb	208	1	He	81.166827	0.4	5429149.260
Bi	209	1	He	81.223167	0.6	4603778.890
Th	232	1	He	76.348903	0.7	5281105.130
U	238	1	He	77.411445	0.8	5141891.383

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.3797219	616510.503
Sc	45	2	H2	104.2766517	4613819.000
Ge	72	1	He	103.7256400	517230.207
Ge	72	2	H2	104.6191444	1631824.917
In	115	1	He	102.5944970	6289238.760
Tb	159	1	He	102.8845393	14885968.530
Ir	193	1	He	101.0653611	7485273.430

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 117\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:15:40  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.150170	8.6	134.667
Be	9	2	H2	0.065987	12.4	48.500
B	11	2	H2	-76.416177		3889.503
Na	23	1	He	16.661157	4.2	28811.160
Mg	24	1	He	-4.654653		2415.213
Al	27	1	He	0.271793	5.0	158.667
Si	28	2	H2	0.094243	1292.7	14795.283
K	39	1	He	-1.283696		74337.583
Ca	43	1	He	2.382025	13.5	19.767
Ti	47	1	He	0.019148	62.7	7.000
V	51	1	He	0.023166	254.6	-487.353
Cr	52	1	He	0.020283	75.2	2711.597
Mn	55	1	He	0.028534	7.3	480.010
Fe	56	1	He	0.253870	7.1	14163.540
Co	59	1	He	0.031171	11.4	484.677
Ni	60	1	He	0.019459	70.5	278.670
Cu	63	1	He	0.032267	7.7	640.687
Zn	66	1	He	0.013494	46.2	252.667
As	75	1	He	0.007857	66.6	190.167
Se	78	2	H2	0.005354	127.4	47.333
Sr	88	1	He	0.030154	27.0	533.347
Mo	95	1	He	0.035558	13.0	246.667
Pd	105	1	He	0.030486	28.5	498.347
Ag	107	1	He	0.145784	20.8	3187.073
Cd	111	1	He	0.022013	8.8	108.957
Sn	118	1	He	0.022968	21.9	378.343
Sb	121	1	He	0.023029	20.1	383.343
Ba	138	1	He	0.024012	18.7	898.370
Pt	195	1	He	0.020432	21.8	486.010
Hg	202	1	He	0.011266	35.2	304.333
Tl	205	1	He	0.045373	20.9	2716.973
Pb	208	1	He	0.015922	31.2	3930.253
Bi	209	1	He	0.021822	17.2	3490.517
Th	232	1	He	0.032585	13.3	3287.117
U	238	1	He	0.020193	20.5	2331.903

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.0875575	614751.147
Sc	45	2	H2	103.5922764	4583538.167
Ge	72	1	He	102.9905692	513564.760
Ge	72	2	H2	104.2699837	1626378.790
In	115	1	He	102.8818910	6306856.560
Tb	159	1	He	102.2274850	14790901.860
Ir	193	1	He	101.5476628	7520994.470

Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 118CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:19:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.577469	2.3	306.333
Be	9	2	H2	0.248009	9.2	123.667
B	11	2	H2	-67.070760		7175.700
Na	23	1	He	67.346616	0.7	77640.417
Mg	24	1	He	26.393949	2.2	19477.813
Al	27	1	He	31.826731	0.9	8994.383
Si	28	2	H2	99.511685	0.3	311390.167
K	39	1	He	103.382475	0.4	155440.613
Ca	43	1	He	107.657106	5.2	264.617
Ti	47	1	He	1.010399	6.1	263.333
V	51	1	He	0.988935	4.3	6480.790
Cr	52	1	He	2.066886	0.7	20207.237
Mn	55	1	He	0.520285	1.1	3671.140
Fe	56	1	He	53.391628	0.1	446952.407
Co	59	1	He	0.540946	1.2	7398.560
Ni	60	1	He	0.534823	1.3	2009.477
Cu	63	1	He	1.072560	1.3	10399.063
Zn	66	1	He	5.605926	1.7	12279.867
As	75	1	He	0.484419	3.4	1094.043
Se	78	2	H2	0.488442	2.4	464.677
Sr	88	1	He	0.519420	2.3	6618.243
Mo	95	1	He	0.485270	1.4	3189.697
Pd	105	1	He	0.500614	4.7	5105.960
Ag	107	1	He	0.463364	4.8	9793.470
Cd	111	1	He	0.086034	6.9	358.100
Sn	118	1	He	0.483603	7.4	5000.940
Sb	121	1	He	0.487766	2.0	7250.277
Ba	138	1	He	0.310906	2.5	10592.483
Pt	195	1	He	0.502284	2.4	6883.790
Hg	202	1	He	0.217197	1.5	1642.440
Tl	205	1	He	0.111823	2.6	5968.060
Pb	208	1	He	0.508712	2.1	36764.997
Bi	209	1	He	0.503808	2.3	30906.303
Th	232	1	He	0.499285	3.3	35690.713
U	238	1	He	0.482390	2.7	33150.613

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.8434356	607259.290
Sc	45	2	H2	105.1720370	4653436.167
Ge	72	1	He	102.5661565	511448.417
Ge	72	2	H2	105.1855851	1640660.127
In	115	1	He	102.1821114	6263958.730
Tb	159	1	He	102.5344223	14835311.447
Ir	193	1	He	101.4988816	7517381.557

Sample Name 4310648\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 119SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:23:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.170572	13.0	141.000
Be	9	2	H2	0.040144	8.1	37.667
B	11	2	H2	-78.012782		3307.530
Na	23	1	He	42.987114	47.0	52218.367
Mg	24	1	He	6.213938	82.5	8094.127
Al	27	1	He	4.548227	8.8	1308.727
Si	28	2	H2	0.143808	44.0	14781.360
K	39	1	He	6.099032	89.9	76571.230
Ca	43	1	He	33.577256	33.5	89.117
Ti	47	1	He	0.058830	30.7	16.667
V	51	1	He	0.028153	414.5	-420.180
Cr	52	1	He	0.164928	7.1	3783.827
Mn	55	1	He	0.146631	22.5	1200.057
Fe	56	1	He	3.045518	15.0	35501.953
Co	59	1	He	0.031607	45.2	467.343
Ni	60	1	He	0.182701	149.0	791.840
Cu	63	1	He	0.075654	22.6	1002.703
Zn	66	1	He	0.276935	14.3	785.357
As	75	1	He	0.039396	27.9	239.000
Se	78	2	H2	-0.001140		41.333
Sr	88	1	He	0.157784	46.7	2028.517
Mo	95	1	He	0.051961	42.8	346.670
Pd	105	1	He	0.020753	32.3	395.010
Ag	107	1	He	0.079452	17.5	1735.123
Cd	111	1	He	0.018557	72.7	93.270
Sn	118	1	He	0.814762	4.3	8194.150
Sb	121	1	He	0.022062	37.1	360.010
Ba	138	1	He	0.060835	46.2	2103.537
Pt	195	1	He	0.008497	29.3	322.003
Hg	202	1	He	0.004208	9.4	254.667
Tl	205	1	He	0.028409	44.1	1851.820
Pb	208	1	He	0.032217	47.1	4927.053
Bi	209	1	He	0.029894	52.4	3860.653
Th	232	1	He	0.026108	55.1	2767.010
U	238	1	He	0.020797	88.5	2310.267

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.43725475	586747.940
Sc	45	2	H2	102.3976020	4530678.667
Ge	72	1	He	98.40243767	490685.940
Ge	72	2	H2	103.1309345	1608612.167
In	115	1	He	100.5882126	6166249.690
Tb	159	1	He	100.6750415	14566284.780
Ir	193	1	He	99.59594738	7376443.223

Sample Name 4310649\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 120SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:26:55  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	49.753094	1.6	18927.617
Be	9	2	H2	47.917186	1.3	18736.063
B	11	2	H2	-27.016699		20060.097
Na	23	1	He	930.632057	2.1	877542.720
Mg	24	1	He	902.419083	2.3	481009.953
Al	27	1	He	887.549442	1.9	238465.827
Si	28	2	H2	240.727581	1.5	699307.790
K	39	1	He	925.416648	2.0	766508.607
Ca	43	1	He	917.072817	1.6	2061.163
Ti	47	1	He	44.475410	2.2	11034.130
V	51	1	He	44.401055	1.5	306013.280
Cr	52	1	He	45.924585	2.7	379635.417
Mn	55	1	He	44.834138	2.4	279813.510
Fe	56	1	He	920.678920	2.1	7205627.667
Co	59	1	He	46.639727	2.7	613736.397
Ni	60	1	He	47.308040	2.8	154448.747
Cu	63	1	He	46.180206	3.6	420474.220
Zn	66	1	He	45.416732	3.1	94939.423
As	75	1	He	44.265661	2.8	81667.017
Se	78	2	H2	48.567515	1.0	40607.247
Sr	88	1	He	45.007789	3.3	543314.573
Mo	95	1	He	43.522357	2.6	278744.607
Pd	105	1	He	9.301618	3.3	89371.083
Ag	107	1	He	23.030837	3.7	471194.133
Cd	111	1	He	44.453995	2.7	169820.303
Sn	118	1	He	43.470994	2.3	426997.037
Sb	121	1	He	43.316317	3.0	626264.690
Ba	138	1	He	43.789990	2.7	1448579.513
Pt	195	1	He	9.067084	2.5	118495.970
Hg	202	1	He	3.747797	3.1	24138.827
Tl	205	1	He	46.899855	1.5	2254788.040
Pb	208	1	He	45.614213	2.1	2988694.703
Bi	209	1	He	44.920267	1.7	2490433.817
Th	232	1	He	44.633533	2.5	3019260.580
U	238	1	He	43.601747	1.7	2832276.103

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.71195590	582380.333
Sc	45	2	H2	100.4291805	4443584.000
Ge	72	1	He	99.47016981	496010.210
Ge	72	2	H2	101.8072086	1587965.000
In	115	1	He	99.92658026	6125690.360
Tb	159	1	He	100.7248937	14573497.700
Ir	193	1	He	98.80330188	7317736.973



Sample Name 10606414001\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 121SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:30:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.568507	0.8	2229.833
Be	9	2	H2	0.489736	7.1	217.000
B	11	2	H2	-73.510486		4828.103
Na	23	1	He	210.840969	0.7	204322.143
Mg	24	1	He	3434.906268	0.5	1785943.200
Al	27	1	He	3858.547539	0.9	1018372.980
Si	28	2	H2	3306.040278	0.1	9622715.000
K	39	1	He	1188.688361	1.2	947463.423
Ca	43	1	He	9962.683438	0.3	21872.620
Ti	47	1	He	202.577467	0.5	49380.047
V	51	1	He	16.163817	0.5	109084.930
Cr	52	1	He	5.276422	1.2	44946.557
Mn	55	1	He	22479.10482	1.0	137732154.667
Fe	56	1	He	48242.81908	1.4	370444842.667
Co	59	1	He	3.794694	0.7	49432.700
Ni	60	1	He	2.842711	2.5	9368.357
Cu	63	1	He	3842.979361	1.4	34578409.333
Zn	66	1	He	15749.51534	1.4	32485240.667
As	75	1	He	520.296394	1.0	947480.670
Se	78	2	H2	0.283424	8.4	286.667
Sr	88	1	He	56.879943	0.4	678981.107
Mo	95	1	He	3.884871	0.9	25142.163
Pd	105	1	He	0.080199	5.1	971.707
Ag	107	1	He	19.820881	1.2	409637.547
Cd	111	1	He	3.671718	0.9	14186.940
Sn	118	1	He	3.677166	1.6	36614.543
Sb	121	1	He	9.519038	0.7	139036.337
Ba	138	1	He	192.611354	0.6	6435889.070
Pt	195	1	He	0.005137	83.4	280.003
Hg	202	1	He	0.692946	0.3	4684.830
Tl	205	1	He	0.326686	7.2	16306.793
Pb	208	1	He	1290.755696	0.5	85150179.980
Bi	209	1	He	4.181169	0.7	234661.820
Th	232	1	He	2.874946	1.0	196134.353
U	238	1	He	3.795952	0.7	248371.570

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.03138556	572260.270
Sc	45	2	H2	102.5396865	4536965.333
Ge	72	1	He	98.35430927	490445.947
Ge	72	2	H2	104.7988336	1634627.667
In	115	1	He	100.9311784	6187274.147
Tb	159	1	He	101.5251545	14689284.363
Ir	193	1	He	99.18766702	7346204.473

Sample Name 10606414001\_B69994Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 122SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:34:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.663018	8.3	329.833
Be	9	2	H2	0.064170	19.8	47.000
B	11	2	H2	-78.603676		3095.317
Na	23	1	He	28.291298	2.7	38892.213
Mg	24	1	He	351.739633	0.7	194204.730
Al	27	1	He	406.346091	0.6	111409.637
Si	28	2	H2	339.071510	0.2	993955.043
K	39	1	He	123.509862	2.4	167478.660
Ca	43	1	He	1065.264878	3.9	2439.833
Ti	47	1	He	21.266455	0.7	5382.990
V	51	1	He	1.757140	3.1	11752.940
Cr	52	1	He	0.590087	0.8	7393.877
Mn	55	1	He	2390.172486	0.7	15201912.333
Fe	56	1	He	5091.326766	0.7	40593505.333
Co	59	1	He	0.423546	2.9	5723.137
Ni	60	1	He	0.352681	5.7	1377.400
Cu	63	1	He	414.609750	0.4	3834869.167
Zn	66	1	He	1679.995161	0.3	3561987.333
As	75	1	He	54.852830	0.7	102827.563
Se	78	2	H2	0.018575	122.4	58.333
Sr	88	1	He	6.030753	1.7	74131.133
Mo	95	1	He	0.438789	2.8	2916.973
Pd	105	1	He	0.015500	15.8	353.343
Ag	107	1	He	2.063801	2.1	43741.157
Cd	111	1	He	0.398217	5.5	1594.900
Sn	118	1	He	0.397767	1.4	4183.997
Sb	121	1	He	1.022257	2.0	15316.823
Ba	138	1	He	19.936475	1.2	681851.603
Pt	195	1	He	0.000772	340.0	226.000
Hg	202	1	He	0.065376	5.1	658.353
Tl	205	1	He	0.046998	13.2	2803.657
Pb	208	1	He	135.709878	0.3	9069820.177
Bi	209	1	He	0.443256	4.6	27632.520
Th	232	1	He	0.294742	2.8	21621.287
U	238	1	He	0.394451	1.6	27459.100

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.65430057	594076.750
Sc	45	2	H2	101.9362866	4510267.333
Ge	72	1	He	101.1047545	504161.103
Ge	72	2	H2	103.5684867	1615437.003
In	115	1	He	103.3056028	6332830.900
Tb	159	1	He	102.8201327	14876649.780
Ir	193	1	He	102.1394958	7564827.803

Sample Name 10606414002\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 123SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:38:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	6.474010	4.3	2616.060
Be	9	2	H2	0.093204	18.2	59.667
B	11	2	H2	-79.289715		2924.120
Na	23	1	He	43.315376	2.1	53080.557
Mg	24	1	He	1540.034905	2.7	832831.080
Al	27	1	He	2952.138692	2.2	807852.517
Si	28	2	H2	603.870487	1.6	1794516.417
K	39	1	He	1346.106322	2.0	1102790.557
Ca	43	1	He	1095.626645	2.4	2505.980
Ti	47	1	He	416.313926	2.8	105202.610
V	51	1	He	42.192875	2.1	296212.027
Cr	52	1	He	8.091892	1.7	70162.043
Mn	55	1	He	98.095910	2.2	623367.043
Fe	56	1	He	13767.00436	2.5	109601613.333
Co	59	1	He	3.188223	1.9	42652.750
Ni	60	1	He	2.586646	2.4	8771.320
Cu	63	1	He	1394.434408	1.6	12882306.333
Zn	66	1	He	558.553532	1.9	1183088.167
As	75	1	He	16.618251	1.5	31237.757
Se	78	2	H2	0.055238	8.2	90.667
Sr	88	1	He	6.165191	3.3	75702.767
Mo	95	1	He	0.330905	5.4	2182.840
Pd	105	1	He	0.017189	46.6	366.677
Ag	107	1	He	0.270381	6.1	5766.227
Cd	111	1	He	34.086459	2.7	133409.757
Sn	118	1	He	0.893444	2.9	9133.043
Sb	121	1	He	0.104031	3.2	1580.100
Ba	138	1	He	31.310796	2.7	1061219.307
Pt	195	1	He	0.000686	87.0	224.000
Hg	202	1	He	0.057200	9.1	602.680
Tl	205	1	He	0.106924	3.2	5721.283
Pb	208	1	He	5.921976	2.7	396917.410
Bi	209	1	He	0.132446	1.5	9680.380
Th	232	1	He	5.976771	2.8	411947.883
U	238	1	He	1.073156	4.3	71825.877

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.53190533	593339.710
Sc	45	2	H2	104.0138141	4602189.500
Ge	72	1	He	100.9855018	503566.447
Ge	72	2	H2	105.0755531	1638943.873
In	115	1	He	102.3734236	6275686.533
Tb	159	1	He	102.4006759	14815960.197
Ir	193	1	He	100.4826813	7442118.013

Sample Name 10606414002\_B69994Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 124SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:41:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.746172	4.9	368.337
Be	9	2	H2	0.027322	17.5	33.000
B	11	2	H2	-80.057322		2655.900
Na	23	1	He	8.782465	0.8	20492.453
Mg	24	1	He	166.259349	0.7	94876.117
Al	27	1	He	325.717446	0.2	89815.253
Si	28	2	H2	61.942331	1.3	196776.637
K	39	1	He	141.980817	1.0	182647.623
Ca	43	1	He	132.031686	2.4	316.167
Ti	47	1	He	45.649447	0.6	11616.580
V	51	1	He	4.650972	0.9	32314.037
Cr	52	1	He	0.929270	1.2	10292.283
Mn	55	1	He	10.314658	1.2	66251.743
Fe	56	1	He	1525.811906	0.2	12241232.000
Co	59	1	He	0.354635	0.1	4846.817
Ni	60	1	He	0.262908	7.2	1090.043
Cu	63	1	He	151.173690	0.6	1411732.460
Zn	66	1	He	61.203036	1.1	131209.077
As	75	1	He	1.791017	0.4	3557.273
Se	78	2	H2	-0.009453		35.000
Sr	88	1	He	0.722964	2.2	9106.290
Mo	95	1	He	0.057548	8.9	392.010
Pd	105	1	He	-0.000106		198.333
Ag	107	1	He	0.047152	6.8	1096.720
Cd	111	1	He	3.746690	1.5	14791.677
Sn	118	1	He	0.099715	8.2	1156.720
Sb	121	1	He	0.013100	13.4	235.000
Ba	138	1	He	3.446525	0.5	117738.567
Pt	195	1	He	-0.001391		198.000
Hg	202	1	He	-0.001238		225.667
Tl	205	1	He	0.010076	19.4	996.717
Pb	208	1	He	0.599806	0.9	43143.997
Bi	209	1	He	0.011332	39.2	2883.717
Th	232	1	He	0.640096	1.0	45432.347
U	238	1	He	0.116702	2.5	8754.690

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.19957581	597360.290
Sc	45	2	H2	103.7876088	4592180.833
Ge	72	1	He	102.0626372	508937.607
Ge	72	2	H2	105.2016317	1640910.417
In	115	1	He	103.1285267	6321975.797
Tb	159	1	He	103.2656746	14941113.530
Ir	193	1	He	101.4061601	7510514.260

Sample Name 10606414003\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 125SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:45:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.786270	1.5	2315.843
Be	9	2	H2	0.084667	10.0	55.500
B	11	2	H2	-79.817556		2706.743
Na	23	1	He	39.294277	3.7	49030.090
Mg	24	1	He	1346.608149	3.6	725271.710
Al	27	1	He	2795.827624	4.1	761303.227
Si	28	2	H2	559.806561	1.1	1642558.917
K	39	1	He	1016.169486	3.8	846147.410
Ca	43	1	He	1121.788837	3.7	2552.983
Ti	47	1	He	341.429350	3.3	85858.970
V	51	1	He	27.266348	3.8	190256.743
Cr	52	1	He	5.862100	3.3	51249.790
Mn	55	1	He	87.239827	3.8	551684.250
Fe	56	1	He	9724.469016	4.0	77040530.667
Co	59	1	He	1.859147	3.6	24913.250
Ni	60	1	He	1.961224	6.2	6704.223
Cu	63	1	He	103.652793	3.8	958490.627
Zn	66	1	He	216.470385	3.7	458922.117
As	75	1	He	13.787666	3.7	25961.733
Se	78	2	H2	0.118027	6.2	144.000
Sr	88	1	He	4.224248	3.4	51945.850
Mo	95	1	He	0.493440	4.5	3260.383
Pd	105	1	He	0.018247	30.9	378.343
Ag	107	1	He	0.062890	2.7	1423.420
Cd	111	1	He	1.026368	3.4	4052.333
Sn	118	1	He	0.894694	1.3	9176.403
Sb	121	1	He	0.072951	5.9	1123.390
Ba	138	1	He	23.877748	3.2	812064.807
Pt	195	1	He	0.002851	42.2	253.333
Hg	202	1	He	0.002933	95.4	251.333
Tl	205	1	He	0.074445	4.3	4144.013
Pb	208	1	He	5.556711	4.1	373494.187
Bi	209	1	He	0.049532	13.5	5041.053
Th	232	1	He	12.745235	4.4	882726.733
U	238	1	He	0.817854	4.5	55307.243

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.06269314	590514.207
Sc	45	2	H2	102.6170119	4540386.667
Ge	72	1	He	101.0641331	503958.543
Ge	72	2	H2	104.4252679	1628800.877
In	115	1	He	102.7190894	6296876.513
Tb	159	1	He	102.6569548	14853040.197
Ir	193	1	He	101.1030455	7488064.470

Sample Name 10606414003\_B69994Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 126SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:49:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.569684	1.7	290.333
Be	9	2	H2	0.007407	84.7	24.167
B	11	2	H2	-80.427122		2452.200
Na	23	1	He	7.733266	8.9	19180.713
Mg	24	1	He	128.486984	2.5	73252.033
Al	27	1	He	273.097730	3.3	74117.457
Si	28	2	H2	53.299668	3.5	166167.800
K	39	1	He	96.237304	5.5	145063.297
Ca	43	1	He	128.640578	0.4	303.583
Ti	47	1	He	32.830627	3.1	8222.300
V	51	1	He	2.700971	4.5	18203.760
Cr	52	1	He	0.597439	2.1	7379.873
Mn	55	1	He	8.816652	2.9	55769.757
Fe	56	1	He	946.054684	2.8	7473785.000
Co	59	1	He	0.181102	5.6	2478.887
Ni	60	1	He	0.173085	2.4	782.020
Cu	63	1	He	10.274913	3.4	95317.090
Zn	66	1	He	21.553030	1.9	45901.543
As	75	1	He	1.292086	4.1	2588.900
Se	78	2	H2	-0.010263		33.333
Sr	88	1	He	0.485920	2.2	6111.353
Mo	95	1	He	0.066657	11.5	450.010
Pd	105	1	He	0.003695	115.7	235.003
Ag	107	1	He	0.013896	14.9	393.343
Cd	111	1	He	0.105589	10.2	436.263
Sn	118	1	He	0.087741	6.1	1030.050
Sb	121	1	He	0.009056	42.7	173.333
Ba	138	1	He	2.319790	3.1	78891.943
Pt	195	1	He	-0.000534		208.667
Hg	202	1	He	-0.007704		182.667
Tl	205	1	He	0.006495	16.1	816.700
Pb	208	1	He	0.538559	4.1	38828.967
Bi	209	1	He	0.000323	423.7	2263.563
Th	232	1	He	1.202927	3.4	84622.687
U	238	1	He	0.075221	7.8	5999.773

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.65972356	588087.603
Sc	45	2	H2	100.7206611	4456480.833
Ge	72	1	He	101.0964722	504119.803
Ge	72	2	H2	102.3562750	1596529.210
In	115	1	He	102.6604848	6293283.933
Tb	159	1	He	102.7682330	14869140.610
Ir	193	1	He	101.5847255	7523739.470

Sample Name 10606414004\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 127SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:53:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	9.179632	0.5	3619.930
Be	9	2	H2	0.325097	9.0	151.000
B	11	2	H2	-79.178115		2914.450
Na	23	1	He	221.767614	1.5	219239.657
Mg	24	1	He	2772.107883	1.9	1475377.373
Al	27	1	He	5693.757414	1.5	1537294.587
Si	28	2	H2	718.718334	1.5	2098936.543
K	39	1	He	1906.830580	1.7	1511453.363
Ca	43	1	He	4593.806899	1.5	10324.503
Ti	47	1	He	539.766202	1.2	134586.613
V	51	1	He	46.673744	1.5	323375.213
Cr	52	1	He	11.991027	1.0	101421.913
Mn	55	1	He	725.234600	1.2	4545565.833
Fe	56	1	He	15056.06870	1.5	118269906.667
Co	59	1	He	4.028943	1.4	53555.757
Ni	60	1	He	7.876896	1.3	26124.023
Cu	63	1	He	46.192075	1.8	424450.657
Zn	66	1	He	129.083948	1.3	271910.470
As	75	1	He	13.773616	1.7	25761.857
Se	78	2	H2	0.107957	7.4	134.333
Sr	88	1	He	22.724706	1.4	276916.557
Mo	95	1	He	0.946344	2.6	6148.677
Pd	105	1	He	0.040444	1.9	588.353
Ag	107	1	He	0.391992	8.9	8220.810
Cd	111	1	He	0.340986	4.6	1340.957
Sn	118	1	He	1.298314	0.7	13054.487
Sb	121	1	He	0.219115	2.4	3247.073
Ba	138	1	He	78.964183	1.8	2645580.687
Pt	195	1	He	-0.001719		192.000
Hg	202	1	He	0.067287	1.7	667.687
Tl	205	1	He	0.158413	2.8	8232.617
Pb	208	1	He	31.521946	1.9	2099156.910
Bi	209	1	He	0.322551	4.4	20422.667
Th	232	1	He	7.393300	2.8	510272.387
U	238	1	He	1.126046	2.1	75451.190

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.21313471	585398.333
Sc	45	2	H2	102.3374571	4528017.500
Ge	72	1	He	100.3704499	500499.477
Ge	72	2	H2	103.6249633	1616317.913
In	115	1	He	101.2025097	6203907.273
Tb	159	1	He	102.3331879	14806195.613
Ir	193	1	He	100.6406169	7453815.307

Sample Name 10606414004\_B69994Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 128SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:56:55  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.946195	5.2	438.343
Be	9	2	H2	0.024649	43.0	31.333
B	11	2	H2	-80.654214		2406.357
Na	23	1	He	25.119688	5.8	35522.210
Mg	24	1	He	274.823723	2.6	151304.040
Al	27	1	He	574.165395	1.9	155868.257
Si	28	2	H2	68.218323	1.7	211175.097
K	39	1	He	187.667172	4.3	214507.360
Ca	43	1	He	473.712678	2.7	1082.273
Ti	47	1	He	53.960694	2.7	13521.533
V	51	1	He	4.808404	0.7	32932.587
Cr	52	1	He	1.382064	2.4	13894.593
Mn	55	1	He	72.087455	2.6	454272.563
Fe	56	1	He	1525.628545	2.9	12052514.000
Co	59	1	He	0.416220	6.7	5561.743
Ni	60	1	He	0.791408	2.9	2801.613
Cu	63	1	He	4.752558	2.3	43826.330
Zn	66	1	He	13.182643	3.6	27867.987
As	75	1	He	1.379058	4.3	2723.257
Se	78	2	H2	-0.007008		36.667
Sr	88	1	He	2.419552	3.7	29515.563
Mo	95	1	He	0.116615	6.0	769.357
Pd	105	1	He	0.003683	67.2	231.670
Ag	107	1	He	0.064089	3.6	1431.753
Cd	111	1	He	0.032627	2.7	148.530
Sn	118	1	He	0.130153	1.8	1441.753
Sb	121	1	He	0.026622	13.7	430.010
Ba	138	1	He	7.829409	2.4	263030.453
Pt	195	1	He	-0.000480		208.000
Hg	202	1	He	-0.003803		206.333
Tl	205	1	He	0.010916	24.5	1025.050
Pb	208	1	He	3.202908	3.0	215241.777
Bi	209	1	He	0.026683	20.2	3747.257
Th	232	1	He	0.734088	3.6	51804.240
U	238	1	He	0.108750	7.2	8197.640

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.73265632	588526.790
Sc	45	2	H2	101.8353244	4505800.167
Ge	72	1	He	100.0927185	499114.563
Ge	72	2	H2	103.8938777	1620512.377
In	115	1	He	101.4982099	6222034.263
Tb	159	1	He	102.0907033	14771111.450
Ir	193	1	He	101.1515567	7491657.390



Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 129\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:00:40  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	77.598495	0.1	30326.383
Be	9	2	H2	75.062921	0.2	30180.640
B	11	2	H2	-2.059386		29102.083
Na	23	1	He	992.326185	0.7	965598.943
Mg	24	1	He	986.887523	1.1	542834.407
Al	27	1	He	981.804199	1.1	272427.897
Si	28	2	H2	491.748766	0.4	1454423.040
K	39	1	He	1016.645747	0.6	862419.963
Ca	43	1	He	1002.271728	0.9	2325.267
Ti	47	1	He	79.702125	0.8	20420.790
V	51	1	He	80.236419	1.1	571629.253
Cr	52	1	He	81.743957	0.8	695962.250
Mn	55	1	He	80.042532	0.8	515715.187
Fe	56	1	He	520.323411	1.2	4210893.583
Co	59	1	He	82.277467	1.1	1125985.790
Ni	60	1	He	83.306799	0.8	282697.500
Cu	63	1	He	82.667480	0.8	782576.210
Zn	66	1	He	80.966099	0.6	175851.330
As	75	1	He	79.547998	0.3	152495.040
Se	78	2	H2	81.009482	0.6	70061.800
Sr	88	1	He	80.582634	0.3	1011601.730
Mo	95	1	He	76.805276	1.3	513211.250
Pd	105	1	He	80.580403	0.9	806237.123
Ag	107	1	He	40.486511	0.5	864208.240
Cd	111	1	He	79.760516	0.9	317879.170
Sn	118	1	He	76.244672	1.0	781249.727
Sb	121	1	He	76.619393	1.4	1155690.867
Ba	138	1	He	77.415450	1.2	2671956.940
Pt	195	1	He	81.740671	0.7	1090152.587
Hg	202	1	He	3.851458	0.6	25348.040
Tl	205	1	He	41.545826	0.5	2041744.603
Pb	208	1	He	81.269608	0.4	5440374.550
Bi	209	1	He	81.323886	1.5	4609144.930
Th	232	1	He	76.927023	1.3	5320633.257
U	238	1	He	77.788763	1.4	5166571.280

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.88472223	601486.107
Sc	45	2	H2	103.3114899	4571114.500
Ge	72	1	He	103.4431057	515821.343
Ge	72	2	H2	105.3385130	1643045.460
In	115	1	He	104.2634278	6391547.407
Tb	159	1	He	102.9687100	14898146.863
Ir	193	1	He	101.0646326	7485219.470

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 130\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:04:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.048241	60.4	93.833
Be	9	2	H2	0.044136	30.1	39.333
B	11	2	H2	-80.477885		2482.370
Na	23	1	He	1.287890	25.8	13386.077
Mg	24	1	He	-6.752358		1220.063
Al	27	1	He	0.490850	26.1	215.333
Si	28	2	H2	-0.959376		11595.860
K	39	1	He	-5.507716		69244.673
Ca	43	1	He	1.252900	65.4	16.667
Ti	47	1	He	0.062664	28.2	18.000
V	51	1	He	0.118057	23.6	206.087
Cr	52	1	He	0.020566	26.8	2644.913
Mn	55	1	He	0.188125	7.4	1492.080
Fe	56	1	He	0.994108	10.8	19765.363
Co	59	1	He	0.037464	20.1	568.013
Ni	60	1	He	0.025058	28.0	296.000
Cu	63	1	He	0.053841	17.9	842.027
Zn	66	1	He	0.105015	22.8	449.343
As	75	1	He	0.005105	119.2	184.333
Se	78	2	H2	-0.002867		40.667
Sr	88	1	He	0.033505	15.9	571.683
Mo	95	1	He	0.038705	14.4	268.667
Pd	105	1	He	0.031687	36.1	515.013
Ag	107	1	He	0.151243	27.8	3308.763
Cd	111	1	He	0.032364	32.3	150.617
Sn	118	1	He	0.030773	17.8	460.010
Sb	121	1	He	0.029824	18.0	486.680
Ba	138	1	He	0.034188	13.0	1250.070
Pt	195	1	He	0.029980	18.0	618.683
Hg	202	1	He	0.010775	51.6	304.667
Tl	205	1	He	0.042733	24.0	2610.290
Pb	208	1	He	0.029791	33.3	4902.043
Bi	209	1	He	0.027033	21.0	3793.953
Th	232	1	He	0.041783	9.7	3932.303
U	238	1	He	0.027535	16.9	2825.337

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.53221816	599363.397
Sc	45	2	H2	102.5446927	4537186.833
Ge	72	1	He	102.7051264	512141.393
Ge	72	2	H2	104.9492825	1636974.333
In	115	1	He	103.5678952	6348909.927
Tb	159	1	He	103.4989755	14974868.943
Ir	193	1	He	101.8853114	7546001.970

Sample Name 10606414005\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 131SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:08:09  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	6.818280	2.4	2765.753
Be	9	2	H2	1.134855	4.4	483.510
B	11	2	H2	-42.872369		15435.020
Na	23	1	He	703.563102	6.1	653605.590
Mg	24	1	He	2131.146319	6.3	1107944.903
Al	27	1	He	5617.596507	6.8	1479951.497
Si	28	2	H2	1048.751734	3.0	3121129.333
K	39	1	He	1448.779816	6.9	1137350.970
Ca	43	1	He	8355.974009	7.7	18307.557
Ti	47	1	He	354.942808	6.3	86365.667
V	51	1	He	24.066511	6.7	162398.847
Cr	52	1	He	6.080738	6.5	51351.493
Mn	55	1	He	24249.42234	6.8	148307408.000
Fe	56	1	He	30205.26524	6.7	231524133.333
Co	59	1	He	5.001914	5.9	64701.440
Ni	60	1	He	4.819083	4.1	15639.060
Cu	63	1	He	2433.101740	4.9	21746421.333
Zn	66	1	He	4487.098843	5.1	9193548.667
As	75	1	He	1512.126196	5.2	2735127.500
Se	78	2	H2	0.771524	2.6	718.687
Sr	88	1	He	88.393788	5.3	1048095.867
Mo	95	1	He	2.916916	5.3	18538.063
Pd	105	1	He	0.098419	10.5	1126.727
Ag	107	1	He	25.631779	6.7	520037.690
Cd	111	1	He	9.155090	5.9	34704.210
Sn	118	1	He	5.560687	5.6	54291.647
Sb	121	1	He	10.092431	6.0	144732.630
Ba	138	1	He	245.441613	5.5	8053560.923
Pt	195	1	He	-0.000612		198.667
Hg	202	1	He	16.224565	5.9	101430.270
Tl	205	1	He	0.309330	4.5	15016.957
Pb	208	1	He	1421.114317	5.4	90957851.977
Bi	209	1	He	16.112717	4.7	869130.403
Th	232	1	He	5.517995	5.4	363388.367
U	238	1	He	6.705244	5.0	423894.093

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.03264874	572267.877
Sc	45	2	H2	104.5532458	4626057.167
Ge	72	1	He	97.79603574	487662.103
Ge	72	2	H2	106.5851445	1662490.127
In	115	1	He	99.22206819	6082502.423
Tb	159	1	He	98.60049388	14266126.457
Ir	193	1	He	96.06238955	7114734.897

Sample Name 4312115\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 132SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:11:58  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	76.396651	1.2	30670.080
Be	9	2	H2	69.533094	1.6	28718.640
B	11	2	H2	28.216393	8.0	40441.857
Na	23	1	He	2304.598389	3.0	2249660.020
Mg	24	1	He	3577.119199	3.2	1975151.167
Al	27	1	He	6734.710682	3.5	1887829.500
Si	28	2	H2	1936.497628	1.9	5839458.333
K	39	1	He	3048.115885	3.1	2463830.277
Ca	43	1	He	9410.377467	3.6	21943.350
Ti	47	1	He	392.021618	3.2	101483.990
V	51	1	He	89.659908	2.8	645532.003
Cr	52	1	He	73.877126	2.7	635809.560
Mn	55	1	He	22250.62531	3.6	144782336.000
Fe	56	1	He	28338.42254	3.8	231104810.667
Co	59	1	He	73.828861	3.3	1013521.647
Ni	60	1	He	74.997156	2.8	255313.637
Cu	63	1	He	2283.469696	3.5	21675353.333
Zn	66	1	He	4159.318968	3.3	9050450.333
As	75	1	He	1454.407495	3.3	2793747.083
Se	78	2	H2	75.041037	1.3	66730.103
Sr	88	1	He	150.065955	4.0	1889600.023
Mo	95	1	He	69.321565	2.3	462270.737
Pd	105	1	He	68.521244	2.7	684228.583
Ag	107	1	He	43.168409	2.2	919511.600
Cd	111	1	He	75.479139	2.7	300219.030
Sn	118	1	He	70.437375	2.3	720318.687
Sb	121	1	He	74.327744	2.7	1118943.057
Ba	138	1	He	291.727191	3.0	10048870.893
Pt	195	1	He	67.281547	2.6	905318.790
Hg	202	1	He	14.956179	3.3	98633.527
Tl	205	1	He	34.888931	2.7	1729926.850
Pb	208	1	He	1361.023178	3.6	91880565.717
Bi	209	1	He	81.830488	3.0	4621905.453
Th	232	1	He	11.025279	2.1	760734.180
U	238	1	He	72.816833	3.3	4820035.970

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.9246472	607748.330
Sc	45	2	H2	106.1241807	4695564.667
Ge	72	1	He	103.7570440	517386.803
Ge	72	2	H2	108.3169257	1689502.043
In	115	1	He	104.0343594	6377505.077
Tb	159	1	He	103.8721482	15028861.860
Ir	193	1	He	100.6764532	7456469.473

Sample Name 4312116\_B69994Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 133SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:15:47  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.402444	1.8	635.010
Be	9	2	H2	0.263921	4.6	130.500
B	11	2	H2	-72.896199		5175.220
Na	23	1	He	141.839667	0.7	150508.593
Mg	24	1	He	423.712699	1.1	239098.367
Al	27	1	He	1121.677342	0.5	315503.917
Si	28	2	H2	205.103651	2.5	627503.937
K	39	1	He	284.669575	0.7	298636.873
Ca	43	1	He	1707.219783	0.6	4005.260
Ti	47	1	He	70.986282	1.2	18437.520
V	51	1	He	4.897716	1.0	34767.803
Cr	52	1	He	1.275926	1.4	13486.893
Mn	55	1	He	4897.714210	0.4	31972037.333
Fe	56	1	He	6082.483694	0.1	49773140.000
Co	59	1	He	1.033762	0.8	14221.613
Ni	60	1	He	0.983864	0.4	3553.107
Cu	63	1	He	498.780588	0.5	4725040.000
Zn	66	1	He	912.028200	0.3	1980650.920
As	75	1	He	301.270947	0.4	577671.083
Se	78	2	H2	0.149445	20.6	175.000
Sr	88	1	He	17.763519	0.8	223355.913
Mo	95	1	He	0.608505	2.9	4113.937
Pd	105	1	He	0.035005	6.3	556.683
Ag	107	1	He	5.095822	1.2	109839.140
Cd	111	1	He	1.847498	0.9	7451.233
Sn	118	1	He	1.123361	2.1	11760.013
Sb	121	1	He	2.040226	0.7	31089.573
Ba	138	1	He	49.153017	0.3	1711734.037
Pt	195	1	He	0.006403	49.6	308.670
Hg	202	1	He	3.272634	1.5	22096.607
Tl	205	1	He	0.094818	11.2	5281.093
Pb	208	1	He	282.320833	0.9	19349232.940
Bi	209	1	He	3.227497	0.6	189786.907
Th	232	1	He	1.078122	0.8	77490.453
U	238	1	He	1.318761	1.0	90815.163

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.2543557	609733.770
Sc	45	2	H2	105.3938087	4663248.667
Ge	72	1	He	103.5533930	516371.293
Ge	72	2	H2	106.9302955	1667873.710
In	115	1	He	105.1946315	6448631.973
Tb	159	1	He	105.4609491	15258739.353
Ir	193	1	He	103.6322763	7675388.637

Sample Name 4310650\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 134SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:19:31  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	53.801717	2.2	21200.610
Be	9	2	H2	46.841051	2.3	18976.857
B	11	2	H2	-10.718079		26353.063
Na	23	1	He	1447.376830	1.0	1415410.187
Mg	24	1	He	3292.225696	1.3	1815600.857
Al	27	1	He	7078.217959	1.2	1981235.290
Si	28	2	H2	1434.060291	1.9	4244007.333
K	39	1	He	2519.355521	1.4	2046391.897
Ca	43	1	He	8639.867879	1.7	20118.713
Ti	47	1	He	410.591679	1.7	106136.313
V	51	1	He	71.436765	1.3	513451.257
Cr	52	1	He	54.341126	1.3	467658.070
Mn	55	1	He	18253.89620	1.9	118604082.667
Fe	56	1	He	29008.68384	1.7	236227290.667
Co	59	1	He	51.754686	1.1	706334.437
Ni	60	1	He	53.346851	1.0	180606.183
Cu	63	1	He	2061.449495	1.5	19453132.000
Zn	66	1	He	3909.495175	1.6	8457129.500
As	75	1	He	1208.194379	1.7	2307254.417
Se	78	2	H2	49.442621	0.6	42956.643
Sr	88	1	He	107.883907	1.4	1350536.800
Mo	95	1	He	48.502074	1.5	323460.540
Pd	105	1	He	8.482065	2.2	84880.463
Ag	107	1	He	46.561321	2.1	991844.333
Cd	111	1	He	52.484745	1.7	208768.530
Sn	118	1	He	47.088160	1.7	481603.510
Sb	121	1	He	39.940718	1.5	601291.827
Ba	138	1	He	244.500690	1.9	8422002.373
Pt	195	1	He	9.107467	2.1	123594.153
Hg	202	1	He	17.890076	2.0	118756.557
Tl	205	1	He	46.665047	2.4	2329872.517
Pb	208	1	He	1294.575754	1.9	88001444.520
Bi	209	1	He	59.660297	1.3	3407082.243
Th	232	1	He	51.467345	1.5	3586451.510
U	238	1	He	50.346193	1.3	3368899.120

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.7813490	606885.417
Sc	45	2	H2	104.0670129	4604543.333
Ge	72	1	He	103.1542237	514380.827
Ge	72	2	H2	105.7903861	1650093.670
In	115	1	He	104.0458730	6378210.883
Tb	159	1	He	104.6033457	15134656.023
Ir	193	1	He	101.7971666	7539473.640

Sample Name 4310651\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 135SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:23:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	49.577509	1.4	19952.090
Be	9	2	H2	43.700049	0.9	18077.597
B	11	2	H2	-19.414204		23872.120
Na	23	1	He	1288.514015	3.0	1258134.563
Mg	24	1	He	2993.452547	3.1	1647009.403
Al	27	1	He	5884.326534	3.1	1642810.707
Si	28	2	H2	1745.533418	2.1	5270759.500
K	39	1	He	2182.692577	3.2	1778243.620
Ca	43	1	He	9202.616444	3.1	21372.533
Ti	47	1	He	324.315846	2.5	83616.847
V	51	1	He	62.664497	2.9	449158.427
Cr	52	1	He	49.107785	2.9	421766.533
Mn	55	1	He	23204.85515	2.7	150379424.000
Fe	56	1	He	28913.16249	3.1	234839877.333
Co	59	1	He	47.982740	3.3	654730.310
Ni	60	1	He	47.727647	3.8	161572.790
Cu	63	1	He	1981.465481	3.9	18694045.333
Zn	66	1	He	4180.925647	3.4	9042156.667
As	75	1	He	1114.808618	3.6	2128480.167
Se	78	2	H2	46.101280	0.4	40953.537
Sr	88	1	He	95.035467	3.0	1189460.140
Mo	95	1	He	42.881103	4.3	285408.240
Pd	105	1	He	7.645006	3.9	76370.287
Ag	107	1	He	41.983852	4.8	892556.810
Cd	111	1	He	48.232061	3.8	191474.197
Sn	118	1	He	42.822431	3.5	437129.397
Sb	121	1	He	35.894956	3.7	539329.890
Ba	138	1	He	240.986850	3.9	8284543.420
Pt	195	1	He	8.334746	2.5	112932.463
Hg	202	1	He	16.015160	2.6	106155.580
Tl	205	1	He	42.906369	1.9	2138409.757
Pb	208	1	He	1286.324199	2.3	87286866.610
Bi	209	1	He	53.813797	2.8	3082325.580
Th	232	1	He	46.504911	3.5	3250679.950
U	238	1	He	46.677341	2.8	3132980.580

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.5115444	605260.707
Sc	45	2	H2	106.2418714	4700772.000
Ge	72	1	He	103.1323240	514271.623
Ge	72	2	H2	108.1574447	1687014.497
In	115	1	He	103.8510987	6366270.847
Tb	159	1	He	104.4013223	15105426.023
Ir	193	1	He	102.0847119	7560770.303

Sample Name 10606414006\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 136SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:27:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	8.306416	1.4	3332.033
Be	9	2	H2	0.235577	4.2	117.167
B	11	2	H2	-78.868540		3063.813
Na	23	1	He	77.183880	1.7	86155.140
Mg	24	1	He	2137.993518	1.1	1167647.560
Al	27	1	He	3887.363099	1.4	1075993.453
Si	28	2	H2	740.350455	1.9	2194240.667
K	39	1	He	1553.441221	0.9	1275951.597
Ca	43	1	He	2316.797932	1.8	5344.880
Ti	47	1	He	437.282114	2.0	111774.220
V	51	1	He	32.059448	1.1	227508.673
Cr	52	1	He	6.508275	1.5	57563.043
Mn	55	1	He	1578.747320	1.2	10143597.667
Fe	56	1	He	13740.87671	1.7	110652162.667
Co	59	1	He	4.038533	1.5	54579.517
Ni	60	1	He	3.737625	2.1	12713.550
Cu	63	1	He	318.038971	1.6	2969241.667
Zn	66	1	He	416.248507	1.5	890961.397
As	75	1	He	235.071706	1.4	444226.040
Se	78	2	H2	0.127864	5.3	153.667
Sr	88	1	He	15.506599	1.7	192164.277
Mo	95	1	He	0.929584	1.2	6146.007
Pd	105	1	He	0.027447	24.7	470.013
Ag	107	1	He	2.181015	1.0	46070.087
Cd	111	1	He	1.481881	0.7	5854.787
Sn	118	1	He	2.286833	1.5	23284.433
Sb	121	1	He	2.743782	2.4	40916.503
Ba	138	1	He	84.834244	1.8	2891923.500
Pt	195	1	He	0.003661	123.0	270.003
Hg	202	1	He	0.425007	1.4	3065.357
Tl	205	1	He	0.203931	2.4	10732.773
Pb	208	1	He	211.967687	2.2	14475010.407
Bi	209	1	He	4.250452	2.9	248315.817
Th	232	1	He	10.304608	1.8	729154.573
U	238	1	He	2.006354	1.9	137136.903

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.66004533	600133.147
Sc	45	2	H2	103.8846384	4596474.000
Ge	72	1	He	102.0478400	508863.820
Ge	72	2	H2	105.3563119	1643323.083
In	115	1	He	102.9667706	6312059.843
Tb	159	1	He	105.0637129	15201264.773
Ir	193	1	He	103.2569603	7647591.347



Sample Name 10606414006\_B69994Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 137SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:30:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.882597	7.0	418.843
Be	9	2	H2	0.044945	30.3	39.833
B	11	2	H2	-80.843452		2371.353
Na	23	1	He	13.922039	2.9	25209.680
Mg	24	1	He	224.386851	1.8	125410.443
Al	27	1	He	426.182391	0.3	116628.763
Si	28	2	H2	74.387336	3.6	231762.030
K	39	1	He	164.108966	1.2	198225.237
Ca	43	1	He	269.192845	3.6	625.663
Ti	47	1	He	47.214083	2.7	11926.160
V	51	1	He	3.576473	0.6	24522.010
Cr	52	1	He	0.740880	1.2	8641.237
Mn	55	1	He	172.060647	1.9	1092581.873
Fe	56	1	He	1483.749802	0.9	11816483.000
Co	59	1	He	0.449391	3.6	6096.620
Ni	60	1	He	0.447079	3.2	1698.103
Cu	63	1	He	34.023724	2.1	316474.760
Zn	66	1	He	45.752893	2.0	97675.100
As	75	1	He	25.279565	1.4	47706.767
Se	78	2	H2	-0.000153		43.000
Sr	88	1	He	1.747801	1.6	21694.867
Mo	95	1	He	0.123983	7.5	830.027
Pd	105	1	He	0.011560	11.5	313.343
Ag	107	1	He	0.275729	5.4	5914.613
Cd	111	1	He	0.176497	3.1	717.203
Sn	118	1	He	0.250672	3.9	2683.617
Sb	121	1	He	0.312710	5.1	4699.167
Ba	138	1	He	8.952084	0.4	305347.437
Pt	195	1	He	0.007215	80.0	316.003
Hg	202	1	He	0.099412	9.7	893.030
Tl	205	1	He	0.032086	14.0	2101.853
Pb	208	1	He	22.726632	1.4	1543615.133
Bi	209	1	He	0.468988	4.2	29503.187
Th	232	1	He	1.083674	1.3	77812.340
U	238	1	He	0.218638	2.6	15873.103

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.47020897	592968.187
Sc	45	2	H2	103.0658666	4560246.667
Ge	72	1	He	101.5853193	506557.450
Ge	72	2	H2	105.1215133	1639660.750
In	115	1	He	103.0105750	6314745.133
Tb	159	1	He	104.3410568	15096706.443
Ir	193	1	He	103.5361878	7668271.967

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 138\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:34:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	78.162406	0.5	30112.463
Be	9	2	H2	75.555352	0.6	29946.840
B	11	2	H2	-2.093285		28676.267
Na	23	1	He	972.120757	4.1	947270.847
Mg	24	1	He	963.682574	4.3	530773.480
Al	27	1	He	960.012936	4.1	266691.177
Si	28	2	H2	490.970778	0.9	1431492.917
K	39	1	He	992.107015	3.8	844465.430
Ca	43	1	He	990.923690	6.1	2301.163
Ti	47	1	He	77.073975	5.0	19766.900
V	51	1	He	78.221703	4.0	557913.093
Cr	52	1	He	80.494249	3.7	686217.667
Mn	55	1	He	80.308129	3.8	518056.897
Fe	56	1	He	515.151544	3.8	4174329.167
Co	59	1	He	81.081936	2.7	1107728.707
Ni	60	1	He	82.105183	2.9	278137.367
Cu	63	1	He	81.809697	2.8	773130.083
Zn	66	1	He	79.832865	3.5	173079.603
As	75	1	He	78.229209	2.8	149712.163
Se	78	2	H2	79.995515	1.1	68288.033
Sr	88	1	He	79.274224	2.5	993489.987
Mo	95	1	He	74.976656	4.3	504624.510
Pd	105	1	He	79.545676	4.2	801664.050
Ag	107	1	He	39.578577	4.1	850928.633
Cd	111	1	He	77.764879	4.2	312179.123
Sn	118	1	He	74.160612	3.7	765523.350
Sb	121	1	He	74.716977	4.4	1135160.090
Ba	138	1	He	75.995862	4.2	2642134.390
Pt	195	1	He	80.217039	3.4	1083787.877
Hg	202	1	He	3.834454	3.3	25567.117
Tl	205	1	He	41.218811	3.5	2052135.283
Pb	208	1	He	80.316043	3.5	5446660.360
Bi	209	1	He	79.124335	3.4	4592589.203
Th	232	1	He	74.546164	4.3	5279203.047
U	238	1	He	75.628895	4.3	5143317.737

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.0873188	602706.103
Sc	45	2	H2	101.8459130	4506268.667
Ge	72	1	He	103.3052515	515133.930
Ge	72	2	H2	103.9674699	1621660.250
In	115	1	He	105.1300530	6444673.190
Tb	159	1	He	104.3998104	15105207.277
Ir	193	1	He	103.5778609	7671358.427

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 139\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:38:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.099565	25.1	106.333
Be	9	2	H2	0.045168	37.5	37.167
B	11	2	H2	-80.356604		2345.183
Na	23	1	He	-0.530603		11449.470
Mg	24	1	He	-7.469485		816.697
Al	27	1	He	0.312241	94.9	163.000
Si	28	2	H2	-0.735030		11391.177
K	39	1	He	-7.661551		66448.807
Ca	43	1	He	1.044559	67.9	15.917
Ti	47	1	He	0.033388	45.4	10.333
V	51	1	He	0.046546	78.0	-296.510
Cr	52	1	He	-0.005225		2386.200
Mn	55	1	He	1.052589	19.0	6919.033
Fe	56	1	He	1.354378	26.6	22277.197
Co	59	1	He	0.024338	71.5	384.007
Ni	60	1	He	0.012088	168.8	248.667
Cu	63	1	He	0.095965	32.4	1219.393
Zn	66	1	He	0.194603	20.9	632.680
As	75	1	He	0.030783	90.6	229.667
Se	78	2	H2	-0.017412		25.667
Sr	88	1	He	0.019528	74.1	391.677
Mo	95	1	He	0.028735	45.7	203.333
Pd	105	1	He	0.018758	41.5	388.343
Ag	107	1	He	0.154976	24.9	3402.133
Cd	111	1	He	0.020987	60.3	105.967
Sn	118	1	He	0.016407	80.7	315.007
Sb	121	1	He	0.024264	58.3	405.010
Ba	138	1	He	0.025815	60.0	966.717
Pt	195	1	He	0.019127	89.7	472.677
Hg	202	1	He	0.049141	21.9	555.680
Tl	205	1	He	0.042908	36.3	2616.967
Pb	208	1	He	0.056211	45.4	6672.383
Bi	209	1	He	0.016352	97.8	3227.157
Th	232	1	He	0.025934	47.1	2865.367
U	238	1	He	0.013879	107.3	1936.867

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.86774155	589340.247
Sc	45	2	H2	96.45306291	4267656.917
Ge	72	1	He	101.1447390	504360.487
Ge	72	2	H2	98.60266034	1537981.207
In	115	1	He	104.0480134	6378342.090
Tb	159	1	He	103.4096615	14961946.447
Ir	193	1	He	103.3070719	7651302.800

Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 140CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:42:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.503479	1.6	271.167
Be	9	2	H2	0.220272	5.2	110.000
B	11	2	H2	-71.834748		5415.303
Na	23	1	He	49.377170	1.8	58852.063
Mg	24	1	He	22.194978	1.4	16779.490
Al	27	1	He	30.296229	0.5	8372.350
Si	28	2	H2	93.322353	0.9	286824.540
K	39	1	He	94.247854	0.8	144933.740
Ca	43	1	He	103.773431	0.4	249.817
Ti	47	1	He	1.052338	0.8	268.000
V	51	1	He	0.982965	14.6	6288.717
Cr	52	1	He	2.010098	1.2	19273.980
Mn	55	1	He	1.407988	9.7	9233.617
Fe	56	1	He	53.721059	0.3	439487.450
Co	59	1	He	0.528460	4.1	7177.780
Ni	60	1	He	0.557146	2.7	2069.487
Cu	63	1	He	1.098410	3.6	10565.870
Zn	66	1	He	5.545380	2.6	12062.363
As	75	1	He	0.478753	0.4	1075.540
Se	78	2	H2	0.459441	4.6	439.010
Sr	88	1	He	0.526959	1.7	6663.277
Mo	95	1	He	0.486949	2.1	3267.053
Pd	105	1	He	0.483418	1.7	5039.283
Ag	107	1	He	0.454091	6.2	9796.810
Cd	111	1	He	0.089572	5.2	379.757
Sn	118	1	He	0.471666	5.2	4982.593
Sb	121	1	He	0.491725	1.8	7460.383
Ba	138	1	He	0.312372	4.1	10864.343
Pt	195	1	He	0.513283	4.8	7192.623
Hg	202	1	He	0.243756	2.2	1857.133
Tl	205	1	He	0.110348	2.1	6033.080
Pb	208	1	He	0.532388	5.3	39229.363
Bi	209	1	He	0.486858	3.9	30612.510
Th	232	1	He	0.489936	2.7	35827.607
U	238	1	He	0.471184	3.6	33127.290

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.56549162	593541.960
Sc	45	2	H2	102.9785667	4556384.000
Ge	72	1	He	101.8268697	507761.947
Ge	72	2	H2	105.0593889	1638691.747
In	115	1	He	104.3052041	6394108.370
Tb	159	1	He	104.9225452	15180839.773
Ir	193	1	He	103.7787747	7686238.843

Sample Name 4303384\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 141SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:45:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.117064	22.1	116.500
Be	9	2	H2	0.019496	29.9	28.500
B	11	2	H2	-81.267253		2143.153
Na	23	1	He	-0.561945		11034.140
Mg	24	1	He	-3.732715		2716.937
Al	27	1	He	2.253085	3.4	667.353
Si	28	2	H2	-0.122394		13563.517
K	39	1	He	-5.300859		65936.513
Ca	43	1	He	5.153282	38.7	24.333
Ti	47	1	He	0.036173	5.8	10.667
V	51	1	He	0.096791	24.2	53.150
Cr	52	1	He	0.099298	9.1	3145.013
Mn	55	1	He	1.009738	6.2	6427.427
Fe	56	1	He	1.728760	6.3	24391.650
Co	59	1	He	0.017211	42.8	278.003
Ni	60	1	He	0.017229	70.9	256.000
Cu	63	1	He	0.111609	10.5	1314.733
Zn	66	1	He	0.372359	9.0	973.370
As	75	1	He	0.038414	24.4	235.167
Se	78	2	H2	-0.010737		32.667
Sr	88	1	He	0.025668	18.3	450.010
Mo	95	1	He	0.018722	23.1	132.000
Pd	105	1	He	0.019580	48.5	383.343
Ag	107	1	He	0.081223	24.3	1770.130
Cd	111	1	He	0.012012	64.2	67.977
Sn	118	1	He	0.883451	1.3	8869.527
Sb	121	1	He	0.020839	37.1	341.673
Ba	138	1	He	0.026480	27.3	956.710
Pt	195	1	He	0.012567	40.7	377.343
Hg	202	1	He	0.024279	18.3	385.010
Tl	205	1	He	0.011052	37.2	1025.050
Pb	208	1	He	0.046858	21.7	5923.887
Bi	209	1	He	0.013245	77.8	2987.077
Th	232	1	He	0.011244	44.3	1791.810
U	238	1	He	0.006339	86.3	1396.757

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.55991103	569421.143
Sc	45	2	H2	99.14530774	4386777.833
Ge	72	1	He	97.51845417	486277.937
Ge	72	2	H2	101.5048071	1583248.213
In	115	1	He	100.5286702	6162599.627
Tb	159	1	He	101.3274017	14660672.280
Ir	193	1	He	101.2383542	7498085.930

Sample Name 4303385\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 142SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:49:35  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	47.923768	1.1	18034.360
Be	9	2	H2	46.755737	1.8	18081.267
B	11	2	H2	-32.122484		18174.733
Na	23	1	He	916.062207	1.9	852815.977
Mg	24	1	He	897.309314	2.1	472140.383
Al	27	1	He	889.674654	1.9	235946.443
Si	28	2	H2	241.547767	1.8	693931.857
K	39	1	He	937.977082	1.4	765905.900
Ca	43	1	He	941.134149	2.8	2087.657
Ti	47	1	He	45.710028	2.6	11194.253
V	51	1	He	46.358372	1.7	315397.297
Cr	52	1	He	48.568432	1.9	396165.343
Mn	55	1	He	47.471171	2.2	292431.167
Fe	56	1	He	960.645929	2.4	7420866.500
Co	59	1	He	47.987520	2.7	629771.813
Ni	60	1	He	48.990379	2.1	159506.390
Cu	63	1	He	47.992040	2.9	435800.927
Zn	66	1	He	47.163245	2.7	98316.303
As	75	1	He	46.321531	2.6	85223.210
Se	78	2	H2	49.703246	1.2	41763.823
Sr	88	1	He	47.032583	2.4	566240.083
Mo	95	1	He	45.253773	3.7	292977.543
Pd	105	1	He	9.588941	2.5	93129.793
Ag	107	1	He	23.284857	3.5	481563.783
Cd	111	1	He	46.195404	3.3	178387.847
Sn	118	1	He	45.443153	3.6	451197.687
Sb	121	1	He	45.278507	3.7	661708.350
Ba	138	1	He	45.530285	2.9	1522566.437
Pt	195	1	He	9.347425	2.1	125495.107
Hg	202	1	He	4.004562	2.6	26483.280
Tl	205	1	He	47.693632	1.3	2355612.727
Pb	208	1	He	46.552503	1.9	3133557.880
Bi	209	1	He	45.912006	2.5	2616341.317
Th	232	1	He	45.742531	3.4	3180513.597
U	238	1	He	44.617427	3.2	2979073.187

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.45648306	574820.123
Sc	45	2	H2	99.32889141	4394900.667
Ge	72	1	He	99.19347529	494630.467
Ge	72	2	H2	102.3147250	1595881.123
In	115	1	He	101.0159807	6192472.690
Tb	159	1	He	103.4758133	14971517.693
Ir	193	1	He	101.5629228	7522124.680

Sample Name 10605435001\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 143SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:53:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.848212	1.2	1938.457
Be	9	2	H2	0.211864	3.3	105.500
B	11	2	H2	-80.838277		2345.683
Na	23	1	He	301.749158	1.7	290046.030
Mg	24	1	He	2362.095215	2.4	1240832.377
Al	27	1	He	5378.707808	2.3	1432579.250
Si	28	2	H2	824.435053	1.5	2394635.167
K	39	1	He	722.953396	1.7	609252.893
Ca	43	1	He	3016.236490	2.0	6691.690
Ti	47	1	He	797.900031	2.2	196256.013
V	51	1	He	35.859422	2.8	244946.057
Cr	52	1	He	9.872700	2.7	82794.880
Mn	55	1	He	153.018244	2.3	946304.187
Fe	56	1	He	12027.74000	2.1	93204146.667
Co	59	1	He	5.443589	2.0	71709.070
Ni	60	1	He	8.962312	3.9	29436.993
Cu	63	1	He	7.066981	2.2	64646.080
Zn	66	1	He	68.040390	2.4	142178.157
As	75	1	He	1.517099	2.4	2963.307
Se	78	2	H2	0.128057	16.0	151.000
Sr	88	1	He	23.214658	1.6	280415.280
Mo	95	1	He	0.171998	5.4	1120.047
Pd	105	1	He	0.041341	17.5	593.350
Ag	107	1	He	0.190873	28.1	4025.650
Cd	111	1	He	0.305104	4.0	1194.853
Sn	118	1	He	1.100445	4.6	11019.427
Sb	121	1	He	0.075599	6.1	1138.387
Ba	138	1	He	73.571066	1.9	2449694.237
Pt	195	1	He	0.002885	52.3	255.333
Hg	202	1	He	0.054528	13.1	590.347
Tl	205	1	He	0.121711	2.1	6501.633
Pb	208	1	He	5.006492	2.3	339129.003
Bi	209	1	He	0.050476	14.4	5144.427
Th	232	1	He	1.745081	2.7	123010.153
U	238	1	He	0.504942	2.3	34878.470

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.89423291	577456.167
Sc	45	2	H2	101.8729399	4507464.500
Ge	72	1	He	99.49392718	496128.677
Ge	72	2	H2	103.4540895	1613652.663
In	115	1	He	100.5777247	6165606.760
Tb	159	1	He	103.3424413	14952220.610
Ir	193	1	He	102.1347195	7564474.053

Sample Name 10605435001\_B69848Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 144SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:57:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.534531	1.3	280.833
Be	9	2	H2	0.039218	23.7	37.167
B	11	2	H2	-81.775887		2036.307
Na	23	1	He	31.489885	3.5	41367.210
Mg	24	1	He	257.881628	0.8	141756.323
Al	27	1	He	596.779231	0.4	161402.230
Si	28	2	H2	83.706473	1.3	256546.537
K	39	1	He	71.041794	0.7	125585.763
Ca	43	1	He	324.904380	0.6	743.653
Ti	47	1	He	87.980444	0.4	21966.663
V	51	1	He	3.973302	1.7	26997.950
Cr	52	1	He	1.123854	1.1	11708.027
Mn	55	1	He	17.814485	0.3	112067.437
Fe	56	1	He	1342.373306	0.4	10568541.667
Co	59	1	He	0.619510	1.2	8304.380
Ni	60	1	He	1.099439	3.2	3833.850
Cu	63	1	He	0.875337	1.3	8386.437
Zn	66	1	He	7.964131	0.2	17023.310
As	75	1	He	0.190839	10.1	526.510
Se	78	2	H2	-0.002446		40.667
Sr	88	1	He	2.620053	1.7	32141.177
Mo	95	1	He	0.033027	21.2	230.000
Pd	105	1	He	0.017751	42.2	375.010
Ag	107	1	He	0.034668	17.3	833.363
Cd	111	1	He	0.043106	21.9	192.293
Sn	118	1	He	0.133732	3.4	1501.763
Sb	121	1	He	0.022036	29.7	368.343
Ba	138	1	He	7.927392	0.7	270795.067
Pt	195	1	He	0.000311	1158.8	222.667
Hg	202	1	He	0.022130	23.4	381.677
Tl	205	1	He	0.021687	24.7	1581.777
Pb	208	1	He	0.578587	1.2	42067.653
Bi	209	1	He	0.016244	65.2	3223.793
Th	232	1	He	0.195374	2.4	14860.237
U	238	1	He	0.057602	7.6	4910.967

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.33484854	586131.270
Sc	45	2	H2	102.1018988	4517595.000
Ge	72	1	He	100.6238937	501763.280
Ge	72	2	H2	104.2709644	1626394.087
In	115	1	He	103.1593758	6323866.907
Tb	159	1	He	104.1331873	15066630.610
Ir	193	1	He	103.4143079	7659245.093



Sample Name 10605435002\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 145SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:00:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.105280	1.1	2033.970
Be	9	2	H2	0.205548	2.0	102.833
B	11	2	H2	-81.299461		2187.993
Na	23	1	He	310.126468	2.5	298738.130
Mg	24	1	He	2477.318357	2.3	1305339.693
Al	27	1	He	5653.132601	2.5	1510526.877
Si	28	2	H2	851.275730	0.9	2468324.833
K	39	1	He	763.989741	1.7	641886.397
Ca	43	1	He	3161.058336	2.0	7034.997
Ti	47	1	He	815.889154	3.2	201330.050
V	51	1	He	35.945624	3.3	246328.647
Cr	52	1	He	9.953921	2.1	83725.383
Mn	55	1	He	151.581677	2.6	940449.980
Fe	56	1	He	12534.90413	2.8	97448010.667
Co	59	1	He	5.672219	2.4	74745.563
Ni	60	1	He	9.264722	3.1	30434.397
Cu	63	1	He	7.611511	2.2	69627.633
Zn	66	1	He	71.520934	2.3	149492.753
As	75	1	He	1.449575	2.1	2839.780
Se	78	2	H2	0.102370	12.8	129.000
Sr	88	1	He	23.362233	2.5	282303.380
Mo	95	1	He	0.174349	1.8	1140.717
Pd	105	1	He	0.033139	4.9	516.677
Ag	107	1	He	0.046916	2.6	1070.050
Cd	111	1	He	0.308802	6.7	1215.183
Sn	118	1	He	1.070031	6.0	10772.560
Sb	121	1	He	0.061491	12.9	938.373
Ba	138	1	He	82.937143	2.7	2775217.357
Pt	195	1	He	0.002734	33.6	253.333
Hg	202	1	He	0.030075	6.4	430.343
Tl	205	1	He	0.111919	2.8	6016.417
Pb	208	1	He	5.296133	3.2	358341.837
Bi	209	1	He	0.039346	5.7	4524.203
Th	232	1	He	1.812556	2.7	128126.250
U	238	1	He	0.520835	3.2	36061.807

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.20461227	579325.210
Sc	45	2	H2	101.7112340	4500309.667
Ge	72	1	He	99.52610124	496289.113
Ge	72	2	H2	103.2639636	1610687.123
In	115	1	He	101.0679271	6195657.103
Tb	159	1	He	103.2720879	14942041.447
Ir	193	1	He	102.4604555	7588599.263

Sample Name 10605435002\_B69848Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 146SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:04:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.535766	3.2	281.333
Be	9	2	H2	0.033341	33.6	34.833
B	11	2	H2	-82.075046		1936.127
Na	23	1	He	30.605009	2.2	40601.753
Mg	24	1	He	255.879853	0.3	140906.900
Al	27	1	He	592.205892	0.5	160399.610
Si	28	2	H2	83.132365	1.2	254888.157
K	39	1	He	72.058311	1.8	126536.870
Ca	43	1	He	340.562432	2.1	779.987
Ti	47	1	He	85.564472	0.9	21394.833
V	51	1	He	3.823192	2.3	25991.290
Cr	52	1	He	1.051559	1.1	11126.240
Mn	55	1	He	16.368339	0.4	103144.640
Fe	56	1	He	1320.388768	0.9	10410622.667
Co	59	1	He	0.606515	2.6	8132.283
Ni	60	1	He	0.987125	2.5	3463.753
Cu	63	1	He	0.855414	2.1	8203.663
Zn	66	1	He	7.802942	2.1	16684.247
As	75	1	He	0.143471	2.2	438.343
Se	78	2	H2	-0.006543		37.333
Sr	88	1	He	2.450649	0.3	30075.017
Mo	95	1	He	0.019546	21.9	142.000
Pd	105	1	He	0.003414	26.0	235.003
Ag	107	1	He	0.011956	7.8	356.677
Cd	111	1	He	0.033581	5.7	155.977
Sn	118	1	He	0.107616	5.1	1246.733
Sb	121	1	He	0.008322	41.8	165.000
Ba	138	1	He	8.344396	0.6	287268.927
Pt	195	1	He	-0.002434		185.333
Hg	202	1	He	0.011501	19.1	310.667
Tl	205	1	He	0.009678	2.6	983.377
Pb	208	1	He	0.567238	0.1	41198.077
Bi	209	1	He	0.005109	29.9	2566.960
Th	232	1	He	0.184888	0.7	14042.653
U	238	1	He	0.050845	1.6	4429.127

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.48008079	587005.830
Sc	45	2	H2	102.1019138	4517595.667
Ge	72	1	He	100.6319929	501803.667
Ge	72	2	H2	104.6662719	1632560.000
In	115	1	He	103.9675963	6373412.367
Tb	159	1	He	103.8739279	15029119.363
Ir	193	1	He	102.8468937	7617220.303

Sample Name 10605435003\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 147SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:08:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.635885	0.8	1860.450
Be	9	2	H2	0.205372	10.6	103.167
B	11	2	H2	-81.399580		2161.990
Na	23	1	He	194.497751	0.3	192221.697
Mg	24	1	He	1930.106731	2.4	1020648.943
Al	27	1	He	5413.752365	1.6	1450248.333
Si	28	2	H2	849.272425	1.4	2471304.167
K	39	1	He	665.158244	2.1	569486.840
Ca	43	1	He	2359.575372	1.5	5268.100
Ti	47	1	He	653.198647	2.1	161595.507
V	51	1	He	28.382772	3.5	194871.347
Cr	52	1	He	8.368067	2.3	70947.913
Mn	55	1	He	205.931695	2.4	1280819.417
Fe	56	1	He	10724.90352	1.7	83590706.667
Co	59	1	He	4.371911	1.0	57487.940
Ni	60	1	He	8.156086	1.1	26753.157
Cu	63	1	He	9.461564	1.7	86269.853
Zn	66	1	He	58.047869	2.1	121087.743
As	75	1	He	1.863632	1.6	3594.450
Se	78	2	H2	0.228150	7.8	236.000
Sr	88	1	He	16.634955	2.3	200577.420
Mo	95	1	He	0.160487	3.6	1058.043
Pd	105	1	He	0.038392	26.9	571.680
Ag	107	1	He	0.039692	11.4	926.707
Cd	111	1	He	0.257434	5.3	1023.180
Sn	118	1	He	1.042202	3.5	10564.047
Sb	121	1	He	0.067200	5.4	1028.380
Ba	138	1	He	57.949139	1.8	1951958.927
Pt	195	1	He	-0.000103		216.000
Hg	202	1	He	0.016641	20.2	343.670
Tl	205	1	He	0.076373	3.9	4277.383
Pb	208	1	He	5.966871	2.3	404599.683
Bi	209	1	He	0.068762	3.2	6244.887
Th	232	1	He	1.415810	2.5	100829.030
U	238	1	He	0.818804	3.0	56417.097

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.45024026	580804.333
Sc	45	2	H2	102.0767138	4516480.667
Ge	72	1	He	99.29638870	495143.647
Ge	72	2	H2	103.4051806	1612889.793
In	115	1	He	101.7541445	6237723.543
Tb	159	1	He	103.5934588	14988539.363
Ir	193	1	He	102.9831728	7627313.637

Sample Name 10605435003\_B69848Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 148SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:12:03  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.509240	0.8	270.667
Be	9	2	H2	0.030910	4.7	33.833
B	11	2	H2	-82.359072		1838.280
Na	23	1	He	19.550027	2.4	30137.093
Mg	24	1	He	210.589849	1.6	116440.127
Al	27	1	He	605.020388	1.6	163355.737
Si	28	2	H2	87.246137	0.9	266393.220
K	39	1	He	66.690855	2.4	122088.510
Ca	43	1	He	264.126612	3.8	606.077
Ti	47	1	He	73.109431	1.2	18223.247
V	51	1	He	3.198316	2.9	21571.477
Cr	52	1	He	0.974749	0.7	10457.077
Mn	55	1	He	23.335812	0.5	146465.363
Fe	56	1	He	1200.826646	0.9	9439145.667
Co	59	1	He	0.487369	1.3	6566.157
Ni	60	1	He	0.941567	1.4	3323.720
Cu	63	1	He	1.088548	1.8	10382.377
Zn	66	1	He	6.731561	2.1	14469.220
As	75	1	He	0.189992	4.8	526.677
Se	78	2	H2	-0.007809		36.000
Sr	88	1	He	1.826381	0.2	22521.107
Mo	95	1	He	0.017143	19.6	124.667
Pd	105	1	He	-0.000566		193.333
Ag	107	1	He	0.008578	26.3	281.670
Cd	111	1	He	0.027292	5.7	129.643
Sn	118	1	He	0.111513	5.6	1273.400
Sb	121	1	He	0.007312	14.3	148.333
Ba	138	1	He	6.308503	0.8	214941.600
Pt	195	1	He	-0.002286		187.333
Hg	202	1	He	0.002664	114.1	253.000
Tl	205	1	He	0.006425	17.2	823.370
Pb	208	1	He	0.671746	1.7	48317.523
Bi	209	1	He	0.001318	186.7	2376.923
Th	232	1	He	0.147738	1.8	11566.890
U	238	1	He	0.082073	2.0	6618.417

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.16798268	585126.437
Sc	45	2	H2	101.9434021	4510582.167
Ge	72	1	He	100.9415713	503347.387
Ge	72	2	H2	104.0799699	1623415.000
In	115	1	He	102.8896294	6307330.937
Tb	159	1	He	104.0209991	15050398.527
Ir	193	1	He	104.0948568	7709649.050

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 149\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:15:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	75.271873	0.1	28967.743
Be	9	2	H2	72.919771	0.2	28869.260
B	11	2	H2	-5.482976		27510.437
Na	23	1	He	985.143834	2.4	923446.027
Mg	24	1	He	976.722345	2.5	517538.700
Al	27	1	He	972.422183	2.9	259892.893
Si	28	2	H2	480.566615	0.6	1399819.830
K	39	1	He	1010.634419	2.8	826197.203
Ca	43	1	He	996.395220	3.8	2226.330
Ti	47	1	He	78.965392	2.7	19487.200
V	51	1	He	80.902478	2.6	555173.777
Cr	52	1	He	82.638369	2.8	677651.627
Mn	55	1	He	80.567437	2.6	499998.843
Fe	56	1	He	527.221186	2.4	4109799.500
Co	59	1	He	81.850513	2.5	1097760.253
Ni	60	1	He	83.080518	3.2	276268.260
Cu	63	1	He	82.506020	2.6	765415.540
Zn	66	1	He	80.552879	2.4	171457.637
As	75	1	He	79.118737	2.5	148636.707
Se	78	2	H2	79.092905	1.1	67883.880
Sr	88	1	He	79.838144	2.1	982255.403
Mo	95	1	He	76.581850	3.2	502126.167
Pd	105	1	He	81.388247	2.6	799116.523
Ag	107	1	He	40.532338	2.2	849195.717
Cd	111	1	He	79.607864	2.7	311338.857
Sn	118	1	He	76.191940	2.3	766172.357
Sb	121	1	He	76.937086	2.7	1138821.183
Ba	138	1	He	77.725245	3.2	2632256.423
Pt	195	1	He	82.160360	1.9	1089114.873
Hg	202	1	He	3.906140	1.7	25550.763
Tl	205	1	He	41.843781	2.3	2043803.567
Pb	208	1	He	81.361326	2.8	5412827.443
Bi	209	1	He	80.552667	3.2	4609442.117
Th	232	1	He	75.943090	2.6	5303811.170
U	238	1	He	77.020297	2.8	5165217.007

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.24129509	579546.107
Sc	45	2	H2	101.7258606	4500956.833
Ge	72	1	He	101.4073435	505669.970
Ge	72	2	H2	104.5321794	1630468.457
In	115	1	He	102.3569326	6274675.603
Tb	159	1	He	102.3801458	14812989.777
Ir	193	1	He	102.0864784	7560901.137

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 150\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:19:32  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.034581	39.1	87.500
Be	9	2	H2	0.019630	38.1	29.167
B	11	2	H2	-81.827353		2002.967
Na	23	1	He	-1.676033		10325.290
Mg	24	1	He	-6.965517		1081.717
Al	27	1	He	1.252552	40.6	417.340
Si	28	2	H2	-1.035986		11232.087
K	39	1	He	-9.020578		65137.937
Ca	43	1	He	3.805236	49.8	22.033
Ti	47	1	He	0.157562	27.2	41.333
V	51	1	He	0.104412	47.1	105.527
Cr	52	1	He	-0.008084		2352.200
Mn	55	1	He	0.343226	7.1	2436.210
Fe	56	1	He	2.703701	35.4	32839.593
Co	59	1	He	0.022169	23.5	356.007
Ni	60	1	He	0.013237	92.7	253.333
Cu	63	1	He	0.027101	19.3	584.013
Zn	66	1	He	0.087081	11.3	406.010
As	75	1	He	-0.006369		160.667
Se	78	2	H2	-0.015739		29.333
Sr	88	1	He	0.017655	49.0	370.010
Mo	95	1	He	0.022338	7.7	160.667
Pd	105	1	He	0.021930	28.9	420.010
Ag	107	1	He	0.138196	26.5	3045.370
Cd	111	1	He	0.017536	28.2	92.303
Sn	118	1	He	0.012006	25.6	270.007
Sb	121	1	He	0.019725	22.9	336.673
Ba	138	1	He	0.029806	29.5	1105.057
Pt	195	1	He	0.013295	22.1	402.010
Hg	202	1	He	0.016083	35.7	345.337
Tl	205	1	He	0.037523	29.2	2395.243
Pb	208	1	He	0.016732	16.7	4093.590
Bi	209	1	He	0.010991	33.5	2953.727
Th	232	1	He	0.021532	27.9	2586.950
U	238	1	He	0.009248	40.1	1643.453

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.45295437	586842.480
Sc	45	2	H2	101.2716570	4480860.167
Ge	72	1	He	101.5107362	506185.540
Ge	72	2	H2	104.2935527	1626746.413
In	115	1	He	103.9912492	6374862.340
Tb	159	1	He	105.2026630	15221368.937
Ir	193	1	He	104.5462279	7743079.260

Sample Name 10605661001\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 151SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:23:17  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.067647	57.7	98.667
Be	9	2	H2	0.007819	121.1	24.167
B	11	2	H2	-82.108742		1881.283
Na	23	1	He	1.503295	14.6	12900.620
Mg	24	1	He	-4.666052		2233.523
Al	27	1	He	3.298111	10.5	940.700
Si	28	2	H2	-0.145119		13585.350
K	39	1	He	-5.407991		65797.607
Ca	43	1	He	3.381741	33.9	20.467
Ti	47	1	He	0.058339	71.2	16.000
V	51	1	He	0.072165	15.9	-113.343
Cr	52	1	He	0.052310	29.2	2764.937
Mn	55	1	He	0.415896	5.7	2802.947
Fe	56	1	He	1.721435	22.4	24303.787
Co	59	1	He	0.010223	25.6	189.333
Ni	60	1	He	0.017612	37.4	259.333
Cu	63	1	He	1.090715	1.2	10132.207
Zn	66	1	He	1.409457	4.5	3119.680
As	75	1	He	-0.010985		147.167
Se	78	2	H2	-0.018754		26.333
Sr	88	1	He	0.021309	27.7	401.677
Mo	95	1	He	0.009246	11.5	71.333
Pd	105	1	He	0.005293	74.8	246.667
Ag	107	1	He	0.041763	18.3	963.373
Cd	111	1	He	0.005203	22.7	41.990
Sn	118	1	He	0.026533	14.2	406.677
Sb	121	1	He	0.008977	26.5	170.000
Ba	138	1	He	0.057376	6.4	1995.160
Pt	195	1	He	0.025705	166.0	556.020
Hg	202	1	He	0.005227	69.1	265.667
Tl	205	1	He	0.007277	41.6	851.700
Pb	208	1	He	0.062680	7.4	7040.747
Bi	209	1	He	0.001113	358.0	2340.247
Th	232	1	He	0.008326	32.1	1618.450
U	238	1	He	-0.001708		878.373

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.47073231	568884.127
Sc	45	2	H2	99.78669985	4415156.833
Ge	72	1	He	98.32581981	490303.883
Ge	72	2	H2	102.5428214	1599438.917
In	115	1	He	101.0453726	6194274.473
Tb	159	1	He	102.4136321	14817834.780
Ir	193	1	He	103.0297375	7630762.387

Sample Name 4305431\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 152SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:27:01  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.844121	0.4	30852.433
Be	9	2	H2	80.381384	0.5	30801.053
B	11	2	H2	0.188958	225.0	28463.370
Na	23	1	He	2025.948177	0.2	1857186.740
Mg	24	1	He	2018.878198	0.2	1048080.403
Al	27	1	He	1995.258853	0.6	524879.113
Si	28	2	H2	1019.842791	0.6	2859976.000
K	39	1	He	2073.963647	0.4	1595454.093
Ca	43	1	He	2056.087148	0.5	4509.233
Ti	47	1	He	83.594904	1.3	20307.967
V	51	1	He	85.783851	0.8	579535.410
Cr	52	1	He	87.670424	0.3	707582.103
Mn	55	1	He	87.411435	0.3	533991.393
Fe	56	1	He	1082.085449	0.4	8291511.333
Co	59	1	He	87.246238	0.4	1150326.040
Ni	60	1	He	89.010804	0.2	291000.133
Cu	63	1	He	88.372720	0.3	805978.960
Zn	66	1	He	87.317359	0.2	182696.087
As	75	1	He	84.559435	0.3	156164.530
Se	78	2	H2	86.492829	1.4	72144.683
Sr	88	1	He	85.466681	0.6	1033681.963
Mo	95	1	He	81.567848	0.5	528486.960
Pd	105	1	He	85.115075	0.3	825737.410
Ag	107	1	He	31.336063	0.8	648557.580
Cd	111	1	He	85.384562	0.6	329951.540
Sn	118	1	He	80.864852	0.6	803416.527
Sb	121	1	He	80.984754	0.2	1184466.623
Ba	138	1	He	83.452624	0.4	2792819.020
Pt	195	1	He	85.251263	0.6	1135432.080
Hg	202	1	He	0.008384	35.2	287.333
Tl	205	1	He	42.823575	0.4	2101691.013
Pb	208	1	He	86.218551	0.2	5763933.427
Bi	209	1	He	83.989666	1.8	4780239.510
Th	232	1	He	7.256899	0.9	504968.430
U	238	1	He	82.853351	1.2	5526168.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.70874187	570317.373
Sc	45	2	H2	98.46465026	4356661.500
Ge	72	1	He	99.66083108	496960.947
Ge	72	2	H2	101.5978890	1584700.083
In	115	1	He	101.0918663	6197124.627
Tb	159	1	He	102.8319744	14878363.113
Ir	193	1	He	101.4814445	7516090.097



Sample Name 4305432\_B69848Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 153SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:30:45  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.093991	23.8	107.667
Be	9	2	H2	0.049462	17.7	40.000
B	11	2	H2	-81.849514		1950.293
Na	23	1	He	0.466084	82.1	11951.513
Mg	24	1	He	-4.732494		2198.517
Al	27	1	He	2.161042	18.1	642.013
Si	28	2	H2	-0.430324		12674.743
K	39	1	He	-4.870269		66157.420
Ca	43	1	He	2.860237	20.2	19.317
Ti	47	1	He	0.056993	47.7	15.667
V	51	1	He	0.010017	489.4	-532.813
Cr	52	1	He	0.028912	38.5	2576.233
Mn	55	1	He	0.379709	6.6	2581.570
Fe	56	1	He	1.967519	26.3	26169.910
Co	59	1	He	0.025796	58.8	392.007
Ni	60	1	He	0.020219	72.4	268.000
Cu	63	1	He	0.057000	26.8	835.363
Zn	66	1	He	0.479882	1.6	1204.717
As	75	1	He	0.002537	321.7	172.000
Se	78	2	H2	-0.008612		34.667
Sr	88	1	He	0.024633	59.3	441.680
Mo	95	1	He	0.024166	49.0	168.667
Pd	105	1	He	0.019852	20.0	390.010
Ag	107	1	He	0.150744	25.6	3233.747
Cd	111	1	He	0.015461	51.6	81.970
Sn	118	1	He	0.025180	59.5	395.007
Sb	121	1	He	0.022118	64.3	363.340
Ba	138	1	He	0.025029	49.1	916.713
Pt	195	1	He	0.012768	84.4	384.003
Hg	202	1	He	-0.004398		203.333
Tl	205	1	He	0.040158	32.3	2458.593
Pb	208	1	He	0.030797	47.2	4920.393
Bi	209	1	He	0.014889	82.9	3117.113
Th	232	1	He	0.005101	73.0	1383.420
U	238	1	He	0.009849	104.2	1648.470

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.42204479	568590.940
Sc	45	2	H2	98.97139349	4379082.833
Ge	72	1	He	98.45917327	490968.853
Ge	72	2	H2	102.1139189	1592748.997
In	115	1	He	101.6715047	6232657.567
Tb	159	1	He	102.4790870	14827305.197
Ir	193	1	He	102.5396272	7594463.010

Sample Name 4303386\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 154SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:34:30  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	52.260151	1.0	19537.220
Be	9	2	H2	46.613418	1.4	17914.237
B	11	2	H2	-32.844078		17827.483
Na	23	1	He	1332.156436	1.5	1222211.987
Mg	24	1	He	3105.100702	1.5	1605614.767
Al	27	1	He	6256.881633	1.4	1641860.083
Si	28	2	H2	928.754282	1.5	2612168.083
K	39	1	He	1659.822256	1.4	1287724.330
Ca	43	1	He	3779.436730	1.0	8257.753
Ti	47	1	He	746.952998	1.1	181011.247
V	51	1	He	74.836925	1.1	504290.637
Cr	52	1	He	56.014087	1.9	451848.863
Mn	55	1	He	174.655333	1.5	1064120.147
Fe	56	1	He	10908.79549	1.4	83286274.667
Co	59	1	He	52.297565	1.5	678862.020
Ni	60	1	He	56.445406	1.3	181747.043
Cu	63	1	He	53.493041	1.5	480432.083
Zn	66	1	He	76.817446	1.6	158258.770
As	75	1	He	48.539943	1.5	88322.797
Se	78	2	H2	50.447605	0.3	41929.043
Sr	88	1	He	71.166698	1.7	847407.930
Mo	95	1	He	46.271156	1.7	294386.083
Pd	105	1	He	9.073687	1.1	86605.240
Ag	107	1	He	24.106786	1.7	489930.060
Cd	111	1	He	47.540753	1.4	180401.380
Sn	118	1	He	47.329337	1.4	461786.687
Sb	121	1	He	33.430196	1.8	480134.967
Ba	138	1	He	96.584160	2.2	3173932.660
Pt	195	1	He	9.635819	2.9	128081.977
Hg	202	1	He	4.165368	2.9	27263.153
Tl	205	1	He	49.243905	3.0	2408412.097
Pb	208	1	He	49.657598	1.4	3309306.667
Bi	209	1	He	47.069644	1.9	2679657.197
Th	232	1	He	48.897770	1.6	3396313.283
U	238	1	He	46.130843	2.2	3076927.457

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.47817748	568928.960
Sc	45	2	H2	98.71015675	4367524.167
Ge	72	1	He	98.11186241	489236.980
Ge	72	2	H2	101.2015556	1578518.167
In	115	1	He	99.25608333	6084587.617
Tb	159	1	He	102.4670581	14825564.780
Ir	193	1	He	101.4651662	7514884.470

Sample Name 4303387\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 155SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:38:14  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	40.395140	0.9	15220.293
Be	9	2	H2	35.619026	2.0	13787.617
B	11	2	H2	-43.471413		14481.427
Na	23	1	He	969.118206	4.8	887053.813
Mg	24	1	He	2196.633826	4.1	1130591.310
Al	27	1	He	4429.751754	3.9	1155667.290
Si	28	2	H2	696.456870	1.6	1975659.417
K	39	1	He	1239.952854	4.7	973920.820
Ca	43	1	He	2713.358341	5.0	5897.417
Ti	47	1	He	518.054549	4.2	124811.090
V	51	1	He	52.955786	5.3	354571.827
Cr	52	1	He	39.895008	4.0	320617.763
Mn	55	1	He	128.851045	5.0	780524.020
Fe	56	1	He	7586.790450	5.2	57587377.333
Co	59	1	He	37.254400	4.6	483780.440
Ni	60	1	He	40.094218	4.7	129201.827
Cu	63	1	He	38.060681	4.9	342040.667
Zn	66	1	He	53.835617	4.6	111013.917
As	75	1	He	34.916737	4.9	63604.127
Se	78	2	H2	39.168609	0.9	32907.383
Sr	88	1	He	50.631012	4.9	603123.183
Mo	95	1	He	32.959786	4.0	209798.220
Pd	105	1	He	6.951046	4.3	66423.887
Ag	107	1	He	17.437941	5.5	354603.340
Cd	111	1	He	33.965047	4.1	128954.457
Sn	118	1	He	33.377841	5.1	325871.570
Sb	121	1	He	24.123524	3.9	346638.510
Ba	138	1	He	68.975334	4.7	2267718.663
Pt	195	1	He	7.083651	4.4	93123.380
Hg	202	1	He	3.095635	4.5	20085.797
Tl	205	1	He	36.666049	3.9	1772510.807
Pb	208	1	He	36.415810	4.2	2399515.253
Bi	209	1	He	34.299178	3.7	1938263.040
Th	232	1	He	34.742313	4.3	2394923.557
U	238	1	He	33.172308	5.1	2195971.320

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.94699602	565730.290
Sc	45	2	H2	99.37165240	4396792.667
Ge	72	1	He	98.15072115	489430.750
Ge	72	2	H2	102.2686127	1595161.873
In	115	1	He	99.30266170	6087442.960
Tb	159	1	He	101.2731752	14652826.447
Ir	193	1	He	100.6815980	7456850.513

Sample Name 10605661002\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 156SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:41:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.890347	1.5	1510.910
Be	9	2	H2	0.176411	7.7	88.000
B	11	2	H2	-81.487540		2048.140
Na	23	1	He	348.327989	1.4	321949.977
Mg	24	1	He	2240.427413	0.9	1138078.837
Al	27	1	He	4329.167420	0.4	1114790.457
Si	28	2	H2	784.701950	1.1	2193891.250
K	39	1	He	486.963456	0.2	419118.223
Ca	43	1	He	10207.38979	0.4	21863.823
Ti	47	1	He	769.503961	0.5	182994.270
V	51	1	He	35.423686	1.5	233926.887
Cr	52	1	He	7.707634	0.2	62998.537
Mn	55	1	He	291.997780	0.2	1745662.920
Fe	56	1	He	11677.26037	0.3	87485986.667
Co	59	1	He	4.835791	0.9	61894.497
Ni	60	1	He	8.640788	1.4	27579.353
Cu	63	1	He	6.990122	0.4	62125.860
Zn	66	1	He	50.941674	0.5	103468.820
As	75	1	He	1.852213	2.5	3478.587
Se	78	2	H2	0.093357	14.7	118.000
Sr	88	1	He	25.447649	0.4	298623.410
Mo	95	1	He	0.199702	6.7	1277.397
Pd	105	1	He	0.042017	8.4	590.020
Ag	107	1	He	0.170946	30.5	3555.510
Cd	111	1	He	0.133396	5.1	525.780
Sn	118	1	He	1.086570	2.1	10700.843
Sb	121	1	He	0.060602	4.9	905.040
Ba	138	1	He	61.111569	0.4	2001099.140
Pt	195	1	He	0.006182	19.8	294.667
Hg	202	1	He	0.031188	13.6	430.677
Tl	205	1	He	0.081374	4.0	4439.127
Pb	208	1	He	4.064131	1.0	271236.717
Bi	209	1	He	0.032771	8.6	4084.037
Th	232	1	He	1.541300	0.6	107447.227
U	238	1	He	0.300535	1.2	20903.600

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.71576896	558316.083
Sc	45	2	H2	98.02405998	4337167.167
Ge	72	1	He	96.66328100	482013.597
Ge	72	2	H2	100.3223564	1564804.623
In	115	1	He	98.91278474	6063542.757
Tb	159	1	He	101.6305694	14704536.447
Ir	193	1	He	100.9142356	7474080.517

Sample Name 10605661002\_B69848Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 157SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:45:43  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.370020	7.7	210.000
Be	9	2	H2	0.040718	36.3	36.500
B	11	2	H2	-82.187068		1833.947
Na	23	1	He	30.342382	3.6	38870.500
Mg	24	1	He	201.252827	1.9	107737.463
Al	27	1	He	400.197723	0.7	104441.813
Si	28	2	H2	73.599543	1.2	219541.597
K	39	1	He	37.769263	4.4	96888.793
Ca	43	1	He	923.758905	1.1	2015.790
Ti	47	1	He	70.046657	2.6	16871.647
V	51	1	He	3.340046	1.9	21798.580
Cr	52	1	He	0.724184	4.5	8106.920
Mn	55	1	He	26.823926	1.5	162653.923
Fe	56	1	He	1077.882085	0.9	8188949.333
Co	59	1	He	0.449896	2.1	5871.200
Ni	60	1	He	0.813500	1.6	2806.947
Cu	63	1	He	0.682149	0.5	6416.767
Zn	66	1	He	5.068008	5.0	10595.230
As	75	1	He	0.164348	5.4	463.343
Se	78	2	H2	-0.016794		27.667
Sr	88	1	He	2.321414	2.7	27668.537
Mo	95	1	He	0.022802	8.2	160.000
Pd	105	1	He	0.009090	19.8	285.010
Ag	107	1	He	0.028055	2.7	683.360
Cd	111	1	He	0.011752	16.9	67.637
Sn	118	1	He	0.107801	8.0	1220.063
Sb	121	1	He	0.009028	7.5	171.667
Ba	138	1	He	5.481277	1.8	184425.903
Pt	195	1	He	-0.002743		179.333
Hg	202	1	He	0.008824	47.5	290.333
Tl	205	1	He	0.008376	9.8	910.043
Pb	208	1	He	0.369840	3.2	27606.147
Bi	209	1	He	0.002021	249.9	2390.257
Th	232	1	He	0.143817	5.1	11159.273
U	238	1	He	0.022208	9.3	2495.267

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.90328375	565467.063
Sc	45	2	H2	98.61350006	4363247.500
Ge	72	1	He	97.70811141	487223.667
Ge	72	2	H2	101.4624904	1582588.167
In	115	1	He	101.6008808	6228328.187
Tb	159	1	He	102.8817546	14885565.613
Ir	193	1	He	102.9238376	7622919.053

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 158\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:49:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	75.509803	0.7	28565.810
Be	9	2	H2	73.234061	0.9	28501.400
B	11	2	H2	-5.370034		27082.347
Na	23	1	He	968.298805	0.4	902209.077
Mg	24	1	He	962.076758	0.1	506684.707
Al	27	1	He	956.135726	0.3	253968.197
Si	28	2	H2	475.599362	0.5	1362031.000
K	39	1	He	994.348358	0.3	808990.977
Ca	43	1	He	979.552739	2.6	2175.663
Ti	47	1	He	77.459594	0.4	18997.887
V	51	1	He	80.037192	1.0	545840.563
Cr	52	1	He	81.404117	0.6	663457.957
Mn	55	1	He	79.207423	0.3	488527.937
Fe	56	1	He	515.626050	0.3	3994643.667
Co	59	1	He	81.038056	0.3	1076475.247
Ni	60	1	He	82.181651	1.0	270687.593
Cu	63	1	He	82.143161	0.7	754774.650
Zn	66	1	He	80.154937	1.0	168977.507
As	75	1	He	78.544802	1.2	146147.370
Se	78	2	H2	79.226540	1.0	66983.293
Sr	88	1	He	79.839959	0.7	972824.883
Mo	95	1	He	75.980270	0.6	497270.113
Pd	105	1	He	80.839626	0.9	792199.363
Ag	107	1	He	40.187892	1.1	840148.763
Cd	111	1	He	78.980590	0.3	308299.283
Sn	118	1	He	75.630881	0.4	759045.013
Sb	121	1	He	76.343827	0.5	1127891.990
Ba	138	1	He	76.997625	0.1	2602894.807
Pt	195	1	He	81.800005	0.6	1090399.873
Hg	202	1	He	3.875267	1.0	25491.980
Tl	205	1	He	41.560342	0.5	2041570.493
Pb	208	1	He	80.969663	0.3	5417846.610
Bi	209	1	He	79.575433	0.6	4587442.017
Th	232	1	He	75.517611	0.5	5312808.257
U	238	1	He	76.218419	0.1	5149101.277

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.61374880	575767.147
Sc	45	2	H2	100.0018457	4424676.167
Ge	72	1	He	100.4060425	500676.960
Ge	72	2	H2	102.9755703	1606188.833
In	115	1	He	102.1155989	6259881.387
Tb	159	1	He	102.9224922	14891459.780
Ir	193	1	He	102.7869932	7612783.847

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 159\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:53:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.033633	30.5	86.000
Be	9	2	H2	0.030015	38.3	32.833
B	11	2	H2	-81.978354		1927.457
Na	23	1	He	-2.465969		9344.653
Mg	24	1	He	-7.089832		990.043
Al	27	1	He	0.559900	64.5	224.000
Si	28	2	H2	-1.244532		10495.700
K	39	1	He	-8.801734		63648.120
Ca	43	1	He	1.334287	61.7	16.083
Ti	47	1	He	0.071351	81.6	19.333
V	51	1	He	0.068584	22.6	-137.997
Cr	52	1	He	-0.018014		2212.840
Mn	55	1	He	0.213433	15.1	1579.427
Fe	56	1	He	1.597941	55.5	23517.740
Co	59	1	He	0.017073	44.3	281.337
Ni	60	1	He	0.011236	48.4	241.333
Cu	63	1	He	0.011840	51.9	432.677
Zn	66	1	He	0.059888	19.7	340.673
As	75	1	He	-0.014363		142.500
Se	78	2	H2	-0.016880		28.000
Sr	88	1	He	0.013352	65.0	310.007
Mo	95	1	He	0.016827	25.2	122.667
Pd	105	1	He	0.019700	6.2	393.343
Ag	107	1	He	0.148073	21.5	3222.070
Cd	111	1	He	0.013629	51.8	75.977
Sn	118	1	He	0.011446	73.3	261.670
Sb	121	1	He	0.014016	37.2	248.337
Ba	138	1	He	0.018167	51.5	696.697
Pt	195	1	He	0.009506	62.1	344.673
Hg	202	1	He	0.018560	22.0	356.007
Tl	205	1	He	0.037894	30.9	2373.580
Pb	208	1	He	0.009625	85.0	3550.207
Bi	209	1	He	0.004540	161.6	2553.640
Th	232	1	He	0.018043	33.3	2316.900
U	238	1	He	0.006457	89.9	1438.430

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.98044898	571953.540
Sc	45	2	H2	99.96064046	4422853.000
Ge	72	1	He	99.35793059	495450.527
Ge	72	2	H2	103.1956978	1609622.330
In	115	1	He	102.8932363	6307552.050
Tb	159	1	He	103.5584289	14983471.030
Ir	193	1	He	103.7280272	7682480.300

Sample Name 4312068\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 160SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:56:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.052454	30.0	92.833
Be	9	2	H2	0.040564	53.7	36.833
B	11	2	H2	-80.697849		2341.017
Na	23	1	He	5.778043	5.0	16916.350
Mg	24	1	He	-3.789555		2706.937
Al	27	1	He	9.312606	2.8	2538.550
Si	28	2	H2	2.017935	0.7	19682.317
K	39	1	He	-6.172788		65745.627
Ca	43	1	He	11.555650	12.2	38.600
Ti	47	1	He	0.102789	10.8	27.000
V	51	1	He	0.052873	64.9	-246.050
Cr	52	1	He	0.113273	9.1	3279.710
Mn	55	1	He	0.415743	4.4	2824.283
Fe	56	1	He	4.400436	3.4	45111.290
Co	59	1	He	0.021053	3.5	332.670
Ni	60	1	He	0.026654	10.5	290.667
Cu	63	1	He	0.340703	4.4	3411.080
Zn	66	1	He	2.082511	4.6	4541.390
As	75	1	He	-0.009752		150.500
Se	78	2	H2	-0.011951		32.000
Sr	88	1	He	0.031040	1.7	521.677
Mo	95	1	He	0.020752	12.9	147.333
Pd	105	1	He	0.013036	10.7	325.010
Ag	107	1	He	0.043695	17.3	1013.380
Cd	111	1	He	0.015594	0.2	82.973
Sn	118	1	He	0.039748	15.3	543.353
Sb	121	1	He	0.017889	11.2	303.343
Ba	138	1	He	0.057757	3.1	2028.497
Pt	195	1	He	0.003254	89.5	262.667
Hg	202	1	He	0.005320	23.2	271.000
Tl	205	1	He	0.018385	11.6	1420.087
Pb	208	1	He	0.035354	4.8	5317.100
Bi	209	1	He	0.012673	12.5	3030.413
Th	232	1	He	0.008432	25.9	1638.453
U	238	1	He	0.000871	218.9	1060.057

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.20795560	573323.540
Sc	45	2	H2	99.67281747	4410118.000
Ge	72	1	He	99.05585700	493944.230
Ge	72	2	H2	102.5434279	1599448.377
In	115	1	He	102.0920543	6258438.060
Tb	159	1	He	104.2341760	15081242.277
Ir	193	1	He	103.7806734	7686379.470



Sample Name 4312069\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 161SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:00:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	100.892483	0.6	37762.327
Be	9	2	H2	98.167264	0.6	37816.357
B	11	2	H2	22.506056	2.9	35873.393
Na	23	1	He	2052.067860	0.5	1881090.597
Mg	24	1	He	2028.479330	0.5	1053103.137
Al	27	1	He	2017.964204	0.6	530889.857
Si	28	2	H2	510.569811	0.6	1446532.253
K	39	1	He	2092.175182	0.2	1608924.510
Ca	43	1	He	2094.971700	2.3	4594.610
Ti	47	1	He	102.209587	1.2	24831.873
V	51	1	He	105.603905	0.6	713614.497
Cr	52	1	He	108.375144	0.3	874179.980
Mn	55	1	He	105.435107	0.5	644073.187
Fe	56	1	He	2162.322144	0.2	16558510.333
Co	59	1	He	107.376287	0.9	1419942.627
Ni	60	1	He	109.196762	0.9	358008.627
Cu	63	1	He	106.941845	0.8	978168.003
Zn	66	1	He	107.888882	0.4	226358.077
As	75	1	He	103.307918	0.7	191319.180
Se	78	2	H2	105.137515	0.9	88229.630
Sr	88	1	He	105.297548	0.9	1277260.087
Mo	95	1	He	101.487741	0.5	655211.707
Pd	105	1	He	21.076466	0.5	203892.883
Ag	107	1	He	52.372012	1.5	1079950.453
Cd	111	1	He	105.068327	0.3	404573.013
Sn	118	1	He	100.311555	0.4	993067.590
Sb	121	1	He	102.374562	0.1	1491996.490
Ba	138	1	He	102.799542	0.4	3428041.513
Pt	195	1	He	21.327961	0.9	284500.190
Hg	202	1	He	0.008492	24.2	288.333
Tl	205	1	He	108.348470	0.7	5322039.090
Pb	208	1	He	106.261123	0.7	7110109.267
Bi	209	1	He	103.768850	0.9	5923040.540
Th	232	1	He	104.681856	1.0	7292805.307
U	238	1	He	101.058743	0.8	6760256.563

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.71312207	570343.750
Sc	45	2	H2	99.00261293	4380464.167
Ge	72	1	He	99.95674005	498436.503
Ge	72	2	H2	102.2250994	1594483.163
In	115	1	He	100.7333034	6175144.033
Tb	159	1	He	102.9381928	14893731.447
Ir	193	1	He	101.7869023	7538713.430

Sample Name 10601164001\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 162SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:04:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.491772	1.0	1016.033
Be	9	2	H2	0.074252	11.4	50.167
B	11	2	H2	-55.672699		10591.040
Na	23	1	He	8197.685454	1.3	7418838.847
Mg	24	1	He	11652.39117	1.7	5977910.537
Al	27	1	He	56.095903	1.2	14710.230
Si	28	2	H2	1014.967711	0.4	2897757.333
K	39	1	He	1462.182357	0.9	1136201.077
Ca	43	1	He	33699.30672	1.0	73107.567
Ti	47	1	He	0.170769	17.5	43.000
V	51	1	He	0.307500	2.0	1466.327
Cr	52	1	He	0.647502	5.7	7497.270
Mn	55	1	He	1.689955	3.2	10501.780
Fe	56	1	He	8.251476	3.3	73729.300
Co	59	1	He	0.171634	2.6	2296.857
Ni	60	1	He	0.998272	1.5	3432.417
Cu	63	1	He	184.695267	0.9	1667391.377
Zn	66	1	He	27.842293	0.8	57822.413
As	75	1	He	0.371965	1.1	847.193
Se	78	2	H2	0.123232	6.9	146.667
Sr	88	1	He	118.125605	0.2	1414453.573
Mo	95	1	He	1.053477	1.0	6754.957
Pd	105	1	He	0.080179	7.6	961.710
Ag	107	1	He	0.175981	28.2	3690.540
Cd	111	1	He	0.032284	14.6	144.783
Sn	118	1	He	0.107762	11.8	1198.393
Sb	121	1	He	0.192585	6.6	2820.307
Ba	138	1	He	20.415598	1.1	675079.887
Pt	195	1	He	0.007305	24.1	308.003
Hg	202	1	He	0.003204	30.1	249.333
Tl	205	1	He	0.041313	16.4	2480.257
Pb	208	1	He	1.886111	0.6	126729.533
Bi	209	1	He	0.025911	28.3	3673.927
Th	232	1	He	0.051440	10.0	4535.837
U	238	1	He	0.294471	2.3	20386.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.95104409	565754.667
Sc	45	2	H2	100.2417396	4435290.500
Ge	72	1	He	98.67360729	492038.133
Ge	72	2	H2	103.1692867	1609210.377
In	115	1	He	99.87913791	6122782.053
Tb	159	1	He	101.0964997	14627263.947
Ir	193	1	He	100.3586917	7432934.887

Sample Name 4315153\_B70034Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 163SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:08:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.560671	8.5	282.000
Be	9	2	H2	0.042080	19.3	37.167
B	11	2	H2	-76.764526		3603.600
Na	23	1	He	1677.269912	1.2	1529539.663
Mg	24	1	He	2376.961174	1.2	1225136.103
Al	27	1	He	13.327808	3.3	3557.763
Si	28	2	H2	204.847432	0.4	588657.913
K	39	1	He	288.839424	0.7	280571.440
Ca	43	1	He	6795.291472	0.3	14776.553
Ti	47	1	He	0.134632	24.8	34.333
V	51	1	He	0.078137	79.9	-73.563
Cr	52	1	He	0.146556	11.4	3507.097
Mn	55	1	He	0.527577	4.9	3469.087
Fe	56	1	He	3.802659	20.3	40009.947
Co	59	1	He	0.047744	15.3	680.683
Ni	60	1	He	0.262718	25.7	1054.097
Cu	63	1	He	37.393225	0.8	338395.613
Zn	66	1	He	5.661092	1.4	11947.607
As	75	1	He	0.070256	15.7	296.500
Se	78	2	H2	0.014039	28.7	53.667
Sr	88	1	He	23.957781	0.4	287465.927
Mo	95	1	He	0.210066	4.1	1374.073
Pd	105	1	He	0.020355	34.9	393.343
Ag	107	1	He	0.047902	16.1	1091.720
Cd	111	1	He	0.014093	47.6	76.417
Sn	118	1	He	0.034862	25.8	490.013
Sb	121	1	He	0.048017	22.6	741.693
Ba	138	1	He	4.100652	1.1	137468.477
Pt	195	1	He	0.001728	111.2	239.333
Hg	202	1	He	-0.001560		223.000
Tl	205	1	He	0.018423	31.0	1405.090
Pb	208	1	He	0.384572	1.9	28643.683
Bi	209	1	He	0.009945	44.9	2813.700
Th	232	1	He	0.015450	37.0	2091.860
U	238	1	He	0.062782	10.2	5176.067

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.09851156	566642.687
Sc	45	2	H2	98.99652197	4380194.667
Ge	72	1	He	98.83738877	492854.833
Ge	72	2	H2	102.1858899	1593871.583
In	115	1	He	101.2129790	6204549.067
Tb	159	1	He	103.0741624	14913404.363
Ir	193	1	He	101.7611390	7536805.303

Sample Name 4312070\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 164SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:11:55  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	101.511622	0.8	37377.040
Be	9	2	H2	97.624532	0.5	36997.180
B	11	2	H2	47.600590	1.3	43315.610
Na	23	1	He	10400.44973	0.2	9285206.323
Mg	24	1	He	13862.50830	0.3	7017374.893
Al	27	1	He	2009.109421	0.1	517324.917
Si	28	2	H2	1558.114257	0.7	4314733.000
K	39	1	He	3522.041762	0.5	2604179.493
Ca	43	1	He	36457.07981	0.4	78043.687
Ti	47	1	He	100.957392	0.9	24006.493
V	51	1	He	104.239637	0.2	689427.683
Cr	52	1	He	106.151183	0.2	838099.810
Mn	55	1	He	103.585203	0.5	619327.877
Fe	56	1	He	2110.388769	0.4	15817584.333
Co	59	1	He	103.833397	0.6	1333185.707
Ni	60	1	He	105.500395	0.6	335842.137
Cu	63	1	He	290.599760	0.2	2580249.750
Zn	66	1	He	132.002344	0.8	268854.253
As	75	1	He	103.071452	0.2	185334.710
Se	78	2	H2	103.941081	0.7	85780.067
Sr	88	1	He	224.980818	0.2	2649573.817
Mo	95	1	He	103.184815	0.7	643344.543
Pd	105	1	He	20.706091	1.3	193449.857
Ag	107	1	He	51.169516	0.8	1019040.087
Cd	111	1	He	103.853298	0.3	386191.453
Sn	118	1	He	99.912263	0.5	955212.743
Sb	121	1	He	101.967272	0.5	1435132.790
Ba	138	1	He	123.373559	0.3	3973139.107
Pt	195	1	He	20.679162	0.6	272807.177
Hg	202	1	He	0.005307	57.9	264.667
Tl	205	1	He	106.214698	1.2	5159466.070
Pb	208	1	He	104.398014	0.3	6908574.637
Bi	209	1	He	100.399148	0.3	5634273.667
Th	232	1	He	103.901340	0.6	7116212.183
U	238	1	He	101.308082	0.3	6662968.443

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.70117975	558228.230
Sc	45	2	H2	97.39451453	4309312.333
Ge	72	1	He	97.05208304	483952.367
Ge	72	2	H2	100.5287376	1568023.710
In	115	1	He	97.28080919	5963499.537
Tb	159	1	He	101.8000829	14729062.697
Ir	193	1	He	100.0714109	7411657.807

Sample Name 4312071\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 165SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:15:40  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	99.552631	0.7	36635.913
Be	9	2	H2	95.441354	0.6	36149.643
B	11	2	H2	45.698529	2.9	42681.983
Na	23	1	He	9966.660518	0.5	8865350.287
Mg	24	1	He	13244.49743	0.6	6679796.773
Al	27	1	He	1968.329576	0.6	504946.740
Si	28	2	H2	1496.771349	0.6	4143002.667
K	39	1	He	3410.717384	0.3	2514680.170
Ca	43	1	He	34694.45094	0.5	73996.260
Ti	47	1	He	99.078884	0.5	23472.313
V	51	1	He	102.696475	0.2	676682.497
Cr	52	1	He	104.271453	0.5	820240.437
Mn	55	1	He	102.129620	0.4	608364.333
Fe	56	1	He	2076.948355	0.5	15509440.000
Co	59	1	He	101.360055	1.0	1308198.373
Ni	60	1	He	102.822805	1.1	329024.950
Cu	63	1	He	277.515784	0.5	2476924.750
Zn	66	1	He	127.392286	0.9	260820.720
As	75	1	He	100.329558	0.8	181345.960
Se	78	2	H2	101.259672	0.7	83550.810
Sr	88	1	He	216.672229	0.8	2564986.053
Mo	95	1	He	100.406837	1.4	624878.373
Pd	105	1	He	20.301456	0.9	189326.580
Ag	107	1	He	49.978099	0.6	993535.870
Cd	111	1	He	101.852205	0.8	378065.160
Sn	118	1	He	97.851127	0.7	933813.083
Sb	121	1	He	100.448942	0.8	1411182.530
Ba	138	1	He	120.773616	0.4	3882471.713
Pt	195	1	He	20.307451	0.5	266790.323
Hg	202	1	He	0.004229	77.0	256.667
Tl	205	1	He	104.791200	0.2	5069246.693
Pb	208	1	He	103.200935	0.4	6800648.437
Bi	209	1	He	98.238987	0.7	5555987.837
Th	232	1	He	101.156520	0.9	6981844.900
U	238	1	He	99.158020	0.8	6572171.983

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.35683714	556154.667
Sc	45	2	H2	97.33763926	4306795.833
Ge	72	1	He	97.55924078	486481.320
Ge	72	2	H2	100.5102814	1567735.833
In	115	1	He	97.10657417	5952818.597
Tb	159	1	He	101.3730292	14667273.947
Ir	193	1	He	100.8532155	7469561.140

Sample Name 10601164002\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 166SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:19:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.567673	3.2	1038.037
Be	9	2	H2	0.085408	14.1	54.167
B	11	2	H2	-54.439592		10925.943
Na	23	1	He	8464.394318	0.7	7616834.053
Mg	24	1	He	12075.13275	0.6	6160023.033
Al	27	1	He	43.011409	1.2	11232.897
Si	28	2	H2	1046.223319	0.5	2967294.083
K	39	1	He	1489.067964	0.5	1149283.423
Ca	43	1	He	34662.25524	0.5	74772.250
Ti	47	1	He	0.223342	39.0	55.333
V	51	1	He	0.228220	40.5	928.593
Cr	52	1	He	0.629126	2.8	7310.503
Mn	55	1	He	1.051543	3.8	6599.503
Fe	56	1	He	9.252426	4.9	80870.907
Co	59	1	He	0.185379	10.8	2456.883
Ni	60	1	He	1.504968	1.1	5032.880
Cu	63	1	He	223.934713	1.1	2006168.043
Zn	66	1	He	140.925339	0.3	289589.123
As	75	1	He	0.413156	8.3	915.197
Se	78	2	H2	0.150235	9.5	168.333
Sr	88	1	He	119.680734	0.1	1422175.760
Mo	95	1	He	1.057268	3.3	6722.937
Pd	105	1	He	0.076346	13.9	916.703
Ag	107	1	He	0.197340	27.8	4095.657
Cd	111	1	He	0.044414	33.8	189.453
Sn	118	1	He	0.235763	3.6	2435.230
Sb	121	1	He	0.218415	8.2	3167.057
Ba	138	1	He	19.207660	0.7	629902.217
Pt	195	1	He	0.010546	55.7	356.007
Hg	202	1	He	-0.002940		213.333
Tl	205	1	He	0.058393	33.1	3362.143
Pb	208	1	He	1.573629	0.1	107915.483
Bi	209	1	He	0.036271	40.7	4330.803
Th	232	1	He	0.063437	24.8	5452.877
U	238	1	He	0.316300	4.6	22232.467

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.41333469	562516.687
Sc	45	2	H2	99.59468978	4406661.167
Ge	72	1	He	97.92255813	488293.010
Ge	72	2	H2	102.4931829	1598664.667
In	115	1	He	99.05496752	6072258.833
Tb	159	1	He	102.7222714	14862490.613
Ir	193	1	He	102.2604334	7573784.890

Sample Name 10601164003\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 167SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:23:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.558927	4.2	1027.867
Be	9	2	H2	0.061659	9.1	44.667
B	11	2	H2	-54.603609		10801.187
Na	23	1	He	8556.627862	0.3	7665715.513
Mg	24	1	He	12085.83878	0.3	6138247.407
Al	27	1	He	47.829607	1.4	12428.170
Si	28	2	H2	1055.601166	0.5	2974164.417
K	39	1	He	1501.693174	0.5	1153325.813
Ca	43	1	He	34577.45851	0.6	74259.350
Ti	47	1	He	0.136236	25.1	34.333
V	51	1	He	0.247286	21.2	1049.837
Cr	52	1	He	0.262941	3.3	4386.003
Mn	55	1	He	1.374742	2.5	8509.163
Fe	56	1	He	8.549521	2.2	75238.260
Co	59	1	He	0.164015	4.0	2155.500
Ni	60	1	He	0.742415	5.9	2554.900
Cu	63	1	He	205.575076	0.9	1820636.333
Zn	66	1	He	114.751843	0.3	233143.343
As	75	1	He	0.372922	2.0	832.857
Se	78	2	H2	0.129975	16.1	150.000
Sr	88	1	He	121.728549	0.4	1429935.240
Mo	95	1	He	1.054871	2.7	6691.593
Pd	105	1	He	0.068796	4.0	843.367
Ag	107	1	He	0.053718	6.9	1183.393
Cd	111	1	He	0.017152	18.3	86.130
Sn	118	1	He	0.065168	20.0	771.697
Sb	121	1	He	0.204526	10.3	2960.343
Ba	138	1	He	19.739306	0.9	645735.823
Pt	195	1	He	0.006305	27.7	295.337
Hg	202	1	He	-0.001960		216.667
Tl	205	1	He	0.016900	43.6	1308.413
Pb	208	1	He	1.648589	0.8	111357.173
Bi	209	1	He	0.010938	43.1	2843.697
Th	232	1	He	0.016144	20.2	2121.867
U	238	1	He	0.296865	3.1	20636.473

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.00087903	560032.960
Sc	45	2	H2	98.94441174	4377889.000
Ge	72	1	He	96.80219479	482706.293
Ge	72	2	H2	101.7369130	1586868.547
In	115	1	He	98.81678153	6057657.577
Tb	159	1	He	101.3027795	14657109.780
Ir	193	1	He	100.8275168	7467657.803

Sample Name 10601164004\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 168SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:26:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.450714	1.1	986.197
Be	9	2	H2	0.061365	4.7	44.500
B	11	2	H2	-55.867097		10376.557
Na	23	1	He	8279.029918	0.2	7407331.763
Mg	24	1	He	11801.36648	0.4	5985738.453
Al	27	1	He	48.577319	0.9	12603.980
Si	28	2	H2	1036.419099	0.7	2916431.833
K	39	1	He	1455.263920	0.7	1118263.447
Ca	43	1	He	33546.64785	0.8	71948.270
Ti	47	1	He	0.154519	9.5	38.667
V	51	1	He	0.284540	12.9	1297.050
Cr	52	1	He	0.283331	7.8	4540.717
Mn	55	1	He	0.870717	3.1	5479.043
Fe	56	1	He	4.591370	3.3	45434.263
Co	59	1	He	0.143605	1.4	1896.797
Ni	60	1	He	0.749307	2.2	2580.240
Cu	63	1	He	267.170044	0.6	2368964.000
Zn	66	1	He	81.638515	0.6	166127.060
As	75	1	He	0.371122	4.1	830.523
Se	78	2	H2	0.139635	5.2	157.333
Sr	88	1	He	116.712373	0.5	1372688.103
Mo	95	1	He	1.024616	2.0	6472.817
Pd	105	1	He	0.072224	14.0	871.703
Ag	107	1	He	0.034819	8.6	798.360
Cd	111	1	He	0.011494	34.6	64.503
Sn	118	1	He	0.053842	8.0	660.020
Sb	121	1	He	0.261368	1.3	3758.870
Ba	138	1	He	18.385681	0.7	598987.480
Pt	195	1	He	0.005280	20.9	281.333
Hg	202	1	He	-0.000548		225.333
Tl	205	1	He	0.011636	48.4	1050.057
Pb	208	1	He	1.584002	1.1	106910.707
Bi	209	1	He	0.007655	59.4	2666.983
Th	232	1	He	0.010212	16.2	1718.463
U	238	1	He	0.282769	2.8	19748.407

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.87336296	559265.083
Sc	45	2	H2	98.81194385	4372027.833
Ge	72	1	He	96.91927505	483290.117
Ge	72	2	H2	101.0996337	1576928.413
In	115	1	He	98.40550431	6032445.497
Tb	159	1	He	101.1251940	14631415.613
Ir	193	1	He	101.0301775	7482667.597



Sample Name 10601164004\_B70034Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 169SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:30:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.322976	7.7	190.167
Be	9	2	H2	0.033098	61.7	33.167
B	11	2	H2	-79.121814		2791.593
Na	23	1	He	880.810297	6.2	766964.883
Mg	24	1	He	1248.575352	5.8	612505.917
Al	27	1	He	7.352696	6.1	1894.127
Si	28	2	H2	104.361651	0.2	301760.490
K	39	1	He	153.436376	9.9	172244.417
Ca	43	1	He	3526.416531	5.5	7280.207
Ti	47	1	He	0.033215	27.5	9.333
V	51	1	He	0.007088	775.7	-524.380
Cr	52	1	He	0.043838	21.8	2552.230
Mn	55	1	He	0.239382	12.1	1630.100
Fe	56	1	He	1.146906	5.5	18848.823
Co	59	1	He	0.023466	9.3	345.340
Ni	60	1	He	0.105631	7.8	517.343
Cu	63	1	He	28.259699	4.6	242461.527
Zn	66	1	He	8.864220	3.8	17620.680
As	75	1	He	0.047641	16.4	241.833
Se	78	2	H2	-0.003786		38.000
Sr	88	1	He	12.340920	4.1	140435.163
Mo	95	1	He	0.120808	7.0	755.357
Pd	105	1	He	0.011470	57.8	291.673
Ag	107	1	He	0.020368	12.1	496.680
Cd	111	1	He	0.003993	48.5	35.530
Sn	118	1	He	0.023000	14.3	353.343
Sb	121	1	He	0.032126	3.9	485.013
Ba	138	1	He	1.921636	5.7	61250.020
Pt	195	1	He	0.000345	773.6	210.000
Hg	202	1	He	-0.004757		192.667
Tl	205	1	He	0.005248	46.8	723.360
Pb	208	1	He	0.169344	4.3	13564.373
Bi	209	1	He	0.006877	47.3	2540.290
Th	232	1	He	0.002109	54.0	1120.063
U	238	1	He	0.028518	6.7	2773.657

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.44689078	538631.543
Sc	45	2	H2	97.39824745	4309477.500
Ge	72	1	He	93.79317914	467701.770
Ge	72	2	H2	100.2257855	1563298.333
In	115	1	He	96.31394336	5904228.813
Tb	159	1	He	98.31757978	14225192.703
Ir	193	1	He	97.75758872	7240287.600

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 170\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:34:24  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	79.020601	0.7	28562.303
Be	9	2	H2	76.259058	0.6	28358.953
B	11	2	H2	-2.805985		26683.297
Na	23	1	He	993.787380	5.2	888992.617
Mg	24	1	He	988.045196	5.0	499645.750
Al	27	1	He	974.452064	4.4	248626.773
Si	28	2	H2	487.590922	0.3	1333970.620
K	39	1	He	1003.431627	4.7	783585.017
Ca	43	1	He	990.969274	4.8	2114.170
Ti	47	1	He	78.564143	5.9	18501.930
V	51	1	He	80.445275	3.9	527019.310
Cr	52	1	He	82.256148	4.3	643924.710
Mn	55	1	He	80.091316	4.3	474478.343
Fe	56	1	He	520.615432	4.3	3874179.083
Co	59	1	He	81.790679	4.0	1044834.207
Ni	60	1	He	82.787899	3.7	262261.577
Cu	63	1	He	82.634109	4.2	730174.980
Zn	66	1	He	80.993914	4.1	164203.000
As	75	1	He	78.820158	4.4	141031.610
Se	78	2	H2	80.168946	0.7	64905.573
Sr	88	1	He	80.300572	4.1	940978.163
Mo	95	1	He	76.304542	5.0	484186.343
Pd	105	1	He	81.550243	5.3	774755.640
Ag	107	1	He	40.521397	5.3	821304.700
Cd	111	1	He	79.642514	4.8	301430.650
Sn	118	1	He	76.653431	4.9	745890.767
Sb	121	1	He	77.393681	4.4	1108773.653
Ba	138	1	He	78.080716	5.5	2558737.463
Pt	195	1	He	83.058826	4.7	1082815.753
Hg	202	1	He	3.933320	4.4	25303.623
Tl	205	1	He	42.402545	4.2	2037229.293
Pb	208	1	He	82.450242	4.4	5395534.870
Bi	209	1	He	80.356122	5.5	4553356.287
Th	232	1	He	76.470931	4.9	5289027.840
U	238	1	He	77.380844	4.9	5139648.777

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.93600138	553620.477
Sc	45	2	H2	95.55579236	4227956.333
Ge	72	1	He	96.65038959	481949.313
Ge	72	2	H2	98.60878323	1538076.710
In	115	1	He	99.14749814	6077931.137
Tb	159	1	He	100.7793218	14581372.697
Ir	193	1	He	101.2153306	7496380.720

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 171\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:38:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.088906	44.5	92.167
Be	9	2	H2	0.074921	30.1	43.167
B	11	2	H2	-81.052472		1913.457
Na	23	1	He	0.283105	216.9	11279.320
Mg	24	1	He	-4.954851		1995.160
Al	27	1	He	0.444872	27.2	184.000
Si	28	2	H2	-0.595836		10588.457
K	39	1	He	-6.318129		62292.470
Ca	43	1	He	6.366830	16.2	25.800
Ti	47	1	He	0.032444	76.5	9.333
V	51	1	He	0.064579	33.4	-156.993
Cr	52	1	He	-0.000270		2241.513
Mn	55	1	He	0.164197	11.8	1215.387
Fe	56	1	He	0.606264	15.5	15112.537
Co	59	1	He	0.036150	37.6	506.013
Ni	60	1	He	0.032701	51.0	296.003
Cu	63	1	He	0.070673	48.3	920.037
Zn	66	1	He	0.075381	45.5	354.670
As	75	1	He	0.011995	89.2	181.667
Se	78	2	H2	-0.009981		29.333
Sr	88	1	He	0.044333	38.7	650.020
Mo	95	1	He	0.036394	37.6	239.337
Pd	105	1	He	0.024187	24.8	416.677
Ag	107	1	He	0.151022	27.5	3123.720
Cd	111	1	He	0.030239	48.4	134.290
Sn	118	1	He	0.025921	59.2	388.340
Sb	121	1	He	0.033941	33.9	518.347
Ba	138	1	He	0.033276	46.2	1151.730
Pt	195	1	He	0.027194	43.4	565.350
Hg	202	1	He	0.013103	17.6	311.000
Tl	205	1	He	0.049046	30.1	2842.013
Pb	208	1	He	0.026088	55.6	4525.330
Bi	209	1	He	0.025063	51.3	3670.590
Th	232	1	He	0.038907	27.7	3720.580
U	238	1	He	0.024010	43.2	2581.963

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.35313543	544088.770
Sc	45	2	H2	87.44858050	3869245.083
Ge	72	1	He	94.51003613	471276.393
Ge	72	2	H2	90.68158746	1414430.167
In	115	1	He	98.01734490	6008650.583
Tb	159	1	He	100.5680282	14550801.447
Ir	193	1	He	101.5825821	7523580.720

Sample Name 10601164016\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 172SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:41:53  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.072858	1.4	820.020
Be	9	2	H2	0.047960	35.0	38.167
B	11	2	H2	-58.975956		9087.227
Na	23	1	He	8043.180888	0.2	7018403.023
Mg	24	1	He	11122.81532	0.3	5502109.503
Al	27	1	He	54.785513	1.0	13853.420
Si	28	2	H2	992.046127	0.8	2708431.000
K	39	1	He	1420.493052	0.3	1066115.297
Ca	43	1	He	32647.33621	0.3	68286.220
Ti	47	1	He	0.165823	18.2	40.333
V	51	1	He	0.284520	8.5	1264.620
Cr	52	1	He	0.296544	2.4	4530.043
Mn	55	1	He	3.809078	0.8	22501.253
Fe	56	1	He	66.719736	0.4	498968.847
Co	59	1	He	0.048069	9.4	656.683
Ni	60	1	He	0.927050	2.2	3074.333
Cu	63	1	He	23.963949	0.5	207999.927
Zn	66	1	He	61.539041	0.5	122467.597
As	75	1	He	0.334897	3.5	748.353
Se	78	2	H2	0.120235	7.1	137.333
Sr	88	1	He	115.642778	0.8	1329567.900
Mo	95	1	He	0.966259	0.7	5992.607
Pd	105	1	He	0.075713	4.9	888.370
Ag	107	1	He	0.045467	15.6	993.380
Cd	111	1	He	0.029518	9.1	129.920
Sn	118	1	He	0.063199	3.4	736.690
Sb	121	1	He	0.172911	2.5	2453.573
Ba	138	1	He	19.187320	0.4	613581.110
Pt	195	1	He	0.008484	8.1	320.003
Hg	202	1	He	0.004609	47.6	255.667
Tl	205	1	He	0.016741	13.6	1285.073
Pb	208	1	He	2.184633	0.5	144886.493
Bi	209	1	He	0.006064	29.7	2503.637
Th	232	1	He	0.017087	5.0	2131.863
U	238	1	He	0.292325	2.5	19810.817

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.57332475	545414.707
Sc	45	2	H2	95.84792459	4240882.000
Ge	72	1	He	94.74507236	472448.407
Ge	72	2	H2	98.29752049	1533221.707
In	115	1	He	96.59108127	5921217.897
Tb	159	1	He	100.0933342	14482119.783
Ir	193	1	He	98.21411869	7274099.893

Sample Name 10601164017\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 173SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:45:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.256696	1.3	1245.717
Be	9	2	H2	0.045482	42.4	37.167
B	11	2	H2	-50.568195		11710.357
Na	23	1	He	8480.181054	0.6	7454856.343
Mg	24	1	He	12567.30835	0.6	6262900.947
Al	27	1	He	61.687478	0.6	15706.920
Si	28	2	H2	1092.358723	0.6	2975176.167
K	39	1	He	1499.789499	0.2	1130350.117
Ca	43	1	He	34388.04372	0.1	72468.470
Ti	47	1	He	0.158821	28.4	39.000
V	51	1	He	0.294993	43.8	1341.430
Cr	52	1	He	1.750181	0.4	15831.200
Mn	55	1	He	3.115485	0.8	18590.480
Fe	56	1	He	8.798428	0.3	75663.687
Co	59	1	He	0.271642	1.5	3477.760
Ni	60	1	He	3.204094	1.3	10200.917
Cu	63	1	He	113.257738	1.0	987174.647
Zn	66	1	He	116.558735	0.2	233034.547
As	75	1	He	0.390132	4.3	849.860
Se	78	2	H2	0.124177	4.8	140.333
Sr	88	1	He	120.661597	0.8	1394779.510
Mo	95	1	He	1.067274	0.7	6601.543
Pd	105	1	He	0.075055	4.6	880.037
Ag	107	1	He	0.029508	15.6	676.690
Cd	111	1	He	0.020169	22.3	95.143
Sn	118	1	He	0.056700	3.4	673.357
Sb	121	1	He	0.212473	4.0	2998.687
Ba	138	1	He	20.234236	1.2	645461.320
Pt	195	1	He	0.004265	34.5	265.333
Hg	202	1	He	0.000198	150.3	227.667
Tl	205	1	He	0.014347	6.5	1170.067
Pb	208	1	He	1.468312	1.2	98251.883
Bi	209	1	He	0.216304	1.2	14271.273
Th	232	1	He	0.014021	17.7	1951.830
U	238	1	He	0.280796	0.2	19331.133

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.25595863	549525.393
Sc	45	2	H2	95.66061552	4232594.333
Ge	72	1	He	95.25739268	475003.103
Ge	72	2	H2	98.21661937	1531959.830
In	115	1	He	96.35087843	5906493.003
Tb	159	1	He	100.0465144	14475345.617
Ir	193	1	He	99.55953170	7373746.143

Sample Name 10601164018\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 174SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:49:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.220838	2.8	877.197
Be	9	2	H2	0.034158	29.8	33.167
B	11	2	H2	-57.777736		9504.487
Na	23	1	He	8214.666914	0.5	7238151.977
Mg	24	1	He	11542.75920	0.6	5765693.037
Al	27	1	He	42.039269	1.1	10751.540
Si	28	2	H2	1041.416086	0.6	2854653.583
K	39	1	He	1442.269192	0.7	1092050.300
Ca	43	1	He	33399.88927	0.8	70545.137
Ti	47	1	He	0.111567	17.6	28.000
V	51	1	He	0.267463	20.7	1165.570
Cr	52	1	He	0.554038	1.7	6574.820
Mn	55	1	He	0.969408	1.1	5977.900
Fe	56	1	He	8.500328	0.9	73631.463
Co	59	1	He	0.112941	3.4	1488.743
Ni	60	1	He	2.634044	3.6	8483.157
Cu	63	1	He	203.521928	0.5	1786736.663
Zn	66	1	He	250.819821	0.2	504892.330
As	75	1	He	0.363071	1.6	808.020
Se	78	2	H2	0.132319	15.5	148.333
Sr	88	1	He	115.474319	0.5	1344614.667
Mo	95	1	He	1.013507	1.8	6334.757
Pd	105	1	He	0.067261	10.7	816.700
Ag	107	1	He	0.018792	10.2	470.010
Cd	111	1	He	0.068646	6.8	276.527
Sn	118	1	He	0.441316	6.5	4359.050
Sb	121	1	He	0.263824	6.8	3753.867
Ba	138	1	He	18.661108	0.5	601439.820
Pt	195	1	He	0.004122	6.9	262.667
Hg	202	1	He	0.000832	220.3	231.000
Tl	205	1	He	0.012035	3.8	1056.717
Pb	208	1	He	2.755951	0.2	181464.373
Bi	209	1	He	0.006502	25.2	2576.967
Th	232	1	He	0.005316	22.6	1366.753
U	238	1	He	0.295676	1.6	20416.090

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.46240013	550768.543
Sc	45	2	H2	96.25489974	4258889.000
Ge	72	1	He	95.95515487	478482.510
Ge	72	2	H2	99.23112898	1547783.913
In	115	1	He	97.35003977	5967743.503
Tb	159	1	He	99.77143634	14435545.620
Ir	193	1	He	100.1046086	7414116.553

Sample Name 10601164019\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 175SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:53:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.129748	4.0	849.190
Be	9	2	H2	0.026998	81.7	30.667
B	11	2	H2	-58.929437		9195.793
Na	23	1	He	8274.314103	0.5	7329776.977
Mg	24	1	He	11818.95598	0.5	5935362.203
Al	27	1	He	27.652809	2.2	7135.377
Si	28	2	H2	1020.610961	1.2	2814846.083
K	39	1	He	1342.605288	0.5	1026746.417
Ca	43	1	He	34005.50978	0.1	72210.830
Ti	47	1	He	0.119404	0.6	30.000
V	51	1	He	0.290715	6.5	1324.977
Cr	52	1	He	0.340872	3.4	4945.517
Mn	55	1	He	0.989286	1.9	6127.963
Fe	56	1	He	8.823030	0.9	76422.960
Co	59	1	He	0.202167	1.1	2620.910
Ni	60	1	He	0.902544	3.6	3035.657
Cu	63	1	He	176.968021	1.2	1553303.417
Zn	66	1	He	117.817930	0.7	237222.663
As	75	1	He	0.353863	2.7	791.520
Se	78	2	H2	0.122722	13.7	141.000
Sr	88	1	He	117.600881	0.3	1369097.220
Mo	95	1	He	0.998156	2.7	6275.403
Pd	105	1	He	0.073214	12.0	876.700
Ag	107	1	He	0.016985	4.8	436.677
Cd	111	1	He	0.014156	3.9	74.203
Sn	118	1	He	0.069582	12.2	808.367
Sb	121	1	He	0.168059	5.0	2418.560
Ba	138	1	He	19.632211	1.0	636412.050
Pt	195	1	He	0.004886	15.9	275.333
Hg	202	1	He	-0.002375		213.000
Tl	205	1	He	0.008256	22.9	885.040
Pb	208	1	He	1.171334	0.2	79545.550
Bi	209	1	He	0.006443	41.9	2566.960
Th	232	1	He	0.003533	43.9	1241.737
U	238	1	He	0.244777	2.2	17019.537

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.95413105	553729.650
Sc	45	2	H2	96.84155613	4284846.167
Ge	72	1	He	95.93556273	478384.813
Ge	72	2	H2	99.56120596	1552932.377
In	115	1	He	97.91810232	6002566.823
Tb	159	1	He	100.7976949	14584031.033
Ir	193	1	He	99.82337269	7393287.180

Sample Name 10601164020\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 176SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:56:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.807955	4.6	1085.040
Be	9	2	H2	0.075310	8.4	48.333
B	11	2	H2	-53.169961		10907.260
Na	23	1	He	8464.051295	0.8	7516769.890
Mg	24	1	He	12419.52566	0.8	6252617.617
Al	27	1	He	45.337947	0.4	11681.903
Si	28	2	H2	1100.557518	0.6	3001308.333
K	39	1	He	1492.555820	0.3	1136750.817
Ca	43	1	He	34651.97533	0.2	73771.803
Ti	47	1	He	0.167052	22.3	41.333
V	51	1	He	0.297930	16.2	1375.500
Cr	52	1	He	0.443111	0.9	5758.480
Mn	55	1	He	3.992214	0.3	23991.640
Fe	56	1	He	17.465378	0.4	140994.393
Co	59	1	He	0.281030	3.2	3647.800
Ni	60	1	He	1.588776	2.2	5231.617
Cu	63	1	He	345.153016	0.2	3051255.083
Zn	66	1	He	83.264369	0.3	168928.410
As	75	1	He	0.405479	2.7	889.530
Se	78	2	H2	0.147115	6.6	159.667
Sr	88	1	He	118.159351	0.3	1385569.513
Mo	95	1	He	1.078413	2.1	6780.293
Pd	105	1	He	0.063763	11.3	788.367
Ag	107	1	He	0.019972	3.8	496.677
Cd	111	1	He	0.050815	11.0	211.447
Sn	118	1	He	0.141285	4.1	1498.427
Sb	121	1	He	0.211335	4.3	3032.017
Ba	138	1	He	18.184720	0.6	589647.740
Pt	195	1	He	0.004500	17.3	268.667
Hg	202	1	He	-0.004048		201.000
Tl	205	1	He	0.034397	4.9	2130.193
Pb	208	1	He	3.100940	1.0	204671.823
Bi	209	1	He	0.041156	11.9	4510.847
Th	232	1	He	0.010928	12.2	1748.470
U	238	1	He	0.302333	1.4	20811.753

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.19027185	555151.643
Sc	45	2	H2	95.78716949	4238193.833
Ge	72	1	He	96.63059022	481850.583
Ge	72	2	H2	98.70516178	1539580.000
In	115	1	He	97.94018108	6003920.293
Tb	159	1	He	100.1820981	14494962.697
Ir	193	1	He	99.90112955	7399046.140



Sample Name 10601164021\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 177SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:00:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.265856	1.3	902.363
Be	9	2	H2	0.052718	26.8	40.500
B	11	2	H2	-56.727152		9933.427
Na	23	1	He	9123.732273	0.9	8016207.177
Mg	24	1	He	12653.92444	1.0	6303213.033
Al	27	1	He	50.540831	1.6	12876.210
Si	28	2	H2	1139.460923	0.4	3152904.333
K	39	1	He	1628.922703	0.2	1221372.117
Ca	43	1	He	37205.37053	0.7	78370.473
Ti	47	1	He	0.116244	19.1	29.000
V	51	1	He	0.318004	12.7	1490.477
Cr	52	1	He	0.367802	1.8	5114.240
Mn	55	1	He	2.605413	1.1	15582.307
Fe	56	1	He	57.956191	0.8	437920.590
Co	59	1	He	0.085621	1.0	1132.717
Ni	60	1	He	3.369019	2.1	10707.290
Cu	63	1	He	266.245950	1.3	2318421.333
Zn	66	1	He	751.200724	0.8	1499556.337
As	75	1	He	0.429835	1.3	919.197
Se	78	2	H2	0.125475	7.4	144.333
Sr	88	1	He	133.511191	1.1	1542081.333
Mo	95	1	He	1.130068	1.6	6983.727
Pd	105	1	He	0.087972	8.1	998.377
Ag	107	1	He	0.014062	12.4	371.677
Cd	111	1	He	0.108310	8.6	419.420
Sn	118	1	He	0.750975	3.5	7241.933
Sb	121	1	He	0.260643	2.2	3667.173
Ba	138	1	He	23.109630	0.7	736611.420
Pt	195	1	He	0.016404	19.1	422.010
Hg	202	1	He	-0.002576		209.667
Tl	205	1	He	0.023379	5.5	1598.447
Pb	208	1	He	5.188383	1.0	339565.553
Bi	209	1	He	0.067991	7.9	5954.787
Th	232	1	He	0.012389	21.7	1828.477
U	238	1	He	0.319405	1.1	21708.240

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.21948783	549305.773
Sc	45	2	H2	97.20271917	4300826.167
Ge	72	1	He	95.18747087	474654.437
Ge	72	2	H2	100.2514622	1563698.833
In	115	1	He	96.28134286	5902230.340
Tb	159	1	He	99.89189822	14452974.787
Ir	193	1	He	98.87533169	7323071.767

Sample Name 10601164021\_B70034Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 178SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:04:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.265494	10.1	168.833
Be	9	2	H2	0.004999	132.3	22.500
B	11	2	H2	-79.784965		2576.883
Na	23	1	He	901.412913	0.5	831926.340
Mg	24	1	He	1247.381668	0.5	648709.793
Al	27	1	He	6.640809	4.8	1820.447
Si	28	2	H2	117.220736	0.5	336936.977
K	39	1	He	153.798906	1.0	182895.563
Ca	43	1	He	3685.677956	0.9	8064.627
Ti	47	1	He	0.027963	38.0	8.667
V	51	1	He	0.014273	111.1	-505.373
Cr	52	1	He	0.089911	1.7	3071.663
Mn	55	1	He	0.356292	3.2	2444.210
Fe	56	1	He	6.968414	1.8	64455.793
Co	59	1	He	0.010829	23.8	197.333
Ni	60	1	He	0.334125	4.7	1280.730
Cu	63	1	He	27.433513	0.7	247287.800
Zn	66	1	He	75.992203	0.6	157036.173
As	75	1	He	0.043952	23.3	247.333
Se	78	2	H2	0.000237	1263.8	41.333
Sr	88	1	He	13.117184	0.7	156782.923
Mo	95	1	He	0.105117	7.3	697.353
Pd	105	1	He	0.007189	79.3	266.670
Ag	107	1	He	0.008636	5.0	280.007
Cd	111	1	He	0.009800	11.7	60.207
Sn	118	1	He	0.068742	3.3	831.700
Sb	121	1	He	0.028133	13.2	453.343
Ba	138	1	He	2.205712	1.4	74397.267
Pt	195	1	He	0.000031	7286.0	216.667
Hg	202	1	He	-0.006709		189.333
Tl	205	1	He	0.002988	38.0	646.687
Pb	208	1	He	0.632972	1.9	45249.903
Bi	209	1	He	0.006809	79.6	2643.643
Th	232	1	He	-0.001984		883.373
U	238	1	He	0.028183	5.2	2873.673

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.61801932	569771.060
Sc	45	2	H2	97.30687561	4305434.667
Ge	72	1	He	98.41435646	490745.373
Ge	72	2	H2	100.3009458	1564470.667
In	115	1	He	101.7921839	6240055.430
Tb	159	1	He	103.0093238	14904023.113
Ir	193	1	He	102.0079086	7555081.970

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 179\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:08:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	78.556009	0.4	28530.250
Be	9	2	H2	75.230837	1.0	28110.333
B	11	2	H2	-3.699325		26528.190
Na	23	1	He	981.277732	0.4	889570.067
Mg	24	1	He	970.845742	1.3	497506.440
Al	27	1	He	969.987535	0.7	250719.463
Si	28	2	H2	483.933029	0.2	1330377.917
K	39	1	He	998.213962	1.0	790027.777
Ca	43	1	He	983.156798	0.8	2124.957
Ti	47	1	He	78.279908	1.0	18682.823
V	51	1	He	79.661817	1.2	528661.780
Cr	52	1	He	81.790192	0.9	648660.687
Mn	55	1	He	79.637053	1.2	477955.533
Fe	56	1	He	520.415072	0.8	3923212.000
Co	59	1	He	81.824880	0.2	1055082.500
Ni	60	1	He	83.142142	1.1	265843.860
Cu	63	1	He	82.836443	0.4	738857.437
Zn	66	1	He	81.096282	0.6	165957.483
As	75	1	He	79.342956	0.3	143310.363
Se	78	2	H2	80.312362	0.8	65310.717
Sr	88	1	He	80.191621	0.2	948513.733
Mo	95	1	He	76.286204	0.7	487402.177
Pd	105	1	He	81.543289	1.0	780080.927
Ag	107	1	He	40.414788	0.6	824813.217
Cd	111	1	He	79.535410	0.9	303081.770
Sn	118	1	He	76.033843	1.2	744917.147
Sb	121	1	He	76.897618	0.7	1109069.280
Ba	138	1	He	77.515914	0.4	2558110.223
Pt	195	1	He	81.973691	0.6	1075489.127
Hg	202	1	He	3.874229	0.5	25082.197
Tl	205	1	He	41.580809	1.1	2010221.167
Pb	208	1	He	81.176134	0.7	5345882.780
Bi	209	1	He	79.942490	0.3	4528056.080
Th	232	1	He	75.624351	0.3	5227369.713
U	238	1	He	76.586420	0.3	5083595.863

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.04288583	560285.917
Sc	45	2	H2	96.01153280	4248121.000
Ge	72	1	He	97.46382157	486005.510
Ge	72	2	H2	99.04983999	1544956.210
In	115	1	He	99.68877957	6111112.723
Tb	159	1	He	101.2989062	14656549.363
Ir	193	1	He	100.9923525	7479866.140

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 180\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:11:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.051226	20.9	88.000
Be	9	2	H2	0.030007	18.5	31.167
B	11	2	H2	-82.057542		1805.943
Na	23	1	He	-0.677409		10650.550
Mg	24	1	He	-6.334191		1340.073
Al	27	1	He	0.123013	51.0	105.333
Si	28	2	H2	-0.970628		10705.190
K	39	1	He	-7.460655		62695.847
Ca	43	1	He	1.038662	139.5	15.017
Ti	47	1	He	0.014707	71.5	5.333
V	51	1	He	0.019864	199.9	-451.113
Cr	52	1	He	-0.022125		2113.493
Mn	55	1	He	0.103712	3.0	879.363
Fe	56	1	He	0.286139	9.5	13023.143
Co	59	1	He	0.010636	28.9	191.333
Ni	60	1	He	0.007378	63.7	222.000
Cu	63	1	He	0.017103	9.8	466.677
Zn	66	1	He	0.048691	26.9	308.003
As	75	1	He	-0.010038		146.000
Se	78	2	H2	-0.014785		28.333
Sr	88	1	He	0.008154	22.3	240.000
Mo	95	1	He	0.014603	47.4	104.667
Pd	105	1	He	0.016099	6.4	345.010
Ag	107	1	He	0.159153	22.1	3338.770
Cd	111	1	He	0.006556	12.0	46.313
Sn	118	1	He	0.007796	21.7	216.667
Sb	121	1	He	0.008115	38.6	155.000
Ba	138	1	He	0.008503	28.7	353.343
Pt	195	1	He	0.006495	17.6	297.337
Hg	202	1	He	0.011239	23.6	300.667
Tl	205	1	He	0.034768	16.9	2170.200
Pb	208	1	He	0.000986	225.9	2900.147
Bi	209	1	He	0.005554	49.7	2556.963
Th	232	1	He	0.022069	20.9	2548.613
U	238	1	He	0.002390	106.2	1138.397

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.13235730	554802.893
Sc	45	2	H2	94.93558863	4200514.833
Ge	72	1	He	96.44132337	480906.800
Ge	72	2	H2	98.00920484	1528724.627
In	115	1	He	99.20423106	6081408.973
Tb	159	1	He	101.0885745	14626117.283
Ir	193	1	He	101.3752830	7508227.387

Sample Name 10601164005\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 181SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:15:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.858616	1.1	1119.040
Be	9	2	H2	0.015717	43.3	26.500
B	11	2	H2	-53.229452		11042.027
Na	23	1	He	8475.384853	0.7	7462366.970
Mg	24	1	He	12526.55798	1.2	6252309.073
Al	27	1	He	40.305188	0.9	10304.227
Si	28	2	H2	1075.389257	0.4	2974334.000
K	39	1	He	1483.249076	1.0	1120372.980
Ca	43	1	He	34687.51243	1.0	73213.283
Ti	47	1	He	0.126004	30.3	31.333
V	51	1	He	0.211217	46.1	795.380
Cr	52	1	He	0.409250	1.1	5446.357
Mn	55	1	He	1.890800	2.1	11402.457
Fe	56	1	He	6.973049	2.2	62299.977
Co	59	1	He	0.292425	2.0	3764.497
Ni	60	1	He	1.133282	1.7	3759.830
Cu	63	1	He	250.068876	0.6	2193863.667
Zn	66	1	He	123.346175	0.7	248235.177
As	75	1	He	0.374287	3.5	827.357
Se	78	2	H2	0.111127	21.7	132.667
Sr	88	1	He	118.931497	0.6	1383972.320
Mo	95	1	He	1.038634	1.9	6512.840
Pd	105	1	He	0.080344	7.3	941.710
Ag	107	1	He	0.050799	11.1	1111.720
Cd	111	1	He	0.008838	23.4	54.160
Sn	118	1	He	0.047411	8.1	593.353
Sb	121	1	He	0.198134	4.1	2836.980
Ba	138	1	He	18.294581	1.1	591584.237
Pt	195	1	He	0.004144	22.3	264.667
Hg	202	1	He	0.002217	103.3	241.333
Tl	205	1	He	0.013114	23.7	1115.057
Pb	208	1	He	1.531053	0.9	102735.497
Bi	209	1	He	0.004423	98.6	2453.607
Th	232	1	He	0.010189	11.4	1696.790
U	238	1	He	0.273581	1.0	18922.190

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.40145825	550401.563
Sc	45	2	H2	97.13606147	4297876.833
Ge	72	1	He	95.89256750	478170.417
Ge	72	2	H2	100.2054272	1562980.790
In	115	1	He	97.67204354	5987482.950
Tb	159	1	He	100.4378384	14531964.783
Ir	193	1	He	99.88637027	7397953.013

Sample Name 10601164006\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 182SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:19:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.817145	2.8	1092.373
Be	9	2	H2	0.043971	29.2	36.833
B	11	2	H2	-53.759485		10760.660
Na	23	1	He	8320.977452	1.1	7363574.263
Mg	24	1	He	12309.65441	0.7	6175381.990
Al	27	1	He	46.781463	1.2	12008.157
Si	28	2	H2	1054.293935	1.7	2885969.000
K	39	1	He	1469.793130	0.4	1116441.803
Ca	43	1	He	34032.84429	0.3	72195.160
Ti	47	1	He	0.138212	43.9	34.333
V	51	1	He	0.283453	20.8	1277.430
Cr	52	1	He	0.405604	2.0	5445.690
Mn	55	1	He	1.966581	1.2	11908.860
Fe	56	1	He	8.036427	0.6	70511.567
Co	59	1	He	0.308336	4.9	3965.213
Ni	60	1	He	1.378294	0.9	4527.380
Cu	63	1	He	254.504227	0.1	2231512.000
Zn	66	1	He	199.903733	0.7	401948.260
As	75	1	He	0.395459	0.9	864.530
Se	78	2	H2	0.151563	9.5	163.667
Sr	88	1	He	117.615287	0.9	1367791.077
Mo	95	1	He	1.071347	1.0	6677.580
Pd	105	1	He	0.072513	16.8	863.367
Ag	107	1	He	0.027054	19.9	633.357
Cd	111	1	He	0.032364	3.3	141.133
Sn	118	1	He	0.087593	3.4	973.377
Sb	121	1	He	0.202041	2.2	2875.323
Ba	138	1	He	18.403980	0.7	591584.313
Pt	195	1	He	0.008633	14.1	321.340
Hg	202	1	He	0.000471	690.5	229.000
Tl	205	1	He	0.018304	10.6	1356.750
Pb	208	1	He	1.199944	1.1	80673.670
Bi	209	1	He	0.023537	12.4	3510.547
Th	232	1	He	0.016461	6.0	2116.860
U	238	1	He	0.288312	0.9	19800.173

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.86164712	553172.730
Sc	45	2	H2	96.14530777	4254040.000
Ge	72	1	He	95.83697230	477893.190
Ge	72	2	H2	98.95221917	1543433.543
In	115	1	He	97.09255443	5951959.160
Tb	159	1	He	99.87619179	14450702.283
Ir	193	1	He	99.44941526	7365590.513

Sample Name 10601164007\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 183SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:23:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.967379	1.2	1162.547
Be	9	2	H2	0.063901	18.7	44.833
B	11	2	H2	-52.897363		11183.467
Na	23	1	He	8432.743303	0.8	7557475.513
Mg	24	1	He	12473.37651	0.6	6337176.573
Al	27	1	He	44.741431	0.8	11634.197
Si	28	2	H2	1076.131209	1.0	2985822.333
K	39	1	He	1489.251830	1.3	1144686.780
Ca	43	1	He	34651.21527	1.1	74441.733
Ti	47	1	He	0.119144	22.8	30.333
V	51	1	He	0.289787	35.1	1330.637
Cr	52	1	He	1.377292	2.0	13193.957
Mn	55	1	He	1.889670	2.6	11598.613
Fe	56	1	He	12.806761	1.7	107258.290
Co	59	1	He	0.330881	2.7	4295.977
Ni	60	1	He	1.388731	3.7	4609.403
Cu	63	1	He	241.877780	1.0	2143990.750
Zn	66	1	He	230.812535	1.0	469136.407
As	75	1	He	0.402955	2.7	887.530
Se	78	2	H2	0.136767	3.6	154.000
Sr	88	1	He	120.122825	0.8	1412321.803
Mo	95	1	He	1.071713	2.5	6758.287
Pd	105	1	He	0.075526	3.6	901.707
Ag	107	1	He	0.020892	4.5	516.677
Cd	111	1	He	0.070234	3.8	285.117
Sn	118	1	He	0.085964	11.1	968.377
Sb	121	1	He	0.225072	4.3	3237.070
Ba	138	1	He	19.176673	1.5	623683.543
Pt	195	1	He	0.009132	15.5	331.337
Hg	202	1	He	-0.003890		203.667
Tl	205	1	He	0.043776	4.2	2598.613
Pb	208	1	He	1.352353	0.8	91555.663
Bi	209	1	He	0.050798	1.6	5071.070
Th	232	1	He	0.014368	10.6	1990.173
U	238	1	He	0.276080	0.8	19157.537

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.03599089	560244.397
Sc	45	2	H2	97.44737060	4311651.000
Ge	72	1	He	96.89068465	483147.550
Ge	72	2	H2	100.5317428	1568070.583
In	115	1	He	98.24559200	6022642.567
Tb	159	1	He	100.9722653	14609288.947
Ir	193	1	He	100.2663276	7426094.057

Sample Name 10601164008\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 184SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:26:52  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.879182	2.6	1131.373
Be	9	2	H2	0.016287	35.2	26.833
B	11	2	H2	-53.516913		10997.827
Na	23	1	He	7944.170582	0.4	7108159.060
Mg	24	1	He	11794.19627	0.6	5982097.830
Al	27	1	He	59.532152	2.2	15429.633
Si	28	2	H2	1020.988225	1.0	2836738.583
K	39	1	He	1398.925194	0.8	1077629.880
Ca	43	1	He	32490.51743	0.1	69683.587
Ti	47	1	He	0.171335	12.2	42.667
V	51	1	He	0.249068	43.6	1062.213
Cr	52	1	He	0.343099	4.9	5012.203
Mn	55	1	He	3.217029	0.2	19527.683
Fe	56	1	He	6.734295	0.5	61515.263
Co	59	1	He	0.300231	3.5	3881.860
Ni	60	1	He	0.977662	2.3	3286.380
Cu	63	1	He	212.583656	0.7	1873929.793
Zn	66	1	He	35.452463	0.5	71836.443
As	75	1	He	0.367089	4.4	818.523
Se	78	2	H2	0.120130	4.8	141.000
Sr	88	1	He	112.603724	0.4	1316564.357
Mo	95	1	He	1.070754	1.3	6704.260
Pd	105	1	He	0.059981	9.3	750.027
Ag	107	1	He	0.015146	6.9	398.343
Cd	111	1	He	0.012959	9.7	69.460
Sn	118	1	He	0.088195	4.6	983.377
Sb	121	1	He	0.256851	3.1	3662.183
Ba	138	1	He	18.818286	0.7	607682.163
Pt	195	1	He	0.008203	9.0	320.003
Hg	202	1	He	-0.004744		198.667
Tl	205	1	He	0.005991	7.7	780.030
Pb	208	1	He	1.352280	0.9	91777.047
Bi	209	1	He	0.006626	21.2	2566.960
Th	232	1	He	0.004393	26.3	1295.080
U	238	1	He	0.260856	2.1	18005.917

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.87270535	559261.123
Sc	45	2	H2	97.55655574	4316482.000
Ge	72	1	He	96.34752520	480439.073
Ge	72	2	H2	101.0013585	1575395.540
In	115	1	He	97.53715476	5979214.010
Tb	159	1	He	101.2163942	14644611.030
Ir	193	1	He	99.44524096	7365281.350



Sample Name 10601164008\_B70034Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 185SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:30:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.343790	4.4	196.000
Be	9	2	H2	0.004207	198.9	22.000
B	11	2	H2	-79.567312		2625.063
Na	23	1	He	811.666015	0.6	738535.900
Mg	24	1	He	1205.663911	1.0	617365.810
Al	27	1	He	7.571846	1.3	2033.140
Si	28	2	H2	103.707741	1.1	297224.377
K	39	1	He	138.244644	0.5	168784.010
Ca	43	1	He	3316.235296	1.8	7144.027
Ti	47	1	He	0.034038	24.0	10.000
V	51	1	He	0.081069	128.6	-49.733
Cr	52	1	He	0.061637	23.5	2799.607
Mn	55	1	He	0.422197	0.9	2801.610
Fe	56	1	He	1.192339	1.0	19986.310
Co	59	1	He	0.031664	7.2	464.010
Ni	60	1	He	0.105174	3.1	536.677
Cu	63	1	He	21.663139	0.6	193395.267
Zn	66	1	He	3.656443	1.6	7682.053
As	75	1	He	0.035773	25.4	230.167
Se	78	2	H2	-0.005300		36.667
Sr	88	1	He	11.523936	0.6	136386.220
Mo	95	1	He	0.114002	6.4	742.020
Pd	105	1	He	0.004868	18.7	240.000
Ag	107	1	He	0.009609	17.8	295.007
Cd	111	1	He	0.001099	23.8	25.867
Sn	118	1	He	0.009834	34.4	238.333
Sb	121	1	He	0.026494	32.7	421.680
Ba	138	1	He	1.901193	1.8	63014.380
Pt	195	1	He	0.000454	533.8	218.667
Hg	202	1	He	-0.006884		185.333
Tl	205	1	He	0.000345	126.1	508.347
Pb	208	1	He	0.135634	1.6	11780.377
Bi	209	1	He	-0.003644		2023.523
Th	232	1	He	-0.002602		831.703
U	238	1	He	0.023388	6.9	2525.270

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.14069707	560874.917
Sc	45	2	H2	96.51549236	4270419.167
Ge	72	1	He	97.43228724	485848.263
Ge	72	2	H2	99.97165213	1559334.420
In	115	1	He	100.0049110	6130492.187
Tb	159	1	He	101.4038315	14671730.613
Ir	193	1	He	100.9317543	7475378.013

Sample Name 10601164010\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 186SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:34:21  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.068020	2.4	830.187
Be	9	2	H2	0.010337	122.1	24.500
B	11	2	H2	-59.730512		8978.997
Na	23	1	He	8226.133230	0.6	7319862.393
Mg	24	1	He	11637.13259	0.3	5870260.120
Al	27	1	He	48.341158	0.2	12474.540
Si	28	2	H2	1016.856456	1.0	2816425.917
K	39	1	He	1447.255738	0.5	1106417.717
Ca	43	1	He	33864.61194	0.7	72233.620
Ti	47	1	He	0.130119	15.2	32.667
V	51	1	He	0.217499	21.1	847.317
Cr	52	1	He	0.479443	1.4	6054.597
Mn	55	1	He	0.557993	2.5	3587.120
Fe	56	1	He	15.278675	0.5	124946.350
Co	59	1	He	0.106620	2.2	1412.070
Ni	60	1	He	8.053475	1.1	25597.107
Cu	63	1	He	253.525156	1.0	2231462.750
Zn	66	1	He	534.645887	0.8	1078803.247
As	75	1	He	0.366702	3.1	816.687
Se	78	2	H2	0.125512	12.0	145.000
Sr	88	1	He	118.351150	0.4	1381743.310
Mo	95	1	He	1.054039	2.3	6613.550
Pd	105	1	He	0.060205	4.5	753.363
Ag	107	1	He	0.007439	22.7	245.003
Cd	111	1	He	0.007401	15.3	48.810
Sn	118	1	He	0.044269	16.9	563.350
Sb	121	1	He	0.176313	2.0	2530.250
Ba	138	1	He	19.110908	0.7	618365.417
Pt	195	1	He	0.008727	26.4	326.670
Hg	202	1	He	-0.004724		198.667
Tl	205	1	He	0.002058	70.7	590.017
Pb	208	1	He	1.860624	1.1	125154.293
Bi	209	1	He	0.026271	11.0	3723.910
Th	232	1	He	-0.001087		938.377
U	238	1	He	0.288205	1.2	20132.373

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.36630606	556211.687
Sc	45	2	H2	97.24890796	4302869.833
Ge	72	1	He	96.20791086	479742.883
Ge	72	2	H2	100.6345913	1569674.790
In	115	1	He	97.73005946	5991039.437
Tb	159	1	He	101.1717891	14638157.280
Ir	193	1	He	101.1569827	7492059.263

Sample Name 10601164013\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 187SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:38:05  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.122931	4.6	848.690
Be	9	2	H2	-0.001000		20.167
B	11	2	H2	-60.018408		8870.097
Na	23	1	He	8159.532601	1.0	7252553.227
Mg	24	1	He	11206.66996	0.9	5646974.293
Al	27	1	He	49.759459	1.3	12823.830
Si	28	2	H2	982.685385	0.9	2717008.167
K	39	1	He	1447.711492	0.6	1105513.263
Ca	43	1	He	33059.90073	1.2	70438.650
Ti	47	1	He	0.113366	12.3	28.667
V	51	1	He	0.212111	25.1	810.480
Cr	52	1	He	0.406686	1.2	5477.703
Mn	55	1	He	0.337066	5.5	2268.850
Fe	56	1	He	18.059815	0.6	145538.463
Co	59	1	He	0.020681	11.8	317.337
Ni	60	1	He	0.515032	1.4	1816.787
Cu	63	1	He	10.822595	1.0	95260.000
Zn	66	1	He	26.611430	1.3	53725.527
As	75	1	He	0.359627	1.0	801.520
Se	78	2	H2	0.110478	19.4	132.667
Sr	88	1	He	119.792226	0.6	1394171.903
Mo	95	1	He	0.996129	0.9	6215.367
Pd	105	1	He	0.070659	3.8	846.700
Ag	107	1	He	0.003328	64.1	161.667
Cd	111	1	He	0.020858	11.6	98.550
Sn	118	1	He	0.013335	11.0	265.007
Sb	121	1	He	0.175546	5.3	2505.247
Ba	138	1	He	19.885328	0.3	639788.220
Pt	195	1	He	0.005057	29.7	277.333
Hg	202	1	He	-0.005870		190.333
Tl	205	1	He	-0.000066		485.010
Pb	208	1	He	2.907982	0.3	193054.250
Bi	209	1	He	0.009570	25.5	2737.003
Th	232	1	He	-0.001815		875.037
U	238	1	He	0.280569	0.8	19341.113

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.26407699	555596.083
Sc	45	2	H2	97.06342204	4294662.833
Ge	72	1	He	95.90611268	478237.960
Ge	72	2	H2	100.8531189	1573083.333
In	115	1	He	97.18067594	5957361.177
Tb	159	1	He	100.6758766	14566405.613
Ir	193	1	He	99.68809501	7383268.017

Sample Name 10601164014\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 188SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:41:50  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.041776	2.4	821.687
Be	9	2	H2	0.025675	17.1	30.333
B	11	2	H2	-59.713182		8997.340
Na	23	1	He	8084.498269	2.8	7232052.600
Mg	24	1	He	11379.60822	3.0	5770591.993
Al	27	1	He	47.836583	3.1	12410.153
Si	28	2	H2	1010.505076	0.9	2802815.750
K	39	1	He	1653.503214	3.2	1260949.460
Ca	43	1	He	33403.07172	2.9	71625.080
Ti	47	1	He	0.117605	29.6	30.000
V	51	1	He	0.194029	31.1	698.727
Cr	52	1	He	0.346755	5.6	5040.217
Mn	55	1	He	0.760473	3.8	4817.467
Fe	56	1	He	10.784188	3.1	91887.180
Co	59	1	He	0.059812	5.1	817.357
Ni	60	1	He	1.043091	2.5	3491.763
Cu	63	1	He	41.210192	1.8	363408.980
Zn	66	1	He	71.878107	1.3	145391.427
As	75	1	He	0.414110	3.0	902.030
Se	78	2	H2	0.115910	6.6	136.667
Sr	88	1	He	118.582443	2.2	1385991.173
Mo	95	1	He	0.994360	1.7	6264.057
Pd	105	1	He	0.064697	12.2	798.363
Ag	107	1	He	0.010302	9.8	303.343
Cd	111	1	He	0.059861	2.8	245.870
Sn	118	1	He	0.052144	4.1	641.687
Sb	121	1	He	0.198206	4.5	2850.320
Ba	138	1	He	19.826372	2.3	644000.460
Pt	195	1	He	0.007317	10.0	307.333
Hg	202	1	He	-0.005459		193.333
Tl	205	1	He	0.010963	7.2	1016.713
Pb	208	1	He	2.856566	1.7	189938.527
Bi	209	1	He	0.016545	26.8	3127.090
Th	232	1	He	0.009730	5.5	1663.453
U	238	1	He	0.261657	4.8	18102.683

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.89267113	559381.353
Sc	45	2	H2	97.38815990	4309031.167
Ge	72	1	He	96.33318454	480367.563
Ge	72	2	H2	100.3672910	1565505.503
In	115	1	He	98.13556057	6015897.430
Tb	159	1	He	100.8349422	14589420.200
Ir	193	1	He	99.73910688	7387046.143

Sample Name 4312072\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 189SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:45:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	103.020064	0.3	36980.923
Be	9	2	H2	99.542159	0.7	36777.320
B	11	2	H2	47.231211	1.1	42114.233
Na	23	1	He	10392.86972	0.4	9077381.740
Mg	24	1	He	13749.71068	0.4	6809497.607
Al	27	1	He	2060.572836	0.7	519085.353
Si	28	2	H2	1556.354117	0.2	4201891.000
K	39	1	He	3778.353672	0.4	2728335.687
Ca	43	1	He	36752.59595	0.7	76971.193
Ti	47	1	He	103.614043	0.6	24104.663
V	51	1	He	106.317538	0.7	687933.253
Cr	52	1	He	108.306703	1.0	836527.710
Mn	55	1	He	104.662828	0.7	612221.893
Fe	56	1	He	2149.893917	0.1	15764514.333
Co	59	1	He	104.516057	0.3	1325669.043
Ni	60	1	He	107.098648	0.4	336790.730
Cu	63	1	He	145.236566	0.0	1274068.380
Zn	66	1	He	177.170718	0.5	356400.417
As	75	1	He	103.564443	0.2	183960.090
Se	78	2	H2	105.572019	0.6	85136.580
Sr	88	1	He	224.989329	0.7	2617515.793
Mo	95	1	He	104.696806	1.3	638134.730
Pd	105	1	He	20.731410	1.5	189338.820
Ag	107	1	He	52.039201	0.8	1013176.757
Cd	111	1	He	105.688129	0.8	384208.887
Sn	118	1	He	101.435309	0.5	948051.287
Sb	121	1	He	103.990351	0.5	1430836.543
Ba	138	1	He	124.741126	0.6	3927250.777
Pt	195	1	He	20.990174	0.6	270616.090
Hg	202	1	He	-0.002444		209.667
Tl	205	1	He	107.993209	0.8	5126495.967
Pb	208	1	He	108.145146	0.5	6993208.857
Bi	209	1	He	100.645037	0.7	5604412.833
Th	232	1	He	104.931887	0.5	7131065.933
U	238	1	He	102.789080	1.1	6707960.737

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.69312221	546136.103
Sc	45	2	H2	94.95284068	4201278.167
Ge	72	1	He	95.87394797	478077.570
Ge	72	2	H2	98.23867958	1532303.920
In	115	1	He	95.10351226	5830027.073
Tb	159	1	He	99.48062586	14393469.370
Ir	193	1	He	99.29885227	7354439.263

Sample Name 10601164014\_B70034Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 190SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:49:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.312583	9.0	182.333
Be	9	2	H2	0.045398	20.8	37.000
B	11	2	H2	-79.597272		2582.890
Na	23	1	He	832.059444	0.8	740463.427
Mg	24	1	He	1175.982969	0.6	589276.917
Al	27	1	He	12.753619	2.4	3300.703
Si	28	2	H2	104.270879	1.1	295015.790
K	39	1	He	164.186350	0.2	183496.347
Ca	43	1	He	3415.902624	0.8	7199.620
Ti	47	1	He	0.032100	50.2	9.333
V	51	1	He	0.011866	307.9	-501.300
Cr	52	1	He	0.071858	23.0	2818.947
Mn	55	1	He	0.164010	10.2	1224.060
Fe	56	1	He	1.734299	0.5	23544.927
Co	59	1	He	0.017050	14.9	271.333
Ni	60	1	He	0.115424	7.1	560.677
Cu	63	1	He	4.299685	1.3	38055.547
Zn	66	1	He	7.439829	1.3	15178.613
As	75	1	He	0.047605	10.1	247.667
Se	78	2	H2	0.000750	891.7	41.333
Sr	88	1	He	12.106320	0.2	141108.070
Mo	95	1	He	0.118994	3.1	759.353
Pd	105	1	He	0.011553	46.9	298.340
Ag	107	1	He	0.185655	35.5	3823.930
Cd	111	1	He	0.010116	7.9	59.197
Sn	118	1	He	0.026726	5.0	396.677
Sb	121	1	He	0.028939	9.4	448.343
Ba	138	1	He	2.033171	0.4	66108.763
Pt	195	1	He	0.000271	817.5	214.667
Hg	202	1	He	-0.008156		175.667
Tl	205	1	He	0.020120	19.7	1453.430
Pb	208	1	He	0.292565	3.3	21942.007
Bi	209	1	He	0.009529	20.8	2730.330
Th	232	1	He	0.041401	6.2	3815.593
U	238	1	He	0.028530	9.6	2825.340

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.12644039	548745.460
Sc	45	2	H2	95.30617061	4216911.583
Ge	72	1	He	95.95995982	478506.470
Ge	72	2	H2	99.16575402	1546764.210
In	115	1	He	98.11245613	6014481.083
Tb	159	1	He	100.5848059	14553228.947
Ir	193	1	He	99.50524558	7369725.513

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 191\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:53:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	79.138613	0.5	28316.507
Be	9	2	H2	77.086375	0.4	28377.663
B	11	2	H2	-1.869234		26704.843
Na	23	1	He	981.212675	0.3	879234.570
Mg	24	1	He	981.749551	0.9	497220.667
Al	27	1	He	966.873232	0.4	247025.133
Si	28	2	H2	491.132951	0.7	1330022.750
K	39	1	He	996.651124	0.6	779775.487
Ca	43	1	He	981.705265	2.7	2097.390
Ti	47	1	He	78.377749	0.7	18489.580
V	51	1	He	79.503029	1.1	521494.723
Cr	52	1	He	81.967906	0.6	642546.583
Mn	55	1	He	79.674083	0.9	472644.597
Fe	56	1	He	518.753200	0.7	3865503.500
Co	59	1	He	82.527768	0.7	1047906.937
Ni	60	1	He	83.532670	0.2	263014.087
Cu	63	1	He	83.109514	0.5	729991.647
Zn	66	1	He	81.572183	0.8	164383.770
As	75	1	He	79.636666	0.4	141647.887
Se	78	2	H2	81.896180	0.8	66015.540
Sr	88	1	He	80.685654	0.5	939797.303
Mo	95	1	He	76.515831	0.5	482806.667
Pd	105	1	He	81.375904	0.4	768843.840
Ag	107	1	He	40.604582	1.1	818401.083
Cd	111	1	He	80.106342	0.4	301472.697
Sn	118	1	He	76.678646	0.5	741938.480
Sb	121	1	He	77.451596	0.4	1103204.697
Ba	138	1	He	77.868742	0.2	2537881.263
Pt	195	1	He	82.163439	0.6	1074289.417
Hg	202	1	He	3.890501	0.6	25100.907
Tl	205	1	He	41.836228	0.1	2015732.780
Pb	208	1	He	81.276578	0.5	5334386.873
Bi	209	1	He	79.926500	1.5	4519865.037
Th	232	1	He	75.894933	1.4	5237741.903
U	238	1	He	76.271204	0.3	5054978.677

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.96848445	553816.083
Sc	45	2	H2	94.59217863	4185320.333
Ge	72	1	He	95.97885008	478600.667
Ge	72	2	H2	98.18279295	1531432.213
In	115	1	He	98.45076091	6035219.813
Tb	159	1	He	100.9531002	14606516.030
Ir	193	1	He	100.8404843	7468618.223

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 192\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:56:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.048646	41.5	88.000
Be	9	2	H2	0.043832	47.5	36.667
B	11	2	H2	-82.261665		1761.103
Na	23	1	He	-0.581322		10470.407
Mg	24	1	He	-5.643894		1645.103
Al	27	1	He	0.013538	101.5	75.333
Si	28	2	H2	-1.089195		10498.380
K	39	1	He	-4.893450		62955.183
Ca	43	1	He	3.047270	58.0	18.800
Ti	47	1	He	0.008087	111.7	3.667
V	51	1	He	0.065729	137.0	-157.770
Cr	52	1	He	-0.006516		2181.503
Mn	55	1	He	0.075756	3.3	696.020
Fe	56	1	He	0.272773	4.6	12610.123
Co	59	1	He	0.008827	25.2	164.667
Ni	60	1	He	0.013135	32.2	235.333
Cu	63	1	He	0.008022	49.7	379.340
Zn	66	1	He	0.034453	41.0	273.333
As	75	1	He	-0.018932		127.500
Se	78	2	H2	-0.019333		25.000
Sr	88	1	He	0.007311	54.9	225.003
Mo	95	1	He	0.011352	19.4	81.333
Pd	105	1	He	0.016842	49.3	343.343
Ag	107	1	He	0.166627	24.6	3388.780
Cd	111	1	He	0.003741	36.7	34.987
Sn	118	1	He	0.003213	68.5	168.333
Sb	121	1	He	0.005531	14.9	115.000
Ba	138	1	He	0.005437	35.4	248.337
Pt	195	1	He	0.003857	40.8	255.333
Hg	202	1	He	0.014235	42.0	311.003
Tl	205	1	He	0.037253	18.3	2220.207
Pb	208	1	He	-0.002040		2625.130
Bi	209	1	He	0.000733	196.8	2233.563
Th	232	1	He	0.022279	20.3	2503.597
U	238	1	He	-0.001561		855.037

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.89528529	541331.687
Sc	45	2	H2	95.96243226	4245948.500
Ge	72	1	He	94.54375703	471444.543
Ge	72	2	H2	99.35534293	1549721.373
In	115	1	He	96.98114056	5945129.277
Tb	159	1	He	98.41699614	14239576.873
Ir	193	1	He	99.24846492	7350707.390



Sample Name 4312083\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 193SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:00:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.044051	21.7	86.167
Be	9	2	H2	0.012726	123.6	25.000
B	11	2	H2	-81.467364		2007.467
Na	23	1	He	8.351289	8.1	17762.277
Mg	24	1	He	-1.981897		3357.077
Al	27	1	He	13.967849	2.6	3474.743
Si	28	2	H2	1.963017	7.7	18764.463
K	39	1	He	-1.123379		64028.067
Ca	43	1	He	15.906644	27.5	44.350
Ti	47	1	He	0.073341	34.4	18.333
V	51	1	He	0.095783	70.2	32.793
Cr	52	1	He	0.169191	10.6	3439.743
Mn	55	1	He	0.219862	5.2	1494.750
Fe	56	1	He	3.525102	4.6	35367.313
Co	59	1	He	0.008671	23.6	158.000
Ni	60	1	He	0.025218	27.6	264.667
Cu	63	1	He	0.039142	10.5	629.347
Zn	66	1	He	2.128472	3.5	4294.643
As	75	1	He	-0.009429		139.833
Se	78	2	H2	-0.013414		29.667
Sr	88	1	He	0.025093	9.3	416.677
Mo	95	1	He	0.021645	6.4	142.667
Pd	105	1	He	0.005563	59.5	235.000
Ag	107	1	He	0.043288	10.9	935.040
Cd	111	1	He	0.008028	31.4	49.973
Sn	118	1	He	0.050953	2.2	611.687
Sb	121	1	He	0.010587	25.4	181.667
Ba	138	1	He	0.040439	8.2	1343.413
Pt	195	1	He	0.006105	19.9	280.667
Hg	202	1	He	-0.002595		204.000
Tl	205	1	He	0.010683	6.1	966.710
Pb	208	1	He	0.000859	228.3	2778.470
Bi	209	1	He	-0.001396		2093.543
Th	232	1	He	0.005686	26.5	1365.080
U	238	1	He	-0.000964		886.703

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.80950517	528771.530
Sc	45	2	H2	95.77748499	4237765.333
Ge	72	1	He	91.82971584	457910.917
Ge	72	2	H2	98.87549856	1542236.873
In	115	1	He	95.20968035	5836535.380
Tb	159	1	He	97.24777865	14070407.290
Ir	193	1	He	98.30099775	7280534.477

Sample Name 4312084\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 194SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:04:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	102.896389	0.6	36727.640
Be	9	2	H2	100.119798	0.4	36781.990
B	11	2	H2	23.956384	1.1	34661.240
Na	23	1	He	2065.227156	0.3	1805653.773
Mg	24	1	He	2041.569625	0.6	1010894.437
Al	27	1	He	2057.699042	0.4	516341.167
Si	28	2	H2	511.897507	0.5	1383109.043
K	39	1	He	2084.568985	0.5	1529333.467
Ca	43	1	He	2106.086267	0.5	4405.463
Ti	47	1	He	102.807550	0.9	23823.203
V	51	1	He	106.291257	0.1	685105.047
Cr	52	1	He	108.430398	0.8	834216.250
Mn	55	1	He	105.593508	0.8	615241.063
Fe	56	1	He	2166.557971	1.1	15824041.667
Co	59	1	He	107.143151	0.8	1357336.540
Ni	60	1	He	109.069780	0.2	342578.627
Cu	63	1	He	107.164192	0.9	939026.563
Zn	66	1	He	107.867047	0.8	216805.480
As	75	1	He	103.335984	0.6	183333.040
Se	78	2	H2	106.245454	0.5	85154.290
Sr	88	1	He	105.097385	0.7	1221298.160
Mo	95	1	He	100.695536	0.8	630893.957
Pd	105	1	He	21.079381	0.7	197900.687
Ag	107	1	He	51.984287	0.4	1040361.290
Cd	111	1	He	104.874065	0.7	391894.803
Sn	118	1	He	100.392490	0.8	964498.657
Sb	121	1	He	102.215060	0.2	1445685.550
Ba	138	1	He	102.575415	0.3	3319584.427
Pt	195	1	He	21.242805	0.4	277782.550
Hg	202	1	He	-0.001728		217.333
Tl	205	1	He	108.574266	0.6	5227742.213
Pb	208	1	He	106.755362	0.2	7002189.010
Bi	209	1	He	104.014016	1.8	5831623.870
Th	232	1	He	104.924601	1.7	7179196.350
U	238	1	He	101.808718	0.8	6689858.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.34046647	544012.480
Sc	45	2	H2	94.41546375	4177501.417
Ge	72	1	He	95.76052624	477511.990
Ge	72	2	H2	97.63615184	1522905.833
In	115	1	He	97.76025265	5992890.337
Tb	159	1	He	100.9031962	14599295.613
Ir	193	1	He	99.98935038	7405580.100

Sample Name 10604943025\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 195SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:08:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.187994	1.2	852.193
Be	9	2	H2	0.068965	18.8	45.500
B	11	2	H2	-59.253099		8900.783
Na	23	1	He	8467.098342	0.1	7293804.890
Mg	24	1	He	11524.51384	0.2	5628204.293
Al	27	1	He	70.931219	0.4	17687.120
Si	28	2	H2	1099.805035	0.9	2968243.583
K	39	1	He	1489.865687	0.4	1100743.630
Ca	43	1	He	34181.50550	0.4	70585.167
Ti	47	1	He	0.127292	18.5	31.000
V	51	1	He	0.243811	18.8	987.857
Cr	52	1	He	0.401959	1.9	5272.963
Mn	55	1	He	4.875670	0.3	28364.087
Fe	56	1	He	13.955592	0.3	111402.850
Co	59	1	He	0.070862	7.6	935.367
Ni	60	1	He	11.464053	1.4	35537.113
Cu	63	1	He	114.062883	0.2	981609.773
Zn	66	1	He	142.091623	0.3	280429.283
As	75	1	He	0.392233	2.6	842.690
Se	78	2	H2	0.145470	10.0	157.667
Sr	88	1	He	120.346382	0.5	1373487.010
Mo	95	1	He	1.008535	3.8	6220.040
Pd	105	1	He	0.089816	1.7	1013.383
Ag	107	1	He	0.192122	28.4	3872.263
Cd	111	1	He	0.031789	5.6	137.547
Sn	118	1	He	5.894822	2.2	55779.083
Sb	121	1	He	2.585716	1.2	35971.167
Ba	138	1	He	20.055020	1.2	637779.977
Pt	195	1	He	0.004939	31.9	273.333
Hg	202	1	He	-0.003154		206.000
Tl	205	1	He	0.049772	13.4	2853.663
Pb	208	1	He	0.161791	3.6	13292.600
Bi	209	1	He	0.007260	47.7	2596.970
Th	232	1	He	0.044032	7.7	3983.977
U	238	1	He	0.262143	0.7	18057.657

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.42171836	538479.960
Sc	45	2	H2	94.79734432	4194398.083
Ge	72	1	He	94.04835097	468974.190
Ge	72	2	H2	98.31559466	1533503.623
In	115	1	He	96.05588643	5888409.430
Tb	159	1	He	99.83919507	14445349.370
Ir	193	1	He	99.27029298	7352324.057

Sample Name 10604943048\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 196SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:11:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.228063	3.2	862.860
Be	9	2	H2	0.047718	10.2	37.500
B	11	2	H2	-58.323812		9151.770
Na	23	1	He	8839.070088	0.6	7795906.757
Mg	24	1	He	11567.74076	0.7	5784451.370
Al	27	1	He	55.898499	0.5	14287.500
Si	28	2	H2	928.618769	0.8	2497798.417
K	39	1	He	1479.988080	0.1	1120052.457
Ca	43	1	He	33887.88875	0.4	71653.423
Ti	47	1	He	0.141238	8.0	35.000
V	51	1	He	0.278027	28.1	1236.290
Cr	52	1	He	0.411620	0.9	5474.370
Mn	55	1	He	4.153647	1.6	24780.680
Fe	56	1	He	53.708440	0.4	408154.677
Co	59	1	He	0.108950	4.0	1432.077
Ni	60	1	He	1.384506	3.2	4533.383
Cu	63	1	He	63.493244	0.5	555292.643
Zn	66	1	He	196.138010	0.6	393203.153
As	75	1	He	0.352301	6.0	785.520
Se	78	2	H2	0.121084	17.8	137.000
Sr	88	1	He	119.995023	0.4	1391401.073
Mo	95	1	He	1.202979	23.2	7534.873
Pd	105	1	He	0.101765	49.9	1142.130
Ag	107	1	He	0.039559	12.8	885.037
Cd	111	1	He	0.051113	2.9	211.643
Sn	118	1	He	18.440000	1.8	176803.140
Sb	121	1	He	0.452715	5.8	6424.857
Ba	138	1	He	18.858573	0.2	608783.860
Pt	195	1	He	0.006525	11.4	298.000
Hg	202	1	He	-0.004173		202.333
Tl	205	1	He	0.008922	2.7	921.707
Pb	208	1	He	0.338992	0.6	25134.310
Bi	209	1	He	0.014410	15.7	3027.070
Th	232	1	He	0.010910	19.4	1753.463
U	238	1	He	0.309919	0.6	21396.010

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.56122491	551363.647
Sc	45	2	H2	94.39904605	4176775.000
Ge	72	1	He	95.55184038	476471.373
Ge	72	2	H2	97.55686954	1521669.207
In	115	1	He	97.50493842	5977239.087
Tb	159	1	He	101.2217679	14645388.530
Ir	193	1	He	100.3069429	7429102.177

Sample Name 4315145\_B70031Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 197SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:15:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.501027	5.7	248.333
Be	9	2	H2	0.018484	26.7	26.833
B	11	2	H2	-77.673364		3162.667
Na	23	1	He	1831.776700	0.3	1605361.487
Mg	24	1	He	2400.093514	0.3	1189573.343
Al	27	1	He	12.721611	1.9	3269.363
Si	28	2	H2	186.780406	0.8	514296.780
K	39	1	He	300.692883	0.1	278134.533
Ca	43	1	He	6975.961424	0.9	14586.417
Ti	47	1	He	0.038192	26.5	10.667
V	51	1	He	0.041879	372.6	-303.403
Cr	52	1	He	0.101959	6.5	3030.323
Mn	55	1	He	0.918016	1.7	5614.423
Fe	56	1	He	11.363407	0.5	93776.337
Co	59	1	He	0.027699	9.0	402.010
Ni	60	1	He	0.288444	3.7	1092.043
Cu	63	1	He	13.243980	1.1	115193.323
Zn	66	1	He	40.565645	0.8	80870.247
As	75	1	He	0.068504	8.8	281.500
Se	78	2	H2	0.003591	300.5	43.333
Sr	88	1	He	24.690173	0.7	284235.387
Mo	95	1	He	0.208278	4.1	1310.730
Pd	105	1	He	0.011072	26.9	291.673
Ag	107	1	He	0.023059	21.2	555.017
Cd	111	1	He	0.009046	7.2	54.763
Sn	118	1	He	3.765138	0.3	36158.257
Sb	121	1	He	0.092823	9.0	1345.077
Ba	138	1	He	3.842050	1.1	123902.113
Pt	195	1	He	0.001040	81.1	222.000
Hg	202	1	He	-0.006558		183.667
Tl	205	1	He	0.002630	11.3	606.687
Pb	208	1	He	0.067734	2.7	7160.787
Bi	209	1	He	-0.000090		2190.233
Th	232	1	He	0.003626	7.5	1241.737
U	238	1	He	0.061070	0.6	4945.987

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.48518670	544883.957
Sc	45	2	H2	94.64139406	4187497.917
Ge	72	1	He	94.83083687	472876.073
Ge	72	2	H2	98.41365357	1535033.123
In	115	1	He	97.35969727	5968335.527
Tb	159	1	He	99.39298216	14380788.540
Ir	193	1	He	99.35619314	7358686.140

Sample Name 4312085\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 198SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:19:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	101.730964	0.9	35943.097
Be	9	2	H2	98.508807	0.6	35822.880
B	11	2	H2	45.358397	2.0	40875.860
Na	23	1	He	11224.31902	0.6	9628045.273
Mg	24	1	He	13985.09791	0.4	6802552.187
Al	27	1	He	2030.527859	0.1	502402.960
Si	28	2	H2	1446.782125	0.6	3845392.833
K	39	1	He	3572.899712	0.3	2537587.410
Ca	43	1	He	37454.75123	0.2	77046.013
Ti	47	1	He	102.042780	0.9	23315.727
V	51	1	He	105.607348	0.2	671177.077
Cr	52	1	He	107.487459	0.4	815441.833
Mn	55	1	He	107.058038	0.3	615067.167
Fe	56	1	He	2176.020763	0.4	15671700.667
Co	59	1	He	103.520440	0.4	1287937.623
Ni	60	1	He	106.099786	0.1	327277.313
Cu	63	1	He	167.297224	0.7	1439485.667
Zn	66	1	He	305.837926	0.5	603318.933
As	75	1	He	103.847455	0.7	180934.017
Se	78	2	H2	104.503441	0.5	83112.913
Sr	88	1	He	227.095933	0.8	2591492.410
Mo	95	1	He	104.328168	0.7	628905.733
Pd	105	1	He	20.767254	1.3	187579.960
Ag	107	1	He	51.600942	1.7	993522.513
Cd	111	1	He	104.946576	0.7	377318.760
Sn	118	1	He	120.577924	0.9	1114515.477
Sb	121	1	He	103.805717	0.6	1412542.480
Ba	138	1	He	122.865030	1.1	3825478.277
Pt	195	1	He	20.691458	0.4	267041.387
Hg	202	1	He	-0.000697		221.000
Tl	205	1	He	106.603529	1.2	5065666.903
Pb	208	1	He	103.921917	0.6	6727228.597
Bi	209	1	He	99.198506	1.1	5526892.417
Th	232	1	He	103.258451	0.7	7021312.603
U	238	1	He	101.004934	0.5	6595378.653

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.07815735	536411.103
Sc	45	2	H2	93.45661883	4135076.417
Ge	72	1	He	94.04221576	468943.597
Ge	72	2	H2	96.88133754	1511132.417
In	115	1	He	94.05606830	5765816.757
Tb	159	1	He	99.58527766	14408611.037
Ir	193	1	He	99.35622411	7358688.433

Sample Name 4312086\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 199SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:23:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	104.661120	0.9	36794.300
Be	9	2	H2	101.396539	0.8	36690.937
B	11	2	H2	48.831081	2.8	41734.683
Na	23	1	He	10861.77522	3.1	9487161.107
Mg	24	1	He	13549.72121	3.7	6710098.653
Al	27	1	He	2039.001654	3.0	513684.643
Si	28	2	H2	1443.340237	0.4	3817443.833
K	39	1	He	3517.676649	3.0	2544937.620
Ca	43	1	He	36070.76499	2.5	75559.547
Ti	47	1	He	102.911234	3.2	23942.060
V	51	1	He	105.218602	3.0	680880.893
Cr	52	1	He	108.207028	3.0	835845.563
Mn	55	1	He	107.686153	3.7	629849.333
Fe	56	1	He	2186.174652	3.7	16029365.333
Co	59	1	He	104.516549	2.1	1320459.583
Ni	60	1	He	107.050077	2.4	335293.947
Cu	63	1	He	167.063803	2.7	1459607.957
Zn	66	1	He	301.604449	2.3	604162.603
As	75	1	He	105.312838	2.0	186329.827
Se	78	2	H2	107.670980	0.8	85758.887
Sr	88	1	He	224.397291	1.3	2600600.223
Mo	95	1	He	105.074404	3.1	643675.127
Pd	105	1	He	21.161497	2.9	194248.897
Ag	107	1	He	52.263606	2.8	1022680.740
Cd	111	1	He	105.817563	2.8	386634.627
Sn	118	1	He	121.318098	2.8	1139609.097
Sb	121	1	He	105.542406	2.9	1459516.540
Ba	138	1	He	123.330947	2.2	3902930.250
Pt	195	1	He	21.021028	2.3	275505.010
Hg	202	1	He	-0.000865		223.333
Tl	205	1	He	108.039225	2.7	5213705.130
Pb	208	1	He	105.253793	3.3	6918489.793
Bi	209	1	He	100.954113	1.7	5701870.957
Th	232	1	He	104.361205	2.5	7192898.433
U	238	1	He	102.069852	3.4	6754837.400

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.75675598	546519.293
Sc	45	2	H2	92.99856178	4114809.250
Ge	72	1	He	95.52365641	476330.833
Ge	72	2	H2	97.03001546	1513451.460
In	115	1	He	95.63127846	5862380.150
Tb	159	1	He	101.1644399	14637093.950
Ir	193	1	He	100.7333861	7460686.137

Sample Name 10604943049\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 200SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:26:50  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.466438	0.8	954.030
Be	9	2	H2	0.100218	23.9	57.167
B	11	2	H2	-56.993952		9626.893
Na	23	1	He	9102.409447	0.7	7864296.967
Mg	24	1	He	11819.60543	0.6	5789887.410
Al	27	1	He	68.390959	0.7	17108.440
Si	28	2	H2	936.903775	0.6	2536516.333
K	39	1	He	1525.925996	1.3	1129217.900
Ca	43	1	He	34748.51699	0.6	71976.187
Ti	47	1	He	0.137071	19.2	33.333
V	51	1	He	0.226735	13.5	882.687
Cr	52	1	He	0.345662	4.5	4860.150
Mn	55	1	He	2.425108	1.8	14280.977
Fe	56	1	He	36.634886	0.6	276106.367
Co	59	1	He	0.128910	6.8	1656.103
Ni	60	1	He	1.579054	2.0	5056.223
Cu	63	1	He	110.285003	0.8	948088.063
Zn	66	1	He	144.661953	1.0	285189.843
As	75	1	He	0.390536	2.2	838.857
Se	78	2	H2	0.121493	16.6	138.667
Sr	88	1	He	124.930206	1.2	1424246.907
Mo	95	1	He	1.082280	3.5	6677.580
Pd	105	1	He	0.082157	4.9	943.373
Ag	107	1	He	0.175038	28.0	3538.840
Cd	111	1	He	0.043272	3.1	179.797
Sn	118	1	He	0.096401	16.3	1046.717
Sb	121	1	He	0.193710	3.8	2730.290
Ba	138	1	He	19.837809	0.1	631244.367
Pt	195	1	He	0.004730	39.0	269.333
Hg	202	1	He	-0.008076		174.000
Tl	205	1	He	0.033372	12.3	2063.513
Pb	208	1	He	0.119725	8.8	10513.277
Bi	209	1	He	0.048160	12.9	4890.997
Th	232	1	He	0.047730	2.4	4255.737
U	238	1	He	0.314545	1.6	21574.653

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.69697812	540137.520
Sc	45	2	H2	95.01914054	4204211.667
Ge	72	1	He	93.95146648	468491.073
Ge	72	2	H2	98.44024136	1535447.833
In	115	1	He	96.11213280	5891857.440
Tb	159	1	He	99.36682495	14377003.953
Ir	193	1	He	99.70894698	7384812.390



Sample Name 10604943050\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 201SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:30:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.088389	1.8	813.520
Be	9	2	H2	0.060849	14.5	42.333
B	11	2	H2	-58.475687		9109.573
Na	23	1	He	9065.067048	0.8	7828405.507
Mg	24	1	He	11356.23627	1.4	5560349.920
Al	27	1	He	83.198964	1.9	20786.757
Si	28	2	H2	879.609443	0.1	2367970.083
K	39	1	He	1497.317424	1.1	1108791.543
Ca	43	1	He	33687.80720	1.0	69746.710
Ti	47	1	He	0.135624	30.2	33.000
V	51	1	He	0.236955	55.4	944.333
Cr	52	1	He	0.260900	1.7	4212.617
Mn	55	1	He	4.545415	0.6	26529.323
Fe	56	1	He	177.855228	0.6	1298952.287
Co	59	1	He	0.141038	2.7	1807.450
Ni	60	1	He	1.279136	2.0	4134.600
Cu	63	1	He	76.342034	0.2	656654.543
Zn	66	1	He	259.392432	0.8	511427.427
As	75	1	He	0.359275	5.6	784.853
Se	78	2	H2	0.117940	18.3	135.000
Sr	88	1	He	121.083983	0.3	1381003.103
Mo	95	1	He	1.009152	2.5	6190.030
Pd	105	1	He	0.060959	7.5	743.360
Ag	107	1	He	0.042251	7.6	920.037
Cd	111	1	He	0.073067	10.7	287.550
Sn	118	1	He	0.039926	18.1	510.013
Sb	121	1	He	0.176271	2.5	2473.573
Ba	138	1	He	19.922220	0.9	630185.773
Pt	195	1	He	0.003685	70.5	256.000
Hg	202	1	He	-0.008593		171.000
Tl	205	1	He	0.011176	21.2	1011.713
Pb	208	1	He	0.090299	3.9	8622.777
Bi	209	1	He	0.008686	30.4	2660.313
Th	232	1	He	0.013509	8.1	1900.157
U	238	1	He	0.307229	1.3	20873.537

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.65654892	539894.063
Sc	45	2	H2	94.44928983	4178998.083
Ge	72	1	He	93.98539928	468660.280
Ge	72	2	H2	98.01431754	1528804.373
In	115	1	He	95.54817333	5857285.647
Tb	159	1	He	99.45452913	14389693.533
Ir	193	1	He	98.67309016	7308093.013

Sample Name 10604943050\_B70031Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 202SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:34:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.321200	9.8	182.333
Be	9	2	H2	0.058050	17.3	41.000
B	11	2	H2	-79.740965		2496.040
Na	23	1	He	931.149384	0.5	812330.747
Mg	24	1	He	1168.709526	0.4	575057.117
Al	27	1	He	22.191227	0.4	5586.050
Si	28	2	H2	90.804668	0.8	254398.937
K	39	1	He	148.100322	1.5	168998.090
Ca	43	1	He	3472.175772	0.9	7185.727
Ti	47	1	He	0.021225	30.6	6.667
V	51	1	He	0.062919	170.9	-167.587
Cr	52	1	He	0.040801	17.2	2531.560
Mn	55	1	He	0.544732	0.5	3398.407
Fe	56	1	He	18.723410	0.8	145943.217
Co	59	1	He	0.019890	9.8	300.000
Ni	60	1	He	0.145129	11.7	638.683
Cu	63	1	He	7.961956	1.4	68511.540
Zn	66	1	He	27.007883	0.7	53241.047
As	75	1	He	0.032403	32.1	215.333
Se	78	2	H2	-0.001555		38.667
Sr	88	1	He	12.538159	1.0	142614.853
Mo	95	1	He	0.103618	4.1	654.687
Pd	105	1	He	0.002440	62.1	210.000
Ag	107	1	He	0.021823	11.5	528.350
Cd	111	1	He	0.009055	33.0	54.550
Sn	118	1	He	0.020936	23.5	336.677
Sb	121	1	He	0.022312	3.6	350.010
Ba	138	1	He	2.003761	1.0	64365.813
Pt	195	1	He	0.000060	3000.4	209.333
Hg	202	1	He	-0.004995		193.333
Tl	205	1	He	0.005350	33.5	735.030
Pb	208	1	He	0.005177	41.1	3118.503
Bi	209	1	He	0.004557	25.2	2443.623
Th	232	1	He	0.004845	21.0	1321.747
U	238	1	He	0.029405	1.8	2872.007

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.47786157	538818.043
Sc	45	2	H2	93.73894225	4147568.083
Ge	72	1	He	93.65119641	466993.770
Ge	72	2	H2	97.41838027	1519509.083
In	115	1	He	96.92927627	5941949.897
Tb	159	1	He	99.34937050	14374478.537
Ir	193	1	He	99.12504920	7341566.767

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 203\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:38:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	81.070873	1.0	28493.173
Be	9	2	H2	78.564554	1.2	28409.723
B	11	2	H2	-1.295279		26407.990
Na	23	1	He	989.731290	1.8	869483.057
Mg	24	1	He	986.639234	1.6	489958.823
Al	27	1	He	971.828306	1.9	243449.473
Si	28	2	H2	497.451564	0.7	1323158.707
K	39	1	He	1000.843235	1.9	767526.840
Ca	43	1	He	966.536607	2.6	2024.670
Ti	47	1	He	78.200057	2.7	18086.413
V	51	1	He	79.246777	1.1	509747.057
Cr	52	1	He	82.012049	1.5	630391.020
Mn	55	1	He	79.694876	1.4	463584.853
Fe	56	1	He	522.277774	1.3	3816106.583
Co	59	1	He	81.723956	1.1	1034265.647
Ni	60	1	He	82.479907	1.1	258836.680
Cu	63	1	He	82.354099	0.8	720964.900
Zn	66	1	He	80.422044	1.1	161528.617
As	75	1	He	78.695603	1.3	139509.983
Se	78	2	H2	82.487579	0.6	65036.430
Sr	88	1	He	79.739160	1.1	925690.740
Mo	95	1	He	75.559744	2.0	476522.320
Pd	105	1	He	81.217278	2.6	766879.467
Ag	107	1	He	40.308979	2.9	811900.403
Cd	111	1	He	79.679402	1.9	299709.880
Sn	118	1	He	75.783857	1.9	732899.570
Sb	121	1	He	76.724176	2.1	1092257.433
Ba	138	1	He	77.640886	2.1	2529120.690
Pt	195	1	He	81.566417	2.3	1074273.750
Hg	202	1	He	3.824626	2.3	24859.457
Tl	205	1	He	41.685027	2.9	2022932.000
Pb	208	1	He	81.296504	2.6	5374291.113
Bi	209	1	He	80.104236	1.0	4561247.640
Th	232	1	He	76.077482	1.0	5286483.880
U	238	1	He	76.119314	1.2	5079310.967

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.19169818	543116.627
Sc	45	2	H2	92.92399940	4111510.167
Ge	72	1	He	95.66486371	477034.967
Ge	72	2	H2	96.04241120	1498047.040
In	115	1	He	98.42358150	6033553.663
Tb	159	1	He	101.7121569	14716341.030
Ir	193	1	He	101.5260148	7519391.137

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 204\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:41:50  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.036032	51.2	81.833
Be	9	2	H2	0.048438	26.1	37.667
B	11	2	H2	-82.132813		1767.267
Na	23	1	He	-0.885623		10070.123
Mg	24	1	He	-5.390040		1745.117
Al	27	1	He	0.051819	23.8	83.667
Si	28	2	H2	-1.033223		10447.023
K	39	1	He	-6.752346		60814.707
Ca	43	1	He	2.372381	39.9	17.150
Ti	47	1	He	0.011181	97.4	4.333
V	51	1	He	0.086356	55.6	-13.993
Cr	52	1	He	-0.017453		2069.487
Mn	55	1	He	0.053405	18.9	559.343
Fe	56	1	He	0.247117	8.5	12254.500
Co	59	1	He	0.014450	11.8	231.333
Ni	60	1	He	0.018852	11.5	249.333
Cu	63	1	He	0.007385	108.3	368.007
Zn	66	1	He	0.039568	38.8	279.333
As	75	1	He	-0.014324		133.667
Se	78	2	H2	-0.008094		33.333
Sr	88	1	He	0.011074	28.1	265.003
Mo	95	1	He	0.016586	38.0	114.667
Pd	105	1	He	0.022549	39.6	398.347
Ag	107	1	He	0.155128	25.6	3190.400
Cd	111	1	He	0.008653	35.8	53.313
Sn	118	1	He	0.018565	12.2	315.010
Sb	121	1	He	0.008947	16.3	163.333
Ba	138	1	He	0.009724	24.2	386.677
Pt	195	1	He	0.004320	93.6	264.670
Hg	202	1	He	0.011937	13.5	300.667
Tl	205	1	He	0.038595	16.3	2316.897
Pb	208	1	He	-0.000032		2790.130
Bi	209	1	He	0.005839	85.4	2566.967
Th	232	1	He	0.022310	17.3	2556.940
U	238	1	He	0.002006	63.5	1110.060

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.65749208	533877.940
Sc	45	2	H2	94.12783099	4164774.833
Ge	72	1	He	93.10562847	464273.283
Ge	72	2	H2	97.15434416	1515390.710
In	115	1	He	97.25013212	5961618.973
Tb	159	1	He	99.58568947	14408670.620
Ir	193	1	He	101.1961354	7494959.053

Sample Name 10604943051\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 205SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:45:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.335227	2.8	885.697
Be	9	2	H2	0.043500	25.1	35.333
B	11	2	H2	-57.530573		9237.487
Na	23	1	He	9176.773997	0.9	7777016.967
Mg	24	1	He	11919.67877	1.3	5727249.080
Al	27	1	He	117.552135	1.5	28793.317
Si	28	2	H2	961.238010	0.9	2540949.750
K	39	1	He	1526.113607	0.4	1107836.467
Ca	43	1	He	35118.59280	0.7	71354.033
Ti	47	1	He	0.170832	12.0	40.333
V	51	1	He	0.272295	36.8	1148.823
Cr	52	1	He	0.358686	5.8	4864.820
Mn	55	1	He	1.675025	2.3	9753.270
Fe	56	1	He	37.345634	0.5	275890.710
Co	59	1	He	0.123181	1.5	1554.757
Ni	60	1	He	1.279337	1.6	4055.240
Cu	63	1	He	51.036821	0.4	430600.957
Zn	66	1	He	55.580251	0.4	107621.357
As	75	1	He	0.365637	3.2	780.520
Se	78	2	H2	0.123338	5.2	137.333
Sr	88	1	He	127.261901	0.3	1423378.780
Mo	95	1	He	1.076688	3.3	6551.523
Pd	105	1	He	0.079553	2.7	906.703
Ag	107	1	He	0.048200	20.6	1028.380
Cd	111	1	He	0.027310	2.1	119.487
Sn	118	1	He	0.119614	3.9	1248.400
Sb	121	1	He	0.180164	3.8	2506.910
Ba	138	1	He	21.734437	0.3	682059.233
Pt	195	1	He	0.006897	20.0	293.333
Hg	202	1	He	0.006032	21.7	259.333
Tl	205	1	He	0.014171	9.3	1138.393
Pb	208	1	He	0.134781	1.1	11335.227
Bi	209	1	He	0.081141	4.2	6601.777
Th	232	1	He	0.017749	10.0	2165.197
U	238	1	He	0.316017	2.5	21229.100

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.98627781	529836.020
Sc	45	2	H2	92.78711303	4105453.500
Ge	72	1	He	92.16720690	459593.823
Ge	72	2	H2	96.53756523	1505770.337
In	115	1	He	94.78803248	5810687.560
Tb	159	1	He	98.04305458	14185472.707
Ir	193	1	He	97.69037463	7235309.477

Sample Name 10604943052\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 206SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:49:21  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.132603	2.7	827.520
Be	9	2	H2	0.039266	15.8	34.333
B	11	2	H2	-59.852365		8665.150
Na	23	1	He	8709.816216	2.3	7344418.850
Mg	24	1	He	11371.56684	2.5	5436384.917
Al	27	1	He	126.085147	2.5	30722.150
Si	28	2	H2	889.391707	0.7	2389144.000
K	39	1	He	1455.476097	2.5	1054154.333
Ca	43	1	He	33446.01601	1.4	67618.763
Ti	47	1	He	0.251439	19.6	58.333
V	51	1	He	0.160612	37.8	444.963
Cr	52	1	He	0.381036	3.4	5008.203
Mn	55	1	He	1.886728	2.5	10898.067
Fe	56	1	He	41.938503	2.1	306979.583
Co	59	1	He	0.107896	4.5	1362.067
Ni	60	1	He	1.143711	0.3	3629.793
Cu	63	1	He	45.485621	1.4	382097.023
Zn	66	1	He	52.487643	1.4	101194.307
As	75	1	He	0.343821	4.6	739.853
Se	78	2	H2	0.120824	7.2	136.333
Sr	88	1	He	119.709689	1.7	1332942.273
Mo	95	1	He	1.026185	2.6	6194.027
Pd	105	1	He	0.076146	11.0	868.367
Ag	107	1	He	0.025958	10.1	591.683
Cd	111	1	He	0.023142	5.9	103.553
Sn	118	1	He	0.126599	12.5	1303.407
Sb	121	1	He	0.177835	2.9	2455.240
Ba	138	1	He	20.183336	1.5	628301.240
Pt	195	1	He	0.007105	47.3	294.003
Hg	202	1	He	0.001451	198.0	230.000
Tl	205	1	He	0.008379	31.2	861.703
Pb	208	1	He	0.129793	4.8	10961.770
Bi	209	1	He	0.068795	4.6	5958.133
Th	232	1	He	0.006755	11.9	1438.423
U	238	1	He	0.289751	1.5	19646.610

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.56044742	527271.753
Sc	45	2	H2	94.25504039	4170403.333
Ge	72	1	He	91.77042401	457615.257
Ge	72	2	H2	97.25988535	1517036.917
In	115	1	He	94.03666951	5764627.573
Tb	159	1	He	97.59951984	14121299.370
Ir	193	1	He	98.21642522	7274270.723

Sample Name 10604943053\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 207SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:53:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.167036	2.6	827.520
Be	9	2	H2	0.027685	39.4	29.667
B	11	2	H2	-59.215256		8732.353
Na	23	1	He	8718.290158	0.3	7409007.390
Mg	24	1	He	11418.44474	0.4	5501532.210
Al	27	1	He	108.553456	0.3	26667.393
Si	28	2	H2	910.007806	0.8	2408459.667
K	39	1	He	1450.804922	0.2	1059197.903
Ca	43	1	He	33207.95187	0.6	67654.633
Ti	47	1	He	0.155706	17.6	37.000
V	51	1	He	0.187742	6.7	622.067
Cr	52	1	He	0.644213	5.0	7017.703
Mn	55	1	He	1.696712	1.0	9902.700
Fe	56	1	He	38.851677	0.4	287367.280
Co	59	1	He	0.109969	2.4	1398.737
Ni	60	1	He	1.167829	2.2	3731.820
Cu	63	1	He	46.822411	0.6	396524.187
Zn	66	1	He	52.233306	0.4	101526.700
As	75	1	He	0.360752	4.2	775.187
Se	78	2	H2	0.123751	16.1	136.333
Sr	88	1	He	119.413554	1.2	1340485.553
Mo	95	1	He	1.033677	0.2	6273.403
Pd	105	1	He	0.075597	13.1	868.367
Ag	107	1	He	0.012852	8.5	341.677
Cd	111	1	He	0.020033	4.8	92.870
Sn	118	1	He	0.092684	6.5	995.043
Sb	121	1	He	0.170180	1.8	2363.553
Ba	138	1	He	20.083585	1.2	628562.570
Pt	195	1	He	0.004244	60.2	259.333
Hg	202	1	He	-0.001434		212.667
Tl	205	1	He	0.001932	23.3	565.020
Pb	208	1	He	0.109411	3.3	9703.050
Bi	209	1	He	0.066516	10.9	5818.050
Th	232	1	He	0.002724	40.5	1163.400
U	238	1	He	0.300611	2.3	20290.980

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.22101925	531249.587
Sc	45	2	H2	92.87440351	4109315.750
Ge	72	1	He	92.50993207	461302.830
Ge	72	2	H2	95.59774538	1491111.247
In	115	1	He	94.53221235	5795005.297
Tb	159	1	He	97.89129795	14163515.623
Ir	193	1	He	97.92538917	7252715.520

Sample Name 10604943054\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 208SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:56:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.475190	2.4	942.530
Be	9	2	H2	0.012895	59.0	24.500
B	11	2	H2	-57.499891		9325.207
Na	23	1	He	9189.419584	0.2	7860039.257
Mg	24	1	He	11752.48980	0.4	5699499.500
Al	27	1	He	159.527897	0.5	39413.107
Si	28	2	H2	929.131312	0.7	2477313.333
K	39	1	He	1505.956020	0.3	1104178.787
Ca	43	1	He	34363.45797	0.1	70467.473
Ti	47	1	He	0.243943	1.6	57.333
V	51	1	He	0.250211	17.2	1023.343
Cr	52	1	He	0.361723	9.7	4932.177
Mn	55	1	He	3.143172	0.7	18248.050
Fe	56	1	He	65.296305	0.3	478982.387
Co	59	1	He	0.246980	1.2	3089.670
Ni	60	1	He	1.035459	4.3	3345.727
Cu	63	1	He	133.396405	0.2	1134326.333
Zn	66	1	He	83.473735	1.4	162869.630
As	75	1	He	0.366436	5.1	788.353
Se	78	2	H2	0.124173	5.7	138.000
Sr	88	1	He	123.883001	0.8	1397086.020
Mo	95	1	He	1.062524	1.6	6485.490
Pd	105	1	He	0.070281	5.1	825.030
Ag	107	1	He	0.010615	8.9	300.010
Cd	111	1	He	0.027662	8.0	121.167
Sn	118	1	He	0.190006	3.7	1910.150
Sb	121	1	He	0.208805	0.8	2908.670
Ba	138	1	He	20.749656	0.5	653149.613
Pt	195	1	He	0.006611	34.8	291.333
Hg	202	1	He	-0.004562		194.667
Tl	205	1	He	0.004963	21.9	711.693
Pb	208	1	He	0.108882	2.4	9739.717
Bi	209	1	He	0.126757	5.1	9189.993
Th	232	1	He	0.001884	71.0	1115.057
U	238	1	He	0.307680	1.9	20900.173

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.80001584	534736.190
Sc	45	2	H2	93.57422847	4140280.167
Ge	72	1	He	92.93239217	463409.437
Ge	72	2	H2	96.61107170	1506916.873
In	115	1	He	95.07585217	5828331.457
Tb	159	1	He	98.59903095	14265914.790
Ir	193	1	He	98.65429161	7306700.723



Sample Name 10604943055\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 209SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:00:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.257891	5.9	856.193
Be	9	2	H2	0.024818	88.4	28.500
B	11	2	H2	-58.294819		8982.330
Na	23	1	He	9080.792910	0.1	7766030.300
Mg	24	1	He	11916.01735	0.2	5777856.370
Al	27	1	He	130.882121	0.8	32343.560
Si	28	2	H2	955.578970	1.7	2519752.833
K	39	1	He	1509.782946	0.6	1106648.760
Ca	43	1	He	34646.92902	0.5	71037.617
Ti	47	1	He	0.178136	19.0	42.333
V	51	1	He	0.209545	45.5	763.550
Cr	52	1	He	0.332721	2.7	4713.437
Mn	55	1	He	1.955520	2.4	11447.163
Fe	56	1	He	32.339764	0.4	242491.280
Co	59	1	He	0.103586	1.3	1316.730
Ni	60	1	He	0.542915	3.1	1831.453
Cu	63	1	He	38.287982	0.7	323323.407
Zn	66	1	He	52.061879	1.1	100886.240
As	75	1	He	0.365844	2.7	781.353
Se	78	2	H2	0.112906	9.1	128.000
Sr	88	1	He	124.005037	0.8	1387897.117
Mo	95	1	He	1.089227	1.7	6614.220
Pd	105	1	He	0.069866	8.4	816.697
Ag	107	1	He	0.008551	21.3	258.337
Cd	111	1	He	0.020382	10.2	94.143
Sn	118	1	He	0.091196	1.0	981.707
Sb	121	1	He	0.182582	4.6	2535.253
Ba	138	1	He	20.435715	0.5	640057.893
Pt	195	1	He	0.009672	14.0	330.673
Hg	202	1	He	-0.006596		182.000
Tl	205	1	He	0.002272	77.5	585.017
Pb	208	1	He	0.046121	0.8	5722.163
Bi	209	1	He	0.060872	1.3	5547.933
Th	232	1	He	0.001086	65.0	1061.720
U	238	1	He	0.313166	2.3	21259.133

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.78582685	534650.747
Sc	45	2	H2	92.56667663	4095700.083
Ge	72	1	He	92.22893195	459901.617
Ge	72	2	H2	95.71013348	1492864.250
In	115	1	He	94.59988952	5799154.037
Tb	159	1	He	98.65343606	14273786.457
Ir	193	1	He	98.67788621	7308448.227

Sample Name 10604943055\_B70031Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 210SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:04:22  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.271305	16.1	161.167
Be	9	2	H2	0.012421	115.8	23.833
B	11	2	H2	-80.475352		2221.667
Na	23	1	He	929.452413	0.6	804363.273
Mg	24	1	He	1223.246329	0.7	596850.710
Al	27	1	He	24.449536	1.8	6097.583
Si	28	2	H2	97.617956	1.7	266660.543
K	39	1	He	152.449335	0.9	170636.430
Ca	43	1	He	3533.718941	0.6	7254.140
Ti	47	1	He	0.028805	17.5	8.333
V	51	1	He	0.036538	319.5	-334.990
Cr	52	1	He	0.273156	6.4	4262.627
Mn	55	1	He	0.292713	2.4	1928.803
Fe	56	1	He	5.091552	1.5	47007.880
Co	59	1	He	0.012888	25.7	212.667
Ni	60	1	He	0.064103	9.9	388.677
Cu	63	1	He	3.908176	1.0	33691.503
Zn	66	1	He	6.486371	2.1	12904.413
As	75	1	He	0.041115	11.4	229.833
Se	78	2	H2	-0.000540		38.667
Sr	88	1	He	12.480586	0.8	141560.727
Mo	95	1	He	0.113500	2.9	710.020
Pd	105	1	He	0.001706	226.9	201.667
Ag	107	1	He	0.004933	28.3	191.667
Cd	111	1	He	0.001198	72.6	25.207
Sn	118	1	He	0.015918	26.3	286.670
Sb	121	1	He	0.019067	21.8	301.673
Ba	138	1	He	2.051140	0.5	65320.093
Pt	195	1	He	0.000243	387.6	210.667
Hg	202	1	He	-0.014005		136.000
Tl	205	1	He	-0.000725		445.010
Pb	208	1	He	-0.001993		2643.457
Bi	209	1	He	0.004321	20.7	2430.267
Th	232	1	He	-0.001809		870.037
U	238	1	He	0.027387	3.7	2740.320

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.75949919	534492.207
Sc	45	2	H2	91.73277912	4058803.500
Ge	72	1	He	93.38675426	465675.123
Ge	72	2	H2	95.41644591	1488283.380
In	115	1	He	96.09699727	5890929.603
Tb	159	1	He	98.86159062	14303903.540
Ir	193	1	He	99.11839951	7341074.267

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 211\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:08:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.194328	5.2	28073.900
Be	9	2	H2	80.947065	4.1	28112.005
B	11	2	H2	0.583442	675.3	25910.880
Na	23	1	He	1001.686594	1.0	862242.360
Mg	24	1	He	996.563972	1.0	484930.863
Al	27	1	He	982.073460	1.0	241098.160
Si	28	2	H2	510.257593	4.3	1303099.435
K	39	1	He	1009.965131	1.0	758436.523
Ca	43	1	He	980.329691	2.8	2012.360
Ti	47	1	He	78.648067	1.0	17827.760
V	51	1	He	80.641458	0.5	508320.953
Cr	52	1	He	82.719983	1.0	623083.123
Mn	55	1	He	80.406815	1.2	458345.583
Fe	56	1	He	524.753182	1.0	3757243.583
Co	59	1	He	83.006789	1.1	1019072.770
Ni	60	1	He	83.957409	0.9	255592.973
Cu	63	1	He	83.515010	1.3	709239.147
Zn	66	1	He	81.901996	1.2	159578.737
As	75	1	He	79.964797	1.1	137517.237
Se	78	2	H2	86.067585	4.1	64767.620
Sr	88	1	He	80.750016	1.5	909371.523
Mo	95	1	He	77.632980	1.3	472991.977
Pd	105	1	He	82.724362	1.1	754680.430
Ag	107	1	He	41.115225	1.9	800157.593
Cd	111	1	He	80.989536	1.1	294306.933
Sn	118	1	He	77.175204	0.9	721050.510
Sb	121	1	He	78.414510	0.8	1078503.813
Ba	138	1	He	79.414775	1.1	2499175.223
Pt	195	1	He	83.024823	1.1	1063577.837
Hg	202	1	He	3.925403	1.2	24810.707
Tl	205	1	He	41.884255	0.7	1977218.250
Pb	208	1	He	82.324635	0.8	5293725.937
Bi	209	1	He	81.268406	1.2	4487438.477
Th	232	1	He	76.921956	1.6	5183172.320
U	238	1	He	77.556783	2.1	5018104.197

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.37431886	532172.727
Sc	45	2	H2	89.31614806	3951877.375
Ge	72	1	He	92.80410703	462769.740
Ge	72	2	H2	91.77147645	1431430.000
In	115	1	He	95.06843342	5827876.673
Tb	159	1	He	98.91550614	14311704.370
Ir	193	1	He	98.46834804	7292929.057

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 212\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:11:52  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.026570	57.0	77.833
Be	9	2	H2	0.021772	63.3	27.667
B	11	2	H2	-82.554400		1623.257
Na	23	1	He	-0.853053		10151.840
Mg	24	1	He	-5.380410		1760.117
Al	27	1	He	0.032537	61.8	79.333
Si	28	2	H2	-1.085419		10221.520
K	39	1	He	-7.812156		60418.160
Ca	43	1	He	2.394223	70.5	17.267
Ti	47	1	He	0.003872	131.1	2.667
V	51	1	He	0.017451	366.7	-455.363
Cr	52	1	He	-0.023200		2037.483
Mn	55	1	He	0.043215	4.1	503.343
Fe	56	1	He	0.172096	17.1	11780.090
Co	59	1	He	0.008196	46.3	154.667
Ni	60	1	He	-0.000813		190.000
Cu	63	1	He	0.001584	214.1	319.337
Zn	66	1	He	0.028079	56.8	258.000
As	75	1	He	-0.012138		137.833
Se	78	2	H2	-0.019650		24.000
Sr	88	1	He	0.008080	10.0	231.667
Mo	95	1	He	0.012740	36.9	89.333
Pd	105	1	He	0.020660	11.4	376.677
Ag	107	1	He	0.159468	24.6	3232.080
Cd	111	1	He	0.004391	43.2	36.987
Sn	118	1	He	0.000928	551.9	145.000
Sb	121	1	He	0.003694	53.0	88.333
Ba	138	1	He	0.007104	5.5	298.343
Pt	195	1	He	0.000235	709.8	210.667
Hg	202	1	He	0.010019	18.2	286.667
Tl	205	1	He	0.035529	25.3	2156.870
Pb	208	1	He	-0.006356		2365.110
Bi	209	1	He	0.000273	1468.0	2226.897
Th	232	1	He	0.017288	6.2	2186.873
U	238	1	He	-0.000901		906.707

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.13471959	536751.710
Sc	45	2	H2	93.34109788	4129965.083
Ge	72	1	He	93.41569293	465819.427
Ge	72	2	H2	96.50556513	1505271.207
In	115	1	He	96.19312707	5896822.543
Tb	159	1	He	98.93806937	14314968.957
Ir	193	1	He	100.0925216	7413221.347

Sample Name 4312177\_B70029Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 213SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:15:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.032273	19.1	80.000
Be	9	2	H2	0.037659	35.0	33.500
B	11	2	H2	-81.534364		1939.960
Na	23	1	He	1.857477	16.9	12533.657
Mg	24	1	He	-2.345297		3252.053
Al	27	1	He	2.621408	8.6	723.353
Si	28	2	H2	2.157123	5.1	18839.903
K	39	1	He	-5.643596		62205.463
Ca	43	1	He	6.745648	12.8	26.350
Ti	47	1	He	0.073430	23.6	18.667
V	51	1	He	0.048314	121.0	-260.087
Cr	52	1	He	0.188994	8.9	3660.470
Mn	55	1	He	0.094993	2.2	804.690
Fe	56	1	He	1.776873	4.9	23443.427
Co	59	1	He	0.015740	26.2	246.667
Ni	60	1	He	0.024256	14.4	265.333
Cu	63	1	He	0.026185	6.9	526.677
Zn	66	1	He	0.512447	7.8	1200.720
As	75	1	He	-0.003004		152.833
Se	78	2	H2	-0.018292		25.000
Sr	88	1	He	0.046483	19.0	663.357
Mo	95	1	He	0.021685	15.7	146.667
Pd	105	1	He	0.004215	129.9	228.337
Ag	107	1	He	0.042858	11.2	951.710
Cd	111	1	He	0.013179	6.2	70.307
Sn	118	1	He	0.037358	8.9	496.677
Sb	121	1	He	0.029103	22.0	448.343
Ba	138	1	He	0.027243	1.5	953.373
Pt	195	1	He	0.009602	27.5	336.673
Hg	202	1	He	-0.004280		200.667
Tl	205	1	He	0.019060	7.0	1405.090
Pb	208	1	He	0.008943	23.1	3411.863
Bi	209	1	He	0.016067	18.3	3143.773
Th	232	1	He	0.013043	1.9	1915.160
U	238	1	He	0.002689	89.1	1153.393

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.55196341	539264.270
Sc	45	2	H2	93.53651880	4138611.667
Ge	72	1	He	92.92527298	463373.937
Ge	72	2	H2	96.12532093	1499340.247
In	115	1	He	97.59283824	5982627.513
Tb	159	1	He	100.7906797	14583016.030
Ir	193	1	He	101.0978135	7487676.970

Sample Name 4312178\_B70029Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 214SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:19:22  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	104.780960	0.6	36670.837
Be	9	2	H2	101.943683	0.2	36722.687
B	11	2	H2	25.174505	2.0	34356.890
Na	23	1	He	2091.303323	1.0	1785791.017
Mg	24	1	He	2078.245590	0.9	1005075.503
Al	27	1	He	2042.066634	1.3	500496.647
Si	28	2	H2	521.556357	0.5	1381538.293
K	39	1	He	2081.173196	2.0	1491349.770
Ca	43	1	He	2082.164452	0.5	4254.537
Ti	47	1	He	103.383174	1.0	23400.203
V	51	1	He	107.112534	0.8	674352.223
Cr	52	1	He	110.221163	1.2	828250.020
Mn	55	1	He	106.751875	1.1	607536.267
Fe	56	1	He	2200.283670	1.1	15697259.333
Co	59	1	He	109.636438	1.5	1344756.333
Ni	60	1	He	111.088876	1.1	337822.710
Cu	63	1	He	108.886886	1.2	923788.917
Zn	66	1	He	109.000154	0.9	212122.927
As	75	1	He	105.454650	1.1	181143.750
Se	78	2	H2	107.396563	1.5	84886.423
Sr	88	1	He	107.447889	1.3	1208907.850
Mo	95	1	He	102.459813	1.6	623965.127
Pd	105	1	He	21.640762	1.6	197469.197
Ag	107	1	He	50.966452	2.6	991329.310
Cd	111	1	He	107.115883	1.2	389073.440
Sn	118	1	He	102.107690	1.3	953517.850
Sb	121	1	He	104.500306	1.9	1436521.540
Ba	138	1	He	104.875821	1.4	3298977.137
Pt	195	1	He	21.922950	1.2	280733.157
Hg	202	1	He	-0.000084		223.000
Tl	205	1	He	111.497652	1.8	5257222.840
Pb	208	1	He	109.457972	1.1	7031023.173
Bi	209	1	He	104.794000	1.4	5832016.580
Th	232	1	He	105.585171	1.0	7172142.187
U	238	1	He	103.498845	1.5	6750795.313

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.24342007	531384.480
Sc	45	2	H2	92.57751567	4096179.667
Ge	72	1	He	92.72246831	462362.647
Ge	72	2	H2	96.28456148	1501824.043
In	115	1	He	95.03300076	5825704.583
Tb	159	1	He	98.82796321	14299038.120
Ir	193	1	He	99.25811881	7351422.393

Sample Name 10606726001\_B70029Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 215SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:23:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	32.745279	0.5	11625.450
Be	9	2	H2	0.079327	20.1	48.667
B	11	2	H2	-43.694677		13560.570
Na	23	1	He	21649.90519	0.7	18165150.147
Mg	24	1	He	39367.24777	0.8	18732542.220
Al	27	1	He	6.918399	4.0	1744.447
Si	28	2	H2	2131.568929	1.1	5663828.167
K	39	1	He	2035.927586	1.3	1442792.427
Ca	43	1	He	66751.75339	0.7	134372.283
Ti	47	1	He	0.114508	12.0	27.333
V	51	1	He	0.092130	114.1	17.190
Cr	52	1	He	0.097077	8.7	2882.960
Mn	55	1	He	45.983744	0.2	258701.853
Fe	56	1	He	2.640201	5.7	28899.830
Co	59	1	He	0.048782	14.5	644.680
Ni	60	1	He	1.066438	4.2	3399.743
Cu	63	1	He	1.441576	1.2	12408.637
Zn	66	1	He	11.451862	1.3	22251.020
As	75	1	He	0.103127	7.4	331.333
Se	78	2	H2	3.489312	1.0	2819.610
Sr	88	1	He	302.500286	0.5	3370509.950
Mo	95	1	He	1.200297	0.8	7197.833
Pd	105	1	He	0.185478	4.9	1843.470
Ag	107	1	He	0.184709	32.3	3620.530
Cd	111	1	He	0.032821	20.3	137.373
Sn	118	1	He	0.131550	8.4	1340.077
Sb	121	1	He	0.031399	20.6	460.013
Ba	138	1	He	4.181251	0.8	129391.380
Pt	195	1	He	0.000743	250.0	212.667
Hg	202	1	He	-0.005029		188.333
Tl	205	1	He	0.037738	23.8	2210.210
Pb	208	1	He	0.142513	4.1	11680.337
Bi	209	1	He	0.008297	82.5	2576.967
Th	232	1	He	0.047853	9.1	4122.360
U	238	1	He	12.224868	0.6	775786.213

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.18080752	524985.637
Sc	45	2	H2	93.53274256	4138444.583
Ge	72	1	He	91.82544165	457889.603
Ge	72	2	H2	97.09415905	1514451.957
In	115	1	He	93.43103108	5727500.780
Tb	159	1	He	96.84556038	14012211.873
Ir	193	1	He	96.45946330	7144143.643

Sample Name 10606727001\_B70029Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 216SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:26:52  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	7.770967	1.8	2799.093
Be	9	2	H2	0.060165	15.3	41.500
B	11	2	H2	-66.516590		6523.743
Na	23	1	He	5002.474736	0.7	4231997.123
Mg	24	1	He	9239.399752	0.2	4427531.913
Al	27	1	He	3.506264	2.7	924.363
Si	28	2	H2	2099.472315	0.5	5554847.667
K	39	1	He	1043.992460	0.2	776078.737
Ca	43	1	He	22417.06000	0.3	45418.323
Ti	47	1	He	0.052910	20.7	13.667
V	51	1	He	-0.068721		-989.640
Cr	52	1	He	0.206284	1.6	3715.143
Mn	55	1	He	87.827478	0.7	496966.417
Fe	56	1	He	135.475991	0.2	970626.270
Co	59	1	He	0.038781	12.4	526.010
Ni	60	1	He	0.128962	6.1	580.010
Cu	63	1	He	0.418397	0.2	3832.520
Zn	66	1	He	2.583468	1.5	5197.610
As	75	1	He	0.698336	2.2	1349.230
Se	78	2	H2	-0.008311		33.000
Sr	88	1	He	94.053343	0.7	1052889.020
Mo	95	1	He	0.413853	1.1	2513.567
Pd	105	1	He	0.058484	19.5	711.697
Ag	107	1	He	0.042131	16.7	906.707
Cd	111	1	He	0.008156	47.4	49.880
Sn	118	1	He	0.024049	6.0	356.677
Sb	121	1	He	0.020175	14.8	311.677
Ba	138	1	He	5.718931	1.1	178714.927
Pt	195	1	He	0.000266	263.1	209.333
Hg	202	1	He	-0.006280		183.000
Tl	205	1	He	0.011446	6.9	1011.717
Pb	208	1	He	0.048119	7.0	5818.843
Bi	209	1	He	0.002480	48.0	2310.243
Th	232	1	He	0.011414	4.8	1753.470
U	238	1	He	0.697090	1.6	46006.163

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.72603294	528268.877
Sc	45	2	H2	93.13001451	4120625.500
Ge	72	1	He	92.24715173	459992.470
Ge	72	2	H2	96.46771271	1504680.793
In	115	1	He	94.36464911	5784733.350
Tb	159	1	He	98.11316610	14195616.873
Ir	193	1	He	98.36025976	7284923.640



Sample Name 4315138\_B70029Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 217SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:30:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	85.891500	1.0	29866.483
Be	9	2	H2	77.201648	0.6	27625.280
B	11	2	H2	12.793565	8.5	30383.580
Na	23	1	He	6745.704399	0.8	5696640.750
Mg	24	1	He	10775.73655	0.8	5157247.943
Al	27	1	He	1893.161663	0.7	460793.480
Si	28	2	H2	3004.857917	1.4	7843407.667
K	39	1	He	2957.486587	0.5	2077452.157
Ca	43	1	He	23654.86873	0.5	47870.927
Ti	47	1	He	80.503358	0.4	18095.093
V	51	1	He	82.866467	0.8	517945.613
Cr	52	1	He	83.997800	0.6	627333.853
Mn	55	1	He	167.306848	1.1	945379.727
Fe	56	1	He	1148.284320	0.9	8140005.833
Co	59	1	He	80.664231	0.8	994570.937
Ni	60	1	He	82.140913	1.8	251129.073
Cu	63	1	He	81.669429	0.8	696559.670
Zn	66	1	He	83.850419	0.9	164070.840
As	75	1	He	81.771644	0.6	141228.173
Se	78	2	H2	82.155848	0.4	64959.120
Sr	88	1	He	171.085291	0.3	1934900.337
Mo	95	1	He	80.381021	0.5	489325.823
Pd	105	1	He	79.978571	0.3	729027.777
Ag	107	1	He	14.698373	2.2	285874.643
Cd	111	1	He	81.517167	0.6	295970.140
Sn	118	1	He	78.971123	0.9	737191.317
Sb	121	1	He	79.174957	0.4	1088012.170
Ba	138	1	He	85.953847	0.5	2702678.187
Pt	195	1	He	81.696695	1.0	1049955.623
Hg	202	1	He	-0.007568		177.000
Tl	205	1	He	40.988928	1.0	1941157.313
Pb	208	1	He	82.056096	0.4	5293453.567
Bi	209	1	He	77.508157	1.4	4289998.167
Th	232	1	He	6.825333	1.3	461920.107
U	238	1	He	79.537997	1.3	5159169.920

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.62843648	527681.170
Sc	45	2	H2	91.94842412	4068344.917
Ge	72	1	He	93.19831765	464735.480
Ge	72	2	H2	96.30770026	1502184.957
In	115	1	He	94.98302842	5822641.183
Tb	159	1	He	99.22803319	14356922.707
Ir	193	1	He	98.70098566	7310159.057

Sample Name 4315139\_B70029Dx25  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 218SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:34:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.564113	2.0	624.677
Be	9	2	H2	0.062517	18.8	42.833
B	11	2	H2	-79.159999		2686.073
Na	23	1	He	970.250906	0.3	846296.887
Mg	24	1	He	1795.210959	0.6	881285.690
Al	27	1	He	1.881447	2.9	539.343
Si	28	2	H2	409.905384	0.9	1106787.250
K	39	1	He	198.991195	0.1	204436.117
Ca	43	1	He	4338.962484	0.9	8979.690
Ti	47	1	He	0.042965	71.8	11.667
V	51	1	He	0.115508	58.3	168.337
Cr	52	1	He	0.063136	10.7	2702.260
Mn	55	1	He	17.095861	0.4	98911.790
Fe	56	1	He	26.648123	0.5	203306.270
Co	59	1	He	0.025275	16.4	372.673
Ni	60	1	He	0.050648	28.0	354.003
Cu	63	1	He	0.105086	14.3	1226.057
Zn	66	1	He	0.568596	2.2	1341.400
As	75	1	He	0.135257	9.4	400.010
Se	78	2	H2	-0.009100		33.000
Sr	88	1	He	18.118411	0.7	209345.687
Mo	95	1	He	0.102800	12.0	654.683
Pd	105	1	He	0.039606	12.3	560.017
Ag	107	1	He	0.149087	28.7	3077.053
Cd	111	1	He	0.015993	36.2	80.883
Sn	118	1	He	0.034023	20.5	465.013
Sb	121	1	He	0.017400	2.5	283.340
Ba	138	1	He	1.123629	1.9	36407.830
Pt	195	1	He	0.011461	16.3	359.343
Hg	202	1	He	-0.009612		166.000
Tl	205	1	He	0.052660	25.6	3003.713
Pb	208	1	He	0.017731	25.6	3966.917
Bi	209	1	He	0.015510	63.7	3073.750
Th	232	1	He	0.004440	37.2	1305.077
U	238	1	He	0.146265	3.8	10566.030

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.50999425	539011.540
Sc	45	2	H2	94.13231540	4164973.250
Ge	72	1	He	95.15823406	474508.647
Ge	72	2	H2	98.33797778	1533852.750
In	115	1	He	97.68296343	5988152.360
Tb	159	1	He	100.3316575	14516601.867
Ir	193	1	He	99.91753997	7400261.557

Sample Name 4312179\_B70029Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 219SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:38:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	27.821166	0.7	9844.523
Be	9	2	H2	20.064001	0.7	7286.083
B	11	2	H2	-45.808393		12855.287
Na	23	1	He	5319.370942	0.8	4545643.790
Mg	24	1	He	9423.242394	1.0	4562012.637
Al	27	1	He	411.008602	1.1	101238.687
Si	28	2	H2	2152.323251	0.6	5693989.500
K	39	1	He	1464.428188	0.6	1073453.397
Ca	43	1	He	22511.06098	0.3	46077.273
Ti	47	1	He	20.462567	2.6	4653.070
V	51	1	He	21.995359	2.3	138634.377
Cr	52	1	He	22.318933	0.9	170212.243
Mn	55	1	He	107.772141	0.3	616038.520
Fe	56	1	He	571.021778	0.4	4099474.833
Co	59	1	He	21.553637	0.8	267302.253
Ni	60	1	He	21.960905	0.1	67667.273
Cu	63	1	He	21.907671	0.4	188138.923
Zn	66	1	He	23.900826	0.3	47178.953
As	75	1	He	21.867912	0.5	38099.290
Se	78	2	H2	20.996086	1.5	16916.570
Sr	88	1	He	114.196736	1.0	1298853.053
Mo	95	1	He	21.162423	0.2	128904.087
Pd	105	1	He	4.237778	1.8	38821.660
Ag	107	1	He	10.052651	3.1	195630.793
Cd	111	1	He	21.629195	0.2	78587.643
Sn	118	1	He	20.718545	0.9	193611.007
Sb	121	1	He	20.895262	0.7	287322.817
Ba	138	1	He	26.913587	0.3	846745.067
Pt	195	1	He	4.259852	0.2	54932.973
Hg	202	1	He	-0.007280		178.667
Tl	205	1	He	22.482951	0.9	1064698.293
Pb	208	1	He	21.746636	0.7	1404574.650
Bi	209	1	He	21.055635	1.6	1163630.217
Th	232	1	He	21.517334	1.0	1449968.363
U	238	1	He	21.892744	1.8	1416558.310

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.62748944	533697.270
Sc	45	2	H2	93.12423808	4120369.917
Ge	72	1	He	93.72735838	467373.553
Ge	72	2	H2	97.95995890	1527956.500
In	115	1	He	95.03203733	5825645.523
Tb	159	1	He	99.20618127	14353761.037
Ir	193	1	He	98.41513375	7288987.810

Sample Name 4312180\_B70029Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 220SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:41:53  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	28.257304	0.4	9925.247
Be	9	2	H2	20.394600	1.3	7352.287
B	11	2	H2	-44.911531		13033.777
Na	23	1	He	5433.809459	0.3	4607284.410
Mg	24	1	He	9672.998512	1.0	4646588.367
Al	27	1	He	408.054434	0.9	99733.367
Si	28	2	H2	2226.928305	0.8	5848040.500
K	39	1	He	1475.261841	0.4	1072566.443
Ca	43	1	He	22898.88887	0.5	46508.607
Ti	47	1	He	21.292461	1.8	4804.453
V	51	1	He	22.101885	1.9	138236.863
Cr	52	1	He	22.277000	0.6	168580.370
Mn	55	1	He	110.012121	0.3	623984.603
Fe	56	1	He	574.709426	0.1	4094009.417
Co	59	1	He	21.357751	0.3	264948.230
Ni	60	1	He	21.810753	0.4	67223.990
Cu	63	1	He	21.736252	0.3	186720.703
Zn	66	1	He	23.652906	1.0	46704.703
As	75	1	He	21.697485	0.2	37814.533
Se	78	2	H2	21.620788	0.9	17290.343
Sr	88	1	He	115.655831	0.6	1315830.503
Mo	95	1	He	21.304314	1.4	129635.030
Pd	105	1	He	4.187073	0.4	38323.527
Ag	107	1	He	10.065937	0.9	195717.510
Cd	111	1	He	21.493054	0.3	78016.670
Sn	118	1	He	20.661409	1.2	192872.943
Sb	121	1	He	20.924563	0.5	287433.297
Ba	138	1	He	26.847648	0.3	843864.803
Pt	195	1	He	4.251891	1.3	54890.150
Hg	202	1	He	-0.003466		203.000
Tl	205	1	He	22.250012	1.6	1054831.493
Pb	208	1	He	21.622949	0.2	1398113.670
Bi	209	1	He	20.721702	0.9	1155671.937
Th	232	1	He	21.196123	1.1	1441341.230
U	238	1	He	21.628460	1.6	1412285.187

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.94282848	529574.377
Sc	45	2	H2	92.44903497	4090494.917
Ge	72	1	He	93.75324884	467502.657
Ge	72	2	H2	97.23904347	1516711.830
In	115	1	He	94.93969643	5819984.850
Tb	159	1	He	99.30931832	14368683.540
Ir	193	1	He	99.30826142	7355136.140

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 221\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:45:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	78.211020	1.4	27739.953
Be	9	2	H2	75.967695	0.7	27721.627
B	11	2	H2	-3.676091		25914.303
Na	23	1	He	986.739934	1.0	862364.493
Mg	24	1	He	980.440942	0.6	484364.770
Al	27	1	He	963.865224	0.9	240200.813
Si	28	2	H2	483.641039	1.5	1298426.960
K	39	1	He	1003.139356	1.2	765125.250
Ca	43	1	He	988.912101	3.0	2060.703
Ti	47	1	He	79.033997	1.0	18186.530
V	51	1	He	79.601277	1.0	509330.843
Cr	52	1	He	82.574836	1.1	631374.103
Mn	55	1	He	80.209621	1.1	464122.070
Fe	56	1	He	523.476501	1.1	3804676.833
Co	59	1	He	81.986903	0.6	1032460.773
Ni	60	1	He	82.792629	0.7	258530.877
Cu	63	1	He	82.697777	0.8	720367.103
Zn	66	1	He	80.542813	0.7	160976.757
As	75	1	He	79.366038	0.5	140004.673
Se	78	2	H2	80.987113	0.3	64954.067
Sr	88	1	He	80.113744	0.2	925452.120
Mo	95	1	He	76.269923	0.5	478824.157
Pd	105	1	He	81.403765	0.6	765217.853
Ag	107	1	He	40.648296	0.3	815138.453
Cd	111	1	He	80.133414	0.6	300049.330
Sn	118	1	He	76.595575	1.0	737395.253
Sb	121	1	He	77.550074	0.4	1099025.790
Ba	138	1	He	78.136296	0.6	2533803.247
Pt	195	1	He	82.799700	0.5	1080430.790
Hg	202	1	He	3.901527	1.1	25119.947
Tl	205	1	He	41.971573	1.3	2018084.293
Pb	208	1	He	81.737168	0.7	5353659.977
Bi	209	1	He	79.069875	1.1	4528164.513
Th	232	1	He	75.061147	1.6	5245667.420
U	238	1	He	76.190749	1.1	5113293.050

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.70805288	540204.210
Sc	45	2	H2	93.76691091	4148805.583
Ge	72	1	He	95.18725228	474653.347
Ge	72	2	H2	97.69236972	1523782.707
In	115	1	He	97.95516723	6004838.973
Tb	159	1	He	100.7486174	14576930.197
Ir	193	1	He	102.1165764	7563130.307

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 222\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:49:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.092356	34.0	102.333
Be	9	2	H2	0.064291	18.6	43.667
B	11	2	H2	-82.531131		1651.760
Na	23	1	He	-1.235823		9859.980
Mg	24	1	He	-5.345676		1783.460
Al	27	1	He	0.149476	56.5	108.667
Si	28	2	H2	-1.022993		10522.393
K	39	1	He	-6.265063		61711.750
Ca	43	1	He	0.026964	148.5	12.450
Ti	47	1	He	0.006748	163.2	3.333
V	51	1	He	0.003094	2211.3	-549.377
Cr	52	1	He	-0.009682		2147.497
Mn	55	1	He	0.053066	5.2	562.010
Fe	56	1	He	0.260606	13.9	12461.987
Co	59	1	He	0.021336	10.8	319.337
Ni	60	1	He	0.024103	59.2	268.000
Cu	63	1	He	0.012120	46.7	412.010
Zn	66	1	He	0.018043	23.4	240.000
As	75	1	He	-0.006560		148.500
Se	78	2	H2	-0.014795		28.333
Sr	88	1	He	0.015114	52.4	313.340
Mo	95	1	He	0.024634	28.3	164.667
Pd	105	1	He	0.027319	37.8	443.343
Ag	107	1	He	0.187410	26.5	3828.903
Cd	111	1	He	0.016263	22.9	81.637
Sn	118	1	He	0.014833	20.2	280.003
Sb	121	1	He	0.016298	40.7	266.670
Ba	138	1	He	0.015369	26.0	568.350
Pt	195	1	He	0.012386	48.4	370.673
Hg	202	1	He	0.009071	24.3	284.000
Tl	205	1	He	0.043579	28.5	2565.280
Pb	208	1	He	0.005321	28.0	3151.837
Bi	209	1	He	0.009824	42.4	2797.013
Th	232	1	He	0.027564	6.8	2927.020
U	238	1	He	0.009621	24.3	1618.450

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.46141744	538719.020
Sc	45	2	H2	94.56046763	4183917.250
Ge	72	1	He	94.06280259	469046.253
Ge	72	2	H2	98.06411655	1529581.127
In	115	1	He	97.47204771	5975222.823
Tb	159	1	He	100.0911311	14481801.033
Ir	193	1	He	101.3661214	7507548.847

Sample Name 4308538\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 223SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:53:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.054818	13.2	88.333
Be	9	2	H2	0.042751	6.4	35.500
B	11	2	H2	-82.362422		1692.760
Na	23	1	He	3.423731	15.4	13858.177
Mg	24	1	He	-2.343923		3247.053
Al	27	1	He	26.899870	1.4	6749.530
Si	28	2	H2	0.215500	42.3	13749.690
K	39	1	He	-5.483715		62206.983
Ca	43	1	He	15.131961	4.3	43.617
Ti	47	1	He	0.059129	48.1	15.333
V	51	1	He	0.112091	40.1	148.290
Cr	52	1	He	0.069182	9.0	2744.930
Mn	55	1	He	0.084026	2.8	740.020
Fe	56	1	He	1.759864	2.4	23283.177
Co	59	1	He	0.009434	16.1	170.000
Ni	60	1	He	0.011233	72.2	226.667
Cu	63	1	He	0.033494	8.0	591.343
Zn	66	1	He	1.751542	1.7	3630.467
As	75	1	He	-0.015787		131.333
Se	78	2	H2	-0.011482		30.667
Sr	88	1	He	0.033428	24.3	518.347
Mo	95	1	He	0.010651	13.1	78.000
Pd	105	1	He	0.009956	10.4	283.343
Ag	107	1	He	0.048439	17.7	1068.390
Cd	111	1	He	0.004642	32.5	38.653
Sn	118	1	He	0.032080	11.3	448.343
Sb	121	1	He	0.033780	5.0	516.680
Ba	138	1	He	0.069962	1.7	2345.223
Pt	195	1	He	0.008386	12.5	318.670
Hg	202	1	He	-0.002010		213.667
Tl	205	1	He	0.012476	12.7	1080.053
Pb	208	1	He	0.001021	129.2	2870.147
Bi	209	1	He	0.002389	151.9	2376.927
Th	232	1	He	0.007077	15.4	1506.770
U	238	1	He	-0.000027		976.713

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.39404448	538313.313
Sc	45	2	H2	93.93245904	4156130.417
Ge	72	1	He	93.32734880	465378.897
Ge	72	2	H2	97.02983936	1513448.713
In	115	1	He	98.07444519	6012150.940
Tb	159	1	He	100.0339009	14473520.617
Ir	193	1	He	101.4470709	7513544.263

Sample Name 4308539\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 224SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:56:53  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	96.552729	0.6	33585.877
Be	9	2	H2	93.792408	0.6	33577.247
B	11	2	H2	16.342366	3.8	31474.637
Na	23	1	He	1946.726714	0.4	1661124.820
Mg	24	1	He	1933.076807	0.5	934072.903
Al	27	1	He	1902.220848	0.4	465681.020
Si	28	2	H2	506.954631	0.3	1334849.917
K	39	1	He	1955.315801	0.1	1403480.813
Ca	43	1	He	1963.330057	0.4	4007.490
Ti	47	1	He	103.334349	0.4	23360.470
V	51	1	He	100.065918	1.1	629213.713
Cr	52	1	He	103.173438	0.2	774519.727
Mn	55	1	He	99.514298	0.4	565699.687
Fe	56	1	He	2057.955663	0.4	14665256.000
Co	59	1	He	102.567671	0.5	1261643.120
Ni	60	1	He	103.704813	0.6	316261.303
Cu	63	1	He	101.865551	0.8	866659.293
Zn	66	1	He	102.077415	0.6	199220.837
As	75	1	He	104.184736	0.4	179465.117
Se	78	2	H2	105.576215	1.6	83402.287
Sr	88	1	He	100.324009	0.1	1131947.040
Mo	95	1	He	101.785069	1.3	624013.123
Pd	105	1	He	21.380808	0.6	196422.203
Ag	107	1	He	49.436006	0.9	968129.983
Cd	111	1	He	99.611251	0.8	364236.040
Sn	118	1	He	100.778023	0.6	947421.107
Sb	121	1	He	103.427661	0.8	1431392.167
Ba	138	1	He	98.079722	0.8	3105879.850
Pt	195	1	He	21.442834	0.1	276475.490
Hg	202	1	He	-0.001926		213.000
Tl	205	1	He	103.661848	0.5	4921702.117
Pb	208	1	He	101.012801	0.6	6533015.993
Bi	209	1	He	96.629653	0.6	5413849.503
Th	232	1	He	98.126377	1.2	6709070.320
U	238	1	He	95.340783	0.6	6260013.243

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.13389141	530724.920
Sc	45	2	H2	92.00141768	4070689.667
Ge	72	1	He	92.97517817	463622.790
Ge	72	2	H2	96.22875476	1500953.583
In	115	1	He	95.66205608	5864266.877
Tb	159	1	He	99.49308386	14395271.870
Ir	193	1	He	99.90820675	7399570.303



Sample Name 10606181001\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 225SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:00:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	26.239539	0.2	9319.193
Be	9	2	H2	0.089590	9.9	52.333
B	11	2	H2	23.963156	3.4	34301.093
Na	23	1	He	44706.26738	0.6	36791881.120
Mg	24	1	He	31674.10395	0.5	14788467.697
Al	27	1	He	8.926369	1.3	2188.830
Si	28	2	H2	12820.46208	0.5	33962880.000
K	39	1	He	5345.992809	0.8	3614431.403
Ca	43	1	He	81577.82010	0.5	161116.707
Ti	47	1	He	0.274828	3.5	62.000
V	51	1	He	1.157721	17.8	6526.480
Cr	52	1	He	1.489649	0.8	12945.720
Mn	55	1	He	1.584117	0.9	8980.110
Fe	56	1	He	7.560765	0.4	62365.470
Co	59	1	He	0.096004	1.9	1192.720
Ni	60	1	He	0.719678	2.0	2304.857
Cu	63	1	He	0.552149	1.4	4832.150
Zn	66	1	He	1.642828	2.5	3290.387
As	75	1	He	0.936315	3.1	1709.937
Se	78	2	H2	0.551412	3.0	475.343
Sr	88	1	He	321.966786	0.7	3510316.927
Mo	95	1	He	1.679663	2.2	9875.443
Pd	105	1	He	0.205274	4.2	1981.823
Ag	107	1	He	0.224849	27.4	4304.053
Cd	111	1	He	0.014976	31.9	72.223
Sn	118	1	He	0.043904	12.0	525.013
Sb	121	1	He	0.100185	7.4	1363.413
Ba	138	1	He	184.628577	1.1	5601297.003
Pt	195	1	He	0.010248	11.5	333.340
Hg	202	1	He	-0.006735		178.667
Tl	205	1	He	0.034227	24.2	2060.183
Pb	208	1	He	0.028494	20.1	4528.653
Bi	209	1	He	0.005942	51.9	2446.937
Th	232	1	He	0.041805	4.2	3718.897
U	238	1	He	11.835077	1.2	749436.837

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	85.53300920	515062.920
Sc	45	2	H2	93.42978586	4133889.167
Ge	72	1	He	89.85119328	448044.970
Ge	72	2	H2	96.34537403	1502772.583
In	115	1	He	91.65137379	5618404.387
Tb	159	1	He	97.30919607	14079293.540
Ir	193	1	He	96.25491241	7128993.850

Sample Name 4309028\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 226SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:04:24  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	100.448360	0.7	35445.773
Be	9	2	H2	74.927790	0.7	27217.043
B	11	2	H2	99.952057	2.6	57551.313
Na	23	1	He	45699.77060	0.3	38053441.100
Mg	24	1	He	32914.04042	0.3	15548811.437
Al	27	1	He	1848.955518	0.6	444469.803
Si	28	2	H2	13587.87269	1.3	35957438.667
K	39	1	He	7133.815217	0.5	4858879.197
Ca	43	1	He	82446.28085	0.2	164756.130
Ti	47	1	He	79.974564	0.1	17754.010
V	51	1	He	83.111623	1.0	513066.597
Cr	52	1	He	83.962030	0.1	619324.127
Mn	55	1	He	81.188416	0.3	453235.980
Fe	56	1	He	1003.114936	0.6	7024408.833
Co	59	1	He	80.060359	0.4	959468.480
Ni	60	1	He	81.894734	0.1	243369.367
Cu	63	1	He	80.308375	0.2	665762.833
Zn	66	1	He	82.553294	0.5	157010.653
As	75	1	He	81.913663	0.5	137508.253
Se	78	2	H2	81.629700	1.1	64355.420
Sr	88	1	He	397.337680	0.2	4367499.727
Mo	95	1	He	82.199524	0.5	479691.167
Pd	105	1	He	77.918136	0.8	680856.473
Ag	107	1	He	15.992959	0.9	298172.373
Cd	111	1	He	81.327398	0.6	283064.893
Sn	118	1	He	79.859066	0.4	714636.240
Sb	121	1	He	79.495583	1.1	1047203.890
Ba	138	1	He	267.237858	0.4	8055074.880
Pt	195	1	He	80.517653	0.2	1012733.333
Hg	202	1	He	-0.005494		186.000
Tl	205	1	He	40.255753	0.9	1865754.763
Pb	208	1	He	80.138451	0.6	5059347.030
Bi	209	1	He	75.331443	1.0	4065644.003
Th	232	1	He	6.965276	1.2	459612.413
U	238	1	He	90.881114	1.0	5747648.873

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	86.54352218	521148.030
Sc	45	2	H2	93.34038972	4129933.750
Ge	72	1	He	90.58506882	451704.457
Ge	72	2	H2	96.02658094	1497800.123
In	115	1	He	91.05310457	5581729.340
Tb	159	1	He	97.11106320	14050626.457
Ir	193	1	He	96.23748939	7127703.437

Sample Name 4309029\_B69934Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 227SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:08:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.678563	1.7	2069.643
Be	9	2	H2	0.069921	18.9	45.167
B	11	2	H2	-59.154856		8799.390
Na	23	1	He	9154.552734	0.4	7739290.093
Mg	24	1	He	6521.708354	0.8	3127984.640
Al	27	1	He	3.184961	8.6	846.373
Si	28	2	H2	2654.253275	0.9	7038868.167
K	39	1	He	1085.688850	0.2	804869.830
Ca	43	1	He	16561.96329	0.6	33574.463
Ti	47	1	He	0.078099	32.9	19.333
V	51	1	He	0.286393	31.7	1237.687
Cr	52	1	He	0.333454	2.8	4664.757
Mn	55	1	He	0.377588	2.3	2387.537
Fe	56	1	He	1.927544	3.3	24048.413
Co	59	1	He	0.028024	12.4	395.343
Ni	60	1	He	0.153883	3.7	656.020
Cu	63	1	He	0.145141	8.3	1528.087
Zn	66	1	He	0.403534	3.4	982.037
As	75	1	He	0.177890	5.4	461.010
Se	78	2	H2	0.094698	16.8	114.667
Sr	88	1	He	64.237432	0.7	719865.847
Mo	95	1	He	0.319553	3.6	1960.143
Pd	105	1	He	0.069091	7.2	815.030
Ag	107	1	He	0.171189	28.7	3433.813
Cd	111	1	He	0.010270	7.8	57.980
Sn	118	1	He	0.019784	26.6	320.010
Sb	121	1	He	0.027240	13.6	411.677
Ba	138	1	He	36.599000	1.1	1152972.690
Pt	195	1	He	0.004687	35.3	268.000
Hg	202	1	He	-0.006877		181.000
Tl	205	1	He	0.046455	26.6	2675.297
Pb	208	1	He	0.005390	30.6	3123.503
Bi	209	1	He	0.007967	104.0	2603.650
Th	232	1	He	0.005756	13.9	1368.420
U	238	1	He	2.347702	0.5	152237.253

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.76718175	528516.667
Sc	45	2	H2	93.39064856	4132157.500
Ge	72	1	He	92.33622984	460436.660
Ge	72	2	H2	96.58766023	1506551.707
In	115	1	He	95.16359304	5833710.140
Tb	159	1	He	99.04666649	14330681.457
Ir	193	1	He	98.06497903	7263054.060

Sample Name 4308540\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 228SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:11:55  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	124.417051	1.1	43527.030
Be	9	2	H2	97.915514	1.1	35269.410
B	11	2	H2	130.805881	1.8	66459.957
Na	23	1	He	47304.00078	1.8	38919245.253
Mg	24	1	He	34099.31905	1.9	15916311.427
Al	27	1	He	1970.223696	2.0	467954.343
Si	28	2	H2	13636.16042	0.6	35791064.000
K	39	1	He	7396.563045	2.4	4974940.653
Ca	43	1	He	84709.79306	2.4	167245.517
Ti	47	1	He	103.665383	3.0	22733.817
V	51	1	He	107.973673	3.3	658598.847
Cr	52	1	He	108.680079	2.6	791361.563
Mn	55	1	He	103.550742	2.3	571061.063
Fe	56	1	He	2129.564323	2.3	14722102.667
Co	59	1	He	104.197115	1.3	1235486.917
Ni	60	1	He	105.286581	1.9	309495.643
Cu	63	1	He	103.409913	1.8	848066.893
Zn	66	1	He	104.167216	1.9	195956.150
As	75	1	He	105.868083	2.1	175778.293
Se	78	2	H2	106.405370	0.4	82848.763
Sr	88	1	He	427.620202	1.5	4650464.513
Mo	95	1	He	106.832363	2.1	617895.603
Pd	105	1	He	20.953282	1.8	181597.067
Ag	107	1	He	52.200925	2.8	964320.637
Cd	111	1	He	105.325646	2.0	363332.950
Sn	118	1	He	103.192661	1.6	915225.483
Sb	121	1	He	105.165588	1.7	1373091.283
Ba	138	1	He	294.515714	2.0	8798283.620
Pt	195	1	He	21.029523	2.5	263225.487
Hg	202	1	He	-0.004613		190.333
Tl	205	1	He	106.965789	2.7	4929755.550
Pb	208	1	He	103.302597	2.5	648589.330
Bi	209	1	He	101.102872	1.7	5366840.337
Th	232	1	He	107.077912	2.6	6935924.480
U	238	1	He	115.759822	2.6	7200302.393

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	85.53449491	515071.867
Sc	45	2	H2	92.57265646	4095964.667
Ge	72	1	He	89.63865570	446985.147
Ge	72	2	H2	94.85209115	1479480.707
In	115	1	He	90.26167617	5533213.267
Tb	159	1	He	96.60912912	13978003.543
Ir	193	1	He	94.67741312	7012158.433

Sample Name 4308541\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 229SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:15:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	127.907420	0.9	44703.930
Be	9	2	H2	100.618088	0.8	36208.283
B	11	2	H2	138.408946	0.7	68706.943
Na	23	1	He	48491.33719	0.1	40240682.733
Mg	24	1	He	34999.49990	0.2	16477762.667
Al	27	1	He	1994.241146	0.1	477766.323
Si	28	2	H2	14194.51303	1.0	37220376.000
K	39	1	He	7647.368209	0.2	5186408.153
Ca	43	1	He	87496.90817	0.3	174256.917
Ti	47	1	He	105.467821	1.3	23333.760
V	51	1	He	108.958365	0.5	670508.560
Cr	52	1	He	109.985169	0.1	807864.663
Mn	55	1	He	104.695971	0.3	582413.917
Fe	56	1	He	2150.440531	0.5	14996104.000
Co	59	1	He	105.621821	0.3	1259857.087
Ni	60	1	He	106.751978	0.6	315694.500
Cu	63	1	He	104.197610	0.3	859671.710
Zn	66	1	He	105.006047	0.8	198722.187
As	75	1	He	107.439994	0.3	179465.353
Se	78	2	H2	108.590107	0.4	84219.247
Sr	88	1	He	442.671514	0.8	4842942.843
Mo	95	1	He	108.327725	0.6	629001.457
Pd	105	1	He	21.166356	1.1	184160.980
Ag	107	1	He	52.464679	0.6	973086.107
Cd	111	1	He	106.778924	0.3	369791.440
Sn	118	1	He	104.751277	0.3	932693.320
Sb	121	1	He	106.725457	0.2	1398918.990
Ba	138	1	He	301.571002	1.0	9044295.700
Pt	195	1	He	21.439691	1.1	268767.177
Hg	202	1	He	-0.004831		189.333
Tl	205	1	He	108.172475	0.9	4993489.510
Pb	208	1	He	104.158207	0.3	6549961.570
Bi	209	1	He	101.230376	0.8	5428018.040
Th	232	1	He	106.853779	0.1	6992765.730
U	238	1	He	116.533950	0.3	7323110.933

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	86.25057448	519383.957
Sc	45	2	H2	92.48455611	4092066.583
Ge	72	1	He	90.16101977	449589.927
Ge	72	2	H2	94.48094569	1473691.667
In	115	1	He	90.59854946	5553864.243
Tb	159	1	He	96.73927285	13996833.540
Ir	193	1	He	95.61948803	7081931.977

Sample Name 10606181002\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 230SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:19:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	19.470688	0.8	6921.583
Be	9	2	H2	0.123357	20.6	64.500
B	11	2	H2	-5.962251		25081.063
Na	23	1	He	44973.96125	0.2	36764832.783
Mg	24	1	He	28939.01894	0.1	13421666.467
Al	27	1	He	13.817576	2.3	3328.377
Si	28	2	H2	20236.63566	0.4	53516140.000
K	39	1	He	8888.483349	0.3	5927857.203
Ca	43	1	He	101029.5811	0.5	198198.997
Ti	47	1	He	0.438793	21.8	97.333
V	51	1	He	0.166743	39.0	471.540
Cr	52	1	He	0.808086	0.6	7940.830
Mn	55	1	He	274.960914	0.4	1506330.250
Fe	56	1	He	666.084053	0.1	4582488.167
Co	59	1	He	0.057758	8.5	732.023
Ni	60	1	He	0.522839	3.1	1711.437
Cu	63	1	He	0.184184	1.4	1793.450
Zn	66	1	He	2.604681	1.8	5062.227
As	75	1	He	1.488026	0.9	2606.737
Se	78	2	H2	0.022131	18.8	56.000
Sr	88	1	He	370.576136	0.1	4008087.130
Mo	95	1	He	2.825137	1.0	16556.960
Pd	105	1	He	0.231087	7.0	2201.863
Ag	107	1	He	0.194905	27.8	3730.553
Cd	111	1	He	0.011616	7.5	60.357
Sn	118	1	He	0.057430	15.9	645.023
Sb	121	1	He	0.043015	9.9	603.353
Ba	138	1	He	624.349408	1.0	18887621.803
Pt	195	1	He	0.018195	4.7	428.677
Hg	202	1	He	-0.007579		171.667
Tl	205	1	He	0.044931	20.9	2526.937
Pb	208	1	He	0.058141	5.4	6332.277
Bi	209	1	He	0.014857	19.7	2890.373
Th	232	1	He	0.044466	3.0	3842.263
U	238	1	He	0.043028	6.0	3602.200

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	84.96179433	511623.177
Sc	45	2	H2	93.27952727	4127240.833
Ge	72	1	He	89.13387437	444468.043
Ge	72	2	H2	94.62495926	1475937.957
In	115	1	He	91.39243140	5602530.723
Tb	159	1	He	96.21936306	13921609.790
Ir	193	1	He	95.00997604	7036789.270

Sample Name 10606181003\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 231SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:23:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	46.314495	2.1	16222.490
Be	9	2	H2	0.099028	9.5	55.167
B	11	2	H2	347.878155	1.9	132251.650
Na	23	1	He	109021.7294	1.4	89663638.663
Mg	24	1	He	56266.71106	1.5	26254702.943
Al	27	1	He	15.299282	1.2	3701.130
Si	28	2	H2	14948.49342	1.1	39179470.667
K	39	1	He	8653.750629	1.2	5809081.370
Ca	43	1	He	143937.4161	1.4	284133.950
Ti	47	1	He	0.463440	13.0	103.333
V	51	1	He	0.317796	35.4	1399.983
Cr	52	1	He	0.708831	1.6	7269.813
Mn	55	1	He	1539.733574	1.4	8486735.333
Fe	56	1	He	5596.013280	1.4	38665021.333
Co	59	1	He	1.204903	1.9	14172.233
Ni	60	1	He	5.850759	1.1	17173.433
Cu	63	1	He	0.243945	6.4	2266.187
Zn	66	1	He	2.483549	2.2	4806.147
As	75	1	He	59.388687	1.1	97541.267
Se	78	2	H2	0.106480	13.0	121.000
Sr	88	1	He	667.852269	1.0	7179237.810
Mo	95	1	He	1.209618	1.7	6929.693
Pd	105	1	He	0.416209	2.6	3737.190
Ag	107	1	He	0.562567	5.8	10367.237
Cd	111	1	He	0.014691	28.7	69.420
Sn	118	1	He	0.159251	5.0	1523.433
Sb	121	1	He	0.082926	1.7	1105.057
Ba	138	1	He	517.886044	2.0	15298773.937
Pt	195	1	He	0.009383	8.8	317.337
Hg	202	1	He	-0.009555		158.667
Tl	205	1	He	0.014329	15.2	1118.393
Pb	208	1	He	0.070404	5.6	7062.413
Bi	209	1	He	0.006890	16.2	2466.943
Th	232	1	He	0.018996	2.7	2186.870
U	238	1	He	0.057516	6.1	4505.827

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	85.50048682	514867.077
Sc	45	2	H2	92.44533406	4090331.167
Ge	72	1	He	88.59745709	441793.187
Ge	72	2	H2	94.16933311	1468831.207
In	115	1	He	89.25158319	5471292.637
Tb	159	1	He	95.74194468	13852533.960
Ir	193	1	He	95.01555682	7037202.603

Sample Name 10606181003\_B69934Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 232SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:26:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.121602	0.4	1855.947
Be	9	2	H2	0.065541	18.3	43.167
B	11	2	H2	-33.560429		16493.143
Na	23	1	He	11394.34463	0.7	9637527.150
Mg	24	1	He	5895.263130	1.2	2830008.810
Al	27	1	He	2.896023	2.5	776.687
Si	28	2	H2	1560.256739	0.8	4104468.000
K	39	1	He	896.059629	0.3	676139.420
Ca	43	1	He	14813.04926	1.0	30054.030
Ti	47	1	He	0.070685	32.7	17.667
V	51	1	He	0.026701	284.2	-391.477
Cr	52	1	He	0.112316	8.1	3018.987
Mn	55	1	He	156.780537	0.8	888052.103
Fe	56	1	He	578.237081	0.8	4114034.167
Co	59	1	He	0.130912	3.8	1640.767
Ni	60	1	He	0.589495	2.1	1960.807
Cu	63	1	He	0.028578	20.5	540.010
Zn	66	1	He	0.364271	6.9	899.363
As	75	1	He	5.981952	0.3	10308.500
Se	78	2	H2	-0.002727		37.000
Sr	88	1	He	67.250808	0.8	748303.373
Mo	95	1	He	0.124654	2.3	762.020
Pd	105	1	He	0.042104	3.1	561.687
Ag	107	1	He	0.112692	3.4	2261.867
Cd	111	1	He	0.006348	40.8	43.193
Sn	118	1	He	0.029767	10.1	408.343
Sb	121	1	He	0.014002	28.7	226.670
Ba	138	1	He	51.058907	0.8	1589714.300
Pt	195	1	He	0.002316	80.6	234.000
Hg	202	1	He	-0.010321		157.000
Tl	205	1	He	0.006673	19.6	783.363
Pb	208	1	He	0.004618	51.7	3026.827
Bi	209	1	He	0.002556	66.2	2293.577
Th	232	1	He	0.005651	14.0	1353.413
U	238	1	He	0.007790	28.8	1438.423

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.83715304	528938.020
Sc	45	2	H2	92.52223565	4093733.750
Ge	72	1	He	91.68790825	457203.790
Ge	72	2	H2	95.21079381	1485075.667
In	115	1	He	94.04913519	5765391.743
Tb	159	1	He	97.54031125	14112732.707
Ir	193	1	He	97.46069335	7218298.433



Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 233\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:30:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	80.654824	0.7	28488.000
Be	9	2	H2	77.808851	0.2	28276.643
B	11	2	H2	0.920210	82.5	27217.747
Na	23	1	He	1000.593273	1.5	877902.407
Mg	24	1	He	984.708684	1.1	488459.057
Al	27	1	He	973.257274	1.1	243542.427
Si	28	2	H2	491.974482	1.2	1315198.873
K	39	1	He	1001.037898	1.2	766819.837
Ca	43	1	He	969.192096	1.5	2028.180
Ti	47	1	He	78.223630	1.8	18072.393
V	51	1	He	80.298814	1.0	515922.487
Cr	52	1	He	81.743715	1.8	627573.603
Mn	55	1	He	79.151645	1.8	459865.220
Fe	56	1	He	518.280469	1.9	3782248.750
Co	59	1	He	81.425204	0.8	1018003.293
Ni	60	1	He	82.677220	0.7	256316.853
Cu	63	1	He	82.246212	0.8	711307.480
Zn	66	1	He	80.720265	0.3	160171.690
As	75	1	He	78.733094	0.6	137889.643
Se	78	2	H2	81.810887	0.8	64561.967
Sr	88	1	He	80.243430	1.0	920248.557
Mo	95	1	He	75.700473	0.6	472489.053
Pd	105	1	He	81.010696	1.4	757068.163
Ag	107	1	He	40.236719	2.7	802078.503
Cd	111	1	He	79.316637	0.9	295261.537
Sn	118	1	He	75.913693	1.7	726526.003
Sb	121	1	He	77.011081	1.2	1085003.760
Ba	138	1	He	77.383504	1.7	2494562.563
Pt	195	1	He	81.599404	0.9	1059854.123
Hg	202	1	He	3.819397	0.4	24482.760
Tl	205	1	He	41.648519	1.1	1993363.930
Pb	208	1	He	80.912907	0.6	5275218.900
Bi	209	1	He	79.527433	0.7	4475850.457
Th	232	1	He	75.485633	1.4	5184429.507
U	238	1	He	76.251427	0.5	5029169.403

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.08772821	542490.540
Sc	45	2	H2	93.38098478	4131729.917
Ge	72	1	He	94.50574991	471255.020
Ge	72	2	H2	96.11839174	1499232.167
In	115	1	He	97.38839034	5970094.467
Tb	159	1	He	100.2828650	14509542.280
Ir	193	1	He	100.3503037	7432313.637

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 234\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:34:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.160748	11.7	125.833
Be	9	2	H2	0.062863	5.3	42.833
B	11	2	H2	-80.398535		2297.673
Na	23	1	He	7.535830	8.1	17381.827
Mg	24	1	He	-3.353926		2751.947
Al	27	1	He	0.105900	49.5	97.667
Si	28	2	H2	-0.501814		11836.057
K	39	1	He	-4.609037		62764.290
Ca	43	1	He	3.687052	62.9	19.983
Ti	47	1	He	0.013989	81.6	5.000
V	51	1	He	0.058103	168.6	-194.910
Cr	52	1	He	-0.007489		2160.830
Mn	55	1	He	0.091886	1.8	784.690
Fe	56	1	He	0.276363	22.3	12557.393
Co	59	1	He	0.013642	18.8	223.333
Ni	60	1	He	0.006201	45.8	212.667
Cu	63	1	He	-0.001806		292.000
Zn	66	1	He	0.016490	31.9	236.667
As	75	1	He	-0.013064		137.000
Se	78	2	H2	-0.014066		28.667
Sr	88	1	He	0.022163	45.8	393.343
Mo	95	1	He	0.015797	36.1	109.333
Pd	105	1	He	0.022644	8.0	398.343
Ag	107	1	He	0.175175	29.7	3577.177
Cd	111	1	He	0.007181	13.9	47.650
Sn	118	1	He	0.007773	29.4	211.667
Sb	121	1	He	0.007560	9.7	143.333
Ba	138	1	He	0.022367	23.6	791.697
Pt	195	1	He	0.003056	75.7	247.333
Hg	202	1	He	0.007848	15.8	273.667
Tl	205	1	He	0.040258	20.5	2385.240
Pb	208	1	He	-0.003576		2548.453
Bi	209	1	He	0.001600	214.2	2300.247
Th	232	1	He	0.015231	6.0	2045.177
U	238	1	He	0.001593	121.1	1070.053

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.31886267	537860.583
Sc	45	2	H2	93.90120194	4154747.417
Ge	72	1	He	93.95596193	468513.490
Ge	72	2	H2	97.45930514	1520147.420
In	115	1	He	97.03878188	5948662.800
Tb	159	1	He	99.15613331	14346519.790
Ir	193	1	He	100.0760437	7412000.930

Sample Name 10606199001\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 235SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:38:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	63.143708	0.6	22201.873
Be	9	2	H2	0.060948	13.2	41.667
B	11	2	H2	204.488007	0.5	89166.997
Na	23	1	He	61595.21636	1.9	50458977.583
Mg	24	1	He	25530.26994	1.9	11867168.987
Al	27	1	He	76.753749	1.6	18219.427
Si	28	2	H2	13577.96712	0.1	35763192.000
K	39	1	He	4626.423645	1.3	3122619.643
Ca	43	1	He	113025.3063	2.0	222216.413
Ti	47	1	He	2.599148	50.4	568.823
V	51	1	He	2.927086	0.4	17259.460
Cr	52	1	He	1.124274	2.6	10244.927
Mn	55	1	He	2.068492	1.7	11599.270
Fe	56	1	He	52.593131	2.0	371895.123
Co	59	1	He	0.062449	4.2	785.357
Ni	60	1	He	0.412159	4.7	1383.403
Cu	63	1	He	0.799799	2.9	6791.597
Zn	66	1	He	3.129304	2.7	6024.600
As	75	1	He	5.010031	2.1	8392.097
Se	78	2	H2	5.488542	0.8	4337.990
Sr	88	1	He	775.536392	1.8	8362565.290
Mo	95	1	He	15.196526	2.0	88584.750
Pd	105	1	He	0.472555	4.9	4299.017
Ag	107	1	He	0.081209	6.2	1601.777
Cd	111	1	He	0.034325	1.8	139.053
Sn	118	1	He	0.058378	12.0	650.023
Sb	121	1	He	0.329746	2.3	4374.057
Ba	138	1	He	51.466104	1.6	1549481.123
Pt	195	1	He	0.009733	17.8	320.007
Hg	202	1	He	0.006640	85.8	255.333
Tl	205	1	He	0.037480	2.6	2165.197
Pb	208	1	He	0.104215	7.7	9117.910
Bi	209	1	He	0.001632	96.6	2170.220
Th	232	1	He	0.028539	6.7	2785.320
U	238	1	He	48.205961	2.0	2987405.373

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	85.16997174	512876.780
Sc	45	2	H2	92.89586311	4110265.250
Ge	72	1	He	88.88324879	443218.293
Ge	72	2	H2	95.45901055	1488947.293
In	115	1	He	90.95833884	5575920.020
Tb	159	1	He	95.25717130	13782393.963
Ir	193	1	He	94.29464012	6983808.853

Sample Name 10606199002\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 236SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:41:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	70.642388	1.1	25017.067
Be	9	2	H2	0.051833	54.9	38.667
B	11	2	H2	515.007527	0.9	185262.547
Na	23	1	He	75278.75802	0.3	62225629.073
Mg	24	1	He	15037.96615	0.3	7055209.267
Al	27	1	He	6.658091	1.8	1657.430
Si	28	2	H2	11736.20841	0.9	31146134.667
K	39	1	He	4959.978642	0.4	3373239.843
Ca	43	1	He	95974.69525	0.5	190406.810
Ti	47	1	He	0.281202	8.6	63.667
V	51	1	He	0.004457	704.2	-517.763
Cr	52	1	He	0.339895	3.0	4613.400
Mn	55	1	He	19.009391	1.4	105538.933
Fe	56	1	He	99.656783	0.4	701988.707
Co	59	1	He	0.073542	5.7	924.700
Ni	60	1	He	0.311467	1.5	1101.377
Cu	63	1	He	0.223341	3.0	2127.493
Zn	66	1	He	1.223691	2.0	2498.223
As	75	1	He	17.896132	0.4	29886.760
Se	78	2	H2	0.015511	56.1	51.667
Sr	88	1	He	845.720565	0.3	9210955.697
Mo	95	1	He	24.157296	0.8	142947.077
Pd	105	1	He	0.495086	6.6	4564.113
Ag	107	1	He	0.037621	2.4	801.697
Cd	111	1	He	0.044471	1.9	176.937
Sn	118	1	He	0.052831	8.5	610.020
Sb	121	1	He	0.029299	5.5	426.677
Ba	138	1	He	28.511990	0.4	871436.990
Pt	195	1	He	0.010349	6.9	330.677
Hg	202	1	He	0.004810	72.7	247.000
Tl	205	1	He	0.037777	8.2	2200.210
Pb	208	1	He	0.016895	7.6	3751.893
Bi	209	1	He	-0.000141		2090.203
Th	232	1	He	0.011081	11.4	1670.123
U	238	1	He	8.546937	0.8	533955.980

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	85.92174494	517403.810
Sc	45	2	H2	93.59373874	4141143.417
Ge	72	1	He	89.75699536	447575.250
Ge	72	2	H2	96.06434297	1498389.127
In	115	1	He	92.31982059	5659381.453
Tb	159	1	He	96.17047275	13914536.040
Ir	193	1	He	94.91110843	7029466.770

Sample Name 10606199003\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 237SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:45:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	61.852345	0.4	22001.413
Be	9	2	H2	0.057755	14.7	41.000
B	11	2	H2	408.685555	1.1	153209.143
Na	23	1	He	84244.53291	0.7	70595487.280
Mg	24	1	He	12521.59064	0.5	5956359.913
Al	27	1	He	13.239152	3.4	3272.700
Si	28	2	H2	13542.91906	0.7	36084998.667
K	39	1	He	4591.342502	0.4	3170379.227
Ca	43	1	He	79404.06832	0.0	159708.390
Ti	47	1	He	0.317380	13.6	72.667
V	51	1	He	0.158803	27.1	434.620
Cr	52	1	He	0.803073	1.9	8104.260
Mn	55	1	He	264.305686	1.0	1484474.207
Fe	56	1	He	555.778626	0.8	3921731.167
Co	59	1	He	0.045192	7.1	596.013
Ni	60	1	He	0.254375	2.4	946.030
Cu	63	1	He	0.299513	0.8	2790.277
Zn	66	1	He	1.780880	2.6	3595.123
As	75	1	He	5.260383	0.5	9013.137
Se	78	2	H2	-0.001399		38.333
Sr	88	1	He	915.640503	0.5	10107555.473
Mo	95	1	He	22.120596	1.8	130651.930
Pd	105	1	He	0.550097	3.6	5040.933
Ag	107	1	He	0.023132	13.1	526.680
Cd	111	1	He	0.017067	20.0	80.147
Sn	118	1	He	0.049084	15.2	575.020
Sb	121	1	He	0.046107	4.6	650.020
Ba	138	1	He	66.828775	0.9	2038793.043
Pt	195	1	He	0.009780	21.5	325.340
Hg	202	1	He	0.007830	27.1	266.667
Tl	205	1	He	0.006754	23.2	780.033
Pb	208	1	He	0.090081	7.2	8367.713
Bi	209	1	He	0.002342	72.3	2226.893
Th	232	1	He	0.009183	5.4	1550.107
U	238	1	He	5.942549	0.8	372278.260

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.10589031	524534.500
Sc	45	2	H2	93.97307105	4157927.333
Ge	72	1	He	90.97326121	453640.187
Ge	72	2	H2	96.16176846	1499908.747
In	115	1	He	92.16209875	5649712.803
Tb	159	1	He	96.68328097	13988732.290
Ir	193	1	He	95.10280155	7043664.270

Sample Name 10606199004\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 238SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:49:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	51.657618	0.5	19121.360
Be	9	2	H2	0.267022	5.5	122.167
B	11	2	H2	50.022730	1.5	44241.760
Na	23	1	He	56447.20293	0.2	47996075.950
Mg	24	1	He	29628.89549	0.1	14293911.873
Al	27	1	He	6424.391106	0.3	1576893.670
Si	28	2	H2	32865.84403	0.7	91050650.667
K	39	1	He	4467.852854	0.6	3131904.017
Ca	43	1	He	88431.72664	0.8	180458.760
Ti	47	1	He	136.421172	0.5	30925.017
V	51	1	He	14.569987	2.1	91383.167
Cr	52	1	He	5.010757	1.2	39807.123
Mn	55	1	He	93.652795	0.8	533849.393
Fe	56	1	He	4086.017454	0.7	29186965.333
Co	59	1	He	1.512274	1.3	18290.793
Ni	60	1	He	3.214992	3.3	9795.310
Cu	63	1	He	8.191349	1.0	68610.007
Zn	66	1	He	23.610693	0.7	45334.440
As	75	1	He	4.777247	0.6	8217.163
Se	78	2	H2	1.153531	1.9	957.363
Sr	88	1	He	604.013451	0.9	6681613.233
Mo	95	1	He	1.494332	1.4	8953.493
Pd	105	1	He	0.366347	2.6	3462.117
Ag	107	1	He	0.051343	13.7	1073.383
Cd	111	1	He	0.165123	7.3	609.733
Sn	118	1	He	0.483820	4.3	4570.790
Sb	121	1	He	0.152961	3.9	2101.843
Ba	138	1	He	108.256303	0.3	3346296.827
Pt	195	1	He	0.008934	45.6	316.003
Hg	202	1	He	0.000525	332.1	223.000
Tl	205	1	He	0.110747	3.9	5606.223
Pb	208	1	He	3.139852	0.9	200929.190
Bi	209	1	He	0.055261	10.3	4974.373
Th	232	1	He	1.954045	1.4	126301.343
U	238	1	He	12.302589	0.7	758787.777

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.37713529	532189.687
Sc	45	2	H2	97.72807429	4324071.000
Ge	72	1	He	91.16688982	454605.720
Ge	72	2	H2	96.96034715	1512364.790
In	115	1	He	93.37484724	5724056.603
Tb	159	1	He	97.15624433	14057163.540
Ir	193	1	He	93.74689649	6943240.940

Sample Name 10606199004\_B69934Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 239SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:53:13  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.877527	1.9	2168.157
Be	9	2	H2	0.035236	17.7	33.000
B	11	2	H2	-63.955625		7425.150
Na	23	1	He	5891.581635	0.4	5091140.030
Mg	24	1	He	3099.402732	0.5	1520632.687
Al	27	1	He	677.287943	0.4	168690.587
Si	28	2	H2	3570.051876	1.0	9588943.333
K	39	1	He	467.582670	0.4	391729.933
Ca	43	1	He	9155.558025	0.9	18962.350
Ti	47	1	He	15.087947	2.2	3471.100
V	51	1	He	1.554935	3.9	9382.150
Cr	52	1	He	0.525143	3.2	6224.000
Mn	55	1	He	9.997502	0.8	58033.057
Fe	56	1	He	436.126581	0.5	3169361.917
Co	59	1	He	0.159656	3.0	2036.150
Ni	60	1	He	0.334790	5.9	1223.390
Cu	63	1	He	0.870674	0.9	7782.767
Zn	66	1	He	2.614507	3.0	5350.333
As	75	1	He	0.465422	2.4	968.197
Se	78	2	H2	0.086071	33.2	110.000
Sr	88	1	He	60.981676	0.9	694651.737
Mo	95	1	He	0.153514	3.6	966.037
Pd	105	1	He	0.038553	4.7	546.683
Ag	107	1	He	0.016755	7.7	428.343
Cd	111	1	He	0.017287	17.4	85.160
Sn	118	1	He	0.054077	4.5	653.353
Sb	121	1	He	0.017292	13.7	280.007
Ba	138	1	He	10.900383	0.9	350338.013
Pt	195	1	He	0.002027	42.8	235.333
Hg	202	1	He	-0.000516		222.333
Tl	205	1	He	0.016015	4.2	1245.073
Pb	208	1	He	0.323160	1.3	23725.007
Bi	209	1	He	0.006878	56.3	2546.963
Th	232	1	He	0.196571	1.1	14177.827
U	238	1	He	1.214681	0.9	79250.237

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.64269316	539810.627
Sc	45	2	H2	94.63688329	4187298.333
Ge	72	1	He	93.86269586	468048.417
Ge	72	2	H2	98.46259776	1535796.543
In	115	1	He	97.06817673	5950464.760
Tb	159	1	He	99.67414242	14421468.537
Ir	193	1	He	98.09626967	7265371.560

Sample Name 10606199005\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 240SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:56:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	40.898864	0.9	14287.387
Be	9	2	H2	0.041871	48.5	34.500
B	11	2	H2	33.634567	2.0	36753.990
Na	23	1	He	58236.41192	0.4	49001182.603
Mg	24	1	He	24045.13907	0.7	11480164.830
Al	27	1	He	766.675843	0.6	186286.170
Si	28	2	H2	14518.23137	0.7	37928302.667
K	39	1	He	2883.802831	0.7	2023359.763
Ca	43	1	He	89660.77663	0.4	181062.780
Ti	47	1	He	15.334254	0.4	3441.410
V	51	1	He	3.370600	1.2	20493.620
Cr	52	1	He	1.204803	1.1	11120.890
Mn	55	1	He	12.806491	0.7	72458.140
Fe	56	1	He	446.019902	0.4	3162037.917
Co	59	1	He	0.194746	1.7	2388.207
Ni	60	1	He	0.586953	4.9	1931.470
Cu	63	1	He	1.022305	1.1	8776.660
Zn	66	1	He	2.701904	4.4	5334.997
As	75	1	He	2.769965	1.5	4803.800
Se	78	2	H2	1.851681	1.8	1473.410
Sr	88	1	He	821.295398	0.3	9036782.157
Mo	95	1	He	1.820514	1.4	10889.517
Pd	105	1	He	0.490430	3.9	4567.447
Ag	107	1	He	0.060957	11.6	1255.067
Cd	111	1	He	0.017725	14.7	83.373
Sn	118	1	He	0.065260	15.5	730.023
Sb	121	1	He	0.065310	12.1	916.707
Ba	138	1	He	122.915627	0.8	3793916.090
Pt	195	1	He	0.008238	4.9	308.667
Hg	202	1	He	0.006263	20.2	259.333
Tl	205	1	He	0.019860	2.1	1396.753
Pb	208	1	He	0.287317	0.3	20936.513
Bi	209	1	He	0.016713	26.1	3027.073
Th	232	1	He	0.193934	4.6	13732.313
U	238	1	He	7.851765	0.5	497283.653

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.45627320	526644.437
Sc	45	2	H2	92.14026468	4076833.083
Ge	72	1	He	90.67903009	452172.997
Ge	72	2	H2	94.42238239	1472778.210
In	115	1	He	93.23896126	5715726.533
Tb	159	1	He	97.50207043	14107199.790
Ir	193	1	He	96.20087392	7124991.560



Sample Name 10606199006\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 241SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:00:43  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	97.434595	2.0	34563.247
Be	9	2	H2	0.029732	27.1	30.667
B	11	2	H2	103.749727	5.1	59016.303
Na	23	1	He	188211.0905	0.9	158568037.640
Mg	24	1	He	28601.75847	1.2	13674025.217
Al	27	1	He	39.999551	1.8	9799.557
Si	28	2	H2	6864.963068	2.5	18267085.333
K	39	1	He	3557.128920	0.7	2484296.580
Ca	43	1	He	118758.3471	0.7	240166.637
Ti	47	1	He	0.844921	9.5	191.667
V	51	1	He	0.603085	29.6	3214.463
Cr	52	1	He	6.275487	0.8	48857.670
Mn	55	1	He	1.982185	2.1	11442.493
Fe	56	1	He	38.878210	0.8	285474.470
Co	59	1	He	0.085601	7.4	1068.043
Ni	60	1	He	0.962679	5.6	3018.320
Cu	63	1	He	0.547324	2.8	4788.803
Zn	66	1	He	4.135157	2.1	7980.210
As	75	1	He	0.438395	4.3	881.197
Se	78	2	H2	3.069250	2.0	2467.883
Sr	88	1	He	1248.436312	0.2	13600037.717
Mo	95	1	He	3.550566	0.4	20936.030
Pd	105	1	He	0.743419	0.7	6736.653
Ag	107	1	He	0.268989	4.8	5154.313
Cd	111	1	He	0.036488	10.6	148.233
Sn	118	1	He	0.069632	18.3	760.027
Sb	121	1	He	0.067007	2.0	926.707
Ba	138	1	He	75.944334	0.4	2311824.237
Pt	195	1	He	0.011141	17.6	341.340
Hg	202	1	He	0.004958	99.1	248.333
Tl	205	1	He	0.005493	22.3	720.027
Pb	208	1	He	0.056304	2.4	6225.573
Bi	209	1	He	-0.000666		2060.197
Th	232	1	He	0.014266	2.8	1875.150
U	238	1	He	36.083864	0.1	2248712.517

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.58747366	527434.500
Sc	45	2	H2	93.85491145	4152699.250
Ge	72	1	He	89.77710356	447675.520
Ge	72	2	H2	96.44168334	1504274.793
In	115	1	He	91.95558600	5637053.177
Tb	159	1	He	96.34580915	13939904.790
Ir	193	1	He	94.79663771	7020988.647

Sample Name 10606211001\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 242SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:04:31  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.428234	2.4	2043.807
Be	9	2	H2	0.026088	39.1	30.167
B	11	2	H2	255.070496	0.5	108457.037
Na	23	1	He	141627.0454	1.1	121362644.857
Mg	24	1	He	23934.84657	1.1	11639410.247
Al	27	1	He	23.464625	3.3	5875.840
Si	28	2	H2	5700.465393	0.5	15576741.667
K	39	1	He	17507.16739	1.3	12177643.153
Ca	43	1	He	99049.73592	1.0	203733.247
Ti	47	1	He	0.598288	18.4	138.333
V	51	1	He	-8.397150		-53998.360
Cr	52	1	He	284.139158	1.1	2151993.167
Mn	55	1	He	18.929482	0.9	108966.967
Fe	56	1	He	41.331831	0.5	308027.030
Co	59	1	He	1.079070	1.6	13137.943
Ni	60	1	He	273.530623	0.2	822103.877
Cu	63	1	He	6.187606	0.4	52183.737
Zn	66	1	He	42.704533	0.5	82284.737
As	75	1	He	1.695724	1.4	3033.150
Se	78	2	H2	1.059929	3.7	899.363
Sr	88	1	He	257.017063	0.8	2858826.523
Mo	95	1	He	3.150941	1.0	18668.230
Pd	105	1	He	0.148358	4.6	1493.427
Ag	107	1	He	0.037870	11.4	806.700
Cd	111	1	He	0.160939	3.6	588.317
Sn	118	1	He	0.040279	6.1	496.677
Sb	121	1	He	0.574294	1.4	7712.187
Ba	138	1	He	75.291443	0.5	2302877.673
Pt	195	1	He	0.010048	39.6	328.007
Hg	202	1	He	0.015577	23.6	313.333
Tl	205	1	He	0.074816	3.1	3910.607
Pb	208	1	He	0.098725	3.0	8889.503
Bi	209	1	He	0.007334	53.4	2490.277
Th	232	1	He	0.006065	30.2	1346.750
U	238	1	He	1.190609	0.5	75241.617

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.08450595	536449.333
Sc	45	2	H2	96.32301897	4261903.000
Ge	72	1	He	91.66438886	457086.510
Ge	72	2	H2	98.77945917	1540738.873
In	115	1	He	92.39099194	5663744.393
Tb	159	1	He	96.43365446	13952614.790
Ir	193	1	He	94.99920549	7035991.563

Sample Name 10606291001\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 243SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:08:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	8.649940	2.6	3206.507
Be	9	2	H2	0.013819	35.4	25.500
B	11	2	H2	-44.615944		13639.637
Na	23	1	He	47097.46201	0.4	40229136.900
Mg	24	1	He	15898.78474	0.5	7706786.137
Al	27	1	He	38.335180	1.8	9522.377
Si	28	2	H2	12555.22783	0.4	34204568.000
K	39	1	He	5410.590293	0.8	3796075.880
Ca	43	1	He	53938.09929	0.4	110573.597
Ti	47	1	He	1.578865	37.1	361.023
V	51	1	He	3.747215	6.6	23193.890
Cr	52	1	He	15.839302	0.7	121636.760
Mn	55	1	He	0.537852	3.9	3332.393
Fe	56	1	He	39.886632	0.5	296604.313
Co	59	1	He	0.036389	7.1	497.343
Ni	60	1	He	0.239686	3.8	915.363
Cu	63	1	He	0.594846	1.0	5324.990
Zn	66	1	He	3.125339	2.8	6250.030
As	75	1	He	4.408694	1.0	7689.877
Se	78	2	H2	5.424594	2.4	4383.673
Sr	88	1	He	300.308099	0.8	3363605.050
Mo	95	1	He	3.863007	0.4	23387.837
Pd	105	1	He	0.166597	2.5	1691.787
Ag	107	1	He	0.016583	14.7	413.343
Cd	111	1	He	0.002214	34.9	28.453
Sn	118	1	He	0.089251	9.7	961.710
Sb	121	1	He	0.295350	1.4	4070.623
Ba	138	1	He	63.098716	0.6	1972326.690
Pt	195	1	He	0.010813	26.5	343.340
Hg	202	1	He	0.003006	126.0	240.667
Tl	205	1	He	0.010569	13.7	970.047
Pb	208	1	He	0.037891	11.7	5163.740
Bi	209	1	He	0.002933	84.3	2280.247
Th	232	1	He	0.009726	7.1	1601.780
U	238	1	He	7.104401	1.3	449345.633

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.77683563	534596.603
Sc	45	2	H2	96.08103070	4251196.000
Ge	72	1	He	92.30556786	460283.763
Ge	72	2	H2	97.58544201	1522114.873
In	115	1	He	94.42066863	5788167.453
Tb	159	1	He	98.08524072	14191576.457
Ir	193	1	He	96.05894652	7114479.893

Sample Name 10606291001\_B69934Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 244SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:12:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.078684	0.8	460.343
Be	9	2	H2	0.012650	64.2	25.000
B	11	2	H2	-75.691987		3825.817
Na	23	1	He	4846.796295	0.3	4284486.083
Mg	24	1	He	1631.018733	0.3	820345.690
Al	27	1	He	5.290593	1.1	1420.070
Si	28	2	H2	1314.433770	0.4	3583599.667
K	39	1	He	543.975558	0.3	454946.633
Ca	43	1	He	5431.208114	0.9	11507.673
Ti	47	1	He	0.148095	15.4	36.667
V	51	1	He	0.428762	34.5	2221.470
Cr	52	1	He	1.640944	0.3	15051.063
Mn	55	1	He	0.091710	11.0	804.023
Fe	56	1	He	4.546140	1.1	44505.993
Co	59	1	He	0.005262	17.5	121.333
Ni	60	1	He	0.015867	25.0	246.667
Cu	63	1	He	0.066068	3.7	890.697
Zn	66	1	He	0.380568	4.5	970.703
As	75	1	He	0.420162	5.6	906.030
Se	78	2	H2	0.523727	6.6	465.677
Sr	88	1	He	30.031489	0.8	348499.450
Mo	95	1	He	0.386021	4.1	2462.883
Pd	105	1	He	0.009127	44.0	278.340
Ag	107	1	He	0.009163	27.6	283.340
Cd	111	1	He	-0.001472		15.887
Sn	118	1	He	0.009206	6.2	230.000
Sb	121	1	He	0.031665	12.8	491.680
Ba	138	1	He	6.190923	0.4	203126.993
Pt	195	1	He	0.002939	66.1	248.000
Hg	202	1	He	-0.001067		219.667
Tl	205	1	He	0.001043	6.7	535.017
Pb	208	1	He	0.000179	173.2	2816.813
Bi	209	1	He	-0.002008		2073.543
Th	232	1	He	0.000245	495.1	1006.717
U	238	1	He	0.705392	2.6	46767.317

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.66168596	551968.603
Sc	45	2	H2	95.82922984	4240054.833
Ge	72	1	He	95.59922678	476707.667
Ge	72	2	H2	98.90803015	1542744.293
In	115	1	He	99.07927927	6073749.190
Tb	159	1	He	100.0624138	14477646.033
Ir	193	1	He	98.83988080	7320446.143

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 245\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:15:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	79.317732	1.5	28209.820
Be	9	2	H2	76.458243	2.0	27975.590
B	11	2	H2	-0.432900		26987.330
Na	23	1	He	1013.297625	0.5	901309.127
Mg	24	1	He	987.448893	0.7	496620.303
Al	27	1	He	971.572567	0.9	246504.590
Si	28	2	H2	486.739940	1.4	1310300.503
K	39	1	He	1005.270398	0.7	780483.347
Ca	43	1	He	995.503766	2.1	2111.903
Ti	47	1	He	78.085126	1.0	18292.997
V	51	1	He	79.988547	1.1	521064.883
Cr	52	1	He	81.772160	0.7	636577.397
Mn	55	1	He	79.371156	0.2	467590.240
Fe	56	1	He	520.443274	1.1	3851213.833
Co	59	1	He	81.685608	0.8	1036395.543
Ni	60	1	He	82.589633	0.2	259832.867
Cu	63	1	He	82.121062	0.6	720733.833
Zn	66	1	He	80.640083	0.9	162374.307
As	75	1	He	78.943143	0.8	140304.093
Se	78	2	H2	80.561279	2.7	64435.497
Sr	88	1	He	79.783949	0.7	928552.510
Mo	95	1	He	75.605521	1.0	478185.563
Pd	105	1	He	80.718469	0.6	764408.087
Ag	107	1	He	40.082163	1.5	809726.550
Cd	111	1	He	78.878358	0.3	297546.617
Sn	118	1	He	75.450139	0.7	731754.523
Sb	121	1	He	76.238208	0.5	1088468.630
Ba	138	1	He	77.613522	0.5	2535464.910
Pt	195	1	He	81.673209	0.5	1061813.167
Hg	202	1	He	3.864473	0.6	24792.670
Tl	205	1	He	41.722429	0.7	1998787.420
Pb	208	1	He	81.406626	0.4	5312438.410
Bi	209	1	He	79.931273	1.1	4505390.973
Th	232	1	He	75.448973	0.6	5190003.570
U	238	1	He	75.870341	1.2	5011529.200

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.32749480	549956.170
Sc	45	2	H2	94.03186928	4160528.917
Ge	72	1	He	95.89928761	478203.927
Ge	72	2	H2	97.42488483	1519610.540
In	115	1	He	98.68198796	6049394.473
Tb	159	1	He	100.3779070	14523293.530
Ir	193	1	He	100.5069482	7443915.307

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 246\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:19:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.141948	16.4	120.833
Be	9	2	H2	0.040565	36.8	35.167
B	11	2	H2	-80.333486		2349.853
Na	23	1	He	13.191431	3.7	22430.207
Mg	24	1	He	-3.328644		2786.953
Al	27	1	He	0.047824	21.8	84.000
Si	28	2	H2	-0.623613		11671.267
K	39	1	He	-4.556391		63330.080
Ca	43	1	He	1.626219	107.4	15.883
Ti	47	1	He	0.003719	241.2	2.667
V	51	1	He	0.048521	70.6	-261.347
Cr	52	1	He	-0.012506		2140.830
Mn	55	1	He	0.022470	24.9	388.010
Fe	56	1	He	0.196863	19.8	12085.683
Co	59	1	He	0.008950	33.9	164.667
Ni	60	1	He	0.004571	71.4	207.333
Cu	63	1	He	-0.002365		286.667
Zn	66	1	He	0.002113	780.3	208.000
As	75	1	He	-0.023716		118.333
Se	78	2	H2	-0.017229		26.333
Sr	88	1	He	0.024941	19.5	425.010
Mo	95	1	He	0.015101	16.5	105.333
Pd	105	1	He	0.015663	41.3	335.010
Ag	107	1	He	0.168798	22.2	3467.140
Cd	111	1	He	0.004160	44.5	36.647
Sn	118	1	He	0.004203	47.6	178.333
Sb	121	1	He	0.006910	22.3	135.000
Ba	138	1	He	0.011003	11.8	428.343
Pt	195	1	He	0.006313	30.7	292.000
Hg	202	1	He	0.015798	27.4	326.337
Tl	205	1	He	0.037756	26.1	2283.553
Pb	208	1	He	-0.001774		2688.463
Bi	209	1	He	0.003177	164.7	2396.927
Th	232	1	He	0.020374	7.3	2405.240
U	238	1	He	0.002699	118.6	1146.730

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.07826260	542433.540
Sc	45	2	H2	95.19973713	4212202.333
Ge	72	1	He	93.83143894	467892.553
Ge	72	2	H2	97.98202146	1528300.627
In	115	1	He	97.52003860	5978164.757
Tb	159	1	He	100.0267648	14472488.117
Ir	193	1	He	100.4286681	7438117.597

Sample Name 10606348001\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 247SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:23:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.894318	2.2	1789.103
Be	9	2	H2	0.041240	25.3	34.667
B	11	2	H2	38.268127	2.4	38584.357
Na	23	1	He	11326.97716	0.9	9208988.197
Mg	24	1	He	61541.12522	1.2	28357961.243
Al	27	1	He	23.468793	3.2	5570.047
Si	28	2	H2	11708.70037	0.7	30934213.333
K	39	1	He	7016.429673	0.6	4663108.263
Ca	43	1	He	209864.5311	0.5	409113.753
Ti	47	1	He	0.450655	25.7	99.333
V	51	1	He	0.336015	33.9	1490.740
Cr	52	1	He	0.591989	0.5	6341.387
Mn	55	1	He	1928.473388	0.9	10496963.667
Fe	56	1	He	18092.24214	0.7	123426546.667
Co	59	1	He	0.154959	2.3	1874.123
Ni	60	1	He	3.599427	0.8	10676.583
Cu	63	1	He	2.447183	0.7	20199.333
Zn	66	1	He	477.058396	0.6	889825.940
As	75	1	He	5.091569	0.8	8533.013
Se	78	2	H2	0.158562	8.9	164.667
Sr	88	1	He	500.706276	0.8	5403070.960
Mo	95	1	He	0.714007	2.7	4160.620
Pd	105	1	He	0.324622	15.8	3002.200
Ag	107	1	He	0.046935	21.0	960.040
Cd	111	1	He	0.004781	30.4	36.250
Sn	118	1	He	0.233609	5.7	2210.197
Sb	121	1	He	0.137981	3.8	1845.140
Ba	138	1	He	164.804777	0.6	4948501.173
Pt	195	1	He	0.008616	4.3	305.333
Hg	202	1	He	0.006691	61.0	255.000
Tl	205	1	He	0.016541	25.4	1208.400
Pb	208	1	He	0.109364	7.0	9407.970
Bi	209	1	He	-0.000637		2050.200
Th	232	1	He	0.023662	3.1	2471.927
U	238	1	He	2.708432	1.8	168746.963

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	84.42917089	508415.823
Sc	45	2	H2	93.17479074	4122606.667
Ge	72	1	He	88.93082036	443455.510
Ge	72	2	H2	96.19408655	1500412.837
In	115	1	He	90.70328437	5560284.693
Tb	159	1	He	94.99733591	13744799.380
Ir	193	1	He	94.30989168	6984938.440

Sample Name 10606348001\_B69934Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 248SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:27:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.664091	2.8	302.667
Be	9	2	H2	0.018063	77.4	26.333
B	11	2	H2	-67.510064		6240.120
Na	23	1	He	1154.073807	0.5	995186.650
Mg	24	1	He	6342.254792	0.4	3073392.453
Al	27	1	He	3.296233	4.3	882.697
Si	28	2	H2	1240.958004	1.0	3299385.417
K	39	1	He	706.856726	0.9	552282.897
Ca	43	1	He	21346.91596	0.3	43717.473
Ti	47	1	He	0.044980	39.3	12.000
V	51	1	He	0.081827	101.3	-44.893
Cr	52	1	He	0.102612	19.6	2974.313
Mn	55	1	He	193.167770	0.7	1104543.707
Fe	56	1	He	1851.715993	0.2	13277237.667
Co	59	1	He	0.016908	6.0	263.333
Ni	60	1	He	0.377395	6.2	1352.067
Cu	63	1	He	0.243924	4.8	2397.540
Zn	66	1	He	50.260283	0.5	98952.303
As	75	1	He	0.489065	1.3	1007.540
Se	78	2	H2	-0.004587		36.333
Sr	88	1	He	50.362473	0.4	572709.613
Mo	95	1	He	0.073193	5.3	464.677
Pd	105	1	He	0.034811	6.5	510.013
Ag	107	1	He	0.023393	2.3	558.350
Cd	111	1	He	-0.001012		17.250
Sn	118	1	He	0.030993	29.6	431.677
Sb	121	1	He	0.015092	23.6	248.337
Ba	138	1	He	16.267611	0.7	521044.573
Pt	195	1	He	0.001243	43.4	226.000
Hg	202	1	He	0.001044	219.7	233.000
Tl	205	1	He	0.003422	50.8	648.357
Pb	208	1	He	0.004030	64.3	3065.163
Bi	209	1	He	-0.002752		2043.527
Th	232	1	He	0.003114	9.7	1208.397
U	238	1	He	0.271774	2.1	18725.200

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.67347567	533974.190
Sc	45	2	H2	93.43463941	4134103.917
Ge	72	1	He	93.69779937	467226.157
Ge	72	2	H2	97.61535826	1522581.500
In	115	1	He	96.74210571	5930475.983
Tb	159	1	He	100.0090742	14469928.533
Ir	193	1	He	99.47857651	7367750.303



Sample Name 10606348002\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 249SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:30:50  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.802056	2.6	1441.237
Be	9	2	H2	0.024487	26.2	29.333
B	11	2	H2	-34.458749		16753.257
Na	23	1	He	21112.66779	1.5	17713651.823
Mg	24	1	He	38268.30854	1.4	18209185.563
Al	27	1	He	58.552932	1.9	14245.130
Si	28	2	H2	11990.26349	0.4	32490007.333
K	39	1	He	5196.632104	1.4	3582679.947
Ca	43	1	He	103434.4583	1.8	208191.420
Ti	47	1	He	1.819179	5.3	408.343
V	51	1	He	0.447404	5.2	2232.247
Cr	52	1	He	0.817899	1.4	8221.000
Mn	55	1	He	1386.151577	1.8	7790203.167
Fe	56	1	He	1662.497891	1.6	11719695.000
Co	59	1	He	3.068570	2.5	37072.913
Ni	60	1	He	10.378737	1.1	31217.983
Cu	63	1	He	654.313527	1.1	5459267.333
Zn	66	1	He	52.414067	1.3	100439.830
As	75	1	He	3.248141	2.0	5638.433
Se	78	2	H2	0.303915	11.6	284.000
Sr	88	1	He	248.912220	1.8	2754632.457
Mo	95	1	He	0.568226	3.5	3382.410
Pd	105	1	He	0.148341	3.8	1496.757
Ag	107	1	He	0.021050	9.0	490.010
Cd	111	1	He	0.019914	19.9	90.723
Sn	118	1	He	4.841943	1.8	44192.810
Sb	121	1	He	0.344775	6.0	4652.480
Ba	138	1	He	459.321837	1.6	14081746.873
Pt	195	1	He	0.006988	16.5	294.000
Hg	202	1	He	0.002518	140.0	237.333
Tl	205	1	He	0.010002	40.2	941.707
Pb	208	1	He	110.653665	1.0	7042539.793
Bi	209	1	He	0.044939	6.9	4600.897
Th	232	1	He	0.017329	3.2	2128.520
U	238	1	He	0.292356	2.6	19631.570

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.18606785	525017.313
Sc	45	2	H2	95.56424888	4228330.500
Ge	72	1	He	91.21251881	454833.250
Ge	72	2	H2	97.86838852	1526528.207
In	115	1	He	92.62787569	5678265.820
Tb	159	1	He	97.91931549	14167569.373
Ir	193	1	He	97.30552847	7206806.350

Sample Name 10606348002\_B69934Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 250SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:34:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.479780	4.0	238.500
Be	9	2	H2	0.005459	80.2	21.833
B	11	2	H2	-76.488540		3497.903
Na	23	1	He	2167.758386	0.4	1858389.347
Mg	24	1	He	3953.038001	0.5	1915785.387
Al	27	1	He	7.017515	2.3	1797.780
Si	28	2	H2	1231.659577	0.4	3286160.417
K	39	1	He	522.466637	0.2	424974.513
Ca	43	1	He	10475.97259	1.1	21444.497
Ti	47	1	He	0.174091	13.1	41.333
V	51	1	He	0.093337	84.0	27.007
Cr	52	1	He	0.095212	20.2	2916.300
Mn	55	1	He	140.124255	0.2	800703.083
Fe	56	1	He	171.343426	0.6	1237147.043
Co	59	1	He	0.319379	2.5	3979.887
Ni	60	1	He	1.109219	1.5	3571.113
Cu	63	1	He	66.650904	1.5	566949.710
Zn	66	1	He	5.548340	0.5	11015.527
As	75	1	He	0.316584	0.6	702.687
Se	78	2	H2	0.007875	65.9	46.000
Sr	88	1	He	25.143453	0.3	283700.737
Mo	95	1	He	0.058874	2.0	370.677
Pd	105	1	He	0.009726	17.9	273.343
Ag	107	1	He	0.010569	34.2	300.003
Cd	111	1	He	-0.000381		19.263
Sn	118	1	He	0.486471	2.8	4694.153
Sb	121	1	He	0.033959	14.4	505.013
Ba	138	1	He	45.358293	0.6	1432082.790
Pt	195	1	He	-0.000364		204.000
Hg	202	1	He	-0.007786		176.000
Tl	205	1	He	0.000299	648.0	496.680
Pb	208	1	He	11.284206	0.9	731864.103
Bi	209	1	He	0.002951	81.8	2350.257
Th	232	1	He	0.000543	310.1	1028.390
U	238	1	He	0.027643	7.9	2751.983

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.60590177	533567.273
Sc	45	2	H2	93.75819448	4148419.917
Ge	72	1	He	92.94418730	463468.253
Ge	72	2	H2	96.86121436	1510818.540
In	115	1	He	95.37134616	5846445.803
Tb	159	1	He	99.43589396	14386997.283
Ir	193	1	He	98.95522630	7328989.057

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 251\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:38:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	77.706571	0.1	27365.107
Be	9	2	H2	74.899482	0.7	27136.067
B	11	2	H2	-3.145198		25891.423
Na	23	1	He	995.188084	0.4	860607.410
Mg	24	1	He	981.200403	0.3	479690.763
Al	27	1	He	974.137173	0.6	240234.563
Si	28	2	H2	484.903174	0.4	1292512.460
K	39	1	He	1015.826419	0.8	765907.097
Ca	43	1	He	1011.650817	2.1	2085.923
Ti	47	1	He	79.391560	0.5	18078.403
V	51	1	He	80.661255	0.3	510739.130
Cr	52	1	He	83.049106	0.2	628381.980
Mn	55	1	He	80.715865	0.7	462196.843
Fe	56	1	He	529.644778	0.6	3809349.917
Co	59	1	He	81.976272	1.1	1024382.083
Ni	60	1	He	83.076454	1.3	257422.007
Cu	63	1	He	82.887635	0.6	716483.440
Zn	66	1	He	81.024689	0.4	160688.257
As	75	1	He	79.552429	0.5	139251.927
Se	78	2	H2	80.305453	1.1	63607.453
Sr	88	1	He	80.483910	0.8	922563.607
Mo	95	1	He	76.577852	0.7	477218.177
Pd	105	1	He	81.285842	0.9	758475.327
Ag	107	1	He	40.355032	0.7	803317.253
Cd	111	1	He	79.725210	0.6	296324.133
Sn	118	1	He	76.459415	0.7	730657.877
Sb	121	1	He	76.986220	1.2	1082988.890
Ba	138	1	He	77.672541	0.5	2500142.100
Pt	195	1	He	81.465880	0.3	1049283.603
Hg	202	1	He	3.869420	0.8	24593.617
Tl	205	1	He	41.583230	0.8	1973618.773
Pb	208	1	He	81.096180	0.6	5242975.207
Bi	209	1	He	80.122264	0.4	4447407.123
Th	232	1	He	75.747988	0.5	5131235.760
U	238	1	He	76.726003	0.4	4991038.053

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.77192680	534567.043
Sc	45	2	H2	93.09483803	4119069.083
Ge	72	1	He	94.45423973	470998.163
Ge	72	2	H2	96.47126813	1504736.250
In	115	1	He	97.23316984	5960579.153
Tb	159	1	He	99.44366368	14388121.453
Ir	193	1	He	98.97169020	7330208.433

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 252\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:42:05  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.072937	13.6	93.167
Be	9	2	H2	0.030550	41.7	30.500
B	11	2	H2	-81.370809		1965.463
Na	23	1	He	5.111446	10.9	15219.493
Mg	24	1	He	-3.994781		2426.887
Al	27	1	He	0.049652	53.4	83.333
Si	28	2	H2	-0.526131		11580.213
K	39	1	He	-6.326599		61261.507
Ca	43	1	He	2.825321	78.4	18.117
Ti	47	1	He	0.008300	81.2	3.667
V	51	1	He	0.064891	49.6	-152.537
Cr	52	1	He	-0.017514		2074.150
Mn	55	1	He	0.097936	2.2	815.360
Fe	56	1	He	0.327540	3.5	12860.340
Co	59	1	He	0.009985	20.8	177.333
Ni	60	1	He	0.001629	327.9	198.000
Cu	63	1	He	0.002903	181.3	331.337
Zn	66	1	He	0.014087	102.9	231.333
As	75	1	He	-0.020538		123.667
Se	78	2	H2	-0.008354		32.667
Sr	88	1	He	0.018466	44.4	350.010
Mo	95	1	He	0.014901	28.7	103.333
Pd	105	1	He	0.020246	29.5	375.010
Ag	107	1	He	0.184634	28.2	3750.557
Cd	111	1	He	0.004970	77.4	39.317
Sn	118	1	He	0.007124	39.9	205.000
Sb	121	1	He	0.009609	26.1	171.667
Ba	138	1	He	0.012670	24.6	478.347
Pt	195	1	He	0.005407	65.2	276.670
Hg	202	1	He	0.019986	8.4	349.007
Tl	205	1	He	0.039396	17.4	2336.900
Pb	208	1	He	0.001438	101.9	2865.153
Bi	209	1	He	0.006813	74.8	2570.307
Th	232	1	He	0.018938	19.9	2278.553
U	238	1	He	0.005272	17.6	1301.743

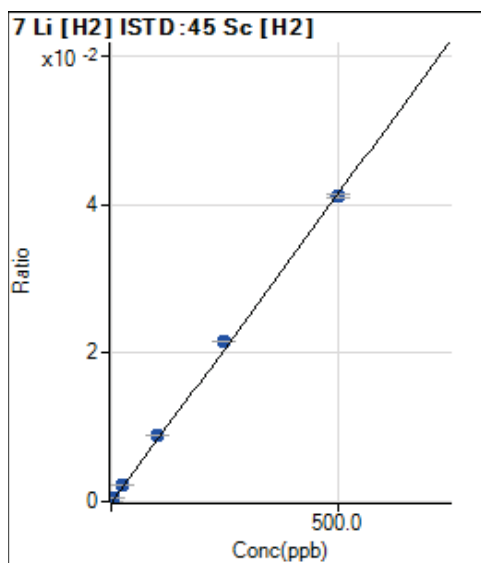
**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.86868243	535149.687
Sc	45	2	H2	92.38429269	4087630.333
Ge	72	1	He	93.70691126	467271.593
Ge	72	2	H2	95.84782158	1495011.877
In	115	1	He	96.80392471	5934265.607
Tb	159	1	He	98.91353924	14311419.787
Ir	193	1	He	99.28279631	7353250.100

Calibration for 024CALS.d

Batch Folder: D:\DATA\051022.b\  
 Analysis File: 051022.batch.bin  
 DA Date-Time: 05/10/22 12:00:07  
 Calibration Title:  
 Calibration Method: External Calibration  
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	019CALB.d	CAL0	05/10/22 08:38:00
2	020CALS.d	CAL1	05/10/22 08:42:09
3	021CALS.d	CAL2	05/10/22 08:46:07
4	022CALS.d	CAL3	05/10/22 08:50:05
5	023CALS.d	CAL4	05/10/22 08:54:04
6	024CALS.d	CAL5	05/10/22 08:58:00
7	025CALS.d	CAL6	05/10/22 09:03:30
8	026CALS.d	CAL7	05/10/22 09:08:34



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	115.50	0.0000	P	8.6	
2	<input type="checkbox"/>	0.500	0.520	313.00	0.0001	P	4.6	4.1
3	<input type="checkbox"/>	5.000	5.243	2110.15	0.0005	P	2.8	4.9
4	<input type="checkbox"/>	25.000	27.469	10360.54	0.0023	P	2.9	9.9
5	<input type="checkbox"/>	100.000	105.983	39617.06	0.0088	P	0.6	6.0
6	<input type="checkbox"/>	250.000	258.842	97146.49	0.0215	P	0.8	3.5
7	<input type="checkbox"/>	500.000	494.257	189858.74	0.0411	P	0.8	-1.1
8	<input type="checkbox"/>			225.17	0.0000	P	6.1	

$y = 8.3155E-005 * x + 2.5034E-005$

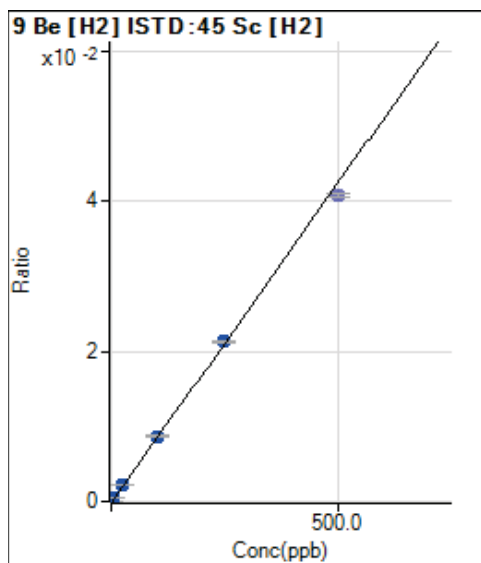
R = 0.9997

DL = 0.07766 ppb

BEC = 0.3011 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	45.33	0.0000	P	8.2	
2	<input type="checkbox"/>	0.200	0.198	122.33	0.0000	P	5.0	-1.1
3	<input type="checkbox"/>	5.000	5.168	2063.14	0.0005	P	0.9	3.4
4	<input type="checkbox"/>	25.000	26.518	10194.59	0.0023	P	2.8	6.1
5	<input type="checkbox"/>	100.000	101.824	38982.82	0.0087	P	1.1	1.8
6	<input type="checkbox"/>	250.000	249.115	95854.66	0.0213	P	1.0	-0.4
7	<input checked="" type="checkbox"/>	500.000		188372.21	0.0408	P	0.9	
8	<input type="checkbox"/>			134.83	0.0000	P	0.6	

$y = 8.5312E-005 * x + 9.8238E-006$

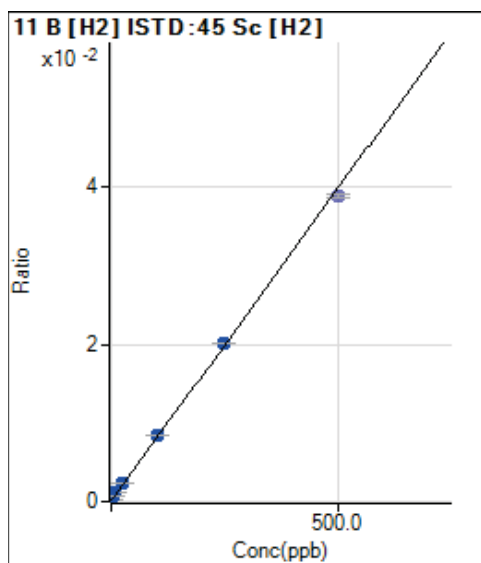
R = 1.0000

DL = 0.02846 ppb

BEC = 0.1152 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	1304.56	0.0003	P	1.8	
2	<input type="checkbox"/>	10.000	9.933	4915.30	0.0011	P	0.6	-0.7
3	<input type="checkbox"/>	5.000	4.959	3098.98	0.0007	P	1.4	-0.8
4	<input type="checkbox"/>	25.000	25.926	10518.66	0.0023	P	2.2	3.7
5	<input type="checkbox"/>	100.000	101.534	37456.39	0.0084	P	0.9	1.5
6	<input type="checkbox"/>	250.000	249.297	90638.33	0.0201	P	0.5	-0.3
7	<input checked="" type="checkbox"/>	500.000		179405.09	0.0389	P	0.9	
8	<input type="checkbox"/>			1971.80	0.0004	P	3.0	

$y = 7.9514E-005 * x + 2.8265E-004$

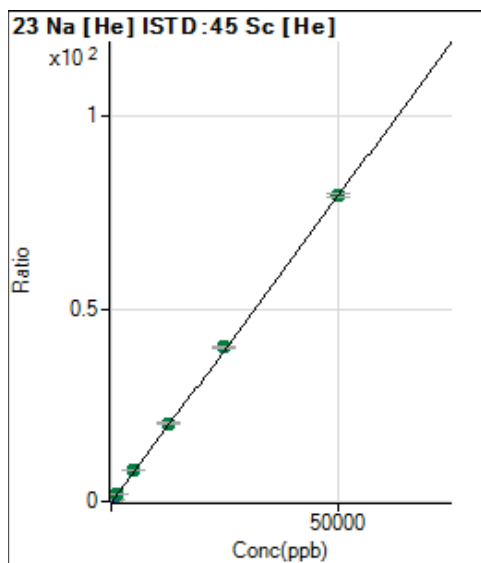
R = 1.0000

DL = 0.1956 ppb

BEC = 3.555 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	10823.98	0.0180	P	2.9	
2	<input type="checkbox"/>	50.000	54.041	62918.49	0.1041	P	0.9	8.1
3	<input type="checkbox"/>	250.000	261.035	259750.36	0.4338	P	0.2	4.4
4	<input type="checkbox"/>	1250.000	1326.567	1262512.19	2.1313	A	0.4	6.1
5	<input type="checkbox"/>	5000.000	5146.475	4808656.81	8.2165	A	2.8	2.9
6	<input type="checkbox"/>	12500.00	12732.60	11708630.66	20.3015	A	0.9	1.9
7	<input type="checkbox"/>	25000.00	25119.31	23286279.65	40.0341	A	0.3	0.5
8	<input type="checkbox"/>	50000.00	49865.57	46774354.31	79.4559	A	1.0	-0.3

$y = 0.0016 * x + 0.0180$

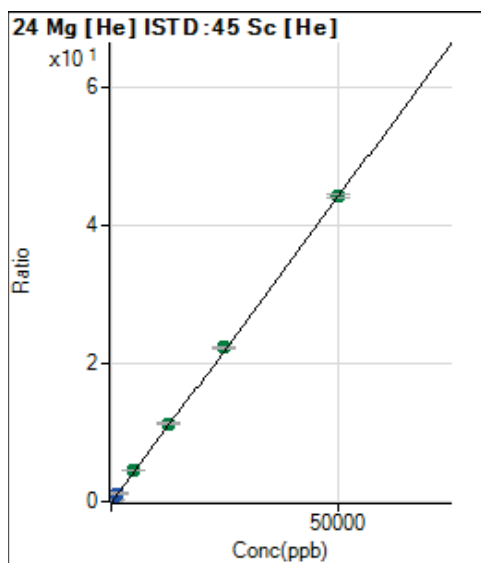
R = 1.0000

DL = 0.9687 ppb

BEC = 11.29 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	6626.53	0.0110	P	2.6	
2	<input type="checkbox"/>	30.000	30.509	23029.52	0.0381	P	1.8	1.7
3	<input type="checkbox"/>	250.000	265.733	147841.34	0.2469	P	0.7	6.3
4	<input type="checkbox"/>	1250.000	1339.814	711133.77	1.2005	P	0.3	7.2
5	<input type="checkbox"/>	5000.000	5129.735	2671683.87	4.5651	A	2.8	2.6
6	<input type="checkbox"/>	12500.00	12730.67	6524704.90	11.3130	A	0.7	1.8
7	<input type="checkbox"/>	25000.00	25097.40	12966286.06	22.2920	A	0.6	0.4
8	<input type="checkbox"/>	50000.00	49878.33	26073306.28	44.2919	A	1.2	-0.2

$y = 8.8778E-004 * x + 0.0110$

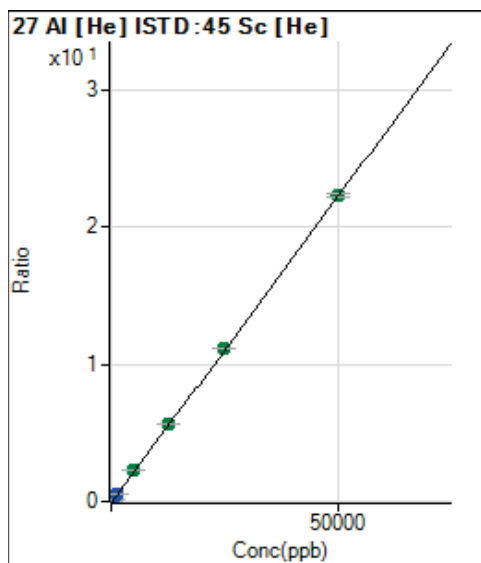
R = 1.0000

DL = 0.9766 ppb

BEC = 12.4 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	89.33	0.0001	P	4.8	
2	<input type="checkbox"/>	30.000	31.613	8633.50	0.0143	P	1.6	5.4
3	<input type="checkbox"/>	250.000	259.418	69530.56	0.1161	P	0.6	3.8
4	<input type="checkbox"/>	1250.000	1320.220	349736.69	0.5904	P	0.3	5.6
5	<input type="checkbox"/>	5000.000	5109.061	1336851.00	2.2843	A	3.1	2.2
6	<input type="checkbox"/>	12500.00	12694.05	3273252.00	5.6754	A	0.7	1.6
7	<input type="checkbox"/>	25000.00	25010.08	6503993.33	11.1817	A	0.2	0.0
8	<input type="checkbox"/>	50000.00	49933.73	13142509.00	22.3246	A	0.9	-0.1

$y = 4.4708E-004 * x + 1.4842E-004$

R = 1.0000

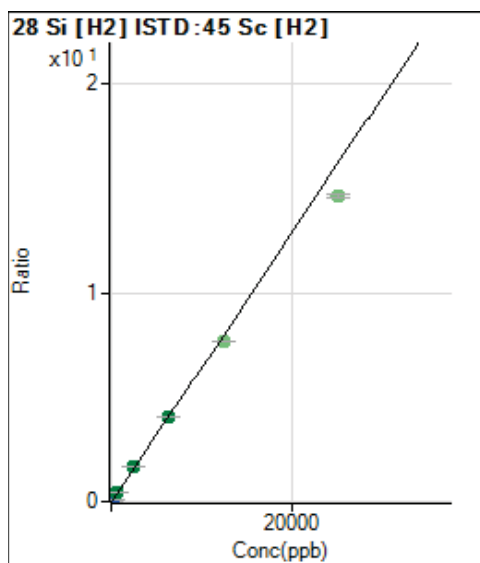
DL = 0.04792 ppb

BEC = 0.332 ppb

Weight: <None>

Min Conc: <None>





	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	15888.57	0.0034	P	10.8	
2	<input type="checkbox"/>	100.000	100.875	316731.50	0.0691	P	0.2	0.9
3	<input type="checkbox"/>	125.000	129.934	402937.03	0.0880	P	0.4	3.9
4	<input type="checkbox"/>	625.000	668.497	1967761.96	0.4386	A	3.1	7.0
5	<input type="checkbox"/>	2500.000	2575.248	7529733.00	1.6798	A	0.6	3.0
6	<input type="checkbox"/>	6250.000	6215.438	18255154.00	4.0493	A	0.7	-0.6
7	<input checked="" type="checkbox"/>	12500.00		35416380.00	7.6714	A	0.7	
8	<input checked="" type="checkbox"/>	25000.00		70066773.33	14.6353	A	0.7	

$y = 6.5094E-004 * x + 0.0034$

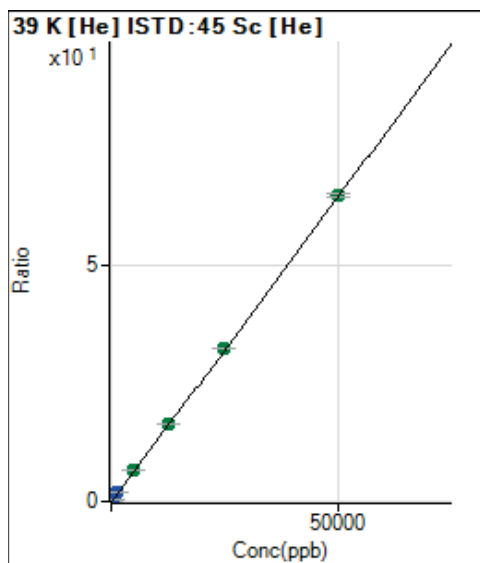
R = 0.9999

DL = 1.707 ppb

BEC = 5.291 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	71609.36	0.1190	P	0.7	
2	<input type="checkbox"/>	100.000	100.735	150751.41	0.2494	P	1.5	0.7
3	<input type="checkbox"/>	250.000	258.856	271843.42	0.4540	P	0.9	3.5
4	<input type="checkbox"/>	1250.000	1318.026	1081019.93	1.8249	P	0.4	5.4
5	<input type="checkbox"/>	5000.000	5056.207	3899651.50	6.6631	A	2.5	1.1
6	<input type="checkbox"/>	12500.00	12614.12	9484536.32	16.4451	A	0.7	0.9
7	<input type="checkbox"/>	25000.00	24873.79	18794955.97	32.3124	A	0.5	-0.5
8	<input type="checkbox"/>	50000.00	50027.20	38186427.77	64.8677	A	1.0	0.1

$y = 0.0013 * x + 0.1190$

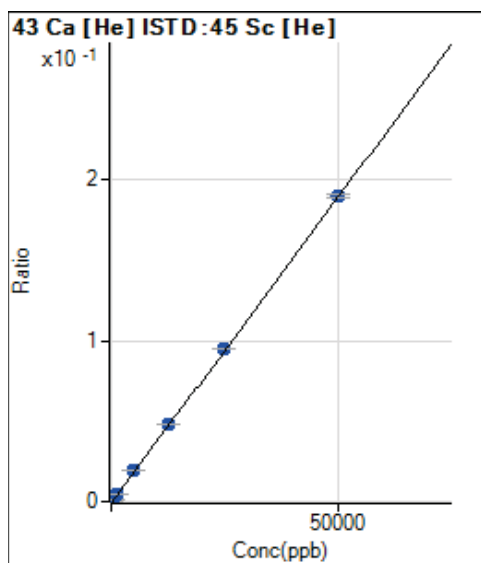
R = 1.0000

DL = 1.897 ppb

BEC = 91.95 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	14.40	0.0000	P	24.9	
2	<input type="checkbox"/>	100.000	102.324	249.77	0.0004	P	2.3	2.3
3	<input type="checkbox"/>	250.000	259.262	604.73	0.0010	P	1.2	3.7
4	<input type="checkbox"/>	1250.000	1315.775	2978.78	0.0050	P	0.5	5.3
5	<input type="checkbox"/>	5000.000	5045.144	11243.95	0.0192	P	3.2	0.9
6	<input type="checkbox"/>	12500.00	12632.81	27725.29	0.0481	P	1.1	1.1
7	<input type="checkbox"/>	25000.00	24981.84	55282.84	0.0950	P	0.3	-0.1
8	<input type="checkbox"/>	50000.00	49969.66	111888.78	0.1901	P	1.8	-0.1

$y = 3.8035E-006 * x + 2.3900E-005$

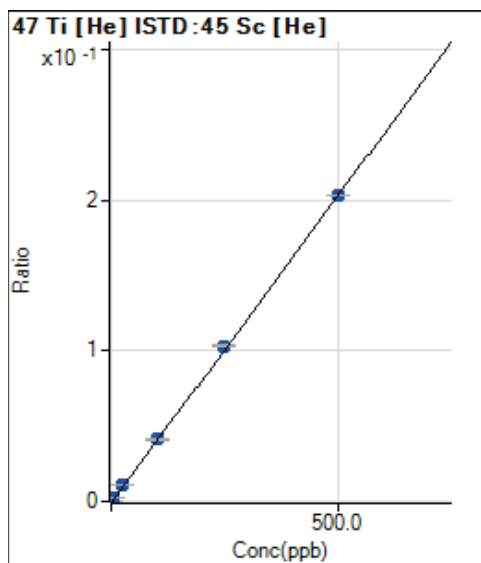
R = 1.0000

DL = 4.703 ppb

BEC = 6.284 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2.33	0.0000	P	25.5	
2	<input type="checkbox"/>	1.000	1.028	256.00	0.0004	P	5.1	2.8
3	<input type="checkbox"/>	5.000	5.001	1224.06	0.0020	P	5.2	0.0
4	<input type="checkbox"/>	25.000	25.740	6224.32	0.0105	P	1.5	3.0
5	<input type="checkbox"/>	100.000	100.877	24093.65	0.0412	P	2.6	0.9
6	<input type="checkbox"/>	250.000	253.143	59579.12	0.1033	P	0.4	1.3
7	<input type="checkbox"/>	500.000	498.216	118256.13	0.2033	P	0.2	-0.4
8	<input type="checkbox"/>			597.34	0.0010	P	4.1	

$y = 4.0806E-004 * x + 3.8821E-006$

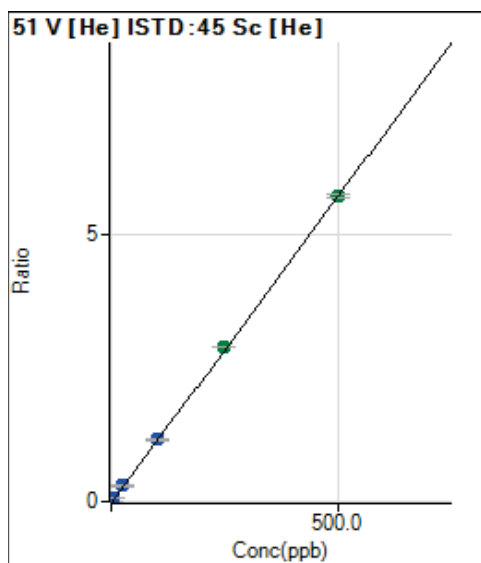
R = 1.0000

DL = 0.007265 ppb

BEC = 0.009513 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	-517.37	-0.0009	P	-39.	
2	<input type="checkbox"/>	1.000	1.004	6440.80	0.0107	P	1.5	0.4
3	<input type="checkbox"/>	5.000	5.099	34496.48	0.0576	P	4.4	2.0
4	<input type="checkbox"/>	25.000	25.569	173192.78	0.2924	P	0.5	2.3
5	<input type="checkbox"/>	100.000	100.588	674624.21	1.1527	P	2.2	0.6
6	<input type="checkbox"/>	250.000	253.091	1673466.83	2.9015	A	0.4	1.2
7	<input type="checkbox"/>	500.000	498.307	3323353.06	5.7136	A	0.7	-0.3
8	<input type="checkbox"/>			429.03	0.0007	P	84.5	

$y = 0.0115 * x - 8.5773E-004$

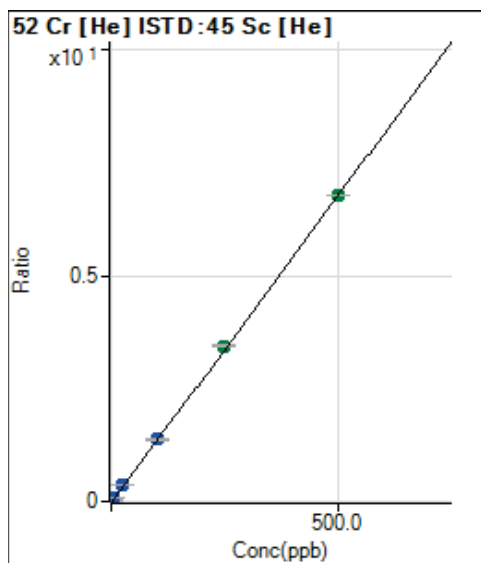
R = 1.0000

DL = 0.08941 ppb

BEC = -0.07479 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2345.53	0.0039	P	1.4	
2	<input type="checkbox"/>	2.000	2.023	18987.63	0.0314	P	1.7	1.2
3	<input type="checkbox"/>	5.000	5.061	43543.72	0.0727	P	0.5	1.2
4	<input type="checkbox"/>	25.000	26.150	212974.63	0.3595	P	0.5	4.6
5	<input type="checkbox"/>	100.000	101.450	809742.47	1.3835	P	2.3	1.4
6	<input type="checkbox"/>	250.000	252.862	1985567.96	3.4426	A	0.5	1.1
7	<input type="checkbox"/>	500.000	498.221	3943264.17	6.7793	A	0.4	-0.4
8	<input type="checkbox"/>			4406.01	0.0075	P	3.9	

$y = 0.0136 * x + 0.0039$

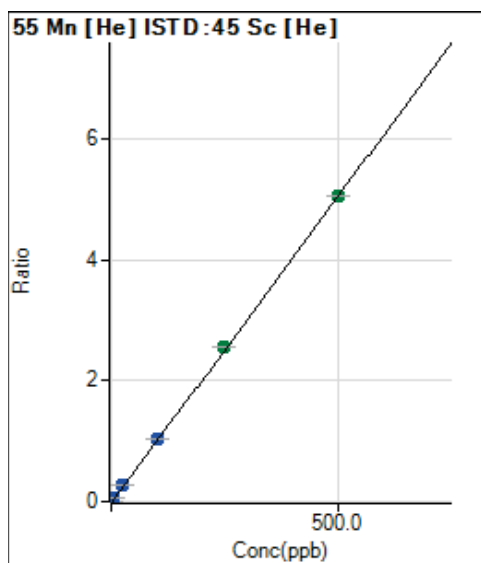
R = 1.0000

DL = 0.01168 ppb

BEC = 0.2866 ppb

Weight: <None>

Min Conc: <None>



	R <sub>j</sub> c <sub>t</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	430.01	0.0007	P	3.9	
2	<input type="checkbox"/>	0.500	0.504	3521.10	0.0058	P	1.8	0.9
3	<input type="checkbox"/>	5.000	5.179	31843.20	0.0532	P	1.1	3.6
4	<input type="checkbox"/>	25.000	26.523	159594.08	0.2694	P	0.5	6.1
5	<input type="checkbox"/>	100.000	102.304	606997.94	1.0371	P	2.4	2.3
6	<input type="checkbox"/>	250.000	252.164	1473753.00	2.5553	A	0.8	0.9
7	<input type="checkbox"/>	500.000	498.380	2937217.92	5.0497	A	0.4	-0.3
8	<input type="checkbox"/>			4311.32	0.0073	P	2.1	

$y = 0.0101 * x + 7.1454E-004$

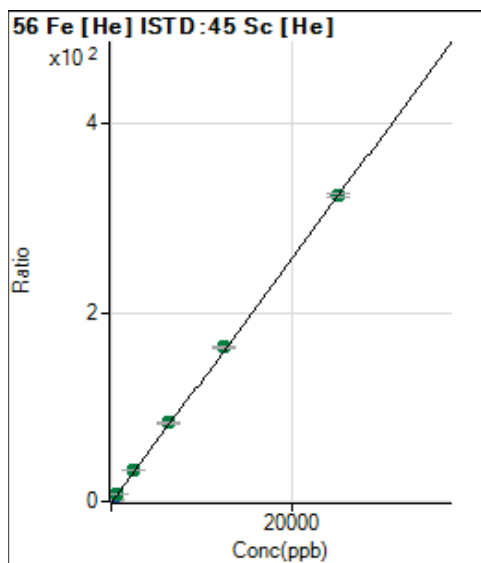
R = 1.0000

DL = 0.00825 ppb

BEC = 0.07053 ppb

Weight: <None>

Min Conc: <None>



	R <sub>j</sub> c <sub>t</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	14170.21	0.0236	P	1.8	
2	<input type="checkbox"/>	50.000	51.170	416277.40	0.6886	P	0.3	2.3
3	<input type="checkbox"/>	125.000	130.323	1028209.81	1.7173	P	0.9	4.3
4	<input type="checkbox"/>	625.000	664.195	5127480.00	8.6558	A	0.8	6.3
5	<input type="checkbox"/>	2500.000	2561.783	19499424.00	33.3180	A	2.6	2.5
6	<input type="checkbox"/>	6250.000	6383.529	47861705.33	82.9876	A	1.0	2.1
7	<input type="checkbox"/>	12500.00	12560.61	94966770.67	163.268	A	0.6	0.5
8	<input type="checkbox"/>	25000.00	24929.12	190732608.0	324.016	A	1.5	-0.3

$y = 0.0130 * x + 0.0236$

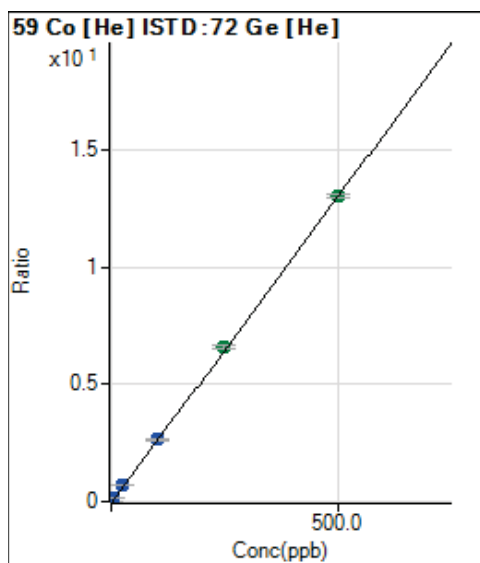
R = 1.0000

DL = 0.09563 ppb

BEC = 1.812 ppb

Weight: <None>

Min Conc: <None>



	R <sub>j</sub> c <sub>t</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	159.33	0.0003	P	4.9	
2	<input type="checkbox"/>	0.500	0.519	6782.26	0.0139	P	3.4	3.8
3	<input type="checkbox"/>	5.000	5.247	66752.44	0.1376	P	0.5	4.9
4	<input type="checkbox"/>	25.000	26.548	334790.28	0.6948	P	0.4	6.2
5	<input type="checkbox"/>	100.000	100.914	1270441.81	2.6402	P	1.4	0.9
6	<input type="checkbox"/>	250.000	252.309	3110505.83	6.6007	A	1.4	0.9
7	<input type="checkbox"/>	500.000	498.583	6178744.00	13.0432	A	0.7	-0.3
8	<input type="checkbox"/>			8775.33	0.0185	P	2.2	

$y = 0.0262 * x + 3.2575E-004$

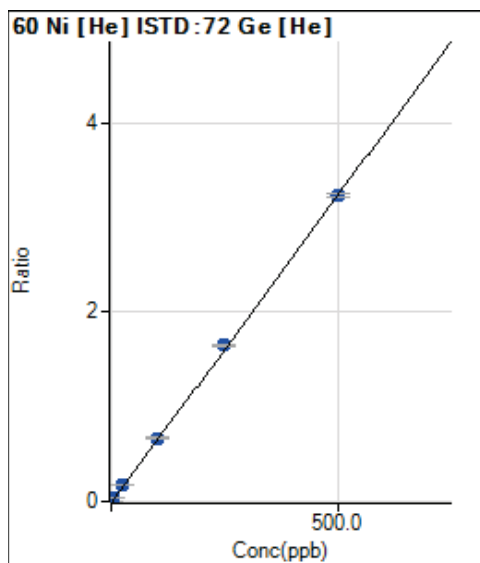
R = 1.0000

DL = 0.001813 ppb

BEC = 0.01245 ppb

Weight: <None>

Min Conc: <None>



	R <sub>j</sub> c <sub>t</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	881.36	0.0018	P	6.4	
2	<input type="checkbox"/>	0.500	0.534	2570.90	0.0053	P	3.4	6.7
3	<input type="checkbox"/>	5.000	5.322	17660.03	0.0364	P	1.0	6.4
4	<input type="checkbox"/>	25.000	26.790	84793.47	0.1760	P	1.2	7.2
5	<input type="checkbox"/>	100.000	102.319	320964.16	0.6670	P	1.6	2.3
6	<input type="checkbox"/>	250.000	254.071	779284.98	1.6537	P	1.3	1.6
7	<input type="checkbox"/>	500.000	497.408	1532778.96	3.2357	P	1.2	-0.5
8	<input type="checkbox"/>			4315.99	0.0091	P	2.0	

$y = 0.0065 * x + 0.0018$

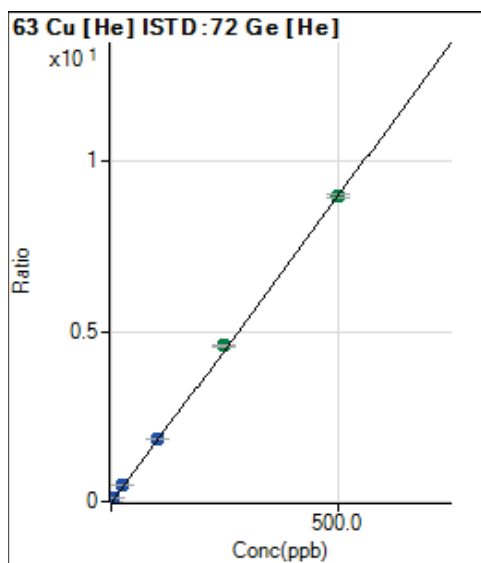
R = 0.9999

DL = 0.05296 ppb

BEC = 0.2771 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	238.67	0.0005	P	3.0	
2	<input type="checkbox"/>	1.000	1.102	9934.07	0.0204	P	2.1	10.2
3	<input type="checkbox"/>	5.000	5.281	46445.74	0.0957	P	0.9	5.6
4	<input type="checkbox"/>	25.000	26.958	234489.79	0.4867	P	0.5	7.8
5	<input type="checkbox"/>	100.000	102.045	885752.63	1.8408	P	2.0	2.0
6	<input type="checkbox"/>	250.000	253.598	2155479.00	4.5740	A	1.0	1.4
7	<input type="checkbox"/>	500.000	497.691	4252033.17	8.9761	A	0.9	-0.5
8	<input type="checkbox"/>			2988.32	0.0063	P	3.6	

$y = 0.0180 * x + 4.8773E-004$

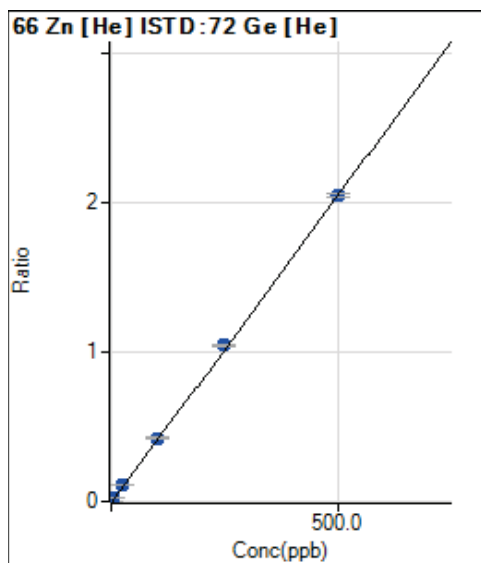
R = 1.0000

DL = 0.00245 ppb

BEC = 0.02704 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	210.00	0.0004	P	12.2	
2	<input type="checkbox"/>	5.000	5.277	10792.69	0.0221	P	0.8	5.5
3	<input type="checkbox"/>	5.000	5.245	10671.94	0.0220	P	1.9	4.9
4	<input type="checkbox"/>	25.000	26.463	52642.25	0.1093	P	0.4	5.9
5	<input type="checkbox"/>	100.000	102.371	202764.24	0.4214	P	2.2	2.4
6	<input type="checkbox"/>	250.000	253.446	491345.90	1.0427	P	1.0	1.4
7	<input type="checkbox"/>	500.000	497.725	969770.48	2.0472	P	0.8	-0.5
8	<input type="checkbox"/>			3357.73	0.0071	P	3.0	

$y = 0.0041 * x + 4.2892E-004$

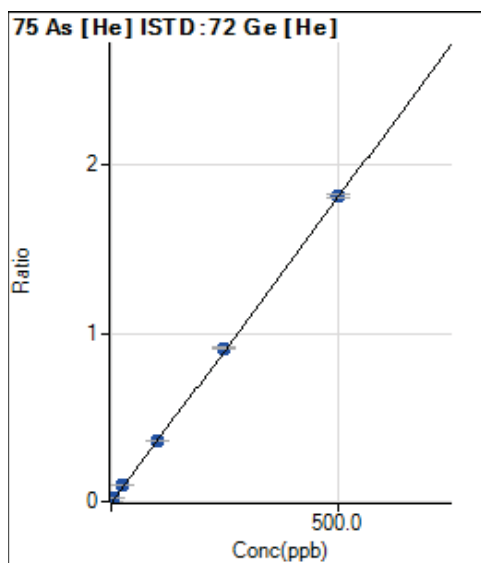
R = 1.0000

DL = 0.03822 ppb

BEC = 0.1043 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	123.83	0.0003	P	6.1	
2	<input type="checkbox"/>	0.500	0.487	986.20	0.0020	P	2.7	-2.5
3	<input type="checkbox"/>	5.000	4.956	8847.87	0.0182	P	0.2	-0.9
4	<input type="checkbox"/>	25.000	25.720	45095.62	0.0936	P	0.9	2.9
5	<input type="checkbox"/>	100.000	99.442	173773.29	0.3611	P	1.3	-0.6
6	<input type="checkbox"/>	250.000	250.380	428303.61	0.9089	P	1.4	0.2
7	<input type="checkbox"/>	500.000	499.886	859493.62	1.8144	P	0.7	0.0
8	<input type="checkbox"/>			354.00	0.0007	P	4.6	

$y = 0.0036 * x + 2.5317E-004$

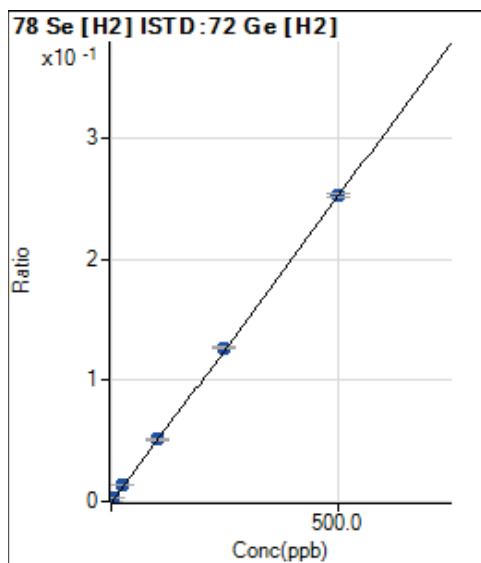
R = 1.0000

DL = 0.01273 ppb

BEC = 0.06976 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	26.67	0.0000	P	29.8	
2	<input type="checkbox"/>	0.500	0.498	409.68	0.0003	P	5.0	-0.5
3	<input type="checkbox"/>	5.000	5.063	3958.55	0.0026	P	1.5	1.3
4	<input type="checkbox"/>	25.000	26.061	19985.81	0.0132	P	1.2	4.2
5	<input type="checkbox"/>	100.000	101.558	77264.64	0.0515	P	1.7	1.6
6	<input type="checkbox"/>	250.000	250.955	191612.32	0.1272	P	1.3	0.4
7	<input type="checkbox"/>	500.000	499.157	388028.25	0.2529	P	1.4	-0.2
8	<input type="checkbox"/>			104.33	0.0001	P	16.5	

$y = 5.0665E-004 * x + 1.7367E-005$

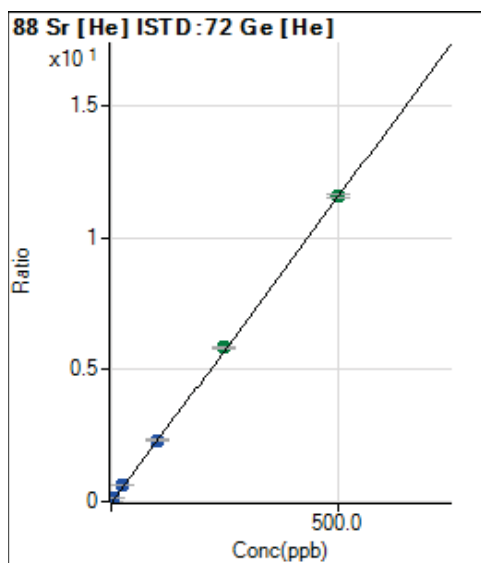
R = 1.0000

DL = 0.03065 ppb

BEC = 0.03428 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	166.67	0.0003	P	26.2	
2	<input type="checkbox"/>	0.500	0.510	5941.29	0.0122	P	1.9	2.0
3	<input type="checkbox"/>	5.000	5.047	57046.72	0.1176	P	2.1	0.9
4	<input type="checkbox"/>	25.000	25.891	289960.07	0.6018	P	0.5	3.6
5	<input type="checkbox"/>	100.000	100.453	1122939.64	2.3338	P	2.1	0.5
6	<input type="checkbox"/>	250.000	251.708	2755464.85	5.8473	A	1.3	0.7
7	<input type="checkbox"/>	500.000	499.010	5491169.50	11.5919	A	1.0	-0.2
8	<input type="checkbox"/>			6263.09	0.0132	P	2.2	

$y = 0.0232 * x + 3.4010E-004$

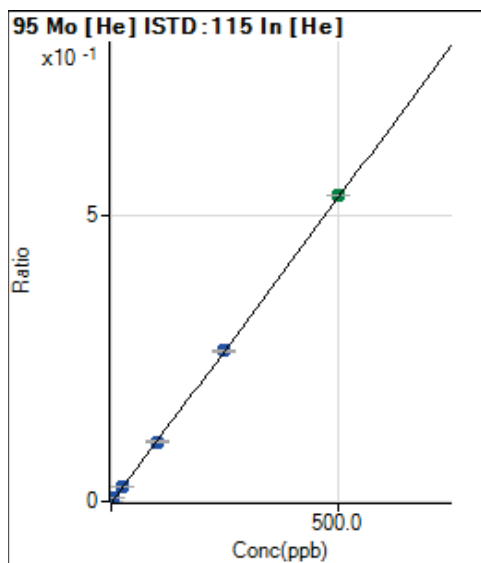
R = 1.0000

DL = 0.01151 ppb

BEC = 0.01464 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	22.67	0.0000	P	40.5	
2	<input type="checkbox"/>	0.500	0.483	2861.63	0.0005	P	2.1	-3.3
3	<input type="checkbox"/>	5.000	4.850	28368.86	0.0052	P	1.3	-3.0
4	<input type="checkbox"/>	25.000	24.846	144910.73	0.0265	P	1.8	-0.6
5	<input type="checkbox"/>	100.000	98.181	564156.00	0.1048	P	2.8	-1.8
6	<input type="checkbox"/>	250.000	247.122	1383755.71	0.2639	P	1.4	-1.2
7	<input type="checkbox"/>	500.000	501.812	2817057.08	0.5358	A	0.6	0.4
8	<input type="checkbox"/>			584.01	0.0001	P	5.4	

$y = 0.0011 * x + 4.0802E-006$

R = 1.0000

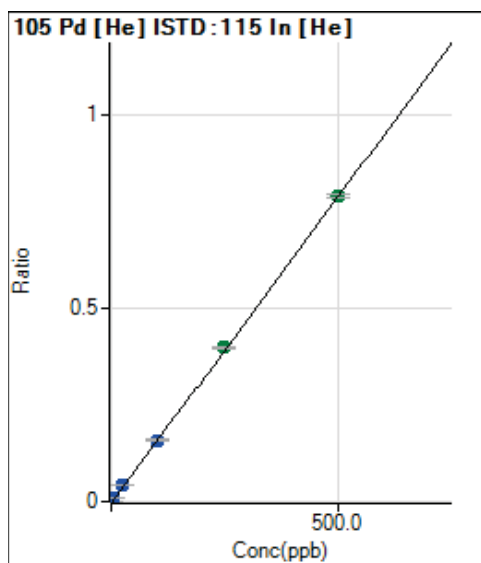
DL = 0.004646 ppb

BEC = 0.003821 ppb

Weight: <None>

Min Conc: <None>





	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	260.00	0.0000	P	8.8	
2	<input type="checkbox"/>	0.500	0.490	4529.10	0.0008	P	7.6	-2.0
3	<input type="checkbox"/>	5.000	5.097	44476.55	0.0081	P	0.7	1.9
4	<input type="checkbox"/>	25.000	25.964	225025.15	0.0412	P	0.3	3.9
5	<input type="checkbox"/>	100.000	99.754	851068.82	0.1582	P	2.6	-0.2
6	<input type="checkbox"/>	250.000	252.103	2095654.40	0.3996	A	1.1	0.8
7	<input type="checkbox"/>	500.000	498.949	4157937.65	0.7909	A	0.7	-0.2
8	<input type="checkbox"/>			936.71	0.0002	P	8.9	

$y = 0.0016 * x + 4.6846E-005$

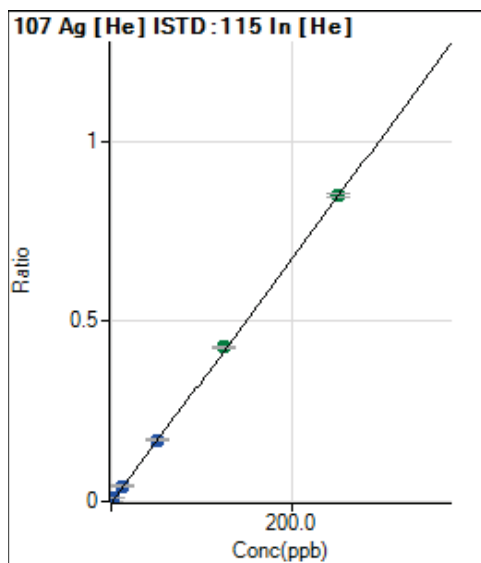
R = 1.0000

DL = 0.007795 ppb

BEC = 0.02956 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	160.00	0.0000	P	11.1	
2	<input type="checkbox"/>	0.500	0.386	7388.67	0.0013	P	8.7	-22.
3	<input type="checkbox"/>	2.500	2.297	42955.43	0.0078	P	2.9	-8.1
4	<input type="checkbox"/>	12.500	12.721	236661.98	0.0433	P	2.6	1.8
5	<input type="checkbox"/>	50.000	50.175	919276.32	0.1708	P	3.7	0.4
6	<input type="checkbox"/>	125.000	125.671	2243746.58	0.4279	A	1.4	0.5
7	<input type="checkbox"/>	250.000	249.621	4468059.73	0.8499	A	0.9	-0.2
8	<input type="checkbox"/>			2185.19	0.0004	P	7.8	

$y = 0.0034 * x + 2.8835E-005$

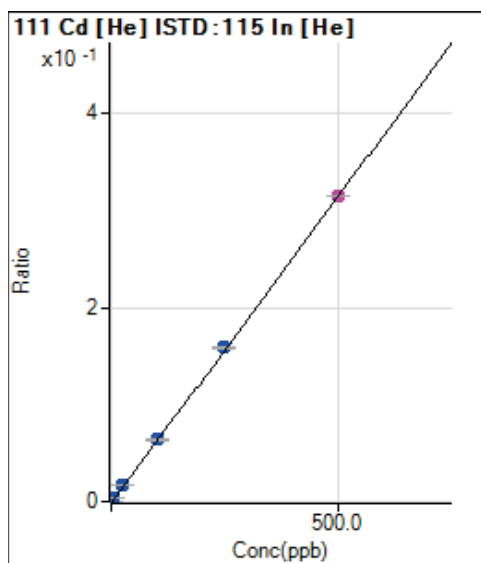
R = 1.0000

DL = 0.002829 ppb

BEC = 0.00847 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	20.66	0.0000	P	9.4	
2	<input type="checkbox"/>	0.080	0.080	299.48	0.0001	P	7.0	0.2
3	<input type="checkbox"/>	5.000	5.041	17469.02	0.0032	P	0.9	0.8
4	<input type="checkbox"/>	25.000	25.746	88945.12	0.0163	P	1.4	3.0
5	<input type="checkbox"/>	100.000	100.838	343191.58	0.0638	P	2.7	0.8
6	<input type="checkbox"/>	250.000	252.168	836318.78	0.1595	P	1.3	0.9
7	<input type="checkbox"/>	500.000	498.711	1658203.01	0.3154	M	0.4	-0.3
8	<input type="checkbox"/>			160.56	0.0000	P	1.4	

$y = 6.3243E-004 * x + 3.7211E-006$

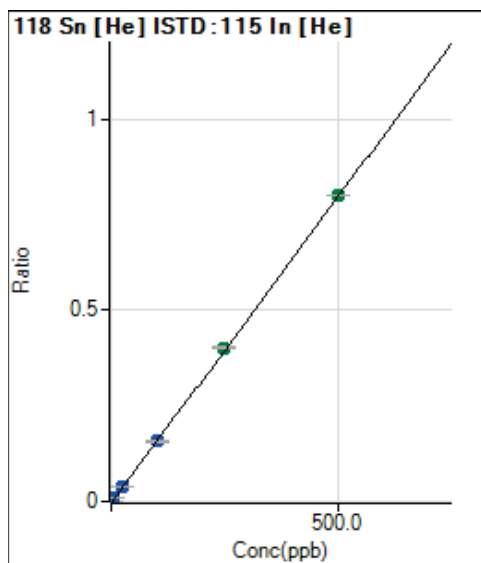
R = 1.0000

DL = 0.001665 ppb

BEC = 0.005884 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	96.67	0.0000	P	8.4	
2	<input type="checkbox"/>	0.500	0.489	4400.73	0.0008	P	2.9	-2.3
3	<input type="checkbox"/>	5.000	4.869	42776.90	0.0078	P	0.4	-2.6
4	<input type="checkbox"/>	25.000	25.132	219935.62	0.0403	P	1.1	0.5
5	<input type="checkbox"/>	100.000	98.603	849876.32	0.1579	P	2.9	-1.4
6	<input type="checkbox"/>	250.000	250.291	2102209.60	0.4009	A	1.2	0.1
7	<input type="checkbox"/>	500.000	500.128	4211263.89	0.8010	A	0.5	0.0
8	<input type="checkbox"/>			7558.78	0.0014	P	1.6	

$y = 0.0016 * x + 1.7422E-005$

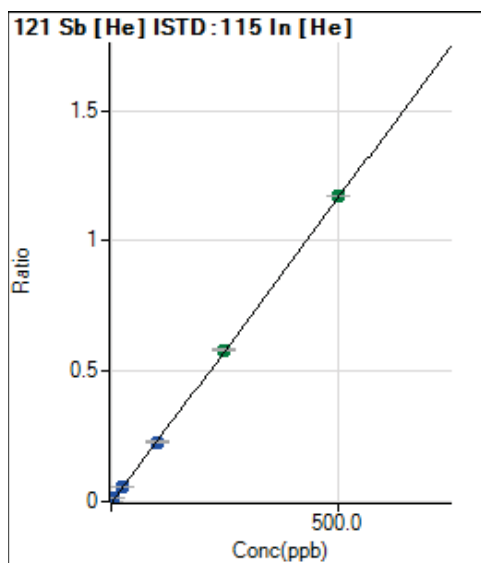
R = 1.0000

DL = 0.002727 ppb

BEC = 0.01088 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	75.00	0.0000	P	13.4	
2	<input type="checkbox"/>	0.500	0.493	6418.18	0.0012	P	3.4	-1.3
3	<input type="checkbox"/>	5.000	4.854	62182.62	0.0114	P	2.2	-2.9
4	<input type="checkbox"/>	25.000	24.953	318691.93	0.0584	P	1.2	-0.2
5	<input type="checkbox"/>	100.000	97.435	1225869.83	0.2278	P	2.7	-2.6
6	<input type="checkbox"/>	250.000	248.576	3047688.50	0.5812	A	0.9	-0.6
7	<input type="checkbox"/>	500.000	501.229	6160837.62	1.1718	A	0.2	0.2
8	<input type="checkbox"/>			2068.51	0.0004	P	7.7	

$y = 0.0023 * x + 1.3514E-005$

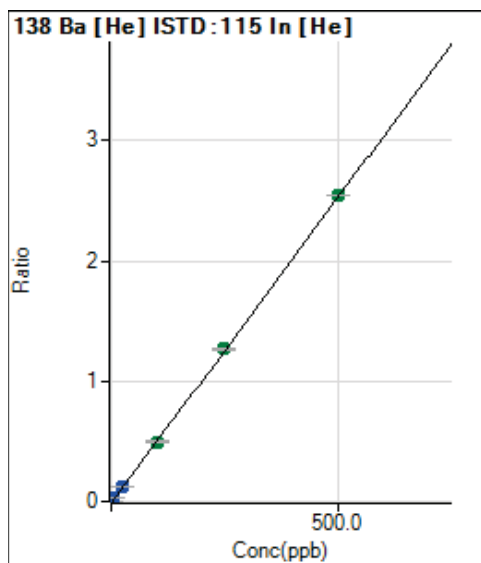
R = 1.0000

DL = 0.002331 ppb

BEC = 0.005781 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	146.67	0.0000	P	8.3	
2	<input type="checkbox"/>	0.300	0.301	8562.72	0.0016	P	5.4	0.4
3	<input type="checkbox"/>	5.000	4.904	136576.52	0.0250	P	0.7	-1.9
4	<input type="checkbox"/>	25.000	25.066	696019.47	0.1274	P	0.8	0.3
5	<input type="checkbox"/>	100.000	97.560	2668838.24	0.4959	A	1.9	-2.4
6	<input type="checkbox"/>	250.000	249.290	6644941.98	1.2671	A	1.2	-0.3
7	<input type="checkbox"/>	500.000	500.841	13384108.55	2.5458	A	0.2	0.2
8	<input type="checkbox"/>			2135.18	0.0004	P	0.6	

$y = 0.0051 * x + 2.6432E-005$

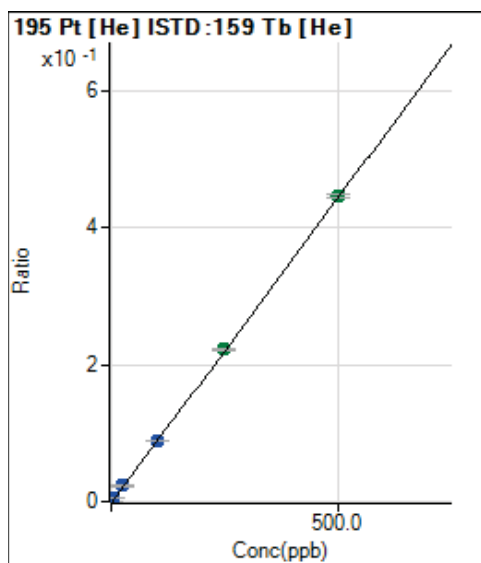
R = 1.0000

DL = 0.001289 ppb

BEC = 0.0052 ppb

Weight: <None>

Min Conc: <None>



	R <sub>j</sub> c <sub>t</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	196.00	0.0000	P	6.4	
2	<input type="checkbox"/>	0.500	0.507	5865.97	0.0005	P	4.0	1.4
3	<input type="checkbox"/>	5.000	4.955	55899.71	0.0044	P	1.0	-0.9
4	<input type="checkbox"/>	25.000	25.761	286973.05	0.0230	P	1.1	3.0
5	<input type="checkbox"/>	100.000	99.675	1107776.13	0.0890	P	1.9	-0.3
6	<input type="checkbox"/>	250.000	248.897	2752110.75	0.2222	A	0.8	-0.4
7	<input type="checkbox"/>	500.000	500.579	5620947.17	0.4469	A	0.7	0.1
8	<input type="checkbox"/>			364.01	0.0000	P	5.8	

$y = 8.9274E-004 * x + 1.5428E-005$

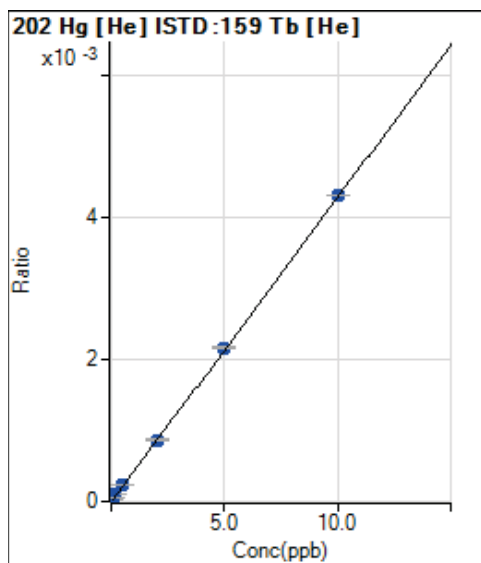
R = 1.0000

DL = 0.003314 ppb

BEC = 0.01728 ppb

Weight: <None>

Min Conc: <None>



	R <sub>j</sub> c <sub>t</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	193.00	0.0000	P	2.1	
2	<input type="checkbox"/>	0.200	0.210	1323.07	0.0001	P	2.8	5.1
3	<input type="checkbox"/>	0.100	0.100	732.02	0.0001	P	3.9	-0.1
4	<input type="checkbox"/>	0.500	0.501	2876.65	0.0002	P	1.9	0.3
5	<input type="checkbox"/>	2.000	1.981	10787.87	0.0009	P	1.1	-1.0
6	<input type="checkbox"/>	5.000	4.997	26790.52	0.0022	P	1.2	-0.1
7	<input type="checkbox"/>	10.000	10.005	54281.36	0.0043	P	0.5	0.0
8	<input type="checkbox"/>			454.68	0.0000	P	2.8	

$y = 4.2984E-004 * x + 1.5190E-005$

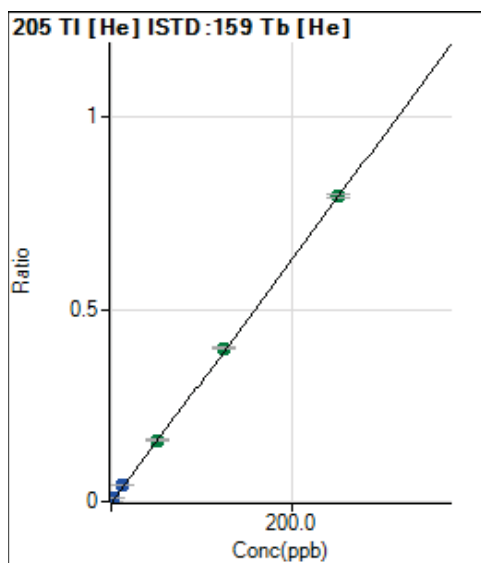
R = 1.0000

DL = 0.002251 ppb

BEC = 0.03534 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	523.35	0.0000	P	12.0	
2	<input type="checkbox"/>	0.100	0.091	4157.36	0.0003	P	2.6	-8.8
3	<input type="checkbox"/>	2.500	2.471	99587.94	0.0079	P	2.4	-1.2
4	<input type="checkbox"/>	12.500	13.096	520453.24	0.0417	P	2.9	4.8
5	<input type="checkbox"/>	50.000	50.340	1995880.44	0.1603	A	0.6	0.7
6	<input type="checkbox"/>	125.000	125.513	4950245.76	0.3997	A	0.1	0.4
7	<input type="checkbox"/>	250.000	249.646	9998925.27	0.7950	A	0.6	-0.1
8	<input type="checkbox"/>			3027.05	0.0002	P	19.7	

$y = 0.0032 * x + 4.1197E-005$

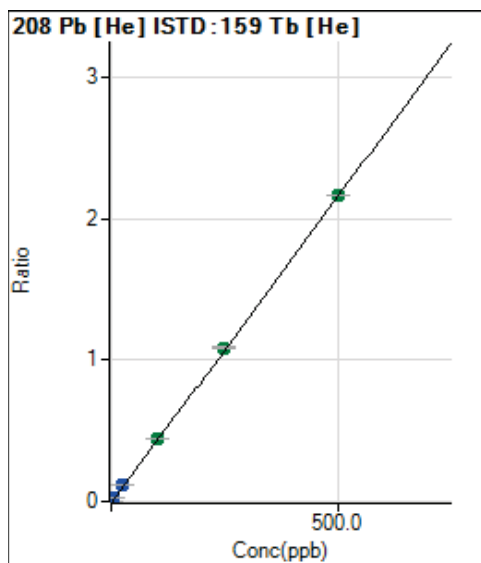
R = 1.0000

DL = 0.004659 ppb

BEC = 0.01294 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2761.80	0.0002	P	3.8	
2	<input type="checkbox"/>	0.500	0.514	30640.45	0.0024	P	1.0	2.8
3	<input type="checkbox"/>	5.000	5.054	278567.87	0.0221	P	0.9	1.1
4	<input type="checkbox"/>	25.000	26.204	1418737.83	0.1138	P	1.5	4.8
5	<input type="checkbox"/>	100.000	101.403	5473021.67	0.4397	A	1.2	1.4
6	<input type="checkbox"/>	250.000	250.817	13464817.20	1.0872	A	0.5	0.3
7	<input type="checkbox"/>	500.000	499.250	27216436.47	2.1639	A	0.1	-0.1
8	<input type="checkbox"/>			15358.49	0.0012	P	2.4	

$y = 0.0043 * x + 2.1737E-004$

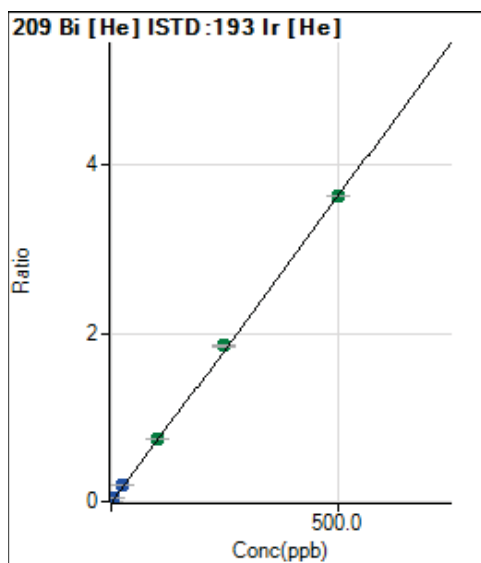
R = 1.0000

DL = 0.005674 ppb

BEC = 0.05016 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	1740.15	0.0003	P	4.2	
2	<input type="checkbox"/>	0.500	0.514	24960.59	0.0040	P	2.5	2.8
3	<input type="checkbox"/>	5.000	5.098	231552.28	0.0375	P	1.0	2.0
4	<input type="checkbox"/>	25.000	26.749	1194571.47	0.1958	P	1.4	7.0
5	<input type="checkbox"/>	100.000	102.334	4554706.03	0.7483	A	1.3	2.3
6	<input type="checkbox"/>	250.000	253.526	11180589.00	1.8535	A	0.2	1.4
7	<input type="checkbox"/>	500.000	497.682	22444866.33	3.6381	A	0.2	-0.5
8	<input type="checkbox"/>			3067.09	0.0005	P	7.9	

$y = 0.0073 * x + 2.7866E-004$

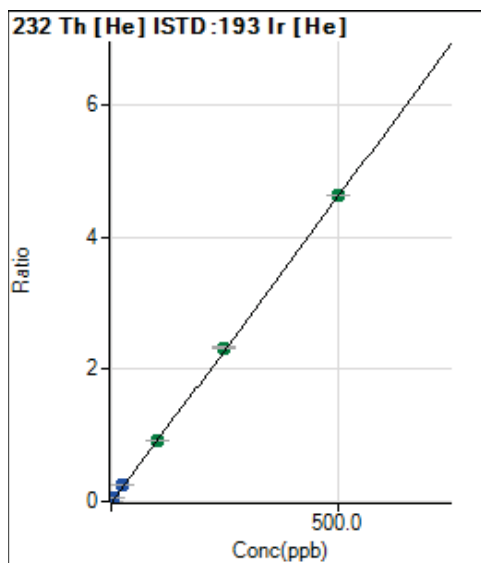
R = 1.0000

DL = 0.004817 ppb

BEC = 0.03812 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	830.03	0.0001	P	7.7	
2	<input type="checkbox"/>	0.500	0.488	28818.60	0.0047	P	1.4	-2.4
3	<input type="checkbox"/>	5.000	4.864	279150.94	0.0453	P	0.9	-2.7
4	<input type="checkbox"/>	25.000	25.700	1455586.54	0.2386	P	0.5	2.8
5	<input type="checkbox"/>	100.000	99.252	5605031.80	0.9210	A	2.5	-0.7
6	<input type="checkbox"/>	250.000	250.741	14033654.79	2.3264	A	0.7	0.3
7	<input type="checkbox"/>	500.000	499.745	28604835.41	4.6366	A	0.4	-0.1
8	<input type="checkbox"/>			13121.70	0.0021	P	3.4	

$y = 0.0093 * x + 1.3299E-004$

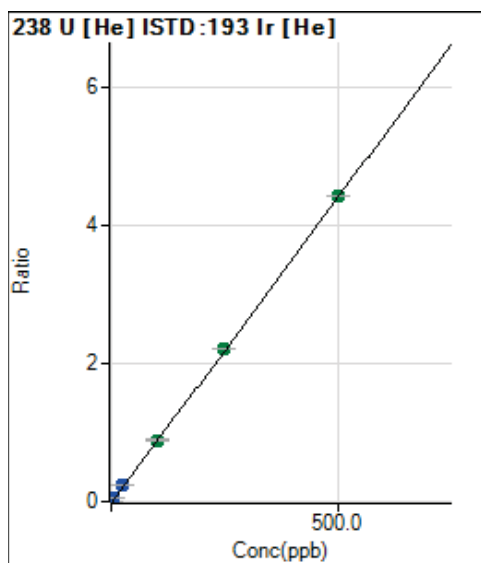
R = 1.0000

DL = 0.003309 ppb

BEC = 0.01433 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	1008.38	0.0002	P	10.0	
2	<input type="checkbox"/>	0.500	0.502	28569.78	0.0046	P	2.1	0.5
3	<input type="checkbox"/>	5.000	4.984	273746.83	0.0444	P	0.4	-0.3
4	<input type="checkbox"/>	25.000	25.757	1395284.04	0.2287	P	1.2	3.0
5	<input type="checkbox"/>	100.000	100.275	5416338.67	0.8899	A	1.7	0.3
6	<input type="checkbox"/>	250.000	250.141	13389411.05	2.2197	A	0.5	0.1
7	<input type="checkbox"/>	500.000	499.837	27361818.76	4.4352	A	0.3	0.0
8	<input type="checkbox"/>			3118.73	0.0005	P	3.8	

$y = 0.0089 * x + 1.6159E-004$

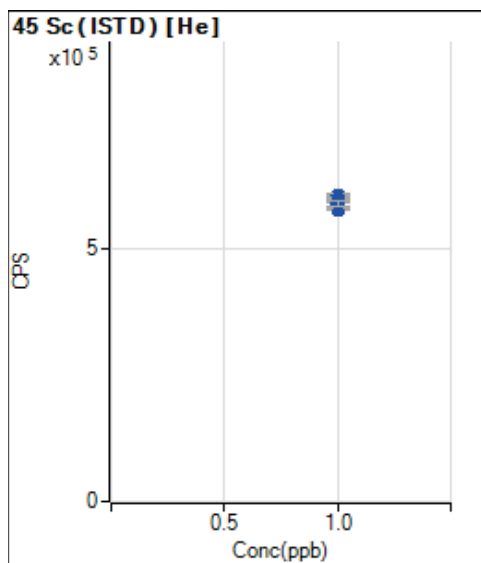
R = 1.0000

DL = 0.005458 ppb

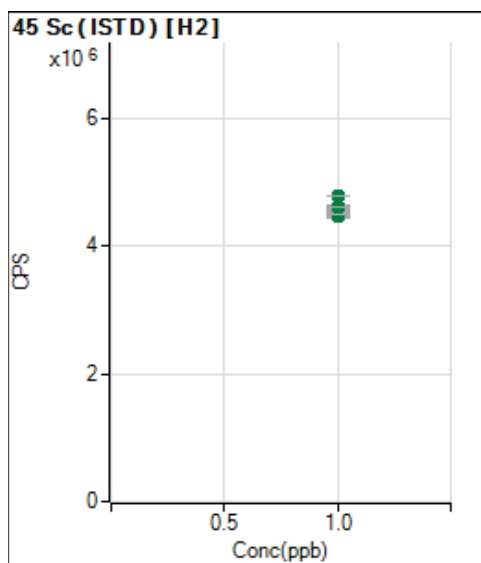
BEC = 0.01821 ppb

Weight: <None>

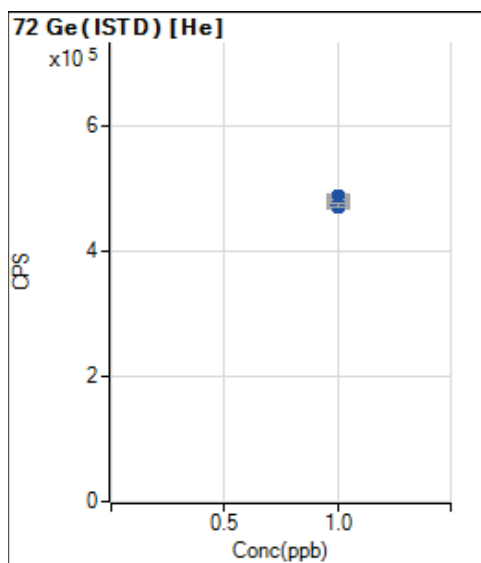
Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		601726.75		P	0.9	
2	<input type="checkbox"/>	1.000		604553.31		P	0.8	
3	<input type="checkbox"/>	1.000		598741.29		P	0.3	
4	<input type="checkbox"/>	1.000		592379.85		P	0.2	
5	<input type="checkbox"/>	1.000		585395.19		P	1.8	
6	<input type="checkbox"/>	1.000		576761.35		P	0.8	
7	<input type="checkbox"/>	1.000		581666.09		P	0.4	
8	<input type="checkbox"/>	1.000		588756.79		P	1.9	

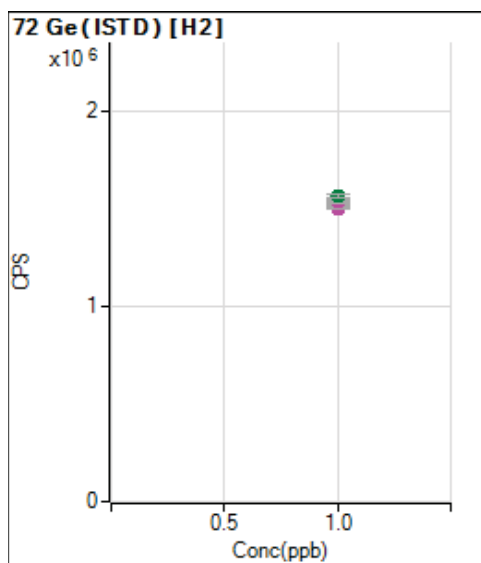


	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		4615868.83		A	0.8	
2	<input type="checkbox"/>	1.000		4583156.67		A	0.3	
3	<input type="checkbox"/>	1.000		4577649.17		A	0.3	
4	<input type="checkbox"/>	1.000		4489003.83		A	2.7	
5	<input type="checkbox"/>	1.000		4482561.33		A	0.2	
6	<input type="checkbox"/>	1.000		4508245.00		A	0.4	
7	<input type="checkbox"/>	1.000		4616736.50		A	0.4	
8	<input type="checkbox"/>	1.000		4787465.67		A	0.3	

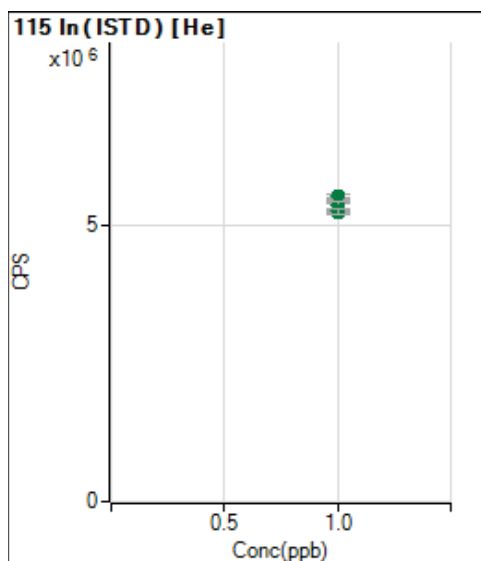


	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		489259.38		P	0.9	
2	<input type="checkbox"/>	1.000		487731.59		P	0.4	
3	<input type="checkbox"/>	1.000		485151.46		P	0.2	
4	<input type="checkbox"/>	1.000		481842.19		P	0.4	
5	<input type="checkbox"/>	1.000		481205.71		P	0.7	
6	<input type="checkbox"/>	1.000		471276.13		P	1.0	
7	<input type="checkbox"/>	1.000		473726.30		P	0.6	
8	<input type="checkbox"/>	1.000		474790.19		P	1.0	



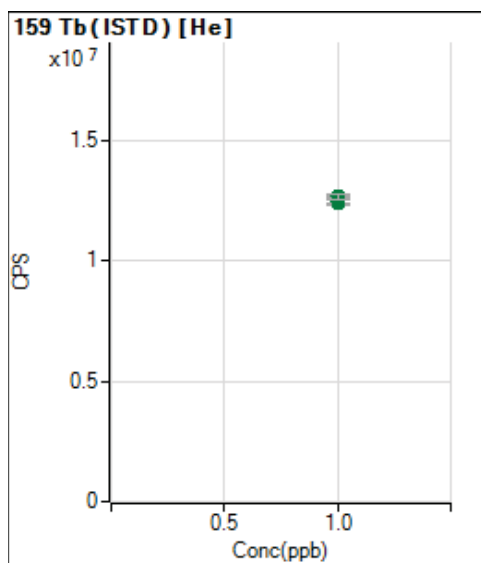


	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		1538701.21		A	1.2	
2	<input type="checkbox"/>	1.000		1519846.92		A	0.5	
3	<input type="checkbox"/>	1.000		1532905.38		A	0.8	
4	<input type="checkbox"/>	1.000		1511844.54		M	1.9	
5	<input type="checkbox"/>	1.000		1501180.13		M	0.4	
6	<input type="checkbox"/>	1.000		1506754.88		M	0.6	
7	<input type="checkbox"/>	1.000		1534158.83		M	0.6	
8	<input type="checkbox"/>	1.000		1564082.16		A	0.9	

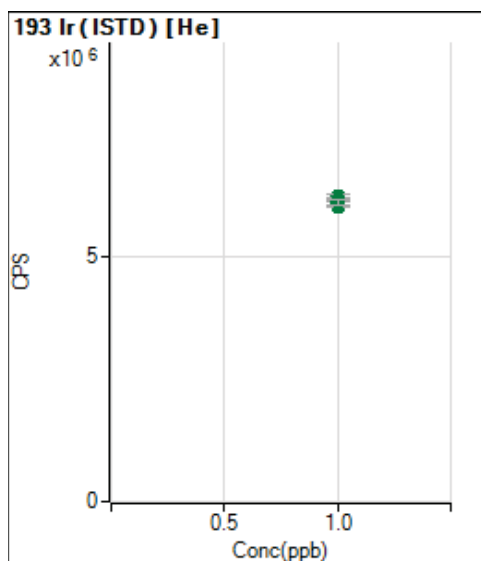


	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		5550040.77		A	0.6	
2	<input type="checkbox"/>	1.000		5500062.88		A	1.0	
3	<input type="checkbox"/>	1.000		5473823.16		A	1.3	
4	<input type="checkbox"/>	1.000		5462019.75		A	1.2	
5	<input type="checkbox"/>	1.000		5382751.14		A	2.2	
6	<input type="checkbox"/>	1.000		5244390.96		A	0.9	
7	<input type="checkbox"/>	1.000		5257423.96		A	0.2	
8	<input type="checkbox"/>	1.000		5267919.07		A	1.5	

Calibration for 024CAL5.d



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		12705930.64		A	0.3	
2	<input type="checkbox"/>	1.000		12536276.89		A	0.1	
3	<input type="checkbox"/>	1.000		12592602.31		A	0.9	
4	<input type="checkbox"/>	1.000		12470634.40		A	1.2	
5	<input type="checkbox"/>	1.000		12448833.57		A	1.5	
6	<input type="checkbox"/>	1.000		12384806.48		A	0.3	
7	<input type="checkbox"/>	1.000		12577736.89		A	0.4	
8	<input type="checkbox"/>	1.000		12684522.31		A	1.9	



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		6244576.37		A	1.1	
2	<input type="checkbox"/>	1.000		6184289.28		A	1.0	
3	<input type="checkbox"/>	1.000		6168177.20		A	1.2	
4	<input type="checkbox"/>	1.000		6101421.37		A	1.2	
5	<input type="checkbox"/>	1.000		6087492.72		A	1.9	
6	<input type="checkbox"/>	1.000		6032277.62		A	0.3	
7	<input type="checkbox"/>	1.000		6169302.20		A	0.4	
8	<input type="checkbox"/>	1.000		6118186.37		A	1.7	

Sample Name SysBlk-EPA Tune-352695  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 017SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:30:29  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2			121.000
Be	9	2	H2			51.667
B	11	2	H2			1462.070
Na	23	1	He			10849.033
Mg	24	1	He			7178.453
Al	27	1	He			128.000
Si	28	2	H2			16506.570
K	39	1	He			71895.610
Ca	43	1	He			16.317
Ti	47	1	He			1.667
V	51	1	He			-357.117
Cr	52	1	He			2266.850
Mn	55	1	He			388.010
Fe	56	1	He			15282.833
Co	59	1	He			176.000
Ni	60	1	He			942.700
Cu	63	1	He			193.333
Zn	66	1	He			212.000
As	75	1	He			120.500
Se	78	2	H2			21.000
Sr	88	1	He			185.000
Mo	95	1	He			44.667
Pd	105	1	He			275.010
Ag	107	1	He			240.003
Cd	111	1	He			25.990
Sn	118	1	He			146.667
Sb	121	1	He			75.000
Ba	138	1	He			133.333
Pt	195	1	He			189.333
Hg	202	1	He			230.667
Tl	205	1	He			600.020
Pb	208	1	He			2663.463
Bi	209	1	He			1680.137
Th	232	1	He			890.040
U	238	1	He			940.040

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He		608809.560
Sc	45	2	H2		4597464.833
Ge	72	1	He		493916.447
Ge	72	2	H2		1539022.583
In	115	1	He		5628810.853
Tb	159	1	He		12845161.893
Ir	193	1	He		6310918.867

Sample Name SysBlk-EPA Tune-352695  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 018SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:34:15  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2			118.000
Be	9	2	H2			50.167
B	11	2	H2			1391.900
Na	23	1	He			10528.770
Mg	24	1	He			6804.930
Al	27	1	He			118.333
Si	28	2	H2			15939.297
K	39	1	He			71607.510
Ca	43	1	He			16.067
Ti	47	1	He			4.000
V	51	1	He			-22.887
Cr	52	1	He			2346.860
Mn	55	1	He			389.343
Fe	56	1	He			14462.493
Co	59	1	He			189.333
Ni	60	1	He			815.357
Cu	63	1	He			203.333
Zn	66	1	He			186.000
As	75	1	He			119.500
Se	78	2	H2			22.333
Sr	88	1	He			223.333
Mo	95	1	He			28.667
Pd	105	1	He			216.670
Ag	107	1	He			160.000
Cd	111	1	He			20.993
Sn	118	1	He			131.667
Sb	121	1	He			101.667
Ba	138	1	He			121.667
Pt	195	1	He			201.333
Hg	202	1	He			215.667
Tl	205	1	He			520.017
Pb	208	1	He			2485.117
Bi	209	1	He			1763.483
Th	232	1	He			790.030
U	238	1	He			905.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He		603277.083
Sc	45	2	H2		4679873.167
Ge	72	1	He		488571.080
Ge	72	2	H2		1561325.663
In	115	1	He		5561898.580
Tb	159	1	He		12650683.977
Ir	193	1	He		6258329.073

Sample Name CAL0  
 Sample Type CalBlk  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 019CALB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:38:00  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.000000	N/A	115.500
Be	9	2	H2	0.000000	N/A	45.333
B	11	2	H2	0.000000	N/A	1304.560
Na	23	1	He	0.000000	N/A	10823.983
Mg	24	1	He	0.000000	N/A	6626.527
Al	27	1	He	0.000000	N/A	89.333
Si	28	2	H2	0.000000	N/A	15888.573
K	39	1	He	0.000000	N/A	71609.360
Ca	43	1	He	0.000000	N/A	14.400
Ti	47	1	He	0.000000	N/A	2.333
V	51	1	He	0.000000	N/A	-517.370
Cr	52	1	He	0.000000	N/A	2345.527
Mn	55	1	He	0.000000	N/A	430.010
Fe	56	1	He	0.000000	N/A	14170.213
Co	59	1	He	0.000000	N/A	159.333
Ni	60	1	He	0.000000	N/A	881.363
Cu	63	1	He	0.000000	N/A	238.667
Zn	66	1	He	0.000000	N/A	210.000
As	75	1	He	0.000000	N/A	123.833
Se	78	2	H2	0.000000	N/A	26.667
Sr	88	1	He	0.000000	N/A	166.667
Mo	95	1	He	0.000000	N/A	22.667
Pd	105	1	He	0.000000	N/A	260.003
Ag	107	1	He	0.000000	N/A	160.000
Cd	111	1	He	0.000000	N/A	20.660
Sn	118	1	He	0.000000	N/A	96.667
Sb	121	1	He	0.000000	N/A	75.000
Ba	138	1	He	0.000000	N/A	146.667
Pt	195	1	He	0.000000	N/A	196.000
Hg	202	1	He	0.000000	N/A	193.000
Tl	205	1	He	0.000000	N/A	523.350
Pb	208	1	He	0.000000	N/A	2761.800
Bi	209	1	He	0.000000	N/A	1740.147
Th	232	1	He	0.000000	N/A	830.033
U	238	1	He	0.000000	N/A	1008.383

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100	601726.753
Sc	45	2	H2	100	4615868.833
Ge	72	1	He	100	489259.377
Ge	72	2	H2	100	1538701.210
In	115	1	He	100	5550040.770
Tb	159	1	He	100	12705930.643
Ir	193	1	He	100	6244576.367

Sample Name CAL1  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 020CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:42:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.520296	7.2	313.000
Be	9	2	H2	0.197703	7.9	122.333
B	11	2	H2	9.933168	0.8	4915.300
Na	23	1	He	54.040725	1.1	62918.490
Mg	24	1	He	30.509336	2.5	23029.520
Al	27	1	He	31.613110	1.7	8633.503
Si	28	2	H2	100.874679	0.2	316731.503
K	39	1	He	100.735422	2.9	150751.407
Ca	43	1	He	102.323522	2.5	249.767
Ti	47	1	He	1.028336	5.1	256.000
V	51	1	He	1.003796	1.4	6440.797
Cr	52	1	He	2.023097	1.9	18987.630
Mn	55	1	He	0.504414	2.0	3521.100
Fe	56	1	He	51.169586	0.3	416277.397
Co	59	1	He	0.519093	3.5	6782.257
Ni	60	1	He	0.533681	5.1	2570.903
Cu	63	1	He	1.102408	2.2	9934.067
Zn	66	1	He	5.276853	0.8	10792.690
As	75	1	He	0.487427	3.1	986.203
Se	78	2	H2	0.497715	5.4	409.677
Sr	88	1	He	0.509752	1.9	5941.287
Mo	95	1	He	0.483499	2.1	2861.630
Pd	105	1	He	0.490217	8.1	4529.097
Ag	107	1	He	0.386345	8.8	7388.667
Cd	111	1	He	0.080175	7.5	299.483
Sn	118	1	He	0.488650	2.9	4400.730
Sb	121	1	He	0.493461	3.4	6418.177
Ba	138	1	He	0.301171	5.5	8562.723
Pt	195	1	He	0.506864	4.1	5865.970
Hg	202	1	He	0.210187	3.3	1323.067
Tl	205	1	He	0.091207	2.9	4157.363
Pb	208	1	He	0.513813	1.1	30640.450
Bi	209	1	He	0.514130	2.7	24960.593
Th	232	1	He	0.487972	1.4	28818.600
U	238	1	He	0.502451	2.1	28569.783

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.4697414	604553.313
Sc	45	2	H2	99.29131074	4583156.667
Ge	72	1	He	99.68773550	487731.593
Ge	72	2	H2	98.77466204	1519846.920
In	115	1	He	99.09950415	5500062.883
Tb	159	1	He	98.66476722	12536276.893
Ir	193	1	He	99.03456888	6184289.283

Sample Name CAL2  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 021CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:46:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.242676	3.0	2110.150
Be	9	2	H2	5.167745	0.9	2063.143
B	11	2	H2	4.959404	2.4	3098.983
Na	23	1	He	261.034877	0.2	259750.360
Mg	24	1	He	265.733418	0.8	147841.343
Al	27	1	He	259.417584	0.6	69530.557
Si	28	2	H2	129.933644	0.4	402937.033
K	39	1	He	258.855866	1.2	271843.420
Ca	43	1	He	259.262496	1.2	604.733
Ti	47	1	He	5.000545	5.2	1224.057
V	51	1	He	5.098938	4.3	34496.480
Cr	52	1	He	5.061112	0.5	43543.723
Mn	55	1	He	5.179097	1.1	31843.200
Fe	56	1	He	130.322847	0.9	1028209.813
Co	59	1	He	5.247174	0.5	66752.437
Ni	60	1	He	5.321738	1.0	17660.027
Cu	63	1	He	5.281324	0.9	46445.737
Zn	66	1	He	5.244820	2.0	10671.937
As	75	1	He	4.955584	0.2	8847.870
Se	78	2	H2	5.062629	1.5	3958.547
Sr	88	1	He	5.047367	2.1	57046.720
Mo	95	1	He	4.850367	1.3	28368.857
Pd	105	1	He	5.096776	0.7	44476.553
Ag	107	1	He	2.296526	2.9	42955.433
Cd	111	1	He	5.040731	0.9	17469.023
Sn	118	1	He	4.868500	0.4	42776.897
Sb	121	1	He	4.853744	2.2	62182.617
Ba	138	1	He	4.903885	0.7	136576.523
Pt	195	1	He	4.955386	1.0	55899.710
Hg	202	1	He	0.099930	5.3	732.020
Tl	205	1	He	2.470576	2.4	99587.937
Pb	208	1	He	5.054377	0.9	278567.867
Bi	209	1	He	5.097663	1.0	231552.283
Th	232	1	He	4.863814	0.9	279150.943
U	238	1	He	4.983698	0.4	273746.830

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.50385065	598741.290
Sc	45	2	H2	99.17199409	4577649.167
Ge	72	1	He	99.16038059	485151.460
Ge	72	2	H2	99.62332951	1532905.377
In	115	1	He	98.62671987	5473823.163
Tb	159	1	He	99.10806743	12592602.310
Ir	193	1	He	98.77655159	6168177.197

Sample Name CAL3  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 022CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:50:05  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	27.468673	2.9	10360.537
Be	9	2	H2	26.518237	2.8	10194.593
B	11	2	H2	25.926124	2.5	10518.657
Na	23	1	He	1326.567375	0.4	1262512.193
Mg	24	1	He	1339.813967	0.3	711133.767
Al	27	1	He	1320.220339	0.3	349736.687
Si	28	2	H2	668.497484	3.2	1967761.960
K	39	1	He	1318.026182	0.4	1081019.933
Ca	43	1	He	1315.775062	0.5	2978.780
Ti	47	1	He	25.740291	1.5	6224.323
V	51	1	He	25.569470	0.5	173192.777
Cr	52	1	He	26.150246	0.5	212974.633
Mn	55	1	He	26.523009	0.5	159594.083
Fe	56	1	He	664.195189	0.8	5127480.000
Co	59	1	He	26.547964	0.4	334790.280
Ni	60	1	He	26.790375	1.2	84793.470
Cu	63	1	He	26.957865	0.5	234489.793
Zn	66	1	He	26.463244	0.4	52642.247
As	75	1	He	25.719711	0.9	45095.623
Se	78	2	H2	26.060952	1.2	19985.810
Sr	88	1	He	25.891168	0.5	289960.067
Mo	95	1	He	24.845980	1.8	144910.733
Pd	105	1	He	25.963734	0.3	225025.153
Ag	107	1	He	12.720899	2.6	236661.977
Cd	111	1	He	25.745889	1.4	88945.123
Sn	118	1	He	25.131630	1.1	219935.617
Sb	121	1	He	24.953471	1.2	318691.933
Ba	138	1	He	25.066315	0.8	696019.467
Pt	195	1	He	25.760750	1.1	286973.050
Hg	202	1	He	0.501386	2.1	2876.647
Tl	205	1	He	13.096247	2.9	520453.243
Pb	208	1	He	26.203844	1.5	1418737.830
Bi	209	1	He	26.749099	1.4	1194571.467
Th	232	1	He	25.700295	0.5	1455586.540
U	238	1	He	25.756992	1.2	1395284.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.44665374	592379.853
Sc	45	2	H2	97.25154668	4489003.833
Ge	72	1	He	98.48399635	481842.187
Ge	72	2	H2	98.25458857	1511844.543
In	115	1	He	98.41404738	5462019.753
Tb	159	1	He	98.14813845	12470634.400
Ir	193	1	He	97.70753063	6101421.367



Sample Name CAL4  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 023CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:54:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	105.982690	0.6	39617.060
Be	9	2	H2	101.823802	1.1	38982.820
B	11	2	H2	101.534451	0.9	37456.387
Na	23	1	He	5146.474536	2.8	4808656.805
Mg	24	1	He	5129.734647	2.8	2671683.865
Al	27	1	He	5109.060625	3.1	1336851.000
Si	28	2	H2	2575.247964	0.6	7529733.000
K	39	1	He	5056.206627	2.5	3899651.500
Ca	43	1	He	5045.143633	3.2	11243.950
Ti	47	1	He	100.876556	2.6	24093.645
V	51	1	He	100.587838	2.2	674624.205
Cr	52	1	He	101.449666	2.3	809742.470
Mn	55	1	He	102.303616	2.4	606997.940
Fe	56	1	He	2561.782627	2.6	19499424.000
Co	59	1	He	100.914450	1.4	1270441.810
Ni	60	1	He	102.318671	1.6	320964.160
Cu	63	1	He	102.045283	2.0	885752.630
Zn	66	1	He	102.370557	2.2	202764.235
As	75	1	He	99.442182	1.3	173773.290
Se	78	2	H2	101.558340	1.7	77264.643
Sr	88	1	He	100.452578	2.1	1122939.635
Mo	95	1	He	98.181170	2.8	564156.000
Pd	105	1	He	99.753798	2.6	851068.815
Ag	107	1	He	50.175425	3.7	919276.315
Cd	111	1	He	100.838072	2.7	343191.580
Sn	118	1	He	98.603177	2.9	849876.315
Sb	121	1	He	97.434876	2.7	1225869.825
Ba	138	1	He	97.560341	1.9	2668838.240
Pt	195	1	He	99.674879	1.9	1107776.125
Hg	202	1	He	1.980865	1.1	10787.865
Tl	205	1	He	50.339698	0.6	1995880.440
Pb	208	1	He	101.403458	1.2	5473021.670
Bi	209	1	He	102.334354	1.3	4554706.025
Th	232	1	He	99.251826	2.5	5605031.795
U	238	1	He	100.275397	1.7	5416338.665

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.28588379	585395.190
Sc	45	2	H2	97.11197382	4482561.333
Ge	72	1	He	98.35390550	481205.705
Ge	72	2	H2	97.56150946	1501180.127
In	115	1	He	96.98579448	5382751.135
Tb	159	1	He	97.97655846	12448833.565
Ir	193	1	He	97.48447873	6087492.720

Sample Name CAL5  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 024CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:58:00  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	258.841947	0.8	97146.493
Be	9	2	H2	249.115302	1.0	95854.660
B	11	2	H2	249.297092	0.5	90638.333
Na	23	1	He	12732.60690	0.9	11708630.660
Mg	24	1	He	12730.67463	0.7	6524704.903
Al	27	1	He	12694.05441	0.7	3273252.000
Si	28	2	H2	6215.438398	0.7	18255154.000
K	39	1	He	12614.12365	0.7	9484536.317
Ca	43	1	He	12632.81292	1.1	27725.293
Ti	47	1	He	253.142876	0.4	59579.123
V	51	1	He	253.091229	0.4	1673466.827
Cr	52	1	He	252.862124	0.6	1985567.960
Mn	55	1	He	252.163544	0.8	1473753.000
Fe	56	1	He	6383.529129	1.0	47861705.333
Co	59	1	He	252.308896	1.4	3110505.833
Ni	60	1	He	254.070702	1.3	779284.980
Cu	63	1	He	253.598353	1.0	2155479.000
Zn	66	1	He	253.445662	1.0	491345.903
As	75	1	He	250.379652	1.4	428303.607
Se	78	2	H2	250.955426	1.3	191612.317
Sr	88	1	He	251.708439	1.3	2755464.853
Mo	95	1	He	247.122162	1.4	1383755.707
Pd	105	1	He	252.102612	1.1	2095654.397
Ag	107	1	He	125.671050	1.4	2243746.580
Cd	111	1	He	252.168294	1.3	836318.780
Sn	118	1	He	250.291321	1.2	2102209.603
Sb	121	1	He	248.576419	0.9	3047688.497
Ba	138	1	He	249.289855	1.2	6644941.983
Pt	195	1	He	248.896848	0.8	2752110.750
Hg	202	1	He	4.997132	1.2	26790.520
Tl	205	1	He	125.512978	0.1	4950245.760
Pb	208	1	He	250.817033	0.5	13464817.197
Bi	209	1	He	253.526088	0.2	11180588.997
Th	232	1	He	250.741444	0.7	14033654.790
U	238	1	He	250.141257	0.5	13389411.050

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.85104038	576761.353
Sc	45	2	H2	97.66839489	4508245.000
Ge	72	1	He	96.32439338	471276.127
Ge	72	2	H2	97.92381177	1506754.877
In	115	1	He	94.49283661	5244390.957
Tb	159	1	He	97.47264353	12384806.483
Ir	193	1	He	96.60026983	6032277.620

Sample Name CAL6  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 025CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:03:30  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	494.256608	0.8	189858.737
Be	9	2	H2	478.163614	0.9	188372.213
B	11	2	H2	485.173719	0.9	179405.090
Na	23	1	He	25119.31247	0.3	23286279.650
Mg	24	1	He	25097.40484	0.6	12966286.060
Al	27	1	He	25010.08737	0.2	6503993.333
Si	28	2	H2	11779.81034	0.7	35416380.000
K	39	1	He	24873.79791	0.5	18794955.970
Ca	43	1	He	24981.84800	0.3	55282.837
Ti	47	1	He	498.216174	0.2	118256.133
V	51	1	He	498.307347	0.7	3323353.057
Cr	52	1	He	498.220789	0.4	3943264.167
Mn	55	1	He	498.379559	0.4	2937217.917
Fe	56	1	He	12560.61017	0.6	94966770.667
Co	59	1	He	498.582773	0.7	6178744.000
Ni	60	1	He	497.408145	1.2	1532778.960
Cu	63	1	He	497.690856	0.9	4252033.167
Zn	66	1	He	497.724679	0.8	969770.480
As	75	1	He	499.886209	0.7	859493.623
Se	78	2	H2	499.156947	1.4	388028.250
Sr	88	1	He	499.010223	1.0	5491169.500
Mo	95	1	He	501.811899	0.6	2817057.083
Pd	105	1	He	498.948790	0.7	4157937.647
Ag	107	1	He	249.620607	0.9	4468059.727
Cd	111	1	He	498.710537	0.4	1658203.010
Sn	118	1	He	500.128449	0.5	4211263.893
Sb	121	1	He	501.228611	0.2	6160837.617
Ba	138	1	He	500.840649	0.2	13384108.550
Pt	195	1	He	500.579002	0.7	5620947.167
Hg	202	1	He	10.004988	0.5	54281.357
Tl	205	1	He	249.646057	0.6	9998925.267
Pb	208	1	He	499.250042	0.1	27216436.467
Bi	209	1	He	497.681640	0.2	22444866.333
Th	232	1	He	499.745272	0.4	28604835.407
U	238	1	He	499.836603	0.3	27361818.757

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.66615011	581666.087
Sc	45	2	H2	100.0187974	4616736.500
Ge	72	1	He	96.82518637	473726.303
Ge	72	2	H2	99.70479150	1534158.833
In	115	1	He	94.72766383	5257423.963
Tb	159	1	He	98.99107154	12577736.893
Ir	193	1	He	98.79456728	6169302.200

Sample Name CAL7  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 026CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:08:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.264570	13.1	225.167
Be	9	2	H2	0.214977	1.0	134.833
B	11	2	H2	1.625186	9.5	1971.797
Na	23	1	He	49865.57118	1.0	46774354.307
Mg	24	1	He	49878.33113	1.2	26073306.277
Al	27	1	He	49933.73308	0.9	13142509.000
Si	28	2	H2	22477.98602	0.7	70066773.333
K	39	1	He	50027.20306	1.0	38186427.767
Ca	43	1	He	49969.66306	1.8	111888.777
Ti	47	1	He	2.477713	4.1	597.343
V	51	1	He	0.138420	38.8	429.033
Cr	52	1	He	0.263937	8.1	4406.013
Mn	55	1	He	0.652433	2.3	4311.317
Fe	56	1	He	24929.12553	1.5	190732608.000
Co	59	1	He	0.694011	2.3	8775.327
Ni	60	1	He	1.121207	2.4	4315.987
Cu	63	1	He	0.321868	3.9	2988.320
Zn	66	1	He	1.615293	3.2	3357.733
As	75	1	He	0.135733	7.0	354.003
Se	78	2	H2	0.097435	22.3	104.333
Sr	88	1	He	0.553163	2.3	6263.093
Mo	95	1	He	0.099997	5.6	584.013
Pd	105	1	He	0.082543	12.1	936.710
Ag	107	1	He	0.113468	8.4	2185.190
Cd	111	1	He	0.042315	1.6	160.560
Sn	118	1	He	0.885145	1.6	7558.777
Sb	121	1	He	0.162163	7.9	2068.510
Ba	138	1	He	0.074546	0.7	2135.183
Pt	195	1	He	0.014867	12.5	364.010
Hg	202	1	He	0.048079	4.9	454.677
Tl	205	1	He	0.062144	23.8	3027.050
Pb	208	1	He	0.229307	2.9	15358.493
Bi	209	1	He	0.030521	17.8	3067.087
Th	232	1	He	0.216923	3.6	13121.697
U	238	1	He	0.039225	5.5	3118.733

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.84454323	588756.793
Sc	45	2	H2	103.7175413	4787465.667
Ge	72	1	He	97.04263477	474790.190
Ge	72	2	H2	101.6495049	1564082.163
In	115	1	He	94.91676346	5267919.070
Tb	159	1	He	99.83150912	12684522.310
Ir	193	1	He	97.97600361	6118186.367

Sample Name ICV  
 Sample Type ICV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 027\_ICV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:13:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.548565	0.5	33252.143
Be	9	2	H2	82.142909	0.5	33072.977
B	11	2	H2	81.418176	1.0	31842.253
Na	23	1	He	1027.784832	0.2	1014862.877
Mg	24	1	He	1024.320714	0.2	564282.660
Al	27	1	He	1022.343951	0.7	280324.760
Si	28	2	H2	522.115987	0.9	1617962.913
K	39	1	He	1020.521040	0.7	882758.687
Ca	43	1	He	1016.371836	1.7	2384.850
Ti	47	1	He	81.988764	0.8	20514.587
V	51	1	He	81.185266	0.8	570286.153
Cr	52	1	He	82.598116	0.9	691069.353
Mn	55	1	He	82.171722	0.7	510823.613
Fe	56	1	He	519.001785	0.6	4149916.667
Co	59	1	He	84.027518	0.3	1100353.460
Ni	60	1	He	84.225728	0.3	274984.127
Cu	63	1	He	84.415297	0.9	762181.187
Zn	66	1	He	82.980902	0.5	171003.920
As	75	1	He	81.027799	0.5	147301.107
Se	78	2	H2	81.874591	0.9	65508.943
Sr	88	1	He	82.422345	0.1	958440.767
Mo	95	1	He	79.169634	1.2	474923.857
Pd	105	1	He	82.914493	0.9	738547.357
Ag	107	1	He	41.184641	2.7	787768.713
Cd	111	1	He	81.432138	1.2	289335.353
Sn	118	1	He	79.084086	1.7	711621.733
Sb	121	1	He	79.611025	1.1	1045679.100
Ba	138	1	He	79.247385	1.1	2263029.707
Pt	195	1	He	82.181071	0.6	955362.520
Hg	202	1	He	3.839880	0.8	21685.940
Tl	205	1	He	42.353725	1.4	1756245.187
Pb	208	1	He	82.721100	1.2	4669958.210
Bi	209	1	He	82.840351	0.8	3888071.293
Th	232	1	He	76.921889	0.2	4581223.890
U	238	1	He	80.124123	1.2	4563835.453

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.8900118	613099.460
Sc	45	2	H2	102.1017567	4712883.167
Ge	72	1	He	102.2992105	500508.480
Ge	72	2	H2	102.5932611	1578603.750
In	115	1	He	101.2265890	5618116.963
Tb	159	1	He	102.4687322	13019606.057
Ir	193	1	He	102.7801190	6418183.027

Sample Name ICB  
 Sample Type ICB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 028\_ICB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:18:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.144334	14.6	173.833
Be	9	2	H2	0.116729	10.9	92.833
B	11	2	H2	0.961528	9.8	1685.597
Na	23	1	He	2.324639	22.8	13124.187
Mg	24	1	He	-2.881599		5114.250
Al	27	1	He	0.125192	27.6	123.667
Si	28	2	H2	4.215086	16.9	29032.127
K	39	1	He	-0.119772		71910.903
Ca	43	1	He	-0.282745		13.817
Ti	47	1	He	-0.001441		2.000
V	51	1	He	0.066846	137.3	-52.400
Cr	52	1	He	0.008860	61.9	2431.547
Mn	55	1	He	-0.006829		390.677
Fe	56	1	He	0.246849	15.8	16190.967
Co	59	1	He	0.006855	32.8	248.000
Ni	60	1	He	-0.074316		648.020
Cu	63	1	He	0.009745	18.6	326.007
Zn	66	1	He	0.002636	226.1	216.000
As	75	1	He	0.006837	130.3	136.500
Se	78	2	H2	0.003193	257.8	30.000
Sr	88	1	He	-0.001358		151.667
Mo	95	1	He	0.008730	7.5	75.333
Pd	105	1	He	0.042444	37.5	641.687
Ag	107	1	He	0.049144	16.4	1101.720
Cd	111	1	He	0.003588	28.9	33.657
Sn	118	1	He	0.005422	25.8	146.667
Sb	121	1	He	0.001068	32.6	90.000
Ba	138	1	He	0.002606	106.7	223.337
Pt	195	1	He	0.002099	113.0	222.000
Hg	202	1	He	0.025187	18.8	334.003
Tl	205	1	He	0.019541	22.3	1326.743
Pb	208	1	He	0.007974	44.3	3235.167
Bi	209	1	He	0.003042	169.8	1933.503
Th	232	1	He	0.010504	17.6	1480.097
U	238	1	He	0.001394	161.4	1116.723

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.5593131	605092.290
Sc	45	2	H2	101.6822546	4693519.500
Ge	72	1	He	100.4196029	491312.323
Ge	72	2	H2	102.5245613	1577546.667
In	115	1	He	101.2682879	5620431.270
Tb	159	1	He	101.1416847	12850992.310
Ir	193	1	He	102.8156733	6420403.237

Sample Name ICB  
 Sample Type ICB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 029\_ICB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:23:43  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.097692	5.0	153.500
Be	9	2	H2	0.065957	15.2	71.500
B	11	2	H2	0.634737	20.7	1541.920
Na	23	1	He	1.161559	13.0	11974.890
Mg	24	1	He	-2.571591		5267.640
Al	27	1	He	0.144573	61.6	128.667
Si	28	2	H2	1.998305	10.9	21969.093
K	39	1	He	0.128547	877.6	71927.487
Ca	43	1	He	0.021632	4120.8	14.467
Ti	47	1	He	-0.001411		2.000
V	51	1	He	0.020549	390.5	-377.940
Cr	52	1	He	0.006226	124.9	2403.537
Mn	55	1	He	-0.008287		380.677
Fe	56	1	He	0.117008	8.3	15133.190
Co	59	1	He	0.003269	45.4	202.000
Ni	60	1	He	-0.097678		573.347
Cu	63	1	He	0.004466	69.2	279.333
Zn	66	1	He	0.004889	102.7	220.667
As	75	1	He	0.003206	198.3	130.167
Se	78	2	H2	-0.002902		24.667
Sr	88	1	He	0.001567	53.0	185.000
Mo	95	1	He	0.003506	24.0	44.000
Pd	105	1	He	0.017922	54.8	423.343
Ag	107	1	He	0.010265	35.5	358.343
Cd	111	1	He	0.003019	45.7	31.657
Sn	118	1	He	0.003387	135.5	128.333
Sb	121	1	He	0.000814	73.1	86.667
Ba	138	1	He	0.000399	117.0	160.000
Pt	195	1	He	0.003386	35.2	238.000
Hg	202	1	He	0.019106	14.4	301.667
Tl	205	1	He	0.005528	5.1	758.363
Pb	208	1	He	0.004250	86.4	3038.483
Bi	209	1	He	-0.000347		1776.817
Th	232	1	He	0.004649	50.3	1133.393
U	238	1	He	-0.000900		988.377

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.3098815	603591.393
Sc	45	2	H2	100.2916135	4629329.333
Ge	72	1	He	100.4245934	491336.740
Ge	72	2	H2	100.7042003	1549536.750
In	115	1	He	101.2933153	5621820.297
Tb	159	1	He	101.4905867	12895323.557
Ir	193	1	He	103.0489223	6434968.650

Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 030CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:27:29  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.550873	2.5	331.667
Be	9	2	H2	0.236478	13.5	140.500
B	11	2	H2	10.079753	2.3	5075.687
Na	23	1	He	54.337278	1.5	63338.577
Mg	24	1	He	28.466528	2.3	21982.900
Al	27	1	He	31.636258	0.5	8658.850
Si	28	2	H2	102.179057	0.8	327535.033
K	39	1	He	104.500712	1.6	154032.800
Ca	43	1	He	110.823029	1.9	269.833
Ti	47	1	He	1.075997	3.0	268.333
V	51	1	He	1.089660	5.8	7050.953
Cr	52	1	He	2.030788	0.5	19093.087
Mn	55	1	He	0.540715	3.8	3751.157
Fe	56	1	He	52.190648	0.5	425202.157
Co	59	1	He	0.536228	3.0	7045.050
Ni	60	1	He	0.448398	5.8	2315.527
Cu	63	1	He	1.104717	0.7	10018.793
Zn	66	1	He	5.323998	1.6	10956.820
As	75	1	He	0.497512	1.4	1010.537
Se	78	2	H2	0.525959	5.1	445.010
Sr	88	1	He	0.516263	2.1	6052.993
Mo	95	1	He	0.484297	1.2	2912.977
Pd	105	1	He	0.531038	1.5	4965.917
Ag	107	1	He	0.407265	3.6	7897.270
Cd	111	1	He	0.079974	3.1	303.477
Sn	118	1	He	0.493589	3.1	4515.763
Sb	121	1	He	0.490203	3.0	6479.887
Ba	138	1	He	0.300681	1.0	8689.463
Pt	195	1	He	0.501480	2.6	5895.980
Hg	202	1	He	0.225470	2.7	1427.410
Tl	205	1	He	0.092464	8.9	4274.057
Pb	208	1	He	0.515034	2.1	31182.637
Bi	209	1	He	0.515828	2.8	25508.223
Th	232	1	He	0.485016	2.2	29187.673
U	238	1	He	0.491601	0.2	28504.623

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.6830614	605836.917
Sc	45	2	H2	101.4356741	4682137.667
Ge	72	1	He	100.3275679	490862.033
Ge	72	2	H2	101.9177671	1568209.917
In	115	1	He	100.6974909	5588751.800
Tb	159	1	He	100.2040812	12731861.060
Ir	193	1	He	100.9114475	6301492.403



Sample Name ICSA  
 Sample Type ICSA  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 031ICSA.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:31:14  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.170846	14.8	180.167
Be	9	2	H2	0.017579	97.6	52.000
B	11	2	H2	0.371501	25.0	1433.237
Na	23	1	He	25527.40694	0.6	23809203.810
Mg	24	1	He	25226.26720	0.4	13112663.133
Al	27	1	He	25304.33782	0.4	6620743.667
Si	28	2	H2	16.744713	1.0	65851.880
K	39	1	He	25488.36988	0.5	19375303.877
Ca	43	1	He	25023.75453	0.5	55714.007
Ti	47	1	He	510.236195	0.7	121848.237
V	51	1	He	0.095416	80.1	137.600
Cr	52	1	He	0.250263	3.0	4272.633
Mn	55	1	He	0.035288	5.5	627.353
Fe	56	1	He	25707.23470	0.6	195537712.000
Co	59	1	He	0.057683	10.9	870.027
Ni	60	1	He	-0.068049		644.687
Cu	63	1	He	0.077486	4.2	894.030
Zn	66	1	He	0.227582	9.9	647.350
As	75	1	He	0.035117	10.2	180.500
Se	78	2	H2	0.051212	24.2	67.333
Sr	88	1	He	0.235652	5.9	2756.960
Mo	95	1	He	527.163121	1.1	2968431.250
Pd	105	1	He	0.001150	333.3	256.670
Ag	107	1	He	0.038406	12.4	841.700
Cd	111	1	He	-0.000274		18.690
Sn	118	1	He	0.025043	18.3	303.343
Sb	121	1	He	0.013409	31.1	236.670
Ba	138	1	He	0.019921	11.1	673.353
Pt	195	1	He	0.000879	182.9	202.667
Hg	202	1	He	0.004809	32.2	215.667
Tl	205	1	He	0.012488	9.5	1011.720
Pb	208	1	He	0.001907	38.7	2820.133
Bi	209	1	He	0.000734	386.3	1720.143
Th	232	1	He	0.010535	10.1	1398.417
U	238	1	He	0.003342	36.9	1158.397

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.25799848	585227.397
Sc	45	2	H2	99.46161092	4591017.500
Ge	72	1	He	96.93216780	474249.720
Ge	72	2	H2	101.1059948	1555719.167
In	115	1	He	95.01797293	5273536.237
Tb	159	1	He	98.36601894	12498318.143
Ir	193	1	He	97.02445793	6058766.370

Sample Name ICSAB  
 Sample Type ICSB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 032ICSB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:35:02  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	100.345976	1.0	39093.360
Be	9	2	H2	100.391156	1.2	40050.413
B	11	2	H2	95.666139	0.9	36851.230
Na	23	1	He	27398.40612	0.4	26103452.943
Mg	24	1	He	27078.14413	0.4	14377688.953
Al	27	1	He	27128.94328	0.6	7250790.333
Si	28	2	H2	1271.272911	0.4	3881487.000
K	39	1	He	27317.71198	0.3	21207786.350
Ca	43	1	He	27277.09162	0.4	62037.233
Ti	47	1	He	604.438110	0.7	147451.297
V	51	1	He	99.746288	0.6	683296.050
Cr	52	1	He	99.966688	0.2	815044.897
Mn	55	1	He	100.513713	0.1	609173.750
Fe	56	1	He	26292.57424	0.5	204293989.333
Co	59	1	He	101.790715	0.1	1292122.210
Ni	60	1	He	102.596022	0.6	324508.230
Cu	63	1	He	100.873390	0.1	882877.687
Zn	66	1	He	100.866336	0.4	201453.640
As	75	1	He	100.040976	0.2	176271.173
Se	78	2	H2	101.197630	0.5	80545.800
Sr	88	1	He	99.930491	0.5	1126412.717
Mo	95	1	He	622.214445	0.7	3535395.000
Pd	105	1	He	99.438811	0.4	838937.020
Ag	107	1	He	49.610629	0.1	898920.873
Cd	111	1	He	100.553983	0.4	338418.100
Sn	118	1	He	99.422801	0.5	847417.797
Sb	121	1	He	99.456363	0.5	1237376.153
Ba	138	1	He	100.463795	0.3	2717464.230
Pt	195	1	He	98.827795	0.7	1110743.707
Hg	202	1	He	4.029034	0.6	21992.450
Tl	205	1	He	49.454759	0.5	1982779.033
Pb	208	1	He	98.841107	0.5	5394812.603
Bi	209	1	He	109.218885	0.5	4876826.387
Th	232	1	He	104.643962	1.0	5928974.703
U	238	1	He	100.264388	0.2	5433517.837

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.35032416	597817.480
Sc	45	2	H2	101.1963186	4671089.333
Ge	72	1	He	99.16674872	485182.617
Ge	72	2	H2	102.0599946	1570398.373
In	115	1	He	95.87999873	5321379.020
Tb	159	1	He	99.07196880	12588015.643
Ir	193	1	He	97.78965860	6106549.910

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 033\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:38:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.670648	1.1	32941.807
Be	9	2	H2	81.472992	1.1	32837.140
B	11	2	H2	79.766353	1.4	31255.013
Na	23	1	He	1018.776745	0.7	1007691.990
Mg	24	1	He	1019.927303	1.1	562810.017
Al	27	1	He	1013.662157	0.5	278392.480
Si	28	2	H2	509.750283	1.1	1581678.080
K	39	1	He	1021.949328	0.7	885321.393
Ca	43	1	He	1040.163524	2.2	2444.217
Ti	47	1	He	81.509471	1.1	20427.460
V	51	1	He	81.480712	0.8	573284.017
Cr	52	1	He	82.631036	1.0	692454.103
Mn	55	1	He	81.739839	0.6	508961.750
Fe	56	1	He	515.555275	0.2	4129195.750
Co	59	1	He	83.752673	0.3	1095692.790
Ni	60	1	He	84.712798	0.7	276293.187
Cu	63	1	He	84.365785	0.2	761015.603
Zn	66	1	He	82.727393	0.3	170316.593
As	75	1	He	80.330688	0.2	145894.783
Se	78	2	H2	82.060025	0.4	65715.900
Sr	88	1	He	81.488923	0.7	946653.710
Mo	95	1	He	79.216928	0.7	474622.407
Pd	105	1	He	82.781938	1.0	736445.223
Ag	107	1	He	41.286860	0.5	788837.567
Cd	111	1	He	81.286960	0.7	288464.077
Sn	118	1	He	78.294970	0.3	703694.027
Sb	121	1	He	79.115240	0.8	1037890.220
Ba	138	1	He	78.821299	0.4	2248102.933
Pt	195	1	He	81.290343	0.3	940295.250
Hg	202	1	He	3.857782	0.8	21677.917
Tl	205	1	He	41.894181	1.3	1728572.630
Pb	208	1	He	81.736216	0.7	4591461.703
Bi	209	1	He	82.525418	0.5	3840258.483
Th	232	1	He	76.928364	0.6	4542452.747
U	238	1	He	79.243142	0.5	4475128.060

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.0565979	614101.853
Sc	45	2	H2	102.2127867	4718008.167
Ge	72	1	He	102.1991866	500019.103
Ge	72	2	H2	102.6796839	1579933.540
In	115	1	He	101.0977273	5610965.083
Tb	159	1	He	101.9548974	12954318.560
Ir	193	1	He	101.9018870	6363341.153

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 034\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:42:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.098632	14.2	158.000
Be	9	2	H2	0.069353	15.4	74.833
B	11	2	H2	0.772284	0.8	1635.590
Na	23	1	He	1.597327	8.0	12635.413
Mg	24	1	He	-4.661382		4228.963
Al	27	1	He	0.156337	19.0	134.333
Si	28	2	H2	0.185919	83.4	16948.397
K	39	1	He	-0.469448		72851.997
Ca	43	1	He	-0.256875		14.100
Ti	47	1	He	0.009070	25.2	4.667
V	51	1	He	0.039135	92.3	-251.847
Cr	52	1	He	-0.001919		2382.200
Mn	55	1	He	-0.016837		334.673
Fe	56	1	He	0.445524	1.5	18055.143
Co	59	1	He	0.002053	95.2	190.000
Ni	60	1	He	-0.133729		467.343
Cu	63	1	He	0.004238	35.0	282.667
Zn	66	1	He	0.003518	472.8	222.000
As	75	1	He	0.002231	364.5	130.833
Se	78	2	H2	0.006713	36.7	33.333
Sr	88	1	He	-0.001744		150.000
Mo	95	1	He	0.022422	10.7	158.667
Pd	105	1	He	0.020225	37.8	446.677
Ag	107	1	He	0.083258	23.6	1768.463
Cd	111	1	He	0.002766	66.5	30.970
Sn	118	1	He	0.010996	20.6	198.333
Sb	121	1	He	0.003286	89.8	120.000
Ba	138	1	He	0.002155	69.7	211.670
Pt	195	1	He	0.001642	85.3	220.000
Hg	202	1	He	0.021419	27.4	317.670
Tl	205	1	He	0.027423	18.6	1673.457
Pb	208	1	He	-0.002164		2708.463
Bi	209	1	He	-0.000825		1750.147
Th	232	1	He	0.011021	10.9	1510.100
U	238	1	He	-0.001142		971.713

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.2617514	615336.317
Sc	45	2	H2	102.9878773	4753785.333
Ge	72	1	He	102.4104521	501052.740
Ge	72	2	H2	104.2734876	1604457.417
In	115	1	He	102.0134488	5661788.000
Tb	159	1	He	102.4735332	13020216.057
Ir	193	1	He	102.7926266	6418964.070

Sample Name 4315579\_B70071Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 035\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:47:03  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.118881	6.3	165.167
Be	9	2	H2	0.043089	26.9	63.833
B	11	2	H2	2.338432	5.0	2216.330
Na	23	1	He	7.233714	2.4	18067.653
Mg	24	1	He	-2.099002		5601.093
Al	27	1	He	6.662014	2.6	1914.457
Si	28	2	H2	3.409238	1.8	26788.010
K	39	1	He	0.728968	76.1	73431.527
Ca	43	1	He	7.932500	38.8	33.117
Ti	47	1	He	0.194681	13.7	51.000
V	51	1	He	0.107338	13.1	228.100
Cr	52	1	He	0.167253	8.4	3778.497
Mn	55	1	He	0.051990	9.6	760.020
Fe	56	1	He	2.885920	2.0	37380.240
Co	59	1	He	0.040048	1.2	676.020
Ni	60	1	He	-0.104232		553.343
Cu	63	1	He	0.060618	9.7	778.023
Zn	66	1	He	0.910833	2.5	2054.820
As	75	1	He	0.171735	3.5	431.343
Se	78	2	H2	0.170594	3.7	165.333
Sr	88	1	He	0.042046	16.1	648.353
Mo	95	1	He	0.197573	6.5	1212.057
Pd	105	1	He	0.031054	22.8	541.680
Ag	107	1	He	0.032345	7.2	783.360
Cd	111	1	He	0.037446	7.9	154.450
Sn	118	1	He	0.072738	13.3	755.027
Sb	121	1	He	0.146890	4.2	2011.830
Ba	138	1	He	0.033547	8.1	1110.057
Pt	195	1	He	0.017699	4.7	405.343
Hg	202	1	He	0.010306	17.6	254.667
Tl	205	1	He	0.030732	8.4	1805.137
Pb	208	1	He	0.026671	6.0	4321.957
Bi	209	1	He	0.022978	8.3	2867.040
Th	232	1	He	0.015529	4.0	1778.473
U	238	1	He	0.024372	5.3	2425.247

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.7420797	612209.313
Sc	45	2	H2	102.4785402	4730275.000
Ge	72	1	He	100.6027041	492208.163
Ge	72	2	H2	103.5347774	1593090.873
In	115	1	He	101.5682164	5637077.420
Tb	159	1	He	102.1580276	12980128.143
Ir	193	1	He	102.7943881	6419074.070

Sample Name 10607356001\_B70071Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 036SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:50:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	116.391616	1.5	46241.557
Be	9	2	H2	0.060718	18.5	71.500
B	11	2	H2	1511.896101	0.9	574231.933
Na	23	1	He	200650.8461	4.7	186445363.890
Mg	24	1	He	7389.627036	4.6	3832888.900
Al	27	1	He	2.738019	7.8	800.353
Si	28	2	H2	2113.493751	1.0	6572530.500
K	39	1	He	2073.562786	5.0	1634675.600
Ca	43	1	He	54830.08800	4.7	121650.960
Ti	47	1	He	0.090780	46.2	23.667
V	51	1	He	3.840993	5.2	25187.033
Cr	52	1	He	0.466908	6.4	5979.233
Mn	55	1	He	3.997361	3.3	24044.380
Fe	56	1	He	1.586589	24.4	25725.117
Co	59	1	He	0.054670	9.2	823.360
Ni	60	1	He	0.118611	23.6	1206.720
Cu	63	1	He	0.118360	6.5	1230.723
Zn	66	1	He	1.172825	5.0	2464.220
As	75	1	He	0.738663	5.0	1376.567
Se	78	2	H2	4.018477	2.0	3301.050
Sr	88	1	He	1707.546573	5.0	18609385.973
Mo	95	1	He	1.459098	5.9	8042.297
Pd	105	1	He	1.081565	3.1	9072.977
Ag	107	1	He	0.019267	9.9	486.680
Cd	111	1	He	0.006502	36.8	40.217
Sn	118	1	He	0.036127	21.7	386.677
Sb	121	1	He	0.040960	1.6	563.353
Ba	138	1	He	8.497350	4.9	222556.553
Pt	195	1	He	0.001393	214.6	201.333
Hg	202	1	He	0.009206	19.3	231.000
Tl	205	1	He	0.011238	29.7	928.373
Pb	208	1	He	0.011641	5.5	3230.177
Bi	209	1	He	0.005070	12.5	1843.500
Th	232	1	He	0.010495	13.8	1343.420
U	238	1	He	7.611504	5.1	394811.257

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.03334280	583875.583
Sc	45	2	H2	103.2404625	4765444.333
Ge	72	1	He	95.99431080	469661.167
Ge	72	2	H2	104.4827416	1607677.210
In	115	1	He	92.88715915	5155275.203
Tb	159	1	He	94.94888774	12064139.823
Ir	193	1	He	93.51180972	5839416.370

Sample Name 4316208\_B70071Dx25  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 037SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:54:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	24.720786	3.5	9823.850
Be	9	2	H2	0.011909	82.6	51.167
B	11	2	H2	324.255430	3.2	123073.267
Na	23	1	He	39543.87504	0.9	39518471.913
Mg	24	1	He	1449.368035	0.2	813878.010
Al	27	1	He	2.155040	8.3	697.350
Si	28	2	H2	430.614887	2.9	1339862.710
K	39	1	He	401.497039	0.6	400525.747
Ca	43	1	He	10620.02659	0.5	25347.583
Ti	47	1	He	0.033361	70.1	11.000
V	51	1	He	0.797918	10.0	5198.160
Cr	52	1	He	0.107207	12.6	3359.060
Mn	55	1	He	0.781951	3.1	5415.683
Fe	56	1	He	0.825957	6.0	21501.103
Co	59	1	He	0.014264	10.3	352.007
Ni	60	1	He	-0.084524		630.683
Cu	63	1	He	0.048276	4.5	684.020
Zn	66	1	He	0.387063	5.0	1017.373
As	75	1	He	0.151942	2.9	405.177
Se	78	2	H2	0.820439	2.7	689.687
Sr	88	1	He	326.066253	1.1	3814137.030
Mo	95	1	He	0.278962	0.9	1694.110
Pd	105	1	He	0.207228	10.6	2105.183
Ag	107	1	He	0.004612	39.2	250.000
Cd	111	1	He	0.003230	73.2	32.360
Sn	118	1	He	0.016031	26.9	241.667
Sb	121	1	He	0.012388	18.7	238.337
Ba	138	1	He	1.616561	0.8	46250.503
Pt	195	1	He	-0.002004		174.667
Hg	202	1	He	0.000576	330.5	197.667
Tl	205	1	He	0.000468	97.7	546.683
Pb	208	1	He	0.017752	24.5	3770.227
Bi	209	1	He	0.003525	69.7	1886.843
Th	232	1	He	0.002892	72.1	990.050
U	238	1	He	1.458473	2.7	81170.153

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	104.2269939	627161.707
Sc	45	2	H2	102.3525690	4724460.333
Ge	72	1	He	102.9238124	503564.403
Ge	72	2	H2	103.5437055	1593228.250
In	115	1	He	101.0918711	5610640.067
Tb	159	1	He	100.7556084	12801937.727
Ir	193	1	He	99.22150443	6195962.617

Sample Name 4315581\_B70071Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 038SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:58:20  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	128.484619	1.1	51521.110
Be	9	2	H2	19.336099	1.1	7983.437
B	11	2	H2	1438.305144	1.1	551565.127
Na	23	1	He	180552.6297	1.0	175002277.393
Mg	24	1	He	7008.202888	1.1	3792015.360
Al	27	1	He	370.304895	1.0	100814.730
Si	28	2	H2	2068.320281	1.1	6493832.500
K	39	1	He	2200.733729	0.9	1805341.223
Ca	43	1	He	49179.29308	0.8	113819.237
Ti	47	1	He	19.298750	2.0	4793.787
V	51	1	He	22.705381	1.3	157891.290
Cr	52	1	He	19.127476	1.4	160628.973
Mn	55	1	He	21.523733	0.8	133097.093
Fe	56	1	He	368.261446	0.9	2926220.583
Co	59	1	He	19.297545	0.4	246437.137
Ni	60	1	He	19.219357	0.5	61839.707
Cu	63	1	He	18.906886	1.0	166587.410
Zn	66	1	He	19.503454	1.5	39337.730
As	75	1	He	19.850052	1.5	35268.483
Se	78	2	H2	23.353538	0.2	18917.710
Sr	88	1	He	1521.572668	1.0	17243534.327
Mo	95	1	He	20.420201	1.5	116192.650
Pd	105	1	He	4.632471	1.4	39366.457
Ag	107	1	He	8.354275	6.0	151718.037
Cd	111	1	He	18.551139	1.6	62529.927
Sn	118	1	He	18.449872	0.9	157523.120
Sb	121	1	He	18.600837	0.5	231759.587
Ba	138	1	He	26.129718	0.9	707763.610
Pt	195	1	He	3.650326	0.3	40878.973
Hg	202	1	He	0.003913	25.4	210.667
Tl	205	1	He	18.320119	1.4	728874.700
Pb	208	1	He	18.007539	0.8	977102.930
Bi	209	1	He	18.637247	1.0	819016.630
Th	232	1	He	19.168449	0.8	1067777.537
U	238	1	He	25.689479	0.8	1368539.927

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.1092759	608401.563
Sc	45	2	H2	104.2286116	4811056.000
Ge	72	1	He	99.71118046	487846.300
Ge	72	2	H2	103.7584591	1596532.667
In	115	1	He	95.99520167	5327772.830
Tb	159	1	He	98.26327492	12485263.560
Ir	193	1	He	96.07619841	5999551.580



Sample Name 4315582\_B70071Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 039SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:02:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	131.982697	1.5	53547.443
Be	9	2	H2	19.817175	1.1	8277.927
B	11	2	H2	1477.760658	1.6	573368.647
Na	23	1	He	180860.1353	1.8	178468310.677
Mg	24	1	He	7023.587135	1.4	3868991.503
Al	27	1	He	371.802852	1.4	103051.577
Si	28	2	H2	2117.775652	1.7	6727421.667
K	39	1	He	2205.164101	1.7	1841502.423
Ca	43	1	He	49393.20469	1.7	116378.767
Ti	47	1	He	19.041321	1.4	4815.123
V	51	1	He	22.449617	1.2	158930.337
Cr	52	1	He	19.179031	1.7	163964.057
Mn	55	1	He	21.566174	1.4	135769.340
Fe	56	1	He	369.352682	1.7	2987865.917
Co	59	1	He	19.195095	0.9	248765.593
Ni	60	1	He	19.092556	1.4	62348.523
Cu	63	1	He	18.856035	1.2	168599.750
Zn	66	1	He	19.504891	1.5	39922.640
As	75	1	He	19.732769	1.2	35579.407
Se	78	2	H2	23.712730	0.4	19315.563
Sr	88	1	He	1520.733311	0.9	17489223.907
Mo	95	1	He	20.220188	1.5	116179.227
Pd	105	1	He	4.606720	0.4	39535.387
Ag	107	1	He	8.544518	4.6	156646.653
Cd	111	1	He	18.617174	1.3	63363.957
Sn	118	1	He	18.509246	2.0	159576.010
Sb	121	1	He	18.690408	1.2	235158.830
Ba	138	1	He	26.336602	1.9	720335.663
Pt	195	1	He	3.632838	1.5	40780.670
Hg	202	1	He	-0.001814		180.333
Tl	205	1	He	18.503818	1.2	737872.827
Pb	208	1	He	18.233480	0.9	991601.927
Bi	209	1	He	18.603490	1.1	815813.970
Th	232	1	He	19.228303	0.9	1068839.670
U	238	1	He	25.901084	0.0	1376801.700

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.9387225	619409.833
Sc	45	2	H2	105.4668039	4868209.333
Ge	72	1	He	101.1901083	495082.093
Ge	72	2	H2	104.3369502	1605433.917
In	115	1	He	96.93831462	5380115.983
Tb	159	1	He	98.48753046	12513757.313
Ir	193	1	He	95.86879507	5986600.120

Sample Name 4315580\_B70071Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 040SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:05:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	109.535206	0.4	43975.653
Be	9	2	H2	107.192735	0.8	44077.363
B	11	2	H2	128.888882	0.7	50704.787
Na	23	1	He	2136.514861	0.4	2174042.417
Mg	24	1	He	2078.380750	0.8	1179362.923
Al	27	1	He	2077.024849	1.0	590113.313
Si	28	2	H2	532.782565	0.2	1686423.043
K	39	1	He	2082.795598	0.5	1788437.840
Ca	43	1	He	2100.829541	0.7	5092.410
Ti	47	1	He	102.988982	0.8	26704.803
V	51	1	He	102.604803	0.3	747093.980
Cr	52	1	He	105.042408	0.3	910150.440
Mn	55	1	He	103.959029	0.7	669639.607
Fe	56	1	He	2070.944544	0.4	17116756.000
Co	59	1	He	107.567779	0.2	1432535.583
Ni	60	1	He	108.805814	0.4	361001.670
Cu	63	1	He	106.576651	0.3	978616.730
Zn	66	1	He	107.101861	0.3	224408.183
As	75	1	He	103.916269	0.5	192089.723
Se	78	2	H2	104.690694	0.4	85371.633
Sr	88	1	He	104.312529	0.1	1233581.467
Mo	95	1	He	101.945881	1.2	611760.980
Pd	105	1	He	21.265816	0.6	189698.680
Ag	107	1	He	50.616648	0.8	968595.323
Cd	111	1	He	104.142531	0.8	370160.010
Sn	118	1	He	100.745990	0.9	906869.203
Sb	121	1	He	103.055317	1.6	1354016.803
Ba	138	1	He	102.713994	0.5	2934244.333
Pt	195	1	He	20.568251	1.3	238048.350
Hg	202	1	He	0.000341	300.5	198.667
Tl	205	1	He	106.034621	1.3	4374041.913
Pb	208	1	He	103.948995	0.2	5838359.030
Bi	209	1	He	104.297964	0.7	4821167.323
Th	232	1	He	103.665237	0.6	6080812.617
U	238	1	He	101.204505	0.2	5677836.583

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	105.5963762	635401.647
Sc	45	2	H2	104.3104958	4814835.667
Ge	72	1	He	104.0399791	509025.353
Ge	72	2	H2	104.5664483	1608965.207
In	115	1	He	101.2630448	5620140.277
Tb	159	1	He	101.9496997	12953658.143
Ir	193	1	He	101.2357590	6321744.283

Sample Name FiltBlk-050922\_B70071Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 041SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:09:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.326228	16.3	248.167
Be	9	2	H2	0.113948	14.0	93.000
B	11	2	H2	18.581786	1.1	8376.983
Na	23	1	He	27.919125	5.1	38915.647
Mg	24	1	He	-0.015381		6851.627
Al	27	1	He	15.325065	0.2	4360.977
Si	28	2	H2	9.358556	0.7	45382.097
K	39	1	He	4.309578	24.8	77612.717
Ca	43	1	He	20.439691	10.3	63.317
Ti	47	1	He	0.137298	19.9	37.333
V	51	1	He	0.127555	47.5	376.367
Cr	52	1	He	0.373871	1.6	5595.750
Mn	55	1	He	0.109368	5.0	1135.380
Fe	56	1	He	3.669538	0.9	44383.697
Co	59	1	He	0.064306	11.5	1008.040
Ni	60	1	He	-0.055081		724.687
Cu	63	1	He	0.130257	5.8	1424.077
Zn	66	1	He	1.223685	1.3	2741.600
As	75	1	He	0.081464	9.5	275.500
Se	78	2	H2	0.074076	14.1	86.667
Sr	88	1	He	0.092715	5.4	1251.737
Mo	95	1	He	0.093865	10.2	592.017
Pd	105	1	He	0.005849	29.1	318.343
Ag	107	1	He	0.157036	31.0	3192.073
Cd	111	1	He	0.055888	10.0	221.563
Sn	118	1	He	0.067286	9.5	710.027
Sb	121	1	He	0.064456	2.8	931.707
Ba	138	1	He	0.090174	4.0	2750.297
Pt	195	1	He	0.009396	26.8	307.340
Hg	202	1	He	-0.001201		189.333
Tl	205	1	He	0.056868	10.1	2867.007
Pb	208	1	He	0.057664	4.0	6028.880
Bi	209	1	He	0.062265	5.3	4717.587
Th	232	1	He	0.058316	6.3	4330.757
U	238	1	He	0.024635	2.2	2443.587

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.5347921	622996.543
Sc	45	2	H2	103.1051250	4759197.333
Ge	72	1	He	102.6078185	502018.373
Ge	72	2	H2	102.6700358	1579785.083
In	115	1	He	102.2416243	5674451.837
Tb	159	1	He	101.5328504	12900693.560
Ir	193	1	He	102.9305162	6427574.693

Sample Name BottleTopFilt-It-211125-345-A  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 042SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:13:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	-0.063035		98.667
Be	9	2	H2	-0.006988		46.000
B	11	2	H2	10.117676	1.8	5419.140
Na	23	1	He	18.936541	1.8	31142.500
Mg	24	1	He	-2.508830		5681.117
Al	27	1	He	1.065243	5.4	404.010
Si	28	2	H2	11.436645	0.8	54274.877
K	39	1	He	-1.620148		75602.210
Ca	43	1	He	23.759306	6.3	73.900
Ti	47	1	He	0.020788	54.3	8.000
V	51	1	He	0.001990	406.3	-539.957
Cr	52	1	He	0.090341	7.3	3315.047
Mn	55	1	He	-0.019940		331.337
Fe	56	1	He	0.306389	8.8	17805.520
Co	59	1	He	0.001463	121.7	189.333
Ni	60	1	He	-0.145249		446.010
Cu	63	1	He	0.030091	7.3	536.010
Zn	66	1	He	1.163634	3.8	2712.263
As	75	1	He	-0.014658		104.000
Se	78	2	H2	-0.010984		19.333
Sr	88	1	He	0.019845	22.2	416.677
Mo	95	1	He	0.005307	36.5	56.667
Pd	105	1	He	-0.021240		76.667
Ag	107	1	He	-0.000224		163.333
Cd	111	1	He	0.006357	12.7	44.990
Sn	118	1	He	0.008094	26.3	176.667
Sb	121	1	He	0.004024	56.5	133.333
Ba	138	1	He	0.010880	8.6	475.010
Pt	195	1	He	0.004437	53.4	256.667
Hg	202	1	He	0.000555	401.5	204.333
Tl	205	1	He	0.007011	32.0	841.703
Pb	208	1	He	-0.008942		2365.107
Bi	209	1	He	0.001291	302.8	1893.507
Th	232	1	He	-0.001478		783.367
U	238	1	He	-0.004884		776.700

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	107.4729822	646693.687
Sc	45	2	H2	107.9887813	4984620.500
Ge	72	1	He	106.3179412	520170.497
Ge	72	2	H2	106.6439632	1640931.953
In	115	1	He	104.7157696	5811767.910
Tb	159	1	He	104.2369157	13244270.217
Ir	193	1	He	105.1865606	6568455.110

Sample Name 10606181002\_B69934Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 043SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:17:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.424574	1.1	1042.873
Be	9	2	H2	0.016047	28.4	51.500
B	11	2	H2	16.743091	0.9	7426.157
Na	23	1	He	4709.780470	0.1	4482491.287
Mg	24	1	He	3027.404227	0.6	1608453.153
Al	27	1	He	2.770841	5.2	826.693
Si	28	2	H2	2168.590574	1.6	6510713.500
K	39	1	He	899.666403	0.1	764925.353
Ca	43	1	He	10080.94723	0.4	22866.980
Ti	47	1	He	0.059022	4.4	16.667
V	51	1	He	0.067397	24.1	-50.420
Cr	52	1	He	0.125414	6.1	3339.723
Mn	55	1	He	27.872214	0.4	168720.477
Fe	56	1	He	66.661469	0.3	530400.207
Co	59	1	He	0.007933	10.9	257.333
Ni	60	1	He	-0.060822		678.687
Cu	63	1	He	0.070082	7.0	845.360
Zn	66	1	He	0.532670	5.3	1264.057
As	75	1	He	0.175776	0.4	430.010
Se	78	2	H2	0.012692	20.2	36.667
Sr	88	1	He	36.671809	0.9	411244.020
Mo	95	1	He	0.272281	4.5	1619.433
Pd	105	1	He	0.020196	27.6	433.343
Ag	107	1	He	0.028641	31.3	693.360
Cd	111	1	He	0.004486	18.1	36.043
Sn	118	1	He	0.016376	29.2	240.000
Sb	121	1	He	0.007577	43.1	171.667
Ba	138	1	He	60.041413	0.3	1676856.487
Pt	195	1	He	-0.000341		190.667
Hg	202	1	He	-0.003612		172.000
Tl	205	1	He	0.004032	41.4	681.690
Pb	208	1	He	0.005712	18.3	3053.483
Bi	209	1	He	0.006548	41.6	1996.850
Th	232	1	He	0.011546	9.6	1468.430
U	238	1	He	0.005140	23.2	1266.737

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.04957524	596007.793
Sc	45	2	H2	99.68138537	4601162.000
Ge	72	1	He	98.63467103	482579.377
Ge	72	2	H2	100.0837420	1539989.750
In	115	1	He	98.99053948	5494015.300
Tb	159	1	He	99.25971905	12611871.060
Ir	193	1	He	97.91152099	6114159.700

Sample Name 10606181003\_B69934Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 044SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:21:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.509774	3.8	2198.660
Be	9	2	H2	0.015825	67.4	50.833
B	11	2	H2	51.835960	1.6	20041.580
Na	23	1	He	11462.86732	0.7	10802154.007
Mg	24	1	He	5940.315566	0.6	3123082.040
Al	27	1	He	3.205720	3.6	934.697
Si	28	2	H2	1630.936480	0.6	4846693.167
K	39	1	He	885.807286	0.8	747852.230
Ca	43	1	He	14545.23174	0.7	32708.130
Ti	47	1	He	0.080292	26.2	21.667
V	51	1	He	0.061054	165.6	-93.760
Cr	52	1	He	0.132723	15.5	3369.733
Mn	55	1	He	155.706670	0.9	932634.523
Fe	56	1	He	555.971171	0.7	4284045.333
Co	59	1	He	0.126144	3.4	1724.777
Ni	60	1	He	0.453764	4.9	2260.183
Cu	63	1	He	0.063735	6.1	778.690
Zn	66	1	He	0.506522	6.3	1194.720
As	75	1	He	5.974455	0.5	10433.920
Se	78	2	H2	0.017995	41.4	40.333
Sr	88	1	He	66.799023	0.7	738266.813
Mo	95	1	He	0.129081	1.0	762.687
Pd	105	1	He	0.038577	21.4	580.017
Ag	107	1	He	0.059199	3.5	1238.400
Cd	111	1	He	0.006030	26.9	40.527
Sn	118	1	He	0.024776	27.2	306.677
Sb	121	1	He	0.011069	24.9	211.667
Ba	138	1	He	50.559902	0.6	1381435.243
Pt	195	1	He	0.001424	121.5	209.333
Hg	202	1	He	-0.001554		182.000
Tl	205	1	He	0.004598	22.9	700.023
Pb	208	1	He	0.007923	26.3	3155.170
Bi	209	1	He	0.006366	54.1	1993.523
Th	232	1	He	0.009425	13.1	1351.750
U	238	1	He	0.005808	3.1	1306.747

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.21111992	590962.583
Sc	45	2	H2	98.58606250	4550603.333
Ge	72	1	He	97.22264699	475670.917
Ge	72	2	H2	98.89953705	1521768.373
In	115	1	He	96.84257196	5374802.227
Tb	159	1	He	98.63473859	12532461.477
Ir	193	1	He	98.18304327	6131115.117

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 045\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:24:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	86.711651	1.3	33324.983
Be	9	2	H2	83.518431	0.4	32863.187
B	11	2	H2	87.940871	1.1	33507.827
Na	23	1	He	1030.679397	1.0	999961.470
Mg	24	1	He	1024.748432	1.1	554686.257
Al	27	1	He	1015.645896	0.9	273636.187
Si	28	2	H2	512.815231	1.0	1553347.417
K	39	1	He	1020.430727	0.8	867324.283
Ca	43	1	He	1020.295131	1.2	2352.213
Ti	47	1	He	81.954429	0.9	20148.750
V	51	1	He	80.309694	0.4	554306.913
Cr	52	1	He	81.992710	0.7	674070.000
Mn	55	1	He	81.627701	0.3	498611.377
Fe	56	1	He	511.356766	0.5	4017820.333
Co	59	1	He	83.688364	0.1	1070065.960
Ni	60	1	He	83.998253	0.2	267770.717
Cu	63	1	He	84.316601	0.5	743356.773
Zn	66	1	He	83.011440	1.1	167032.970
As	75	1	He	80.604337	0.1	143078.030
Se	78	2	H2	82.314782	1.0	64055.380
Sr	88	1	He	82.180222	0.1	933080.143
Mo	95	1	He	78.479413	0.0	463789.103
Pd	105	1	He	82.652086	0.4	725265.220
Ag	107	1	He	40.478722	0.7	762844.180
Cd	111	1	He	80.593058	0.6	282096.090
Sn	118	1	He	78.084550	0.3	692206.500
Sb	121	1	He	78.865847	0.7	1020481.183
Ba	138	1	He	78.692735	0.3	2213785.383
Pt	195	1	He	81.730331	0.7	928537.853
Hg	202	1	He	3.826534	1.1	21121.703
Tl	205	1	He	42.191158	0.5	1709918.983
Pb	208	1	He	82.319310	0.3	4541945.950
Bi	209	1	He	82.222296	1.4	3790980.570
Th	232	1	He	76.429737	1.4	4471389.310
U	238	1	He	78.923017	1.5	4415965.870

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.1170858	602431.290
Sc	45	2	H2	99.78571748	4605977.833
Ge	72	1	He	99.88578314	488700.560
Ge	72	2	H2	99.77475050	1535235.293
In	115	1	He	99.71626070	5534293.123
Tb	159	1	He	100.1389311	12723583.143
Ir	193	1	He	100.9677898	6305010.743

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 046\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:29:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.096623	15.3	153.333
Be	9	2	H2	0.024339	35.4	55.167
B	11	2	H2	5.988422	1.9	3517.910
Na	23	1	He	5.950030	11.7	16312.283
Mg	24	1	He	-5.380282		3702.157
Al	27	1	He	0.054881	66.6	102.667
Si	28	2	H2	-0.031297		15886.667
K	39	1	He	1.958010	120.9	72187.027
Ca	43	1	He	-0.390807		13.350
Ti	47	1	He	0.000200	3275.4	2.333
V	51	1	He	0.097786	82.9	157.713
Cr	52	1	He	0.004625	207.1	2353.530
Mn	55	1	He	-0.008594		372.677
Fe	56	1	He	-0.052628		13584.990
Co	59	1	He	0.001619	80.7	177.333
Ni	60	1	He	-0.163662		356.007
Cu	63	1	He	0.001362	201.6	247.333
Zn	66	1	He	-0.002799		201.333
As	75	1	He	0.004625	40.3	130.167
Se	78	2	H2	-0.001623		25.667
Sr	88	1	He	0.008190	67.5	255.003
Mo	95	1	He	0.008536	25.3	72.000
Pd	105	1	He	0.003596	118.6	286.673
Ag	107	1	He	0.086371	14.6	1765.130
Cd	111	1	He	0.001554	64.6	25.657
Sn	118	1	He	0.008151	35.7	166.667
Sb	121	1	He	0.000468	347.1	80.000
Ba	138	1	He	0.001468	31.1	185.000
Pt	195	1	He	-0.000634		186.667
Hg	202	1	He	0.009382	24.9	241.667
Tl	205	1	He	0.025617	1.9	1543.437
Pb	208	1	He	-0.007566		2321.763
Bi	209	1	He	-0.001735		1670.140
Th	232	1	He	0.012313	11.5	1551.777
U	238	1	He	-0.001582		926.707

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.74300918	594163.103
Sc	45	2	H2	100.4382418	4636097.500
Ge	72	1	He	98.58617051	482342.083
Ge	72	2	H2	100.9065327	1552650.040
In	115	1	He	98.40885541	5461731.597
Tb	159	1	He	98.96041659	12573841.897
Ir	193	1	He	100.5149468	6276732.617



Sample Name DJM-6020S-IDC-BLK  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 047SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:32:55  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.208117	6.4	191.667
Be	9	2	H2	0.001354	1370.2	45.000
B	11	2	H2	5.097937	7.3	3114.160
Na	23	1	He	23.416813	3.1	32299.917
Mg	24	1	He	-1.930878		5431.037
Al	27	1	He	3.030136	2.8	878.030
Si	28	2	H2	-0.111417		15261.143
K	39	1	He	5.152222	23.5	73411.363
Ca	43	1	He	10.959476	22.8	38.317
Ti	47	1	He	0.012825	81.5	5.333
V	51	1	He	0.020314	439.5	-363.400
Cr	52	1	He	0.082069	11.9	2928.967
Mn	55	1	He	0.022422	33.4	550.010
Fe	56	1	He	1.075561	2.8	21923.727
Co	59	1	He	0.004391	52.3	209.333
Ni	60	1	He	-0.135077		438.677
Cu	63	1	He	0.035909	7.4	539.343
Zn	66	1	He	0.342065	5.1	872.030
As	75	1	He	0.019661	17.2	154.167
Se	78	2	H2	0.004292	187.8	29.667
Sr	88	1	He	0.156058	8.6	1883.473
Mo	95	1	He	0.007580	31.3	66.000
Pd	105	1	He	0.013431	49.4	368.343
Ag	107	1	He	0.042428	19.4	936.707
Cd	111	1	He	0.002494	33.5	28.657
Sn	118	1	He	0.023555	28.9	298.343
Sb	121	1	He	0.002788	44.1	108.333
Ba	138	1	He	0.014953	18.9	555.017
Pt	195	1	He	-0.002669		164.000
Hg	202	1	He	0.010015	28.7	245.000
Tl	205	1	He	0.009600	18.0	901.707
Pb	208	1	He	0.024075	8.1	4046.923
Bi	209	1	He	0.006405	60.3	2033.537
Th	232	1	He	0.011296	10.4	1486.767
U	238	1	He	0.001503	118.0	1093.390

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.08453935	584183.647
Sc	45	2	H2	98.06720749	4526653.667
Ge	72	1	He	97.10112249	475076.347
Ge	72	2	H2	98.59977645	1517155.953
In	115	1	He	97.52927340	5412914.437
Tb	159	1	He	98.97851181	12576141.063
Ir	193	1	He	100.1521920	6254080.113

Sample Name DJM-6021S-IDC-1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 048SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:36:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.128001	6.8	161.667
Be	9	2	H2	-0.010393		40.500
B	11	2	H2	4.334158	2.8	2842.437
Na	23	1	He	32.756399	1.2	40556.587
Mg	24	1	He	-1.473398		5607.773
Al	27	1	He	2.885442	1.7	831.353
Si	28	2	H2	0.019330	213.7	15662.883
K	39	1	He	5.588989	18.2	72959.193
Ca	43	1	He	7.726115	2.7	30.800
Ti	47	1	He	0.024420	35.2	8.000
V	51	1	He	4.315070	3.4	28100.623
Cr	52	1	He	0.082543	2.7	2901.630
Mn	55	1	He	0.019624	36.4	528.010
Fe	56	1	He	0.574614	5.5	17927.660
Co	59	1	He	0.003863	2.9	201.333
Ni	60	1	He	-0.152356		382.677
Cu	63	1	He	0.040185	11.0	572.010
Zn	66	1	He	23.121475	0.3	45052.183
As	75	1	He	0.016708	28.1	148.000
Se	78	2	H2	-0.002995		24.000
Sr	88	1	He	0.100068	3.6	1256.733
Mo	95	1	He	0.003747	24.3	43.333
Pd	105	1	He	0.001629	154.8	265.007
Ag	107	1	He	0.018449	8.4	491.677
Cd	111	1	He	0.003174	70.3	30.657
Sn	118	1	He	7.878783	1.2	67786.703
Sb	121	1	He	0.001538	123.0	91.667
Ba	138	1	He	0.017233	15.1	611.717
Pt	195	1	He	0.000365	64.4	196.000
Hg	202	1	He	2.124524	0.7	11552.340
Tl	205	1	He	0.002885	40.6	626.687
Pb	208	1	He	0.018588	15.3	3706.893
Bi	209	1	He	0.004021	104.7	1893.507
Th	232	1	He	0.006311	33.9	1178.400
U	238	1	He	0.000033	5340.1	995.047

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.05413312	577983.417
Sc	45	2	H2	98.16885683	4531345.667
Ge	72	1	He	96.41166202	471703.097
Ge	72	2	H2	98.34544962	1513242.623
In	115	1	He	96.67191940	5365330.940
Tb	159	1	He	97.93187459	12443156.063
Ir	193	1	He	98.49680552	6150708.240

Sample Name DJM-6021S-IDC-2  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 049SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:40:24  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.096429	15.2	148.833
Be	9	2	H2	-0.017976		37.333
B	11	2	H2	3.678383	1.6	2589.723
Na	23	1	He	11.103011	5.4	20757.850
Mg	24	1	He	-2.877104		4920.857
Al	27	1	He	2.224346	4.9	665.017
Si	28	2	H2	0.004714	3867.0	15521.770
K	39	1	He	1.908774	23.0	70678.120
Ca	43	1	He	5.469259	65.5	26.017
Ti	47	1	He	0.010147	63.7	4.667
V	51	1	He	4.148835	1.9	27184.397
Cr	52	1	He	0.086924	19.4	2955.643
Mn	55	1	He	0.004788	94.5	444.010
Fe	56	1	He	0.335802	9.0	16242.420
Co	59	1	He	0.001872	42.1	176.667
Ni	60	1	He	-0.158583		363.340
Cu	63	1	He	0.016322	24.7	368.673
Zn	66	1	He	22.250678	1.0	43339.693
As	75	1	He	0.020041	38.7	153.667
Se	78	2	H2	0.002314	246.4	28.000
Sr	88	1	He	0.067694	3.1	901.703
Mo	95	1	He	0.005046	13.1	51.333
Pd	105	1	He	0.004387	63.1	291.673
Ag	107	1	He	0.009952	9.6	340.010
Cd	111	1	He	0.001797	12.3	26.323
Sn	118	1	He	7.823014	1.0	68005.970
Sb	121	1	He	0.000134	1834.4	75.000
Ba	138	1	He	0.010040	10.8	420.010
Pt	195	1	He	0.000940	93.3	204.000
Hg	202	1	He	2.093707	2.7	11479.620
Tl	205	1	He	0.001419	132.6	573.353
Pb	208	1	He	0.013625	21.3	3466.863
Bi	209	1	He	0.005413	38.9	1983.523
Th	232	1	He	0.002516	73.8	973.383
U	238	1	He	-0.001437		928.373

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.69588288	581844.997
Sc	45	2	H2	97.55121580	4502836.167
Ge	72	1	He	96.35978088	471449.263
Ge	72	2	H2	98.06615043	1508945.043
In	115	1	He	97.65824206	5420072.250
Tb	159	1	He	98.71229752	12542316.060
Ir	193	1	He	99.78592756	6231208.450

Sample Name DJM-6021S-IDC-3  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 050SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:44:29  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.084192	19.3	144.333
Be	9	2	H2	-0.013408		39.167
B	11	2	H2	3.280282	1.8	2449.200
Na	23	1	He	12.656670	5.5	22224.947
Mg	24	1	He	-2.951227		4890.843
Al	27	1	He	2.667906	3.3	781.353
Si	28	2	H2	-0.111104		15192.820
K	39	1	He	2.279422	23.2	71058.427
Ca	43	1	He	6.150408	48.8	27.517
Ti	47	1	He	0.017128	120.9	6.333
V	51	1	He	4.297475	2.4	28211.827
Cr	52	1	He	0.168326	4.3	3604.453
Mn	55	1	He	0.022601	35.6	550.010
Fe	56	1	He	1.092638	3.8	21994.517
Co	59	1	He	0.000920	180.7	165.333
Ni	60	1	He	-0.100720		542.010
Cu	63	1	He	0.030297	22.9	488.677
Zn	66	1	He	23.048136	0.7	45006.737
As	75	1	He	0.024773	10.0	162.167
Se	78	2	H2	-0.006415		21.333
Sr	88	1	He	0.077207	8.9	1008.377
Mo	95	1	He	0.003499	11.9	42.667
Pd	105	1	He	-0.004913		213.333
Ag	107	1	He	0.004983	24.5	250.000
Cd	111	1	He	0.002707	108.4	29.657
Sn	118	1	He	7.901023	2.1	69178.217
Sb	121	1	He	0.002705	79.3	108.333
Ba	138	1	He	0.013115	20.6	508.353
Pt	195	1	He	-0.000051		194.667
Hg	202	1	He	2.188560	1.7	12103.830
Tl	205	1	He	0.000045	2773.7	523.347
Pb	208	1	He	0.010270	27.5	3316.847
Bi	209	1	He	0.005839	41.4	2013.517
Th	232	1	He	0.003934	35.8	1061.720
U	238	1	He	-0.003312		828.367

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.83166655	582662.043
Sc	45	2	H2	97.63553362	4506728.167
Ge	72	1	He	96.62084009	472726.520
Ge	72	2	H2	98.30304914	1512590.207
In	115	1	He	98.37083136	5459621.247
Tb	159	1	He	99.65479375	12662068.977
Ir	193	1	He	100.3324117	6265334.073

Sample Name DJM-6021S-IDC-4  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 051SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:48:13  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.086018	12.8	144.000
Be	9	2	H2	-0.033534		31.167
B	11	2	H2	3.008843	4.2	2335.180
Na	23	1	He	12.664509	1.7	22084.713
Mg	24	1	He	-2.214676		5234.287
Al	27	1	He	2.390570	1.0	704.353
Si	28	2	H2	6.378009	179.2	33893.683
K	39	1	He	3.416421	18.9	71423.283
Ca	43	1	He	5.423072	42.9	25.767
Ti	47	1	He	0.031402	40.9	9.667
V	51	1	He	4.308822	2.3	28097.733
Cr	52	1	He	0.084172	25.4	2917.637
Mn	55	1	He	0.035565	6.0	622.017
Fe	56	1	He	0.644800	2.0	18478.330
Co	59	1	He	0.002773	28.3	187.333
Ni	60	1	He	-0.111420		506.677
Cu	63	1	He	0.024051	6.3	433.343
Zn	66	1	He	23.101399	0.9	44878.323
As	75	1	He	0.017436	49.3	148.833
Se	78	2	H2	0.003371	122.6	28.667
Sr	88	1	He	0.075531	11.4	985.047
Mo	95	1	He	0.004976	24.7	50.667
Pd	105	1	He	-0.001494		240.000
Ag	107	1	He	0.004691	68.1	241.670
Cd	111	1	He	-0.000904		16.990
Sn	118	1	He	8.044173	2.3	69598.570
Sb	121	1	He	0.002014	114.9	98.333
Ba	138	1	He	0.009266	24.6	396.677
Pt	195	1	He	-0.000335		190.000
Hg	202	1	He	2.201225	2.9	12072.807
Tl	205	1	He	-0.000310		505.017
Pb	208	1	He	0.011640	9.4	3363.517
Bi	209	1	He	0.002470	112.8	1846.840
Th	232	1	He	0.004144	38.2	1066.720
U	238	1	He	0.000204	82.6	1016.720

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.16975204	578679.127
Sc	45	2	H2	96.93106891	4474211.000
Ge	72	1	He	96.12366686	470294.053
Ge	72	2	H2	97.69415921	1503221.210
In	115	1	He	97.20266409	5394787.487
Tb	159	1	He	98.83675384	12558129.393
Ir	193	1	He	99.63733195	6221929.283

Sample Name 4303386\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 052SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:51:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	57.216776	1.1	21374.517
Be	9	2	H2	51.252112	1.4	19583.963
B	11	2	H2	52.681229	1.7	19982.840
Na	23	1	He	1420.472899	1.3	1316933.520
Mg	24	1	He	3314.824126	1.0	1705519.087
Al	27	1	He	6759.113424	1.4	1744880.793
Si	28	2	H2	998.853038	1.2	2921080.500
K	39	1	He	1692.263854	1.4	1333317.687
Ca	43	1	He	3923.143688	2.1	8629.227
Ti	47	1	He	786.625310	1.4	185341.990
V	51	1	He	77.404444	1.1	512018.980
Cr	52	1	He	57.766517	1.7	455834.667
Mn	55	1	He	182.439780	1.7	1067587.087
Fe	56	1	He	11060.09563	1.9	83008504.000
Co	59	1	He	53.873709	1.5	664672.377
Ni	60	1	He	58.134208	0.7	179063.167
Cu	63	1	He	55.080630	1.1	468603.740
Zn	66	1	He	78.192879	1.2	151814.253
As	75	1	He	50.038203	1.2	85742.147
Se	78	2	H2	51.939088	0.3	39432.997
Sr	88	1	He	74.129480	1.8	812089.883
Mo	95	1	He	48.033262	1.3	271874.980
Pd	105	1	He	9.941906	2.0	83772.003
Ag	107	1	He	24.332125	2.8	439239.237
Cd	111	1	He	49.204256	1.4	164959.657
Sn	118	1	He	49.175611	1.7	417550.303
Sb	121	1	He	34.723986	2.0	430372.960
Ba	138	1	He	100.201940	2.2	2699774.023
Pt	195	1	He	9.819375	2.6	110056.527
Hg	202	1	He	4.297022	1.3	23338.073
Tl	205	1	He	50.920767	2.3	2032594.607
Pb	208	1	He	51.552542	2.0	2802724.320
Bi	209	1	He	50.016185	2.0	2252173.297
Th	232	1	He	51.452458	2.2	2939165.893
U	238	1	He	49.095069	2.0	2682425.063

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.95770895	577403.207
Sc	45	2	H2	96.82073216	4469118.000
Ge	72	1	He	96.37094947	471503.907
Ge	72	2	H2	97.32436682	1497531.210
In	115	1	He	95.50109064	5300349.467
Tb	159	1	He	98.63194462	12532106.477
Ir	193	1	He	98.56613902	6155037.823

Sample Name 4303387\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 053SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:55:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	58.727196	0.9	22076.193
Be	9	2	H2	52.571275	1.4	20214.957
B	11	2	H2	53.733822	0.7	20487.337
Na	23	1	He	1489.345201	0.4	1387259.147
Mg	24	1	He	3447.755751	0.5	1782605.237
Al	27	1	He	7108.120564	0.7	1844227.543
Si	28	2	H2	1004.905974	1.8	2957367.417
K	39	1	He	1816.533852	1.0	1433383.677
Ca	43	1	He	4138.628385	1.8	9148.363
Ti	47	1	He	810.677040	0.2	191971.907
V	51	1	He	80.396534	0.7	534534.740
Cr	52	1	He	61.233252	0.4	485499.950
Mn	55	1	He	199.127378	1.0	1171059.587
Fe	56	1	He	11508.80827	0.5	86812520.000
Co	59	1	He	57.187180	0.6	708311.437
Ni	60	1	He	61.070920	0.7	188805.613
Cu	63	1	He	58.857041	1.1	502675.843
Zn	66	1	He	83.459428	1.0	162661.927
As	75	1	He	52.935089	0.7	91054.993
Se	78	2	H2	53.503488	0.1	40921.117
Sr	88	1	He	78.507051	0.3	863415.927
Mo	95	1	He	50.537182	2.1	288794.987
Pd	105	1	He	10.336896	2.3	87925.073
Ag	107	1	He	25.826503	2.4	470672.050
Cd	111	1	He	52.073207	1.5	176261.260
Sn	118	1	He	52.371009	1.0	448979.240
Sb	121	1	He	37.173505	2.1	465154.070
Ba	138	1	He	106.701108	1.6	2902591.413
Pt	195	1	He	10.316790	1.1	116979.740
Hg	202	1	He	4.530495	1.3	24885.843
Tl	205	1	He	53.638719	1.0	2166158.563
Pb	208	1	He	54.328555	1.2	2988155.033
Bi	209	1	He	52.796170	0.6	2390184.130
Th	232	1	He	54.409288	0.4	3124902.243
U	238	1	He	52.267991	0.1	2871258.500

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.44050007	580308.290
Sc	45	2	H2	97.43905562	4497659.000
Ge	72	1	He	96.75250236	473370.690
Ge	72	2	H2	98.04628519	1508639.377
In	115	1	He	96.43396739	5352124.507
Tb	159	1	He	99.79402335	12679759.393
Ir	193	1	He	99.10844632	6188902.617

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 054\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:59:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.149523	0.5	31781.187
Be	9	2	H2	81.173836	0.6	31761.017
B	11	2	H2	81.643679	0.2	31026.220
Na	23	1	He	992.808052	2.0	961381.600
Mg	24	1	He	995.538937	1.7	537829.657
Al	27	1	He	988.559185	1.6	265734.323
Si	28	2	H2	504.452062	0.2	1519664.667
K	39	1	He	999.383546	1.8	848960.400
Ca	43	1	He	1009.916605	1.4	2323.210
Ti	47	1	He	80.552563	2.1	19758.220
V	51	1	He	80.167761	3.1	551958.553
Cr	52	1	He	81.693872	2.1	670057.607
Mn	55	1	He	80.941773	2.0	493270.530
Fe	56	1	He	508.390271	1.6	3985498.333
Co	59	1	He	81.992647	1.0	1062930.627
Ni	60	1	He	82.839278	1.0	267751.113
Cu	63	1	He	82.763841	1.2	739803.563
Zn	66	1	He	81.479585	1.4	166224.513
As	75	1	He	79.352422	1.3	142808.893
Se	78	2	H2	82.077151	0.9	64733.767
Sr	88	1	He	80.586029	1.1	927668.160
Mo	95	1	He	77.180650	1.5	463250.500
Pd	105	1	He	81.806410	2.1	729051.163
Ag	107	1	He	40.228094	2.8	769906.343
Cd	111	1	He	79.711410	1.2	283384.220
Sn	118	1	He	77.344762	1.2	696393.947
Sb	121	1	He	77.898899	0.6	1023806.937
Ba	138	1	He	77.612967	1.5	2217574.187
Pt	195	1	He	80.876442	1.6	942191.917
Hg	202	1	He	3.853771	2.9	21808.140
Tl	205	1	He	41.605956	2.8	1728848.570
Pb	208	1	He	81.092773	2.1	4587805.970
Bi	209	1	He	81.907102	2.2	3847394.423
Th	232	1	He	76.021161	1.6	4531335.140
U	238	1	He	78.222775	2.1	4459163.057

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.90647360	601163.980
Sc	45	2	H2	99.22020458	4579874.500
Ge	72	1	He	101.2779853	495512.040
Ge	72	2	H2	101.1212187	1555953.417
In	115	1	He	101.2862398	5621427.607
Tb	159	1	He	102.6945520	13048298.557
Ir	193	1	He	102.8768430	6424223.027



Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 055\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:03:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.057834	75.7	136.833
Be	9	2	H2	0.027211	28.7	55.667
B	11	2	H2	2.790184	1.7	2312.677
Na	23	1	He	1.045027	17.7	11566.207
Mg	24	1	He	-7.678363		2468.557
Al	27	1	He	0.034177	129.6	96.333
Si	28	2	H2	-1.003886		12792.243
K	39	1	He	-1.966347		68531.397
Ca	43	1	He	0.030043	1518.3	14.133
Ti	47	1	He	0.009916	63.9	4.667
V	51	1	He	0.028433	352.5	-312.623
Cr	52	1	He	-0.001692		2280.187
Mn	55	1	He	-0.008018		372.677
Fe	56	1	He	0.109689	35.7	14698.057
Co	59	1	He	0.005478	29.5	226.667
Ni	60	1	He	-0.162984		358.673
Cu	63	1	He	0.001641	195.2	250.000
Zn	66	1	He	-0.009033		189.333
As	75	1	He	0.005034	69.2	131.167
Se	78	2	H2	-0.006587		21.667
Sr	88	1	He	0.003628	76.3	205.000
Mo	95	1	He	0.012090	5.4	94.000
Pd	105	1	He	0.007691	66.6	326.677
Ag	107	1	He	0.136556	23.1	2731.963
Cd	111	1	He	0.003160	60.1	31.647
Sn	118	1	He	0.010184	36.6	186.667
Sb	121	1	He	0.003370	59.2	118.333
Ba	138	1	He	0.000312	302.6	155.000
Pt	195	1	He	-0.000550		190.000
Hg	202	1	He	0.047065	14.3	450.677
Tl	205	1	He	0.040045	22.9	2146.870
Pb	208	1	He	-0.005444		2465.110
Bi	209	1	He	0.000897	122.8	1806.823
Th	232	1	He	0.014955	6.0	1721.800
U	238	1	He	-0.001577		935.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.79655246	588468.020
Sc	45	2	H2	99.30884806	4583966.167
Ge	72	1	He	98.76225502	483203.593
Ge	72	2	H2	100.4151932	1545089.793
In	115	1	He	99.68702386	5532670.467
Tb	159	1	He	100.1194914	12721113.143
Ir	193	1	He	101.4556731	6335476.990

Sample Name 4314160\_B70041Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 056\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:06:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.035263	41.2	128.167
Be	9	2	H2	-0.002180		44.167
B	11	2	H2	3.890161	3.1	2712.410
Na	23	1	He	5.143779	5.6	15463.087
Mg	24	1	He	-4.286038		4255.643
Al	27	1	He	12.634218	1.0	3423.397
Si	28	2	H2	2.131624	9.8	22136.553
K	39	1	He	-0.949756		69551.170
Ca	43	1	He	6.791524	16.4	29.367
Ti	47	1	He	0.081785	23.3	22.000
V	51	1	He	0.038919	242.4	-243.450
Cr	52	1	He	0.210117	2.8	3989.223
Mn	55	1	He	0.036554	9.7	640.687
Fe	56	1	He	3.958763	3.3	44291.427
Co	59	1	He	0.008265	10.7	260.667
Ni	60	1	He	-0.146215		409.343
Cu	63	1	He	0.041834	12.4	597.350
Zn	66	1	He	1.205436	3.3	2590.240
As	75	1	He	0.007299	111.8	134.500
Se	78	2	H2	0.003123	256.2	29.333
Sr	88	1	He	0.031745	10.8	518.347
Mo	95	1	He	0.042047	11.5	270.667
Pd	105	1	He	-0.008439		185.000
Ag	107	1	He	0.034328	5.2	805.030
Cd	111	1	He	0.000677	215.2	22.953
Sn	118	1	He	0.026965	12.8	335.010
Sb	121	1	He	0.004797	32.3	136.667
Ba	138	1	He	0.038118	4.5	1216.730
Pt	195	1	He	0.011523	51.5	329.337
Hg	202	1	He	0.023815	14.6	325.670
Tl	205	1	He	0.010445	30.0	953.377
Pb	208	1	He	-0.007665		2358.440
Bi	209	1	He	0.002373	61.6	1880.163
Th	232	1	He	0.005525	55.7	1170.063
U	238	1	He	-0.002093		908.373

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.14268465	590550.790
Sc	45	2	H2	99.26920222	4582136.167
Ge	72	1	He	98.30665347	480974.520
Ge	72	2	H2	100.7381196	1550058.667
In	115	1	He	99.55527714	5525358.470
Tb	159	1	He	100.8084413	12808650.643
Ir	193	1	He	101.7206364	6352022.823

Sample Name BottleTopFilt-It-211125-345-A  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 057\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:10:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	-0.158242		56.833
Be	9	2	H2	-0.035970		32.333
B	11	2	H2	1.380548	2.7	1878.287
Na	23	1	He	8.216729	5.7	19252.467
Mg	24	1	He	-4.649873		4263.977
Al	27	1	He	0.977538	3.8	362.670
Si	28	2	H2	10.851197	2.6	50290.423
K	39	1	He	-4.527693		70087.097
Ca	43	1	He	16.140489	10.8	52.833
Ti	47	1	He	0.002357	168.5	3.000
V	51	1	He	0.102218	35.4	194.403
Cr	52	1	He	0.091484	6.6	3185.023
Mn	55	1	He	-0.020805		312.003
Fe	56	1	He	0.253149	5.5	16626.780
Co	59	1	He	-0.002000		138.000
Ni	60	1	He	-0.168315		357.340
Cu	63	1	He	0.025575	26.3	479.343
Zn	66	1	He	0.293543	4.8	826.027
As	75	1	He	-0.020011		91.167
Se	78	2	H2	-0.012095		18.000
Sr	88	1	He	0.013484	24.8	330.010
Mo	95	1	He	0.002417	48.8	38.000
Pd	105	1	He	-0.022928		60.000
Ag	107	1	He	-0.003322		100.000
Cd	111	1	He	0.002516	64.8	30.323
Sn	118	1	He	0.002064	188.9	118.333
Sb	121	1	He	0.001964	172.6	103.333
Ba	138	1	He	0.010027	17.9	441.677
Pt	195	1	He	0.002927	87.2	236.000
Hg	202	1	He	0.022739	22.3	326.673
Tl	205	1	He	0.004862	3.3	741.693
Pb	208	1	He	-0.013422		2083.417
Bi	209	1	He	-0.003122		1683.467
Th	232	1	He	-0.002537		720.027
U	238	1	He	-0.004473		801.700

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.9444073	619444.040
Sc	45	2	H2	103.6954978	4786448.167
Ge	72	1	He	103.2038663	504934.593
Ge	72	2	H2	103.9950684	1600173.377
In	115	1	He	102.7804466	5704356.693
Tb	159	1	He	102.9916048	13086041.887
Ir	193	1	He	105.3582630	6579177.193

Sample Name 60398600001\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 058SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:14:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.807574	1.3	1928.790
Be	9	2	H2	0.012182	58.8	49.333
B	11	2	H2	80.376890	1.4	30299.413
Na	23	1	He	32914.10407	0.7	30086085.383
Mg	24	1	He	29654.35846	0.3	15107311.440
Al	27	1	He	33.936421	1.1	8787.930
Si	28	2	H2	4880.285884	1.1	14438727.333
K	39	1	He	2164.216376	0.4	1674974.450
Ca	43	1	He	59342.20391	0.4	129481.510
Ti	47	1	He	0.350793	16.4	84.333
V	51	1	He	2.007972	2.7	12717.240
Cr	52	1	He	0.752817	3.0	8108.257
Mn	55	1	He	0.324666	4.8	2296.853
Fe	56	1	He	10.620040	1.5	92677.440
Co	59	1	He	0.035343	5.4	585.347
Ni	60	1	He	1.362419	3.3	4990.207
Cu	63	1	He	0.547503	1.1	4850.153
Zn	66	1	He	5.207986	1.0	10225.610
As	75	1	He	0.689763	0.8	1290.227
Se	78	2	H2	1.123031	1.0	891.363
Sr	88	1	He	153.997035	0.4	1674652.633
Mo	95	1	He	9.984167	0.6	56046.347
Pd	105	1	He	0.090279	16.0	998.377
Ag	107	1	He	0.014458	16.6	410.010
Cd	111	1	He	0.039232	8.9	149.910
Sn	118	1	He	0.104372	6.4	970.043
Sb	121	1	He	1.465819	2.6	18078.410
Ba	138	1	He	48.227968	0.2	1288402.197
Pt	195	1	He	0.007993	16.8	279.333
Hg	202	1	He	0.012887	21.5	256.667
Tl	205	1	He	0.016572	12.4	1163.397
Pb	208	1	He	0.021631	25.2	3851.903
Bi	209	1	He	0.005043	59.8	1890.180
Th	232	1	He	0.010999	6.7	1408.420
U	238	1	He	10.562575	0.8	562443.313

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.32735971	573610.227
Sc	45	2	H2	98.36485821	4540392.833
Ge	72	1	He	95.67524691	468100.117
Ge	72	2	H2	98.80300564	1520283.043
In	115	1	He	94.68884177	5255269.323
Tb	159	1	He	97.47693939	12385352.313
Ir	193	1	He	95.94429392	5991314.703

Sample Name 4314161\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 059SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:18:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	111.986705	0.9	42069.940
Be	9	2	H2	109.834711	0.7	42263.233
B	11	2	H2	109.143248	0.4	40375.527
Na	23	1	He	2143.571768	1.4	2039744.553
Mg	24	1	He	2120.699434	1.3	1125241.990
Al	27	1	He	2121.211315	0.9	563617.750
Si	28	2	H2	555.360740	0.6	1644342.460
K	39	1	He	2121.739332	0.5	1702550.650
Ca	43	1	He	2127.113676	1.3	4822.080
Ti	47	1	He	108.647131	0.7	26348.823
V	51	1	He	107.005937	1.4	728634.690
Cr	52	1	He	109.634787	0.9	888265.750
Mn	55	1	He	108.017228	1.3	650650.750
Fe	56	1	He	2150.546297	1.1	16621885.333
Co	59	1	He	110.409038	0.4	1404390.123
Ni	60	1	He	111.809833	0.4	354302.363
Cu	63	1	He	109.280851	0.1	958411.957
Zn	66	1	He	109.452312	0.3	219033.007
As	75	1	He	107.868806	0.3	190444.590
Se	78	2	H2	111.494575	0.7	86032.807
Sr	88	1	He	107.615980	0.5	1215537.353
Mo	95	1	He	105.344291	0.2	614951.563
Pd	105	1	He	21.798170	0.4	189131.573
Ag	107	1	He	52.023886	1.6	968360.740
Cd	111	1	He	106.901031	0.6	369610.100
Sn	118	1	He	105.299291	0.8	922026.600
Sb	121	1	He	106.331772	0.8	1359056.593
Ba	138	1	He	104.337361	0.8	2899348.187
Pt	195	1	He	21.732136	0.6	246222.363
Hg	202	1	He	0.014249	7.2	270.333
Tl	205	1	He	109.890392	1.8	4437720.870
Pb	208	1	He	108.272884	1.5	5953124.883
Bi	209	1	He	108.731214	1.1	4947903.260
Th	232	1	He	108.180374	1.0	6246945.950
U	238	1	He	105.868238	1.0	5846942.830

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.75909456	594259.893
Sc	45	2	H2	97.61391255	4505730.167
Ge	72	1	He	99.37082180	486181.063
Ge	72	2	H2	98.94753229	1522506.877
In	115	1	He	98.50073762	5466831.097
Tb	159	1	He	99.80699629	12681407.727
Ir	193	1	He	99.66088572	6223400.117

Sample Name 60398600002\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 060SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:21:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	7.220113	1.6	2819.263
Be	9	2	H2	0.051290	20.6	64.000
B	11	2	H2	49.667993	1.0	19077.170
Na	23	1	He	9976.376730	0.5	9061458.820
Mg	24	1	He	17994.94972	0.3	9104687.780
Al	27	1	He	107.505036	0.5	27457.977
Si	28	2	H2	4536.793984	0.6	13328375.000
K	39	1	He	8738.529474	0.5	6509058.653
Ca	43	1	He	84820.95407	0.4	183750.300
Ti	47	1	He	1.858202	8.3	434.010
V	51	1	He	0.582959	8.8	3319.377
Cr	52	1	He	0.646647	5.5	7228.463
Mn	55	1	He	2.972868	1.8	17559.213
Fe	56	1	He	71.130966	1.2	539904.147
Co	59	1	He	0.501456	0.3	6281.370
Ni	60	1	He	1.369127	1.9	5000.870
Cu	63	1	He	0.251371	5.1	2346.193
Zn	66	1	He	3.754170	1.9	7413.243
As	75	1	He	0.176998	10.8	418.343
Se	78	2	H2	0.760570	4.9	610.347
Sr	88	1	He	246.661020	0.4	2677245.900
Mo	95	1	He	4.018142	1.2	22574.523
Pd	105	1	He	0.146069	8.3	1463.420
Ag	107	1	He	0.171546	20.3	3220.413
Cd	111	1	He	0.021365	12.4	90.600
Sn	118	1	He	0.052867	4.1	536.680
Sb	121	1	He	0.078166	5.8	1031.717
Ba	138	1	He	44.385161	0.7	1186063.917
Pt	195	1	He	0.007429	18.5	270.667
Hg	202	1	He	0.019139	17.5	287.333
Tl	205	1	He	0.066051	14.8	3085.390
Pb	208	1	He	0.102986	2.5	8144.317
Bi	209	1	He	0.013648	23.3	2290.237
Th	232	1	He	0.058137	6.8	4069.000
U	238	1	He	1.112159	2.2	60699.337

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.64794058	569521.980
Sc	45	2	H2	97.66384176	4508034.833
Ge	72	1	He	95.49799328	467232.887
Ge	72	2	H2	98.52772716	1516047.330
In	115	1	He	94.71216551	5256563.800
Tb	159	1	He	96.58403948	12271901.070
Ir	193	1	He	96.91423220	6051883.240

Sample Name 4315278\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 061SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:25:38  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	88.003908	0.7	32807.360
Be	9	2	H2	80.717251	0.6	30810.567
B	11	2	H2	127.222538	0.7	46459.407
Na	23	1	He	11885.58493	0.8	10682903.590
Mg	24	1	He	19836.80409	0.7	9932986.520
Al	27	1	He	2082.758605	0.6	524971.543
Si	28	2	H2	5443.899514	0.6	15848036.333
K	39	1	He	10508.29317	0.8	7733399.470
Ca	43	1	He	86036.52498	1.0	184471.267
Ti	47	1	He	84.945702	0.7	19541.260
V	51	1	He	82.692159	1.5	534020.433
Cr	52	1	He	83.122778	1.0	639370.977
Mn	55	1	He	84.526429	0.7	483098.530
Fe	56	1	He	1062.506623	1.2	7796846.500
Co	59	1	He	80.471894	0.9	976894.563
Ni	60	1	He	82.590960	0.7	249984.053
Cu	63	1	He	80.318205	0.8	672299.543
Zn	66	1	He	84.415056	0.4	161269.453
As	75	1	He	80.792055	1.0	136156.230
Se	78	2	H2	81.809280	0.9	62739.667
Sr	88	1	He	323.748940	0.8	3489478.073
Mo	95	1	He	86.072181	0.8	472467.333
Pd	105	1	He	80.733266	1.0	658022.803
Ag	107	1	He	32.842575	2.2	574883.977
Cd	111	1	He	81.173102	0.9	263912.923
Sn	118	1	He	81.221405	1.2	668775.613
Sb	121	1	He	81.023260	0.8	973812.643
Ba	138	1	He	124.314542	0.7	3248373.177
Pt	195	1	He	79.444552	1.7	870735.710
Hg	202	1	He	0.008000	6.6	228.667
Tl	205	1	He	40.500039	0.7	1583460.027
Pb	208	1	He	80.570167	1.0	4288631.423
Bi	209	1	He	79.092825	0.7	3469915.990
Th	232	1	He	6.526601	0.9	364050.487
U	238	1	He	82.834688	0.9	4410074.310

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.68190188	563709.067
Sc	45	2	H2	96.79544981	4467951.000
Ge	72	1	He	94.83774363	464002.553
Ge	72	2	H2	98.33319101	1513054.000
In	115	1	He	92.62510522	5140731.103
Tb	159	1	He	96.60868349	12275032.320
Ir	193	1	He	96.06708383	5998982.413

Sample Name 4315279\_B70041Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 062SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:29:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.454183	2.5	659.680
Be	9	2	H2	0.045302	20.6	61.833
B	11	2	H2	11.499359	0.4	5409.303
Na	23	1	He	1789.607259	0.9	1651774.193
Mg	24	1	He	3206.328673	1.4	1645219.243
Al	27	1	He	21.150222	6.0	5529.877
Si	28	2	H2	839.442574	1.1	2484804.417
K	39	1	He	1532.751050	1.4	1210672.973
Ca	43	1	He	14870.75568	1.5	32578.653
Ti	47	1	He	0.362194	5.9	87.333
V	51	1	He	0.174495	21.6	658.293
Cr	52	1	He	0.132171	8.6	3279.047
Mn	55	1	He	0.547092	5.2	3602.457
Fe	56	1	He	12.982247	2.4	110700.010
Co	59	1	He	0.102879	6.2	1422.077
Ni	60	1	He	0.106306	20.7	1175.383
Cu	63	1	He	0.067687	4.4	805.357
Zn	66	1	He	0.833216	2.0	1817.450
As	75	1	He	0.048221	1.0	201.833
Se	78	2	H2	0.152040	20.6	144.000
Sr	88	1	He	43.177972	1.5	472955.670
Mo	95	1	He	0.710030	2.0	4100.600
Pd	105	1	He	0.040613	5.3	598.353
Ag	107	1	He	0.142345	19.3	2761.967
Cd	111	1	He	0.010657	48.8	56.263
Sn	118	1	He	0.033235	8.4	380.010
Sb	121	1	He	0.021895	23.0	348.340
Ba	138	1	He	7.667368	1.7	209813.350
Pt	195	1	He	0.003961	39.7	236.667
Hg	202	1	He	0.001461	310.7	197.333
Tl	205	1	He	0.055502	17.7	2720.310
Pb	208	1	He	0.023149	10.7	3963.583
Bi	209	1	He	0.012411	26.9	2293.580
Th	232	1	He	0.014861	6.8	1681.793
U	238	1	He	0.199384	2.1	11988.960

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.68357123	575753.647
Sc	45	2	H2	97.90390129	4519115.667
Ge	72	1	He	96.34729262	471388.163
Ge	72	2	H2	99.03045677	1523782.837
In	115	1	He	96.93630905	5380004.673
Tb	159	1	He	98.19876111	12477066.480
Ir	193	1	He	99.43440251	6209257.200



Sample Name 4314162\_B70041Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 063SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:33:07  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	22.810184	1.3	8571.087
Be	9	2	H2	20.919752	0.1	8003.617
B	11	2	H2	31.447973	0.7	12412.917
Na	23	1	He	2330.372907	2.0	2119925.803
Mg	24	1	He	3856.288107	2.2	1951754.763
Al	27	1	He	431.754436	2.0	109785.857
Si	28	2	H2	998.817562	0.8	2915115.250
K	39	1	He	2067.610399	2.6	1588296.903
Ca	43	1	He	16444.83786	2.3	35557.660
Ti	47	1	He	20.860745	4.1	4838.467
V	51	1	He	20.621464	3.2	133880.727
Cr	52	1	He	20.899651	2.3	163727.970
Mn	55	1	He	20.892719	1.8	120691.500
Fe	56	1	He	421.131520	1.8	3123848.333
Co	59	1	He	20.547438	1.4	251805.757
Ni	60	1	He	20.592598	1.4	63525.517
Cu	63	1	He	20.382658	1.2	172331.357
Zn	66	1	He	21.205582	2.0	41024.347
As	75	1	He	20.152925	1.5	34358.957
Se	78	2	H2	20.869486	1.4	15947.807
Sr	88	1	He	67.005391	1.8	728884.807
Mo	95	1	He	20.654411	2.0	117071.513
Pd	105	1	He	4.087238	3.5	34625.693
Ag	107	1	He	9.572647	5.9	173071.320
Cd	111	1	He	19.895943	1.8	66797.157
Sn	118	1	He	19.599073	1.2	166690.857
Sb	121	1	He	19.892801	1.2	246908.793
Ba	138	1	He	28.068199	1.4	757327.933
Pt	195	1	He	3.983248	2.2	44253.643
Hg	202	1	He	0.006351	43.3	222.000
Tl	205	1	He	20.754536	3.2	819339.963
Pb	208	1	He	20.206872	2.0	1087852.750
Bi	209	1	He	20.192585	2.8	906374.390
Th	232	1	He	20.238752	1.9	1151726.417
U	238	1	He	20.235429	1.5	1101520.843

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.46566959	568425.207
Sc	45	2	H2	96.62299401	4459990.667
Ge	72	1	He	95.70287779	468235.303
Ge	72	2	H2	97.86140243	1505794.583
In	115	1	He	95.63573854	5307822.480
Tb	159	1	He	97.53861663	12393188.980
Ir	193	1	He	98.17314802	6130497.200

Sample Name 4314163\_B70041Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 064SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:36:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	22.341351	1.7	8358.300
Be	9	2	H2	20.796324	2.4	7918.903
B	11	2	H2	30.873181	2.0	12151.877
Na	23	1	He	2248.492364	0.3	2067038.093
Mg	24	1	He	3721.201861	0.4	1903222.787
Al	27	1	He	426.802858	0.5	109649.177
Si	28	2	H2	989.209269	2.6	2873461.750
K	39	1	He	2003.568108	0.4	1557301.697
Ca	43	1	He	15831.49497	0.1	34588.757
Ti	47	1	He	20.206630	1.2	4736.767
V	51	1	He	20.045584	2.3	131497.510
Cr	52	1	He	20.454936	0.9	161961.297
Mn	55	1	He	20.588203	0.7	120172.567
Fe	56	1	He	415.067232	0.4	3110954.083
Co	59	1	He	20.207465	0.9	250437.033
Ni	60	1	He	20.526531	1.8	64037.083
Cu	63	1	He	20.089257	0.9	171764.147
Zn	66	1	He	21.005140	0.9	41099.233
As	75	1	He	19.788173	0.9	34120.243
Se	78	2	H2	20.410949	0.1	15584.737
Sr	88	1	He	64.613441	1.1	710773.973
Mo	95	1	He	20.234445	0.4	115058.130
Pd	105	1	He	4.001968	0.6	34020.987
Ag	107	1	He	9.489104	2.0	172191.773
Cd	111	1	He	19.784070	0.4	66636.140
Sn	118	1	He	19.444262	0.9	165889.503
Sb	121	1	He	19.425240	0.9	241858.070
Ba	138	1	He	27.598324	0.7	747018.377
Pt	195	1	He	3.902086	1.3	43752.640
Hg	202	1	He	-0.000989		184.667
Tl	205	1	He	20.573685	1.2	819747.123
Pb	208	1	He	19.788593	0.6	1075136.013
Bi	209	1	He	19.858535	0.6	892530.483
Th	232	1	He	19.962742	0.6	1137437.537
U	238	1	He	19.976292	0.5	1088791.673

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.42372128	574190.060
Sc	45	2	H2	96.18018102	4439551.000
Ge	72	1	He	96.77346875	473473.270
Ge	72	2	H2	97.77955309	1504535.167
In	115	1	He	95.93411395	5324382.437
Tb	159	1	He	98.41620219	12504694.393
Ir	193	1	He	98.27819582	6137056.990

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 065\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:40:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.831051	1.1	31639.047
Be	9	2	H2	82.109186	0.4	31351.837
B	11	2	H2	81.508176	1.3	30229.273
Na	23	1	He	1015.643755	0.3	953042.460
Mg	24	1	He	1015.800694	0.3	531783.677
Al	27	1	He	1007.097245	0.5	262384.713
Si	28	2	H2	506.207911	1.0	1488101.790
K	39	1	He	1010.751396	0.3	831420.767
Ca	43	1	He	1008.329169	1.3	2248.170
Ti	47	1	He	80.355753	1.6	19104.020
V	51	1	He	81.106922	0.5	541344.913
Cr	52	1	He	82.506074	0.6	655907.980
Mn	55	1	He	81.468646	0.6	481219.393
Fe	56	1	He	511.708016	0.7	3887959.833
Co	59	1	He	83.018994	0.7	1039320.167
Ni	60	1	He	83.963446	1.3	262062.637
Cu	63	1	He	83.946465	0.9	724634.273
Zn	66	1	He	82.172057	1.3	161895.500
As	75	1	He	79.833536	0.4	138750.787
Se	78	2	H2	81.352116	0.9	62552.870
Sr	88	1	He	81.622101	1.4	907342.697
Mo	95	1	He	77.741870	1.0	453236.437
Pd	105	1	He	82.247896	1.1	711985.720
Ag	107	1	He	40.965682	2.0	761566.393
Cd	111	1	He	80.765267	0.8	278893.227
Sn	118	1	He	78.221691	1.1	684080.173
Sb	121	1	He	78.559973	0.7	1002844.413
Ba	138	1	He	78.131188	1.0	2168368.980
Pt	195	1	He	81.837928	1.3	920544.833
Hg	202	1	He	3.875190	0.8	21175.117
Tl	205	1	He	42.489450	0.7	1704888.200
Pb	208	1	He	82.876718	0.8	4527304.770
Bi	209	1	He	81.915592	1.3	3755544.943
Th	232	1	He	76.030500	1.0	4422971.080
U	238	1	He	79.341064	0.8	4414353.477

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.81597836	582567.643
Sc	45	2	H2	96.82845551	4469474.500
Ge	72	1	He	97.80145927	478502.810
Ge	72	2	H2	98.59033970	1517010.750
In	115	1	He	98.37658664	5459940.667
Tb	159	1	He	99.14716990	12597570.643
Ir	193	1	He	100.3943922	6269204.490

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 066\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:44:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.061836	38.2	135.333
Be	9	2	H2	0.018129	42.8	51.000
B	11	2	H2	2.131394	3.8	2027.803
Na	23	1	He	1.243307	4.7	11597.887
Mg	24	1	He	-7.082028		2743.607
Al	27	1	He	0.091718	55.3	110.000
Si	28	2	H2	-0.970060		12614.757
K	39	1	He	-1.642481		67876.937
Ca	43	1	He	1.005622	111.3	16.100
Ti	47	1	He	-0.003889		1.333
V	51	1	He	-0.050000		-830.857
Cr	52	1	He	-0.014028		2152.833
Mn	55	1	He	-0.011267		348.673
Fe	56	1	He	-0.088134		13012.507
Co	59	1	He	0.003020	72.0	192.667
Ni	60	1	He	-0.141843		418.677
Cu	63	1	He	0.001776	252.6	247.333
Zn	66	1	He	-0.006208		192.000
As	75	1	He	0.005984	108.8	130.833
Se	78	2	H2	-0.000701		25.667
Sr	88	1	He	0.005108	74.0	218.337
Mo	95	1	He	0.010148	19.9	81.333
Pd	105	1	He	0.010348	18.3	345.010
Ag	107	1	He	0.116913	22.8	2328.547
Cd	111	1	He	0.005118	48.0	37.983
Sn	118	1	He	0.009712	62.9	180.003
Sb	121	1	He	0.002060	31.9	100.000
Ba	138	1	He	0.003283	54.6	235.003
Pt	195	1	He	0.001374	190.4	210.000
Hg	202	1	He	0.019078	10.1	295.000
Tl	205	1	He	0.038625	30.0	2070.187
Pb	208	1	He	-0.008921		2253.430
Bi	209	1	He	0.005242	45.7	2000.183
Th	232	1	He	0.014502	3.5	1688.460
U	238	1	He	0.000660	85.5	1056.717

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.51485608	580755.710
Sc	45	2	H2	97.16631534	4485069.667
Ge	72	1	He	97.28857998	475993.500
Ge	72	2	H2	98.07222958	1509038.583
In	115	1	He	98.27788814	5454462.860
Tb	159	1	He	99.25853522	12611720.643
Ir	193	1	He	101.0700418	6311395.950

Sample Name 60398600003\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 067SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:48:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.483789	1.3	1038.040
Be	9	2	H2	0.041749	23.8	60.000
B	11	2	H2	575.758179	1.0	206475.110
Na	23	1	He	35927.62029	0.5	31775945.360
Mg	24	1	He	41855.52723	0.4	20629797.607
Al	27	1	He	27.690415	1.2	6953.630
Si	28	2	H2	3681.627647	1.1	10757605.000
K	39	1	He	4154.577691	0.5	3050417.140
Ca	43	1	He	251352.6939	0.6	530617.133
Ti	47	1	He	0.245040	6.1	57.667
V	51	1	He	0.054774	239.5	-129.573
Cr	52	1	He	0.493066	2.4	5884.533
Mn	55	1	He	0.552616	1.2	3503.763
Fe	56	1	He	9.932701	1.8	84714.247
Co	59	1	He	0.082606	6.6	1117.380
Ni	60	1	He	0.094091	6.2	1084.710
Cu	63	1	He	0.108521	2.8	1098.713
Zn	66	1	He	3.767929	1.4	7156.440
As	75	1	He	0.127838	5.9	322.333
Se	78	2	H2	2.172825	1.2	1691.437
Sr	88	1	He	434.963531	0.6	4541073.890
Mo	95	1	He	0.314981	0.7	1728.110
Pd	105	1	He	0.271245	4.2	2420.230
Ag	107	1	He	0.049592	9.1	1003.380
Cd	111	1	He	0.005335	69.9	36.023
Sn	118	1	He	0.038317	7.1	400.010
Sb	121	1	He	0.046043	9.1	615.020
Ba	138	1	He	57.770577	0.8	1490840.707
Pt	195	1	He	0.004922	55.2	240.667
Hg	202	1	He	0.016790	15.2	272.000
Tl	205	1	He	0.028675	6.9	1608.447
Pb	208	1	He	0.009485	16.2	3138.500
Bi	209	1	He	0.003067	149.1	1786.823
Th	232	1	He	0.017356	6.1	1745.133
U	238	1	He	1.950453	0.4	103646.890

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.23867260	555024.770
Sc	45	2	H2	97.11099531	4482516.167
Ge	72	1	He	91.85944744	449430.960
Ge	72	2	H2	98.30091271	1512557.333
In	115	1	He	91.46873696	5076552.193
Tb	159	1	He	95.56277427	12142139.820
Ir	193	1	He	95.02306121	5933787.623

Sample Name rinse  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 068SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:51:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	-0.020104		106.667
Be	9	2	H2	0.010307	232.7	48.833
B	11	2	H2	6.620687	1.4	3692.453
Na	23	1	He	4.938722	8.5	15269.537
Mg	24	1	He	-5.668706		3530.450
Al	27	1	He	0.122607	40.1	120.000
Si	28	2	H2	-0.793860		13356.693
K	39	1	He	-0.629765		69792.383
Ca	43	1	He	9.527071	17.5	35.517
Ti	47	1	He	-0.008128		0.333
V	51	1	He	-0.050962		-851.687
Cr	52	1	He	-0.016045		2172.837
Mn	55	1	He	-0.030195		241.333
Fe	56	1	He	-0.089706		13219.313
Co	59	1	He	-0.002988		118.667
Ni	60	1	He	-0.139565		428.677
Cu	63	1	He	-0.006988		173.333
Zn	66	1	He	-0.014004		178.000
As	75	1	He	0.005167	110.2	130.333
Se	78	2	H2	-0.005022		22.667
Sr	88	1	He	0.018592	25.5	370.010
Mo	95	1	He	0.004351	61.1	48.000
Pd	105	1	He	-0.011587		156.667
Ag	107	1	He	0.007995	11.7	308.343
Cd	111	1	He	-0.001191		16.323
Sn	118	1	He	0.007850	50.0	165.000
Sb	121	1	He	0.001347	130.0	91.667
Ba	138	1	He	0.002370	65.0	211.667
Pt	195	1	He	0.000118	366.2	197.333
Hg	202	1	He	0.003784	76.3	213.667
Tl	205	1	He	0.001195	89.7	571.683
Pb	208	1	He	-0.009861		2218.430
Bi	209	1	He	0.001960	71.8	1860.163
Th	232	1	He	0.002108	73.8	968.380
U	238	1	He	-0.002821		866.707

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.13913653	590529.440
Sc	45	2	H2	98.86559818	4563506.333
Ge	72	1	He	97.95958534	479276.457
Ge	72	2	H2	99.21661204	1526647.210
In	115	1	He	99.11178994	5500744.750
Tb	159	1	He	99.98525950	12704057.727
Ir	193	1	He	101.6628029	6348411.367

Sample Name 60398600003\_B70041Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 069SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:55:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.250164	5.2	205.667
Be	9	2	H2	-0.001090		43.667
B	11	2	H2	63.289364	0.5	23848.413
Na	23	1	He	3563.464291	1.0	3275423.077
Mg	24	1	He	4189.427586	1.0	2145537.573
Al	27	1	He	4.465670	0.9	1233.717
Si	28	2	H2	374.978393	0.7	1110672.877
K	39	1	He	414.783729	0.5	377223.393
Ca	43	1	He	24679.97026	0.8	54005.107
Ti	47	1	He	0.060011	53.3	16.333
V	51	1	He	0.046632	118.3	-185.967
Cr	52	1	He	0.079917	9.0	2866.953
Mn	55	1	He	0.052918	6.5	719.353
Fe	56	1	He	1.330969	4.4	23495.157
Co	59	1	He	0.007612	13.2	247.333
Ni	60	1	He	-0.128062		456.677
Cu	63	1	He	0.022767	9.8	423.343
Zn	66	1	He	0.563585	7.9	1294.063
As	75	1	He	0.025254	34.8	162.500
Se	78	2	H2	0.245323	4.1	215.000
Sr	88	1	He	41.507056	0.7	454495.500
Mo	95	1	He	0.032248	3.6	206.667
Pd	105	1	He	0.022936	26.1	446.677
Ag	107	1	He	0.011597	15.5	366.677
Cd	111	1	He	0.001866	90.4	26.293
Sn	118	1	He	0.008909	18.7	170.000
Sb	121	1	He	0.004182	8.3	125.000
Ba	138	1	He	5.503365	0.9	150253.023
Pt	195	1	He	-0.000357		188.667
Hg	202	1	He	0.001808	283.9	199.333
Tl	205	1	He	0.004171	49.6	680.023
Pb	208	1	He	0.003781	112.6	2918.487
Bi	209	1	He	0.002405	111.3	1820.157
Th	232	1	He	0.005145	21.9	1110.063
U	238	1	He	0.187965	1.8	11238.280

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.58777359	575177.207
Sc	45	2	H2	97.20843454	4487013.833
Ge	72	1	He	96.31293457	471220.063
Ge	72	2	H2	98.61790602	1517434.913
In	115	1	He	96.68955422	5366309.680
Tb	159	1	He	98.30167565	12490142.730
Ir	193	1	He	98.38841482	6143939.700

Sample Name 60398600004\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 070SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:59:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.484436	3.8	1030.870
Be	9	2	H2	0.007686	104.1	46.667
B	11	2	H2	593.486614	3.6	211217.507
Na	23	1	He	36612.79601	0.7	32319965.353
Mg	24	1	He	42667.49791	0.6	20989686.773
Al	27	1	He	19.333416	4.5	4870.517
Si	28	2	H2	3790.724400	3.4	10994349.000
K	39	1	He	4220.612279	0.5	3091990.267
Ca	43	1	He	257264.9631	0.4	542070.340
Ti	47	1	He	0.238210	3.6	56.000
V	51	1	He	0.089056	45.7	90.317
Cr	52	1	He	0.568258	3.6	6440.097
Mn	55	1	He	0.695218	3.5	4297.310
Fe	56	1	He	8.949444	1.7	77478.123
Co	59	1	He	0.084096	9.1	1130.047
Ni	60	1	He	1.039893	3.6	3830.510
Cu	63	1	He	0.138142	5.6	1332.730
Zn	66	1	He	2.960488	2.6	5637.107
As	75	1	He	0.130560	3.0	325.167
Se	78	2	H2	2.254117	4.2	1739.443
Sr	88	1	He	450.383893	1.1	4679872.847
Mo	95	1	He	0.316047	1.5	1730.780
Pd	105	1	He	0.267894	6.4	2388.560
Ag	107	1	He	0.012380	25.4	360.010
Cd	111	1	He	0.008369	4.9	45.687
Sn	118	1	He	0.047056	11.0	470.010
Sb	121	1	He	0.078355	4.0	996.717
Ba	138	1	He	59.178727	0.8	1524379.873
Pt	195	1	He	0.007257	35.7	264.000
Hg	202	1	He	0.005206	58.7	210.000
Tl	205	1	He	0.016296	16.2	1121.727
Pb	208	1	He	0.019472	17.2	3635.207
Bi	209	1	He	0.005461	11.2	1870.173
Th	232	1	He	0.009688	10.8	1308.413
U	238	1	He	2.035854	1.4	106980.250

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.06220823	553962.937
Sc	45	2	H2	96.45578822	4452272.667
Ge	72	1	He	91.42602635	447310.407
Ge	72	2	H2	97.53938843	1500839.750
In	115	1	He	91.30559245	5067497.607
Tb	159	1	He	94.82307376	12048153.987
Ir	193	1	He	94.00069396	5869945.120



Sample Name rinse  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 071SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:03:03  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	-0.045749		96.500
Be	9	2	H2	-0.009392		41.000
B	11	2	H2	7.928884	4.7	4151.070
Na	23	1	He	5.289052	12.5	15438.070
Mg	24	1	He	-5.945196		3350.407
Al	27	1	He	0.072434	34.2	105.667
Si	28	2	H2	-0.841105		13165.823
K	39	1	He	0.968648	60.0	70276.250
Ca	43	1	He	4.538428	20.4	24.050
Ti	47	1	He	-0.003929		1.333
V	51	1	He	0.028977	99.8	-306.530
Cr	52	1	He	-0.007842		2215.507
Mn	55	1	He	-0.025817		264.667
Fe	56	1	He	-0.112651		12907.723
Co	59	1	He	-0.003217		115.333
Ni	60	1	He	-0.157393		372.007
Cu	63	1	He	-0.008244		162.000
Zn	66	1	He	-0.023731		158.000
As	75	1	He	0.005839	117.5	131.000
Se	78	2	H2	-0.002745		24.333
Sr	88	1	He	0.009256	14.6	265.003
Mo	95	1	He	0.000635	377.0	26.000
Pd	105	1	He	-0.015495		121.667
Ag	107	1	He	0.000762	331.9	171.667
Cd	111	1	He	-0.001059		16.663
Sn	118	1	He	0.007422	34.2	160.000
Sb	121	1	He	-0.000298		70.000
Ba	138	1	He	0.000985	110.4	171.667
Pt	195	1	He	0.000877	87.2	204.667
Hg	202	1	He	-0.003276		174.000
Tl	205	1	He	-0.002080		436.680
Pb	208	1	He	-0.012480		2061.753
Bi	209	1	He	0.002999	141.5	1886.837
Th	232	1	He	-0.000179		825.033
U	238	1	He	-0.003831		801.700

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.11944556	584393.687
Sc	45	2	H2	98.47801495	4545616.000
Ge	72	1	He	97.60167430	477525.343
Ge	72	2	H2	98.99398900	1523221.707
In	115	1	He	98.38540771	5460430.240
Tb	159	1	He	99.38179787	12627382.310
Ir	193	1	He	100.5830092	6280982.823

Sample Name 60398600004\_B70041Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 072SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:06:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.219554	1.7	193.000
Be	9	2	H2	-0.014355		38.333
B	11	2	H2	61.689754	2.4	23125.803
Na	23	1	He	3332.200817	2.7	3055498.807
Mg	24	1	He	3890.114776	2.2	1987608.410
Al	27	1	He	3.900548	1.6	1085.707
Si	28	2	H2	359.451694	1.9	1058403.210
K	39	1	He	384.162689	2.9	353513.537
Ca	43	1	He	22862.96557	2.5	49900.287
Ti	47	1	He	0.048861	18.1	13.667
V	51	1	He	0.053607	80.1	-139.613
Cr	52	1	He	0.102038	29.3	3034.423
Mn	55	1	He	0.061315	15.9	766.690
Fe	56	1	He	1.208285	2.6	22524.673
Co	59	1	He	0.007499	9.7	245.333
Ni	60	1	He	-0.049186		696.687
Cu	63	1	He	0.051484	17.7	666.023
Zn	66	1	He	0.913993	3.6	1967.473
As	75	1	He	0.030132	43.0	170.167
Se	78	2	H2	0.203397	6.8	181.667
Sr	88	1	He	38.680689	2.1	422295.737
Mo	95	1	He	0.031829	13.3	204.000
Pd	105	1	He	0.017819	34.3	401.677
Ag	107	1	He	0.002218	60.3	195.000
Cd	111	1	He	0.001500	104.1	24.963
Sn	118	1	He	0.014611	34.8	218.333
Sb	121	1	He	0.006859	36.2	158.333
Ba	138	1	He	5.110260	2.9	139186.820
Pt	195	1	He	0.000862	399.3	201.333
Hg	202	1	He	-0.002936		173.333
Tl	205	1	He	0.000221	205.8	521.683
Pb	208	1	He	0.008909	14.5	3188.503
Bi	209	1	He	0.001978	200.7	1793.493
Th	232	1	He	0.002930	20.4	980.043
U	238	1	He	0.174710	4.4	10474.300

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.36759115	573852.310
Sc	45	2	H2	96.58836348	4458392.167
Ge	72	1	He	96.04359618	469902.300
Ge	72	2	H2	97.99955465	1507920.333
In	115	1	He	96.47097673	5354178.540
Tb	159	1	He	98.02236383	12454653.563
Ir	193	1	He	97.98149835	6118529.490

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 073\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:10:32  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	86.928438	3.8	31363.817
Be	9	2	H2	84.676573	3.1	31282.530
B	11	2	H2	86.385738	3.2	30927.513
Na	23	1	He	1032.405821	0.5	945840.507
Mg	24	1	He	1027.199460	1.1	525019.430
Al	27	1	He	1025.655660	1.0	260938.600
Si	28	2	H2	520.867692	3.3	1481081.290
K	39	1	He	1025.713826	0.4	822915.143
Ca	43	1	He	1036.802363	2.9	2256.667
Ti	47	1	He	81.991357	1.5	19034.267
V	51	1	He	82.049272	0.6	534776.420
Cr	52	1	He	83.872092	0.8	651058.353
Mn	55	1	He	82.974086	0.7	478589.477
Fe	56	1	He	518.733976	0.6	3848564.167
Co	59	1	He	84.000084	0.7	1034021.940
Ni	60	1	He	84.612957	0.5	259676.010
Cu	63	1	He	84.582415	0.6	717915.210
Zn	66	1	He	83.077375	0.9	160934.280
As	75	1	He	80.816631	0.8	138107.383
Se	78	2	H2	84.628880	2.5	62572.260
Sr	88	1	He	82.536682	0.5	902211.003
Mo	95	1	He	79.488819	1.2	451046.400
Pd	105	1	He	83.712944	0.9	705316.083
Ag	107	1	He	41.546537	2.2	751733.140
Cd	111	1	He	82.141178	0.6	276070.027
Sn	118	1	He	78.914994	0.3	671729.260
Sb	121	1	He	80.354177	0.1	998371.733
Ba	138	1	He	80.097733	0.3	2163631.843
Pt	195	1	He	82.855425	1.7	921618.857
Hg	202	1	He	3.894606	3.5	21040.247
Tl	205	1	He	42.998762	2.1	1706062.683
Pb	208	1	He	83.678325	1.8	4520113.480
Bi	209	1	He	83.309849	0.5	3763940.463
Th	232	1	He	77.526558	0.7	4444494.203
U	238	1	He	79.936703	0.6	4382995.143

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.54319038	568891.670
Sc	45	2	H2	93.74174879	4326996.167
Ge	72	1	He	96.16614126	470501.863
Ge	72	2	H2	94.85016154	1459460.583
In	115	1	He	95.74774475	5314038.870
Tb	159	1	He	98.05371076	12458636.483
Ir	193	1	He	98.93641031	6178159.697

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 074\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:14:17  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	-0.002080		109.667
Be	9	2	H2	-0.016394		37.167
B	11	2	H2	4.038734	3.1	2663.570
Na	23	1	He	1.814827	6.9	11858.110
Mg	24	1	He	-7.565699		2438.550
Al	27	1	He	0.078895	38.4	104.333
Si	28	2	H2	0.195196	977.8	15732.193
K	39	1	He	0.838382	171.0	68194.863
Ca	43	1	He	0.661850	122.1	15.000
Ti	47	1	He	0.003416	217.1	3.000
V	51	1	He	-0.007133		-532.543
Cr	52	1	He	-0.011656		2123.493
Mn	55	1	He	-0.014201		324.007
Fe	56	1	He	-0.153995		12237.807
Co	59	1	He	0.001392	90.3	168.667
Ni	60	1	He	-0.169052		327.337
Cu	63	1	He	-0.000141		226.000
Zn	66	1	He	-0.008612		183.333
As	75	1	He	0.010299	27.8	135.333
Se	78	2	H2	-0.006576		21.000
Sr	88	1	He	0.006157	28.1	225.000
Mo	95	1	He	0.009055	15.1	73.333
Pd	105	1	He	0.003976	76.5	283.340
Ag	107	1	He	0.143664	25.4	2760.303
Cd	111	1	He	0.000045	5958.9	19.990
Sn	118	1	He	0.005128	37.6	136.667
Sb	121	1	He	0.001171	38.2	86.667
Ba	138	1	He	0.001073	53.2	170.000
Pt	195	1	He	0.001619	78.4	209.333
Hg	202	1	He	0.018045	12.6	284.667
Tl	205	1	He	0.041682	25.9	2156.877
Pb	208	1	He	-0.007217		2308.427
Bi	209	1	He	0.001466	94.5	1786.817
Th	232	1	He	0.015162	12.2	1690.127
U	238	1	He	-0.001389		921.707

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.37572733	567884.000
Sc	45	2	H2	95.57845249	4411776.000
Ge	72	1	He	95.20660455	465807.240
Ge	72	2	H2	97.33767068	1497735.917
In	115	1	He	96.07835901	5332388.097
Tb	159	1	He	97.64064250	12406152.317
Ir	193	1	He	98.89192173	6175381.573

Sample Name 4310629\_B70030Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 075\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:18:01  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	-0.038192		96.667
Be	9	2	H2	-0.018386		36.500
B	11	2	H2	5.091599	2.0	3038.973
Na	23	1	He	10.797492	4.2	20060.193
Mg	24	1	He	-4.214538		4143.943
Al	27	1	He	8.204688	3.0	2175.493
Si	28	2	H2	2.817713	4.3	23327.557
K	39	1	He	1.369332	74.5	68844.557
Ca	43	1	He	14.960740	15.6	46.067
Ti	47	1	He	0.079319	17.2	20.667
V	51	1	He	-0.046689		-794.420
Cr	52	1	He	0.127712	10.1	3211.697
Mn	55	1	He	0.090628	3.9	930.697
Fe	56	1	He	2.383562	1.5	31083.590
Co	59	1	He	0.006452	18.2	230.000
Ni	60	1	He	-0.130740		442.677
Cu	63	1	He	0.049981	7.6	646.020
Zn	66	1	He	1.443240	4.2	2959.643
As	75	1	He	0.009737	80.1	134.167
Se	78	2	H2	0.003001	435.1	28.000
Sr	88	1	He	0.028713	21.0	468.347
Mo	95	1	He	0.011667	20.2	89.333
Pd	105	1	He	-0.006584		196.667
Ag	107	1	He	0.033587	8.9	773.363
Cd	111	1	He	0.005723	46.4	39.650
Sn	118	1	He	0.145778	7.2	1355.077
Sb	121	1	He	0.004779	9.8	133.333
Ba	138	1	He	0.039363	14.1	1223.397
Pt	195	1	He	0.004467	17.6	242.000
Hg	202	1	He	0.010649	26.7	246.333
Tl	205	1	He	0.011890	18.2	985.043
Pb	208	1	He	0.003637	71.9	2905.147
Bi	209	1	He	0.011778	30.0	2276.907
Th	232	1	He	0.008285	5.0	1310.080
U	238	1	He	0.002276	70.6	1135.060

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.73327444	570035.457
Sc	45	2	H2	95.76030341	4420170.000
Ge	72	1	He	95.05718415	465076.187
Ge	72	2	H2	96.39214403	1483187.087
In	115	1	He	97.31916383	5401253.270
Tb	159	1	He	98.08048629	12462038.563
Ir	193	1	He	99.97525522	6243031.160

Sample Name 4310630\_B70030Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 076SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:21:46  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	108.426515	0.1	39580.777
Be	9	2	H2	106.545981	0.2	39836.020
B	11	2	H2	106.062545	0.5	38157.287
Na	23	1	He	2098.041026	0.3	1896237.107
Mg	24	1	He	2091.908114	0.5	1054230.973
Al	27	1	He	2071.816893	0.5	522786.647
Si	28	2	H2	526.986295	0.2	1516836.957
K	39	1	He	2074.459087	0.3	1582268.360
Ca	43	1	He	2097.279980	2.5	4514.837
Ti	47	1	He	103.932261	0.4	23935.063
V	51	1	He	105.835130	0.9	684396.980
Cr	52	1	He	108.115473	0.6	831887.730
Mn	55	1	He	105.982335	0.3	606287.897
Fe	56	1	He	2116.046362	0.5	15532492.667
Co	59	1	He	107.801078	0.4	1318081.543
Ni	60	1	He	108.776265	0.1	331358.137
Cu	63	1	He	107.422167	0.2	905612.893
Zn	66	1	He	106.746622	0.6	205345.640
As	75	1	He	103.008205	0.4	174821.000
Se	78	2	H2	105.011578	1.4	79254.737
Sr	88	1	He	105.404792	0.3	1144421.210
Mo	95	1	He	101.118897	0.6	571763.020
Pd	105	1	He	21.056456	0.8	176971.423
Ag	107	1	He	49.673819	0.7	895646.417
Cd	111	1	He	105.307021	0.4	352678.570
Sn	118	1	He	100.611071	0.8	853347.460
Sb	121	1	He	103.066511	0.5	1276010.347
Ba	138	1	He	102.756372	0.8	2765838.187
Pt	195	1	He	21.089642	0.1	233860.287
Hg	202	1	He	0.009593	24.5	239.667
Tl	205	1	He	108.891753	0.3	4303847.747
Pb	208	1	He	106.523323	0.4	5732178.460
Bi	209	1	He	105.606542	1.1	4753566.283
Th	232	1	He	105.485414	0.6	6025330.537
U	238	1	He	103.447349	0.9	5651338.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.78172127	564309.707
Sc	45	2	H2	94.84289938	4377823.833
Ge	72	1	He	95.52091091	467345.013
Ge	72	2	H2	96.77619867	1489096.540
In	115	1	He	95.41053875	5295323.800
Tb	159	1	He	97.67912191	12411041.483
Ir	193	1	He	98.58381436	6156141.573

Sample Name 10606599001\_B70030Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 077SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:25:30  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.578756	1.0	2141.650
Be	9	2	H2	0.031595	62.1	54.833
B	11	2	H2	56.295817	0.5	20845.490
Na	23	1	He	43457.55595	1.4	38334736.097
Mg	24	1	He	8552.999016	1.4	4209605.977
Al	27	1	He	15.866649	4.2	4008.207
Si	28	2	H2	2020.197305	0.6	5775269.000
K	39	1	He	9189.152002	1.7	6649671.360
Ca	43	1	He	21604.27625	1.1	45504.057
Ti	47	1	He	0.064214	20.5	16.667
V	51	1	He	0.979955	15.3	5754.873
Cr	52	1	He	0.143709	4.5	3239.697
Mn	55	1	He	19.777772	1.8	111311.910
Fe	56	1	He	28.266446	1.5	216408.853
Co	59	1	He	0.228807	2.8	2884.293
Ni	60	1	He	2.041071	1.8	6886.980
Cu	63	1	He	0.086820	6.6	938.033
Zn	66	1	He	10.338350	2.3	19620.573
As	75	1	He	0.977195	1.0	1736.270
Se	78	2	H2	5.776730	0.3	4393.677
Sr	88	1	He	95.641564	1.1	1015364.543
Mo	95	1	He	10.380496	1.6	57840.847
Pd	105	1	He	0.063310	13.2	768.357
Ag	107	1	He	0.215749	31.2	3985.640
Cd	111	1	He	0.007330	27.4	43.587
Sn	118	1	He	0.031076	23.2	350.010
Sb	121	1	He	0.273743	2.2	3408.780
Ba	138	1	He	21.111587	1.8	559902.363
Pt	195	1	He	0.007457	29.5	272.000
Hg	202	1	He	-0.001113		181.333
Tl	205	1	He	0.095633	2.1	4262.407
Pb	208	1	He	0.046414	6.7	5158.730
Bi	209	1	He	0.008630	50.1	2086.877
Th	232	1	He	0.062556	12.0	4347.437
U	238	1	He	0.134610	4.7	8274.383

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.01115017	553655.707
Sc	45	2	H2	94.89647543	4380296.833
Ge	72	1	He	93.40522807	456993.837
Ge	72	2	H2	96.98792225	1492354.333
In	115	1	He	94.00535328	5217335.433
Tb	159	1	He	97.01865933	12327123.567
Ir	193	1	He	97.69422912	6100590.743

Sample Name 4315140\_B70030Dx25  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 078SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:29:15  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.129438	2.6	526.843
Be	9	2	H2	-0.007474		40.667
B	11	2	H2	12.996070	1.6	5828.290
Na	23	1	He	10002.46956	25.1	7729070.930
Mg	24	1	He	1956.349900	24.9	847224.467
Al	27	1	He	6.046341	28.5	1377.733
Si	28	2	H2	389.533282	0.7	1138241.000
K	39	1	He	2131.823999	27.0	1392891.177
Ca	43	1	He	4911.655936	26.1	9050.050
Ti	47	1	He	0.034527	68.7	8.333
V	51	1	He	0.286183	19.3	1176.160
Cr	52	1	He	0.105573	62.8	2617.580
Mn	55	1	He	4.466055	26.0	22249.570
Fe	56	1	He	6.943221	35.0	54915.327
Co	59	1	He	0.054991	28.1	711.353
Ni	60	1	He	0.350753	51.3	1631.430
Cu	63	1	He	0.060566	45.7	628.680
Zn	66	1	He	2.615905	24.5	4504.047
As	75	1	He	0.238755	29.4	451.343
Se	78	2	H2	1.167324	4.6	912.030
Sr	88	1	He	21.839550	25.4	203843.210
Mo	95	1	He	2.316102	24.9	11369.227
Pd	105	1	He	0.013466	128.6	306.673
Ag	107	1	He	0.045001	29.6	836.700
Cd	111	1	He	0.004421	57.1	29.953
Sn	118	1	He	0.036002	33.2	345.010
Sb	121	1	He	0.065682	35.6	758.363
Ba	138	1	He	4.740387	25.3	110637.587
Pt	195	1	He	0.004776	56.3	216.667
Hg	202	1	He	0.010738	113.6	212.000
Tl	205	1	He	0.023932	26.5	1273.410
Pb	208	1	He	0.017130	81.4	3146.837
Bi	209	1	He	0.004540	93.3	1716.817
Th	232	1	He	0.015603	35.9	1490.103
U	238	1	He	0.034314	42.9	2465.257

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	83.53975630	502681.063
Sc	45	2	H2	95.94972604	4428913.500
Ge	72	1	He	85.13521045	416532.000
Ge	72	2	H2	97.39557926	1498626.957
In	115	1	He	85.66181439	4754265.623
Tb	159	1	He	87.40766369	11105957.127
Ir	193	1	He	88.01603568	5496228.563



Sample Name 4310631\_B70030Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 079SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:32:59  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	27.543383	1.4	10175.240
Be	9	2	H2	22.100025	0.6	8328.957
B	11	2	H2	79.183603	0.2	28912.040
Na	23	1	He	45435.31897	0.3	40506850.233
Mg	24	1	He	9250.729186	0.5	4601142.430
Al	27	1	He	437.816117	0.4	109599.377
Si	28	2	H2	2217.022954	0.4	6357370.333
K	39	1	He	9973.048074	0.1	7288534.057
Ca	43	1	He	22843.69154	0.6	48626.810
Ti	47	1	He	21.840663	1.8	4988.513
V	51	1	He	23.155216	0.8	148088.453
Cr	52	1	He	22.209407	0.7	171166.883
Mn	55	1	He	42.531530	0.3	241476.470
Fe	56	1	He	463.869282	0.4	3386236.833
Co	59	1	He	22.369684	1.0	269894.103
Ni	60	1	He	24.288517	1.3	73619.280
Cu	63	1	He	22.086412	0.6	183832.507
Zn	66	1	He	29.111886	1.0	55379.610
As	75	1	He	22.630475	0.5	37975.137
Se	78	2	H2	27.885189	2.5	21149.137
Sr	88	1	He	121.344837	0.5	1299480.527
Mo	95	1	He	32.142848	0.2	178942.257
Pd	105	1	He	3.972641	1.8	33070.353
Ag	107	1	He	9.650467	3.5	171434.333
Cd	111	1	He	21.514988	0.6	70951.850
Sn	118	1	He	21.044138	0.9	175792.127
Sb	121	1	He	21.598659	0.6	263306.130
Ba	138	1	He	43.434903	0.4	1151068.653
Pt	195	1	He	4.179129	1.4	46325.260
Hg	202	1	He	-0.004102		166.000
Tl	205	1	He	21.423608	1.4	844062.463
Pb	208	1	He	21.416454	0.9	1150436.927
Bi	209	1	He	21.241911	0.3	950765.323
Th	232	1	He	21.642525	0.7	1228135.947
U	238	1	He	21.666704	0.9	1176071.830

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.98272295	559501.920
Sc	45	2	H2	95.20836326	4394693.167
Ge	72	1	He	94.21886535	460974.633
Ge	72	2	H2	97.16132889	1495022.543
In	115	1	He	93.92934741	5213117.077
Tb	159	1	He	97.32605518	12366181.070
Ir	193	1	He	97.88186522	6112307.823

Sample Name 4310632\_B70030Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 080SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:36:43  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	26.334245	0.9	9828.347
Be	9	2	H2	21.311276	0.3	8111.507
B	11	2	H2	75.273067	0.9	27813.830
Na	23	1	He	42322.91120	0.9	38101349.430
Mg	24	1	He	8663.421459	1.0	4351473.270
Al	27	1	He	423.620045	1.1	107083.013
Si	28	2	H2	2064.962516	0.5	5980093.000
K	39	1	He	9281.619435	0.8	6854177.397
Ca	43	1	He	21172.89196	1.0	45510.717
Ti	47	1	He	20.724396	2.2	4779.777
V	51	1	He	22.142309	0.8	142974.270
Cr	52	1	He	21.330746	1.4	166086.763
Mn	55	1	He	39.683025	0.7	227534.153
Fe	56	1	He	442.736948	0.7	3264191.750
Co	59	1	He	21.354598	0.7	260575.090
Ni	60	1	He	23.243597	0.8	71289.157
Cu	63	1	He	21.254151	0.3	178915.843
Zn	66	1	He	27.737411	0.6	53372.813
As	75	1	He	21.586193	0.5	36637.193
Se	78	2	H2	26.519965	0.7	20202.113
Sr	88	1	He	113.304953	0.7	1227128.053
Mo	95	1	He	30.593531	1.1	170783.917
Pd	105	1	He	3.889513	0.6	32470.647
Ag	107	1	He	9.554545	2.7	170191.337
Cd	111	1	He	20.711393	0.8	68489.580
Sn	118	1	He	20.413773	1.4	170993.893
Sb	121	1	He	20.972606	0.4	256378.800
Ba	138	1	He	41.214741	0.8	1095217.277
Pt	195	1	He	4.056559	1.2	45063.017
Hg	202	1	He	-0.001608		179.667
Tl	205	1	He	20.837812	0.2	822656.577
Pb	208	1	He	20.642524	0.6	1111167.333
Bi	209	1	He	20.609583	0.8	923242.513
Th	232	1	He	20.993543	0.6	1192253.187
U	238	1	He	20.802968	0.5	1130113.030

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.89495761	564991.080
Sc	45	2	H2	96.13644061	4437532.000
Ge	72	1	He	95.28226108	466177.397
Ge	72	2	H2	97.58591034	1501555.583
In	115	1	He	94.18699819	5227416.800
Tb	159	1	He	97.51867521	12390655.237
Ir	193	1	He	97.95849172	6117092.823

Sample Name 10606170001\_B70030Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 081SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:40:28  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.799301	3.2	408.843
Be	9	2	H2	-0.000167		43.833
B	11	2	H2	106.797161	1.2	39206.967
Na	23	1	He	5566.832553	0.7	5123516.173
Mg	24	1	He	2260.745856	0.6	1163554.200
Al	27	1	He	9.040674	3.6	2415.867
Si	28	2	H2	260.015730	0.3	771671.190
K	39	1	He	739.732753	0.7	620631.593
Ca	43	1	He	4940.045045	1.4	10847.117
Ti	47	1	He	0.649226	5.5	155.000
V	51	1	He	0.265316	34.5	1259.443
Cr	52	1	He	0.225325	5.3	4013.900
Mn	55	1	He	204.292381	0.5	1193715.040
Fe	56	1	He	345.271019	0.6	2600855.083
Co	59	1	He	0.035638	3.6	596.680
Ni	60	1	He	-0.066749		648.687
Cu	63	1	He	0.092605	7.1	1023.373
Zn	66	1	He	0.931266	1.4	2019.480
As	75	1	He	0.452543	3.6	898.863
Se	78	2	H2	0.023145	63.4	44.000
Sr	88	1	He	46.682844	1.1	514346.853
Mo	95	1	He	0.378774	4.8	2198.847
Pd	105	1	He	0.025143	2.1	466.677
Ag	107	1	He	0.120606	30.0	2365.230
Cd	111	1	He	0.006144	17.3	40.940
Sn	118	1	He	0.018715	46.6	255.003
Sb	121	1	He	0.013288	28.6	240.003
Ba	138	1	He	6.783110	1.6	185728.767
Pt	195	1	He	0.000854	206.0	202.667
Hg	202	1	He	-0.000911		185.333
Tl	205	1	He	0.018371	21.6	1248.403
Pb	208	1	He	0.025190	15.3	4088.600
Bi	209	1	He	0.005680	58.2	1983.527
Th	232	1	He	0.026575	1.9	2350.233
U	238	1	He	0.041796	2.5	3297.123

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.82117134	576581.623
Sc	45	2	H2	96.80292763	4468296.167
Ge	72	1	He	96.92265138	474203.160
Ge	72	2	H2	98.18551538	1510781.713
In	115	1	He	96.98425897	5382665.913
Tb	159	1	He	98.57719004	12525149.397
Ir	193	1	He	99.15765569	6191975.533

Sample Name 10606181001\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 082SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:44:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	28.635300	1.1	10880.563
Be	9	2	H2	-0.003245		43.167
B	11	2	H2	110.564169	0.3	41033.773
Na	23	1	He	46958.59164	0.3	41792112.713
Mg	24	1	He	33395.56189	0.5	16565426.000
Al	27	1	He	11.687218	4.6	3001.307
Si	28	2	H2	13706.33745	0.7	40361049.333
K	39	1	He	5484.614158	0.7	4031241.603
Ca	43	1	He	83146.39059	0.0	176648.307
Ti	47	1	He	0.334188	15.2	78.333
V	51	1	He	1.146199	17.8	6862.560
Cr	52	1	He	1.574304	0.4	14134.830
Mn	55	1	He	1.635241	1.5	9651.860
Fe	56	1	He	7.296436	0.8	66119.207
Co	59	1	He	0.085985	4.8	1168.717
Ni	60	1	He	0.593428	2.4	2568.903
Cu	63	1	He	0.622983	1.5	5320.987
Zn	66	1	He	1.818921	2.2	3589.790
As	75	1	He	0.987674	0.4	1741.777
Se	78	2	H2	0.601790	5.4	482.010
Sr	88	1	He	330.295850	0.7	3482523.700
Mo	95	1	He	1.678148	0.7	9219.670
Pd	105	1	He	0.194163	5.9	1820.137
Ag	107	1	He	0.048754	3.4	1000.047
Cd	111	1	He	0.009318	26.8	49.340
Sn	118	1	He	0.037153	14.1	395.010
Sb	121	1	He	0.088239	4.7	1128.387
Ba	138	1	He	188.771973	0.2	4925814.717
Pt	195	1	He	0.007197	4.7	269.333
Hg	202	1	He	-0.001486		179.333
Tl	205	1	He	0.005406	20.1	720.027
Pb	208	1	He	0.019105	12.2	3700.217
Bi	209	1	He	0.007488	23.2	2003.520
Th	232	1	He	0.006932	37.5	1186.733
U	238	1	He	12.260029	0.4	654800.747

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.82157118	558532.227
Sc	45	2	H2	97.96800985	4522074.833
Ge	72	1	He	92.77021793	453886.990
Ge	72	2	H2	97.24762461	1496350.377
In	115	1	He	92.49572966	5133550.707
Tb	159	1	He	97.00765400	12325725.237
Ir	193	1	He	96.25212099	6010537.200

Sample Name 4309028\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 083SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:47:56  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	108.210637	0.9	40829.573
Be	9	2	H2	80.660454	0.4	31182.323
B	11	2	H2	187.343590	0.8	68683.997
Na	23	1	He	47713.37639	1.2	42923686.027
Mg	24	1	He	34541.25800	1.0	17319262.657
Al	27	1	He	1965.448240	0.9	496197.343
Si	28	2	H2	14462.95977	1.3	42615132.000
K	39	1	He	7315.609499	0.6	5413033.250
Ca	43	1	He	83978.29160	0.8	180351.957
Ti	47	1	He	82.176105	0.3	18935.143
V	51	1	He	82.845427	1.6	535884.583
Cr	52	1	He	83.518403	1.4	643439.460
Mn	55	1	He	82.560972	1.4	472620.157
Fe	56	1	He	994.254734	0.8	7308935.333
Co	59	1	He	80.896796	0.1	972386.960
Ni	60	1	He	82.480327	0.8	247184.283
Cu	63	1	He	81.043877	0.7	671679.767
Zn	66	1	He	83.203337	0.4	157383.533
As	75	1	He	82.569855	0.8	137776.807
Se	78	2	H2	82.231402	1.3	62543.907
Sr	88	1	He	403.772853	0.4	4309063.897
Mo	95	1	He	84.699919	0.9	460081.493
Pd	105	1	He	79.735000	1.3	643085.563
Ag	107	1	He	31.874535	0.4	552222.583
Cd	111	1	He	82.023898	1.3	263885.703
Sn	118	1	He	82.314979	1.3	670686.947
Sb	121	1	He	81.651254	0.8	971134.803
Ba	138	1	He	269.759528	0.9	6975089.897
Pt	195	1	He	79.711247	0.5	873673.623
Hg	202	1	He	0.002817	88.1	201.333
Tl	205	1	He	40.171754	0.9	1570575.290
Pb	208	1	He	80.478573	0.7	4283706.897
Bi	209	1	He	79.419291	1.2	3454032.240
Th	232	1	He	6.391349	0.8	353438.733
U	238	1	He	94.419145	1.2	4983119.717

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.83277268	564616.897
Sc	45	2	H2	98.03173927	4525016.500
Ge	72	1	He	93.89960933	459412.643
Ge	72	2	H2	97.51680184	1500492.210
In	115	1	He	91.66275241	5087320.130
Tb	159	1	He	96.60855559	12275016.070
Ir	193	1	He	95.24387613	5947576.580

Sample Name 4309029\_B69934Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 084SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:51:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	6.102432	2.3	2365.853
Be	9	2	H2	0.010600	82.6	47.667
B	11	2	H2	25.857279	0.9	10390.900
Na	23	1	He	9501.709031	0.5	8622618.413
Mg	24	1	He	6780.399513	0.2	3431250.887
Al	27	1	He	4.028641	5.0	1109.040
Si	28	2	H2	2796.086725	0.6	8102148.833
K	39	1	He	1112.152917	0.7	886700.637
Ca	43	1	He	16810.75926	0.4	36393.980
Ti	47	1	He	0.069367	28.7	18.333
V	51	1	He	0.300675	26.8	1473.633
Cr	52	1	He	0.366353	3.1	5052.883
Mn	55	1	He	0.389236	1.6	2650.247
Fe	56	1	He	1.762389	1.3	26432.497
Co	59	1	He	0.024665	7.3	451.343
Ni	60	1	He	0.006520	181.1	857.363
Cu	63	1	He	0.149554	5.4	1480.747
Zn	66	1	He	0.559737	2.4	1269.393
As	75	1	He	0.218463	4.7	486.177
Se	78	2	H2	0.124032	17.1	119.667
Sr	88	1	He	65.749891	0.7	710131.447
Mo	95	1	He	0.339660	3.8	1950.140
Pd	105	1	He	0.056642	7.7	726.693
Ag	107	1	He	0.139652	24.0	2683.623
Cd	111	1	He	0.006989	15.5	43.313
Sn	118	1	He	0.021196	15.6	273.340
Sb	121	1	He	0.022785	10.1	355.010
Ba	138	1	He	37.237034	1.5	1006562.720
Pt	195	1	He	0.005647	50.2	254.000
Hg	202	1	He	0.000031	2994.1	188.667
Tl	205	1	He	0.040615	25.4	2115.190
Pb	208	1	He	0.006839	17.2	3065.153
Bi	209	1	He	0.010847	31.5	2176.887
Th	232	1	He	0.009703	10.7	1356.753
U	238	1	He	2.438320	1.4	132605.503

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.55930678	568988.647
Sc	45	2	H2	96.25712212	4443102.500
Ge	72	1	He	95.01294449	464859.740
Ge	72	2	H2	97.00281837	1492583.540
In	115	1	He	95.81518605	5317781.890
Tb	159	1	He	97.66938562	12409804.397
Ir	193	1	He	97.42941601	6084054.287

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 085\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:55:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	86.871467	0.6	32078.637
Be	9	2	H2	84.936848	0.9	32110.080
B	11	2	H2	84.870160	0.5	31114.897
Na	23	1	He	1035.019409	1.4	968443.920
Mg	24	1	He	1022.326077	1.5	533726.957
Al	27	1	He	1022.275341	1.3	265635.997
Si	28	2	H2	517.650611	0.4	1506429.877
K	39	1	He	1023.830622	1.7	839042.070
Ca	43	1	He	1033.045546	2.0	2297.253
Ti	47	1	He	81.479771	2.6	19317.300
V	51	1	He	81.468337	1.9	542286.293
Cr	52	1	He	83.260948	2.1	660094.833
Mn	55	1	He	82.012595	1.9	483133.073
Fe	56	1	He	516.052143	1.8	3910331.500
Co	59	1	He	83.674716	1.6	1046226.460
Ni	60	1	He	84.402592	1.8	263098.697
Cu	63	1	He	84.661822	1.3	729913.377
Zn	66	1	He	82.811483	1.6	162946.700
As	75	1	He	80.571385	1.5	139856.733
Se	78	2	H2	82.946320	1.4	62878.627
Sr	88	1	He	82.388431	1.8	914728.033
Mo	95	1	He	78.693008	0.9	457195.760
Pd	105	1	He	83.021456	1.7	716176.810
Ag	107	1	He	41.191122	3.1	763017.150
Cd	111	1	He	81.326119	1.5	279844.800
Sn	118	1	He	78.975008	1.5	688242.620
Sb	121	1	He	79.719961	0.8	1014127.797
Ba	138	1	He	79.592338	1.2	2201240.177
Pt	195	1	He	82.474170	1.8	930003.250
Hg	202	1	He	3.897030	1.9	21345.730
Tl	205	1	He	42.651580	1.7	1715625.910
Pb	208	1	He	83.153040	1.5	4553710.717
Bi	209	1	He	83.012130	1.2	3808052.340
Th	232	1	He	76.888057	0.7	4475476.497
U	238	1	He	79.442022	1.2	4422543.893

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.57540737	581120.063
Sc	45	2	H2	95.87427617	4425430.833
Ge	72	1	He	97.69284544	477971.407
Ge	72	2	H2	97.19208795	1495495.833
In	115	1	He	98.03860966	5441182.807
Tb	159	1	He	99.40310682	12630089.810
Ir	193	1	He	100.4517152	6272784.073

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 086\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:59:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.029979	39.9	123.500
Be	9	2	H2	0.005923	169.2	46.333
B	11	2	H2	2.700801	3.9	2231.500
Na	23	1	He	4.655354	4.8	14645.570
Mg	24	1	He	-7.680270		2416.880
Al	27	1	He	0.021199	315.9	91.000
Si	28	2	H2	-0.808932		13087.287
K	39	1	He	0.725792	150.0	69135.827
Ca	43	1	He	1.615321	107.6	17.300
Ti	47	1	He	-0.003834		1.333
V	51	1	He	0.048099	28.0	-176.923
Cr	52	1	He	-0.012786		2146.830
Mn	55	1	He	-0.010229		352.007
Fe	56	1	He	-0.207081		12024.290
Co	59	1	He	0.001875	88.5	176.000
Ni	60	1	He	-0.186245		277.333
Cu	63	1	He	0.001072	447.8	238.000
Zn	66	1	He	-0.001429		198.667
As	75	1	He	0.001160	540.1	120.833
Se	78	2	H2	0.000571	1197.1	26.667
Sr	88	1	He	0.003838	74.1	201.667
Mo	95	1	He	0.012635	15.5	95.333
Pd	105	1	He	0.012904	52.8	365.010
Ag	107	1	He	0.110159	22.2	2191.863
Cd	111	1	He	0.002271	13.2	27.980
Sn	118	1	He	0.005621	46.6	143.333
Sb	121	1	He	0.001313	102.6	90.000
Ba	138	1	He	0.002475	22.0	211.667
Pt	195	1	He	0.002222	90.7	218.000
Hg	202	1	He	0.014959	13.2	270.667
Tl	205	1	He	0.031266	22.3	1761.803
Pb	208	1	He	-0.009402		2211.757
Bi	209	1	He	0.001238	249.0	1800.160
Th	232	1	He	0.014802	6.8	1691.793
U	238	1	He	-0.001463		930.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.79955688	576451.563
Sc	45	2	H2	97.19039171	4486181.000
Ge	72	1	He	95.94886115	469438.800
Ge	72	2	H2	98.03075543	1508400.420
In	115	1	He	97.75135153	5425239.863
Tb	159	1	He	98.54250148	12520741.893
Ir	193	1	He	100.2107195	6257734.910



Sample Name 4312705\_B70019Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 087SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:02:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.053055	29.9	131.000
Be	9	2	H2	0.015328	130.7	49.500
B	11	2	H2	3.839037	1.5	2615.393
Na	23	1	He	10.692302	2.0	19985.130
Mg	24	1	He	-4.621645		3942.230
Al	27	1	He	5.664080	1.5	1529.747
Si	28	2	H2	1.364292	4.5	19271.103
K	39	1	He	2.062446	1.6	69430.663
Ca	43	1	He	7.227015	34.1	29.317
Ti	47	1	He	0.092109	9.4	23.667
V	51	1	He	0.005466	2779.3	-452.100
Cr	52	1	He	0.572755	2.8	6668.867
Mn	55	1	He	0.170041	1.2	1390.737
Fe	56	1	He	15.875453	0.7	131178.747
Co	59	1	He	0.017987	23.3	371.340
Ni	60	1	He	-0.150299		384.677
Cu	63	1	He	0.039526	11.5	560.010
Zn	66	1	He	1.472278	4.2	3023.657
As	75	1	He	0.007724	103.7	131.167
Se	78	2	H2	0.007166	86.9	31.333
Sr	88	1	He	0.031508	6.3	500.010
Mo	95	1	He	0.049044	8.2	302.670
Pd	105	1	He	0.005548	52.5	298.340
Ag	107	1	He	0.036554	4.5	821.697
Cd	111	1	He	0.015930	9.0	73.947
Sn	118	1	He	0.025044	17.4	308.343
Sb	121	1	He	0.005392	20.4	140.000
Ba	138	1	He	0.103248	2.3	2955.340
Pt	195	1	He	0.008372	13.6	287.333
Hg	202	1	He	0.008496	34.7	236.333
Tl	205	1	He	0.018140	22.6	1241.737
Pb	208	1	He	0.012234	5.1	3391.850
Bi	209	1	He	0.025146	20.0	2907.043
Th	232	1	He	0.018466	12.4	1913.490
U	238	1	He	0.008534	25.0	1491.770

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.83375638	570640.083
Sc	45	2	H2	96.37549637	4448566.500
Ge	72	1	He	95.32594071	466391.103
Ge	72	2	H2	96.96927016	1492067.333
In	115	1	He	96.59608302	5361121.990
Tb	159	1	He	98.73225867	12544852.310
Ir	193	1	He	100.6886008	6287576.573

Sample Name 10607060001\_B70019Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 088SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:06:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	143.936058	1.3	53927.457
Be	9	2	H2	0.302859	8.9	160.333
B	11	2	H2	408.571611	1.0	147340.427
Na	23	1	He	158113.6912	1.1	137914094.610
Mg	24	1	He	4963.489597	0.9	2418577.360
Al	27	1	He	6052.956129	1.3	1481680.543
Si	28	2	H2	13613.38033	0.9	39858928.000
K	39	1	He	2701.360497	1.2	1979349.657
Ca	43	1	He	18398.70621	1.3	38326.267
Ti	47	1	He	102.670001	2.8	22937.843
V	51	1	He	20.608832	2.3	128915.697
Cr	52	1	He	10.145905	1.9	77672.380
Mn	55	1	He	289.882701	1.1	1608239.460
Fe	56	1	He	5300.480425	1.2	37728693.333
Co	59	1	He	3.932315	1.8	45853.717
Ni	60	1	He	13.478678	0.8	39741.253
Cu	63	1	He	13.950122	1.3	112004.623
Zn	66	1	He	65.376383	1.6	119646.420
As	75	1	He	3.987263	1.4	6542.147
Se	78	2	H2	1.037552	1.4	809.353
Sr	88	1	He	438.113216	1.8	4522116.913
Mo	95	1	He	7.013480	1.1	37564.010
Pd	105	1	He	0.284523	5.6	2495.243
Ag	107	1	He	0.058415	3.5	1141.723
Cd	111	1	He	0.622303	4.3	1992.050
Sn	118	1	He	0.280389	1.2	2338.553
Sb	121	1	He	0.063769	3.4	815.030
Ba	138	1	He	78.777297	1.3	2007510.803
Pt	195	1	He	0.002970	114.5	218.000
Hg	202	1	He	0.069692	7.2	544.343
Tl	205	1	He	0.320876	1.9	12814.580
Pb	208	1	He	18.551628	1.5	971869.760
Bi	209	1	He	0.103867	3.4	6034.830
Th	232	1	He	4.282774	0.3	231811.580
U	238	1	He	13.723385	1.1	708949.443

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.99272335	547527.560
Sc	45	2	H2	97.40996756	4496316.333
Ge	72	1	He	90.82327177	444361.373
Ge	72	2	H2	96.86623651	1490481.953
In	115	1	He	90.33131048	5013424.560
Tb	159	1	He	94.87994025	12055379.403
Ir	193	1	He	93.11209619	5814455.953

Sample Name 4313472\_B70019Dx25  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 089SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:10:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	29.951245	1.2	11266.180
Be	9	2	H2	0.034045	38.5	57.000
B	11	2	H2	87.944076	0.7	32583.140
Na	23	1	He	31888.18397	0.5	29102800.400
Mg	24	1	He	1000.032589	0.4	514750.880
Al	27	1	He	1214.789100	0.0	311126.200
Si	28	2	H2	2762.026480	0.9	8067386.167
K	39	1	He	547.232757	0.3	473783.963
Ca	43	1	He	3671.509650	0.8	8011.277
Ti	47	1	He	20.765183	2.1	4855.147
V	51	1	He	4.170436	1.6	26897.230
Cr	52	1	He	2.048402	1.6	18185.930
Mn	55	1	He	58.086473	0.6	337417.230
Fe	56	1	He	1059.840380	0.7	7902029.667
Co	59	1	He	0.788848	2.3	9838.663
Ni	60	1	He	2.567801	2.3	8681.933
Cu	63	1	He	2.831158	1.2	24196.743
Zn	66	1	He	13.376789	0.9	26021.933
As	75	1	He	0.810476	1.8	1499.577
Se	78	2	H2	0.202383	5.8	180.333
Sr	88	1	He	85.335137	1.2	930590.247
Mo	95	1	He	1.388762	2.1	7890.203
Pd	105	1	He	0.051892	3.7	685.020
Ag	107	1	He	0.016444	11.0	450.010
Cd	111	1	He	0.136336	3.2	477.257
Sn	118	1	He	0.057180	8.0	578.350
Sb	121	1	He	0.016923	8.3	281.670
Ba	138	1	He	15.393511	0.9	415340.827
Pt	195	1	He	0.001402	214.6	207.333
Hg	202	1	He	0.013593	38.7	261.333
Tl	205	1	He	0.071313	7.3	3333.793
Pb	208	1	He	3.712495	2.0	202672.763
Bi	209	1	He	0.027589	2.4	2913.707
Th	232	1	He	0.822332	0.5	47086.467
U	238	1	He	2.663545	1.8	144338.487

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.17672766	572703.833
Sc	45	2	H2	97.02606728	4478596.000
Ge	72	1	He	95.94447425	469417.337
Ge	72	2	H2	97.75368171	1504137.083
In	115	1	He	95.61132563	5306467.553
Tb	159	1	He	97.83251154	12430531.063
Ir	193	1	He	97.14024833	6065996.990

Sample Name 4312707\_B70019Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 090SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:14:10  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	158.029630	0.8	61348.323
Be	9	2	H2	21.288870	0.9	8508.557
B	11	2	H2	415.067089	0.8	155101.113
Na	23	1	He	151246.4071	0.7	137110417.957
Mg	24	1	He	5386.662530	0.6	2727402.980
Al	27	1	He	7987.730961	0.9	2032118.917
Si	28	2	H2	18984.16081	0.9	57597813.333
K	39	1	He	3250.617768	0.4	2461725.170
Ca	43	1	He	18039.01368	0.4	39054.900
Ti	47	1	He	177.253025	3.1	41157.923
V	51	1	He	41.368874	1.6	269462.667
Cr	52	1	He	31.121456	0.9	243041.403
Mn	55	1	He	298.962628	1.1	1723764.497
Fe	56	1	He	5973.879620	0.7	44191592.000
Co	59	1	He	25.254737	0.5	303790.343
Ni	60	1	He	34.484650	0.2	103874.963
Cu	63	1	He	34.443439	0.3	285715.573
Zn	66	1	He	84.501551	0.4	159903.143
As	75	1	He	24.898864	0.8	41646.683
Se	78	2	H2	21.827488	0.7	16888.870
Sr	88	1	He	440.264881	0.2	4700511.803
Mo	95	1	He	27.003809	0.6	147560.813
Pd	105	1	He	4.362037	0.6	35616.633
Ag	107	1	He	9.783057	3.4	170560.380
Cd	111	1	He	21.761788	0.9	70440.580
Sn	118	1	He	16.274082	1.1	133456.747
Sb	121	1	He	10.429690	1.6	124837.397
Ba	138	1	He	98.357332	1.2	2558256.993
Pt	195	1	He	4.051635	0.7	44700.423
Hg	202	1	He	0.071744	4.4	566.343
Tl	205	1	He	21.331309	0.7	836382.463
Pb	208	1	He	37.942035	1.0	2026164.503
Bi	209	1	He	21.323762	0.2	918387.407
Th	232	1	He	26.179804	0.8	1429316.750
U	238	1	He	34.445681	1.2	1798502.317

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.56555269	569026.230
Sc	45	2	H2	100.9497092	4659706.167
Ge	72	1	He	93.93912961	459606.000
Ge	72	2	H2	99.09171211	1524725.373
In	115	1	He	92.19618765	5116926.003
Tb	159	1	He	96.85465458	12306285.237
Ir	193	1	He	94.18668539	5881559.497

Sample Name 4312708\_B70019Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 091SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:17:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	157.451725	0.5	62133.987
Be	9	2	H2	20.605454	0.5	8372.980
B	11	2	H2	418.511766	0.4	158959.753
Na	23	1	He	152280.1336	0.5	141827914.550
Mg	24	1	He	5216.563361	1.0	2713808.603
Al	27	1	He	6775.394554	1.2	1770914.540
Si	28	2	H2	15309.48558	0.7	47219417.333
K	39	1	He	3005.300532	0.8	2343576.213
Ca	43	1	He	17987.69849	0.5	40011.070
Ti	47	1	He	131.499965	1.4	31374.960
V	51	1	He	39.345114	0.7	263268.240
Cr	52	1	He	29.449432	0.4	236415.920
Mn	55	1	He	293.458169	0.3	1738466.670
Fe	56	1	He	5486.585412	0.3	41700441.333
Co	59	1	He	24.270652	0.5	298277.893
Ni	60	1	He	33.082986	0.8	101842.743
Cu	63	1	He	33.221531	0.1	281556.773
Zn	66	1	He	80.774115	0.8	156168.110
As	75	1	He	24.033847	0.5	41074.030
Se	78	2	H2	21.203455	0.5	16584.183
Sr	88	1	He	434.969623	0.4	4744625.450
Mo	95	1	He	25.734864	1.1	143296.397
Pd	105	1	He	4.217699	1.6	35098.637
Ag	107	1	He	9.464804	1.6	168173.543
Cd	111	1	He	20.723450	0.9	68354.877
Sn	118	1	He	14.653987	1.3	122473.400
Sb	121	1	He	8.892651	0.7	108479.550
Ba	138	1	He	94.744051	0.9	2511074.390
Pt	195	1	He	3.926560	0.9	43981.423
Hg	202	1	He	0.068337	4.3	556.677
Tl	205	1	He	20.428501	0.5	813100.640
Pb	208	1	He	36.791456	0.2	1994503.903
Bi	209	1	He	20.254955	0.8	885385.820
Th	232	1	He	24.862897	0.8	1377634.197
U	238	1	He	33.619717	1.1	1781505.597

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.15625961	584615.207
Sc	45	2	H2	102.6150548	4736576.333
Ge	72	1	He	95.97319930	469557.877
Ge	72	2	H2	100.1708581	1541330.207
In	115	1	He	93.95056293	5214294.547
Tb	159	1	He	98.31516670	12491856.893
Ir	193	1	He	95.58194278	5968687.410

Sample Name 10607060001\_B70019Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 092SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:21:43  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	38.028590	1.2	14787.690
Be	9	2	H2	0.068759	31.8	72.833
B	11	2	H2	113.032007	0.7	43011.583
Na	23	1	He	41766.16965	3.3	38604804.423
Mg	24	1	He	1316.548365	3.5	684340.407
Al	27	1	He	1584.485352	3.9	410959.373
Si	28	2	H2	3512.410288	0.8	10624151.000
K	39	1	He	719.303052	3.9	609027.077
Ca	43	1	He	4839.726852	4.0	10690.737
Ti	47	1	He	26.584901	3.1	6296.373
V	51	1	He	5.336750	4.0	34998.987
Cr	52	1	He	2.684159	3.0	23437.350
Mn	55	1	He	75.991581	2.8	447012.300
Fe	56	1	He	1385.940485	3.0	10462733.000
Co	59	1	He	1.064898	2.3	13275.380
Ni	60	1	He	3.367181	5.1	11154.280
Cu	63	1	He	3.740299	3.9	31992.413
Zn	66	1	He	17.542495	4.3	34167.397
As	75	1	He	1.033286	3.6	1885.123
Se	78	2	H2	0.277227	4.1	243.000
Sr	88	1	He	112.043844	4.0	1225618.213
Mo	95	1	He	1.797131	3.4	10201.007
Pd	105	1	He	0.069970	5.8	836.697
Ag	107	1	He	0.128677	27.8	2466.920
Cd	111	1	He	0.165918	2.3	576.507
Sn	118	1	He	0.084560	10.4	810.030
Sb	121	1	He	0.025986	15.2	393.343
Ba	138	1	He	20.107455	1.9	542441.150
Pt	195	1	He	0.002527	68.6	221.333
Hg	202	1	He	0.016198	16.4	276.667
Tl	205	1	He	0.093924	3.8	4250.717
Pb	208	1	He	4.817616	2.5	263580.397
Bi	209	1	He	0.034356	17.9	3170.457
Th	232	1	He	1.100397	3.9	61959.913
U	238	1	He	3.500911	2.9	187111.893

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.45114333	580372.333
Sc	45	2	H2	100.5212489	4639929.000
Ge	72	1	He	96.32404796	471274.437
Ge	72	2	H2	100.0862142	1540027.790
In	115	1	He	95.63608310	5307841.603
Tb	159	1	He	98.38669500	12500945.230
Ir	193	1	He	96.03022507	5996680.740

Sample Name 4313472\_B70019Dx100  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 093SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:25:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	7.424996	1.2	2970.127
Be	9	2	H2	-0.005702		43.167
B	11	2	H2	25.264452	0.6	10593.870
Na	23	1	He	7739.075634	0.3	7366110.310
Mg	24	1	He	240.209232	0.7	133797.373
Al	27	1	He	295.311916	1.3	78860.017
Si	28	2	H2	657.209631	0.5	1993708.500
K	39	1	He	134.019326	1.6	174480.877
Ca	43	1	He	910.790377	4.0	2081.220
Ti	47	1	He	5.001965	1.1	1220.053
V	51	1	He	1.056063	7.3	6714.723
Cr	52	1	He	0.519894	1.4	6543.477
Mn	55	1	He	13.965364	1.0	84833.410
Fe	56	1	He	255.913910	0.2	1998382.833
Co	59	1	He	0.192622	4.1	2608.910
Ni	60	1	He	0.462350	5.4	2338.863
Cu	63	1	He	0.699845	0.7	6376.747
Zn	66	1	He	3.377154	1.4	6964.353
As	75	1	He	0.182727	3.9	445.677
Se	78	2	H2	0.043176	17.6	61.000
Sr	88	1	He	20.299241	1.0	229520.267
Mo	95	1	He	0.309468	3.6	1868.130
Pd	105	1	He	0.001687	259.7	276.670
Ag	107	1	He	0.027396	13.0	681.690
Cd	111	1	He	0.032899	8.7	136.997
Sn	118	1	He	0.029927	12.3	365.010
Sb	121	1	He	0.004442	51.7	133.333
Ba	138	1	He	3.620107	0.6	102892.017
Pt	195	1	He	-0.001670		180.000
Hg	202	1	He	-0.002049		184.667
Tl	205	1	He	0.016224	2.4	1198.403
Pb	208	1	He	0.885954	1.4	52359.930
Bi	209	1	He	0.008508	23.8	2130.210
Th	232	1	He	0.196430	0.7	12222.470
U	238	1	He	0.620788	0.5	35440.020

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.14989376	596611.437
Sc	45	2	H2	100.1564385	4623089.833
Ge	72	1	He	99.42289234	486435.823
Ge	72	2	H2	100.9593153	1553462.207
In	115	1	He	100.6061622	5583683.023
Tb	159	1	He	101.5755044	12906113.143
Ir	193	1	He	100.1000367	6250823.240

Sample Name 10607060002\_B70019Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 094SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:29:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	119.859730	1.5	46061.980
Be	9	2	H2	0.011555	84.5	49.833
B	11	2	H2	646.517009	1.2	238288.650
Na	23	1	He	166222.8026	0.1	152579357.727
Mg	24	1	He	3130.904886	0.1	1607838.360
Al	27	1	He	984.451209	2.6	253699.000
Si	28	2	H2	5405.082636	2.9	16234383.333
K	39	1	He	1322.489702	0.5	1054790.377
Ca	43	1	He	20455.68469	0.3	44842.233
Ti	47	1	He	24.444474	6.3	5748.030
V	51	1	He	5.253981	1.2	34219.790
Cr	52	1	He	3.318025	1.0	28245.133
Mn	55	1	He	30.938608	0.6	181001.577
Fe	56	1	He	978.041322	0.3	7337443.167
Co	59	1	He	0.321087	2.0	4075.247
Ni	60	1	He	1.232213	2.5	4583.403
Cu	63	1	He	2.405056	0.8	20487.070
Zn	66	1	He	4.677453	1.7	9184.923
As	75	1	He	2.091756	0.5	3663.967
Se	78	2	H2	1.820292	3.7	1445.407
Sr	88	1	He	949.394555	0.6	10301043.597
Mo	95	1	He	4.326290	1.6	24117.050
Pd	105	1	He	0.593862	3.2	5154.320
Ag	107	1	He	0.021287	10.0	528.350
Cd	111	1	He	0.017966	12.3	78.660
Sn	118	1	He	0.078678	11.9	748.357
Sb	121	1	He	0.058327	4.7	781.697
Ba	138	1	He	12.666762	0.8	335980.073
Pt	195	1	He	0.000950	289.8	202.000
Hg	202	1	He	0.014045	18.7	263.667
Tl	205	1	He	0.021347	4.9	1356.750
Pb	208	1	He	0.498915	0.8	29566.007
Bi	209	1	He	0.008247	53.3	2036.867
Th	232	1	He	0.444735	1.5	25606.880
U	238	1	He	8.273146	0.6	442288.550

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.75240757	576167.853
Sc	45	2	H2	99.87770449	4610223.833
Ge	72	1	He	95.46714257	467081.947
Ge	72	2	H2	100.0060195	1538793.833
In	115	1	He	93.98418791	5216160.747
Tb	159	1	He	97.79250070	12425447.313
Ir	193	1	He	96.27222510	6011792.617



Sample Name 10607060002\_B70019Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 095SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:32:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	31.989871	0.7	12286.633
Be	9	2	H2	-0.024598		35.333
B	11	2	H2	177.017227	1.1	65697.483
Na	23	1	He	44011.01475	0.2	41285506.883
Mg	24	1	He	823.786885	0.6	437023.820
Al	27	1	He	270.594201	5.1	71306.243
Si	28	2	H2	1399.797097	1.0	4185393.417
K	39	1	He	350.892876	1.0	337418.210
Ca	43	1	He	5366.362871	0.3	12030.153
Ti	47	1	He	6.389362	10.6	1537.113
V	51	1	He	1.430430	8.3	9151.807
Cr	52	1	He	0.912902	1.4	9603.153
Mn	55	1	He	8.186855	0.9	49247.870
Fe	56	1	He	256.727065	1.9	1978101.247
Co	59	1	He	0.090983	3.0	1299.397
Ni	60	1	He	0.220420	7.2	1553.423
Cu	63	1	He	0.679451	2.2	6118.643
Zn	66	1	He	2.122735	1.3	4398.010
As	75	1	He	0.550933	2.7	1081.707
Se	78	2	H2	0.441428	6.4	370.673
Sr	88	1	He	245.443994	0.4	2738240.790
Mo	95	1	He	1.112217	1.1	6438.803
Pd	105	1	He	0.147152	4.0	1513.433
Ag	107	1	He	0.008752	31.6	316.673
Cd	111	1	He	0.007819	25.2	46.840
Sn	118	1	He	0.028018	13.1	336.677
Sb	121	1	He	0.019811	21.8	323.340
Ba	138	1	He	3.217868	0.9	88511.783
Pt	195	1	He	-0.000127		193.333
Hg	202	1	He	-0.001802		182.000
Tl	205	1	He	0.005389	23.1	736.693
Pb	208	1	He	0.133897	2.9	10071.503
Bi	209	1	He	0.007508	20.1	2050.187
Th	232	1	He	0.113823	3.7	7308.770
U	238	1	He	2.129812	0.1	117170.447

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.83599782	588705.373
Sc	45	2	H2	99.13408501	4575899.333
Ge	72	1	He	98.15769976	480245.750
Ge	72	2	H2	99.94461757	1537849.040
In	115	1	He	97.34985364	5402956.567
Tb	159	1	He	99.36325338	12625026.060
Ir	193	1	He	98.44882725	6147712.200

Sample Name 4312706\_B70019Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 096SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:36:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	110.086288	0.9	42018.317
Be	9	2	H2	107.565279	0.6	42051.977
B	11	2	H2	112.271791	0.7	42158.700
Na	23	1	He	2119.460384	0.2	2024625.593
Mg	24	1	He	2079.014880	0.5	1107466.597
Al	27	1	He	2072.348971	0.3	552727.813
Si	28	2	H2	529.967729	0.7	1594950.543
K	39	1	He	2072.269873	0.4	1670734.197
Ca	43	1	He	2046.311282	2.2	4657.097
Ti	47	1	He	103.102432	0.8	25096.627
V	51	1	He	102.517341	0.3	700726.103
Cr	52	1	He	106.049021	0.1	862540.937
Mn	55	1	He	104.697822	0.2	633078.710
Fe	56	1	He	2088.951612	0.2	16207819.000
Co	59	1	He	107.831307	0.1	1371362.250
Ni	60	1	He	109.107554	0.9	345688.657
Cu	63	1	He	106.823525	0.7	936679.393
Zn	66	1	He	106.976637	0.4	214043.057
As	75	1	He	102.912914	0.5	181665.533
Se	78	2	H2	105.406146	0.8	81713.583
Sr	88	1	He	105.037186	0.8	1186148.107
Mo	95	1	He	100.223128	0.4	591245.770
Pd	105	1	He	20.841113	1.3	182749.887
Ag	107	1	He	50.724943	0.6	954213.267
Cd	111	1	He	103.293274	0.3	360919.543
Sn	118	1	He	99.439113	0.4	879944.857
Sb	121	1	He	101.148988	0.7	1306510.710
Ba	138	1	He	100.938280	1.0	2834618.917
Pt	195	1	He	20.723548	0.6	236761.303
Hg	202	1	He	-0.001431		186.333
Tl	205	1	He	107.082377	0.1	4360431.183
Pb	208	1	He	105.278811	1.0	5836744.527
Bi	209	1	He	105.263780	0.8	4833333.260
Th	232	1	He	104.633262	0.0	6096542.407
U	238	1	He	102.531835	0.5	5713691.167

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.12608062	596468.147
Sc	45	2	H2	99.17320729	4577705.167
Ge	72	1	He	99.35313997	486094.553
Ge	72	2	H2	99.40864607	1529602.040
In	115	1	He	99.54262444	5524656.240
Tb	159	1	He	100.6349790	12786610.643
Ir	193	1	He	100.5561125	6279303.240

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 097\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:40:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	85.687095	0.0	32743.047
Be	9	2	H2	83.230212	0.2	32560.040
B	11	2	H2	86.707572	0.7	32865.243
Na	23	1	He	1041.778516	2.5	992960.663
Mg	24	1	He	1029.029745	2.0	547276.007
Al	27	1	He	1026.680159	2.4	271779.687
Si	28	2	H2	512.847685	0.7	1544456.667
K	39	1	He	1024.474913	1.7	855341.470
Ca	43	1	He	1025.804428	1.2	2324.040
Ti	47	1	He	82.395149	1.8	19904.747
V	51	1	He	81.696710	1.5	554083.490
Cr	52	1	He	83.228978	1.9	672295.167
Mn	55	1	He	82.227654	1.8	493525.393
Fe	56	1	He	517.085538	2.1	3991868.250
Co	59	1	He	84.018926	1.7	1069661.457
Ni	60	1	He	84.863414	1.5	269359.897
Cu	63	1	He	84.754423	1.5	744007.230
Zn	66	1	He	82.556291	1.5	165404.793
As	75	1	He	81.084944	1.4	143313.887
Se	78	2	H2	82.022217	0.4	64005.550
Sr	88	1	He	82.220266	1.2	929559.547
Mo	95	1	He	79.078910	1.7	462682.657
Pd	105	1	He	83.648947	1.0	726753.377
Ag	107	1	He	41.429617	1.3	773007.227
Cd	111	1	He	82.072792	1.5	284423.603
Sn	118	1	He	78.917291	0.9	692677.593
Sb	121	1	He	79.545313	1.0	1019112.823
Ba	138	1	He	79.423433	1.3	2212210.593
Pt	195	1	He	82.504714	2.3	936249.690
Hg	202	1	He	3.897577	1.6	21486.273
Tl	205	1	He	42.900773	1.6	1736755.340
Pb	208	1	He	83.273269	1.8	4589451.397
Bi	209	1	He	83.474165	1.3	3854349.110
Th	232	1	He	77.466197	2.1	4538169.827
U	238	1	He	79.847794	2.4	4473635.350

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.39067318	592043.003
Sc	45	2	H2	99.20659934	4579246.500
Ge	72	1	He	99.47012972	486666.937
Ge	72	2	H2	100.0605161	1539632.373
In	115	1	He	98.73983135	5480100.897
Tb	159	1	He	100.0566795	12713132.313
Ir	193	1	He	101.1332533	6315343.237

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 098\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:44:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.120181	17.0	159.167
Be	9	2	H2	0.003098	401.6	45.833
B	11	2	H2	5.523821	1.7	3280.023
Na	23	1	He	10.721987	6.7	20654.343
Mg	24	1	He	-8.925730		1820.127
Al	27	1	He	0.023049	135.1	93.667
Si	28	2	H2	-0.592247		13895.953
K	39	1	He	1.543235	132.2	71281.177
Ca	43	1	He	1.345748	82.5	17.067
Ti	47	1	He	-0.001105		2.000
V	51	1	He	0.075768	149.7	12.910
Cr	52	1	He	-0.001897		2280.183
Mn	55	1	He	-0.009962		362.007
Fe	56	1	He	-0.139344		12806.290
Co	59	1	He	0.003011	51.3	194.000
Ni	60	1	He	-0.194983		256.667
Cu	63	1	He	0.000974	428.8	242.000
Zn	66	1	He	-0.013275		179.333
As	75	1	He	-0.001356		119.167
Se	78	2	H2	0.001795	455.2	28.000
Sr	88	1	He	0.007178	56.6	243.337
Mo	95	1	He	0.008848	41.4	74.000
Pd	105	1	He	0.002233	104.2	276.673
Ag	107	1	He	0.123017	22.4	2455.243
Cd	111	1	He	0.001011	152.0	23.987
Sn	118	1	He	0.010891	10.9	191.667
Sb	121	1	He	0.001974	76.1	100.000
Ba	138	1	He	0.004044	5.2	258.337
Pt	195	1	He	0.002571	43.9	224.000
Hg	202	1	He	0.017215	19.2	285.667
Tl	205	1	He	0.033676	24.8	1871.817
Pb	208	1	He	-0.005572		2443.443
Bi	209	1	He	0.004725	95.6	1976.857
Th	232	1	He	0.016931	7.3	1833.487
U	238	1	He	-0.001004		965.047

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.93176056	589281.603
Sc	45	2	H2	98.43883489	4543807.500
Ge	72	1	He	98.14245426	480171.160
Ge	72	2	H2	99.46067328	1530402.583
In	115	1	He	99.03997786	5496759.150
Tb	159	1	He	99.62019376	12657672.727
Ir	193	1	He	101.1486034	6316301.783

Sample Name 4312073\_B70036Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 099SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:47:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.099161	27.4	152.667
Be	9	2	H2	-0.001903		44.333
B	11	2	H2	6.156697	4.0	3543.247
Na	23	1	He	11.272812	1.9	21141.687
Mg	24	1	He	-5.382290		3667.140
Al	27	1	He	6.186392	2.3	1713.767
Si	28	2	H2	2.033986	7.7	21878.030
K	39	1	He	1.576112	71.9	71185.470
Ca	43	1	He	8.248515	12.5	32.517
Ti	47	1	He	0.062735	10.8	17.333
V	51	1	He	0.034931	189.4	-265.367
Cr	52	1	He	0.201127	1.3	3901.197
Mn	55	1	He	0.020816	30.1	544.010
Fe	56	1	He	2.779444	20.9	35086.693
Co	59	1	He	0.006818	10.1	240.667
Ni	60	1	He	-0.180713		299.333
Cu	63	1	He	0.023532	3.7	435.343
Zn	66	1	He	0.844425	4.6	1862.793
As	75	1	He	0.005376	69.4	130.167
Se	78	2	H2	0.003314	120.4	29.333
Sr	88	1	He	0.027908	6.4	471.677
Mo	95	1	He	0.007912	19.9	68.667
Pd	105	1	He	-0.003818		223.333
Ag	107	1	He	0.035652	22.6	823.363
Cd	111	1	He	0.011531	19.4	60.323
Sn	118	1	He	0.022178	5.6	290.010
Sb	121	1	He	0.004761	6.1	135.000
Ba	138	1	He	0.041441	8.6	1298.407
Pt	195	1	He	0.009818	6.0	307.333
Hg	202	1	He	0.003804	95.9	213.667
Tl	205	1	He	0.014141	8.1	1095.053
Pb	208	1	He	0.001023	237.8	2816.807
Bi	209	1	He	0.013606	21.2	2386.927
Th	232	1	He	0.009543	8.7	1398.423
U	238	1	He	-0.000952		966.713

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.74571986	588162.147
Sc	45	2	H2	99.41959644	4589078.167
Ge	72	1	He	97.56669626	477354.210
Ge	72	2	H2	100.0701294	1539780.293
In	115	1	He	98.68258162	5476923.513
Tb	159	1	He	99.97209964	12702385.643
Ir	193	1	He	101.0871900	6312466.780

Sample Name 4312074\_B70036Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 100SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:51:40  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	106.559681	0.7	39908.973
Be	9	2	H2	103.849220	0.8	39834.673
B	11	2	H2	105.469892	0.6	38934.590
Na	23	1	He	2073.108369	0.5	1946121.843
Mg	24	1	He	2043.249801	0.7	1069584.073
Al	27	1	He	2031.159570	0.6	532306.647
Si	28	2	H2	526.495841	0.5	1554702.373
K	39	1	He	2035.041878	0.5	1613429.457
Ca	43	1	He	2046.976514	1.8	4577.027
Ti	47	1	He	103.216172	0.9	24687.293
V	51	1	He	102.681481	1.1	689623.180
Cr	52	1	He	105.318143	0.8	841701.830
Mn	55	1	He	103.559779	0.6	615303.733
Fe	56	1	He	2065.542055	0.3	15747291.000
Co	59	1	He	105.978439	0.1	1328715.373
Ni	60	1	He	107.518626	0.8	335846.720
Cu	63	1	He	105.613142	0.4	912973.917
Zn	66	1	He	106.616853	0.2	210307.573
As	75	1	He	103.564169	0.1	180228.933
Se	78	2	H2	104.977446	1.1	81083.167
Sr	88	1	He	103.812441	0.5	1155777.507
Mo	95	1	He	100.527442	1.5	581857.187
Pd	105	1	He	20.783958	0.8	178821.930
Ag	107	1	He	50.870826	0.7	938949.283
Cd	111	1	He	102.526498	0.7	351499.020
Sn	118	1	He	100.079462	0.5	868960.220
Sb	121	1	He	101.614543	0.9	1287833.523
Ba	138	1	He	100.485414	1.5	2768672.980
Pt	195	1	He	20.514523	0.1	234173.593
Hg	202	1	He	0.006355	29.8	229.000
Tl	205	1	He	105.445973	0.3	4290180.667
Pb	208	1	He	103.256727	0.2	5719883.533
Bi	209	1	He	103.310940	0.6	4739779.823
Th	232	1	He	102.806399	0.9	5985033.247
U	238	1	He	100.585284	0.6	5600613.877

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.40105179	586088.187
Sc	45	2	H2	97.30121591	4491296.500
Ge	72	1	He	97.94628497	479211.383
Ge	72	2	H2	99.04161878	1523954.587
In	115	1	He	97.67200611	5420836.160
Tb	159	1	He	100.5498023	12775788.143
Ir	193	1	He	100.4778713	6274417.407

Sample Name 10604943001\_B70036Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 101SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:55:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.573233	1.5	1081.540
Be	9	2	H2	0.078697	21.5	74.833
B	11	2	H2	29.709441	0.6	11968.567
Na	23	1	He	10125.94446	0.1	9315362.363
Mg	24	1	He	12771.33314	0.1	6546606.570
Al	27	1	He	58.575925	1.3	15191.717
Si	28	2	H2	989.843516	0.5	2931215.167
K	39	1	He	1636.000310	0.3	1290058.940
Ca	43	1	He	36607.15876	0.5	80330.320
Ti	47	1	He	0.180290	14.5	44.667
V	51	1	He	0.364244	32.0	1913.443
Cr	52	1	He	0.494502	5.3	6127.293
Mn	55	1	He	0.927825	3.6	5834.517
Fe	56	1	He	21.406207	0.4	174065.500
Co	59	1	He	0.143340	1.1	1922.797
Ni	60	1	He	1.047461	2.9	4062.577
Cu	63	1	He	85.156924	1.1	724765.937
Zn	66	1	He	122.117500	1.0	237117.933
As	75	1	He	0.474412	1.9	931.863
Se	78	2	H2	0.193946	6.7	175.667
Sr	88	1	He	132.194251	1.0	1448911.903
Mo	95	1	He	1.196952	1.6	6871.007
Pd	105	1	He	0.085645	5.3	978.377
Ag	107	1	He	0.155623	25.3	2990.353
Cd	111	1	He	0.096816	1.2	348.100
Sn	118	1	He	0.099416	13.6	946.707
Sb	121	1	He	0.313808	7.4	4005.617
Ba	138	1	He	21.331796	0.6	581208.113
Pt	195	1	He	0.008701	8.5	292.000
Hg	202	1	He	0.006298	48.4	225.333
Tl	205	1	He	0.062466	6.7	3022.033
Pb	208	1	He	0.249098	0.4	16325.600
Bi	209	1	He	0.075791	3.5	5151.083
Th	232	1	He	0.077972	3.2	5297.793
U	238	1	He	0.349554	3.6	20184.140

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.86386846	576838.543
Sc	45	2	H2	98.03251919	4525052.500
Ge	72	1	He	96.43437254	471814.210
Ge	72	2	H2	98.77086251	1519788.457
In	115	1	He	96.56141871	5359198.107
Tb	159	1	He	99.07225738	12588052.310
Ir	193	1	He	99.06220620	6186015.117

Sample Name 4315164\_B70036Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 102SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:59:09  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.597458	3.2	334.500
Be	9	2	H2	0.017484	71.8	50.667
B	11	2	H2	8.301711	2.4	4219.923
Na	23	1	He	2057.973415	2.0	1908069.710
Mg	24	1	He	2581.259641	2.4	1332775.503
Al	27	1	He	13.132524	1.1	3484.747
Si	28	2	H2	198.614017	0.9	594146.273
K	39	1	He	329.477427	2.6	315717.640
Ca	43	1	He	7298.016422	1.5	16081.967
Ti	47	1	He	0.028589	15.1	9.000
V	51	1	He	0.080982	61.0	40.070
Cr	52	1	He	0.132760	8.6	3301.050
Mn	55	1	He	0.189525	4.9	1524.753
Fe	56	1	He	4.135459	0.9	44749.527
Co	59	1	He	0.031051	7.9	540.677
Ni	60	1	He	0.067623	37.7	1064.043
Cu	63	1	He	17.303514	1.5	148423.947
Zn	66	1	He	24.494855	0.9	48040.383
As	75	1	He	0.097143	5.1	287.667
Se	78	2	H2	0.046091	13.6	61.667
Sr	88	1	He	26.561813	1.1	293181.333
Mo	95	1	He	0.240285	0.5	1421.410
Pd	105	1	He	0.009588	4.0	338.343
Ag	107	1	He	0.038527	22.5	871.707
Cd	111	1	He	0.017615	17.4	81.077
Sn	118	1	He	0.022526	11.2	291.677
Sb	121	1	He	0.060614	6.3	846.700
Ba	138	1	He	4.252366	1.0	118007.283
Pt	195	1	He	0.000796	286.4	204.000
Hg	202	1	He	0.000292	1173.0	193.667
Tl	205	1	He	0.010854	4.0	958.377
Pb	208	1	He	0.042752	5.0	5093.727
Bi	209	1	He	0.019446	18.6	2633.643
Th	232	1	He	0.013782	14.2	1633.450
U	238	1	He	0.066140	1.0	4684.220

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.21451876	578948.500
Sc	45	2	H2	96.98180331	4476552.833
Ge	72	1	He	97.07253643	474936.487
Ge	72	2	H2	98.36871339	1513600.583
In	115	1	He	98.25465636	5453173.487
Tb	159	1	He	99.55211860	12649023.143
Ir	193	1	He	100.2188498	6258242.613



Sample Name 4312075\_B70036Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 103SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 14:02:53  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	110.093127	1.0	40444.543
Be	9	2	H2	107.397808	0.9	40410.383
B	11	2	H2	131.813157	0.9	47422.203
Na	23	1	He	11883.35514	0.4	10746585.257
Mg	24	1	He	14454.54561	0.3	7284065.100
Al	27	1	He	2130.935746	0.3	540402.083
Si	28	2	H2	1496.762421	1.1	4307709.667
K	39	1	He	3655.972064	0.6	2751108.603
Ca	43	1	He	37736.25568	0.3	81415.667
Ti	47	1	He	105.723418	0.5	24469.600
V	51	1	He	107.096346	0.6	696050.210
Cr	52	1	He	108.479132	0.4	838880.520
Mn	55	1	He	106.819789	0.3	614149.190
Fe	56	1	He	2136.998024	0.5	15764959.667
Co	59	1	He	106.233369	0.6	1303027.250
Ni	60	1	He	107.874027	0.5	329655.373
Cu	63	1	He	185.050109	0.9	1564786.417
Zn	66	1	He	221.905363	0.8	428004.763
As	75	1	He	105.287105	0.6	179251.970
Se	78	2	H2	106.075726	1.2	80997.287
Sr	88	1	He	233.094228	0.5	2538620.167
Mo	95	1	He	105.563986	0.7	589172.393
Pd	105	1	He	20.950669	1.1	173803.303
Ag	107	1	He	52.136288	1.7	927842.330
Cd	111	1	He	106.237870	0.9	351187.313
Sn	118	1	He	102.704351	0.5	859844.103
Sb	121	1	He	105.181037	1.3	1285297.403
Ba	138	1	He	125.162823	1.3	3325249.433
Pt	195	1	He	20.842499	0.6	231541.377
Hg	202	1	He	0.005270	61.5	217.000
Tl	205	1	He	108.539490	0.3	4297663.893
Pb	208	1	He	105.611350	0.4	5693490.850
Bi	209	1	He	104.890238	1.5	4695062.847
Th	232	1	He	106.766147	0.6	6064546.370
U	238	1	He	105.254201	0.8	5717930.330

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.25251248	567142.583
Sc	45	2	H2	95.45100447	4405893.167
Ge	72	1	He	95.82409025	468828.347
Ge	72	2	H2	97.91135776	1506563.247
In	115	1	He	94.17795153	5226914.707
Tb	159	1	He	97.85517812	12433411.063
Ir	193	1	He	98.03018060	6121569.490

Sample Name 4312076\_B70036Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 104SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 14:06:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	108.598211	1.2	39437.403
Be	9	2	H2	105.932636	0.7	39402.567
B	11	2	H2	129.248632	0.8	45989.637
Na	23	1	He	11314.66936	0.9	10189315.057
Mg	24	1	He	13711.32699	0.8	6880482.813
Al	27	1	He	2069.666721	0.6	522633.913
Si	28	2	H2	1445.922716	0.9	4114130.083
K	39	1	He	3509.249733	0.7	2632113.400
Ca	43	1	He	35861.04388	0.5	77040.367
Ti	47	1	He	102.883333	0.4	23710.690
V	51	1	He	104.196159	0.9	674301.217
Cr	52	1	He	105.711998	1.0	814037.397
Mn	55	1	He	103.971657	0.7	595230.187
Fe	56	1	He	2088.881112	0.8	15344483.000
Co	59	1	He	104.022409	0.4	1266569.667
Ni	60	1	He	105.271052	0.2	319364.583
Cu	63	1	He	179.603881	0.4	1507633.873
Zn	66	1	He	213.539324	0.5	408862.637
As	75	1	He	102.871437	0.4	173858.997
Se	78	2	H2	103.632384	1.5	78361.860
Sr	88	1	He	226.454536	0.2	2448253.247
Mo	95	1	He	103.059341	0.8	574600.627
Pd	105	1	He	20.369641	1.4	168815.790
Ag	107	1	He	51.194270	0.5	910177.640
Cd	111	1	He	103.549194	0.4	341952.150
Sn	118	1	He	100.700555	0.4	842196.317
Sb	121	1	He	102.277764	0.4	1248580.113
Ba	138	1	He	122.204377	0.5	3243407.137
Pt	195	1	He	20.216145	0.7	226027.583
Hg	202	1	He	0.004636	52.9	215.000
Tl	205	1	He	105.744130	0.3	4213903.790
Pb	208	1	He	102.895953	0.3	5582748.643
Bi	209	1	He	102.873913	0.7	4606238.993
Th	232	1	He	104.910463	1.1	5960672.623
U	238	1	He	103.128849	1.2	5604036.167

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.85112598	564727.333
Sc	45	2	H2	94.35550829	4355326.500
Ge	72	1	He	95.12089609	465387.903
Ge	72	2	H2	96.95603410	1491863.670
In	115	1	He	94.07880109	5221411.817
Tb	159	1	He	98.48470042	12513397.730
Ir	193	1	He	98.05820161	6123319.283

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 105\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 14:10:22  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	87.346432	0.8	31435.960
Be	9	2	H2	85.201231	1.0	31393.420
B	11	2	H2	86.572008	1.5	30908.810
Na	23	1	He	1038.511557	3.1	946498.270
Mg	24	1	He	1031.010472	2.6	524312.557
Al	27	1	He	1027.284456	2.9	260026.953
Si	28	2	H2	522.101993	0.8	1480738.880
K	39	1	He	1028.019150	3.6	820359.623
Ca	43	1	He	1018.377789	3.6	2205.520
Ti	47	1	He	81.672149	3.4	18863.047
V	51	1	He	81.935926	1.9	531412.633
Cr	52	1	He	84.035272	2.7	649041.667
Mn	55	1	He	82.974900	2.8	476177.280
Fe	56	1	He	523.574114	2.7	3864754.083
Co	59	1	He	84.509485	1.8	1037438.103
Ni	60	1	He	85.124664	2.3	260504.267
Cu	63	1	He	85.172010	2.0	720909.897
Zn	66	1	He	83.434270	1.9	161179.523
As	75	1	He	81.422344	1.8	138760.073
Se	78	2	H2	83.366535	1.1	62445.080
Sr	88	1	He	82.932734	1.8	904036.680
Mo	95	1	He	79.129235	2.7	454453.873
Pd	105	1	He	83.790814	2.3	714581.450
Ag	107	1	He	41.544729	1.7	760989.493
Cd	111	1	He	82.133020	2.3	279402.567
Sn	118	1	He	79.886272	2.9	688210.223
Sb	121	1	He	80.259682	2.9	1009222.953
Ba	138	1	He	80.107302	2.5	2190147.727
Pt	195	1	He	83.362204	3.1	933386.020
Hg	202	1	He	3.915197	2.2	21297.643
Tl	205	1	He	43.407118	3.5	1733538.620
Pb	208	1	He	83.941885	3.0	4564446.363
Bi	209	1	He	83.560012	3.4	3809032.237
Th	232	1	He	78.085919	3.1	4516906.703
U	238	1	He	80.463275	3.0	4451533.683

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.10626338	566262.563
Sc	45	2	H2	93.44756438	4313417.000
Ge	72	1	He	95.91979749	469296.603
Ge	72	2	H2	96.03915412	1477755.627
In	115	1	He	96.94613012	5380549.747
Tb	159	1	He	98.74993089	12547097.730
Ir	193	1	He	99.88074979	6237129.697

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 106\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 14:14:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.128645	22.3	154.333
Be	9	2	H2	0.073783	9.6	69.667
B	11	2	H2	3.564148	9.0	2445.700
Na	23	1	He	5.117000	8.6	14755.690
Mg	24	1	He	-8.929532		1740.123
Al	27	1	He	0.082889	98.9	104.667
Si	28	2	H2	-0.752479		12761.453
K	39	1	He	-0.499101		66818.680
Ca	43	1	He	-0.415573		12.600
Ti	47	1	He	0.003534	125.5	3.000
V	51	1	He	0.102761	62.4	179.313
Cr	52	1	He	-0.010499		2119.493
Mn	55	1	He	-0.006526		366.010
Fe	56	1	He	-0.135424		12301.857
Co	59	1	He	0.006591	16.1	231.333
Ni	60	1	He	-0.190564		261.333
Cu	63	1	He	0.005520	26.1	272.667
Zn	66	1	He	-0.001652		196.000
As	75	1	He	0.007580	21.1	130.333
Se	78	2	H2	0.004943	119.7	29.333
Sr	88	1	He	0.006840	28.0	231.670
Mo	95	1	He	0.013680	16.0	100.667
Pd	105	1	He	0.017312	38.7	400.010
Ag	107	1	He	0.110897	24.9	2186.860
Cd	111	1	He	0.005171	16.2	37.647
Sn	118	1	He	0.014635	17.5	220.003
Sb	121	1	He	0.003761	90.5	120.000
Ba	138	1	He	0.004545	4.5	266.677
Pt	195	1	He	0.002585	108.1	222.667
Hg	202	1	He	0.018535	12.6	290.667
Tl	205	1	He	0.040229	20.8	2123.527
Pb	208	1	He	-0.002881		2571.780
Bi	209	1	He	0.006491	58.0	2053.523
Th	232	1	He	0.018287	5.7	1906.830
U	238	1	He	0.000568	172.8	1050.057

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.82426882	564565.727
Sc	45	2	H2	93.66537097	4323470.667
Ge	72	1	He	94.90596238	464336.320
Ge	72	2	H2	95.90194685	1475644.417
In	115	1	He	96.99268046	5383133.310
Tb	159	1	He	98.77721471	12550564.393
Ir	193	1	He	100.9100730	6301406.573



# Prep Log Report

Batch Information: MPRP 811306 6020BS\_P

Template Version: ENV-EPL-MIN4-0015-Rev.00 (13Dec2020)

Prep Method	EPA 3050B	Analysis Method	EPA 6020B	Prepared By	NJ1	Instrument	10BALT
Block ID	10MET50	Thermometer ID	210354356	Correction Factor (C)	.5	Block Temp (C)	92.7
Corrected Temp. (C)	93.20	Digestion Start Date/Time	04/26/2022 14:58:06.444	Digestion End Date/Time	04/26/2022 17:09:31.064	Block End Temp (C)	93.4
Corrected End Temp. (C)	93.90	Digestion Vessel	360488	Resin Pellets Solid Matrix	344615	Metals Pipette 1	Q473
Metals Pipette 2		Bottle Disp. 1	Q814	Bottle Disp. 2	Q791	Bottle Disp. 3	Q452
Reviewed By	BT	Reviewed By Date	04/27/2022 07:54	Batch Notes			

## Sample Information:

QC Rule	Sample Type	Lab Sample ID	Matrix	Initial Weight (g)	Conc. HNO3 (mL)	H2O2 (mL)	Conc. HCL (mL)	Final Volume (mL)	Sample Notes	Hg-SPK (mL)	METALS-STK1 (mL)	METALS-STK2 (mL)
6020BS_P	BLANK	4303384	Solid	1.006	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	LCS	4303385	Solid	1.018	357589 (7.5)	332176 (2.5)	357590 (5)	50		353891 (.25)	343315 (.5)	343316 (.5)
6020BS_P	PS	10605435001	Solid	1.082	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10605435002	Solid	1.001	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10605435003	Solid	1.051	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	RQS	10605661001	Solid	1.027	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	MS	4303386	Solid	1.038	357589 (7.5)	332176 (2.5)	357590 (5)	50		353891 (.25)	343315 (.5)	343316 (.5)
6020BS_P	MSD	4303387	Solid	1.018	357589 (7.5)	332176 (2.5)	357590 (5)	50		353891 (.25)	343315 (.5)	343316 (.5)
6020BS_P	PS	10605661002	Solid	1.025	357589 (7.5)	332176 (2.5)	357590 (5)	50				

## Standard Notes:

343315: ZPACEMN-116 (MIX 1)

343316: ZPACEMN-106

353891: Intermediate Spike for ICPMS Soil

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-SG01-041922-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI  
Lab Sample ID: 10605435001 Percent Moisture: 33.8

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.021	J	mg/kg	1	05/10/2022 14:17

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

FD01-041922-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI  
Lab Sample ID: 10605435002 Percent Moisture: 28.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.022	J	mg/kg	1	05/10/2022 14:19

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-SG02-041922-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI  
Lab Sample ID: 10605435003 Percent Moisture: 53.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.035	J	mg/kg	1	05/10/2022 14:20



FORM II INORGANIC-1  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Initial Calibration Verification Source: 365356

Continuing Calibration Verification Source: 365356

Concentration Units: ug/L Instrument ID: 10HG09

Analyte	Initial Calibration Verification				Continuing Calibration Verification						
	05/10/2022 12:08				05/10/2022 12:23			05/10/2022 13:54			Control Limit
	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Mercury	5.0	5.0	101.0	90-110	5.0	4.9	98.6	5.0	4.9	97.8	90-110

FORM II INORGANIC-2  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Initial Calibration Verification Source: \_\_\_\_\_

Continuing Calibration Verification Source: 365356

Concentration Units: ug/L Instrument ID: 10HG09

Analyte	Continuing Calibration Verification						Control Limit
	05/10/2022 14:11			05/10/2022 14:30			
	True	Found	%R	True	Found	%R	
Mercury	5.0	4.9	98.0	5.0	4.9	98.0	90-110

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

CRDL Check Standard Source: 365084,365351 Analysis Date/Time: 05/10/2022 12:11

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.2	0.19	95.0	70-130

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

CRDL Check Standard Source: 365084,365351 Analysis Date/Time: 05/10/2022 12:22

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.2	0.18	90.0	70-130

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

CRDL Check Standard Source: 365084,365351 Analysis Date/Time: 05/10/2022 14:09

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.2	0.18	90.0	70-130

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

CRDL Check Standard Source: 365084,365351 Analysis Date/Time: 05/10/2022 14:29

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.2	0.18	90.0	70-130

FORM III INORGANIC-1  
BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract : 3593500 WISHRAM RI

Method Blank Matrix: Solid Instrument ID: 10HG09

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	05/10/2022 12:09	C	05/10/2022 12:25	C	05/10/2022 13:56	C	05/10/2022 14:12	C	4303400	C
Mercury	0.087	U	0.087	U	0.087	U	0.087	U	ND	U

FORM III INORGANIC-2  
BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract : 3593500 WISHRAM RI

Method Blank Matrix: \_\_\_\_\_ Instrument ID: 10HG09

Method Blank Concentration Units: \_\_\_\_\_

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	05/10/2022 14:32	C		C		C
Mercury			0.087	U				



FORM V INORGANIC-1  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4303402MS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Matrix: Solid Basis: Dry Parent Sample ID: 10605661001

Percent Moisture: 33.1

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Mercury	mg/kg	80-120	0.64	ND	0.73	87

FORM V INORGANIC-2  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4303403MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Matrix: Solid Basis: Dry Parent Sample ID: 10605661001

Percent Moisture: 33.1

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Mercury	mg/kg	80-120	0.62	ND	0.70	87

FORM VI INORGANIC-1  
DUPLICATES

SAMPLE NO.

4303403MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 33.1 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Mercury	20	0.64	0.62	4

FORM VII INORGANIC-1  
LABORATORY CONTROL SAMPLE

SAMPLE NO.

4303401LCS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Mercury	mg/kg	0.48	0.49	102	80	120

FORM IX INORGANIC-1  
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Preparation Method: None Instrument ID: 10HG09

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Mercury	0.20	0.087	03/30/2021

FORM IX INORGANIC-2  
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Preparation Method: EPA 7471B Instrument ID: 10HG09

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Mercury	0.020	0.0087	03/30/2021

FORM XII INORGANIC-1  
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Preparation Method: EPA 7471B Batch: MERP 37030

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
4303400	4303400	04/26/2022	0.314	30
4303401	4303401	04/26/2022	0.312	30
4303402	4303402	04/26/2022	0.307	30
4303403	4303403	04/26/2022	0.319	30
10605435001	BNSF-SG01-041922-0-10	04/26/2022	0.3	30
10605435002	FD01-041922-0-10	04/26/2022	0.326	30
10605435003	BNSF-SG02-041922-0-10	04/26/2022	0.331	30

FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Instrument ID: 10HG09 Analysis Method: EPA 7471B

Start Date: 05/10/2022 11:40 End Date: 05/10/2022 14:32

Sample Name	Lab Sample ID	D/F	Date	Time	Hg
29937326CAL0	29937326CAL0	1	05/10/2022	11:40	X
29937327CAL1	29937327CAL1	1	05/10/2022	11:41	X
29937328CAL2	29937328CAL2	1	05/10/2022	11:43	X
29937329CAL3	29937329CAL3	1	05/10/2022	11:45	X
29937330CAL4	29937330CAL4	1	05/10/2022	11:46	X
29937331CAL5	29937331CAL5	1	05/10/2022	11:48	X
29937332ICV	29937332ICV	1	05/10/2022	12:08	X
29937333ICB	29937333ICB	1	05/10/2022	12:09	X
29937334CRDL	29937334CRDL	1	05/10/2022	12:11	X
29937336CRDL	29937336CRDL	1	05/10/2022	12:22	X
29937337CCV	29937337CCV	1	05/10/2022	12:23	X
29937341CCB	29937341CCB	1	05/10/2022	12:25	X
29937364CCV	29937364CCV	1	05/10/2022	13:54	X
29937365CCB	29937365CCB	1	05/10/2022	13:56	X
29937367CRDL	29937367CRDL	1	05/10/2022	14:09	X
29937368CCV	29937368CCV	1	05/10/2022	14:11	X
29937369CCB	29937369CCB	1	05/10/2022	14:12	X
4303400BLANK	4303400	1	05/10/2022	14:14	X
4303401LCS	4303401	1	05/10/2022	14:16	X
BNSF-SG01-041922-0-10	10605435001	1	05/10/2022	14:17	X
FD01-041922-0-10	10605435002	1	05/10/2022	14:19	X
BNSF-SG02-041922-0-10	10605435003	1	05/10/2022	14:20	X
10605661001	10605661001	1	05/10/2022	14:22	X
4303402MS	4303402	1	05/10/2022	14:24	X
4303403MSD	4303403	1	05/10/2022	14:25	X
29937371CRDL	29937371CRDL	1	05/10/2022	14:29	X
29937372CCV	29937372CCV	1	05/10/2022	14:30	X
29937373CCB	29937373CCB	1	05/10/2022	14:32	X



Report Generated By Teledyne Leeman QuickTrace

Analyst: 10metalsuser,LENA WIGER

Worksheet file: S:\DATA\Metals\10HG09\10MAY22SOLIDSB10HG09.wszf

Creation Date: 5/10/2022 11:37:52 AM

Comment: EPA 7471/7471B

## Results

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
Calibration Blank	STD	05/10/22 11:40:16 am	0.00	396	3.07			1.0000	N/A
Replicates			387.3 394.0 413.5 388.5						
Standard #1 (0.2 ug/L)	STD	05/10/22 11:41:53 am	0.20	2001	0.59	-8.65%		1.0000	N/A
Replicates			2007.6 1983.7 2009.2 2002.2						
Standard #2 (1 ug/L)	STD	05/10/22 11:43:30 am	1.00	8271	0.43	-1.69%		1.0000	N/A
Replicates			8222.4 8275.4 8307.4 8278.9						
Standard #3 (3 ug/L)	STD	05/10/22 11:45:08 am	3.00	24464	0.48	1.67%		1.0000	N/A
Replicates			24298.3 24465.4 24534.6 24557.6						
Standard #4 (5 ug/L)	STD	05/10/22 11:46:46 am	5.00	40040	0.28	0.77%		1.0000	N/A
Replicates			40170.4 39908.9 39995.1 40084.9						
Standard #5 (10 ug/L)	STD	05/10/22 11:48:24 am	10.00	78656	1.20	-0.32%		1.0000	N/A
Replicates			79916.4 77791.3 78108.6 78809.6						
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Calibration</p> <p>Equation: <math>Abs = 7833.940x + 569.366</math></p> <p>R2: 0.99992 RSE: 5.20%</p> <p>SEE: 305.9292</p> <p>Flags:</p> </div> <div style="width: 50%;"> </div> </div>									
ICV	ICV	05/10/22 12:08:01 pm	5.05	40149	0.17			1.0000	101.05
Replicates			40126.1 40249.5 40091.5 40128.0						
ICB	ICB	05/10/22 12:09:40 pm	-0.02	419	7.42			1.0000	N/A
Replicates			418.1 404.3 426.0 429.3						
CRDL	CRDL	05/10/22 12:11:17 pm	0.19	2089	1.96			1.0000	96.98
Replicates			2116.6 2078.5 2108.5 2051.5						
4312191_43583	UNK	05/10/22 12:14:10 pm	-0.01	506	32.13			1.0000	N/A
Replicates			530.4 497.9 512.9 482.9						
4312192_43583	UNK	05/10/22 12:15:46 pm	4.92	39076	0.32			1.0000	N/A
Replicates			39232.3 38930.6 39057.1 39085.3						
10605980004_43583	UNK	05/10/22 12:17:23 pm	0.11	1428	1.12			1.0000	N/A
Replicates			1426.4 1432.7 1415.2 1437.4						
4312193_43583	UNK	05/10/22 12:19:00 pm	5.22	41466	0.23			1.0000	N/A
Replicates			41491.5 41533.0 41515.0 41325.5						

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
4312194_43583	UNK	05/10/22 12:20:36 pm	5.11	40610	0.13			1.0000	N/A
Replicates		40566.2 40570.3 40678.5 40626.5							
CRDL	CRDL	05/10/22 12:22:14 pm	0.18	1984	1.24			1.0000	90.26
Replicates		1983.0 2007.2 1979.0 1965.0							
CCV	CCV	05/10/22 12:23:52 pm	4.93	39184	0.61			1.0000	98.58
Replicates		39116.9 38928.1 39198.3 39493.6							
CCB	CCB	05/10/22 12:25:31 pm	-0.02	449	12.78			1.0000	N/A
Replicates		426.2 458.7 457.2 454.4							
4308604_43535	UNK	05/10/22 12:27:08 pm	0.00	557	89.73			1.0000	N/A
Replicates		557.7 554.7 571.5 545.2							
4308605_43535	UNK	05/10/22 12:28:45 pm	5.07	40296	0.09			1.0000	N/A
Replicates		40267.4 40326.1 40325.8 40265.8							
10606046001_43535	UNK	05/10/22 12:30:22 pm	0.05	993	2.85			1.0000	N/A
Replicates		980.1 991.1 1009.1 990.6							
10606394001_43535	UNK	05/10/22 12:32:00 pm	0.15	1711	1.07			1.0000	N/A
Replicates		1714.8 1699.9 1726.2 1702.2							
4308606_43535	UNK	05/10/22 12:33:38 pm	5.26	41794	0.31			1.0000	N/A
Replicates		41722.1 41957.4 41826.7 41668.9							
4308607_43535	UNK	05/10/22 12:35:15 pm	5.14	40829	0.19			1.0000	N/A
Replicates		40717.3 40859.9 40877.1 40863.4							
10606394002_43535	UNK	05/10/22 12:36:53 pm	0.03	798	3.64			1.0000	N/A
Replicates		794.2 793.8 810.3 793.0							
10606394003_43535	UNK	05/10/22 12:38:30 pm	0.01	623	44.08			1.0000	N/A
Replicates		610.2 610.1 612.8 658.1							
CCV	CCV	05/10/22 12:40:08 pm	4.86	38633	0.19			1.0000	97.18
Replicates		38527.9 38659.3 38690.6 38653.3							
CCB	CCB	05/10/22 12:41:47 pm	-0.02	389	14.59			1.0000	N/A
Replicates		390.5 418.4 392.6 354.4							
10606394004_43535	UNK	05/10/22 12:43:24 pm	0.33	3174	0.71			1.0000	N/A
Replicates		3179.3 3197.9 3156.9 3162.6							
10606395001_43535	UNK	05/10/22 12:45:00 pm	0.02	761	9.48			1.0000	N/A
Replicates		780.4 766.3 761.8 736.8							
10606395002_43535	UNK	05/10/22 12:46:37 pm	0.05	979	3.03			1.0000	N/A
Replicates		983.0 976.6 964.1 993.9							
10606395003_43535	UNK	05/10/22 12:48:14 pm	0.03	803	2.59			1.0000	N/A
Replicates		794.5 808.8 804.8 802.3							
10606395004_43535	UNK	05/10/22 12:49:51 pm	0.20	2160	0.92			1.0000	N/A
Replicates		2159.0 2148.4 2181.2 2152.4							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
CRDL		CRDL 05/10/22 12:51:28 pm	0.19	2081	1.12			1.0000	96.47
Replicates		2096.8 2094.3 2065.8 2066.5							
CCV		CCV 05/10/22 12:53:07 pm	4.86	38665	1.38			1.0000	97.26
Replicates		38681.9 38050.6 38595.4 39330.6							
CCB		CCB 05/10/22 12:54:45 pm	-0.02	445	5.62			1.0000	N/A
Replicates		448.0 448.1 434.3 448.8							
4315272_43568		UNK 05/10/22 12:56:23 pm	0.00	551	67.67			1.0000	N/A
Replicates		558.9 564.1 538.1 543.9							
4315273_43568		UNK 05/10/22 12:58:00 pm	5.22	41441	0.38			1.0000	N/A
Replicates		41215.3 41509.3 41465.5 41574.8							
10607417001_43568		UNK 05/10/22 12:59:38 pm	0.09	1253	1.58			1.0000	N/A
Replicates		1267.6 1243.7 1246.0 1254.0							
4315274_43568		UNK 05/10/22 01:01:15 pm	5.23	41505	0.72			1.0000	N/A
Replicates		41262.0 41341.9 41489.9 41925.4							
4315275_43568		UNK 05/10/22 01:02:53 pm	5.45	43284	0.71			1.0000	N/A
Replicates		42838.2 43370.9 43516.4 43410.7							
CRDL		CRDL 05/10/22 01:04:30 pm	0.18	1958	1.45			1.0000	88.61
Replicates		1928.9 1975.9 1964.4 1961.9							
CCV		CCV 05/10/22 01:06:09 pm	4.90	38934	0.60			1.0000	97.95
Replicates		39132.4 38685.6 38790.8 39128.6							
CCB		CCB 05/10/22 01:07:48 pm	-0.02	439	11.05			1.0000	N/A
Replicates		427.5 459.5 438.0 430.8							
4315290_43569		UNK 05/10/22 01:09:26 pm	0.00	550	40.95			1.0000	N/A
Replicates		560.8 542.1 550.1 547.4							
4315291_43569		UNK 05/10/22 01:11:03 pm	5.29	42015	0.70			1.0000	N/A
Replicates		41667.1 41885.5 42280.5 42228.0							
10606264001_43569		UNK 05/10/22 01:12:39 pm	0.01	680	2.85			1.0000	N/A
Replicates		683.3 677.0 681.0 677.0							
4315292_43569		UNK 05/10/22 01:14:16 pm	5.27	41893	0.56			1.0000	N/A
Replicates		41672.8 41787.0 41903.5 42207.3							
4315293_43569		UNK 05/10/22 01:15:53 pm	5.09	40440	1.22			1.0000	N/A
Replicates		39786.0 40366.8 40714.8 40891.1							
CRDL		CRDL 05/10/22 01:17:30 pm	0.18	1977	1.56			1.0000	89.85
Replicates		1983.1 1947.2 1999.7 1978.5							
CCV		CCV 05/10/22 01:19:09 pm	5.00	39757	0.38			1.0000	100.05
Replicates		39598.0 39884.5 39663.8 39881.5							
CCB		CCB 05/10/22 01:20:47 pm	-0.02	438	16.45			1.0000	N/A
Replicates		421.6 459.3 416.3 452.8							

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
4315282_43570	UNK	05/10/22 01:22:24 pm	-0.01	473	20.24			1.0000	N/A
Replicates		465.5 486.5 490.0 448.0							
4315283_43570	UNK	05/10/22 01:24:01 pm	5.24	41611	0.18			1.0000	N/A
Replicates		41513.3 41591.0 41668.2 41671.0							
10607169001_43570	UNK	05/10/22 01:25:38 pm	0.34	3212	0.84			1.0000	N/A
Replicates		3194.7 3194.1 3219.8 3240.3							
4315284_43570	UNK	05/10/22 01:27:16 pm	5.67	44955	0.77			1.0000	N/A
Replicates		44529.7 44896.5 45043.3 45351.3							
4315285_43570	UNK	05/10/22 01:28:53 pm	5.49	43547	0.17			1.0000	N/A
Replicates		43456.8 43576.0 43630.7 43522.7							
10607169002_43570	UNK	05/10/22 01:30:31 pm	0.34	3224	0.65			1.0000	N/A
Replicates		3218.0 3248.1 3224.6 3207.3							
10607169003_43570	UNK	05/10/22 01:32:09 pm	0.56	4957	1.23			1.0000	N/A
Replicates		5008.8 4951.3 4884.5 4984.5							
10607169004_43570	UNK	05/10/22 01:33:47 pm	0.46	4190	0.45			1.0000	N/A
Replicates		4180.0 4197.3 4209.8 4174.3							
10607169005_43570	UNK	05/10/22 01:35:24 pm	0.34	3231	0.30			1.0000	N/A
Replicates		3225.6 3227.3 3242.5 3227.8							
CRDL	CRDL	05/10/22 01:37:01 pm	0.19	2028	1.11			1.0000	93.10
Replicates		2024.5 2024.8 2012.3 2050.8							
CCV	CCV	05/10/22 01:38:39 pm	5.03	39955	0.31			1.0000	100.55
Replicates		39786.6 39938.6 40042.1 40054.4							
CCB	CCB	05/10/22 01:40:18 pm	-0.02	393	5.74			1.0000	N/A
Replicates		381.7 406.3 391.8 393.8							
4312183_43584	UNK	05/10/22 01:41:55 pm	0.00	540	93.12			1.0000	N/A
Replicates		507.0 528.7 552.0 570.7							
4312184_43584	UNK	05/10/22 01:43:32 pm	5.25	41671	0.53			1.0000	N/A
Replicates		41971.0 41677.7 41480.9 41553.7							
10606797001_43584	UNK	05/10/22 01:45:08 pm	-0.01	529	34.03			1.0000	N/A
Replicates		533.1 514.2 545.9 522.2							
4312185_43584	UNK	05/10/22 01:46:45 pm	4.74	37674	0.18			1.0000	N/A
Replicates		37578.2 37676.7 37712.9 37727.9							
4312186_43584	UNK	05/10/22 01:48:22 pm	4.91	38999	0.13			1.0000	N/A
Replicates		38947.0 39037.6 39042.6 38969.4							
10606981001_43584	UNK	05/10/22 01:50:00 pm	0.19	2038	1.60			1.0000	N/A
Replicates		2016.3 2034.3 2071.6 2031.1							
10606796001_43584	UNK	05/10/22 01:51:37 pm	-0.01	515	38.28			1.0000	N/A
Replicates		508.8 545.3 497.8 507.5							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
CRDL	CRDL	05/10/22 01:53:14 pm	0.19	2038	0.43			1.0000	93.72
Replicates		2031.9 2032.8 2044.1 2042.1							
CCV	CCV	05/10/22 01:54:52 pm	4.89	38845	0.32			1.0000	97.72
Replicates		38665.9 38864.6 38926.8 38922.8							
CCB	CCB	05/10/22 01:56:31 pm	-0.02	439	11.70			1.0000	N/A
Replicates		423.6 429.1 453.4 451.4							
4307147_43503	UNK	05/10/22 01:58:09 pm	0.00	573	365.90			1.0000	N/A
Replicates		582.6 584.9 557.2 567.2							
4307148_43503	UNK	05/10/22 01:59:47 pm	5.14	40847	1.97			1.0000	N/A
Replicates		40175.4 40237.0 41142.0 41833.8							
10606192001_43503	UNK	05/10/22 02:01:24 pm	0.21	2253	0.61			1.0000	N/A
Replicates		2260.7 2239.8 2261.3 2248.8							
4307149_43503	UNK	05/10/22 02:03:02 pm	5.26	41809	0.12			1.0000	N/A
Replicates		41809.1 41868.8 41750.8 41806.0							
4307150_43503	UNK	05/10/22 02:04:39 pm	5.03	39978	2.15			1.0000	N/A
Replicates		39078.3 39487.0 40409.0 40937.5							
10606192002_43503	UNK	05/10/22 02:06:16 pm	0.15	1781	1.32			1.0000	N/A
Replicates		1790.0 1798.0 1767.8 1766.3							
10606192003_43503	UNK	05/10/22 02:07:53 pm	0.21	2204	1.19			1.0000	N/A
Replicates		2194.5 2181.1 2216.8 2222.8							
CRDL	CRDL	05/10/22 02:09:30 pm	0.18	2009	1.50			1.0000	91.89
Replicates		2004.6 2004.6 1987.9 2039.1							
CCV	CCV	05/10/22 02:11:09 pm	4.90	38994	1.05			1.0000	98.10
Replicates		38441.2 38961.5 39198.0 39373.5							
CCB	CCB	05/10/22 02:12:48 pm	-0.02	417	8.43			1.0000	N/A
Replicates		400.7 421.3 414.0 431.3							
4303400_43454	UNK	05/10/22 02:14:25 pm	0.00	566	420.64			1.0000	N/A
Replicates		550.7 574.2 581.2 557.9							
4303401_43454	UNK	05/10/22 02:16:02 pm	5.09	40449	0.12			1.0000	N/A
Replicates		40380.8 40466.3 40486.3 40462.3							
10605435001_43454	UNK	05/10/22 02:17:39 pm	0.14	1678	1.50			1.0000	N/A
Replicates		1681.3 1692.9 1653.9 1682.1							
10605435002_43454	UNK	05/10/22 02:19:16 pm	0.17	1903	0.94			1.0000	N/A
Replicates		1918.3 1903.0 1887.7 1901.7							
10605435003_43454	UNK	05/10/22 02:20:54 pm	0.18	1954	0.62			1.0000	N/A
Replicates		1942.7 1951.6 1958.9 1961.9							
10605661001_43454	UNK	05/10/22 02:22:31 pm	0.04	853	3.54			1.0000	N/A
Replicates		843.4 862.1 844.8 860.8							

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
4303402_43454	UNK	05/10/22 02:24:09 pm	4.38	34852	1.03			1.0000	N/A
Replicates		34790.8 34555.1 34699.1 35361.3							
4303403_43454	UNK	05/10/22 02:25:47 pm	4.38	34861	0.16			1.0000	N/A
Replicates		34787.8 34853.5 34919.2 34884.7							
10605661002_43454	UNK	05/10/22 02:27:25 pm	0.07	1093	2.82			1.0000	N/A
Replicates		1075.3 1106.8 1086.8 1103.5							
CRDL	CRDL	05/10/22 02:29:02 pm	0.18	1968	2.42			1.0000	89.30
Replicates		1955.4 1944.2 1955.5 2018.7							
CCV	CCV	05/10/22 02:30:41 pm	4.90	38983	0.66			1.0000	98.07
Replicates		39184.7 38683.6 38861.3 39201.8							
CCB	CCB	05/10/22 02:32:20 pm	-0.02	398	9.58			1.0000	N/A
Replicates		403.1 377.9 417.1 395.1							
4310680_43571	UNK	05/10/22 02:33:57 pm	0.01	652	20.04			1.0000	N/A
Replicates		642.0 634.8 670.3 661.8							
4310681_43571	UNK	05/10/22 02:35:34 pm	5.25	41670	1.82			1.0000	N/A
Replicates		41550.1 42443.9 41991.9 40693.2							
10606360001_43571	UNK	05/10/22 02:37:12 pm	0.22	2260	0.97			1.0000	N/A
Replicates		2270.8 2256.7 2239.0 2275.2							
4310682_43571	UNK	05/10/22 02:38:49 pm	4.35	34679	0.10			1.0000	N/A
Replicates		34631.9 34679.9 34706.6 34696.6							
4310683_43571	UNK	05/10/22 02:40:26 pm	4.65	36984	0.06			1.0000	N/A
Replicates		36999.3 36977.2 36957.2 37003.2							
10606360002_43571	UNK	05/10/22 02:42:03 pm	0.10	1385	3.17			1.0000	N/A
Replicates		1371.0 1420.5 1361.5 1385.3							
10606361001_43571	UNK	05/10/22 02:43:41 pm	0.12	1480	2.33			1.0000	N/A
Replicates		1477.1 1452.6 1484.6 1503.9							
10606361002_43571	UNK	05/10/22 02:45:18 pm	0.11	1466	1.88			1.0000	N/A
Replicates		1444.2 1478.1 1462.4 1480.9							
CRDL	CRDL	05/10/22 02:46:55 pm	0.18	1995	2.55			1.0000	91.01
Replicates		1947.2 1995.3 2035.0 2003.5							
CCV	CCV	05/10/22 02:48:34 pm	4.88	38837	0.78			1.0000	97.70
Replicates		38527.6 38661.9 38965.4 39193.6							
CCB	CCB	05/10/22 02:50:13 pm	-0.02	442	3.01			1.0000	N/A
Replicates		436.9 445.6 442.4 444.1							
4310663_43573	UNK	05/10/22 02:51:50 pm	0.00	604	20.13			1.0000	N/A
Replicates		596.6 613.0 606.3 601.3							
4310664_43573	UNK	05/10/22 02:53:28 pm	5.15	40896	0.14			1.0000	N/A
Replicates		40813.5 40910.2 40922.9 40936.2							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
10606414001_43573	UNK	05/10/22 02:55:06 pm	1.43	11802	1.54			1.0000	N/A
Replicates		11979.1 11903.1 11731.8 11593.6							
10606414002_43573	UNK	05/10/22 02:56:44 pm	0.60	5245	1.75			1.0000	N/A
Replicates		5251.8 5152.8 5226.5 5350.8							
10606414003_43573	UNK	05/10/22 02:58:22 pm	0.06	1011	1.14			1.0000	N/A
Replicates		1012.3 1015.2 1003.5 1011.7							
10606414004_43573	UNK	05/10/22 02:59:59 pm	0.57	5041	0.24			1.0000	N/A
Replicates		5054.7 5033.7 5031.7 5042.9							
10606414005_43573	UNK	05/10/22 03:01:36 pm	85.61	671274	0.51	O		1.0000	N/A
Replicates		667007.4 670233.3 672841.3 675012.6							
4310665_43573	UNK	05/10/22 03:05:41 pm	97.17	761807	0.20	O		1.0000	N/A
Replicates		759682.8 761888.7 762611.7 763044.2							
4310666_43573	UNK	05/10/22 03:10:05 pm	95.98	752484	1.05	O		1.0000	N/A
Replicates		744199.6 749091.8 753994.3 762651.3							
10606414006_43573	UNK	05/10/22 03:14:46 pm	5.06	40192	0.06			1.0000	N/A
Replicates		40177.7 40178.0 40182.3 40229.8							
CRDL	CRDL	05/10/22 03:16:24 pm	0.17	1887	1.03			1.0000	84.12
Replicates		1868.5 1892.6 1887.9 1900.1							
CCV	CCV	05/10/22 03:18:02 pm	4.95	39375	0.91			1.0000	99.07
Replicates		39893.8 39253.6 39116.6 39234.3							
CCB	CCB	05/10/22 03:19:41 pm	-0.02	390	9.04			1.0000	N/A
Replicates		376.3 399.6 407.6 375.8							
4315286_43581	UNK	05/10/22 03:21:19 pm	-0.01	473	19.16			1.0000	N/A
Replicates		448.8 473.9 476.1 493.6							
4315287_43581	UNK	05/10/22 03:22:56 pm	5.14	40845	0.20			1.0000	N/A
Replicates		40731.4 40852.0 40906.7 40891.0							
10606158001_43581	UNK	05/10/22 03:24:34 pm	0.26	2623	1.40			1.0000	N/A
Replicates		2585.9 2632.9 2654.2 2617.7							
4315288_43581	UNK	05/10/22 03:26:11 pm	5.82	46131	0.13			1.0000	N/A
Replicates		46141.2 46201.1 46128.1 46053.1							
4315289_43581	UNK	05/10/22 03:27:49 pm	5.54	43955	0.23			1.0000	N/A
Replicates		43824.2 43953.9 43977.4 44063.4							
10607008001_43581	UNK	05/10/22 03:29:27 pm	1.67	13674	0.31			1.0000	N/A
Replicates		13619.3 13666.1 13709.3 13699.6							
10607011001_43581	UNK	05/10/22 03:31:05 pm	0.50	4470	0.47			1.0000	N/A
Replicates		4487.7 4479.2 4445.7 4469.2							
10607172001_43581	UNK	05/10/22 03:32:43 pm	0.02	721	6.01			1.0000	N/A
Replicates		725.8 715.9 710.9 730.9							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
CCV	CCV	05/10/22 03:34:21 pm	4.91	39003	0.45			1.0000	98.12
Replicates		38759.0 39013.3 39074.6 39163.8							
CCB	CCB	05/10/22 03:36:00 pm	-0.03	372	3.57			1.0000	N/A
Replicates		371.0 366.9 369.2 382.7							
10607172003_43581	UNK	05/10/22 03:37:38 pm	0.02	717	14.15			1.0000	N/A
Replicates		701.9 748.0 707.3 711.8							
10607172005_43581	UNK	05/10/22 03:39:15 pm	0.03	827	4.59			1.0000	N/A
Replicates		839.0 826.1 811.4 832.6							
10607172007_43581	UNK	05/10/22 03:40:53 pm	0.01	631	28.38			1.0000	N/A
Replicates		613.9 619.9 639.9 651.9							
10607223002_43581	UNK	05/10/22 03:42:31 pm	0.40	3694	0.57			1.0000	N/A
Replicates		3684.0 3675.5 3714.5 3703.0							
10607223003_43581	UNK	05/10/22 03:44:08 pm	0.60	5249	0.47			1.0000	N/A
Replicates		5222.0 5241.2 5262.2 5270.7							
10607223004_43581	UNK	05/10/22 03:45:46 pm	0.61	5339	1.87			1.0000	N/A
Replicates		5217.0 5329.8 5415.5 5394.8							
10606445002_43581	UNK	05/10/22 03:47:23 pm	-0.01	478	26.95			1.0000	N/A
Replicates		485.2 449.2 507.5 469.0							
10607170001_43581	UNK	05/10/22 03:49:21 pm	0.03	804	10.82			1.0000	N/A
Replicates		817.3 821.8 809.8 766.5							
CCV	CCV	05/10/22 03:50:59 pm	4.85	38555	0.35			1.0000	96.98
Replicates		38359.7 38570.0 38646.3 38642.0							
CCB	CCB	05/10/22 03:52:38 pm	-0.02	378	4.56			1.0000	N/A
Replicates		369.3 373.6 389.1 381.1							
10607170003_43581	UNK	05/10/22 03:54:16 pm	0.01	609	48.62			1.0000	N/A
Replicates		609.6 633.4 585.7 609.2							
10607170004_43581	UNK	05/10/22 03:55:54 pm	0.03	768	2.75			1.0000	N/A
Replicates		769.3 761.5 766.2 774.5							
10607170005_43581	UNK	05/10/22 03:57:32 pm	0.04	852	3.65			1.0000	N/A
Replicates		858.7 862.0 844.7 841.0							
10607170007_43581	UNK	05/10/22 03:59:10 pm	0.07	1120	3.10			1.0000	N/A
Replicates		1114.6 1099.3 1139.6 1125.8							
10607170008_43581	UNK	05/10/22 04:00:47 pm	0.01	672	16.07			1.0000	N/A
Replicates		682.5 650.4 667.4 686.7							
10606414005Dx50_43573	UNK	05/10/22 04:03:24 pm	2.60	20956	1.13			1.0000	N/A
Replicates		21201.9 21080.3 20859.3 20681.5							
4310665Dx50_43573	UNK	05/10/22 04:05:02 pm	3.26	26111	1.86			1.0000	N/A
Replicates		26567.1 26381.8 26006.5 25488.8							



Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
4310666Dx50_43573	UNK	05/10/22 04:06:39 pm	3.34	26701	1.11			1.0000	N/A
Replicates		26338.5 26621.8 26831.3 27012.6							
CRDL	CRDL	05/10/22 04:08:35 pm	0.18	1977	0.35			1.0000	89.82
Replicates		1976.6 1981.0 1979.2 1969.7							
CCV	CCV	05/10/22 04:10:13 pm	4.93	39199	0.45			1.0000	98.62
Replicates		38964.2 39195.1 39263.3 39372.3							
CCB	CCB	05/10/22 04:11:52 pm	-0.02	403	16.85			1.0000	N/A
Replicates		390.4 406.3 441.1 376.1							



# Prep Log Report

Batch Information: MPRP 811310 7471B S\_P

Template Version: ENV-EPL-MIN4-0028-Rev.00 (13Dec2020)

Prep Method	EPA 7471B	Analysis Method	EPA 7471B	Prepared By	NJ1	Instrument	10BALT
Block ID	10MET54	Thermometer ID	210354363	Correction Factor (C)	.8	Block Temp (C)	94.1
Corrected Temp. (C)	94.90	Digestion Start Date/Time	04/26/2022 18:49:25:279	Digestion End Date/Time	04/26/2022 19:29:25:279	Block End Temp (C)	96
Corrected End Temp. (C)	96.80	Digestion Vessel	360488	Resin Pellets Solid Matrix	344615	Metals Pipette 1	Q765
Metals Pipette 2	Q778	Bottle Disp. 1	Q814	Bottle Disp. 2	Q791	Bottle Disp. 3	Q452
Bottle Disp. 4		Bottle Disp. 5		Reviewed By	BT	Reviewed By Date	04/27/2022 07:56
Batch Notes							

10605435

## Sample Information:

QC Rule	Sample Type	Lab Sample ID	Matrix	Initial Weight (g)	Aqua Regia (mL)	5% KMnO4 (mL)	12% NH2OH-HCL (mL)	Final Volume (mL)	Sample Notes	MERCURY-SPK (mL)
7471B S_P	BLANK	4303400	Solid	0.314	363124 (3)	362589 (9)	359597 (3.6)	30		
7471B S_P	LCS	4303401	Solid	0.312	363124 (3)	362589 (9)	359597 (3.6)	30		350870 (.15)
7471B S_P	PS	10605435001	Solid	0.3	363124 (3)	362589 (9)	359597 (3.6)	30		
7471B S_P	PS	10605435002	Solid	0.326	363124 (3)	362589 (9)	359597 (3.6)	30		
7471B S_P	PS	10605435003	Solid	0.331	363124 (3)	362589 (9)	359597 (3.6)	30		
7471B S_P	RQS	10605661001	Solid	0.314	363124 (3)	362589 (9)	359597 (3.6)	30		
7471B S_P	MS	4303402	Solid	0.307	363124 (3)	362589 (9)	359597 (3.6)	30		350870 (.15)
7471B S_P	MSD	4303403	Solid	0.319	363124 (3)	362589 (9)	359597 (3.6)	30		350870 (.15)
7471B S_P	PS	10605661002	Solid	0.318	363124 (3)	362589 (9)	359597 (3.6)	30		

782 of 790

## Standard Notes:

350870: LCS, MS, MSD Spike Solution

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-SG01-041922-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI  
Lab Sample ID: 10605435001 Percent Moisture: \_\_\_\_\_

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	33.8		%	1	04/26/2022 14:23

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.  
FD01-041922-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI  
Lab Sample ID: 10605435002 Percent Moisture: \_\_\_\_\_

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	28.9		%	1	04/26/2022 14:23

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-SG02-041922-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI  
Lab Sample ID: 10605435003 Percent Moisture: \_\_\_\_\_

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	53.9		%	1	04/26/2022 14:23

FORM VI INORGANIC-1  
DUPLICATES

SAMPLE NO.

4303422DUP

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Matrix: Solid Concentration Units: %

Percent Moisture: \_\_\_\_\_ Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	30	33.1	33.5	1

FORM IX INORGANIC-1  
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Preparation Method: ASTM D2974 Instrument ID: 10BALP

Concentration Units: %

Analyte	PQL	MDL	MDL Date
Percent Moisture	0.10	0.10	01/01/2003

FORM XII INORGANIC-1  
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Preparation Method: ASTM D2974 Batch: MPRP 123803

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
4303422	4303422	04/26/2022	1	1
10605435001	BNSF-SG01-041922-0-10	04/26/2022	1	1
10605435002	FD01-041922-0-10	04/26/2022	1	1
10605435003	BNSF-SG02-041922-0-10	04/26/2022	1	1



FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10605435 Contract: 3593500 WISHRAM RI

Instrument ID: 10BALP

Analysis Method: ASTM D2974

Start Date: 04/26/2022 14:23

End Date: 04/26/2022 14:24

Sample Name	Lab Sample ID	D/F	Date	Time	MO IST
BNSF-SG01-041922-0-10	10605435001	1	04/26/2022	14:23	X
FD01-041922-0-10	10605435002	1	04/26/2022	14:23	X
BNSF-SG02-041922-0-10	10605435003	1	04/26/2022	14:23	X
10605661001	10605661001	1	04/26/2022	14:24	X
4303422DUP	4303422	1	04/26/2022	14:24	X



# Prep Log Report

Batch Information: 811326 123803 DW

Template Version: ENV-EPL-MIN4-0033-Rev.00 (13Dec2020)

Analysis Method	ASTM D2974	Analyzed By	JDL	Instrument	10BALP	Oven ID	10WET49
Acceptance Range	100-110 C	Thermometer ID	559926	Oven Correction Factor (C)	0	Oven Temp In1 (C)   Corr   Date/Time   Init	105.0   105.0   04/26/2022 14:30   JDL
Oven Temp Out1 (C)   Corr   Date/Time   Init	103.0   103.0   04/27/2022 09:01   JDL	Desic. In 1 ID   Date/Time   Init	10MET41   04/27/2022 09:01   JDL	Desic. Out 1 Date/Time   Init	04/27/2022 09:33   JDL	Reviewed By	CR2
Reviewed By Date	04/27/2022 10:03	Batch Notes					

## Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	ID	TS Posted (%)	Percent Moisture	Run Date/Time	Posted Dry Weight w/ Dish (g)	Dish Weight (g)	Wet Weight w/ Dish (g)	Dry Weight 1 (g)	Dry Wt Use 1	Sample Notes
DRY WEIGHT	PS	10605435001	Y		66.24	33.76	04/26/2022 14:23:26	6.5713	1.2841	9.2659	6.5713	M	
DRY WEIGHT	PS	10605435002	Y		71.11	28.89	04/26/2022 14:23:38	7.4126	1.2841	9.9028	7.4126	M	
DRY WEIGHT	PS	10605435003	Y		46.14	53.86	04/26/2022 14:23:49	5.1981	1.2871	9.7631	5.1981	M	
DRY WEIGHT	RQS	10605661001	Y		66.94	33.06	04/26/2022 14:24:00	7.1146	1.2839	9.9945	7.1146	M	
DRY WEIGHT	DUP	4303422	Y		66.46	33.54	04/26/2022 14:24:10	7.0608	1.2863	9.9756	7.0608	M	
DRY WEIGHT	PS	10605661002	Y		76.08	23.92	04/26/2022 14:24:21	7.6593	1.2871	9.6633	7.6593	M	

## Pace Analytical - Minnesota

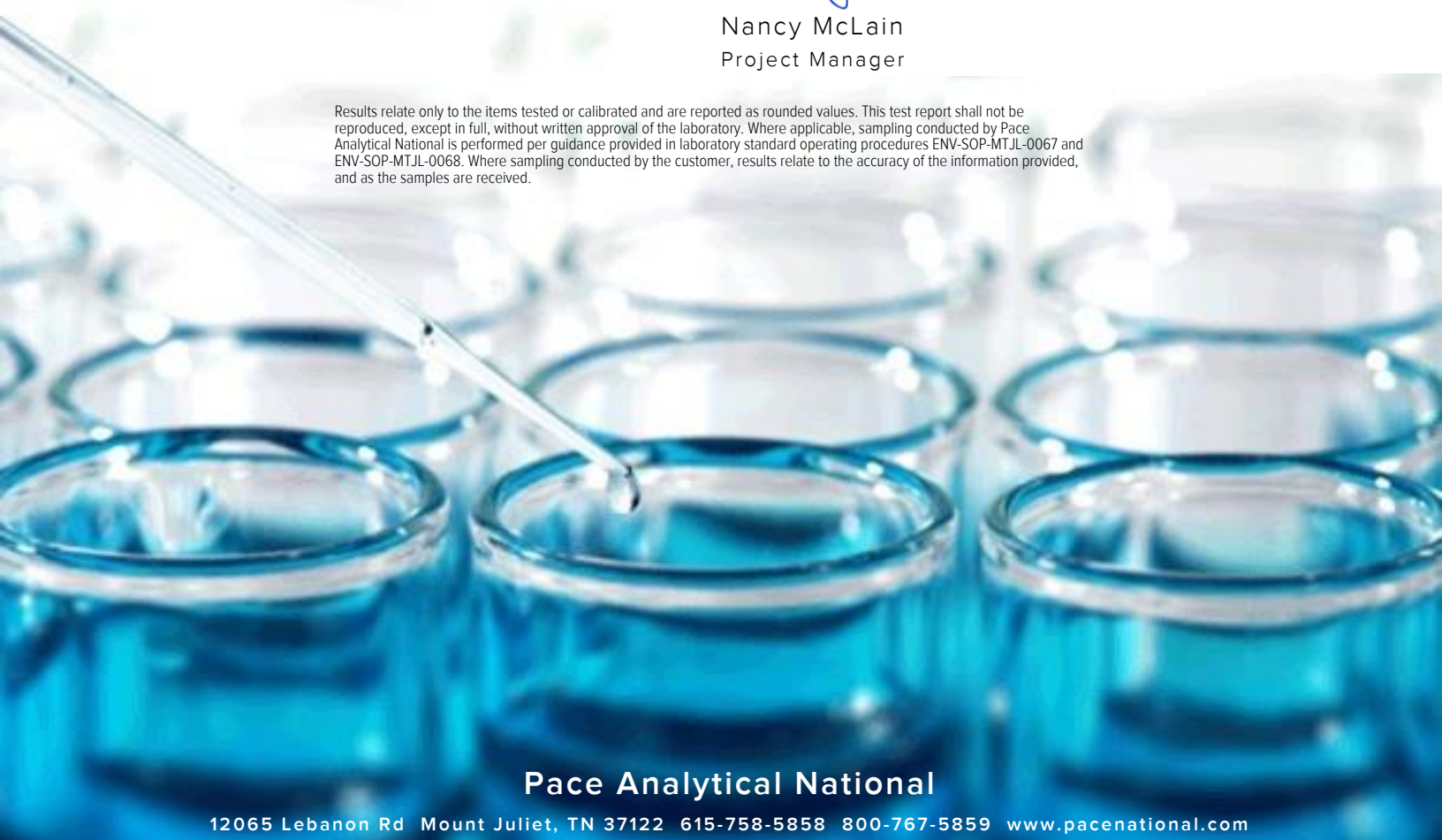
Sample Delivery Group: L1487377  
Samples Received: 04/28/2022  
Project Number: 10605435  
Description: 3593500 WISHRAM RI  
Site: 001  
Report To: Kongmeng Vang  
1700 Elm Street Suite 200  
Minneapolis, MN 55414

Entire Report Reviewed By:



Nancy McLain  
Project Manager

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Pace Analytical National

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# TABLE OF CONTENTS

Cp: Cover Page	1	<span style="border: 1px solid black; padding: 2px;"><sup>1</sup>Cp</span>
Tc: Table of Contents	2	<span style="border: 1px solid black; padding: 2px;"><sup>2</sup>Tc</span>
Ss: Sample Summary	8	<span style="border: 1px solid black; padding: 2px;"><sup>3</sup>Ss</span>
Cn: Case Narrative	9	<span style="border: 1px solid black; padding: 2px;"><sup>4</sup>Cn</span>
Su: Summary Results	10	<span style="border: 1px solid black; padding: 2px;"><sup>5</sup>Su</span>
2540 G-2011 Total Solids	11	<span style="border: 1px solid black; padding: 2px;"><sup>6</sup>Gl</span>
Sample Result Inorganic Analysis Data Sheet	11	<span style="border: 1px solid black; padding: 2px;"><sup>7</sup>Al</span>
L1487377-01 05/03/22 06:04 LOGBAL4	11	<span style="border: 1px solid black; padding: 2px;"><sup>8</sup>Sc</span>
L1487377-02 05/03/22 05:55 LOGBAL4	12	
L1487377-03 05/03/22 05:55 LOGBAL4	13	
BLANK(R3787628-1) WG1856493 05/03/22 05:55 LOGBAL4	14	
BLANK(R3787629-1) WG1856483 05/03/22 06:04 LOGBAL4	15	
LCS(R3787628-2) WG1856493 05/03/22 05:55 LOGBAL4	16	
DUP(R3787628-3) WG1856493 05/03/22 05:55 LOGBAL4	17	
DUP(R3787629-3) WG1856483 05/03/22 06:04 LOGBAL4	18	
LCS(R3787629-2) WG1856483 05/03/22 06:04 LOGBAL4	19	
Blank	20	
LOGBAL4 WG1856493	20	
LOGBAL4 WG1856483	21	
Laboratory Duplicate	22	
WG1856493 DUP(R3787628-3)	22	
WG1856483 DUP(R3787629-3)	23	
Laboratory Control Sample / Duplicate	24	
WG1856493 LCS(R3787628-2)	24	
WG1856483 LCS(R3787629-2)	25	
Detection Limit Summary	26	
2540 G-2011 - Solid	26	
Analysis Log	27	
LOGBAL4 WG1856493	27	
LOGBAL4 WG1856483	28	
Preparation Logs	29	
WG1856483	29	
WG1856493	30	
8270E Semi Volatile Organic Compounds (GC/MS)	32	
Surrogate Recovery	32	
Solid Surrogate Summary	32	
Matrix Spike / Duplicate	33	
WG1857248 MS(R3788258-1) MSD(R3788258-2)	33	
Laboratory Control Sample / Duplicate	34	
WG1857248 LCS(R3787713-1)	34	

<b>Method Blank</b>	<b>35</b>
WG1857248 R3788334-1 BNAMS24 05/04/22 18:14	35
WG1857248 R3787713-2 BNAMS4 05/03/22 15:52	36
<b>GC/MS Performance Check</b>	<b>37</b>
BNAMS4 020922 02/09/22 10:23	37
<b>0209_05</b>	<b>38</b>
BNAMS4 050322A 05/03/22 12:48	39
<b>0503A_01T-1</b>	<b>40</b>
BNAMS4 050422 05/04/22 04:39	41
<b>0504_02T-1</b>	<b>42</b>
BNAMS24 033122 03/31/22 17:02	43
<b>0331_02</b>	<b>44</b>
BNAMS24 050422A 05/04/22 16:09	45
<b>0504A_02T-1</b>	<b>46</b>
<b>Internal Standard &amp; Retention Time</b>	<b>47</b>
BNAMS4 05/03/22 13:09	47
BNAMS4 05/04/22 04:59	49
<b>Sample Result Summary Organic Analysis Data Sheet</b>	<b>51</b>
L1487377-01 05/04/22 12:40 BNAMS4	51
<b>Raw Data - 0504_24</b>	<b>52</b>
L1487377-02 05/04/22 12:19 BNAMS4	55
<b>Raw Data - 0504_23</b>	<b>56</b>
L1487377-03 05/04/22 13:01 BNAMS4	58
<b>Raw Data - 0504_25</b>	<b>59</b>
<b>GC/MS Initial Calibration</b>	<b>61</b>
BNAMS4 02/09/22 10:43	61
<b>Calibration Plots</b>	<b>63</b>
2,4-Dinitrophenol	63
4,6-Dinitro-2-methylphenol	64
Benzidine	65
Hydroquinone	66
<b>Calibration Summary</b>	<b>67</b>
<b>Raw Data</b>	<b>69</b>
0209_06	69
0209_07	75
0209_08	80
0209_09	85
0209_10	96
0209_11	99
0209_12	110

1 Cp

2 Tc

3 Ss

4 Cn

5 Su

6 Gl

7 Al

8 Sc

0209_13	119
0209_15	130
0209_16	134
0209_17	140
0209_18	147
0209_19	155
0209_20	161
BNAMS24 03/31/22 17:24	167
Calibration Plots	169
2,4-Dinitrophenol	169
2-nitrodiphenylamine	170
4,6-Dinitro-2-methylphenol	171
Benzidine	172
Benzoic Acid	173
Di-n-octyl phthalate	174
Pentachlorophenol	175
Calibration Summary	176
Raw Data	181
0331_03	181
0331_04	196
0331_05	211
0331_06	218
0331_07	229
0331_08	236
0331_09	243
0331_10	252
0331_12	261
0331_13	263
0331_14	267
0331_15	269
0331_16	271
0331_17	273
GC/MS Calibration Verification	275
BNAMS4 02/09/22 15:56	275
BNAMS4 - 020922	276
1_bis(2-Chloroethyl)ether	279
2_bis(2-Chloroethyl)ether	280
3_Benzo(b)fluoranthene	281
BNAMS4 02/09/22 16:16	282
BNAMS4 - 020922	283

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Su

<sup>6</sup>Gl

<sup>7</sup>Al

<sup>8</sup>Sc

BNAMS4 05/03/22 13:09	285
<b>BNAMS4 - 050322A</b>	<b>286</b>
1_bis(2-Chloroethyl)ether	289
3_Nitrobenzene-d5	290
4_Nitrobenzene-d5	291
5_Benzo(b)fluoranthene	292
5_bis(2-Chloroethyl)ether	293
BNAMS4 05/03/22 13:30	294
<b>BNAMS4 - 050322A</b>	<b>295</b>
1_Hydroquinone	297
2_Hydroquinone	298
BNAMS4 05/04/22 04:59	299
<b>BNAMS4 - 050422</b>	<b>300</b>
1_bis(2-Chloroethyl)ether	303
2_bis(2-Chloroethyl)ether	304
3_2-Methylphenol	305
4_2-Methylphenol	306
5_Benzo(b)fluoranthene	307
BNAMS4 05/04/22 05:20	308
<b>BNAMS4 - 050422</b>	<b>309</b>
1_Hydroquinone	311
3_Hydroquinone	312
BNAMS24 03/31/22 22:44	313
<b>BNAMS24 - 033122</b>	<b>314</b>
5_Benzo(b)fluoranthene	317
6_bis(2-Chloroethyl)ether	318
7_bis(2-Chloroethyl)ether	319
8_Nitrobenzene-d5	320
9_Nitrobenzene-d5	321
BNAMS24 03/31/22 23:06	322
<b>BNAMS24 - 033122</b>	<b>323</b>
BNAMS24 05/04/22 16:30	325
<b>BNAMS24 - 050422A</b>	<b>326</b>
1_bis(2-Chloroethyl)ether	329
2_bis(2-Chloroethyl)ether	330
3_Nitrobenzene-d5	331
4_Nitrobenzene-d5	332
5_Benzo(b)fluoranthene	333
BNAMS24 05/04/22 16:52	334
<b>BNAMS24 - 050422A</b>	<b>335</b>



<b>Analytical Sequence</b>	<b>337</b>
BNAMS4 02/09/22 10:43	337
BNAMS24 03/31/22 17:24	338
<b>Detection Limit Summary</b>	<b>339</b>
8270E - Solid	339
<b>QC Result Summary Organic Analysis Data Sheet</b>	<b>340</b>
BLANK(R3787713-2) WG1857248 05/03/22 15:52 BNAMS4	340
Raw Data - 0503A_05	341
BLANK(R3788334-1) WG1857248 05/04/22 18:14 BNAMS24	343
Raw Data - 0504A_07	344
LCS(R3787713-1) WG1857248 05/03/22 15:31 BNAMS4	346
Raw Data - 0503A_04	347
1_bis(2-Chloroethyl)ether	351
2_bis(2-Chloroethyl)ether	352
3_Phenol	353
4_Phenol	354
5_Nitrobenzene-d5	355
6_Nitrobenzene-d5	356
7_Hydroquinone	357
8_Hydroquinone	358
MS(R3788258-1) WG1857248 05/04/22 13:43 BNAMS4	359
Raw Data - 0504_27	360
1_bis(2-Chloroethyl)ether	363
2_bis(2-Chloroethyl)ether	364
3_Hydroquinone	365
4_Hydroquinone	366
5_Indeno(1,2,3-cd)pyrene	367
6_Indeno(1,2,3-cd)pyrene	368
MSD(R3788258-2) WG1857248 05/04/22 14:03 BNAMS4	369
Raw Data - 0504_28	370
1_bis(2-Chloroethyl)ether	373
2_bis(2-Chloroethyl)ether	374
3_Phenol	375
4_Phenol	376
5_Hydroquinone	377
6_Hydroquinone	378
<b>Preparation Logs</b>	<b>379</b>
WG1857248	379
<b>9034/9030B Wet Chemistry</b>	<b>381</b>
<b>Sample Result Inorganic Analysis Data Sheet</b>	<b>381</b>





L1487377-01 05/05/22 18:00 MAN TITR	381
L1487377-02 05/05/22 18:00 MAN TITR	382
L1487377-03 05/05/22 18:00 MAN TITR	383
BLANK(R3788703-1) WG1857987 05/05/22 18:00 MAN TITR	384
LCS(R3788703-2) WG1857987 05/05/22 18:00 MAN TITR	385
MS(R3788703-3) WG1857987 05/05/22 18:00 MAN TITR	386
MSD(R3788703-4) WG1857987 05/05/22 18:00 MAN TITR	387
<b>Blank</b>	<b>388</b>
MAN TITR WG1857987	388
<b>Matrix Spike / Duplicate</b>	<b>389</b>
WG1857987 MS(R3788703-3) MSD(R3788703-4)	389
<b>Laboratory Control Sample / Duplicate</b>	<b>390</b>
WG1857987 LCS(R3788703-2)	390
<b>Detection Limit Summary</b>	<b>391</b>
9034/9030B - Solid	391
<b>Analysis Log</b>	<b>392</b>
MAN TITR WG1857987	392
<b>Preparation Logs</b>	<b>393</b>
WG1857987	393
<b>Gl: Glossary of Terms</b>	<b>394</b>
<b>Al: Accreditations &amp; Locations</b>	<b>396</b>
<b>Sc: Sample Chain of Custody</b>	<b>397</b>



# SAMPLE SUMMARY

## BNSF-SC01-041922-0-10 L1487377-01 Solid

Collected by:   
 Collected date/time: 04/19/22 12:00   
 Received date/time: 04/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1856483	1	05/03/22 05:57	05/03/22 06:04	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9034/9030B	WG1857987	1	05/03/22 12:51	05/05/22 18:00	BMD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1857248	2	05/03/22 09:05	05/04/22 12:40	JNJ	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Su

6 Gl

7 Al

8 Sc

## FD01-041922-0-10 L1487377-02 Solid

Collected by:   
 Collected date/time: 04/19/22 12:15   
 Received date/time: 04/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1856493	1	05/03/22 05:40	05/03/22 05:55	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9034/9030B	WG1857987	1	05/03/22 12:51	05/05/22 18:00	BMD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1857248	1	05/03/22 09:05	05/04/22 12:19	JNJ	Mt. Juliet, TN

## BNSF-SG02-041922-0-10 L1487377-03 Solid

Collected by:   
 Collected date/time: 04/19/22 13:35   
 Received date/time: 04/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1856493	1	05/03/22 05:40	05/03/22 05:55	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9034/9030B	WG1857987	1	05/03/22 12:51	05/05/22 18:00	BMD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1857248	2	05/03/22 09:05	05/04/22 13:01	JNJ	Mt. Juliet, TN

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Nancy McLain  
Project Manager

- <sup>1</sup> Cp
- <sup>2</sup> Tc
- <sup>3</sup> Ss
- <sup>4</sup> Cn
- <sup>5</sup> Su
- <sup>6</sup> Gl
- <sup>7</sup> Al
- <sup>8</sup> Sc

## Report Revision History

---

Level II Report - Version 1: 05/06/22 10:19

2540 G-2011 Total Solids

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1487377-01  
Client Sample ID: BNSF-SC01-041922-0-10  
Lab File ID: 11  
Instrument ID: LOGBAL4  
Analytical Batch: WG1856483  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): 73.9

SDG: L1487377  
Collected Date/Time: 04/19/22 12:00  
Received Date/Time: 04/28/22 09:00  
Preparation Date/Time: 05/03/22 05:57  
Analysis Date/Time: 05/03/22 06:04  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 12.037 g  
Final Wt/Vol: 9.223 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	73.9	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1487377-02  
Client Sample ID: FD01-041922-0-10  
Lab File ID: 07  
Instrument ID: LOGBAL4  
Analytical Batch: WG1856493  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): 73.9

SDG: L1487377  
Collected Date/Time: 04/19/22 12:15  
Received Date/Time: 04/28/22 09:00  
Preparation Date/Time: 05/03/22 05:40  
Analysis Date/Time: 05/03/22 05:55  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 12.49 g  
Final Wt/Vol: 9.55 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	73.9	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1487377-03  
Client Sample ID: BNSF-SG02-041922-0-10  
Lab File ID: 08  
Instrument ID: LOGBAL4  
Analytical Batch: WG1856493  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): 50.4

SDG: L1487377  
Collected Date/Time: 04/19/22 13:35  
Received Date/Time: 04/28/22 09:00  
Preparation Date/Time: 05/03/22 05:40  
Analysis Date/Time: 05/03/22 05:55  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 7.586 g  
Final Wt/Vol: 4.453 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	50.4	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3787628-1  
Client Sample ID: BLANK  
Lab File ID: 01  
Instrument ID: LOGBAL4  
Analytical Batch: WG1856493  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1487377  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 05/03/22 05:36  
Analysis Date/Time: 05/03/22 05:55  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 1.258 g  
Final Wt/Vol: 1.257 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	0.00100 %	



SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3787629-1  
Client Sample ID: BLANK  
Lab File ID: 01  
Instrument ID: LOGBAL4  
Analytical Batch: WG1856483  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1487377  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 05/03/22 05:57  
Analysis Date/Time: 05/03/22 06:04  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 1.253 g  
Final Wt/Vol: 1.252 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	0.00100 %	

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3787628-2  
Client Sample ID: LCS  
Lab File ID: 03  
Instrument ID: LOGBAL4  
Analytical Batch: WG1856493  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1487377  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 05/03/22 05:36  
Analysis Date/Time: 05/03/22 05:55  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 11.285 g  
Final Wt/Vol: 6.282 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	50.0	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

<b>Lab Sample ID:</b> R3787628-3	<b>SDG:</b> L1487377
<b>Client Sample ID:</b> DUP	<b>Collected Date/Time:</b> 04/25/22 11:50
<b>Lab File ID:</b> 02	<b>Received Date/Time:</b> 04/27/22 09:00
<b>Instrument ID:</b> LOGBAL4	<b>Preparation Date/Time:</b> 05/03/22 05:40
<b>Analytical Batch:</b> WG1856493	<b>Analysis Date/Time:</b> 05/03/22 05:55
<b>Dilution Factor:</b> 1	<b>Prep Method:</b> SM 2540 G
<b>Analytical Method:</b> 2540 G-2011	<b>Sample Vol Used:</b> _____
<b>Matrix:</b> Solid	<b>Initial Wt/Vol:</b> 8.911 g
<b>Total Solids (%):</b> 85.9	<b>Final Wt/Vol:</b> 7.813 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	85.6	

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3787629-3  
Client Sample ID: DUP  
Lab File ID: 02  
Instrument ID: LOGBAL4  
Analytical Batch: WG1856483  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): 80.9

SDG: L1487377  
Collected Date/Time: 04/27/22 08:06  
Received Date/Time: 04/28/22 12:00  
Preparation Date/Time: 05/03/22 05:57  
Analysis Date/Time: 05/03/22 06:04  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 11.146 g  
Final Wt/Vol: 9.358 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	81.9	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3787629-2  
Client Sample ID: LCS  
Lab File ID: 03  
Instrument ID: LOGBAL4  
Analytical Batch: WG1856483  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1487377  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 05/03/22 05:57  
Analysis Date/Time: 05/03/22 06:04  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 11.27 g  
Final Wt/Vol: 6.271 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	50.0	%

<b>SDG:</b>	L1487377	<b>Calibration (begin) date/time:</b>	_____
<b>Instrument ID:</b>	LOGBAL4	<b>Calibration (end) date/time:</b>	_____
<b>Analytical Method:</b>	2540 G-2011	<b>Analytical Run:</b>	WG1856493

---

	Sample ID: BLANK	Result	BLANK Qual
	File ID:	01	
<b>Analyte</b>		%	
TOTAL SOLIDS		0.00100	

---

<b>SDG:</b>	L1487377	<b>Calibration (begin) date/time:</b>	_____
<b>Instrument ID:</b>	LOGBAL4	<b>Calibration (end) date/time:</b>	_____
<b>Analytical Method:</b>	2540 G-2011	<b>Analytical Run:</b>	WG1856483

---

	Sample ID: BLANK	Result	BLANK Qual
	File ID:	01	
<b>Analyte</b>		%	
TOTAL SOLIDS		0.00100	

---

**DUP Sample / File ID:** R3787628-3 / 02  
**OS Sample / File ID:** L1487412-10 / 09  
**Instrument ID:** LOGBAL4  
**Analytical Method:** 2540 G-2011

**SDG:** L1487377  
**Analytical Batch:** WG1856493  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	OS Result %	DUP Result %	RPD %	RPD Limits %
Total Solids	85.9	85.6	0.273	10

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.



**DUP Sample / File ID:** R3787629-3 / 02  
**OS Sample / File ID:** L1487253-02 / 05  
**Instrument ID:** LOGBAL4  
**Analytical Method:** 2540 G-2011

**SDG:** L1487377  
**Analytical Batch:** WG1856483  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	OS Result %	DUP Result %	RPD %	RPD Limits %
Total Solids	80.9	81.9	1.25	10

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE  
 LABORATORY CONTROL SAMPLE DUPLICATE  
 RECOVERY  
 L1487377-02,03

SAMPLE NO.:  
 R3787628-2

**LCS Sample / File ID:** R3787628-2 / 03  
**LCSD Sample / File ID:** \_\_\_\_\_  
**Instrument ID:** LOGBAL4  
**Analytical Method:** 2540 G-2011

**SDG:** L1487377  
**Analytical Batch:** WG1856493  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	%	%		%	%	%	%	%
Total Solids	50.0	50.0		100		85.0 - 115		

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE  
 LABORATORY CONTROL SAMPLE DUPLICATE  
 RECOVERY  
 L1487377-01

SAMPLE NO.:  
 R3787629-2

**LCS Sample / File ID:** R3787629-2 / 03  
**LCSD Sample / File ID:** \_\_\_\_\_  
**Instrument ID:** LOGBAL4  
**Analytical Method:** 2540 G-2011

**SDG:** L1487377  
**Analytical Batch:** WG1856483  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	%	%		%	%	%	%	%
Total Solids	50.0	50.0		100		85.0 - 115		

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1487377-01,02,03  
Matrix: Solid

Analytical Method: 2540 G-2011  
Prep Method: SM 2540 G

---

Analyte	CAS	Wavelength	Mass	MDL	RDL
Total Solids	TSOLIDS			%	%

---

ANALYSIS LOG

<b>SDG:</b>	L1487377	<b>Analytical Method:</b>	2540 G-2011
<b>Instrument ID:</b>	LOGBAL4	<b>Calibration Start Date:</b>	_____
<b>Analytical Run:</b>	WG1856493	<b>Calibration End Date:</b>	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3787628-1	01	05/03/22 05:55	1	WG1856493
DUP	R3787628-3	02	05/03/22 05:55	1	WG1856493
LCS	R3787628-2	03	05/03/22 05:55	1	WG1856493
OS	L1487412-10	09	05/03/22 05:55		
FD01-041922-0-10	L1487377-02	07	05/03/22 05:55	1	WG1856493
BNSF-SG02-041922-0-10	L1487377-03	08	05/03/22 05:55	1	WG1856493

ANALYSIS LOG

**SDG:** L1487377 **Analytical Method:** 2540 G-2011  
**Instrument ID:** LOGBAL4 **Calibration Start Date:** \_\_\_\_\_  
**Analytical Run:** WG1856483 **Calibration End Date:** \_\_\_\_\_

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3787629-1	01	05/03/22 06:04	1	WG1856483
DUP	R3787629-3	02	05/03/22 06:04	1	WG1856483
LCS	R3787629-2	03	05/03/22 06:04	1	WG1856483
OS	L1487253-02	05	05/03/22 06:04		
BNSF-SC01-041922-0-1 0	L1487377-01	11	05/03/22 06:04	1	WG1856483

# Total Solids WetChem Prep Benchsheet

Batch: WG1856483

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1487253	WG1856109	KMT967	PREPREPBAL1	29-APR-22
L1487295	WG1856109	KMT967	PREPREPBAL1	29-APR-22
L1487377	WG1856083	KMT967	PREPREPBAL3	28-APR-22
L1487472	WG1856147	ANS3804	PREPREPBAL4	28-APR-22

Analyst: KDW475 Prep Start Date/Time: 05/03/22 05:57 Prep End Date/Time: 05/03/22 15:10 SOP: 0178 Method: SM 2540G Oven ID: 2305  
 Balance ID: LOGBAL4 LCS True Value: 50

LCS: 22D11416 Amt. Used: 50 Exp. Date: 10/11/22

Sample Number	Matrix	State	Collect Date	Vessel ID	Vessel Wt (g)	Sample + Vessel Wt (g)	Oven Wt1 (g)	Oven Wt2 (g)	Wt Diff (g)	% TS Result	% Moisture Result	TS % Recovery	Moisture % Rec.	TS RPD	% Moisture RPD	Box ID	Review Analyst	Review Date
BLANK				B1	1.253	1.253	1.252	1.252	0	0.001	99.999						CMK3616	05/03/22 15:10:17
LCS				B2	1.270	11.270	6.271	6.271	0	50.01	49.99	100.02	99.98				CMK3616	05/03/22 15:10:17
DUP(L1487253-02)				B3	1.251	11.146	9.365	9.358	0.007	81.9303	18.0697			1.25	5.48	FRI 1/0429-PP1	CMK3616	05/03/22 15:10:17
1. L1487253-01	SS	KS	04/27/22 08:03	B4	1.263	7.700	6.475	6.467	0.008	80.8451	19.1549					FRI 1/0429-PP1	CMK3616	05/03/22 15:10:17
2. L1487253-02	SS	KS	04/27/22 08:06	B5	1.241	12.290	10.190	10.181	0.009	80.9123	19.0877						CMK3616	05/03/22 15:10:17
3. L1487253-03	SS	KS	04/27/22 08:08	B6	1.273	11.378	9.183	9.176	0.007	78.2088	21.7912					FRI 1/0429-PP1	CMK3616	05/03/22 15:10:17
4. L1487295-01	SS	CO	04/25/22 11:58	B7	1.262	14.757	12.592	12.588	0.004	83.9274	16.0726					FRI 1/0429-PP1	CMK3616	05/03/22 15:10:17
5. L1487295-02	SS	CO	04/25/22 11:53	B8	1.263	11.238	10.323	10.321	0.002	90.807	9.193					FRI 1/0429-PP1	CMK3616	05/03/22 15:10:17
6. L1487295-04	SS	CO	04/25/22 11:48	B9	1.243	10.257	8.713	8.708	0.005	82.8156	17.1844					FRI 1/0429-PP1	CMK3616	05/03/22 15:10:17
7. L1487295-05	SS	CO	04/25/22 12:02	B10	1.272	13.709	12.436	12.428	0.008	89.7001	10.2999					FRI 1/0429-PP1	CMK3616	05/03/22 15:10:17
8. L1487377-01	SS	WA	04/19/22 12:00	B11	1.247	12.037	9.227	9.223	0.004	73.9203	26.0797					4/28 PP3 RUSH	CMK3616	05/03/22 15:10:17
9. L1487472-02	SS	WA	04/20/22 15:20	B12	1.247	9.285	7.562	7.555	0.007	78.4772	21.5228					PP4 0428	CMK3616	05/03/22 15:10:17
10. L1487472-03	SS	WA	04/20/22 15:38	B13	1.263	11.273	9.345	9.343	0.002	80.7193	19.2807					PP4 0428	CMK3616	05/03/22 15:10:17

Comments:

Reviewed By: CMK3616 on 05/03/22 15:10:17

#	Type	Time In	Obs. Temp In (°C)	Corrected Temp In (°C)	Time Out	Obs. Temp Out (°C)	Corrected Temp Out (°C)	Samples
1	Oven-05/03/22 4hr	06:04:37	104	104	05/03/22 12:52:04	104	104	BLANK, LCS, DUP(L1487253-02), L1487253-01, L1487472-03, L1487472-02, L1487377-01, L1487295-05, L1487295-04, L1487295-02, L1487295-01, L1487253-03, L1487253-02
2	Oven-05/03/22 1hr	12:56:14	104	104	05/03/22 15:07:34	104	104	BLANK, LCS, DUP(L1487253-02), L1487253-01, L1487253-02, L1487253-03, L1487295-01, L1487295-02, L1487295-04, L1487295-05, L1487377-01, L1487472-02, L1487472-03

# Total Solids WetChem Prep Benchsheet

Batch: WG1856493

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1487371	WG1856117	KMT967	PREPREPBAL1	29-APR-22
L1487377	WG1856083	KMT967	PREPREPBAL3	28-APR-22
L1487412	WG1856098	KMT967	PREPREPBAL1	28-APR-22
L1487421	WG1856098	KMT967	PREPREPBAL1	28-APR-22
L1487435	WG1856133	KMT967	PREPREPBAL2	29-APR-22

Analyst: KDW475 Prep Start Date/Time: 05/03/22 05:36-05:40 Prep End Date/Time: 05/03/22 15:07 SOP: 0178 Method: SM 2540G Oven ID: 2305  
 Balance ID: LOGBAL4 LCS True Value: 50

LCS: 22D11416 Amt. Used: 50 Exp. Date: 10/11/22

Sample Number	Matrix	State	Collect Date	Vessel ID	Vessel Wt (g)	Sample + Vessel Wt (g)	Oven Wt1 (g)	Oven Wt2 (g)	Wt Diff (g)	% TS Result	% Moisture Result	TS % Recovery	Moisture % Rec.	TS RPD	% Moisture RPD	Box ID	Review Analyst	Review Date
BLANK				A1	1.258	1.258	1.258	1.257	0.001	0.001	99.999						CMK3616	05/03/22 15:07:04
LCS				A2	1.281	11.285	6.283	6.282	0.001	49.99	50.01	99.98	100.02				CMK3616	05/03/22 15:07:04
DUP(L1487412-10)				A3	1.262	8.911	7.820	7.813	0.007	85.6452	14.3548			0.27	1.65		CMK3616	05/03/22 15:07:04
1. L1487371-29	SS	CA	04/26/22 09:19	A4	1.268	8.651	6.906	6.902	0.004	76.3104	23.6896					FRI 3/0429-PP1	CMK3616	05/03/22 15:07:04
2. L1487371-30	SS	CA	04/26/22 09:30	A5	1.251	9.415	8.116	8.111	0.005	84.0274	15.9726					FRI 3/0429-PP1	CMK3616	05/03/22 15:07:04
3. L1487371-31	SS	CA	04/26/22 09:49	A6	1.257	9.741	8.489	8.484	0.005	85.1839	14.8161					FRI 3/0429-PP1	CMK3616	05/03/22 15:07:04
4. L1487377-02	SS	WA	04/19/22 12:15	A7	1.244	12.490	9.552	9.550	0.002	73.8574	26.1426					4/28 PP3 RUSH	CMK3616	05/03/22 15:07:04
5. L1487377-03	SS	WA	04/19/22 13:35	A8	1.270	7.586	4.456	4.453	0.003	50.3958	49.6042					4/28 PP3 RUSH	CMK3616	05/03/22 15:07:04
6. L1487412-10	SS	MT	04/25/22 11:50	A9	1.268	9.823	8.618	8.615	0.003	85.8796	14.1204					THUR BOX 5, 0428 PP1	CMK3616	05/03/22 15:07:04
7. L1487412-11	SS	MT	04/25/22 00:00	A10	1.251	11.439	9.966	9.958	0.008	85.4633	14.5367					THUR BOX 5, 0428 PP1	CMK3616	05/03/22 15:07:04
8. L1487421-02	SS	MO	04/25/22 11:30	A11	1.245	12.137	10.515	10.513	0.002	85.09	14.91					THUR BOX 5, 0428 PP1	CMK3616	05/03/22 15:07:04
9. L1487435-01	SS	TX	04/25/22 09:12	A12	1.252	11.210	9.406	9.404	0.002	81.8638	18.1362					Fri03 / 0429PP02	CMK3616	05/03/22 15:07:04
10. L1487435-03	SS	TX	04/25/22 10:29	A13	1.259	12.243	10.852	10.852	0	87.3361	12.6639					Fri03 / 0429PP02	CMK3616	05/03/22 15:07:04

Comments:

Reviewed By: CMK3616 on 05/03/22 15:07:04

#	Type	Time In	Obs. Temp In (°C)	Corrected Temp In (°C)	Time Out	Obs. Temp Out (°C)	Corrected Temp Out (°C)	Samples
1	Oven	05/03/22 4hr 05:55:36	104	104	05/03/22 12:48:13	104	104	BLANK, LCS, DUP(L1487412-10), L1487371-29, L1487435-03, L1487435-01, L1487421-02, L1487412-11, L1487412-10, L1487377-03, L1487377-02, L1487371-31, L1487371-30
2	Oven	05/03/22 1hr 12:50:01	104	104	05/03/22 15:03:56	104	104	BLANK, LCS, DUP(L1487412-10), L1487371-29, L1487371-30, L1487371-31, L1487377-02, L1487377-03, L1487412-10, L1487412-11, L1487421-02, L1487435-01, L1487435-03



8270E Semi Volatile Organic Compounds (GC/MS)

Analytical Method: 8270E  
 Matrix: Solid

SDG: L1487377

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	DMC-2 % Rec.	DMC-3 % Rec.	DMC-4 % Rec.	DMC-5 % Rec.	DMC-6 % Rec.	TOT Out
BNSF-SC01-041922-0-10	L1487377-01	BNAMS4	0504_24	64.6	67.2	65.4	64.2	96.7	88.4	0
FD01-041922-0-10	L1487377-02	BNAMS4	0504_23	34.2	38.9	33.8	39.1	64.5	61.2	0
BNSF-SG02-041922-0-10	L1487377-03	BNAMS4	0504_25	75.0	75.7	75.1	68.7	83.8	70.3	0
OS	L1486885-01	BNAMS4	0504_26	66.0	68.5	69.9	63.0	85.7	68.4	0
MS	R3788258-1	BNAMS4	0504_27	71.5	74.5	59.2	62.9	91.0	69.9	0
MSD	R3788258-2	BNAMS4	0504_28	54.8	58.0	49.8	50.8	82.1	76.6	0
BLANK	R3788334-1	BNAMS24	0504A_07	67.7	65.6	66.1	68.5	70.3	61.6	0
BLANK	R3787713-2	BNAMS4	0503A_05	72.7	74.6	72.7	68.5	75.7	72.7	0
LCS	R3787713-1	BNAMS4	0503A_04	60.8	61.7	52.6	56.8	68.6	62.5	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	2-Fluorophenol	12.0 - 120
DMC-2	Phenol-d5	10.0 - 120
DMC-3	Nitrobenzene-d5	10.0 - 122
DMC-4	2-Fluorobiphenyl	15.0 - 120
DMC-5	2,4,6-Tribromophenol	10.0 - 127
DMC-6	p-Terphenyl-d14	10.0 - 120

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

MATRIX SPIKE /  
MATRIX SPIKE DUPLICATE RECOVERY  
L1487377-01,02,03

MS Sample / File ID: R3788258-1 / 0504\_27  
MSD Sample / File ID: R3788258-2 / 0504\_28  
OS Sample / File ID: L1486885-01 / 0504\_26  
Instrument ID: BNAMS4  
Analytical Method: 8270E

SDG: L1487377  
Analytical Batch: WG1857248  
Matrix: Solid

Analyte	Spike Amount (dry) mg/kg	OS Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	RPD %	RPD Limit %
Acenaphthene	0.862	U	0.590	0.417	68.4	49.1	2	18.0 - 120	34.4*	32
Acenaphthylene	0.862	U	0.620	0.435	71.9	51.2	2	25.0 - 120	35.1*	32
Anthracene	0.862	U	0.677	0.555	78.5	65.4	2	22.0 - 120	19.7	29
Benzoic Acid	1.72	U	1.90	1.20	111	70.6	2	10.0 - 152	45.7*	40
Benzo(a)anthracene	0.862	U	0.705	0.599	81.7	70.6	2	25.0 - 120	16.2	29
Benzo(b)fluoranthene	0.862	U	0.678	0.589	78.7	69.3	2	19.0 - 122	14.2	31
Benzo(k)fluoranthene	0.862	U	0.688	0.599	79.8	70.6	2	23.0 - 120	13.8	30
Benzo(g,h,i)perylene	0.862	U	0.592	0.517	68.7	60.9	2	10.0 - 120	13.6	33
Benzo(a)pyrene	0.862	U	0.753	0.653	87.3	76.9	2	24.0 - 120	14.1	30
Carbazole	0.862	U	0.698	0.583	81.0	68.7	2	31.0 - 120	18.0	24
Chrysene	0.862	U	0.709	0.607	82.2	71.5	2	21.0 - 120	15.5	29
Dibenz(a,h)anthracene	0.862	U	0.648	0.548	75.2	64.5	2	10.0 - 120	16.8	32
Dibenzofuran	0.862	U	0.606	0.435	70.2	51.2	2	24.0 - 120	32.8*	30
Fluoranthene	0.862	U	0.717	0.592	83.1	69.8	2	18.0 - 126	19.0	32
Fluorene	0.862	U	0.635	0.469	73.6	55.3	2	25.0 - 120	29.9	30
Indeno(1,2,3-cd)pyrene	0.862	U	0.627	0.544	72.7	64.0	2	10.0 - 120	14.2	32
1-Methylnaphthalene	0.862	U	0.480	0.333	55.7	39.3	2	10.0 - 120	36.1*	36
2-Methylnaphthalene	0.862	U	0.452	0.313	52.5	36.9	2	10.0 - 120	36.3	37
Naphthalene	0.862	U	0.451	0.312	52.3	36.8	2	10.0 - 120	36.4*	35
Phenanthrene	0.862	U	0.671	0.546	77.8	64.3	2	17.0 - 120	20.4	31
Bis(2-ethylhexyl)phthalate	0.862	U	0.837	0.701	97.1	82.6	2	17.0 - 126	17.7	30
Di-n-butyl phthalate	0.862	U	0.796	0.639	92.3	75.2	2	30.0 - 120	21.9	29
Di-n-octyl phthalate	0.862	U	0.825	0.706	95.7	83.2	2	21.0 - 123	15.5	29
Pyrene	0.862	U	0.692	0.587	80.2	69.2	2	16.0 - 121	16.3	32
3&4-Methyl Phenol	0.862	U	0.734	0.480	85.1	56.5	2	12.0 - 123	41.8*	38
Pentachlorophenol	0.862	U	0.697	0.595	80.8	70.1	2	10.0 - 160	15.8	31
Phenol	0.862	U	0.622	0.406	72.1	47.8	2	12.0 - 120	42.0*	38

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE  
LABORATORY CONTROL SAMPLE DUPLICATE  
RECOVERY  
L1487377-01,02,03

LCS Sample / File ID: R3787713-1 / 0503A\_04  
LCSD Sample / File ID: \_\_\_\_\_  
Instrument ID: BNAMS4  
Analytical Method: 8270E

SDG: L1487377  
Analytical Batch: WG1857248  
Dilution Factor: 1  
Matrix: Solid

Analyte	Spike Amount <i>mg/kg</i>	LCS Result <i>mg/kg</i>	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limit %
Acenaphthene	0.666	0.390		58.6		38.0 - 120		
Acenaphthylene	0.666	0.423		63.5		40.0 - 120		
Anthracene	0.666	0.418		62.8		42.0 - 120		
Benzoic Acid	1.33	0.179		13.5		10.0 - 120		
Benzo(a)anthracene	0.666	0.412		61.9		44.0 - 120		
Benzo(b)fluoranthene	0.666	0.389		58.4		43.0 - 120		
Benzo(k)fluoranthene	0.666	0.413		62.0		44.0 - 120		
Benzo(g,h,i)perylene	0.666	0.427		64.1		43.0 - 120		
Benzo(a)pyrene	0.666	0.447		67.1		45.0 - 120		
Carbazole	0.666	0.398		59.8		48.0 - 120		
Chrysene	0.666	0.414		62.2		43.0 - 120		
Dibenz(a,h)anthracene	0.666	0.422		63.4		44.0 - 120		
Dibenzofuran	0.666	0.401		60.2		44.0 - 120		
Fluoranthene	0.666	0.402		60.4		44.0 - 120		
Fluorene	0.666	0.391		58.7		41.0 - 120		
Indeno(1,2,3-cd)pyrene	0.666	0.411		61.7		45.0 - 120		
1-Methylnaphthalene	0.666	0.321		48.2		34.0 - 120		
2-Methylnaphthalene	0.666	0.312		46.8		34.0 - 120		
Naphthalene	0.666	0.309		46.4		18.0 - 120		
Phenanthrene	0.666	0.400		60.1		42.0 - 120		
Bis(2-ethylhexyl)phthalate	0.666	0.471		70.7		41.0 - 120		
Di-n-butyl phthalate	0.666	0.445		66.8		43.0 - 120		
Di-n-octyl phthalate	0.666	0.442		66.4		40.0 - 120		
Pyrene	0.666	0.408		61.3		41.0 - 120		
3&4-Methyl Phenol	0.666	0.464		69.7		42.0 - 120		
Pentachlorophenol	0.666	0.393		59.0		29.0 - 120		
Phenol	0.666	0.400		60.1		28.0 - 120		

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

**Lab Sample ID:** R3788334-1  
**Lab File ID:** 0504A\_07  
**Instrument ID:** BNAMS24  
**Analytical Batch:** WG1857248  
**Analytical Method:** 8270E

**SDG:** L1487377  
**Preparation Date/Time:** 05/02/22 17:00  
**Analysis Date/Time:** 05/04/22 18:14  
**Dilution Factor:** 1  
**Matrix:** Solid

Sample ID	Lab Sample ID	Instrument	File ID	Analysis date/time
LCS	R3787713-1	BNAMS4	0503A_04	05/03/22 15:31
FD01-041922-0-10	L1487377-02	BNAMS4	0504_23	05/04/22 12:19
BNSF-SC01-041922-0-10	L1487377-01	BNAMS4	0504_24	05/04/22 12:40
BNSF-SG02-041922-0-10	L1487377-03	BNAMS4	0504_25	05/04/22 13:01
OS	L1486885-01	BNAMS4	0504_26	05/04/22 13:22
MS	R3788258-1	BNAMS4	0504_27	05/04/22 13:43
MSD	R3788258-2	BNAMS4	0504_28	05/04/22 14:03

## Sample Narrative:

Dilution due to matrix impact during extract concentration procedure

**Lab Sample ID:** R3787713-2  
**Lab File ID:** 0503A\_05  
**Instrument ID:** BNAMS4  
**Analytical Batch:** WG1857248  
**Analytical Method:** 8270E

**SDG:** L1487377  
**Preparation Date/Time:** 05/02/22 17:00  
**Analysis Date/Time:** 05/03/22 15:52  
**Dilution Factor:** 1  
**Matrix:** Solid

Sample ID	Lab Sample ID	Instrument	File ID	Analysis date/time
LCS	R3787713-1	BNAMS4	0503A_04	05/03/22 15:31
FD01-041922-0-10	L1487377-02	BNAMS4	0504_23	05/04/22 12:19
BNSF-SC01-041922-0-10	L1487377-01	BNAMS4	0504_24	05/04/22 12:40
BNSF-SG02-041922-0-10	L1487377-03	BNAMS4	0504_25	05/04/22 13:01
OS	L1486885-01	BNAMS4	0504_26	05/04/22 13:22
MS	R3788258-1	BNAMS4	0504_27	05/04/22 13:43
MSD	R3788258-2	BNAMS4	0504_28	05/04/22 14:03

## Sample Narrative:

Dilution due to matrix impact during extract concentration procedure

GC/MS INSTRUMENT  
PERFORMANCE CHECK

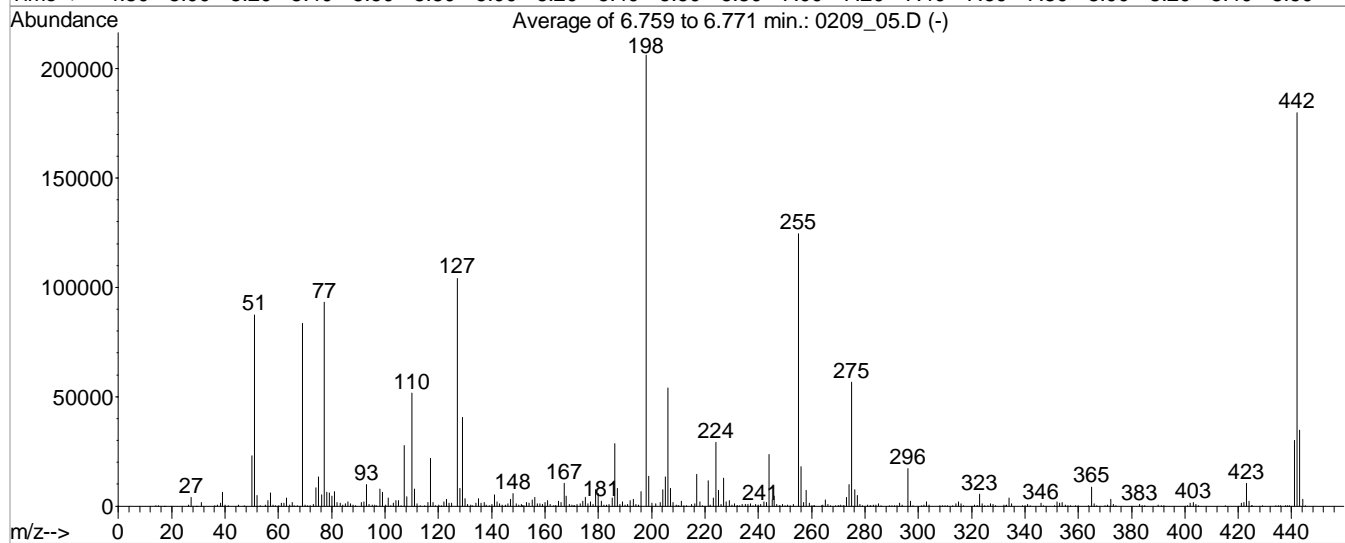
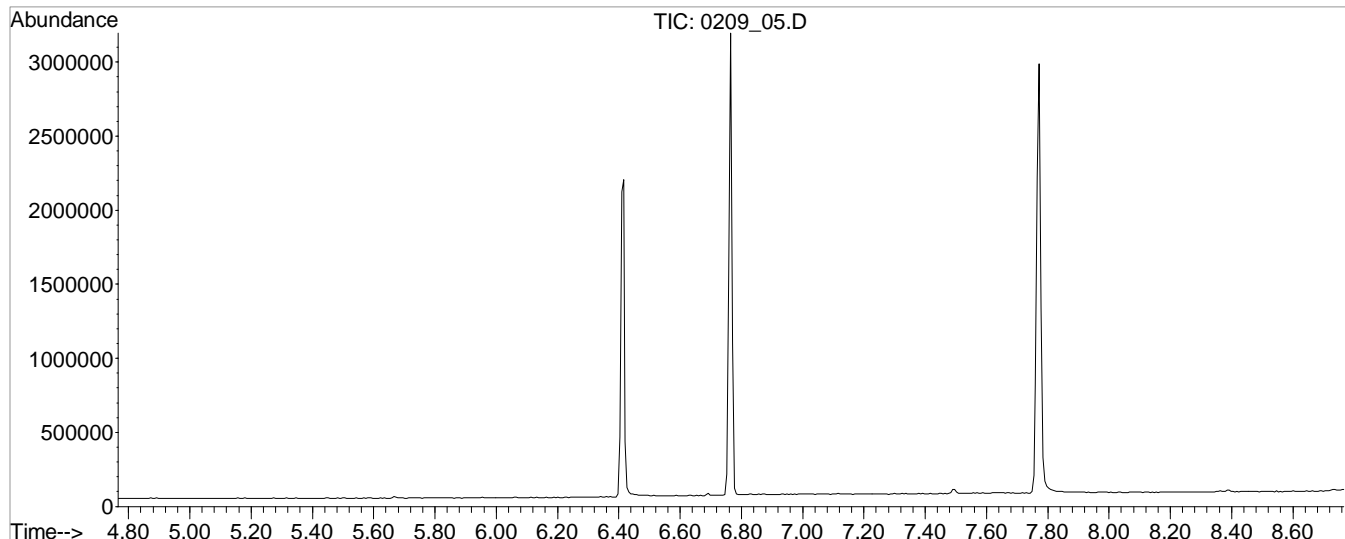
Lab File ID: 0209\_05  
Instrument ID: BNAMS4  
Analysis Date/Time: 02/09/22 10:23

SDG: L1487377  
Analytical Method: 8270E

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	198	10	80	42
68	69	0	2	0
69	69	100	100	100
70	69	0	2	1
127	198	10	80	50
197	198	0	2	0
198	198	50	100	100
199	198	5	9	7
275	198	10	60	28
365	198	1	100	4
441	442	0.0001	24	17
442	198	50	100	87
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-500	500	0209_06	02/09/22 10:43
STD-1000	1000	0209_07	02/09/22 11:04
STD-4000	4000	0209_08	02/09/22 11:25
STD-10000	10000	0209_09	02/09/22 11:46
STD-20000	20000	0209_10	02/09/22 12:07
STD-30000	30000	0209_11	02/09/22 12:27
STD-40000	40000	0209_12	02/09/22 12:48
STD-50000	50000	0209_13	02/09/22 13:09
STD-1K1	1K1	0209_14	02/09/22 13:30
STD-4K1	4K1	0209_15	02/09/22 13:51
STD-10K1	10K1	0209_16	02/09/22 14:11
STD-20K1	20K1	0209_17	02/09/22 14:32
STD-30K1	30K1	0209_18	02/09/22 14:53
STD-40K1	40K1	0209_19	02/09/22 15:14
STD-50K1	50K1	0209_20	02/09/22 15:35
SSCV	BNAMS40209220209_21572116	0209_21	02/09/22 15:56
SSCV	BNAMS40209220209_22572116	0209_22	02/09/22 16:16

Data File : C:\MSDCHEM\1\DATA\020922\0209\_05.D Vial: 2  
 Acq On : 9 Feb 2022 10:23 am Operator: 917  
 Sample : TUNE 50 PPM Inst : BNAMS4  
 Misc : DFTTP TUNE 22B07163 exp. 05/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Method : C:\MSDCHEM\1\METHODS\TUNED.M (RTE Integrator)  
 Title : 8270 BNA



Spectrum Information: Average of 6.759 to 6.771 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	42.4	87399	PASS
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	83556	PASS
70	69	0.00	2	0.7	564	PASS
127	198	10	80	50.5	104194	PASS
197	198	0.00	2	0.0	0	PASS
198	198	50	100	100.0	206269	PASS
199	198	5	9	6.6	13692	PASS
275	198	10	60	27.5	56626	PASS
365	198	1	100	4.3	8784	PASS
441	442	0.01	24	16.7	30103	PASS
442	198	50	100	87.1	179744	PASS
443	442	15	24	19.4	34822	PASS



GC/MS INSTRUMENT  
PERFORMANCE CHECK

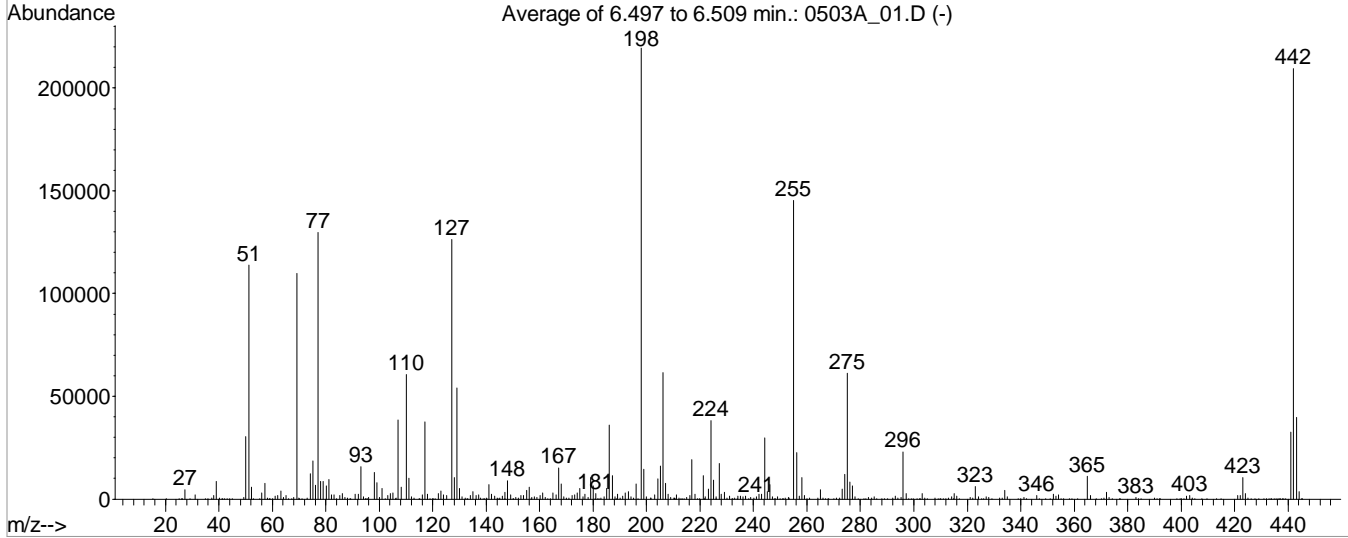
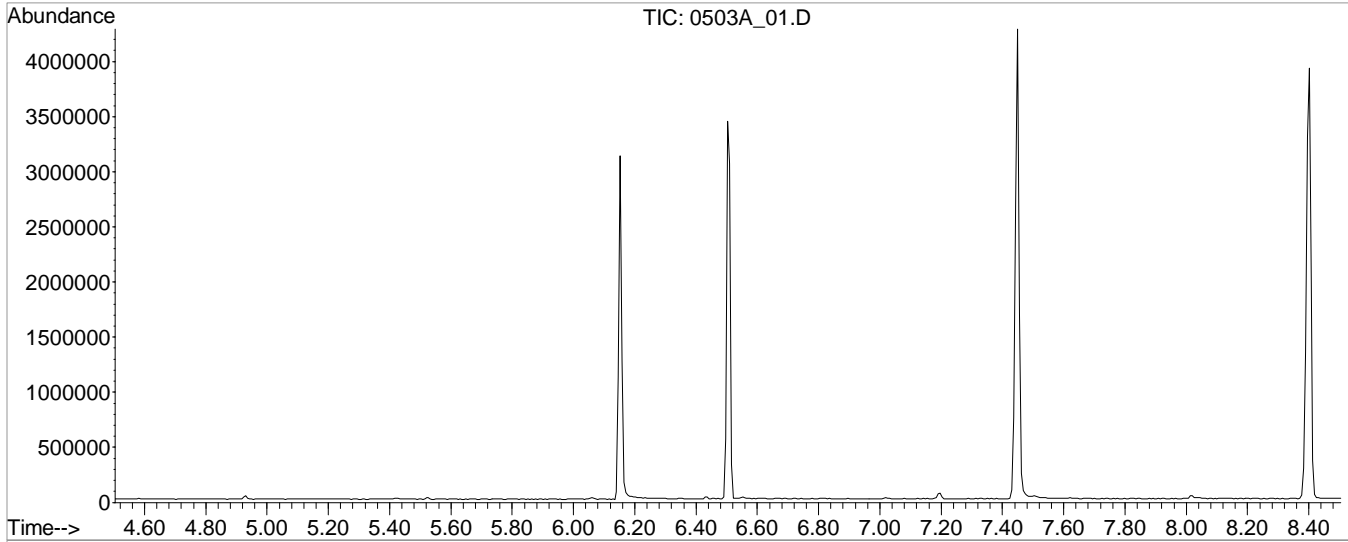
Lab File ID: 0503A\_01T-1  
Instrument ID: BNAMS4  
Analysis Date/Time: 05/03/22 12:48

SDG: L1487377  
Analytical Method: 8270E

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	198	10	80	52
68	69	0	2	1
69	69	100	100	100
70	69	0	2	0
127	198	10	80	58
197	198	0	2	0
198	198	50	100	100
199	198	5	9	7
275	198	10	60	28
365	198	1	100	5
441	442	0.0001	24	16
442	198	50	100	95
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	BNAMS4050322A0503A_02572116	0503A_02	05/03/22 13:09
ICV	BNAMS4050322A0503A_03572116	0503A_03	05/03/22 13:30
LCS	R3787713-1	0503A_04	05/03/22 15:31
BLANK	R3787713-2	0503A_05	05/03/22 15:52

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 01.D Vial: 2  
 Acq On : 3 May 2022 12:48 pm Operator: 3545  
 Sample : TUNE 50 PPM 22D18771 exp 08/11/22 Inst : BNAMS4  
 Misc : DFTTP TUNE Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Method : C:\MSDCHEM\1\METHODS\TUNED.M (RTE Integrator)  
 Title : 8270 BNA



Spectrum Information: Average of 6.497 to 6.509 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	51.8	113808	PASS
68	69	0.00	2	0.6	679	PASS
69	69	100	100	100.0	109720	PASS
70	69	0.00	2	0.4	462	PASS
127	198	10	80	57.6	126373	PASS
197	198	0.00	2	0.1	180	PASS
198	198	50	100	100.0	219522	PASS
199	198	5	9	6.7	14645	PASS
275	198	10	60	27.9	61249	PASS
365	198	1	100	5.0	11003	PASS
441	442	0.01	24	15.5	32482	PASS
442	198	50	100	95.4	209427	PASS
443	442	15	24	19.0	39730	PASS

GC/MS INSTRUMENT  
PERFORMANCE CHECK

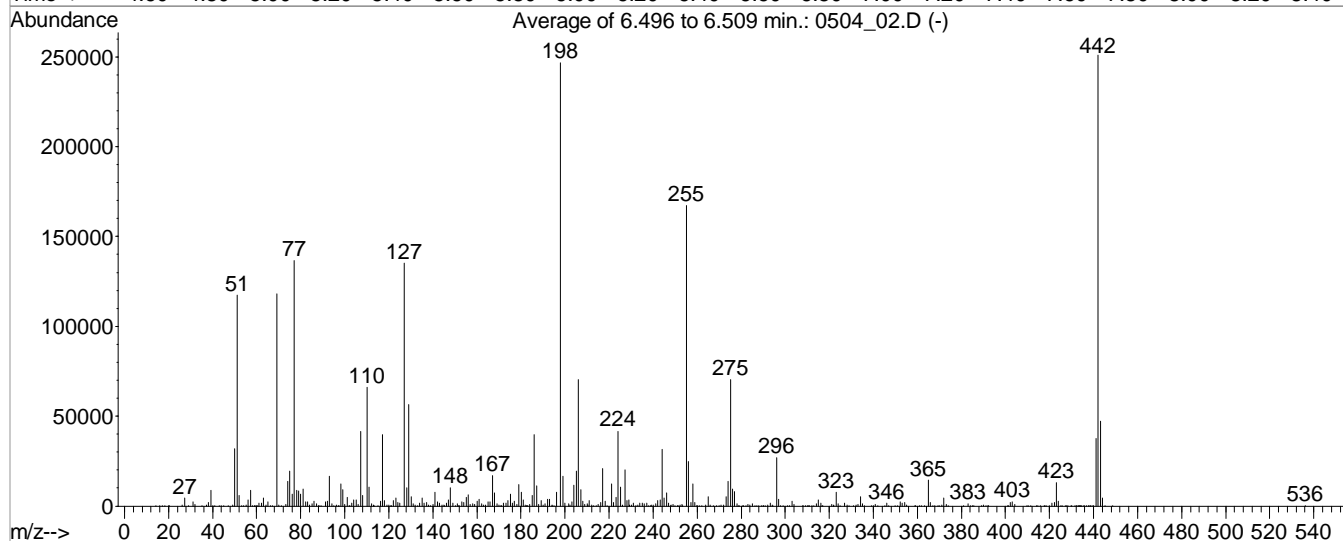
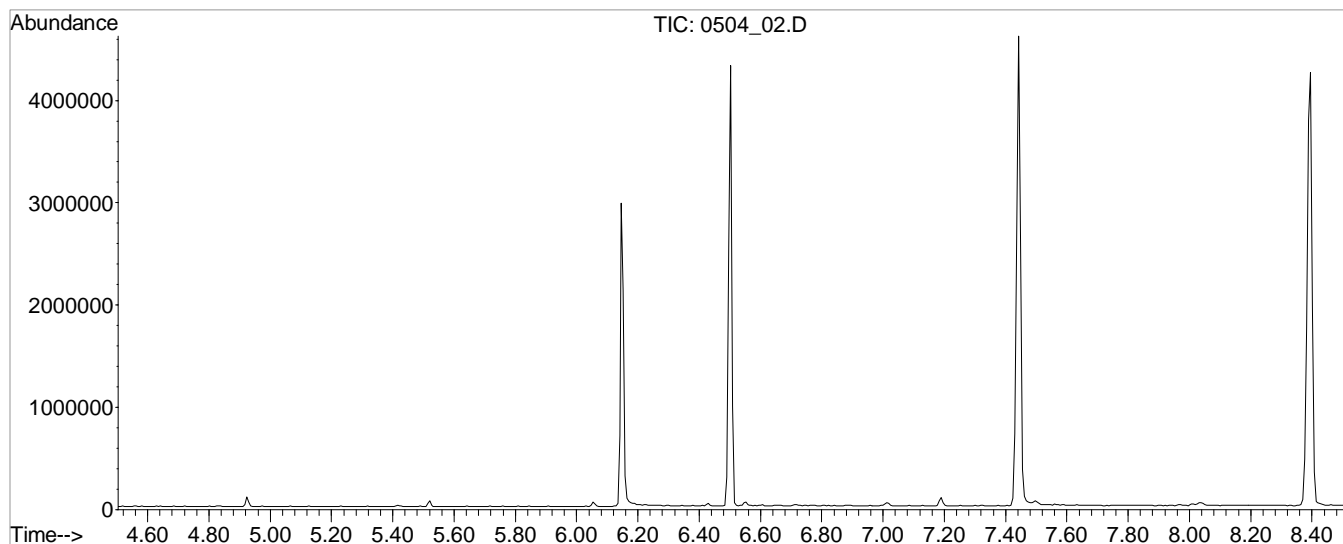
Lab File ID: 0504\_02T-1  
 Instrument ID: BNAMS4  
 Analysis Date/Time: 05/04/22 04:39

SDG: L1487377  
 Analytical Method: 8270E

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	442	10	80	47
68	69	0	2	0
69	69	100	100	100
70	69	0	2	1
127	442	10	80	54
197	198	0	2	0
198	442	50	100	98
199	198	5	9	7
275	442	10	60	28
365	198	1	100	6
441	442	0.0001	24	15
442	442	50	100	100
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	BNAMS40504220504_03572116	0504_03	05/04/22 04:59
ICV	BNAMS40504220504_04572116	0504_04	05/04/22 05:20
FD01-041922-0-10	L1487377-02	0504_23	05/04/22 12:19
BNSF-SC01-041922-0-10	L1487377-01	0504_24	05/04/22 12:40
BNSF-SG02-041922-0-10	L1487377-03	0504_25	05/04/22 13:01
OS	L1486885-01	0504_26	05/04/22 13:22
MS	R3788258-1	0504_27	05/04/22 13:43
MSD	R3788258-2	0504_28	05/04/22 14:03

Data File : C:\MSDCHEM\1\DATA\050422\0504\_02.D Vial: 2  
 Acq On : 4 May 2022 4:39 am Operator: 3545  
 Sample : TUNE 50 PPM 22D18771 exp 08/11/22 Inst : BNAMS4  
 Misc : DFTTP TUNE Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Method : C:\MSDCHEM\1\METHODS\TUNED.M (RTE Integrator)  
 Title : 8270 BNA



Spectrum Information: Average of 6.496 to 6.509 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	442	10	80	46.8	117513	PASS
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	117930	PASS
70	69	0.00	2	0.6	680	PASS
127	442	10	80	53.8	135090	PASS
197	198	0.00	2	0.0	0	PASS
198	442	50	100	98.2	246506	PASS
199	198	5	9	6.7	16610	PASS
275	442	10	60	28.0	70176	PASS
365	198	1	100	5.8	14303	PASS
441	442	0.01	24	15.0	37714	PASS
442	442	50	100	100.0	251002	PASS
443	442	15	24	18.8	47229	PASS

GC/MS INSTRUMENT  
PERFORMANCE CHECK

Lab File ID: 0331\_02  
Instrument ID: BNAMS24  
Analysis Date/Time: 03/31/22 17:02

SDG: L1487377  
Analytical Method: 8270E

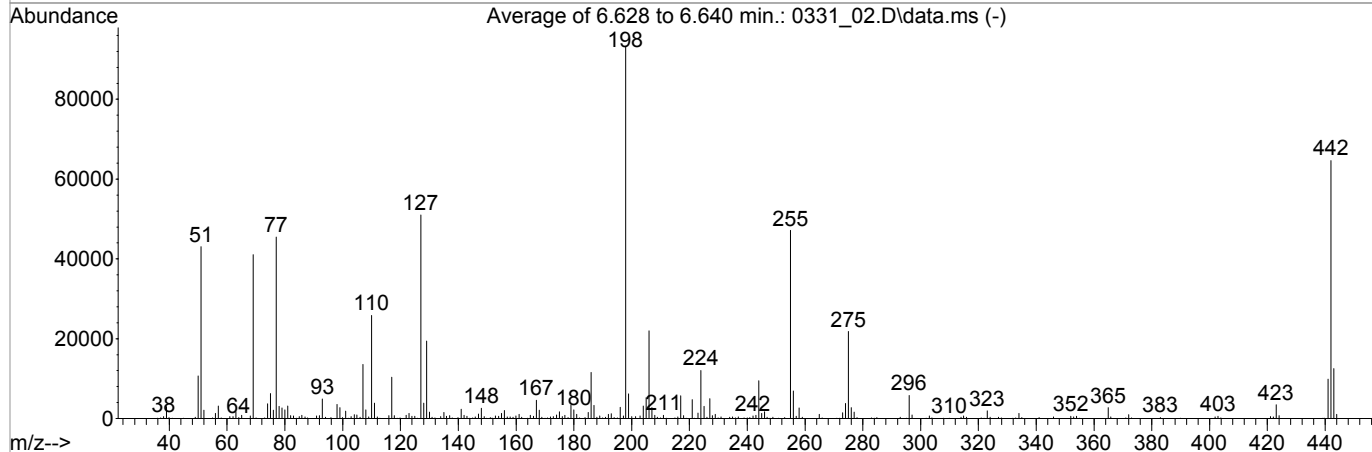
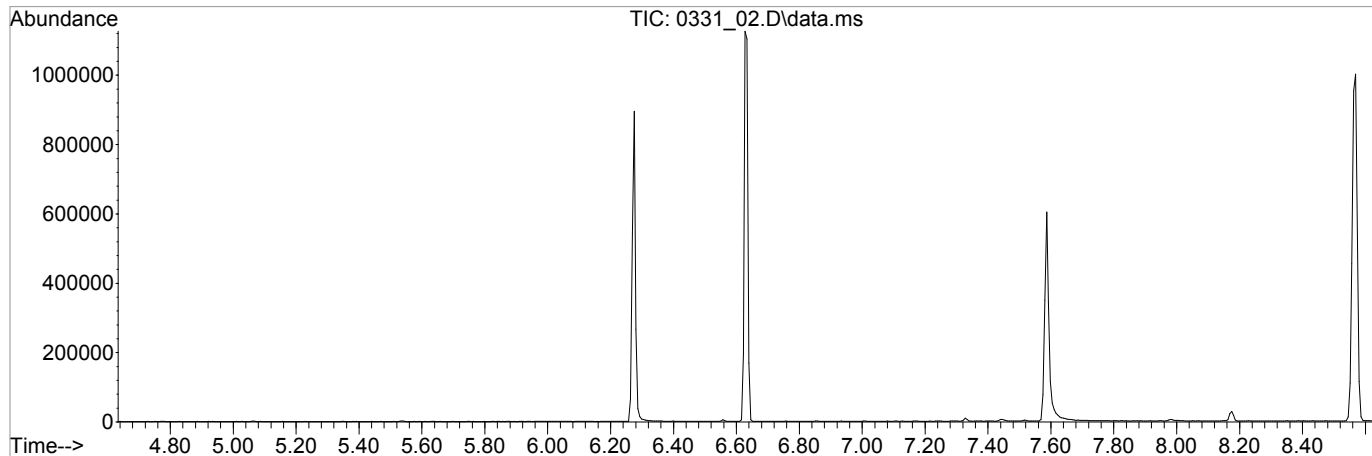
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	198	10	80	46
68	69	0	2	2
69	69	100	100	100
70	69	0	2	0
127	198	10	80	55
197	198	0	2	1
198	198	50	100	100
199	198	5	9	7
275	198	10	60	23
365	198	1	100	3
441	442	0.0001	24	15
442	198	50	100	69
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-500	500	0331_03	03/31/22 17:24
STD-1000	1000	0331_04	03/31/22 17:45
STD-4000	4000	0331_05	03/31/22 18:07
STD-10000	10000	0331_06	03/31/22 18:28
STD-20000	20000	0331_07	03/31/22 18:49
STD-30000	30000	0331_08	03/31/22 19:11
STD-40000	40000	0331_09	03/31/22 19:32
STD-50000	50000	0331_10	03/31/22 19:53
STD-1K1	1K1	0331_11	03/31/22 20:15
STD-4K1	4K1	0331_12	03/31/22 20:36
STD-10K1	10K1	0331_13	03/31/22 20:58
STD-20K1	20K1	0331_14	03/31/22 21:19
STD-30K1	30K1	0331_15	03/31/22 21:40
STD-40K1	40K1	0331_16	03/31/22 22:02
STD-50K1	50K1	0331_17	03/31/22 22:23
SSCV	BNAMS240331220331_18576947	0331_18	03/31/22 22:44
SSCV	BNAMS240331220331_19576947	0331_19	03/31/22 23:06

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_02.D  
Acq On : 31 Mar 2022 5:02 pm  
Operator : 3545  
Sample : TUNE 50 PPM 22C25374 exp 8/11/22  
Misc : DFTPP Tune  
ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e

Method : C:\msdchem\1\methods\TUNED.M  
Title :  
Last Update : Mon Mar 28 16:39:56 2022



Spectrum Information: Average of 6.628 to 6.640 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	46.2	43070	PASS
68	69	0.00	2	1.5	616	PASS
69	69	100	100	100.0	41045	PASS
70	69	0.00	2	0.5	194	PASS
127	198	10	80	54.7	51035	PASS
197	198	0.00	2	0.7	627	PASS
198	198	50	100	100.0	93259	PASS
199	198	5	9	6.6	6186	PASS
275	198	10	60	23.4	21794	PASS
365	198	1	100	3.0	2770	PASS
441	442	0.01	24	15.3	9884	PASS
442	198	50	100	69.4	64677	PASS
443	442	15	24	19.3	12480	PASS

GC/MS INSTRUMENT  
PERFORMANCE CHECK

Lab File ID: 0504A\_02T-1  
Instrument ID: BNAMS24  
Analysis Date/Time: 05/04/22 16:09

SDG: L1487377  
Analytical Method: 8270E

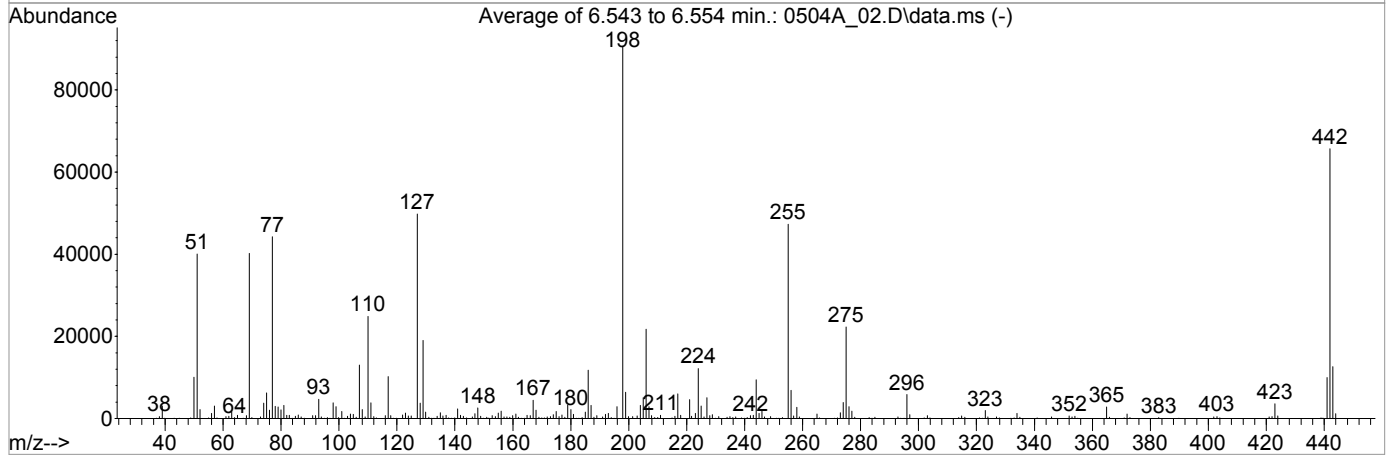
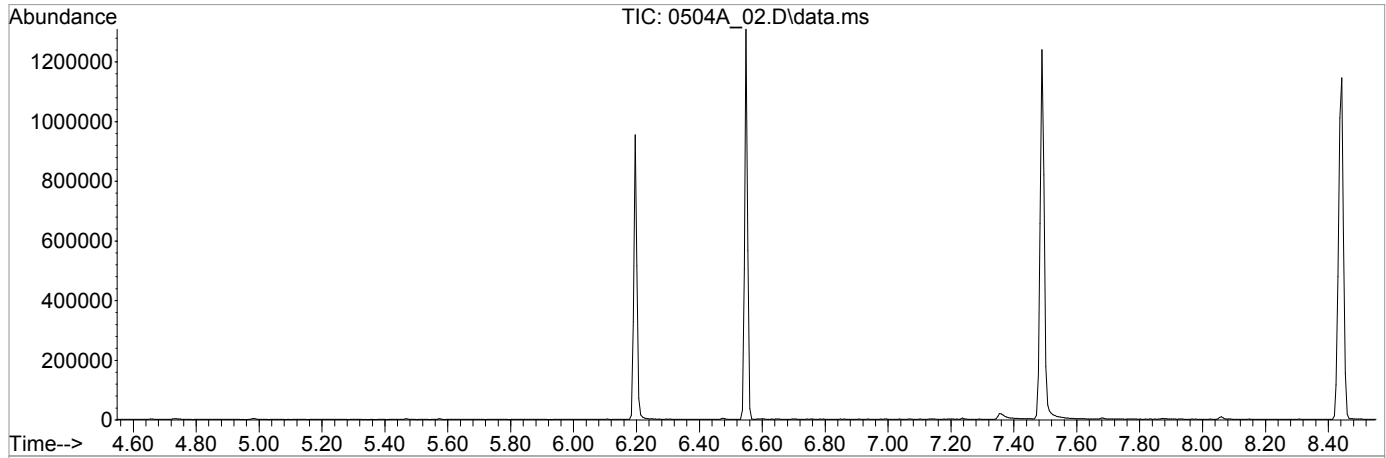
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	198	10	80	44
68	69	0	2	2
69	69	100	100	100
70	69	0	2	0
127	198	10	80	55
197	198	0	2	0
198	198	50	100	100
199	198	5	9	7
275	198	10	60	25
365	198	1	100	3
441	442	0.0001	24	15
442	198	50	100	72
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	BNAMS24050422A0504A_03576947	0504A_03	05/04/22 16:30
ICV	BNAMS24050422A0504A_04576947	0504A_04	05/04/22 16:52
BLANK	R3788334-1	0504A_07	05/04/22 18:14

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_02.D  
 Acq On : 4 May 2022 4:09 pm  
 Operator : 3545  
 Sample : TUNE 50 PPM 22D25444 exp 10/15/22  
 Misc : DFTPP Tune  
 ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e

Method : C:\msdchem\1\methods\TUNED.M  
 Title :  
 Last Update : Mon Mar 28 16:39:56 2022



Spectrum Information: Average of 6.543 to 6.554 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	44.2	40045	PASS
68	69	0.00	2	1.7	683	PASS
69	69	100	100	100.0	40235	PASS
70	69	0.00	2	0.5	217	PASS
127	198	10	80	54.9	49779	PASS
197	198	0.00	2	0.0	0	PASS
198	198	50	100	100.0	90619	PASS
199	198	5	9	7.0	6366	PASS
275	198	10	60	24.6	22294	PASS
365	198	1	100	3.1	2819	PASS
441	442	0.01	24	15.2	9970	PASS
442	198	50	100	72.5	65682	PASS
443	442	15	24	19.2	12608	PASS



INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1487377	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS4	<b>Calibration Start Date:</b>	02/09/22 10:43
<b>Std File:</b>	0503A_02	<b>Calibration End Date:</b>	02/09/22 15:35
		<b>Std Analysis Date:</b>	05/03/22 13:09

Sample ID	File ID	1,4-DCB		ACE		CHR		NAP	
		Response	RT	Response	RT	Response	RT	Response	RT
STANDARD		74619	3.28	154226	5.18	237512	9.07	298130	4.02
UPPER LIMIT		149238		308452		475024		596260	
LOWER LIMIT		37310		77113		118756		149065	
LCS R3787713-1 WG1857248 1x	0503A_04	82890	3.28	170754	5.18	287519	9.08	385068	4.02
BLANK R3787713-2 WG1857248 1x	0503A_05	84368	3.28	158867	5.18	255513	9.07	319717	4.02

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.  
 D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1487377	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS4	<b>Calibration Start Date:</b>	02/09/22 10:43
<b>Std File:</b>	0503A_02	<b>Calibration End Date:</b>	02/09/22 15:35
		<b>Std Analysis Date:</b>	05/03/22 13:09

Sample ID	File ID	PER		PHEN	
		Response	RT	Response	RT
STANDARD		241363	11.75	285680	6.30
UPPER LIMIT		482726		571360	
LOWER LIMIT		120682		142840	
LCS R3787713-1 WG1857248 1x	0503A_04	292231	11.77	320873	6.31
BLANK R3787713-2 WG1857248 1x	0503A_05	266216	11.75	295421	6.30

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.  
 D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1487377	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS4	<b>Calibration Start Date:</b>	02/09/22 10:43
<b>Std File:</b>	0504_03	<b>Calibration End Date:</b>	02/09/22 15:35
		<b>Std Analysis Date:</b>	05/04/22 04:59

Sample ID	File ID	1,4-DCB		ACE		CHR		NAP	
		Response	RT	Response	RT	Response	RT	Response	RT
STANDARD		72614	3.28	146746	5.18	245009	9.07	285391	4.02
UPPER LIMIT		145228		293492		490018		570782	
LOWER LIMIT		36307		73373		122505		142696	
L1487377-02 WG1857248 1x	0504_23	88522	3.28	170599	5.18	336765	9.07	346577	4.02
L1487377-01 WG1857248 2x	0504_24	76753	3.28	151336	5.18	303387	9.07	297510	4.02
L1487377-03 WG1857248 2x	0504_25	78217	3.28	147289	5.18	293237	9.07	301783	4.02
OS L1486885-01 WG1857248 2x	0504_26	77143	3.28	141577	5.18	253623	9.06	297306	4.02
MS R3788258-1 WG1857248 2x	0504_27	75706	3.28	162768	5.18	295235	9.07	350717	4.02
MSD R3788258-2 WG1857248 2x	0504_28	82044	3.28	167362	5.18	282631	9.07	356439	4.02

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1487377	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS4	<b>Calibration Start Date:</b>	02/09/22 10:43
<b>Std File:</b>	0504_03	<b>Calibration End Date:</b>	02/09/22 15:35
		<b>Std Analysis Date:</b>	05/04/22 04:59

Sample ID	File ID	PER		PHEN	
		Response	RT	Response	RT
STANDARD		246687	11.75	276509	6.30
UPPER LIMIT		493374		553018	
LOWER LIMIT		123344		138255	
L1487377-02 WG1857248 1x	0504_23	357365	11.75	347087	6.30
L1487377-01 WG1857248 2x	0504_24	347722	11.75	297436	6.30
L1487377-03 WG1857248 2x	0504_25	288555	11.75	288923	6.30
OS L1486885-01 WG1857248 2x	0504_26	259723	11.75	273018	6.30
MS R3788258-1 WG1857248 2x	0504_27	306410	11.75	314291	6.30
MSD R3788258-2 WG1857248 2x	0504_28	287421	11.75	316041	6.30

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.  
 D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** L1487377-01  
**Client Sample ID:** BNSF-SC01-041922-0-10  
**Lab File ID:** 0504\_24  
**Instrument ID:** BNAMS4  
**Analytical Batch:** WG1857248  
**Dilution Factor:** 2  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** 73.9

**SDG:** L1487377  
**Collected Date/Time:** 04/19/22 12:00  
**Received Date/Time:** 04/28/22 09:00  
**Preparation Date/Time:** 05/03/22 09:05  
**Analysis Date/Time:** 05/04/22 12:40  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15.74 g  
**Final Wt/Vol:** 1 mL

Analyte	CAS	RT	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	0	U		0.0146	0.0901
Acenaphthylene	208-96-8	0	U		0.0127	0.0901
Anthracene	120-12-7	6.36	U		0.0161	0.0901
Benzoic Acid	65-85-0	3.82	U		0.319	4.52
Benzo(a)anthracene	56-55-3	9.05	U		0.0158	0.0901
Benzo(b)fluoranthene	205-99-2	10.99	U		0.0168	0.0901
Benzo(k)fluoranthene	207-08-9	11.05	U		0.0160	0.0901
Benzo(g,h,i)perylene	191-24-2	14.10	0.0187	J	0.0165	0.0901
Benzo(a)pyrene	50-32-8	11.64	0.0185	J	0.0168	0.0901
Carbazole	86-74-8	6.43	U		0.0279	0.901
Chrysene	218-01-9	9.11	U		0.0179	0.0901
Dibenz(a,h)anthracene	53-70-3	13.73	U		0.0250	0.0901
Dibenzofuran	132-64-9	0	U		0.0295	0.901
Fluoranthene	206-44-0	7.31	U		0.0162	0.0901
Fluorene	86-73-7	5.59	U		0.0146	0.0901
Indeno(1,2,3-cd)pyrene	193-39-5	13.76	U		0.0254	0.0901
1-Methylnaphthalene	90-12-0	0	U		0.0115	0.0901
2-Methylnaphthalene	91-57-6	0	U		0.0117	0.0901
Naphthalene	91-20-3	4.03	U		0.0226	0.0901
Phenanthrene	85-01-8	6.32	U		0.0179	0.0901
Bis(2-ethylhexyl)phthalate	117-81-7	9.14	U		0.114	0.901
Di-n-butyl phthalate	84-74-2	6.80	U		0.0308	0.901
Di-n-octyl phthalate	117-84-0	10.32	U		0.0609	0.901
Pyrene	129-00-0	7.53	U		0.0176	0.0901
3&4-Methyl Phenol	3&4-Methyl Phenol	0	U		0.0281	0.901
Pentachlorophenol	87-86-5	0	U		0.0242	0.901
Phenol	108-95-2	0	U		0.0363	0.901

## Sample Narrative:

Dilution due to matrix impact during extract concentration procedure

Data File : C:\MSDCHEM\1\DATA\050422\0504 24.D Vial: 30  
 Acq On : 4 May 2022 12:40 pm Operator: 3545  
 Sample : L1487377-01 1x WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 13:09 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	76753	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	297510	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	151336	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	297436	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	303387	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	347722	8000.00	ppb	-0.11
System Monitoring Compounds						
4) 2-Fluorophenol	2.62	112	80498	6454.1980988	ppb	-0.03
Spiked Amount	20000.000	Range 20 - 120	Recovery =	32.27%		
7) Phenol-d5	3.06	99	100705	6727.4103207	ppb	-0.03
Spiked Amount	20000.000	Range 20 - 120	Recovery =	33.64%		
24) Nitrobenzene-d5	3.59	82	41274	3269.6375225	ppb	-0.04
Spiked Amount	10000.000	Range 18 - 125	Recovery =	32.70%		
50) 2-Fluorobiphenyl	4.70	172	81899	3208.0386156	ppb	-0.05
Spiked Amount	10000.000	Range 28 - 120	Recovery =	32.08%		
73) 2,4,6-Tribromophenol	5.76	330	32533	9662.2876630	ppb	-0.05
Spiked Amount	20000.000	Range 17 - 137	Recovery =	48.31%		
87) p-Terphenyl-d14	7.69	244	183698	4430.5886371	ppb	-0.07
Spiked Amount	10000.000	Range 13 - 131	Recovery =	44.31%		
Target Compounds						
97) Benzo(a)pyrene	11.64	252	9267	216.0016936	ppb	97
100) Benzo(g,h,i)perylene	14.10	276	9543	217.5173687	ppb	73

(#) = qualifier out of range (m) = manual integration

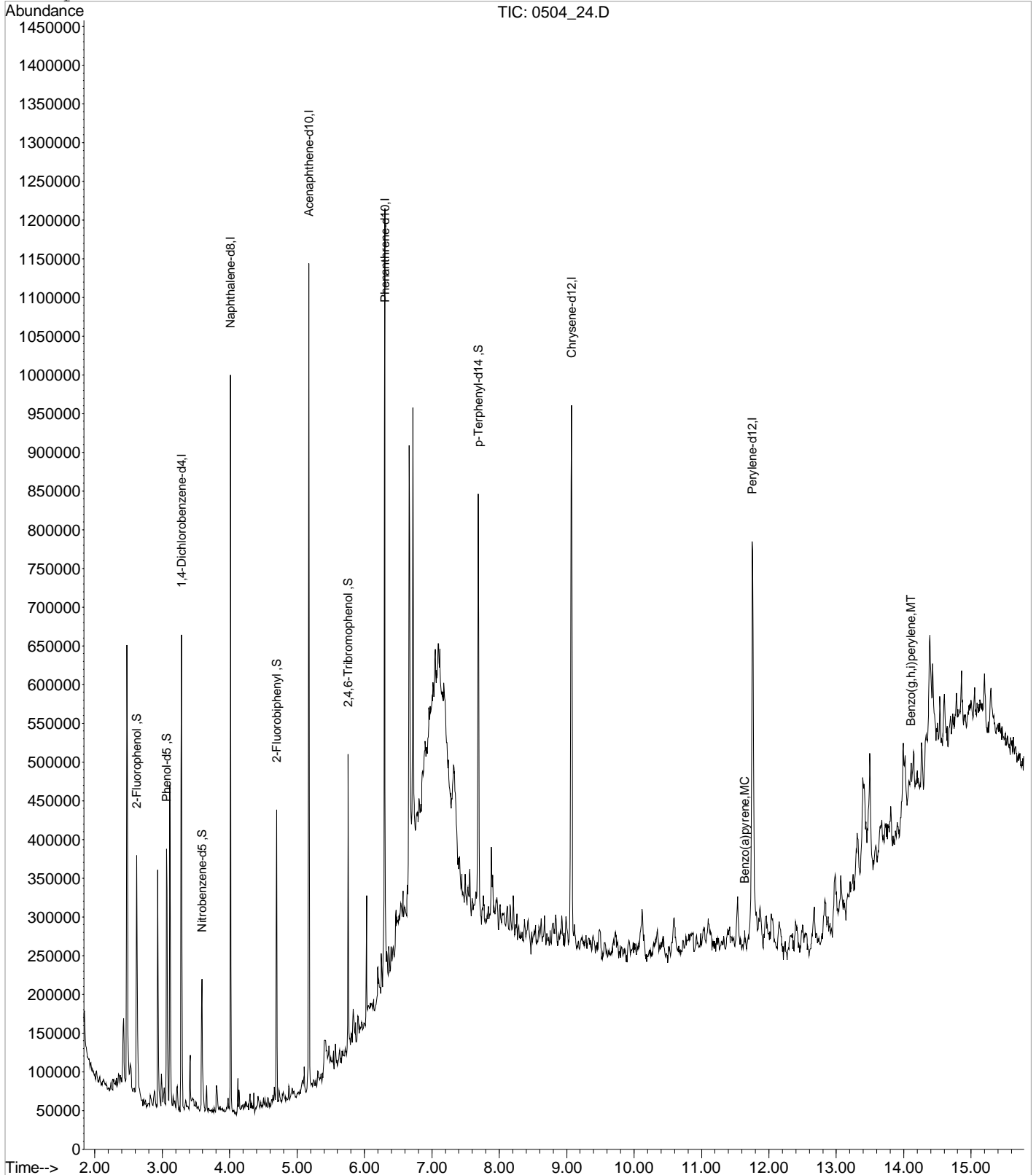
0504\_24.D S804C29V.M Thu May 05 13:09:43 2022

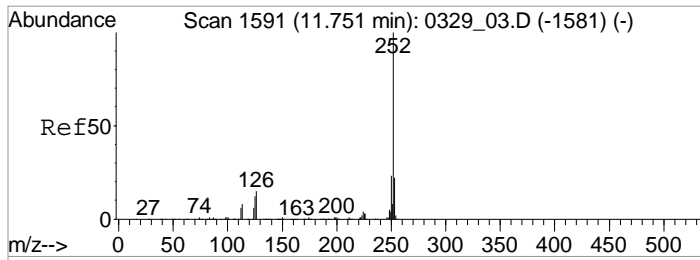
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Acq On : 4 May 2022 12:40 pm  
Sample : L1487377-01 1x WG1857248  
Misc : SOIL ISTD 22D28020 exp 10/28/22  
MS Integration Params: RTEINT.P  
Quant Time: May 5 13:09 2022

Vial: 30  
Operator: 3545  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804C29V.RES

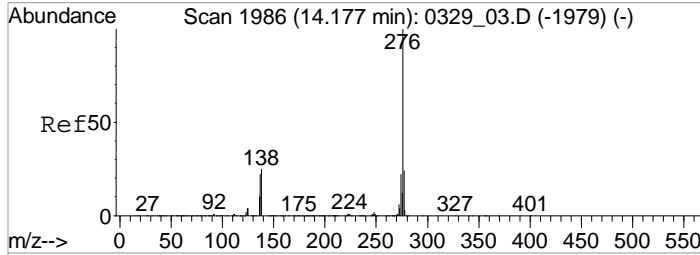
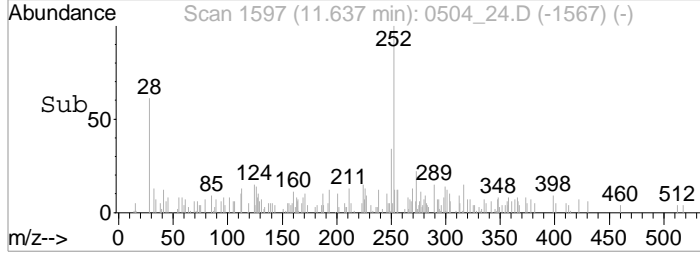
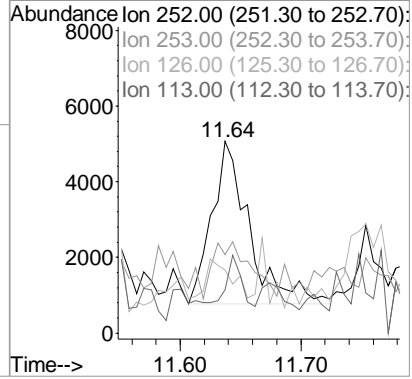
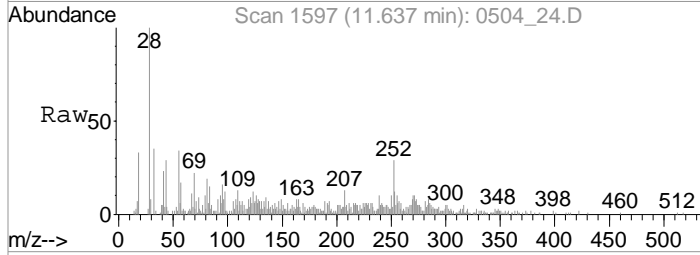
Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Tue Mar 29 09:44:27 2022  
Response via : Initial Calibration





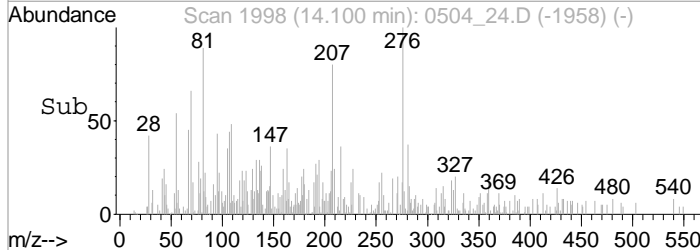
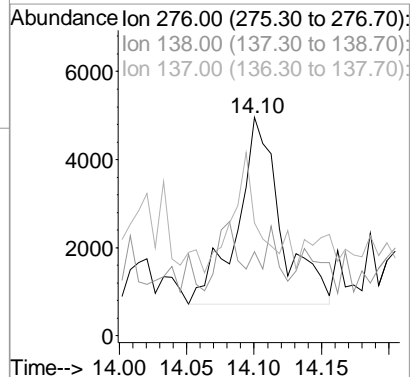
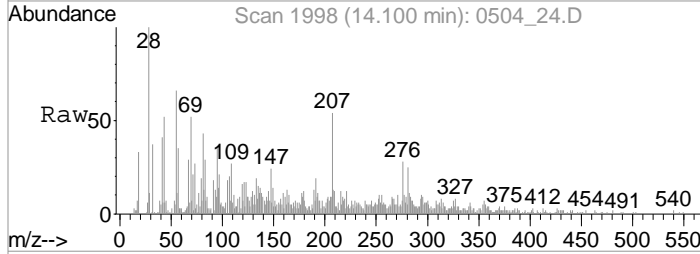
#97  
 Benzo (a) pyrene  
 Concen: 216.0016936 ppb  
 RT: 11.64 min Scan# 1597  
 Delta R.T. -0.11 min  
 Lab File: 0504\_24.D  
 Acq: 4 May 2022 12:40 pm

Tgt Ion	Resp	Lower	Upper
252	9267		
253	20.9	1.6	41.6
126	18.5	0.0	39.2
113	13.2	0.0	30.9



#100  
 Benzo (g, h, i) perylene  
 Concen: 217.5173687 ppb  
 RT: 14.10 min Scan# 1998  
 Delta R.T. -0.08 min  
 Lab File: 0504\_24.D  
 Acq: 4 May 2022 12:40 pm

Tgt Ion	Resp	Lower	Upper
276	9543		
138	5.8	5.0	45.0
137	15.9	2.5	42.5





SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** L1487377-02  
**Client Sample ID:** FD01-041922-0-10  
**Lab File ID:** 0504\_23  
**Instrument ID:** BNAMS4  
**Analytical Batch:** WG1857248  
**Dilution Factor:** 1  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** 73.9

**SDG:** L1487377  
**Collected Date/Time:** 04/19/22 12:15  
**Received Date/Time:** 04/28/22 09:00  
**Preparation Date/Time:** 05/03/22 09:05  
**Analysis Date/Time:** 05/04/22 12:19  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15.38 g  
**Final Wt/Vol:** 0.5 mL

Analyte	CAS	RT	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	0	U		0.00730	0.0451
Acenaphthylene	208-96-8	0	U		0.00635	0.0451
Anthracene	120-12-7	6.36	U		0.00803	0.0451
Benzoic Acid	65-85-0	3.82	U		0.160	2.26
Benzo(a)anthracene	56-55-3	9.05	U		0.00795	0.0451
Benzo(b)fluoranthene	205-99-2	10.99	U		0.00841	0.0451
Benzo(k)fluoranthene	207-08-9	11.02	U		0.00802	0.0451
Benzo(g,h,i)perylene	191-24-2	14.11	U		0.00825	0.0451
Benzo(a)pyrene	50-32-8	11.64	U		0.00838	0.0451
Carbazole	86-74-8	6.58	U		0.0139	0.451
Chrysene	218-01-9	9.11	U		0.00896	0.0451
Dibenz(a,h)anthracene	53-70-3	13.80	U		0.0125	0.0451
Dibenzofuran	132-64-9	0	U		0.0148	0.451
Fluoranthene	206-44-0	7.32	U		0.00814	0.0451
Fluorene	86-73-7	5.58	U		0.00734	0.0451
Indeno(1,2,3-cd)pyrene	193-39-5	13.45	U		0.0127	0.0451
1-Methylnaphthalene	90-12-0	4.66	U		0.00577	0.0451
2-Methylnaphthalene	91-57-6	0	U		0.00585	0.0451
Naphthalene	91-20-3	0	U		0.0113	0.0451
Phenanthrene	85-01-8	6.32	U		0.00895	0.0451
Bis(2-ethylhexyl)phthalate	117-81-7	9.25	U		0.0571	0.451
Di-n-butyl phthalate	84-74-2	6.74	U		0.0154	0.451
Di-n-octyl phthalate	117-84-0	10.34	U		0.0305	0.451
Pyrene	129-00-0	7.53	U		0.00877	0.0451
3&4-Methyl Phenol	3&4-Methyl Phenol	0	U		0.0141	0.451
Pentachlorophenol	87-86-5	0	U		0.0121	0.451
Phenol	108-95-2	0	U		0.0181	0.451

Data File : C:\MSDCHEM\1\DATA\050422\0504 23.D Vial: 29  
 Acq On : 4 May 2022 12:19 pm Operator: 3545  
 Sample : L1487377-02 1x WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 13:09 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	88522	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	346577	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	170599	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	347087	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	336765	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	357365	8000.00	ppb	-0.11
System Monitoring Compounds						
4) 2-Fluorophenol	2.62	112	98289	6832.9187932	ppb	-0.03
Spiked Amount	20000.000	Range	20 - 120	Recovery	=	34.16%
7) Phenol-d5	3.06	99	134481	7789.3632134	ppb	-0.03
Spiked Amount	20000.000	Range	20 - 120	Recovery	=	38.95%
24) Nitrobenzene-d5	3.59	82	49937	3395.8408394	ppb	-0.04
Spiked Amount	10000.000	Range	18 - 125	Recovery	=	33.96%
50) 2-Fluorobiphenyl	4.70	172	112164	3897.4472574	ppb	-0.04
Spiked Amount	10000.000	Range	28 - 120	Recovery	=	38.97%
73) 2,4,6-Tribromophenol	5.76	330	50614	12881.9525435	ppb	-0.05
Spiked Amount	20000.000	Range	17 - 137	Recovery	=	64.41%
87) p-Terphenyl-d14	7.69	244	281772	6122.4444664	ppb	-0.07
Spiked Amount	10000.000	Range	13 - 131	Recovery	=	61.22%

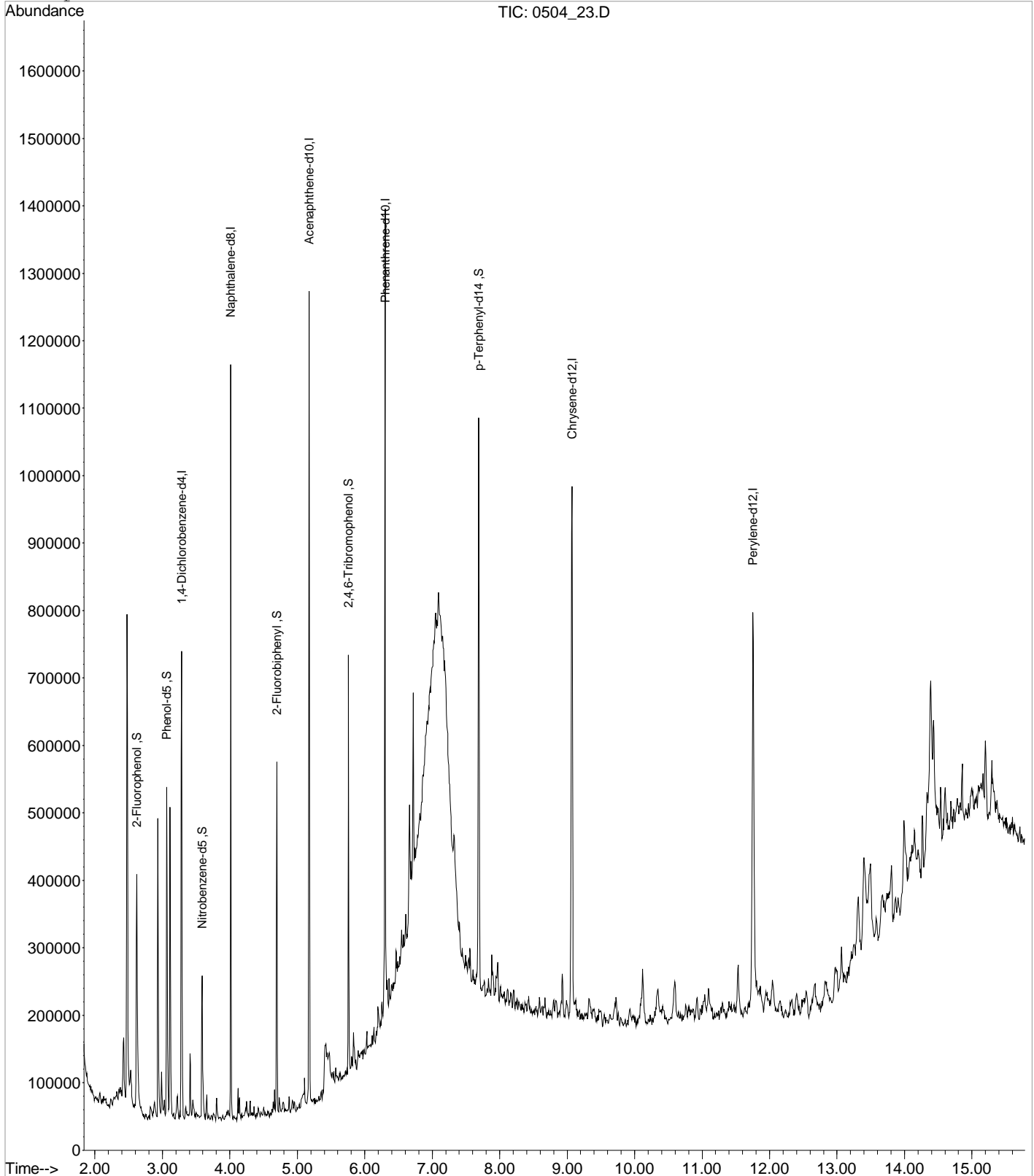
Target Compounds Qvalue

Data File : C:\MSDCHEM\1\DATA\050422\0504 23.D  
Acq On : 4 May 2022 12:19 pm  
Sample : L1487377-02 1x WG1857248  
Misc : SOIL ISTD 22D28020 exp 10/28/22  
MS Integration Params: RTEINT.P  
Quant Time: May 5 13:09 2022

Vial: 29  
Operator: 3545  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804C29V.RES

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Tue Mar 29 09:44:27 2022  
Response via : Initial Calibration



SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** L1487377-03  
**Client Sample ID:** BNSF-SG02-041922-0-10  
**Lab File ID:** 0504\_25  
**Instrument ID:** BNAMS4  
**Analytical Batch:** WG1857248  
**Dilution Factor:** 2  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** 50.4

**SDG:** L1487377  
**Collected Date/Time:** 04/19/22 13:35  
**Received Date/Time:** 04/28/22 09:00  
**Preparation Date/Time:** 05/03/22 09:05  
**Analysis Date/Time:** 05/04/22 13:01  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15.99 g  
**Final Wt/Vol:** 1 mL

Analyte	CAS	RT	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	0	U		0.0214	0.132
Acenaphthylene	208-96-8	0	U		0.0186	0.132
Anthracene	120-12-7	6.23	U		0.0236	0.132
Benzoic Acid	65-85-0	3.81	U		0.468	6.63
Benzo(a)anthracene	56-55-3	9.06	U		0.0232	0.132
Benzo(b)fluoranthene	205-99-2	0	U		0.0246	0.132
Benzo(k)fluoranthene	207-08-9	0	U		0.0234	0.132
Benzo(g,h,i)perylene	191-24-2	14.03	U		0.0242	0.132
Benzo(a)pyrene	50-32-8	11.75	U		0.0246	0.132
Carbazole	86-74-8	0	U		0.0409	1.32
Chrysene	218-01-9	9.11	U		0.0262	0.132
Dibenz(a,h)anthracene	53-70-3	0	U		0.0367	0.132
Dibenzofuran	132-64-9	0	U		0.0433	1.32
Fluoranthene	206-44-0	7.31	U		0.0238	0.132
Fluorene	86-73-7	0	U		0.0214	0.132
Indeno(1,2,3-cd)pyrene	193-39-5	13.44	U		0.0373	0.132
1-Methylnaphthalene	90-12-0	4.66	U		0.0169	0.132
2-Methylnaphthalene	91-57-6	0	U		0.0171	0.132
Naphthalene	91-20-3	0	U		0.0331	0.132
Phenanthrene	85-01-8	6.23	U		0.0262	0.132
Bis(2-ethylhexyl)phthalate	117-81-7	9.13	U		0.167	1.32
Di-n-butyl phthalate	84-74-2	6.67	U		0.0452	1.32
Di-n-octyl phthalate	117-84-0	10.43	U		0.0893	1.32
Pyrene	129-00-0	7.31	U		0.0258	0.132
3&4-Methyl Phenol	3&4-Methyl Phenol	0	U		0.0413	1.32
Pentachlorophenol	87-86-5	0	U		0.0355	1.32
Phenol	108-95-2	0	U		0.0532	1.32

## Sample Narrative:

Dilution due to matrix impact during extract concentration procedure

Data File : C:\MSDCHEM\1\DATA\050422\0504 25.D Vial: 31  
 Acq On : 4 May 2022 1:01 pm Operator: 3545  
 Sample : L1487377-03 1x WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 13:10 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	78217	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	301783	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	147289	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	288923	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	293237	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	288555	8000.00	ppb	-0.11
System Monitoring Compounds						
4) 2-Fluorophenol	2.63	112	95420	7507.4218124	ppb	-0.02
Spiked Amount	20000.000	Range 20 - 120	Recovery =	37.54%		
7) Phenol-d5	3.07	99	115575	7576.2620944	ppb	-0.03
Spiked Amount	20000.000	Range 20 - 120	Recovery =	37.88%		
24) Nitrobenzene-d5	3.59	82	48219	3765.7201719	ppb	-0.04
Spiked Amount	10000.000	Range 18 - 125	Recovery =	37.66%		
50) 2-Fluorobiphenyl	4.70	172	85422	3437.9745780	ppb	-0.04
Spiked Amount	10000.000	Range 28 - 120	Recovery =	34.38%		
73) 2,4,6-Tribromophenol	5.76	330	27413	8381.5401979	ppb	-0.05
Spiked Amount	20000.000	Range 17 - 137	Recovery =	41.91%		
87) p-Terphenyl-d14	7.69	244	141191	3523.2398976	ppb	-0.07
Spiked Amount	10000.000	Range 13 - 131	Recovery =	35.23%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

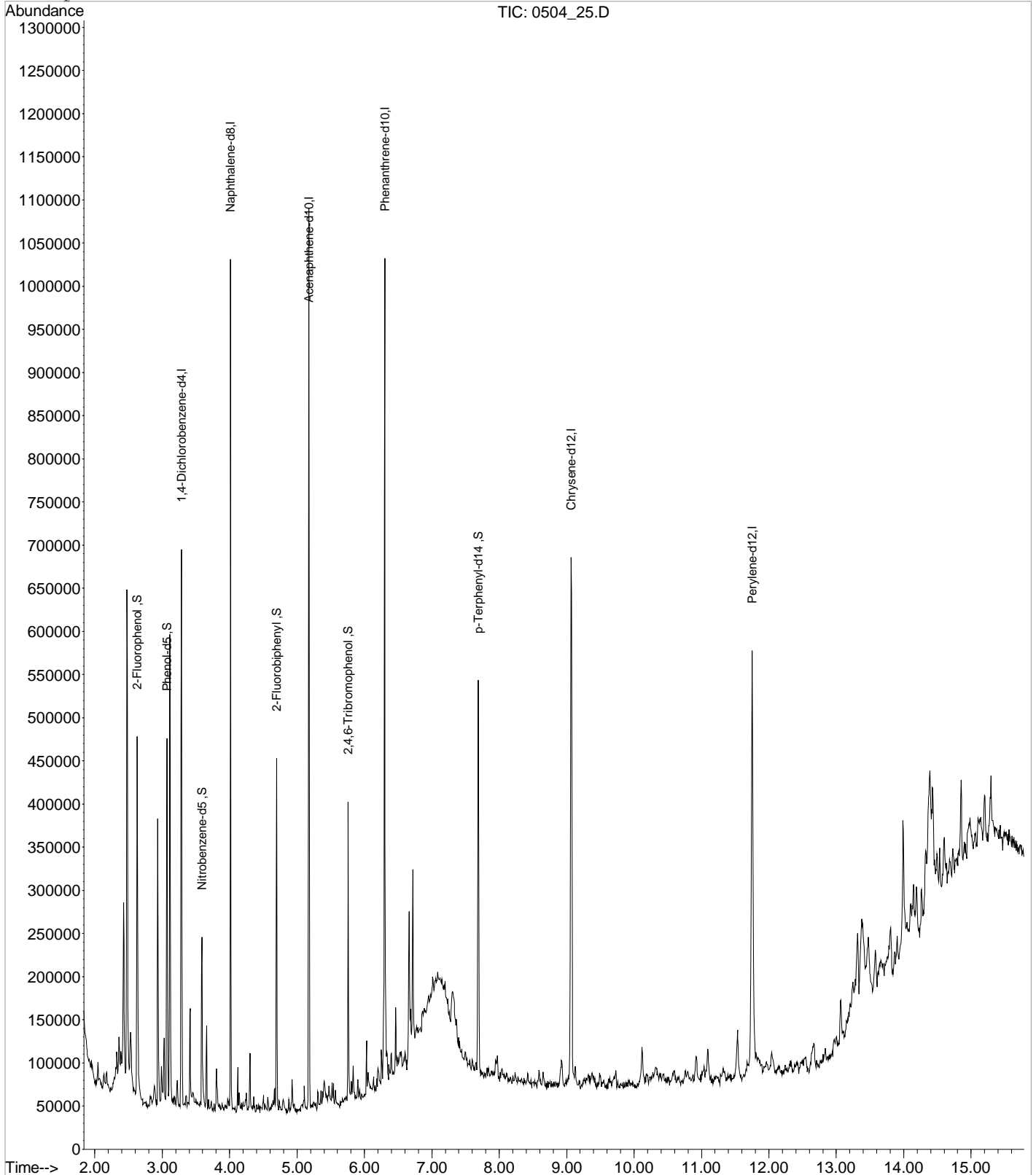
0504\_25.D S804C29V.M Thu May 05 13:10:10 2022

Data File : C:\MSDCHEM\1\DATA\050422\0504 25.D  
Acq On : 4 May 2022 1:01 pm  
Sample : L1487377-03 1x WG1857248  
Misc : SOIL ISTD 22D28020 exp 10/28/22  
MS Integration Params: RTEINT.P  
Quant Time: May 5 13:10 2022

Vial: 31  
Operator: 3545  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804C29V.RES

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Tue Mar 29 09:44:27 2022  
Response via : Initial Calibration



SDG: L1487377  
Instrument ID: BNAMS4

Analytical Method: 8270E

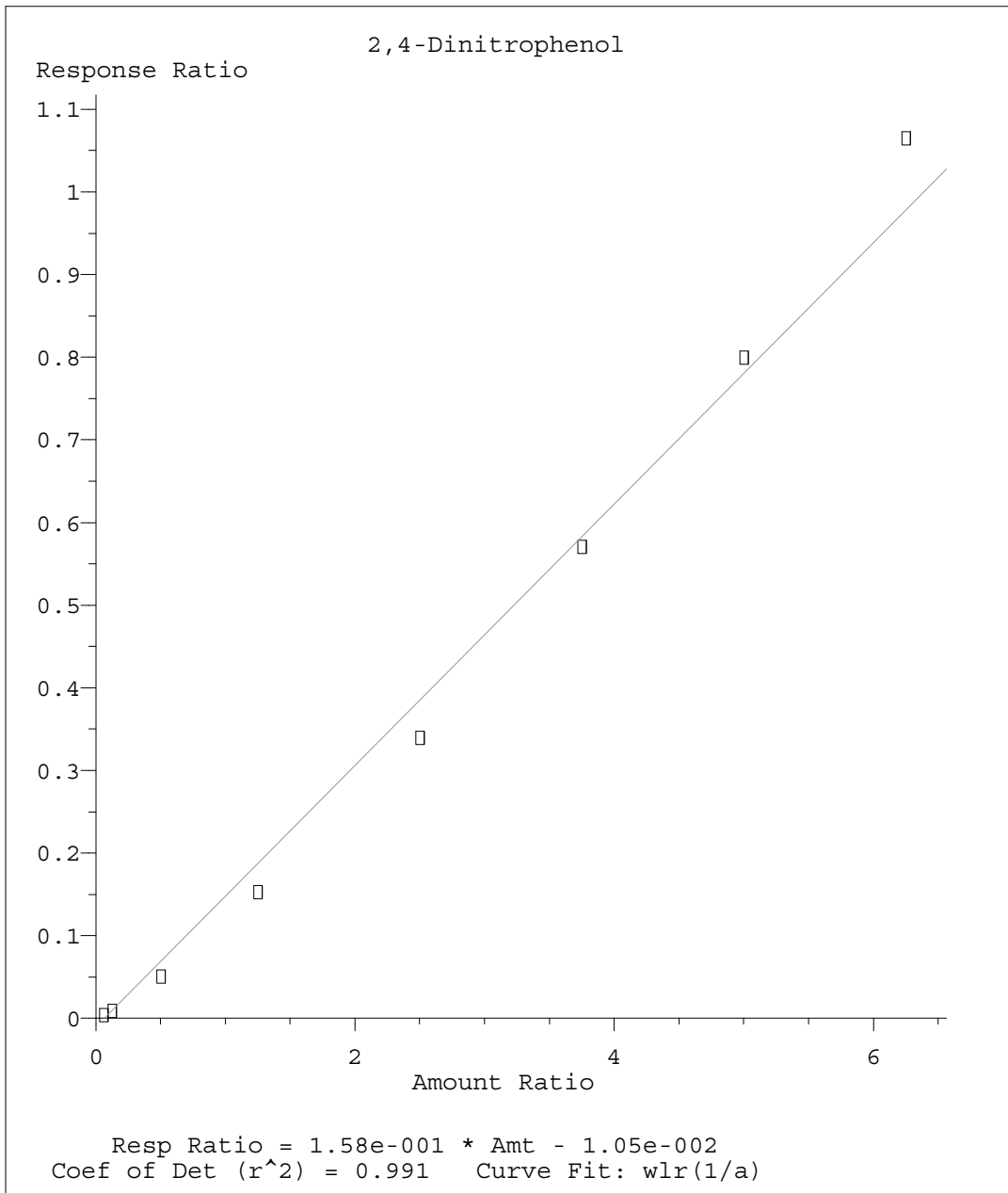
Analyte	RRF: 500	RRF: 1000	RRF: 4000	RRF: 10000	RRF: 20000	RRF: 30000	RRF: 40000	RRF: 50000	RRF: 4K1	RRF: 10K1
Analysis date/time	02/09/22 10:43	02/09/22 11:04	02/09/22 11:25	02/09/22 11:46	02/09/22 12:07	02/09/22 12:27	02/09/22 12:48	02/09/22 13:09	02/09/22 13:51	02/09/22 14:11
PHENOL	1.86	1.7610	1.6110	1.6190	1.5890	1.5540	1.5380	1.6160		
3&4-METHYL PHENOL	1.5470	1.4040	1.3310	1.3490	1.31	1.2870	1.2680	1.31		
NAPHTHALENE	1.1570	1.1090	0.9970	1.0020	0.9730	0.9690	0.9590	0.9840		
2-METHYLNAPHTHALENE	0.7650	0.7160	0.6390	0.6560	0.6250	0.6280	0.6270	0.6560		
1-METHYLNAPHTHALENE	0.7270	0.6540	0.6070	0.61	0.5920	0.59	0.5960	0.6150		
ACENAPHTHYLENE	1.9170	1.8280	1.7420	1.7820	1.7190	1.7290	1.74	1.7750		
ACENAPHTHENE	1.33	1.2470	1.1440	1.17	1.1090	1.1180	1.11	1.1350		
DIBENZOFURAN	1.8720	1.7490	1.5850	1.6110	1.5540	1.5280	1.5350	1.55		
FLUORENE	1.4190	1.3880	1.3130	1.3260	1.2610	1.2670	1.27	1.2890		
PHENANTHRENE	1.1840	1.1520	1.0180	1.0260	1.0090	1.0070	0.9990	1.0250		
ANTHRACENE	1.1850	1.1120	1.0030	1.0530	1.0410	1.0380	1.0290	1.0620		
CARBAZOLE	1.0770	1.0220	0.94	0.9840	0.9550	0.9160	0.9280	0.9550		
DI-N-BUTYL PHTHALATE	1.1590	1.0630	1.0420	1.1170	1.1170	1.1430	1.2090	1.2550		
FLUORANTHENE	1.2040	1.1390	1.0510	1.0870	1.0630	1.0850	1.1220	1.1950		
PYRENE	1.3430	1.3720	1.2060	1.2780	1.2960	1.2780	1.2720	1.2520		
BENZO(A)ANTHRACENE	1.27	1.23	1.0720	1.1390	1.1430	1.1290	1.1310	1.1030		
CHRYSENE	1.2320	1.2020	1.0740	1.1040	1.0990	1.0820	1.0840	1.0520		
BIS(2-ETHYLHEXYL)PHTHALATE	0.7150	0.6660	0.6360	0.7410	0.7620	0.7650	0.7620	0.7520		
DI-N-OCTYL PHTHALATE	1.1290	1.0730	1.0570	1.2150	1.2870	1.2960	1.3010	1.2770		
BENZO(B)FLUORANTHENE	1.3280	1.1770	1.0640	1.1090	1.1020	1.1070	1.0910	1.1410		
BENZO(K)FLUORANTHENE	1.2610	1.1670	1.0410	1.1050	1.1010	1.1030	1.0950	1.1080		
BENZO(A)PYRENE	1.0460	1.0160	0.9140	0.97	0.9830	0.9890	0.9780	1		
INDENO(1,2,3-CD)PYRENE	1.0370	1.0050	0.9320	0.9830	0.9830	0.9540	0.9270	0.9370		
DIBENZ(A,H)ANTHRACENE	1.0930	1.1170	0.99	1.0520	1.0270	1.0160	0.9840	0.9890		
BENZO(G,H,I)PERYLENE	1.15	1.0620	0.9870	1.04	1.0060	0.9740	0.93	0.9250		
2-FLUOROPHENOL	1.4680	1.4030	1.2730	1.2720	1.2630	1.2240	1.2140	1.2830		
PHENOL-D5	1.8550	1.5980	1.5240	1.5320	1.5050	1.4770	1.4580	1.5320		
NITROBENZENE-D5	0.39	0.3210	0.3390	0.3160	0.34	0.3450	0.3410	0.3230		
2-FLUOROBIPHENYL	1.5680	1.4650	1.3320	1.3440	1.2780	1.2630	1.2610	1.2850		
2,4,6-TRIBROMOPHENOL	0.0790	0.0770	0.0830	0.0910	0.0930	0.0940	0.1010	0.1070		
P-TERPHENYL-D14	1.1760	1.1190	0.9890	1.0850	1.1070	1.0910	1.1020	1.0760		
PENTACHLOROPHENOL		0.0960	0.1020	0.12	0.1250	0.1290	0.1350	0.1420		
BENZOIC ACID									0.1110	0.1390
File ID:	0209_06	0209_07	0209_08	0209_09	0209_10	0209_11	0209_12	0209_13	0209_15	0209_16

SDG: L1487377  
Instrument ID: BNAMS4

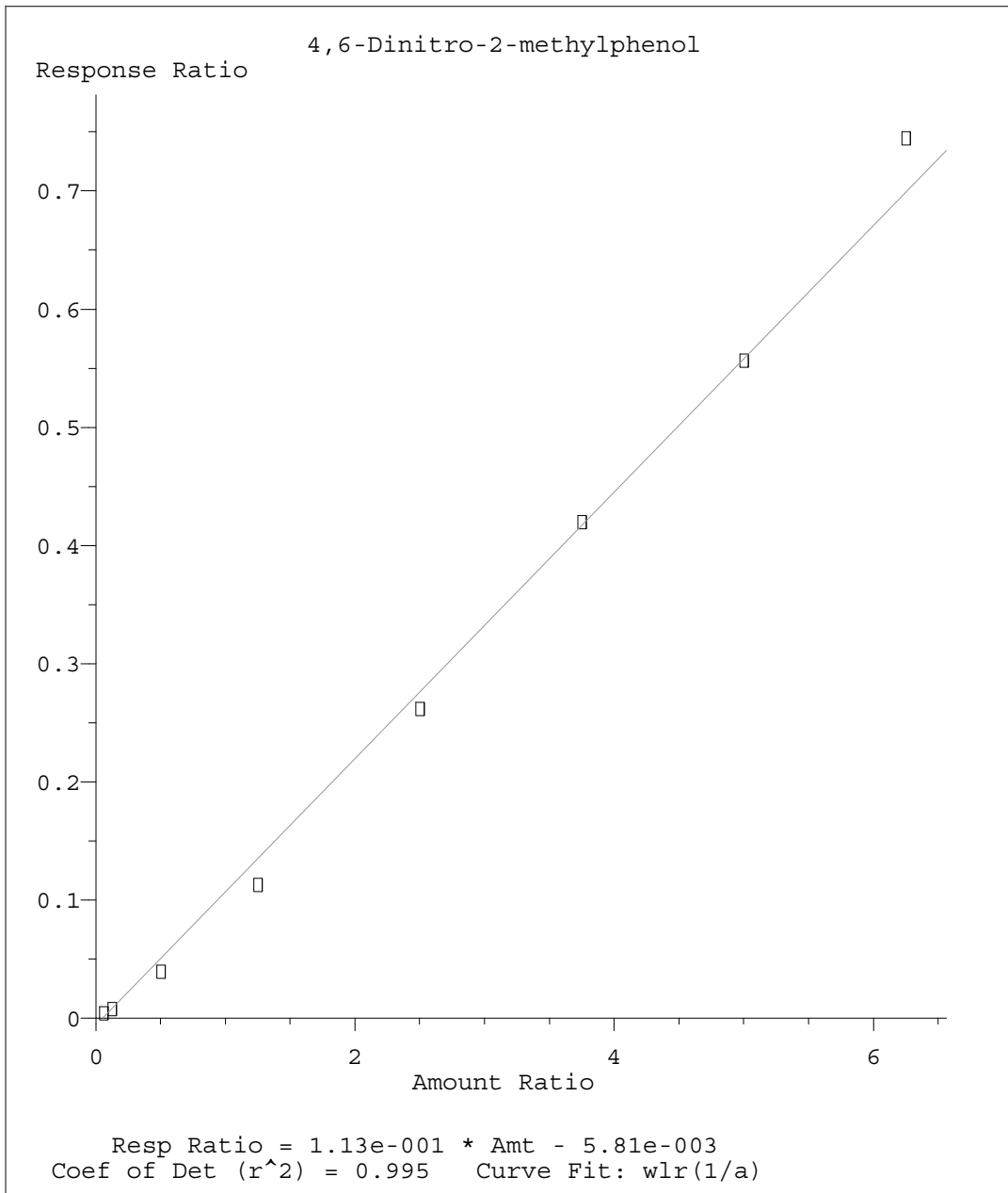
Analytical Method: 8270E

Analyte	RRF: 20K1	RRF: 30K1	RRF: 40K1	RRF: 50K1	RRF. Avg	%RSD	COD
Analysis date/time	02/09/22 14:32	02/09/22 14:53	02/09/22 15:14	02/09/22 15:35			
PHENOL					1.643512	6.71	
3&4-METHYL PHENOL					1.350649	6.63	
NAPHTHALENE					1.018747	7.18	
2-METHYLNAPHTHALENE					0.663826	7.61	
1-METHYLNAPHTHALENE					0.623837	7.43	
ACENAPHTHYLENE					1.779211	3.71	
ACENAPHTHENE					1.170435	6.73	
DIBENZOFURAN					1.623192	7.59	
FLUORENE					1.316666	4.46	
PHENANTHRENE					1.052577	6.87	
ANTHRACENE					1.065424	5.42	
CARBAZOLE					0.972084	5.54	
DI-N-BUTYL PHTHALATE					1.138017	6.21	
FLUORANTHENE					1.1182	5.15	
PYRENE					1.28723	3.99	
BENZO(A)ANTHRACENE					1.151953	5.68	
CHRYSENE					1.116357	5.8	
BIS(2-ETHYLHEXYL)PHTHALATE					0.724997	6.75	
DI-N-OCTYL PHTHALATE					1.204403	8.59	
BENZO(B)FLUORANTHENE					1.139642	7.29	
BENZO(K)FLUORANTHENE					1.122546	5.83	
BENZO(A)PYRENE					0.987052	3.86	
INDENO(1,2,3-CD)PYRENE					0.969769	4.03	
DIBENZ(A,H)ANTHRACENE					1.033545	4.86	
BENZO(G,H,I)PERYLENE					1.009366	7.35	
2-FLUOROPHENOL					1.299982	6.82	
PHENOL-D5					1.560263	8.09	
NITROBENZENE-D5					0.339442	6.83	
2-FLUOROBIPHENYL					1.349543	8.23	
2,4,6-TRIBROMOPHENOL					0.090561	11.74	
P-TERPHENYL-D14					1.093292	4.78	
PENTACHLOROPHENOL					0.121187	13.94	
BENZOIC ACID	0.1430	0.1360	0.1310	0.1260	0.13089	8.56	
File ID:	0209_17	0209_18	0209_19	0209_20			

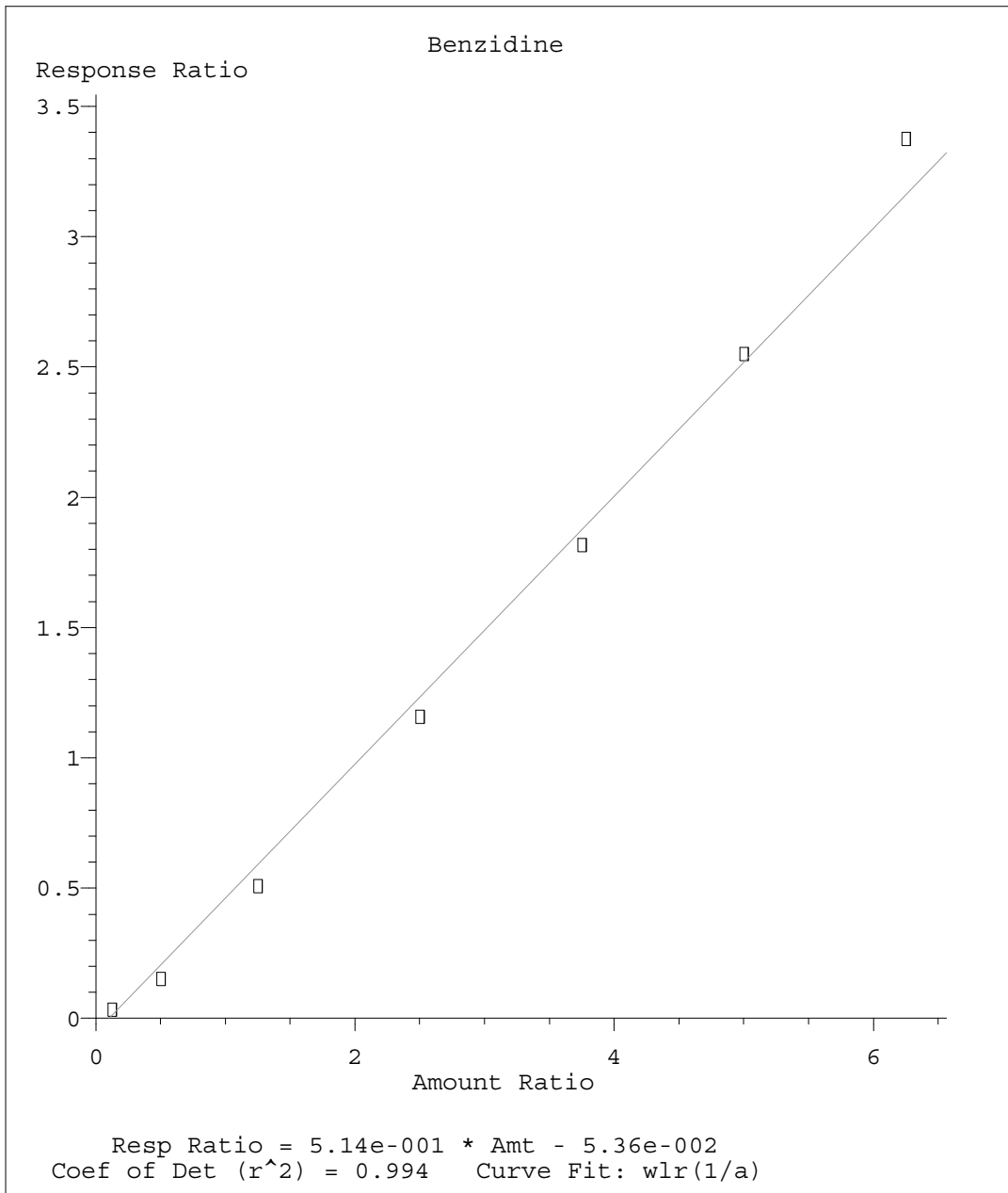




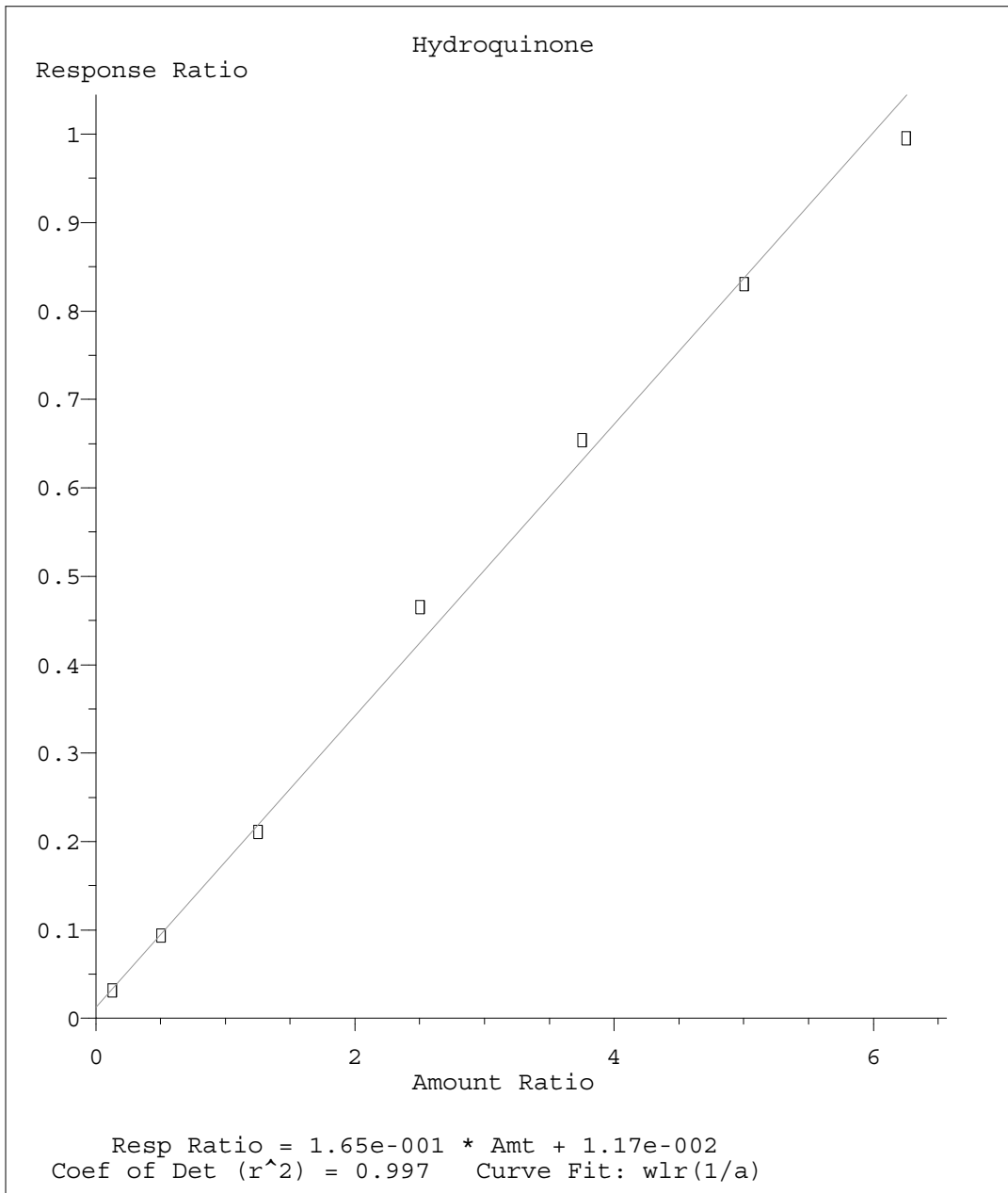
Method Name: C:\MSDCHEM\1\METHODS\S804B09V.M



Method Name: C:\MSDCHEM\1\METHODS\S804B09V.M



Method Name: C:\MSDCHEM\1\METHODS\S804B09V.M



Method Name: C:\MSDCHEM\1\METHODS\S804B09V.M

Response Factor Report BNAMS4

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration

Calibration Files

500 =0209 06.D 1K =0209 07.D 4K =0209 08.D  
 10K =0209\_09.D 20K =0209\_10.D 30K =0209\_11.D

Compound	500	1K	4K	10K	20K	30K	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	-----ISTD-----							
2) TM Pyridine	1.278	1.248	1.226	1.224	1.215	1.222	1.238	2.11
3) MT N-Nitrosodimeth	0.791	0.721	0.658	0.658	0.631	0.611	0.664	9.34
4) S 2-Fluorophenol	1.468	1.403	1.273	1.272	1.263	1.224	1.300	6.82
5) MT Aniline	0.809	0.804	0.729	0.745	0.717	0.697	0.740	6.02
6) MT bis(2-Chloroeth	1.328	1.237	1.062	1.037	1.077	1.116	1.150	8.78
7) S Phenol-d5	1.855	1.598	1.524	1.532	1.505	1.477	1.560	8.09
8) MC Phenol	1.860	1.761	1.611	1.619	1.589	1.554	1.644	6.71
9) Benzaldehyde							0.356	4.92
10) MT 2-Chlorophenol	1.477	1.400	1.305	1.295	1.266	1.249	1.316	6.22
11) T n-Decane	0.972	0.830	0.789	0.770	0.731	0.709	0.775	11.94
12) MT 1,3-Dichloroben	1.717	1.603	1.455	1.474	1.421	1.398	1.488	7.66
13) MTC 1,4-Dichloroben	1.747	1.661	1.518	1.503	1.485	1.442	1.531	7.38
14) MT Benzyl Alcohol	1.106	1.048	0.989	1.007	1.002	0.992	1.018	4.06
15) MT 1,2-Dichloroben	1.627	1.513	1.396	1.385	1.360	1.324	1.408	7.72
16) MT bis(2-Chloroiso	0.614	0.531	0.483	0.469	0.447	0.442	0.482	13.00
17) MT 2,2-oxybis(1-ch	0.614	0.531	0.483	0.469	0.447	0.442	0.482	13.00
18) MT 2-Methylphenol	1.336	1.276	1.157	1.194	1.153	1.132	1.189	6.54
19) MT Hexachloroethan	0.600	0.593	0.549	0.559	0.545	0.530	0.556	4.83
20) MP N-Nitrosodi-n-p	0.979	0.933	0.849	0.875	0.841	0.818	0.869	6.73
21) MT 3&4-Methyl phen	1.547	1.404	1.331	1.349	1.310	1.287	1.351	6.63
22) MT Acetophenone							1.654	2.40
23) I Naphthalene-d8	-----ISTD-----							
24) S Nitrobenzene-d5	0.390	0.321	0.339	0.316	0.340	0.345	0.339	6.83
25) MT Nitrobenzene	0.370	0.342	0.326	0.333	0.320	0.320	0.332	5.25
26) MT Isophorone	0.663	0.613	0.559	0.595	0.580	0.586	0.595	5.24
27) MCT 2-Nitrophenol	0.172	0.163	0.155	0.163	0.165	0.169	0.167	4.46
28) MT 2,4-Dimethylphe	0.342	0.334	0.302	0.302	0.297	0.303	0.311	5.62
29) MT bis(2-Chloretho	0.449	0.419	0.366	0.371	0.360	0.359	0.381	9.03
30) MCT 2,4-Dichlorophe	0.284	0.271	0.247	0.260	0.255	0.257	0.262	4.42
31) MT Benzoic Acid							0.131	8.56
32) MT 1,2,4-Trichloro	0.335	0.317	0.288	0.289	0.278	0.274	0.293	7.40
33) MT alpha-terpineol							0.251	14.78
34) MT Naphthalene	1.157	1.109	0.997	1.002	0.973	0.969	1.019	7.18
35) MT 4-Chloroaniline	0.127	0.128	0.116	0.119	0.113	0.115	0.118	5.02
36) MCT Hexachloro-1,3-	0.188	0.166	0.153	0.158	0.152	0.151	0.160	7.77
37) Hydroquinone							0.185	16.97
38) MT Quinoline							0.533	14.37
39) MT Caprolactam							0.055	10.67
40) MCT 4-Chloro-3-meth	0.283	0.267	0.250	0.262	0.259	0.262	0.264	3.75
41) MT 2-Methylnaphtha	0.765	0.716	0.639	0.656	0.625	0.628	0.664	7.61
42) MT 1-Methylnaphtha	0.727	0.654	0.607	0.610	0.592	0.590	0.624	7.43
43) MT 1,2,4,5-Tetrach							0.214	14.86
44) Diphenyl Ether							0.342	14.08
45) Diphenyl Oxide							0.342	14.08
46) I Acenaphthene-d10	-----ISTD-----							
47) MPT Hexachlorocyclo	0.392	0.376	0.366	0.371	0.367	0.370	0.375	2.29
48) MCT 2,4,6-Trichloro	0.395	0.343	0.318	0.333	0.327	0.352	0.347	6.74
49) MT 2,4,5-Trichloro	0.362	0.375	0.352	0.375	0.364	0.343	0.361	3.07
50) S 2-Fluorobipheny	1.568	1.465	1.332	1.344	1.278	1.263	1.350	8.23
51) MT Biphenyl	1.711	1.622	1.487	1.490	1.411	1.401	1.499	7.42
52) MT 2-Chloronaphtha	1.276	1.255	1.149	1.153	1.091	1.072	1.144	7.16
53) MT 2-Nitroaniline	0.334	0.327	0.326	0.364	0.362	0.370	0.355	6.12
54) MT Acenaphthylene	1.917	1.828	1.742	1.782	1.719	1.729	1.779	3.71

(#) = Out of Range ### Number of calibration levels exceeded format ###  
 S804B09V.M Sat Feb 19 13:22:02 2022

Response Factor Report BNAMS4

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration

Calibration Files

500 =0209 06.D 1K =0209 07.D 4K =0209 08.D  
 10K =0209\_09.D 20K =0209\_10.D 30K =0209\_11.D

Compound	500	1K	4K	10K	20K	30K	Avg	%RSD
55) MT Dimethyl phthal	1.249	1.203	1.131	1.200	1.165	1.172	1.185	3.02
56) MT 2,6-Dinitrotolu	0.255	0.251	0.256	0.286	0.283	0.287	0.275	6.29
57) MT 3-Nitroaniline	0.267	0.255	0.278	0.308	0.306	0.315	0.296	8.64
58) MCT Acenaphthene	1.330	1.247	1.144	1.170	1.109	1.118	1.170	6.73
59) MPT 2,4-Dinitrophen	0.062	0.072	0.100	0.122	0.136	0.152	0.122	33.30
60) MT Dibenzofuran	1.872	1.749	1.585	1.611	1.554	1.528	1.623	7.59
61) MT 2,4-Dinitrotolu	0.292	0.296	0.313	0.350	0.366	0.367	0.344	11.15
62) T 2,3,4,6-Tetrach							0.228	3.11
63) MPT 4-Nitrophenol	0.235	0.200	0.222	0.250	0.253	0.263	0.244	9.73
64) MT Fluorene	1.419	1.388	1.313	1.326	1.261	1.267	1.317	4.46
65) MT 4-Chlorophenyl-	0.726	0.679	0.607	0.624	0.592	0.580	0.624	8.28
66) MT Diethyl phthala	1.293	1.255	1.186	1.217	1.177	1.194	1.214	3.32
67) MT 4-Nitroaniline	0.274	0.262	0.287	0.298	0.303	0.298	0.277	8.67
68) MT Azobenzene	1.317	1.240	1.192	1.245	1.172	1.163	1.211	4.41
69) MT Atrazine							0.327	2.53
70) I Phenanthrene-d10	-----ISTD-----							
71) MT 4,6-Dinitro-2-m	0.062	0.063	0.079	0.090	0.105	0.112	0.093	24.46
72) MCT N-Nitrosodiphen	0.639	0.604	0.572	0.592	0.585	0.597	0.608	4.74
73) S 2,4,6-Tribromop	0.079	0.077	0.083	0.091	0.093	0.094	0.091	11.74
74) MT 4-Bromophenyl-p	0.199	0.199	0.191	0.194	0.192	0.193	0.197	3.66
75) MT Hexachlorobenze	0.243	0.233	0.202	0.209	0.207	0.212	0.220	6.70
76) T n-octadecane	0.153	0.127	0.114	0.120	0.113	0.113	0.122	10.82
77) MCT Pentachlorophen		0.096	0.102	0.120	0.125	0.129	0.121	13.94
78) MT Phenanthrene	1.184	1.152	1.018	1.026	1.009	1.007	1.053	6.87
79) MT Anthracene	1.185	1.112	1.003	1.053	1.041	1.038	1.065	5.42
80) MT Carbazole	1.077	1.022	0.940	0.984	0.955	0.916	0.972	5.54
81) MT Di-n-butyl phth	1.159	1.063	1.042	1.117	1.117	1.143	1.138	6.21
82) MT 2-nitrodiphenyl							0.202	14.20
83) MCT Fluoranthene	1.204	1.139	1.051	1.087	1.063	1.085	1.118	5.15
84) I Chrysene-d12	-----ISTD-----							
85) MT Benzidine							0.423	25.01
86) MT Pyrene	1.343	1.372	1.206	1.278	1.296	1.278	1.287	3.99
87) S p-Terphenyl-d14	1.176	1.119	0.989	1.085	1.107	1.091	1.093	4.78
88) MT Benzylbutyl pht	0.532	0.484	0.472	0.528	0.551	0.549	0.526	5.91
89) MT 3,3-Dichloroben							0.412	4.48
90) MT Benzo(a)anthrac	1.270	1.230	1.072	1.139	1.143	1.129	1.152	5.68
91) MT Chrysene	1.232	1.202	1.074	1.104	1.099	1.082	1.116	5.80
92) MT bis(2-Ethylhexy	0.715	0.666	0.636	0.741	0.762	0.765	0.725	6.75
93) MC Di-n-octyl phth	1.129	1.073	1.057	1.215	1.287	1.296	1.204	8.59
94) I Perylene-d12	-----ISTD-----							
95) MT Benzo(b)fluoran	1.328	1.177	1.064	1.109	1.102	1.107	1.140	7.29
96) MT Benzo(k)fluoran	1.261	1.167	1.041	1.105	1.101	1.103	1.123	5.83
97) MC Benzo(a)pyrene	1.046	1.016	0.914	0.970	0.983	0.989	0.987	3.86
98) MT Indeno(1,2,3-cd	1.037	1.005	0.932	0.983	0.983	0.954	0.970	4.03
99) MT Dibenz(a,h)anth	1.093	1.117	0.990	1.052	1.027	1.016	1.034	4.86
100) MT Benzo(g,h,i)per	1.150	1.062	0.987	1.040	1.006	0.974	1.009	7.35

Data File : C:\MSDCHEM\1\DATA\020922\0209 06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:40 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	73198m	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	291221	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	151021	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	282418	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	254847	8000.00	ppb	0.00
94) Perylene-d12	12.39	264	266366	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	6716	564.7582426	ppb	0.00
Spiked Amount 666.000			Recovery =	84.80%		
7) Phenol-d5	3.28	99	8487	594.6294949	ppb	0.00
Spiked Amount 666.000			Recovery =	89.28%		
24) Nitrobenzene-d5	3.82	82	7103	566.4718290	ppb	0.00
Spiked Amount 333.000			Recovery =	170.11%		
50) 2-Fluorobiphenyl	4.95	172	14804	581.0921036	ppb	0.00
Spiked Amount 333.000			Recovery =	174.50%		
73) 2,4,6-Tribromophenol	6.02	330	1390	434.7822532	ppb	0.00
Spiked Amount 666.000			Recovery =	65.28%		
87) p-Terphenyl-d14	8.04	244	18732	537.8468042	ppb	0.00
Spiked Amount 333.000			Recovery =	161.52%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue	#
2) Pyridine	2.31	79	5846	516.2841543	ppb		85
3) N-Nitrosodimethylamine	2.29	42	3617	595.1420623	ppb		89
5) Aniline	3.34	66	3700	546.4526374	ppb		87
6) bis(2-Chloroethyl)ether	3.36	93	6074m	280.2271058	ppb		
8) Phenol	3.29	94	8510	566.0388074	ppb		95
10) 2-Chlorophenol	3.41	128	6755	561.1658820	ppb		97
11) n-Decane	3.40	41	4449	627.4781303	ppb	#	89
12) 1,3-Dichlorobenzene	3.49	146	7856	577.2009286	ppb		95
13) 1,4-Dichlorobenzene	3.53	146	7993	570.5643647	ppb		92
14) Benzyl Alcohol	3.58	79	5058	543.2830139	ppb		94
15) 1,2-Dichlorobenzene	3.61	146	7444	578.0573187	ppb		94
16) bis(2-Chloroisopropyl)ethe	3.65	121	2809	637.4442809	ppb	#	55
17) 2,2-oxybis(1-chloropropane	3.65	121	2809	637.4442809	ppb	#	55
18) 2-Methylphenol	3.62	108	6113	561.9967038	ppb		97
19) Hexachloroethane	3.80	117	2744	539.6006744	ppb		98
20) N-Nitrosodi-n-propylamine	3.72	70	4481	563.7205314	ppb		99
21) 3&4-Methyl phenol	3.70	107	7078	572.8724821	ppb		95
25) Nitrobenzene	3.84	77	6737	557.6116506	ppb		91
26) Isophorone	3.96	82	12066	556.7216060	ppb		99
27) 2-Nitrophenol	4.02	139	3136	514.9782790	ppb		93
28) 2,4-Dimethylphenol	4.01	107	6231	550.9528074	ppb		95
29) bis(2-Chlorethoxy)methane	4.08	93	8179	590.2143618	ppb		94
30) 2,4-Dichlorophenol	4.15	162	5177	543.3798696	ppb		95
32) 1,2,4-Trichlorobenzene	4.22	180	6095	571.5118181	ppb		98
34) Naphthalene	4.27	128	21058	567.8297386	ppb		99
35) 4-Chloroaniline	4.29	65	2308	535.6261108	ppb		97
36) Hexachloro-1,3-butadiene	4.33	225	3425	588.6986796	ppb	#	84
40) 4-Chloro-3-methylphenol	4.57	107	5149	536.1373266	ppb		88
41) 2-Methylnaphthalene	4.71	142	13922	576.1219160	ppb		99
42) 1-Methylnaphthalene	4.78	142	13232	582.6684229	ppb		99
47) Hexachlorocyclopentadiene	4.81	237	3703	523.3554859	ppb		94
48) 2,4,6-Trichlorophenol	4.89	196	3726	568.8364160	ppb		87
49) 2,4,5-Trichlorophenol	4.91	196	3416	501.1076239	ppb		93

(#) = qualifier out of range (m) = manual integration

0209\_06.D S804B09V.M Mon Feb 14 15:44:29 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:40 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	16154	571.0219592	ppb	98
52) 2-Chloronaphthalene	5.05	162	12048	558.0401136	ppb	95
53) 2-Nitroaniline	5.10	138	3154	471.2803774	ppb #	93
54) Acenaphthylene	5.34	152	18097	538.8052071	ppb	98
55) Dimethyl phthalate	5.22	163	11792	527.1899145	ppb	93
56) 2,6-Dinitrotoluene	5.27	165	2406	463.9446622	ppb	92
57) 3-Nitroaniline	5.39	138	2518	450.9660011	ppb	89
58) Acenaphthene	5.46	153	12554	568.1820999	ppb	96
60) Dibenzofuran	5.59	168	17674	576.7899184	ppb #	97
61) 2,4-Dinitrotoluene	5.56	165	2753	423.9069814	ppb #	80
63) 4-Nitrophenol	5.49	139	2219	481.1339126	ppb	93
64) Fluorene	5.84	166	13394	538.8741946	ppb	99
65) 4-Chlorophenyl-phenylether	5.83	204	6853	581.3973883	ppb	96
66) Diethyl phthalate	5.73	149	12208	532.7351724	ppb	97
67) 4-Nitroaniline	5.84	138	2583	493.9183878	ppb	98
68) Azobenzene	5.95	77	12432	543.8645129	ppb	96
71) 4,6-Dinitro-2-methylphenol	5.86	198	1098	335.9892172	ppb	80
72) N-Nitrosodiphenylamine	5.92	169	11278	525.5181216	ppb	95
74) 4-Bromophenyl-phenylether	6.21	248	3507	503.5169622	ppb	90
75) Hexachlorobenzene	6.26	284	4283	552.6506620	ppb	97
76) n-octadecane	6.45	55	2700	624.8296052	ppb #	88
77) Pentachlorophenol	6.41	266	1641	395.0735832	ppb	87
78) Phenanthrene	6.59	178	20891	562.2158818	ppb	93
79) Anthracene	6.63	178	20925	556.3404017	ppb	99
80) Carbazole	6.75	167	19009	553.9274983	ppb	99
81) Di-n-butyl phthalate	7.02	149	20464	509.3768613	ppb	99
83) Fluoranthene	7.64	202	21245	538.1889960	ppb	98
86) Pyrene	7.88	202	21399	521.8526444	ppb	98
88) Benzylbutyl phthalate	8.68	149	8466	504.9149051	ppb	93
90) Benzo(a)anthracene	9.52	228	20222	551.0613246	ppb	94
91) Chrysene	9.58	228	19627	551.9009123	ppb	97
92) bis(2-Ethylhexyl)phthalate	9.62	149	11394	493.3450222	ppb	98
93) Di-n-octyl phthalate	10.92	149	17985	468.7583125	ppb	99
95) Benzo(b)fluoranthene	11.57	252	22101	582.4447660	ppb	95
96) Benzo(k)fluoranthene	11.62	252	20993	561.6702641	ppb	98
97) Benzo(a)pyrene	12.25	252	17410	529.7489985	ppb	97
98) Indeno(1,2,3-cd)pyrene	14.20	276	17264	534.6681369	ppb	98
99) Dibenz(a,h)anthracene	14.24	278	18203	528.7141684	ppb	95
100) Benzo(g,h,i)perylene	14.52	276	19143	569.6031683	ppb	95

(#) = qualifier out of range (m) = manual integration

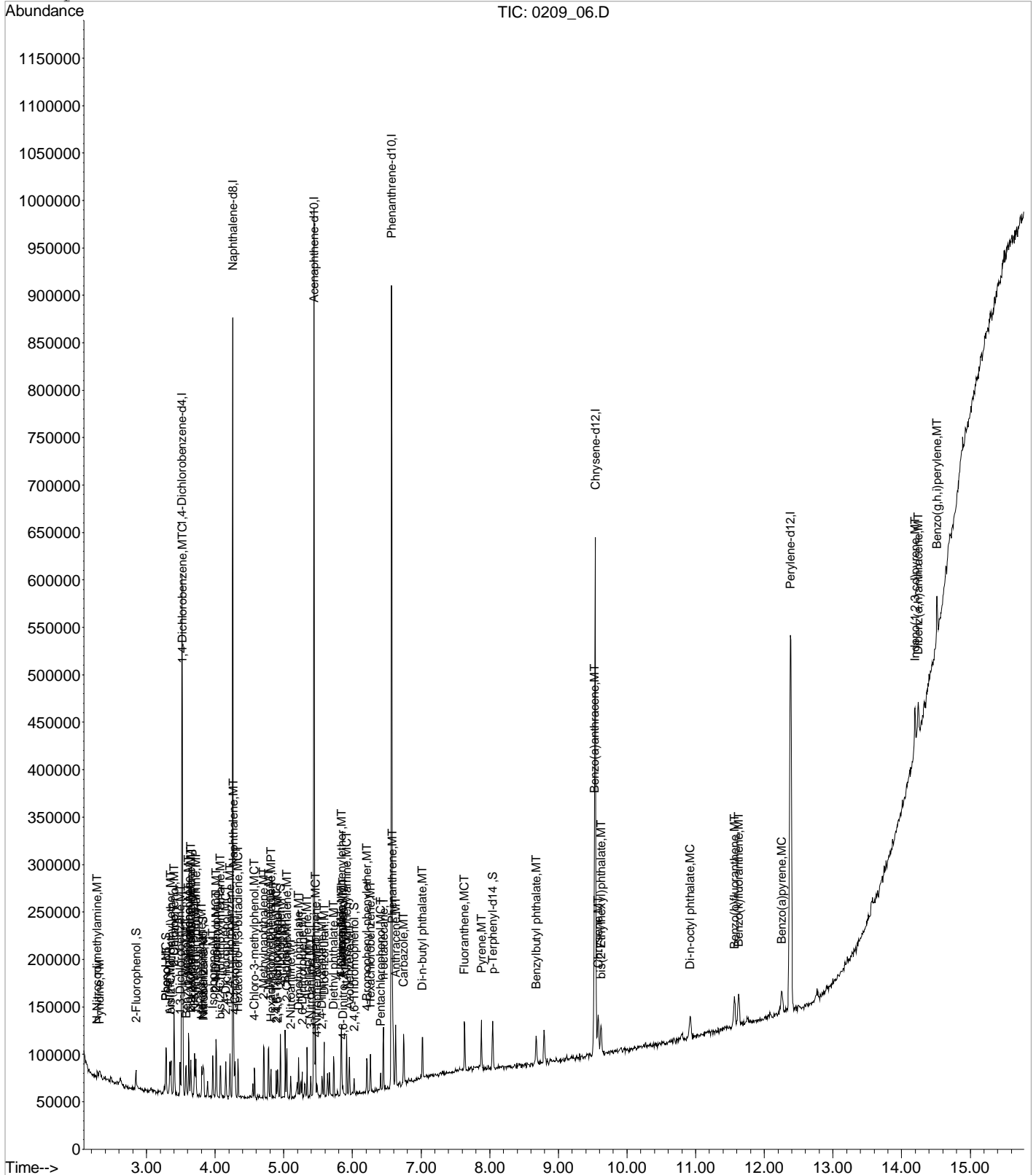


Data File : C:\MSDCHEM\1\DATA\020922\0209 06.D
Acq On : 9 Feb 2022 10:43 am
Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:40 2022

Vial: 3
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

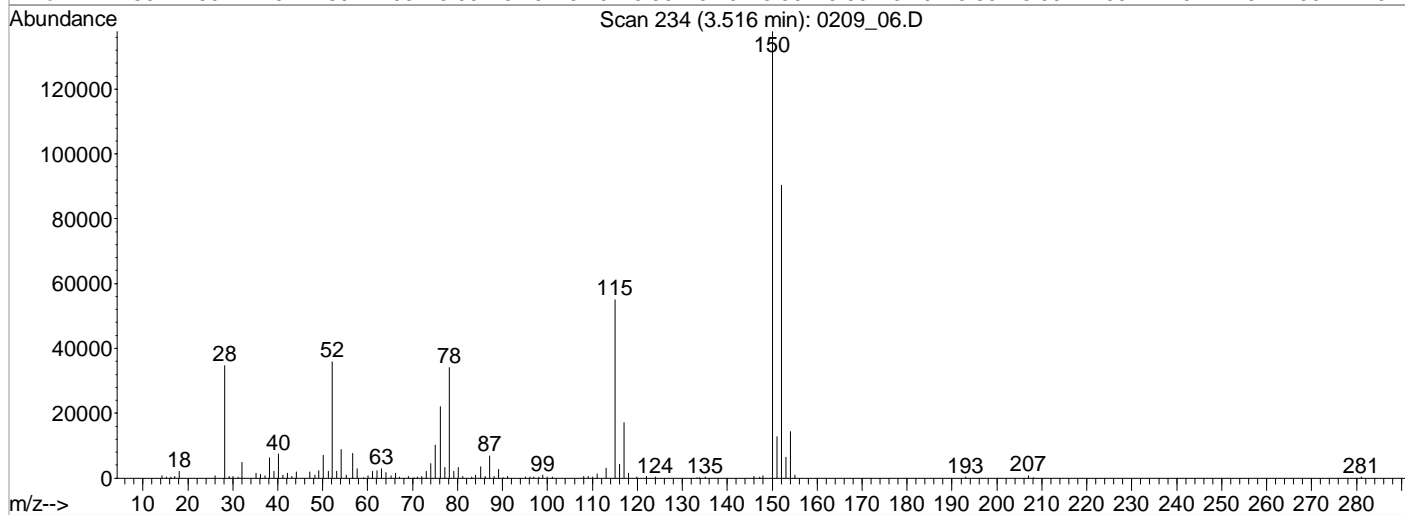
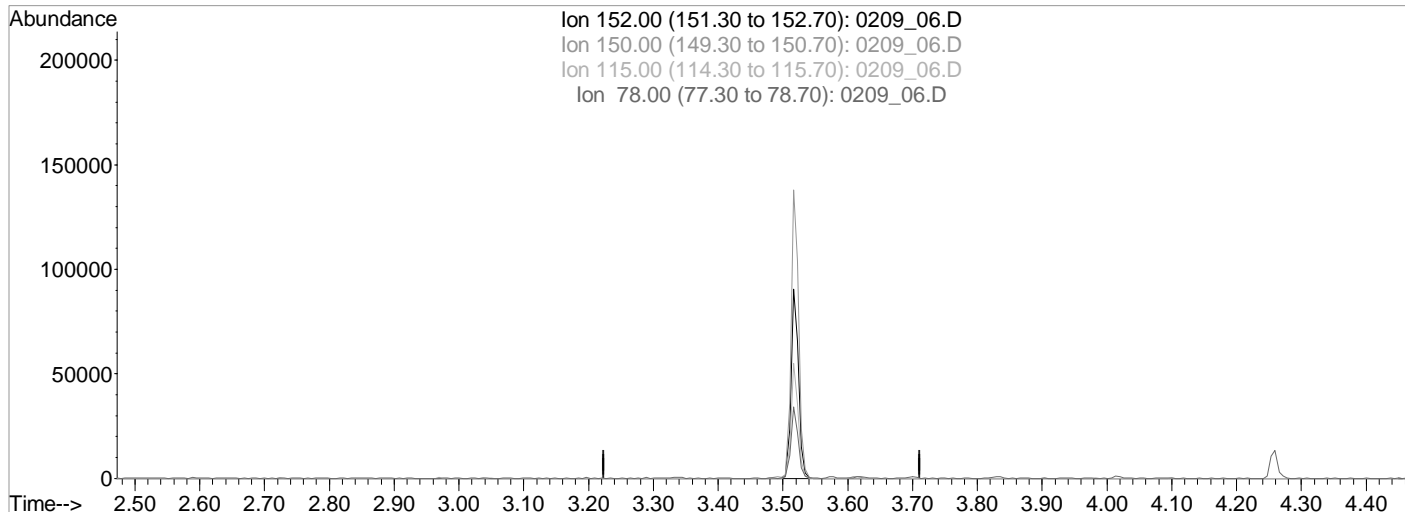
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:18:21 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:37 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_06.D

(1) 1,4-Dichlorobenzene-d4 (I)  
 3.52min (-3.516) 0.0000000 ppb d

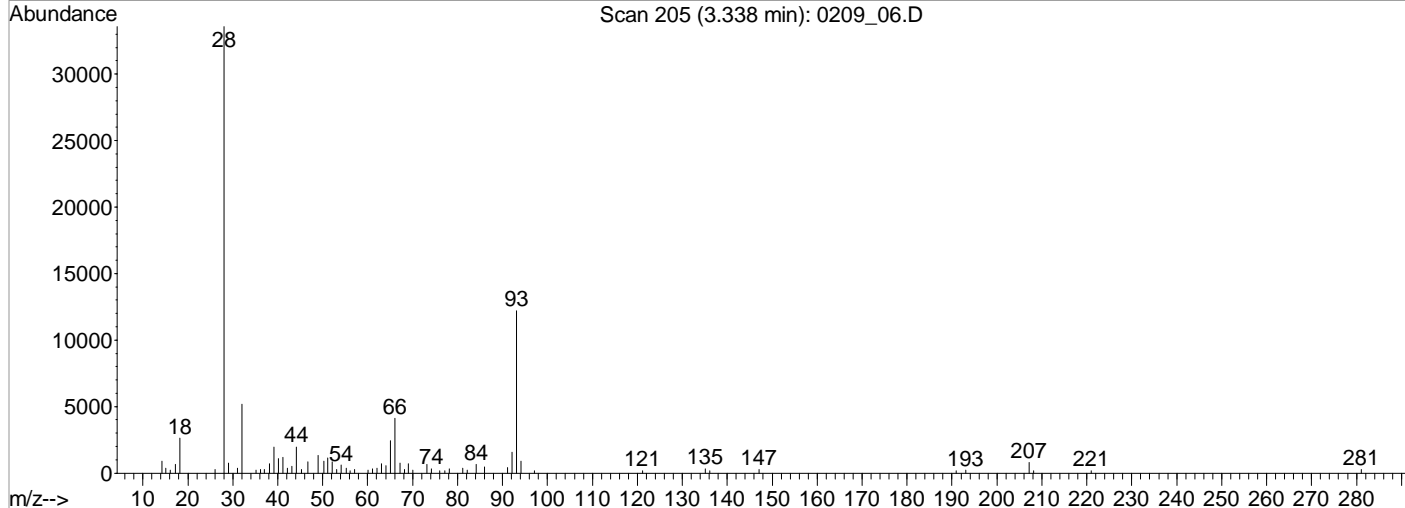
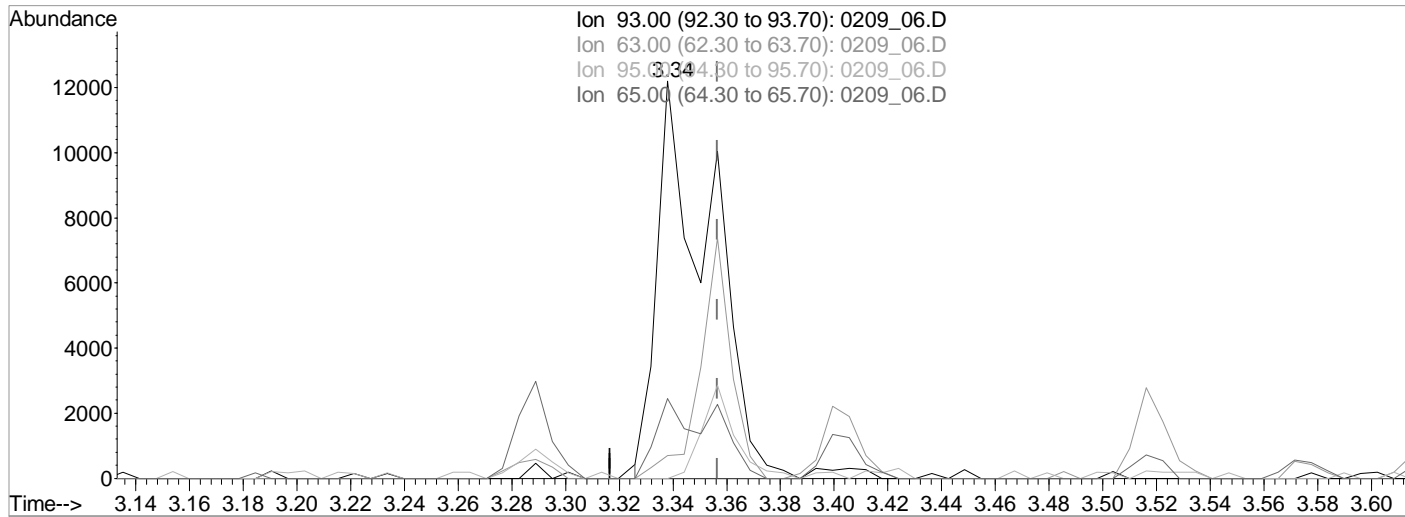
response 0

Ion	Exp%	Act%
152.00	100	0.00
150.00	155.20	0.00
115.00	59.30	0.00
78.00	35.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:38 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_06.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.018) 773.8770947 ppb

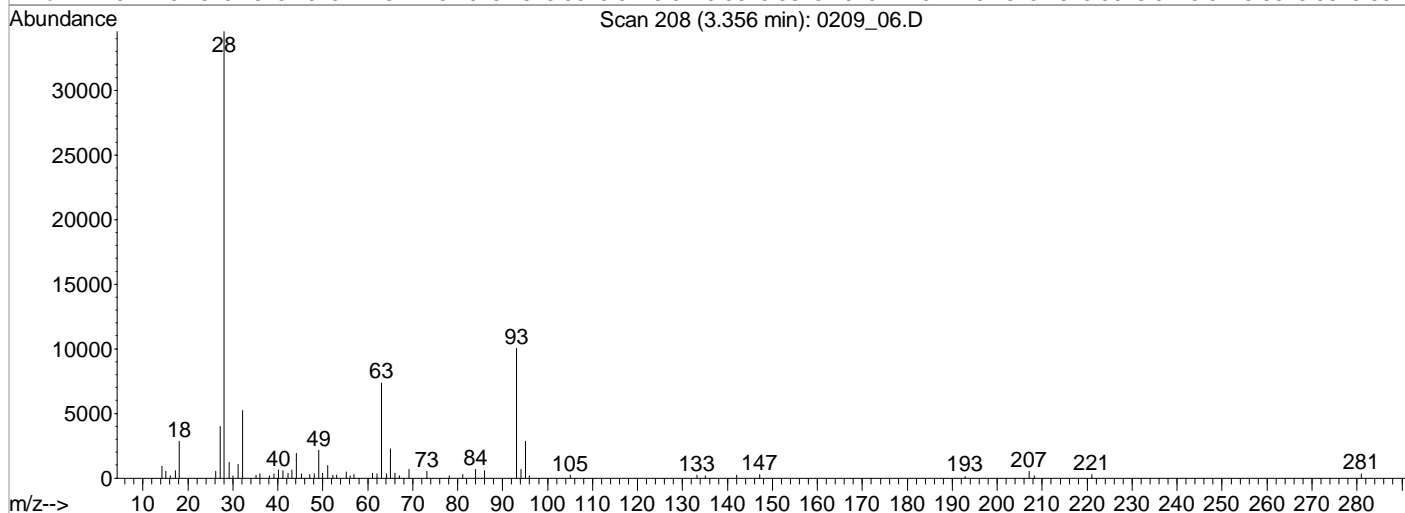
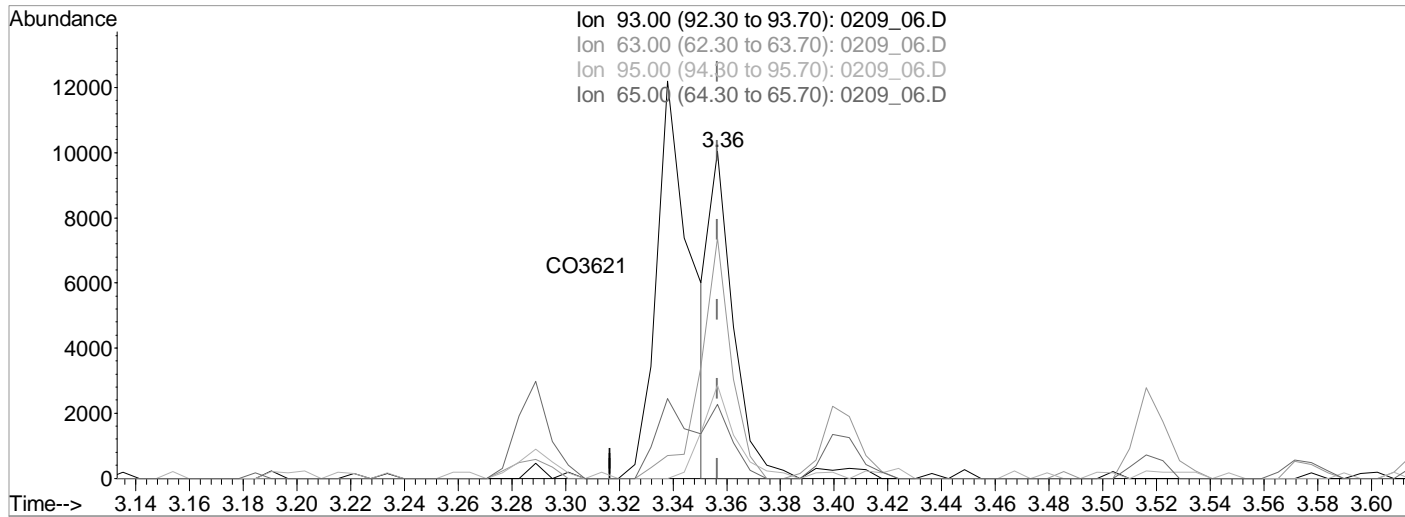
response 16774

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.71#
95.00	30.20	0.00#
65.00	24.00	20.09

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:40 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_06.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (0.000) 280.2271058 ppb m

response 6074

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	73.44
95.00	30.20	28.46
65.00	24.00	22.56

Data File : C:\MSDCHEM\1\DATA\020922\0209 07.D Vial: 4  
 Acq On : 9 Feb 2022 11:04 am Operator: 917  
 Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:47 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:19:47 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	76270	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	301288	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	154859	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	290690	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	252819	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	273649	8000.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	2.85	112	13374	1024.1746086	ppb	0.00
Spiked Amount 666.000				Recovery = 153.78%		
7) Phenol-d5	3.28	99	15234	943.4936610	ppb	0.00
Spiked Amount 666.000				Recovery = 141.67%		
24) Nitrobenzene-d5	3.82	82	12081m	907.8777697	ppb	0.00
Spiked Amount 333.000				Recovery = 272.64%		
50) 2-Fluorobiphenyl	4.95	172	28365	1006.2816806	ppb	0.00
Spiked Amount 333.000				Recovery = 302.19%		
73) 2,4,6-Tribromophenol	6.02	330	2781	902.8887466	ppb	0.00
Spiked Amount 666.000				Recovery = 135.57%		
87) p-Terphenyl-d14	8.04	244	35378	990.0403797	ppb	0.00
Spiked Amount 333.000				Recovery = 297.31%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.31	79	11901	998.1129452	ppb	94
3) N-Nitrosodimethylamine	2.29	42	6873	995.7330245	ppb	90
5) Aniline	3.34	66	7669	1035.6691945	ppb	# 95
6) bis(2-Chloroethyl)ether	3.36	93	11795m	558.9513471	ppb	
8) Phenol	3.29	94	16788	1012.5031366	ppb	99
10) 2-Chlorophenol	3.41	128	13345	1010.2445624	ppb	99
11) n-Decane	3.40	41	7909	952.1233752	ppb	# 90
12) 1,3-Dichlorobenzene	3.49	146	15281	1004.7592285	ppb	96
13) 1,4-Dichlorobenzene	3.53	146	15836	1022.2006471	ppb	96
14) Benzyl Alcohol	3.58	79	9993	992.2878509	ppb	94
15) 1,2-Dichlorobenzene	3.61	146	14424	1004.8210774	ppb	99
16) bis(2-Chloroisopropyl)ethe	3.65	121	5060	980.4227239	ppb	68
17) 2,2-oxybis(1-chloropropane	3.65	121	5060	980.4227239	ppb	68
18) 2-Methylphenol	3.62	108	12162	1008.5121853	ppb	98
19) Hexachloroethane	3.80	117	5649	1022.8026899	ppb	95
20) N-Nitrosodi-n-propylamine	3.72	70	8897	1006.4466665	ppb	95
21) 3&4-Methyl phenol	3.70	107	13385	969.5977105	ppb	96
25) Nitrobenzene	3.84	77	12867	971.7918627	ppb	97
26) Isophorone	3.96	82	23074	973.7600763	ppb	99
27) 2-Nitrophenol	4.02	139	6136	971.3209513	ppb	95
28) 2,4-Dimethylphenol	4.01	107	12562	1035.6727790	ppb	99
29) bis(2-Chlorethoxy)methane	4.08	93	15787	1022.5280775	ppb	95
30) 2,4-Dichlorophenol	4.15	162	10201	995.5789595	ppb	97
32) 1,2,4-Trichlorobenzene	4.22	180	11941	1016.2429131	ppb	99
34) Naphthalene	4.27	128	41782	1027.7434603	ppb	99
35) 4-Chloroaniline	4.29	65	4826	1042.1949294	ppb	96
36) Hexachloro-1,3-butadiene	4.33	225	6244	957.7274149	ppb	92
40) 4-Chloro-3-methylphenol	4.57	107	10067	981.5027088	ppb	86
41) 2-Methylnaphthalene	4.71	142	26958	1007.7179044	ppb	99
42) 1-Methylnaphthalene	4.78	142	24628	978.4163804	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	7287	986.5856772	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	6640	943.0418676	ppb	95
49) 2,4,5-Trichlorophenol	4.91	196	7255	1017.6821826	ppb	93

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\020922\0209 07.D Vial: 4  
 Acq On : 9 Feb 2022 11:04 am Operator: 917  
 Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:47 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:19:47 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	31396	1013.2193660	ppb	98
52) 2-Chloronaphthalene	5.05	162	24285	1032.7965655	ppb	97
53) 2-Nitroaniline	5.10	138	6335	936.9430644	ppb #	96
54) Acenaphthylene	5.34	152	35382	988.1131522	ppb	99
55) Dimethyl phthalate	5.22	163	23291	982.3490986	ppb	96
56) 2,6-Dinitrotoluene	5.27	165	4865	928.8368997	ppb	99
57) 3-Nitroaniline	5.39	138	4936	887.3217022	ppb	91
58) Acenaphthene	5.46	153	24135	997.3544259	ppb	99
59) 2,4-Dinitrophenol	5.46	184	1390	781.2926895	ppb #	1
60) Dibenzofuran	5.59	168	33852	1004.0506798	ppb	100
61) 2,4-Dinitrotoluene	5.56	165	5734	923.6569672	ppb #	77
63) 4-Nitrophenol	5.49	139	3863	823.0078370	ppb	97
64) Fluorene	5.84	166	26866	1011.0676989	ppb	98
65) 4-Chlorophenyl-phenylether	5.83	204	13151	1006.1449282	ppb	94
66) Diethyl phthalate	5.73	149	24302	1000.2320751	ppb	99
67) 4-Nitroaniline	5.84	138	5080	917.9528314	ppb	96
68) Azobenzene	5.95	77	23996	967.7887017	ppb	99
71) 4,6-Dinitro-2-methylphenol	5.86	198	2275	821.1747835	ppb	91
72) N-Nitrosodiphenylamine	5.92	169	21933	980.5621274	ppb	94
74) 4-Bromophenyl-phenylether	6.21	248	7249	1016.9661888	ppb	94
75) Hexachlorobenzene	6.26	284	8451	1030.4154727	ppb	97
76) n-octadecane	6.45	55	4622	932.7469322	ppb #	89
77) Pentachlorophenol	6.41	266	3482	901.2827855	ppb	97
78) Phenanthrene	6.59	178	41877	1043.2531380	ppb	98
79) Anthracene	6.63	178	40406	993.3957930	ppb	99
80) Carbazole	6.75	167	37131	991.6965643	ppb	98
81) Di-n-butyl phthalate	7.02	149	38609	933.6214592	ppb	99
83) Fluoranthene	7.64	202	41394	994.6744483	ppb	99
86) Pyrene	7.88	202	43345	1046.3115430	ppb	97
88) Benzylbutyl phthalate	8.68	149	15306	914.0065001	ppb	96
90) Benzo(a)anthracene	9.52	228	38865	1021.2752983	ppb	91
91) Chrysene	9.58	228	37999	1029.2590925	ppb	96
92) bis(2-Ethylhexyl)phthalate	9.62	149	21050	914.9946856	ppb	99
93) Di-n-octyl phthalate	10.92	149	33904	915.3989320	ppb	97
95) Benzo(b)fluoranthene	11.56	252	40261	966.1548100	ppb	98
96) Benzo(k)fluoranthene	11.62	252	39928	986.7291781	ppb	93
97) Benzo(a)pyrene	12.26	252	34757	1008.2775726	ppb	99
98) Indeno(1,2,3-cd)pyrene	14.20	276	34378	995.1350728	ppb	98
99) Dibenz(a,h)anthracene	14.24	278	38216	1041.3233414	ppb	97
100) Benzo(g,h,i)perylene	14.52	276	36328	970.1482120	ppb	88

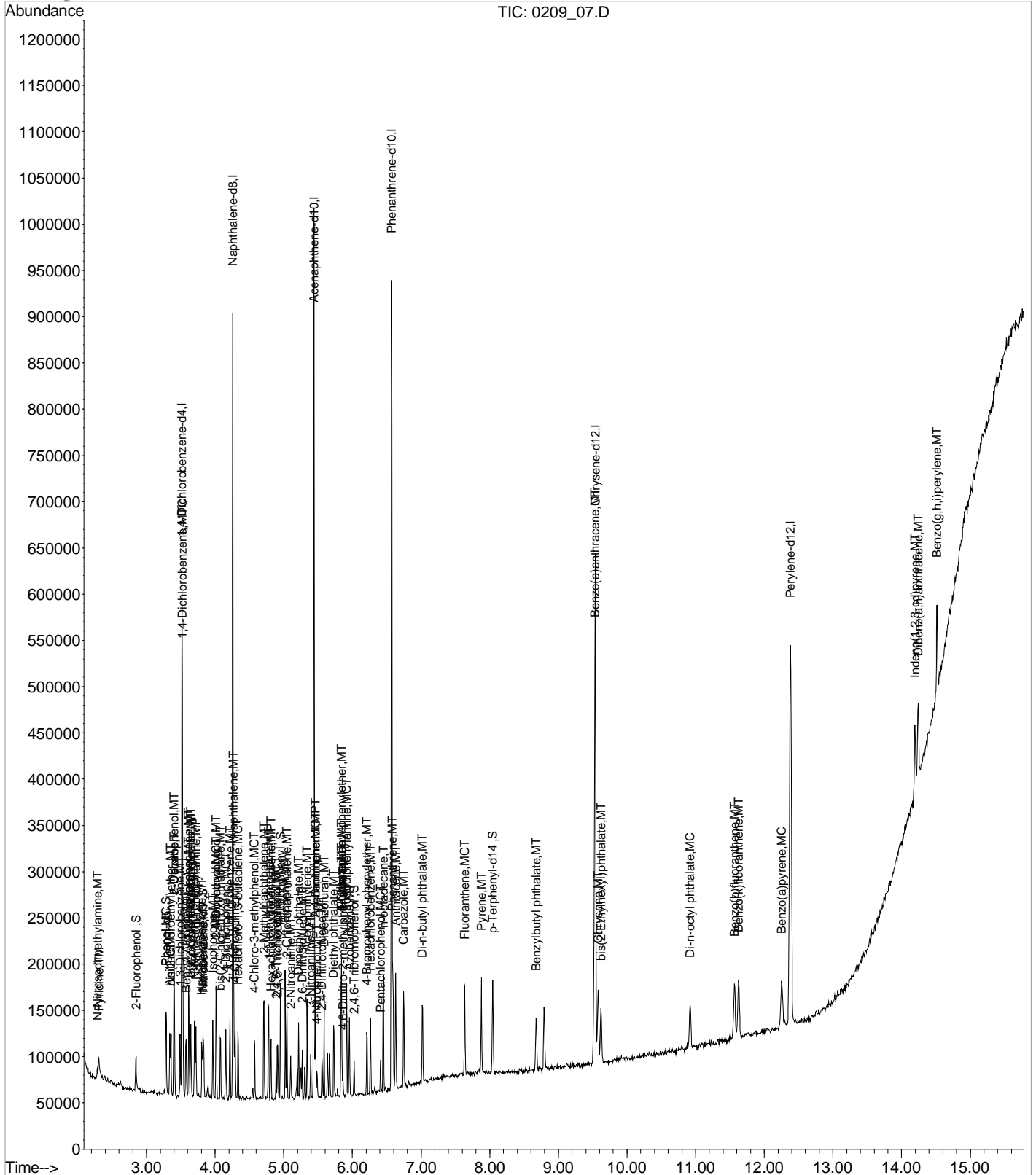
(#) = qualifier out of range (m) = manual integration  
 0209\_07.D S804B09V.M Mon Feb 14 15:47:33 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 07.D
Acq On : 9 Feb 2022 11:04 am
Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:47 2022

Vial: 4
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

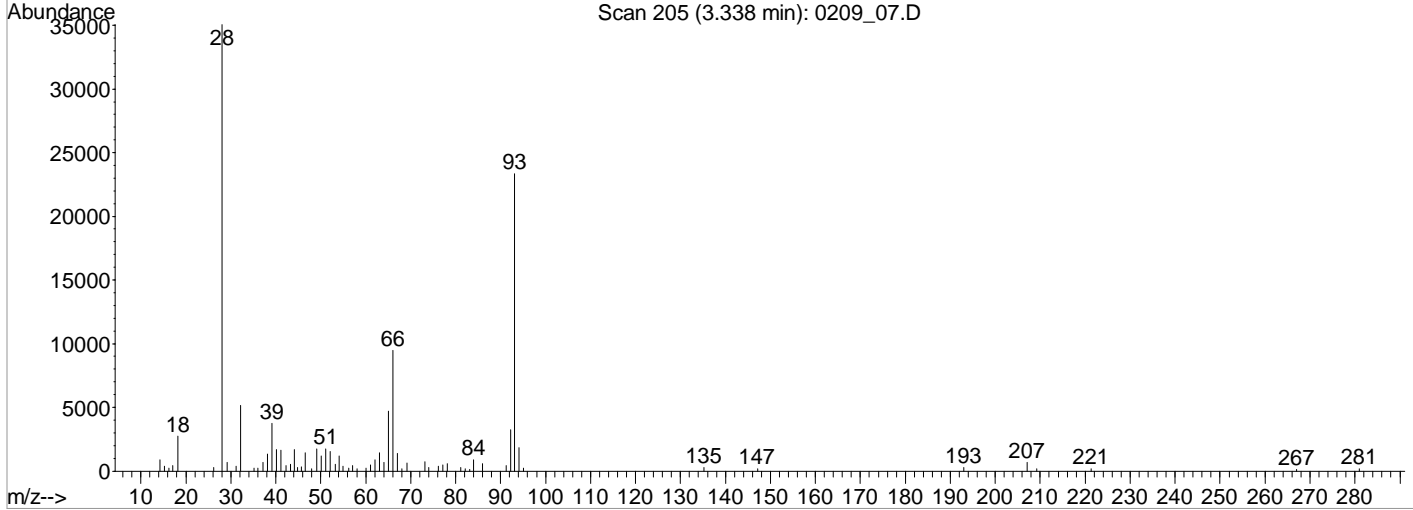
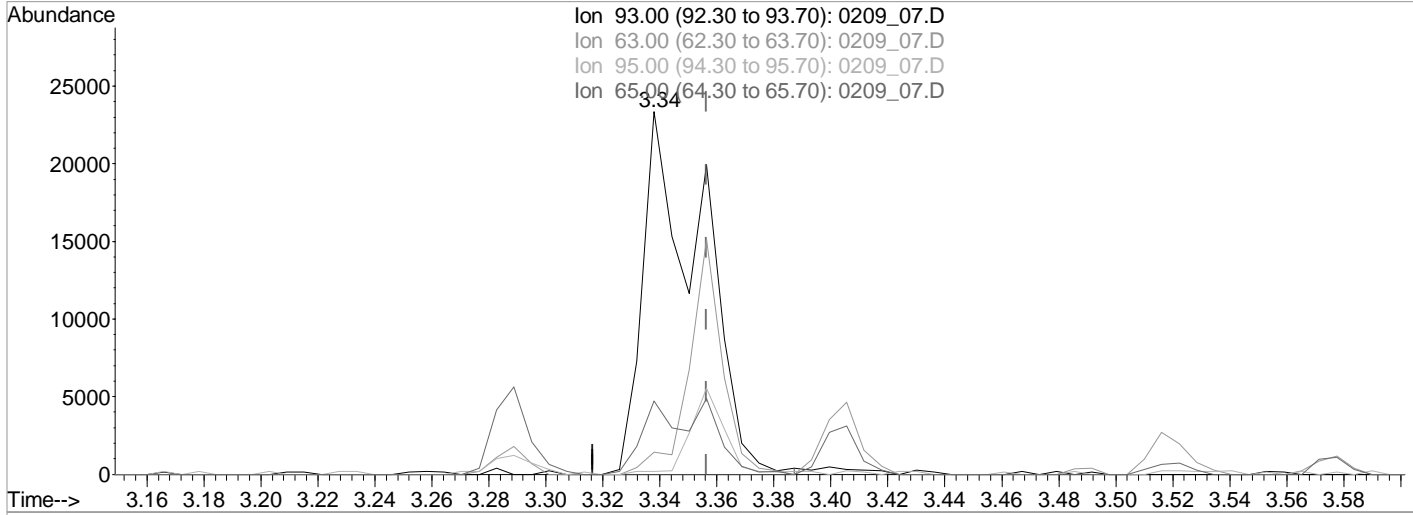
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:44:48 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_07.D Vial: 4  
 Acq On : 9 Feb 2022 11:04 am Operator: 917  
 Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:46 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:44:48 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_07.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.018) 1569.5183226 ppb m

response 33120

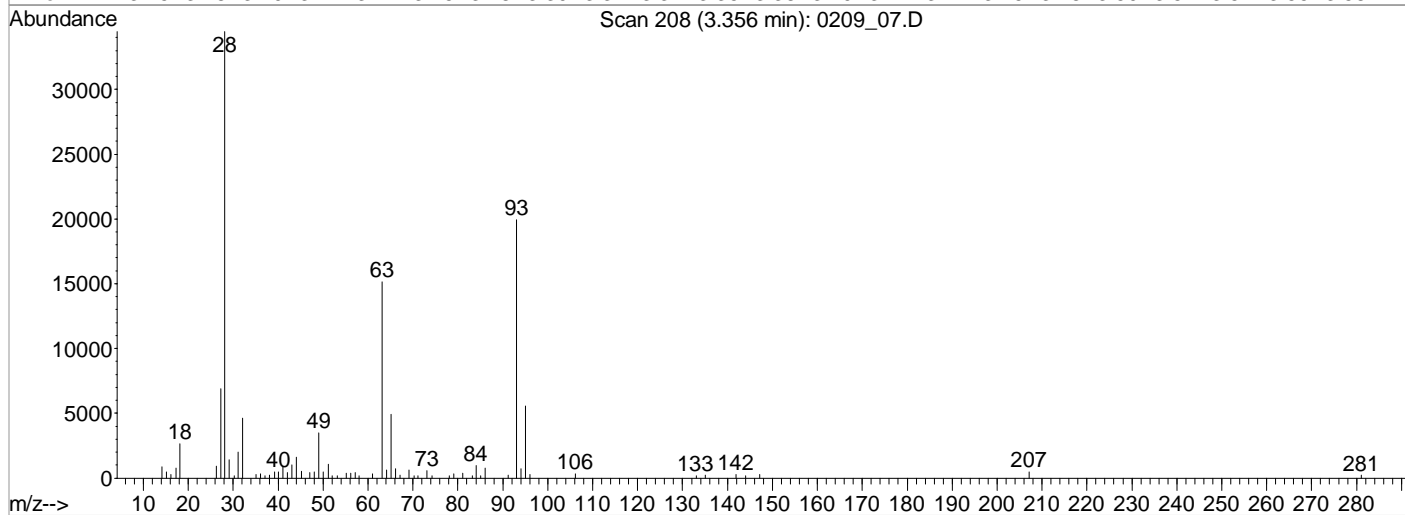
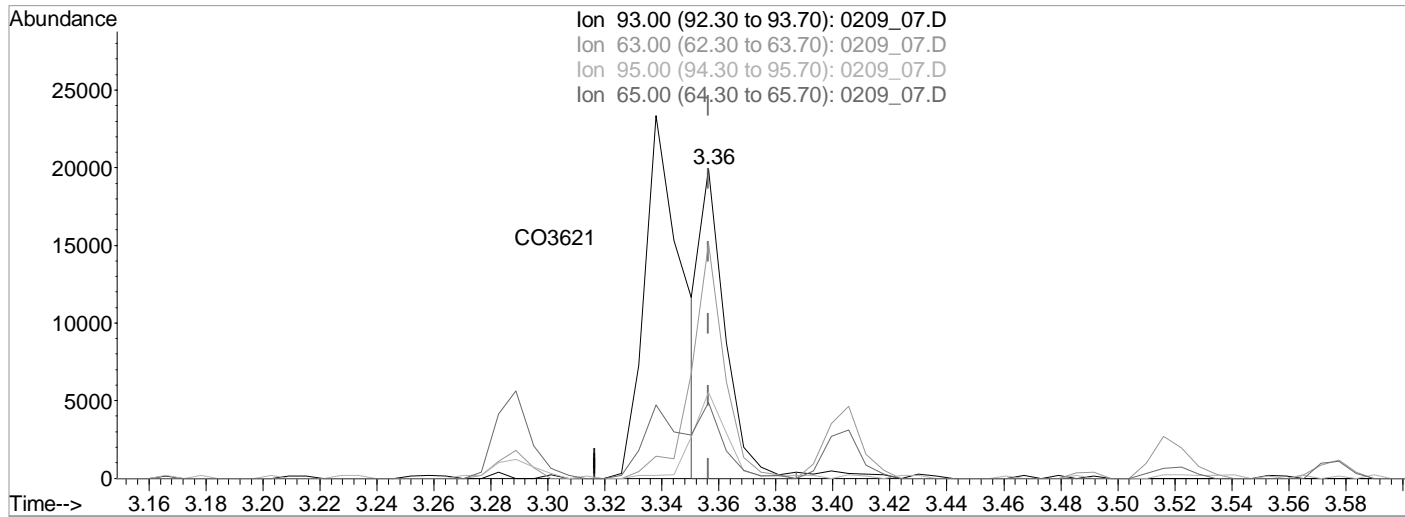
Ion	Exp%	Act%
93.00	100	100
63.00	76.20	6.09#
95.00	30.20	0.87#
65.00	24.00	20.20



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_07.D Vial: 4  
 Acq On : 9 Feb 2022 11:04 am Operator: 917  
 Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:47 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:44:48 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_07.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (-0.000) 558.9513471 ppb m

response 11795

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	75.97
95.00	30.20	27.78
65.00	24.00	24.57

Data File : C:\MSDCHEM\1\DATA\020922\0209 08.D Vial: 5  
 Acq On : 9 Feb 2022 11:25 am Operator: 917  
 Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:16 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:27:29 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	76560	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	308834	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	158910	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	298649	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	273094	8000.00	ppb	0.00
94) Perylene-d12	12.39	264	293434	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	48725	3687.4891163	ppb	0.00
Spiked Amount 666.000			Recovery =	553.68%		
7) Phenol-d5	3.28	99	58350	3669.2378705	ppb	0.00
Spiked Amount 666.000			Recovery =	550.94%		
24) Nitrobenzene-d5	3.82	82	52297	3806.9552688	ppb	0.00
Spiked Amount 333.000			Recovery =	1143.23%		
50) 2-Fluorobiphenyl	4.95	172	105816	3650.6056885	ppb	0.00
Spiked Amount 333.000			Recovery =	1096.28%		
73) 2,4,6-Tribromophenol	6.02	330	12407	4051.9112414	ppb	0.00
Spiked Amount 666.000			Recovery =	608.40%		
87) p-Terphenyl-d14	8.04	244	135025	3509.7450349	ppb	0.00
Spiked Amount 333.000			Recovery =	1053.98%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.30	79	46914	3922.1462465	ppb	92
3) N-Nitrosodimethylamine	2.29	42	25194	3641.3603720	ppb	92
5) Aniline	3.34	66	27896	3708.8809048	ppb	97
6) bis(2-Chloroethyl)ether	3.36	93	40648m	2249.7087184	ppb	
8) Phenol	3.29	94	61675	3690.2190244	ppb	98
10) 2-Chlorophenol	3.41	128	49941	3753.5004602	ppb	98
11) n-Decane	3.40	41	30186	3678.8814437	ppb	# 100
12) 1,3-Dichlorobenzene	3.49	146	55691	3642.1568344	ppb	98
13) 1,4-Dichlorobenzene	3.53	146	58102	3708.7838455	ppb	99
14) Benzyl Alcohol	3.58	79	37857	3754.5482410	ppb	99
15) 1,2-Dichlorobenzene	3.61	146	53437	3702.5382219	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	18481	3590.7364409	ppb	70
17) 2,2-oxybis(1-chloropropane	3.65	121	18481	3590.7364409	ppb	70
18) 2-Methylphenol	3.62	108	44297	3648.9823869	ppb	97
19) Hexachloroethane	3.80	117	21006	3760.3383531	ppb	98
20) N-Nitrosodi-n-propylamine	3.72	70	32491	3653.6742608	ppb	97
21) 3&4-Methyl phenol	3.70	107	50954	3714.7273657	ppb	98
25) Nitrobenzene	3.84	77	50279	3739.7466534	ppb	97
26) Isophorone	3.96	82	86386	3587.9344294	ppb	100
27) 2-Nitrophenol	4.02	139	23882	3723.7157111	ppb	97
28) 2,4-Dimethylphenol	4.01	107	46618	3705.4455563	ppb	99
29) bis(2-Chlorethoxy)methane	4.08	93	56471	3541.6753632	ppb	94
30) 2,4-Dichlorophenol	4.15	162	38182	3640.7331375	ppb	98
32) 1,2,4-Trichlorobenzene	4.22	180	44416	3667.8194095	ppb	98
34) Naphthalene	4.27	128	153901	3659.2817273	ppb	100
35) 4-Chloroaniline	4.29	65	17865	3711.5524610	ppb	100
36) Hexachloro-1,3-butadiene	4.33	225	23634	3587.0389463	ppb	99
40) 4-Chloro-3-methylphenol	4.57	107	38533	3687.7972059	ppb	91
41) 2-Methylnaphthalene	4.71	142	98637	3587.8315328	ppb	99
42) 1-Methylnaphthalene	4.78	142	93691	3657.5057324	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	29092	3855.5923968	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	25288	3567.6924956	ppb	87
49) 2,4,5-Trichlorophenol	4.91	196	27944	3797.4870871	ppb	97

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\020922\0209 08.D Vial: 5  
 Acq On : 9 Feb 2022 11:25 am Operator: 917  
 Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:16 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:27:29 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	118174	3700.2138562	ppb	99
52) 2-Chloronaphthalene	5.05	162	91273	3741.8140427	ppb	98
53) 2-Nitroaniline	5.10	138	25895	3812.3559871	ppb	97
54) Acenaphthylene	5.34	152	138397	3781.4678851	ppb	98
55) Dimethyl phthalate	5.22	163	89878	3716.0291707	ppb	100
56) 2,6-Dinitrotoluene	5.27	165	20369	3881.8398479	ppb	95
57) 3-Nitroaniline	5.39	138	22058	4014.9800104	ppb	98
58) Acenaphthene	5.46	153	90926	3664.8708952	ppb	99
59) 2,4-Dinitrophenol	5.46	184	7954	4699.4207519	ppb	# 65
60) Dibenzofuran	5.59	168	125970	3636.1153668	ppb	99
61) 2,4-Dinitrotoluene	5.56	165	24897	4010.3299275	ppb	99
63) 4-Nitrophenol	5.49	139	17661	3896.6279998	ppb	97
64) Fluorene	5.84	166	104287	3810.5999505	ppb	98
65) 4-Chlorophenyl-phenylether	5.83	204	48245	3589.6378717	ppb	99
66) Diethyl phthalate	5.73	149	94239	3779.5583767	ppb	99
67) 4-Nitroaniline	5.84	138	22766	4121.6546071	ppb	99
68) Azobenzene	5.95	77	94745	3764.1896388	ppb	100
71) 4,6-Dinitro-2-methylphenol	5.86	198	11741	4386.5146094	ppb	93
72) N-Nitrosodiphenylamine	5.92	169	85367	3739.0321479	ppb	100
74) 4-Bromophenyl-phenylether	6.21	248	28452	3863.3232975	ppb	96
75) Hexachlorobenzene	6.26	284	30100	3536.3795647	ppb	97
76) n-octadecane	6.45	55	17047	3425.2915399	ppb	93
77) Pentachlorophenol	6.41	266	15204	3960.8681961	ppb	97
78) Phenanthrene	6.59	178	152049	3634.5438187	ppb	98
79) Anthracene	6.63	178	149791	3592.4300031	ppb	99
80) Carbazole	6.75	167	140338	3658.3915478	ppb	98
81) Di-n-butyl phthalate	7.02	149	155562	3744.3117272	ppb	100
83) Fluoranthene	7.64	202	156913	3676.5726891	ppb	99
86) Pyrene	7.88	202	164730	3625.2603146	ppb	99
88) Benzylbutyl phthalate	8.68	149	64453	3668.2506321	ppb	98
90) Benzo(a)anthracene	9.52	228	146345	3535.0092132	ppb	100
91) Chrysene	9.58	228	146632	3641.3605935	ppb	99
92) bis(2-Ethylhexyl)phthalate	9.62	149	86899	3598.8379231	ppb	99
93) Di-n-octyl phthalate	10.92	149	144282	3711.0126159	ppb	98
95) Benzo(b)fluoranthene	11.57	252	156039	3531.8820648	ppb	99
96) Benzo(k)fluoranthene	11.63	252	152687	3534.5271144	ppb	98
97) Benzo(a)pyrene	12.26	252	134154	3619.3303945	ppb	98
98) Indeno(1,2,3-cd)pyrene	14.20	276	136698	3696.1693366	ppb	97
99) Dibenz(a,h)anthracene	14.24	278	145241	3640.5893699	ppb	98
100) Benzo(g,h,i)perylene	14.52	276	144798	3642.3839778	ppb	99

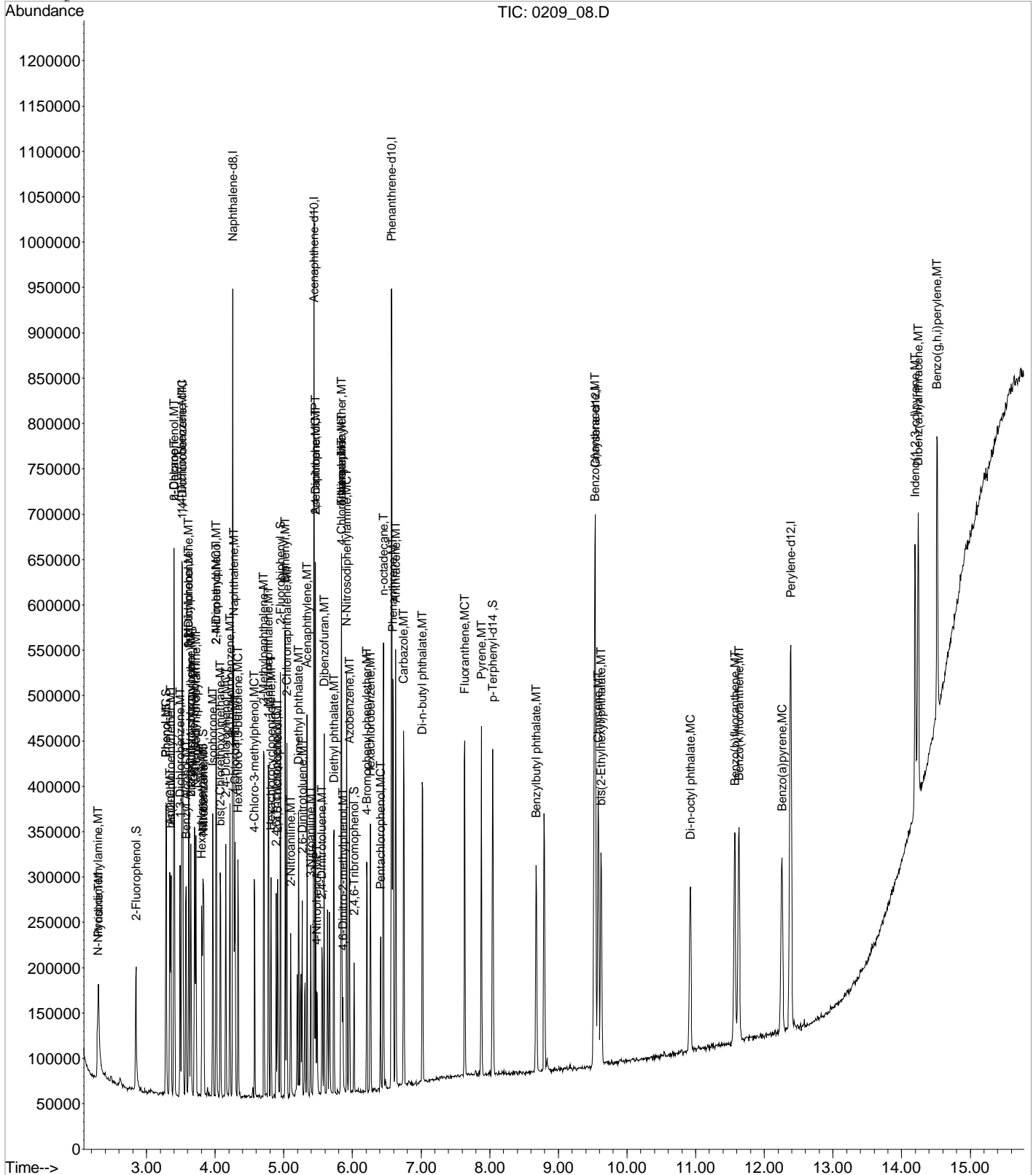
(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\020922\0209 08.D
Acq On : 9 Feb 2022 11:25 am
Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:16 2022

Vial: 5
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

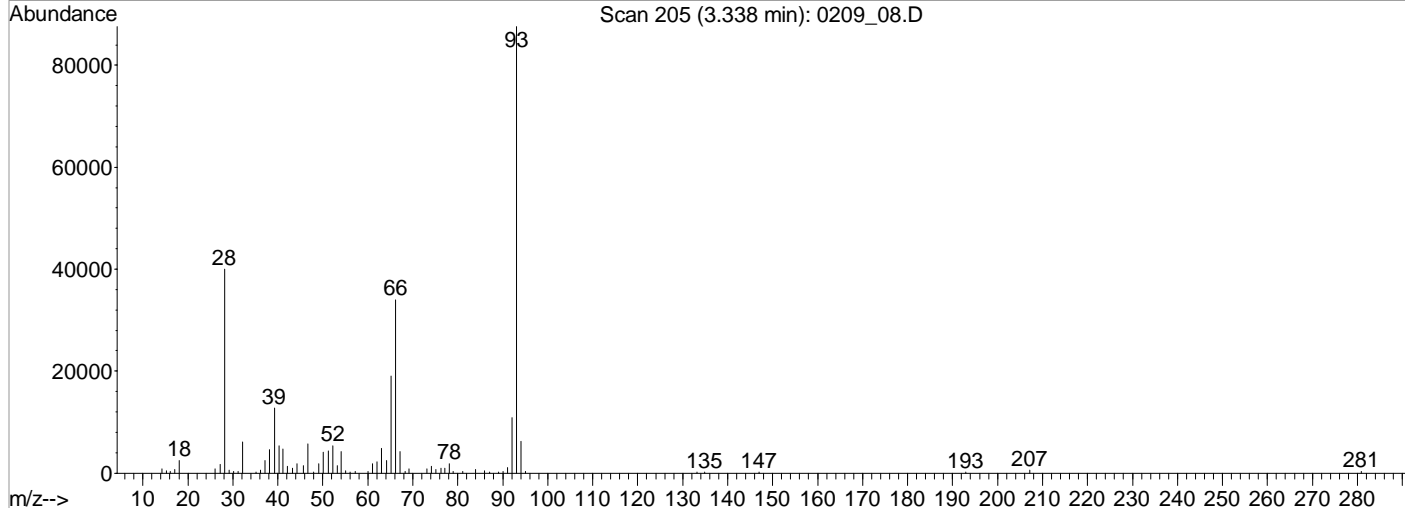
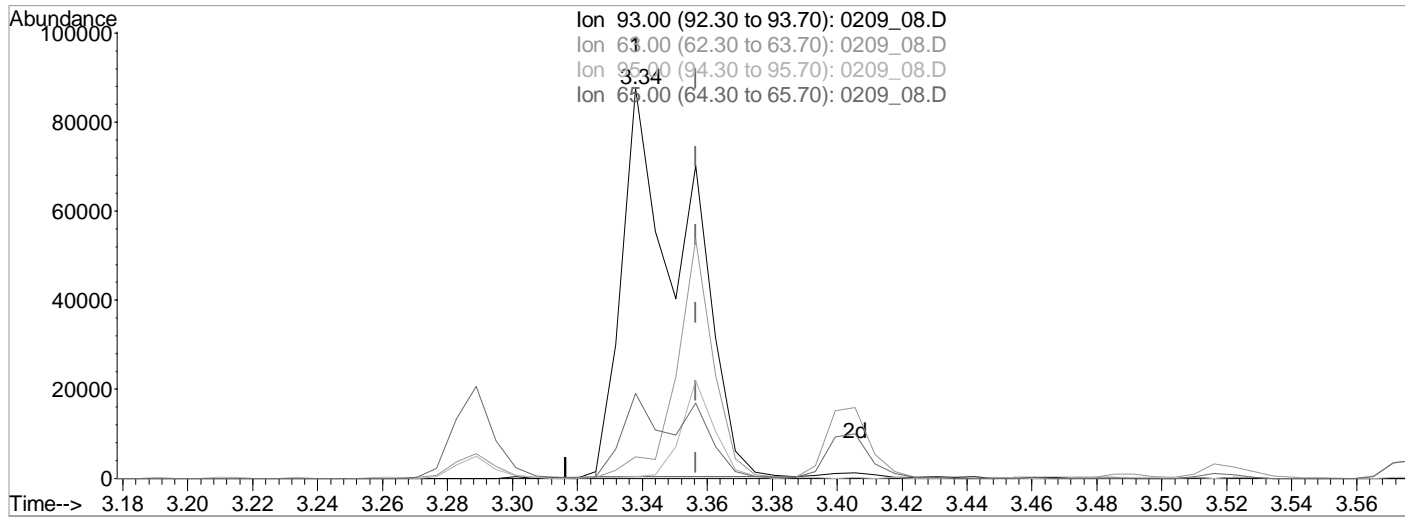
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:47:45 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_08.D Vial: 5  
 Acq On : 9 Feb 2022 11:25 am Operator: 917  
 Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:29 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:27:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_08.D

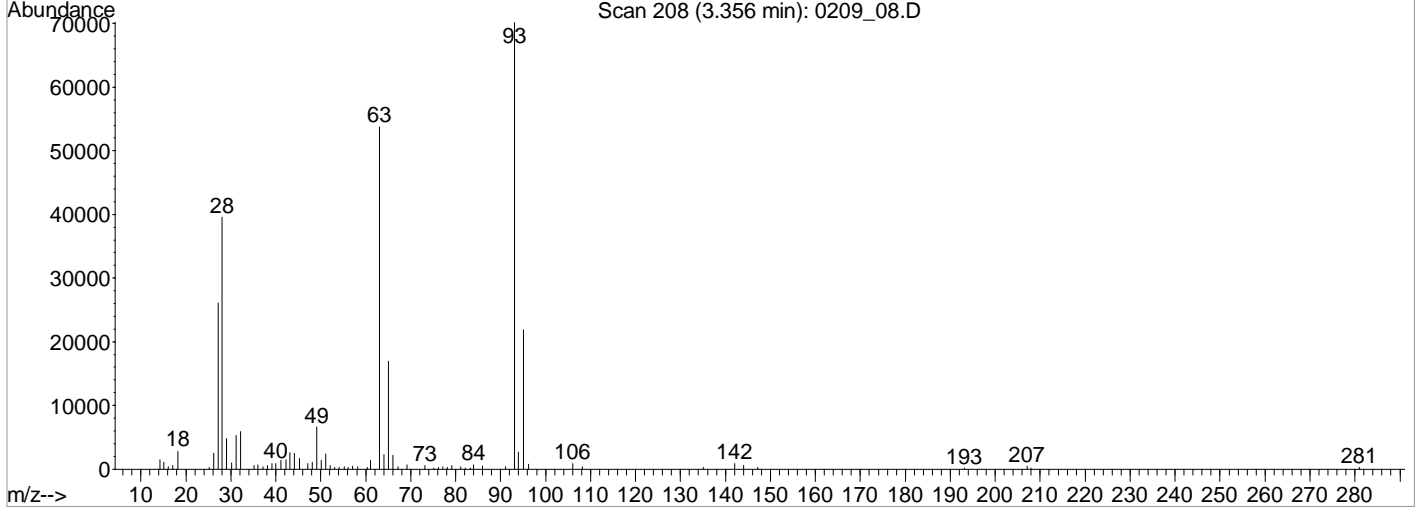
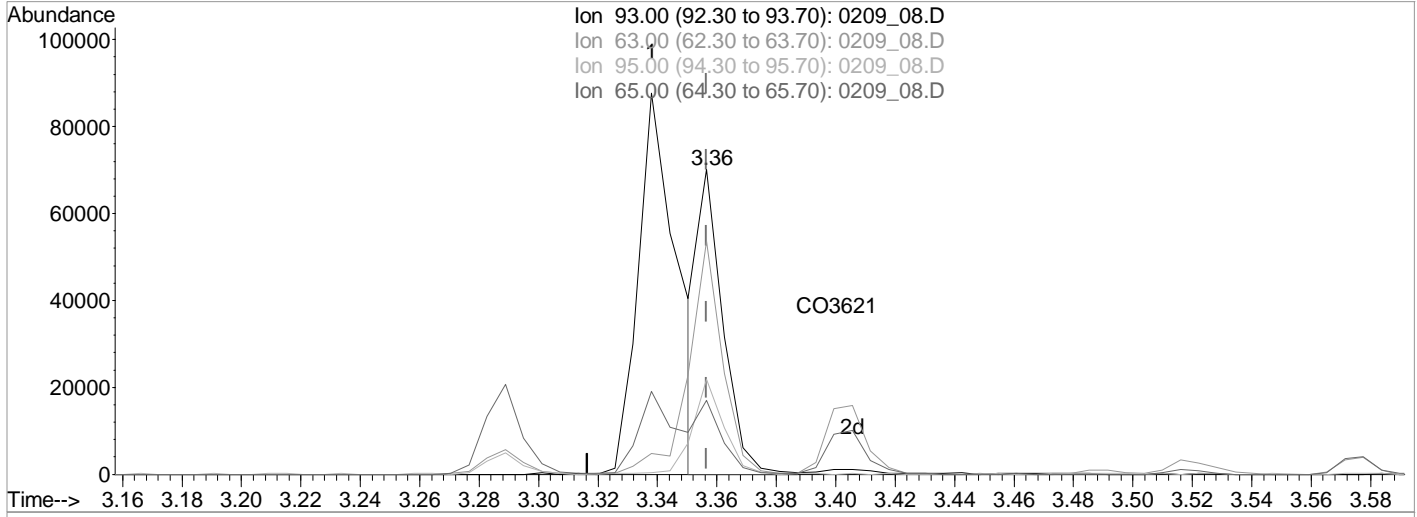
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.018) 6535.1580902 ppb  
 Qvalue = 38  
 response 118078

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.23#
95.00	30.20	0.18#
65.00	24.00	21.53

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_08.D Vial: 5  
 Acq On : 9 Feb 2022 11:25 am Operator: 917  
 Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:16 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 14:25:02 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_08.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (-0.000) 2249.7087184 ppb m

response 40648

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	76.56
95.00	30.20	31.18
65.00	24.00	24.14

Data File : C:\MSDCHEM\1\DATA\020922\0209 09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:51 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	79698	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	318573	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	166698	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	313275	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	276256	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	294444	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	126685	10000.0000000	ppb	0.00
Spiked Amount 666.000			Recovery = 1501.50%			
7) Phenol-d5	3.28	99	152664	10000.0000000	ppb	0.00
Spiked Amount 666.000			Recovery = 1501.50%			
24) Nitrobenzene-d5	3.82	82	126003m	9983.3614604	ppb	0.00
Spiked Amount 333.000			Recovery = 2998.01%			
50) 2-Fluorobiphenyl	4.95	172	280043	10000.0000000	ppb	0.00
Spiked Amount 333.000			Recovery = 3003.00%			
73) 2,4,6-Tribromophenol	6.02	330	35551	10000.0000000	ppb	0.00
Spiked Amount 666.000			Recovery = 1501.50%			
87) p-Terphenyl-d14	8.04	244	374818	10000.0000000	ppb	0.00
Spiked Amount 333.000			Recovery = 3003.00%			

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.29	79	121910	9699.8002912	ppb	99
3) N-Nitrosodimethylamine	2.28	42	65505	10000.0000000	ppb	100
5) Aniline	3.34	66	74198	10000.0000000	ppb	100
6) bis(2-Chloroethyl)ether	3.36	93	103260m	10000.0000000	ppb	100
8) Phenol	3.29	94	161240	10000.0000000	ppb	100
10) 2-Chlorophenol	3.41	128	128999	10000.0000000	ppb	100
11) n-Decane	3.40	41	76738	10000.0000000	ppb	100
12) 1,3-Dichlorobenzene	3.49	146	146804	10000.0000000	ppb	100
13) 1,4-Dichlorobenzene	3.53	146	149745	10000.0000000	ppb	100
14) Benzyl Alcohol	3.58	79	100344	10000.0000000	ppb	100
15) 1,2-Dichlorobenzene	3.61	146	137930	10000.0000000	ppb	100
16) bis(2-Chloroisopropyl)ethe	3.65	121	46703	10000.0000000	ppb	100
17) 2,2-oxybis(1-chloropropane	3.65	121	46703	10000.0000000	ppb	100
18) 2-Methylphenol	3.62	108	118936	10000.0000000	ppb	100
19) Hexachloroethane	3.80	117	55684	10000.0000000	ppb	100
20) N-Nitrosodi-n-propylamine	3.72	70	87187	10000.0000000	ppb	100
21) 3&4-Methyl phenol	3.70	107	134402	10000.0000000	ppb	100
25) Nitrobenzene	3.84	77	132607	10000.0000000	ppb	100
26) Isophorone	3.96	82	237119	10000.0000000	ppb	100
27) 2-Nitrophenol	4.02	139	64981	10000.0000000	ppb	100
28) 2,4-Dimethylphenol	4.01	107	120179	10000.0000000	ppb	100
29) bis(2-Chlorethoxy)methane	4.08	93	147555	10000.0000000	ppb	100
30) 2,4-Dichlorophenol	4.15	162	103418	10000.0000000	ppb	100
32) 1,2,4-Trichlorobenzene	4.22	180	115136	10000.0000000	ppb	100
34) Naphthalene	4.27	128	399013	10000.0000000	ppb	100
35) 4-Chloroaniline	4.29	65	47430	10000.0000000	ppb	100
36) Hexachloro-1,3-butadiene	4.33	225	62939	10000.0000000	ppb	100
40) 4-Chloro-3-methylphenol	4.58	107	104251	10000.0000000	ppb	100
41) 2-Methylnaphthalene	4.71	142	261134	10000.0000000	ppb	100
42) 1-Methylnaphthalene	4.78	142	242812	10000.0000000	ppb	100
47) Hexachlorocyclopentadiene	4.81	237	77267	10000.0000000	ppb	100
48) 2,4,6-Trichlorophenol	4.89	196	69331	10000.0000000	ppb	100
49) 2,4,5-Trichlorophenol	4.91	196	78067	10000.0000000	ppb	100

(#) = qualifier out of range (m) = manual integration

0209\_09.D S804B09V.M Mon Feb 14 15:53:06 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:51 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
51) Biphenyl	5.02	154	310488	10000.0000000	ppb	100	100
52) 2-Chloronaphthalene	5.05	162	240256	10000.0000000	ppb	100	100
53) 2-Nitroaniline	5.10	138	75937	10000.0000000	ppb	100	100
54) Acenaphthylene	5.34	152	371391	10000.0000000	ppb	100	100
55) Dimethyl phthalate	5.22	163	250120	10000.0000000	ppb	100	100
56) 2,6-Dinitrotoluene	5.27	165	59648	10000.0000000	ppb	100	100
57) 3-Nitroaniline	5.39	138	64174	10000.0000000	ppb	100	100
58) Acenaphthene	5.46	153	243837	10000.0000000	ppb	100	100
59) 2,4-Dinitrophenol	5.46	184	25454	10000.0000000	ppb	100	100
60) Dibenzofuran	5.59	168	335686	10000.0000000	ppb	100	100
61) 2,4-Dinitrotoluene	5.56	165	72875	10000.0000000	ppb	100	100
63) 4-Nitrophenol	5.49	139	52065	10000.0000000	ppb	100	100
64) Fluorene	5.84	166	276379	10000.0000000	ppb	100	100
65) 4-Chlorophenyl-phenylether	5.83	204	130111	10000.0000000	ppb	100	100
66) Diethyl phthalate	5.73	149	253571	10000.0000000	ppb	100	100
67) 4-Nitroaniline	5.84	138	62120	10000.0000000	ppb	100	100
68) Azobenzene	5.95	77	259354	10000.0000000	ppb	100	100
71) 4,6-Dinitro-2-methylphenol	5.86	198	35354	10000.0000000	ppb	100	100
72) N-Nitrosodiphenylamine	5.92	169	231908	10000.0000000	ppb	100	100
74) 4-Bromophenyl-phenylether	6.21	248	75834	10000.0000000	ppb	100	100
75) Hexachlorobenzene	6.26	284	81756	10000.0000000	ppb	100	100
76) n-octadecane	6.45	55	46905	10000.0000000	ppb	100	100
77) Pentachlorophenol	6.41	266	46865	10000.0000000	ppb	100	100
78) Phenanthrene	6.59	178	401719	10000.0000000	ppb	100	100
79) Anthracene	6.63	178	412471	10000.0000000	ppb	100	100
80) Carbazole	6.75	167	385300	10000.0000000	ppb	100	100
81) Di-n-butyl phthalate	7.02	149	437342	10000.0000000	ppb	100	100
83) Fluoranthene	7.64	202	425654	10000.0000000	ppb	100	100
86) Pyrene	7.88	202	441403	10000.0000000	ppb	100	100
88) Benzylbutyl phthalate	8.68	149	182425	10000.0000000	ppb	100	100
90) Benzo(a)anthracene	9.52	228	393248	10000.0000000	ppb	100	100
91) Chrysene	9.58	228	381309	10000.0000000	ppb	100	100
92) bis(2-Ethylhexyl)phthalate	9.62	149	255742	10000.0000000	ppb	100	100
93) Di-n-octyl phthalate	10.92	149	419500	10000.0000000	ppb	100	100
95) Benzo(b)fluoranthene	11.57	252	408147	10000.0000000	ppb	100	100
96) Benzo(k)fluoranthene	11.63	252	406682	10000.0000000	ppb	100	100
97) Benzo(a)pyrene	12.26	252	356920	10000.0000000	ppb	100	100
98) Indeno(1,2,3-cd)pyrene	14.20	276	361749	10000.0000000	ppb	100	100
99) Dibenz(a,h)anthracene	14.24	278	387330	10000.0000000	ppb	100	100
100) Benzo(g,h,i)perylene	14.52	276	382610	10000.0000000	ppb	100	100

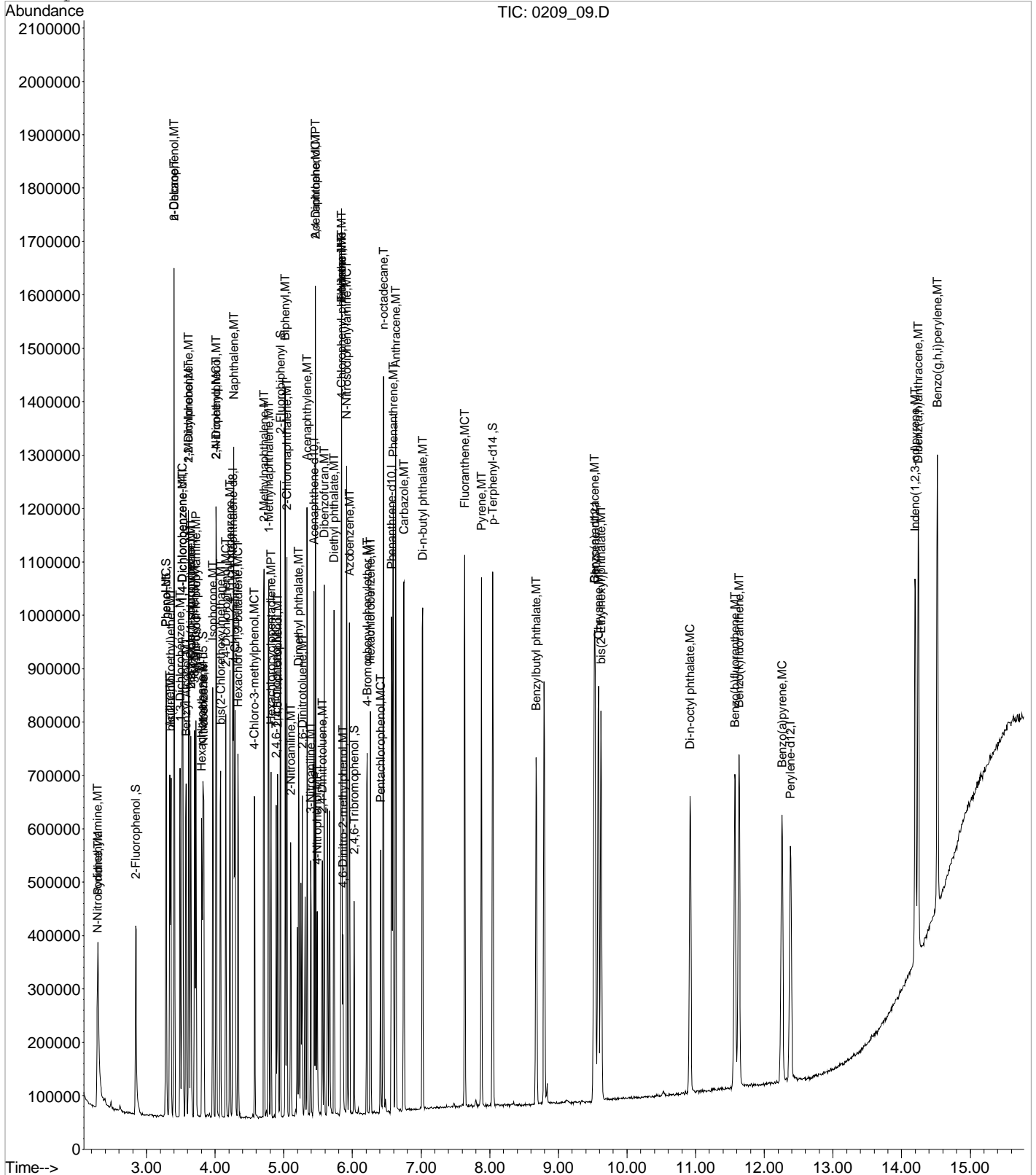
(#) = qualifier out of range (m) = manual integration

0209\_09.D S804B09V.M Mon Feb 14 15:53:07 2022



Data File : C:\MSDCHEM\1\DATA\020922\0209 09.D Vial: 6
Acq On : 9 Feb 2022 11:46 am Operator: 917
Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:51 2022 Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:49:28 2022
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\050422B\0504B 03.D Vial: 3  
 Acq On : 4 May 2022 8:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 16:03 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	72810	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	308811	8000.00	ppb	0.00
46) Acenaphthene-d10	5.15	164	153956	8000.00	ppb	0.00
70) Phenanthrene-d10	6.26	188	290793	8000.00	ppb	0.00
84) Chrysene-d12	9.01	240	239869	8000.00	ppb	0.00
94) Perylene-d12	11.67	264	248833	8000.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	2.58	112	125991	10648.8093607	ppb	0.00
Spiked Amount 20000.000			Recovery =	53.24%		
7) Phenol-d5	3.03	99	154852	10904.8081827	ppb	0.00
Spiked Amount 20000.000			Recovery =	54.52%		
24) Nitrobenzene-d5	3.56	82	148958m	11368.3042392	ppb	0.00
Spiked Amount 10000.000			Recovery =	113.68%		
50) 2-Fluorobiphenyl	4.67	172	266294	10253.4023911	ppb	0.00
Spiked Amount 10000.000			Recovery =	102.53%		
73) 2,4,6-Tribromophenol	5.72	330	38217	11609.7274995	ppb	0.00
Spiked Amount 20000.000			Recovery =	58.05%		
87) p-Terphenyl-d14	7.65	244	342371	10444.2393420	ppb	0.00
Spiked Amount 10000.000			Recovery =	104.44%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	1.99	79	148014	13138.2970554	ppb	91
3) N-Nitrosodimethylamine	1.98	42	78031	12904.7576433	ppb	92
5) Aniline	3.08	66	77309	11476.0102541	ppb	# 36
6) bis(2-Chloroethyl)ether	3.09	93	134334	12837.6695153	ppb	98
8) Phenol	3.04	94	159489	10662.4454340	ppb	91
10) 2-Chlorophenol	3.14	128	126641	10574.2456665	ppb	95
11) n-Decane	3.14	41	83245	11800.6717158	ppb	97
12) 1,3-Dichlorobenzene	3.22	146	137383	10145.3675510	ppb	93
13) 1,4-Dichlorobenzene	3.27	146	142112	10196.1300433	ppb	97
14) Benzyl Alcohol	3.32	79	102792	11097.2164608	ppb	96
15) 1,2-Dichlorobenzene	3.35	146	135933	10609.6074912	ppb	95
16) bis(2-Chloroisopropyl)ethe	3.38	121	46434	10591.0535705	ppb	# 39
17) 2,2-oxybis(1-chloropropane	3.38	121	46434	10591.0535705	ppb	# 39
18) 2-Methylphenol	3.37	108	122831	11350.0352901	ppb	95
19) Hexachloroethane	3.54	117	58879	11637.4411130	ppb	95
20) N-Nitrosodi-n-propylamine	3.46	70	100110	12658.3109219	ppb	93
21) 3&4-Methyl phenol	3.45	107	139627	11358.6276700	ppb	95
25) Nitrobenzene	3.57	77	149196	11645.3460556	ppb	93
26) Isophorone	3.70	82	273139	11884.7047612	ppb	96
27) 2-Nitrophenol	3.76	139	67830	10504.2391718	ppb	81
28) 2,4-Dimethylphenol	3.76	107	131358	10953.2526094	ppb	95
29) bis(2-Chlorethoxy)methane	3.82	93	162553	11062.0210610	ppb	98
30) 2,4-Dichlorophenol	3.89	162	100259	9923.8153739	ppb	95
32) 1,2,4-Trichlorobenzene	3.95	180	112134	9915.5942513	ppb	97
34) Naphthalene	4.00	128	374919m	9533.8516433	ppb	
35) 4-Chloroaniline	4.02	65	50343	11017.8017774	ppb	# 49
36) Hexachloro-1,3-butadiene	4.06	225	66952	10852.4043763	ppb	96
40) 4-Chloro-3-methylphenol	4.32	107	102521	10066.9036815	ppb	91
41) 2-Methylnaphthalene	4.43	142	242446	9461.4504064	ppb	96
42) 1-Methylnaphthalene	4.49	142	232320	9647.4495585	ppb	98
47) Hexachlorocyclopentadiene	4.53	237	49301	6835.0157549	ppb	95
48) 2,4,6-Trichlorophenol	4.61	196	68606	10274.1845518	ppb	90
49) 2,4,5-Trichlorophenol	4.64	196	71338	10265.3745585	ppb	91

(#) = qualifier out of range (m) = manual integration  
 0504B\_03.D S804E04BV.M Thu May 05 16:04:03 2022

Data File : C:\MSDCHEM\1\DATA\050422B\0504B 03.D Vial: 3  
 Acq On : 4 May 2022 8:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 16:03 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	4.73	154	301118	10441.1941443	ppb	99
52) 2-Chloronaphthalene	4.76	162	225125	10228.5696808	ppb	97
53) 2-Nitroaniline	4.82	138	77356	11338.4162347	ppb	92
54) Acenaphthylene	5.05	152	349630	10211.1489350	ppb	99
55) Dimethyl phthalate	4.94	163	241288	10581.7152130	ppb	99
56) 2,6-Dinitrotoluene	4.99	165	57670	10908.4044924	ppb #	77
57) 3-Nitroaniline	5.11	138	60805	10682.3816714	ppb	93
58) Acenaphthene	5.17	153	225966	10032.0397375	ppb	98
59) 2,4-Dinitrophenol	5.19	184	25739	8991.4846740	ppb #	1
60) Dibenzofuran	5.29	168	313173	10025.5416474	ppb	96
61) 2,4-Dinitrotoluene	5.27	165	75641	11425.1613528	ppb #	70
63) 4-Nitrophenol	5.22	139	45267	9627.8896252	ppb #	76
64) Fluorene	5.54	166	256925	10139.6783842	ppb	97
65) 4-Chlorophenyl-phenylether	5.54	204	121190	10085.5561793	ppb	97
66) Diethyl phthalate	5.44	149	247489	10594.0855044	ppb	99
67) 4-Nitroaniline	5.56	138	65508	12287.5656579	ppb #	84
68) Azobenzene	5.66	77	297244	12755.6777858	ppb	93
71) 4,6-Dinitro-2-methylphenol	5.58	198	37511	9563.0231518	ppb	99
72) N-Nitrosodiphenylamine	5.62	169	211635	9577.4859602	ppb	97
74) 4-Bromophenyl-phenylether	5.91	248	72523	10112.5929308	ppb #	81
75) Hexachlorobenzene	5.96	284	77452	9706.0758801	ppb	98
76) n-octadecane	6.15	55	48116	10814.2343337	ppb #	96
77) Pentachlorophenol	6.12	266	38231	8678.9089734	ppb	98
78) Phenanthrene	6.28	178	384570	10051.4266576	ppb	96
79) Anthracene	6.32	178	388432	10029.9451799	ppb	100
80) Carbazole	6.45	167	353123	9993.7408883	ppb	98
81) Di-n-butyl phthalate	6.71	149	434009	10491.9411679	ppb	98
83) Fluoranthene	7.27	202	378397	9309.6678860	ppb	99
86) Pyrene	7.49	202	390486	10117.3151564	ppb	98
88) Benzylbutyl phthalate	8.22	149	171356	10857.8701556	ppb	93
90) Benzo(a)anthracene	8.99	228	347193	10051.9932243	ppb	98
91) Chrysene	9.05	228	348883	10422.9918589	ppb	99
92) bis(2-Ethylhexyl)phthalate	9.08	149	240106	11045.4381754	ppb	98
93) Di-n-octyl phthalate	10.28	149	361907	10021.6890694	ppb	99
95) Benzo(b)fluoranthene	10.90	252	334061	9424.0897312	ppb	99
96) Benzo(k)fluoranthene	10.96	252	351862	10077.4373458	ppb	96
97) Benzo(a)pyrene	11.55	252	295004	9608.8207390	ppb	94
98) Indeno(1,2,3-cd)pyrene	13.68	276	275571	9135.8130051	ppb	97
99) Dibenz(a,h)anthracene	13.73	278	313847	9762.7192535	ppb	97
100) Benzo(g,h,i)perylene	14.03	276	325162	10356.9766358	ppb	95

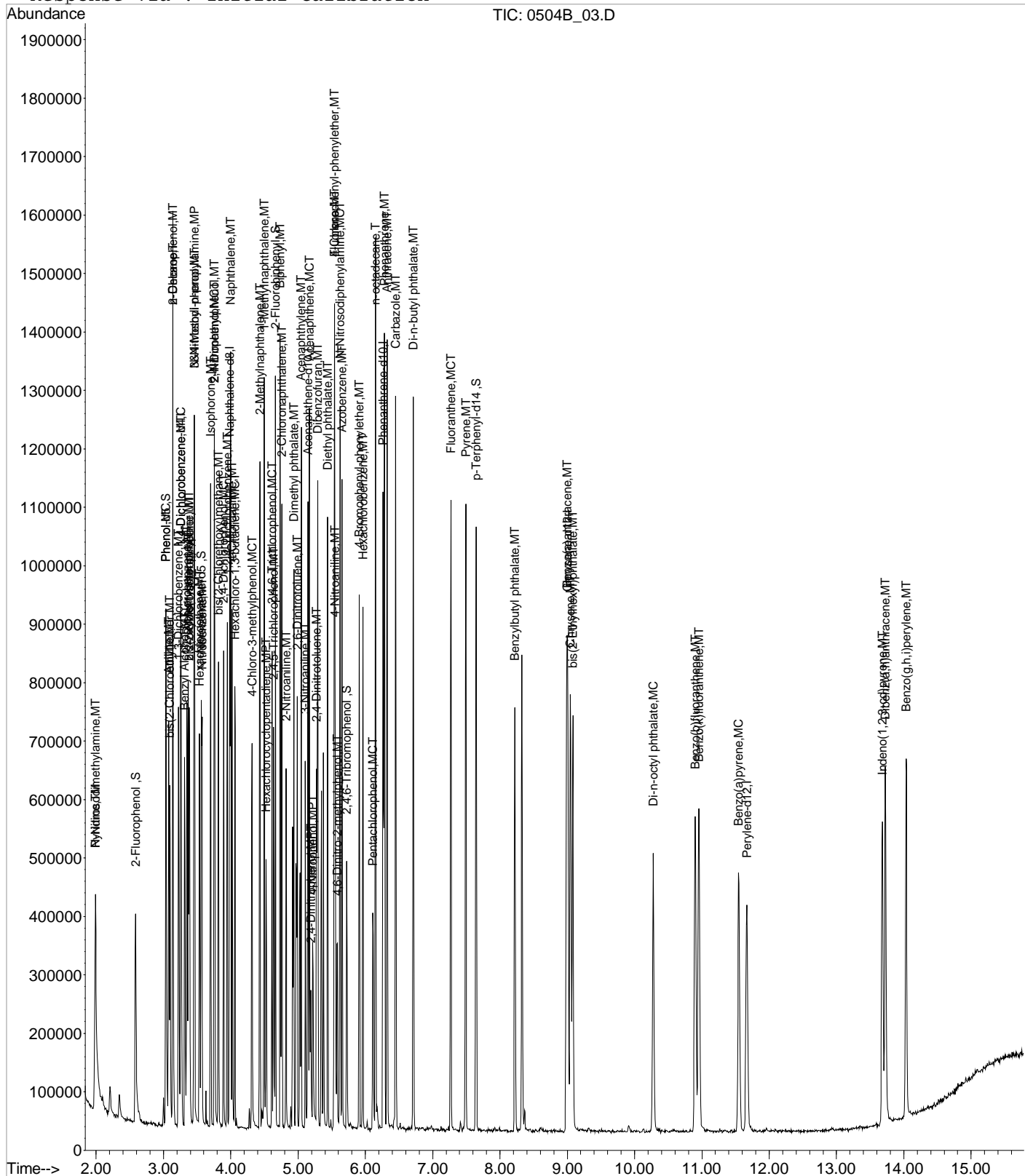
(#) = qualifier out of range (m) = manual integration  
 0504B\_03.D S804E04BV.M Thu May 05 16:04:03 2022

Data File : C:\MSDCHEM\1\DATA\050422B\0504B 03.D
Acq On : 4 May 2022 8:09 pm
Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22
Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22
MS Integration Params: RTEINT.P
Quant Time: May 5 16:03 2022

Vial: 3
Operator: 3545
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804E04BV.RES

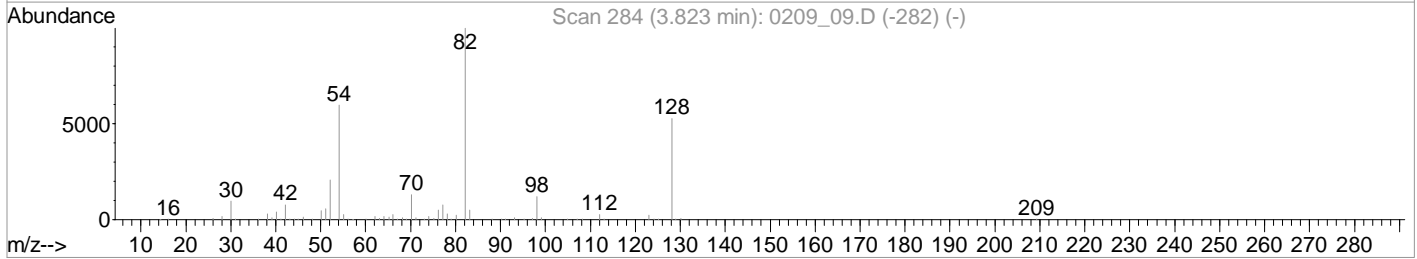
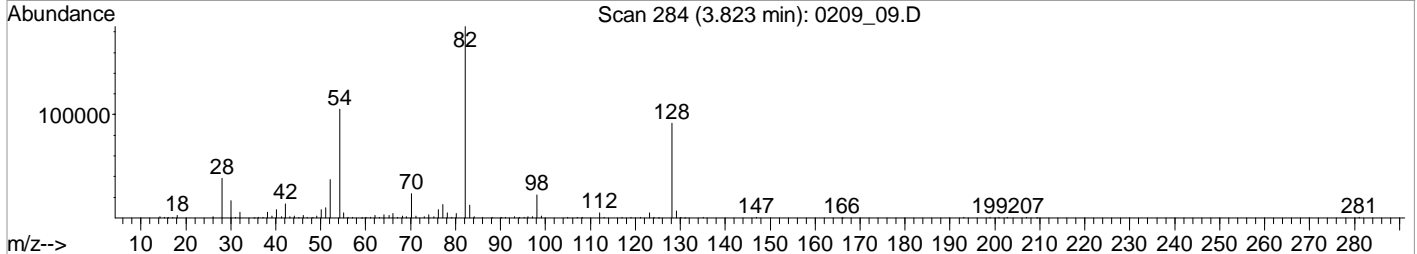
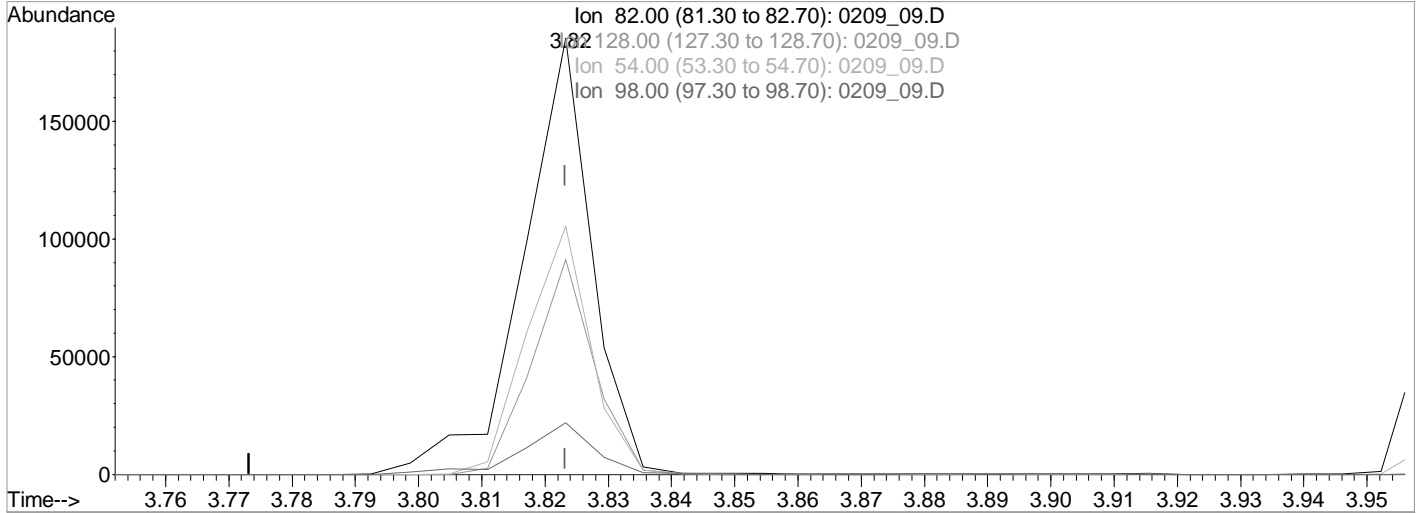
Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)
Title : 8270 BNA
Last Update : Thu May 05 15:59:02 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:46 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_09.D

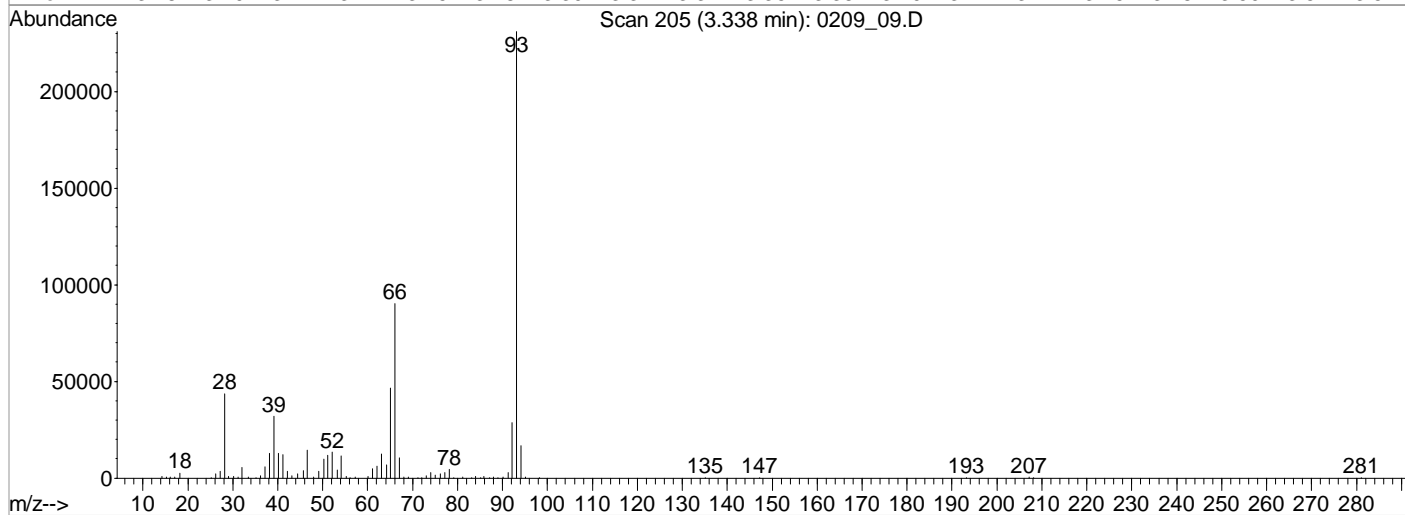
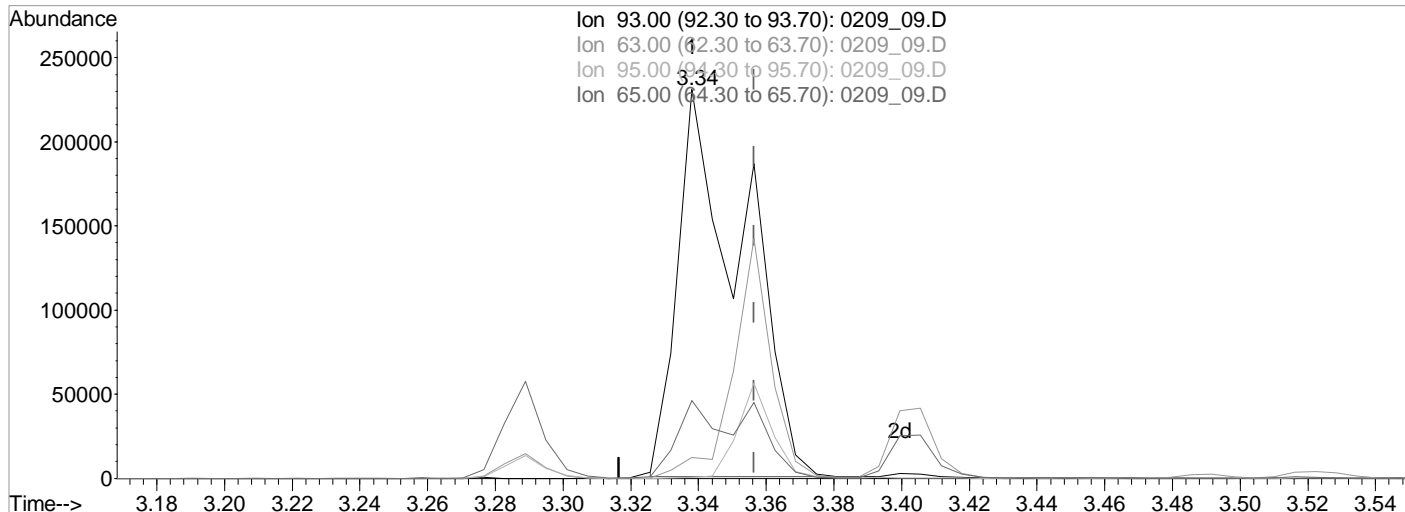
(24) Nitrobenzene-d5 (S)  
 3.82min (0.000) 11153.2092574 ppb  
 Qvalue = 100  
 response 140768

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	49.28
54.00	56.90	56.86
98.00	11.80	11.80

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6
Acq On : 9 Feb 2022 11:46 am Operator: 917
Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 14 11:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:49:28 2022
Response via : Multiple Level Calibration



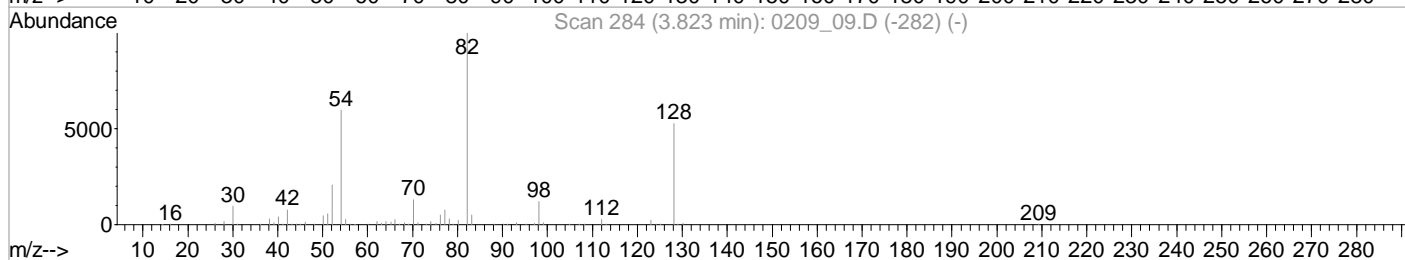
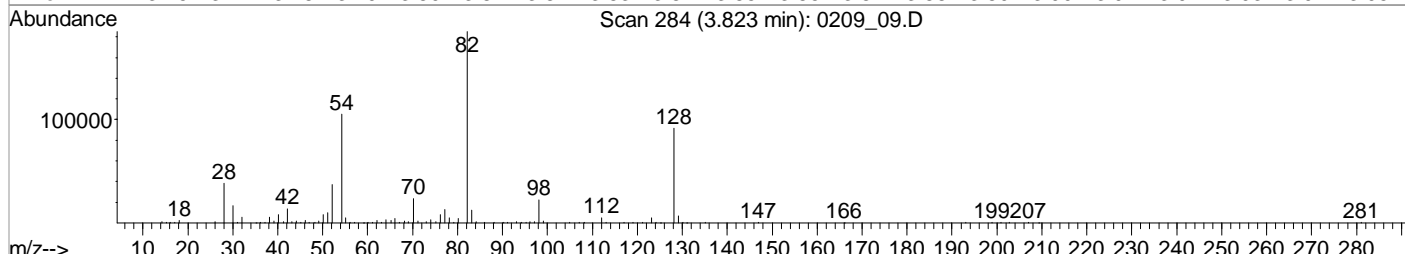
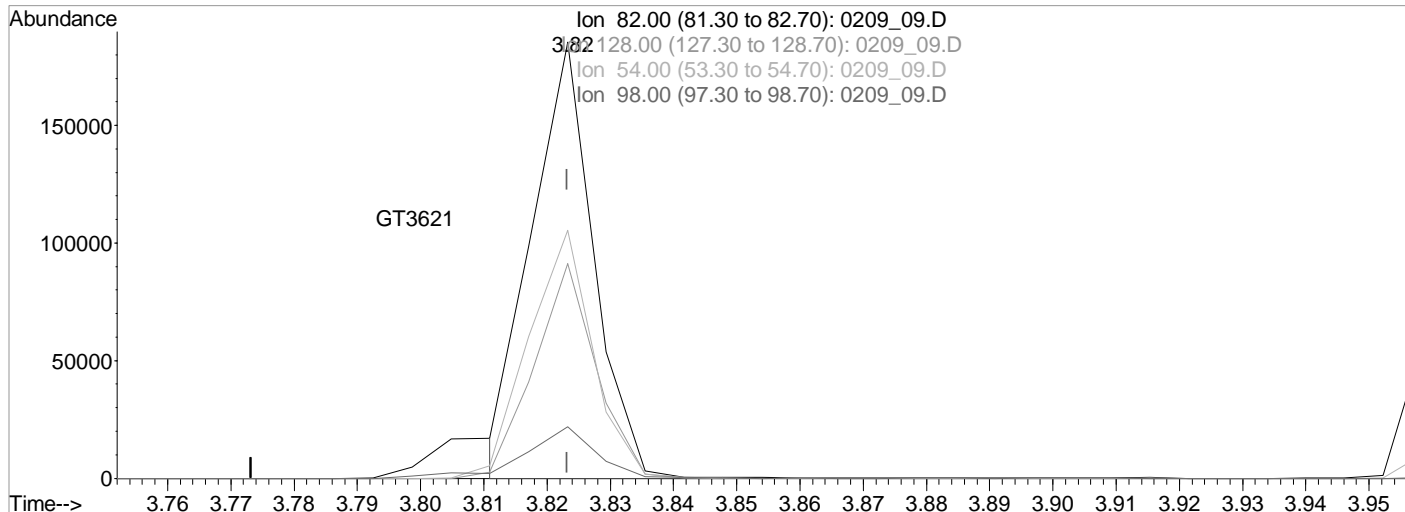
TIC: 0209\_09.D

(6) bis(2-Chloroethyl)ether (MT)
3.34min (-0.018) 29901.8981212 ppb
Qvalue = 37
response 308767
Ion Exp% Act%
93.00 100 100
63.00 76.20 5.25#
95.00 30.20 0.25#
65.00 24.00 19.97

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_09.D

(24) Nitrobenzene-d5 (S)  
 3.82min (0.000) 9983.3614604 ppb m

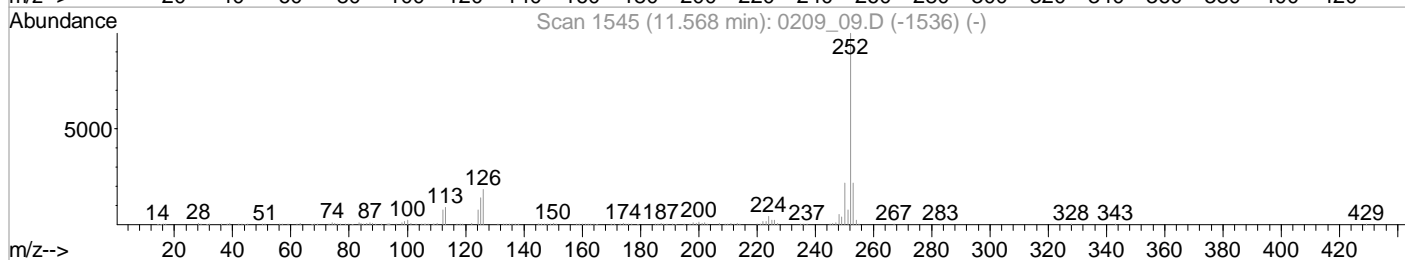
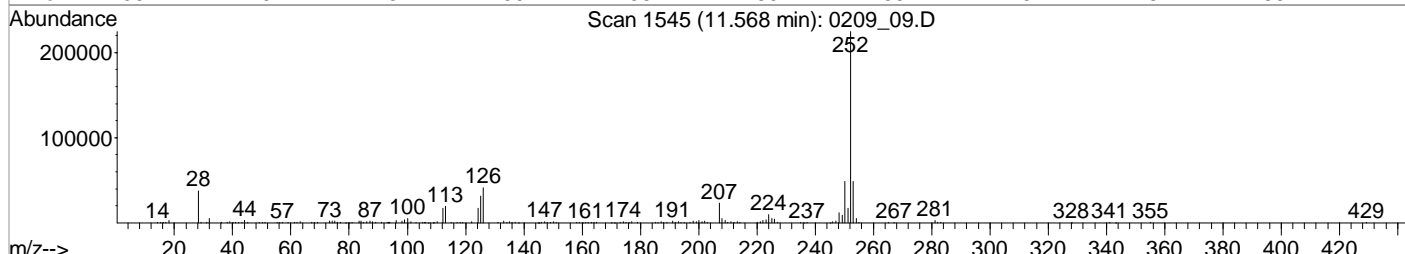
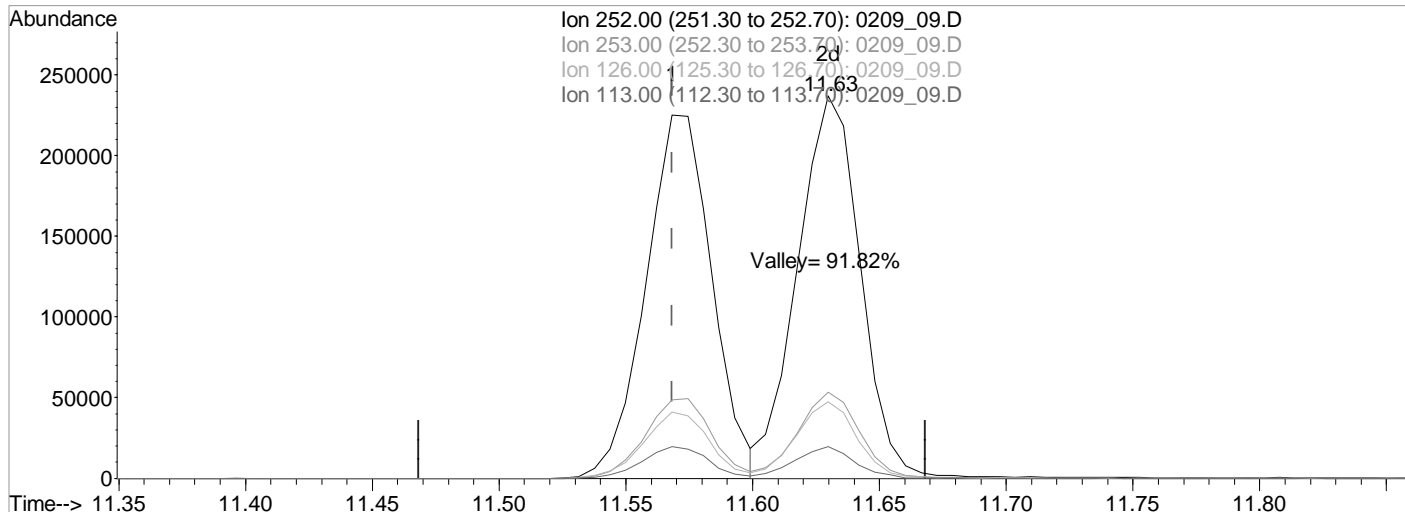
response 126003

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	49.28
54.00	56.90	56.86
98.00	11.80	11.80

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_09.D

(95) Benzo(b)fluoranthene (MT)  
 11.57min (0.000) 10000.0000000 ppb  
 Qvalue = 100  
 response 408147

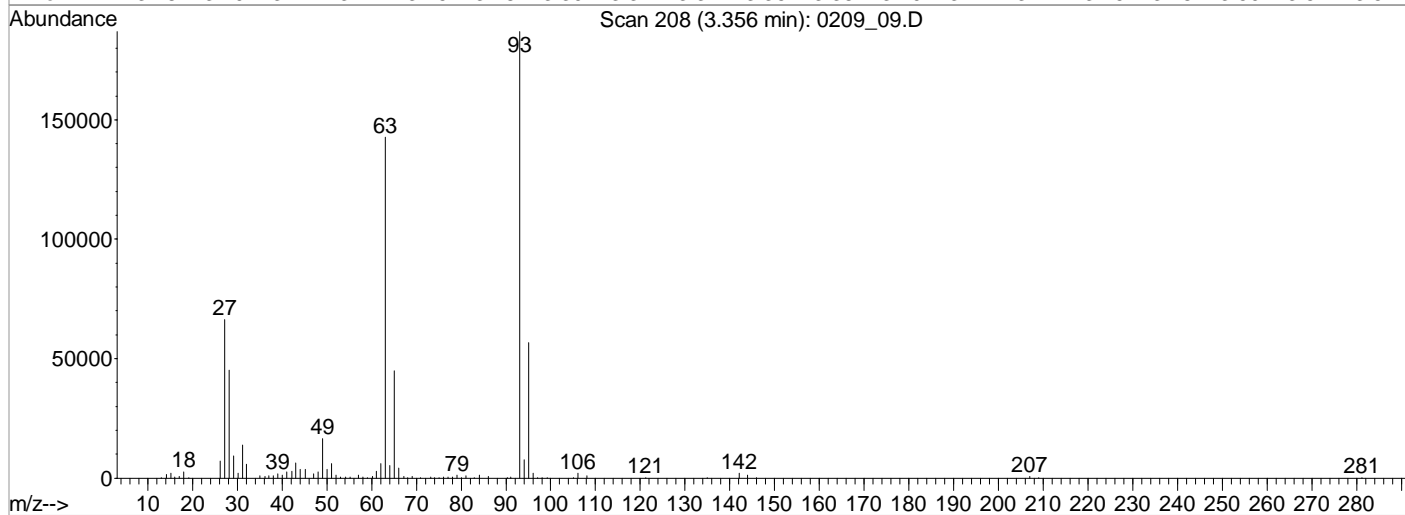
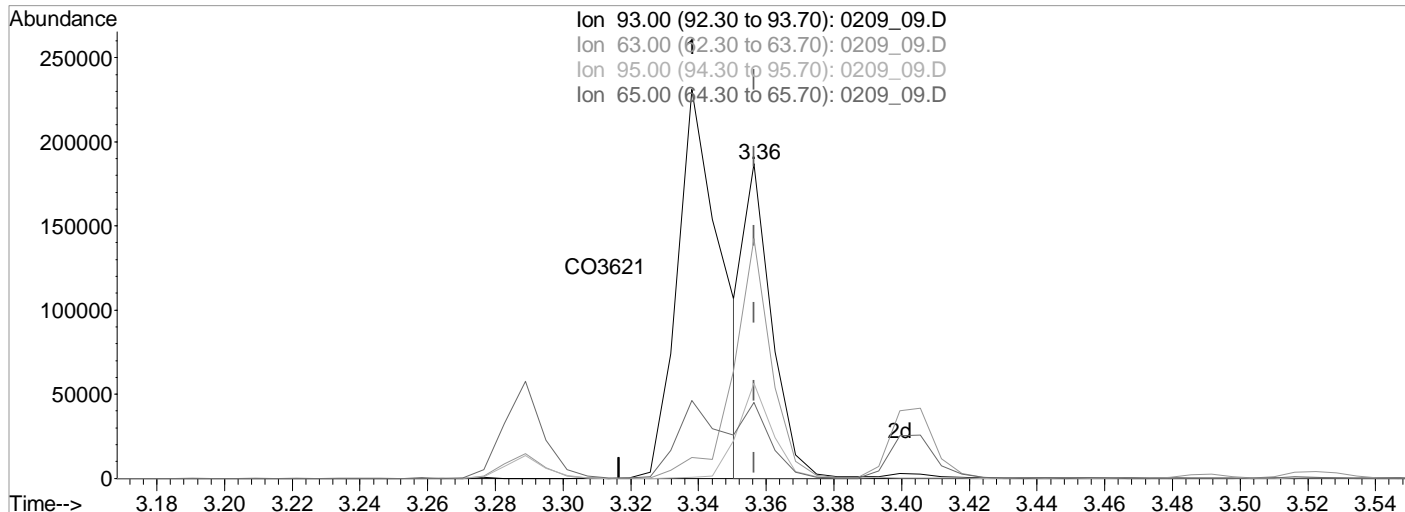
Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.58
126.00	18.30	18.28
113.00	8.80	8.83



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:51 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:49:28 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_09.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (0.000) 10000.0000000 ppb m

response	Ion	Exp%	Act%
103260	93.00	100	100
	63.00	76.20	76.22
	95.00	30.20	30.24
	65.00	24.00	24.04

Data File : C:\MSDCHEM\1\DATA\020922\0209 10.D Vial: 7  
 Acq On : 9 Feb 2022 12:07 pm Operator: 917  
 Sample : STD SVMS 20K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:56 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:33:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	86208	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	347138	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	183569	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	330840	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	285073	8000.00	ppb	0.01
94) Perylene-d12	12.39	264	302743	8000.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	2.85	112	272239	18661.6543157	ppb	0.00
Spiked Amount			Recovery	= 2802.05%		
7) Phenol-d5	3.28	99	324364	18496.6942819	ppb	0.00
Spiked Amount			Recovery	= 2777.28%		
24) Nitrobenzene-d5	3.82	82	295460	19368.4291281	ppb	0.00
Spiked Amount			Recovery	= 5816.35%		
50) 2-Fluorobiphenyl	4.95	172	586401	17903.9561881	ppb	0.00
Spiked Amount			Recovery	= 5376.56%		
73) 2,4,6-Tribromophenol	6.03	330	77136	22666.6083724	ppb	0.00
Spiked Amount			Recovery	= 3403.39%		
87) p-Terphenyl-d14	8.04	244	789163	20272.1352079	ppb	0.00
Spiked Amount			Recovery	= 6087.73%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.30	79	261928	19542.3134867	ppb	96
3) N-Nitrosodimethylamine	2.29	42	136057	17864.3509858	ppb	95
5) Aniline	3.34	66	154541	18585.4791613	ppb	96
6) bis(2-Chloroethyl)ether	3.36	93	232095m	9847.6121887	ppb	
8) Phenol	3.29	94	342395	18553.0677715	ppb	100
10) 2-Chlorophenol	3.41	128	272840	18496.2866686	ppb	99
11) n-Decane	3.40	41	157445	17389.9510473	ppb	99
12) 1,3-Dichlorobenzene	3.49	146	306344	18199.5524043	ppb	98
13) 1,4-Dichlorobenzene	3.53	146	320047	18479.3195352	ppb	99
14) Benzyl Alcohol	3.58	79	215987	19320.0163386	ppb	100
15) 1,2-Dichlorobenzene	3.61	146	293093	18376.6949746	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	96264	17046.2821911	ppb	# 60
17) 2,2-oxybis(1-chloropropane	3.65	121	96264	17046.2821911	ppb	# 60
18) 2-Methylphenol	3.62	108	248477	18585.3987464	ppb	98
19) Hexachloroethane	3.80	117	117446	18955.2970174	ppb	99
20) N-Nitrosodi-n-propylamine	3.72	70	181180	18494.1786409	ppb	94
21) 3&4-Methyl phenol	3.71	107	282323	18610.6871902	ppb	98
25) Nitrobenzene	3.84	77	277783	18685.5725230	ppb	99
26) Isophorone	3.97	82	502937	19075.1991737	ppb	92
27) 2-Nitrophenol	4.02	139	143139	20204.6602031	ppb	98
28) 2,4-Dimethylphenol	4.01	107	257480	18549.1054427	ppb	100
29) bis(2-Chlorethoxy)methane	4.08	93	312005	17922.1424470	ppb	99
30) 2,4-Dichlorophenol	4.15	162	221280	19202.5171699	ppb	97
32) 1,2,4-Trichlorobenzene	4.22	180	241090	18087.6469240	ppb	98
34) Naphthalene	4.27	128	844829	18259.7283814	ppb	100
35) 4-Chloroaniline	4.29	65	98492	18538.6186811	ppb	96
36) Hexachloro-1,3-butadiene	4.34	225	131833	18272.6824704	ppb	96
40) 4-Chloro-3-methylphenol	4.58	107	224609	19504.8371308	ppb	97
41) 2-Methylnaphthalene	4.71	142	542000	18003.1584047	ppb	100
42) 1-Methylnaphthalene	4.78	142	513619	18228.4010365	ppb	100
47) Hexachlorocyclopentadiene	4.81	237	168652	19525.3320136	ppb	98
48) 2,4,6-Trichlorophenol	4.89	196	150293	18865.1085833	ppb	99
49) 2,4,5-Trichlorophenol	4.91	196	167246	19927.2482835	ppb	97

(#) = qualifier out of range (m) = manual integration  
 0209\_10.D S804B09V.M Mon Feb 14 15:57:34 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 10.D Vial: 7  
 Acq On : 9 Feb 2022 12:07 pm Operator: 917  
 Sample : STD SVMS 20K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:56 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:33:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	647595	17888.5309328	ppb	100
52) 2-Chloronaphthalene	5.05	162	500906	18068.1297005	ppb	99
53) 2-Nitroaniline	5.11	138	166348	21452.1290308	ppb	100
54) Acenaphthylene	5.34	152	788960	18919.6543485	ppb	100
55) Dimethyl phthalate	5.22	163	534597	19479.6555890	ppb	95
56) 2,6-Dinitrotoluene	5.27	165	129766	21567.5036117	ppb #	79
57) 3-Nitroaniline	5.40	138	140498	22117.3384802	ppb #	85
58) Acenaphthene	5.46	153	508839	18134.1011029	ppb	99
59) 2,4-Dinitrophenol	5.47	184	62248	30503.8465152	ppb #	8
60) Dibenzofuran	5.59	168	713375	18240.2762900	ppb	99
61) 2,4-Dinitrotoluene	5.56	165	167911	23398.2738002	ppb	94
63) 4-Nitrophenol	5.49	139	116283	22354.0769151	ppb	90
64) Fluorene	5.84	166	578867	18529.5764942	ppb	98
65) 4-Chlorophenyl-phenylether	5.83	204	271726	17962.4414075	ppb	98
66) Diethyl phthalate	5.73	149	540003	19010.0642596	ppb	100
67) 4-Nitroaniline	5.84	138	139219	21654.3738027	ppb	98
68) Azobenzene	5.95	77	538003	18780.1955363	ppb	100
71) 4,6-Dinitro-2-methylphenol	5.86	198	86560	28504.1559685	ppb	91
72) N-Nitrosodiphenylamine	5.92	169	483553	19435.6144222	ppb	99
74) 4-Bromophenyl-phenylether	6.21	248	158468	19591.0940675	ppb	99
75) Hexachlorobenzene	6.26	284	171080	18685.5046189	ppb	98
76) n-octadecane	6.45	55	93724	17633.1560311	ppb	98
77) Pentachlorophenol	6.41	266	103486	24396.1140361	ppb	98
78) Phenanthrene	6.59	178	834889	18436.2632779	ppb	99
79) Anthracene	6.63	178	861133	19130.3122795	ppb	100
80) Carbazole	6.75	167	789748	18989.7533321	ppb	100
81) Di-n-butyl phthalate	7.02	149	923993	20402.1772648	ppb	100
83) Fluoranthene	7.64	202	879416	18984.1216772	ppb	100
86) Pyrene	7.88	202	923400	19934.4915246	ppb	99
88) Benzylbutyl phthalate	8.68	149	392900	21875.2708207	ppb	95
90) Benzo(a)anthracene	9.52	228	814305	19407.2635003	ppb	99
91) Chrysene	9.58	228	783536	19067.5727386	ppb	98
92) bis(2-Ethylhexyl)phthalate	9.62	149	543287	22108.5689402	ppb	99
93) Di-n-octyl phthalate	10.92	149	917409	23020.5211479	ppb	99
95) Benzo(b)fluoranthene	11.57	252	833715	18841.8209418	ppb	100
96) Benzo(k)fluoranthene	11.64	252	832949	19248.9008472	ppb	99
97) Benzo(a)pyrene	12.26	252	744155	19933.4238986	ppb	99
98) Indeno(1,2,3-cd)pyrene	14.20	276	743921	19873.7191700	ppb	97
99) Dibenz(a,h)anthracene	14.25	278	777012m	19311.3833174	ppb	
100) Benzo(g,h,i)perylene	14.53	276	761773	18997.7471488	ppb	99

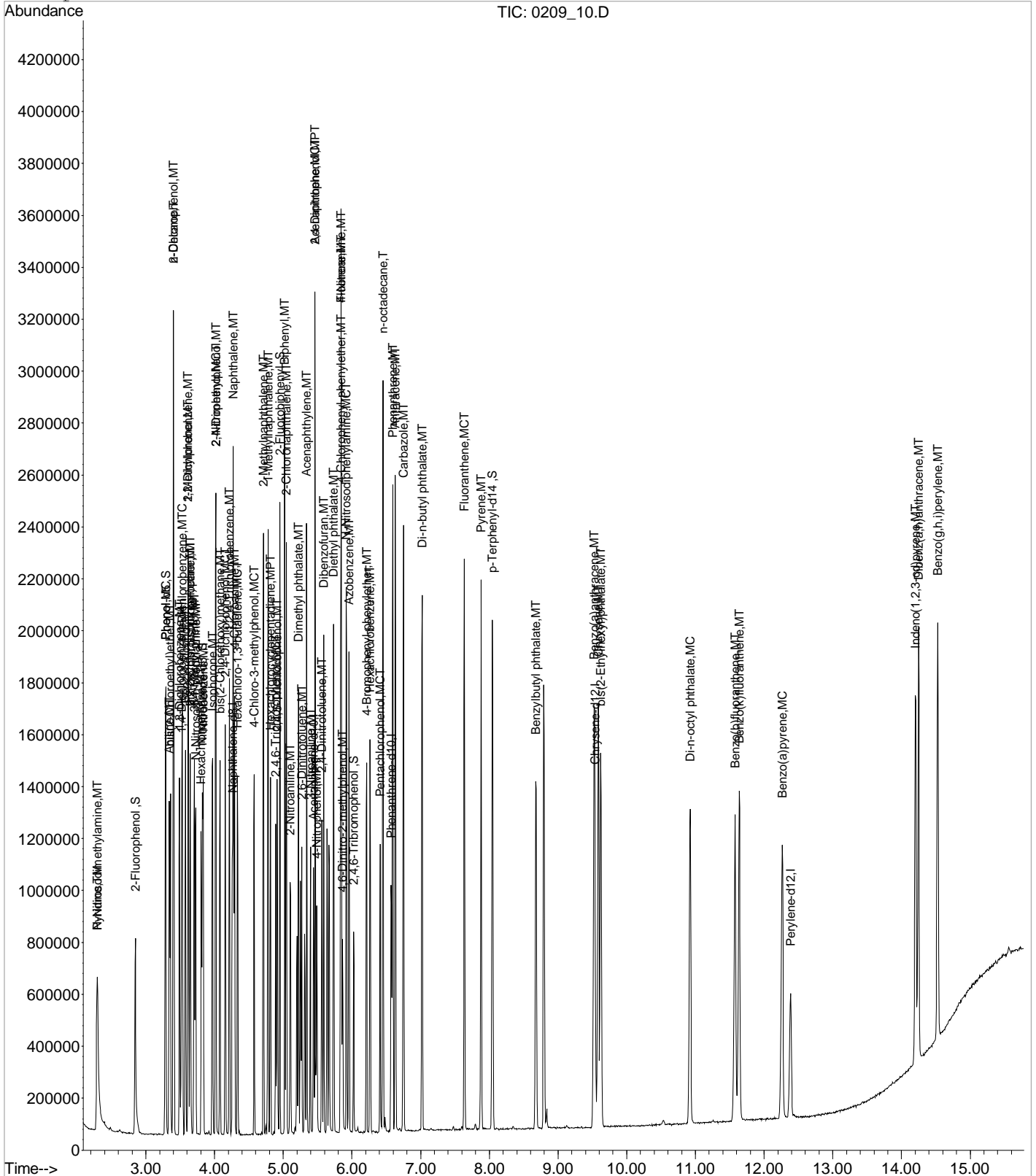
(#) = qualifier out of range (m) = manual integration  
 0209\_10.D S804B09V.M Mon Feb 14 15:57:34 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 10.D
Acq On : 9 Feb 2022 12:07 pm
Sample : STD SVMS 20K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:56 2022

Vial: 7
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:53:30 2022
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:00 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	86467	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	338831	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	181617	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	323775	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	286155	8000.00	ppb	0.01
94) Perylene-d12	12.39	264	297513	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	396904	27493.7551409	ppb	0.00
Spiked Amount 666.000			Recovery = 4128.19%			
7) Phenol-d5	3.28	99	479003	27648.7325708	ppb	0.00
Spiked Amount 666.000			Recovery = 4151.46%			
24) Nitrobenzene-d5	3.82	82	437748	29586.2873557	ppb	0.00
Spiked Amount 333.000			Recovery = 8884.77%			
50) 2-Fluorobiphenyl	4.95	172	859895	27104.5580823	ppb	0.00
Spiked Amount 333.000			Recovery = 8139.51%			
73) 2,4,6-Tribromophenol	6.03	330	114484	33482.6410351	ppb	0.00
Spiked Amount 666.000			Recovery = 5027.42%			
87) p-Terphenyl-d14	8.05	244	1170779	29880.1096870	ppb	0.00
Spiked Amount 333.000			Recovery = 8973.01%			

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.30	79	396351	29618.5269538	ppb	94
3) N-Nitrosodimethylamine	2.29	42	198133	26503.0481554	ppb	92
5) Aniline	3.34	66	225992	27485.7338400	ppb	95
6) bis(2-Chloroethyl)ether	3.36	93	361980m	14180.1077032	ppb	
8) Phenol	3.29	94	503929	27623.8813249	ppb	98
10) 2-Chlorophenol	3.41	128	404850	27781.0061873	ppb	99
11) n-Decane	3.40	41	230021	26008.7813892	ppb	100
12) 1,3-Dichlorobenzene	3.49	146	453285	27340.7451256	ppb	97
13) 1,4-Dichlorobenzene	3.53	146	467492	27327.4140627	ppb	99
14) Benzyl Alcohol	3.58	79	321645	28881.3226194	ppb	100
15) 1,2-Dichlorobenzene	3.61	146	429368	27283.2803134	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	143314	26071.8989188	ppb	# 61
17) 2,2-oxybis(1-chloropropane	3.65	121	143314	26071.8989188	ppb	# 61
18) 2-Methylphenol	3.62	108	367051	27764.9362732	ppb	99
19) Hexachloroethane	3.80	117	171733	27925.7118393	ppb	97
20) N-Nitrosodi-n-propylamine	3.72	70	265139	27395.8653183	ppb	97
21) 3&4-Methyl phenol	3.71	107	417216	27806.7541719	ppb	98
25) Nitrobenzene	3.84	77	406583	28393.2636833	ppb	99
26) Isophorone	3.97	82	744063	29182.2832651	ppb	95
27) 2-Nitrophenol	4.02	139	215234	31062.4386869	ppb	97
28) 2,4-Dimethylphenol	4.02	107	384614	28805.1997458	ppb	95
29) bis(2-Chlorethoxy)methane	4.08	93	456276	27421.6832015	ppb	98
30) 2,4-Dichlorophenol	4.15	162	325979	29214.7349032	ppb	95
32) 1,2,4-Trichlorobenzene	4.22	180	348647	27320.8062112	ppb	98
34) Naphthalene	4.27	128	1231112	27743.8370133	ppb	100
35) 4-Chloroaniline	4.29	65	145575	28488.9054183	ppb	98
36) Hexachloro-1,3-butadiene	4.34	225	192487	27814.1495195	ppb	96
40) 4-Chloro-3-methylphenol	4.58	107	332331	29713.9819067	ppb	96
41) 2-Methylnaphthalene	4.71	142	798214	27717.0946035	ppb	99
42) 1-Methylnaphthalene	4.78	142	749807	27754.8528533	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	252254	29658.8428408	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	239963	30793.8957639	ppb	99
49) 2,4,5-Trichlorophenol	4.92	196	233799	28176.8965672	ppb	90

(#) = qualifier out of range (m) = manual integration

0209\_11.D S804B09V.M Mon Feb 14 16:00:15 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:00 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
51) Biphenyl	5.02	154	954298	27218.6284076	ppb		100
52) 2-Chloronaphthalene	5.05	162	729917	27135.9728440	ppb		99
53) 2-Nitroaniline	5.11	138	252000	32376.8830601	ppb		99
54) Acenaphthylene	5.34	152	1177864	28861.1488889	ppb		100
55) Dimethyl phthalate	5.22	163	798035	29545.0865909	ppb		98
56) 2,6-Dinitrotoluene	5.27	165	195650	32359.8783339	ppb		87
57) 3-Nitroaniline	5.40	138	214569	33432.8235967	ppb		92
58) Acenaphthene	5.46	153	761361	27946.6119578	ppb		100
59) 2,4-Dinitrophenol	5.47	184	103583	46428.3381283	ppb	#	5
60) Dibenzofuran	5.59	168	1040729	27378.1723117	ppb		100
61) 2,4-Dinitrotoluene	5.56	165	250004	34055.0234732	ppb		91
63) 4-Nitrophenol	5.49	139	179386	34053.8922654	ppb		94
64) Fluorene	5.84	166	862949	28336.6208660	ppb		98
65) 4-Chlorophenyl-phenylether	5.83	204	395130	26949.9161147	ppb		98
66) Diethyl phthalate	5.73	149	813472	29234.3554715	ppb		99
67) 4-Nitroaniline	5.85	138	203025	31398.8262569	ppb		98
68) Azobenzene	5.95	77	792154	28294.2375148	ppb		99
71) 4,6-Dinitro-2-methylphenol	5.87	198	135786	42108.9352390	ppb		92
72) N-Nitrosodiphenylamine	5.92	169	724399	29920.2193573	ppb		99
74) 4-Bromophenyl-phenylether	6.21	248	234282	29717.3604968	ppb		98
75) Hexachlorobenzene	6.27	284	257996	29176.9503169	ppb		98
76) n-octadecane	6.45	55	136953	26966.7219366	ppb		98
77) Pentachlorophenol	6.41	266	156898	36203.1890934	ppb		96
78) Phenanthrene	6.59	178	1222718	28027.8670594	ppb		99
79) Anthracene	6.64	178	1260001	28852.9977991	ppb		100
80) Carbazole	6.75	167	1111930	27598.9585677	ppb		99
81) Di-n-butyl phthalate	7.02	149	1387515	31180.0704196	ppb		100
83) Fluoranthene	7.64	202	1317288	29355.2678784	ppb		100
86) Pyrene	7.88	202	1371296	29511.1301678	ppb		99
88) Benzylbutyl phthalate	8.68	149	589200	32078.9480949	ppb		96
90) Benzo(a)anthracene	9.53	228	1211731	28941.4341701	ppb		99
91) Chrysene	9.59	228	1161595	28425.9125421	ppb		99
92) bis(2-Ethylhexyl)phthalate	9.62	149	821035	32597.5941135	ppb		99
93) Di-n-octyl phthalate	10.92	149	1390793	33747.8146961	ppb		99
95) Benzo(b)fluoranthene	11.58	252	1234766	28728.7906567	ppb		99
96) Benzo(k)fluoranthene	11.64	252	1230724	29160.2102659	ppb		98
97) Benzo(a)pyrene	12.27	252	1103829	30107.7078810	ppb		99
98) Indeno(1,2,3-cd)pyrene	14.21	276	1064818	28983.0879255	ppb		98
99) Dibenz(a,h)anthracene	14.25	278	1133383m	28860.8413210	ppb		
100) Benzo(g,h,i)perylene	14.53	276	1087164	27868.5544106	ppb		94

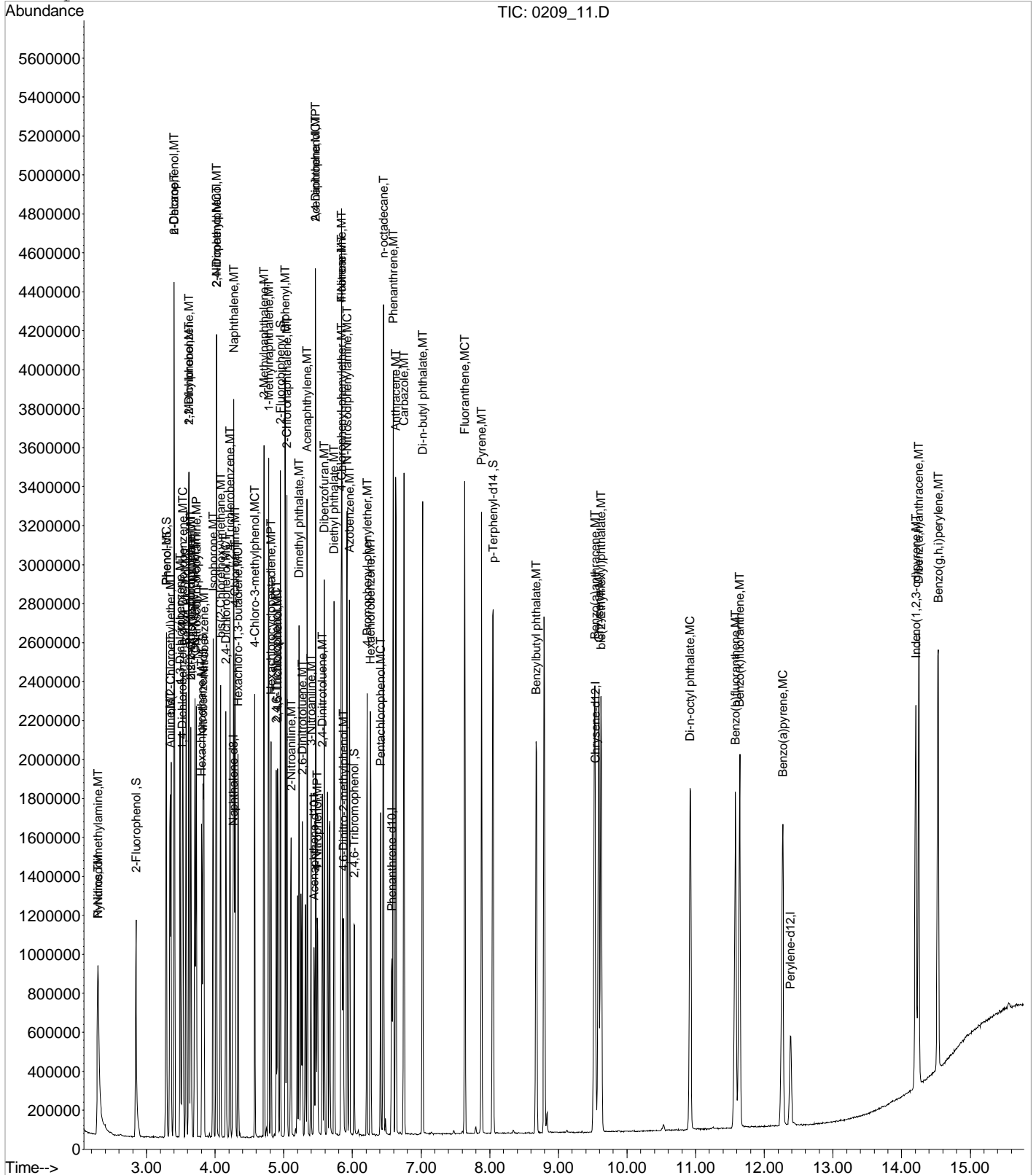
(#) = qualifier out of range (m) = manual integration  
 0209\_11.D S804B09V.M Mon Feb 14 16:00:15 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D
Acq On : 9 Feb 2022 12:27 pm
Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 16:00 2022

Vial: 8
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

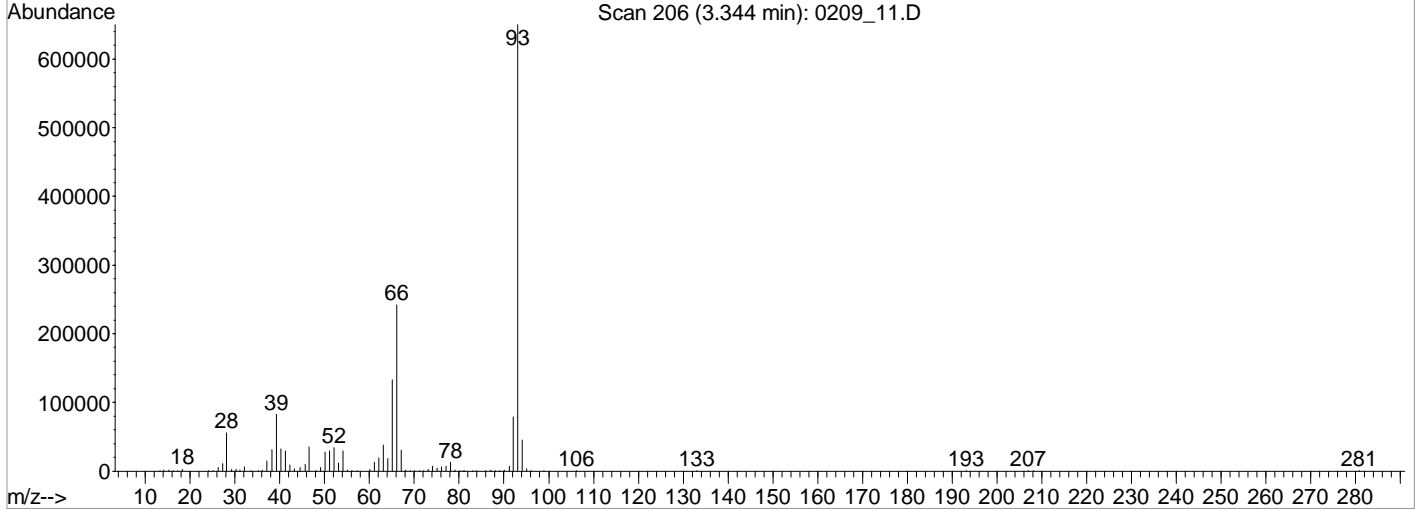
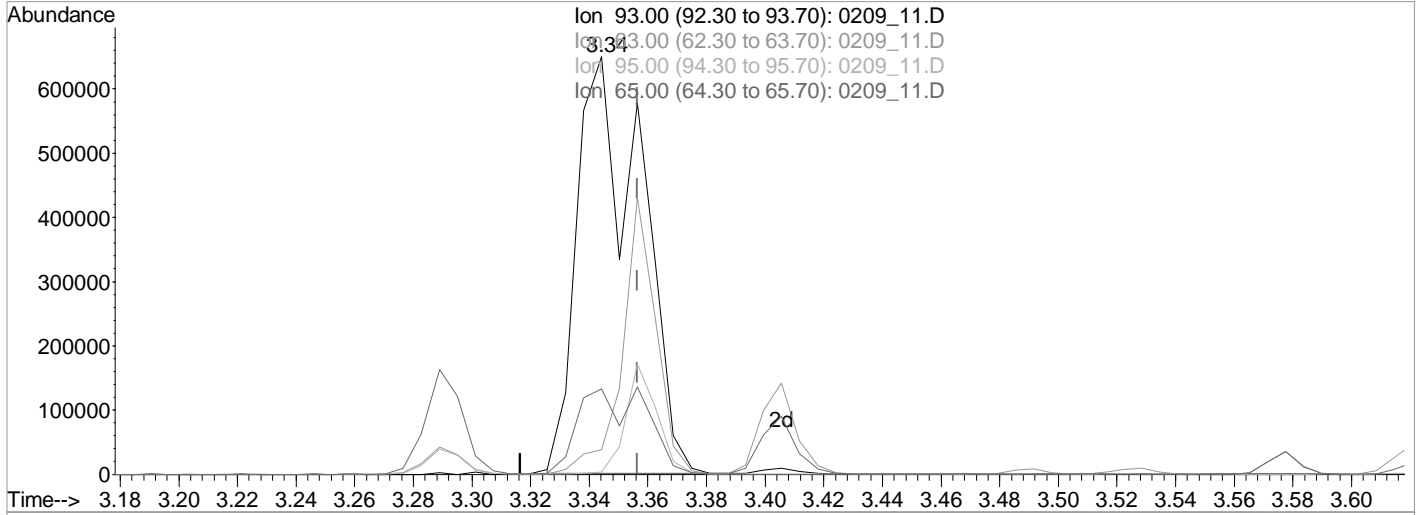
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:58:05 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8
Acq On : 9 Feb 2022 12:27 pm Operator: 917
Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 14 12:41 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 12:40:00 2022
Response via : Multiple Level Calibration



TIC: 0209\_11.D

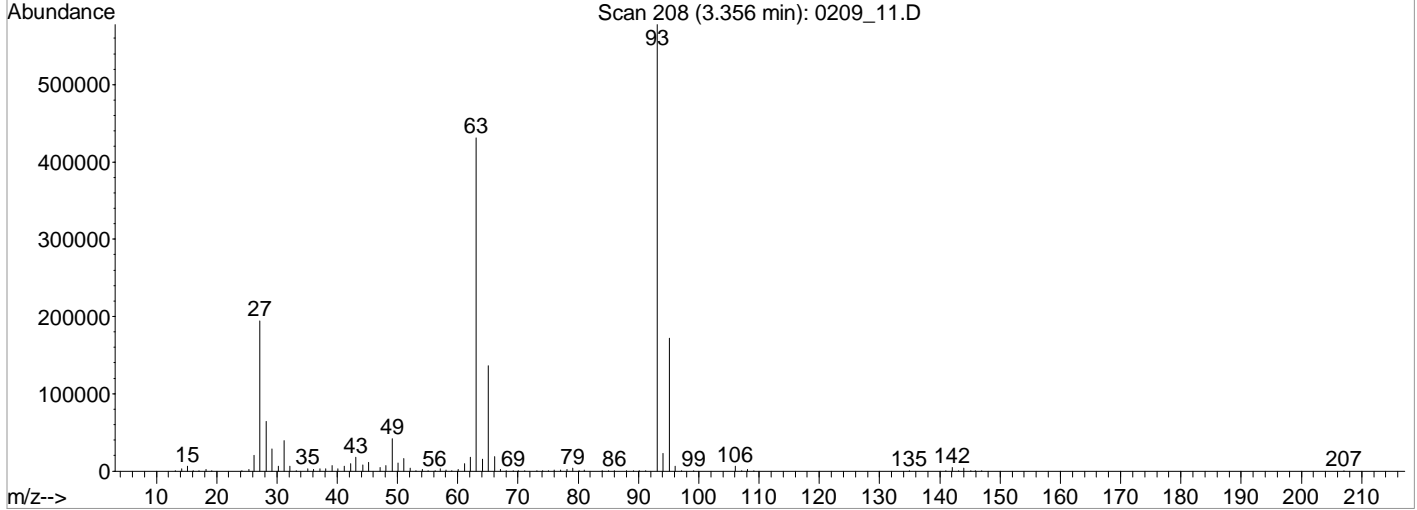
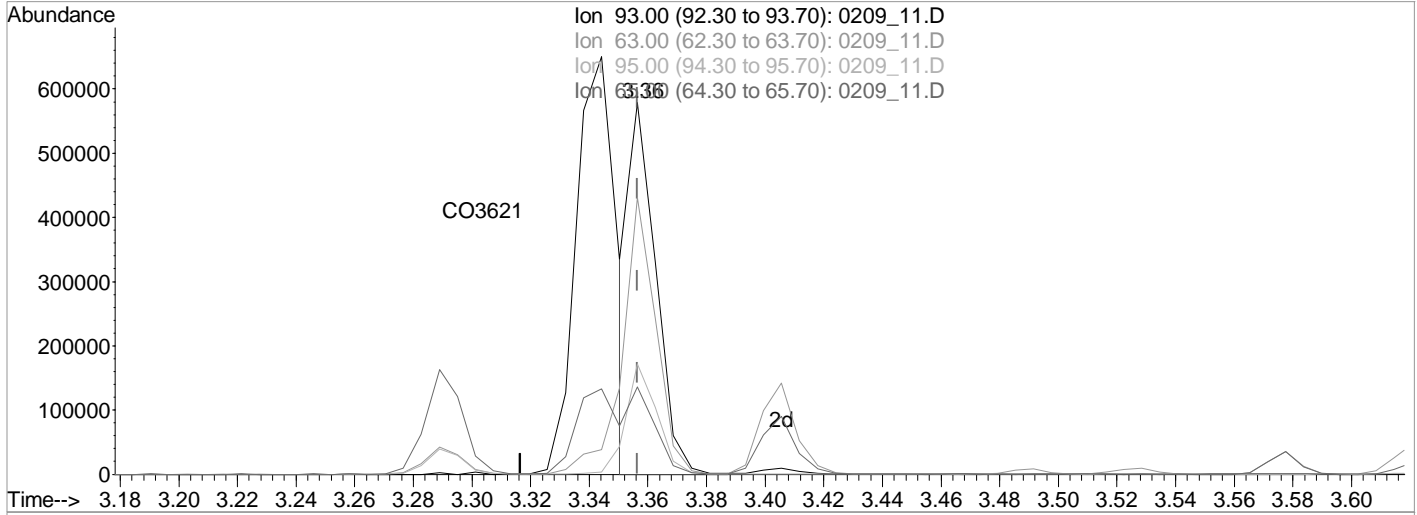
(6) bis(2-Chloroethyl)ether (MT)
3.34min (-0.012) 38212.7225291 ppb
Qvalue = 38
response 975468
Ion Exp% Act%
93.00 100 100
63.00 76.20 5.77#
95.00 30.20 0.50#
65.00 24.00 20.39



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:41 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

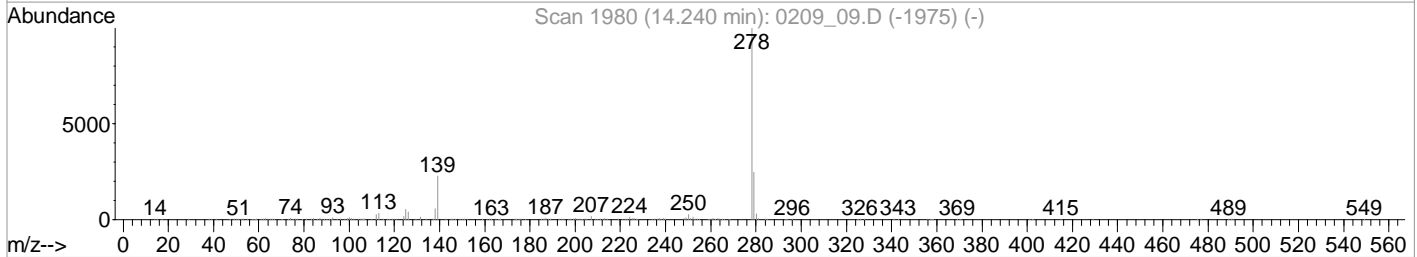
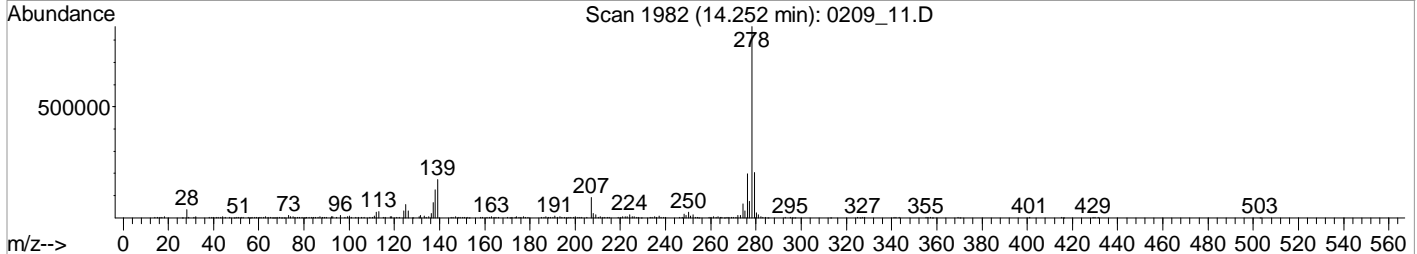
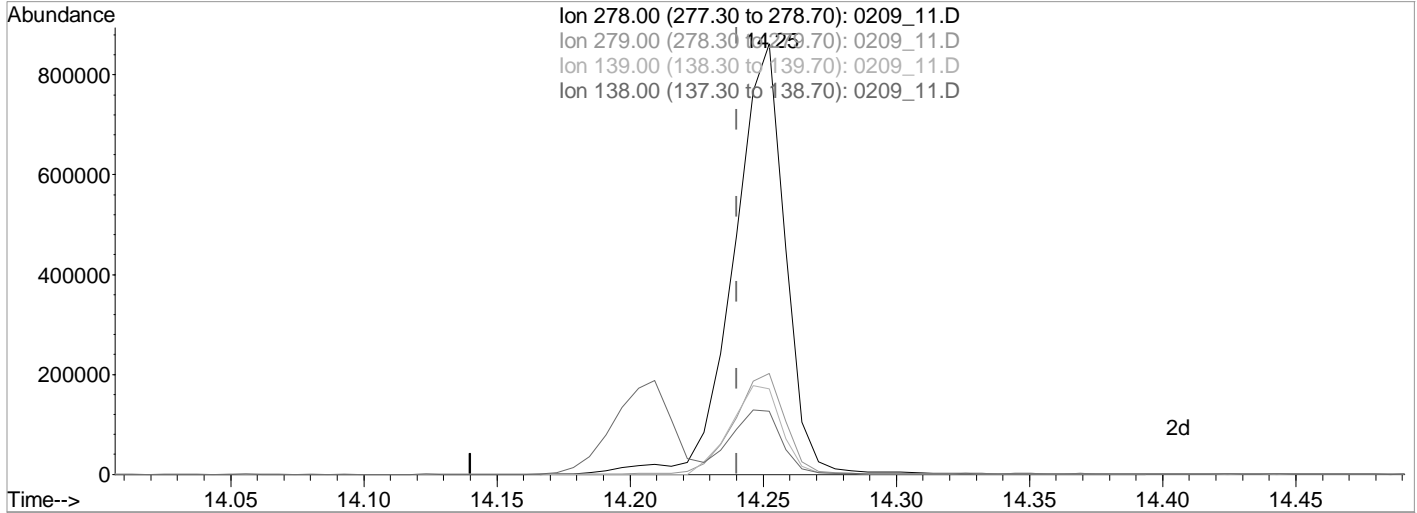
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 38212.7225291 ppb  
 Qvalue = 38  
 response 975468

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.77#
95.00	30.20	0.50#
65.00	24.00	20.39

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:41 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

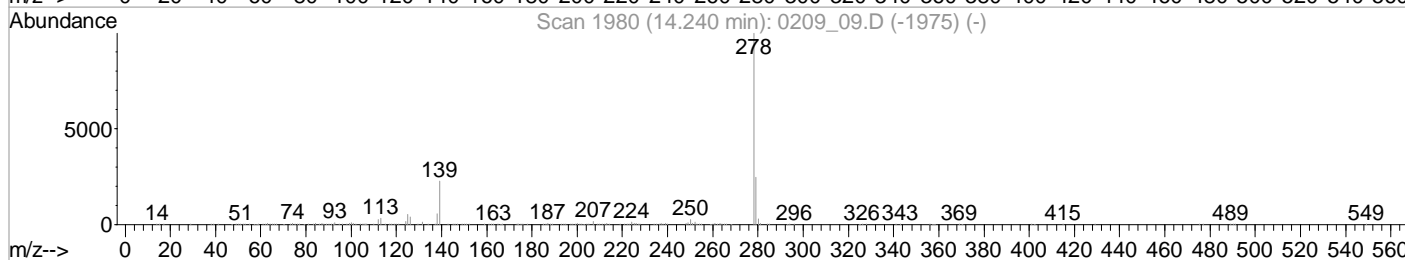
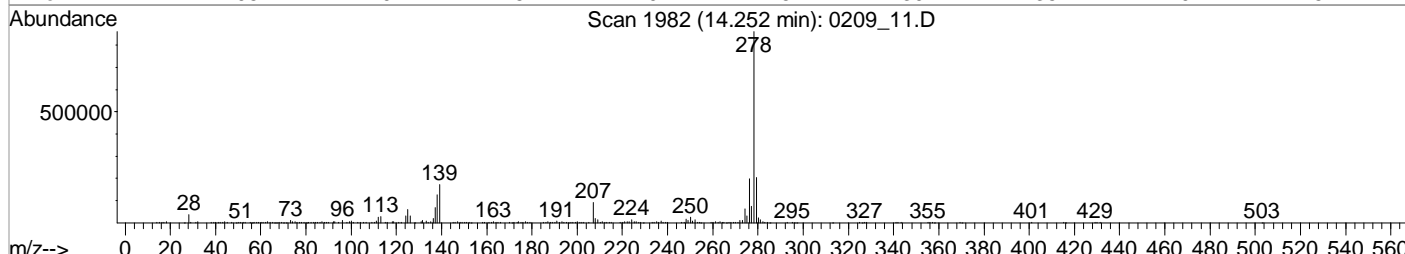
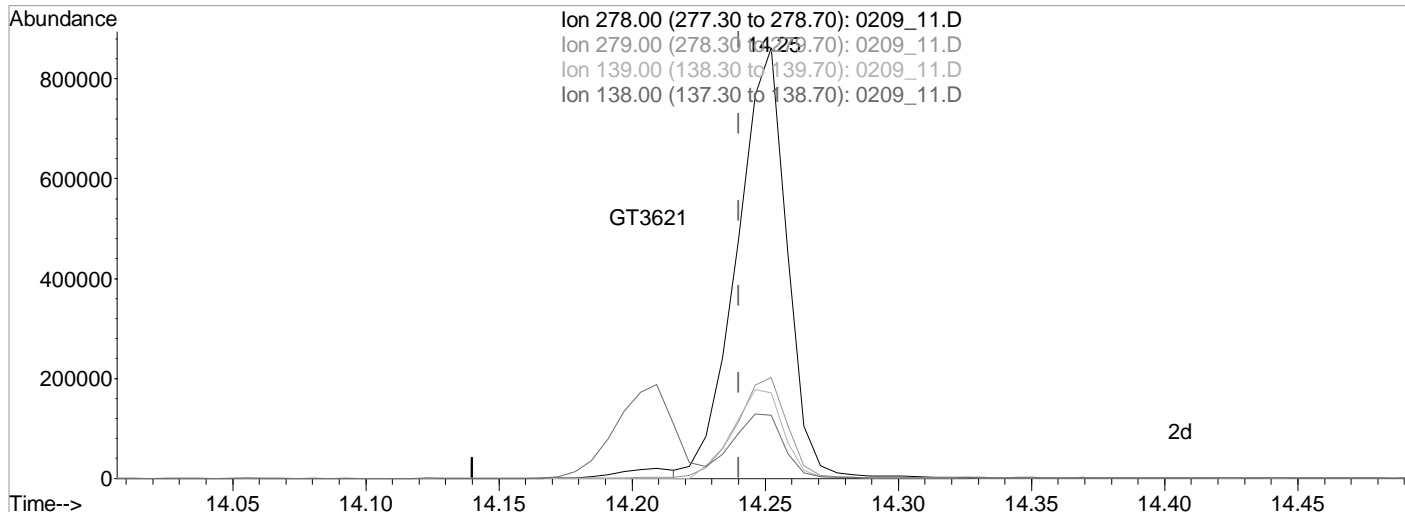
(99) Dibenz(a,h)anthracene (MT)  
 14.25min (+0.012) 29724.9225085 ppb  
 Qvalue = 96  
 response 1167316

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.43
139.00	22.10	19.81
138.00	16.70	14.55

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:46 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

(99) Dibenz(a,h)anthracene (MT)  
 14.25min (+0.012) 28882.0021811 ppb m

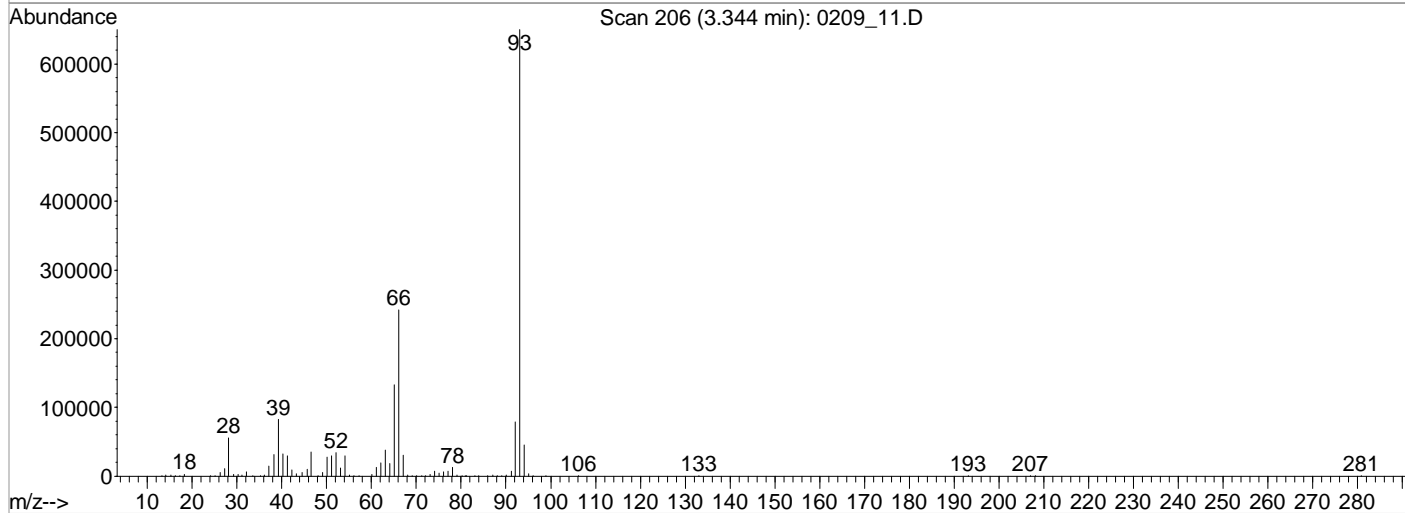
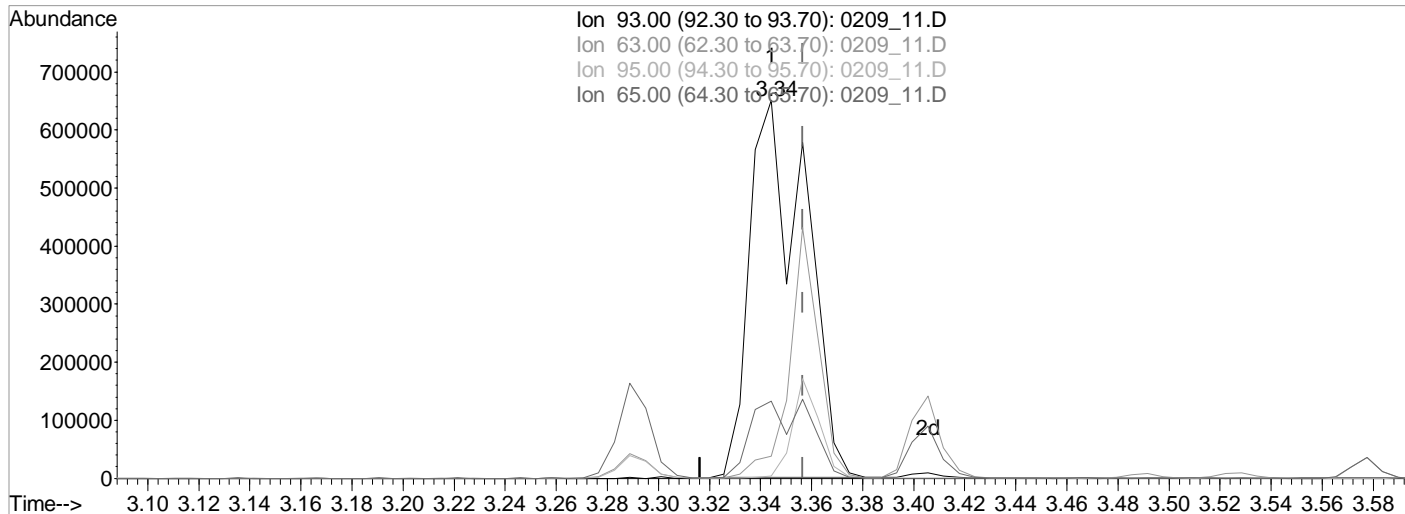
response 1134214

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.46
139.00	22.10	19.84
138.00	16.70	14.59

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:46 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:58:05 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

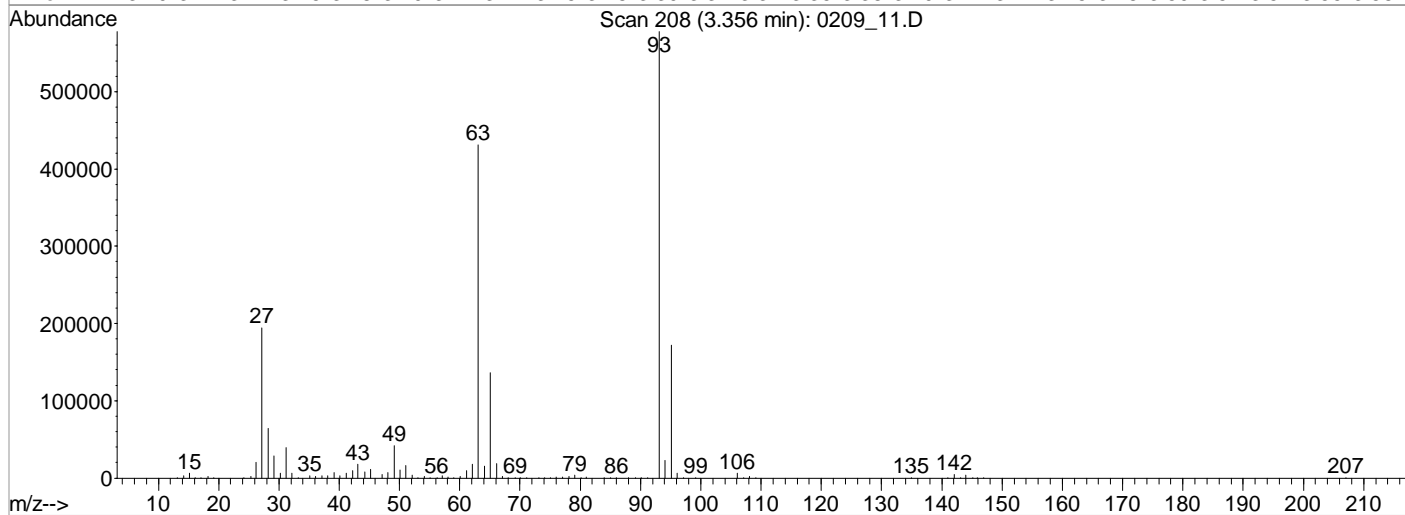
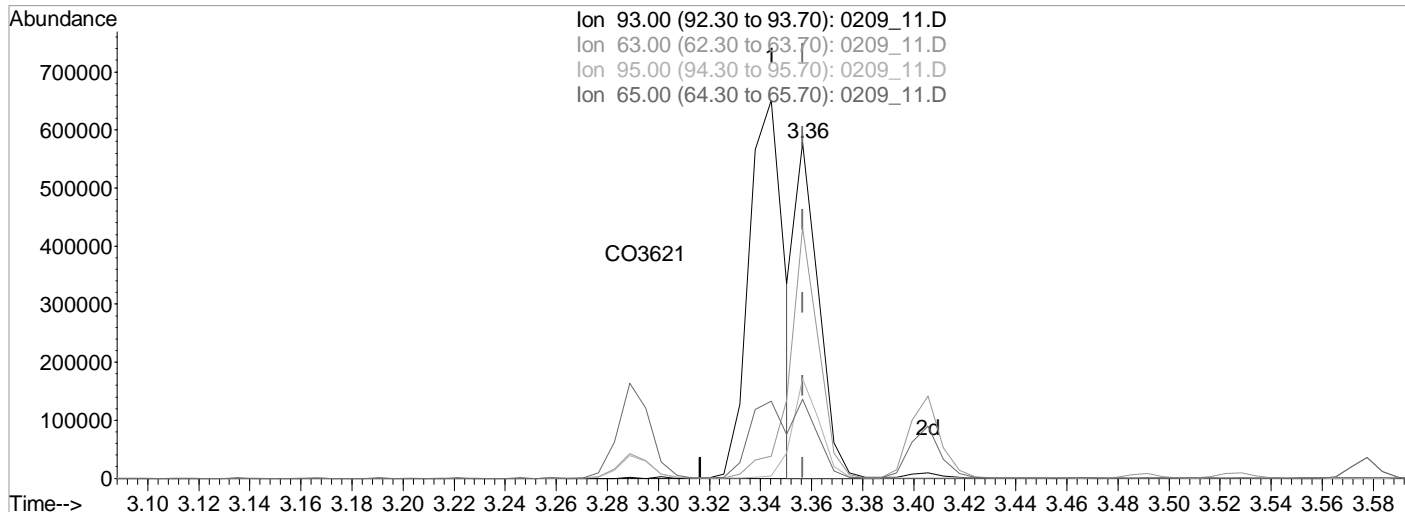
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 38212.7225291 ppb  
 Qvalue = 38  
 response 975468

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.77#
95.00	30.20	0.50#
65.00	24.00	20.39

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:59 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:58:05 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (-0.000) 14180.1077032 ppb m

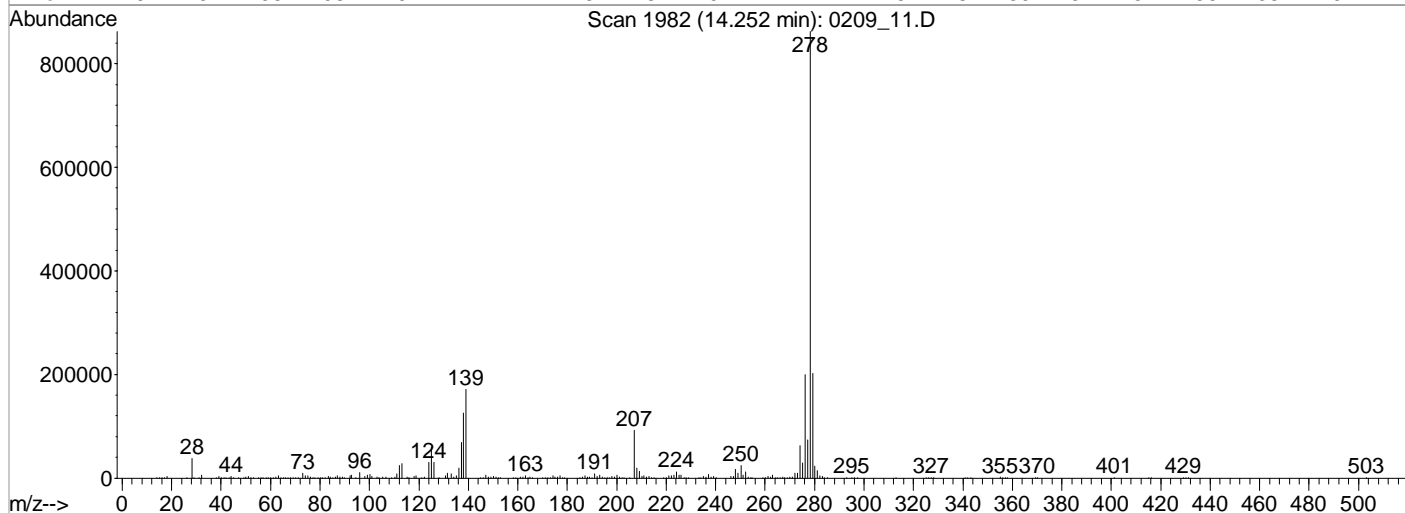
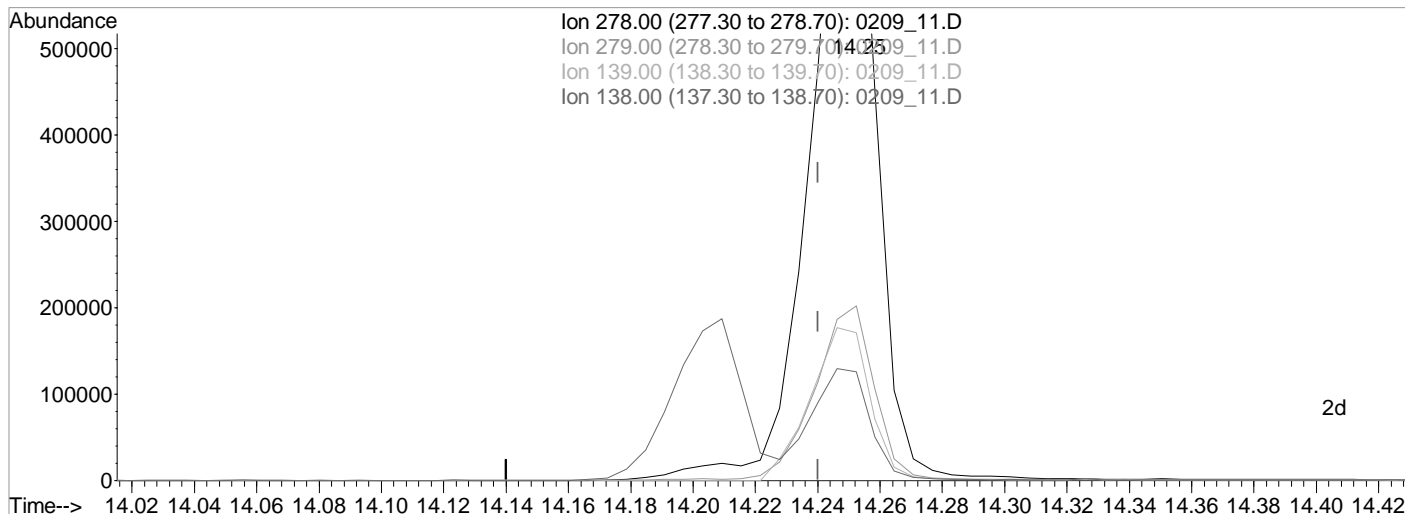
response 361980

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	74.57
95.00	30.20	29.67
65.00	24.00	23.57

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:59 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:58:05 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

(99) Dibenz(a,h)anthracene (MT)  
 14.25min (+0.012) 29577.4840246 ppb m

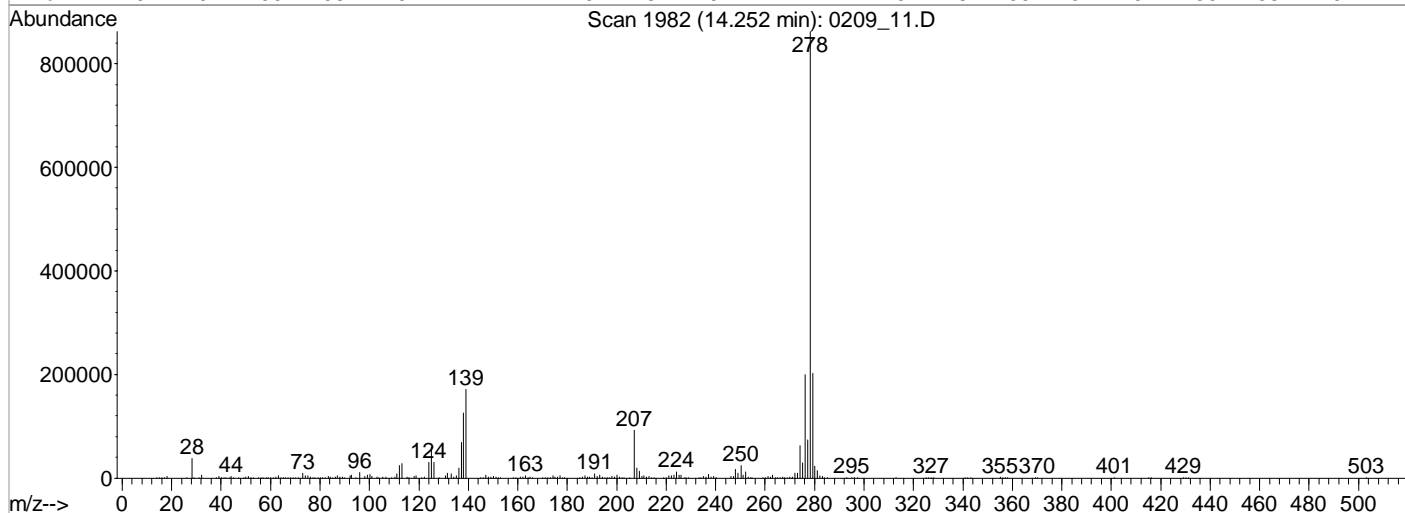
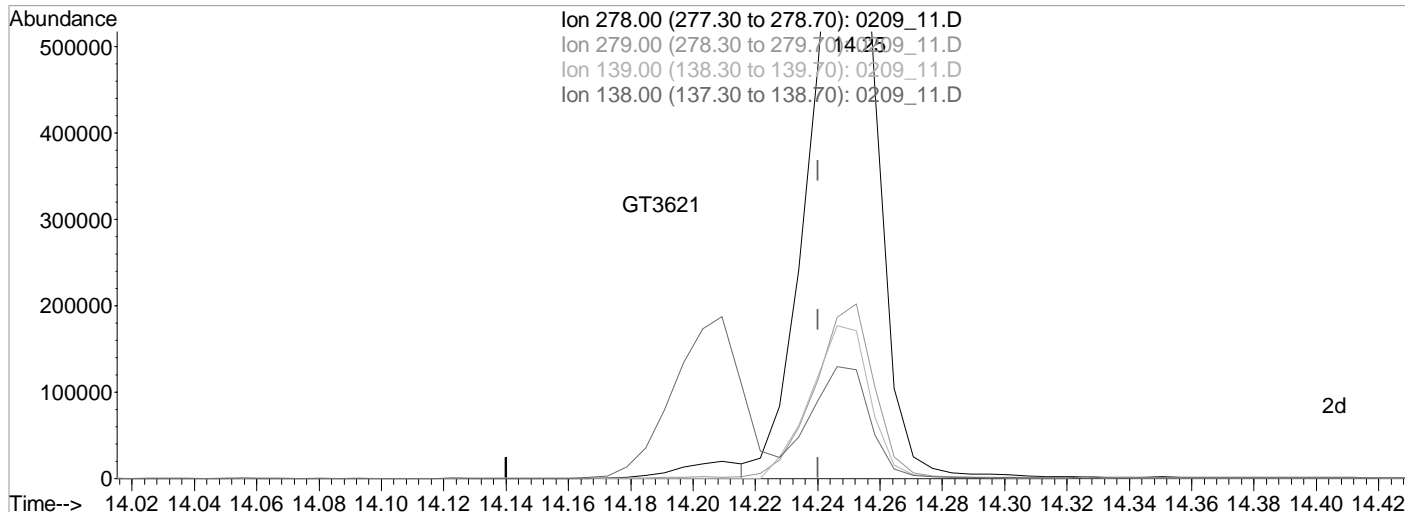
response 1161526

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.46
139.00	22.10	19.84
138.00	16.70	14.59

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8
Acq On : 9 Feb 2022 12:27 pm Operator: 917
Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 14 16:00 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:58:05 2022
Response via : Multiple Level Calibration



TIC: 0209\_11.D
(99) Dibenz(a,h)anthracene (MT)
14.25min (+0.012) 28860.8413210 ppb m
response 1133383
Table with 3 columns: Ion, Exp%, Act%
Rows: 278.00, 279.00, 139.00, 138.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:10 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	87467m	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	341732	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	182560	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	318126	8000.00	ppb	0.00
84) Chrysene-d12	9.55	240	292226	8000.00	ppb	0.02
94) Perylene-d12	12.39	264	304548	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	531044	37370.2200771	ppb	0.00
Spiked Amount 666.000				Recovery = 5611.14%		
7) Phenol-d5	3.28	99	637749	37392.5144194	ppb	0.00
Spiked Amount 666.000				Recovery = 5614.49%		
24) Nitrobenzene-d5	3.82	82	583502	40242.1631535	ppb	0.00
Spiked Amount 333.000				Recovery = 12084.73%		
50) 2-Fluorobiphenyl	4.95	172	1151371	37386.3354702	ppb	0.00
Spiked Amount 333.000				Recovery = 11227.13%		
73) 2,4,6-Tribromophenol	6.03	330	159920	44407.1598699	ppb	0.00
Spiked Amount 666.000				Recovery = 6667.74%		
87) p-Terphenyl-d14	8.05	244	1610324	40322.5863908	ppb	0.00
Spiked Amount 333.000				Recovery = 12108.88%		

Target Compounds

						Qvalue
2) Pyridine	2.29	79	530979	39242.0417090	ppb	94
3) N-Nitrosodimethylamine	2.28	42	266600	36709.1991107	ppb	92
5) Aniline	3.34	66	302187	37348.2466300	ppb	94
6) bis(2-Chloroethyl)ether	3.36	93	492159m	27672.6256004	ppb	
8) Phenol	3.29	94	672710	37444.4764522	ppb	97
10) 2-Chlorophenol	3.41	128	540976	37608.6060560	ppb	99
11) n-Decane	3.40	41	301867	35628.1919174	ppb	98
12) 1,3-Dichlorobenzene	3.49	146	608753	37429.1238340	ppb	99
13) 1,4-Dichlorobenzene	3.53	146	623673	37255.8873494	ppb	99
14) Benzyl Alcohol	3.58	79	428419	38508.7772803	ppb	100
15) 1,2-Dichlorobenzene	3.61	146	571666	37149.2358810	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	186702	35455.3036766	ppb	# 59
17) 2,2-oxybis(1-chloropropane	3.65	121	186702	35455.3036766	ppb	# 59
18) 2-Methylphenol	3.62	108	484867	37303.1335811	ppb	98
19) Hexachloroethane	3.80	117	230924	38001.5428483	ppb	98
20) N-Nitrosodi-n-propylamine	3.72	70	356081	37487.0261982	ppb	99
21) 3&4-Methyl phenol	3.71	107	554387	37549.4457488	ppb	98
25) Nitrobenzene	3.84	77	541148	38169.6686673	ppb	97
26) Isophorone	3.97	82	988961	38885.7931128	ppb	97
27) 2-Nitrophenol	4.02	139	293528	41077.0676710	ppb	94
28) 2,4-Dimethylphenol	4.02	107	507150	38214.6705164	ppb	96
29) bis(2-Chlorethoxy)methane	4.08	93	608273	37406.3337815	ppb	97
30) 2,4-Dichlorophenol	4.15	162	436215	39017.8213772	ppb	94
32) 1,2,4-Trichlorobenzene	4.22	180	470672	37610.3096616	ppb	98
34) Naphthalene	4.27	128	1638066	37641.7190686	ppb	100
35) 4-Chloroaniline	4.29	65	192978	38165.4842430	ppb	98
36) Hexachloro-1,3-butadiene	4.34	225	260451	38150.0890158	ppb	96
40) 4-Chloro-3-methylphenol	4.58	107	441649	39189.2944371	ppb	95
41) 2-Methylnaphthalene	4.71	142	1071294	37779.6978255	ppb	99
42) 1-Methylnaphthalene	4.78	142	1018387	38216.0571488	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	340960	39863.7559909	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	320804	40515.0174392	ppb	97
49) 2,4,5-Trichlorophenol	4.92	196	322612	39149.4243208	ppb	90

(#) = qualifier out of range (m) = manual integration

0209\_12.D S804B09V.M Mon Feb 14 16:14:43 2022



Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:10 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
51) Biphenyl	5.02	154	1303316	38111.3359445	ppb		99
52) 2-Chloronaphthalene	5.05	162	979007	37511.8057862	ppb		98
53) 2-Nitroaniline	5.11	138	342351	42317.5955894	ppb		98
54) Acenaphthylene	5.34	152	1588608	39126.7393856	ppb		99
55) Dimethyl phthalate	5.22	163	1058778	39157.6162617	ppb		100
56) 2,6-Dinitrotoluene	5.27	165	260810	41603.1785962	ppb		95
57) 3-Nitroaniline	5.40	138	286828	42495.3425702	ppb		96
58) Acenaphthene	5.47	153	1013503	37945.6657033	ppb		96
59) 2,4-Dinitrophenol	5.47	184	145907	52538.8415132	ppb	#	17
60) Dibenzofuran	5.59	168	1401121	37825.9781253	ppb		100
61) 2,4-Dinitrotoluene	5.57	165	344829	43923.7949054	ppb		97
63) 4-Nitrophenol	5.49	139	240093	43064.5466551	ppb		95
64) Fluorene	5.84	166	1159234	38581.5718380	ppb		99
65) 4-Chlorophenyl-phenylether	5.84	204	535116	37555.3657476	ppb		88
66) Diethyl phthalate	5.73	149	1089772	39339.9868130	ppb		99
67) 4-Nitroaniline	5.85	138	213656	33796.9567868	ppb		96
68) Azobenzene	5.95	77	1061155	38402.5673874	ppb		100
71) 4,6-Dinitro-2-methylphenol	5.87	198	176996	48081.6828813	ppb		99
72) N-Nitrosodiphenylamine	5.92	169	982230	40631.4208105	ppb		99
74) 4-Bromophenyl-phenylether	6.21	248	315621	40228.8334657	ppb		94
75) Hexachlorobenzene	6.27	284	348572	39928.9901746	ppb		99
76) n-octadecane	6.45	55	187466	38513.5503620	ppb		98
77) Pentachlorophenol	6.41	266	214451	45834.3096376	ppb		97
78) Phenanthrene	6.59	178	1588877	37960.1017014	ppb		99
79) Anthracene	6.64	178	1636676	38630.5645907	ppb		100
80) Carbazole	6.75	167	1476577	38198.2056116	ppb		99
81) Di-n-butyl phthalate	7.02	149	1922913	42491.4478801	ppb		100
83) Fluoranthene	7.64	202	1784764	40137.6631631	ppb		99
86) Pyrene	7.88	202	1858834	39532.6283317	ppb		99
88) Benzylbutyl phthalate	8.68	149	805471	41893.8726269	ppb		98
90) Benzo(a)anthracene	9.53	228	1652877	39280.5024417	ppb		99
91) Chrysene	9.59	228	1584261	38850.3193263	ppb		99
92) bis(2-Ethylhexyl)phthalate	9.62	149	1113109	42031.3076523	ppb		99
93) Di-n-octyl phthalate	10.92	149	1901374	43218.2087672	ppb		99
95) Benzo(b)fluoranthene	11.59	252	1661740	38302.6598317	ppb		99
96) Benzo(k)fluoranthene	11.65	252	1666940	39007.6629727	ppb		98
97) Benzo(a)pyrene	12.27	252	1488575	39615.4990577	ppb		100
98) Indeno(1,2,3-cd)pyrene	14.22	276	1411209	38225.8587590	ppb		98
99) Dibenz(a,h)anthracene	14.26	278	1497799m	38054.6751967	ppb		
100) Benzo(g,h,i)perylene	14.54	276	1416806	36871.9258324	ppb		94

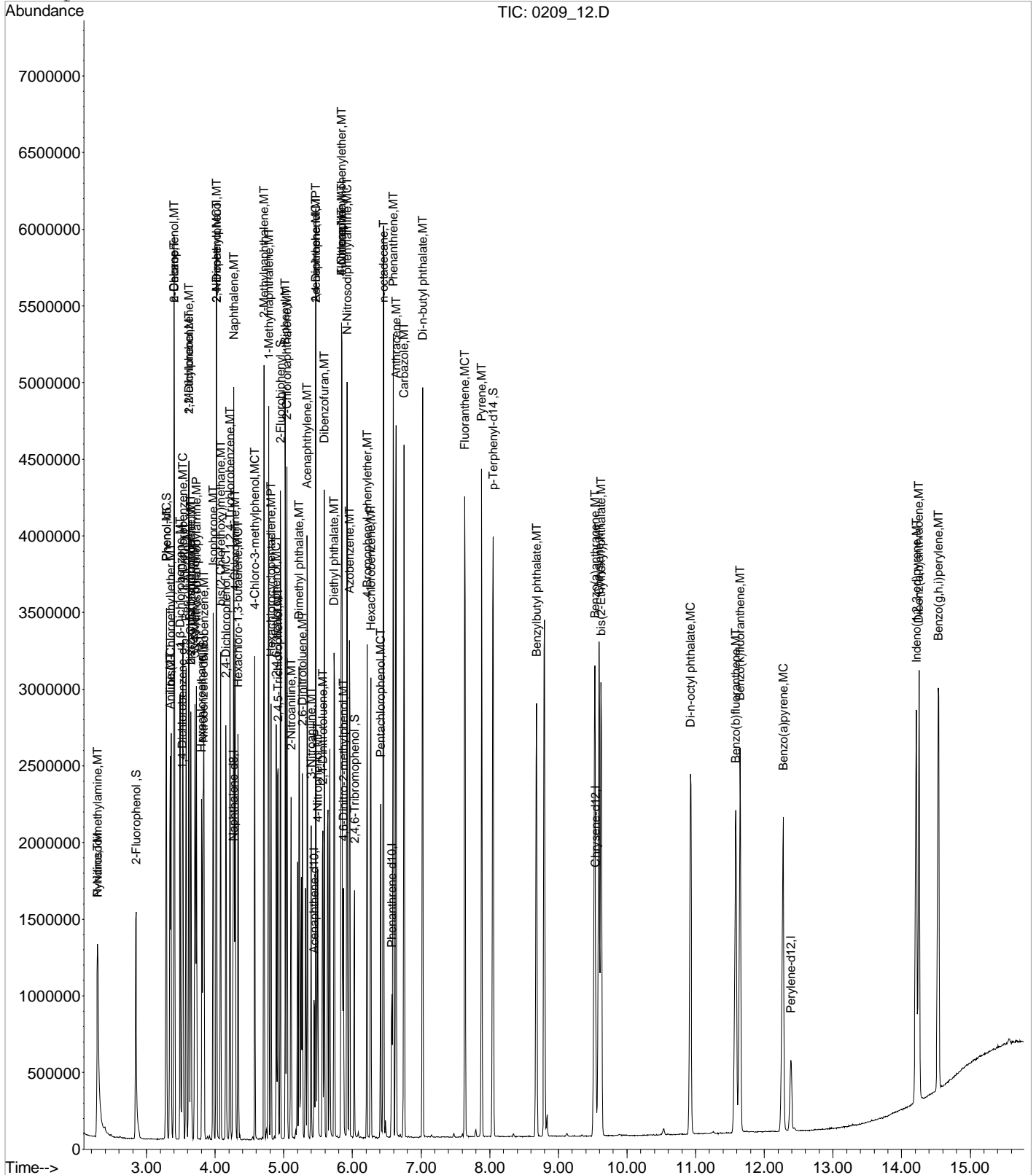
(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D
Acq On : 9 Feb 2022 12:48 pm
Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 16:10 2022

Vial: 9
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

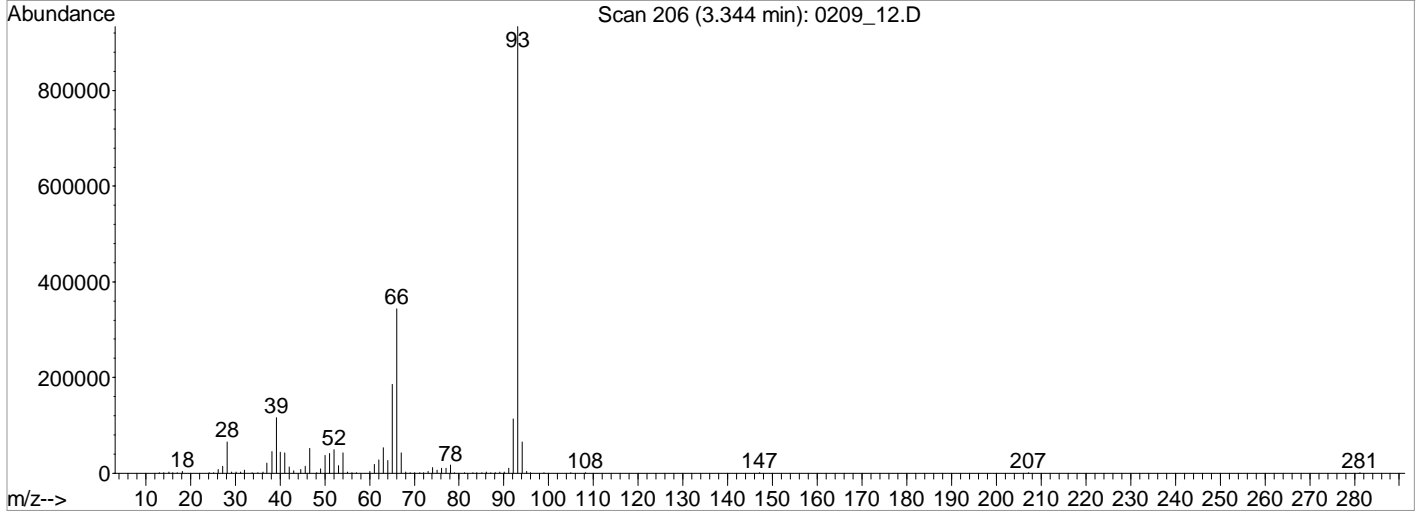
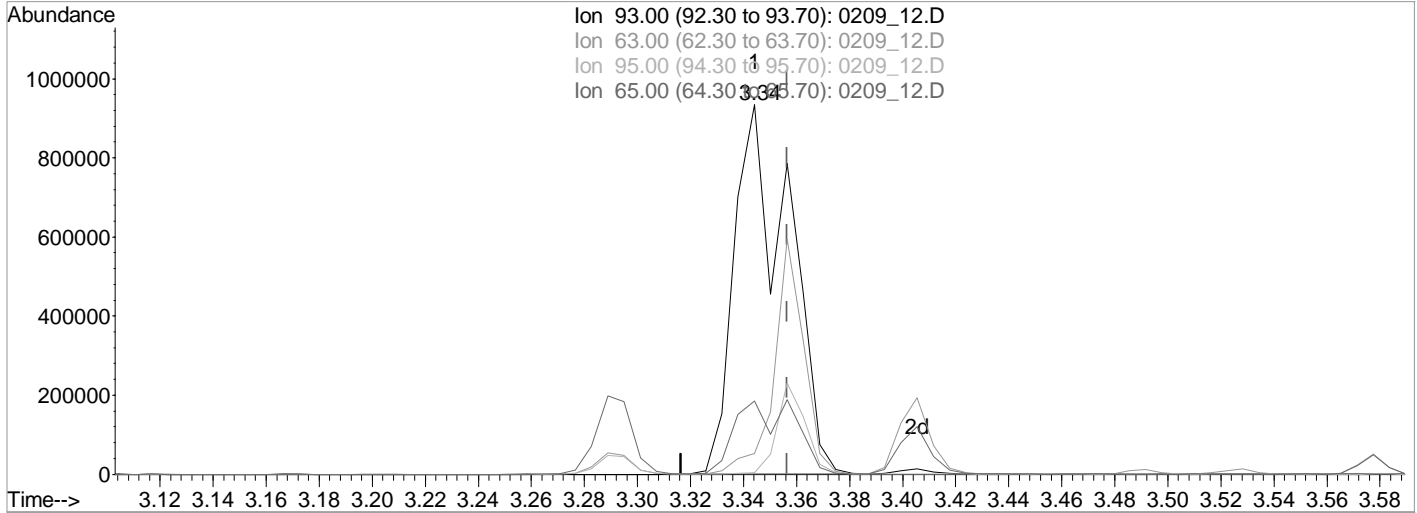
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 16:14:29 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:02 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 0.0000000 ppb

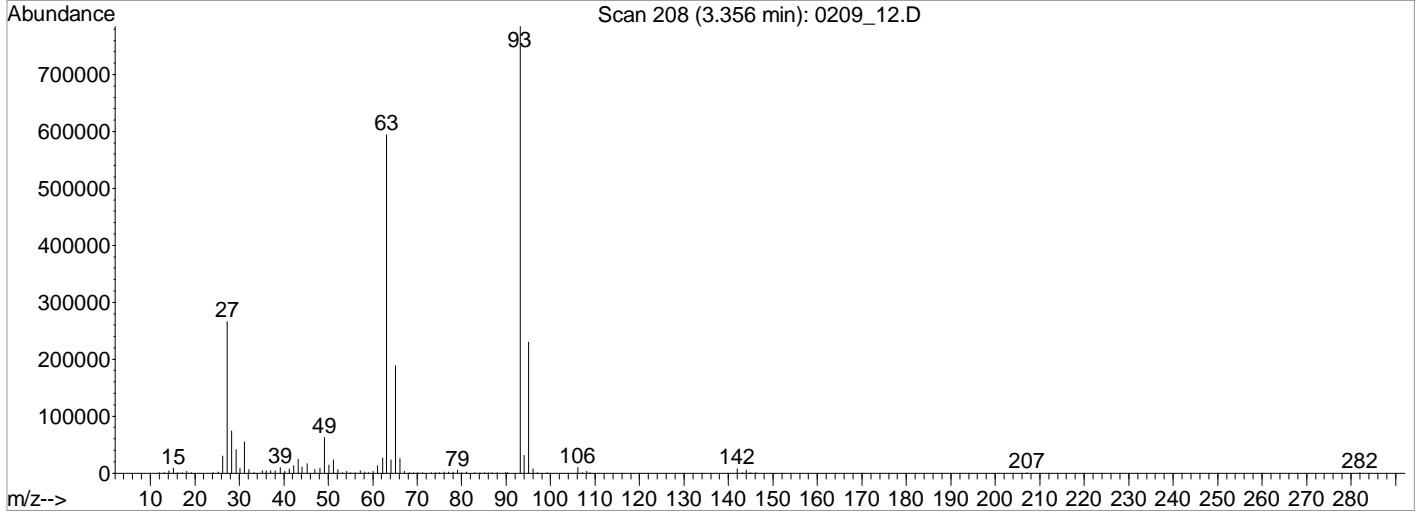
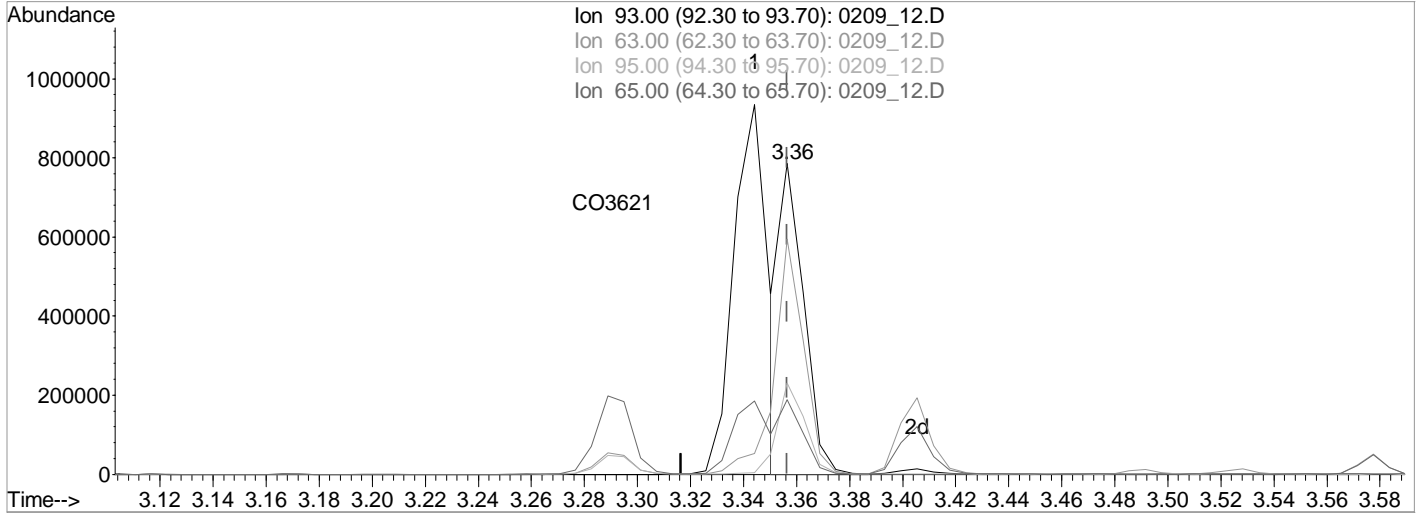
response 1313644

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.62#
95.00	30.20	0.39#
65.00	24.00	19.74

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:02 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 0.0000000 ppb

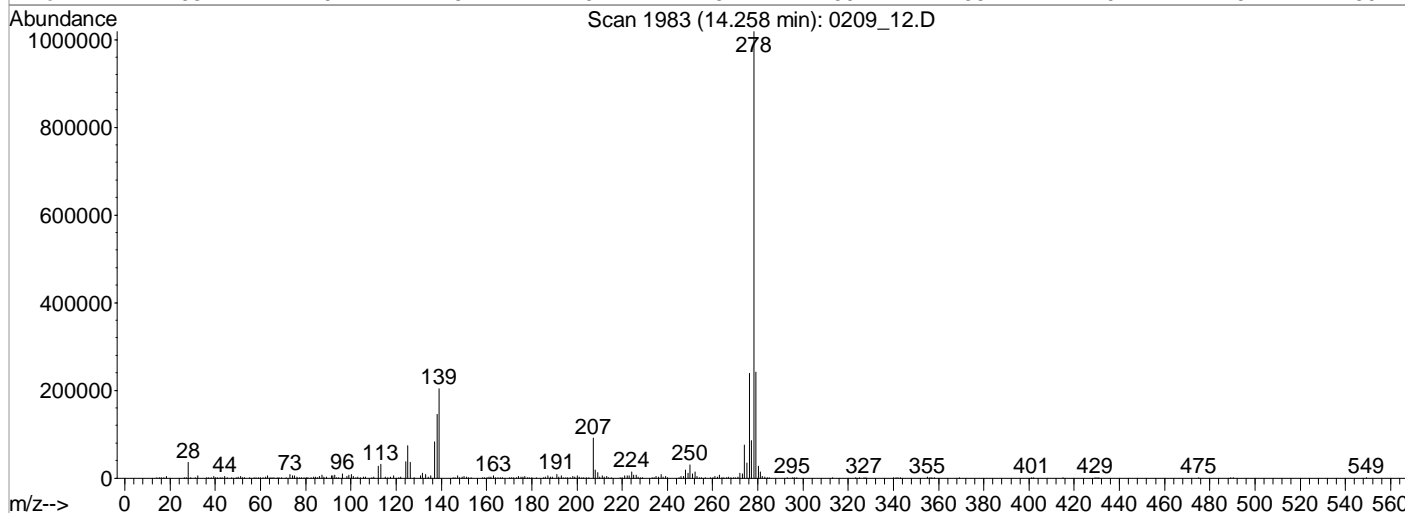
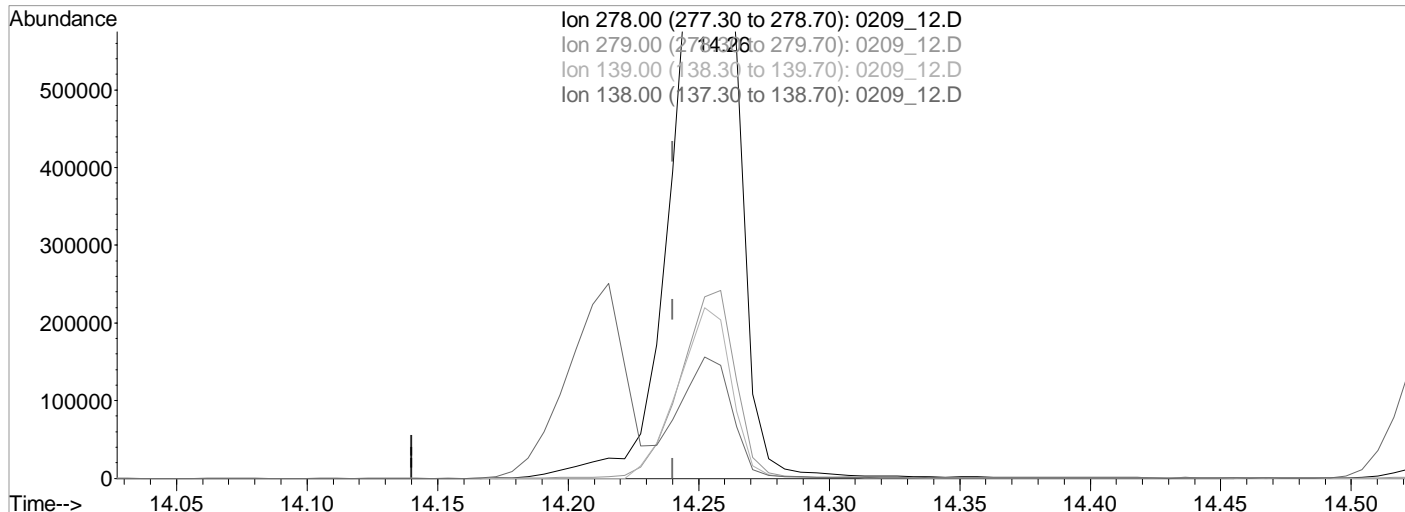
response 1313644

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.62#
95.00	30.20	0.39#
65.00	24.00	19.74

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:02 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

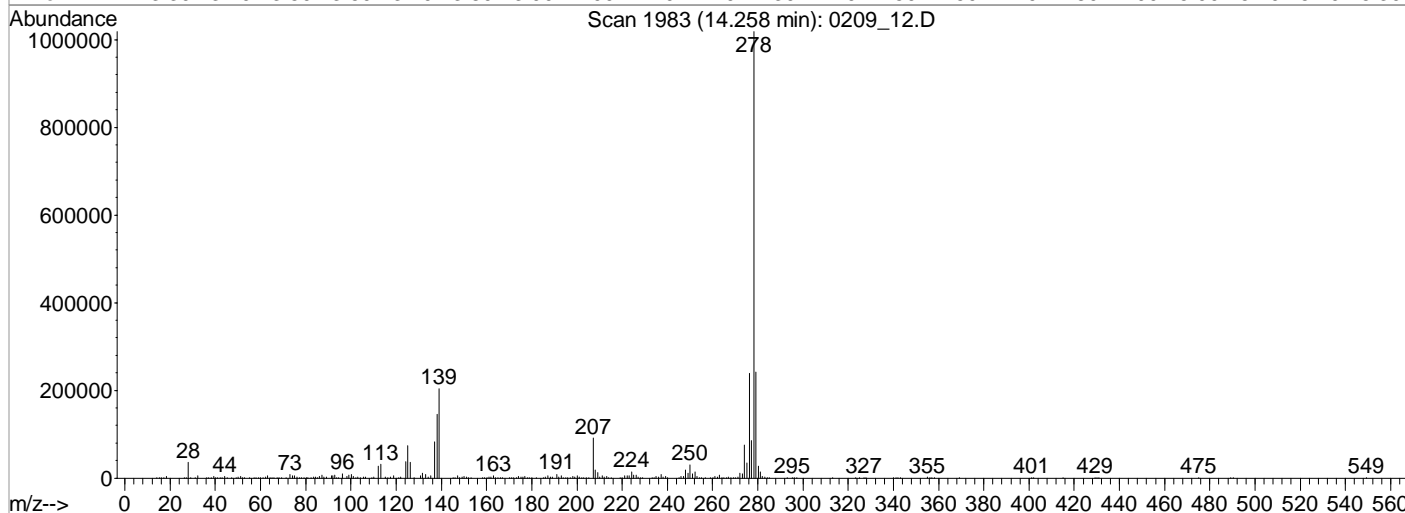
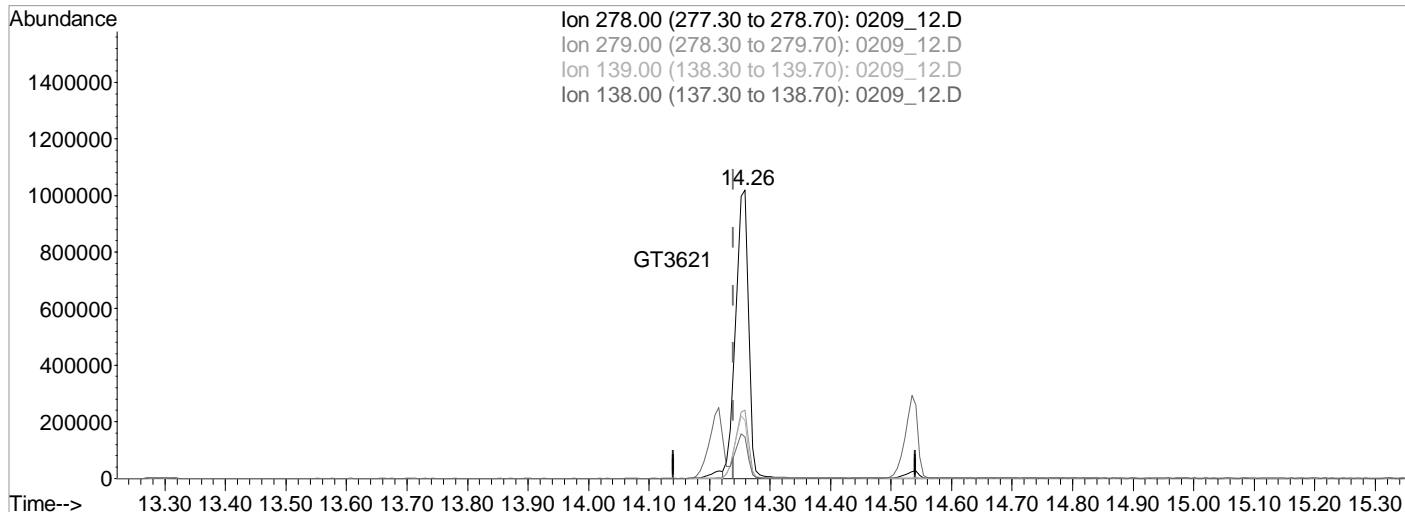
(99) Dibenz(a,h)anthracene (MT)  
 14.26min (+0.018) 39213.5930184 ppb  
 Qvalue = 96  
 response 1543413

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.68
139.00	22.10	20.02
138.00	16.70	14.26

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:03 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(99) Dibenz(a,h)anthracene (MT)  
 14.26min (+0.018) 38054.6751967 ppb m

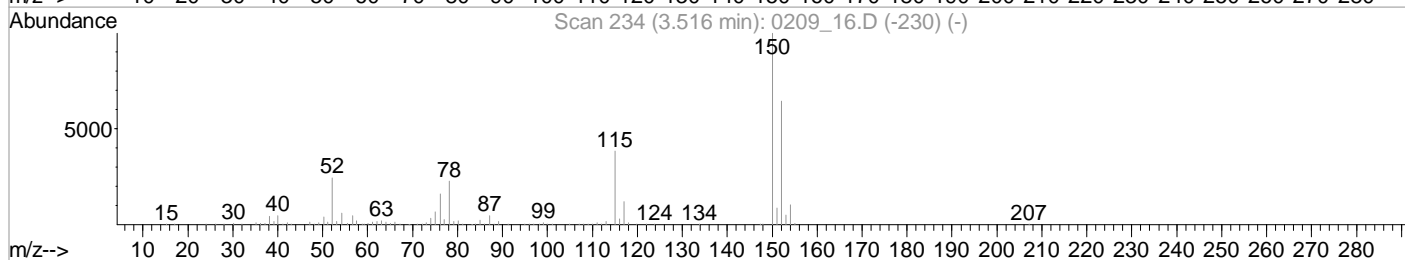
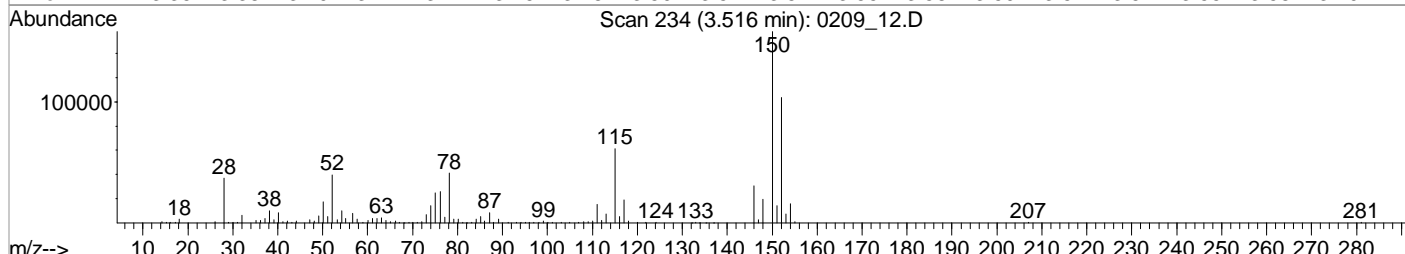
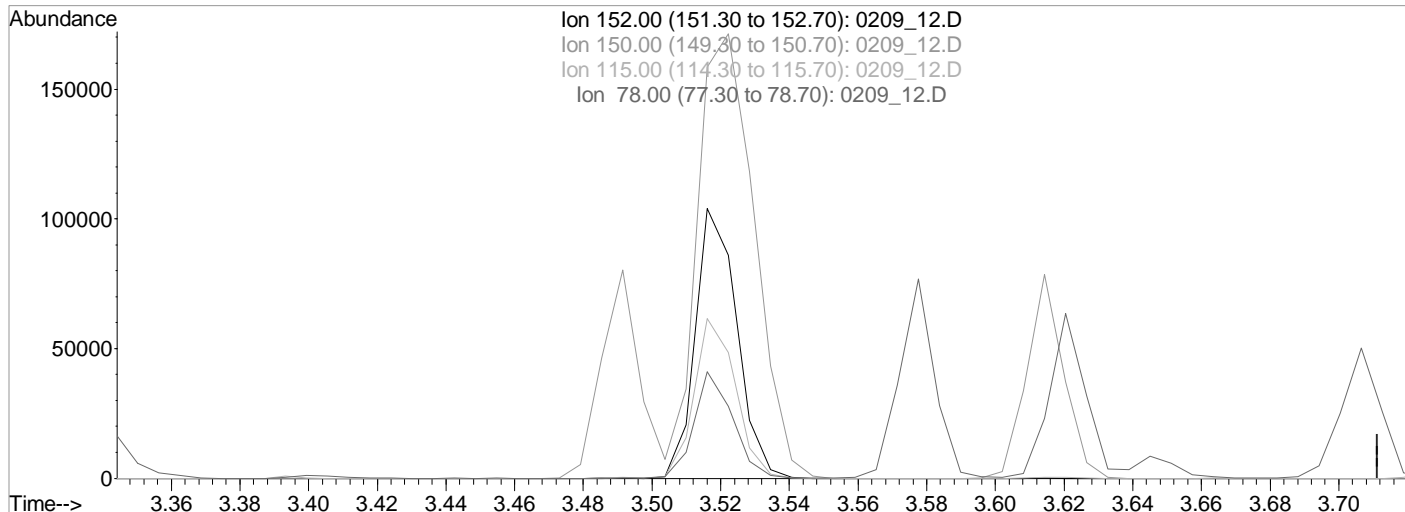
response 1497799

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.71
139.00	22.10	20.02
138.00	16.70	14.29

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:08 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(1) 1,4-Dichlorobenzene-d4 (I)  
 3.52min (-3.516) 0.0000000 ppb d

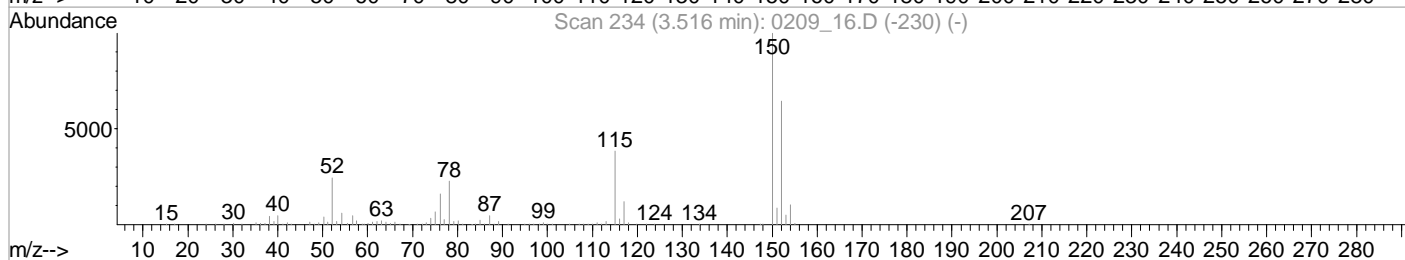
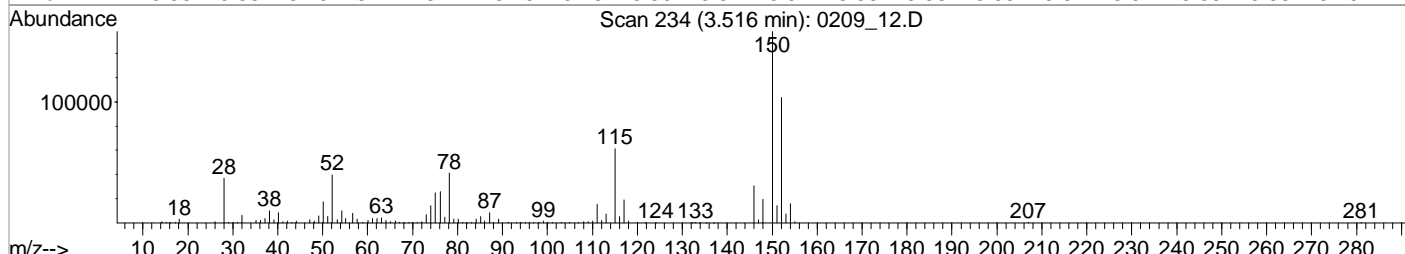
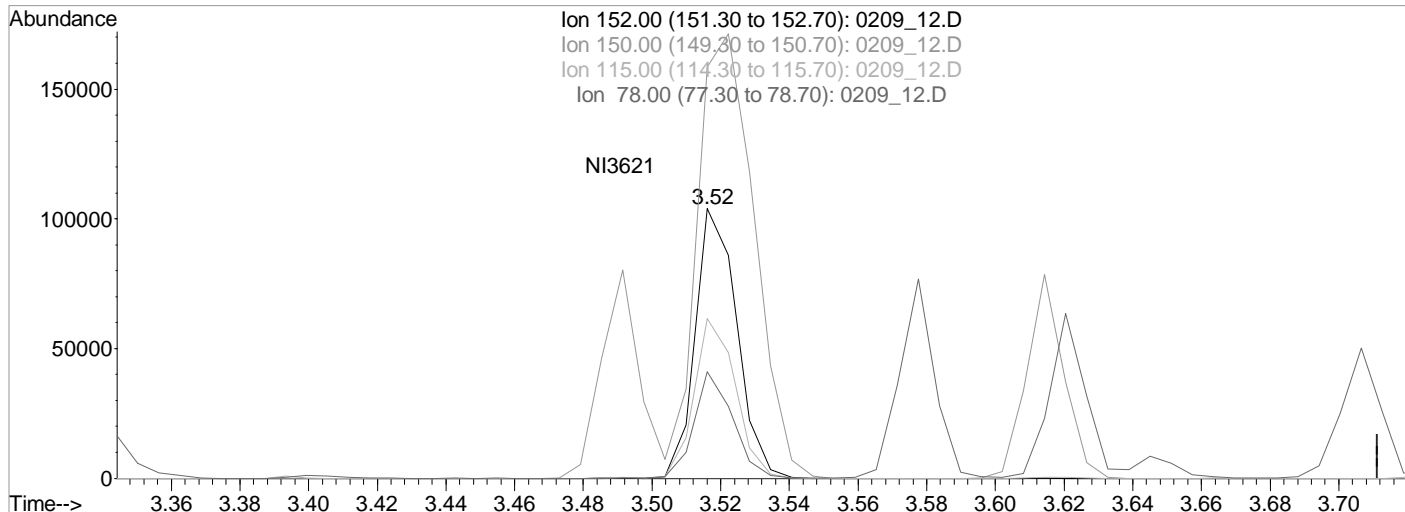
response 0

Ion	Exp%	Act%
152.00	100	0.00
150.00	155.20	0.00
115.00	59.30	0.00
78.00	35.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:10 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(1) 1,4-Dichlorobenzene-d4 (I)  
 3.52min (-0.000) 8000.0000000 ppb m

response 87467

Ion	Exp%	Act%
152.00	100	100
150.00	155.20	152.53
115.00	59.30	59.26
78.00	35.00	39.45



Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:18 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:51:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	85491	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	336033	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	182036	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	303150	8000.00	ppb	0.00
84) Chrysene-d12	9.55	240	299422	8000.00	ppb	0.02
94) Perylene-d12	12.39	264	295920	8000.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	2.85	112	685540	49268.3997408	ppb	0.00
Spiked Amount			Recovery	= 7397.66%		
7) Phenol-d5	3.28	99	818468	48972.9451566	ppb	0.00
Spiked Amount			Recovery	= 7353.30%		
24) Nitrobenzene-d5	3.82	82	678256m	46463.7671389	ppb	0.00
Spiked Amount			Recovery	= 13953.08%		
50) 2-Fluorobiphenyl	4.95	172	1462149	47291.9672001	ppb	0.00
Spiked Amount			Recovery	= 14201.79%		
73) 2,4,6-Tribromophenol	6.03	330	203186	60808.6198147	ppb	0.00
Spiked Amount			Recovery	= 9130.42%		
87) p-Terphenyl-d14	8.05	244	2013746	49101.9592081	ppb	0.00
Spiked Amount			Recovery	= 14745.33%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.29	79	681495	51757.7992292	ppb	97
3) N-Nitrosodimethylamine	2.29	42	339759	47575.2742185	ppb	91
5) Aniline	3.34	66	389920	49209.1195109	ppb	95
6) bis(2-Chloroethyl)ether	3.36	93	649750m	23889.2924070	ppb	
8) Phenol	3.30	94	863642	49070.2900117	ppb	97
10) 2-Chlorophenol	3.41	128	694562	49319.1896257	ppb	99
11) n-Decane	3.40	41	379161	45241.9961601	ppb	99
12) 1,3-Dichlorobenzene	3.49	146	771098	48302.1674606	ppb	98
13) 1,4-Dichlorobenzene	3.53	146	785122	47710.9860129	ppb	99
14) Benzyl Alcohol	3.58	79	544123	50046.4969320	ppb	99
15) 1,2-Dichlorobenzene	3.61	146	721401	47687.1870177	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	236106	45340.6582642	ppb	# 62
17) 2,2-oxybis(1-chloropropane	3.65	121	236106	45340.6582642	ppb	# 62
18) 2-Methylphenol	3.62	108	617710	48432.5889244	ppb	97
19) Hexachloroethane	3.80	117	291009	48857.5187075	ppb	98
20) N-Nitrosodi-n-propylamine	3.73	70	450158	48279.2340149	ppb	100
21) 3&4-Methyl phenol	3.71	107	699728	48282.1151226	ppb	99
25) Nitrobenzene	3.84	77	688841	49328.1690268	ppb	96
26) Isophorone	3.97	82	1236245	49353.4494025	ppb	98
27) 2-Nitrophenol	4.02	139	376131	54074.7423875	ppb	93
28) 2,4-Dimethylphenol	4.02	107	650314	49809.6897293	ppb	97
29) bis(2-Chlorethoxy)methane	4.08	93	768717	47811.7231221	ppb	97
30) 2,4-Dichlorophenol	4.16	162	555918	50650.3447239	ppb	92
32) 1,2,4-Trichlorobenzene	4.22	180	603526	48910.7083770	ppb	98
34) Naphthalene	4.27	128	2066329	48053.2072182	ppb	100
35) 4-Chloroaniline	4.29	65	244067	48960.4771090	ppb	97
36) Hexachloro-1,3-butadiene	4.34	225	331135	49231.5094775	ppb	96
40) 4-Chloro-3-methylphenol	4.58	107	567518	51390.2025153	ppb	94
41) 2-Methylnaphthalene	4.71	142	1377022	49298.2911741	ppb	100
42) 1-Methylnaphthalene	4.78	142	1292317	49222.1326390	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	433861	50998.3780748	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	404822	51460.1647062	ppb	97
49) 2,4,5-Trichlorophenol	4.92	196	414908	50566.0675110	ppb	92

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:18 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:51:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.03	154	1635800	47695.0348514	ppb	100
52) 2-Chloronaphthalene	5.05	162	1229770	46888.0832571	ppb	98
53) 2-Nitroaniline	5.11	138	428726	53629.0313312	ppb	98
54) Acenaphthylene	5.35	152	2019937	49878.2058817	ppb	99
55) Dimethyl phthalate	5.23	163	1363440	50652.8594150	ppb	93
56) 2,6-Dinitrotoluene	5.27	165	333483	53864.1240120	ppb	99
57) 3-Nitroaniline	5.40	138	367978	55415.3653662	ppb #	84
58) Acenaphthene	5.47	153	1291393	48280.6520842	ppb	97
59) 2,4-Dinitrophenol	5.47	184	193721	74186.7854642	ppb #	30
60) Dibenzofuran	5.59	168	1763845	47451.1885412	ppb	100
61) 2,4-Dinitrotoluene	5.57	165	444272	57870.2558482	ppb	95
63) 4-Nitrophenol	5.49	139	304788	55592.5457447	ppb	88
64) Fluorene	5.85	166	1466642	48807.2477794	ppb	99
65) 4-Chlorophenyl-phenylether	5.84	204	682219	47746.6307713	ppb	90
66) Diethyl phthalate	5.74	149	1359007	49088.2502660	ppb	99
67) 4-Nitroaniline	5.86	138	295753	46508.5221381	ppb	98
68) Azobenzene	5.96	77	1359895	49264.7305857	ppb	99
71) 4,6-Dinitro-2-methylphenol	5.87	198	225615	67060.1415206	ppb	91
72) N-Nitrosodiphenylamine	5.92	169	1246858	54771.8942299	ppb	98
74) 4-Bromophenyl-phenylether	6.21	248	403603	54605.9256471	ppb	91
75) Hexachlorobenzene	6.27	284	439934	53323.4768919	ppb	99
76) n-octadecane	6.45	55	229571	49422.1734343	ppb	98
77) Pentachlorophenol	6.42	266	268709	62089.4694687	ppb	95
78) Phenanthrene	6.59	178	1942260	48514.3249917	ppb	98
79) Anthracene	6.64	178	2011440	49796.1324302	ppb	100
80) Carbazole	6.75	167	1809779	49009.1104903	ppb	99
81) Di-n-butyl phthalate	7.02	149	2377465	55951.5065493	ppb	99
83) Fluoranthene	7.64	202	2263702	53951.1908184	ppb	100
86) Pyrene	7.88	202	2343672	48458.5250985	ppb	99
88) Benzylbutyl phthalate	8.68	149	1016118	51813.7045194	ppb	98
90) Benzo(a)anthracene	9.53	228	2063460	47568.5271200	ppb	100
91) Chrysene	9.60	228	1968627	46730.6970697	ppb	99
92) bis(2-Ethylhexyl)phthalate	9.63	149	1407831	52163.0604523	ppb	99
93) Di-n-octyl phthalate	10.93	149	2390033	53481.2603710	ppb	99
95) Benzo(b)fluoranthene	11.59	252	2109399	50044.2348538	ppb	99
96) Benzo(k)fluoranthene	11.65	252	2049426	49265.8283619	ppb	98
97) Benzo(a)pyrene	12.28	252	1849955	50765.3229273	ppb	99
98) Indeno(1,2,3-cd)pyrene	14.22	276	1733830m	48105.1614875	ppb	
99) Dibenz(a,h)anthracene	14.26	278	1829680m	47566.6475034	ppb	
100) Benzo(g,h,i)perylene	14.54	276	1711126	45290.2795709	ppb	98

(#) = qualifier out of range (m) = manual integration

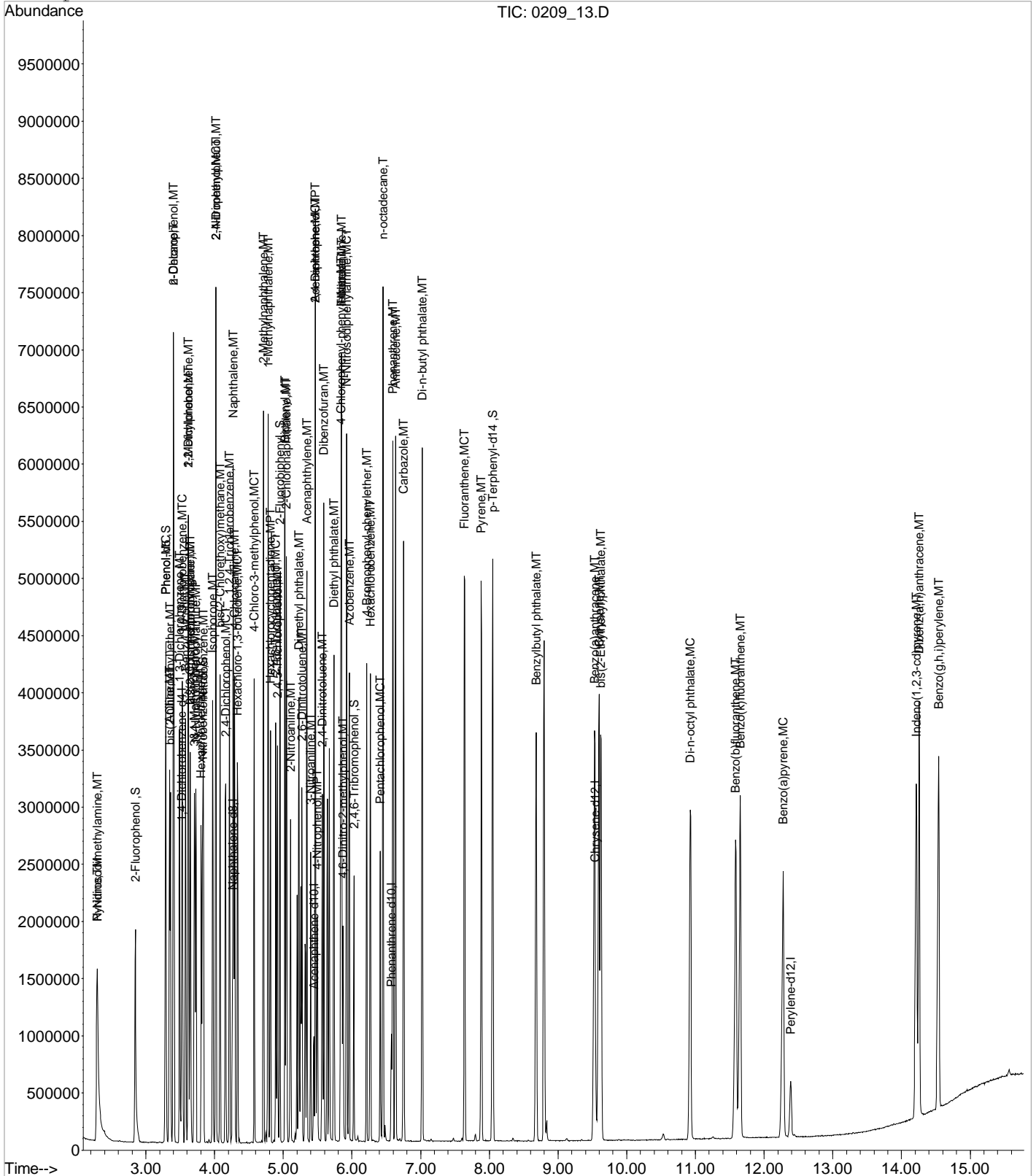
0209\_13.D S804B09V.M Mon Feb 14 16:18:48 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D
Acq On : 9 Feb 2022 1:09 pm
Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 16:18 2022

Vial: 10
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

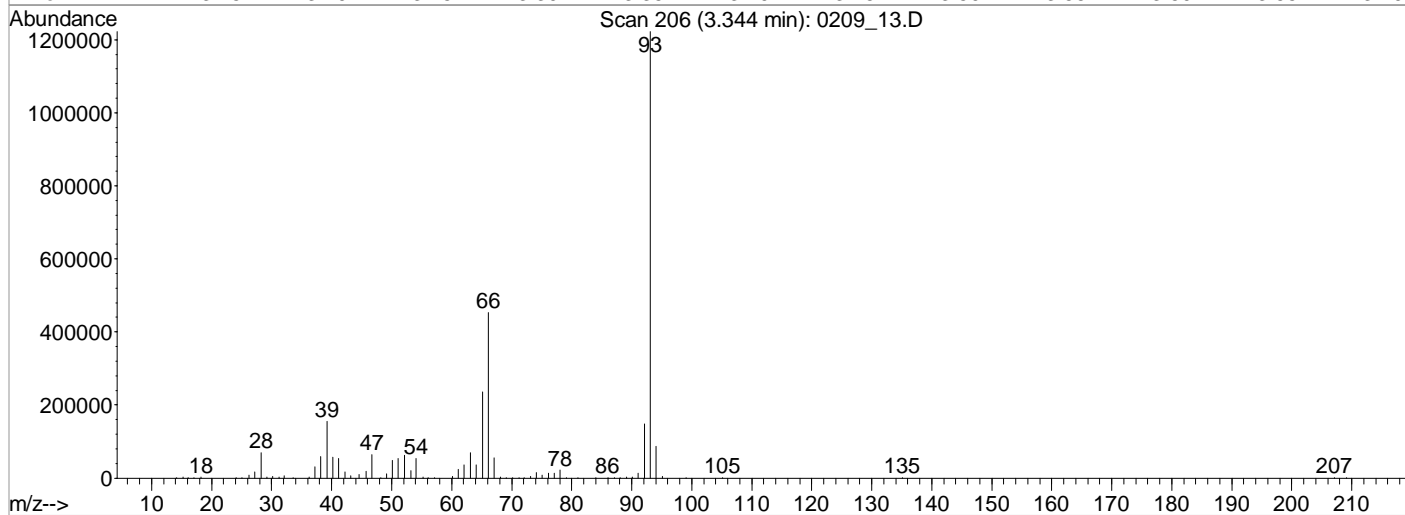
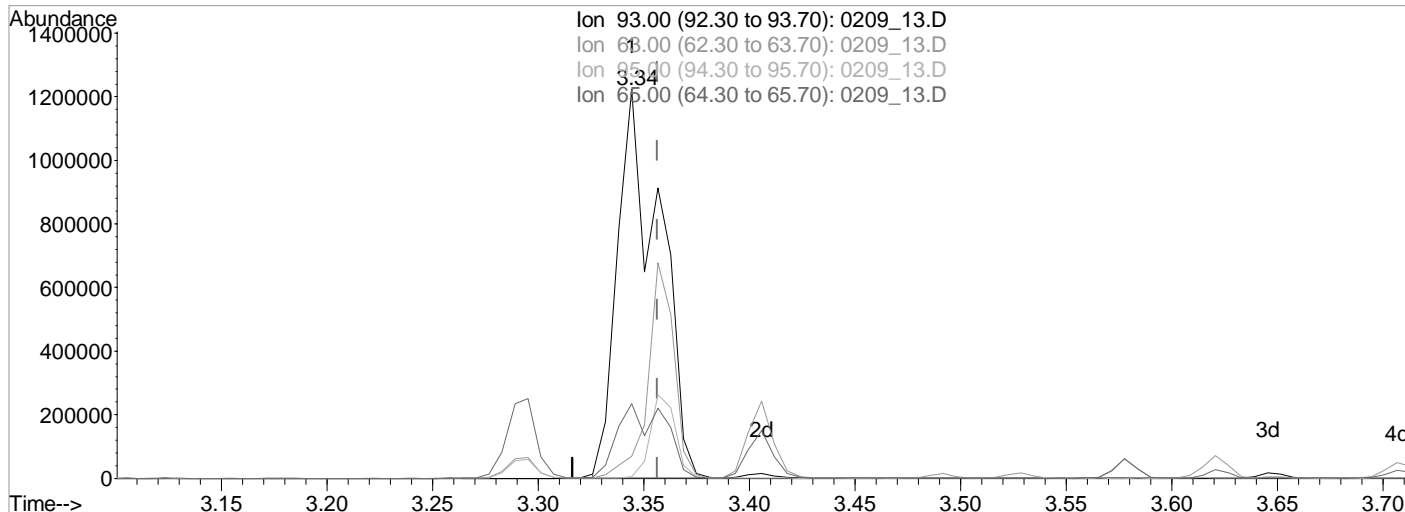
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 16:14:29 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:57 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

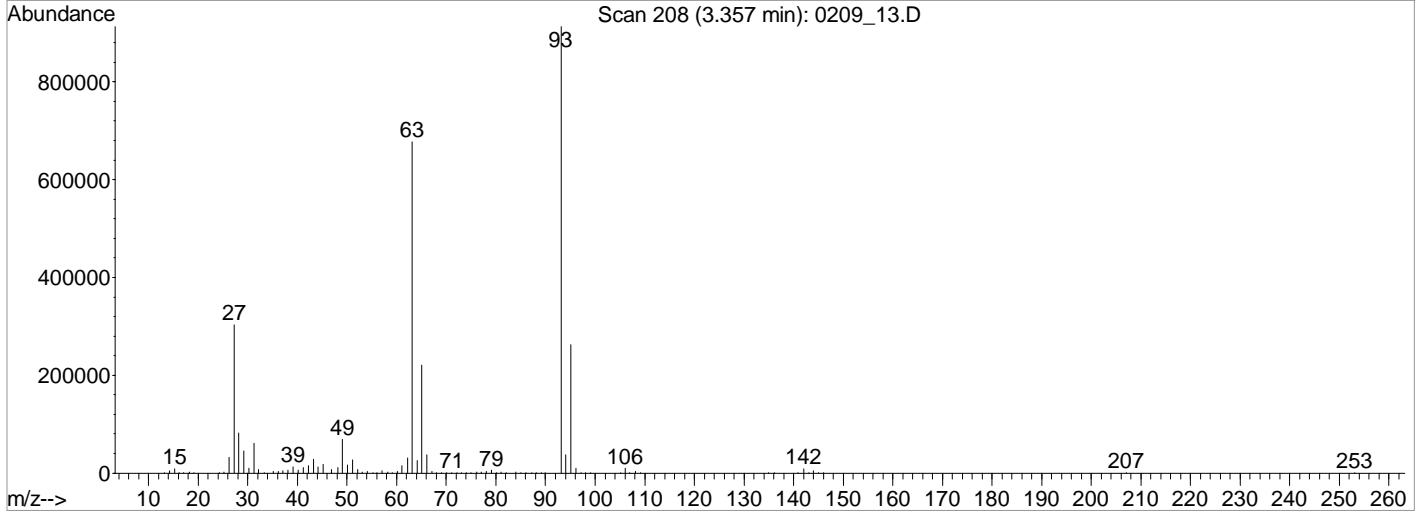
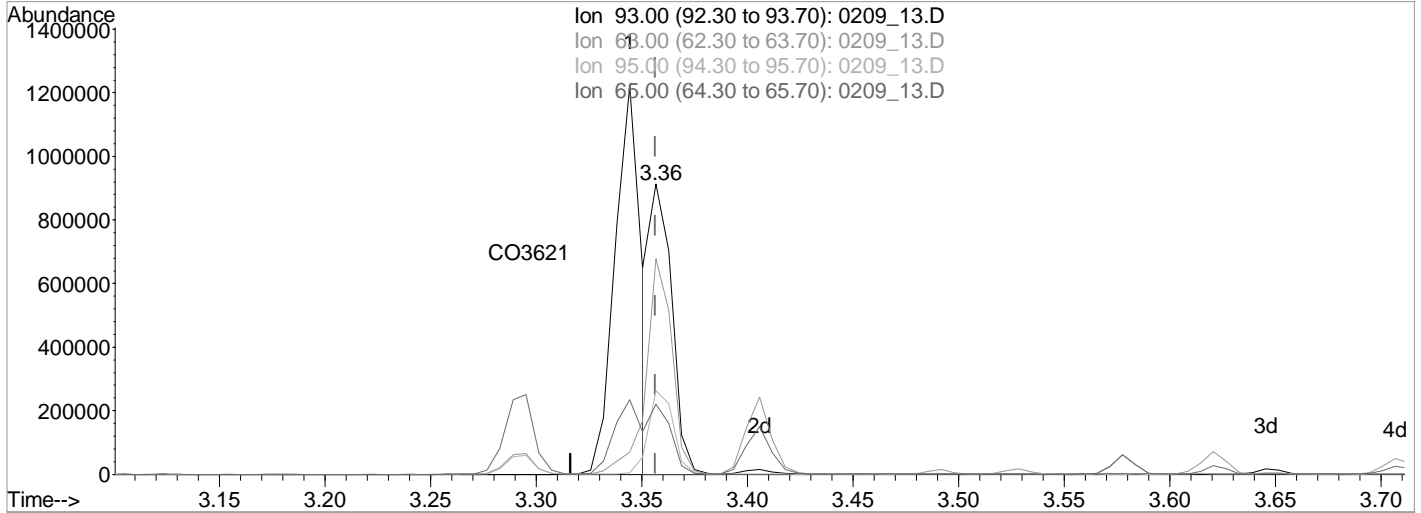
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 62045.3548033 ppb  
 Qvalue = 37  
 response 1687533

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.65#
95.00	30.20	0.34#
65.00	24.00	19.20

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:16 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (+0.000) 23889.2924070 ppb m

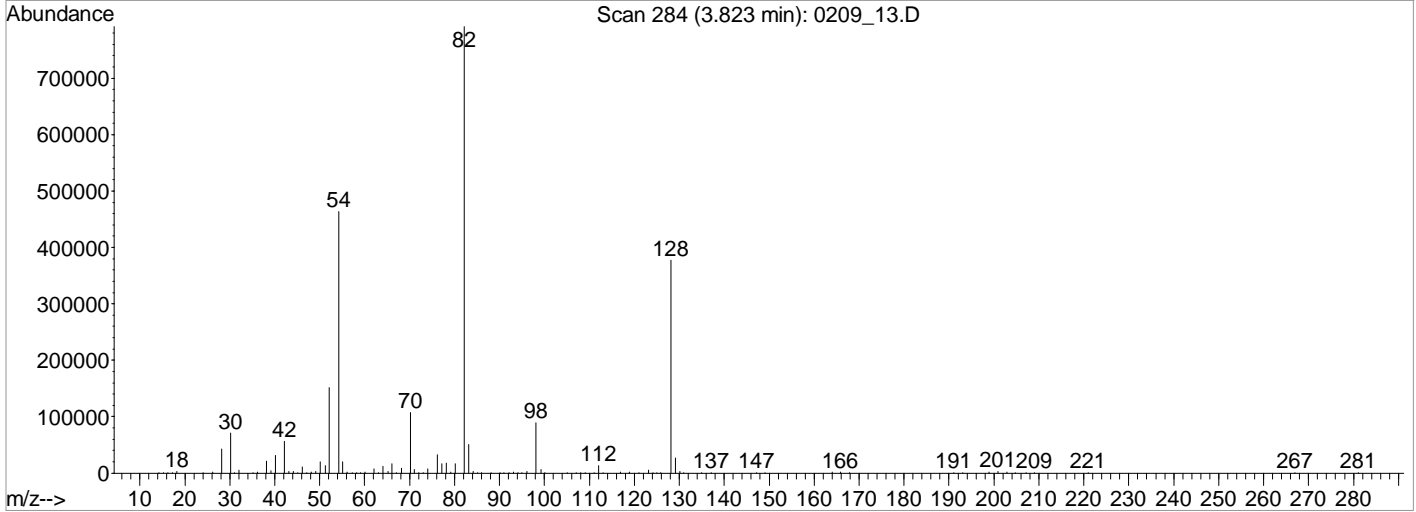
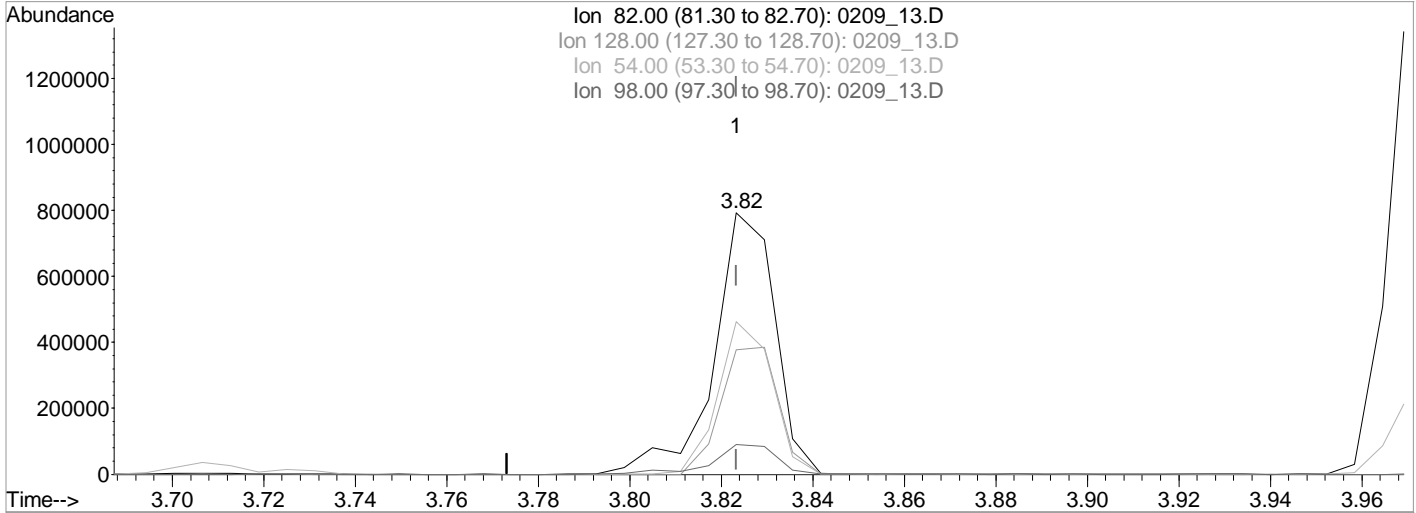
response 649750

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	74.11
95.00	30.20	28.75
65.00	24.00	24.19

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:16 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(24) Nitrobenzene-d5 (S)  
 3.82min (+0.000) 50604.5375924 ppb m

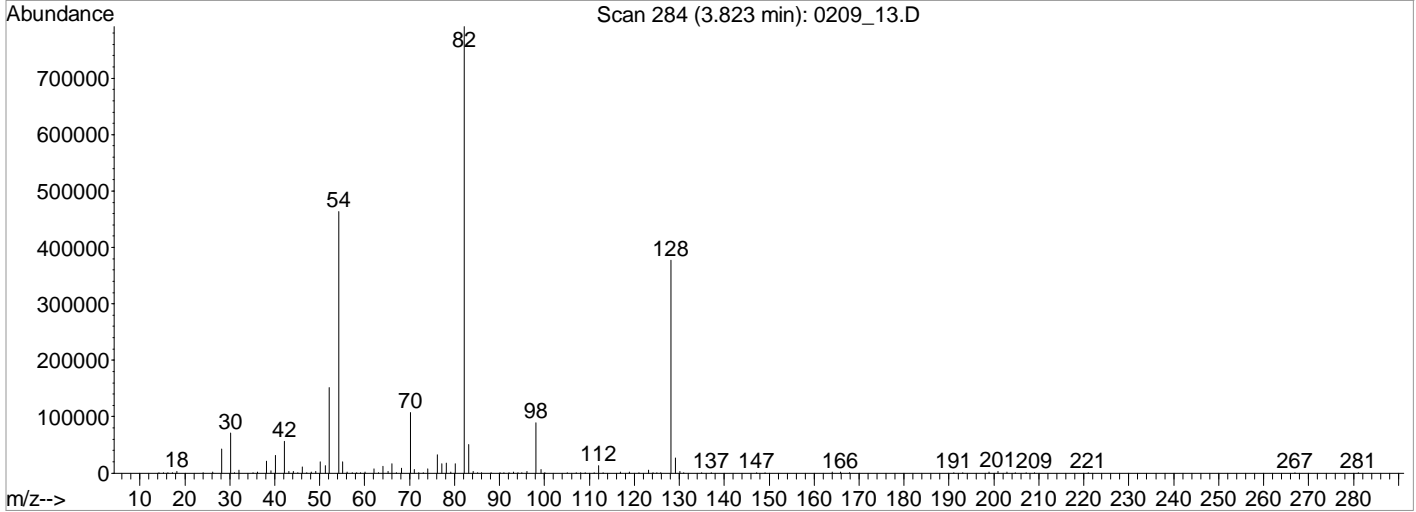
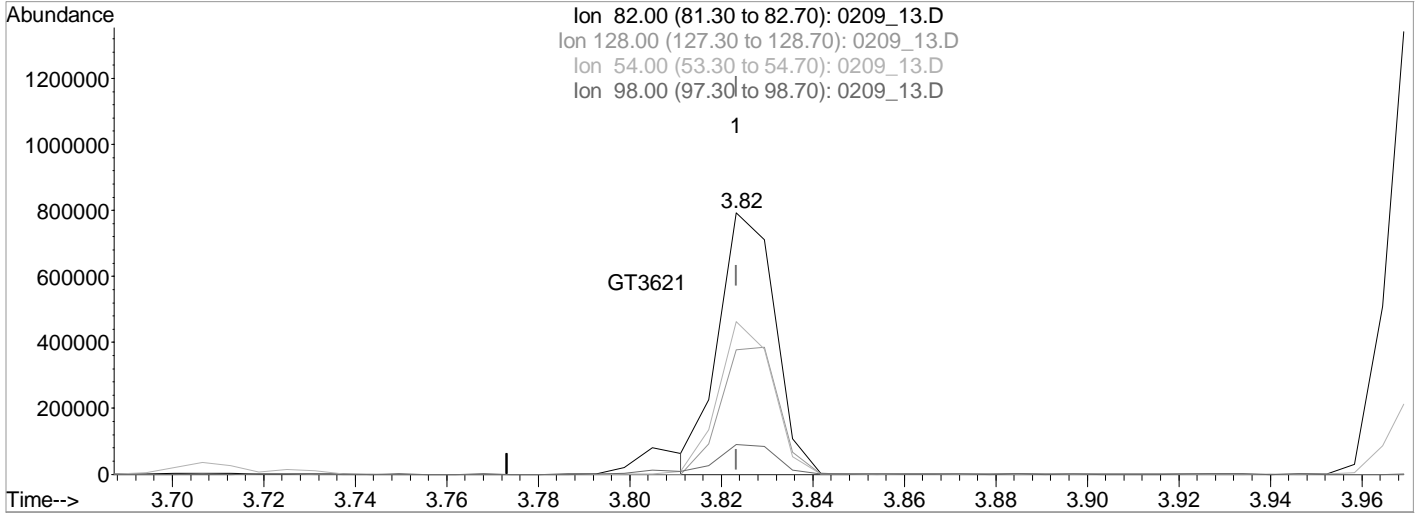
response 738701

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	47.68
54.00	56.90	58.54
98.00	11.80	11.31

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:17 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(24) Nitrobenzene-d5 (S)  
 3.82min (+0.000) 46463.7671389 ppb m

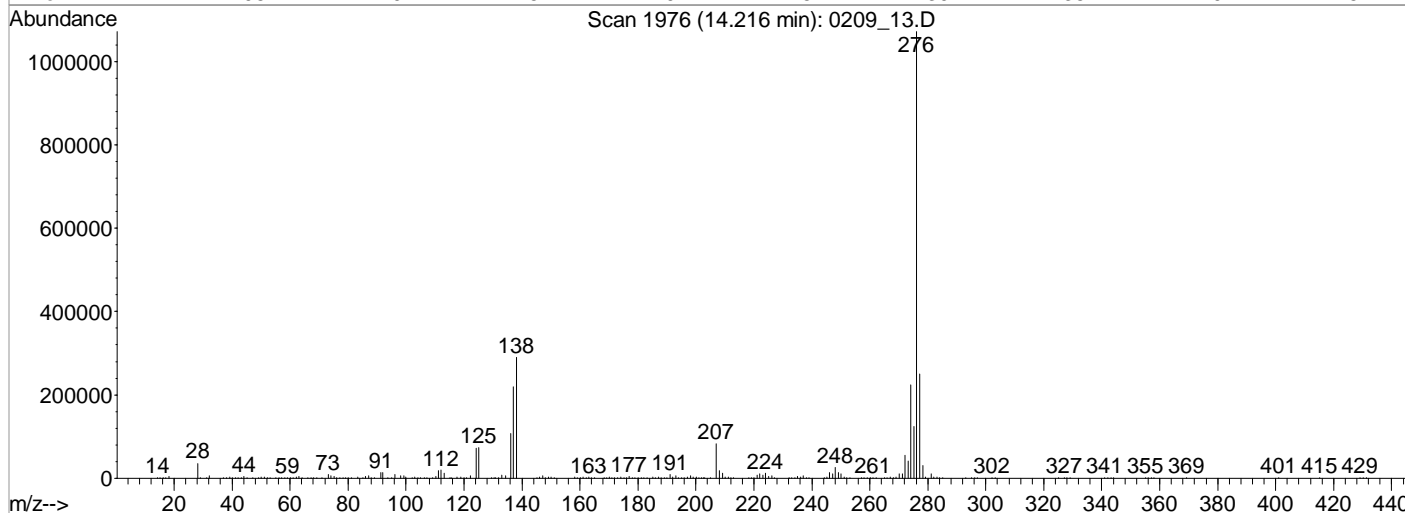
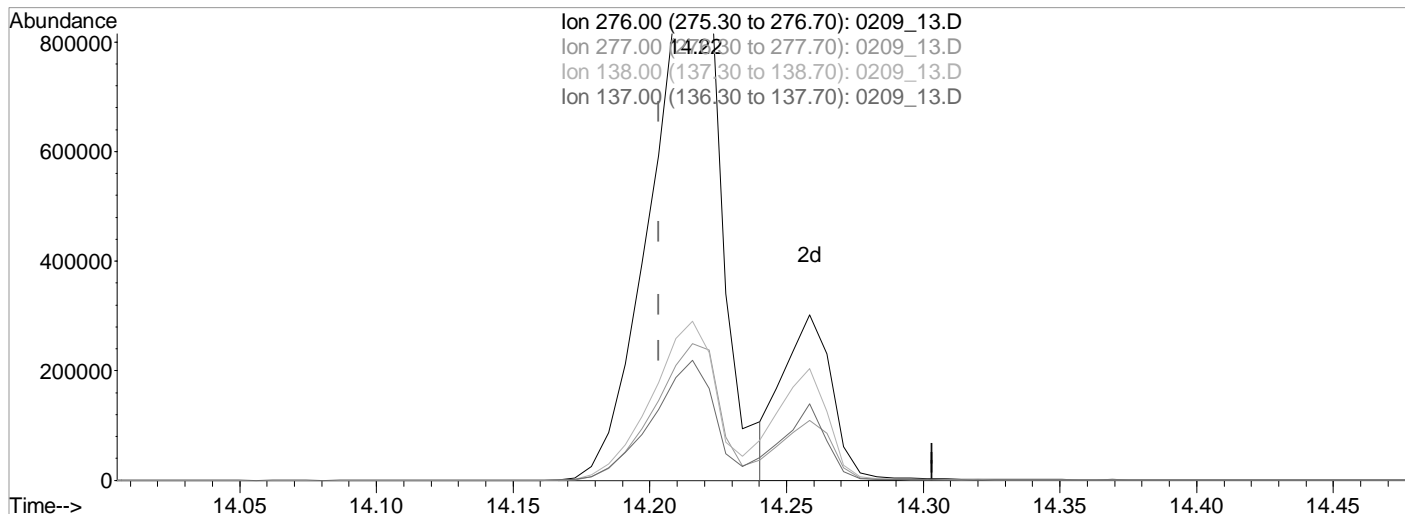
response 678256

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	47.68
54.00	56.90	58.54
98.00	11.80	11.31

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:17 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(98) Indeno(1,2,3-cd)pyrene (MT)  
 14.22min (+0.012) 49190.5747186 ppb m

response 1772951

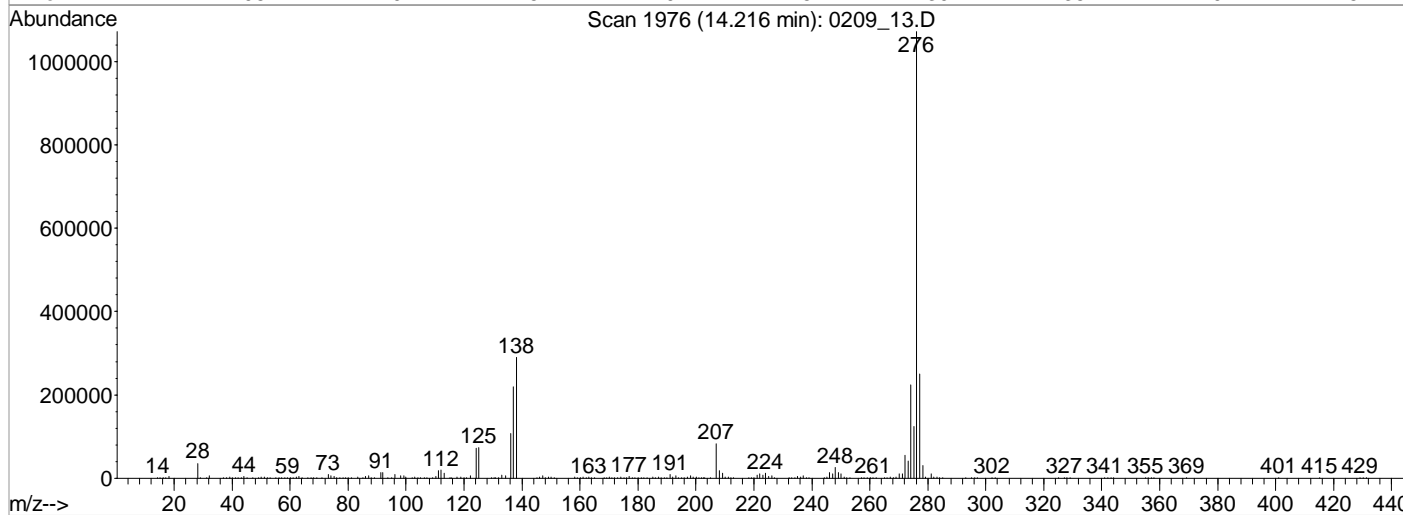
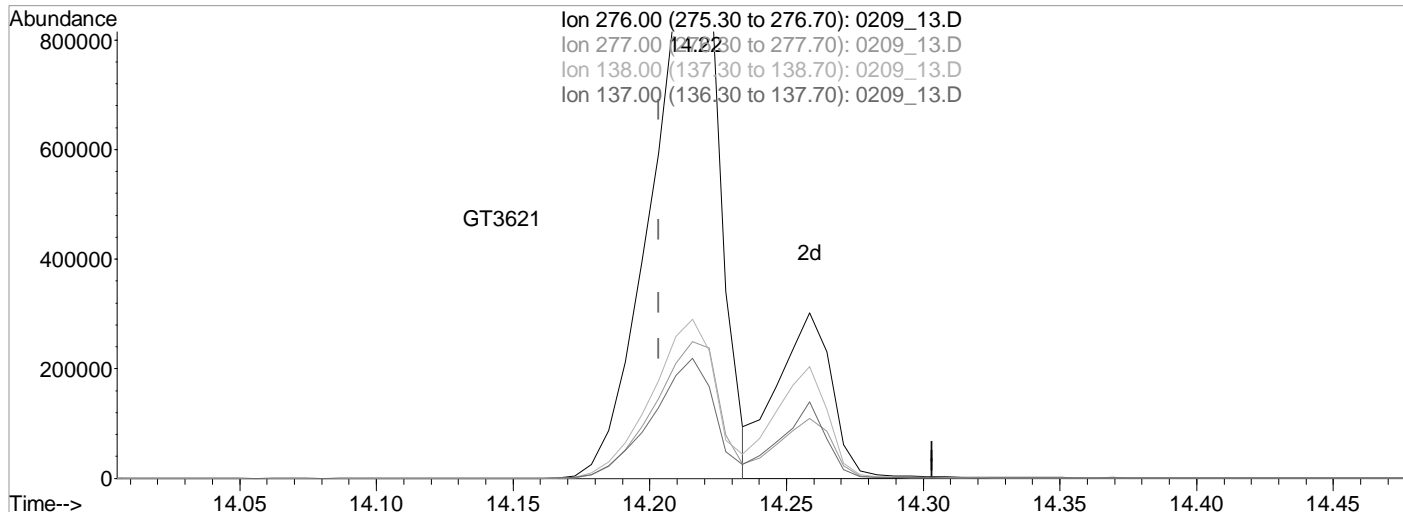
Ion	Exp%	Act%
276.00	100	100
277.00	24.10	23.27
138.00	25.30	27.03
137.00	18.00	20.45



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:17 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(98) Indeno(1,2,3-cd)pyrene (MT)  
 14.22min (+0.012) 48105.1614875 ppb m

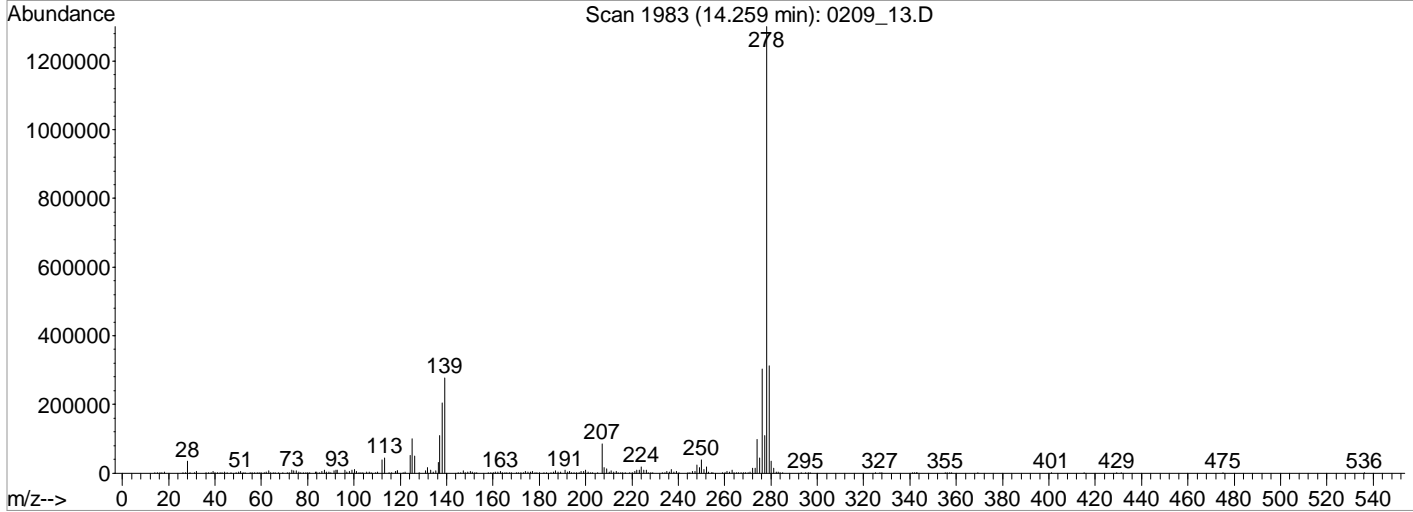
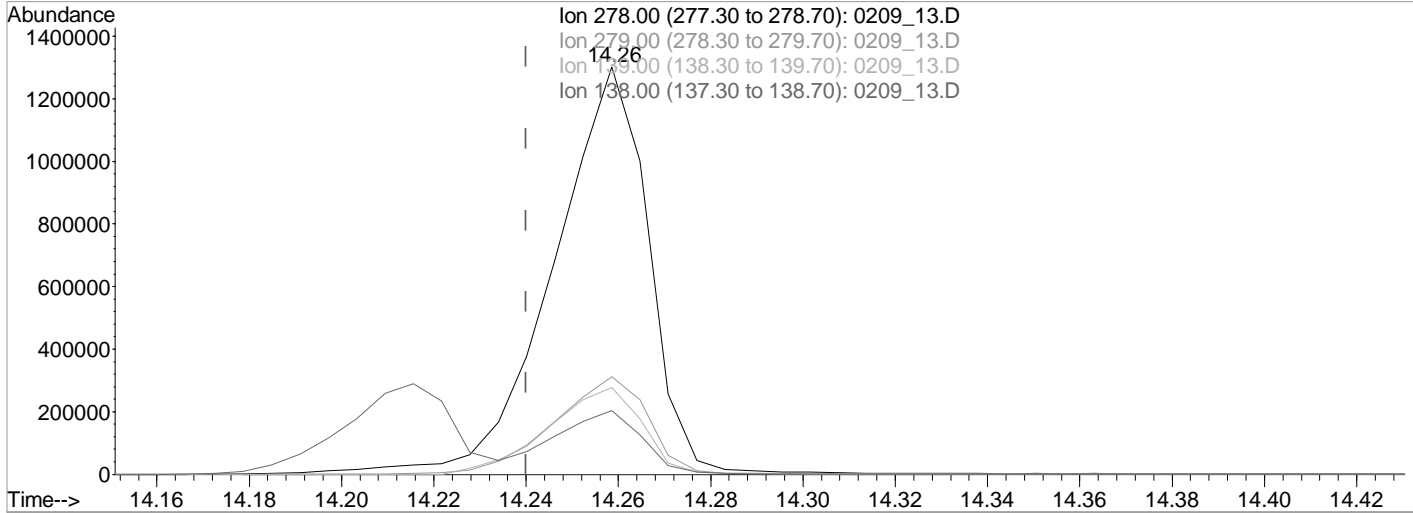
response 1733830

Ion	Exp%	Act%
276.00	100	100
277.00	24.10	23.27
138.00	25.30	27.03
137.00	18.00	20.45

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:18 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(99) Dibenz(a,h)anthracene (MT)  
 14.26min (+0.019) 48815.3733897 ppb m

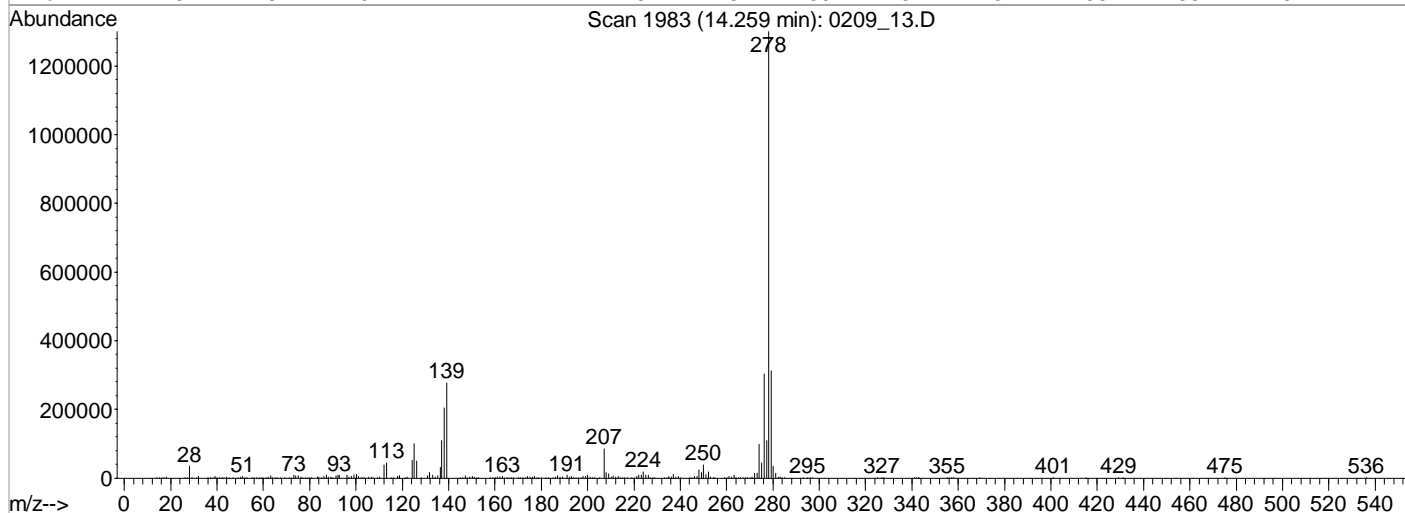
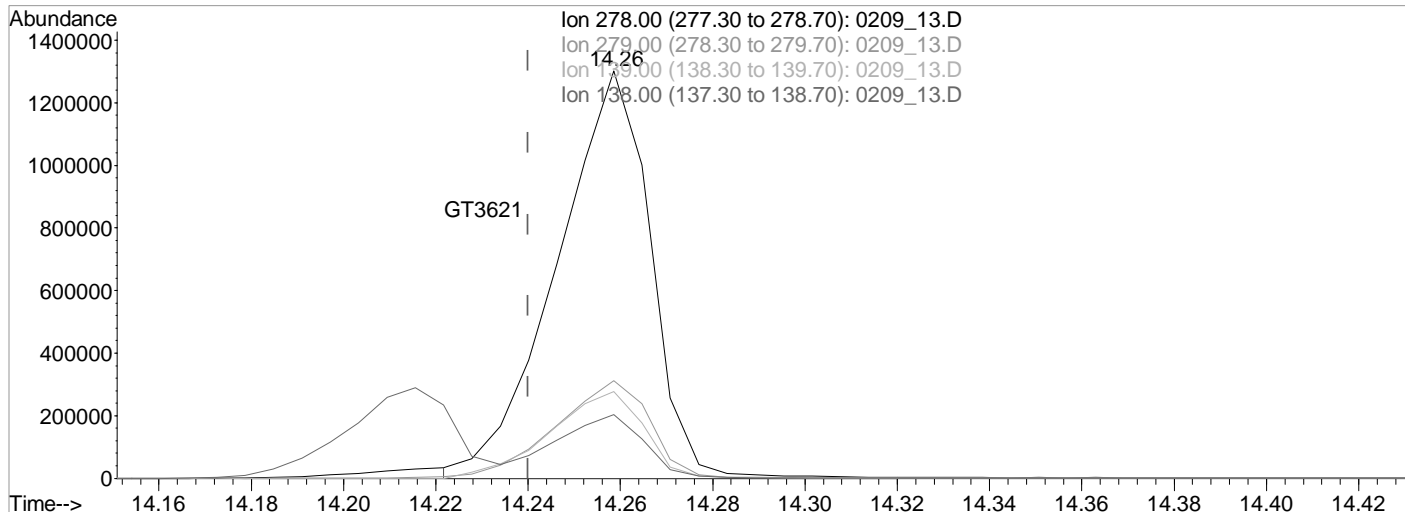
response 1877713

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	24.02
139.00	22.10	21.24
138.00	16.70	15.70

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:18 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(99) Dibenz(a,h)anthracene (MT)  
 14.26min (+0.019) 47566.6475034 ppb m

response 1829680

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	24.02
139.00	22.10	21.24
138.00	16.70	15.70

Data File : C:\MSDCHEM\1\DATA\020922\0209 15.D Vial: 12  
 Acq On : 9 Feb 2022 1:51 pm Operator: 917  
 Sample : STD TCL 4K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:24 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:23:05 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	81654	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	334983	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	163201	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	305950	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	267428	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	282139	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.00	172	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	14487	3988.9621728	ppb	93
22) Acetophenone	3.73	105	65150	3858.1826323	ppb	99
31) Benzoic Acid	4.03	105	18644	3581.9887151	ppb	99
33) alpha-terpineol	4.25	59	44003	4561.5078513	ppb	98
37) Hydroquinone	4.46	110	31357	3954.3453573	ppb	98
38) Quinoline	4.48	129	94131	4566.3745617	ppb	98
39) Caprolactam	4.49	113	8784	3805.5673121	ppb	95
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	42391	4650.8872010	ppb	100
44) Diphenyl Ether	5.09	170	60249	4582.2445482	ug/ml	97
45) Diphenyl Oxide	5.09	170	60249	4582.2445482	ug/ml	97
62) 2,3,4,6-Tetrachlorophenol	5.67	232	18117	3892.8021929	ppb	95
69) Atrazine	6.32	200	26177	3922.3101062	ppb	95
82) 2-nitrodiphenylamine	7.16	167	24613	3523.7990565	ppb #	100
85) Benzidine	7.76	184	40054	2829.4094773	ppb	99
89) 3,3-Dichlorobenzidine	9.49	252	52096	3783.8744076	ppb	98

(#) = qualifier out of range (m) = manual integration

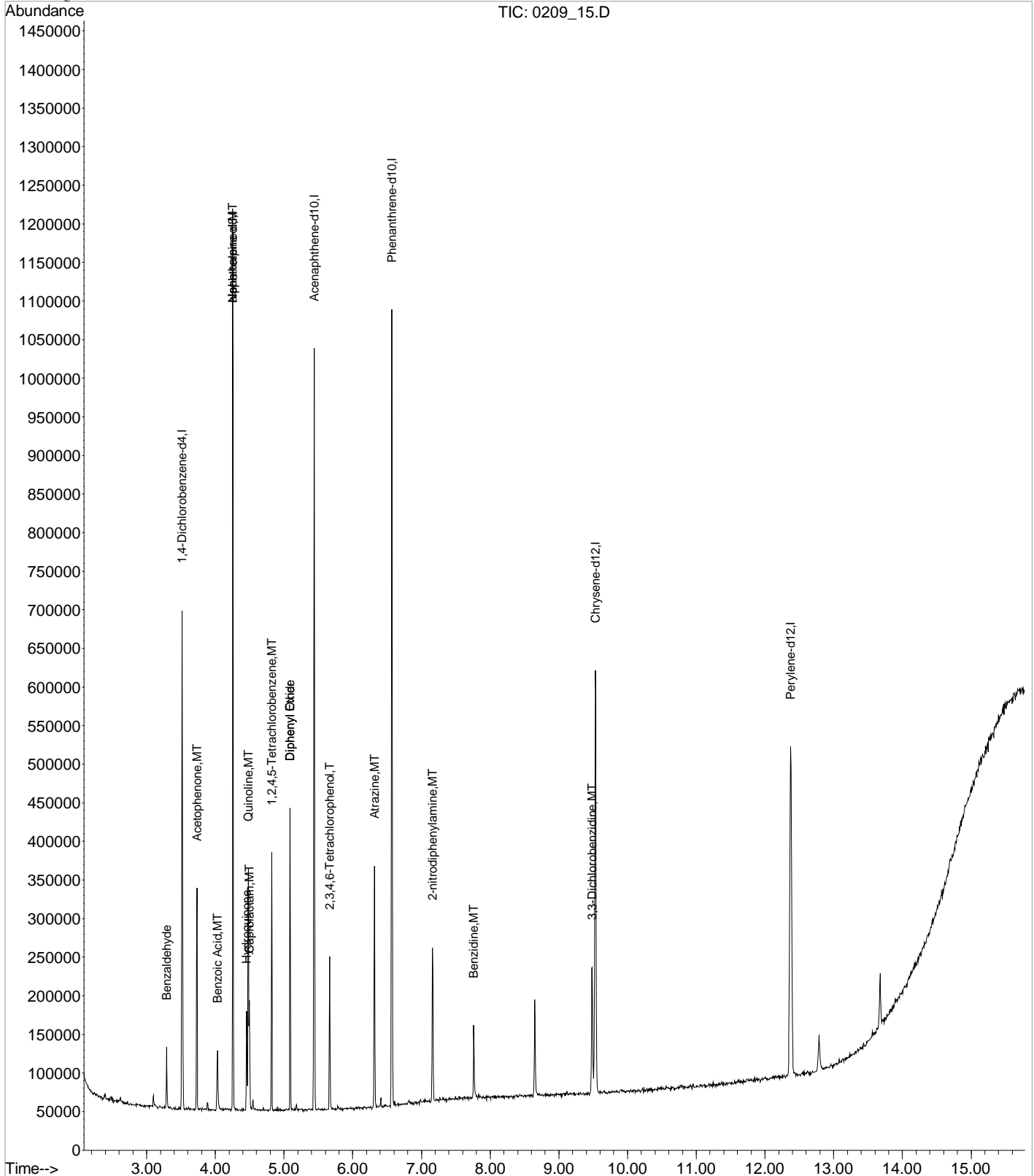
0209\_15.D S804B09V.M Fri Feb 18 15:25:33 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 15.D  
 Acq On : 9 Feb 2022 1:51 pm  
 Sample : STD TCL 4K1 PPB 22B06091 exp. 07/15/22  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:24 2022

Vial: 12  
 Operator: 917  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804B09V.RES

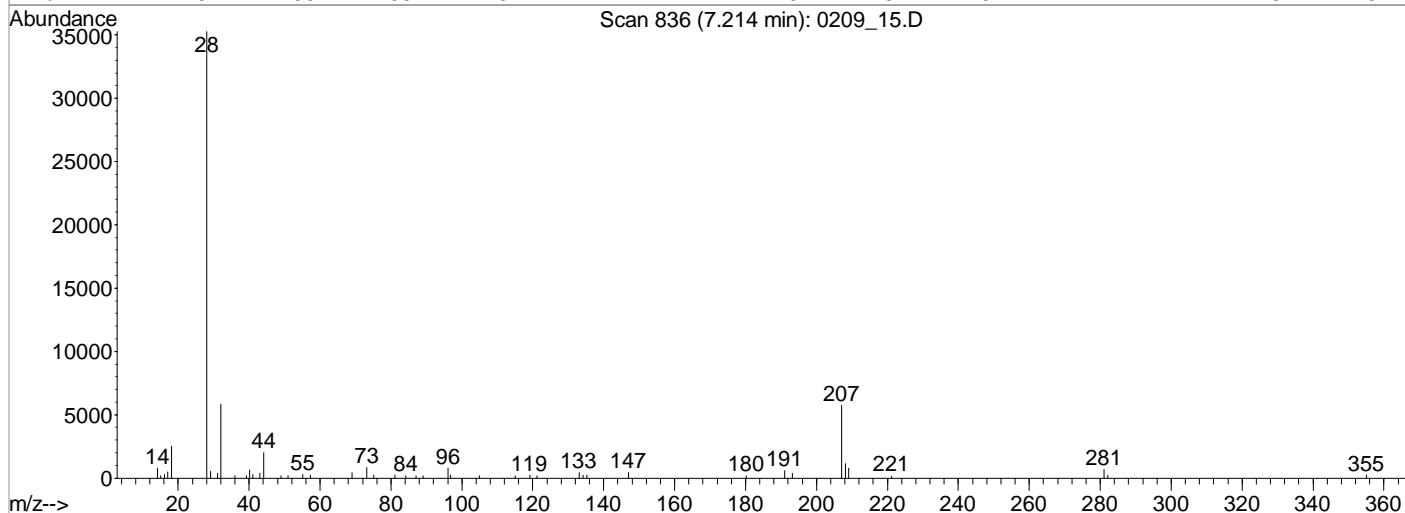
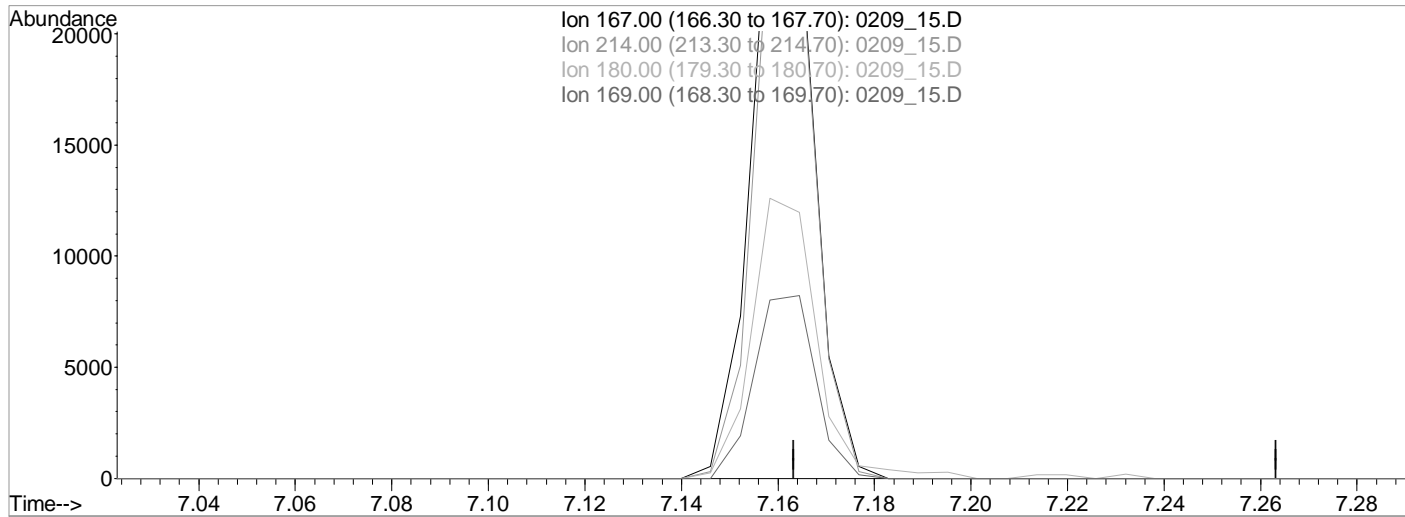
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:23:05 2022  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 15.D Vial: 12  
 Acq On : 9 Feb 2022 1:51 pm Operator: 917  
 Sample : STD TCL 4K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 13:57 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:26:53 2022  
 Response via : Single Level Calibration



TIC: 0209\_15.D

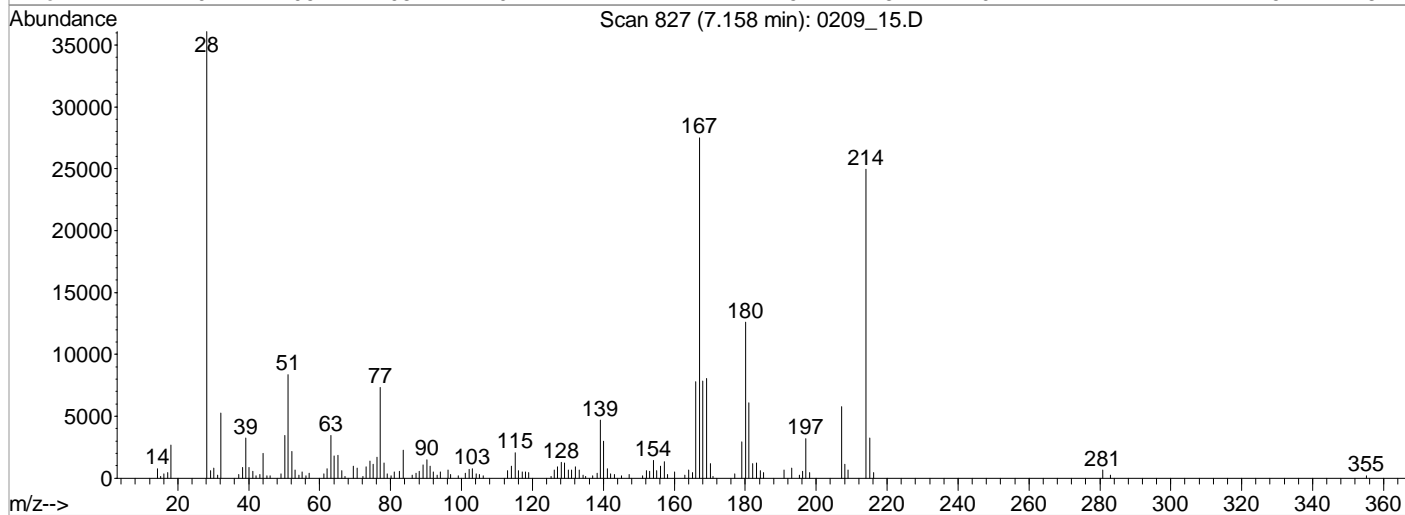
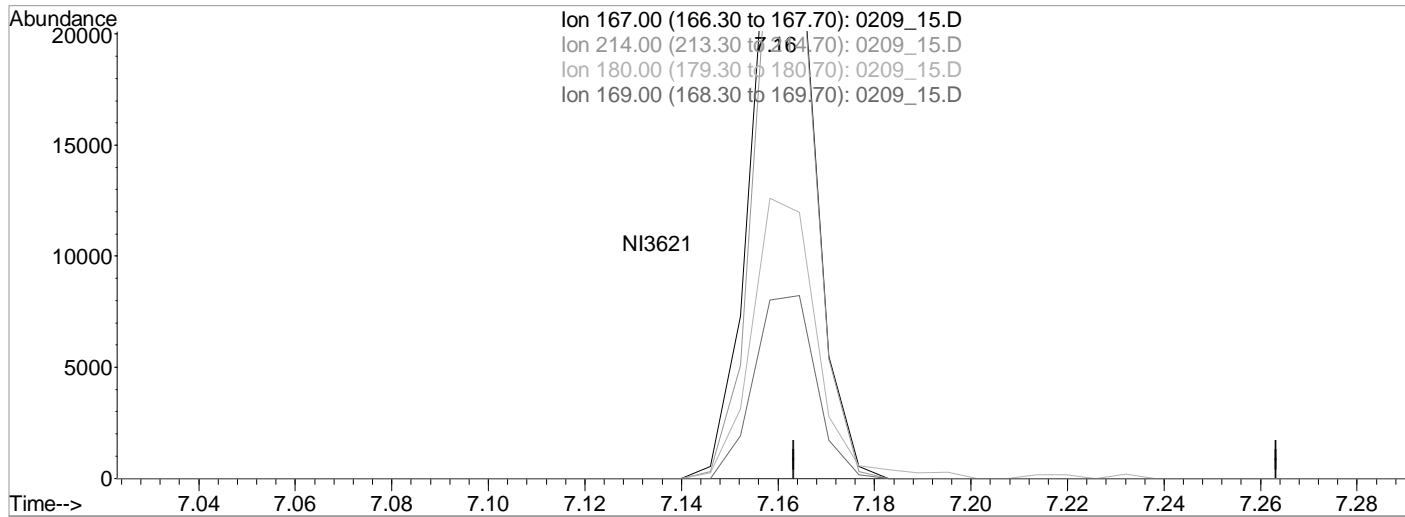
(82) 2-nitrodiphenylamine (MT)  
 7.21min (-7.213) 0.0000000 ppb  
 Qvalue = 0  
 response 0

Ion	Exp%	Act%
167.00	100	0.00
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_15.D Vial: 12  
 Acq On : 9 Feb 2022 1:51 pm Operator: 917  
 Sample : STD TCL 4K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:28 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:26:53 2022  
 Response via : Single Level Calibration



TIC: 0209\_15.D

(82) 2-nitrodiphenylamine (MT)  
 7.16min (-0.055) 0.0000000 ppb m

response 24613

Ion	Exp%	Act%
167.00	100	100
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 16.D Vial: 13  
 Acq On : 9 Feb 2022 2:11 pm Operator: 917  
 Sample : MSTD TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:12 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:11:22 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	80802	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	355632	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	160695	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	305525	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	266241	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	277583	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
7) Phenol-d5	0.00	99	0d	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	34568	9618.5822945	ppb	100
22) Acetophenone	3.73	105	164650	9853.3849640	ppb	100
31) Benzoic Acid	4.04	105	61639	11154.8218541	ppb	100
33) alpha-terpineol	4.25	59	113780	11109.9986247	ppb	100
37) Hydroquinone	4.46	110	74981	8906.6267747	ppb	100
38) Quinoline	4.48	129	235712	10770.6642496	ppb	100
39) Caprolactam	4.50	113	23969	9781.3529859	ppb	100
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	105301	10882.1968071	ppb	100
44) Diphenyl Ether	5.09	170	155858	11165.5328771	ug/ml	100
45) Diphenyl Oxide	5.09	170	155858	11165.5328771	ug/ml	100
62) 2,3,4,6-Tetrachlorophenol	5.67	232	45074	9836.0924902	ppb	100
69) Atrazine	6.32	200	67082	10208.1844301	ppb	100
82) 2-nitrodiphenylamine	7.16	167	72572	10161.7203217	ppb	# 100
85) Benzidine	7.76	184	134678	9556.0521113	ppb	100
89) 3,3-Dichlorobenzidine	9.49	252	138838	10164.4628275	ppb	100

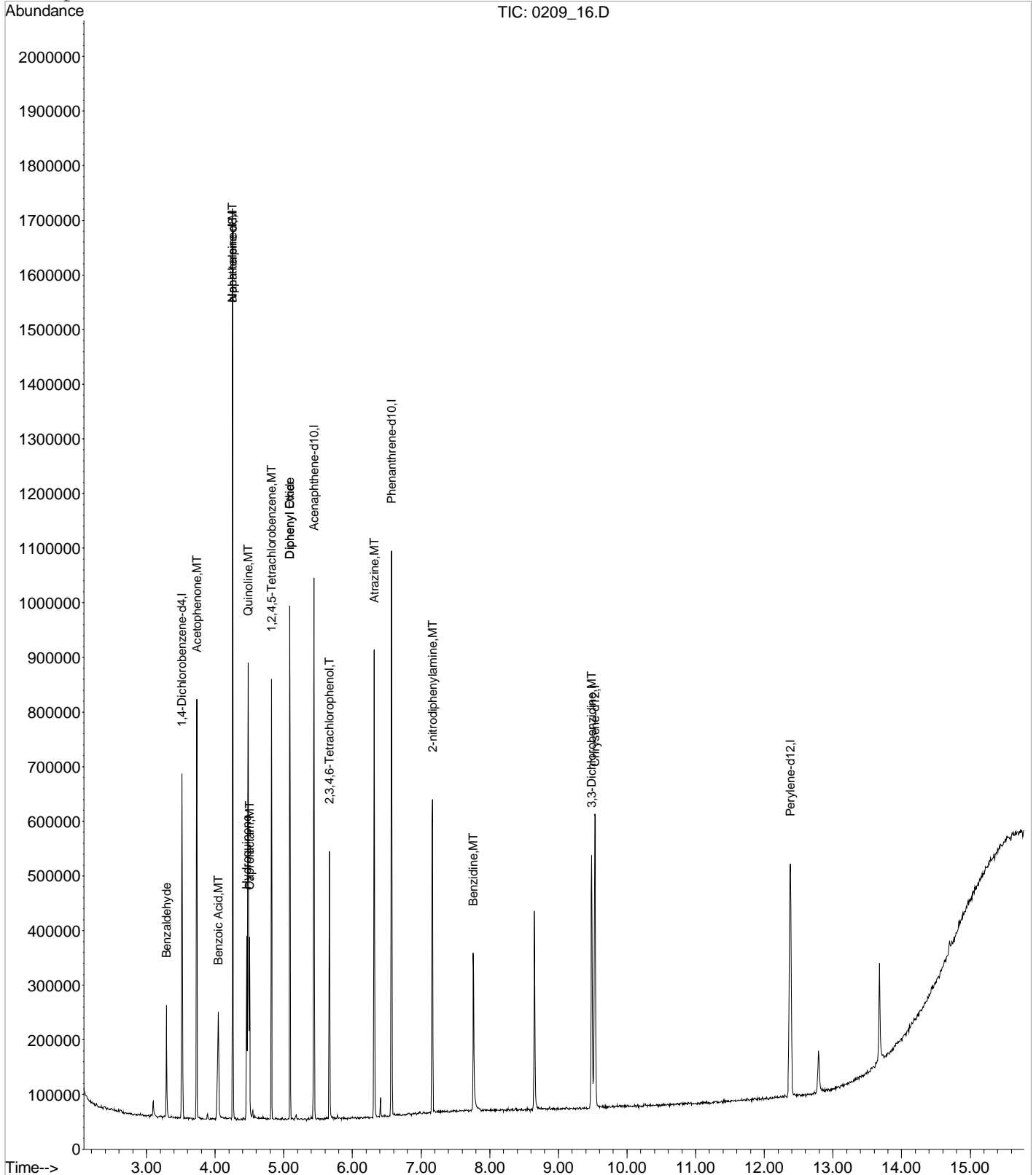
(#) = qualifier out of range (m) = manual integration

0209\_16.D S804B09V.M Fri Feb 18 15:13:48 2022



Data File : C:\MSDCHEM\1\DATA\020922\0209 16.D Vial: 13  
 Acq On : 9 Feb 2022 2:11 pm Operator: 917  
 Sample : MSTD TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:12 2022 Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:11:22 2022  
 Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\050422B\0504B 04.D Vial: 4  
 Acq On : 4 May 2022 8:30 pm Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 16:01 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	73015	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	326671	8000.00	ppb	0.00
46) Acenaphthene-d10	5.15	164	140220	8000.00	ppb	0.00
70) Phenanthrene-d10	6.26	188	265524	8000.00	ppb	0.00
84) Chrysene-d12	9.00	240	228051	8000.00	ppb	0.00
94) Perylene-d12	11.66	264	216467	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	
50) 2-Fluorobiphenyl	0.00	172	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	

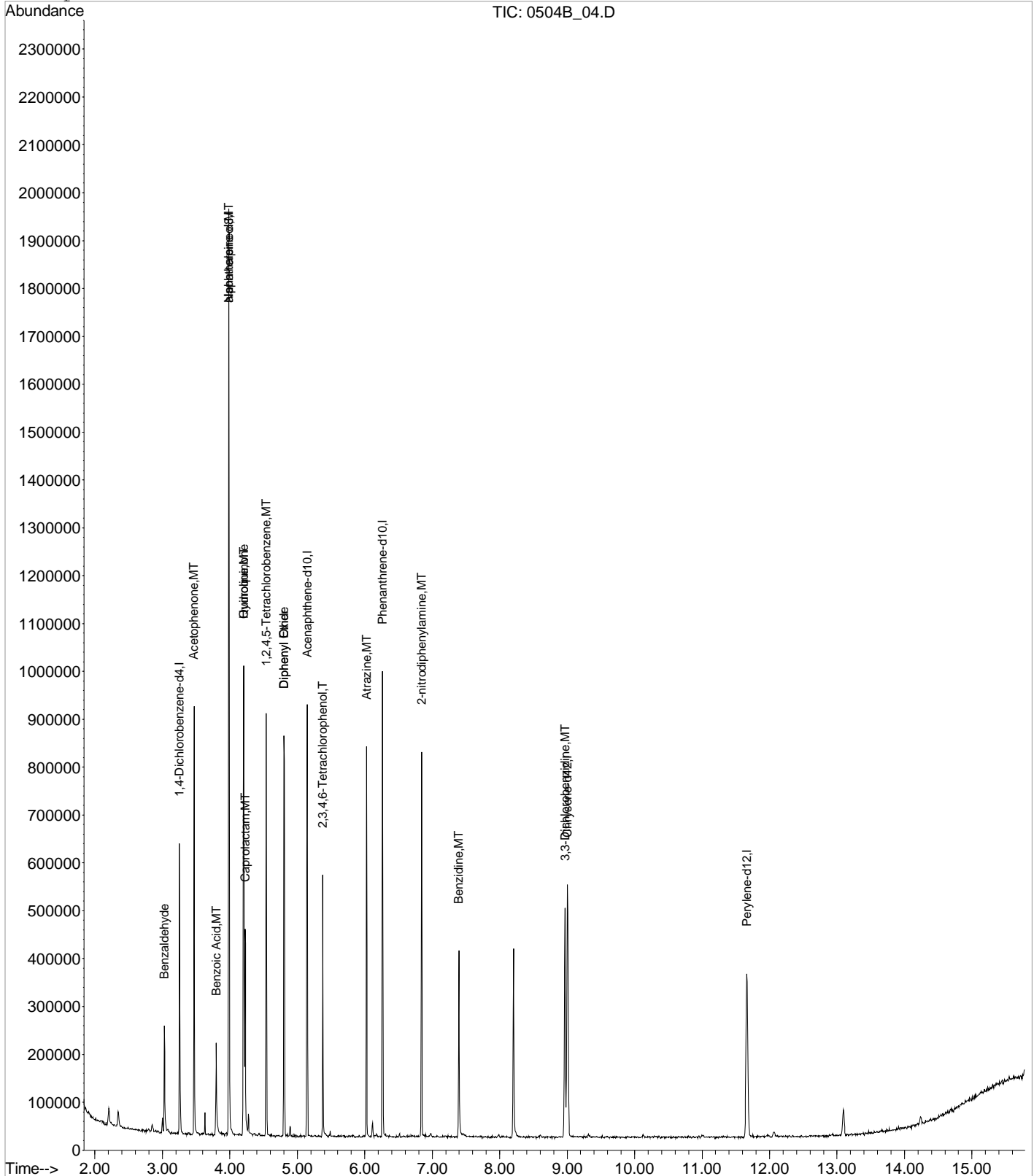
Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue	#
9) Benzaldehyde	3.03	105	37553	11563.5576519	ppb		88
22) Acetophenone	3.47	105	174657	11566.9732918	ppb		96
31) Benzoic Acid	3.80	105	51228	9584.7085299	ppb		94
33) alpha-terpineol	3.98	59	120439	11752.9375562	ppb		96
37) Hydroquinone	4.21	110	72844m	10246.0904601	ppb		
38) Quinoline	4.21	129	226702	10414.3753050	ppb		100
39) Caprolactam	4.23	113	30661	13621.5202940	ppb		81
43) 1,2,4,5-Tetrachlorobenzene	4.54	216	102104	11677.3256633	ppb		99
44) Diphenyl Ether	4.81	170	138570	9934.7053971	ug/ml#		87
45) Diphenyl Oxide	4.81	170	138570	9934.7053971	ug/ml#		87
62) 2,3,4,6-Tetrachlorophenol	5.38	232	46425	11610.2298348	ppb		99
69) Atrazine	6.02	200	60218	10501.7393261	ppb		98
82) 2-nitrodiphenylamine	6.84	167	76767	11463.4210047	ppb		100
85) Benzidine	7.39	184	138285	10272.0957612	ppb		99
89) 3,3-Dichlorobenzidine	8.97	252	124301	10587.2179159	ppb		99

(#) = qualifier out of range (m) = manual integration  
 0504B\_04.D S804E04BV.M Thu May 05 16:01:48 2022

Data File : C:\MSDCHEM\1\DATA\050422B\0504B 04.D Vial: 4  
Acq On : 4 May 2022 8:30 pm Operator: 3545  
Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: May 5 16:01 2022 Quant Results File: S804E04BV.RES

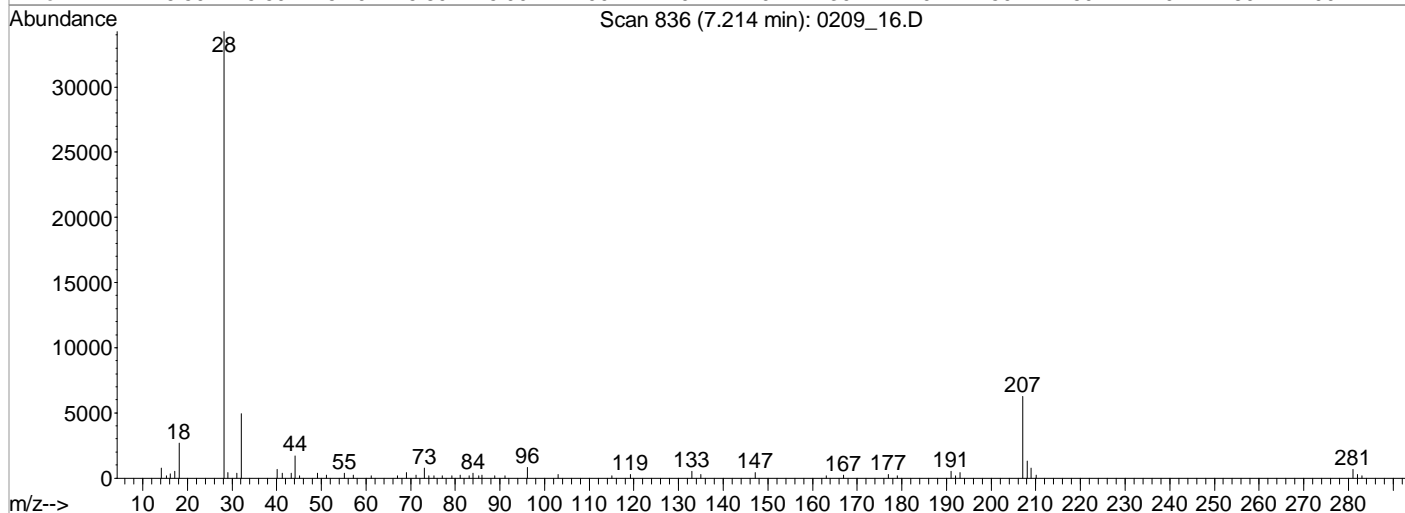
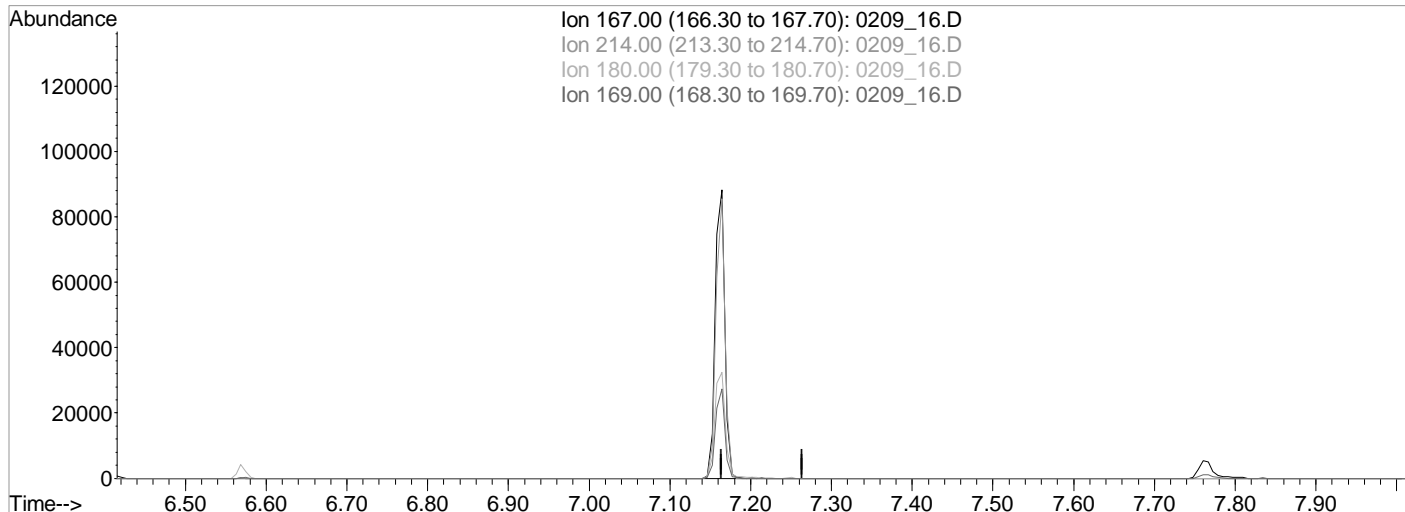
Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Thu May 05 15:59:02 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 16.D Vial: 13  
Acq On : 9 Feb 2022 2:11 pm Operator: 917  
Sample : MSTD TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Feb 14 11:56 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Mon Feb 14 16:30:22 2022  
Response via : Single Level Calibration



TIC: 0209\_16.D

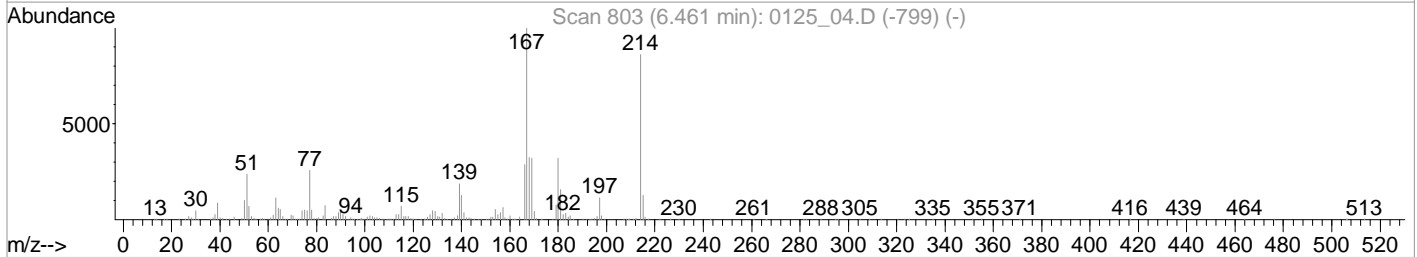
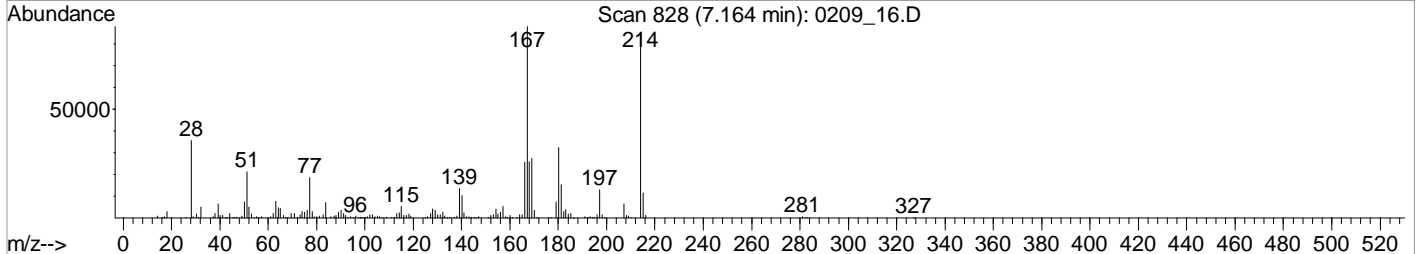
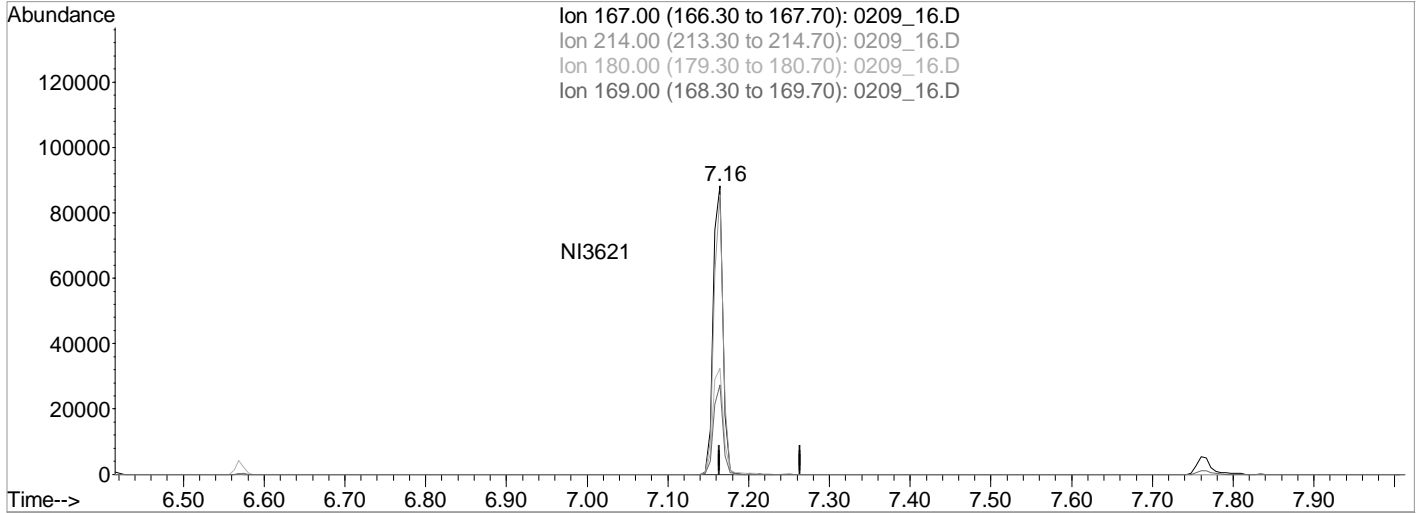
(82) 2-nitrodiphenylamine (MT)  
7.21min (-7.213) 0.0000000 ppb  
Qvalue = 0  
response 0

Ion	Exp%	Act%
167.00	100	0.00
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 16.D Vial: 13  
 Acq On : 9 Feb 2022 2:11 pm Operator: 917  
 Sample : MSTD TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:56 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:30:22 2022  
 Response via : Single Level Calibration



TIC: 0209\_16.D

(82) 2-nitrodiphenylamine (MT)  
 7.21min (-7.213) 0.0000000 ppb  
 Qvalue = 0  
 response 0

Ion	Exp%	Act%
167.00	100	0.00
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:27 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:25:47 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	80706	8000.00	ppb	0.00
23) Naphthalene-d8	4.25	136	399771	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	165153	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	310543	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	267602	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	278906	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.00	172	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	70662	19685.1634252	ppb	97
22) Acetophenone	3.73	105	331215	19844.9495807	ppb	100
31) Benzoic Acid	4.06	105	142776	22985.3864980	ppb	97
33) alpha-terpineol	4.25	59	228650	19861.3528537	ppb	100
37) Hydroquinone	4.47	110	185756	19628.8303703	ppb	97
38) Quinoline	4.48	129	490490	19937.9498035	ppb	99
39) Caprolactam	4.50	113	57125	20737.8999620	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	213585	19635.6089839	ppb	99
44) Diphenyl Ether	5.09	170	314838	20064.4401459	ug/ml	100
45) Diphenyl Oxide	5.09	170	314838	20064.4401459	ug/ml	100
62) 2,3,4,6-Tetrachlorophenol	5.67	232	91641	19458.1801546	ppb	98
69) Atrazine	6.32	200	137477	20355.8128288	ppb	99
82) 2-nitrodiphenylamine	7.16	167	162587	22933.0128430	ppb	# 100
85) Benzidine	7.76	184	309145	21823.7641043	ppb	99
89) 3,3-Dichlorobenzidine	9.49	252	286959	20829.0616750	ppb	99

(#) = qualifier out of range (m) = manual integration

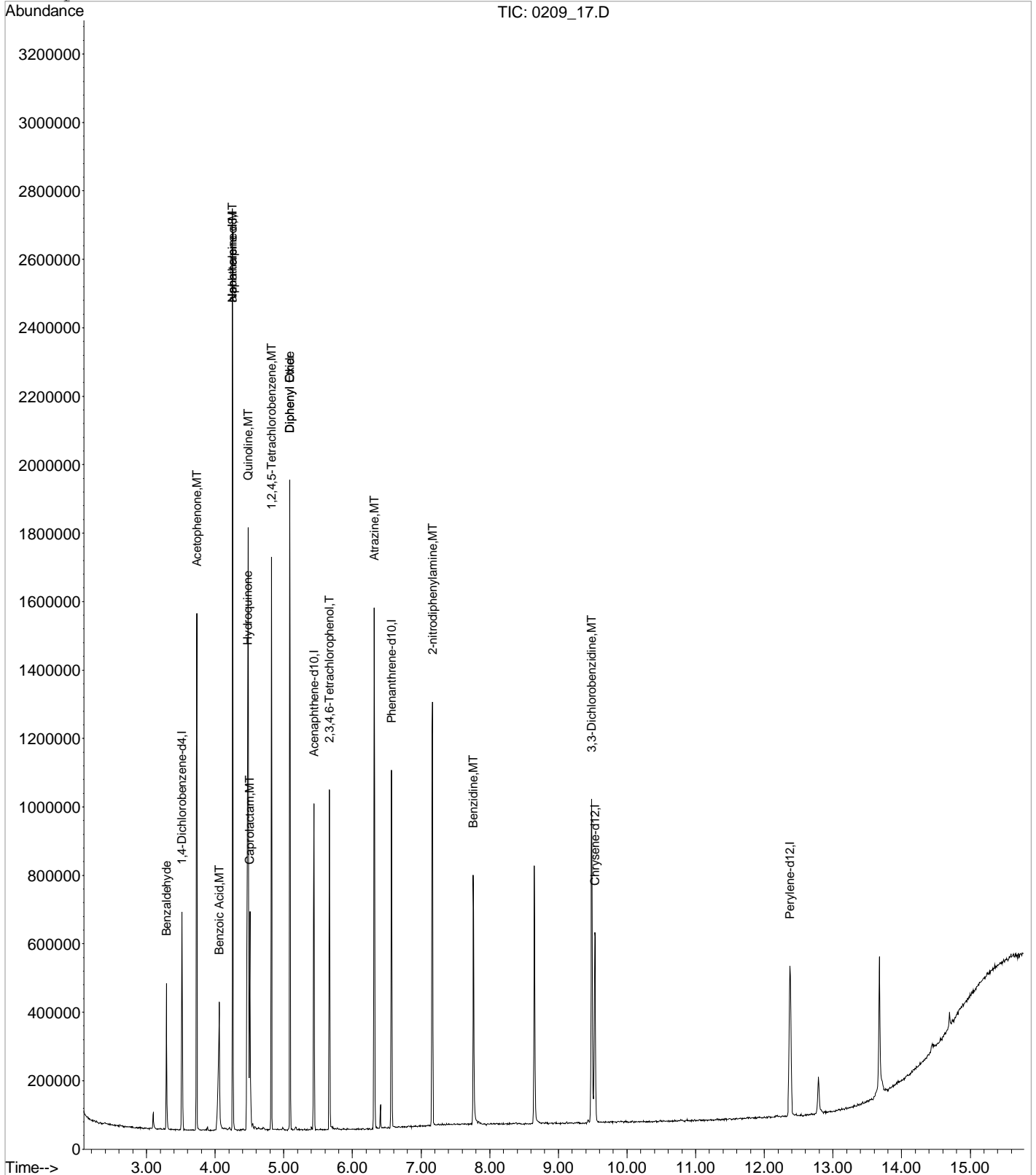
0209\_17.D S804B09V.M Fri Feb 18 15:28:47 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D  
 Acq On : 9 Feb 2022 2:32 pm  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:27 2022

Vial: 14  
 Operator: 917  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804B09V.RES

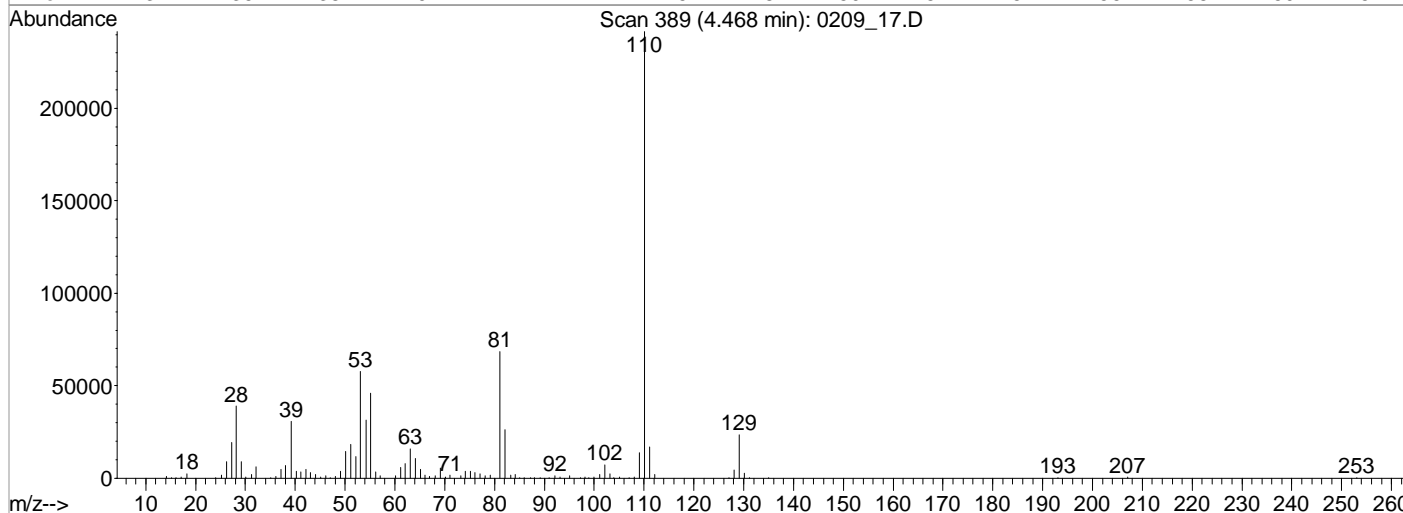
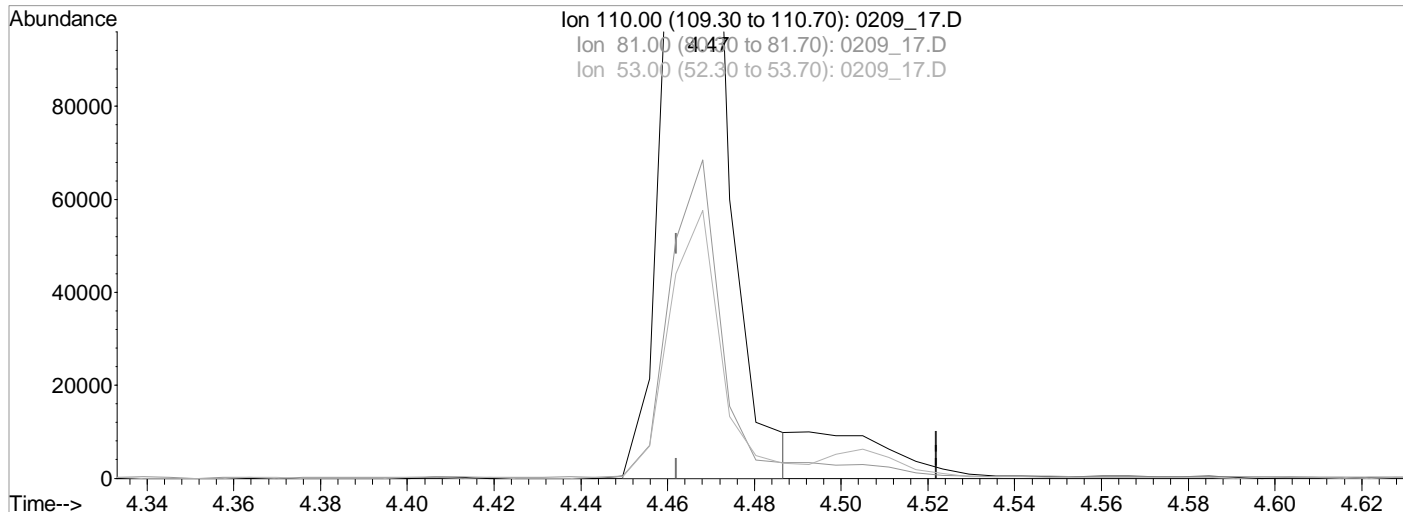
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:25:47 2022  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:36 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:34:51 2022  
 Response via : Single Level Calibration



TIC: 0209\_17.D

(37) Hydroquinone  
 4.47min (+0.006) 18327.5298072 ppb m

response 185555

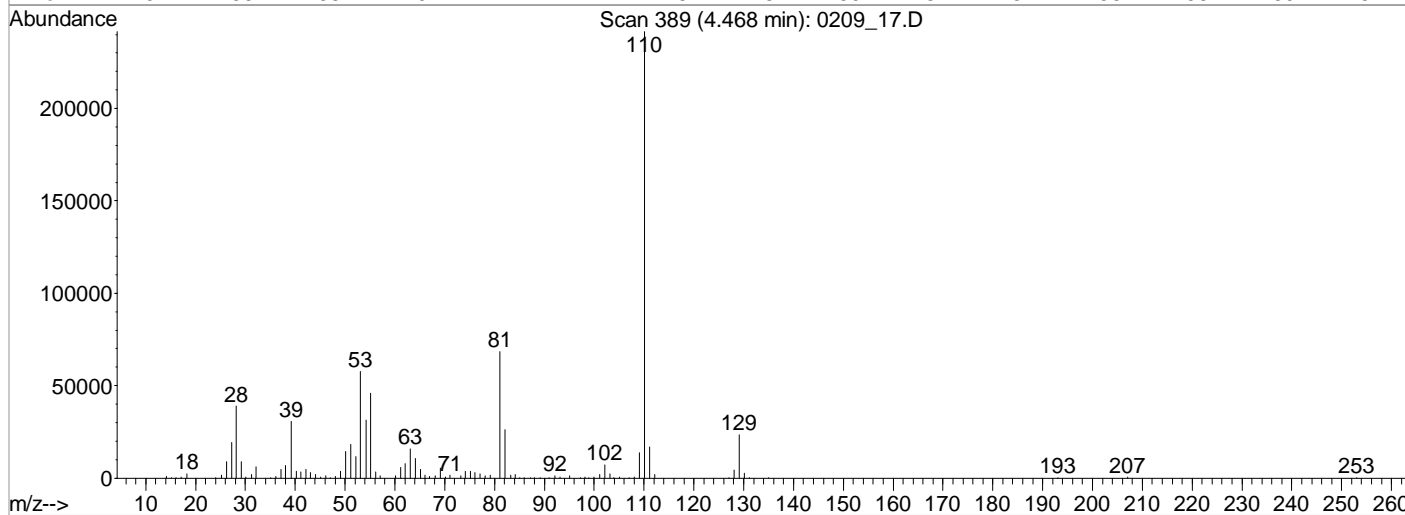
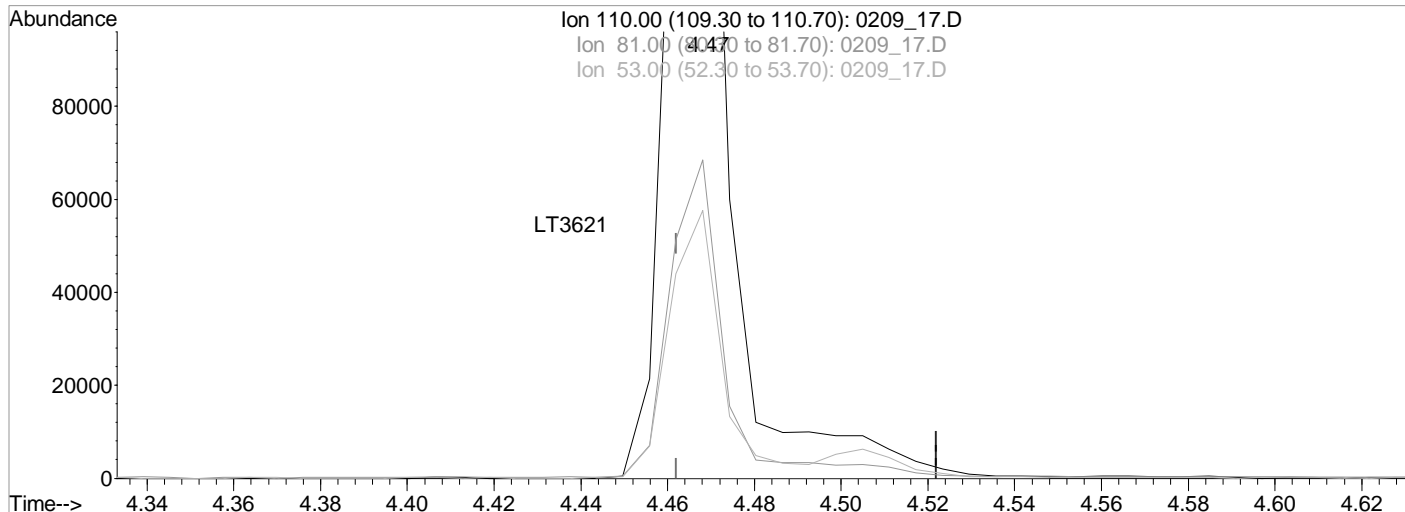
Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.35
53.00	25.90	23.82
0.00	0.00	0.00



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:36 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:34:51 2022  
 Response via : Single Level Calibration



TIC: 0209\_17.D

(37) Hydroquinone  
 4.47min (+0.006) 19899.5756395 ppb m

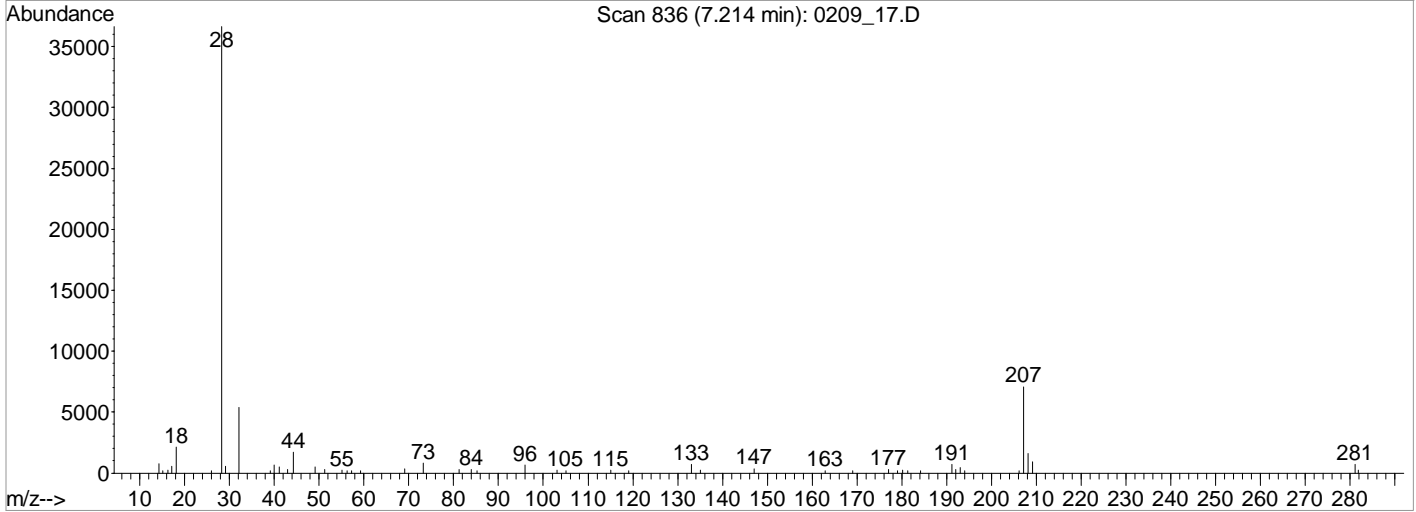
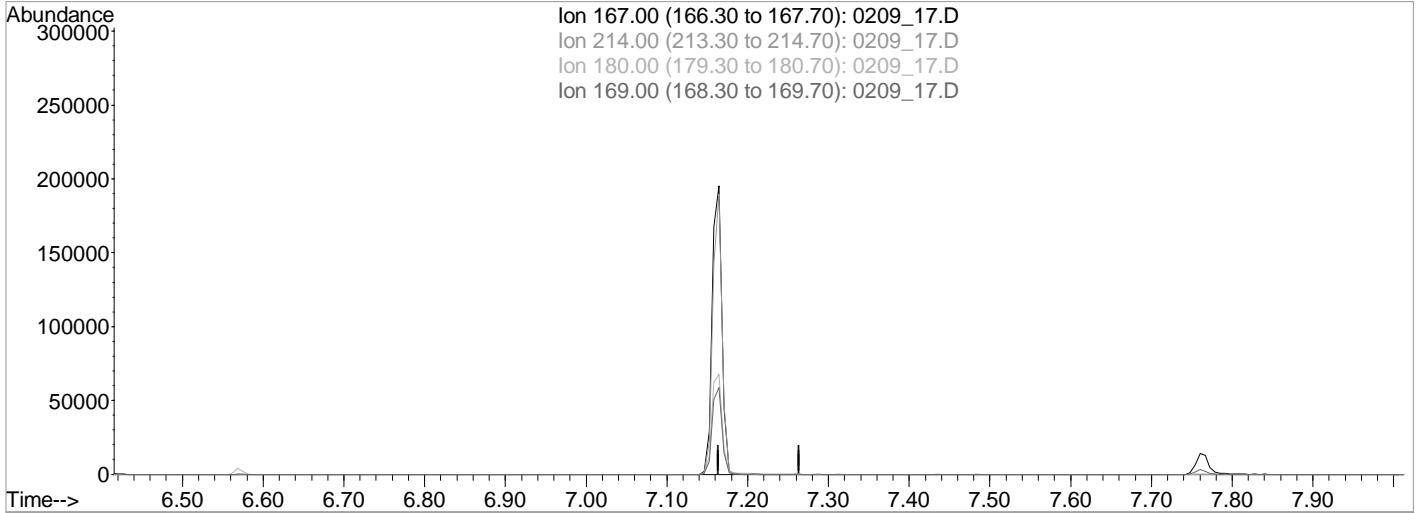
response 201471

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.35
53.00	25.90	23.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_17.D Vial: 14  
Acq On : 9 Feb 2022 2:32 pm Operator: 917  
Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Feb 14 16:36 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Mon Feb 14 16:34:51 2022  
Response via : Single Level Calibration



TIC: 0209\_17.D

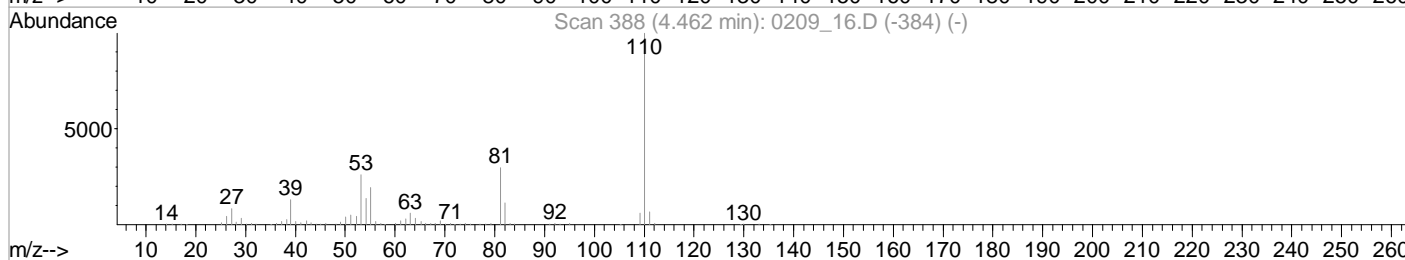
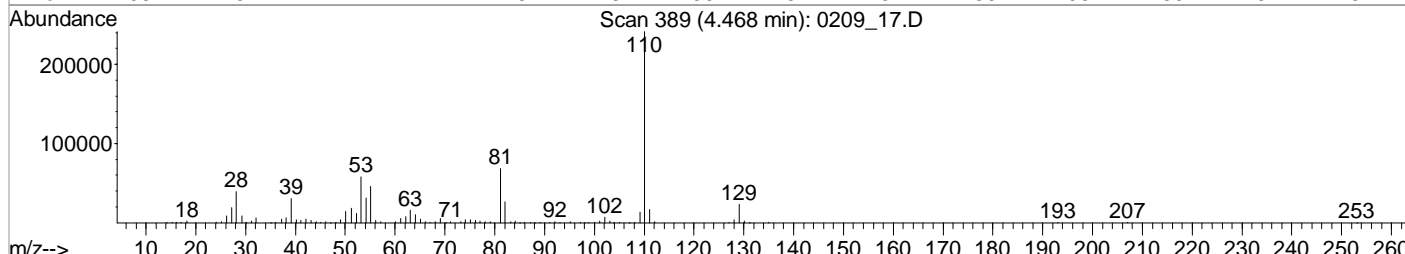
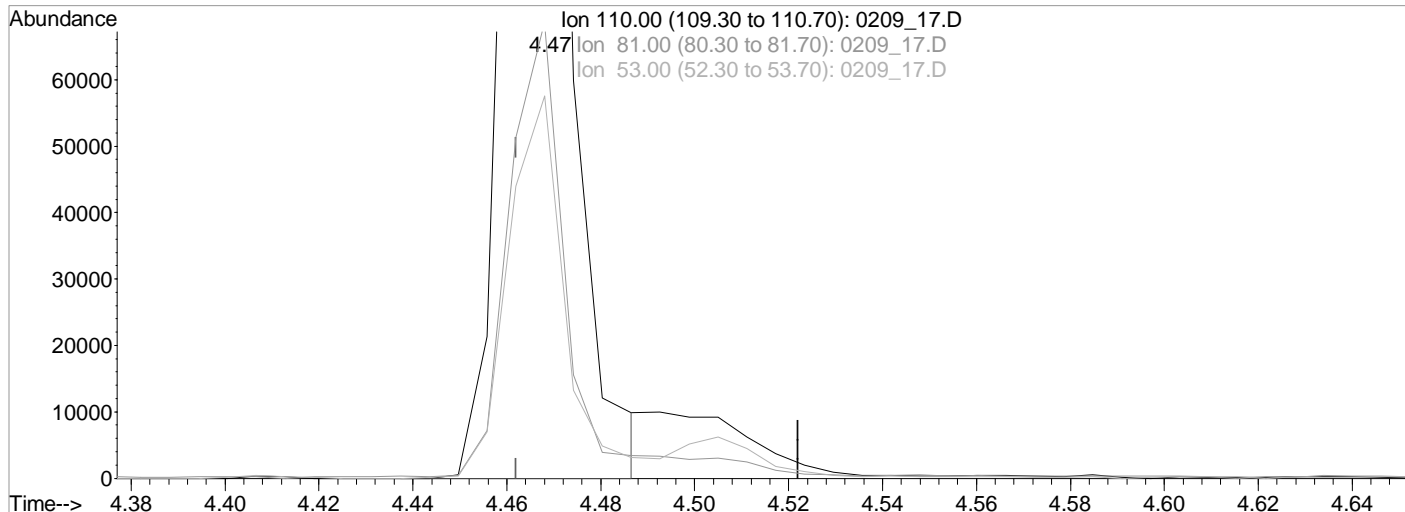
(82) 2-nitrodiphenylamine (MT)  
7.21min (-7.213) 0.0000000 ppb  
Qvalue = 0  
response 0

Ion	Exp%	Act%
167.00	100	0.00
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:27 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:25:47 2022  
 Response via : Single Level Calibration



TIC: 0209\_17.D

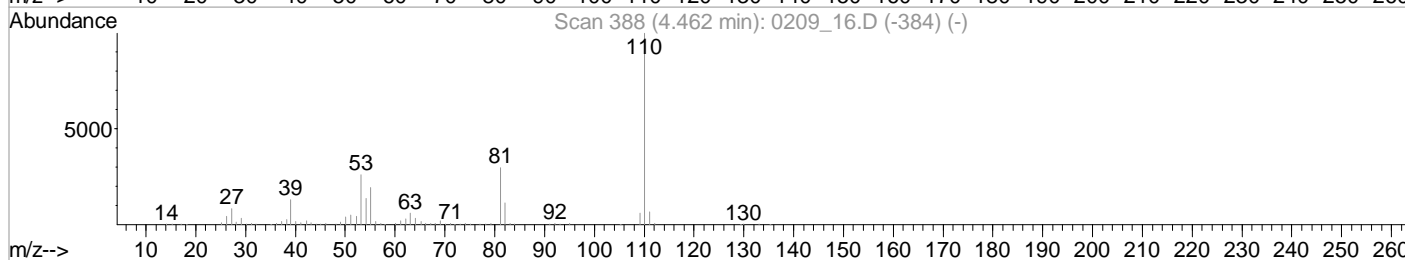
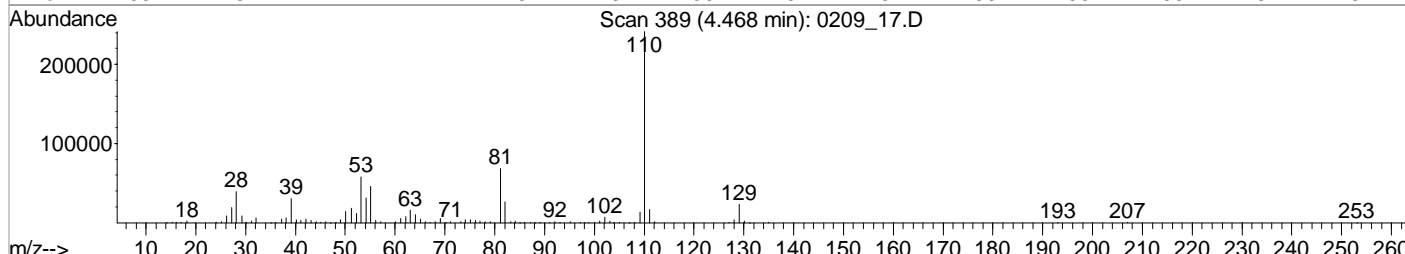
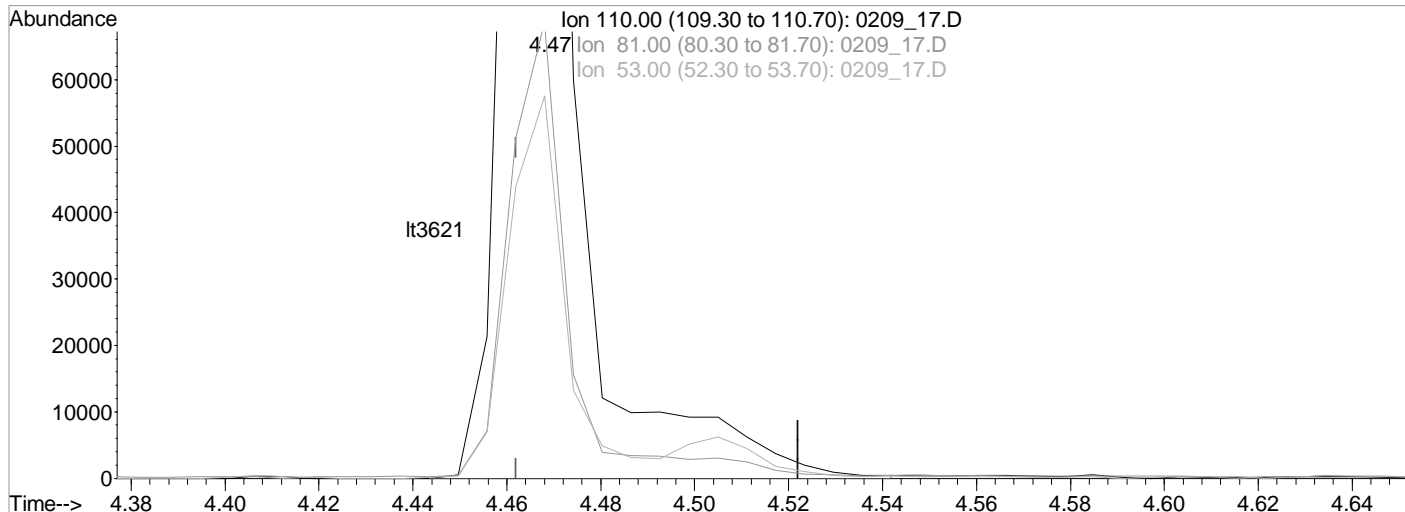
(37) Hydroquinone  
 4.47min (+0.006) 19628.8303703 ppb  
 Qvalue = 97  
 response 185756

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.22
53.00	25.90	23.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:27 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:25:47 2022  
 Response via : Single Level Calibration



TIC: 0209\_17.D

(37) Hydroquinone

4.47min (+0.006) 19628.8303703 ppb

Qvalue = 97

response 185756

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.22
53.00	25.90	23.82
0.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:30 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:28:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	82108	8000.00	ppb	0.00
23) Naphthalene-d8	4.25	136	454114	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	168401	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	315216	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	275976	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	284329	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	106225	29087.0842194	ppb	99
22) Acetophenone	3.73	105	505456	29767.5922833	ppb	99
31) Benzoic Acid	4.08	105	230790	32708.4514047	ppb	98
33) alpha-terpineol	4.25	59	348279	26632.4613626	ppb	100
37) Hydroquinone	4.47	110	296671	27928.9894085	ppb	96
38) Quinoline	4.48	129	748414	26781.7307239	ppb	99
39) Caprolactam	4.51	113	91827	29346.4351921	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	326532	26426.8725297	ppb	100
44) Diphenyl Ether	5.09	170	472571	26512.6637447	ug/ml	99
45) Diphenyl Oxide	5.09	170	472571	26512.6637447	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.67	232	141749	29517.1352371	ppb	99
69) Atrazine	6.32	200	207850	30182.1541051	ppb	99
82) 2-nitrodiphenylamine	7.16	167	262818	36543.3967385	ppb #	100
85) Benzidine	7.77	184	501082	34300.0121056	ppb	100
89) 3,3-Dichlorobenzidine	9.49	252	434215	30561.3628394	ppb	99

(#) = qualifier out of range (m) = manual integration

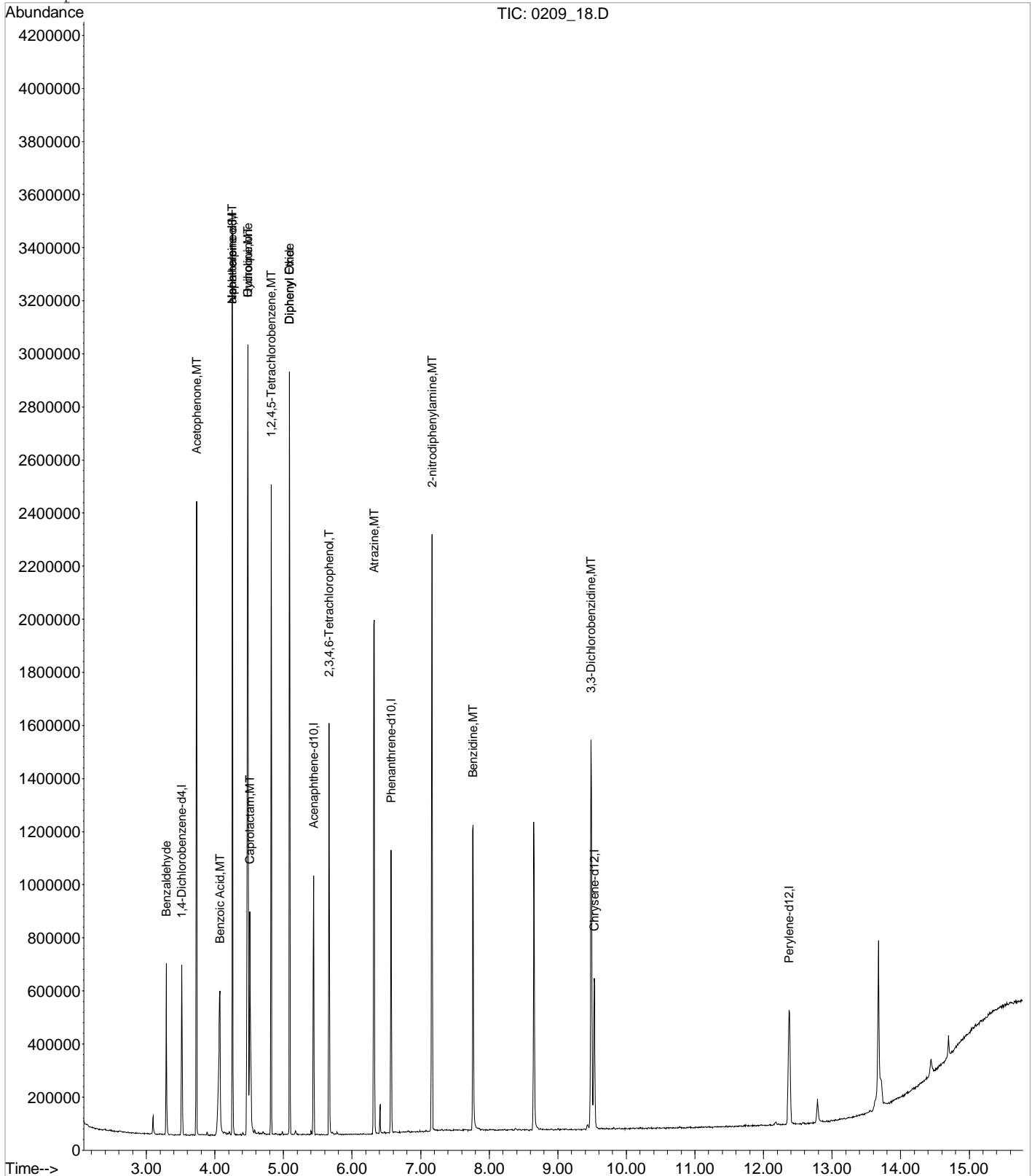
0209\_18.D S804B09V.M Fri Feb 18 15:31:52 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D  
Acq On : 9 Feb 2022 2:53 pm  
Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
MS Integration Params: RTEINT.P  
Quant Time: Feb 18 15:30 2022

Vial: 15  
Operator: 917  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804B09V.RES

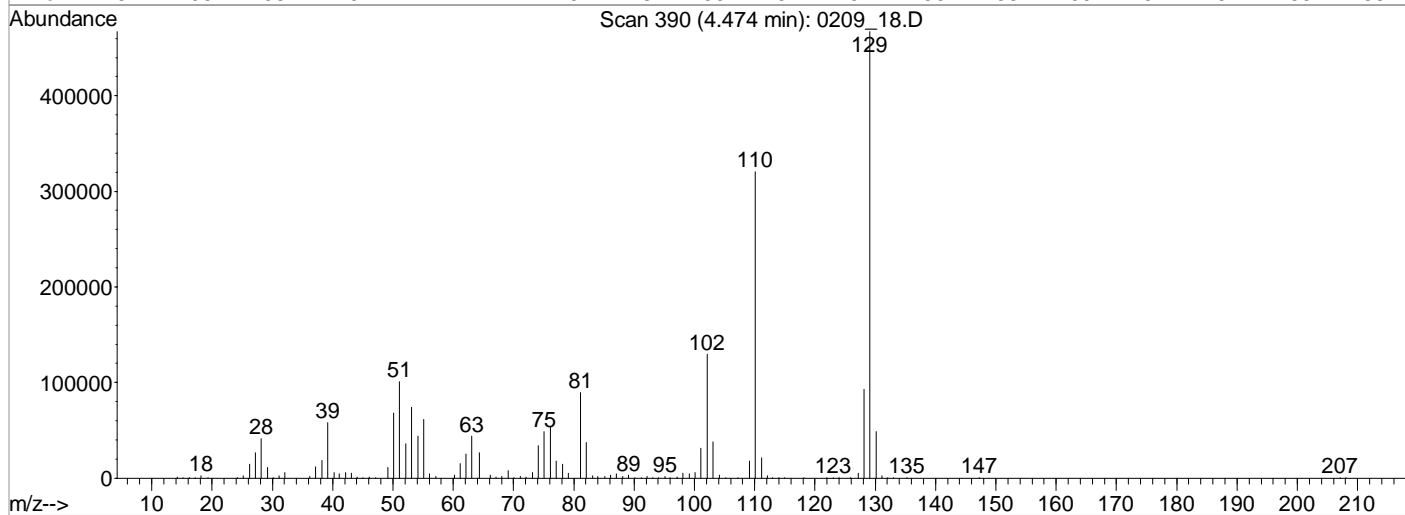
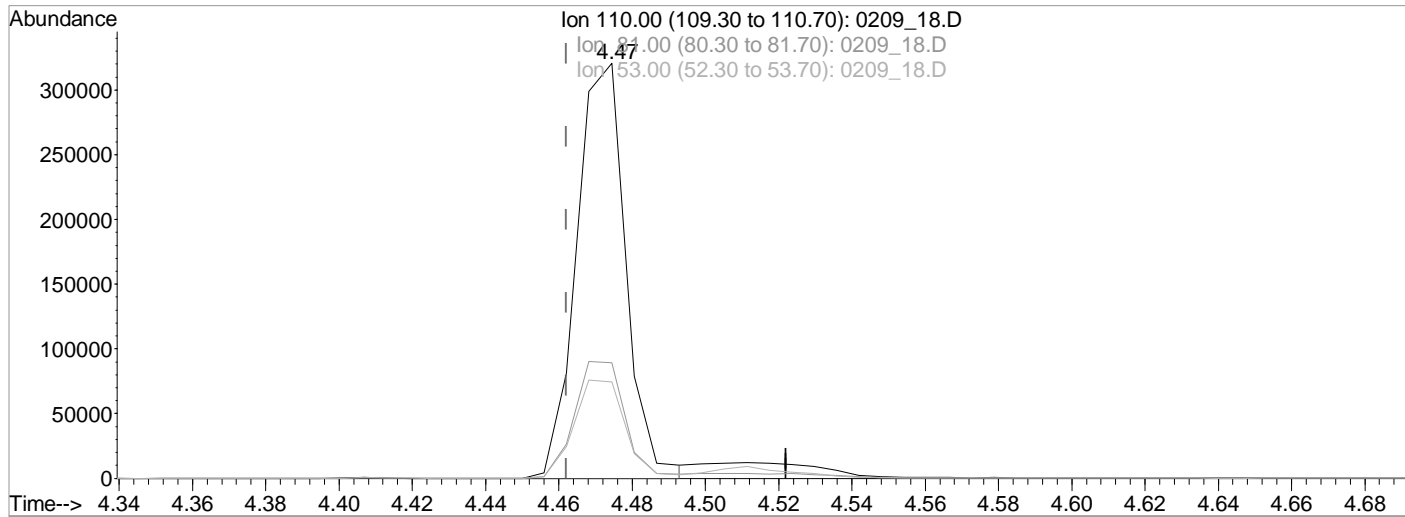
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Fri Feb 18 15:28:57 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:37:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

(37) Hydroquinone  
 4.47min (+0.012) 26335.0012438 ppb m

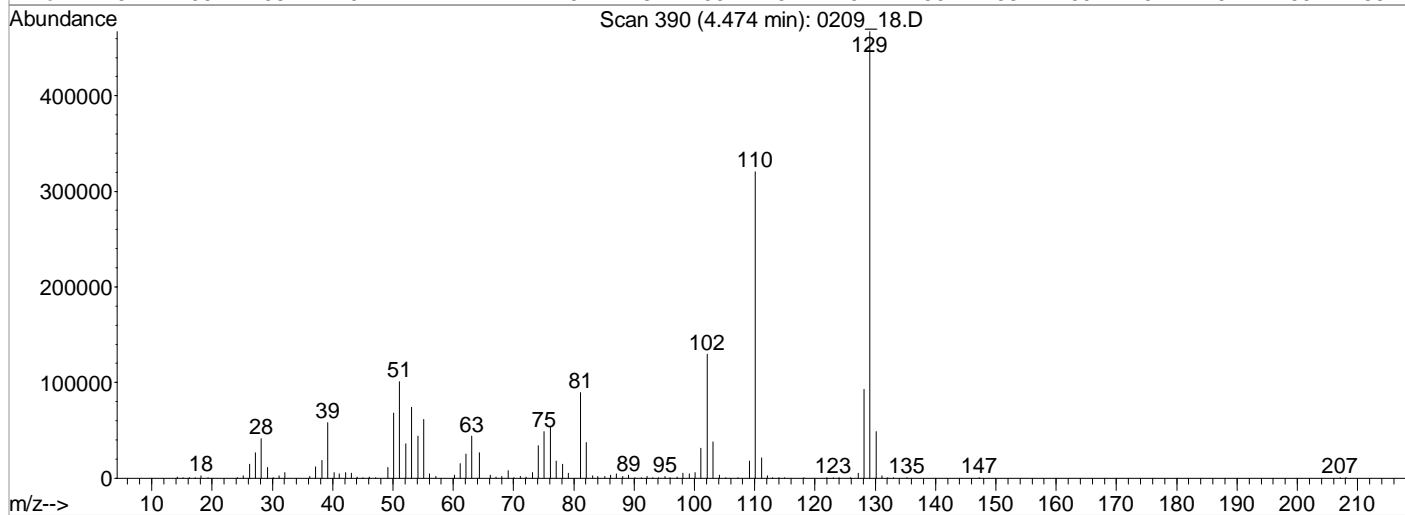
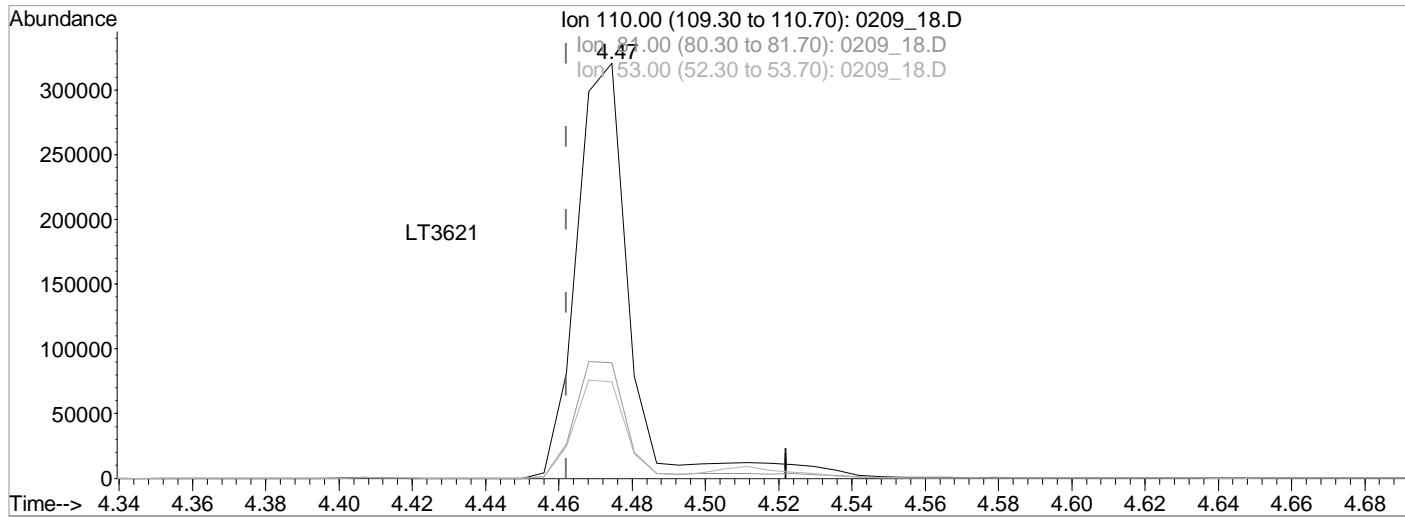
response 296613

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	27.93
53.00	25.90	23.20
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:37:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

(37) Hydroquinone  
 4.47min (+0.012) 28839.3802835 ppb m

response 324820

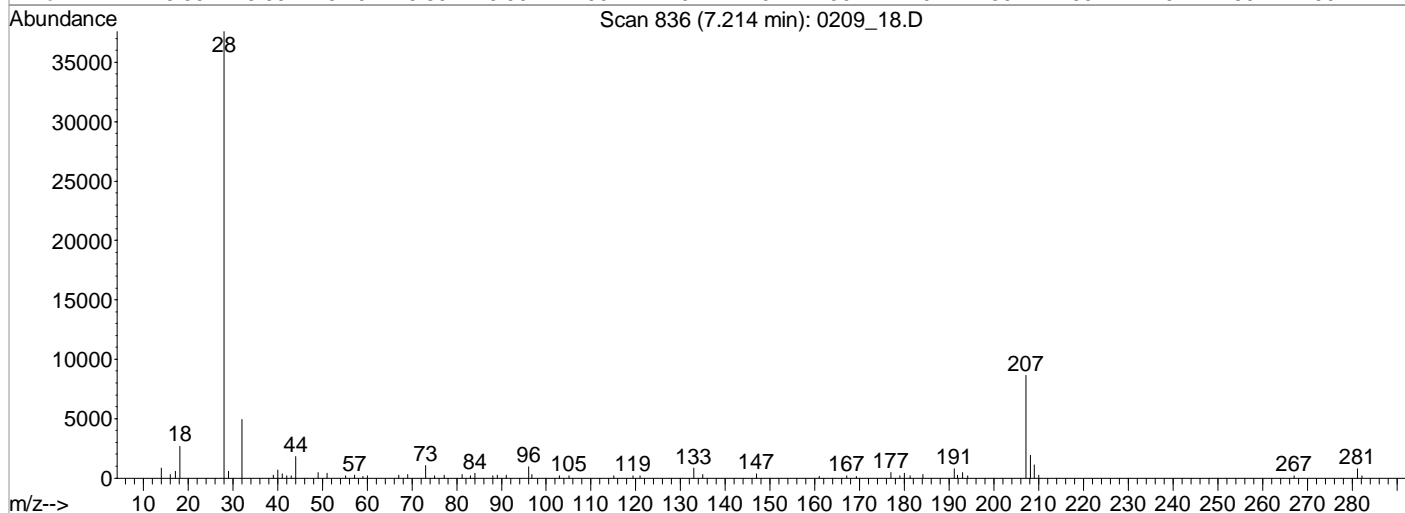
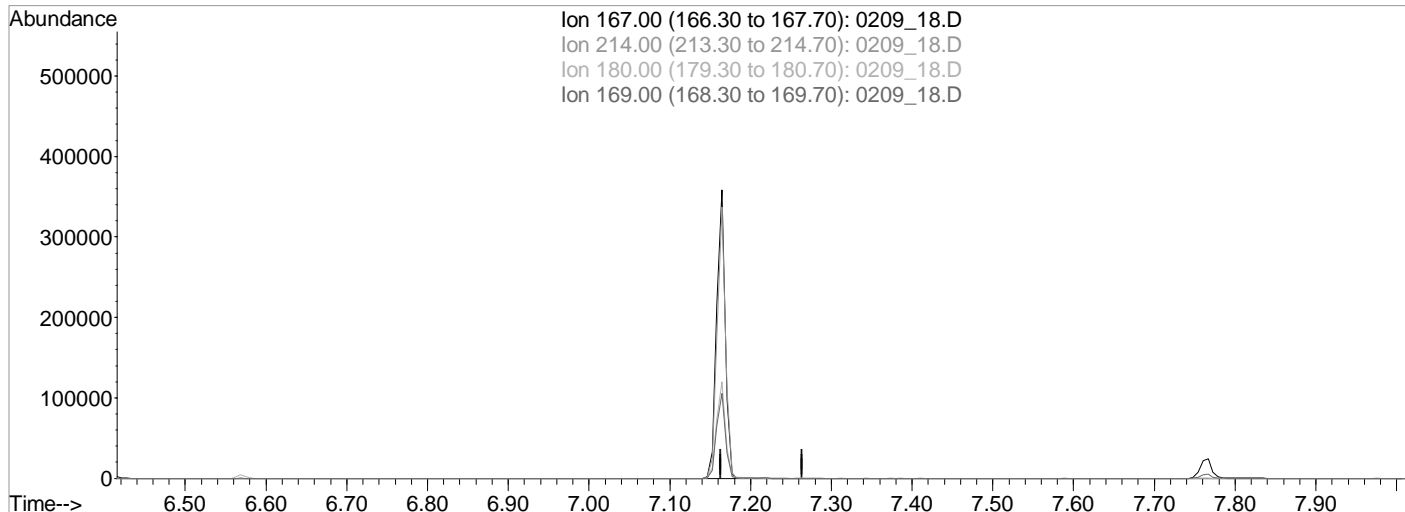
Ion	Exp%	Act%
110.00	100	100
81.00	29.80	27.93
53.00	25.90	23.20
0.00	0.00	0.00



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
Acq On : 9 Feb 2022 2:53 pm Operator: 917  
Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Feb 14 16:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Mon Feb 14 16:37:26 2022  
Response via : Single Level Calibration



TIC: 0209\_18.D

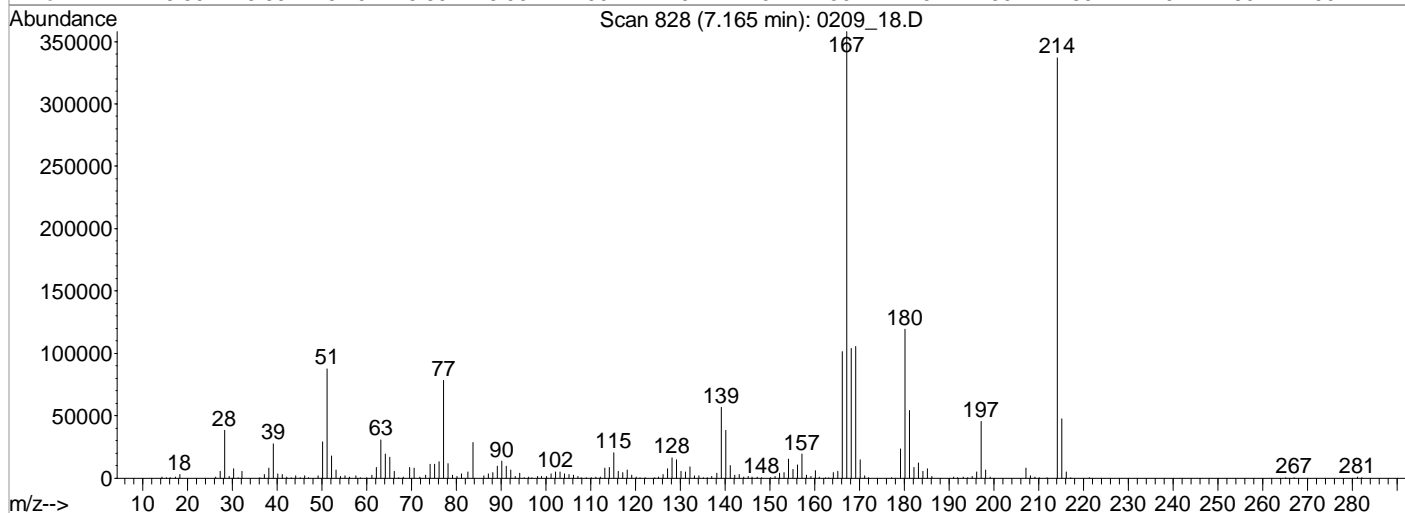
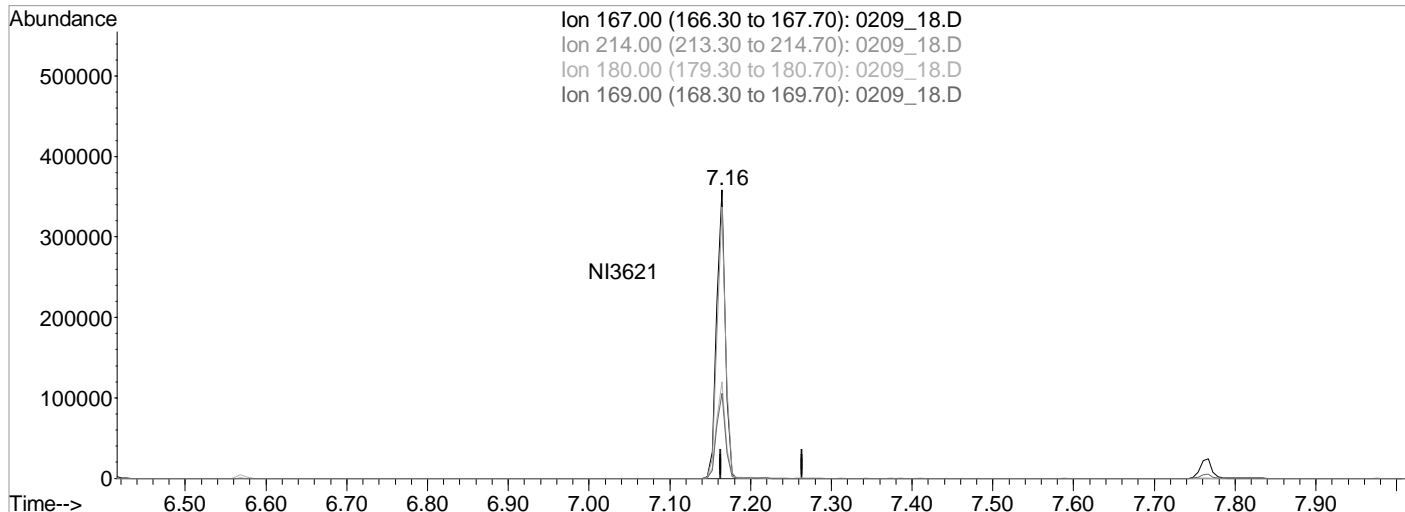
(82) 2-nitrodiphenylamine (MT)  
7.21min (-7.213) 0.0000000 ppb  
Qvalue = 0  
response 0

Ion	Exp%	Act%
167.00	100	0.00
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:40 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:37:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

(82) 2-nitrodiphenylamine (MT)  
 7.16min (-0.049) 0.0000000 ppb m

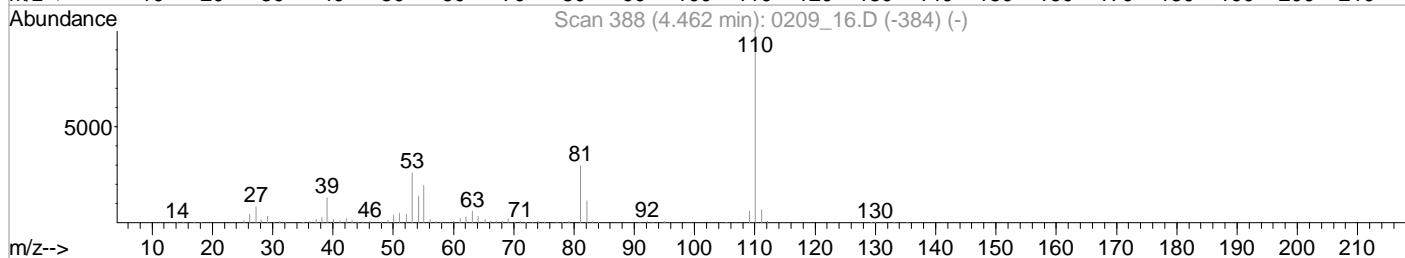
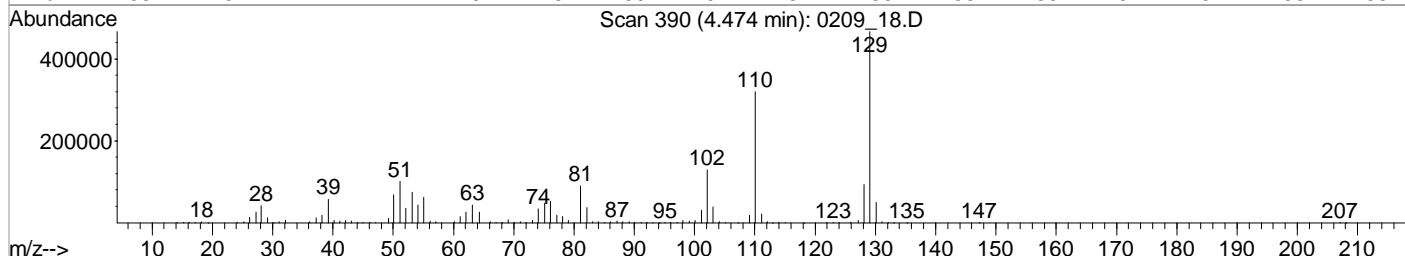
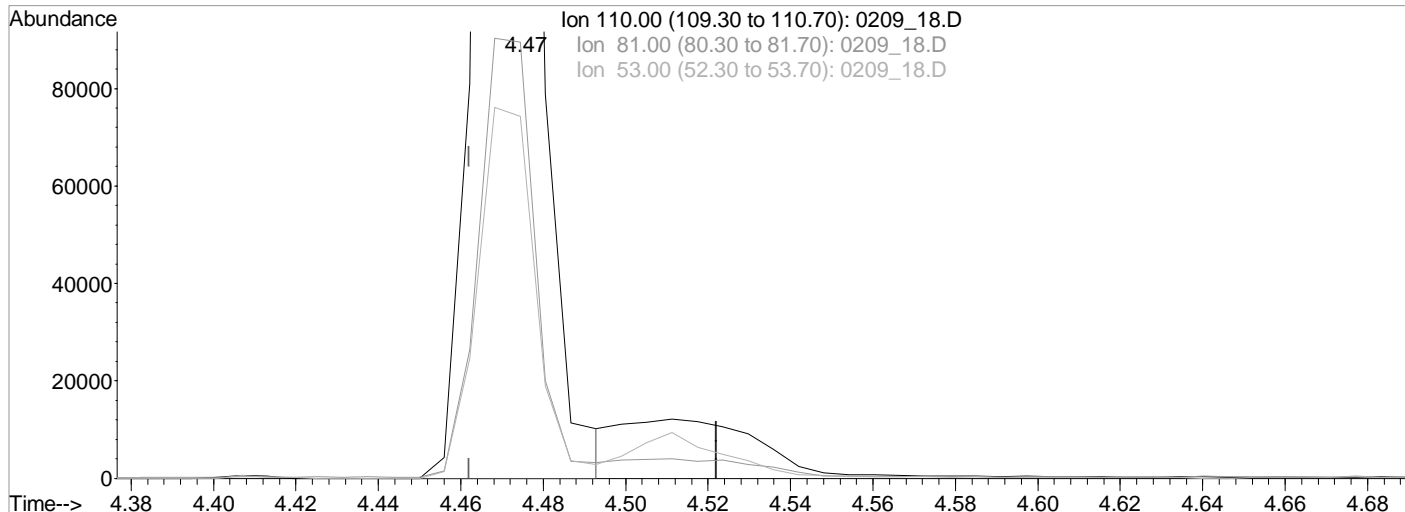
response 263020

Ion	Exp%	Act%
167.00	100	100
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:30 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:28:57 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

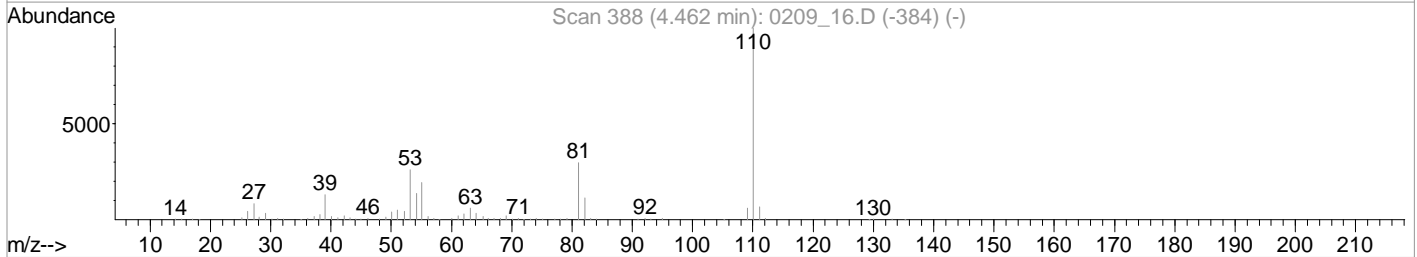
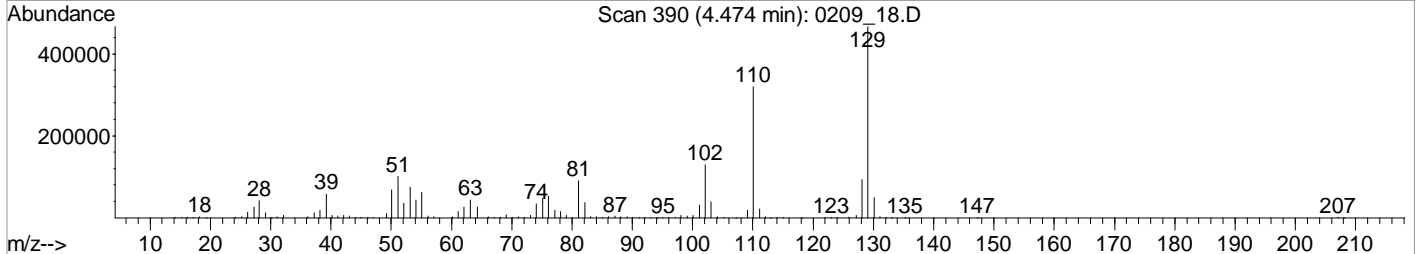
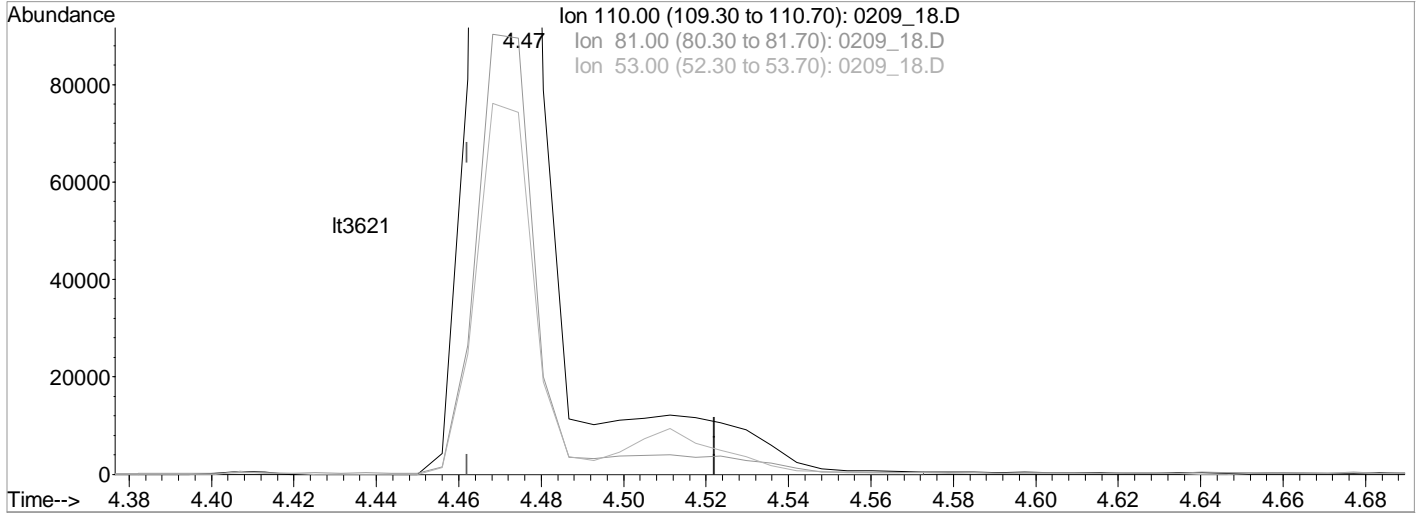
(37) Hydroquinone  
 4.47min (+0.012) 27928.9894085 ppb  
 Qvalue = 96  
 response 296671

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	27.88
53.00	25.90	23.20
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:30 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:28:57 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

(37) Hydroquinone  
 4.47min (+0.012) 27928.9894085 ppb  
 Qvalue = 96  
 response 296671

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	27.88
53.00	25.90	23.20
0.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:33 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:32:01 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	83834	8000.00	ppb	0.00
23) Naphthalene-d8	4.25	136	509998	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	170524	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	328342	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	284281	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	291842	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	146822	39375.8434486	ppb	99
22) Acetophenone	3.73	105	707524	40810.0206029	ppb	99
31) Benzoic Acid	4.08	105	332830	42001.2174148	ppb	98
33) alpha-terpineol	4.25	59	473632	32249.3875896	ppb	100
37) Hydroquinone	4.47	110	423227	35941.1634228	ppb	98
38) Quinoline	4.48	129	1027793	32749.0578074	ppb	99
39) Caprolactam	4.52	113	131001	37278.2903404	ppb	96
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	446831	32200.2864656	ppb	99
44) Diphenyl Ether	5.09	170	646081	32275.2551573	ug/ml	99
45) Diphenyl Oxide	5.09	170	646081	32275.2551573	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.67	232	194914	40082.6466467	ppb	98
69) Atrazine	6.32	200	283883	40709.7789465	ppb	98
82) 2-nitrodiphenylamine	7.16	167	372323	47622.4782969	ppb #	100
85) Benzidine	7.77	184	724521	48145.9688179	ppb	99
89) 3,3-Dichlorobenzidine	9.49	252	596043	40725.7384781	ppb	99

(#) = qualifier out of range (m) = manual integration

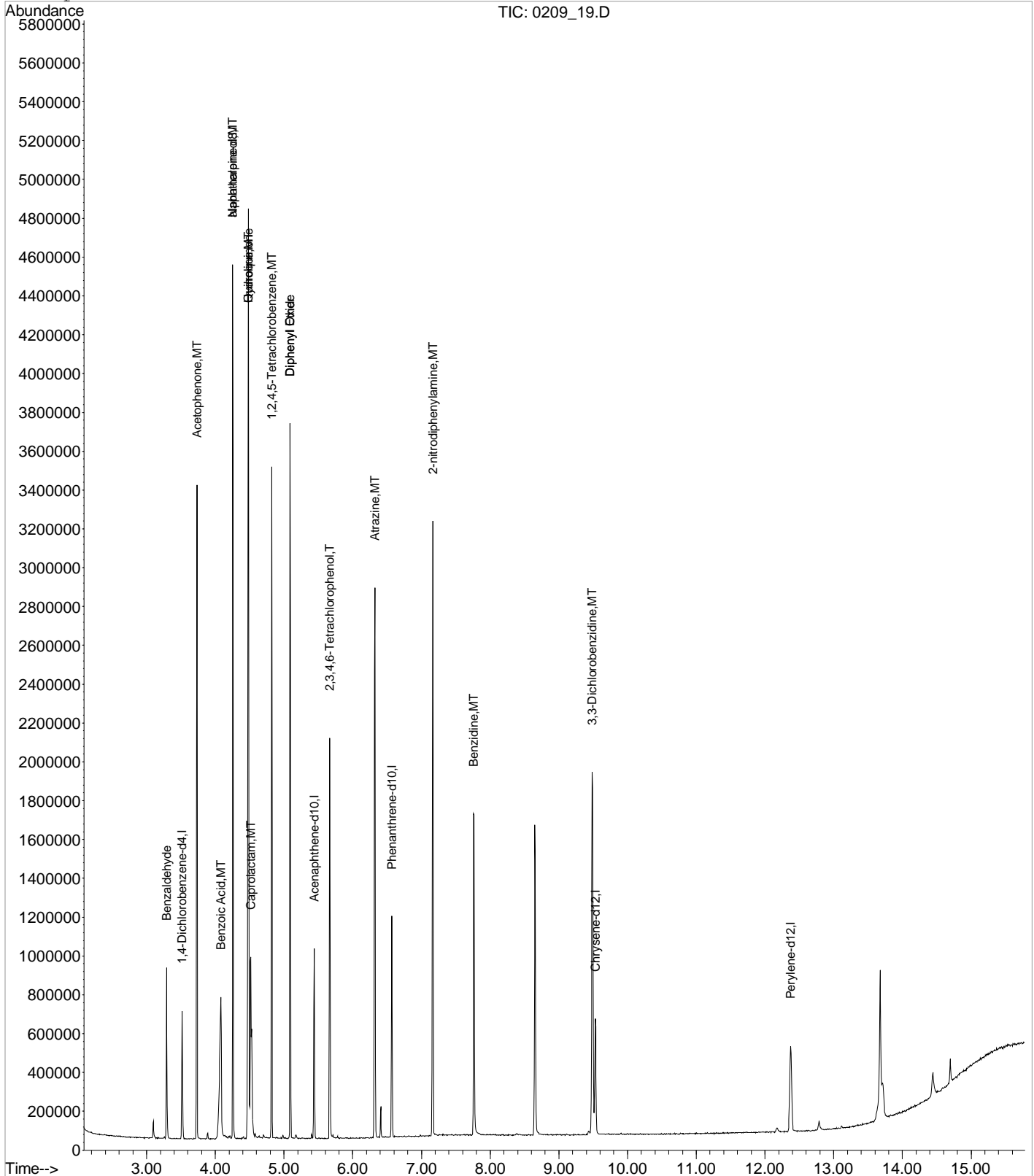
0209\_19.D S804B09V.M Fri Feb 18 15:34:19 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D  
 Acq On : 9 Feb 2022 3:14 pm  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:33 2022

Vial: 16  
 Operator: 917  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804B09V.RES

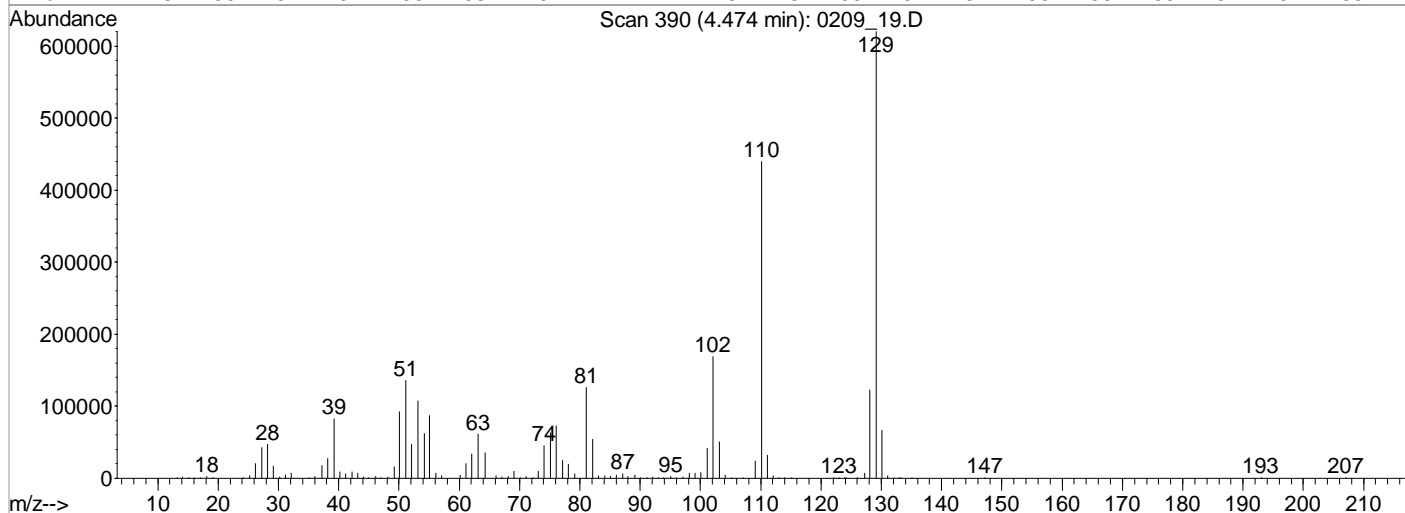
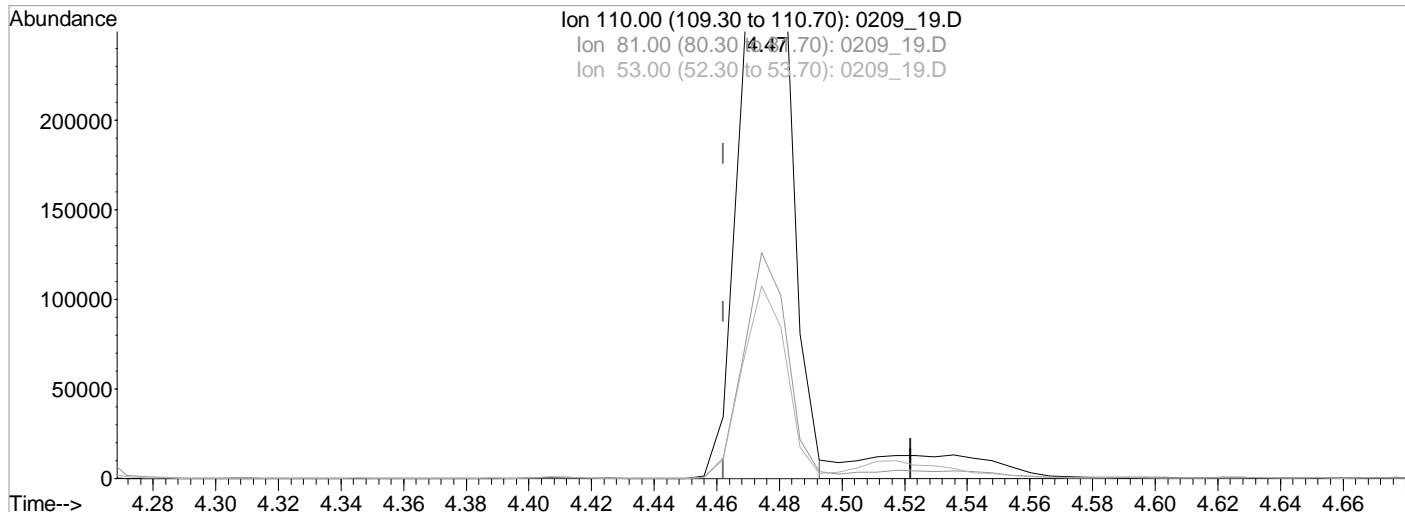
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:32:01 2022  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 14:12 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:41:34 2022  
 Response via : Single Level Calibration



TIC: 0209\_19.D

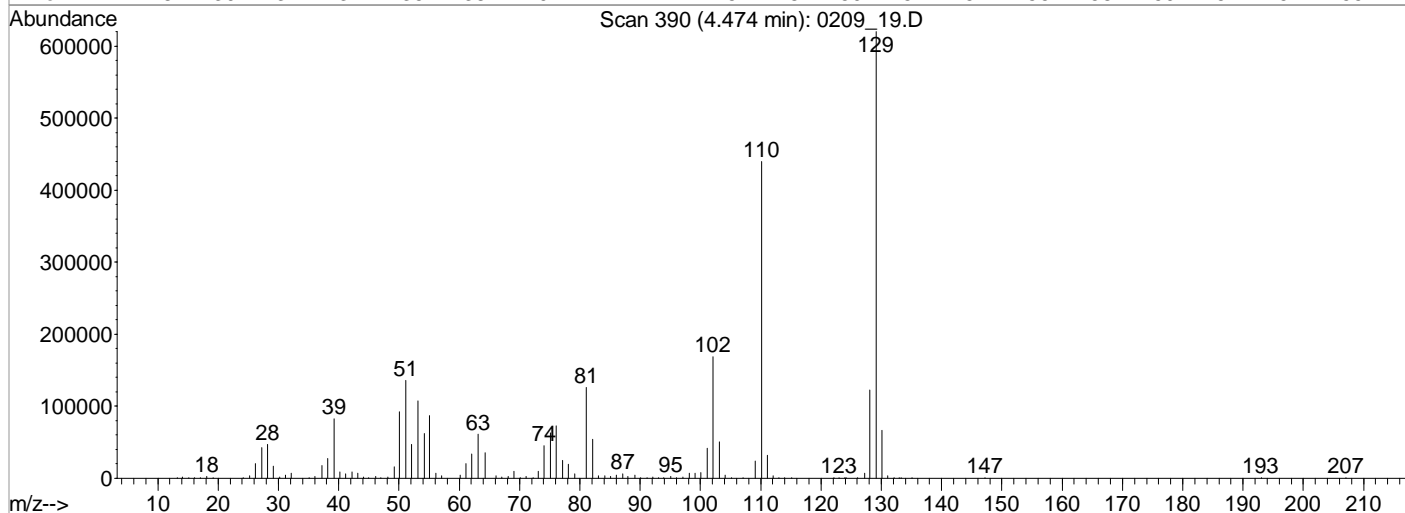
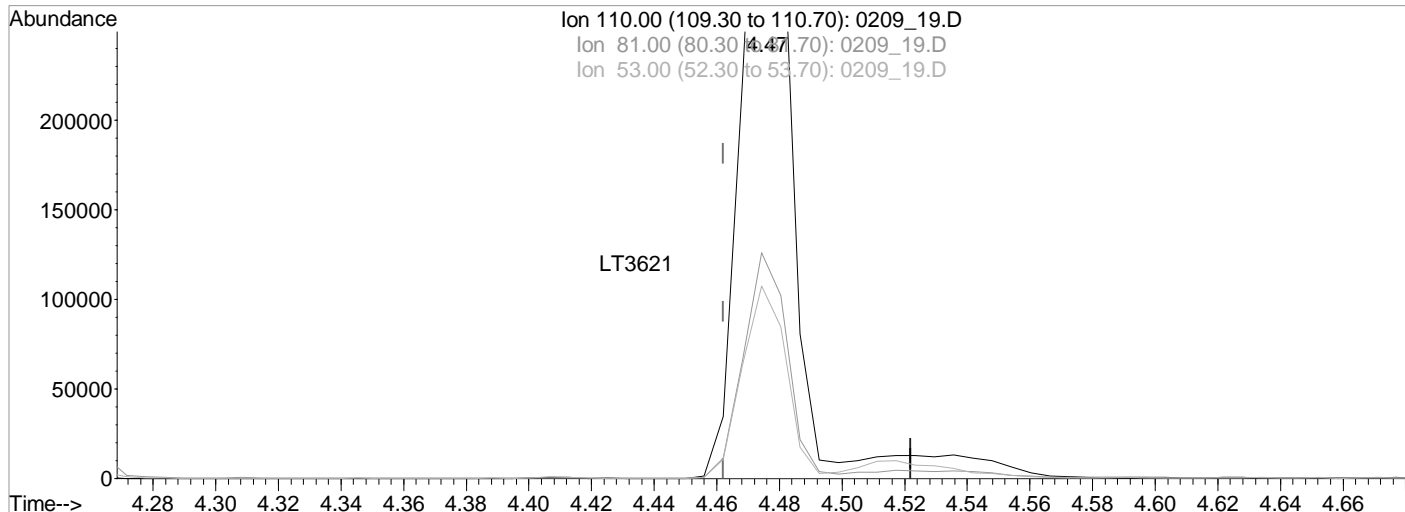
(37) Hydroquinone  
 4.47min (+0.012) 34295.7817388 ppb  
 Qvalue = 98  
 response 423227

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.68
53.00	25.90	24.49
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:42 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:41:34 2022  
 Response via : Single Level Calibration



TIC: 0209\_19.D

(37) Hydroquinone  
 4.47min (+0.012) 37693.9430263 ppb m

response 465162

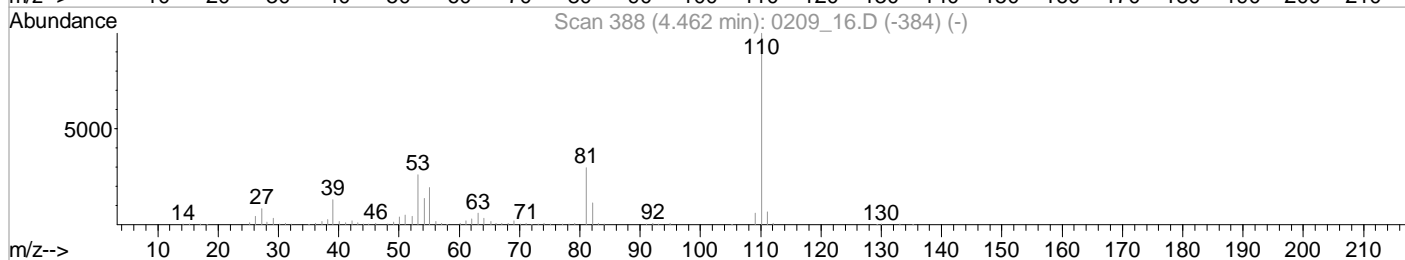
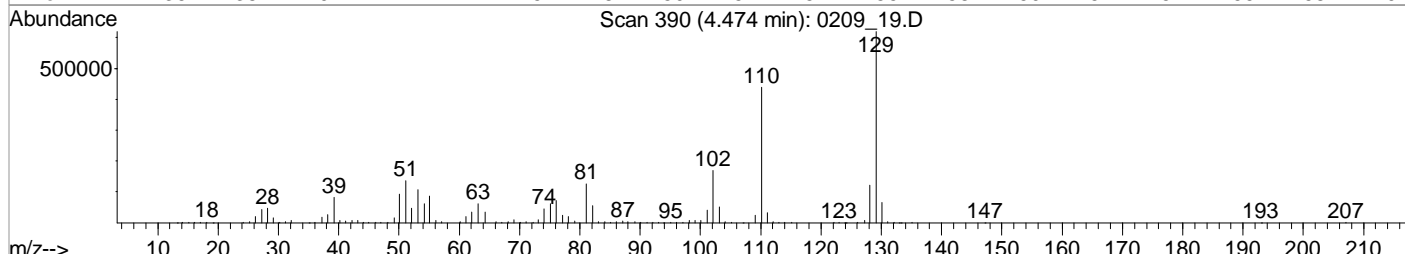
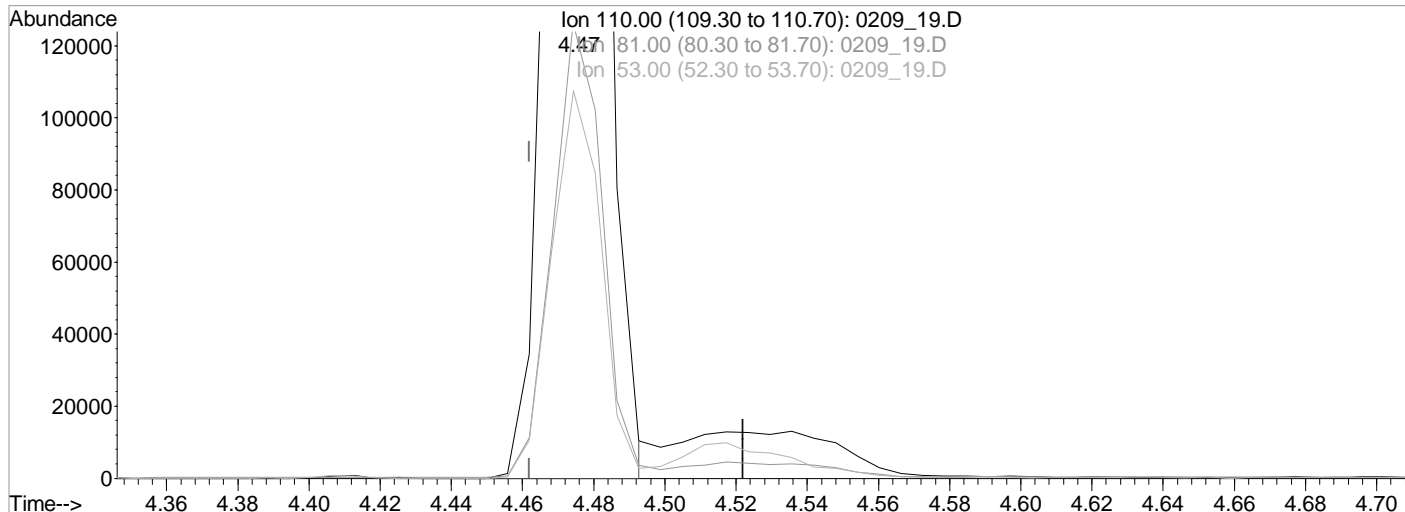
Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.73
53.00	25.90	24.49
0.00	0.00	0.00



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:33 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:32:01 2022  
 Response via : Single Level Calibration



TIC: 0209\_19.D

(37) Hydroquinone

4.47min (+0.012) 35941.1634228 ppb

Qvalue = 98

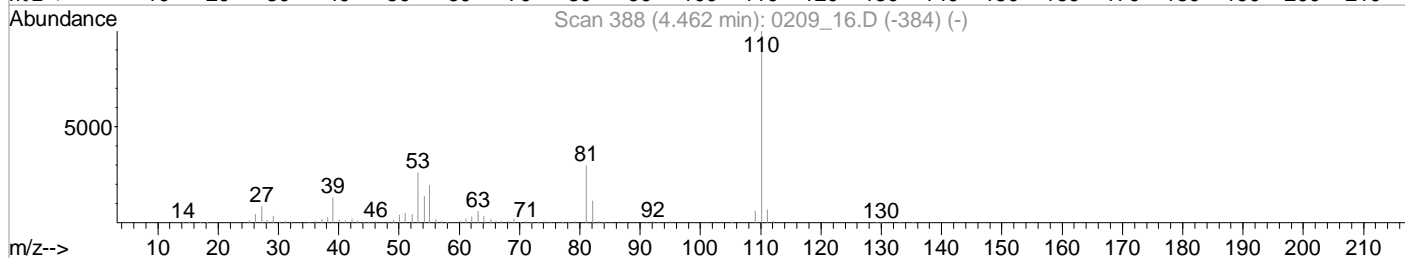
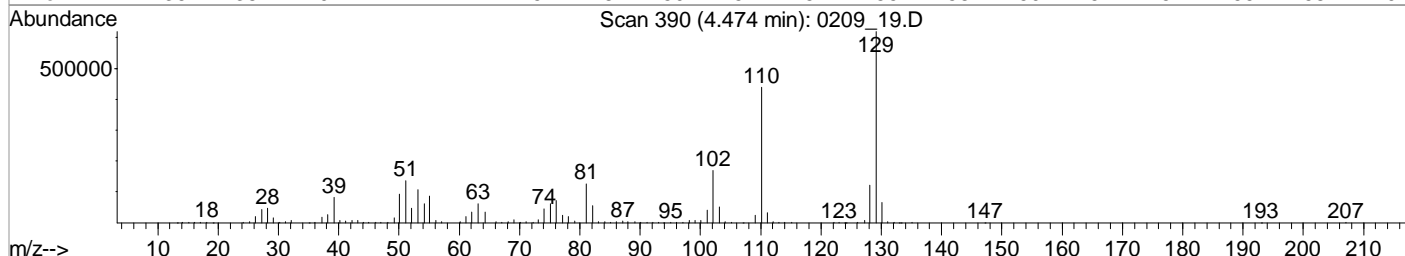
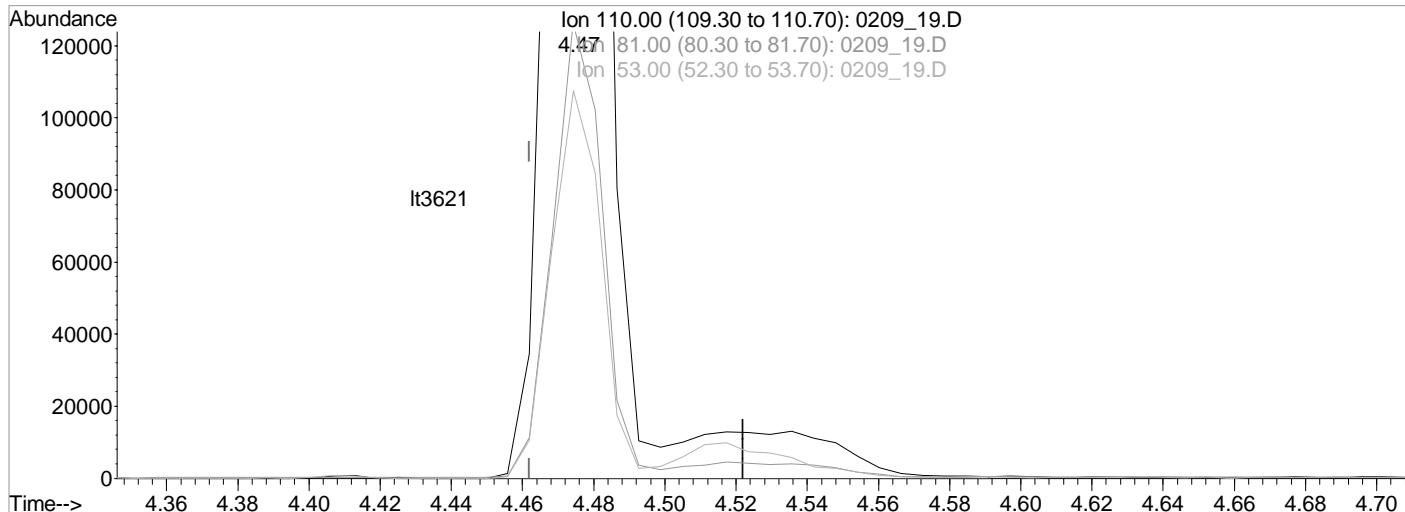
response 423227

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.68
53.00	25.90	24.49
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:33 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:32:01 2022  
 Response via : Single Level Calibration



TIC: 0209\_19.D

(37) Hydroquinone  
 4.47min (+0.012) 35941.1634228 ppb  
 Qvalue = 98  
 response 423227

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.68
53.00	25.90	24.49
0.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:35 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:34:26 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	83009	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	544163	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	169785	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	322067	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	282788	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	287879	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.00	82	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	183661	49745.1431448	ppb	99
22) Acetophenone	3.73	105	865298	50406.4769034	ppb	99
31) Benzoic Acid	4.09	105	430114	50870.0842217	ppb	99
33) alpha-terpineol	4.26	59	585384	37356.0327033	ppb	88
37) Hydroquinone	4.48	110	541268	43079.4928047	ppb	99
38) Quinoline	4.48	129	1284138	38348.1410544	ppb	98
39) Caprolactam	4.52	113	168983	45067.5402951	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	553375	37374.5040763	ppb	99
44) Diphenyl Ether	5.09	170	805278	37702.3146356	ug/ml	99
45) Diphenyl Oxide	5.09	170	805278	37702.3146356	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.67	232	249561	51543.7801154	ppb	98
69) Atrazine	6.32	200	349005	50266.3324683	ppb	97
82) 2-nitrodiphenylamine	7.16	167	469250	59305.8856301	ppb #	100
85) Benzidine	7.77	184	954392	63756.2258960	ppb	100
89) 3,3-Dichlorobenzidine	9.49	252	753855	51780.4778435	ppb	99

(#) = qualifier out of range (m) = manual integration

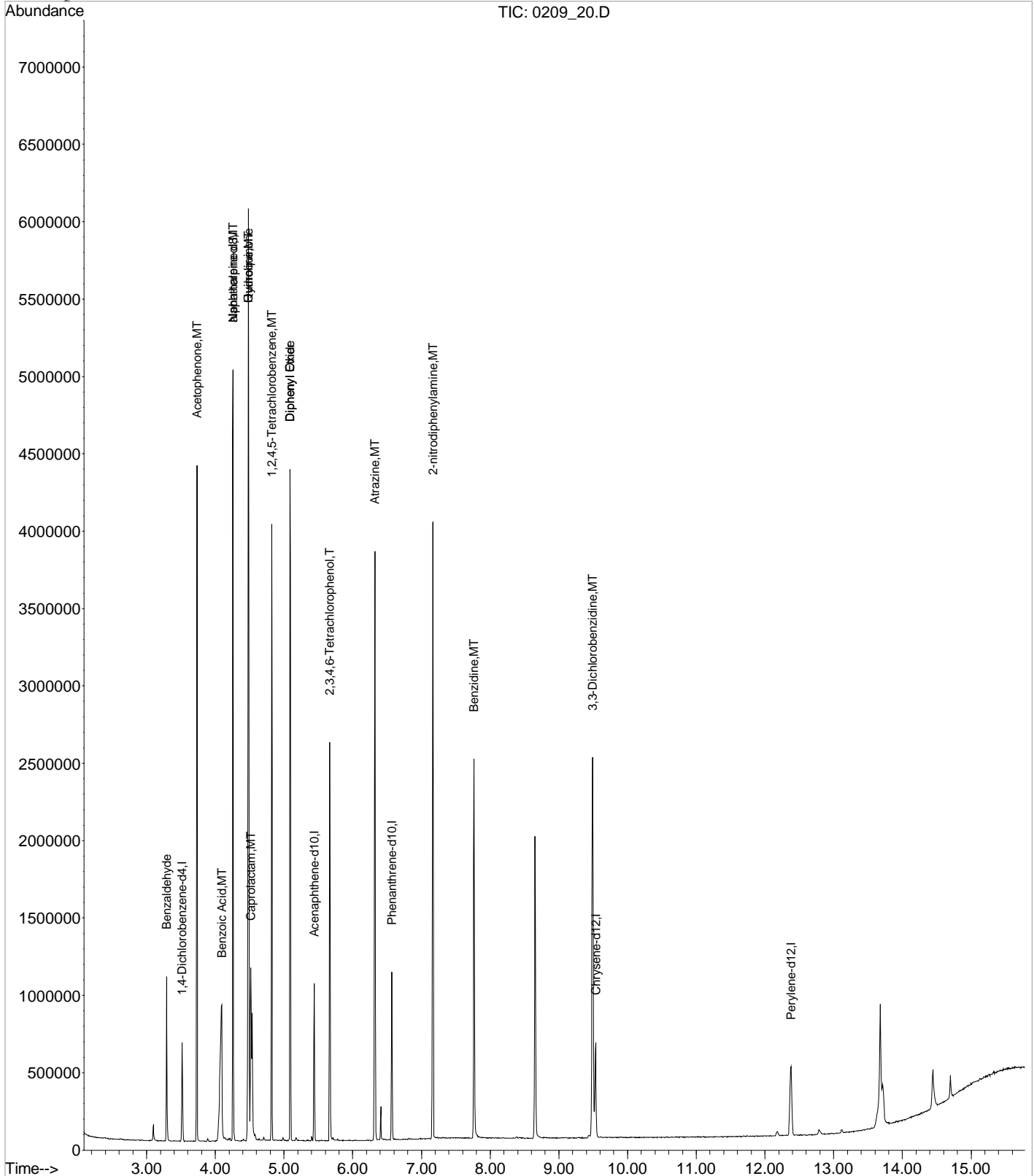
0209\_20.D S804B09V.M Fri Feb 18 15:37:53 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D  
Acq On : 9 Feb 2022 3:35 pm  
Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
MS Integration Params: RTEINT.P  
Quant Time: Feb 18 15:35 2022

Vial: 17  
Operator: 917  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804B09V.RES

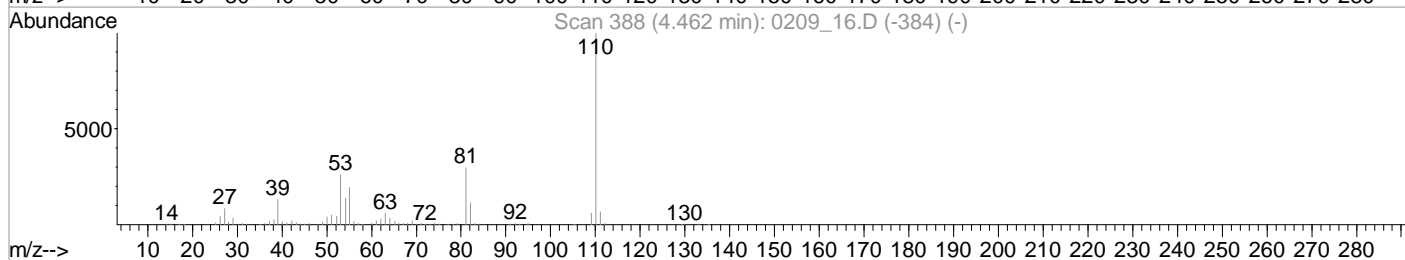
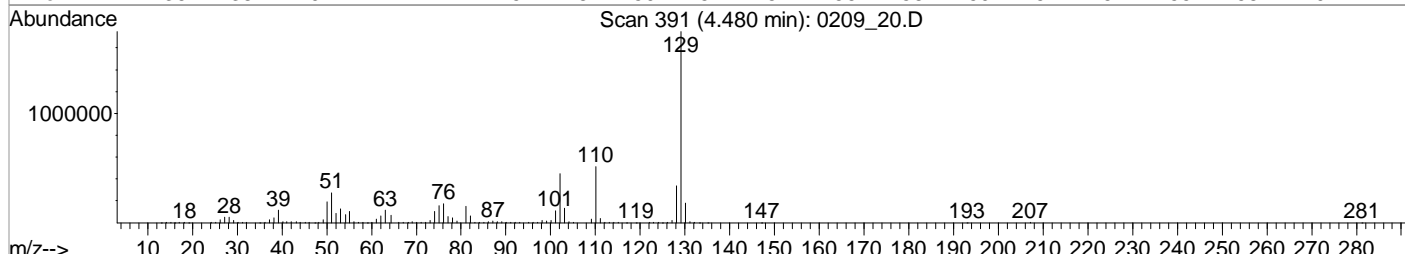
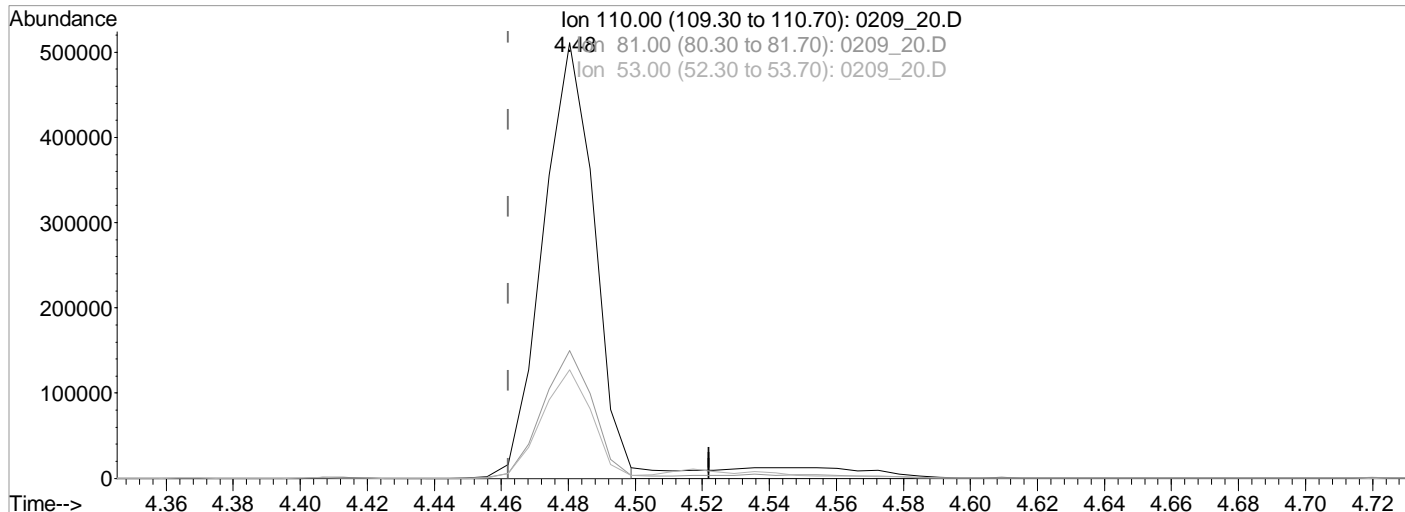
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Fri Feb 18 15:34:26 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 14:22 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 14:20:22 2022  
 Response via : Single Level Calibration



TIC: 0209\_20.D

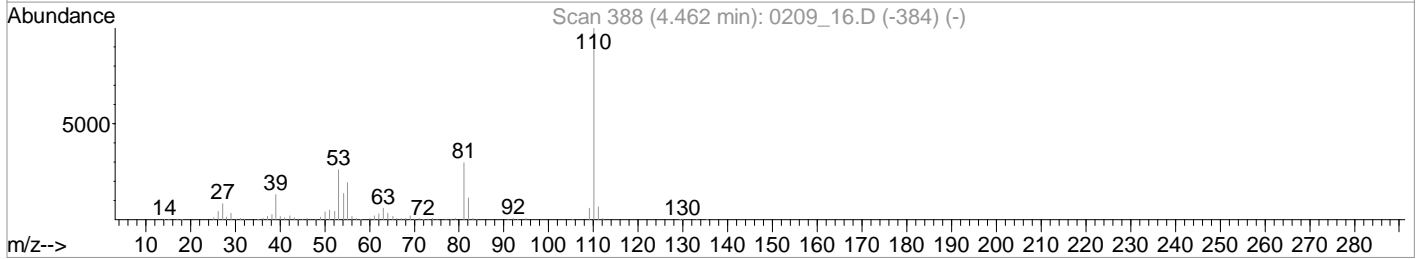
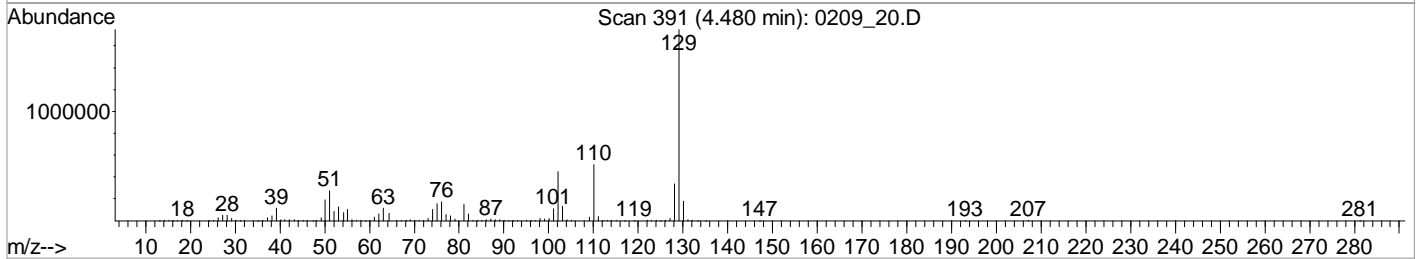
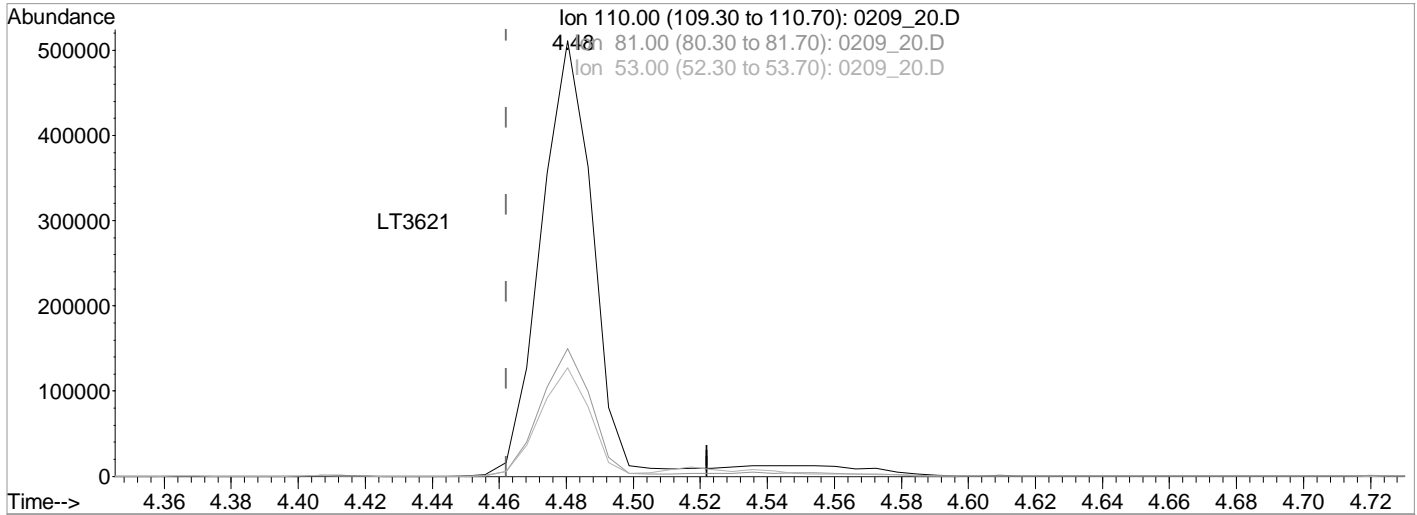
(37) Hydroquinone  
 4.48min (+0.018) 40935.8278868 ppb  
 Qvalue = 99  
 response 541268

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.30
53.00	25.90	24.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 14:22 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 14:20:22 2022  
 Response via : Single Level Calibration



TIC: 0209\_20.D

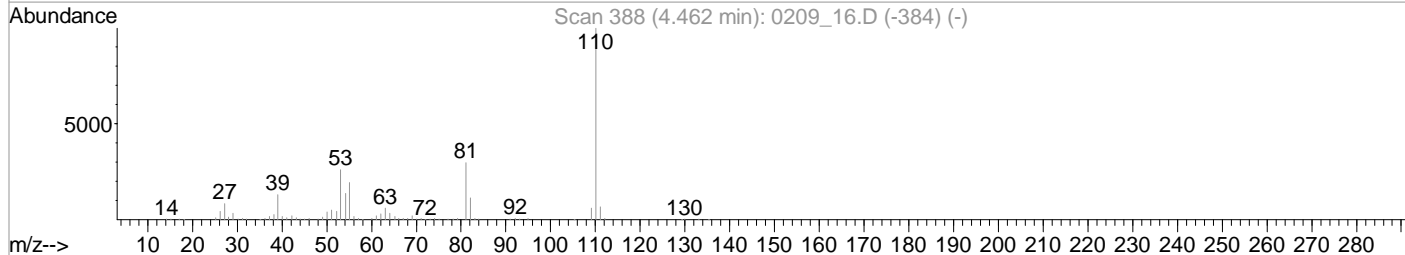
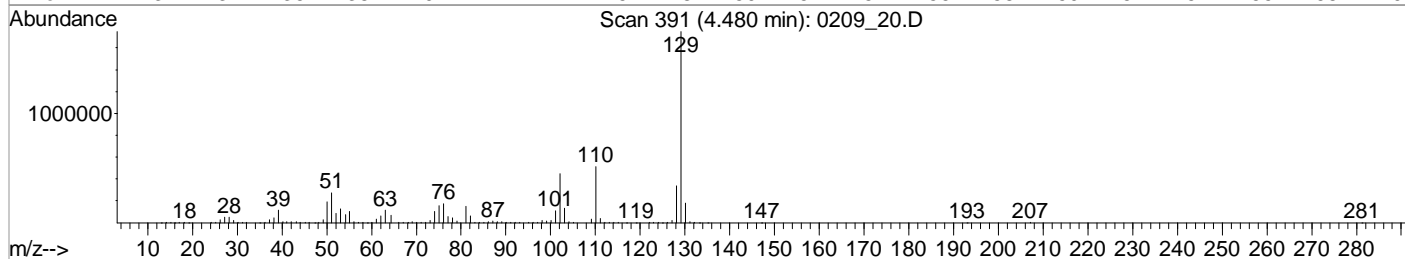
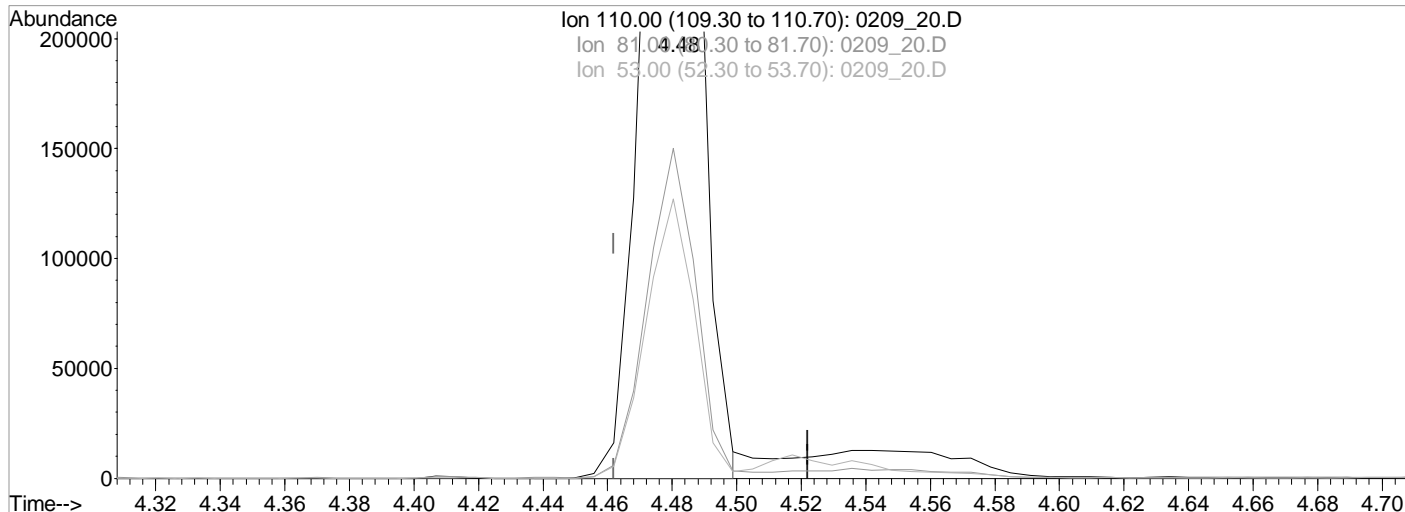
(37) Hydroquinone  
 4.48min (+0.018) 40935.8278868 ppb  
 Qvalue = 99  
 response 541268

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.30
53.00	25.90	24.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:35 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:34:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_20.D

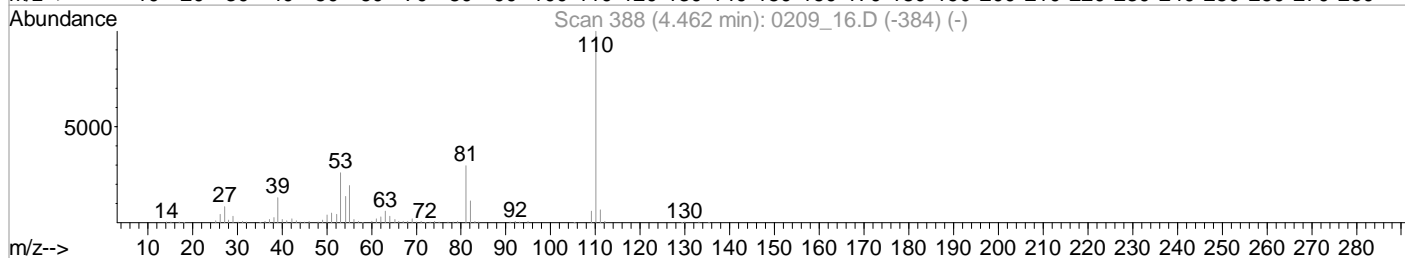
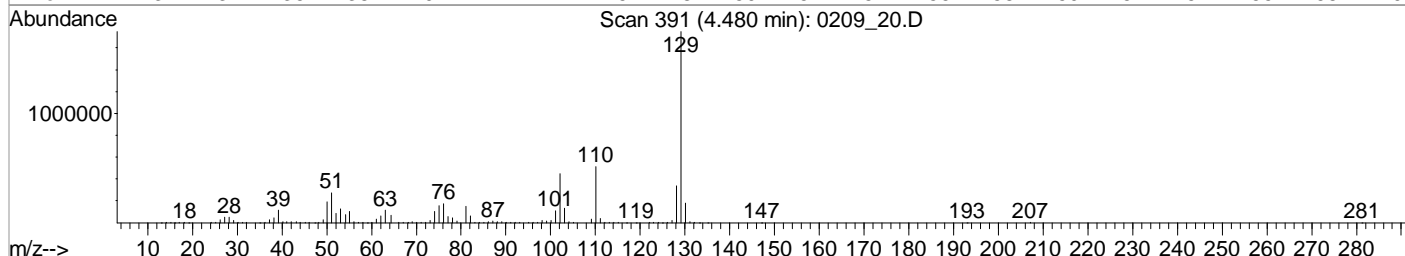
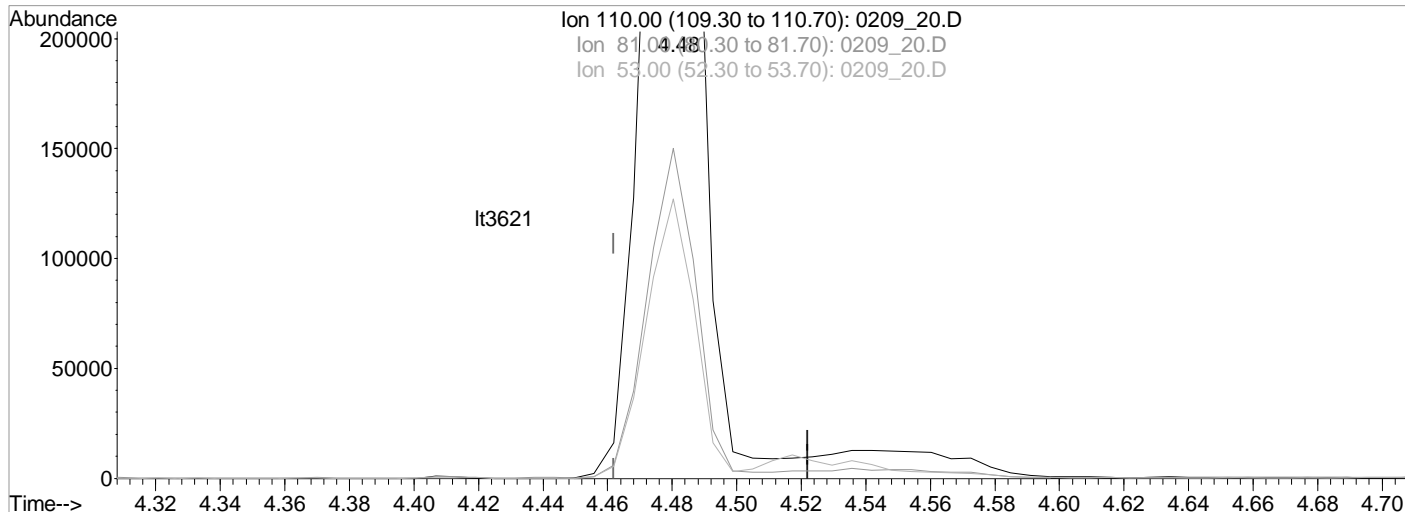
(37) Hydroquinone  
 4.48min (+0.018) 43079.4928047 ppb  
 Qvalue = 99  
 response 541268

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.30
53.00	25.90	24.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:35 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:34:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_20.D

(37) Hydroquinone  
 4.48min (+0.018) 43079.4928047 ppb  
 Qvalue = 99  
 response 541268

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.30
53.00	25.90	24.86
0.00	0.00	0.00



SDG: L1487377  
 Instrument ID: BNAMS24

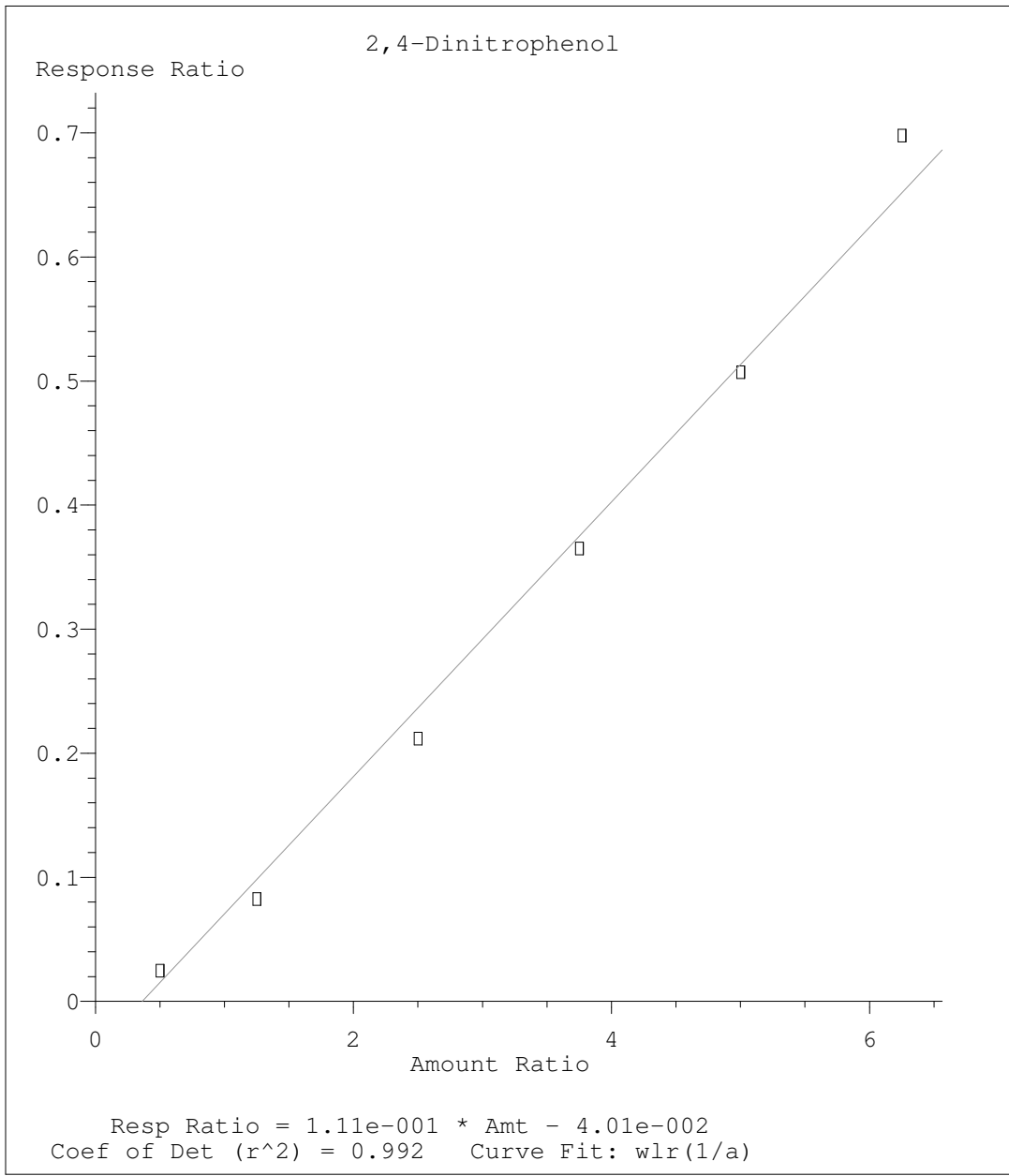
Analytical Method: 8270E

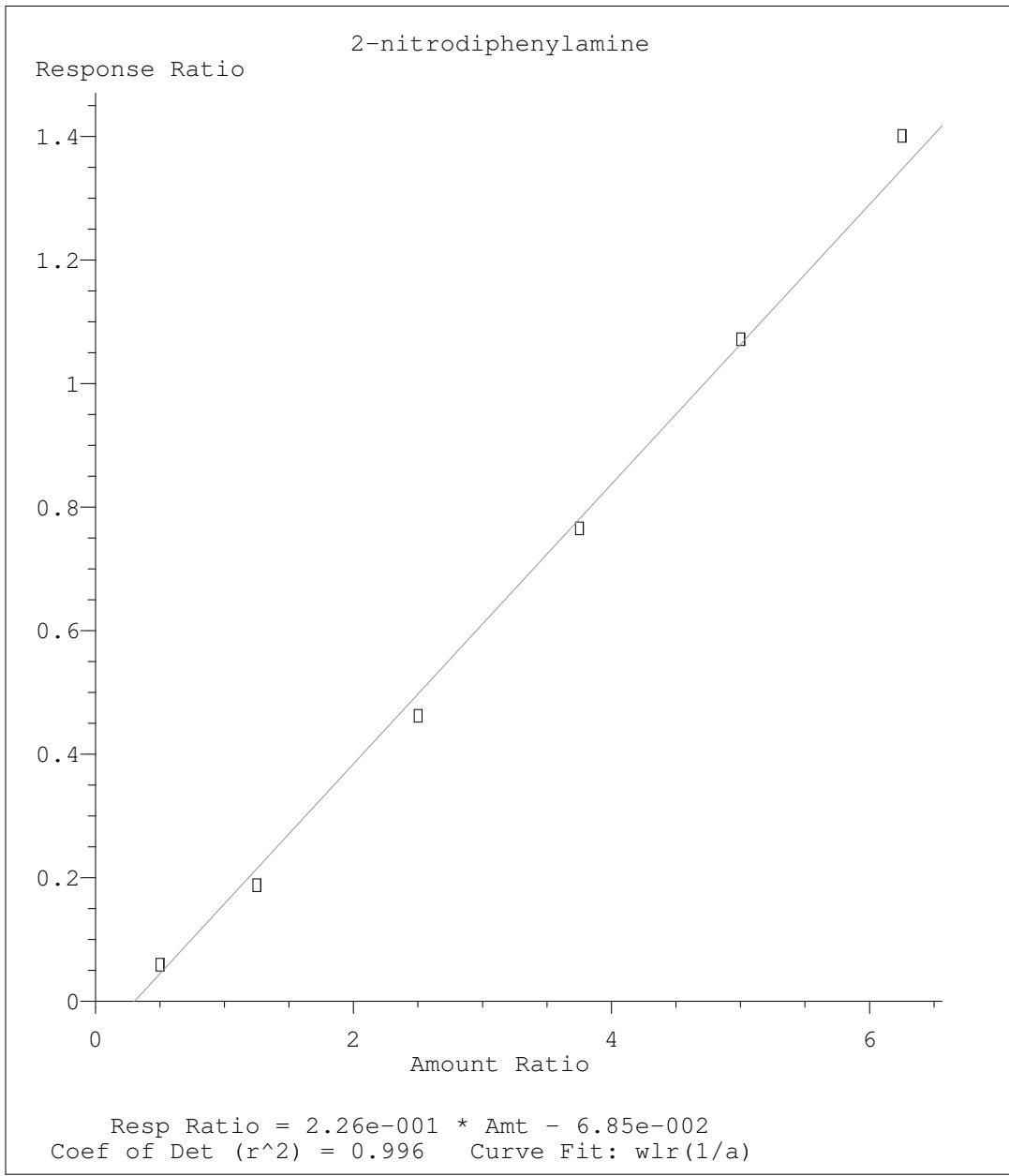
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Analysis date/time	03/31/22 17:24	03/31/22 17:45	03/31/22 18:07	03/31/22 18:28	03/31/22 18:49	03/31/22 19:11	03/31/22 19:32	03/31/22 19:53	03/31/22 20:36	03/31/22 20:58
PHENOL	1.6010	1.4820	1.57	1.5980	1.6240	1.5830	1.5520	1.5950		
3&4-METHYL PHENOL	1.2840	1.2150	1.25	1.3490	1.3650	1.3210	1.3020	1.3260		
NAPHTHALENE	1.1320	1.0560	0.9950	1.0120	0.9840	0.9710	0.92	0.9180		
2-METHYLNAPHTHALENE	0.6570	0.6280	0.6150	0.6330	0.6320	0.6340	0.61	0.61		
1-METHYLNAPHTHALENE	0.6470	0.6310	0.5970	0.61	0.6130	0.6110	0.5890	0.5870		
ACENAPHTHYLENE	1.7480	1.6720	1.6690	1.7240	1.7160	1.7160	1.66	1.6580		
ACENAPHTHENE	1.2270	1.2160	1.14	1.1450	1.1430	1.1340	1.0890	1.0960		
DIBENZOFURAN	1.67	1.5920	1.5340	1.5580	1.5120	1.5070	1.4530	1.4390		
FLUORENE	1.33	1.2780	1.2650	1.3060	1.2780	1.2680	1.2160	1.21		
PHENANTHRENE	1.2170	1.0870	1.0560	1.0550	1.0490	1.0380	0.99	0.9910		
ANTHRACENE	1.0170	0.9560	0.9850	1.0270	1.0410	1.03	0.9950	1.0030		
CARBAZOLE	0.8390	0.7930	0.8460	0.8840	0.8890	0.9070	0.8560	0.8770		
DI-N-BUTYL PHTHALATE	1.1240	1.0760	1.2080	1.3430	1.4080	1.4320	1.3520	1.3760		
FLUORANTHENE	1.0230	0.9560	0.9940	1.0520	1.0770	1.0860	1.0510	1.06		
PYRENE	1.7080	1.5380	1.5110	1.5060	1.48	1.4410	1.4010	1.4030		
BENZO(A)ANTHRACENE	1.0880	1.0760	1.0630	1.1220	1.1430	1.1580	1.1270	1.1560		
CHRYSENE	1.2550	1.2220	1.1770	1.1820	1.1810	1.1590	1.1150	1.1450		
BENZO(B)FLUORANTHENE	1.0580	1.0570	1.1180	1.2060	1.2260	1.2690	1.2170	1.2290		
BENZO(K)FLUORANTHENE	1.0520	1.0420	1.1760	1.2870	1.2760	1.2720	1.2350	1.2510		
BENZO(A)PYRENE	0.8090	0.7610	0.88	0.9960	1.0210	1.0590	1.0250	1.0520		
INDENO(1,2,3-CD)PYRENE	0.7840	0.7330	0.8210	0.9050	0.9080	0.9490	0.9110	0.9090		
DIBENZ(A,H)ANTHRACENE	0.8410	0.8770	0.9470	1.0240	1.0220	1.0470	1.0010	0.9960		
BENZO(G,H,I)PERYLENE	0.9080	0.9740	1.0220	1.1050	1.0720	1.0840	1.0350	1.0150		
2-FLUOROPHENOL	1.2870	1.1960	1.2160	1.2670	1.2950	1.2550	1.2340	1.2710		
PHENOL-D5	1.48	1.4190	1.4560	1.5090	1.54	1.4980	1.4750	1.5120		
NITROBENZENE-D5	0.3150	0.2930	0.2820	0.30	0.3090	0.3140	0.3110	0.3090		
2-FLUOROBIPHENYL	1.3980	1.3490	1.2660	1.2910	1.2610	1.2260	1.18	1.1910		
P-TERPHENYL-D14	1.1680	1.1310	1.1060	1.1160	1.1180	1.0990	1.0520	1.0660		
DI-N-OCTYL PHTHALATE		0.9020	1.0920	1.3640	1.5790	1.6750	1.6490	1.7180		
2,4,6-TRIBROMOPHENOL		0.0630	0.0730	0.0820	0.0890	0.0940	0.0910	0.0940		
PENTACHLOROPHENOL			0.0760	0.0930	0.1090	0.1160	0.1160	0.1220		
BIS(2-ETHYLHEXYL)PHTHALATE			0.8310	0.9730	1.0620	1.0810	1.0540	1.0880		
BENZOIC ACID									0.0530	0.07
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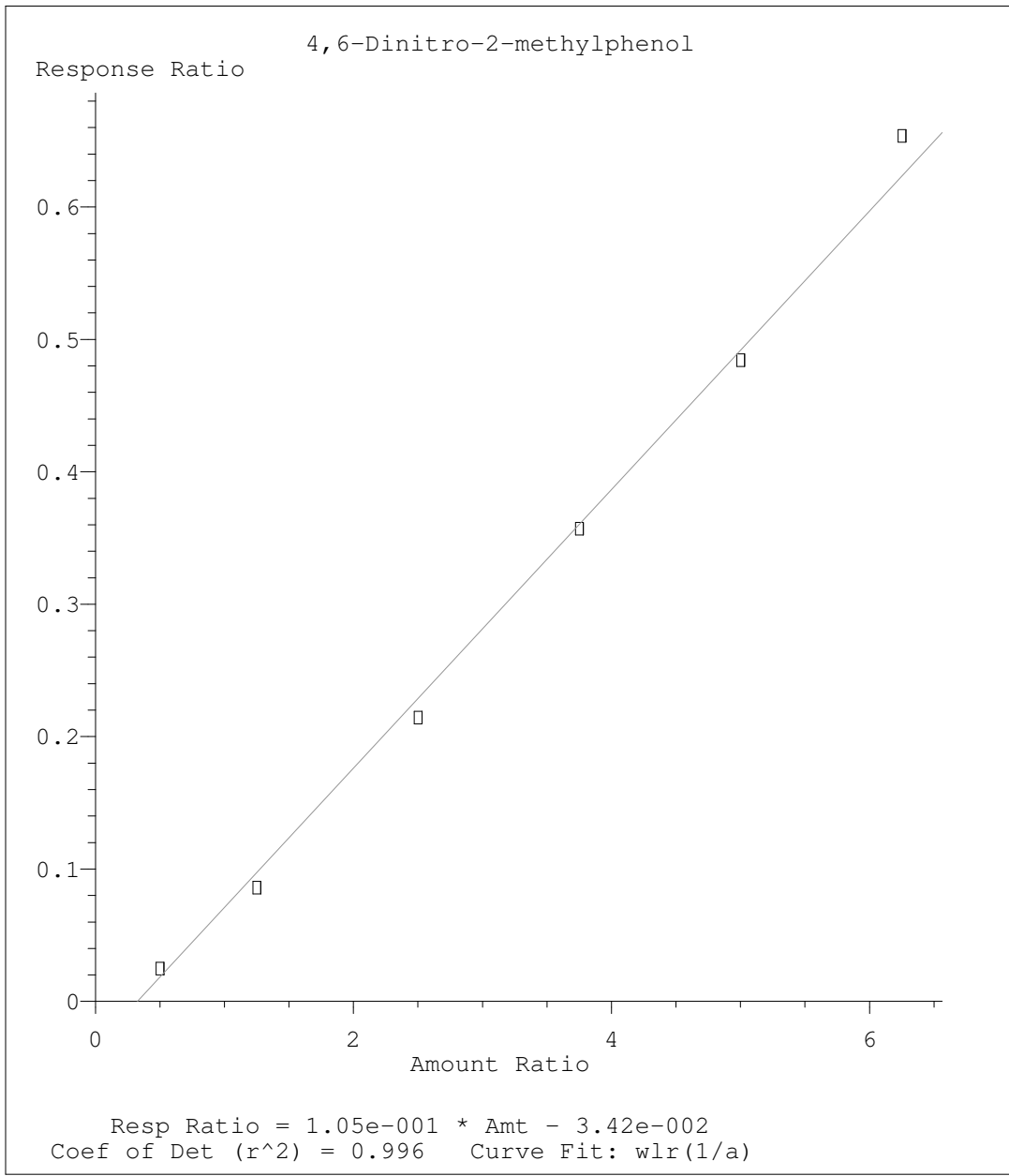
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Instrument ID: BNAMS24

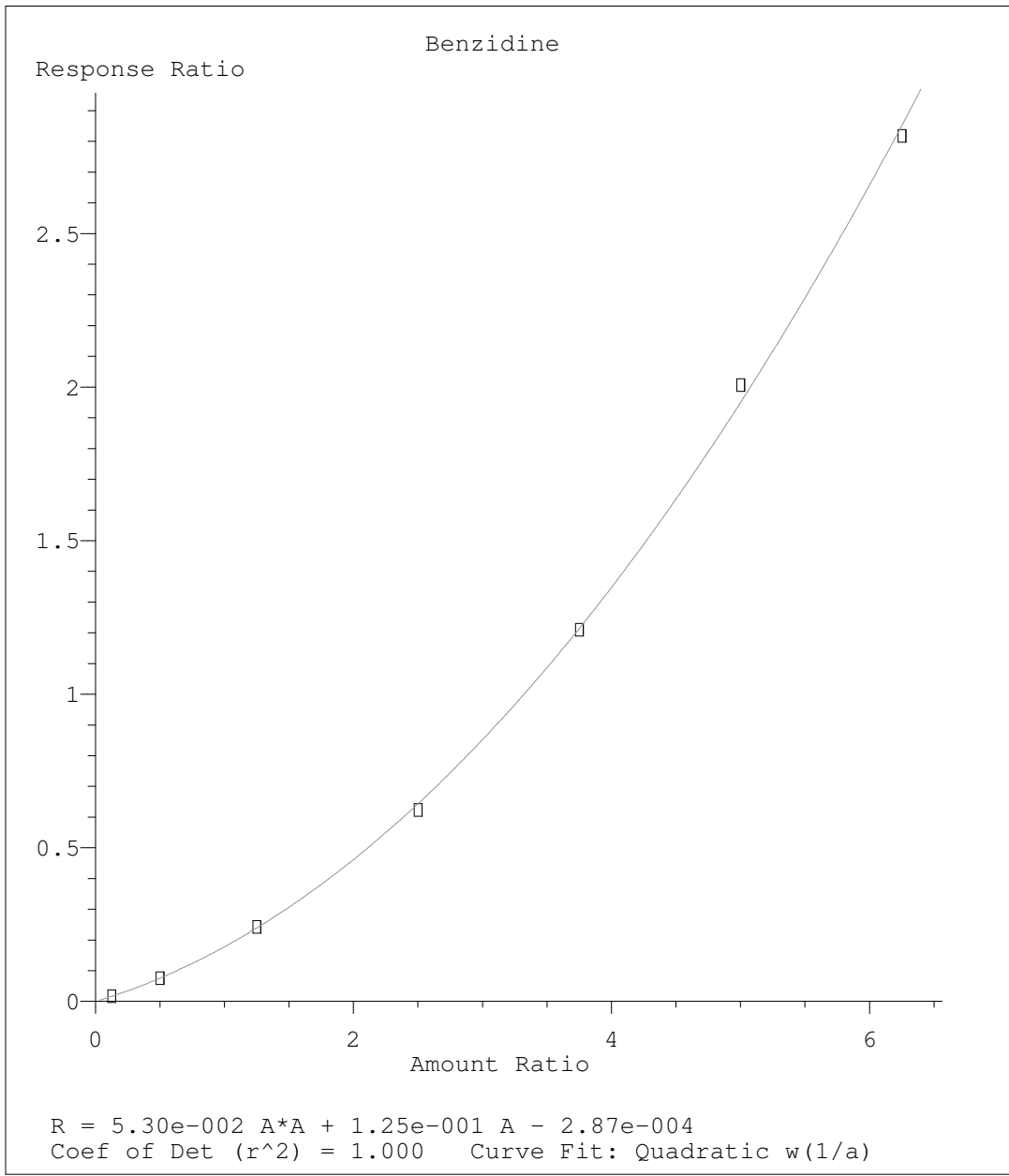
Analytical Method: 8270E

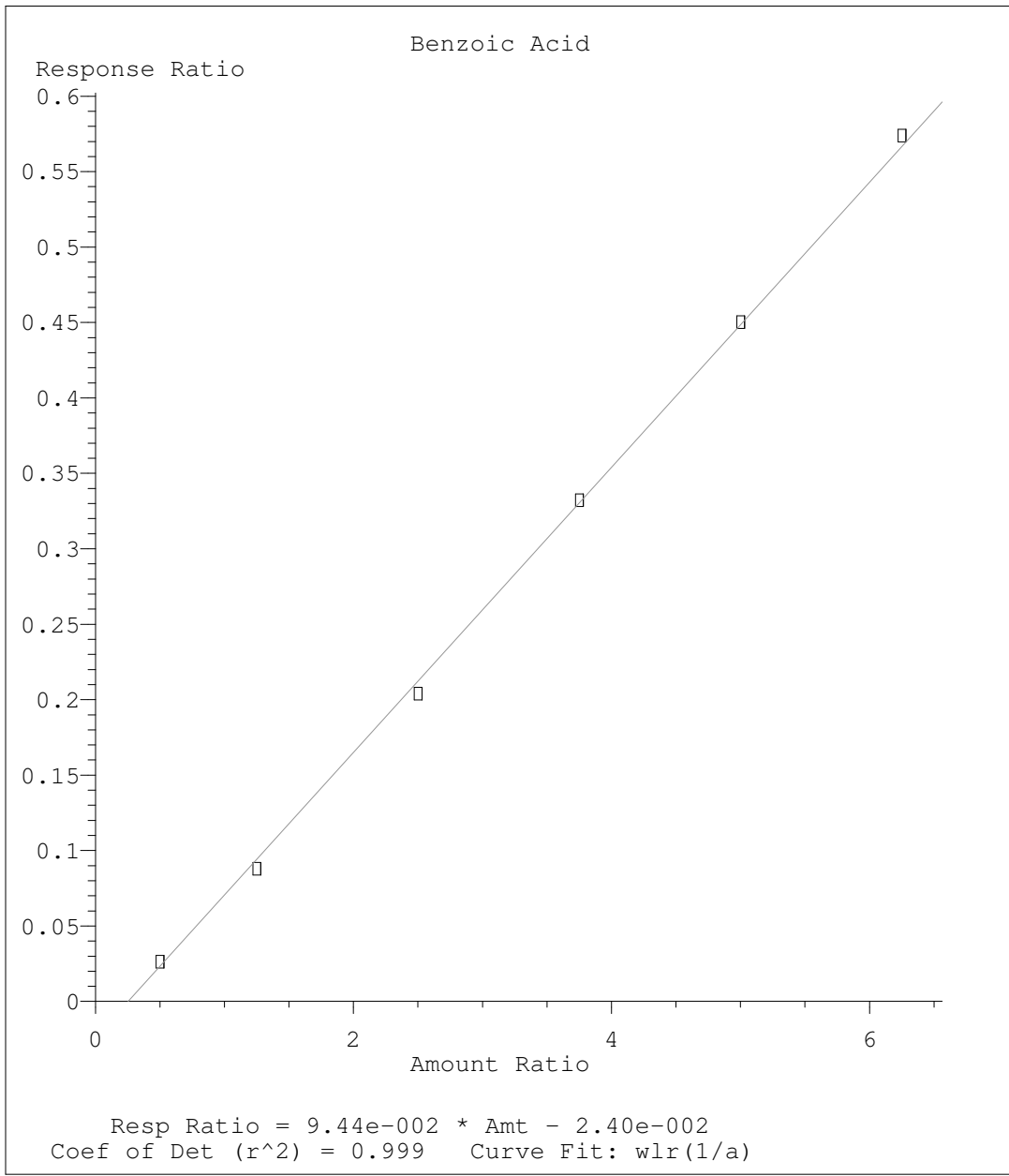
Analyte	RRF: 20K1	RRF: 30K1	RRF: 40K1	RRF: 50K1	RRF. Avg	%RSD	COD
Analysis date/time	03/31/22 21:19	03/31/22 21:40	03/31/22 22:02	03/31/22 22:23			
PHENOL					1.575372	2.77	
3&4-METHYL PHENOL					1.301686	3.86	
NAPHTHALENE					0.998617	7.08	
2-METHYLNAPHTHALENE					0.627399	2.53	
1-METHYLNAPHTHALENE					0.610754	3.34	
ACENAPHTHYLENE					1.695228	2.03	
ACENAPHTHENE					1.148837	4.33	
DIBENZOFURAN					1.532971	4.89	
FLUORENE					1.268965	3.21	
PHENANTHRENE					1.060304	6.75	
ANTHRACENE					1.006737	2.77	
CARBAZOLE					0.861194	4.17	
DI-N-BUTYL PHTHALATE					1.289953	10.48	
FLUORANTHENE					1.03753	4.25	
PYRENE					1.498492	6.58	
BENZO(A)ANTHRACENE					1.116712	3.28	
CHRYSENE					1.179486	3.71	
BENZO(B)FLUORANTHENE					1.172442	7.06	
BENZO(K)FLUORANTHENE					1.198822	8.32	
BENZO(A)PYRENE					0.950358	12.31	
INDENO(1,2,3-CD)PYRENE					0.86497	8.78	
DIBENZ(A,H)ANTHRACENE					0.969471	7.71	
BENZO(G,H,I)PERYLENE					1.02699	6.23	
2-FLUOROPHENOL					1.252515	2.77	
PHENOL-D5					1.486088	2.5	
NITROBENZENE-D5					0.30424	3.85	
2-FLUOROBIPHENYL					1.270391	5.89	
P-TERPHENYL-D14					1.107064	3.26	
DI-N-OCTYL PHTHALATE					1.425428	22.38	0.997
2,4,6-TRIBROMOPHENOL					0.083814	14.11	
PENTACHLOROPHENOL					0.105171	16.65	0.999
BIS(2-ETHYLHEXYL)PHTHALATE					1.014597	9.75	
BENZOIC ACID	0.0820	0.0890	0.09	0.0920	0.07914	19.21	0.999
File ID:	0331_14	0331_15	0331_16	0331_17			

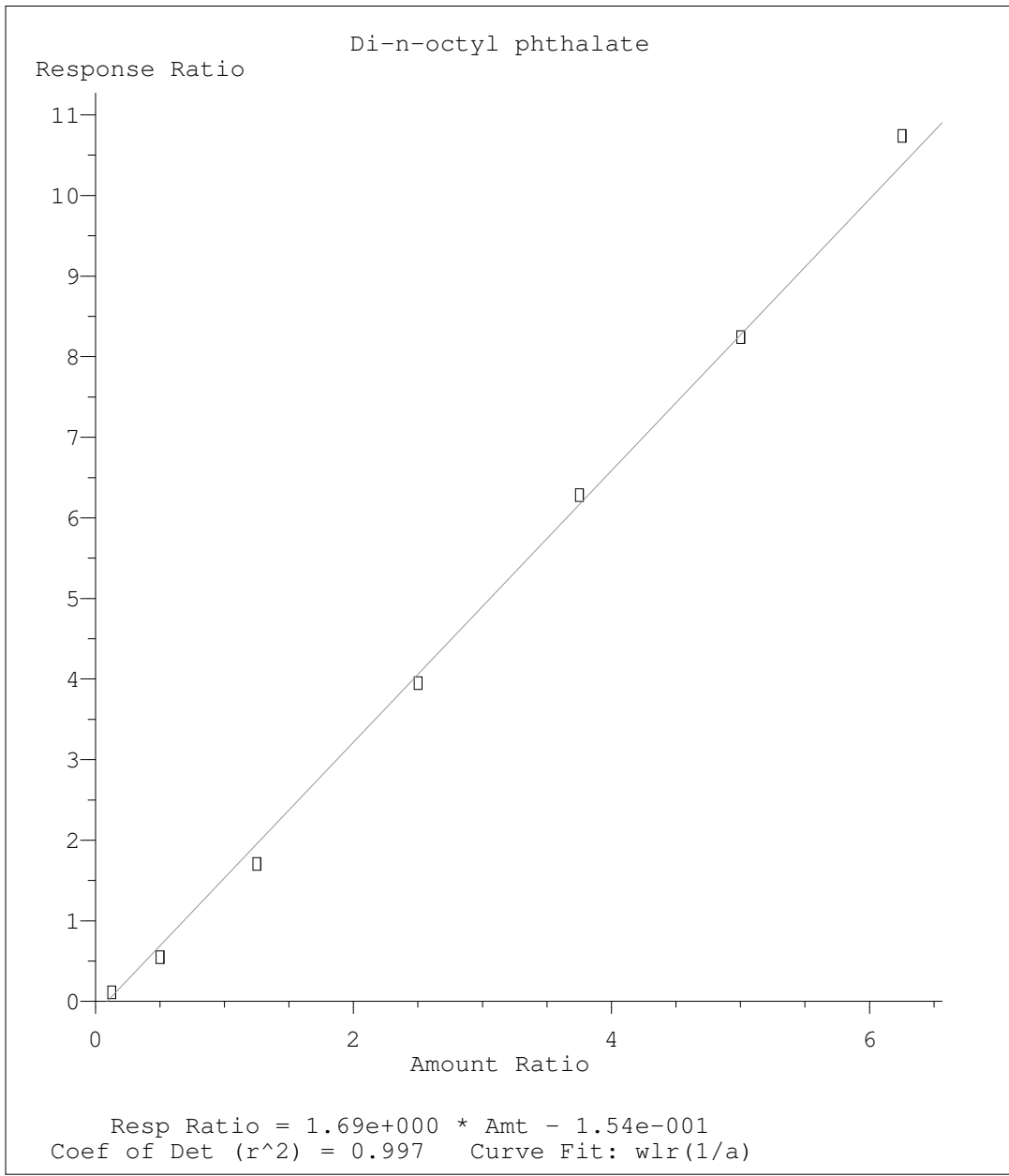




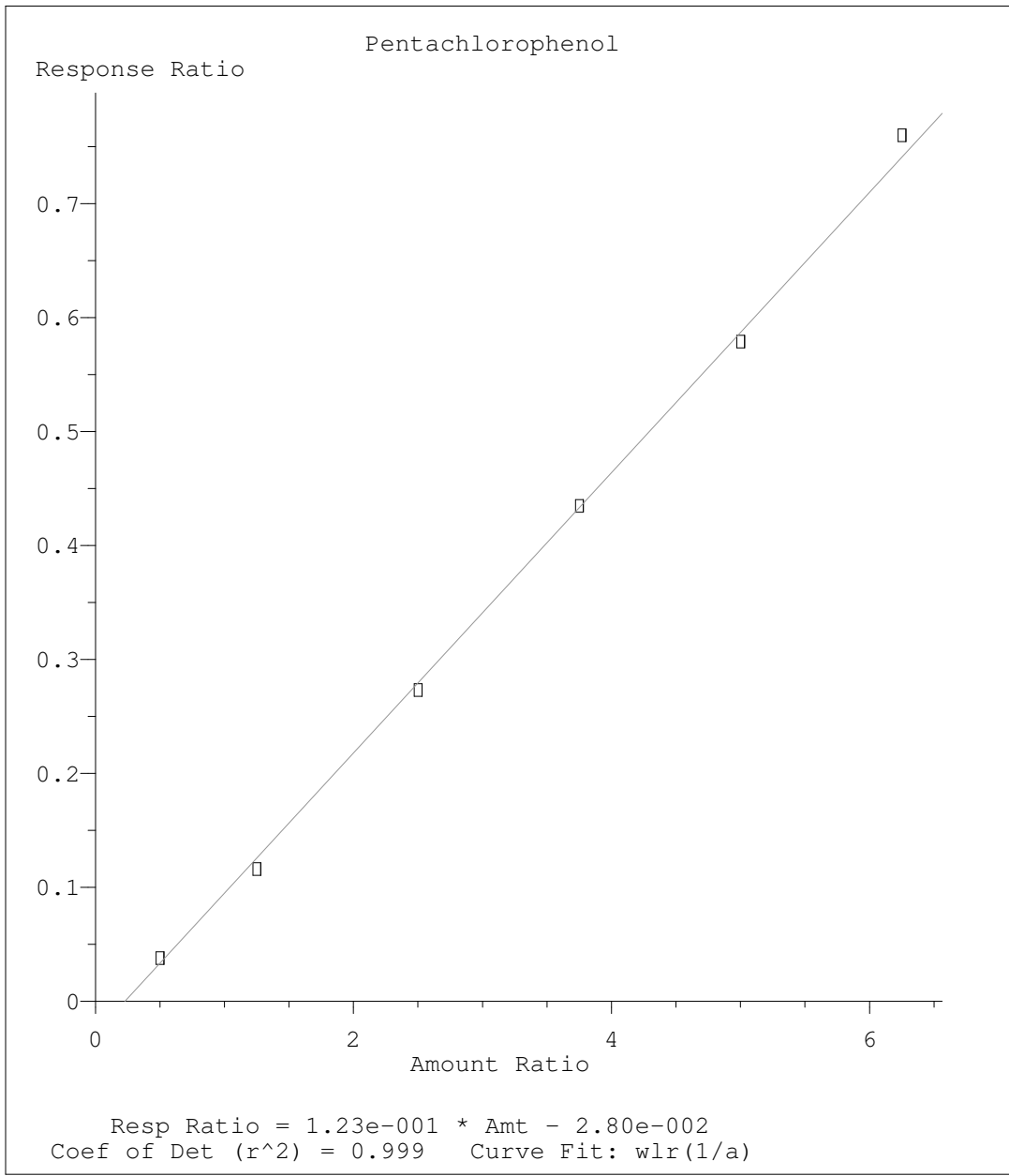












Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA  
 Last Update : Mon Apr 04 16:54:30 2022  
 Response Via : Initial Calibration

10605435

Calibration Files  
 500 =0331\_03.D 1K =0331\_04.D 4K =0331\_05.D 10K =0331\_06.D 20K =0331\_07.D 30K =0331\_08.D 40K =0331\_09.D  
 50K =0331\_10.D 1K1 =0331\_11.D 4K1 =0331\_12.D 10K1 =0331\_13.D 20K1 =0331\_14.D 30K1 =0331\_15.D 40K1 =0331\_16.D  
 50K1 =0331\_17.D

Compound	500	1K	4K	10K	20K	30K	40K	50K	1K1	4K1	10K1	20K1	30K1	40K1	50K1	Avg
1) I 1,4-Dichlorobenzene... -----ISTD-----																
2) TM Pyridine	1.368	1.258	1.308	1.360	1.358	1.325	1.303	1.336								1.327
3) MT N-Nitrosodimet...	0.884	0.802	0.684	0.678	0.667	0.627	0.616	0.628								0.698
4) S 2-Fluorophenol	1.287	1.196	1.216	1.267	1.295	1.255	1.234	1.271								1.253
5) MT Aniline	0.699	0.608	0.690	0.711	0.706	0.698	0.689	0.700								0.688
6) MT bis(2-Chloroet...	1.410	1.346	1.328	1.368	1.353	1.334	1.326	1.358								1.353
7) S Phenol-d5	1.480	1.419	1.456	1.509	1.540	1.498	1.475	1.512								1.486
8) MC Phenol	1.601	1.482	1.570	1.598	1.624	1.583	1.552	1.595								1.575
9) Benzaldehyde									0.316	0.313	0.324	0.339	0.380			0.335
10) MT 2-Chlorophenol	1.250	1.255	1.285	1.345	1.373	1.332	1.318	1.338								1.312
11) T n-Decane	0.981	0.866	0.859	0.852	0.842	0.800	0.768	0.779								0.843
12) MT 1,3-Dichlorobe...	1.581	1.584	1.528	1.528	1.507	1.445	1.417	1.437								1.504
13) MTC 1,4-Dichlorobe...	1.578	1.562	1.514	1.534	1.522	1.461	1.426	1.442								1.505
14) MT Benzyl Alcohol	0.936	0.879	0.900	0.977	1.007	0.992	0.983	1.014								0.961
15) MT 1,2-Dichlorobe...	1.624	1.492	1.457	1.469	1.449	1.392	1.355	1.370								1.451
16) MT bis(2-Chlorois...	0.540	0.503	0.500	0.507	0.504	0.490	0.476	0.487								0.501
17) MT 2,2-oxybis(1-c...	0.540	0.503	0.500	0.507	0.504	0.490	0.476	0.487								0.501
18) MT 2-Methylphenol	1.141	1.074	1.178	1.234	1.242	1.197	1.183	1.191								1.180
19) MT Hexachloroethane	0.665	0.625	0.628	0.635	0.635	0.613	0.601	0.619								0.628

Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA

Last Update : Mon Apr 04 16:54:30 2022

00) MP N-Nitrosodi-n-... 0.798 0.775 0.805 0.849 0.881 0.863 0.857 0.887  
 03  
 11) MT 3&4-Methyl phenol 1.284 1.215 1.250 1.349 1.365 1.321 1.302 1.326  
 06  
 22) MT Acetophenone  
 .42

1.735 1.675 1.724 1.710 1.742 1.749 1.720 1.722 1

Peak #	Retention Time	Area	Height	Width	Height	Area	Height	Area	Height
23) I	Naphthalene-d8	0.315	0.293	0.282	0.300	0.309	0.314	0.311	0.309
24) S	Nitrobenzene-d5	0.297	0.295	0.296	0.315	0.314	0.320	0.313	0.311
25) MT	Nitrobenzene	0.585	0.546	0.560	0.609	0.628	0.641	0.623	0.622
26) MT	Isophorone	0.114	0.122	0.144	0.156	0.161	0.161	0.160	0.161
27) MCT	2-Nitrophenol	0.291	0.282	0.288	0.310	0.308	0.314	0.303	0.299
28) MT	2,4-Dimethylph...	0.421	0.400	0.398	0.410	0.408	0.411	0.395	0.393
29) MT	bis(2-Chloreth...	0.225	0.212	0.222	0.243	0.249	0.252	0.243	0.246
30) MCT	2,4-Dichloroph...	0.309	0.301	0.278	0.283	0.281	0.279	0.267	0.265
31) MT	Benzoic Acid	0.300	0.269	0.254	0.238	0.220	0.198	0.246	0.246
32) MT	1,2,4-Trichlor...	1.132	1.056	0.995	1.012	0.984	0.971	0.920	0.918
33) MT	alpha-terpineol	0.094	0.099	0.103	0.108	0.110	0.109	0.111	0.111
34) MT	Naphthalene	0.169	0.156	0.151	0.153	0.152	0.152	0.145	0.142
35) MT	4-Chloroaniline	0.190	0.191	0.172	0.180	0.173	0.162	0.153	0.175
36) MCT	Hexachloro-1,3...	0.547	0.506	0.492	0.448	0.409	0.368	0.462	0.462
37) Hydroquinone		0.056	0.061	0.065	0.063	0.061	0.059	0.061	0.061
38) MT	Quinoline	0.227	0.216	0.220	0.247	0.262	0.271	0.268	0.269
39) MT	Caprolactam	0.657	0.628	0.615	0.633	0.632	0.634	0.610	0.610
40) MCT	4-Chloro-3-met...	0.647	0.631	0.597	0.610	0.613	0.611	0.589	0.587
41) MT	2-Methylnaphth...	0.249	0.230	0.223	0.198	0.176		0.215	0.215
42) MT	1-Methylnaphth...	0.372	0.348	0.331	0.295	0.266		0.322	0.322
43) MT	1,2,4,5-Tetrac...								
44) Diphenyl Ether									

Response Factor Report BNAMS24

Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA  
 Last Update : Mon Apr 04 16:54:30 2022  
 (45) Diphenyl Oxide

Retention Time	Peak Label	Peak Name	Area	Height	Width	Height	Area	Height	Width
0.372			0.348	0.331	0.295	0.266			
0.322									
13									
0.261									
8									
0.299									
11									
0.305									
13									
1.270									
5									
1.431									
5									
1.105									
3									
0.328									
13									
1.695									
2									
1.238									
3									
0.270									
12									
0.258									
9									
1.149									
4									
0.085									
27									
1.533									
4									
0.338									
11									
0.169			0.200	0.219	0.231	0.241	0.241	0.241	0.241
12									
0.187									
14									
1.269									
3									
0.578									
6									
1.288									
3									
0.156									
11									
1.294									
3									

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1043 of 1353

Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA  
 Last Update : Mon Apr 04 16:54:30 2022

Retention Time	Peak Label	Response Factor	Area	Height	Width	Height	Area	Height	Width
0.229	9) MT Atrazine	0.256	0.277	0.309	0.308	0.318	0.319	0.288	12
0.083	0) I Phenanthrene-d10	0.049	0.069	0.086	0.095	0.097	0.105	0.105	24
0.622	1) MT 4,6-Dinitro-2-...	0.625	0.589	0.613	0.637	0.650	0.639	0.609	3
0.084	2) S 2,4,6-Tribromo...	0.063	0.073	0.082	0.089	0.094	0.091	0.094	14
0.191	3) MT 4-Bromophenyl-...	0.195	0.193	0.190	0.191	0.192	0.194	0.184	1
0.223	4) MT Hexachlorobenzene	0.253	0.236	0.221	0.221	0.221	0.219	0.207	6
0.149	5) T n-octadecane	0.162	0.138	0.146	0.148	0.155	0.153	0.146	4
0.105	6) MCT Pentachlorophenol	0.076	0.093	0.109	0.116	0.116	0.116	0.122	16
1.060	7) MT Phenanthrene	1.217	1.087	1.056	1.055	1.049	1.038	0.990	6
1.007	8) MT Anthracene	1.017	0.956	0.985	1.027	1.041	1.030	0.995	2
0.861	9) MT Carbazole	0.839	0.793	0.846	0.884	0.889	0.907	0.856	4
1.290	10) MT Di-n-butyl pht...	1.124	1.076	1.208	1.343	1.408	1.432	1.352	10
0.119	11) MT 2-nitrodipheny...	0.119	0.150	0.185	0.204	0.214	0.224	0.183	22
1.038	12) MCT Fluoranthene	1.023	0.956	0.994	1.052	1.077	1.086	1.051	4
0.131	13) I Chrysene-d12	0.131	0.151	0.194	0.249	0.323	0.401	0.451	45
1.498	14) MT Benzidine	1.708	1.538	1.511	1.506	1.480	1.441	1.401	6
1.107	15) S p-Terphenyl-d14	1.168	1.131	1.106	1.116	1.118	1.099	1.052	3
0.688	16) MT Benzylbutyl ph...	0.562	0.651	0.709	0.733	0.724	0.748	0.748	10
0.272	17) MT 3,3-Dichlororobe...	0.272	0.322	0.358	0.368	0.380	0.379	0.346	12
1.117	18) MT Benzo(a)anthra...	1.088	1.076	1.063	1.122	1.143	1.158	1.127	3
1.179	19) MT Chrysene	1.255	1.222	1.177	1.182	1.181	1.159	1.115	3
1.015	20) MT bis(2-Ethylhex...	0.831	0.973	1.062	1.081	1.054	1.088	1.088	9
1.425	21) MC Di-n-octyl pht...	0.902	1.092	1.364	1.579	1.675	1.649	1.718	22

Response Factor Report BNAMS24

Method Path : C:\msdchem\1\methods\  
Method File : S824C31V.M  
Title : 8270 BNA  
Last Update : Mon Apr 04 16:54:30 2022

94)	I	Perylene-d12								
95)	MT	Benzo(b)fluora...	1.058	1.057	1.118	1.206	1.226	1.269	1.217	1.229
96)	MT	Benzo(k)fluora...	1.052	1.042	1.176	1.287	1.276	1.272	1.235	1.251
97)	MC	Benzo(a)pyrene	0.809	0.761	0.880	0.996	1.021	1.059	1.025	1.052
98)	MT	Indeno(1,2,3-c...	0.784	0.733	0.821	0.905	0.908	0.949	0.911	0.909
99)	MT	Dibenz(a,h)ant...	0.841	0.877	0.947	1.024	1.022	1.047	1.001	0.996
100)	MT	Benzo(g,h,i)pe...	0.908	0.974	1.022	1.105	1.072	1.084	1.035	1.015

(#) = Out of Range

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:01:33 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.410	152	31379	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.145	136	126523	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	63425	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.433	188	100259	8000.0000000	ppb	0.00
84) Chrysene-d12	9.251	240	65923	8000.0000000	ppb	0.00
94) Perylene-d12	11.957	264	60338	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.740	112	2524	507.9989337	ppb	0.00
Spiked Amount	20000.000		Recovery	=	2.54%	
7) Phenol-d5	3.175	99	2902	490.2811940	ppb	0.00
Spiked Amount	20000.000		Recovery	=	2.45%	
24) Nitrobenzene-d5	3.710	82	2493m	524.6305136	ppb	0.00
Spiked Amount	10000.000		Recovery	=	5.25%	
50) 2-Fluorobiphenyl	4.828	172	5540	541.1485688	ppb	0.00
Spiked Amount	10000.000		Recovery	=	5.41%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	7.845	244	4811	523.3093824	ppb	0.00
Spiked Amount	10000.000		Recovery	=	5.23%	
<b>Target Compounds</b>						
2) Pyridine	2.263	79	2682m	502.9288558	ppb	
3) N-Nitrosodimethylamine	2.204	42	1734m	651.9362692	ppb	
5) Aniline	3.228	66	1370	491.5376500	ppb	# 79
6) bis(2-Chloroethyl)ether	3.245	93	2765m	515.1374508	ppb	
8) Phenol	3.181	94	3140	501.1068373	ppb	93
10) 2-Chlorophenol	3.292	128	2452	464.8748538	ppb	95
11) n-Decane	3.292	41	1924	575.6723728	ppb	# 36
12) 1,3-Dichlorobenzene	3.381	146	3101	517.2524205	ppb	96
13) 1,4-Dichlorobenzene	3.416	146	3094	514.0708349	ppb	# 68
14) Benzyl Alcohol	3.469	79	1836	479.0055036	ppb	99
15) 1,2-Dichlorobenzene	3.504	146	3184	552.5060104	ppb	97
16) bis(2-Chloroisopropyl)...	3.539	121	1060	532.7713266	ppb	87
17) 2,2-oxybis(1-chloropro...	3.539	121	1060	532.7713266	ppb	87
18) 2-Methylphenol	3.510	108	2237	462.2064517	ppb	86
19) Hexachloroethane	3.698	117	1305	524.0277072	ppb	97
20) N-Nitrosodi-n-propylamine	3.610	70	1565	469.7971863	ppb	98
21) 3&4-Methyl phenol	3.592	107	2518	475.7854675	ppb	95
25) Nitrobenzene	3.722	77	2349	471.8104374	ppb	92
26) Isophorone	3.851	82	4629	480.4591456	ppb	99
28) 2,4-Dimethylphenol	3.904	107	2304	469.9159942	ppb	92
29) bis(2-Chlorethoxy)methane	3.969	93	3329	513.4626234	ppb	98
30) 2,4-Dichlorophenol	4.039	162	1782	464.4492046	ppb	84
32) 1,2,4-Trichlorobenzene	4.104	180	2444	545.7286958	ppb	94
34) Naphthalene	4.157	128	8954m	559.6849764	ppb	
36) Hexachloro-1,3-butadiene	4.222	225	1339	554.5918131	ppb	91
40) 4-Chloro-3-methylphenol	4.463	107	1795	460.1058487	ppb	92
41) 2-Methylnaphthalene	4.592	142	5197	519.2282987	ppb	# 95
42) 1-Methylnaphthalene	4.657	142	5117	530.1816916	ppb	# 96
47) Hexachlorocyclopentadiene	4.692	237	939m	453.4144396	ppb	
48) 2,4,6-Trichlorophenol	4.769	196	1005	412.4968894	ppb	93
49) 2,4,5-Trichlorophenol	4.792	196	1011	400.6238575	ppb	94
51) Biphenyl	4.898	154	6324	553.1433075	ppb	99

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:01:33 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

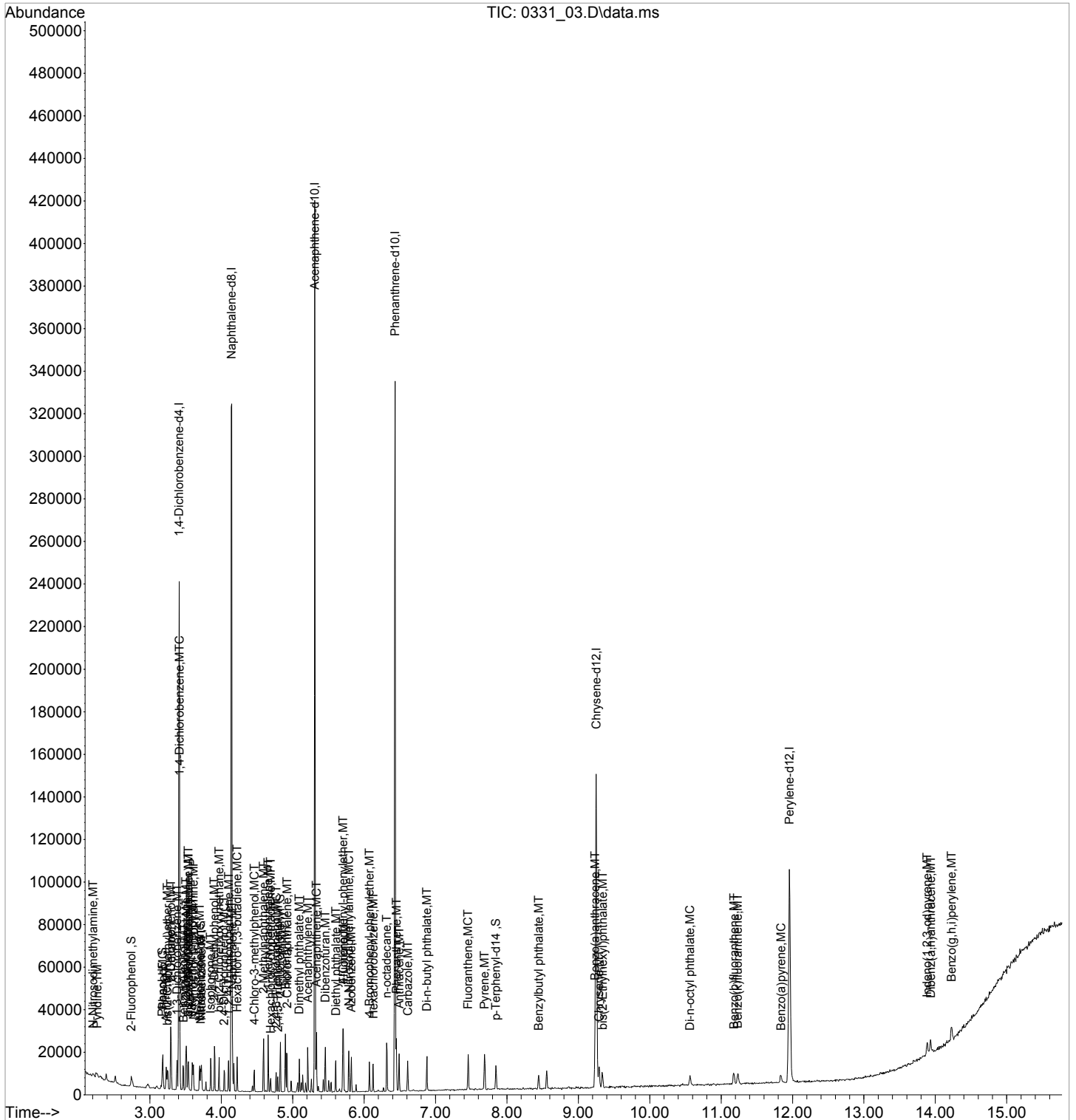
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
52) 2-Chloronaphthalene	4.922	162	4581	513.4164333	ppb		95
54) Acenaphthylene	5.210	152	6929	506.9901865	ppb		99
55) Dimethyl phthalate	5.092	163	4737	469.5927938	ppb		91
58) Acenaphthene	5.333	153	4864	535.9579409	ppb		98
60) Dibenzofuran	5.457	168	6619	535.9944213	ppb	#	89
64) Fluorene	5.710	166	5272	509.1051045	ppb		96
65) 4-Chlorophenyl-phenyle...	5.704	204	2576	557.7817146	ppb		99
66) Diethyl phthalate	5.604	149	5060	474.0047284	ppb		98
68) Azobenzene	5.822	77	4874	453.2199158	ppb	#	86
72) N-Nitrosodiphenylamine	5.786	169	3919	491.1822538	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	1225	512.3795821	ppb		96
75) Hexachlorobenzene	6.128	284	1585	573.4533593	ppb		94
76) n-octadecane	6.316	55	1016	548.9786212	ppb	#	29
78) Phenanthrene	6.451	178	7629	577.0254334	ppb		98
79) Anthracene	6.492	178	6370	494.8391331	ppb		97
80) Carbazole	6.610	167	5256	474.4175216	ppb	#	62
81) Di-n-butyl phthalate	6.880	149	7044	418.5148193	ppb		99
83) Fluoranthene	7.457	202	6410	485.9650062	ppb		99
86) Pyrene	7.686	202	7038	567.1001911	ppb		97
88) Benzylbutyl phthalate	8.445	149	2045	380.9486504	ppb		99
90) Benzo(a)anthracene	9.233	228	4484	484.9718122	ppb		93
91) Chrysene	9.292	228	5171	530.7402982	ppb		97
92) bis(2-Ethylhexyl)phtha...	9.339	149	2721	339.4590534	ppb		94
93) Di-n-octyl phthalate	10.563	149	3967	353.0003114	ppb		96
95) Benzo(b)fluoranthene	11.180	252	3990	438.5119188	ppb		99
96) Benzo(k)fluoranthene	11.233	252	3967	408.5899278	ppb		99
97) Benzo(a)pyrene	11.839	252	3050	406.0798426	ppb		95
98) Indeno(1,2,3-cd)pyrene	13.886	276	2955	433.0546037	ppb		93
99) Dibenz(a,h)anthracene	13.939	278	3172	410.5654286	ppb		98
100) Benzo(g,h,i)perylene	14.227	276	3424	410.7757987	ppb		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

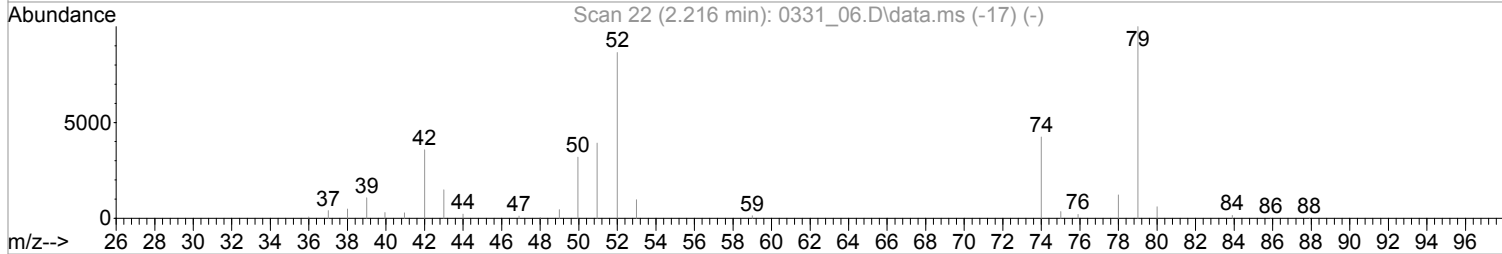
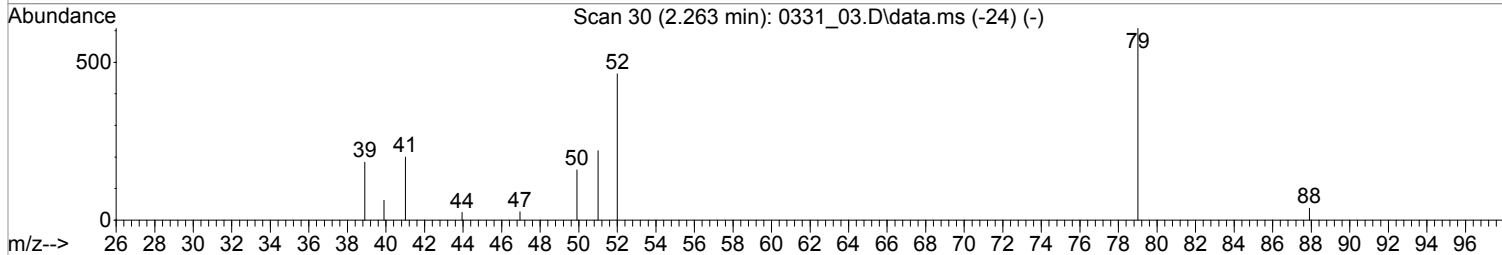
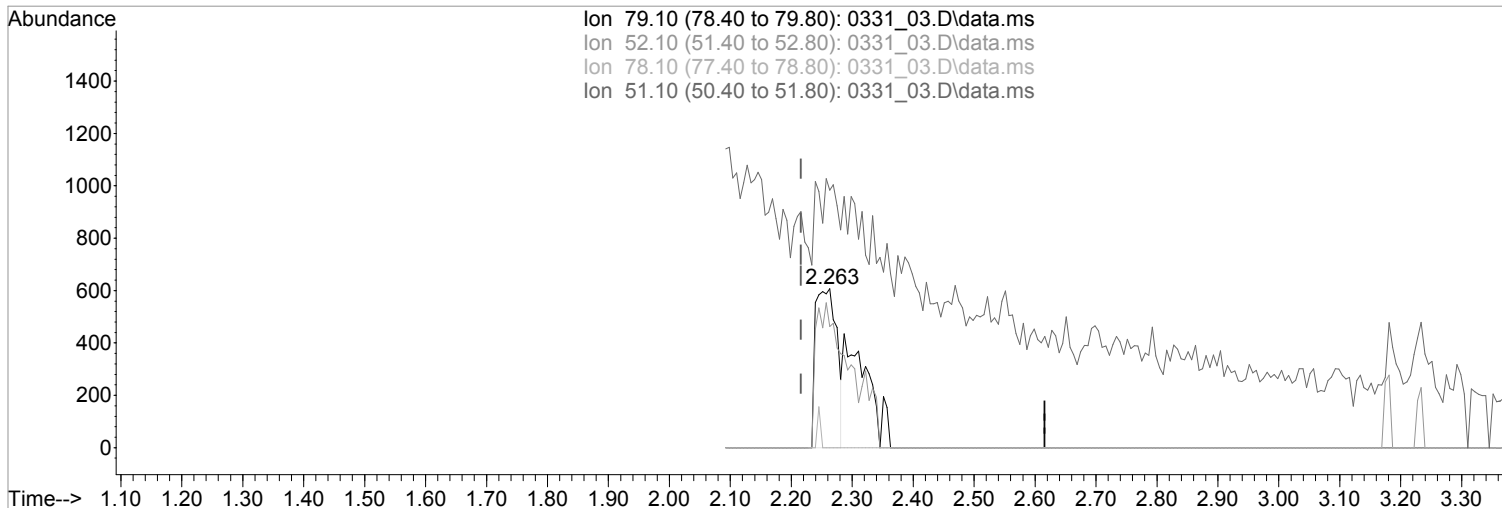
Quant Time: Apr 04 16:01:33 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

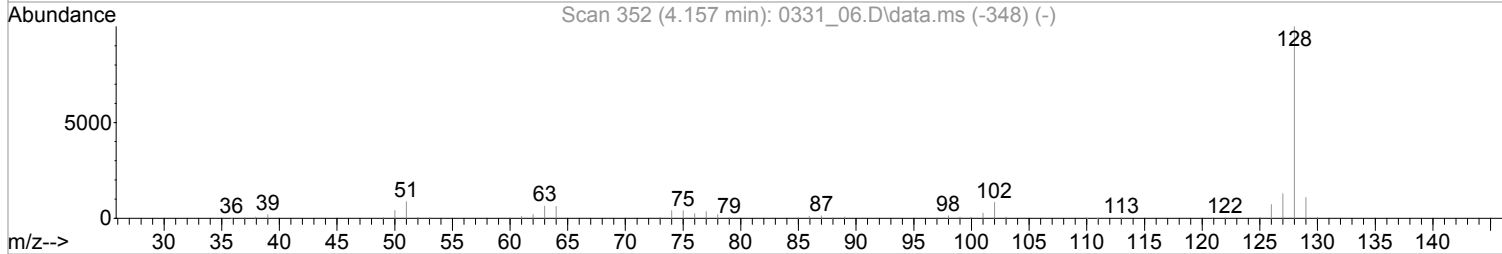
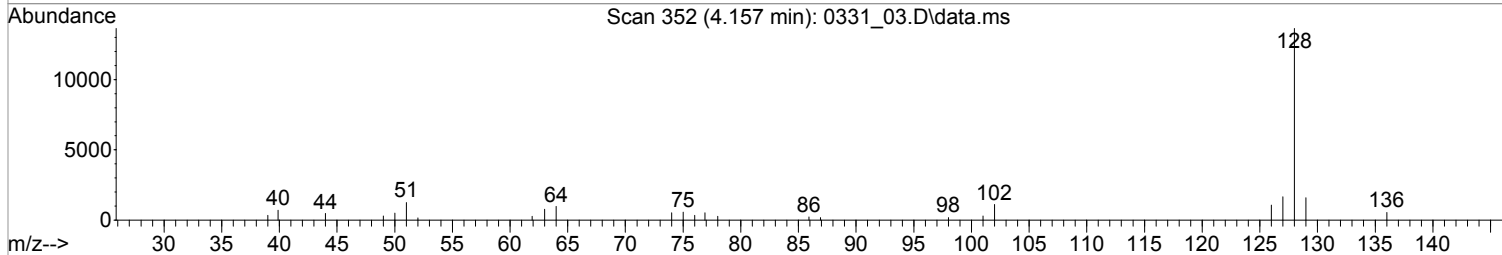
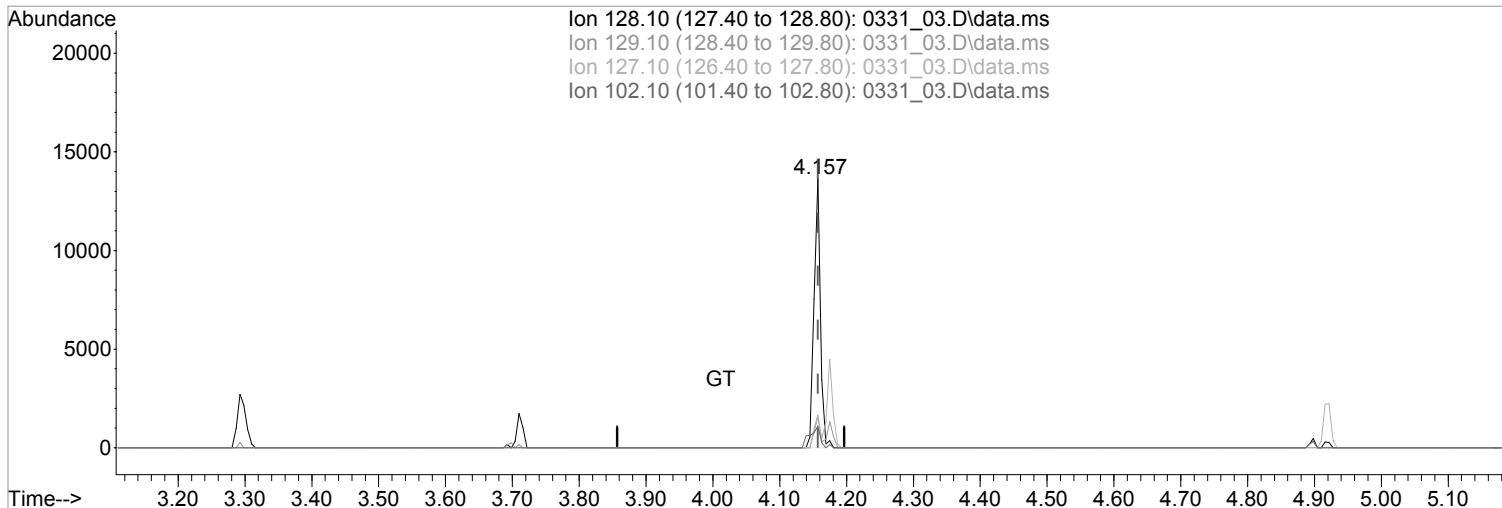
(2) Pyridine (TM)  
 2.263min (+0.047) 273.5917974 ppb  
 Qvalue = 88  
 response 1459

Ion	Exp%	Act%
79.10	100	100
52.10	86.50	76.28
78.10	12.30	0.00#
51.10	40.80	36.24

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

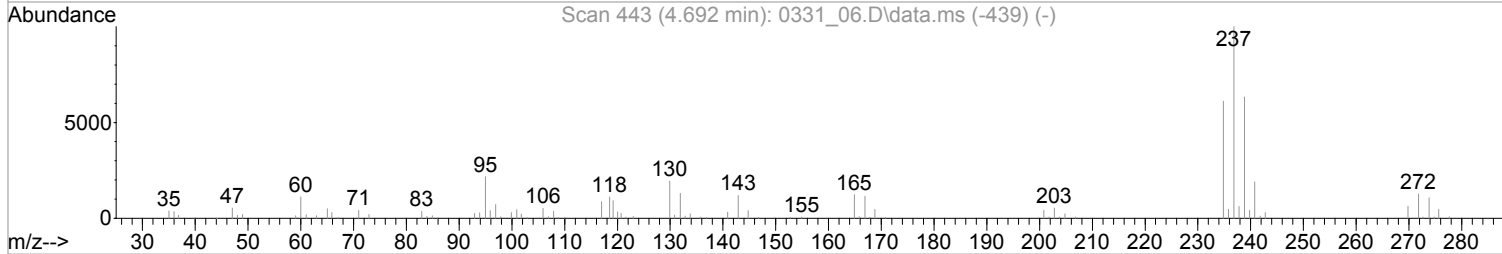
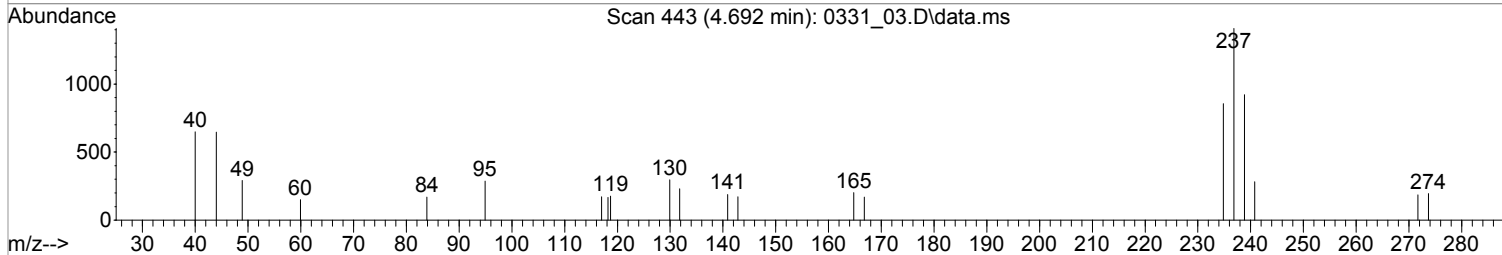
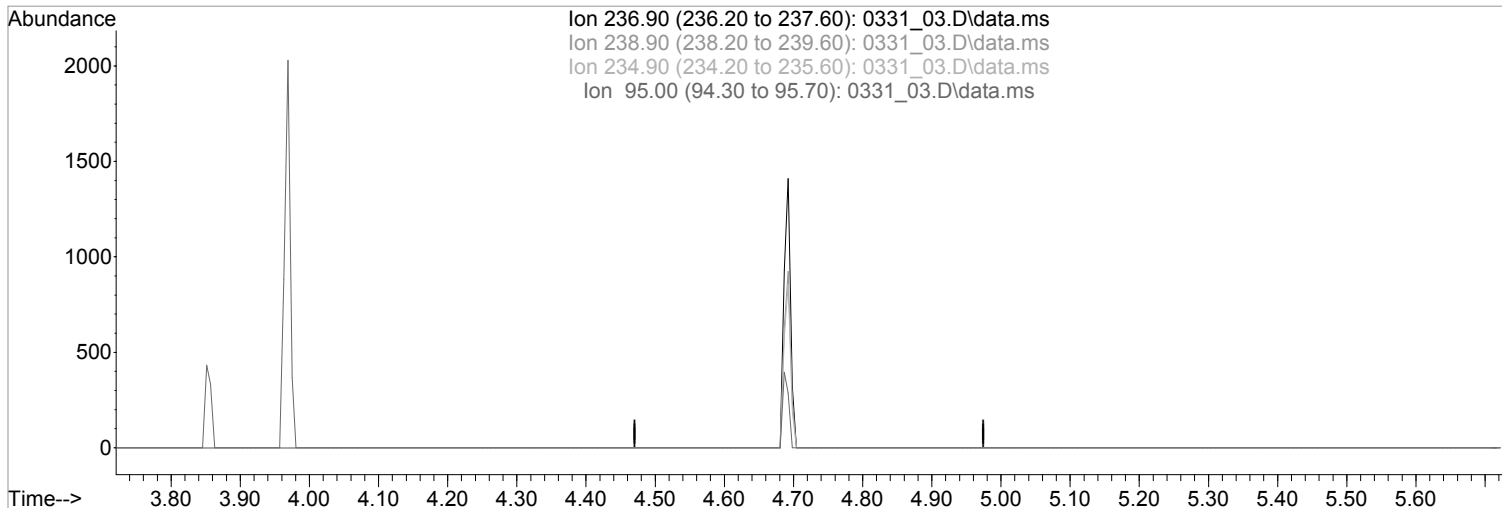
(34) Naphthalene (MT)  
 4.157min (-0.000) 559.6849764 ppb m  
 response 8954  

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.62
127.10	12.80	12.25
102.10	8.30	8.14

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_03.D  
Acq On : 31 Mar 2022 5:24 pm  
Operator : 3545  
Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 15:59:57 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



TIC: 0331\_03.D\data.ms

(47) Hexachlorocyclopentadiene (MPT)

4.692min (-4.692) 0.0000000 ppb

Qvalue = 0

response 0

Ion Exp% Act%

236.90 100 0.00

238.90 63.30 0.00#

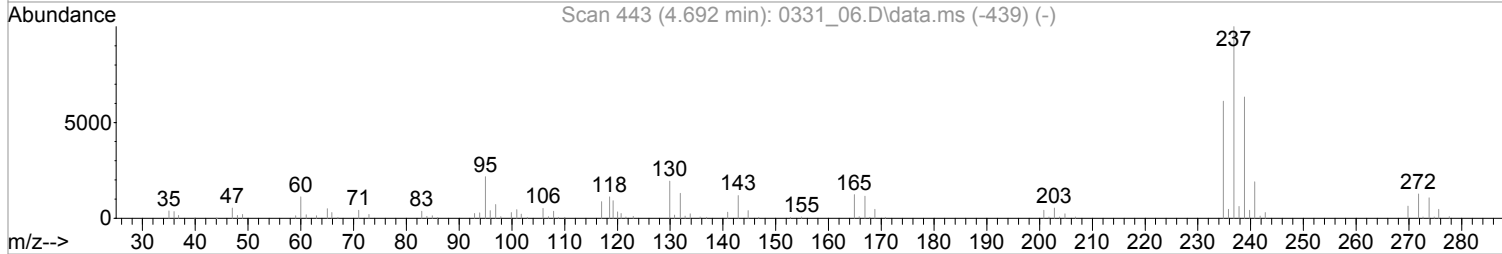
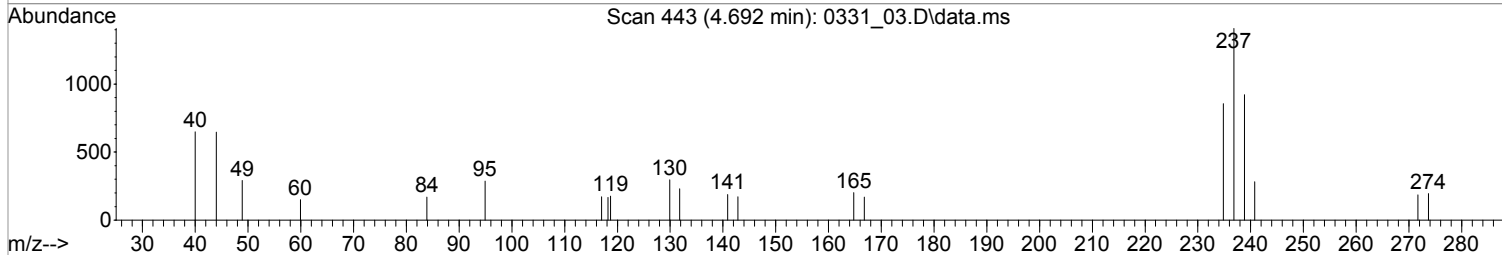
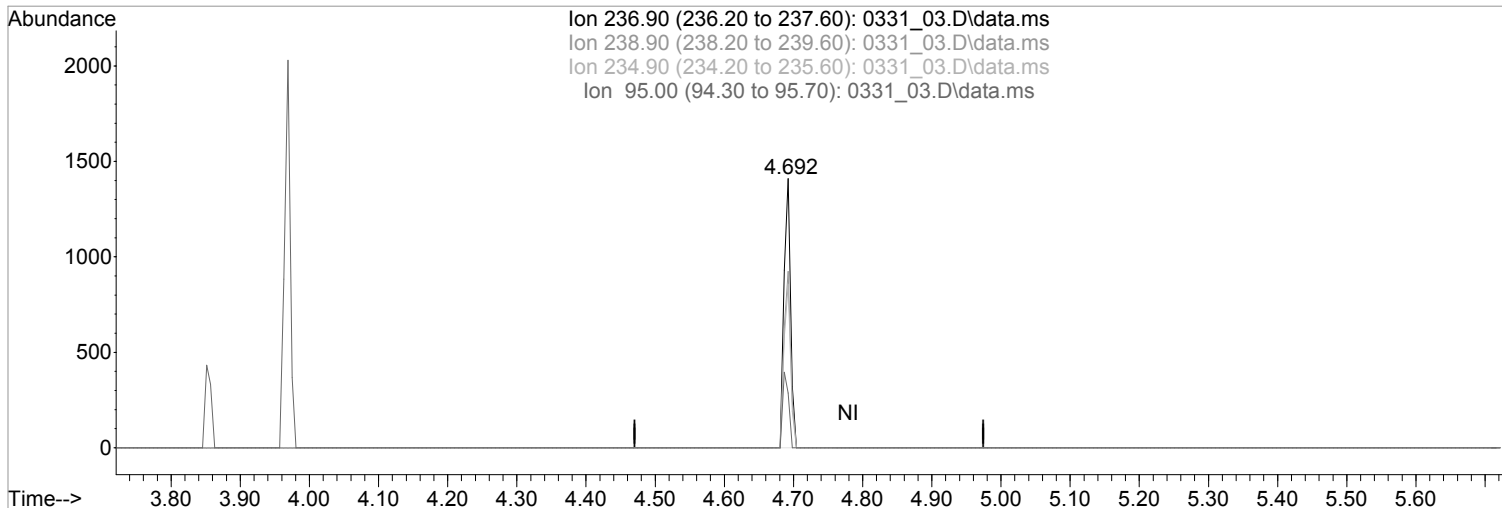
234.90 61.10 0.00#

95.00 21.70 0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_03.D  
Acq On : 31 Mar 2022 5:24 pm  
Operator : 3545  
Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 15:59:57 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



TIC: 0331\_03.D\data.ms

(47) Hexachlorocyclopentadiene (MPT)

4.692min (-0.000) 453.4144396 ppb m

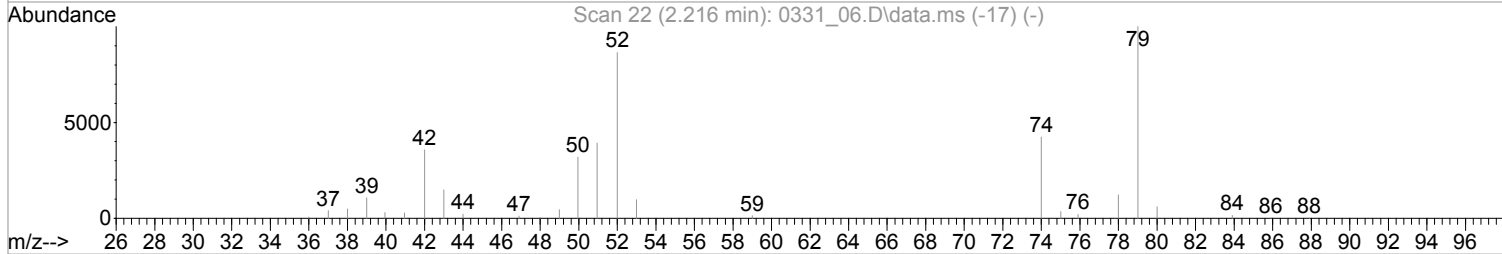
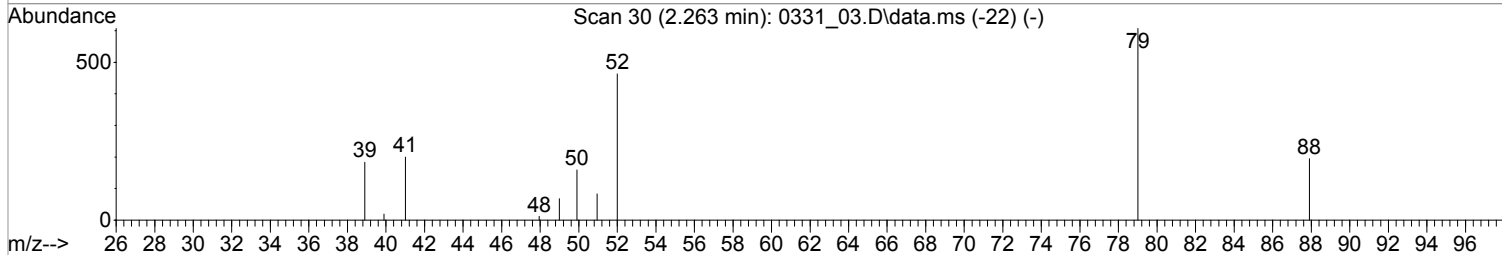
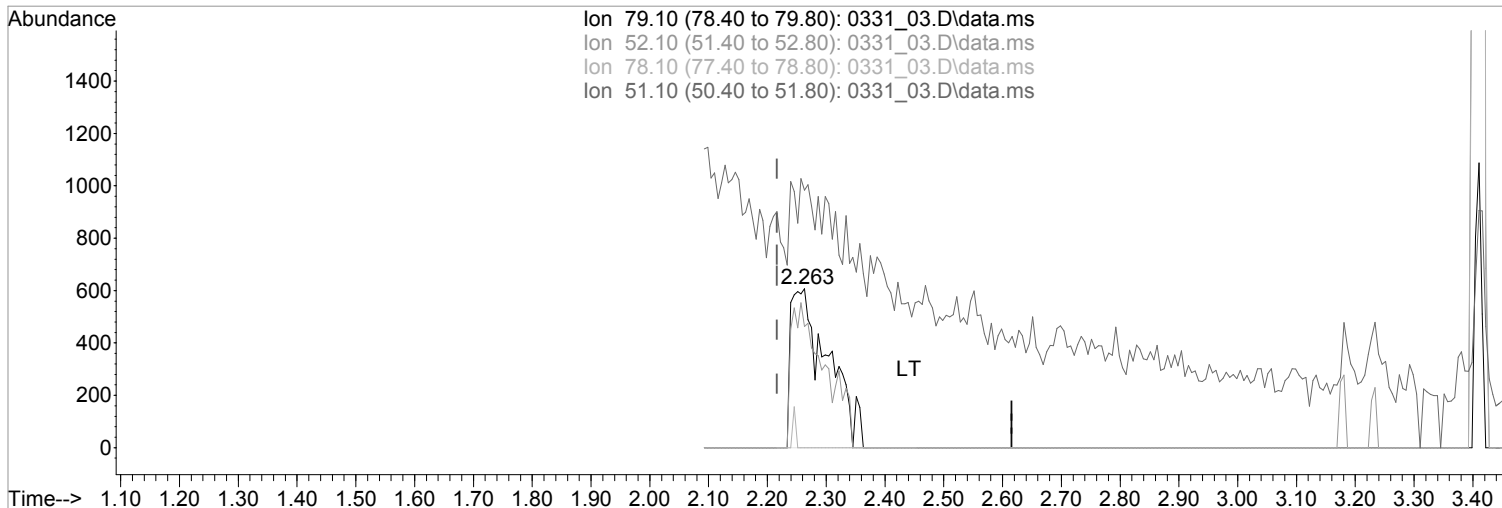
response 939

Ion	Exp%	Act%
236.90	100	100
238.90	63.30	65.51
234.90	61.10	60.75
95.00	21.70	20.37

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(2) Pyridine (TM)  
 2.263min (+0.047) 502.9288558 ppb m

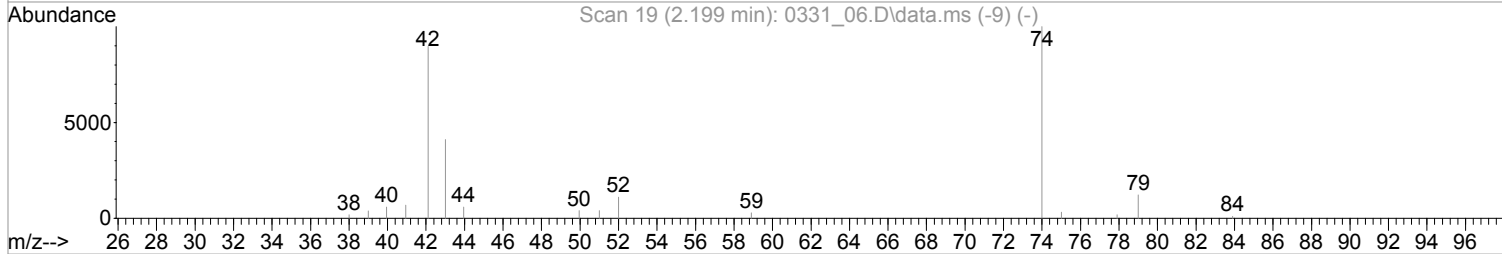
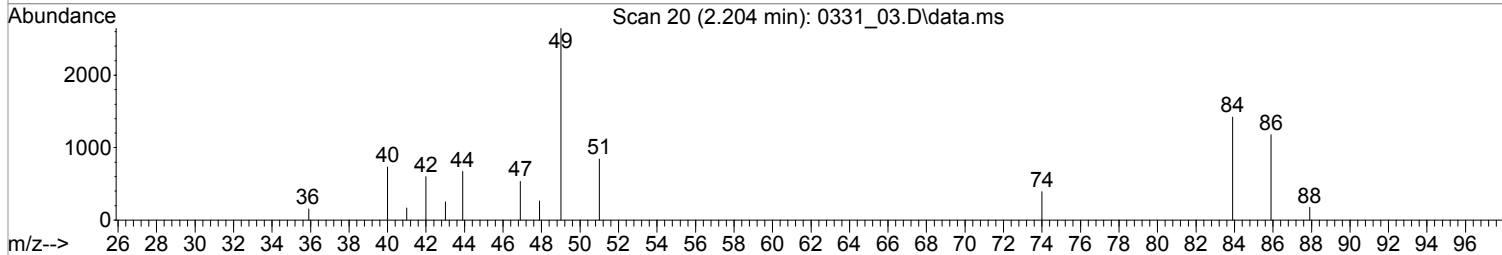
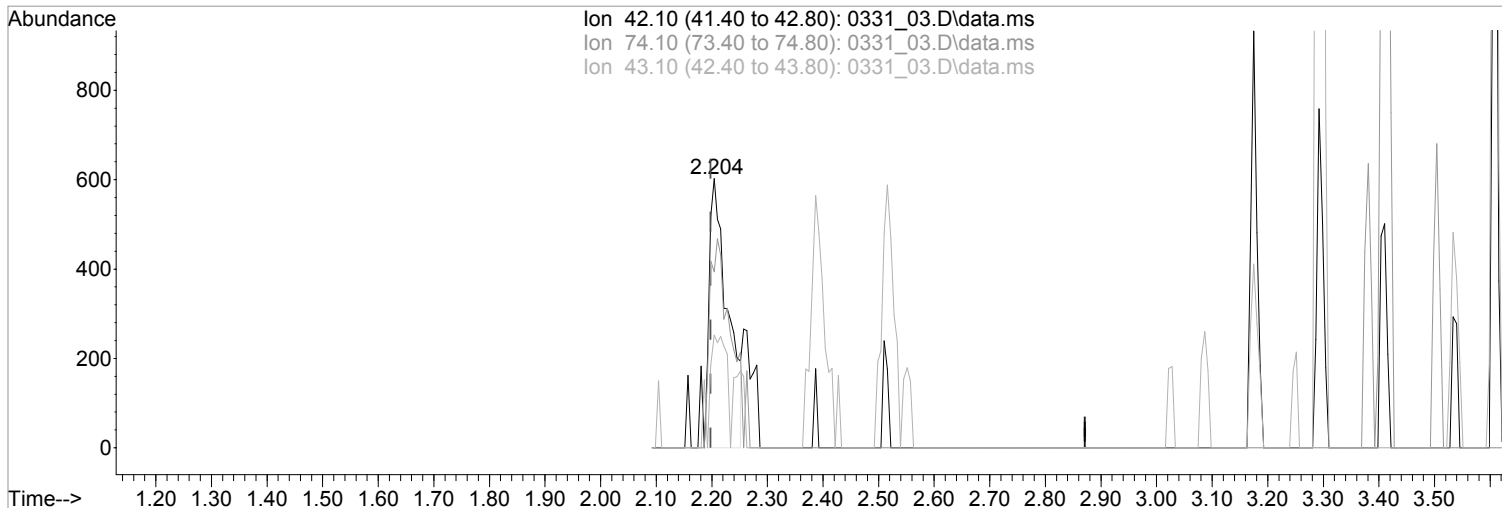
response 2682

Ion	Exp%	Act%
79.10	100	100
52.10	86.50	76.28
78.10	12.30	0.00#
51.10	40.80	162.11#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

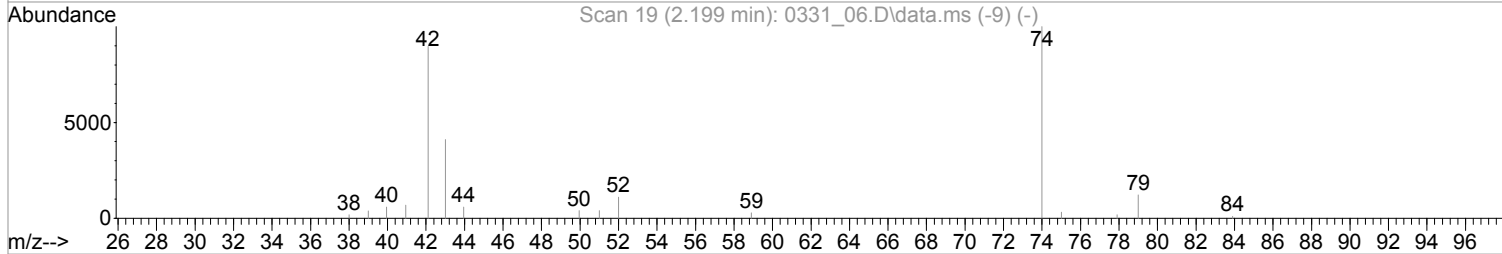
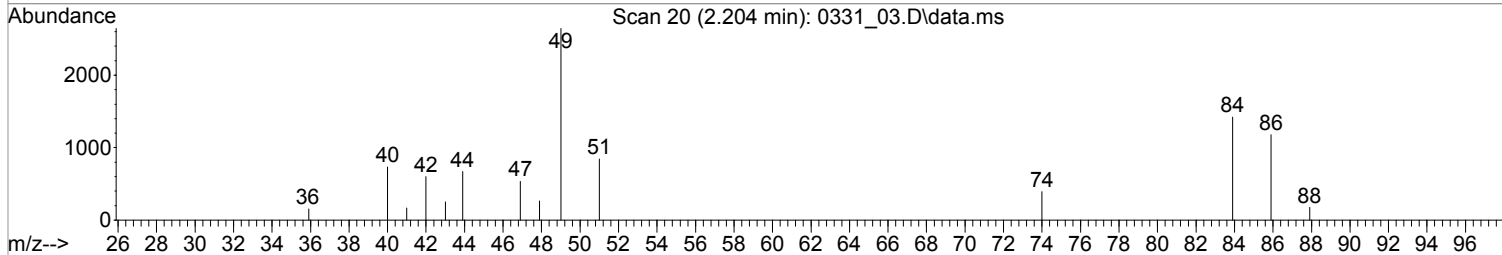
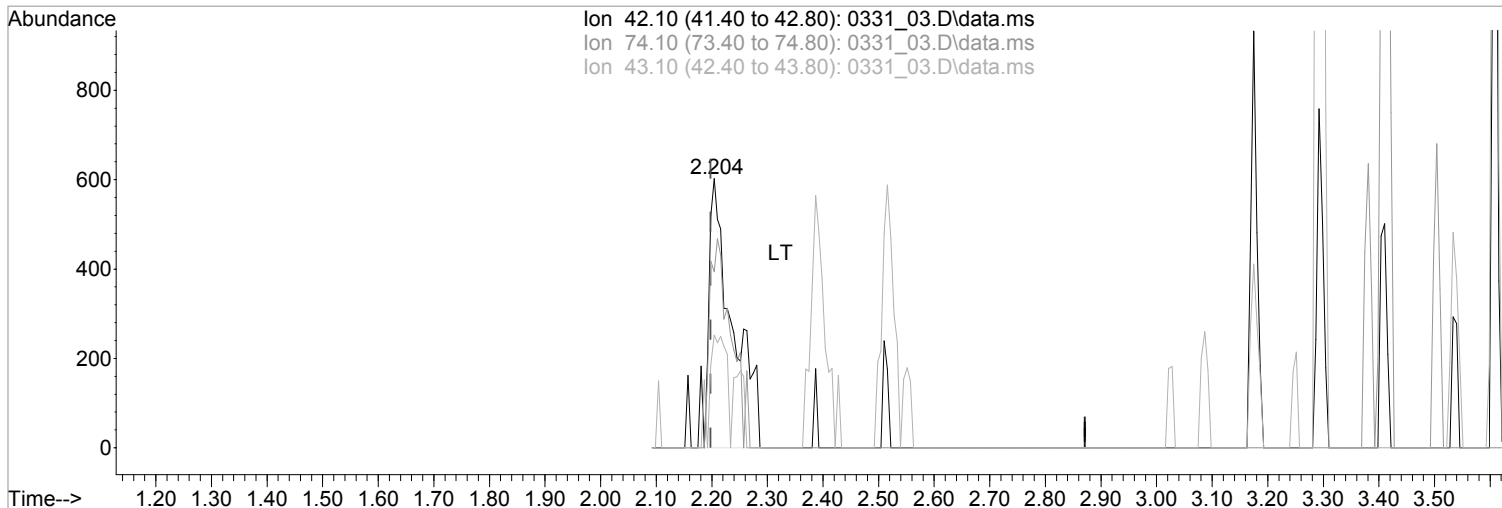
(3) N-Nitrosodimethylamine (MT)  
 2.204min (+0.006) 539.1445272 ppb  
 Qvalue = 64  
 response 1434

Ion	Exp%	Act%
42.10	100	100
74.10	109.30	86.75#
43.10	46.50	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(3) N-Nitrosodimethylamine (MT)  
 2.204min (+0.006) 651.9362692 ppb m

response 1734

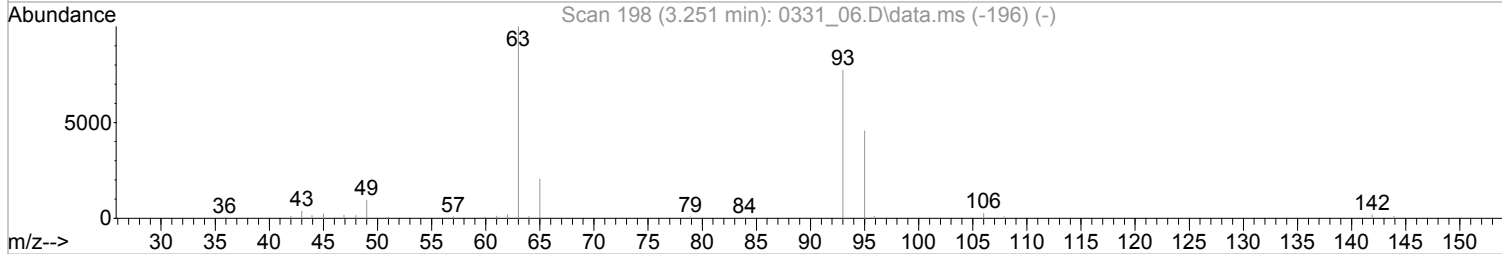
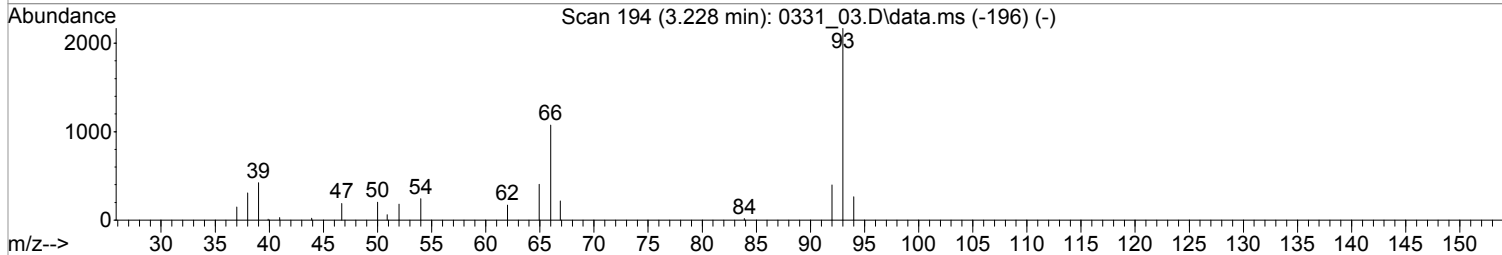
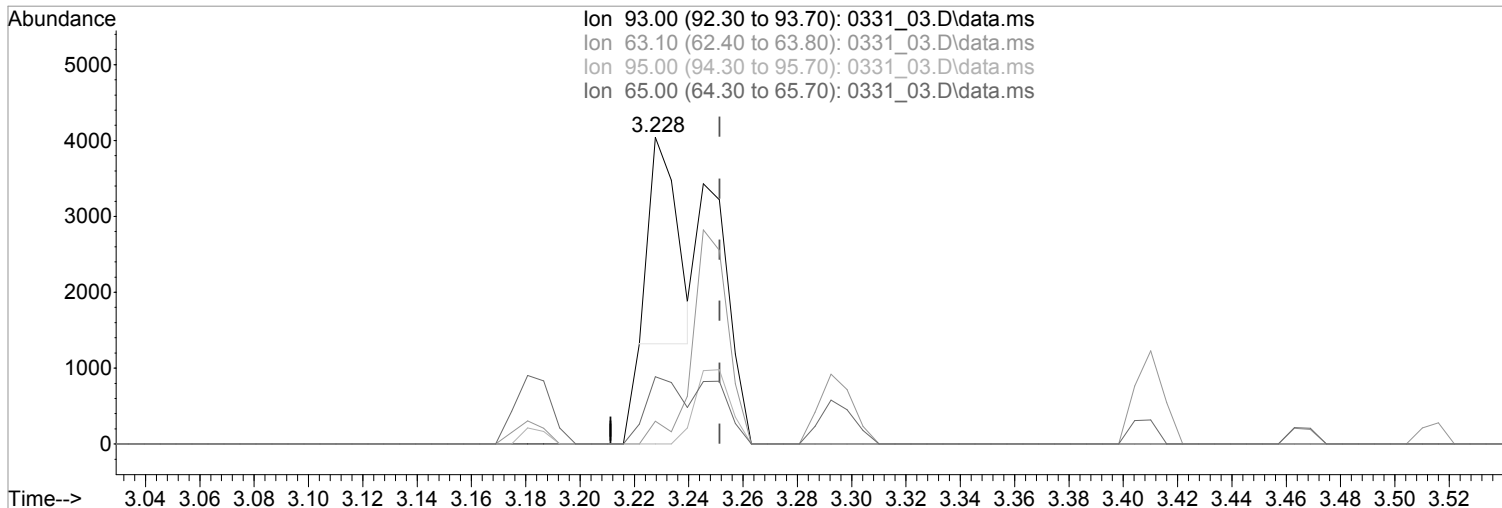
Ion	Exp%	Act%
42.10	100	100
74.10	109.30	71.74#
43.10	46.50	0.00#
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

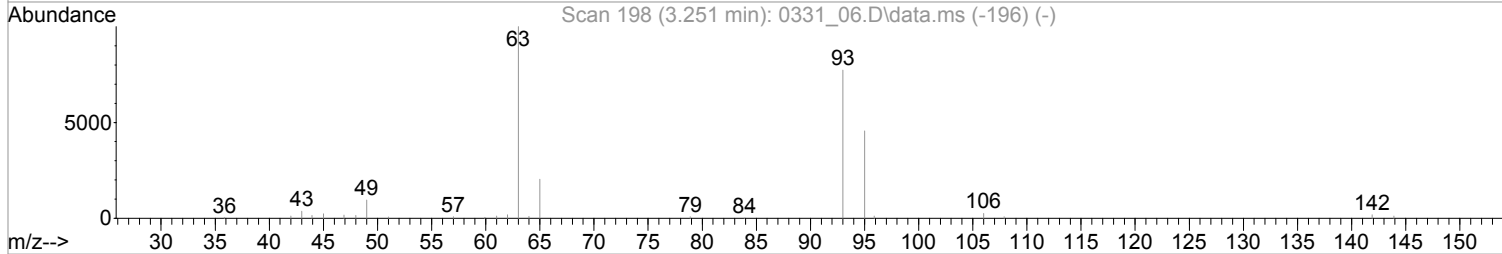
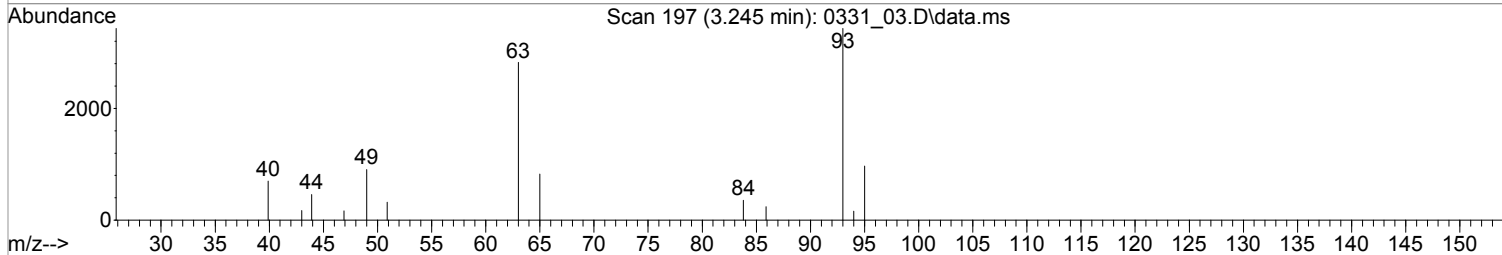
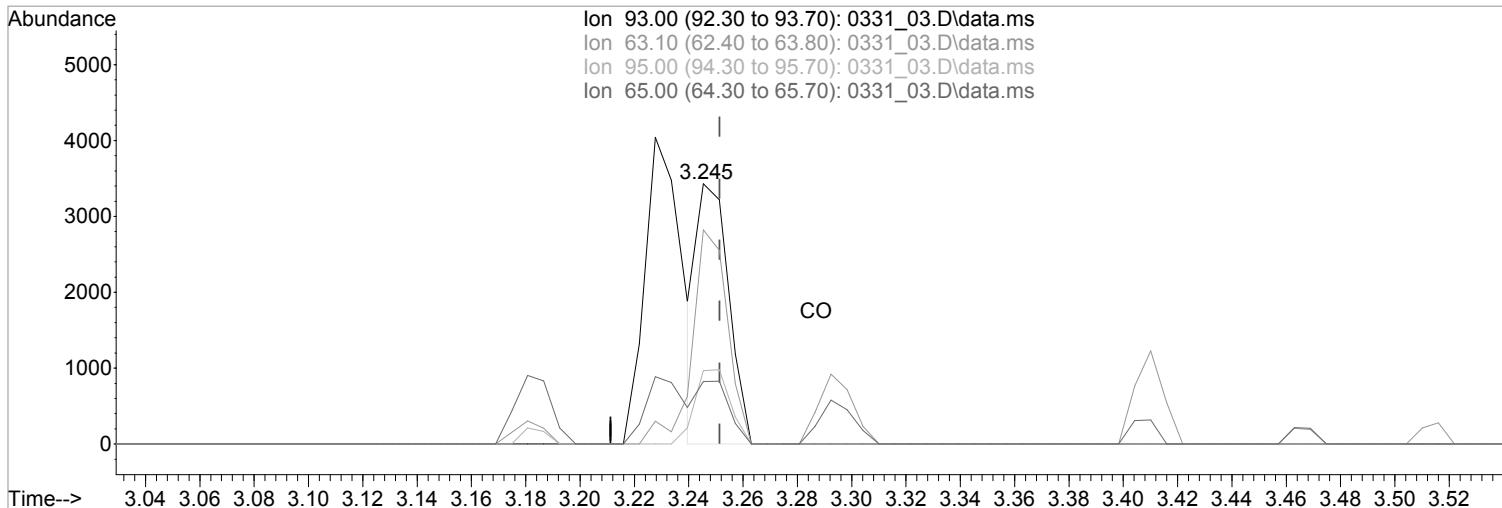
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 356.9632390 ppb  
 Qvalue = 42  
 response 1916

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	11.06#
95.00	31.90	0.00#
65.00	23.10	22.97

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.245min (-0.006) 515.1374508 ppb m

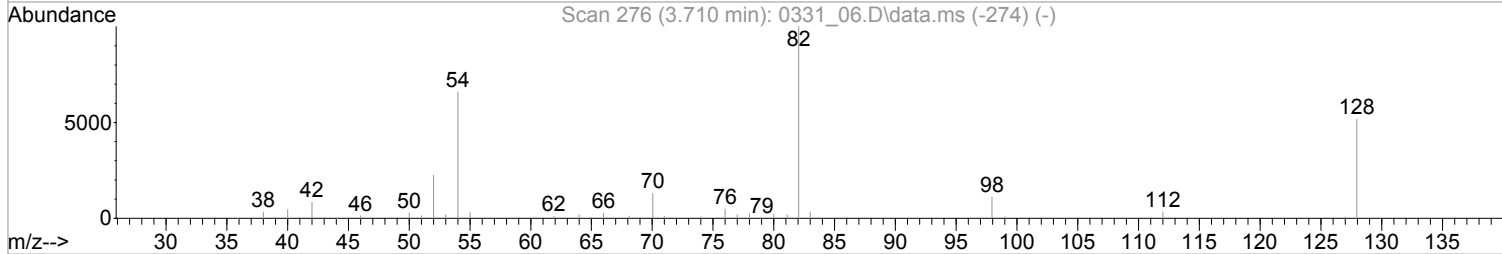
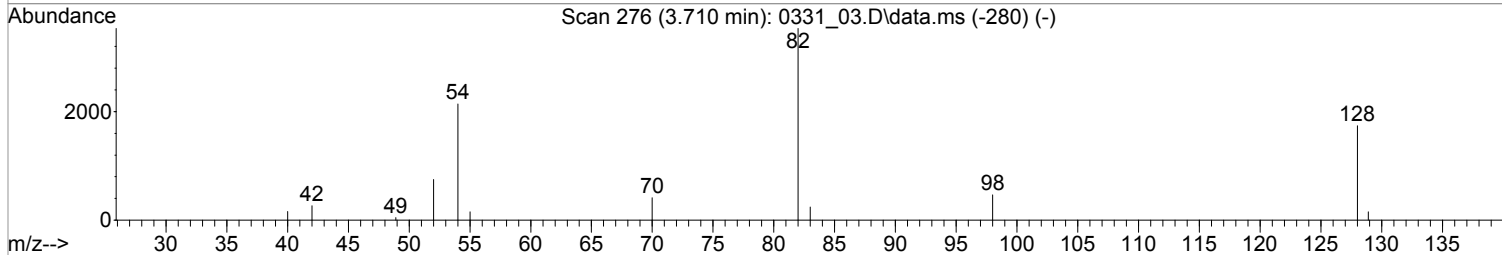
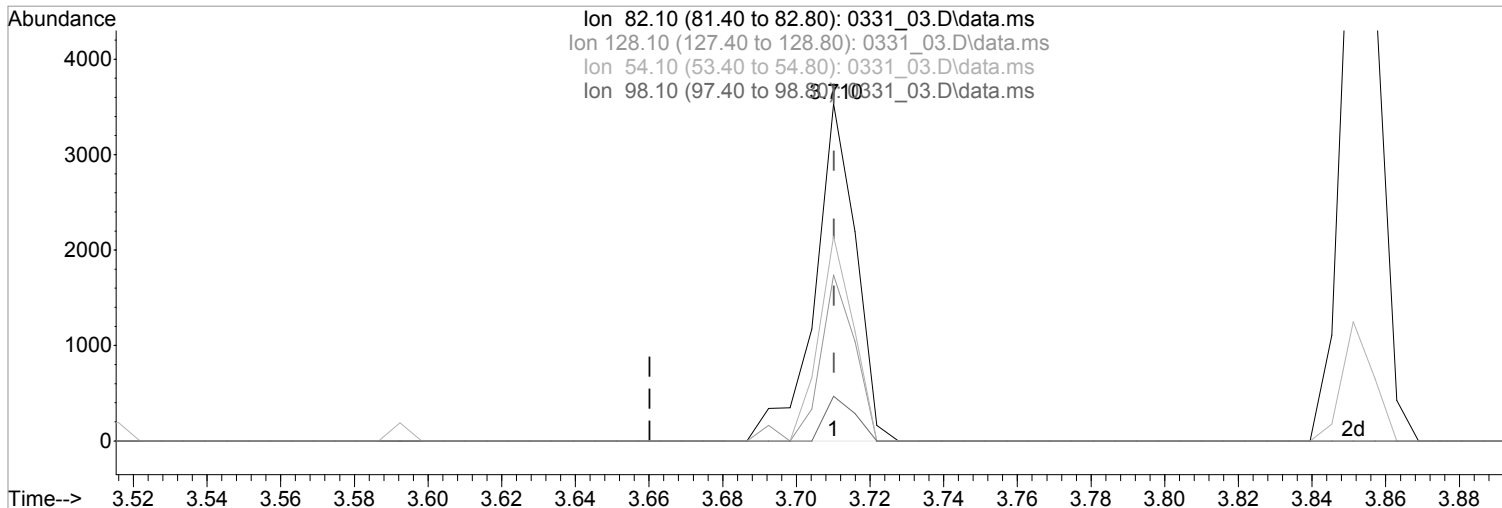
response 2765

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	82.25
95.00	31.90	28.18
65.00	23.10	24.05

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(24) Nitrobenzene-d5 (S)

3.710min (-0.000) 575.7677839 ppb

Qvalue = 98

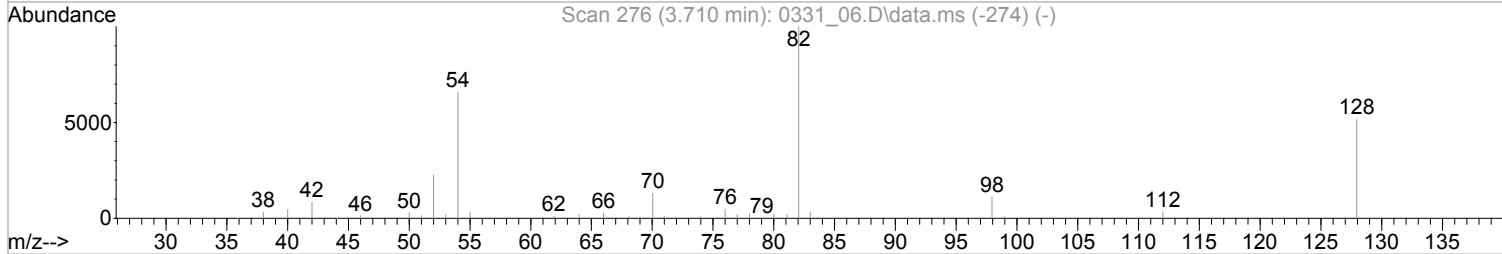
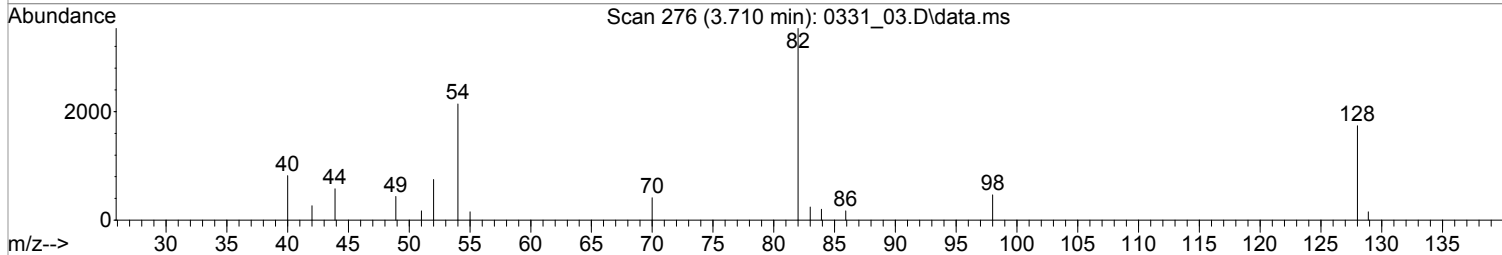
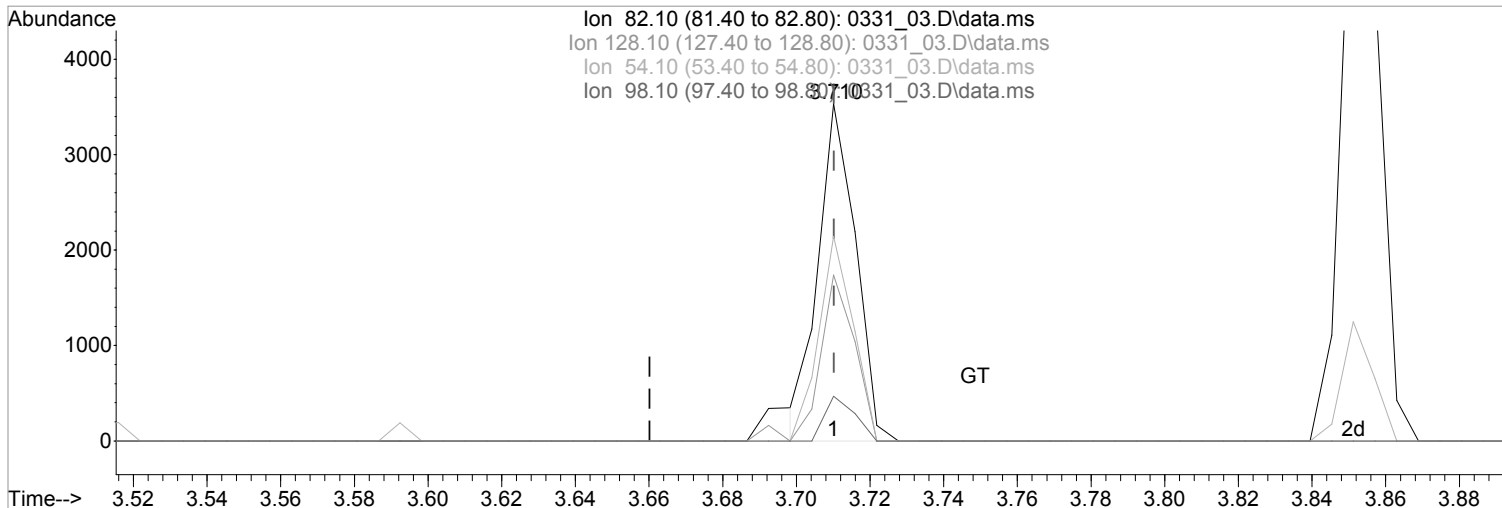
response 2736

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	49.19
54.10	60.00	60.68
98.10	11.40	13.25

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 524.6305136 ppb m

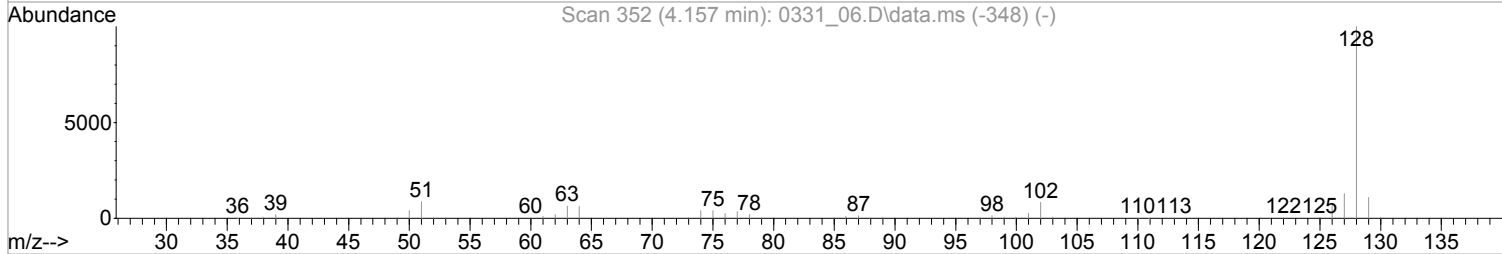
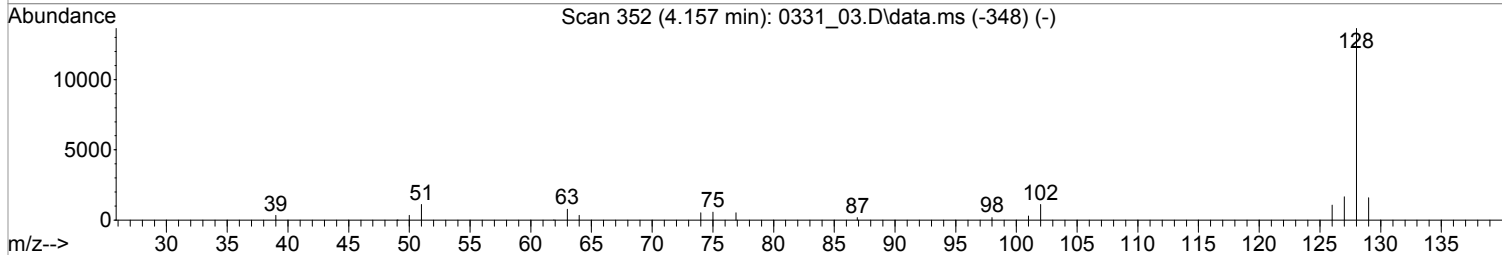
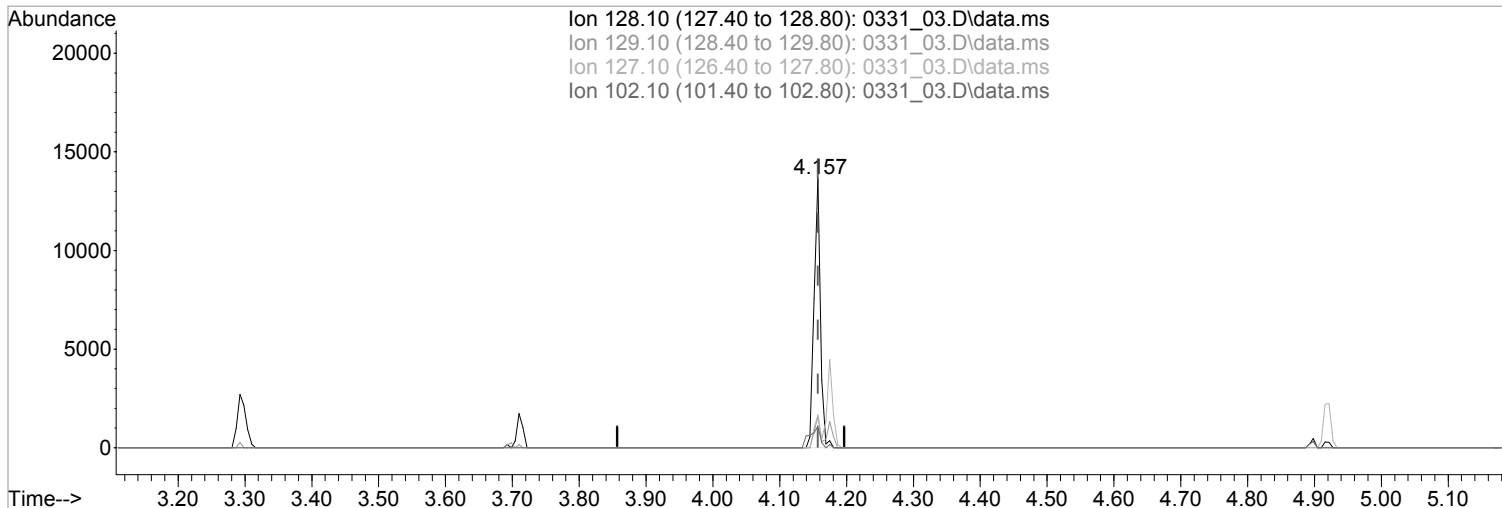
response 2493

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	49.19
54.10	60.00	60.68
98.10	11.40	13.25

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(34) Naphthalene (MT)  
 4.157min (-0.000) 567.6233271 ppb  
 Qvalue = 99  
 response 9081

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.62
127.10	12.80	12.25
102.10	8.30	8.14

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:03:57 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.410	152	32256	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.145	136	127295	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	64408	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.434	188	102417	8000.0000000	ppb	0.00
84) Chrysene-d12	9.251	240	66477	8000.0000000	ppb	0.00
94) Perylene-d12	11.957	264	60703	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.740	112	4822	936.6323900	ppb	0.00
Spiked Amount	20000.000		Recovery	=	4.68%	
7) Phenol-d5	3.175	99	5723	949.8206996	ppb	0.00
Spiked Amount	20000.000		Recovery	=	4.75%	
24) Nitrobenzene-d5	3.710	82	4668m	952.9123725	ppb	0.00
Spiked Amount	10000.000		Recovery	=	9.53%	
50) 2-Fluorobiphenyl	4.828	172	10861	1003.4240800	ppb	0.00
Spiked Amount	10000.000		Recovery	=	10.03%	
73) 2,4,6-Tribromophenol	5.887	330	805m	762.4927132	ppb	0.00
Spiked Amount	20000.000		Recovery	=	3.81%	
87) p-Terphenyl-d14	7.845	244	9398	990.6430560	ppb	0.00
Spiked Amount	10000.000		Recovery	=	9.91%	
<b>Target Compounds</b>						
2) Pyridine	2.240	79	5071	922.3587099	ppb #	95
3) N-Nitrosodimethylamine	2.199	42	3234	1026.8244509	ppb	87
5) Aniline	3.228	66	2453	863.4817222	ppb #	87
6) bis(2-Chloroethyl)ether	3.246	93	5429m	969.2851721	ppb	
8) Phenol	3.181	94	5974	926.4330927	ppb	95
10) 2-Chlorophenol	3.293	128	5060	967.2165217	ppb	98
11) n-Decane	3.293	41	3492	944.9158398	ppb #	99
12) 1,3-Dichlorobenzene	3.381	146	6386	1018.6606650	ppb	98
13) 1,4-Dichlorobenzene	3.416	146	6299	1004.0019603	ppb #	88
14) Benzyl Alcohol	3.463	79	3546	919.2846602	ppb	99
15) 1,2-Dichlorobenzene	3.504	146	6014	964.5647258	ppb	96
16) bis(2-Chloroisopropyl)...	3.540	121	2029	960.5974778	ppb	92
17) 2,2-oxybis(1-chloropro...	3.540	121	2029	960.5974778	ppb	92
18) 2-Methylphenol	3.510	108	4331	904.7290329	ppb	93
19) Hexachloroethane	3.698	117	2518	960.5419697	ppb	92
20) N-Nitrosodi-n-propylamine	3.610	70	3124	940.7078404	ppb	99
21) 3&4-Methyl phenol	3.593	107	4900	923.0511547	ppb	97
25) Nitrobenzene	3.722	77	4690	963.4605718	ppb	95
26) Isophorone	3.851	82	8692	914.5714399	ppb	99
27) 2-Nitrophenol	3.904	139	1821	795.4129864	ppb	93
28) 2,4-Dimethylphenol	3.904	107	4491	938.6524583	ppb	93
29) bis(2-Chlorethoxy)methane	3.969	93	6359	961.9096115	ppb	97
30) 2,4-Dichlorophenol	4.045	162	3374	906.2632690	ppb	98
32) 1,2,4-Trichlorobenzene	4.104	180	4786	1015.7513152	ppb	92
34) Naphthalene	4.157	128	16810m	985.5431213	ppb	
35) 4-Chloroaniline	4.175	65	1501	912.0664575	ppb #	88
36) Hexachloro-1,3-butadiene	4.222	225	2489	971.6089660	ppb	97
40) 4-Chloro-3-methylphenol	4.463	107	3435	911.5050154	ppb	94
41) 2-Methylnaphthalene	4.593	142	9991	973.4222268	ppb	99
42) 1-Methylnaphthalene	4.657	142	10035	1003.1618197	ppb	97
47) Hexachlorocyclopentadiene	4.693	237	1808	901.7104811	ppb	98
48) 2,4,6-Trichlorophenol	4.769	196	2025	896.9514026	ppb	91

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

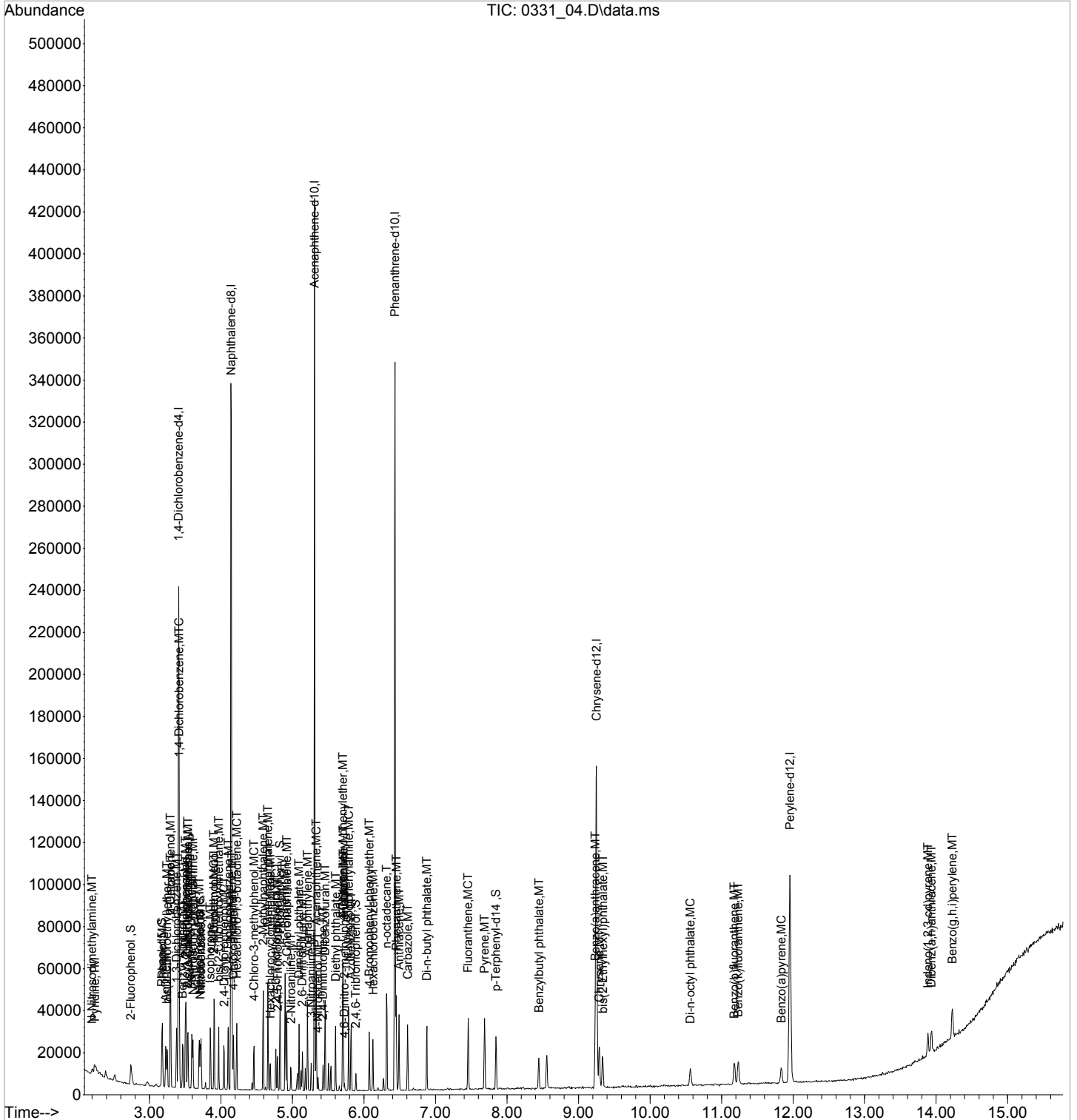
Quant Time: Apr 04 16:03:57 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.793	196	1963	850.5173304	ppb		91
51) Biphenyl	4.898	154	11839	968.2645048	ppb		98
52) 2-Chloronaphthalene	4.922	162	9292	1011.9321511	ppb		98
53) 2-Nitroaniline	4.981	138	1866	769.8225109	ppb	#	93
54) Acenaphthylene	5.210	152	13458	962.9526656	ppb		99
55) Dimethyl phthalate	5.092	163	9503	956.7755123	ppb		93
56) 2,6-Dinitrotoluene	5.140	165	1655	763.6081461	ppb		92
57) 3-Nitroaniline	5.263	138	1426	717.7969135	ppb		98
58) Acenaphthene	5.334	153	9791	1025.5166899	ppb		99
60) Dibenzofuran	5.457	168	12817	986.5464047	ppb	#	98
61) 2,4-Dinitrotoluene	5.428	165	1767	681.0093031	ppb	#	73
63) 4-Nitrophenol	5.357	139	902m	644.5700639	ppb		
64) Fluorene	5.710	166	10290	969.6872468	ppb		98
65) 4-Chlorophenyl-phenyle...	5.704	204	4599	927.0569857	ppb		97
66) Diethyl phthalate	5.604	149	9914	938.9461138	ppb		98
67) 4-Nitroaniline	5.710	138	1350	1129.6086293	ppb	#	26
68) Azobenzene	5.822	77	9927	953.6061374	ppb		97
71) 4,6-Dinitro-2-methylph...	5.728	198	471m	535.7640762	ppb		
72) N-Nitrosodiphenylamine	5.787	169	7540	933.3328472	ppb		98
74) 4-Bromophenyl-phenylether	6.075	248	2477	1001.8199448	ppb		98
75) Hexachlorobenzene	6.128	284	3015	994.7736888	ppb		95
76) n-octadecane	6.316	55	1765	890.0022714	ppb	#	72
78) Phenanthrene	6.451	178	13916	956.6809370	ppb		99
79) Anthracene	6.492	178	12234	935.1720946	ppb		99
80) Carbazole	6.610	167	10150	920.4021822	ppb		98
81) Di-n-butyl phthalate	6.881	149	13780	872.5812197	ppb		99
83) Fluoranthene	7.457	202	12239	921.2610703	ppb		99
86) Pyrene	7.686	202	12779	956.9026432	ppb		99
88) Benzylbutyl phthalate	8.445	149	3894	816.5523448	ppb		98
90) Benzo(a)anthracene	9.233	228	8944	973.9225740	ppb		98
91) Chrysene	9.292	228	10158	1003.0718203	ppb		98
92) bis(2-Ethylhexyl)phtha...	9.339	149	5877	866.1250077	ppb		97
93) Di-n-octyl phthalate	10.563	149	7493	775.1486260	ppb		98
95) Benzo(b)fluoranthene	11.174	252	8017	933.1712569	ppb		97
96) Benzo(k)fluoranthene	11.233	252	7909	891.1685866	ppb		97
97) Benzo(a)pyrene	11.833	252	5772	843.0478053	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.886	276	5564	868.6523357	ppb		93
99) Dibenz(a,h)anthracene	13.933	278	6652	939.8770333	ppb		97
100) Benzo(g,h,i)perylene	14.227	276	7392	967.8372314	ppb		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_04.D  
Acq On : 31 Mar 2022 5:45 pm  
Operator : 3545  
Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:03:57 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:02:11 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M

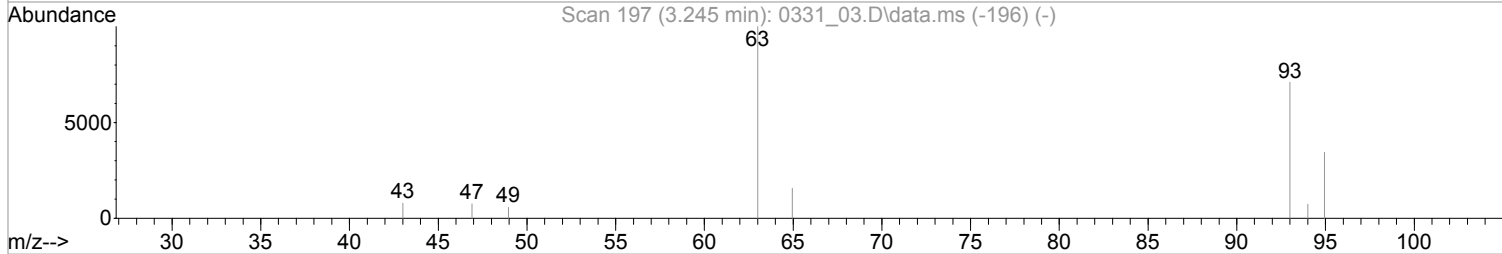
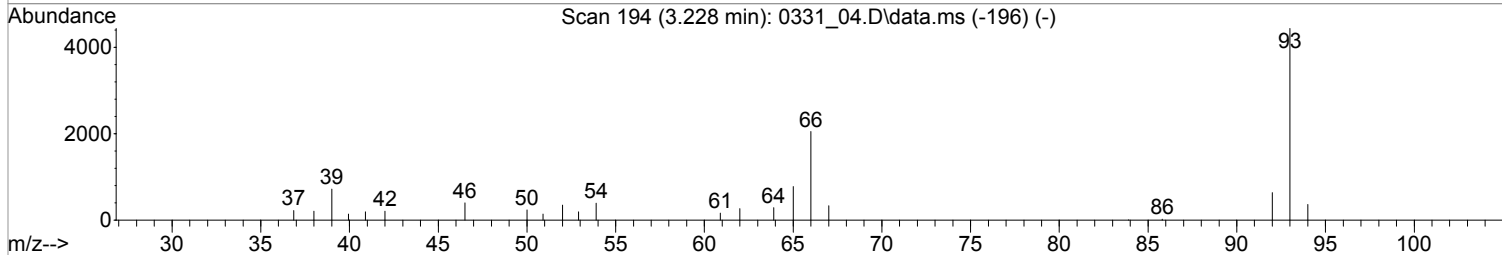
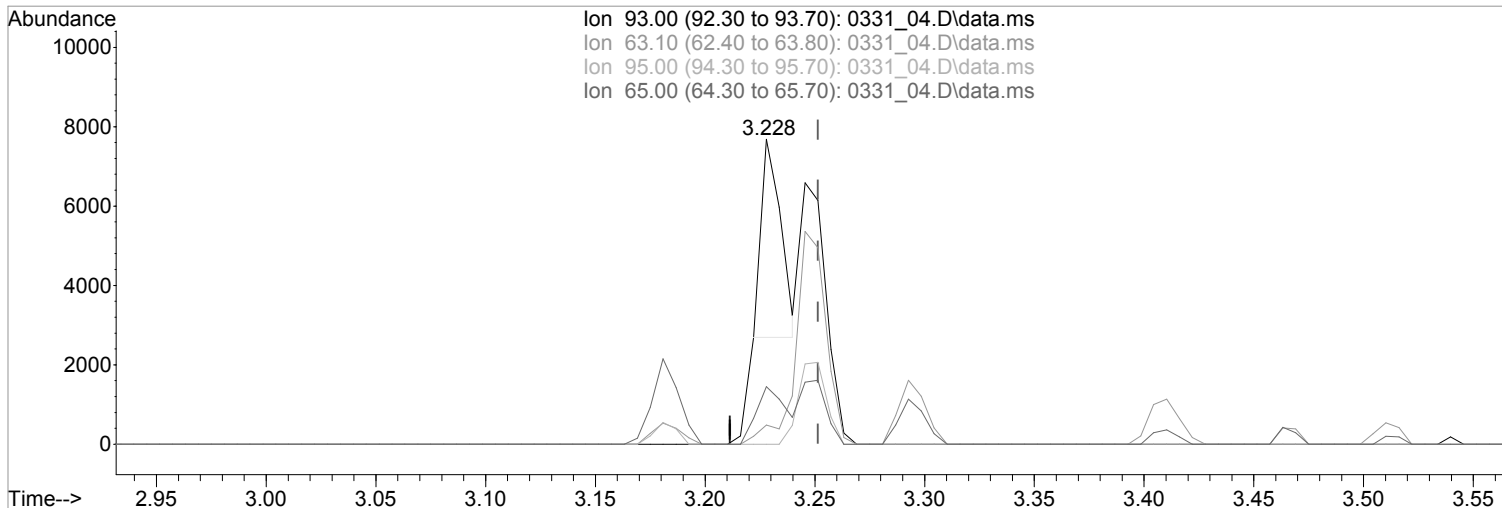




Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

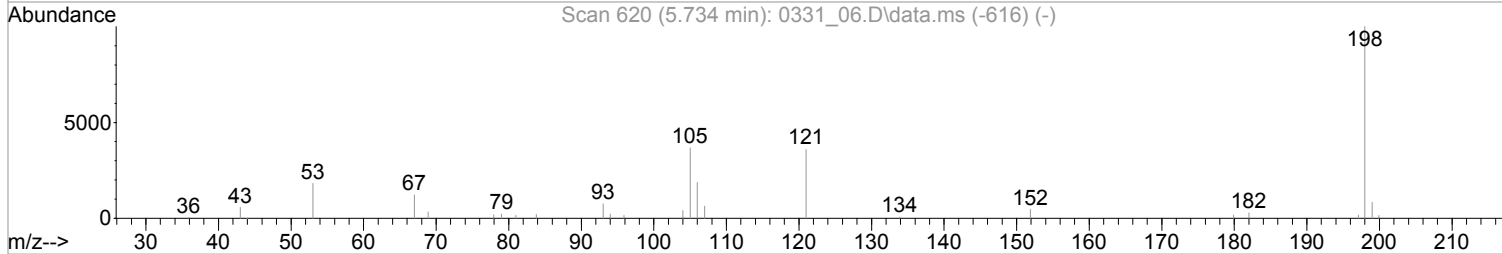
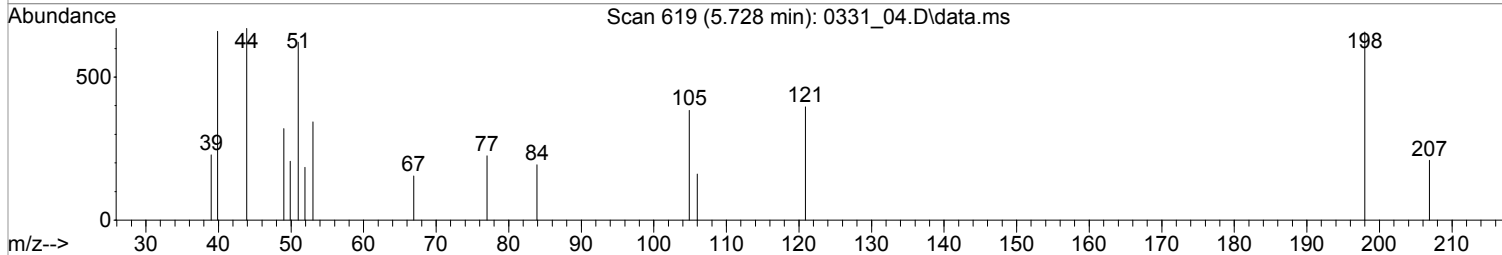
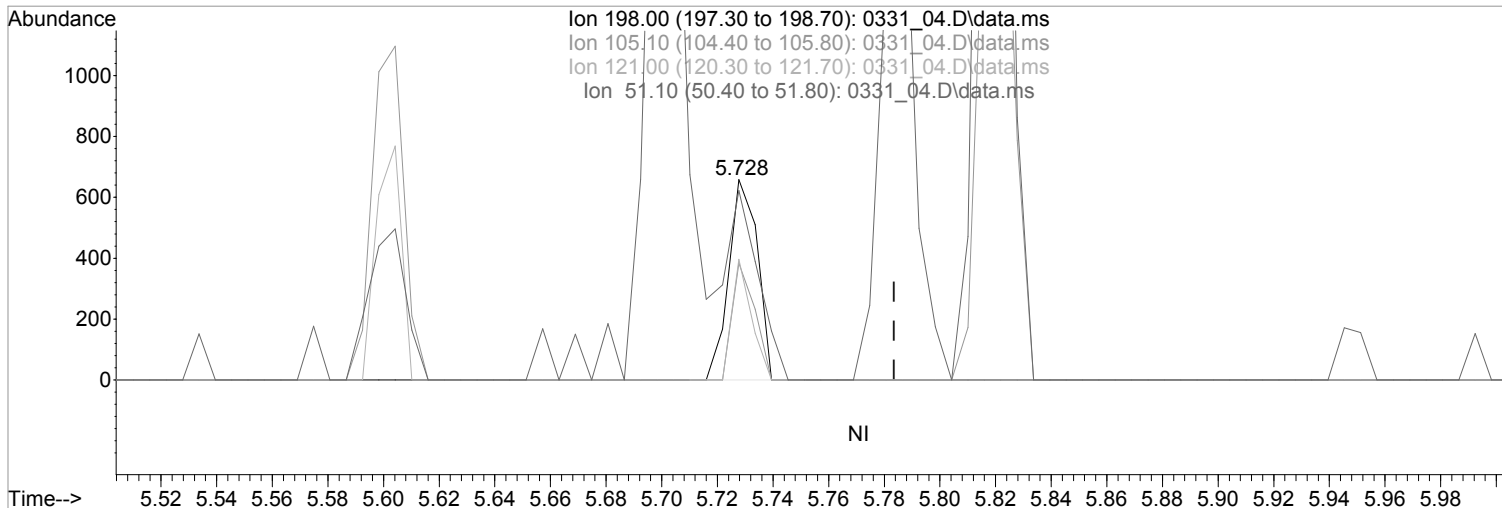
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.023) 555.9686915 ppb  
 Qvalue = 36  
 response 3114

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.69#
95.00	31.90	0.00#
65.00	23.10	15.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(71) 4,6-Dinitro-2-methylphenol (MT)  
 5.728min (-0.006) 535.7640762 ppb m

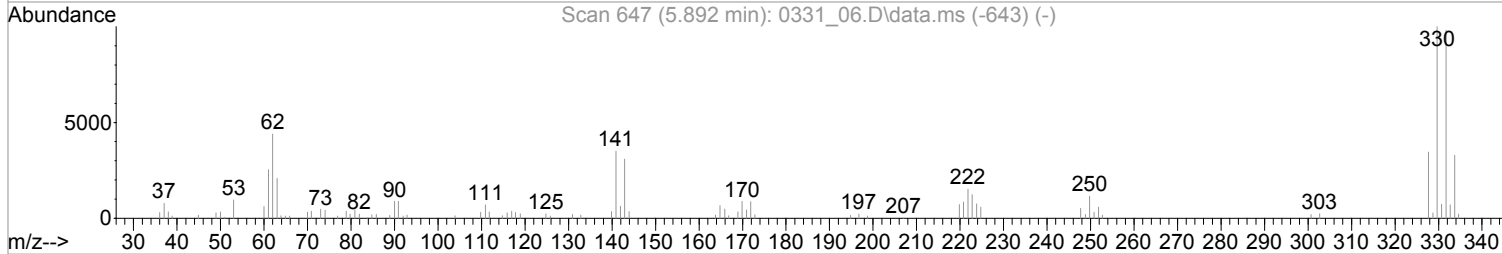
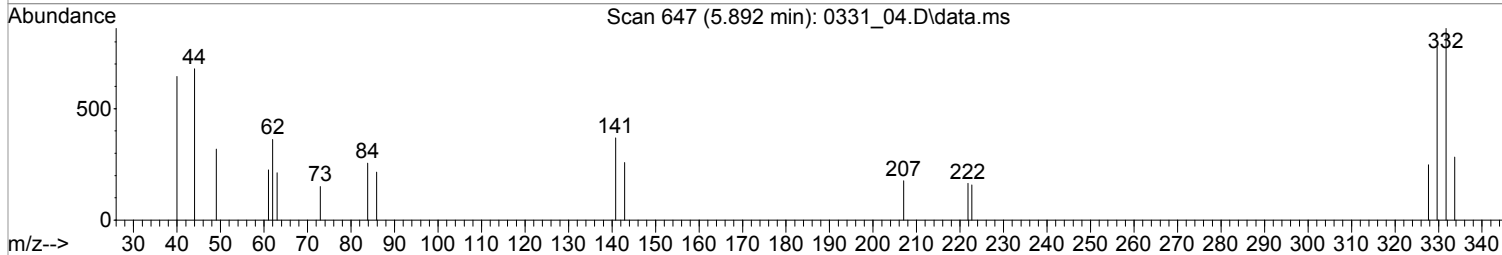
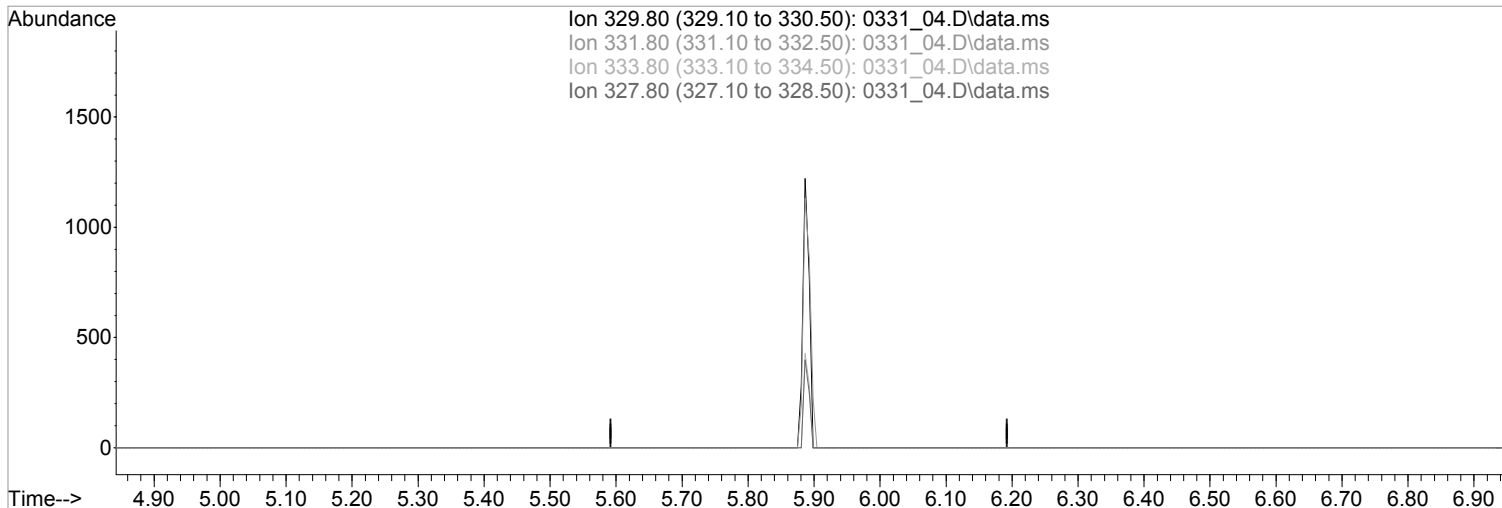
response 471

Ion	Exp%	Act%
198.00	100	100
105.10	38.30	58.36#
121.00	35.90	60.18#
51.10	39.60	94.53#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(73) 2,4,6-Tribromophenol (S)

5.892min (-5.892) 0.0000000 ppb

Qvalue = 0

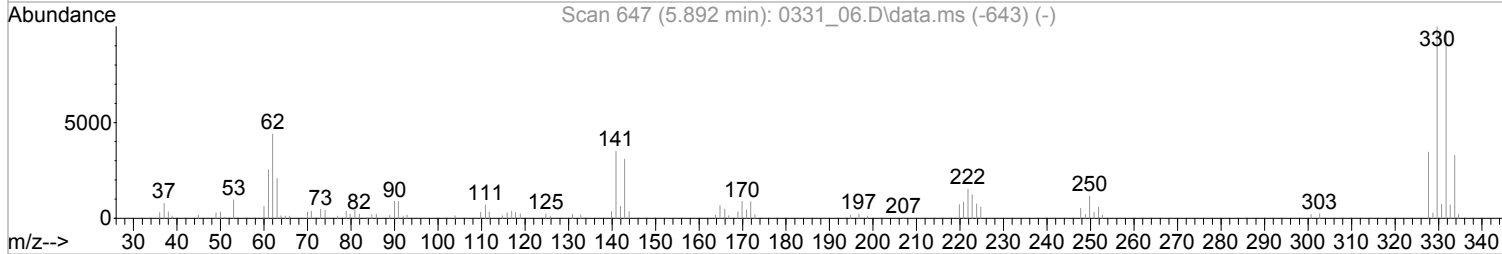
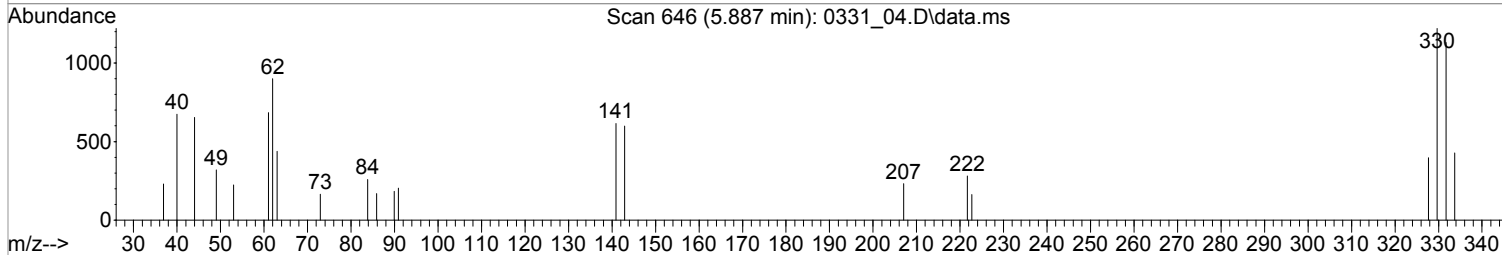
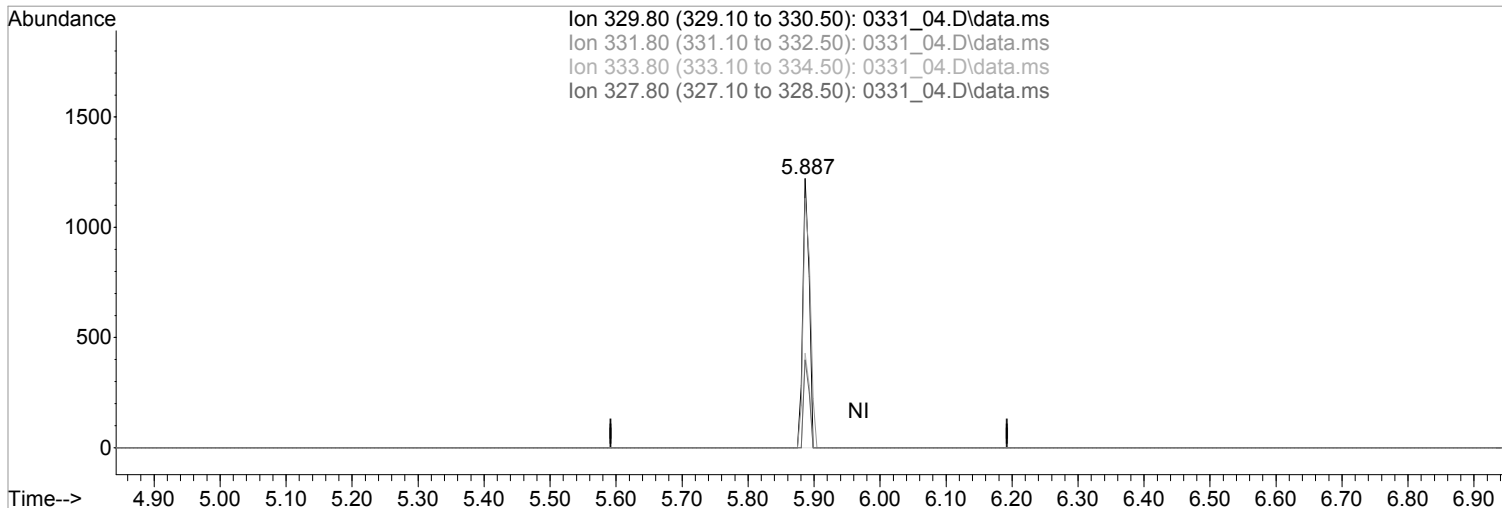
response 0

Ion	Exp%	Act%
329.80	100	0.00
331.80	98.20	0.00#
333.80	33.00	0.00#
327.80	34.60	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(73) 2,4,6-Tribromophenol (S)  
 5.887min (-0.006) 762.4927132 ppb m

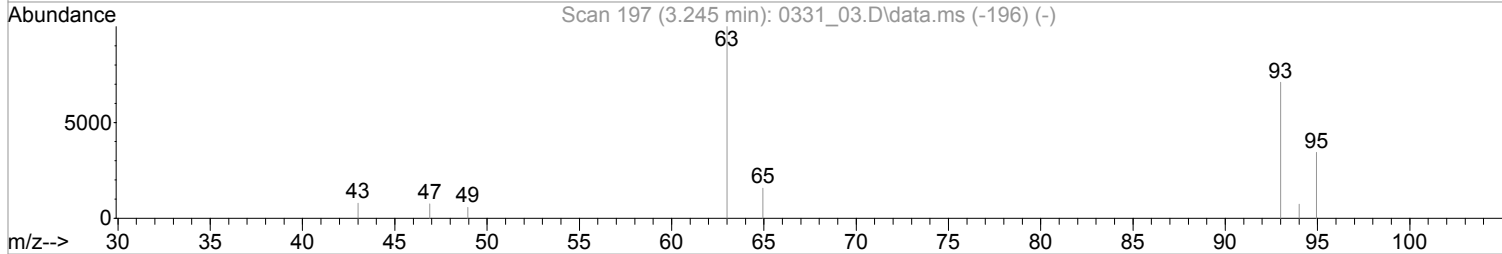
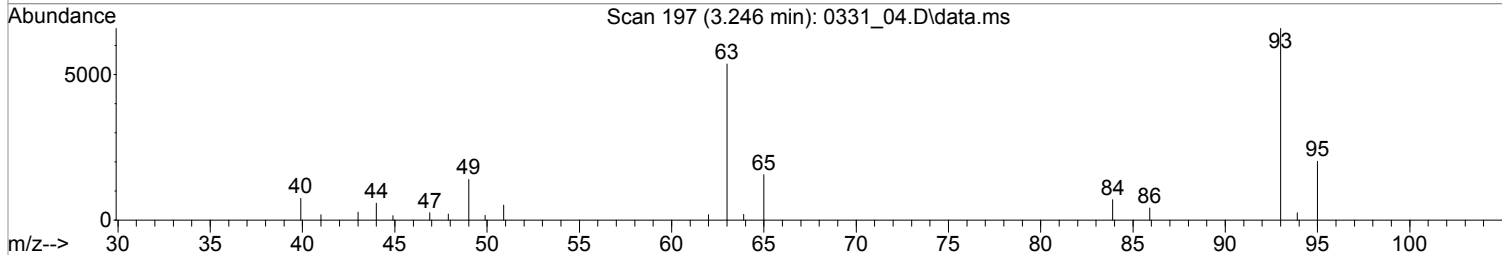
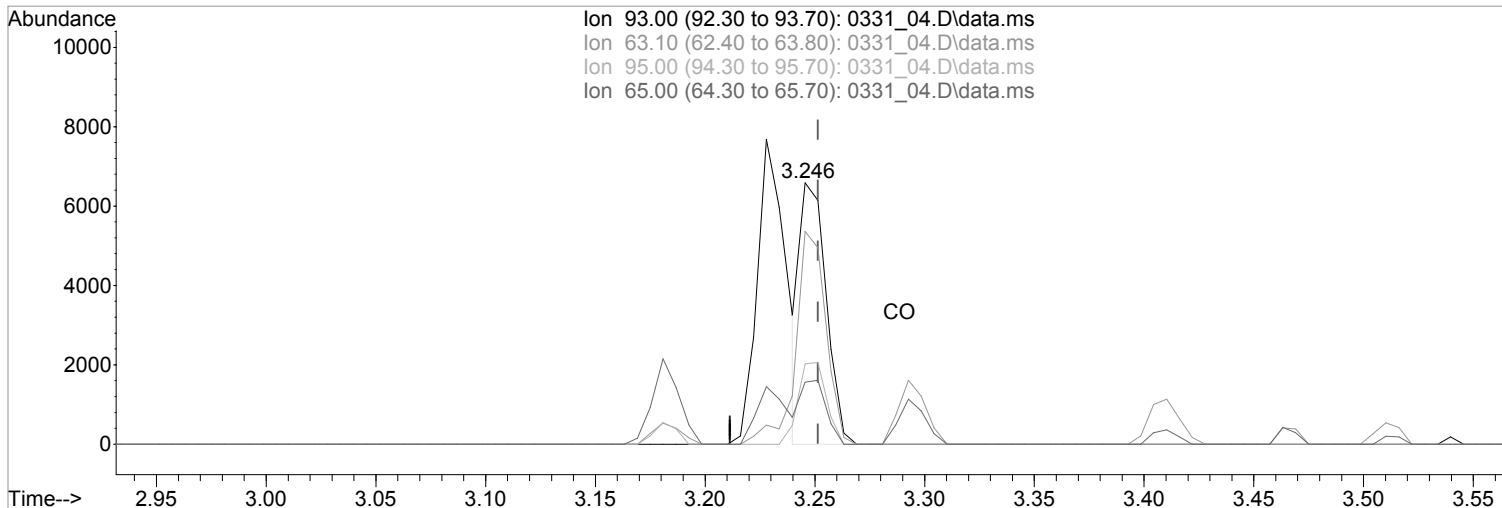
response 805

Ion	Exp%	Act%
329.80	100	100
331.80	98.20	92.62
333.80	33.00	35.08
327.80	34.60	32.62

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.246min (-0.006) 969.2851721 ppb m

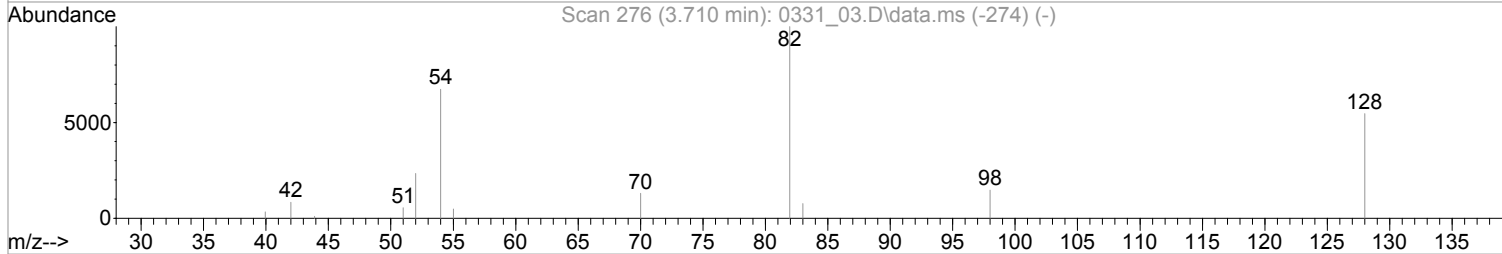
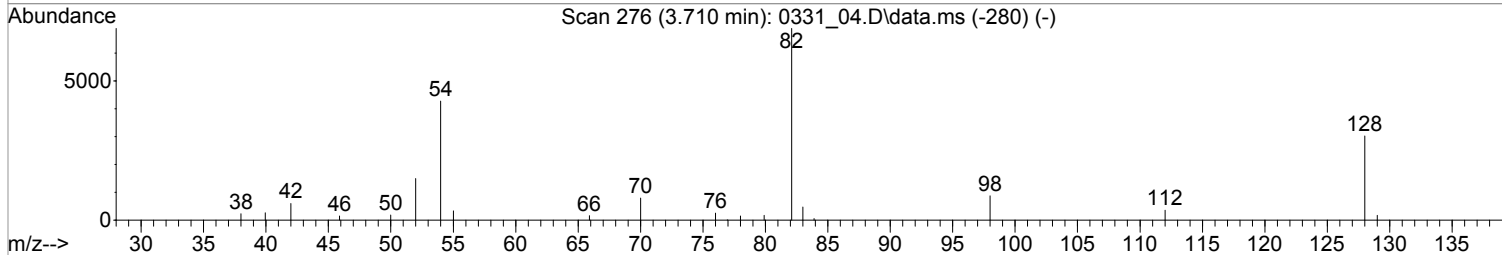
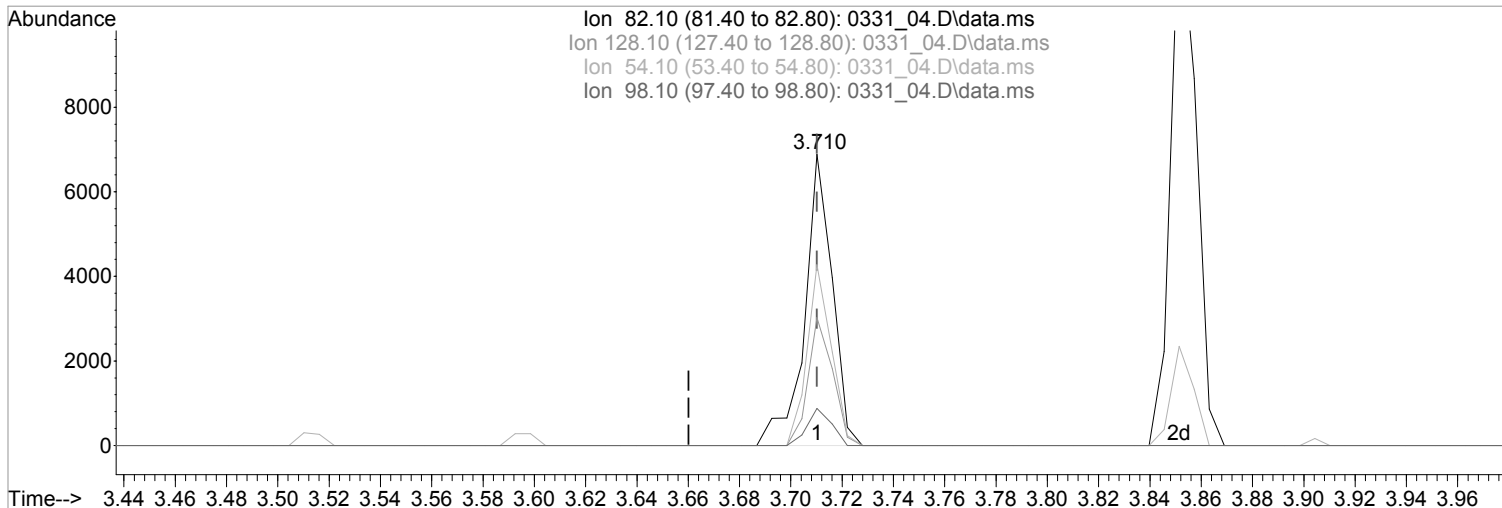
response 5429

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	81.46
95.00	31.90	30.67
65.00	23.10	23.69

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

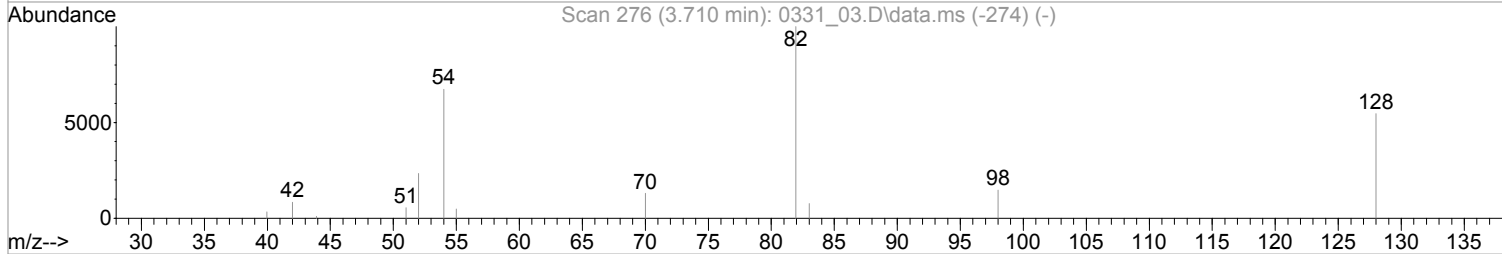
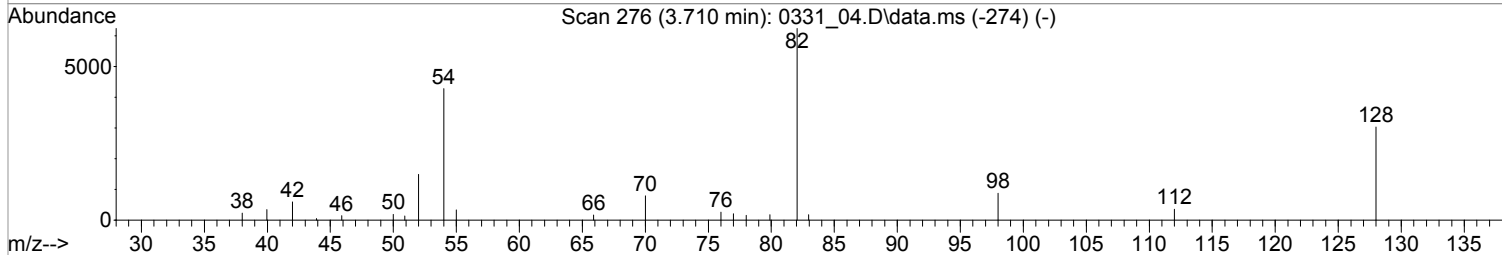
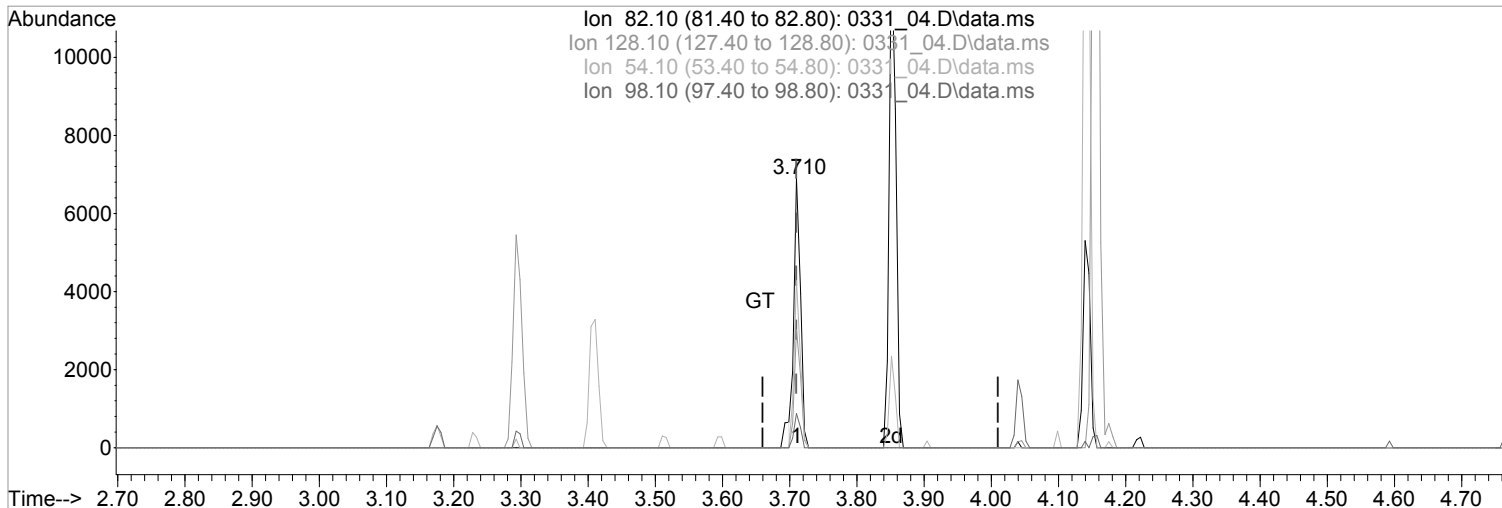
(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 1046.2030654 ppb  
 Qvalue = 97  
 response 5125

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	43.96
54.10	60.00	62.09
98.10	11.40	12.73

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 952.9123725 ppb m

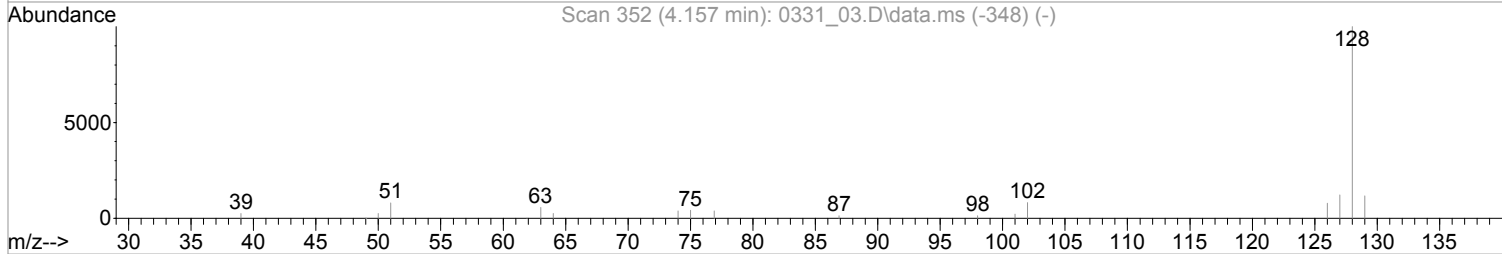
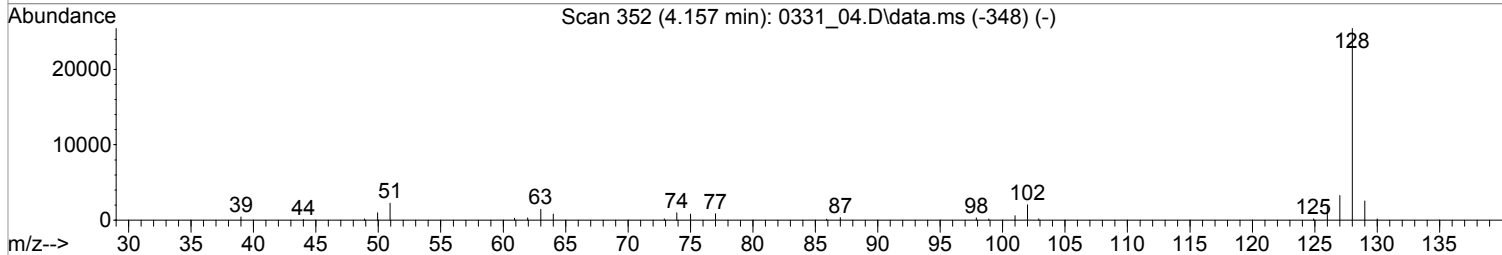
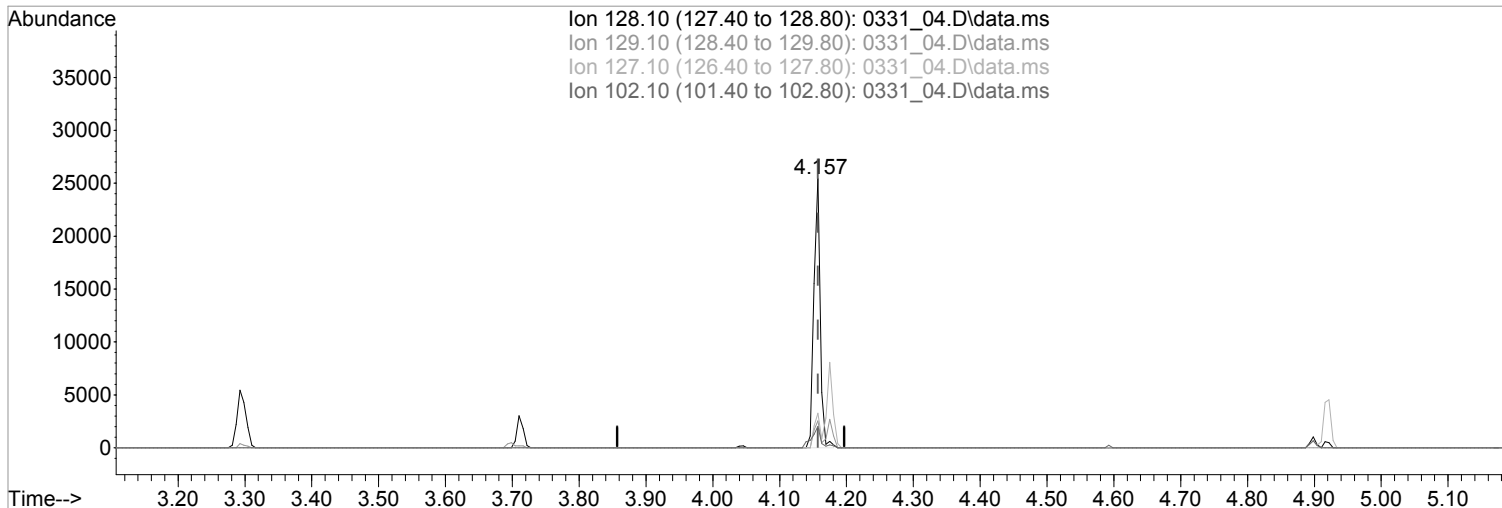
response 4668

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	43.96
54.10	60.00	62.09
98.10	11.40	12.73

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(34) Naphthalene (MT)  
 4.157min (+0.000) 1004.1869471 ppb  
 Qvalue = 99  
 response 17128

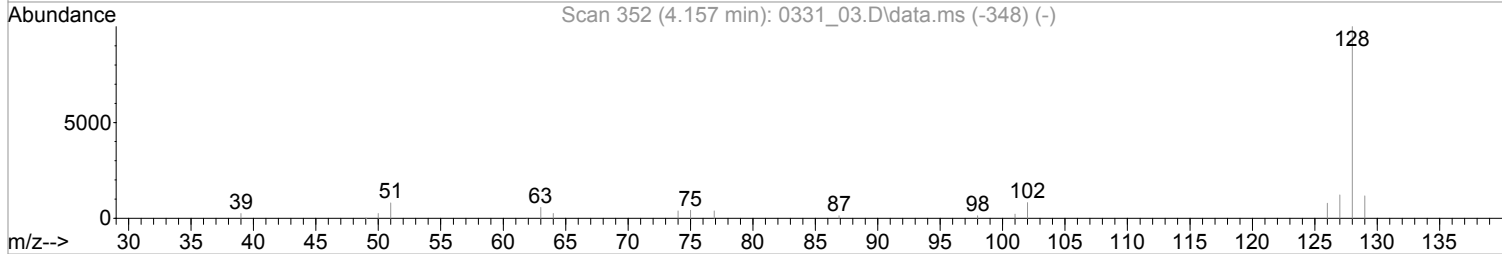
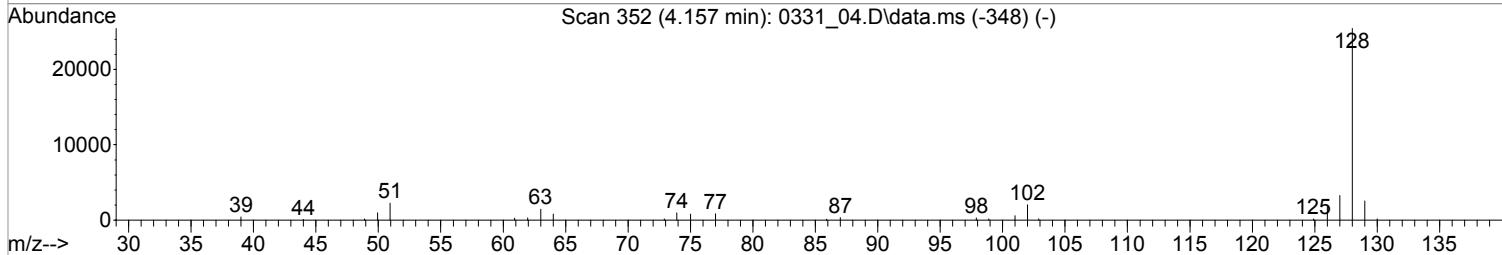
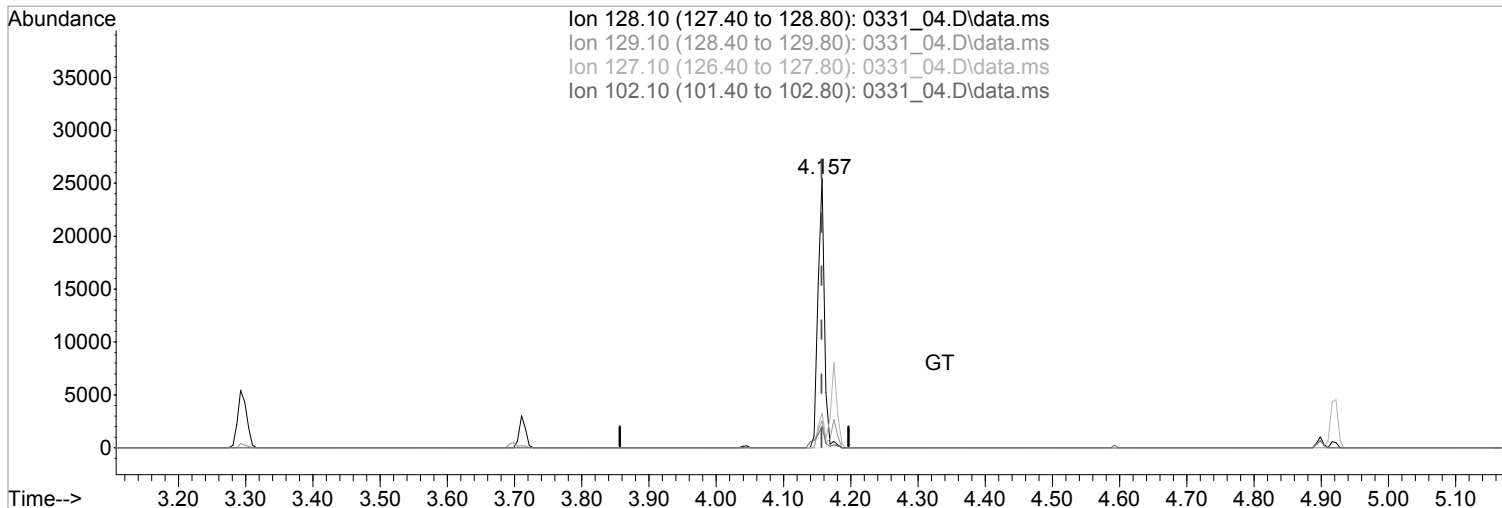
Ion	Exp%	Act%
128.10	100	100
129.10	10.90	9.95
127.10	12.80	12.89
102.10	8.30	7.98



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

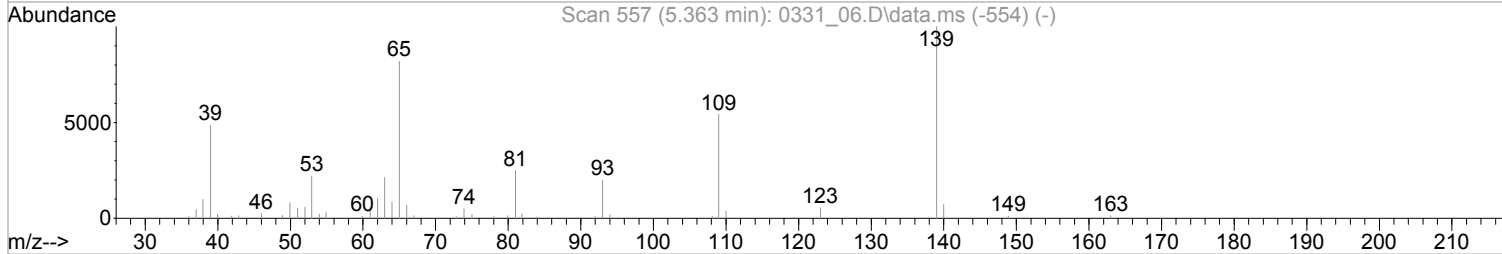
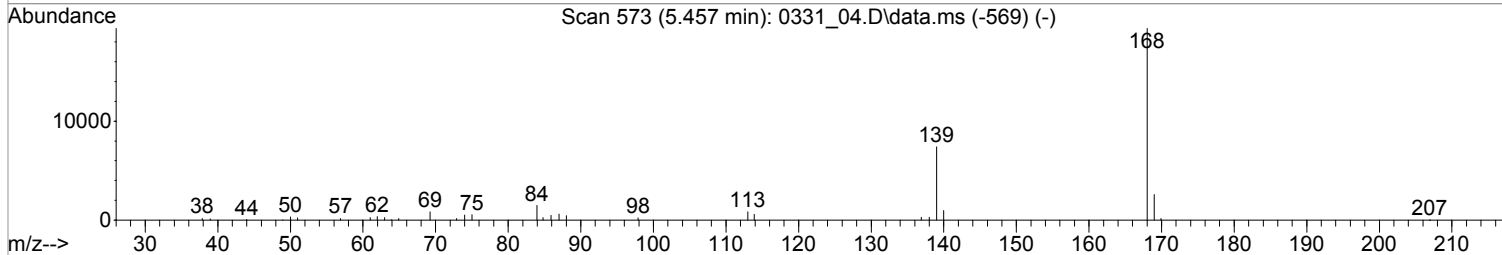
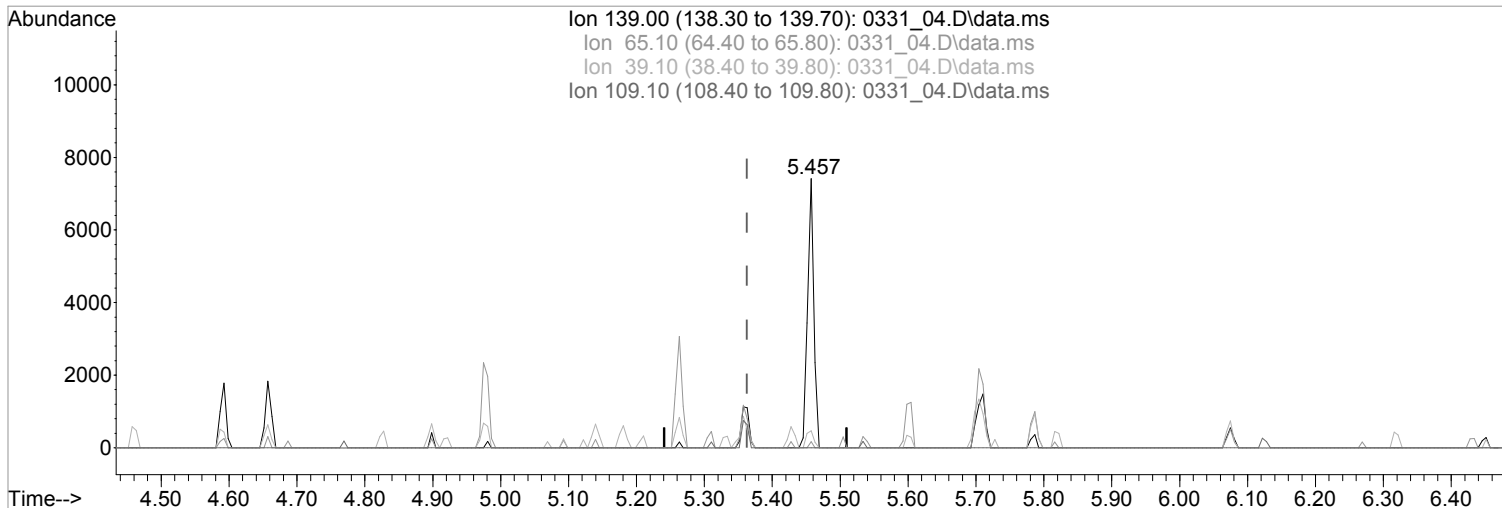
(34) Naphthalene (MT)  
 4.157min (+0.000) 985.5431213 ppb m  
 response 16810  

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	9.95
127.10	12.80	12.89
102.10	8.30	7.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(63) 4-Nitrophenol (MPT)

5.457min (+0.094) 3396.4983522 ppb

Qvalue = 22

response 4753

Ion Exp% Act%

139.00 100 100

65.10 82.10 2.23#

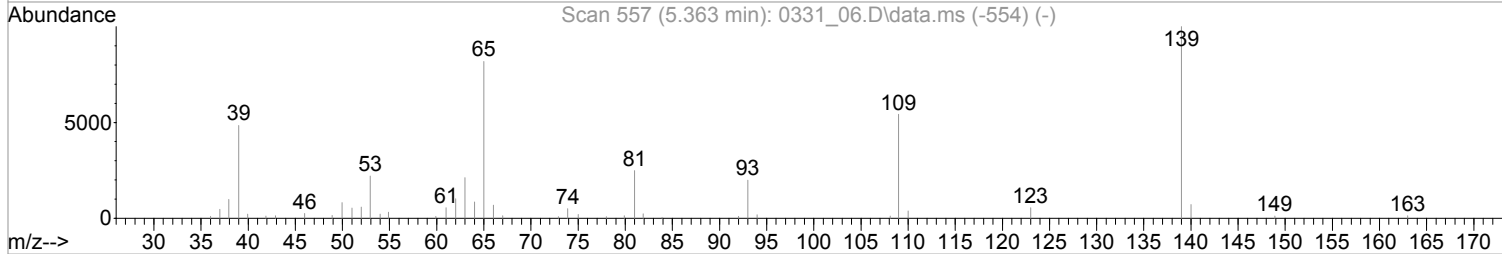
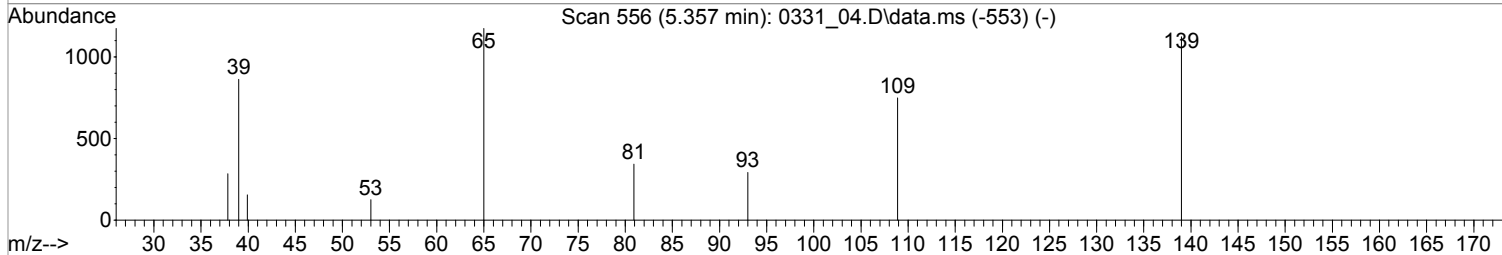
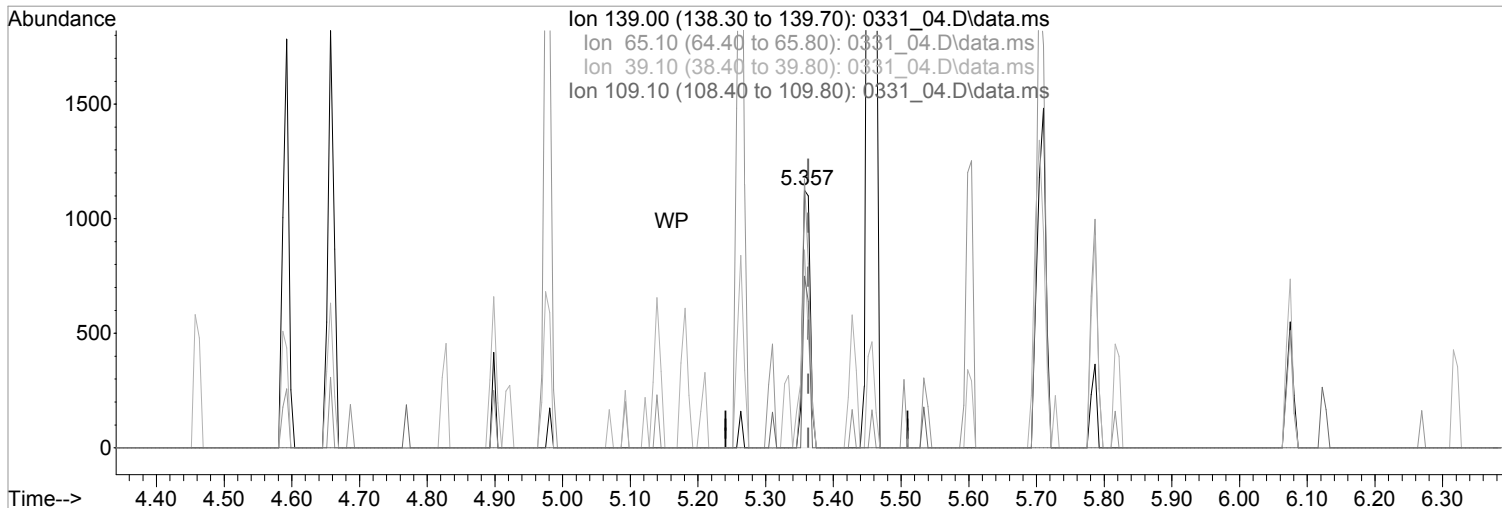
39.10 50.10 6.25#

109.10 54.20 0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(63) 4-Nitrophenol (MPT)  
 5.357min (-0.006) 644.5700639 ppb m

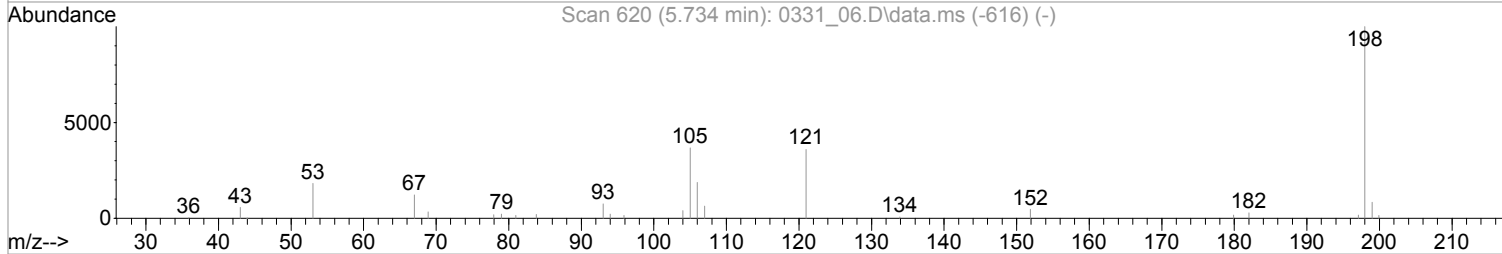
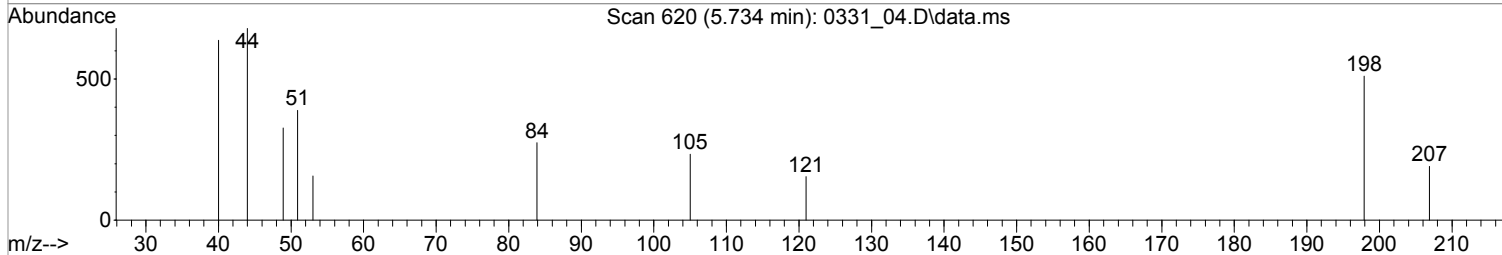
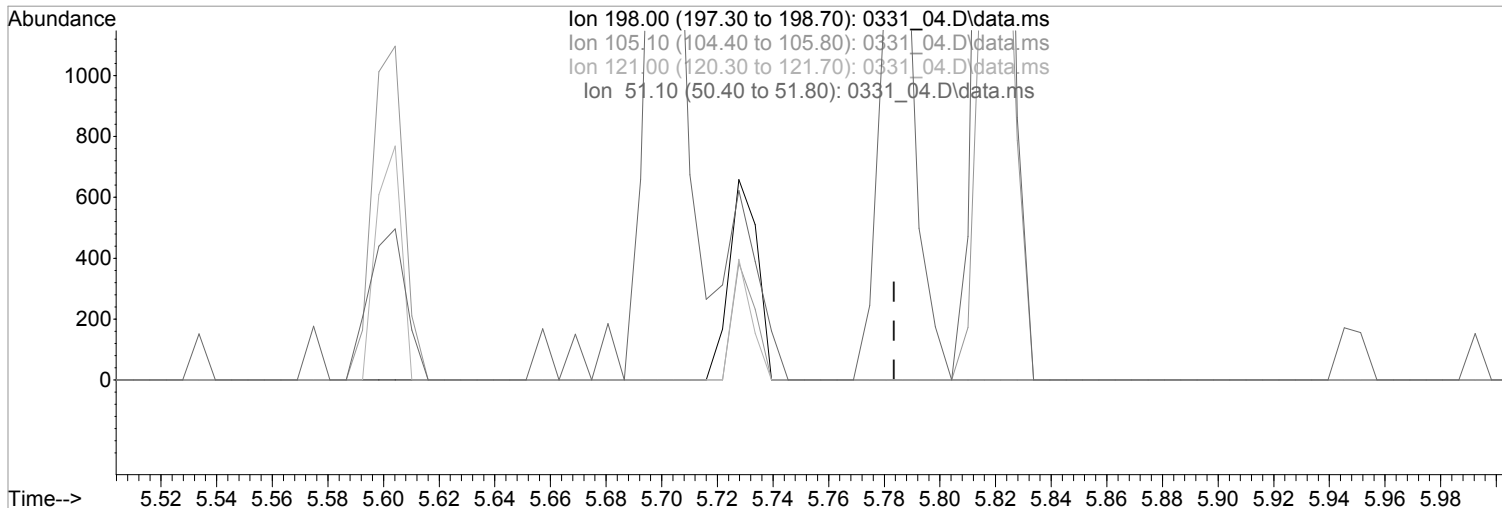
response 902

Ion	Exp%	Act%
139.00	100	100
65.10	82.10	104.45#
39.10	50.10	76.78#
109.10	54.20	66.64

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



(71) 4,6-Dinitro-2-methylphenol (MT)

5.734min (-5.734) 0.0000000 ppb

Qvalue = 0

response 0

Ion	Exp%	Act%
198.00	100	0.00
105.10	38.30	0.00#
121.00	35.90	0.00#
51.10	39.60	0.00#

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:56 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32931	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	134192	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	68434	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	110035	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	75687	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	68115	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.740	112	20022	3891.5864703	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	19.46%		
7) Phenol-d5	3.175	99	23979	3964.4247535	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	19.82%		
24) Nitrobenzene-d5	3.710	82	18889m	3716.0923649	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	37.16%		
50) 2-Fluorobiphenyl	4.828	172	43311	3761.7107736	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	37.62%		
73) 2,4,6-Tribromophenol	5.887	330	4029	4030.7044309	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	20.15%		
87) p-Terphenyl-d14	7.845	244	41873	3888.8628771	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	38.89%		
Target Compounds							
2) Pyridine	2.216	79	21534	3938.4403708	ppb	94	
3) N-Nitrosodimethylamine	2.199	42	11264	3472.0697452	ppb	95	
5) Aniline	3.228	66	11366	4105.7800811	ppb	98	
6) bis(2-Chloroethyl)ether	3.246	93	21863m	3862.9262686	ppb		
8) Phenol	3.181	94	25852	4025.6057139	ppb	98	
10) 2-Chlorophenol	3.293	128	21155	4004.6431903	ppb	98	
11) n-Decane	3.293	41	14144	3818.9599168	ppb	# 99	
12) 1,3-Dichlorobenzene	3.381	146	25164	3907.4447803	ppb	98	
13) 1,4-Dichlorobenzene	3.416	146	24933	3887.4438033	ppb	94	
14) Benzyl Alcohol	3.463	79	14813	3865.4913504	ppb	98	
15) 1,2-Dichlorobenzene	3.504	146	23998	3815.1262164	ppb	98	
16) bis(2-Chloroisopropyl)...	3.540	121	8233	3868.6994504	ppb	96	
17) 2,2-oxybis(1-chloropro...	3.540	121	8233	3868.6994504	ppb	96	
18) 2-Methylphenol	3.510	108	19393	4098.2322025	ppb	93	
19) Hexachloroethane	3.699	117	10345	3916.9383750	ppb	97	
20) N-Nitrosodi-n-propylamine	3.610	70	13250	3986.8930302	ppb	99	
21) 3&4-Methyl phenol	3.593	107	20590	3899.2085753	ppb	99	
25) Nitrobenzene	3.722	77	19872	3920.2115447	ppb	99	
26) Isophorone	3.851	82	37595	3862.4180344	ppb	99	
27) 2-Nitrophenol	3.904	139	8158	3765.4491378	ppb	97	
28) 2,4-Dimethylphenol	3.904	107	19338	3914.0923671	ppb	99	
29) bis(2-Chlorethoxy)methane	3.969	93	26704	3881.1098229	ppb	99	
30) 2,4-Dichlorophenol	4.046	162	14915	3922.8669546	ppb	97	
32) 1,2,4-Trichlorobenzene	4.104	180	18671	3739.3208108	ppb	99	
34) Naphthalene	4.157	128	66762	3730.9538948	ppb	99	
35) 4-Chloroaniline	4.175	65	6627	3995.5309124	ppb	99	
36) Hexachloro-1,3-butadiene	4.222	225	10146	3792.9384009	ppb	97	
40) 4-Chloro-3-methylphenol	4.463	107	14789	3835.8318603	ppb	97	
41) 2-Methylnaphthalene	4.593	142	41264	3847.8046515	ppb	99	
42) 1-Methylnaphthalene	4.657	142	40069	3795.6779953	ppb	99	
47) Hexachlorocyclopentadiene	4.693	237	8420	4086.1645114	ppb	98	
48) 2,4,6-Trichlorophenol	4.769	196	9486	4095.1983274	ppb	97	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

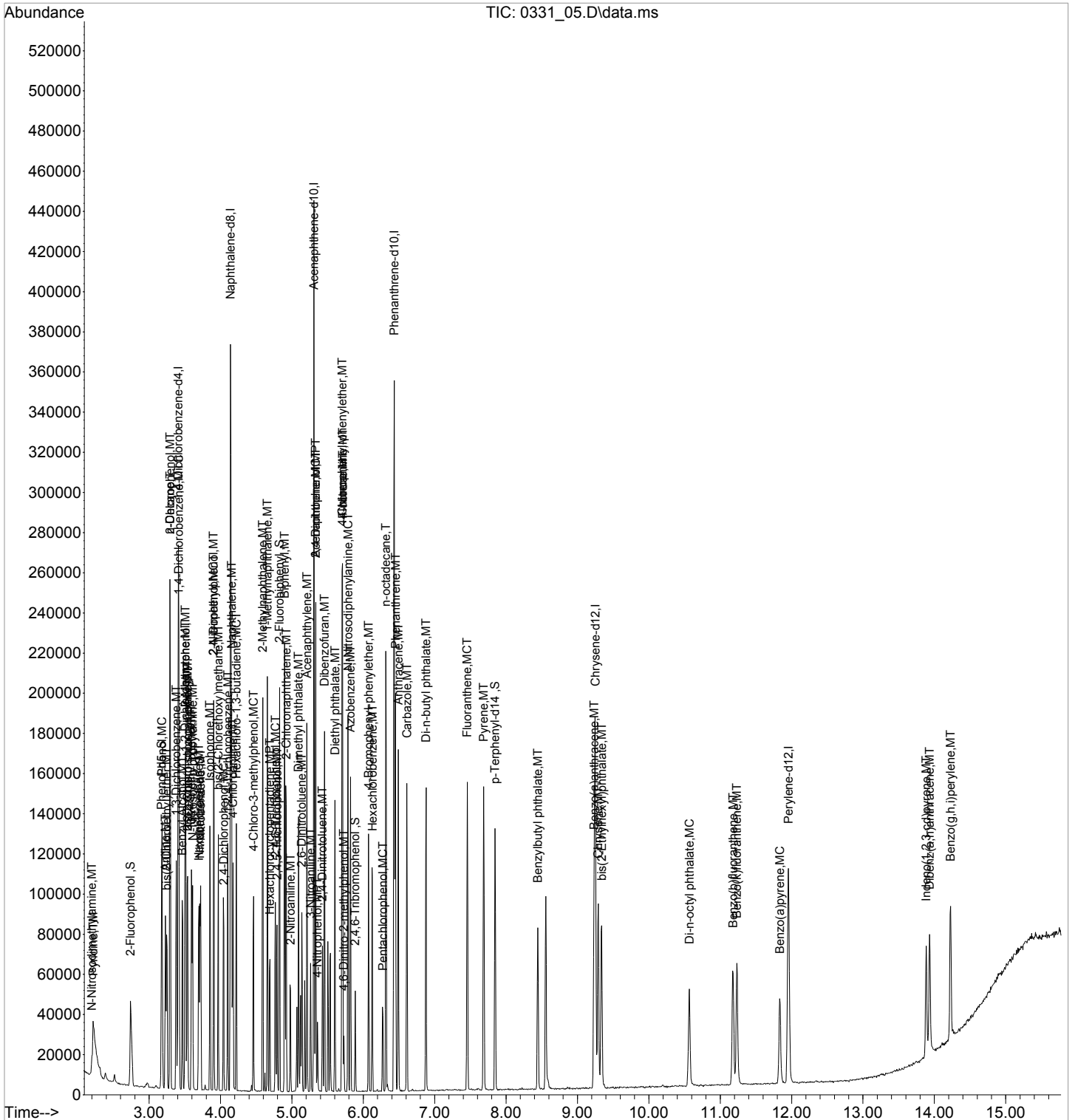
Quant Time: Apr 04 16:04:56 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.793	196	9443	4052.6426870	ppb		98
51) Biphenyl	4.898	154	48637	3783.8360827	ppb		99
52) 2-Chloronaphthalene	4.922	162	38216	3901.4979240	ppb		99
53) 2-Nitroaniline	4.981	138	8468	3715.5917121	ppb		98
54) Acenaphthylene	5.210	152	57104	3893.6362427	ppb		99
55) Dimethyl phthalate	5.093	163	41358	3976.3045598	ppb		94
56) 2,6-Dinitrotoluene	5.140	165	8241	4058.3383916	ppb		93
57) 3-Nitroaniline	5.263	138	7203	3973.0272299	ppb		97
58) Acenaphthene	5.334	153	39005	3812.6378437	ppb		99
59) 2,4-Dinitrophenol	5.334	184	1680	2974.9807456	ppb	#	1
60) Dibenzofuran	5.457	168	52497	3820.1946803	ppb		99
61) 2,4-Dinitrotoluene	5.428	165	9165	3955.2754297	ppb	#	77
63) 4-Nitrophenol	5.357	139	4753	3887.5582689	ppb	#	79
64) Fluorene	5.710	166	43283	3878.0382895	ppb		97
65) 4-Chlorophenyl-phenyle...	5.704	204	20472	3980.7165957	ppb		94
66) Diethyl phthalate	5.604	149	43240	3934.3678190	ppb		99
67) 4-Nitroaniline	5.710	138	6586	4870.9541902	ppb		96
68) Azobenzene	5.822	77	44023	4042.6599452	ppb		99
71) 4,6-Dinitro-2-methylph...	5.728	198	2707	3732.3952874	ppb	#	74
72) N-Nitrosodiphenylamine	5.787	169	33745	3976.2689220	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	10458	3934.5051940	ppb		94
75) Hexachlorobenzene	6.128	284	12174	3745.1457104	ppb		98
76) n-octadecane	6.316	55	8008	3901.5281337	ppb	#	96
77) Pentachlorophenol	6.275	266	4167	3264.5837369	ppb		98
78) Phenanthrene	6.451	178	58086	3771.2225902	ppb		99
79) Anthracene	6.492	178	54209	3942.0610534	ppb		99
80) Carbazole	6.610	167	46540	4035.1322148	ppb		99
81) Di-n-butyl phthalate	6.881	149	66469	4091.3433685	ppb		100
83) Fluoranthene	7.457	202	54696	3935.3597347	ppb		100
86) Pyrene	7.687	202	57163	3814.3474206	ppb		99
88) Benzylbutyl phthalate	8.445	149	21276	4173.7997939	ppb		99
90) Benzo(a)anthracene	9.233	228	40230	3881.3641678	ppb		98
91) Chrysene	9.292	228	44552	3860.0833542	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.339	149	31447	4260.6941032	ppb		98
93) Di-n-octyl phthalate	10.569	149	41318	4058.3889660	ppb		98
95) Benzo(b)fluoranthene	11.180	252	38068	4038.8782196	ppb		98
96) Benzo(k)fluoranthene	11.233	252	40040	4172.0316530	ppb		99
97) Benzo(a)pyrene	11.833	252	29980	4117.7691399	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.886	276	27978	4070.8609426	ppb		97
99) Dibenz(a,h)anthracene	13.933	278	32250	4143.8879049	ppb		98
100) Benzo(g,h,i)perylene	14.227	276	34820	4106.9338075	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_05.D  
Acq On : 31 Mar 2022 6:07 pm  
Operator : 3545  
Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 5 Sample Multiplier: 1

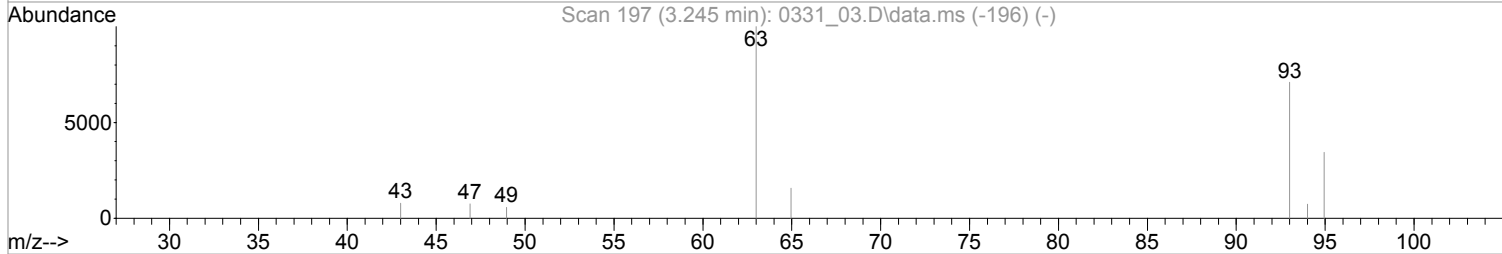
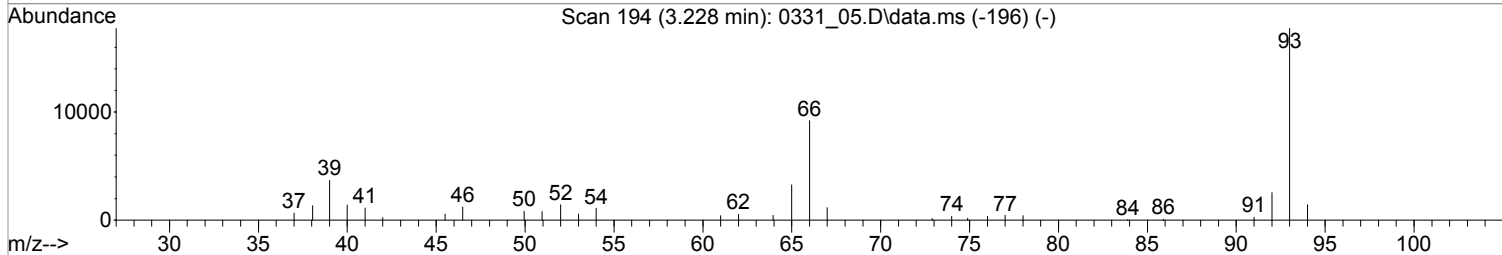
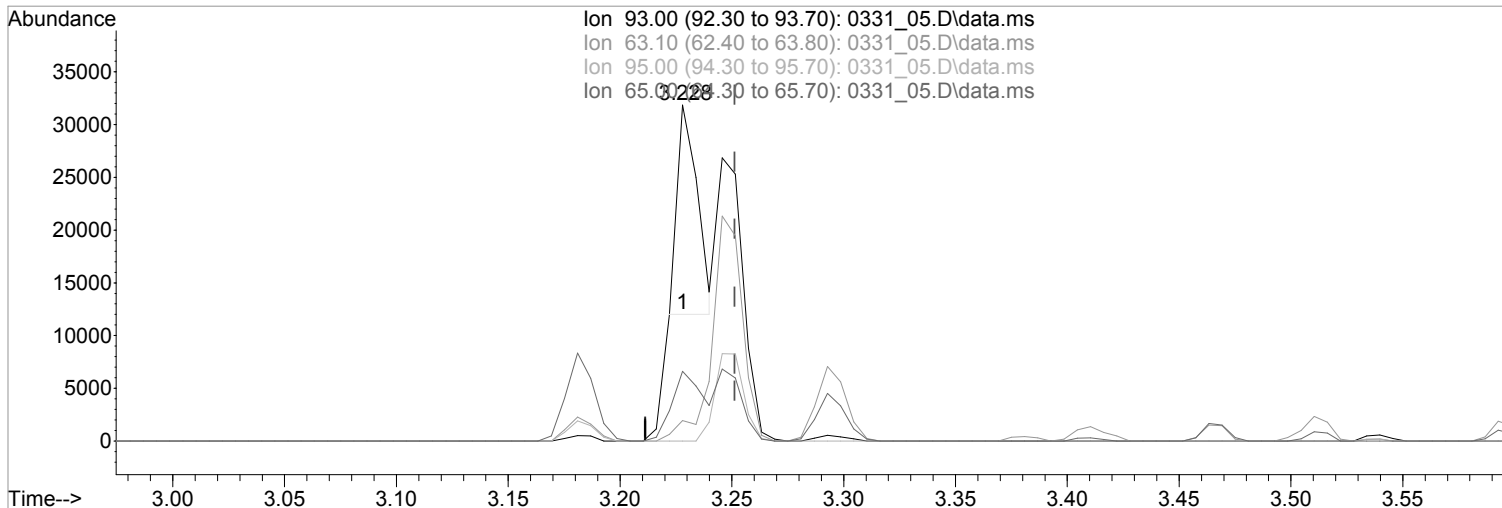
Quant Time: Apr 04 16:04:56 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:04:13 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.023) 2176.4408259 ppb  
 Qvalue = 37  
 response 12318

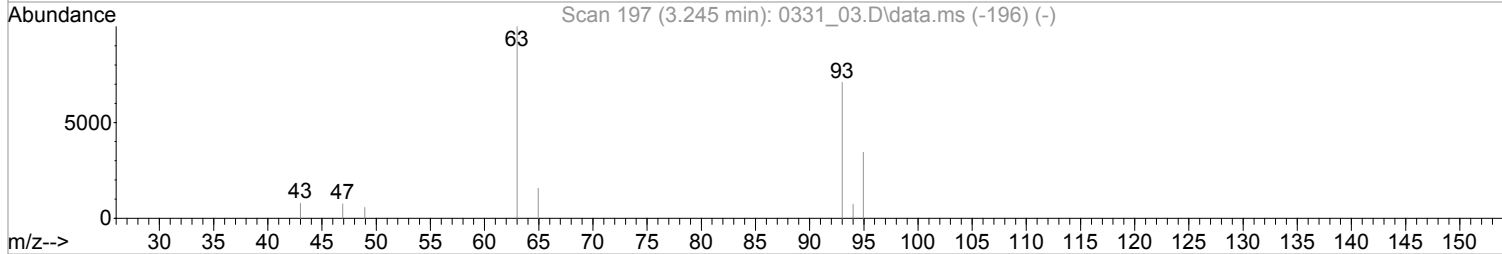
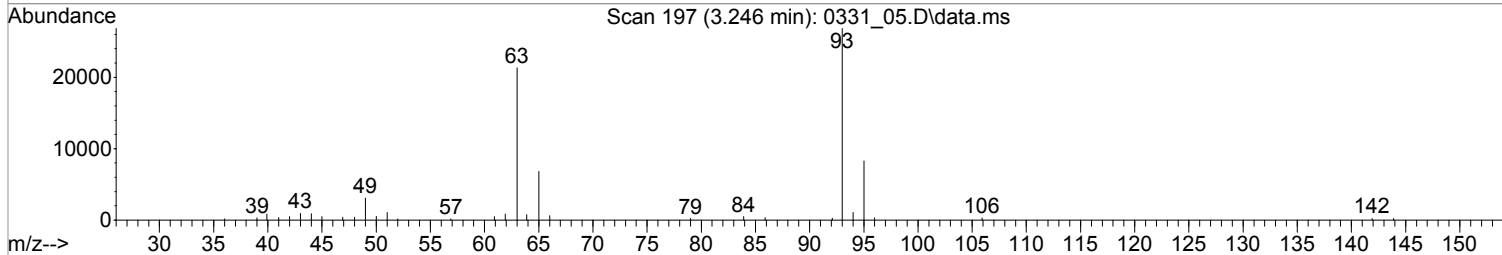
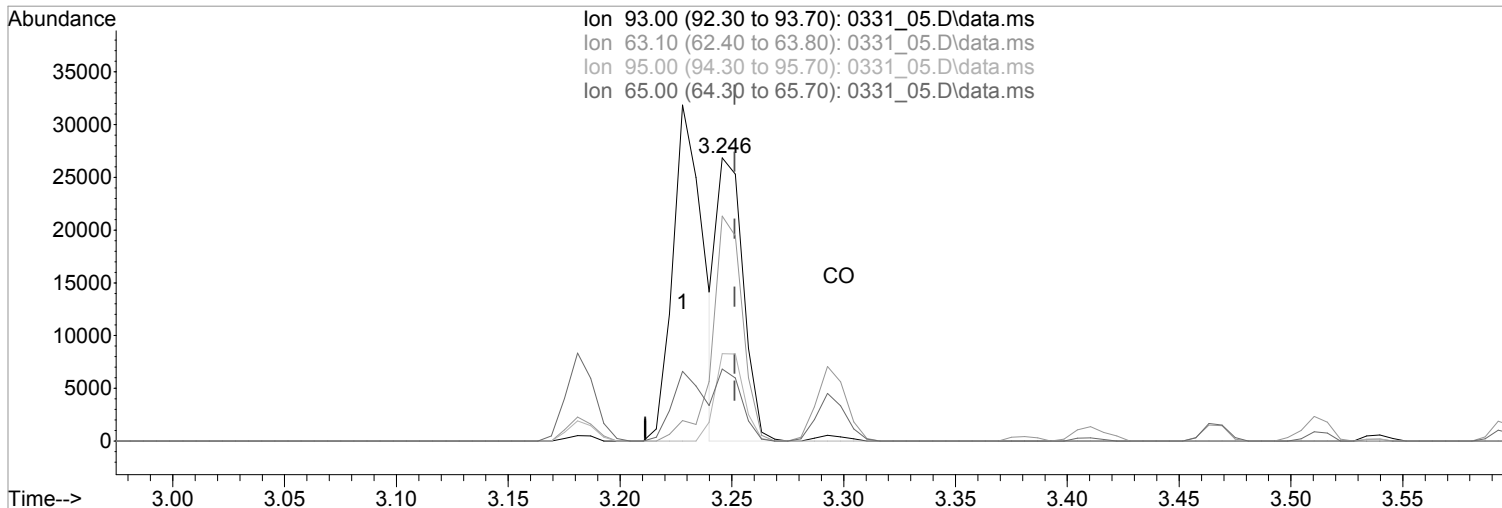
Ion	Exp%	Act%
93.00	100	100
63.10	76.00	6.47#
95.00	31.90	0.00#
65.00	23.10	18.86



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.246min (-0.006) 3862.9262686 ppb m

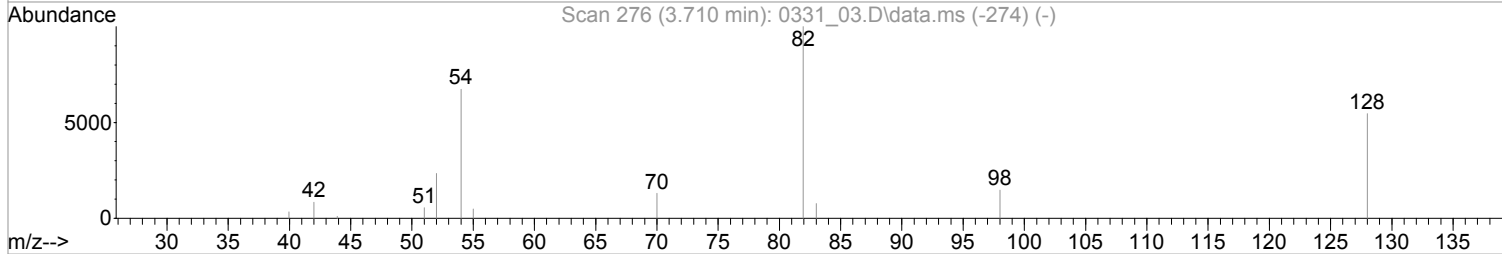
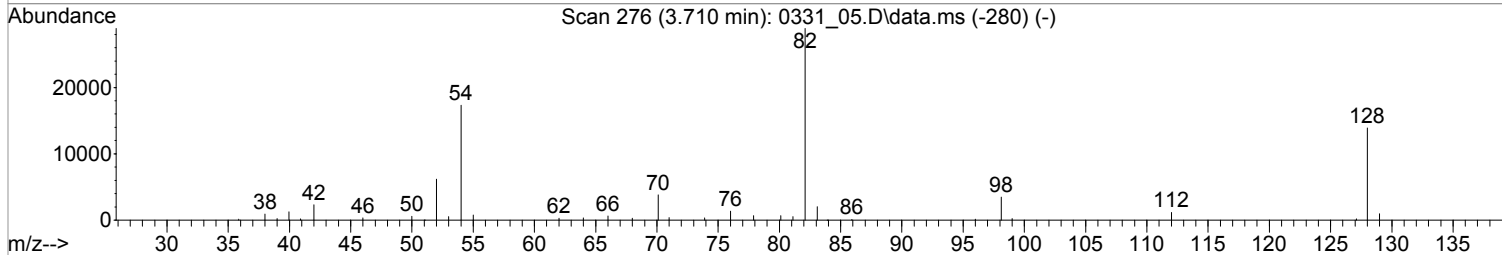
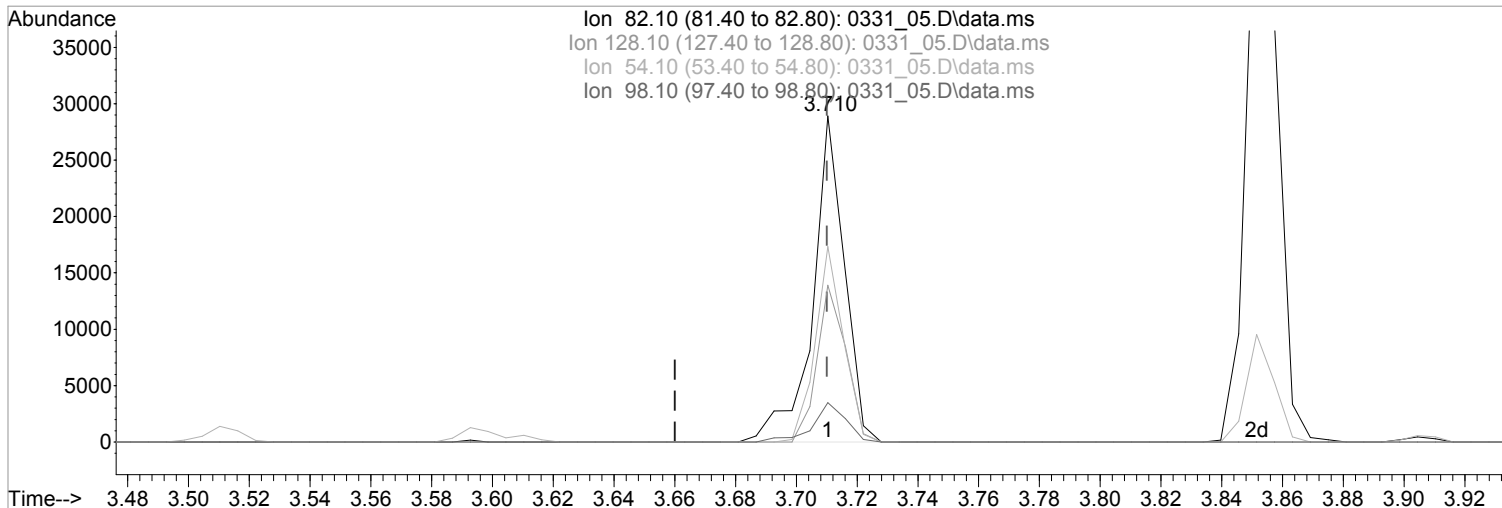
response 21863

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	79.43
95.00	31.90	30.91
65.00	23.10	25.46

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

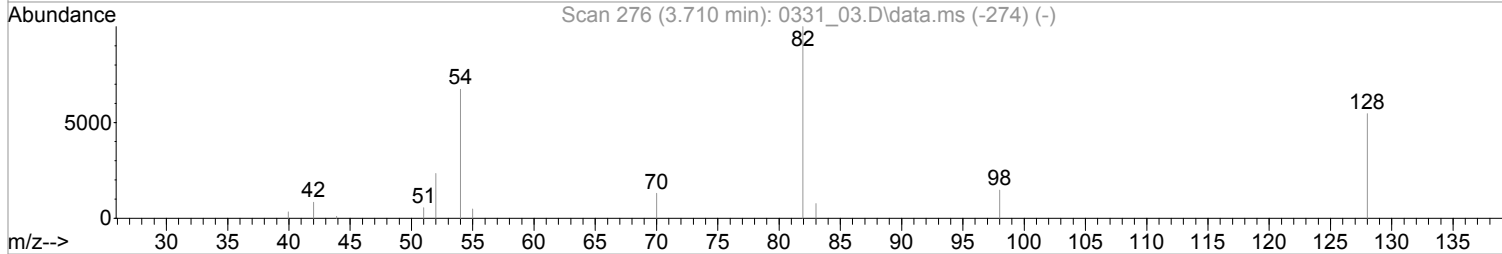
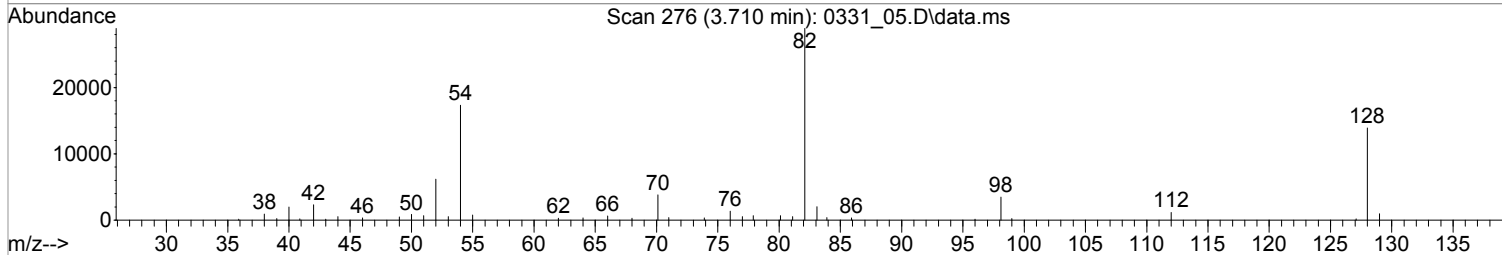
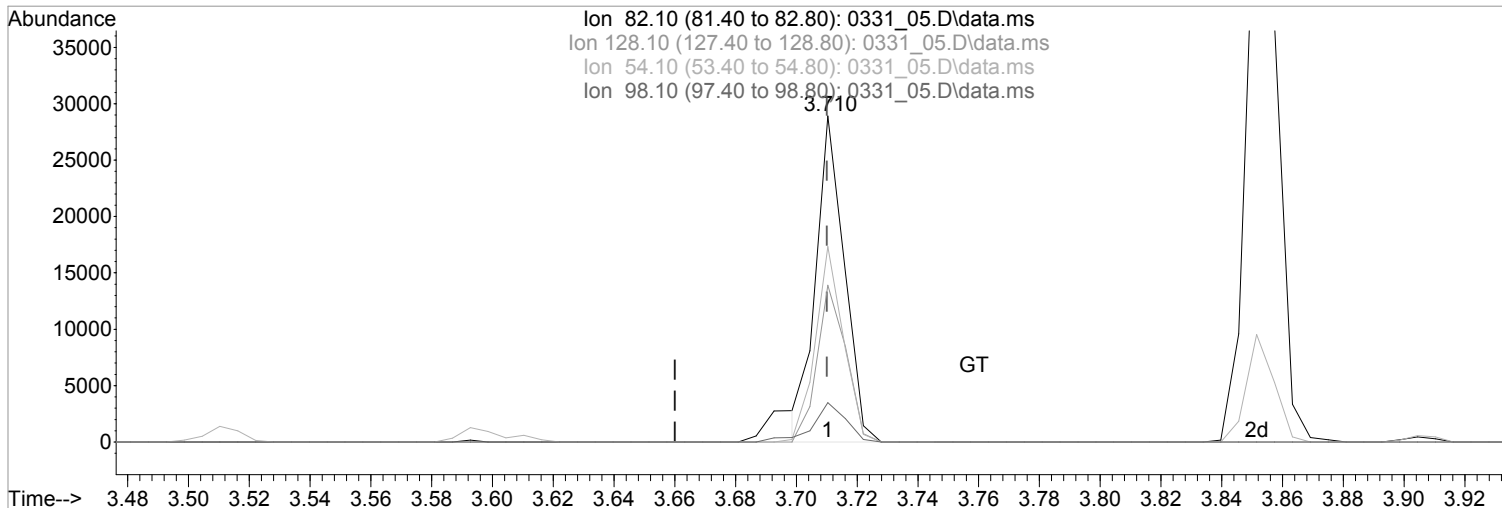
(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 4137.4947602 ppb  
 Qvalue = 99  
 response 21031

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	48.14
54.10	60.00	60.01
98.10	11.40	12.09

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 3716.0923649 ppb m

response 18889

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	48.14
54.10	60.00	60.01
98.10	11.40	12.09

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:57:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	31797	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	129715	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	67221	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	109300	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	79132	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	68335	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.740	112	50347	10000.0000000	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	50.00%		
7) Phenol-d5	3.175	99	59979	10000.0000000	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	50.00%		
24) Nitrobenzene-d5	3.710	82	48718m	10000.0000000	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	100.00%		
50) 2-Fluorobiphenyl	4.828	172	108502	10000.0000000	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	100.00%		
73) 2,4,6-Tribromophenol	5.892	330	11267	10000.0000000	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	50.00%		
87) p-Terphenyl-d14	7.845	244	110355	10000.0000000	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	100.00%		
Target Compounds							
2) Pyridine	2.216	79	54038	10000.0000000	ppb	100	
3) N-Nitrosodimethylamine	2.199	42	26952	10000.0000000	ppb	100	
5) Aniline	3.228	66	28243	10000.0000000	ppb	100	
6) bis(2-Chloroethyl)ether	3.251	93	54390m	10000.0000000	ppb	100	
8) Phenol	3.181	94	63496	10000.0000000	ppb	100	
10) 2-Chlorophenol	3.293	128	53448	10000.0000000	ppb	100	
11) n-Decane	3.293	41	33867	10000.0000000	ppb	100	#
12) 1,3-Dichlorobenzene	3.381	146	60750	10000.0000000	ppb	100	
13) 1,4-Dichlorobenzene	3.422	146	60988	10000.0000000	ppb	100	
14) Benzyl Alcohol	3.469	79	38840	10000.0000000	ppb	100	
15) 1,2-Dichlorobenzene	3.504	146	58396	10000.0000000	ppb	100	
16) bis(2-Chloroisopropyl)...	3.540	121	20161	10000.0000000	ppb	100	
17) 2,2-oxybis(1-chloropro...	3.540	121	20161	10000.0000000	ppb	100	
18) 2-Methylphenol	3.516	108	49043	10000.0000000	ppb	100	
19) Hexachloroethane	3.698	117	25235	10000.0000000	ppb	100	
20) N-Nitrosodi-n-propylamine	3.610	70	33756	10000.0000000	ppb	100	
21) 3&4-Methyl phenol	3.593	107	53628	10000.0000000	ppb	100	
25) Nitrobenzene	3.722	77	51043	10000.0000000	ppb	100	
26) Isophorone	3.851	82	98776	10000.0000000	ppb	100	
27) 2-Nitrophenol	3.904	139	23329	10000.0000000	ppb	100	
28) 2,4-Dimethylphenol	3.904	107	50267	10000.0000000	ppb	100	
29) bis(2-Chloroethoxy)methane	3.969	93	66470	10000.0000000	ppb	100	
30) 2,4-Dichlorophenol	4.045	162	39336	10000.0000000	ppb	100	
32) 1,2,4-Trichlorobenzene	4.104	180	45914	10000.0000000	ppb	100	
34) Naphthalene	4.157	128	164019	10000.0000000	ppb	100	
35) 4-Chloroaniline	4.175	65	16770	10000.0000000	ppb	100	
36) Hexachloro-1,3-butadiene	4.222	225	24753	10000.0000000	ppb	100	
40) 4-Chloro-3-methylphenol	4.463	107	39997	10000.0000000	ppb	100	
41) 2-Methylnaphthalene	4.593	142	102616	10000.0000000	ppb	100	
42) 1-Methylnaphthalene	4.657	142	98949	10000.0000000	ppb	100	
47) Hexachlorocyclopentadiene	4.692	237	21949	10000.0000000	ppb	100	
48) 2,4,6-Trichlorophenol	4.769	196	25822	10000.0000000	ppb	100	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

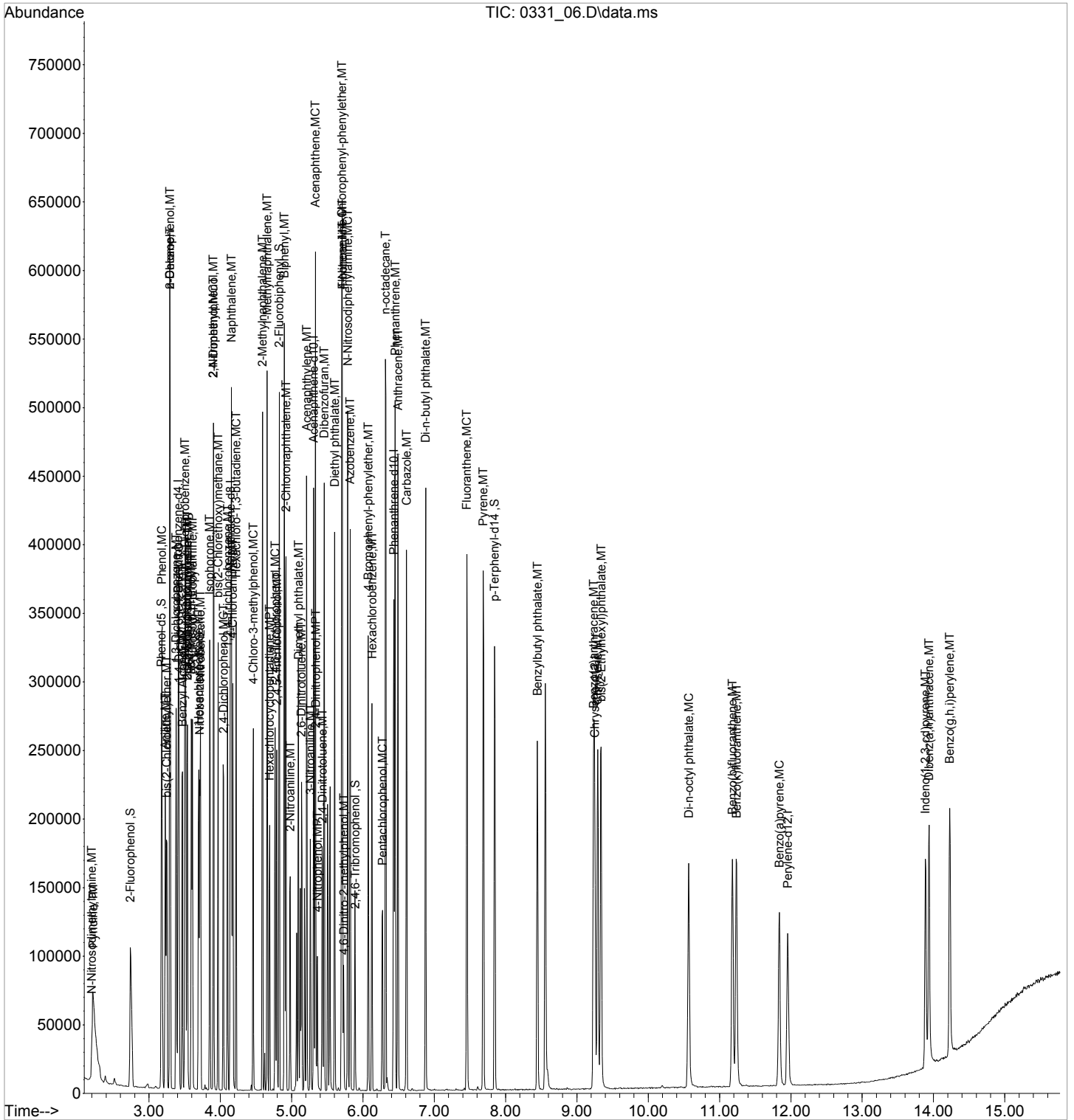
Quant Time: Apr 04 15:57:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
49) 2,4,5-Trichlorophenol	4.792	196	26746	10000.0000000	ppb	100
51) Biphenyl	4.898	154	121171	10000.0000000	ppb	100
52) 2-Chloronaphthalene	4.922	162	94566	10000.0000000	ppb	100
53) 2-Nitroaniline	4.981	138	25298	10000.0000000	ppb	100
54) Acenaphthylene	5.210	152	144849	10000.0000000	ppb	100
55) Dimethyl phthalate	5.098	163	106912	10000.0000000	ppb	100
56) 2,6-Dinitrotoluene	5.140	165	22620	10000.0000000	ppb	100
57) 3-Nitroaniline	5.263	138	20734	10000.0000000	ppb	100
58) Acenaphthene	5.334	153	96185	10000.0000000	ppb	100
59) 2,4-Dinitrophenol	5.340	184	5547	10000.0000000	ppb	100
60) Dibenzofuran	5.457	168	130881	10000.0000000	ppb	100
61) 2,4-Dinitrotoluene	5.434	165	27080	10000.0000000	ppb	100
63) 4-Nitrophenol	5.363	139	14605	10000.0000000	ppb	100
64) Fluorene	5.710	166	109752	10000.0000000	ppb	100
65) 4-Chlorophenyl-phenyle...	5.704	204	48947	10000.0000000	ppb	100
66) Diethyl phthalate	5.604	149	113139	10000.0000000	ppb	100
67) 4-Nitroaniline	5.710	138	12473	10000.0000000	ppb	100
68) Azobenzene	5.822	77	113978	10000.0000000	ppb	100
71) 4,6-Dinitro-2-methylph...	5.734	198	9382	10000.0000000	ppb	100
72) N-Nitrosodiphenylamine	5.787	169	86982	10000.0000000	ppb	100
74) 4-Bromophenyl-phenylether	6.075	248	26064	10000.0000000	ppb	100
75) Hexachlorobenzene	6.128	284	30132	10000.0000000	ppb	100
76) n-octadecane	6.316	55	20176	10000.0000000	ppb	100
77) Pentachlorophenol	6.275	266	12679	10000.0000000	ppb	100
78) Phenanthrene	6.451	178	144135	10000.0000000	ppb	100
79) Anthracene	6.492	178	140337	10000.0000000	ppb	100
80) Carbazole	6.610	167	120779	10000.0000000	ppb	100
81) Di-n-butyl phthalate	6.881	149	183487	10000.0000000	ppb	100
83) Fluoranthene	7.457	202	143797	10000.0000000	ppb	100
86) Pyrene	7.686	202	148972	10000.0000000	ppb	100
88) Benzylbutyl phthalate	8.445	149	64438	10000.0000000	ppb	100
90) Benzo(a)anthracene	9.233	228	110985	10000.0000000	ppb	100
91) Chrysene	9.292	228	116952	9997.5209649	ppb	100
92) bis(2-Ethylhexyl)phtha...	9.339	149	96218	10000.0000000	ppb	100
93) Di-n-octyl phthalate	10.569	149	134897	10000.0000000	ppb	100
95) Benzo(b)fluoranthene	11.180	252	103049	10000.0000000	ppb	100
96) Benzo(k)fluoranthene	11.239	252	109958	10000.0000000	ppb	100
97) Benzo(a)pyrene	11.839	252	85063	10000.0000000	ppb	100
98) Indeno(1,2,3-cd)pyrene	13.886	276	77280	10000.0000000	ppb	100
99) Dibenz(a,h)anthracene	13.939	278	87499	10000.0000000	ppb	100
100) Benzo(g,h,i)perylene	14.227	276	94402	10000.0000000	ppb	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_06.D  
Acq On : 31 Mar 2022 6:28 pm  
Operator : 3545  
Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:57:16 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 15:56:28 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\042922B\  
 Data File : 0429B\_02.D  
 Acq On : 29 Apr 2022 5:31 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 29 19:29:41 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.343	152	34721	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.072	136	141814	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.237	164	72983	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.348	188	122329	8000.0000000	ppb	0.00
84) Chrysene-d12	9.113	240	94191	8000.0000000	ppb	0.00
94) Perylene-d12	11.766	264	87365	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.678	112	51787	9526.5470780	ppb	0.00
Spiked Amount	20000.000		Recovery	=	47.63%	
7) Phenol-d5	3.113	99	62394	9673.7789380	ppb	0.00
Spiked Amount	20000.000		Recovery	=	48.37%	
24) Nitrobenzene-d5	3.648	82	53608m	9939.9649697	ppb	0.00
Spiked Amount	10000.000		Recovery	=	99.40%	
50) 2-Fluorobiphenyl	4.754	172	110751	9556.0525709	ppb	0.00
Spiked Amount	10000.000		Recovery	=	95.56%	
73) 2,4,6-Tribromophenol	5.813	330	12747	9946.0609950	ppb	0.00
Spiked Amount	20000.000		Recovery	=	49.73%	
87) p-Terphenyl-d14	7.736	244	121362	9310.8734599	ppb	0.00
Spiked Amount	10000.000		Recovery	=	93.11%	
<b>Target Compounds</b>						
2) Pyridine	2.149	79	53826	9347.1354793	ppb	97
3) N-Nitrosodimethylamine	2.131	42	24901	8213.8766926	ppb	93
5) Aniline	3.166	66	30037	10064.5052197	ppb	# 24
6) bis(2-Chloroethyl)ether	3.184	93	59920m	10205.4074214	ppb	
8) Phenol	3.119	94	66790	9768.4580572	ppb	96
10) 2-Chlorophenol	3.231	128	55720	9785.6997436	ppb	93
11) n-Decane	3.225	41	30829	8422.3241625	ppb	# 96
12) 1,3-Dichlorobenzene	3.313	146	61737	9460.6674667	ppb	99
13) 1,4-Dichlorobenzene	3.354	146	62717	9601.6296348	ppb	99
14) Benzyl Alcohol	3.401	79	41147	9865.3111340	ppb	99
15) 1,2-Dichlorobenzene	3.437	146	59098	9383.6062355	ppb	99
16) bis(2-Chloroisopropyl)...	3.472	121	19823	9114.7355717	ppb	92
17) 2,2-oxybis(1-chloropro...	3.472	121	19823	9114.7355717	ppb	92
18) 2-Methylphenol	3.448	108	51422	10040.6622639	ppb	97
19) Hexachloroethane	3.625	117	25427	9335.2205902	ppb	94
20) N-Nitrosodi-n-propylamine	3.543	70	35264	9681.1510235	ppb	99
21) 3&4-Methyl phenol	3.531	107	55759	9869.7553944	ppb	99
25) Nitrobenzene	3.654	77	55107	10109.6027410	ppb	98
26) Isophorone	3.784	82	102182	9576.8327252	ppb	100
27) 2-Nitrophenol	3.837	139	25409	9852.4073272	ppb	87
28) 2,4-Dimethylphenol	3.843	107	52260	9847.6018926	ppb	99
29) bis(2-Chlorethoxy)methane	3.901	93	67640	9435.2004785	ppb	99
30) 2,4-Dichlorophenol	3.978	162	42013	10020.5506012	ppb	96
32) 1,2,4-Trichlorobenzene	4.031	180	46298	9233.9072755	ppb	95
34) Naphthalene	4.090	128	166007	9377.7384495	ppb	100
35) 4-Chloroaniline	4.107	65	18448	9916.6835713	ppb	97
36) Hexachloro-1,3-butadiene	4.148	225	25433	9404.1037456	ppb	97
40) 4-Chloro-3-methylphenol	4.395	107	42870	9773.1491472	ppb	97
41) 2-Methylnaphthalene	4.519	142	105002	9441.1403741	ppb	99
42) 1-Methylnaphthalene	4.584	142	101389	9364.7404413	ppb	100
47) Hexachlorocyclopentadiene	4.619	237	21972	9229.5812969	ppb	96
48) 2,4,6-Trichlorophenol	4.695	196	27403	10053.0413465	ppb	94

Data Path : C:\msdchem\1\data\042922B\  
 Data File : 0429B\_02.D  
 Acq On : 29 Apr 2022 5:31 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 29 19:29:41 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

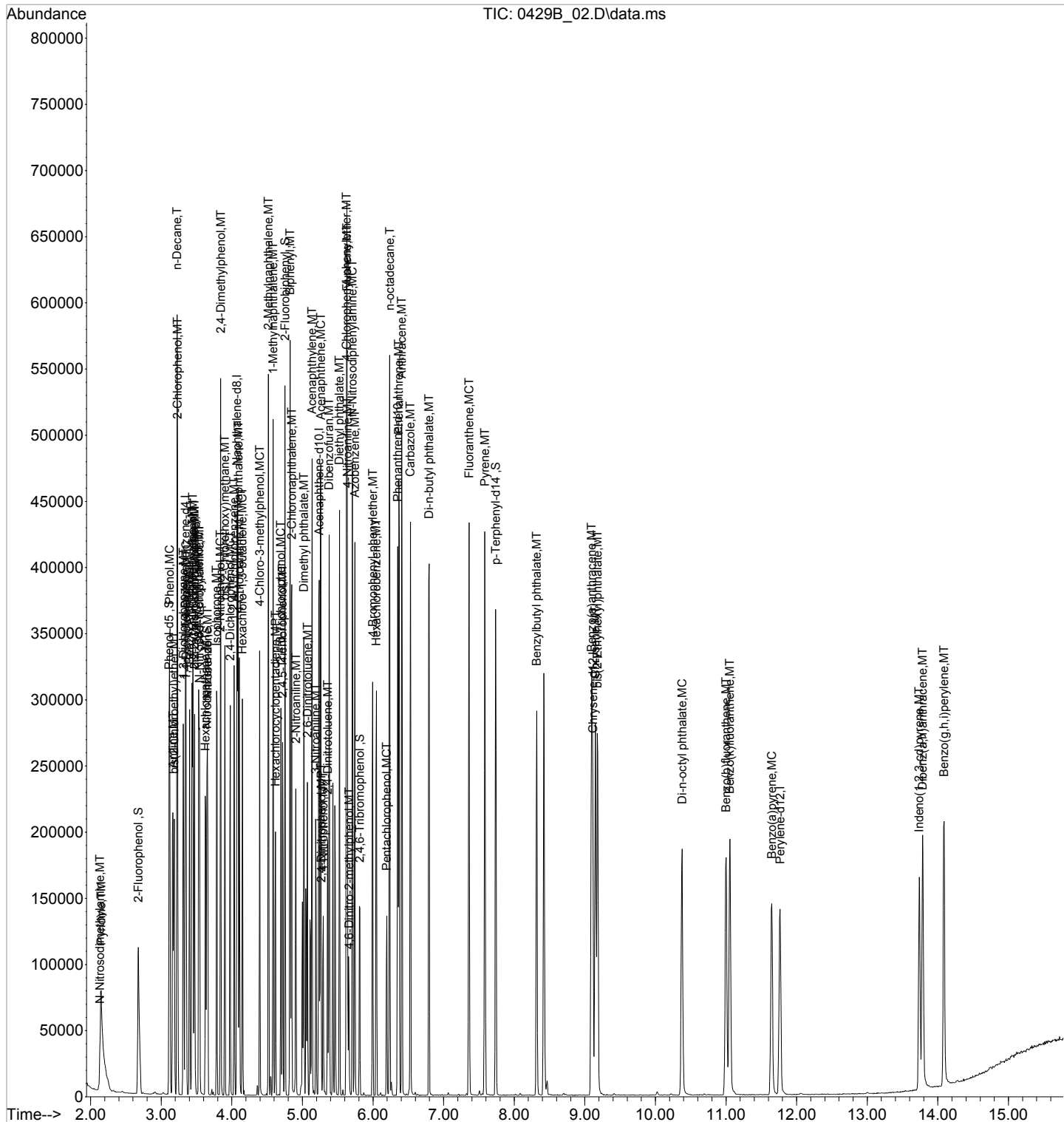
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.719	196	29365	10543.7507224	ppb		93
51) Biphenyl	4.825	154	124290	9517.3986670	ppb		99
52) 2-Chloronaphthalene	4.848	162	97251	9649.1517606	ppb		99
53) 2-Nitroaniline	4.907	138	31669	10592.9410083	ppb		99
54) Acenaphthylene	5.137	152	150810	9751.4770077	ppb		100
55) Dimethyl phthalate	5.019	163	109339	9682.2634147	ppb		92
56) 2,6-Dinitrotoluene	5.072	165	25467	10330.6989938	ppb		81
57) 3-Nitroaniline	5.189	138	25785	10953.1348418	ppb		97
58) Acenaphthene	5.260	153	99101	9455.5726306	ppb		98
59) 2,4-Dinitrophenol	5.266	184	5993	8840.0167598	ppb	#	1
60) Dibenzofuran	5.378	168	137045	9799.3572344	ppb		100
61) 2,4-Dinitrotoluene	5.360	165	30940	10024.9623613	ppb		97
63) 4-Nitrophenol	5.295	139	18931	11108.1142510	ppb		97
64) Fluorene	5.631	166	112911	9753.3710928	ppb		97
65) 4-Chlorophenyl-phenyle...	5.625	204	50189	9518.9986133	ppb		99
66) Diethyl phthalate	5.525	149	115221	9807.0550971	ppb		98
67) 4-Nitroaniline	5.637	138	21489	15075.5679791	ppb		99
68) Azobenzene	5.742	77	117275	9932.7788080	ppb		99
71) 4,6-Dinitro-2-methylph...	5.660	198	10709	9259.2700472	ppb		98
72) N-Nitrosodiphenylamine	5.707	169	91384	9604.8298764	ppb		100
74) 4-Bromophenyl-phenylether	5.995	248	27848	9535.9568611	ppb		90
75) Hexachlorobenzene	6.048	284	31371	9196.1430755	ppb		99
76) n-octadecane	6.236	55	19676	8631.4403952	ppb		100
77) Pentachlorophenol	6.195	266	11706	8043.4149505	ppb		98
78) Phenanthrene	6.366	178	151616	9351.3664803	ppb		99
79) Anthracene	6.407	178	152674	9917.6724685	ppb		98
80) Carbazole	6.531	167	135830	10314.6742137	ppb		99
81) Di-n-butyl phthalate	6.795	149	187224	9491.7916435	ppb		99
83) Fluoranthene	7.360	202	150751	9502.1110437	ppb		99
86) Pyrene	7.583	202	156977	8897.3825763	ppb		99
88) Benzylbutyl phthalate	8.319	149	73740	9107.1006176	ppb		97
90) Benzo(a)anthracene	9.095	228	128467	9770.8170872	ppb		99
91) Chrysene	9.148	228	131331	9457.0343856	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.177	149	104028	8708.3756522	ppb		99
93) Di-n-octyl phthalate	10.377	149	154290	8506.4476678	ppb		99
95) Benzo(b)fluoranthene	11.001	252	117962	9213.0472428	ppb		100
96) Benzo(k)fluoranthene	11.054	252	126080	9630.3948039	ppb		99
97) Benzo(a)pyrene	11.648	252	100734	9706.0216441	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.736	276	91330	9668.6280520	ppb		97
99) Dibenz(a,h)anthracene	13.783	278	104495	9869.9144856	ppb		98
100) Benzo(g,h,i)perylene	14.089	276	110936	9891.4243184	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\042922B\  
Data File : 0429B\_02.D  
Acq On : 29 Apr 2022 5:31 pm  
Operator : 3545  
Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
Misc : SVMS CAL ISTD 22D16229 exp. 10/16/22  
ALS Vial : 3 Sample Multiplier: 1

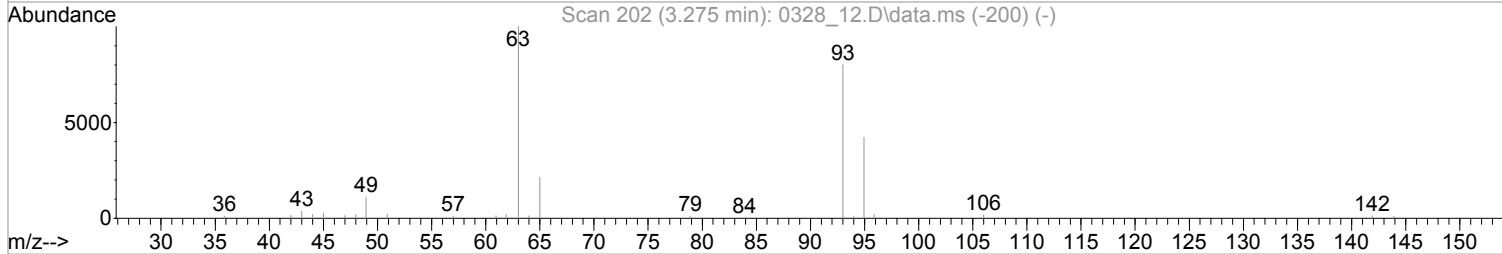
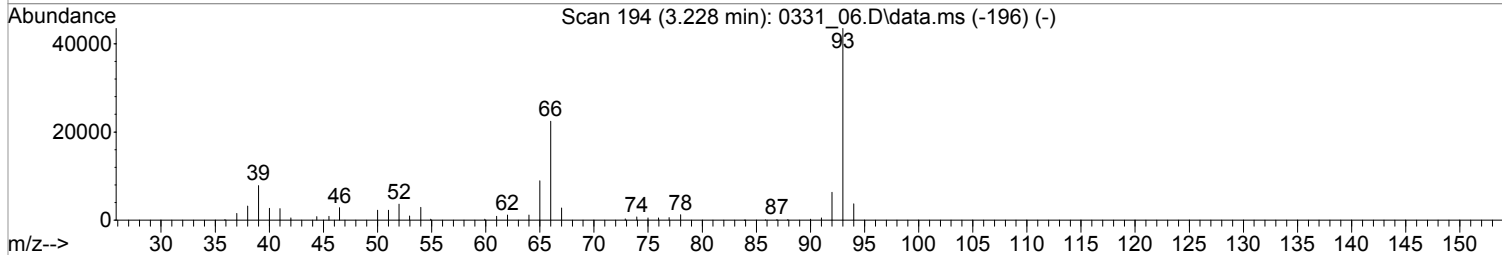
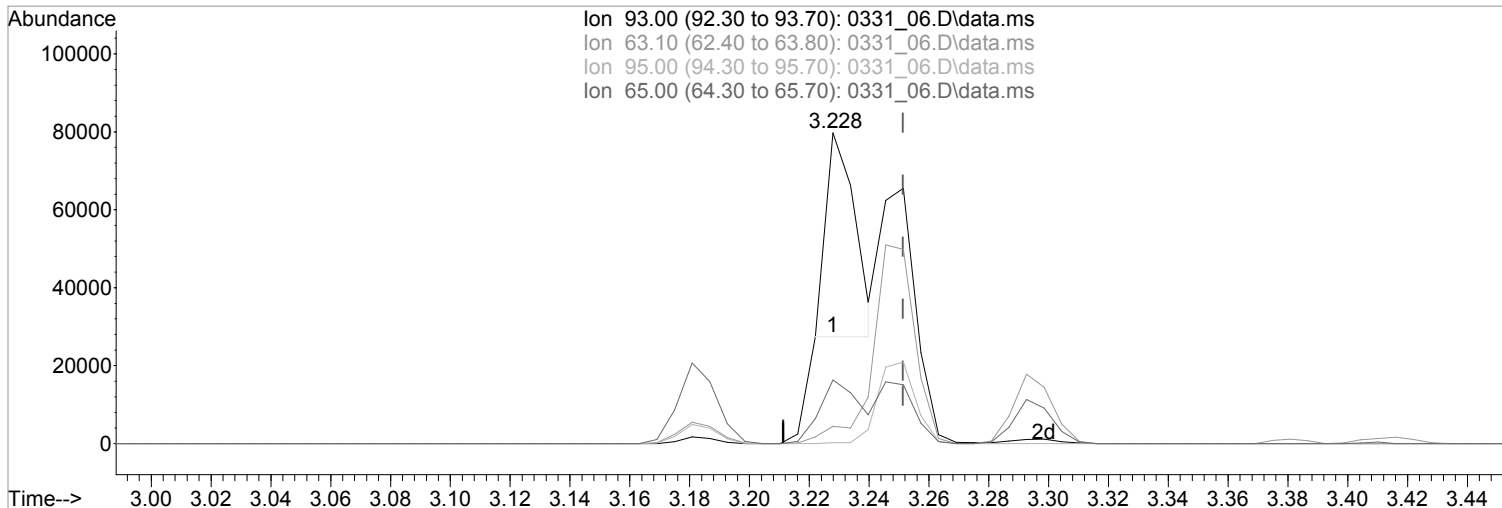
Quant Time: Apr 29 19:29:41 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

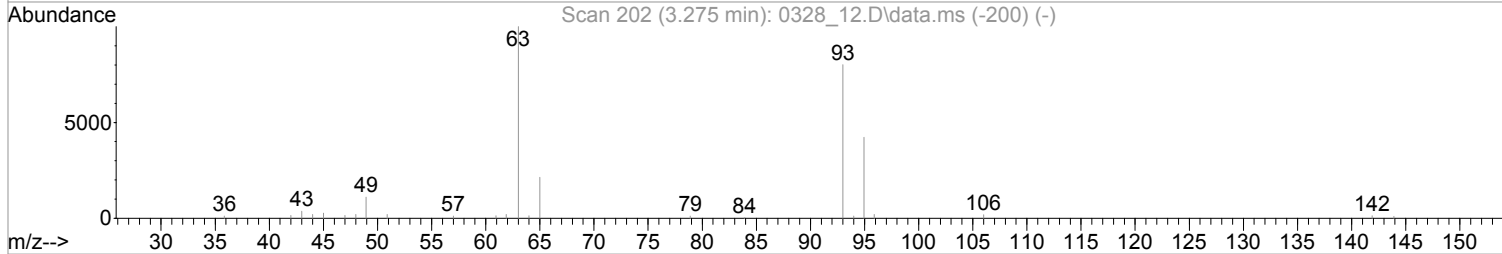
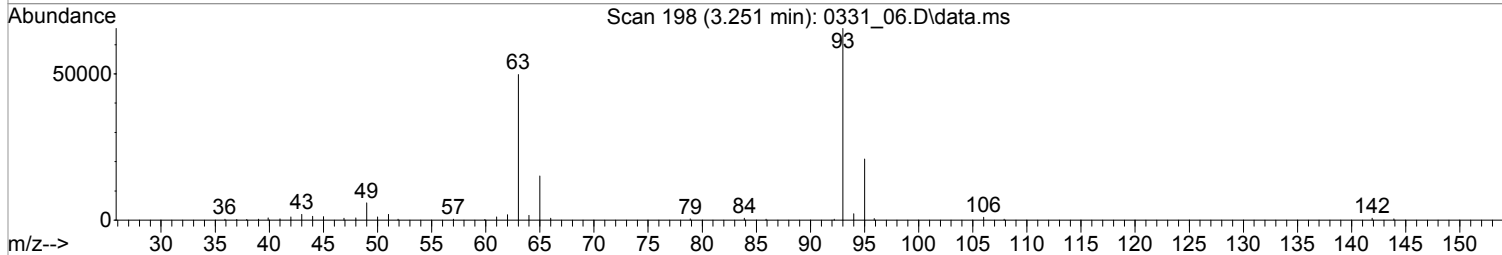
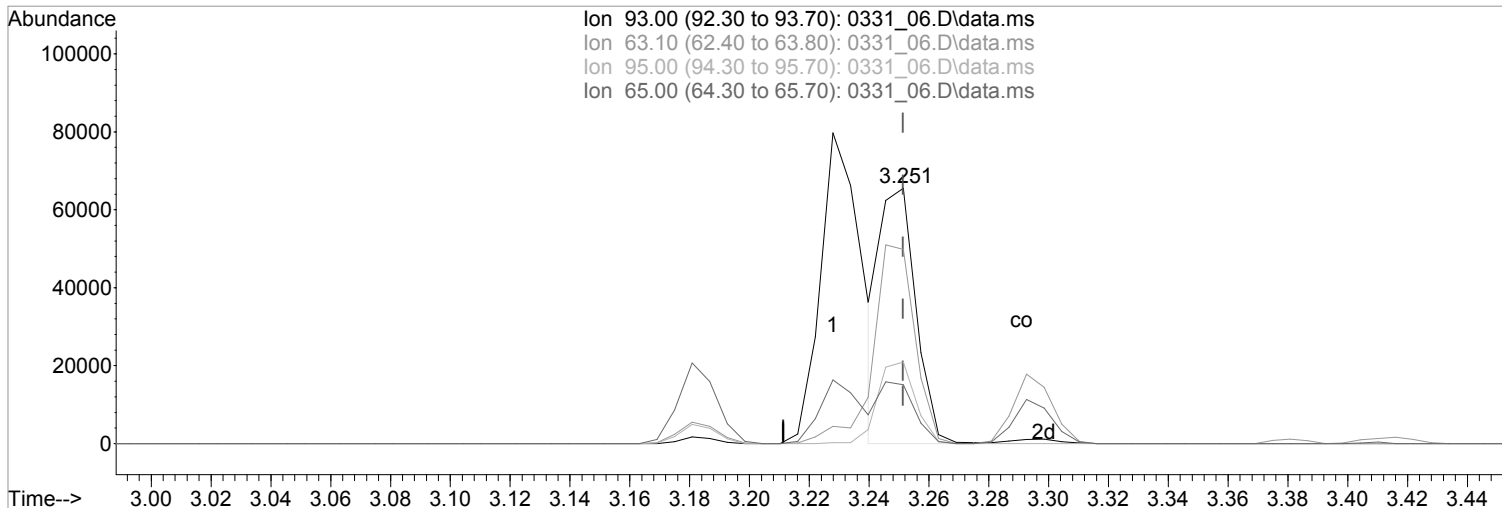
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 6479.8676227 ppb  
 Qvalue = 37  
 response 35244

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.09#
95.00	31.90	0.47#
65.00	23.10	19.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (0.000) 10000.000000 ppb m

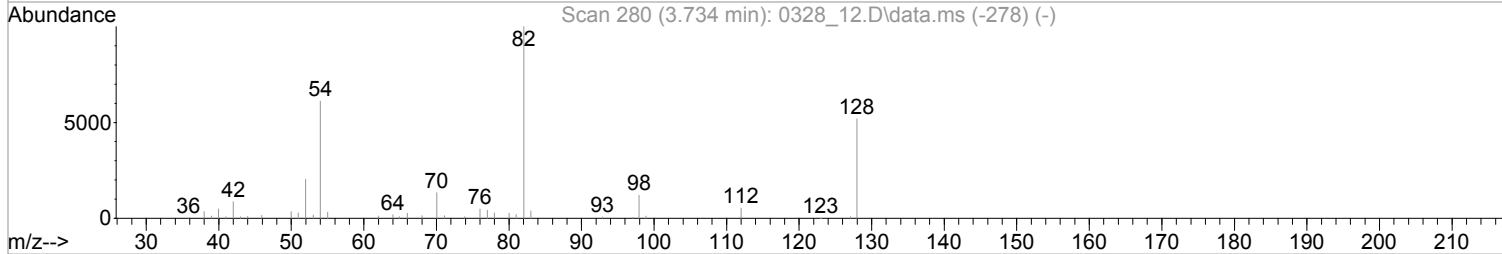
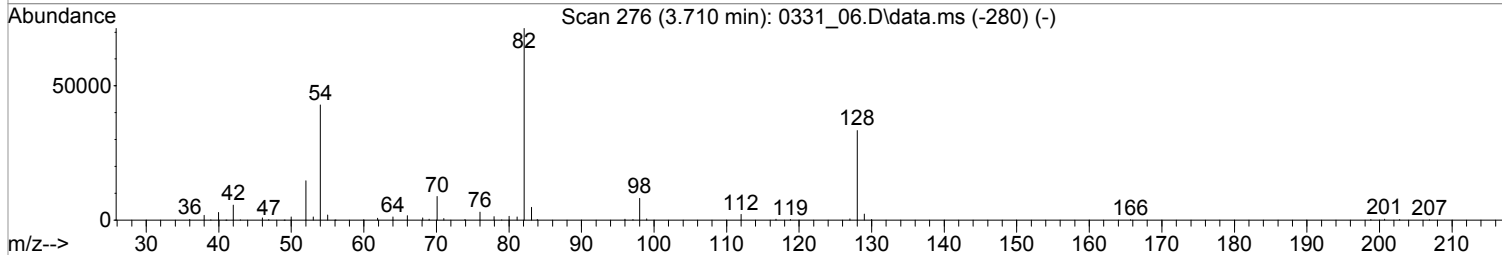
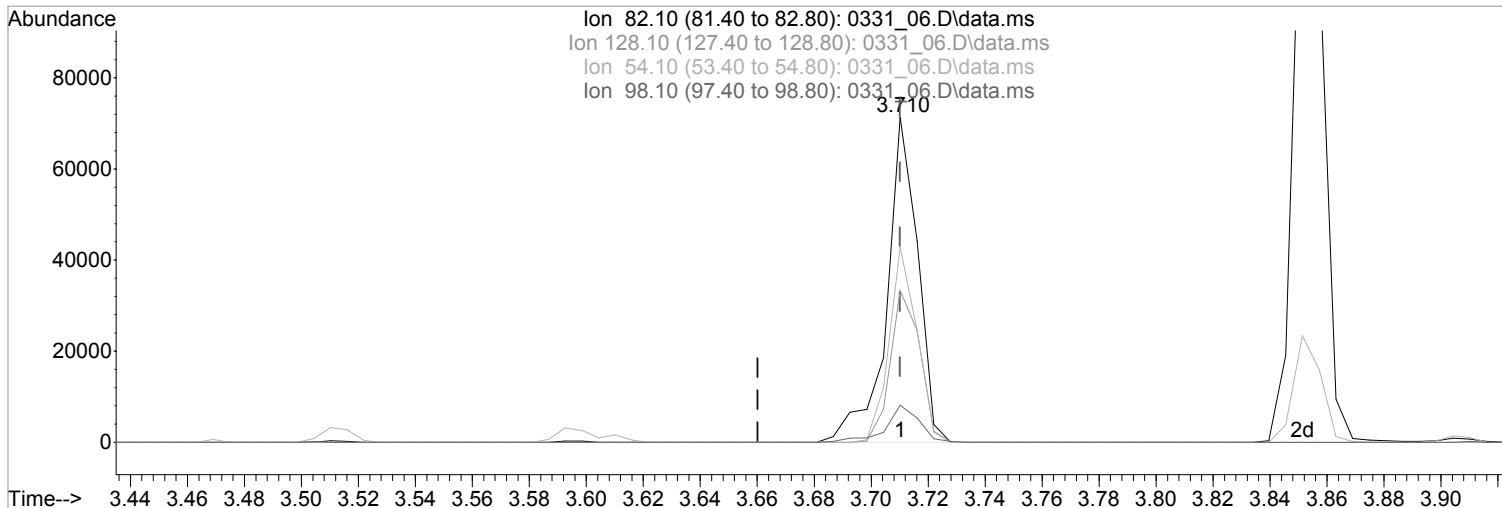
response 54390

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.04
95.00	31.90	31.89
65.00	23.10	23.09

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

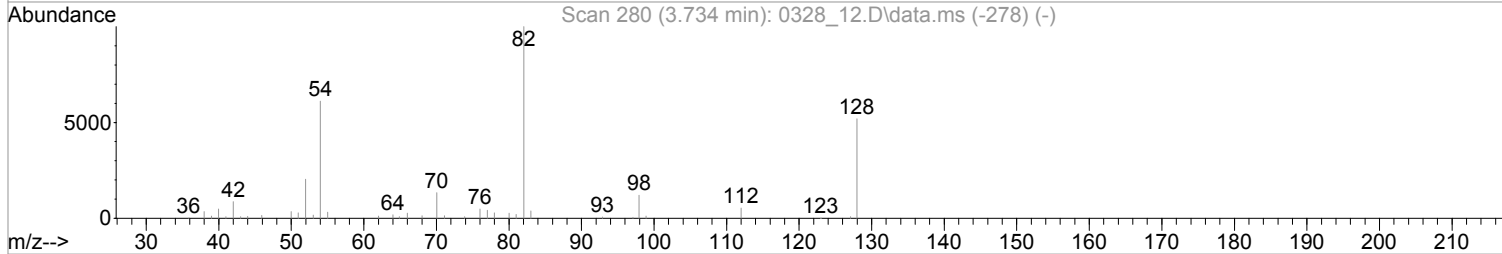
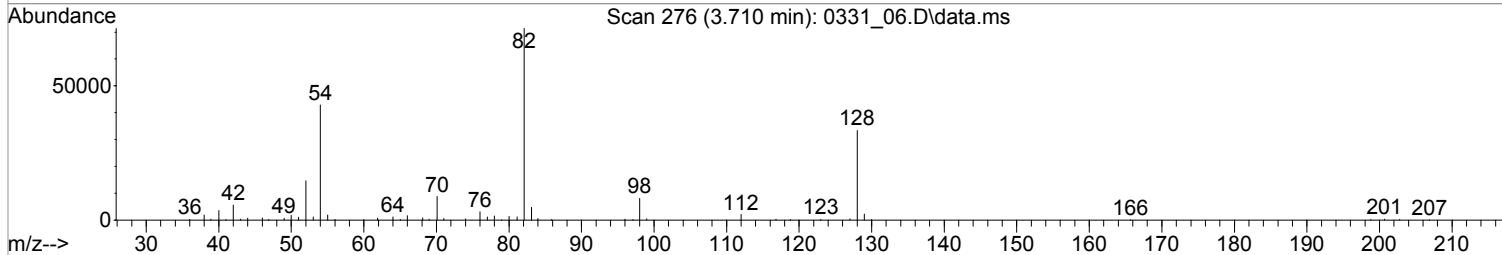
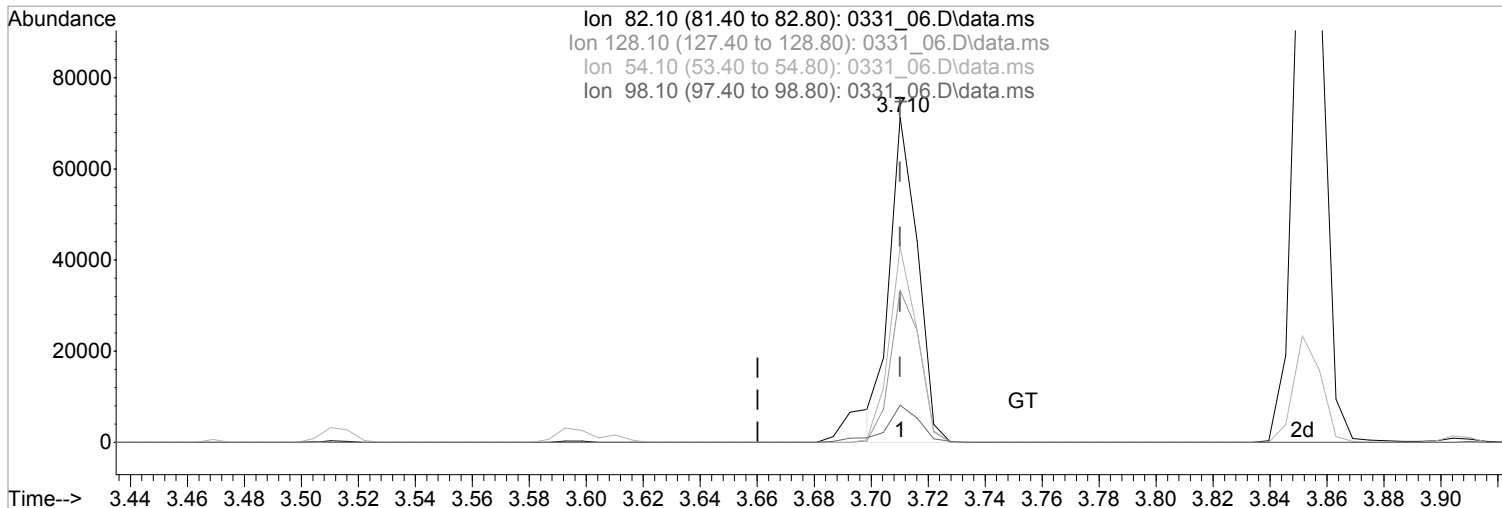
(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 11089.1251693 ppb  
 Qvalue = 100  
 response 54024

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	46.75
54.10	60.00	60.04
98.10	11.40	11.42

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 10000.0000000 ppb m

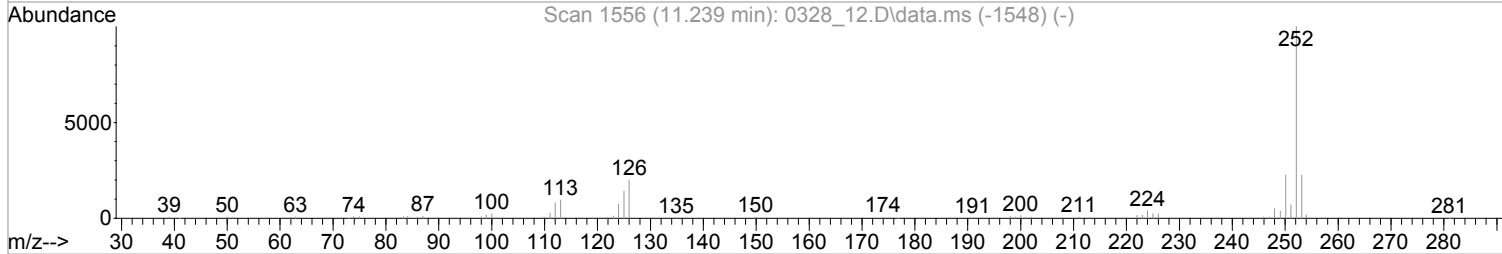
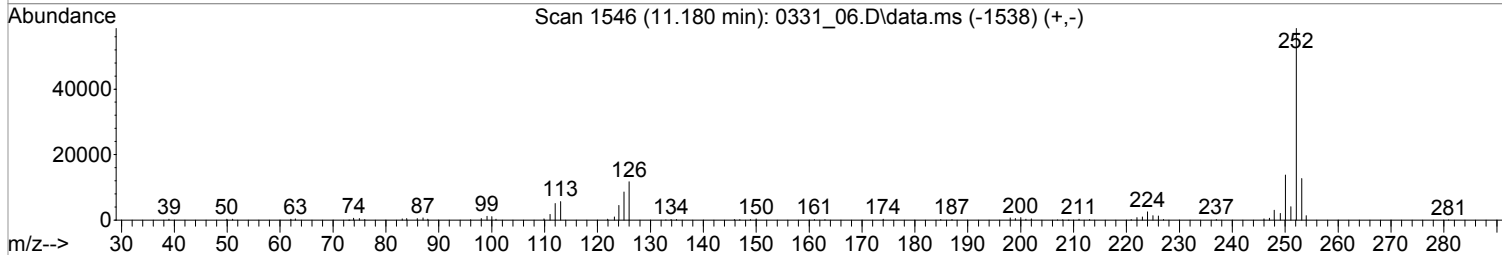
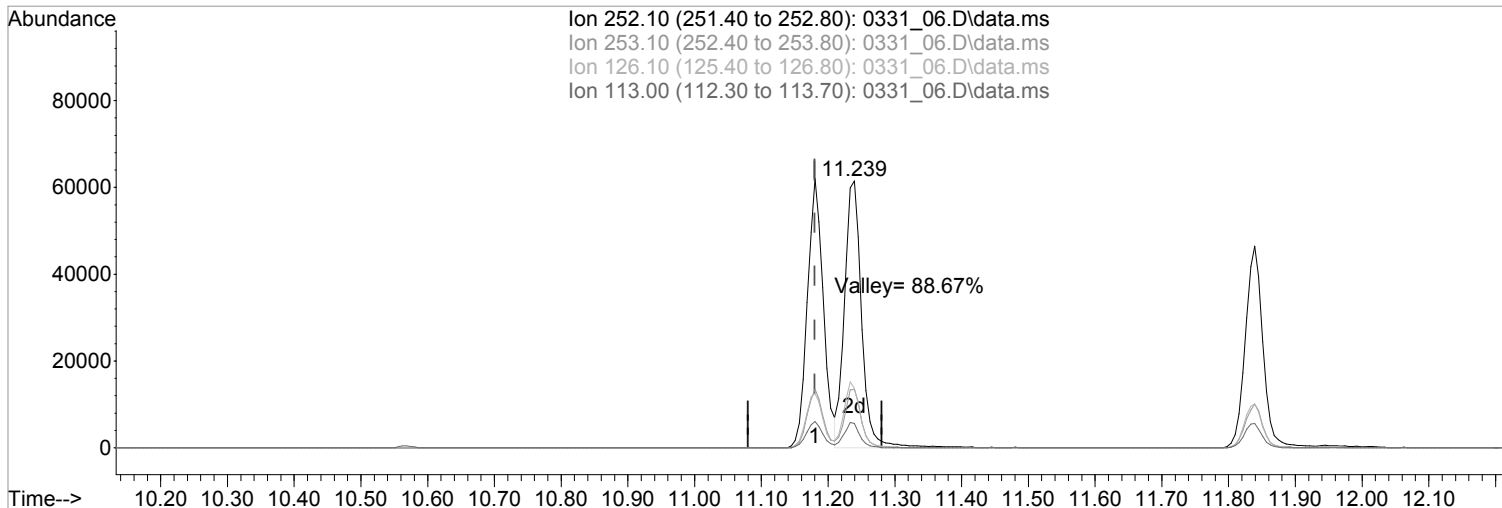
response 48718

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	46.75
54.10	60.00	60.04
98.10	11.40	11.42

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

(95) Benzo(b)fluoranthene (MT)  
 11.180min (0.000) 10000.0000000 ppb  
 Qvalue = 100  
 response 103049

Ion	Exp%	Act%
252.10	100	100
253.10	21.80	21.75
126.10	20.00	20.04
113.00	9.70	9.74

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:06:30 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.410	152	32792	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.140	136	134078	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	70723	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.434	188	112936	8000.0000000	ppb	0.00
84) Chrysene-d12	9.251	240	84930	8000.0000000	ppb	0.00
94) Perylene-d12	11.957	264	75119	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.740	112	106152	20861.0973521	ppb	0.00
Spiked Amount	20000.000		Recovery	=	104.31%	
7) Phenol-d5	3.175	99	126213	21001.8195808	ppb	0.00
Spiked Amount	20000.000		Recovery	=	105.01%	
24) Nitrobenzene-d5	3.710	82	103619m	20771.1930820	ppb	0.00
Spiked Amount	10000.000		Recovery	=	207.71%	
50) 2-Fluorobiphenyl	4.828	172	223030	19027.3520423	ppb	0.00
Spiked Amount	10000.000		Recovery	=	190.27%	
73) 2,4,6-Tribromophenol	5.892	330	25243	24542.1885073	ppb	0.00
Spiked Amount	20000.000		Recovery	=	122.71%	
87) p-Terphenyl-d14	7.845	244	237308	19778.2683501	ppb	0.00
Spiked Amount	10000.000		Recovery	=	197.78%	
<b>Target Compounds</b>						
2) Pyridine	2.210	79	111293	20520.0582576	ppb	98
3) N-Nitrosodimethylamine	2.199	42	54707	17512.4649974	ppb	97
5) Aniline	3.228	66	57894	20863.9637808	ppb	# 16
6) bis(2-Chloroethyl)ether	3.251	93	110886m	19845.2727506	ppb	
8) Phenol	3.181	94	133099	20780.4249322	ppb	98
10) 2-Chlorophenol	3.293	128	112522	21384.5068803	ppb	98
11) n-Decane	3.293	41	68989	18920.4635757	ppb	# 100
12) 1,3-Dichlorobenzene	3.381	146	123575	19382.0792001	ppb	99
13) 1,4-Dichlorobenzene	3.416	146	124782	19676.3481368	ppb	97
14) Benzyl Alcohol	3.469	79	82542	21814.2426793	ppb	99
15) 1,2-Dichlorobenzene	3.504	146	118829	19192.9016445	ppb	98
16) bis(2-Chloroisopropyl)...	3.540	121	41324	19661.8731881	ppb	99
17) 2,2-oxybis(1-chloropro...	3.540	121	41324	19661.8731881	ppb	99
18) 2-Methylphenol	3.516	108	101827	21477.9744707	ppb	99
19) Hexachloroethane	3.698	117	52039	19890.3601889	ppb	98
20) N-Nitrosodi-n-propylamine	3.610	70	72194	21832.9659564	ppb	98
21) 3&4-Methyl phenol	3.598	107	111931	21421.6043465	ppb	96
25) Nitrobenzene	3.722	77	105247	20884.2027666	ppb	98
26) Isophorone	3.857	82	210585	21841.1908819	ppb	91
27) 2-Nitrophenol	3.904	139	52249	24618.0078291	ppb	95
28) 2,4-Dimethylphenol	3.910	107	103310	21041.1313099	ppb	96
29) bis(2-Chlorethoxy)methane	3.969	93	136801	20048.2800815	ppb	100
30) 2,4-Dichlorophenol	4.045	162	83454	22074.7247902	ppb	99
32) 1,2,4-Trichlorobenzene	4.104	180	94214	19197.4563184	ppb	97
34) Naphthalene	4.157	128	329834	18763.7653181	ppb	100
35) 4-Chloroaniline	4.175	65	36268	21893.3392059	ppb	96
36) Hexachloro-1,3-butadiene	4.222	225	50893	19291.4613634	ppb	97
40) 4-Chloro-3-methylphenol	4.463	107	87785	23024.4502760	ppb	100
41) 2-Methylnaphthalene	4.593	142	211946	19970.4058612	ppb	100
42) 1-Methylnaphthalene	4.657	142	205339	19719.8276242	ppb	99
47) Hexachlorocyclopentadiene	4.692	237	48263	22542.2258944	ppb	99
48) 2,4,6-Trichlorophenol	4.769	196	56577	23494.5231526	ppb	99

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:06:30 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

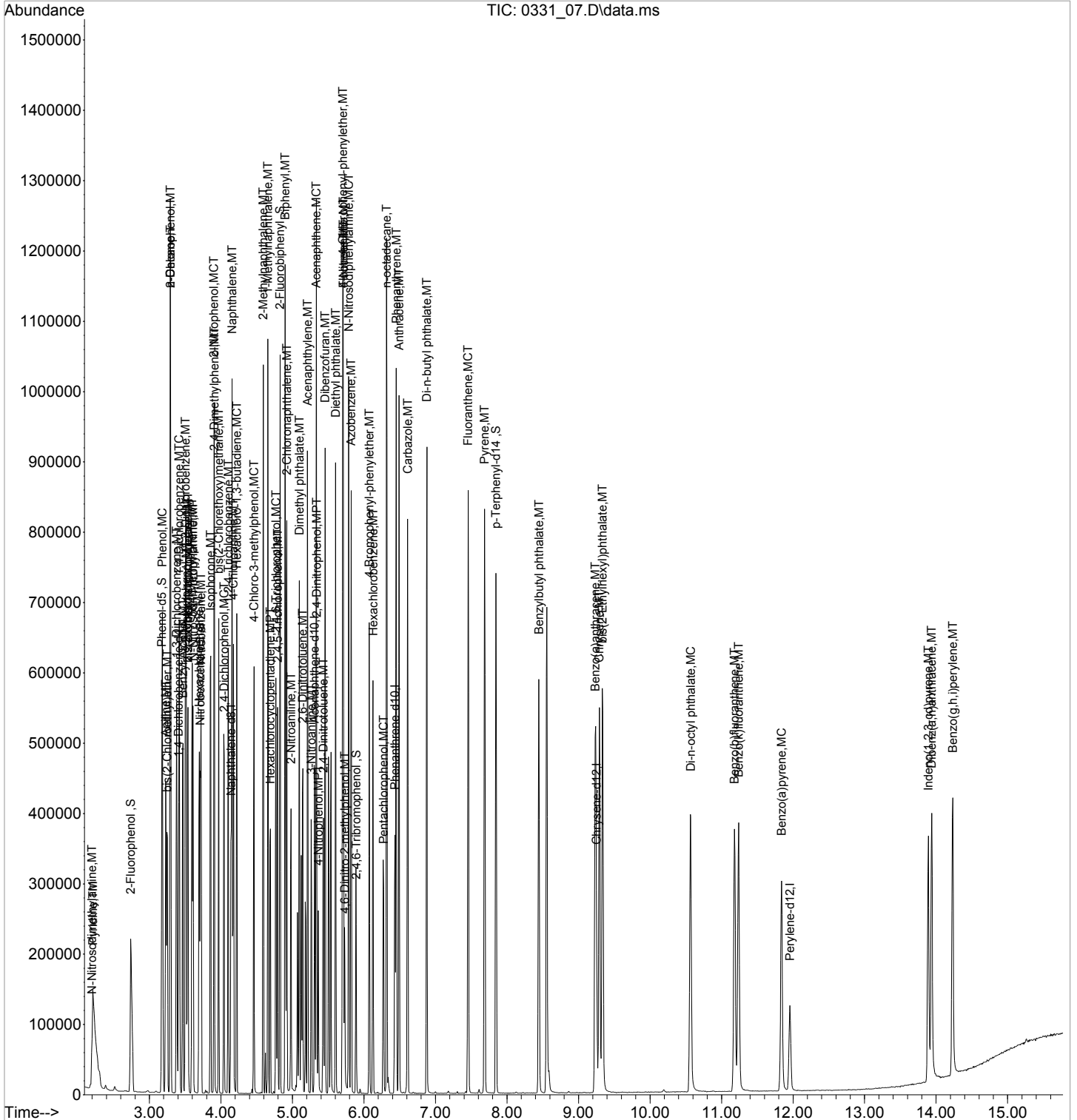
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	59315	24551.4730430	ppb		98
51) Biphenyl	4.898	154	251259	19173.6958276	ppb		100
52) 2-Chloronaphthalene	4.922	162	193285	19212.2177403	ppb		99
53) 2-Nitroaniline	4.981	138	59759	25988.3511479	ppb		98
54) Acenaphthylene	5.210	152	303372	20149.8725762	ppb		100
55) Dimethyl phthalate	5.098	163	227095	21158.3884957	ppb		97
56) 2,6-Dinitrotoluene	5.145	165	51741	24536.2501075	ppb	#	80
57) 3-Nitroaniline	5.263	138	47887	25616.1751347	ppb		99
58) Acenaphthene	5.334	153	202163	19347.9009194	ppb		98
59) 2,4-Dinitrophenol	5.340	184	14976	29432.6206918	ppb	#	70
60) Dibenzofuran	5.457	168	267370	19040.7081128	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	61558	25802.4933154	ppb		99
63) 4-Nitrophenol	5.363	139	33738	26954.3131233	ppb		97
64) Fluorene	5.710	166	226042	19747.7794311	ppb		98
65) 4-Chlorophenyl-phenyle...	5.704	204	101491	19118.9264213	ppb		99
66) Diethyl phthalate	5.604	149	234955	20771.6196118	ppb		100
67) 4-Nitroaniline	5.710	138	24185	16136.9020443	ppb		95
68) Azobenzene	5.822	77	238153	21105.6381926	ppb		99
71) 4,6-Dinitro-2-methylph...	5.734	198	24209	33263.5986863	ppb		96
72) N-Nitrosodiphenylamine	5.787	169	183408	21087.6244155	ppb		100
74) 4-Bromophenyl-phenylether	6.075	248	54290	19982.1021032	ppb		95
75) Hexachlorobenzene	6.128	284	62307	18977.7188118	ppb		100
76) n-octadecane	6.316	55	43712	20878.0975737	ppb		99
77) Pentachlorophenol	6.275	266	30833	25917.7797076	ppb		99
78) Phenanthrene	6.451	178	296157	19005.7829735	ppb		100
79) Anthracene	6.492	178	293833	20894.2352570	ppb		98
80) Carbazole	6.610	167	250897	21148.1675444	ppb		99
81) Di-n-butyl phthalate	6.881	149	397421	23698.6563151	ppb		100
83) Fluoranthene	7.457	202	304212	21412.2235528	ppb		100
86) Pyrene	7.686	202	314336	18911.5981484	ppb		99
88) Benzylbutyl phthalate	8.445	149	150478	26024.5200637	ppb		97
90) Benzo(a)anthracene	9.233	228	242646	21018.4091374	ppb		99
91) Chrysene	9.292	228	250717	19529.3570288	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.333	149	225383	26777.0888674	ppb		98
93) Di-n-octyl phthalate	10.569	149	335350	29247.6424441	ppb		99
95) Benzo(b)fluoranthene	11.180	252	230240	22096.3443995	ppb		98
96) Benzo(k)fluoranthene	11.239	252	239541	22391.4257258	ppb		99
97) Benzo(a)pyrene	11.839	252	191805	23713.6445070	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.892	276	170517	22398.0952594	ppb		98
99) Dibenz(a,h)anthracene	13.939	278	192016	22172.7985225	ppb		98
100) Benzo(g,h,i)perylene	14.233	276	201342	21390.6206879	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_07.D  
Acq On : 31 Mar 2022 6:49 pm  
Operator : 3545  
Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 7 Sample Multiplier: 1

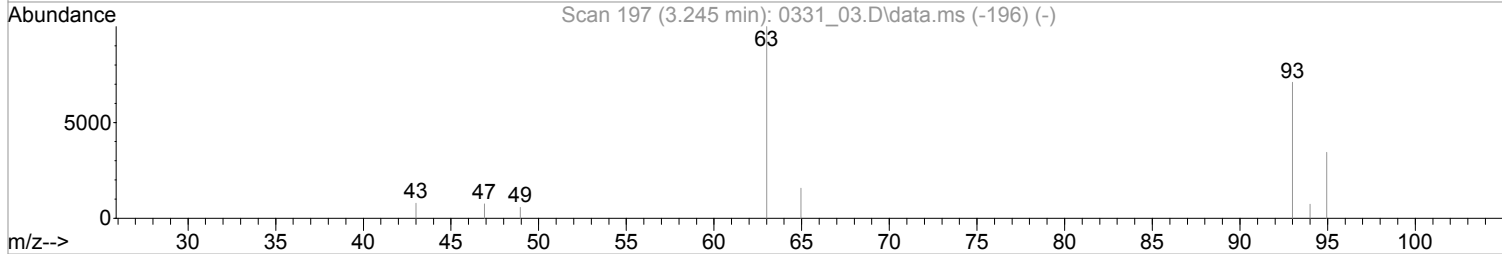
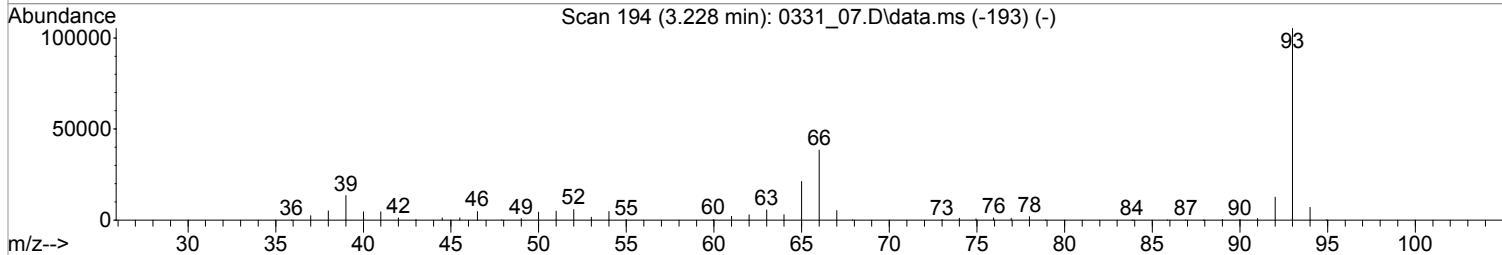
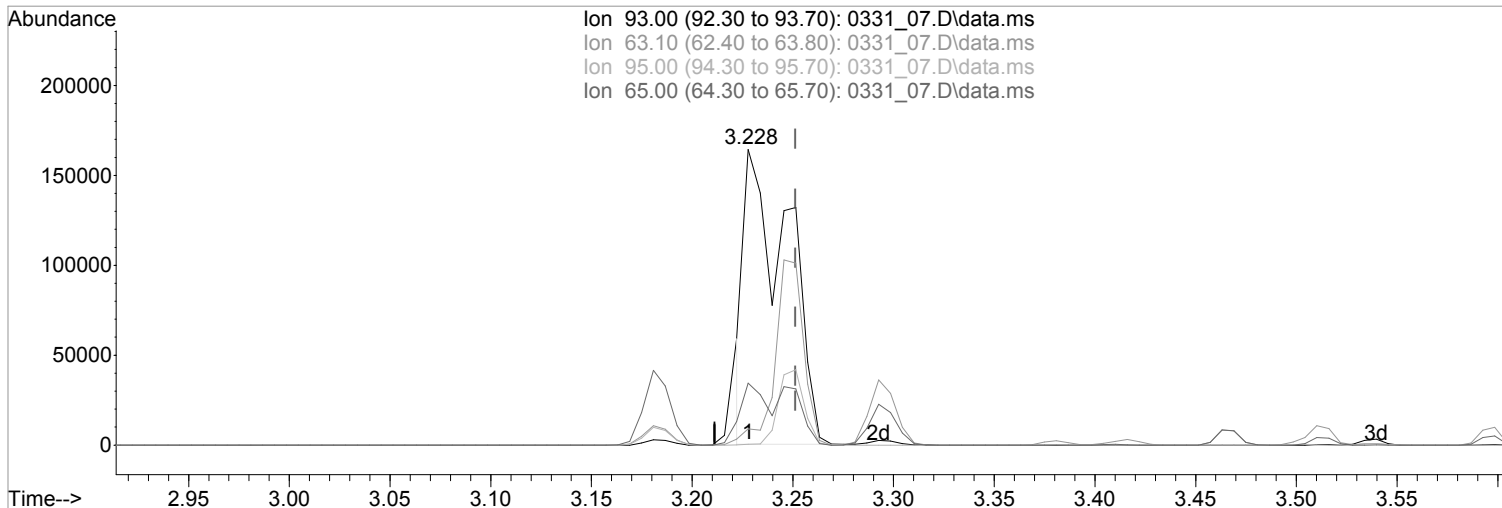
Quant Time: Apr 04 16:06:30 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:05:43 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

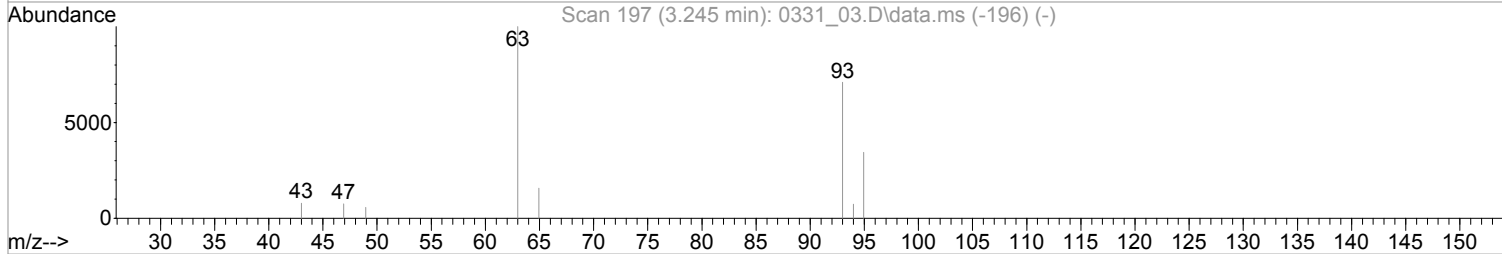
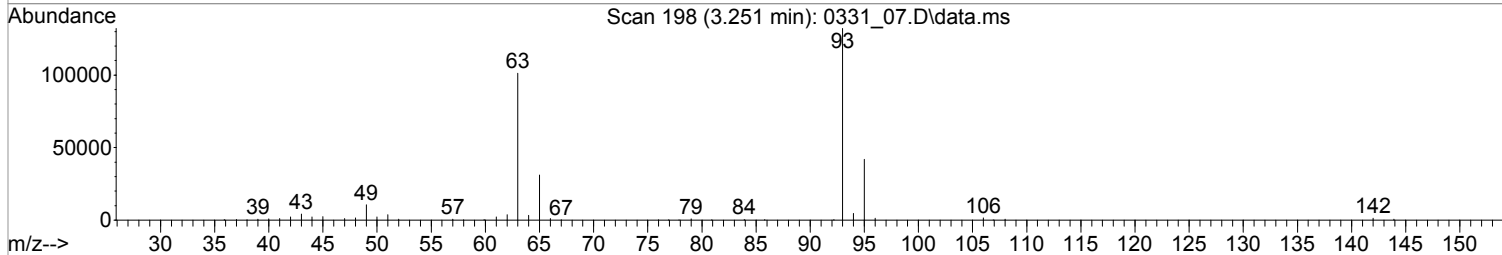
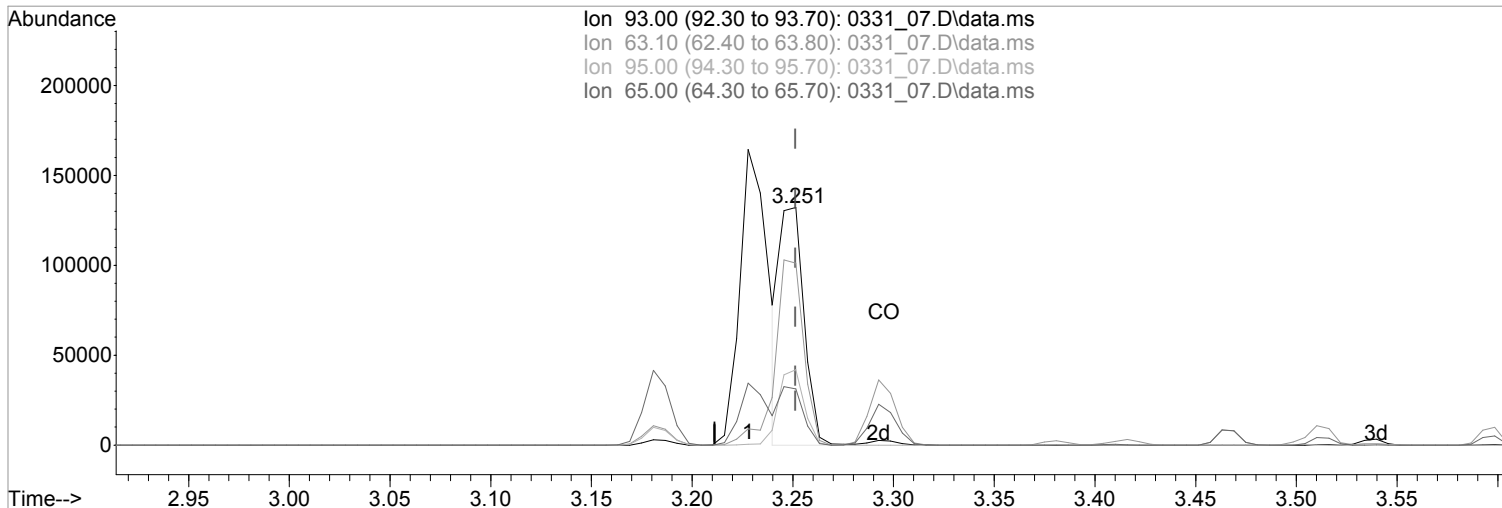
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 43763.3668852 ppb  
 Qvalue = 38  
 response 244529

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.53#
95.00	31.90	0.24#
65.00	23.10	20.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (+0.000) 19845.2727506 ppb m

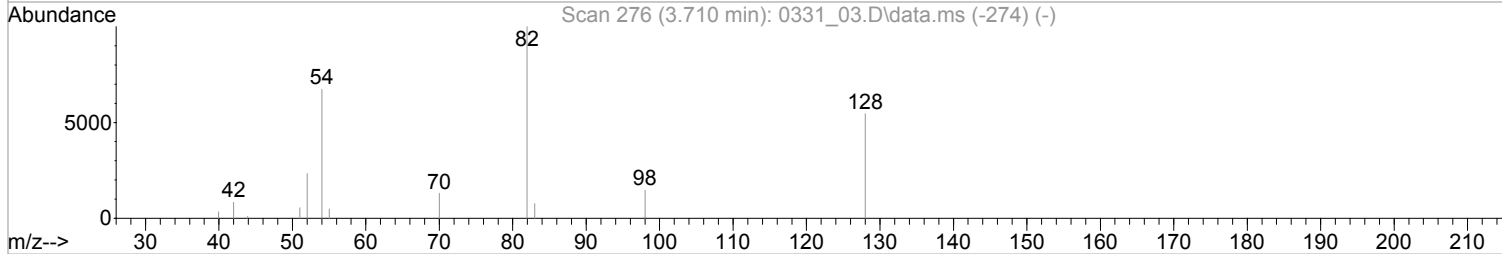
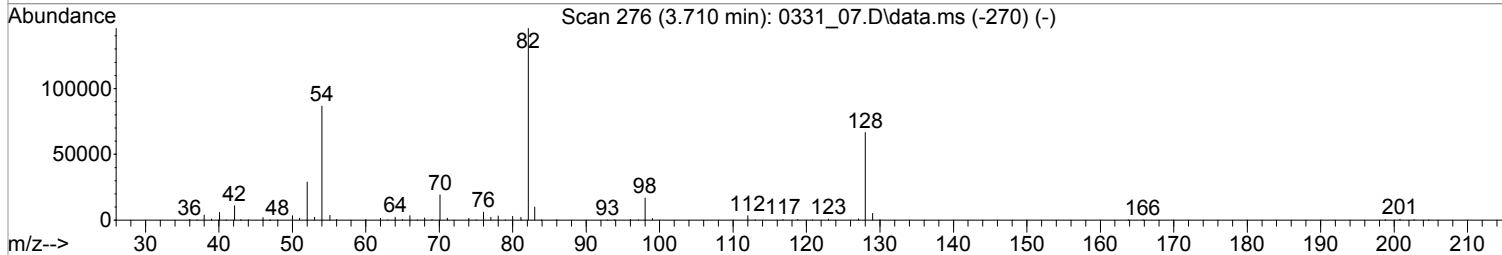
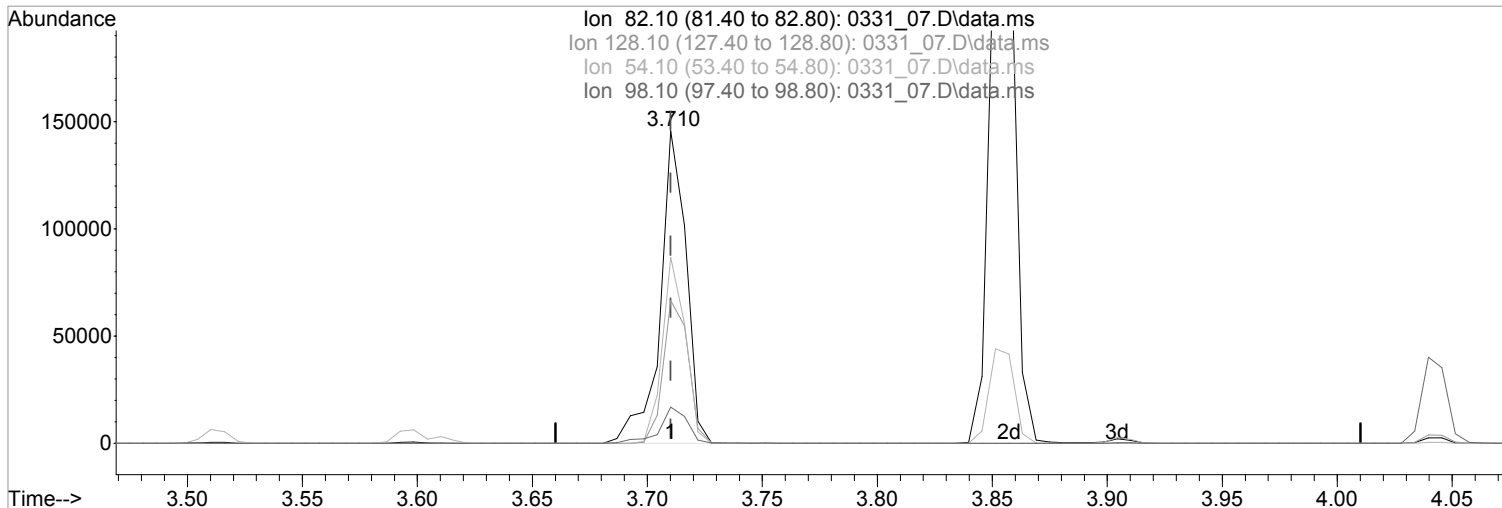
response 110886

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.56
95.00	31.90	31.70
65.00	23.10	23.63

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

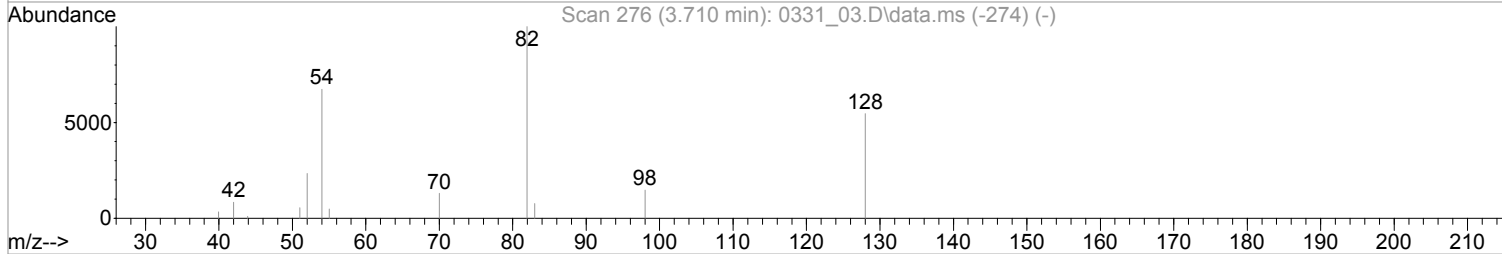
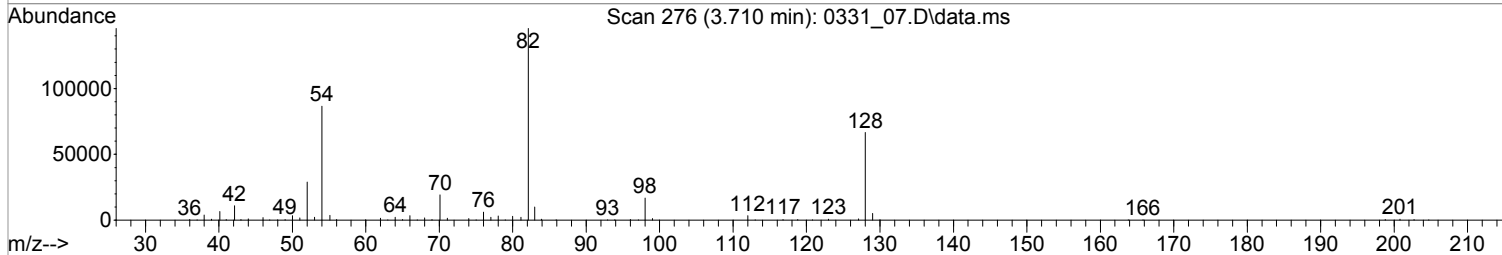
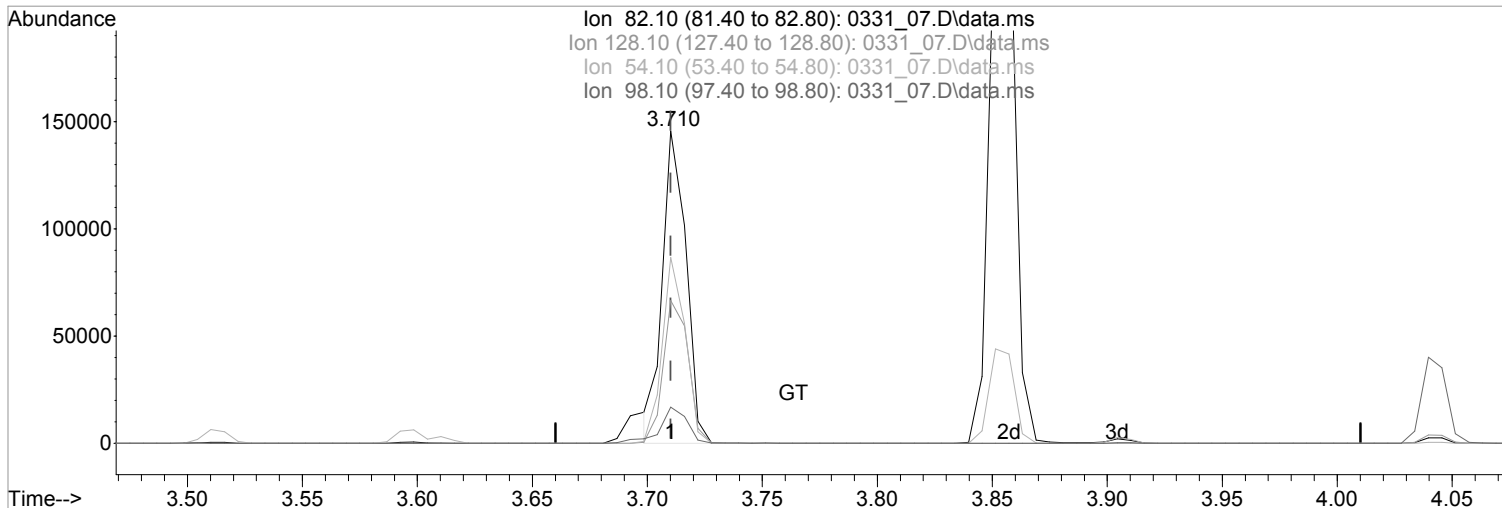
(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 22875.1937247 ppb  
 Qvalue = 99  
 response 114115

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.73
54.10	60.00	59.51
98.10	11.40	11.59

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 20771.1930820 ppb m

response 103619

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.73
54.10	60.00	59.51
98.10	11.40	11.59

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:49 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.410	152	33533	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	132888	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	71209	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	113292	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	87467	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	76329	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.740	112	157758	30058.8366266	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	150.29%		
7) Phenol-d5	3.175	99	188380	30349.6666052	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	151.75%		
24) Nitrobenzene-d5	3.710	82	156535m	31417.3001484	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	314.17%		
50) 2-Fluorobiphenyl	4.828	172	327473	28019.5521228	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	280.20%		
73) 2,4,6-Tribromophenol	5.893	330	40030	36711.9598208	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	183.56%		
87) p-Terphenyl-d14	7.845	244	360600	29247.0817353	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	292.47%		
<b>Target Compounds</b>							
							Qvalue
2) Pyridine	2.210	79	166662	29894.4173979	ppb	100	
3) N-Nitrosodimethylamine	2.199	42	78907	25331.1714229	ppb	95	
5) Aniline	3.228	66	87768	30666.1270466	ppb	#	21
6) bis(2-Chloroethyl)ether	3.252	93	167703m	29396.0633812	ppb		
8) Phenol	3.181	94	199062	30156.9423564	ppb	98	
10) 2-Chlorophenol	3.293	128	167459	30696.8769867	ppb	98	
11) n-Decane	3.293	41	100554	27262.1829473	ppb	#	100
12) 1,3-Dichlorobenzene	3.381	146	181714	28044.3611384	ppb	99	
13) 1,4-Dichlorobenzene	3.416	146	183675	28414.8902144	ppb	96	
14) Benzyl Alcohol	3.469	79	124720	31658.3456118	ppb	99	
15) 1,2-Dichlorobenzene	3.505	146	175099	27881.5403292	ppb	98	
16) bis(2-Chloroisopropyl)...	3.540	121	61647	28780.6723560	ppb	98	
17) 2,2-oxybis(1-chloropro...	3.540	121	61647	28780.6723560	ppb	98	
18) 2-Methylphenol	3.516	108	150526	30596.0667961	ppb	98	
19) Hexachloroethane	3.699	117	77143	28865.7035157	ppb	98	
20) N-Nitrosodi-n-propylamine	3.610	70	108538	31521.0408970	ppb	98	
21) 3&4-Methyl phenol	3.599	107	166101	30650.5927115	ppb	97	
25) Nitrobenzene	3.722	77	159382	31629.7704116	ppb	99	
26) Isophorone	3.857	82	319221	32801.1162840	ppb	91	
27) 2-Nitrophenol	3.904	139	80408	36138.7503562	ppb	94	
28) 2,4-Dimethylphenol	3.910	107	156274	31782.4235741	ppb	96	
29) bis(2-Chlorethoxy)methane	3.969	93	204569	30233.5957475	ppb	100	
30) 2,4-Dichlorophenol	4.046	162	125694	32863.6826156	ppb	98	
32) 1,2,4-Trichlorobenzene	4.104	180	138967	28801.2375631	ppb	97	
34) Naphthalene	4.157	128	484005	28128.6272547	ppb	99	
35) 4-Chloroaniline	4.175	65	54919	32675.6461647	ppb	96	
36) Hexachloro-1,3-butadiene	4.222	225	75737	29172.5927324	ppb	97	
40) 4-Chloro-3-methylphenol	4.463	107	134853	34638.6550486	ppb	98	
41) 2-Methylnaphthalene	4.593	142	316159	30065.4368411	ppb	100	
42) 1-Methylnaphthalene	4.657	142	304694	29606.4143326	ppb	100	
47) Hexachlorocyclopentadiene	4.693	237	75322	34074.3338440	ppb	99	
48) 2,4,6-Trichlorophenol	4.769	196	87140	34725.8348305	ppb	100	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

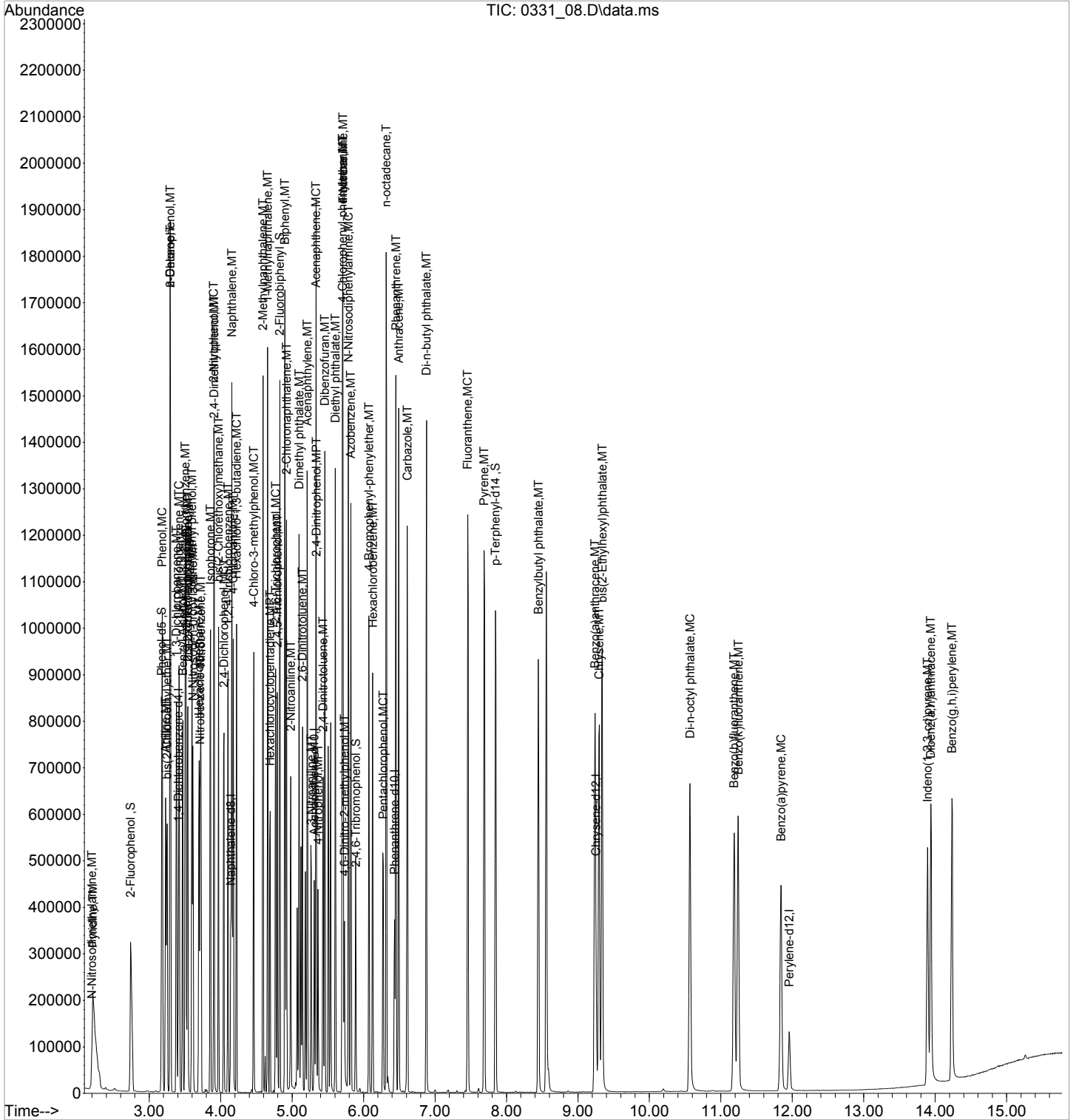
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 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.793	196	89614	35235.8306483	ppb		99
51) Biphenyl	4.899	154	370899	28344.5233795	ppb		99
52) 2-Chloronaphthalene	4.922	162	290244	28880.4016682	ppb		99
53) 2-Nitroaniline	4.981	138	95458	38358.7007923	ppb		99
54) Acenaphthylene	5.210	152	458154	30177.5291948	ppb		99
55) Dimethyl phthalate	5.099	163	343325	31405.3999860	ppb		94
56) 2,6-Dinitrotoluene	5.146	165	79641	35496.2824813	ppb		83
57) 3-Nitroaniline	5.269	138	74618	37042.4932595	ppb	#	82
58) Acenaphthene	5.334	153	302900	28980.0110439	ppb		98
59) 2,4-Dinitrophenol	5.340	184	25983	43826.4078457	ppb	#	52
60) Dibenzofuran	5.457	168	402364	28734.3638947	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	97371	37793.9835615	ppb		95
63) 4-Nitrophenol	5.363	139	54940	40107.1900866	ppb		98
64) Fluorene	5.710	166	338730	29464.9250158	ppb		98
65) 4-Chlorophenyl-phenyle...	5.704	204	151460	28589.2736068	ppb		98
66) Diethyl phthalate	5.604	149	355063	30937.0312942	ppb		99
67) 4-Nitroaniline	5.710	138	39081	27211.9905793	ppb		94
68) Azobenzene	5.822	77	356467	31032.1721850	ppb		100
71) 4,6-Dinitro-2-methylph...	5.734	198	40447	47521.4488194	ppb		96
72) N-Nitrosodiphenylamine	5.787	169	271452	30777.8016182	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	82403	30239.5448272	ppb		95
75) Hexachlorobenzene	6.128	284	93062	28547.9722569	ppb		99
76) n-octadecane	6.316	55	65192	30769.5273176	ppb		98
77) Pentachlorophenol	6.275	266	49246	37560.7979317	ppb		99
78) Phenanthrene	6.451	178	440824	28484.0401965	ppb		99
79) Anthracene	6.493	178	437751	30755.2925924	ppb		98
80) Carbazole	6.610	167	385203	31999.4175581	ppb		99
81) Di-n-butyl phthalate	6.881	149	608371	34873.9743472	ppb		100
83) Fluoranthene	7.457	202	461554	31933.8146061	ppb		100
86) Pyrene	7.687	202	472544	27909.1131163	ppb		99
88) Benzylbutyl phthalate	8.445	149	240272	38056.0281756	ppb		98
90) Benzo(a)anthracene	9.239	228	379776	31620.6351628	ppb		99
91) Chrysene	9.298	228	380085	28883.5511661	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.339	149	354516	38301.5951884	ppb		98
93) Di-n-octyl phthalate	10.569	149	549350	42584.0048156	ppb		100
95) Benzo(b)fluoranthene	11.186	252	363170	33596.9345021	ppb		98
96) Benzo(k)fluoranthene	11.245	252	363957	32700.0638399	ppb		99
97) Benzo(a)pyrene	11.845	252	303156	35565.4967114	ppb		100
98) Indeno(1,2,3-cd)pyrene	13.892	276	271655	34294.8931437	ppb		99
99) Dibenz(a,h)anthracene	13.939	278	299709	33335.5644575	ppb		97
100) Benzo(g,h,i)perylene	14.233	276	310410	32010.1091947	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_08.D  
Acq On : 31 Mar 2022 7:11 pm  
Operator : 3545  
Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:49 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:07:10 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M

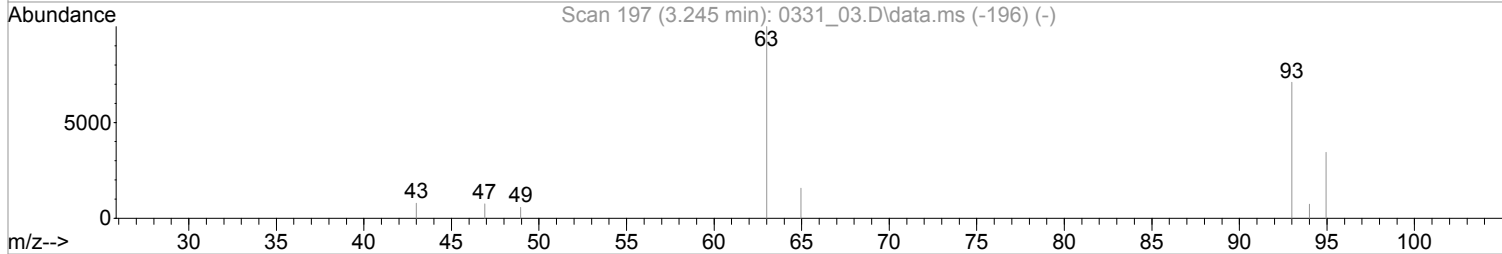
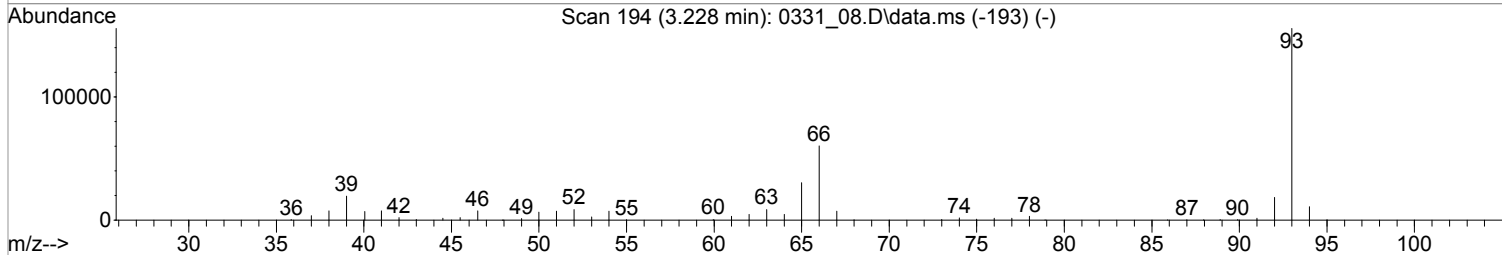
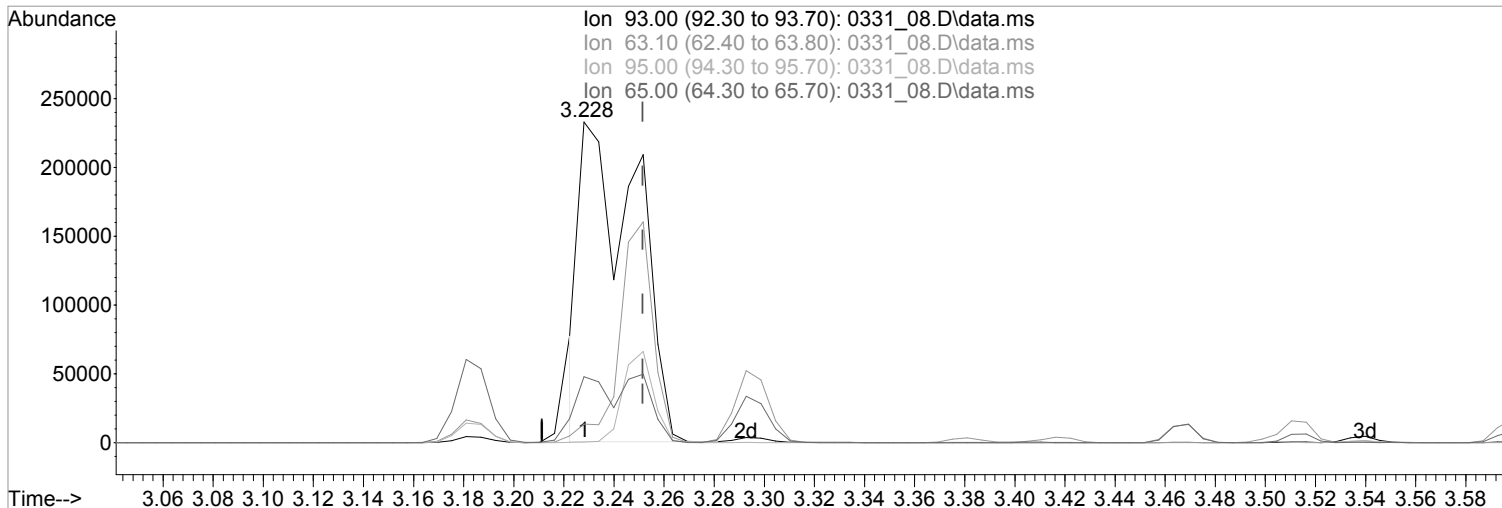




Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

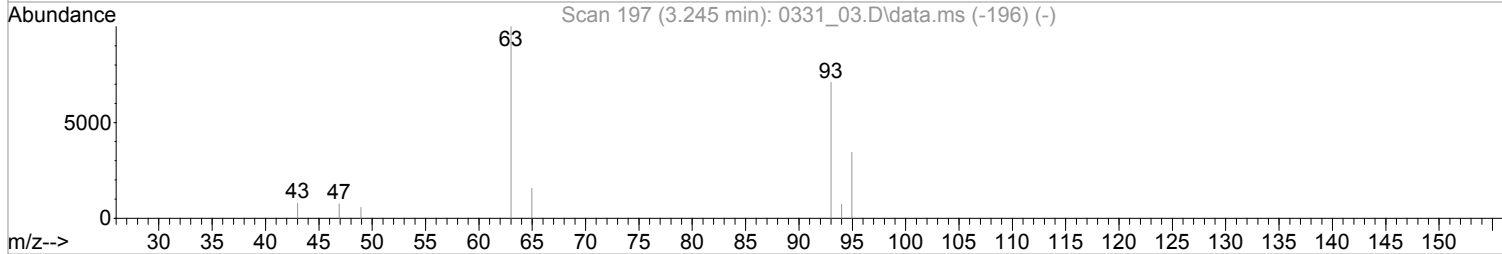
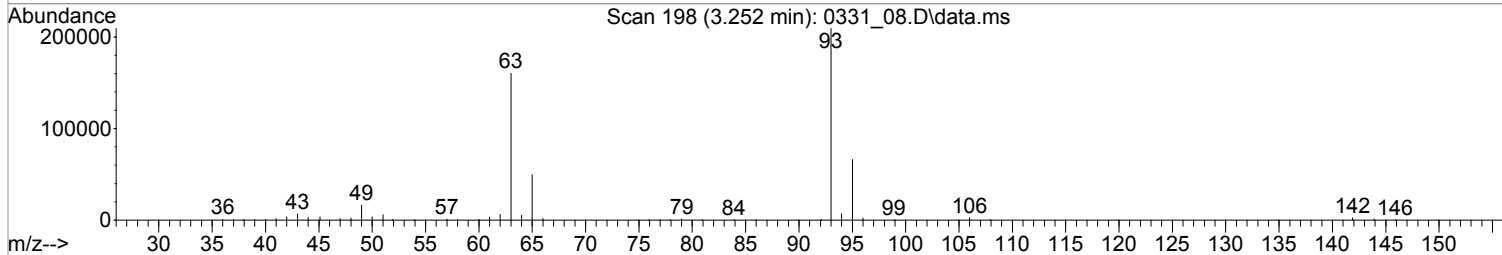
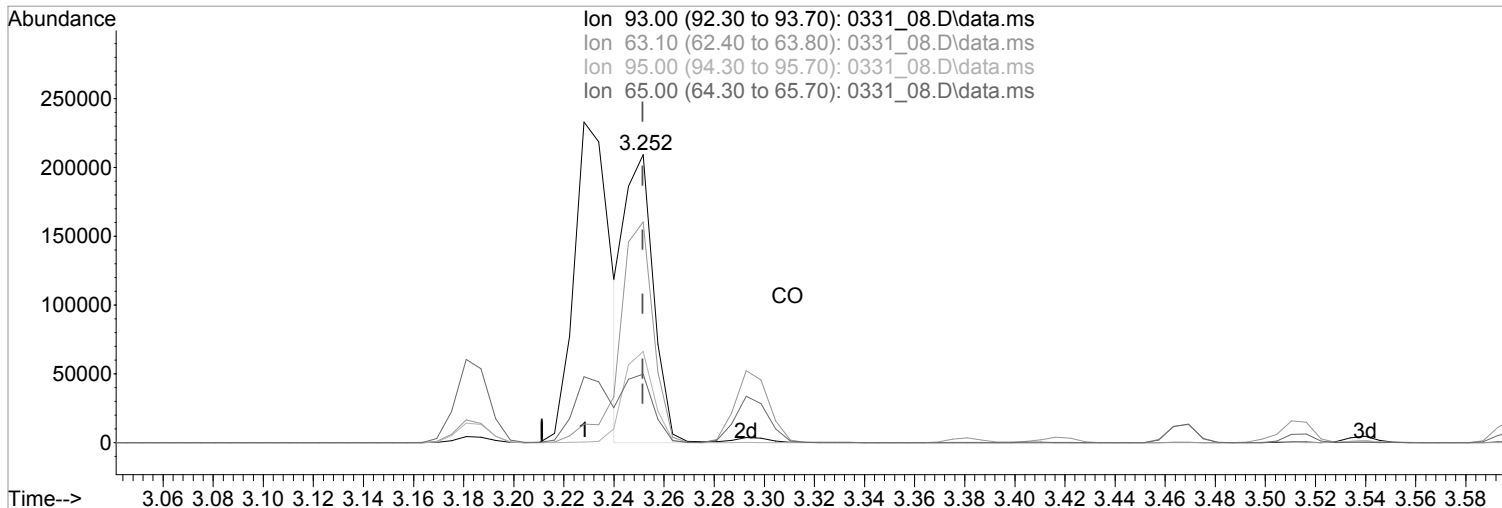
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.023) 64297.1729842 ppb  
 Qvalue = 37  
 response 366812

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	4.74#
95.00	31.90	0.23#
65.00	23.10	20.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.252min (+0.000) 29396.0633812 ppb m

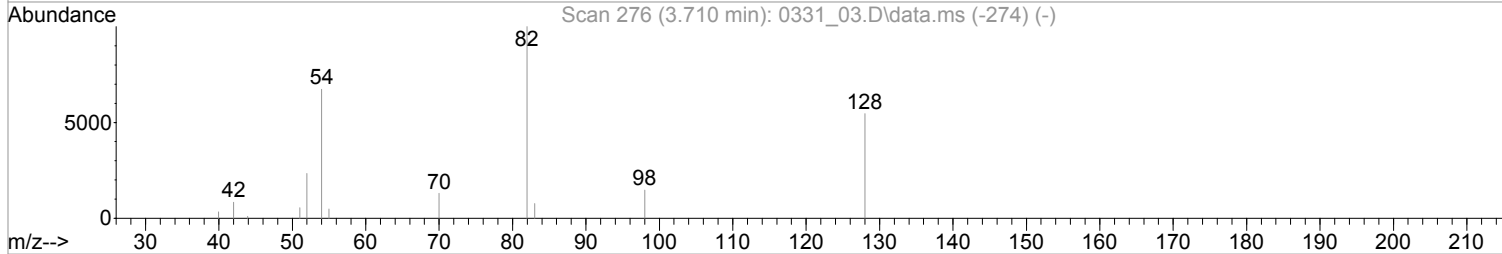
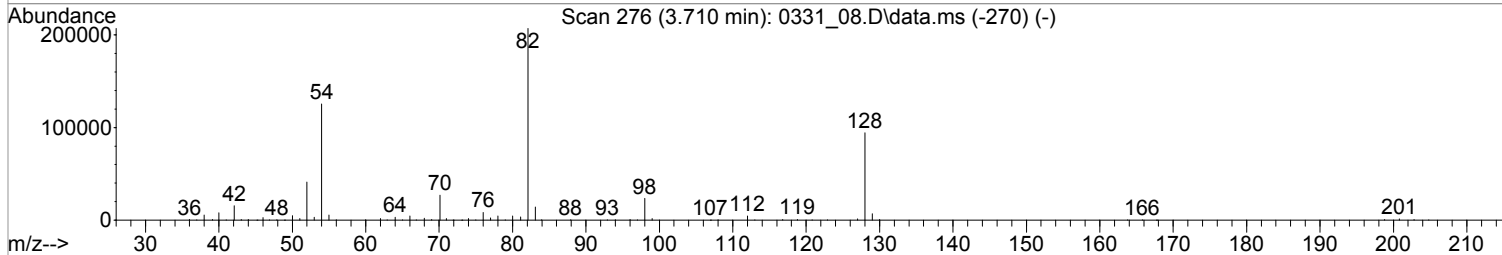
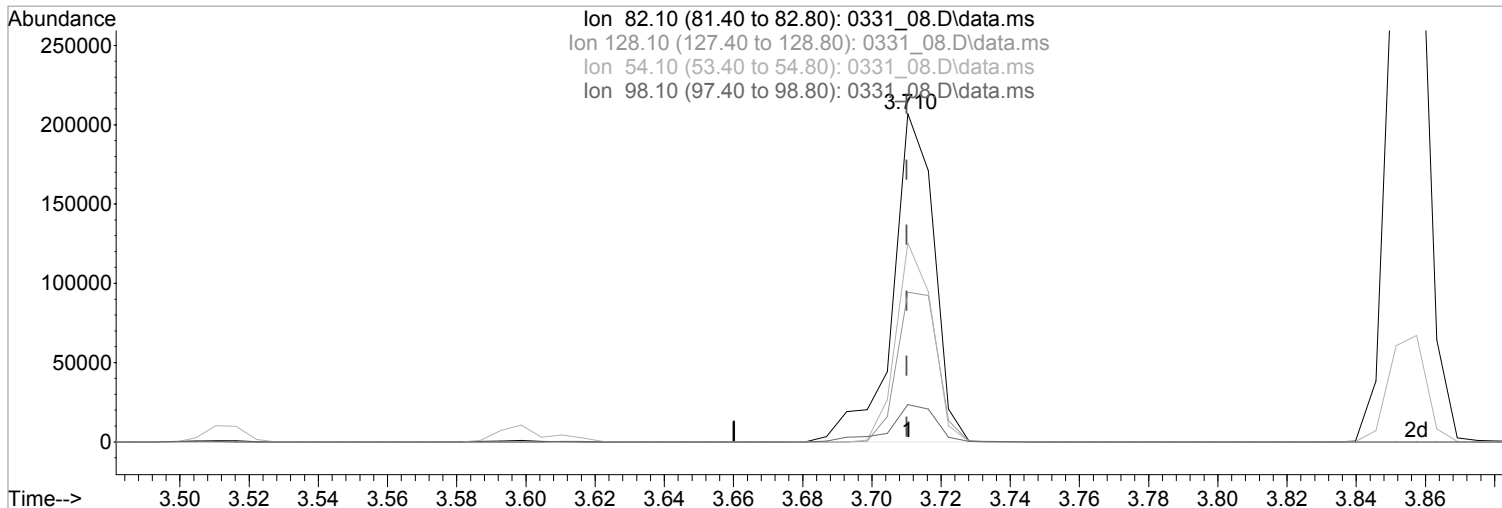
response 167703

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.64
95.00	31.90	31.63
65.00	23.10	23.78

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

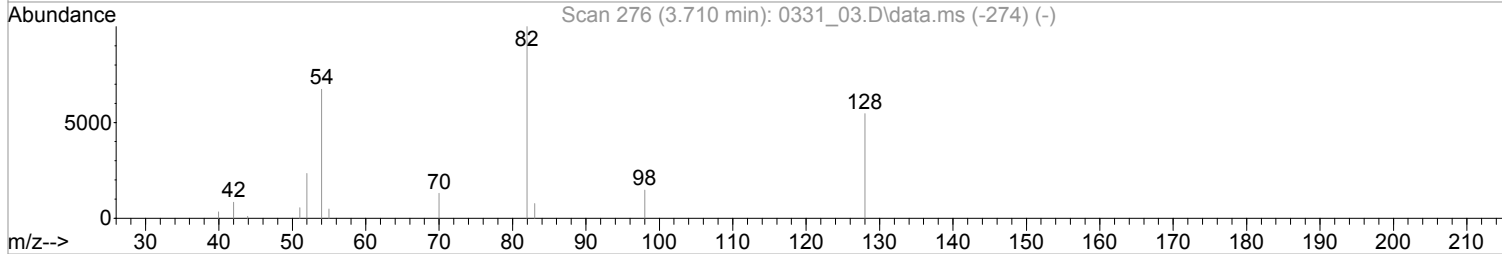
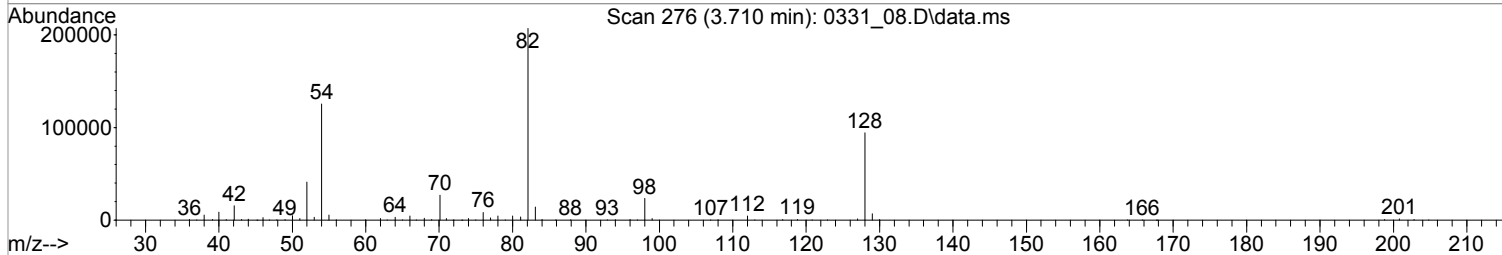
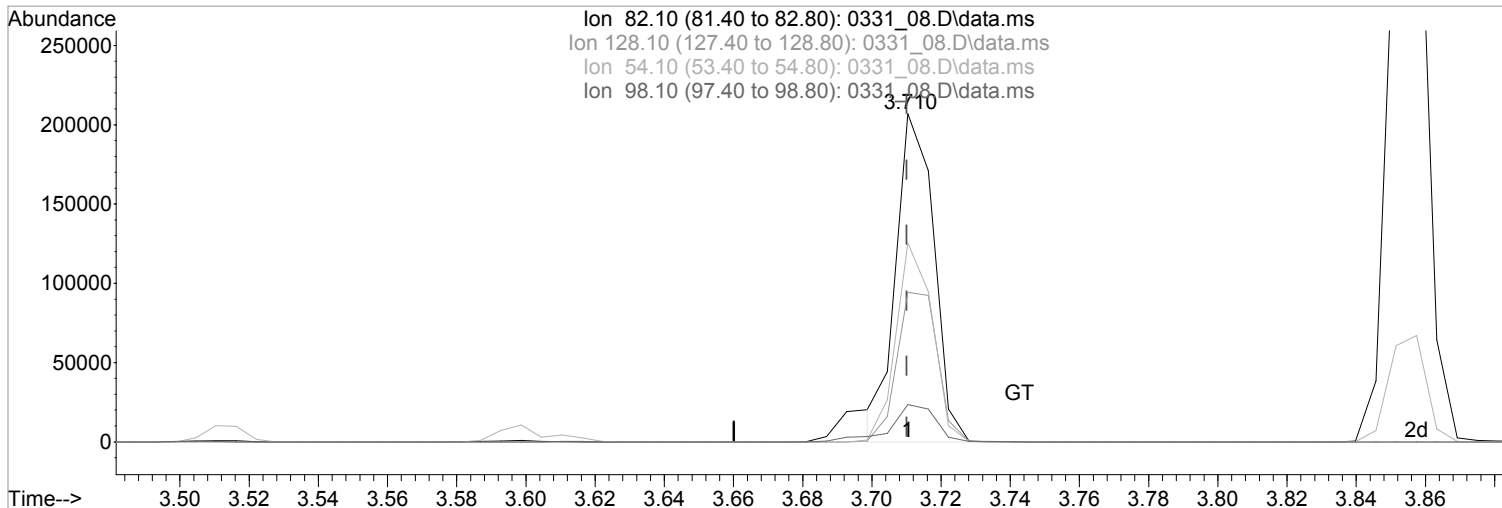
(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 34452.1549448 ppb  
 Qvalue = 99  
 response 171656

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.54
54.10	60.00	60.63
98.10	11.40	11.35

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 31417.3001484 ppb m

response 156535

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.54
54.10	60.00	60.63
98.10	11.40	11.35

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:09:21 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.410	152	33061	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	133057	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	71412	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	114930	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	88961	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	77968	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.740	112	203931	39398.3935171	ppb	0.00	
Spiked Amount	20000.000			Recovery = 196.99%			
7) Phenol-d5	3.175	99	243776	39757.9207209	ppb	0.00	
Spiked Amount	20000.000			Recovery = 198.79%			
24) Nitrobenzene-d5	3.710	82	206939m	41156.7993172	ppb	0.00	
Spiked Amount	10000.000			Recovery = 411.57%			
50) 2-Fluorobiphenyl	4.828	172	421450	36358.0213610	ppb	0.00	
Spiked Amount	10000.000			Recovery = 363.58%			
73) 2,4,6-Tribromophenol	5.892	330	52112	45093.5757565	ppb	0.00	
Spiked Amount	20000.000			Recovery = 225.47%			
87) p-Terphenyl-d14	7.845	244	468126	37487.3348476	ppb	0.00	
Spiked Amount	10000.000			Recovery = 374.87%			
<b>Target Compounds</b>							
							Qvalue
2) Pyridine	2.210	79	215337	39199.7597546	ppb		99
3) N-Nitrosodimethylamine	2.199	42	101884	34057.7162643	ppb		95
5) Aniline	3.228	66	113937	40229.0431035	ppb	#	20
6) bis(2-Chloroethyl)ether	3.251	93	219184m	39099.6807544	ppb		
8) Phenol	3.187	94	256473	39374.8144871	ppb		94
10) 2-Chlorophenol	3.293	128	217896	40356.4763866	ppb		98
11) n-Decane	3.293	41	127032	35472.1283692	ppb	#	98
12) 1,3-Dichlorobenzene	3.381	146	234296	37078.5499497	ppb		99
13) 1,4-Dichlorobenzene	3.422	146	235807	37329.3526295	ppb		99
14) Benzyl Alcohol	3.469	79	162508	41457.2445089	ppb		100
15) 1,2-Dichlorobenzene	3.504	146	223975	36604.1805905	ppb		98
16) bis(2-Chloroisopropyl)...	3.540	121	78759	37548.9281211	ppb		99
17) 2,2-oxybis(1-chloropro...	3.540	121	78759	37548.9281211	ppb		99
18) 2-Methylphenol	3.516	108	195561	40184.3520115	ppb		99
19) Hexachloroethane	3.698	117	99275	37916.4240494	ppb		97
20) N-Nitrosodi-n-propylamine	3.616	70	141625	41367.6274712	ppb		94
21) 3&4-Methyl phenol	3.598	107	215277	40147.0649295	ppb		97
25) Nitrobenzene	3.722	77	207934	40842.8260253	ppb		99
26) Isophorone	3.857	82	414425	41877.8923137	ppb		93
27) 2-Nitrophenol	3.904	139	106429	45894.6910183	ppb		93
28) 2,4-Dimethylphenol	3.910	107	201269	40480.4960184	ppb		97
29) bis(2-Chlorethoxy)methane	3.969	93	263088	38782.5012305	ppb		99
30) 2,4-Dichlorophenol	4.045	162	161714	41566.3970266	ppb		95
32) 1,2,4-Trichlorobenzene	4.104	180	177380	36961.8874658	ppb		97
34) Naphthalene	4.157	128	612175m	35905.5101669	ppb		
35) 4-Chloroaniline	4.175	65	72463	42304.5815986	ppb		93
36) Hexachloro-1,3-butadiene	4.222	225	96557	37316.3930938	ppb		98
40) 4-Chloro-3-methylphenol	4.463	107	178473	44634.5178058	ppb		95
41) 2-Methylnaphthalene	4.592	142	405791	38526.0570869	ppb		99
42) 1-Methylnaphthalene	4.657	142	392103	38134.7387840	ppb		100
47) Hexachlorocyclopentadiene	4.692	237	99377	43836.3485368	ppb		100
48) 2,4,6-Trichlorophenol	4.769	196	115768	44826.2313232	ppb		99

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

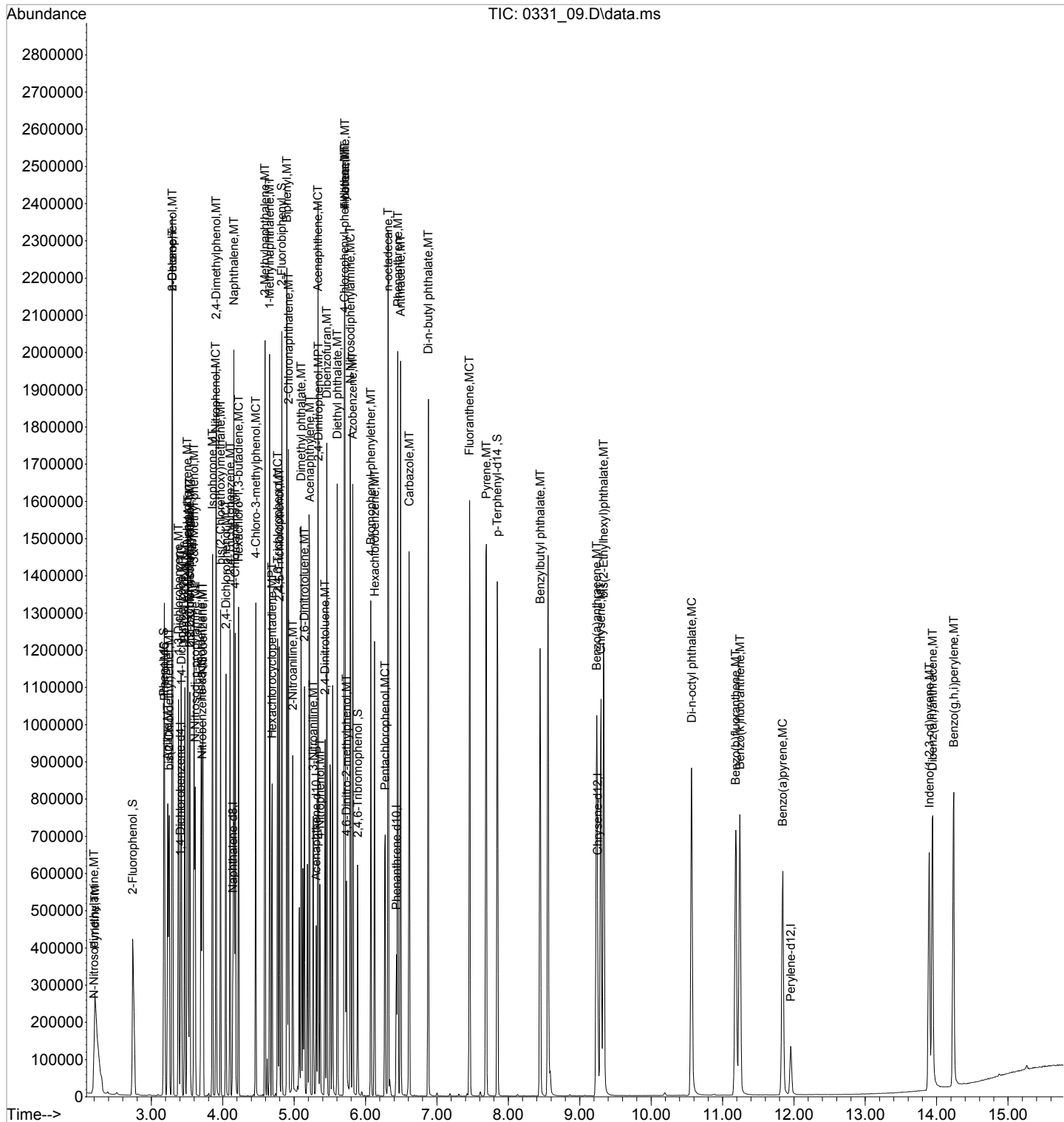
Quant Time: Apr 04 16:09:21 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	119302	45453.5255064	ppb		96
51) Biphenyl	4.898	154	480393	36947.6299186	ppb		99
52) 2-Chloronaphthalene	4.922	162	373851	37326.0436365	ppb		98
53) 2-Nitroaniline	4.981	138	127833	48518.5215917	ppb		99
54) Acenaphthylene	5.216	152	592569	38881.8295975	ppb		99
55) Dimethyl phthalate	5.098	163	444091	40193.5954557	ppb		92
56) 2,6-Dinitrotoluene	5.145	165	103807	44504.8915003	ppb		87
57) 3-Nitroaniline	5.269	138	96588	45668.5841609	ppb		87
58) Acenaphthene	5.334	153	388931	37316.7229950	ppb		99
59) 2,4-Dinitrophenol	5.339	184	36205	54603.2195077	ppb	#	61
60) Dibenzofuran	5.457	168	518647	37194.8213715	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	127967	47082.0688130	ppb		92
63) 4-Nitrophenol	5.363	139	72385	49365.8107588	ppb		89
64) Fluorene	5.710	166	434013	37758.1780561	ppb		99
65) 4-Chlorophenyl-phenyle...	5.704	204	192964	36606.8438369	ppb		98
66) Diethyl phthalate	5.604	149	453615	39207.5189475	ppb		99
67) 4-Nitroaniline	5.710	138	53281	37694.5684669	ppb		94
68) Azobenzene	5.822	77	456869	39433.4676522	ppb		99
71) 4,6-Dinitro-2-methylph...	5.734	198	55654	57714.6966225	ppb		89
72) N-Nitrosodiphenylamine	5.787	169	350165	38968.2162355	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	105898	38256.7651444	ppb		98
75) Hexachlorobenzene	6.128	284	118963	36265.8792912	ppb		99
76) n-octadecane	6.316	55	83858	38849.3842584	ppb		99
77) Pentachlorophenol	6.275	266	66534	47058.4196872	ppb		99
78) Phenanthrene	6.451	178	568662	36528.3050546	ppb		99
79) Anthracene	6.492	178	571694	39427.9021495	ppb		98
80) Carbazole	6.610	167	491734	39824.5607550	ppb		99
81) Di-n-butyl phthalate	6.881	149	777001	42748.1261335	ppb		100
83) Fluoranthene	7.457	202	603883	40747.9721884	ppb		100
86) Pyrene	7.692	202	623307	36620.5339470	ppb		100
88) Benzylbutyl phthalate	8.445	149	321842	47972.5534686	ppb		99
90) Benzo(a)anthracene	9.239	228	501256	40668.1622367	ppb		99
91) Chrysene	9.298	228	495769	37273.1327916	ppb		100
92) bis(2-Ethylhexyl)phtha...	9.333	149	468790	47601.6976177	ppb		99
93) Di-n-octyl phthalate	10.569	149	733280	52235.2983621	ppb		100
95) Benzo(b)fluoranthene	11.186	252	474283	42112.1585885	ppb		98
96) Benzo(k)fluoranthene	11.245	252	481495	41725.0907736	ppb		99
97) Benzo(a)pyrene	11.845	252	399588	44516.7656301	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.898	276	354988	42850.6886914	ppb		96
99) Dibenz(a,h)anthracene	13.945	278	390368	41733.1534265	ppb		100
100) Benzo(g,h,i)perylene	14.239	276	403531	40288.2616536	ppb		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_09.D  
Acq On : 31 Mar 2022 7:32 pm  
Operator : 3545  
Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 9 Sample Multiplier: 1

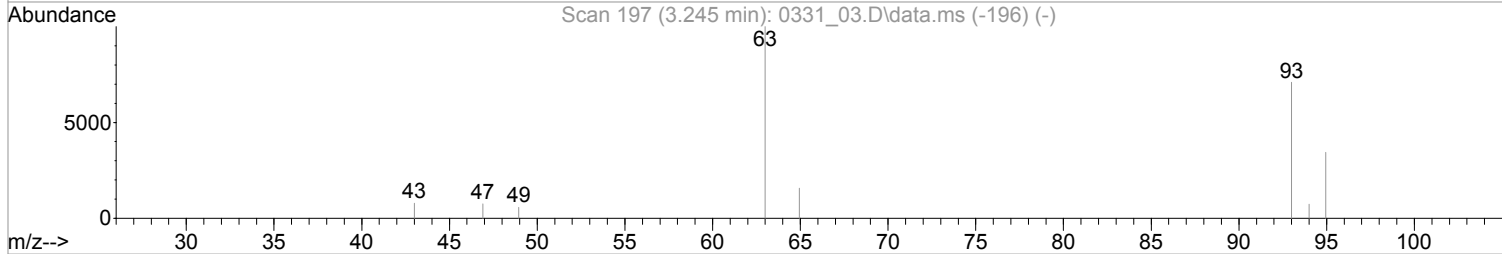
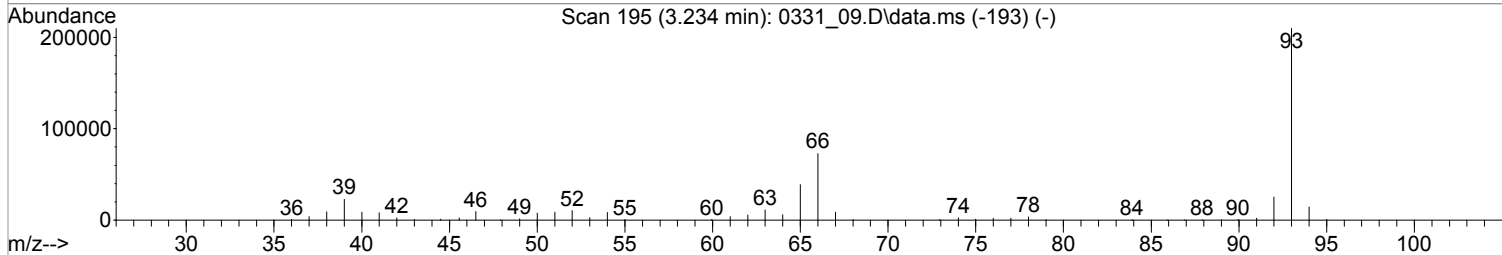
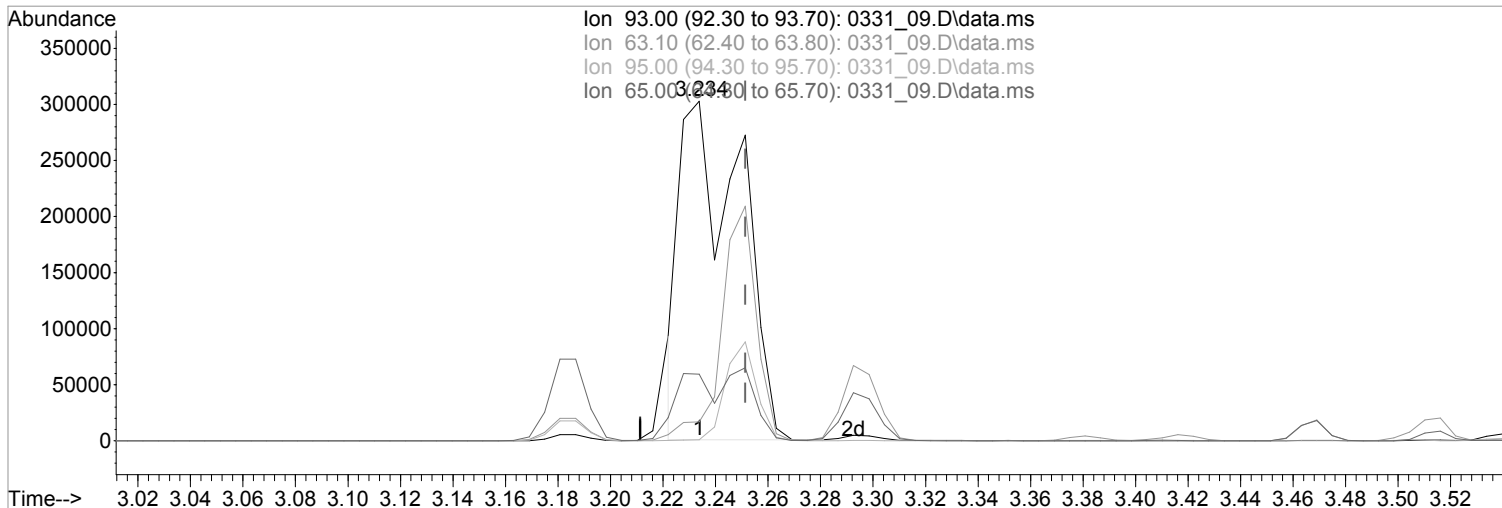
Quant Time: Apr 04 16:09:21 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:08:32 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.234min (-0.018) 85884.8291794 ppb  
 Qvalue = 36  
 response 481451

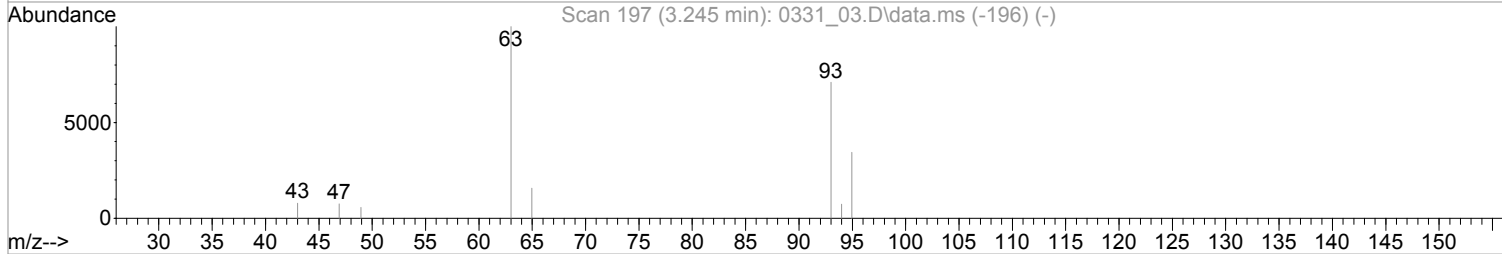
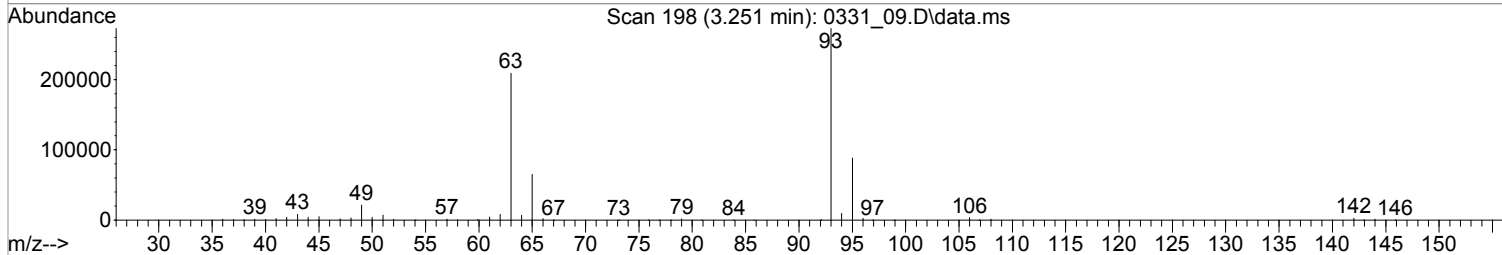
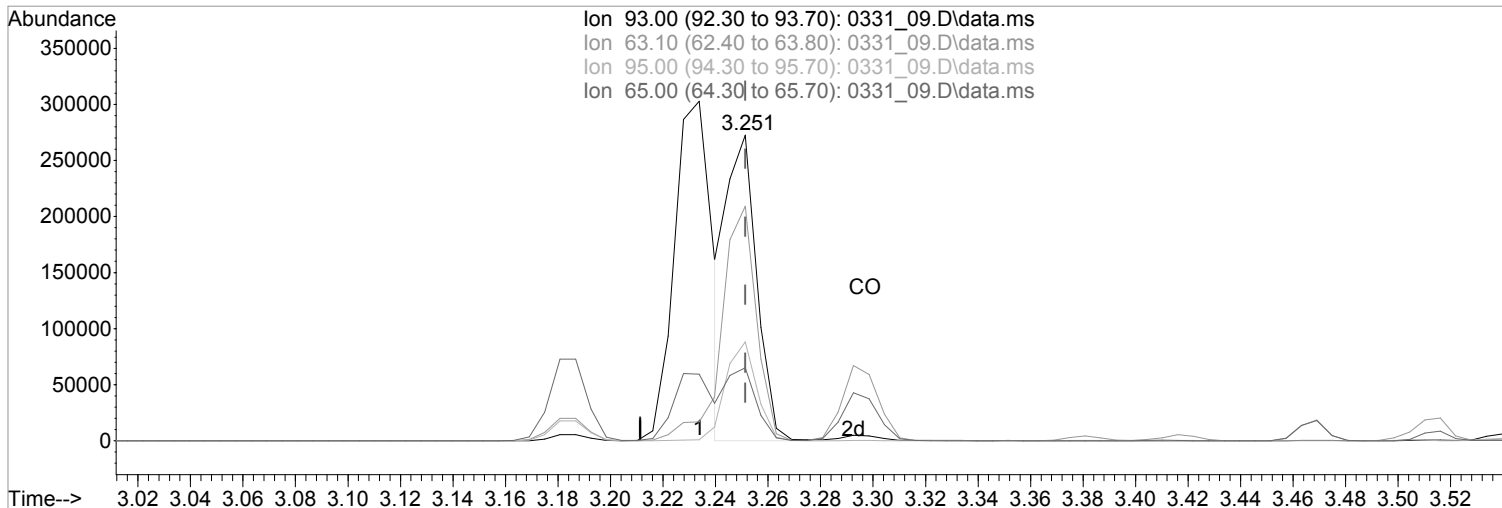
Ion	Exp%	Act%
93.00	100	100
63.10	76.00	4.59#
95.00	31.90	0.31#
65.00	23.10	19.03



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (-0.000) 39099.6807544 ppb m

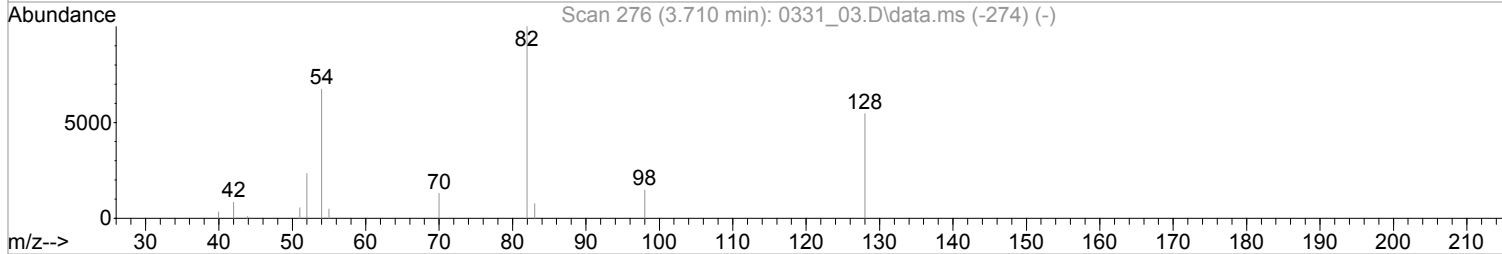
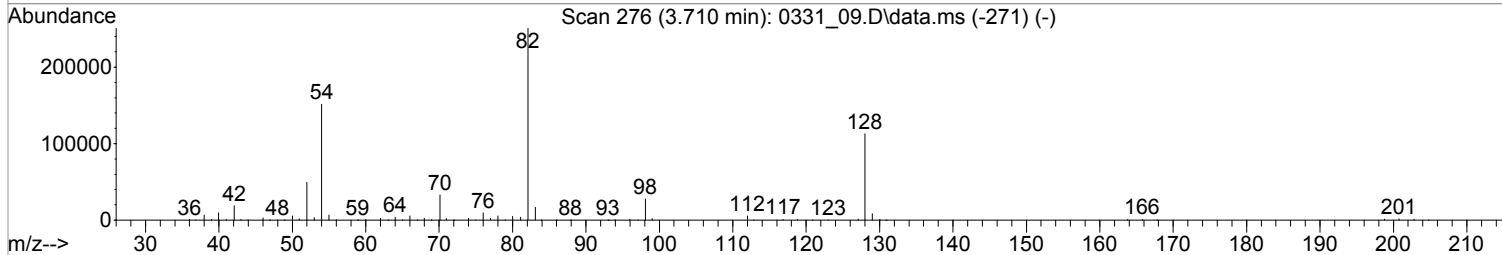
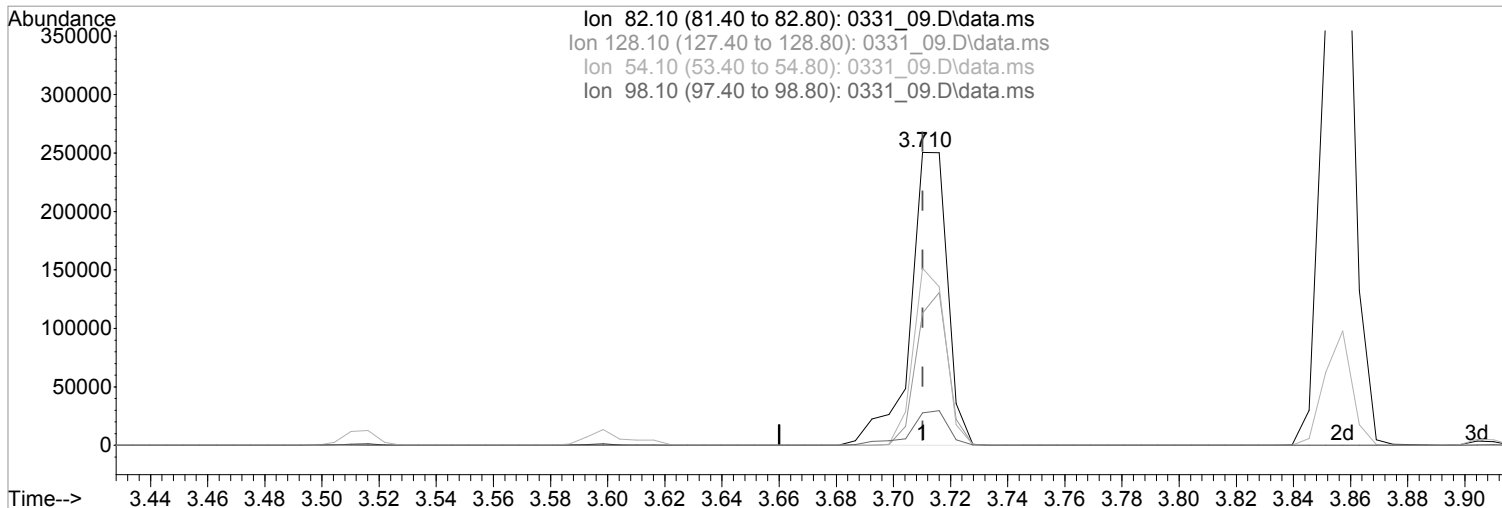
response 219184

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.70
95.00	31.90	32.33
65.00	23.10	23.85

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

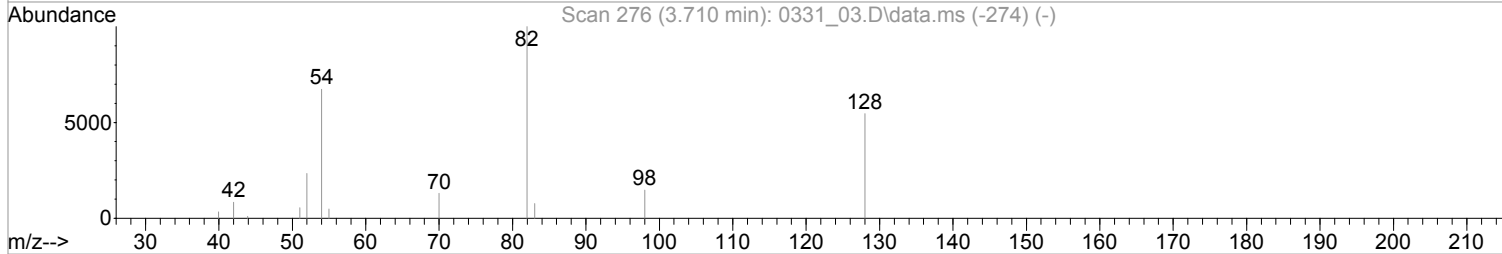
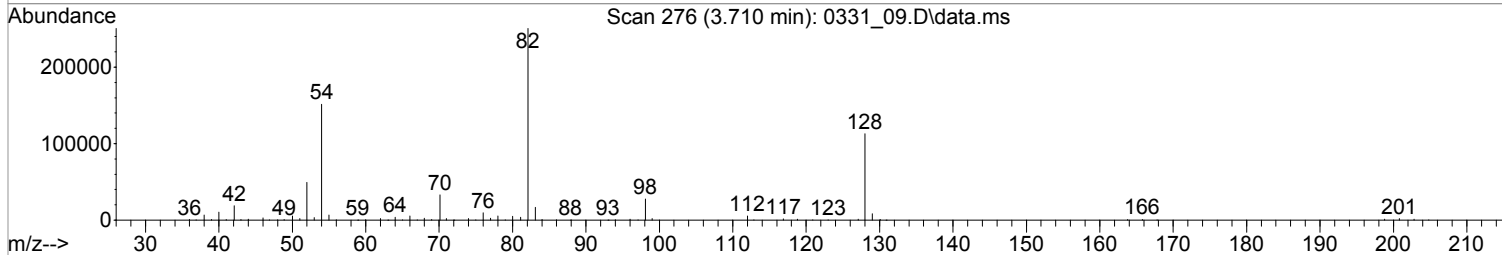
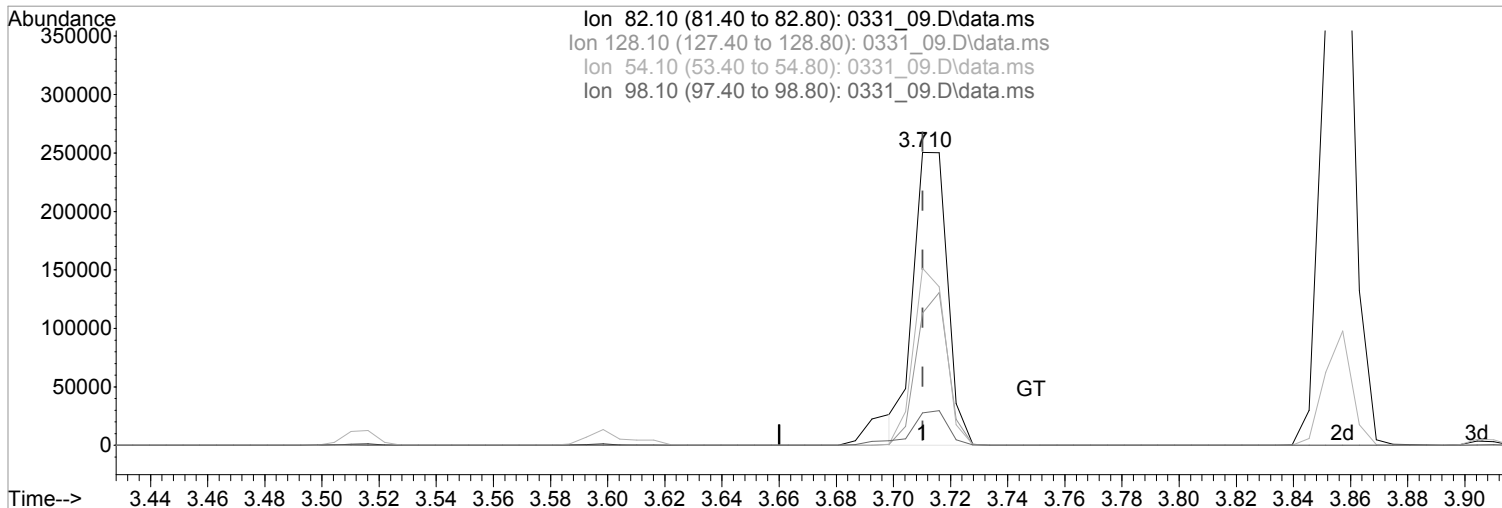
(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 44885.2725233 ppb  
 Qvalue = 99  
 response 225686

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.16
54.10	60.00	60.49
98.10	11.40	11.07

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

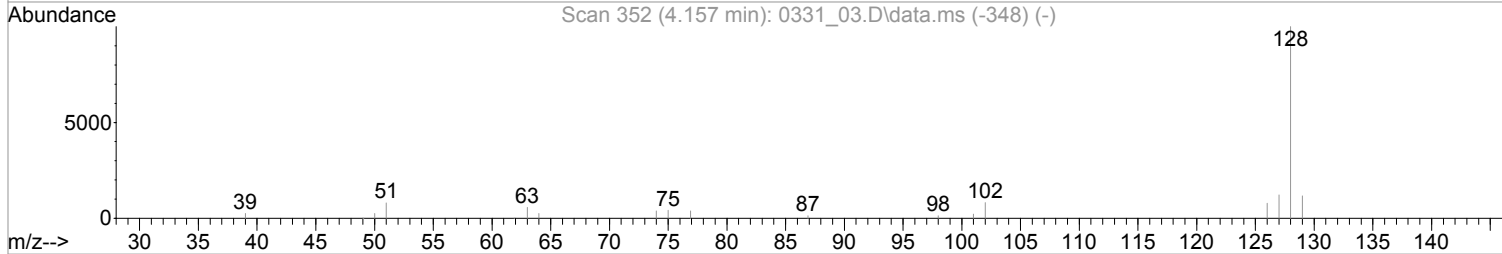
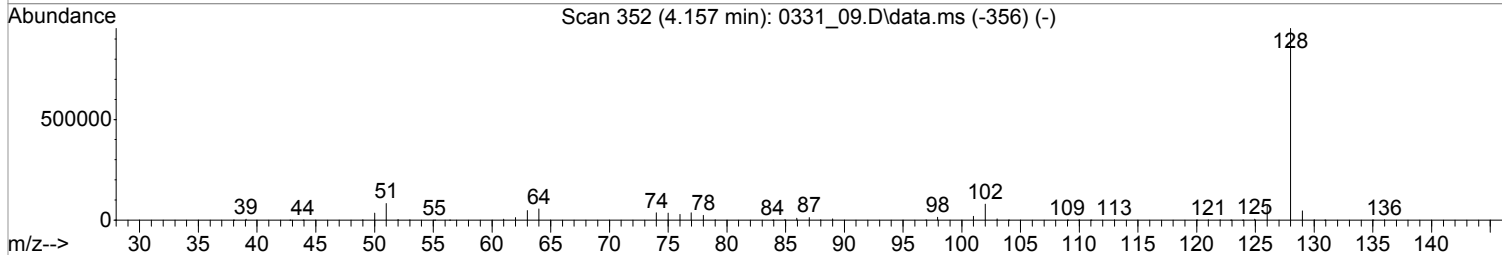
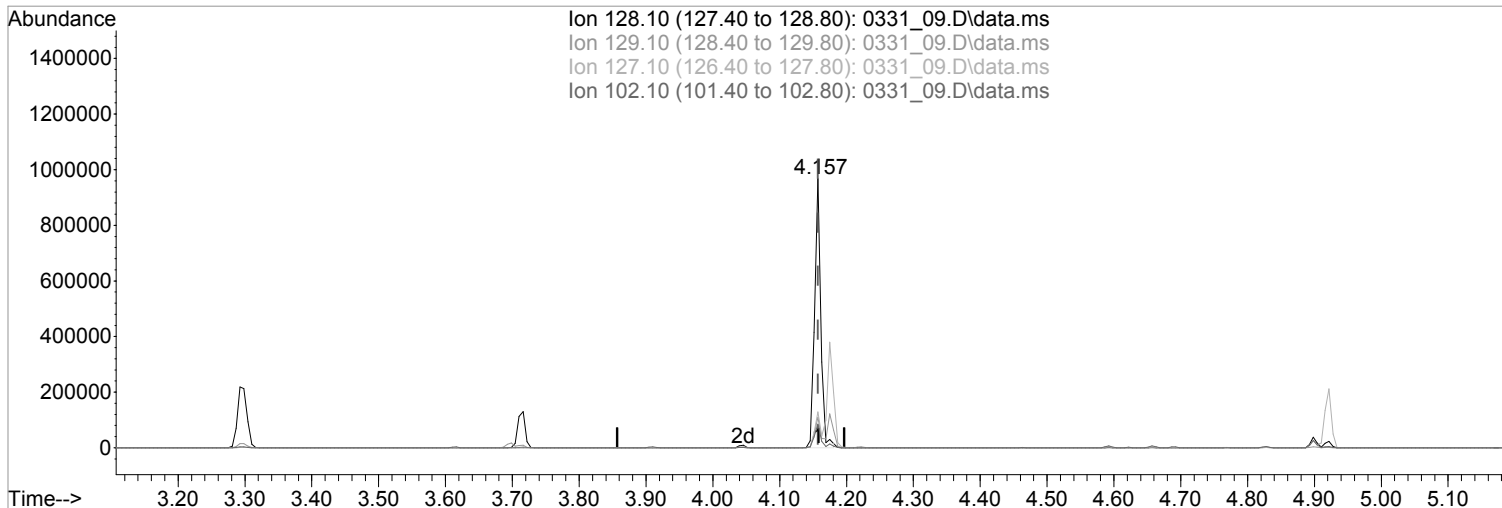
(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 41156.7993172 ppb m  
 response 206939  

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.16
54.10	60.00	60.49
98.10	11.40	11.07

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

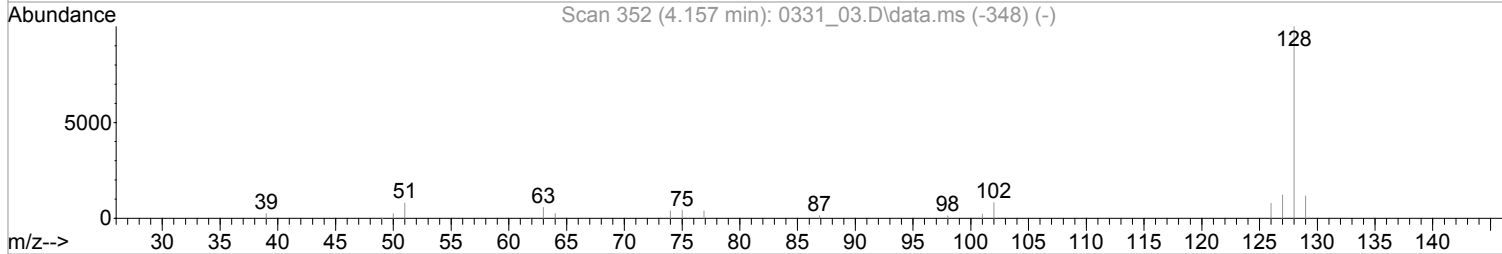
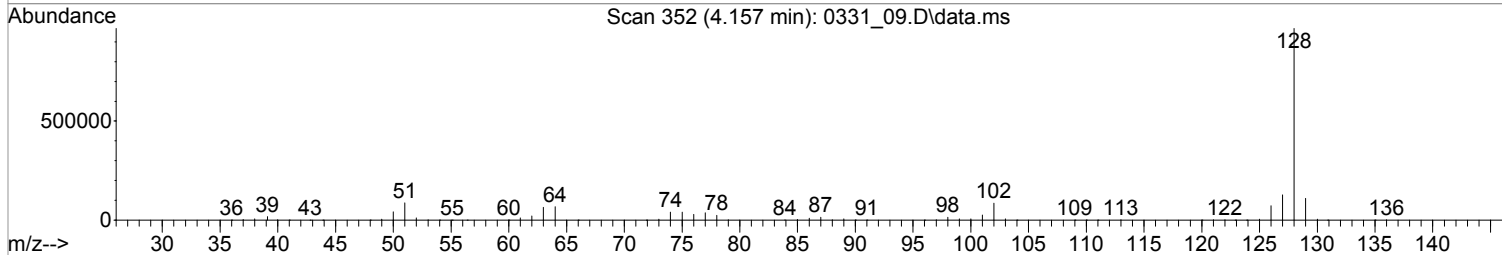
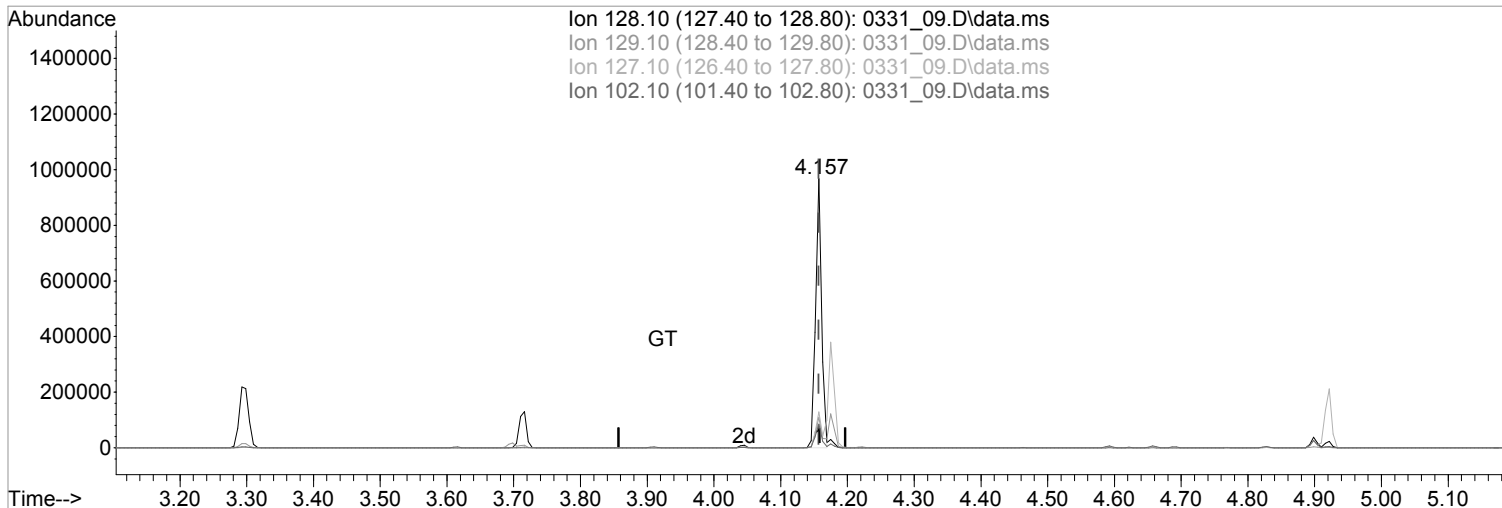
(34) Naphthalene (MT)  
 4.157min (-0.000) 36849.7545549 ppb  
 Qvalue = 99  
 response 628274

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.30
127.10	12.80	13.27
102.10	8.30	8.84

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

(34) Naphthalene (MT)  
 4.157min (-0.000) 35905.5101669 ppb m

response 612175

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.30
127.10	12.80	13.27
102.10	8.30	8.84

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:49 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.410	152	33286	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	137379	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	72853	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	116755	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.257	240	89872	8000.0000000	ppb	0.01	
94) Perylene-d12	11.957	264	80041	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.740	112	264507	50865.2212692	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	254.33%		
7) Phenol-d5	3.175	99	314531	50994.8347848	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	254.97%		
24) Nitrobenzene-d5	3.716	82	265314m	50896.3023359	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	508.96%		
50) 2-Fluorobiphenyl	4.828	172	542476	46477.6781496	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	464.78%		
73) 2,4,6-Tribromophenol	5.892	330	68453	57096.1272770	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	285.48%		
87) p-Terphenyl-d14	7.851	244	598918	47904.8278187	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	479.05%		
<b>Target Compounds</b>							
							Qvalue
2) Pyridine	2.210	79	278007	50410.1333313	ppb		99
3) N-Nitrosodimethylamine	2.199	42	130731	44346.4125409	ppb		94
5) Aniline	3.234	66	145606	51021.5276676	ppb	#	20
6) bis(2-Chloroethyl)ether	3.251	93	282472m	50210.3023281	ppb		
8) Phenol	3.187	94	331731	50697.6796332	ppb		94
10) 2-Chlorophenol	3.293	128	278445	51157.0179990	ppb		99
11) n-Decane	3.293	41	162108	45699.6951523	ppb	#	99
12) 1,3-Dichlorobenzene	3.381	146	298942	47484.7663177	ppb		98
13) 1,4-Dichlorobenzene	3.416	146	300039	47630.8185250	ppb		96
14) Benzyl Alcohol	3.469	79	210910	53164.6348947	ppb		100
15) 1,2-Dichlorobenzene	3.504	146	285067	46841.6039443	ppb		98
16) bis(2-Chloroisopropyl)...	3.540	121	101326	48405.0979156	ppb		97
17) 2,2-oxybis(1-chloropro...	3.540	121	101326	48405.0979156	ppb		97
18) 2-Methylphenol	3.516	108	247855	50552.3018914	ppb		97
19) Hexachloroethane	3.698	117	128718	49195.4518813	ppb		97
20) N-Nitrosodi-n-propylamine	3.616	70	184502	53267.2220924	ppb		96
21) 3&4-Methyl phenol	3.598	107	275858	51070.2615719	ppb		97
25) Nitrobenzene	3.728	77	266900	50623.3549262	ppb		92
26) Isophorone	3.857	82	534310	51945.3365587	ppb		94
27) 2-Nitrophenol	3.910	139	138474	56448.2096839	ppb		83
28) 2,4-Dimethylphenol	3.910	107	256556	49891.1889295	ppb		97
29) bis(2-Chlorethoxy)methane	3.969	93	337131	48344.0868992	ppb		98
30) 2,4-Dichlorophenol	4.045	162	210856	52200.5777632	ppb		95
32) 1,2,4-Trichlorobenzene	4.104	180	227453	46408.3958517	ppb		98
34) Naphthalene	4.157	128	788352m	45448.6219591	ppb		
35) 4-Chloroaniline	4.175	65	95090	53256.5383024	ppb		92
36) Hexachloro-1,3-butadiene	4.222	225	121864	46056.5273806	ppb		98
40) 4-Chloro-3-methylphenol	4.463	107	230866	55010.5698340	ppb		96
41) 2-Methylnaphthalene	4.592	142	523350	48378.6737429	ppb		99
42) 1-Methylnaphthalene	4.657	142	504378	47829.6186952	ppb		100
47) Hexachlorocyclopentadiene	4.692	237	129995	55448.3866010	ppb		98
48) 2,4,6-Trichlorophenol	4.769	196	150352	56098.9471818	ppb		97

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

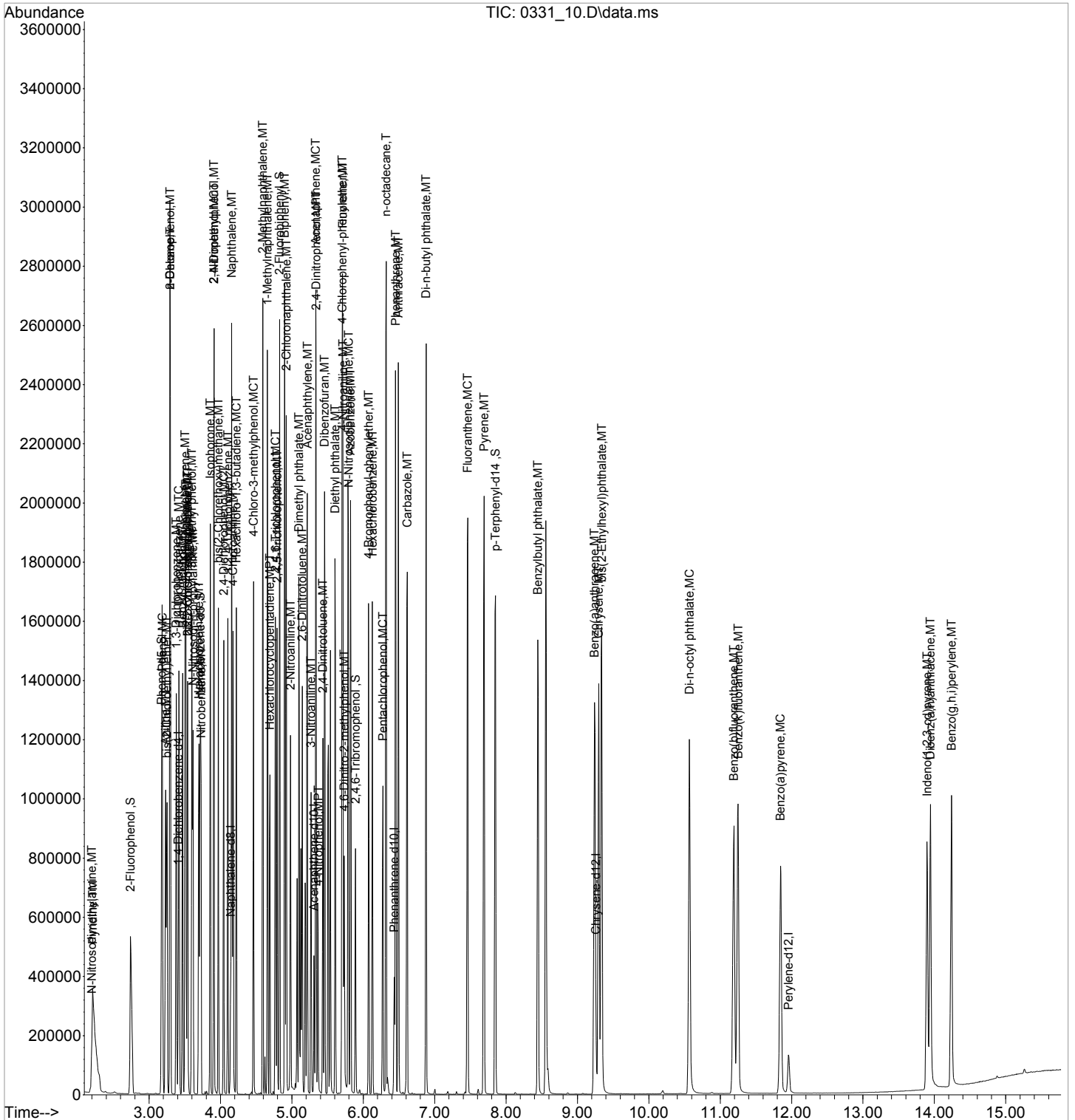
Quant Time: Apr 04 16:10:49 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	156604	57367.9164041	ppb		96
51) Biphenyl	4.898	154	622475	47445.6021582	ppb		99
52) 2-Chloronaphthalene	4.922	162	482181	47644.7044791	ppb		98
53) 2-Nitroaniline	4.981	138	165837	59582.9836669	ppb		98
54) Acenaphthylene	5.216	152	755128	48762.9428449	ppb		100
55) Dimethyl phthalate	5.098	163	561198	49753.6083527	ppb		90
56) 2,6-Dinitrotoluene	5.145	165	134010	55279.7104365	ppb		90
57) 3-Nitroaniline	5.269	138	123042	55709.9964627	ppb		92
58) Acenaphthene	5.334	153	499015	47386.0236386	ppb		99
59) 2,4-Dinitrophenol	5.339	184	50832	70033.2715714	ppb	#	80
60) Dibenzofuran	5.457	168	655054	46514.0746116	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	167787	58777.2992537	ppb		88
63) 4-Nitrophenol	5.369	139	95099	61185.9537290	ppb		93
64) Fluorene	5.710	166	550987	47365.7672850	ppb		98
65) 4-Chlorophenyl-phenyle...	5.704	204	245888	46285.2052677	ppb		97
66) Diethyl phthalate	5.604	149	571768	48579.8844394	ppb		98
67) 4-Nitroaniline	5.716	138	69559	48705.2165231	ppb		94
68) Azobenzene	5.822	77	585843	49665.8520799	ppb		99
71) 4,6-Dinitro-2-methylph...	5.734	198	76313	72546.8457901	ppb		83
72) N-Nitrosodiphenylamine	5.792	169	449103	49379.3048872	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	136813	48957.3690334	ppb		98
75) Hexachlorobenzene	6.128	284	151571	46098.9591670	ppb		98
76) n-octadecane	6.322	55	105949	48515.7513457	ppb		99
77) Pentachlorophenol	6.275	266	88723	59665.7277510	ppb		97
78) Phenanthrene	6.451	178	723203	46303.2942577	ppb		98
79) Anthracene	6.492	178	732119	49804.4207366	ppb		98
80) Carbazole	6.616	167	639932	51048.7019619	ppb		100
81) Di-n-butyl phthalate	6.881	149	1004284	53860.2373075	ppb		99
83) Fluoranthene	7.463	202	773416	51234.8738508	ppb		99
86) Pyrene	7.692	202	788011	46387.8040121	ppb		99
88) Benzylbutyl phthalate	8.445	149	420027	60257.2779756	ppb		100
90) Benzo(a)anthracene	9.239	228	649552	52041.4055443	ppb		98
91) Chrysene	9.298	228	642927	48317.4143460	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.339	149	610913	59781.2931036	ppb		99
93) Di-n-octyl phthalate	10.569	149	964940	65192.1281284	ppb		100
95) Benzo(b)fluoranthene	11.192	252	615009	52794.8465110	ppb		99
96) Benzo(k)fluoranthene	11.251	252	625919	52512.1784771	ppb		98
97) Benzo(a)pyrene	11.845	252	526182	56195.4572647	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.898	276	454752	52932.6248519	ppb		99
99) Dibenz(a,h)anthracene	13.945	278	498154	51557.8237309	ppb		98
100) Benzo(g,h,i)perylene	14.239	276	507520	49307.3651933	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_10.D  
Acq On : 31 Mar 2022 7:53 pm  
Operator : 3545  
Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:49 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:10:00 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M

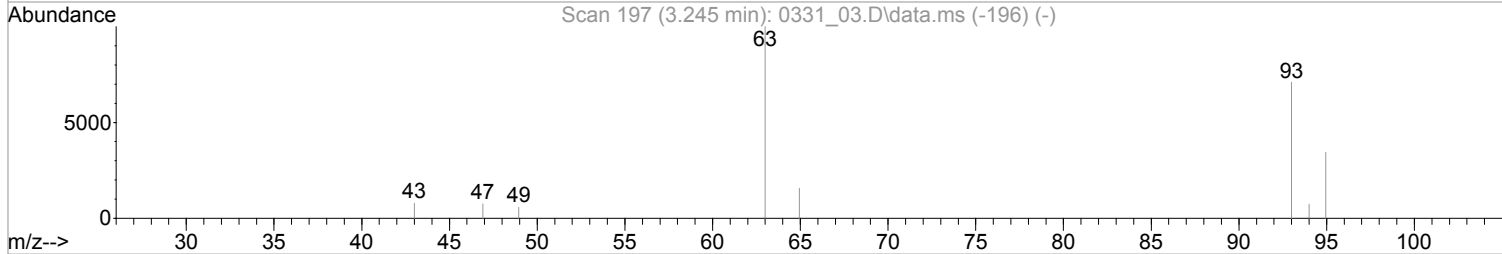
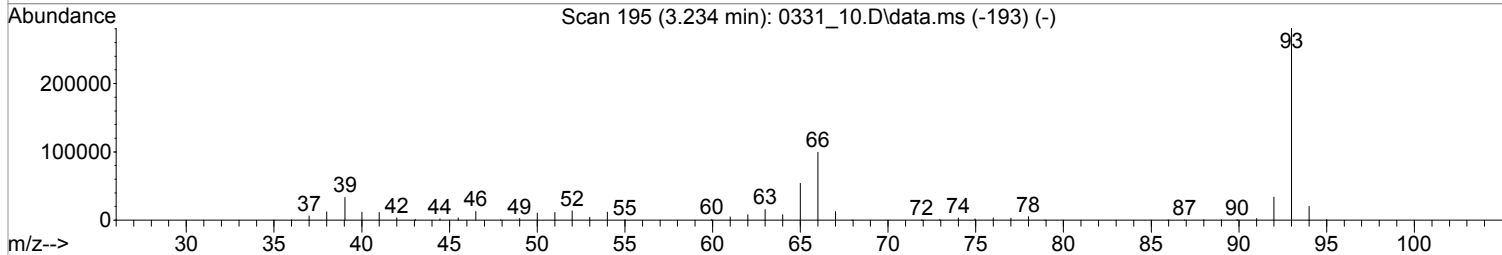
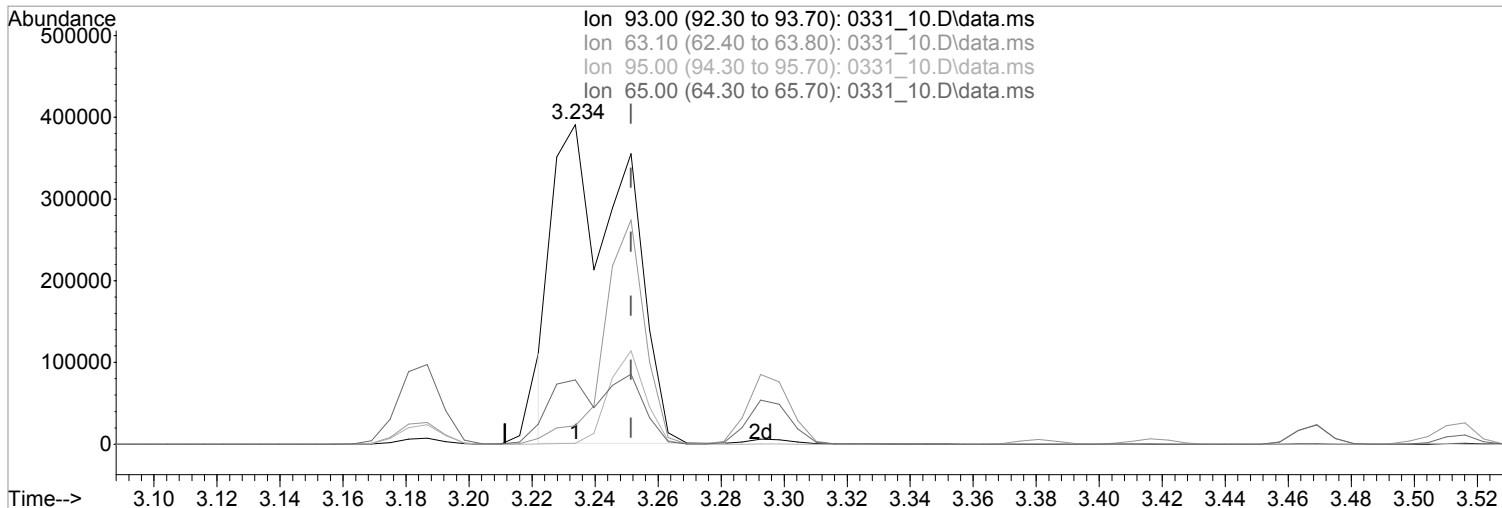




Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

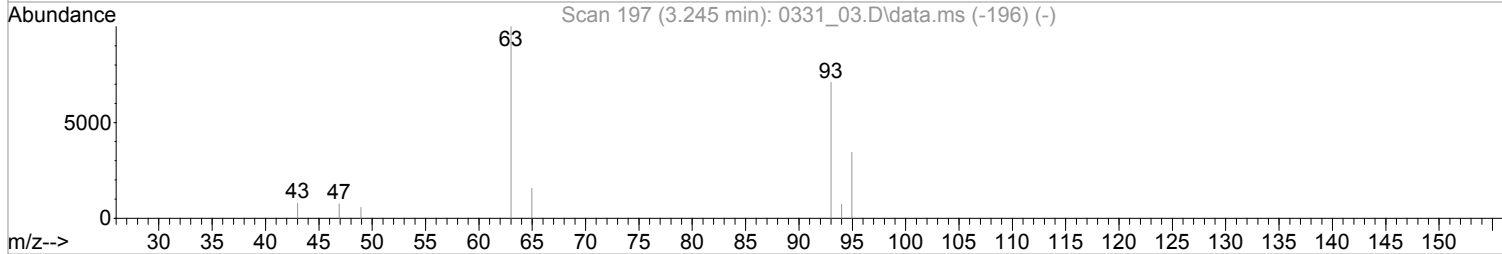
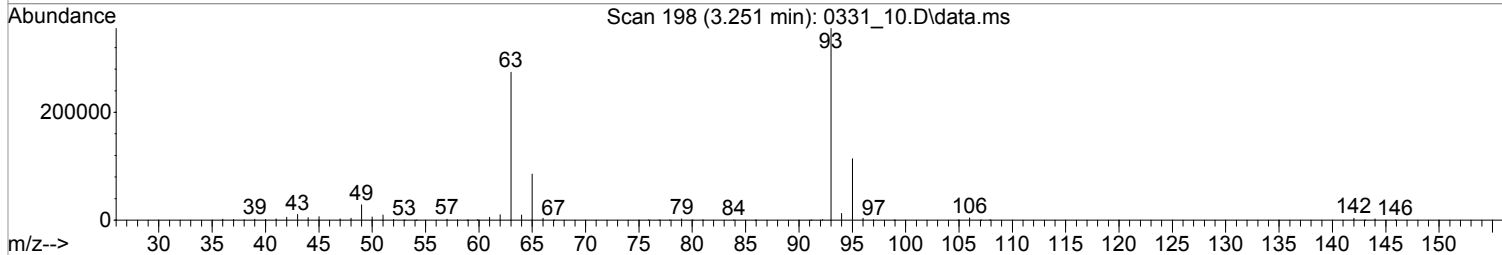
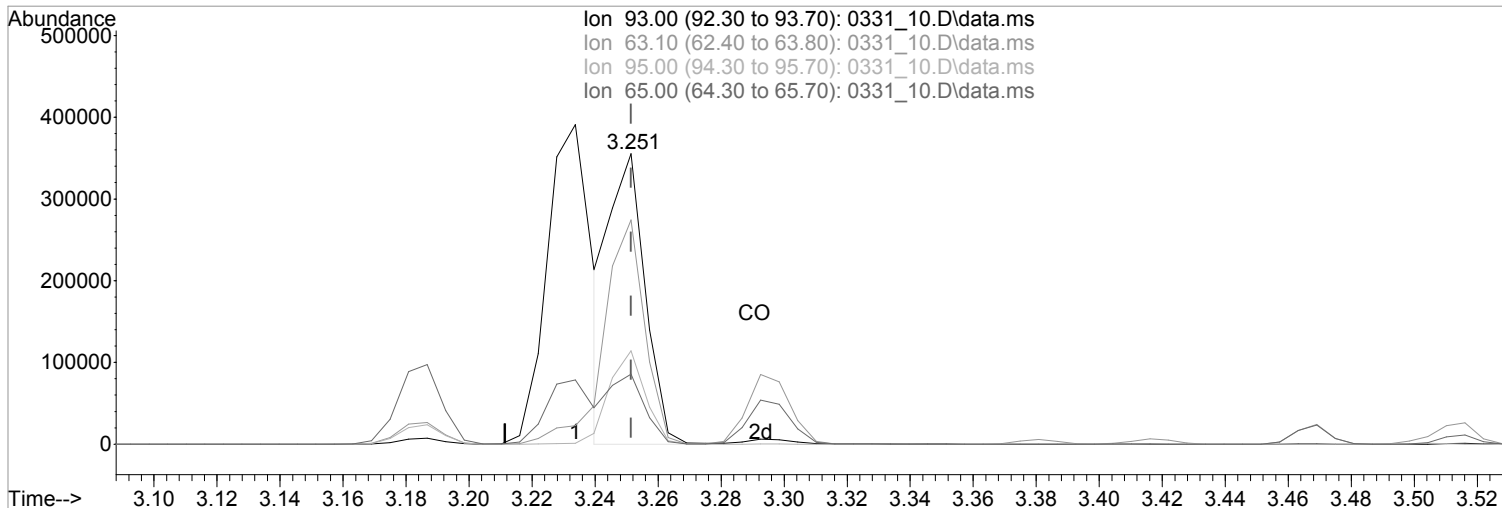
(6) bis(2-Chloroethyl)ether (MT)  
 3.234min (-0.018) 109615.2445090 ppb  
 Qvalue = 37  
 response 616671

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	4.88#
95.00	31.90	0.29#
65.00	23.10	19.61

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (-0.000) 50210.3023281 ppb m

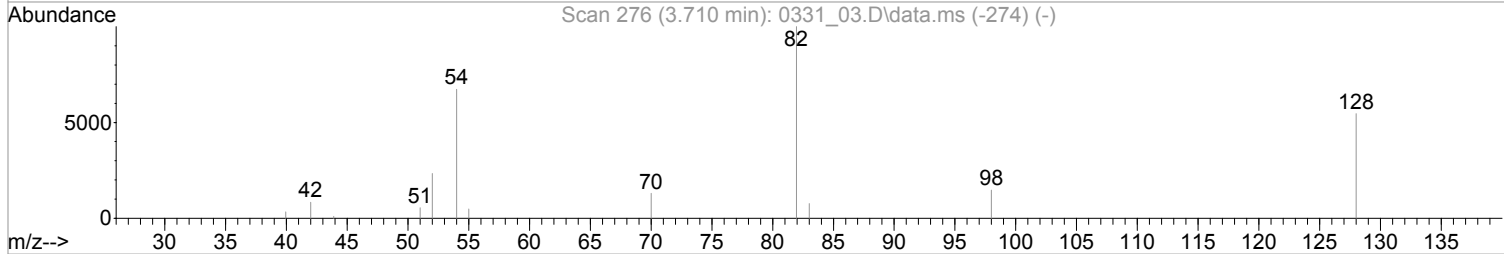
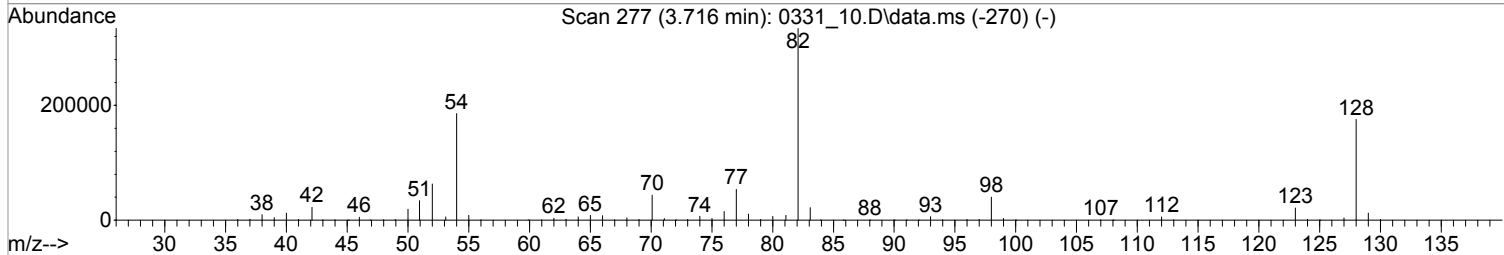
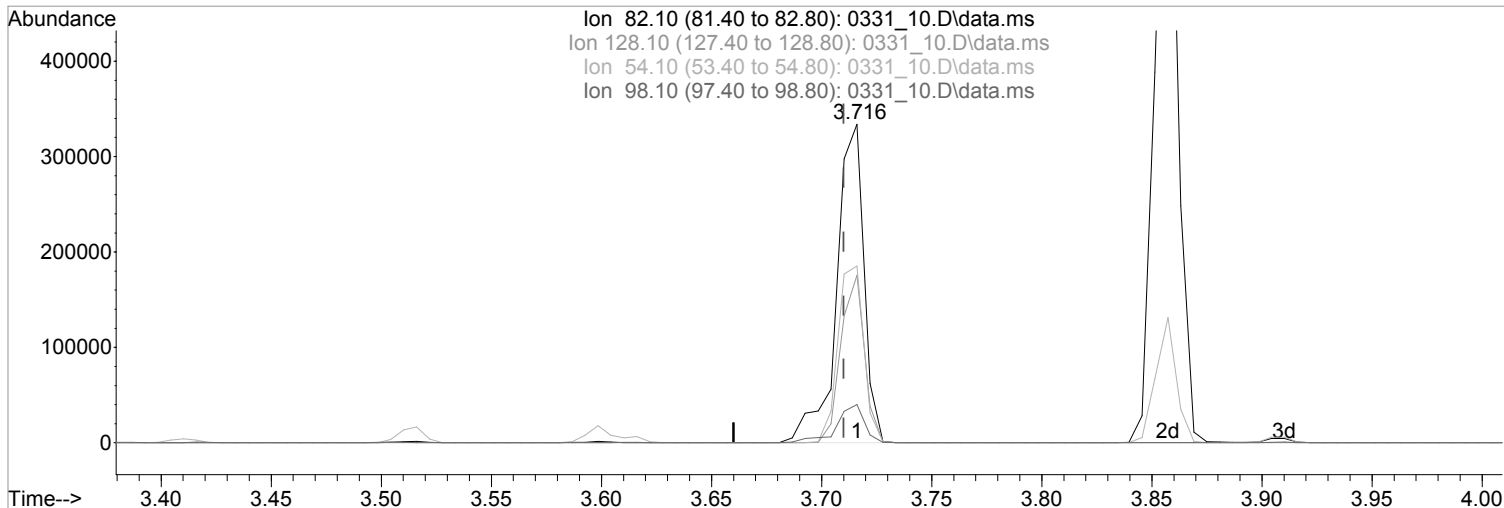
response 282472

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	77.21
95.00	31.90	32.08
65.00	23.10	24.05

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

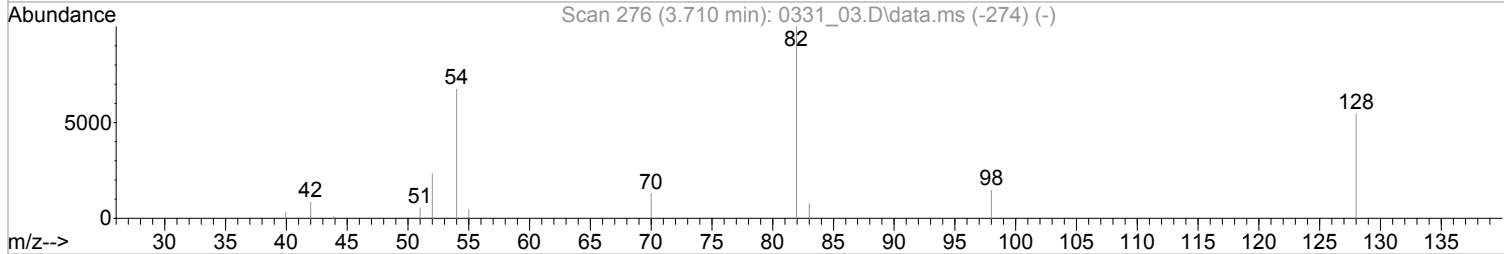
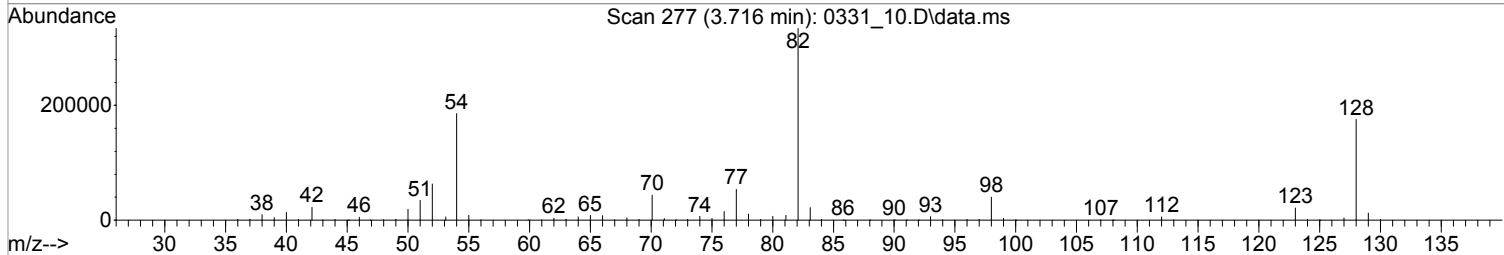
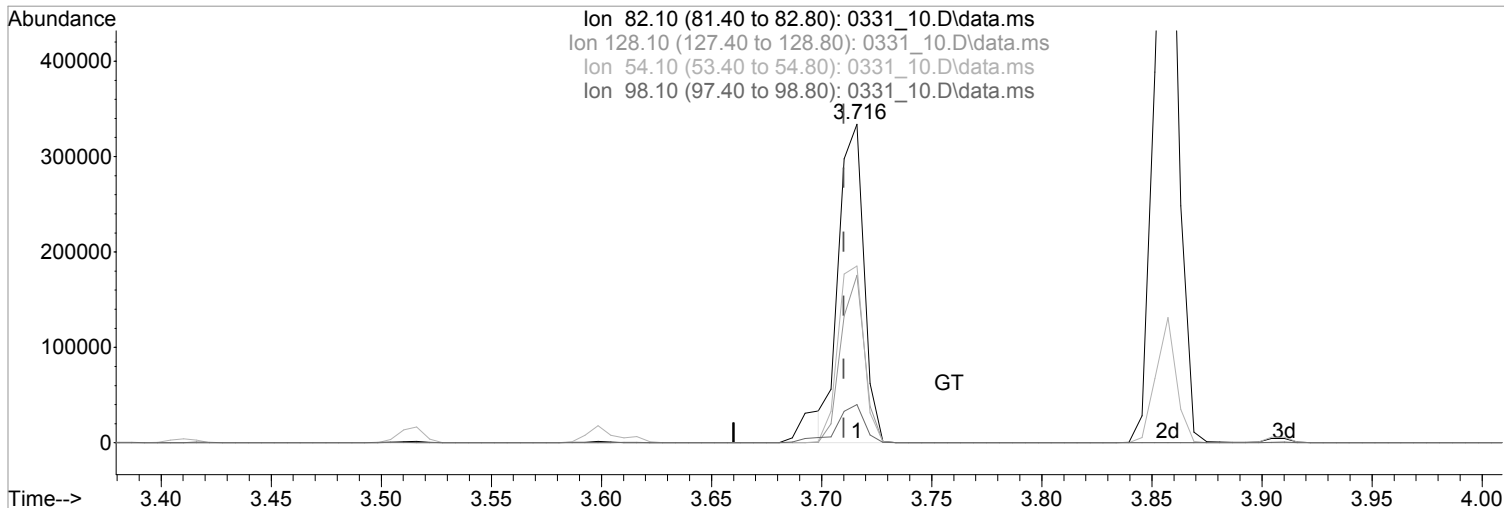
(24) Nitrobenzene-d5 (S)  
 3.716min (+0.006) 55620.7953288 ppb  
 Qvalue = 93  
 response 289942

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	52.57
54.10	60.00	55.54
98.10	11.40	12.01

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.716min (+0.006) 50896.3023359 ppb m

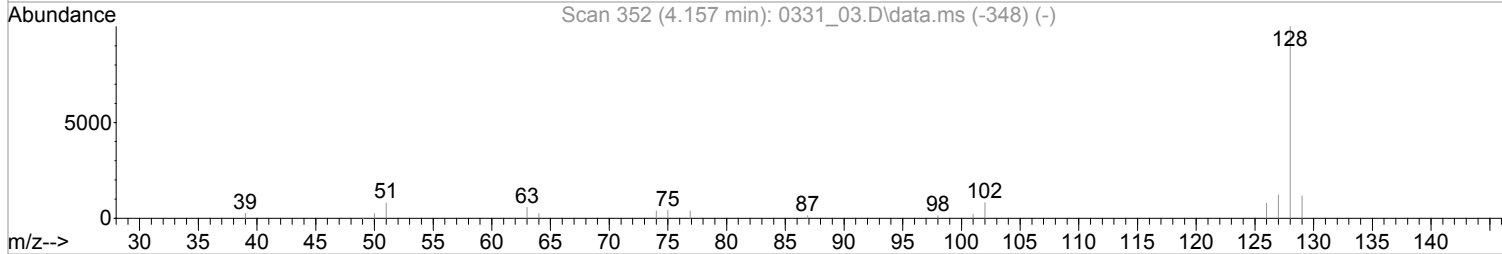
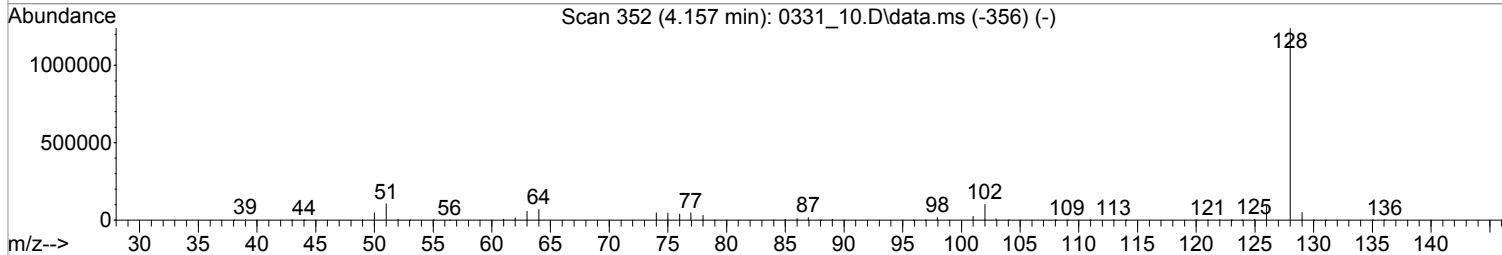
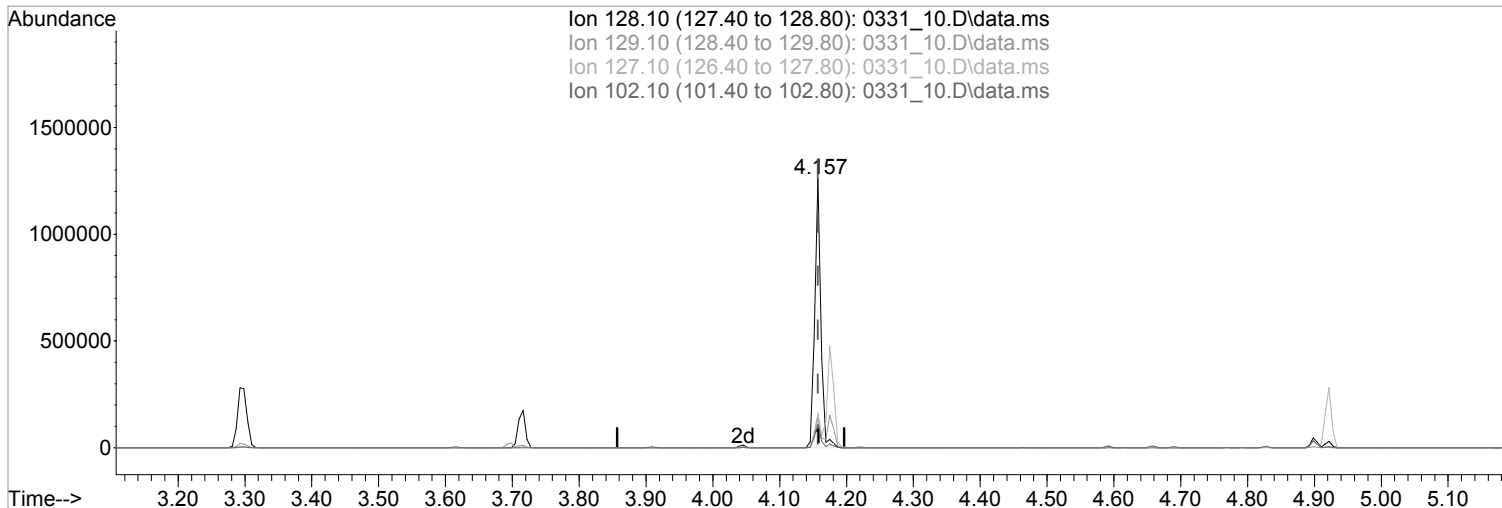
response 265314

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	52.57
54.10	60.00	55.54
98.10	11.40	12.01

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

(34) Naphthalene (MT)

4.157min (-0.000) 46677.1469504 ppb

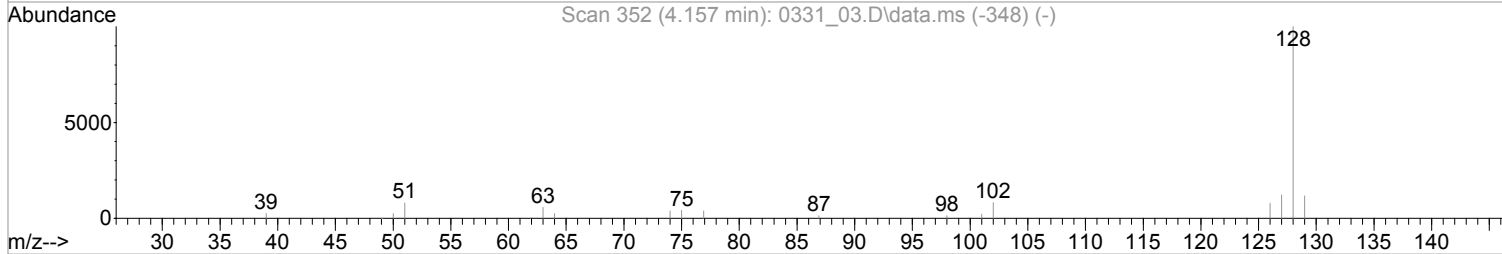
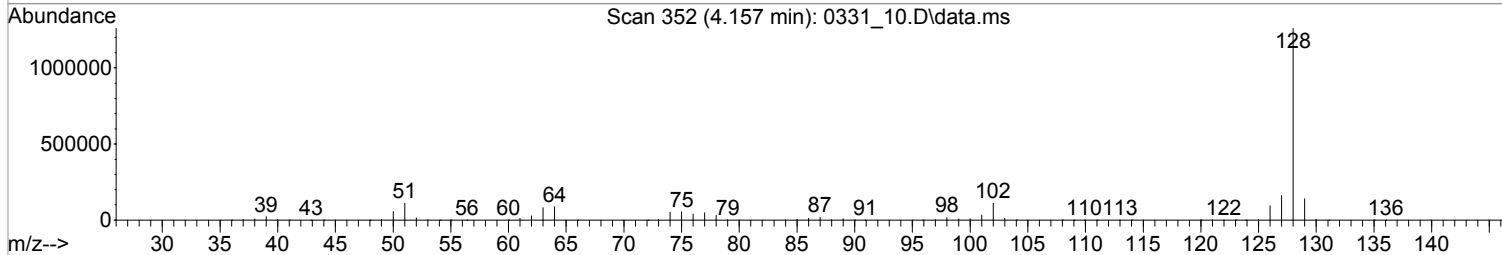
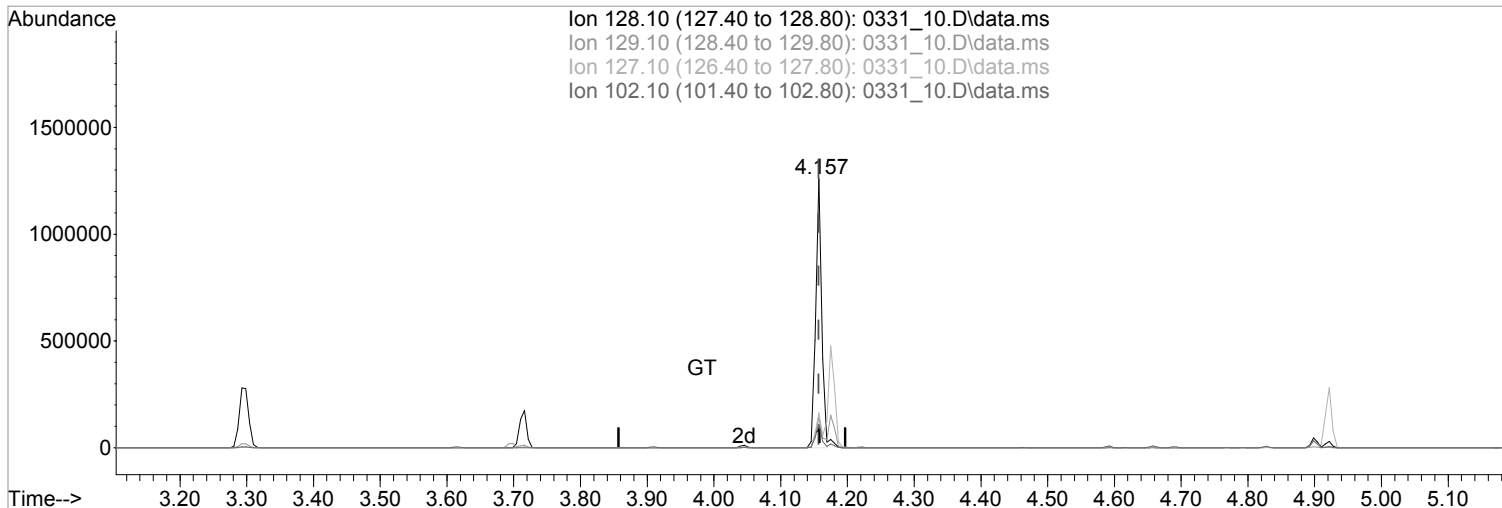
Qvalue = 99  
 response 809662

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.15
127.10	12.80	12.91
102.10	8.30	8.85

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

(34) Naphthalene (MT)  
 4.157min (-0.000) 45448.6219591 ppb m  
 response 788352  

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.15
127.10	12.80	12.91
102.10	8.30	8.85

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_12.D  
 Acq On : 31 Mar 2022 8:36 pm  
 Operator : 3545  
 Sample : STD TCL 4K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 12 Sample Multiplier: 1

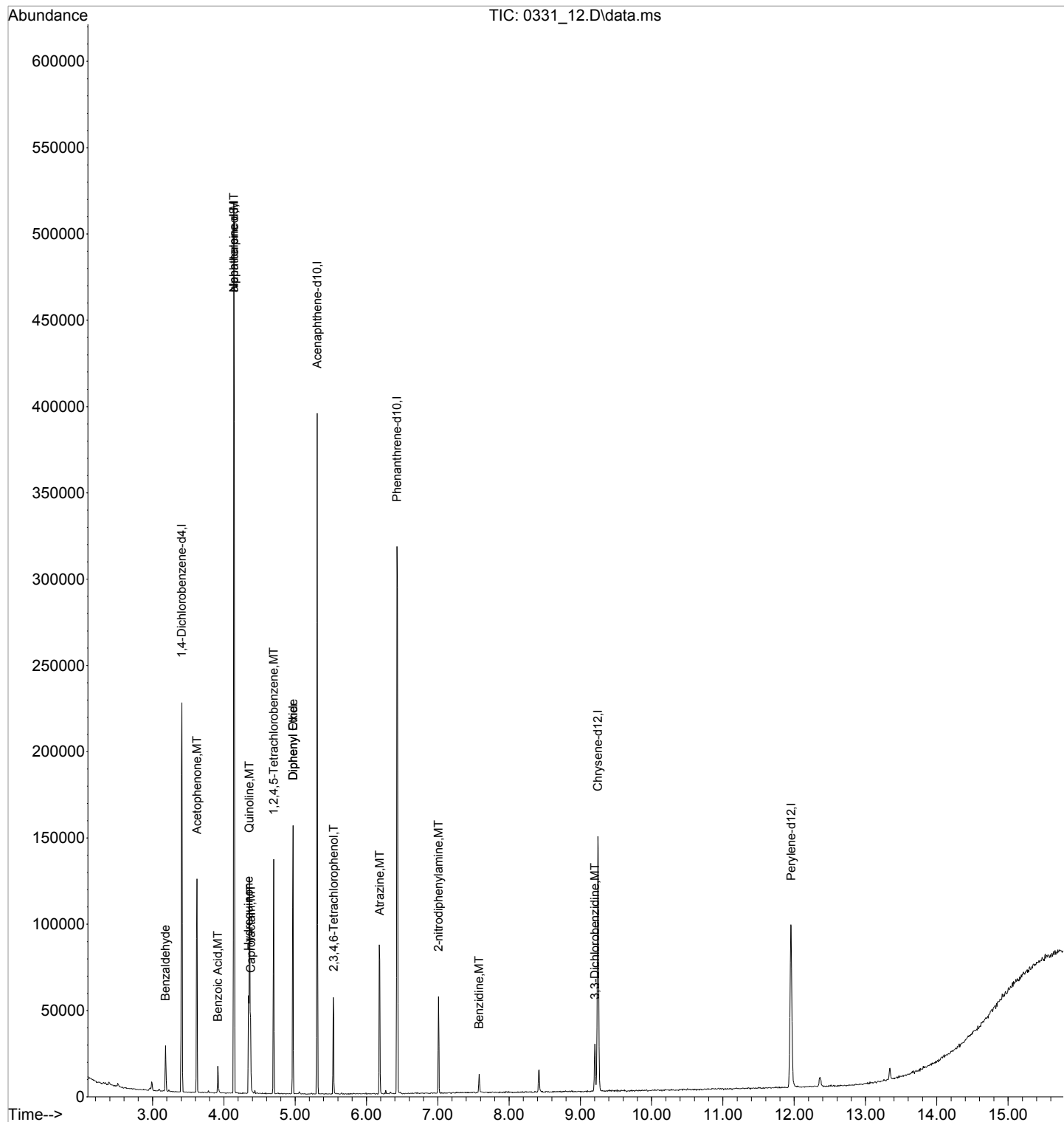
Quant Time: Apr 04 16:53:59 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:34:56 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32210	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	136220	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	65230	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.428	188	103120	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	67182	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	58564	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
9) Benzaldehyde	3.181	105	5045	3745.7880779	ppb	98	
22) Acetophenone	3.622	105	26979	3891.1883832	ppb	98	
31) Benzoic Acid	3.916	105	3581	4259.0418639	ppb	99	
33) alpha-terpineol	4.140	59	18311	4364.0779192	ppb	98	
37) Hydroquinone	4.346	110	12976	4367.0078087	ppb	93	
38) Quinoline	4.357	129	34471	4382.7379345	ppb	99	
39) Caprolactam	4.375	113	3806	3675.2281435	ppb	92	
43) 1,2,4,5-Tetrachloroben...	4.699	216	15681	4281.5578499	ppb	96	
44) Diphenyl Ether	4.969	170	23710	4319.7401334	ug/ml	99	
45) Diphenyl Oxide	4.969	170	23710	4319.7401334	ug/ml	99	
62) 2,3,4,6-Tetrachlorophenol	5.540	232	5528	3126.3602471	ppb	95	
69) Atrazine	6.187	200	8336	3551.1011360	ppb	97	
82) 2-nitrodiphenylamine	7.010	167	6112	4515.3978890	ppb	95	
85) Benzidine	7.581	184	5065	3995.7989172	ppb	# 70	
89) 3,3-Dichlorobenzidine	9.204	252	9134	3139.1498939	ppb	99	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_12.D  
Acq On : 31 Mar 2022 8:36 pm  
Operator : 3545  
Sample : STD TCL 4K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 04 16:53:59 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:34:56 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M





Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_13.D  
 Acq On : 31 Mar 2022 8:58 pm  
 Operator : 3545  
 Sample : MSTD TCL 10K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 13 Sample Multiplier: 1

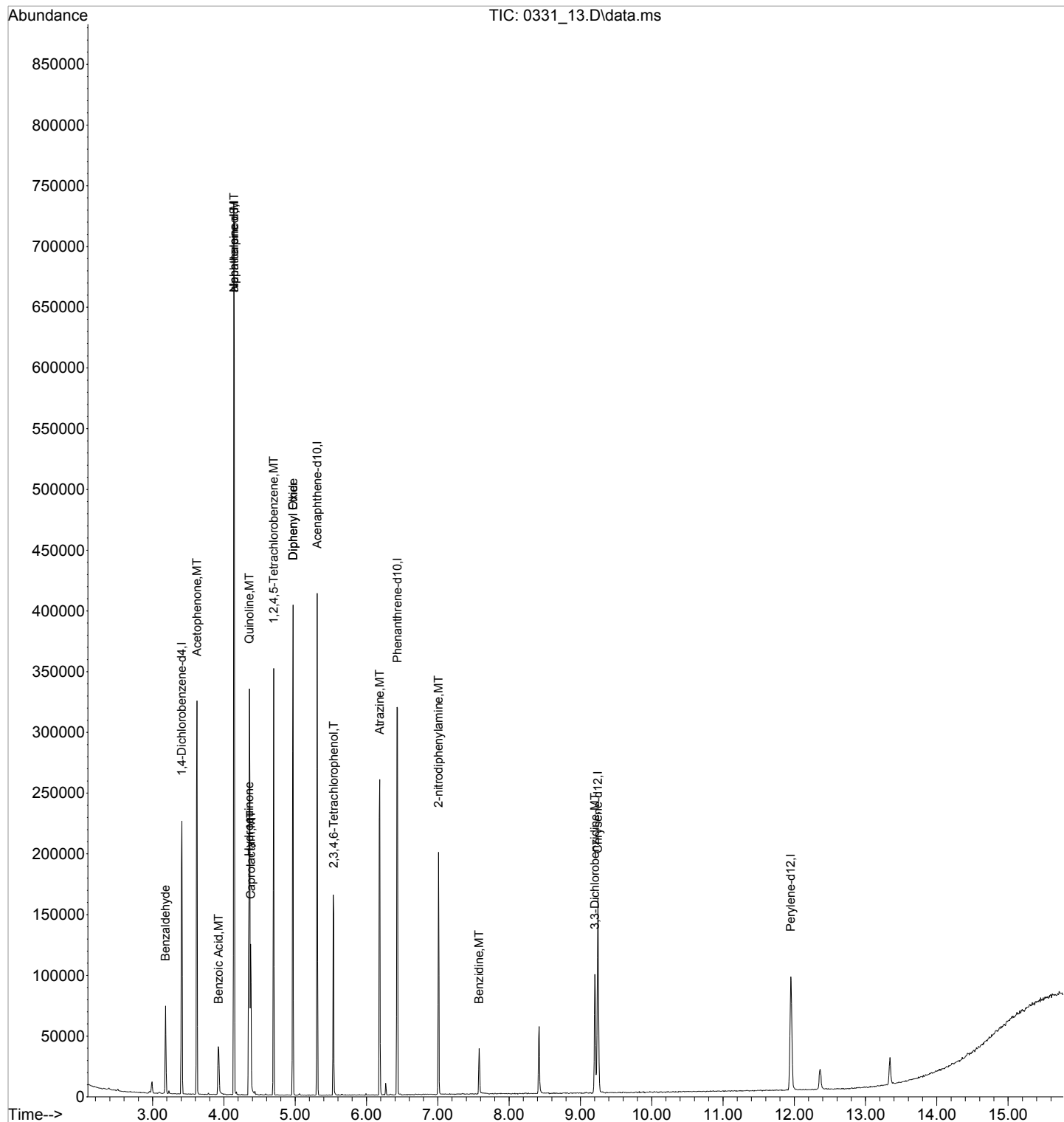
Quant Time: Apr 04 15:59:35 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:06 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32646	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	151075	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	66741	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	106483	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	70148	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	60010	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
							Qvalue
9) Benzaldehyde	3.181	105	13218	10000.0000000	ppb		100
22) Acetophenone	3.622	105	70363	10000.0000000	ppb		100
31) Benzoic Acid	3.928	105	13285	10000.0000000	ppb		100
33) alpha-terpineol	4.140	59	47885	10000.0000000	ppb		100
37) Hydroquinone	4.351	110	32456	10000.0000000	ppb		100
38) Quinoline	4.357	129	92947	10000.0000000	ppb		100
39) Caprolactam	4.375	113	11523	10000.0000000	ppb		100
43) 1,2,4,5-Tetrachloroben...	4.698	216	42102	10000.0000000	ppb		100
44) Diphenyl Ether	4.969	170	62422	10000.0000000	ug/ml		100
45) Diphenyl Oxide	4.969	170	62422	10000.0000000	ug/ml		100
62) 2,3,4,6-Tetrachlorophenol	5.540	232	16672	10000.0000000	ppb		100
69) Atrazine	6.187	200	23085	10000.0000000	ppb		100
82) 2-nitrodiphenylamine	7.010	167	19997	10000.0000000	ppb		100
85) Benzidine	7.581	184	16992	10045.5217263	ppb		100
89) 3,3-Dichlorobenzidine	9.204	252	28248	10000.0000000	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_13.D  
Acq On : 31 Mar 2022 8:58 pm  
Operator : 3545  
Sample : MSTD TCL 10K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 04 15:59:35 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 15:59:06 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\042922B\  
 Data File : 0429B\_03.D  
 Acq On : 29 Apr 2022 5:52 pm  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D05698 exp 9/10/22  
 Misc : TCL CAL ISTD 22D02367 exp. 10/02/22  
 ALS Vial : 4 Sample Multiplier: 1

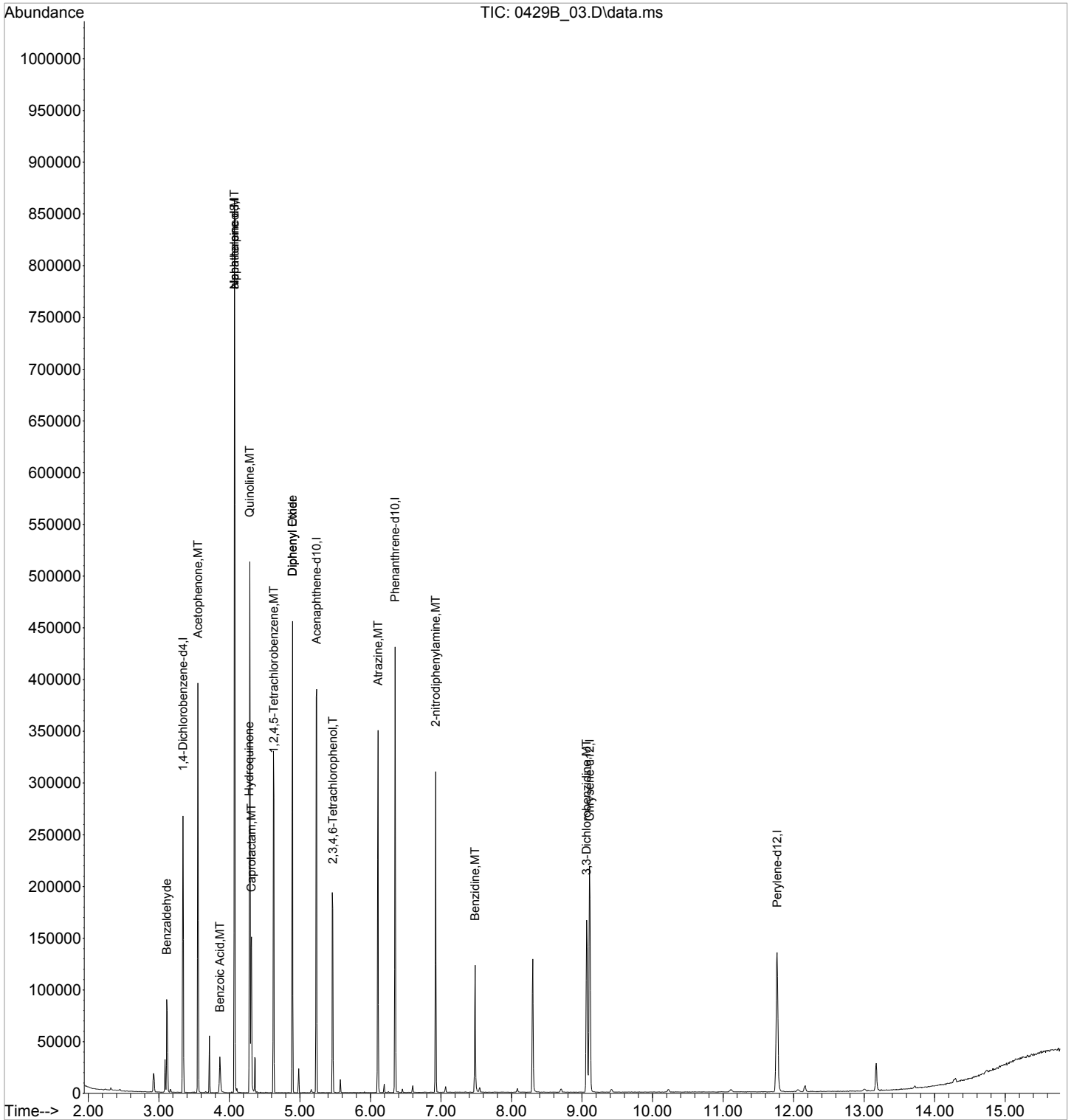
Quant Time: Apr 29 19:31:04 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.343	152	35936	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.072	136	162496	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.237	164	73371	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.348	188	124542	8000.0000000	ppb	0.00
84) Chrysene-d12	9.107	240	92211	8000.0000000	ppb	0.00
94) Perylene-d12	11.766	264	82708	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.113	105	17877	11897.0055136	ppb	99
22) Acetophenone	3.554	105	77833	10061.9271599	ppb	99
31) Benzoic Acid	3.866	105	10441	7475.1145537	ppb	97
33) alpha-terpineol	4.072	59	52436	10476.3063443	ppb	97
37) Hydroquinone	4.284	110	36399	10269.0622148	ppb	95
38) Quinoline	4.290	129	104932	11184.0158031	ppb	99
39) Caprolactam	4.313	113	14776	11961.0857284	ppb	97
43) 1,2,4,5-Tetrachloroben...	4.631	216	44745	10241.6699254	ppb	97
44) Diphenyl Ether	4.895	170	67529	10313.7021917	ug/ml	98
45) Diphenyl Oxide	4.895	170	67529	10313.7021917	ug/ml	98
62) 2,3,4,6-Tetrachlorophenol	5.466	232	19384	9746.2450545	ppb	98
69) Atrazine	6.107	200	28050	10623.3414640	ppb	97
82) 2-nitrodiphenylamine	6.925	167	30889	11185.4538926	ppb	96
85) Benzidine	7.483	184	45803	16815.2055310	ppb	97
89) 3,3-Dichlorobenzidine	9.066	252	45034	11276.1739458	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\042922B\  
Data File : 0429B\_03.D  
Acq On : 29 Apr 2022 5:52 pm  
Operator : 3545  
Sample : ICV TCL 10K1 PPB 22D05698 exp 9/10/22  
Misc : TCL CAL ISTD 22D02367 exp. 10/02/22  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 29 19:31:04 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_14.D  
 Acq On : 31 Mar 2022 9:19 pm  
 Operator : 3545  
 Sample : STD TCL 20K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 14 Sample Multiplier: 1

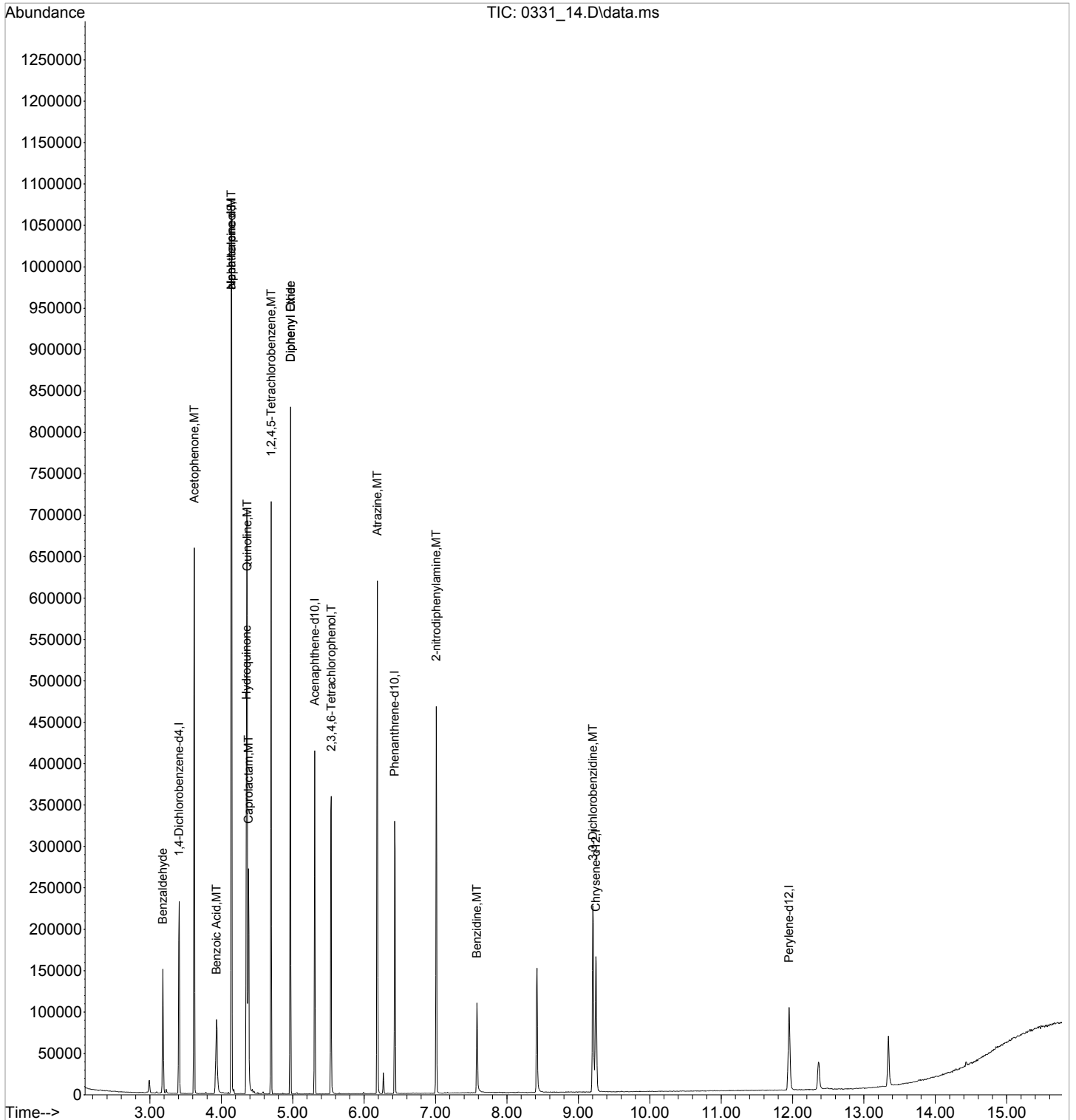
Quant Time: Apr 04 16:18:05 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:17:36 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32976	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	166588	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	65899	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.428	188	106386	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	74217	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	60508	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
Target Compounds							
							Qvalue
9) Benzaldehyde	3.181	105	27985	21379.1641942	ppb		99
22) Acetophenone	3.622	105	140981	19984.9142749	ppb		99
31) Benzoic Acid	3.934	105	33954	31589.3324189	ppb		99
33) alpha-terpineol	4.140	59	99072	17348.5751577	ppb		99
37) Hydroquinone	4.351	110	75121	19593.8858186	ppb		97
38) Quinoline	4.363	129	186747	17405.5577263	ppb		97
39) Caprolactam	4.381	113	27181	22332.1892729	ppb		99
43) 1,2,4,5-Tetrachloroben...	4.698	216	82323	16891.5493678	ppb		98
44) Diphenyl Ether	4.969	170	122968	16869.4038963	ug/ml		99
45) Diphenyl Oxide	4.969	170	122968	16869.4038963	ug/ml		99
62) 2,3,4,6-Tetrachlorophenol	5.540	232	36060	24550.3580536	ppb		100
69) Atrazine	6.187	200	50889	24345.8931400	ppb		99
82) 2-nitrodiphenylamine	7.010	167	49155	28494.9593074	ppb		96
85) Benzidine	7.581	184	46245	31477.4601229	ppb		97
89) 3,3-Dichlorobenzidine	9.204	252	66399	26100.6280685	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_14.D  
Acq On : 31 Mar 2022 9:19 pm  
Operator : 3545  
Sample : STD TCL 20K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 04 16:18:05 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:17:36 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_15.D  
 Acq On : 31 Mar 2022 9:40 pm  
 Operator : 3545  
 Sample : STD TCL 30K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 15 Sample Multiplier: 1

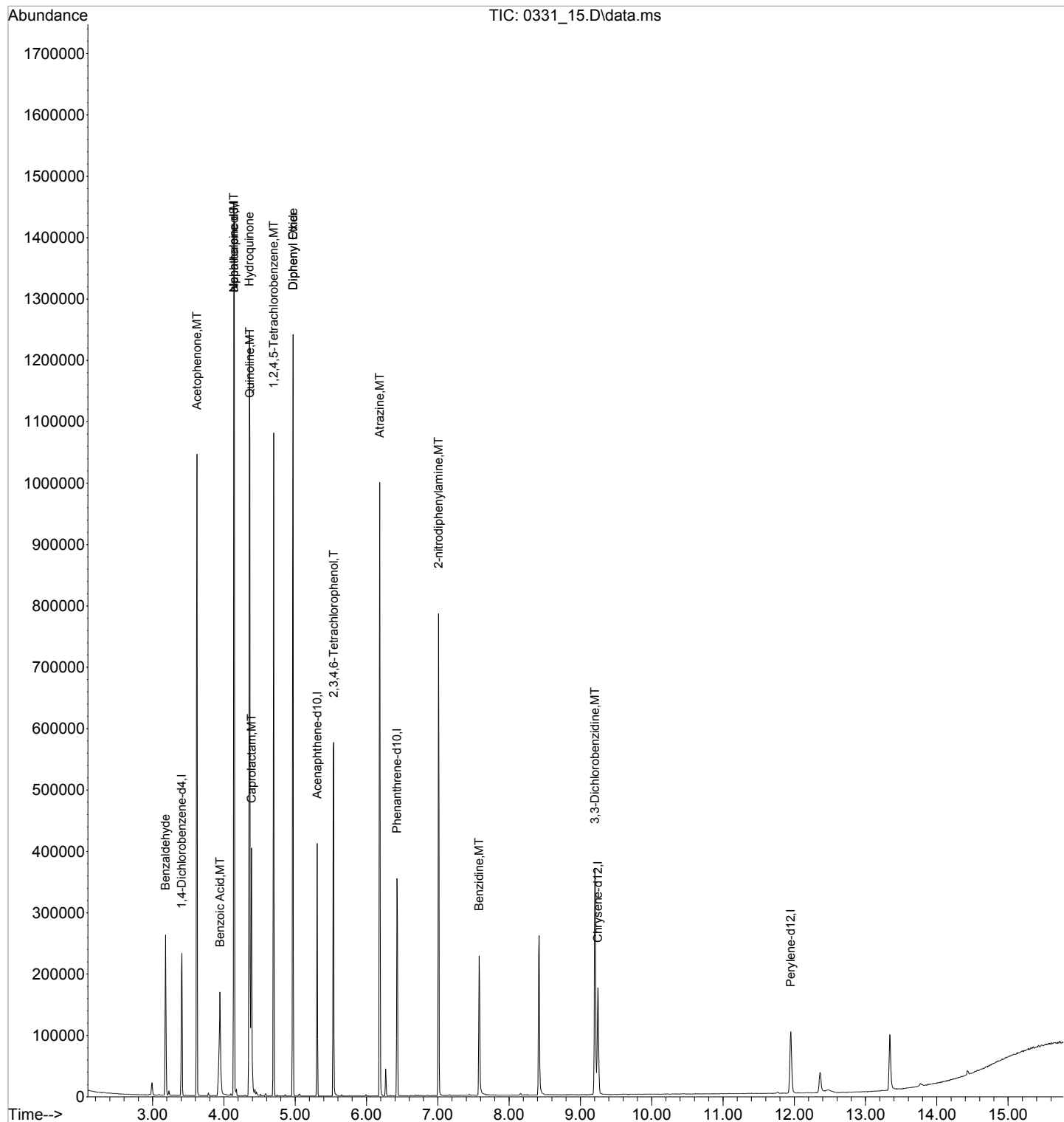
Quant Time: Apr 04 16:18:53 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:18:23 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.410	152	33491	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.140	136	188855	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	68194	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.428	188	108406	8000.0000000	ppb	0.00
84) Chrysene-d12	9.245	240	76700	8000.0000000	ppb	0.00
94) Perylene-d12	11.951	264	62471	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.181	105	47780	35331.1828973	ppb	99
22) Acetophenone	3.622	105	218733	30535.6925993	ppb	99
31) Benzoic Acid	3.946	105	62710	44951.7521731	ppb	98
33) alpha-terpineol	4.140	59	155586	24856.2891851	ppb	99
37) Hydroquinone	4.357	110	122674	28368.5569619	ppb	99
38) Quinoline	4.363	129	289912	24633.9225551	ppb	99
39) Caprolactam	4.387	113	44595	31110.4386175	ppb	95
43) 1,2,4,5-Tetrachloroben...	4.698	216	124397	23425.2808780	ppb	98
44) Diphenyl Ether	4.969	170	188595	23751.4157709	ug/ml	99
45) Diphenyl Oxide	4.969	170	188595	23751.4157709	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.540	232	59018	36738.7005414	ppb	100
69) Atrazine	6.187	200	78865	34581.5780215	ppb	100
82) 2-nitrodiphenylamine	7.010	167	82992	42681.4519179	ppb	95
85) Benzidine	7.581	184	92797	53450.6210134	ppb	98
89) 3,3-Dichlorobenzidine	9.204	252	105817	37396.9826583	ppb	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_15.D  
Acq On : 31 Mar 2022 9:40 pm  
Operator : 3545  
Sample : STD TCL 30K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 04 16:18:53 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:18:23 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M





Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_16.D  
 Acq On : 31 Mar 2022 10:02 pm  
 Operator : 3545  
 Sample : STD TCL 40K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 16 Sample Multiplier: 1

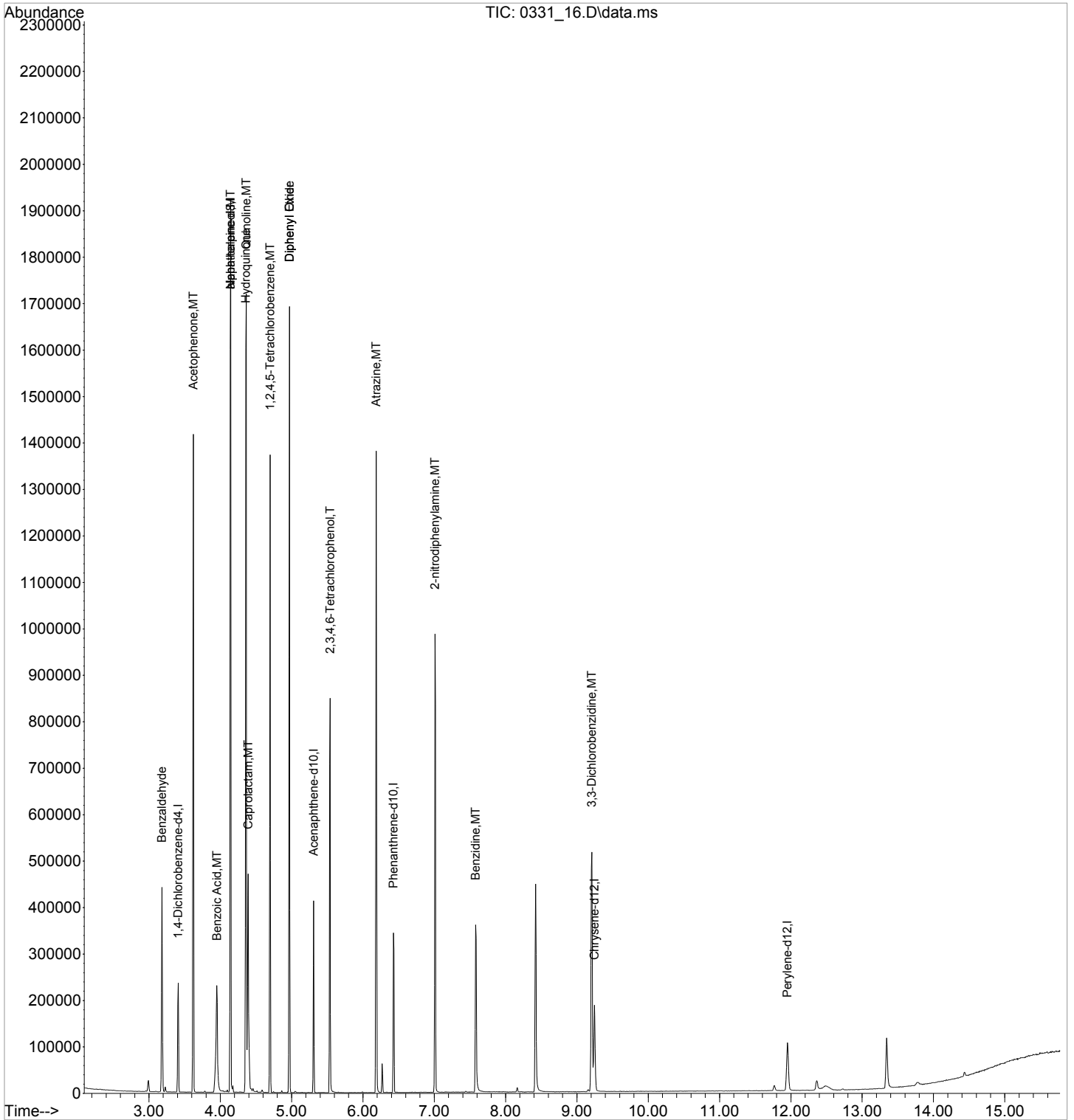
Quant Time: Apr 04 16:19:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:19:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.410	152	32750	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.145	136	205762	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	66340	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.428	188	109489	8000.0000000	ppb	0.00
84) Chrysene-d12	9.245	240	77049	8000.0000000	ppb	0.00
94) Perylene-d12	11.951	264	63298	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.181	105	80706	58934.1841835	ppb	99
22) Acetophenone	3.622	105	286364	40736.1958980	ppb	99
31) Benzoic Acid	3.951	105	92634	55421.4497707	ppb	99
33) alpha-terpineol	4.145	59	203905	30960.7071165	ppb	87
37) Hydroquinone	4.357	110	166918	35817.9389554	ppb	95
38) Quinoline	4.363	129	378568	30619.3304379	ppb	98
39) Caprolactam	4.392	113	62917	39916.3623369	ppb	96
43) 1,2,4,5-Tetrachloroben...	4.698	216	161130	29125.9548510	ppb	98
44) Diphenyl Ether	4.969	170	243421	29360.2543064	ug/ml	99
45) Diphenyl Oxide	4.969	170	243421	29360.2543064	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.539	232	79933	48949.8236216	ppb	97
69) Atrazine	6.186	200	105331	46070.2880297	ppb	99
82) 2-nitrodiphenylamine	7.010	167	117319	55081.7026593	ppb	94
85) Benzidine	7.580	184	154562	76641.7310555	ppb	97
89) 3,3-Dichlorobenzidine	9.210	252	146578	49144.2966400	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_16.D  
Acq On : 31 Mar 2022 10:02 pm  
Operator : 3545  
Sample : STD TCL 40K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 04 16:19:37 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:19:11 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_17.D  
 Acq On : 31 Mar 2022 10:23 pm  
 Operator : 3545  
 Sample : STD TCL 50K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 17 Sample Multiplier: 1

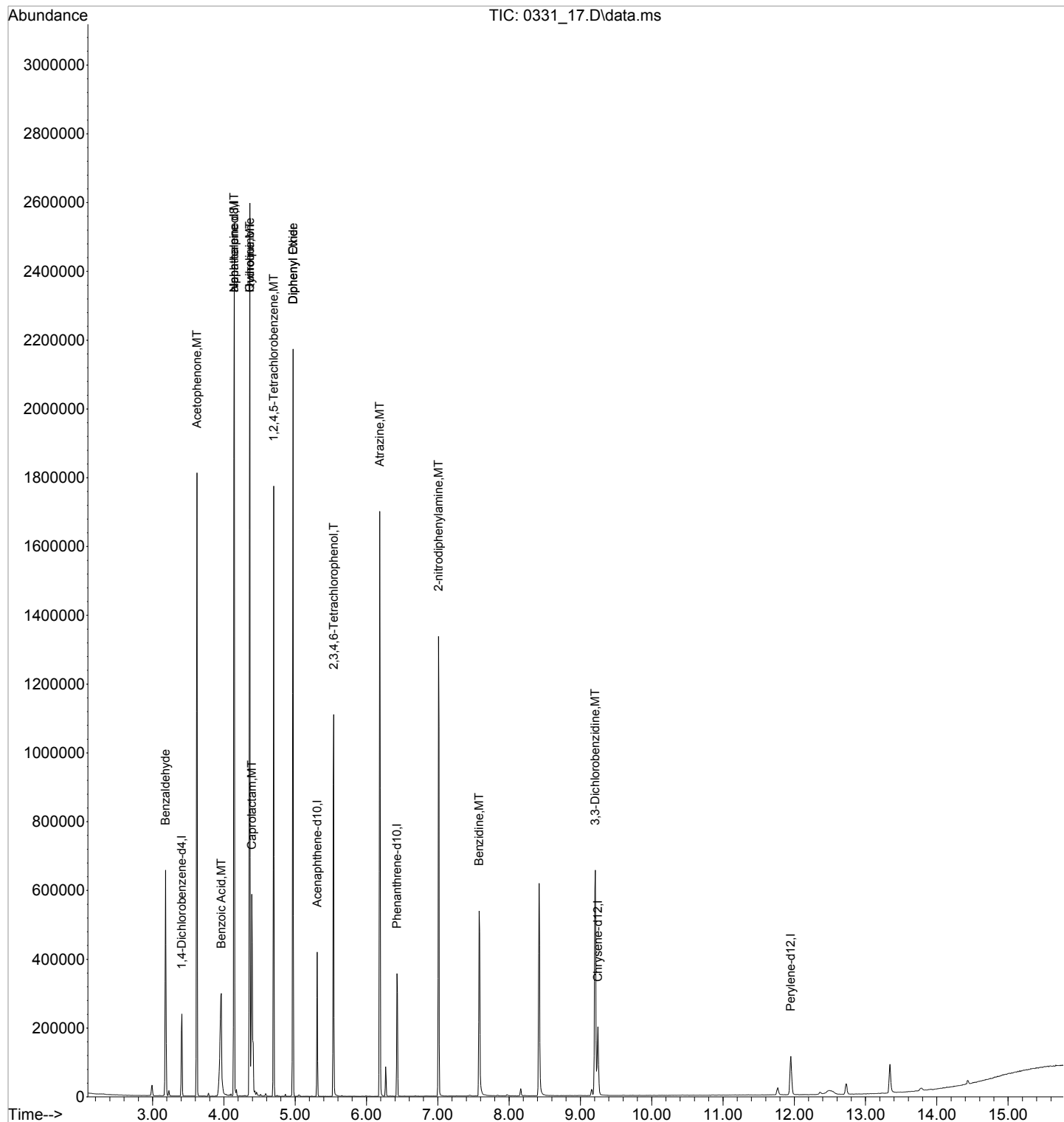
Quant Time: Apr 04 16:20:23 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:19:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	34438	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	228625	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	68678	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.428	188	112052	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	79417	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	67284	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
							Qvalue
9) Benzaldehyde	3.181	105	118679	76388.9545388	ppb		99
22) Acetophenone	3.622	105	370115	49916.2518975	ppb		99
31) Benzoic Acid	3.963	105	131168	66363.7153033	ppb		98
33) alpha-terpineol	4.145	59	264407	37546.5934006	ppb		88
37) Hydroquinone	4.363	110	219123	43068.6482517	ppb		98
38) Quinoline	4.363	129	481916	36507.3343524	ppb		99
39) Caprolactam	4.393	113	83764	47847.9644639	ppb		94
43) 1,2,4,5-Tetrachloroben...	4.698	216	204315	34816.2846862	ppb		97
44) Diphenyl Ether	4.969	170	310150	35229.6306939	ug/ml		99
45) Diphenyl Oxide	4.969	170	310150	35229.6306939	ug/ml		99
62) 2,3,4,6-Tetrachlorophenol	5.540	232	103514	59031.1652154	ppb		96
69) Atrazine	6.187	200	137008	56457.3564133	ppb		100
82) 2-nitrodiphenylamine	7.010	167	156949	67745.4868336	ppb		93
85) Benzidine	7.581	184	223719	93371.1103111	ppb		97
89) 3,3-Dichlorobenzidine	9.210	252	187922	58883.7932200	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_17.D  
Acq On : 31 Mar 2022 10:23 pm  
Operator : 3545  
Sample : STD TCL 50K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 04 16:20:23 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:19:57 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1487377	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0209_21	<b>Analysis date/time:</b>	02/09/22 15:56
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.623837	0.62111570		0.4360		10	9.956	99.60	70 - 130
2-METHYLNAPHTHALENE	0.663826	0.63308330		4.63		10	9.537	95.40	70 - 130
3&4-METHYL PHENOL	1.350649	1.338996		0.8630		10	9.914	99.10	70 - 130
ACENAPHTHENE	1.170435	1.121669		4.17		10	9.583	95.80	70 - 130
ACENAPHTHYLENE	1.779211	1.817918		2.18		10	10.22	102	70 - 130
ANTHRACENE	1.065424	1.034061		2.94		10	9.706	97.10	70 - 130
BENZO(A)ANTHRACENE	1.151953	1.120667		2.72		10	9.728	97.30	70 - 130
BENZO(A)PYRENE	0.987052	1.048235		6.20		10	10.62	106	70 - 130
BENZO(B)FLUORANTHENE	1.139642	1.101573		3.34		10	9.666	96.70	70 - 130
BENZO(G,H,I)PERYLENE	1.009366	1.078476		6.85		10	10.68	107	70 - 130
BENZO(K)FLUORANTHENE	1.122546	1.14238		0.74		10	9.926	99.30	70 - 130
BIS(2-ETHYLHEXYL)PHTHALATE	0.724997	0.79033960		9.01		10	10.90	109	70 - 130
CARBAZOLE	0.972084	1.021167		5.05		10	10.50	105	70 - 130
CHRYSENE	1.116357	1.141252		2.23		10	10.22	102	70 - 130
DI-N-BUTYL PHTHALATE	1.138017	1.178124		3.52		10	10.35	104	70 - 130
DI-N-OCTYL PHTHALATE	1.204403	1.241811		3.11		10	10.31	103	70 - 130
DIBENZ(A,H)ANTHRACENE	1.033545	1.082655		4.75		10	10.48	105	70 - 130
DIBENZOFURAN	1.623192	1.575663		2.93		10	9.707	97.10	70 - 130
FLUORANTHENE	1.1182	1.053931		5.75		10	9.425	94.30	70 - 130
FLUORENE	1.316666	1.307861		0.6690		10	9.933	99.30	70 - 130
INDENO(1,2,3-CD)PYRENE	0.969769	1.039433		7.18		10	10.72	107	70 - 130
NAPHTHALENE	1.018747	1.008173		1.04		10	9.896	99	70 - 130
PENTACHLOROPHENOL	0.121187	0.14212140		17.30		10	11.73	117	70 - 130
PHENANTHRENE	1.052577	1.027167		2.41		10	9.759	97.60	70 - 130
PHENOL	1.643512	1.610572		2		10	9.800	98	70 - 130
PYRENE	1.287230	1.281216		0.4670		10	9.953	99.50	70 - 130
2,4,6-TRIBROMOPHENOL	0.090561	0.08983042		0.8070		10	9.919	99.20	70 - 130
2-FLUOROBIPHENYL	1.349543	1.323445		1.93		10	9.807	98.10	70 - 130
2-FLUOROPHENOL	1.299982	1.279613		1.57		10	9.843	98.40	70 - 130
NITROBENZENE-D5	0.339442	0.35322840		4.06		10	10.41	104	70 - 130
P-TERPHENYL-D14	1.093292	1.098755		0.50		10	10.05	101	70 - 130
PHENOL-D5	1.560263	1.524287		2.31		10	9.769	97.70	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	88915	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	355224	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	184704	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	340250	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	293653	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	310728	8000.00	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.84	112	142221	9843.3121001	ppb	0.00
Spiked Amount	666.000		Recovery	= 1477.97%		
7) Phenol-d5	3.28	99	169415	9769.4265067	ppb	0.00
Spiked Amount	666.000		Recovery	= 1466.88%		
24) Nitrobenzene-d5	3.82	82	156844	10406.1534584	ppb	0.00
Spiked Amount	333.000		Recovery	= 3124.97%		
50) 2-Fluorobiphenyl	4.95	172	305557	9806.6161349	ppb	0.00
Spiked Amount	333.000		Recovery	= 2944.93%		
73) 2,4,6-Tribromophenol	6.02	330	38206	9919.3409749	ppb	0.00
Spiked Amount	666.000		Recovery	= 1489.39%		
87) p-Terphenyl-d14	8.04	244	403316	10049.9749250	ppb	0.00
Spiked Amount	333.000		Recovery	= 3018.01%		
Target Compounds						
2) Pyridine	2.29	79	157472	11446.0495914	ppb	90
3) N-Nitrosodimethylamine	2.28	42	68975	9340.9358063	ppb	87
5) Aniline	3.34	66	79389	9650.2197215	ppb	92
6) bis(2-Chloroethyl)ether	3.36	93	152062m	11899.7254383	ppb	
8) Phenol	3.29	94	179005	9799.5751289	ppb	98
10) 2-Chlorophenol	3.40	128	146262	10000.5197227	ppb	95
11) n-Decane	3.40	41	82952	9629.2271328	ppb	98
12) 1,3-Dichlorobenzene	3.49	146	164692	9959.1733450	ppb	95
13) 1,4-Dichlorobenzene	3.53	146	167144	9819.9981031	ppb	97
14) Benzyl Alcohol	3.57	79	113873	10066.8014240	ppb	99
15) 1,2-Dichlorobenzene	3.61	146	157389	10059.2311925	ppb	100
16) bis(2-Chloroisopropyl)ethe	3.65	121	53196	9935.6902402	ppb	64
17) 2,2-oxybis(1-chloropropane	3.65	121	53196	9935.6902402	ppb	64
18) 2-Methylphenol	3.62	108	133745	10120.0527818	ppb	98
19) Hexachloroethane	3.80	117	62812	10166.1307570	ppb	99
20) N-Nitrosodi-n-propylamine	3.72	70	98111	10158.5564450	ppb	96
21) 3&4-Methyl phenol	3.70	107	148821	9913.7205681	ppb	99
25) Nitrobenzene	3.83	77	149817	10165.9220817	ppb	94
26) Isophorone	3.96	82	260097	9838.5361753	ppb	95
27) 2-Nitrophenol	4.01	139	75876	10214.9836033	ppb	# 76
28) 2,4-Dimethylphenol	4.01	107	139227	10092.5405476	ppb	98
29) bis(2-Chlorethoxy)methane	4.08	93	172239	10189.7011915	ppb	95
30) 2,4-Dichlorophenol	4.15	162	116228	10001.3018153	ppb	94
32) 1,2,4-Trichlorobenzene	4.22	180	126978	9761.1362823	ppb	99
34) Naphthalene	4.27	128	447659	9896.2058674	ppb	99
35) 4-Chloroaniline	4.28	65	50393	9587.7463840	ppb	95
36) Hexachloro-1,3-butadiene	4.33	225	78373	11043.8206612	ppb	98
40) 4-Chloro-3-methylphenol	4.57	107	115951	9898.0134487	ppb	92
41) 2-Methylnaphthalene	4.71	142	281108	9536.8809357	ppb	100
42) 1-Methylnaphthalene	4.78	142	275794	9956.3737843	ppb	100
47) Hexachlorocyclopentadiene	4.81	237	69461	8026.8498870	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	77627	9689.8796793	ppb	95
49) 2,4,5-Trichlorophenol	4.91	196	82579	9904.7566201	ppb	95

(#) = qualifier out of range (m) = manual integration

0209 21.D S804B09V.M Sat Feb 19 13:14:48 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: S804B09V.RES

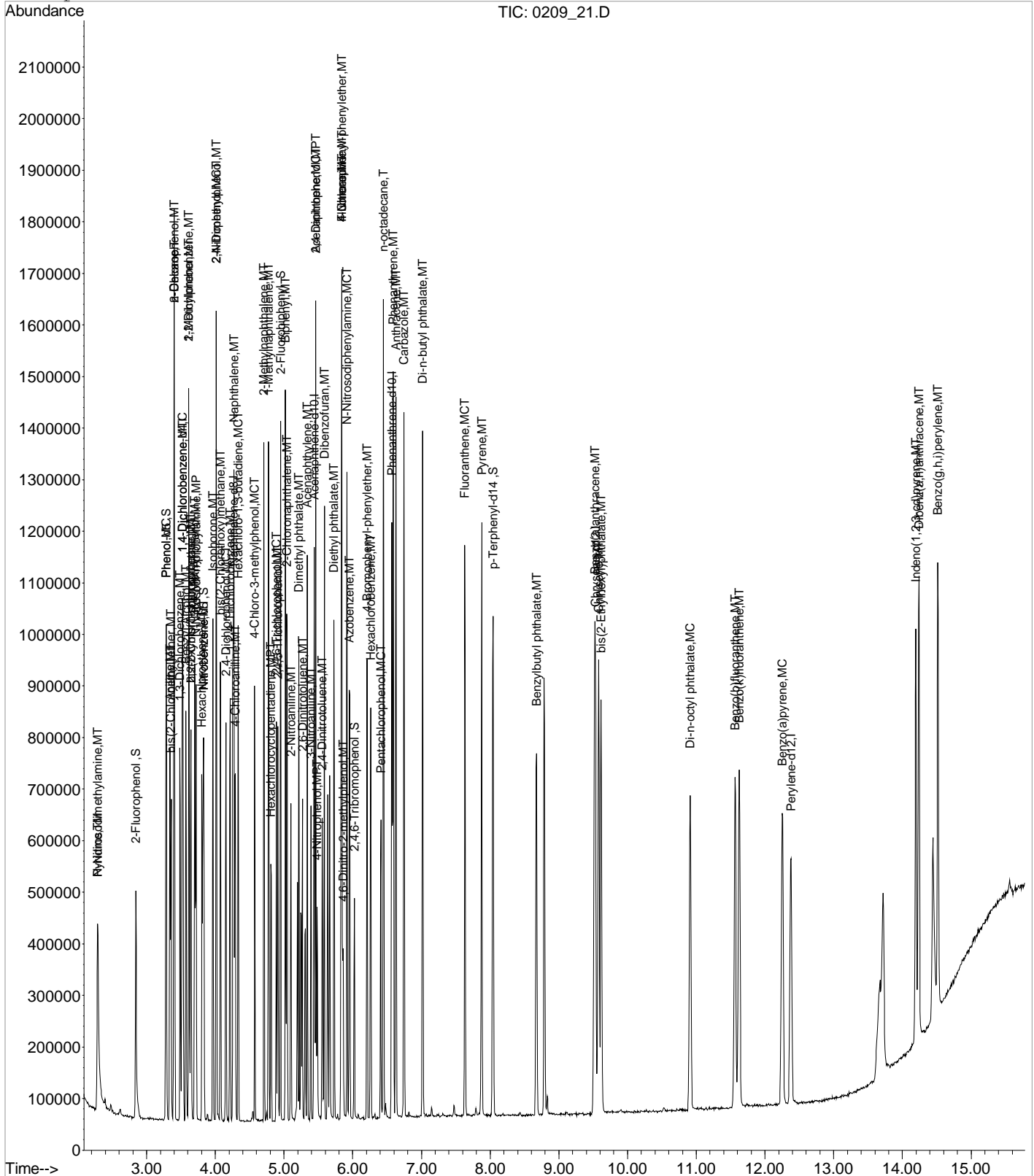
Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	339927	9824.7030690	ppb	100
52) 2-Chloronaphthalene	5.05	162	263674	9985.7067521	ppb	97
53) 2-Nitroaniline	5.10	138	85461	10441.1102055	ppb	99
54) Acenaphthylene	5.34	152	419721	10217.5539048	ppb	99
55) Dimethyl phthalate	5.22	163	271177	9912.7354425	ppb	96
56) 2,6-Dinitrotoluene	5.27	165	66568	10495.3544301	ppb	96
57) 3-Nitroaniline	5.39	138	71255	10434.3274272	ppb	94
58) Acenaphthene	5.46	153	258971	9583.3554787	ppb	98
59) 2,4-Dinitrophenol	5.46	184	32249	9366.7731553	ppb #	41
60) Dibenzofuran	5.59	168	363789	9707.1874050	ppb	99
61) 2,4-Dinitrotoluene	5.56	165	83714	10539.5845559	ppb	88
63) 4-Nitrophenol	5.48	139	57927	10269.5341891	ppb	86
64) Fluorene	5.84	166	301959	9933.1298206	ppb	99
65) 4-Chlorophenyl-phenylether	5.83	204	140076	9716.6624786	ppb	96
66) Diethyl phthalate	5.73	149	278249	9927.9939388	ppb	99
67) 4-Nitroaniline	5.84	138	71180	11128.8378074	ppb	100
68) Azobenzene	5.95	77	286668	10253.9212561	ppb	99
71) 4,6-Dinitro-2-methylphenol	5.86	198	41701	9106.4716264	ppb	91
72) N-Nitrosodiphenylamine	5.92	169	255428	9879.1219938	ppb	99
74) 4-Bromophenyl-phenylether	6.21	248	81712	9737.7454867	ppb	90
75) Hexachlorobenzene	6.26	284	87977	9422.4970036	ppb	97
76) n-octadecane	6.45	55	48997	9411.5588818	ppb	98
77) Pentachlorophenol	6.41	266	60446	11727.4301888	ppb	97
78) Phenanthrene	6.59	178	436867	9758.5964787	ppb	98
79) Anthracene	6.63	178	439799	9705.6272941	ppb	99
80) Carbazole	6.75	167	434315	10504.9193533	ppb	99
81) Di-n-butyl phthalate	7.02	149	501071	10352.4273975	ppb	99
83) Fluoranthene	7.63	202	448250	9425.2443016	ppb	99
86) Pyrene	7.88	202	470291	9953.2786119	ppb	99
88) Benzylbutyl phthalate	8.68	149	199983	10350.8994468	ppb	96
90) Benzo(a)anthracene	9.52	228	411359	9728.4110603	ppb	99
91) Chrysene	9.58	228	418915	10222.9958461	ppb	99
92) bis(2-Ethylhexyl)phthalate	9.62	149	290107	10901.2883412	ppb	99
93) Di-n-octyl phthalate	10.91	149	455827	10310.5936140	ppb	100
95) Benzo(b)fluoranthene	11.56	252	427862	9665.9587742	ppb	99
96) Benzo(k)fluoranthene	11.62	252	432781	9925.9826493	ppb	98
97) Benzo(a)pyrene	12.26	252	407145	10619.8621200	ppb	98
98) Indeno(1,2,3-cd)pyrene	14.20	276	403726	10718.3514750	ppb	98
99) Dibenz(a,h)anthracene	14.24	278	420514	10475.1647908	ppb	98
100) Benzo(g,h,i)perylene	14.52	276	418891	10684.6875266	ppb	99

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18
Acq On : 9 Feb 2022 3:56 pm Operator: 917
Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 19 13:13 2022 Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Fri Feb 18 17:49:17 2022
Response via : Initial Calibration

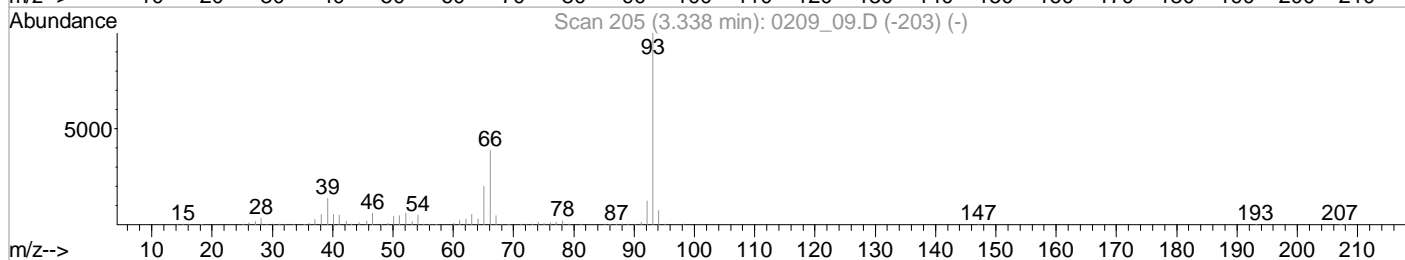
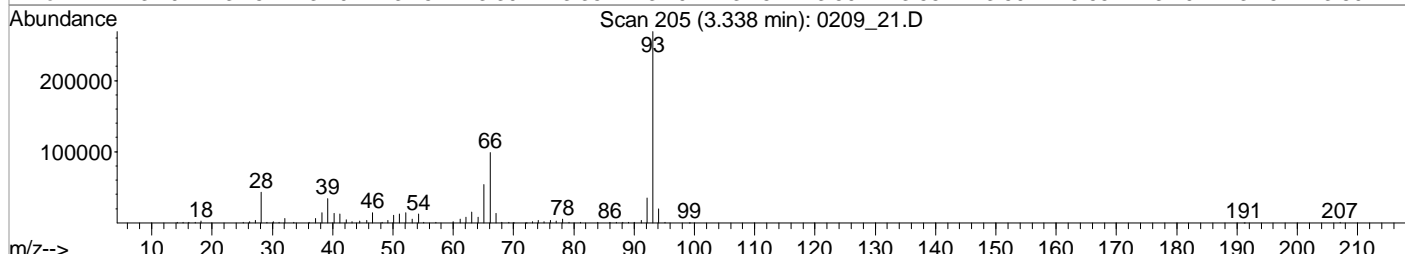
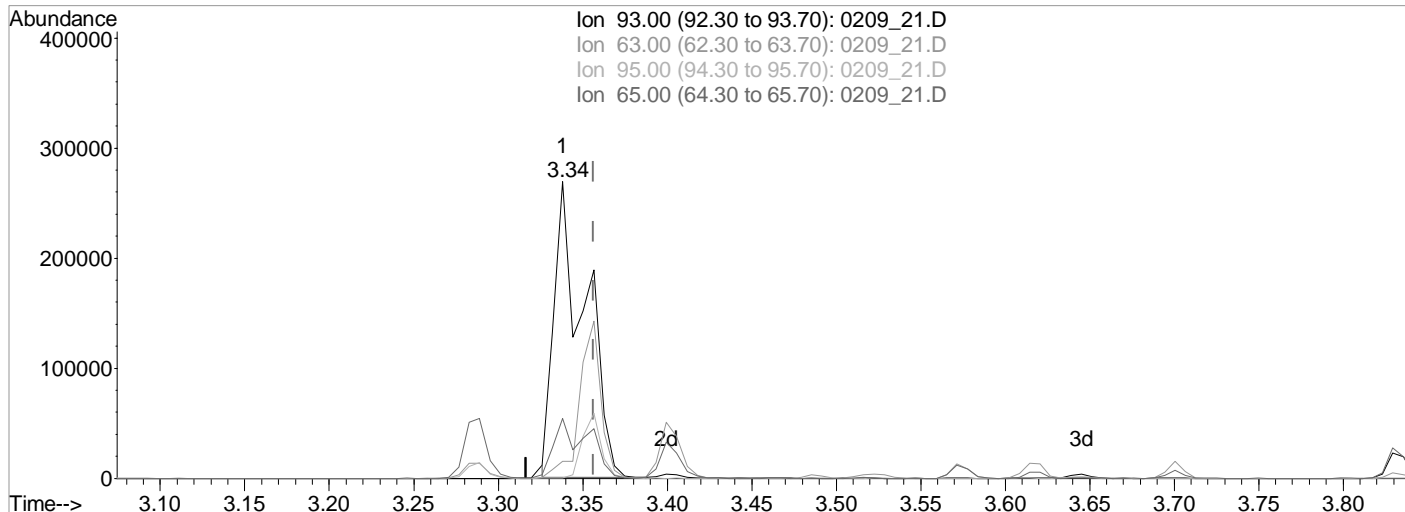




Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_21.D

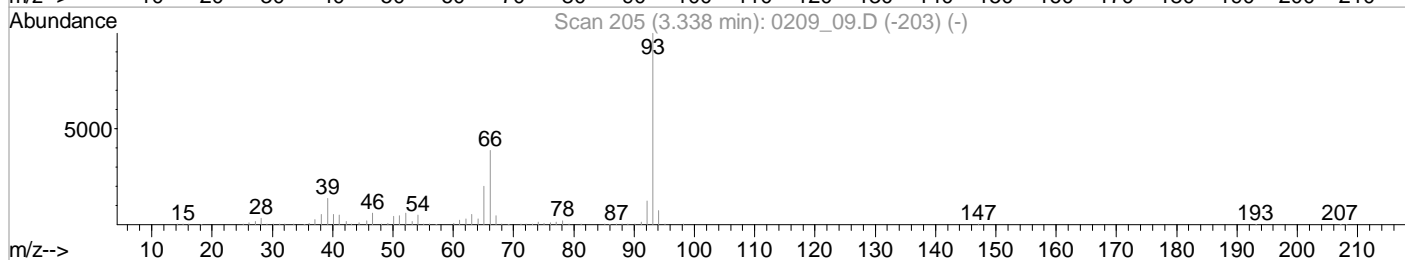
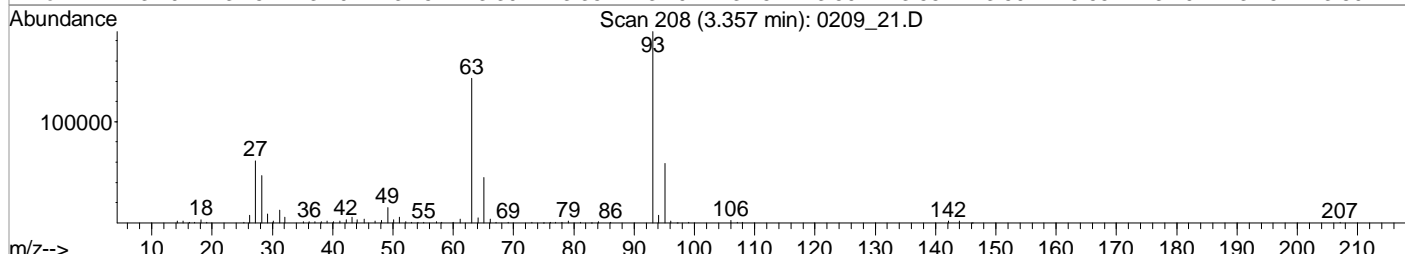
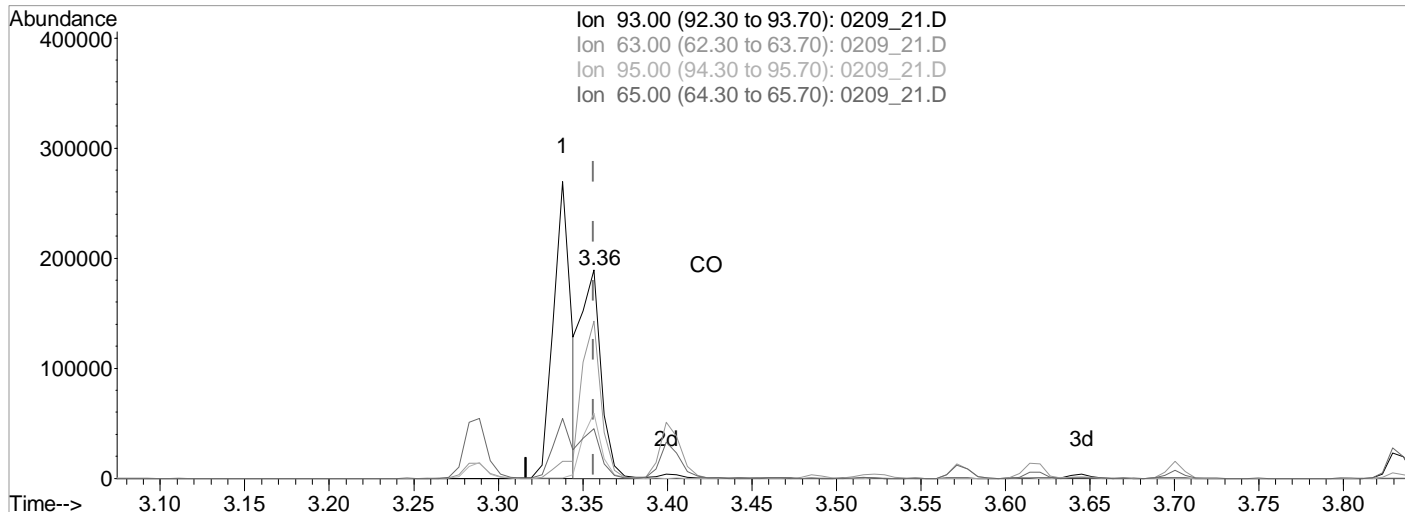
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.018) 26968.5738731 ppb  
 Qvalue = 37  
 response 344621

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.32#
95.00	30.20	0.19#
65.00	24.00	19.88

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_21.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (+0.000) 11899.7254383 ppb m

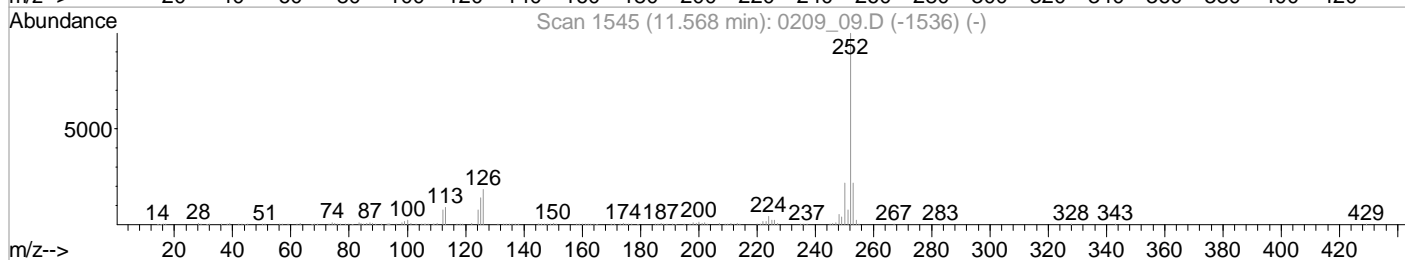
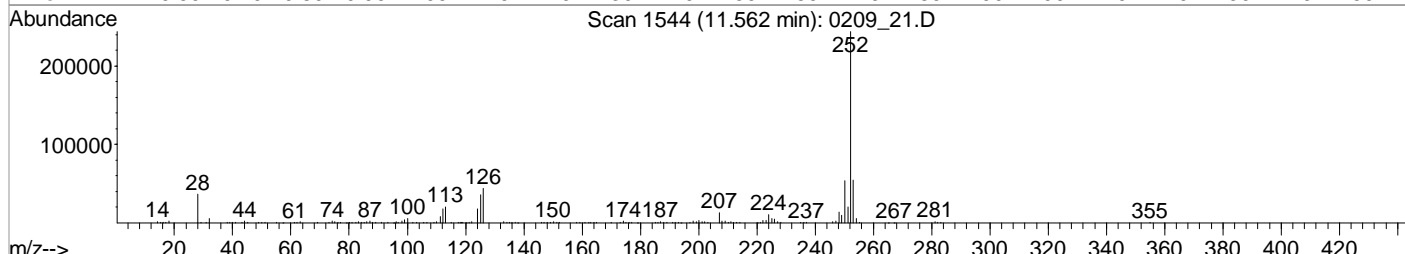
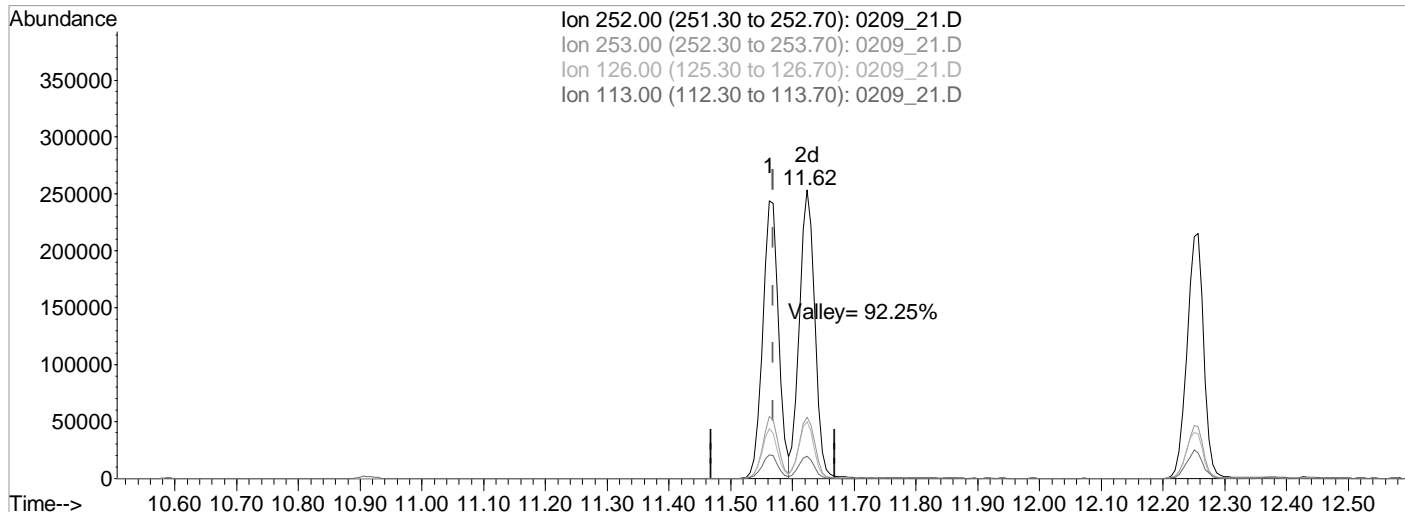
response 152062

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	75.41
95.00	30.20	31.11
65.00	24.00	23.78

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_21.D

(95) Benzo(b)fluoranthene (MT)  
 11.56min (-0.006) 9665.9587742 ppb  
 Qvalue = 99  
 response 427862

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	22.19
126.00	18.30	17.93
113.00	8.80	8.37

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1487377	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0209_22	<b>Analysis date/time:</b>	02/09/22 16:16
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.130890	0.11422550		12.70		10	8.727	87.30	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data File : C:\MSDCHEM\1\DATA\020922\0209 22.D Vial: 19  
 Acq On : 9 Feb 2022 4:16 pm Operator: 917  
 Sample : SSCV TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:15 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	85079	8000.00	ppb	0.00
23) Naphthalene-d8	4.25	136	383109	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	171657	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	322325	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	279649	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	289195	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.00	82	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	37078	9798.3476806	ppb	95
22) Acetophenone	3.73	105	170064	9665.7562550	ppb #	83
31) Benzoic Acid	4.05	105	54701	8726.7995983	ppb	99
33) alpha-terpineol	4.25	59	122109	10160.5025665	ppb	99
37) Hydroquinone	4.46	110	38203	4269.0301296	ppb	96
38) Quinoline	4.48	129	266786	10450.3090905	ppb	100
39) Caprolactam	4.50	113	34287	12988.4396711	ppb #	51
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	109368	10665.4487633	ppb	98
44) Diphenyl Ether	5.09	170	160063	9785.0929631	ug/ml	99
45) Diphenyl Oxide	5.09	170	160063	9785.0929631	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.67	232	44534	9097.6464207	ppb	97
69) Atrazine	6.32	200	72810	10372.2835887	ppb	98
82) 2-nitrodiphenylamine	7.16	167	77558	9540.6082926	ppb #	100
85) Benzidine	7.76	184	172118	10413.7591707	ppb	99
89) 3,3-Dichlorobenzidine	9.48	252	141066	9798.2449383	ppb	99

(#) = qualifier out of range (m) = manual integration

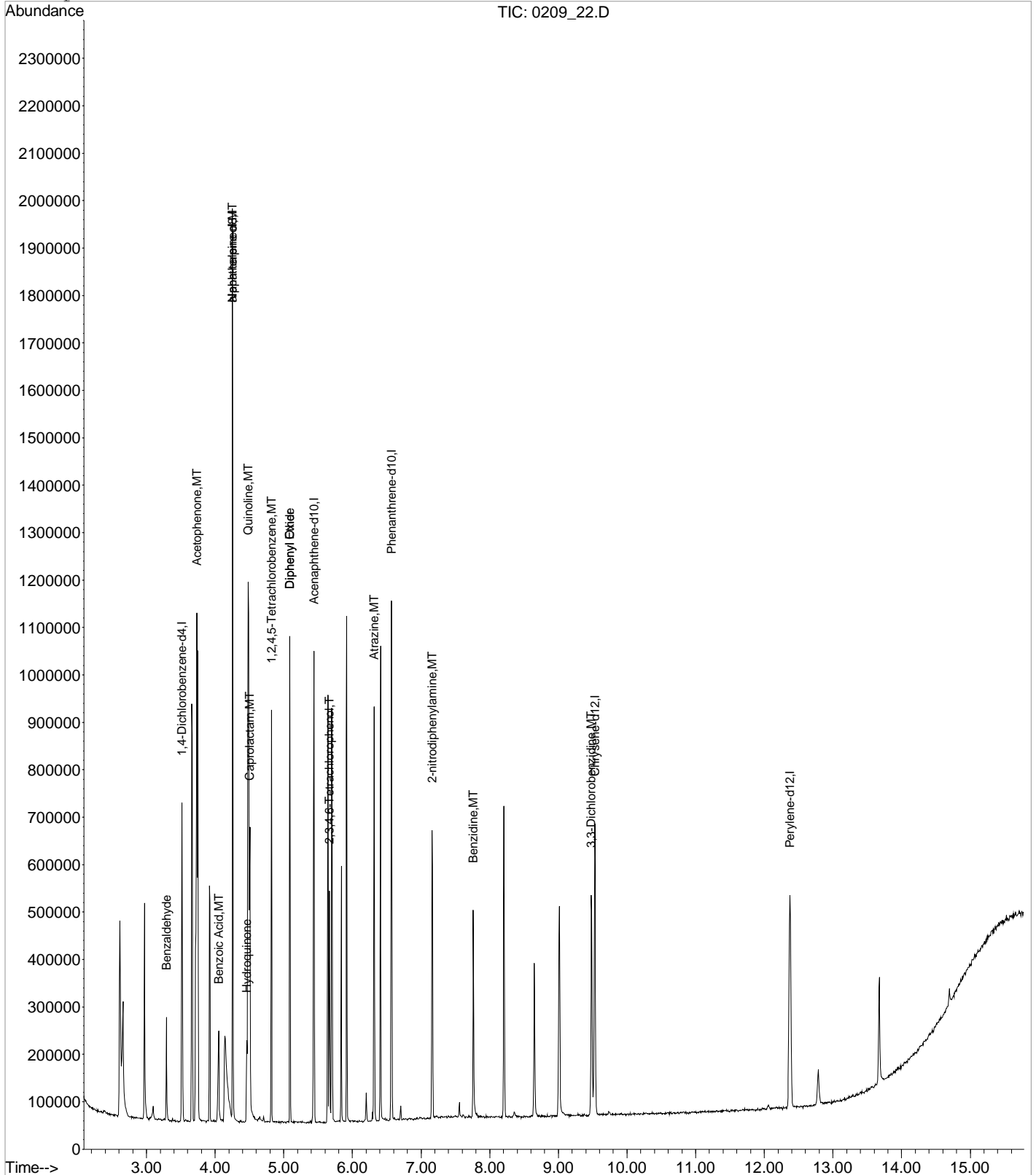
0209\_22.D S804B09V.M Sat Feb 19 13:16:13 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 22.D  
Acq On : 9 Feb 2022 4:16 pm  
Sample : SSCV TCL 10K1 PPB 22B06091 exp. 07/15/22  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
MS Integration Params: RTEINT.P  
Quant Time: Feb 19 13:15 2022

Vial: 19  
Operator: 917  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Fri Feb 18 17:49:17 2022  
Response via : Initial Calibration



GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1487377	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0503A_02	<b>Analysis date/time:</b>	05/03/22 13:09
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.623837	0.62027970		0.57	20	10	9.943	99.40	
2-METHYLNAPHTHALENE	0.663826	0.65147950	0.40	1.86	20	10	9.814	98.10	
3&4-METHYL PHENOL	1.350649	1.498567	0.60	11	20	10	11.10	111	
ACENAPHTHENE	1.170435	1.213922	0.90	3.72	20	10	10.37	104	
ACENAPHTHYLENE	1.779211	1.843212	0.90	3.60	20	10	10.36	104	
ANTHRACENE	1.065424	1.104374	0.70	3.66	20	10	10.37	104	
BENZO(A)ANTHRACENE	1.151953	1.145717	0.80	0.5410	20	10	9.946	99.50	
BENZO(A)PYRENE	0.987052	0.98952040	0.70	0.25	20	10	10.03	100	
BENZO(B)FLUORANTHENE	1.139642	1.138203	0.70	0.1260	20	10	9.987	99.90	
BENZO(G,H,I)PERYLENE	1.009366	1.107553	0.50	9.73	20	10	10.97	110	
BENZO(K)FLUORANTHENE	1.122546	1.158332	0.70	3.19	20	10	10.32	103	
BIS(2-ETHYLHEXYL)PHTHALATE	0.724997	0.83526220	0.01	15.20	20	10	11.52	115	
CARBAZOLE	0.972084	0.96853820	0.01	0.3650	20	10	9.964	99.60	
CHRYSENE	1.116357	1.161295	0.70	4.03	20	10	10.40	104	
DI-N-BUTYL PHTHALATE	1.138017	1.228768	0.01	7.97	20	10	10.80	108	
DI-N-OCTYL PHTHALATE	1.204403	1.255785	0.01	4.27	20	10	10.43	104	
DIBENZ(A,H)ANTHRACENE	1.033545	1.097520	0.40	6.19	20	10	10.62	106	
DIBENZOFURAN	1.623192	1.629774	0.80	0.4050	20	10	10.04	100	
FLUORANTHENE	1.1182	1.062660	0.60	4.97	20	10	9.503	95	
FLUORENE	1.316666	1.331065	0.90	1.09	20	10	10.11	101	
INDENO(1,2,3-CD)PYRENE	0.969769	0.94489380	0.50	2.57	20	10	9.743	97.40	
NAPHTHALENE	1.018747	1.016697	0.70	0.2010	20	10	9.980	99.80	
PENTACHLOROPHENOL	0.121187	0.10562870	0.05	12.80	20	10	8.716	87.20	
PHENANTHRENE	1.052577	1.069776	0.70	1.63	20	10	10.16	102	
PHENOL	1.643512	1.727410	0.80	5.10	20	10	10.51	105	
PYRENE	1.287230	1.308697	0.60	1.67	20	10	10.17	102	
2,4,6-TRIBROMOPHENOL	0.090561	0.10379170		14.60	20	10	11.46	115	70 - 130
2-FLUOROBIPHENYL	1.349543	1.351731		0.1620	20	10	10.02	100	70 - 130
2-FLUOROPHENOL	1.299982	1.303604		0.2790	20	10	10.03	100	70 - 130
NITROBENZENE-D5	0.339442	0.40238820		18.50	20	10	11.85	119	70 - 130
P-TERPHENYL-D14	1.093292	1.162626		6.34	20	10	10.63	106	70 - 130
PHENOL-D5	1.560263	1.731366		11	20	10	11.10	111	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 02.D Vial: 3  
 Acq On : 3 May 2022 1:09 pm Operator: 3545  
 Sample : ICVMSV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:55 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	74619	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	298130	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	154226	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	285680	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	237512	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	241363	8000.00	ppb	-0.11

System Monitoring Compounds

4) 2-Fluorophenol	2.61	112	121592	10027.8571270	ppb	-0.04
Spiked Amount 20000.000			Recovery =	50.14%		
7) Phenol-d5	3.06	99	161491	11096.6309373	ppb	-0.03
Spiked Amount 20000.000			Recovery =	55.48%		
24) Nitrobenzene-d5	3.59	82	149955m	11854.4084745	ppb	-0.04
Spiked Amount 10000.000			Recovery =	118.54%		
50) 2-Fluorobiphenyl	4.70	172	260590	10016.2092797	ppb	-0.04
Spiked Amount 10000.000			Recovery =	100.16%		
73) 2,4,6-Tribromophenol	5.76	330	37064	11460.9820361	ppb	-0.05
Spiked Amount 20000.000			Recovery =	57.30%		
87) p-Terphenyl-d14	7.69	244	345172	10634.1791182	ppb	-0.07
Spiked Amount 10000.000			Recovery =	106.34%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.02	79	142194	12315.7016484	ppb	90
3) N-Nitrosodimethylamine	2.01	42	82206	13265.6276583	ppb	98
5) Aniline	3.11	66	81000	11732.4171835	ppb #	41
6) bis(2-Chloroethyl)ether	3.13	93	118374m	11038.1978521	ppb	
8) Phenol	3.07	94	161122	10510.4796870	ppb	96
10) 2-Chlorophenol	3.17	128	127172	10361.1550455	ppb	91
11) n-Decane	3.17	41	86444	11957.0771750	ppb	96
12) 1,3-Dichlorobenzene	3.25	146	138124	9952.8060946	ppb	93
13) 1,4-Dichlorobenzene	3.29	146	143882	10072.8574262	ppb	97
14) Benzyl Alcohol	3.35	79	102750	10823.7606086	ppb	95
15) 1,2-Dichlorobenzene	3.38	146	134081	10211.3523543	ppb	96
16) bis(2-Chloroisopropyl)ethe	3.41	121	44735	9956.1656978	ppb #	34
17) 2,2-oxybis(1-chloropropane	3.41	121	44735	9956.1656978	ppb #	34
18) 2-Methylphenol	3.40	108	124909	11262.2344054	ppb	90
19) Hexachloroethane	3.57	117	60014	11574.2071651	ppb	98
20) N-Nitrosodi-n-propylamine	3.49	70	100473	12396.2199639	ppb	95
21) 3&4-Methyl phenol	3.48	107	139777	11095.1653390	ppb	95
25) Nitrobenzene	3.60	77	150366	12157.1548213	ppb	89
26) Isophorone	3.73	82	272850	12297.4685962	ppb	100
27) 2-Nitrophenol	3.78	139	70510	11310.4681449	ppb	89
28) 2,4-Dimethylphenol	3.79	107	132934	11481.7934734	ppb	92
29) bis(2-Chlorethoxy)methane	3.84	93	161384	11375.9336167	ppb	94
30) 2,4-Dichlorophenol	3.92	162	99014	10151.7051302	ppb	97
32) 1,2,4-Trichlorobenzene	3.97	180	111695	10230.6269000	ppb	96
34) Naphthalene	4.03	128	378885	9979.8826173	ppb	98
35) 4-Chloroaniline	4.05	65	49820	11293.9709775	ppb #	51
36) Hexachloro-1,3-butadiene	4.09	225	67753	11375.6972279	ppb	98
40) 4-Chloro-3-methylphenol	4.35	107	108178	11002.9492353	ppb	90
41) 2-Methylnaphthalene	4.46	142	242782	9814.0046717	ppb	96
42) 1-Methylnaphthalene	4.53	142	231155	9942.9737086	ppb	96
47) Hexachlorocyclopentadiene	4.56	237	51742	7160.8739201	ppb	94
48) 2,4,6-Trichlorophenol	4.64	196	67989	10163.9598578	ppb #	89
49) 2,4,5-Trichlorophenol	4.67	196	72554	10422.0764752	ppb	94

(#) = qualifier out of range (m) = manual integration  
 0503A\_02.D S804C29V.M Tue May 03 14:57:02 2022



Data File : C:\MSDCHEM\1\DATA\050322A\0503A 02.D Vial: 3  
 Acq On : 3 May 2022 1:09 pm Operator: 3545  
 Sample : ICVMSV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:55 2022 Quant Results File: S804C29V.RES

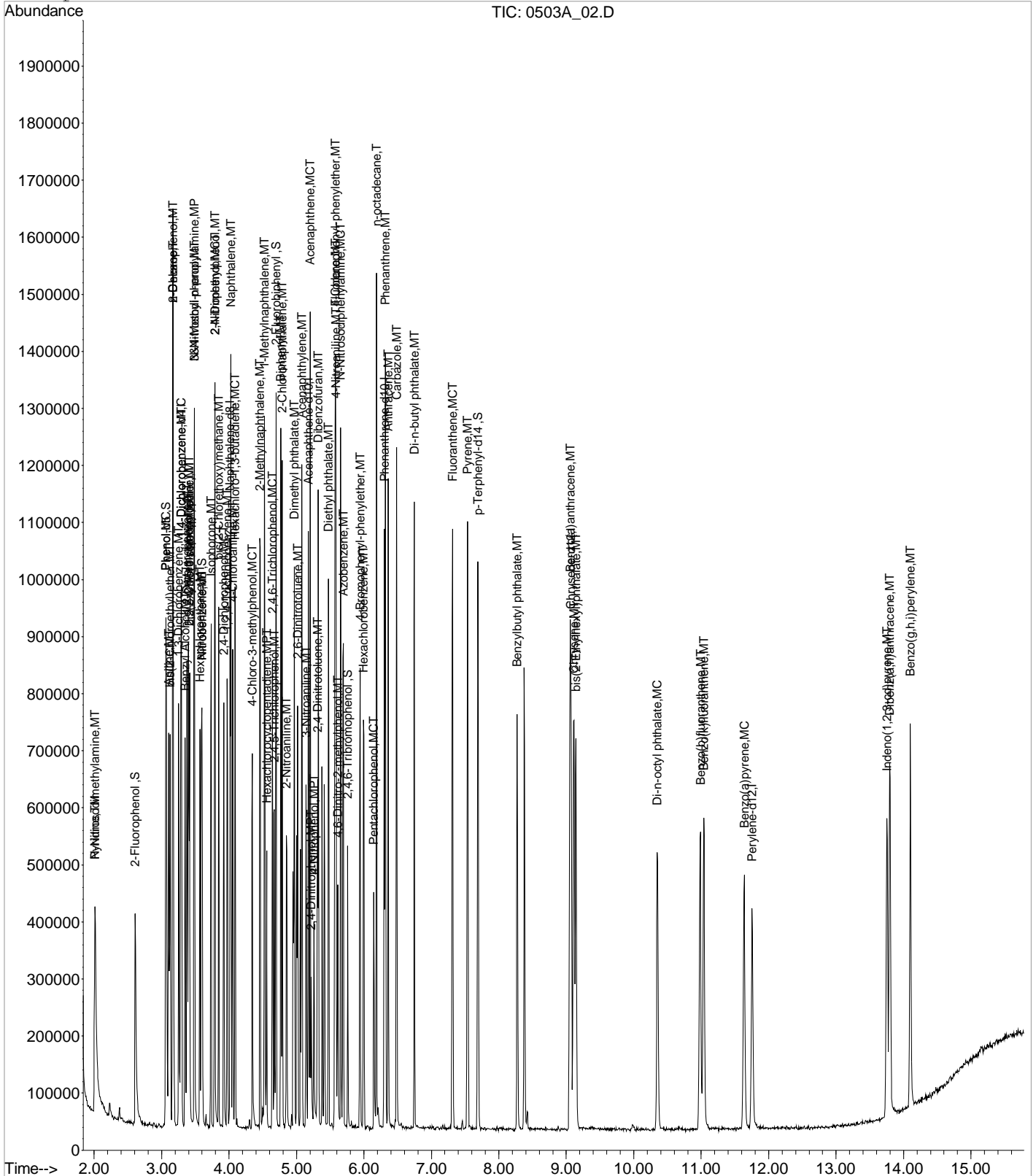
Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
51) Biphenyl	4.76	154	292859	10137.0375005	ppb		99
52) 2-Chloronaphthalene	4.79	162	225823	10242.3209103	ppb		97
53) 2-Nitroaniline	4.86	138	75980	11117.2329137	ppb	#	86
54) Acenaphthylene	5.08	152	355339	10359.7152958	ppb		100
55) Dimethyl phthalate	4.97	163	246226	10779.3675241	ppb		97
56) 2,6-Dinitrotoluene	5.02	165	60076	11343.6107327	ppb	#	75
57) 3-Nitroaniline	5.14	138	63123	11070.1996446	ppb		83
58) Acenaphthene	5.20	153	234023	10371.5511213	ppb		95
59) 2,4-Dinitrophenol	5.22	184	26399	9193.2855139	ppb	#	1
60) Dibenzofuran	5.32	168	314192	10040.5540810	ppb		94
61) 2,4-Dinitrotoluene	5.31	165	77190	11638.7179956	ppb		85
63) 4-Nitrophenol	5.26	139	45019	9558.3792369	ppb	#	74
64) Fluorene	5.58	166	256606	10109.3596163	ppb		97
65) 4-Chlorophenyl-phenylether	5.57	204	121047	10056.0198496	ppb		96
66) Diethyl phthalate	5.47	149	256612	10965.3767676	ppb		97
67) 4-Nitroaniline	5.59	138	68560	12837.5262344	ppb	#	82
68) Azobenzene	5.69	77	291578	12490.6264418	ppb		94
71) 4,6-Dinitro-2-methylphenol	5.61	198	38661	10012.3771836	ppb		82
72) N-Nitrosodiphenylamine	5.66	169	214138	9864.2003462	ppb		97
74) 4-Bromophenyl-phenylether	5.94	248	70731	10039.2362322	ppb		92
75) Hexachlorobenzene	6.00	284	78910	10065.7745634	ppb		98
76) n-octadecane	6.18	55	47116	10779.0077385	ppb		95
77) Pentachlorophenol	6.15	266	37720	8716.1615340	ppb		91
78) Phenanthrene	6.32	178	382017	10163.4020568	ppb		98
79) Anthracene	6.36	178	394372	10365.5832031	ppb		99
80) Carbazole	6.48	167	345865	9963.5202086	ppb		97
81) Di-n-butyl phthalate	6.75	149	438793	10797.4428148	ppb		99
83) Fluoranthene	7.31	202	379476	9503.3107043	ppb		99
86) Pyrene	7.53	202	388539	10166.7699519	ppb		98
88) Benzylbutyl phthalate	8.27	149	171220	10956.9174241	ppb		92
90) Benzo(a)anthracene	9.06	228	340152	9945.8710314	ppb		96
91) Chrysene	9.11	228	344777	10402.5412051	ppb		97
92) bis(2-Ethylhexyl)phthalate	9.14	149	247981	11520.9133758	ppb		94
93) Di-n-octyl phthalate	10.35	149	372830	10426.6155308	ppb		98
95) Benzo(b)fluoranthene	10.99	252	343400	9987.3715531	ppb		97
96) Benzo(k)fluoranthene	11.04	252	349473	10318.7870098	ppb		97
97) Benzo(a)pyrene	11.64	252	298542	10025.0120868	ppb		95
98) Indeno(1,2,3-cd)pyrene	13.75	276	285078	9743.4929023	ppb		99
99) Dibenz(a,h)anthracene	13.79	278	331126	10618.9941618	ppb		95
100) Benzo(g,h,i)perylene	14.10	276	334153	10972.7593685	ppb		99

(#) = qualifier out of range (m) = manual integration  
 0503A\_02.D S804C29V.M Tue May 03 14:57:03 2022

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 02.D Vial: 3
Acq On : 3 May 2022 1:09 pm Operator: 3545
Sample : ICMSC SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 3 14:55 2022 Quant Results File: S804C29V.RES

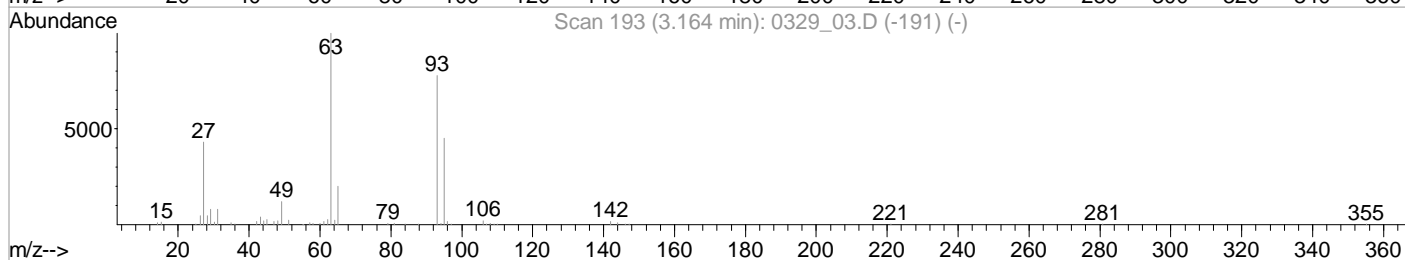
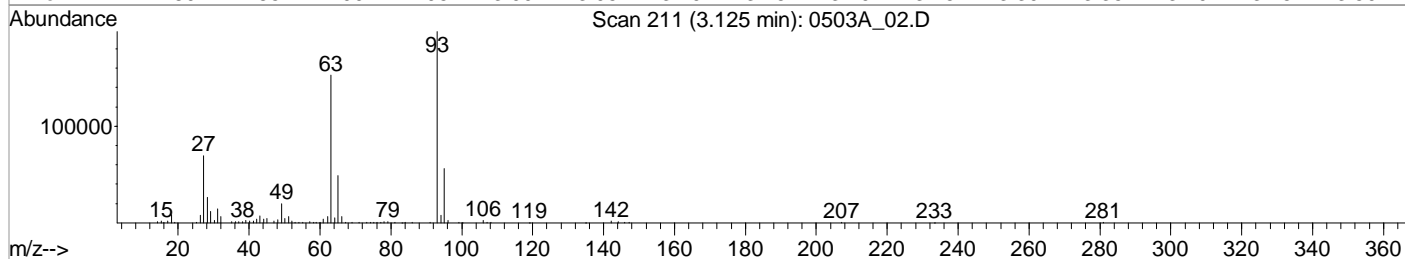
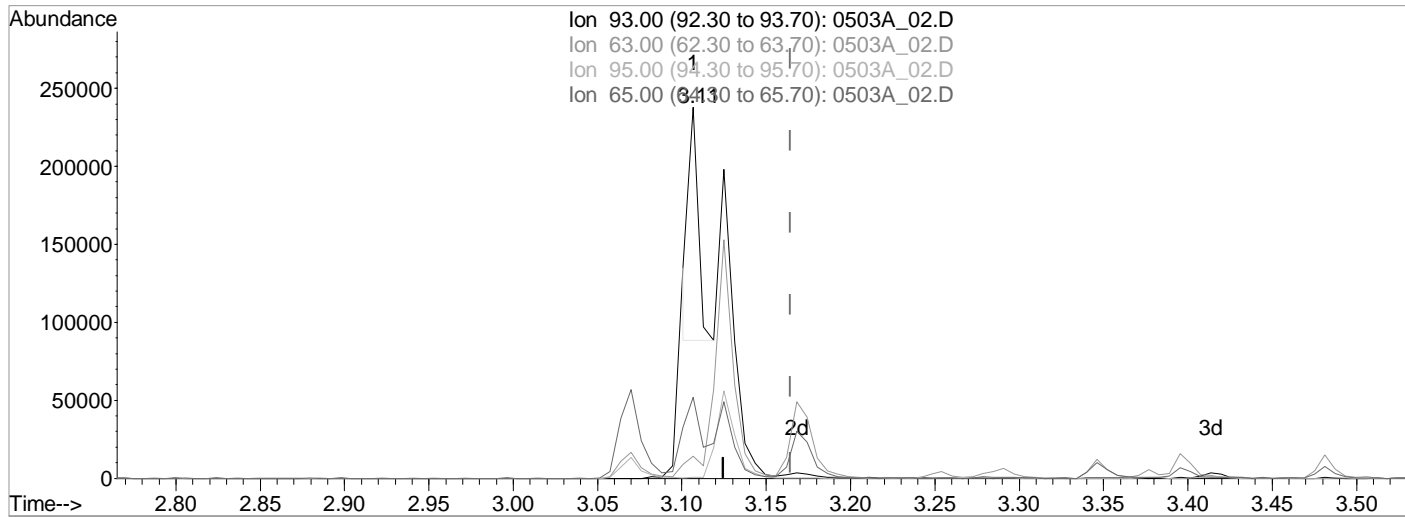
Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Tue Mar 29 09:44:27 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_02.D Vial: 3  
 Acq On : 3 May 2022 1:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_02.D

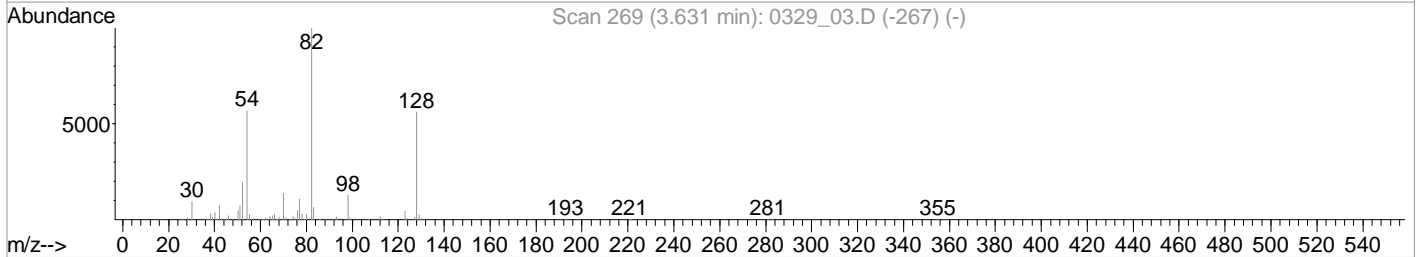
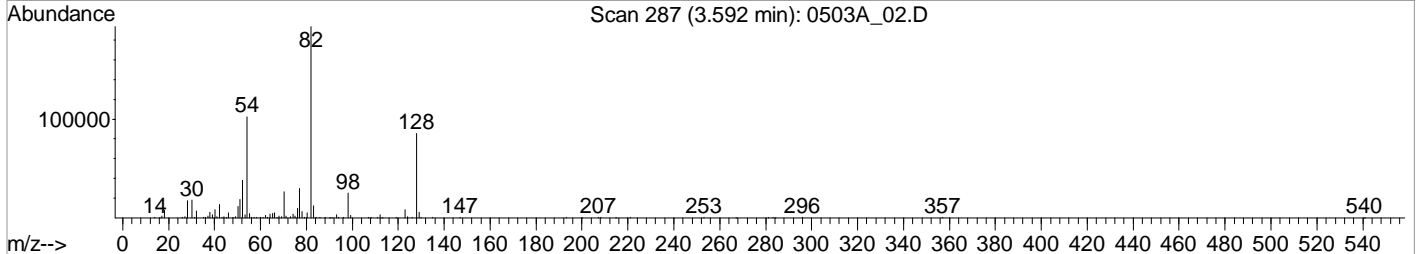
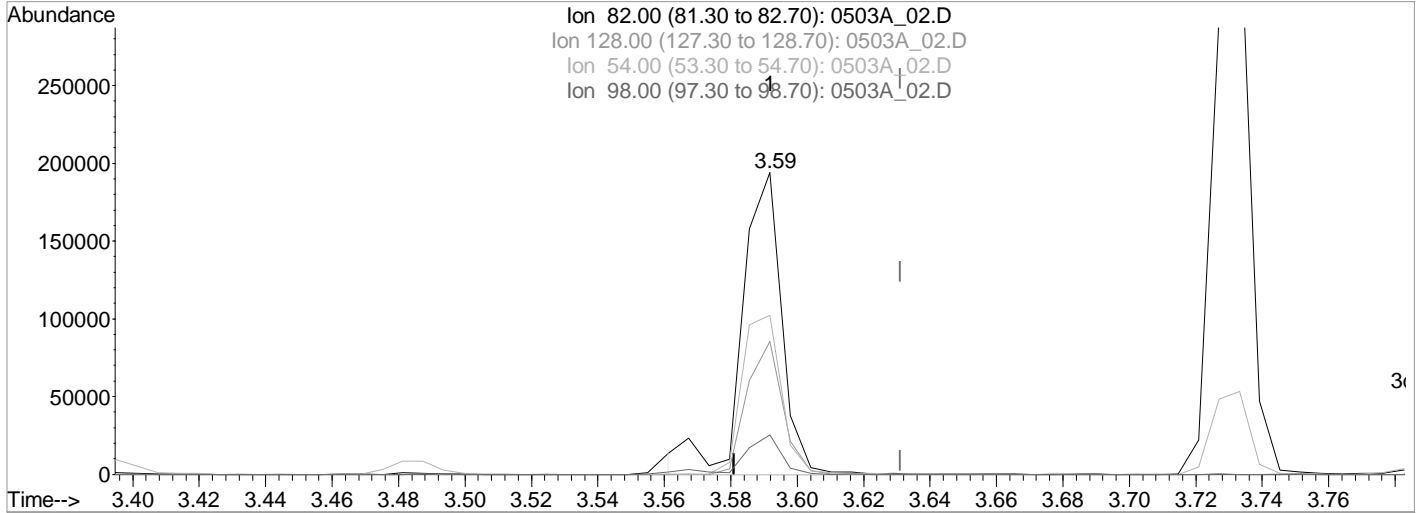
(6) bis(2-Chloroethyl)ether (MT)  
 3.11min (-0.058) 5448.4165636 ppb  
 Qvalue = 36  
 response 58429

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	3.57#
95.00	30.20	0.30#
65.00	24.00	19.66

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_02.D Vial: 3  
 Acq On : 3 May 2022 1:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_02.D

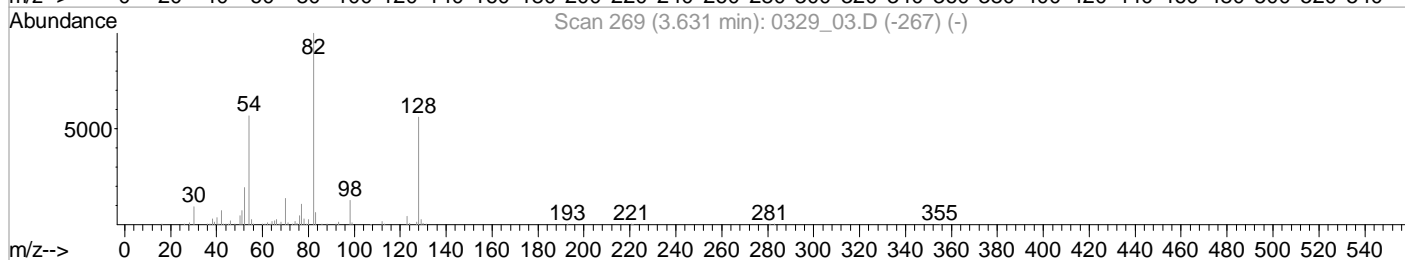
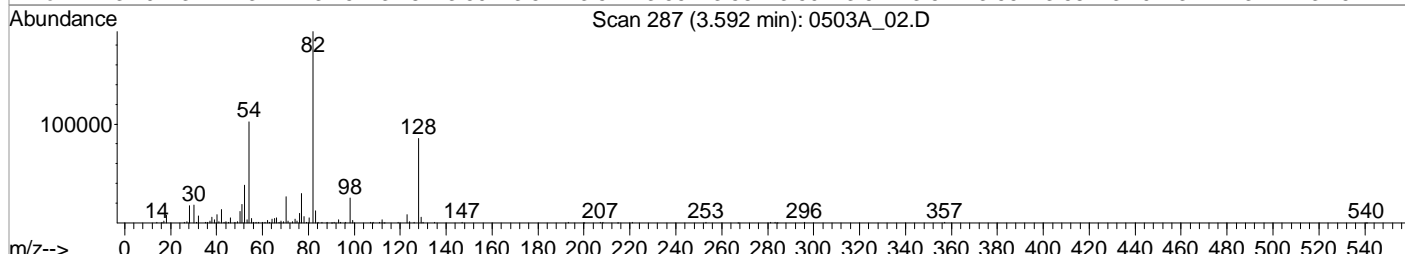
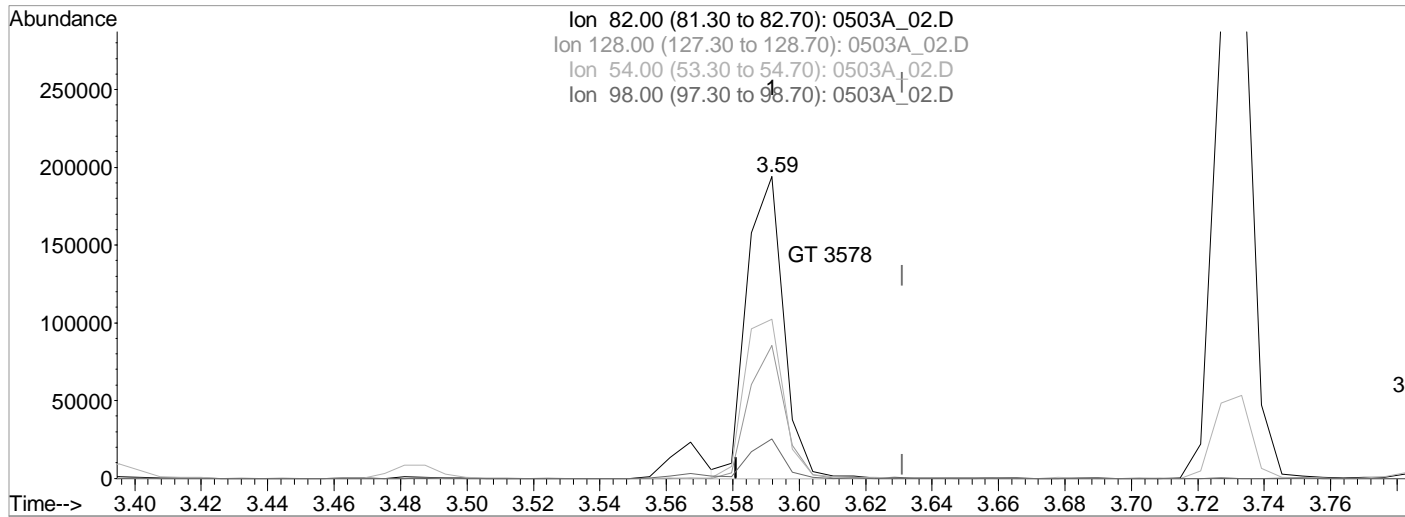
(24) Nitrobenzene-d5 (S)  
 3.59min (-0.039) 12765.9698371 ppb  
 Qvalue = 94  
 response 161486

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	44.10
54.00	56.90	52.76
98.00	11.80	13.09

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_02.D Vial: 3  
 Acq On : 3 May 2022 1:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:43 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_02.D

(24) Nitrobenzene-d5 (S)  
 3.59min (-0.039) 11854.4084745 ppb m

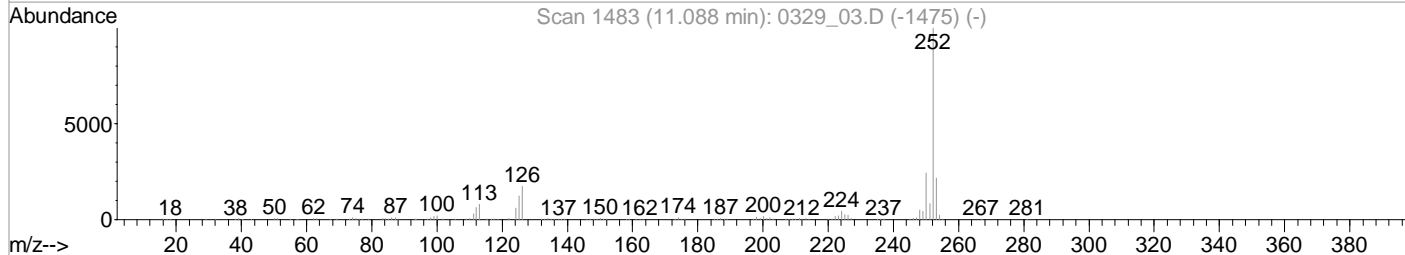
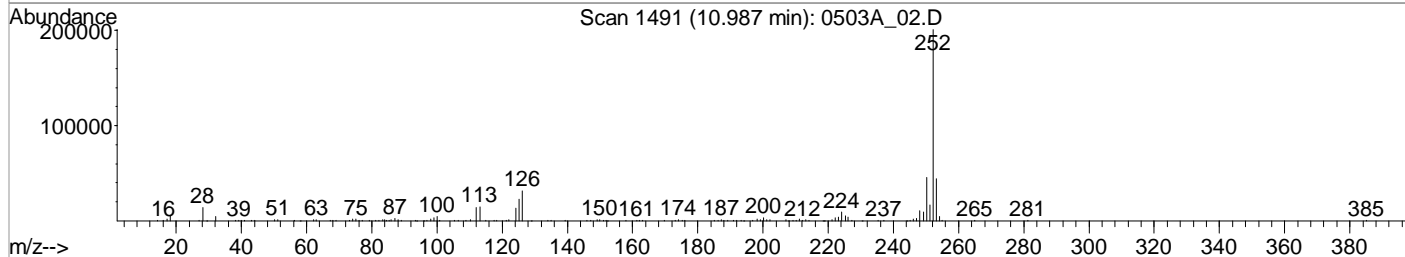
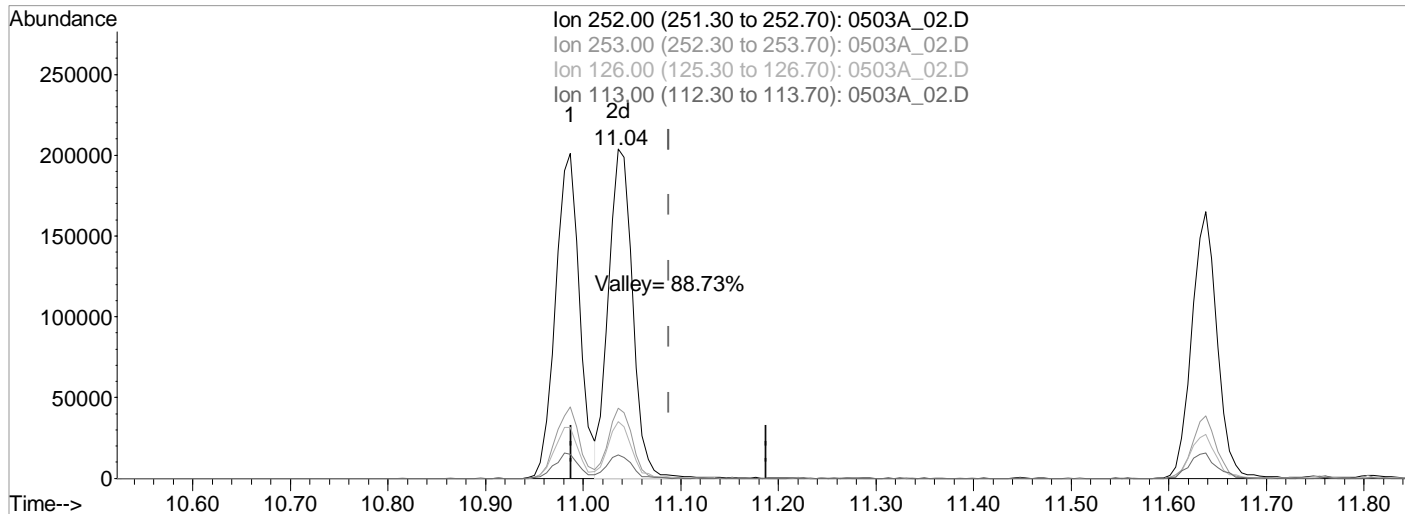
response 149955

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	44.10
54.00	56.90	52.76
98.00	11.80	13.09

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_02.D Vial: 3  
 Acq On : 3 May 2022 1:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:43 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_02.D

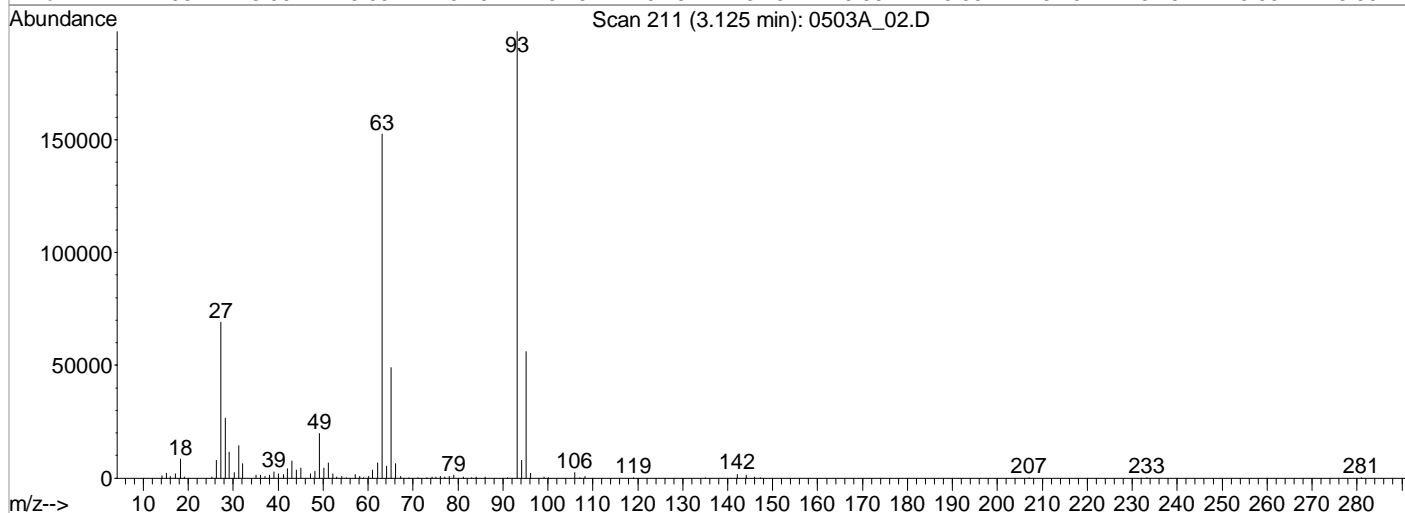
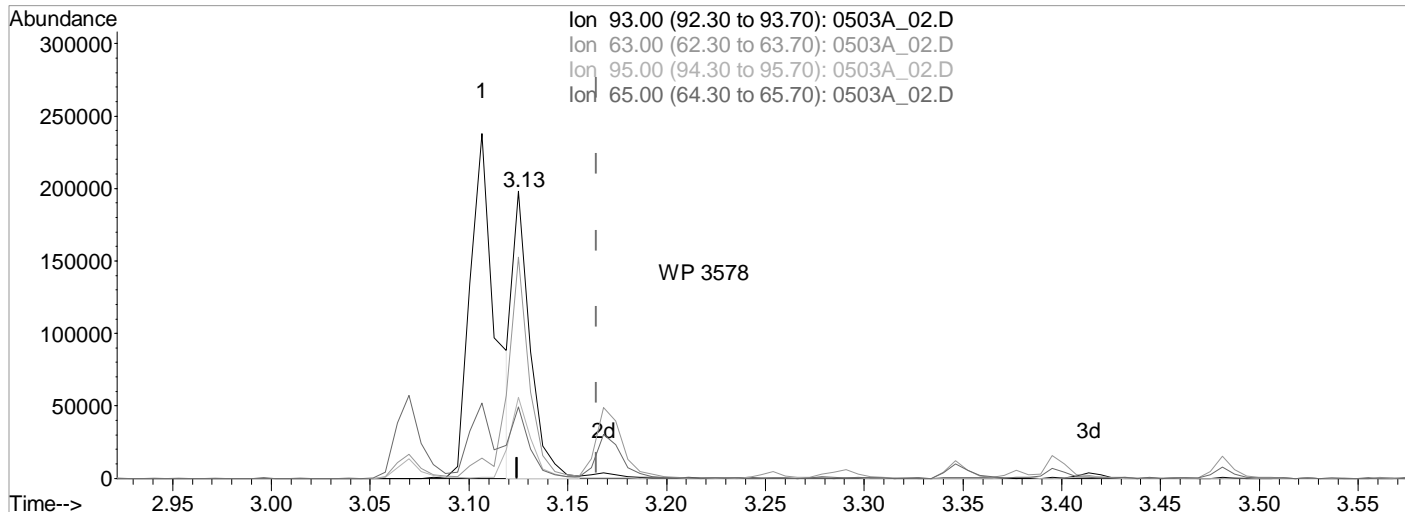
(95) Benzo(b)fluoranthene (MT)  
 10.99min (-0.101) 9987.3715531 ppb  
 Qvalue = 97  
 response 343400

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.88
126.00	18.30	15.56
113.00	8.80	7.21

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_02.D Vial: 3  
 Acq On : 3 May 2022 1:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:55 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_02.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.13min (-0.039) 11038.1978521 ppb m

response 118374

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	77.07
95.00	30.20	28.31
65.00	24.00	24.77

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1487377	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0503A_03	<b>Analysis date/time:</b>	05/03/22 13:30
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.130890	0.12888610		1.53	20	10	9.847	98.50	

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.



Data File : C:\MSDCHEM\1\DATA\050322A\0503A 03.D Vial: 4  
 Acq On : 3 May 2022 1:30 pm Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:48 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	74469	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	343013	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	149999	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	273701	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	231323	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	234462	8000.00	ppb	-0.12

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 20000.000			Recovery =	0.00%		
7) Phenol-d5	0.00	99	0d	0.0000000	ppb	
Spiked Amount 20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 10000.000			Recovery =	0.00%		

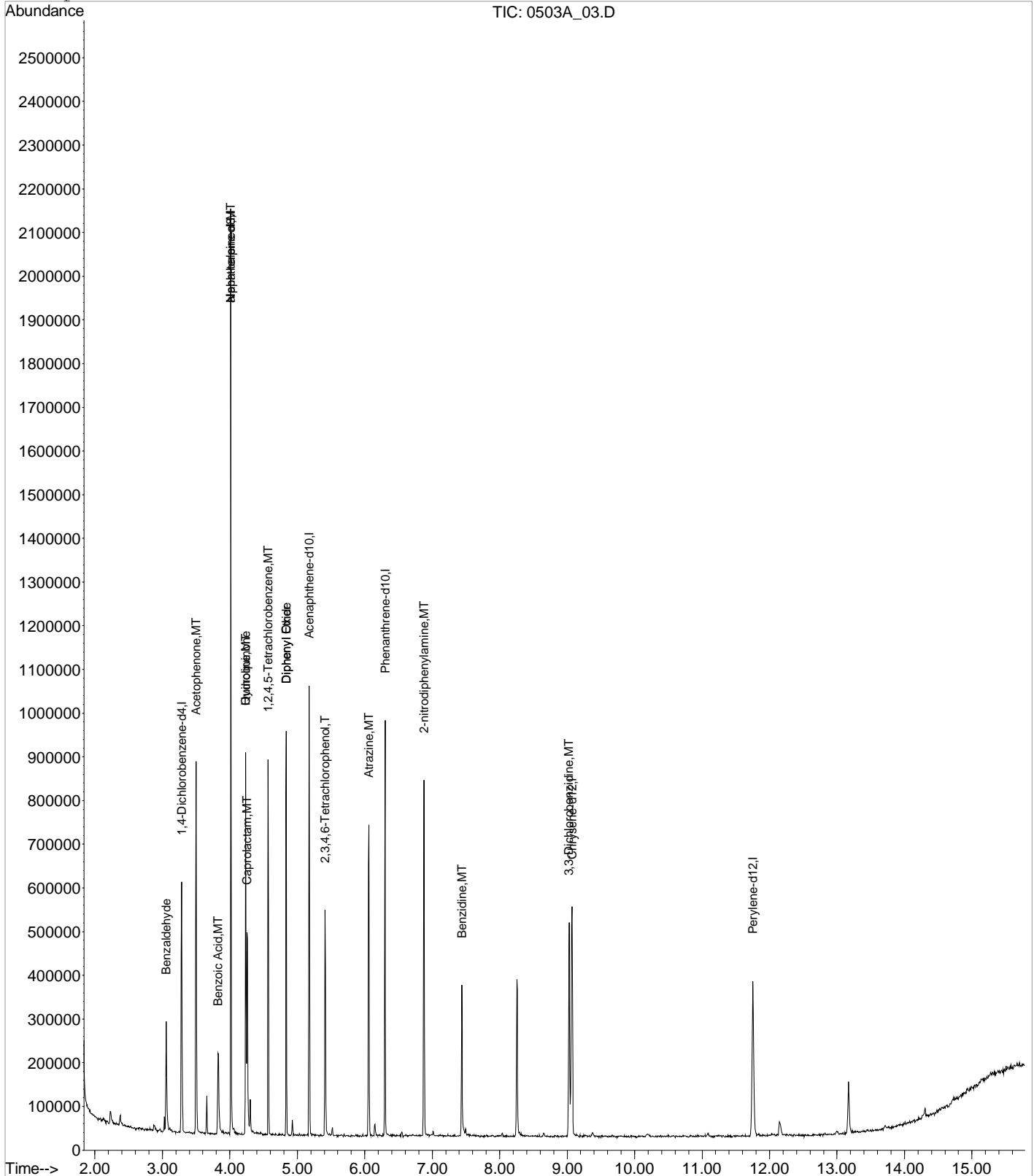
Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.06	105	41431	12508.6032021	ppb	93
22) Acetophenone	3.50	105	174987	11362.5573891	ppb	94
31) Benzoic Acid	3.83	105	55262	9846.8678689	ppb	87
33) alpha-terpineol	4.02	59	128359	11929.0432982	ppb	97
37) Hydroquinone	4.24	110	67152	8926.3680614	ppb	95
38) Quinoline	4.24	129	226963	9929.6270792	ppb	98
39) Caprolactam	4.26	113	30825	13041.9446882	ppb #	75
43) 1,2,4,5-Tetrachlorobenzene	4.57	216	102708	11186.7751887	ppb	98
44) Diphenyl Ether	4.84	170	146270	9987.1377412	ug/ml#	87
45) Diphenyl Oxide	4.84	170	146270	9987.1377412	ug/ml#	87
62) 2,3,4,6-Tetrachlorophenol	5.41	232	48216	11272.0182213	ppb	85
69) Atrazine	6.06	200	63867	10411.9727404	ppb	95
82) 2-nitrodiphenylamine	6.88	167	81441	11798.0482768	ppb #	100
85) Benzidine	7.44	184	129445	9543.7590529	ppb	100
89) 3,3-Dichlorobenzidine	9.03	252	132545	11129.7073291	ppb	98

(#) = qualifier out of range (m) = manual integration  
 0503A\_03.D S804C29V.M Tue May 03 14:52:12 2022

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 03.D Vial: 4  
 Acq On : 3 May 2022 1:30 pm Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:48 2022 Quant Results File: S804C29V.RES

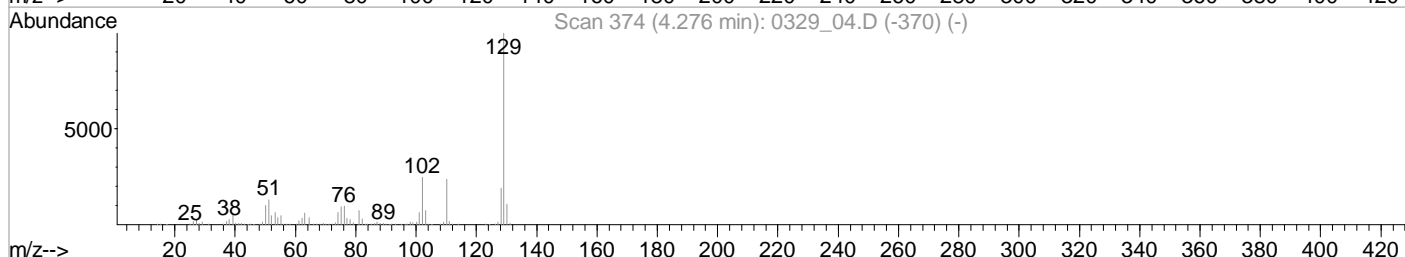
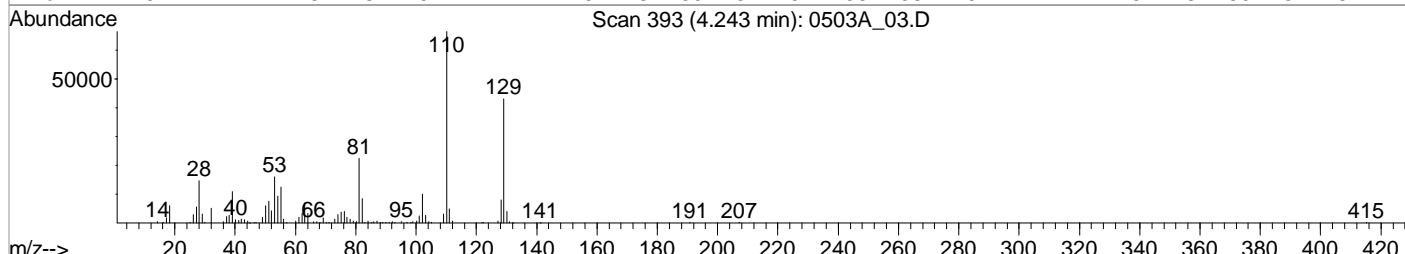
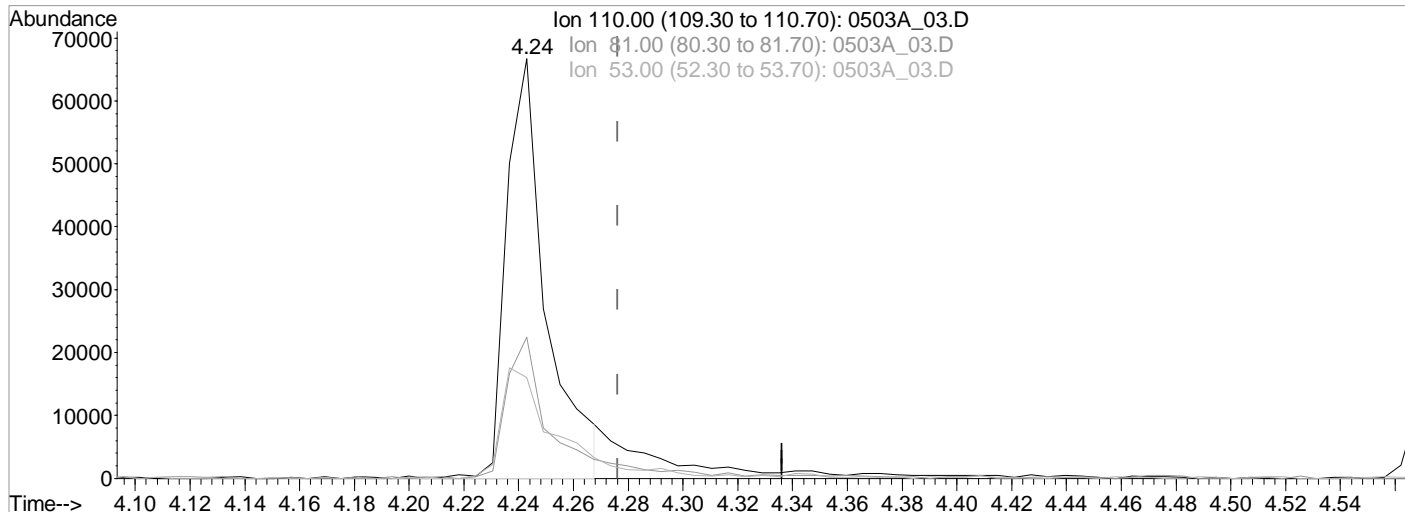
Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_03.D Vial: 4  
 Acq On : 3 May 2022 1:30 pm Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0503A\_03.D

(37) Hydroquinone

4.24min (-0.033) 8926.3680614 ppb

Qvalue = 95

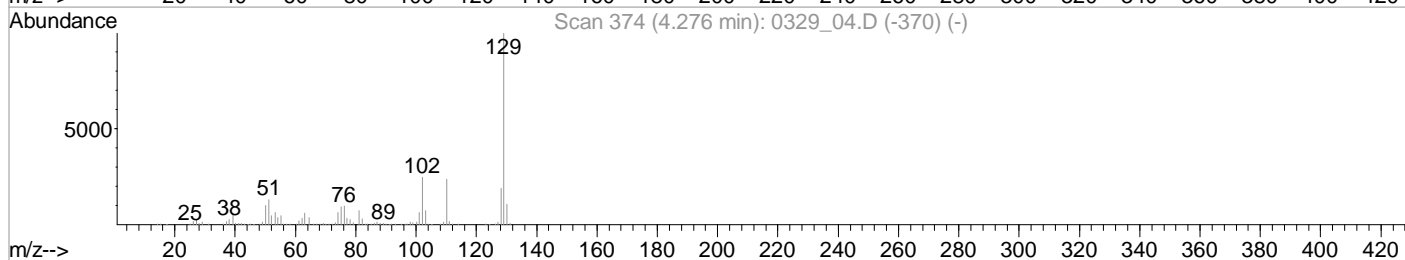
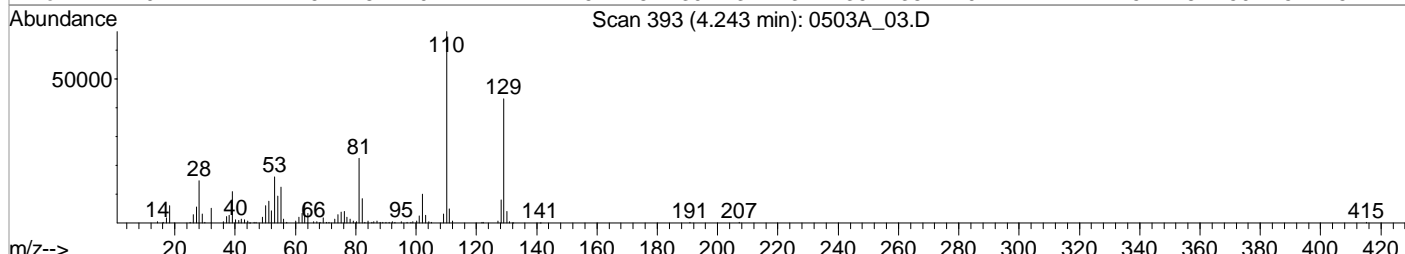
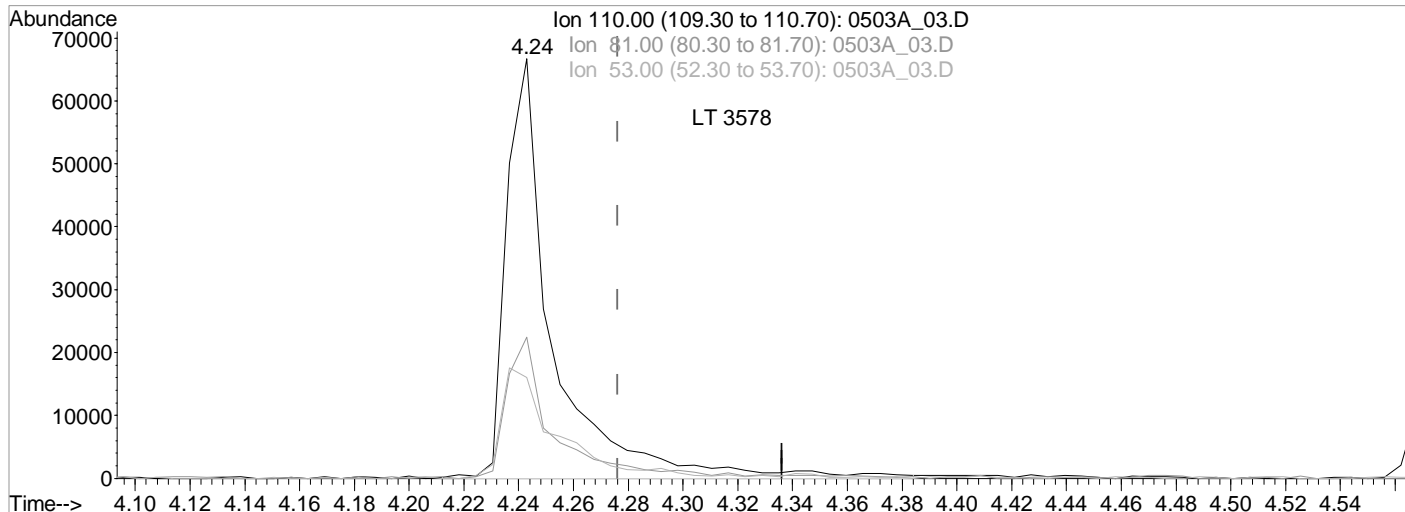
response 67152

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	33.42
53.00	25.90	24.12
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_03.D Vial: 4  
 Acq On : 3 May 2022 1:30 pm Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0503A\_03.D

(37) Hydroquinone  
 4.24min (-0.033) 8926.3680614 ppb  
 Qvalue = 95  
 response 67152

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	33.42
53.00	25.90	24.12
0.00	0.00	0.00

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1487377	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0504_03	<b>Analysis date/time:</b>	05/04/22 04:59
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.623837	0.612608		1.80	20	10	9.820	98.20	
2-METHYLNAPHTHALENE	0.663826	0.64867080	0.40	2.28	20	10	9.772	97.70	
3&4-METHYL PHENOL	1.350649	1.523827	0.60	12.80	20	10	11.28	113	
ACENAPHTHENE	1.170435	1.182740	0.90	1.05	20	10	10.11	101	
ACENAPHTHYLENE	1.779211	1.831633	0.90	2.95	20	10	10.29	103	
ANTHRACENE	1.065424	1.067761	0.70	0.2190	20	10	10.02	100	
BENZO(A)ANTHRACENE	1.151953	1.109442	0.80	3.69	20	10	9.631	96.30	
BENZO(A)PYRENE	0.987052	0.97616170	0.70	1.10	20	10	9.890	98.90	
BENZO(B)FLUORANTHENE	1.139642	1.104227	0.70	3.11	20	10	9.689	96.90	
BENZO(G,H,I)PERYLENE	1.009366	1.115940	0.50	10.60	20	10	11.06	111	
BENZO(K)FLUORANTHENE	1.122546	1.135865	0.70	1.19	20	10	10.12	101	
BIS(2-ETHYLHEXYL)PHTHALATE	0.724997	0.81069670	0.01	11.80	20	10	11.18	112	
CARBAZOLE	0.972084	0.95367020	0.01	1.89	20	10	9.811	98.10	
CHRYSENE	1.116357	1.095140	0.70	1.90	20	10	9.810	98.10	
DI-N-BUTYL PHTHALATE	1.138017	1.228181	0.01	7.92	20	10	10.79	108	
DI-N-OCTYL PHTHALATE	1.204403	1.279182	0.01	6.21	20	10	10.62	106	
DIBENZ(A,H)ANTHRACENE	1.033545	1.085583	0.40	5.03	20	10	10.50	105	
DIBENZOFURAN	1.623192	1.606689	0.80	1.02	20	10	9.898	99	
FLUORANTHENE	1.1182	1.076892	0.60	3.69	20	10	9.631	96.30	
FLUORENE	1.316666	1.300795	0.90	1.21	20	10	9.879	98.80	
INDENO(1,2,3-CD)PYRENE	0.969769	0.96230120	0.50	0.77	20	10	9.923	99.20	
NAPHTHALENE	1.018747	1.049973	0.70	3.07	20	10	10.31	103	
PENTACHLOROPHENOL	0.121187	0.10346140	0.05	14.60	20	10	8.537	85.40	
PHENANTHRENE	1.052577	1.036827	0.70	1.50	20	10	9.850	98.50	
PHENOL	1.643512	1.718104	0.80	4.54	20	10	10.45	105	
PYRENE	1.287230	1.221085	0.60	5.14	20	10	9.486	94.90	
2,4,6-TRIBROMOPHENOL	0.090561	0.10655420		17.70	20	10	11.77	118	70 - 130
2-FLUOROBIPHENYL	1.349543	1.391340		3.10	20	10	10.31	103	70 - 130
2-FLUOROPHENOL	1.299982	1.290925		0.6970	20	10	9.930	99.30	70 - 130
NITROBENZENE-D5	0.339442	0.43843290		29.20	20	10	12.92	129	70 - 130
P-TERPHENYL-D14	1.093292	1.076133		1.57	20	10	9.843	98.40	70 - 130
PHENOL-D5	1.560263	1.692753		8.49	20	10	10.85	109	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data File : C:\MSDCHEM\1\DATA\050422\0504 03.D Vial: 3  
 Acq On : 4 May 2022 4:59 am Operator: 3545  
 Sample : ICVMSV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:44 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	72614	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	285391	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	146746	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	276509	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	245009	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	246687	8000.00	ppb	-0.11

System Monitoring Compounds

4) 2-Fluorophenol	2.62	112	117174	9930.3248368	ppb	-0.03
Spiked Amount 20000.000			Recovery =	49.65%		
7) Phenol-d5	3.06	99	153647	10849.1563237	ppb	-0.03
Spiked Amount 20000.000			Recovery =	54.25%		
24) Nitrobenzene-d5	3.59	82	156406	12916.2889763	ppb	-0.04
Spiked Amount 10000.000			Recovery =	129.16%		
50) 2-Fluorobiphenyl	4.70	172	255217	10309.7127815	ppb	-0.04
Spiked Amount 10000.000			Recovery =	103.10%		
73) 2,4,6-Tribromophenol	5.76	330	36829	11766.0323213	ppb	-0.05
Spiked Amount 20000.000			Recovery =	58.83%		
87) p-Terphenyl-d14	7.69	244	329578	9843.0602873	ppb	-0.07
Spiked Amount 10000.000			Recovery =	98.43%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.02	79	154475	13748.8114362	ppb	92
3) N-Nitrosodimethylamine	2.01	42	79378	13162.9582120	ppb	92
5) Aniline	3.11	66	79706	11863.7655871	ppb #	42
6) bis(2-Chloroethyl)ether	3.12	93	114647m	10985.8486026	ppb	
8) Phenol	3.07	94	155948	10453.8572691	ppb	93
10) 2-Chlorophenol	3.17	128	123201	10314.7799607	ppb	87
11) n-Decane	3.17	41	82664	11749.9402390	ppb	96
12) 1,3-Dichlorobenzene	3.25	146	134638	9969.4938926	ppb	94
13) 1,4-Dichlorobenzene	3.29	146	135760	9766.6834940	ppb	93
14) Benzyl Alcohol	3.35	79	97388	10542.1904707	ppb	95
15) 1,2-Dichlorobenzene	3.38	146	128127	10027.3400525	ppb	94
16) bis(2-Chloroisopropyl)ethe	3.41	121	43683	9990.4763134	ppb #	50
17) 2,2-oxybis(1-chloropropane	3.41	121	43683	9990.4763134	ppb #	50
18) 2-Methylphenol	3.40	108	124393m	11525.3954730	ppb	
19) Hexachloroethane	3.57	117	57126	11321.4370674	ppb	97
20) N-Nitrosodi-n-propylamine	3.49	70	95125	12060.4534703	ppb	97
21) 3&4-Methyl phenol	3.48	107	138314	11282.1863359	ppb	95
25) Nitrobenzene	3.60	77	145362	12277.1792625	ppb	91
26) Isophorone	3.73	82	262394	12354.0988224	ppb	96
27) 2-Nitrophenol	3.78	139	67383	11291.3434004	ppb	90
28) 2,4-Dimethylphenol	3.79	107	126209	11387.5262326	ppb	92
29) bis(2-Chlorethoxy)methane	3.84	93	156181	11500.5915542	ppb	96
30) 2,4-Dichlorophenol	3.92	162	96421	10327.1248426	ppb	98
32) 1,2,4-Trichlorobenzene	3.97	180	105813	10124.4851739	ppb	96
34) Naphthalene	4.03	128	374566	10306.5136137	ppb	99
35) 4-Chloroaniline	4.05	65	49799	11793.1269314	ppb #	47
36) Hexachloro-1,3-butadiene	4.09	225	66280	11625.1188396	ppb	97
40) 4-Chloro-3-methylphenol	4.35	107	103489	10995.8740997	ppb	89
41) 2-Methylnaphthalene	4.46	142	231406	9771.6926327	ppb	96
42) 1-Methylnaphthalene	4.53	142	218541	9819.9964779	ppb	95
47) Hexachlorocyclopentadiene	4.56	237	45391	6602.1272262	ppb	97
48) 2,4,6-Trichlorophenol	4.64	196	67693	10635.5357538	ppb #	89
49) 2,4,5-Trichlorophenol	4.67	196	71158	10742.5640275	ppb	95

(#) = qualifier out of range (m) = manual integration

0504\_03.D S804C29V.M Thu May 05 12:38:07 2022

Data File : C:\MSDCHEM\1\DATA\050422\0504 03.D Vial: 3  
 Acq On : 4 May 2022 4:59 am Operator: 3545  
 Sample : ICVMSV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:44 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

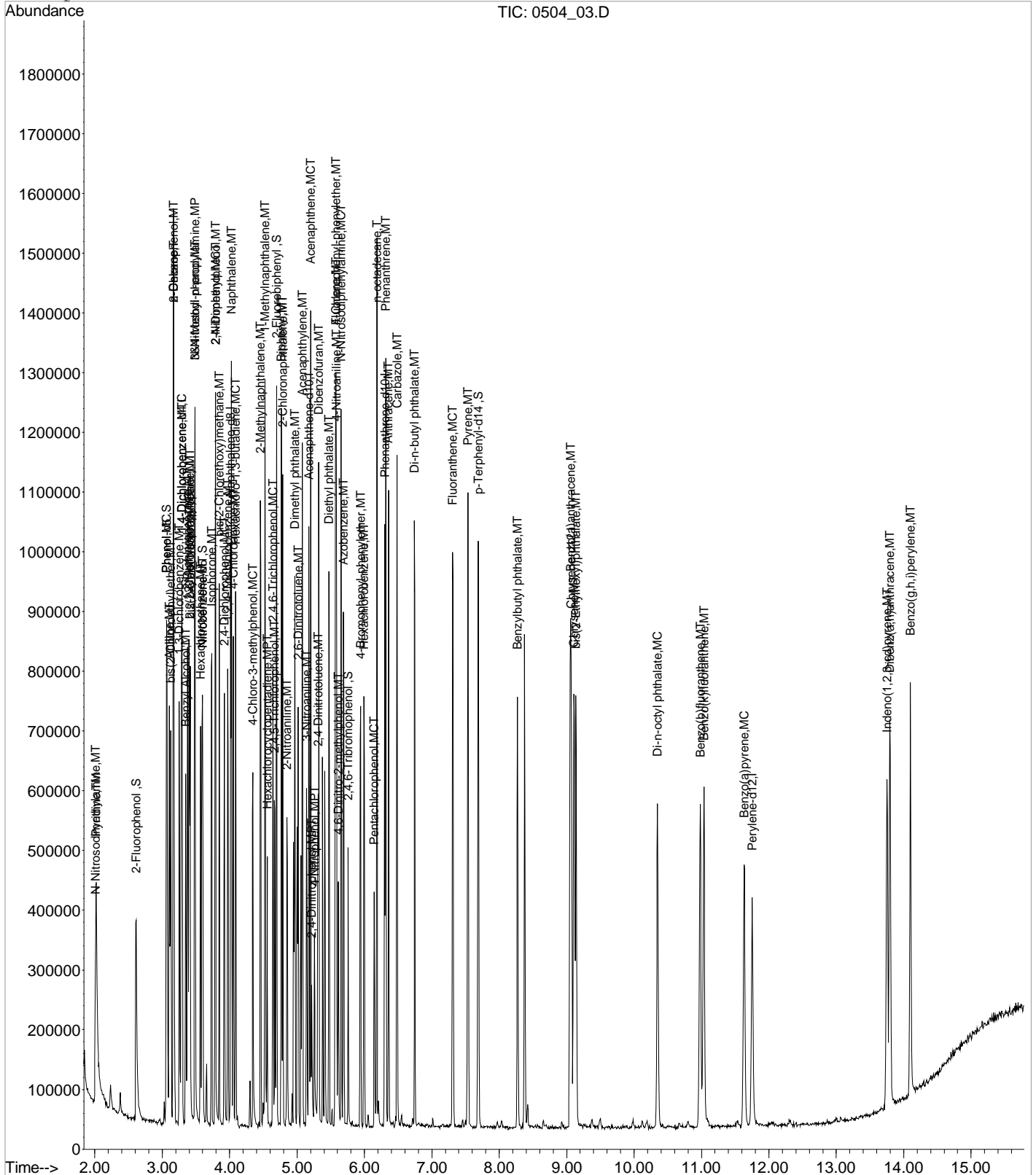
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	4.76	154	283681	10319.8658060	ppb	99
52) 2-Chloronaphthalene	4.79	162	214396	10219.7014198	ppb	95
53) 2-Nitroaniline	4.86	138	75599	11625.3165940	ppb #	91
54) Acenaphthylene	5.08	152	335981	10294.6357717	ppb	99
55) Dimethyl phthalate	4.97	163	233659	10750.6124465	ppb	97
56) 2,6-Dinitrotoluene	5.02	165	55362	10986.3492280	ppb #	76
57) 3-Nitroaniline	5.14	138	62381	11497.7133586	ppb	88
58) Acenaphthene	5.20	153	216953	10105.1357621	ppb	96
59) 2,4-Dinitrophenol	5.22	184	24015	8812.6003069	ppb #	1
60) Dibenzofuran	5.32	168	294719	9898.3319605	ppb	94
61) 2,4-Dinitrotoluene	5.31	165	74856	11862.1126422	ppb	86
63) 4-Nitrophenol	5.26	139	46161	10300.4202737	ppb #	77
64) Fluorene	5.58	166	238608	9879.4589769	ppb	98
65) 4-Chlorophenyl-phenylether	5.57	204	116190	10144.5354933	ppb	98
66) Diethyl phthalate	5.47	149	246167	11055.2292480	ppb	96
67) 4-Nitroaniline	5.59	138	67142	13212.8386534	ppb #	83
68) Azobenzene	5.69	77	279035	12562.5982523	ppb	94
71) 4,6-Dinitro-2-methylphenol	5.61	198	38245	10224.0665095	ppb	87
72) N-Nitrosodiphenylamine	5.66	169	205391	9775.0754275	ppb	96
74) 4-Bromophenyl-phenylether	5.94	248	68664	10069.0973704	ppb	95
75) Hexachlorobenzene	6.00	284	76205	10043.1324256	ppb	97
76) n-octadecane	6.18	55	44886	10609.4248607	ppb	99
77) Pentachlorophenol	6.15	266	35760	8537.3220011	ppb	93
78) Phenanthrene	6.32	178	358365	9850.3705837	ppb	98
79) Anthracene	6.36	178	369057	10021.9373110	ppb	98
80) Carbazole	6.48	167	329623	9810.5705166	ppb	98
81) Di-n-butyl phthalate	6.74	149	424504	10792.2891948	ppb	98
83) Fluoranthene	7.31	202	372213	9630.5860777	ppb	99
86) Pyrene	7.53	202	373971	9486.1464082	ppb	98
88) Benzylbutyl phthalate	8.27	149	175218	10869.6643558	ppb	96
90) Benzo(a)anthracene	9.05	228	339779	9630.9659490	ppb	98
91) Chrysene	9.11	228	335399	9809.9420226	ppb	98
92) bis(2-Ethylhexyl)phthalate	9.14	149	248285	11182.0777055	ppb	96
93) Di-n-octyl phthalate	10.35	149	391764	10620.8812501	ppb	100
95) Benzo(b)fluoranthene	10.98	252	340498	9689.2444567	ppb	98
96) Benzo(k)fluoranthene	11.04	252	350254	10118.6495695	ppb	95
97) Benzo(a)pyrene	11.63	252	301008	9889.6731114	ppb	97
98) Indeno(1,2,3-cd)pyrene	13.75	276	296734	9922.9936292	ppb	97
99) Dibenz(a,h)anthracene	13.79	278	334749	10503.4946655	ppb	95
100) Benzo(g,h,i)perylene	14.10	276	344110	11055.8519930	ppb	96

(#) = qualifier out of range (m) = manual integration

0504\_03.D S804C29V.M Thu May 05 12:38:07 2022

Data File : C:\MSDCHEM\1\DATA\050422\0504 03.D Vial: 3
Acq On : 4 May 2022 4:59 am Operator: 3545
Sample : ICMSC SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 4 9:44 2022 Quant Results File: S804C29V.RES

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Tue Mar 29 09:44:27 2022
Response via : Initial Calibration

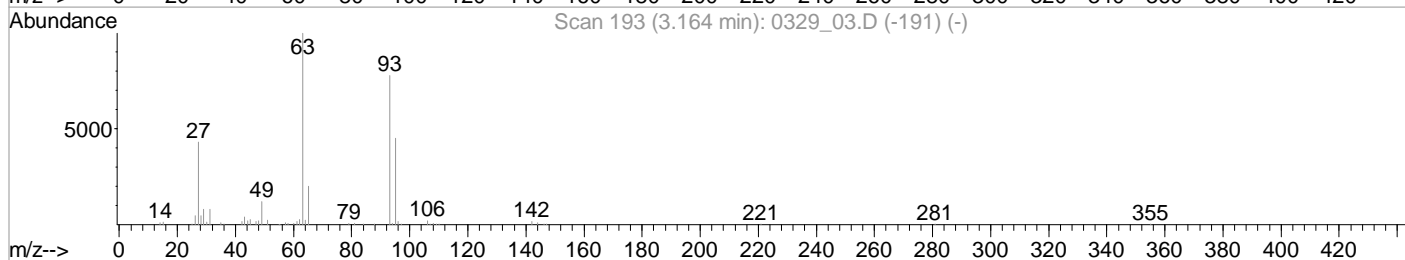
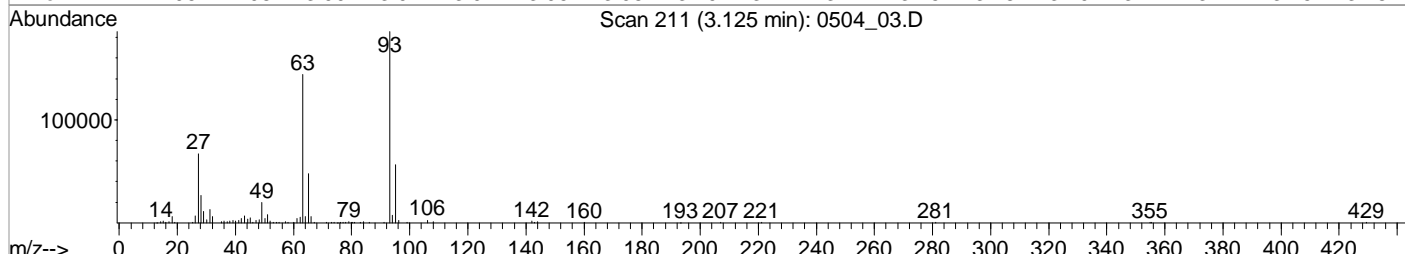
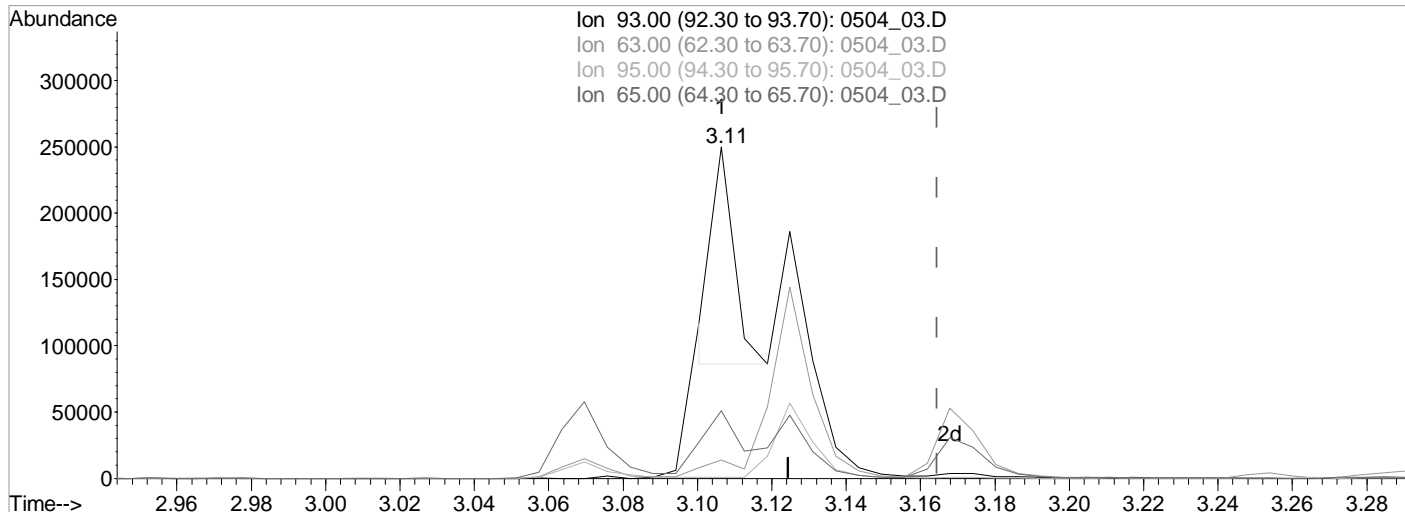




Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504\_03.D Vial: 3  
 Acq On : 4 May 2022 4:59 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_03.D

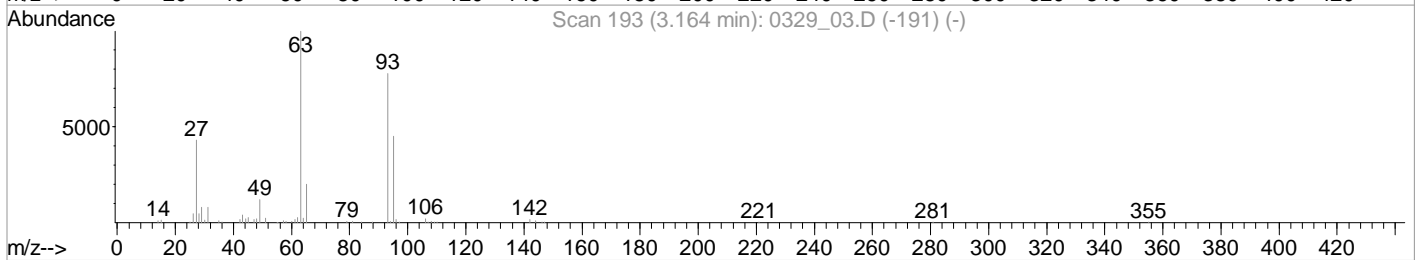
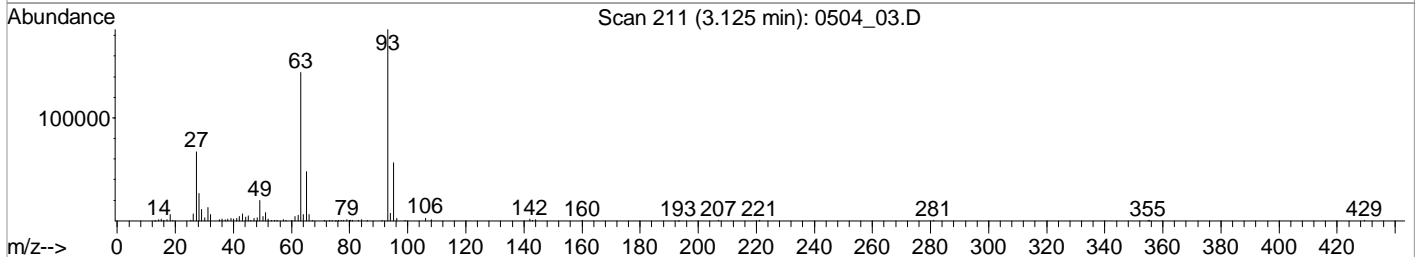
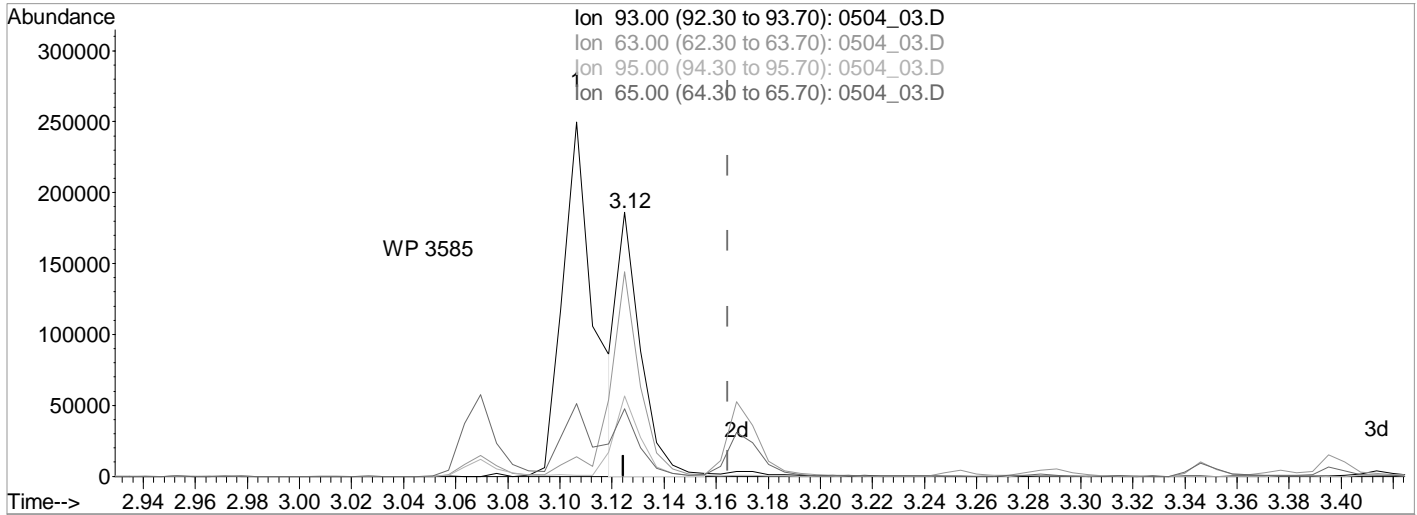
(6) bis(2-Chloroethyl)ether (MT)  
 3.11min (-0.058) 6466.3448272 ppb  
 Qvalue = 35  
 response 67482

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	3.43#
95.00	30.20	0.00#
65.00	24.00	17.28

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504\_03.D Vial: 3  
 Acq On : 4 May 2022 4:59 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:42 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_03.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.12min (-0.040) 10985.8486026 ppb m

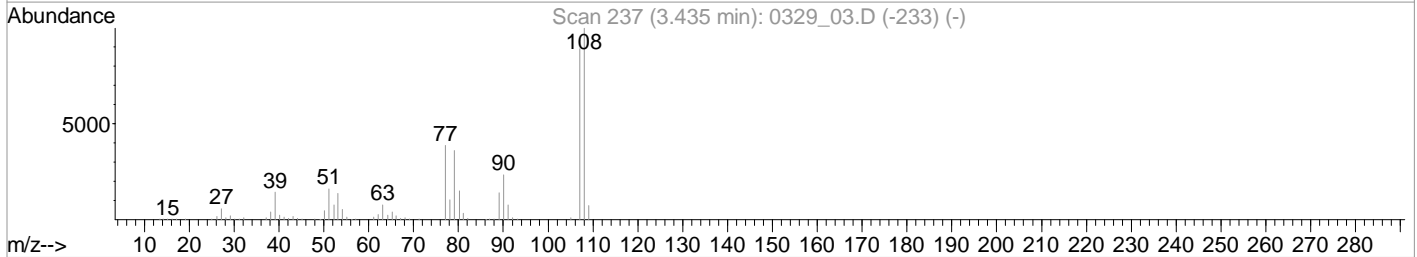
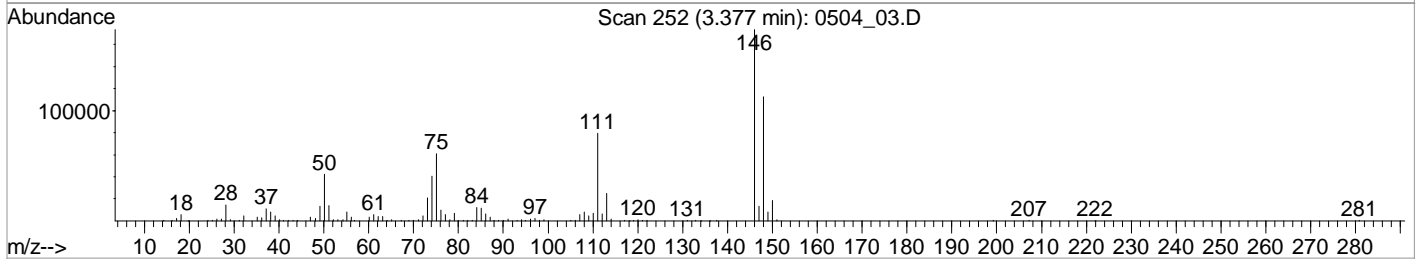
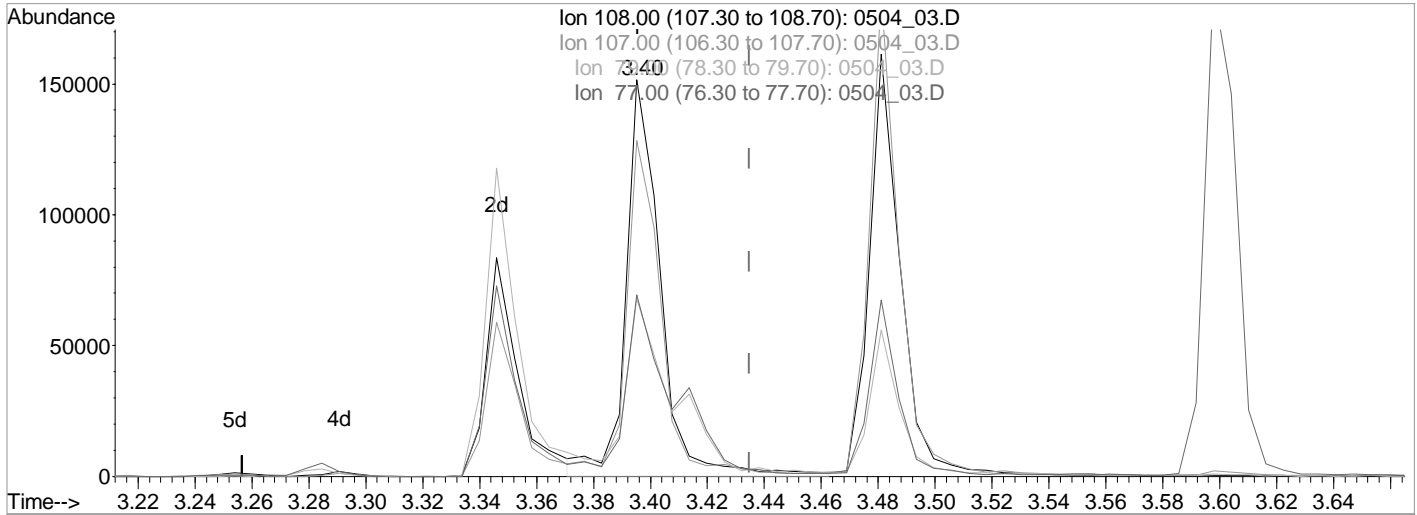
response 114647

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	77.43
95.00	30.20	30.49
65.00	24.00	25.57

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504\_03.D Vial: 3  
 Acq On : 4 May 2022 4:59 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:42 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_03.D

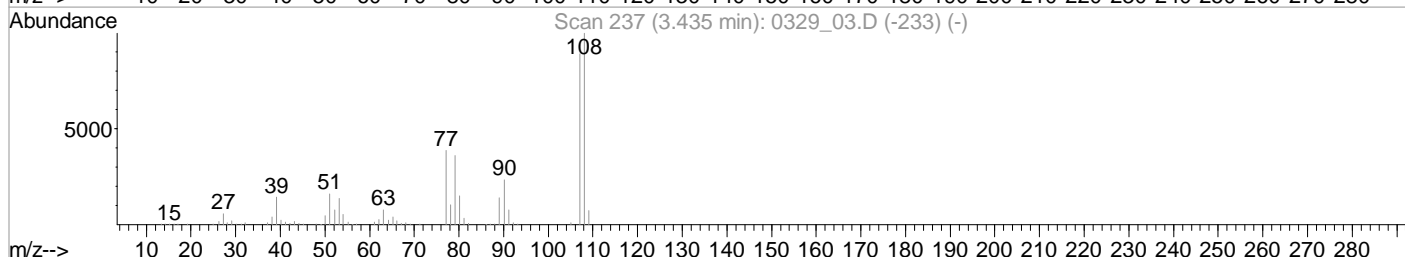
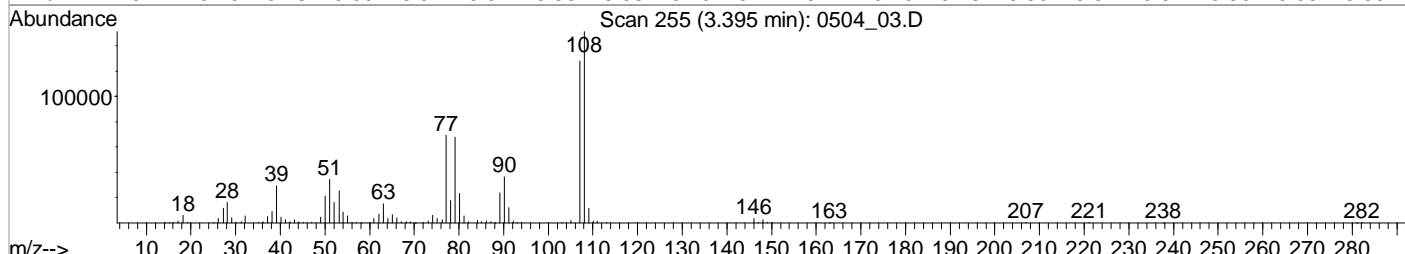
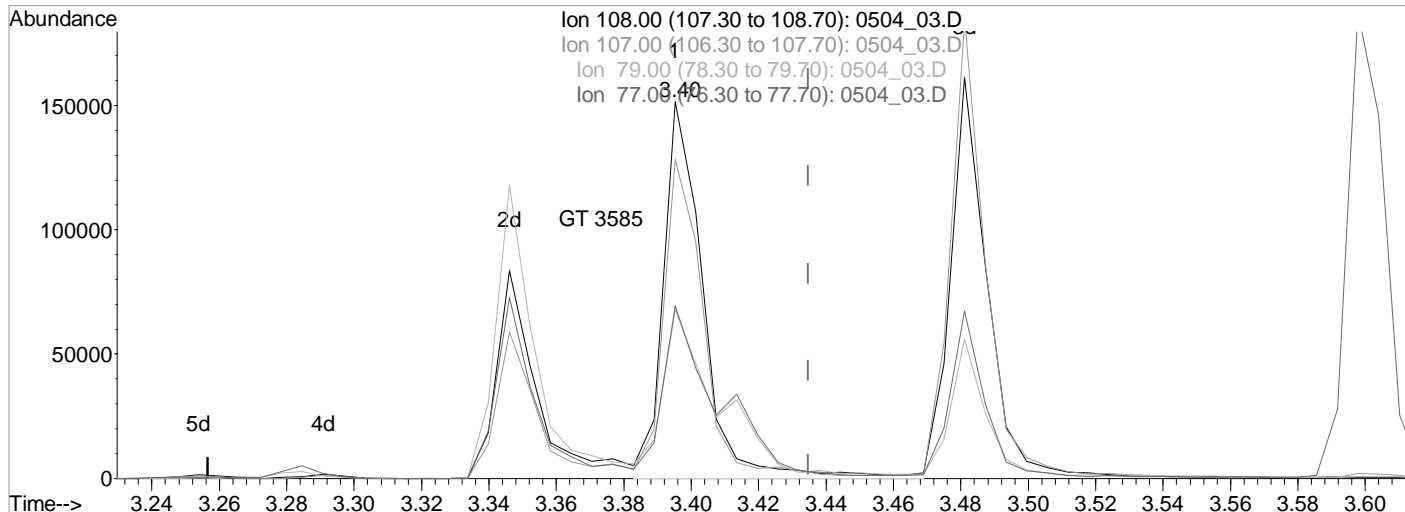
(18) 2-Methylphenol (MT)  
 3.40min (-0.040) 11804.4665716 ppb  
 Qvalue = 92  
 response 127405

Ion	Exp%	Act%
108.00	100	100
107.00	86.00	84.33
79.00	34.90	43.98
77.00	35.50	45.29

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 03.D Vial: 3  
 Acq On : 4 May 2022 4:59 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:44 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_03.D

(18) 2-Methylphenol (MT)  
 3.40min (-0.040) 11525.3954730 ppb m

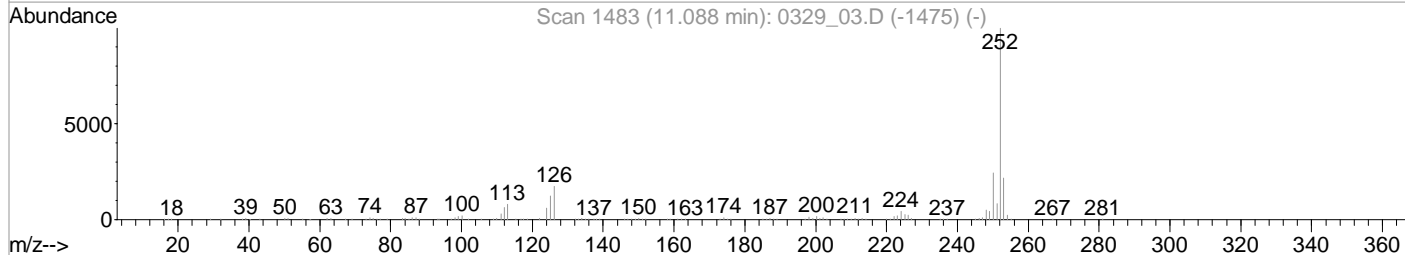
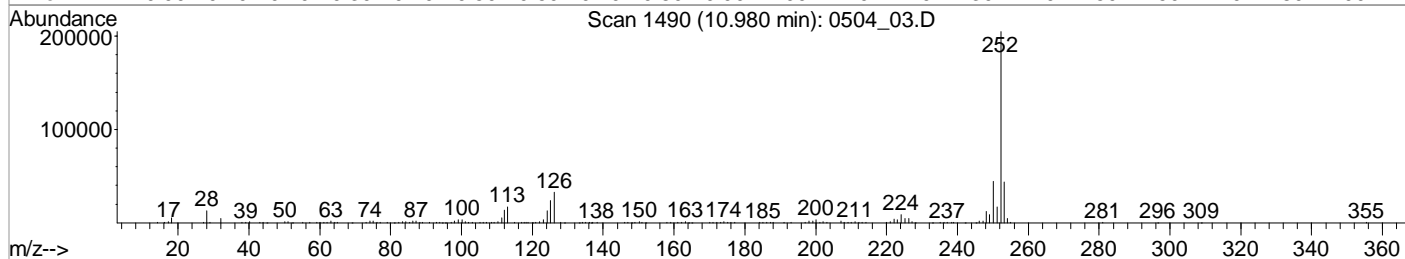
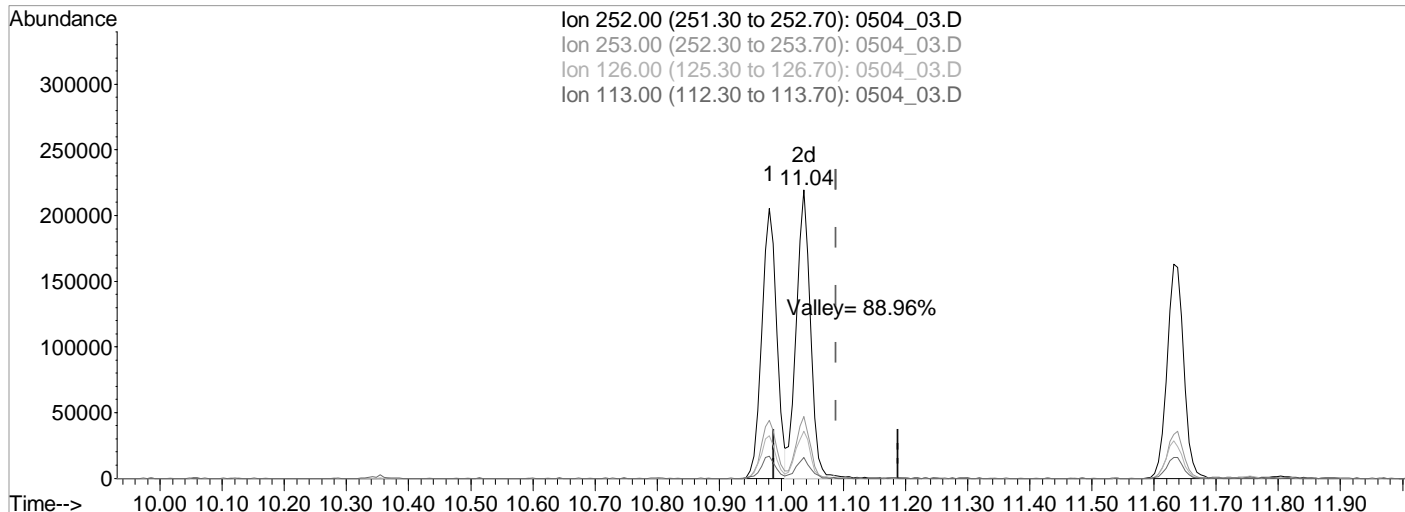
response 124393

Ion	Exp%	Act%
108.00	100	100
107.00	86.00	84.61
79.00	34.90	44.75
77.00	35.50	45.72

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504\_03.D Vial: 3  
 Acq On : 4 May 2022 4:59 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:44 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_03.D

(95) Benzo(b)fluoranthene (MT)  
 10.98min (-0.107) 9689.2444567 ppb  
 Qvalue = 98  
 response 340498

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.28
126.00	18.30	16.02
113.00	8.80	8.36

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1487377	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0504_04	<b>Analysis date/time:</b>	05/04/22 05:20
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.130890	0.13308810		1.68	20	10	10.17	102	

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data File : C:\MSDCHEM\1\DATA\050422\0504 04.D Vial: 4  
 Acq On : 4 May 2022 5:20 am Operator: 3545  
 Sample : ICVMSC TCL 10K1 PPB 22D19628 exp 09/10/2 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:51 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	73299	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	334864	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	145086	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	278104	8000.00	ppb	-0.05
84) Chrysene-d12	9.06	240	241152	8000.00	ppb	-0.09
94) Perylene-d12	11.75	264	246439	8000.00	ppb	-0.11

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
7) Phenol-d5	0.00	99	0d	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	

Target Compounds

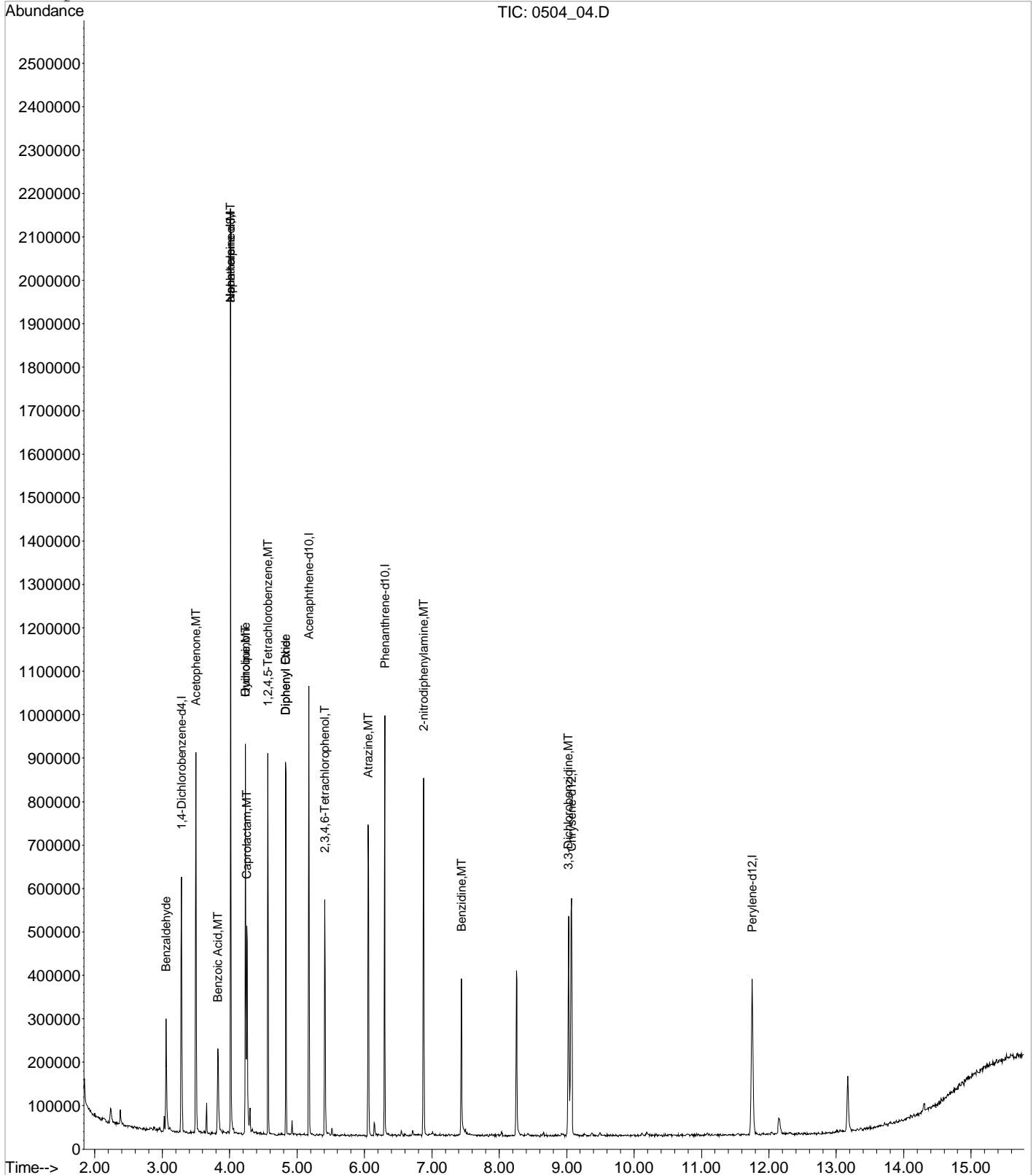
	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.06	105	41442	12711.6398247	ppb	96
22) Acetophenone	3.50	105	178552	11779.1104911	ppb	94
31) Benzoic Acid	3.83	105	55708	10167.8983994	ppb	96
33) alpha-terpineol	4.02	59	128306	12214.2941597	ppb	98
37) Hydroquinone	4.24	110	80635m	11109.6680712	ppb	
38) Quinoline	4.23	129	234985	10530.7701716	ppb	96
39) Caprolactam	4.26	113	31618	13703.0039553	ppb #	75
43) 1,2,4,5-Tetrachlorobenzene	4.57	216	102185	11400.6577060	ppb	98
44) Diphenyl Ether	4.84	170	145863	10201.7115313	ug/ml#	88
45) Diphenyl Oxide	4.84	170	145863	10201.7115313	ug/ml#	88
62) 2,3,4,6-Tetrachlorophenol	5.41	232	52484	12685.2866902	ppb	96
69) Atrazine	6.06	200	65345	11013.6614958	ppb	96
82) 2-nitrodiphenylamine	6.88	167	88049	12553.3792055	ppb #	100
85) Benzidine	7.44	184	136803	9663.6748963	ppb	98
89) 3,3-Dichlorobenzidine	9.03	252	132635	10683.3260793	ppb	97

(#) = qualifier out of range (m) = manual integration

0504\_04.D S804C29V.M Thu May 05 12:39:39 2022

Data File : C:\MSDCHEM\1\DATA\050422\0504 04.D Vial: 4
Acq On : 4 May 2022 5:20 am Operator: 3545
Sample : ICMSC TCL 10K1 PPB 22D19628 exp 09/10/2 Inst : BNAMS4
Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 4 9:51 2022 Quant Results File: S804C29V.RES

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Tue Mar 29 09:44:27 2022
Response via : Initial Calibration

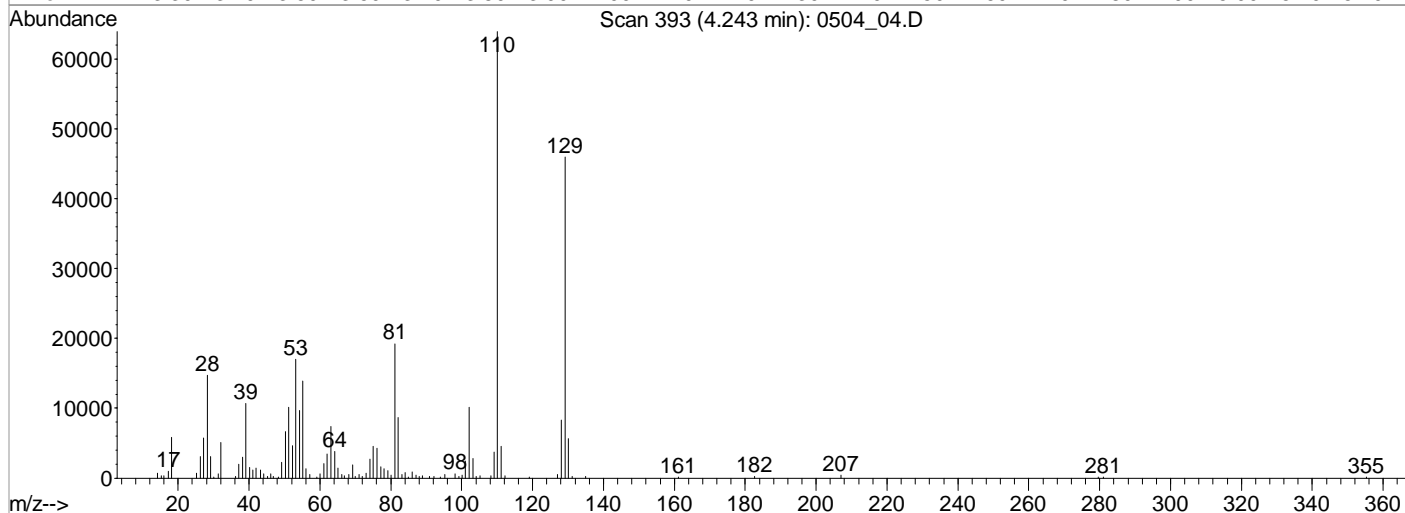
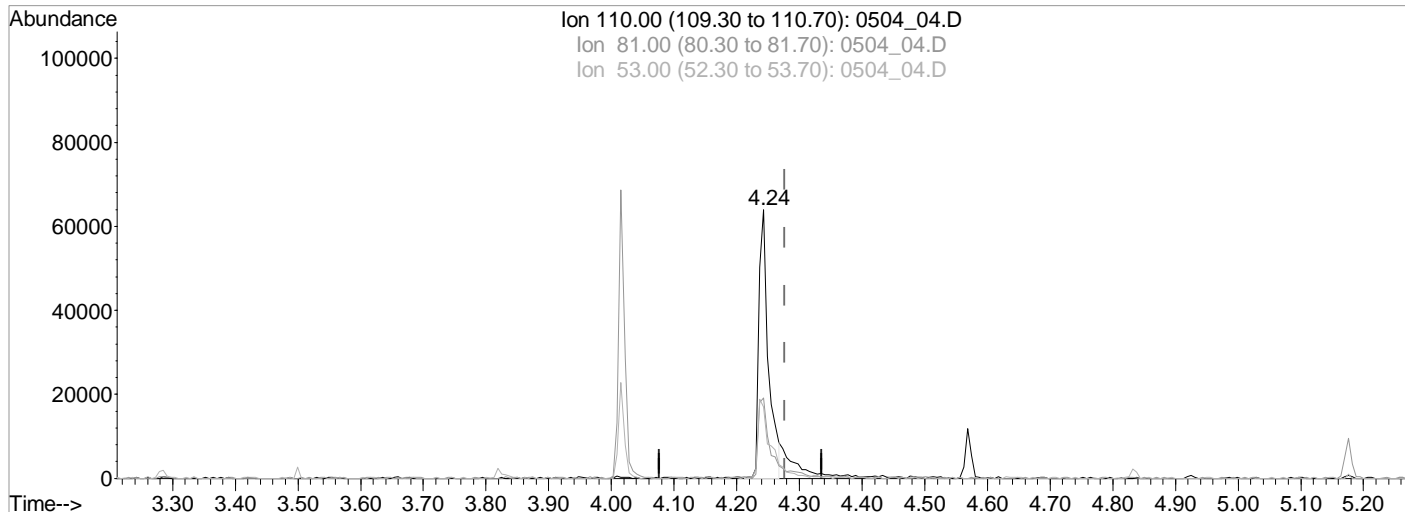




Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504\_04.D Vial: 4  
 Acq On : 4 May 2022 5:20 am Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:49 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0504\_04.D

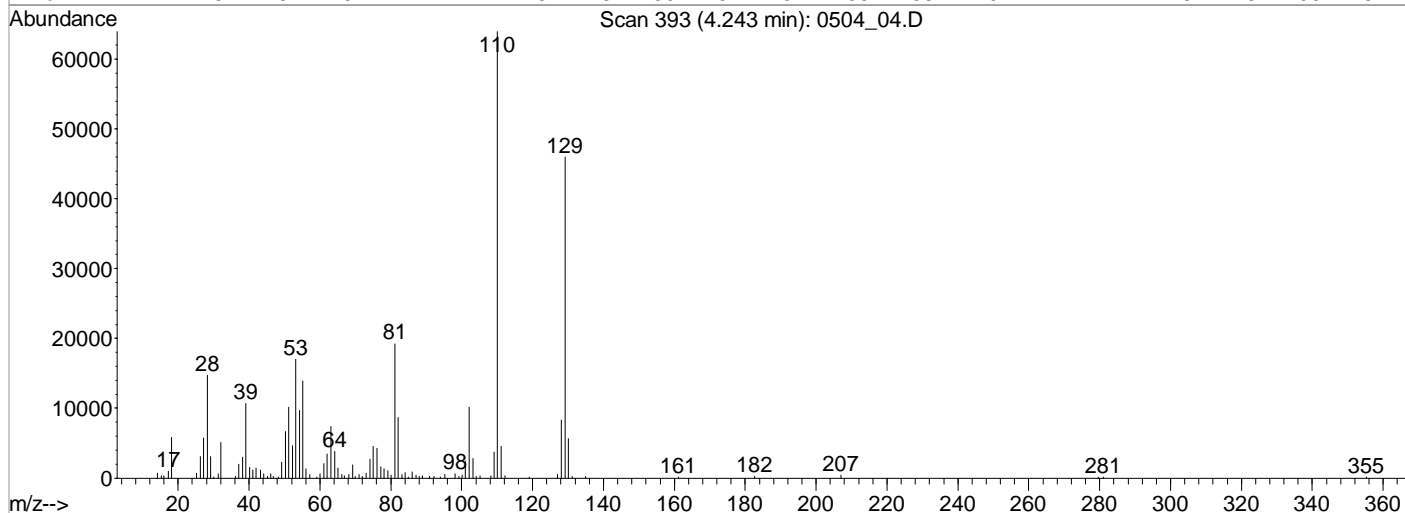
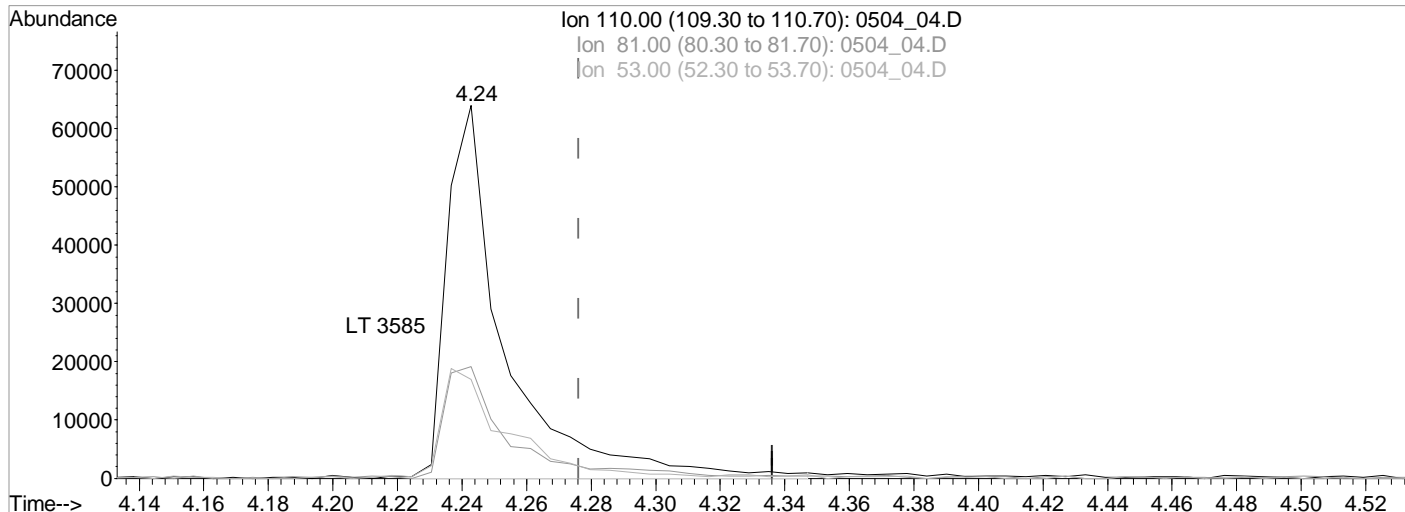
(37) Hydroquinone  
 4.24min (-0.033) 9325.0434824 ppb  
 Qvalue = 99  
 response 68310

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.41
53.00	25.90	26.26
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504\_04.D Vial: 4  
Acq On : 4 May 2022 5:20 am Operator: 3545  
Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: May 4 9:51 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Tue Mar 29 09:44:27 2022  
Response via : Single Level Calibration



TIC: 0504\_04.D

(37) Hydroquinone  
4.24min (-0.033) 11109.6680712 ppb m

response 80635

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.97
53.00	25.90	26.57
0.00	0.00	0.00

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1487377	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0331_18	<b>Analysis date/time:</b>	03/31/22 22:44
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.610754	0.64112010		4.97		10	10.50	105	70 - 130
2-METHYLNAPHTHALENE	0.627399	0.64607670		2.98		10	10.30	103	70 - 130
3&4-METHYL PHENOL	1.301686	1.329116		2.11		10	10.21	102	70 - 130
ACENAPHTHENE	1.148837	1.199481		4.41		10	10.44	104	70 - 130
ACENAPHTHYLENE	1.695228	1.857736		9.59		10	10.96	110	70 - 130
ANTHRACENE	1.006737	1.045115		3.81		10	10.38	104	70 - 130
BENZO(A)ANTHRACENE	1.116712	1.133629		1.51		10	10.15	102	70 - 130
BENZO(A)PYRENE	0.950358	1.085630		14.20		10	11.42	114	70 - 130
BENZO(B)FLUORANTHENE	1.172442	1.217118		3.81		10	10.38	104	70 - 130
BENZO(G,H,I)PERYLENE	1.026990	1.111795		8.26		10	10.83	108	70 - 130
BENZO(K)FLUORANTHENE	1.198822	1.286310		7.30		10	10.73	107	70 - 130
BIS(2-ETHYLHEXYL)PHTHALATE	1.014597	1.069942		5.45		10	10.55	106	70 - 130
CARBAZOLE	0.861194	0.95543070		10.90		10	11.09	111	70 - 130
CHRYSENE	1.179486	1.253499		6.28		10	10.63	106	70 - 130
DI-N-BUTYL PHTHALATE	1.289953	1.485565		15.20		10	11.52	115	70 - 130
DI-N-OCTYL PHTHALATE	1.425428	1.425258		0.0119		10	9.188	91.90	70 - 130
DIBENZ(A,H)ANTHRACENE	0.969471	1.067733		10.10		10	11.01	110	70 - 130
DIBENZOFURAN	1.532971	1.604143		4.64		10	10.46	105	70 - 130
FLUORANTHENE	1.037530	1.086566		4.73		10	10.47	105	70 - 130
FLUORENE	1.268965	1.347410		6.18		10	10.62	106	70 - 130
INDENO(1,2,3-CD)PYRENE	0.864970	0.96418880		11.50		10	11.15	112	70 - 130
NAPHTHALENE	0.998617	1.032092		3.35		10	10.34	103	70 - 130
PENTACHLOROPHENOL	0.105171	0.11822170		12.40		10	11.43	114	70 - 130
PHENANTHRENE	1.060304	1.114125		5.08		10	10.51	105	70 - 130
PHENOL	1.575372	1.630722		3.51		10	10.35	104	70 - 130
PYRENE	1.498492	1.578251		5.32		10	10.53	105	70 - 130
2,4,6-TRIBROMOPHENOL	0.083814	0.08113972		3.19		10	9.681	96.80	70 - 130
2-FLUOROBIPHENYL	1.270391	1.246534		1.88		10	9.812	98.10	70 - 130
2-FLUOROPHENOL	1.252515	1.217577		2.79		10	9.721	97.20	70 - 130
NITROBENZENE-D5	0.304240	0.29725250		2.30		10	9.770	97.70	70 - 130
P-TERPHENYL-D14	1.107064	1.061220		4.14		10	9.586	95.90	70 - 130
PHENOL-D5	1.486088	1.435091		3.43		10	9.657	96.60	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 17:01:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.410	152	32498	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.140	136	129280	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	67005	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.434	188	107114	8000.0000000	ppb	0.00
84) Chrysene-d12	9.245	240	77504	8000.0000000	ppb	0.00
94) Perylene-d12	11.951	264	68794	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.740	112	49461	9721.0515879	ppb	0.00
Spiked Amount	20000.000		Recovery	=	48.61%	
7) Phenol-d5	3.175	99	58297	9656.8420263	ppb	0.00
Spiked Amount	20000.000		Recovery	=	48.28%	
24) Nitrobenzene-d5	3.710	82	48036m	9770.3438575	ppb	0.00
Spiked Amount	10000.000		Recovery	=	97.70%	
50) 2-Fluorobiphenyl	4.828	172	104405	9812.2063195	ppb	0.00
Spiked Amount	10000.000		Recovery	=	98.12%	
73) 2,4,6-Tribromophenol	5.886	330	10864	9680.9076507	ppb	0.00
Spiked Amount	20000.000		Recovery	=	48.40%	
87) p-Terphenyl-d14	7.845	244	102811	9585.8929227	ppb	0.00
Spiked Amount	10000.000		Recovery	=	95.86%	
<b>Target Compounds</b>						
2) Pyridine	2.216	79	56827	10543.3045205	ppb	99
3) N-Nitrosodimethylamine	2.199	42	26162	9220.1486386	ppb	99
5) Aniline	3.228	66	29495	10558.9289085	ppb	97
6) bis(2-Chloroethyl)ether	3.245	93	55703m	10136.1427628	ppb	
8) Phenol	3.181	94	66244	10351.3432882	ppb	96
10) 2-Chlorophenol	3.293	128	56605	10621.1407363	ppb	98
11) n-Decane	3.293	41	32743	9557.1097558	ppb	# 100
12) 1,3-Dichlorobenzene	3.381	146	62683	10262.6996716	ppb	100
13) 1,4-Dichlorobenzene	3.416	146	63047	10312.3985770	ppb	96
14) Benzyl Alcohol	3.463	79	40660	10415.3909180	ppb	100
15) 1,2-Dichlorobenzene	3.504	146	60642	10287.4111665	ppb	98
16) bis(2-Chloroisopropyl)...	3.540	121	21521	10572.3791808	ppb	98
17) 2,2-oxybis(1-chloropro...	3.540	121	21521	10572.3791808	ppb	98
18) 2-Methylphenol	3.510	108	50596	10555.1684687	ppb	96
19) Hexachloroethane	3.698	117	26205	10278.9609507	ppb	97
20) N-Nitrosodi-n-propylamine	3.610	70	35112	10298.7989609	ppb	99
21) 3&4-Methyl phenol	3.593	107	53992	10210.7212151	ppb	99
25) Nitrobenzene	3.722	77	53649	10796.3440550	ppb	98
26) Isophorone	3.851	82	101269	10411.4636677	ppb	100
27) 2-Nitrophenol	3.904	139	25159	10701.2848374	ppb	93
28) 2,4-Dimethylphenol	3.904	107	52280	10806.4841322	ppb	99
29) bis(2-Chlorethoxy)methane	3.969	93	71047	10871.2890055	ppb	97
30) 2,4-Dichlorophenol	4.040	162	40871	10693.2795032	ppb	# 86
32) 1,2,4-Trichlorobenzene	4.098	180	47514	10395.1948767	ppb	94
34) Naphthalene	4.157	128	166786	10335.2044265	ppb	100
35) 4-Chloroaniline	4.175	65	17354	10233.0364786	ppb	98
36) Hexachloro-1,3-butadiene	4.222	225	27825	11286.0704472	ppb	98
40) 4-Chloro-3-methylphenol	4.463	107	41378	10347.5683022	ppb	99
41) 2-Methylnaphthalene	4.592	142	104406	10297.6968942	ppb	99
42) 1-Methylnaphthalene	4.657	142	103605	10497.1978691	ppb	100
47) Hexachlorocyclopentadiene	4.692	237	19130	8752.6966899	ppb	98
48) 2,4,6-Trichlorophenol	4.769	196	27186	10863.2348945	ppb	97

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

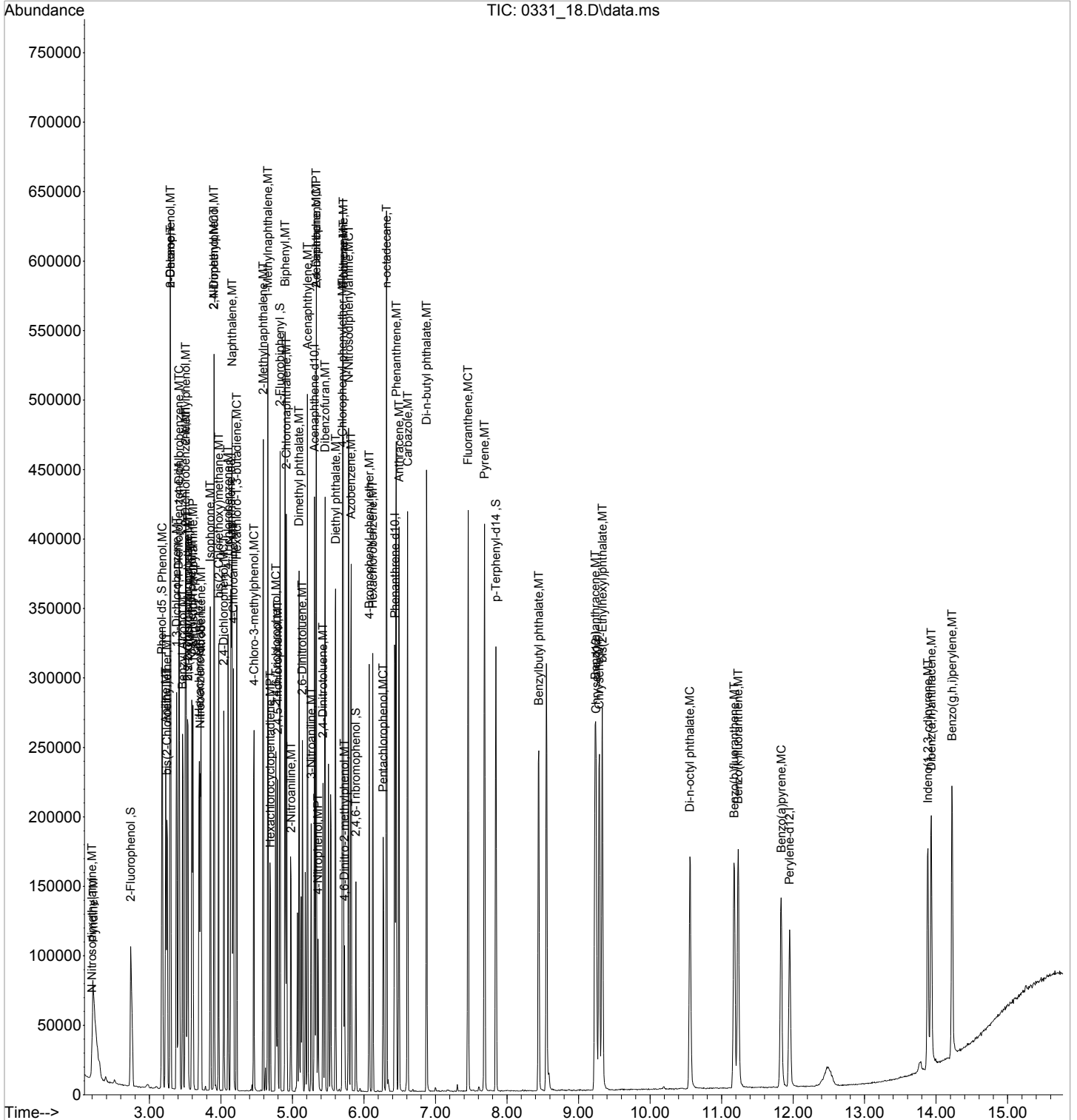
Quant Time: Apr 04 17:01:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	27202	10638.5015338	ppb		96
51) Biphenyl	4.898	154	118579	9890.1836667	ppb		99
52) 2-Chloronaphthalene	4.916	162	97364	10522.2343151	ppb		97
53) 2-Nitroaniline	4.981	138	26879	9792.8659732	ppb		99
54) Acenaphthylene	5.210	152	155597	10958.6228399	ppb		99
55) Dimethyl phthalate	5.092	163	110449	10653.1510320	ppb		94
56) 2,6-Dinitrotoluene	5.139	165	24488	10819.8125221	ppb		94
57) 3-Nitroaniline	5.263	138	21957	10159.1833892	ppb		95
58) Acenaphthene	5.334	153	100464	10440.8237247	ppb		99
59) 2,4-Dinitrophenol	5.334	184	6639	10067.3246842	ppb	#	1
60) Dibenzofuran	5.457	168	134357	10464.2761664	ppb		99
61) 2,4-Dinitrotoluene	5.428	165	28361	10009.1795744	ppb		83
63) 4-Nitrophenol	5.357	139	15677	10019.4582644	ppb		84
64) Fluorene	5.710	166	112854	10618.1767720	ppb		99
65) 4-Chlorophenyl-phenyle...	5.698	204	50559	10444.6934063	ppb		87
66) Diethyl phthalate	5.604	149	118174	10955.7827258	ppb		100
67) 4-Nitroaniline	5.710	138	14373	10982.9600230	ppb		99
68) Azobenzene	5.822	77	118542	10935.8381151	ppb		100
71) 4,6-Dinitro-2-methylph...	5.728	198	10278	9898.9697426	ppb	#	76
72) N-Nitrosodiphenylamine	5.787	169	89933	10794.9785060	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	26731	10453.6669917	ppb		91
75) Hexachlorobenzene	6.122	284	31578	10571.7081466	ppb		99
76) n-octadecane	6.316	55	19875	9957.1898370	ppb		98
77) Pentachlorophenol	6.269	266	15829	11430.0132536	ppb		91
78) Phenanthrene	6.451	178	149173	10507.5981260	ppb		99
79) Anthracene	6.492	178	139933	10381.2108124	ppb		99
80) Carbazole	6.610	167	127925	11094.2622659	ppb		100
81) Di-n-butyl phthalate	6.875	149	198906	11516.4267189	ppb		99
83) Fluoranthene	7.457	202	145483	10472.6197639	ppb		99
86) Pyrene	7.686	202	152901	10532.2669087	ppb		99
88) Benzylbutyl phthalate	8.445	149	68827	10330.4950097	ppb		95
90) Benzo(a)anthracene	9.233	228	109826	10151.4892180	ppb		99
91) Chrysene	9.292	228	121439	10627.5018659	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.333	149	103656	10545.4870384	ppb		98
93) Di-n-octyl phthalate	10.557	149	138079	9187.8214826	ppb		100
95) Benzo(b)fluoranthene	11.174	252	104663	10381.0496709	ppb		98
96) Benzo(k)fluoranthene	11.233	252	110613	10729.7840645	ppb		99
97) Benzo(a)pyrene	11.833	252	93356	11423.3722820	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.886	276	82913	11147.0755413	ppb		95
99) Dibenz(a,h)anthracene	13.933	278	91817	11013.5644462	ppb		99
100) Benzo(g,h,i)perylene	14.221	276	95606	10825.7600661	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_18.D  
Acq On : 31 Mar 2022 10:44 pm  
Operator : 3545  
Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 18 Sample Multiplier: 1

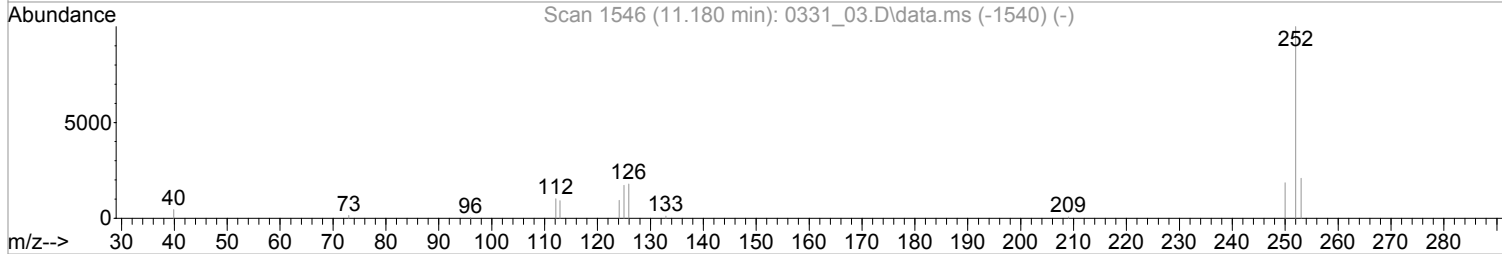
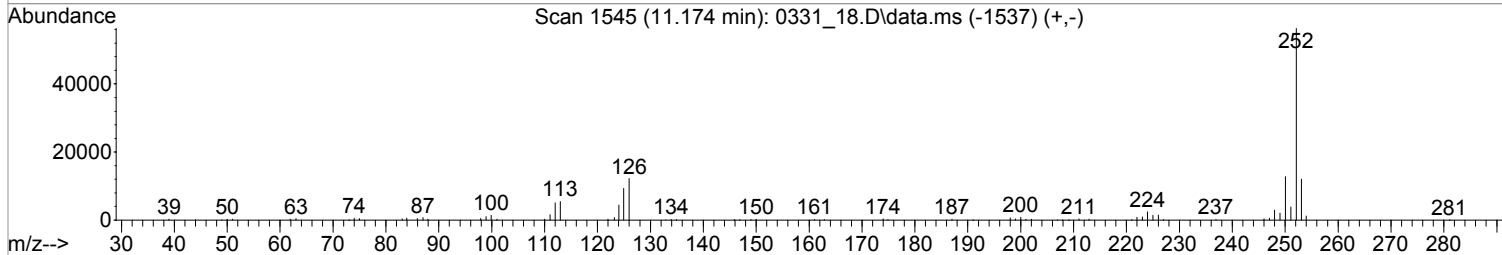
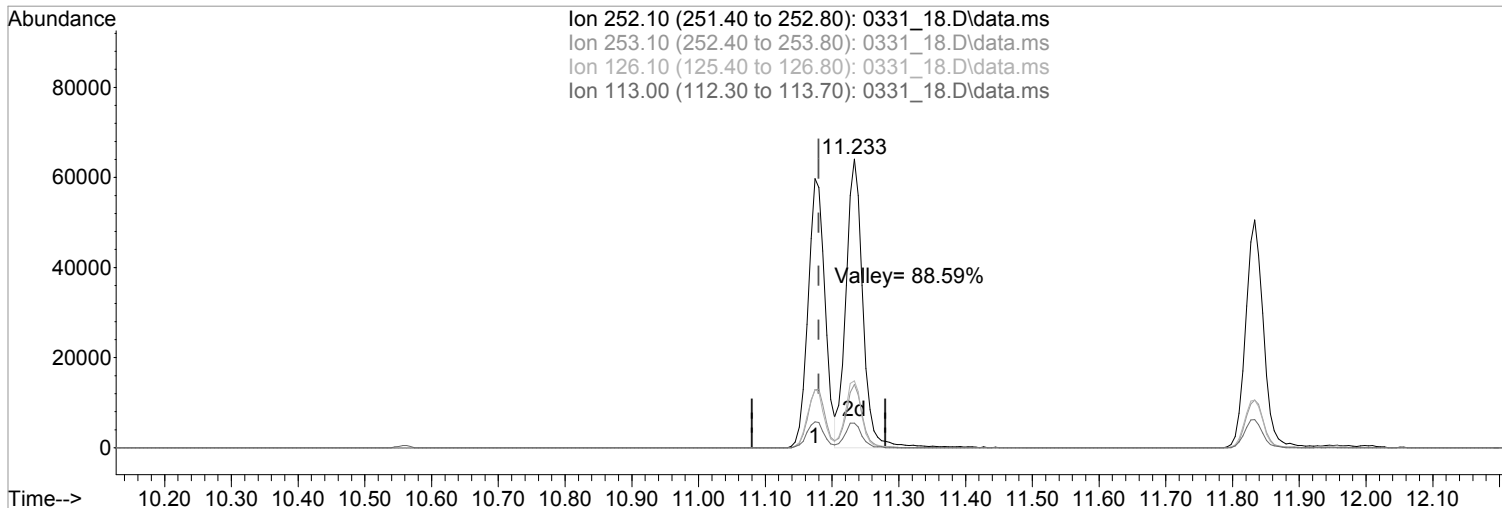
Quant Time: Apr 04 17:01:16 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:54:30 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:39:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:39:09 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

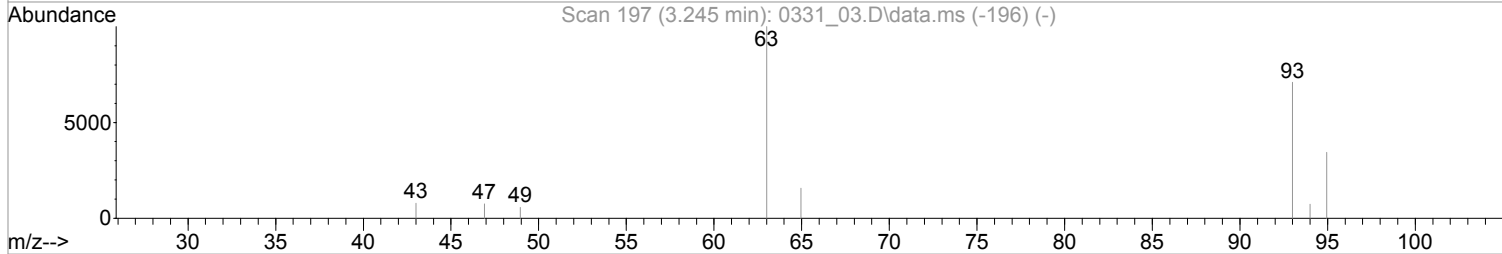
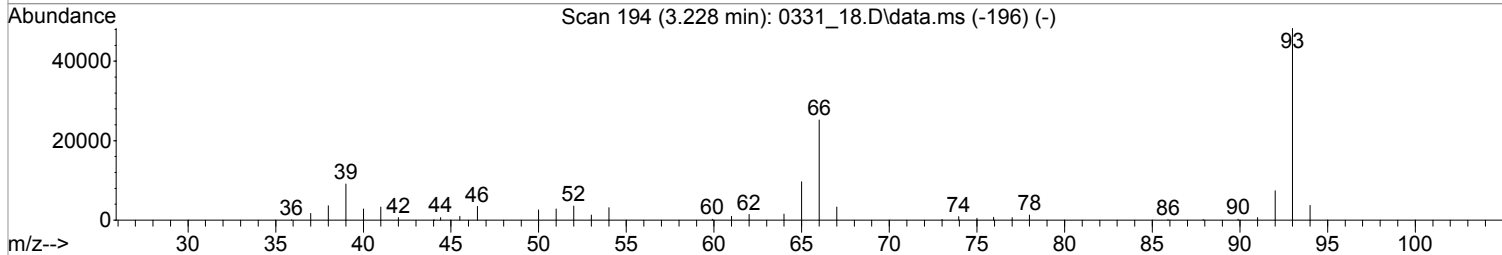
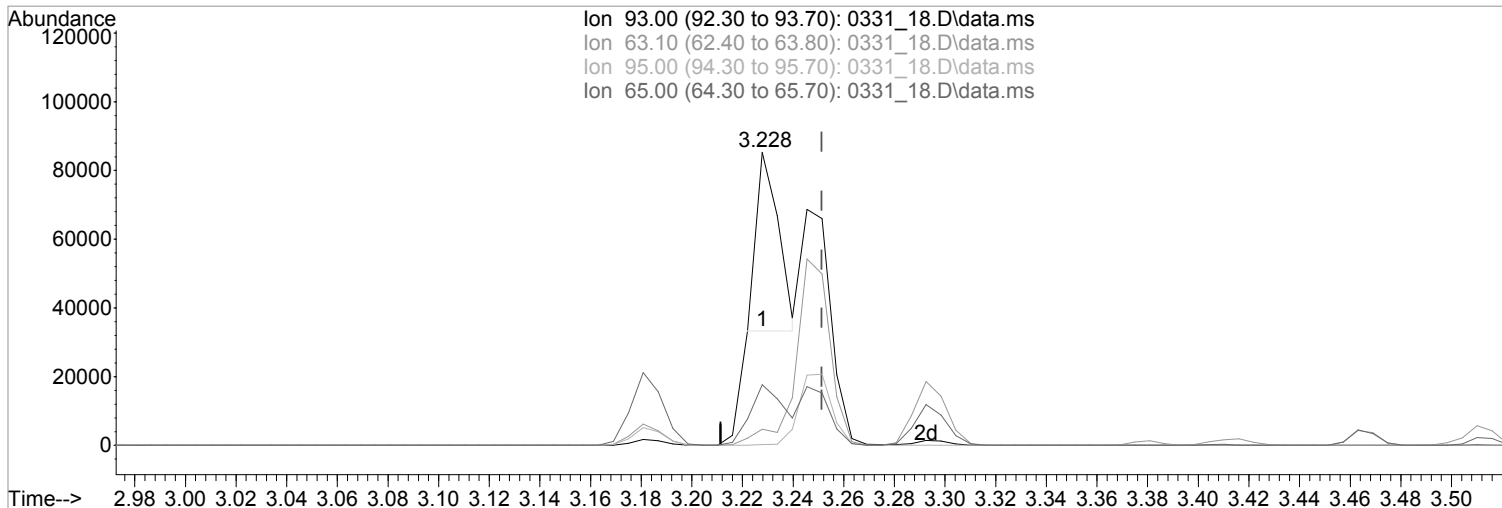
(95) Benzo(b)fluoranthene (MT)  
 11.174min (-0.006) 10381.0496709 ppb  
 Qvalue = 98  
 response 104663

Ion	Exp%	Act%
252.10	100	100
253.10	21.80	21.38
126.10	20.00	21.67
113.00	9.70	9.69

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 5741.0786522 ppb  
 Qvalue = 37  
 response 31550

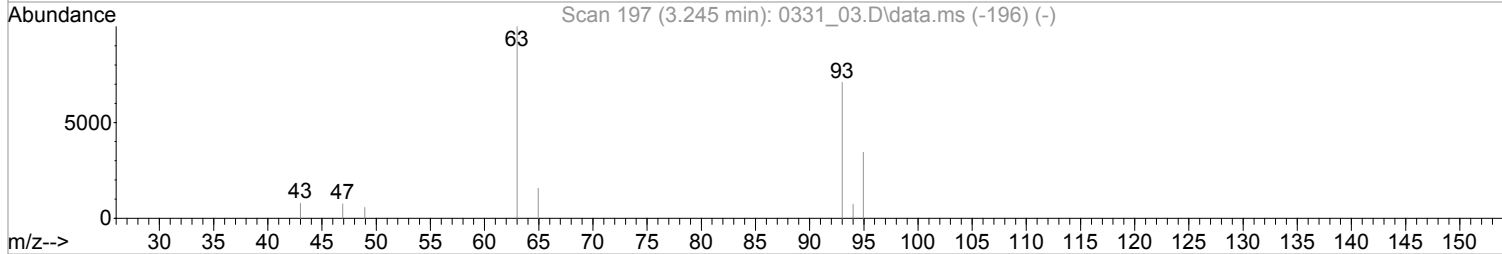
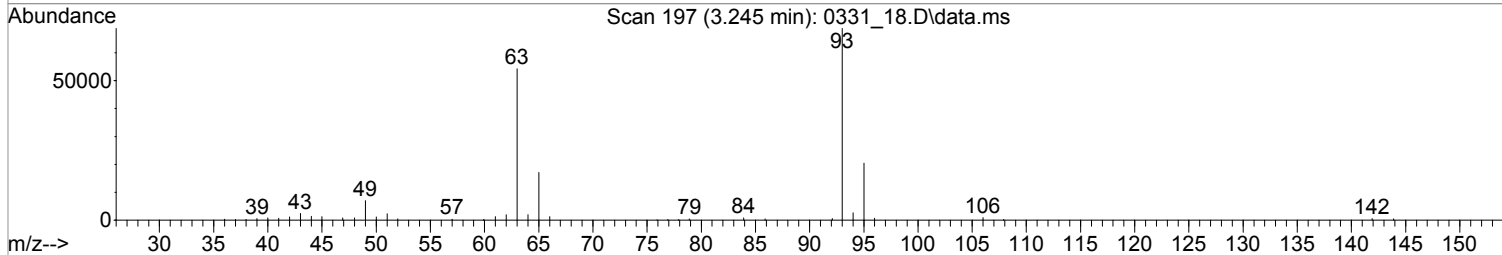
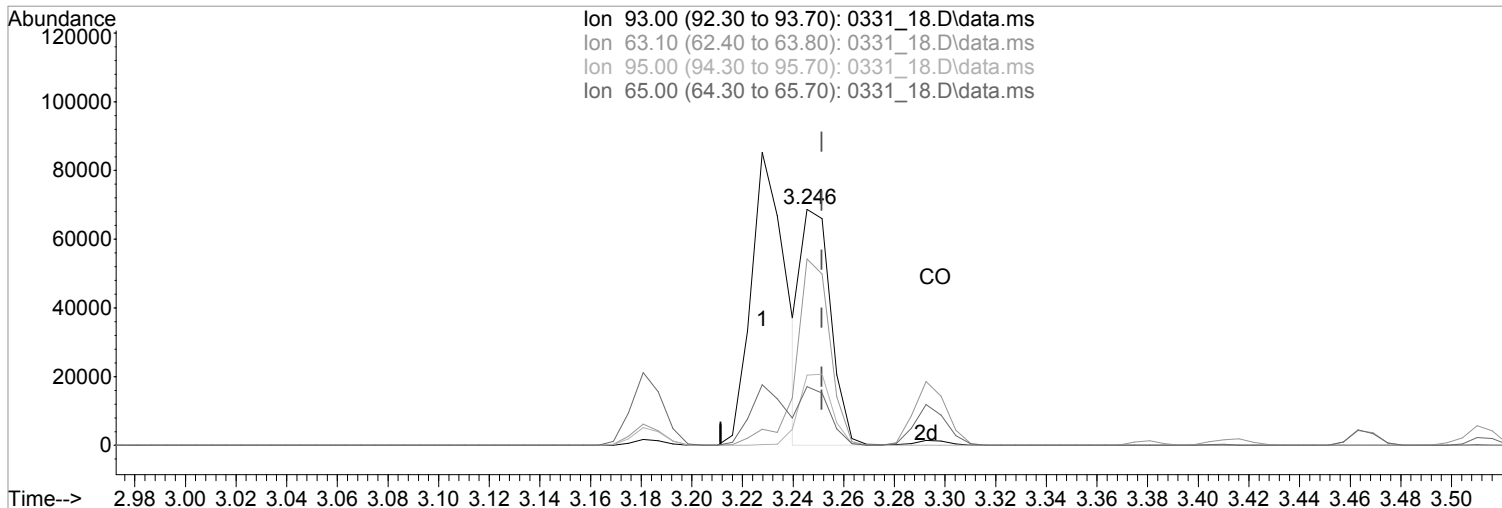
Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.01#
95.00	31.90	0.36#
65.00	23.10	19.07



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.245min (-0.006) 10136.1427628 ppb m

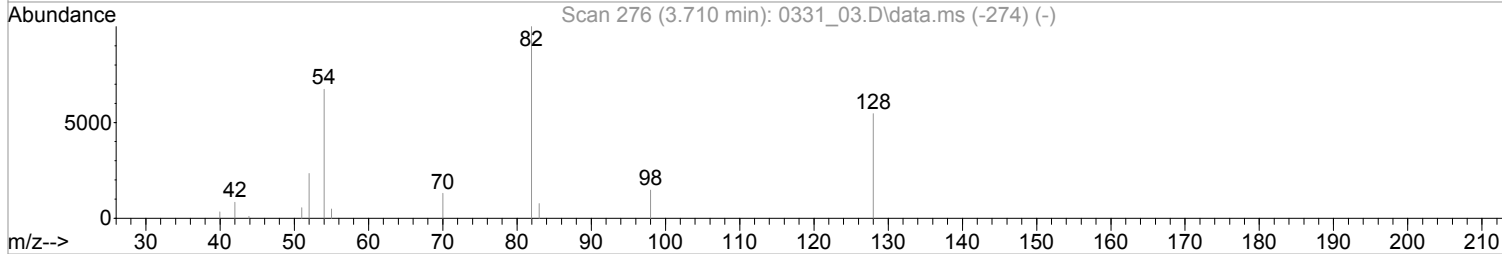
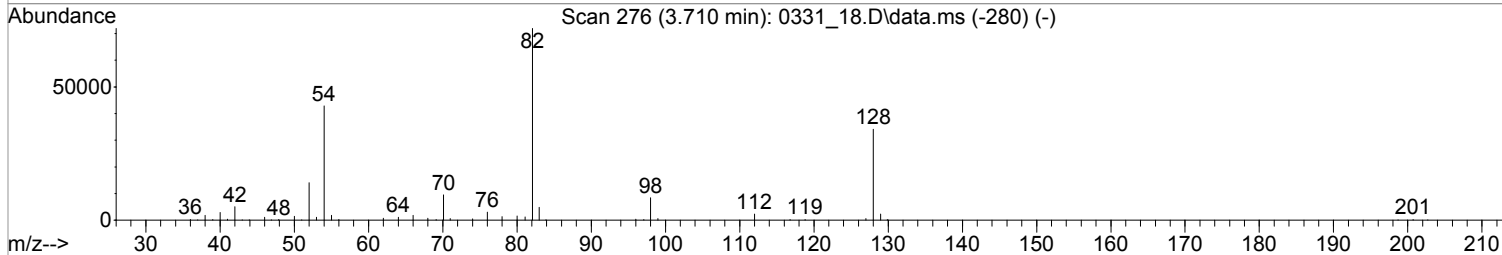
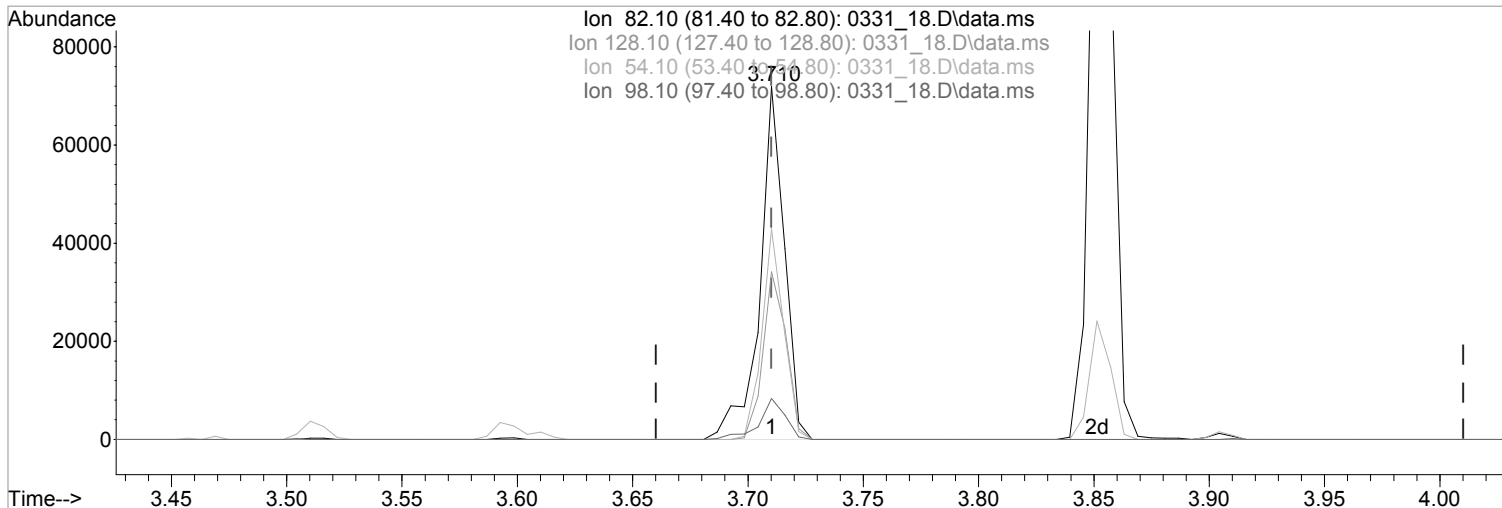
response 55703

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	78.90
95.00	31.90	29.72
65.00	23.10	24.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

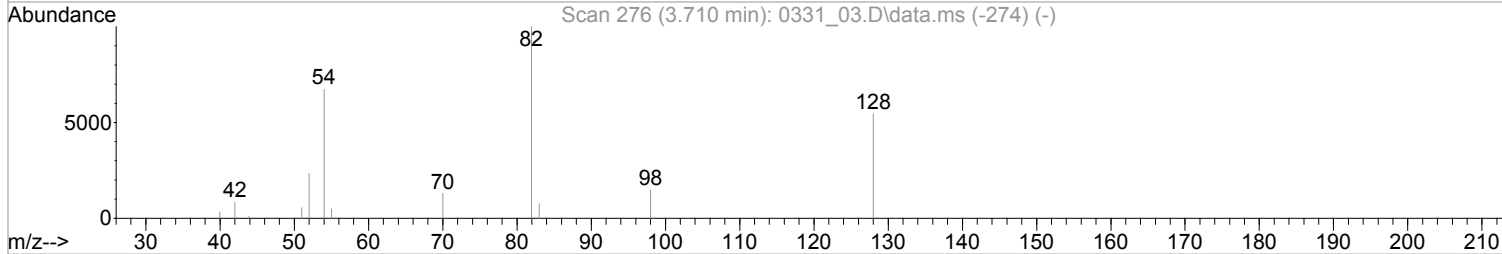
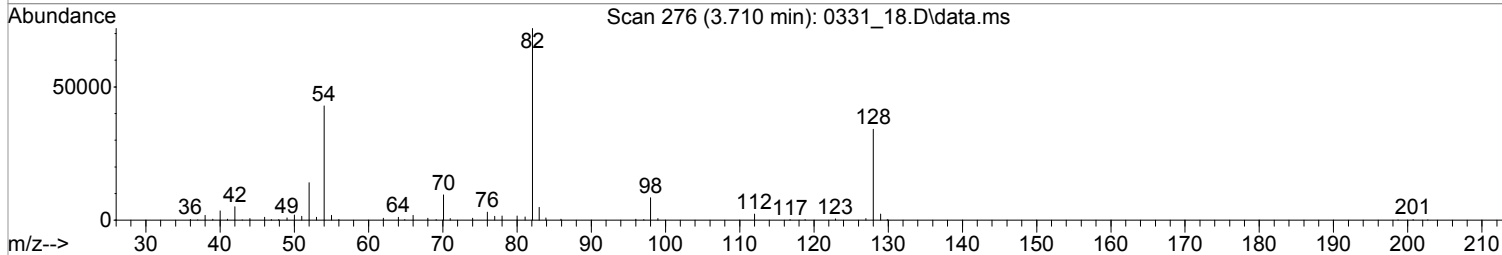
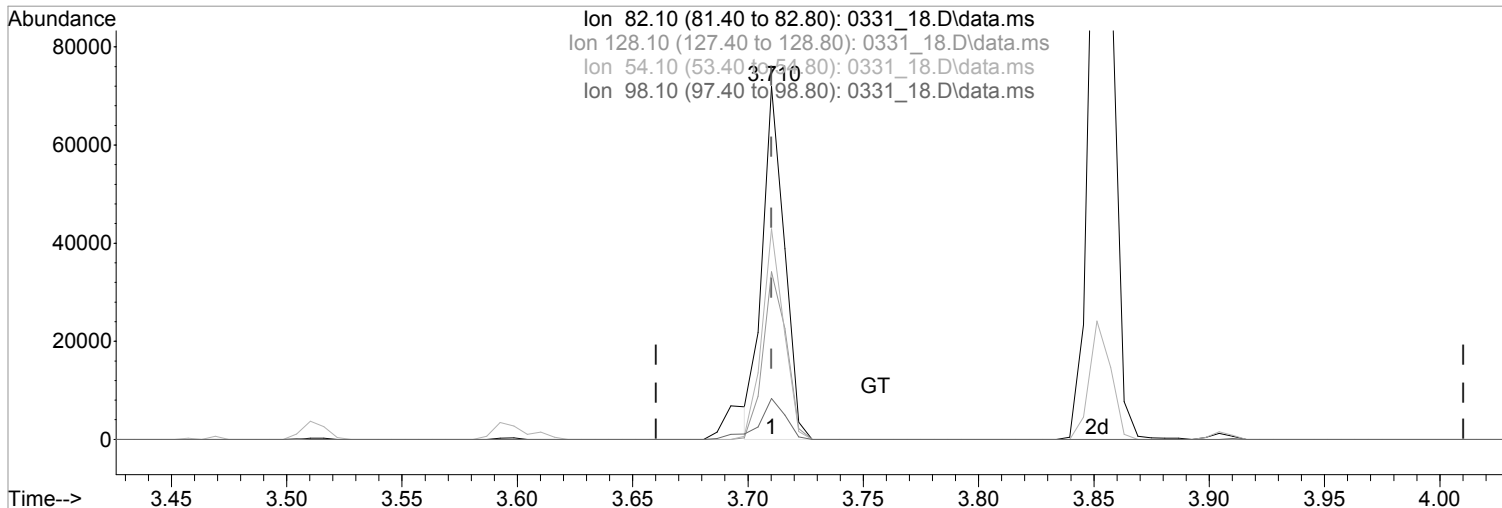
(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 10838.3777403 ppb  
 Qvalue = 99  
 response 53287

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	47.47
54.10	60.00	59.60
98.10	11.40	11.62

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 9770.3438575 ppb m

response 48036

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	47.47
54.10	60.00	59.60
98.10	11.40	11.62

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1487377	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0331_19	<b>Analysis date/time:</b>	03/31/22 23:06
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.079140	0.06852319		13.40		10	9.288	92.90	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_19.D  
 Acq On : 31 Mar 2022 11:06 pm  
 Operator : 3545  
 Sample : SSCV TCL 10K1 PPB 22C25375 exp 5/31/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 19 Sample Multiplier: 1

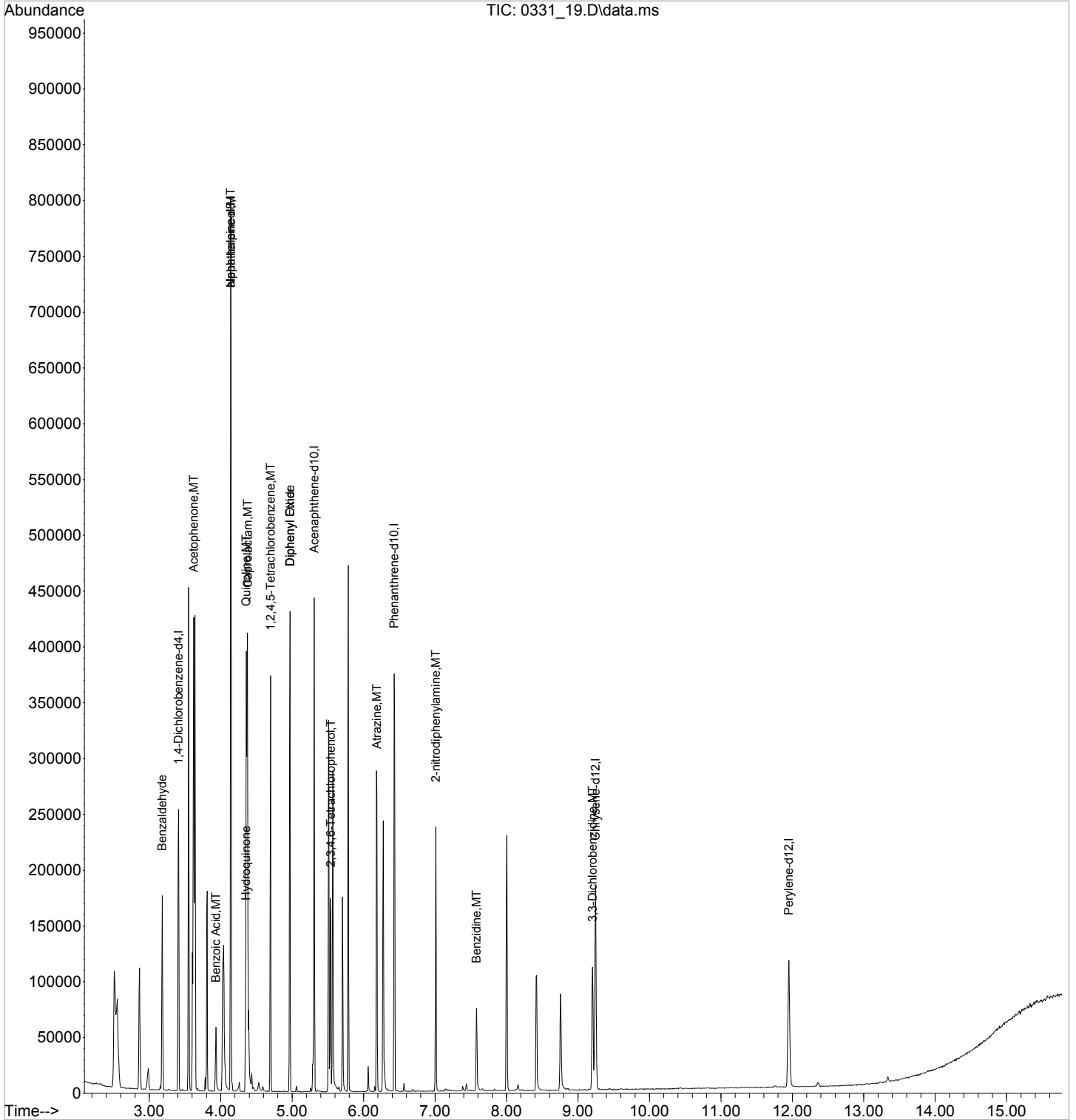
Quant Time: Apr 04 17:01:57 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.410	152	35583	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.140	136	162059	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	73711	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.428	188	118731	8000.0000000	ppb	0.00
84) Chrysene-d12	9.245	240	80072	8000.0000000	ppb	0.00
94) Perylene-d12	11.951	264	68064	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0d	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.181	105	31909	21445.8562524	ppb	98
22) Acetophenone	3.622	105	75382	9841.7477258	ppb	97
31) Benzoic Acid	3.934	105	13881	9287.9241188	ppb	100
33) alpha-terpineol	4.140	59	52858	10589.0958967	ppb	98
37) Hydroquinone	4.351	110	17084	4832.8177254	ppb	98
38) Quinoline	4.357	129	105645	11290.3729771	ppb	99
39) Caprolactam	4.375	113	15088	12246.5826042	ppb #	54
43) 1,2,4,5-Tetrachloroben...	4.698	216	44163	10135.7140612	ppb	98
44) Diphenyl Ether	4.969	170	66081	10119.7642454	ug/ml	99
45) Diphenyl Oxide	4.969	170	66081	10119.7642454	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.539	232	18260	9138.7507826	ppb	99
69) Atrazine	6.186	200	26464	9976.4469748	ppb	99
82) 2-nitrodiphenylamine	7.010	167	24172	9615.2258453	ppb	97
85) Benzidine	7.580	184	31867	14436.7066228	ppb	98
89) 3,3-Dichlorobenzidine	9.204	252	33453	9646.2468026	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_19.D  
Acq On : 31 Mar 2022 11:06 pm  
Operator : 3545  
Sample : SSCV TCL 10K1 PPB 22C25375 exp 5/31/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 04 17:01:57 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:54:30 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1487377	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0504A_03	<b>Analysis date/time:</b>	05/04/22 16:30
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.610754	0.57712780		5.51	20	10	9.449	94.50	
2-METHYLNAPHTHALENE	0.627399	0.59011550	0.40	5.94	20	10	9.406	94.10	
3&4-METHYL PHENOL	1.301686	1.274660	0.60	2.08	20	10	9.792	97.90	
ACENAPHTHENE	1.148837	1.085256	0.90	5.53	20	10	9.447	94.50	
ACENAPHTHYLENE	1.695228	1.662818	0.90	1.91	20	10	9.809	98.10	
ANTHRACENE	1.006737	1.003164	0.70	0.3550	20	10	9.965	99.70	
BENZO(A)ANTHRACENE	1.116712	1.102853	0.80	1.24	20	10	9.876	98.80	
BENZO(A)PYRENE	0.950358	0.97710520	0.70	2.81	20	10	10.28	103	
BENZO(B)FLUORANTHENE	1.172442	1.102772	0.70	5.94	20	10	9.406	94.10	
BENZO(G,H,I)PERYLENE	1.026990	1.051378	0.50	2.37	20	10	10.24	102	
BENZO(K)FLUORANTHENE	1.198822	1.184975	0.70	1.16	20	10	9.884	98.80	
BIS(2-ETHYLHEXYL)PHTHALATE	1.014597	0.91476860	0.01	9.84	20	10	9.016	90.20	
CARBAZOLE	0.861194	0.93770330	0.01	8.88	20	10	10.89	109	
CHRYSENE	1.179486	1.110343	0.70	5.86	20	10	9.414	94.10	
DI-N-BUTYL PHTHALATE	1.289953	1.267799	0.01	1.72	20	10	9.828	98.30	
DI-N-OCTYL PHTHALATE	1.425428	1.442302	0.01	1.18	20	10	9.289	92.90	80 - 120
DIBENZ(A,H)ANTHRACENE	0.969471	1.005691	0.40	3.74	20	10	10.37	104	
DIBENZOFURAN	1.532971	1.499784	0.80	2.16	20	10	9.784	97.80	
FLUORANTHENE	1.037530	1.013832	0.60	2.28	20	10	9.772	97.70	
FLUORENE	1.268965	1.230038	0.90	3.07	20	10	9.693	96.90	
INDENO(1,2,3-CD)PYRENE	0.864970	0.90621660	0.50	4.77	20	10	10.48	105	
NAPHTHALENE	0.998617	0.92716110	0.70	7.16	20	10	9.284	92.80	
PENTACHLOROPHENOL	0.105171	0.09287065	0.05	11.70	20	10	9.370	93.70	80 - 120
PHENANTHRENE	1.060304	0.98730960	0.70	6.88	20	10	9.312	93.10	
PHENOL	1.575372	1.505261	0.80	4.45	20	10	9.555	95.60	
PYRENE	1.498492	1.238516	0.60	17.30	20	10	8.265	82.70	
2,4,6-TRIBROMOPHENOL	0.083814	0.08793892		4.92	20	10	10.49	105	70 - 130
2-FLUOROBIPHENYL	1.270391	1.240064		2.39	20	10	9.761	97.60	70 - 130
2-FLUOROPHENOL	1.252515	1.170585		6.54	20	10	9.346	93.50	70 - 130
NITROBENZENE-D5	0.304240	0.302704		0.5050	20	10	9.950	99.50	70 - 130
P-TERPHENYL-D14	1.107064	0.982555		11.20	20	10	8.875	88.80	70 - 130
PHENOL-D5	1.486088	1.430180		3.76	20	10	9.624	96.20	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_03.D  
 Acq On : 4 May 2022 4:30 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 04 18:23:26 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.343	152	32392	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.072	136	132248	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.237	164	67981	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.354	188	116308	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.113	240	97518	8000.0000000	ppb	0.00	
94) Perylene-d12	11.772	264	92912	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.672	112	47397	9345.8773996	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	46.73%		
7) Phenol-d5	3.113	99	57908	9623.7948589	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	48.12%		
24) Nitrobenzene-d5	3.643	82	50040m	9949.5294987	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	99.50%		
50) 2-Fluorobiphenyl	4.754	172	105376	9761.2794372	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	97.61%		
73) 2,4,6-Tribromophenol	5.813	330	12785	10492.1309564	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	52.46%		
87) p-Terphenyl-d14	7.742	244	119771	8875.3195217	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	88.75%		
Target Compounds							
2) Pyridine	2.143	79	48649	9055.5495040	ppb	97	
3) N-Nitrosodimethylamine	2.125	42	22614	7995.8242468	ppb	89	
5) Aniline	3.160	66	28216	10134.1139340	ppb	92	
6) bis(2-Chloroethyl)ether	3.184	93	52250m	9538.9220202	ppb		
8) Phenol	3.119	94	60948	9554.9516235	ppb	96	
10) 2-Chlorophenol	3.225	128	51781	9747.7789625	ppb	98	
11) n-Decane	3.225	41	28311	8290.5279123	ppb	# 97	
12) 1,3-Dichlorobenzene	3.313	146	56275	9243.7080528	ppb	98	
13) 1,4-Dichlorobenzene	3.349	146	57353	9411.7476548	ppb	97	
14) Benzyl Alcohol	3.402	79	37804	9715.4926066	ppb	99	
15) 1,2-Dichlorobenzene	3.437	146	54959	9353.8472710	ppb	97	
16) bis(2-Chloroisopropyl)...	3.472	121	18310	9024.3825732	ppb	97	
17) 2,2-oxybis(1-chloropro...	3.472	121	18310	9024.3825732	ppb	97	
18) 2-Methylphenol	3.449	108	47208	9880.6031792	ppb	96	
19) Hexachloroethane	3.625	117	23919	9412.9757870	ppb	94	
20) N-Nitrosodi-n-propylamine	3.543	70	33163	9758.9635115	ppb	98	
21) 3&4-Methyl phenol	3.531	107	51611	9792.3775173	ppb	99	
25) Nitrobenzene	3.654	77	51161	10064.5958459	ppb	98	
26) Isophorone	3.784	82	97045	9753.2793066	ppb	100	
27) 2-Nitrophenol	3.837	139	27080	11259.8716307	ppb	# 82	
28) 2,4-Dimethylphenol	3.843	107	46736	9443.7093302	ppb	97	
29) bis(2-Chloroethoxy)methane	3.902	93	61290	9167.8426102	ppb	99	
30) 2,4-Dichlorophenol	3.978	162	39798	10178.8598111	ppb	96	
32) 1,2,4-Trichlorobenzene	4.031	180	42727	9138.0950962	ppb	95	
34) Naphthalene	4.084	128	153269	9284.4468085	ppb	99	
35) 4-Chloroaniline	4.107	65	17335	9992.4274955	ppb	97	
36) Hexachloro-1,3-butadiene	4.149	225	24131	9568.0874055	ppb	99	
40) 4-Chloro-3-methylphenol	4.396	107	41313	10099.4510842	ppb	97	
41) 2-Methylnaphthalene	4.519	142	97552	9405.7418590	ppb	99	
42) 1-Methylnaphthalene	4.584	142	95405	9449.4391991	ppb	99	
47) Hexachlorocyclopentadiene	4.619	237	24971	11261.1438546	ppb	98	
48) 2,4,6-Trichlorophenol	4.696	196	26002	10240.9506775	ppb	93	



Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_03.D  
 Acq On : 4 May 2022 4:30 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

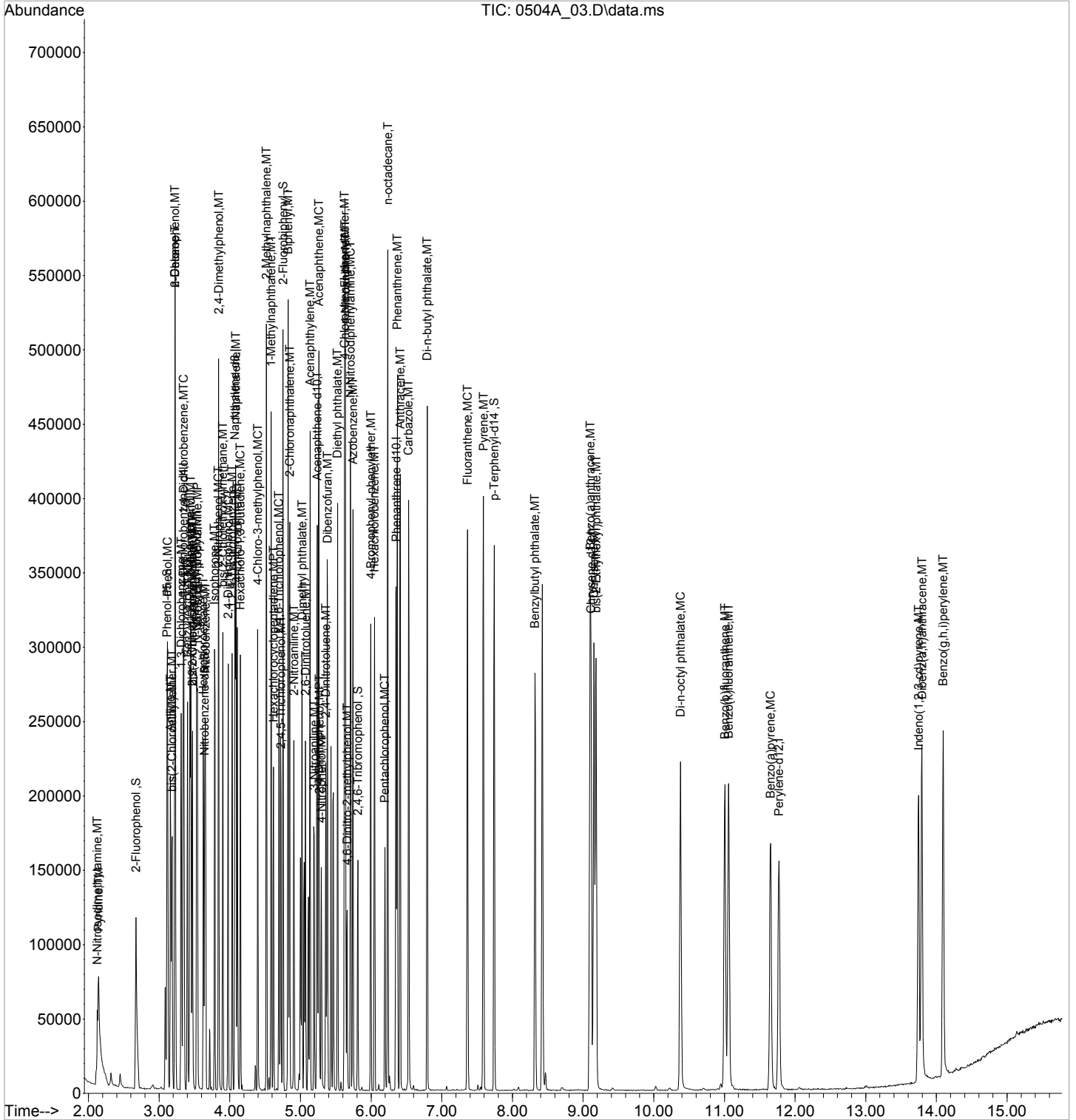
Quant Time: May 04 18:23:26 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.725	196	29123	11226.2677802	ppb		96
51) Biphenyl	4.825	154	116251	9556.8095948	ppb		99
52) 2-Chloronaphthalene	4.848	162	91424	9738.4411126	ppb		99
53) 2-Nitroaniline	4.907	138	31483	11305.5703184	ppb		100
54) Acenaphthylene	5.137	152	141300	9808.8159475	ppb		99
55) Dimethyl phthalate	5.025	163	104368	9922.0936072	ppb		98
56) 2,6-Dinitrotoluene	5.072	165	24506	10672.3119482	ppb		83
57) 3-Nitroaniline	5.196	138	26344	12013.9875811	ppb	#	80
58) Acenaphthene	5.260	153	92221	9446.5621839	ppb		97
59) 2,4-Dinitrophenol	5.266	184	9697	13218.2565472	ppb	#	1
60) Dibenzofuran	5.384	168	127446	9783.5116554	ppb		100
61) 2,4-Dinitrotoluene	5.360	165	31461	10943.8246692	ppb		98
63) 4-Nitrophenol	5.296	139	20914	13174.6185173	ppb		95
64) Fluorene	5.631	166	104524	9693.2335861	ppb		98
65) 4-Chlorophenyl-phenyle...	5.625	204	47307	9632.5726094	ppb		99
66) Diethyl phthalate	5.525	149	107114	9787.8515803	ppb		99
67) 4-Nitroaniline	5.637	138	24432	18401.3912637	ppb		97
68) Azobenzene	5.743	77	107599	9783.8034702	ppb		98
71) 4,6-Dinitro-2-methylph...	5.660	198	14422	12031.8391537	ppb		99
72) N-Nitrosodiphenylamine	5.707	169	86593	9572.4286259	ppb		99
74) 4-Bromophenyl-phenylether	5.995	248	26508	9547.0031778	ppb		89
75) Hexachlorobenzene	6.048	284	29676	9149.6094555	ppb		98
76) n-octadecane	6.237	55	18294	8440.6321635	ppb		99
77) Pentachlorophenol	6.195	266	13502	9369.5622619	ppb		96
78) Phenanthrene	6.372	178	143540	9311.5680670	ppb		99
79) Anthracene	6.413	178	145845	9964.5125864	ppb		99
80) Carbazole	6.531	167	136328	10888.4162730	ppb		99
81) Di-n-butyl phthalate	6.795	149	184319	9828.2596175	ppb		100
83) Fluoranthene	7.366	202	147396	9771.5944758	ppb		99
86) Pyrene	7.590	202	150972	8265.0839752	ppb		99
88) Benzylbutyl phthalate	8.319	149	75992	9065.0352697	ppb		99
90) Benzo(a)anthracene	9.101	228	134435	9875.8906876	ppb		99
91) Chrysene	9.154	228	135348	9413.7829701	ppb		98
92) bis(2-Ethylhexyl)phtha...	9.184	149	111508	9016.0758001	ppb		99
93) Di-n-octyl phthalate	10.378	149	175813	9288.9695759	ppb		100
95) Benzo(b)fluoranthene	11.007	252	128076m	9405.7752897	ppb		
96) Benzo(k)fluoranthene	11.060	252	137623	9884.4972457	ppb		98
97) Benzo(a)pyrene	11.654	252	113481	10281.4413553	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.748	276	105248	10476.8546825	ppb		95
99) Dibenz(a,h)anthracene	13.795	278	116801	10373.6146982	ppb		99
100) Benzo(g,h,i)perylene	14.095	276	122107	10237.4681547	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050422A\  
Data File : 0504A\_03.D  
Acq On : 4 May 2022 4:30 pm  
Operator : 3545  
Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
ALS Vial : 3 Sample Multiplier: 1

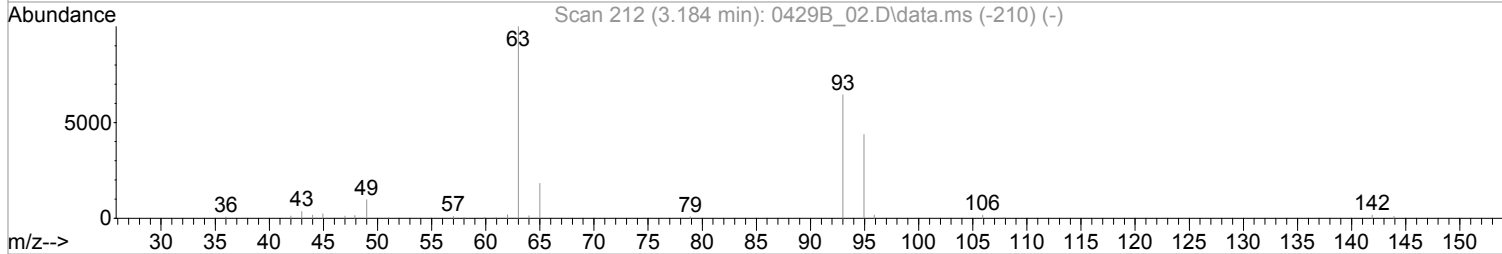
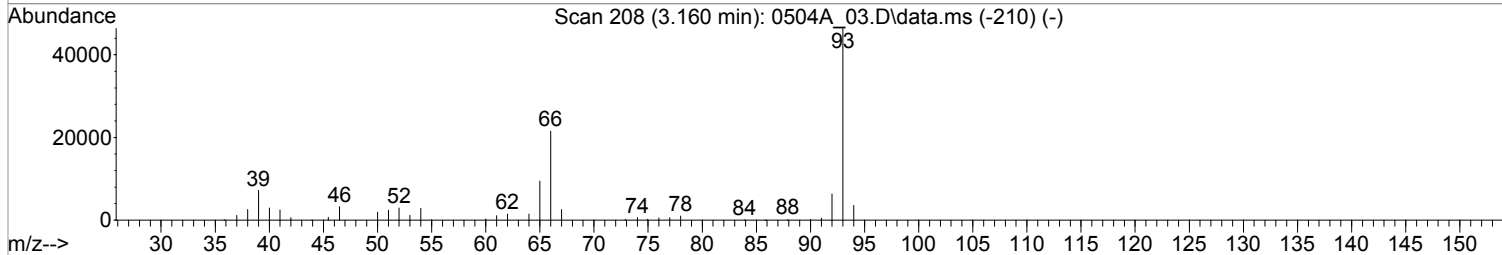
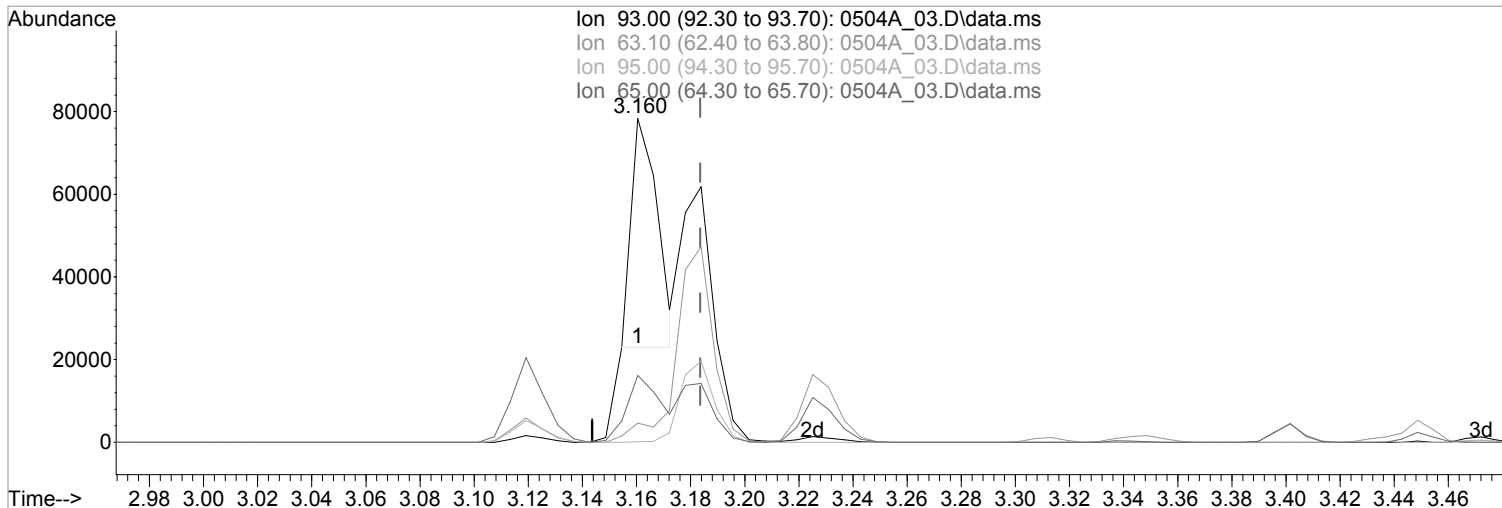
Quant Time: May 04 18:23:26 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_03.D  
 Acq On : 4 May 2022 4:30 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 04 17:14:49 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0504A\_03.D\data.ms

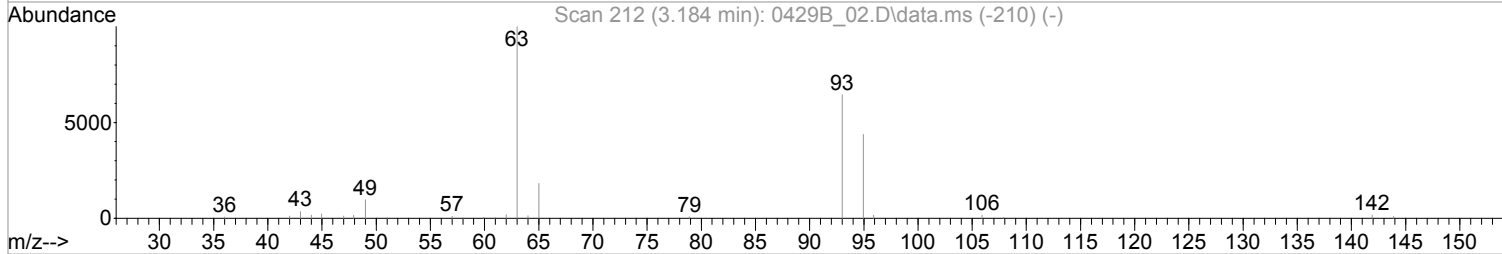
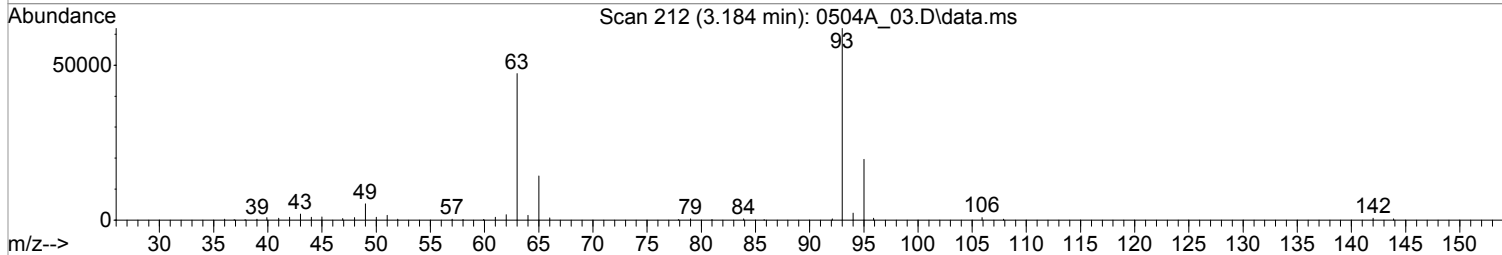
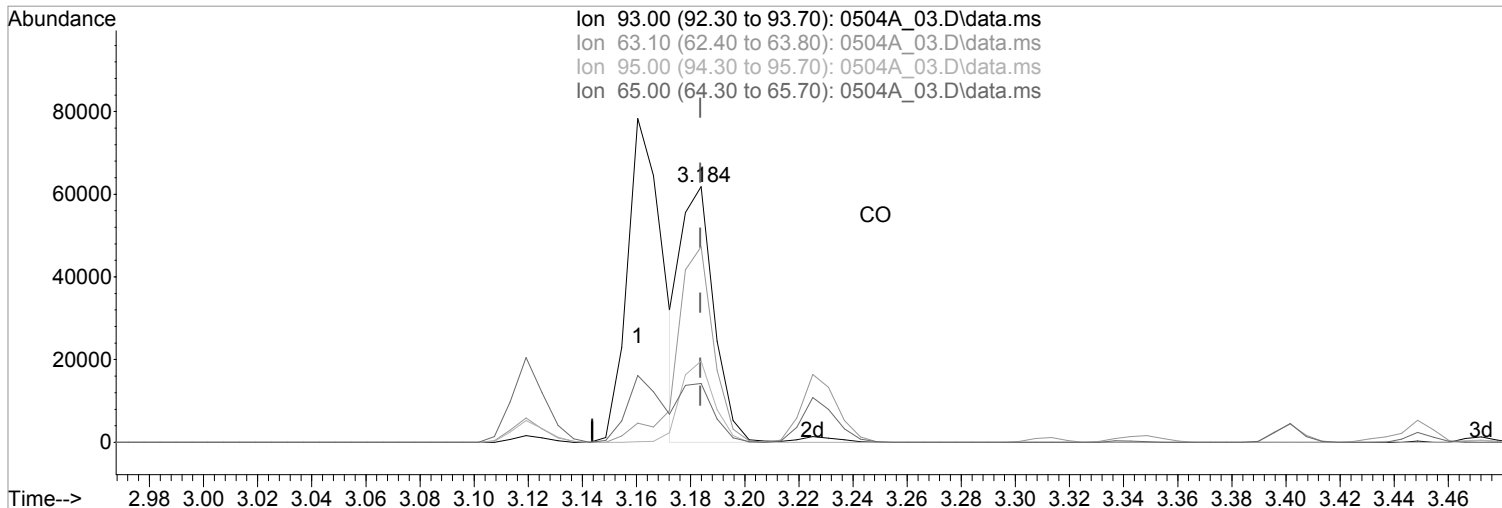
(6) bis(2-Chloroethyl)ether (MT)  
 3.160min (-0.023) 6832.2414868 ppb  
 Qvalue = 37  
 response 37424

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.51#
95.00	31.90	0.32#
65.00	23.10	19.85

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_03.D  
 Acq On : 4 May 2022 4:30 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 04 17:14:49 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



(6) bis(2-Chloroethyl)ether (MT)  
 3.184min (+0.000) 9538.9220202 ppb m

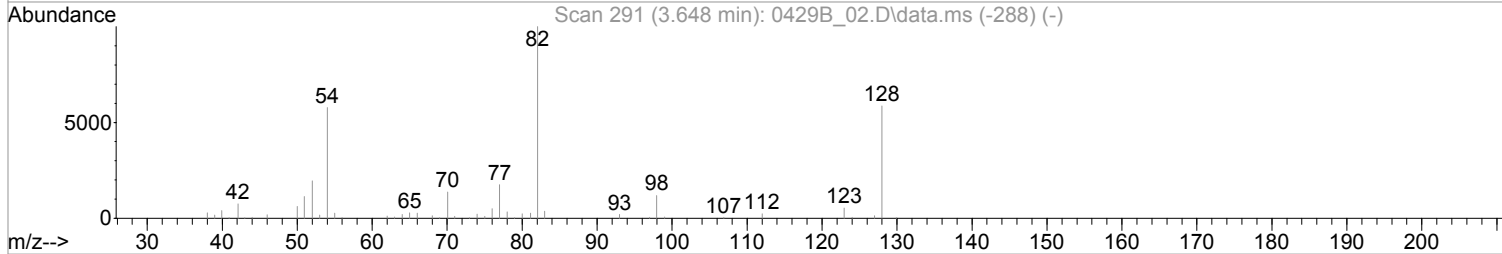
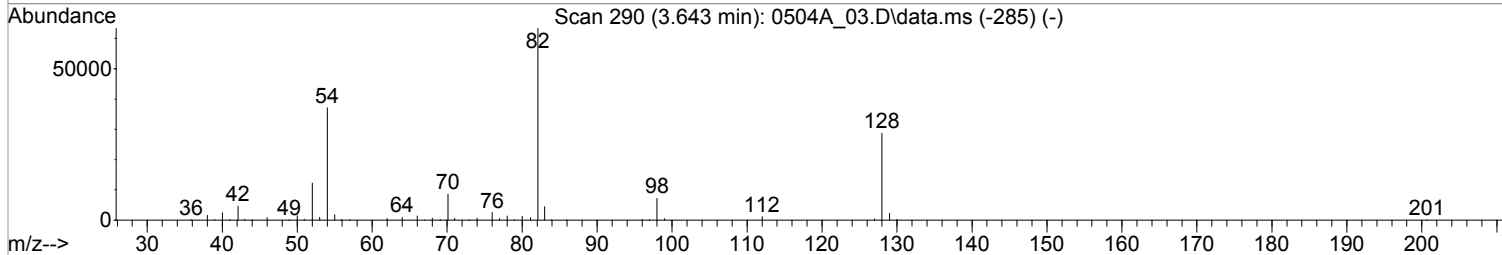
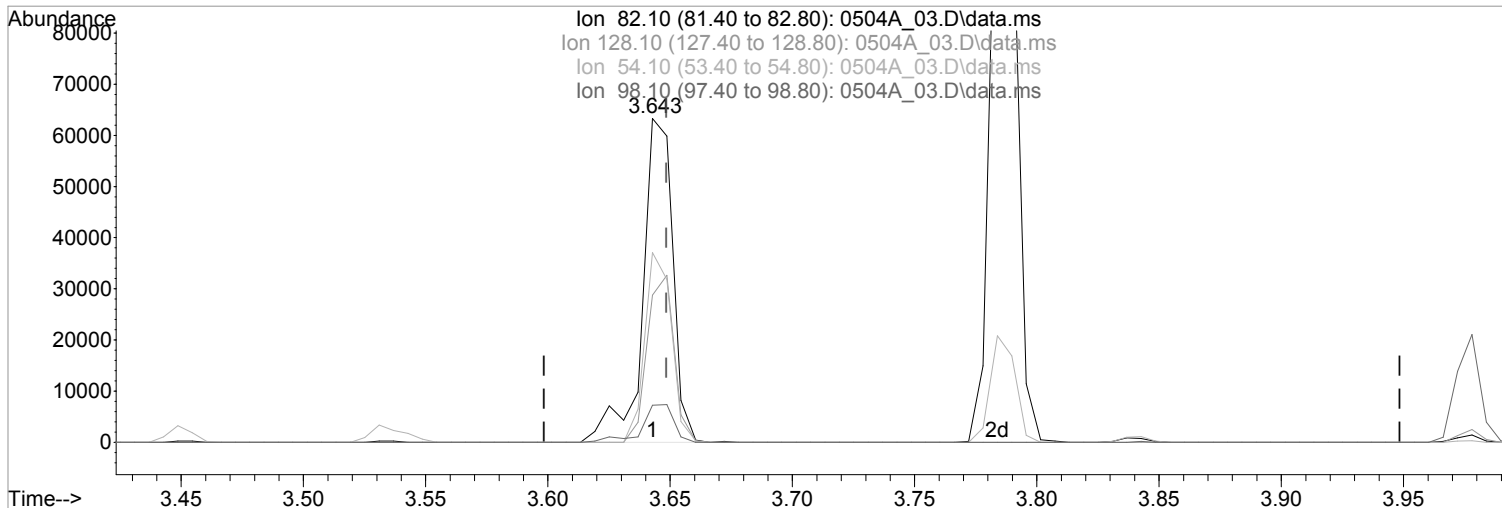
response 52250

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.45
95.00	31.90	31.76
65.00	23.10	23.02

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_03.D  
 Acq On : 4 May 2022 4:30 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 04 17:14:49 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0504A\_03.D\data.ms

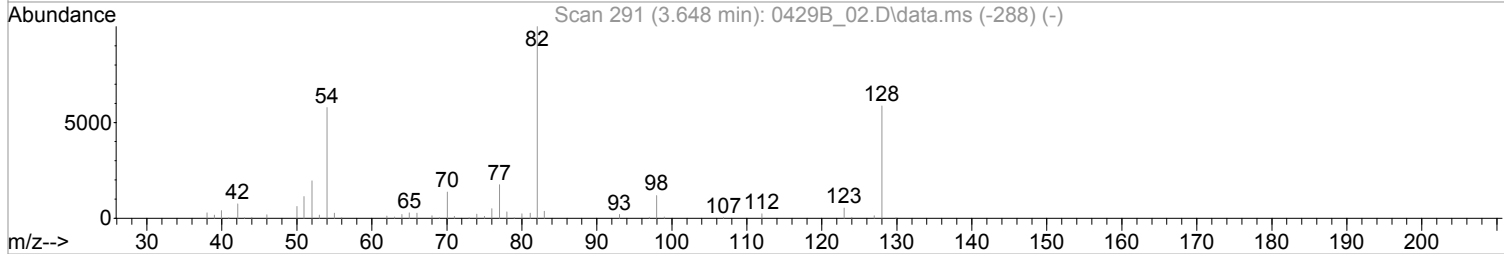
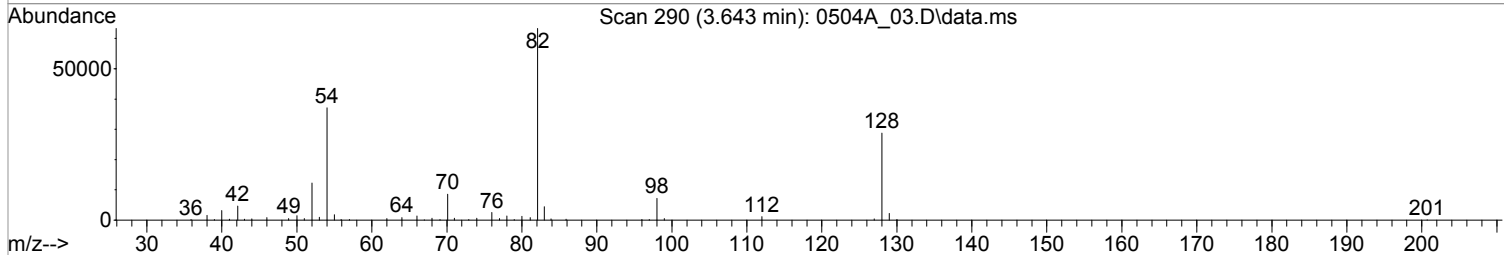
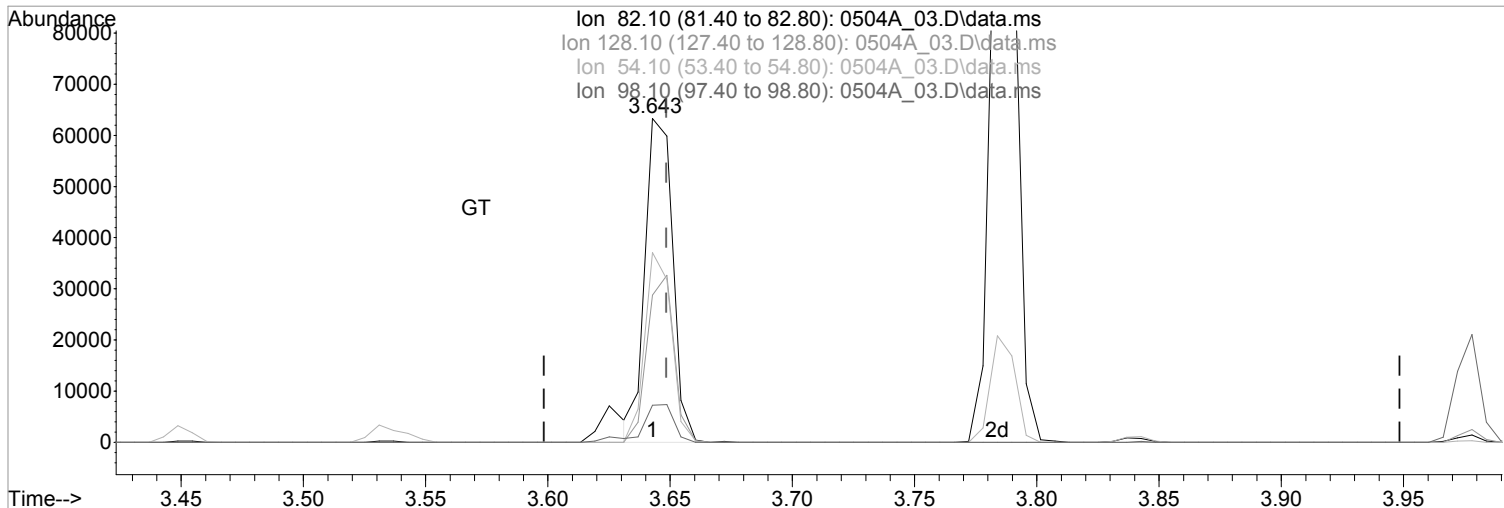
(24) Nitrobenzene-d5 (S)  
 3.643min (-0.006) 10900.9383447 ppb  
 Qvalue = 98  
 response 54825

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.42
54.10	60.00	58.62
98.10	11.40	11.44

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_03.D  
 Acq On : 4 May 2022 4:30 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 04 17:14:49 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0504A\_03.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.643min (-0.006) 9949.5294987 ppb m

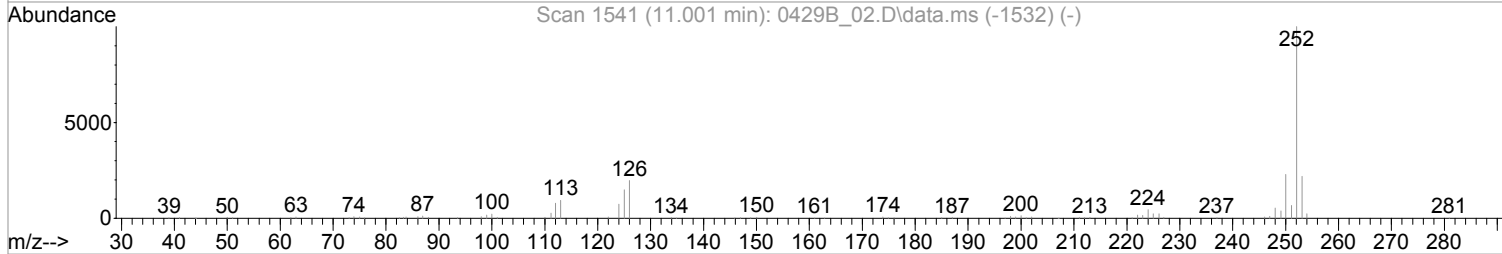
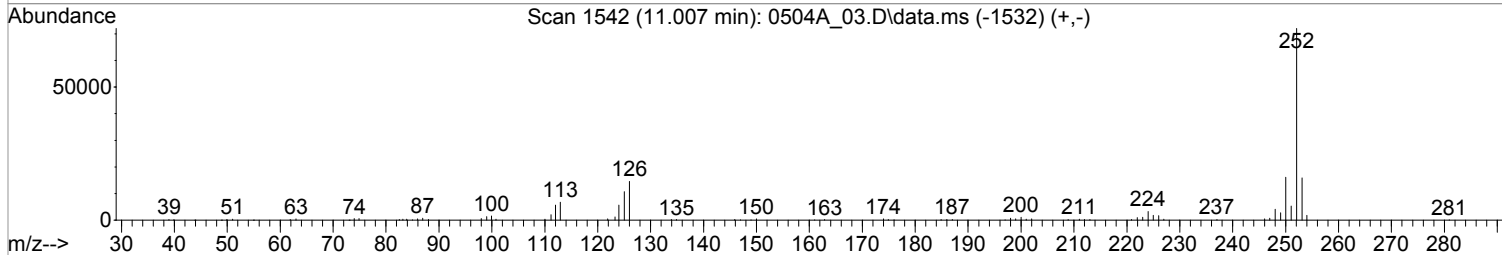
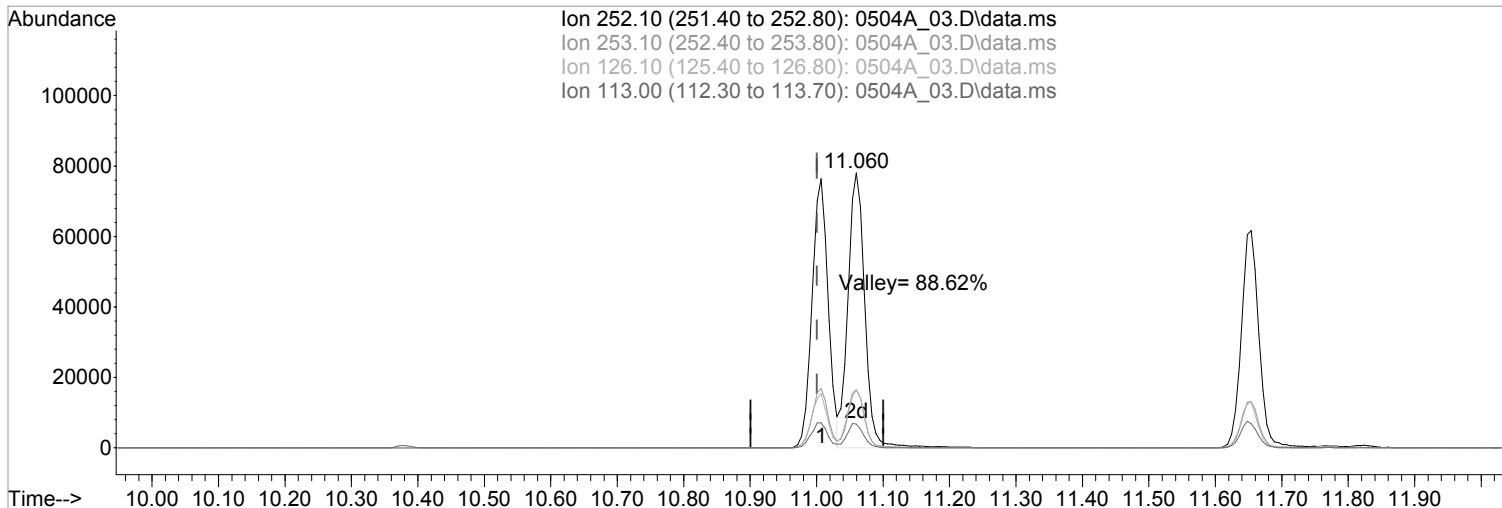
response 50040

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.42
54.10	60.00	58.62
98.10	11.40	11.44

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_03.D  
 Acq On : 4 May 2022 4:30 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 04 17:14:49 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0504A\_03.D\data.ms

(95) Benzo(b)fluoranthene (MT)  
 11.007min (+0.006) 9405.7752897 ppb m  
 response 128076  

Ion	Exp%	Act%
252.10	100	100
253.10	21.80	22.02
126.10	20.00	20.25
113.00	9.70	9.32

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1487377	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0504A_04	<b>Analysis date/time:</b>	05/04/22 16:52
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.079140	0.07610996		3.83	20	10	10.09	101	80 - 120

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.



Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_04.D  
 Acq On : 4 May 2022 4:52 pm  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 9/10/22  
 Misc : TCL CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 4 Sample Multiplier: 1

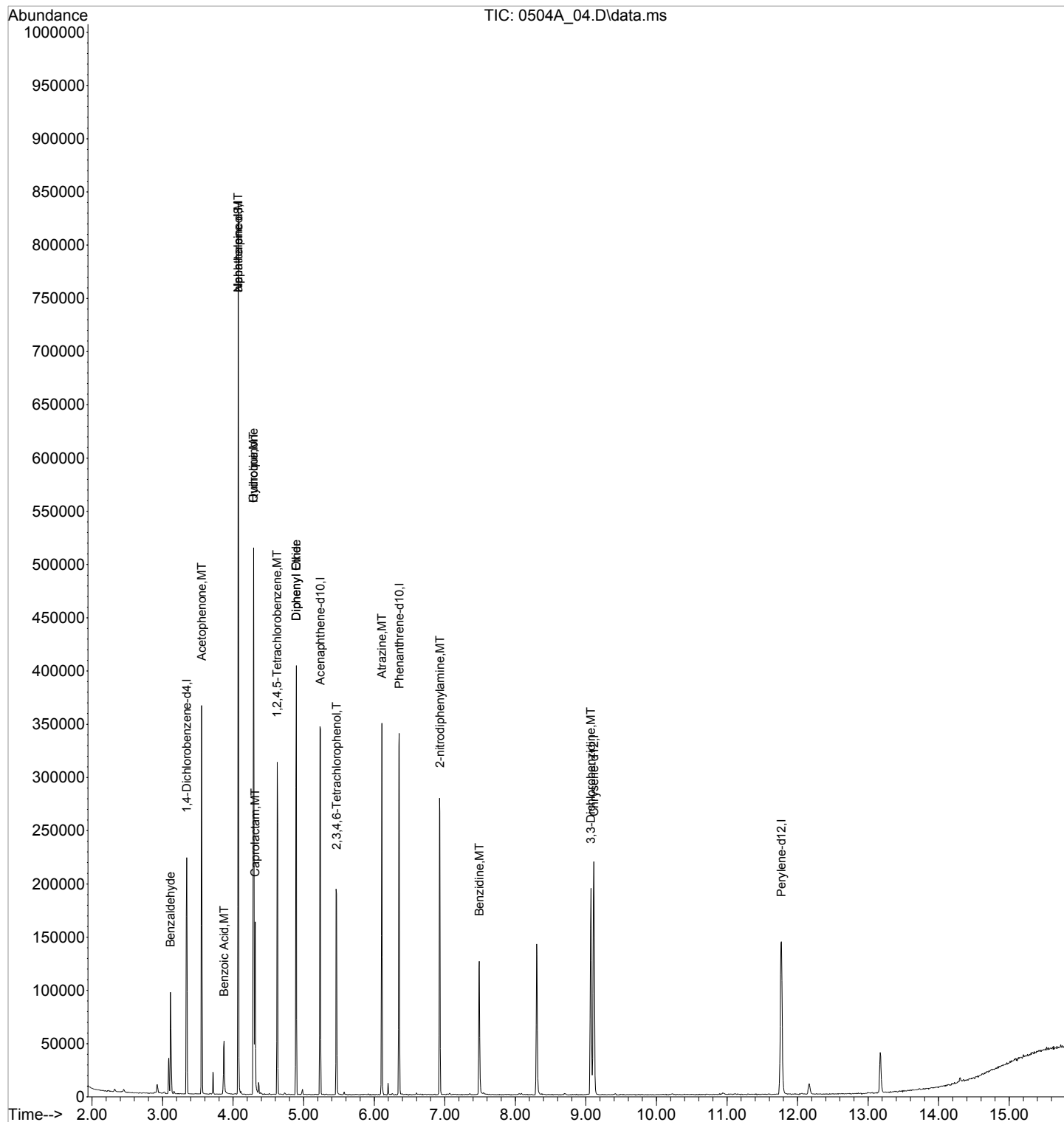
Quant Time: May 04 18:24:22 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.343	152	31313	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.072	136	145726	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.237	164	64926	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.354	188	112213	8000.0000000	ppb	0.00
84) Chrysene-d12	9.113	240	94058	8000.0000000	ppb	0.00
94) Perylene-d12	11.771	264	89381	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.113	105	16983	12970.6723521	ppb	97
22) Acetophenone	3.554	105	72748	10793.0332137	ppb	97
31) Benzoic Acid	3.872	105	13864	10091.2710852	ppb	99
33) alpha-terpineol	4.072	59	50340	11214.9534807	ppb	97
37) Hydroquinone	4.290	110	41654	13103.9937128	ppb	98
38) Quinoline	4.290	129	98367	11690.8174354	ppb	100
39) Caprolactam	4.313	113	14511	13098.3530891	ppb	98
43) 1,2,4,5-Tetrachloroben...	4.625	216	42845	10935.3337003	ppb	99
44) Diphenyl Ether	4.895	170	63999	10899.4124483	ug/ml	97
45) Diphenyl Oxide	4.895	170	63999	10899.4124483	ug/ml	97
62) 2,3,4,6-Tetrachlorophenol	5.466	232	20794	11815.1096435	ppb	98
69) Atrazine	6.107	200	27097	11597.2569018	ppb	96
82) 2-nitrodiphenylamine	6.931	167	34912	13415.3499350	ppb	93
85) Benzidine	7.489	184	54961	18758.1247306	ppb	98
89) 3,3-Dichlorobenzidine	9.072	252	52049	12776.7567065	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050422A\  
Data File : 0504A\_04.D  
Acq On : 4 May 2022 4:52 pm  
Operator : 3545  
Sample : ICV TCL 10K1 PPB 22D19628 exp 9/10/22  
Misc : TCL CAL ISTD 22D16229 exp. 10/16/22  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 04 18:24:22 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



**SDG:** L1487377  
**Instrument ID:** BNAMS4

**Analytical Method:** 8270E  
**Calibration Start Date:** 02/09/22 10:43  
**Calibration End Date:** 02/09/22 15:35

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
TUNE	BNAMS40209220209_05572116	0209_05	02/09/22 10:23		
CAL	500	0209_06	02/09/22 10:43		
CAL	1000	0209_07	02/09/22 11:04		
CAL	4000	0209_08	02/09/22 11:25		
CAL	10000	0209_09	02/09/22 11:46		
CAL	20000	0209_10	02/09/22 12:07		
CAL	30000	0209_11	02/09/22 12:27		
CAL	40000	0209_12	02/09/22 12:48		
CAL	50000	0209_13	02/09/22 13:09		
CAL	1K1	0209_14	02/09/22 13:30		
CAL	4K1	0209_15	02/09/22 13:51		
CAL	10K1	0209_16	02/09/22 14:11		
CAL	20K1	0209_17	02/09/22 14:32		
CAL	30K1	0209_18	02/09/22 14:53		
CAL	40K1	0209_19	02/09/22 15:14		
CAL	50K1	0209_20	02/09/22 15:35		
SSCV	BNAMS40209220209_21572116	0209_21	02/09/22 15:56		
SSCV	BNAMS40209220209_22572116	0209_22	02/09/22 16:16		
TUNE	BNAMS4050322A0503A_01T-1572116	0503A_01T-1	05/03/22 12:48		
ICV	BNAMS4050322A0503A_02572116	0503A_02	05/03/22 13:09		
ICV	BNAMS4050322A0503A_03572116	0503A_03	05/03/22 13:30		
LCS	R3787713-1	0503A_04	05/03/22 15:31	1	WG1857248
BLANK	R3787713-2	0503A_05	05/03/22 15:52	1	WG1857248
L1486453-08	L1486453-08	0503A_09	05/03/22 17:17	20	WG1857248
TUNE	BNAMS40504220504_02T-1572116	0504_02T-1	05/04/22 04:39		
ICV	BNAMS40504220504_03572116	0504_03	05/04/22 04:59		
ICV	BNAMS40504220504_04572116	0504_04	05/04/22 05:20		
FD01-041922-0-10	L1487377-02	0504_23	05/04/22 12:19	1	WG1857248
BNSF-SC01-041922-0-10	L1487377-01	0504_24	05/04/22 12:40	2	WG1857248
BNSF-SG02-041922-0-10	L1487377-03	0504_25	05/04/22 13:01	2	WG1857248
OS	L1486885-01	0504_26	05/04/22 13:22		
L1486885-01	L1486885-01	0504_26	05/04/22 13:22	2	WG1857248
MS	R3788258-1	0504_27	05/04/22 13:43	2	WG1857248
MSD	R3788258-2	0504_28	05/04/22 14:03	2	WG1857248

<b>SDG:</b>	L1487377	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS24	<b>Calibration Start Date:</b>	03/31/22 17:24
		<b>Calibration End Date:</b>	03/31/22 22:23

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
TUNE	BNAMS240331220331_02576947	0331_02	03/31/22 17:02		
CAL	500	0331_03	03/31/22 17:24		
CAL	1000	0331_04	03/31/22 17:45		
CAL	4000	0331_05	03/31/22 18:07		
CAL	10000	0331_06	03/31/22 18:28		
CAL	20000	0331_07	03/31/22 18:49		
CAL	30000	0331_08	03/31/22 19:11		
CAL	40000	0331_09	03/31/22 19:32		
CAL	50000	0331_10	03/31/22 19:53		
CAL	1K1	0331_11	03/31/22 20:15		
CAL	4K1	0331_12	03/31/22 20:36		
CAL	10K1	0331_13	03/31/22 20:58		
CAL	20K1	0331_14	03/31/22 21:19		
CAL	30K1	0331_15	03/31/22 21:40		
CAL	40K1	0331_16	03/31/22 22:02		
CAL	50K1	0331_17	03/31/22 22:23		
SSCV	BNAMS240331220331_18576947	0331_18	03/31/22 22:44		
SSCV	BNAMS240331220331_19576947	0331_19	03/31/22 23:06		
TUNE	BNAMS24050422A0504A_02T-1576947	0504A_02T-1	05/04/22 16:09		
ICV	BNAMS24050422A0504A_03576947	0504A_03	05/04/22 16:30		
ICV	BNAMS24050422A0504A_04576947	0504A_04	05/04/22 16:52		
BLANK	R3788334-1	0504A_07	05/04/22 18:14	1	WG1857248

## DETECTION LIMIT SUMMARY

Lab Sample IDs: L1487377-01,02,03  
 Matrix: Solid

Analytical Method: 8270E  
 Prep Method: 3546

Analyte	CAS	MDL	RDL
		mg/kg	mg/kg
Benzo(b)fluoranthene	205-99-2	0.006210	0.0333
Benzo(k)fluoranthene	207-08-9	0.005920	0.0333
Benzo(g,h,i)perylene	191-24-2	0.006090	0.0333
Benzo(a)pyrene	50-32-8	0.006190	0.0333
Acenaphthene	83-32-9	0.005390	0.0333
Carbazole	86-74-8	0.0103	0.3330
Chrysene	218-01-9	0.006620	0.0333
Dibenz(a,h)anthracene	53-70-3	0.009230	0.0333
Dibenzofuran	132-64-9	0.0109	0.3330
Acenaphthylene	208-96-8	0.004690	0.0333
Fluoranthene	206-44-0	0.006010	0.0333
Fluorene	86-73-7	0.005420	0.0333
Anthracene	120-12-7	0.005930	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	0.009410	0.0333
1-Methylnaphthalene	90-12-0	0.004260	0.0333
2-Methylnaphthalene	91-57-6	0.004320	0.0333
Naphthalene	91-20-3	0.008360	0.0333
Phenanthrene	85-01-8	0.006610	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	0.0422	0.3330
Di-n-butyl phthalate	84-74-2	0.0114	0.3330
Di-n-octyl phthalate	117-84-0	0.0225	0.3330
Pyrene	129-00-0	0.006480	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	0.0104	0.3330
Pentachlorophenol	87-86-5	0.008960	0.3330
Phenol	108-95-2	0.0134	0.3330
Benzoic Acid	65-85-0	0.1180	1.67
Benzo(a)anthracene	56-55-3	0.005870	0.0333

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3787713-2  
 Client Sample ID: BLANK  
 Lab File ID: 0503A\_05  
 Instrument ID: BNAMS4  
 Analytical Batch: WG1857248  
 Dilution Factor: 1  
 Analytical Method: 8270E  
 Matrix: Solid  
 Total Solids (%): \_\_\_\_\_

SDG: L1487377  
 Collected Date/Time: \_\_\_\_\_  
 Received Date/Time: \_\_\_\_\_  
 Preparation Date/Time: 05/02/22 17:00  
 Analysis Date/Time: 05/03/22 15:52  
 Prep Method: 3546  
 Sample Vol Used: \_\_\_\_\_  
 Initial Wt/Vol: 15 g  
 Final Wt/Vol: 0.5 mL

Analyte	CAS	RT	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Acenaphthene	83-32-9	0	U		0.00539	0.0333
Acenaphthylene	208-96-8	0	U		0.00469	0.0333
Anthracene	120-12-7	0	U		0.00593	0.0333
Benzoic Acid	65-85-0	0	U		0.118	1.67
Benzo(a)anthracene	56-55-3	0	U		0.00587	0.0333
Benzo(b)fluoranthene	205-99-2	0	U		0.00621	0.0333
Benzo(k)fluoranthene	207-08-9	0	U		0.00592	0.0333
Benzo(g,h,i)perylene	191-24-2	0	U		0.00609	0.0333
Benzo(a)pyrene	50-32-8	11.75	U		0.00619	0.0333
Carbazole	86-74-8	0	U		0.0103	0.333
Chrysene	218-01-9	0	U		0.00662	0.0333
Dibenz(a,h)anthracene	53-70-3	0	U		0.00923	0.0333
Dibenzofuran	132-64-9	0	U		0.0109	0.333
Fluoranthene	206-44-0	0	U		0.00601	0.0333
Fluorene	86-73-7	0	U		0.00542	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	0	U		0.00941	0.0333
1-Methylnaphthalene	90-12-0	0	U		0.00426	0.0333
2-Methylnaphthalene	91-57-6	0	U		0.00432	0.0333
Naphthalene	91-20-3	4.03	U		0.00836	0.0333
Phenanthrene	85-01-8	0	U		0.00661	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	0	U		0.0422	0.333
Di-n-butyl phthalate	84-74-2	0	U		0.0114	0.333
Di-n-octyl phthalate	117-84-0	0	U		0.0225	0.333
Pyrene	129-00-0	0	U		0.00648	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	0	U		0.0104	0.333
Pentachlorophenol	87-86-5	0	U		0.00896	0.333
Phenol	108-95-2	0	U		0.0134	0.333

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 05.D  
 Acq On : 3 May 2022 3:52 pm  
 Sample : BLANK 1X WG1857248  
 Misc : SOIL ISTD 22D28021 exp 10/28/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:17 2022

Vial: 43  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	84368	8000.00	ppb	-0.05
23) Naphthalene-d8	4.02	136	319717	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	158867	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	295421	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	255513	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	266216	8000.00	ppb	-0.12

System Monitoring Compounds						
4) 2-Fluorophenol	2.63	112	199030	14517.5506291	ppb	-0.02
Spiked Amount	20000.000	Range 20 - 120	Recovery	=	72.59%	
7) Phenol-d5	3.06	99	245624	14927.4384263	ppb	-0.03
Spiked Amount	20000.000	Range 20 - 120	Recovery	=	74.64%	
24) Nitrobenzene-d5	3.59	82	98707	7276.2370648	ppb	-0.05
Spiked Amount	10000.000	Range 18 - 125	Recovery	=	72.76%	
50) 2-Fluorobiphenyl	4.70	172	183524	6847.9788597	ppb	-0.04
Spiked Amount	10000.000	Range 28 - 120	Recovery	=	68.48%	
73) 2,4,6-Tribromophenol	5.76	330	50588	15127.0947727	ppb	-0.05
Spiked Amount	20000.000	Range 17 - 137	Recovery	=	75.64%	
87) p-Terphenyl-d14	7.69	244	253824	7268.9829747	ppb	-0.07
Spiked Amount	10000.000	Range 13 - 131	Recovery	=	72.69%	

Target Compounds Qvalue

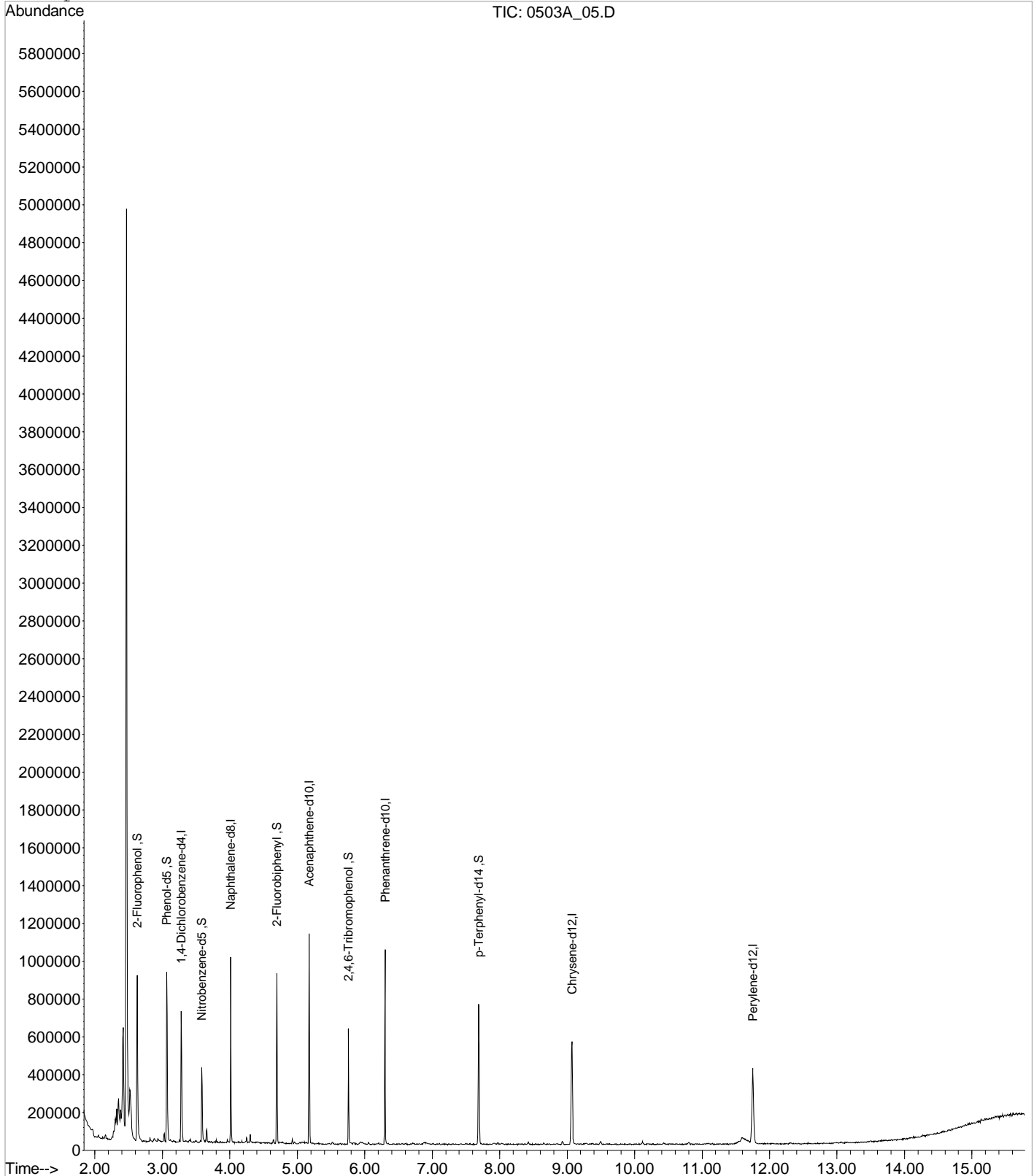
(#) = qualifier out of range (m) = manual integration  
 0503A\_05.D S804C29V.M Tue May 03 16:17:11 2022

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 05.D  
Acq On : 3 May 2022 3:52 pm  
Sample : BLANK 1X WG1857248  
Misc : SOIL ISTD 22D28021 exp 10/28/22  
MS Integration Params: RTEINT.P  
Quant Time: May 3 16:17 2022

Vial: 43  
Operator: 3545  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804C29V.RES

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Tue Mar 29 09:44:27 2022  
Response via : Initial Calibration





SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3788334-1  
 Client Sample ID: BLANK  
 Lab File ID: 0504A\_07  
 Instrument ID: BNAMS24  
 Analytical Batch: WG1857248  
 Dilution Factor: 1  
 Analytical Method: 8270E  
 Matrix: Solid  
 Total Solids (%): \_\_\_\_\_

SDG: L1487377  
 Collected Date/Time: \_\_\_\_\_  
 Received Date/Time: \_\_\_\_\_  
 Preparation Date/Time: 05/02/22 17:00  
 Analysis Date/Time: 05/04/22 18:14  
 Prep Method: 3546  
 Sample Vol Used: \_\_\_\_\_  
 Initial Wt/Vol: 15 g  
 Final Wt/Vol: 0.5 mL

Analyte	CAS	RT	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Acenaphthene	83-32-9	0	U		0.00539	0.0333
Acenaphthylene	208-96-8	0	U		0.00469	0.0333
Anthracene	120-12-7	0	U		0.00593	0.0333
Benzoic Acid	65-85-0	0	U		0.118	1.67
Benzo(a)anthracene	56-55-3	0	U		0.00587	0.0333
Benzo(b)fluoranthene	205-99-2	0	U		0.00621	0.0333
Benzo(k)fluoranthene	207-08-9	0	U		0.00592	0.0333
Benzo(g,h,i)perylene	191-24-2	0	U		0.00609	0.0333
Benzo(a)pyrene	50-32-8	0	U		0.00619	0.0333
Carbazole	86-74-8	0	U		0.0103	0.333
Chrysene	218-01-9	0	U		0.00662	0.0333
Dibenz(a,h)anthracene	53-70-3	0	U		0.00923	0.0333
Dibenzofuran	132-64-9	0	U		0.0109	0.333
Fluoranthene	206-44-0	0	U		0.00601	0.0333
Fluorene	86-73-7	0	U		0.00542	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	0	U		0.00941	0.0333
1-Methylnaphthalene	90-12-0	0	U		0.00426	0.0333
2-Methylnaphthalene	91-57-6	0	U		0.00432	0.0333
Naphthalene	91-20-3	0	U		0.00836	0.0333
Phenanthrene	85-01-8	0	U		0.00661	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	9.42	U		0.0422	0.333
Di-n-butyl phthalate	84-74-2	6.60	U		0.0114	0.333
Di-n-octyl phthalate	117-84-0	0	U		0.0225	0.333
Pyrene	129-00-0	0	U		0.00648	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	0	U		0.0104	0.333
Pentachlorophenol	87-86-5	0	U		0.00896	0.333
Phenol	108-95-2	0	U		0.0134	0.333

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_07.D  
 Acq On : 4 May 2022 6:14 pm  
 Operator : 3545  
 Sample : BLANK 1X WG1857248  
 Misc : SOIL ISTD 22D28021 exp. 10/28/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 05 12:13:51 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

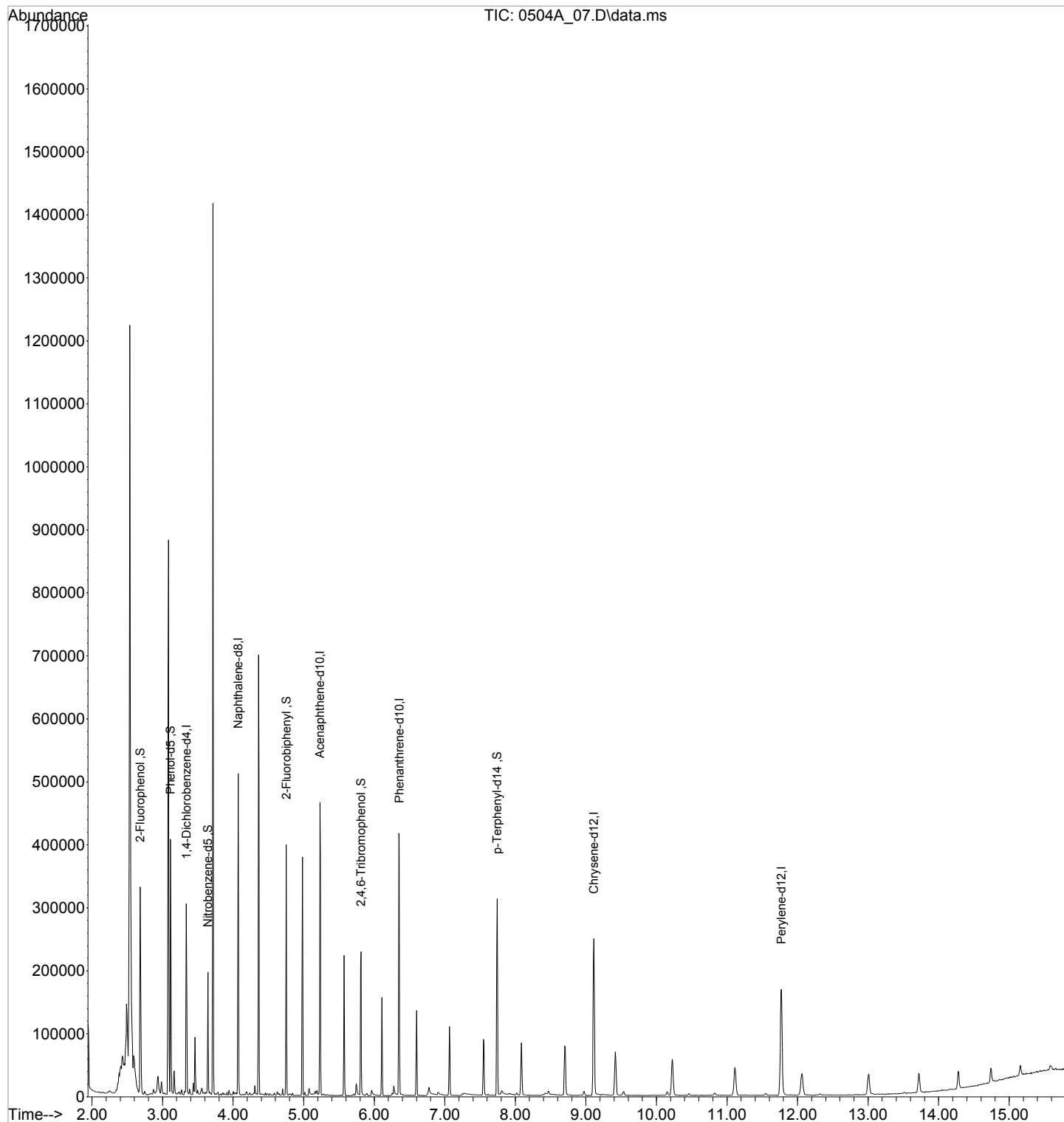
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.337	152	39125	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.072	136	156307	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.231	164	80478	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.354	188	137390	8000.0000000	ppb	0.00
84) Chrysene-d12	9.113	240	109314	8000.0000000	ppb	0.00
94) Perylene-d12	11.772	264	104233	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.684	112	82959	13543.0395690	ppb	0.00
Spiked Amount	20000.000	Range	20 - 120	Recovery	= 67.72%	
7) Phenol-d5	3.113	99	95256	13106.4038281	ppb	0.00
Spiked Amount	20000.000	Range	20 - 120	Recovery	= 65.53%	
24) Nitrobenzene-d5	3.643	82	39345	6618.8947879	ppb	0.00
Spiked Amount	10000.000	Range	18 - 125	Recovery	= 66.19%	
50) 2-Fluorobiphenyl	4.754	172	87590	6853.7764773	ppb	0.00
Spiked Amount	10000.000	Range	28 - 120	Recovery	= 68.54%	
73) 2,4,6-Tribromophenol	5.813	330	20203	14035.6748329	ppb	0.00
Spiked Amount	20000.000	Range	17 - 137	Recovery	= 70.18%	
87) p-Terphenyl-d14	7.742	244	93152	6157.9123753	ppb	0.00
Spiked Amount	10000.000	Range	13 - 131	Recovery	= 61.58%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050422A\  
Data File : 0504A\_07.D  
Acq On : 4 May 2022 6:14 pm  
Operator : 3545  
Sample : BLANK 1X WG1857248  
Misc : SOIL ISTD 22D28021 exp. 10/28/22  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 05 12:13:51 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth: BNA24PS.M



SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3787713-1  
**Client Sample ID:** LCS  
**Lab File ID:** 0503A\_04  
**Instrument ID:** BNAMS4  
**Analytical Batch:** WG1857248  
**Dilution Factor:** 1  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** \_\_\_\_\_

**SDG:** L1487377  
**Collected Date/Time:** \_\_\_\_\_  
**Received Date/Time:** \_\_\_\_\_  
**Preparation Date/Time:** 05/02/22 17:00  
**Analysis Date/Time:** 05/03/22 15:31  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15 g  
**Final Wt/Vol:** 0.5 mL

Analyte	CAS	RT	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Acenaphthene	83-32-9	5.21	0.390		0.00539	0.0333
Acenaphthylene	208-96-8	5.08	0.423		0.00469	0.0333
Anthracene	120-12-7	6.37	0.418		0.00593	0.0333
Benzoic Acid	65-85-0	3.83	0.179		0.000	1.67
Benzo(a)anthracene	56-55-3	9.06	0.412		0.00587	0.0333
Benzo(b)fluoranthene	205-99-2	11	0.389		0.00621	0.0333
Benzo(k)fluoranthene	207-08-9	11.05	0.413		0.00592	0.0333
Benzo(g,h,i)perylene	191-24-2	14.11	0.427		0.00609	0.0333
Benzo(a)pyrene	50-32-8	11.66	0.447		0.00619	0.0333
Carbazole	86-74-8	6.49	0.398		0.0103	0.333
Chrysene	218-01-9	9.13	0.414		0.00662	0.0333
Dibenz(a,h)anthracene	53-70-3	13.81	0.422		0.00923	0.0333
Dibenzofuran	132-64-9	5.33	0.401		0.0109	0.333
Fluoranthene	206-44-0	7.32	0.402		0.00601	0.0333
Fluorene	86-73-7	5.58	0.391		0.00542	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	13.76	0.411		0.00941	0.0333
1-Methylnaphthalene	90-12-0	4.53	0.321		0.00426	0.0333
2-Methylnaphthalene	91-57-6	4.46	0.312		0.00432	0.0333
Naphthalene	91-20-3	4.03	0.309		0.00836	0.0333
Phenanthrene	85-01-8	6.32	0.400		0.00661	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	9.15	0.471		0.0422	0.333
Di-n-butyl phthalate	84-74-2	6.75	0.445		0.0114	0.333
Di-n-octyl phthalate	117-84-0	10.37	0.442		0.0225	0.333
Pyrene	129-00-0	7.54	0.408		0.00648	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	3.48	0.464		0.0104	0.333
Pentachlorophenol	87-86-5	6.15	0.393		0.00896	0.333
Phenol	108-95-2	3.08	0.400		0.0134	0.333

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:15 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	82890	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	385068	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	170754	8000.00	ppb	-0.04
70) Phenanthrene-d10	6.31	188	320873	8000.00	ppb	-0.05
84) Chrysene-d12	9.08	240	287519	8000.00	ppb	-0.07
94) Perylene-d12	11.77	264	292231	8000.00	ppb	-0.10

System Monitoring Compounds

4) 2-Fluorophenol	2.63	112	163898	12168.1365491	ppb	-0.02
Spiked Amount 20000.000	Range 20	- 120	Recovery	=	60.84%	
7) Phenol-d5	3.07	99	199339	12330.5480090	ppb	-0.03
Spiked Amount 20000.000	Range 20	- 120	Recovery	=	61.65%	
24) Nitrobenzene-d5	3.59	82	85923m	5258.9206693	ppb	-0.04
Spiked Amount 10000.000	Range 18	- 125	Recovery	=	52.59%	
50) 2-Fluorobiphenyl	4.70	172	163489	5675.7190624	ppb	-0.04
Spiked Amount 10000.000	Range 28	- 120	Recovery	=	56.76%	
73) 2,4,6-Tribromophenol	5.77	330	49884	13733.3812827	ppb	-0.04
Spiked Amount 20000.000	Range 17	- 137	Recovery	=	68.67%	
87) p-Terphenyl-d14	7.70	244	245186	6239.9784261	ppb	-0.06
Spiked Amount 10000.000	Range 13	- 131	Recovery	=	62.40%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue	
2) Pyridine	2.01	79	103725	8087.3942803	ppb		87
3) N-Nitrosodimethylamine	1.99	42	83766	12168.5645156	ppb	#	80
5) Aniline	3.11	66	75107	9793.3252591	ppb	#	27
6) bis(2-Chloroethyl)ether	3.12	93	175401m	14723.8437833	ppb		
8) Phenol	3.08	94	204276m	11995.8858161	ppb		
9) Benzaldehyde	3.05	105	51305	13916.0658321	ppb	#	84
10) 2-Chlorophenol	3.17	128	155723	11421.3310004	ppb		94
11) n-Decane	3.16	41	79400	9886.8504510	ppb	#	99
12) 1,3-Dichlorobenzene	3.25	146	154634	10030.6406345	ppb		96
13) 1,4-Dichlorobenzene	3.29	146	163800	10323.0350818	ppb		97
14) Benzyl Alcohol	3.35	79	125898	11938.8491199	ppb		94
15) 1,2-Dichlorobenzene	3.38	146	152603	10462.2809522	ppb		95
16) bis(2-Chloroisopropyl)ethe	3.41	121	50973	10212.5019795	ppb	#	30
17) 2,2-oxybis(1-chloropropane	3.41	121	50973	10212.5019795	ppb	#	30
18) 2-Methylphenol	3.40	108	148515	12054.4787379	ppb		93
19) Hexachloroethane	3.57	117	68682	11924.1902257	ppb		99
20) N-Nitrosodi-n-propylamine	3.49	70	122525	13608.5514672	ppb		93
21) 3&4-Methyl phenol	3.48	107	194962	13931.4178916	ppb		93
22) Acetophenone	3.50	105	212755	12411.4768569	ppb	#	71
25) Nitrobenzene	3.60	77	175861	11008.2957727	ppb		90
26) Isophorone	3.73	82	323119	11275.1547430	ppb		99
27) 2-Nitrophenol	3.78	139	84449	10487.9987832	ppb		90
28) 2,4-Dimethylphenol	3.79	107	171462	11465.9434073	ppb		95
29) bis(2-Chlorethoxy)methane	3.84	93	193824	10577.9711052	ppb		90
30) 2,4-Dichlorophenol	3.92	162	123420	9797.0693402	ppb		87
31) Benzoic Acid	3.83	105	33915	5383.1500287	ppb		98
32) 1,2,4-Trichlorobenzene	3.98	180	136726	9695.8943246	ppb		98
33) alpha-terpineol	4.02	59	156993	12996.6890680	ppb		93
34) Naphthalene	4.03	128	455257	9284.1661542	ppb		98
35) 4-Chloroaniline	4.05	65	54118	9498.4542070	ppb	#	48
36) Hexachloro-1,3-butadiene	4.10	225	78534	10208.8180493	ppb		99
37) Hydroquinone	4.25	110	67029m	7874.1707570	ppb		
38) Quinoline	4.24	129	299249	11662.2872267	ppb		97

(#) = qualifier out of range (m) = manual integration

0503A\_04.D S804C29V.M Tue May 03 16:15:44 2022

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 04.D  
 Acq On : 3 May 2022 3:31 pm  
 Sample : LCS 1X WG1857248  
 Misc : SOIL ISTD 22D28021 exp 10/28/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:15 2022

Vial: 42  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
39) Caprolactam	4.27	113	54059	20374.1935265	ppb		85
40) 4-Chloro-3-methylphenol	4.35	107	138602	10914.6021357	ppb		90
41) 2-Methylnaphthalene	4.46	142	299237	9365.1193944	ppb	#	96
42) 1-Methylnaphthalene	4.53	142	289272	9633.5786689	ppb		97
43) 1,2,4,5-Tetrachlorobenzene	4.57	216	132316	12837.6683557	ppb		99
44) Diphenyl Ether	4.84	170	193885	11792.4254620	ug/ml#		85
45) Diphenyl Oxide	4.84	170	193885	11792.4254620	ug/ml#		85
47) Hexachlorocyclopentadiene	4.56	237	53547	6693.3674708	ppb		98
48) 2,4,6-Trichlorophenol	4.65	196	91774	12391.6933449	ppb		91
49) 2,4,5-Trichlorophenol	4.68	196	93814	12171.5883933	ppb		93
51) Biphenyl	4.77	154	366288	11451.4868256	ppb		99
52) 2-Chloronaphthalene	4.80	162	286963	11755.5463758	ppb		98
53) 2-Nitroaniline	4.86	138	101427	13404.1013922	ppb	#	76
54) Acenaphthylene	5.08	152	482305	12700.2835608	ppb		99
55) Dimethyl phthalate	4.97	163	333094	13170.8222379	ppb		97
56) 2,6-Dinitrotoluene	5.02	165	79038	13479.4743698	ppb		87
57) 3-Nitroaniline	5.15	138	83525	13230.3403113	ppb		99
58) Acenaphthene	5.21	153	292767	11719.0930151	ppb		96
59) 2,4-Dinitrophenol	5.23	184	22798	7287.1586869	ppb	#	1
60) Dibenzofuran	5.33	168	417620	12053.9824498	ppb		95
61) 2,4-Dinitrotoluene	5.32	165	105482	14365.1170483	ppb		93
62) 2,3,4,6-Tetrachlorophenol	5.42	232	66806	13719.6632147	ppb		92
63) 4-Nitrophenol	5.26	139	64298	12330.2700074	ppb	#	79
64) Fluorene	5.58	166	329935	11740.1037896	ppb		97
65) 4-Chlorophenyl-phenylether	5.58	204	159986	12004.4089107	ppb		98
66) Diethyl phthalate	5.48	149	349091	13473.2372755	ppb		98
67) 4-Nitroaniline	5.59	138	87589	14813.1292453	ppb	#	78
68) Azobenzene	5.69	77	403875	15626.5514874	ppb		94
69) Atrazine	6.07	200	95160	13627.8836416	ppb		99
71) 4,6-Dinitro-2-methylphenol	5.62	198	51165	11723.8889117	ppb		91
72) N-Nitrosodiphenylamine	5.66	169	286973	11769.4411734	ppb		99
74) 4-Bromophenyl-phenylether	5.95	248	98203	12409.7288731	ppb		97
75) Hexachlorobenzene	6.01	284	104834	11905.9478377	ppb		98
76) n-octadecane	6.19	55	63345	12902.3664819	ppb		97
77) Pentachlorophenol	6.15	266	57319	11792.3090806	ppb		96
78) Phenanthrene	6.32	178	507321	12016.7193638	ppb		98
79) Anthracene	6.37	178	536182	12547.1925247	ppb		99
80) Carbazole	6.49	167	465946	11950.5650634	ppb		98
81) Di-n-butyl phthalate	6.75	149	610295	13370.5014752	ppb		99
82) 2-nitrodiphenylamine	6.88	167	133264	16467.3276016	ppb	#	100
83) Fluoranthene	7.32	202	541807	12080.4159624	ppb		99
85) Benzidine	7.45	184	137410	8272.5434332	ppb		98
86) Pyrene	7.54	202	566925	12254.4265970	ppb		98
88) Benzylbutyl phthalate	8.28	149	258267	13652.8029209	ppb		94
89) 3,3-Dichlorobenzidine	9.05	252	334368	22589.0189030	ppb		99
90) Benzo(a)anthracene	9.06	228	512233	12372.4684762	ppb		98
91) Chrysene	9.13	228	498701	12429.6930755	ppb		98
92) bis(2-Ethylhexyl)phthalate	9.15	149	368721	14150.9430978	ppb		95
93) Di-n-octyl phthalate	10.37	149	574745	13277.8182037	ppb		100
95) Benzo(b)fluoranthene	11.00	252	486558	11687.7239291	ppb		96
96) Benzo(k)fluoranthene	11.05	252	508038	12389.5527425	ppb		95
97) Benzo(a)pyrene	11.66	252	483544	13410.9602963	ppb		96
98) Indeno(1,2,3-cd)pyrene	13.76	276	437607	12353.2047926	ppb		98
99) Dibenz(a,h)anthracene	13.81	278	478702	12679.4306343	ppb		94

(#) = qualifier out of range (m) = manual integration  
 0503A\_04.D S804C29V.M Tue May 03 16:15:44 2022

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:15 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
100) Benzo(g,h,i)perylene	14.11	276	472634	12818.5783470 ppb	96

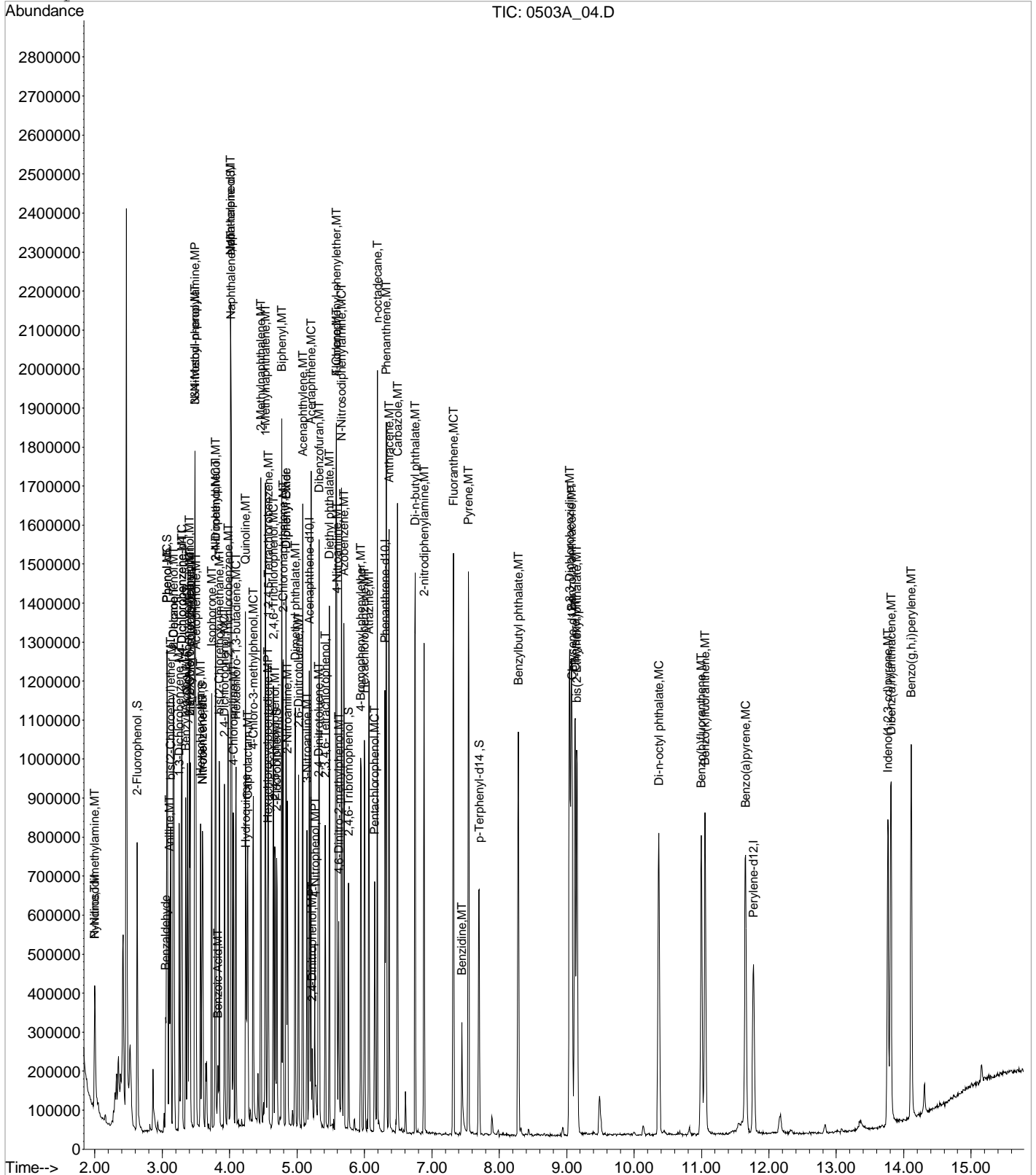
(#) = qualifier out of range (m) = manual integration  
 0503A\_04.D S804C29V.M Tue May 03 16:15:44 2022

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 04.D
Acq On : 3 May 2022 3:31 pm
Sample : LCS 1X WG1857248
Misc : SOIL ISTD 22D28021 exp 10/28/22
MS Integration Params: RTEINT.P
Quant Time: May 3 16:15 2022

Vial: 42
Operator: 3545
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804C29V.RES

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Tue Mar 29 09:44:27 2022
Response via : Initial Calibration

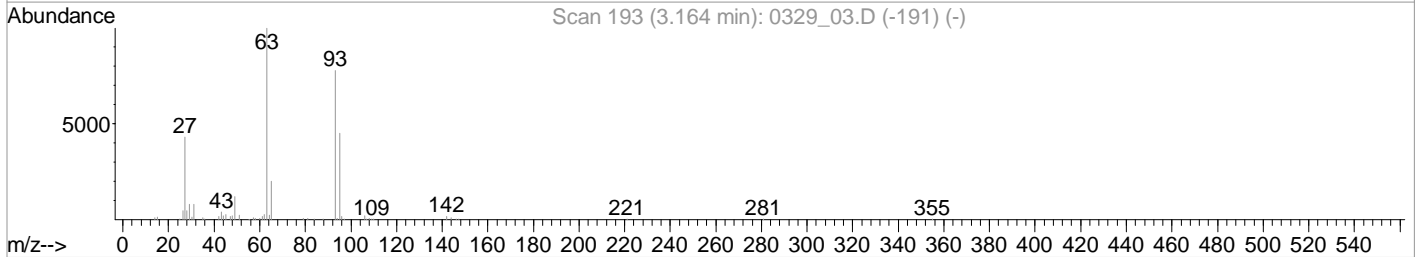
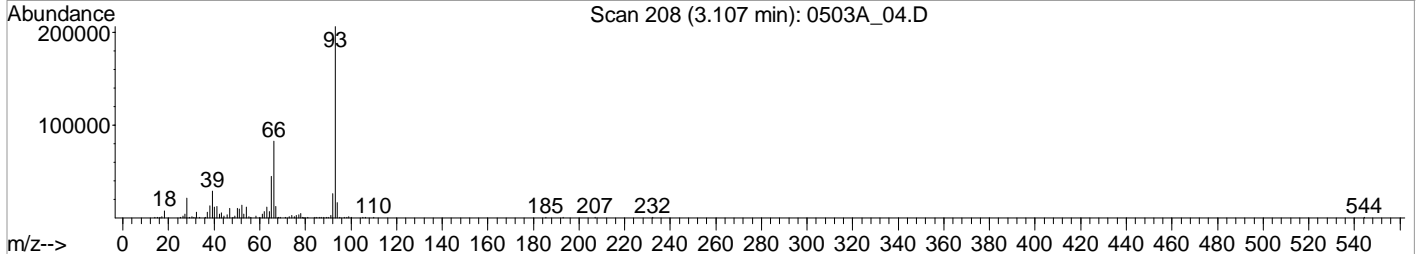
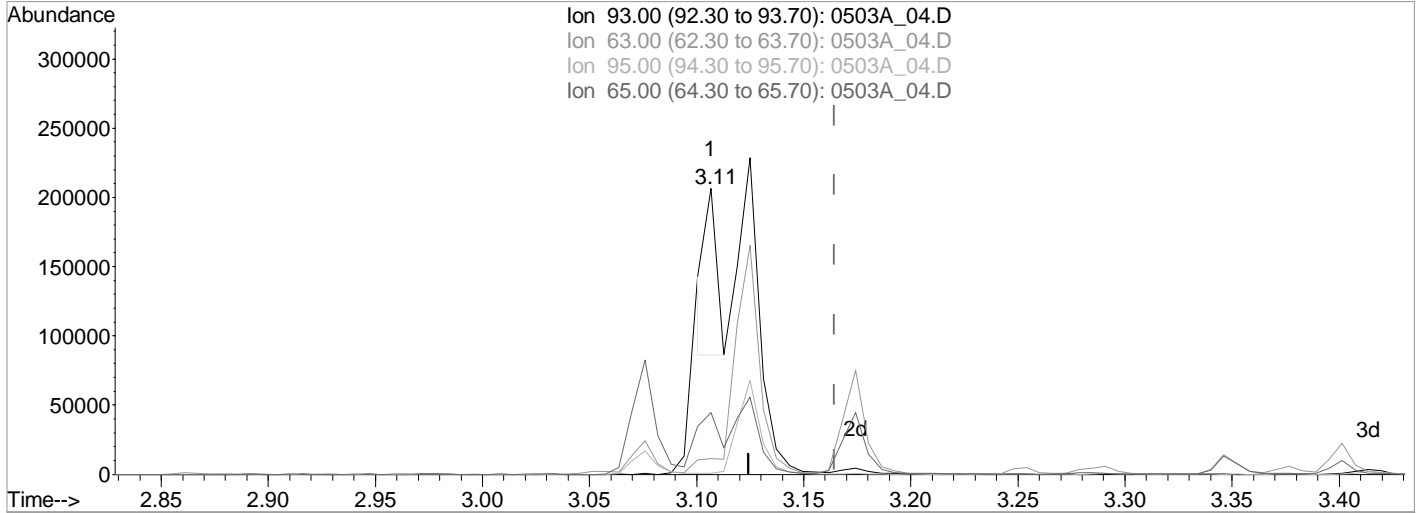




Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:13 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_04.D

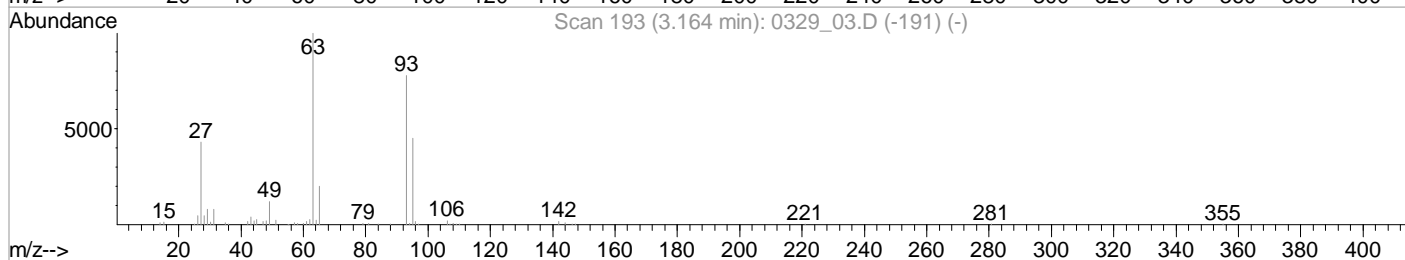
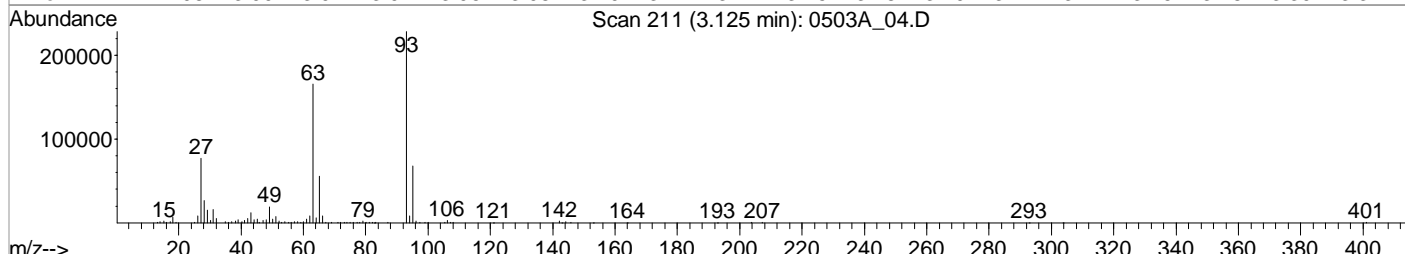
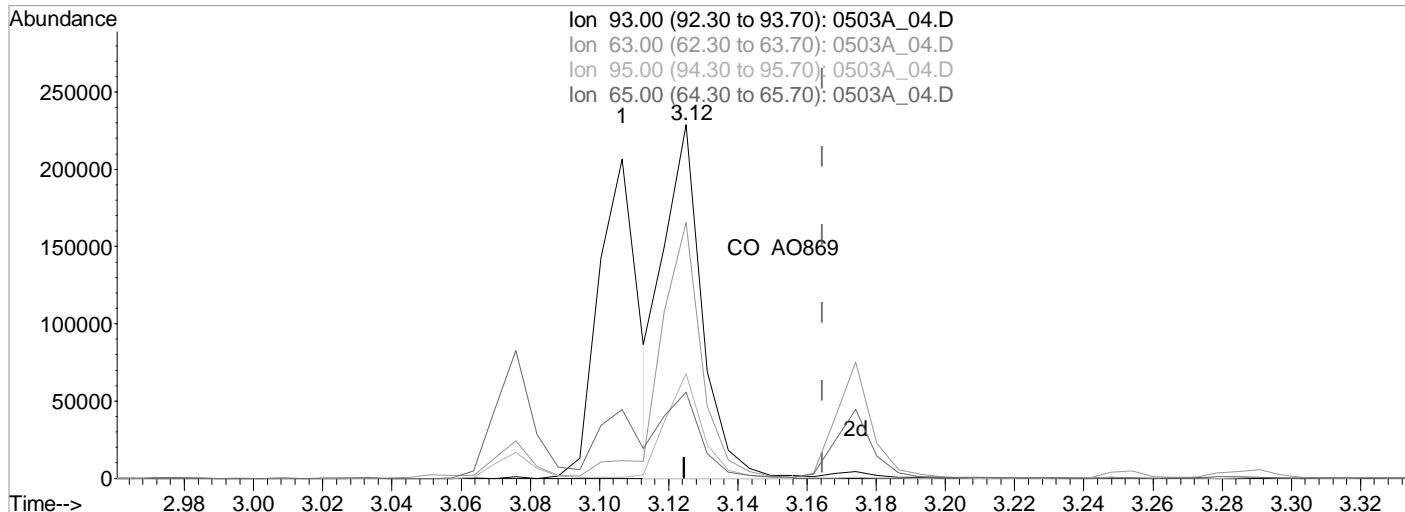
(6) bis(2-Chloroethyl)ether (MT)  
 3.11min (-0.058) 3714.4335754 ppb  
 Qvalue = 35  
 response 44249

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	0.67#
95.00	30.20	0.00#
65.00	24.00	21.16

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:14 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_04.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.12min (-0.039) 14723.8437833 ppb m

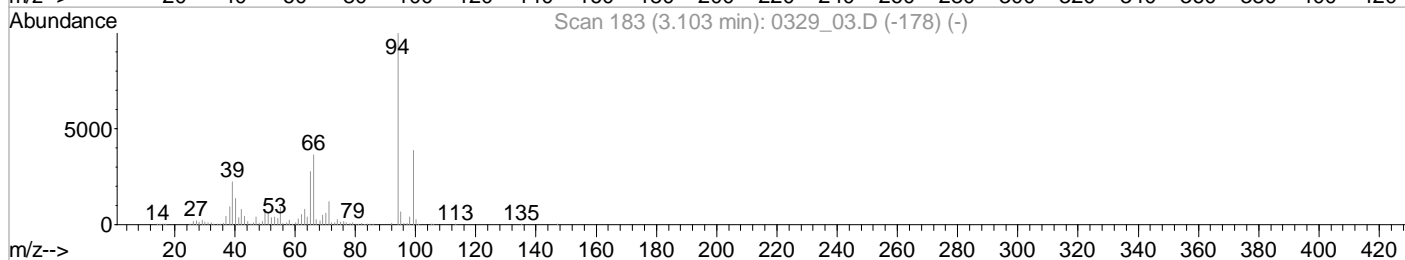
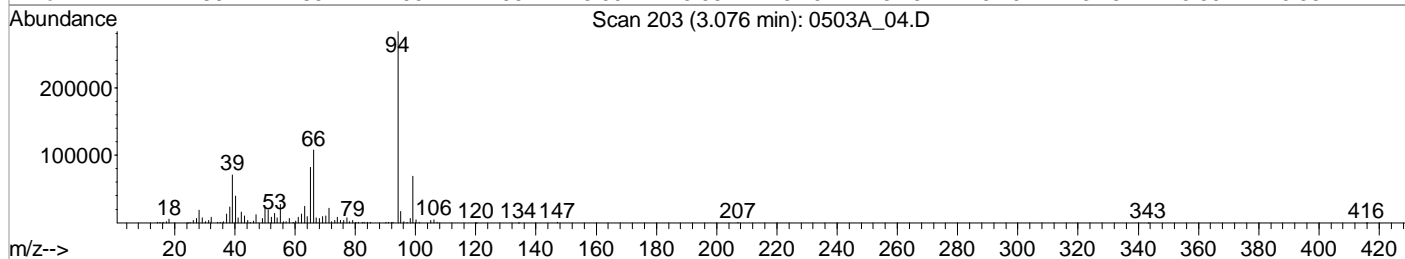
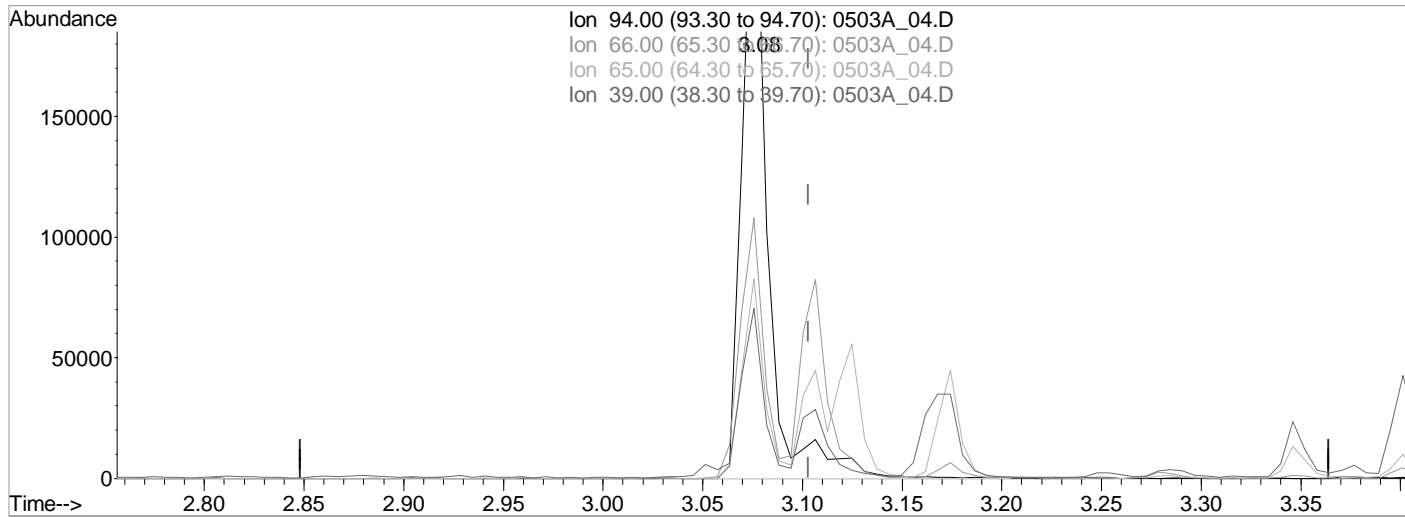
response 175401

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	72.32
95.00	30.20	29.68
65.00	24.00	24.35

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:14 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_04.D

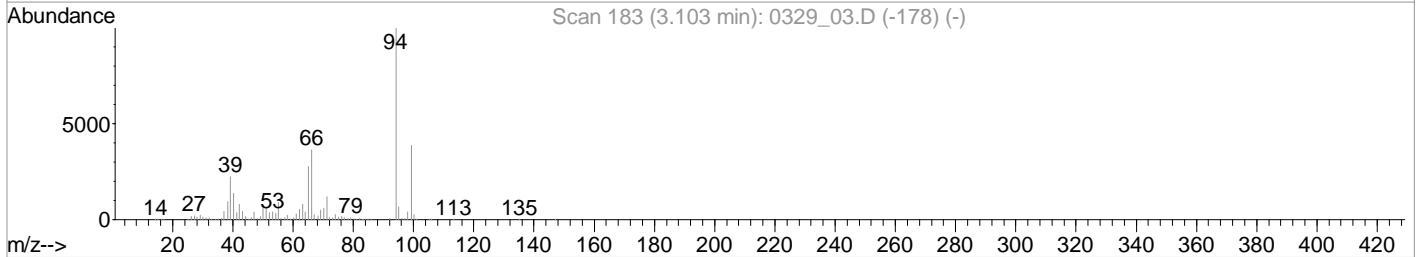
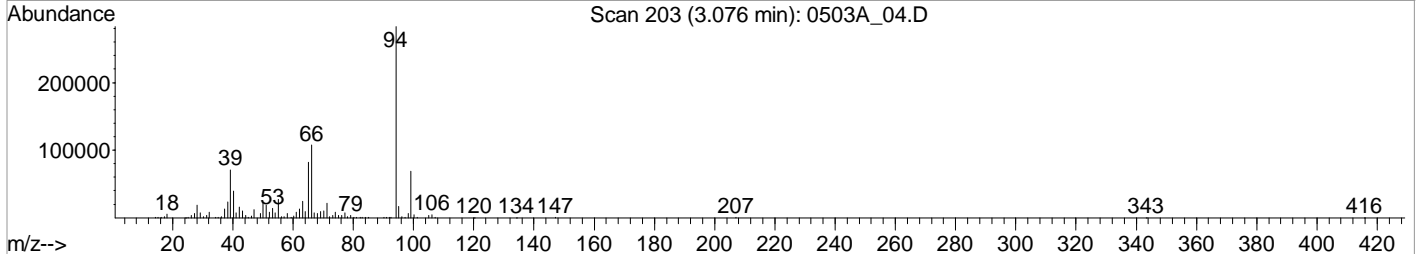
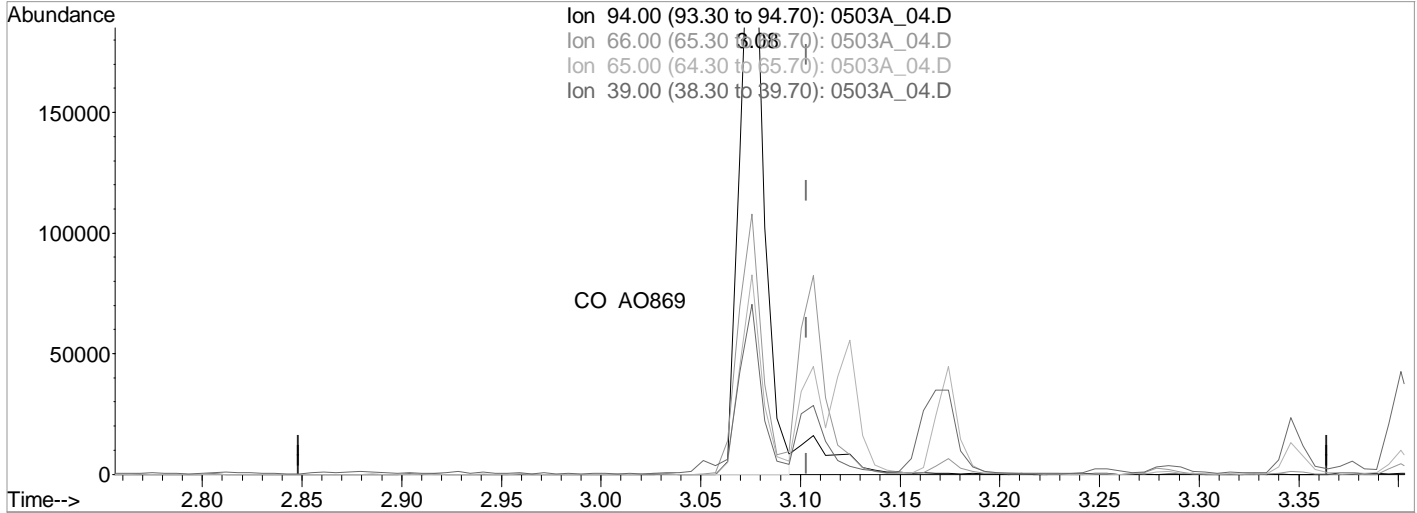
(8) Phenol (MC)  
 3.08min (-0.027) 13339.5476430 ppb  
 Qvalue = 96  
 response 227157

Ion	Exp%	Act%
94.00	100	100
66.00	34.70	38.00
65.00	27.70	29.12
39.00	22.50	24.71

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:14 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_04.D

(8) Phenol (MC)  
 3.08min (-0.027) 11995.8858161 ppb m

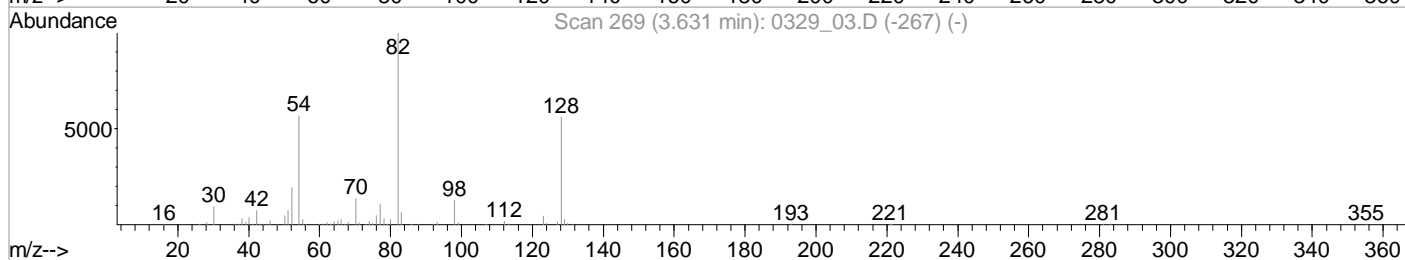
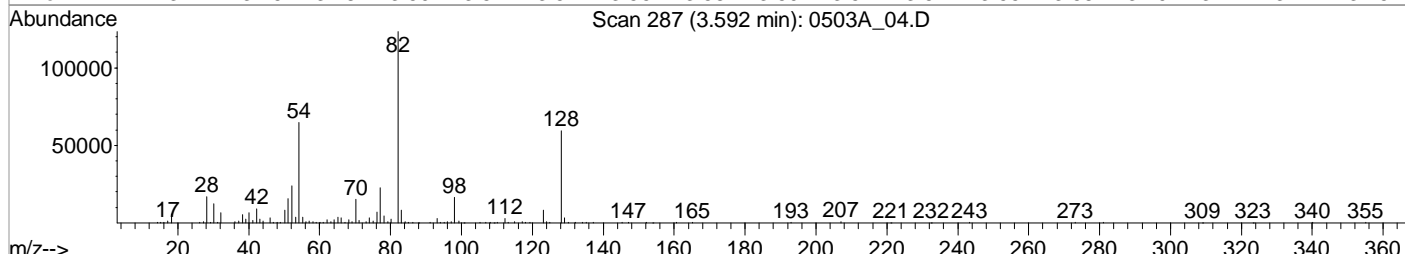
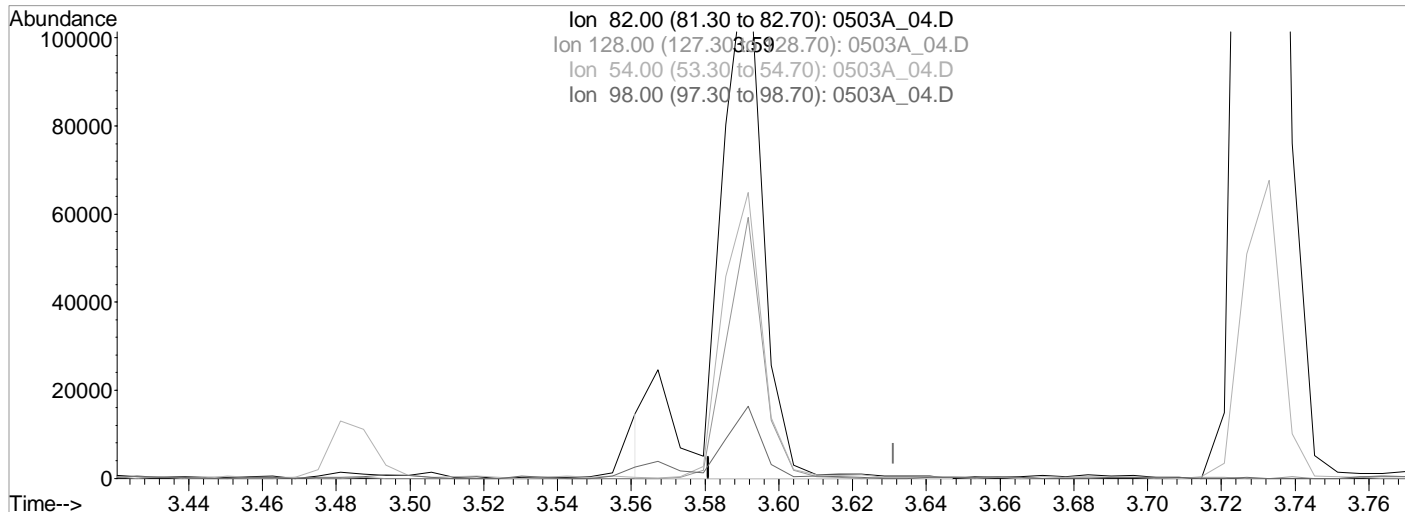
response 204276

Ion	Exp%	Act%
94.00	100	100
66.00	34.70	38.07
65.00	27.70	29.12
39.00	22.50	24.87

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:14 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_04.D

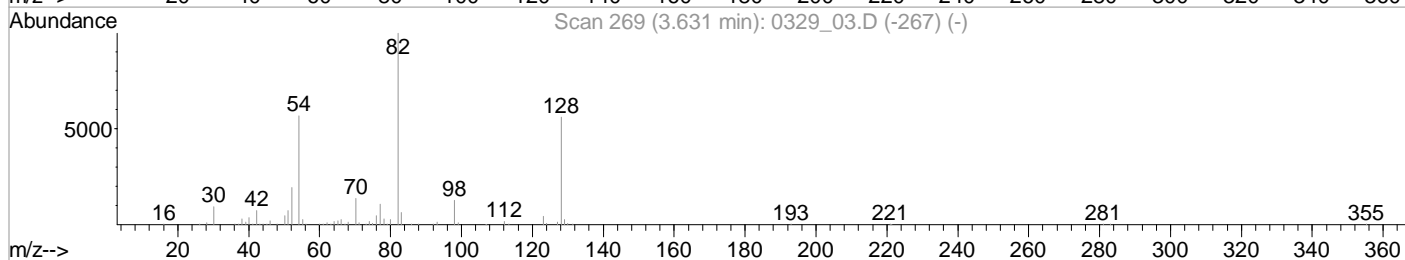
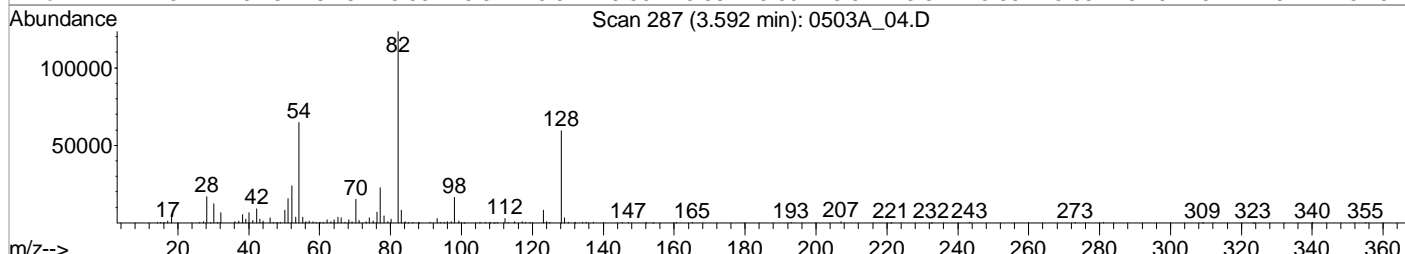
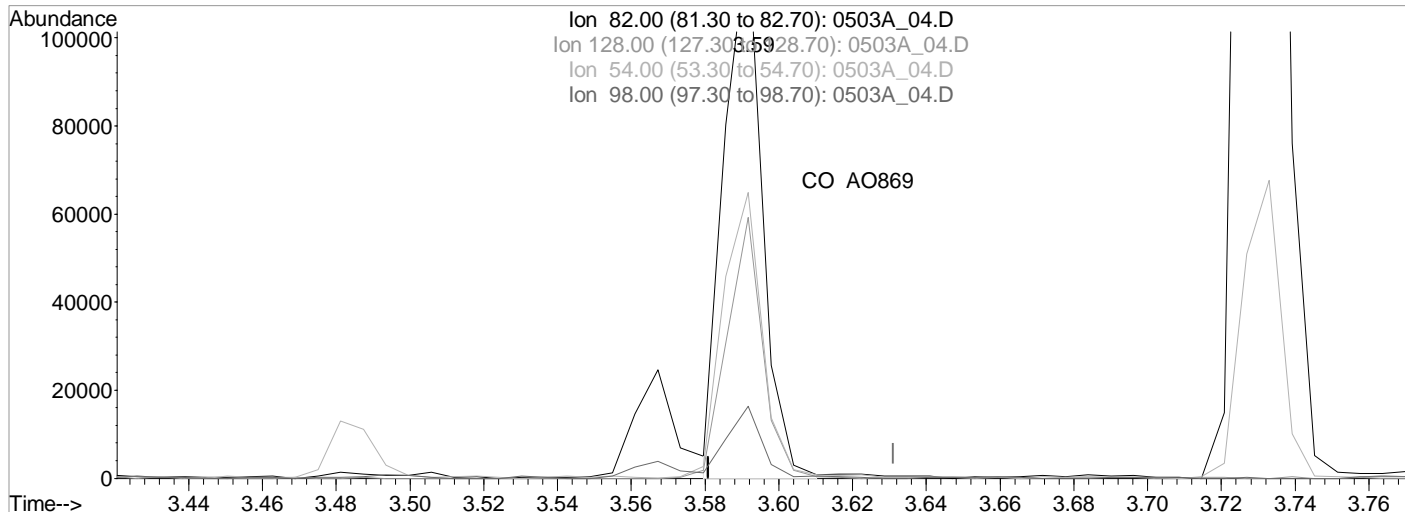
(24) Nitrobenzene-d5 (S)  
 3.59min (-0.039) 6162.1846527 ppb  
 Qvalue = 96  
 response 100681

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	47.96
54.00	56.90	52.30
98.00	11.80	13.14

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:14 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_04.D

(24) Nitrobenzene-d5 (S)  
 3.59min (-0.039) 5258.9206693 ppb m

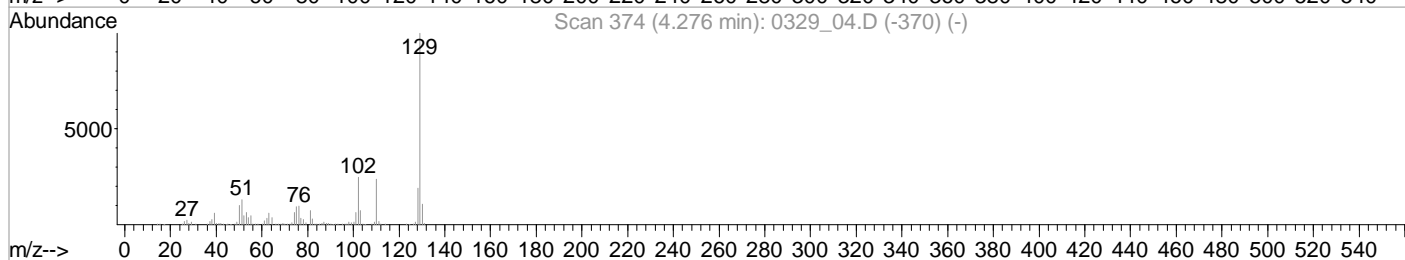
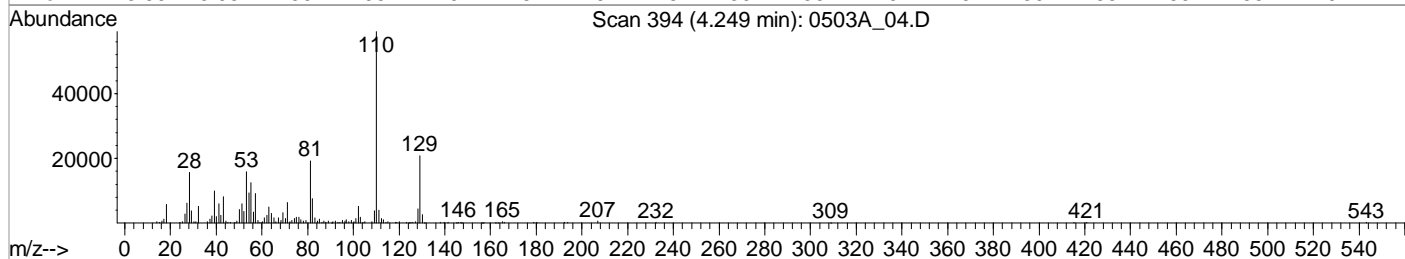
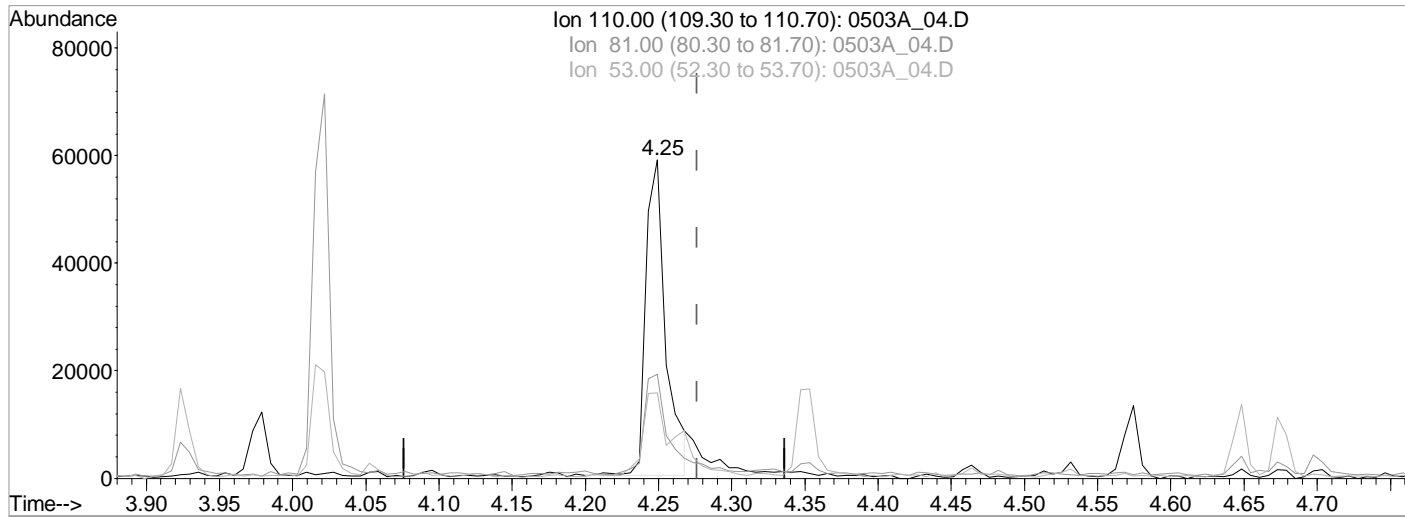
response 85923

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	47.96
54.00	56.90	52.46
98.00	11.80	13.28

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:14 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0503A\_04.D

(37) Hydroquinone

4.25min (-0.027) 6499.6398714 ppb

Qvalue = 99

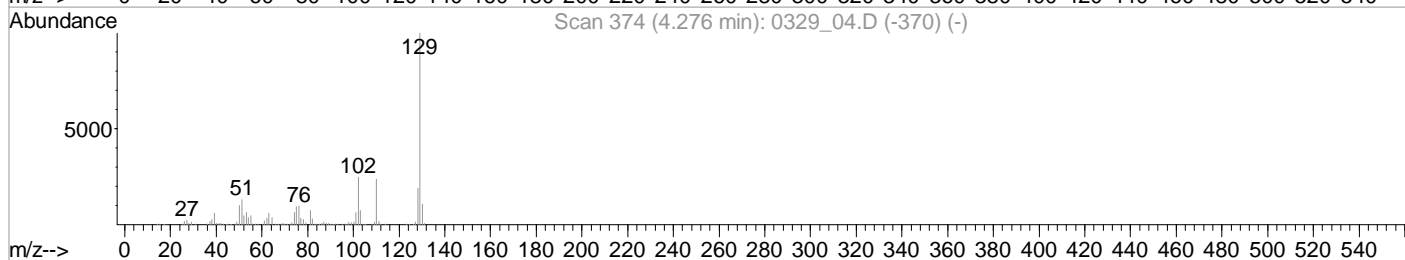
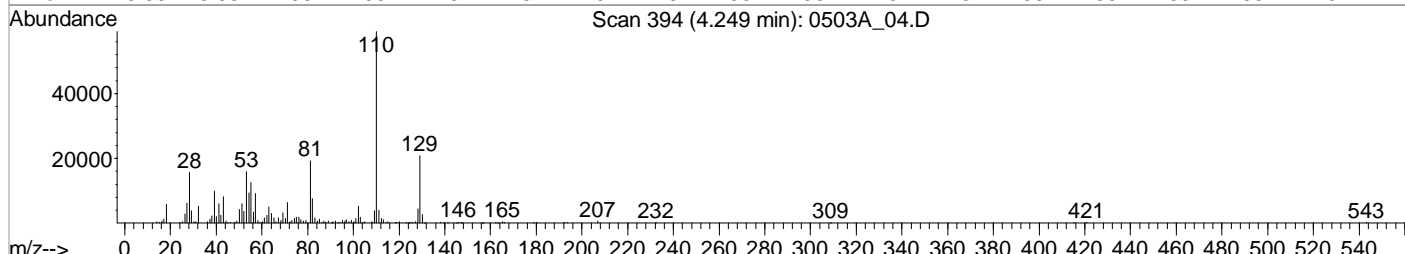
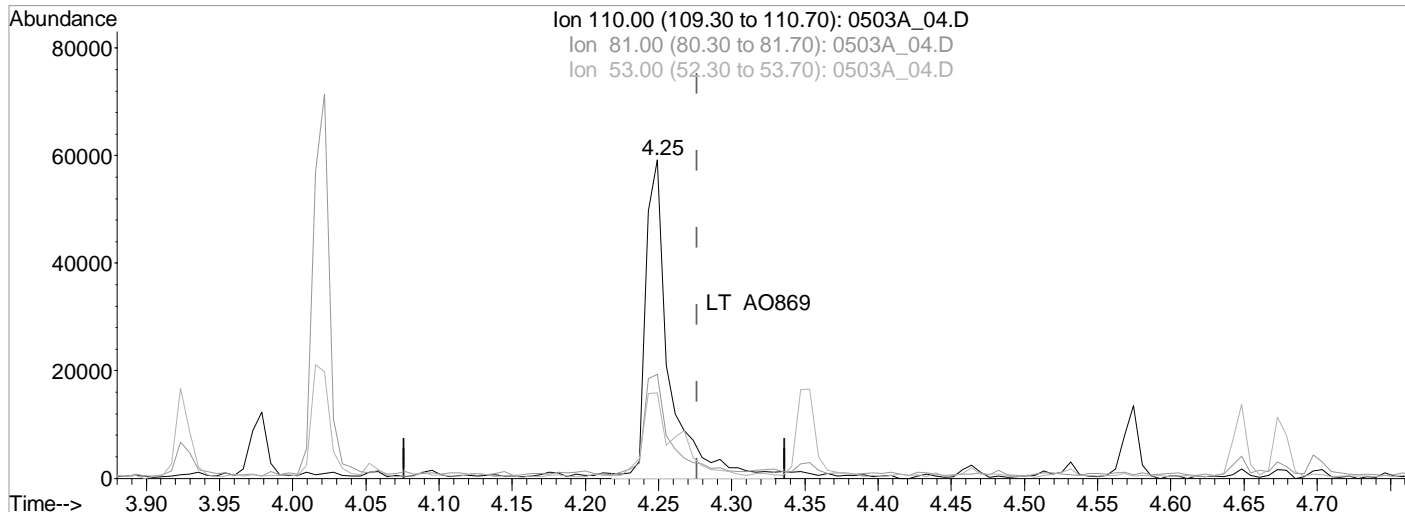
response 56113

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	30.61
53.00	25.90	26.54
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:15 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0503A\_04.D

(37) Hydroquinone  
 4.25min (-0.027) 7874.1707570 ppb m

response 67029

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	32.60
53.00	25.90	26.81
0.00	0.00	0.00



SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3788258-1  
 Client Sample ID: MS  
 Lab File ID: 0504\_27  
 Instrument ID: BNAMS4  
 Analytical Batch: WG1857248  
 Dilution Factor: 2  
 Analytical Method: 8270E  
 Matrix: Solid  
 Total Solids (%): 75.6

SDG: L1487377  
 Collected Date/Time: 04/21/22 09:50  
 Received Date/Time: 04/27/22 09:00  
 Preparation Date/Time: 05/02/22 17:00  
 Analysis Date/Time: 05/04/22 13:43  
 Prep Method: 3546  
 Sample Vol Used: \_\_\_\_\_  
 Initial Wt/Vol: 15.34 g  
 Final Wt/Vol: 1 mL

Analyte	CAS	RT	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	5.20	0.590		0.0143	0.0881
Acenaphthylene	208-96-8	5.08	0.620		0.0124	0.0881
Anthracene	120-12-7	6.36	0.677		0.0157	0.0881
Benzoic Acid	65-85-0	3.84	1.90		0.312	4.42
Benzo(a)anthracene	56-55-3	9.05	0.705		0.0155	0.0881
Benzo(b)fluoranthene	205-99-2	10.98	0.678		0.0164	0.0881
Benzo(k)fluoranthene	207-08-9	11.04	0.688		0.0156	0.0881
Benzo(g,h,i)perylene	191-24-2	14.10	0.592		0.0161	0.0881
Benzo(a)pyrene	50-32-8	11.63	0.753		0.0164	0.0881
Carbazole	86-74-8	6.48	0.698		0.0272	0.881
Chrysene	218-01-9	9.11	0.709		0.0175	0.0881
Dibenz(a,h)anthracene	53-70-3	13.79	0.648		0.0245	0.0881
Dibenzofuran	132-64-9	5.32	0.606		0.0288	0.881
Fluoranthene	206-44-0	7.31	0.717		0.0159	0.0881
Fluorene	86-73-7	5.58	0.635		0.0143	0.0881
Indeno(1,2,3-cd)pyrene	193-39-5	13.75	0.627		0.0249	0.0881
1-Methylnaphthalene	90-12-0	4.53	0.480		0.0113	0.0881
2-Methylnaphthalene	91-57-6	4.46	0.452		0.0114	0.0881
Naphthalene	91-20-3	4.03	0.451		0.0221	0.0881
Phenanthrene	85-01-8	6.32	0.671		0.0175	0.0881
Bis(2-ethylhexyl)phthalate	117-81-7	9.14	0.837		0.112	0.881
Di-n-butyl phthalate	84-74-2	6.75	0.796		0.0302	0.881
Di-n-octyl phthalate	117-84-0	10.35	0.825		0.0595	0.881
Pyrene	129-00-0	7.53	0.692		0.0172	0.0881
3&4-Methyl Phenol	3&4-Methyl Phenol	3.48	0.734		0.0275	0.881
Pentachlorophenol	87-86-5	6.15	0.697		0.0237	0.881
Phenol	108-95-2	3.08	0.622		0.0354	0.881

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D  
 Acq On : 4 May 2022 1:43 pm  
 Sample : MS 1x WG1857248 L1486885-01  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022

Vial: 33  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	75706	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	350717	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	162768	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	314291	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	295235	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	306410	8000.00	ppb	-0.12

System Monitoring Compounds

4) 2-Fluorophenol	2.63	112	87906	7145.6341768	ppb	-0.02
Spiked Amount	20000.000	Range 20 - 120	Recovery =	35.73%		
7) Phenol-d5	3.07	99	110042	7452.8163131	ppb	-0.03
Spiked Amount	20000.000	Range 20 - 120	Recovery =	37.26%		
24) Nitrobenzene-d5	3.59	82	44107	2963.9803416	ppb	-0.04
Spiked Amount	10000.000	Range 18 - 125	Recovery =	29.64%		
50) 2-Fluorobiphenyl	4.70	172	86530	3151.3810250	ppb	-0.04
Spiked Amount	10000.000	Range 28 - 120	Recovery =	31.51%		
73) 2,4,6-Tribromophenol	5.76	330	32349	9092.3950518	ppb	-0.05
Spiked Amount	20000.000	Range 17 - 137	Recovery =	45.46%		
87) p-Terphenyl-d14	7.69	244	141240	3500.6108629	ppb	-0.07
Spiked Amount	10000.000	Range 13 - 131	Recovery =	35.01%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.03	79	75865	6476.4717339	ppb	90
3) N-Nitrosodimethylamine	2.01	42	43499	6918.6710715	ppb	86
5) Aniline	3.11	66	34916	4984.7810519	ppb #	32
6) bis(2-Chloroethyl)ether	3.12	93	93236m	8569.2854227	ppb	
8) Phenol	3.08	94	112013	7202.0353082	ppb	94
9) Benzaldehyde	3.06	105	62844	18663.4720976	ppb #	90
10) 2-Chlorophenol	3.17	128	83862	6734.4326029	ppb	92
11) n-Decane	3.16	41	37450	5105.7685499	ppb #	98
12) 1,3-Dichlorobenzene	3.25	146	78380	5566.7379733	ppb	96
13) 1,4-Dichlorobenzene	3.29	146	77768	5366.1928363	ppb	93
14) Benzyl Alcohol	3.35	79	65999	6852.5596901	ppb	95
15) 1,2-Dichlorobenzene	3.38	146	79093	5937.0840168	ppb	96
16) bis(2-Chloroisopropyl)ethe	3.41	121	27122	5949.5690596	ppb #	23
17) 2,2-oxybis(1-chloropropane	3.41	121	27122	5949.5690596	ppb #	23
18) 2-Methylphenol	3.40	108	84794	7535.5521149	ppb	94
19) Hexachloroethane	3.57	117	14617	2778.5361317	ppb	96
20) N-Nitrosodi-n-propylamine	3.49	70	63912	7772.1546987	ppb	95
21) 3&4-Methyl phenol	3.48	107	108863	8517.2125580	ppb	93
22) Acetophenone	3.50	105	112548	7188.7487917	ppb #	69
25) Nitrobenzene	3.60	77	97028	6668.5013378	ppb	91
26) Isophorone	3.73	82	174510	6685.9164490	ppb	91
27) 2-Nitrophenol	3.78	139	43225	5894.0488465	ppb	92
28) 2,4-Dimethylphenol	3.79	107	88106	6468.8637686	ppb	93
29) bis(2-Chlorethoxy)methane	3.84	93	103933	6227.7174337	ppb	94
30) 2,4-Dichlorophenol	3.92	162	69748	6078.8721627	ppb	92
31) Benzoic Acid	3.84	105	126352	22019.4970406	ppb	90
32) 1,2,4-Trichlorobenzene	3.97	180	69479	5409.6720267	ppb	96
33) alpha-terpineol	4.02	59	83835	7620.0605251	ppb	97
34) Naphthalene	4.03	128	233301	5223.7632297	ppb	99
35) 4-Chloroaniline	4.05	65	23900	4605.6370236	ppb #	45
36) Hexachloro-1,3-butadiene	4.09	225	39343	5615.2077653	ppb	97
37) Hydroquinone	4.24	110	51618m	6570.2461911	ppb	
38) Quinoline	4.24	129	172231	7369.5837797	ppb	98

(#) = qualifier out of range (m) = manual integration

0504\_27.D S804C29V.M Thu May 05 12:48:13 2022

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D  
 Acq On : 4 May 2022 1:43 pm  
 Sample : MS 1x WG1857248 L1486885-01  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022

Vial: 33  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) Caprolactam	4.26	113	32825	13583.0645884	ppb #	79
40) 4-Chloro-3-methylphenol	4.35	107	83639	7231.4910915	ppb	84
41) 2-Methylnaphthalene	4.46	142	152683	5246.4957183	ppb #	95
42) 1-Methylnaphthalene	4.53	142	152114	5562.0008180	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	4.57	216	66747	7110.2709581	ppb	98
44) Diphenyl Ether	4.84	170	99489	6643.7702593	ug/ml#	80
45) Diphenyl Oxide	4.84	170	99489	6643.7702593	ug/ml#	80
48) 2,4,6-Trichlorophenol	4.64	196	52029	7369.8446635	ppb #	88
49) 2,4,5-Trichlorophenol	4.67	196	57577	7836.6508029	ppb	97
51) Biphenyl	4.76	154	195482	6411.3253977	ppb	100
52) 2-Chloronaphthalene	4.79	162	150813	6481.2317849	ppb	97
53) 2-Nitroaniline	4.85	138	61284	8496.3635466	ppb #	77
54) Acenaphthylene	5.08	152	260360	7192.2996864	ppb	99
55) Dimethyl phthalate	4.97	163	189240	7849.8412996	ppb	98
56) 2,6-Dinitrotoluene	5.02	165	43589	7798.5844546	ppb #	73
57) 3-Nitroaniline	5.14	138	36982	6145.3522858	ppb #	87
58) Acenaphthene	5.20	153	162866	6839.1821075	ppb	95
59) 2,4-Dinitrophenol	5.22	184	15701	5411.7017090	ppb #	1
60) Dibenzofuran	5.32	168	231986	7024.4593132	ppb	95
61) 2,4-Dinitrotoluene	5.31	165	63325	9047.0683354	ppb	85
62) 2,3,4,6-Tetrachlorophenol	5.41	232	41745	8993.6152771	ppb	93
63) 4-Nitrophenol	5.26	139	47007	9456.6979268	ppb #	68
64) Fluorene	5.58	166	197230	7362.3825786	ppb	100
65) 4-Chlorophenyl-phenylether	5.57	204	88205	6943.1070847	ppb	94
66) Diethyl phthalate	5.47	149	206950	8379.1621633	ppb	98
67) 4-Nitroaniline	5.59	138	41832	7421.7741063	ppb #	76
68) Azobenzene	5.69	77	234777	9529.5761313	ppb	94
69) Atrazine	6.06	200	66687	10018.8303540	ppb	99
71) 4,6-Dinitro-2-methylphenol	5.61	198	27128	6535.2196672	ppb	96
72) N-Nitrosodiphenylamine	5.66	169	173289	7255.8288519	ppb	98
74) 4-Bromophenyl-phenylether	5.94	248	57518	7420.6601848	ppb	92
75) Hexachlorobenzene	5.99	284	63091	7315.2716756	ppb	98
76) n-octadecane	6.18	55	40570	8436.5186459	ppb	97
77) Pentachlorophenol	6.15	266	38480	8082.3293182	ppb	92
78) Phenanthrene	6.32	178	321765	7781.1378785	ppb	99
79) Anthracene	6.36	178	328921	7858.2739249	ppb	100
80) Carbazole	6.48	167	309303	8099.1271140	ppb	98
81) Di-n-butyl phthalate	6.75	149	412792	9232.9479289	ppb	99
82) 2-nitrodiphenylamine	6.88	167	94589	11933.0688059	ppb #	100
83) Fluoranthene	7.31	202	365173	8312.6054217	ppb	99
86) Pyrene	7.53	202	381375	8028.2024242	ppb	99
88) Benzylbutyl phthalate	8.27	149	182538	9397.3391060	ppb	91
89) 3,3-Dichlorobenzidine	9.03	252	159242	10476.8081790	ppb	94
90) Benzo(a)anthracene	9.05	228	347546	8175.2266917	ppb	98
91) Chrysene	9.11	228	338683	8220.7657157	ppb	98
92) bis(2-Ethylhexyl)phthalate	9.14	149	259547	9700.6812088	ppb	96
93) Di-n-octyl phthalate	10.35	149	425445	9571.8007133	ppb	99
95) Benzo(b)fluoranthene	10.98	252	343581	7871.3244830	ppb	98
96) Benzo(k)fluoranthene	11.04	252	342670	7970.0099778	ppb	95
97) Benzo(a)pyrene	11.63	252	329781	8723.1403078	ppb	97
98) Indeno(1,2,3-cd)pyrene	13.75	276	270080m	7271.2847976	ppb	
99) Dibenz(a,h)anthracene	13.79	278	297211	7507.9736283	ppb	97
100) Benzo(g,h,i)perylene	14.10	276	265741	6873.7988021	ppb	98

(#) = qualifier out of range (m) = manual integration

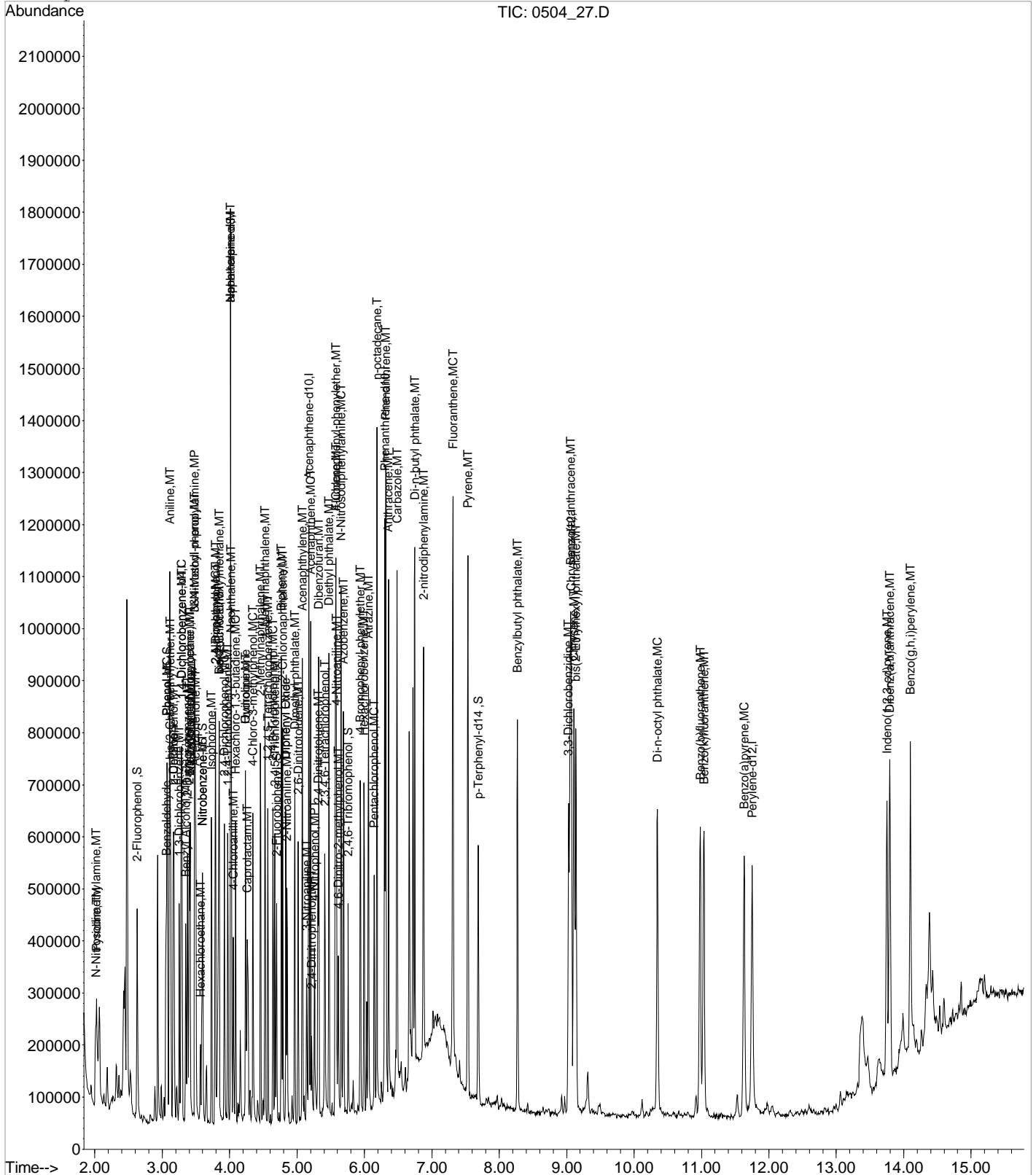
0504\_27.D S804C29V.M Thu May 05 12:48:13 2022

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D
Acq On : 4 May 2022 1:43 pm
Sample : MS 1x WG1857248 L1486885-01
Misc : SOIL ISTD 22D28020 exp 10/28/22
MS Integration Params: RTEINT.P
Quant Time: May 5 12:48 2022

Vial: 33
Operator: 3545
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804C29V.RES

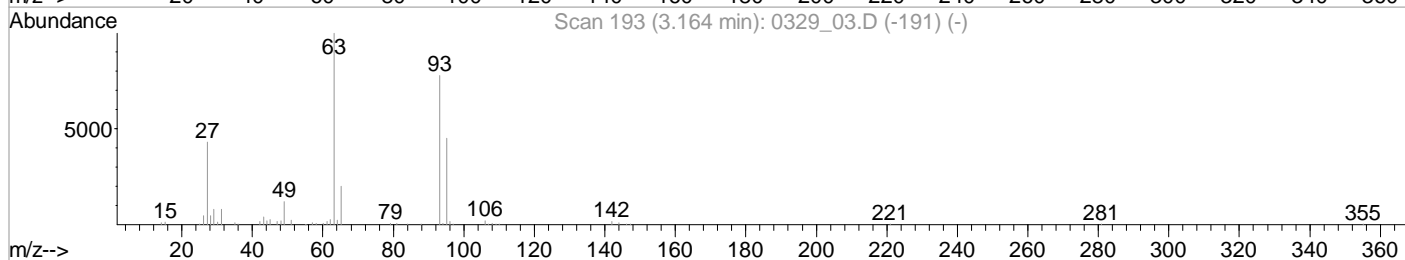
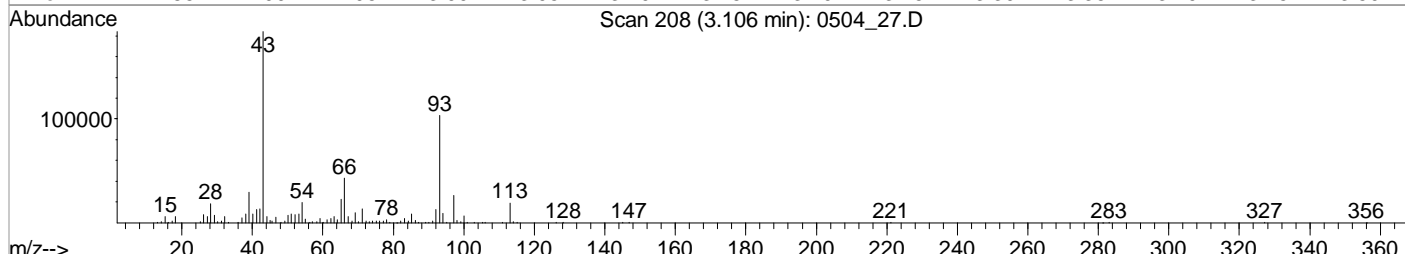
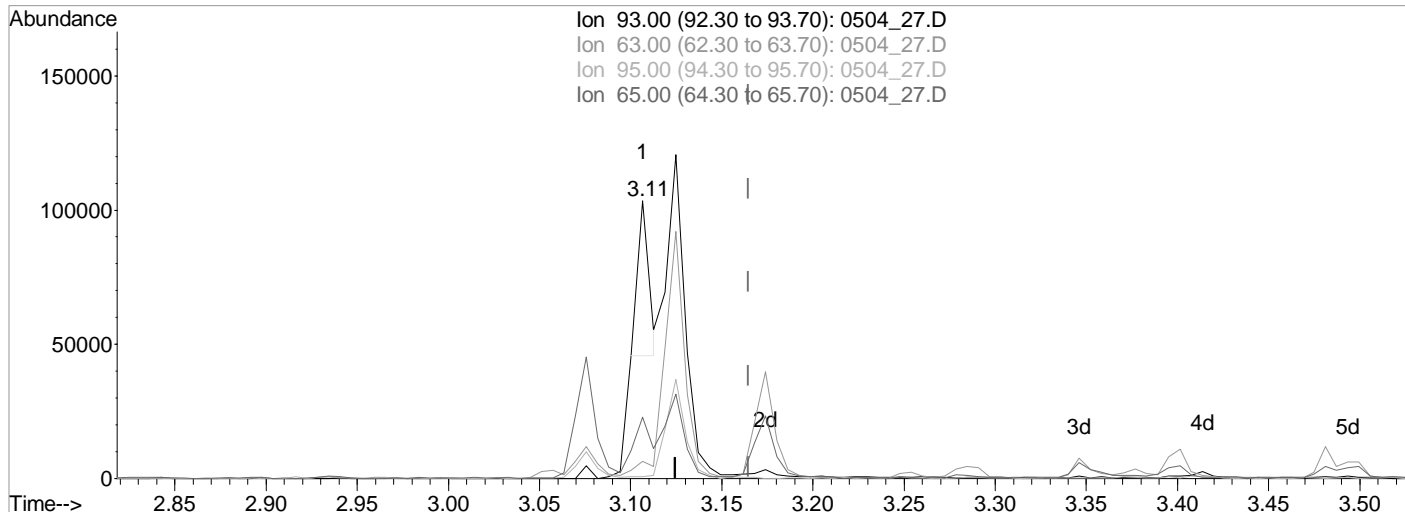
Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Tue Mar 29 09:44:27 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D Vial: 33  
 Acq On : 4 May 2022 1:43 pm Operator: 3545  
 Sample : MS 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 14:29 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_27.D

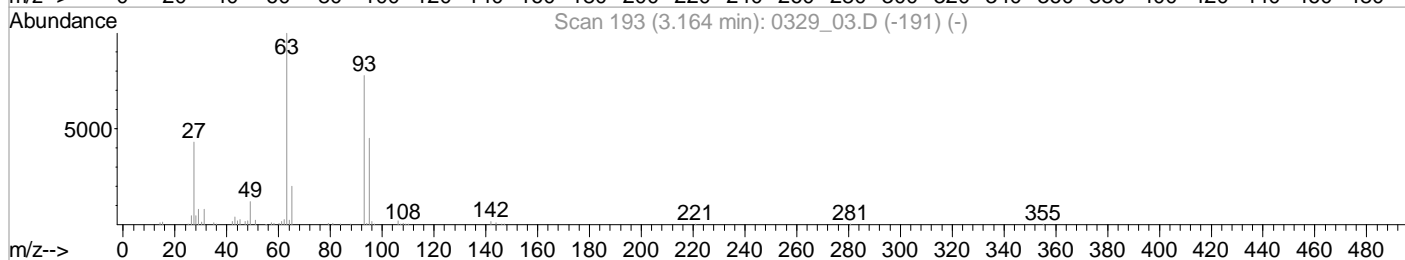
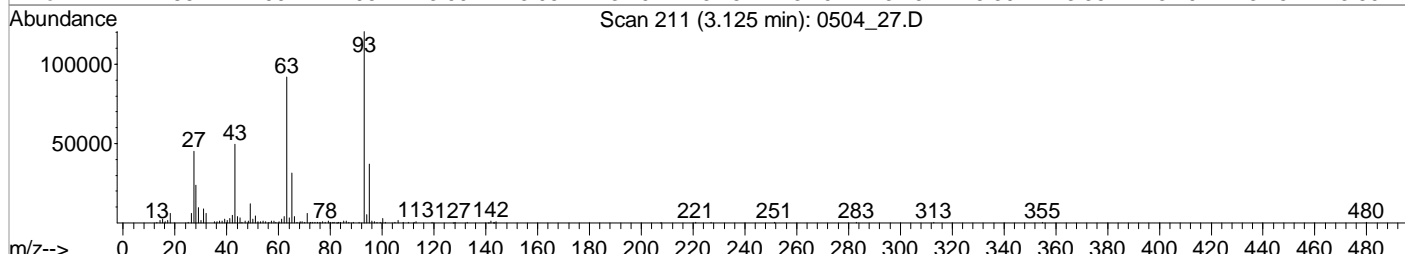
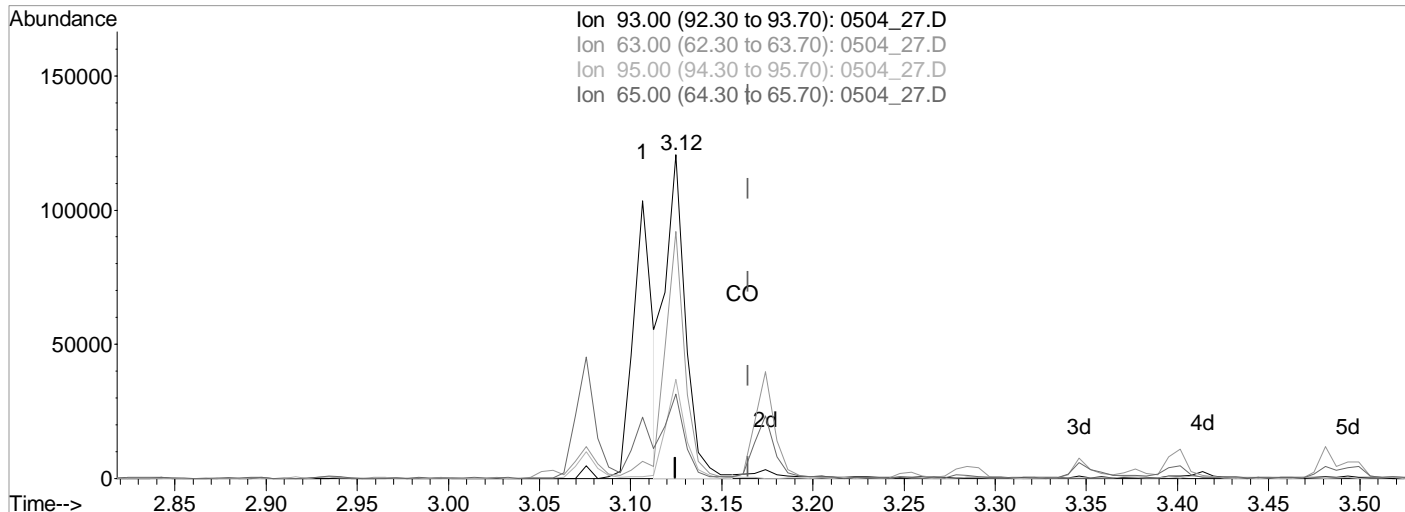
(6) bis(2-Chloroethyl)ether (MT)  
 3.11min (-0.058) 2274.3954810 ppb  
 Qvalue = 38  
 response 24746

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.81#
95.00	30.20	0.00#
65.00	24.00	21.29

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D Vial: 33  
 Acq On : 4 May 2022 1:43 pm Operator: 3545  
 Sample : MS 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:47 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_27.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.12min (-0.040) 8569.2854227 ppb m

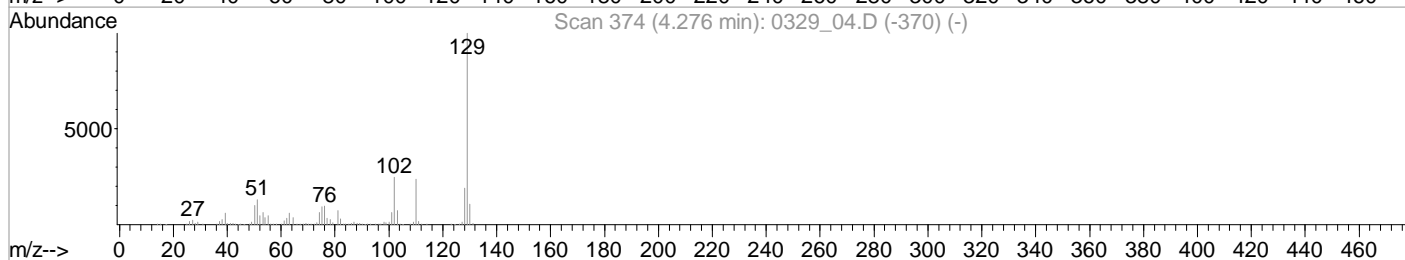
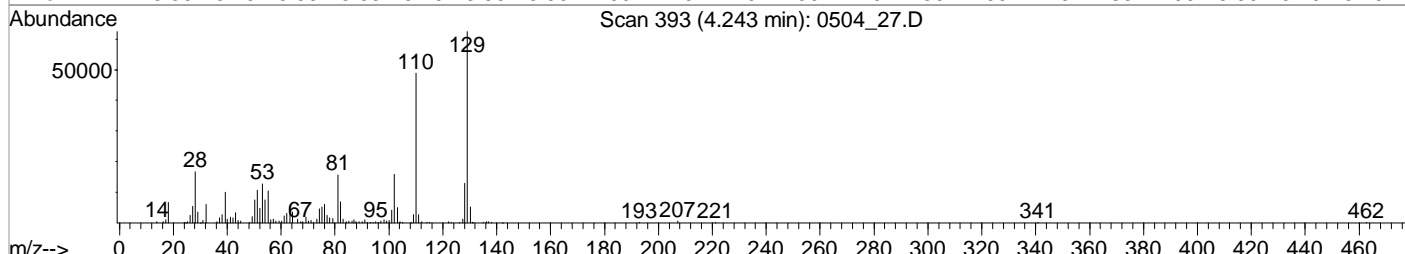
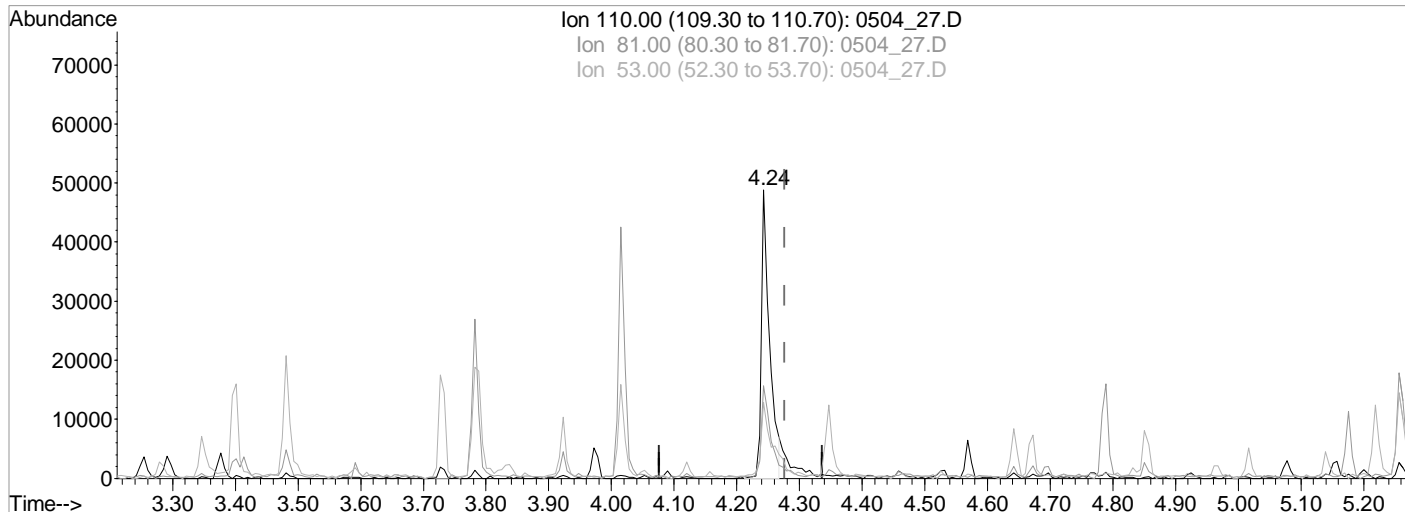
response 93236

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	76.14
95.00	30.20	30.57
65.00	24.00	25.96

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D Vial: 33  
 Acq On : 4 May 2022 1:43 pm Operator: 3545  
 Sample : MS 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:47 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0504\_27.D

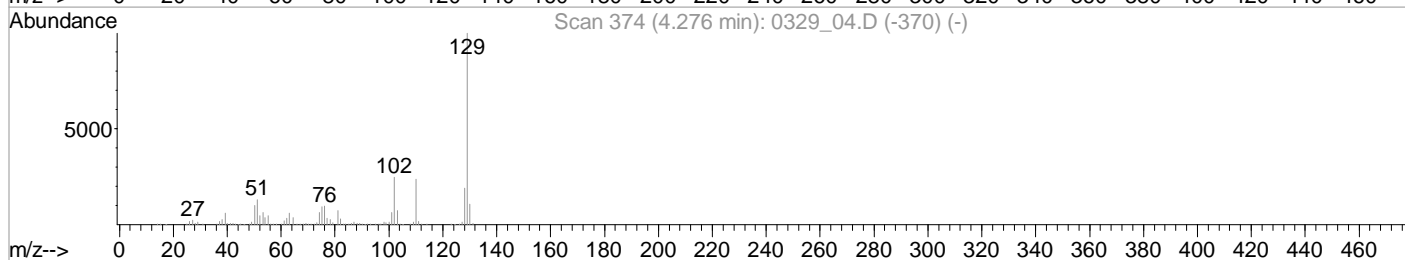
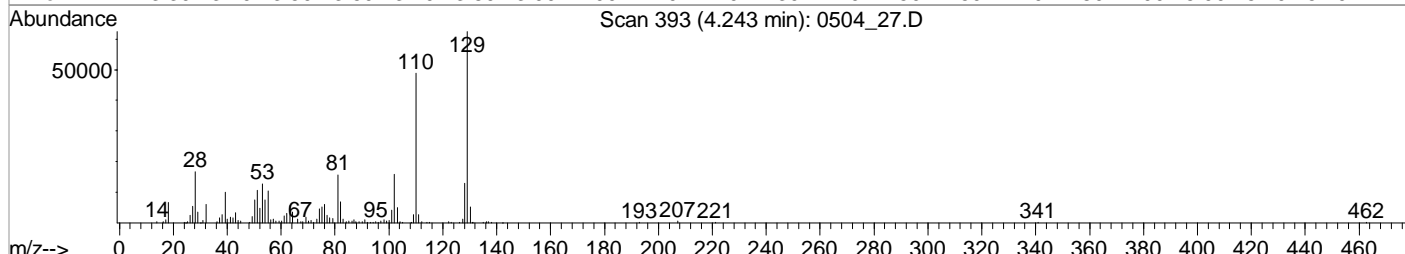
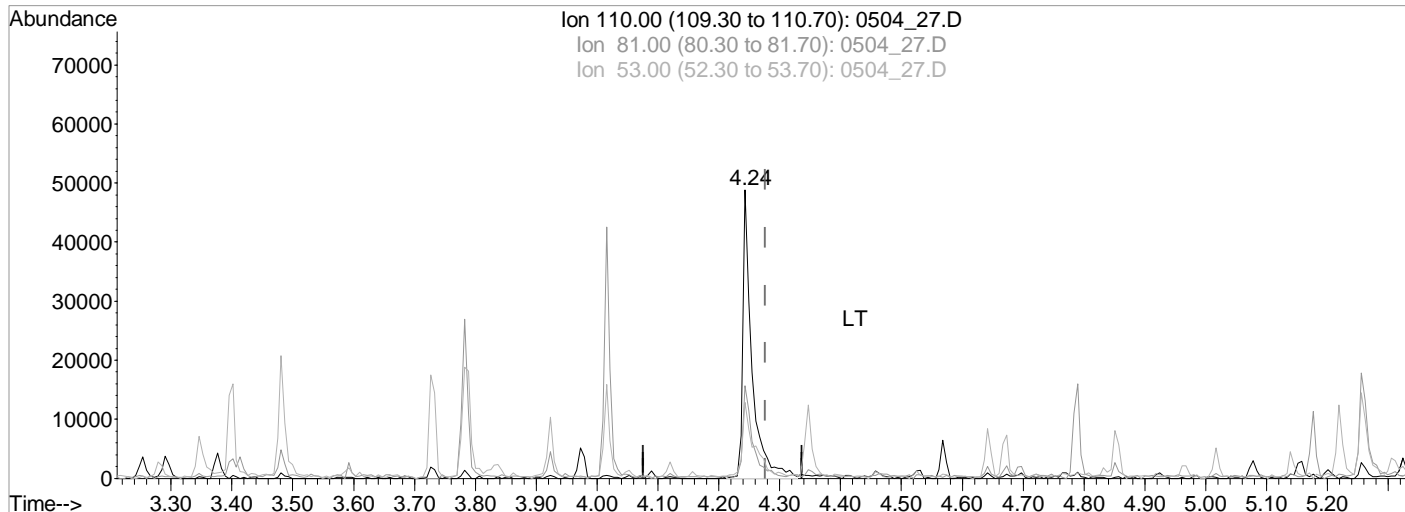
(37) Hydroquinone  
 4.24min (-0.033) 5625.5699164 ppb  
 Qvalue = 98  
 response 44785

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	31.33
53.00	25.90	25.46
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D Vial: 33  
 Acq On : 4 May 2022 1:43 pm Operator: 3545  
 Sample : MS 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:47 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0504\_27.D

(37) Hydroquinone  
 4.24min (-0.033) 6570.2461911 ppb m

response 51618

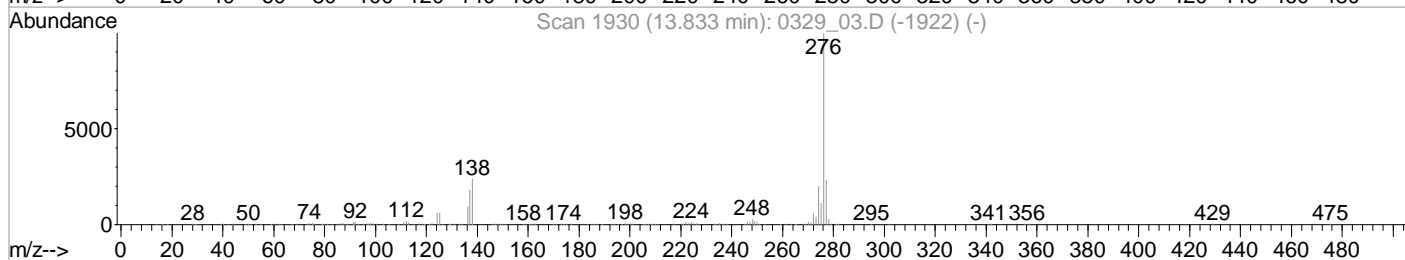
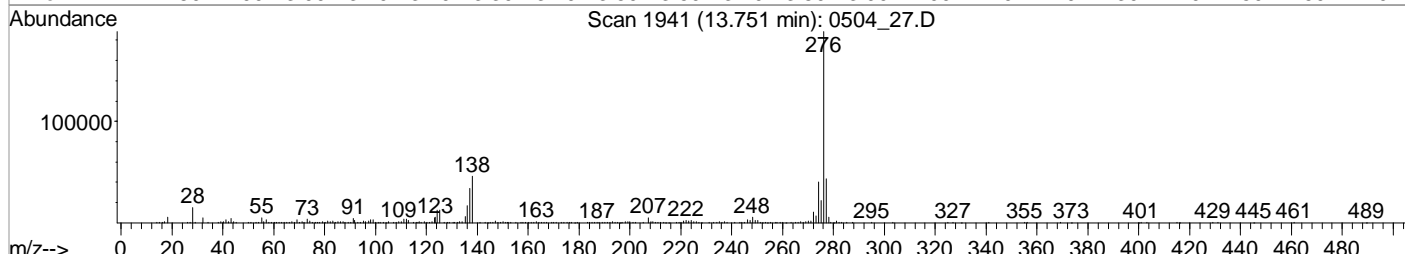
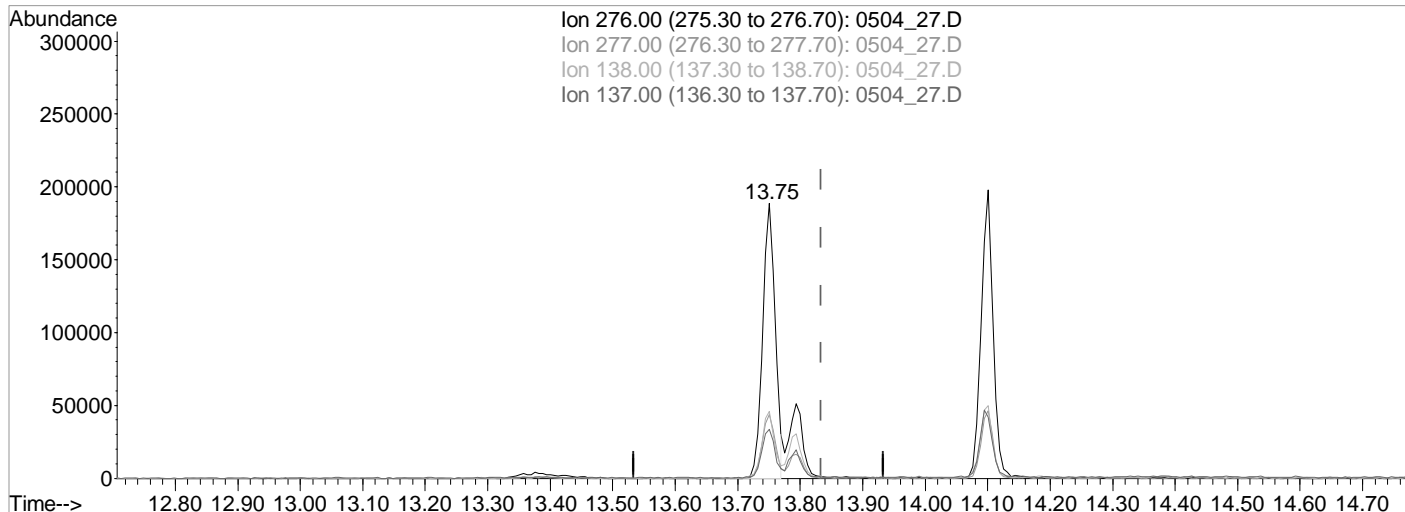
Ion	Exp%	Act%
110.00	100	100
81.00	29.80	31.99
53.00	25.90	26.26
0.00	0.00	0.00



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D Vial: 33  
 Acq On : 4 May 2022 1:43 pm Operator: 3545  
 Sample : MS 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:47 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_27.D

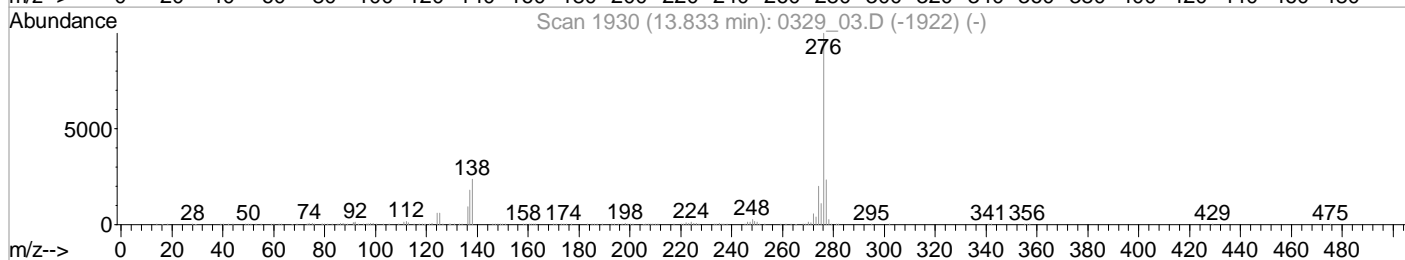
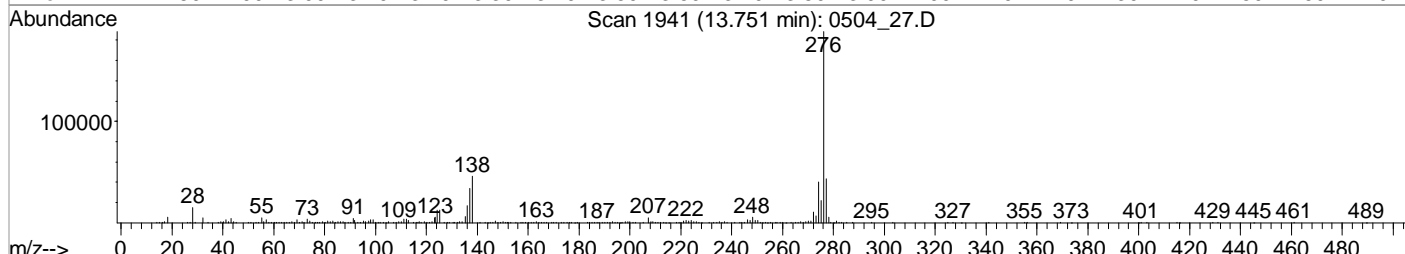
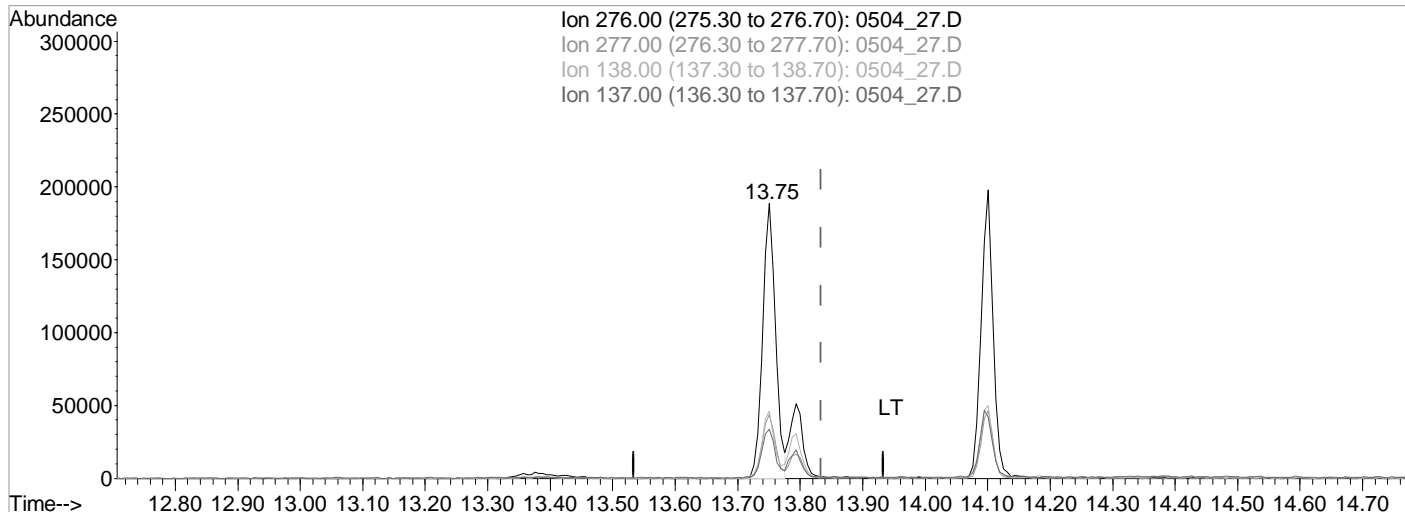
(98) Indeno(1,2,3-cd)pyrene (MT)  
 13.75min (-0.083) 7100.2448379 ppb  
 Qvalue = 98  
 response 263727

Ion	Exp%	Act%
276.00	100	100
277.00	24.10	23.06
138.00	25.30	24.14
137.00	18.00	17.68

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D Vial: 33  
 Acq On : 4 May 2022 1:43 pm Operator: 3545  
 Sample : MS 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_27.D

(98) Indeno(1,2,3-cd)pyrene (MT)  
 13.75min (-0.083) 7271.2847976 ppb m

response 270080

Ion	Exp%	Act%
276.00	100	100
277.00	24.10	23.06
138.00	25.30	24.36
137.00	18.00	17.89

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3788258-2  
**Client Sample ID:** MSD  
**Lab File ID:** 0504\_28  
**Instrument ID:** BNAMS4  
**Analytical Batch:** WG1857248  
**Dilution Factor:** 2  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** 75.6

**SDG:** L1487377  
**Collected Date/Time:** 04/21/22 09:50  
**Received Date/Time:** 04/27/22 09:00  
**Preparation Date/Time:** 05/02/22 17:00  
**Analysis Date/Time:** 05/04/22 14:03  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15.59 g  
**Final Wt/Vol:** 1 mL

Analyte	CAS	RT	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	5.20	0.417	J3	0.0143	0.0881
Acenaphthylene	208-96-8	5.08	0.435	J3	0.0124	0.0881
Anthracene	120-12-7	6.36	0.555		0.0157	0.0881
Benzoic Acid	65-85-0	3.83	1.20	J3	0.312	4.42
Benzo(a)anthracene	56-55-3	9.05	0.599		0.0155	0.0881
Benzo(b)fluoranthene	205-99-2	10.98	0.589		0.0164	0.0881
Benzo(k)fluoranthene	207-08-9	11.04	0.599		0.0156	0.0881
Benzo(g,h,i)perylene	191-24-2	14.09	0.517		0.0161	0.0881
Benzo(a)pyrene	50-32-8	11.63	0.653		0.0164	0.0881
Carbazole	86-74-8	6.48	0.583		0.0272	0.881
Chrysene	218-01-9	9.11	0.607		0.0175	0.0881
Dibenz(a,h)anthracene	53-70-3	13.79	0.548		0.0245	0.0881
Dibenzofuran	132-64-9	5.32	0.435	J3	0.0288	0.881
Fluoranthene	206-44-0	7.31	0.592		0.0159	0.0881
Fluorene	86-73-7	5.58	0.469		0.0143	0.0881
Indeno(1,2,3-cd)pyrene	193-39-5	13.75	0.544		0.0249	0.0881
1-Methylnaphthalene	90-12-0	4.53	0.333	J3	0.0113	0.0881
2-Methylnaphthalene	91-57-6	4.46	0.313		0.0114	0.0881
Naphthalene	91-20-3	4.03	0.312	J3	0.0221	0.0881
Phenanthrene	85-01-8	6.32	0.546		0.0175	0.0881
Bis(2-ethylhexyl)phthalate	117-81-7	9.14	0.701		0.112	0.881
Di-n-butyl phthalate	84-74-2	6.74	0.639		0.0302	0.881
Di-n-octyl phthalate	117-84-0	10.35	0.706		0.0595	0.881
Pyrene	129-00-0	7.53	0.587		0.0172	0.0881
3&4-Methyl Phenol	3&4-Methyl Phenol	3.48	0.480	J3	0.0275	0.881
Pentachlorophenol	87-86-5	6.15	0.595		0.0237	0.881
Phenol	108-95-2	3.08	0.406	J3	0.0354	0.881

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D Vial: 34  
 Acq On : 4 May 2022 2:03 pm Operator: 3545  
 Sample : MSD 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	82044	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	356439	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	167362	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	316041	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	282631	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	287421	8000.00	ppb	-0.11

System Monitoring Compounds

4) 2-Fluorophenol	2.63	112	72950	5471.8102743	ppb	-0.02
Spiked Amount 20000.000	Range 20	- 120	Recovery	=	27.36%	
7) Phenol-d5	3.07	99	92965	5809.8496080	ppb	-0.03
Spiked Amount 20000.000	Range 20	- 120	Recovery	=	29.05%	
24) Nitrobenzene-d5	3.59	82	37835	2501.6879609	ppb	-0.04
Spiked Amount 10000.000	Range 18	- 125	Recovery	=	25.02%	
50) 2-Fluorobiphenyl	4.70	172	71821	2543.8870811	ppb	-0.04
Spiked Amount 10000.000	Range 28	- 120	Recovery	=	25.44%#	
73) 2,4,6-Tribromophenol	5.76	330	29348	8203.2220018	ppb	-0.05
Spiked Amount 20000.000	Range 17	- 137	Recovery	=	41.02%	
87) p-Terphenyl-d14	7.69	244	148368	3841.2663005	ppb	-0.07
Spiked Amount 10000.000	Range 13	- 131	Recovery	=	38.41%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.03	79	54854	4321.0449978	ppb	93
3) N-Nitrosodimethylamine	2.01	42	33179	4869.5651166	ppb	88
5) Aniline	3.11	66	28935	3811.7864663	ppb #	44
6) bis(2-Chloroethyl)ether	3.13	93	66711m	5657.7258623	ppb	
8) Phenol	3.08	94	80716m	4788.8355488	ppb	
9) Benzaldehyde	3.06	105	47143	12919.0123151	ppb #	88
10) 2-Chlorophenol	3.17	128	61171	4532.7821828	ppb	90
11) n-Decane	3.16	41	28133	3539.2302929	ppb #	98
12) 1,3-Dichlorobenzene	3.25	146	56108	3677.0859650	ppb	92
13) 1,4-Dichlorobenzene	3.29	146	57458	3658.4685375	ppb	95
14) Benzyl Alcohol	3.35	79	49818	4772.9318648	ppb	93
15) 1,2-Dichlorobenzene	3.38	146	56350	3903.1257270	ppb	94
16) bis(2-Chloroisopropyl)ethe	3.41	121	18172	3678.3241706	ppb #	19
17) 2,2-oxybis(1-chloropropane	3.41	121	18172	3678.3241706	ppb #	19
18) 2-Methylphenol	3.40	108	62840	5153.1122854	ppb	92
19) Hexachloroethane	3.57	117	11400	1999.6138101	ppb	94
20) N-Nitrosodi-n-propylamine	3.49	70	48368	5427.5100021	ppb	93
21) 3&4-Methyl phenol	3.48	107	78359	5657.0438738	ppb	90
22) Acetophenone	3.50	105	82045	4835.6083576	ppb #	68
25) Nitrobenzene	3.60	77	68268	4616.5755155	ppb	92
26) Isophorone	3.73	82	130447	4917.5221331	ppb	93
27) 2-Nitrophenol	3.78	139	33200	4454.3917934	ppb	93
28) 2,4-Dimethylphenol	3.79	107	59748	4316.3583549	ppb	92
29) bis(2-Chlorethoxy)methane	3.84	93	77664	4578.9593889	ppb	95
30) 2,4-Dichlorophenol	3.92	162	51164	4387.6031818	ppb	94
31) Benzoic Acid	3.83	105	82269	14106.9489102	ppb	95
32) 1,2,4-Trichlorobenzene	3.97	180	51180	3920.9315380	ppb	95
33) alpha-terpineol	4.02	59	62771	5613.8874397	ppb	99
34) Naphthalene	4.03	128	166765	3674.0358740	ppb	98
35) 4-Chloroaniline	4.05	65	23289	4415.8493489	ppb #	45
36) Hexachloro-1,3-butadiene	4.09	225	27712	3891.6863265	ppb	95
37) Hydroquinone	4.24	110	28541m	3316.4598783	ppb	
38) Quinoline	4.24	129	130243	5483.4972421	ppb	99

(#) = qualifier out of range (m) = manual integration

0504\_28.D S804C29V.M Thu May 05 12:49:30 2022

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D Vial: 34  
 Acq On : 4 May 2022 2:03 pm Operator: 3545  
 Sample : MSD 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) Caprolactam	4.26	113	27527	11207.8810962	ppb	89
40) 4-Chloro-3-methylphenol	4.35	107	63948	5440.2341350	ppb	85
41) 2-Methylnaphthalene	4.46	142	109545	3703.7596740	ppb #	94
42) 1-Methylnaphthalene	4.53	142	109325	3933.2626554	ppb	96
43) 1,2,4,5-Tetrachlorobenzene	4.57	216	46611	4885.5607940	ppb	97
44) Diphenyl Ether	4.84	170	72757	4780.6387236	ug/ml#	82
45) Diphenyl Oxide	4.84	170	72757	4780.6387236	ug/ml#	82
48) 2,4,6-Trichlorophenol	4.64	196	41019	5650.8020488	ppb #	88
49) 2,4,5-Trichlorophenol	4.67	196	45442	6015.2138264	ppb	96
51) Biphenyl	4.76	154	140221	4472.6640197	ppb	99
52) 2-Chloronaphthalene	4.79	162	111696	4668.4054220	ppb	97
53) 2-Nitroaniline	4.86	138	49373	6657.1396844	ppb #	79
54) Acenaphthylene	5.08	152	190947	5130.0136633	ppb	99
55) Dimethyl phthalate	4.97	163	145255	5859.9134023	ppb	98
56) 2,6-Dinitrotoluene	5.02	165	34321	5971.8786926	ppb	81
57) 3-Nitroaniline	5.14	138	40263	6506.9083688	ppb	94
58) Acenaphthene	5.20	153	120286	4912.4822118	ppb	97
59) 2,4-Dinitrophenol	5.22	184	11936	4138.9657283	ppb #	1
60) Dibenzofuran	5.32	168	174515	5139.2063552	ppb	93
61) 2,4-Dinitrotoluene	5.31	165	52672	7318.5433811	ppb	90
62) 2,3,4,6-Tetrachlorophenol	5.41	232	35740	7488.5297333	ppb	94
63) 4-Nitrophenol	5.26	139	40015	7829.1023870	ppb #	73
64) Fluorene	5.58	166	152446	5534.4390653	ppb	98
65) 4-Chlorophenyl-phenylether	5.57	204	68602	5251.8172633	ppb	97
66) Diethyl phthalate	5.47	149	170743	6723.4200141	ppb	97
67) 4-Nitroaniline	5.59	138	46014	7939.6482285	ppb #	81
68) Azobenzene	5.69	77	185376	7317.8535186	ppb	93
69) Atrazine	6.06	200	56949	8320.9730387	ppb	97
71) 4,6-Dinitro-2-methylphenol	5.61	198	23095	5596.0362027	ppb	85
72) N-Nitrosodiphenylamine	5.66	169	137389	5720.7967013	ppb	98
74) 4-Bromophenyl-phenylether	5.94	248	44954	5767.6065532	ppb	94
75) Hexachlorobenzene	5.99	284	51207	5904.4697123	ppb	96
76) n-octadecane	6.18	55	33346	6895.8931934	ppb	94
77) Pentachlorophenol	6.15	266	33631	7024.7322747	ppb	94
78) Phenanthrene	6.32	178	267698	6437.8070034	ppb	98
79) Anthracene	6.36	178	275702	6550.3423021	ppb	99
80) Carbazole	6.48	167	264106	6877.3459005	ppb	98
81) Di-n-butyl phthalate	6.74	149	338935	7539.0053274	ppb	98
82) 2-nitrodiphenylamine	6.88	167	75769	9505.8637165	ppb #	100
83) Fluoranthene	7.31	202	308877	6992.1799182	ppb	100
86) Pyrene	7.53	202	315149	6929.9495600	ppb	99
88) Benzylbutyl phthalate	8.27	149	152217	8185.8317841	ppb	94
89) 3,3-Dichlorobenzidine	9.03	252	156667	10767.0552785	ppb	99
90) Benzo(a)anthracene	9.05	228	287755	7070.6352619	ppb	98
91) Chrysene	9.11	228	282374	7159.6472550	ppb	99
92) bis(2-Ethylhexyl)phthalate	9.14	149	211841	8270.7383846	ppb	98
93) Di-n-octyl phthalate	10.35	149	354627	8334.3180269	ppb	99
95) Benzo(b)fluoranthene	10.98	252	284387	6945.6493647	ppb	96
96) Benzo(k)fluoranthene	11.04	252	284898	7064.0964419	ppb	96
97) Benzo(a)pyrene	11.63	252	273570	7714.3641688	ppb	96
98) Indeno(1,2,3-cd)pyrene	13.75	276	223663	6419.4425244	ppb	97
99) Dibenz(a,h)anthracene	13.79	278	240090	6465.7122064	ppb	98
100) Benzo(g,h,i)perylene	14.09	276	220955	6092.9346987	ppb	98

(#) = qualifier out of range (m) = manual integration

0504\_28.D S804C29V.M Thu May 05 12:49:30 2022

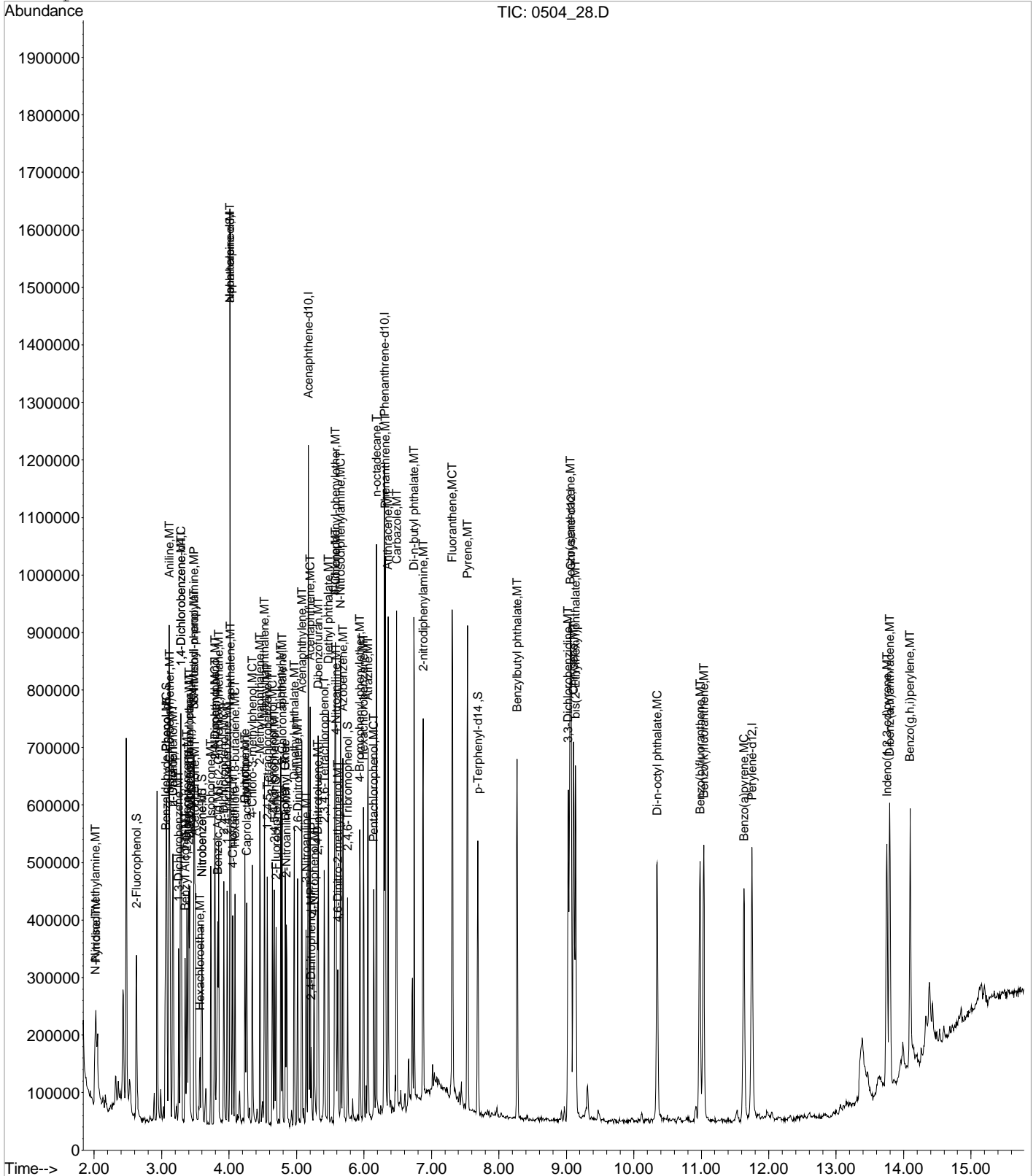
Page 2

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D
Acq On : 4 May 2022 2:03 pm
Sample : MSD 1x WG1857248 L1486885-01
Misc : SOIL ISTD 22D28020 exp 10/28/22
MS Integration Params: RTEINT.P
Quant Time: May 5 12:48 2022

Vial: 34
Operator: 3545
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804C29V.RES

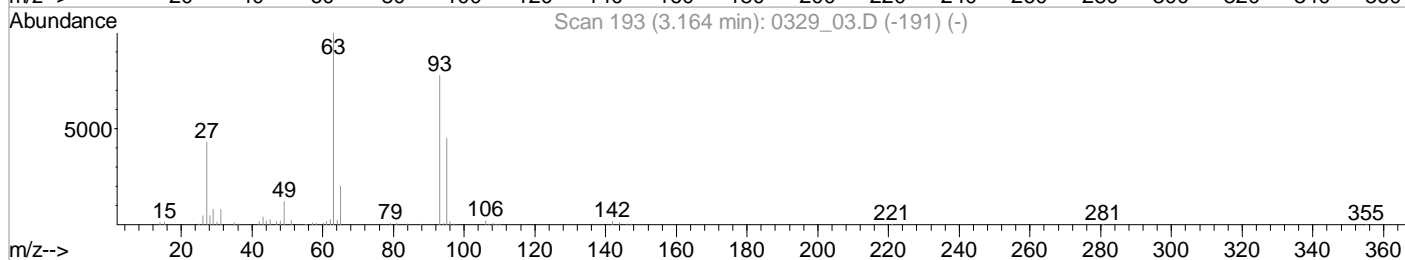
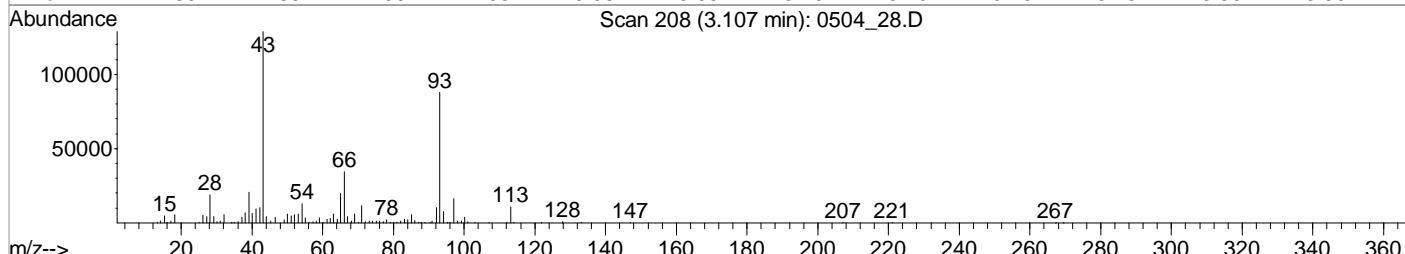
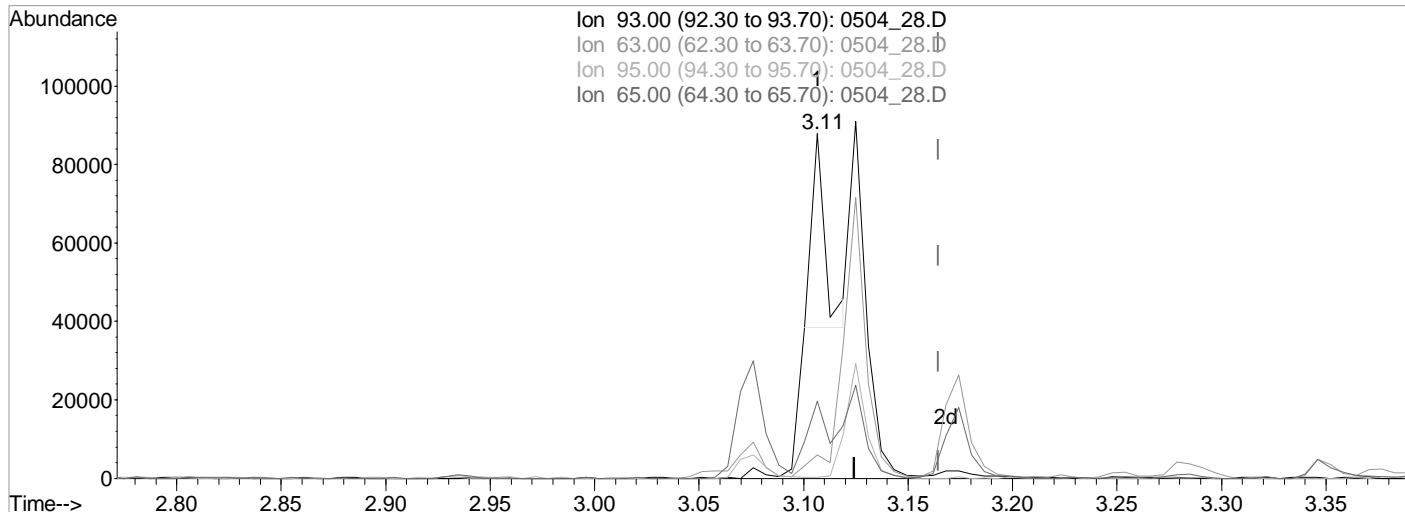
Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Tue Mar 29 09:44:27 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D Vial: 34  
 Acq On : 4 May 2022 2:03 pm Operator: 3545  
 Sample : MSD 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 14:30 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_28.D

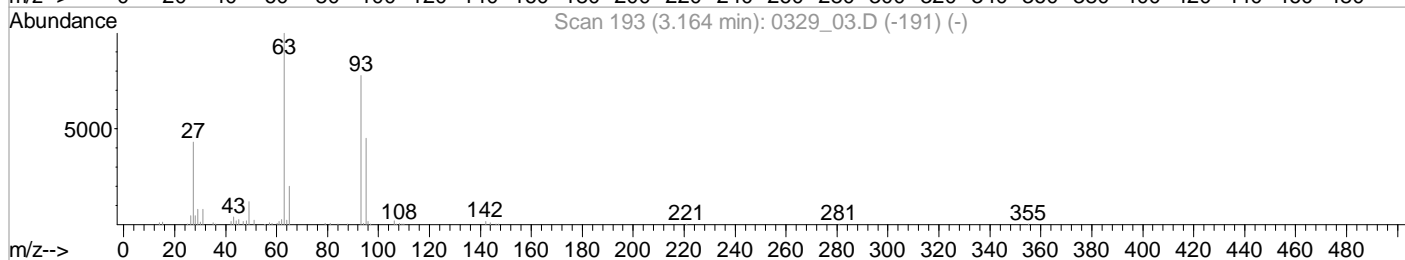
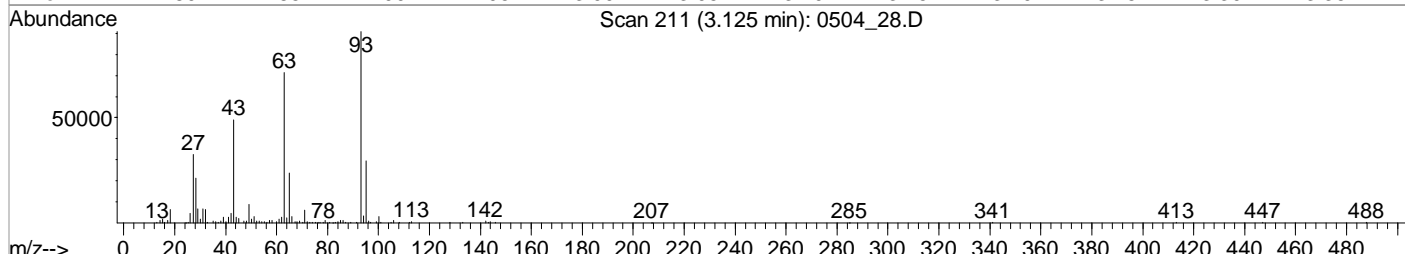
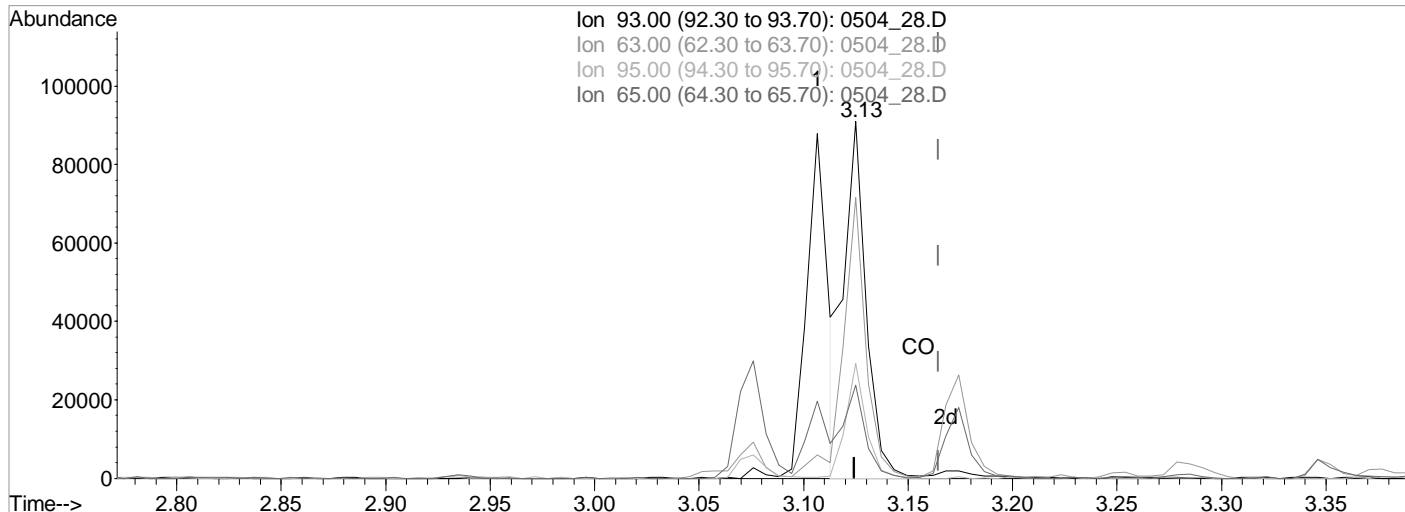
(6) bis(2-Chloroethyl)ether (MT)  
 3.11min (-0.058) 1859.5328695 ppb  
 Qvalue = 38  
 response 21926

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.56#
95.00	30.20	0.00#
65.00	24.00	20.93

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D Vial: 34  
 Acq On : 4 May 2022 2:03 pm Operator: 3545  
 Sample : MSD 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_28.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.13min (-0.039) 5657.7258623 ppb m

response 66711

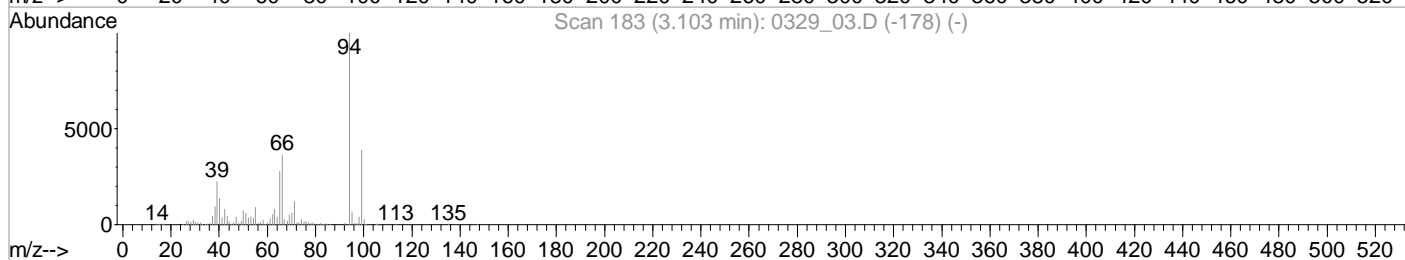
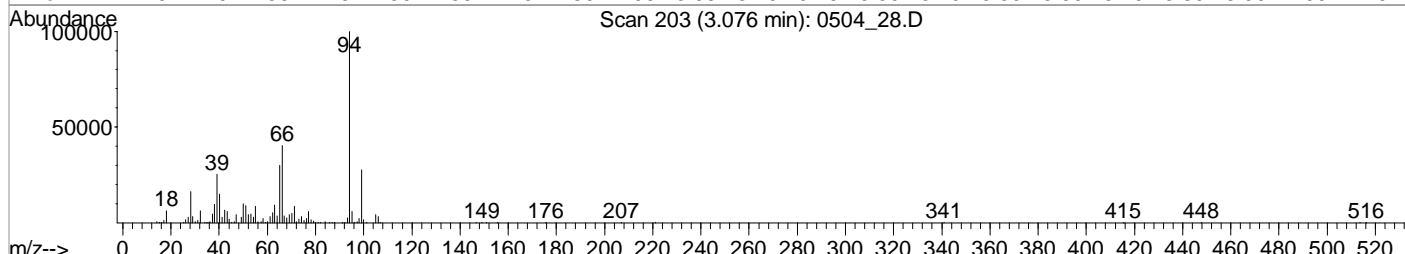
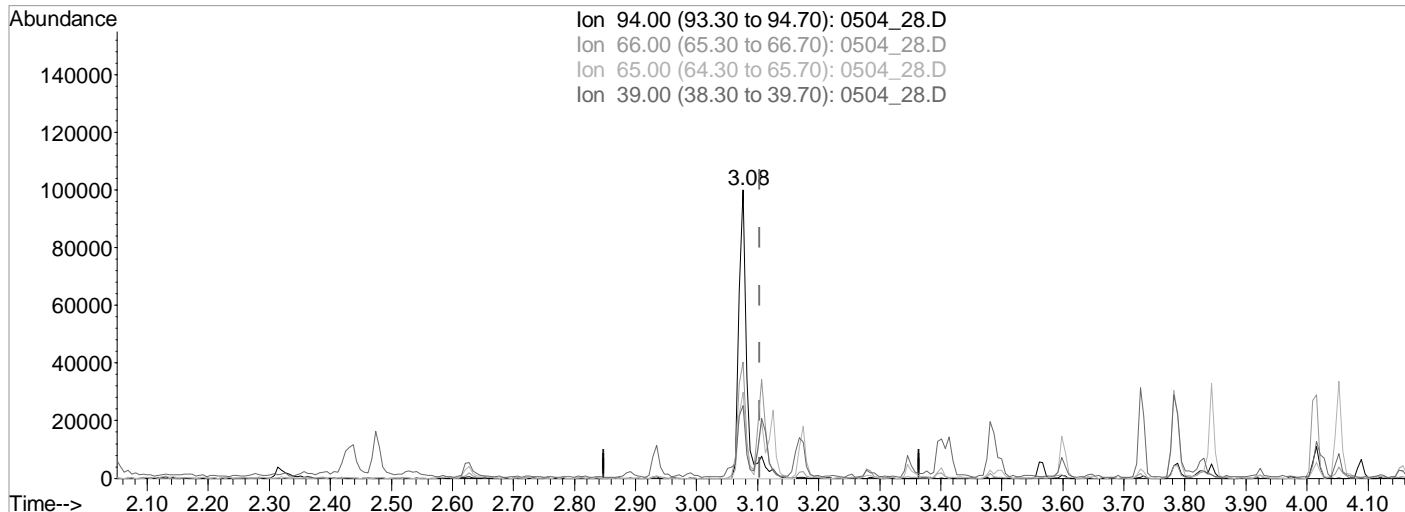
Ion	Exp%	Act%
93.00	100	100
63.00	76.20	78.58
95.00	30.20	32.26
65.00	24.00	26.07



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D Vial: 34  
 Acq On : 4 May 2022 2:03 pm Operator: 3545  
 Sample : MSD 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_28.D

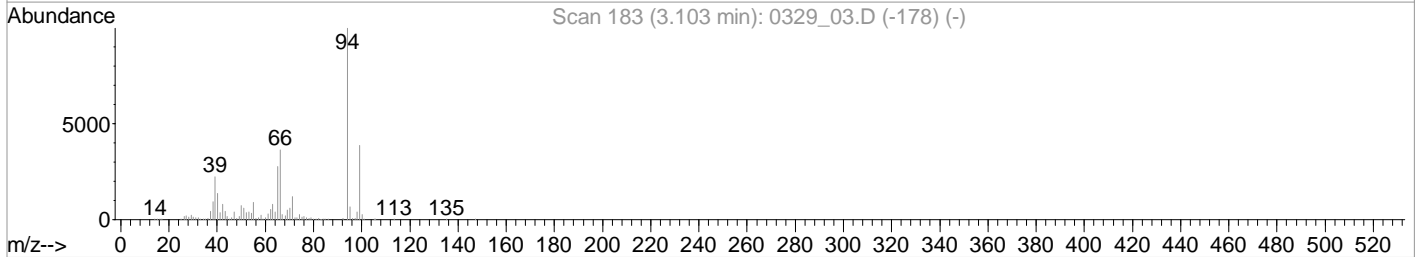
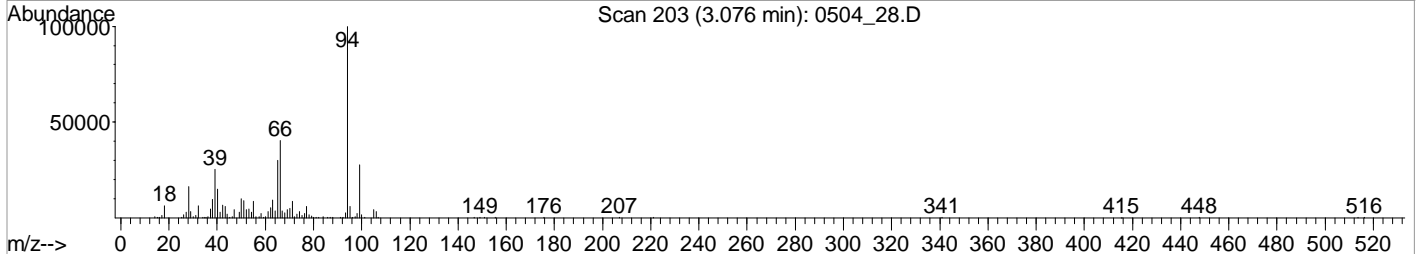
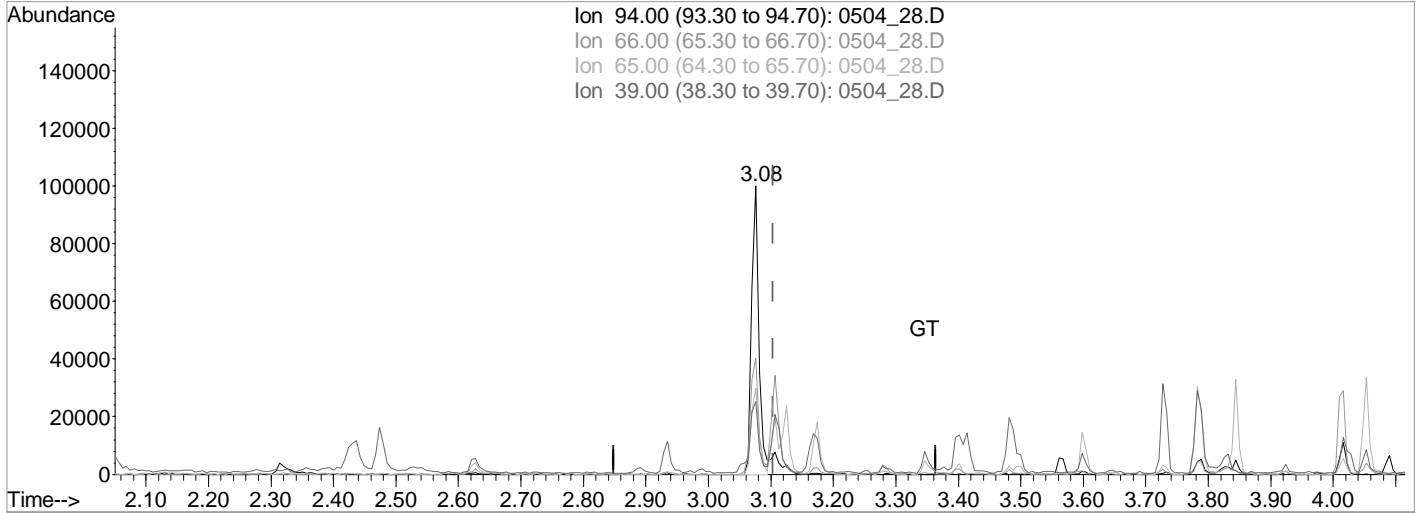
(8) Phenol (MC)  
 3.08min (-0.027) 5348.1342345 ppb  
 Qvalue = 94  
 response 90143

Ion	Exp%	Act%
94.00	100	100
66.00	34.70	40.14
65.00	27.70	29.93
39.00	22.50	21.84

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D Vial: 34  
 Acq On : 4 May 2022 2:03 pm Operator: 3545  
 Sample : MSD 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_28.D

(8) Phenol (MC)  
 3.08min (-0.027) 4788.8355488 ppb m

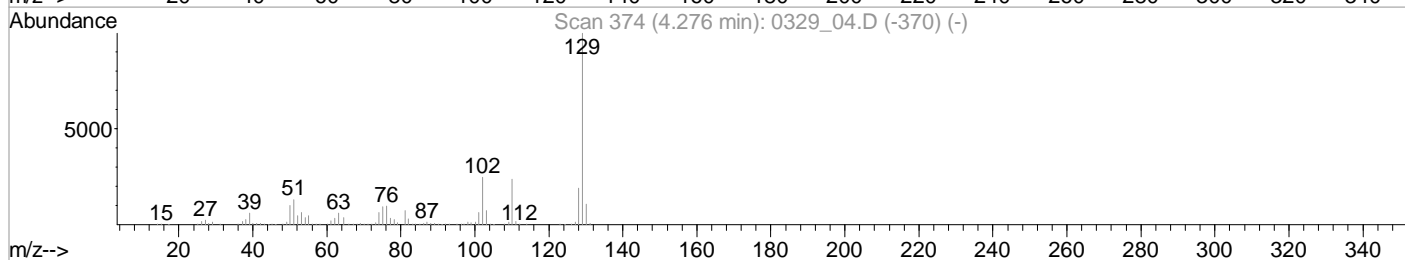
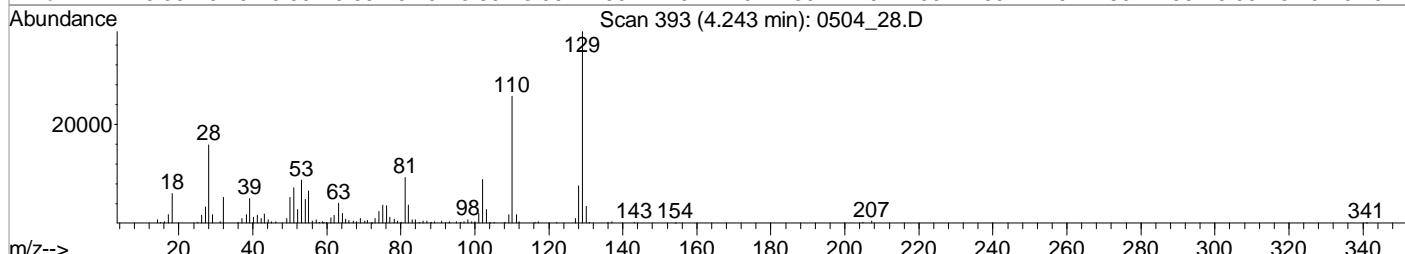
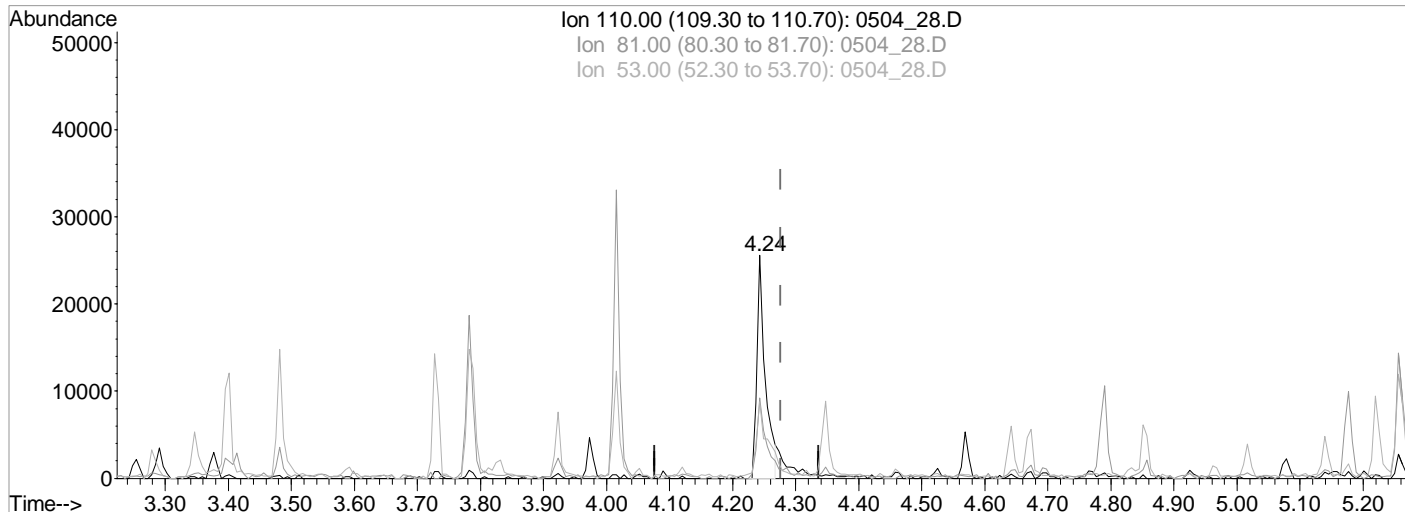
response 80716

Ion	Exp%	Act%
94.00	100	100
66.00	34.70	40.35
65.00	27.70	29.93
39.00	22.50	25.27

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D Vial: 34  
 Acq On : 4 May 2022 2:03 pm Operator: 3545  
 Sample : MSD 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0504\_28.D

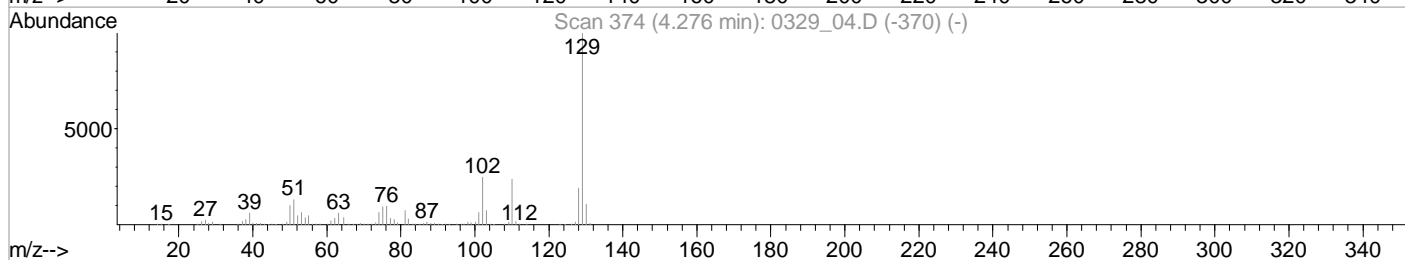
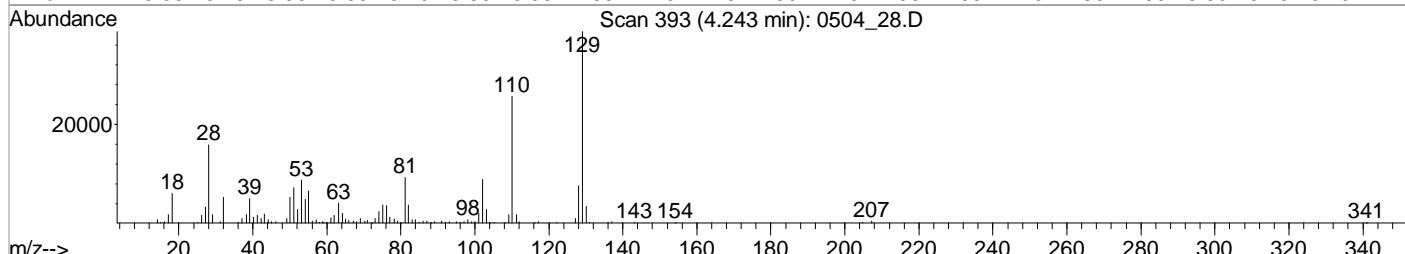
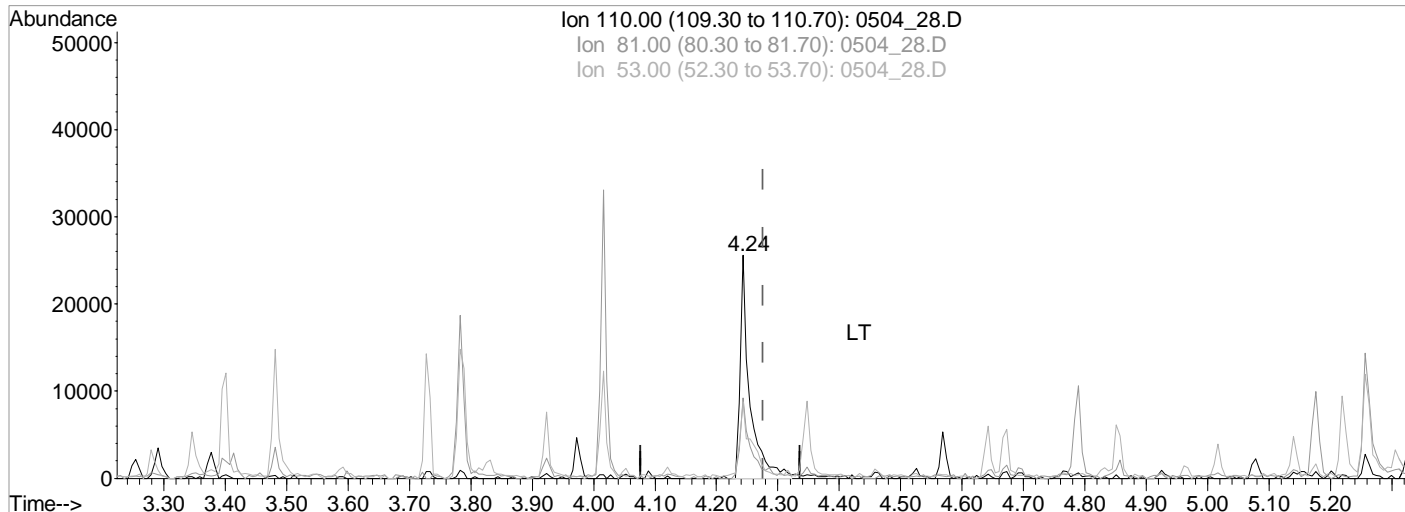
(37) Hydroquinone  
 4.24min (-0.033) 2728.3906916 ppb  
 Qvalue = 88  
 response 24218

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	36.06
53.00	25.90	32.38
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D Vial: 34  
 Acq On : 4 May 2022 2:03 pm Operator: 3545  
 Sample : MSD 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0504\_28.D

(37) Hydroquinone  
 4.24min (-0.033) 3316.4598783 ppb m

response 28541

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	36.06
53.00	25.90	34.31
0.00	0.00	0.00

# BNA SS Extractions Benchsheet

Batch: WG1857248

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1485528	WG1853332	BJM688	PREPREPBAL1	26-APR-22
L1485528	WG1853349	BJM688	PREPREPBAL2	26-APR-22
L1485528	WG1853351	BJM688	PREPREPBAL2	26-APR-22
L1485528	WG1853353	BJM688	PREPREPBAL4	26-APR-22
L1485721	WG1854658	BJM688	PREPREPBAL1	27-APR-22
L1486453	WG1855452	KMT967	PREPREPBAL2	28-APR-22
L1486885	WG1855466	KMT967	PREPREPBAL3	27-APR-22
L1487377	WG1856083	KMT967	PREPREPBAL3	28-APR-22

Process Analyst: JM686 Transfer Analyst: JM686 Material Handler: JM686 Prep Start Date/Time: 05/02/22 17:00-05/03/22 09:05  
 Prep End Date/Time: 05/03/22 13:51 SOP: MTJL-0118 Method: 3546 Balance ID: EXTBAL5 Filter Lot#: 17502125

Na2SO4: 22E01218 Amt. Used: 1 Exp. Date:11/01/22 MeCL2:Acetone: 22D19459 Amt. Used: 1 Exp. Date:08/01/22  
 Surrogate: 22D01225 Amt. Used: 0.50 mL Exp. Date:09/24/22 LCS/MS Spike: 22D25449 Amt. Used: 0.50 mL Exp. Date:05/09/22  
 MeCL2: 22D14991 Amt. Used: 1 Exp. Date:10/14/22 Spike Syringe ID: 21K30871 Amt. Used: 1 Exp. Date:05/30/22  
 Surrogate Syringe ID: 22B04917 Amt. Used: 1 Exp. Date:08/04/22

Sample Number	Initial Sample Wt (g)	Solvent Volume (mL)	Final Volume (mL)	Extract Color	Box ID	Prep Factor	Prep Ratio	DL Adjustment Factor	Spike Factor	Surrogate Factor	Review Analyst	Review Date
BLANK	15	25	0.5	Colorless		0.0333	1	1	1	1	AO869	05/03/22 16:18:47
LCS	15	25	0.5	Yellow		0.0333	1	1	1	1	AO869	05/03/22 16:18:47
MS(L1486885-01)	15.34	25	1	Green	4/27 PP3 WED 5	0.0652	1.96	2	1	1	AO869	05/03/22 16:18:47
MSD(L1486885-01)	15.59	25	1	Green	4/27 PP3 WED 5	0.0641	1.92	2	1	1	AO869	05/03/22 16:18:47
1. L1485528-08	15.88	25	0.5	Brown	TUE 1/0426-PP1	0.0315	0.946	1	1	1	AO869	05/03/22 16:18:47
2. L1485528-108	15.31	25	0.5	Brown	Tues02 / 0426PP02	0.0327	0.982	1	1	1	AO869	05/03/22 16:18:47
3. L1485528-11	15.39	25	0.5	Tan	TUE 1/0426-PP1	0.0325	0.976	1	1	1	AO869	05/03/22 16:18:47
4. L1485528-111	15.45	25	0.5	Brown	Tues04 / 0426PP02	0.0324	0.973	1	1	1	AO869	05/03/22 16:18:47
5. L1485528-115	15.11	25	1	Dark-brown	Tues04 / 0426PP02	0.0662	1.99	2	1	1	AO869	05/03/22 16:18:47
6. L1485528-118	15.42	25	0.5	Brown	Tues04 / 0426PP02	0.0324	0.973	1	1	1	AO869	05/03/22 16:18:47
7. L1485528-15	15.43	25	0.5	Tan	TUE 1/0426-PP1	0.0324	0.973	1	1	1	AO869	05/03/22 16:18:47
8. L1485528-154	15.17	25	0.5	Brown	Tues-5	0.033	0.991	1	1	1	AO869	05/03/22 16:18:47
9. L1485528-157	15.41	25	0.5	Yellow	Tues-5	0.0324	0.973	1	1	1	AO869	05/03/22 16:18:47
10. L1485528-160	15.13	25	1	Dark-brown	Tues-5	0.0661	1.98	2	1	1	AO869	05/03/22 16:18:47
11. L1485721-08	15.10	25	0.5	Brown	WED 3/0427-PP1	0.0331	0.994	1	1	1	AO869	05/03/22 16:18:47
12. L1485721-11	15.65	25	1	Dark-brown	WED 3/0427-PP1	0.0639	1.92	2	1	1	AO869	05/03/22 16:18:47
13. L1485721-14	15.73	25	1	Dark-brown	WED 3/0427-PP1	0.0636	1.91	2	1	1	AO869	05/03/22 16:18:47
14. L1486453-08	15.38	25	1	Dark-brown	Thu02 / 0428PP02	0.065	1.95	2	1	1	AO869	05/03/22 16:18:47
15. L1486885-01	15.07	25	1	Green	4/27 PP3 WED 5	0.0664	1.99	2	1	1	AO869	05/03/22 16:18:47
16. L1487377-01	15.74	25	1	Dark-brown	4/28 PP3 RUSH	0.0635	1.91	2	1	1	AO869	05/03/22 16:18:47
17. L1487377-02	15.38	25	0.5	Dark-brown	4/28 PP3 RUSH	0.0325	0.976	1	1	1	AO869	05/03/22 16:18:47
18. L1487377-03	15.99	25	1	Dark-brown	4/28 PP3 RUSH	0.0625	1.88	2	1	1	AO869	05/03/22 16:18:47
19. L1488463-01	15.06	25	0.5	Yellow		0.0332	0.997	1	1	1	AO869	05/03/22 16:18:47
20. L1488463-02	15.16	25	0.5	Brown		0.033	0.991	1	1	1	AO869	05/03/22 16:18:47

Comments:

Reviewed By:AO869 on 05/03/22 16:18:47

9034/9030B Wet Chemistry

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** L1487377-01  
**Client Sample ID:** BNSF-SC01-041922-0-10  
**Lab File ID:** 05  
**Instrument ID:** MAN TITR  
**Analytical Batch:** WG1857987  
**Dilution Factor:** 1  
**Analytical Method:** 9034/9030B  
**Matrix:** Solid  
**Total Solids (%):** 73.9

**SDG:** L1487377  
**Collected Date/Time:** 04/19/22 12:00  
**Received Date/Time:** 04/28/22 09:00  
**Preparation Date/Time:** 05/03/22 12:51  
**Analysis Date/Time:** 05/05/22 18:00  
**Prep Method:** 9030B  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 9.15 g  
**Final Wt/Vol:** \_\_\_\_\_

Analyte	CAS	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Sulfide	18496-25-8	U	T8	40.6	101

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** L1487377-02  
**Client Sample ID:** FD01-041922-0-10  
**Lab File ID:** 06  
**Instrument ID:** MAN TITR  
**Analytical Batch:** WG1857987  
**Dilution Factor:** 1  
**Analytical Method:** 9034/9030B  
**Matrix:** Solid  
**Total Solids (%):** 73.9

**SDG:** L1487377  
**Collected Date/Time:** 04/19/22 12:15  
**Received Date/Time:** 04/28/22 09:00  
**Preparation Date/Time:** 05/03/22 12:51  
**Analysis Date/Time:** 05/05/22 18:00  
**Prep Method:** 9030B  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 9.37 g  
**Final Wt/Vol:** \_\_\_\_\_

Analyte	CAS	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Sulfide	18496-25-8	U	T8	40.6	102



SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** L1487377-03  
**Client Sample ID:** BNSF-SG02-041922-0-10  
**Lab File ID:** 07  
**Instrument ID:** MAN TITR  
**Analytical Batch:** WG1857987  
**Dilution Factor:** 1  
**Analytical Method:** 9034/9030B  
**Matrix:** Solid  
**Total Solids (%):** 50.4

**SDG:** L1487377  
**Collected Date/Time:** 04/19/22 13:35  
**Received Date/Time:** 04/28/22 09:00  
**Preparation Date/Time:** 05/03/22 12:51  
**Analysis Date/Time:** 05/05/22 18:00  
**Prep Method:** 9030B  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 8.57 g  
**Final Wt/Vol:** \_\_\_\_\_

Analyte	CAS	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Sulfide	18496-25-8	U	T8	59.5	149

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3788703-1  
Client Sample ID: BLANK  
Lab File ID: 01  
Instrument ID: MAN TITR  
Analytical Batch: WG1857987  
Dilution Factor: 1  
Analytical Method: 9034/9030B  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1487377  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 05/03/22 12:51  
Analysis Date/Time: 05/05/22 18:00  
Prep Method: 9030B  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 10.15 g  
Final Wt/Vol: \_\_\_\_\_

Analyte	CAS	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Sulfide	18496-25-8	U		30.0	75.0

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3788703-2  
Client Sample ID: LCS  
Lab File ID: 02  
Instrument ID: MAN TITR  
Analytical Batch: WG1857987  
Dilution Factor: 1  
Analytical Method: 9034/9030B  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1487377  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 05/03/22 12:51  
Analysis Date/Time: 05/05/22 18:00  
Prep Method: 9030B  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 10.14 g  
Final Wt/Vol: \_\_\_\_\_

Analyte	CAS	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Sulfide	18496-25-8	71.1		30.0	75.0

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3788703-3  
Client Sample ID: MS  
Lab File ID: 03  
Instrument ID: MAN TITR  
Analytical Batch: WG1857987  
Dilution Factor: 1  
Analytical Method: 9034/9030B  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1487377  
Collected Date/Time: 04/26/22 12:15  
Received Date/Time: 05/02/22 09:00  
Preparation Date/Time: 05/03/22 12:51  
Analysis Date/Time: 05/05/22 18:00  
Prep Method: 9030B  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 10.38 g  
Final Wt/Vol: \_\_\_\_\_

Analyte	CAS	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Sulfide	18496-25-8	69.5		30.0	75.0

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3788703-4  
Client Sample ID: MSD  
Lab File ID: 04  
Instrument ID: MAN TITR  
Analytical Batch: WG1857987  
Dilution Factor: 1  
Analytical Method: 9034/9030B  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1487377  
Collected Date/Time: 04/26/22 12:15  
Received Date/Time: 05/02/22 09:00  
Preparation Date/Time: 05/03/22 12:51  
Analysis Date/Time: 05/05/22 18:00  
Prep Method: 9030B  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 10.81 g  
Final Wt/Vol: \_\_\_\_\_

Analyte	CAS	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Sulfide	18496-25-8	66.7		30.0	75.0

<b>SDG:</b>	L1487377	<b>Calibration (begin) date/time:</b>	_____
<b>Instrument ID:</b>	MAN TITR	<b>Calibration (end) date/time:</b>	_____
<b>Analytical Method:</b>	9034/9030B	<b>Analytical Run:</b>	WG1857987

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	Sample ID: BLANK	Result	BLANK Qual
	File ID:	01	
<b>Analyte</b>		mg/kg	
SULFIDE		U	

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MATRIX SPIKE /  
 MATRIX SPIKE DUPLICATE RECOVERY  
 L1487377-01,02,03

**MS Sample / File ID:** R3788703-3 / 03  
**MSD Sample / File ID:** R3788703-4 / 04  
**OS Sample / File ID:** L1488556-01 / 14  
**Instrument ID:** MAN TITR  
**Analytical Method:** 9034/9030B

**SDG:** L1487377  
**Analytical Batch:** WG1857987  
**Matrix:** Solid

Analyte	Spike Amount <i>mg/kg</i>	OS Result <i>mg/kg</i>	MS Result <i>mg/kg</i>	MSD Result <i>mg/kg</i>	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	RPD %	RPD Limits %
Sulfide	100	U	69.5	66.7	69.5	66.7	1	10.0 - 136	4.06	20

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE  
 LABORATORY CONTROL SAMPLE DUPLICATE  
 RECOVERY  
 L1487377-01,02,03

SAMPLE NO.:  
 R3788703-2

**LCS Sample / File ID:** R3788703-2 / 02  
**LCSD Sample / File ID:** \_\_\_\_\_  
**Instrument ID:** MAN TITR  
**Analytical Method:** 9034/9030B

**SDG:** L1487377  
**Analytical Batch:** WG1857987  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	Spike Amount <i>mg/kg</i>	LCS Result <i>mg/kg</i>	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limits %
Sulfide	100	71.1		71.1		53.8 - 124		

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.



DETECTION LIMIT SUMMARY

Lab Sample IDs: L1487377-01,02,03  
Matrix: Solid

Analytical Method: 9034/9030B  
Prep Method: 9030B

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Analyte	CAS	Wavelength	Mass	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Sulfide	18496-25-8			30	75

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<b>SDG:</b>	L1487377	<b>Analytical Method:</b>	9034/9030B
<b>Instrument ID:</b>	MAN TITR	<b>Calibration Start Date:</b>	_____
<b>Analytical Run:</b>	WG1857987	<b>Calibration End Date:</b>	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3788703-1	01	05/05/22 18:00	1	WG1857987
LCS	R3788703-2	02	05/05/22 18:00	1	WG1857987
MS	R3788703-3	03	05/05/22 18:00	1	WG1857987
MSD	R3788703-4	04	05/05/22 18:00	1	WG1857987
OS	L1488556-01	14	05/05/22 18:00		
BNSF-SC01-041922-0-10	L1487377-01	05	05/05/22 18:00	1	WG1857987
BNSF-SG02-041922-0-10	L1487377-03	07	05/05/22 18:00	1	WG1857987
FD01-041922-0-10	L1487377-02	06	05/05/22 18:00	1	WG1857987

# SULFIDE SS WetChem Prep Benchsheet

Batch: WG1857987

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1487377	WG1856083	KMT967	PREPREPBAL3	28-APR-22
L1488057	WG1856887	BJM688	PREPREPBAL3	30-APR-22
L1488554	WG1857876	BJM688	PREPREPBAL1	03-MAY-22
L1488556	WG1857876	BJM688	PREPREPBAL1	03-MAY-22
L1488686	WG1858206	BJM688	PREPREPBAL4	03-MAY-22
L1488800	WG1858206	BJM688	PREPREPBAL4	03-MAY-22
L1488802	WG1858206	BJM688	PREPREPBAL4	03-MAY-22

Analyst: BMD3730 Analyst 2: NA Analyst 3: NA Prep Start Date/Time: 05/03/22 12:51 Prep End Date/Time: 05/05/22 18:02  
 Date/Time Analyzed: 05/05/22 18:00:04 SOP: 0172 Method: 9030B LCS True Value: 100 ppm Balance ID: WETBAL12 5mL Pipette Lot#: NA  
 10mL Pipette Lot#: NA 50mL Pipette Lot#: NA 250mL Container Lot#: NA

H2SO4: 22E02355 Amt. Used: 50 mL Exp. Date:11/02/22 0.5M Zn Acetate: 22D28915 Amt. Used: 10 mL Exp. Date:09/29/22  
 37% Formaldehyde: 22D07126 Amt. Used: 5 mL Exp. Date:10/07/22 LCS/D Standard: 22E05006 Amt. Used: 10 mL Exp. Date:05/06/22  
 Iodine Solution: 22E05007 Amt. Used: 15 mL Exp. Date:11/05/22 Sodium Thiosulfate Titrant: 22E05008 Amt. Used: 1 Exp. Date:11/05/22  
 6N HCL: 22C22767 Amt. Used: 1 Exp. Date:09/22/22 MS/D Standard: 22E05006 Amt. Used: 10 mL Exp. Date:05/06/22

Sample Number	Prep Flags	Normality of I2	Vol I2 for Std. (mL)	Vol Titr for Std. (mL)	Normality of Titrant	Initial Sample Wt (g)	Volume of I2 (mL)	Volume of Titrant (mL)	Sulfide Result (mg/L)	Review Analyst	Review Date
BLANK		0.025	15	15	0.025	10.15	15	15.0	0	BMD3730	05/05/22 19:04:55
LCS		0.025	15	15	0.025	10.14	15	13.2	71.139	BMD3730	05/05/22 19:04:55
1. L1487377-01	T8	0.025	15	15	0.025	9.15	15	14.5	21.899	BMD3730	05/05/22 19:04:55
2. L1487377-02	T8	0.025	15	15	0.025	9.37	15	14.7	12.831	BMD3730	05/05/22 19:04:55
3. L1487377-03	T8	0.025	15	15	0.025	8.57	15	14.6	18.705	BMD3730	05/05/22 19:04:55
4. L1488057-10		0.025	15	15	0.025	8.95	15	15.0	0	BMD3730	05/05/22 19:04:55
5. L1488146-03		0.025	15	15	0.025	11.30	15	12.3	95.754	BMD3730	05/05/22 19:04:55
6. L1488554-01		0.025	15	15	0.025	10.14	15	15.0	0	BMD3730	05/05/22 19:04:55
7. L1488554-02		0.025	15	15	0.025	10.11	15	15.0	0	BMD3730	05/05/22 19:04:55
8. L1488554-03		0.025	15	15	0.025	9.97	15	14.9	4.02	BMD3730	05/05/22 19:04:55
9. L1488554-04		0.025	15	15	0.025	10.66	15	14.9	3.759	BMD3730	05/05/22 19:04:55
10. L1488556-01	T8	0.025	15	15	0.025	10.63	15	14.8	7.54	BMD3730	05/05/22 19:04:55
11. L1488686-02		0.025	15	15	0.025	11.01	15	15.0	0	BMD3730	05/05/22 19:04:55
12. L1488800-01		0.025	15	15	0.025	10.68	15	15.0	0	BMD3730	05/05/22 19:04:55
13. L1488800-02		0.025	15	15	0.025	9.34	15	14.1	38.616	BMD3730	05/05/22 19:04:55
14. L1488802-01		0.025	15	15	0.025	14.01	15	15.0	0	BMD3730	05/05/22 19:04:55
15. L1488802-02		0.025	15	15	0.025	12.62	15	14.8	6.351	BMD3730	05/05/22 19:04:55
16. L1488802-03		0.025	15	15	0.025	10.30	15	9.1	229.556	BMD3730	05/05/22 19:04:55
17. L1488802-04		0.025	15	15	0.025	9.27	15	11.4	155.631	BMD3730	05/05/22 19:04:55
18. L1488802-05		0.025	15	15	0.025	7.79	15	13.6	72.022	BMD3730	05/05/22 19:04:55
19. L1488802-06		0.025	15	15	0.025	10.22	15	14.8	7.842	BMD3730	05/05/22 19:04:55
20. L1488911-01		0.025	15	15	0.025	9.48	15	15.0	0	BMD3730	05/05/22 19:04:55
MS(L1488556-01)		0.025	15	15	0.025	10.38	15	13.2	69.494	BMD3730	05/05/22 19:04:55
MSD(L1488556-01)		0.025	15	15	0.025	10.81	15	13.2	66.73	BMD3730	05/05/22 19:04:55

Comments:

Reviewed By: BMD3730 on 05/05/22 19:04:55

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

COD	Coefficient of Determination.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Mass	Mass of parameter.
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
RRF	Relative Response Factor.
RT	Retention Time.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Wavelength	Wavelength of parameter.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
NI	Manual Integration Code to indicate that the peak was not integrated at all by the computer software.
LT	Manual Integration Code to indicate that the peak in question was inappropriately integrated to an area less than what it should be (i.e., peak area was cut).
GT	Manual Integration Code to indicate that the peak in question was inappropriately integrated to an area greater than it should be (i.e., peak tailing).
BA	Manual Integration Code to indicate that the baseline had to be adjusted correctly by the analyst.
WP	Manual Integration Code to indicate that the wrong peak was chosen.
CO	Manual Integration Code to indicate that the analyst had to split two co-eluting peaks apart that were not (or could not be) separated by the computer system.
RT	Manual Integration Code to indicate that the retention time for the peak in question has shifted from the expected retention time.
INT	Manual Integration Code to indicate that there was electronic interference (i.e., noise).



# GLOSSARY OF TERMS

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
T8	Sample(s) received past/too close to holding time expiration.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Su

<sup>6</sup> Gl

<sup>7</sup> Al

<sup>8</sup> Sc

# ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



# Internal Transfer Chain of Custody

C168



Samples Pre-Logged into eCOC.

State Of Origin: WA

Cert. Needed:  Yes  No

**Pace Analytical**  
www.pacelabs.com

Workorder: 10605435 Workorder Name: 3593500 WISHRAM RI

Owner Received Date: 4/21/2022 Results Requested By: 5/12/2022

Report To		Subcontract To				Requested Analysis														
Kongmeng Vang Pace Analytical Minnesota 1700 Elm Street Minneapolis, MN 55414 Phone (612)607-1700		Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858																		
						Preserved Containers														
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved														
1	BNSF-SC01-041922-0-10	PS	4/19/2022 12:00	10605435001	Solid	2														
2	FD01-041922-0-10	PS	4/19/2022 12:15	10605435002	Solid	2														
3	BNSF-SG02-041922-0-10	PS	4/19/2022 13:35	10605435003	Solid	2														
4																				
5																				
																LAB USE ONLY				
																L1487377				
																-01				
																-02				
																-03				
Transfers																Comments				
Released By	Date/Time	Received By	Date/Time																	
CSM/pace	4/22/22 13:45	Uma Sisk	4/28/22 09:00																	
Cooler Temperature on Receipt °C		Custody Seal <input checked="" type="checkbox"/> or <input type="checkbox"/> N		Received on Ice <input checked="" type="checkbox"/> or <input type="checkbox"/> N		Samples Intact <input checked="" type="checkbox"/> or <input type="checkbox"/> N														

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
This chain of custody is considered complete as is since this information is available in the owner laboratory.

DRA7 3.2+0=3.2

**Sample Receipt Checklist**

COC Seal Present/Intact:  N IF Applicable

COC Signed/Accurate:  N VOA Zero Headspace:  Y  N

Bottles arrive intact:  N Pres. Correct/Check:  Y  N

Correct bottles used:  N

Sufficient volume sent:  N

RIN Screen < 0.5 mR/hr:  Y  N

Fed ex 5466 8884 4744





Ship To:  
 Pace National  
 12065 Lebanon Rd  
 Mt. Juliet, TN 37122  
 Phone (615) 758-5858

INTER LABORATORY WORK ORDER # 10605435  
 (To be completed by sending lab)

Sending Project No:	10605435
Receiving Project No:	
Check Box for Consolidated Invoice:	<input type="checkbox"/>
Date Prepared:	04/21/22
REQUESTED COMPLETION DATE:	5/12/2022

Sending Region	IR10-Minnesota	Sending Project Mgr.	Kongmeng Yang
Receiving Region	IR650-Pace National	External Client	BNSF_Jacobs_WA
State of Sample Origin	WA	QC Deliverable	PACKAGELV4

All questions should be addressed to sending project manager.

Requested Reportable Units \_\_\_\_\_ Report Wet or Dry Weight?  IRWO Lab Need to run? \_\_\_\_\_ Cert. Needed  Yes

Method Description	Container Type	Quantity of containers	WORK REQUESTED		Unit Price	Amount
			Preservative	Quantity of Samples		
SMA500 Ammonia	JGFU		Unpreserved	3	\$24.00	\$72.00
SMW9030 Total Sulfides	JGFU		Unpreserved	3	\$22.00	\$66.00
SVOC	JGFU		Unpreserved	3	\$130.00	\$390.00
TOTAL						\$528.00

Special Requirements: Report D, QC Limits, MDLs (D), Jacobs UPRR EQEDD (1579)

Receiving Region Department	Acctg. Code	Totals from above	Revenue Allocation	
			Receiving Region (80%)	Client Services Dept. Sending Region (20%)
Wet Chemistry	21	\$138.00	\$110.40	\$27.60
GC/MS Semivolatiles	30	\$390.00	\$312.00	\$78.00
TOTAL		\$528.00	\$422.40	\$105.60

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region:  Yes  No

DISPOSITION of FORM

Original sent to the receiving lab - Copy kept at the sending lab.  
 When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

*6148737*



8270 SVOC List

*Semi-volatile Organic Compounds and Polycyclic*

3,4-Methylphenol
Benzoic acid
Bis(2-ethylhexyl) phthalate
Carbazole
Dibenzofuran
Di-n-butyl phthalate
Di-n-octyl phthalate
Pentachlorophenol
Phenol
1-Methylnaphthalene
2-Methylnaphthalene
Acenaphthene
Acenaphthylene
Anthracene
Benz(a)anthracene
Benz(a)pyrene
Benzo(ghi)perylene
Chrysene
Dibenz(ah)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-cd)pyrene
Naphthalene
Phenanthrene
Pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene

L148 7377

## ANALYTICAL REPORT

Job Number: 580-112980-1

Job Description: D3593500 10605435

For:

Pace Analytical Services, LLC

1700 Elm Street

Minneapolis, MN 55414

Attention: Kongmeng Vang



Approved for release.  
Pauline M Matlock  
Project Manager  
5/31/2022 10:42 AM

---

Pauline M Matlock, Project Manager  
5755 8th Street East, Tacoma, WA, 98424

(253)922-2310

Pauline.Matlock@et.eurofinsus.com

05/31/2022

Revision: 1

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The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager. This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

### Eurofins Seattle

5755 8th Street East, Tacoma, WA 98424

Tel (253) 922-2310 [www.EurofinsUS.com](http://www.EurofinsUS.com)



# Table of Contents

Cover Title Page . . . . .	1
Data Summaries . . . . .	4
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Client Sample Results . . . . .	7
Default Detection Limits . . . . .	8
QC Sample Results . . . . .	9
QC Association . . . . .	11
Chronicle . . . . .	12
Certification Summary . . . . .	14
Method Summary . . . . .	15
Sample Summary . . . . .	16
Reagent Traceability . . . . .	17
COAs . . . . .	18
Inorganic Sample Data . . . . .	27
General Chemistry Data . . . . .	27
Gen Chem Cover Page . . . . .	28
Gen Chem Sample Data . . . . .	29
Gen Chem QC Data . . . . .	35
Gen Chem ICV/CCV . . . . .	35
Gen Chem Blanks . . . . .	36
Gen Chem MS/MSD/PDS . . . . .	37
Gen Chem Duplicates . . . . .	39
Gen Chem LCS/LCSD . . . . .	40
Gen Chem MDL . . . . .	42

# Table of Contents

Gen Chem Preparation Log .....	47
Gen Chem Analysis Run Log .....	48
Gen Chem Prep Data .....	54
Gen Chem Raw Data .....	63
Shipping and Receiving Documents .....	87
Client Chain of Custody .....	88
Sample Receipt Checklist .....	89

# Definitions/Glossary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

**Job Narrative**  
**580-112980-1**

**Comments**

No additional comments.

**Revision**

The report being provided is a revision of the original report sent on 5/9/2022. The report (revision 1) is being revised due to: Client needs TOC reported by dry weight.

**Receipt**

The samples were received on 4/23/2022 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.0° C.

**Receipt Exceptions**

The Sample ID on the container label for the following sample did not match the information listed on the Chain-of-Custody (COC): BNSF-SG01-041922-0-10 (580-112980-1). The container labels list BNSF-SG01-041922-0-10 while the COC lists BNSF-SC01-041922-0-10. The sample was logged per the container label as this matches the nomenclature of another sample in the login.

**General Chemistry**

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batches 580-389340 and 580-389473 and analytical batch 580-389474 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Detection Summary

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605435

Job ID: 580-112980-1

## Client Sample ID: BNSF-SG01-041922-0-10

## Lab Sample ID: 580-112980-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	4700		2700	130	mg/Kg	1	☼	9060A	Total/NA

## Client Sample ID: FD01-041922-0-10

## Lab Sample ID: 580-112980-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	5500		3000	140	mg/Kg	1	☼	9060A	Total/NA
Ammonia as N	15	J	37	13	mg/Kg	1	☼	EPA 350.1	Soluble

## Client Sample ID: BNSF-SG02-041922-0-10

## Lab Sample ID: 580-112980-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	23000		3500	170	mg/Kg	1	☼	9060A	Total/NA
Ammonia as N	40	J F1	43	15	mg/Kg	1	☼	EPA 350.1	Soluble

This Detection Summary does not include radiochemical test results.

# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605435

Job ID: 580-112980-1

**Client Sample ID: BNSF-SG01-041922-0-10**

**Lab Sample ID: 580-112980-1**

Date Collected: 04/19/22 12:00

Matrix: Solid

Date Received: 04/23/22 09:20

Percent Solids: 75.4

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	4700		2700	130	mg/Kg	☼		05/03/22 14:34	1

**General Chemistry - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		33	11	mg/Kg	☼	05/04/22 20:02	05/04/22 20:09	1

**Client Sample ID: FD01-041922-0-10**

**Lab Sample ID: 580-112980-2**

Date Collected: 04/19/22 12:15

Matrix: Solid

Date Received: 04/23/22 09:20

Percent Solids: 67.6

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	5500		3000	140	mg/Kg	☼		05/03/22 14:39	1

**General Chemistry - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	15	J	37	13	mg/Kg	☼	05/04/22 20:02	05/04/22 20:09	1

**Client Sample ID: BNSF-SG02-041922-0-10**

**Lab Sample ID: 580-112980-3**

Date Collected: 04/19/22 13:35

Matrix: Solid

Date Received: 04/23/22 09:20

Percent Solids: 57.7

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	23000		3500	170	mg/Kg	☼		05/03/22 14:43	1

**General Chemistry - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	40	J F1	43	15	mg/Kg	☼	05/04/22 20:02	05/04/22 20:09	1



# Default Detection Limits

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

## General Chemistry

Analyte	RL	MDL	Units
Total Organic Carbon - Duplicates	2000	97	mg/Kg

## General Chemistry - Soluble

Prep: Distill/Ammonia

Leach: DI Leach

Analyte	RL	MDL	Units
Ammonia as N	25	8.8	mg/Kg

# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605435

Job ID: 580-112980-1

## Method: 9060A - Organic Carbon, Total (TOC)

**Lab Sample ID: MB 580-389420/39**  
**Matrix: Solid**  
**Analysis Batch: 389420**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/03/22 16:35	1

**Lab Sample ID: MB 580-389420/5**  
**Matrix: Solid**  
**Analysis Batch: 389420**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/03/22 13:32	1

**Lab Sample ID: MB 580-389420/75**  
**Matrix: Solid**  
**Analysis Batch: 389420**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/03/22 19:17	1

**Lab Sample ID: LCS 580-389420/40**  
**Matrix: Solid**  
**Analysis Batch: 389420**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120

**Lab Sample ID: LCS 580-389420/6**  
**Matrix: Solid**  
**Analysis Batch: 389420**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120

**Lab Sample ID: LCS 580-389420/76**  
**Matrix: Solid**  
**Analysis Batch: 389420**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	114000		mg/Kg		95	80 - 120

**Lab Sample ID: LCSD 580-389420/41**  
**Matrix: Solid**  
**Analysis Batch: 389420**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	116000		mg/Kg		97	80 - 120	1	20

# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605435

Job ID: 580-112980-1

## Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCSD 580-389420/7  
 Matrix: Solid  
 Analysis Batch: 389420

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	114000		mg/Kg		95	80 - 120	1	20

Lab Sample ID: LCSD 580-389420/77  
 Matrix: Solid  
 Analysis Batch: 389420

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	114000		mg/Kg		95	80 - 120	1	20

## Method: EPA 350.1 - Ammonia

Lab Sample ID: MB 580-389340/1-B  
 Matrix: Solid  
 Analysis Batch: 389474

Client Sample ID: Method Blank  
 Prep Type: Soluble  
 Prep Batch: 389473

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		25	8.8	mg/Kg		05/04/22 20:02	05/04/22 20:09	1

Lab Sample ID: LCS 580-389340/2-B  
 Matrix: Solid  
 Analysis Batch: 389474

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble  
 Prep Batch: 389473

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	50.0	48.3		mg/Kg		97	90 - 110

Lab Sample ID: 580-112980-3 MS  
 Matrix: Solid  
 Analysis Batch: 389474

Client Sample ID: BNSF-SG02-041922-0-10  
 Prep Type: Soluble  
 Prep Batch: 389473

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	40	J F1	83.9	102	F1	mg/Kg	☼	75	90 - 110

Lab Sample ID: 580-112980-3 MSD  
 Matrix: Solid  
 Analysis Batch: 389474

Client Sample ID: BNSF-SG02-041922-0-10  
 Prep Type: Soluble  
 Prep Batch: 389473

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia as N	40	J F1	86.2	109	F1	mg/Kg	☼	80	90 - 110	6	20

Lab Sample ID: 580-112980-3 DU  
 Matrix: Solid  
 Analysis Batch: 389474

Client Sample ID: BNSF-SG02-041922-0-10  
 Prep Type: Soluble  
 Prep Batch: 389473

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia as N	40	J F1	86.2	37.4	J	mg/Kg	☼			6	20

# QC Association Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

## General Chemistry

### Analysis Batch: 389004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-112980-1	BNSF-SG01-041922-0-10	Total/NA	Solid	2540G	
580-112980-2	FD01-041922-0-10	Total/NA	Solid	2540G	
580-112980-3	BNSF-SG02-041922-0-10	Total/NA	Solid	2540G	

### Leach Batch: 389340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-112980-1	BNSF-SG01-041922-0-10	Soluble	Solid	DI Leach	
580-112980-2	FD01-041922-0-10	Soluble	Solid	DI Leach	
580-112980-3	BNSF-SG02-041922-0-10	Soluble	Solid	DI Leach	
MB 580-389340/1-B	Method Blank	Soluble	Solid	DI Leach	
LCS 580-389340/2-B	Lab Control Sample	Soluble	Solid	DI Leach	
580-112980-3 MS	BNSF-SG02-041922-0-10	Soluble	Solid	DI Leach	
580-112980-3 MSD	BNSF-SG02-041922-0-10	Soluble	Solid	DI Leach	
580-112980-3 DU	BNSF-SG02-041922-0-10	Soluble	Solid	DI Leach	

### Analysis Batch: 389420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-112980-1	BNSF-SG01-041922-0-10	Total/NA	Solid	9060A	
580-112980-2	FD01-041922-0-10	Total/NA	Solid	9060A	
580-112980-3	BNSF-SG02-041922-0-10	Total/NA	Solid	9060A	
MB 580-389420/39	Method Blank	Total/NA	Solid	9060A	
MB 580-389420/5	Method Blank	Total/NA	Solid	9060A	
MB 580-389420/75	Method Blank	Total/NA	Solid	9060A	
LCS 580-389420/40	Lab Control Sample	Total/NA	Solid	9060A	
LCS 580-389420/6	Lab Control Sample	Total/NA	Solid	9060A	
LCS 580-389420/76	Lab Control Sample	Total/NA	Solid	9060A	
LCSD 580-389420/41	Lab Control Sample Dup	Total/NA	Solid	9060A	
LCSD 580-389420/7	Lab Control Sample Dup	Total/NA	Solid	9060A	
LCSD 580-389420/77	Lab Control Sample Dup	Total/NA	Solid	9060A	

### Prep Batch: 389473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-112980-1	BNSF-SG01-041922-0-10	Soluble	Solid	Distill/Ammonia	389340
580-112980-2	FD01-041922-0-10	Soluble	Solid	Distill/Ammonia	389340
580-112980-3	BNSF-SG02-041922-0-10	Soluble	Solid	Distill/Ammonia	389340
MB 580-389340/1-B	Method Blank	Soluble	Solid	Distill/Ammonia	389340
LCS 580-389340/2-B	Lab Control Sample	Soluble	Solid	Distill/Ammonia	389340
580-112980-3 MS	BNSF-SG02-041922-0-10	Soluble	Solid	Distill/Ammonia	389340
580-112980-3 MSD	BNSF-SG02-041922-0-10	Soluble	Solid	Distill/Ammonia	389340
580-112980-3 DU	BNSF-SG02-041922-0-10	Soluble	Solid	Distill/Ammonia	389340

### Analysis Batch: 389474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-112980-1	BNSF-SG01-041922-0-10	Soluble	Solid	EPA 350.1	389473
580-112980-2	FD01-041922-0-10	Soluble	Solid	EPA 350.1	389473
580-112980-3	BNSF-SG02-041922-0-10	Soluble	Solid	EPA 350.1	389473
MB 580-389340/1-B	Method Blank	Soluble	Solid	EPA 350.1	389473
LCS 580-389340/2-B	Lab Control Sample	Soluble	Solid	EPA 350.1	389473
580-112980-3 MS	BNSF-SG02-041922-0-10	Soluble	Solid	EPA 350.1	389473
580-112980-3 MSD	BNSF-SG02-041922-0-10	Soluble	Solid	EPA 350.1	389473
580-112980-3 DU	BNSF-SG02-041922-0-10	Soluble	Solid	EPA 350.1	389473

Eurofins Seattle

# Lab Chronicle

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

**Client Sample ID: BNSF-SG01-041922-0-10**

**Lab Sample ID: 580-112980-1**

Date Collected: 04/19/22 12:00

Matrix: Solid

Date Received: 04/23/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	389004	04/29/22 17:15	JSM	FGS SEA

**Client Sample ID: BNSF-SG01-041922-0-10**

**Lab Sample ID: 580-112980-1**

Date Collected: 04/19/22 12:00

Matrix: Solid

Date Received: 04/23/22 09:20

Percent Solids: 75.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	389420	05/03/22 14:34	FCG	FGS SEA
Soluble	Leach	DI Leach			389340	05/03/22 18:46	MLT	FGS SEA
Soluble	Prep	Distill/Ammonia			389473	05/04/22 20:02	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	389474	05/04/22 20:09	MLT	FGS SEA

**Client Sample ID: FD01-041922-0-10**

**Lab Sample ID: 580-112980-2**

Date Collected: 04/19/22 12:15

Matrix: Solid

Date Received: 04/23/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	389004	04/29/22 17:15	JSM	FGS SEA

**Client Sample ID: FD01-041922-0-10**

**Lab Sample ID: 580-112980-2**

Date Collected: 04/19/22 12:15

Matrix: Solid

Date Received: 04/23/22 09:20

Percent Solids: 67.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	389420	05/03/22 14:39	FCG	FGS SEA
Soluble	Leach	DI Leach			389340	05/03/22 18:46	MLT	FGS SEA
Soluble	Prep	Distill/Ammonia			389473	05/04/22 20:02	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	389474	05/04/22 20:09	MLT	FGS SEA

**Client Sample ID: BNSF-SG02-041922-0-10**

**Lab Sample ID: 580-112980-3**

Date Collected: 04/19/22 13:35

Matrix: Solid

Date Received: 04/23/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	389004	04/29/22 17:15	JSM	FGS SEA

**Client Sample ID: BNSF-SG02-041922-0-10**

**Lab Sample ID: 580-112980-3**

Date Collected: 04/19/22 13:35

Matrix: Solid

Date Received: 04/23/22 09:20

Percent Solids: 57.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	389420	05/03/22 14:43	FCG	FGS SEA
Soluble	Leach	DI Leach			389340	05/03/22 18:46	MLT	FGS SEA
Soluble	Prep	Distill/Ammonia			389473	05/04/22 20:02	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	389474	05/04/22 20:09	MLT	FGS SEA

Eurofins Seattle

# Lab Chronicle

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

**Laboratory References:**

FGS SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

# Accreditation/Certification Summary

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605435

Job ID: 580-112980-1

## Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2954	07-07-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids
9060A		Solid	Total Organic Carbon - Duplicates
EPA 350.1	Distill/Ammonia	Solid	Ammonia as N

Oregon	NELAP	4167	07-07-22
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Solids

Washington	State	C788	07-13-22
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids
9060A		Solid	Total Organic Carbon - Duplicates

# Method Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

Method	Method Description	Protocol	Laboratory
2540G	SM 2540G	SM22	FGS SEA
9060A	Organic Carbon, Total (TOC)	SW846	FGS SEA
EPA 350.1	Ammonia	EPA	FGS SEA
DI Leach	Deionized Water Leaching Procedure	ASTM	FGS SEA
Distill/Ammonia	Distillation, Ammonia	None	FGS SEA

#### Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

None = None

SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

FGS SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



# Sample Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605435

Job ID: 580-112980-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-112980-1	BNSF-SG01-041922-0-10	Solid	04/19/22 12:00	04/23/22 09:20
580-112980-2	FD01-041922-0-10	Solid	04/19/22 12:15	04/23/22 09:20
580-112980-3	BNSF-SG02-041922-0-10	Solid	04/19/22 13:35	04/23/22 09:20

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
<b>Ammonia Std_00019</b>	06/14/23		LabChem, Lot L158-09		(Purchased Reagent)		Ammonia as N	1000 mg/L
<b>CaCO3_00004_00009</b>	07/16/25		LECO, Lot 1001		(Purchased Reagent)		TOC Result 1	120000 mg/Kg
							Total Organic Carbon - Duplicates	120000 mg/Kg
<b>CaCO3_00012</b>	03/31/23		Alfa Aesar, Lot X15E030		(Purchased Reagent)		Total Organic Carbon - Duplicates	120000 mg/Kg
<b>TOCS_LCS_00012</b>	07/26/23		ERA, Lot D108-542		(Purchased Reagent)		TOC Result 1	4300 mg/Kg
							Total Organic Carbon - Duplicates	4300 mg/Kg

Reagent

---

**Ammonia Std\_00019**



### CERTIFICATE OF ANALYSIS

Description: AMMONIA (as NITROGEN) STANDARD, 1000ppm (1mL = 1mg N)

Mfg. Date: 06/14/2021

Catalog Number: LC17940

Exp. Date: 06/14/2023

Lot Number: L158-09

### ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm N	1000ppm +/- 10ppm	995 ppm
Concentration mg N/mL	1.000 +/- 0.010 mg N/mL	0.995 mg N/mL
Traceable to NIST	Potassium Chloride	999b

**Intended Use** - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

**Storage Information** - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

**Instructions for Handling and Use** - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

**Preparation** - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor



2899582  
ID: Ammonia Std\_00019  
Exp: 06/14/23 Prpd: R1K  
1000ppm Ammonia (as Nitro

rad 6/30/21  
JSE

An ISO9001:2015 certified company. Registration # 0306-01

06/30/2021 7:01 PM

Form #17.13 07/28/2016

Reagent

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**CaCO3\_00004\_00009**



Version 00  
 Molecular weight 100.09  
 Quality Test / Release Date 07/31/2020  
 Molecular Formula C Ca O3  
 CAS No 471-34-1  
 Linear Formula CaCO3  
 Flash Point (°C)

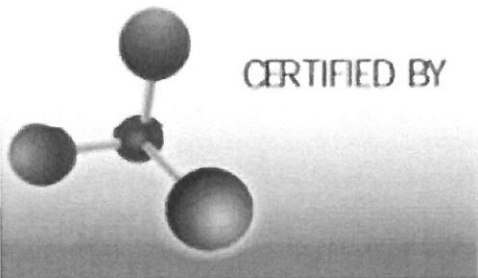
Certificate of Analysis

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsibility of the purchaser, formulator or those performing further manufacturing to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

<b>Catalog Number</b>	42351	<b>Quality Test / Release Date</b>	07/31/2020
<b>Lot Number</b>	A0421160	<b>Suggested retest date</b>	07/31/2025
<b>Description</b>	Calcium carbonate, 99+%, ACS reagent		
<b>Country of Origin</b>	INDIA		
<b>Declaration of Origin</b>	synthetic		

<b>BSE/TSE</b>	
<b>Chemical</b>	

Result name	Specifications	Test Value
Appearance (Color)	White	White
Appearance (Form)	Crystalline powder	Crystalline powder
Titration Complexometric	>=99.0 % (on dried substance)	99.4 % (on dried substance)
Heavy metals (ICP-OES)	=<0.001 %	=<0.001 %
Insoluble matter	=<0.01 % (in dilute HCl)	0.008 % (in dilute HCl)
Chloride (Cl)	=<0.001 %	=<0.001 %
Fluoride (F)	=<0.0015 %	=<0.0015 %
Sulfate (SO4)	=<0.01 %	=<0.01 %
Ammonium (NH4)	=<0.003 %	=<0.003 %
Barium (Ba)	=<0.01 %	0.00164 %
Iron (Fe)	=<0.003 %	=<0.003 %
Magnesium (Mg)	=<0.02 %	0.010341 %
Potassium (K)	=<0.01 %	0.001048 %
Sodium (Na)	=<0.1 %	0.07061 %
Strontium (Sr)	=<0.1 %	0.007741 %



C. Wygaerts, QA Manager

Issued: 08-03-2020

Acros Organics  
 ENA23, zone1, nr 1350, Janssen Pharmaceuticlaan 3a, B-2440 Geel, Belgium  
 Tel +32 14/57.52.11 - Fax+32 14/59.34.34 Internet: <http://www.acros.com>  
 1 Reagent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329

3092515  
 ID: CaCO3\_00004\_00009  
 Exp 07/16/25 Prpd R1K Opn 03/04/22  
 CaCO3-12%TC Second Source

FCG  
 3/14/22

Reagent

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**CaCO3\_00012**

# Certificate of analysis



2450156  
 ID: CaCO3\_00012  
 Exp 03/31/23 Prpd.JKM Opm 08/14/19  
 CaCO3-12%TC Second Source

Product No.: 36337  
 Product: Calcium carbonate, ACS, low in alkalies, 99.0% min  
 Lot No.: X15E030

Test	Limits	Results
Assay	99.5 % min	99.1 %
Insoluble in dilute HCl	0.01 % max	< 0.01 %
Chloride	0.001 % max	< 0.001 %
Fluoride	0.0015 % max	< 0.0008 %
Sulfate	0.005 % max	< 0.01 %
Ammonium	0.003 % max	< 0.003 %
Barium	0.01 %	< 0.01 %
Heavy metals (as Pb)	0.001 % max	< 0.001 %
Iron	0.002 % max	< 0.003 %
Magnesium	0.01 % max	0.003 %
Potassium	0.01 % max	< 0.01 %
Sodium	0.01 % max	< 0.1 %
Strontium	0.1 % max	< 0.1 %

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**ThermoFisher**  
SCIENTIFIC



Reagent

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**TOCS\_LCS\_00012**



A Waters Company

Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Nutrients in Soil  
**Catalog Number:** 542  
**Lot No.** D108-542  
**Certificate Issue Date:** December 26, 2019  
**Expiration Date:** July 26, 2023  
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #542 revision 090119.*

## CERTIFICATION

Parameter	Certified Value <sup>1</sup>	Reference Value <sup>7</sup>	Uncertainty <sup>2</sup>	QC Performance Acceptance Limits <sup>3</sup>	PT Performance Acceptance Limits <sup>4</sup>
	mg/kg	mg/kg	%	mg/kg	mg/kg
Ammonia as N	853	795	5.50	523 - 1070	456 - 1130
Total Kjeldahl Nitrogen	1510	1500	12.3	976 - 2030	827 - 2180
Total Organic Carbon (TOC)	4300	4370	6.86	1580 - 7150	1530 - 7200
Total Phosphorus	911	815	10.8	422 - 1210	185 - 1440

## ANALYTICAL VERIFICATION

Parameter	Certified Value <sup>1</sup>	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery <sup>5</sup>	n	SRM Number <sup>6</sup>	Recovery
	mg/kg	mg/kg	%			%
Ammonia as N	853	795	93.3	39	-	-
Total Kjeldahl Nitrogen	1510	1500	99.7	33	-	-
Total Organic Carbon (TOC)	4300	4370	102	24	-	-
Total Phosphorus	911	815	89.4	55	-	-

*rev. 10/20/20  
WSE*



2735864  
 ID: TOCS\_LCS\_00012  
 Exp: 01/31/22 PpPd: R1K  
 1540-7000 mg/kg TOC

▪ **Certificate of Analysis** ▪

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:

$$U_{expanded} = k * \text{SQRT}((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$$

Where:

U<sub>expanded</sub> = Expanded uncertainty.

k = Coverage factor.

U<sub>char</sub> = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.

U<sub>homogen</sub> = Standard uncertainty of the homogeneity assessment.

U<sub>LTS</sub> = Standard uncertainty associated with long-term stability.

U<sub>STS</sub> = Standard uncertainty associated with short-term (transport) stability.

U<sub>RSS</sub> = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]\*100

The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

8. **Metrological Traceability.** This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

**Quality Officer**

**Matthew Seebeck**




ISO/IEC 17025:2017

ISO/IEC 17034:2016



# GENERAL CHEMISTRY

COVER PAGE  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job Number: 580-112980-1

SDG No.: \_\_\_\_\_

Project: D3593500 10605435

Client Sample ID	Lab Sample ID
BNSF-SG01-041922-0-10	580-112980-1
FD01-041922-0-10	580-112980-2
BNSF-SG02-041922-0-10	580-112980-3

Comments:

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY

Client Sample ID: BNSF-SG01-041922-0-10

Lab Sample ID: 580-112980-1

Lab Name: Eurofins Seattle

Job No.: 580-112980-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/19/2022 12:00

Reporting Basis: DRY

Date Received: 04/23/2022 09:20

% Solids: 75.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Duplicates	4700	2700	130	mg/Kg			1	9060A

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY - SOLUBLE

Client Sample ID: BNSF-SG01-041922-0-10

Lab Sample ID: 580-112980-1

Lab Name: Eurofins Seattle

Job No.: 580-112980-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/19/2022 12:00

Reporting Basis: DRY

Date Received: 04/23/2022 09:20

% Solids: 75.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7664-41-7	Ammonia as N	ND	33	11	mg/Kg			1	EPA 350.1

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY

Client Sample ID: FD01-041922-0-10

Lab Sample ID: 580-112980-2

Lab Name: Eurofins Seattle

Job No.: 580-112980-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/19/2022 12:15

Reporting Basis: DRY

Date Received: 04/23/2022 09:20

% Solids: 67.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Duplicates	5500	3000	140	mg/Kg			1	9060A



1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY - SOLUBLE

Client Sample ID: FD01-041922-0-10

Lab Sample ID: 580-112980-2

Lab Name: Eurofins Seattle

Job No.: 580-112980-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/19/2022 12:15

Reporting Basis: DRY

Date Received: 04/23/2022 09:20

% Solids: 67.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7664-41-7	Ammonia as N	15	37	13	mg/Kg	J		1	EPA 350.1

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY

Client Sample ID: BNSF-SG02-041922-0-10

Lab Sample ID: 580-112980-3

Lab Name: Eurofins Seattle

Job No.: 580-112980-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/19/2022 13:35

Reporting Basis: DRY

Date Received: 04/23/2022 09:20

% Solids: 57.7

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Duplicates	23000	3500	170	mg/Kg			1	9060A

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY - SOLUBLE

Client Sample ID: BNSF-SG02-041922-0-10

Lab Sample ID: 580-112980-3

Lab Name: Eurofins Seattle

Job No.: 580-112980-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/19/2022 13:35

Reporting Basis: DRY

Date Received: 04/23/2022 09:20

% Solids: 57.7

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7664-41-7	Ammonia as N	40	43	15	mg/Kg	J	F1	1	EPA 350.1

2-IN  
 CALIBRATION QUALITY CONTROL  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle

Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Analyst: FCG

Batch Start Date: 03/18/2022

Reporting Units: mg/Kg

Analytical Batch No.: 389420

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	18:26	Total Organic Carbon - Duplicates	4350	4300	101	80-120		TOCS_LCS_00012
2	ICB	18:28	Total Organic Carbon - Duplicates	ND					
3	CCV	13:27	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
4	CCB	13:29	Total Organic Carbon - Duplicates	ND					
10	CCV	14:07	Total Organic Carbon - Duplicates	120000	120000	100	80-120		CaCO3_00004_00009
11	CCB	14:10	Total Organic Carbon - Duplicates	ND					
19	CCV	14:57	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
20	CCB	14:59	Total Organic Carbon - Duplicates	ND					
28	CCV	15:32	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
29	CCB	15:34	Total Organic Carbon - Duplicates	ND					
35	CCV	16:25	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
36	CCB	16:28	Total Organic Carbon - Duplicates	ND					
37	CCV	16:30	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
38	CCB	16:33	Total Organic Carbon - Duplicates	ND					
43	CCV	16:48	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
44	CCB	16:50	Total Organic Carbon - Duplicates	ND					
55	CCV	17:47	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
56	CCB	17:49	Total Organic Carbon - Duplicates	ND					
65	CCV	18:26	Total Organic Carbon - Duplicates	120000	120000	100	80-120		CaCO3_00004_00009
66	CCB	18:29	Total Organic Carbon - Duplicates	ND					
71	CCV	18:45	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
72	CCB	18:47	Total Organic Carbon - Duplicates	ND					
73	CCV	19:12	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
74	CCB	19:15	Total Organic Carbon - Duplicates	ND					
84	CCV	19:48	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
85	CCB	19:50	Total Organic Carbon - Duplicates	ND					
96	CCV	20:35	Total Organic Carbon - Duplicates	121000	120000	101	80-120		CaCO3_00004_00009
97	CCB	20:38	Total Organic Carbon - Duplicates	812				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN  
METHOD BLANK  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle

Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 389420 Date: 05/03/2022 13:32							
9060A	MB 580-389420/5	Total Organic Carbon - Duplicates	ND		mg/Kg	2000	1
Batch ID: 389420 Date: 05/03/2022 16:35							
9060A	MB 580-389420/39	Total Organic Carbon - Duplicates	ND		mg/Kg	2000	1
Batch ID: 389420 Date: 05/03/2022 19:17							
9060A	MB 580-389420/75	Total Organic Carbon - Duplicates	ND		mg/Kg	2000	1
Batch ID: 389474 Date: 05/04/2022 20:09 Prep Batch: 389473 Date: 05/04/2022 20:02							
EPA 350.1	MB 580-389340/1-B	Ammonia as N	ND		mg/Kg	25	1

5-IN  
 MATRIX SPIKE SAMPLE RECOVERY  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-112980-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 389474		Date: 05/04/2022 20:09	Prep Batch: 389473		Date: 05/04/2022 20:02						
EPA 350.1	580-112980-3	Ammonia as N	40	J	mg/Kg						F1
EPA 350.1	580-112980-3	Ammonia as N	102		mg/Kg	83.9	75	90-110			F1
	MS										

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Note - Results and Reporting Limits have been adjusted for dry weight.

5-IN  
 MATRIX SPIKE DUPLICATE SAMPLE RECOVERY  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-112980-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 389474		Date: 05/04/2022 20:09	Prep Batch: 389473		Date: 05/04/2022 20:02						
EPA 350.1	580-112980-3 MSD	Ammonia as N	109		mg/Kg	86.2	80	90-110	6	20	F1

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Note - Results and Reporting Limits have been adjusted for dry weight.

6-IN  
DUPLICATE  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Matrix: Solid

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 389474		Date: 05/04/2022 20:09		Prep Batch: 389473		Date: 05/04/2022 20:02		
EPA 350.1	BNSF-SG02-041922-0-10	580-112980-3	Ammonia as N	40	mg/Kg			J
EPA 350.1	BNSF-SG02-041922-0-10	580-112980-3 DU	Ammonia as N	37.4	mg/Kg	6	20	J

Calculations are performed before rounding to avoid round-off errors in calculated results.



7A-IN  
LAB CONTROL SAMPLE  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 389420 Date: 05/03/2022 13:34											
9060A	LCS 580-389420/6	Total Organic Carbon - Duplicates	115000		mg/Kg	120000	96	80-120	1	20	
LCS Source: CaCO3_00012											
Batch ID: 389420 Date: 05/03/2022 16:38											
9060A	LCS 580-389420/40	Total Organic Carbon - Duplicates	115000		mg/Kg	120000	96	80-120	1	20	
LCS Source: CaCO3_00012											
Batch ID: 389420 Date: 05/03/2022 19:20											
9060A	LCS 580-389420/76	Total Organic Carbon - Duplicates	114000		mg/Kg	120000	95	80-120	1	20	
LCS Source: CaCO3_00012											
Batch ID: 389474 Date: 05/04/2022 20:09 Prep Batch: 389473 Date: 05/04/2022 20:02											
EPA 350.1	LCS 580-389340/2- B	Ammonia as N	48.3		mg/Kg	50.0	97	90-110			
LCS Source: Ammonia Std_00019											

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN  
 LAB CONTROL SAMPLE DUPLICATE  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-112980-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 389420 Date: 05/03/2022 13:37											
LCSD Source: CaCO3_00012											
9060A	LCSD 580-389420/7	Total Organic Carbon - Duplicates	114000		mg/Kg	120000	95	80-120	1	20	
Batch ID: 389420 Date: 05/03/2022 16:40											
LCSD Source: CaCO3_00012											
9060A	LCSD 580-389420/41	Total Organic Carbon - Duplicates	116000		mg/Kg	120000	97	80-120	1	20	
Batch ID: 389420 Date: 05/03/2022 19:23											
LCSD Source: CaCO3_00012											
9060A	LCSD 580-389420/77	Total Organic Carbon - Duplicates	114000		mg/Kg	120000	95	80-120	1	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY - SOLUBLE

Lab Name: Eurofins Seattle Job Number: 580-112980-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC126  
Method: EPA 350.1 MDL Date: 04/21/2021 07:54  
Prep Method: Distill/Ammonia  
Leach Method: DI Leach

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Ammonia as N		25	8.78

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY - SOLUBLE

Lab Name: Eurofins Seattle Job Number: 580-112980-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC126  
Method: EPA 350.1 XMDL Date: 10/08/2019 08:54

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia as N		1	0.3512

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job Number: 580-112980-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: NOEQUIP  
Method: 2540G RL Date: 01/01/2005 13:13

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job Number: 580-112980-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC105  
Method: 9060A MDL Date: 07/09/2019 14:51

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Total Organic Carbon - Duplicates		2000	96.7

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job Number: 580-112980-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC105  
Method: 9060A XMDL Date: 07/09/2019 14:51

Analyte	Wavelength/ Mass	XRL (mg/Kg)	XMDL (mg/Kg)
Total Organic Carbon - Duplicates		2000	96.7

12-IN  
PREPARATION LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Prep Method: Distill/Ammonia

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 580-389340/1-B	05/04/2022 20:02	389473		50	50
LCS 580-389340/2-B	05/04/2022 20:02	389473		50	50
580-112980-1	05/04/2022 20:02	389473		50	50
580-112980-2	05/04/2022 20:02	389473		50	50
580-112980-3	05/04/2022 20:02	389473		50	50
580-112980-3 DU	05/04/2022 20:02	389473		50	50
580-112980-3 MS	05/04/2022 20:02	389473		50	50
580-112980-3 MSD	05/04/2022 20:02	389473		50	50



13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Instrument ID: TAC126 Analysis Method: EPA 350.1

Start Date: 05/04/2022 20:09 End Date: 05/04/2022 20:09

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				N H 3																											
MB 580-389340/1-B	1	S	20:09	X																											
LCS 580-389340/2-B	1	S	20:09	X																											
ZZZZZZ			20:09																												
580-112980-1	1	S	20:09	X																											
580-112980-2	1	S	20:09	X																											
580-112980-3	1	S	20:09	X																											
580-112980-3 DU	1	S	20:09	X																											
580-112980-3 MS	1	S	20:09	X																											
580-112980-3 MSD	1	S	20:09	X																											

Prep Types: \_\_\_\_\_  
S = Soluble

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Instrument ID: NOEQUIP Analysis Method: 2540G

Start Date: 04/29/2022 17:15 End Date: 04/29/2022 17:15

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				% S o l	M o i s t																										
ZZZZZZ			17:15																												
ZZZZZZ			17:15																												
ZZZZZZ			17:15																												
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13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-112980-1  
 SDG No.: \_\_\_\_\_  
 Instrument ID: NOEQUIP Analysis Method: 2540G  
 Start Date: 04/29/2022 17:15 End Date: 04/29/2022 17:15

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				% S o l	M o i s t																										
580-112980-1	1	T	17:15	X	X																										
580-112980-2	1	T	17:15	X	X																										
580-112980-3	1	T	17:15	X	X																										
ZZZZZZ			17:15																												
ZZZZZZ			17:15																												
ZZZZZZ			17:15																												
ZZZZZZ			17:15																												
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ZZZZZZ			17:15																												
ZZZZZZ			17:15																												

Prep Types: \_\_\_\_\_  
 T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Instrument ID: TAC105 Analysis Method: 9060A

Start Date: 03/18/2022 18:26 End Date: 05/03/2022 20:38

Lab Sample Id	D/F	Type	Time	Analytes																											
				T	O	C	D																								
ICV 580-389420/1	1		18:26	X																											
ICB 580-389420/2	1		18:28	X																											
CCV 580-389420/3	1		13:27	X																											
CCB 580-389420/4	1		13:29	X																											
MB 580-389420/5	1	T	13:32	X																											
LCS 580-389420/6	1	T	13:34	X																											
LCSD 580-389420/7	1	T	13:37	X																											
ZZZZZZ			13:58																												
ZZZZZZ			14:02																												
CCV 580-389420/10	1		14:07	X																											
CCB 580-389420/11	1		14:10	X																											
ZZZZZZ			14:12																												
ZZZZZZ			14:30																												
580-112980-1	1	T	14:34	X																											
580-112980-2	1	T	14:39	X																											
580-112980-3	1	T	14:43	X																											
ZZZZZZ			14:48																												
ZZZZZZ			14:52																												
CCV 580-389420/19	1		14:57	X																											
CCB 580-389420/20	1		14:59	X																											
ZZZZZZ			15:01																												
ZZZZZZ			15:06																												
ZZZZZZ			15:10																												
ZZZZZZ			15:14																												
ZZZZZZ			15:19																												
ZZZZZZ			15:23																												
ZZZZZZ			15:27																												
CCV 580-389420/28	1		15:32	X																											
CCB 580-389420/29	1		15:34	X																											
ZZZZZZ			15:57																												
ZZZZZZ			16:01																												
ZZZZZZ			16:06																												
ZZZZZZ			16:10																												
ZZZZZZ			16:23																												
CCV 580-389420/35	1		16:25	X																											
CCB 580-389420/36	1		16:28	X																											
CCV 580-389420/37	1		16:30	X																											
CCB 580-389420/38	1		16:33	X																											
MB 580-389420/39	1	T	16:35	X																											
LCS 580-389420/40	1	T	16:38	X																											

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Instrument ID: TAC105 Analysis Method: 9060A

Start Date: 03/18/2022 18:26 End Date: 05/03/2022 20:38

Lab Sample Id	D/F	Type	Time	T O C D	Analytes																											
LCSD 580-389420/41	1	T	16:40	X																												
ZZZZZZ			16:42																													
CCV 580-389420/43	1		16:48	X																												
CCB 580-389420/44	1		16:50	X																												
ZZZZZZ			16:52																													
ZZZZZZ			16:56																													
ZZZZZZ			17:01																													
ZZZZZZ			17:05																													
ZZZZZZ			17:20																													
ZZZZZZ			17:25																													
ZZZZZZ			17:29																													
ZZZZZZ			17:33																													
ZZZZZZ			17:38																													
ZZZZZZ			17:42																													
CCV 580-389420/55	1		17:47	X																												
CCB 580-389420/56	1		17:49	X																												
ZZZZZZ			17:51																													
ZZZZZZ			17:56																													
ZZZZZZ			18:00																													
ZZZZZZ			18:05																													
ZZZZZZ			18:09																													
ZZZZZZ			18:13																													
ZZZZZZ			18:17																													
ZZZZZZ			18:22																													
CCV 580-389420/65	1		18:26	X																												
CCB 580-389420/66	1		18:29	X																												
ZZZZZZ			18:31																													
ZZZZZZ			18:35																													
ZZZZZZ			18:40																													
ZZZZZZ			18:42																													
CCV 580-389420/71	1		18:45	X																												
CCB 580-389420/72	1		18:47	X																												
CCV 580-389420/73	1		19:12	X																												
CCB 580-389420/74	1		19:15	X																												
MB 580-389420/75	1	T	19:17	X																												
LCS 580-389420/76	1	T	19:20	X																												
LCSD 580-389420/77	1	T	19:23	X																												
ZZZZZZ			19:25																													
ZZZZZZ			19:29																													
ZZZZZZ			19:34																													

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-112980-1  
 SDG No.: \_\_\_\_\_  
 Instrument ID: TAC105 Analysis Method: 9060A  
 Start Date: 03/18/2022 18:26 End Date: 05/03/2022 20:38

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				T O C D																									
ZZZZZZ			19:38																										
ZZZZZZ			19:41																										
ZZZZZZ			19:43																										
CCV 580-389420/84	1		19:48	X																									
CCB 580-389420/85	1		19:50	X																									
ZZZZZZ			19:52																										
ZZZZZZ			19:57																										
ZZZZZZ			20:01																										
ZZZZZZ			20:05																										
ZZZZZZ			20:09																										
ZZZZZZ			20:14																										
ZZZZZZ			20:18																										
ZZZZZZ			20:22																										
ZZZZZZ			20:27																										
ZZZZZZ			20:31																										
CCV 580-389420/96	1		20:35	X																									
CCB 580-389420/97	1		20:38	X																									

Prep Types: \_\_\_\_\_  
 T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Batch Number: 389340 Batch Start Date: 05/03/22 18:46 Batch Analyst: Tanase, Michelle L

Batch Method: DI Leach Batch End Date: 05/04/22 20:01

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Ammonia Std 00019			
MB 580-389340/1		DI Leach, Distill/Ammo nia, EPA 350.1		10 g	250 mL				
LCS 580-389340/2		DI Leach, Distill/Ammo nia, EPA 350.1		10 g	250 mL	0.5 mL			
580-112980-A-1	BNSF-SG01-041922 -0-10	DI Leach, Distill/Ammo nia, EPA 350.1	S	10.1760 g	250 mL				
580-112980-A-2	FD01-041922-0-10	DI Leach, Distill/Ammo nia, EPA 350.1	S	10.1057 g	250 mL				
580-112980-A-3	BNSF-SG02-041922 -0-10	DI Leach, Distill/Ammo nia, EPA 350.1	S	10.0285 g	250 mL				
580-112980-A-3 DU	BNSF-SG02-041922 -0-10	DI Leach, Distill/Ammo nia, EPA 350.1	S	10.2053 g	250 mL				
580-112980-A-3 MS	BNSF-SG02-041922 -0-10	DI Leach, Distill/Ammo nia, EPA 350.1	S	10.3335 g	250 mL	0.5 mL			
580-112980-A-3 MSD	BNSF-SG02-041922 -0-10	DI Leach, Distill/Ammo nia, EPA 350.1	S	10.0561 g	250 mL	0.5 mL			

Batch Notes	
Balance ID	SEA227
Blank Matrix ID	DI water
Tumble Start Time	05/03/2022 18:45
Tumble End Time	05/03/2022 21:20
Pipette/Syringe/Dispenser ID	WC 2E

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Batch Number: 389340 Batch Start Date: 05/03/22 18:46 Batch Analyst: Tanase, Michelle L

Batch Method: DI Leach Batch End Date: 05/04/22 20:01

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.



GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Batch Number: 389473 Batch Start Date: 05/04/22 20:02 Batch Analyst: Tanase, Michelle L

Batch Method: Distill/Ammonia Batch End Date: 05/04/22 20:07

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 580-389340/1-A		Distill/Ammonia, EPA 350.1		50 mL	50 mL				
LCS 580-389340/2-A		Distill/Ammonia, EPA 350.1		50 mL	50 mL				
580-112980-A-1-A	BNSF-SG01-041922-0-10	Distill/Ammonia, EPA 350.1	S	50 mL	50 mL				
580-112980-A-2-A	FD01-041922-0-10	Distill/Ammonia, EPA 350.1	S	50 mL	50 mL				
580-112980-A-3-A	BNSF-SG02-041922-0-10	Distill/Ammonia, EPA 350.1	S	50 mL	50 mL				
580-112980-A-3-B DU	BNSF-SG02-041922-0-10	Distill/Ammonia, EPA 350.1	S	50 mL	50 mL				
580-112980-A-3-C MS	BNSF-SG02-041922-0-10	Distill/Ammonia, EPA 350.1	S	50 mL	50 mL				
580-112980-A-3-D MSD	BNSF-SG02-041922-0-10	Distill/Ammonia, EPA 350.1	S	50 mL	50 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Batch Number: 389473 Batch Start Date: 05/04/22 20:02 Batch Analyst: Tanase, Michelle L

Batch Method: Distill/Ammonia Batch End Date: 05/04/22 20:07

Batch Notes	
Blank Matrix ID	DI water
Acid used for pH adjustment	3131013
Base used for pH adjustment	3118259
Buffer Reagent ID	3139694
Boiling Chips ID	3093959
Anti Foam ID	3090171
Sulfuric Acid Reagent ID Number	3131013
Pipette/Syringe/Dispenser ID	WC 5A, WC 10E
Distillation Unit ID	AMM Dist Block1
Distillation Start Time	1648
Distillation End Time	1733
Temperature	In: 210 Out: 208 Degrees C

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Batch Number: 389474 Batch Start Date: 05/04/22 20:09 Batch Analyst: Tanase, Michelle L

Batch Method: EPA 350.1 Batch End Date: 05/04/22 22:58

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 580-389340/1-B		EPA 350.1		50 mL	50 mL				
LCS 580-389340/2-B		EPA 350.1		50 mL	50 mL				
580-112980-A-1-B	BNSF-SG01-041922-0-10	EPA 350.1	S	50 mL	50 mL				
580-112980-A-2-B	FD01-041922-0-10	EPA 350.1	S	50 mL	50 mL				
580-112980-A-3-E	BNSF-SG02-041922-0-10	EPA 350.1	S	50 mL	50 mL				
580-112980-A-3-F DU	BNSF-SG02-041922-0-10	EPA 350.1	S	50 mL	50 mL				
580-112980-A-3-G MS	BNSF-SG02-041922-0-10	EPA 350.1	S	50 mL	50 mL				
580-112980-A-3-H MSD	BNSF-SG02-041922-0-10	EPA 350.1	S	50 mL	50 mL				

Batch Notes	
Sodium Nitroprusside ID	3146568
Hypochlorite ID	3146725
Sodium Phenolate ID	Phenol/nitroferricyanide: 3146569
EDTA Buffer ID	3093957
Carrier Identification	DI water
Pipette/Syringe/Dispenser ID	WC 0.2D, WC 2E, WC 10E
Batch Comment	NH3: 3062042 (ICV), 3087035 (CCV)

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Batch Number: 389004 Batch Start Date: 04/29/22 17:15 Batch Analyst: McKell, Justin S

Batch Method: 2540G Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry	%_Moisture	%_Solid	
580-112980-A-1	BNSF-SG01-041922 -0-10	2540G	T	00000.62 g	00005.94 g	00004.63 g	24.624060150375 9 %	75.375939849624 1 %	
580-112980-A-2	FD01-041922-0-10	2540G	T	00000.63 g	00006.43 g	00004.55 g	32.413793103448 3 %	67.586206896551 7 %	
580-112980-A-3	BNSF-SG02-041922 -0-10	2540G	T	00000.64 g	00004.49 g	00002.86 g	42.337662337662 3 %	57.662337662337 7 %	

Batch Notes	
Balance ID	sea225
Oven ID	microwave
Date samples were placed in the oven	04/29/2022
Time samples were place in the oven	17:57
Date samples were removed from oven	04/29/2022
Time Samples were removed from oven	18:58

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Batch Number: 389420 Batch Start Date: 05/03/22 13:27 Batch Analyst: Guerra, Fernando C

Batch Method: 9060A Batch End Date: 05/03/22 20:38

Lab Sample ID	Client Sample ID	Method Chain	Basis	Baked Sand 00149	CaCO3 00012	CaCO3_00004 00009	TOCS_LCS 00012		
ICV 580-389420/1		9060A					# g		
ICB 580-389420/2		9060A		0.2002 g					
CCV 580-389420/3		9060A				# g			
CCB 580-389420/4		9060A		# g					
MB 580-389420/5		9060A		# g					
LCS 580-389420/6		9060A			# g				
LCSD 580-389420/7		9060A			# g				
CCV 580-389420/10		9060A				# g			
CCB 580-389420/11		9060A		# g					
CCV 580-389420/19		9060A				# g			
CCB 580-389420/20		9060A		# g					
CCV 580-389420/28		9060A				# g			
CCB 580-389420/29		9060A		# g					
CCV 580-389420/35		9060A				# g			
CCB 580-389420/36		9060A		# g					
CCV 580-389420/37		9060A				# g			
CCB 580-389420/38		9060A		# g					
MB 580-389420/39		9060A		# g					
LCS 580-389420/40		9060A			# g				
LCSD 580-389420/41		9060A			# g				
CCV 580-389420/43		9060A				# g			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Batch Number: 389420 Batch Start Date: 05/03/22 13:27 Batch Analyst: Guerra, Fernando C

Batch Method: 9060A Batch End Date: 05/03/22 20:38

Lab Sample ID	Client Sample ID	Method Chain	Basis	Baked Sand 00149	CaCO3 00012	CaCO3 00004 00009	TOCS_LCS 00012		
CCB 580-389420/44		9060A		# g					
CCV 580-389420/55		9060A				# g			
CCB 580-389420/56		9060A		# g					
CCV 580-389420/65		9060A				# g			
CCB 580-389420/66		9060A		# g					
CCV 580-389420/71		9060A				# g			
CCB 580-389420/72		9060A		# g					
CCV 580-389420/73		9060A				# g			
CCB 580-389420/74		9060A		# g					
MB 580-389420/75		9060A		# g					
LCS 580-389420/76		9060A			# g				
LCSD 580-389420/77		9060A			# g				
CCV 580-389420/84		9060A				# g			
CCB 580-389420/85		9060A		# g					
CCV 580-389420/96		9060A				# g			
CCB 580-389420/97		9060A		# g					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-112980-1

SDG No.: \_\_\_\_\_

Batch Number: 389420 Batch Start Date: 05/03/22 13:27 Batch Analyst: Guerra, Fernando C

Batch Method: 9060A Batch End Date: 05/03/22 20:38

Batch Notes	
Acid ID	3035886
Pipette/Syringe/Dispenser ID	sea224
Oven ID	oven 4
Temperature	70.1 Deg. C
Drying Time	12+ hours min
Batch Comment	alum dish: 20200416

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# General Chemistry Raw Data Report

Job ID: 580-112980-1

**Batch: 389474**  
**Method: EPA 350.1**

**Analyst Initials: MLT**  
**Instrument: Astoria Pacific rAPID T**

**Lab Sample ID: MB 580-389340/1-B**

**Analysis Date: May 04, 2022 20:09**

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	0.22	mg/L	50 mL	50 mL

**Lab Sample ID: LCS 580-389340/2-B**

**Analysis Date: May 04, 2022 20:09**

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	1.93	mg/L	50 mL	50 mL

**Lab Sample ID: 580-112980-A-1-B**

**Analysis Date: May 04, 2022 20:09**

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	0.32	mg/L	50 mL	50 mL

**Lab Sample ID: 580-112980-A-2-B**

**Analysis Date: May 04, 2022 20:09**

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	0.42	mg/L	50 mL	50 mL

**Lab Sample ID: 580-112980-A-3-E**

**Analysis Date: May 04, 2022 20:09**

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	0.92	mg/L	50 mL	50 mL

**Lab Sample ID: 580-112980-A-3-F DU**

**Analysis Date: May 04, 2022 20:09**

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	0.88	mg/L	50 mL	50 mL

**Lab Sample ID: 580-112980-A-3-G MS**

**Analysis Date: May 04, 2022 20:09**

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	2.44	mg/L	50 mL	50 mL

**Lab Sample ID: 580-112980-A-3-H MSD**

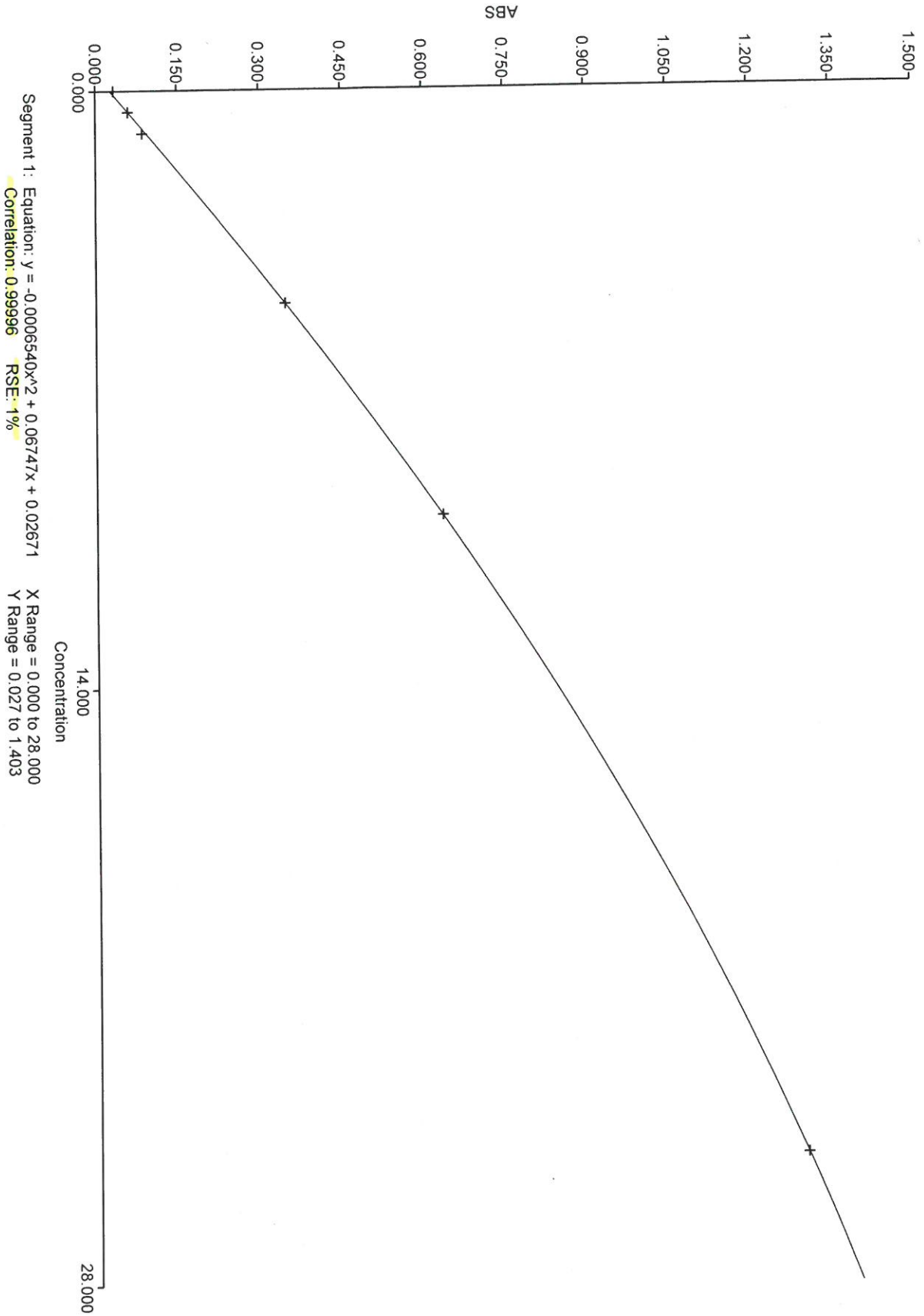
**Analysis Date: May 04, 2022 20:09**

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	2.53	mg/L	50 mL	50 mL



Batch: 389474

Row	Sample Info			Ammonia, High Level (T023)				
	Cup	ID	Comment	Abs	ppm Status	Well	Date	Time
1	C1	NH3 0.0		0.033	0.09Crv	A02	5/4/2022	8:14:07 PM
2	C2	NH3 0.5		0.060	0.50	A03	5/4/2022	8:16:52 PM
3	C3	NH3 1.0		0.086	0.89	A04	5/4/2022	8:19:41 PM
4	C4	NH3 5.0		0.348	5.01	A05	5/4/2022	8:22:33 PM
5	C5	NH3 10.0		0.637	10.02	B02	5/4/2022	8:25:23 PM
6	C6	NH3 25.0		1.305	25.00	B03	5/4/2022	8:28:28 PM
7	CC1	CCV		0.338	4.84	B04	5/4/2022	8:31:46 PM
8	CC5	CCB		0.038	0.17	B05	5/4/2022	8:34:55 PM
9	11	ICV		0.154	1.92	C02	5/4/2022	8:38:04 PM
10	12	ICB		0.034	0.11	C03	5/4/2022	8:41:10 PM
11	13	MB		0.042	0.22	C04	5/4/2022	8:44:06 PM
12	14	LCS		0.154	1.93	C05	5/4/2022	8:47:16 PM
13	15	907-1		0.137	1.66	D02	5/4/2022	8:50:26 PM
14	16	980-1		0.048	0.32	D03	5/4/2022	8:53:30 PM
15	17	980-2		0.055	0.42	D04	5/4/2022	8:56:26 PM
16	18	980-3		0.088	0.92	D05	5/4/2022	8:59:36 PM
17	CC1	CCV		0.338	4.85	E02	5/4/2022	9:02:46 PM
18	CC5	CCB		0.040	0.19	E03	5/4/2022	9:05:52 PM
19	19	980-3 DU		0.086	0.88	E04	5/4/2022	9:08:55 PM
20	20	980-3 MS		0.187	2.44	E05	5/4/2022	9:11:57 PM
21	21	980-3 MSD		0.193	2.53	F02	5/4/2022	9:15:06 PM
22	CC1	CCV		0.338	4.84	F03	5/4/2022	9:18:11 PM
23	CC5	CCB		0.044	0.26	F04	5/4/2022	9:21:16 PM
24	CC1	CCV		???	IP	A02	---	~03:41
25	CC5	CCB		???	IP	A03	---	~06:26
26	22	MB	mt 5/4/22	???	IP	A04	---	~09:19
27	23	LCS		???	IP	A05	---	~13:09



# General Chemistry Raw Data Report

Job ID: 580-112980-1

**Batch: 389004**  
**Method: 2540G**

**Analyst Initials: JSM**  
**Instrument: NONE**

**Lab Sample ID: 580-112980-A-1**

**Analysis Date: Apr 29, 2022 17:15**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Solids	None	1	75.3759398496241	%
Percent Moisture	None	1	24.6240601503759	%

**Lab Sample ID: 580-112980-A-2**

**Analysis Date: Apr 29, 2022 17:15**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Solids	None	1	67.5862068965517	%
Percent Moisture	None	1	32.4137931034483	%

**Lab Sample ID: 580-112980-A-3**

**Analysis Date: Apr 29, 2022 17:15**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Solids	None	1	57.6623376623377	%
Percent Moisture	None	1	42.3376623376623	%

**SC632**3/15/22 TOLSON  
CAI

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
Blank	1126.0		1.0000	TA SOIL LINNEAR	3/12/2022 12:11:17 PM	-0.00000004585	A07

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
2450155	1451030		0.2506	TA SOIL LINNEAR	3/12/2022 12:14:29 PM	11.72	A08
2450155	1177768		0.2010	TA SOIL LINNEAR	3/12/2022 12:16:59 PM	11.85	A09
2450155	888162		0.1495	TA SOIL LINNEAR	3/12/2022 12:19:25 PM	12.01	A10
2450155	615185		0.1009	TA SOIL LINNEAR	3/12/2022 12:21:59 PM	12.32	A01
2450155	457663		0.0742	TA SOIL LINNEAR	3/12/2022 12:24:31 PM	12.46	A02
2450155	163681		0.0253	TA SOIL LINNEAR	3/12/2022 12:26:45 PM	13.01	A03
Average			0.1336			12.23	
Std. Deviation			0.08			0.474	
RSD			62.46			3.874	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICV 2735864	54587		0.2001	TA SOIL LINNEAR	3/15/2022 4:03:45 PM	0.5153	A01

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICB	2280.0		0.2007	TA SOIL LINNEAR	3/15/2022 4:05:56 PM	0.007354	A02

# SC632

TA SOIL LINNEAR Calibration - Read Only

CO2 Low (range: 0.000000 to 30.072000 mg)

Previous Calibration:

$$y = +1.07104x + 0.000345869$$

Date: 3/12/2022 12:27:51 PM

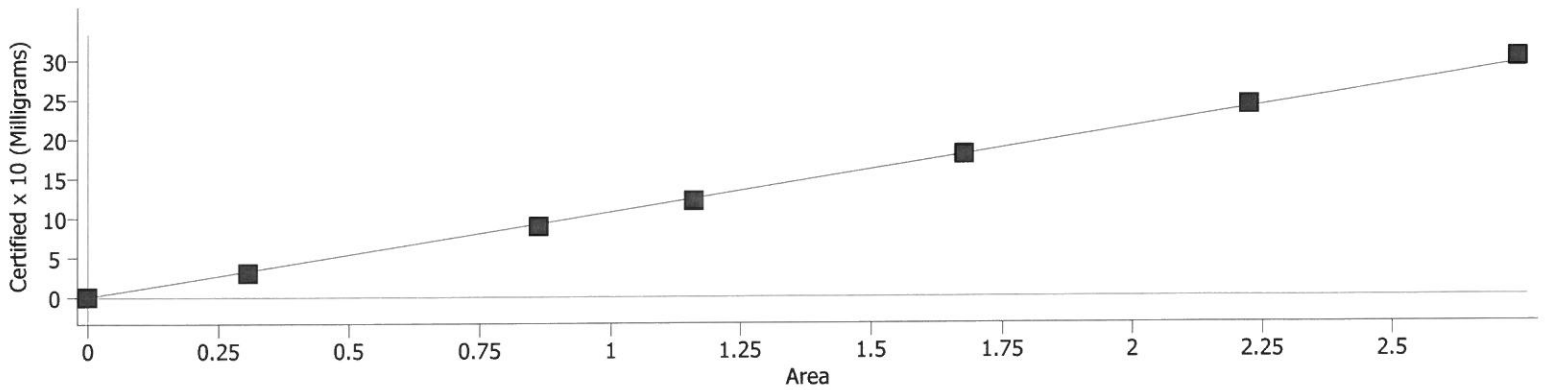
New Calibration:

$$y = +1.07104x + 0.000345869$$

Curve Type: Linear

Weighting: 1 / Certified

RMS Error: 0.0012198



Row	Standard	Drift	Mass	Certified	Calculated	Error %	Prev Err %	Peak	Peak Area	Weighting	Date	Range	Saturated
1	Blank	0	1.0000	0.0000	0.0000000045	100.00	100.00	6.1098	0.00032297	2.5000E+6	03/12/22 12:11 PM	Low	No
2	2450155	0	0.25060	12.000	11.715	-2.3711	-2.3711	2707.6	2.7408	0.33254	03/12/22 12:14 PM	Low	No
3	2450155	1	0.20100	12.000	11.854	-1.2201	-1.2201	2408.8	2.2242	0.41459	03/12/22 12:16 PM	Low	No
4	2450155	0	0.14950	12.000	12.014	0.11992	0.11992	2103.5	1.6767	0.55741	03/12/22 12:19 PM	Low	No
5	2450155	0	0.10090	12.000	12.323	2.6926	2.6926	1478.2	1.1606	0.82590	03/12/22 12:21 PM	Low	No
6	2450155	0	0.074200	12.000	12.459	3.8227	3.8227	1115.8	0.86280	1.1231	03/12/22 12:24 PM	Low	No
7	2450155	0	0.025300	12.000	13.010	8.4179	8.4179	493.53	0.30700	3.2938	03/12/22 12:26 PM	Low	No



# SC632

389420

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICV 2735864	46786		0.2021	TA SOIL LINNEAR	3/18/2022 6:26:29 PM	0.4352	A01

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICB	1514.5		0.2002	TA SOIL LINNEAR	3/18/2022 6:28:40 PM	-0.00005695	A02

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
CCV 3092515	1177933		0.2036	TA SOIL LINNEAR	5/3/2022 1:27:35 PM	11.85	A01
CCV 3092515	1213296		0.2079	TA SOIL LINNEAR	5/3/2022 2:07:55 PM	11.95	B08
CCV 3092515	1175554		0.2021	TA SOIL LINNEAR	5/3/2022 2:57:16 PM	11.91	D10
CCV 3092515	1182792		0.2034	TA SOIL LINNEAR	5/3/2022 3:32:46 PM	11.91	A06
CCV 3092515	1193734		0.2059	TA SOIL LINNEAR	5/3/2022 4:25:53 PM	11.87	A01
CCV 3092515	1184507		0.2039	TA SOIL LINNEAR	5/3/2022 4:30:55 PM	11.90	A03
CCV 3092515	1187834		0.2044	TA SOIL LINNEAR	5/3/2022 4:48:04 PM	11.90	B06
CCV 3092515	1199958		0.2064	TA SOIL LINNEAR	5/3/2022 5:47:31 PM	11.91	D08
CCV 3092515	1200475		0.2055	TA SOIL LINNEAR	5/3/2022 6:26:49 PM	11.96	A06
CCV 3092515	1171369		0.2018	TA SOIL LINNEAR	5/3/2022 6:45:45 PM	11.89	B04
CCV 3092515	1208175		0.2083	TA SOIL LINNEAR	5/3/2022 7:12:59 PM	11.88	A01
CCV 3092515	1214611		0.2087	TA SOIL LINNEAR	5/3/2022 7:48:18 PM	11.92	B06
CCV 3092515	1194202		0.2023	TA SOIL LINNEAR	5/3/2022 8:35:59 PM	12.09	D08
Average			0.2049			11.92	
Std. Deviation			0.002			0.060	
RSD			1.161			0.503	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
CCB 3117971	2395.8		0.2046	TA SOIL LINNEAR	5/3/2022 1:29:51 PM	-0.02402	A02
CCB 3117971	2033.7		0.2028	TA SOIL LINNEAR	5/3/2022 2:10:08 PM	-0.02790	B09

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
CCB 3117971	1017.4		0.2089	TA SOIL LINNEAR	5/3/2022 2:59:29 PM	-0.03709	E01
CCB 3117971	2200.9		0.2031	TA SOIL LINNEAR	5/3/2022 3:34:57 PM	-0.02617	A07
CCB 3117971	1671.2		0.2061	TA SOIL LINNEAR	5/3/2022 4:28:06 PM	-0.03107	A02
CCB 3117971	1148.6		0.2052	TA SOIL LINNEAR	5/3/2022 4:33:09 PM	-0.03645	A04
CCB 3117971	1680.9		0.2082	TA SOIL LINNEAR	5/3/2022 4:50:17 PM	-0.03066	B07
CCB 3117971	1747.3		0.2042	TA SOIL LINNEAR	5/3/2022 5:49:43 PM	-0.03060	D09
CCB 3117971	1878.9		0.2060	TA SOIL LINNEAR	5/3/2022 6:29:00 PM	-0.02901	A07
CCB 3117971	1025.7		0.2019	TA SOIL LINNEAR	5/3/2022 6:47:57 PM	-0.03829	B05
CCB 3117971	1366.7		0.2007	TA SOIL LINNEAR	5/3/2022 7:15:11 PM	-0.03503	A02
CCB 3117971	2300.7		0.2073	TA SOIL LINNEAR	5/3/2022 7:50:31 PM	-0.02465	B07
CCB 3117971	12987		0.2076	TA SOIL LINNEAR	5/3/2022 8:38:14 PM	0.08123	D09
Average			0.2051			-0.02229	
Std. Deviation			0.003			0.031453	
RSD			1.234			141.1	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MB 3117971	1843.3		0.2085	TA SOIL LINNEAR	5/3/2022 1:32:02 PM	-0.02902	A03
MB 3117971	2341.5		0.2069	TA SOIL LINNEAR	5/3/2022 4:35:22 PM	-0.02429	A05
MB 3117971	1193.1		0.2022	TA SOIL LINNEAR	5/3/2022 7:17:23 PM	-0.03653	A03
Average			0.2059			-0.02995	
Std. Deviation			0.003			0.006174	
RSD			1.591			20.62	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
LCS 2450156	1147691		0.2045	TA SOIL LINNEAR	5/3/2022 1:34:45 PM	11.49	A04
LCS 2450156	1165236		0.2082	TA SOIL LINNEAR	5/3/2022 4:38:06 PM	11.46	A06

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
LCS 2450156	1123541		0.2010	TA SOIL LINNEAR	5/3/2022 7:20:15 PM	11.44	A04
Average			0.2046			11.47	
Std. Deviation			0.004			0.024	
RSD			1.760			0.208	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
LCSD 2450156	1118980		0.2008	TA SOIL LINNEAR	5/3/2022 1:37:56 PM	11.41	A05
LCSD 2450156	1156374		0.2039	TA SOIL LINNEAR	5/3/2022 4:40:44 PM	11.61	A07
LCSD 2450156	1145649		0.2062	TA SOIL LINNEAR	5/3/2022 7:23:09 PM	11.38	A05
Average			0.2036			11.47	
Std. Deviation			0.003			0.128	
RSD			1.331			1.117	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112970-A-9	280007		0.2038	TA SOIL LINNEAR	5/3/2022 1:58:30 PM	2.777	B04
580-112970-A-9	330648		0.2012	TA SOIL LINNEAR	5/3/2022 2:00:42 PM	3.330	B05
Average			0.2025			3.054	
Std. Deviation			0.002			0.3913	
RSD			0.908			12.82	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112970-C-10	1044458		0.2056	TA SOIL LINNEAR	5/3/2022 2:02:56 PM	10.40	B06
580-112970-C-10	1323236		0.2054	TA SOIL LINNEAR	5/3/2022 2:05:09 PM	13.20	B07
Average			0.2055			11.80	
Std. Deviation			0.0001			1.981	
RSD			0.069			16.79	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112970-B-11	678366		0.2013	TA SOIL LINNEAR	5/3/2022 2:12:20 PM	6.881	B10



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112970-B-11	593584		0.2013	TA SOIL LINNEAR	5/3/2022 2:14:33 PM	6.014	C01
Average			0.2013			6.447	
Std. Deviation			0			0.6124	
RSD			0.000			9.498	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112970-C-16	659412		0.2029	TA SOIL LINNEAR	5/3/2022 2:30:35 PM	6.634	C08
580-112970-C-16	690024		0.2096	TA SOIL LINNEAR	5/3/2022 2:32:48 PM	6.722	C09
Average			0.2063			6.678	
Std. Deviation			0.005			0.0624	
RSD			2.297			0.934	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112980-A-1	39073		0.2064	TA SOIL LINNEAR	5/3/2022 2:34:59 PM	0.3416	C10
580-112980-A-1	41271		0.2056	TA SOIL LINNEAR	5/3/2022 2:37:10 PM	0.3649	D01
Average			0.2060			0.3532	
Std. Deviation			0.0006			0.01648	
RSD			0.275			4.667	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112980-A-2	38958		0.2058	TA SOIL LINNEAR	5/3/2022 2:39:21 PM	0.3414	D02
580-112980-A-2	45850		0.2082	TA SOIL LINNEAR	5/3/2022 2:41:32 PM	0.4056	D03
Average			0.2070			0.3735	
Std. Deviation			0.002			0.04535	
RSD			0.820			12.14	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112980-A-3	136675		0.2055	TA SOIL LINNEAR	5/3/2022 2:43:43 PM	1.320	D04

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112980-A-3	134945		0.2034	TA SOIL LINNEAR	5/3/2022 2:45:54 PM	1.316	D05
Average			0.2044			1.318	
Std. Deviation			0.001			0.0027	
RSD			0.726			0.207	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-9	254488		0.2066	TA SOIL LINNEAR	5/3/2022 2:48:05 PM	2.485	D06
580-112817-B-9	258164		0.2096	TA SOIL LINNEAR	5/3/2022 2:50:16 PM	2.486	D07
Average			0.2081			2.485	
Std. Deviation			0.002			0.0003	
RSD			1.019			0.014	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-10	224017		0.2068	TA SOIL LINNEAR	5/3/2022 2:52:27 PM	2.180	D08
580-112817-B-10	226771		0.2040	TA SOIL LINNEAR	5/3/2022 2:54:38 PM	2.238	D09
Average			0.2054			2.209	
Std. Deviation			0.002			0.0408	
RSD			0.964			1.846	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-12	237187		0.2038	TA SOIL LINNEAR	5/3/2022 3:01:40 PM	2.345	E02
580-112817-B-12	246924		0.2072	TA SOIL LINNEAR	5/3/2022 3:03:51 PM	2.403	E03
Average			0.2055			2.374	
Std. Deviation			0.002			0.0411	
RSD			1.170			1.732	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-13	235709		0.2076	TA SOIL LINNEAR	5/3/2022 3:06:02 PM	2.287	E04
580-112817-B-13	230558		0.2036	TA SOIL LINNEAR	5/3/2022 3:08:13 PM	2.280	E05
Average			0.2056			2.284	
Std. Deviation			0.003			0.0050	
RSD			1.376			0.219	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-22	207738		0.2021	TA SOIL LINNEAR	5/3/2022 3:10:24 PM	2.065	E06
580-112817-B-22	207032		0.2058	TA SOIL LINNEAR	5/3/2022 3:12:35 PM	2.021	E07
Average			0.2040			2.043	
Std. Deviation			0.003			0.0312	
RSD			1.283			1.529	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-24	260615		0.2047	TA SOIL LINNEAR	5/3/2022 3:14:46 PM	2.570	E08
580-112817-B-24	263400		0.2074	TA SOIL LINNEAR	5/3/2022 3:16:57 PM	2.564	E09
Average			0.2061			2.567	
Std. Deviation			0.002			0.0041	
RSD			0.927			0.161	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-26	246648		0.2041	TA SOIL LINNEAR	5/3/2022 3:19:08 PM	2.437	E10
580-112817-B-26	250412		0.2032	TA SOIL LINNEAR	5/3/2022 3:21:19 PM	2.486	A01

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
Average			0.2036			2.461	
Std. Deviation			0.0006			0.0346	
RSD			0.312			1.404	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-28	227461		0.2084	TA SOIL LINNEAR	5/3/2022 3:23:30 PM	2.197	A02
580-112817-B-28	222029		0.2025	TA SOIL LINNEAR	5/3/2022 3:25:41 PM	2.206	A03
Average			0.2055			2.202	
Std. Deviation			0.004			0.0063	
RSD			2.031			0.284	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-29	230115		0.2031	TA SOIL LINNEAR	5/3/2022 3:27:52 PM	2.281	A04
580-112817-B-29	235274		0.2062	TA SOIL LINNEAR	5/3/2022 3:30:03 PM	2.298	A05
Average			0.2047			2.290	
Std. Deviation			0.002			0.0121	
RSD			1.071			0.530	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-31	227706		0.2021	TA SOIL LINNEAR	5/3/2022 3:57:16 PM	2.268	A06
580-112817-B-31	222989		0.2034	TA SOIL LINNEAR	5/3/2022 3:59:28 PM	2.206	A07
Average			0.2027			2.237	
Std. Deviation			0.0009			0.0440	
RSD			0.453			1.966	



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
DU 580-112817-B-31	230358		0.2042	TA SOIL LINNEAR	5/3/2022 4:01:39 PM	2.271	A08
DU 580-112817-B-31	226995		0.2025	TA SOIL LINNEAR	5/3/2022 4:03:50 PM	2.256	A09
Average			0.2034			2.264	
Std. Deviation			0.001			0.0107	
RSD			0.591			0.471	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
TRL 580-112817	230026		0.2059	TA SOIL LINNEAR	5/3/2022 4:06:01 PM	2.249	A10
TRL 580-112817	223737		0.2023	TA SOIL LINNEAR	5/3/2022 4:08:12 PM	2.225	B01
Average			0.2041			2.237	
Std. Deviation			0.003			0.0169	
RSD			1.247			0.755	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MS 580-112817-B-31	734981	0.1064	0.1027	TA SOIL LINNEAR	5/3/2022 4:10:43 PM	14.62	B02

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MSD 580-112817	697926	0.1013	0.1020	TA SOIL LINNEAR	5/3/2022 4:23:03 PM	13.97	B03

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112970-A-8	1013052		0.0751	TA SOIL LINNEAR	5/3/2022 4:42:57 PM	27.61	B04
580-112970-A-8	852382		0.0750	TA SOIL LINNEAR	5/3/2022 4:45:08 PM	23.24	B05
Average			0.0751			25.42	
Std. Deviation			0.00007			3.089	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
RSD			0.094			12.15	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112970-B-13	856078		0.0500	TA SOIL LINNEAR	5/3/2022 4:52:29 PM	35.01	B08
580-112970-B-13	825100		0.0505	TA SOIL LINNEAR	5/3/2022 4:54:40 PM	33.40	B09
Average			0.0503			34.21	
Std. Deviation			0.0004			1.137	
RSD			0.704			3.324	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112970-C-14	351990		0.0202	TA SOIL LINNEAR	5/3/2022 4:56:51 PM	35.34	B10
580-112970-C-14	354828		0.0207	TA SOIL LINNEAR	5/3/2022 4:59:02 PM	34.77	C01
Average			0.0204			35.06	
Std. Deviation			0.0004			0.404	
RSD			1.729			1.153	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112970-C-15	479915		0.0208	TA SOIL LINNEAR	5/3/2022 5:01:16 PM	46.97	C02
580-112970-C-15	453379		0.0202	TA SOIL LINNEAR	5/3/2022 5:03:27 PM	45.66	C03
Average			0.0205			46.32	
Std. Deviation			0.0004			0.924	
RSD			2.070			1.994	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-32	192880		0.2037	TA SOIL LINNEAR	5/3/2022 5:05:39 PM	1.899	C04

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-32	193687		0.2065	TA SOIL LINNEAR	5/3/2022 5:07:50 PM	1.881	C05
Average			0.2051			1.890	
Std. Deviation			0.002			0.0125	
RSD			0.965			0.662	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-34	214067		0.2076	TA SOIL LINNEAR	5/3/2022 5:20:38 PM	2.073	C04
580-112817-B-34	216597		0.2081	TA SOIL LINNEAR	5/3/2022 5:22:49 PM	2.093	C07
Average			0.2079			2.083	
Std. Deviation			0.0004			0.0142	
RSD			0.170			0.680	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-44	226537		0.2012	TA SOIL LINNEAR	5/3/2022 5:25:00 PM	2.266	C08
580-112817-B-44	230809		0.2030	TA SOIL LINNEAR	5/3/2022 5:27:11 PM	2.289	C09
Average			0.2021			2.278	
Std. Deviation			0.001			0.0164	
RSD			0.630			0.719	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-47	218136		0.2040	TA SOIL LINNEAR	5/3/2022 5:29:22 PM	2.150	C10
580-112817-B-47	220301		0.2058	TA SOIL LINNEAR	5/3/2022 5:31:33 PM	2.153	D01
Average			0.2049			2.152	
Std. Deviation			0.001			0.0020	
RSD			0.621			0.093	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112817-B-48	229313		0.2008	TA SOIL LINNEAR	5/3/2022 5:33:44 PM	2.299	D02
580-112817-B-48	223999		0.2015	TA SOIL LINNEAR	5/3/2022 5:35:55 PM	2.237	D03
Average			0.2011			2.268	
Std. Deviation			0.0005			0.0440	
RSD			0.246			1.940	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112561-A-29	241494		0.2026	TA SOIL LINNEAR	5/3/2022 5:38:07 PM	2.402	D04
580-112561-A-29	249469		0.2067	TA SOIL LINNEAR	5/3/2022 5:40:18 PM	2.434	D05
Average			0.2047			2.418	
Std. Deviation			0.003			0.0224	
RSD			1.417			0.926	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112561-A-31	265048		0.2056	TA SOIL LINNEAR	5/3/2022 5:42:29 PM	2.603	D06
580-112561-A-31	265562		0.2019	TA SOIL LINNEAR	5/3/2022 5:44:40 PM	2.656	D07
Average			0.2037			2.629	
Std. Deviation			0.003			0.0374	
RSD			1.284			1.423	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112561-A-34	230277		0.2049	TA SOIL LINNEAR	5/3/2022 5:51:54 PM	2.263	D10
580-112561-A-34	232966		0.2076	TA SOIL LINNEAR	5/3/2022 5:54:05 PM	2.260	E01



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
Average			0.2063			2.261	
Std. Deviation			0.002			0.0020	
RSD			0.926			0.088	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112561-A-36	205781		0.2059	TA SOIL LINNEAR	5/3/2022 5:56:16 PM	2.007	E02
580-112561-A-36	203518		0.2060	TA SOIL LINNEAR	5/3/2022 5:58:27 PM	1.984	E03
Average			0.2060			1.995	
Std. Deviation			0.00007			0.0167	
RSD			0.034			0.835	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-B-9	242970		0.2005	TA SOIL LINNEAR	5/3/2022 6:00:38 PM	2.443	E04
580-112871-B-9	245612		0.2090	TA SOIL LINNEAR	5/3/2022 6:02:49 PM	2.369	E05
Average			0.2047			2.406	
Std. Deviation			0.006			0.0519	
RSD			2.935			2.156	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-B-10	256794		0.2056	TA SOIL LINNEAR	5/3/2022 6:05:00 PM	2.520	E06
580-112871-B-10	253649		0.2034	TA SOIL LINNEAR	5/3/2022 6:06:59 PM	2.516	E07
Average			0.2045			2.518	
Std. Deviation			0.002			0.0032	
RSD			0.761			0.127	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-B-12	240902		0.2037	TA SOIL LINNEAR	5/3/2022 6:09:11 PM	2.383	E08

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-B-12	245429		0.2036	TA SOIL LINNEAR	5/3/2022 6:11:22 PM	2.430	E09
Average			0.2036			2.407	
Std. Deviation			0.00007			0.0332	
RSD			0.035			1.378	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-B-13	246139		0.2043	TA SOIL LINNEAR	5/3/2022 6:13:33 PM	2.429	E10
580-112871-B-13	243034		0.2031	TA SOIL LINNEAR	5/3/2022 6:15:44 PM	2.412	A01
Average			0.2037			2.421	
Std. Deviation			0.0008			0.0121	
RSD			0.417			0.499	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-B-22	217163		0.2041	TA SOIL LINNEAR	5/3/2022 6:17:41 PM	2.140	A02
580-112871-B-22	219429		0.2052	TA SOIL LINNEAR	5/3/2022 6:19:52 PM	2.151	A03
Average			0.2047			2.145	
Std. Deviation			0.0008			0.0079	
RSD			0.380			0.370	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-B-24	243302		0.2007	TA SOIL LINNEAR	5/3/2022 6:22:03 PM	2.444	A04
580-112871-B-24	251252		0.2074	TA SOIL LINNEAR	5/3/2022 6:24:14 PM	2.444	A05
Average			0.2041			2.444	
Std. Deviation			0.005			0.0001	
RSD			2.322			0.003	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-B-24 DU	247846		0.2053	TA SOIL LINNEAR	5/3/2022 6:31:11 PM	2.434	A08
580-112871-B-24 DU	247341		0.2009	TA SOIL LINNEAR	5/3/2022 6:33:23 PM	2.483	A09
Average			0.2031			2.459	
Std. Deviation			0.003			0.0340	
RSD			1.532			1.385	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
TRL 580-112871	244771		0.2044	TA SOIL LINNEAR	5/3/2022 6:35:34 PM	2.414	A10
TRL 580-112871	244365		0.2032	TA SOIL LINNEAR	5/3/2022 6:37:46 PM	2.424	B01
Average			0.2038			2.419	
Std. Deviation			0.0008			0.0072	
RSD			0.416			0.297	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MS 580-112871-B-24	710252	0.1030	0.1002	TA SOIL LINNEAR	5/3/2022 6:40:19 PM	14.48	B02

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MSD 580-112871	733326	0.1055	0.1047	TA SOIL LINNEAR	5/3/2022 6:42:58 PM	14.31	B03

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-B-26	239555		0.2073	TA SOIL LINNEAR	5/3/2022 7:25:21 PM	2.329	A06
580-112871-B-26	241386		0.2081	TA SOIL LINNEAR	5/3/2022 7:27:32 PM	2.338	A07
Average			0.2077			2.333	
Std. Deviation			0.0006			0.0065	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
RSD			0.272			0.277	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
DU 580-112871-B-26	237034		0.2048	TA SOIL LINNEAR	5/3/2022 7:29:43 PM	2.332	A08
DU 580-112871-B-26	232427		0.2031	TA SOIL LINNEAR	5/3/2022 7:31:54 PM	2.305	A09
Average			0.2040			2.318	
Std. Deviation			0.001			0.0192	
RSD			0.589			0.827	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
TRL 580-112871	236285		0.2026	TA SOIL LINNEAR	5/3/2022 7:34:05 PM	2.350	A10
TRL 580-112871	241079		0.2088	TA SOIL LINNEAR	5/3/2022 7:36:16 PM	2.327	B01
Average			0.2057			2.338	
Std. Deviation			0.004			0.0159	
RSD			2.131			0.682	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MS 580-112871-B-26	735558	0.1075	0.1019	TA SOIL LINNEAR	5/3/2022 7:38:50 PM	14.75	B02

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MSD 580-112871	720076	0.1048	0.1054	TA SOIL LINNEAR	5/3/2022 7:41:26 PM	13.95	B03

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-B-30	192463		0.2002	TA SOIL LINNEAR	5/3/2022 7:43:37 PM	1.928	B04



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-B-30	201530		0.2084	TA SOIL LINNEAR	5/3/2022 7:45:48 PM	1.941	B05
Average			0.2043			1.934	
Std. Deviation			0.006			0.0096	
RSD			2.838			0.498	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-B-32	207072		0.2052	TA SOIL LINNEAR	5/3/2022 7:52:42 PM	2.027	B08
580-112871-B-32	200932		0.2021	TA SOIL LINNEAR	5/3/2022 7:54:53 PM	1.996	B09
Average			0.2036			2.011	
Std. Deviation			0.002			0.0222	
RSD			1.076			1.103	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-A-33	194323		0.2075	TA SOIL LINNEAR	5/3/2022 7:57:04 PM	1.878	B10
580-112871-A-33	190872		0.2041	TA SOIL LINNEAR	5/3/2022 7:59:15 PM	1.875	C01
Average			0.2058			1.877	
Std. Deviation			0.002			0.0025	
RSD			1.168			0.131	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-B-39	214495		0.2057	TA SOIL LINNEAR	5/3/2022 8:01:26 PM	2.096	C02
580-112871-B-39	185803		0.2066	TA SOIL LINNEAR	5/3/2022 8:03:37 PM	1.802	C03
Average			0.2062			1.949	
Std. Deviation			0.0006			0.2084	
RSD			0.309			10.69	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112871-B-40	193474		0.2066	TA SOIL LINNEAR	5/3/2022 8:05:36 PM	1.878	C04
580-112871-B-40	187297		0.2019	TA SOIL LINNEAR	5/3/2022 8:07:47 PM	1.859	C05
Average			0.2042			1.868	
Std. Deviation			0.003			0.0136	
RSD			1.627			0.726	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112929-B-5	173812		0.2036	TA SOIL LINNEAR	5/3/2022 8:09:58 PM	1.707	C06
580-112929-B-5	179535		0.2087	TA SOIL LINNEAR	5/3/2022 8:11:56 PM	1.722	C07
Average			0.2062			1.714	
Std. Deviation			0.004			0.0104	
RSD			1.749			0.605	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-112929-B-9	228292		0.2024	TA SOIL LINNEAR	5/3/2022 8:14:07 PM	2.271	C08
580-112929-B-9	231571		0.2033	TA SOIL LINNEAR	5/3/2022 8:16:20 PM	2.294	C09
Average			0.2029			2.282	
Std. Deviation			0.0006			0.0163	
RSD			0.314			0.716	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-109068-C-25	50389		0.2056	TA SOIL LINNEAR	5/3/2022 8:18:31 PM	0.4561	C10
580-109068-C-25	52793		0.2079	TA SOIL LINNEAR	5/3/2022 8:20:42 PM	0.4748	D01
Average			0.2068			0.4655	
Std. Deviation			0.002			0.01325	
RSD			0.787			2.846	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-109068-E-26	30273		0.2043	TA SOIL LINNEAR	5/3/2022 8:22:40 PM	0.2565	D02
580-109068-E-26	32644		0.2040	TA SOIL LINNEAR	5/3/2022 8:24:51 PM	0.2808	D03
Average			0.2041			0.2687	
Std. Deviation			0.0002			0.01717	
RSD			0.104			6.391	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-109068-D-27	39212		0.2028	TA SOIL LINNEAR	5/3/2022 8:27:02 PM	0.3491	D04
580-109068-D-27	39313		0.2048	TA SOIL LINNEAR	5/3/2022 8:29:13 PM	0.3467	D05
Average			0.2038			0.3479	
Std. Deviation			0.001			0.00169	
RSD			0.694			0.486	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-109068-E-28	54844		0.2042	TA SOIL LINNEAR	5/3/2022 8:31:24 PM	0.5041	D06
580-109068-E-28	54598		0.2094	TA SOIL LINNEAR	5/3/2022 8:33:23 PM	0.4891	D07
Average			0.2068			0.4966	
Std. Deviation			0.004			0.01056	
RSD			1.778			2.127	

# Shipping and Receiving Documents



# Chain of Custody

PASI Minnesota Laboratory



580-112980 Chain of Custody



Workorder: 10605435

Workorder Name: 3593500 WISHRAM RI

Results Requested By: 5/12/2022

Report / Invoice To

Kongmeng Vang  
Pace Analytical Minnesota  
1700 Elm Street  
Minneapolis, MN 55414  
Phone (612)607-1700  
Email: kongmeng.vang@pacelabs.com

Subcontract To

Eurofins Frontier Global Sciences  
5755 8th Street East  
Tacoma, WA 98424

P.O.

Requested Analysis

State of Sample Origin: WA

JGFU

Preserved Containers

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers					50 Total Organic Carbon	LAB USE ONLY
					Unpreserved						
1	BNSF-SC01-041922-0-10	4/19/2022 12:00	10605435001	Solid	1					X	
2	FD01-041922-0-10	4/19/2022 12:15	10605435002	Solid	1					X	
3	BNSF-SG02-041922-0-10	4/19/2022 13:35	10605435003	Solid	1					X	
4											
5											

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	<i>[Signature]</i>	4/20/22 15:44	<i>[Signature]</i>	4/22/22 09:20	
2					
3					

Cooler Temperature on Receipt °C \_\_\_\_\_ Custody Seal Y or N \_\_\_\_\_ Received on Ice Y or N \_\_\_\_\_ Samples Intact Y or N \_\_\_\_\_

*Fed Po*  
*Sm B wet/Bub*  
*A3 = 1.0 p. 2*

# Login Sample Receipt Checklist

Client: Pace Analytical Services, LLC

Job Number: 580-112980-1

**Login Number: 112980**  
**List Number: 1**  
**Creator: Presley, Kim A**

**List Source: Eurofins Seattle**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

June 08, 2022

Bernice Kidd  
Jacobs Engineering  
2525 Air Park Drive  
Redding, CA 96001

RE: Project: D3593500-Revised Report  
Pace Project No.: 10605661

Dear Bernice Kidd:

Enclosed are the analytical results for sample(s) received by the laboratory on April 23, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Minneapolis

This report was revised on June 8th, 2022, to include a revised subcontract report from Eurofins.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kongmeng Vang  
kongmeng.vang@pacelabs.com  
(612)607-1700  
Project Manager

Enclosures

cc: Kris Ivarson, Jacobs  
Jennifer Ulrich, Jacobs



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
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## CERTIFICATIONS

Project: D3593500-Revised Report  
Pace Project No.: 10605661

### Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414  
A2LA Certification #: 2926.01\*  
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab  
Alabama Certification #: 40770  
Alaska Contaminated Sites Certification #: 17-009\*  
Alaska DW Certification #: MN00064  
Arizona Certification #: AZ0014\*  
Arkansas DW Certification #: MN00064  
Arkansas WW Certification #: 88-0680  
California Certification #: 2929  
Colorado Certification #: MN00064  
Connecticut Certification #: PH-0256  
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137  
Florida Certification #: E87605\*  
Georgia Certification #: 959  
Hawaii Certification #: MN00064  
Idaho Certification #: MN00064  
Illinois Certification #: 200011  
Indiana Certification #: C-MN-01  
Iowa Certification #: 368  
Kansas Certification #: E-10167  
Kentucky DW Certification #: 90062  
Kentucky WW Certification #: 90062  
Louisiana DEQ Certification #: AI-03086\*  
Louisiana DW Certification #: MN00064  
Maine Certification #: MN00064\*  
Maryland Certification #: 322  
Michigan Certification #: 9909  
Minnesota Certification #: 027-053-137\*  
Minnesota Dept of Ag Approval: via MN 027-053-137  
Minnesota Petrofund Registration #: 1240\*  
Mississippi Certification #: MN00064

Missouri Certification #: 10100  
Montana Certification #: CERT0092  
Nebraska Certification #: NE-OS-18-06  
Nevada Certification #: MN00064  
New Hampshire Certification #: 2081\*  
New Jersey Certification #: MN002  
New York Certification #: 11647\*  
North Carolina DW Certification #: 27700  
North Carolina WW Certification #: 530  
North Dakota Certification (A2LA) #: R-036  
North Dakota Certification (MN) #: R-036  
Ohio DW Certification #: 41244  
Ohio VAP Certification (1700) #: CL101  
Ohio VAP Certification (1800) #: CL110\*  
Oklahoma Certification #: 9507\*  
Oregon Primary Certification #: MN300001  
Oregon Secondary Certification #: MN200001\*  
Pennsylvania Certification #: 68-00563\*  
Puerto Rico Certification #: MN00064  
South Carolina Certification #: 74003001  
Tennessee Certification #: TN02818  
Texas Certification #: T104704192\*  
Utah Certification #: MN00064\*  
Vermont Certification #: VT-027053137  
Virginia Certification #: 460163\*  
Washington Certification #: C486\*  
West Virginia DEP Certification #: 382  
West Virginia DW Certification #: 9952 C  
Wisconsin Certification #: 999407970  
Wyoming UST Certification #: via A2LA 2926.01  
USDA Permit #: P330-19-00208  
\*Please Note: Applicable air certifications are denoted with an asterisk (\*).

### Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122  
Alabama Certification #: 40660  
Alaska Certification 17-026  
Arizona Certification #: AZ0612  
Arkansas Certification #: 88-0469  
California Certification #: 2932  
Canada Certification #: 1461.01  
Colorado Certification #: TN00003  
Connecticut Certification #: PH-0197  
DOD Certification: #1461.01  
EPA# TN00003  
Florida Certification #: E87487  
Georgia DW Certification #: 923  
Georgia Certification: NELAP  
Idaho Certification #: TN00003  
Illinois Certification #: 200008

Indiana Certification #: C-TN-01  
Iowa Certification #: 364  
Kansas Certification #: E-10277  
Kentucky UST Certification #: 16  
Kentucky Certification #: 90010  
Louisiana Certification #: AI30792  
Louisiana DW Certification #: LA180010  
Maine Certification #: TN0002  
Maryland Certification #: 324  
Massachusetts Certification #: M-TN003  
Michigan Certification #: 9958  
Minnesota Certification #: 047-999-395  
Mississippi Certification #: TN00003  
Missouri Certification #: 340  
Montana Certification #: CERT0086  
Nebraska Certification #: NE-OS-15-05

## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: D3593500-Revised Report

Pace Project No.: 10605661

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### **Pace Analytical Services National**

Nevada Certification #: TN-03-2002-34

New Hampshire Certification #: 2975

New Jersey Certification #: TN002

New Mexico DW Certification

New York Certification #: 11742

North Carolina Aquatic Toxicity Certification #: 41

North Carolina Drinking Water Certification #: 21704

North Carolina Environmental Certificate #: 375

North Dakota Certification #: R-140

Ohio VAP Certification #: CL0069

Oklahoma Certification #: 9915

Oregon Certification #: TN200002

Pennsylvania Certification #: 68-02979

Rhode Island Certification #: LAO00356

South Carolina Certification #: 84004

South Dakota Certification

Tennessee DW/Chem/Micro Certification #: 2006

Texas Mold Certification #: LAB0152

Texas Certification #: T 104704245-17-14

USDA Soil Permit #: P330-15-00234

Utah Certification #: TN00003

Vermont Dept. of Health: ID# VT-2006

Virginia Certification #: VT2006

Virginia Certification #: 460132

Washington Certification #: C847

West Virginia Certification #: 233

Wisconsin Certification #: 998093910

Wyoming UST Certification #: via A2LA 2926.01

A2LA-ISO 17025 Certification #: 1461.01

A2LA-ISO 17025 Certification #: 1461.02

AIHA-LAP/LLC EMLAP Certification #:100789

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: D3593500-Revised Report

Pace Project No.: 10605661

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Lab ID	Sample ID	Matrix	Date Collected	Date Received
10605661001	BNSF-BG13-042122-0-10	Solid	04/21/22 09:50	04/23/22 09:00
10605661002	BNSF-SG23-042122-0-6	Solid	04/21/22 14:40	04/23/22 09:00

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: D3593500-Revised Report

Pace Project No.: 10605661

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10605661001	BNSF-BG13-042122-0-10	NWTPH-Dx	TT2	4	PASI-M
		EPA 6020B	RJS	9	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	JNJ	33	PAN
		SM 2540G	CMK	1	PAN
		EPA 9030B	BMD	1	PAN
10605661002	BNSF-SG23-042122-0-6	NWTPH-Dx	TT2	4	PASI-M
		EPA 6020B	RJS	9	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	JNJ	33	PAN
		SM 2540G	KDW	1	PAN
		EPA 9030B	BMD	1	PAN

PAN = Pace National - Mt. Juliet

PASI-M = Pace Analytical Services - Minneapolis

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10605661

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**Date:** June 08, 2022

**BNSF-BG13-042122-0-10 (Lab ID: 10605661001)**

- Semi Volatile Organic Compounds (GC/MS) by Method 8270E - Dilution due to matrix impact during extract concentration procedure

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10605661

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**Method:** NWTPH-Dx

**Description:** NWTPH-Dx GCS

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

2 samples were analyzed for NWTPH-Dx by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 811397

B: Analyte was detected in the associated method blank.

- BLANK for HBN 811397 [OEXT/644 (Lab ID: 4303622)
- Motor Oil Range

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10605661

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**Method:** EPA 6020B

**Description:** 6020B MET ICPMS

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

### General Information:

2 samples were analyzed for EPA 6020B by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3050B with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 811306

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10605661001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 4303386)
  - Zinc
- MSD (Lab ID: 4303387)
  - Zinc

### Additional Comments:

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10605661

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**Method:** EPA 7471B

**Description:** 7471B Mercury

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

2 samples were analyzed for EPA 7471B by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 7471B with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10605661

---

**Method:** EPA 8270E

**Description:** SVOA (GC/MS) 8270E

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

### General Information:

2 samples were analyzed for EPA 8270E by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 1857248

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10605661001

R1: RPD value was outside control limits.

- MSD (Lab ID: R3788258-2)
  - 1-Methylnaphthalene
  - 3&4-Methylphenol(m&p Cresol)
  - Acenaphthene
  - Acenaphthylene
  - Benzoic acid
  - Dibenzofuran
  - Naphthalene
  - Phenol

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10605661

---

**Method:** EPA 8270E

**Description:** SVOA (GC/MS) 8270E

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

QC Batch: 1857484

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): L1485528-168

P6: Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

- MS (Lab ID: R3787994-3)
  - bis(2-Ethylhexyl)phthalate

R1: RPD value was outside control limits.

- MSD (Lab ID: R3787994-4)
  - 2-Methylnaphthalene
  - 3&4-Methylphenol(m&p Cresol)
  - Acenaphthene
  - Acenaphthylene
  - Anthracene
  - Benzo(a)anthracene
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene
  - Benzo(k)fluoranthene
  - Benzoic acid
  - Carbazole
  - Chrysene
  - Di-n-butylphthalate
  - Di-n-octylphthalate
  - Dibenz(a,h)anthracene
  - Dibenzofuran
  - Fluoranthene
  - Fluorene
  - Indeno(1,2,3-cd)pyrene
  - Pentachlorophenol
  - Phenanthrene
  - Phenol
  - Pyrene

**Additional Comments:**

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10605661

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**Method:** SM 2540G

**Description:** Total Solids 2540 G-2011

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

2 samples were analyzed for SM 2540G by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10605661

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**Method:** EPA 9030B

**Description:** Wet Chemistry 9034/9030B

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

2 samples were analyzed for EPA 9030B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10605661

**Sample: BNSF-BG13-042122-0-10    Lab ID: 10605661001    Collected: 04/21/22 09:50    Received: 04/23/22 09:00    Matrix: Solid**

**Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.**

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Pace Analytical Services - Minneapolis									
Diesel Fuel Range	<b>15.8J</b>	mg/kg	22.2	10.2	1	04/26/22 10:34	05/04/22 12:31	68334-30-5	
Motor Oil Range	<b>36.9</b>	mg/kg	14.8	7.4	1	04/26/22 10:34	05/04/22 12:31		B
<b>Surrogates</b>									
n-Triacontane (S)	94	%	50-150		1	04/26/22 10:34	05/04/22 12:31		
o-Terphenyl (S)	85	%	50-150		1	04/26/22 10:34	05/04/22 12:31	84-15-1	
<b>6020B MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3050B									
Pace Analytical Services - Minneapolis									
Arsenic	ND	mg/kg	0.73	0.16	1	04/26/22 14:58	05/09/22 23:23	7440-38-2	
Cadmium	ND	mg/kg	0.12	0.046	1	04/26/22 14:58	05/09/22 23:23	7440-43-9	
Chromium	ND	mg/kg	2.9	0.20	1	04/26/22 14:58	05/09/22 23:23	7440-47-3	
Copper	<b>1.6</b>	mg/kg	1.5	0.35	1	04/26/22 14:58	05/09/22 23:23	7440-50-8	
Lead	<b>0.092J</b>	mg/kg	0.73	0.043	1	04/26/22 14:58	05/09/22 23:23	7439-92-1	
Nickel	ND	mg/kg	0.73	0.29	1	04/26/22 14:58	05/09/22 23:23	7440-02-0	
Selenium	ND	mg/kg	0.73	0.12	1	04/26/22 14:58	05/09/22 23:23	7782-49-2	
Silver	ND	mg/kg	0.73	0.21	1	04/26/22 14:58	05/09/22 23:23	7440-22-4	
Zinc	<b>2.0J</b>	mg/kg	7.3	1.3	1	04/26/22 14:58	05/09/22 23:23	7440-66-6	M1
<b>7471B Mercury</b>									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Minneapolis									
Mercury	ND	mg/kg	0.029	0.012	1	04/26/22 18:49	05/10/22 14:22	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>33.1</b>	%	0.10	0.10	1		04/26/22 14:24		N2
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
Acenaphthene	ND	mg/kg	0.0881	0.0143	2	05/03/22 09:05	05/04/22 13:22	83-32-9	R1
Acenaphthylene	ND	mg/kg	0.0881	0.0124	2	05/03/22 09:05	05/04/22 13:22	208-96-8	R1
Anthracene	ND	mg/kg	0.0881	0.0157	2	05/03/22 09:05	05/04/22 13:22	120-12-7	
Benzoic acid	ND	mg/kg	4.42	0.312	2	05/03/22 09:05	05/04/22 13:22	65-85-0	R1
Benzo(a)anthracene	ND	mg/kg	0.0881	0.0155	2	05/03/22 09:05	05/04/22 13:22	56-55-3	
Benzo(b)fluoranthene	ND	mg/kg	0.0881	0.0164	2	05/03/22 09:05	05/04/22 13:22	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0881	0.0156	2	05/03/22 09:05	05/04/22 13:22	207-08-9	
Benzo(g,h,i)perylene	ND	mg/kg	0.0881	0.0161	2	05/03/22 09:05	05/04/22 13:22	191-24-2	
Benzo(a)pyrene	ND	mg/kg	0.0881	0.0164	2	05/03/22 09:05	05/04/22 13:22	50-32-8	
Carbazole	ND	mg/kg	0.881	0.0272	2	05/03/22 09:05	05/04/22 13:22	86-74-8	
Chrysene	ND	mg/kg	0.0881	0.0175	2	05/03/22 09:05	05/04/22 13:22	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0881	0.0245	2	05/03/22 09:05	05/04/22 13:22	53-70-3	
Dibenzofuran	ND	mg/kg	0.881	0.0288	2	05/03/22 09:05	05/04/22 13:22	132-64-9	R1
Fluoranthene	ND	mg/kg	0.0881	0.0159	2	05/03/22 09:05	05/04/22 13:22	206-44-0	
Fluorene	ND	mg/kg	0.0881	0.0143	2	05/03/22 09:05	05/04/22 13:22	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0881	0.0249	2	05/03/22 09:05	05/04/22 13:22	193-39-5	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10605661

**Sample: BNSF-BG13-042122-0-10 Lab ID: 10605661001** Collected: 04/21/22 09:50 Received: 04/23/22 09:00 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
1-Methylnaphthalene	ND	mg/kg	0.0881	0.0113	2	05/03/22 09:05	05/04/22 13:22	90-12-0	R1
2-Methylnaphthalene	ND	mg/kg	0.0881	0.0114	2	05/03/22 09:05	05/04/22 13:22	91-57-6	
Naphthalene	ND	mg/kg	0.0881	0.0221	2	05/03/22 09:05	05/04/22 13:22	91-20-3	R1
Phenanthrene	ND	mg/kg	0.0881	0.0175	2	05/03/22 09:05	05/04/22 13:22	85-01-8	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.881	0.112	2	05/03/22 09:05	05/04/22 13:22	117-81-7	
Di-n-butylphthalate	ND	mg/kg	0.881	0.0302	2	05/03/22 09:05	05/04/22 13:22	84-74-2	
Di-n-octylphthalate	ND	mg/kg	0.881	0.0595	2	05/03/22 09:05	05/04/22 13:22	117-84-0	
Pyrene	ND	mg/kg	0.0881	0.0172	2	05/03/22 09:05	05/04/22 13:22	129-00-0	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.881	0.0275	2	05/03/22 09:05	05/04/22 13:22		R1
Pentachlorophenol	ND	mg/kg	0.881	0.0237	2	05/03/22 09:05	05/04/22 13:22	87-86-5	
Phenol	ND	mg/kg	0.881	0.0354	2	05/03/22 09:05	05/04/22 13:22	108-95-2	R1
<b>Surrogates</b>									
2-Fluorophenol (S)	66.0	%	12.0-120		2	05/03/22 09:05	05/04/22 13:22	367-12-4	
Phenol-d5 (S)	68.5	%	10.0-120		2	05/03/22 09:05	05/04/22 13:22	4165-62-2	
Nitrobenzene-d5 (S)	69.9	%	10.0-122		2	05/03/22 09:05	05/04/22 13:22	4165-60-0	
2-Fluorobiphenyl (S)	63.0	%	15.0-120		2	05/03/22 09:05	05/04/22 13:22	321-60-8	
2,4,6-Tribromophenol (S)	85.7	%	10.0-127		2	05/03/22 09:05	05/04/22 13:22	118-79-6	
p-Terphenyl-d14 (S)	68.4	%	10.0-120		2	05/03/22 09:05	05/04/22 13:22	1718-51-0	
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>75.6</b>	%			1	04/29/22 08:12	04/29/22 08:19		
<b>Wet Chemistry 9034/9030B</b>									
Analytical Method: EPA 9030B Preparation Method: 9030B									
Pace National - Mt. Juliet									
Sulfide	ND	mg/kg	99.2	39.7	1	04/27/22 14:39	05/01/22 17:00	18496-25-8	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10605661

**Sample: BNSF-SG23-042122-0-6 Lab ID: 10605661002** Collected: 04/21/22 14:40 Received: 04/23/22 09:00 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Pace Analytical Services - Minneapolis									
Diesel Fuel Range	<b>12.9J</b>	mg/kg	19.7	9.1	1	04/26/22 10:34	05/04/22 12:59	68334-30-5	
Motor Oil Range	<b>37.4</b>	mg/kg	13.1	6.6	1	04/26/22 10:34	05/04/22 12:59		B
<b>Surrogates</b>									
n-Triacontane (S)	90	%	50-150		1	04/26/22 10:34	05/04/22 12:59		
o-Terphenyl (S)	86	%	50-150		1	04/26/22 10:34	05/04/22 12:59	84-15-1	
<b>6020B MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3050B									
Pace Analytical Services - Minneapolis									
Arsenic	<b>2.4</b>	mg/kg	0.64	0.14	1	04/26/22 14:58	05/09/22 23:41	7440-38-2	
Cadmium	<b>0.17</b>	mg/kg	0.10	0.040	1	04/26/22 14:58	05/09/22 23:41	7440-43-9	
Chromium	<b>9.9</b>	mg/kg	2.6	0.18	1	04/26/22 14:58	05/09/22 23:41	7440-47-3	
Copper	<b>9.0</b>	mg/kg	1.3	0.31	1	04/26/22 14:58	05/09/22 23:41	7440-50-8	
Lead	<b>5.2</b>	mg/kg	0.64	0.038	1	04/26/22 14:58	05/09/22 23:41	7439-92-1	
Nickel	<b>11.1</b>	mg/kg	0.64	0.26	1	04/26/22 14:58	05/09/22 23:41	7440-02-0	
Selenium	<b>0.12J</b>	mg/kg	0.64	0.11	1	04/26/22 14:58	05/09/22 23:41	7782-49-2	
Silver	<b>0.22J</b>	mg/kg	0.64	0.19	1	04/26/22 14:58	05/09/22 23:41	7440-22-4	
Zinc	<b>65.3</b>	mg/kg	6.4	1.2	1	04/26/22 14:58	05/09/22 23:41	7440-66-6	
<b>7471B Mercury</b>									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Minneapolis									
Mercury	ND	mg/kg	0.025	0.011	1	04/26/22 18:49	05/10/22 14:27	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>23.9</b>	%	0.10	0.10	1		04/26/22 14:24		N2
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
Acenaphthene	ND	mg/kg	0.0421	0.00681	1	05/03/22 09:11	05/04/22 14:13	83-32-9	
Acenaphthylene	ND	mg/kg	0.0421	0.00593	1	05/03/22 09:11	05/04/22 14:13	208-96-8	
Anthracene	ND	mg/kg	0.0421	0.00749	1	05/03/22 09:11	05/04/22 14:13	120-12-7	
Benzoic acid	ND	mg/kg	2.11	0.149	1	05/03/22 09:11	05/04/22 14:13	65-85-0	
Benzo(a)anthracene	ND	mg/kg	0.0421	0.00742	1	05/03/22 09:11	05/04/22 14:13	56-55-3	
Benzo(b)fluoranthene	ND	mg/kg	0.0421	0.00785	1	05/03/22 09:11	05/04/22 14:13	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0421	0.00748	1	05/03/22 09:11	05/04/22 14:13	207-08-9	
Benzo(g,h,i)perylene	ND	mg/kg	0.0421	0.00770	1	05/03/22 09:11	05/04/22 14:13	191-24-2	
Benzo(a)pyrene	ND	mg/kg	0.0421	0.00782	1	05/03/22 09:11	05/04/22 14:13	50-32-8	
Carbazole	ND	mg/kg	0.421	0.0130	1	05/03/22 09:11	05/04/22 14:13	86-74-8	
Chrysene	ND	mg/kg	0.0421	0.00837	1	05/03/22 09:11	05/04/22 14:13	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0421	0.0117	1	05/03/22 09:11	05/04/22 14:13	53-70-3	
Dibenzofuran	ND	mg/kg	0.421	0.0138	1	05/03/22 09:11	05/04/22 14:13	132-64-9	
Fluoranthene	ND	mg/kg	0.0421	0.00760	1	05/03/22 09:11	05/04/22 14:13	206-44-0	
Fluorene	ND	mg/kg	0.0421	0.00685	1	05/03/22 09:11	05/04/22 14:13	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0421	0.0119	1	05/03/22 09:11	05/04/22 14:13	193-39-5	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: D3593500-Revised Report  
Pace Project No.: 10605661

**Sample: BNSF-SG23-042122-0-6      Lab ID: 10605661002      Collected: 04/21/22 14:40      Received: 04/23/22 09:00      Matrix: Solid**

**Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.**

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E    Preparation Method: 3546									
Pace National - Mt. Juliet									
1-Methylnaphthalene	ND	mg/kg	0.0421	0.00538	1	05/03/22 09:11	05/04/22 14:13	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0421	0.00546	1	05/03/22 09:11	05/04/22 14:13	91-57-6	
Naphthalene	ND	mg/kg	0.0421	0.0106	1	05/03/22 09:11	05/04/22 14:13	91-20-3	
Phenanthrene	ND	mg/kg	0.0421	0.00835	1	05/03/22 09:11	05/04/22 14:13	85-01-8	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.421	0.0533	1	05/03/22 09:11	05/04/22 14:13	117-81-7	
Di-n-butylphthalate	ND	mg/kg	0.421	0.0144	1	05/03/22 09:11	05/04/22 14:13	84-74-2	
Di-n-octylphthalate	ND	mg/kg	0.421	0.0284	1	05/03/22 09:11	05/04/22 14:13	117-84-0	
Pyrene	ND	mg/kg	0.0421	0.00819	1	05/03/22 09:11	05/04/22 14:13	129-00-0	
3&4-Methylphenol(m&p Cresol)	<b>0.0195J</b>	mg/kg	0.421	0.0131	1	05/03/22 09:11	05/04/22 14:13		J
Pentachlorophenol	ND	mg/kg	0.421	0.0113	1	05/03/22 09:11	05/04/22 14:13	87-86-5	
Phenol	ND	mg/kg	0.421	0.0169	1	05/03/22 09:11	05/04/22 14:13	108-95-2	
<b>Surrogates</b>									
2-Fluorophenol (S)	60.1	%	12.0-120		1	05/03/22 09:11	05/04/22 14:13	367-12-4	
Phenol-d5 (S)	62.0	%	10.0-120		1	05/03/22 09:11	05/04/22 14:13	4165-62-2	
Nitrobenzene-d5 (S)	56.7	%	10.0-122		1	05/03/22 09:11	05/04/22 14:13	4165-60-0	
2-Fluorobiphenyl (S)	60.1	%	15.0-120		1	05/03/22 09:11	05/04/22 14:13	321-60-8	
2,4,6-Tribromophenol (S)	86.6	%	10.0-127		1	05/03/22 09:11	05/04/22 14:13	118-79-6	
p-Terphenyl-d14 (S)	67.4	%	10.0-120		1	05/03/22 09:11	05/04/22 14:13	1718-51-0	
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G    Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>79.1</b>	%			1	04/29/22 17:12	04/29/22 17:30		
<b>Wet Chemistry 9034/9030B</b>									
Analytical Method: EPA 9030B    Preparation Method: 9030B									
Pace National - Mt. Juliet									
Sulfide	ND	mg/kg	94.8	37.9	1	04/27/22 14:39	05/01/22 17:00	18496-25-8	

### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: D3593500-Revised Report

Pace Project No.: 10605661

QC Batch: 811310	Analysis Method: EPA 7471B
QC Batch Method: EPA 7471B	Analysis Description: 7471B Mercury Solids
	Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10605661001, 10605661002

METHOD BLANK: 4303400 Matrix: Solid

Associated Lab Samples: 10605661001, 10605661002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.019	0.0083	05/10/22 14:14	

LABORATORY CONTROL SAMPLE: 4303401

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.48	0.49	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4303402 4303403

Parameter	Units	4303402		4303403		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10605661001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Mercury	mg/kg	ND	0.73	0.7	0.64	0.62	87	87	80-120	4	20

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**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10605661

QC Batch: 811306	Analysis Method: EPA 6020B
QC Batch Method: EPA 3050B	Analysis Description: 6020B Solids UPD5
	Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10605661001, 10605661002

METHOD BLANK: 4303384 Matrix: Solid

Associated Lab Samples: 10605661001, 10605661002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	ND	0.50	0.11	05/09/22 22:45	
Cadmium	mg/kg	ND	0.080	0.031	05/09/22 22:45	
Chromium	mg/kg	ND	2.0	0.14	05/09/22 22:45	
Copper	mg/kg	ND	0.99	0.24	05/09/22 22:45	
Lead	mg/kg	0.047J	0.50	0.029	05/09/22 22:45	
Nickel	mg/kg	ND	0.50	0.20	05/09/22 22:45	
Selenium	mg/kg	ND	0.50	0.085	05/09/22 22:45	
Silver	mg/kg	ND	0.50	0.14	05/09/22 22:45	
Zinc	mg/kg	ND	5.0	0.89	05/09/22 22:45	

LABORATORY CONTROL SAMPLE: 4303385

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	49.1	45.5	93	80-120	
Cadmium	mg/kg	49.1	45.4	92	80-120	
Chromium	mg/kg	49.1	47.7	97	80-120	
Copper	mg/kg	49.1	47.1	96	80-120	
Lead	mg/kg	49.1	45.7	93	80-120	
Nickel	mg/kg	49.1	48.1	98	80-120	
Selenium	mg/kg	49.1	48.8	99	80-120	
Silver	mg/kg	24.6	22.9	93	80-120	
Zinc	mg/kg	49.1	46.3	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4303386 4303387

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10605661001 Result	Spike Conc.	Spike Conc.	Conc.								
Arsenic	mg/kg	ND	72	73.4	72.0	77.7	100	106	75-125	8	20		
Cadmium	mg/kg	ND	72	73.4	70.8	76.4	98	104	75-125	8	20		
Chromium	mg/kg	ND	72	73.4	83.1	89.9	115	122	75-125	8	20		
Copper	mg/kg	1.6	72	73.4	79.3	86.4	108	116	75-125	9	20		
Lead	mg/kg	0.092J	72	73.4	74.2	79.7	103	109	75-125	7	20		
Nickel	mg/kg	ND	72	73.4	83.7	89.6	116	122	75-125	7	20		
Selenium	mg/kg	ND	72	73.4	74.8	78.5	104	107	75-125	5	20		
Silver	mg/kg	ND	36	36.8	35.0	37.9	97	103	75-125	8	20		
Zinc	mg/kg	2.0J	72	73.4	113	122	154	164	75-125	8	20	M1	

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10605661

QC Batch: 811326

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight / %M by ASTM D2974

Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10605661001, 10605661002

SAMPLE DUPLICATE: 4303422

Parameter	Units	10605661001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	33.1	33.5	1	30	N2

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report  
Pace Project No.: 10605661

QC Batch: 1857248	Analysis Method: EPA 8270E
QC Batch Method: 3546	Analysis Description: SVOA (GC/MS) 8270E
	Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10605661001

METHOD BLANK: R3787713-2 Matrix: Solid  
Associated Lab Samples: 10605661001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	mg/kg	ND	0.0333	0.00539	05/03/22 15:52	
Acenaphthylene	mg/kg	ND	0.0333	0.00469	05/03/22 15:52	
Anthracene	mg/kg	ND	0.0333	0.00593	05/03/22 15:52	
Benzoic acid	mg/kg	ND	1.67	0.118	05/03/22 15:52	
Benzo(a)anthracene	mg/kg	ND	0.0333	0.00587	05/03/22 15:52	
Benzo(b)fluoranthene	mg/kg	ND	0.0333	0.00621	05/03/22 15:52	
Benzo(k)fluoranthene	mg/kg	ND	0.0333	0.00592	05/03/22 15:52	
Benzo(g,h,i)perylene	mg/kg	ND	0.0333	0.00609	05/03/22 15:52	
Benzo(a)pyrene	mg/kg	ND	0.0333	0.00619	05/03/22 15:52	
Carbazole	mg/kg	ND	0.333	0.0103	05/03/22 15:52	
Chrysene	mg/kg	ND	0.0333	0.00662	05/03/22 15:52	
Dibenz(a,h)anthracene	mg/kg	ND	0.0333	0.00923	05/03/22 15:52	
Dibenzofuran	mg/kg	ND	0.333	0.0109	05/03/22 15:52	
Fluoranthene	mg/kg	ND	0.0333	0.00601	05/03/22 15:52	
Fluorene	mg/kg	ND	0.0333	0.00542	05/03/22 15:52	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.0333	0.00941	05/03/22 15:52	
1-Methylnaphthalene	mg/kg	ND	0.0333	0.00426	05/03/22 15:52	
2-Methylnaphthalene	mg/kg	ND	0.0333	0.00432	05/03/22 15:52	
Naphthalene	mg/kg	ND	0.0333	0.00836	05/03/22 15:52	
Phenanthrene	mg/kg	ND	0.0333	0.00661	05/03/22 15:52	
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.333	0.0422	05/03/22 15:52	
Di-n-butylphthalate	mg/kg	ND	0.333	0.0114	05/03/22 15:52	
Di-n-octylphthalate	mg/kg	ND	0.333	0.0225	05/03/22 15:52	
Pyrene	mg/kg	ND	0.0333	0.00648	05/03/22 15:52	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.333	0.0104	05/03/22 15:52	
Pentachlorophenol	mg/kg	ND	0.333	0.00896	05/03/22 15:52	
Phenol	mg/kg	ND	0.333	0.0134	05/03/22 15:52	
2-Fluorophenol (S)	%	72.7	12.0-120		05/03/22 15:52	
Phenol-d5 (S)	%	74.6	10.0-120		05/03/22 15:52	
Nitrobenzene-d5 (S)	%	72.7	10.0-122		05/03/22 15:52	
2-Fluorobiphenyl (S)	%	68.5	15.0-120		05/03/22 15:52	
2,4,6-Tribromophenol (S)	%	75.7	10.0-127		05/03/22 15:52	
p-Terphenyl-d14 (S)	%	72.7	10.0-120		05/03/22 15:52	

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report  
Pace Project No.: 10605661

METHOD BLANK: R3788334-1 Matrix: Solid  
Associated Lab Samples: 10605661001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	mg/kg	ND	0.0333	0.00539	05/04/22 18:14	
Acenaphthylene	mg/kg	ND	0.0333	0.00469	05/04/22 18:14	
Anthracene	mg/kg	ND	0.0333	0.00593	05/04/22 18:14	
Benzoic acid	mg/kg	ND	1.67	0.118	05/04/22 18:14	
Benzo(a)anthracene	mg/kg	ND	0.0333	0.00587	05/04/22 18:14	
Benzo(b)fluoranthene	mg/kg	ND	0.0333	0.00621	05/04/22 18:14	
Benzo(k)fluoranthene	mg/kg	ND	0.0333	0.00592	05/04/22 18:14	
Benzo(g,h,i)perylene	mg/kg	ND	0.0333	0.00609	05/04/22 18:14	
Benzo(a)pyrene	mg/kg	ND	0.0333	0.00619	05/04/22 18:14	
Carbazole	mg/kg	ND	0.333	0.0103	05/04/22 18:14	
Chrysene	mg/kg	ND	0.0333	0.00662	05/04/22 18:14	
Dibenz(a,h)anthracene	mg/kg	ND	0.0333	0.00923	05/04/22 18:14	
Dibenzofuran	mg/kg	ND	0.333	0.0109	05/04/22 18:14	
Fluoranthene	mg/kg	ND	0.0333	0.00601	05/04/22 18:14	
Fluorene	mg/kg	ND	0.0333	0.00542	05/04/22 18:14	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.0333	0.00941	05/04/22 18:14	
1-Methylnaphthalene	mg/kg	ND	0.0333	0.00426	05/04/22 18:14	
2-Methylnaphthalene	mg/kg	ND	0.0333	0.00432	05/04/22 18:14	
Naphthalene	mg/kg	ND	0.0333	0.00836	05/04/22 18:14	
Phenanthrene	mg/kg	ND	0.0333	0.00661	05/04/22 18:14	
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.333	0.0422	05/04/22 18:14	
Di-n-butylphthalate	mg/kg	ND	0.333	0.0114	05/04/22 18:14	
Di-n-octylphthalate	mg/kg	ND	0.333	0.0225	05/04/22 18:14	
Pyrene	mg/kg	ND	0.0333	0.00648	05/04/22 18:14	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.333	0.0104	05/04/22 18:14	
Pentachlorophenol	mg/kg	ND	0.333	0.00896	05/04/22 18:14	
Phenol	mg/kg	ND	0.333	0.0134	05/04/22 18:14	
2-Fluorophenol (S)	%	67.7	12.0-120		05/04/22 18:14	
Phenol-d5 (S)	%	65.6	10.0-120		05/04/22 18:14	
Nitrobenzene-d5 (S)	%	66.1	10.0-122		05/04/22 18:14	
2-Fluorobiphenyl (S)	%	68.5	15.0-120		05/04/22 18:14	
2,4,6-Tribromophenol (S)	%	70.3	10.0-127		05/04/22 18:14	
p-Terphenyl-d14 (S)	%	61.6	10.0-120		05/04/22 18:14	

LABORATORY CONTROL SAMPLE: R3787713-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	mg/kg	0.666	0.390	58.6	38.0-120	
Acenaphthylene	mg/kg	0.666	0.423	63.5	40.0-120	
Anthracene	mg/kg	0.666	0.418	62.8	42.0-120	
Benzoic acid	mg/kg	1.33	0.179	13.5	10.0-120	
Benzo(a)anthracene	mg/kg	0.666	0.412	61.9	44.0-120	
Benzo(b)fluoranthene	mg/kg	0.666	0.389	58.4	43.0-120	
Benzo(k)fluoranthene	mg/kg	0.666	0.413	62.0	44.0-120	

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10605661

LABORATORY CONTROL SAMPLE: R3787713-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(g,h,i)perylene	mg/kg	0.666	0.427	64.1	43.0-120	
Benzo(a)pyrene	mg/kg	0.666	0.447	67.1	45.0-120	
Carbazole	mg/kg	0.666	0.398	59.8	48.0-120	
Chrysene	mg/kg	0.666	0.414	62.2	43.0-120	
Dibenz(a,h)anthracene	mg/kg	0.666	0.422	63.4	44.0-120	
Dibenzofuran	mg/kg	0.666	0.401	60.2	44.0-120	
Fluoranthene	mg/kg	0.666	0.402	60.4	44.0-120	
Fluorene	mg/kg	0.666	0.391	58.7	41.0-120	
Indeno(1,2,3-cd)pyrene	mg/kg	0.666	0.411	61.7	45.0-120	
1-Methylnaphthalene	mg/kg	0.666	0.321	48.2	34.0-120	
2-Methylnaphthalene	mg/kg	0.666	0.312	46.8	34.0-120	
Naphthalene	mg/kg	0.666	0.309	46.4	18.0-120	
Phenanthrene	mg/kg	0.666	0.400	60.1	42.0-120	
bis(2-Ethylhexyl)phthalate	mg/kg	0.666	0.471	70.7	41.0-120	
Di-n-butylphthalate	mg/kg	0.666	0.445	66.8	43.0-120	
Di-n-octylphthalate	mg/kg	0.666	0.442	66.4	40.0-120	
Pyrene	mg/kg	0.666	0.408	61.3	41.0-120	
3&4-Methylphenol(m&p Cresol)	mg/kg	0.666	0.464	69.7	42.0-120	
Pentachlorophenol	mg/kg	0.666	0.393	59.0	29.0-120	
Phenol	mg/kg	0.666	0.400	60.1	28.0-120	
2-Fluorophenol (S)	%			60.8	12.0-120	
Phenol-d5 (S)	%			61.7	10.0-120	
Nitrobenzene-d5 (S)	%			52.6	10.0-122	
2-Fluorobiphenyl (S)	%			56.8	15.0-120	
2,4,6-Tribromophenol (S)	%			68.6	10.0-127	
p-Terphenyl-d14 (S)	%			62.5	10.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3788258-1 R3788258-2

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10605661001 Result	Spike Conc.	Spike Conc.	Conc.								
Acenaphthene	mg/kg	ND	0.862	0.849	0.590	0.417	68.4	49.1	18.0-120	34.4	32	R1	
Acenaphthylene	mg/kg	ND	0.862	0.849	0.620	0.435	71.9	51.2	25.0-120	35.1	32	R1	
Anthracene	mg/kg	ND	0.862	0.849	0.677	0.555	78.5	65.4	22.0-120	19.7	29		
Benzoic acid	mg/kg	ND	1.72	1.69	1.90	1.20	111	70.6	10.0-152	45.7	40	R1	
Benzo(a)anthracene	mg/kg	ND	0.862	0.849	0.705	0.599	81.7	70.6	25.0-120	16.2	29		
Benzo(b)fluoranthene	mg/kg	ND	0.862	0.849	0.678	0.589	78.7	69.3	19.0-122	14.2	31		
Benzo(k)fluoranthene	mg/kg	ND	0.862	0.849	0.688	0.599	79.8	70.6	23.0-120	13.8	30		
Benzo(g,h,i)perylene	mg/kg	ND	0.862	0.849	0.592	0.517	68.7	60.9	10.0-120	13.6	33		
Benzo(a)pyrene	mg/kg	ND	0.862	0.849	0.753	0.653	87.3	76.9	24.0-120	14.1	30		
Carbazole	mg/kg	ND	0.862	0.849	0.698	0.583	81.0	68.7	31.0-120	18.0	24		
Chrysene	mg/kg	ND	0.862	0.849	0.709	0.607	82.2	71.5	21.0-120	15.5	29		
Dibenz(a,h)anthracene	mg/kg	ND	0.862	0.849	0.648	0.548	75.2	64.5	10.0-120	16.8	32		
Dibenzofuran	mg/kg	ND	0.862	0.849	0.606	0.435	70.2	51.2	24.0-120	32.8	30	R1	
Fluoranthene	mg/kg	ND	0.862	0.849	0.717	0.592	83.1	69.8	18.0-126	19.0	32		

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10605661

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3788258-1			R3788258-2			% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		10605661001	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Fluorene	mg/kg	ND	0.862	0.849	0.635	0.469	73.6	55.3	25.0-120	29.9	30			
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.862	0.849	0.627	0.544	72.7	64.0	10.0-120	14.2	32			
1-Methylnaphthalene	mg/kg	ND	0.862	0.849	0.480	0.333	55.7	39.3	10.0-120	36.1	36	R1		
2-Methylnaphthalene	mg/kg	ND	0.862	0.849	0.452	0.313	52.5	36.9	10.0-120	36.3	37			
Naphthalene	mg/kg	ND	0.862	0.849	0.451	0.312	52.3	36.8	10.0-120	36.4	35	R1		
Phenanthrene	mg/kg	ND	0.862	0.849	0.671	0.546	77.8	64.3	17.0-120	20.4	31			
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.862	0.849	0.837	0.701	97.1	82.6	17.0-126	17.7	30			
Di-n-butylphthalate	mg/kg	ND	0.862	0.849	0.796	0.639	92.3	75.2	30.0-120	21.9	29			
Di-n-octylphthalate	mg/kg	ND	0.862	0.849	0.825	0.706	95.7	83.2	21.0-123	15.5	29			
Pyrene	mg/kg	ND	0.862	0.849	0.692	0.587	80.2	69.2	16.0-121	16.3	32			
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.862	0.849	0.734	0.480	85.1	56.5	12.0-123	41.8	38	R1		
Pentachlorophenol	mg/kg	ND	0.862	0.849	0.697	0.595	80.8	70.1	10.0-160	15.8	31			
Phenol	mg/kg	ND	0.862	0.849	0.622	0.406	72.1	47.8	12.0-120	42.0	38	R1		
2-Fluorophenol (S)	%						71.5	54.8	12.0-120					
Phenol-d5 (S)	%						74.5	58.0	10.0-120					
Nitrobenzene-d5 (S)	%						59.2	49.8	10.0-122					
2-Fluorobiphenyl (S)	%						62.9	50.8	15.0-120					
2,4,6-Tribromophenol (S)	%						91.0	82.1	10.0-127					
p-Terphenyl-d14 (S)	%						69.9	76.6	10.0-120					

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report  
Pace Project No.: 10605661

QC Batch: 1857484      Analysis Method: EPA 8270E  
QC Batch Method: 3546      Analysis Description: SVOA (GC/MS) 8270E  
Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10605661002

METHOD BLANK: R3787994-2      Matrix: Solid  
Associated Lab Samples: 10605661002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	mg/kg	ND	0.0333	0.00539	05/04/22 06:23	
Acenaphthylene	mg/kg	ND	0.0333	0.00469	05/04/22 06:23	
Anthracene	mg/kg	ND	0.0333	0.00593	05/04/22 06:23	
Benzoic acid	mg/kg	ND	1.67	0.118	05/04/22 06:23	
Benzo(a)anthracene	mg/kg	ND	0.0333	0.00587	05/04/22 06:23	
Benzo(b)fluoranthene	mg/kg	ND	0.0333	0.00621	05/04/22 06:23	
Benzo(k)fluoranthene	mg/kg	ND	0.0333	0.00592	05/04/22 06:23	
Benzo(g,h,i)perylene	mg/kg	ND	0.0333	0.00609	05/04/22 06:23	
Benzo(a)pyrene	mg/kg	ND	0.0333	0.00619	05/04/22 06:23	
Carbazole	mg/kg	ND	0.333	0.0103	05/04/22 06:23	
Chrysene	mg/kg	ND	0.0333	0.00662	05/04/22 06:23	
Dibenz(a,h)anthracene	mg/kg	ND	0.0333	0.00923	05/04/22 06:23	
Dibenzofuran	mg/kg	ND	0.333	0.0109	05/04/22 06:23	
Fluoranthene	mg/kg	ND	0.0333	0.00601	05/04/22 06:23	
Fluorene	mg/kg	ND	0.0333	0.00542	05/04/22 06:23	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.0333	0.00941	05/04/22 06:23	
1-Methylnaphthalene	mg/kg	ND	0.0333	0.00426	05/04/22 06:23	
2-Methylnaphthalene	mg/kg	ND	0.0333	0.00432	05/04/22 06:23	
Naphthalene	mg/kg	ND	0.0333	0.00836	05/04/22 06:23	
Phenanthrene	mg/kg	ND	0.0333	0.00661	05/04/22 06:23	
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.333	0.0422	05/04/22 06:23	
Di-n-butylphthalate	mg/kg	ND	0.333	0.0114	05/04/22 06:23	
Di-n-octylphthalate	mg/kg	ND	0.333	0.0225	05/04/22 06:23	
Pyrene	mg/kg	ND	0.0333	0.00648	05/04/22 06:23	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.333	0.0104	05/04/22 06:23	
Pentachlorophenol	mg/kg	ND	0.333	0.00896	05/04/22 06:23	
Phenol	mg/kg	ND	0.333	0.0134	05/04/22 06:23	
2-Fluorophenol (S)	%	78.8	12.0-120		05/04/22 06:23	
Phenol-d5 (S)	%	73.3	10.0-120		05/04/22 06:23	
Nitrobenzene-d5 (S)	%	72.4	10.0-122		05/04/22 06:23	
2-Fluorobiphenyl (S)	%	76.3	15.0-120		05/04/22 06:23	
2,4,6-Tribromophenol (S)	%	97.1	10.0-127		05/04/22 06:23	
p-Terphenyl-d14 (S)	%	79	10.0-120		05/04/22 06:23	

LABORATORY CONTROL SAMPLE: R3787994-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	mg/kg	0.666	0.487	73.1	38.0-120	
Acenaphthylene	mg/kg	0.666	0.506	76.0	40.0-120	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10605661

LABORATORY CONTROL SAMPLE: R3787994-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Anthracene	mg/kg	0.666	0.531	79.7	42.0-120	
Benzoic acid	mg/kg	1.33	0.192	14.4	10.0-120	
Benzo(a)anthracene	mg/kg	0.666	0.560	84.1	44.0-120	
Benzo(b)fluoranthene	mg/kg	0.666	0.529	79.4	43.0-120	
Benzo(k)fluoranthene	mg/kg	0.666	0.538	80.8	44.0-120	
Benzo(g,h,i)perylene	mg/kg	0.666	0.556	83.5	43.0-120	
Benzo(a)pyrene	mg/kg	0.666	0.562	84.4	45.0-120	
Carbazole	mg/kg	0.666	0.523	78.5	48.0-120	
Chrysene	mg/kg	0.666	0.553	83.0	43.0-120	
Dibenz(a,h)anthracene	mg/kg	0.666	0.581	87.2	44.0-120	
Dibenzofuran	mg/kg	0.666	0.494	74.2	44.0-120	
Fluoranthene	mg/kg	0.666	0.562	84.4	44.0-120	
Fluorene	mg/kg	0.666	0.517	77.6	41.0-120	
Indeno(1,2,3-cd)pyrene	mg/kg	0.666	0.597	89.6	45.0-120	
1-Methylnaphthalene	mg/kg	0.666	0.387	58.1	34.0-120	
2-Methylnaphthalene	mg/kg	0.666	0.389	58.4	34.0-120	
Naphthalene	mg/kg	0.666	0.363	54.5	18.0-120	
Phenanthrene	mg/kg	0.666	0.507	76.1	42.0-120	
bis(2-Ethylhexyl)phthalate	mg/kg	0.666	0.584	87.7	41.0-120	
Di-n-butylphthalate	mg/kg	0.666	0.589	88.4	43.0-120	
Di-n-octylphthalate	mg/kg	0.666	0.601	90.2	40.0-120	
Pyrene	mg/kg	0.666	0.508	76.3	41.0-120	
3&4-Methylphenol(m&p Cresol)	mg/kg	0.666	0.547	82.1	42.0-120	
Pentachlorophenol	mg/kg	0.666	0.605	90.8	29.0-120	
Phenol	mg/kg	0.666	0.453	68.0	28.0-120	
2-Fluorophenol (S)	%			75.5	12.0-120	
Phenol-d5 (S)	%			73.1	10.0-120	
Nitrobenzene-d5 (S)	%			58.3	10.0-122	
2-Fluorobiphenyl (S)	%			75.4	15.0-120	
2,4,6-Tribromophenol (S)	%			99.5	10.0-127	
p-Terphenyl-d14 (S)	%			78.4	10.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3787994-3 R3787994-4

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1485528-168 Result	Spike Conc.	Spike Conc.	Conc.								
Acenaphthene	mg/kg	ND	0.689	0.696	0.458	0.330	66.5	47.5	18.0-120	32.4	32	R1	
Acenaphthylene	mg/kg	ND	0.689	0.696	0.437	0.311	63.4	44.7	25.0-120	33.8	32	R1	
Anthracene	mg/kg	ND	0.689	0.696	0.565	0.351	82.0	50.5	22.0-120	46.7	29	R1	
Benzoic acid	mg/kg	ND	1.37	1.40	U	U	29.6	11.8	10.0-152	84.7	40	R1	
Benzo(a)anthracene	mg/kg	0.214	0.689	0.696	1.38	0.604	170	56.1	25.0-120	78.5	29	MH,R1	
Benzo(b)fluoranthene	mg/kg	0.340	0.689	0.696	1.74	0.660	204	45.9	19.0-122	90.2	31	MH,R1	
Benzo(k)fluoranthene	mg/kg	0.128	0.689	0.696	0.896	0.462	112	48.1	23.0-120	63.9	30	R1	
Benzo(g,h,i)perylene	mg/kg	0.299	0.689	0.696	1.04	0.561	107	37.6	10.0-120	59.6	33	R1	
Benzo(a)pyrene	mg/kg	0.231	0.689	0.696	1.38	0.579	167	50.0	24.0-120	82.1	30	MH,R1	

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10605661

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3787994-3			R3787994-4										
Parameter	Units	L1485528-168 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Carbazole	mg/kg	ND	0.689	0.696	0.490	0.318	71.0	45.8	31.0-120	42.4	24	R1	
Chrysene	mg/kg	0.218	0.689	0.696	1.53	0.583	190	52.5	21.0-120	89.4	29	MH,R1	
Dibenz(a,h)anthracene	mg/kg	ND	0.689	0.696	0.562	0.347	81.5	49.8	10.0-120	47.3	32	R1	
Dibenzofuran	mg/kg	ND	0.689	0.696	0.453	0.317	65.7	45.6	24.0-120	35.1	30	R1	
Fluoranthene	mg/kg	0.349	0.689	0.696	1.71	0.728	198	54.5	18.0-126	80.6	32	MH,R1	
Fluorene	mg/kg	ND	0.689	0.696	0.490	0.352	71.0	50.6	25.0-120	32.6	30	R1	
Indeno(1,2,3-cd)pyrene	mg/kg	0.289	0.689	0.696	1.12	0.590	121	43.3	10.0-120	62.3	32	MH,R1	
1-Methylnaphthalene	mg/kg	0.126	0.689	0.696	0.466	0.332	49.2	29.5	10.0-120	33.7	36		
2-Methylnaphthalene	mg/kg	0.110	0.689	0.696	0.501	0.306	56.6	28.2	10.0-120	48.1	37	R1	
Naphthalene	mg/kg	ND	0.689	0.696	0.471	0.348	68.4	50.0	10.0-120	30.1	35		
Phenanthrene	mg/kg	0.176	0.689	0.696	0.883	0.465	103	41.5	17.0-120	62.1	31	R1	
bis(2-Ethylhexyl)phthalate	mg/kg	3.13	0.689	0.696	4.11	3.29	142	23.5	17.0-126	22.1	30	P6	
Di-n-butylphthalate	mg/kg	0.167	0.689	0.696	0.778	0.395	88.6	32.8	30.0-120	65.3	29	R1	
Di-n-octylphthalate	mg/kg	ND	0.689	0.696	0.820	1.25	119	180	21.0-123	41.9	29	MH,R1	
Pyrene	mg/kg	0.299	0.689	0.696	1.48	0.668	172	53.1	16.0-121	75.7	32	MH,R1	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.689	0.696	0.447	0.250	64.9	35.9	12.0-123	56.7	38	R1	
Pentachlorophenol	mg/kg	ND	0.689	0.696	0.328	ND	47.6	0.00	10.0-160	200	31	ML,R1	
Phenol	mg/kg	ND	0.689	0.696	0.367	0.228	53.3	32.8	12.0-120	46.9	38	R1	
2-Fluorophenol (S)	%						71.5	43.0	12.0-120				
Phenol-d5 (S)	%						61.4	40.7	10.0-120				
Nitrobenzene-d5 (S)	%						67.1	50.8	10.0-122				
2-Fluorobiphenyl (S)	%						66.1	49.5	15.0-120				
2,4,6-Tribromophenol (S)	%						65.8	50.9	10.0-127				
p-Terphenyl-d14 (S)	%						68.7	47.6	10.0-120				

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10605661

QC Batch: 811397	Analysis Method: NWTPH-Dx
QC Batch Method: EPA 3550	Analysis Description: NWTPH-Dx GCS
	Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10605661001, 10605661002

METHOD BLANK: 4303622 Matrix: Solid

Associated Lab Samples: 10605661001, 10605661002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Diesel Fuel Range	mg/kg	ND	15.0	6.9	04/27/22 15:49	
Motor Oil Range	mg/kg	7.6J	10.0	5.0	04/27/22 15:49	
n-Triacontane (S)	%	89	50-150		04/27/22 15:49	
o-Terphenyl (S)	%	91	50-150		04/27/22 15:49	

LABORATORY CONTROL SAMPLE: 4303623

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel Range	mg/kg	50	43.1	86	50-150	
Motor Oil Range	mg/kg	50	45.8	92	50-150	
n-Triacontane (S)	%			86	50-150	
o-Terphenyl (S)	%			87	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4303624 4303625

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10605661001 Result	Spike Conc.	Spike Conc.	Result						
Diesel Fuel Range	mg/kg	15.8J	74.5	74.4	78.9	84.1	85	92	50-150	6	30
Motor Oil Range	mg/kg	36.9	74.5	74.4	106	117	93	107	50-150	10	30
n-Triacontane (S)	%						90	92	50-150		
o-Terphenyl (S)	%						86	88	50-150		

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**QUALITY CONTROL DATA**

Project: D3593500-Revised Report

Pace Project No.: 10605661

QC Batch: 1855693

Analysis Method: SM 2540G

QC Batch Method: SM 2540 G

Analysis Description: Total Solids 2540 G-2011

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10605661001

METHOD BLANK: R3786597-1

Matrix: Solid

Associated Lab Samples: 10605661001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	0.00100			04/29/22 08:19	

LABORATORY CONTROL SAMPLE: R3786597-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	85.0-115	

SAMPLE DUPLICATE: R3786597-3

Parameter	Units	L1486465-03 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	90.9	92.0	1.19	10	

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**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10605661

QC Batch: 1855863

Analysis Method: SM 2540G

QC Batch Method: SM 2540 G

Analysis Description: Total Solids 2540 G-2011

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10605661002

METHOD BLANK: R3786687-1

Matrix: Solid

Associated Lab Samples: 10605661002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	ND			04/29/22 17:30	

LABORATORY CONTROL SAMPLE: R3786687-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	85.0-115	

SAMPLE DUPLICATE: R3786687-3

Parameter	Units	L1486961-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	76.0	78.8	3.71	10	

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10605661

QC Batch: 1857111

Analysis Method: EPA 9030B

QC Batch Method: 9030B

Analysis Description: Wet Chemistry 9034/9030B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10605661001, 10605661002

METHOD BLANK: R3786887-1

Matrix: Solid

Associated Lab Samples: 10605661001, 10605661002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/kg	ND	75.0	30.0	05/01/22 17:00	

LABORATORY CONTROL SAMPLE: R3786887-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/kg	100	74.9	74.9	53.8-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3786887-3 R3786887-4

Parameter	Units	R3786887-3		R3786887-4		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1485355-02 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Sulfide	mg/kg	ND	109	109	54.7	52.6	50.0	48.2	10.0-136	3.78	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: D3593500-Revised Report  
Pace Project No.: 10605661

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.  
ND - Not Detected at or above adjusted reporting limit.  
TNTC - Too Numerous To Count  
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.  
MDL - Adjusted Method Detection Limit.  
PQL - Practical Quantitation Limit.  
RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.  
S - Surrogate  
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.  
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.  
LCS(D) - Laboratory Control Sample (Duplicate)  
MS(D) - Matrix Spike (Duplicate)  
DUP - Sample Duplicate  
RPD - Relative Percent Difference  
NC - Not Calculable.  
SG - Silica Gel - Clean-Up  
U - Indicates the compound was analyzed for, but not detected.  
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.  
Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.  
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.  
TNI - The NELAC Institute.

### SAMPLE QUALIFIERS

Sample: 10605661001

[1] Semi Volatile Organic Compounds (GC/MS) by Method 8270E - Dilution due to matrix impact during extract concentration procedure

Sample: L1485528-168

[1] Semi Volatile Organic Compounds (GC/MS) by Method 8270E - Dilution due to matrix.

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.  
J Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.  
M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.  
MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.  
ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.  
N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.  
P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.  
R1 RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: D3593500-Revised Report

Pace Project No.: 10605661

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10605661001	BNSF-BG13-042122-0-10	EPA 3550	811397	NWTPH-Dx	811952
10605661002	BNSF-SG23-042122-0-6	EPA 3550	811397	NWTPH-Dx	811952
10605661001	BNSF-BG13-042122-0-10	EPA 3050B	811306	EPA 6020B	811795
10605661002	BNSF-SG23-042122-0-6	EPA 3050B	811306	EPA 6020B	811795
10605661001	BNSF-BG13-042122-0-10	EPA 7471B	811310	EPA 7471B	811726
10605661002	BNSF-SG23-042122-0-6	EPA 7471B	811310	EPA 7471B	811726
10605661001	BNSF-BG13-042122-0-10	ASTM D2974	811326		
10605661002	BNSF-SG23-042122-0-6	ASTM D2974	811326		
10605661001	BNSF-BG13-042122-0-10	3546	1857248	EPA 8270E	1857248
10605661002	BNSF-SG23-042122-0-6	3546	1857484	EPA 8270E	1857484
10605661001	BNSF-BG13-042122-0-10	SM 2540 G	1855693	SM 2540G	1855693
10605661002	BNSF-SG23-042122-0-6	SM 2540 G	1855863	SM 2540G	1855863
10605661001	BNSF-BG13-042122-0-10	9030B	1857111	EPA 9030B	1857111
10605661002	BNSF-SG23-042122-0-6	9030B	1857111	EPA 9030B	1857111

### REPORT OF LABORATORY ANALYSIS

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# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: **JACOBS**  
 Address: **2020 SW 4TH AVE PDX 97201**  
 Report To: **KRIS IVARSON**  
 Copy To: **BEARNEY KIDD**  
 Customer Project Name/Number: **D 3593500**  
 Phone: **503 253 1234**  
 Email: **BEARNEY.KIDD@JACOBS.COM**  
 Collected By (print): **J. WURICH**  
 Collected By (signature): *[Signature]*  
 Sample Disposal:  Dispose as appropriate  Return  Archive  Hold

LAB USE ONLY - Affix Work  
**WO# : 10605661**  
 ALL SHAD  
 Container Preservative TV  
 U U U U U U U U  
 \*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses	U	U	U	U	U	U	U	U	U	U
AMMONIUM (SM450 NH3)	X	X	X	X	X	X	X	X	X	X
PCB CONGENERS & DIBENZO PHTHALS	X	X	X	X	X	X	X	X	X	X
T. SULFIDES (SM9030)	X	X	X	X	X	X	X	X	X	X
METALS (SM6018/SM7018) (SW9018)	X	X	X	X	X	X	X	X	X	X
TPH DEP/PRO (SM7018-DX)	X	X	X	X	X	X	X	X	X	X
SVOCs & PAHs (SM8210/SM8210B)	X	X	X	X	X	X	X	X	X	X
GRAIN SIZE (D7928/D6913)	X	X	X	X	X	X	X	X	X	X

Lab Profile/Line: \_\_\_\_\_  
 Lab Sample Receipt Checklist:  
 Custody Seals Present/Intact Y N NA  
 Custody Signatures Present Y N NA  
 Collector Signature Present Y N NA  
 Bottles Intact Y N NA  
 Correct Bottles Y N NA  
 Sufficient Volume Y N NA  
 Samples Received on Ice Y N NA  
 VOA - Headspace Acceptable Y N NA  
 USDA Regulated Soils Y N NA  
 Samples in Holding Time Y N NA  
 Residual Chlorine Present Y N NA  
 Cl. Strips: \_\_\_\_\_  
 Sample pH Acceptable Y N NA  
 pH Strips: \_\_\_\_\_  
 Sulfide Present Y N NA  
 Lead Acetate Strips: \_\_\_\_\_  
 LAB USE ONLY:  
 Lab Sample # / Comments: \_\_\_\_\_

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Time	Res Cl	# of Ctns
BNSF-BG13-042122-D-10	SL	G	4/21/22	0950		7
BNSF-BG13-042122-0-10-MS	SL	G	4/21/22	0950		7
BNSF-BG13-042122-0-10-MSD	SL	G	4/21/22	0950		7
BNSF-SG23-042122-0-10	SL	G	4/21/22	1440		7

Customer Remarks / Special Conditions / Possible Hazards:  
 Type of ice Used: Wet Blue Dry None  
 Packing Material Used:  
 Radchem sample(s) screened (<5000 cpm): Y N NA  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: 4/22/22 1515  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: 4/22/22 9:00  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: \_\_\_\_\_  
 Received by/Company: (Signature) \_\_\_\_\_  
 Date/Time: \_\_\_\_\_

Customer Remarks / Special Conditions / Possible Hazards:  
 Type of ice Used: Wet Blue Dry None  
 Packing Material Used:  
 Radchem sample(s) screened (<5000 cpm): Y N NA  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: 4/22/22 1515  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: 4/22/22 9:00  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: \_\_\_\_\_  
 Received by/Company: (Signature) \_\_\_\_\_  
 Date/Time: \_\_\_\_\_

Customer Remarks / Special Conditions / Possible Hazards:  
 Type of ice Used: Wet Blue Dry None  
 Packing Material Used:  
 Radchem sample(s) screened (<5000 cpm): Y N NA  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: 4/22/22 1515  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: 4/22/22 9:00  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: \_\_\_\_\_  
 Received by/Company: (Signature) \_\_\_\_\_  
 Date/Time: \_\_\_\_\_

Lab Sample Temperature Info:  
 Temp Blank Received:  N NA  
 Therm ID#: \_\_\_\_\_  
 Cooler 1 Temp Upon Receipt: 21.0C  
 Cooler 1 Therm Corr. Factor: 0.0C  
 Cooler 1 Corrected Temp: 21.0C  
 Comments:

Lab Sample Temperature Info:  
 Temp Blank Received:  N NA  
 Therm ID#: \_\_\_\_\_  
 Cooler 1 Temp Upon Receipt: 21.0C  
 Cooler 1 Therm Corr. Factor: 0.0C  
 Cooler 1 Corrected Temp: 21.0C  
 Comments:

Lab Sample Temperature Info:  
 Temp Blank Received:  N NA  
 Therm ID#: \_\_\_\_\_  
 Cooler 1 Temp Upon Receipt: 21.0C  
 Cooler 1 Therm Corr. Factor: 0.0C  
 Cooler 1 Corrected Temp: 21.0C  
 Comments:

Customer Remarks / Special Conditions / Possible Hazards:  
 Type of ice Used: Wet Blue Dry None  
 Packing Material Used:  
 Radchem sample(s) screened (<5000 cpm): Y N NA  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: 4/22/22 1515  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: 4/22/22 9:00  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: \_\_\_\_\_  
 Received by/Company: (Signature) \_\_\_\_\_  
 Date/Time: \_\_\_\_\_

Customer Remarks / Special Conditions / Possible Hazards:  
 Type of ice Used: Wet Blue Dry None  
 Packing Material Used:  
 Radchem sample(s) screened (<5000 cpm): Y N NA  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: 4/22/22 1515  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: 4/22/22 9:00  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: \_\_\_\_\_  
 Received by/Company: (Signature) \_\_\_\_\_  
 Date/Time: \_\_\_\_\_

Customer Remarks / Special Conditions / Possible Hazards:  
 Type of ice Used: Wet Blue Dry None  
 Packing Material Used:  
 Radchem sample(s) screened (<5000 cpm): Y N NA  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: 4/22/22 1515  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: 4/22/22 9:00  
 Received by/Company: (Signature) *[Signature]*  
 Date/Time: \_\_\_\_\_  
 Received by/Company: (Signature) \_\_\_\_\_  
 Date/Time: \_\_\_\_\_



DC#\_Title: ENV-FRM-MIN4-0149 v03\_Sample Condition Upon Receipt (SCUR) - ESI

Effective Date: 04/12/2022

Sample Condition Upon Receipt - ESI Tech Specs

Client Name:

BNSF Jacobs

Project #:

WO#: 10605661

Courier:

Fed Ex UPS USPS Client Pace SpeeDee Commercial

PM: KV

Due Date: 05/16/22

CLIENT: BNSF\_Jacobs

Tracking Number: 2723 2528 680

See Exceptions ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? Yes No Seals Intact? Yes No Biological Tissue Frozen? Yes No N/A

Packing Material: Bubble Wrap Bubble Bags None Other: Temp Blank? Yes No

Thermometer: T1(0461) T2(1336) T3(0459) T4(0254) T5(0489) T6(0235) T7(0042) Type of Ice: Wet Blue None Dry Melted

Temp should be above freezing to 6°C Cooler Temp Read w/temp blank: 2.1 °C

Average Corrected Temp (no temp blank only): See Exceptions ENV-FRM-MIN4-0142 1 Container

Correction Factor: Cooler Temp Corrected w/temp blank: 2.1 °C

USDA Regulated Soil: N/A, water sample/Other:

Date/Initials of Person Examining Contents: 4/12/22

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MIN4-0154) and include with SCUR/COC paperwork.

Table with 2 columns: Questions and COMMENTS. Includes rows for Chain of Custody, Short Hold Time Analysis, Rush Turn Around Time, Field Filtered Volume, Matrix, All containers needing acid/base preservation, Extra labels present on soil VOA or WIDRO containers, Trip Blanks Present, etc.

Temp Log table with columns: Opened Time, Temp, Corrected Temp, Time, and another Temp/Corrected Temp column.

CLIENT NOTIFICATION/RESOLUTION table with columns: Field Data Required?, Person Contacted, Date/Time, Comments/Resolution.

Project Manager Review:

Date:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers)

Labeled by: [Signature]

# Internal Transfer Chain of Custody



Samples Pre-Logged into eCOC.

State Of Origin: WA

Cert. Needed:  Yes  No

Owner Received Date: 4/23/2022 Results Requested By: 5/16/2022

Workorder: 10605661

Workorder Name: D3593500

Report To		Subcontract To		Requested Analysis																											
Kongmeng Vang Pace Analytical Minnesota 1700 Elm Street Minneapolis, MN 55414 Phone (612)607-1700		Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858		<table border="1"> <tr> <td>SM4500 Ammonia</td> <td>SVOC</td> <td>SW9030 Total Sulfides</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>												SM4500 Ammonia	SVOC	SW9030 Total Sulfides													
SM4500 Ammonia	SVOC	SW9030 Total Sulfides																													
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved	Preserved Containers					SM4500 Ammonia	SVOC	SW9030 Total Sulfides	LAB USE ONLY																
1	BNSF-BG13-042122-0-10	RQS	4/21/2022 09:50	10605661001	Solid	2							X	X	X	U486885															
2	BNSF-SG23-042122-0-6	PS	4/21/2022 14:40	10605661002	Solid	2							X	X	X	u m															
3																															
4																															
5																															
Transfers												Comments																			
Released By	Date/Time	Received By	Date/Time																												
CSM/Pace	4/26/22 14:45			MS/MSD on sample 001																											
				0900 DRAT 3.4+0=3.4 802																											
Cooler Temperature on Receipt °C		Custody Seal <input checked="" type="checkbox"/> or N		Received on Ice <input checked="" type="checkbox"/> or N		Samples Intact Y or N																									

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

Sample Receipt Checklist

COC Seal Present/Intact:  Y  N If Applicable

COC Signed/Accurate:  Y  N VOA Zero Headspace:  Y  N

Bottles arrive intact:  Y  N Pres. Correct/Check:  Y  N

Correct bottles used:  Y  N

Sufficient volume sent:  Y  N

nan Screen < 0.5 mB/hr:  Y  N

U486885

### 8270 SVOC List

#### Semi-volatile Organic Compounds and Polycyclic

3&4-Methylphenol
Benzoic acid
Bis(2-ethylhexyl) phthalate
Carbazole
Dibenzofuran
Di-n-butyl phthalate
Di-n-octyl phthalate
Pentachlorophenol
Phenol
1-Methylnaphthalene
2-Methylnaphthalene
Acenaphthene
Acenaphthylene
Anthracene
Benz(a)anthracene
Benzo(a)pyrene
Benzo(ghi)perylene
Chrysene
Dibenz(ah)anthracene
Fluoranthene
Fluorene
Indeno(123-cd)pyrene
Naphthalene
Phenanthrene
Pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene



## ANALYTICAL REPORT

Eurofins Seattle  
5755 8th Street East  
Tacoma, WA 98424  
Tel: (253)922-2310

Laboratory Job ID: 580-113170-1  
Client Project/Site: 10605661  
Revision: 1

For:  
Pace Analytical Services, LLC  
1700 Elm Street  
Minneapolis, Minnesota 55414

Attn: Kongmeng Vang



Authorized for release by:  
5/26/2022 12:22:18 PM

Pauline Matlock, Project Manager  
(253)922-2310  
[Pauline.Matlock@et.eurofinsus.com](mailto:Pauline.Matlock@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

10605661

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.





# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions . . . . .	4
Client Sample Results . . . . .	5
QC Sample Results . . . . .	7
Chronicle . . . . .	10
Certification Summary . . . . .	11
Sample Summary . . . . .	12
Chain of Custody . . . . .	13
Receipt Checklists . . . . .	14

# Case Narrative

Client: Pace Analytical Services, LLC  
Project/Site: 10605661

Job ID: 580-113170-1



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## Job ID: 580-113170-1

---

### Laboratory: Eurofins Seattle

#### Narrative

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#### Job Narrative 580-113170-1

#### Comments

No additional comments.

#### Revision

The report being provided is a revision of the original report sent on 5/13/2022. The report (revision 1) is being revised due to: Client needs TOC reported by dry weight.

#### Receipt

The samples were received on 4/27/2022 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.2° C.

#### General Chemistry

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batches 580-389754 and 580-389808 and analytical batch 580-389867 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Definitions/Glossary

Client: Pace Analytical Services, LLC  
Project/Site: 10605661

Job ID: 580-113170-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: 10605661

Job ID: 580-113170-1

**Client Sample ID: BNSF-BG13-042122-0-10**

**Lab Sample ID: 580-113170-1**

Date Collected: 04/21/22 09:50

Matrix: Solid

Date Received: 04/27/22 11:00

Percent Solids: 70.0

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	1600	J	2900	140	mg/Kg	☼		05/10/22 14:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	70.0		0.1	0.1	%			05/10/22 11:22	1
Percent Moisture	30.0		0.1	0.1	%			05/10/22 11:22	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND	F1	35	12	mg/Kg	☼	05/06/22 21:15	05/07/22 23:20	1



# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: 10605661

Job ID: 580-113170-1

**Client Sample ID: BNSF-SG23-042122-0-6**

**Lab Sample ID: 580-113170-2**

Date Collected: 04/21/22 14:40

Matrix: Solid

Date Received: 04/27/22 11:00

Percent Solids: 80.3

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	11000		2500	120	mg/Kg	☼		05/10/22 19:07	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80.3		0.1	0.1	%			05/10/22 11:22	1
Percent Moisture	19.7		0.1	0.1	%			05/10/22 11:22	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	24	J	30	11	mg/Kg	☼	05/06/22 21:15	05/07/22 23:20	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# QC Sample Results

Client: Pace Analytical Services, LLC  
Project/Site: 10605661

Job ID: 580-113170-1

## Method: 350.1 - Nitrogen, Ammonia

**Lab Sample ID: MB 580-389754/1-B**  
**Matrix: Solid**  
**Analysis Batch: 389867**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**  
**Prep Batch: 389808**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		25	8.8	mg/Kg		05/06/22 21:15	05/07/22 23:20	1

**Lab Sample ID: LCS 580-389754/2-B**  
**Matrix: Solid**  
**Analysis Batch: 389867**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Soluble**  
**Prep Batch: 389808**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	50.0	50.3		mg/Kg		101	90 - 110

**Lab Sample ID: 580-113170-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 389867**

**Client Sample ID: BNSF-BG13-042122-0-10**  
**Prep Type: Soluble**  
**Prep Batch: 389808**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	ND	F1	69.4	58.6	F1	mg/Kg	⊛	84	90 - 110

**Lab Sample ID: 580-113170-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 389867**

**Client Sample ID: BNSF-BG13-042122-0-10**  
**Prep Type: Soluble**  
**Prep Batch: 389808**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia as N	ND	F1	70.1	56.1	F1	mg/Kg	⊛	80	90 - 110	4	20

**Lab Sample ID: 580-113170-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 389867**

**Client Sample ID: BNSF-BG13-042122-0-10**  
**Prep Type: Soluble**  
**Prep Batch: 389808**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia as N	ND	F1	17.4	J	mg/Kg	⊛	NC	20

**Lab Sample ID: MB 580-389754/1-A**  
**Matrix: Solid**  
**Analysis Batch: 390299**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		25	8.8	mg/Kg			05/11/22 17:11	1

**Lab Sample ID: LCS 580-389754/2-A**  
**Matrix: Solid**  
**Analysis Batch: 390299**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Soluble**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	50.0	54.3		mg/Kg		109	90 - 110

# QC Sample Results

Client: Pace Analytical Services, LLC  
Project/Site: 10605661

Job ID: 580-113170-1

## Method: 9060A - Organic Carbon, Total (TOC)

**Lab Sample ID: MB 580-390132/5**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/10/22 13:48	1

**Lab Sample ID: LCS 580-390132/6**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	118000		mg/Kg		98	80 - 120

**Lab Sample ID: LCSD 580-390132/7**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120	3	20

**Lab Sample ID: 580-113170-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: BNSF-BG13-042122-0-10**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	1600	J	171000	173000		mg/Kg	⊛	100	75 - 125

**Lab Sample ID: 580-113170-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: BNSF-BG13-042122-0-10**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	1600	J	171000	177000		mg/Kg	⊛	102	75 - 125	2	20

**Lab Sample ID: 580-113170-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: BNSF-BG13-042122-0-10**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon - Duplicates	1600	J	1760	J	mg/Kg	⊛	7	20

**Lab Sample ID: MB 580-390261/5**  
**Matrix: Solid**  
**Analysis Batch: 390261**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/10/22 17:35	1

# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: 10605661

Job ID: 580-113170-1

## Method: 9060A - Organic Carbon, Total (TOC) (Continued)

**Lab Sample ID: LCS 580-390261/6**  
**Matrix: Solid**  
**Analysis Batch: 390261**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	114000		mg/Kg		95	80 - 120

**Lab Sample ID: LCSD 580-390261/7**  
**Matrix: Solid**  
**Analysis Batch: 390261**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	114000		mg/Kg		95	80 - 120	0	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11



# Lab Chronicle

Client: Pace Analytical Services, LLC  
Project/Site: 10605661

Job ID: 580-113170-1

**Client Sample ID: BNSF-BG13-042122-0-10**

**Lab Sample ID: 580-113170-1**

Date Collected: 04/21/22 09:50

Matrix: Solid

Date Received: 04/27/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	390064	05/10/22 11:22	JSM	FGS SEA

**Client Sample ID: BNSF-BG13-042122-0-10**

**Lab Sample ID: 580-113170-1**

Date Collected: 04/21/22 09:50

Matrix: Solid

Date Received: 04/27/22 11:00

Percent Solids: 70.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			389754	05/06/22 16:28	MLT	FGS SEA
Soluble	Prep	Distill/Ammonia			389808	05/06/22 21:15	MLT	FGS SEA
Soluble	Analysis	350.1		1	389867	05/07/22 23:20	MLT	FGS SEA
Total/NA	Analysis	9060A		1	390132	05/10/22 14:50	N1R	FGS SEA

**Client Sample ID: BNSF-SG23-042122-0-6**

**Lab Sample ID: 580-113170-2**

Date Collected: 04/21/22 14:40

Matrix: Solid

Date Received: 04/27/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	390064	05/10/22 11:22	JSM	FGS SEA

**Client Sample ID: BNSF-SG23-042122-0-6**

**Lab Sample ID: 580-113170-2**

Date Collected: 04/21/22 14:40

Matrix: Solid

Date Received: 04/27/22 11:00

Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			389754	05/06/22 16:28	MLT	FGS SEA
Soluble	Prep	Distill/Ammonia			389808	05/06/22 21:15	MLT	FGS SEA
Soluble	Analysis	350.1		1	389867	05/07/22 23:20	MLT	FGS SEA
Total/NA	Analysis	9060A		1	390261	05/10/22 19:07	N1R	FGS SEA

**Laboratory References:**

FGS SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

# Accreditation/Certification Summary

Client: Pace Analytical Services, LLC  
 Project/Site: 10605661

Job ID: 580-113170-1

## Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2954	07-07-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids
350.1	Distill/Ammonia	Solid	Ammonia as N
9060A		Solid	Total Organic Carbon - Duplicates

Oregon	NELAP	4167	07-07-22
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Solids

Washington	State	C788	07-13-22
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids
9060A		Solid	Total Organic Carbon - Duplicates



# Sample Summary

Client: Pace Analytical Services, LLC  
Project/Site: 10605661

Job ID: 580-113170-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-113170-1	BNSF-BG13-042122-0-10	Solid	04/21/22 09:50	04/27/22 11:00
580-113170-2	BNSF-SG23-042122-0-6	Solid	04/21/22 14:40	04/27/22 11:00

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- 11

# Chain of Custody

PASI Minnesota Laboratory



113170

Workorder: 10605661

Workorder Name: D3593500

Results Requested By: 5/16/2022

Report / Invoiced To		Subcontract To				Requested Analysis															
Kongmeng Vang Pace Analytical Minnesota 1700 Elm Street Minneapolis, MN 55414 Phone (612)607-1700 Email: kongmeng.vang@pacelabs.com		Eurofins Frontier Global Sciences 5755 8th Street East Tacoma, WA 98424				SO Total Organic Carbon															
State of Sample Origin: WA		Preserved Containers				LAB USE ONLY															
Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Unpreserved																
1	BNSF-BG13-042122-0-10	4/21/2022 09:50	10605661001	Solid	3																
2	BNSF-SG23-042122-0-6	4/21/2022 14:40	10605661002	Solid	1																
3																					
4																					
5																					
Transfers										Comments											
Released By	Date/Time	Received By	Date/Time	MS/MSD on sample 001																	
CSM/pace	4-26-22 13:20	Tom Blanty	4/27/22 11:00																		
Cooler Temperature on Receipt °C		Custody Seal Y or N		Received on Ice Y or N		Samples Intact Y or N															

FedPo SmRed/wet/bub  
AR 0.2/0.3



580-113170 Chain of Custody

# Login Sample Receipt Checklist

Client: Pace Analytical Services, LLC

Job Number: 580-113170-1

**Login Number: 113170**

**List Source: Eurofins Seattle**

**List Number: 1**

**Creator: Blankinship, Tom X**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Date: 5/11/2022

CLIENT: Pace Analytical - Minneapolis  
Project: 10605661/ D3593500  
Lab Order: S2204364

**CASE NARRATIVE**  
Report ID: S2204364001

Entire Report Reviewed by: *John M. Jacobs*  
John Jacobs, Project Manager

This report contains:

- Case Narrative - 2 pages
- Sample Analysis Report - 12 pages
- Data Sheets- 3 pages
- Original COC - 1 page

-----  
Samples BNSF-BG13-042122-0-10 and BNSF-SG23-042122-0-6 were received on April 27, 2022. .

All samples were received and analyzed within the EPA recommended holding times, except those noted below in this case narrative. Samples were analyzed using the methods outlined in the following references:

- U.S.E.P.A. 600 "Methods for Chemical Analysis of Water and Wastes", 1993
- "Standard Methods For The Examination of Water and Wastewater", 20th ed., 1998
- Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition
- Methods indicated with the Monday, March 12, 2007 Federal Register, 40 CFR Part 122, 136 et al.
- US EPA Methods from Technology Transfer Network Ambient Monitoring Technology Information Center, 2009

All Quality objectives were achieved except as noted below:



Date: 5/11/2022

## Definitions

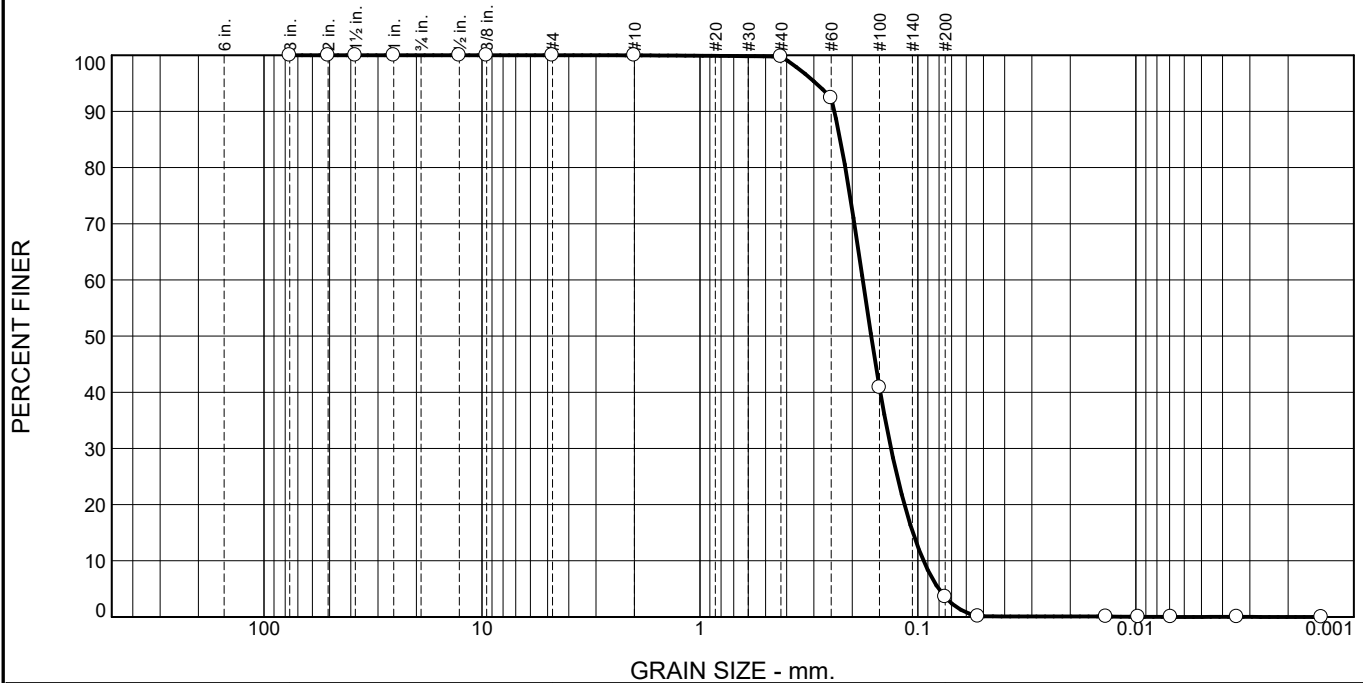
RL Reporting Limit

---

## Qualifiers

- \* Value exceeds Maximum Contaminant Level
- A Check MSA specifications
- B Analyte detected in the associated Method Blank
- C Calculated Value
- D Report limit raised due to dilution
- E Value above quantitation range
- G Analyzed at Pace Gillette, WY laboratory
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by another laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- U Analyte below method detection limit
- X Matrix Effect

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.2	96.2	3.6	0.0

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375	100.0		
#4	100.0		
#10	100.0		
#40	99.8		
#60	92.4		
#100	40.9		
#200	3.6		
0.0530 mm.	0.1		
0.0137 mm.	0.1		
0.0098 mm.	0.0		
0.0069 mm.	0.0		
0.0034 mm.	0.0		
0.0014 mm.			

\* (no specification provided)

**Material Description**

poorly graded sand

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= SP                      AASHTO (M 145)= A-3

**Coefficients**

D<sub>90</sub>= 0.2415                      D<sub>85</sub>= 0.2271                      D<sub>60</sub>= 0.1790  
D<sub>50</sub>= 0.1637                      D<sub>30</sub>= 0.1329                      D<sub>15</sub>= 0.1055  
D<sub>10</sub>= 0.0943                      C<sub>u</sub>= 1.90                      C<sub>c</sub>= 1.05

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

Date Received: 4/27/2022                      Date Tested: 5/5/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: BNSF-BG13-042122-0-10  
Sample Number: S2204364-001A

Date Sampled: 4/21/2022

**Pace Analytical Services, Inc.**

Client: Pace Analytical - Minneapolis  
Project: 10605661/D3593500

**Sheridan, Wyoming**

Project No: S2204364

Figure



**GRAIN SIZE DISTRIBUTION TEST DATA**

5/5/2022

**Client:** Pace Analytical - Minneapolis

**Project:** 10605661/D3593500

**Project Number:** S2204364

**Location:** BNSF-BG13-042122-0-10

**Sample Number:** S2204364-001A

**Material Description:** poorly graded sand

**Sample Date:** 4/21/2022 9:50

**Date Received:** 4/27/2022    **PL:** NP

**LL:** NV

**USCS Classification:** SP

**AASHTO Classification:** A-3

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5/5/2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
442.22	0.00	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1.5"	0.00	0.00	100.0
		1"	0.00	0.00	100.0
		0.5"	0.00	0.00	100.0
		0.375"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#10	0.08	0.00	100.0
		#40	0.15	0.00	99.8
		#60	5.20	0.00	92.4
70.50	0.00	#100	36.34	0.00	40.9
		#200	26.30	0.00	3.6

Pace Analytical Services, Inc.

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 3.6

Weight of hydrometer sample =70.50

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	8.5	2.0	0.0137	8.5	14.9	0.0530	0.1
15.00	19.5	8.0	1.5	0.0137	8.0	15.0	0.0137	0.1
30.00	19.5	7.0	0.5	0.0137	7.0	15.1	0.0098	0.0
60.00	19.5	6.5	0.0	0.0137	6.5	15.2	0.0069	0.0
240.00	20.0	6.5	0.1	0.0136	6.5	15.2	0.0034	0.0
1440.00	20.0	6.0	-0.4	0.0136	6.0	15.3	0.0014	0.0

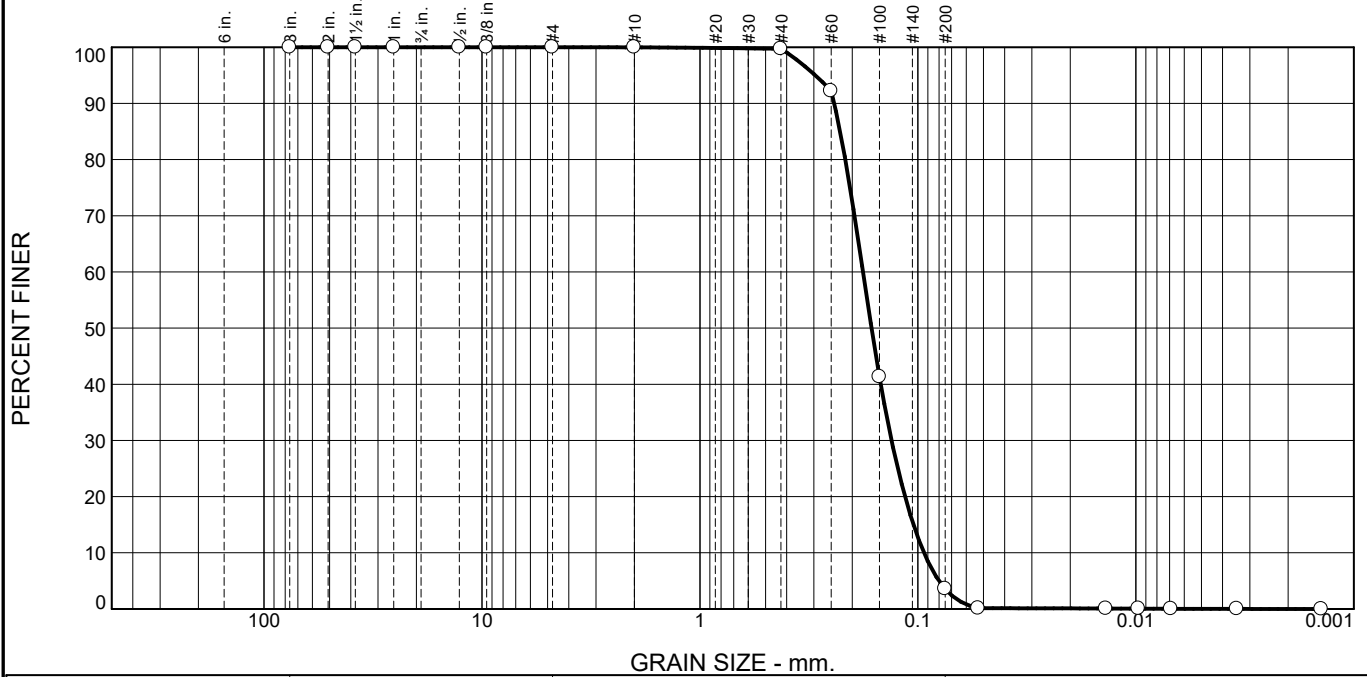
**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	0.2	96.2	96.4	3.6	0.0	3.6

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0802	0.0943	0.1055	0.1153	0.1329	0.1487	0.1637	0.1790	0.2153	0.2271	0.2415	0.2932

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.64	1.90	1.05

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.3	96.1	3.6	0.0

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375	100.0		
#4	100.0		
#10	100.0		
#40	99.7		
#60	92.2		
#100	41.3		
#200	3.6		
0.0529 mm.	0.1		
0.0137 mm.	0.1		
0.0097 mm.	0.1		
0.0069 mm.	0.0		
0.0034 mm.	0.0		
0.0014 mm.			

\* (no specification provided)

**Material Description**

poorly graded sand

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= SP                      AASHTO (M 145)= A-3

**Coefficients**

D<sub>90</sub>= 0.2420                      D<sub>85</sub>= 0.2273                      D<sub>60</sub>= 0.1786  
D<sub>50</sub>= 0.1631                      D<sub>30</sub>= 0.1321                      D<sub>15</sub>= 0.1048  
D<sub>10</sub>= 0.0938                      C<sub>u</sub>= 1.90                      C<sub>c</sub>= 1.04

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

Date Received: 4/27/2022                      Date Tested: 5/5/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: BNSF-BG13-042122-0-10  
Sample Number: S2204364-001DUP

Date Sampled: 4/21/2022

**Pace Analytical Services, Inc.**  
**Sheridan, Wyoming**

Client: Pace Analytical - Minneapolis  
Project: 10605661/D3593500  
Project No: S2204364

Figure

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/5/2022

**Client:** Pace Analytical - Minneapolis

**Project:** 10605661/D3593500

**Project Number:** S2204364

**Location:** BNSF-BG13-042122-0-10

**Sample Number:** S2204364-001DUP

**Material Description:** poorly graded sand

**Sample Date:** 4/21/2022 9:50

**Date Received:** 4/27/2022    **PL:** NP

**LL:** NV

**USCS Classification:** SP

**AASHTO Classification:** A-3

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5/5/2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
442.22	0.00	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1.5"	0.00	0.00	100.0
		1"	0.00	0.00	100.0
		0.5"	0.00	0.00	100.0
		0.375"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#10	0.08	0.00	100.0
		#40	0.18	0.00	99.7
		#60	5.29	0.00	92.2
70.50	0.00	#100	35.90	0.00	41.3
		#200	26.61	0.00	3.6

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 3.6

Weight of hydrometer sample =70.50

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	9.0	2.5	0.0137	9.0	14.8	0.0529	0.1
15.00	19.5	8.0	1.5	0.0137	8.0	15.0	0.0137	0.1
30.00	19.5	7.5	1.0	0.0137	7.5	15.1	0.0097	0.1
60.00	19.5	7.0	0.5	0.0137	7.0	15.1	0.0069	0.0
240.00	20.0	6.5	0.1	0.0136	6.5	15.2	0.0034	0.0
1440.00	20.0	6.0	-0.4	0.0136	6.0	15.3	0.0014	0.0

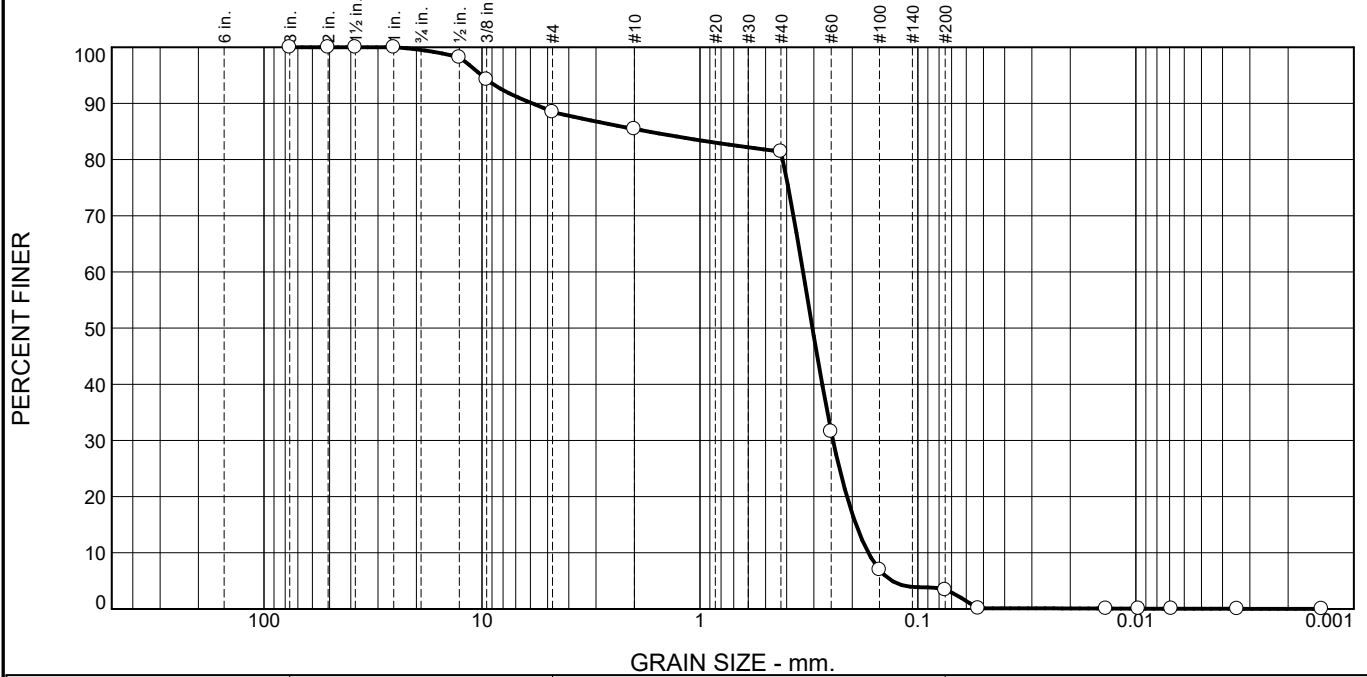
**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	0.3	96.1	96.4	3.6	0.0	3.6

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0800	0.0938	0.1048	0.1146	0.1321	0.1480	0.1631	0.1786	0.2153	0.2273	0.2420	0.2956

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.64	1.90	1.04

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.5	11.0	3.1	4.0	78.0	3.4	0.0

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	98.2		
0.375"	94.3		
#4	88.5		
#10	85.4		
#40	81.4		
#60	31.6		
#100	7.0		
#200	3.4		
0.0529 mm.	0.1		
0.0137 mm.	0.1		
0.0097 mm.	0.0		
0.0069 mm.	0.0		
0.0034 mm.	0.0		
0.0014 mm.	0.0		

\* (no specification provided)

**Material Description**

poorly graded sand

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= SP                      AASHTO (M 145)= A-3

**Coefficients**

D<sub>90</sub>= 5.8669                      D<sub>85</sub>= 1.7310                      D<sub>60</sub>= 0.3363  
D<sub>50</sub>= 0.3046                      D<sub>30</sub>= 0.2451                      D<sub>15</sub>= 0.1922  
D<sub>10</sub>= 0.1688                      C<sub>u</sub>= 1.99                      C<sub>c</sub>= 1.06

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

Date Received: 4/27/2022                      Date Tested: 5/5/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: BNSF-SG23-042122-0-6  
Sample Number: S2204364-002A

Date Sampled: 4/21/2022

**Pace Analytical Services, Inc.**

Client: Pace Analytical - Minneapolis  
Project: 10605661/D3593500

**Sheridan, Wyoming**

Project No: S2204364

Figure

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/5/2022

**Client:** Pace Analytical - Minneapolis

**Project:** 10605661/D3593500

**Project Number:** S2204364

**Location:** BNSF-SG23-042122-0-6

**Sample Number:** S2204364-002A

**Material Description:** poorly graded sand

**Sample Date:** 4/21/2022 2:40

**Date Received:** 4/27/2022    **PL:** NP

**LL:** NV

**USCS Classification:** SP

**AASHTO Classification:** A-3

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5/5/2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer		
158.19	0.00	3"	0.00	0.00	100.0		
		2"	0.00	0.00	100.0		
		1.5"	0.00	0.00	100.0		
		1"	0.00	0.00	100.0		
		0.5"	2.84	0.00	98.2		
		0.375"	6.22	0.00	94.3		
		#4	9.21	0.00	88.5		
		#10	4.75	0.00	85.4		
		70.00	0.00	#40	3.28	0.00	81.4
				#60	40.83	0.00	31.6
#100	20.18			0.00	7.0		
#200	2.93			0.00	3.4		

Pace Analytical Services, Inc.

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 3.4

Weight of hydrometer sample =70.00

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	9.0	2.5	0.0137	9.0	14.8	0.0529	0.1
15.00	19.5	8.0	1.5	0.0137	8.0	15.0	0.0137	0.1
30.00	19.5	7.5	1.0	0.0137	7.5	15.1	0.0097	0.0
60.00	19.5	7.5	1.0	0.0137	7.5	15.1	0.0069	0.0
240.00	20.0	7.0	0.6	0.0136	7.0	15.1	0.0034	0.0
1440.00	20.0	6.5	0.1	0.0136	6.5	15.2	0.0014	0.0

**Fractional Components**

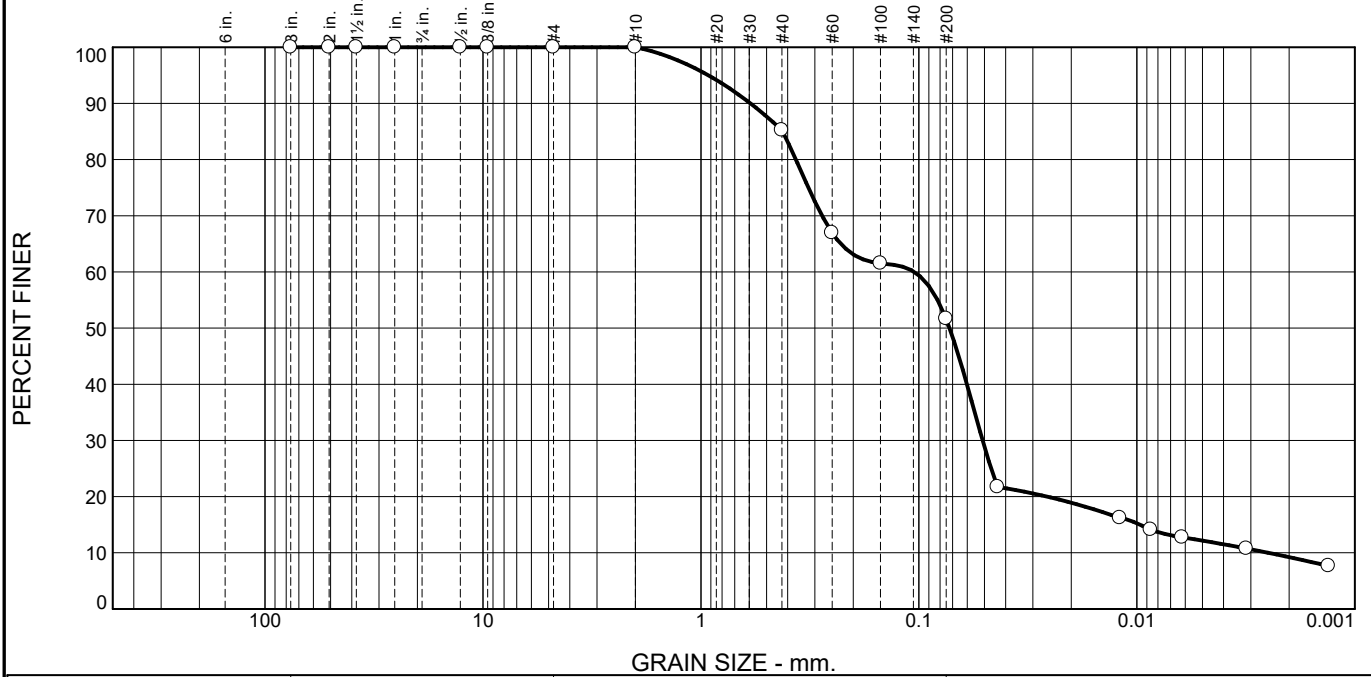
Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.5	11.0	11.5	3.1	4.0	78.0	85.1	3.4	0.0	3.4

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.1315	0.1688	0.1922	0.2117	0.2451	0.2749	0.3046	0.3363	0.4172	1.7310	5.8669	10.0470

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
2.10	1.99	1.06



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	14.8	33.5	39.5	12.2

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375	100.0		
#4	100.0		
#10	100.0		
#40	85.2		
#60	67.0		
#100	61.5		
#200	51.7		
0.0436 mm.	21.7		
0.0120 mm.	16.2		
0.0086 mm.	14.1		
0.0062 mm.	12.8		
0.0031 mm.	10.8		
0.0013 mm.	7.7		

\* (no specification provided)

<b>Material Description</b>
sandy silt
<b>Atterberg Limits (ASTM D 4318)</b>
PL= NP      LL= NV      PI=
<b>Classification</b>
USCS (D 2487)= ML      AASHTO (M 145)= A-4(0)
<b>Coefficients</b>
D <sub>90</sub> = 0.5928      D <sub>85</sub> = 0.4221      D <sub>60</sub> = 0.1050
D <sub>50</sub> = 0.0723      D <sub>30</sub> = 0.0510      D <sub>15</sub> = 0.0097
D <sub>10</sub> = 0.0025      C <sub>u</sub> = 42.06      C <sub>c</sub> = 9.93
<b>Remarks</b>
SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)
Date Received: _____ Date Tested: 5/5/2022
Tested By: Steve Holzerland
Checked By: John Jacobs
Title: Project Manager 2

Location: LCS  
Sample Number: LCS

Date Sampled: \_\_\_\_\_

**Pace Analytical Services, Inc.**

Client: \_\_\_\_\_  
Project: \_\_\_\_\_

**Sheridan, Wyoming**

Project No: \_\_\_\_\_

Figure \_\_\_\_\_

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/5/2022

**Location:** LCS

**Sample Number:** LCS

**Material Description:** sandy silt

**PL:** NP                      **LL:** NV

**USCS Classification:** ML

**AASHTO Classification:** A-4(0)

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5/5/2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer		
75.00	0.00	3"	0.00	0.00	100.0		
		2"	0.00	0.00	100.0		
		1.5"	0.00	0.00	100.0		
		1"	0.00	0.00	100.0		
		0.5"	0.00	0.00	100.0		
		0.375	0.00	0.00	100.0		
		#4	0.00	0.00	100.0		
		#10	0.00	0.00	100.0		
		75.00	0.00	#40	11.08	0.00	85.2
				#60	13.70	0.00	67.0
#100	4.08			0.00	61.5		
#200	7.40			0.00	51.7		

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 51.7

Weight of hydrometer sample = 75.0

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	38.0	31.5	0.0137	38.0	10.1	0.0436	21.7
15.00	19.5	30.0	23.5	0.0137	30.0	11.4	0.0120	16.2
30.00	19.5	27.0	20.5	0.0137	27.0	11.9	0.0086	14.1
60.00	19.5	25.0	18.5	0.0137	25.0	12.2	0.0062	12.8
240.00	20.0	22.0	15.6	0.0136	22.0	12.7	0.0031	10.8
1440.00	20.0	17.5	11.1	0.0136	17.5	13.4	0.0013	7.7

Pace Analytical Services, Inc.

**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	14.8	33.5	48.3	39.5	12.2	51.7

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
	0.0025	0.0097	0.0258	0.0510	0.0602	0.0723	0.1050	0.3669	0.4221	0.5928	0.9236

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.79	42.06	9.93

Pace Analytical Services, Inc.

# Internal Transfer Chain of Custody



Samples Pre-Logged into eCOC.

Workorder: 10605661      Workorder Name: D3593500

State Of Origin: WA  
 Cert. Needed:  Yes     No  
 Owner Received Date: 4/23/2022

Results Requested By: 5/16/2022



Kongmeng Yang  
 Pace Analytical Minnesota  
 1700 Elm Street  
 Minneapolis, MN 55414  
 Phone (612)607-1700

Pace Analytical Sheridan WY  
 1673 Terra Avenue  
 Sheridan, WY 82801  
 Phone (307) 672-8945

Report ID	Sub Contract ID	Requester Analysis	Requester Name	Requester Phone	Requester Email	Requester Address	Requester City	Requester State	Requester Zip	Requester Fax	Requester Website																																				
1	BNSF-BG13-042122-0-10	RQS	4/21/2022 09:50	10605661001	Solid	Unpreserved																																									
2	BNSF-SG23-042122-0-6	PS	4/21/2022 14:40	10605661002	Solid	1																																									
3																																															
4																																															
5																																															
<table border="1"> <thead> <tr> <th>Transfers</th> <th>Released By</th> <th>Date/Time</th> <th>Received By</th> <th>Date/Time</th> <th>Received on Ice</th> <th>Y or N</th> <th>Samples Intact</th> <th>Y or N</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CSM/Pace</td> <td>4/22/2022 13:10</td> <td>[Signature]</td> <td>4/27/22</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>												Transfers	Released By	Date/Time	Received By	Date/Time	Received on Ice	Y or N	Samples Intact	Y or N	1	CSM/Pace	4/22/2022 13:10	[Signature]	4/27/22					2									3								
Transfers	Released By	Date/Time	Received By	Date/Time	Received on Ice	Y or N	Samples Intact	Y or N																																							
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2																																															
3																																															
<table border="1"> <thead> <tr> <th>Cooler Temperature on Receipt</th> <th>°C</th> <th>Custody Seal</th> <th>Y or N</th> <th>Received on Ice</th> <th>Y or N</th> <th>Samples Intact</th> <th>Y or N</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>												Cooler Temperature on Receipt	°C	Custody Seal	Y or N	Received on Ice	Y or N	Samples Intact	Y or N																												
Cooler Temperature on Receipt	°C	Custody Seal	Y or N	Received on Ice	Y or N	Samples Intact	Y or N																																								
<p>Comments: m/s/msd on sample 001</p>																																															
<p>LAB USE ONLY</p>																																															

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

LCS = 25g ASTM grade sand + 50g lab ac soil

Sieve/Hydrometer

1/2" 2.84

3/8" 6.22

Sample #	Initial Wt (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)
S2204	442.22	158.19	75.0	442.22			
364-001							
002							
LCS							
001 DP							
442.22							
Sieve #	Retained (g)	Retained (g)	Retained (g)	Retained (g)	Retained (g)	Retained (g)	Retained (g)
4	0	9.21	0	0	0		
10	.08	4.75	0	.08			
40	.15	3.28	11.08	.18			
60	5.20	46.83	13.70	5.29			
100	36.34	20.18	4.08	35.90			
200	26.30	2.93	7.40	26.61			
Sample Wt	70.50	70.00	75.0	70.50			
Start Time	11:08	11:12	11:14	11:10			
Minutes	19.5	19.5	19.5	19.5			
1	8.5	9	38	9			
15	8	8	30	8			
30	7	7.5	27	7.5			
60	6.5	7.5	25	7			
240	6.5	7	22	6.5			
1440	6	6.5	17.5	6			

④ ③ ④ ③

Hydrometer: No. 32982  
 Thermometer: No. 05169100

- 1 Sod. Hex / Sod. carb. see solution prep. log copy
- 2 No. 10 Sieve (2.00 mm) W.S. Tyler Incorporated
- 3 Amvex Instruments Inc Gyromax 818 orbital shaker  
SN: A114 1010 501-40
- 4 No. 200 sieve Fisher Brand SN: 2119 12174
- 5 VWR Scientific Inc convection oven
- 6 Geosystem Soils Test Software version 5
- 7 Ro-Tap RX-29 SN: 16763
8. No 4 sieve Soil Test Inc. 4.75 mm
- 9 3/8" sieve Soil Test, Inc. 9.5 mm
- 10 1/2" sieve Gilson Company 16.0 mm
11. Hydrometer: Fisher Brand / ERTCO No. 32982  
ASTM 152 H
12. Thermometer: Fisher Brand / ERTCO SN: 05169100



Solution Preparation Log

Initials	Date	Solution	Preparation				pH	Solution Lot #
			Chemical	Lot #	Amount	DI Volume		
SH	Prep: 4-6-22 Expire: 10-6-22	CEC	Ammonium Acetate	203214	711g	10L	7.30	NH4Ac 040622
CH	Prep: 4/10/22 Expire: 10/10/22	O.I. HCl	HCl	1820961	1000mL	14L	-	O.I.HCl-041022
SH	Prep: 4-11-22 Expire: 10-11-22	CEC	Sodium Acetate	201280	272g	2L	-	MAACE 041122
CH	Prep: 4-12-22 Expire: 10-12-22	IM KCl	KCl	10227405	26075g	3.5L	-	IMKCl-041222
SH	Prep: 4-13-22 Expire: 10-13-22	MA	Sodium carb.	A0423850	198.50	25L	-	MAA041322
CH	Prep: 4/13/22 Expire: 10/13/22	IMKCl	KCl	10232899	26075	3.5L	-	IMKCl-041322
CH	Prep: 4/14/22 Expire: 10/14/22	AOCA / CEC	Ammon. Acetate	203214	711.00g	10L	7.07	NH4Ac-041422
CH	Prep: 4/15/22 Expire: 10/15/22	MIXED acid AS	HCl	195225	17mL	2L	-	MIXED acid 041522
			Sulfuric	101072	141mL			



# Analytical Data Package

**Prepared by:**

**Pace Analytical Services**

**Pace Project No.: 10605661**





## Organic

### GC-FID DRO

Surrogate Recovery Summary (Form 2) .....	1
Laboratory Control Spike/Laboratory Control Spike Duplicate Summary (Form 3) .....	2
Matrix Spike/Matrix Spike Duplicate Summary (Form 3) .....	3
Method Blank Association Summary (Form 4) .....	5
Analytical Results with Raw Data (Form 1) .....	6
Initial Calibration Summary (Form 6) .....	26
Raw Data for Initial Calibration Standards .....	32
Continuing Calibration Summary (Form 7) .....	356
Raw Data for Continuing Calibration Standards .....	364
Raw Data QC .....	476
Preparation Logs Raw Data .....	526
Instrument Run Log .....	528

## InOrganic

### ICPMS

Analytical Results (Form 1-IN) .....	536
Initial & Continuing Calibration Verification (Form 2A-IN) .....	538
CRDL Check Standard (Form 2B-IN) .....	542
Blanks (Form 3-IN) .....	545
Interference Check Sample (Form 4B-IN) .....	548
Matrix Spike Recovery (Form 5A-IN) .....	550
Post Digestion Spike Recovery (Form 5B-IN) .....	552
Duplicates (Form 6-IN) .....	553
Laboratory Control Spike (Form 7-IN) .....	554
Serial Dilution (Form 8-IN) .....	555
Method Detection Limits (Form 9-IN) .....	556
Linear Ranges (Form 11-IN) .....	558
Preparation Log (Form 12-IN) .....	559
Analysis Run Log (Form 13-IN) .....	560
Tune (Form 14-IN) .....	562
Internal Standard Relative Intensity Summary (Form 15-IN) .....	566
ICPMS Raw Data (Multiple Schedules/Sample) .....	568
Preparation Logs Raw Data .....	950

## Mercury

Analytical Results (Form 1-IN) .....	951
Initial & Continuing Calibration Verification (Form 2A-IN) .....	953
CRDL Check Standard (Form 2B-IN) .....	955
Blanks (Form 3-IN) .....	958
Matrix Spike Recovery (Form 5A-IN) .....	960
Duplicates (Form 6-IN) .....	962

Laboratory Control Spike (Form 7-IN) .....	963
Method Detection Limits (Form 9-IN) .....	964
Preparation Log (Form 12-IN) .....	966
Analysis Run Log (Form 13-IN) .....	967
Mercury Raw Data .....	968
Preparation Logs Raw Data .....	977
<b>Gravimetric</b>	
Analytical Results (Form 1-IN) .....	978
Duplicates (Form 6-IN) .....	980
Method Detection Limits (Form 9-IN) .....	981
Preparation Log (Form 12-IN) .....	982
Analysis Run Log (Form 13-IN) .....	983
Percent Moisture Determination Raw Data .....	984

GC-FID DRO - FORM II SVOA-1  
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Minnesota SDG No.: 10605661 Contract: D3593500

Instrument ID: 10GCSF

LAB SAMPLE ID	SAMPLE NAME	NTCS	OTER
4303622	4303622BLANK	89	91
4303623	4303623LCS	86	87
4303624	4303624MS	90	86
4303625	4303625MSD	92	88
10605661001	BNSF-BG13-042122-0-10	94	85
10605661002	BNSF-SG23-042122-0-6	90	86

(NTCS) = n-Triacontane (S)

(OTER) = o-Terphenyl (S)

\* Values outside of QC Limits

QC LIMITS

(50-150)

(50-150)

GC-FID DRO - FORM III SVOA-1  
SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Minnesota

Lab Sample ID: 4303623LCS

Date Extracted: 04/26/2022

Date Analyzed (1): 04/27/2022

Instrument: 10GCSF

LCS Lot No: 358262

Lab File ID: 042722F.B\0427F0000024.D

SDG No.: 10605661

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
Diesel Fuel Range	50.0	43.1	86	50-150
Motor Oil Range	50.0	45.8	92	50-150

Spike Recovery: 0 out of 2 outside limits.

GC-FID DRO - FORM III SVOA-1  
SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Minnesota

Matrix Spike - Sample No: 4303624MS

Date Extracted: 04/26/2022

Date Analyzed (1): 05/04/2022

Instrument: 10GCSF

Lab File ID: 050422R.B\0504R0000012.D

Parent Sample ID: BNSF-BG13-042122-0-10

SDG No.: 10605661

COMPOUND	SPIKE ADDED (mg/kg)	SAMPLE CONCENTRATION (mg/kg)	MS CONCENTRATION (mg/kg)	MS %REC	QC LIMITS REC.
Diesel Fuel Range	74.5	15.8J	78.9	85	50-150
Motor Oil Range	74.5	36.9	106	93	50-150

Spike Recovery: 0 out of 2 outside limits.

GC-FID DRO - FORM III SVOA-2  
SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 10GCSF Matrix Spike Duplicate - Sample No: 4303625MSD  
Lab File ID (2): 050422R.B\0504R0000013.D Date Analyzed (2): 05/04/2022

COMPOUND	SPIKE ADDED (mg/kg)	MSD CONCENTRATION (mg/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Diesel Fuel Range	74.4	84.1	92	6	0-30	50-150
Motor Oil Range	74.4	117	107	10	0-30	50-150

RPD: 0 out of 2 outside limits.

Spike Recovery: 0 out of 2 outside limits.

GC-FID DRO - FORM IV SVOA-1  
SEMI-VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

4303622BLANK

Lab Name: Pace Analytical - Minnesota SDG No.: 10605661 Contract: D3593500  
Instrument ID: 10GCSF Matrix: Solid Lab Sample ID: 4303622  
Lab File ID: 042722F.B\0427F0000023.D Date Analyzed: 04/27/2022 Time: 15:49

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
4303623LCS	4303623	042722F.B\0427F0000024.D	04/27/2022 16:00
BNSF-BG13-042122-0-10	10605661001	050422R.B\0504R0000011.D	05/04/2022 12:31
4303624MS	4303624	050422R.B\0504R0000012.D	05/04/2022 12:41
4303625MSD	4303625	050422R.B\0504R0000013.D	05/04/2022 12:50
BNSF-SG23-042122-0-6	10605661002	050422R.B\0504R0000014.D	05/04/2022 12:59

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BNSF-BG13-042122-0-10

Lab Name: Pace Analytical - Minnesota Contract: D3593500  
Date Received: 04/23/2022 09:00 Matrix: Solid SDG No.: 10605661  
Date Extracted: 04/26/2022 10:34 Lab Sample ID: 10605661001  
Date Analyzed: 05/04/2022 12:31 Lab File ID: 050422R.B\0504R0000011.D  
Initial wt/vol: 10.1 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: 33.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	15.8	J
	Motor Oil Range	36.9	B



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000011.D  
 Lab Smp Id: 10605661001 Client Smp ID: BNSF-BG13-042122-0-  
 Inj Date : 04-MAY-2022 12:31  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 10605661001  
 Misc Info : 39215  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050422R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 05-May-2022 11:33 tthao Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 9  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.100	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	33.062	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL		FINAL	REVIEW CODE
			RESPONSE	(ug/mL)	(mg/Kg)	
=====	=====	=====	=====	=====	=====	=====
\$ 2	o-Terphenyl (S)				CAS #:	
2.715	2.715	0.000	283732	42.3685	6.27	(M) BA
\$ 3	n-Triacontane (S)				CAS #:	
4.250	4.255	-0.005	246855	47.1516	6.97	(M) BA
S 10	Motor Oil Range				CAS #:	
3.641	- 6.100		1216870	249.522	36.9	(M) RNG
S 11	Motor Oil Range SG				CAS #:	
3.641	- 6.100		1216870	249.522	36.9	(M) RNG
S 8	Diesel Fuel Range				CAS #:	
1.340	- 3.640		827952	106.590	15.8	(M) RNG
S 9	Diesel Fuel Range SG				CAS #:	
1.340	- 3.640		827952	106.590	15.8	(M) RNG

QC Flag Legend

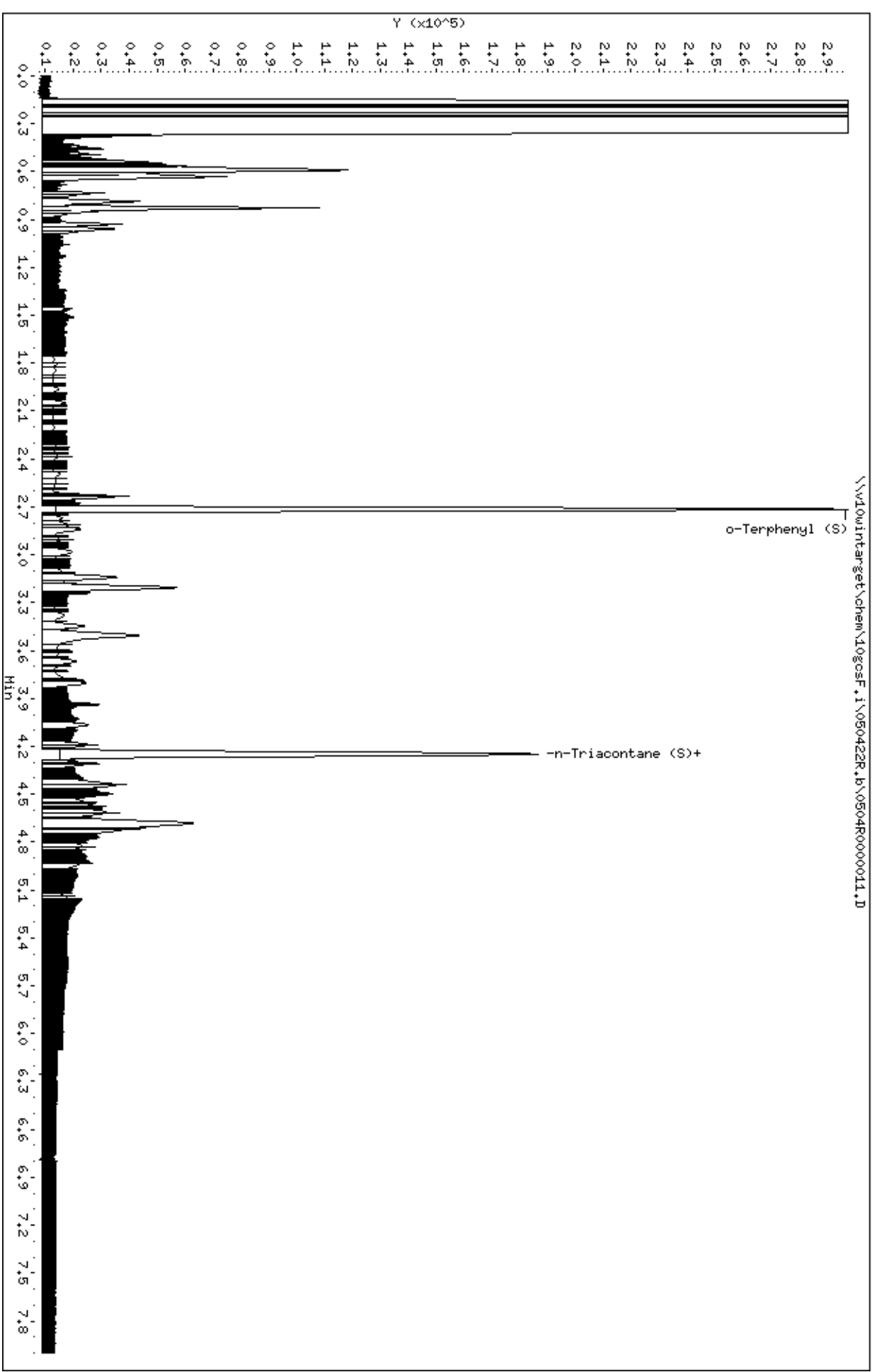
M - Compound response manually integrated.

Review Codes Legend

BA: Indicates that the baseline had to be adjusted correctly by the analyst.  
RNG: Indicates that the analyst integrated a surrogate within the range.

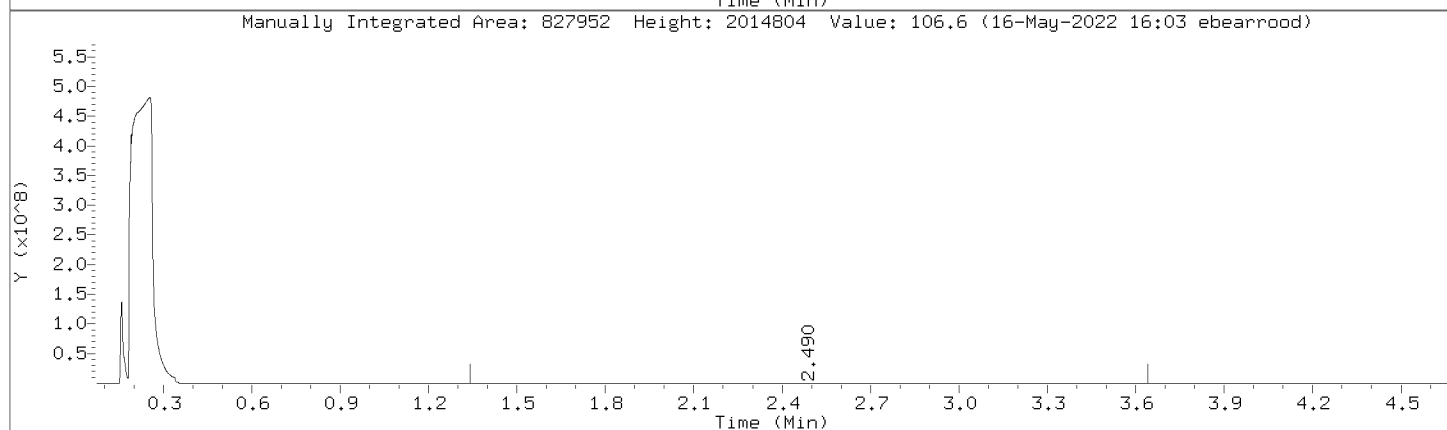
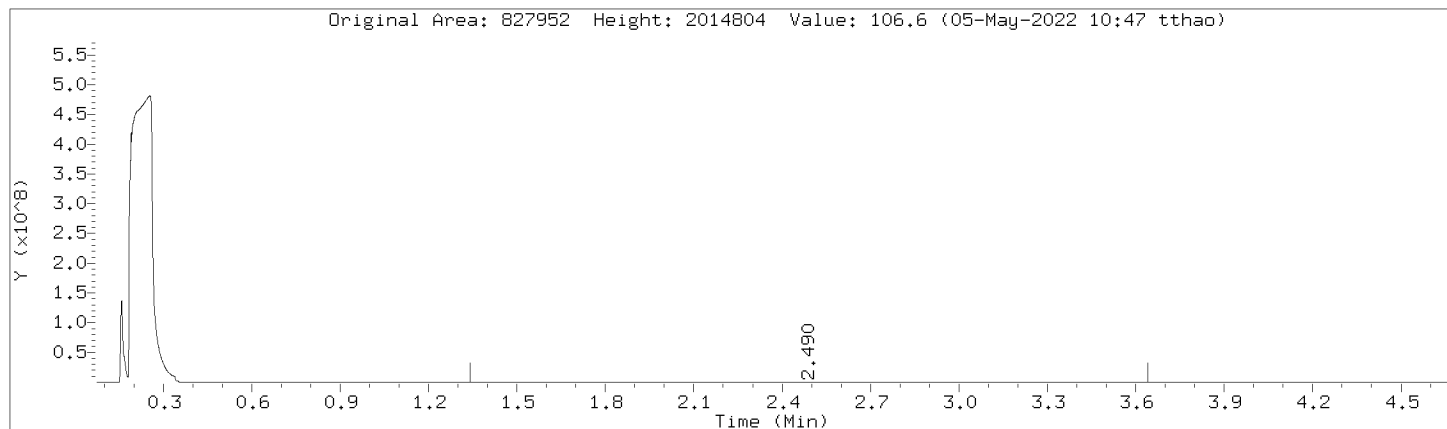
Data File: \\10605661\10605661\10605661.D  
Date: 04-MAY-2022 12:31  
Client ID: BNSF-BGL3-042122-0-  
Sample Info: 10605661001  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21430033

Instrument: 10605661.1  
Operator: TT2  
Column diameter: 0.32



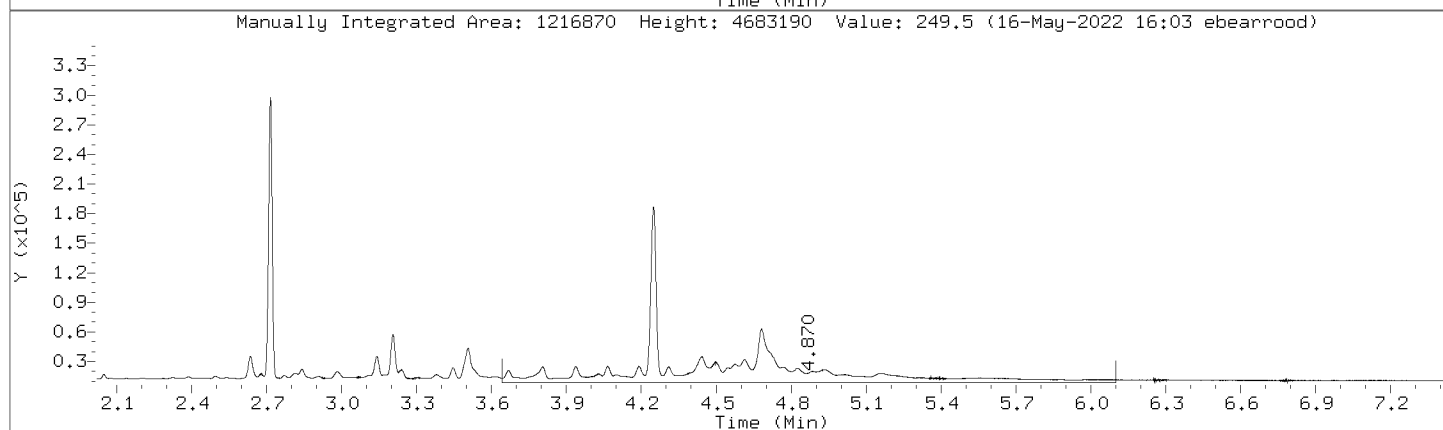
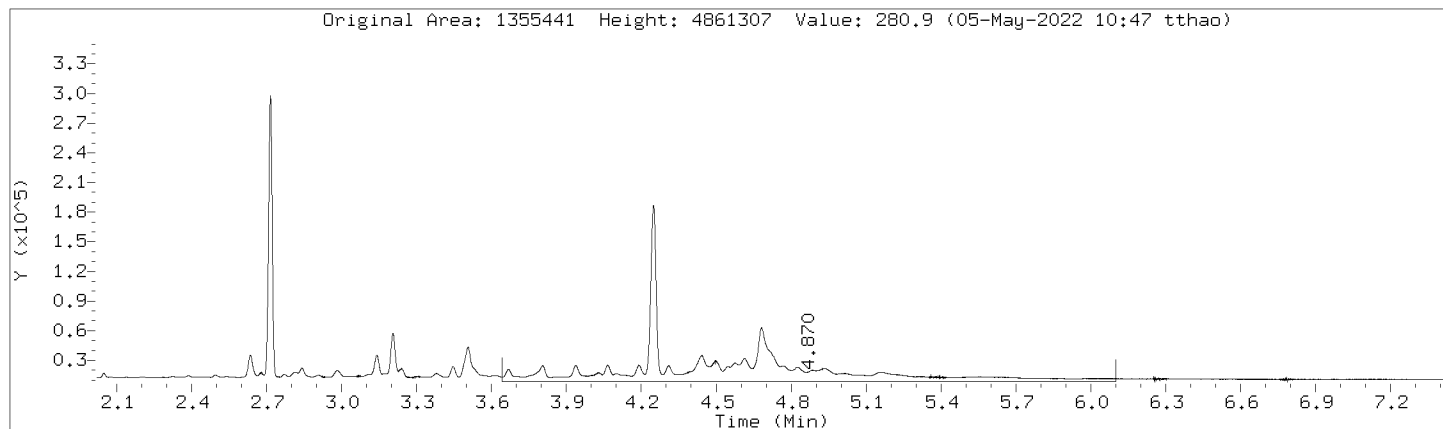
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Injection Date: 04-MAY-2022 12:31  
Instrument: 10gcsF.i  
Lab Sample ID: 10605661001

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



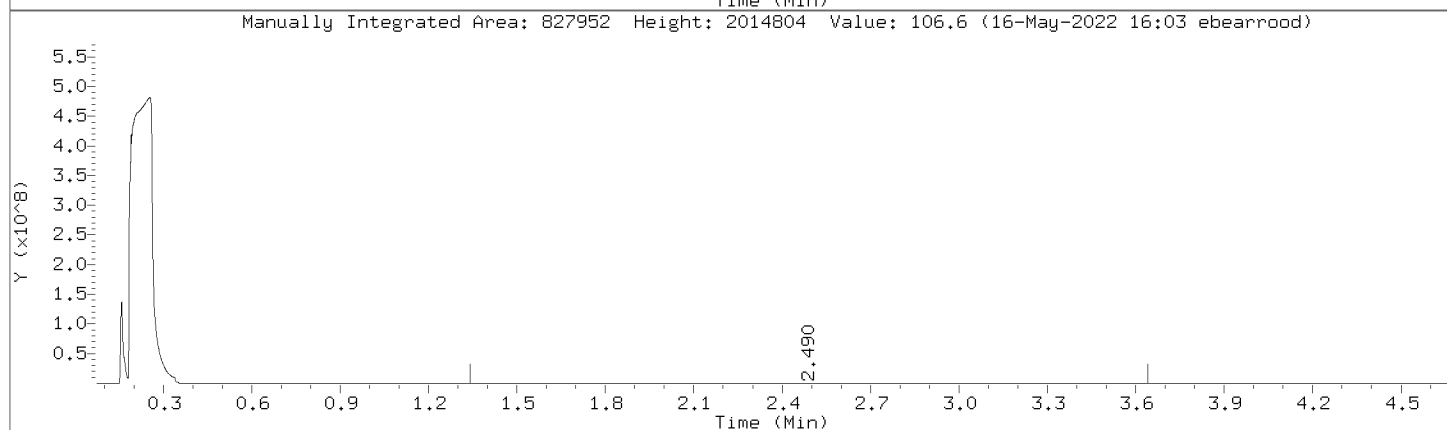
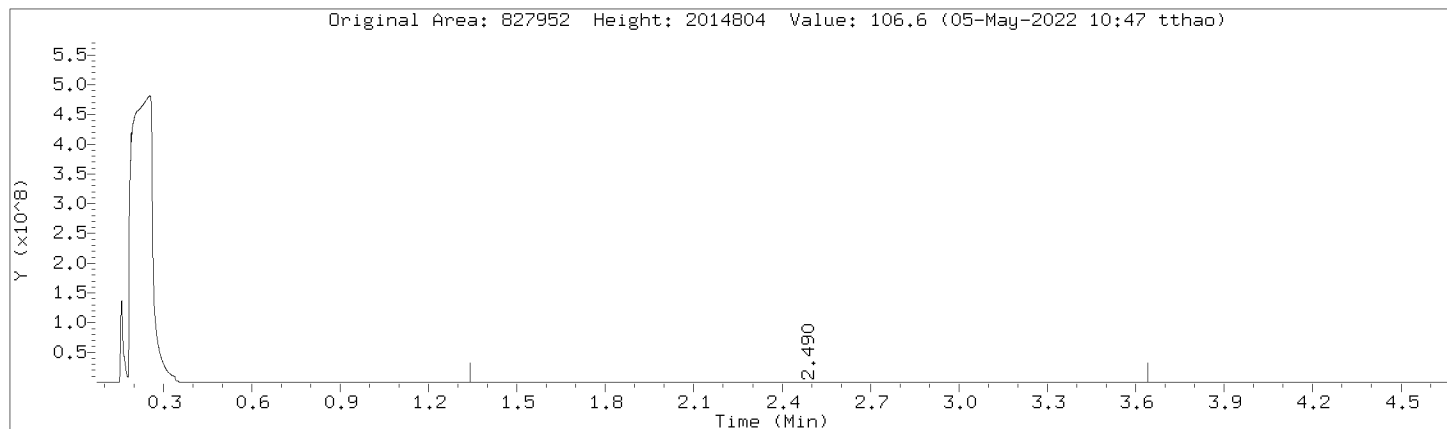
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Injection Date: 04-MAY-2022 12:31  
Instrument: 10gcsF.i  
Lab Sample ID: 10605661001

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



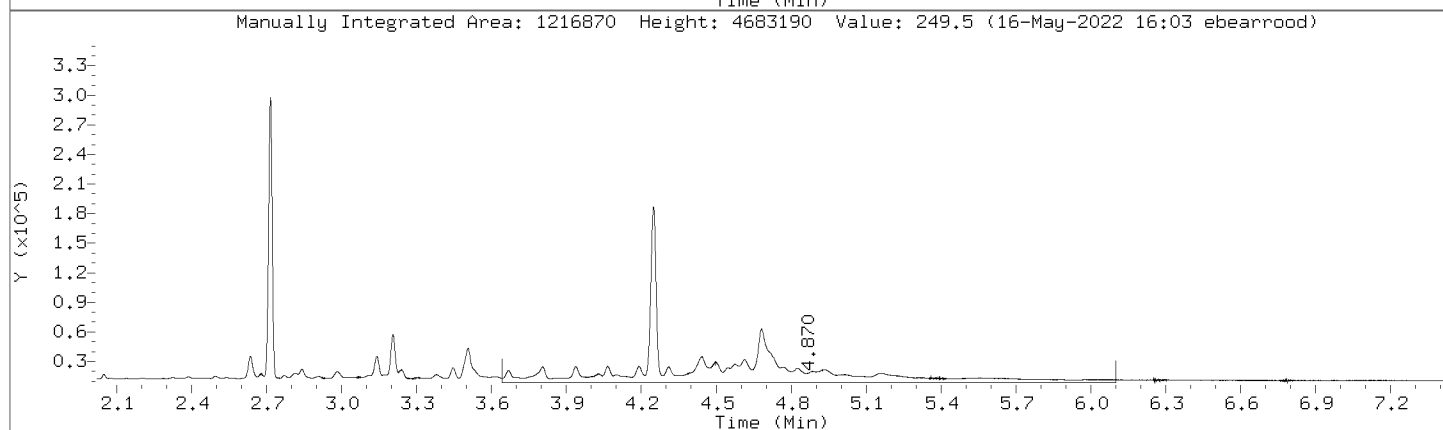
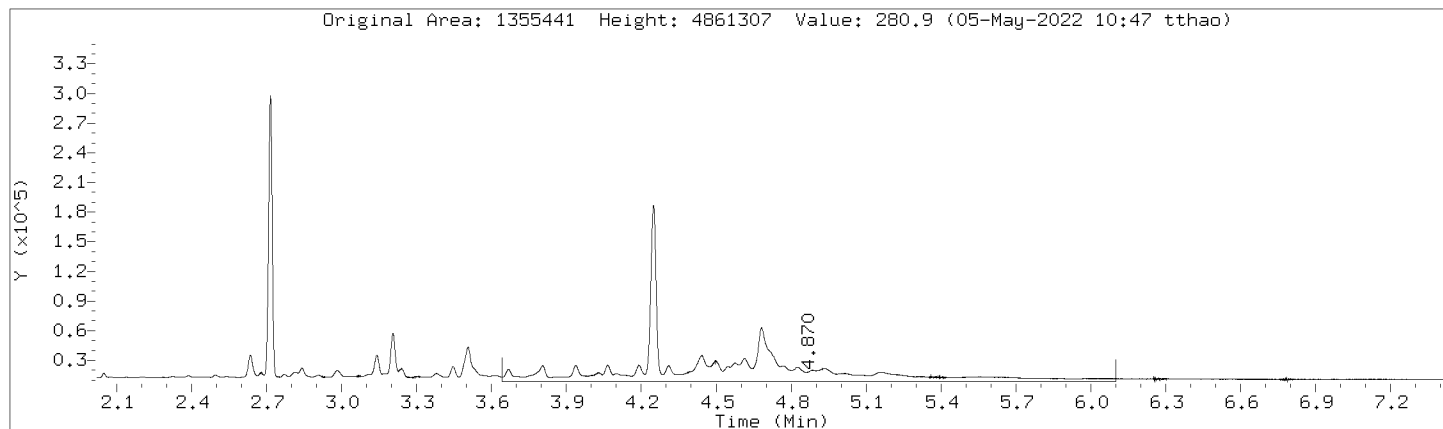
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Injection Date: 04-MAY-2022 12:31  
Instrument: 10gcsF.i  
Lab Sample ID: 10605661001

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



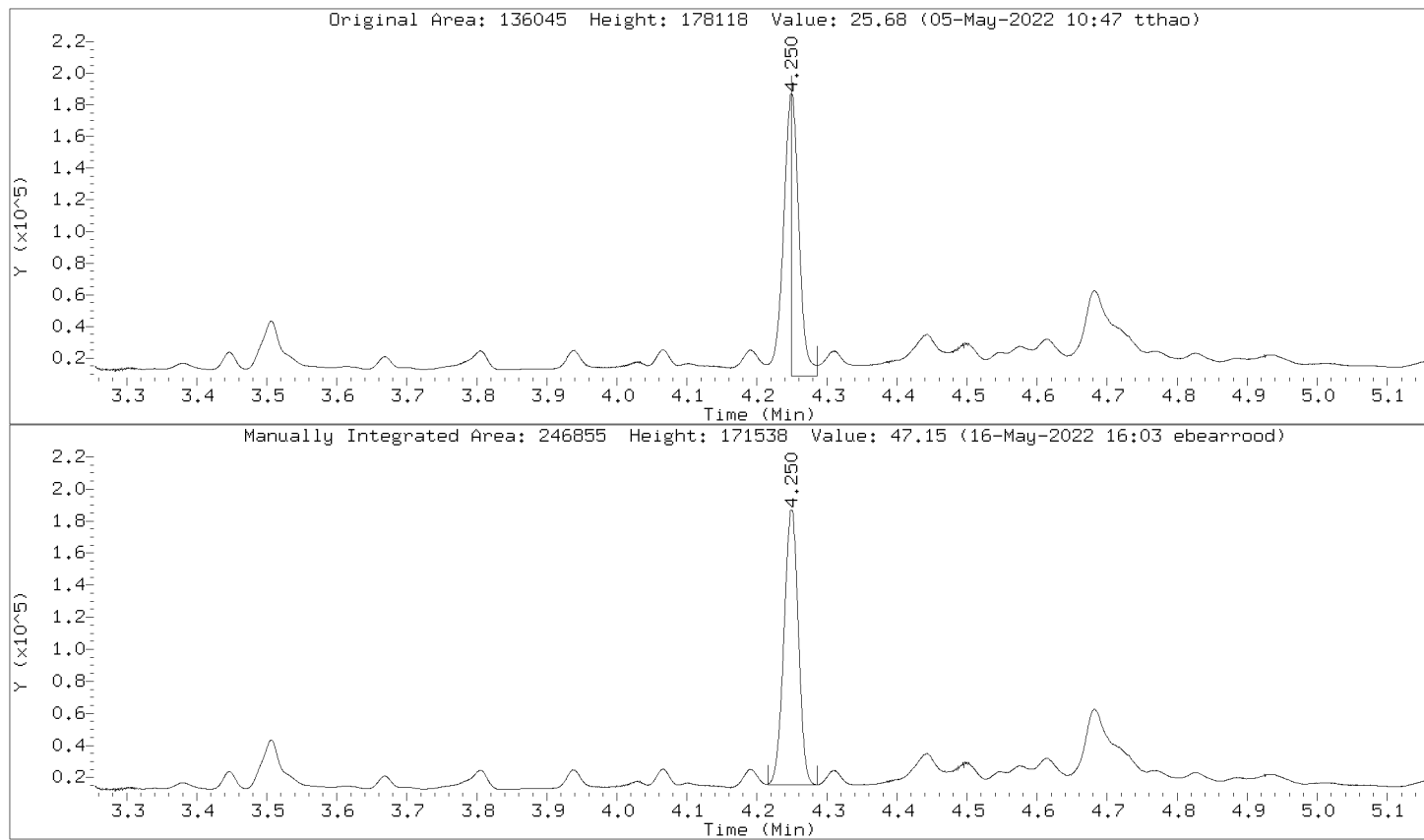
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Injection Date: 04-MAY-2022 12:31  
Instrument: 10gcsF.i  
Lab Sample ID: 10605661001

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000011.D  
Injection Date: 04-MAY-2022 12:31  
Instrument: 10gcsF.i  
Lab Sample ID: 10605661001

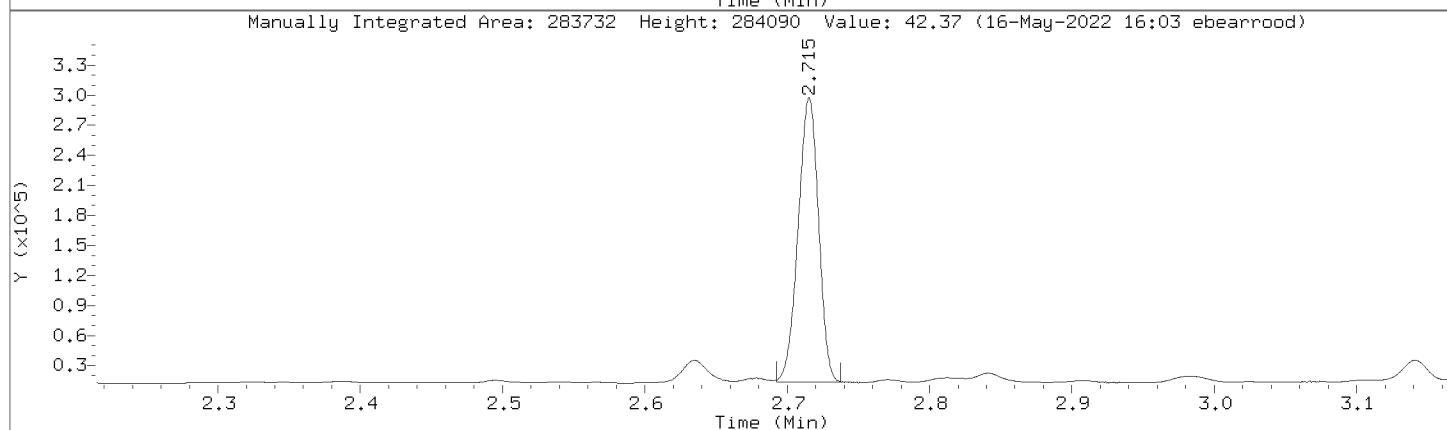
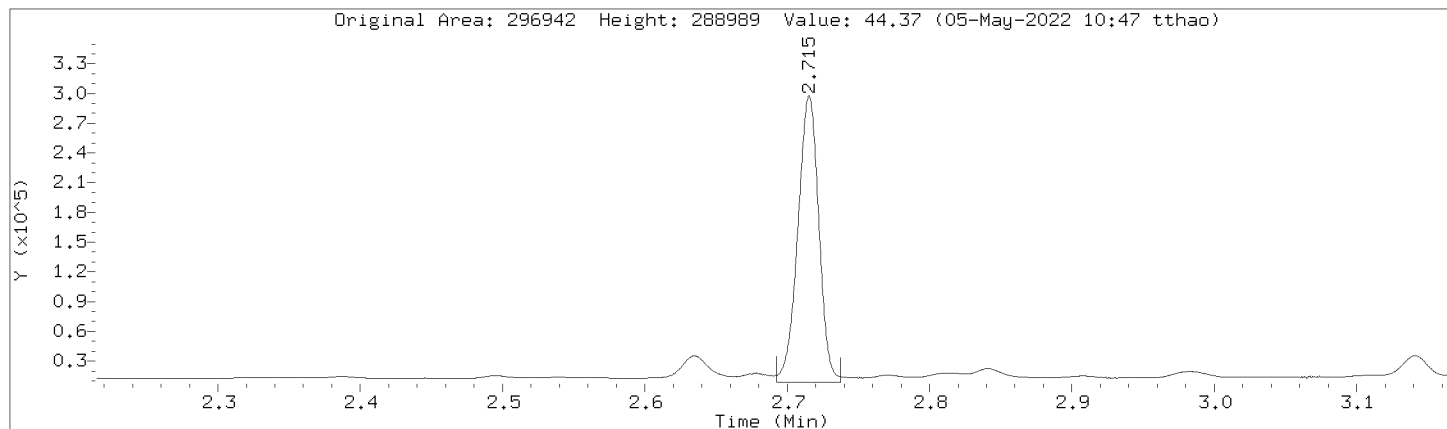
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000011.D  
 Injection Date: 04-MAY-2022 12:31  
 Instrument: 10gcsF.i  
 Lab Sample ID: 10605661001

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	827952	827952
Motor Oil Range	1355441	1216870
Diesel Fuel Range SG	827952	827952
Motor Oil Range SG	1355441	1216870
n-Triacontane (S)	136045	246855
o-Terphenyl (S)	296942	283732

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BNSF-SG23-042122-0-6

Lab Name: Pace Analytical - Minnesota Contract: D3593500  
Date Received: 04/23/2022 09:00 Matrix: Solid SDG No.: 10605661  
Date Extracted: 04/26/2022 10:34 Lab Sample ID: 10605661002  
Date Analyzed: 05/04/2022 12:59 Lab File ID: 050422R.B\0504R0000014.D  
Initial wt/vol: 10.01 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: 23.9%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	12.9	J
	Motor Oil Range	37.4	B

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000014.D  
 Lab Smp Id: 10605661002 Client Smp ID: BNSF-SG23-042122-0-  
 Inj Date : 04-MAY-2022 12:59  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 10605661002  
 Misc Info : 39215  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050422R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 05-May-2022 11:33 tthao Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 12  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.010	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	23.925	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
\$ 2	o-Terphenyl (S)					CAS #:
2.714	2.715	-0.001	288850	43.1435	5.66	(M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.251	4.255	-0.004	235831	45.0152	5.91	(M) BA
S 10	Motor Oil Range					CAS #:
3.641	- 6.100		1373226	284.979	37.4	(M) RNG
S 11	Motor Oil Range SG					CAS #:
3.641	- 6.100		1373226	284.979	37.4	(M) RNG
S 8	Diesel Fuel Range					CAS #:
1.340	- 3.640		788921	98.4739	12.9	(M) RNG
S 9	Diesel Fuel Range SG					CAS #:
1.340	- 3.640		788921	98.4739	12.9	(M) RNG

QC Flag Legend

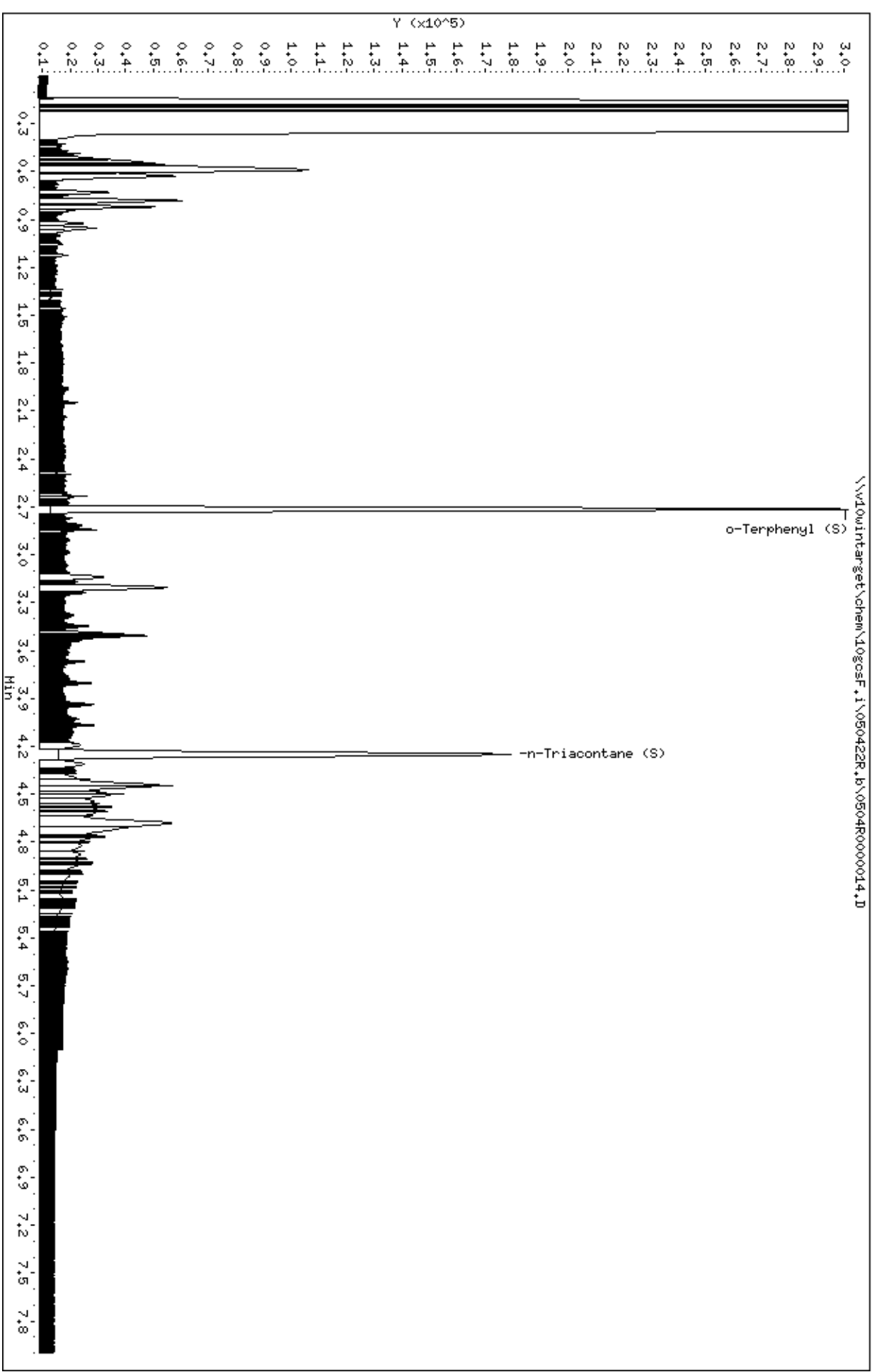
M - Compound response manually integrated.

Review Codes Legend

- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.

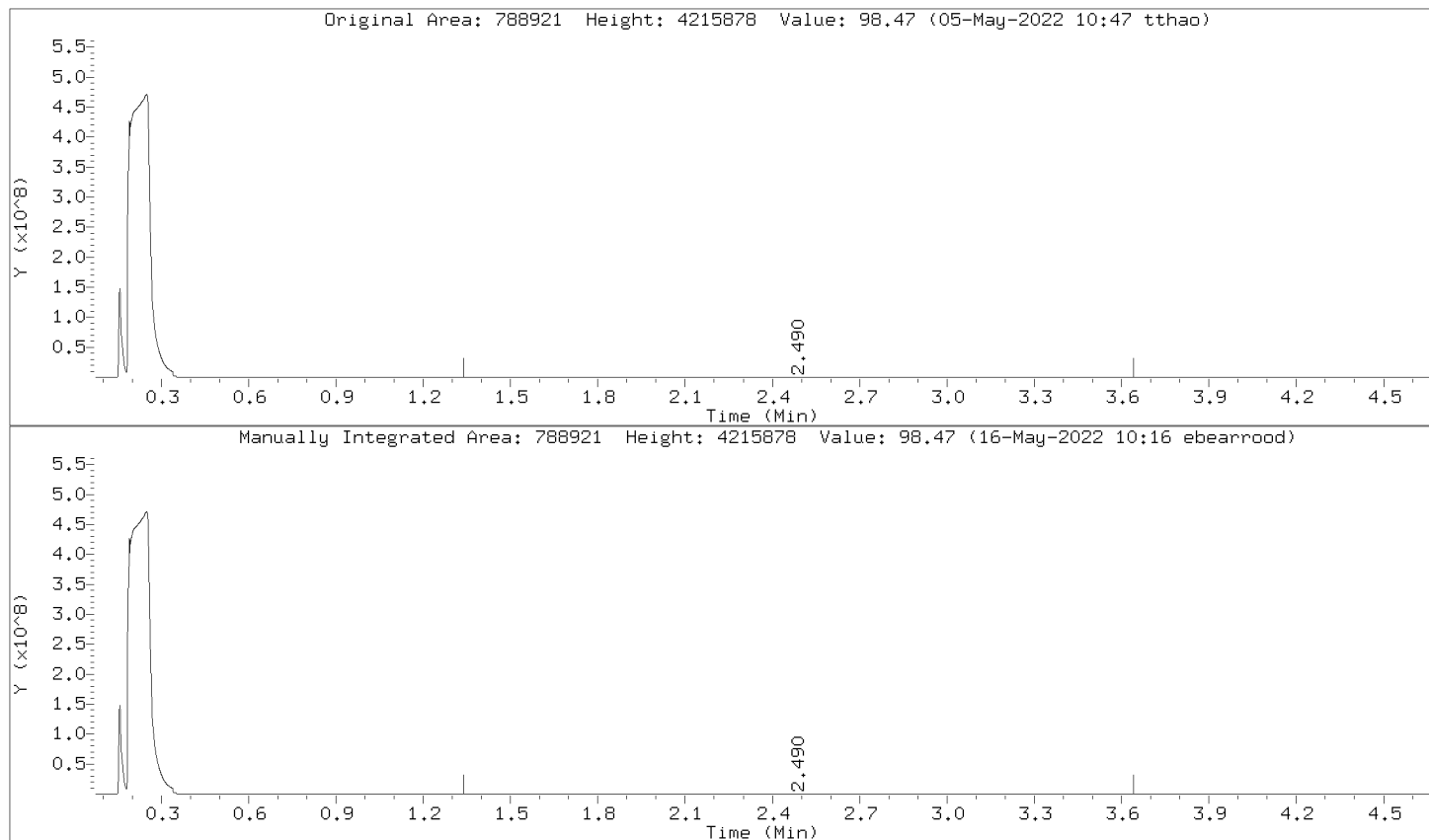
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Date: 04-MAY-2022 12:59  
Client ID: BNSF-SG23-042122-0-  
Sample Info: 10605661002  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21430033

Instrument: 10605661.1  
Operator: TT2  
Column diameter: 0.32



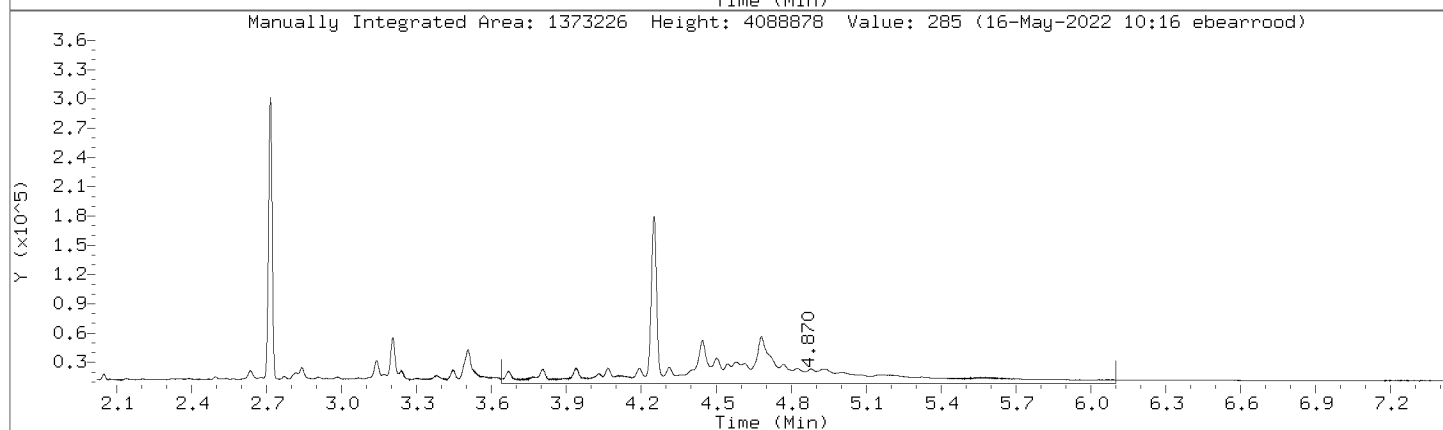
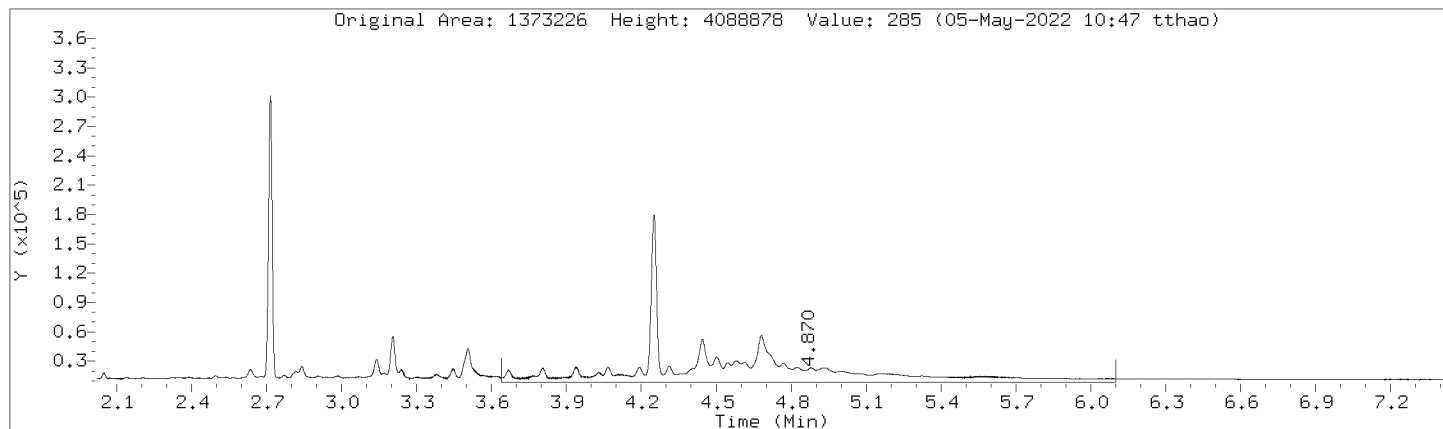
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Injection Date: 04-MAY-2022 12:59  
Instrument: 10gcsF.i  
Lab Sample ID: 10605661002

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



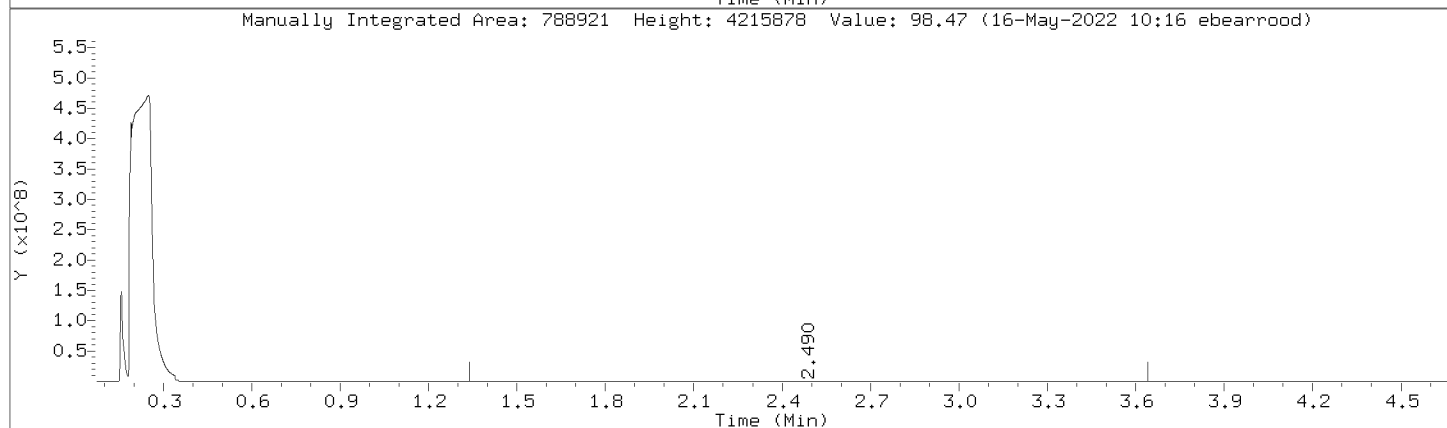
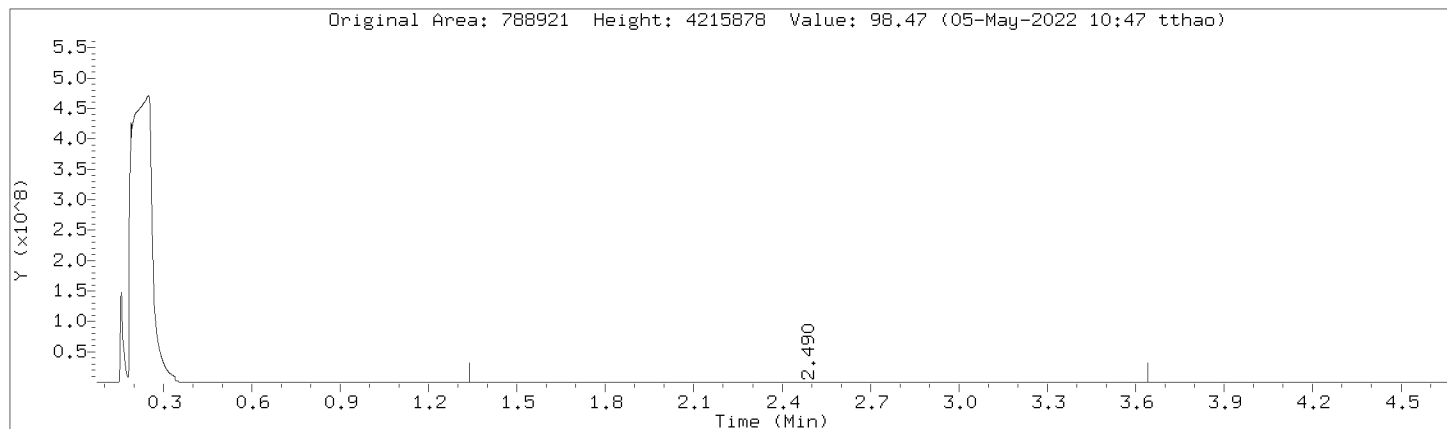
Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000014.D  
Injection Date: 04-MAY-2022 12:59  
Instrument: 10gcsF.i  
Lab Sample ID: 10605661002

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000014.D  
Injection Date: 04-MAY-2022 12:59  
Instrument: 10gcsF.i  
Lab Sample ID: 10605661002

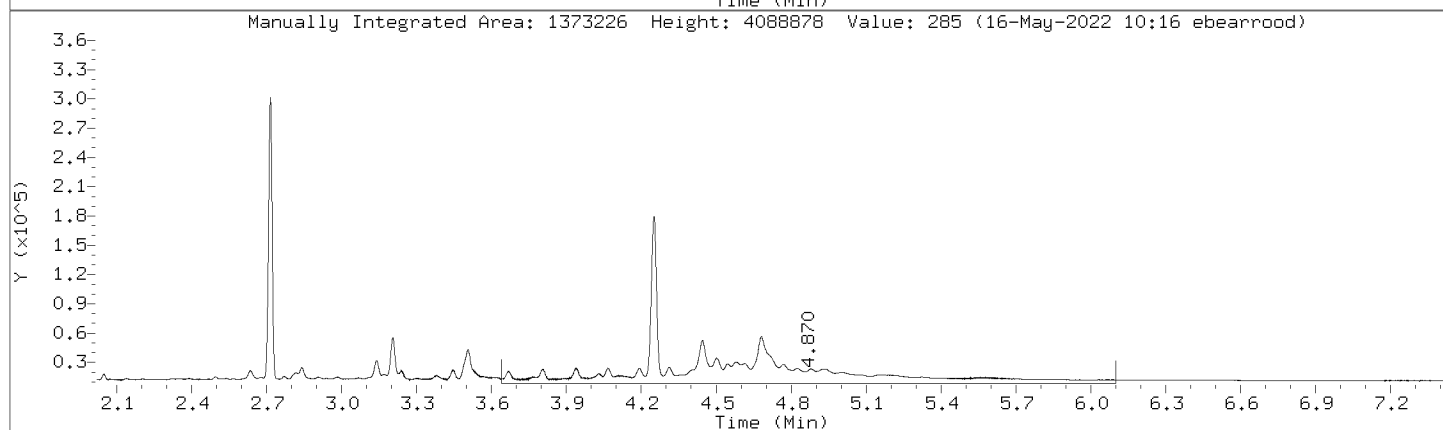
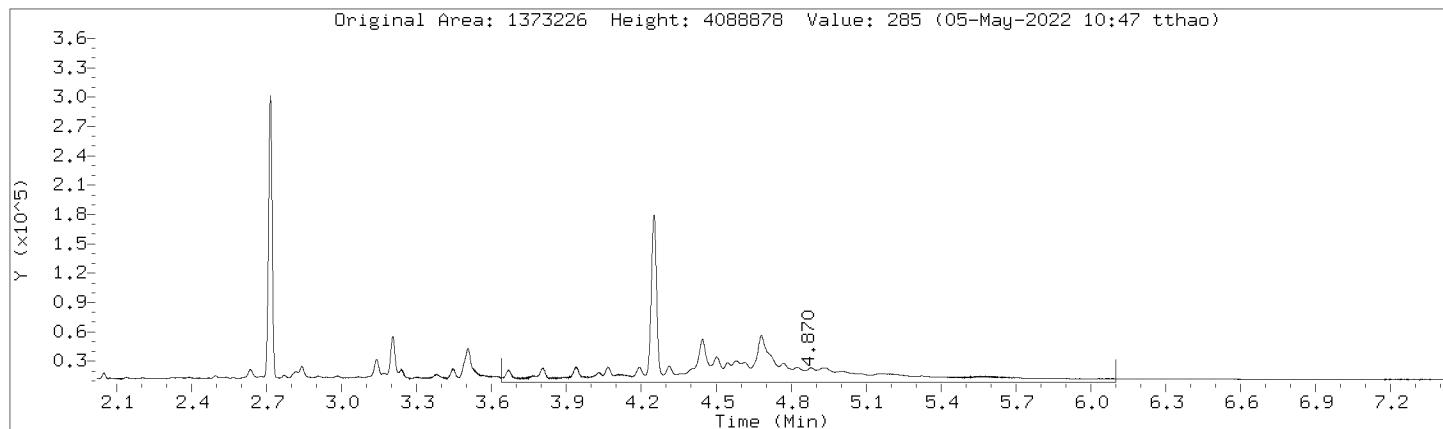
Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:





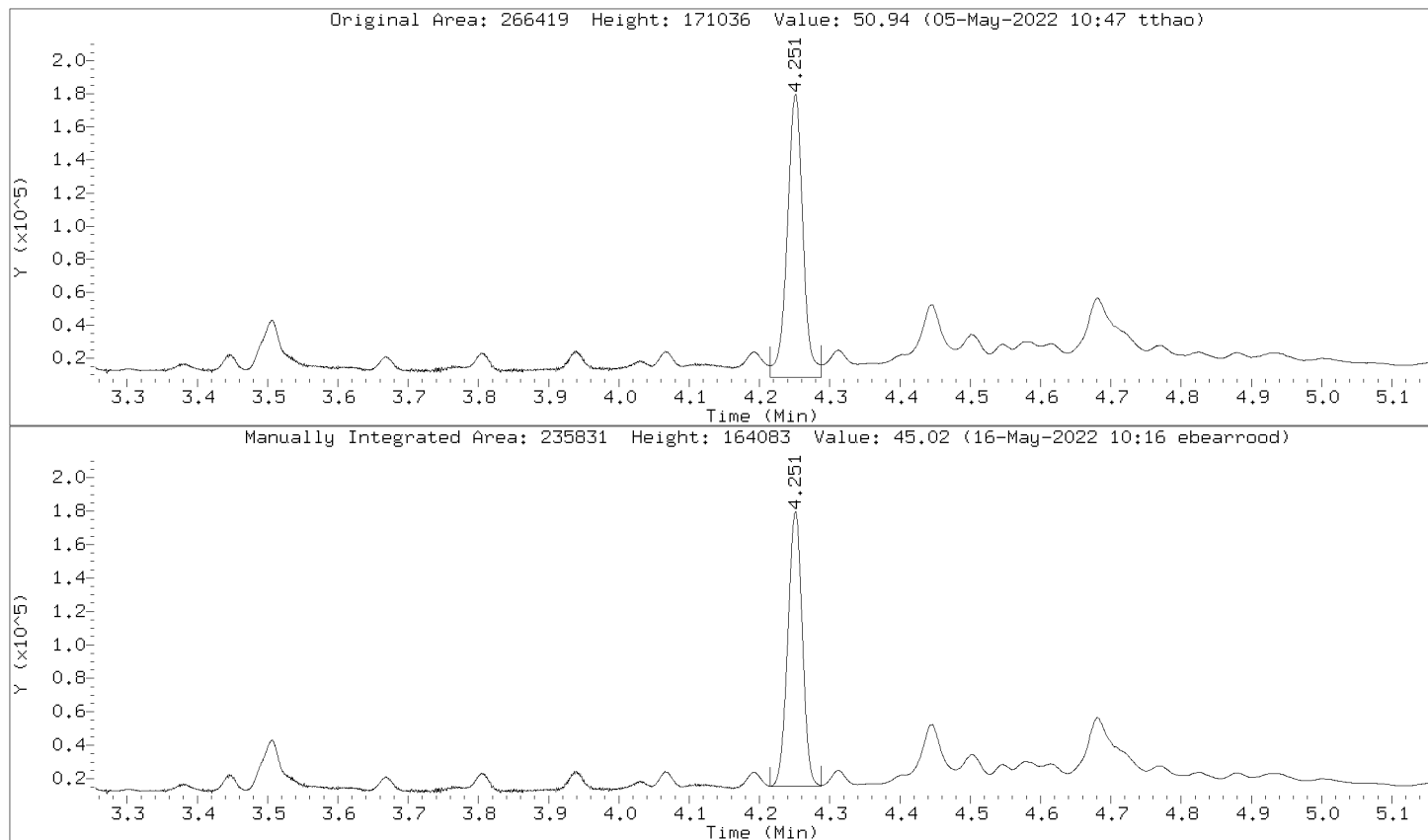
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Injection Date: 04-MAY-2022 12:59  
Instrument: 10gcsF.i  
Lab Sample ID: 10605661002

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



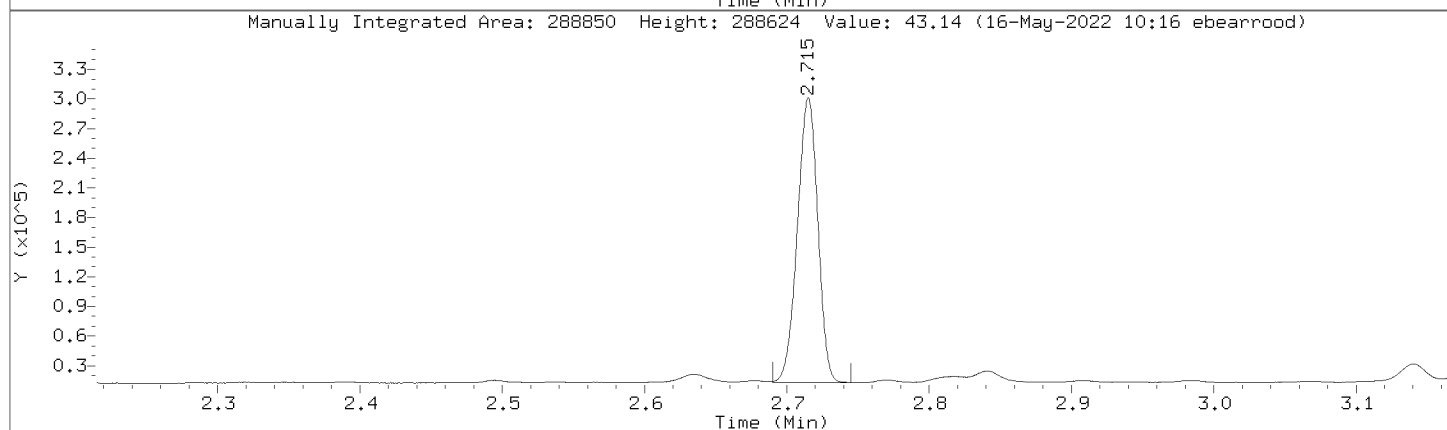
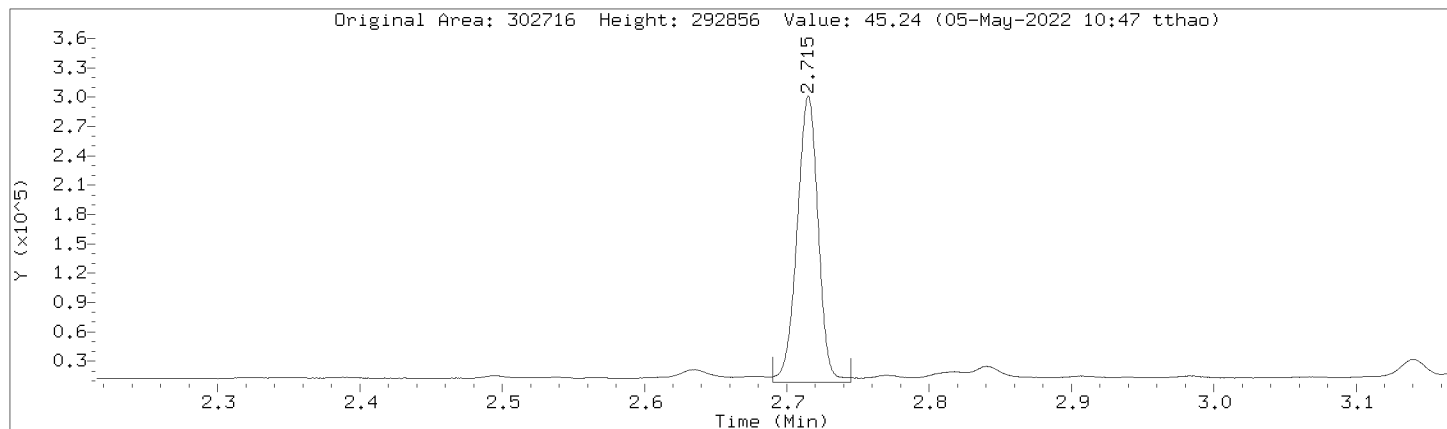
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Injection Date: 04-MAY-2022 12:59  
Instrument: 10gcsF.i  
Lab Sample ID: 10605661002

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000014.D  
 Injection Date: 04-MAY-2022 12:59  
 Instrument: 10gcsF.i  
 Lab Sample ID: 10605661002

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	788921	788921
Motor Oil Range	1373226	1373226
Diesel Fuel Range SG	788921	788921
Motor Oil Range SG	1373226	1373226
n-Triacontane (S)	266419	235831
o-Terphenyl (S)	302716	288850

GC-FID DRO - FORM VI SVOA-1  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10605661  
 Calibration Date(s): 04/26/2022 04/26/2022 Calibration Time(s): 07:55 09:36

**LAB FILE ID**

CAL1 = 042622F.B\0426F0000004.D CAL2 = 042622F.B\0426F0000005.D CAL3 = 042622F.B\0426F0000006.D  
 CAL4 = 042622F.B\0426F0000007.D CAL5 = 042622F.B\0426F0000008.D CAL6 = 042622F.B\0426F0000009.D  
 CAL7 = 042622F.B\0426F0000010.D CAL8 = 042622F.B\0426F0000011.D CAL9 = 042622F.B\0426F0000012.D  
 CAL10 = 042622F.B\0426F0000013.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Diesel Fuel Range	Linear	48885.1666	31188.7000	15237.3600	9956.8600	7151.1800	5544.3880
Motor Oil Range	Linear	23267.1666	15310.5000	8810.1200	6215.7600	5040.6600	4366.9240
n-Triacontane (S)	Averaged	4361.6666	4654.0000	4816.4000	4825.4000	4806.2000	4824.9200
o-Terphenyl (S)	Averaged	5008.3333	5272.0000	5561.6000	5560.0000	5521.3000	5560.0400

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VI SVOA-2  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10605661  
 Calibration Date(s): 04/26/2022 04/26/2022 Calibration Time(s): 07:55 09:36

**LAB FILE ID**

CAL1 = 042622F.B\0426F0000004.D CAL2 = 042622F.B\0426F0000005.D CAL3 = 042622F.B\0426F0000006.D  
 CAL4 = 042622F.B\0426F0000007.D CAL5 = 042622F.B\0426F0000008.D CAL6 = 042622F.B\0426F0000009.D  
 CAL7 = 042622F.B\0426F0000010.D CAL8 = 042622F.B\0426F0000011.D CAL9 = 042622F.B\0426F0000012.D  
 CAL10 = 042622F.B\0426F0000013.D

COMPOUND	CURVE TYPE	CAL7	CAL8	CAL9	CAL10
Diesel Fuel Range	Linear	5089.0980	4796.4940	4636.6090	4507.7042
Motor Oil Range	Linear	4253.2080	4126.7940	4045.8670	4015.6790
n-Triacontane (S)	Averaged	4887.5800	4898.9400	4855.3950	4776.3975
o-Terphenyl (S)	Averaged	5679.3000	5679.7500	5682.4800	5701.0950

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VI SVOA-3  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10605661  
 Calibration Date(s): 04/26/2022 04/26/2022 Calibration Time(s): 07:55 09:36

**LAB FILE ID**

CAL1 = 042622F.B\0426F0000004.D CAL2 = 042622F.B\0426F0000005.D CAL3 = 042622F.B\0426F0000006.D  
 CAL4 = 042622F.B\0426F0000007.D CAL5 = 042622F.B\0426F0000008.D CAL6 = 042622F.B\0426F0000009.D  
 CAL7 = 042622F.B\0426F0000010.D CAL8 = 042622F.B\0426F0000011.D CAL9 = 042622F.B\0426F0000012.D  
 CAL10 = 042622F.B\0426F0000013.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Diesel Fuel Range	Linear		0.99994	289335.750	4449.93206	
Motor Oil Range	Linear		0.99999	115660.591	3988.26194	
n-Triacontane (S)	Averaged	3.33278			4770.68992	
o-Terphenyl (S)	Averaged	3.99581			5522.58983	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VI SVOA-1  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10605661  
 Calibration Date(s): 04/27/2022 04/27/2022 Calibration Time(s): 13:00 14:42

**LAB FILE ID**

CAL1 = 042722R.B\0427R0000008.D CAL2 = 042722R.B\0427R0000009.D CAL3 = 042722R.B\0427R0000010.D  
 CAL4 = 042722R.B\0427R0000011.D CAL5 = 042722R.B\0427R0000012.D CAL6 = 042722R.B\0427R0000013.D  
 CAL7 = 042722R.B\0427R0000014.D CAL8 = 042722R.B\0427R0000015.D CAL9 = 042722R.B\0427R0000016.D  
 CAL10 = 042722R.B\0427R0000017.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Diesel Fuel Range	Linear		32799.2000	15994.5600	10516.6800	7598.3000	6137.9160
Motor Oil Range	Linear		15156.0000	8573.0400	6184.1400	5184.0300	4861.4360
n-Triacontane (S)	Linear		4770.0000	5078.8000	5142.4000	5157.2000	5290.4800
o-Terphenyl (S)	Linear		6499.0000	6898.4000	6828.0000	6766.1000	6784.8000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VI SVOA-2  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10605661  
 Calibration Date(s): 04/27/2022 04/27/2022 Calibration Time(s): 13:00 14:42

**LAB FILE ID**

CAL1 = 042722R.B\0427R0000008.D CAL2 = 042722R.B\0427R0000009.D CAL3 = 042722R.B\0427R0000010.D  
 CAL4 = 042722R.B\0427R0000011.D CAL5 = 042722R.B\0427R0000012.D CAL6 = 042722R.B\0427R0000013.D  
 CAL7 = 042722R.B\0427R0000014.D CAL8 = 042722R.B\0427R0000015.D CAL9 = 042722R.B\0427R0000016.D  
 CAL10 = 042722R.B\0427R0000017.D

COMPOUND	CURVE TYPE	CAL7	CAL8	CAL9	CAL10
Diesel Fuel Range	Linear	5514.4620	5194.6480	5002.1655	4874.0325
Motor Oil Range	Linear	4701.7520	4563.5490	4504.7180	4426.8685
n-Triacontane (S)	Linear	5326.0000	5282.2800	5221.2450	5151.8275
o-Terphenyl (S)	Linear	6798.7200	6709.3900	6640.3250	6603.0700

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.



GC-FID DRO - FORM VI SVOA-3  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10605661  
 Calibration Date(s): 04/27/2022 04/27/2022 Calibration Time(s): 13:00 14:42

**LAB FILE ID**

CAL1 = 042722R.B\0427R0000008.D CAL2 = 042722R.B\0427R0000009.D CAL3 = 042722R.B\0427R0000010.D  
 CAL4 = 042722R.B\0427R0000011.D CAL5 = 042722R.B\0427R0000012.D CAL6 = 042722R.B\0427R0000013.D  
 CAL7 = 042722R.B\0427R0000014.D CAL8 = 042722R.B\0427R0000015.D CAL9 = 042722R.B\0427R0000016.D  
 CAL10 = 042722R.B\0427R0000017.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Diesel Fuel Range	Linear		0.99994	315322.471	4809.38081	
Motor Oil Range	Linear		0.99996	116539.639	4409.74584	
n-Triacontane (S)	Linear		0.99993	3541.89337	5160.23183	
o-Terphenyl (S)	Linear		0.99998	3963.03758	6603.23461	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000003.D  
 Lab Smp Id: DMO-RTM,357103:2 Client Smp ID: DMO-RTM,357103:2  
 Inj Date : 26-APR-2022 07:44  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-rtm,357103:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			RESPONSE	CAS #:	
=====	=====	=====	(ug/mL)	(ug/mL)	=====
S 1	DRO by AK 102				
0.765	- 3.430		2104579 336.809	337	
-----					
\$ 2	o-Terphenyl (S)				
2.582	2.582 0.000		328 0.05939	0.0594	(R)
-----					
\$ 3	n-Triacontane (S)				
4.063	4.064 -0.001		148 0.03102	0.0310	(R)
-----					
S 4	Residual Range Organics AK103				
3.431	- 4.840		1983460 583.153	583	
-----					
S 5	TPH-DRO (C10-C28)				
0.765	- 3.980		3380030 497.351	497	
-----					
S 6	Motor Oil Range (C24-C36)				
3.300	- 4.840		2603963 747.393	747	
-----					
S 7	C10-C36				
0.765	- 4.840		4088040 860.716	861	
-----					
S 8	Diesel Fuel Range				
1.210	- 3.480		1486051 268.929	269	
-----					
S 9	Diesel Fuel Range SG				
1.210	- 3.480		1486051 268.929	269	
-----					
S 10	Motor Oil Range				
3.481	- 5.350		2577456 617.260	617	
-----					
S 11	Motor Oil Range SG				
3.481	- 5.350		2577456 617.260	617	
-----					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Date : 26-APR-2022 07:44

Client ID: DM0-RTM,357103;2

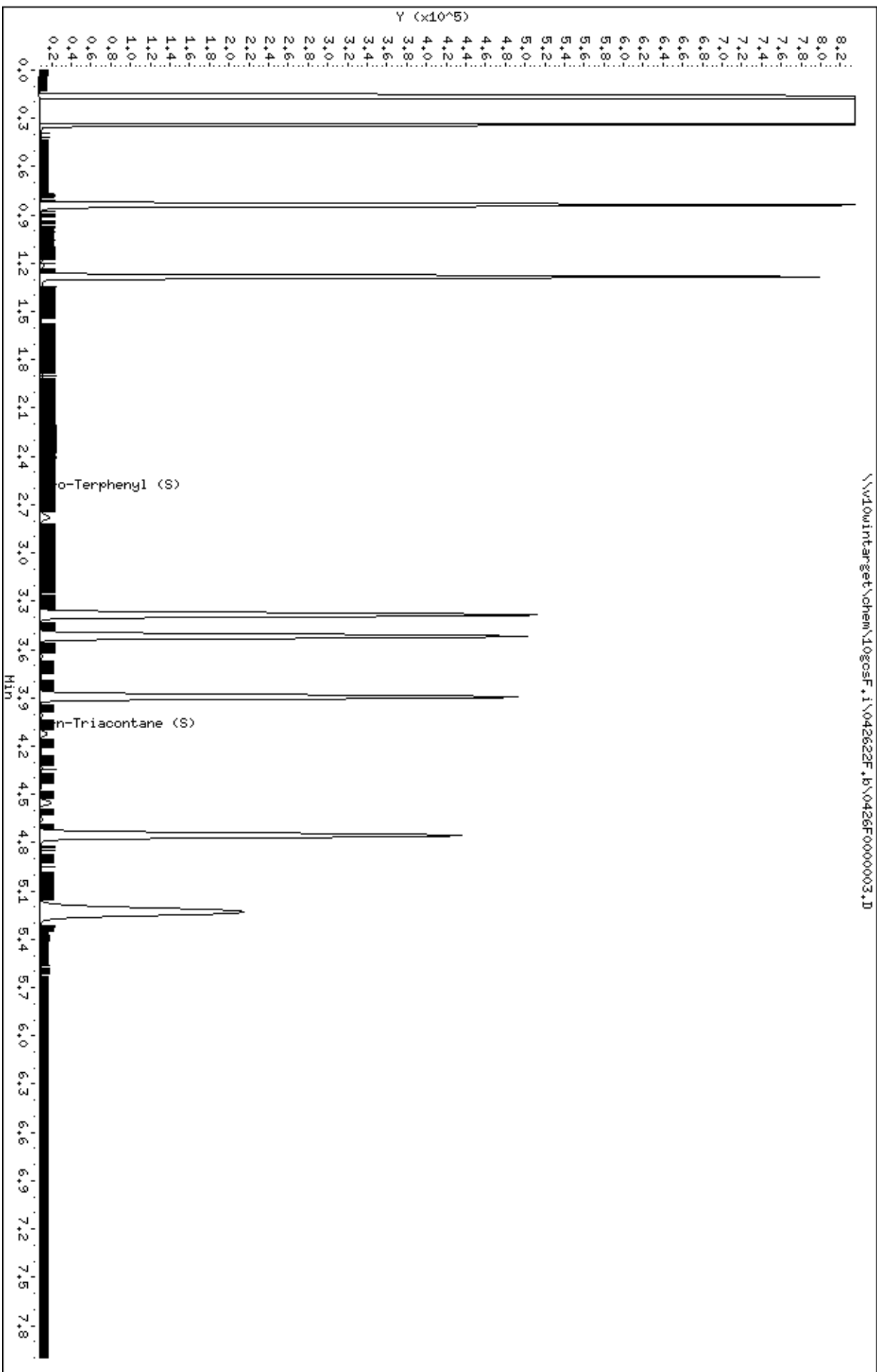
Sample Info: DM0-RTM,357103;2

Instrument: 10gocsf.1

Operator: EB3

Column diameter: 0.32

Column phase: DB-5-US21250010



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000003.D  
Injection Date: 26-APR-2022 07:44  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-RTM,357103:2  
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1983460	1983460
DRO by AK 102	2104579	2104579
TPH-DRO (C10-C28)	3380030	3380030
Motor Oil Range (C24-C36)	2603963	2603963
Diesel Fuel Range	1486051	1486051
Motor Oil Range	2577456	2577456
Diesel Fuel Range SG	1486051	1486051
Motor Oil Range SG	2577456	2577456
C10-C36	4088040	4088040
n-Triacontane (S)	148	148
o-Terphenyl (S)	328	328

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000004.D  
 Lab Smp Id: DMO-CAL1,362369:2 Client Smp ID: DMO-CAL1,362369:2  
 Inj Date : 26-APR-2022 07:55  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-call,362369:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 3 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		324590 6.00000	0.673	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.585	2.582 0.003		3005 0.60000	0.544	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.065	4.064 0.001		2617 0.60000	0.548	(MH) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		111185 6.00000	5.75	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		366711 6.00000	1.10	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		123721 6.00000	4.64	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		435776 12.0000	5.18	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		293311 6.00000	0.893	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		293311 6.00000	0.893	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		139603 6.00000	6.00	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		139603 6.00000	6.00	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.  
H - Operator selected an alternate compound hit.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 07:55

Client ID: DMO-CAL1,362369;2

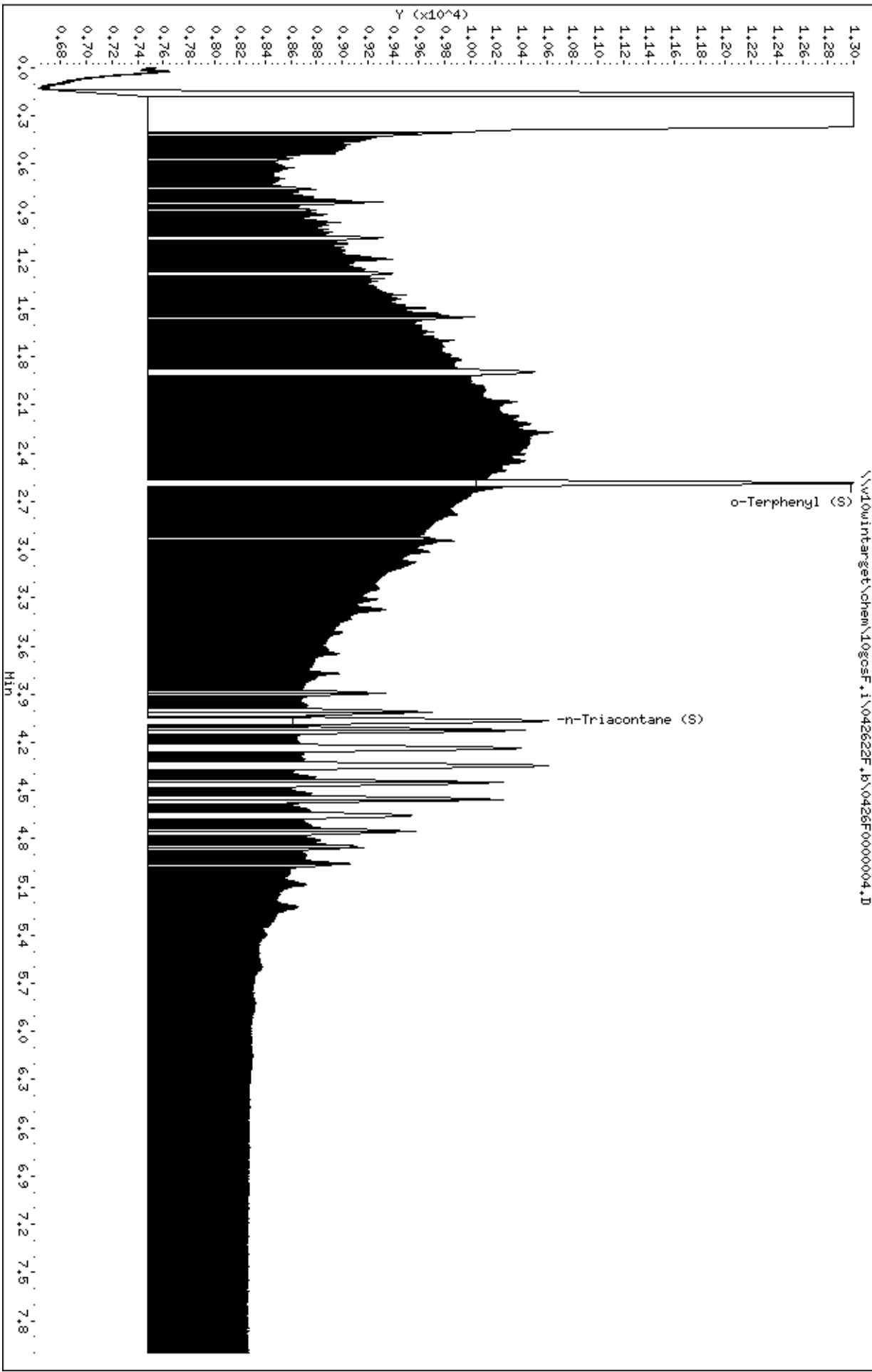
Sample Info: DMO-CAL1,362369;2

Instrument: 10goscF.1

Operator: EB3

Column diameter: 0.32

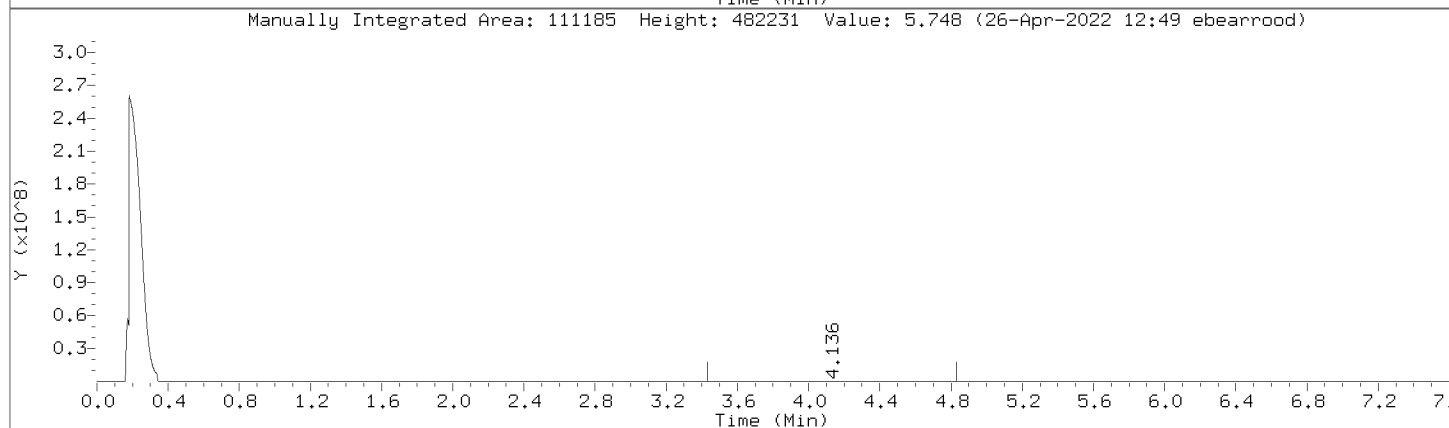
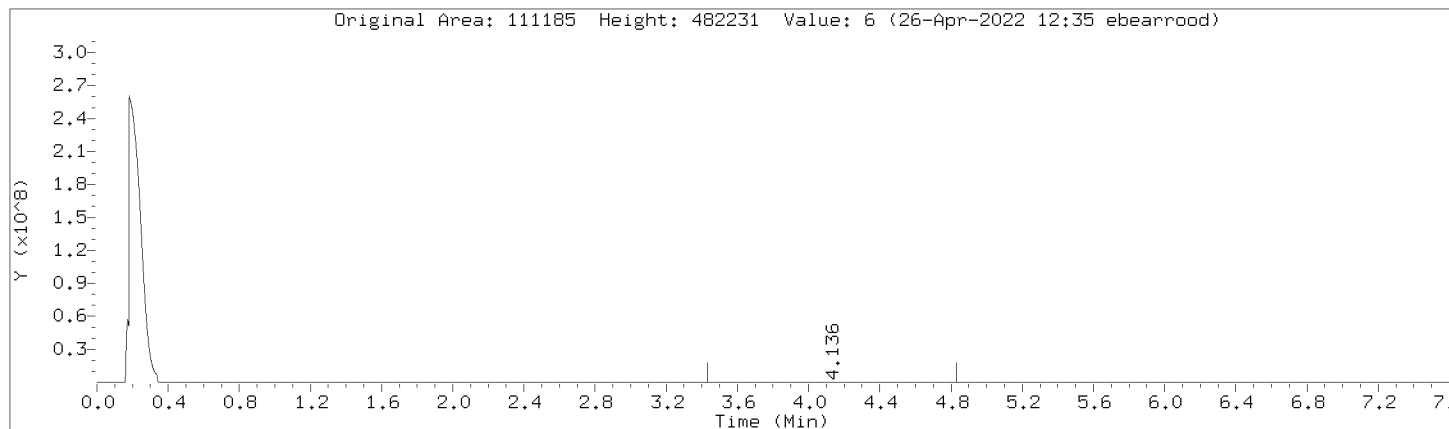
Column phase: DB-5-MS21250010





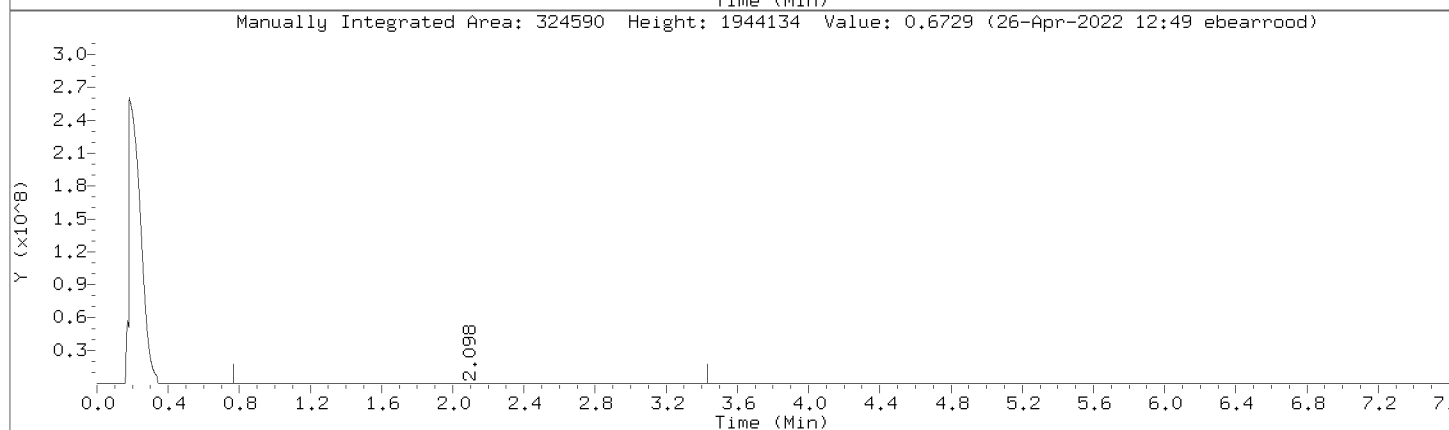
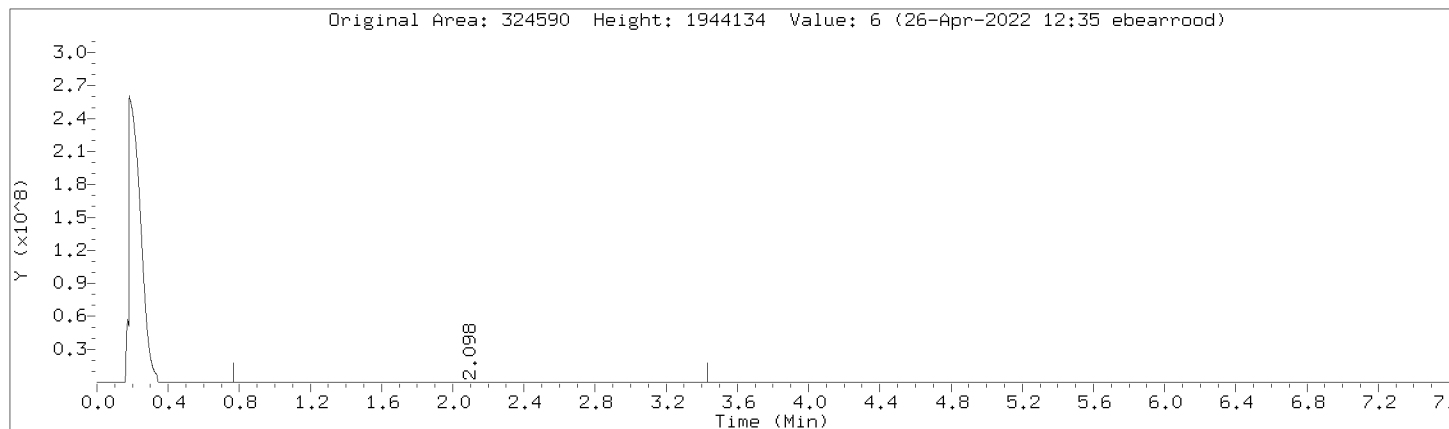
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



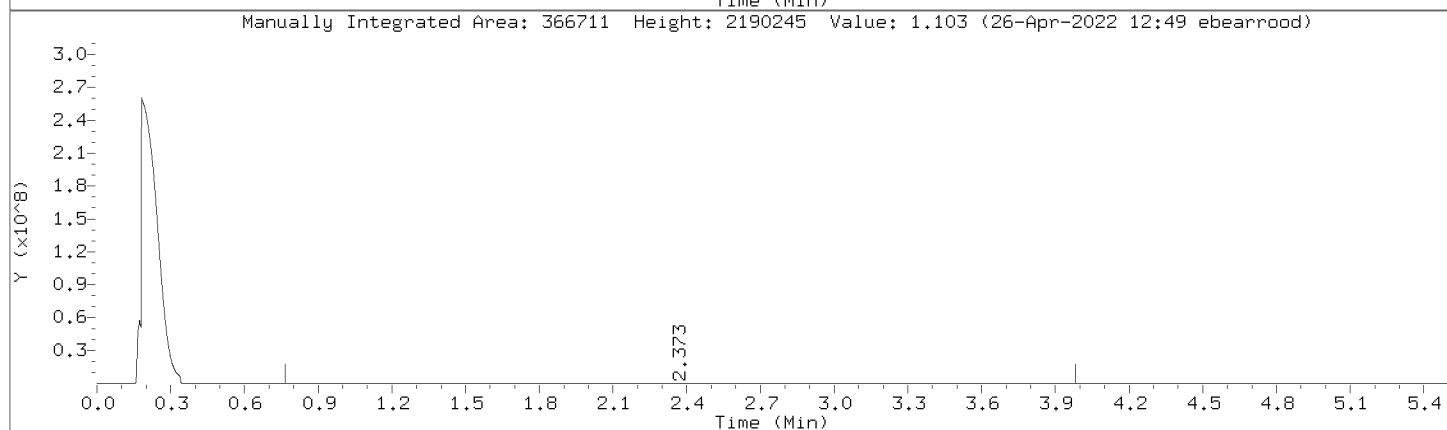
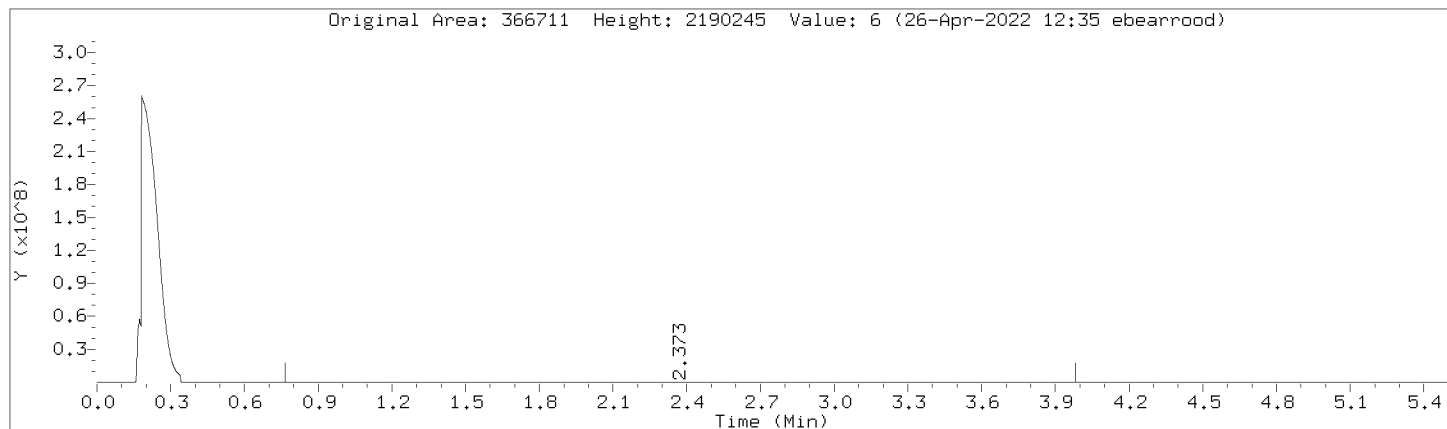
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



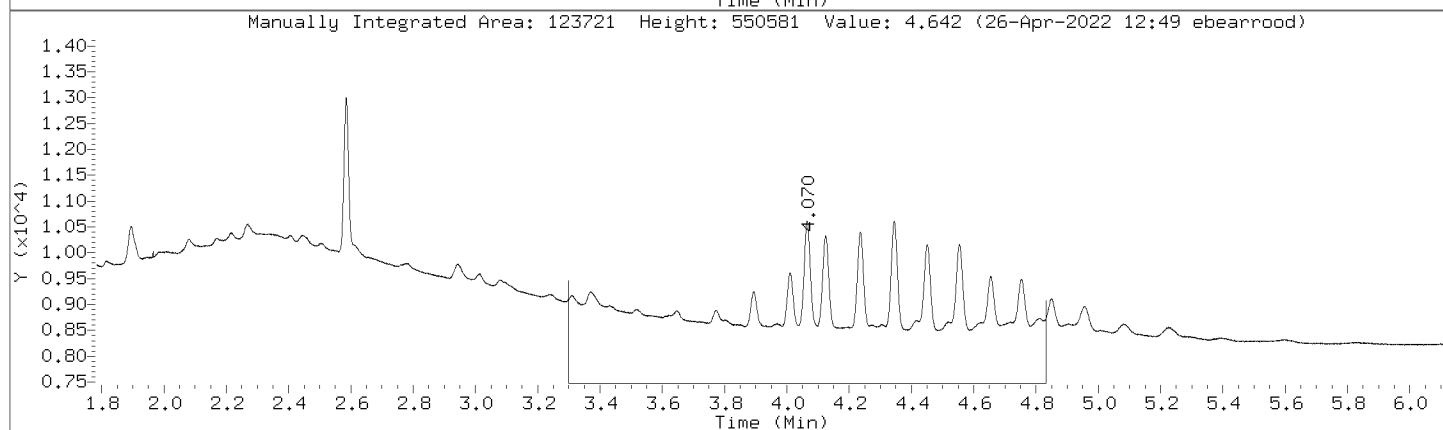
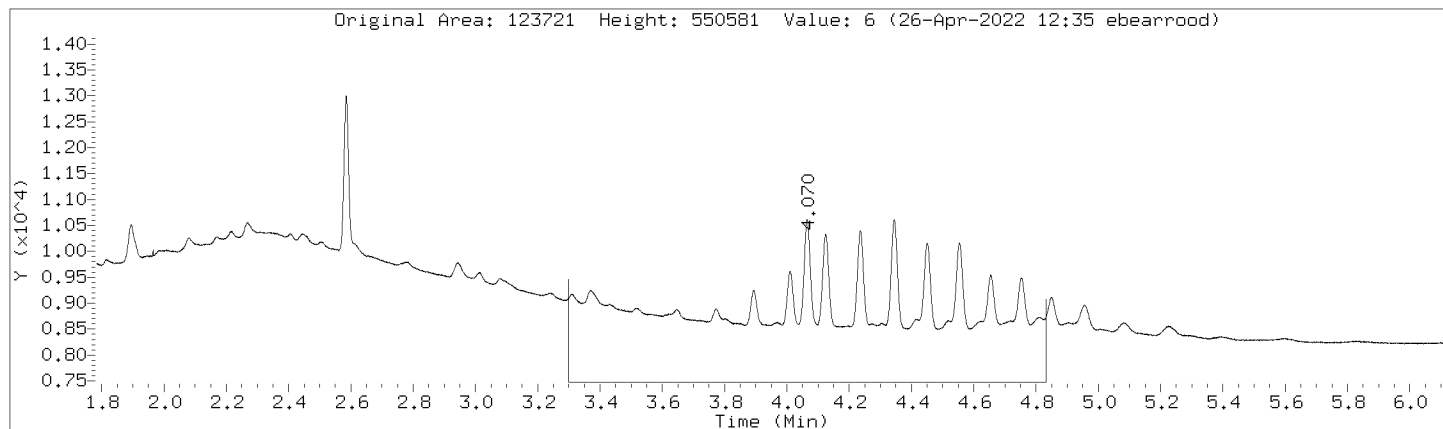
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



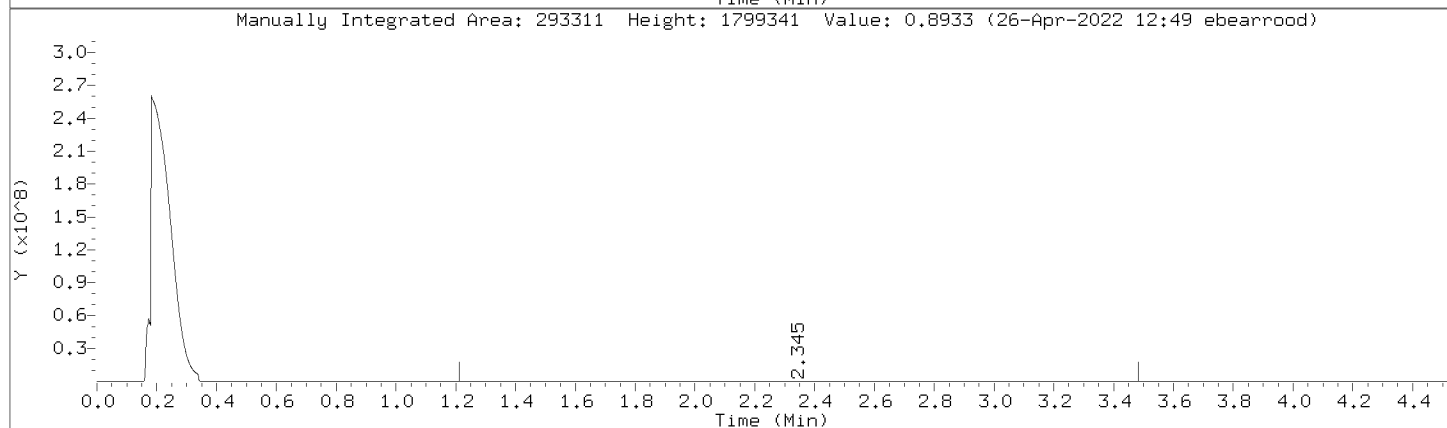
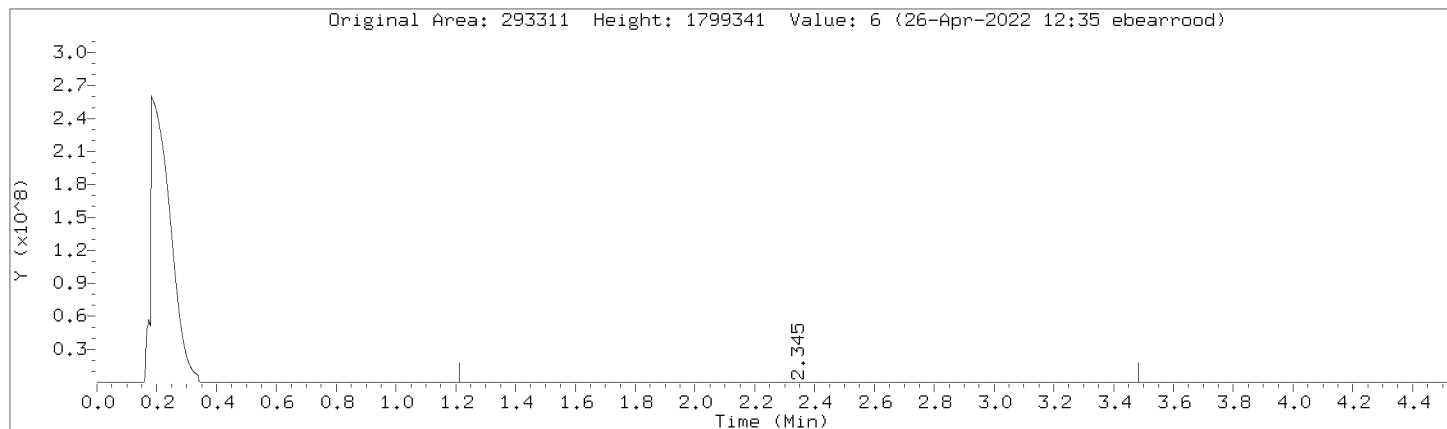
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



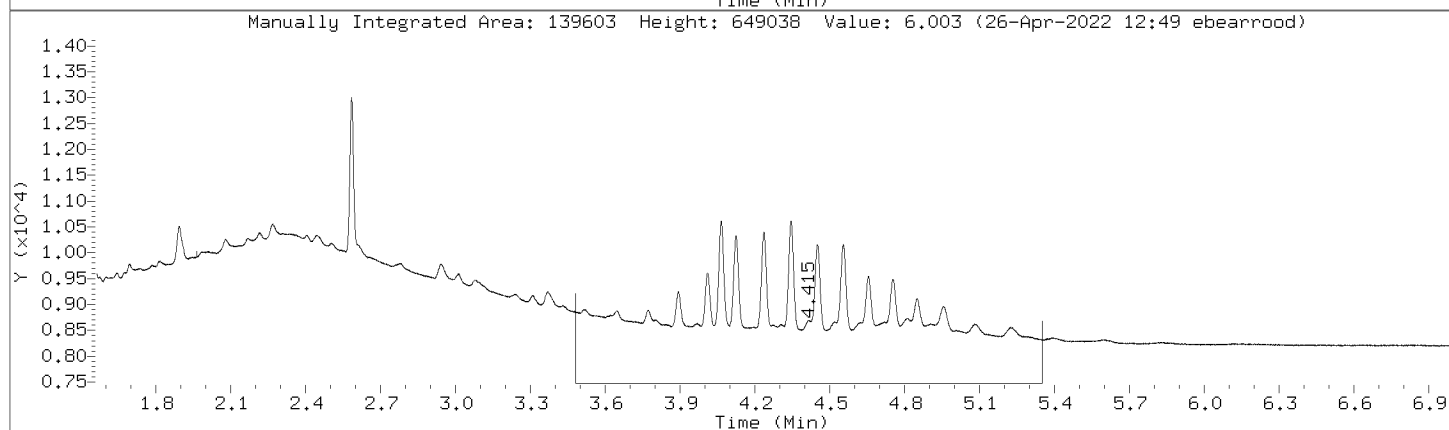
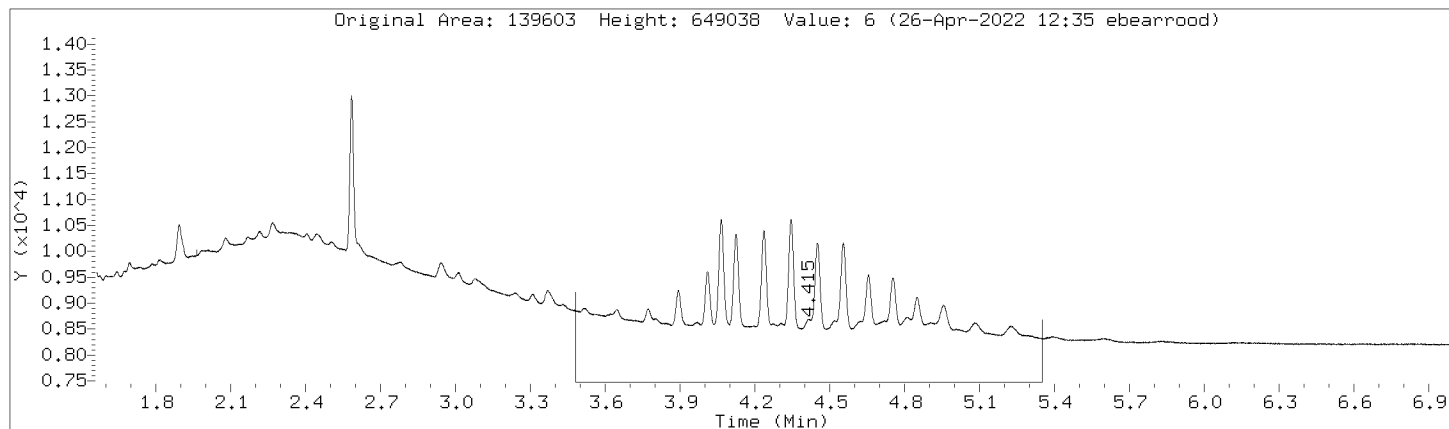
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



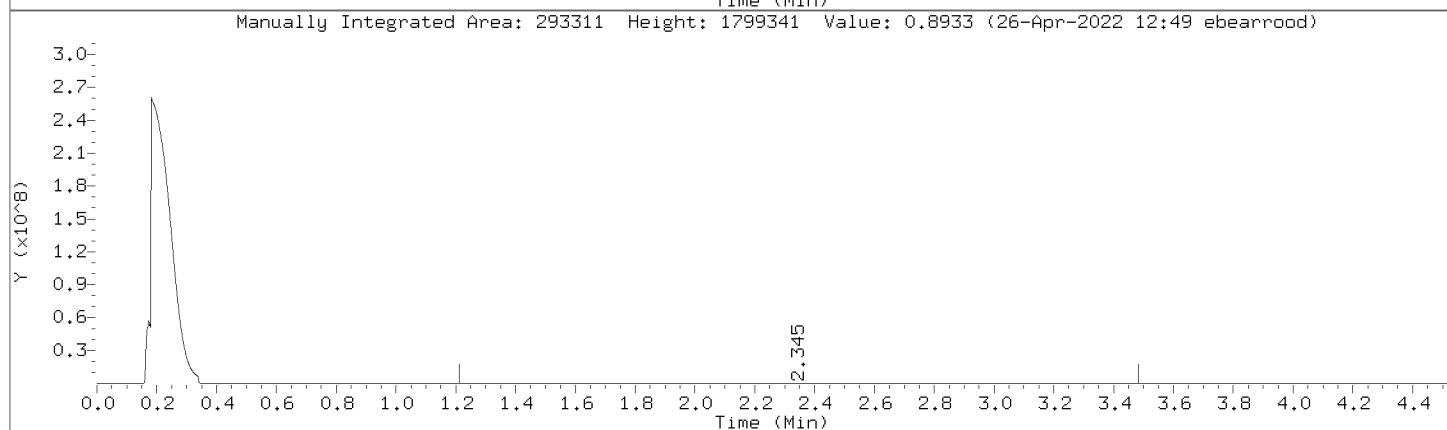
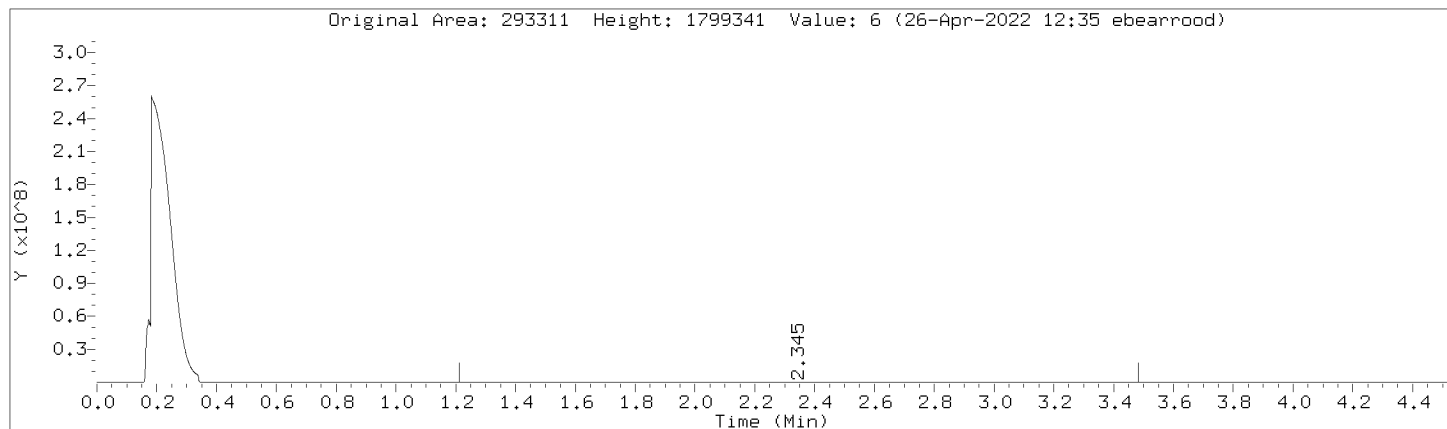
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



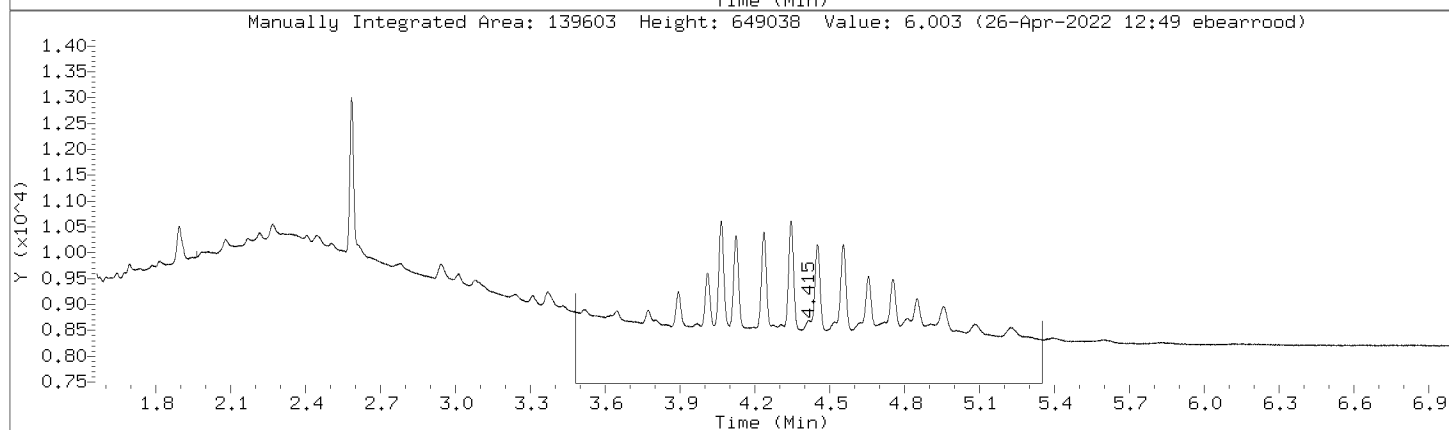
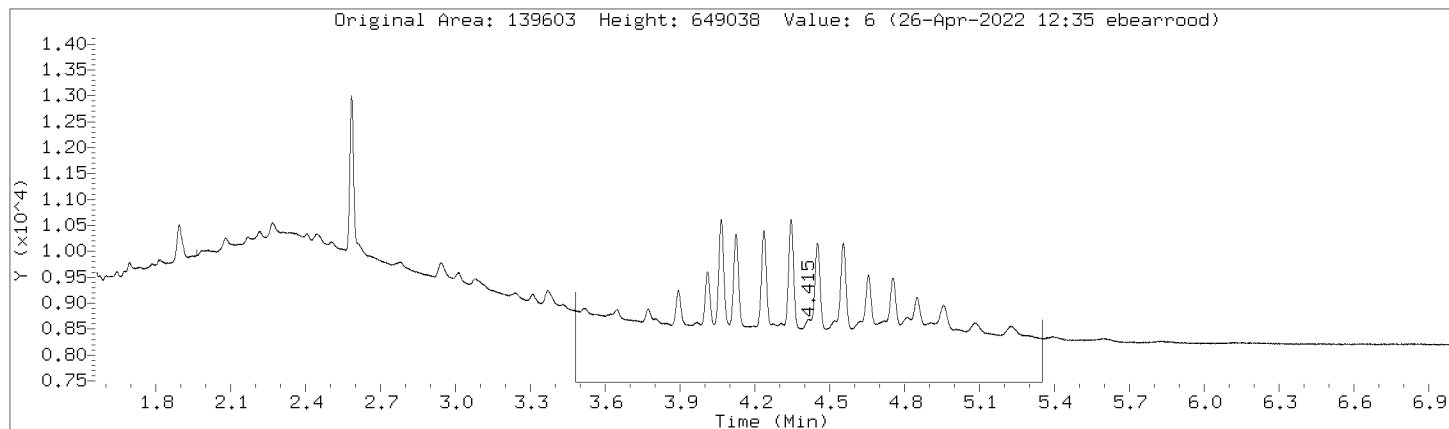
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000004.D  
Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

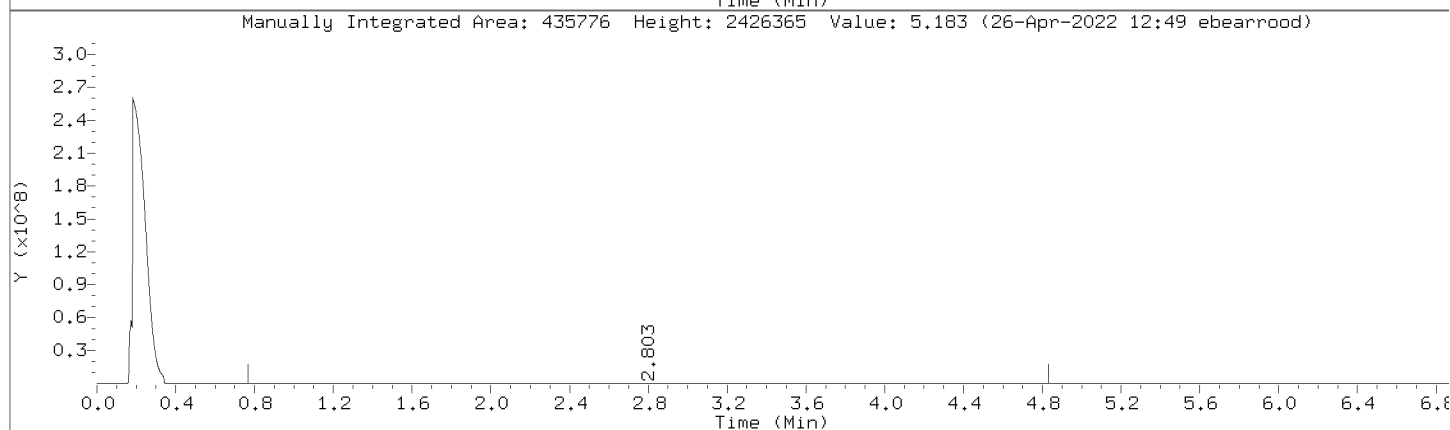
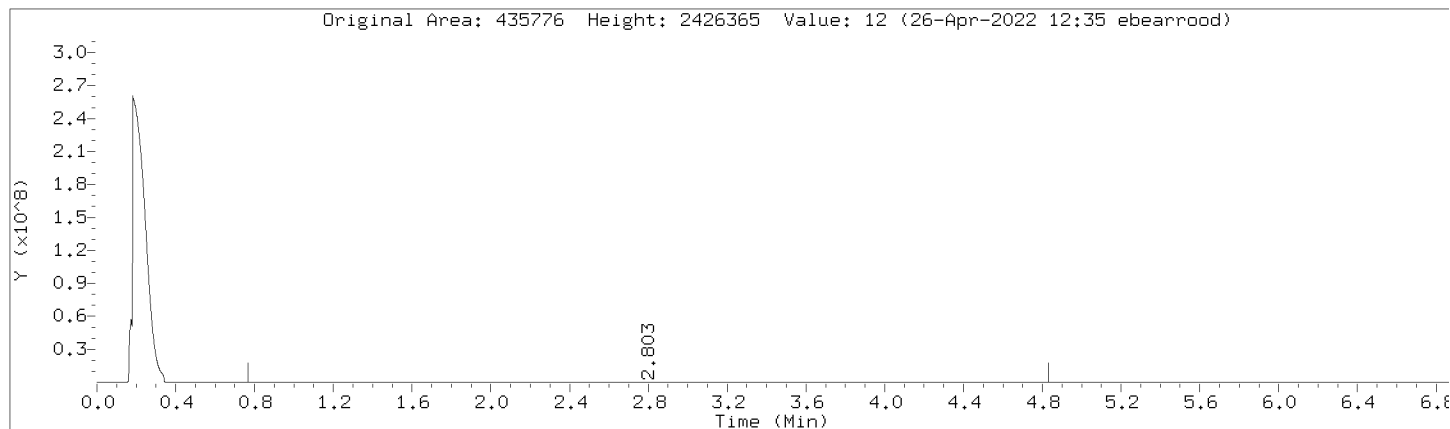
Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





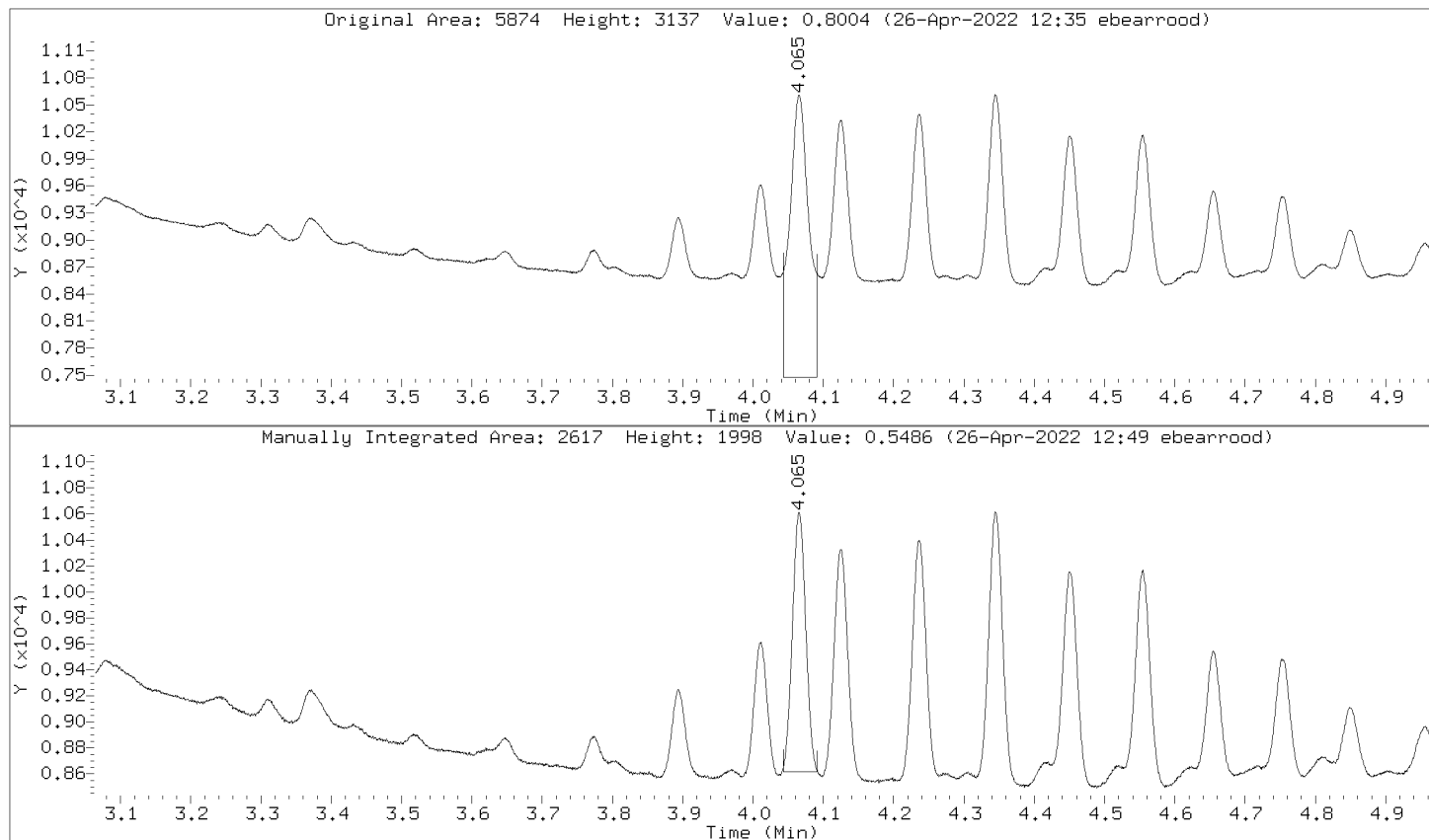
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Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



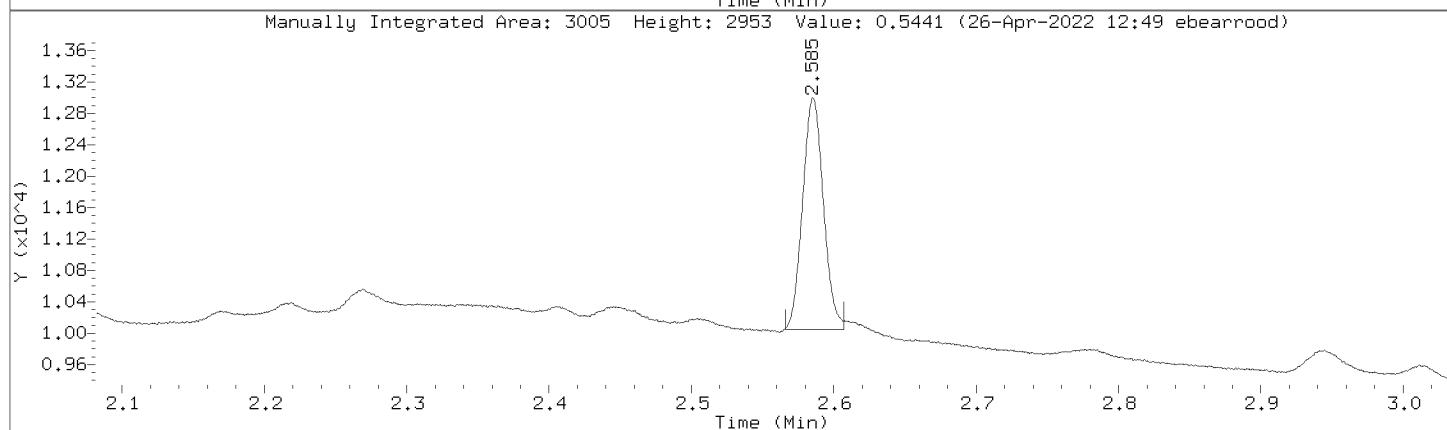
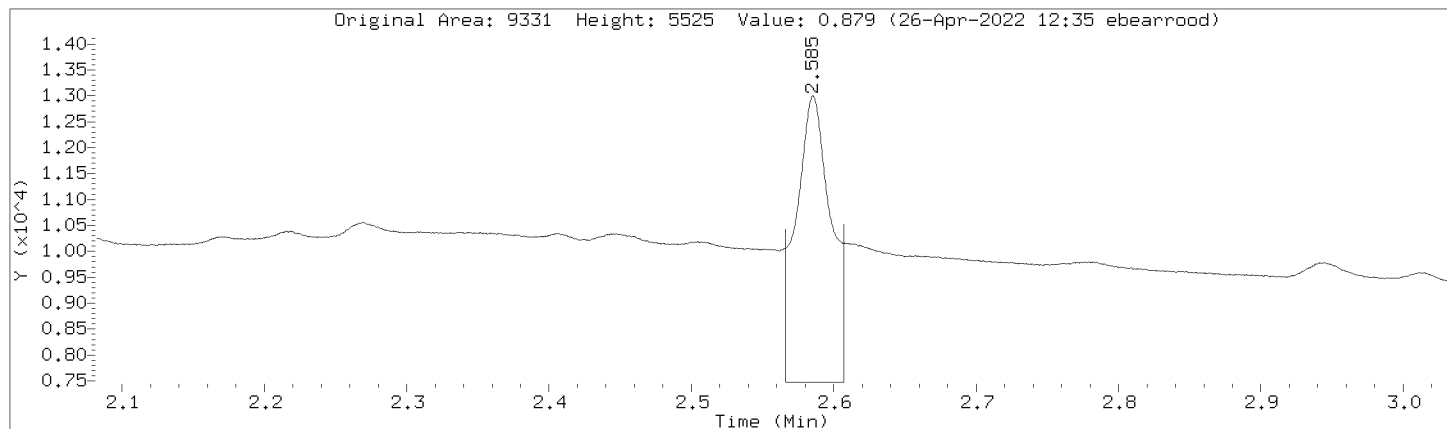
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000004.D  
Injection Date: 26-APR-2022 07:55  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000004.D  
 Injection Date: 26-APR-2022 07:55  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL1,362369:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	111185	111185
DRO by AK 102	324590	324590
TPH-DRO (C10-C28)	366711	366711
Motor Oil Range (C24-C36)	123721	123721
Diesel Fuel Range	293311	293311
Motor Oil Range	139603	139603
Diesel Fuel Range SG	293311	293311
Motor Oil Range SG	139603	139603
C10-C36	435776	435776
n-Triacontane (S)	5874	2617
o-Terphenyl (S)	9331	3005

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
 Lab Smp Id: DMO-CAL2,362370:2 Client Smp ID: DMO-CAL2,362370:2  
 Inj Date : 26-APR-2022 08:06  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal2,362370:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 4 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		347386 10.0000	4.98	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.586	2.582 0.004		5272 1.00000	0.955	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.063	4.064 -0.001		4654 1.00000	0.976	(MH) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		122854 10.0000	9.35	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		392406 10.0000	5.33	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		135827 10.0000	8.27	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		470241 20.0000	13.2	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		311887 10.0000	5.07	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		311887 10.0000	5.07	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		153105 10.0000	9.39	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		153105 10.0000	9.39	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.  
H - Operator selected an alternate compound hit.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 08:06

Client ID: DMO-CAL2,362370:2

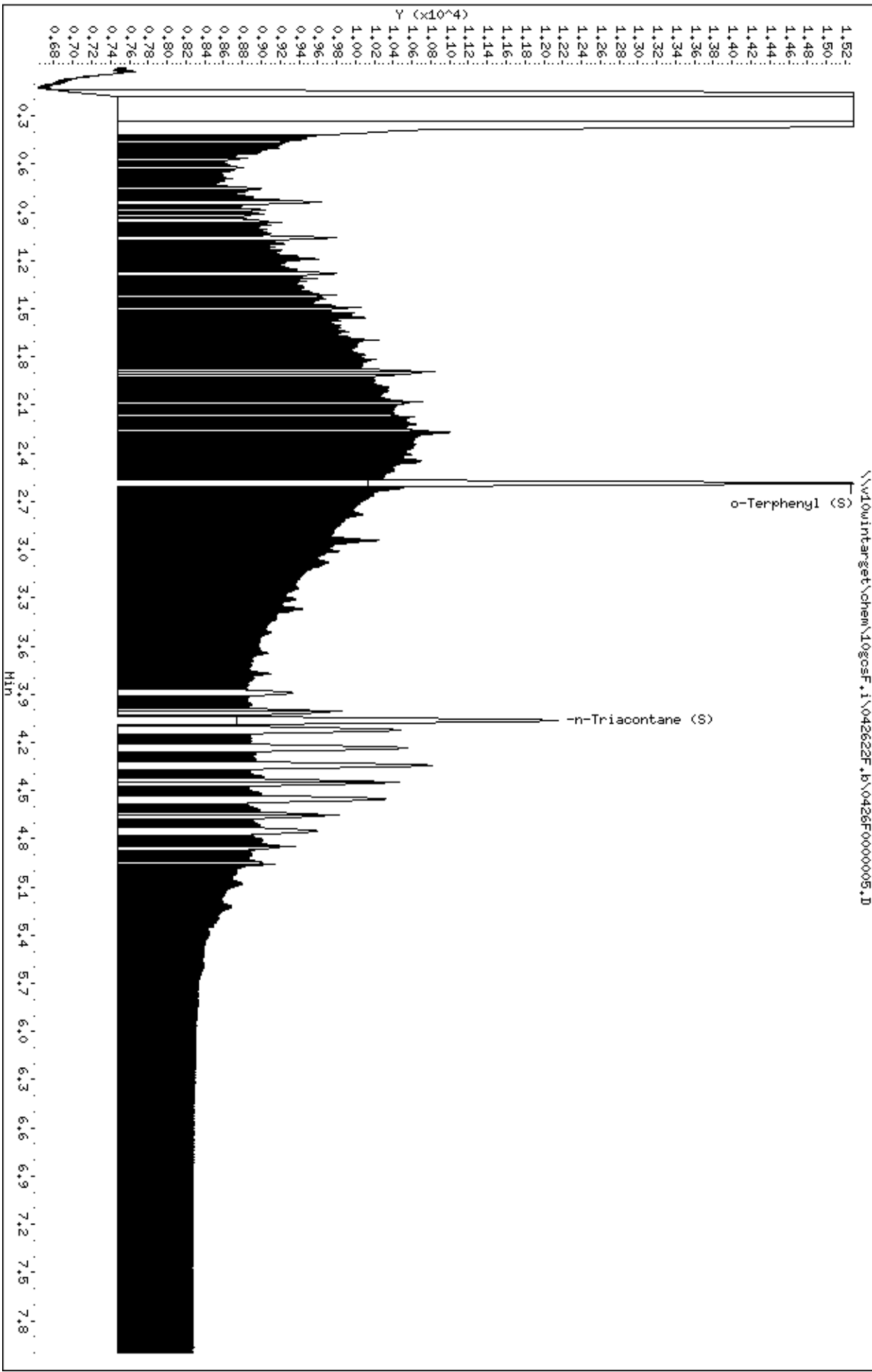
Sample Info: DMO-CAL2,362370:2

Instrument: 10gosf.i

Operator: EB3

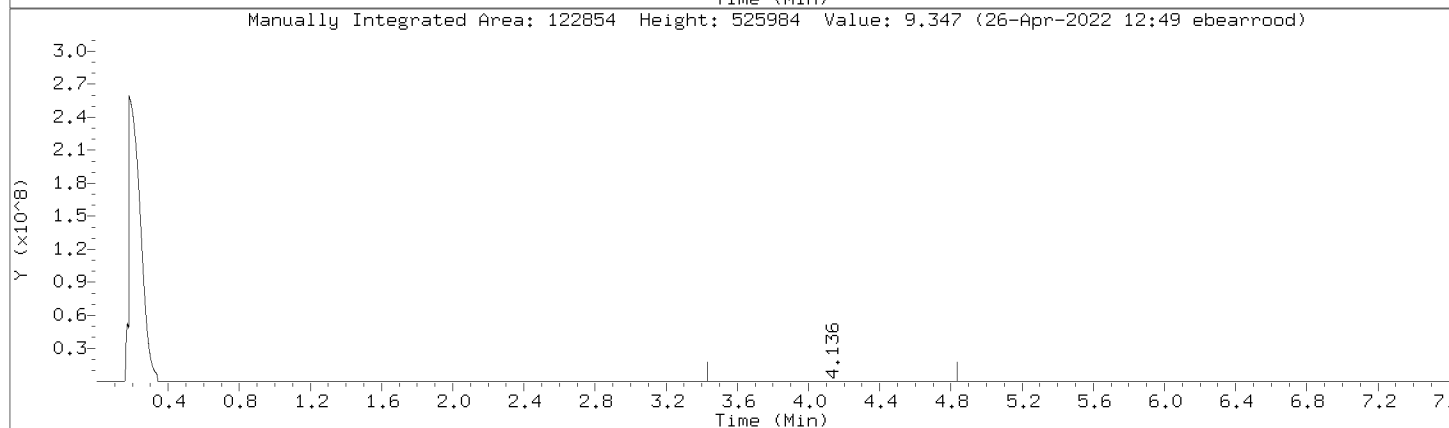
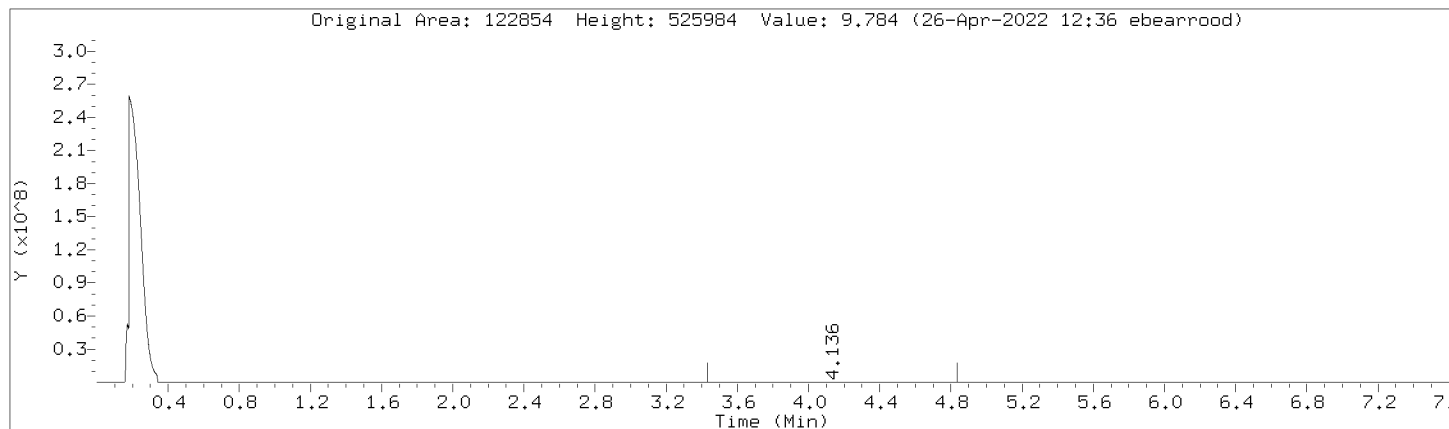
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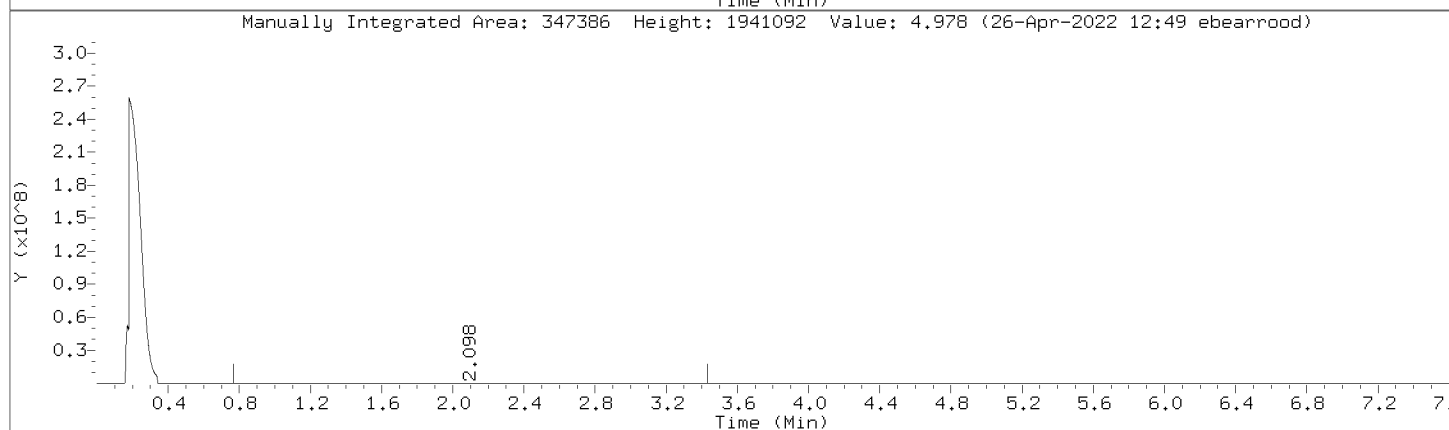
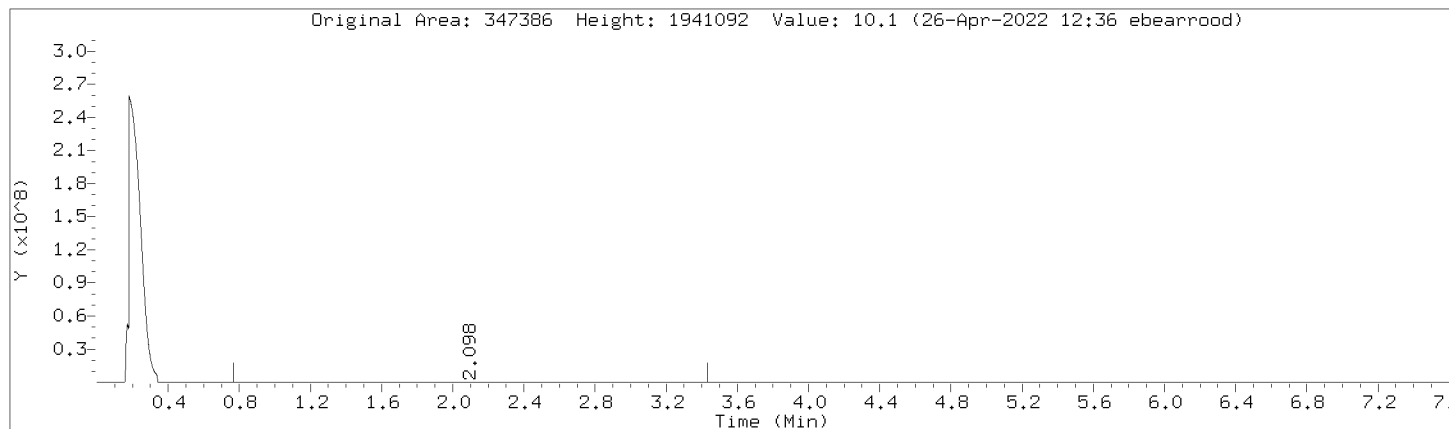
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

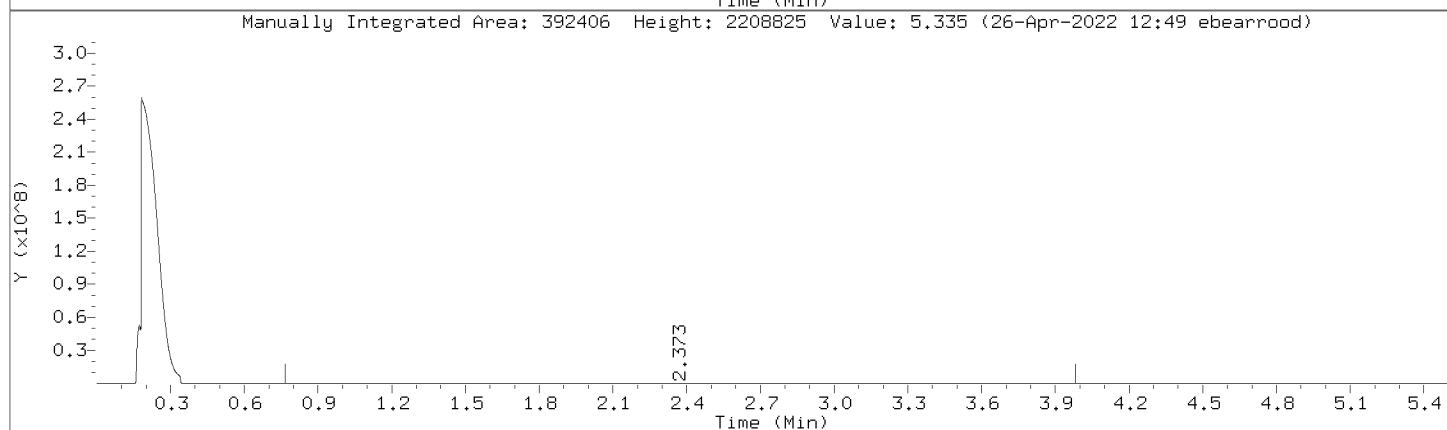
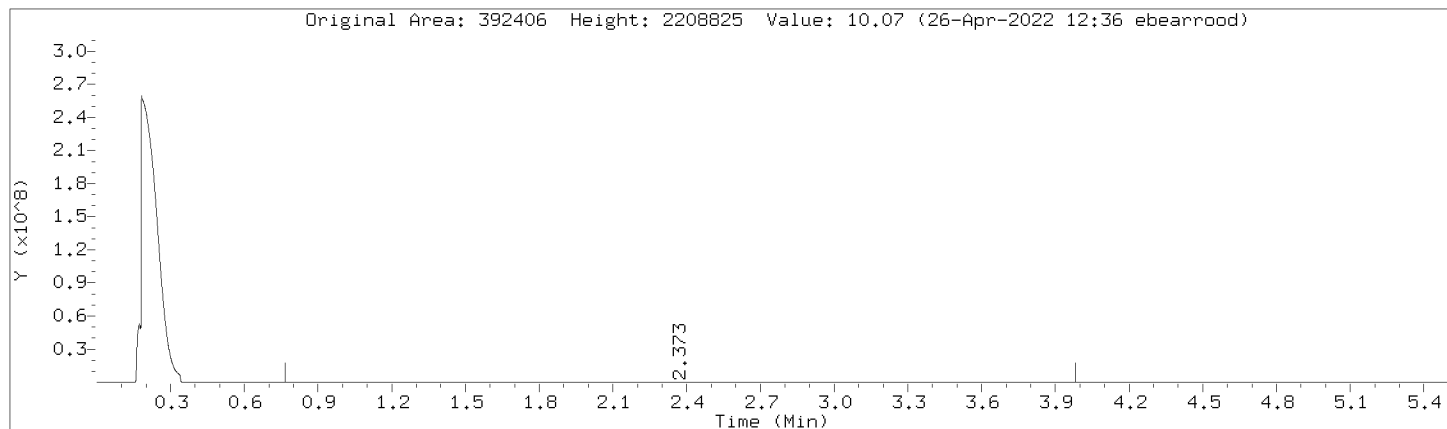
Compound: DRO by AK 102      Review Code: RNG  
CAS Number:





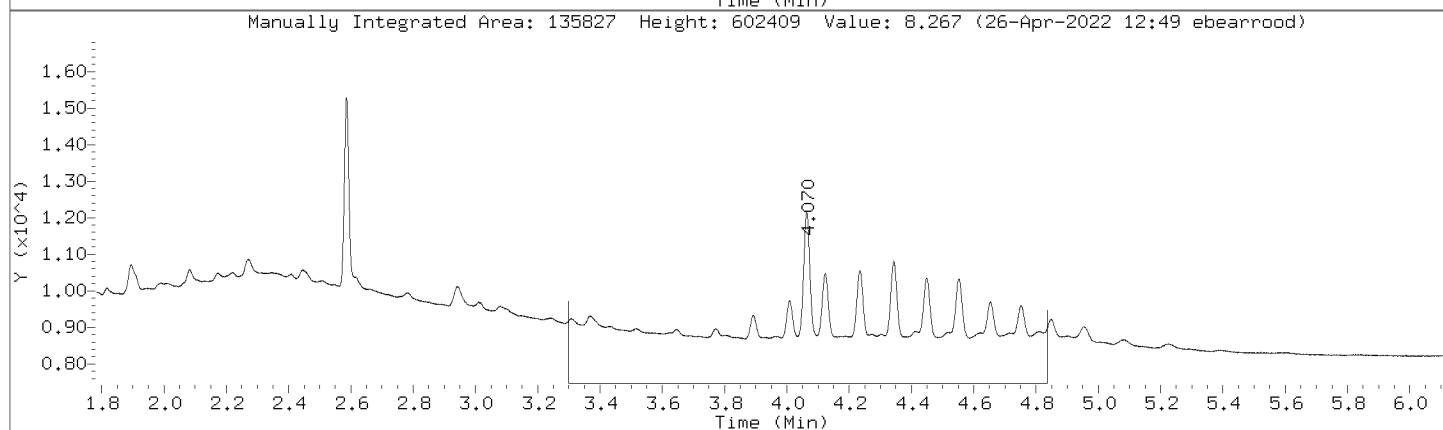
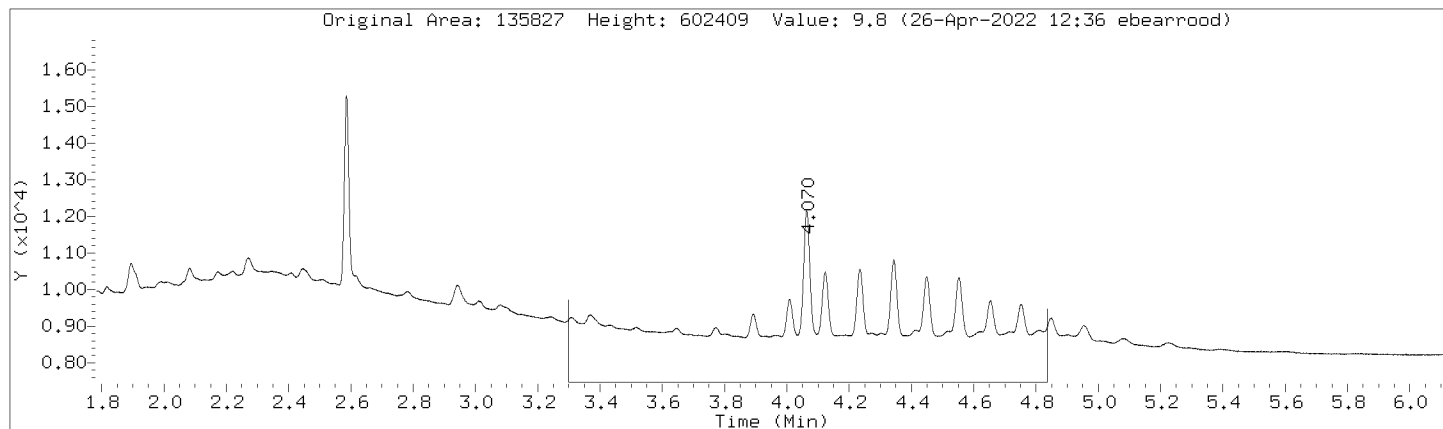
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Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



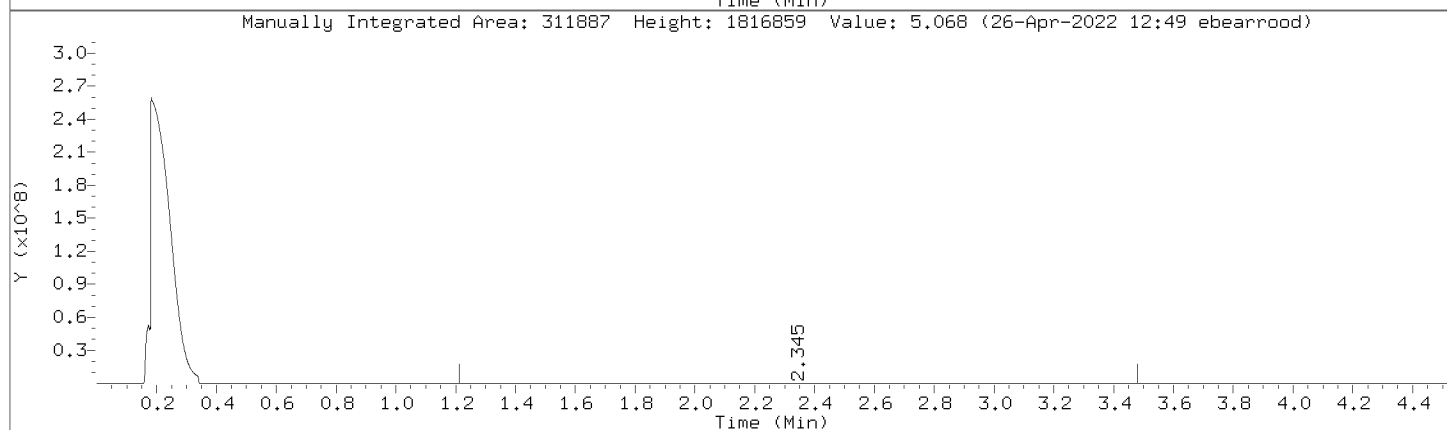
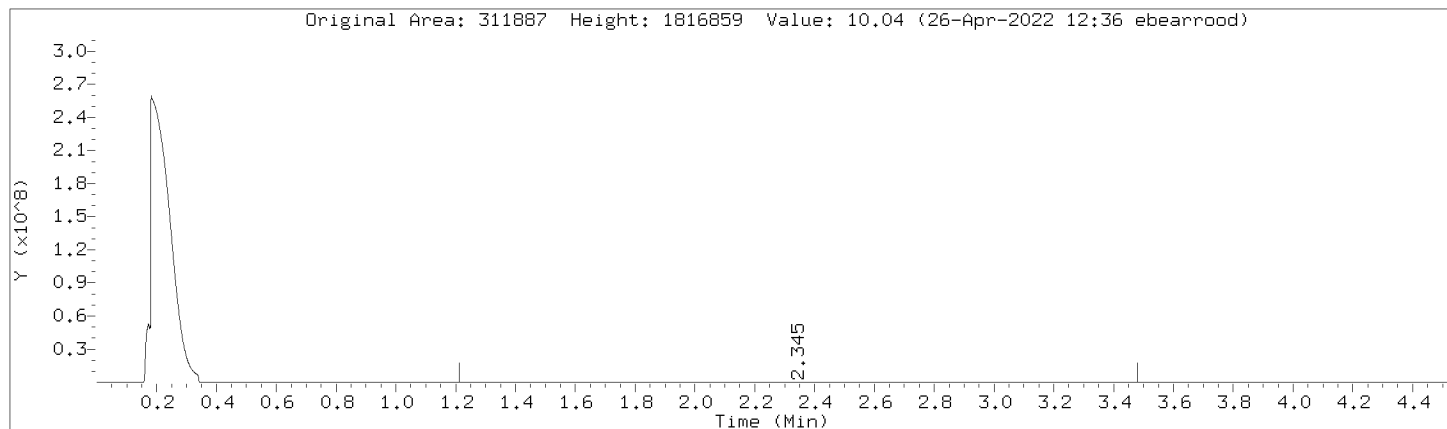
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Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



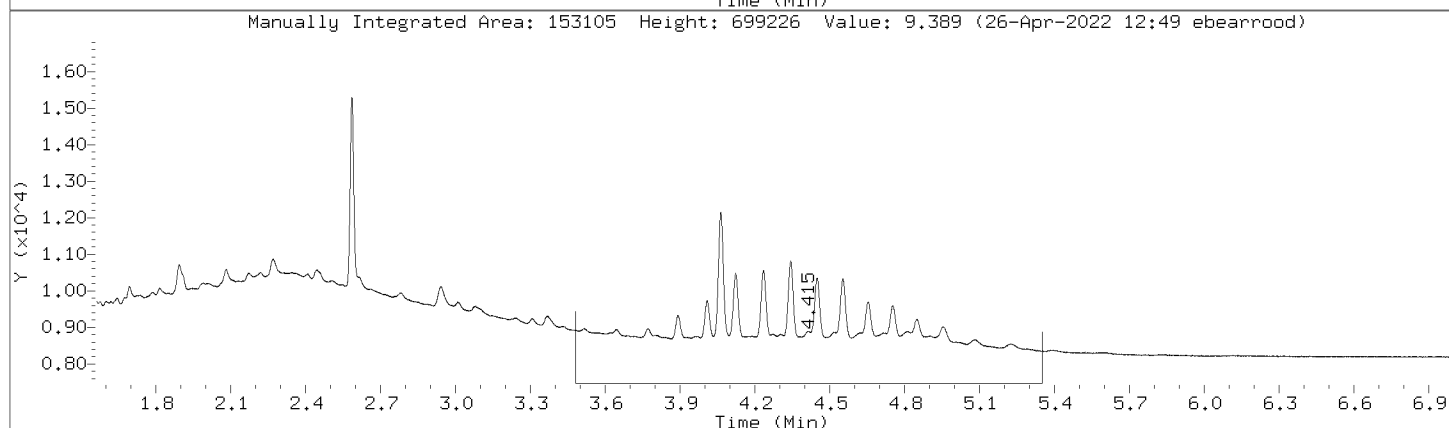
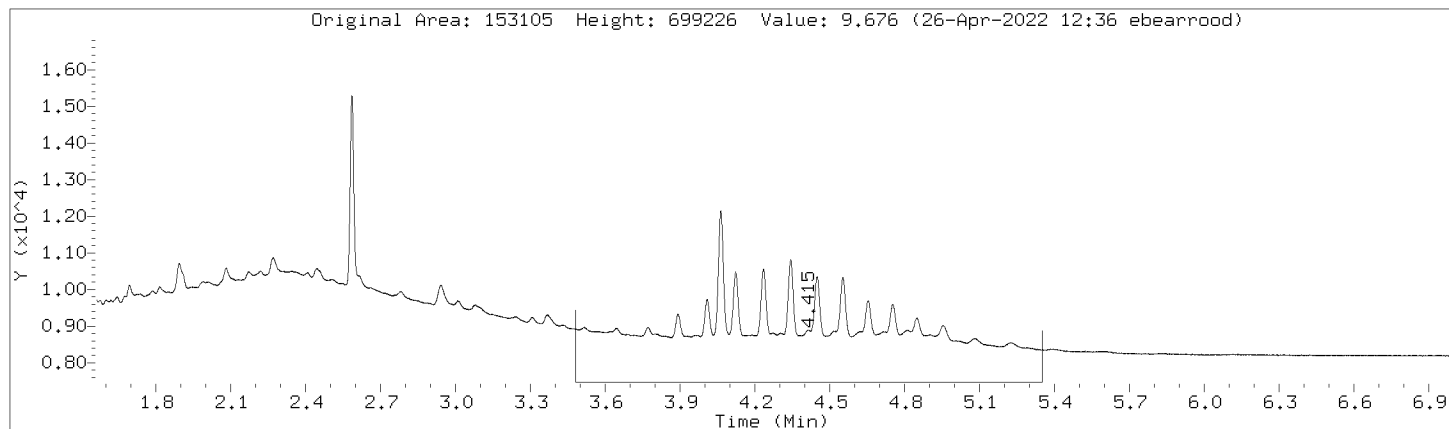
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Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



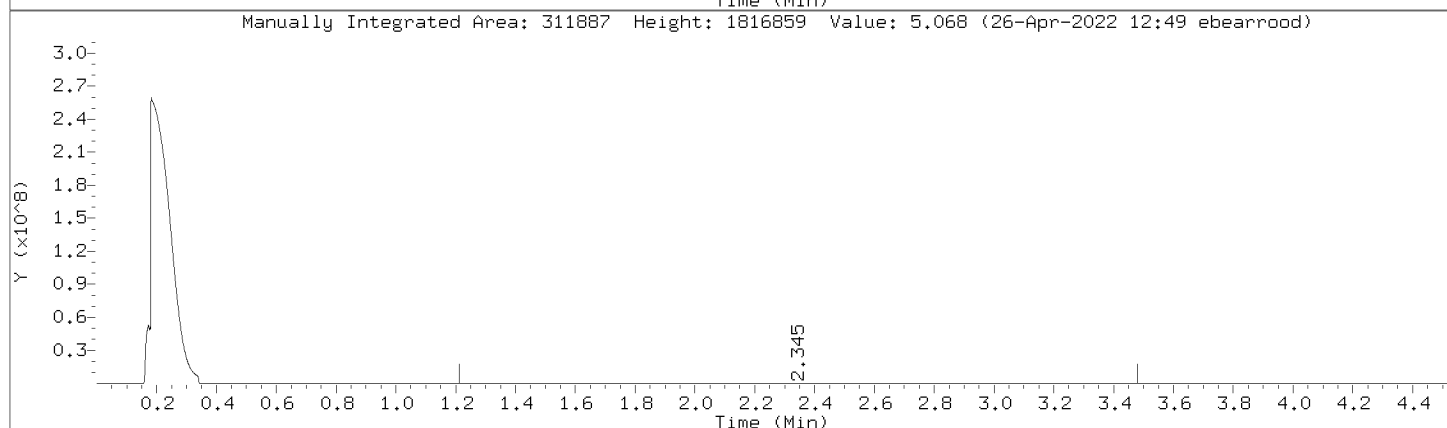
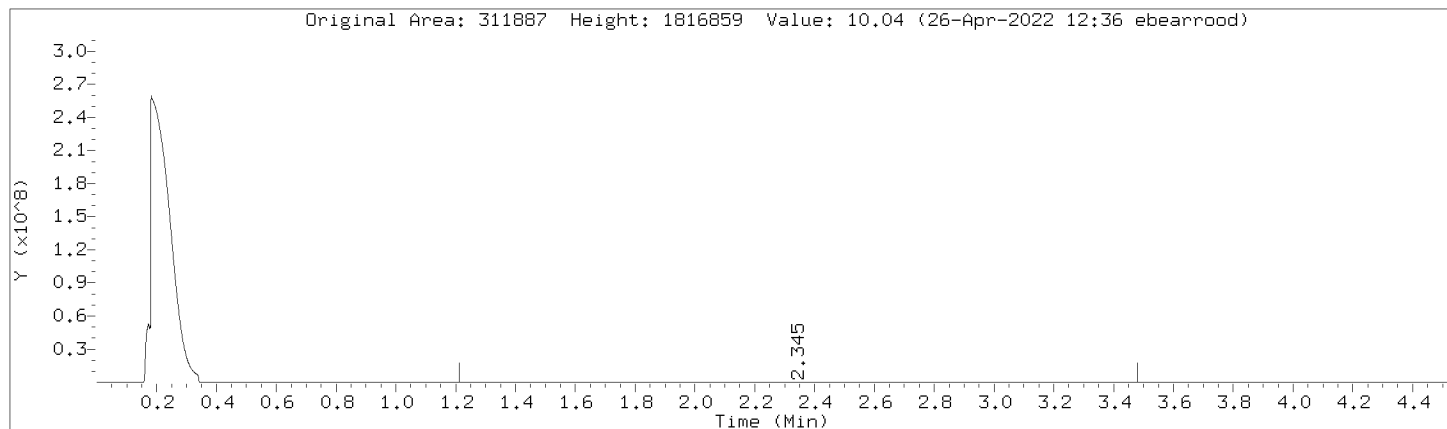
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Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



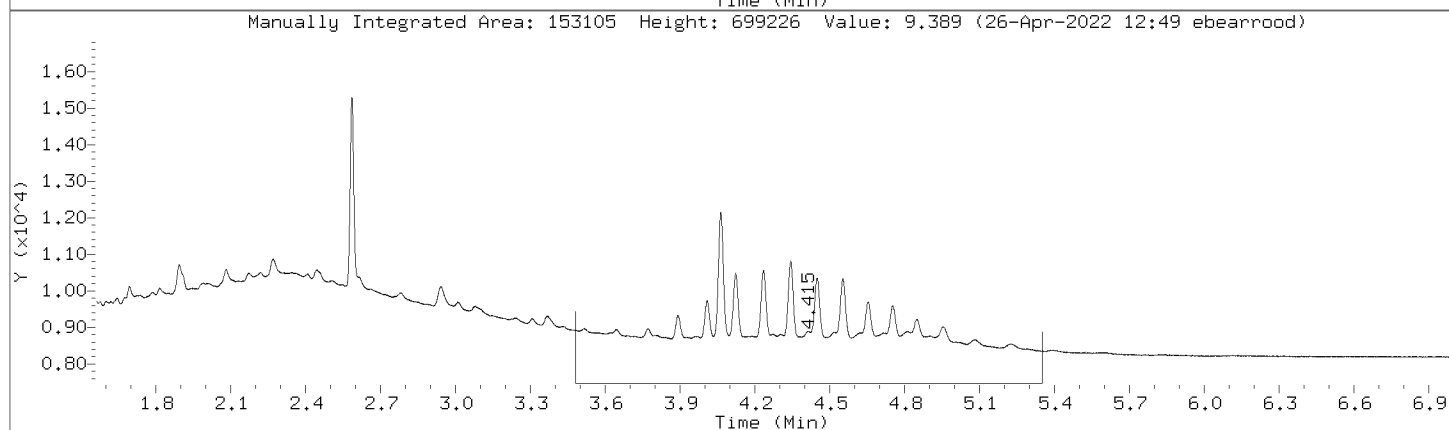
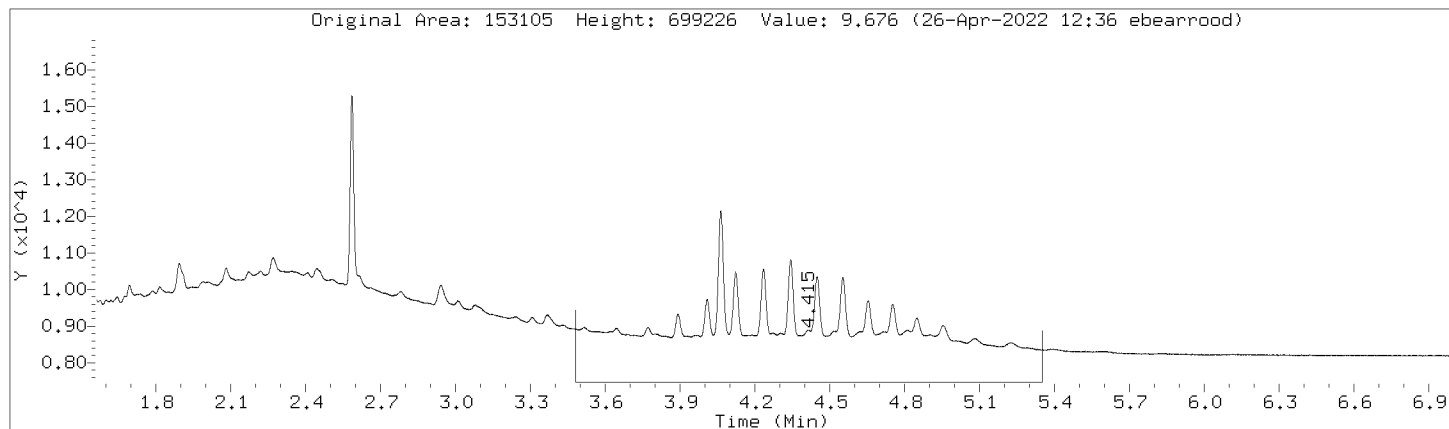
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Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



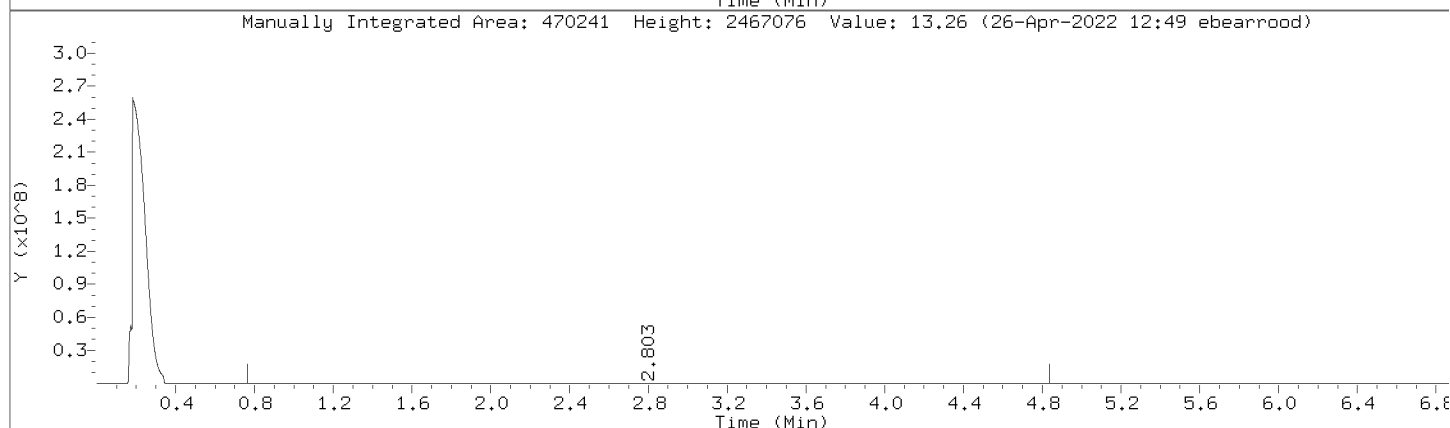
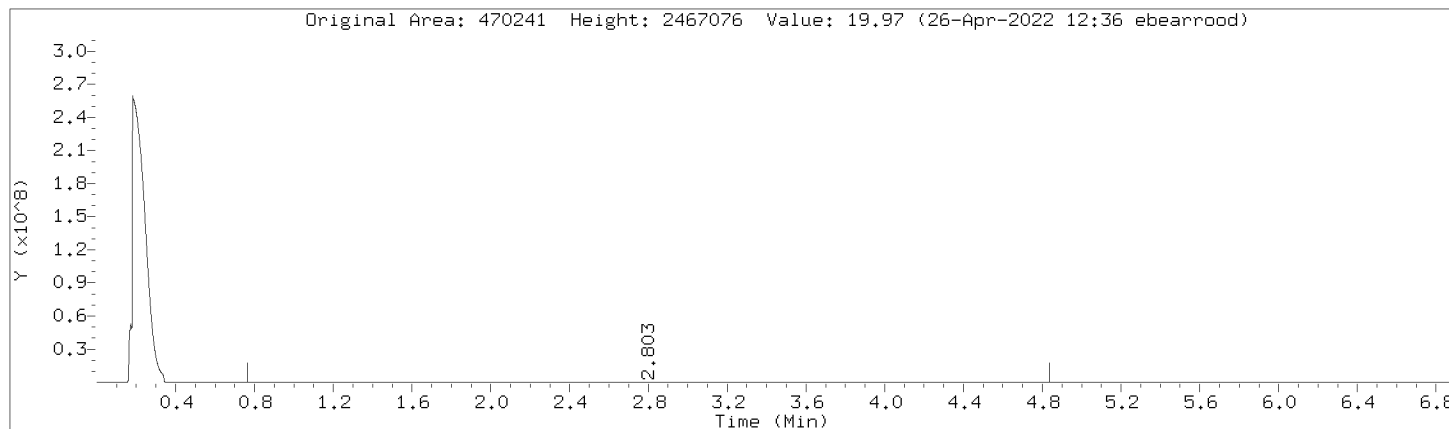
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Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



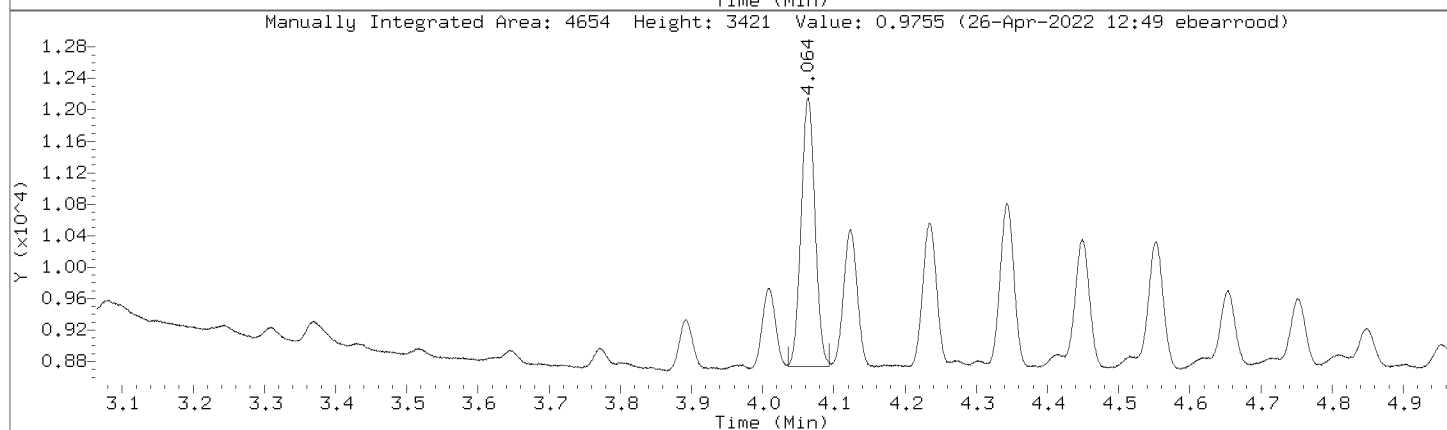
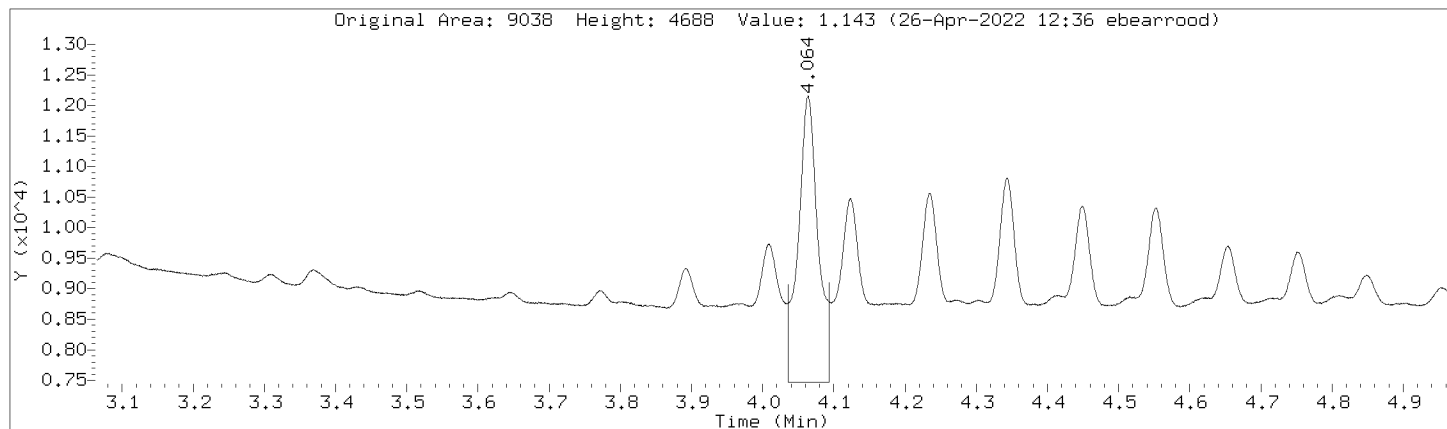
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Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
Injection Date: 26-APR-2022 08:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

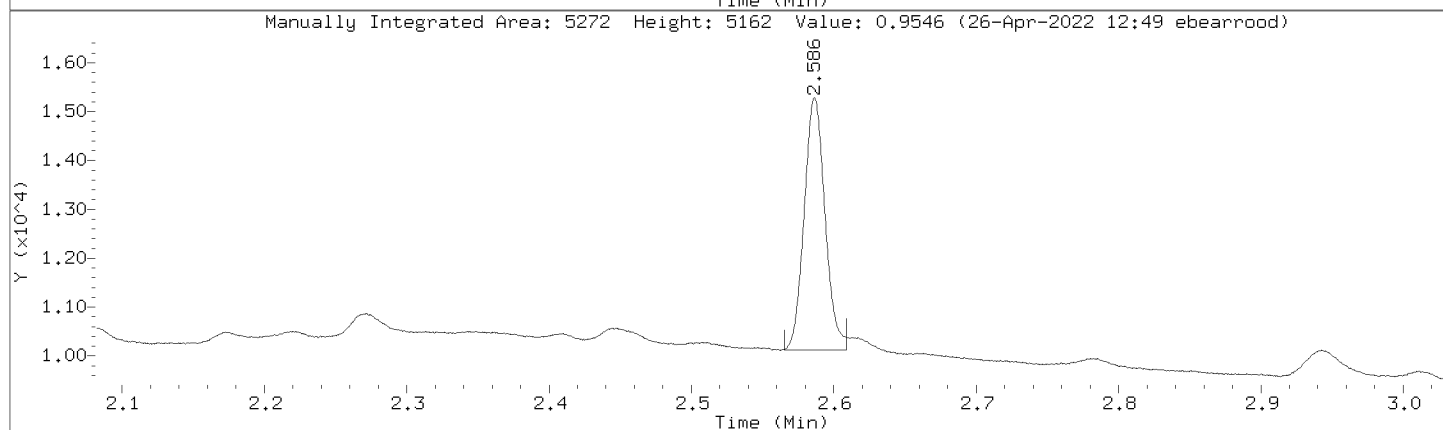
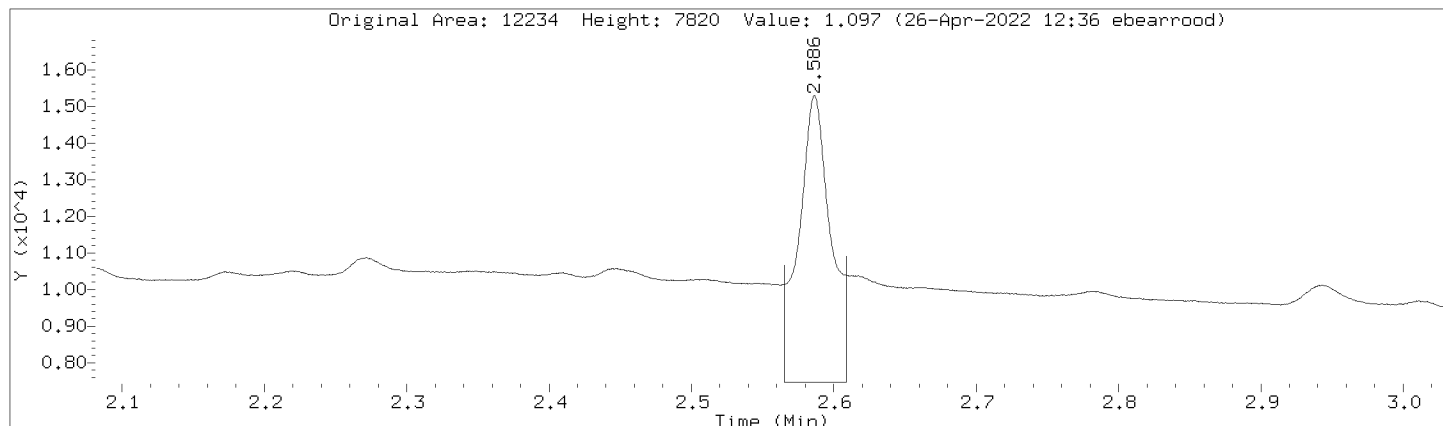
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000005.D  
 Injection Date: 26-APR-2022 08:06  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL2,362370:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	122854	122854
DRO by AK 102	347386	347386
TPH-DRO (C10-C28)	392406	392406
Motor Oil Range (C24-C36)	135827	135827
Diesel Fuel Range	311887	311887
Motor Oil Range	153105	153105
Diesel Fuel Range SG	311887	311887
Motor Oil Range SG	153105	153105
C10-C36	470241	470241
n-Triacontane (S)	9038	4654
o-Terphenyl (S)	12234	5272

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
 Lab Smp Id: DMO-CAL3,362371:2 Client Smp ID: DMO-CAL3,362371:2  
 Inj Date : 26-APR-2022 08:18  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal3,362371:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 5 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		430132 25.0000	25.0	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.585	2.582 0.003		13904 2.50000	2.63	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.064	4.064 0.000		12041 2.50000	2.61	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		176198 25.0000	25.1	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		487019 25.0000	25.0	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		191144 25.0000	25.1	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		606474 50.0000	50.0	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		380934 25.0000	25.0	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		380934 25.0000	25.0	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		220253 25.0000	25.1	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		220253 25.0000	25.1	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 08:18

Client ID: DMO-CAL3,362371:2

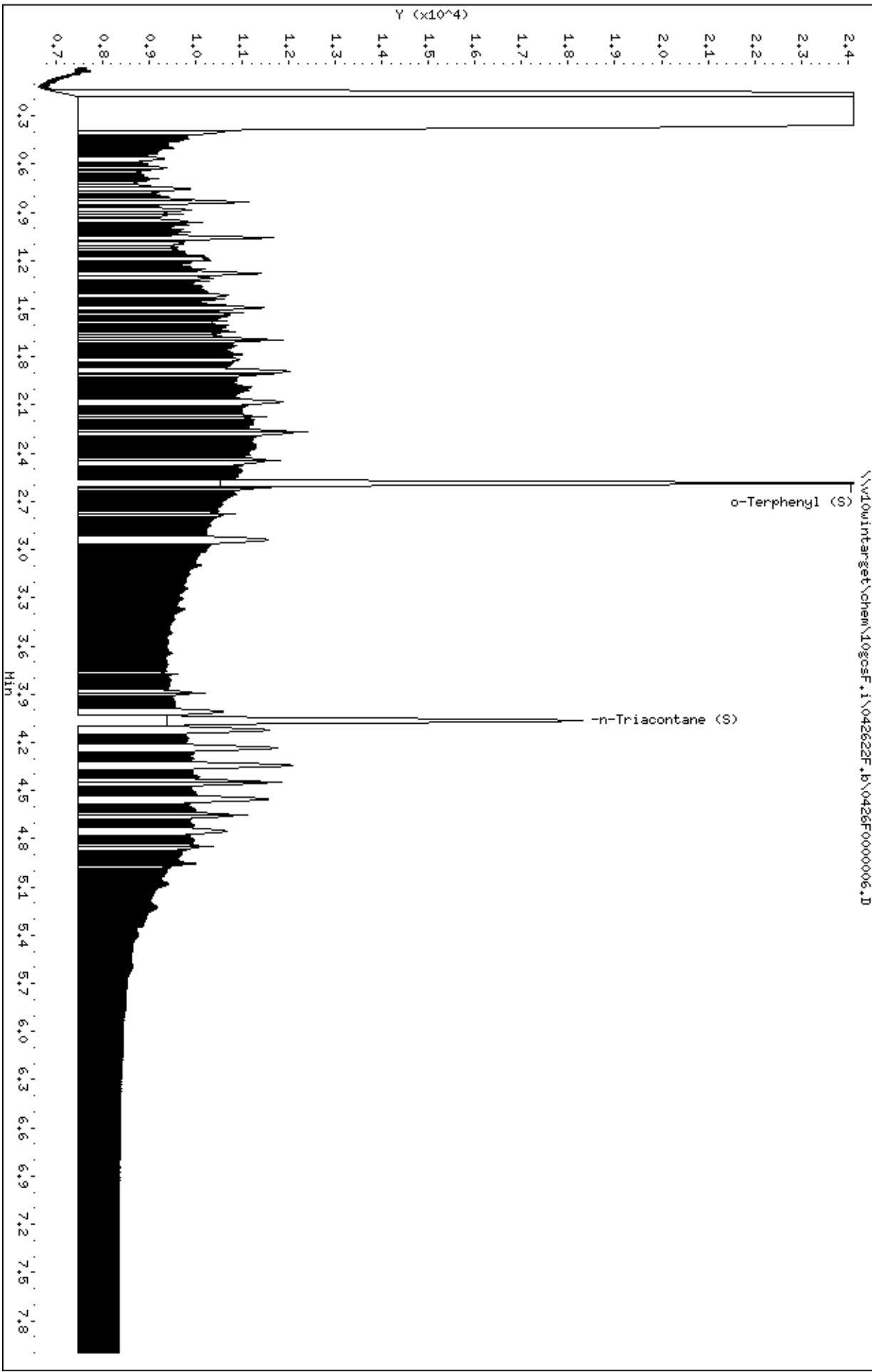
Sample Info: DMO-CAL3,362371:2

Instrument: 10gocsf.1

Operator: EB3

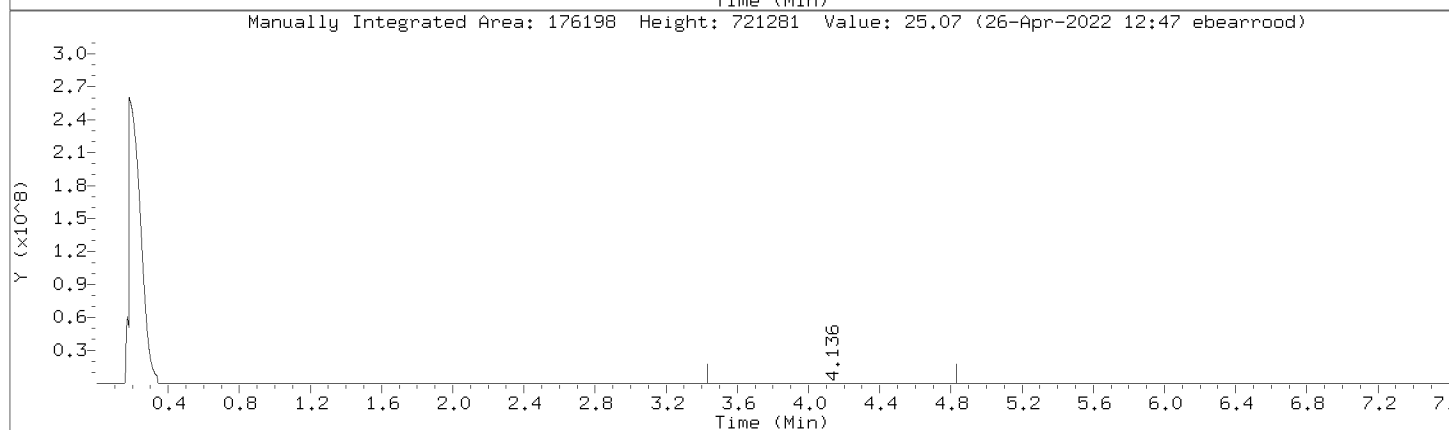
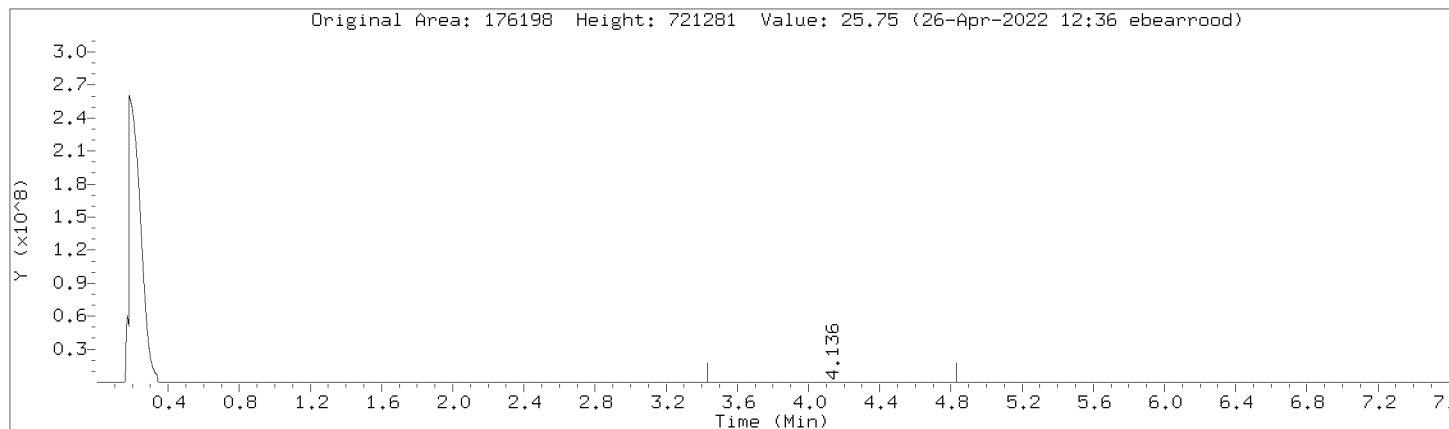
Column diameter: 0.32

Column phase: DB-5-MS21250010



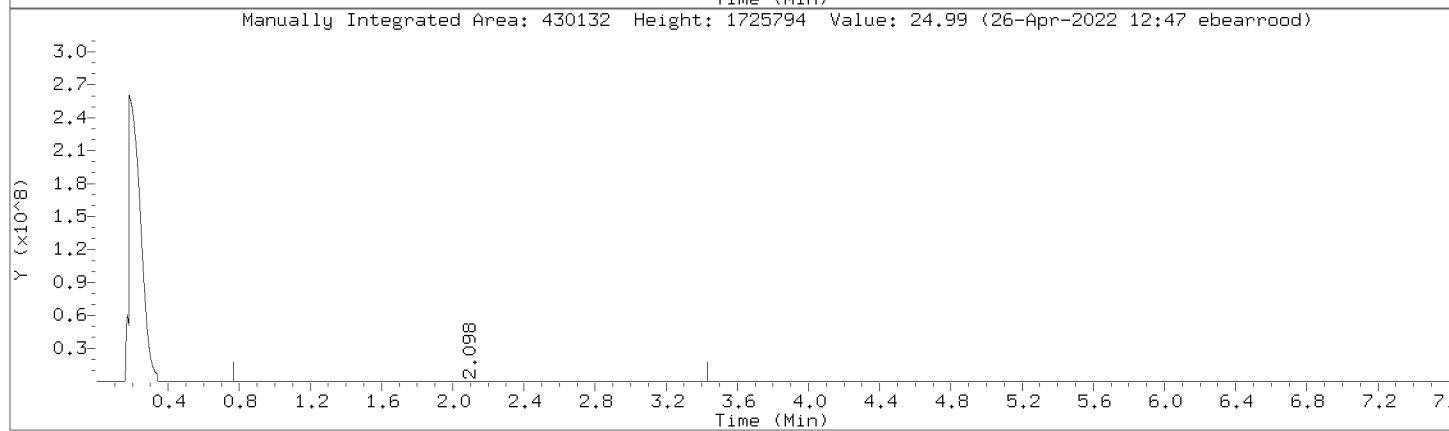
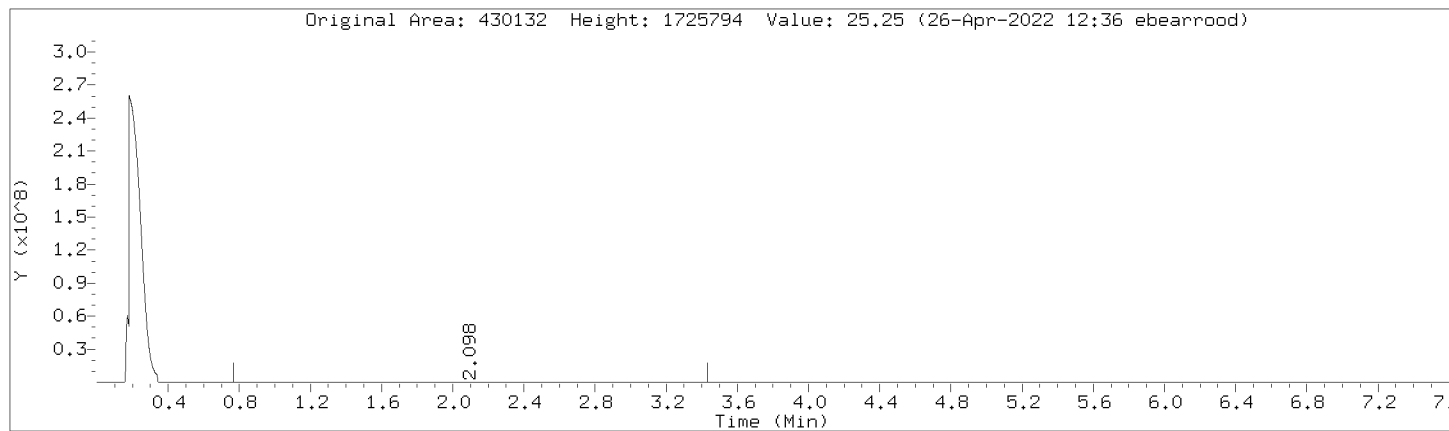
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



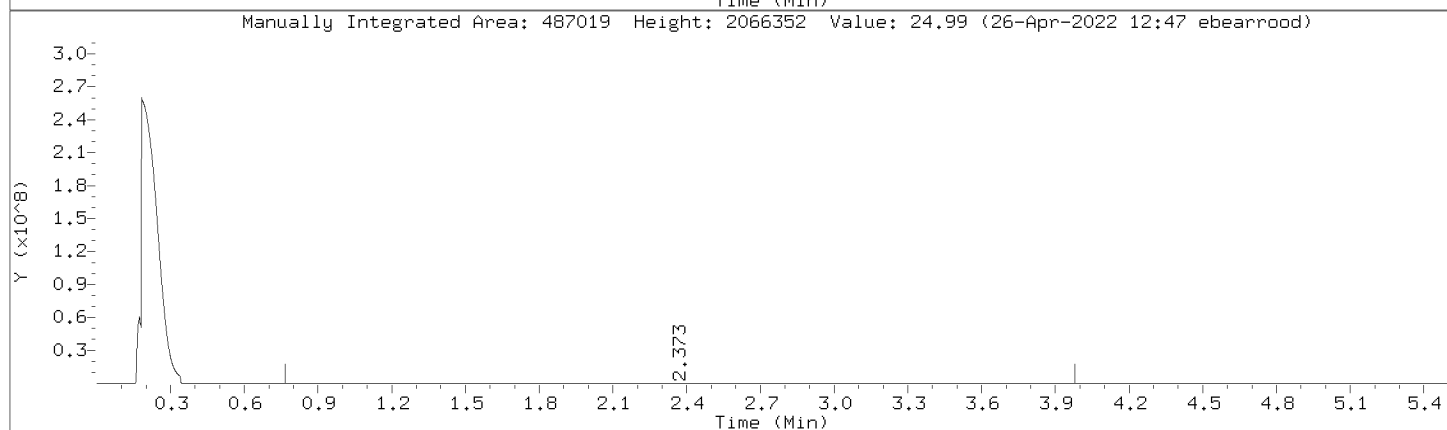
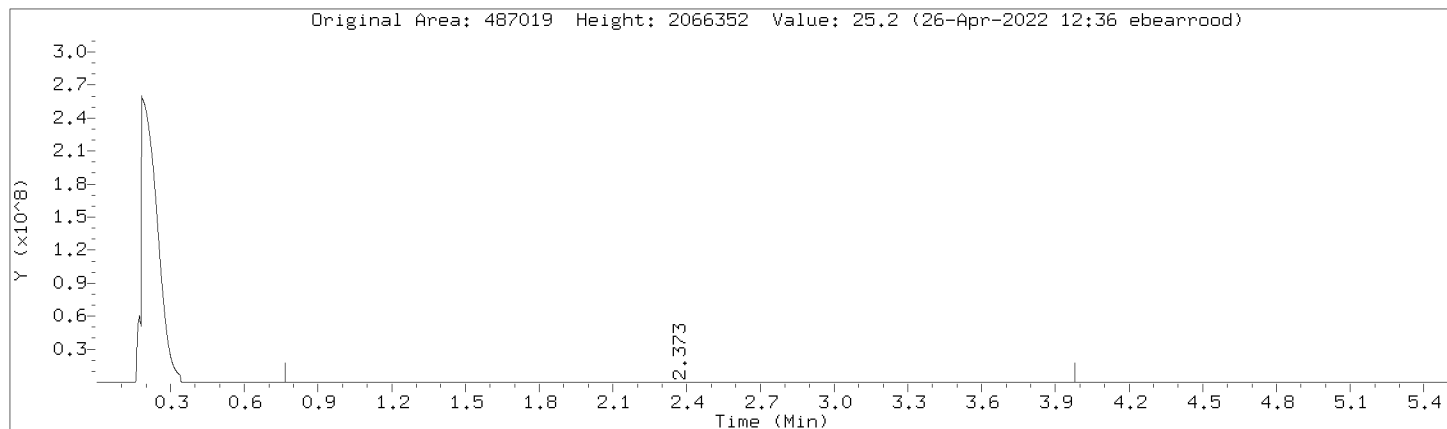
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Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



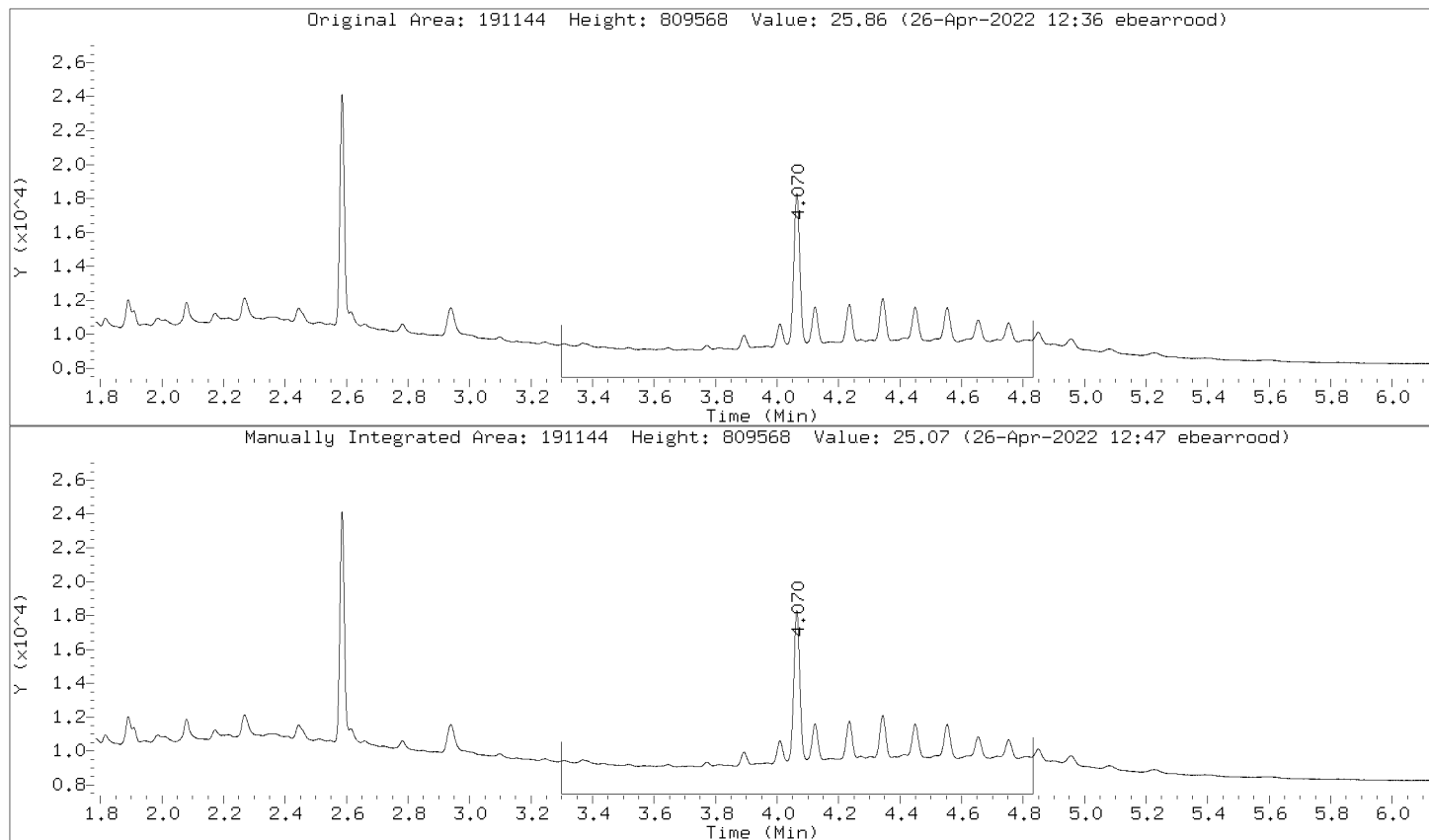
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Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

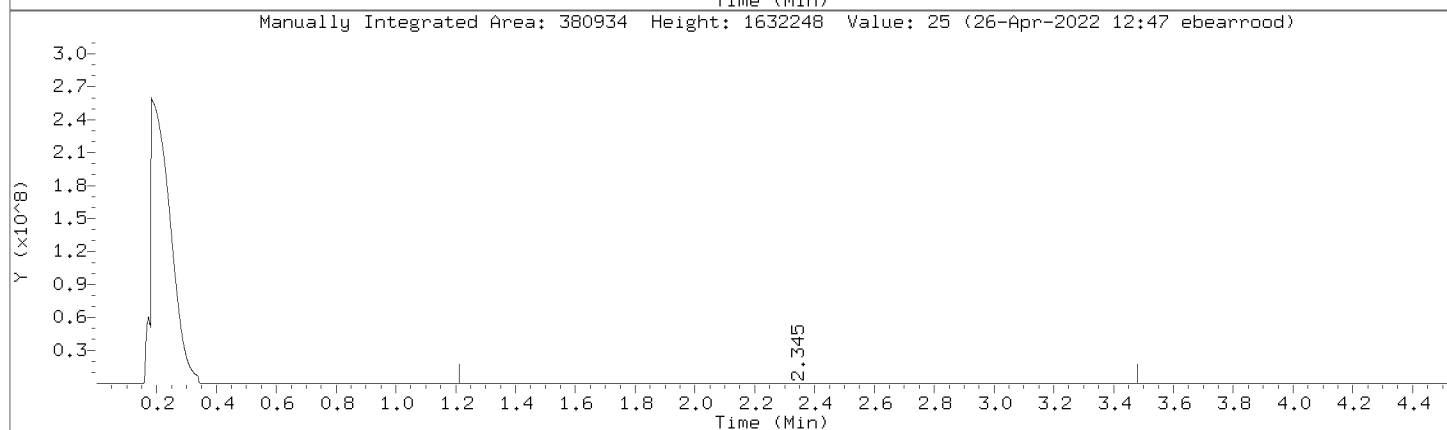
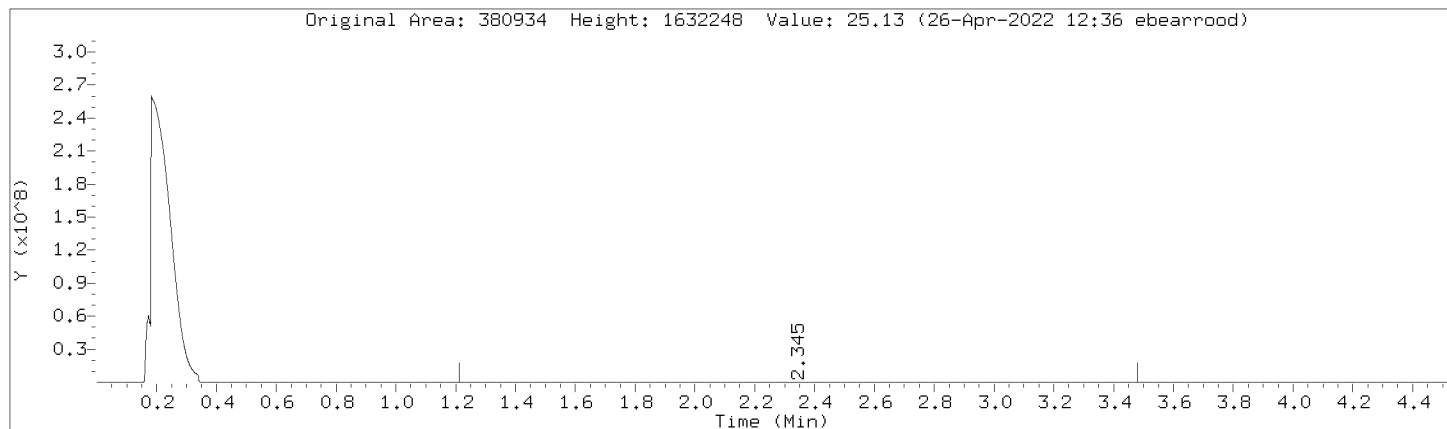
Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:





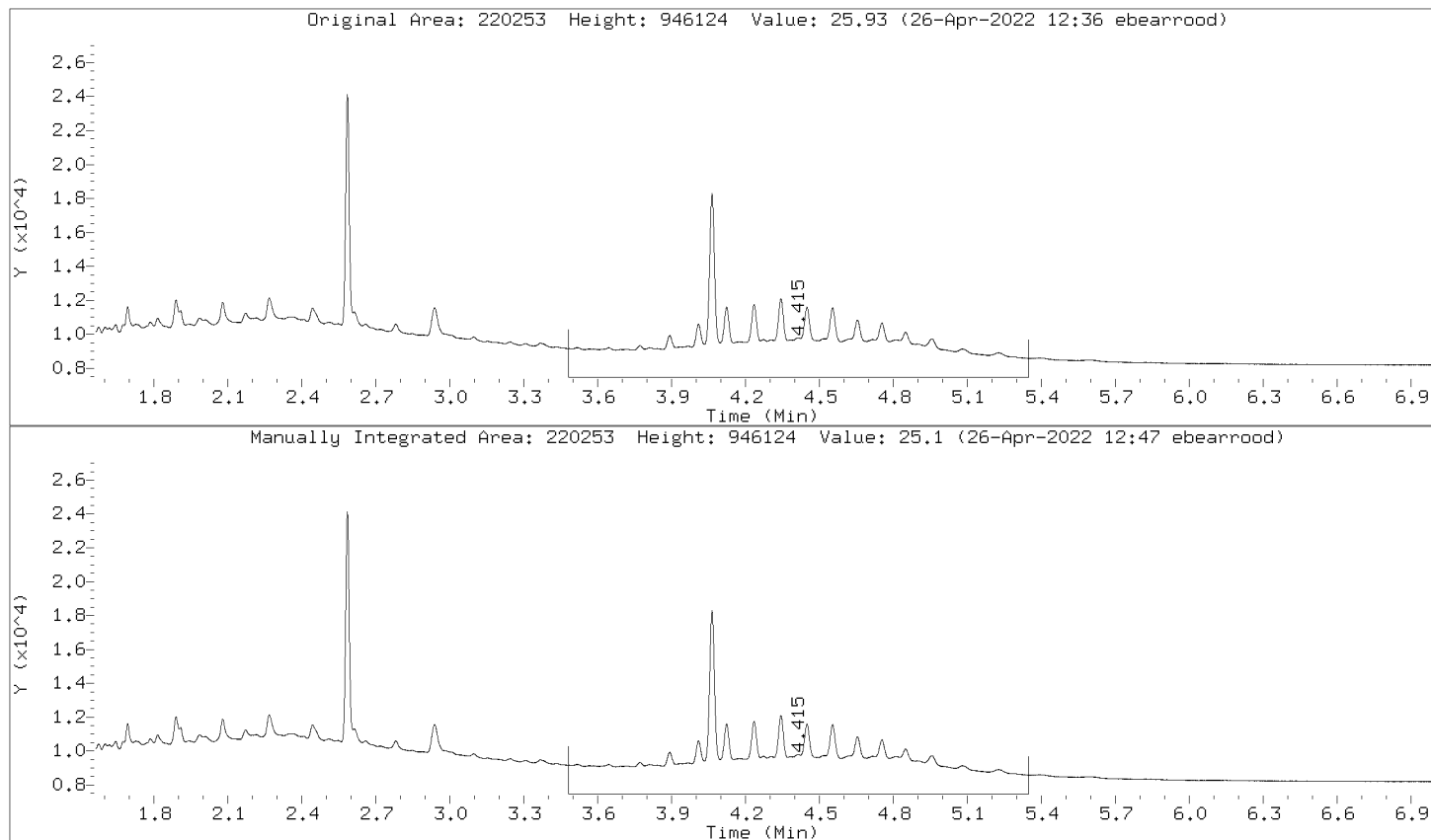
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



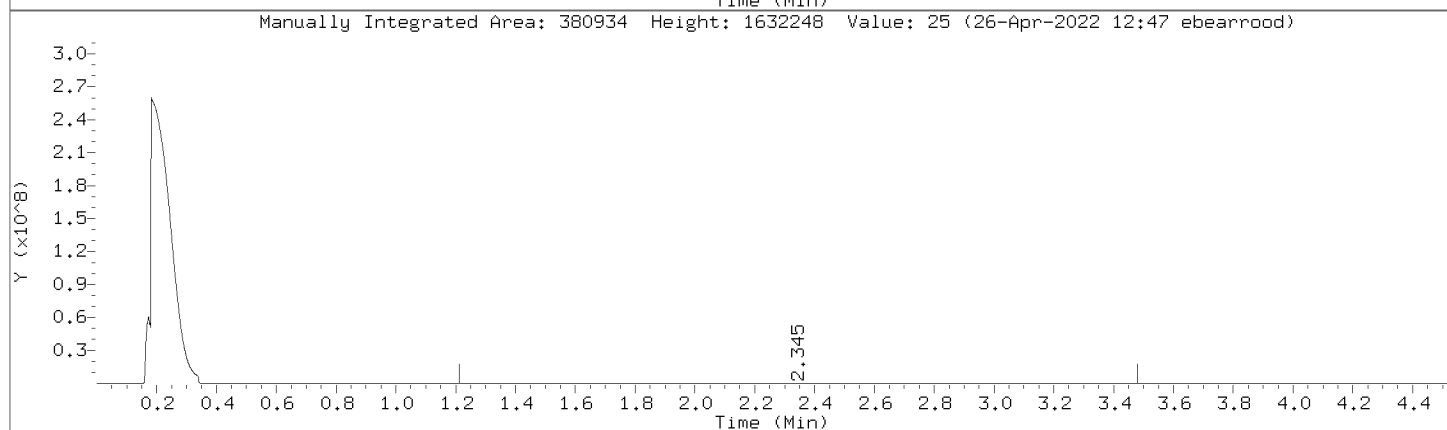
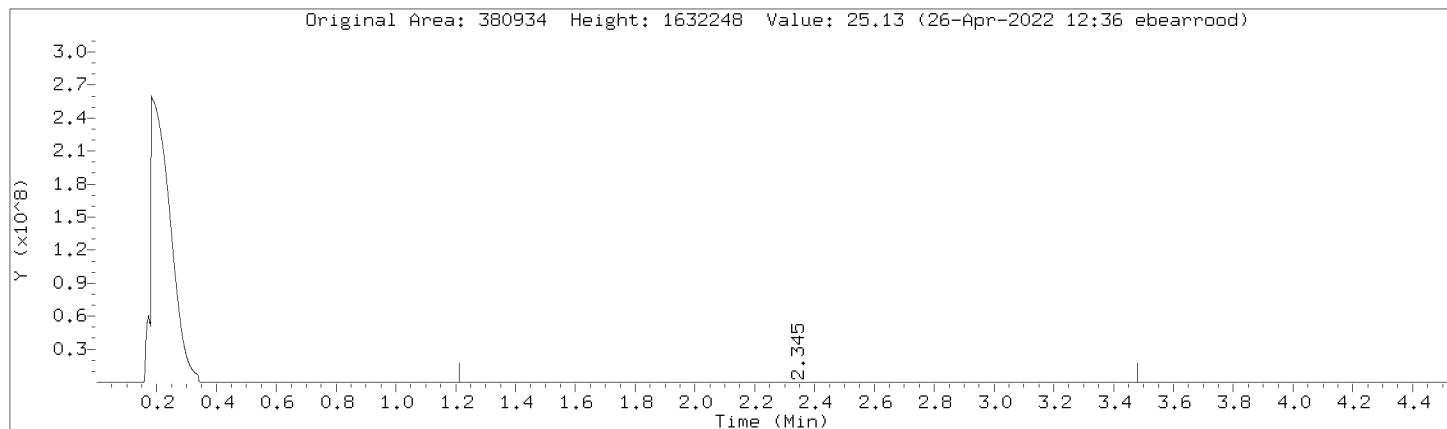
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



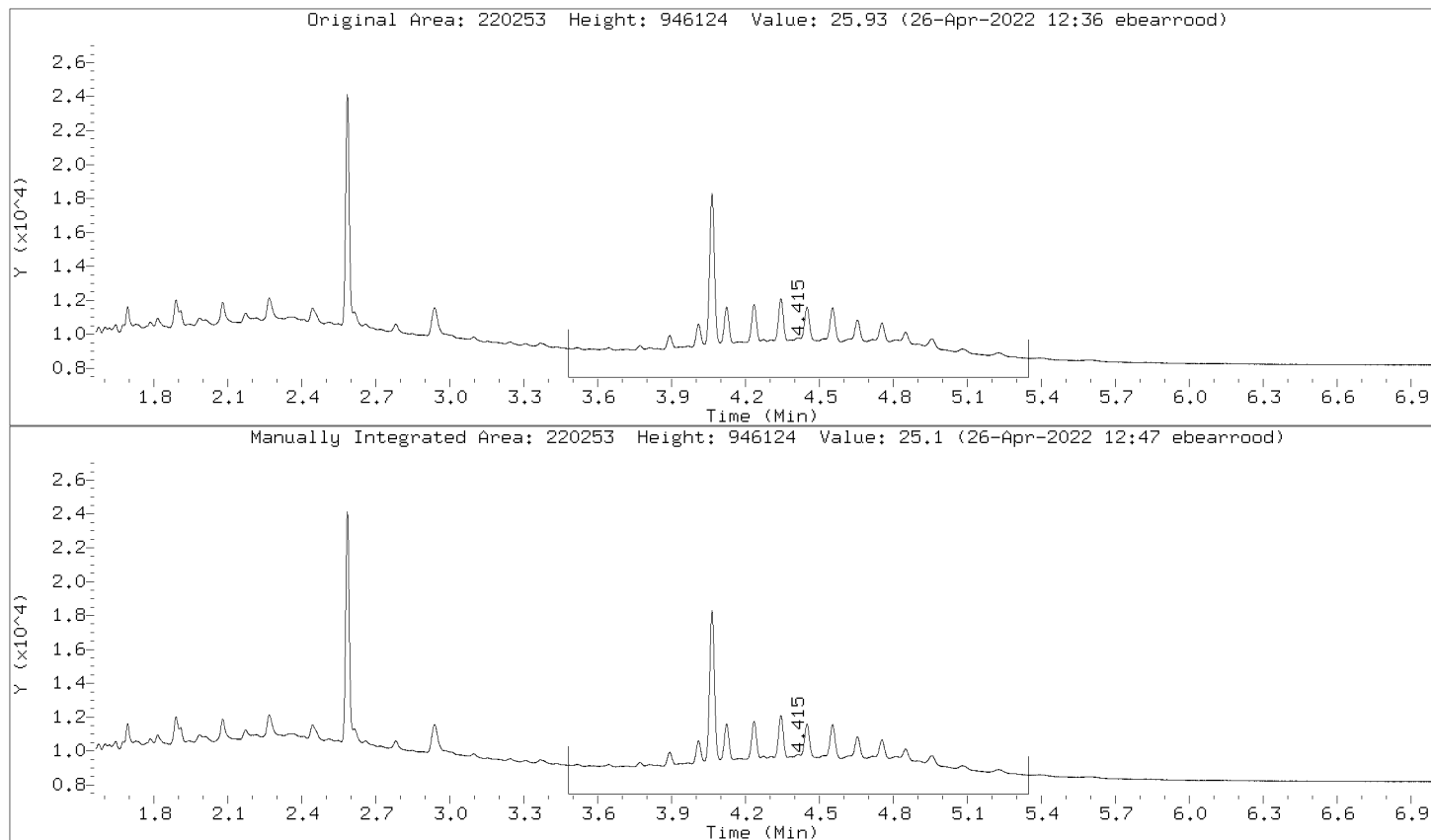
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Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



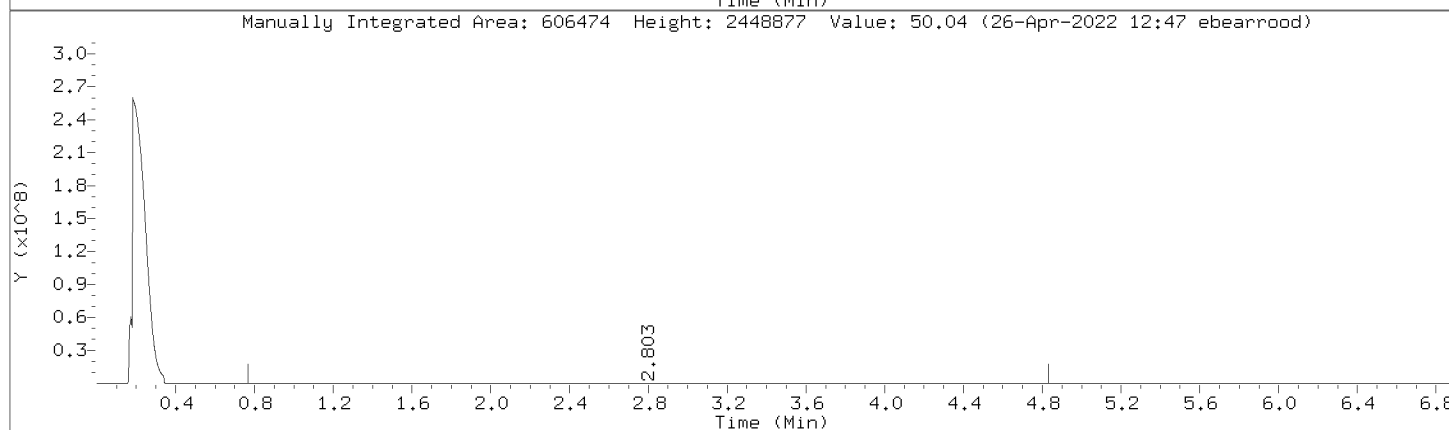
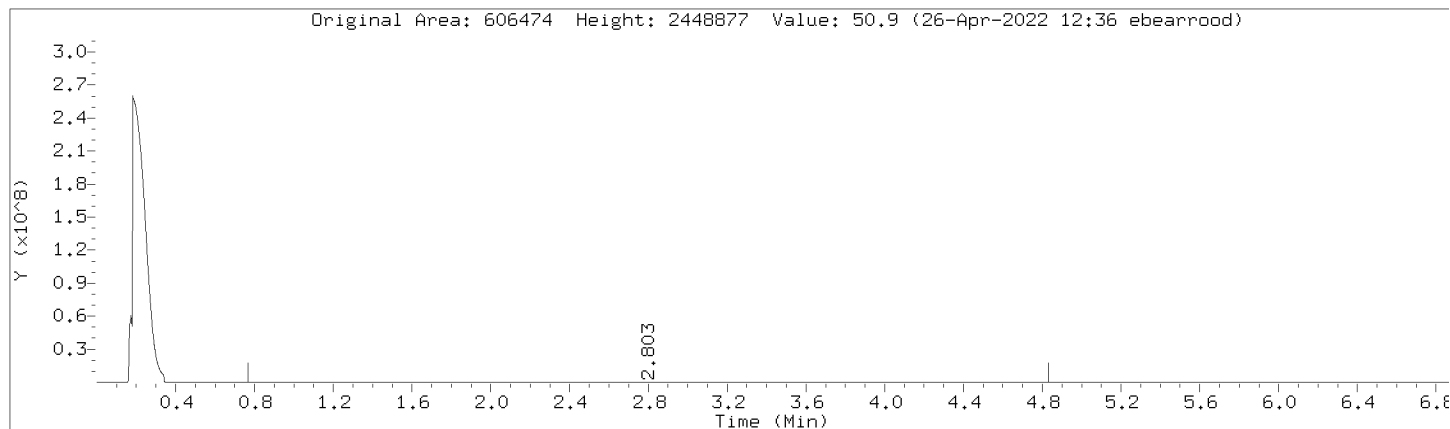
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



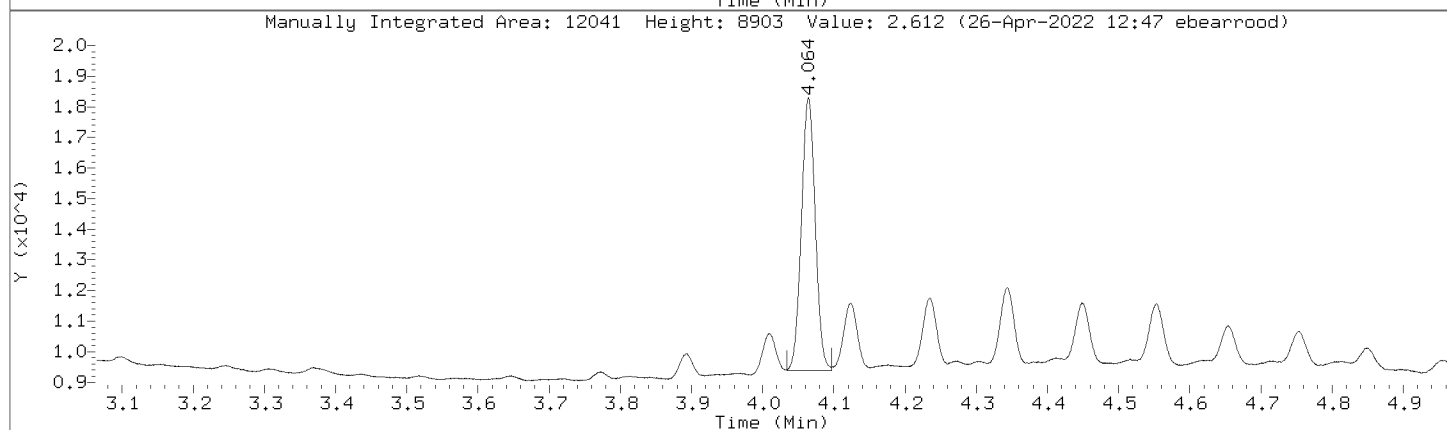
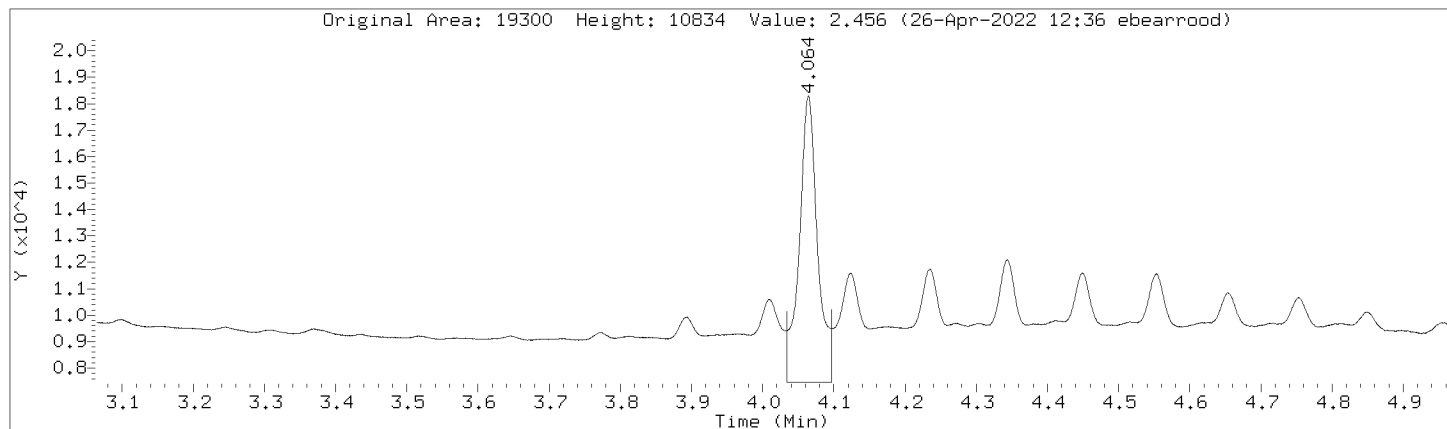
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



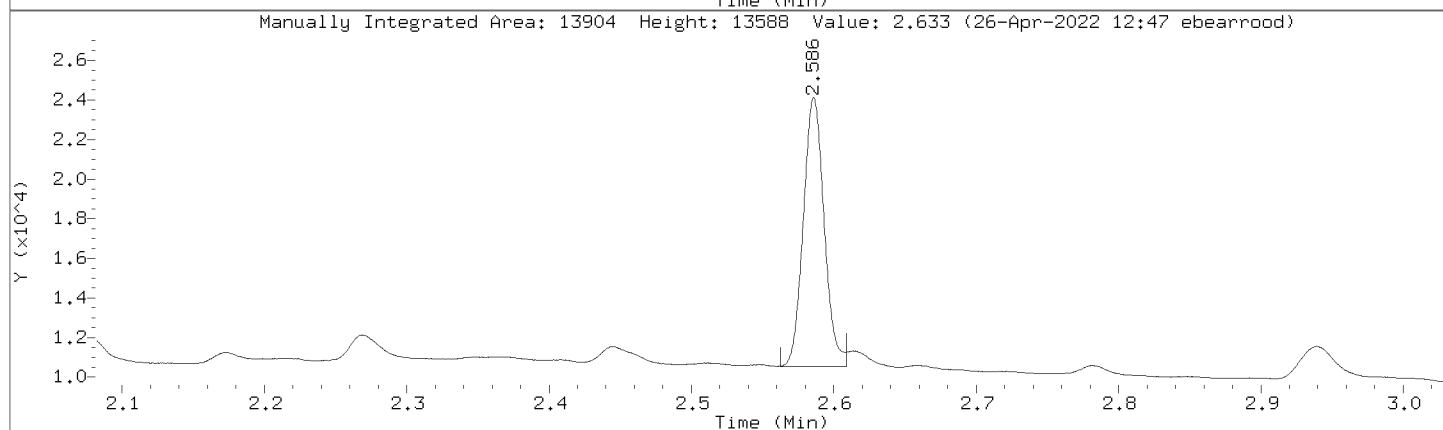
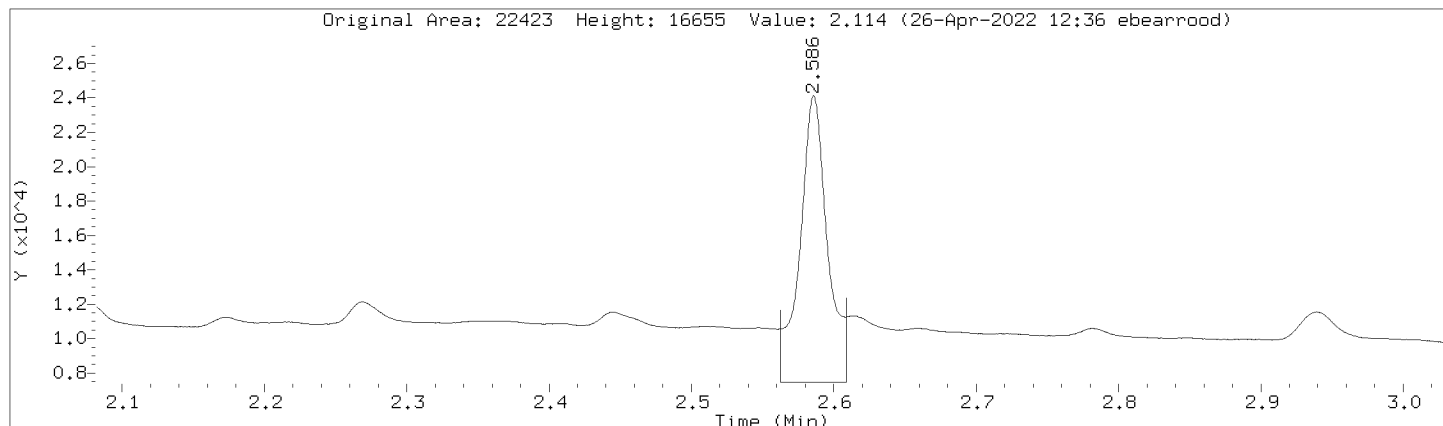
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
Injection Date: 26-APR-2022 08:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000006.D  
 Injection Date: 26-APR-2022 08:18  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL3,362371:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	176198	176198
DRO by AK 102	430132	430132
TPH-DRO (C10-C28)	487019	487019
Motor Oil Range (C24-C36)	191144	191144
Diesel Fuel Range	380934	380934
Motor Oil Range	220253	220253
Diesel Fuel Range SG	380934	380934
Motor Oil Range SG	220253	220253
C10-C36	606474	606474
n-Triacontane (S)	19300	12041
o-Terphenyl (S)	22423	13904

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000007.D  
 Lab Smp Id: DMO-CAL4,362372:2 Client Smp ID: DMO-CAL4,362372:2  
 Inj Date : 26-APR-2022 08:29  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal4,362372:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 6 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		568966 50.0000	50.0	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.587	2.582 0.005		27800 5.00000	5.20	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.063	4.064 -0.001		24127 5.00000	5.17	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		251014 50.0000	49.5	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		645591 50.0000	50.0	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		272245 50.0000	49.7	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		819980 100.000	99.7	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		497843 50.0000	50.0	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		497843 50.0000	50.0	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		310788 50.0000	49.5	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		310788 50.0000	49.5	(M) RNG
-----					



QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 08:29

Client ID: DMO-CAL4,362372:2

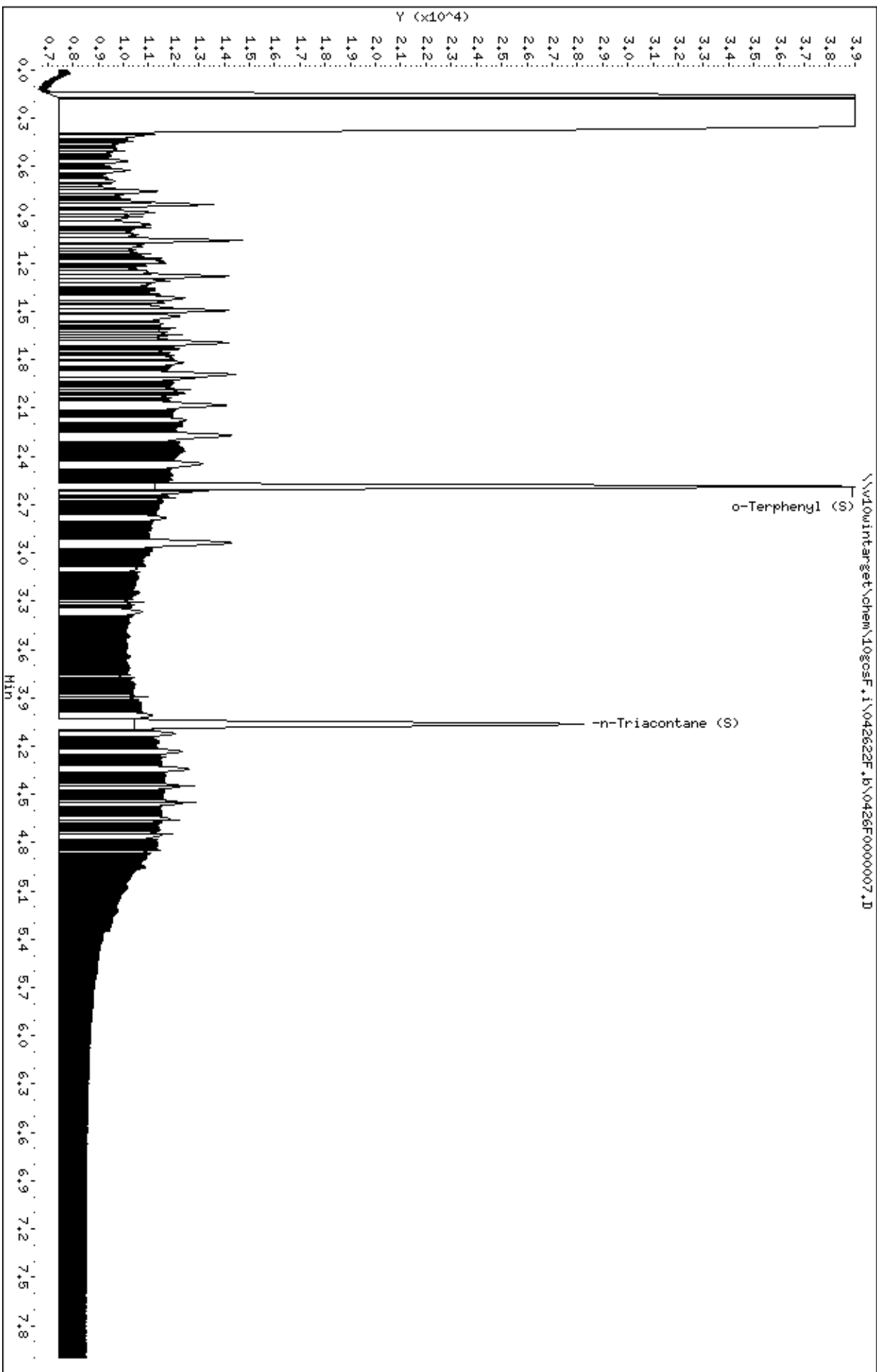
Sample Info: DMO-CAL4,362372:2

Instrument: 10gocsf.1

Operator: EB3

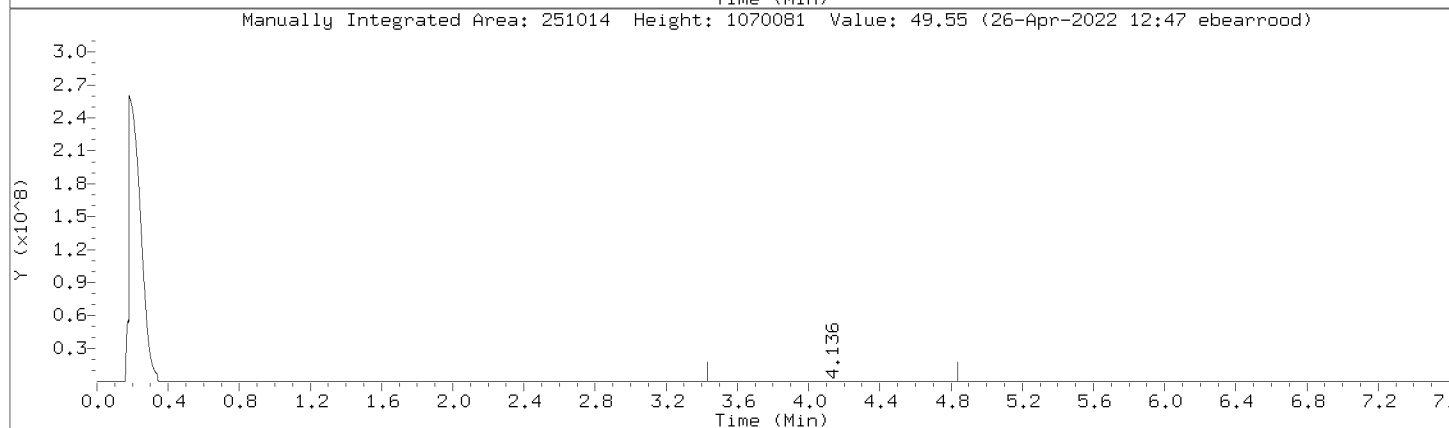
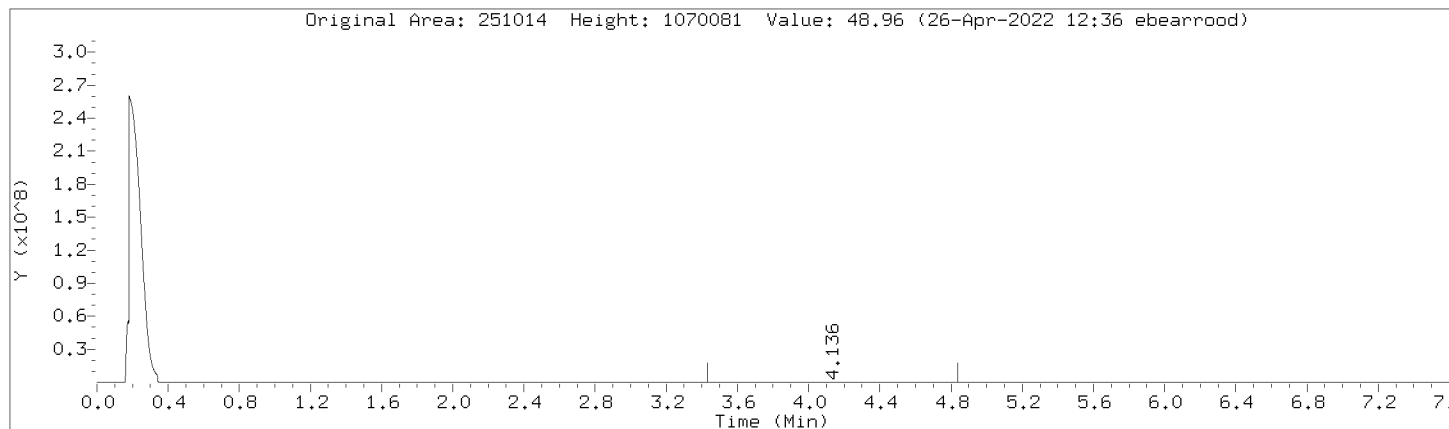
Column diameter: 0.32

Column phase: DB-5-US21250010



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000007.D  
Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000007.D

Injection Date: 26-APR-2022 08:29

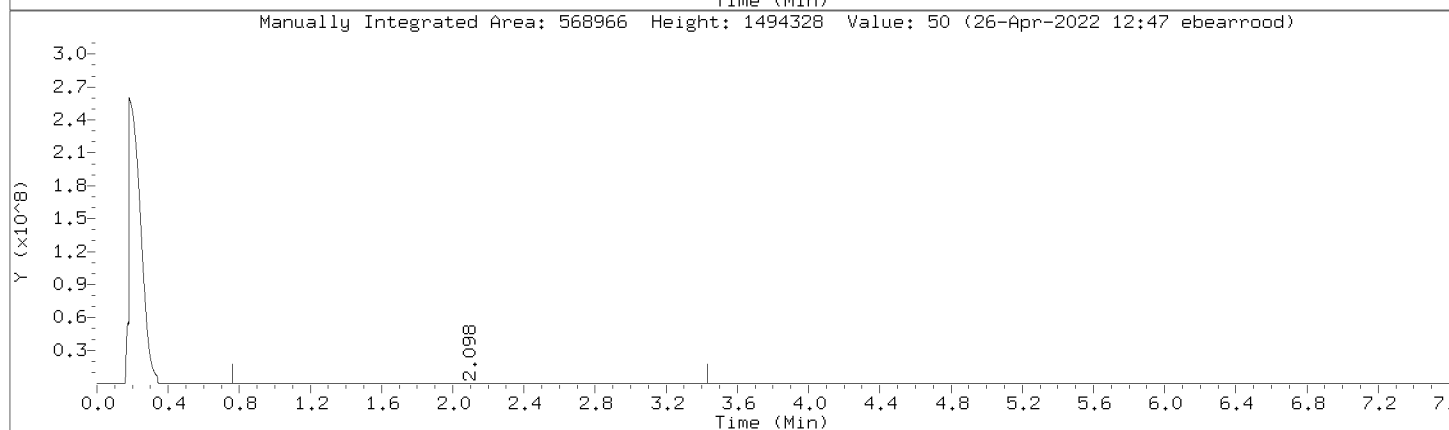
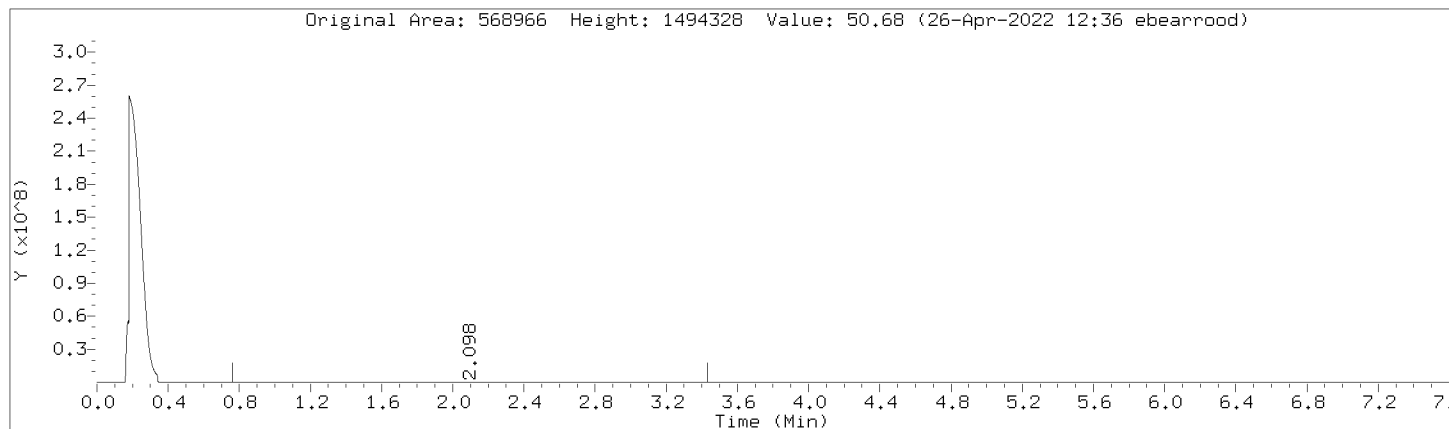
Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL4,362372:2

Compound: DRO by AK 102

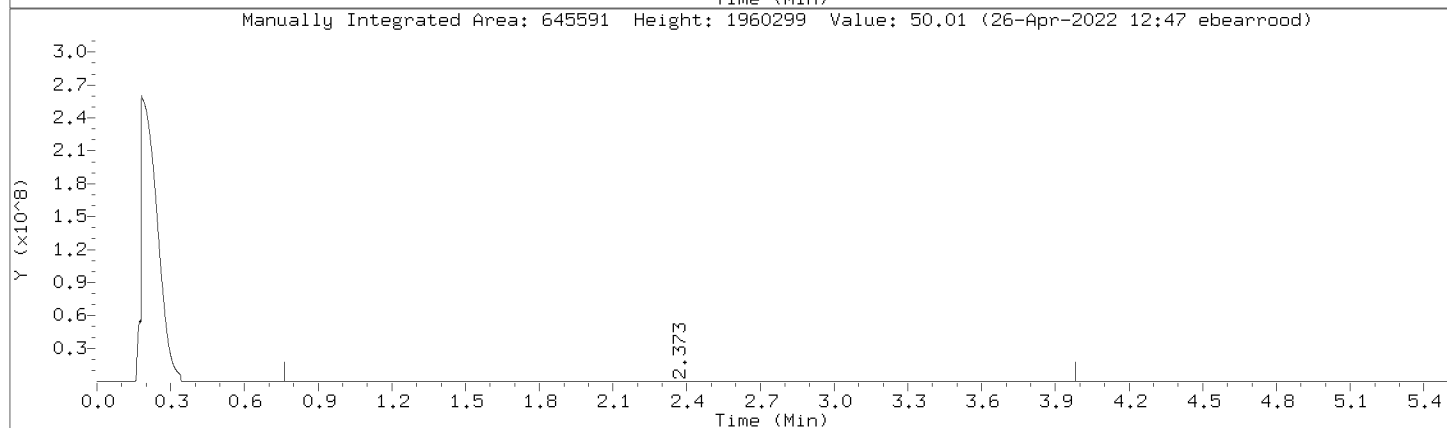
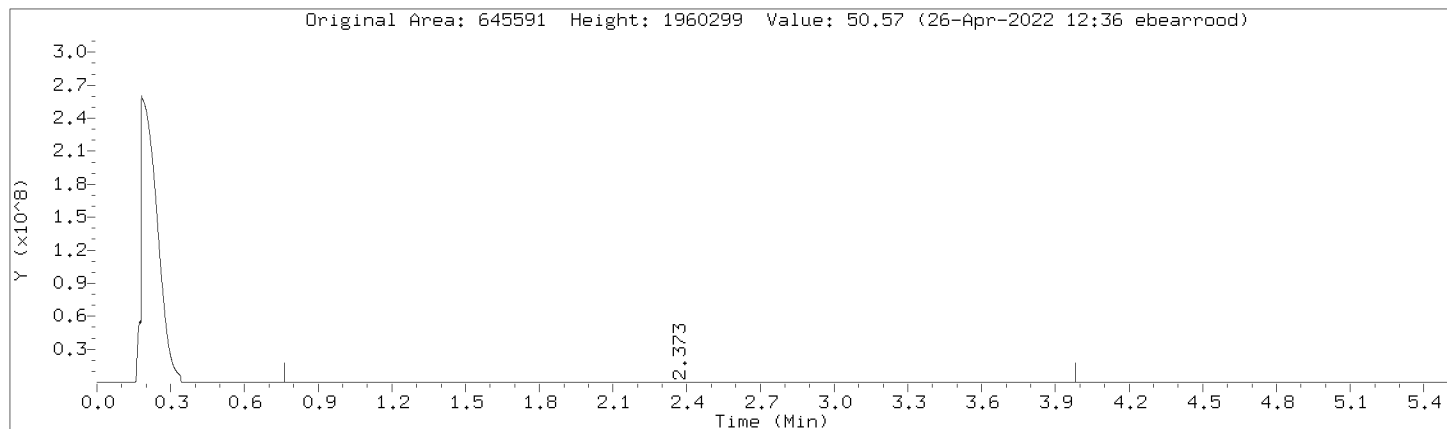
Review Code: RNG

CAS Number:



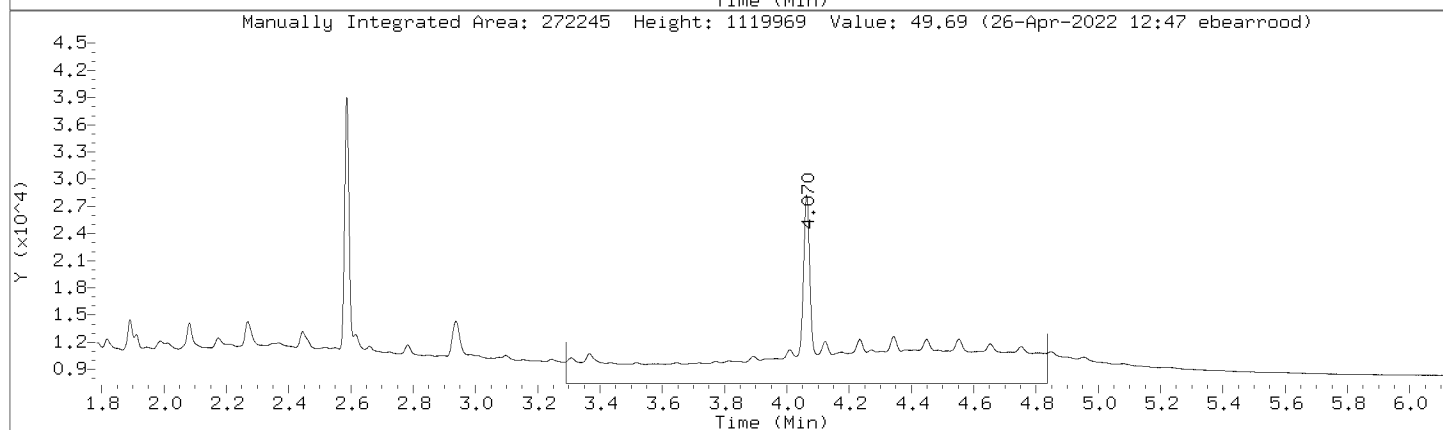
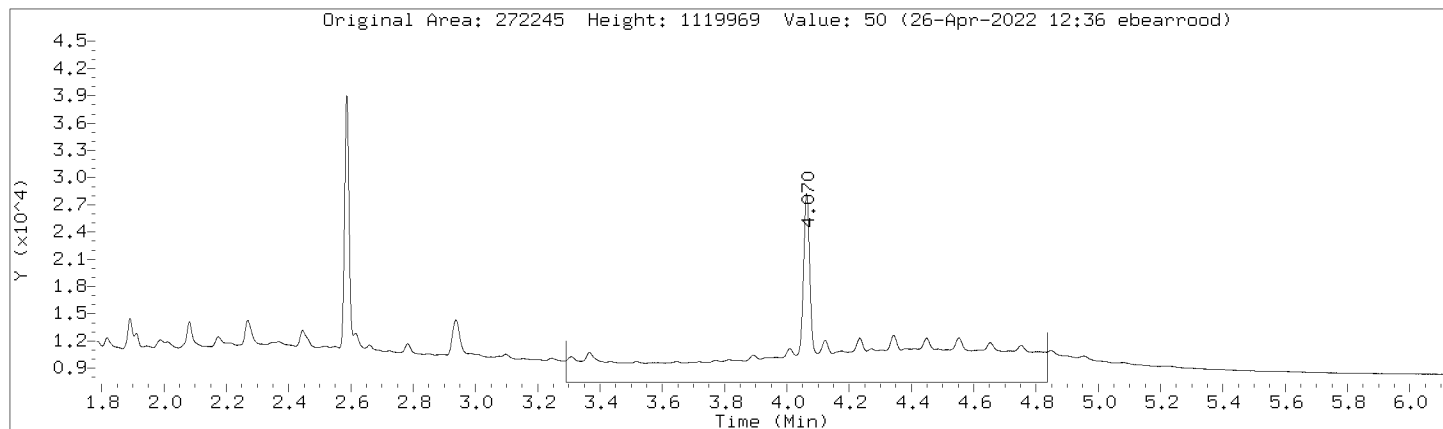
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Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



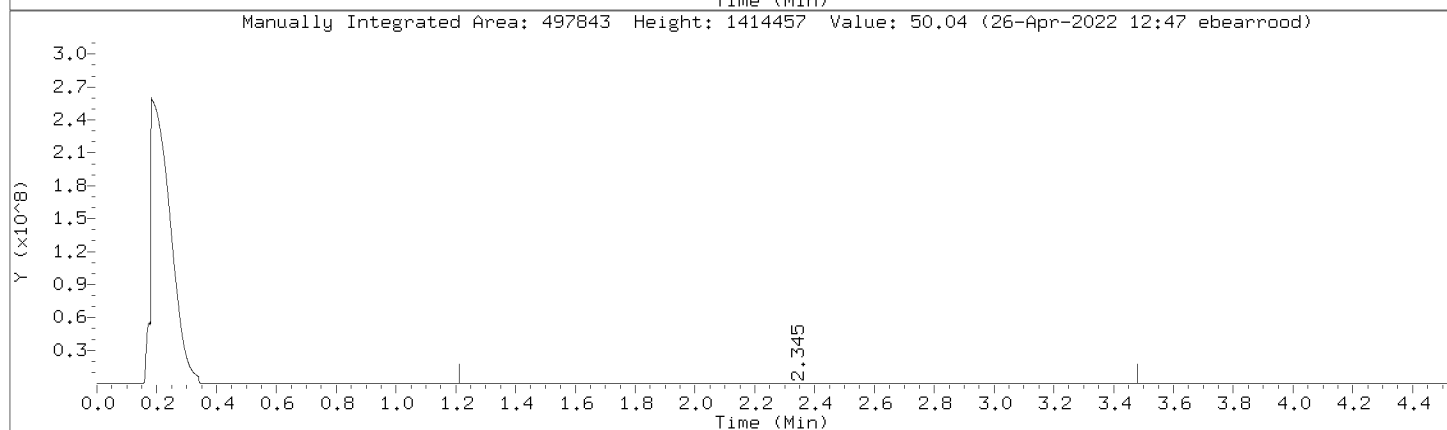
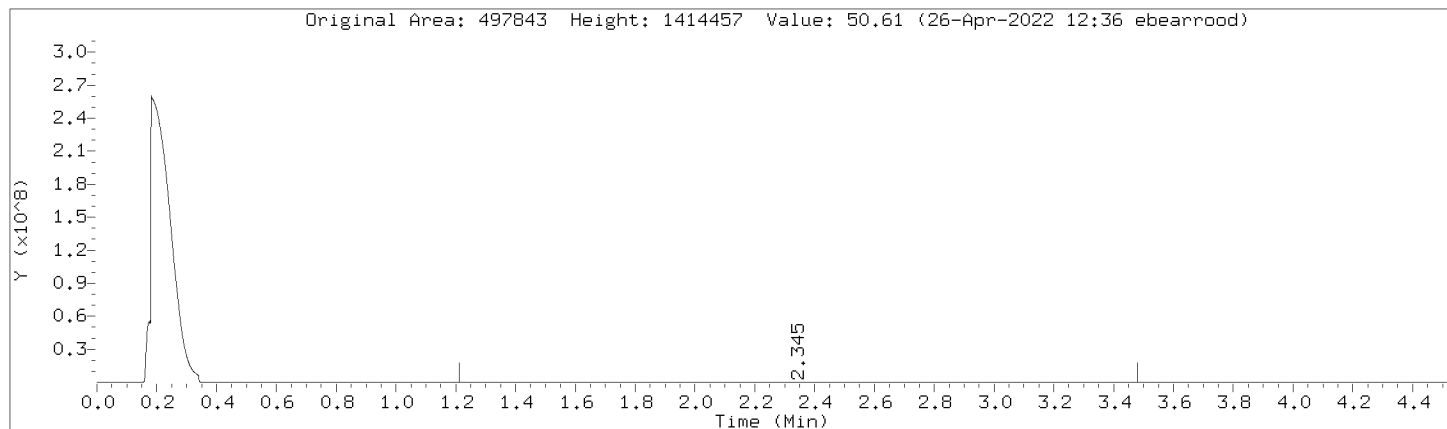
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Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



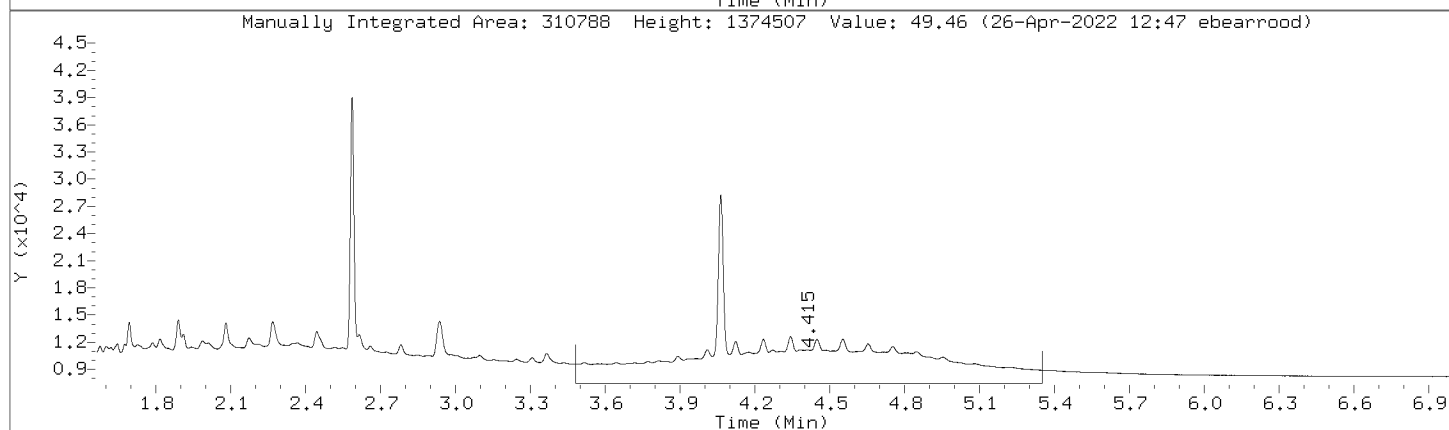
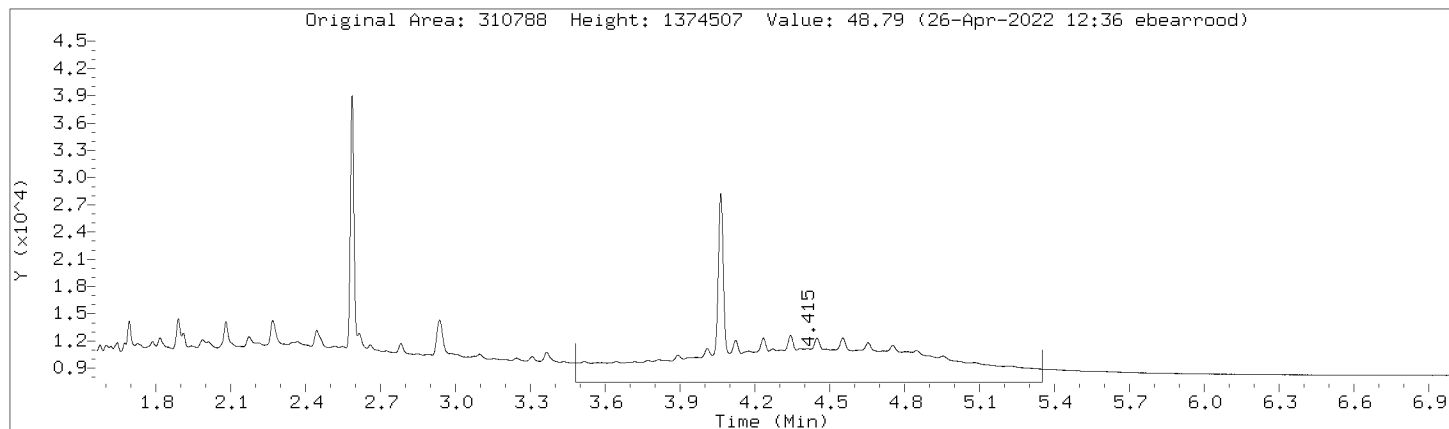
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Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000007.D  
Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

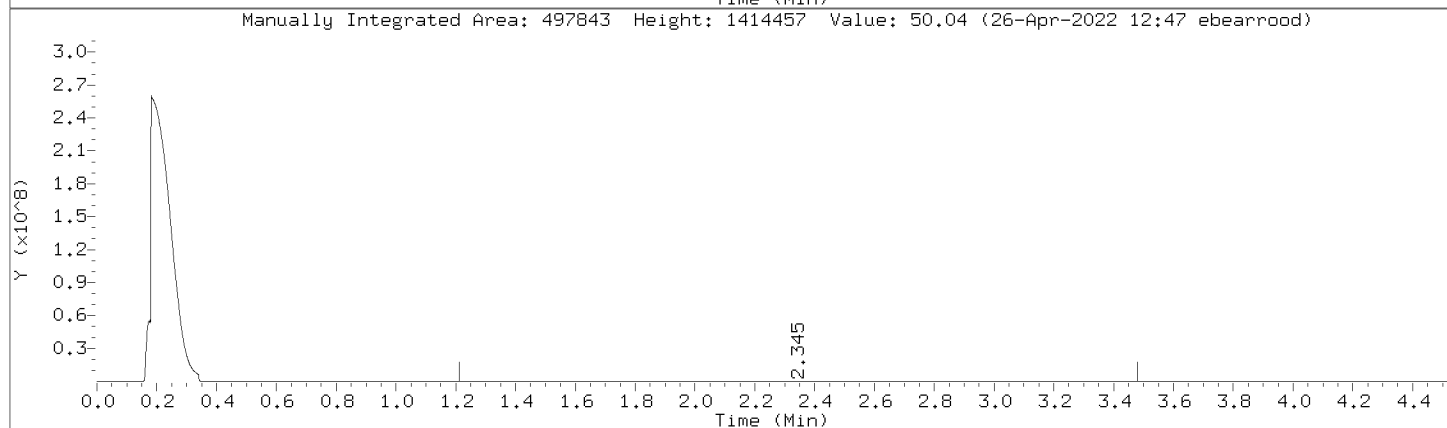
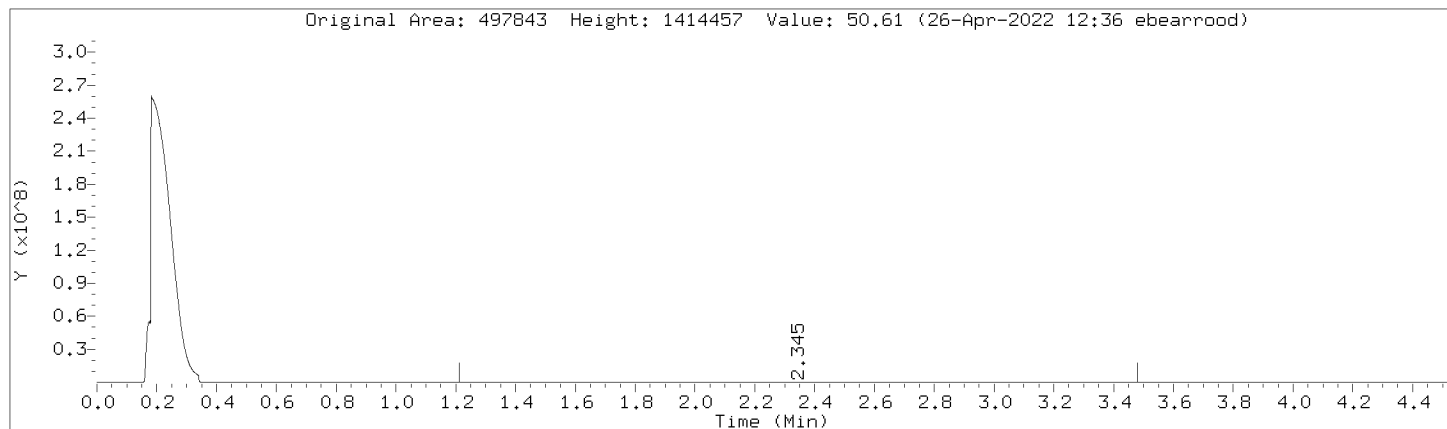
Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





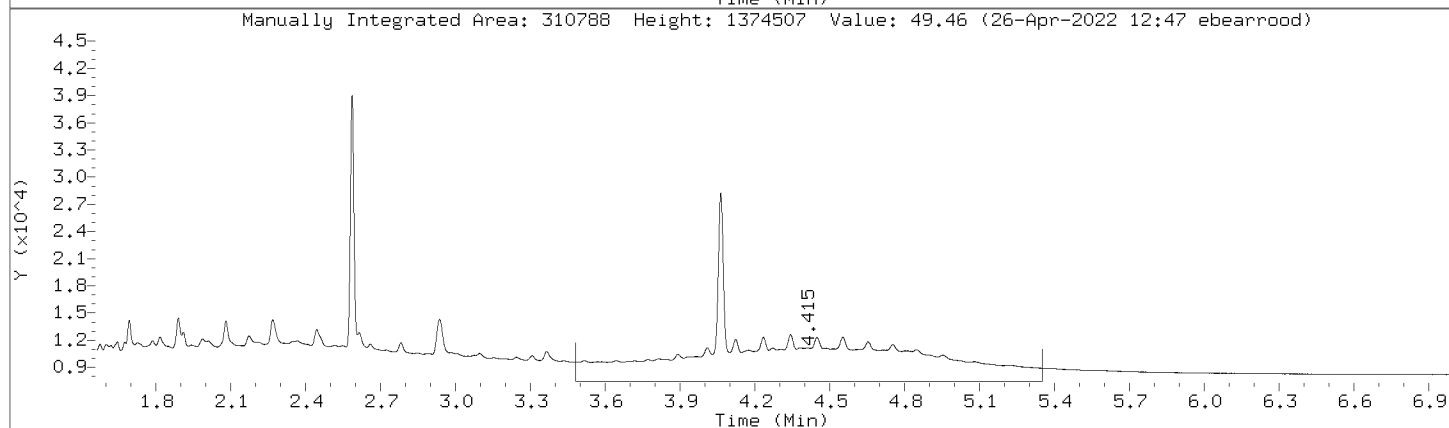
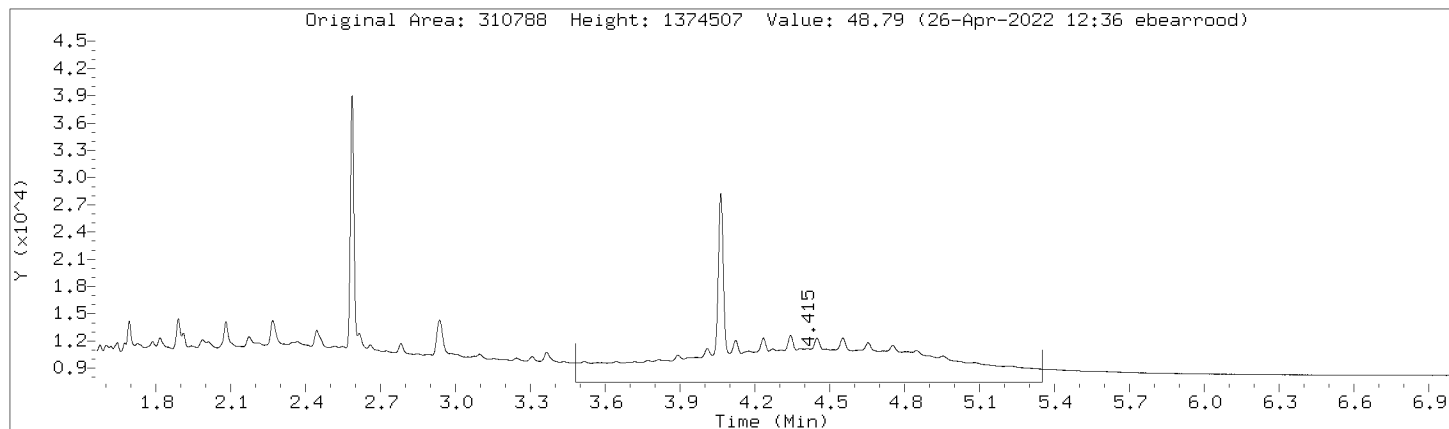
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Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



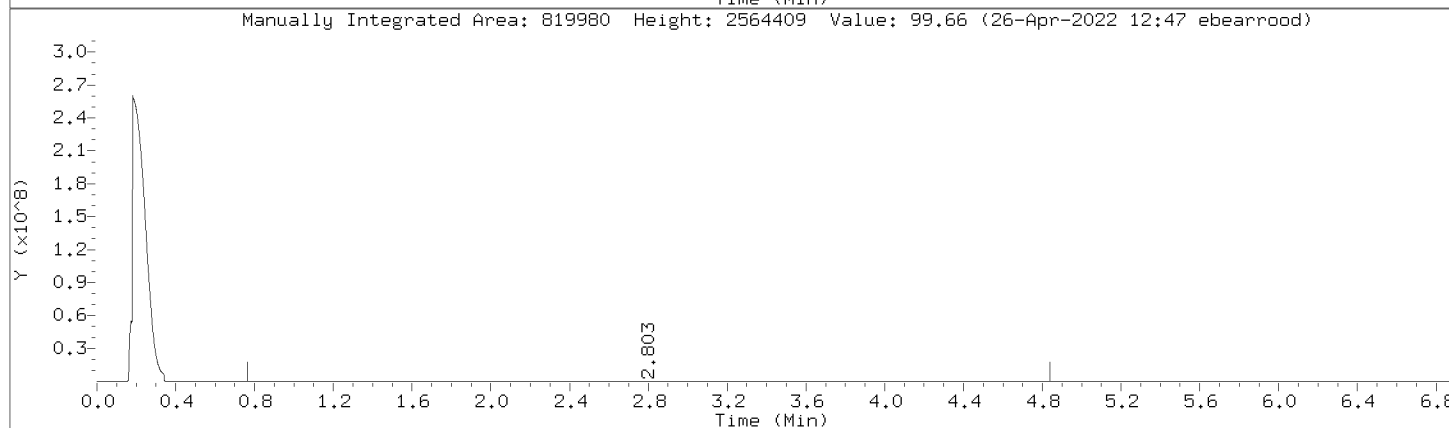
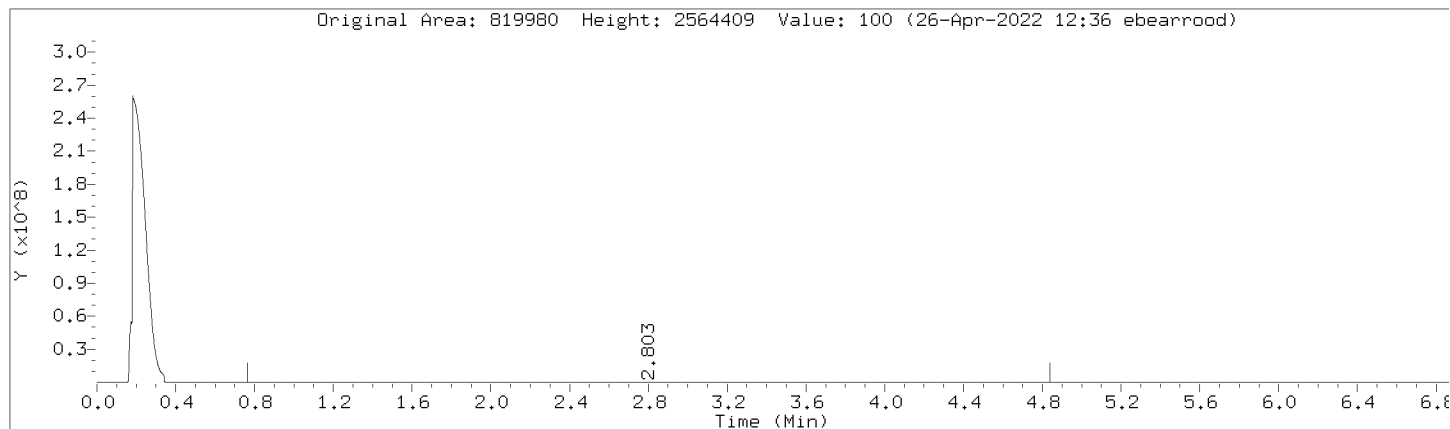
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Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



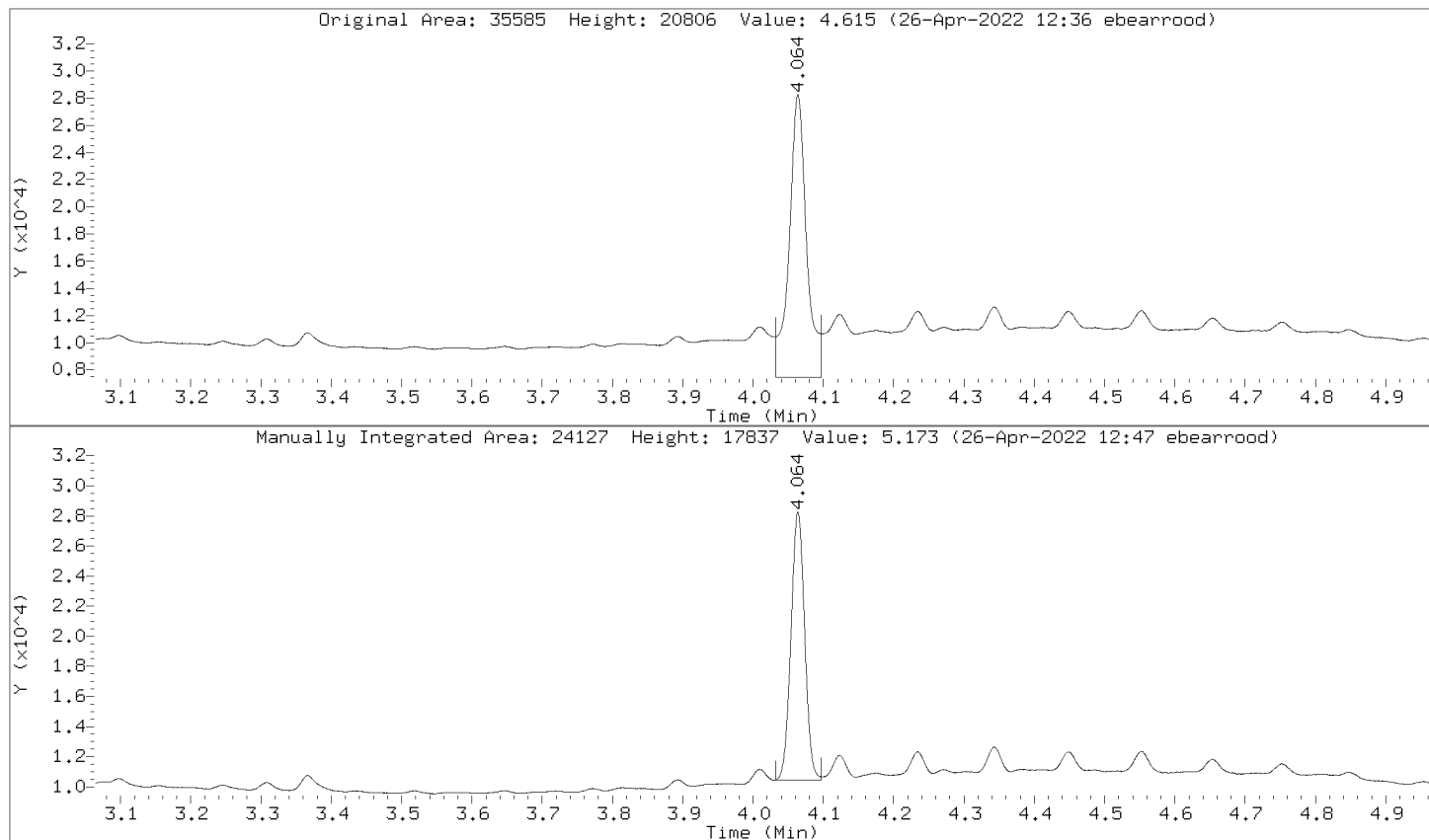
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Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



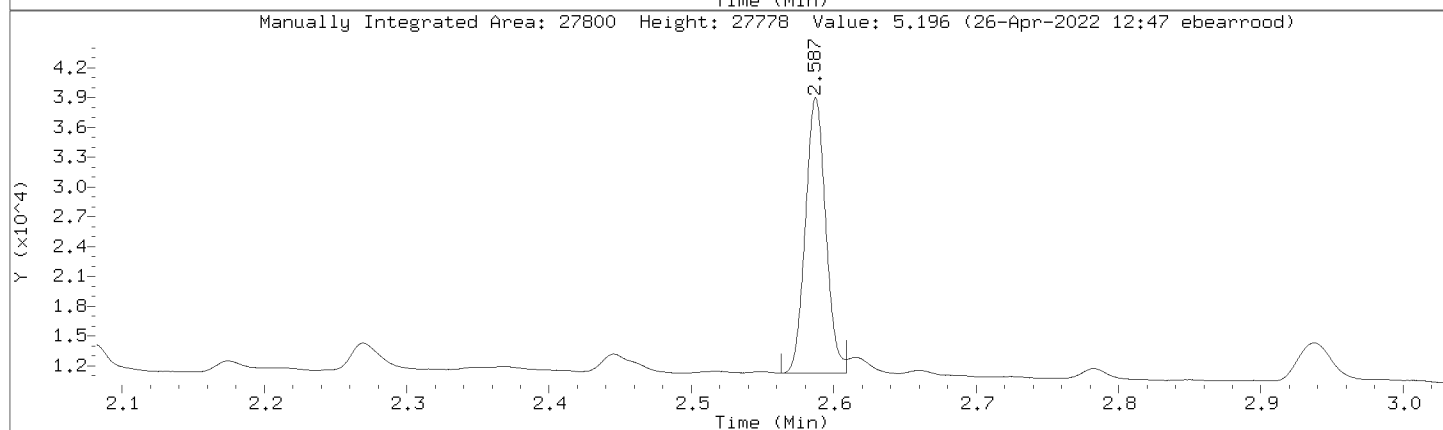
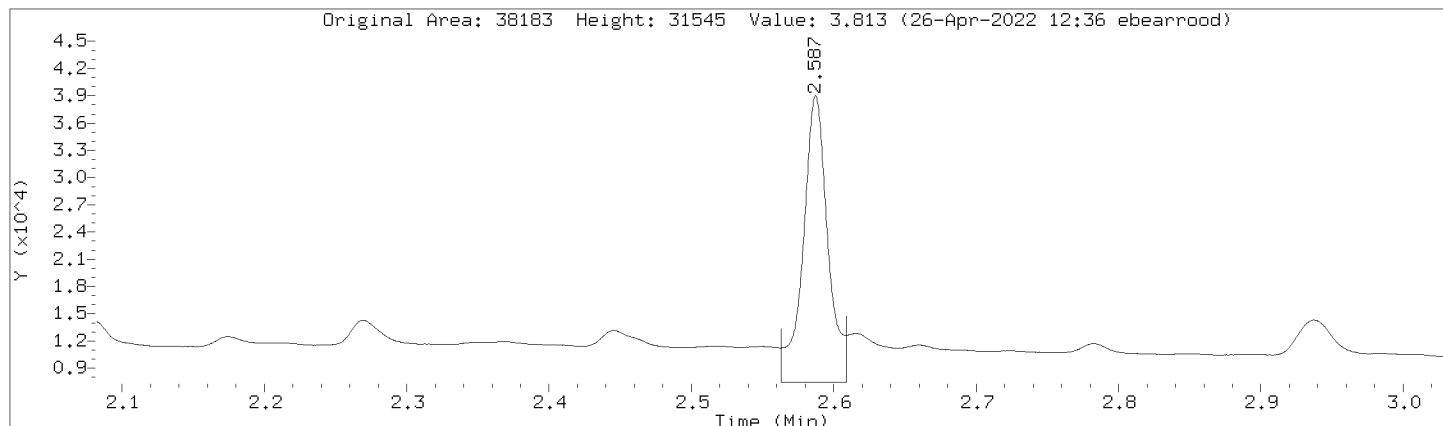
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000007.D  
Injection Date: 26-APR-2022 08:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000007.D  
 Injection Date: 26-APR-2022 08:29  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL4,362372:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	251014	251014
DRO by AK 102	568966	568966
TPH-DRO (C10-C28)	645591	645591
Motor Oil Range (C24-C36)	272245	272245
Diesel Fuel Range	497843	497843
Motor Oil Range	310788	310788
Diesel Fuel Range SG	497843	497843
Motor Oil Range SG	310788	310788
C10-C36	819980	819980
n-Triacontane (S)	35585	24127
o-Terphenyl (S)	38183	27800

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000008.D  
 Lab Smp Id: DMO-CAL5,362373:2 Client Smp ID: DMO-CAL5,362373:2  
 Inj Date : 26-APR-2022 08:40  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal5,362373:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 7 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		828225 100.000	99.5	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.586	2.582 0.004		55213 10.0000	10.2	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.064	4.064 0.000		48062 10.0000	10.2	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		406861 100.000	99.7	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		941615 100.000	99.5	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		431645 100.000	99.4	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		1235509 200.000	199	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		715118 100.000	99.5	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		715118 100.000	99.5	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		504066 100.000	99.8	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		504066 100.000	99.8	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 08:40

Client ID: DM0-CAL5.362373;2

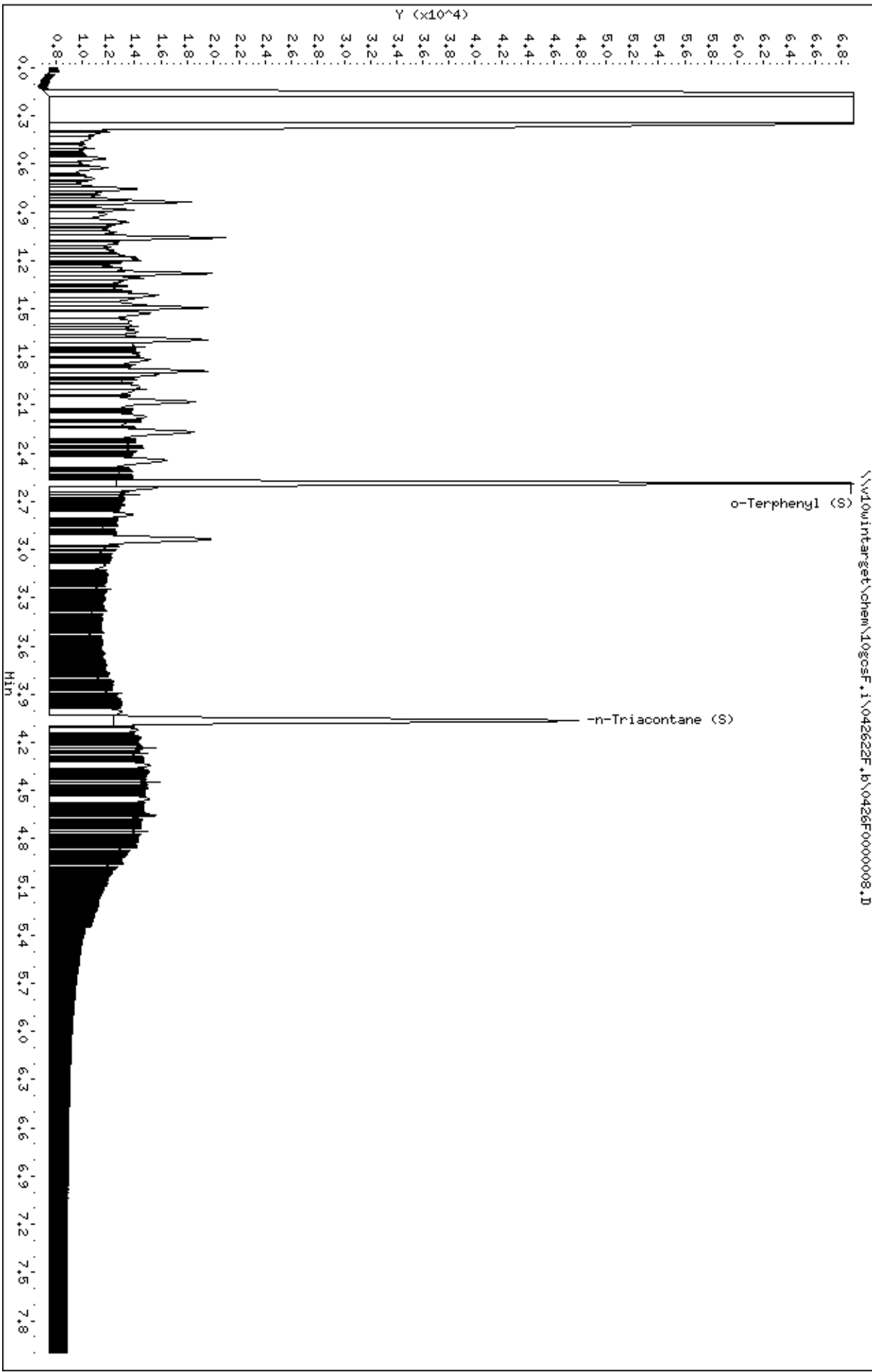
Sample Info: DM0-CAL5.362373;2

Instrument: 10gocsf.1

Operator: EB3

Column diameter: 0.32

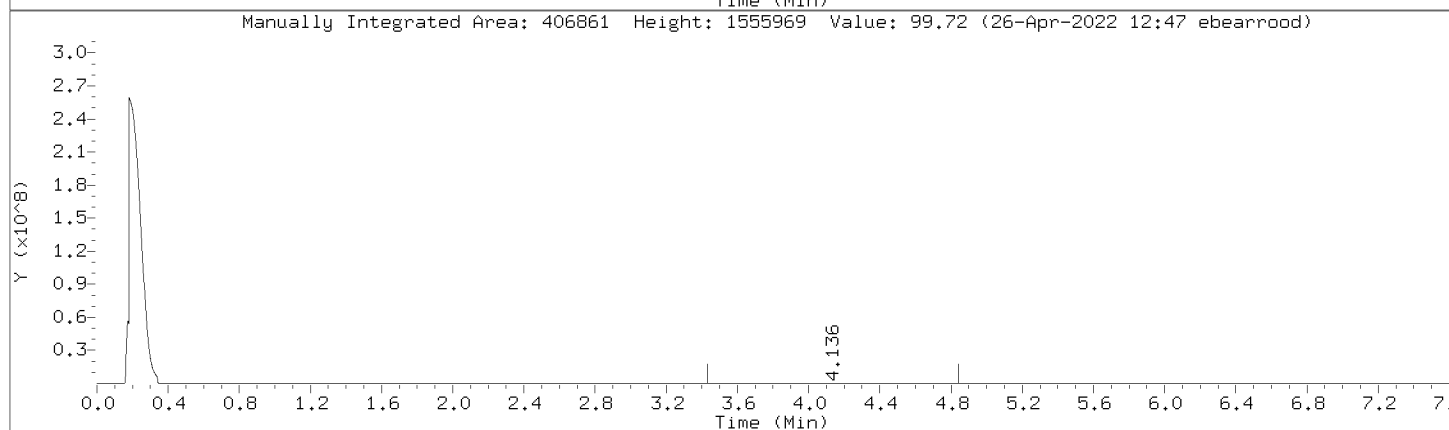
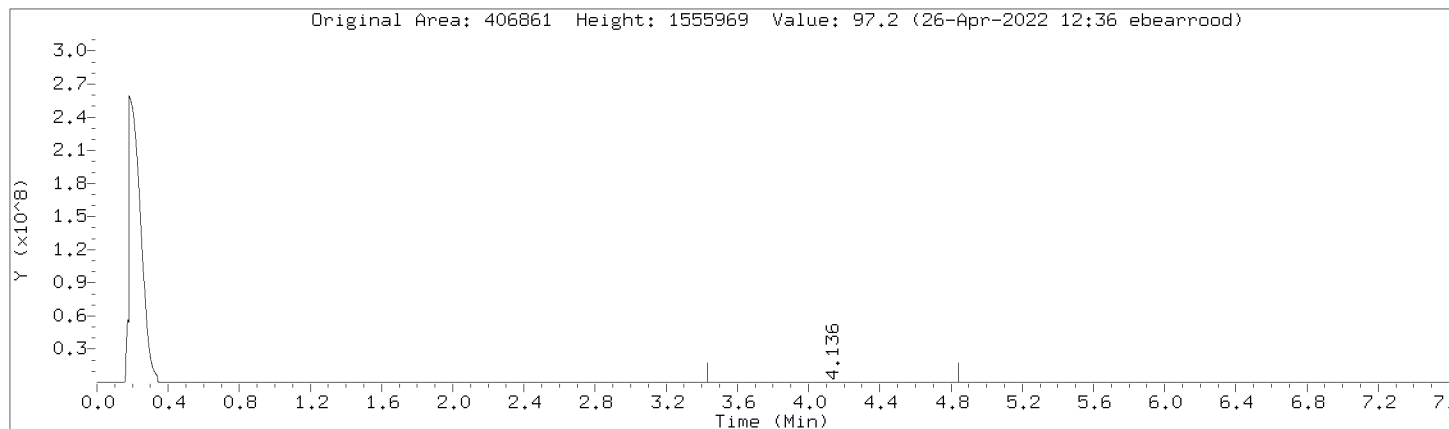
Column phase: DB-5-MS21250010





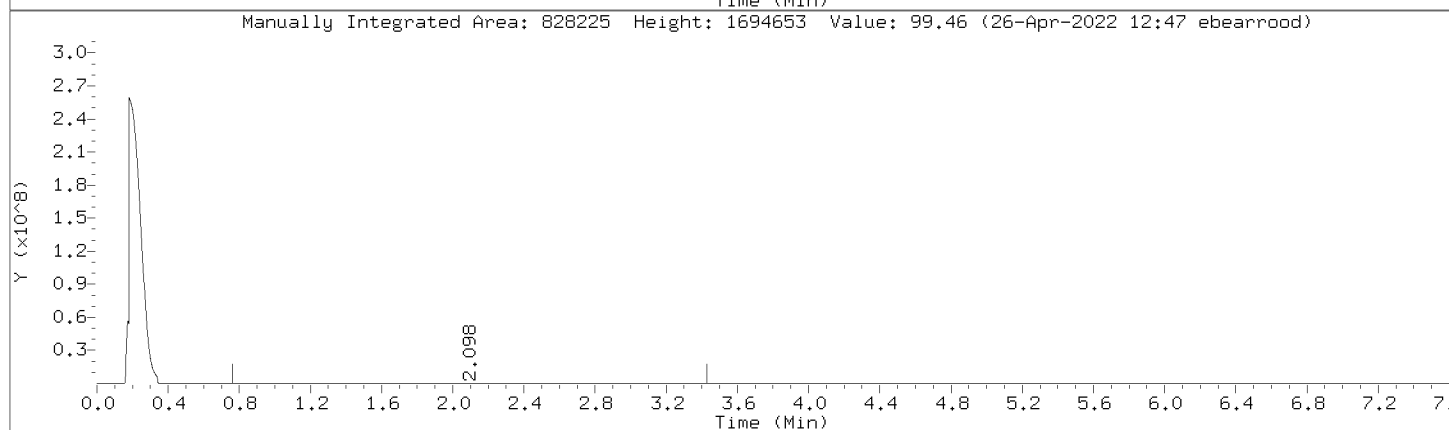
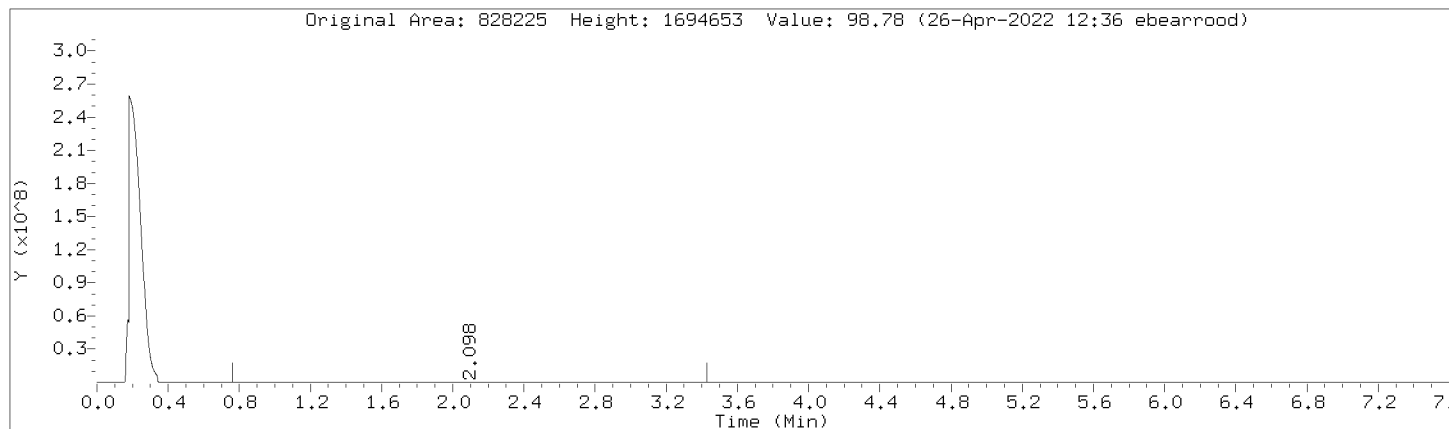
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000008.D  
Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



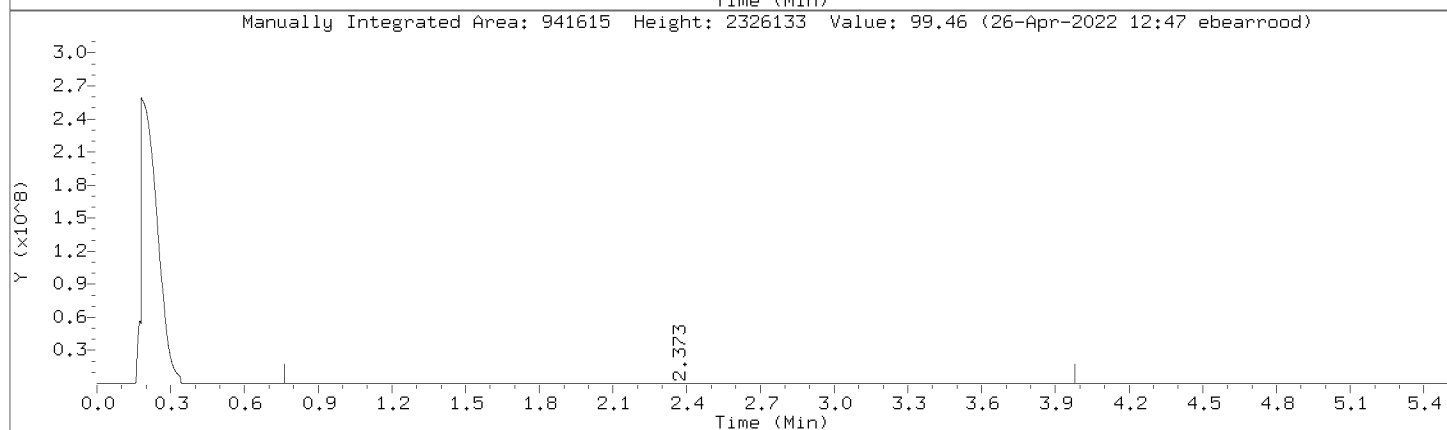
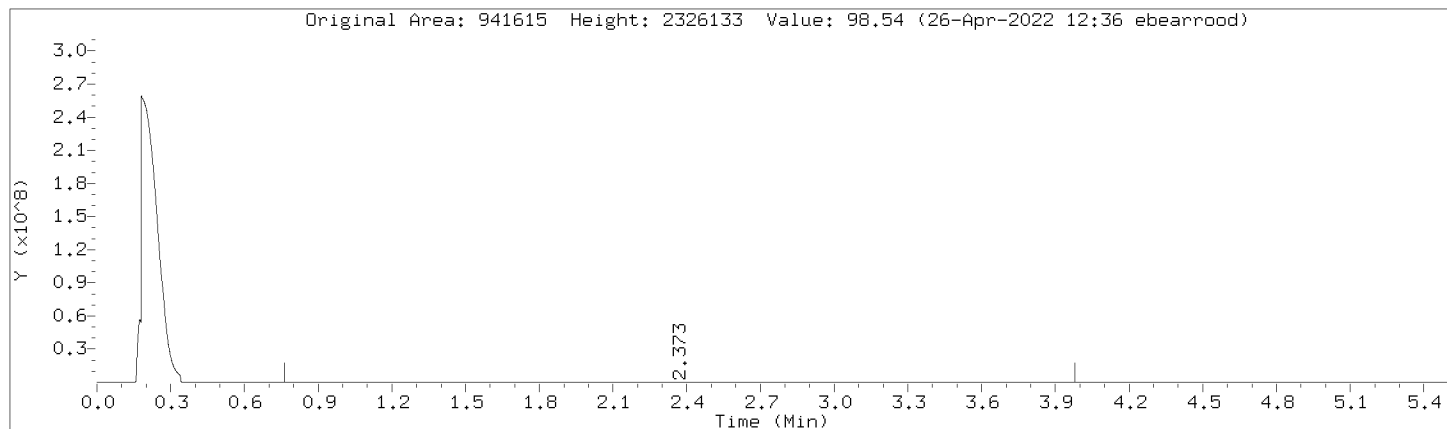
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Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000008.D  
Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

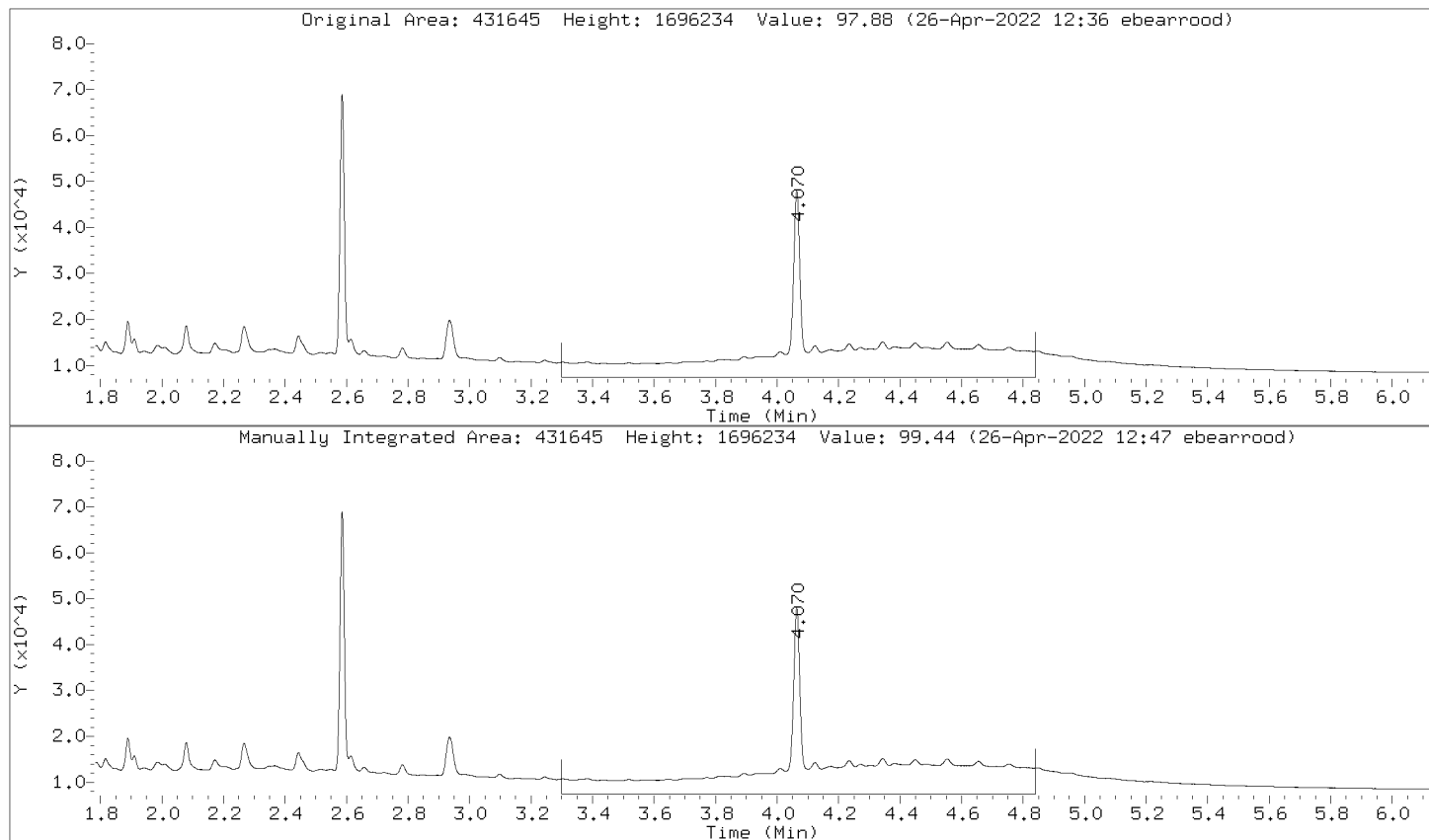
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000008.D  
Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

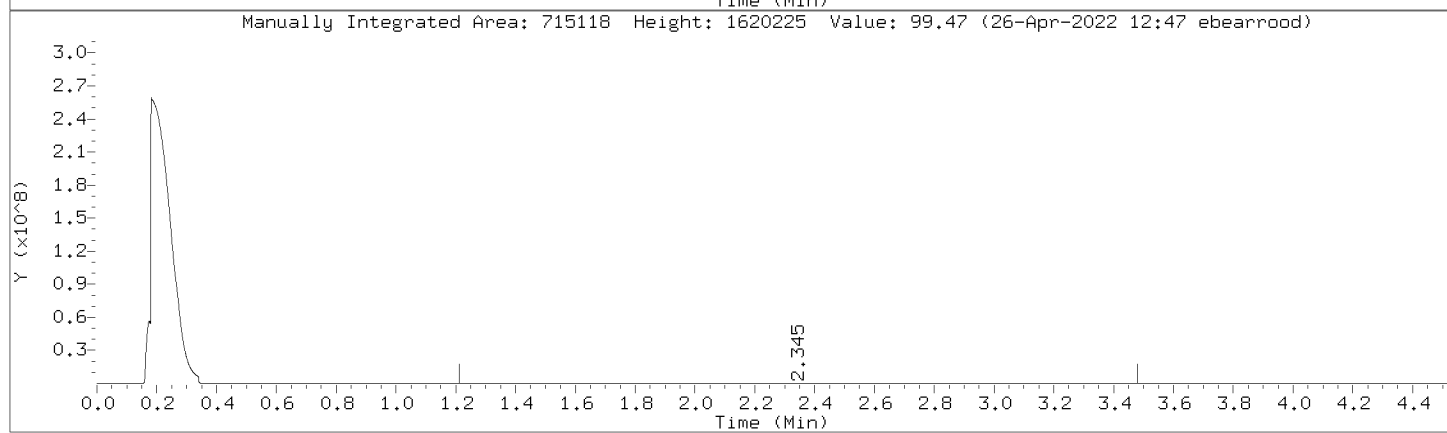
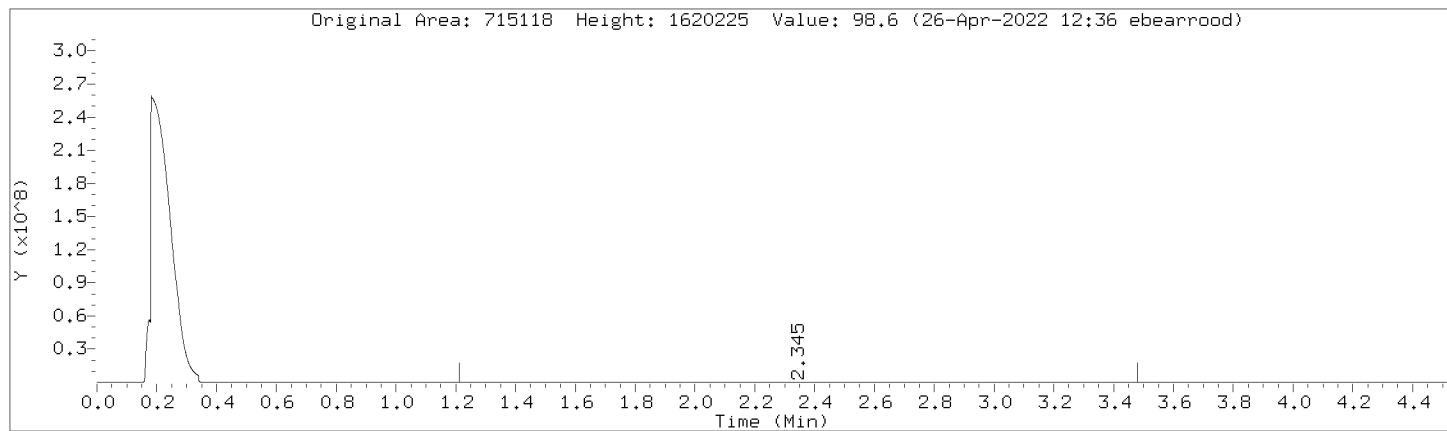
Compound: Motor Oil Range (C24-C36)  
CAS Number:

Review Code: RNG



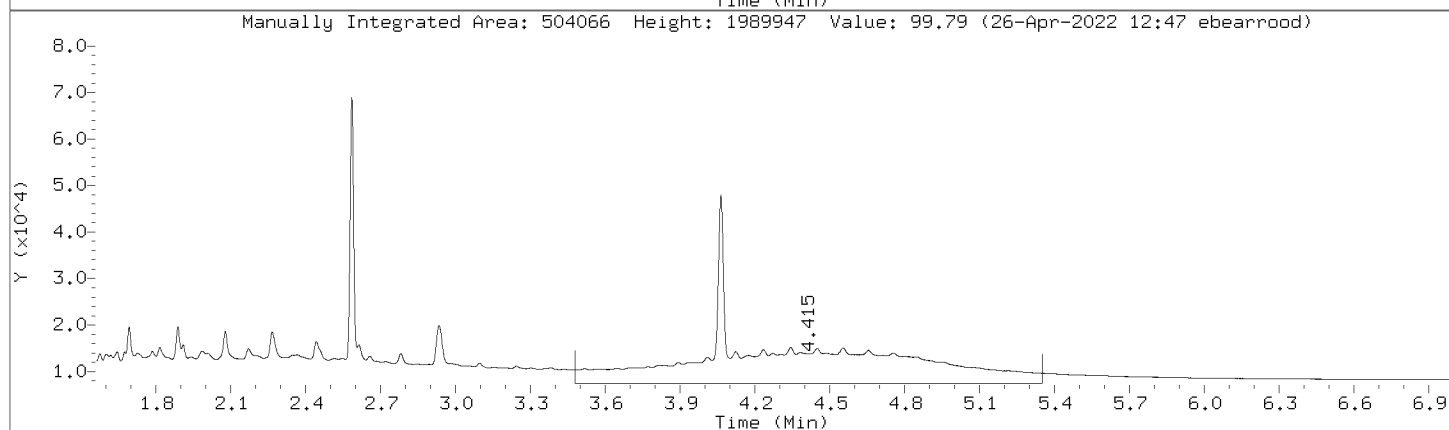
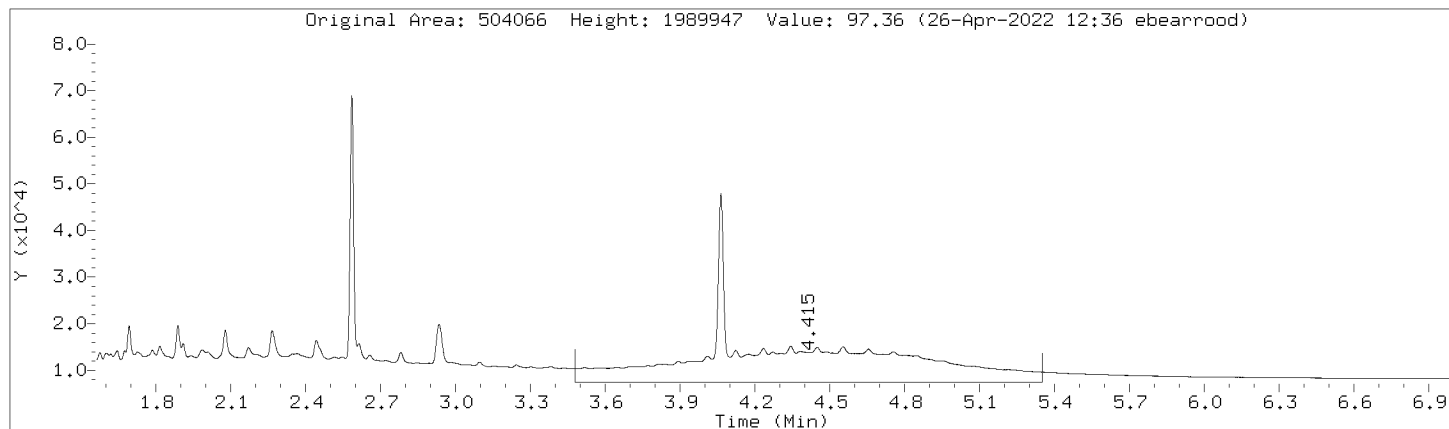
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000008.D  
Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



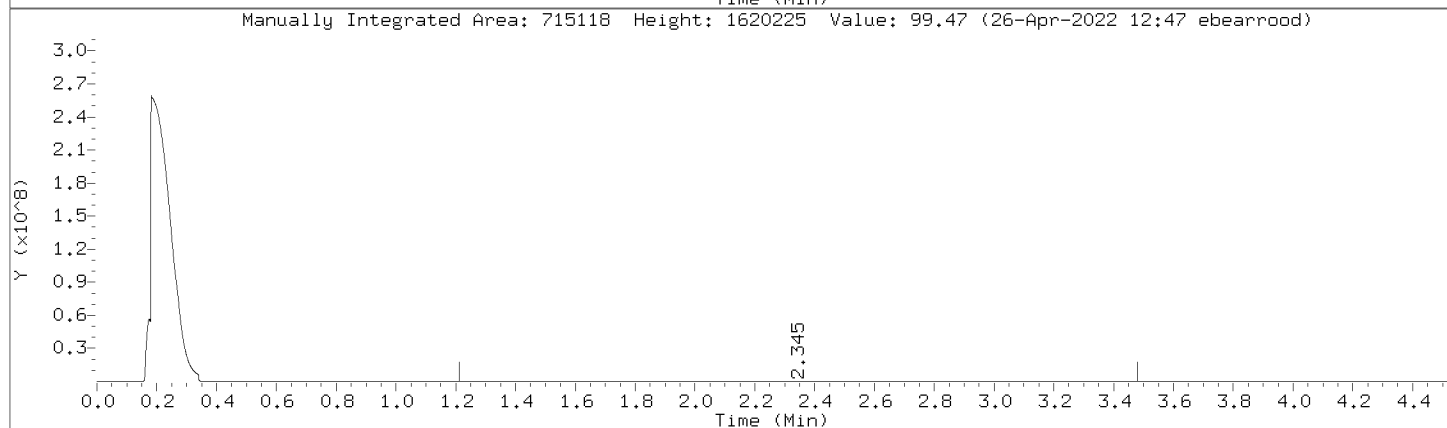
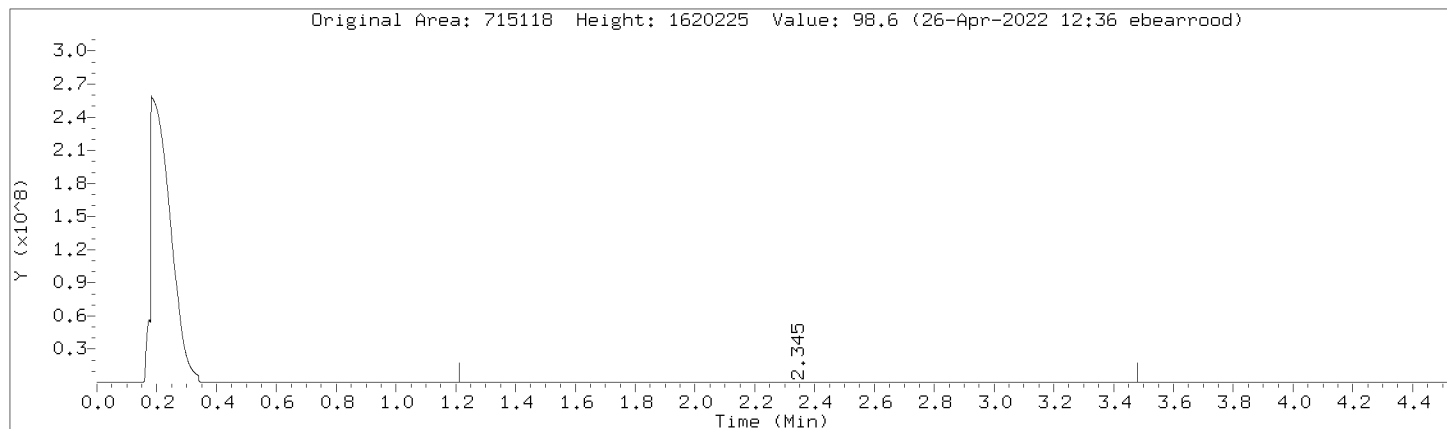
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Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



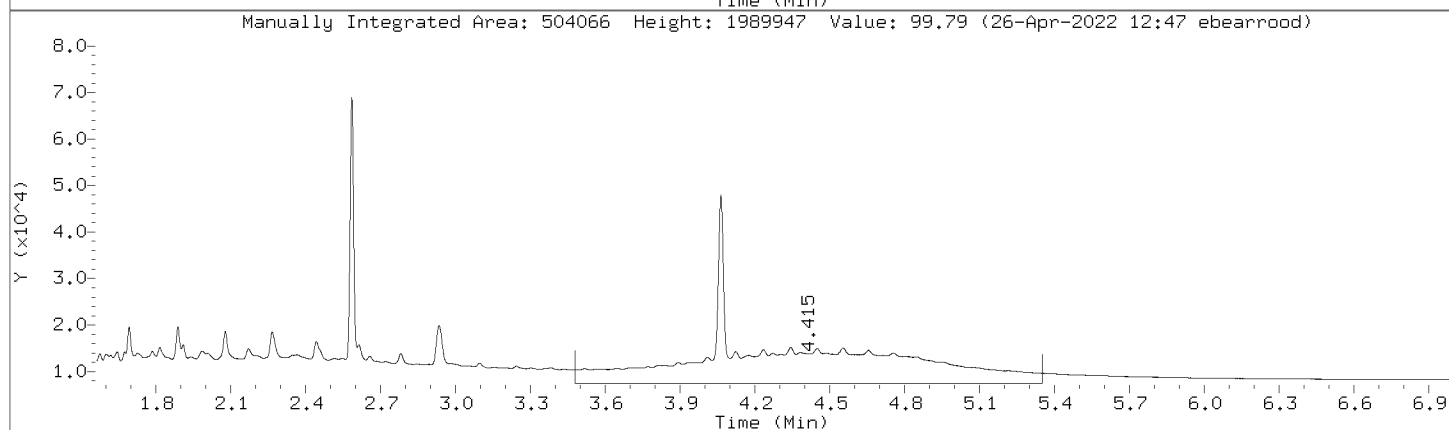
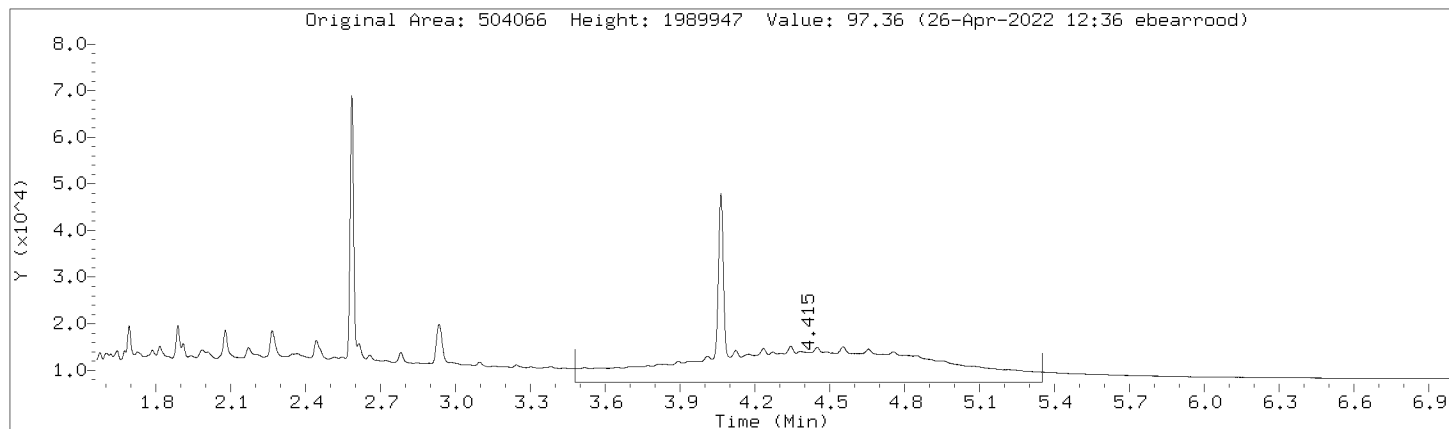
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000008.D  
Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000008.D  
Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000008.D

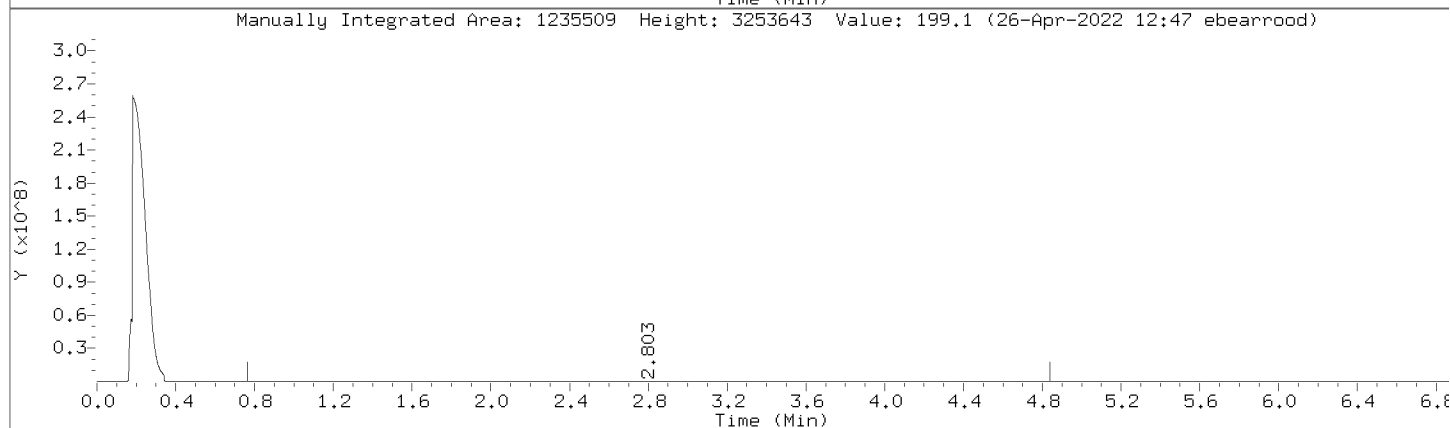
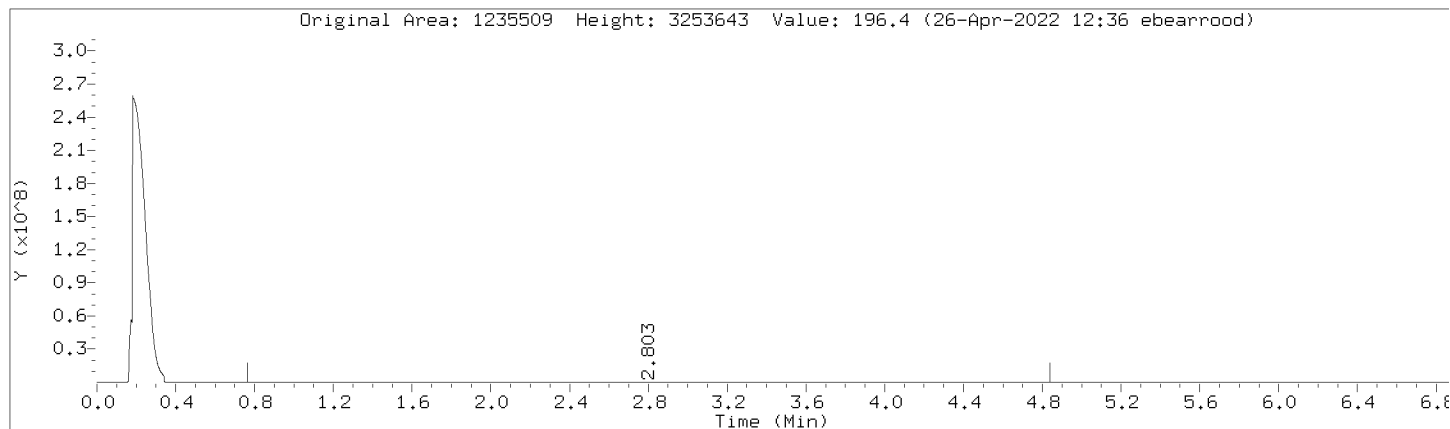
Injection Date: 26-APR-2022 08:40

Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL5,362373:2

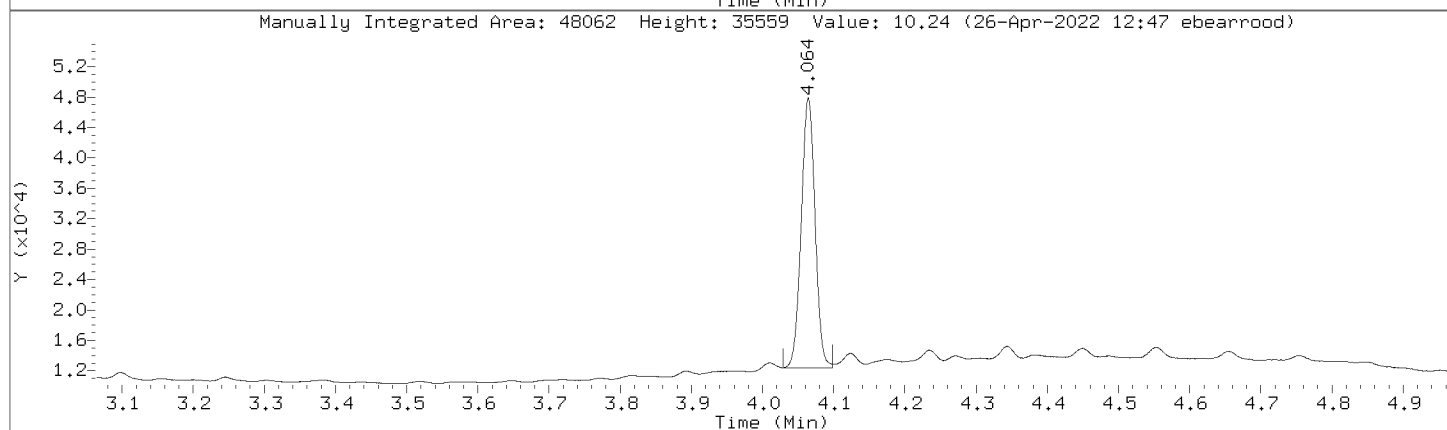
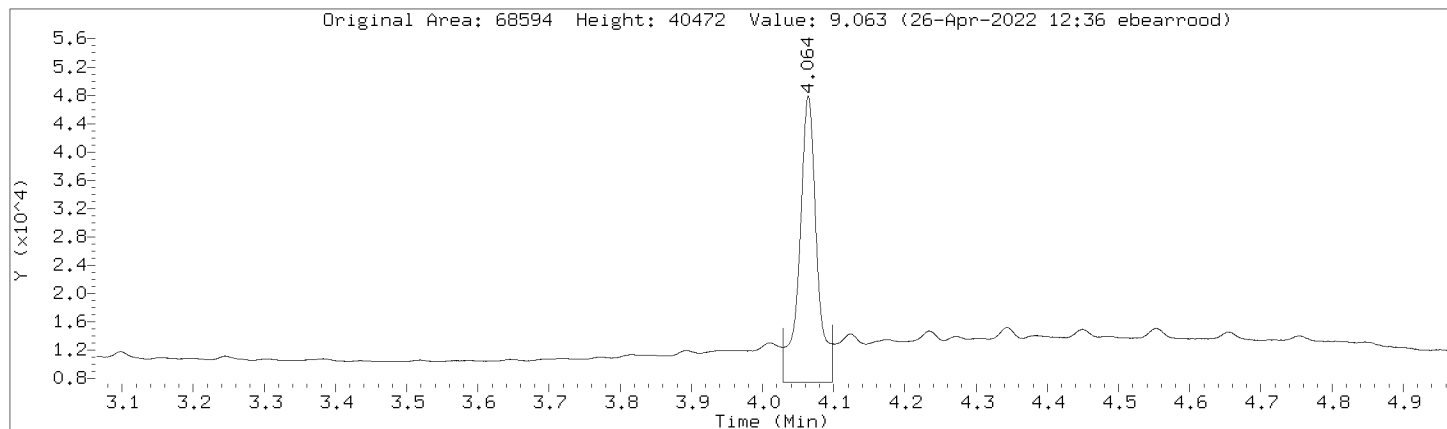
Compound: C10-C36      Review Code: RNG

CAS Number:



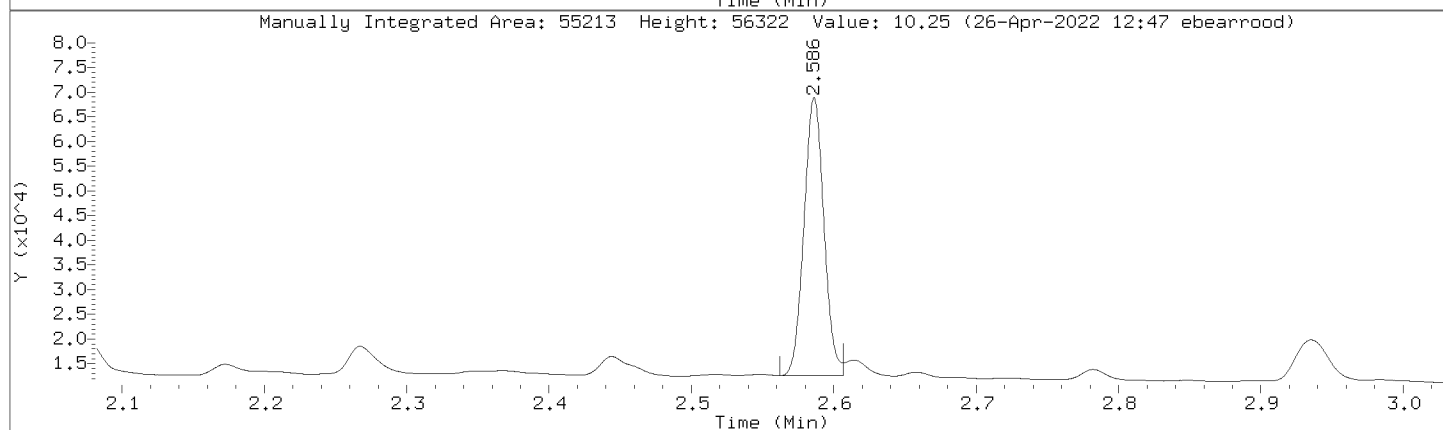
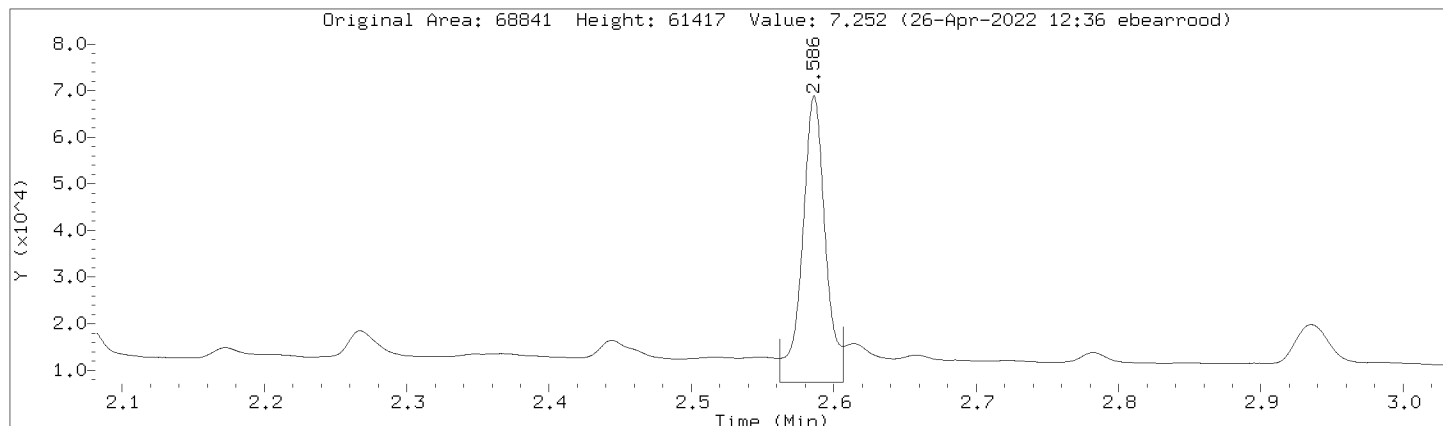
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000008.D  
Injection Date: 26-APR-2022 08:40  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000008.D  
 Injection Date: 26-APR-2022 08:40  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL5,362373:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	406861	406861
DRO by AK 102	828225	828225
TPH-DRO (C10-C28)	941615	941615
Motor Oil Range (C24-C36)	431645	431645
Diesel Fuel Range	715118	715118
Motor Oil Range	504066	504066
Diesel Fuel Range SG	715118	715118
Motor Oil Range SG	504066	504066
C10-C36	1235509	1235509
n-Triacontane (S)	68594	48062
o-Terphenyl (S)	68841	55213

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AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000009.D  
 Lab Smp Id: DMO-CAL6,362374:2 Client Smp ID: DMO-CAL6,362374:2  
 Inj Date : 26-APR-2022 08:51  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal6,362374:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 8 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		1627220 250.000	250	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.588	2.582 0.006		139001 25.0000	25.7	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.064	4.064 0.000		120623 25.0000	25.6	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		882204 250.000	250	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		1857730 250.000	250	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		925451 250.000	250	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		2509425 500.000	500	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		1386097 250.000	250	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		1386097 250.000	250	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		1091731 250.000	250	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		1091731 250.000	250	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 08:51

Client ID: DM0-CAL6,362374;2

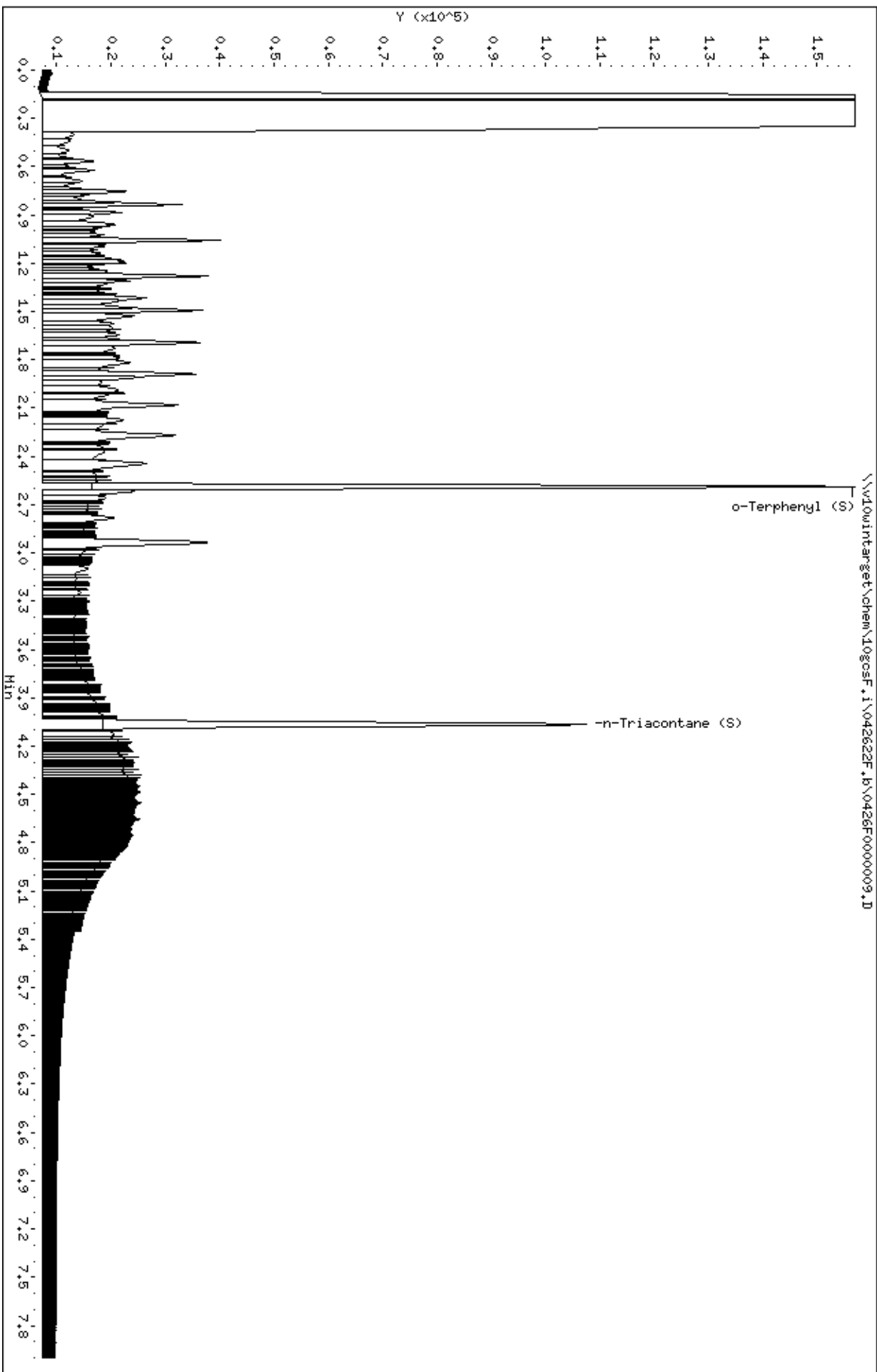
Sample Info: DM0-CAL6,362374;2

Instrument: 10gocsf.1

Operator: EB3

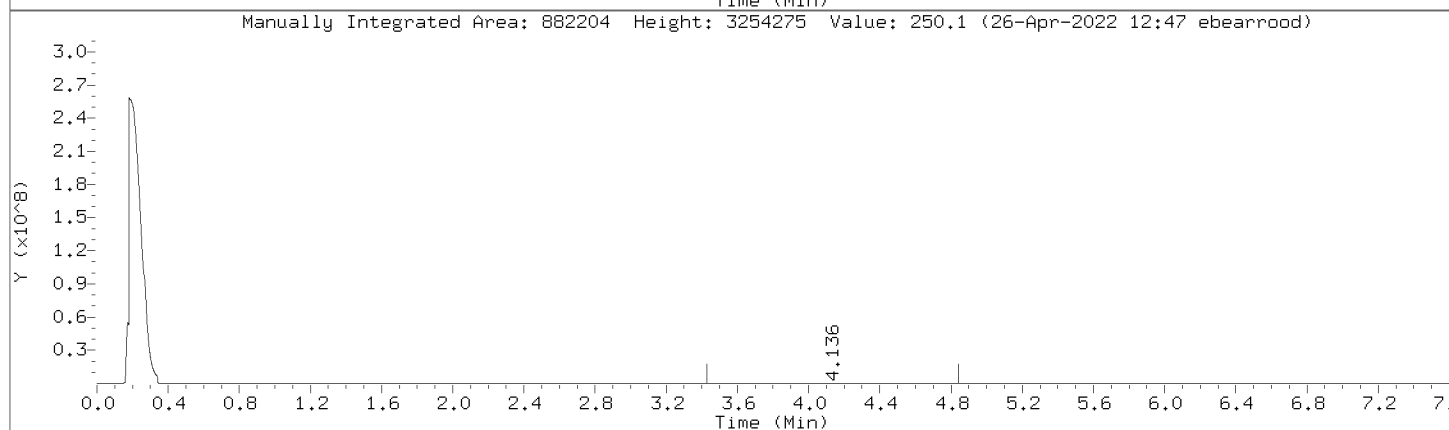
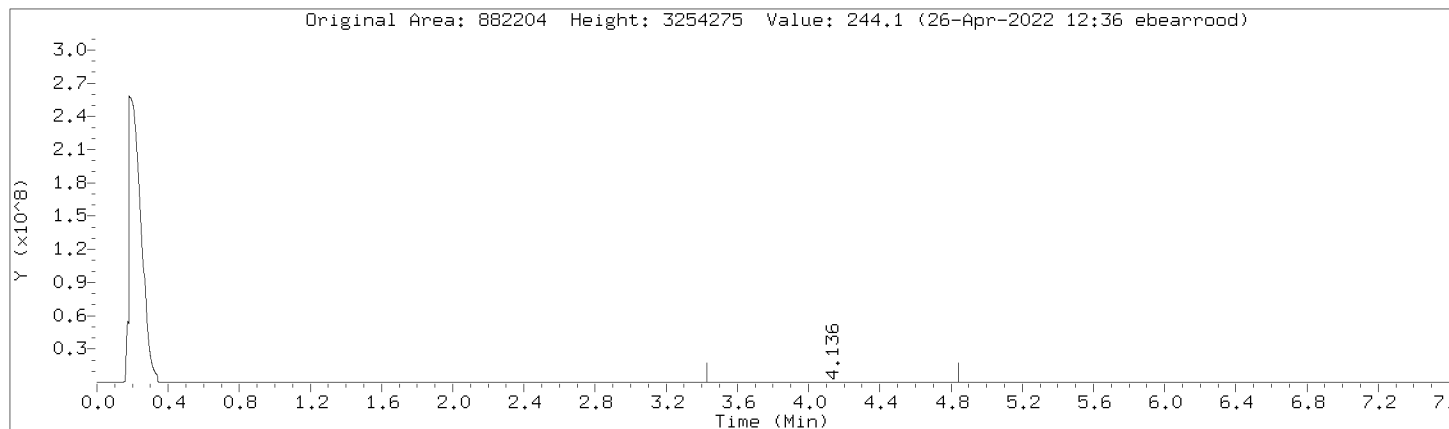
Column diameter: 0.32

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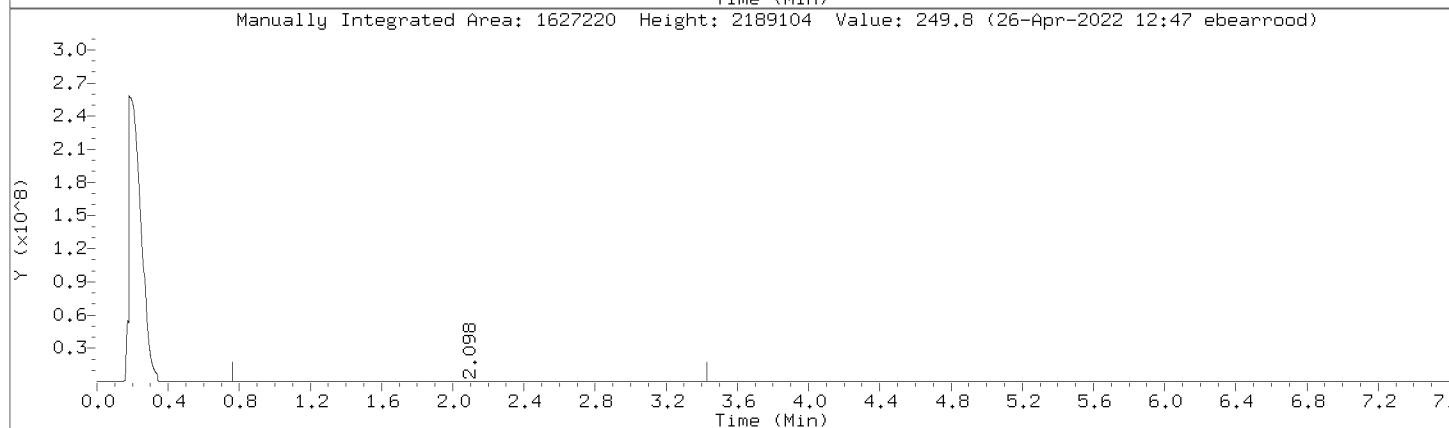
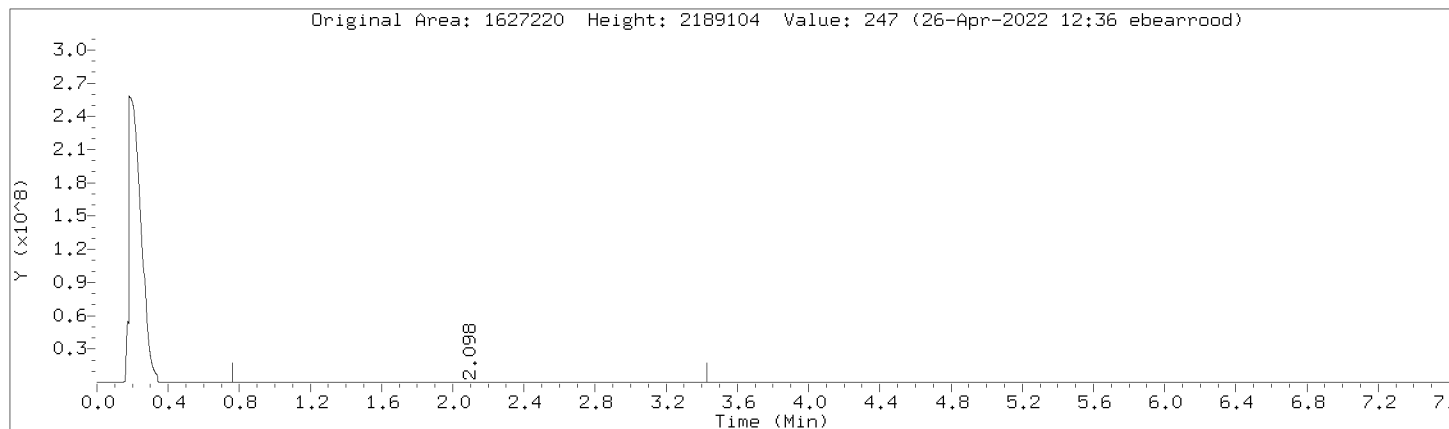
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000009.D  
Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000009.D  
Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

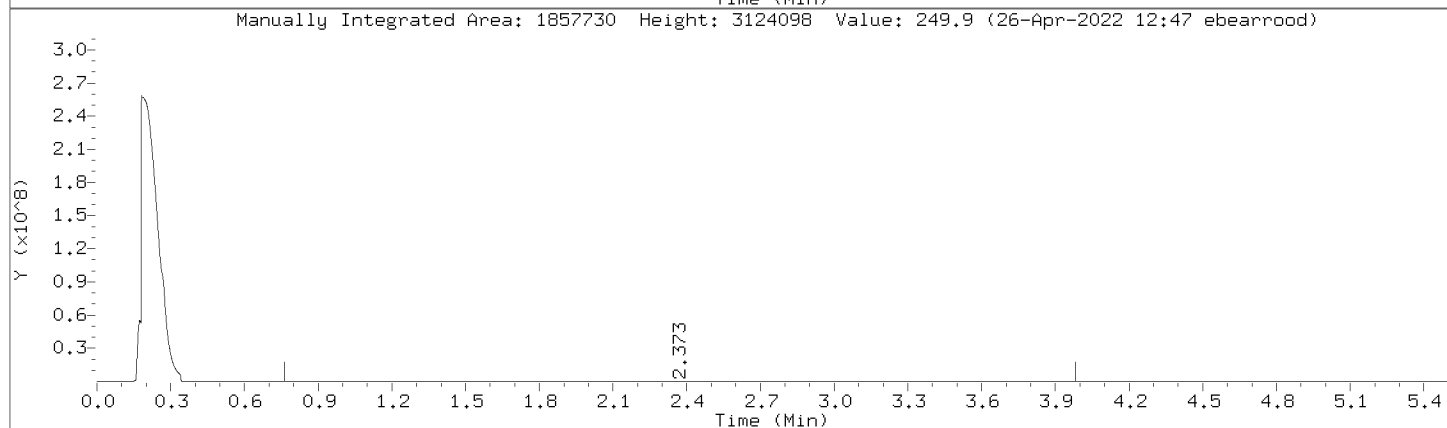
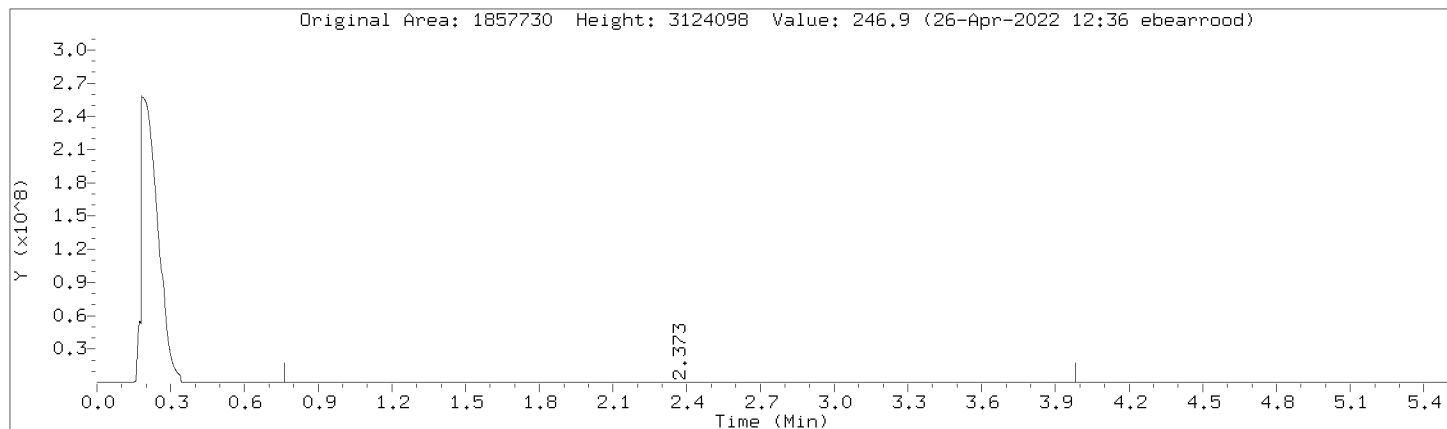
Compound: DRO by AK 102      Review Code: RNG  
CAS Number:





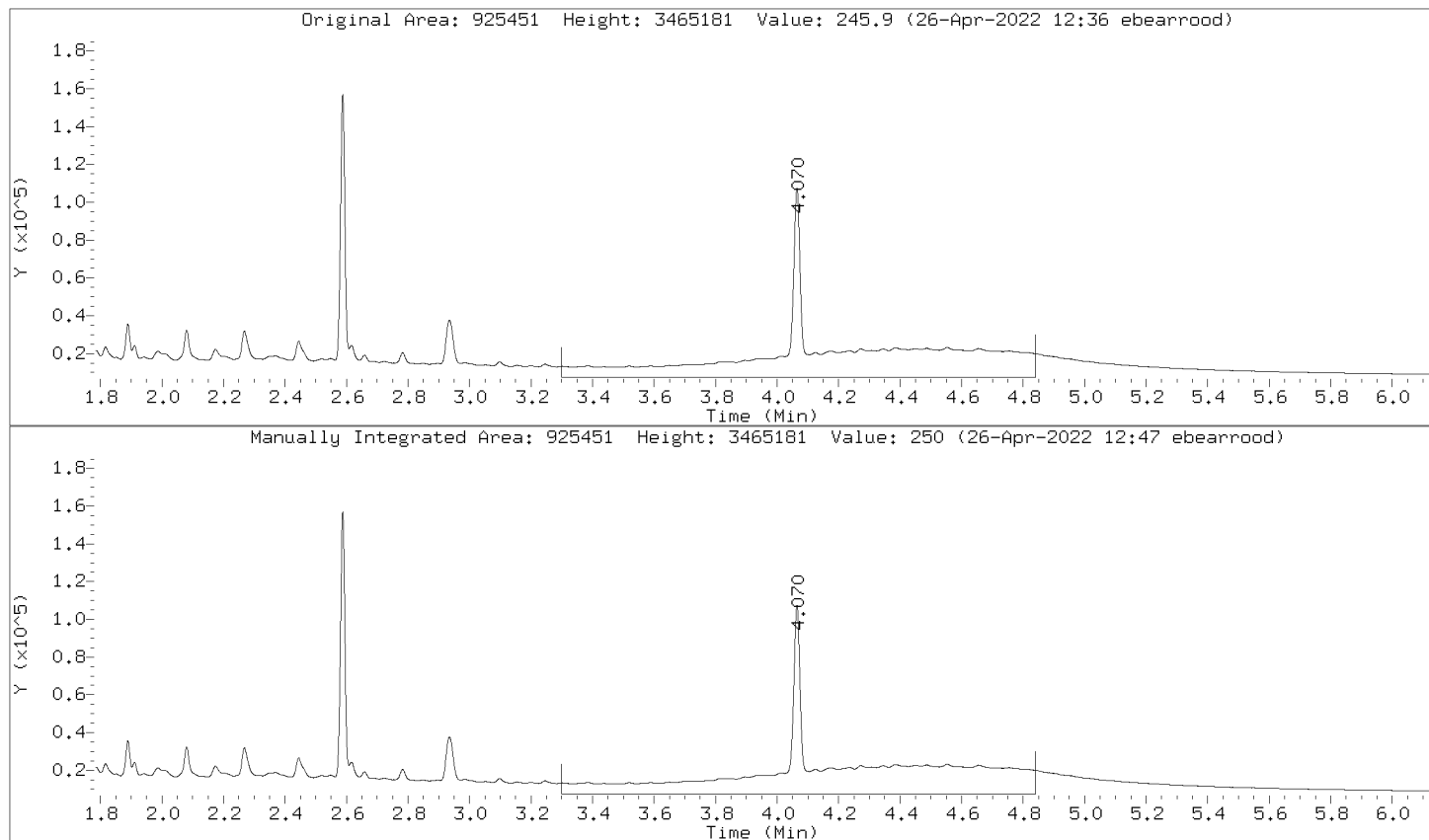
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



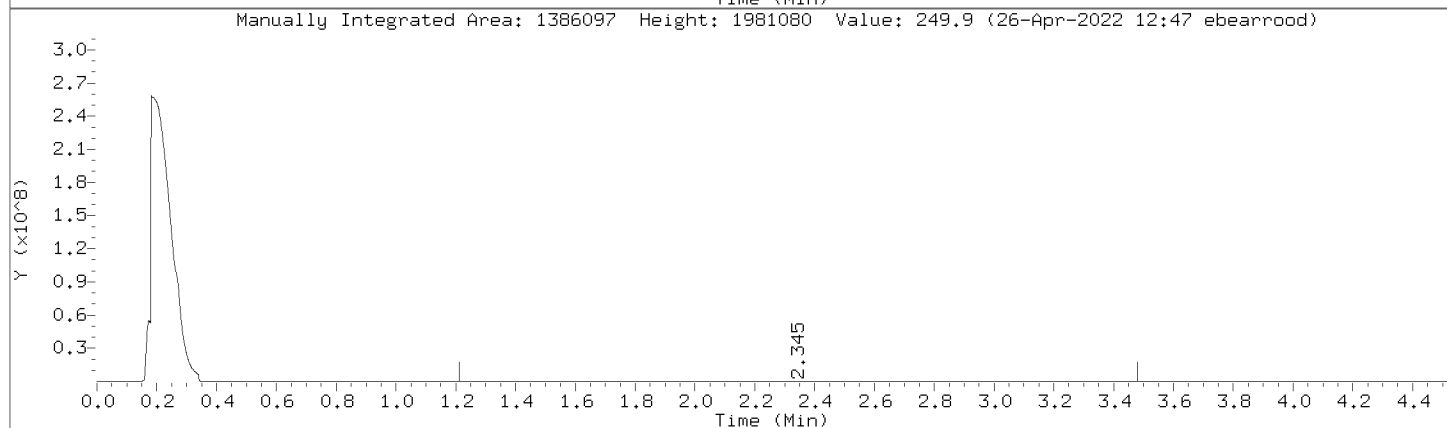
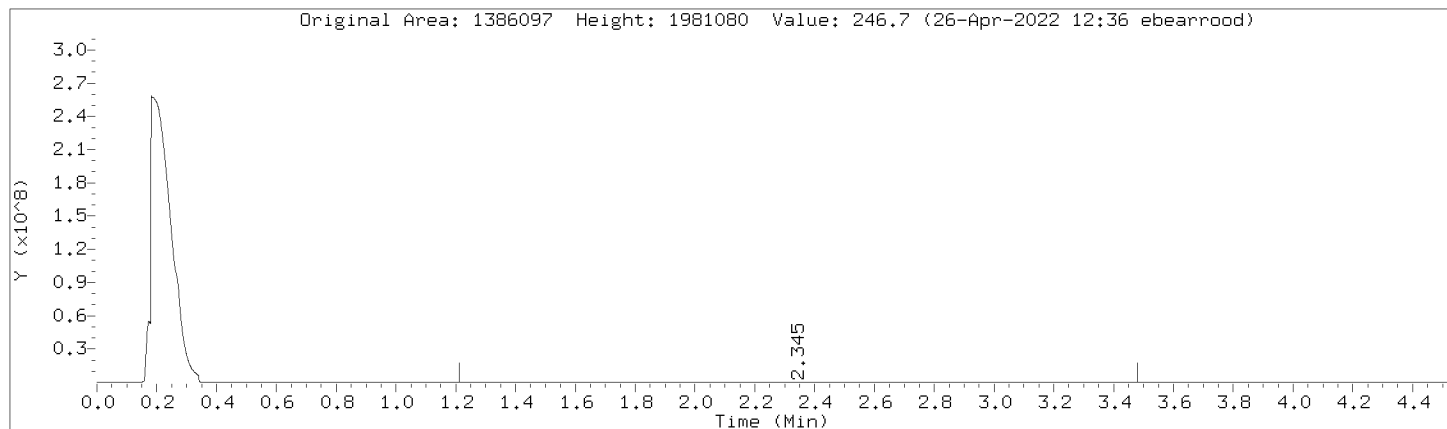
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



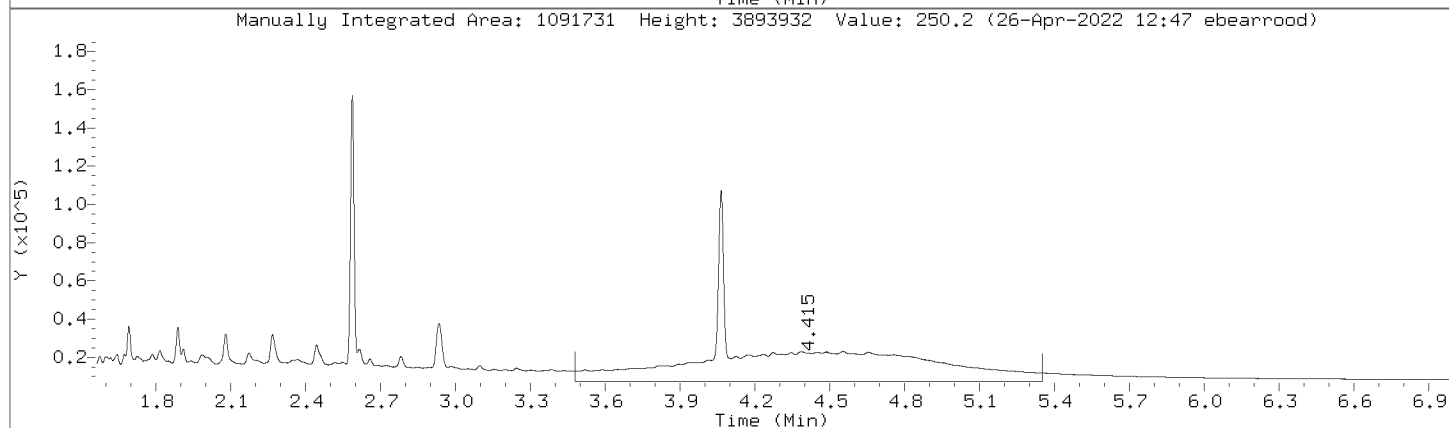
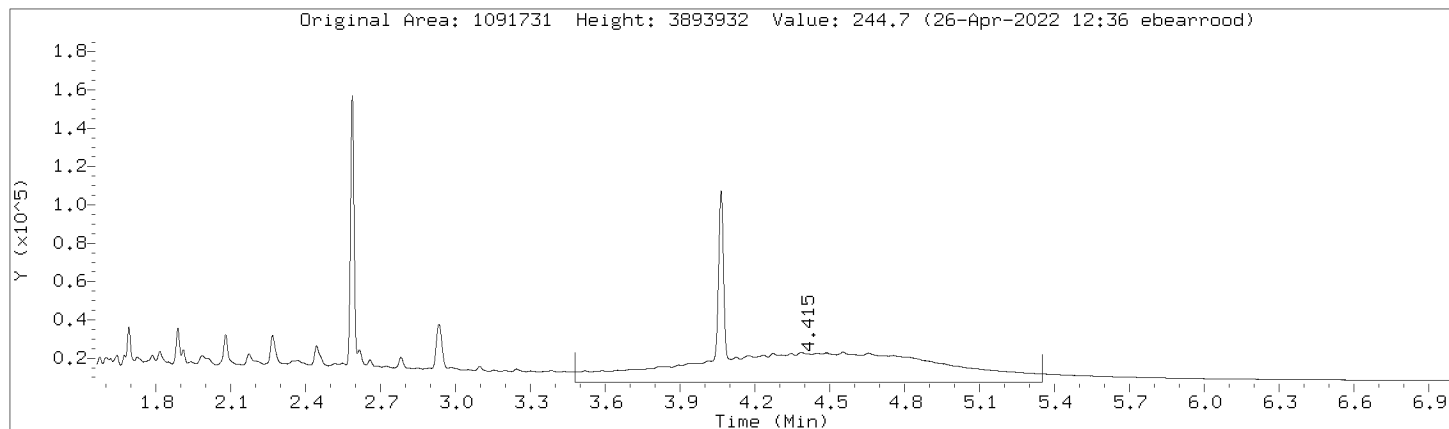
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



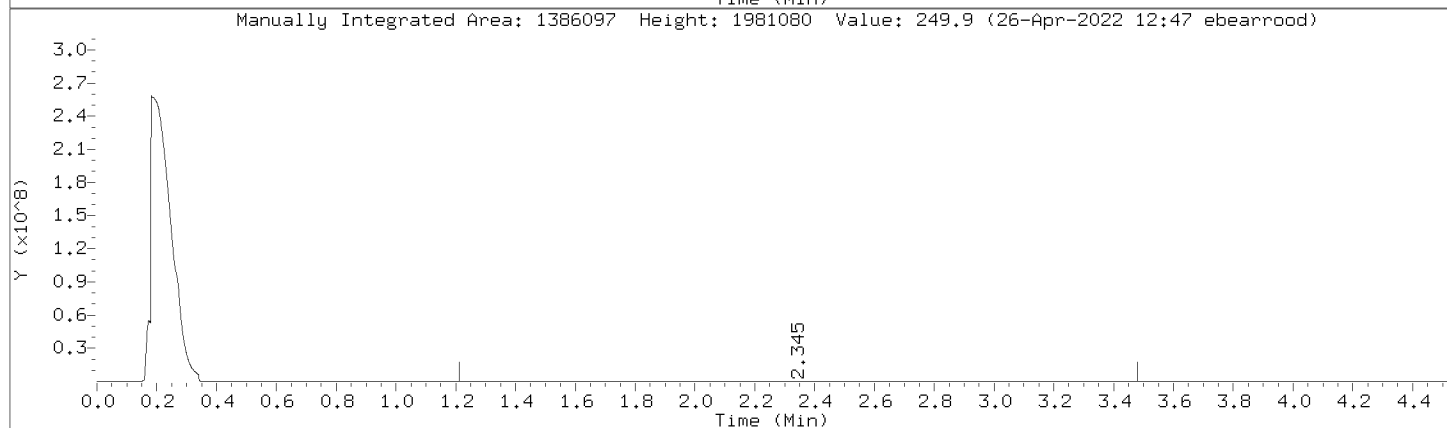
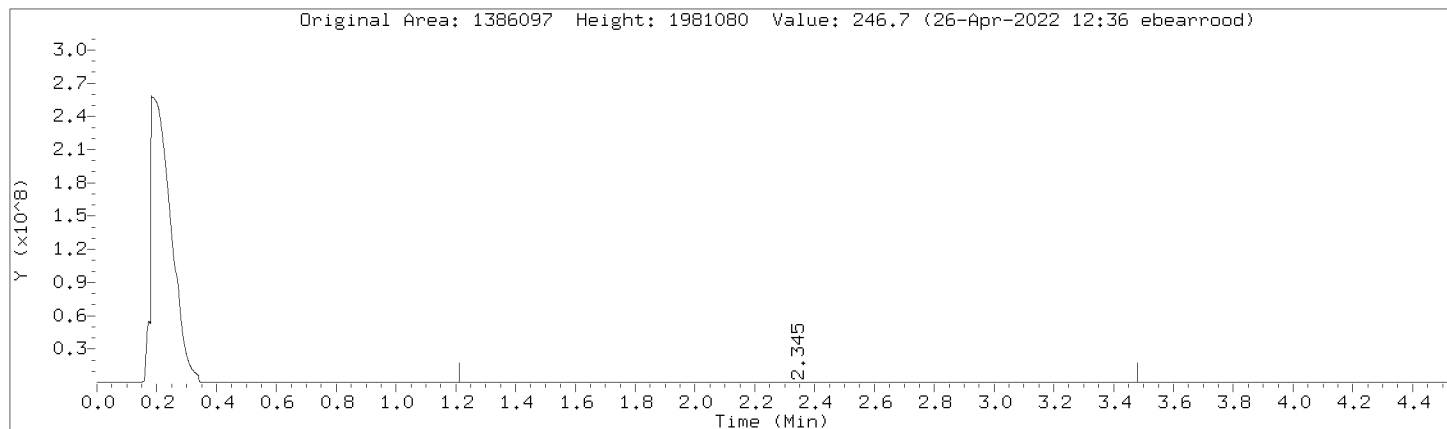
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



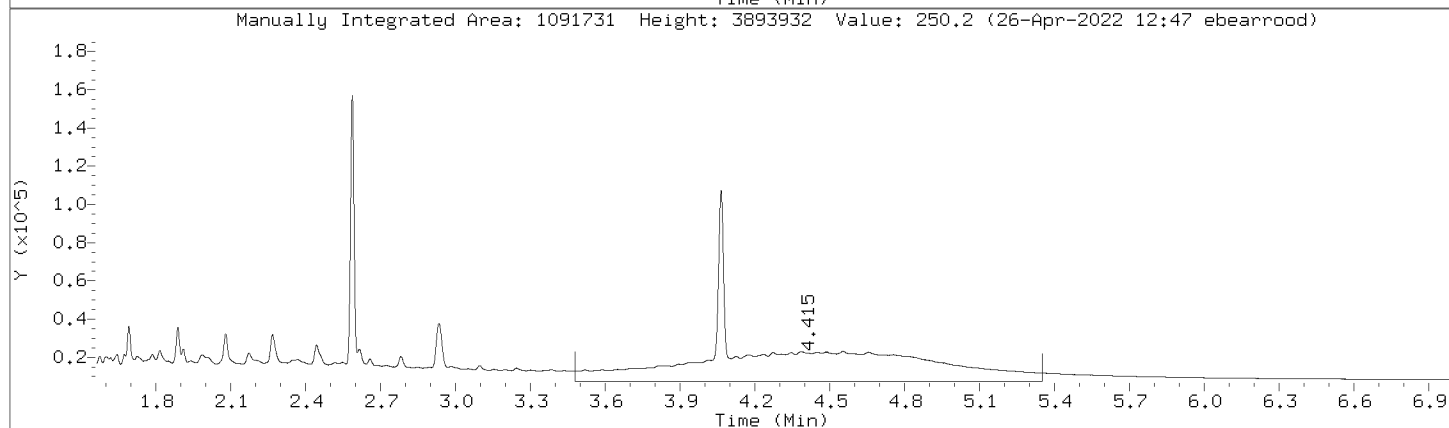
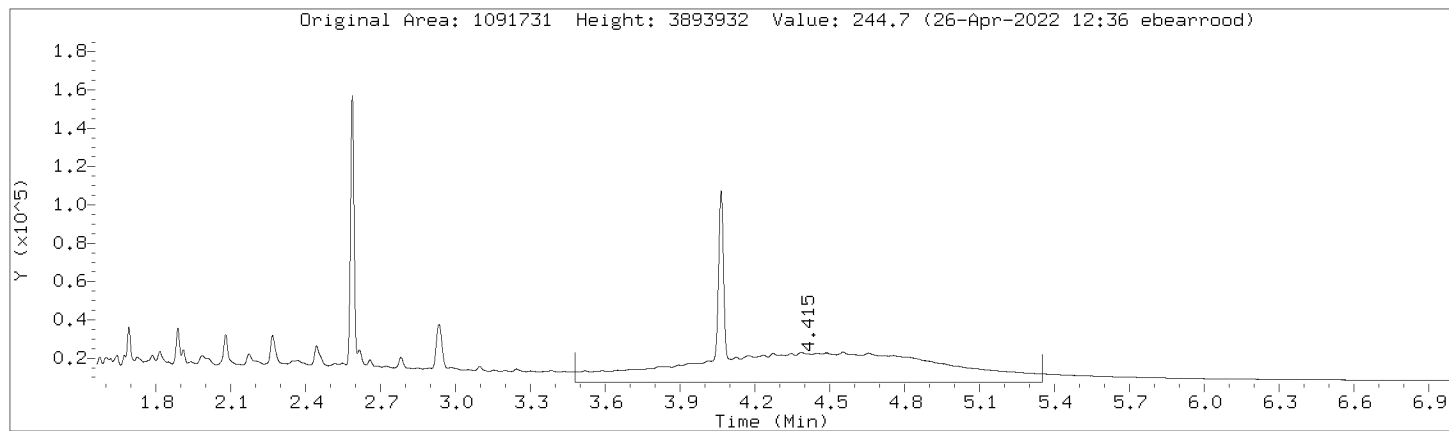
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



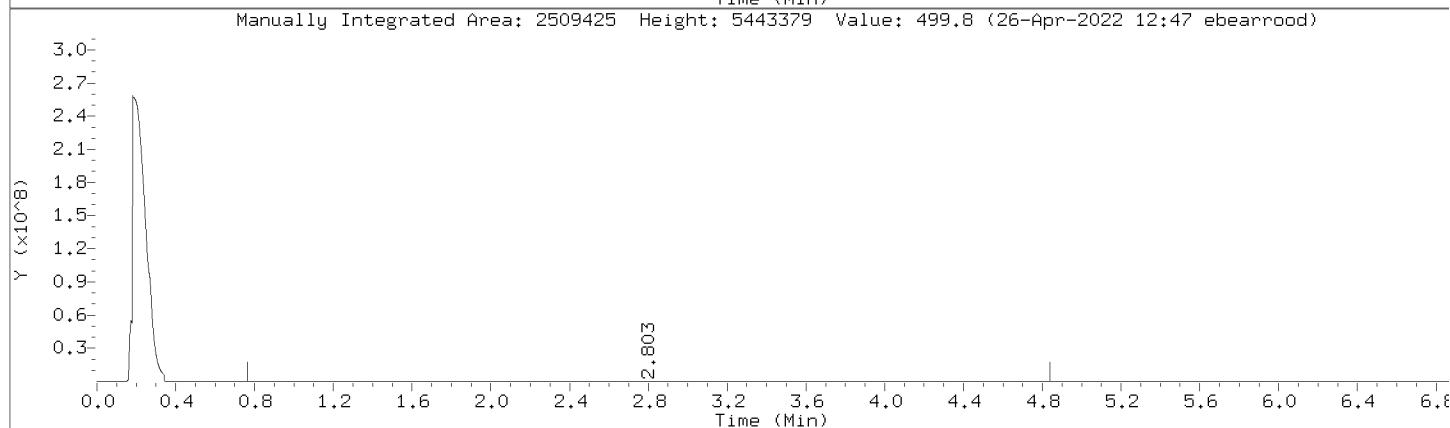
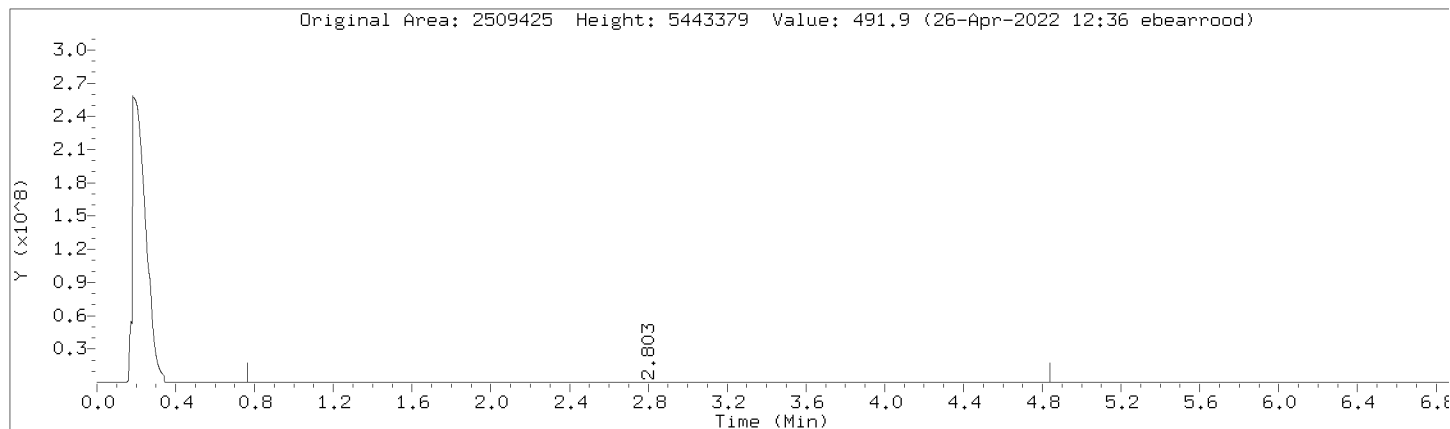
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



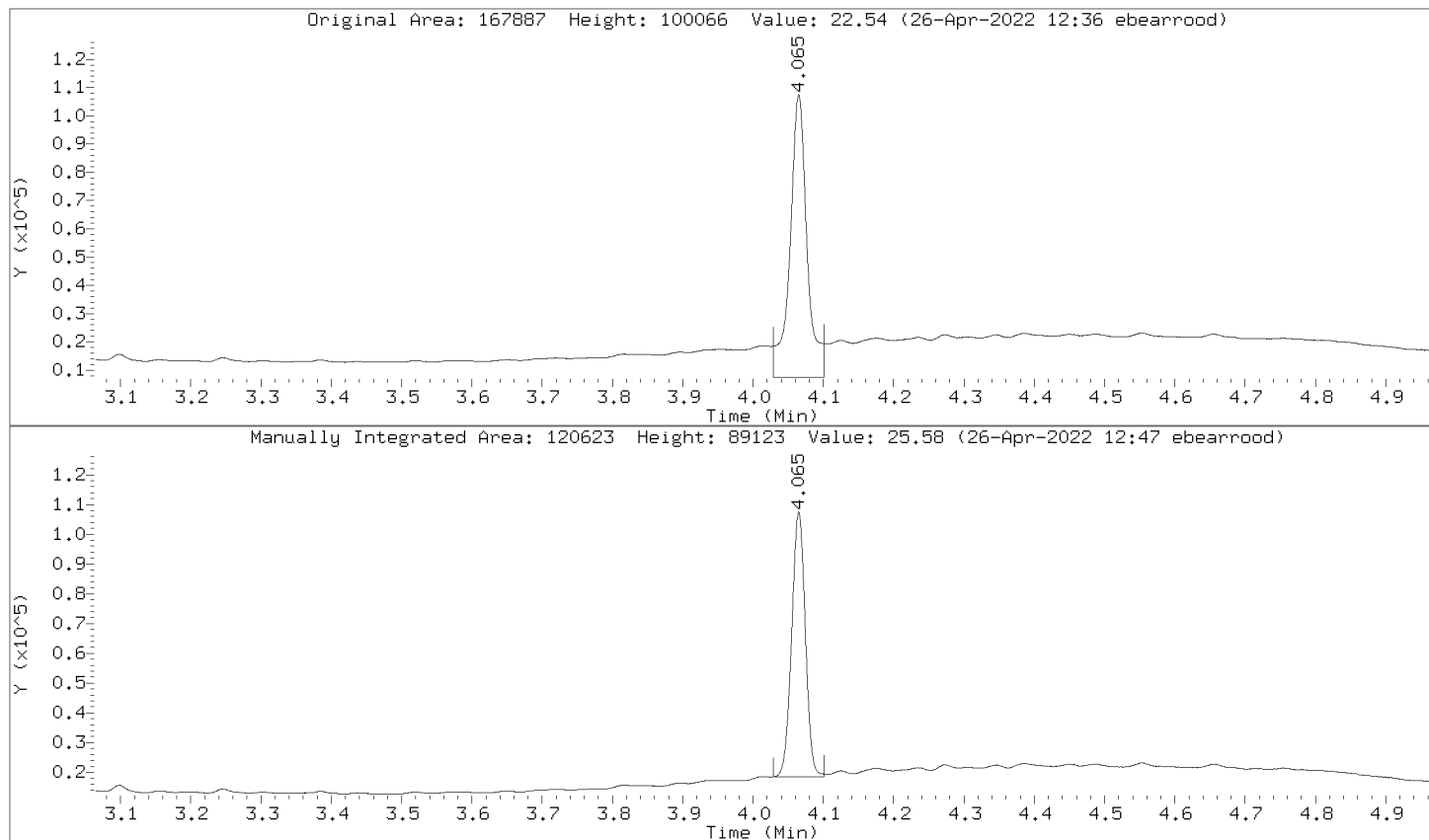
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Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000009.D  
Injection Date: 26-APR-2022 08:51  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

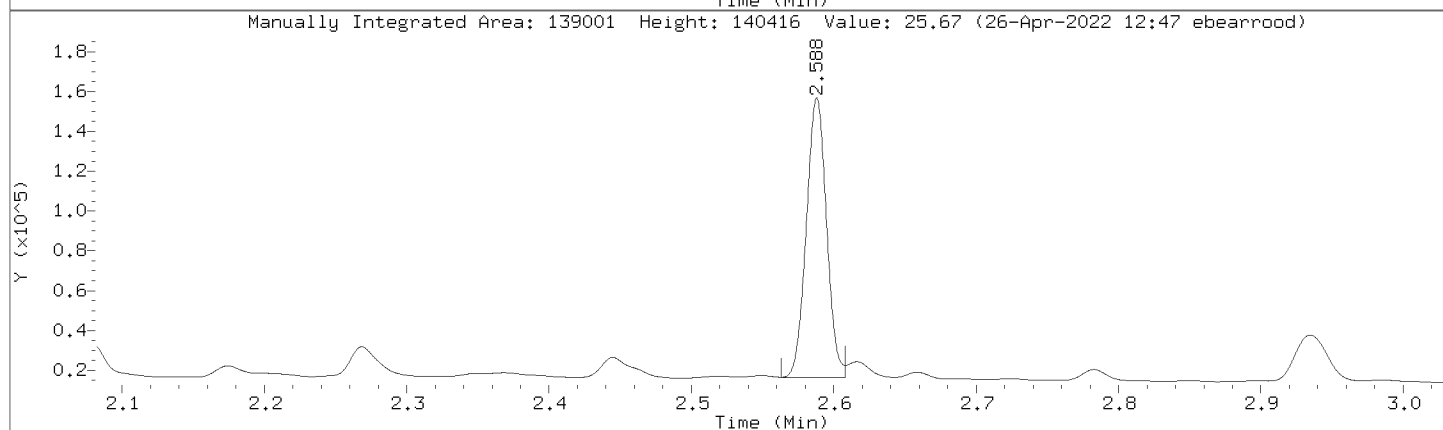
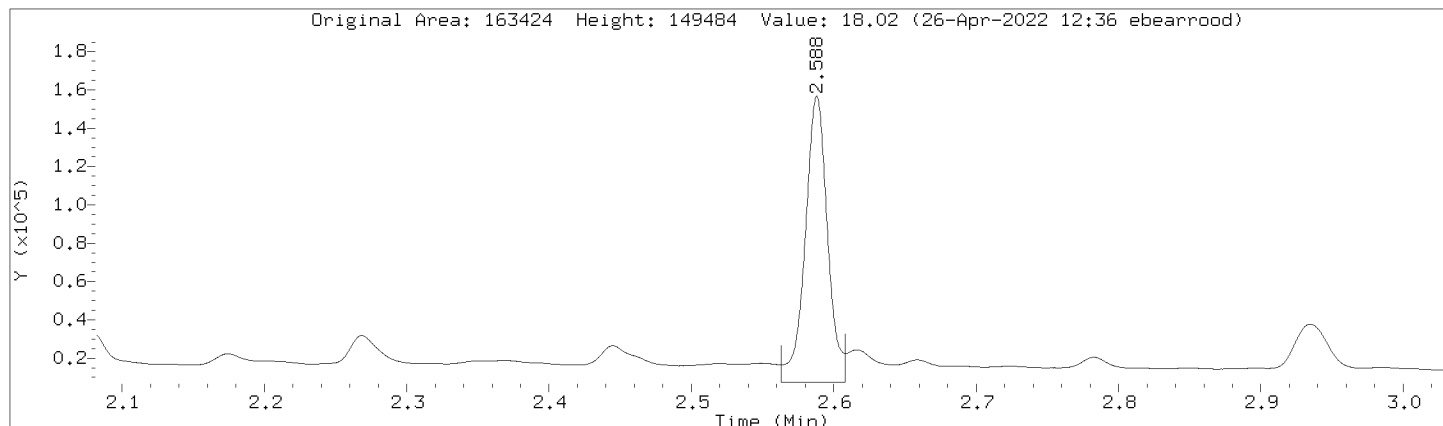
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000009.D  
 Injection Date: 26-APR-2022 08:51  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL6,362374:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	882204	882204
DRO by AK 102	1627220	1627220
TPH-DRO (C10-C28)	1857730	1857730
Motor Oil Range (C24-C36)	925451	925451
Diesel Fuel Range	1386097	1386097
Motor Oil Range	1091731	1091731
Diesel Fuel Range SG	1386097	1386097
Motor Oil Range SG	1091731	1091731
C10-C36	2509425	2509425
n-Triacontane (S)	167887	120623
o-Terphenyl (S)	163424	139001

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000010.D  
 Lab Smp Id: DMO-CAL7,362375:2 Client Smp ID: DMO-CAL7,362375:2  
 Inj Date : 26-APR-2022 09:02  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal7,362375:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 9 Calibration Sample, Level: 7  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		3002656 500.000	501	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.586	2.582 0.004		283965 50.0000	52.1	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.064	4.064 0.000		244379 50.0000	51.6	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		1725450 500.000	503	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		3435856 500.000	502	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		1783702 500.000	502	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		4728106 1000.00	1000	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		2544549 500.000	502	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		2544549 500.000	502	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		2126604 500.000	503	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		2126604 500.000	503	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 09:02

Client ID: DMO-CAL7.362375;2

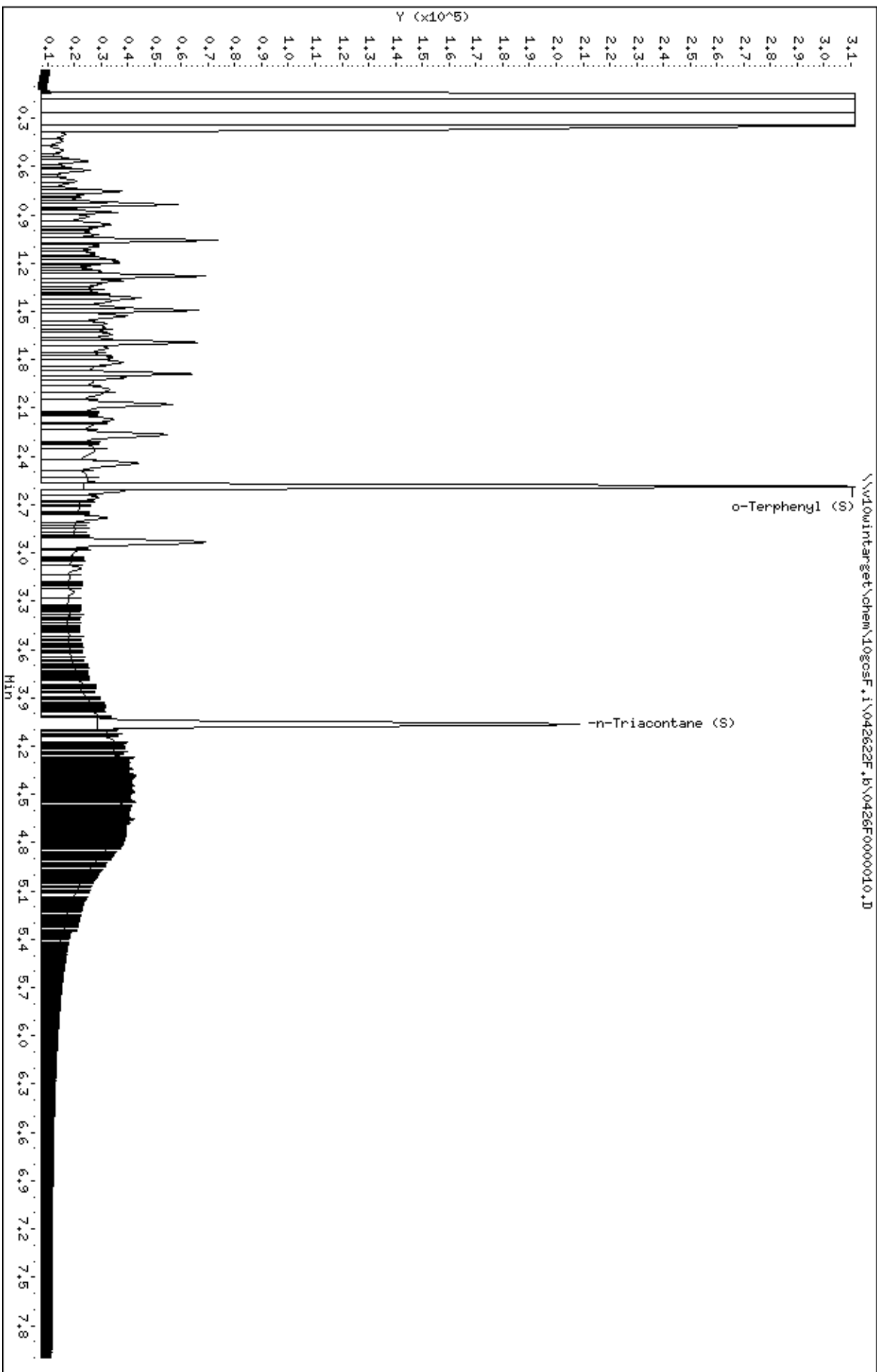
Sample Info: DMO-CAL7.362375;2

Instrument: logosf.1

Operator: EB3

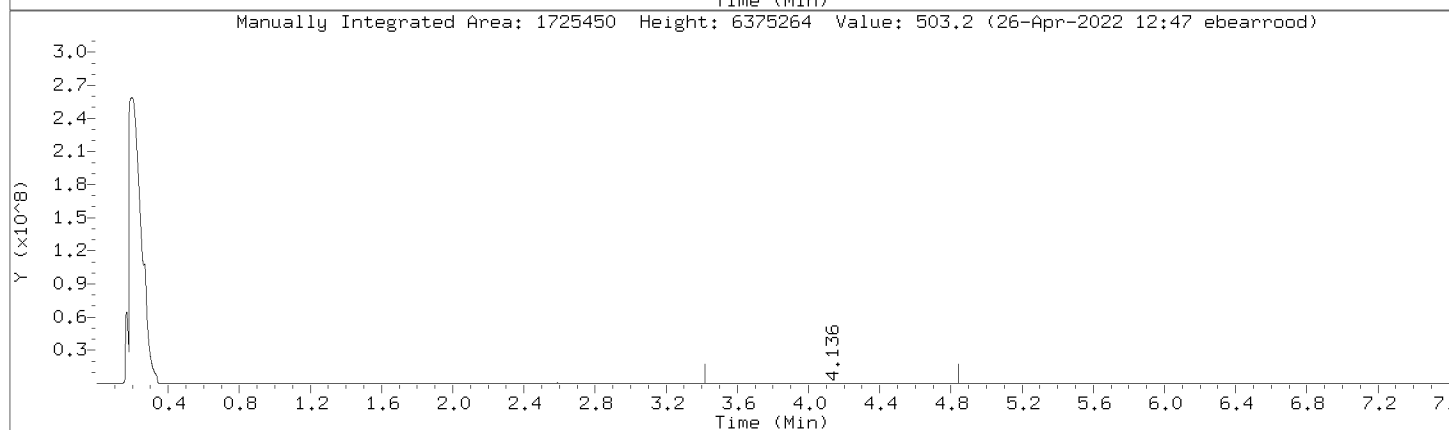
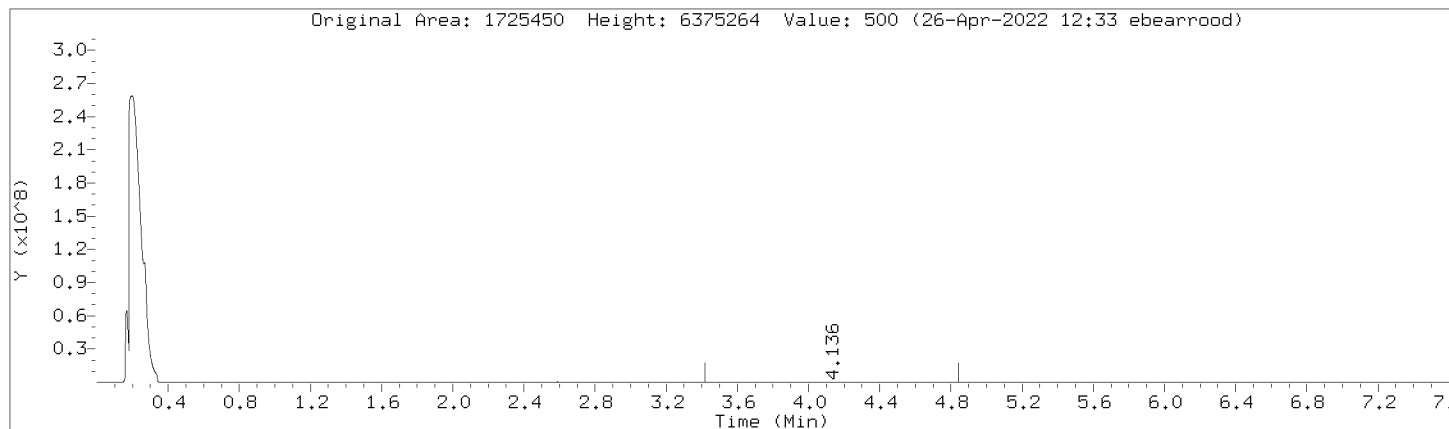
Column diameter: 0.32

Column phase: DB-5-MS21250010



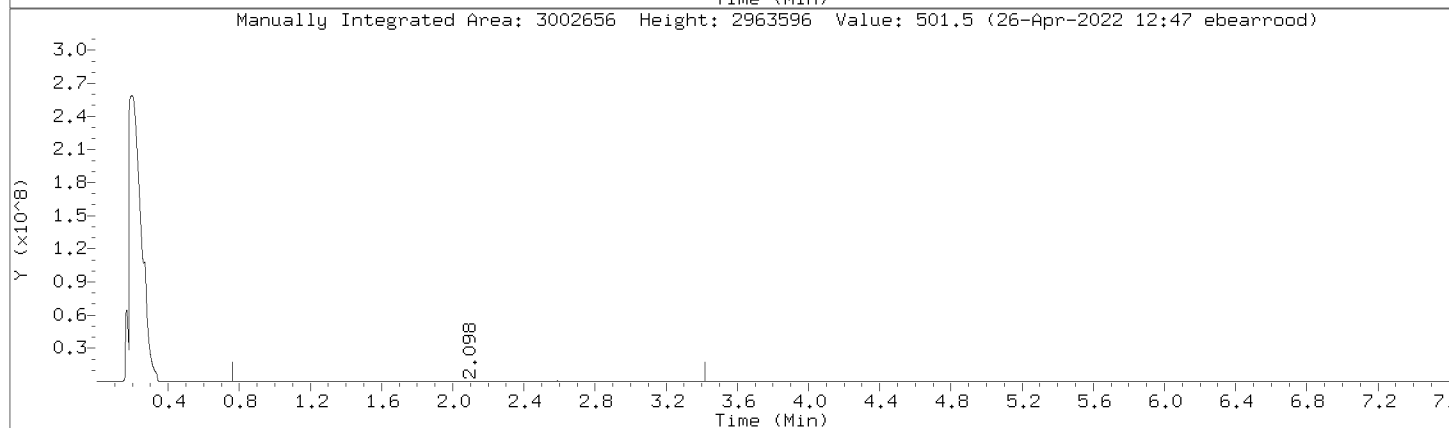
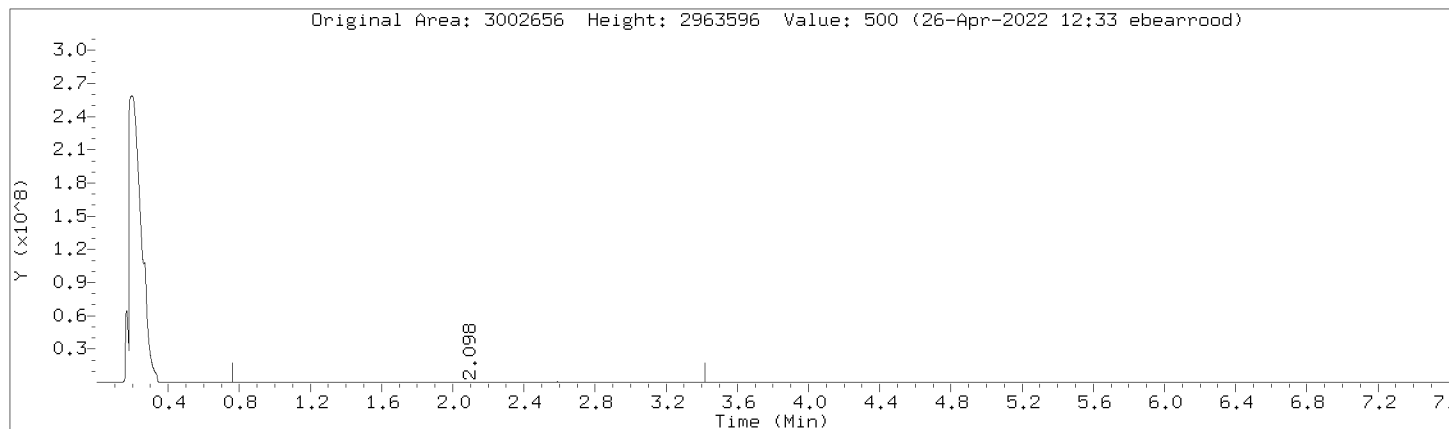
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000010.D  
Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



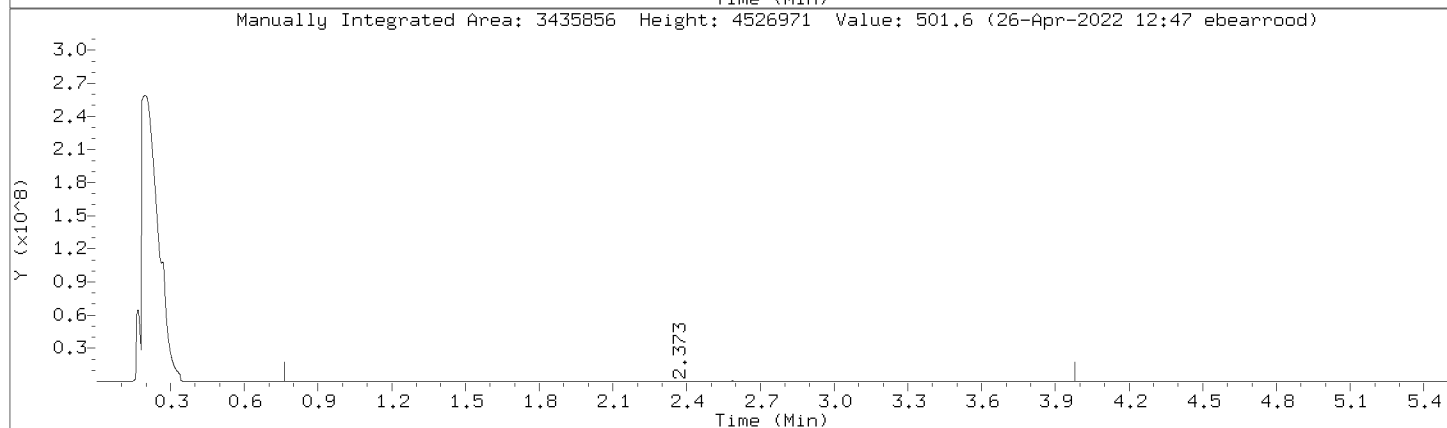
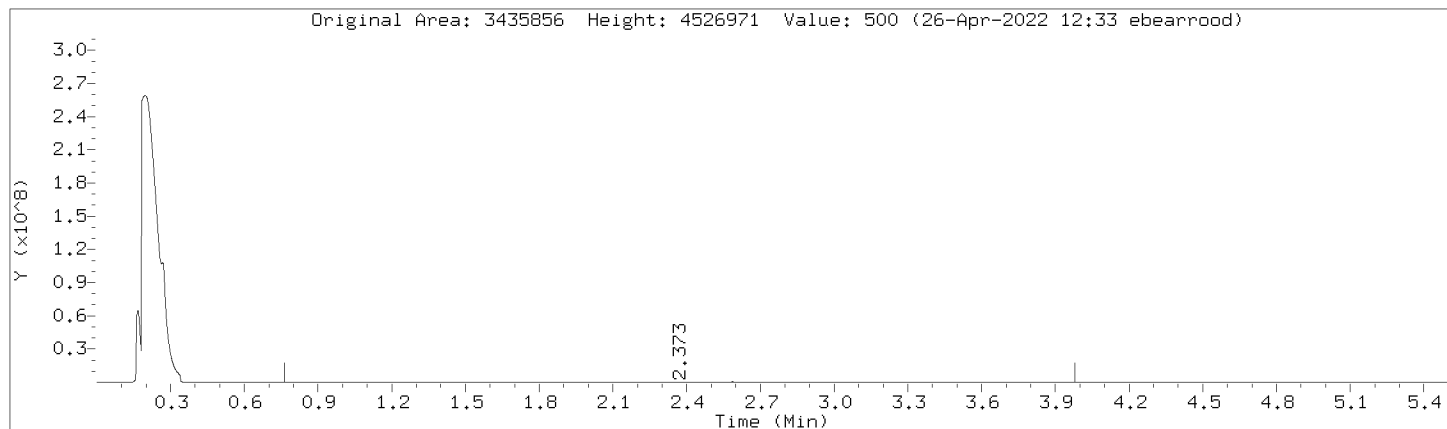
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Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



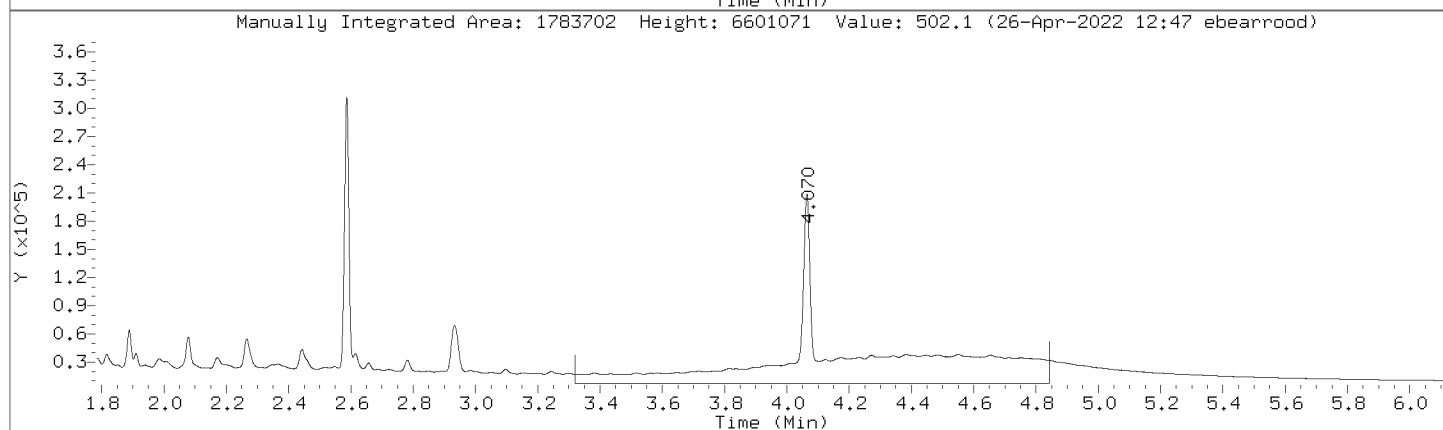
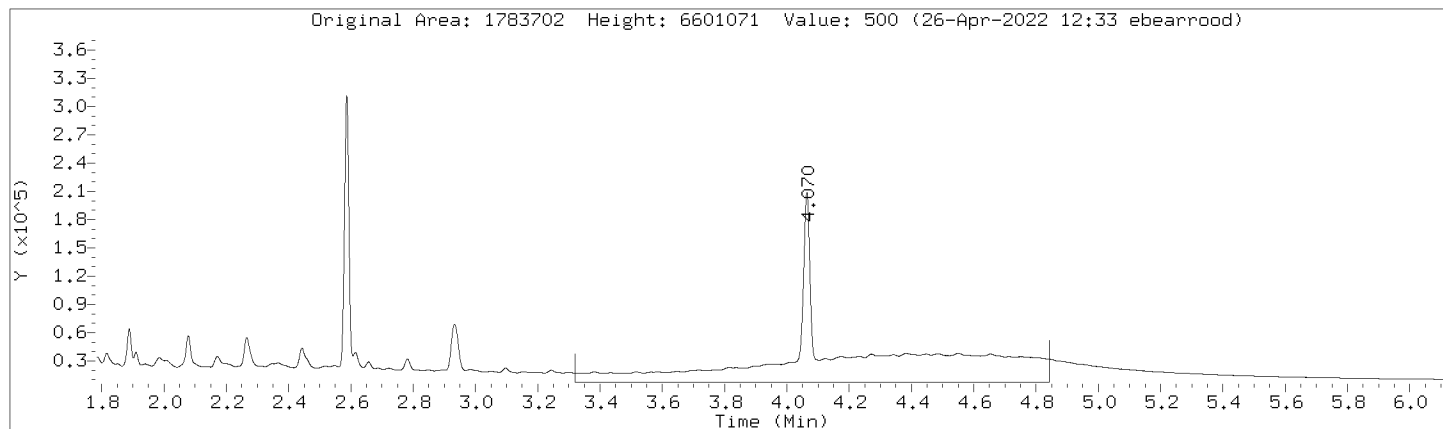
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Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000010.D  
Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

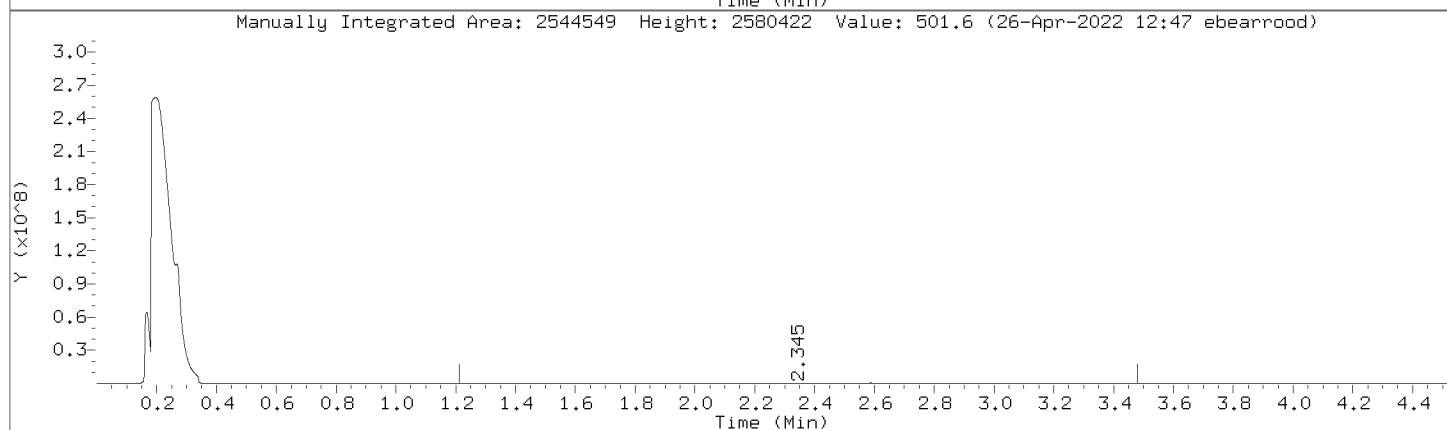
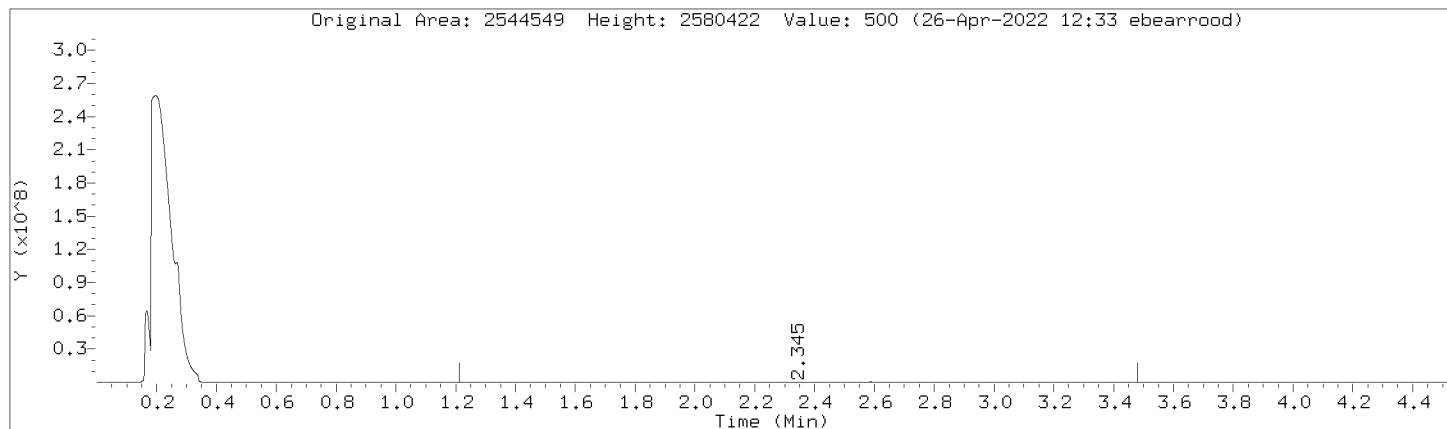
Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:





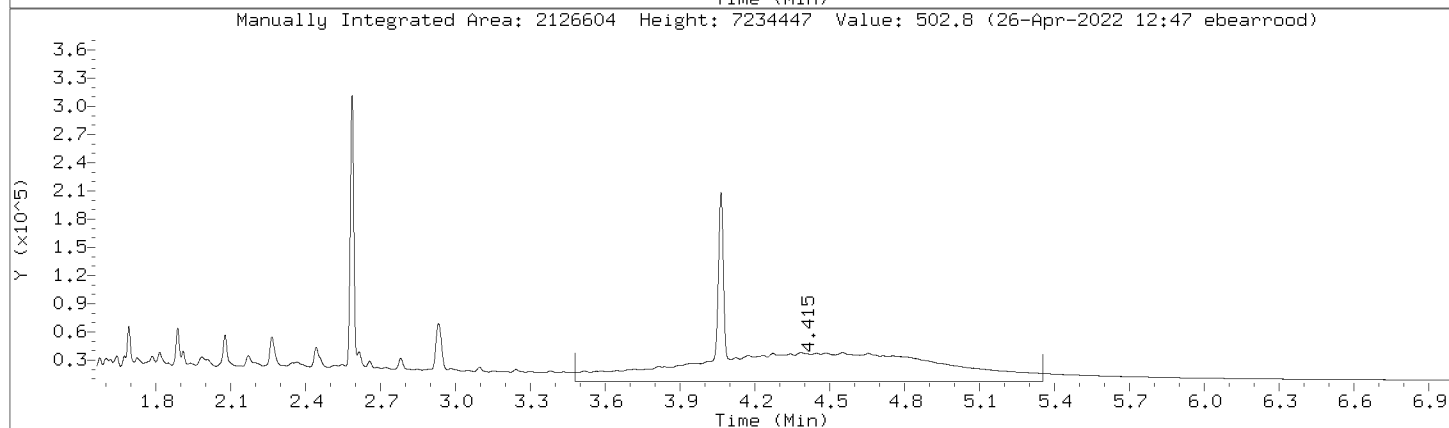
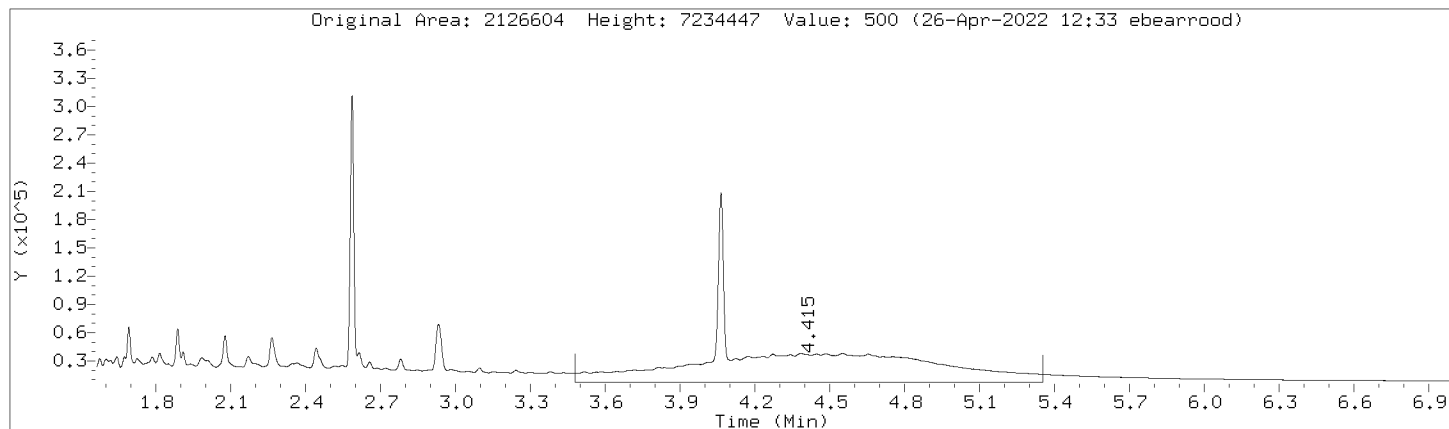
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Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



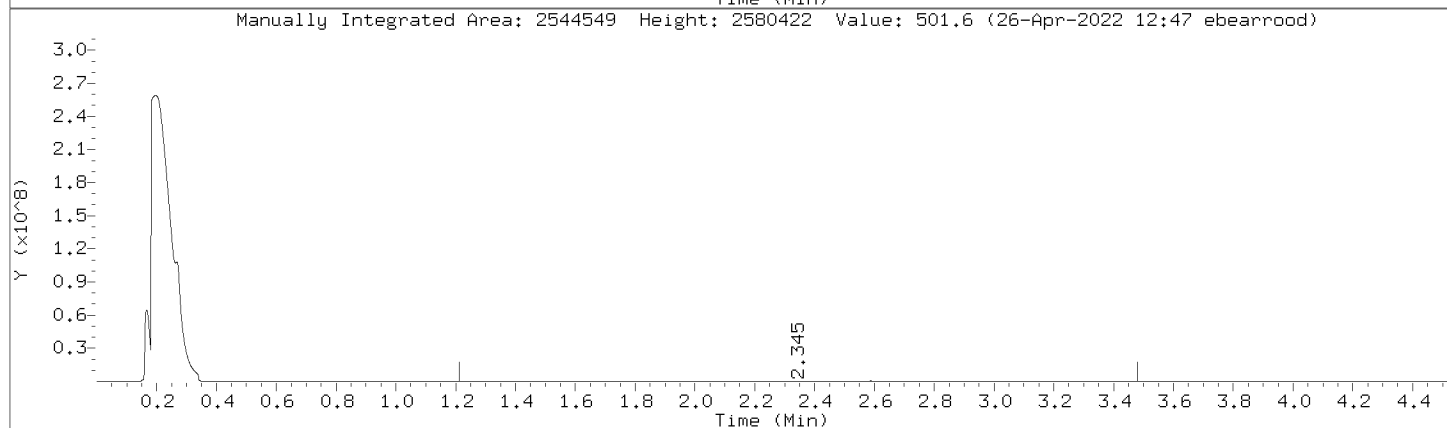
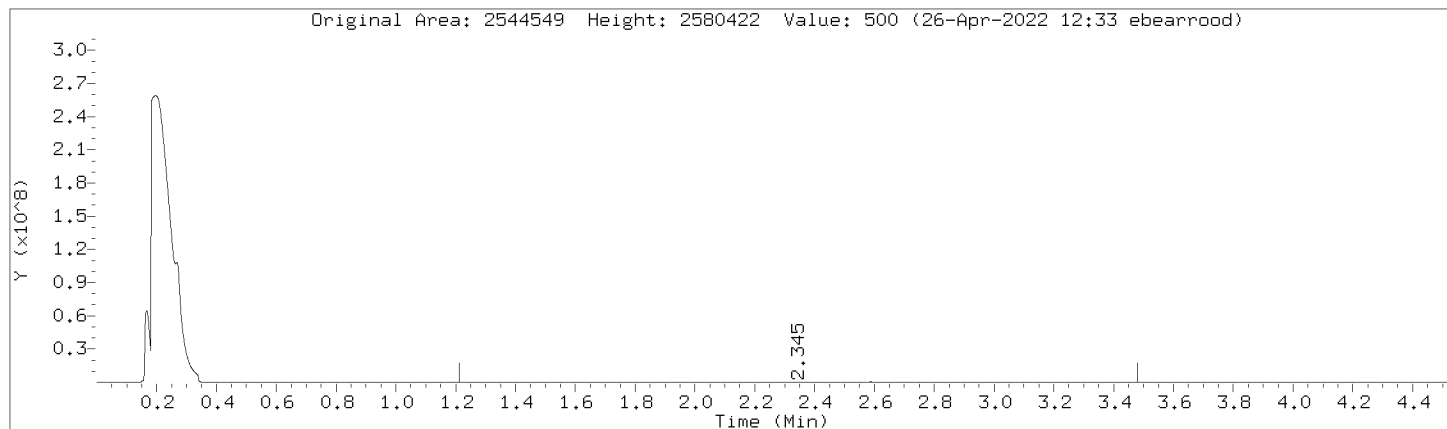
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Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



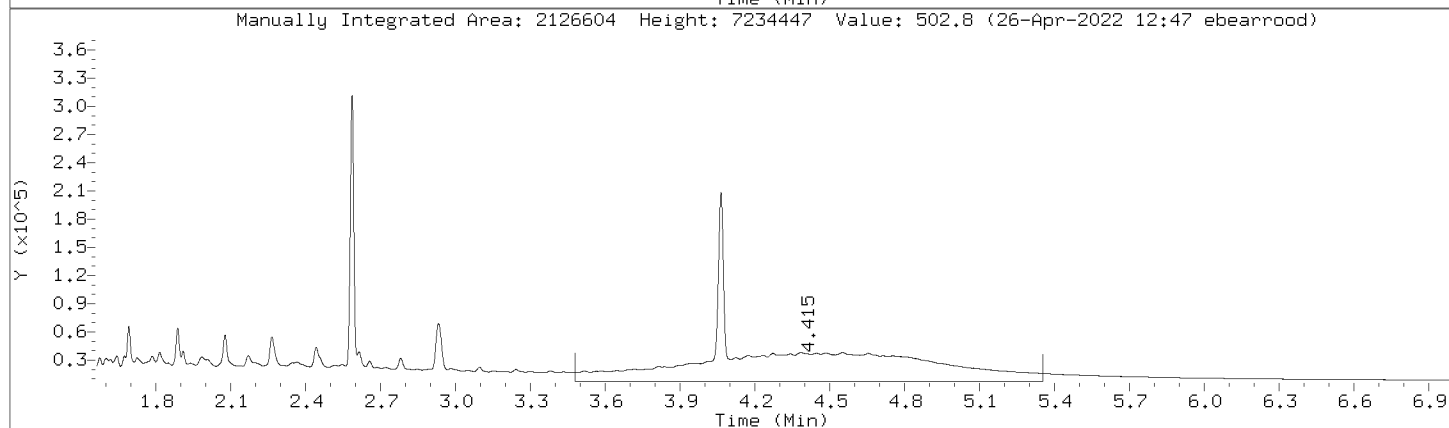
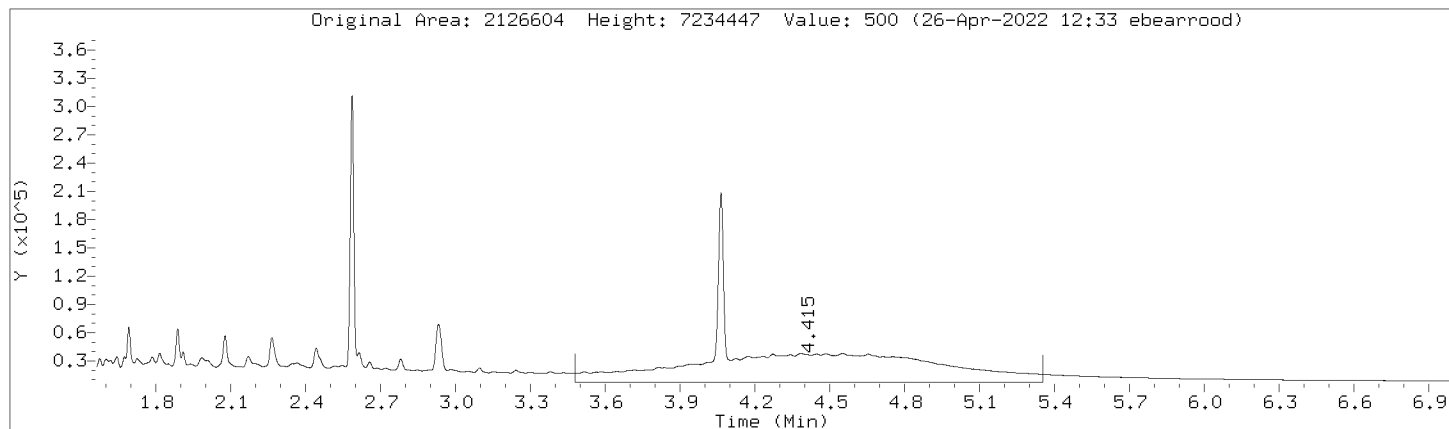
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Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



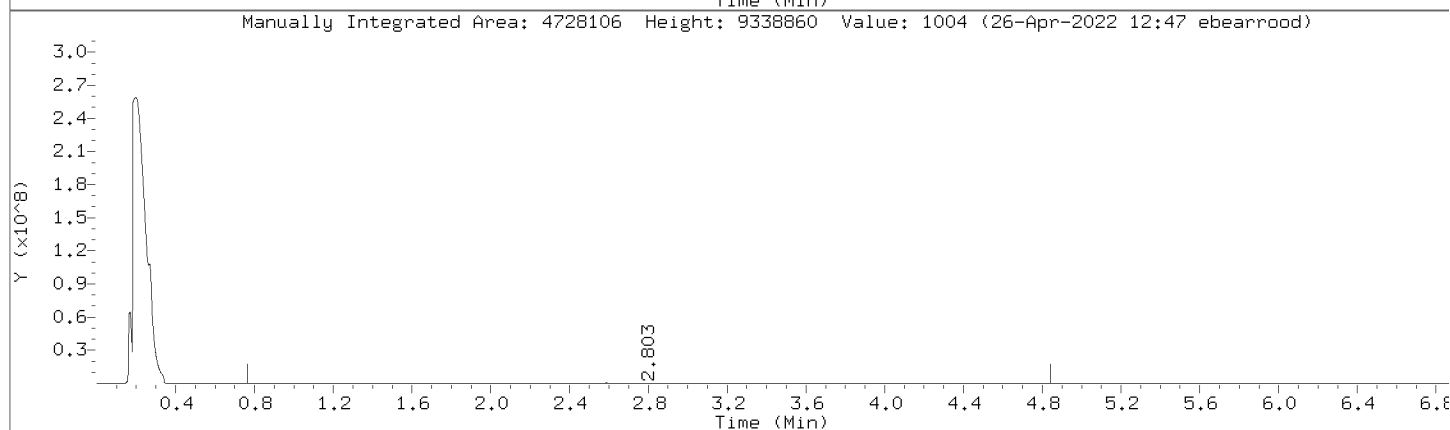
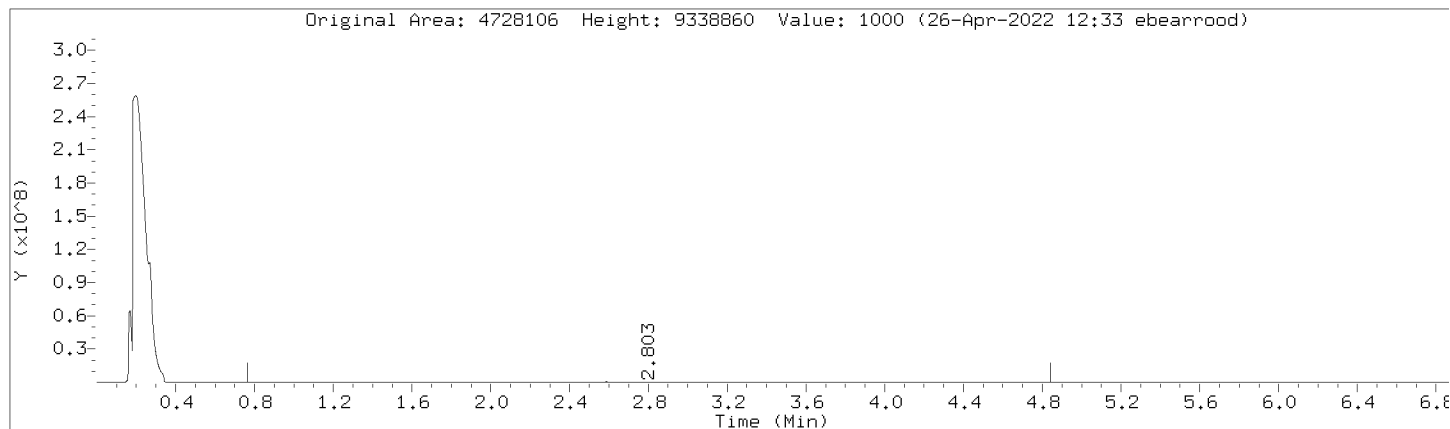
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



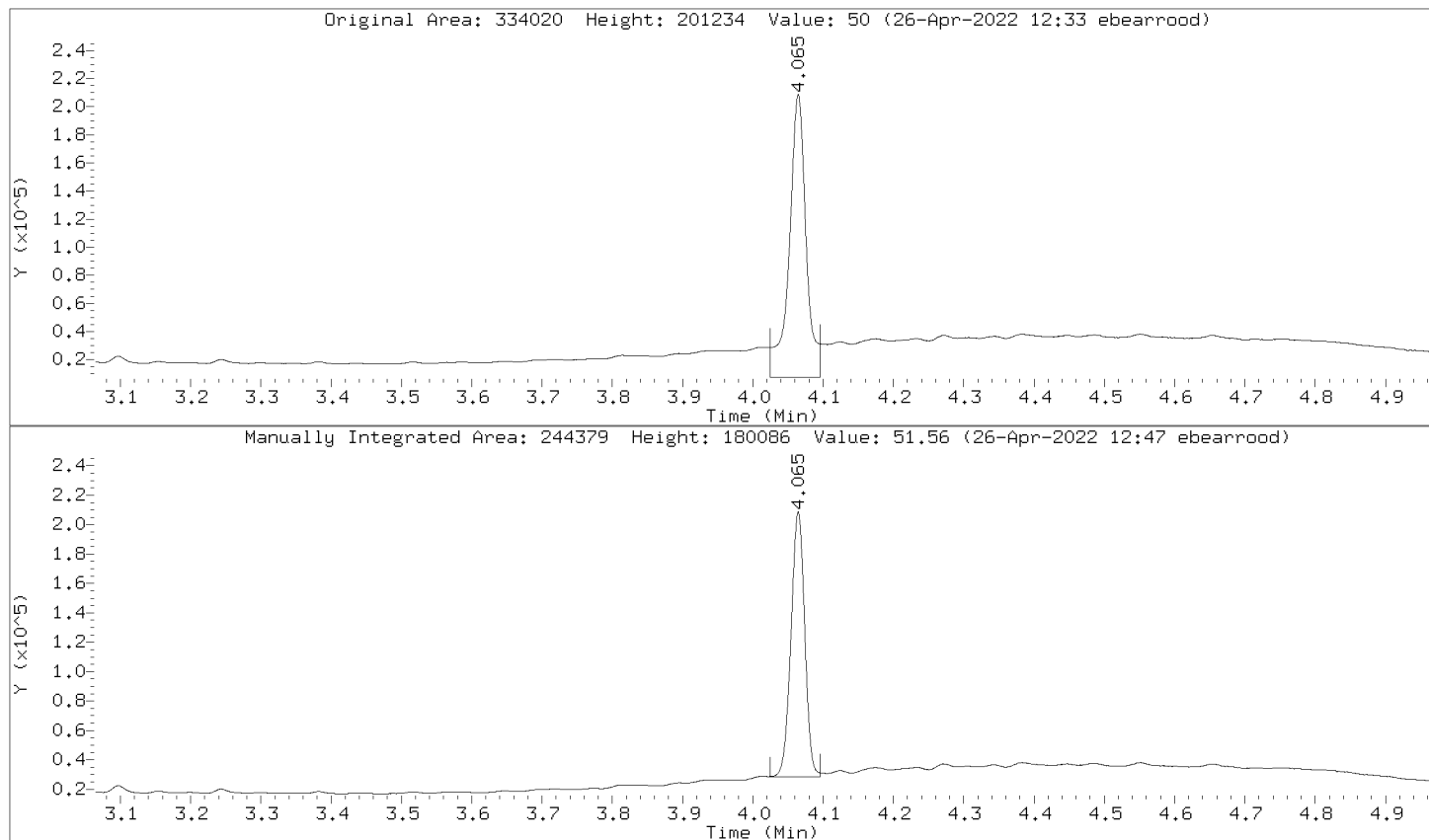
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Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



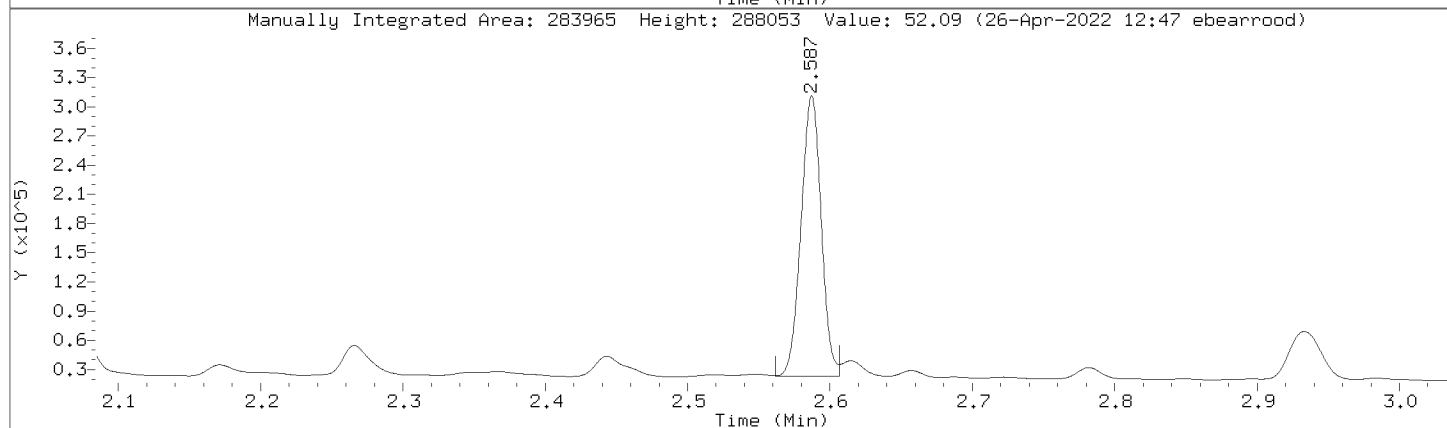
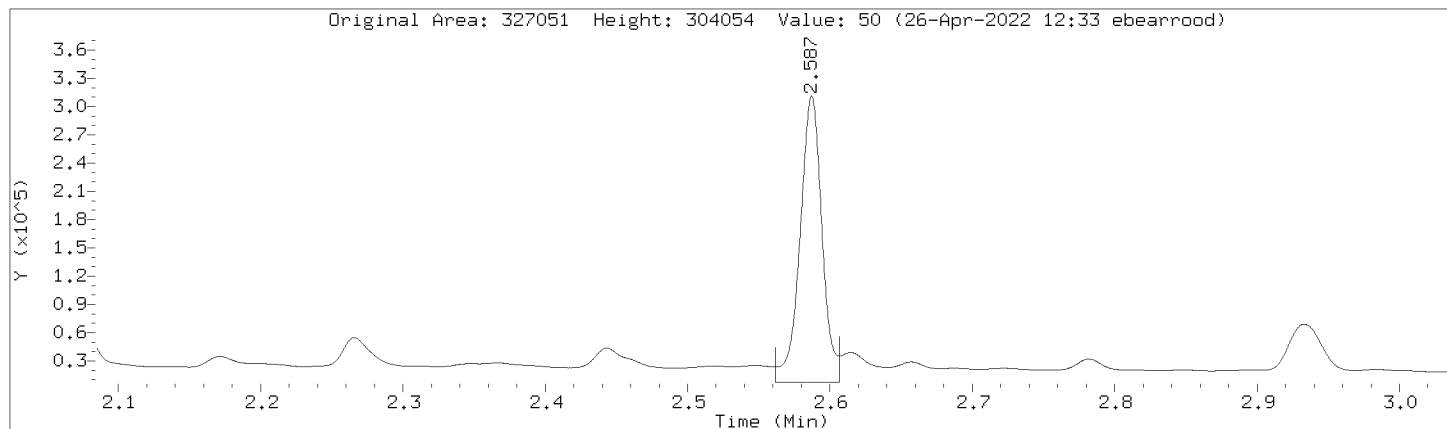
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000010.D  
Injection Date: 26-APR-2022 09:02  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000010.D  
 Injection Date: 26-APR-2022 09:02  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL7,362375:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1725450	1725450
DRO by AK 102	3002656	3002656
TPH-DRO (C10-C28)	3435856	3435856
Motor Oil Range (C24-C36)	1783702	1783702
Diesel Fuel Range	2544549	2544549
Motor Oil Range	2126604	2126604
Diesel Fuel Range SG	2544549	2544549
Motor Oil Range SG	2126604	2126604
C10-C36	4728106	4728106
n-Triacontane (S)	334020	244379
o-Terphenyl (S)	327051	283965

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000011.D  
 Lab Smp Id: DMO-CAL8,362376:2 Client Smp ID: DMO-CAL8,362376:2  
 Inj Date : 26-APR-2022 09:13  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal8,362376:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 10 Calibration Sample, Level: 8  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		5684961 1000.00	1000	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.588	2.582 0.006		567975 100.000	104	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.070	4.064 0.006		489894 100.000	103	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		3340334 1000.00	1000	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		6506472 1000.00	999	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		3472644 1000.00	1000	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		9025295 2000.00	2000	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		4796494 1000.00	999	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		4796494 1000.00	999	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		4126794 1000.00	1000	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		4126794 1000.00	1000	(M) RNG
-----					



QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 09:13

Client ID: DM0-CAL8.362376:2

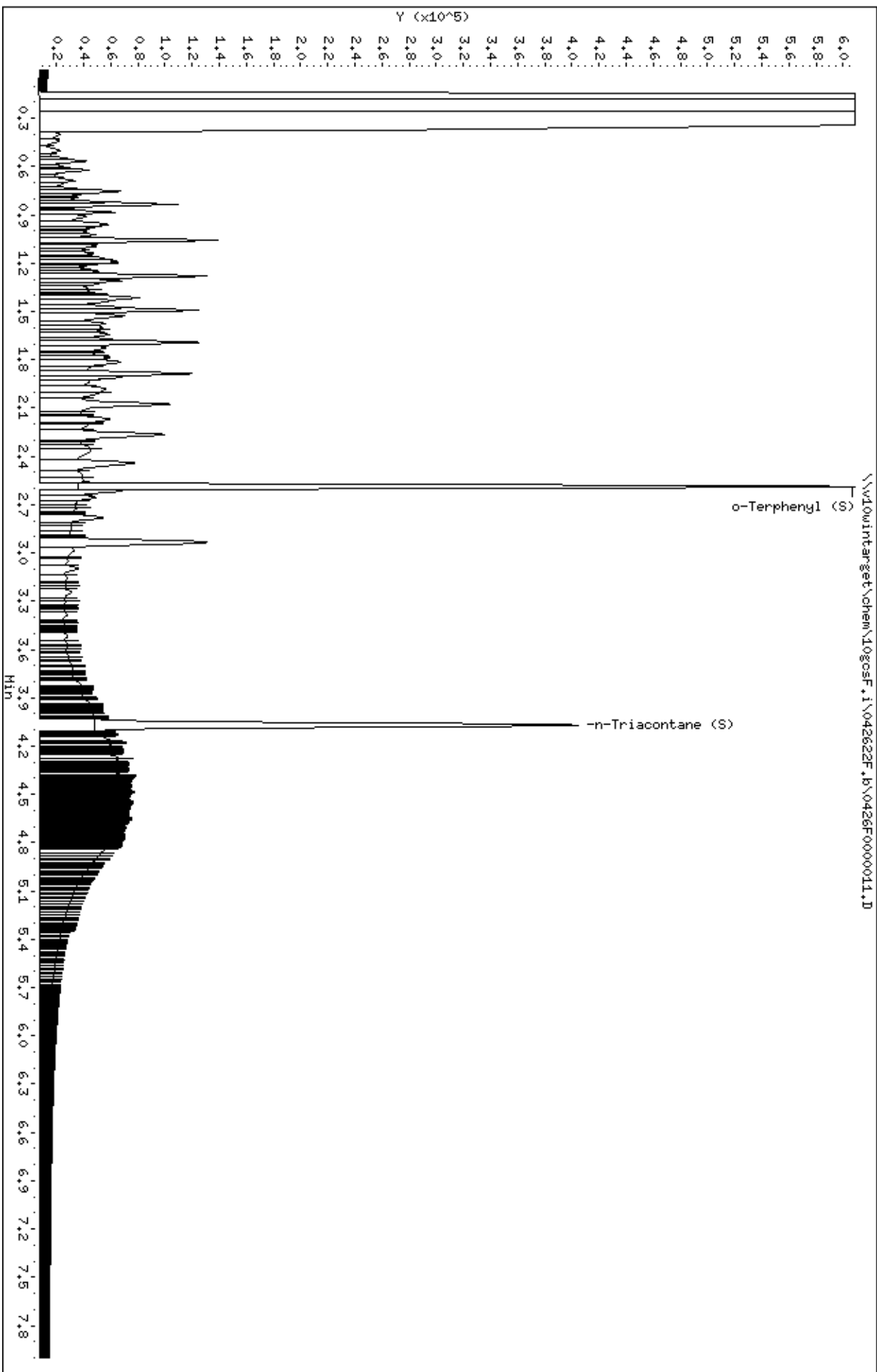
Sample Info: DM0-CAL8.362376:2

Instrument: 10goscF.1

Operator: EB3

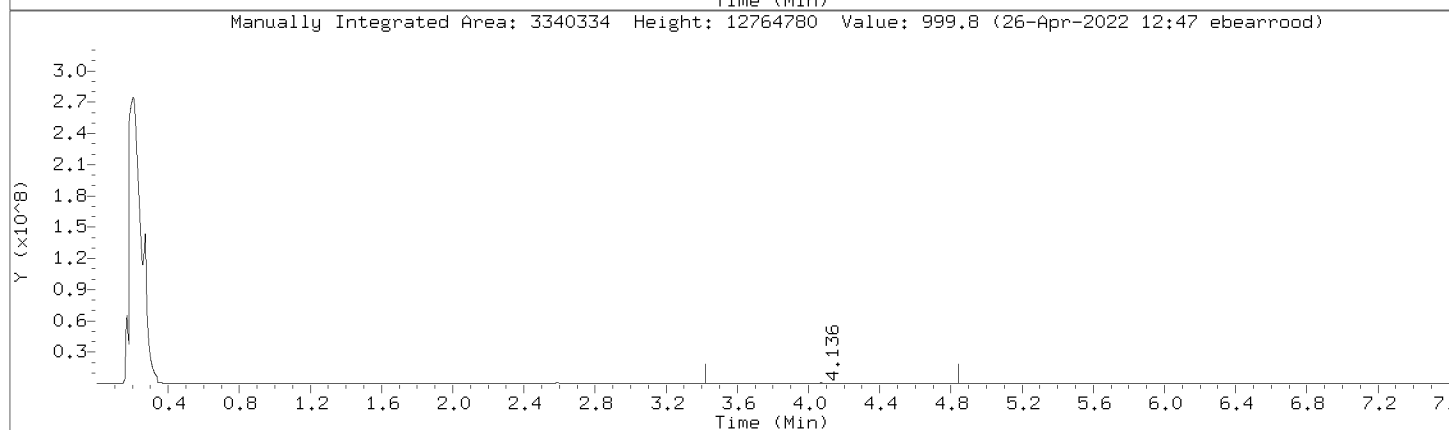
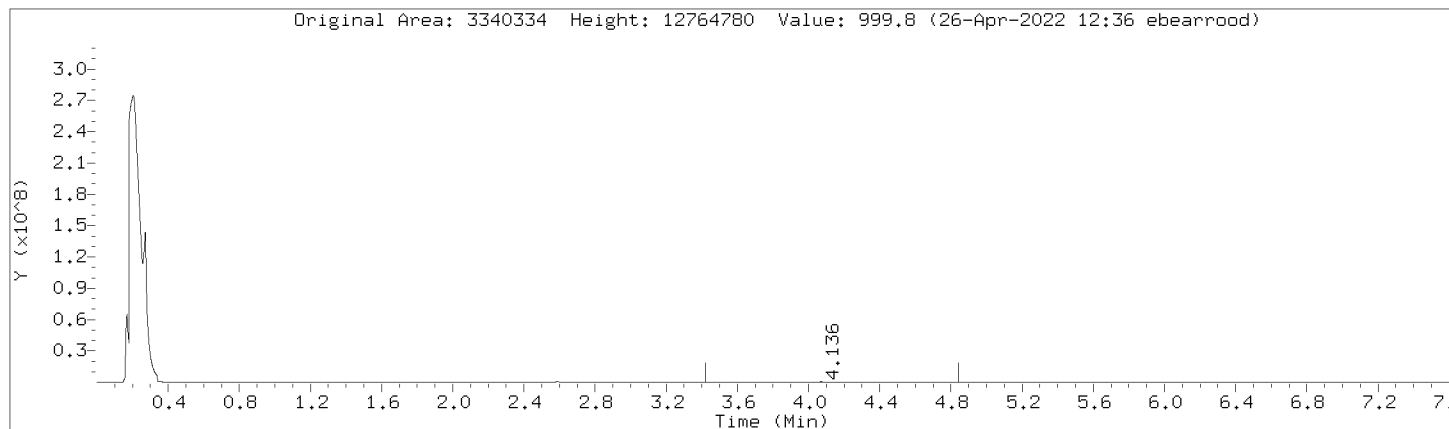
Column phase: DB-5-MS21250010

Column diameter: 0.32



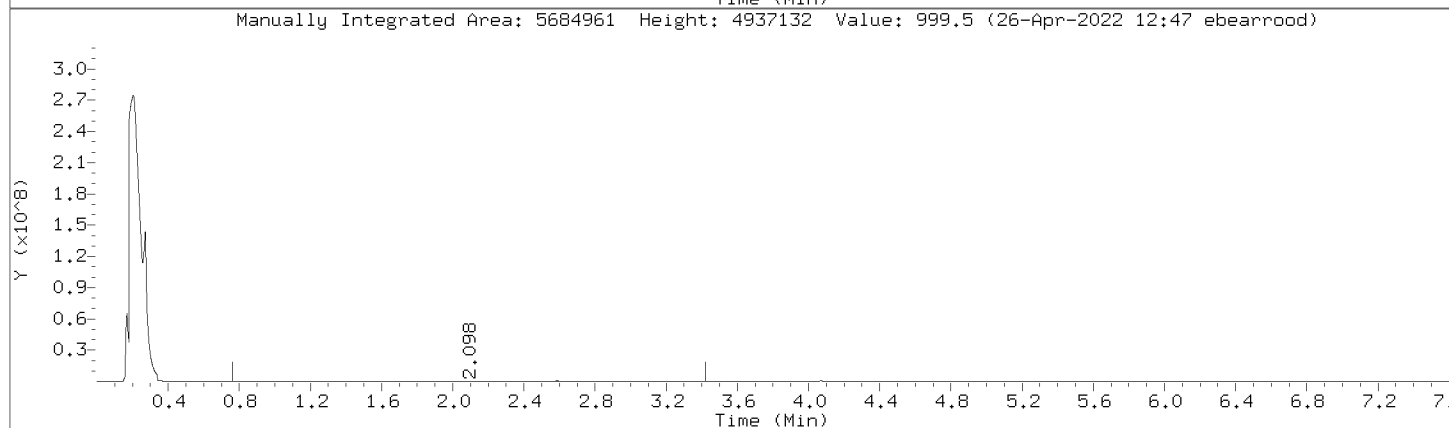
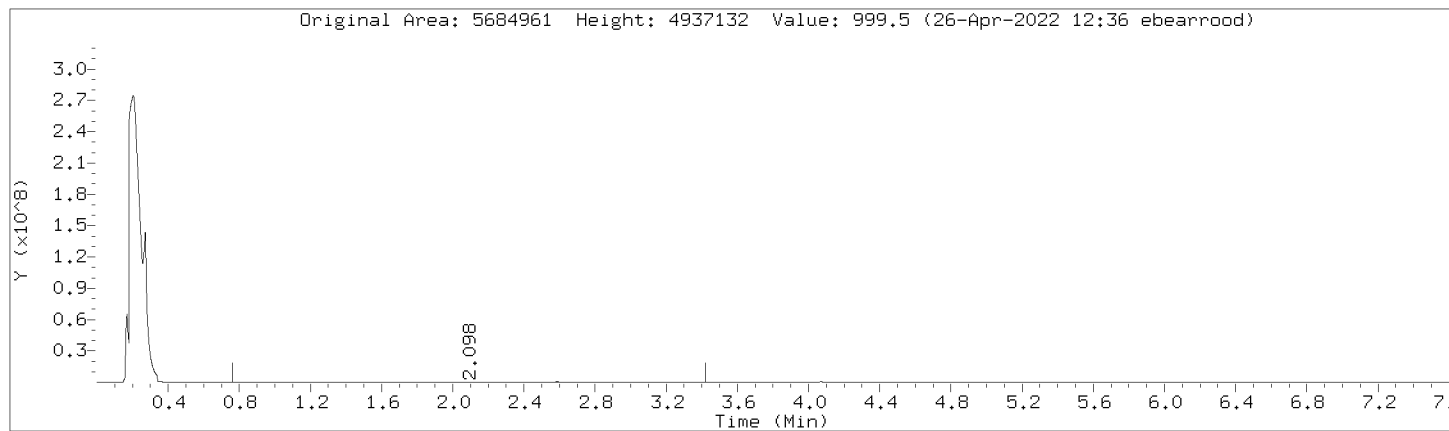
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Injection Date: 26-APR-2022 09:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



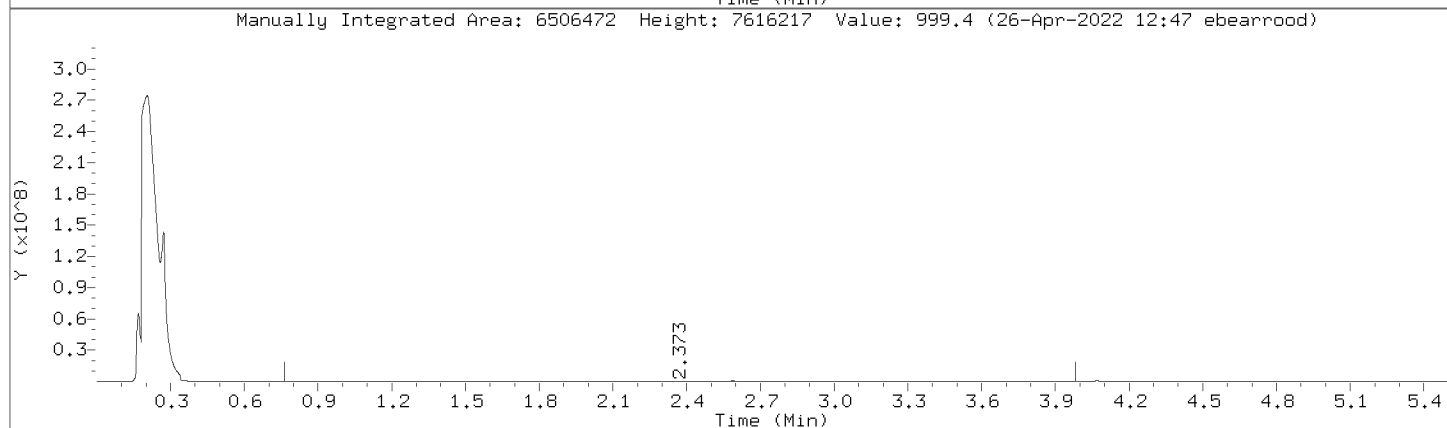
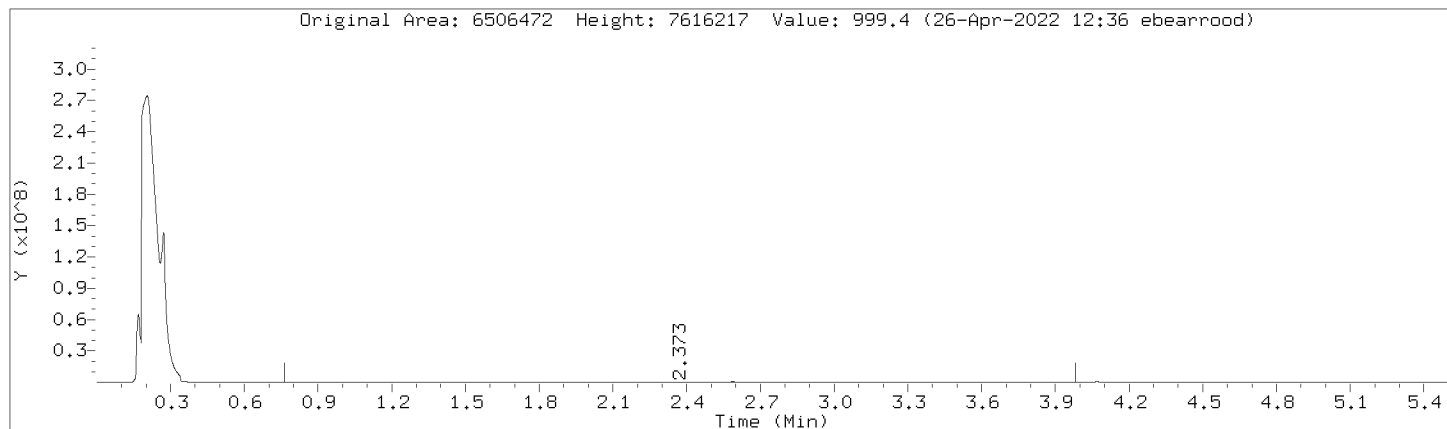
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Injection Date: 26-APR-2022 09:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



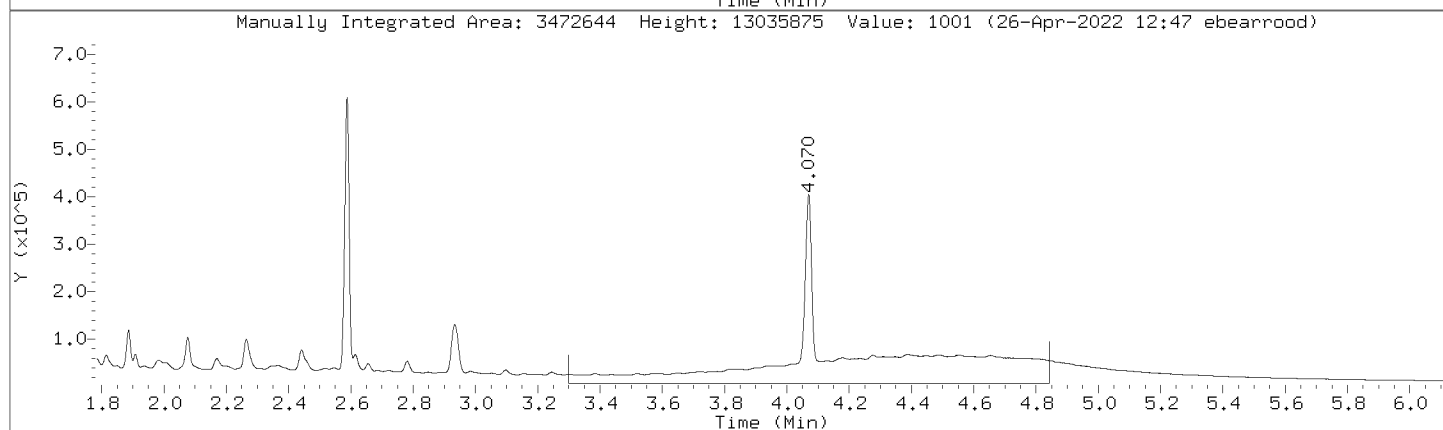
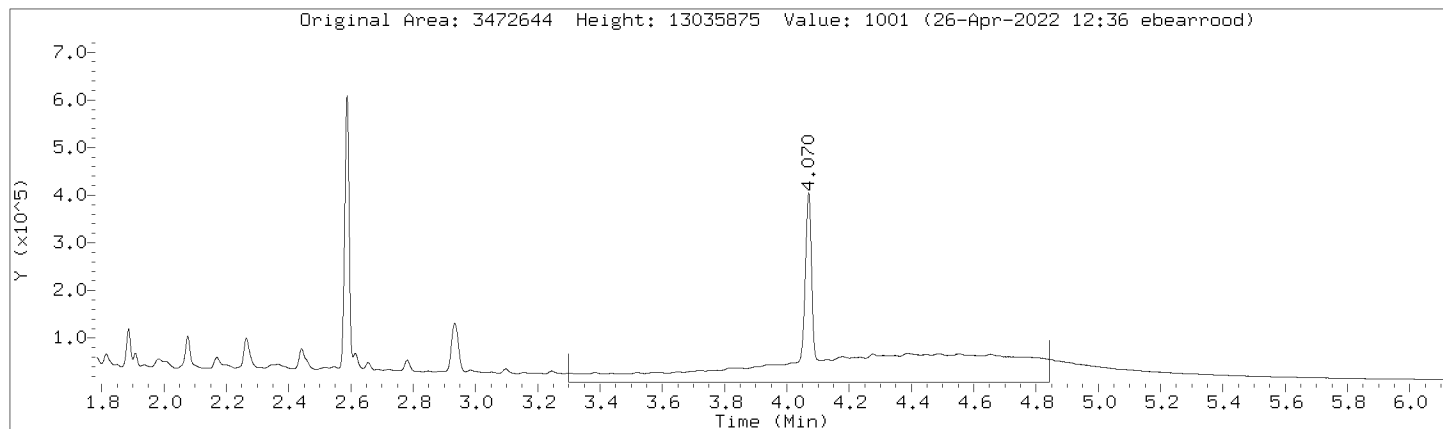
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



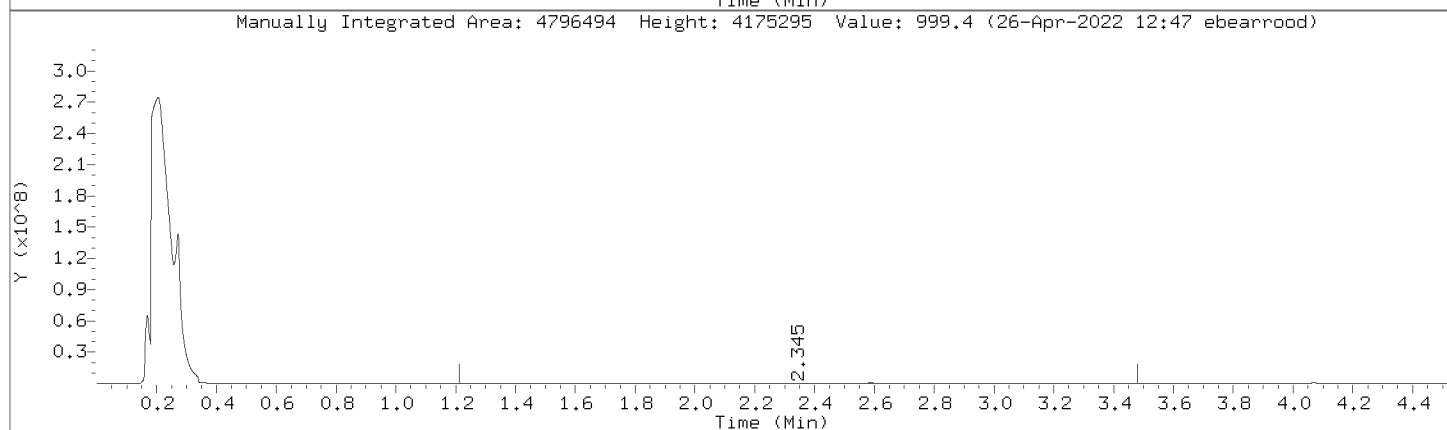
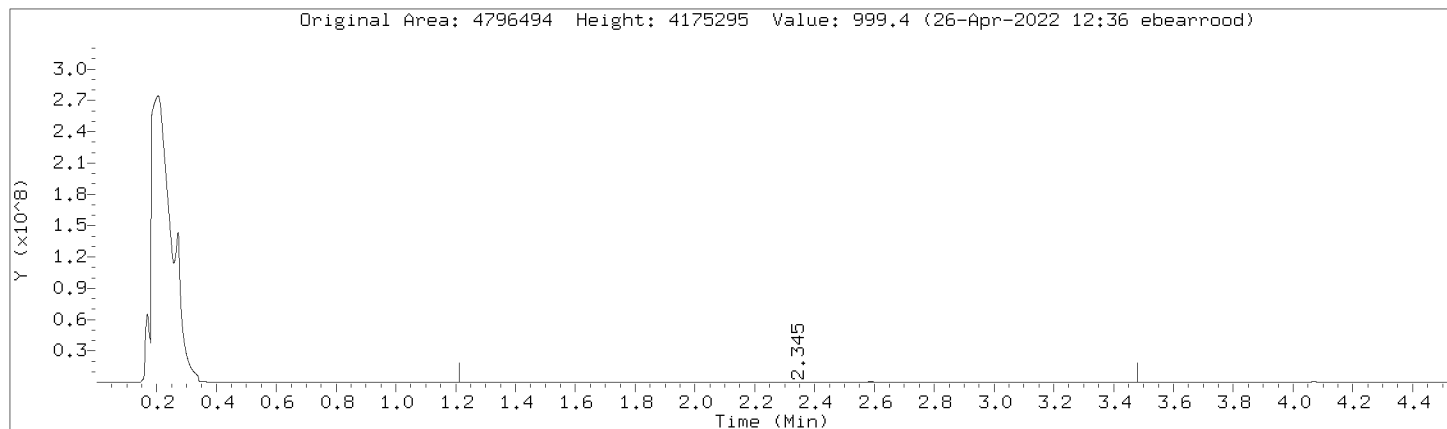
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



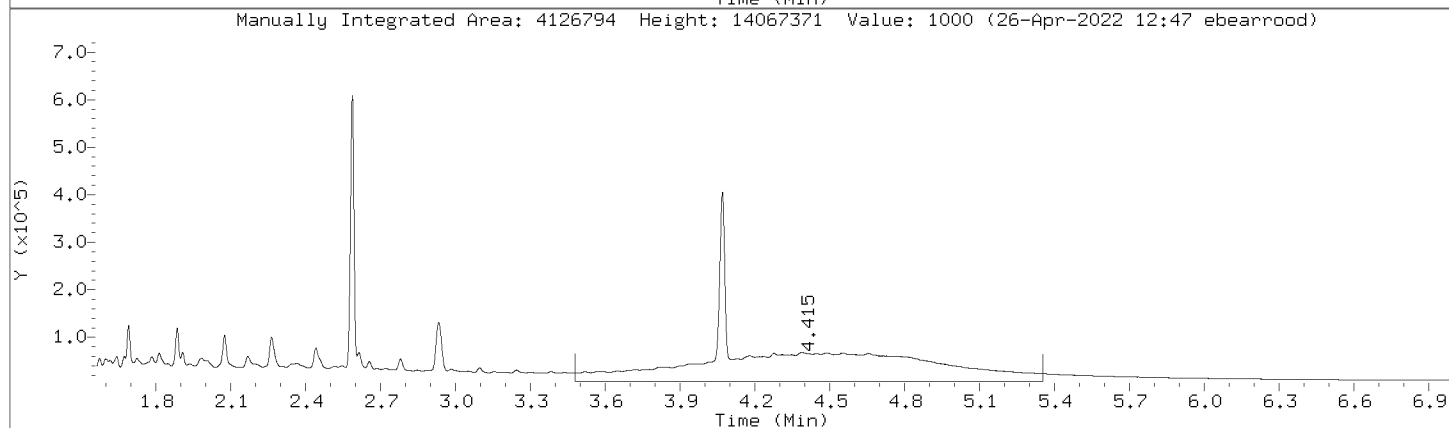
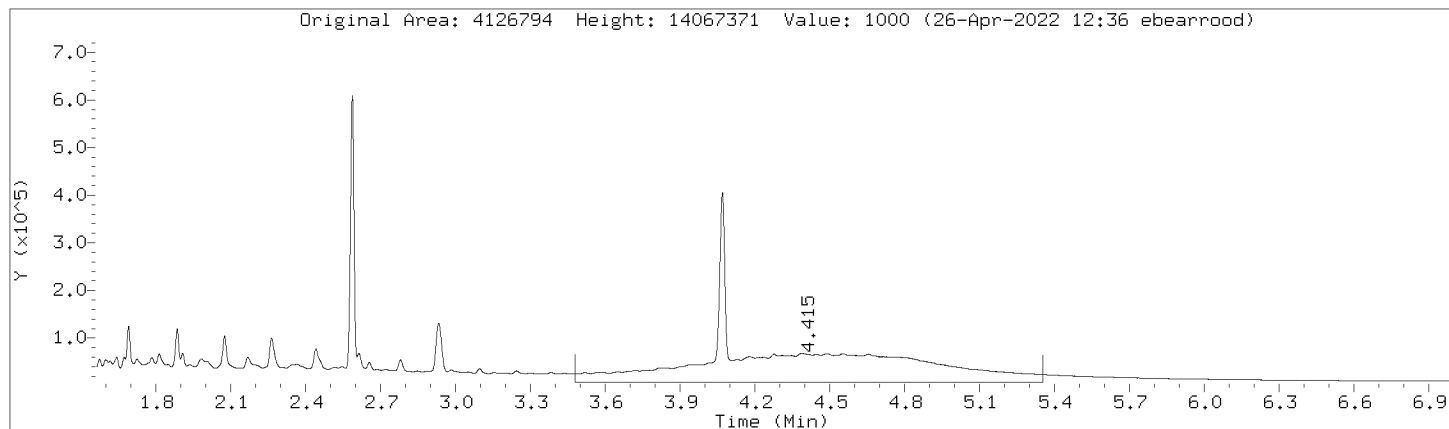
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Injection Date: 26-APR-2022 09:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000011.D  
Injection Date: 26-APR-2022 09:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

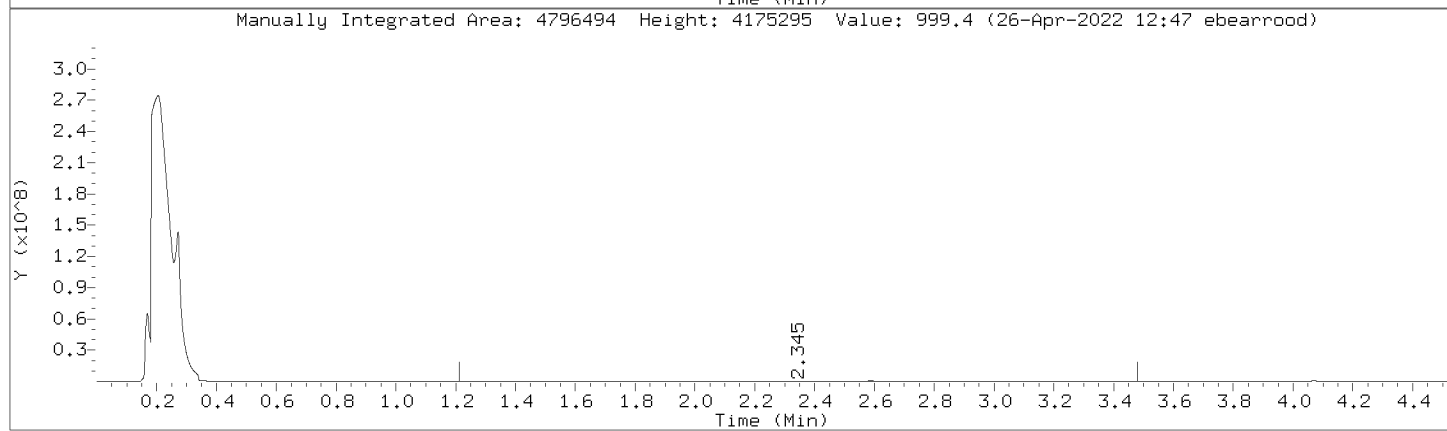
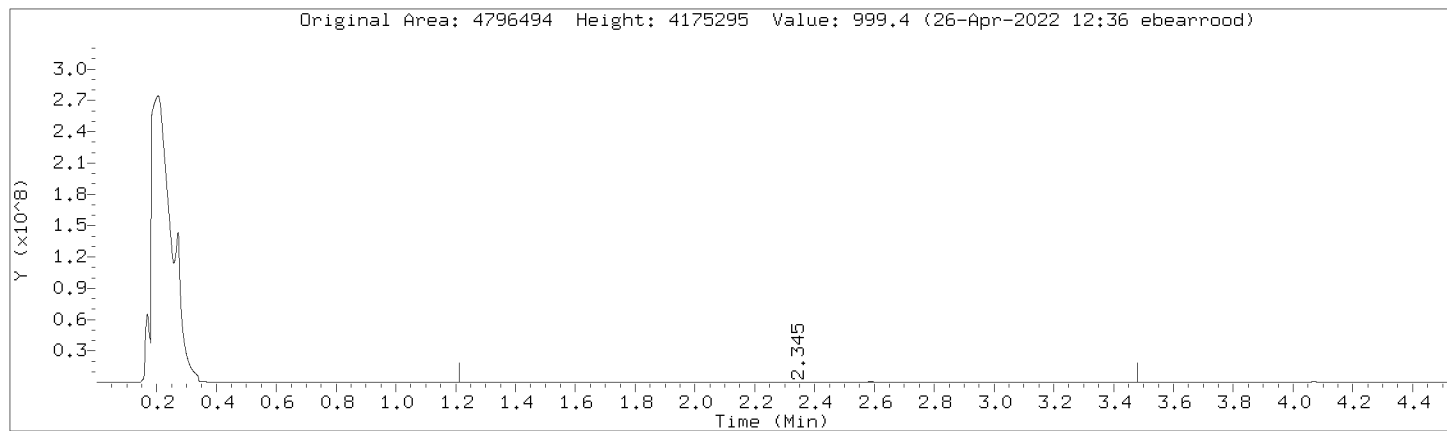
Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





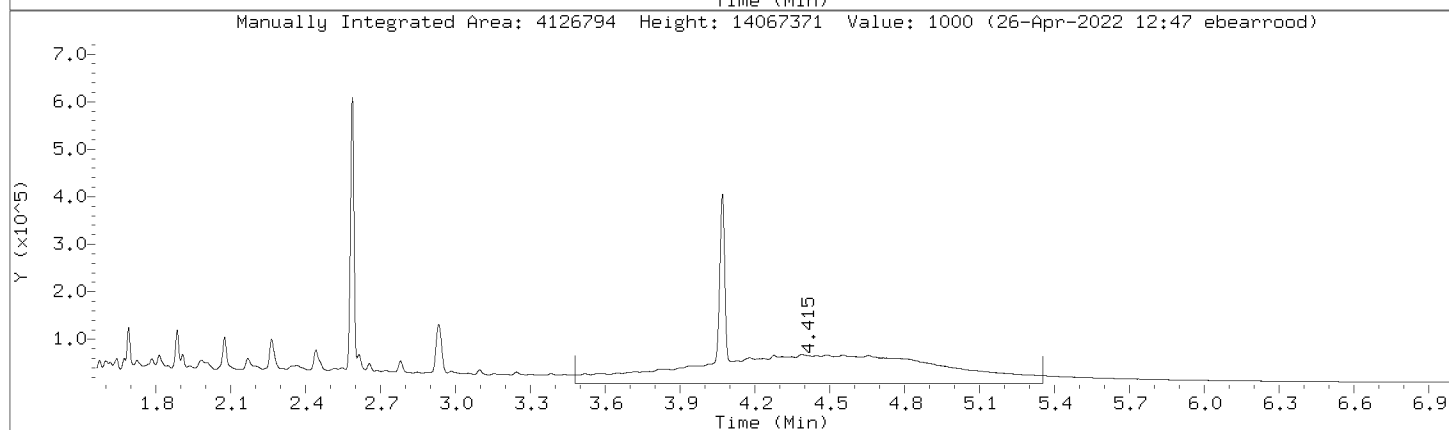
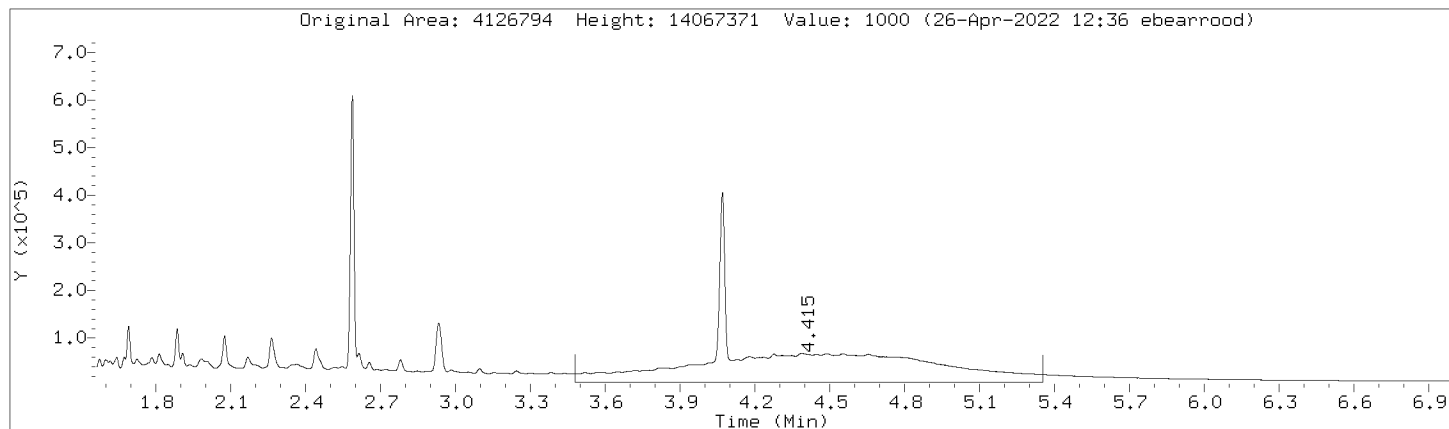
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Injection Date: 26-APR-2022 09:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



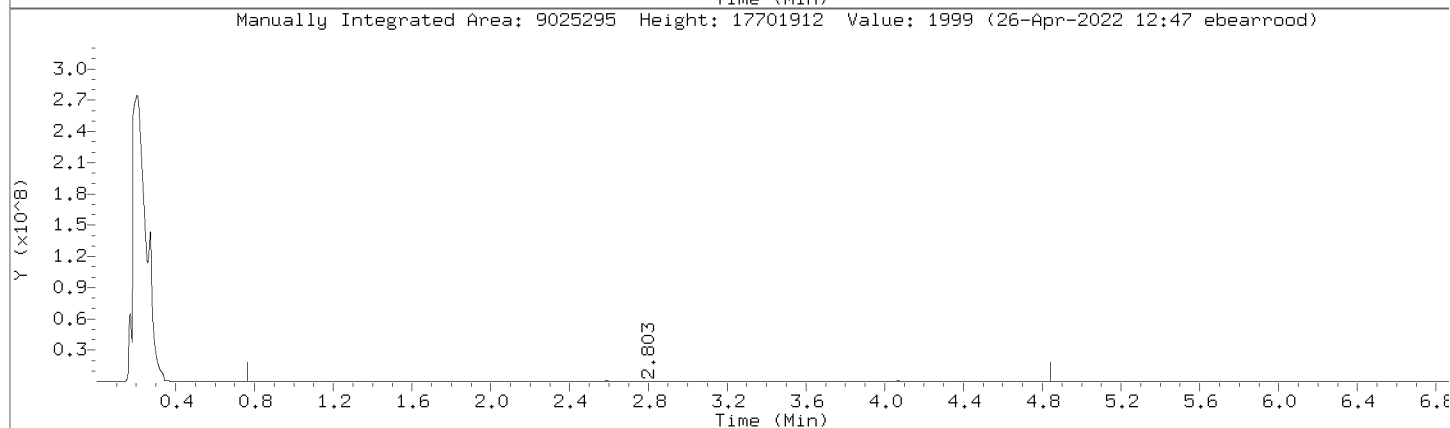
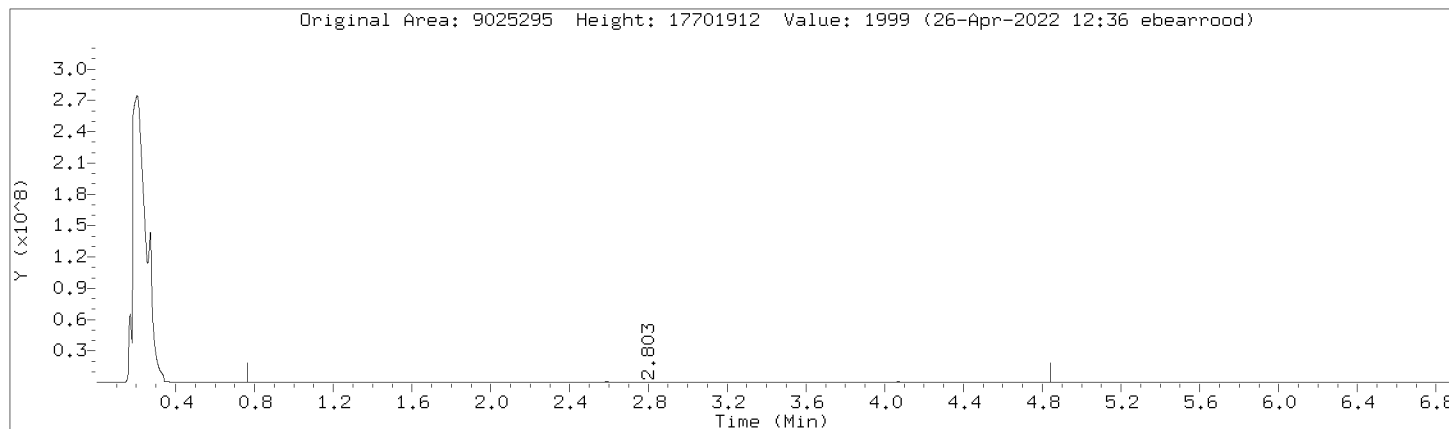
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



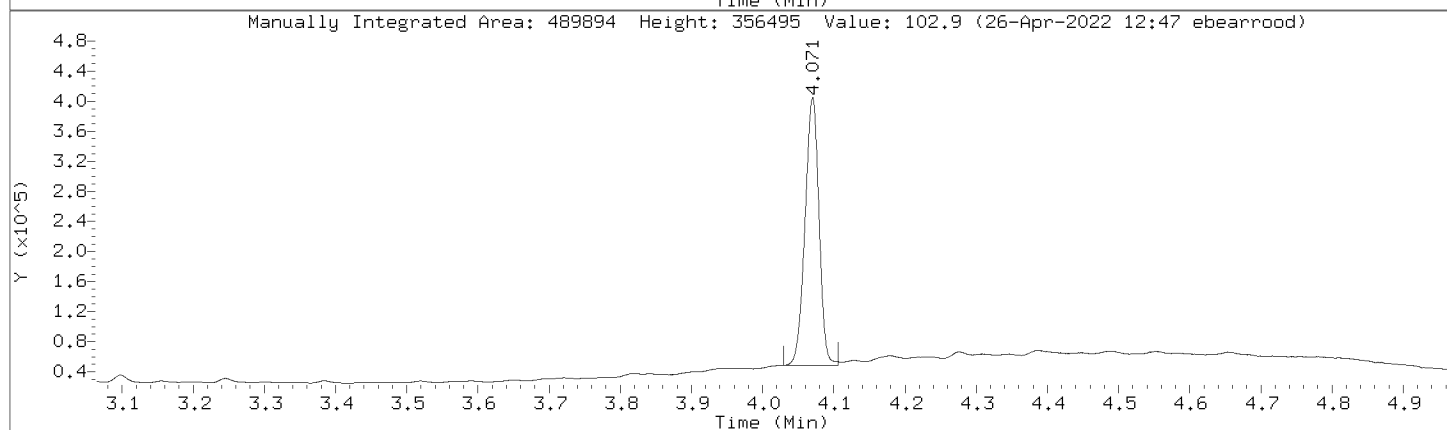
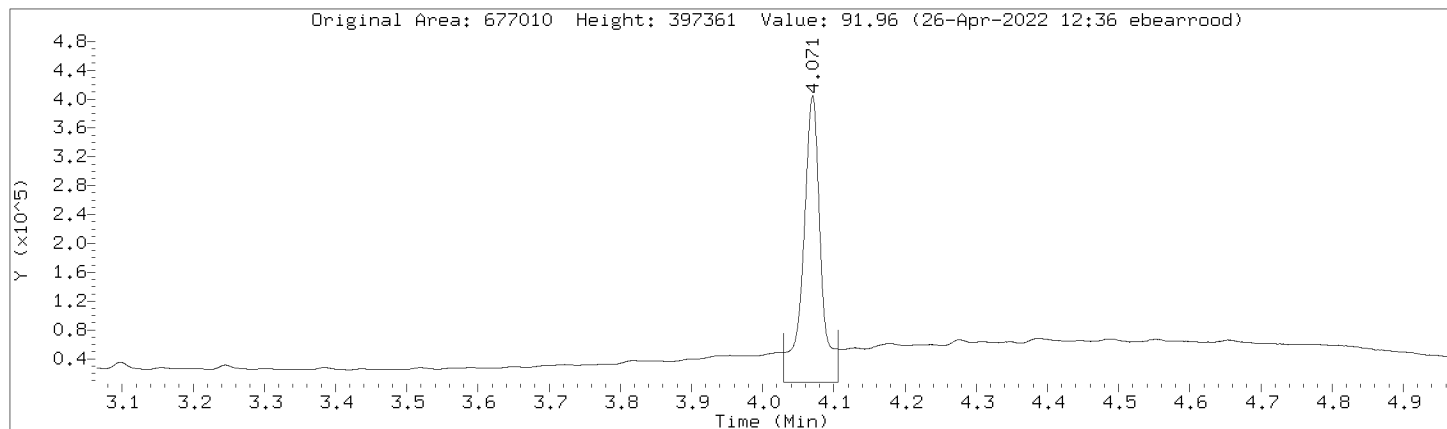
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



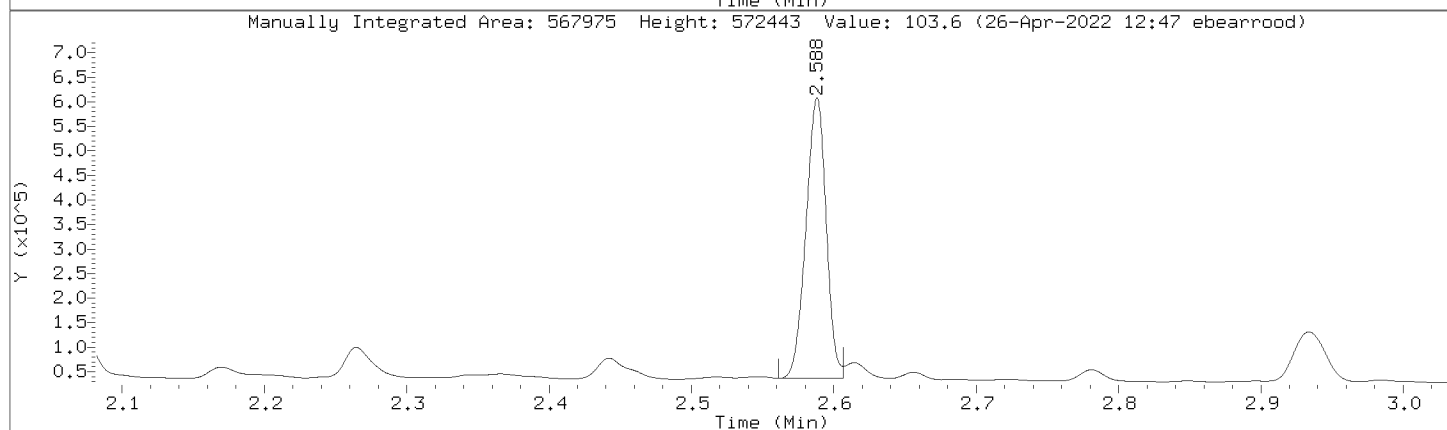
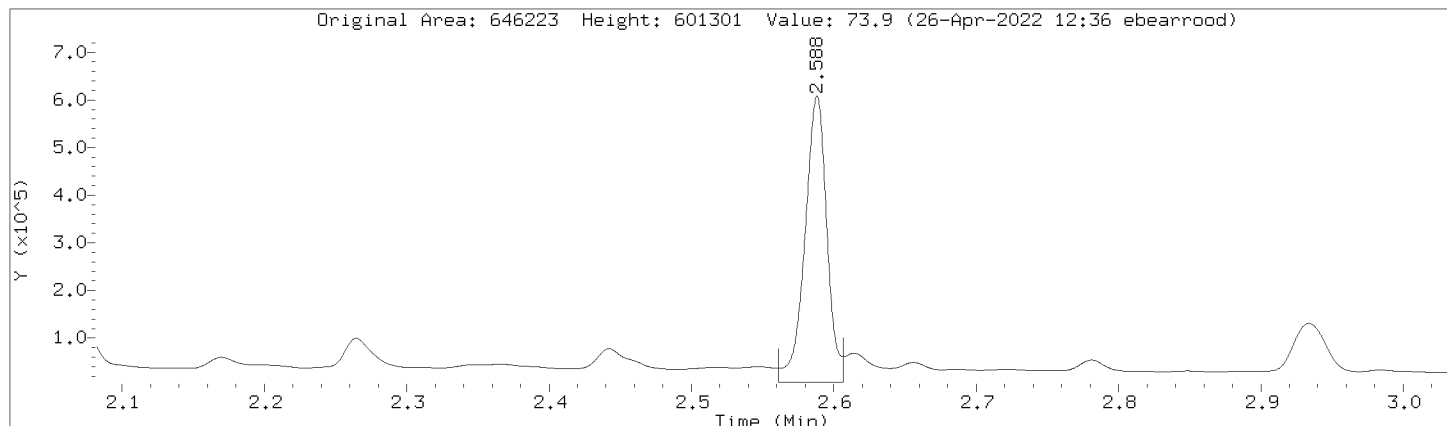
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Injection Date: 26-APR-2022 09:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000011.D  
 Injection Date: 26-APR-2022 09:13  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL8,362376:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	3340334	3340334
DRO by AK 102	5684961	5684961
TPH-DRO (C10-C28)	6506472	6506472
Motor Oil Range (C24-C36)	3472644	3472644
Diesel Fuel Range	4796494	4796494
Motor Oil Range	4126794	4126794
Diesel Fuel Range SG	4796494	4796494
Motor Oil Range SG	4126794	4126794
C10-C36	9025295	9025295
n-Triacontane (S)	677010	489894
o-Terphenyl (S)	646223	567975

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000012.D  
 Lab Smp Id: DMO-CAL9,362377:2 Client Smp ID: DMO-CAL9,362377:2  
 Inj Date : 26-APR-2022 09:25  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal9,362377:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 11 Calibration Sample, Level: 9  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		11015439 2000.00	2000	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.590	2.582 0.008		1136496 200.000	206	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.071	4.064 0.007		971079 200.000	204	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		6616190 2000.00	2000	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		12612399 2000.00	2000	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		6819738 2000.00	2000	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		17631630 4000.00	4000	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		9273218 2000.00	2000	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		9273218 2000.00	2000	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		8091734 2000.00	2000	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		8091734 2000.00	2000	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 09:25

Client ID: DM0-CAL9,362377:2

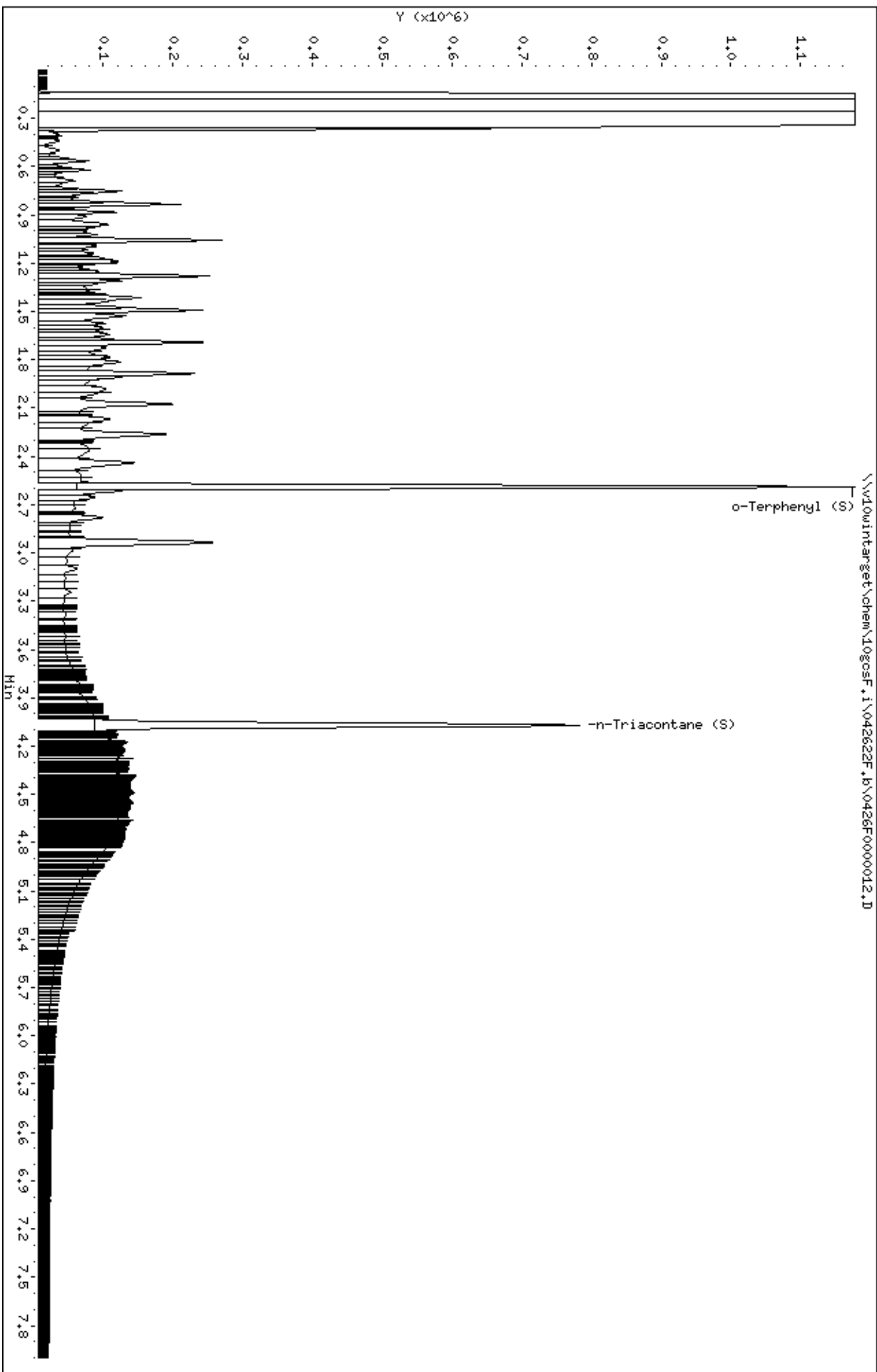
Sample Info: DM0-CAL9,362377:2

Instrument: 10gocsf.1

Operator: EB3

Column diameter: 0.32

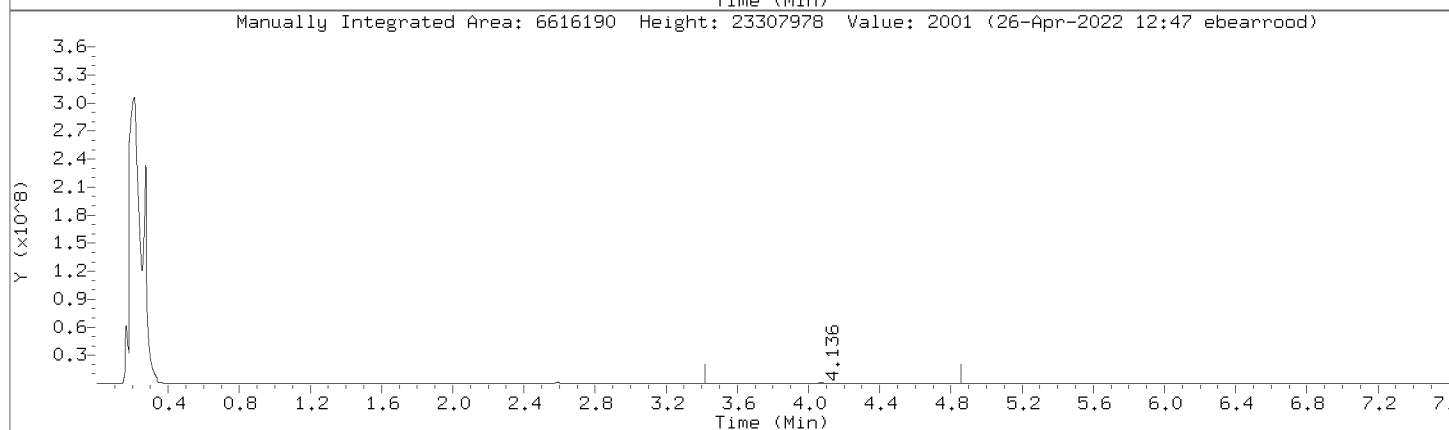
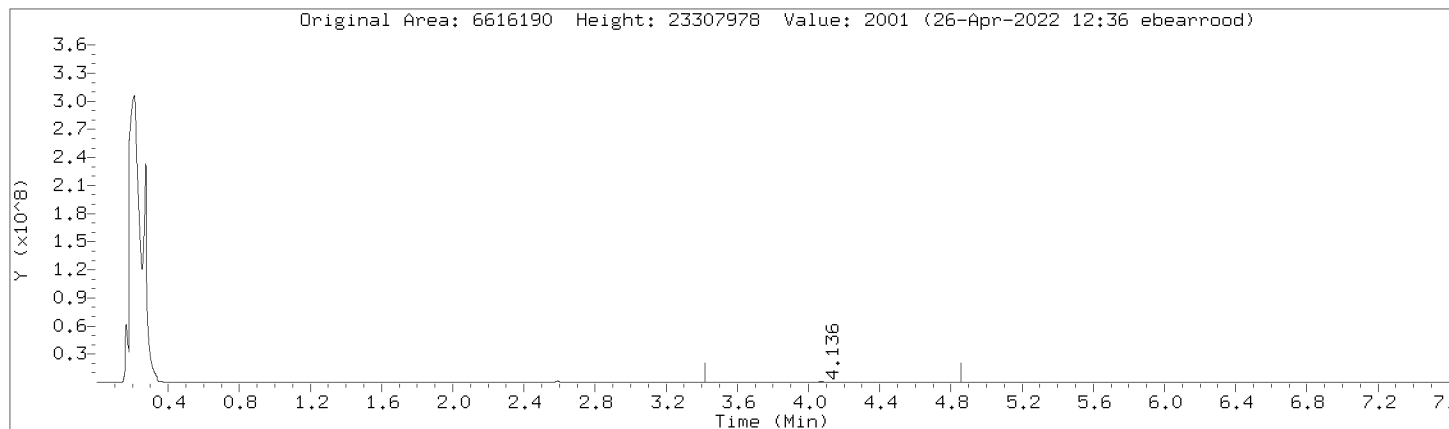
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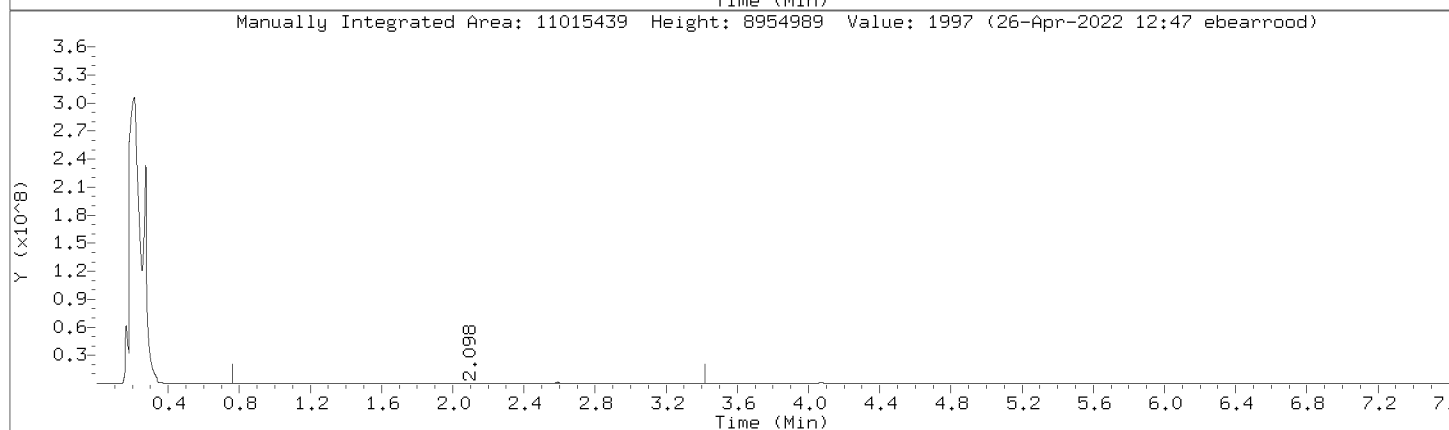
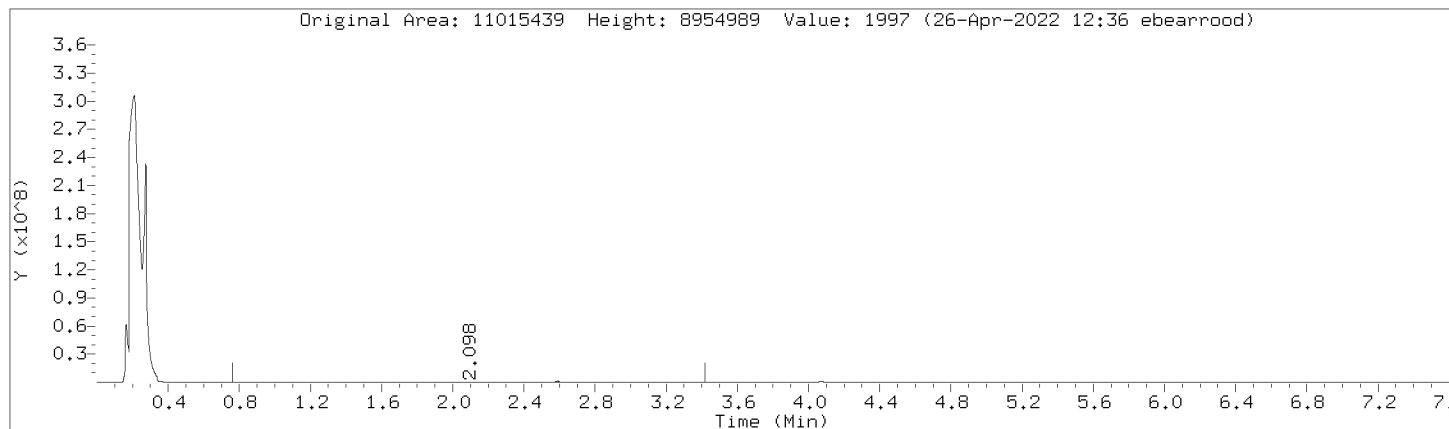
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Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



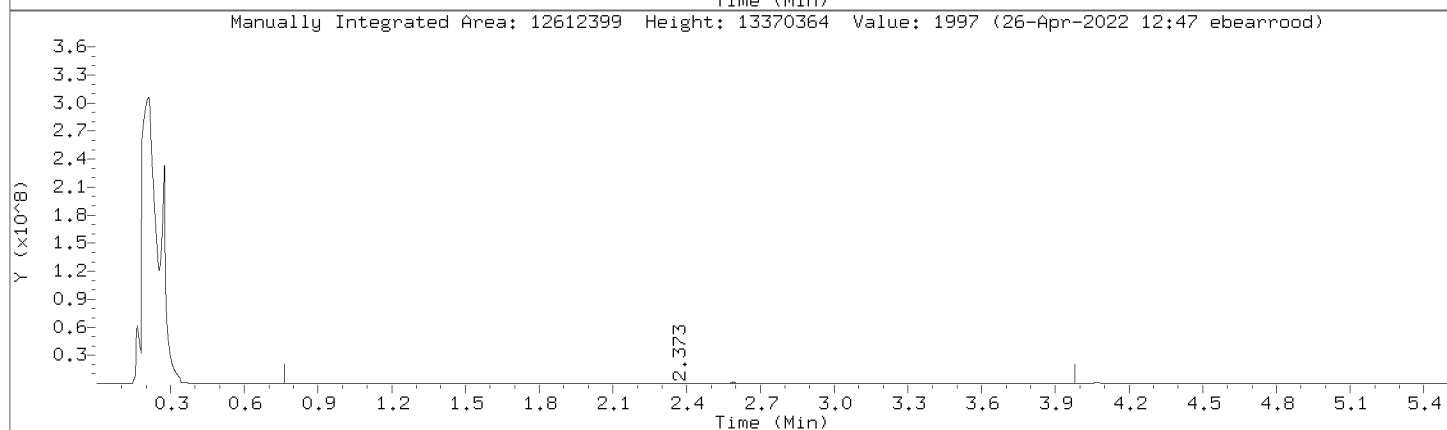
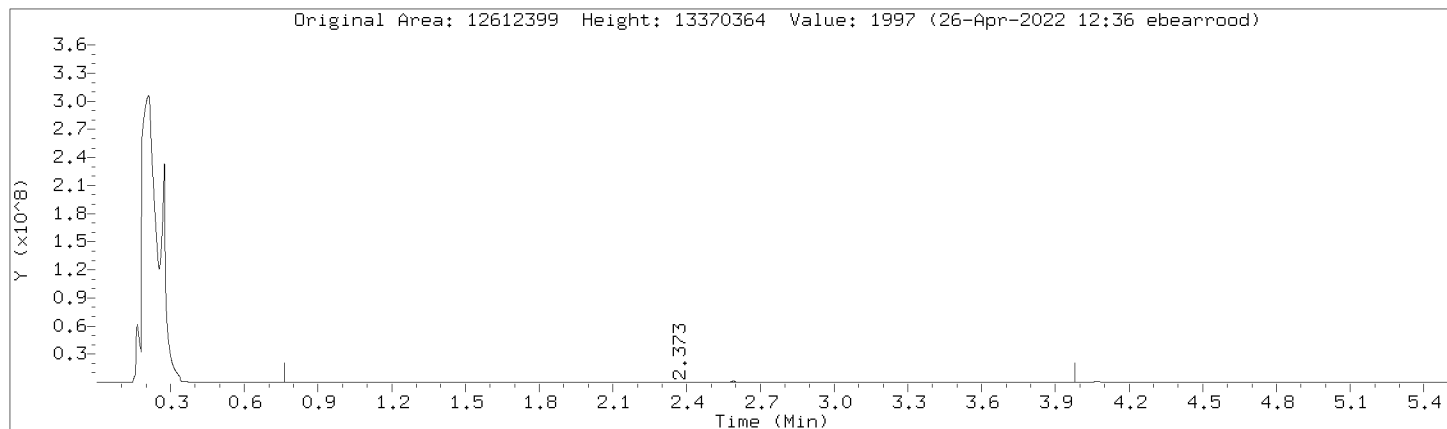
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Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



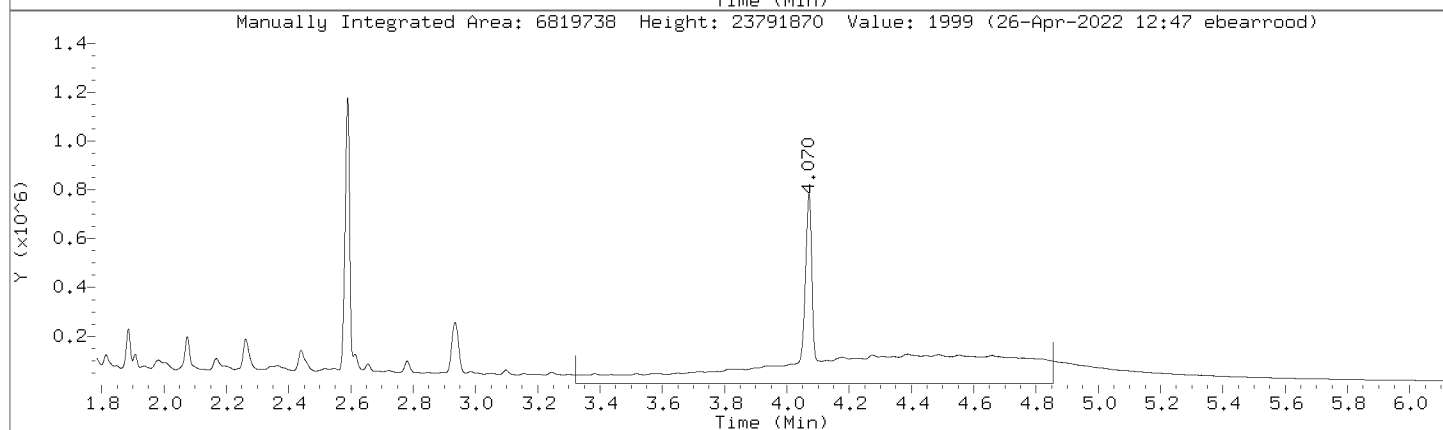
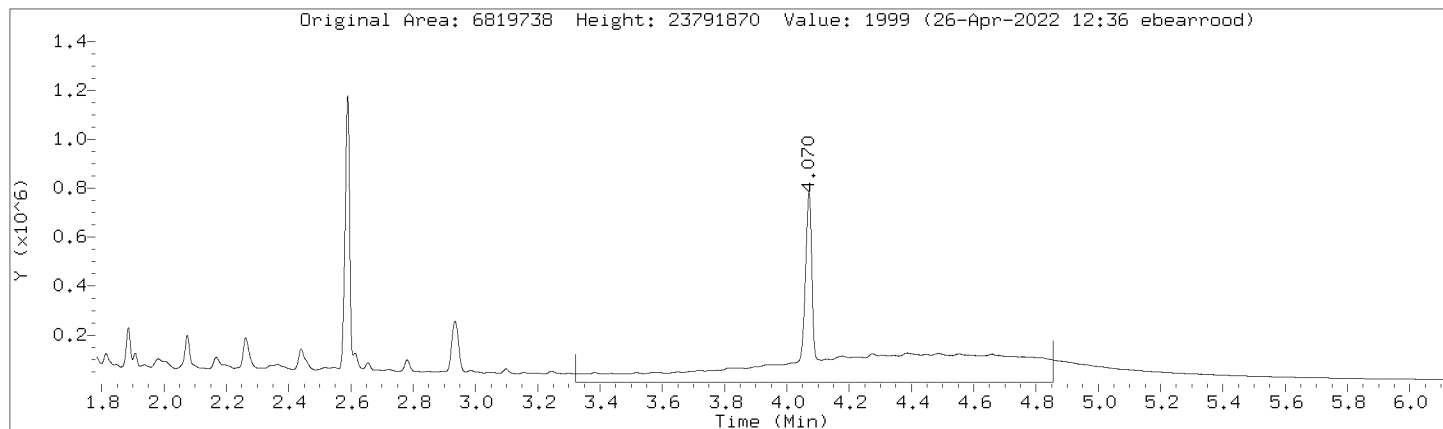
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Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



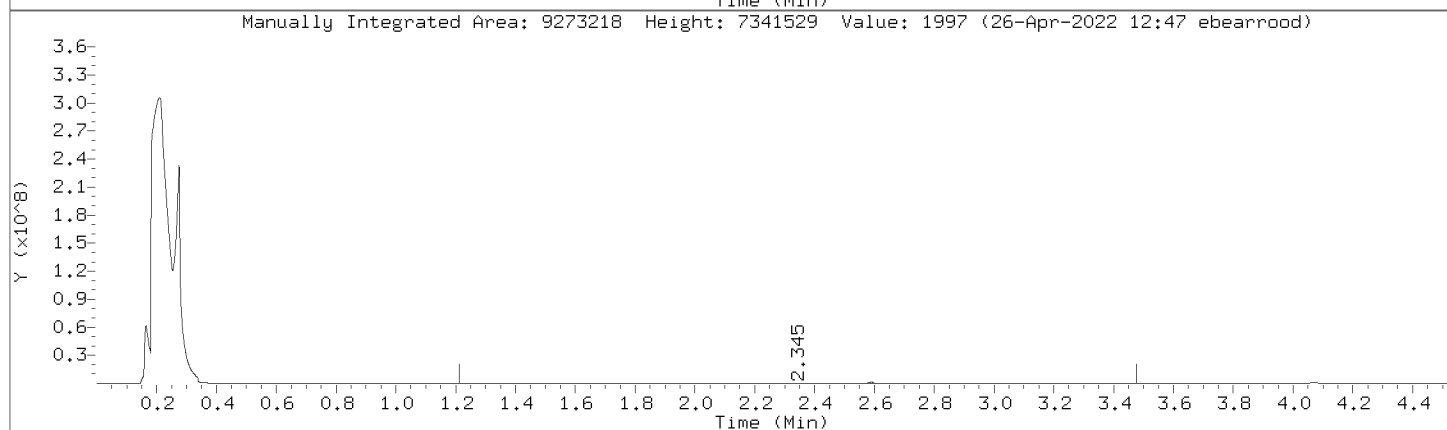
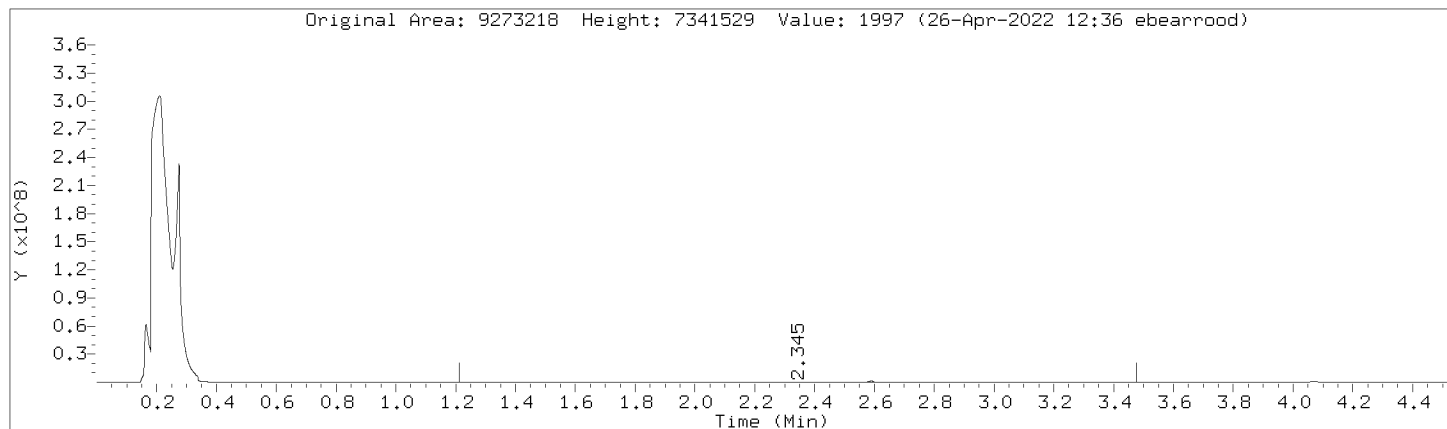
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Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



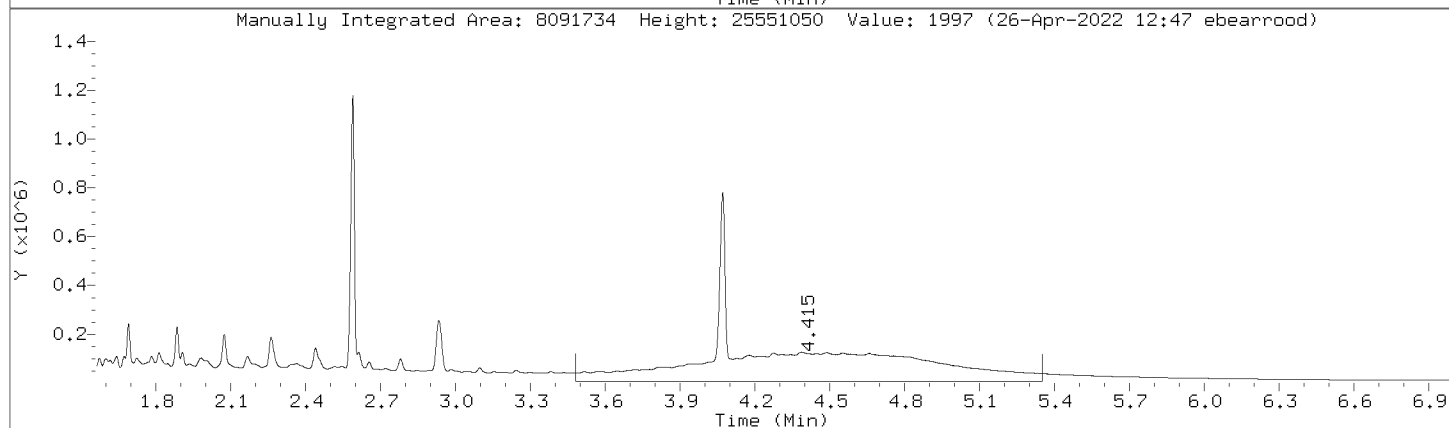
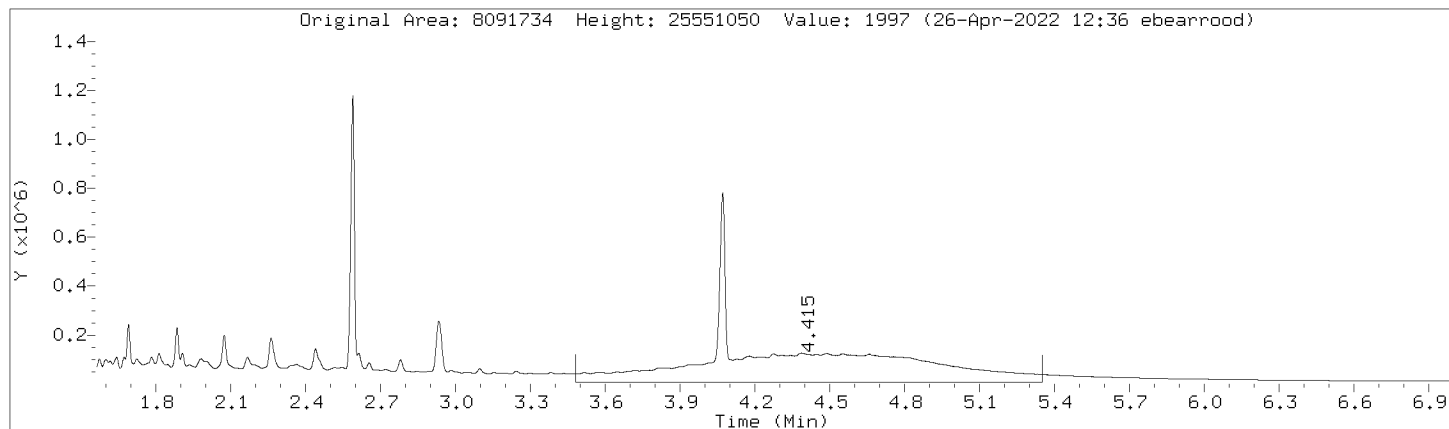
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Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



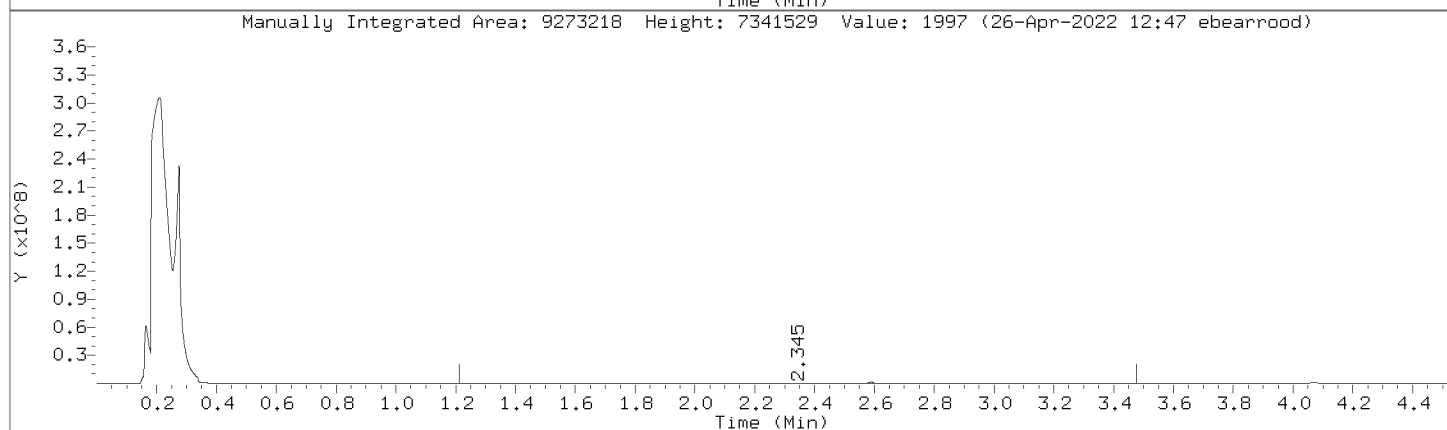
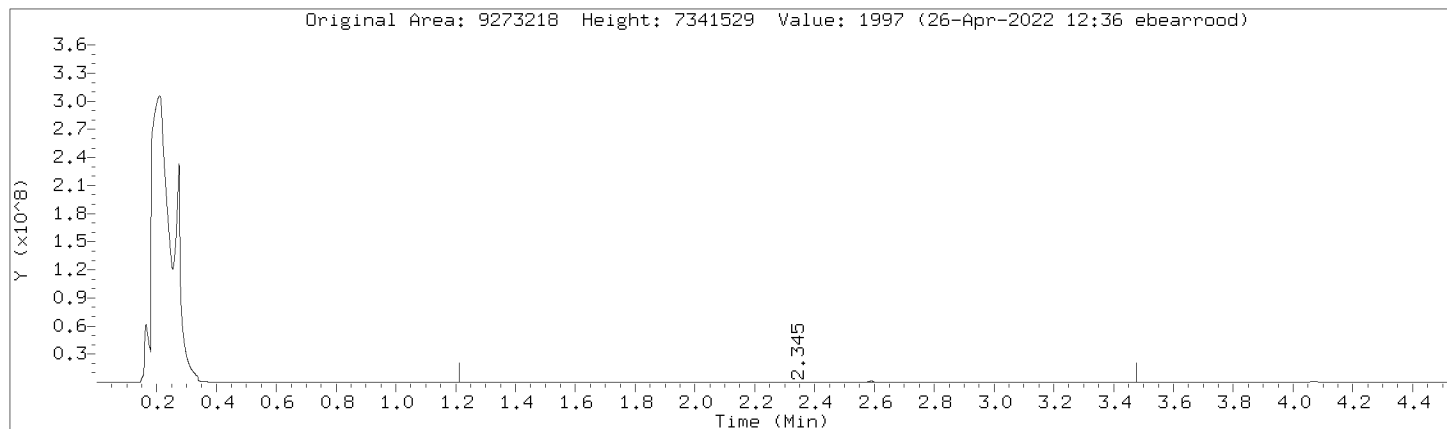
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Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



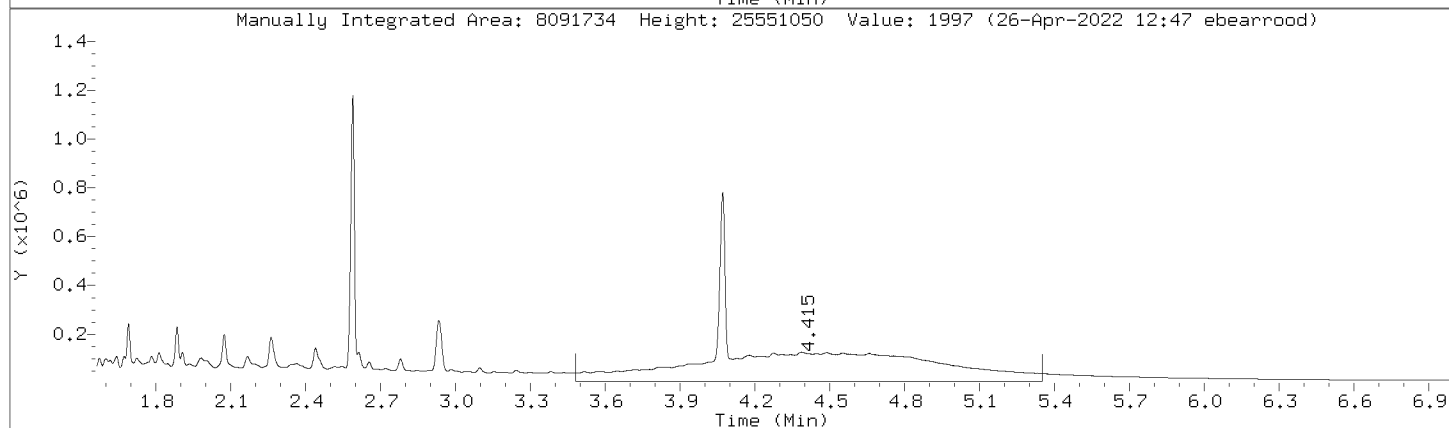
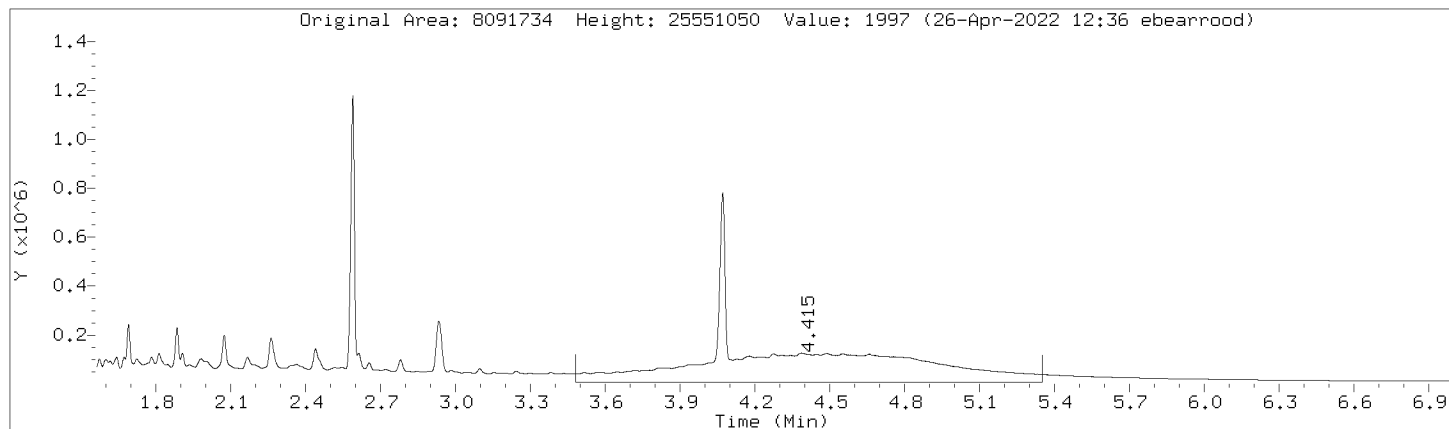
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Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000012.D  
Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

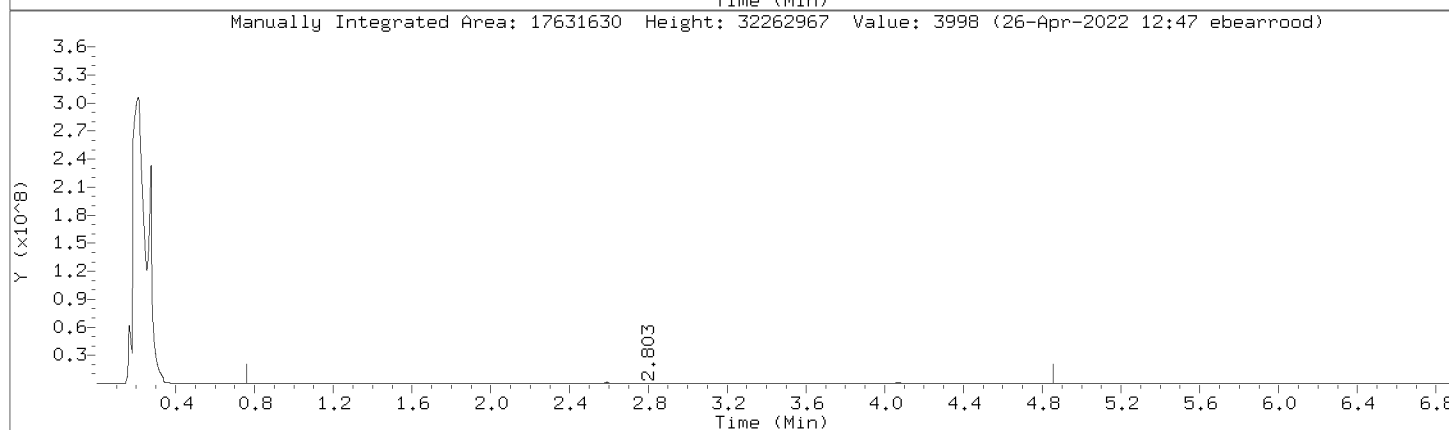
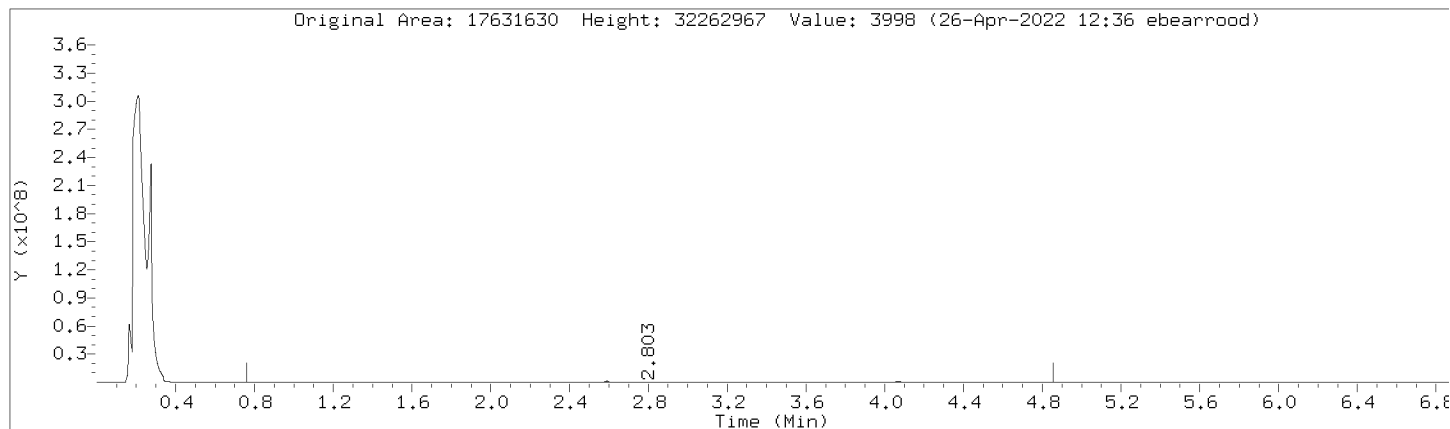
Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





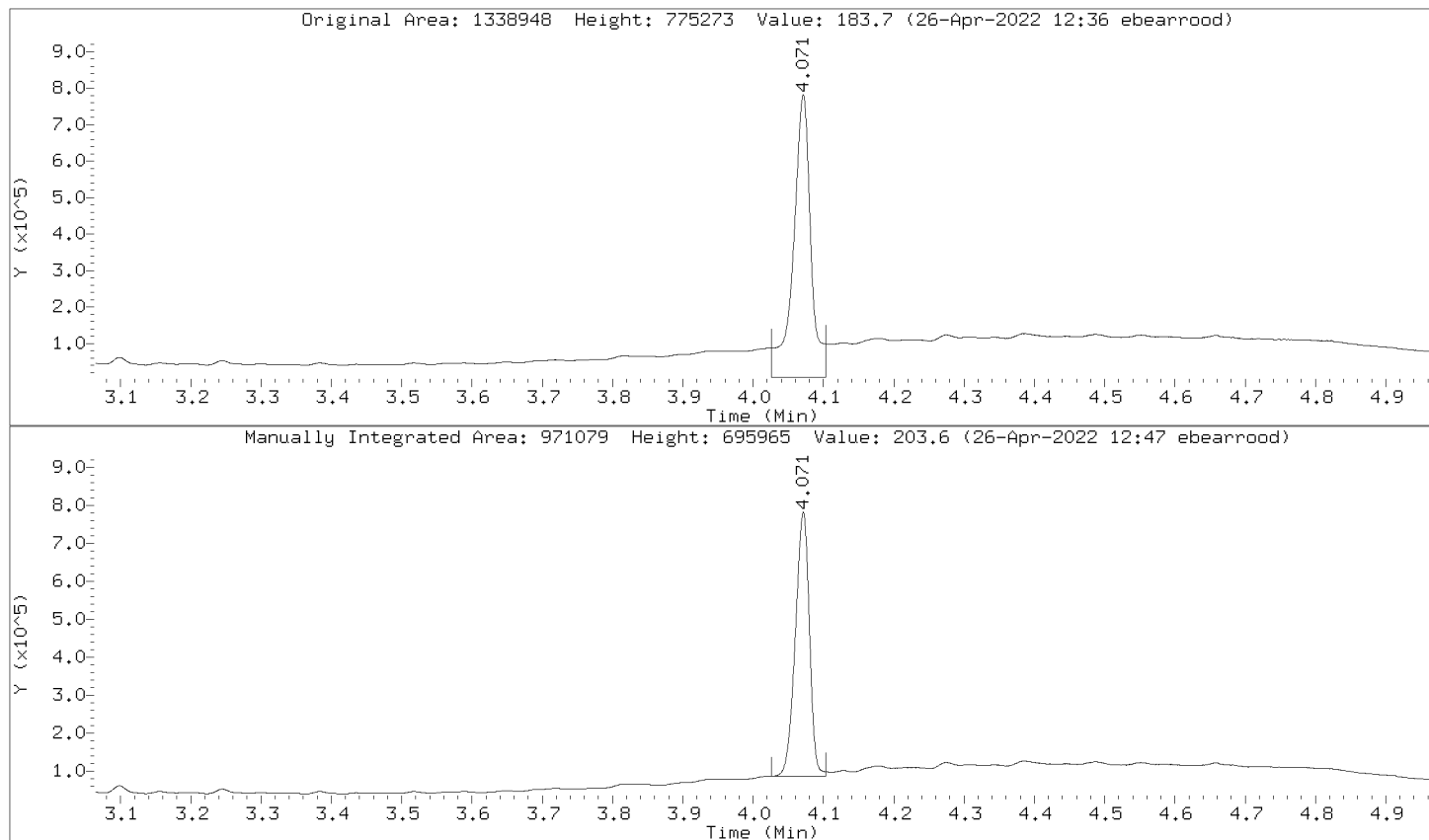
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



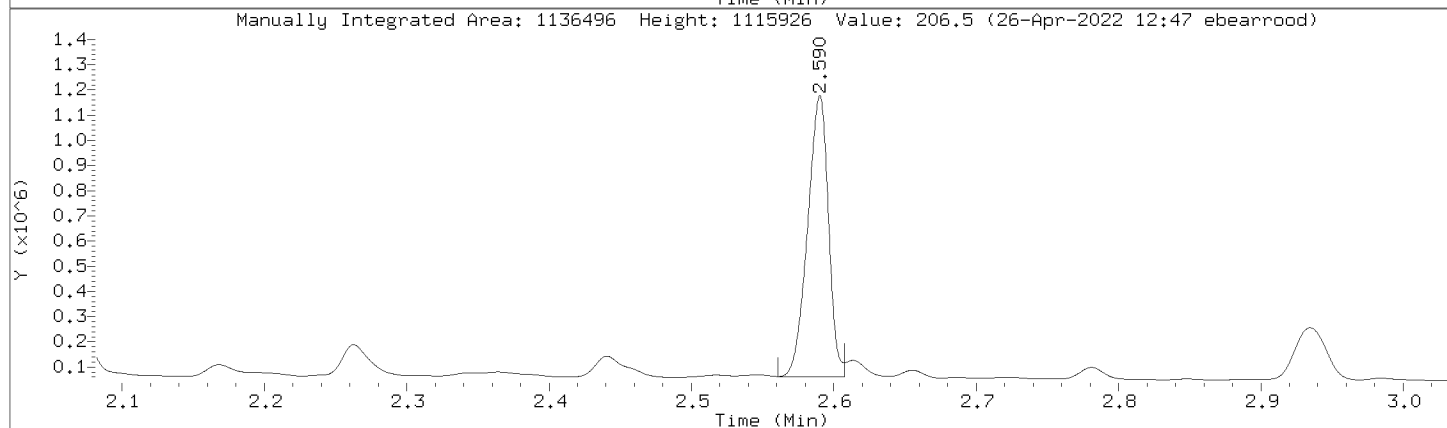
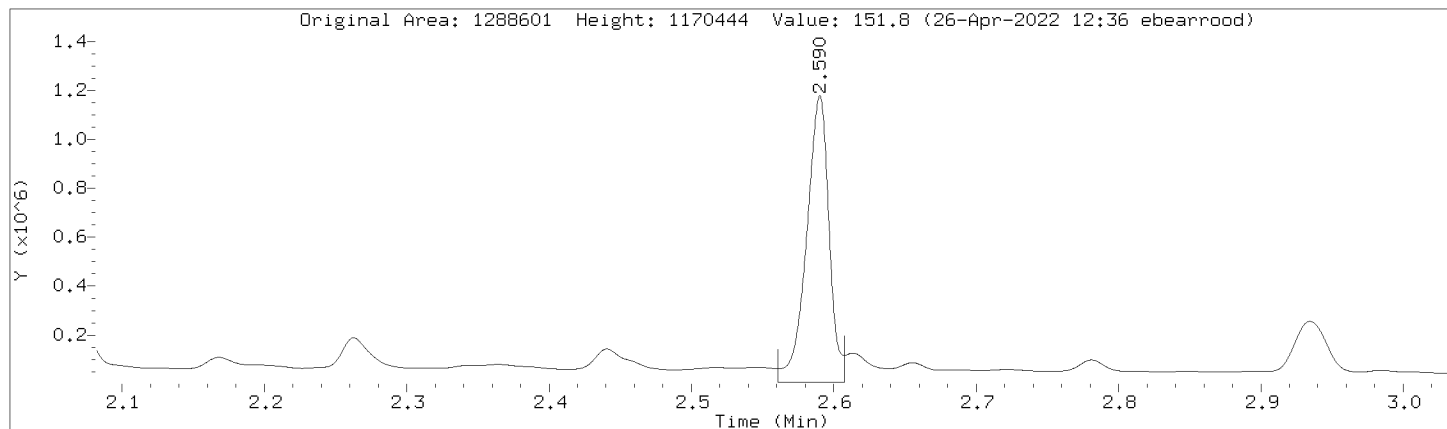
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Injection Date: 26-APR-2022 09:25  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000012.D  
 Injection Date: 26-APR-2022 09:25  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL9,362377:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	6616190	6616190
DRO by AK 102	11015439	11015439
TPH-DRO (C10-C28)	12612399	12612399
Motor Oil Range (C24-C36)	6819738	6819738
Diesel Fuel Range	9273218	9273218
Motor Oil Range	8091734	8091734
Diesel Fuel Range SG	9273218	9273218
Motor Oil Range SG	8091734	8091734
C10-C36	17631630	17631630
n-Triacontane (S)	1338948	971079
o-Terphenyl (S)	1288601	1136496

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AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
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 Inj Date : 26-APR-2022 09:36  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal10,362378:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 12 Calibration Sample, Level: 10  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		21431795 4000.00	3990	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.595	2.582 0.013		2280438 400.000	413	(AM) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.079	4.064 0.015		1910559 400.000	400	(AM) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		13042412 4000.00	3990	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		24573747 4000.00	3990	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		13443188 4000.00	3990	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		34474208 8000.00	7980	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		18030817 4000.00	3990	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		18030817 4000.00	3990	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		16062716 4000.00	4000	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		16062716 4000.00	4000	(M) RNG
-----					

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Review Codes Legend

- RNG: Indicates that the analyst integrated a surrogate within the range.
- BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 09:36

Client ID: DM0-CALL0,362378:2

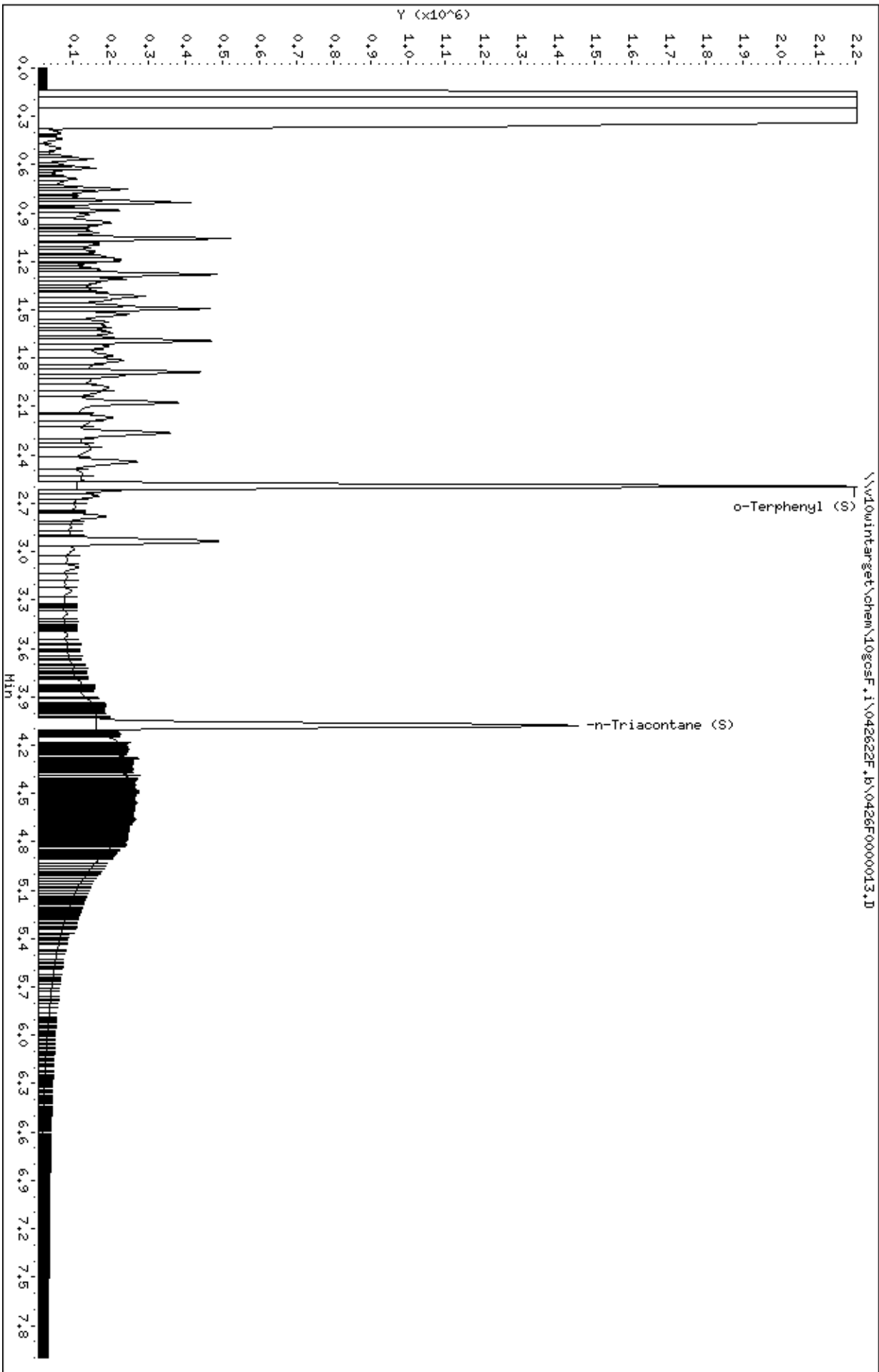
Sample Info: DM0-CALL0,362378:2

Instrument: 10gocsf.1

Operator: EB3

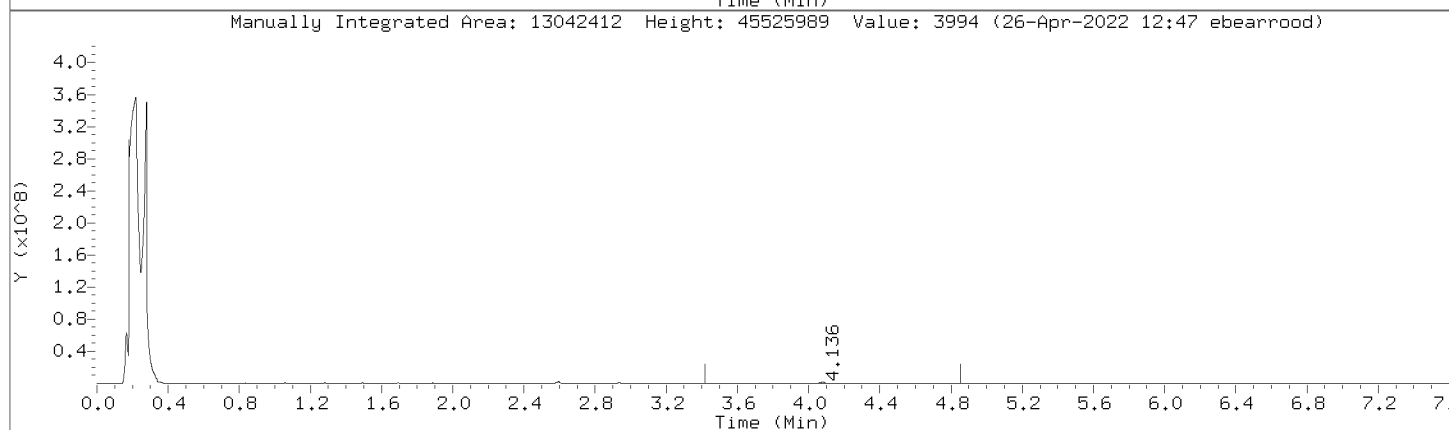
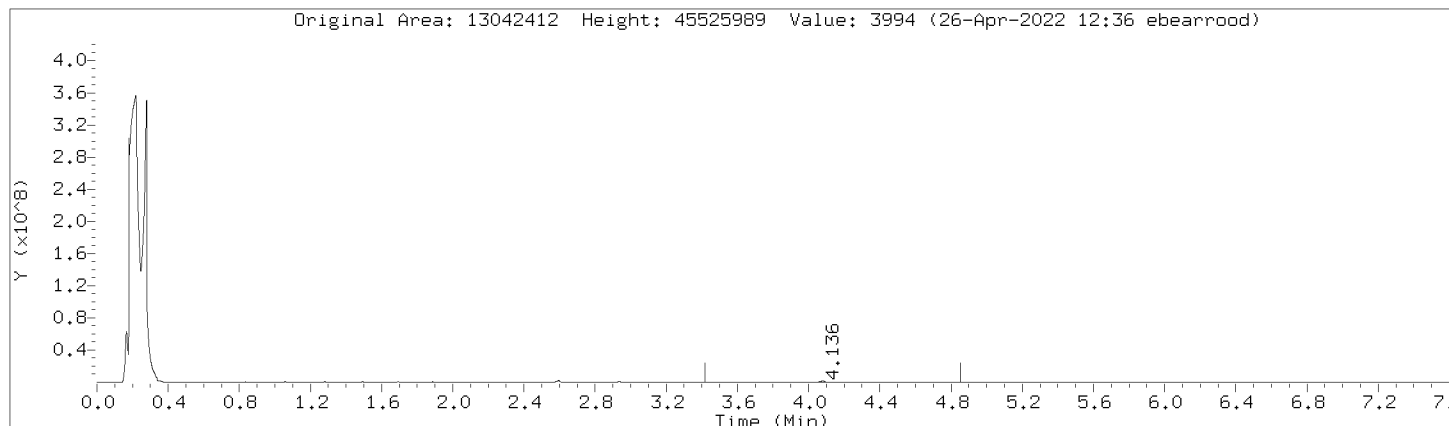
Column diameter: 0.32

Column phase: DB-5-MS21250010



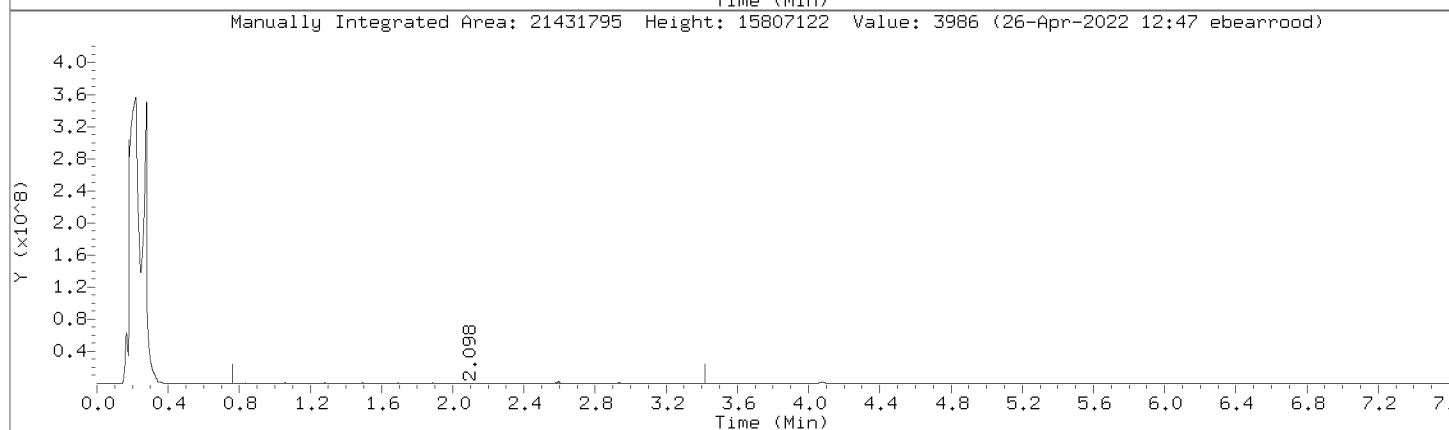
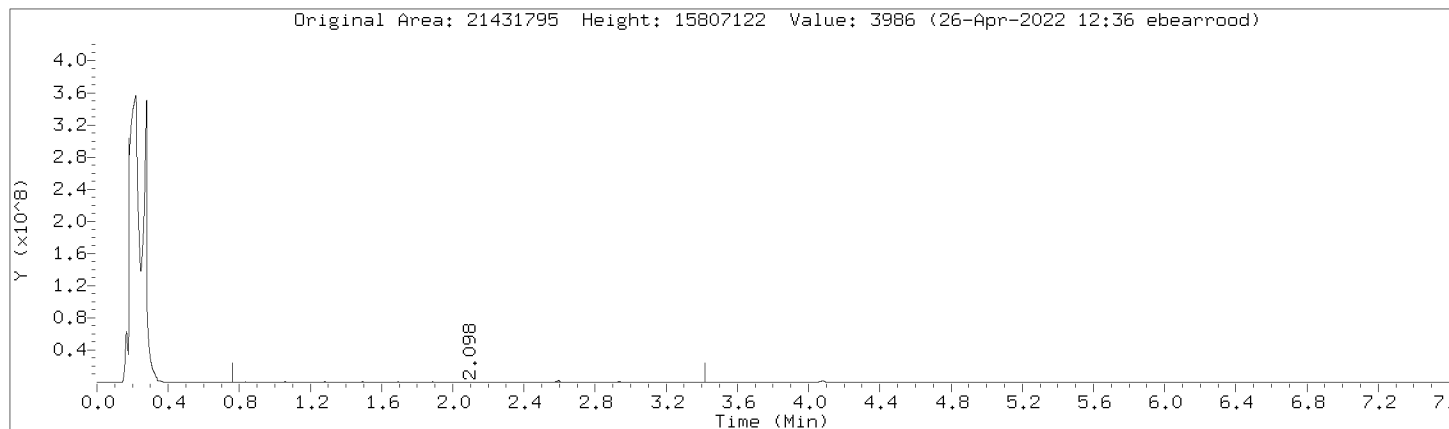
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

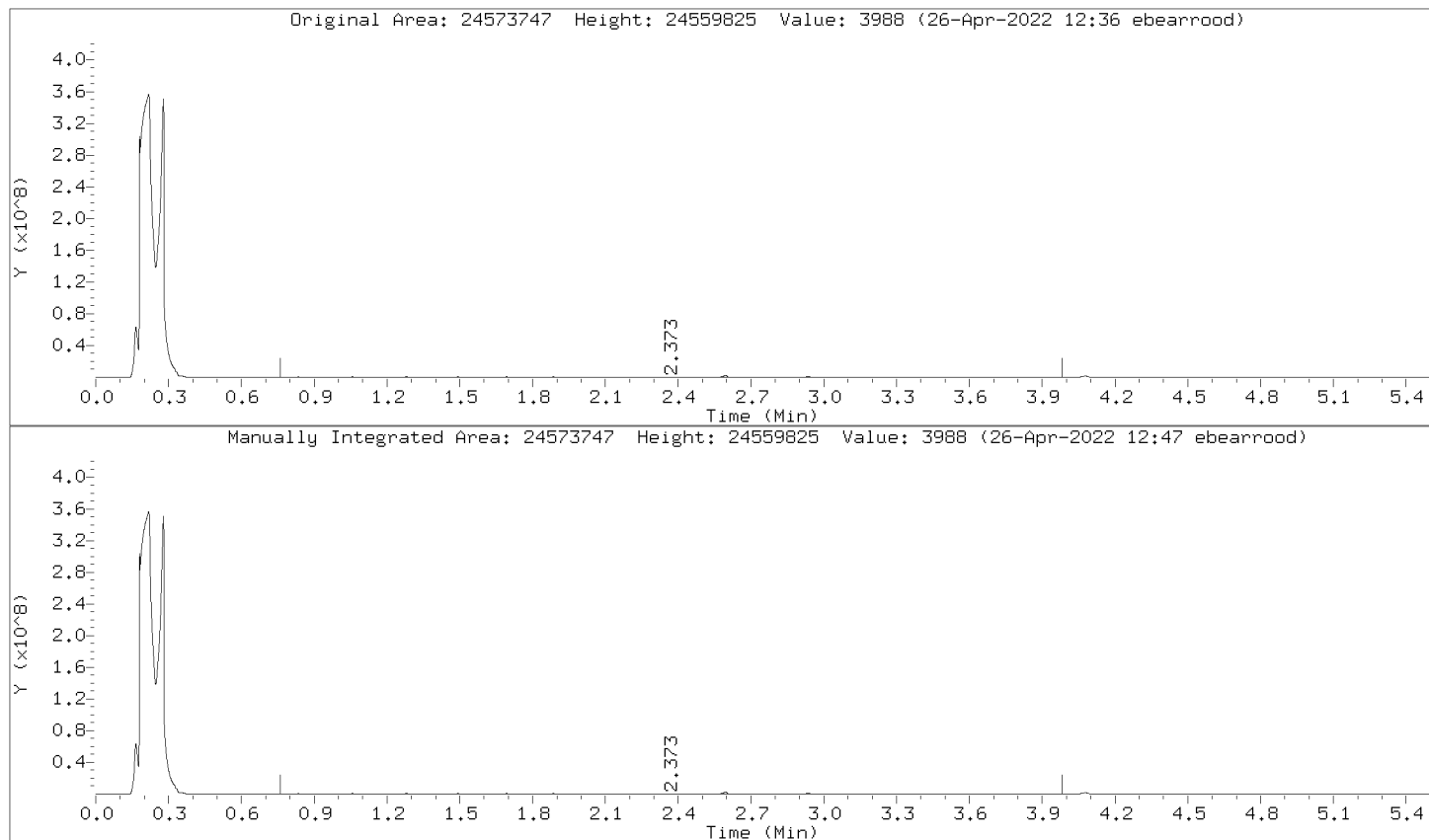
Compound: DRO by AK 102      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

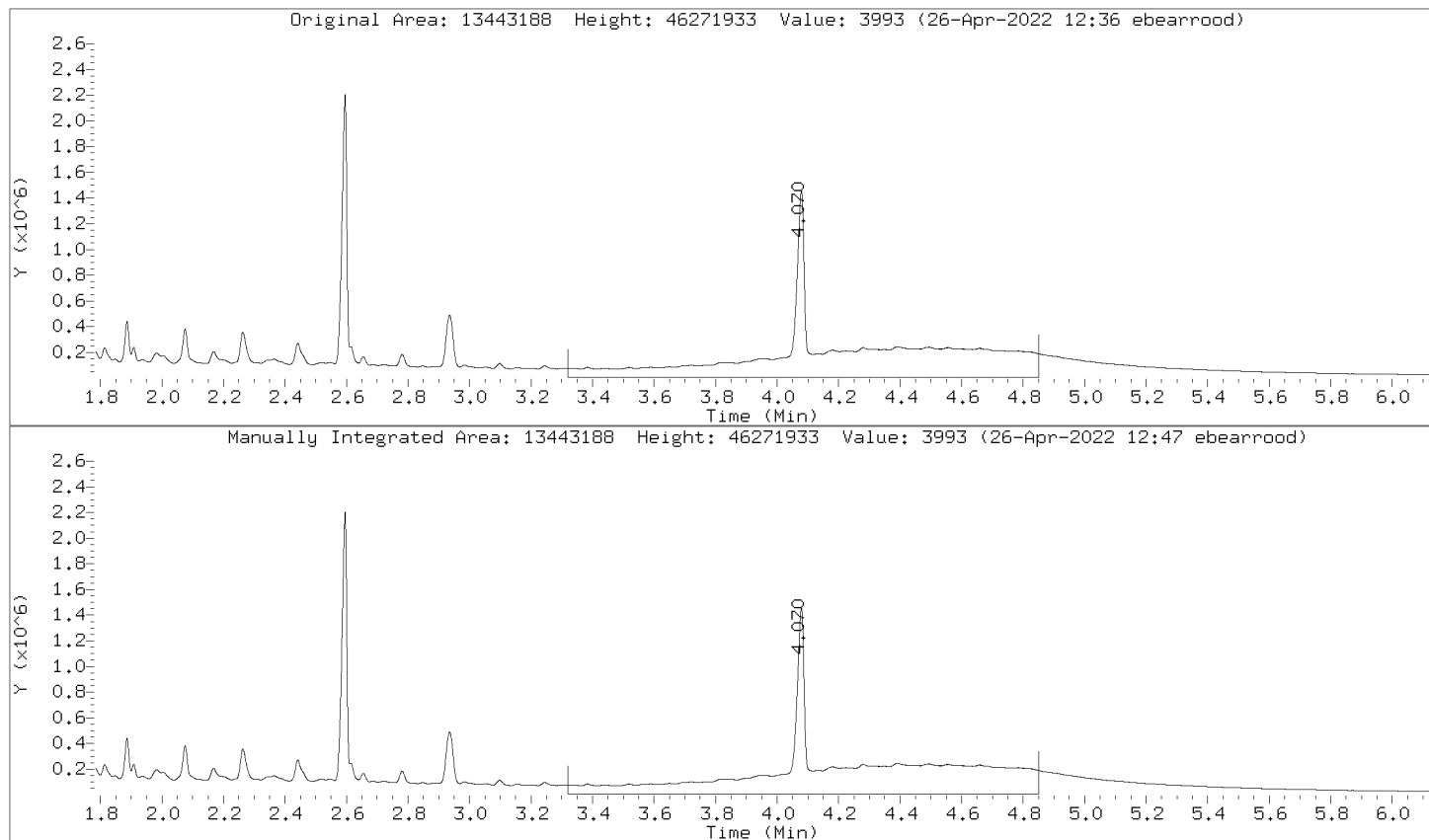
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

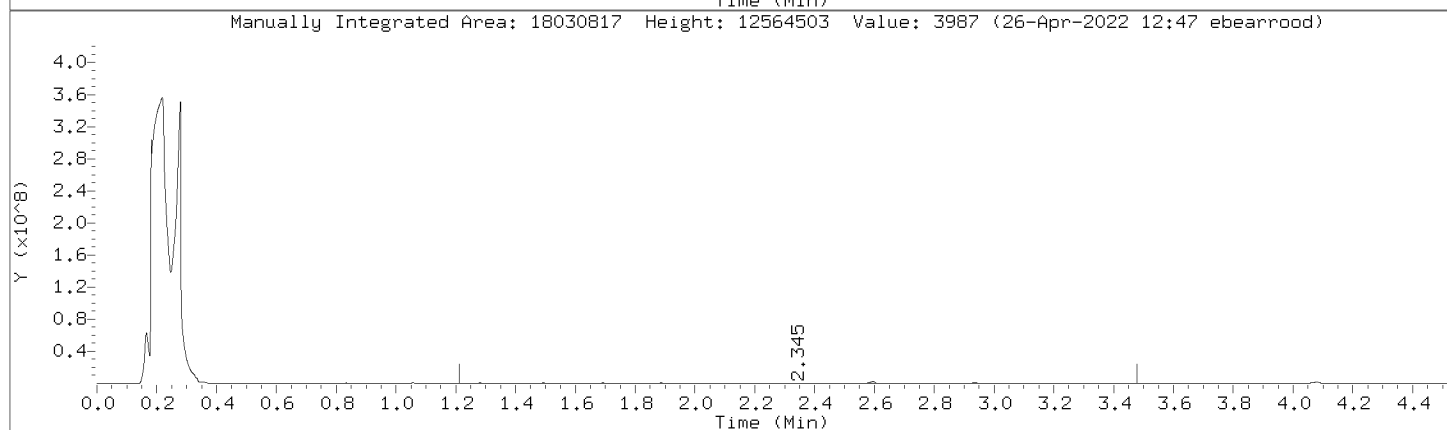
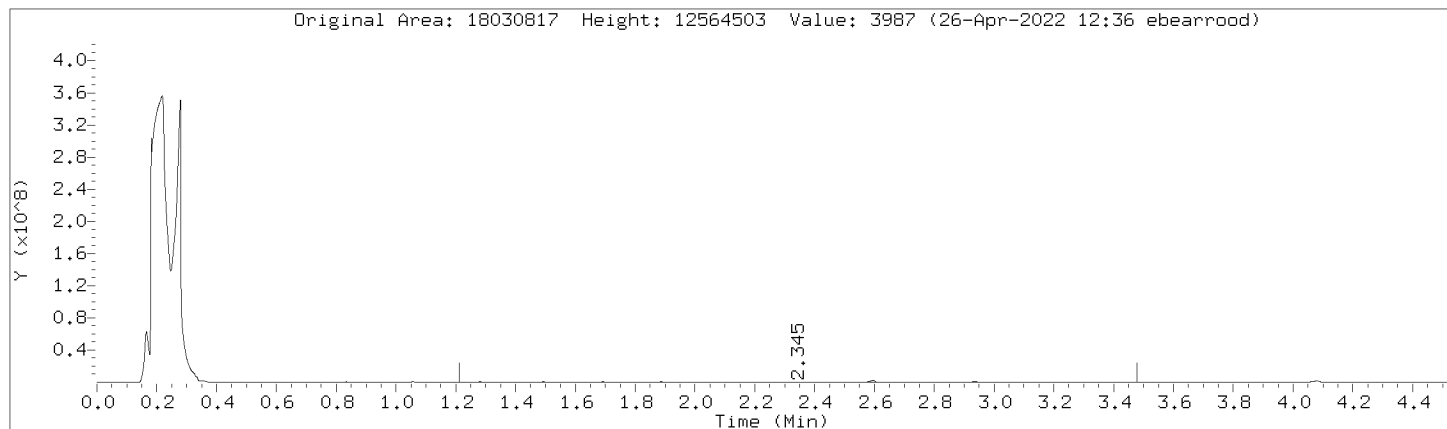
Compound: Motor Oil Range (C24-C36)  
CAS Number:

Review Code: RNG



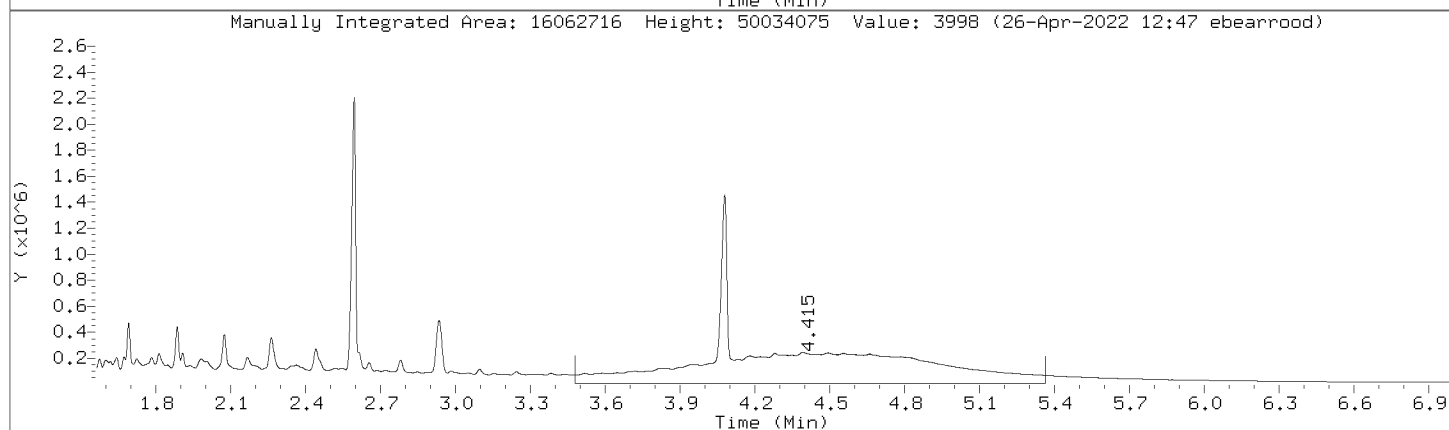
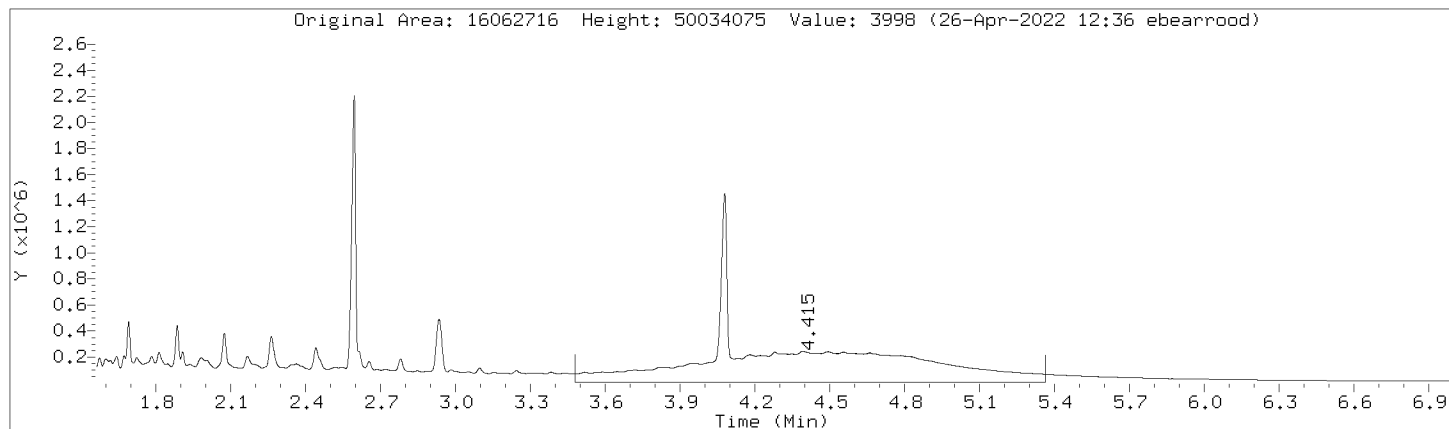
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Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



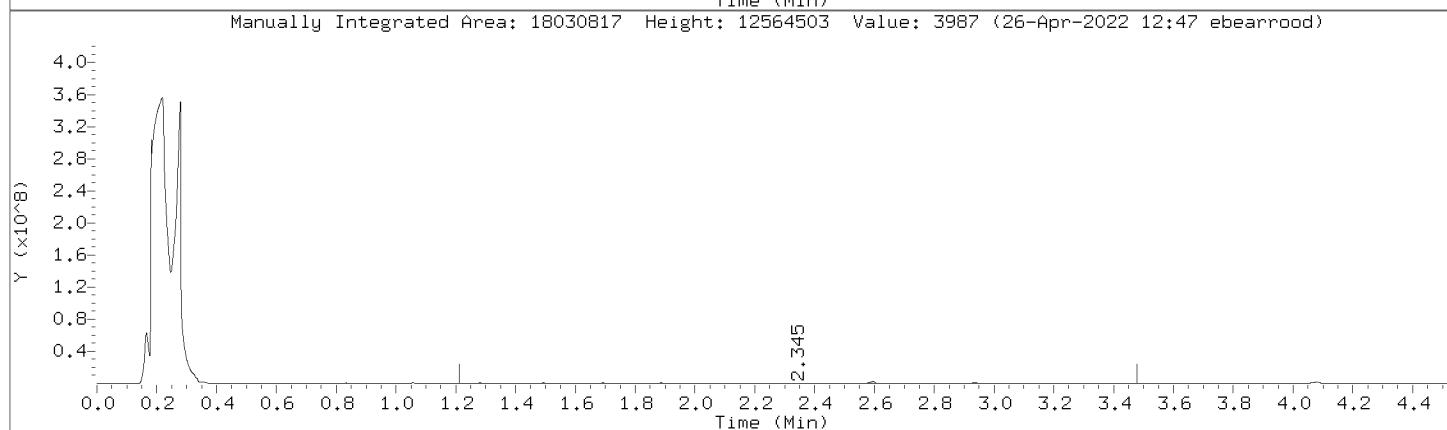
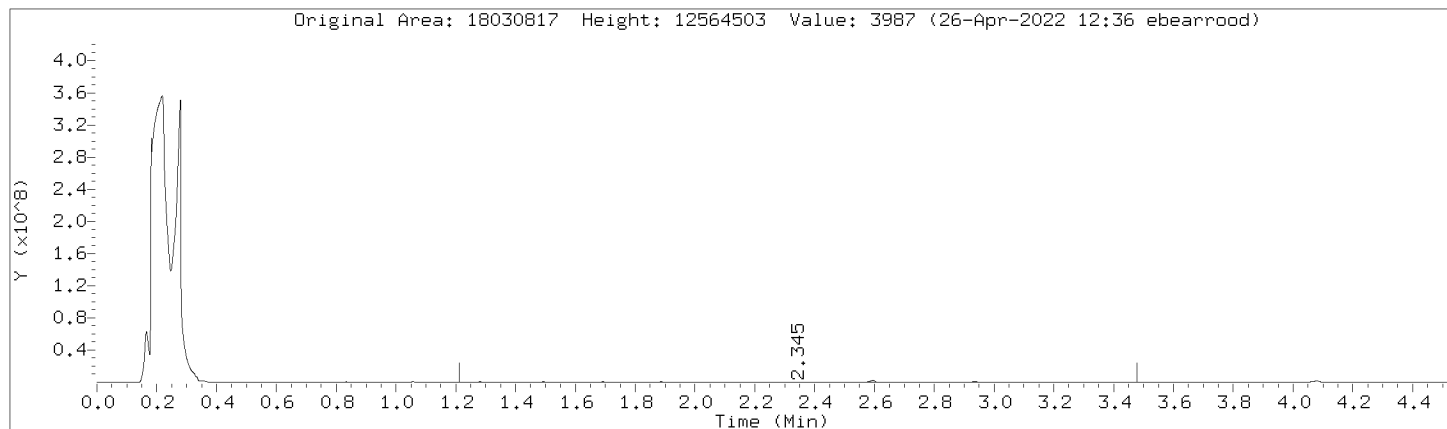
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Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



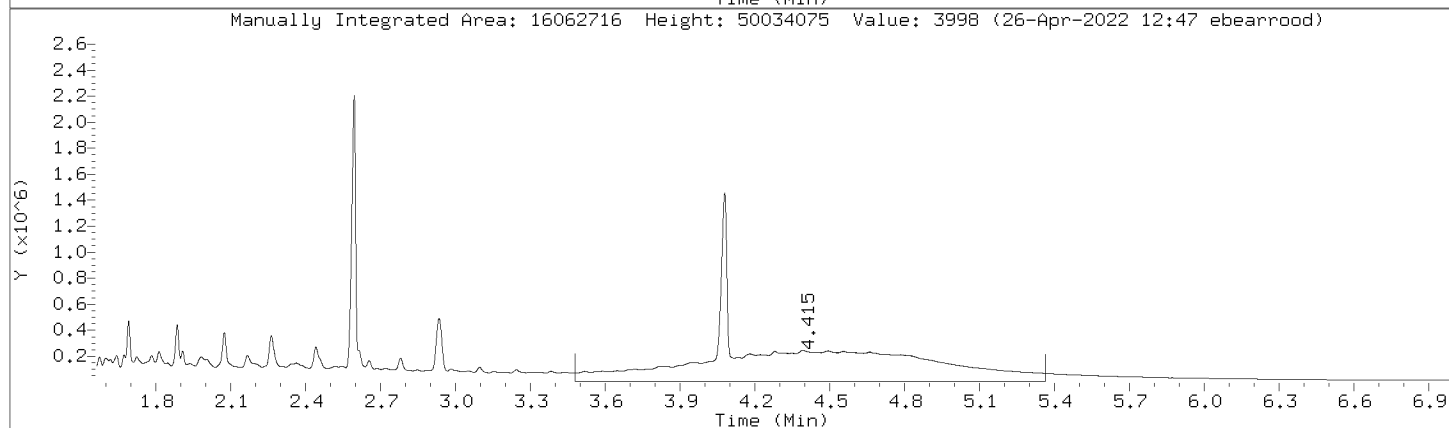
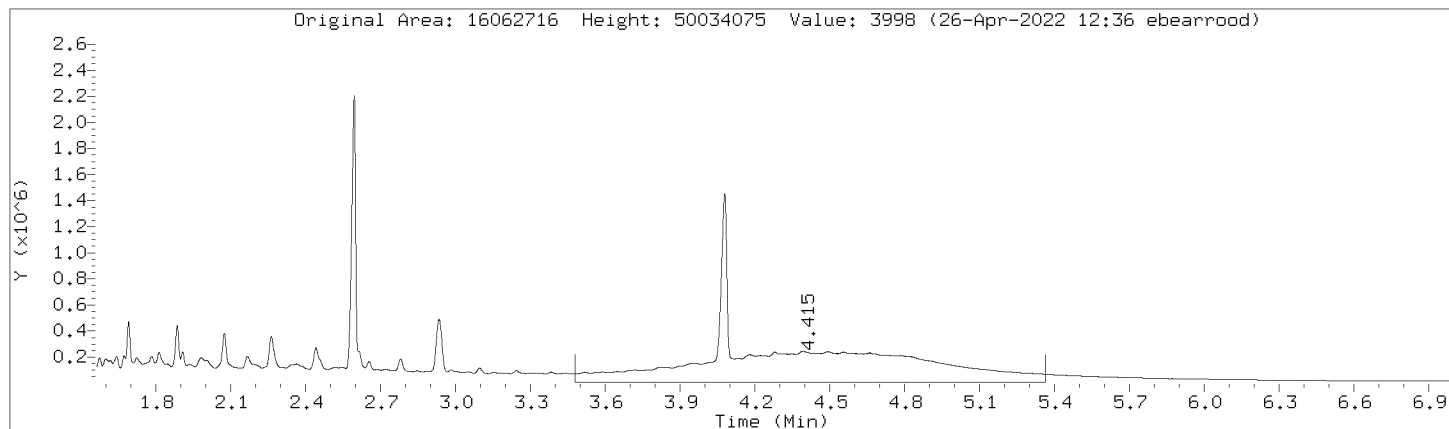
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



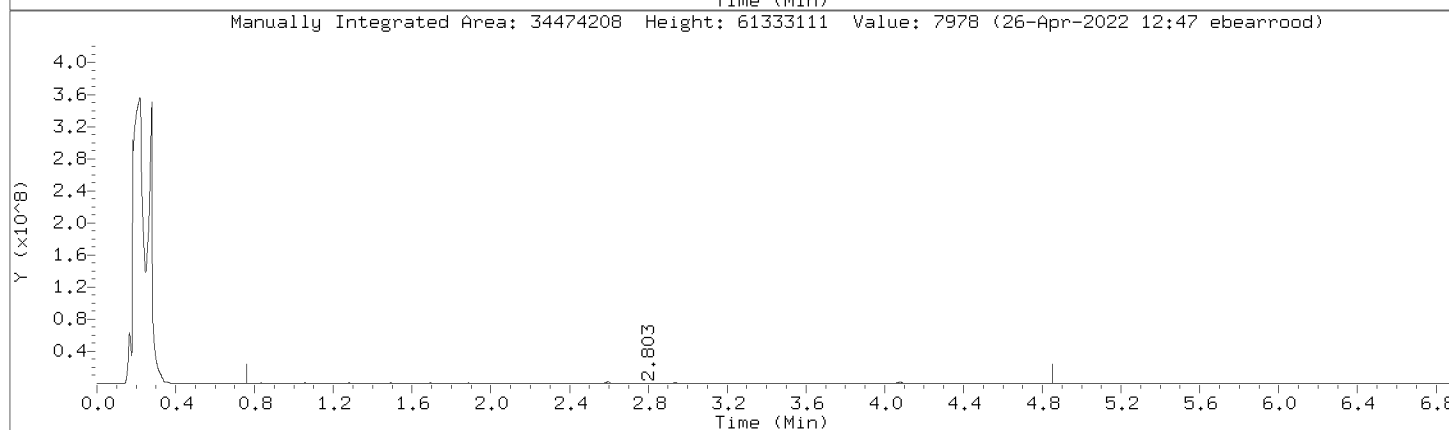
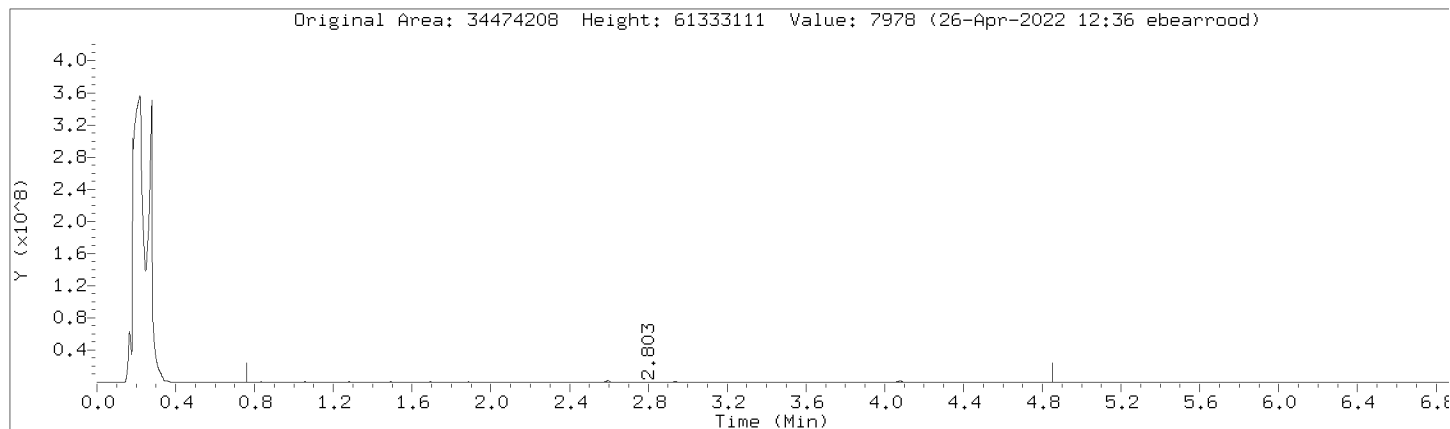
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



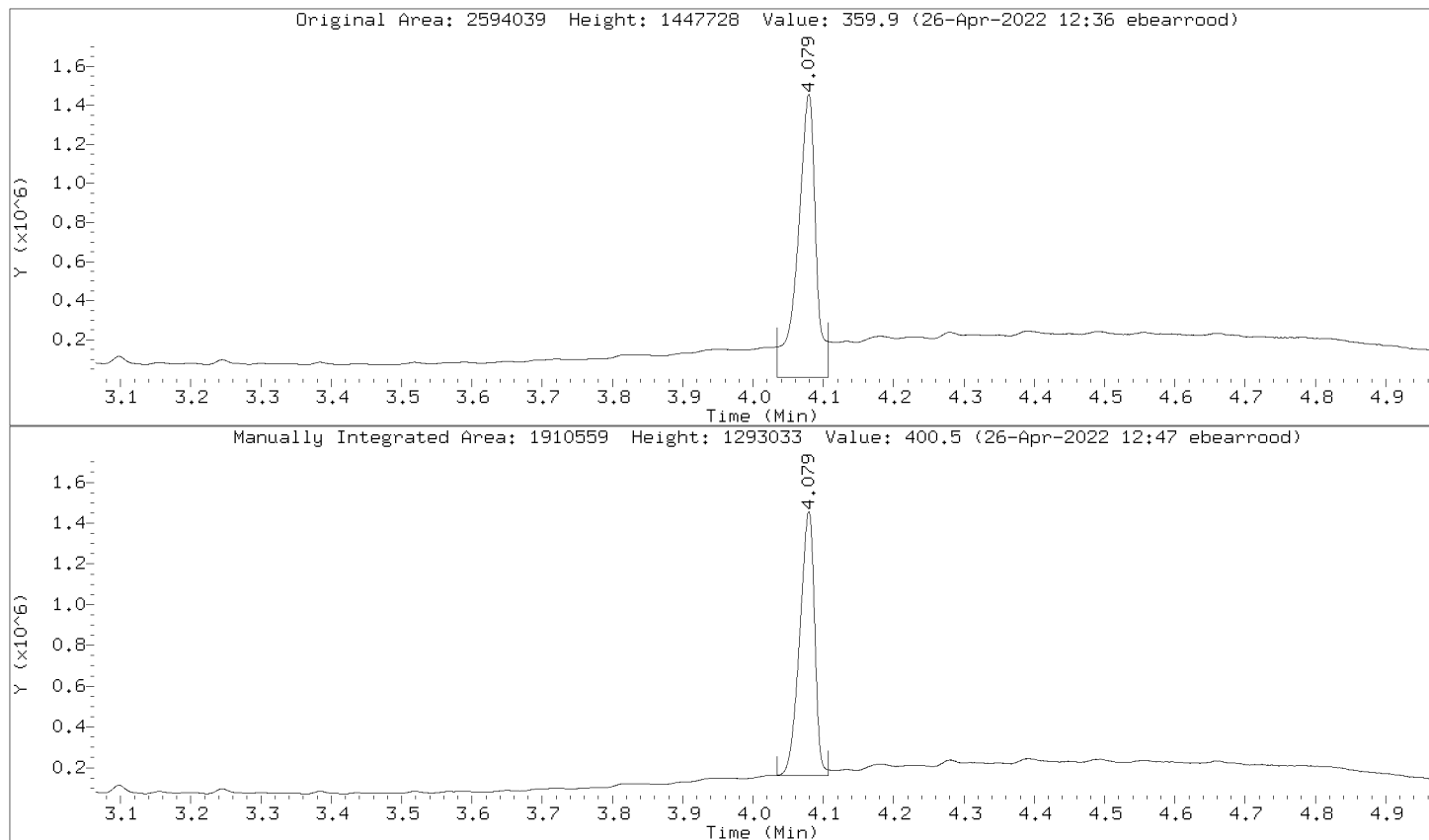
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
Injection Date: 26-APR-2022 09:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

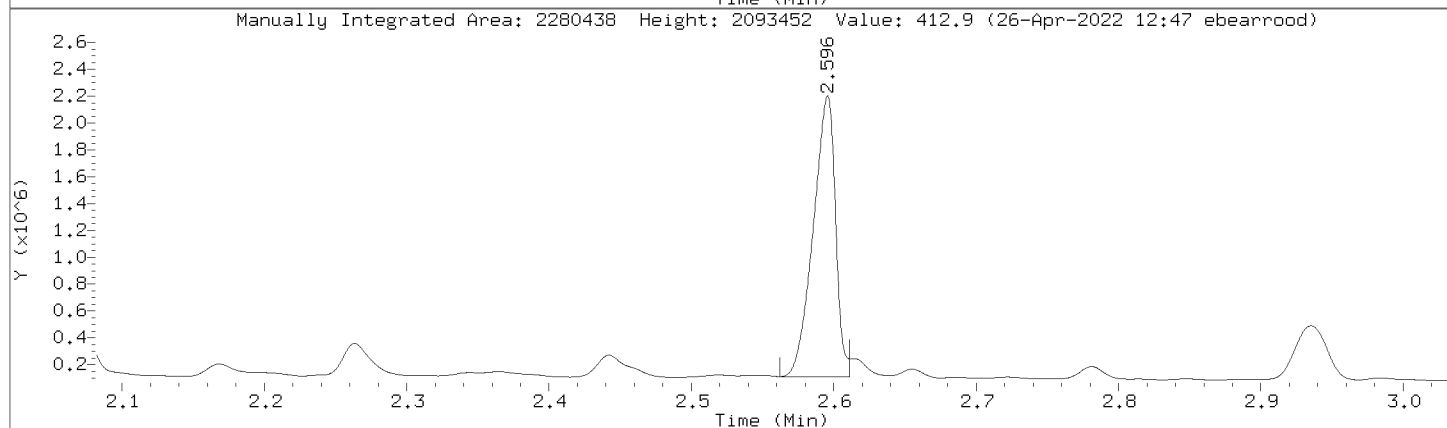
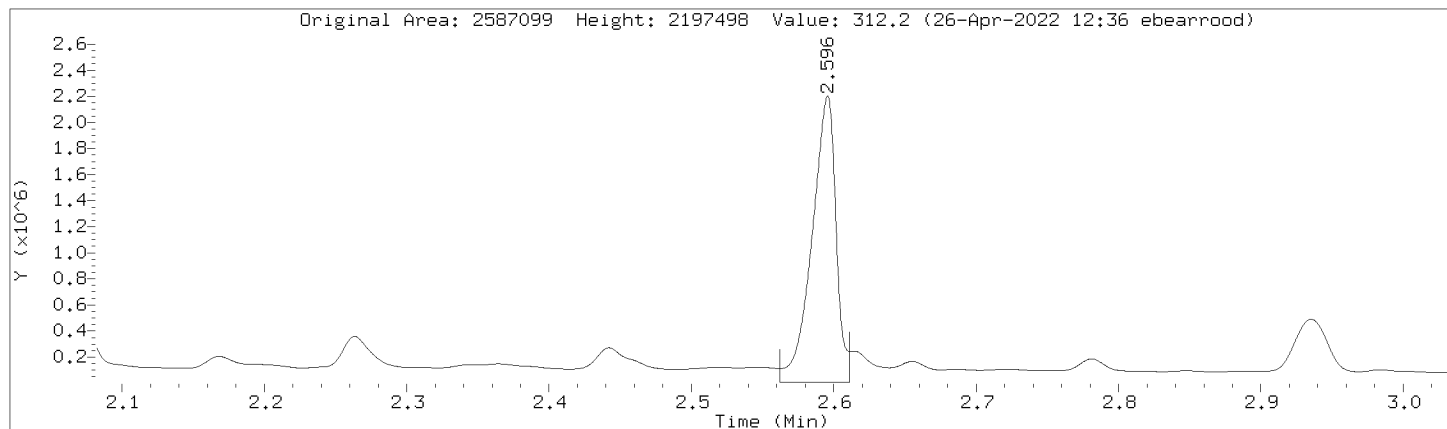
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000013.D  
 Injection Date: 26-APR-2022 09:36  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL10,362378:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	13042412	13042412
DRO by AK 102	21431795	21431795
TPH-DRO (C10-C28)	24573747	24573747
Motor Oil Range (C24-C36)	13443188	13443188
Diesel Fuel Range	18030817	18030817
Motor Oil Range	16062716	16062716
Diesel Fuel Range SG	18030817	18030817
Motor Oil Range SG	16062716	16062716
C10-C36	34474208	34474208
n-Triacontane (S)	2594039	1910559
o-Terphenyl (S)	2587099	2280438

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
 Lab Smp Id: PBLK,349203:2 Client Smp ID: PBLK,349203:2  
 Inj Date : 26-APR-2022 10:09  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : pblk,349203:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 14  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			RESPONSE	CAS #:	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		298065		(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.580	2.582 -0.002		285209 51.6441	51.6	(RM) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.064	4.064 0.000		231254 48.4739	48.5	(RM) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		89594		(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		336474		(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		102242		(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		387659		(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		272174		(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		272174		(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		117872 0.55448	0.554	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		117872 0.55448	0.554	(M) RNG
-----					

QC Flag Legend

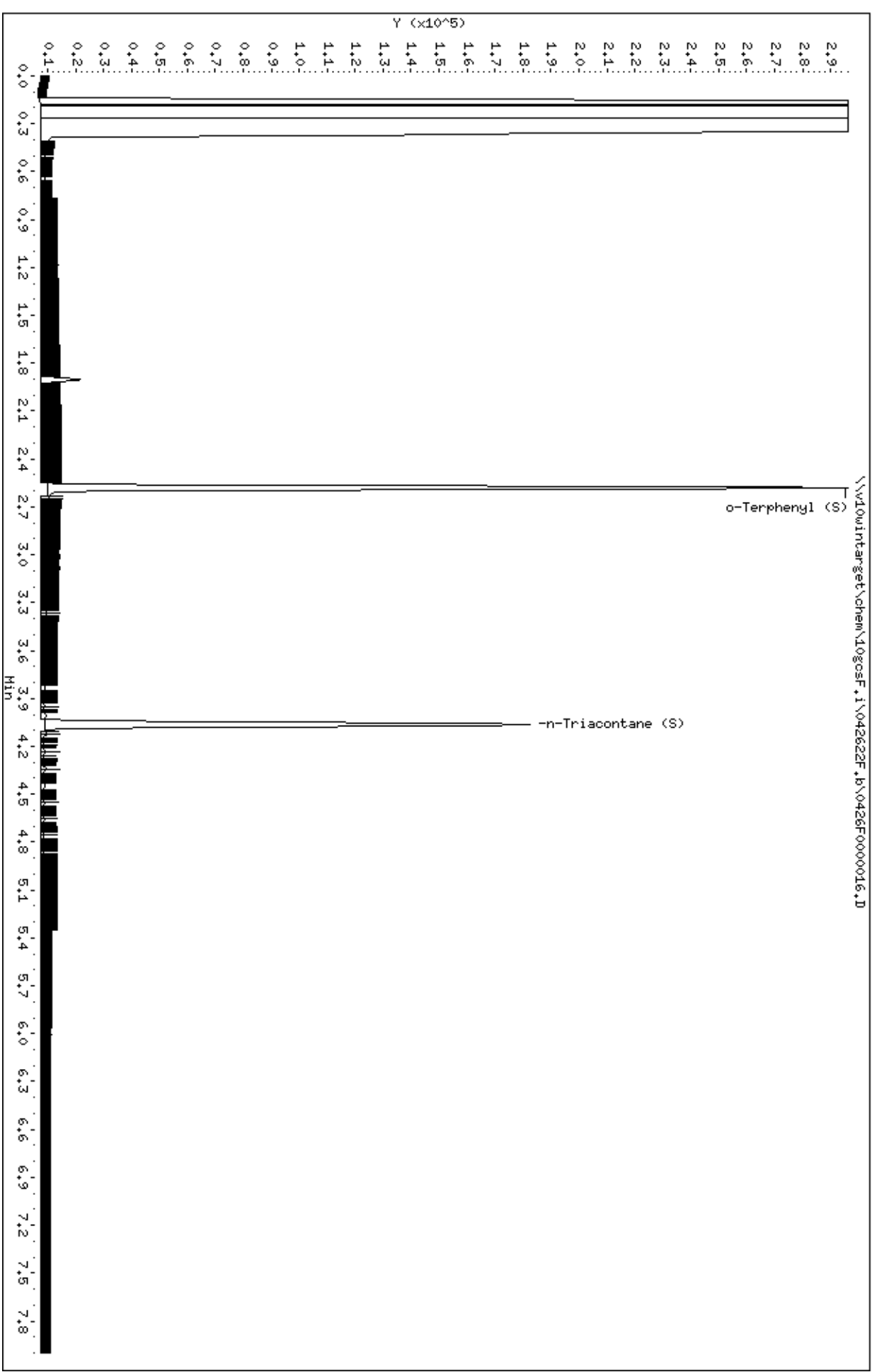
R - Spike/Surrogate failed recovery limits.  
M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.

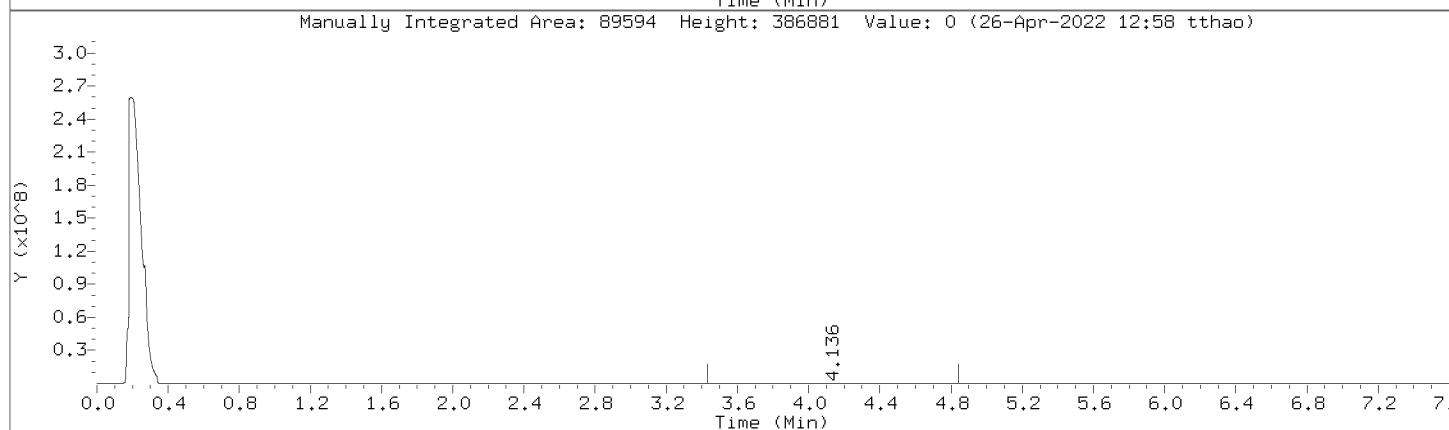
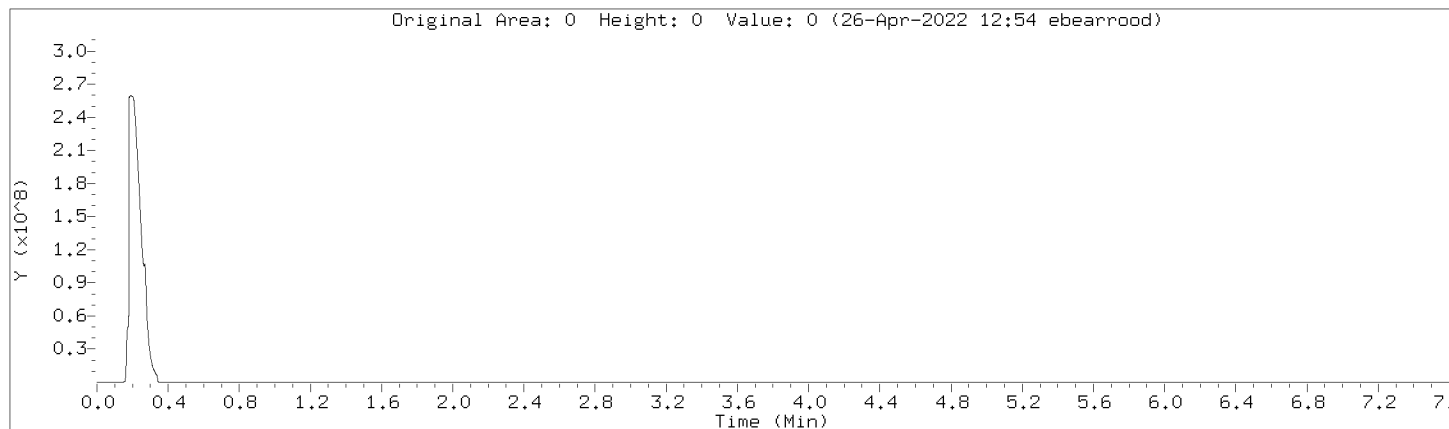
Data File: \\v10win\intarget\chem\10gocsf.1\042622F.1\0426F0000016.D  
Date: 26-APR-2022 10:09  
Client ID: PBLK,349203;2  
Sample Info: PBLK,349203;2  
Column phase: DB-5-MS21250010

Instrument: 10gocsf.1  
Operator: EB3  
Column diameter: 0.32



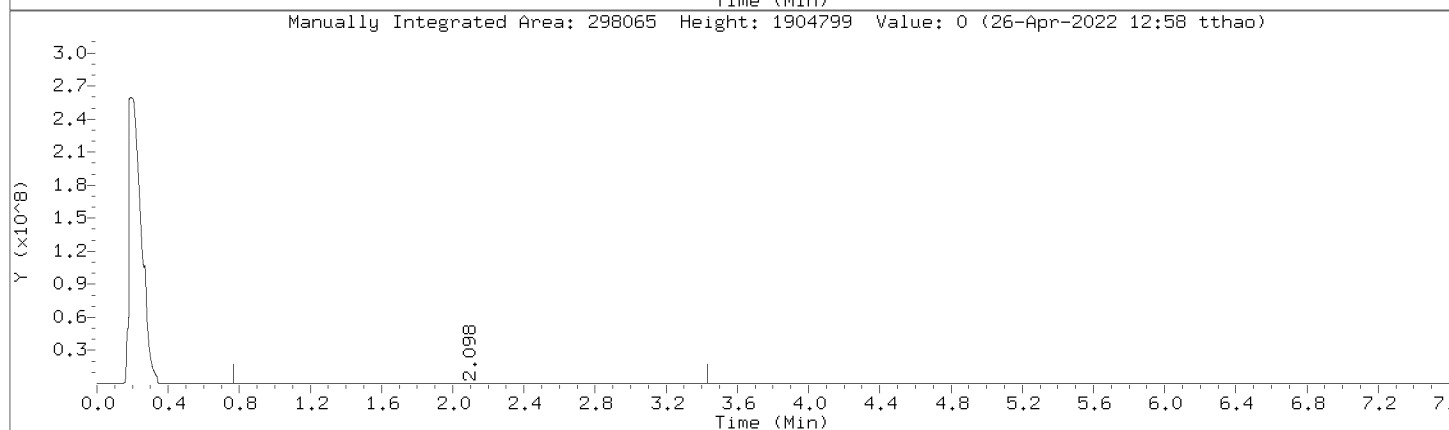
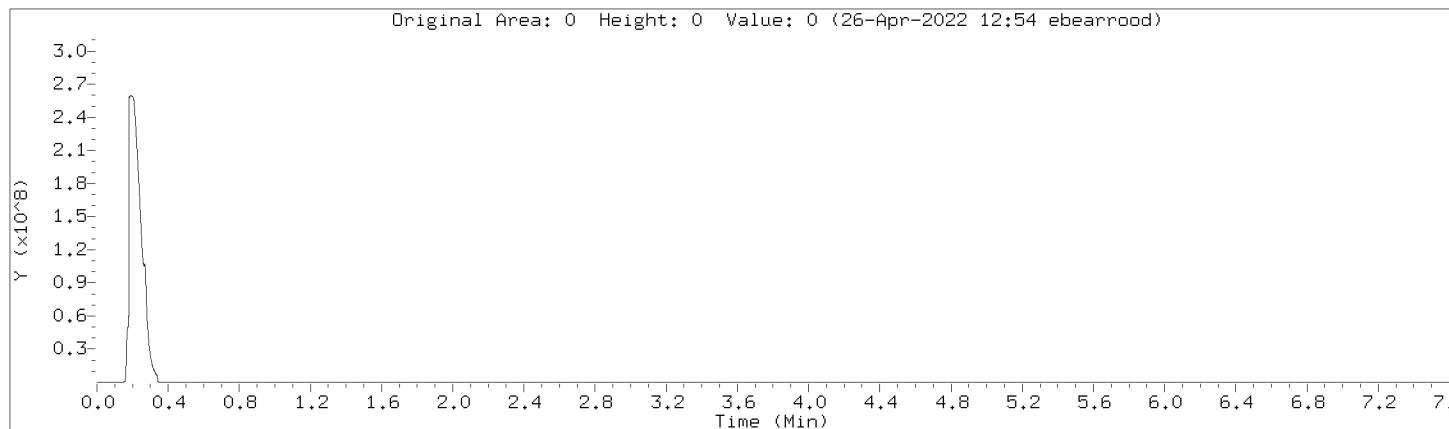
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



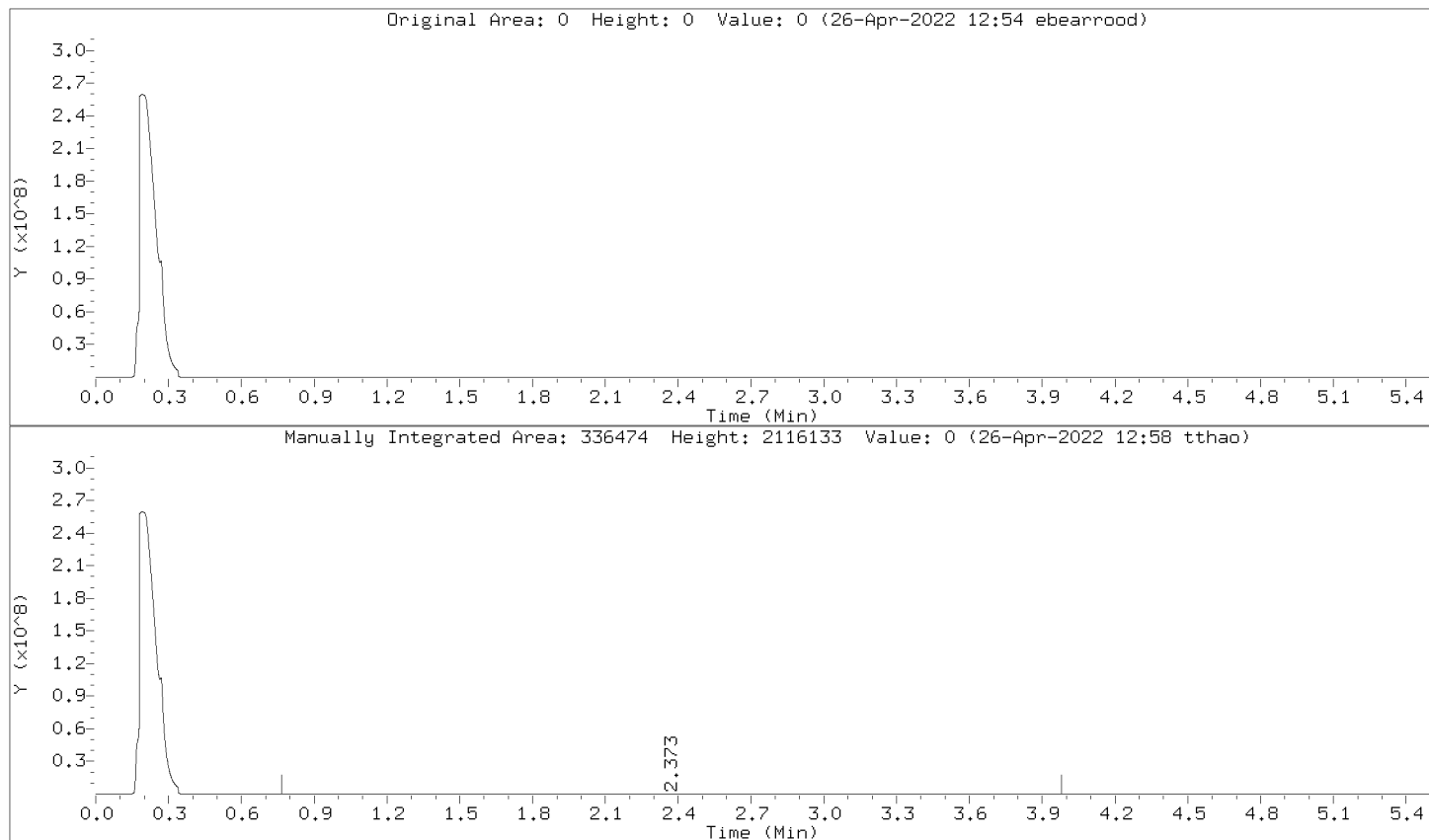
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Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



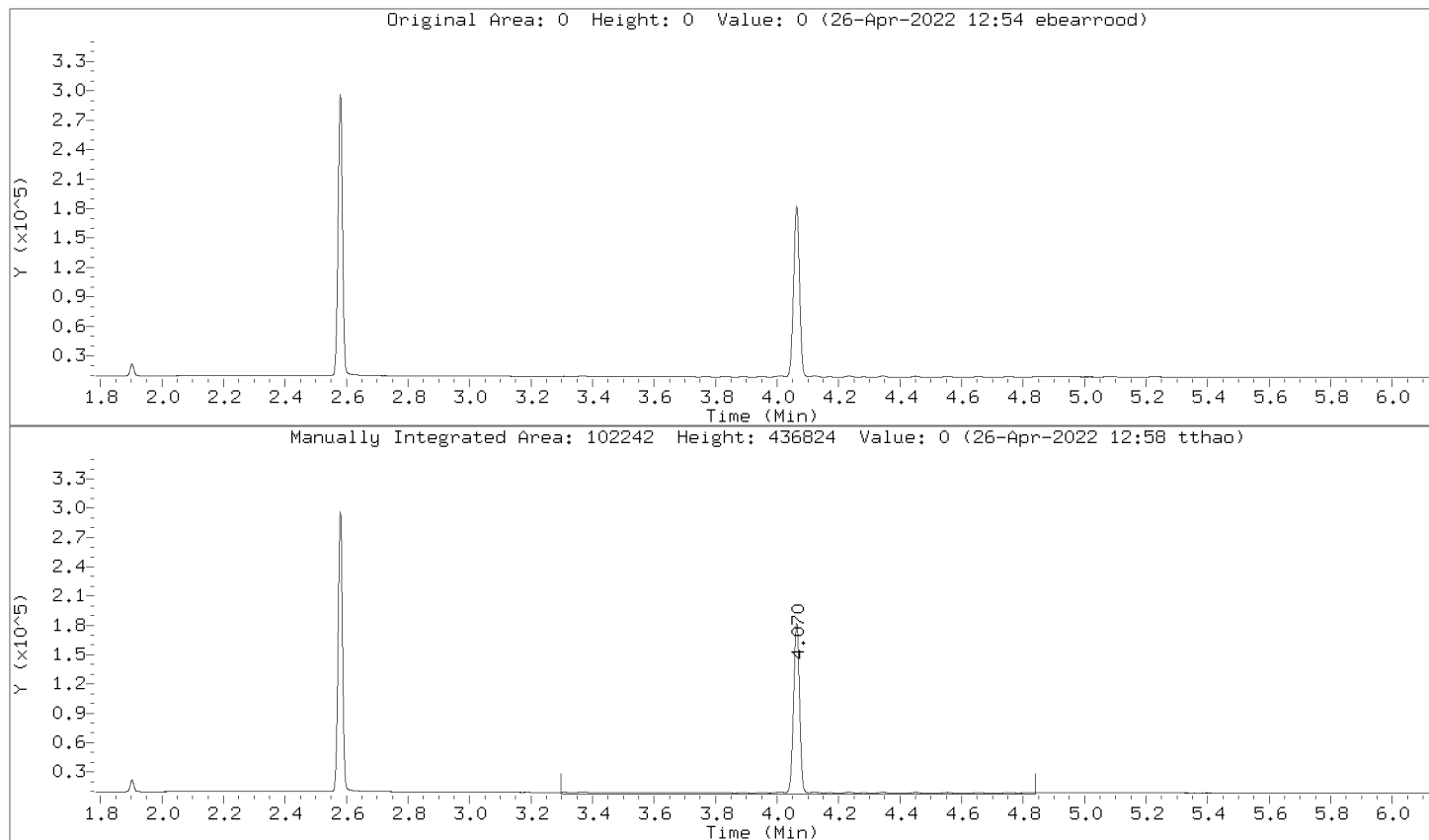
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

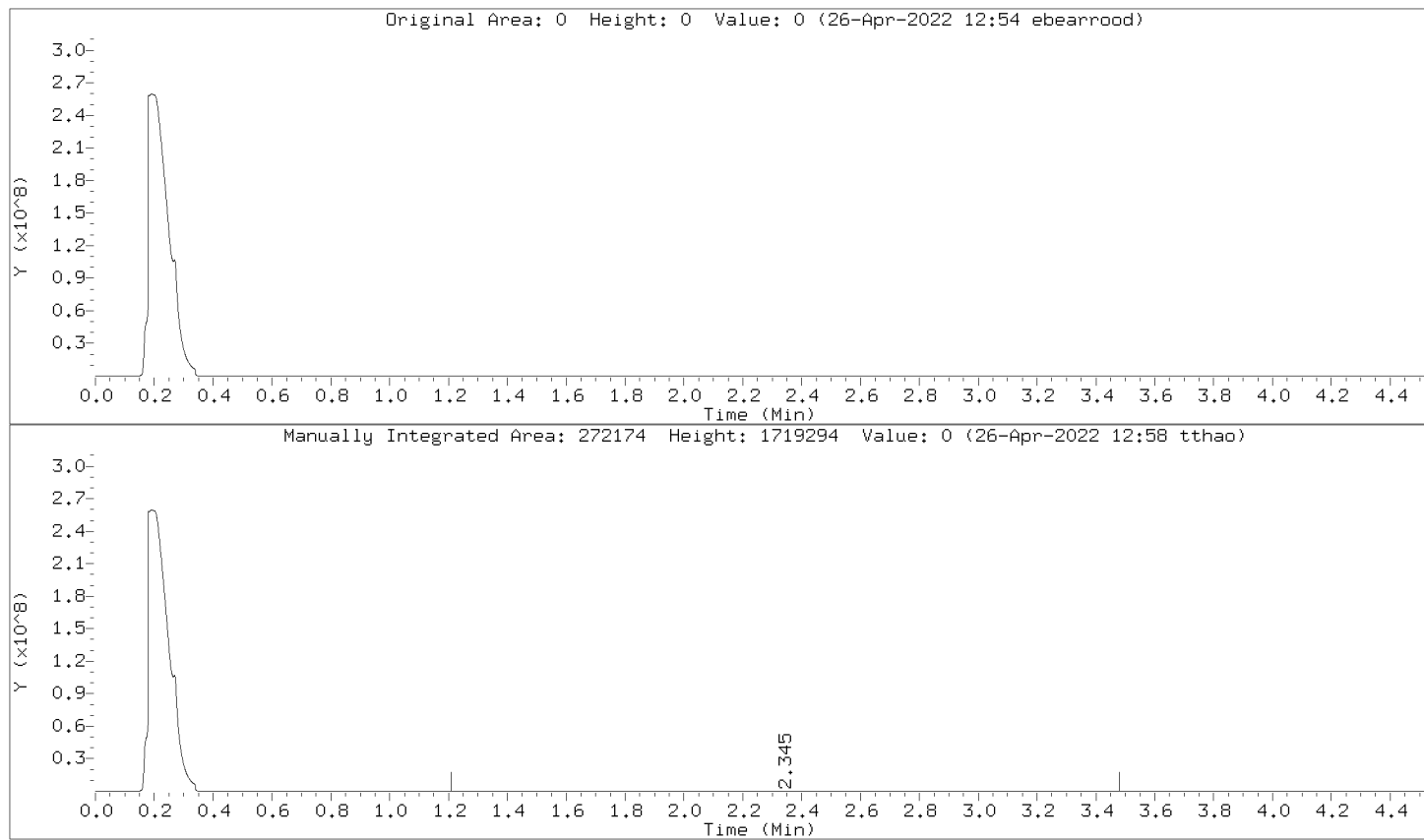
Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D

Injection Date: 26-APR-2022 10:09

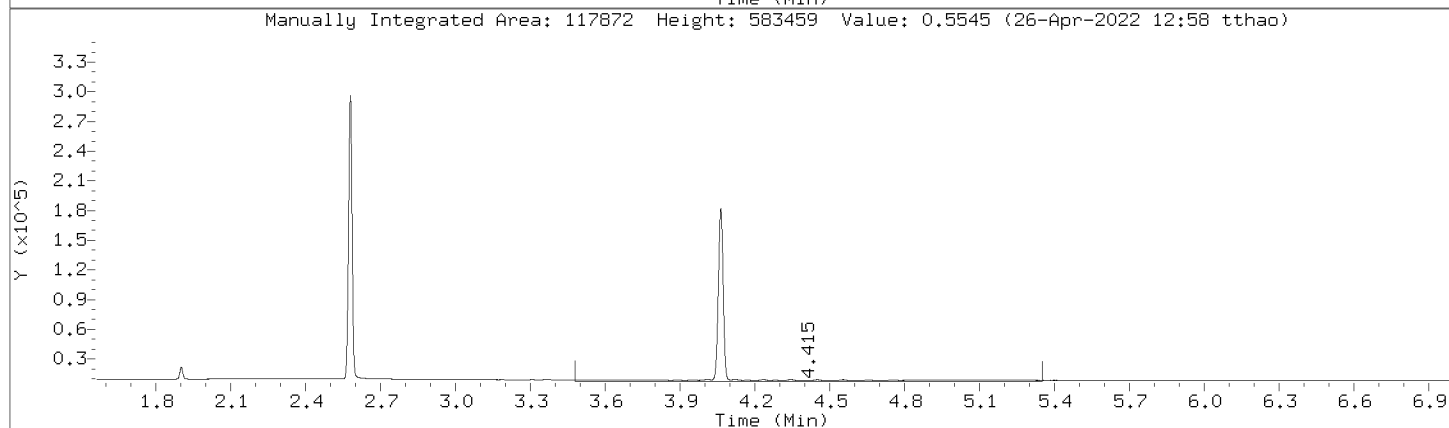
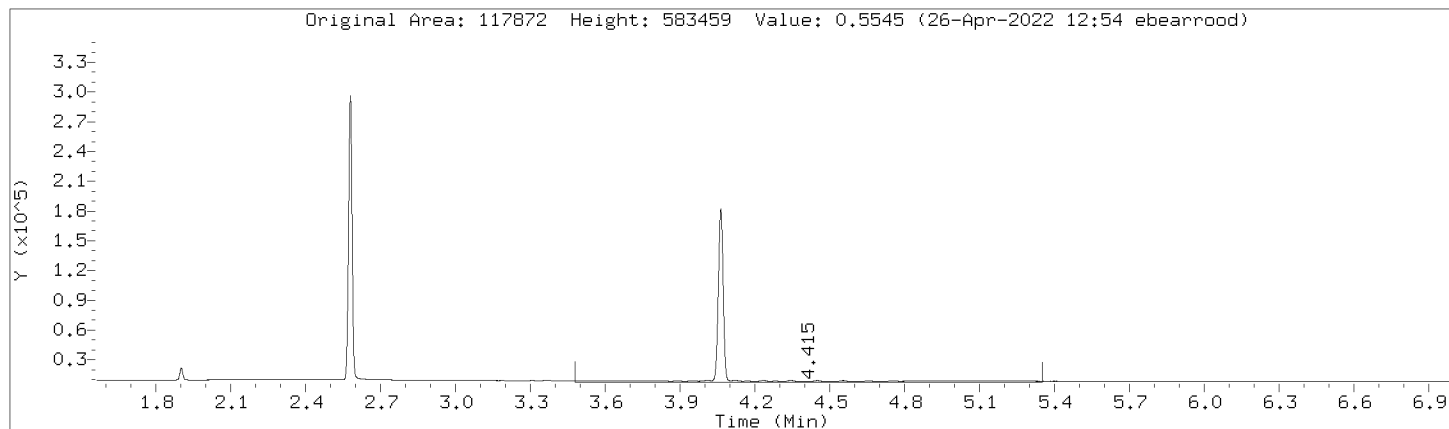
Instrument: 10gcsF.i

Lab Sample ID: PBLK,349203:2

Compound: Motor Oil Range

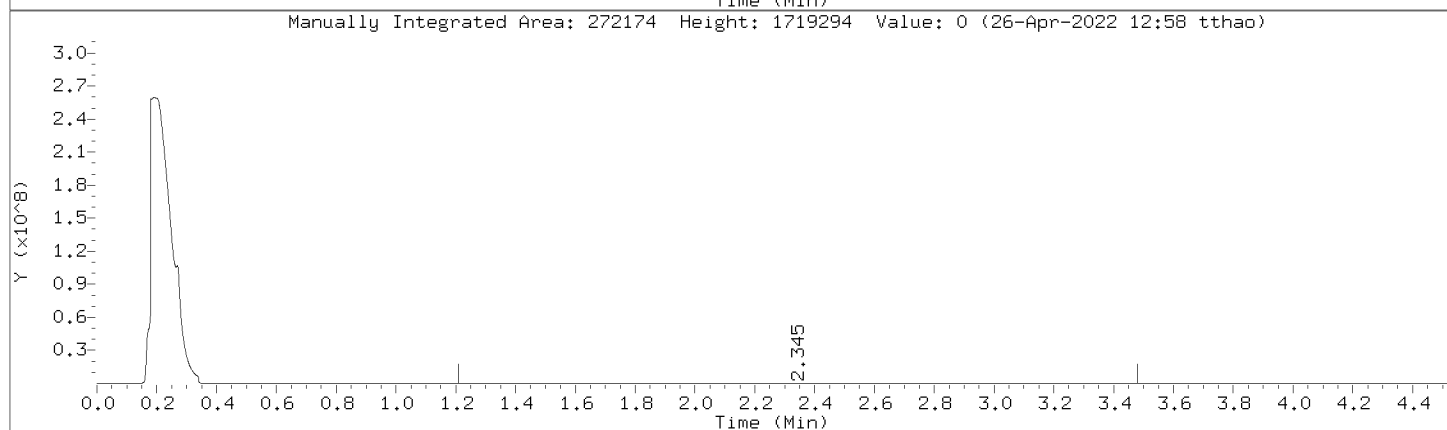
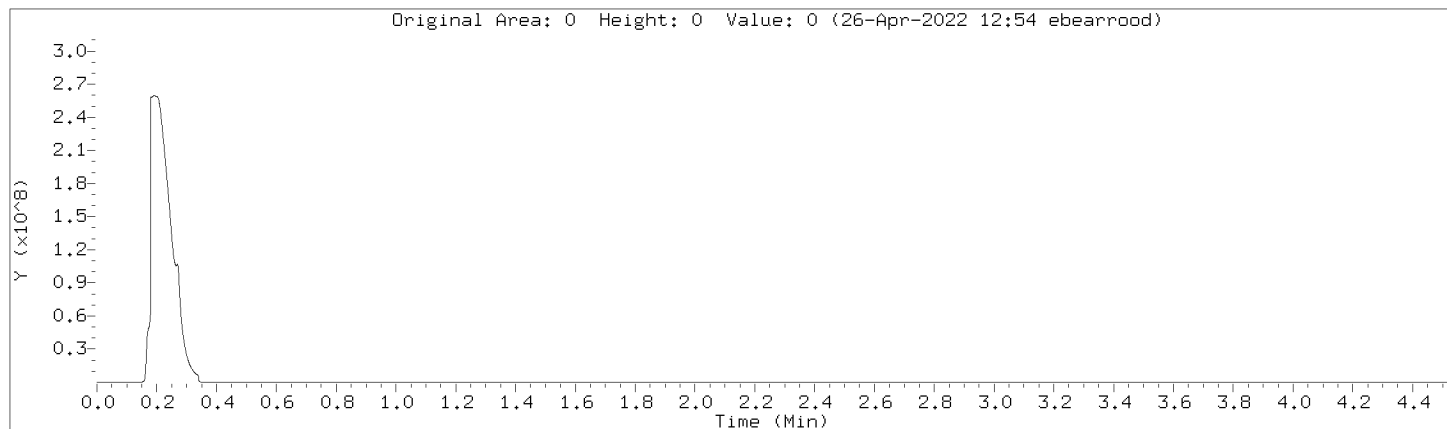
Review Code: RNG

CAS Number:



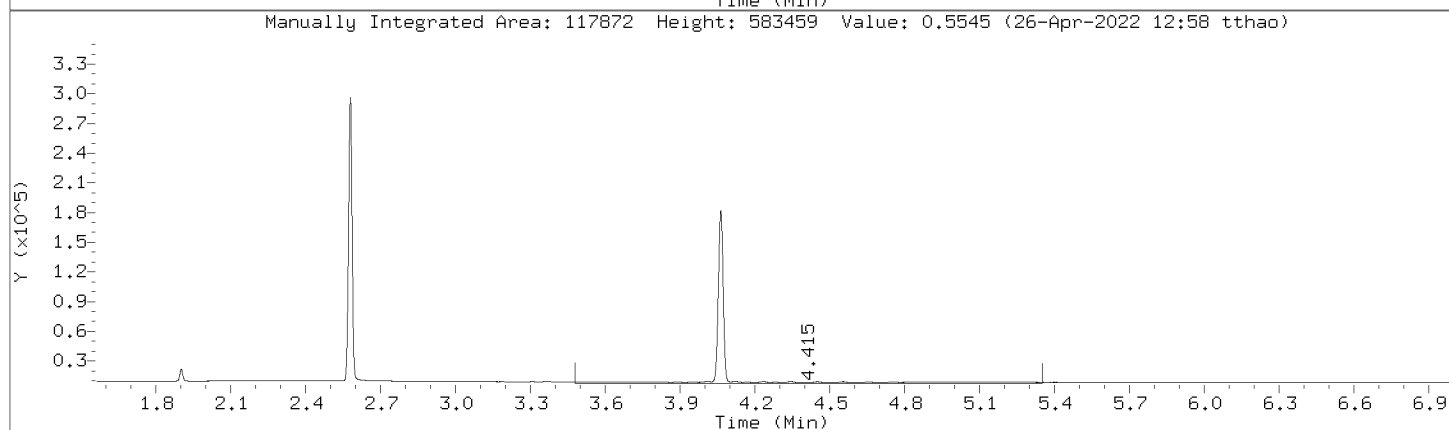
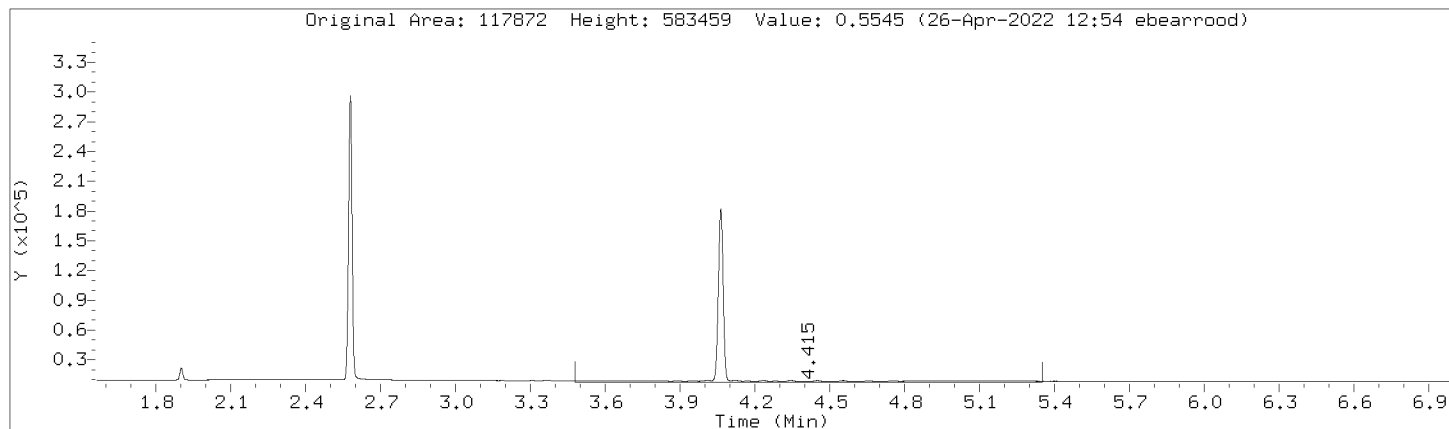
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



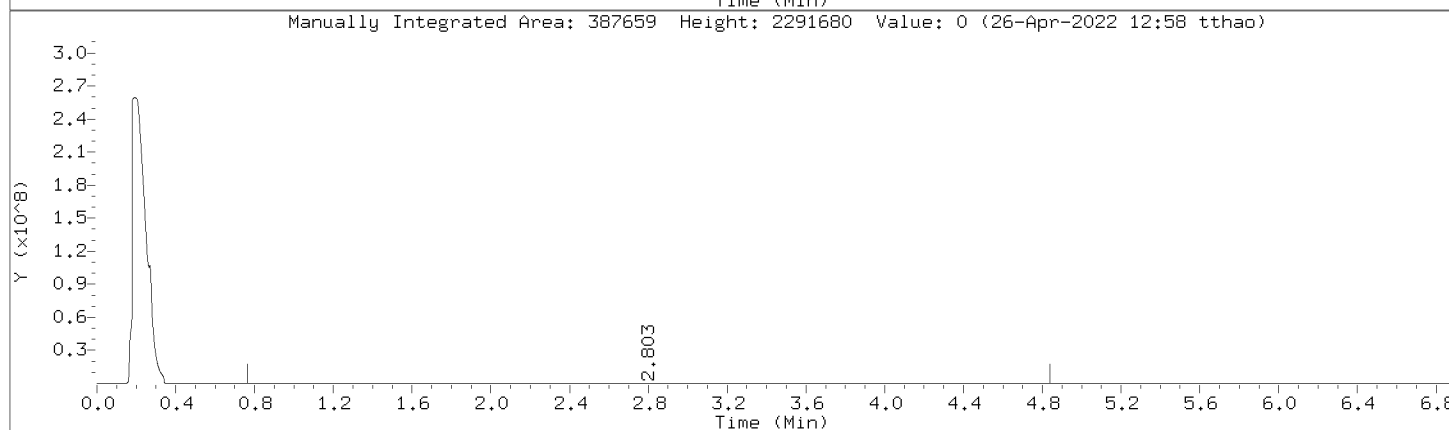
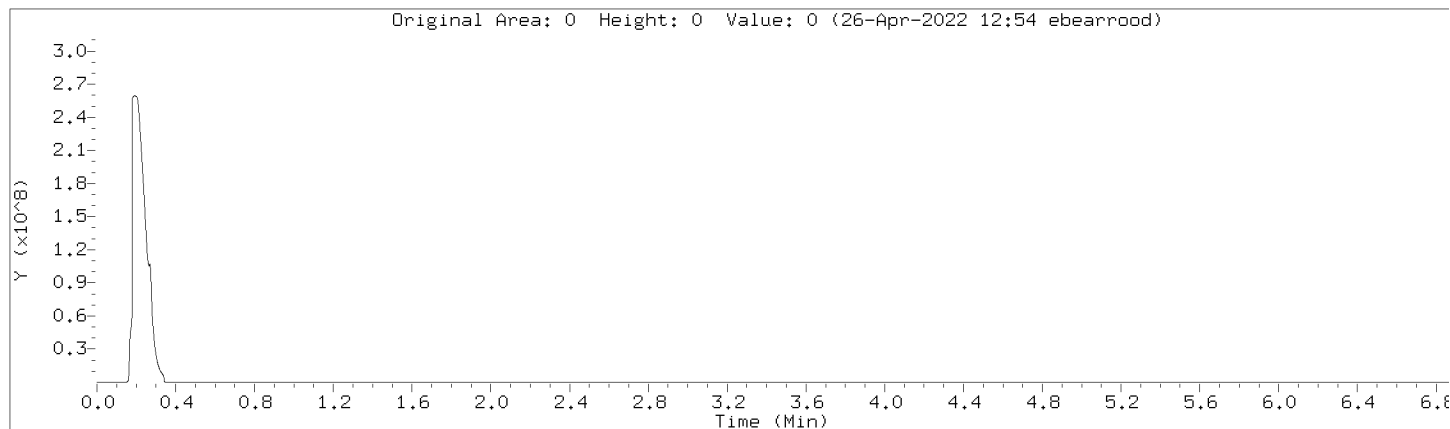
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



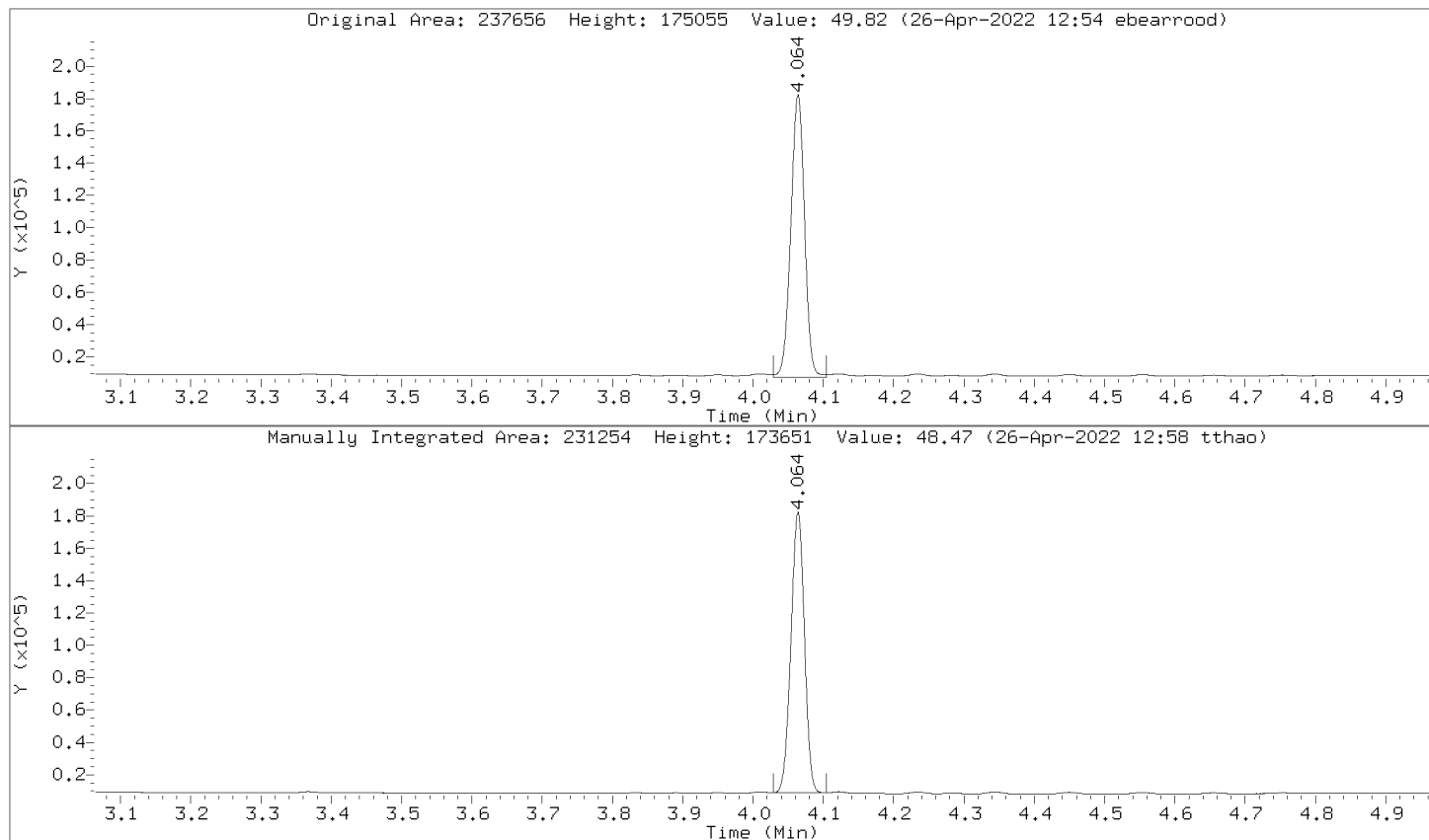
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



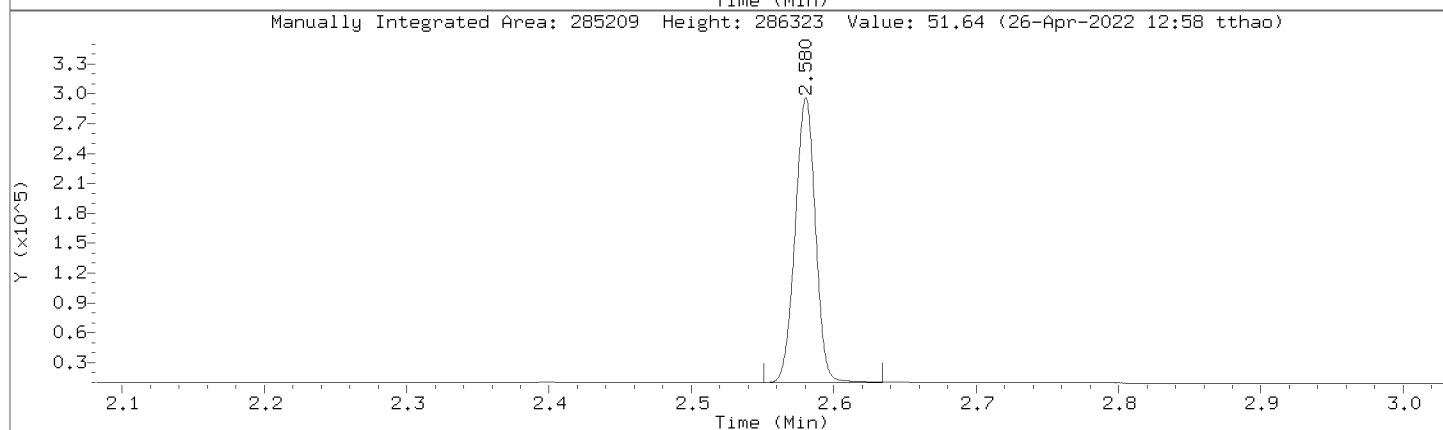
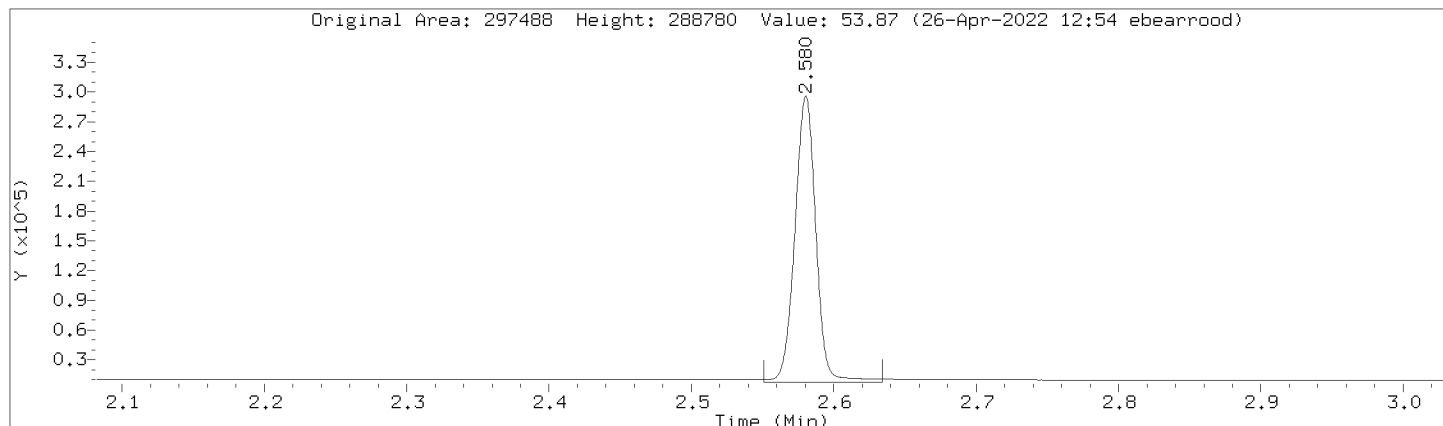
Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
Injection Date: 26-APR-2022 10:09  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000016.D  
 Injection Date: 26-APR-2022 10:09  
 Instrument: 10gcsF.i  
 Lab Sample ID: PBLK,349203:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	0	89594
DRO by AK 102	0	298065
TPH-DRO (C10-C28)	0	336474
Motor Oil Range (C24-C36)	0	102242
Diesel Fuel Range	0	272174
Motor Oil Range	117872	117872
Diesel Fuel Range SG	0	272174
Motor Oil Range SG	117872	117872
C10-C36	0	387659
n-Triacontane (S)	237656	231254
o-Terphenyl (S)	297488	285209

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000003.D  
 Lab Smp Id: DMO-RTM,362403:2 Client Smp ID: DMO-RTM,362403:2  
 Inj Date : 27-APR-2022 12:04  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-rtm,362403:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 27-Apr-2022 16:52 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 77  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			ON-COL RESPONSE (ug/mL)	FINAL (ug/mL)	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.755	- 3.420		2109841 337.803	338	
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.534	2.529 0.005		601 0.10883	0.109	(R)
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.071	4.058 0.013		95 0.01991	0.0199	(R)
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.421	- 4.880		1963660 577.047	577	
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.755	- 4.000		3389142 498.851	499	
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.280	- 4.880		2585552 741.879	742	
-----					
S 7	C10-C36			CAS #:	
0.755	- 4.880		4073501 857.310	857	
-----					
S 8	Diesel Fuel Range			CAS #:	
1.200	- 3.470		1479255 267.402	267	
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.200	- 3.470		1479255 267.402	267	
-----					
S 10	Motor Oil Range			CAS #:	
3.471	- 5.370		2527976 604.854	605	
-----					
S 11	Motor Oil Range SG			CAS #:	
3.471	- 5.370		2527976 604.854	605	
-----					



QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Date : 27-APR-2022 12:04

Client ID: DM0-RTM,362403;2

Sample Info: DM0-RTM,362403;2

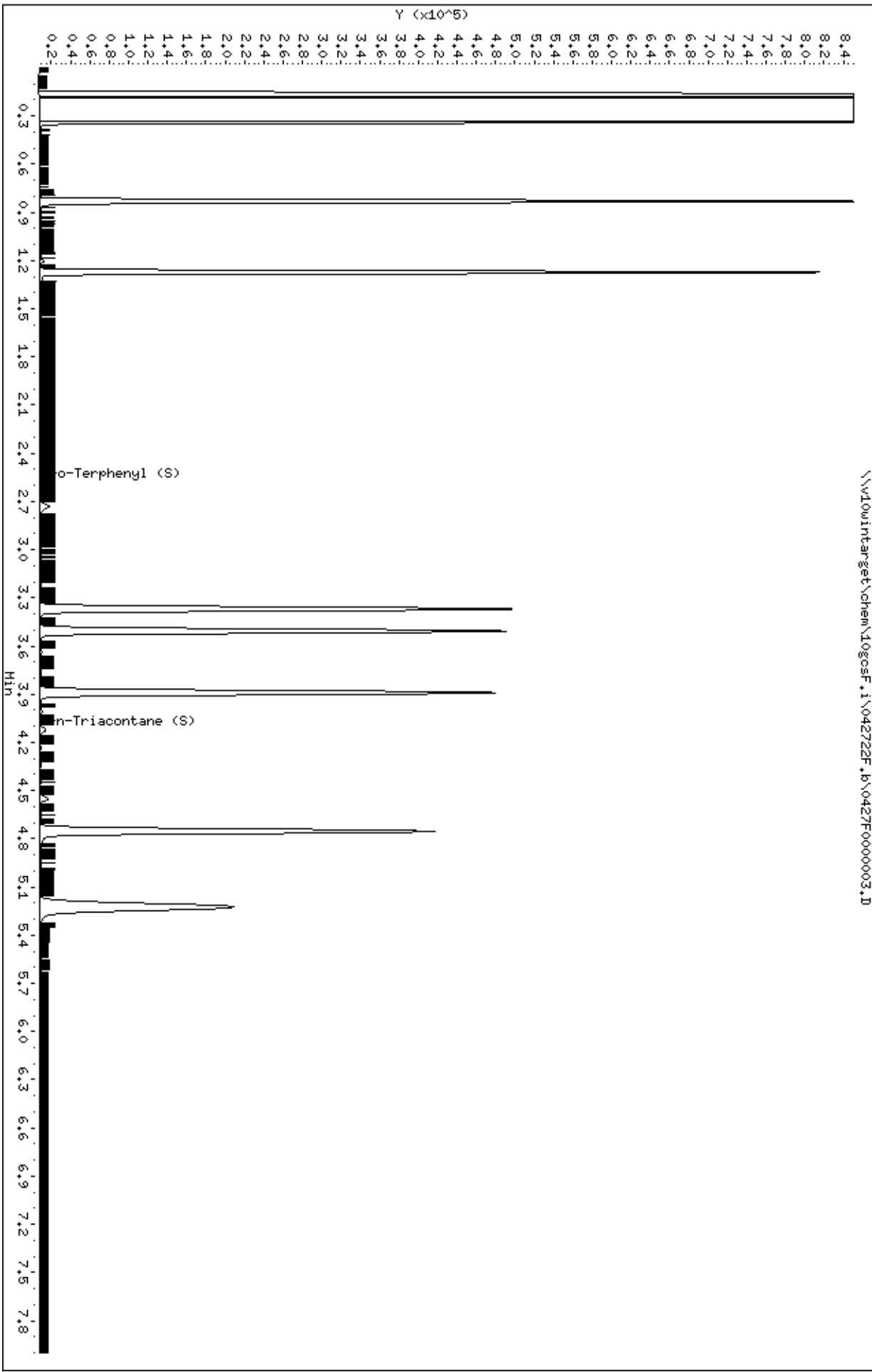
Instrument: 10gocsf.1

Operator: EB3

Column diameter: 0.32

Column phase: DB-5-US21250010

\\vl0win\target\chem\10gocsf.1\042722F.1\0427F0000003.D



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000003.D  
Injection Date: 27-APR-2022 12:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-RTM,362403:2  
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1963660	1963660
DRO by AK 102	2109841	2109841
TPH-DRO (C10-C28)	3389142	3389142
Motor Oil Range (C24-C36)	2585552	2585552
Diesel Fuel Range	1479255	1479255
Motor Oil Range	2527976	2527976
Diesel Fuel Range SG	1479255	1479255
Motor Oil Range SG	2527976	2527976
C10-C36	4073501	4073501
n-Triacontane (S)	95	95
o-Terphenyl (S)	601	601

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000007.D  
 Lab Smp Id: DMO-RTM,362403:2 Client Smp ID: DMO-RTM,362403:2  
 Inj Date : 27-APR-2022 12:49  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-rtm,362403:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 77  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL		FINAL	REVIEW CODE
			RESPONSE	(ug/mL)	(ug/mL)	
====	=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102				CAS #:	
0.885	- 3.540		2305153	338.845	339	
-----						
\$ 2	o-Terphenyl (S)				CAS #:	
Compound Not Detected.						
-----						
\$ 3	n-Triacontane (S)				CAS #:	
Compound Not Detected.						
-----						
S 4	Residual Range Organics AK103				CAS #:	
3.541	- 5.020		2128603	578.081	578	
-----						
S 5	TPH-DRO (C10-C28)				CAS #:	
0.885	- 4.099		3703303	503.789	504	
-----						
S 6	Motor Oil Range (C24-C36)				CAS #:	
3.400	- 5.020		2815723	742.120	742	
-----						
S 7	C10-C36				CAS #:	
0.885	- 5.020		4433757	858.994	859	
-----						
S 8	Diesel Fuel Range				CAS #:	
1.340	- 3.580		1622920	271.885	272	
-----						
S 9	Diesel Fuel Range SG				CAS #:	
1.340	- 3.580		1622920	271.885	272	
-----						
S 10	Motor Oil Range				CAS #:	
3.581	- 5.740		2620070	567.727	568	
-----						

CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/mL)	(ug/mL)	REVIEW CODE
====	=====	=====	=====	=====	=====	=====
S	11	Motor Oil Range	SG			CAS #:
3.581	-	5.740	2620070	567.727	568	

---

Date : 27-APR-2022 12:49

Client ID: DM0-RTM,362403:2

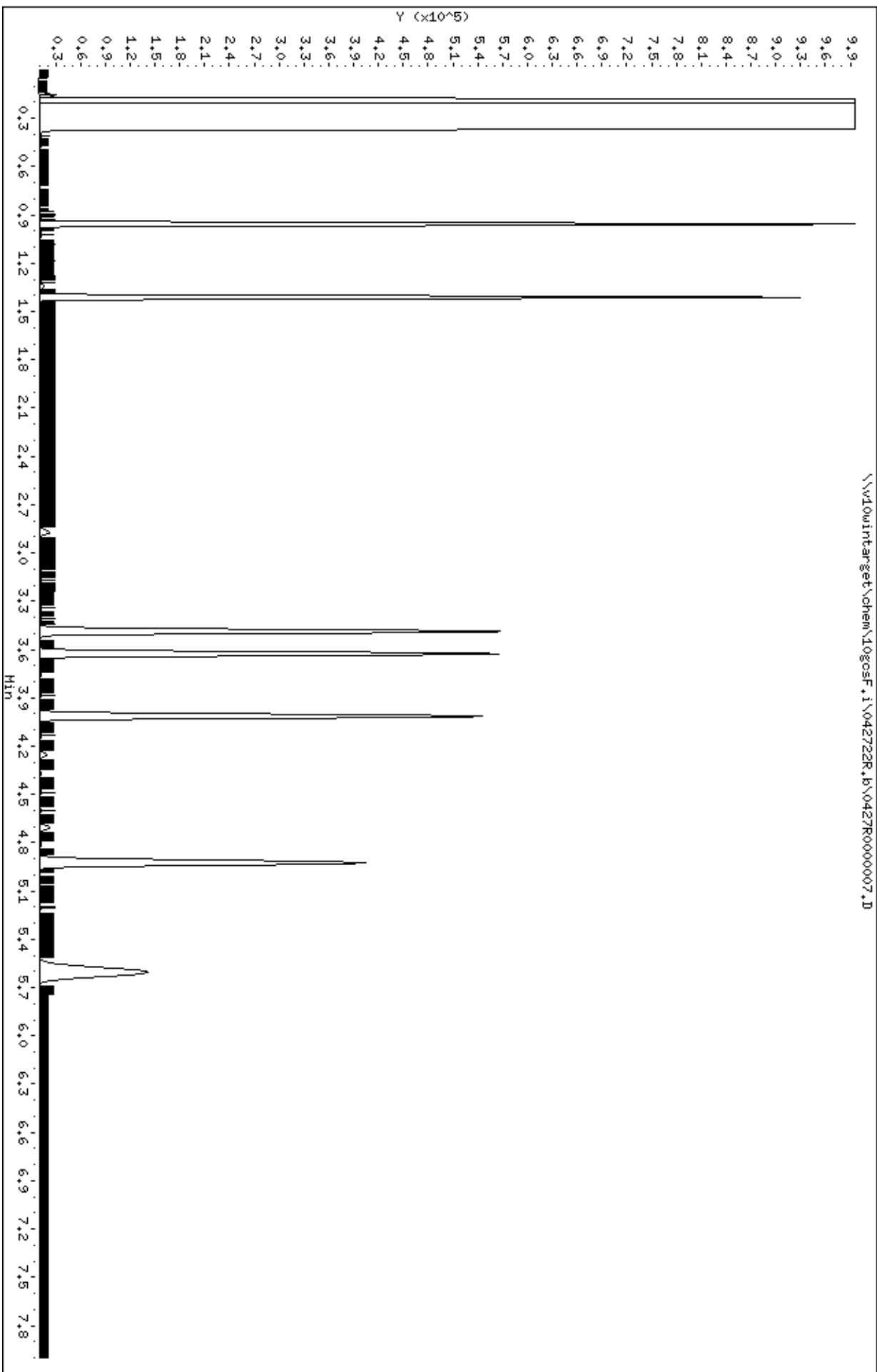
Sample Info: DM0-RTM,362403:2

Instrument: logosf.i

Operator: EB3

Column diameter: 0.32

Column phase: DB-5-US21430033



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000007.D  
Injection Date: 27-APR-2022 12:49  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-RTM,362403:2  
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
 Lab Smp Id: DMO-CAL1,362369:2 Client Smp ID: DMO-CAL1,362369:2  
 Inj Date : 27-APR-2022 13:00  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-call,362369:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 78 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		347320 6.00000		(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.684	2.685 -0.001		3754 0.60000		(MH) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.193	4.193 0.000		2820 0.60000		(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		104920 6.00000		(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		387621 6.00000		(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		119128 6.00000		(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		452378 12.0000		(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		308284 6.00000		(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		308284 6.00000		(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		132846 6.00000	3.70	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		132846 6.00000	3.70	(M) RNG
-----					



QC Flag Legend

M - Compound response manually integrated.  
H - Operator selected an alternate compound hit.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:00

Client ID: DMO-CAL1,362369;2

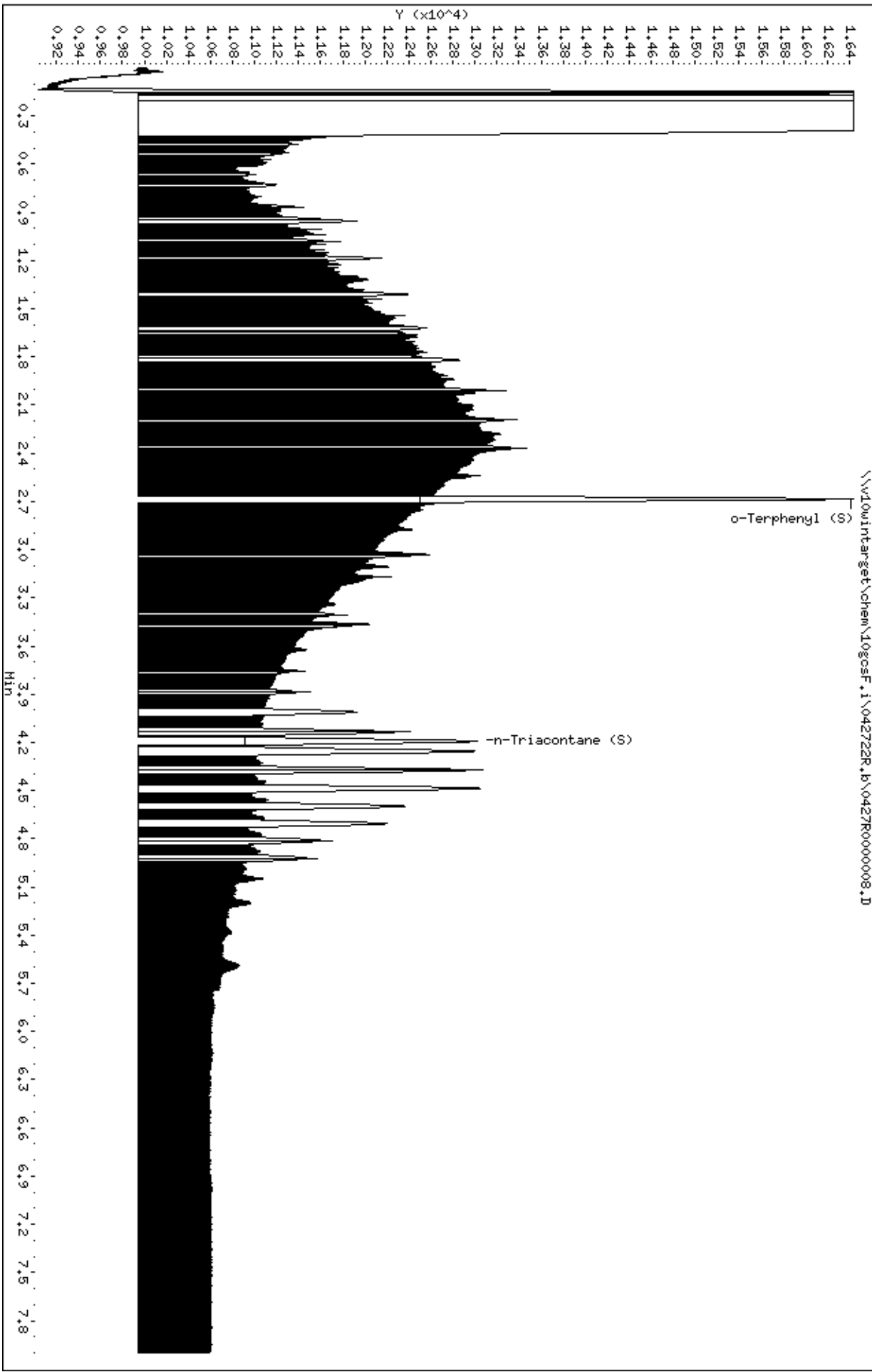
Sample Info: DMO-CAL1,362369;2

Instrument: 10gocsf.1

Operator: EB3

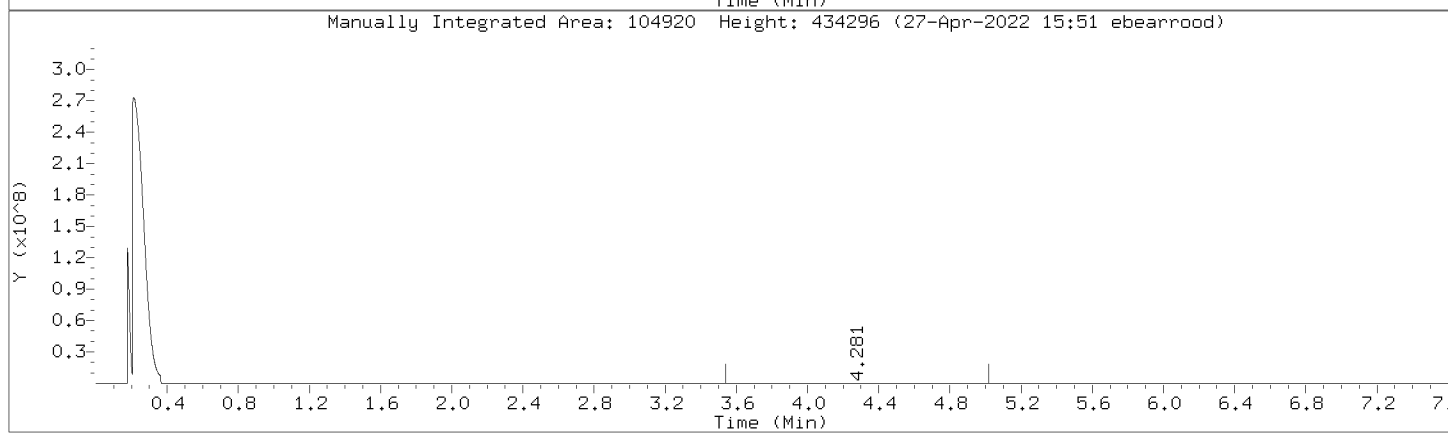
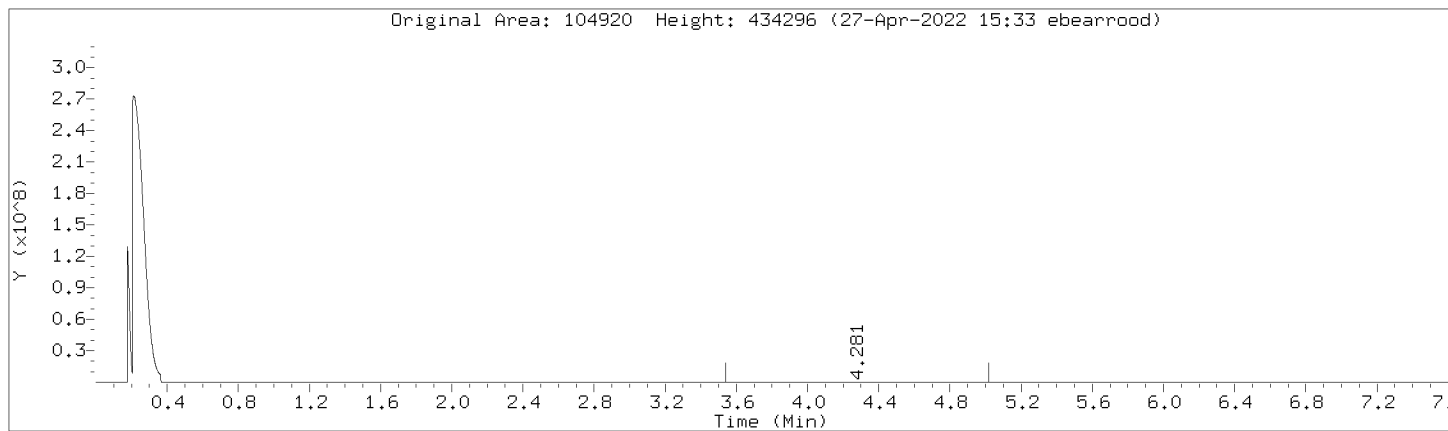
Column diameter: 0.32

Column phase: DB-5-MS21430033



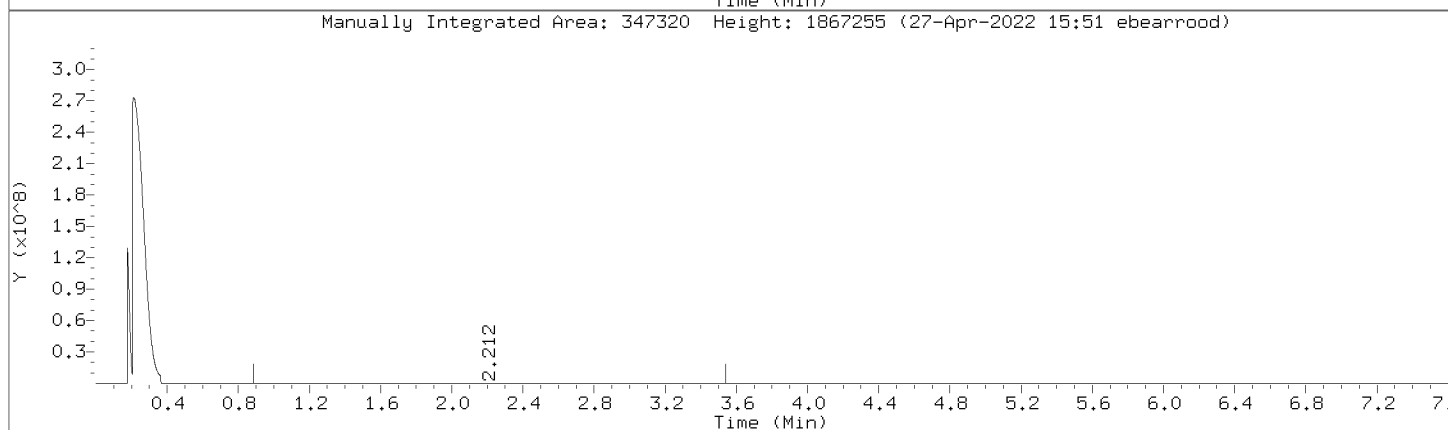
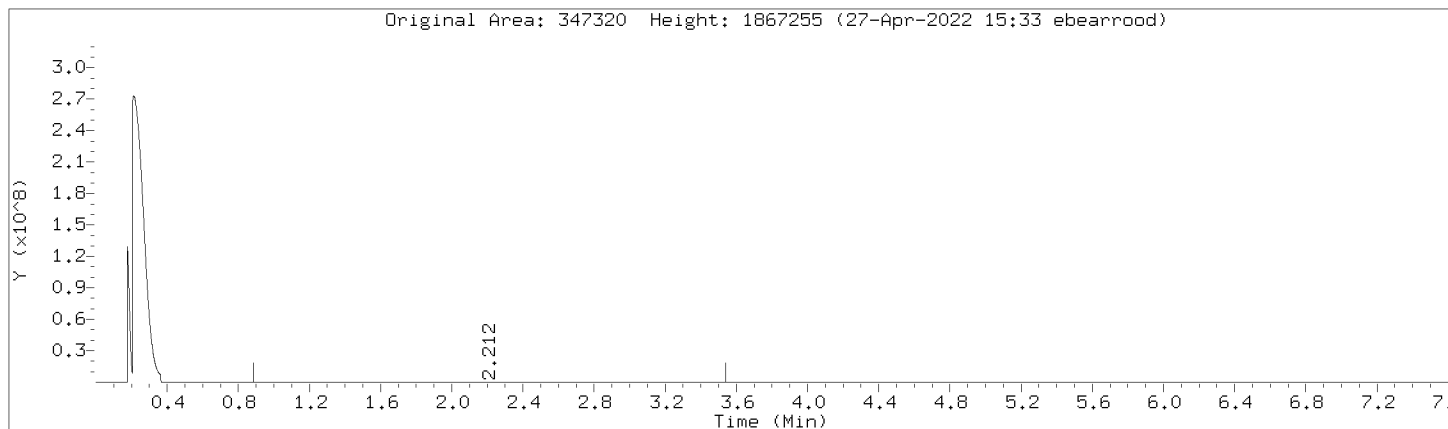
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



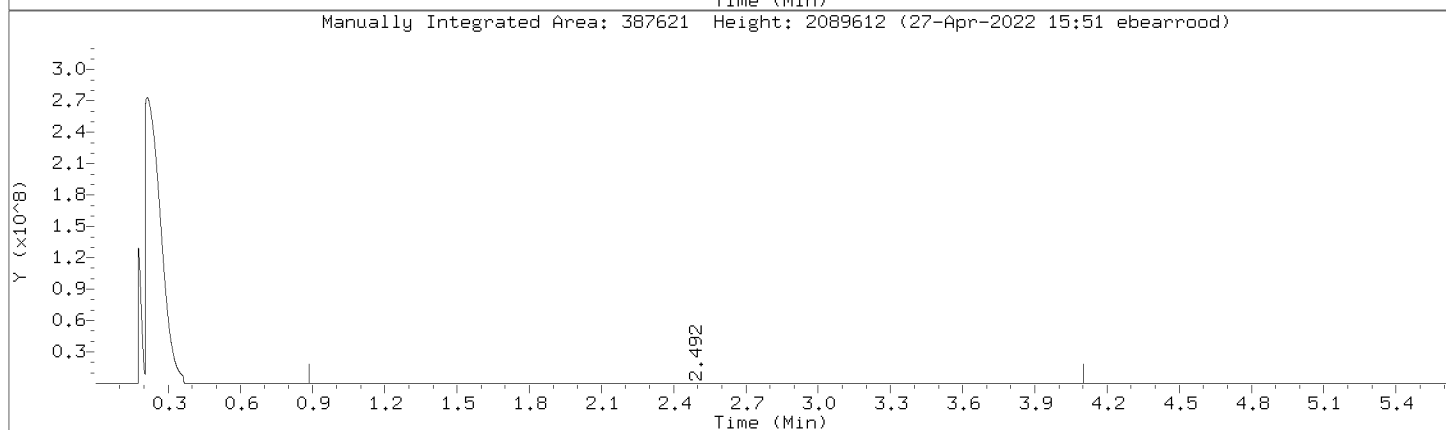
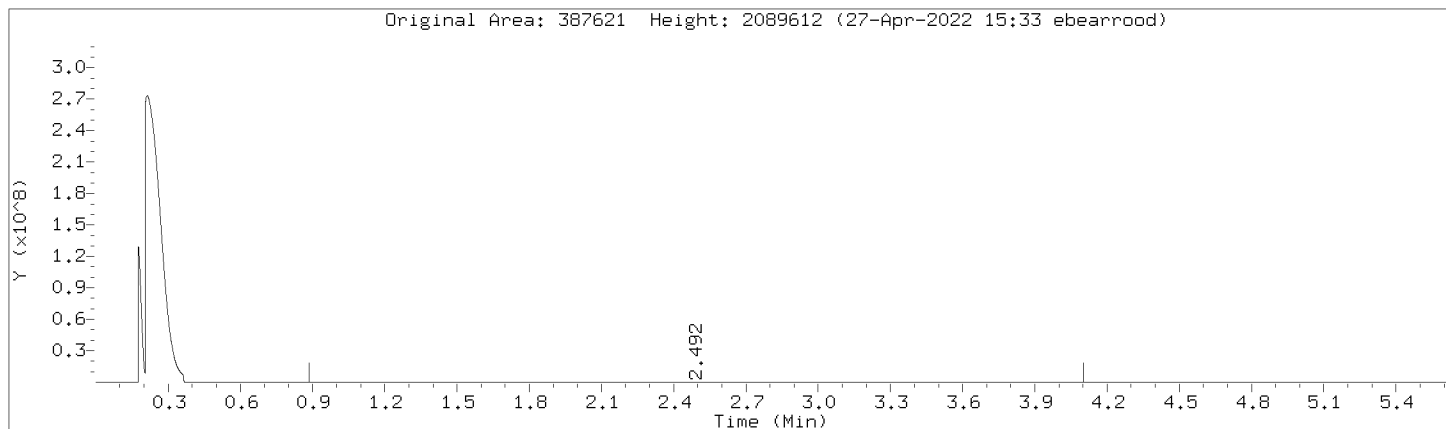
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Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

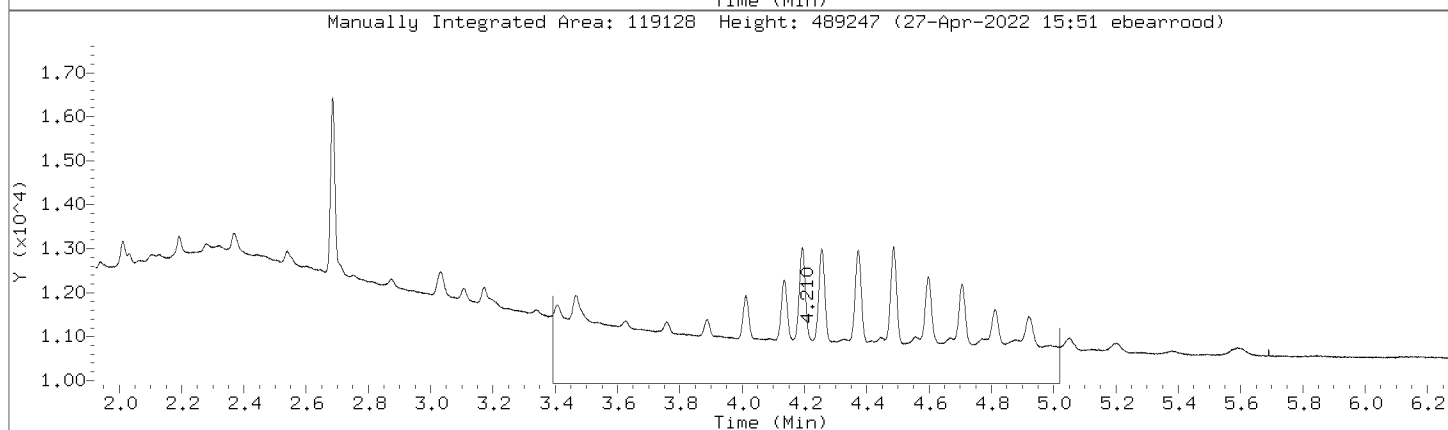
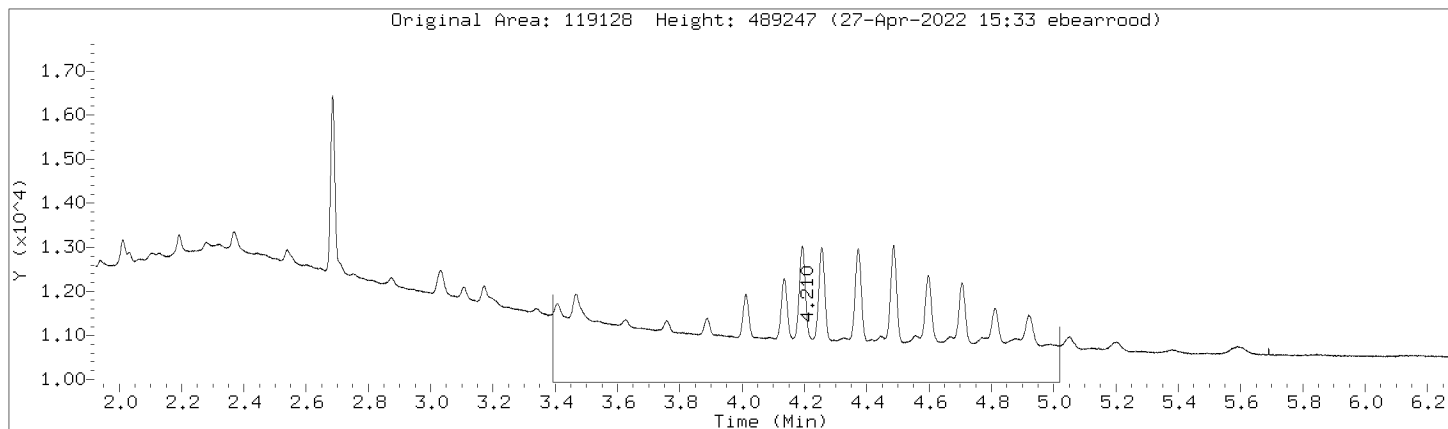
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

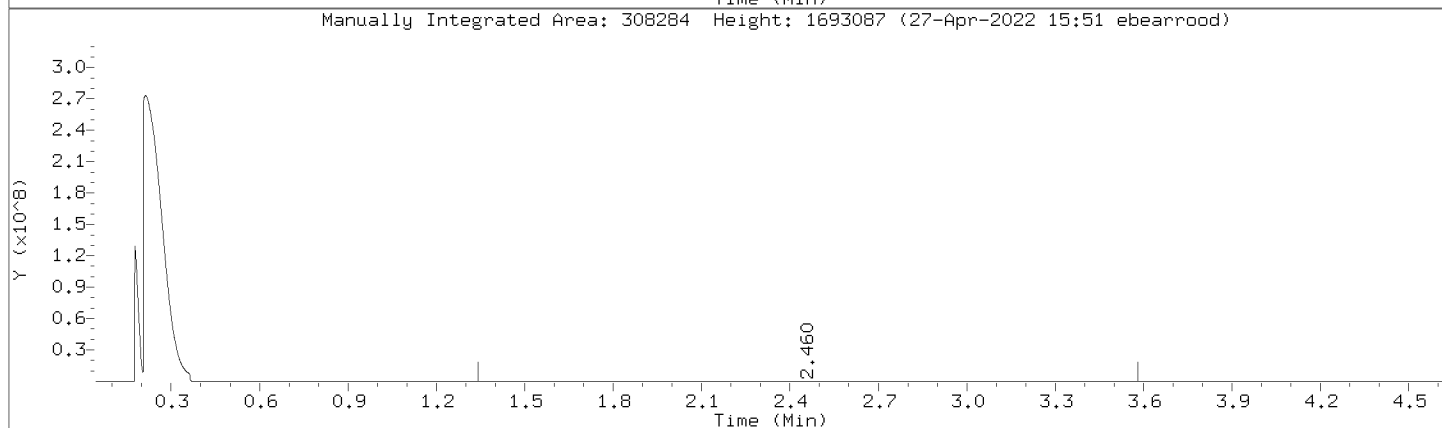
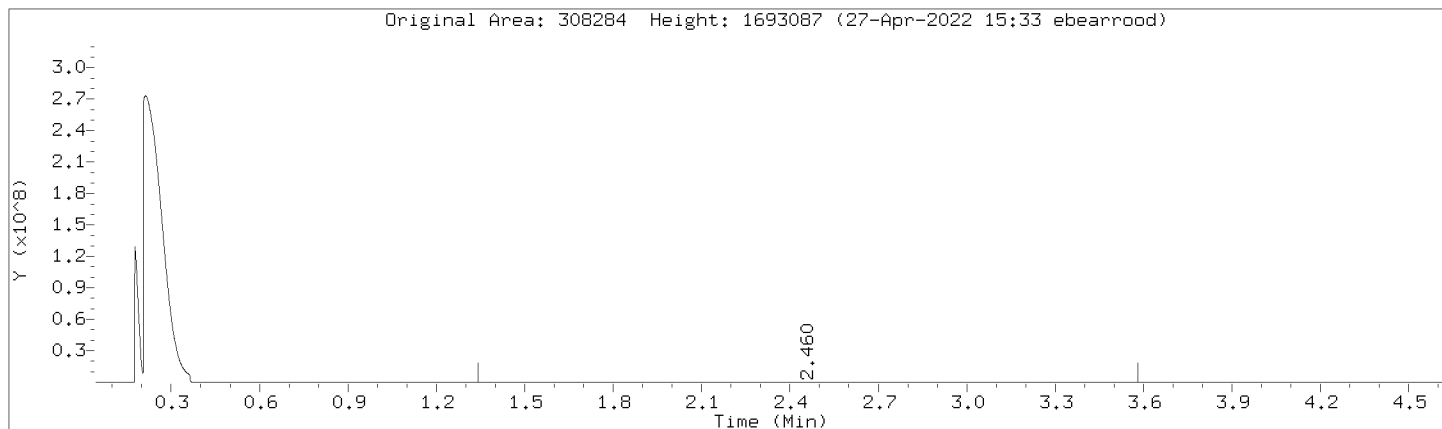
Compound: Motor Oil Range (C24-C36)  
CAS Number:

Review Code: RNG



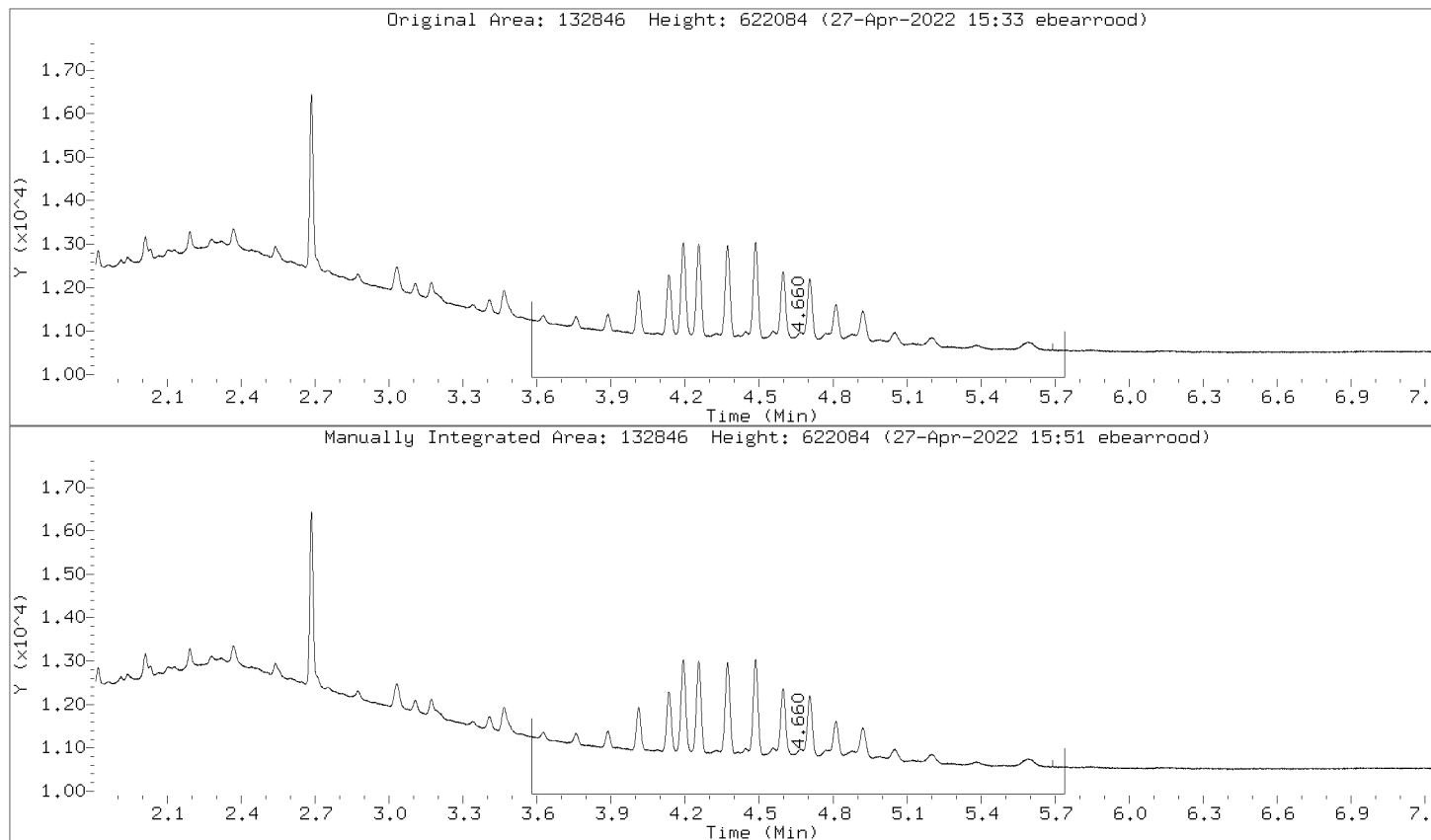
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Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

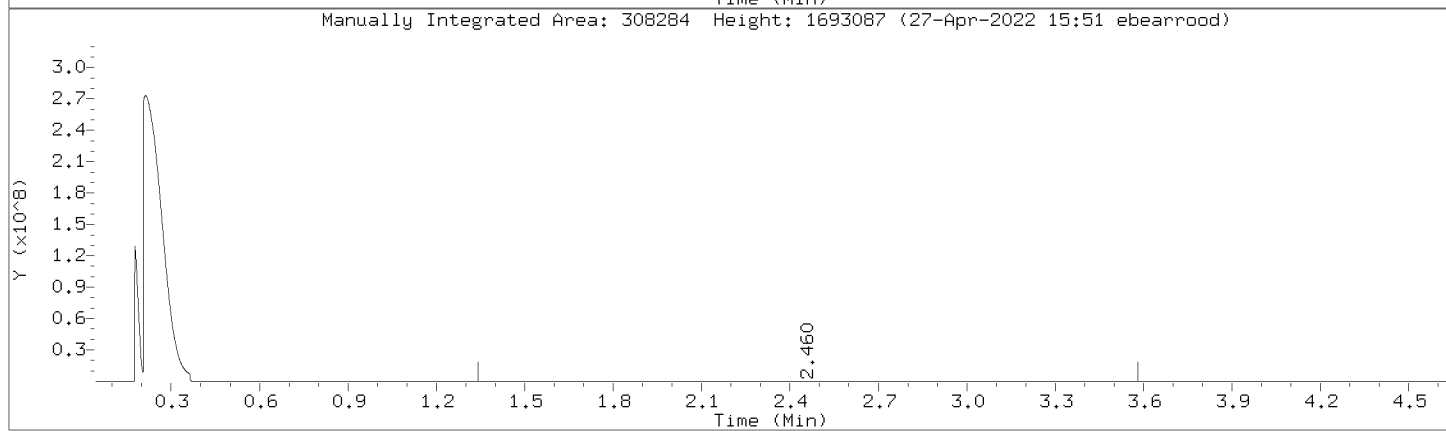
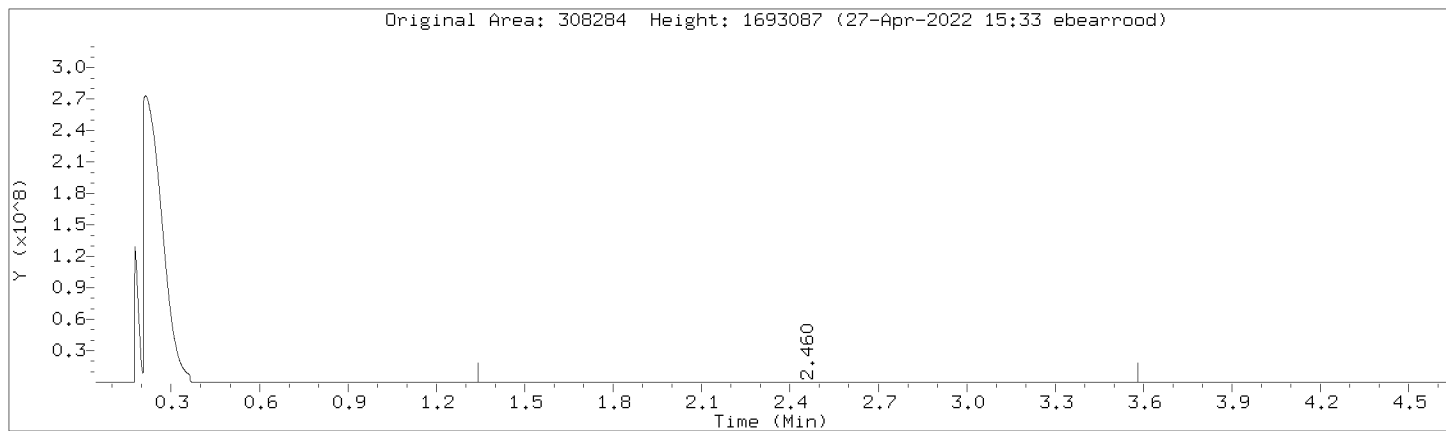
Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





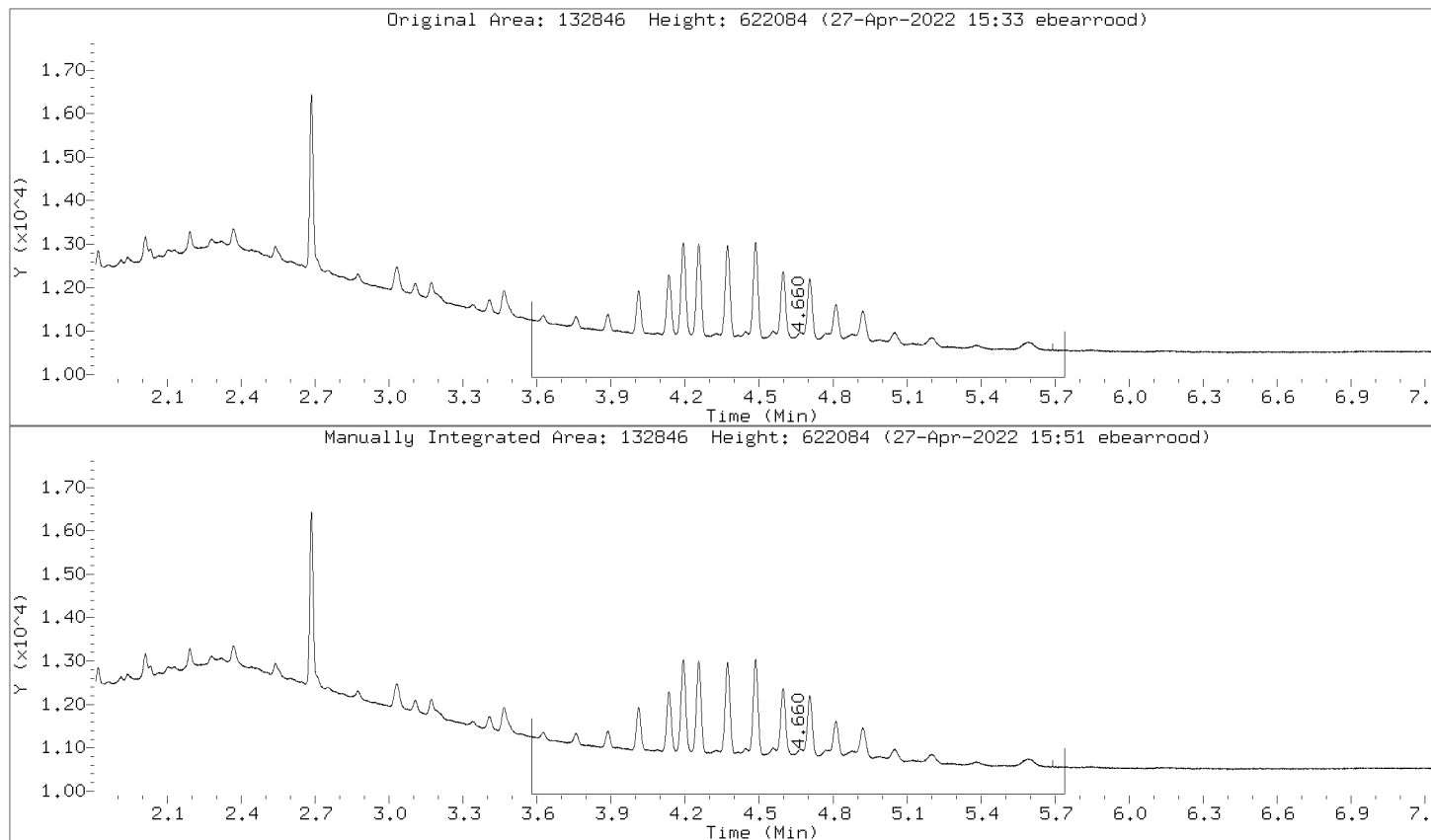
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Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



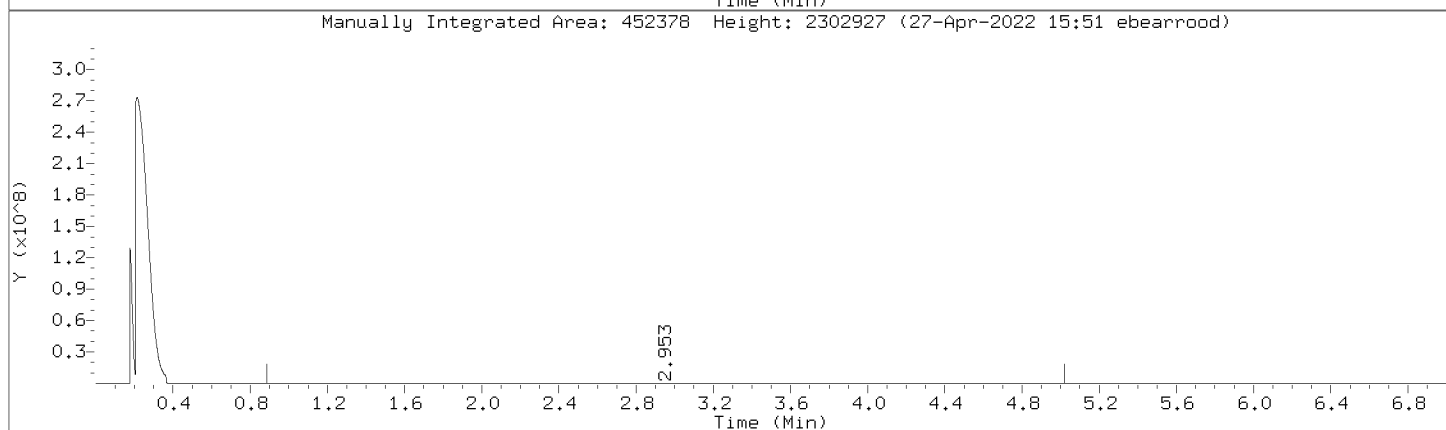
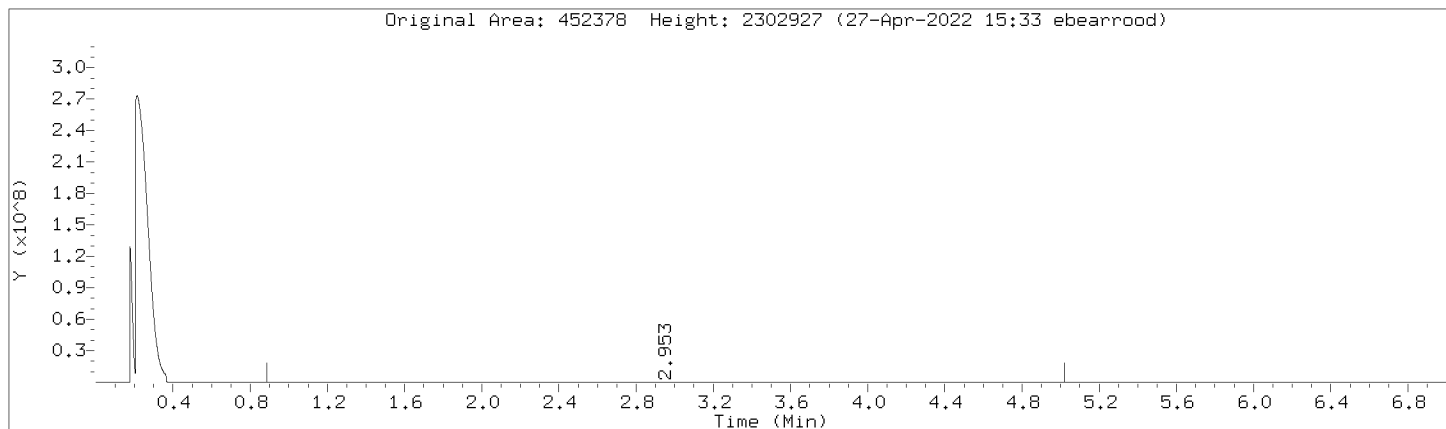
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



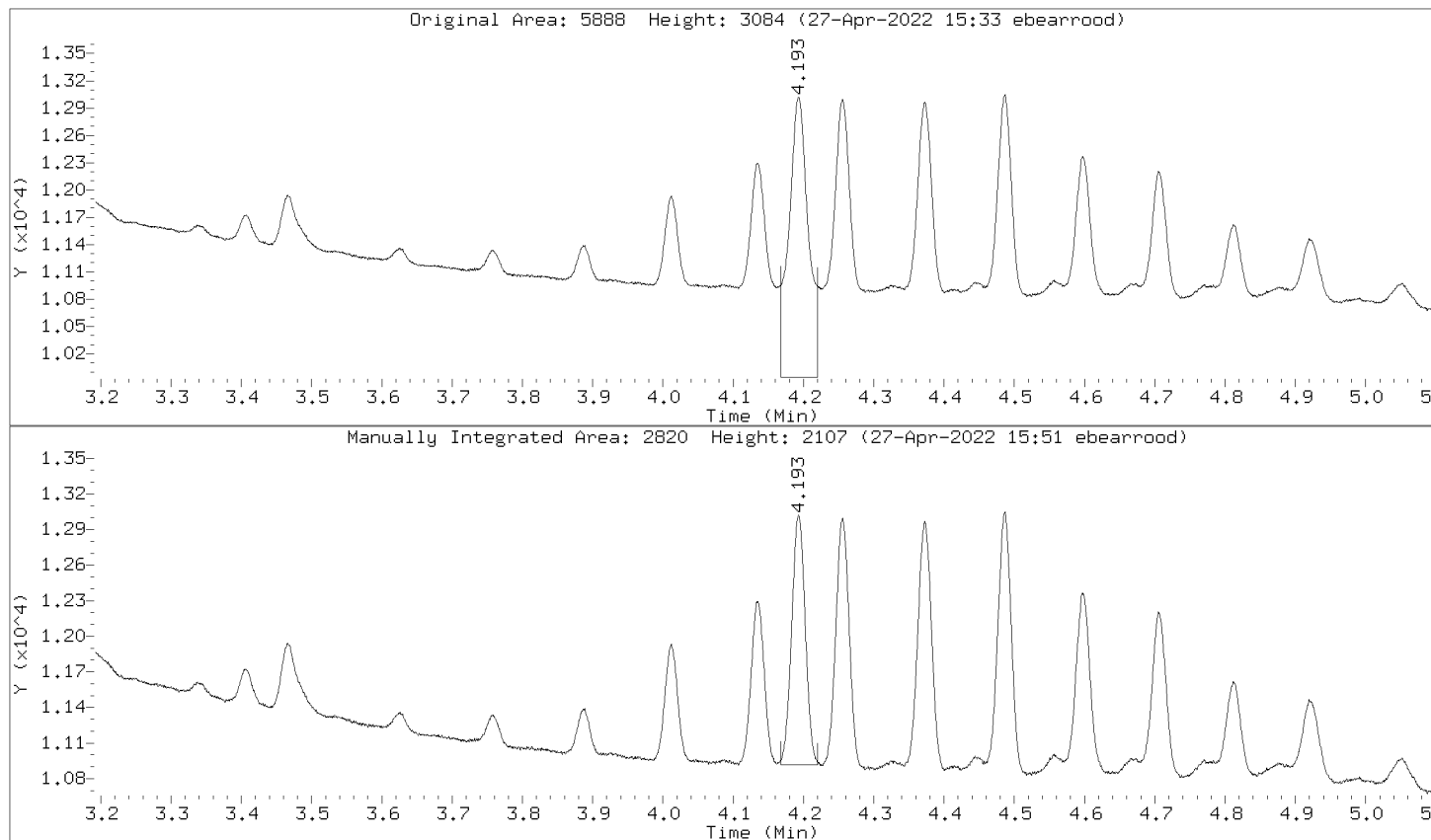
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Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



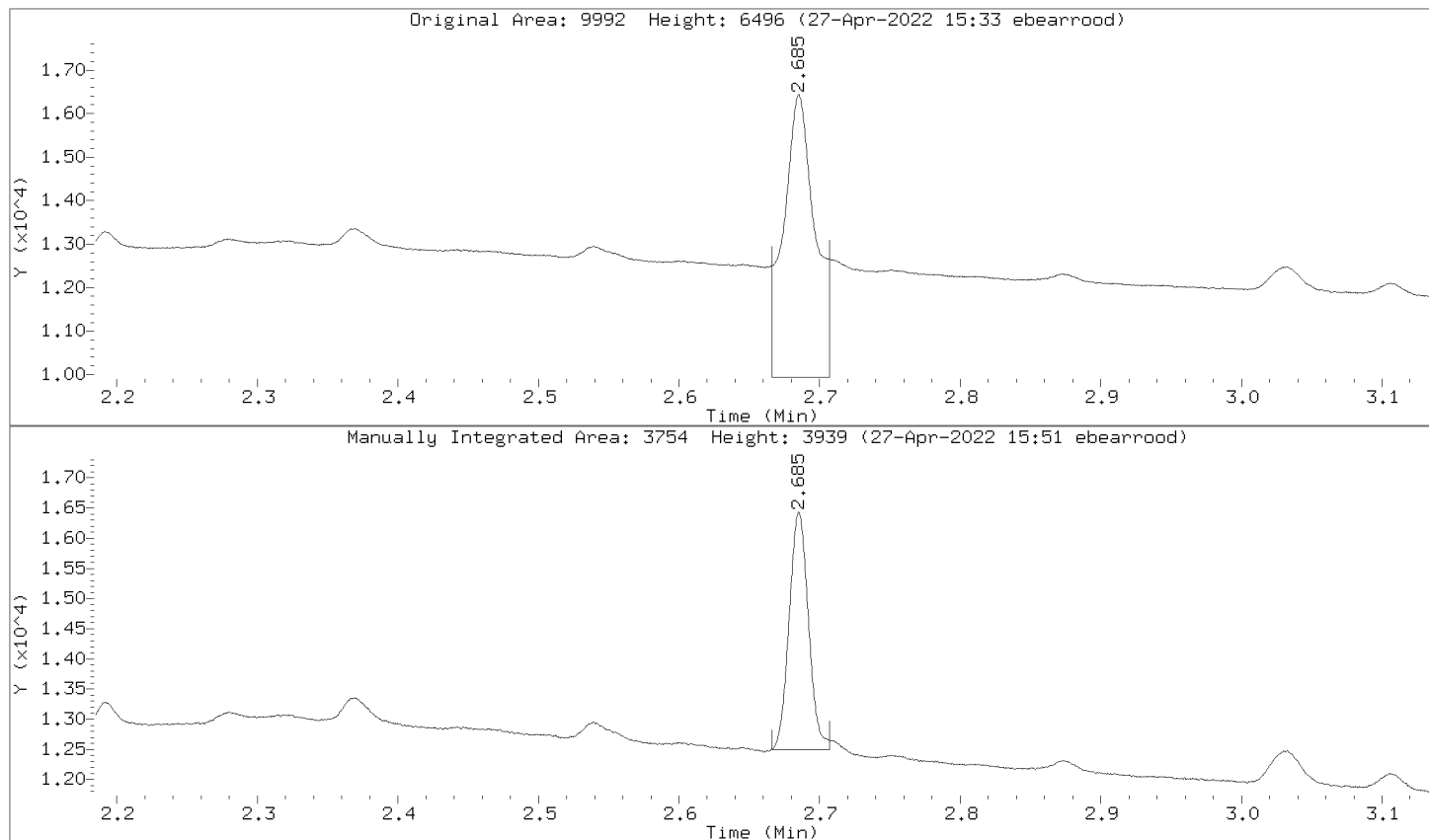
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Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
 Lab Smp Id: DMO-CAL2,362370:2 Client Smp ID: DMO-CAL2,362370:2  
 Inj Date : 27-APR-2022 13:11  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal2,362370:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 79 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		371077 10.0000	0.708	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.684	2.685 -0.001		6499 1.00000	0.384	(MH) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.193	4.193 0.000		4770 1.00000	0.238	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		121697 10.0000	3.10	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		414945 10.0000	0.851	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		136931 10.0000	2.46	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		493035 20.0000	3.26	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		327992 10.0000	2.63	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		327992 10.0000	2.63	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		151560 10.0000	7.94	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		151560 10.0000	7.94	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.  
H - Operator selected an alternate compound hit.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:11

Client ID: DM0-CAL2.362370:2

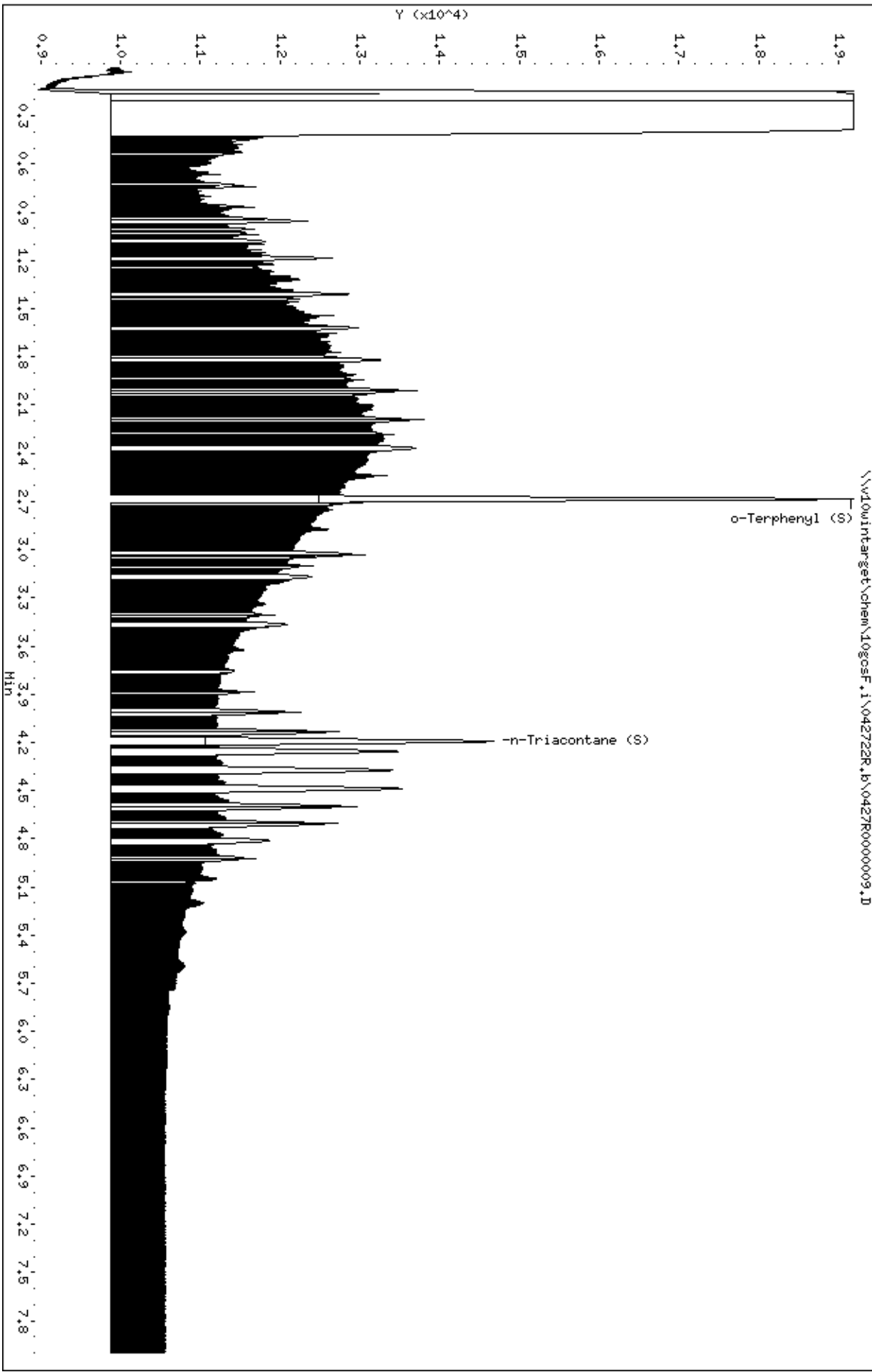
Sample Info: DM0-CAL2.362370:2

Column phase: DB-5-MS21430033

Instrument: 10gocsf.1

Operator: EB3

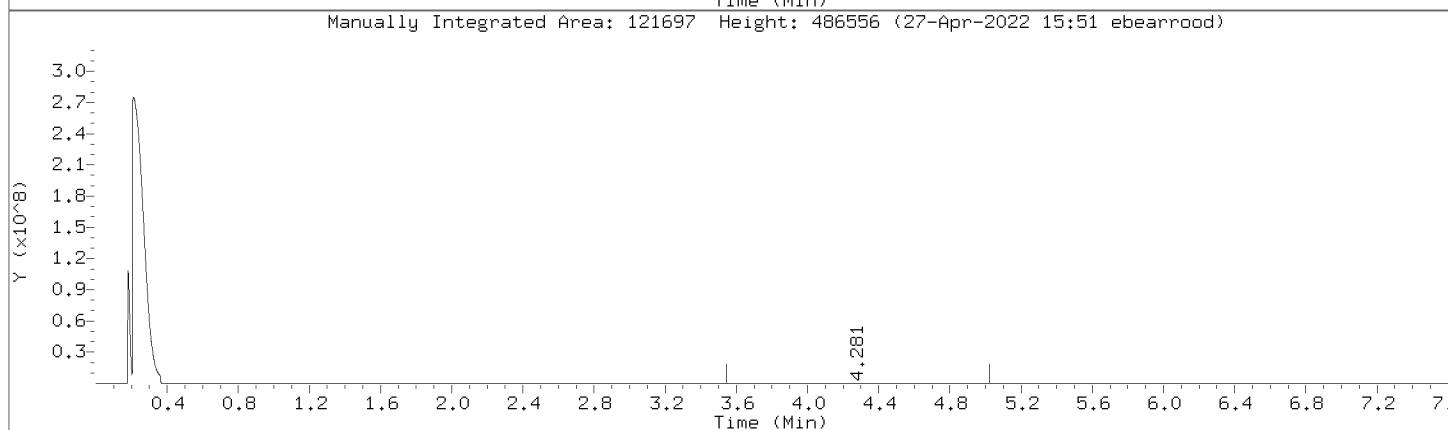
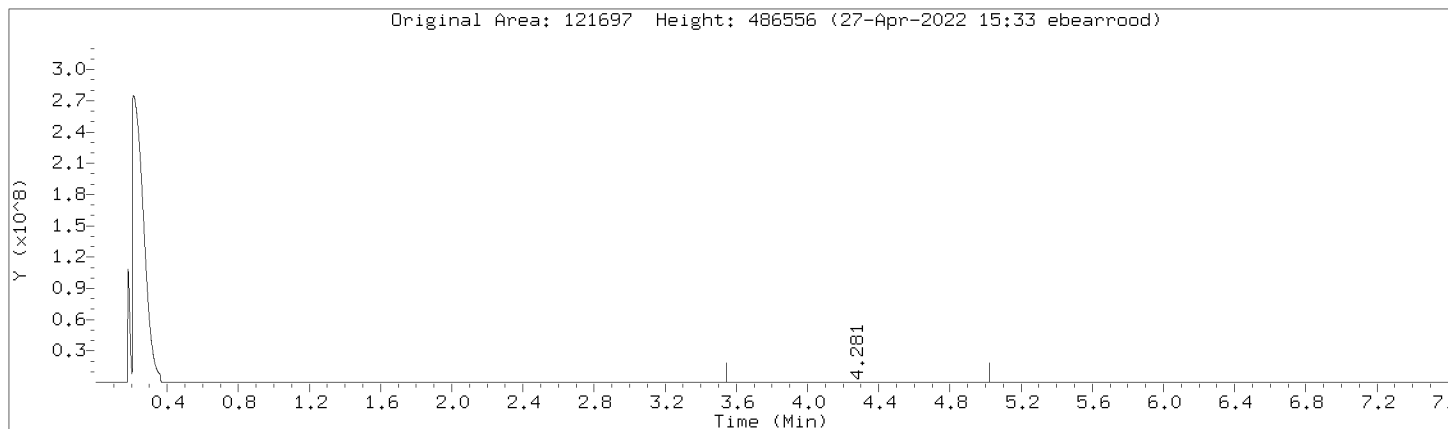
Column diameter: 0.32





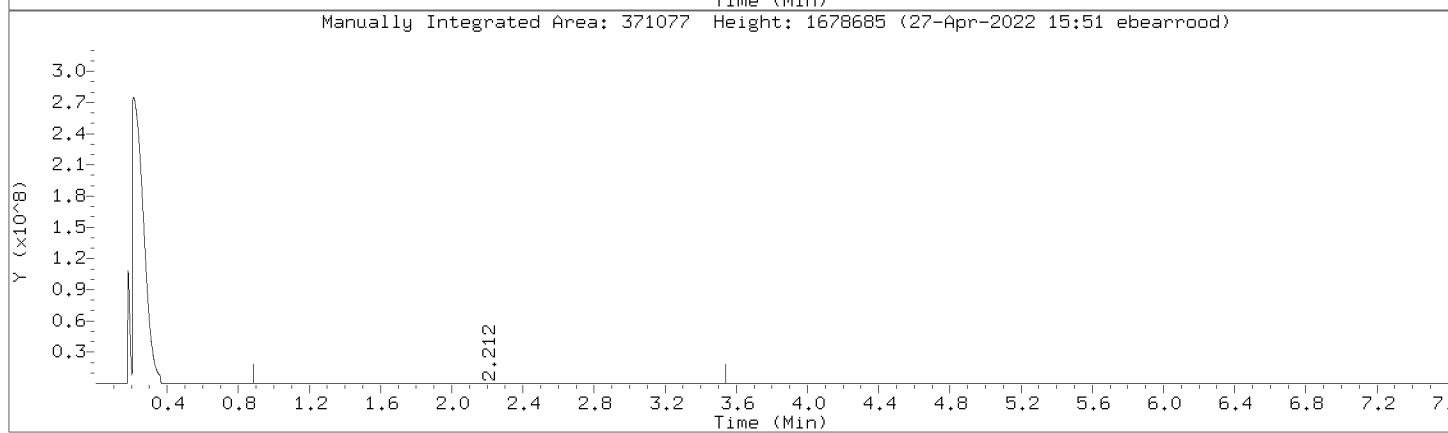
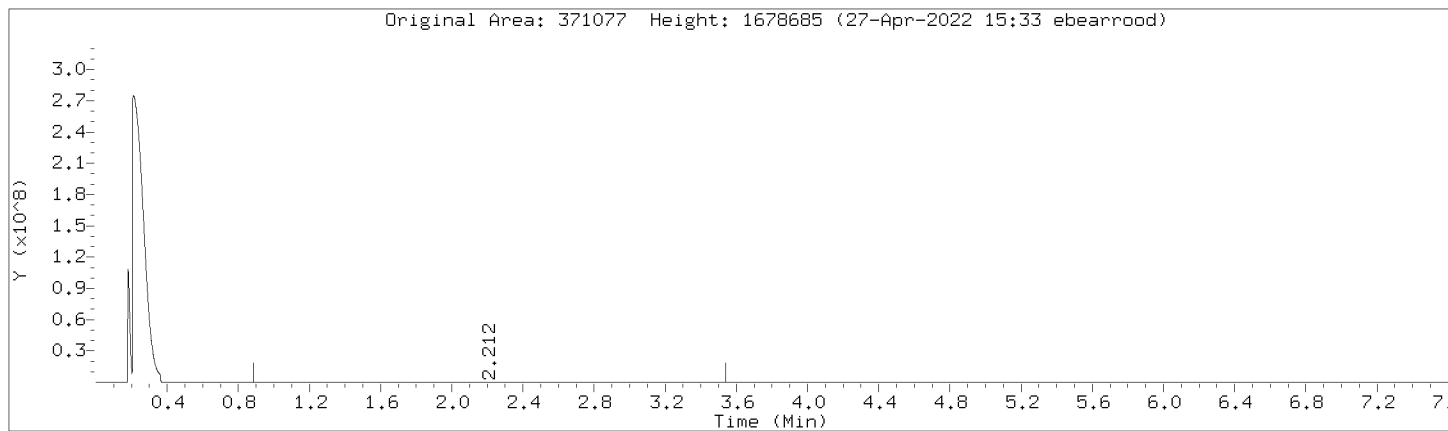
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



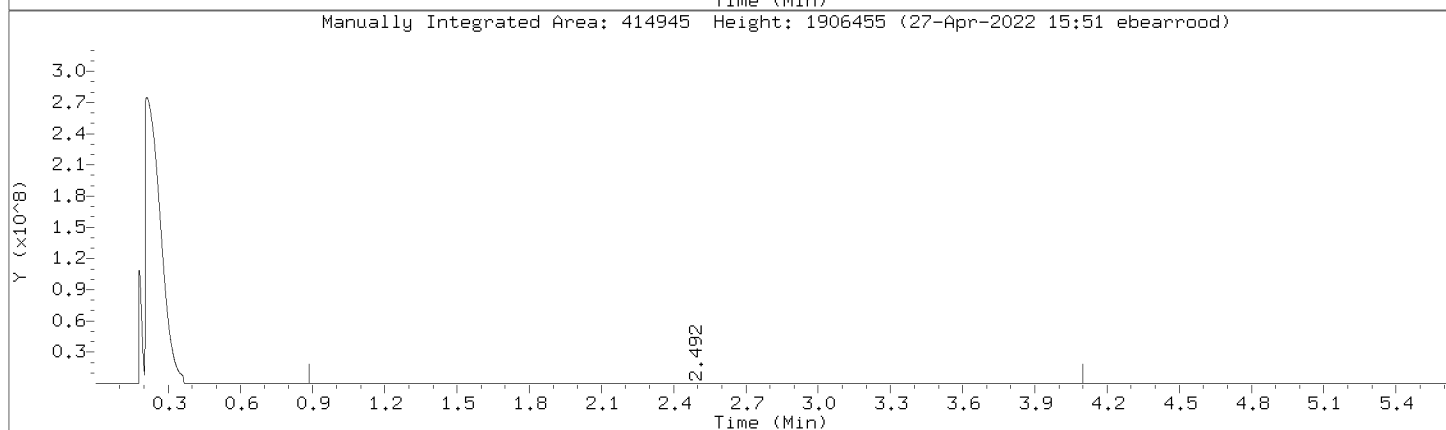
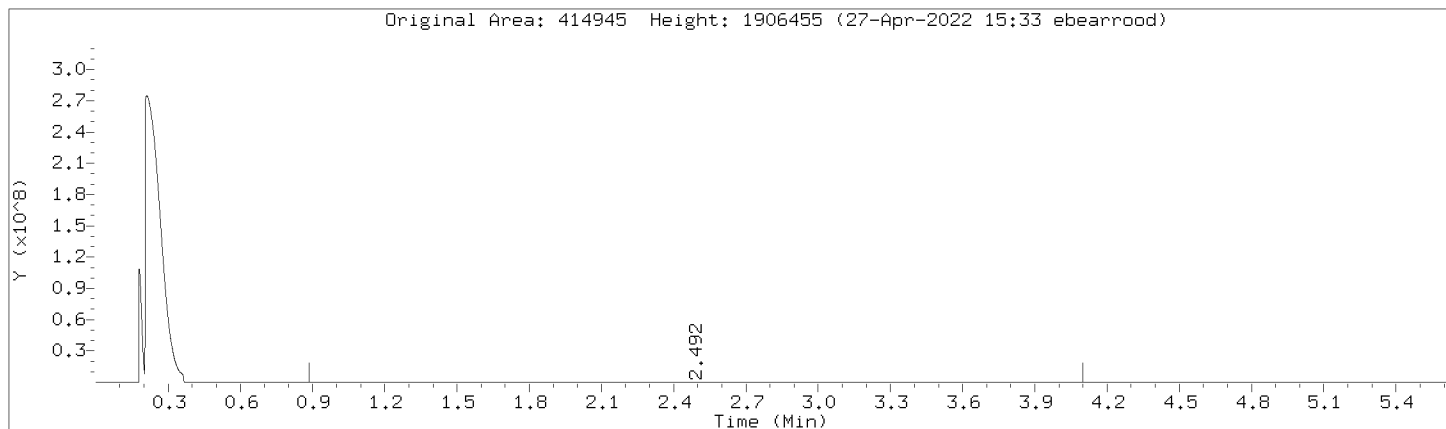
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



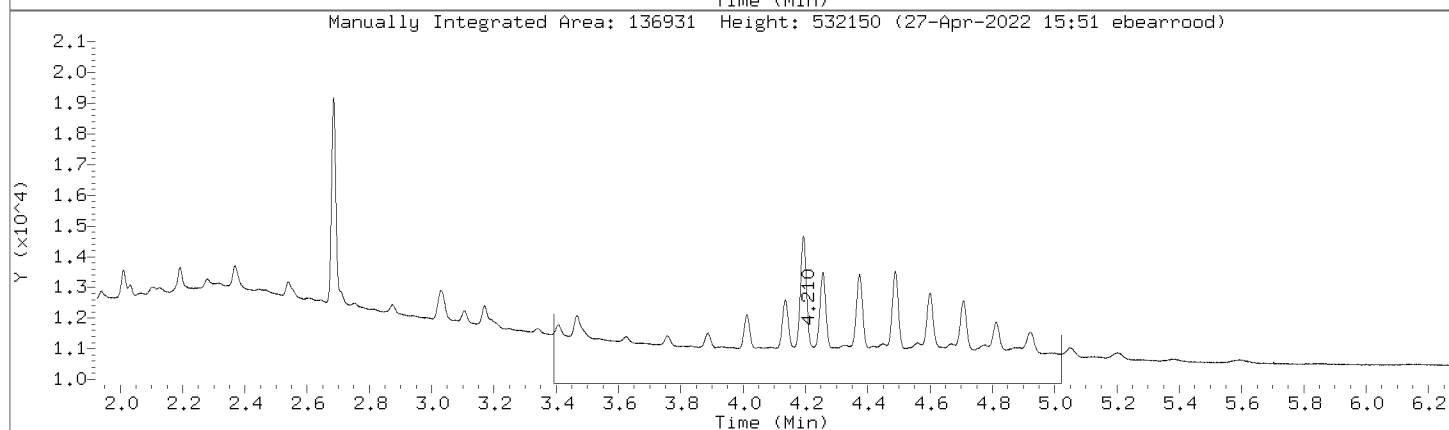
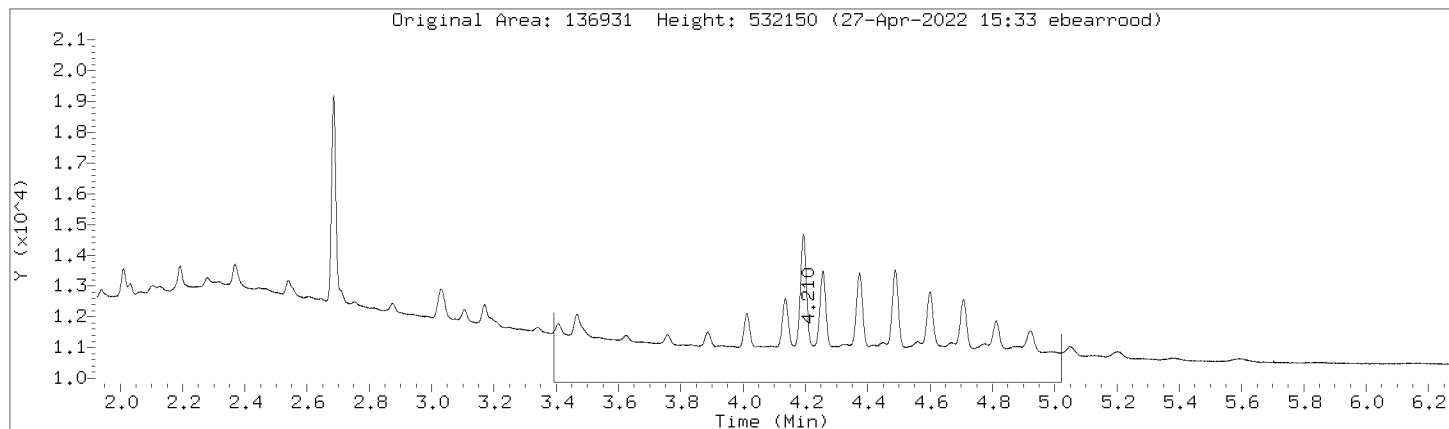
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



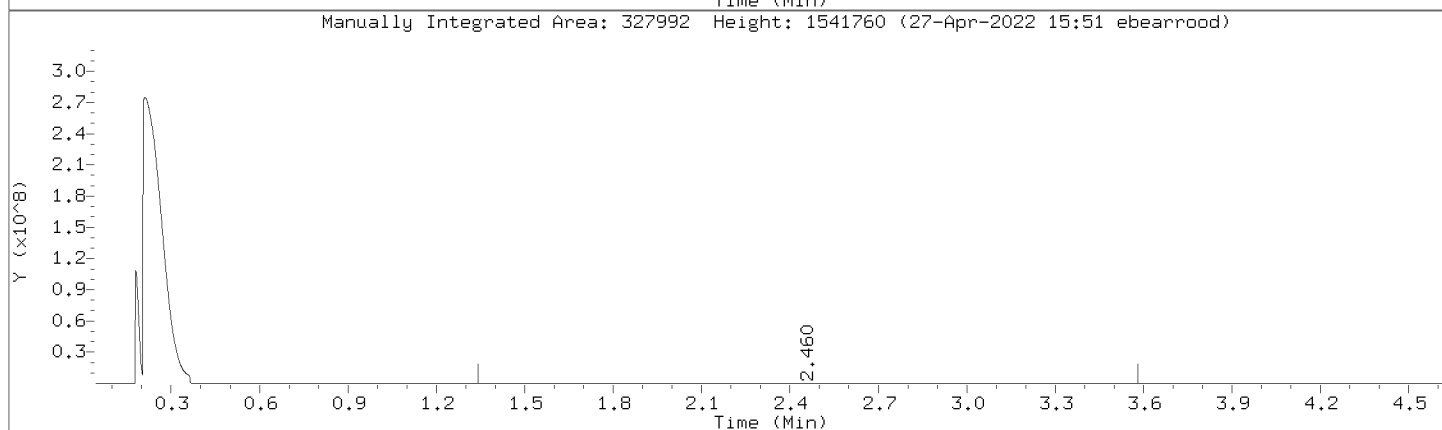
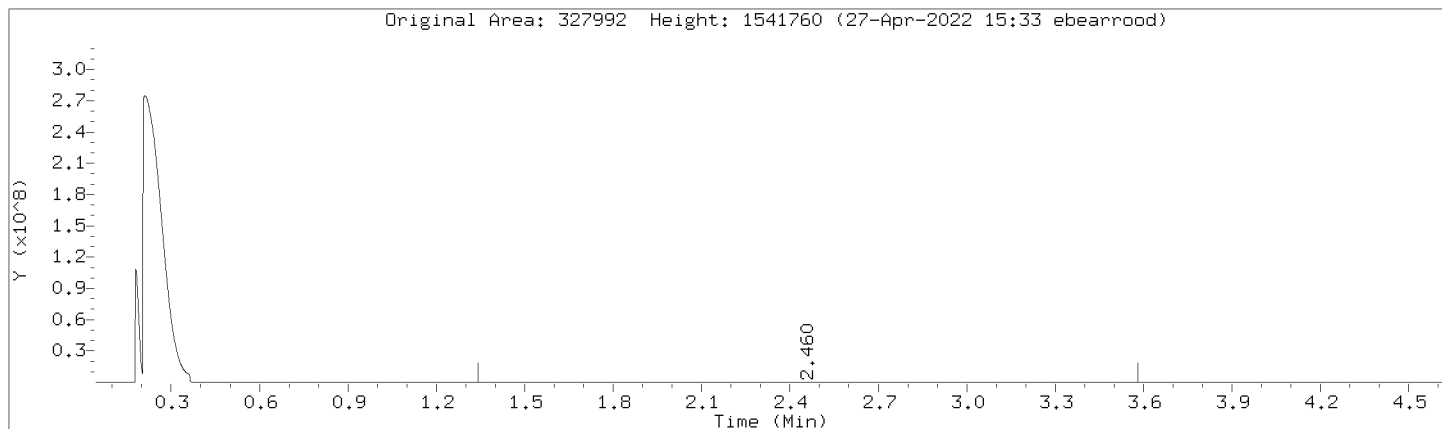
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



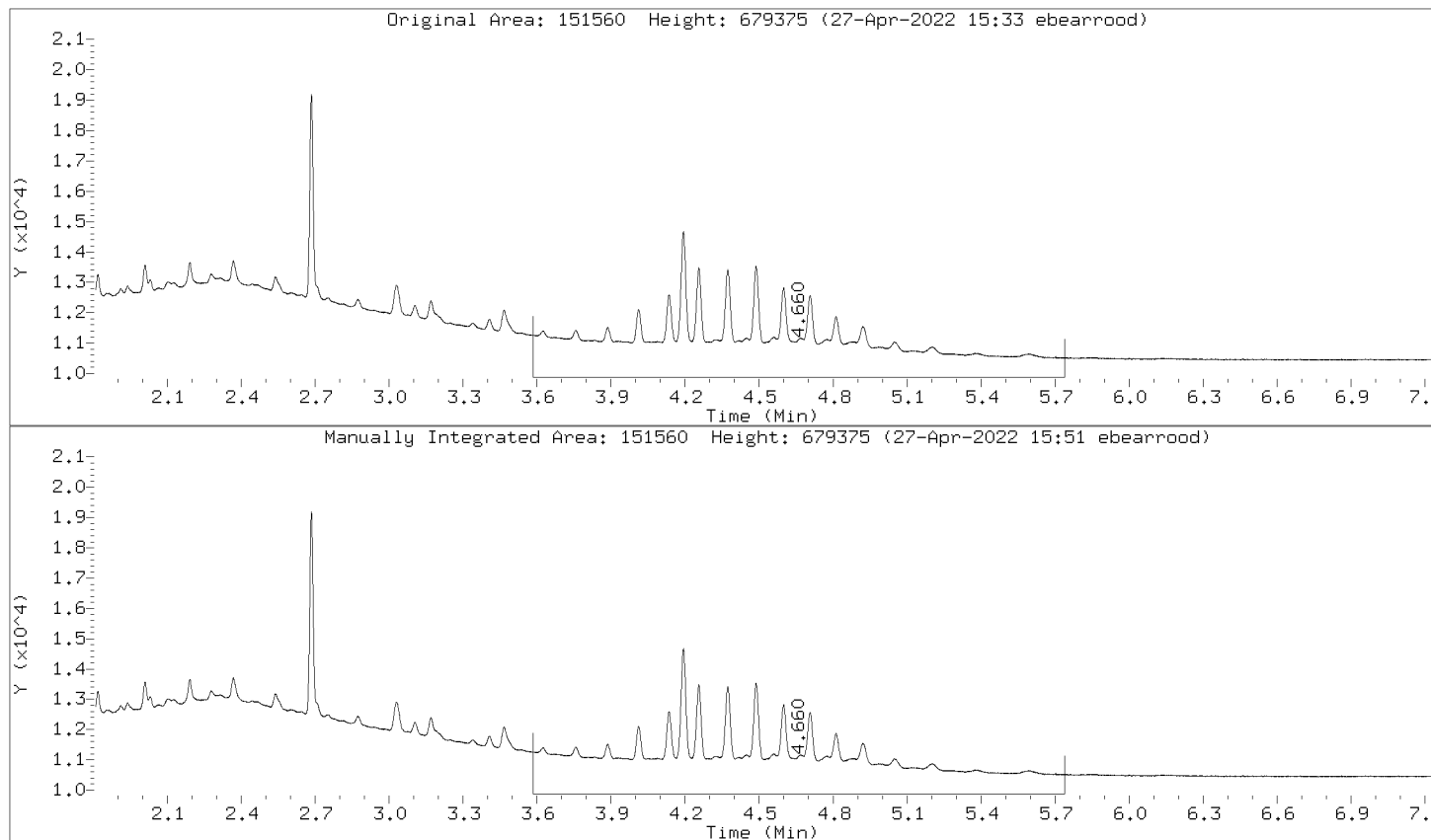
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



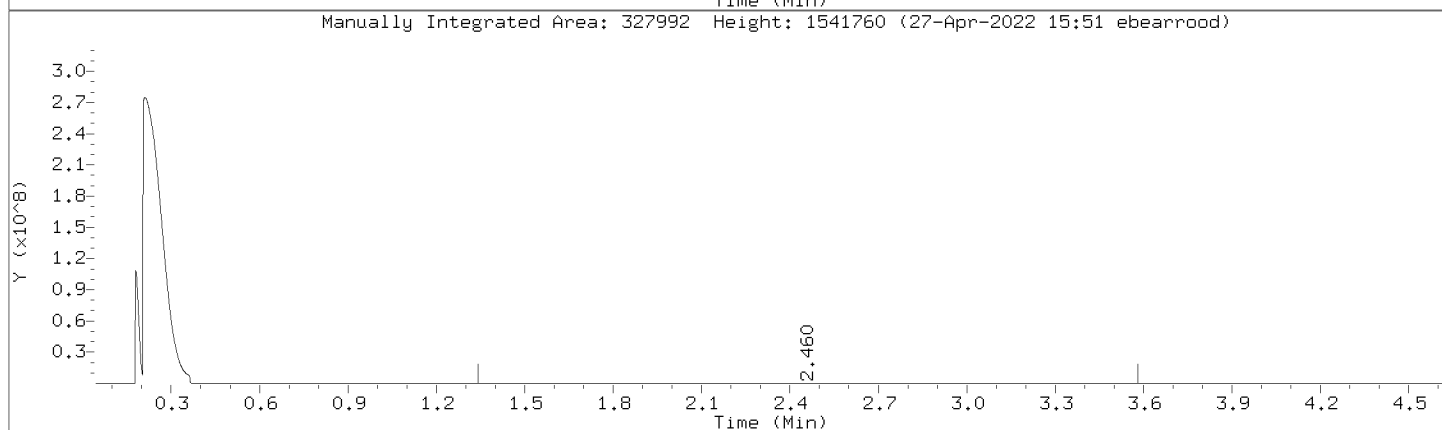
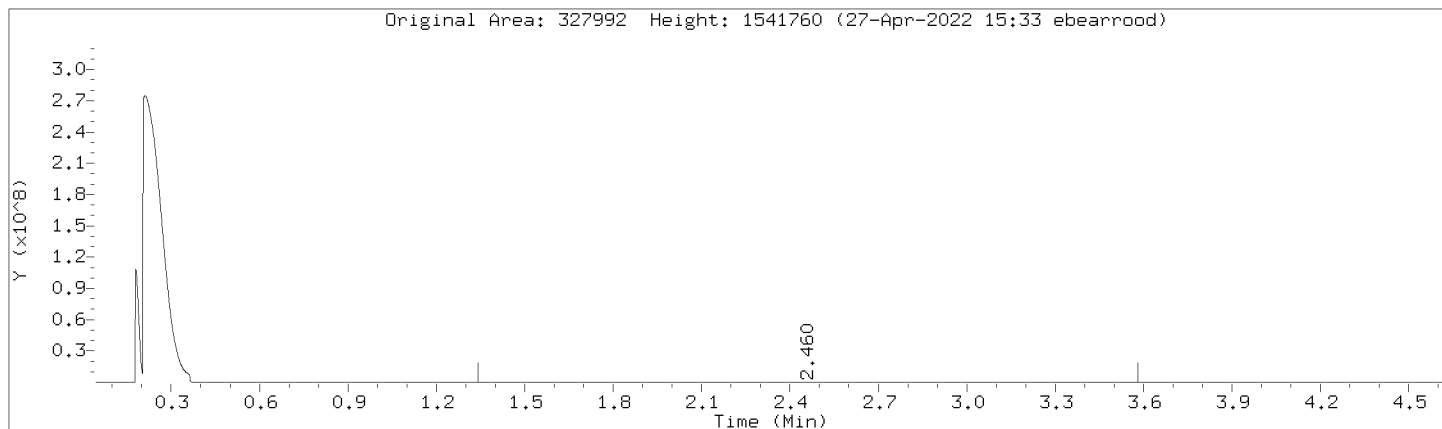
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



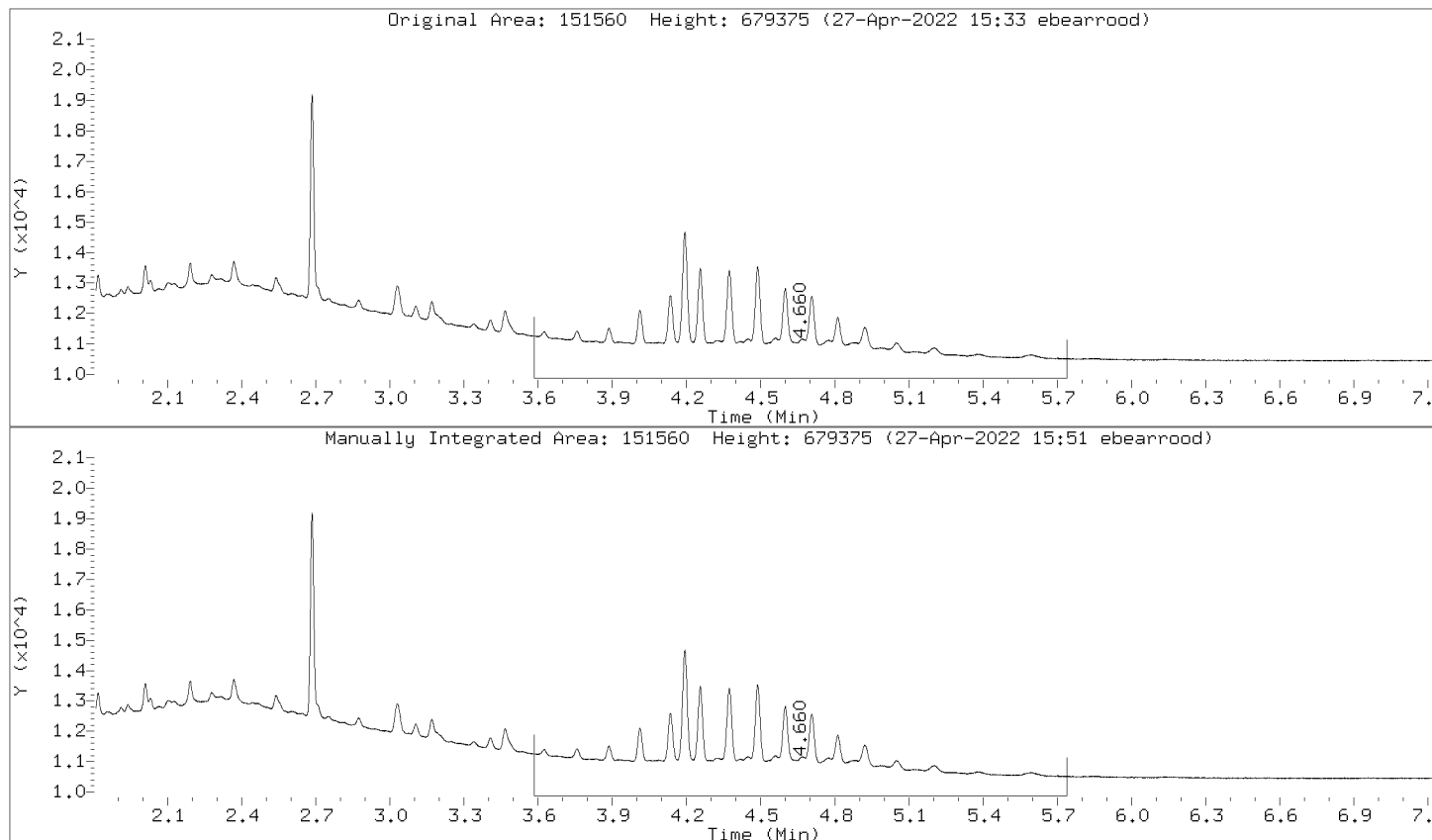
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

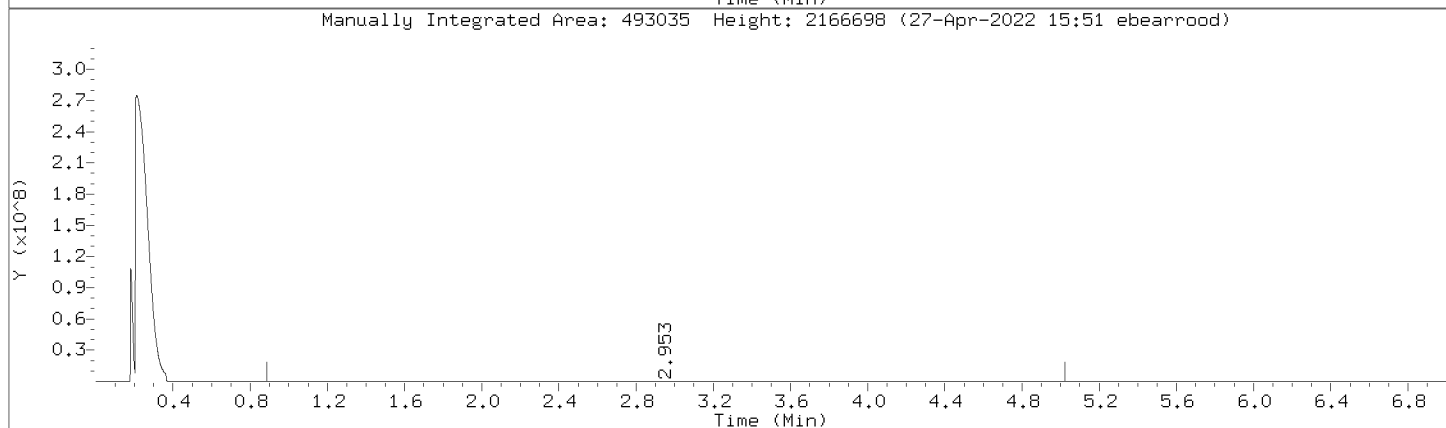
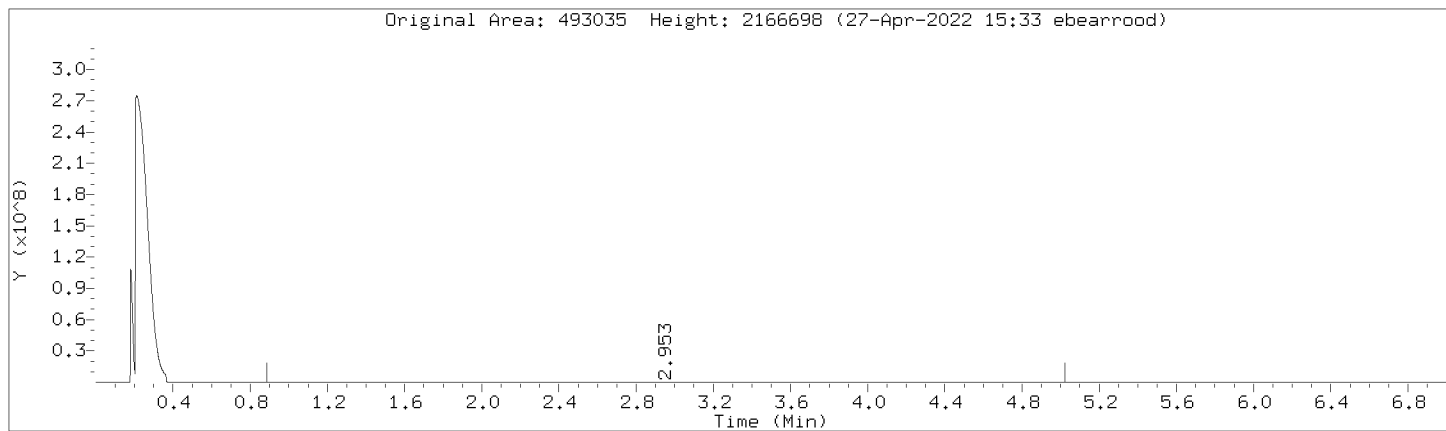
Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





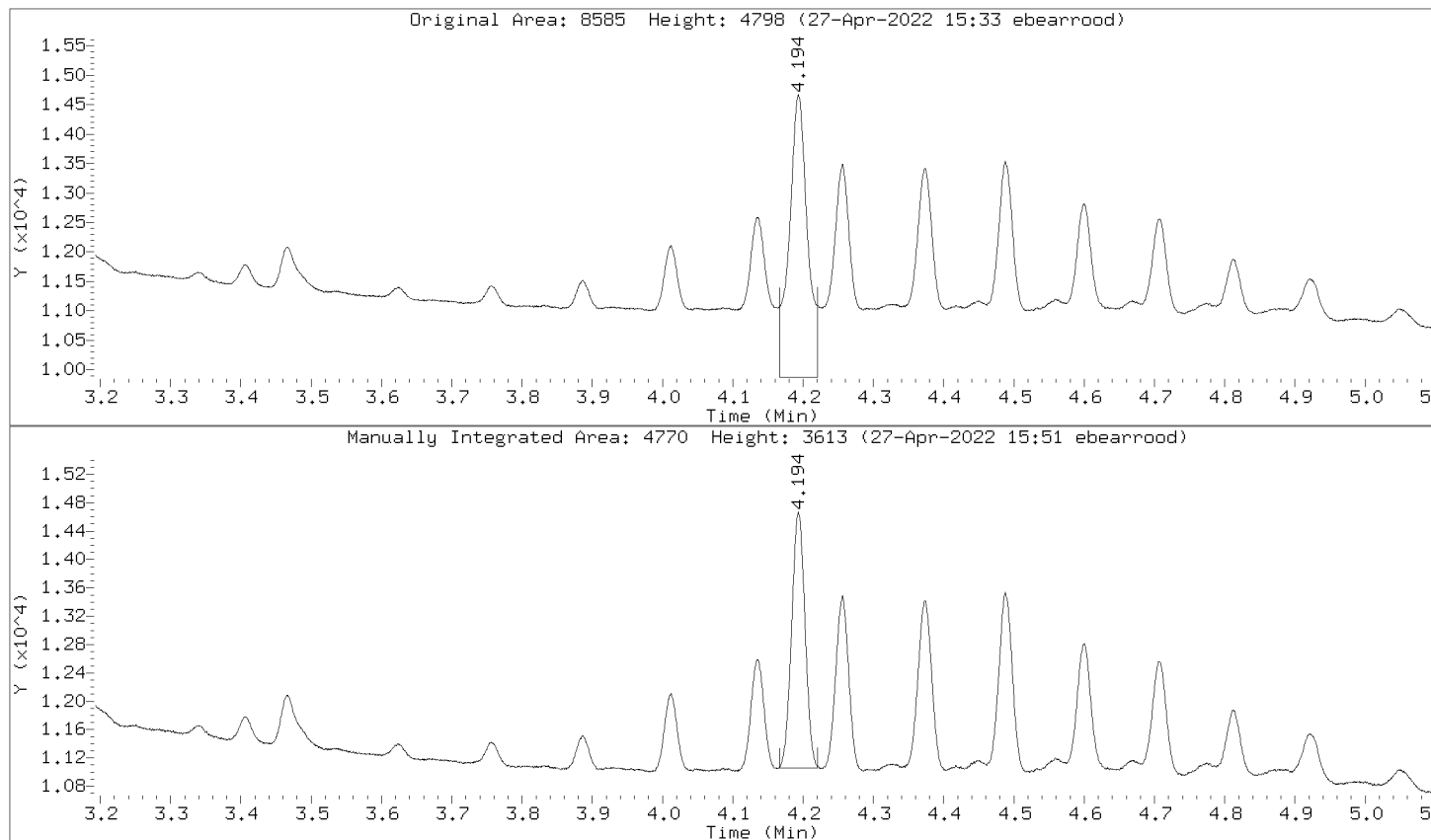
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Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



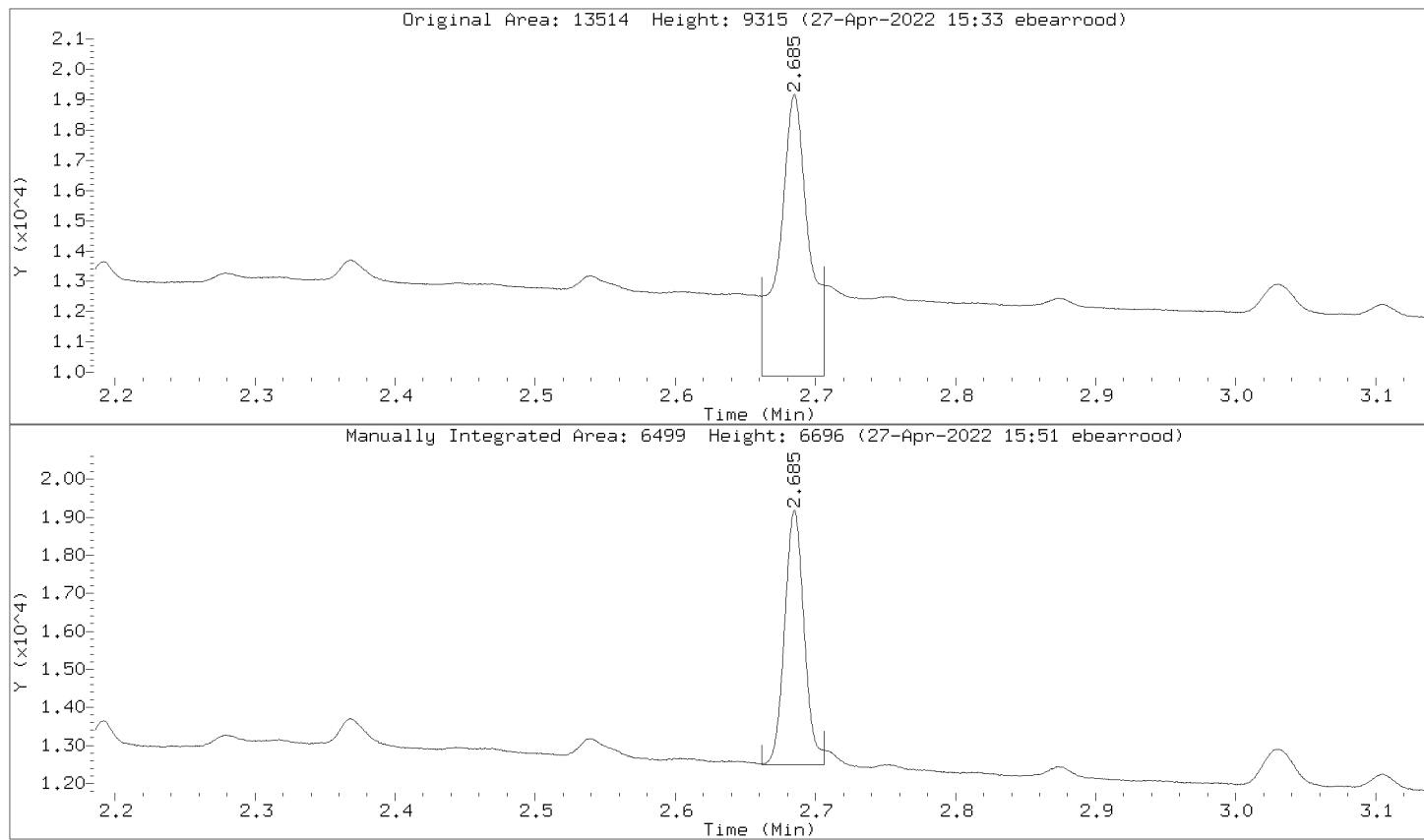
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
 Lab Smp Id: DMO-CAL3,362371:2 Client Smp ID: DMO-CAL3,362371:2  
 Inj Date : 27-APR-2022 13:23  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal3,362371:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 80 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		458652 25.0000	16.0	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.684	2.685 -0.001		17246 2.50000	2.01	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.191	4.193 -0.002		12697 2.50000	1.77	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		175114 25.0000	18.4	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		514803 25.0000	16.1	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		191130 25.0000	17.4	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		633766 50.0000	33.8	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		399864 25.0000	17.6	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		399864 25.0000	17.6	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		214326 25.0000	22.2	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		214326 25.0000	22.2	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:23

Client ID: DMO-CAL3,362371:2

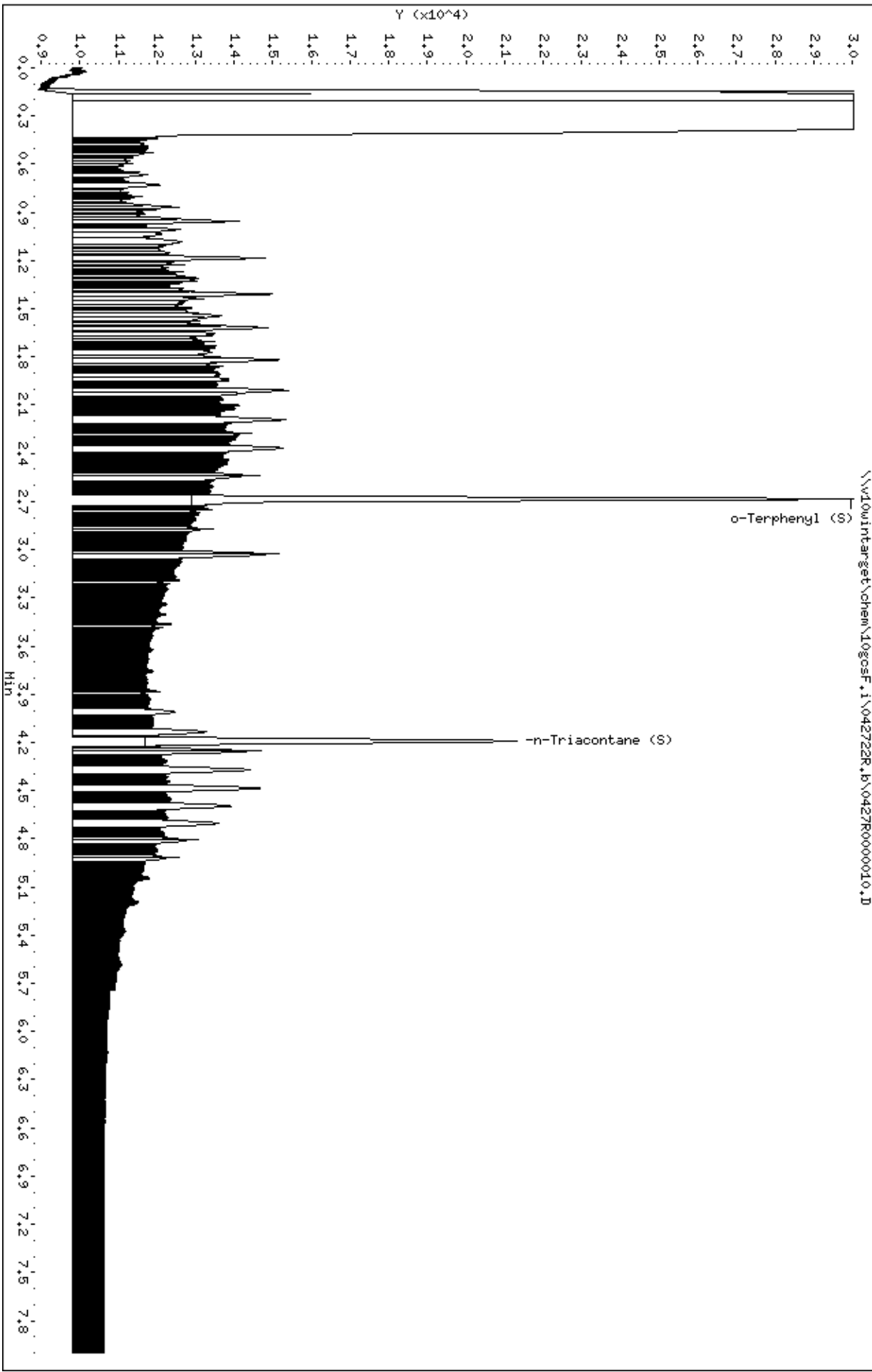
Sample Info: DMO-CAL3,362371:2

Instrument: 10gocsf.1

Operator: EBS

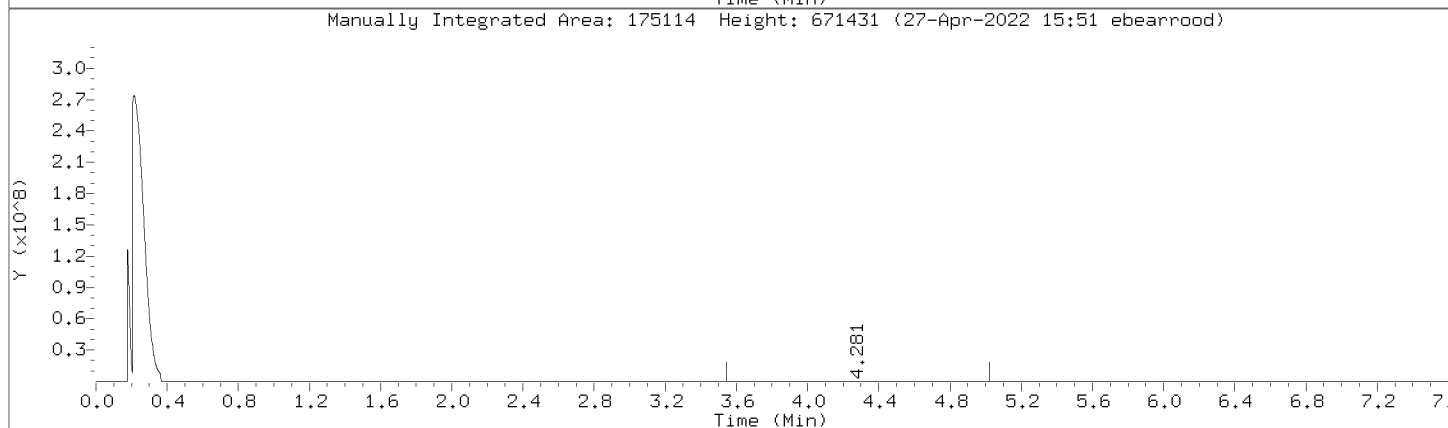
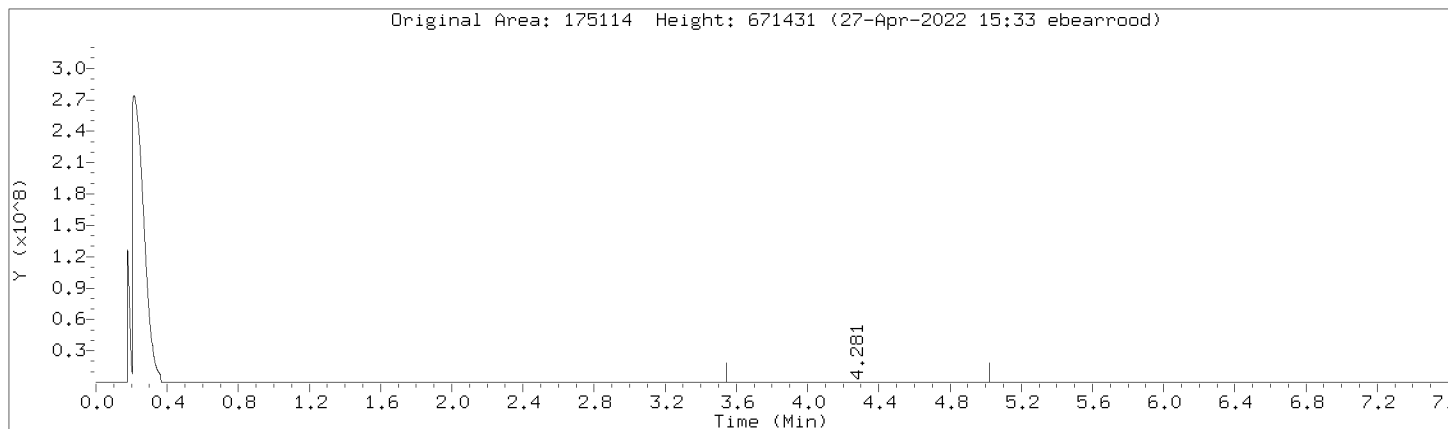
Column diameter: 0.32

Column phase: DB-5-US21430033



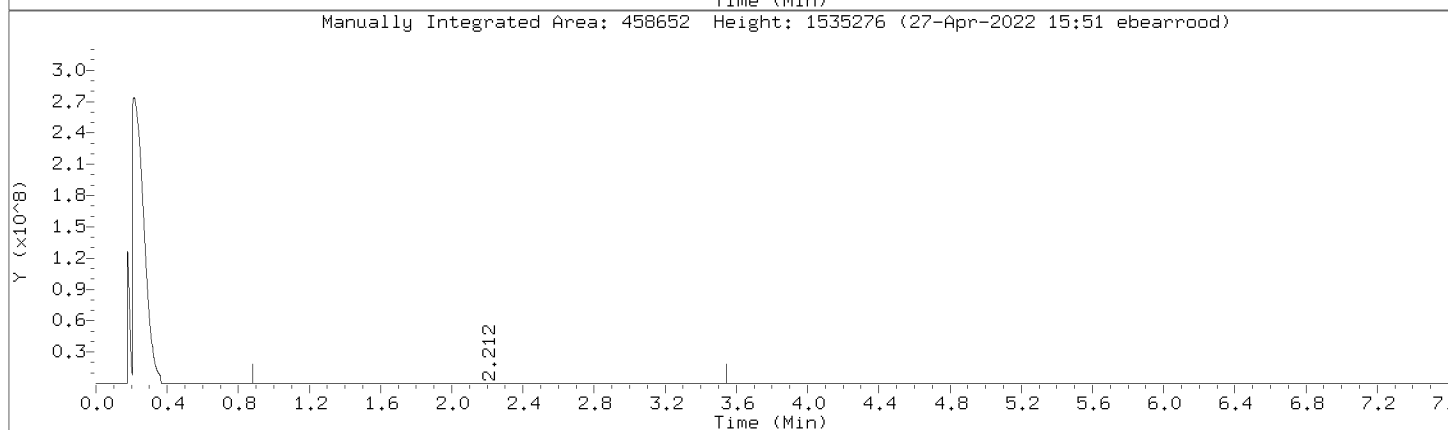
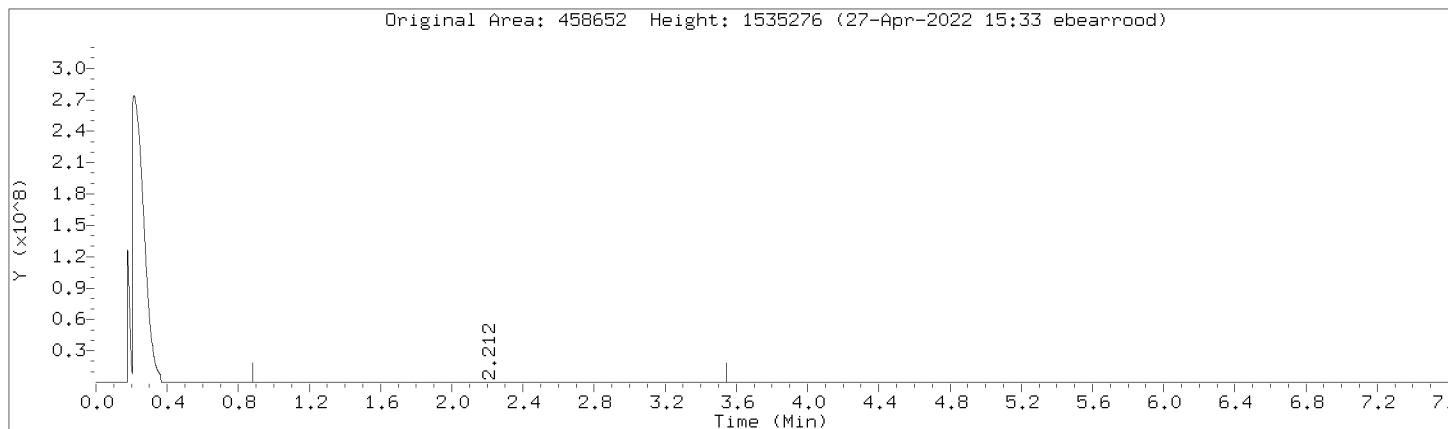
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

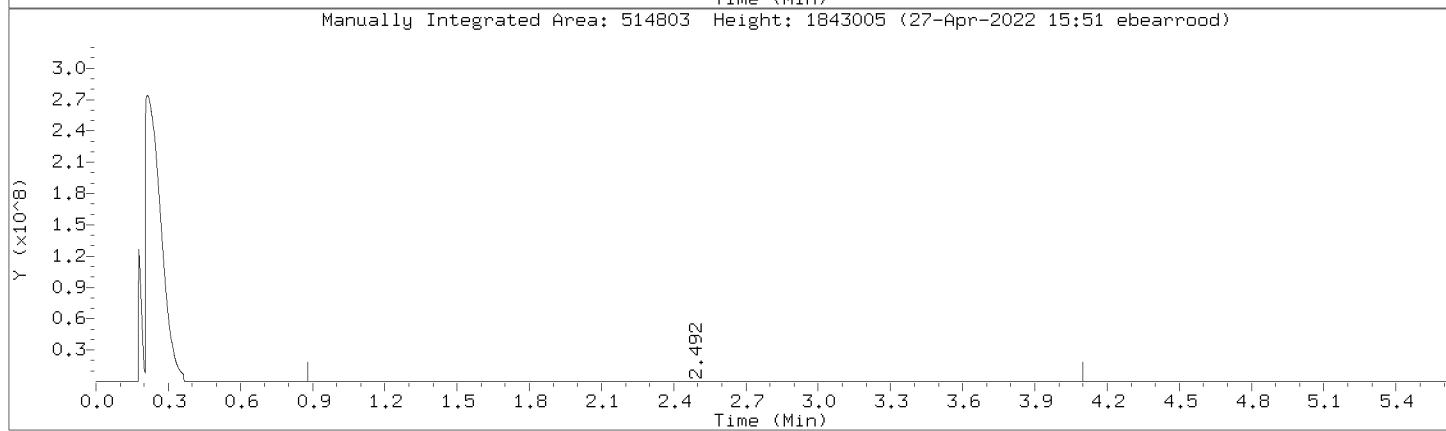
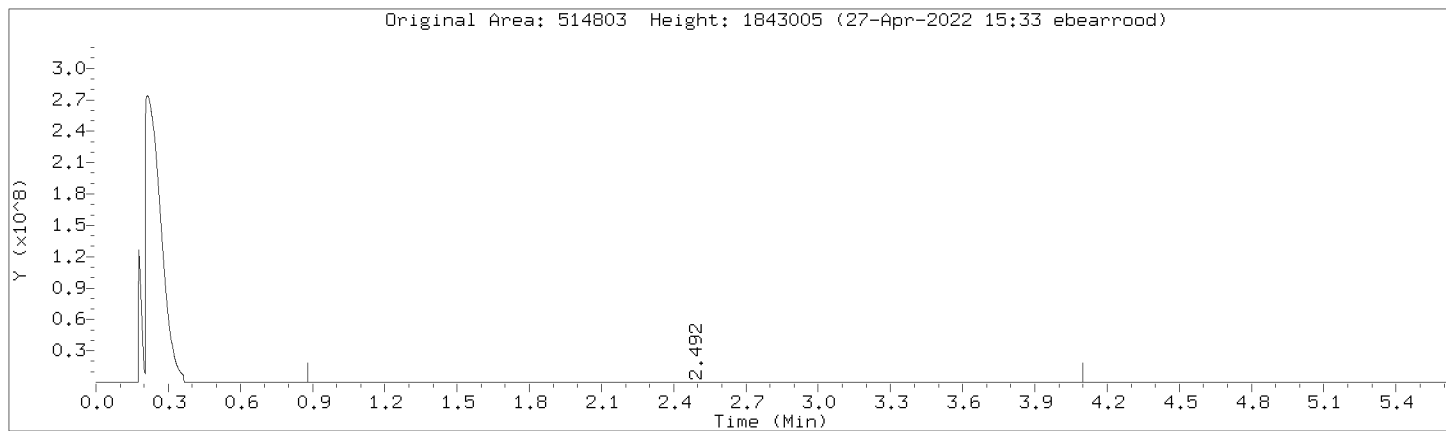
Compound: DRO by AK 102      Review Code: RNG  
CAS Number:





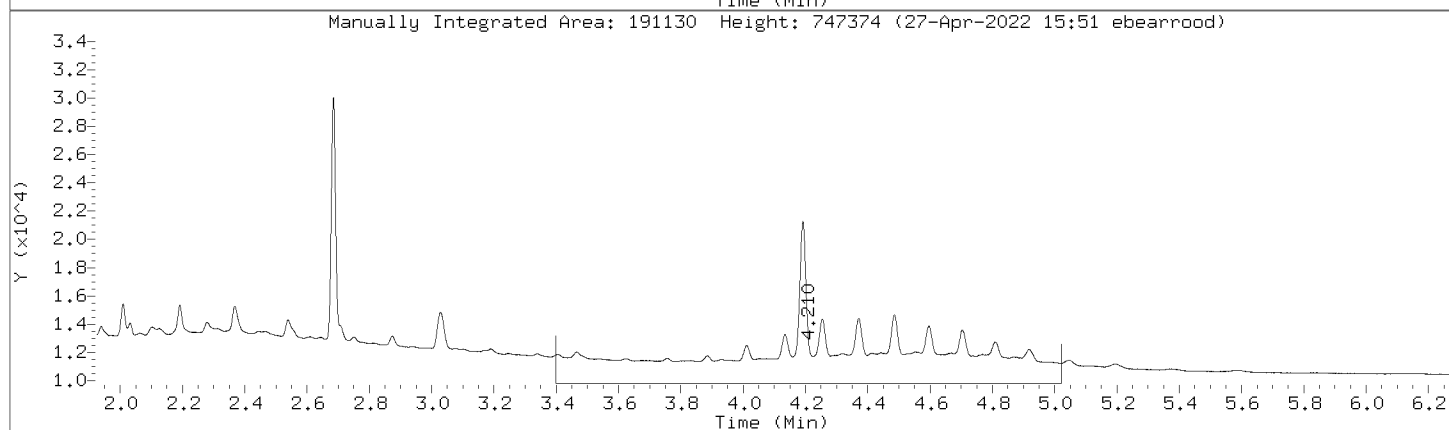
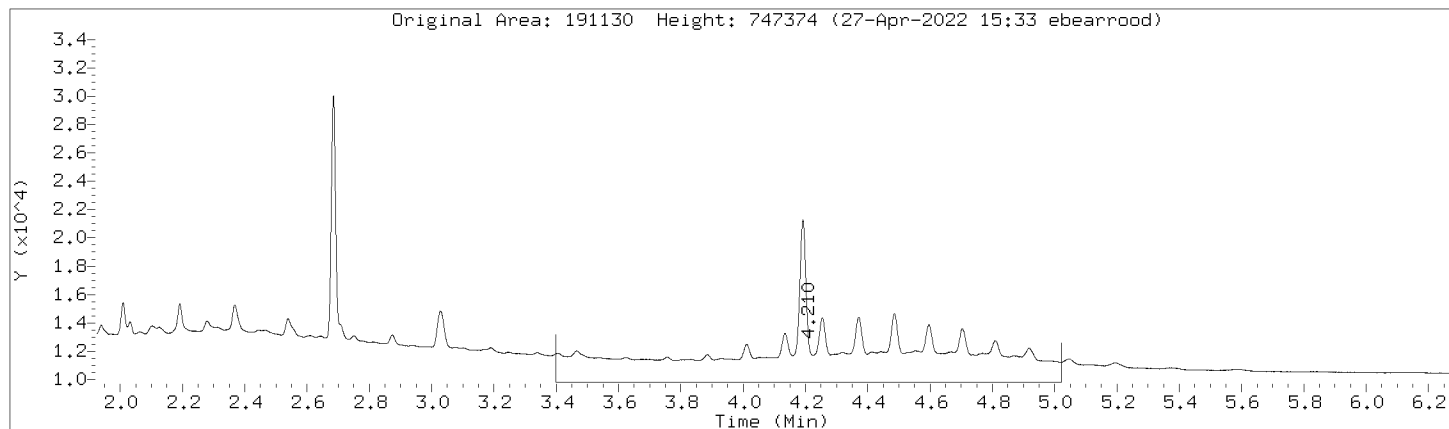
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



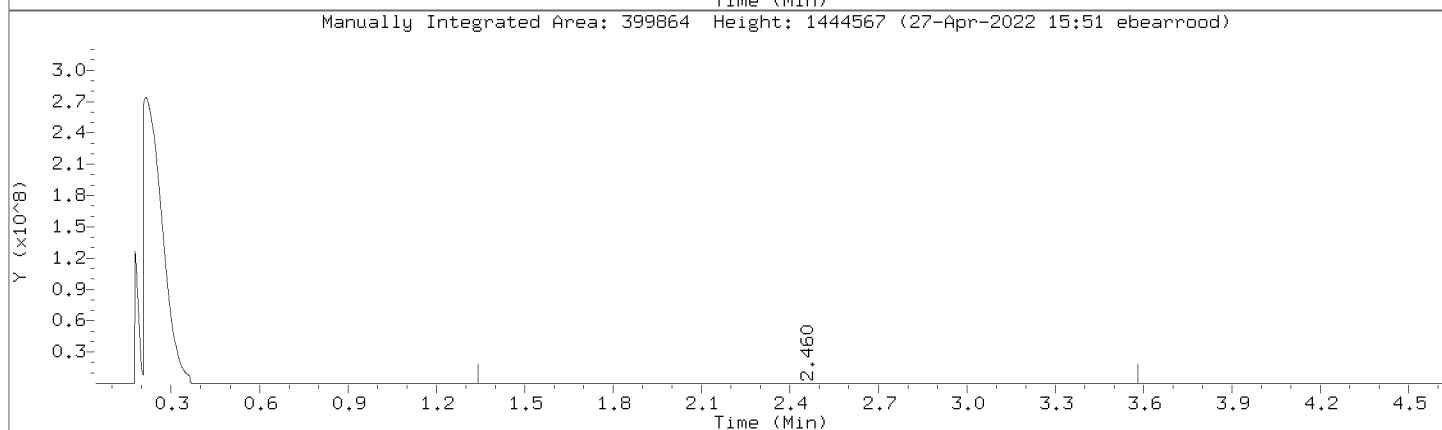
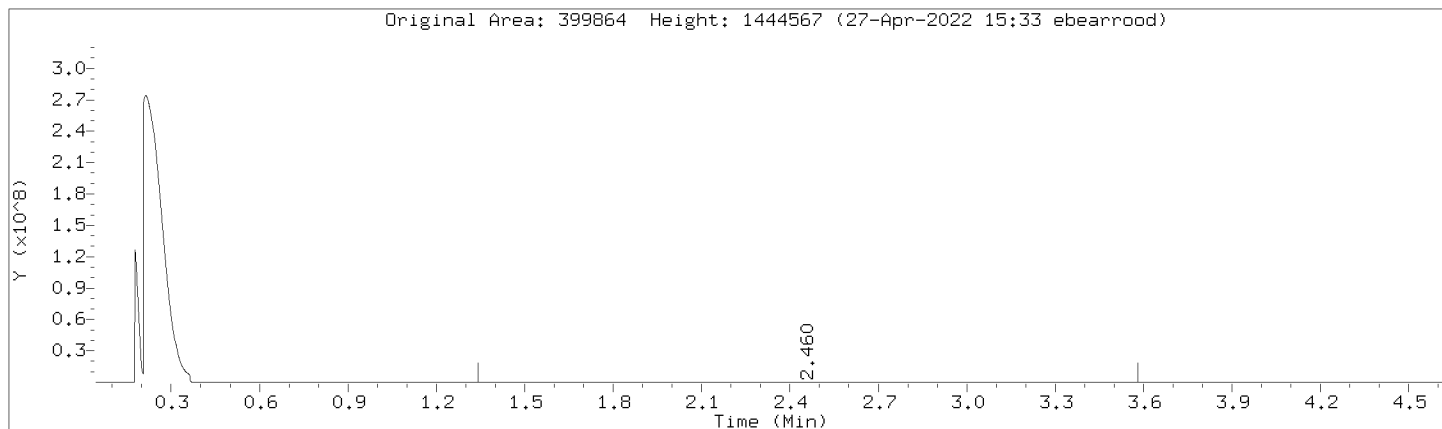
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



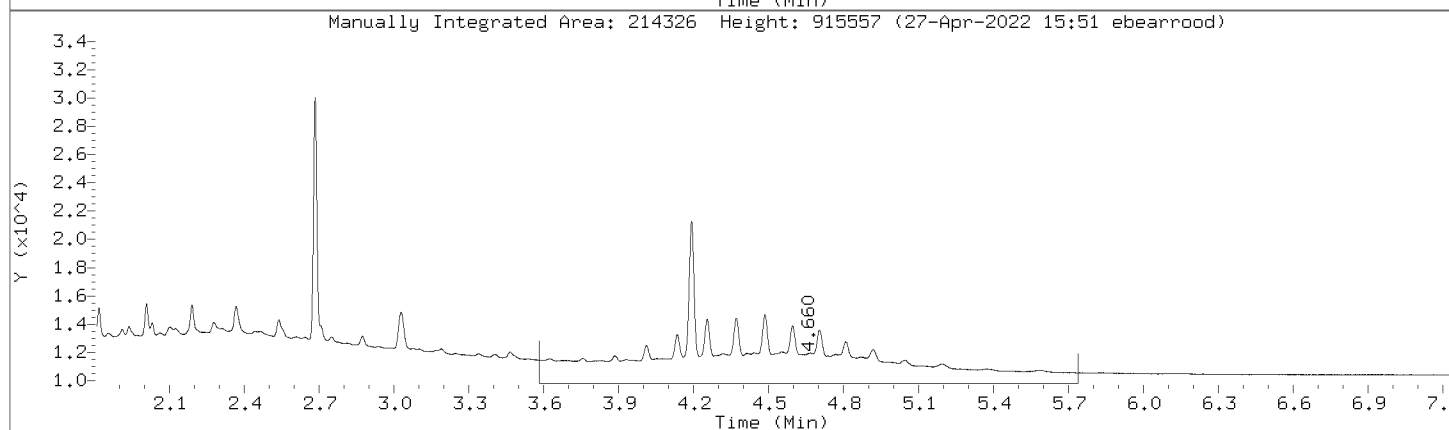
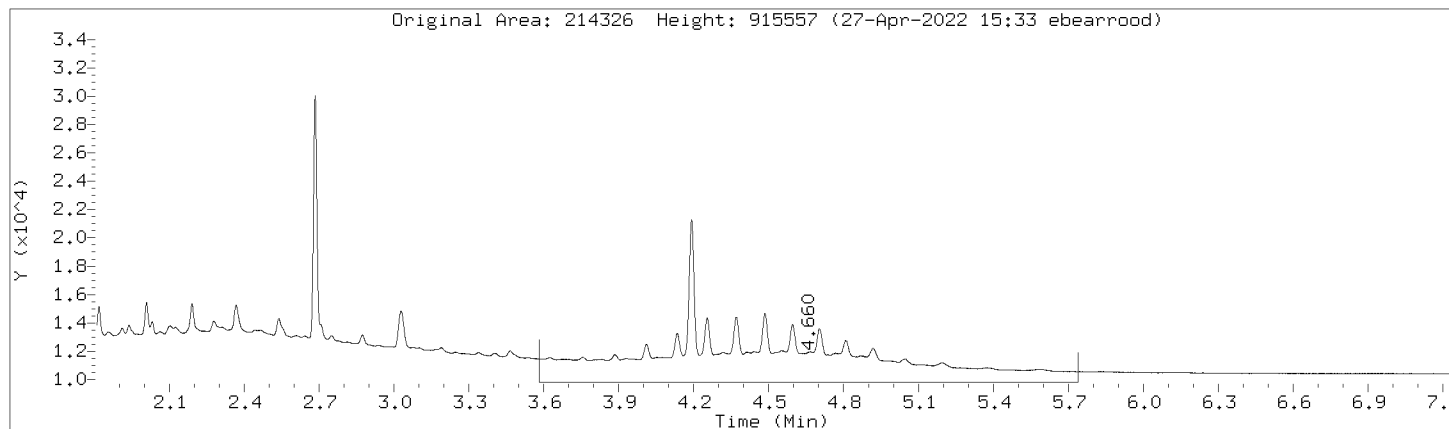
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



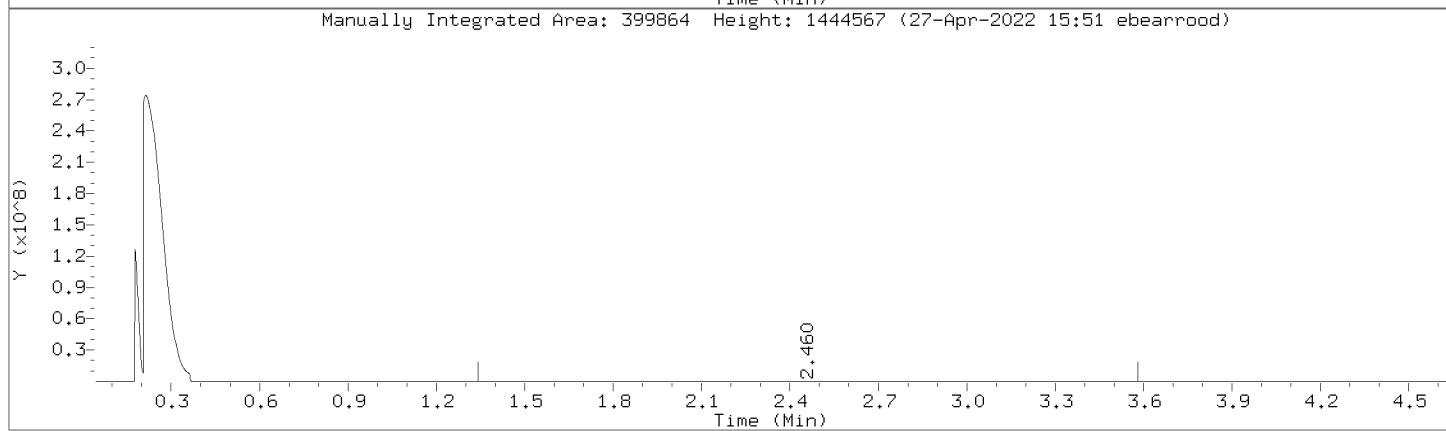
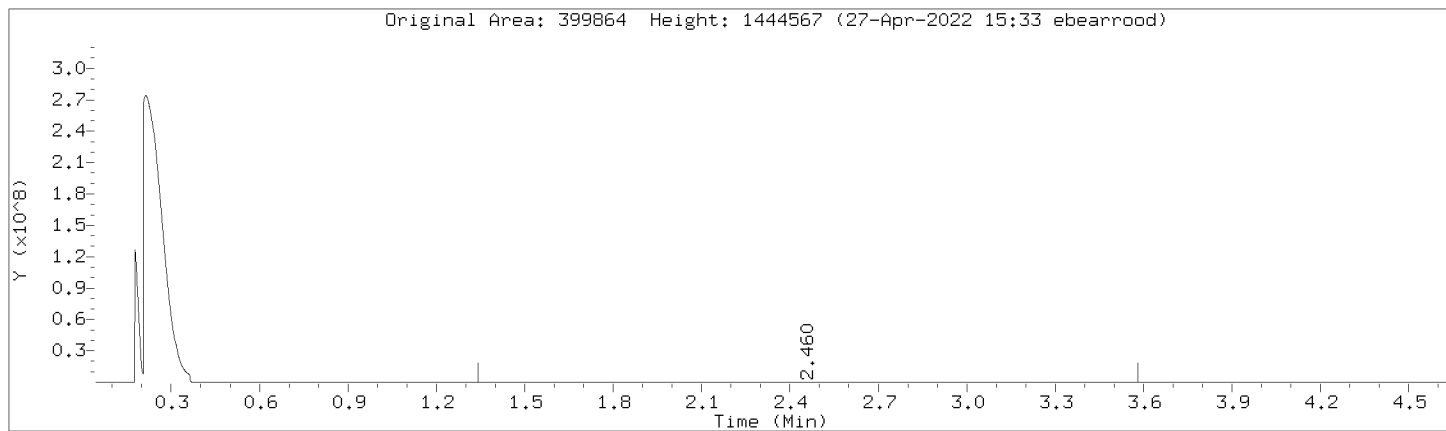
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



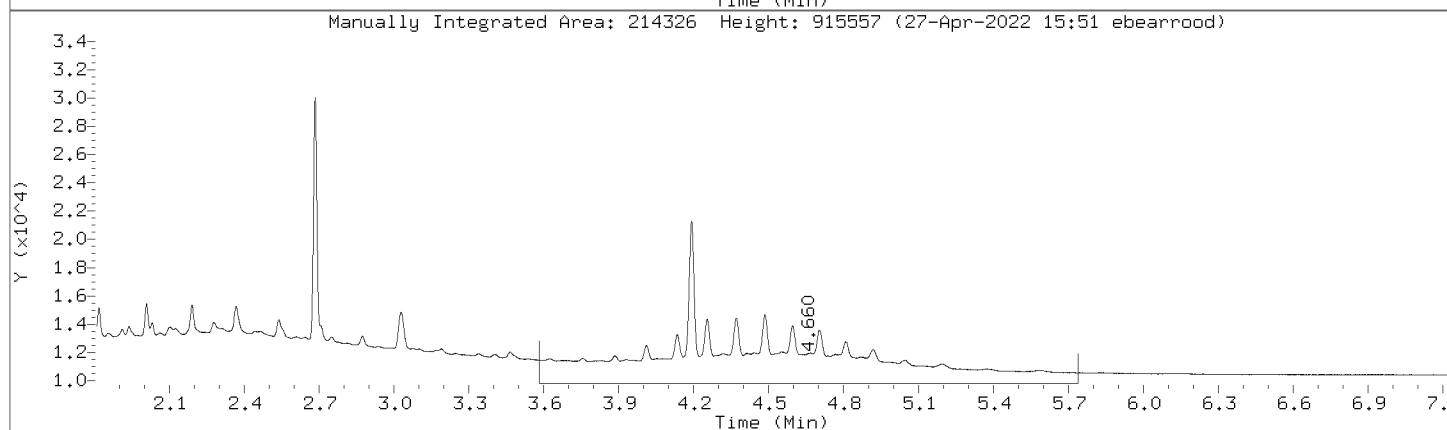
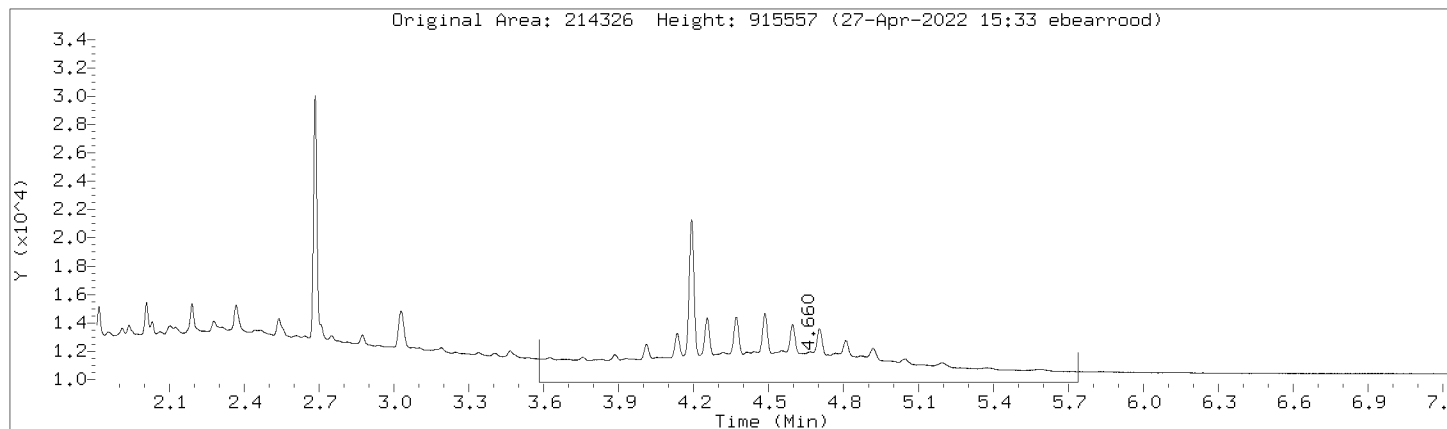
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



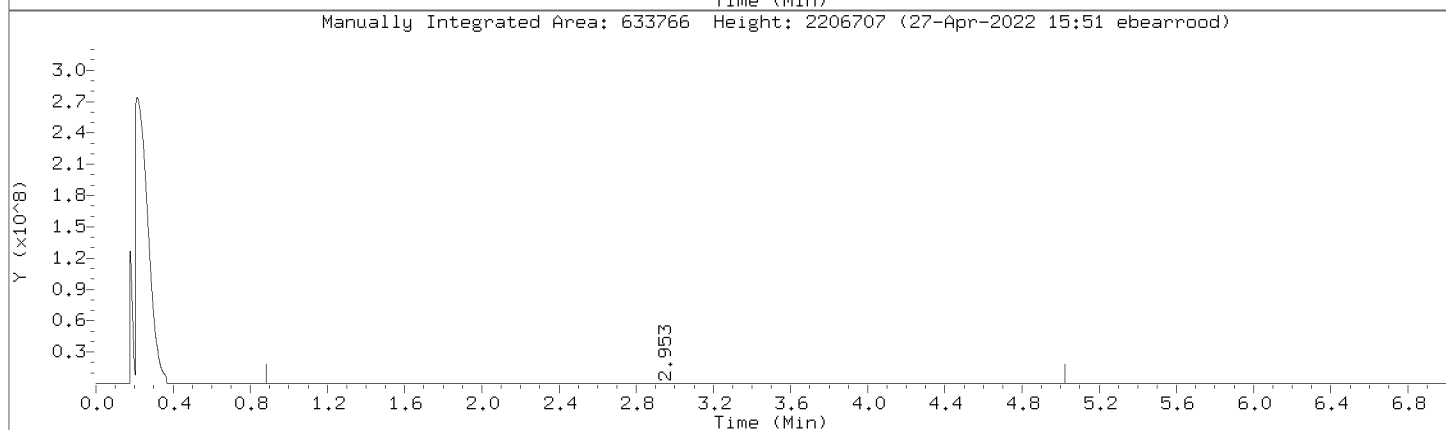
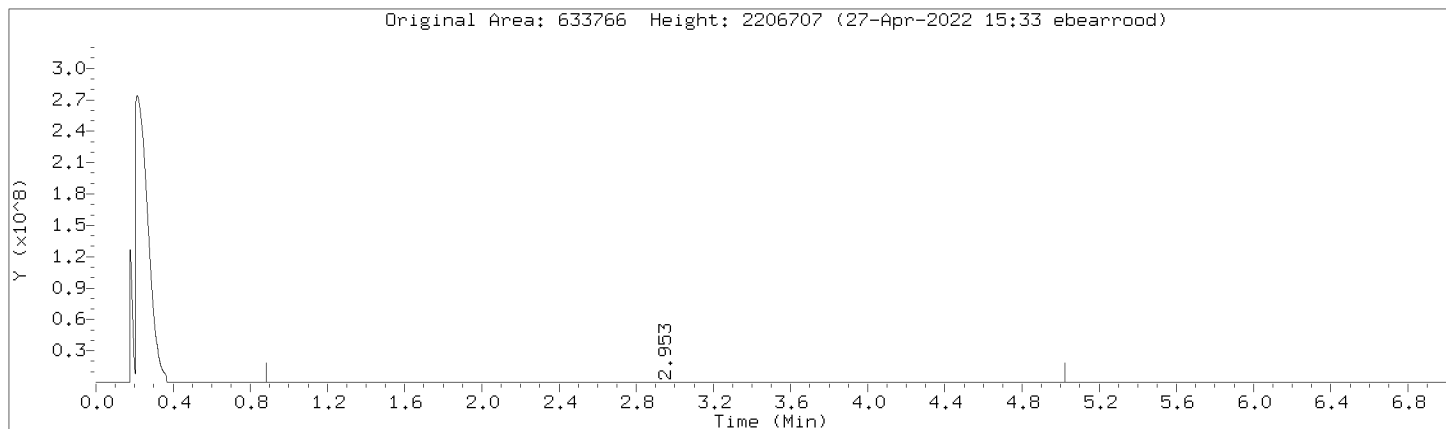
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



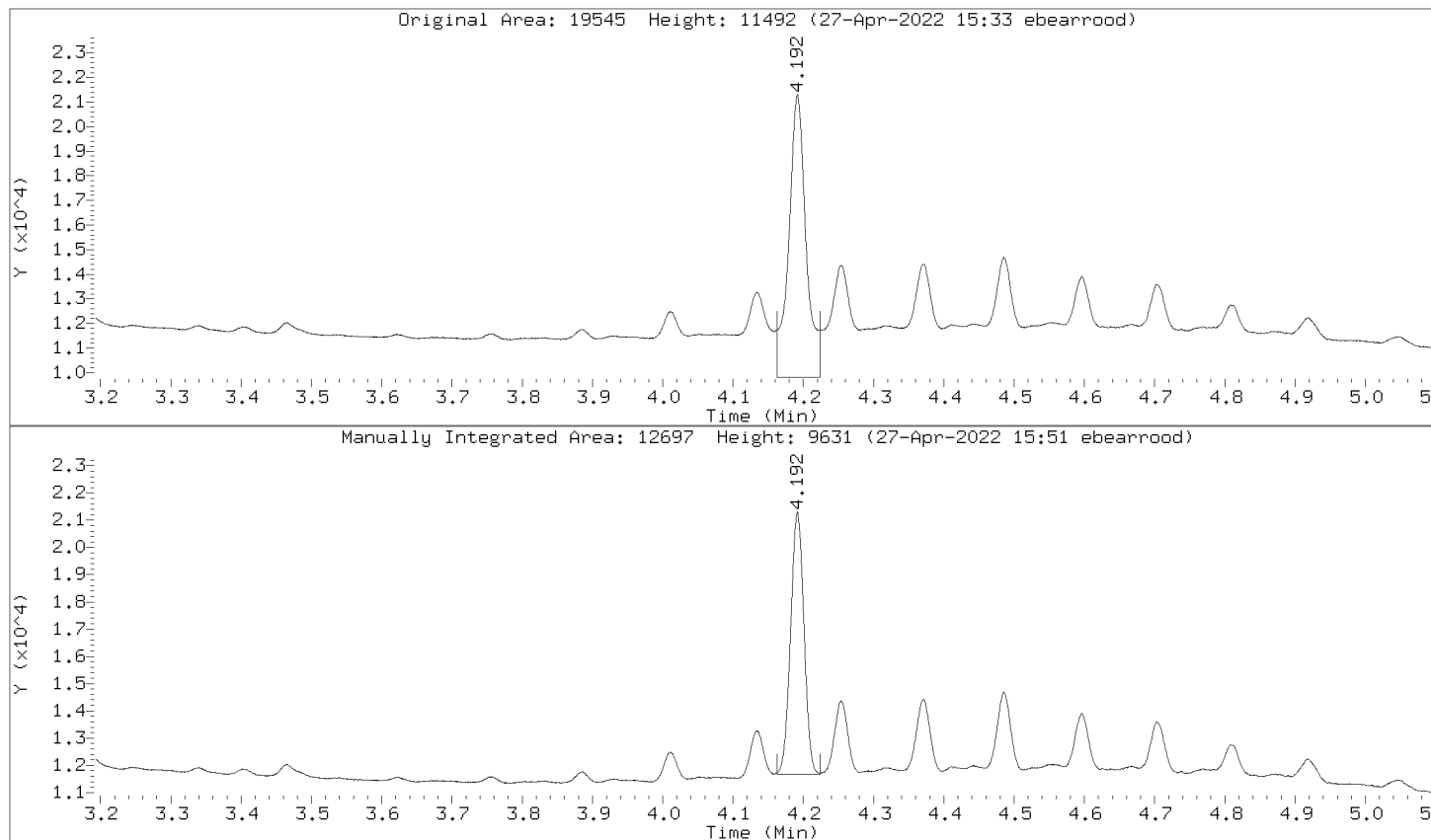
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

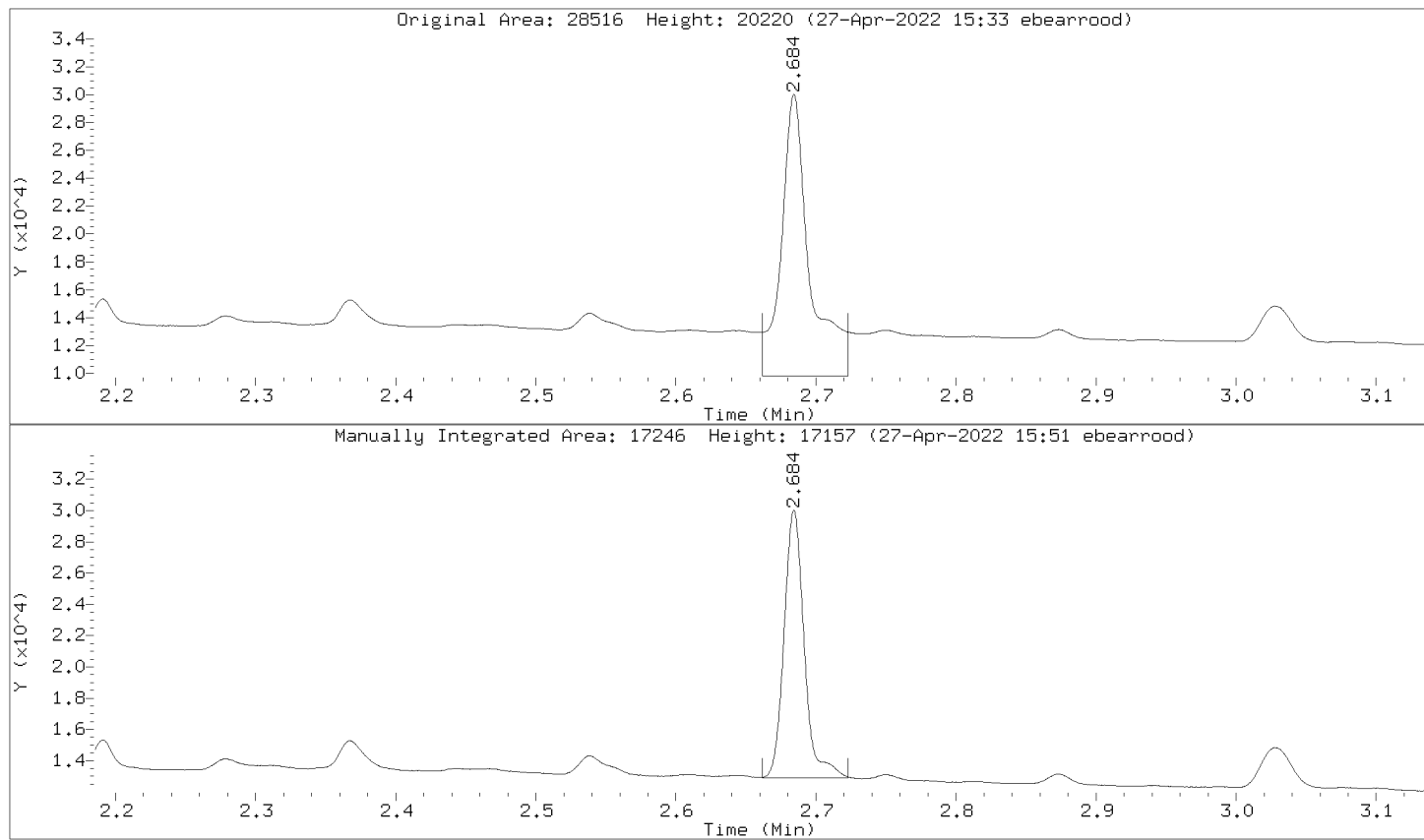
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
 Lab Smp Id: DMO-CAL4,362372:2 Client Smp ID: DMO-CAL4,362372:2  
 Inj Date : 27-APR-2022 13:34  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal4,362372:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 81 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT (ug/mL)	
S 1	0.885	- 3.540	608687	50.0000	42.2 (M) RNG
-----					
\$ 2	2.684	2.685 -0.001	34140	5.00000	4.57 (M) BA
-----					
\$ 3	4.193	4.193 0.000	25712	5.00000	4.30 (M) BA
-----					
S 4	3.541	- 5.020	256015	50.0000	41.6 (M) RNG
-----					
S 5	0.885	- 4.099	685656	50.0000	42.2 (M) RNG
-----					
S 6	3.400	- 5.020	279506	50.0000	41.8 (M) RNG
-----					
S 7	0.885	- 5.020	864702	100.000	84.0 (M) RNG
-----					
S 8	1.340	- 3.580	525834	50.0000	43.8 (M) RNG
-----					
S 9	1.340	- 3.580	525834	50.0000	43.8 (M) RNG
-----					
S 10	3.581	- 5.740	309207	50.0000	43.7 (M) RNG
-----					
S 11	3.581	- 5.740	309207	50.0000	43.7 (M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:34

Client ID: DMO-CAL4,362372:2

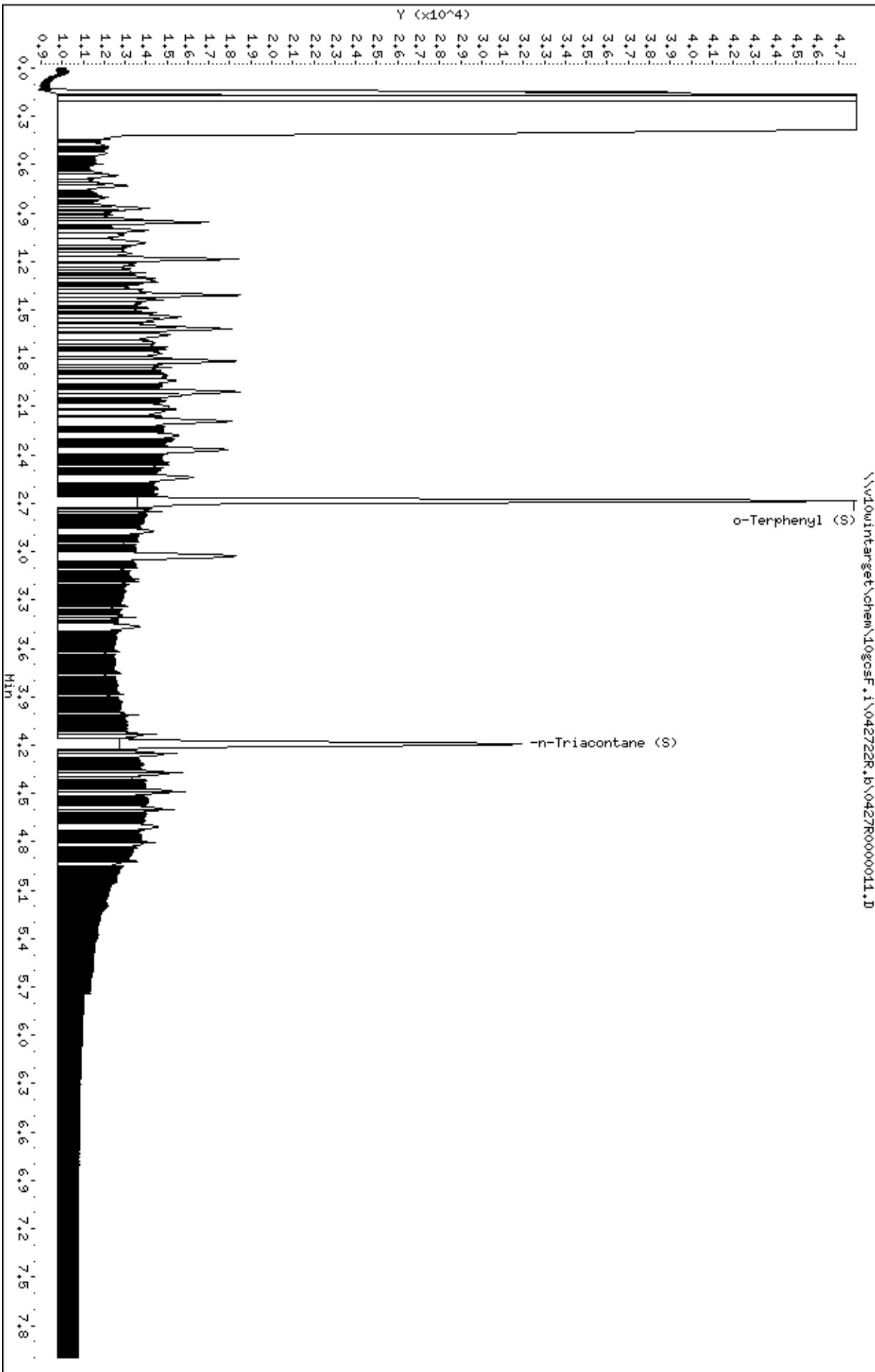
Sample Info: DMO-CAL4,362372:2

Column phase: DB-5-MS21430033

Instrument: 10gocsf.1

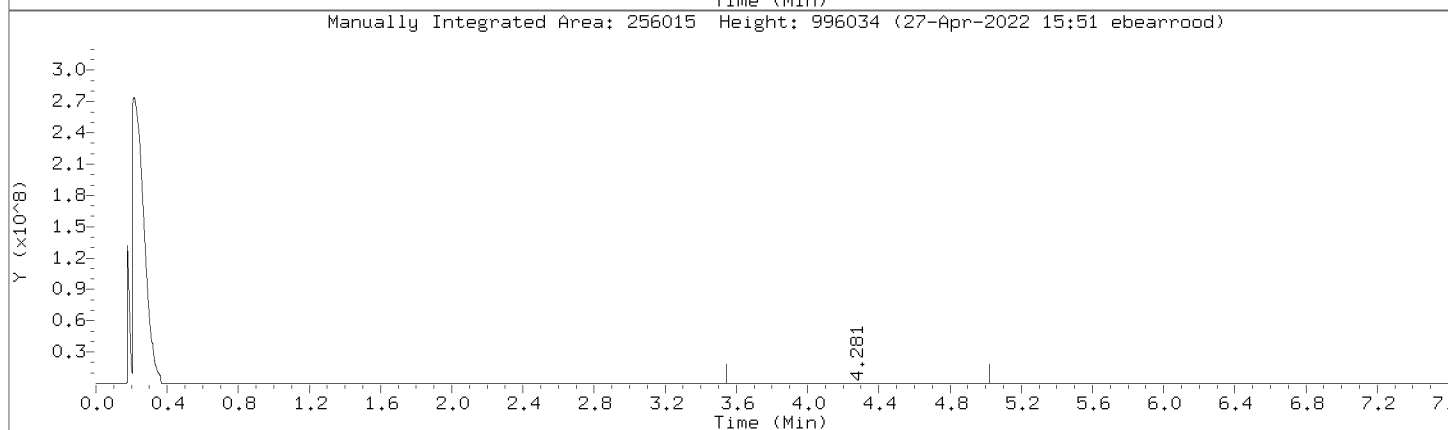
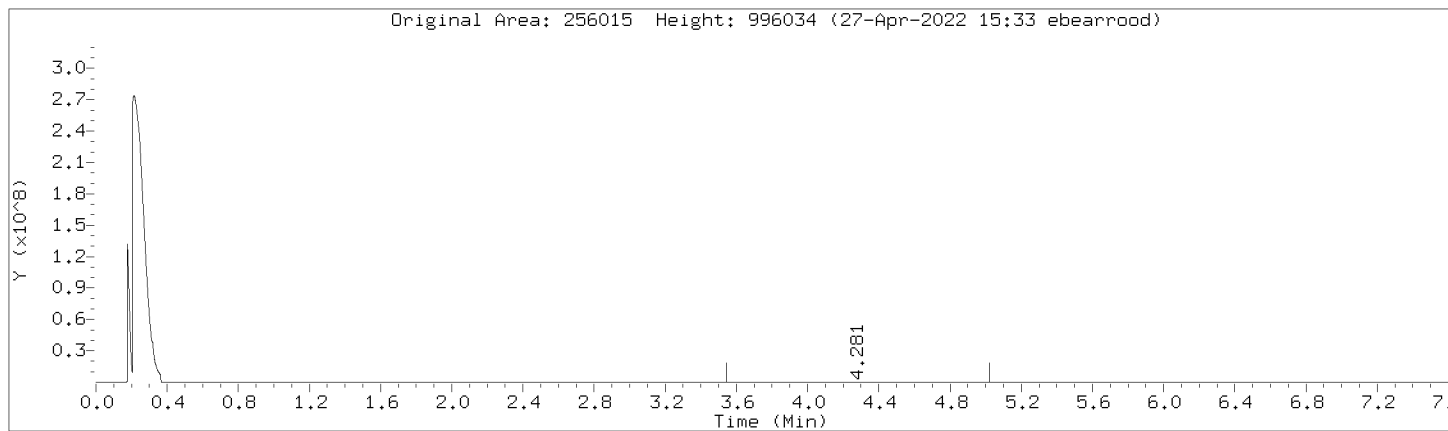
Operator: EBS

Column diameter: 0.32



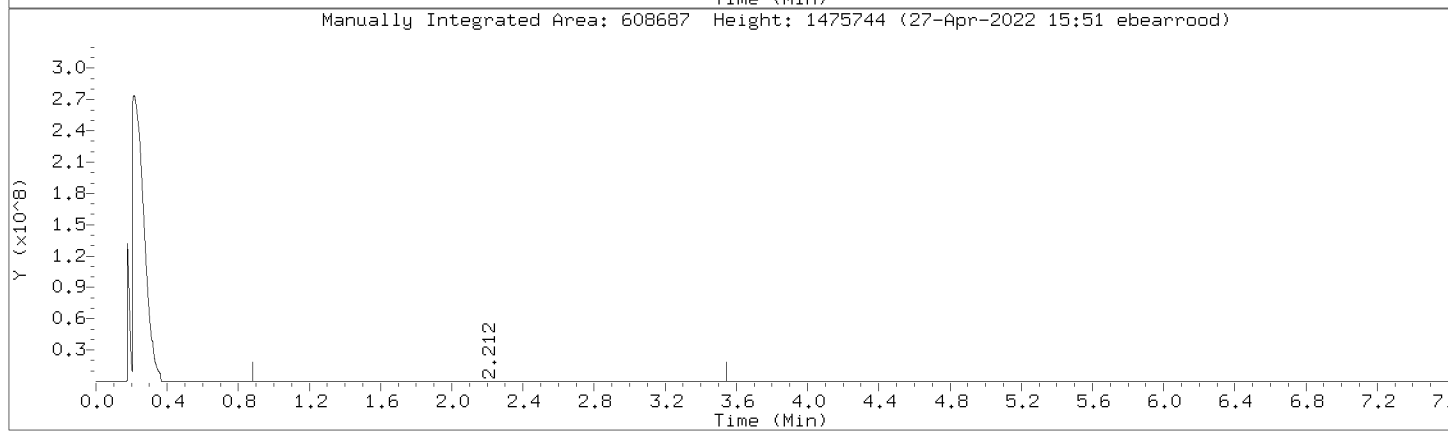
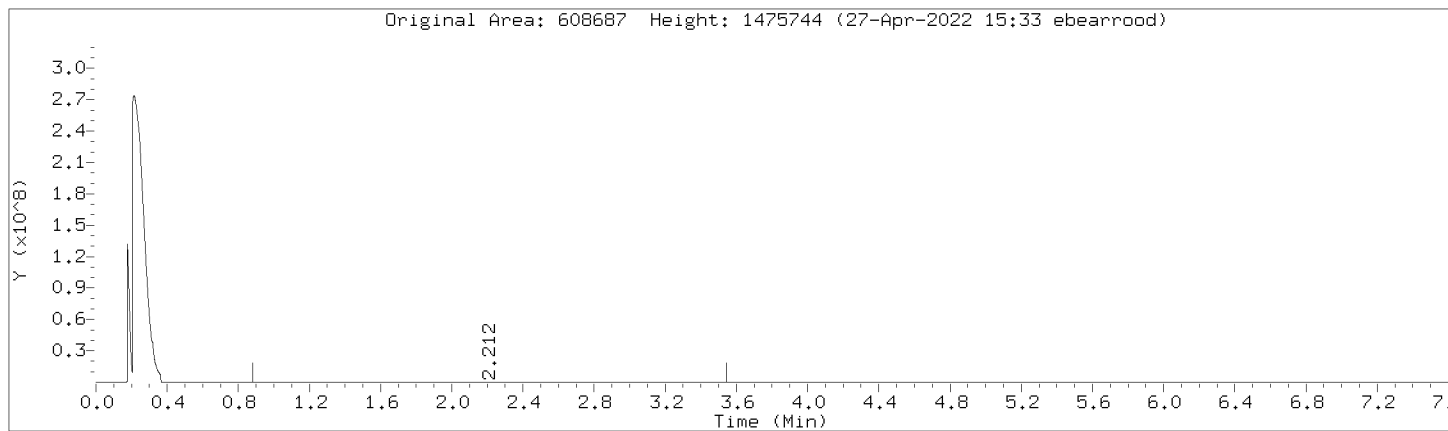
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D

Injection Date: 27-APR-2022 13:34

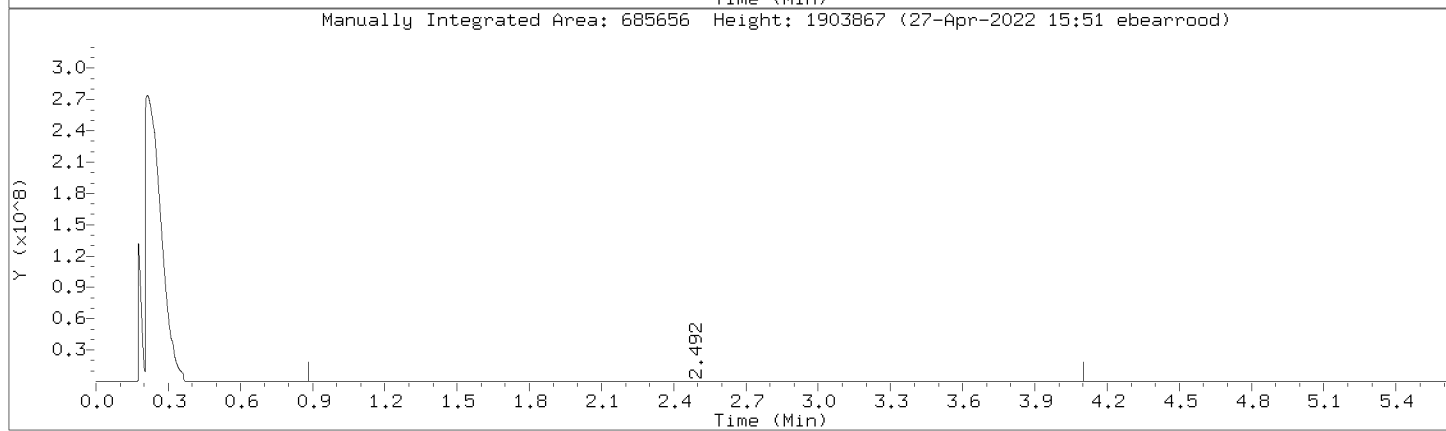
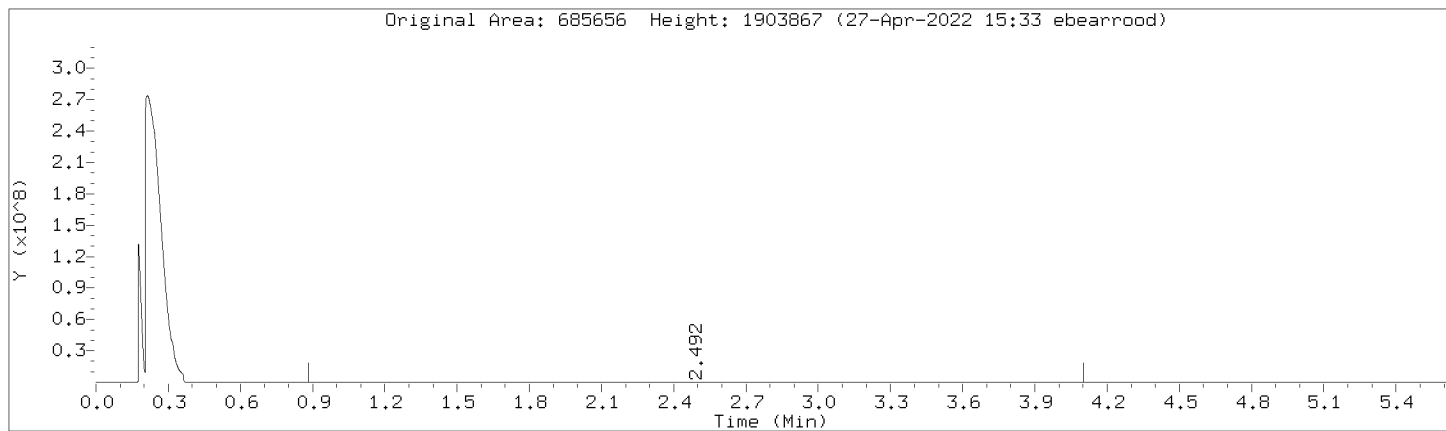
Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL4,362372:2

Compound: TPH-DRO (C10-C28)

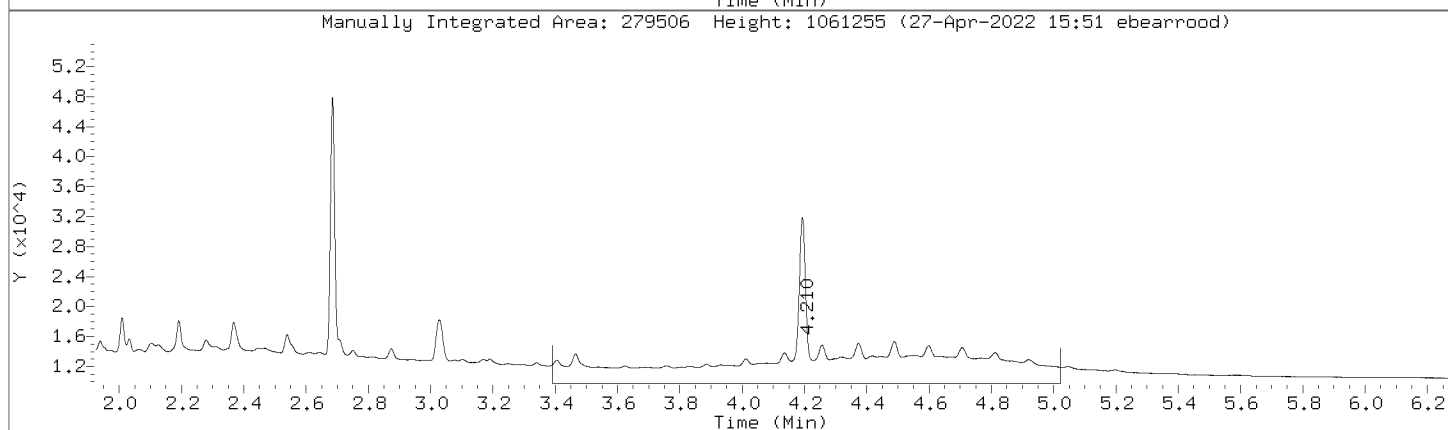
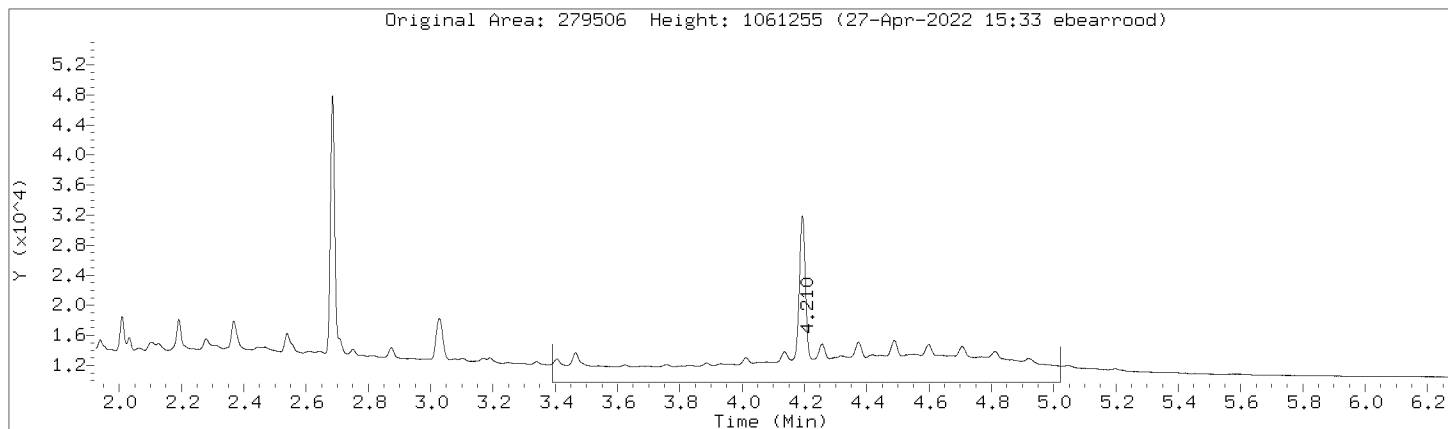
Review Code: RNG

CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

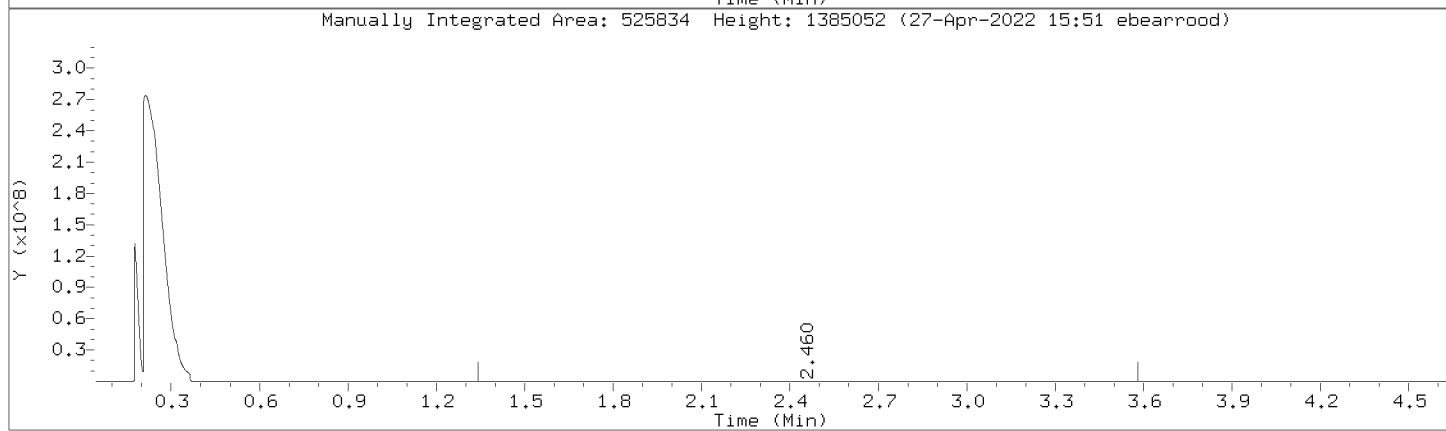
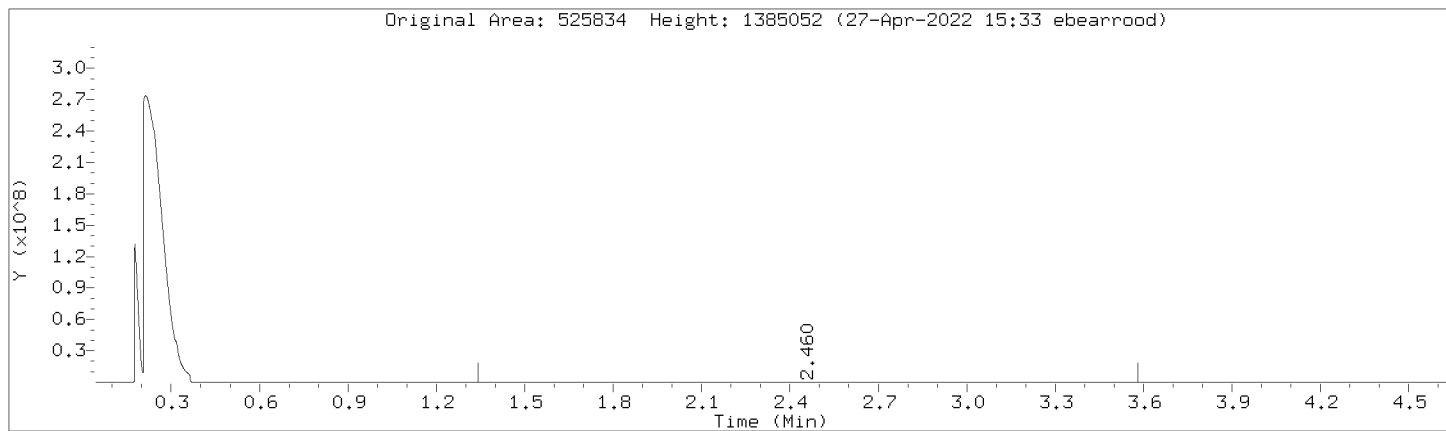
Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:





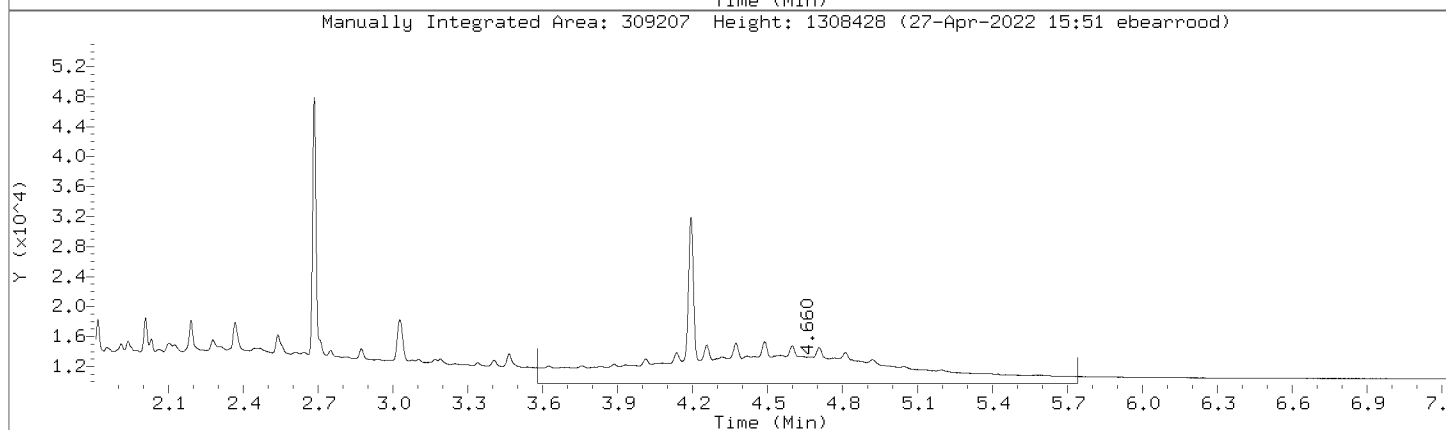
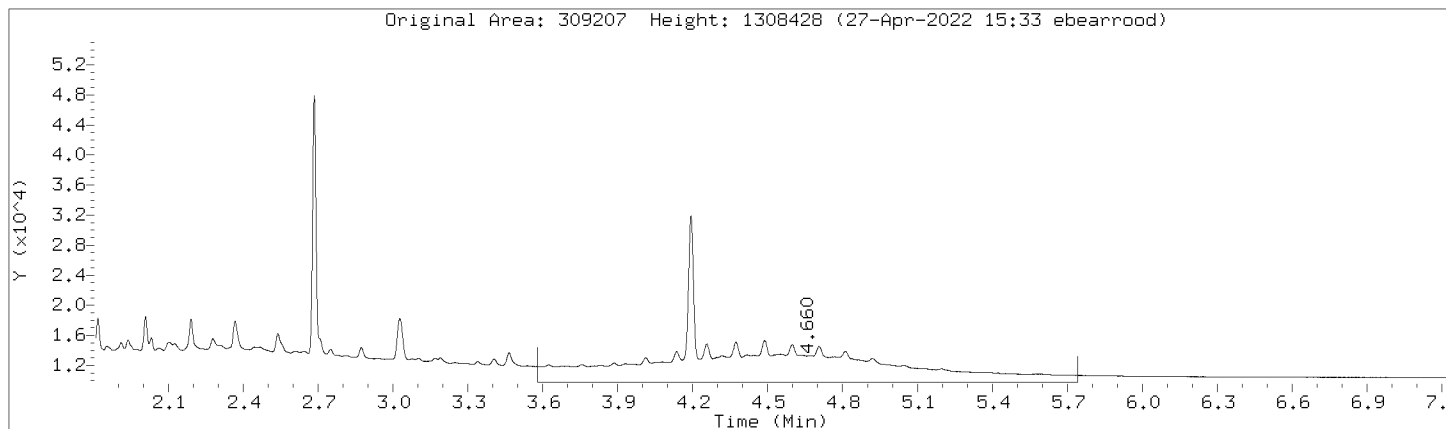
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



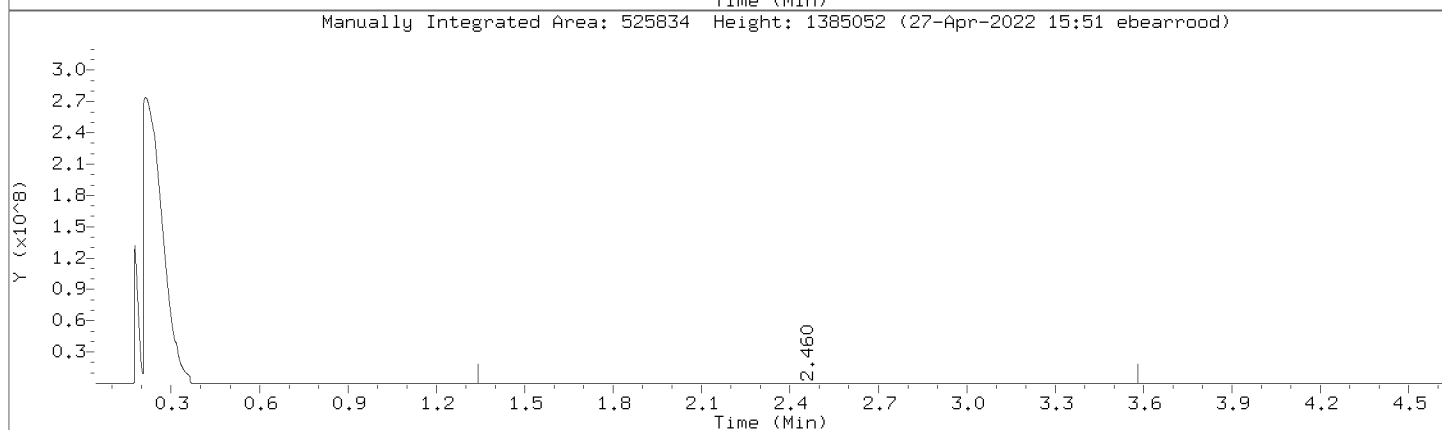
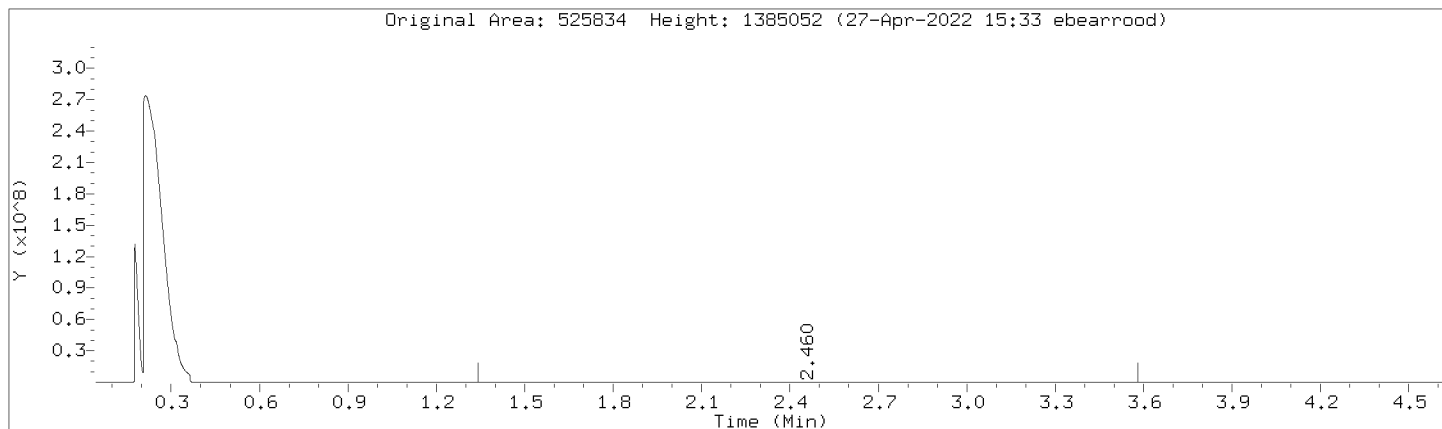
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



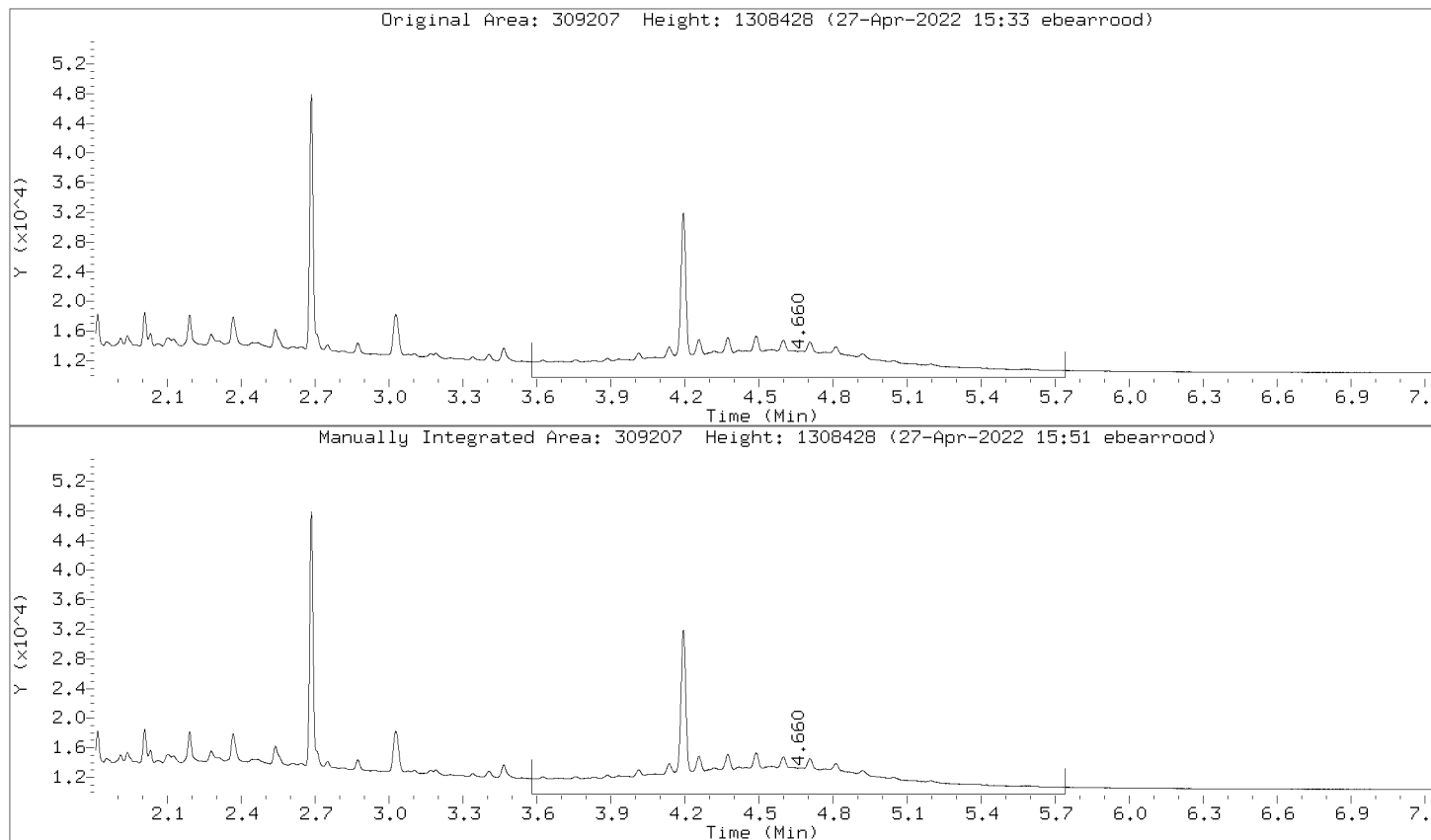
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



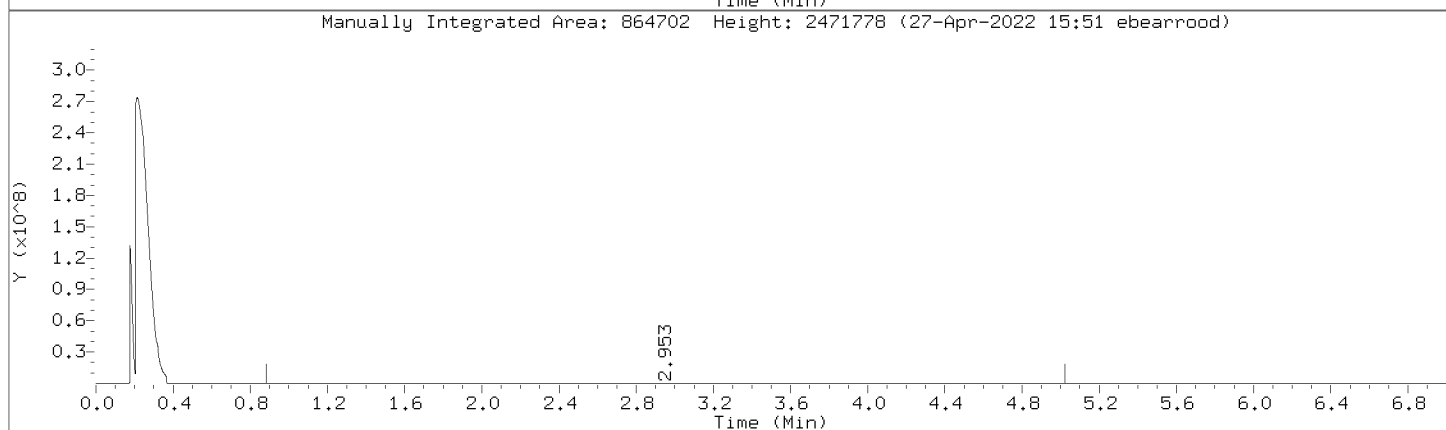
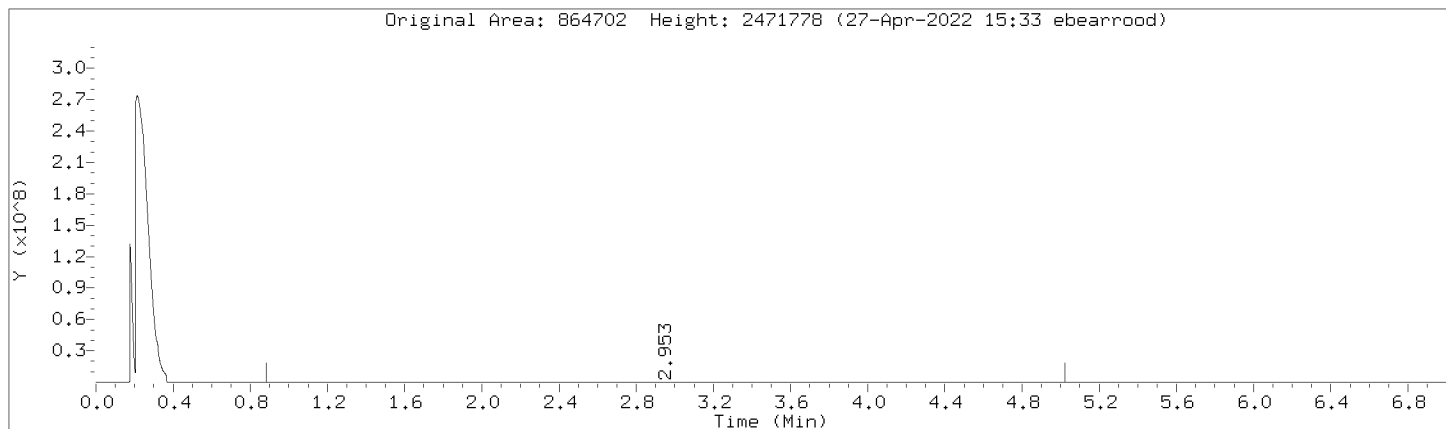
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



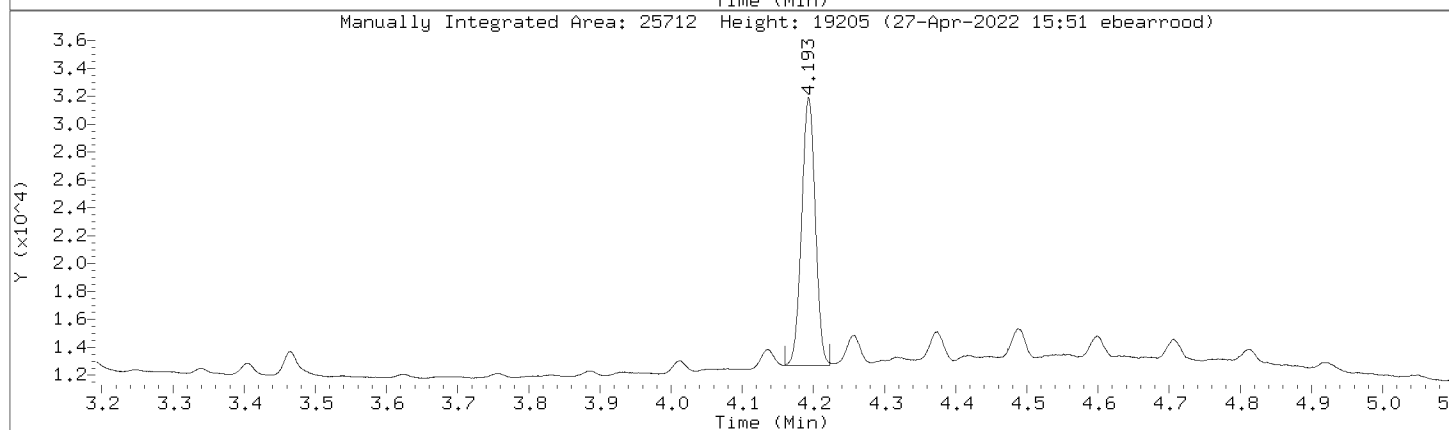
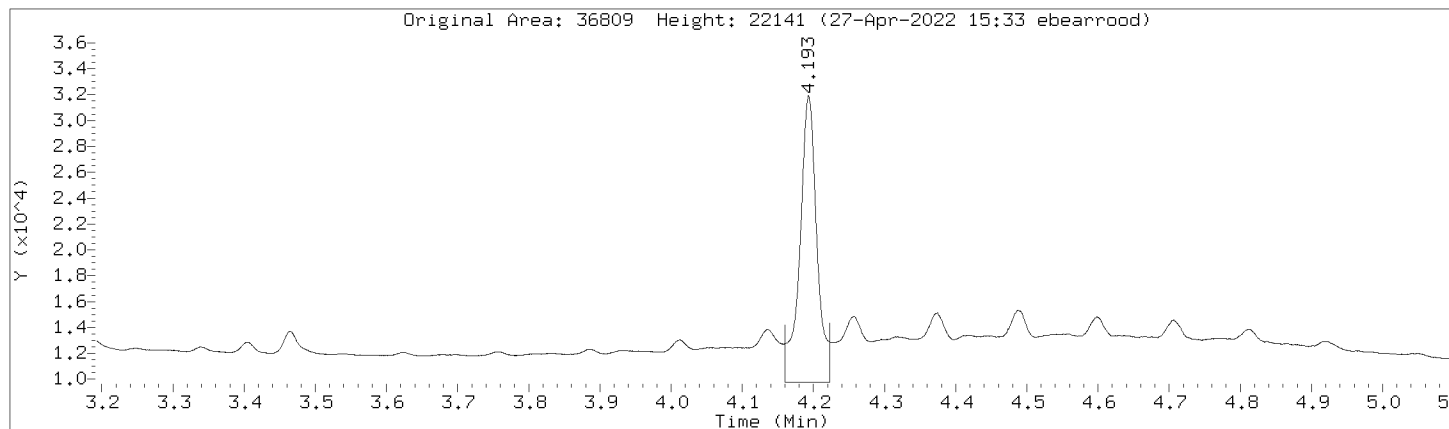
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



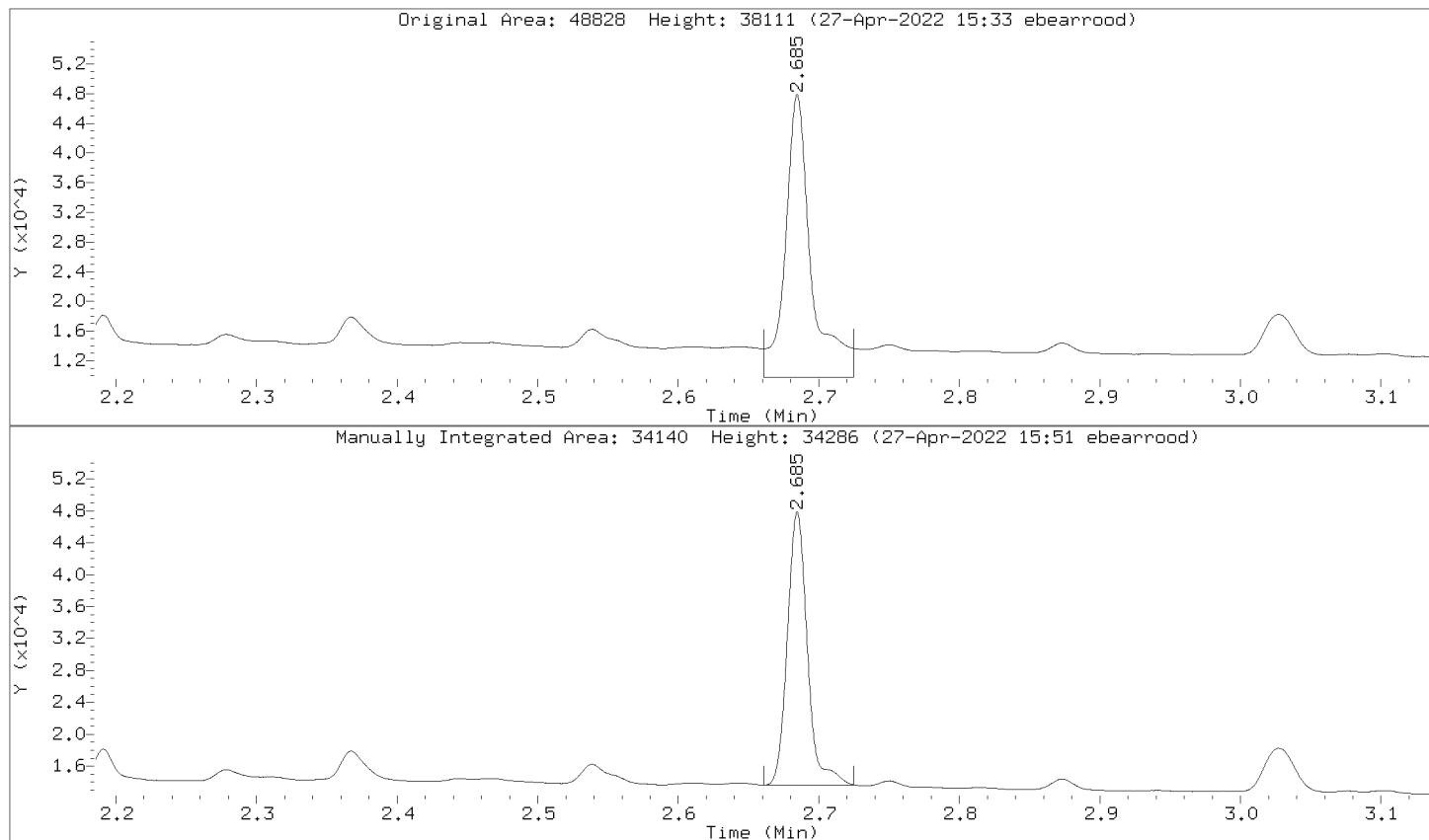
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
 Lab Smp Id: DMO-CAL5,362373:2 Client Smp ID: DMO-CAL5,362373:2  
 Inj Date : 27-APR-2022 13:45  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal5,362373:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 82 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		889707 100.000	91.4	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.684	2.685 -0.001		67661 10.0000	9.65	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.193	4.193 0.000		51572 10.0000	9.31	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		429960 100.000	91.4	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		1007171 100.000	91.4	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		456691 100.000	90.8	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		1320158 200.000	183	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		759830 100.000	92.4	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		759830 100.000	92.4	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		518403 100.000	91.1	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		518403 100.000	91.1	(M) RNG
-----					



QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:45

Client ID: DMO-CAL5.362373;2

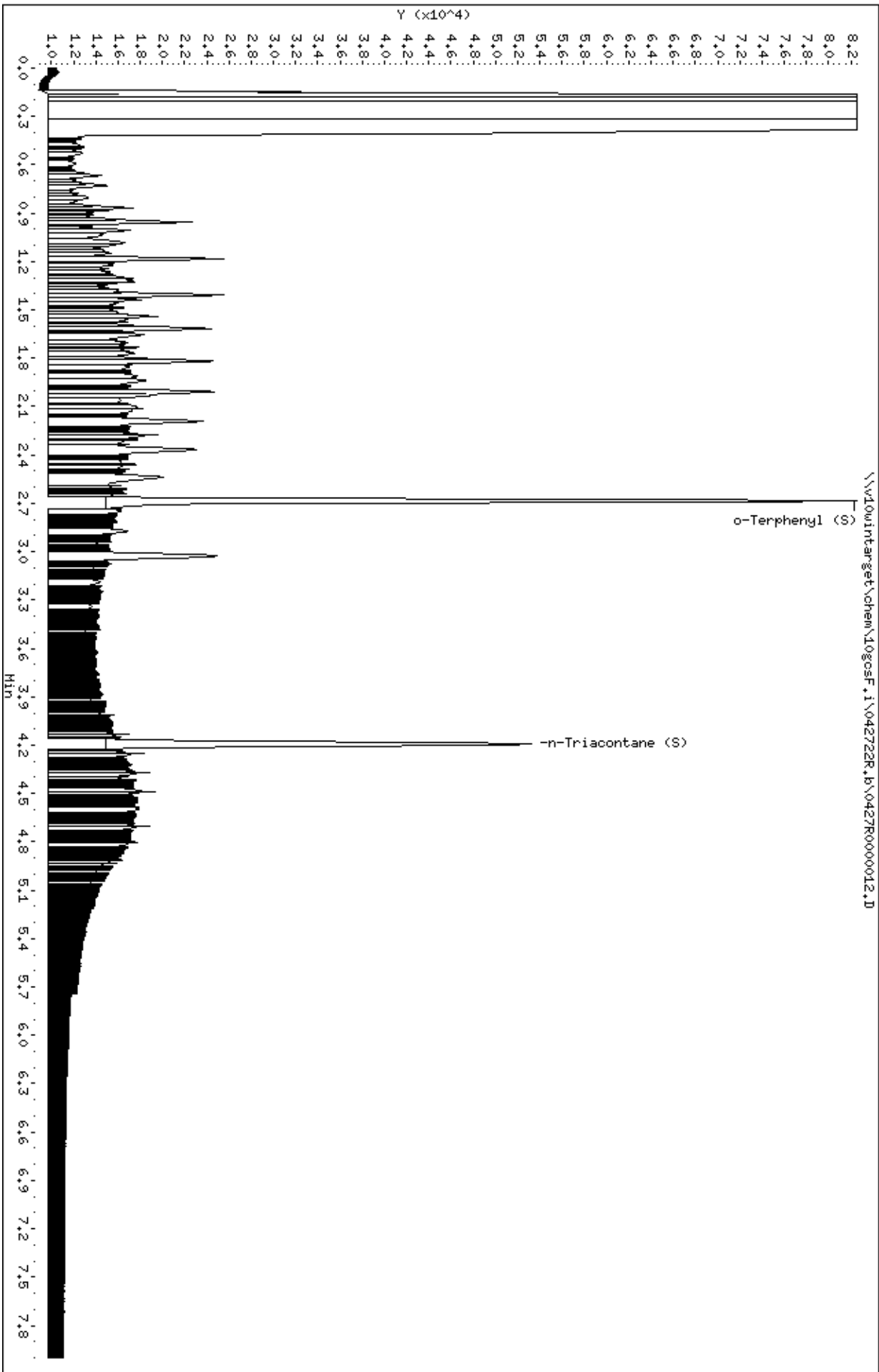
Sample Info: DMO-CAL5.362373;2

Instrument: 10gocsf.1

Operator: EB3

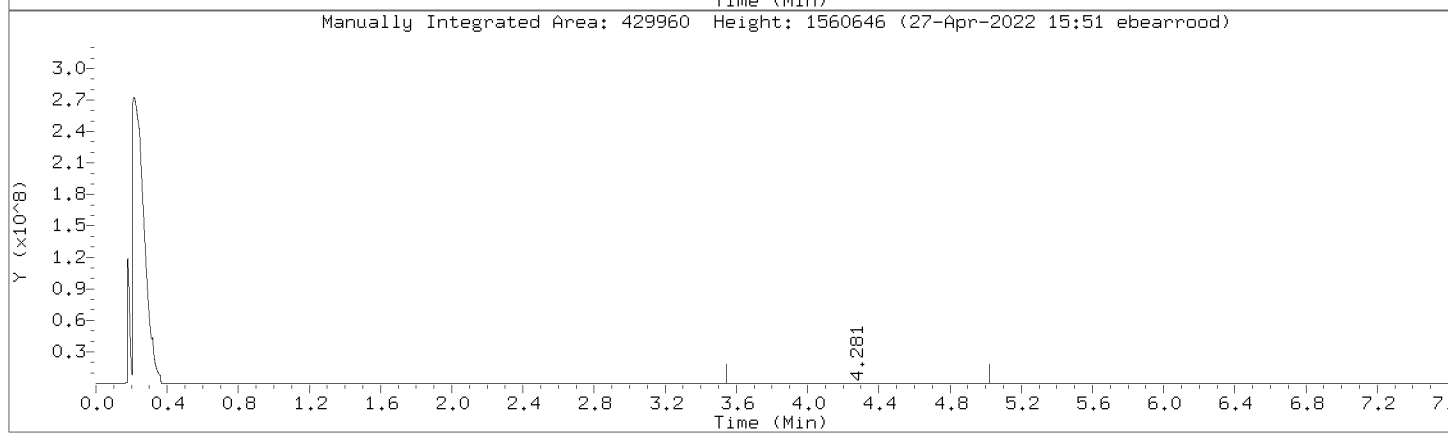
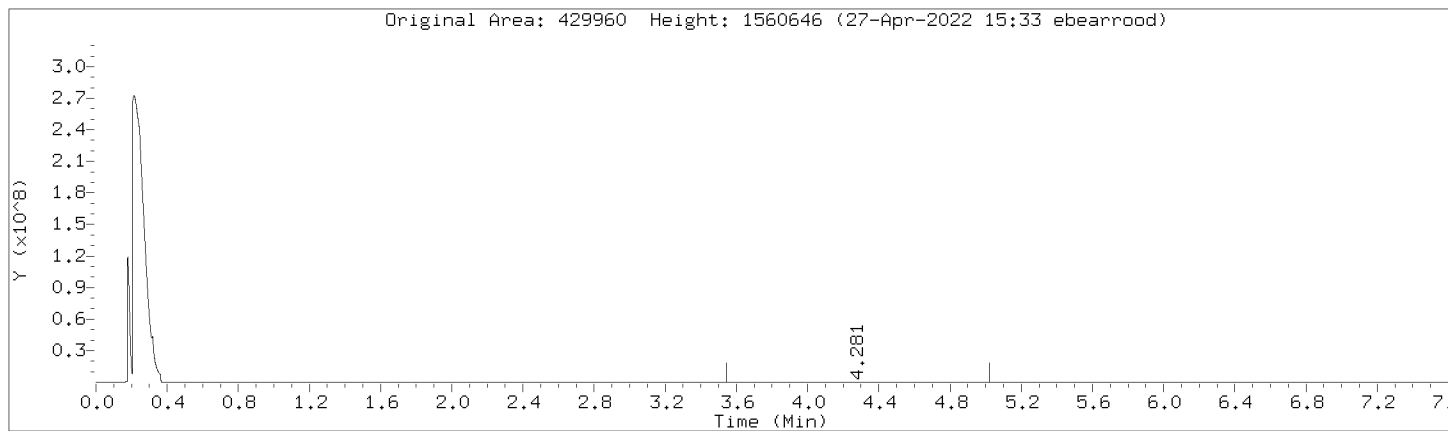
Column diameter: 0.32

Column phase: DB-5-US21430033



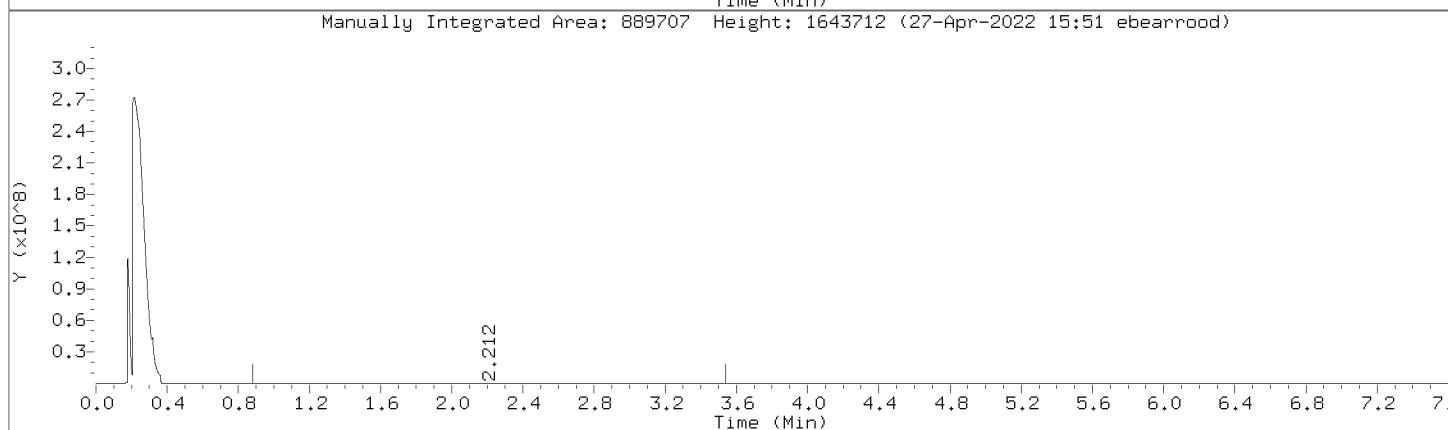
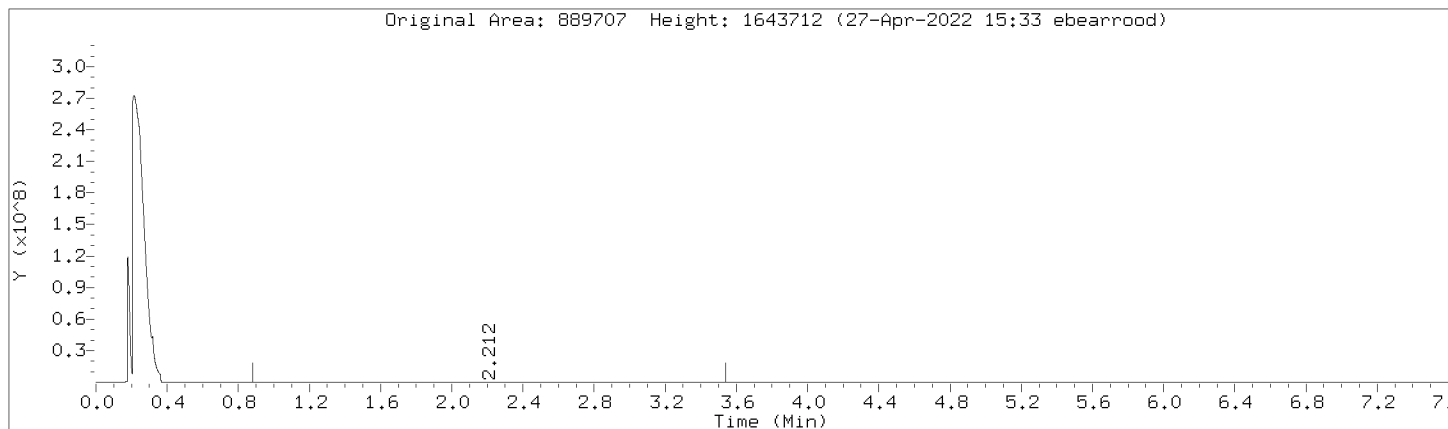
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



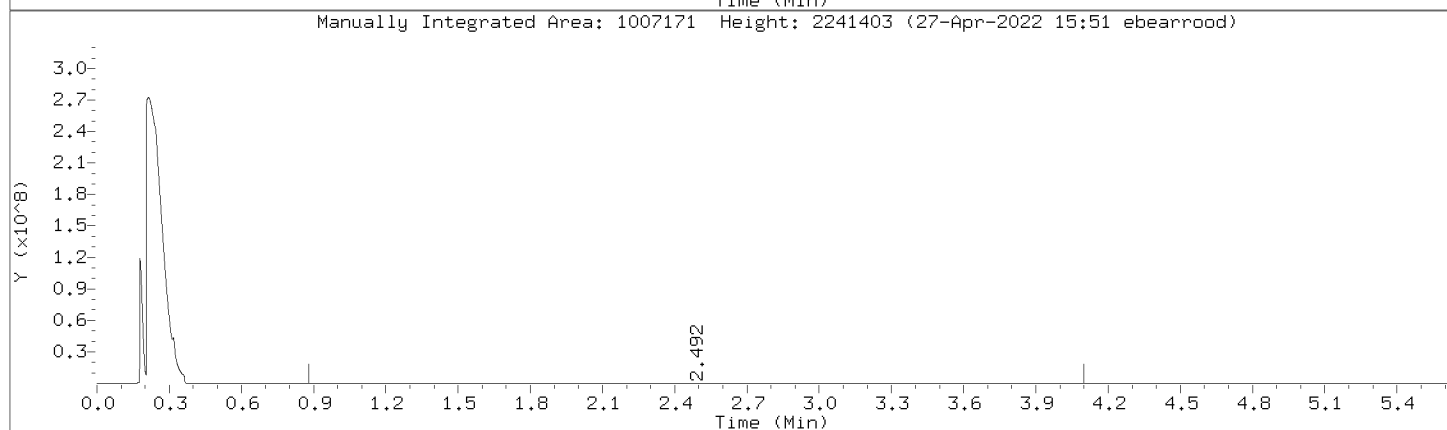
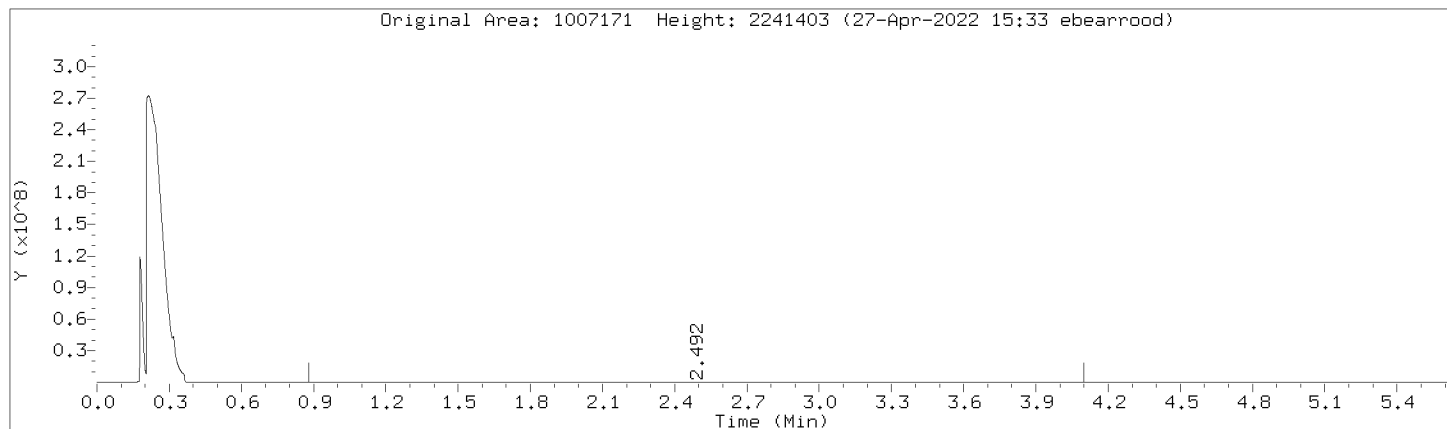
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



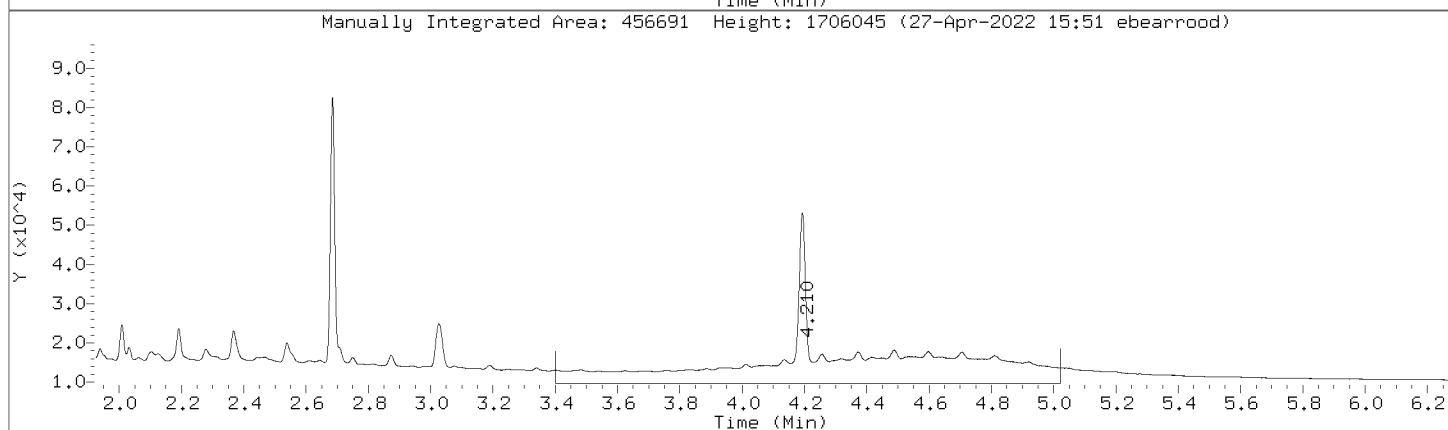
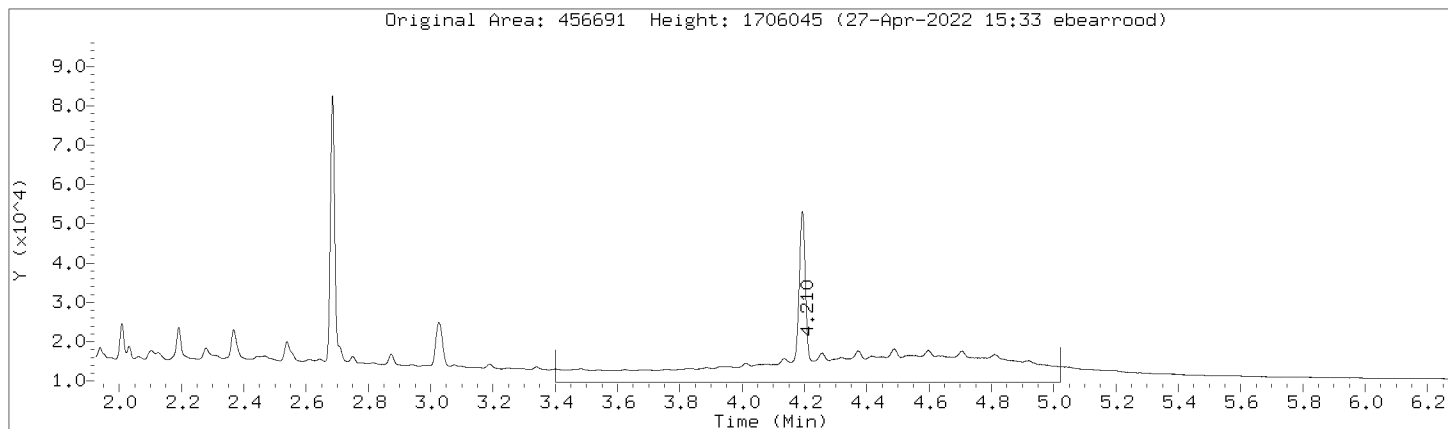
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



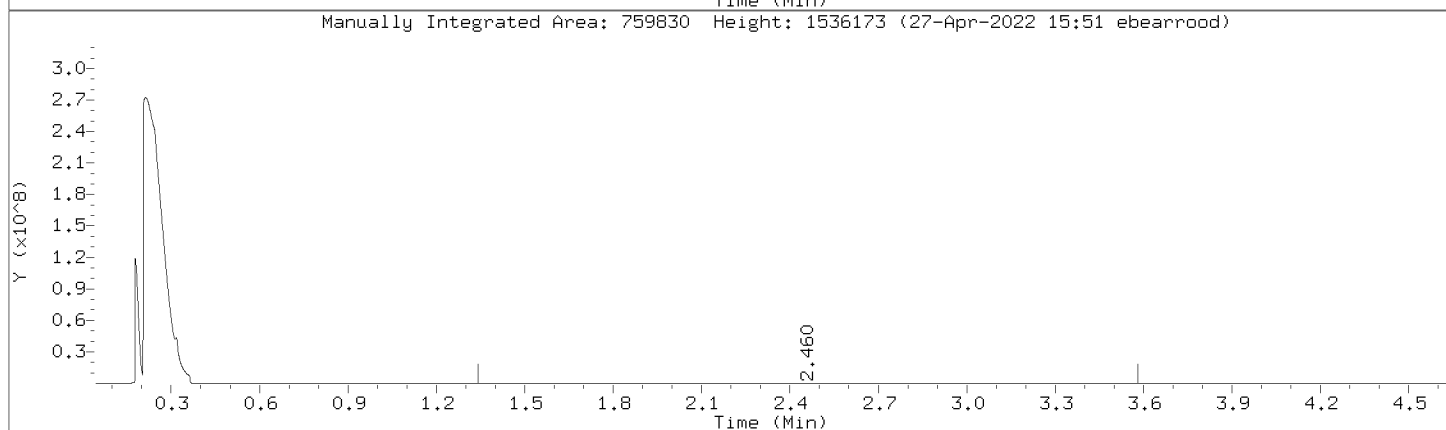
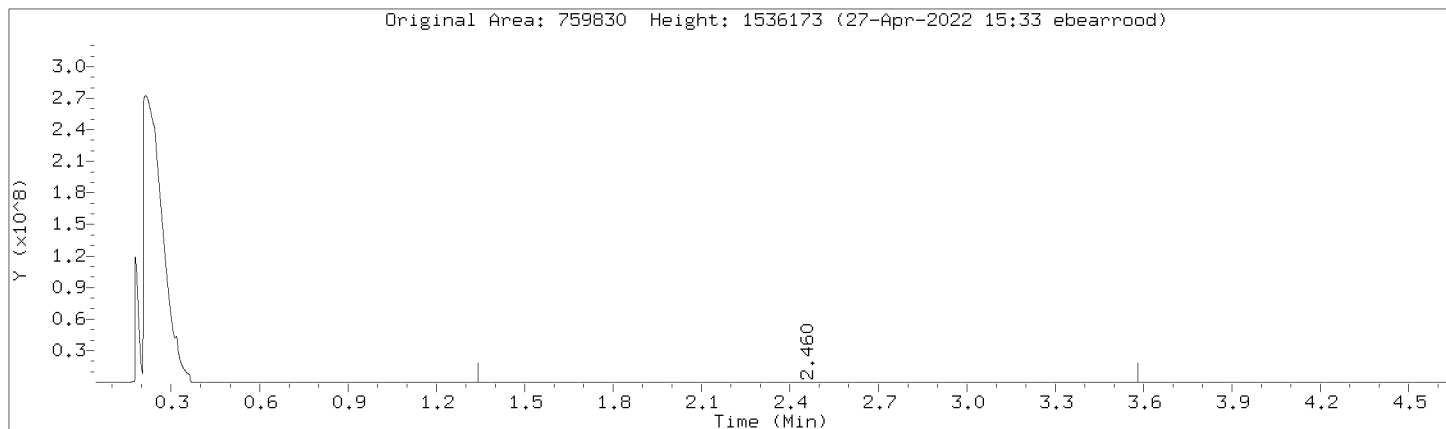
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



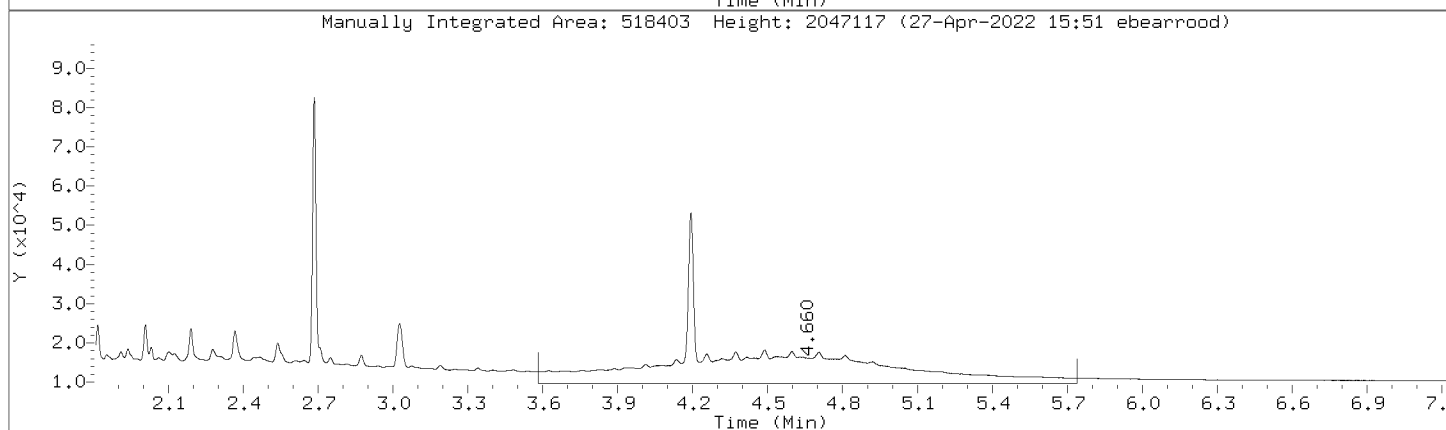
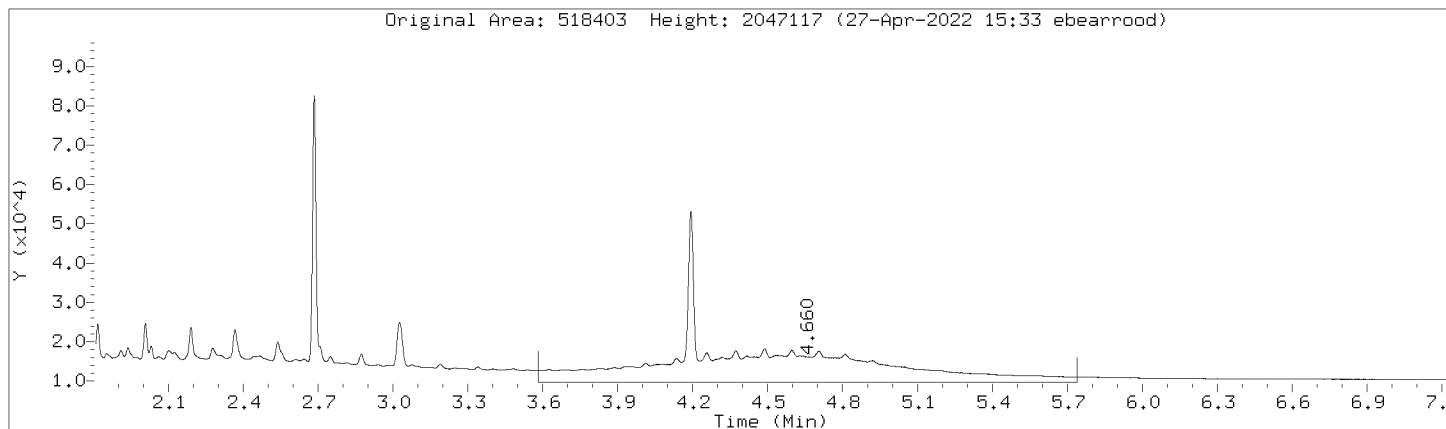
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

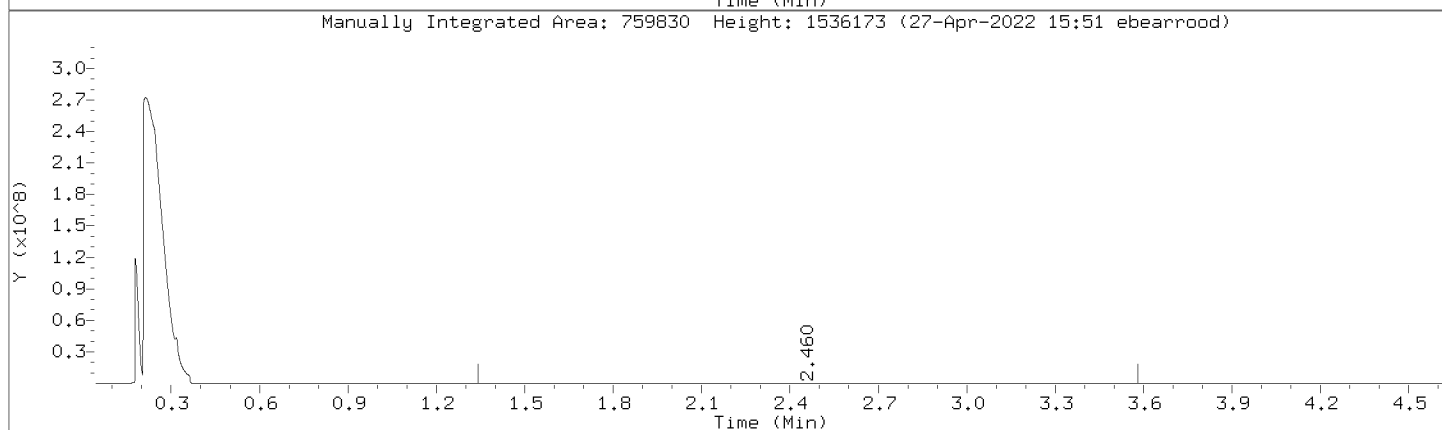
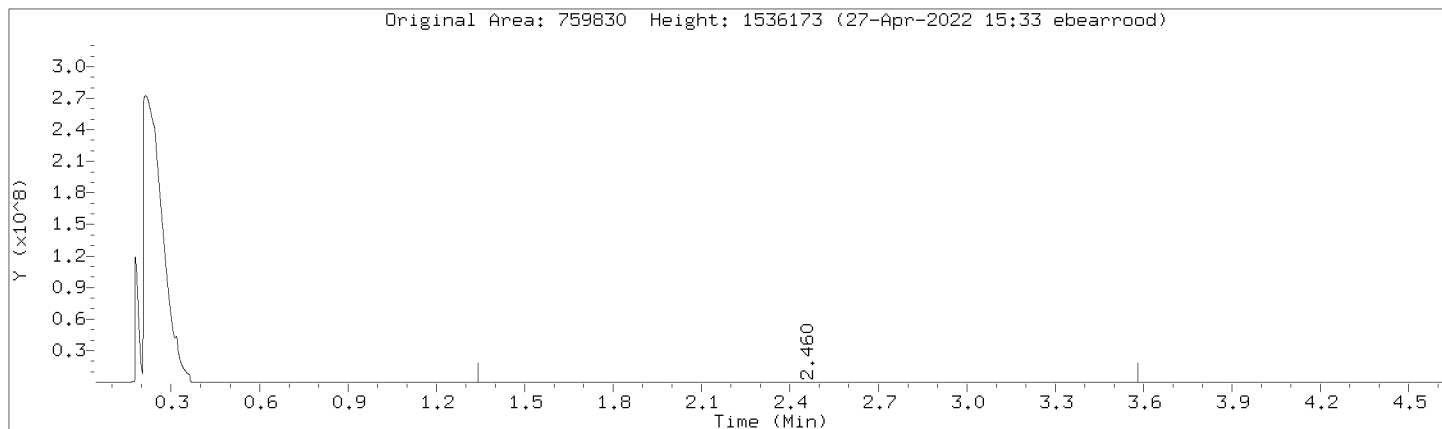
Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





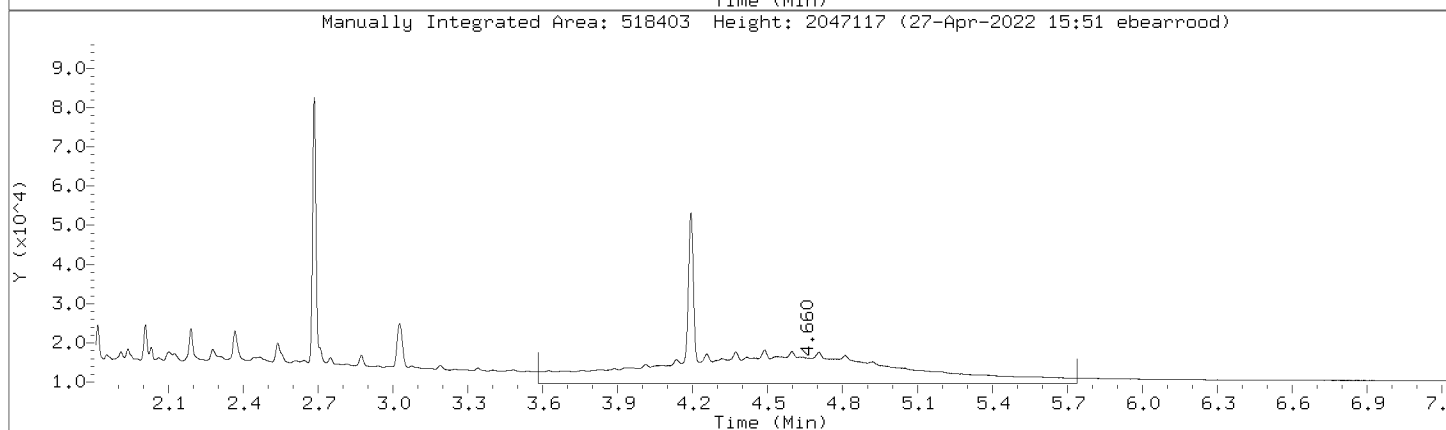
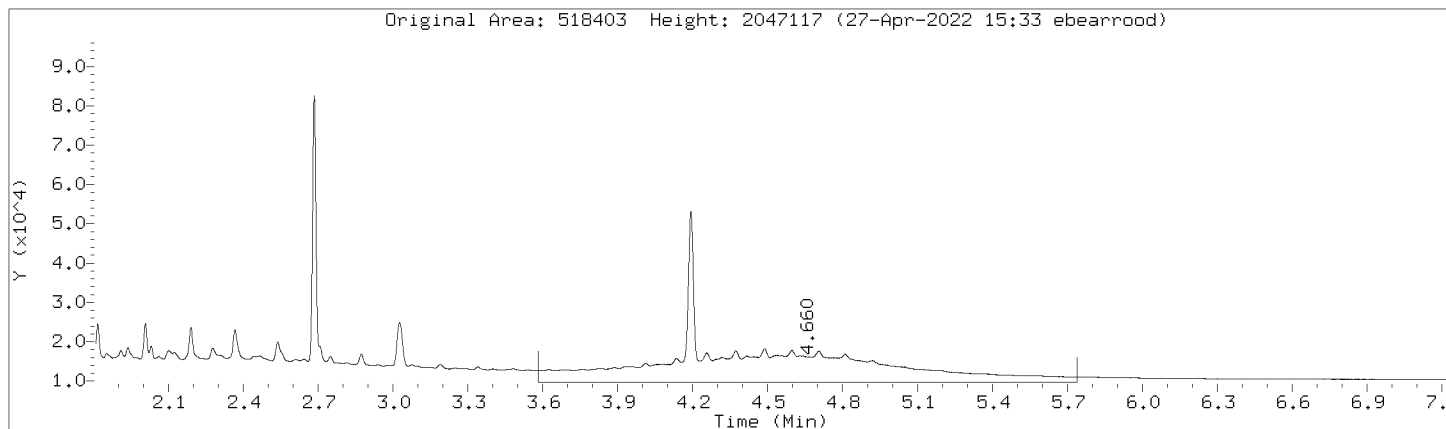
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



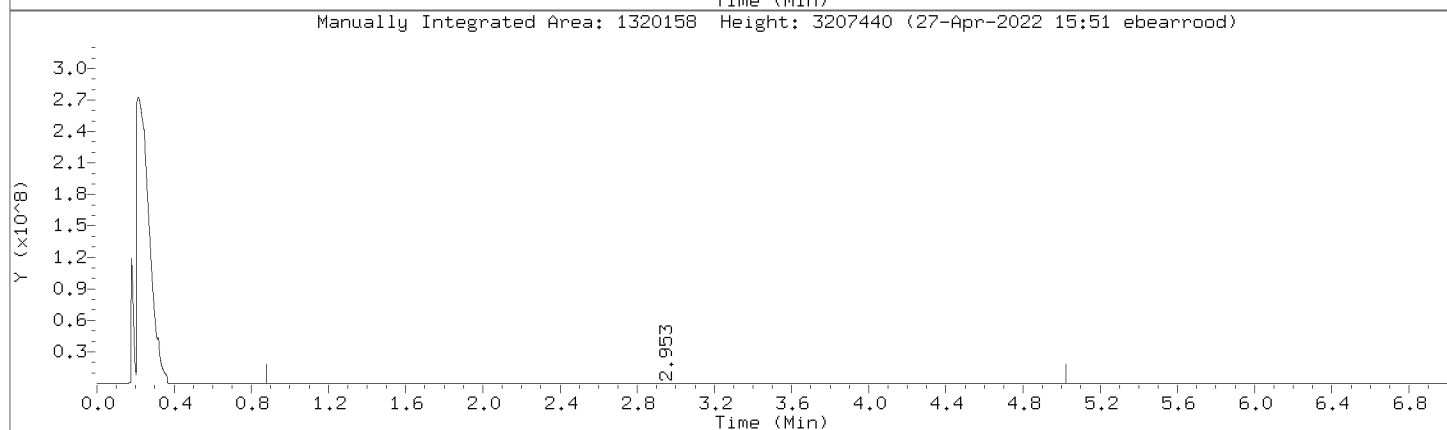
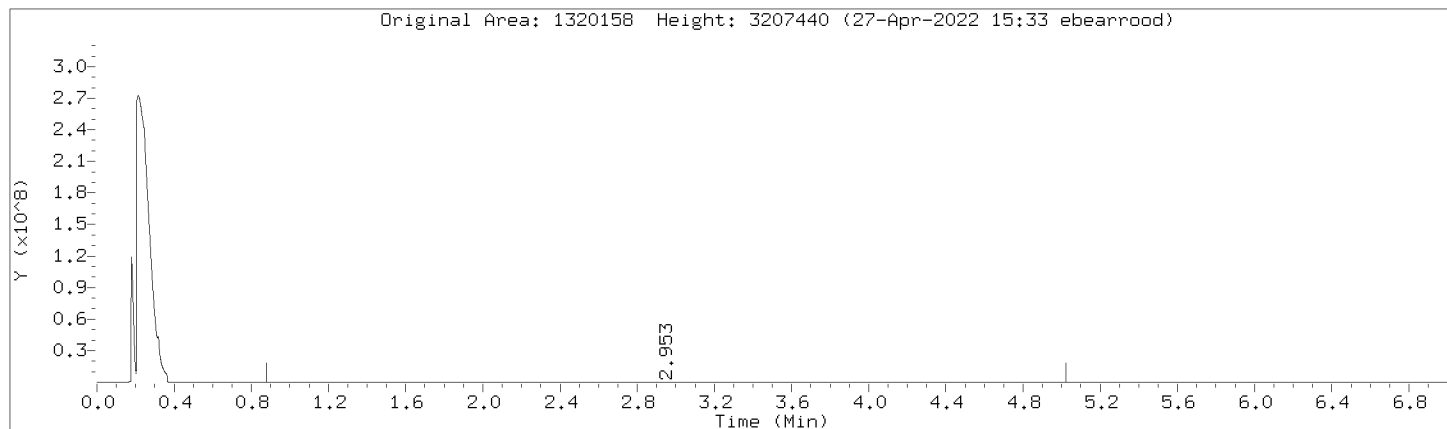
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



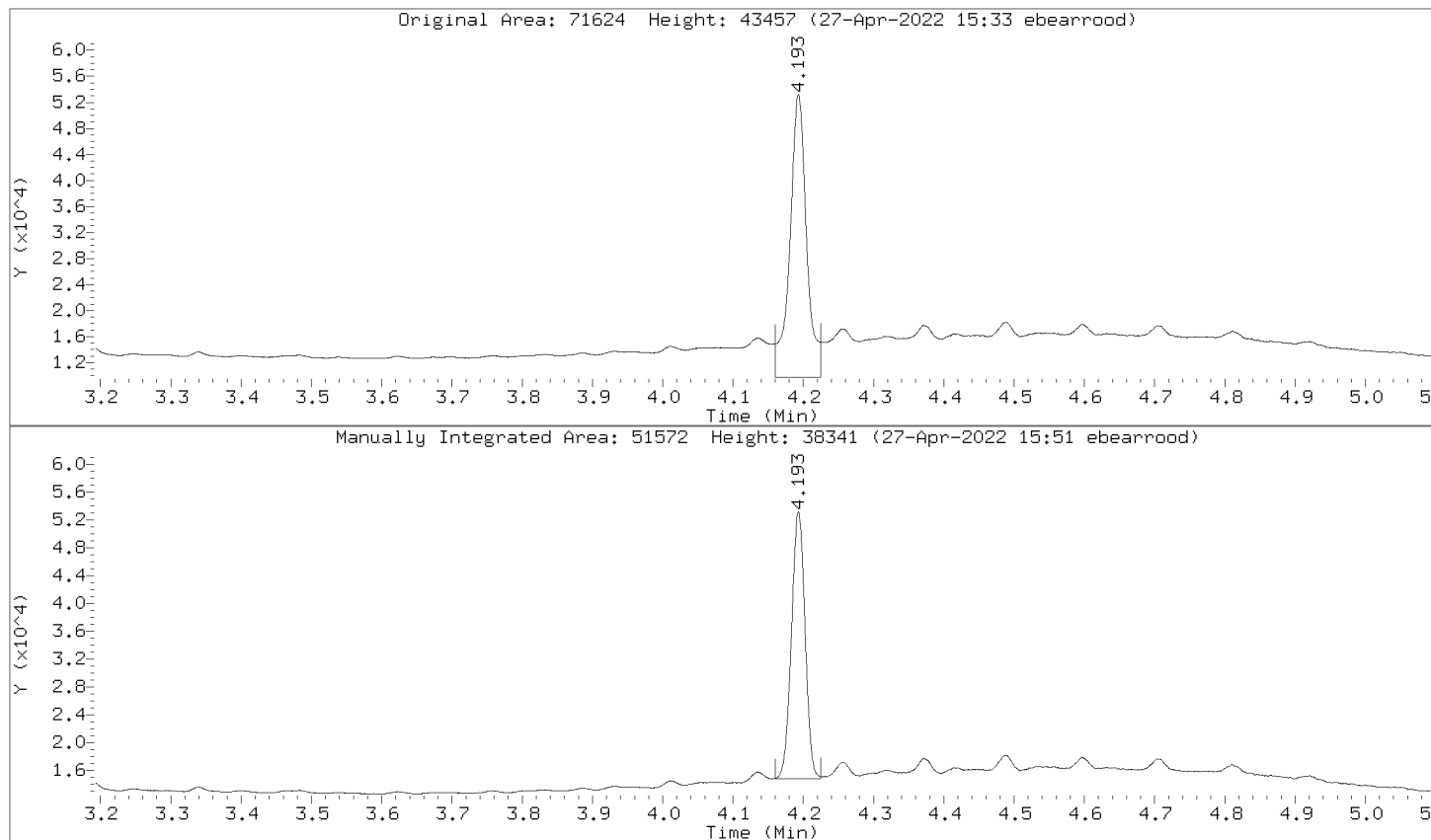
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



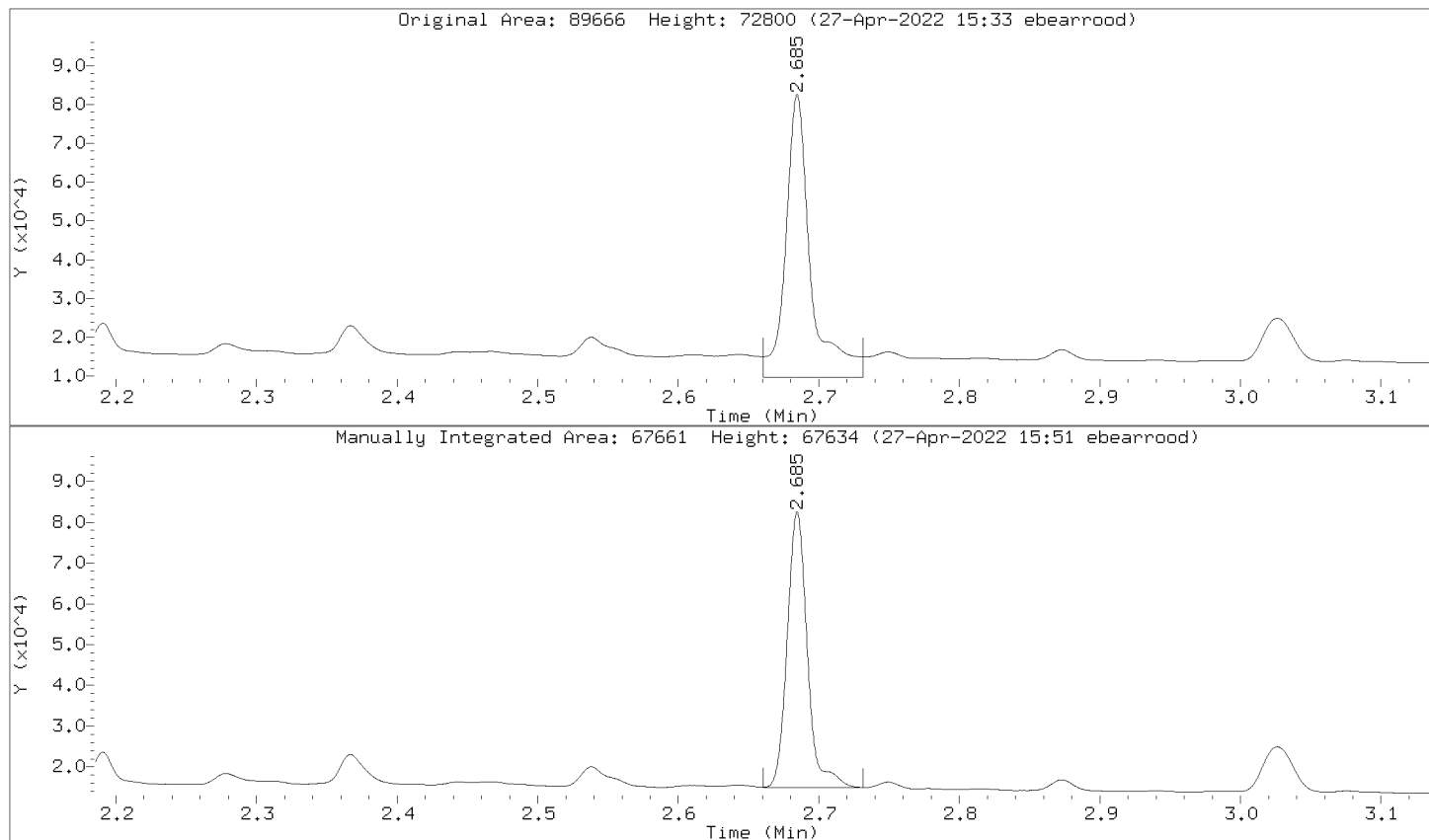
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
 Lab Smp Id: DMO-CAL6,362374:2 Client Smp ID: DMO-CAL6,362374:2  
 Inj Date : 27-APR-2022 13:57  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal6,362374:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 83 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL (ug/mL) (ug/mL)	
====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		1816320 250.000	253	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.685	2.685 0.000		169620 25.0000	25.1	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.193	4.193 0.000		132262 25.0000	24.9	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		995322 250.000	253	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		2067409 250.000	254	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		1048038 250.000	254	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		2811643 500.000	507	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		1534479 250.000	253	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		1534479 250.000	253	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		1215359 250.000	249	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		1215359 250.000	249	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:57

Client ID: DM0-CAL6,362374;2

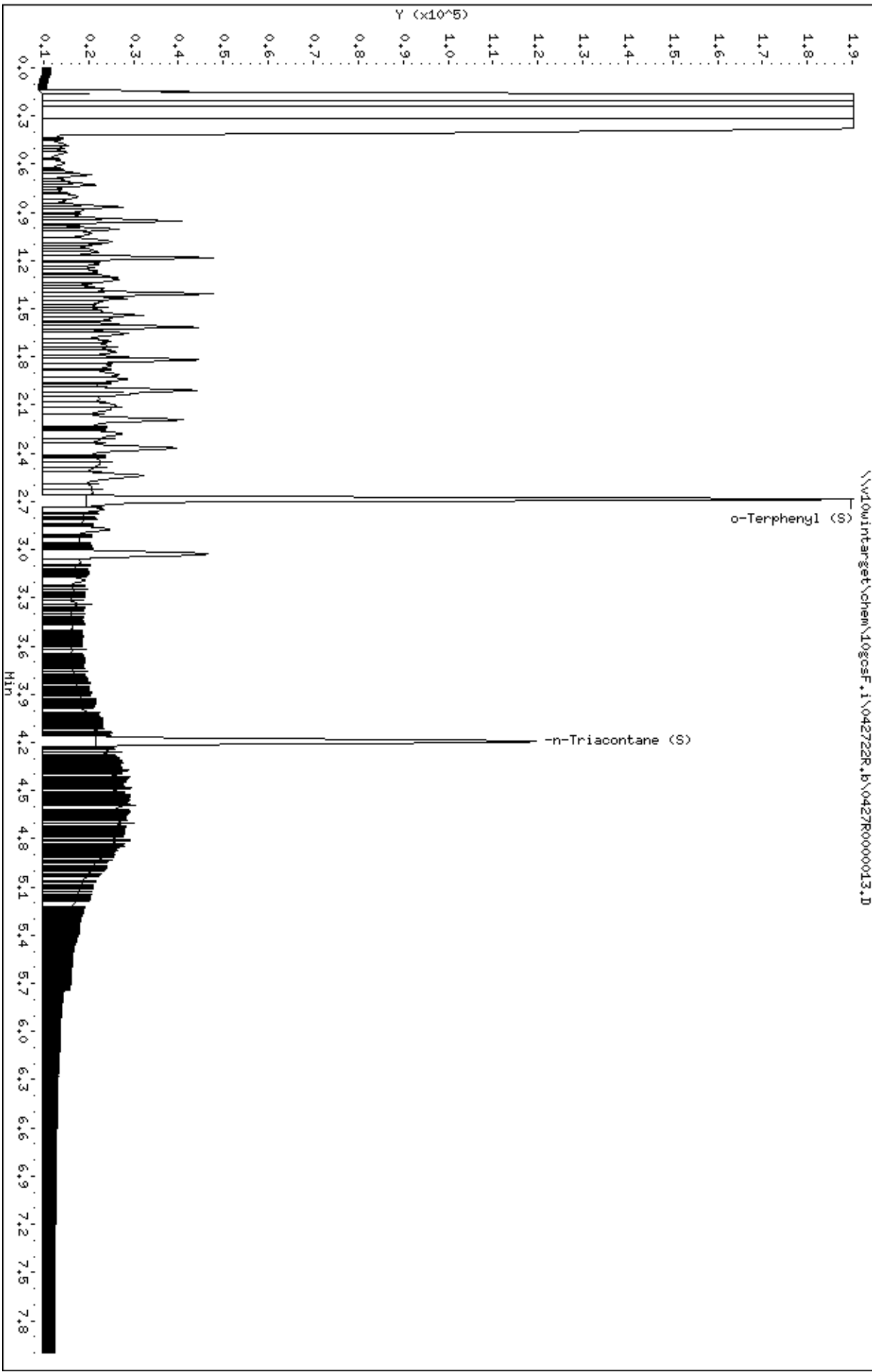
Sample Info: DM0-CAL6,362374;2

Column phase: DB-5-MS21430033

Instrument: 10goscF.1

Operator: EB3

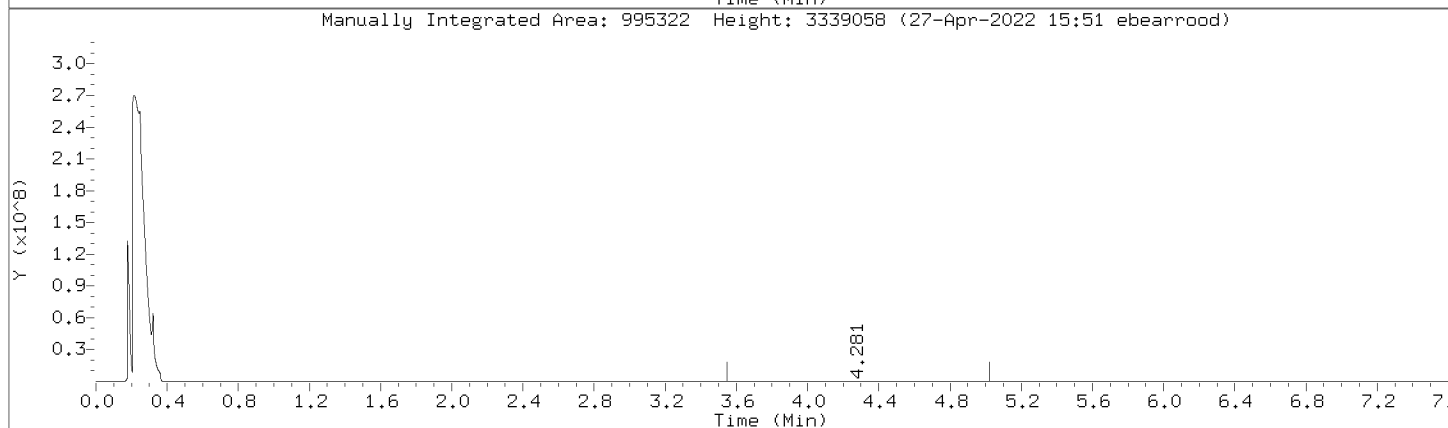
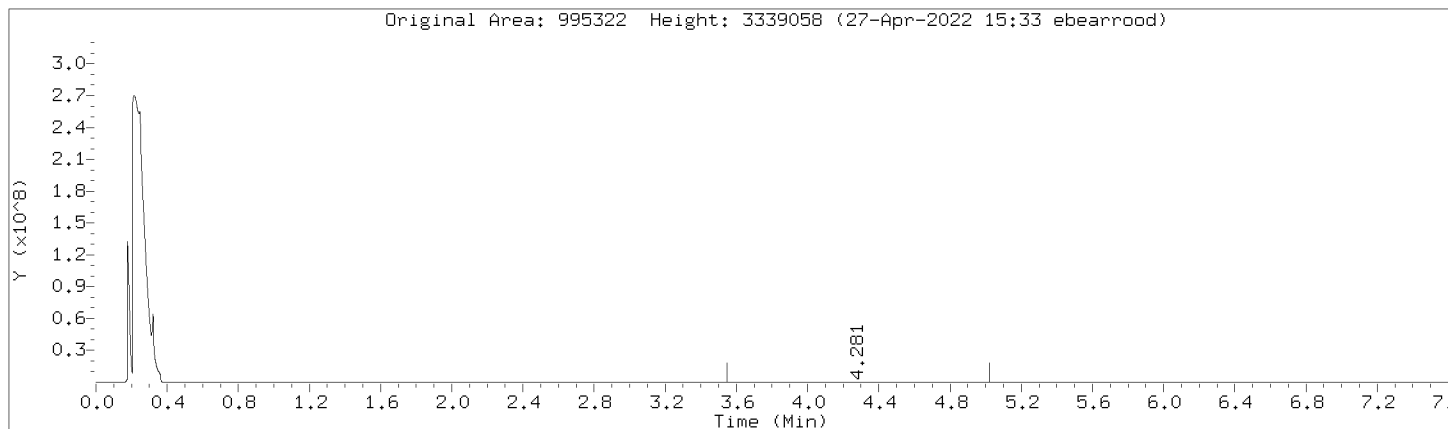
Column diameter: 0.32





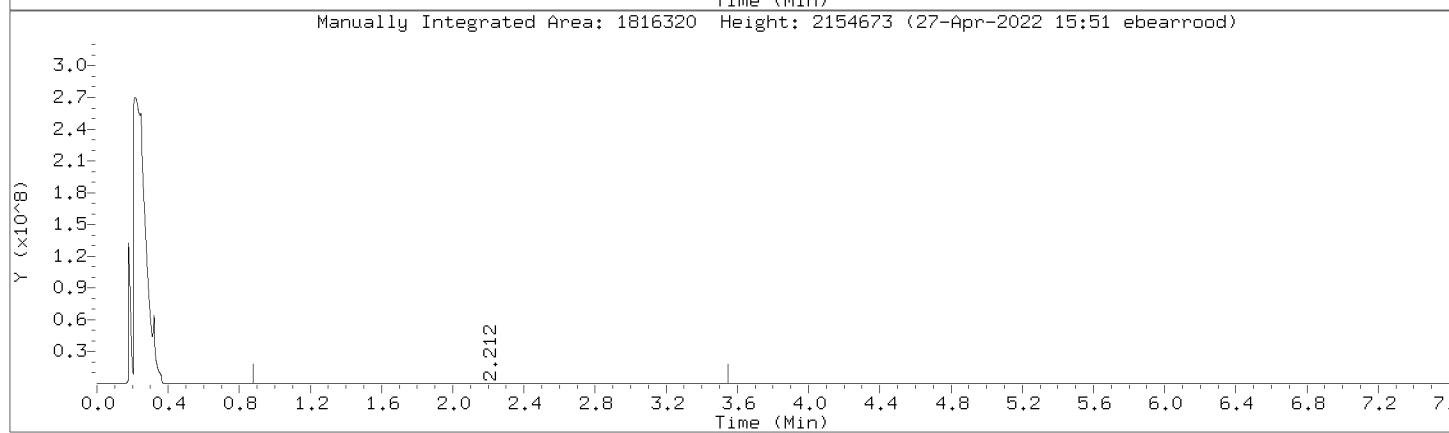
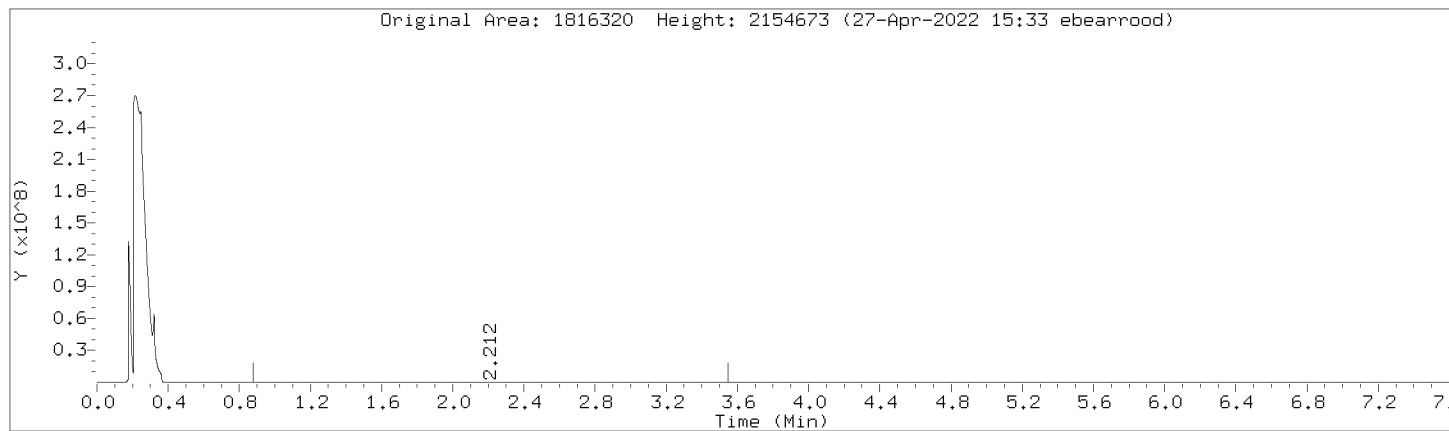
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



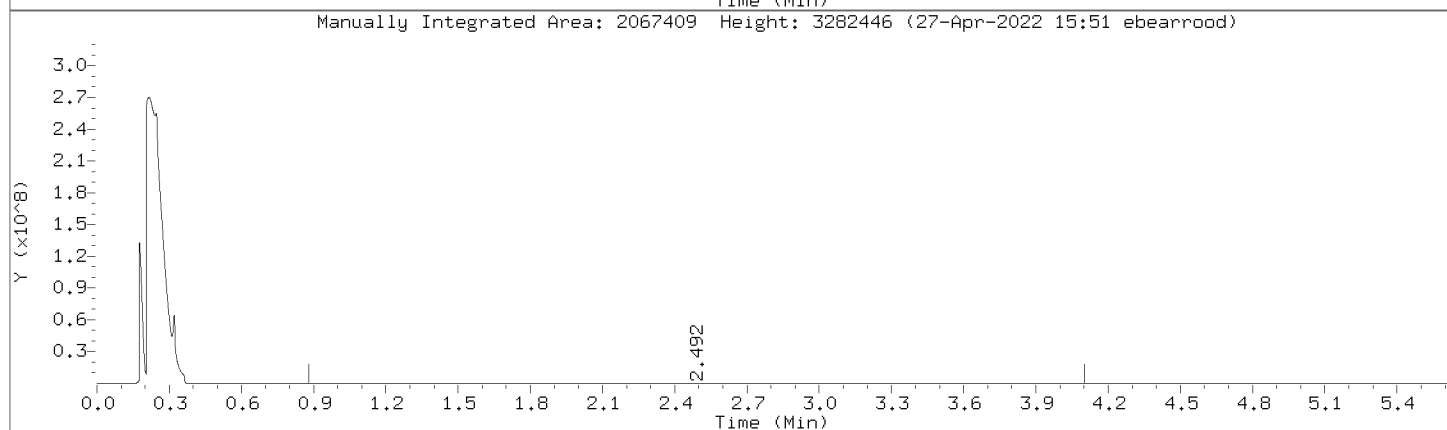
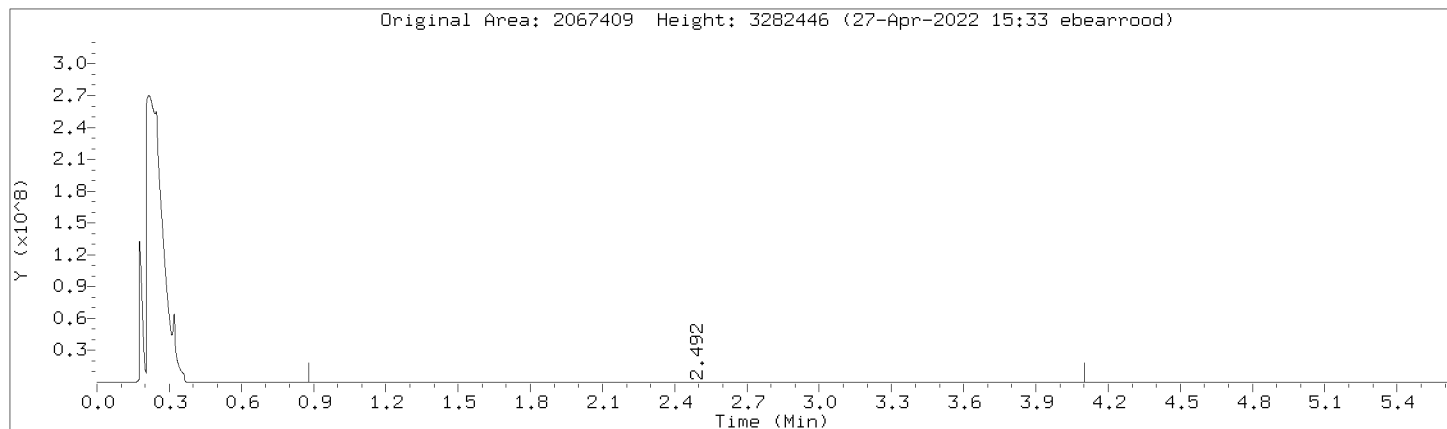
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



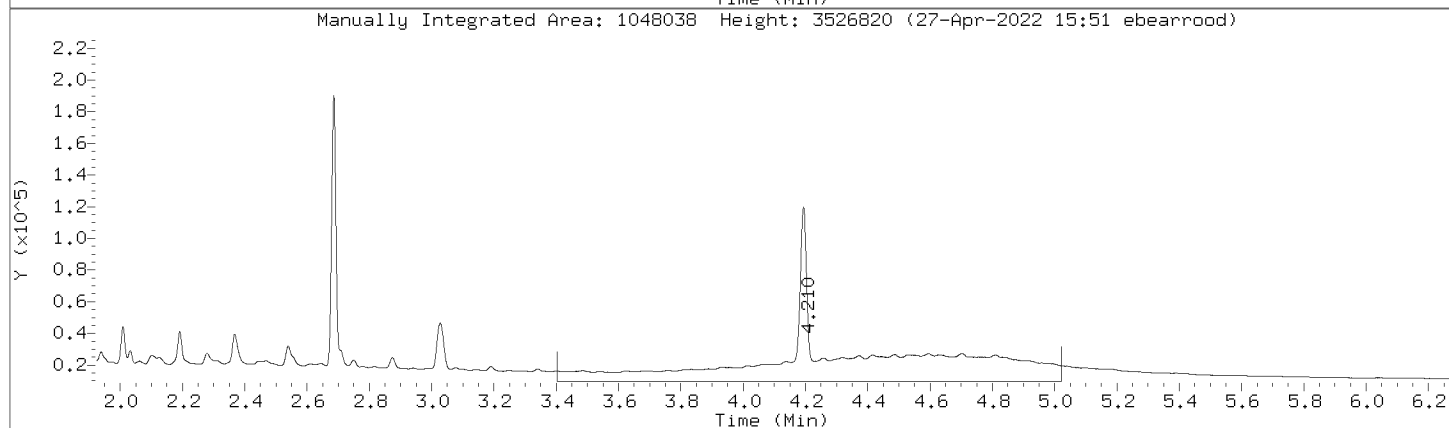
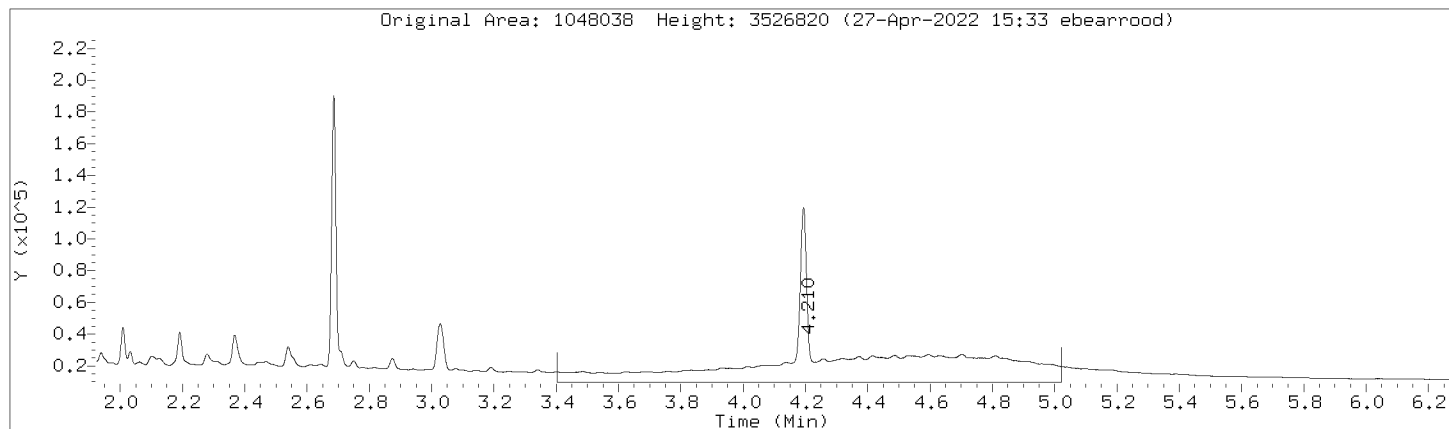
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



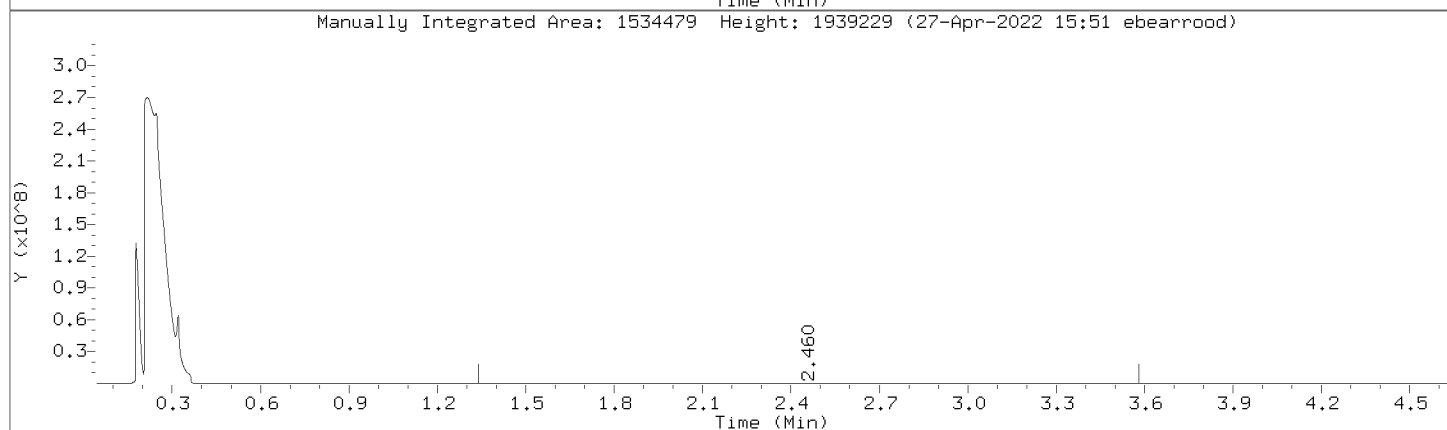
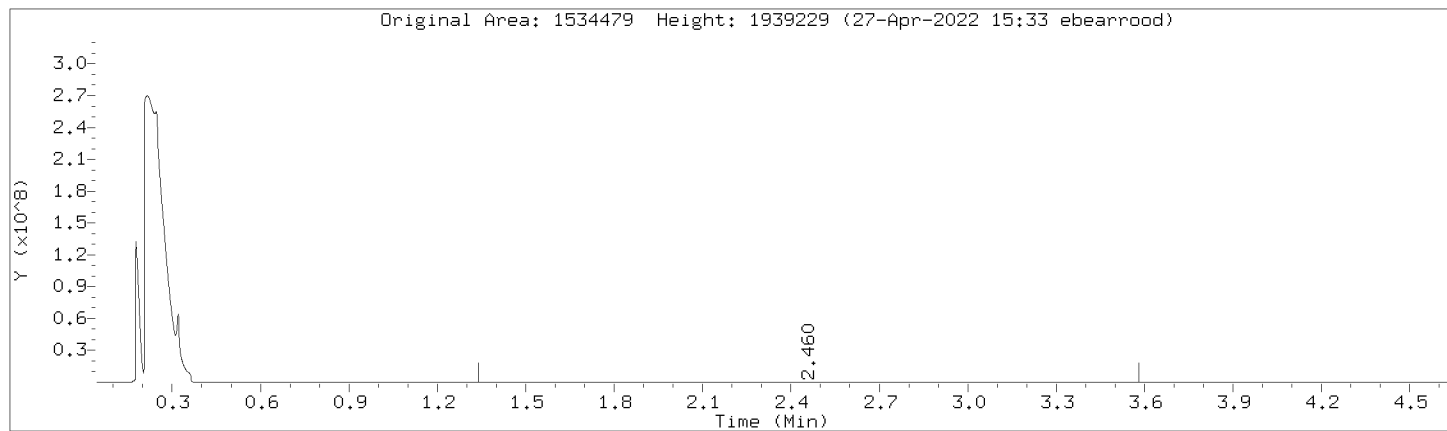
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



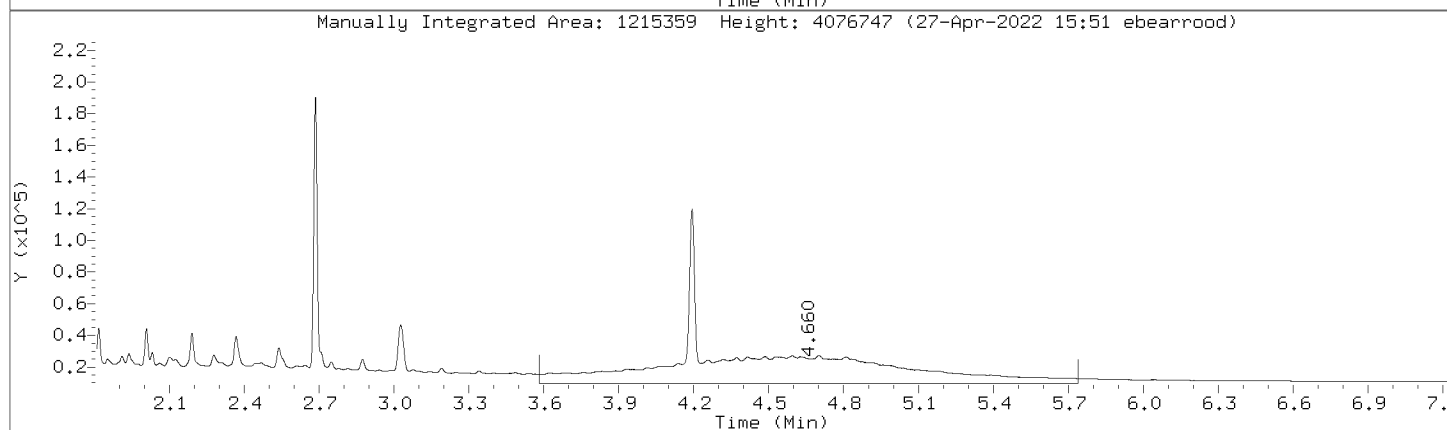
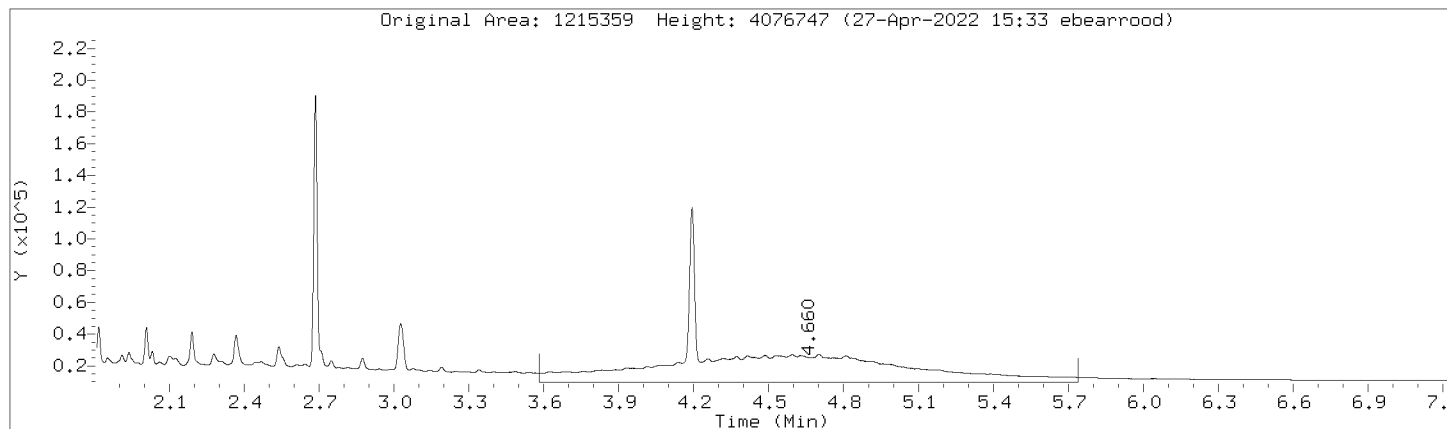
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



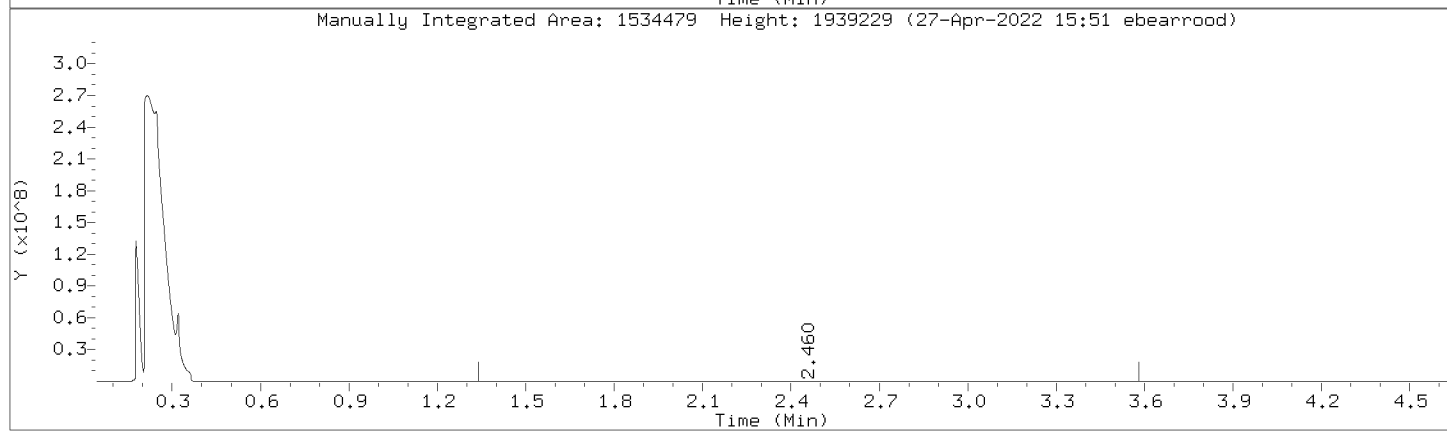
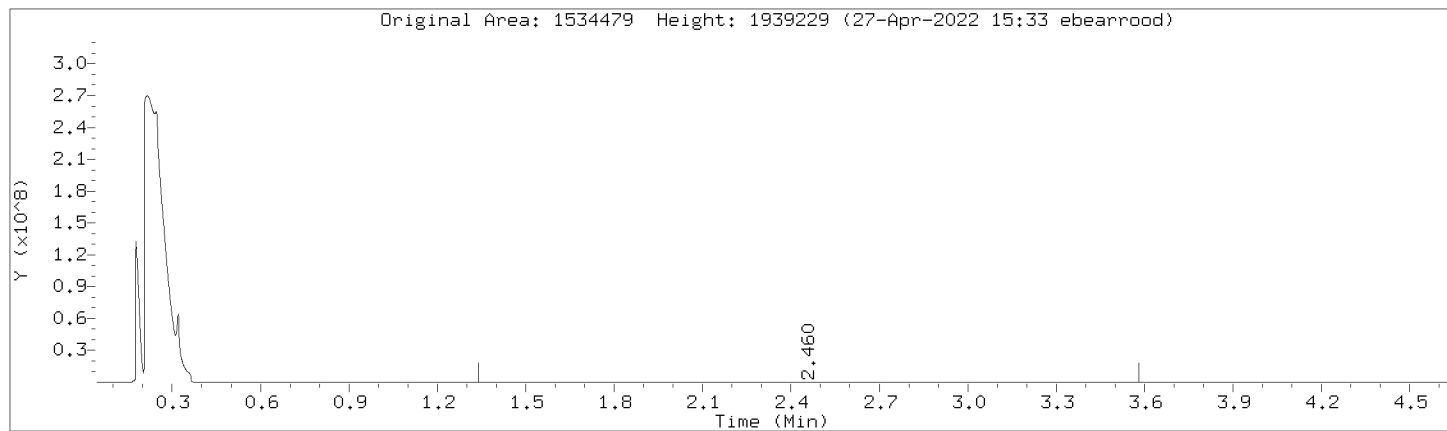
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



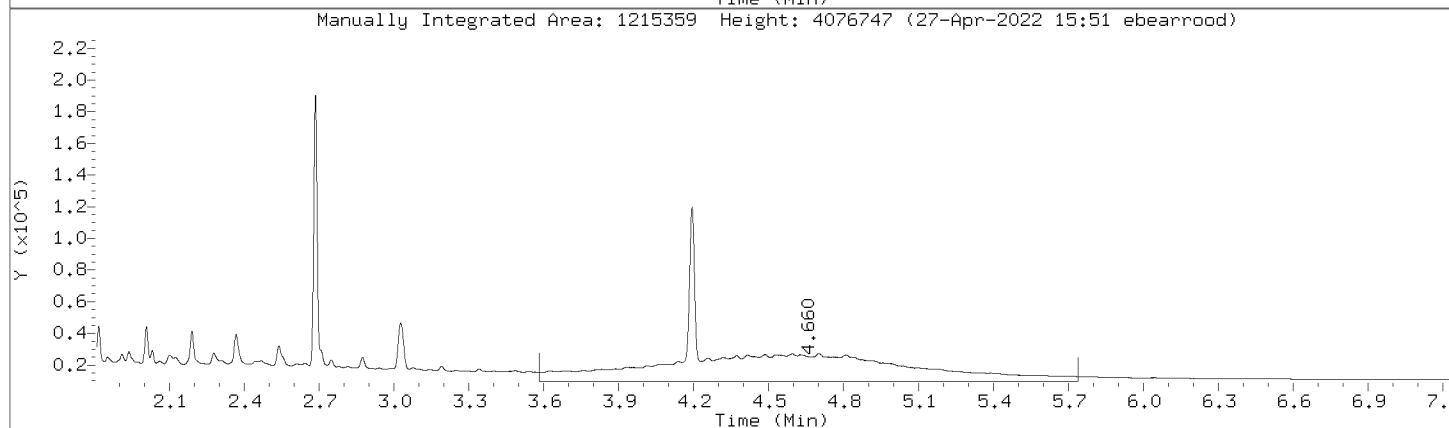
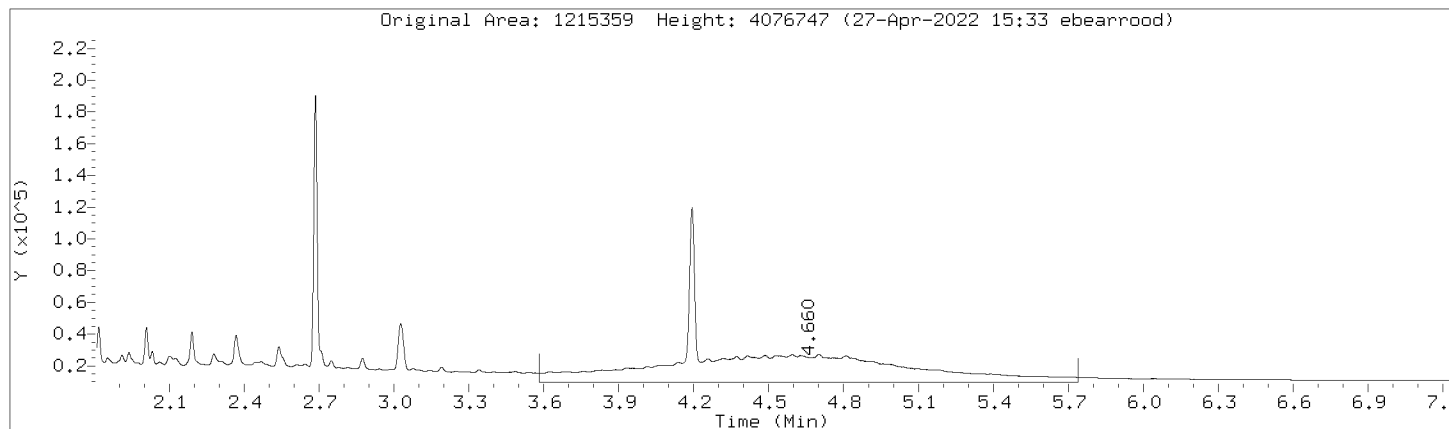
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

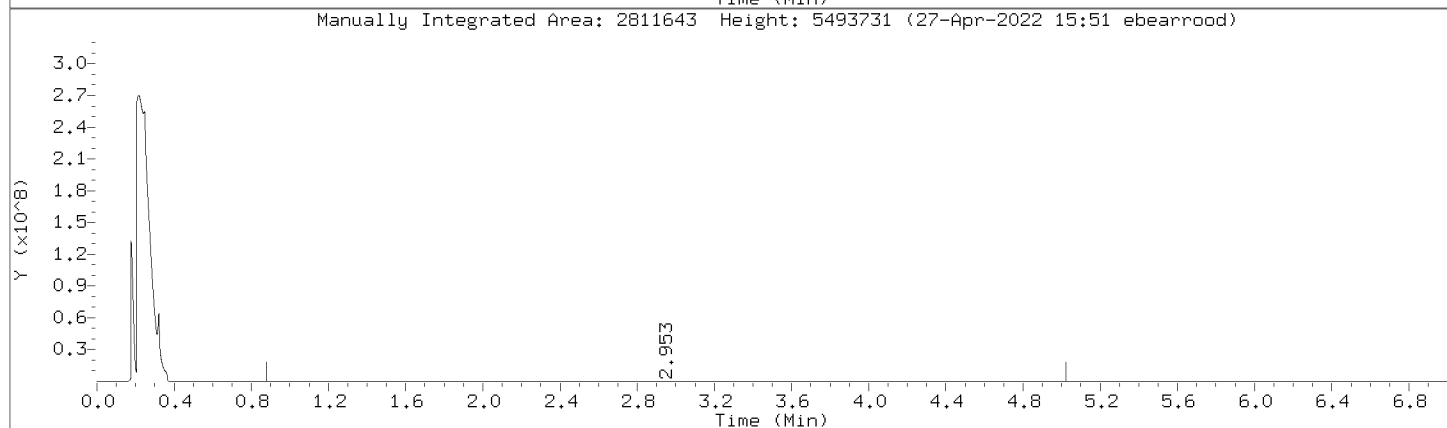
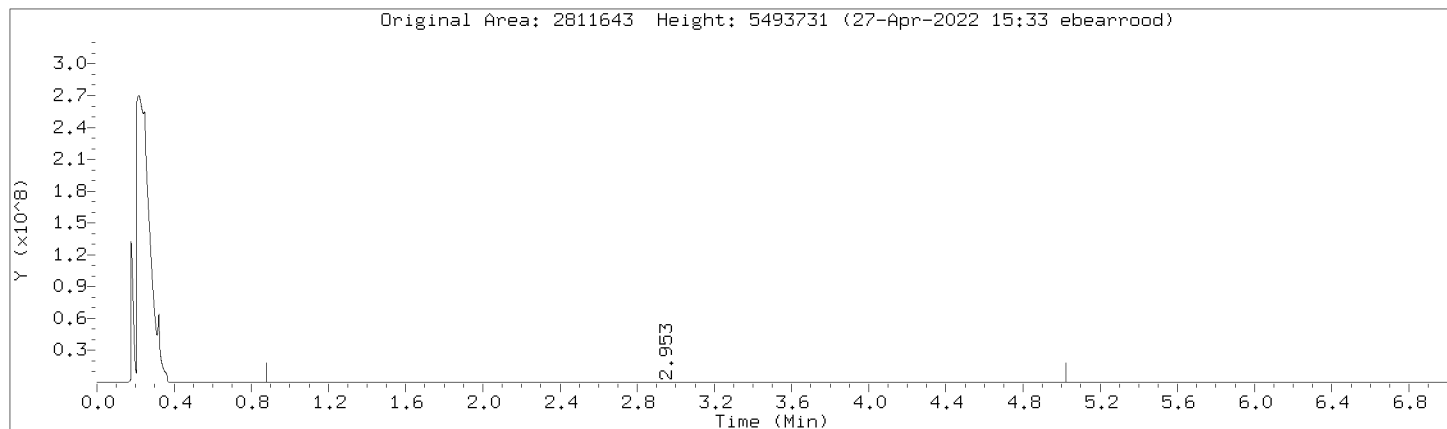
Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





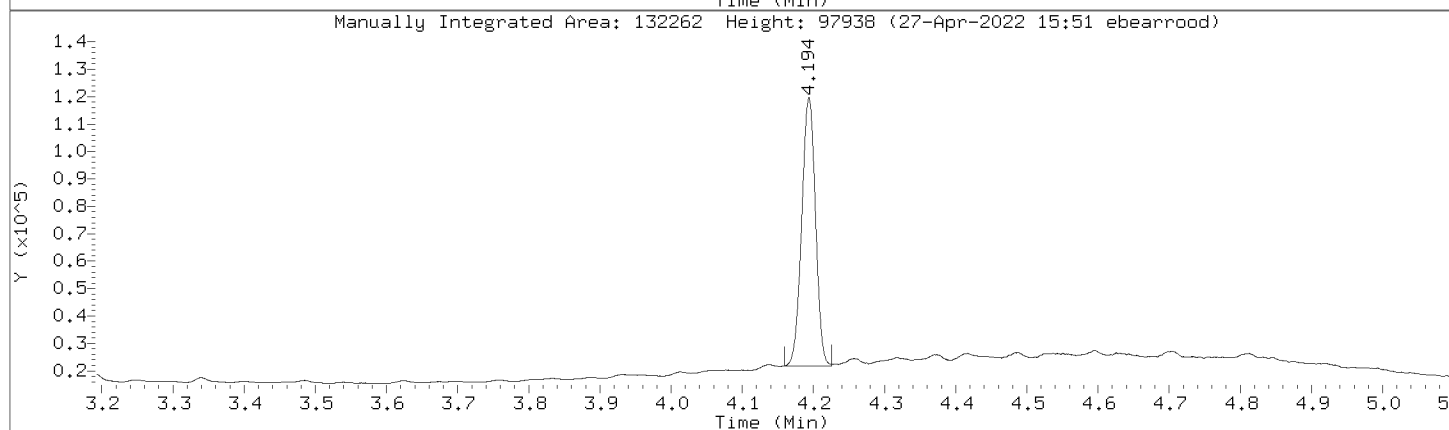
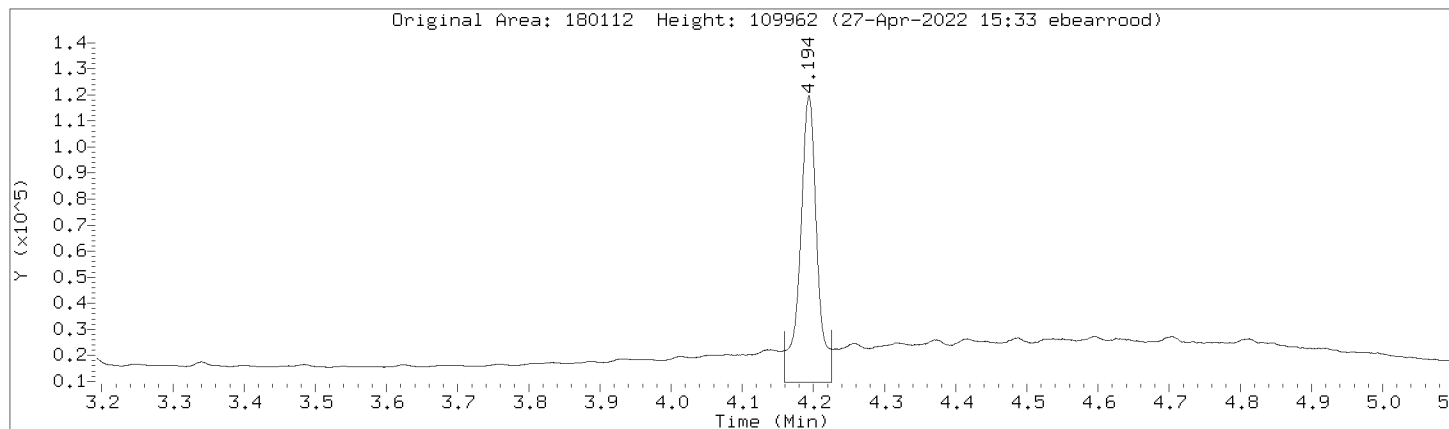
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



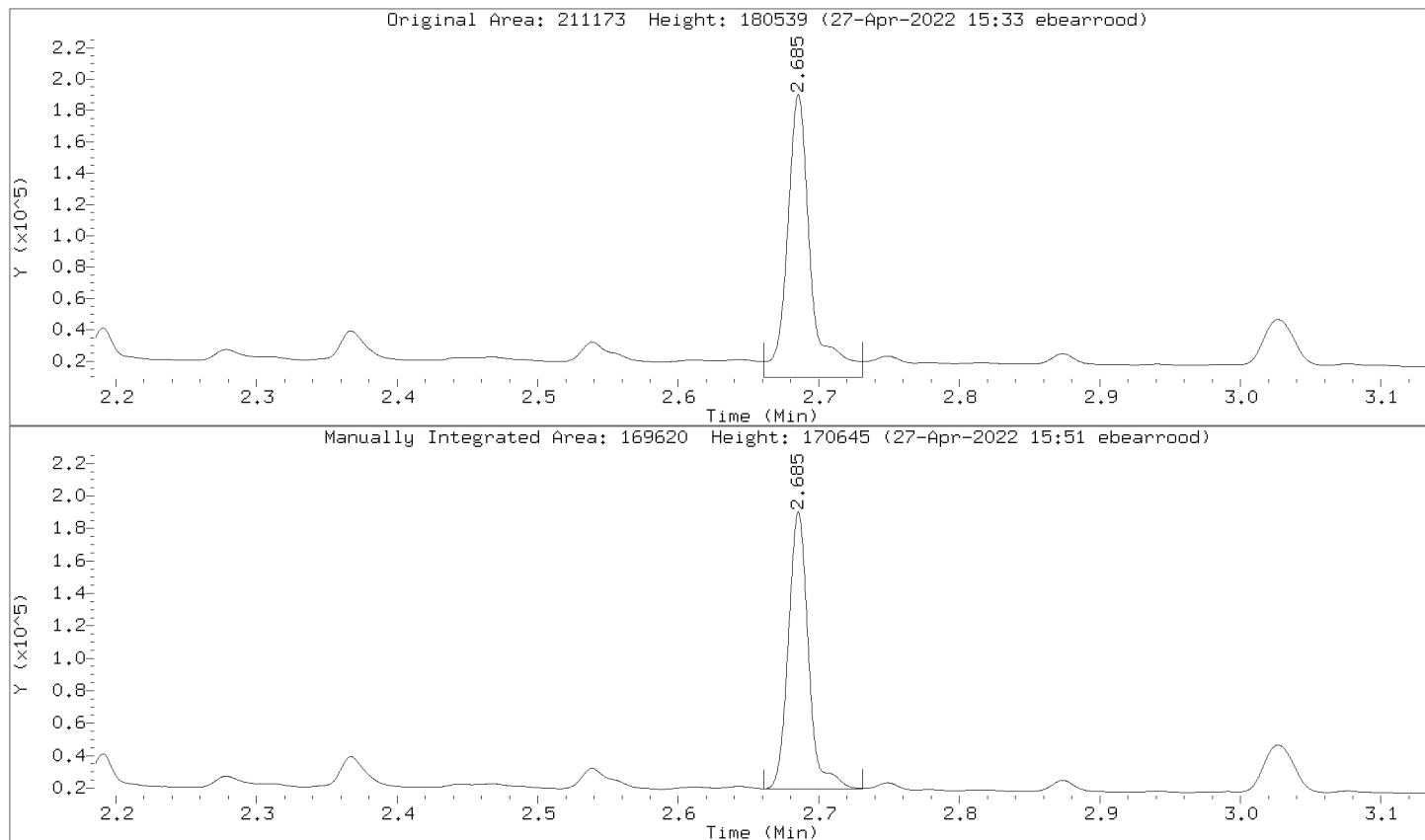
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
 Lab Smp Id: DMO-CAL7,362375:2 Client Smp ID: DMO-CAL7,362375:2  
 Inj Date : 27-APR-2022 14:08  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal7,362375:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 84 Calibration Sample, Level: 7  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		3278745 500.000	509	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.686	2.685 0.001		339936 50.0000	50.9	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.196	4.193 0.003		266300 50.0000	50.9	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		1893104 500.000	511	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		3731684 500.000	508	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		1980340 500.000	511	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		5171850 1000.00	1020	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		2757231 500.000	508	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		2757231 500.000	508	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		2350876 500.000	507	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		2350876 500.000	507	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 14:08

Client ID: DM0-CAL7.362375;2

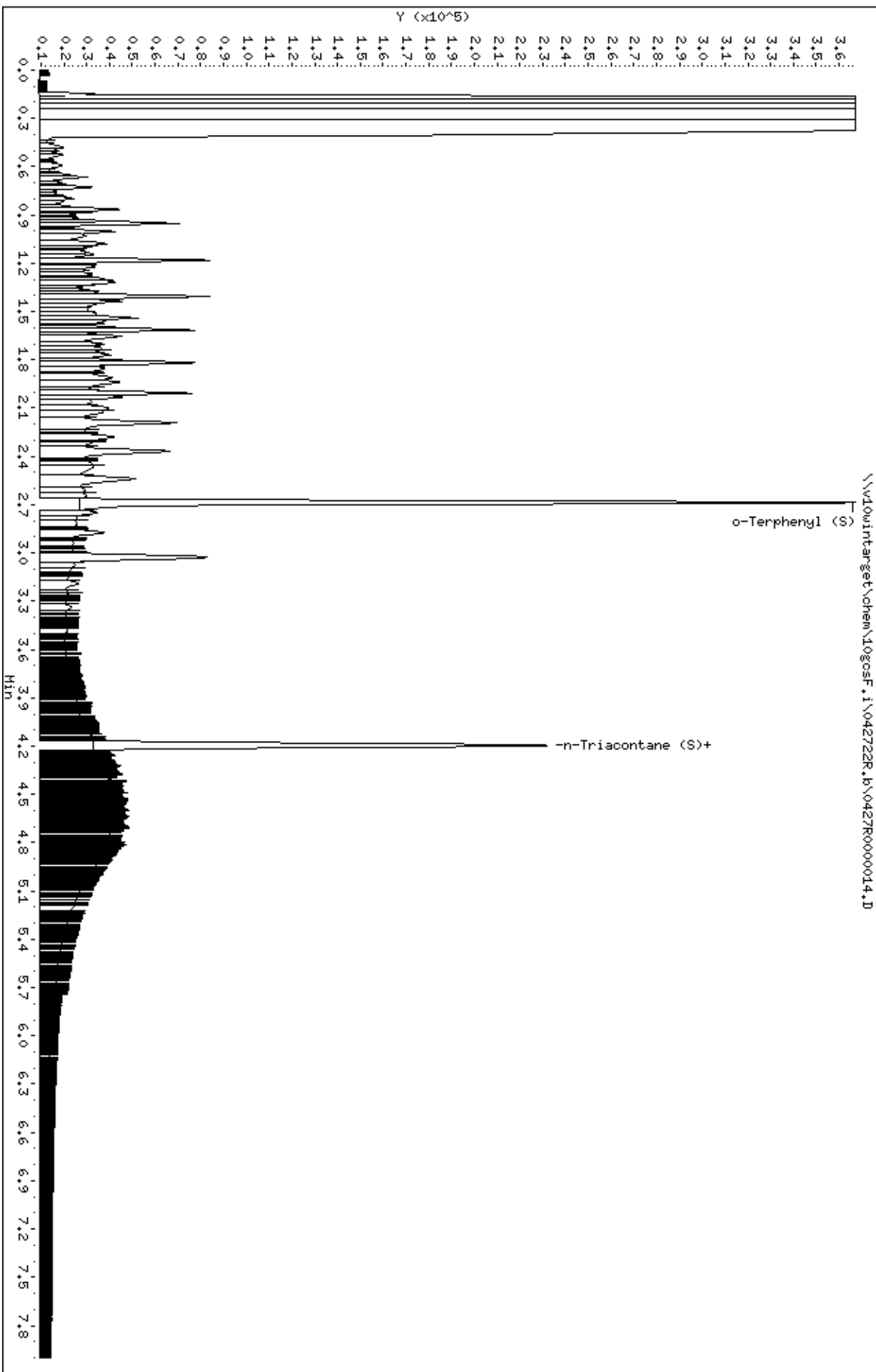
Sample Info: DM0-CAL7.362375;2

Column phase: DB-5-MS21430033

Instrument: 10goscF.1

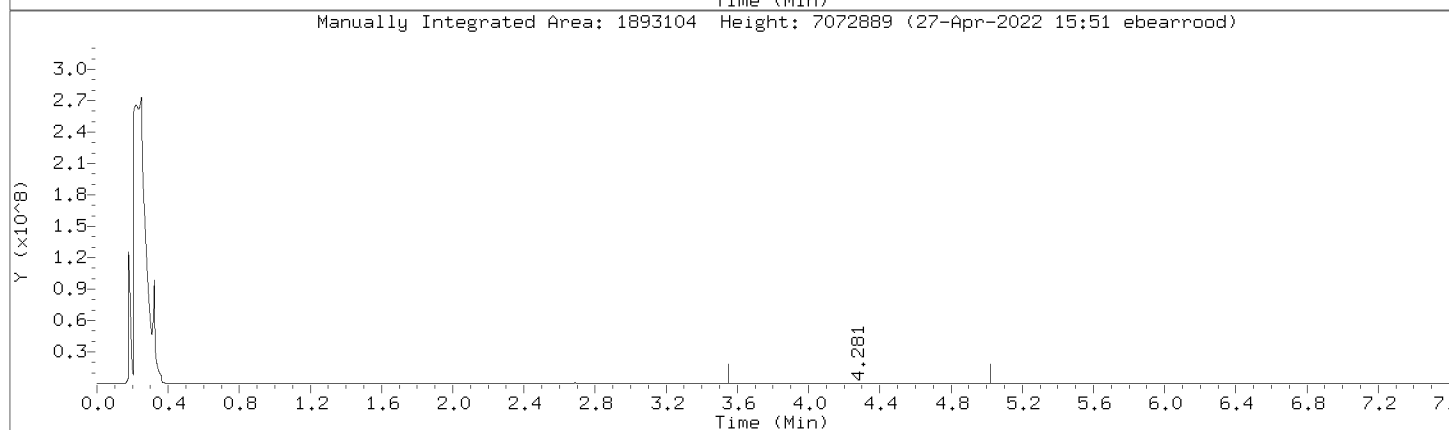
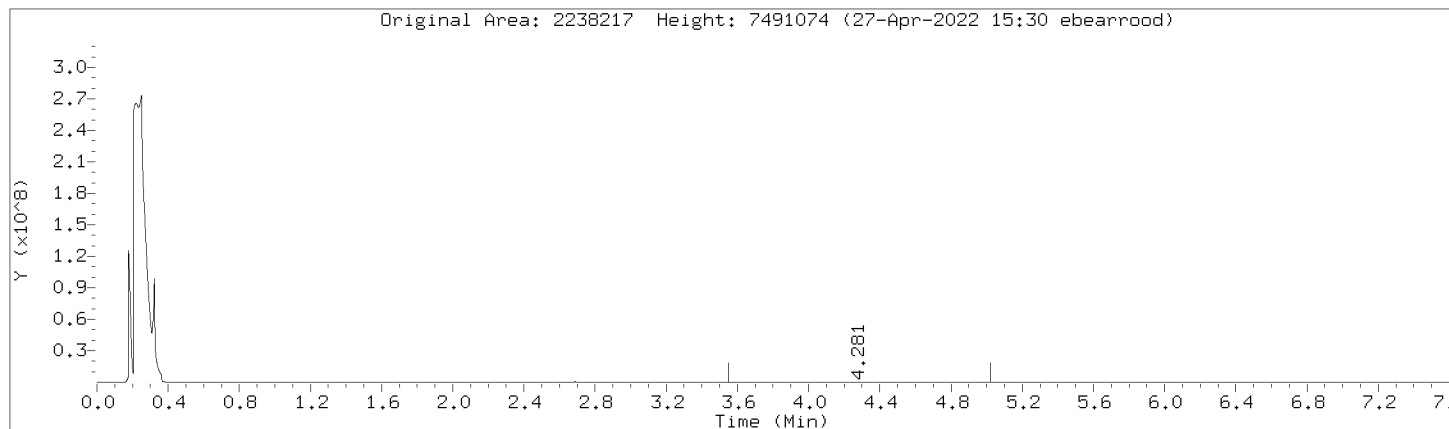
Operator: EB3

Column diameter: 0.32



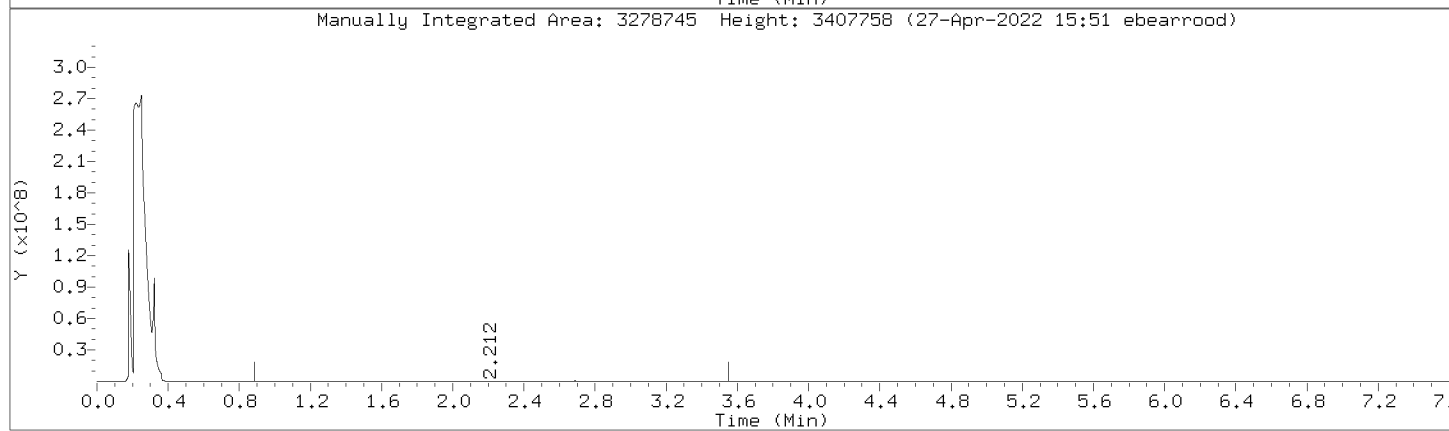
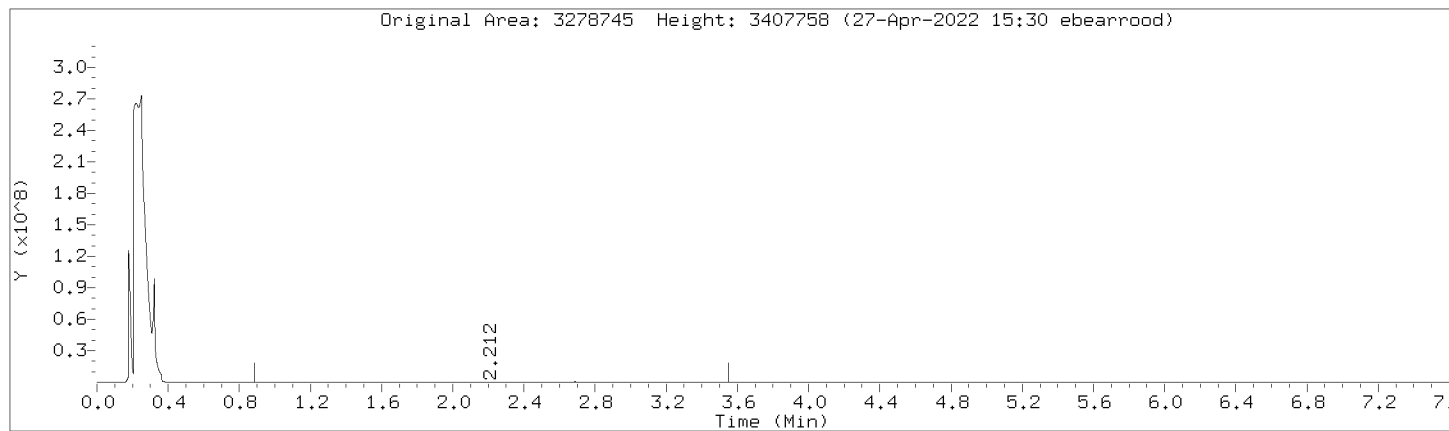
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

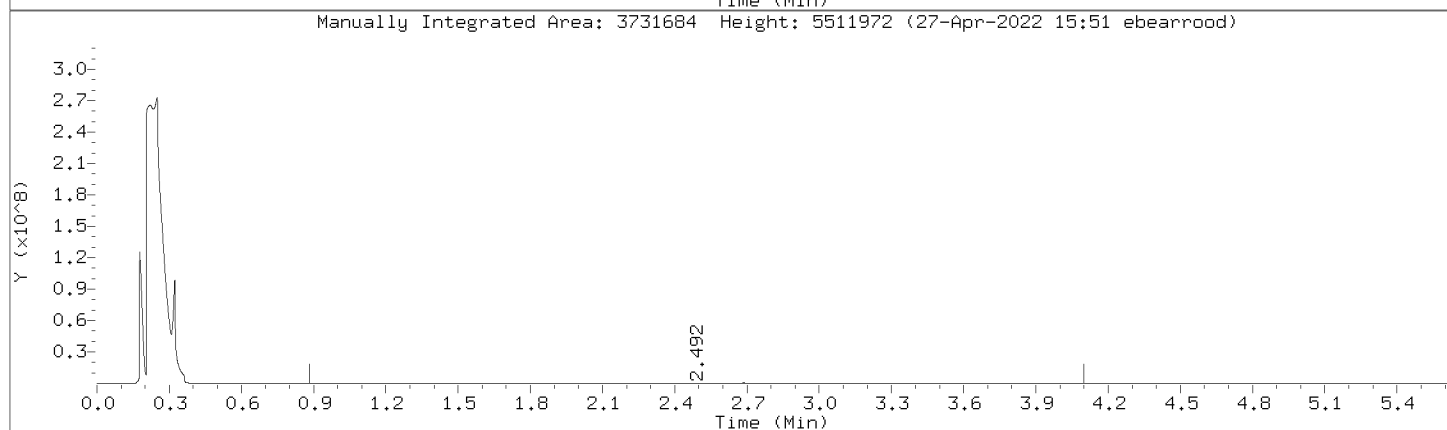
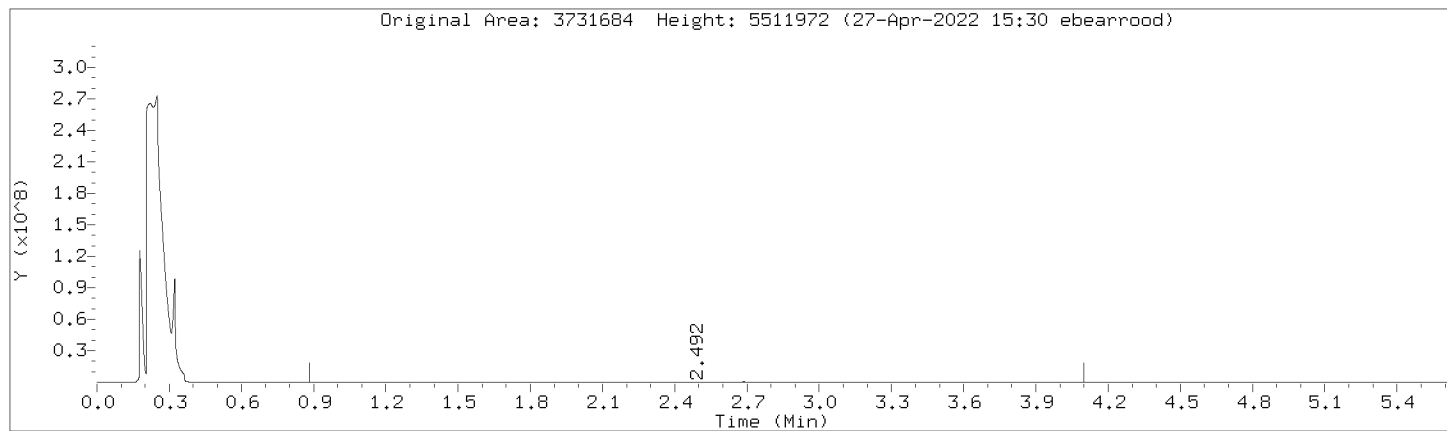
Compound: DRO by AK 102      Review Code: RNG  
CAS Number:





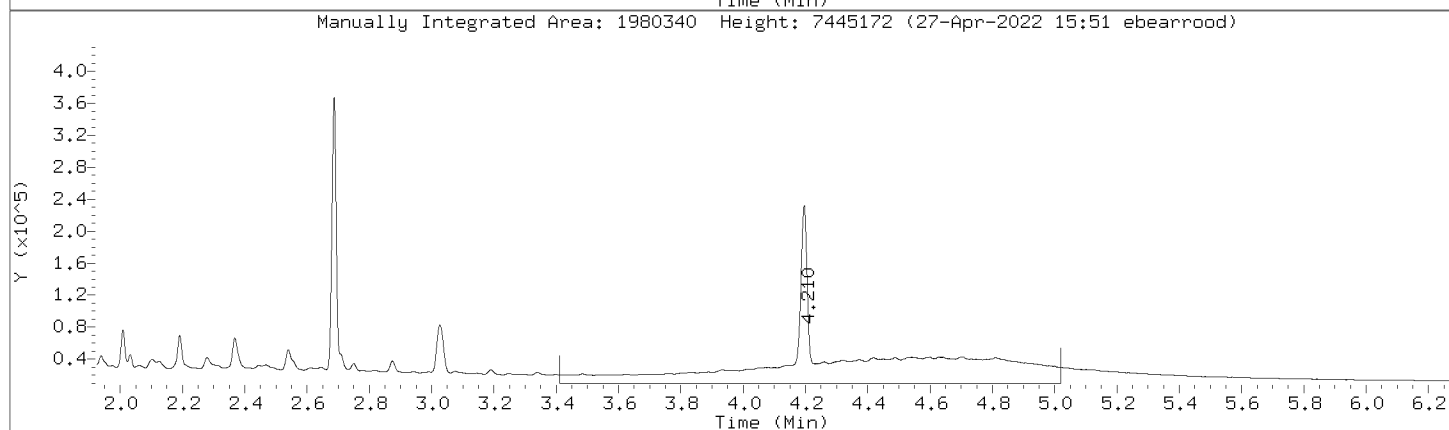
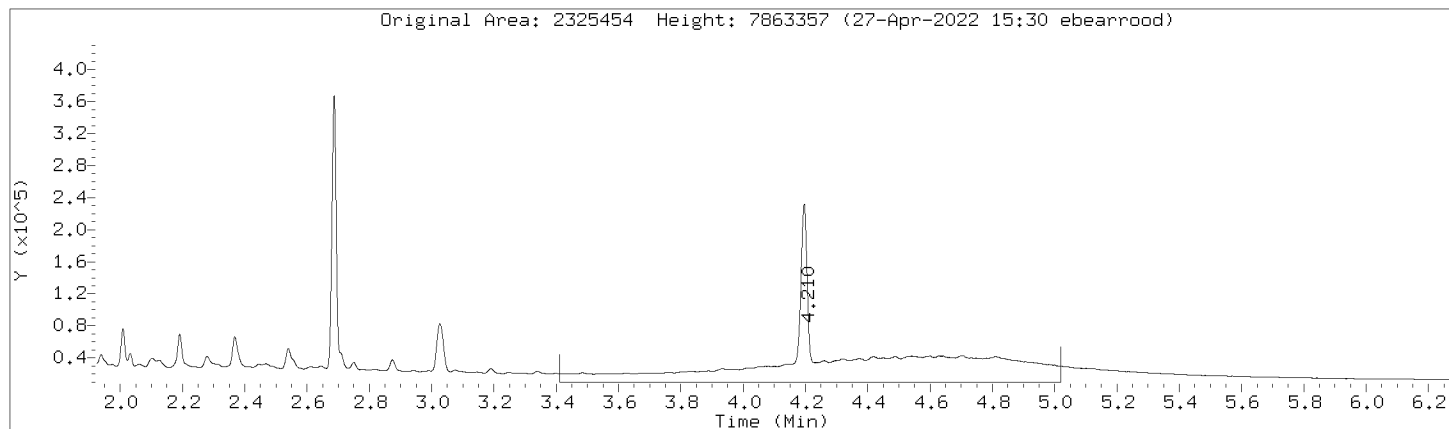
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



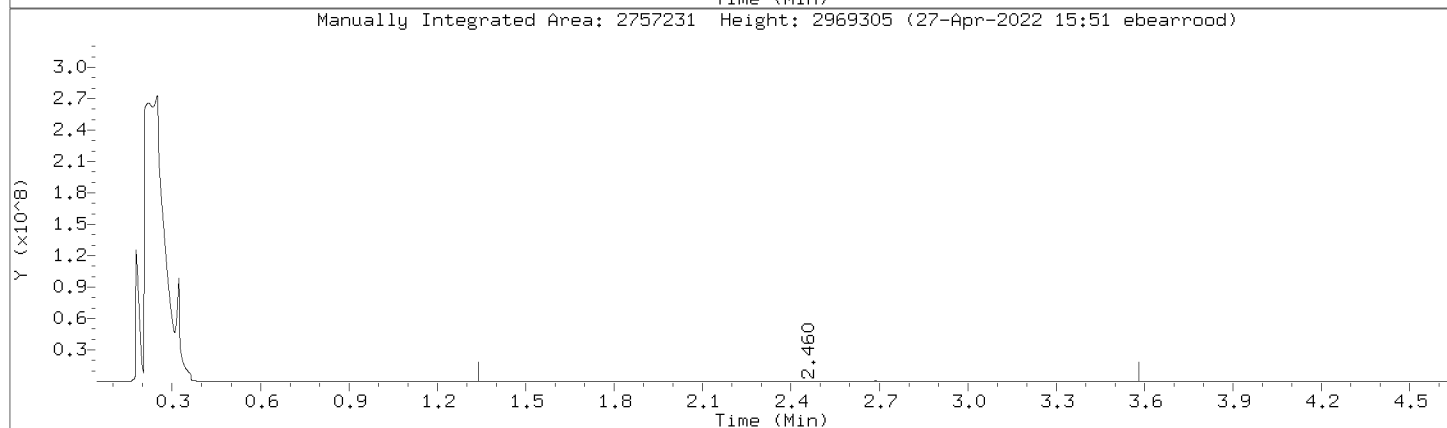
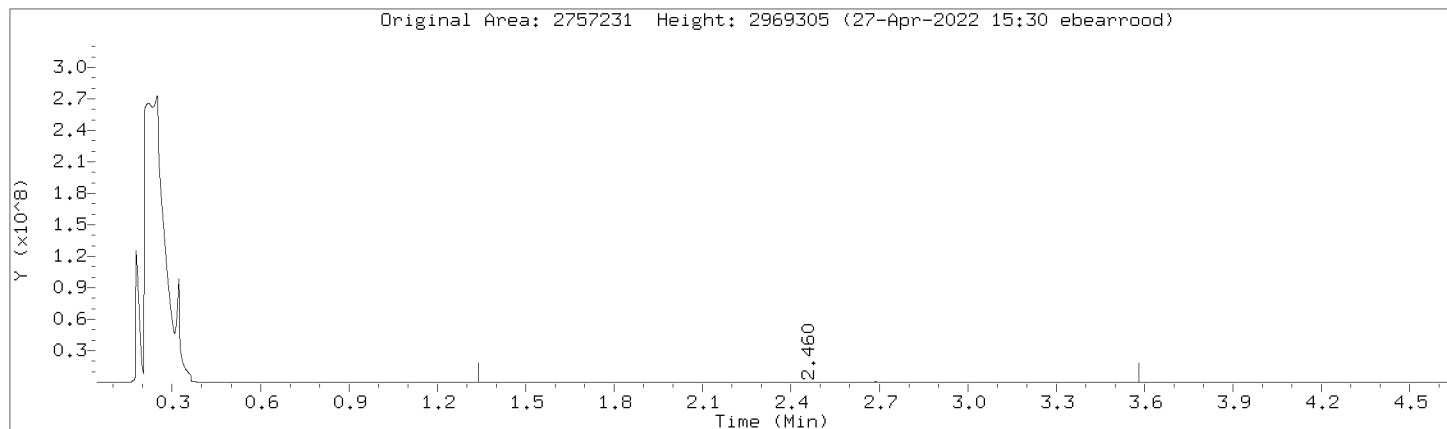
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Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



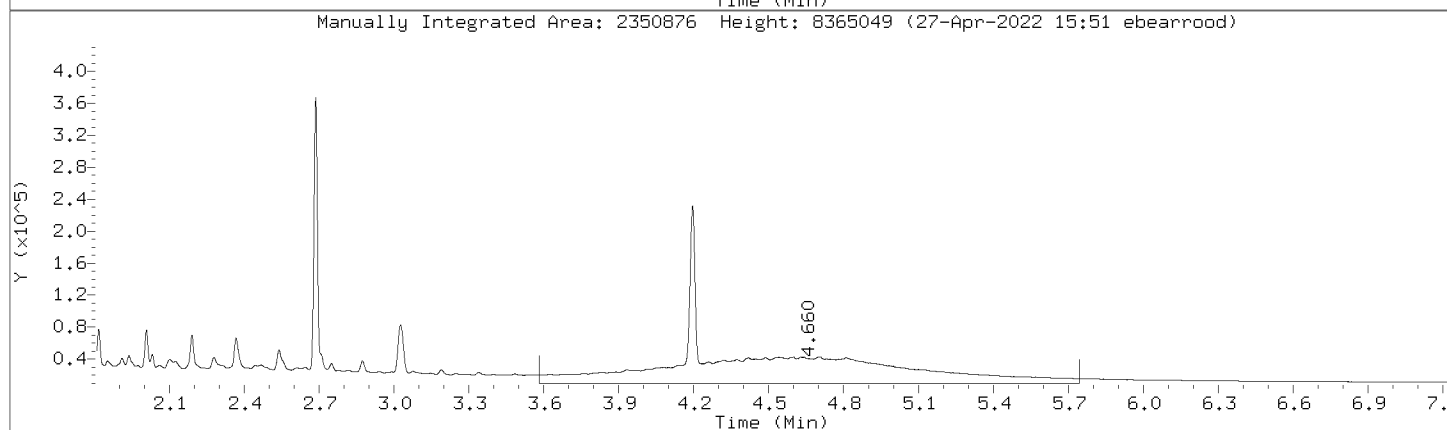
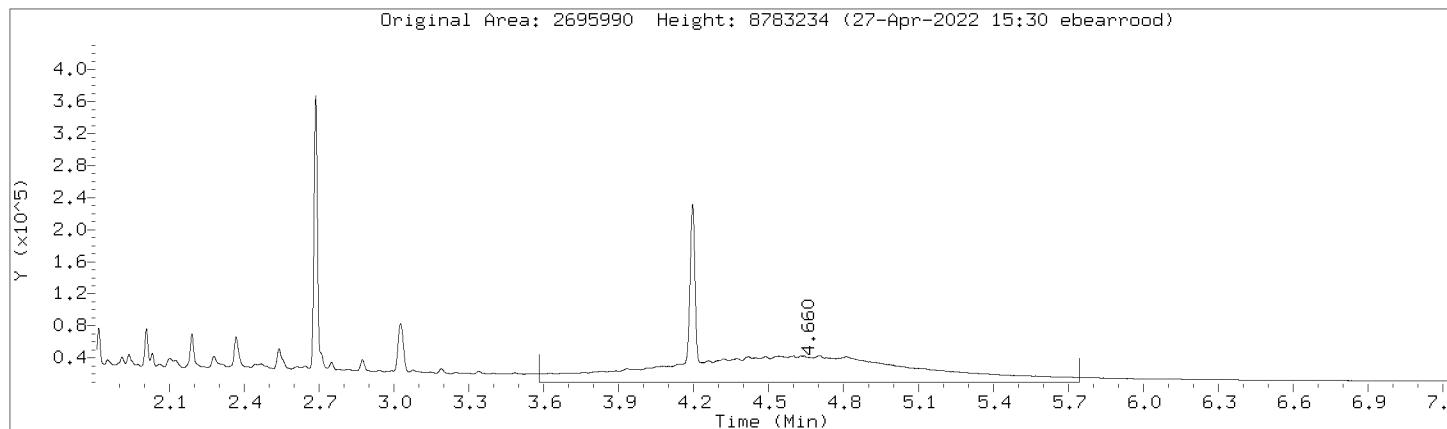
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Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



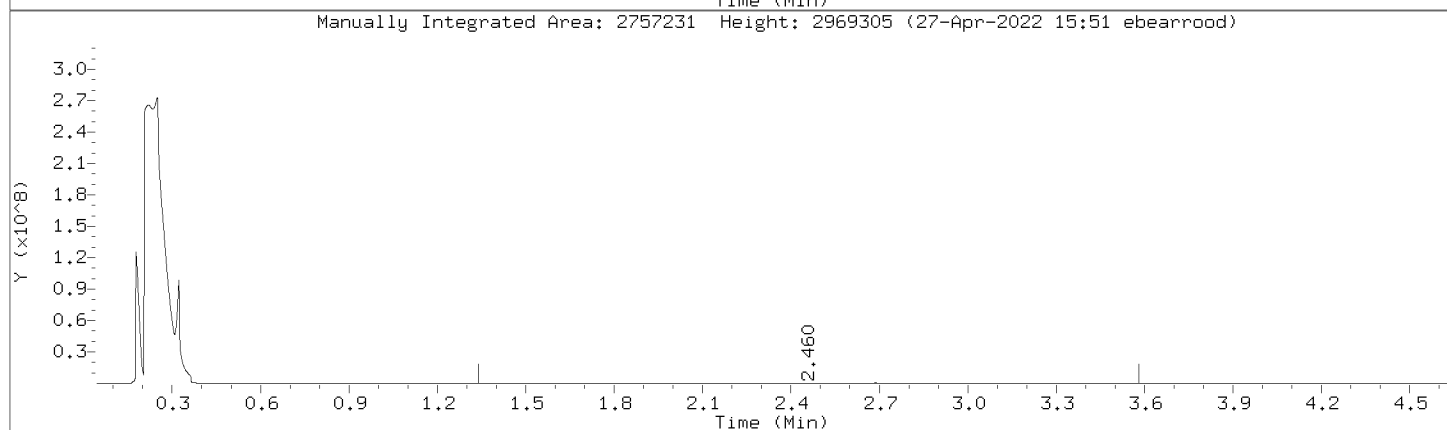
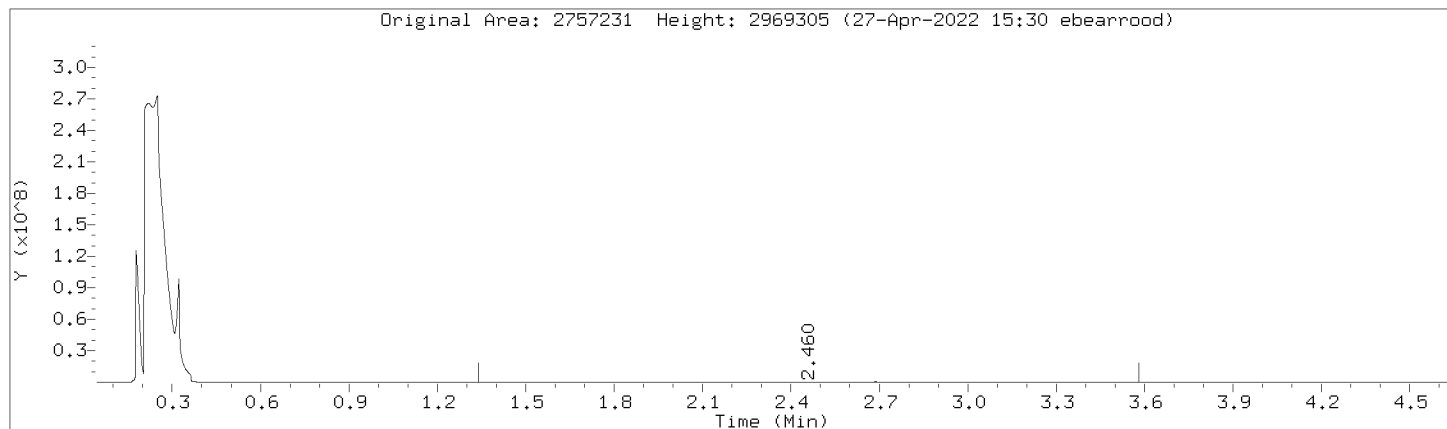
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Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



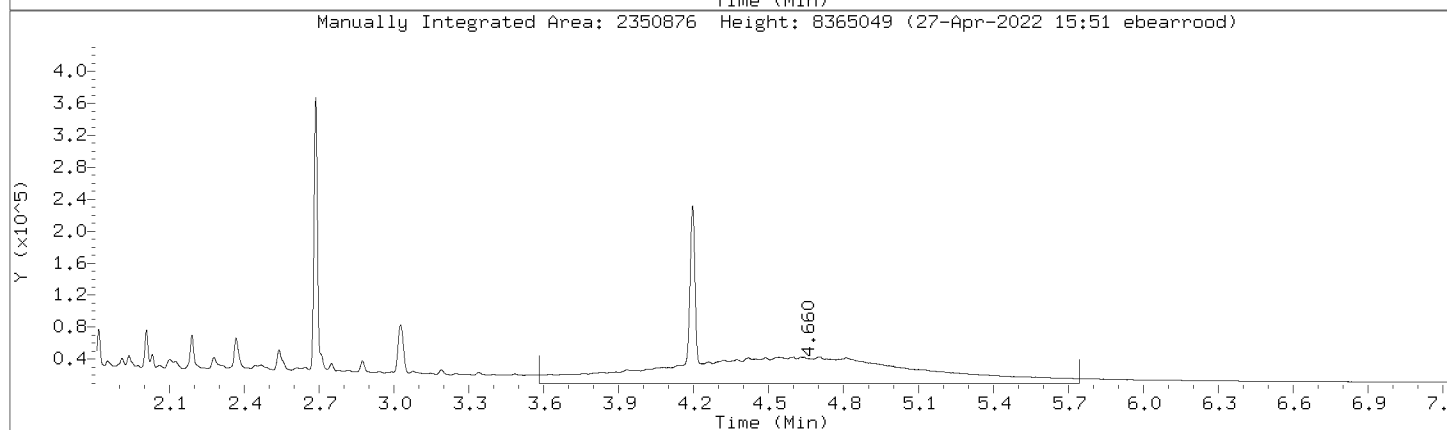
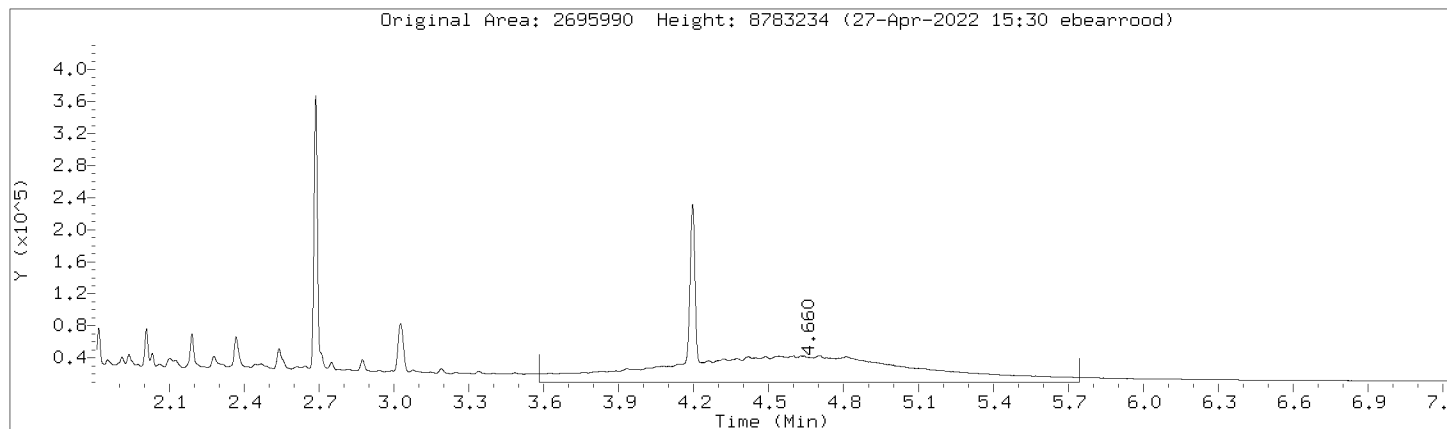
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Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



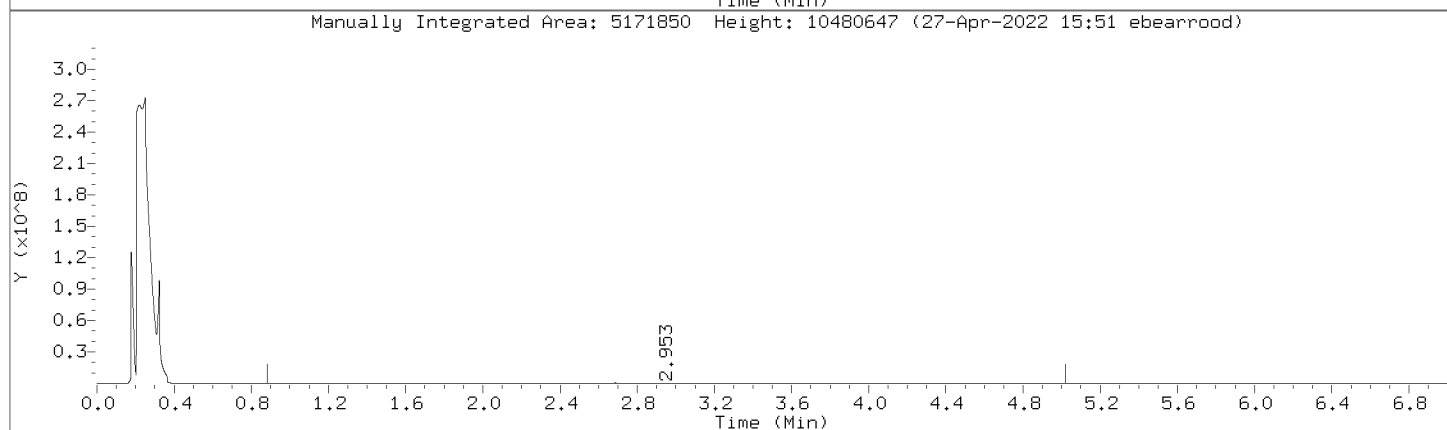
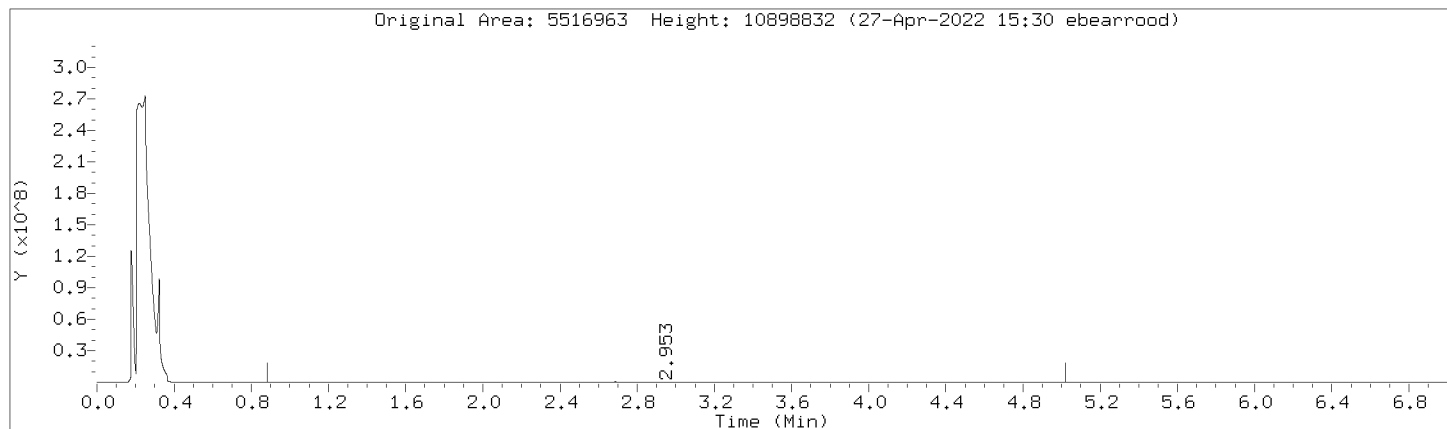
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



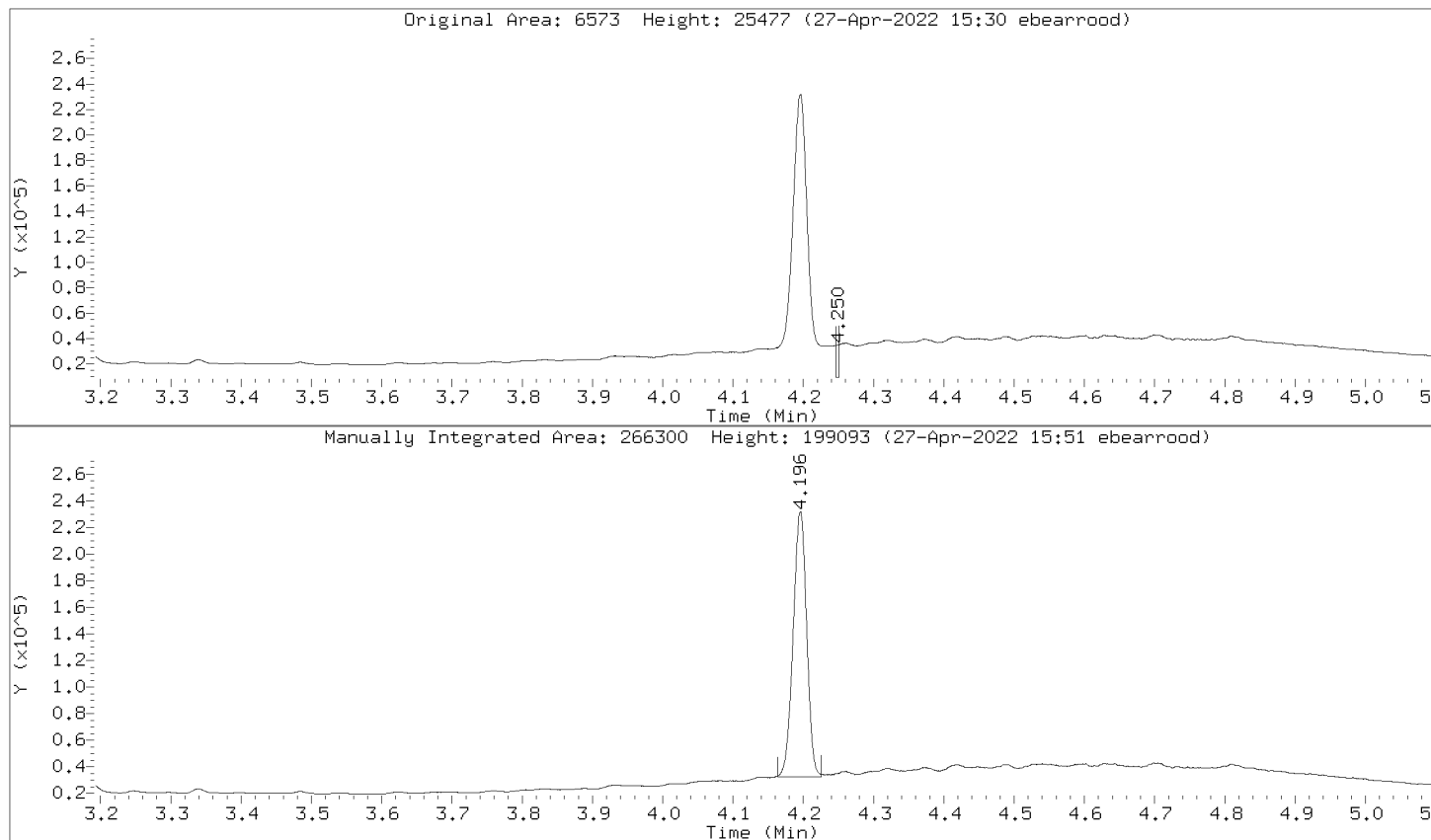
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Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

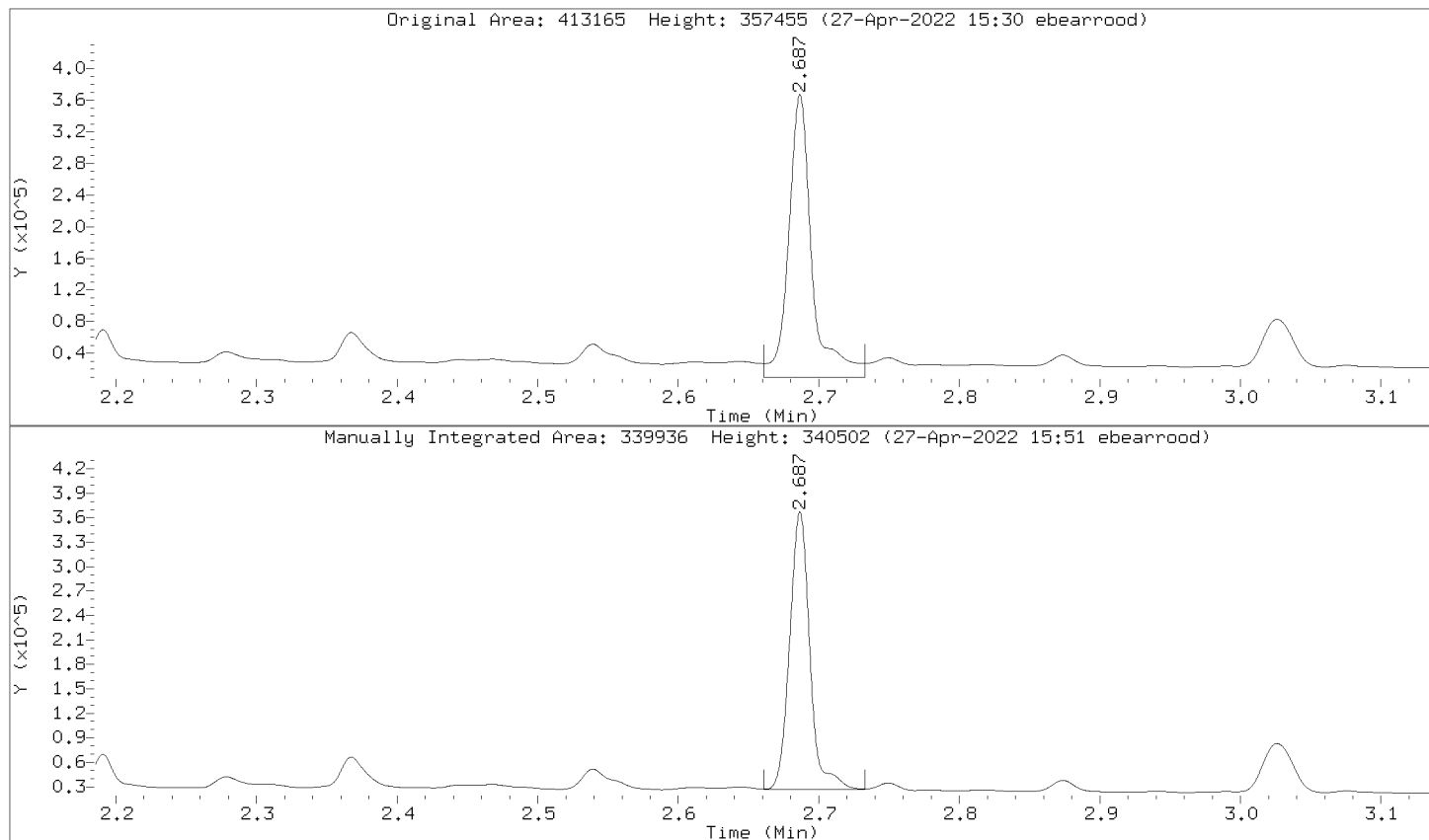
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
 Lab Smp Id: DMO-CAL8,362376:2 Client Smp ID: DMO-CAL8,362376:2  
 Inj Date : 27-APR-2022 14:19  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal8,362376:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 85 Calibration Sample, Level: 8  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	-	3.540	6183718 1000.00	1020	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.687	2.685	0.002	670939 100.000	101	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.197	4.193	0.004	528228 100.000	102	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	-	5.020	3660871 1000.00	1020	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	-	4.099	7059201 1000.00	1020	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	-	5.020	3812366 1000.00	1020	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	-	5.020	9844589 2000.00	2030	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	-	3.580	5194648 1000.00	1010	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	-	3.580	5194648 1000.00	1010	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	-	5.740	4563549 1000.00	1010	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	-	5.740	4563549 1000.00	1010	(M) RNG
-----					

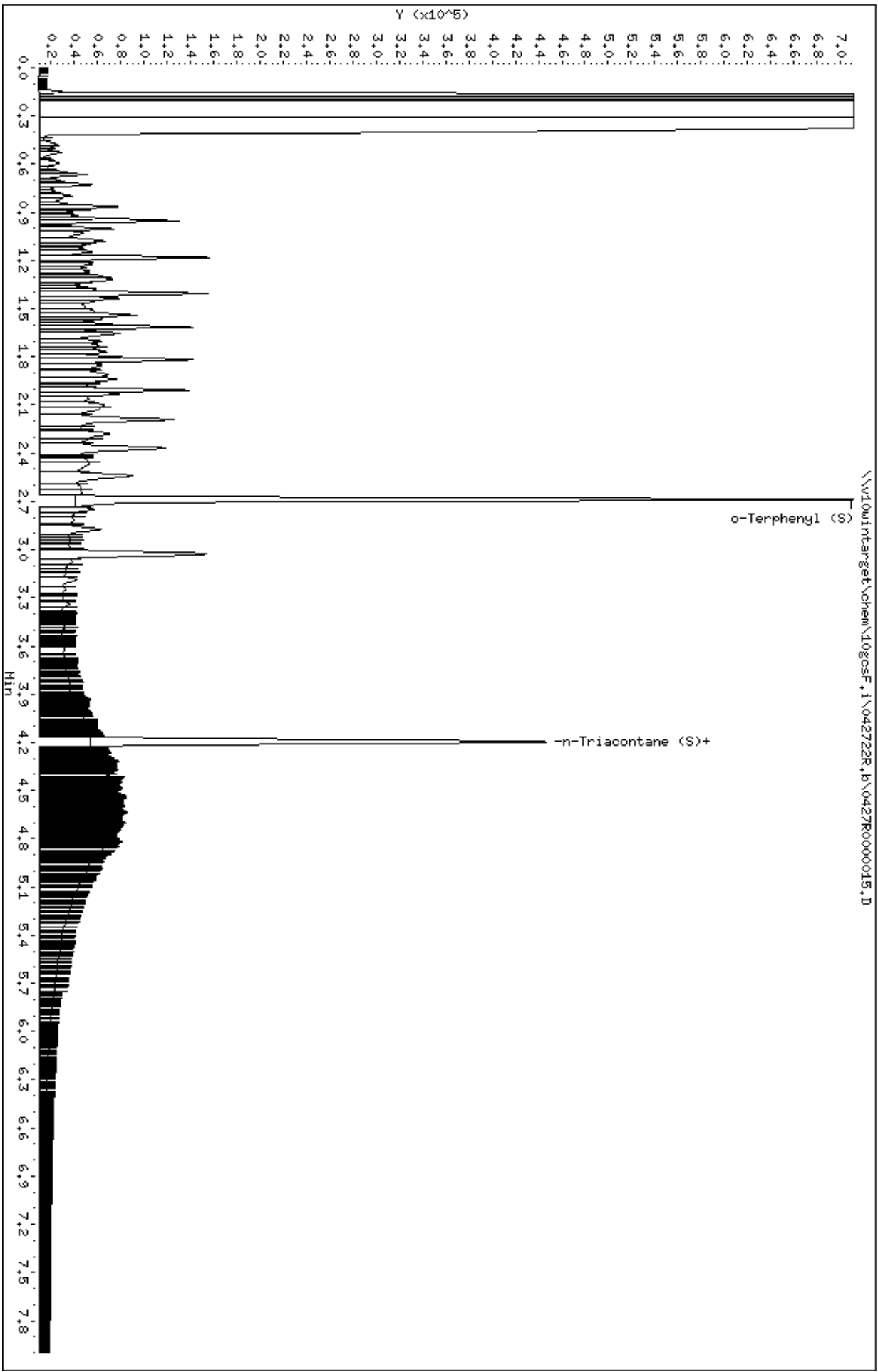
QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

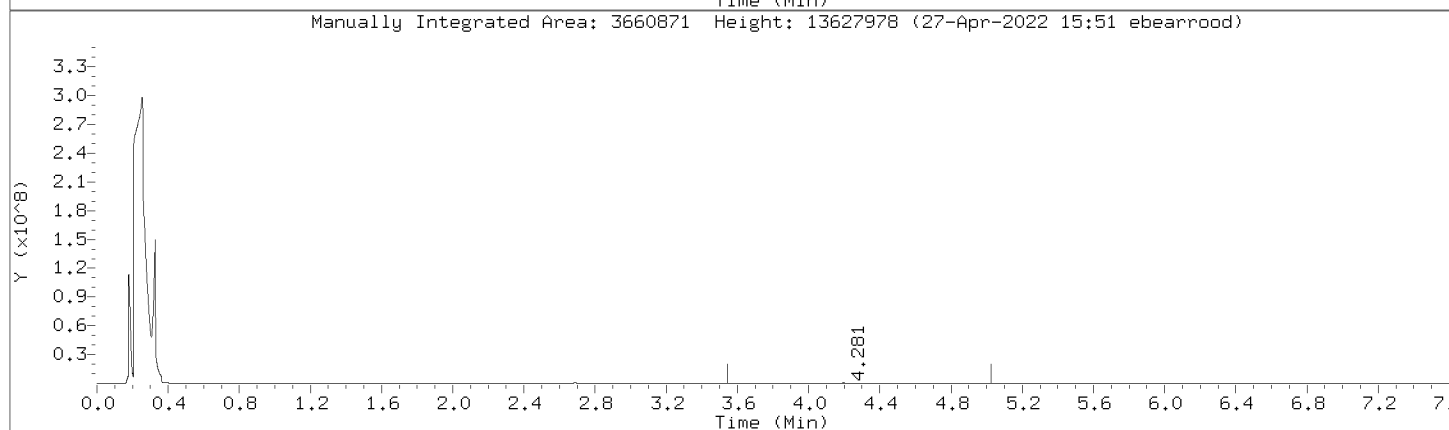
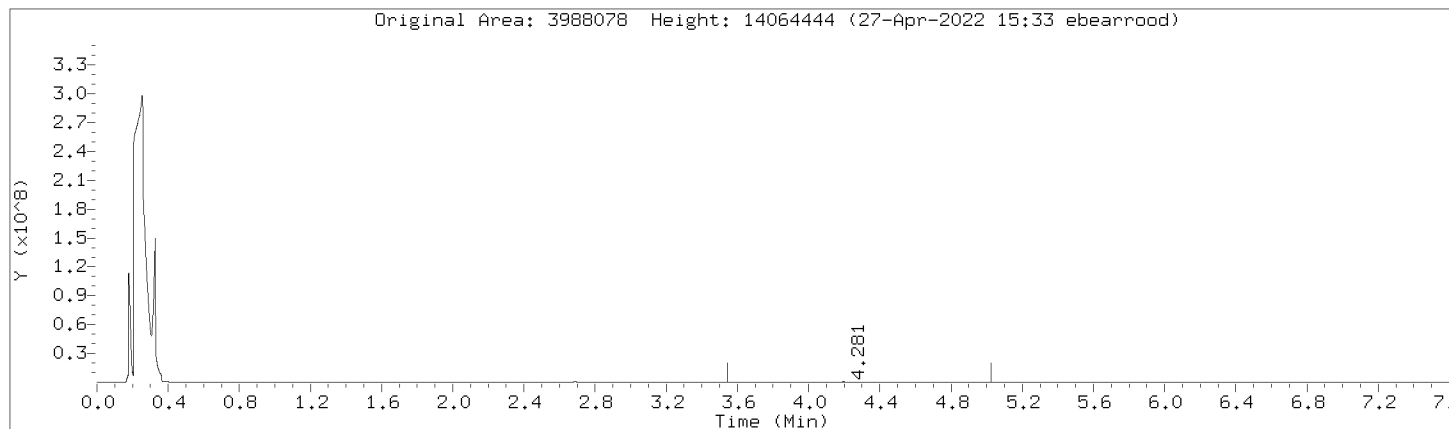
RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.



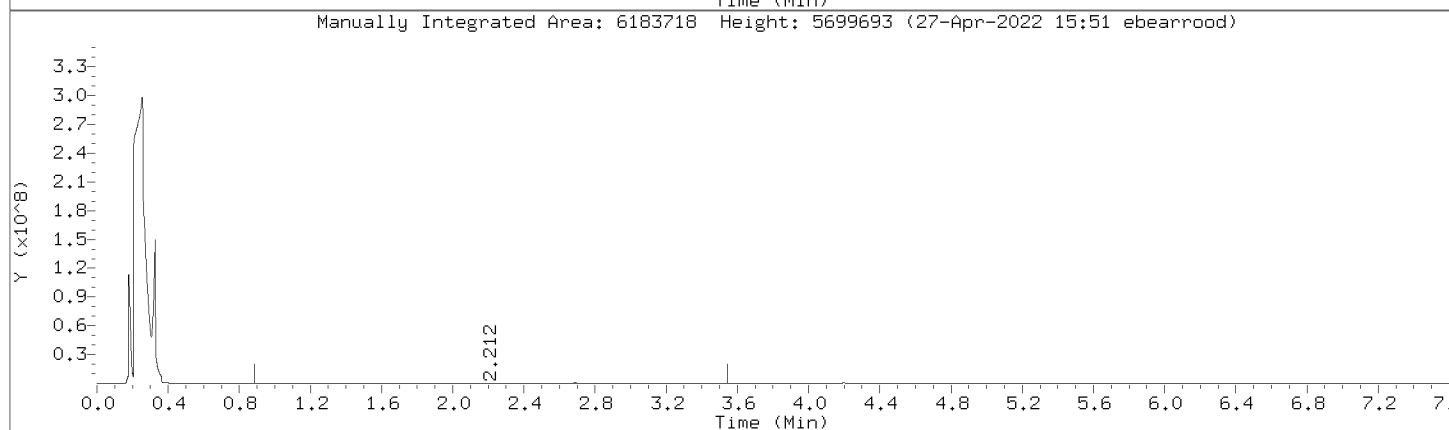
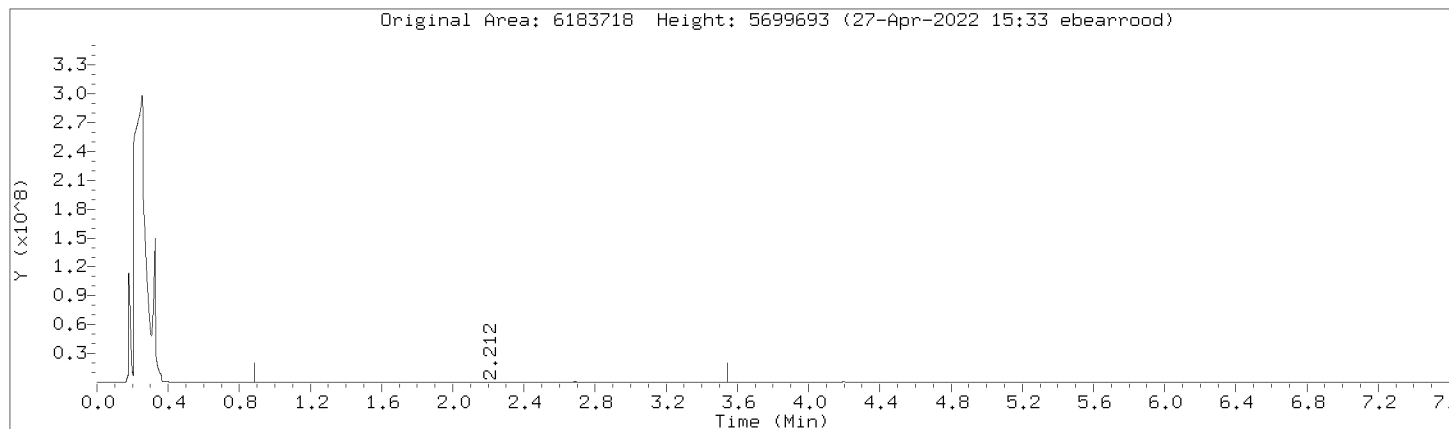
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



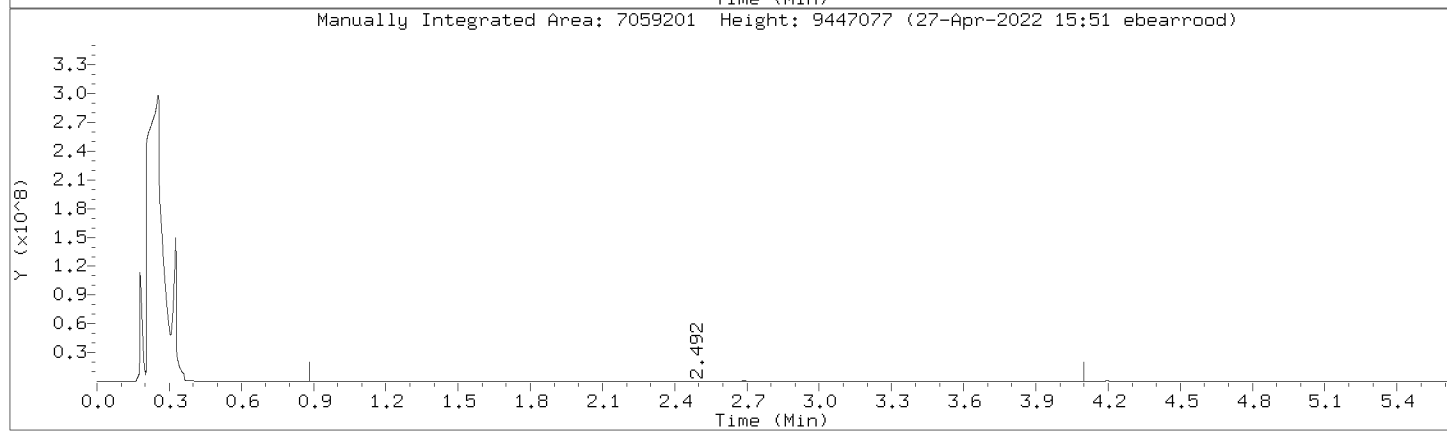
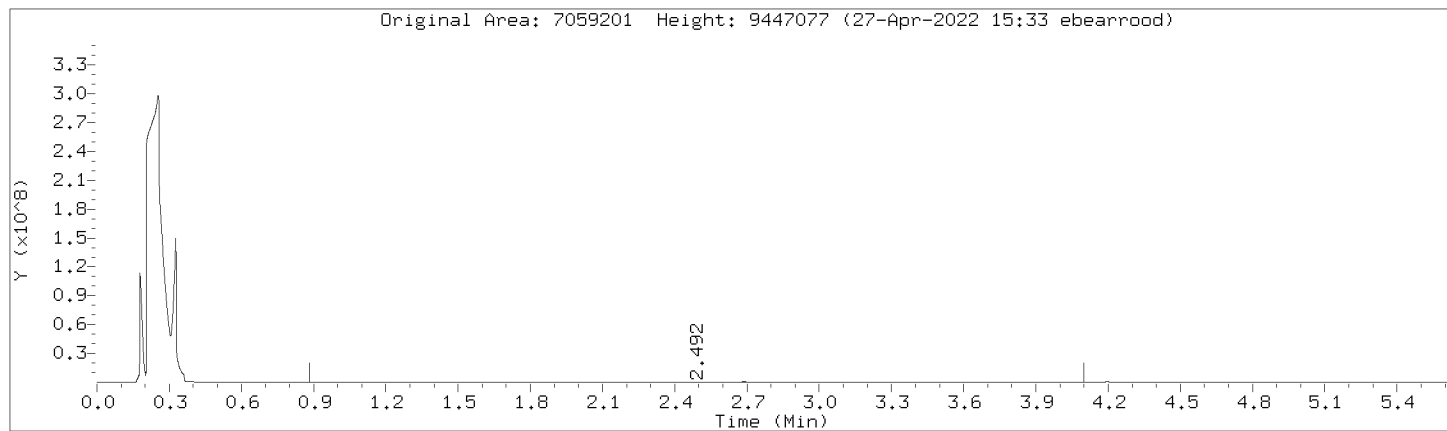
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Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



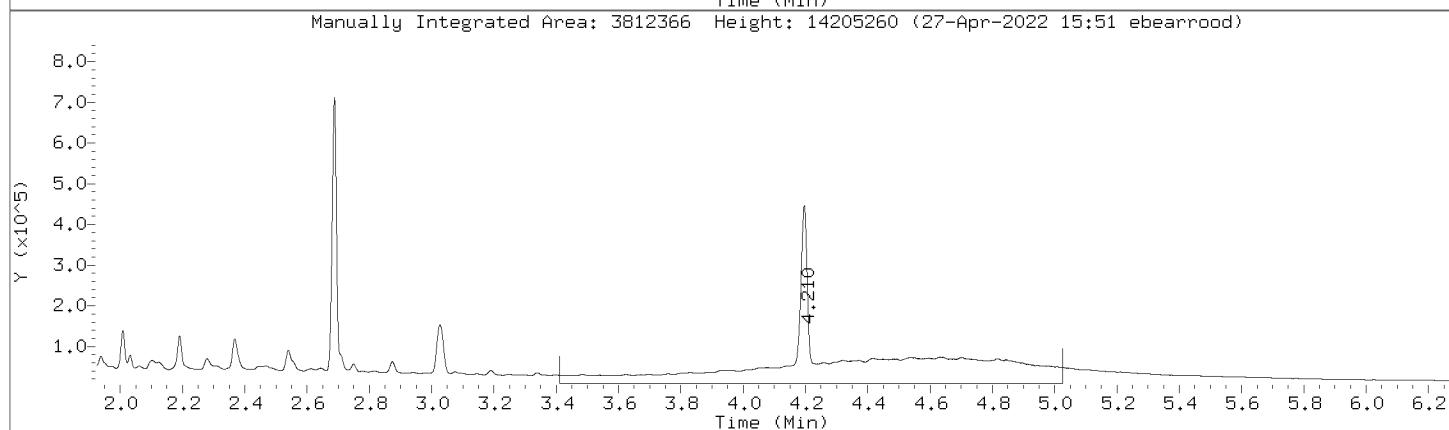
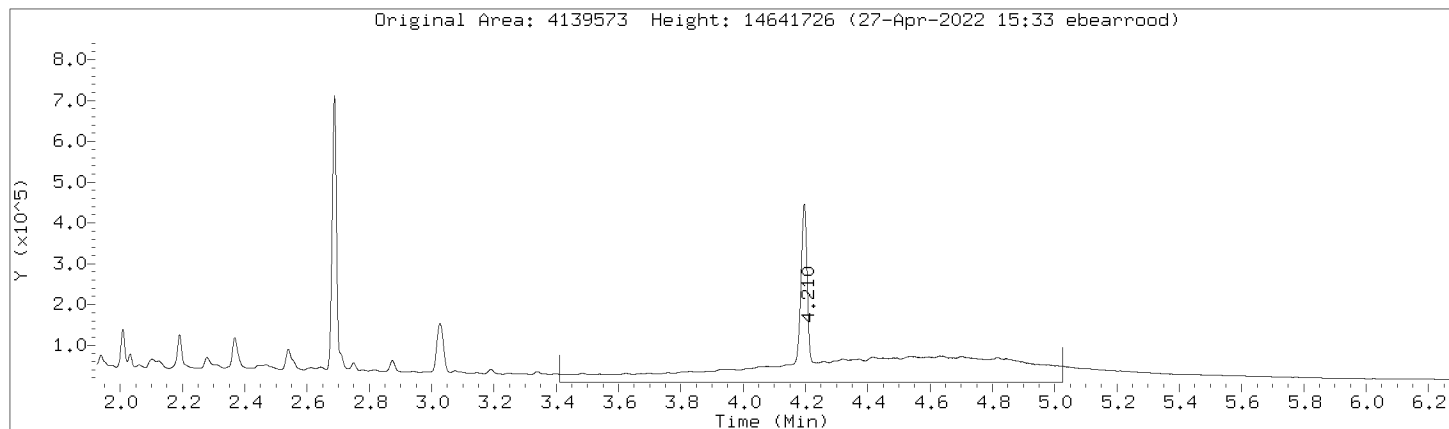
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Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

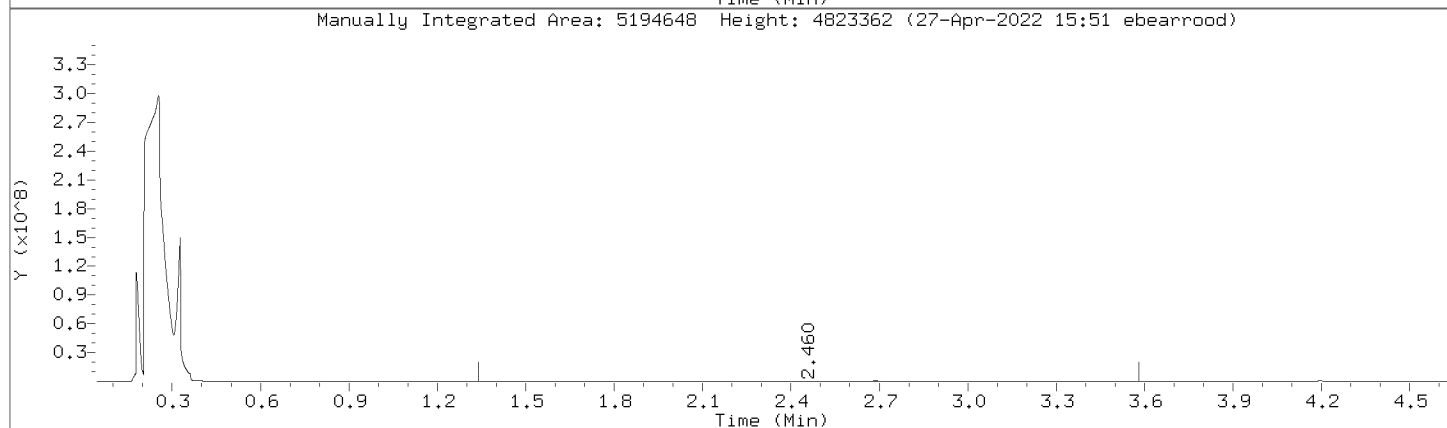
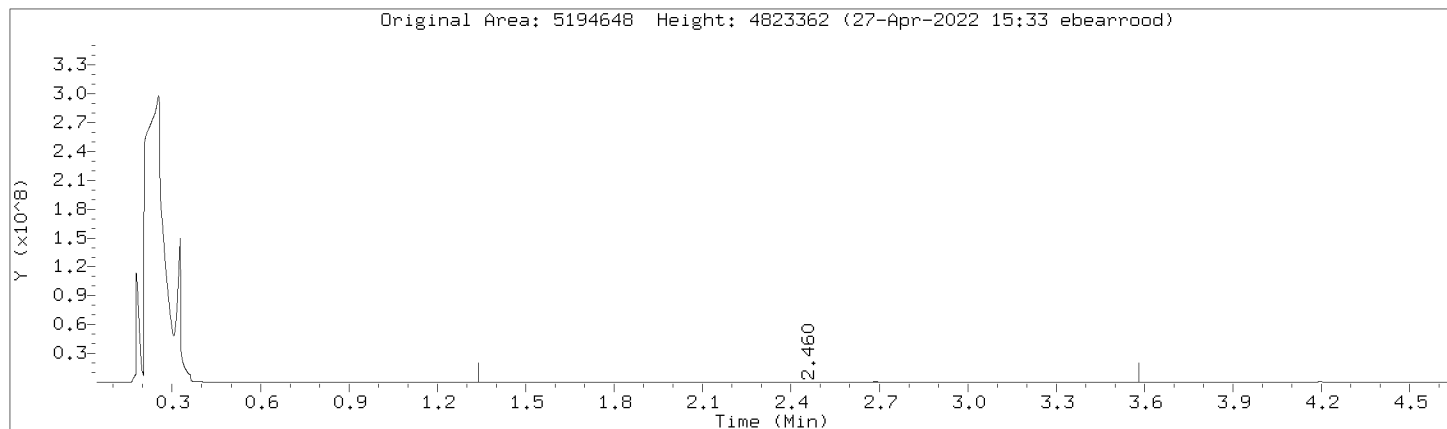
Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:





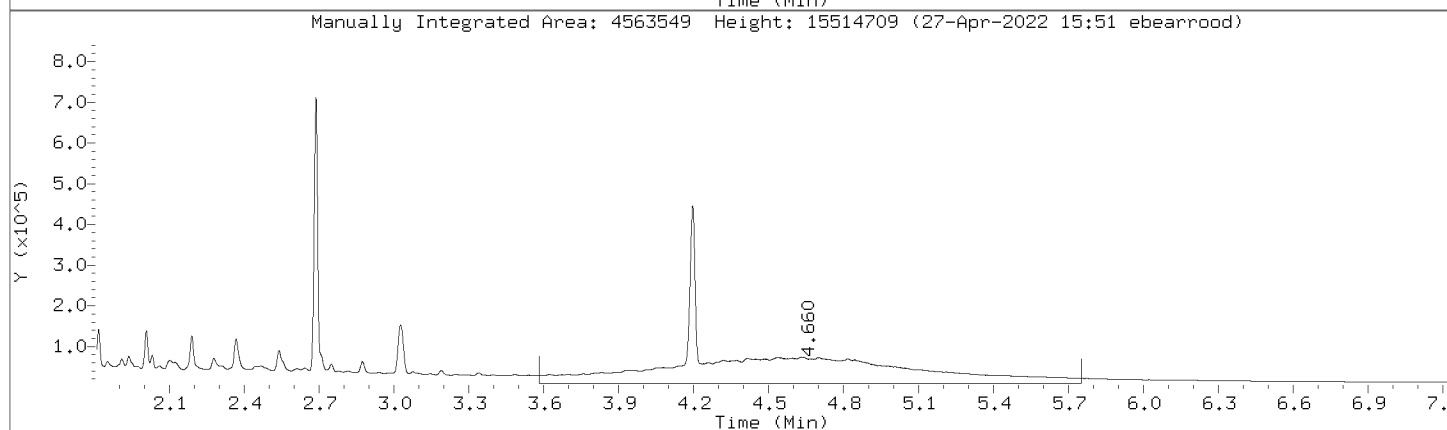
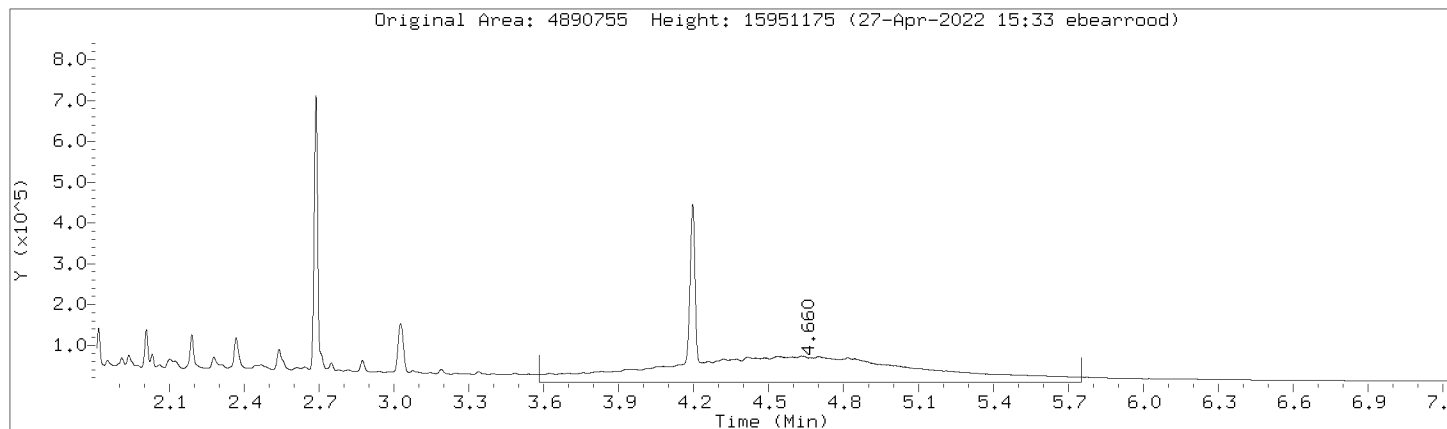
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Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



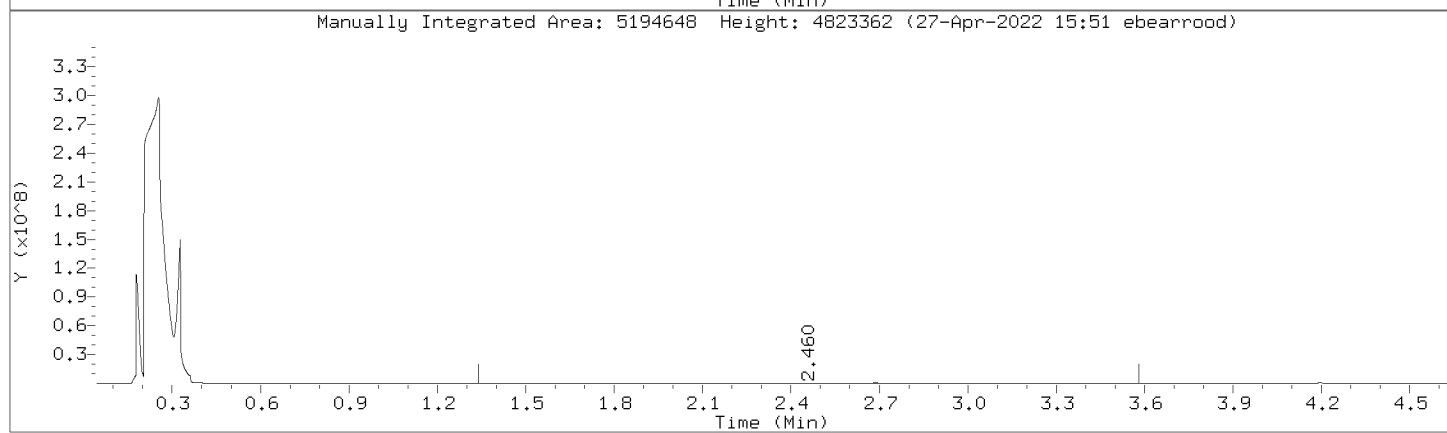
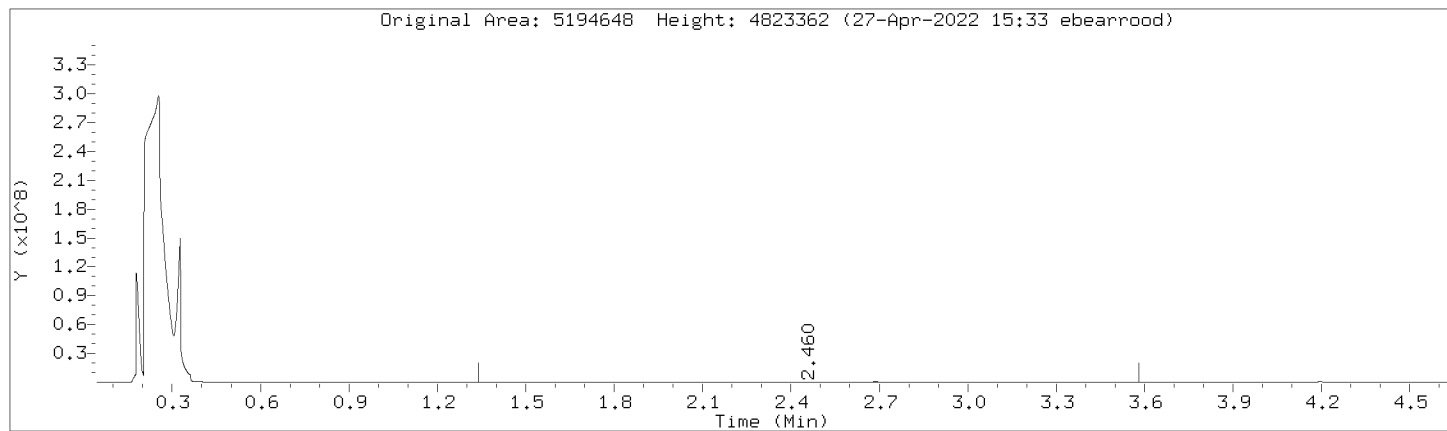
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



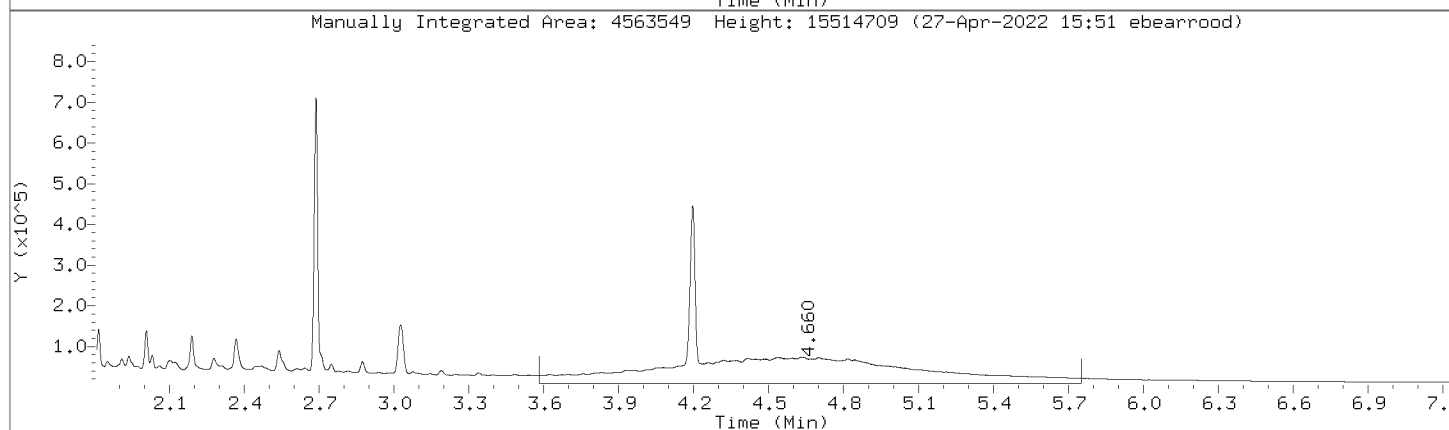
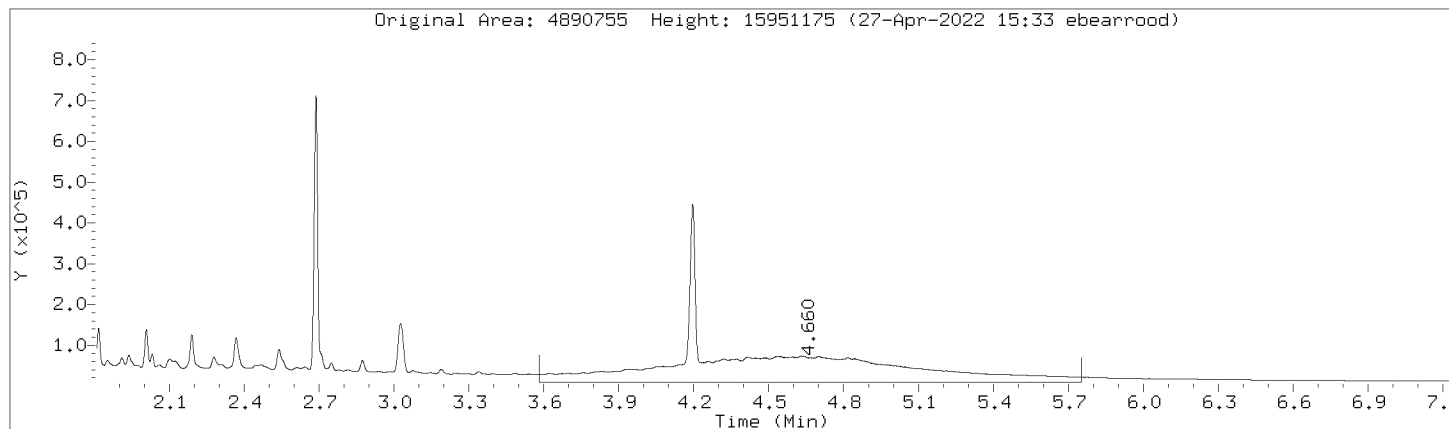
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Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



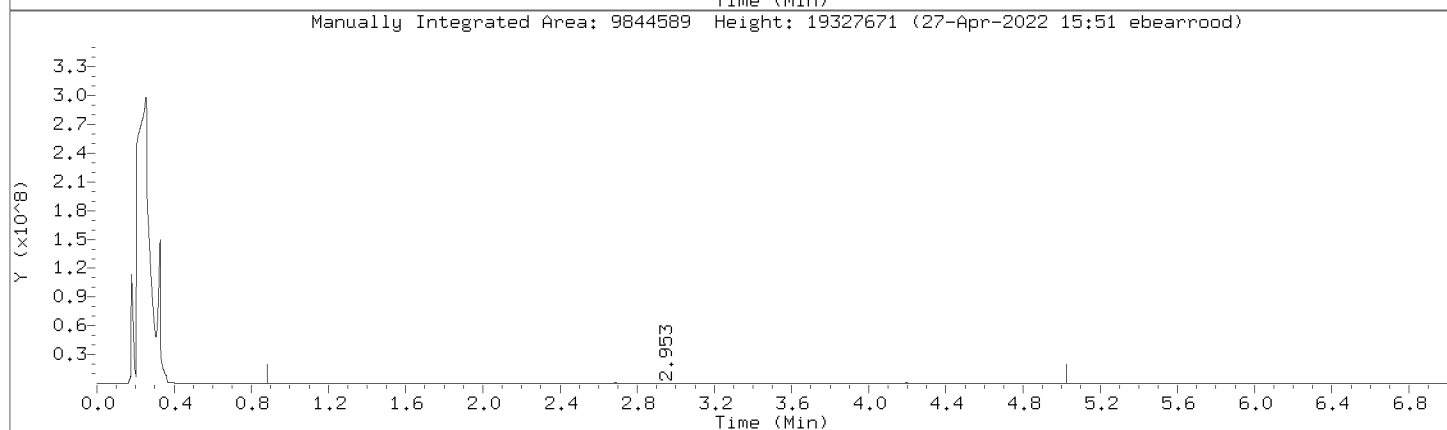
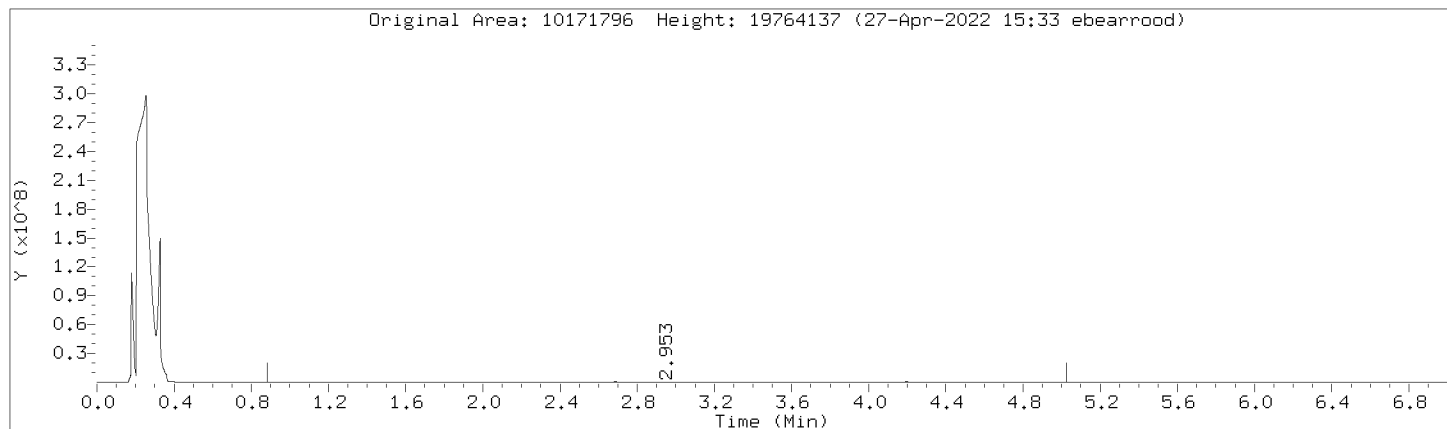
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Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



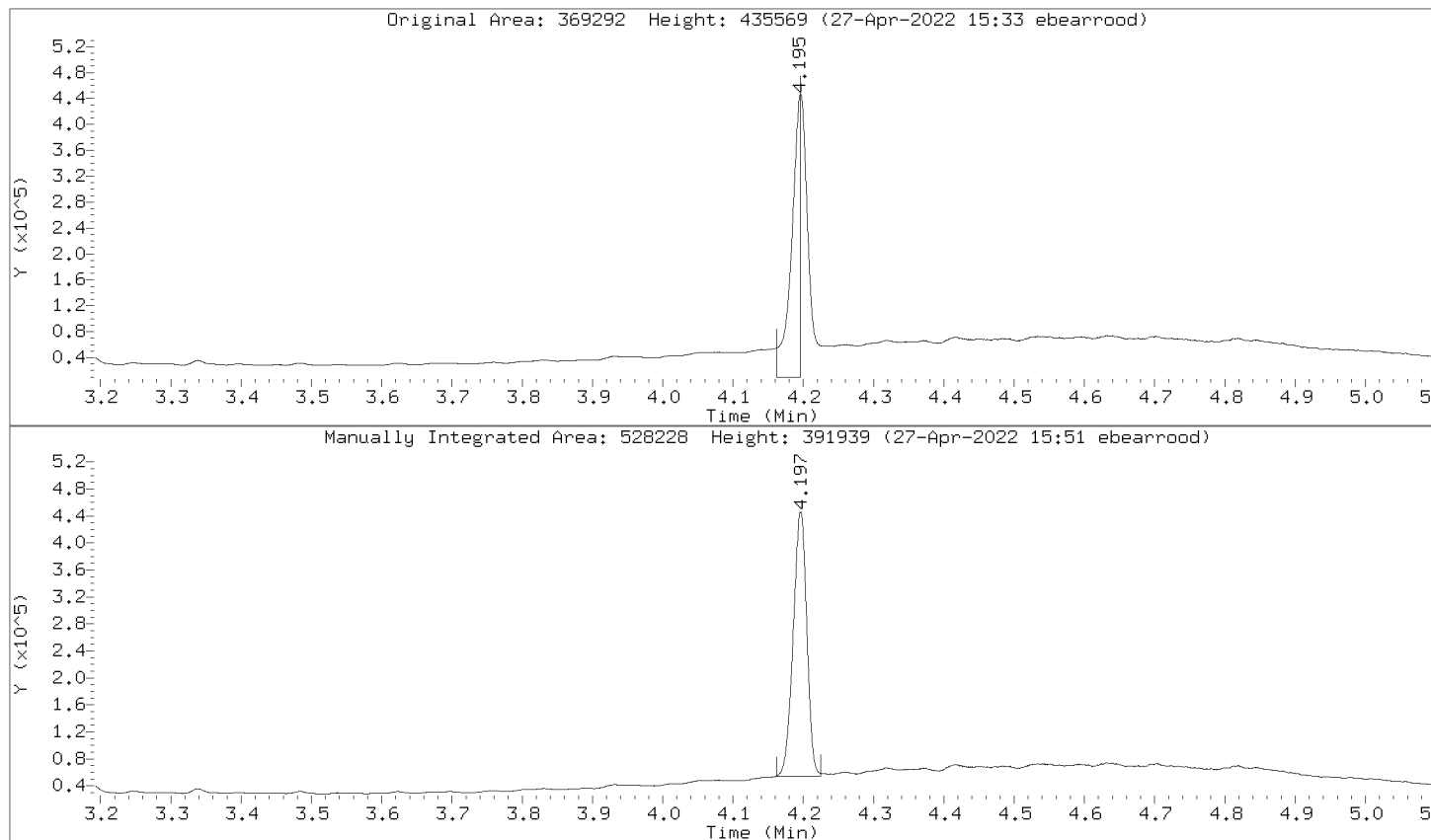
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



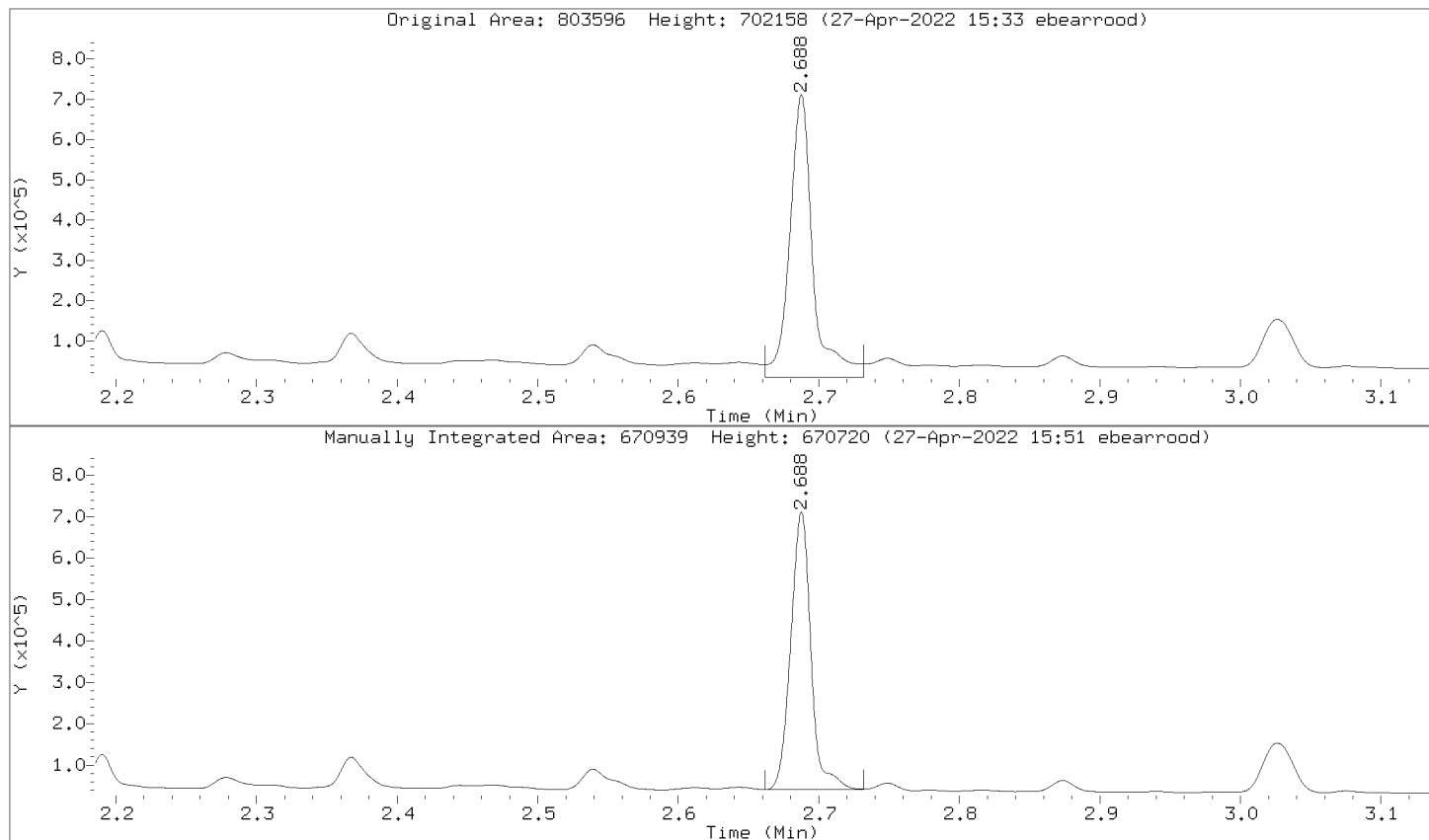
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
 Lab Smp Id: DMO-CAL9,362377:2 Client Smp ID: DMO-CAL9,362377:2  
 Inj Date : 27-APR-2022 14:30  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal9,362377:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 86 Calibration Sample, Level: 9  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		11926188 2000.00	2020	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.692	2.685 0.007		1328065 200.000	200	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.202	4.193 0.009		1044249 200.000	202	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		7125460 2000.00	2010	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		13625690 2000.00	2020	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		7409993 2000.00	2010	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		19051649 4000.00	4030	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		10004331 2000.00	2010	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		10004331 2000.00	2010	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		9009436 2000.00	2020	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		9009436 2000.00	2020	(M) RNG
-----					



QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 14:30

Client ID: DM0-CAL9,362377:2

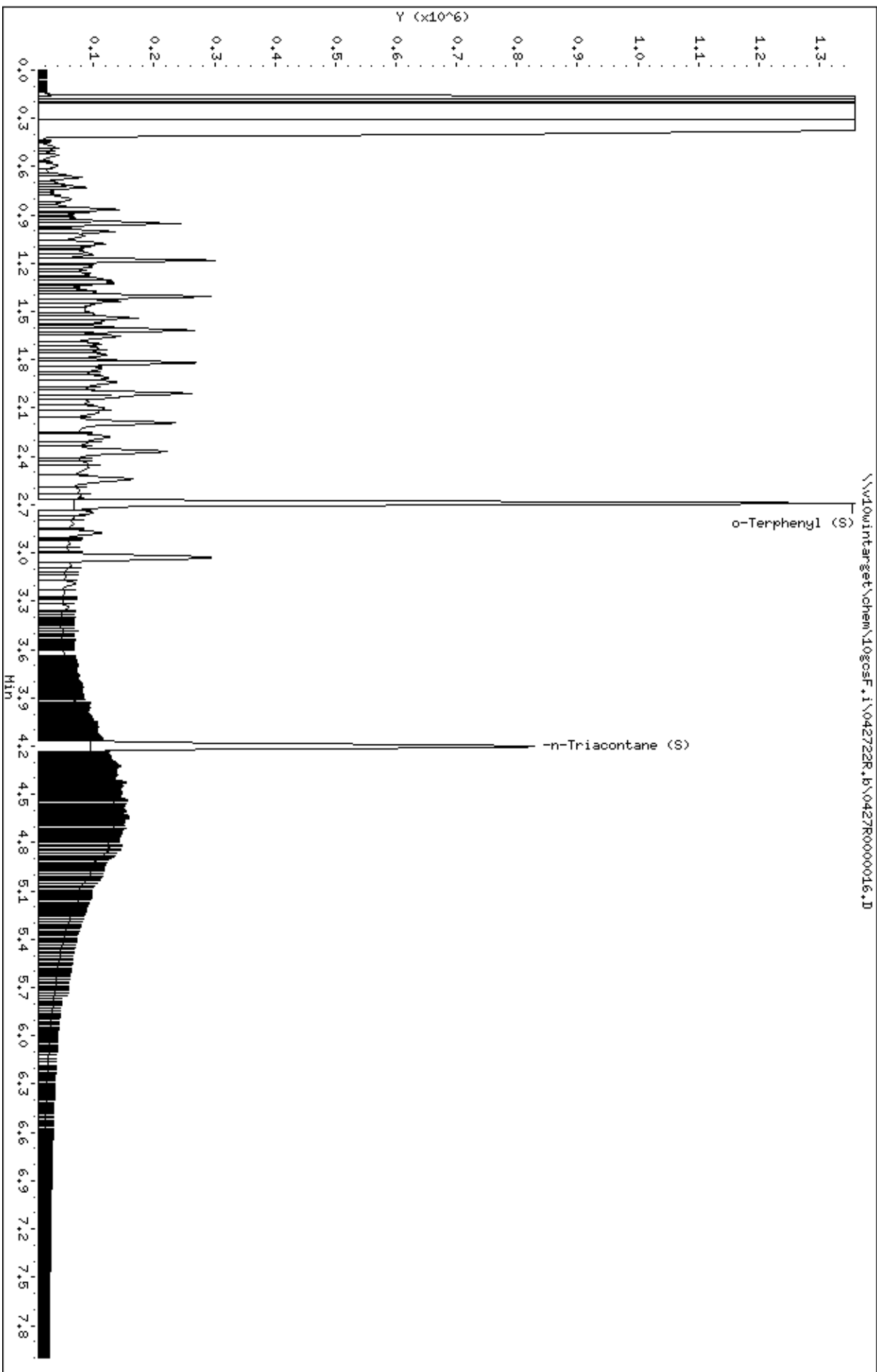
Sample Info: DM0-CAL9,362377:2

Instrument: 10goscF.1

Operator: EBS

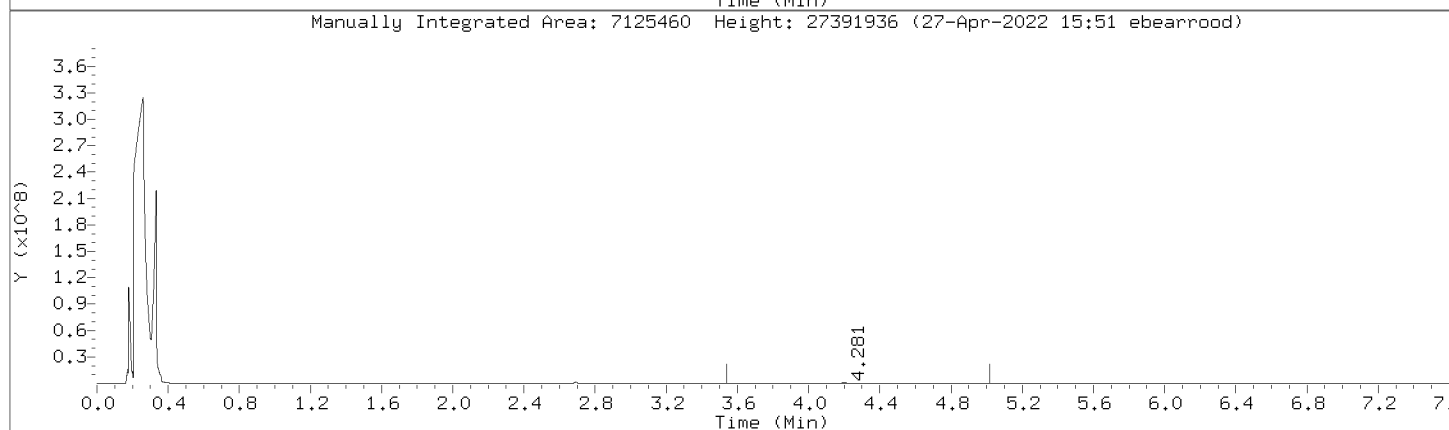
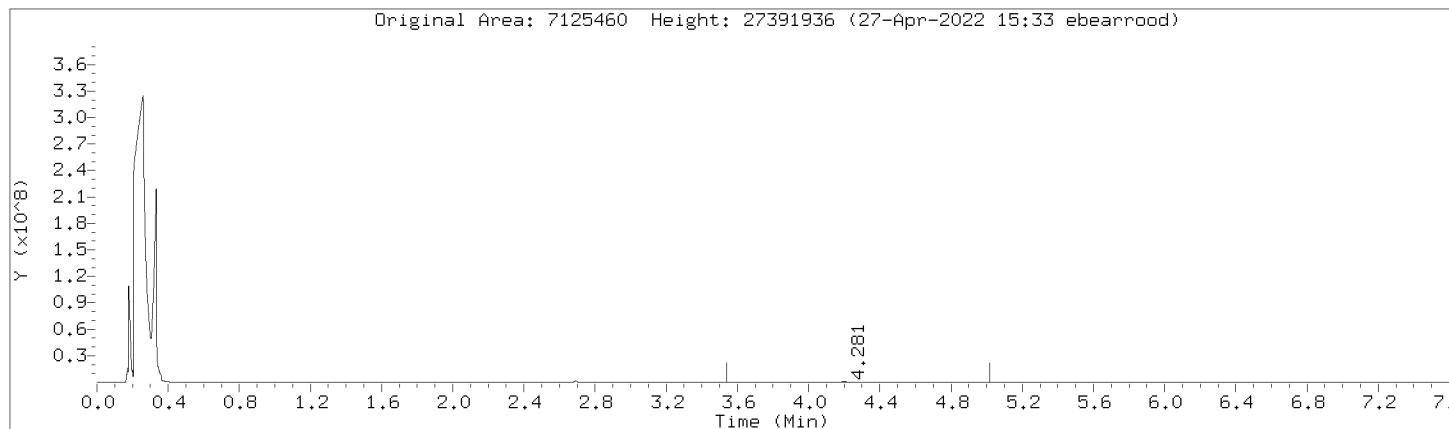
Column diameter: 0.32

Column phase: DB-5-US21430033



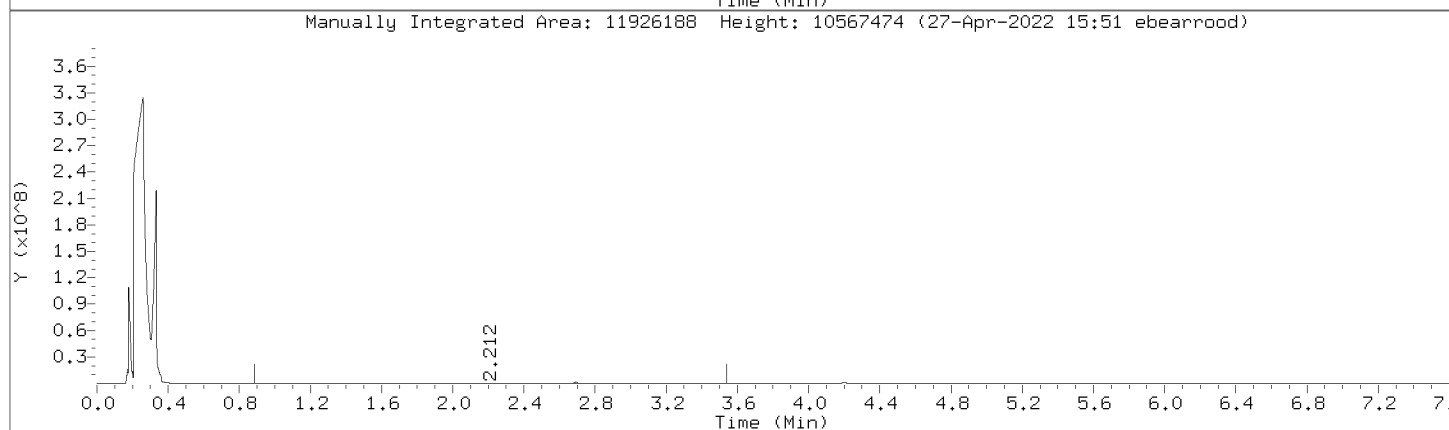
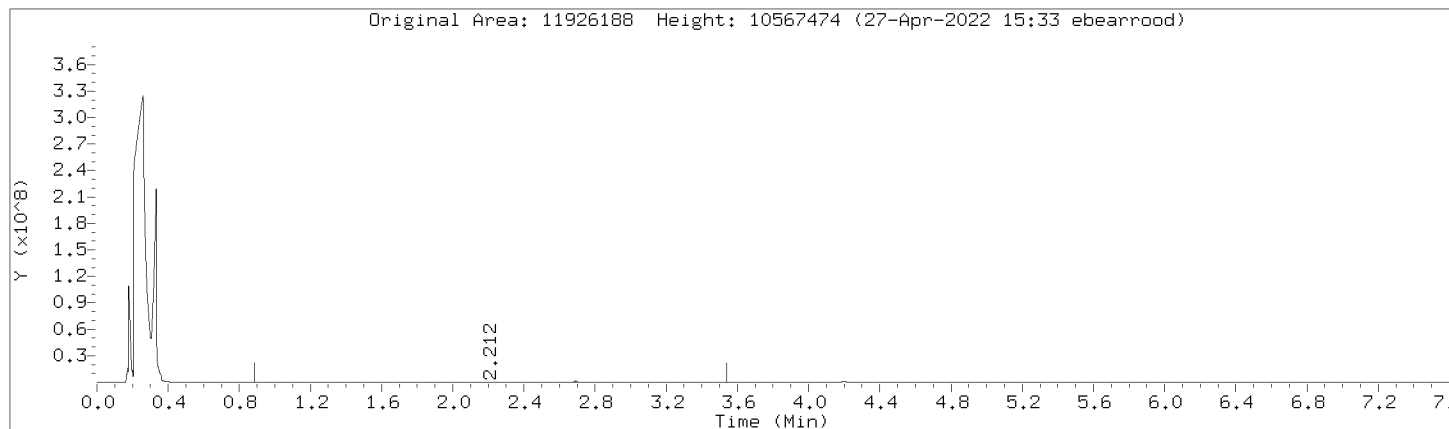
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



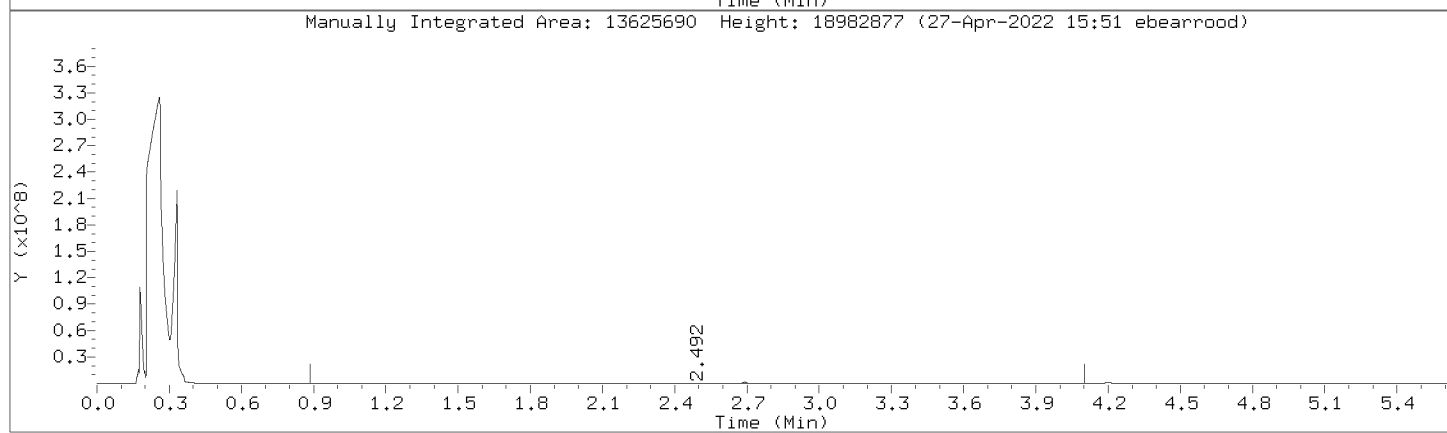
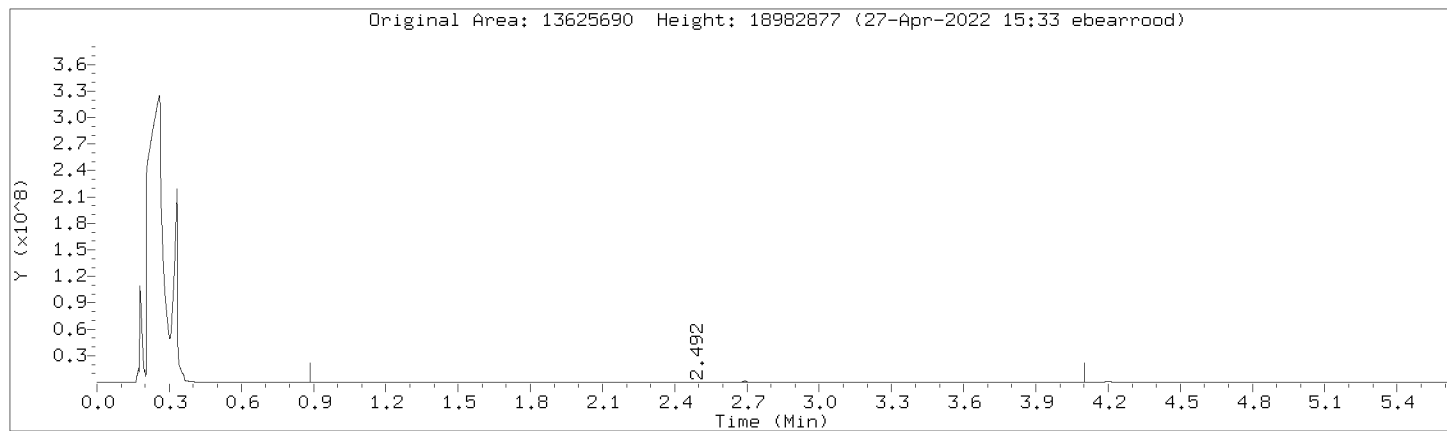
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Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



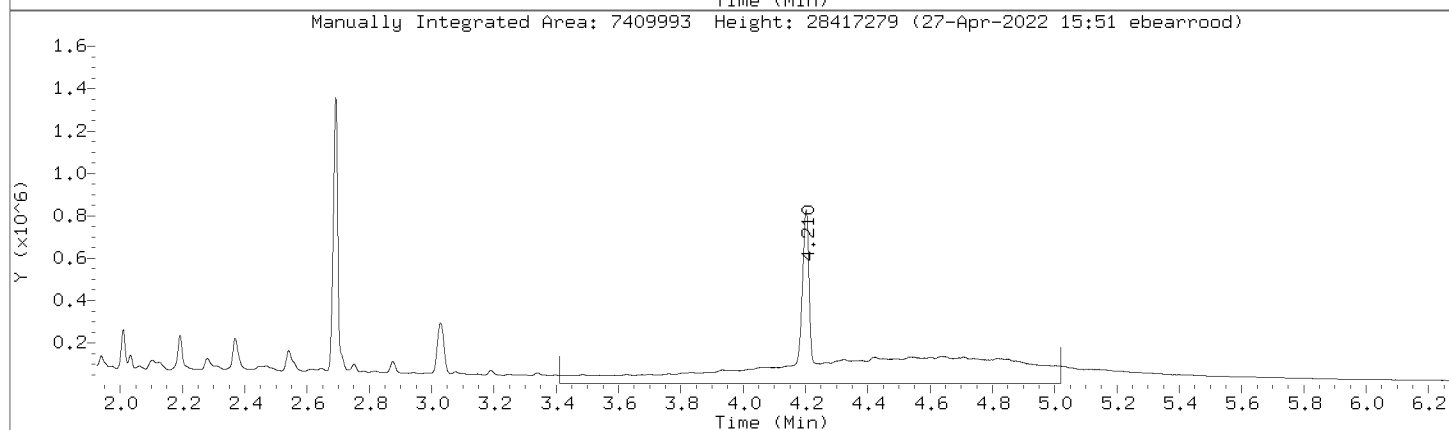
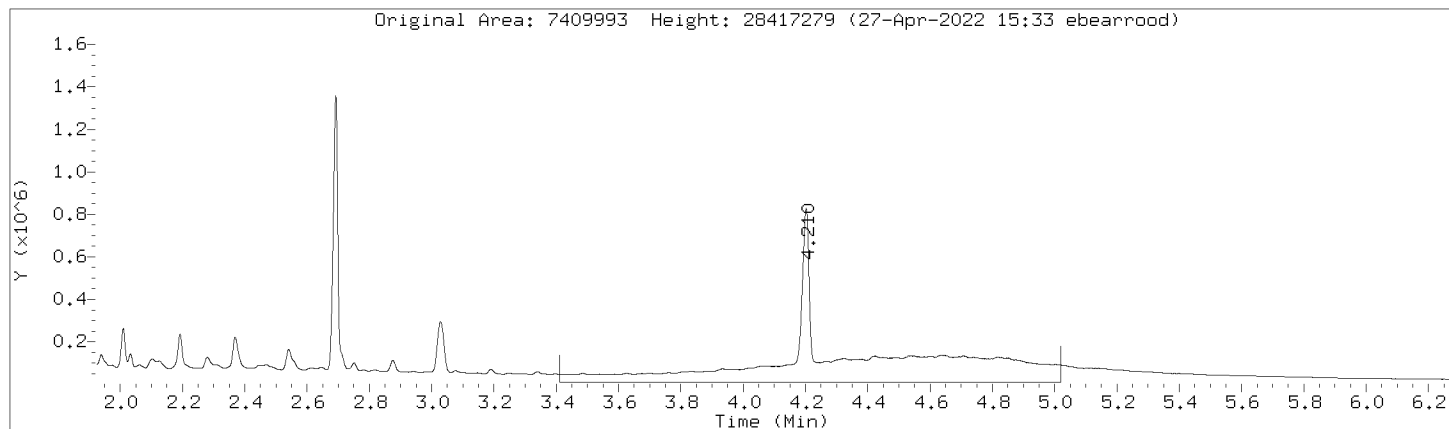
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



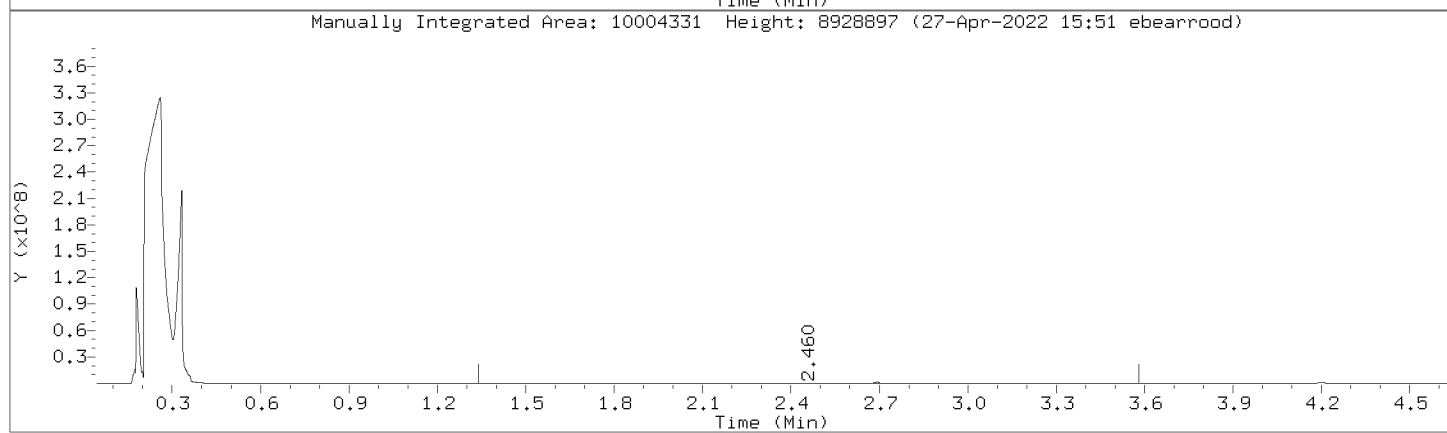
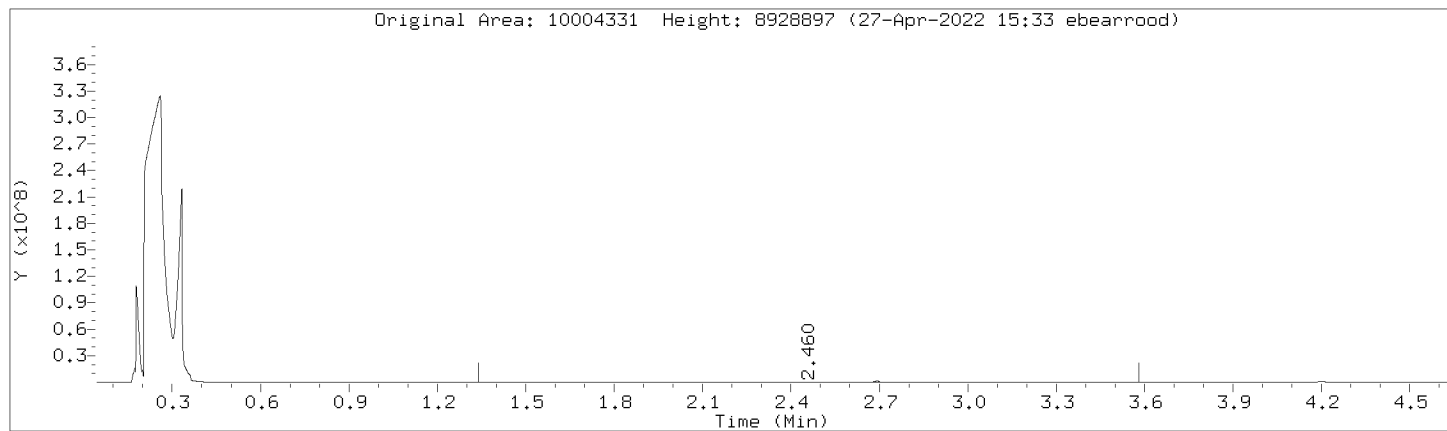
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Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



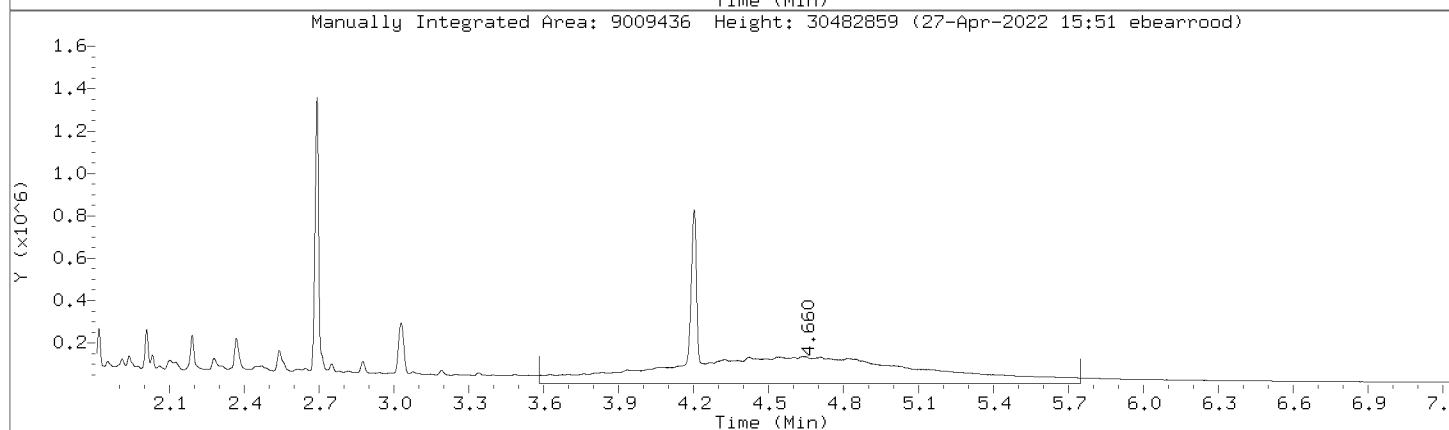
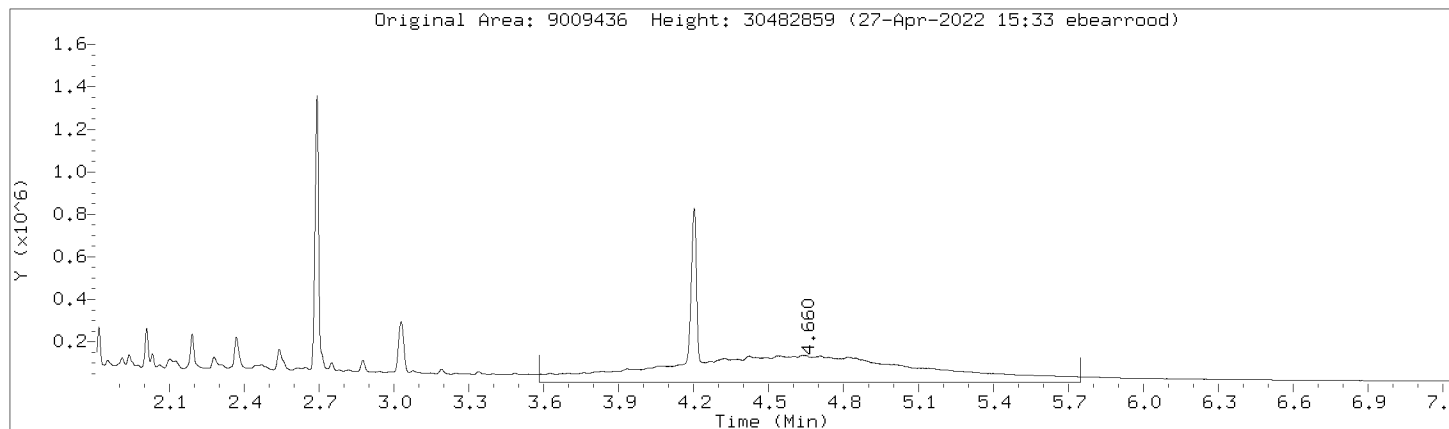
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

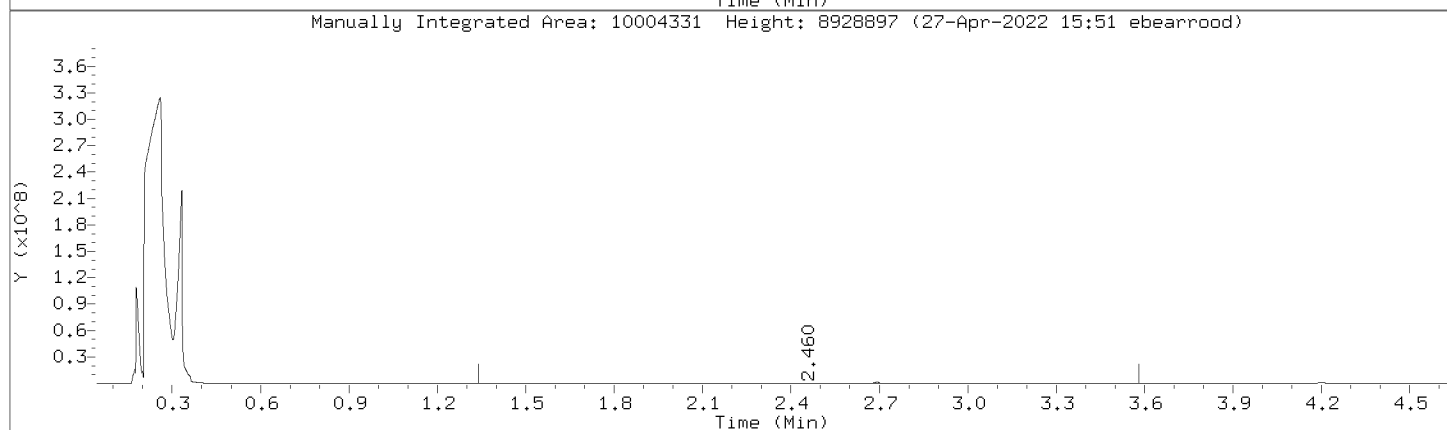
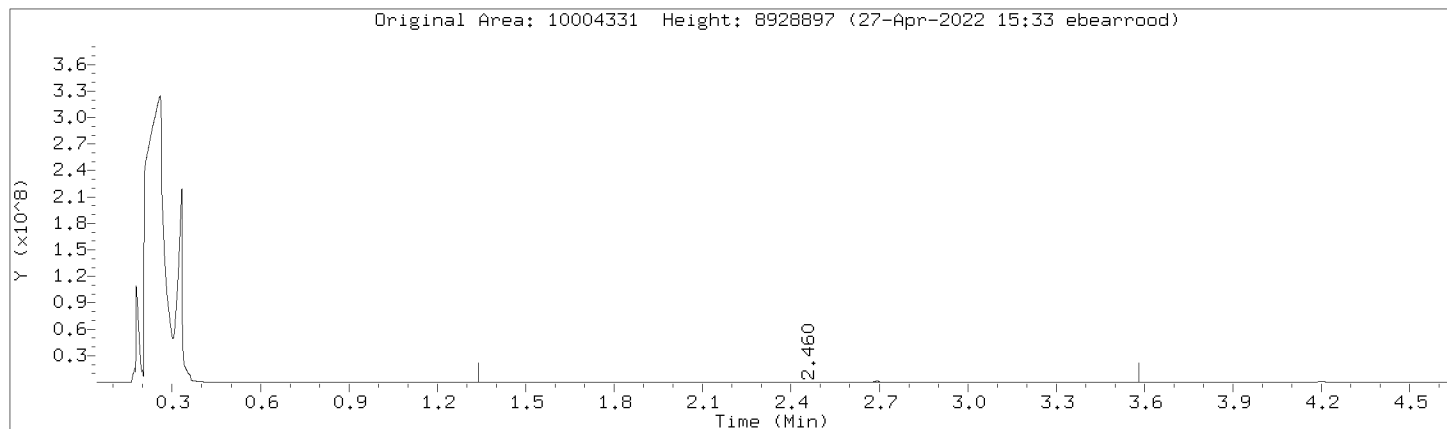
Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





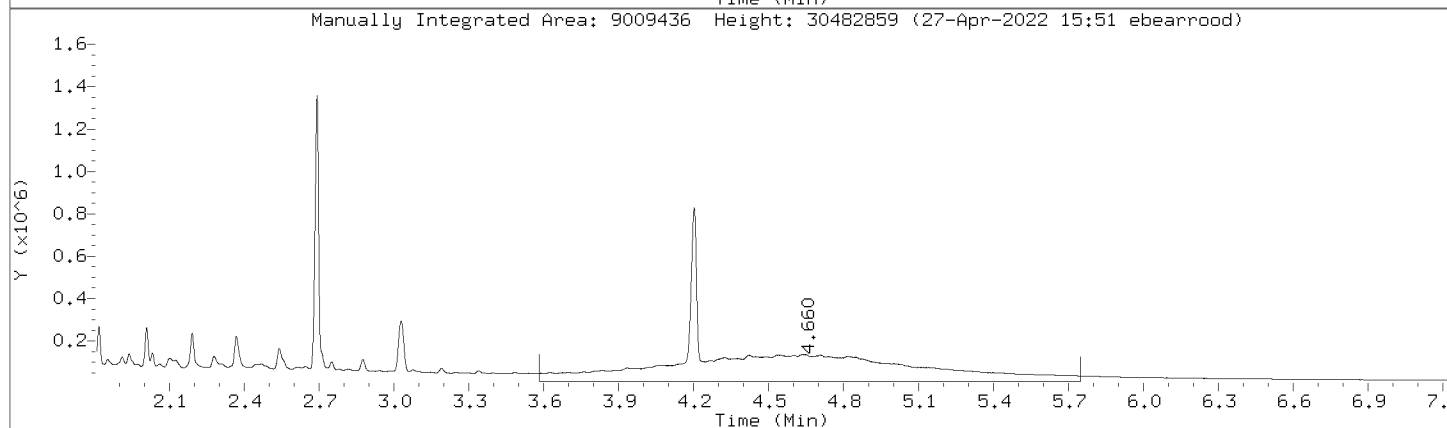
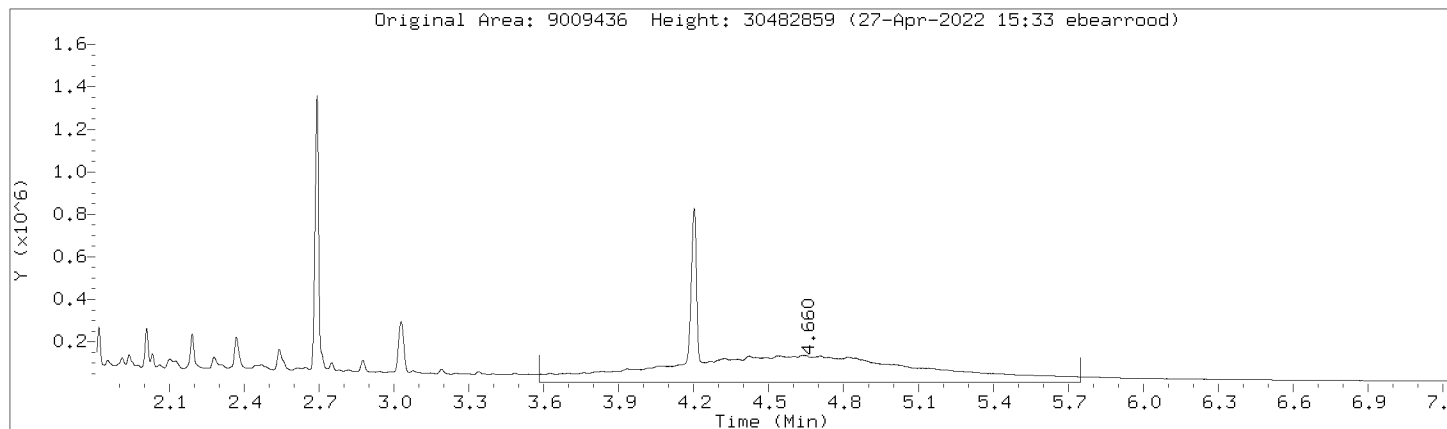
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



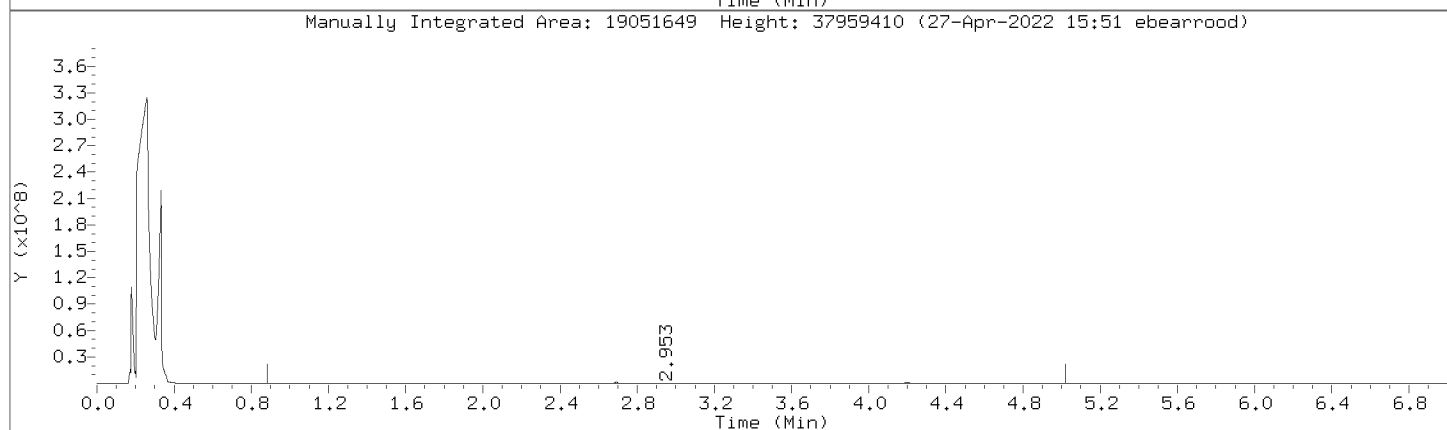
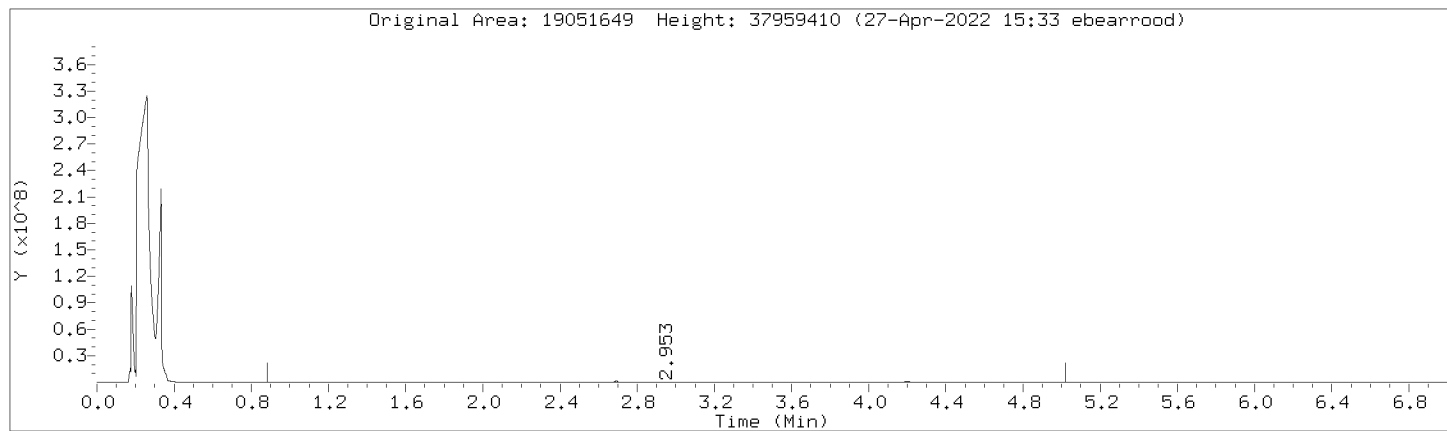
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



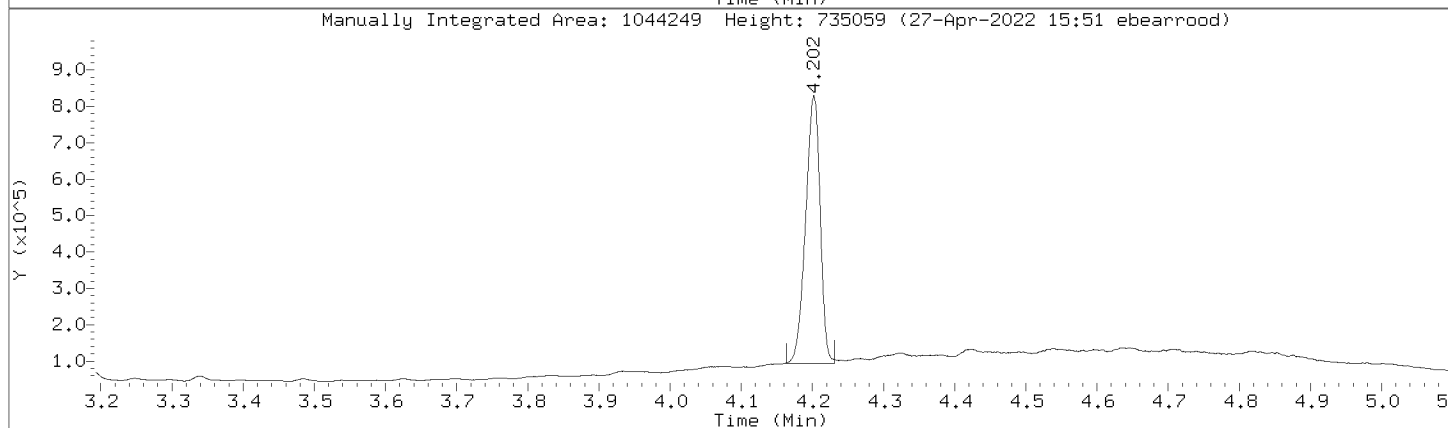
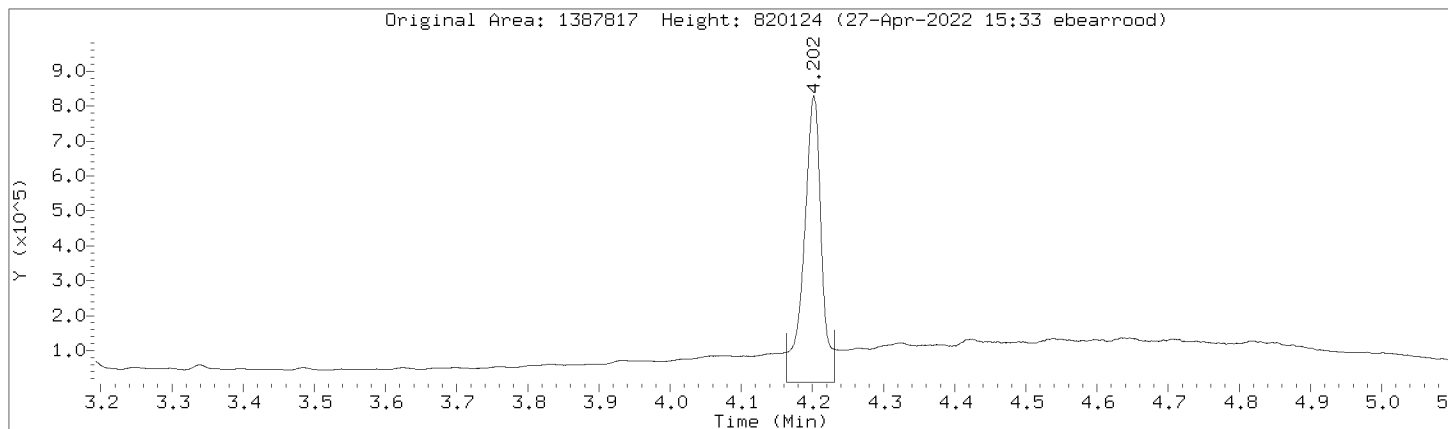
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



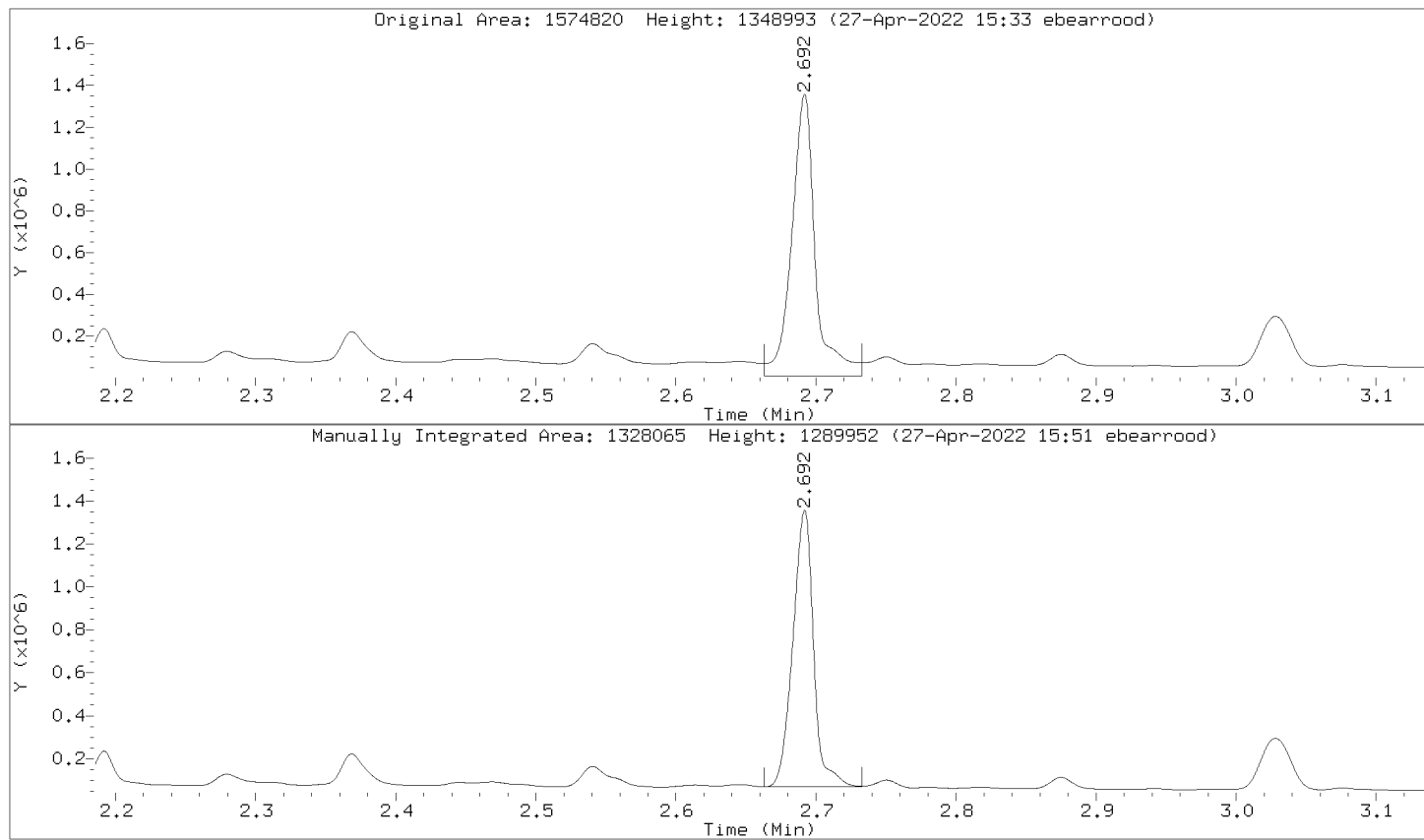
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Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
 Lab Smp Id: DMO-CAL10,362378:2 Client Smp ID: DMO-CAL10,362378:2  
 Inj Date : 27-APR-2022 14:42  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal10,362378:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 87 Calibration Sample, Level: 10  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT (ug/mL)	
S 1	DRO by AK 102				CAS #:
0.885	- 3.540		23156787	4000.00	3980 (M) RNG
\$ 2	o-Terphenyl (S)				CAS #:
2.698	2.685 0.013		2641228	400.000	399 (M) BA
\$ 3	n-Triacontane (S)				CAS #:
4.210	4.193 0.017		2060731	400.000	399 (M) BA
S 4	Residual Range Organics AK103				CAS #:
3.541	- 5.020		14036526	4000.00	3990 (M) RNG
S 5	TPH-DRO (C10-C28)				CAS #:
0.885	- 4.099		26459303	4000.00	3980 (M) RNG
S 6	Motor Oil Range (C24-C36)				CAS #:
3.400	- 5.020		14575028	4000.00	3990 (M) RNG
S 7	C10-C36				CAS #:
0.885	- 5.020		37193313	8000.00	7970 (M) RNG
S 8	Diesel Fuel Range				CAS #:
1.340	- 3.580		19496130	4000.00	3990 (M) RNG
S 9	Diesel Fuel Range SG				CAS #:
1.340	- 3.580		19496130	4000.00	3990 (M) RNG
S 10	Motor Oil Range				CAS #:
3.581	- 5.740		17707474	4000.00	3990 (M) RNG
S 11	Motor Oil Range SG				CAS #:
3.581	- 5.740		17707474	4000.00	3990 (M) RNG

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 14:42

Client ID: DMO-CALL0,362378:2

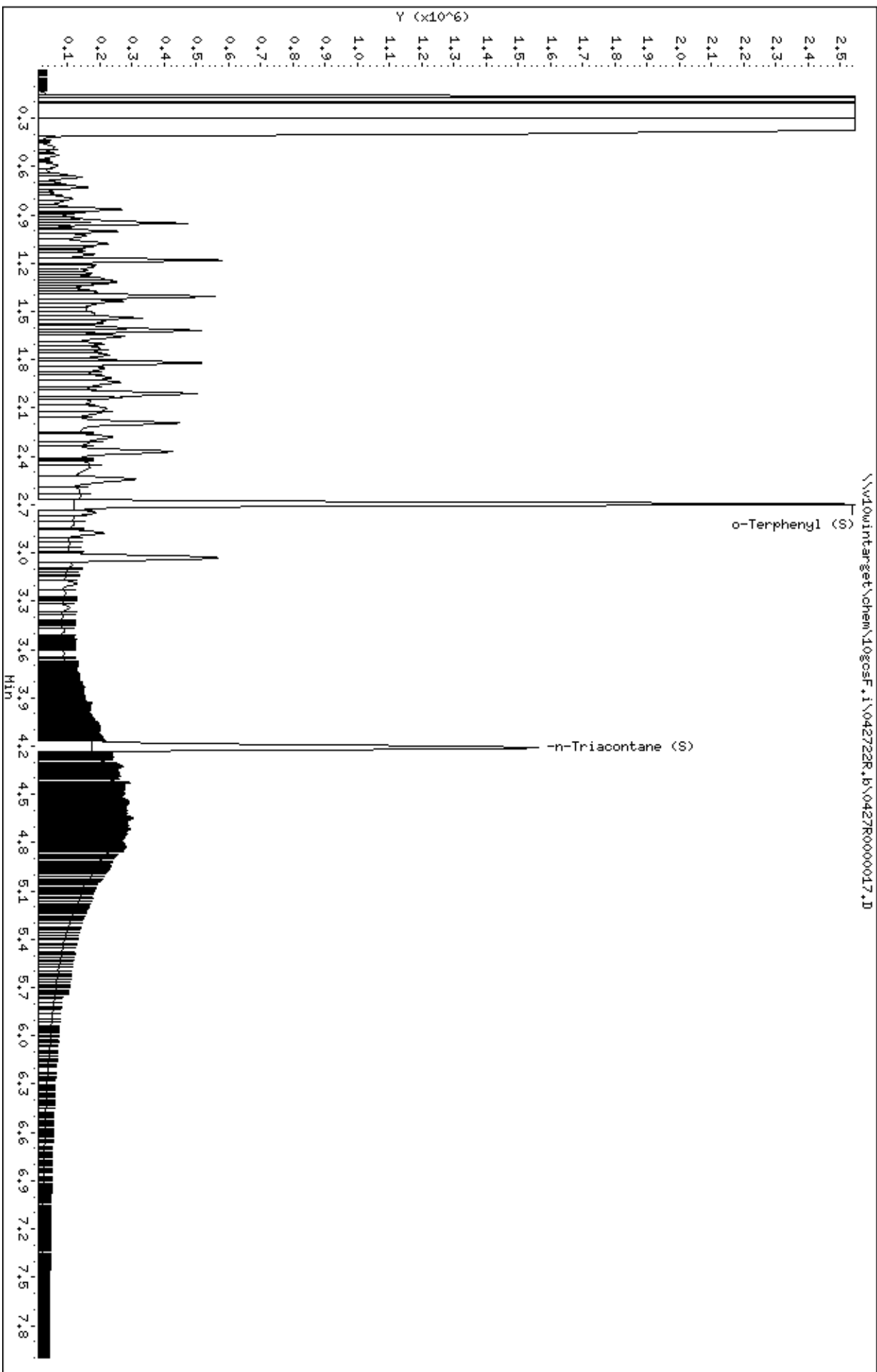
Sample Info: DMO-CALL0,362378:2

Instrument: 10gocsf.1

Operator: EB3

Column diameter: 0.32

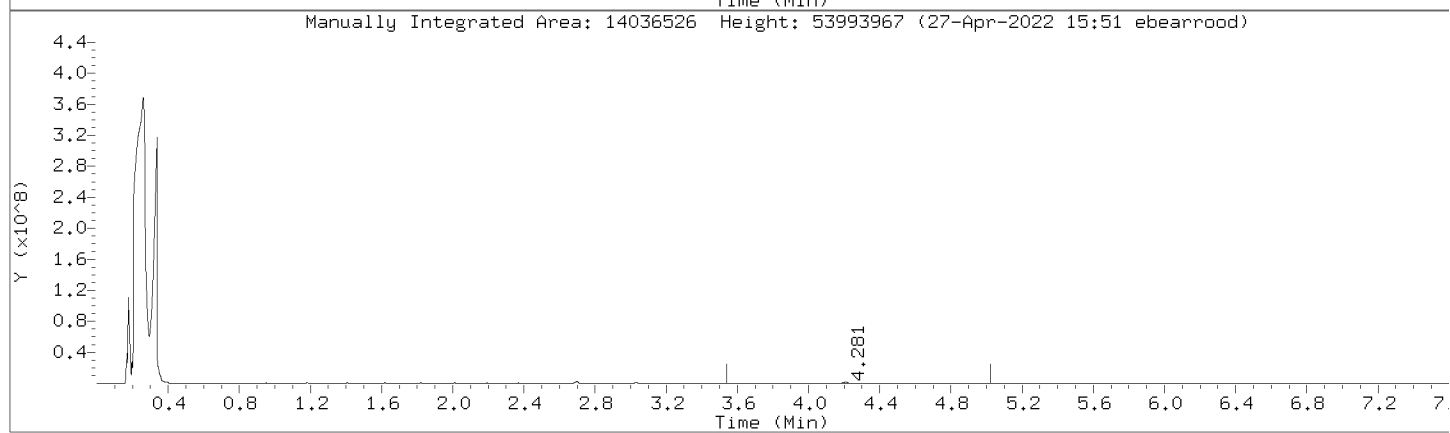
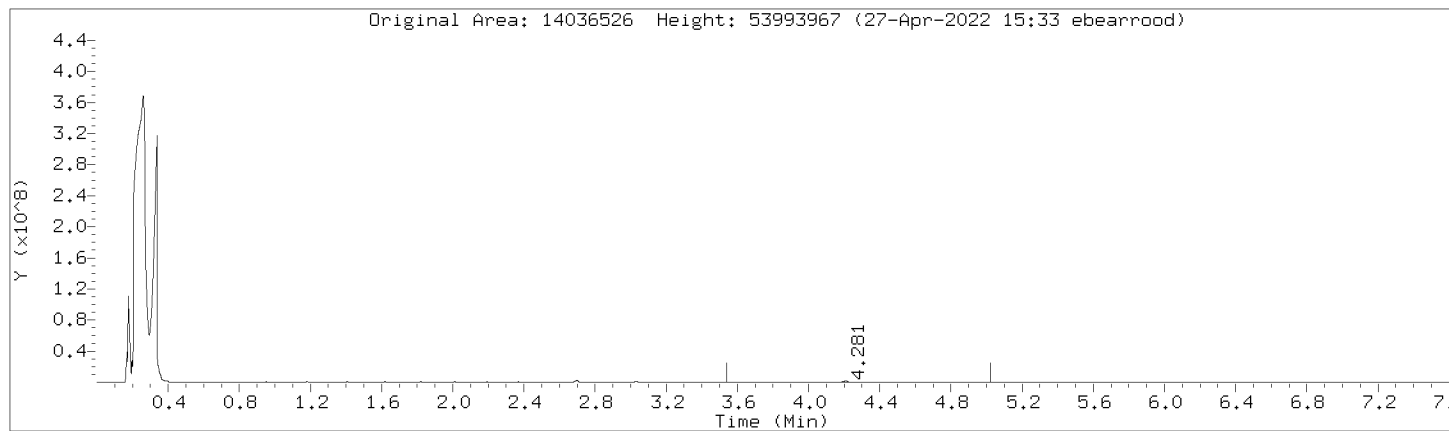
Column phase: DB-5-US21430033





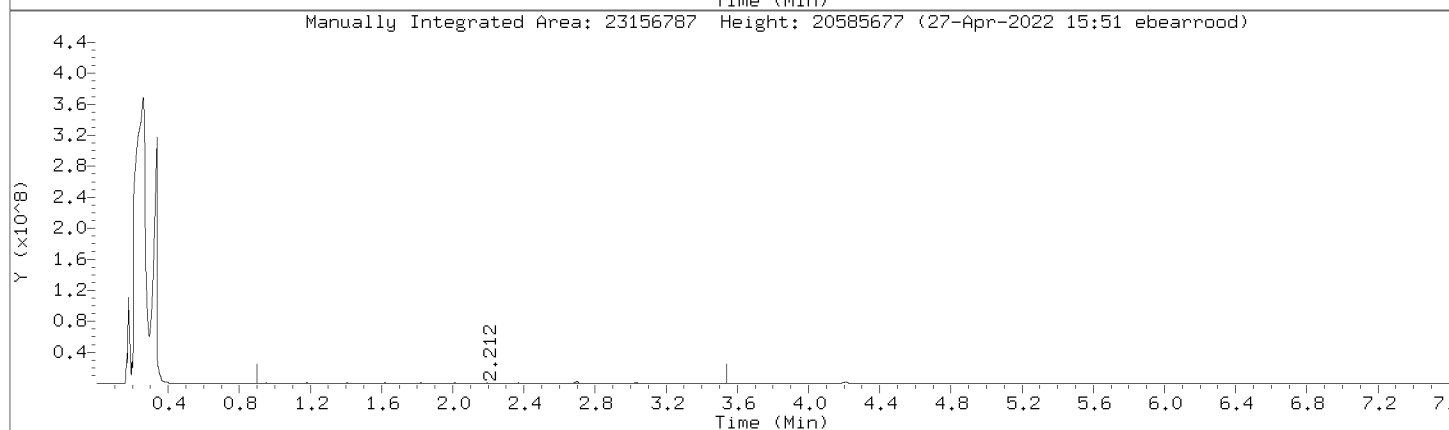
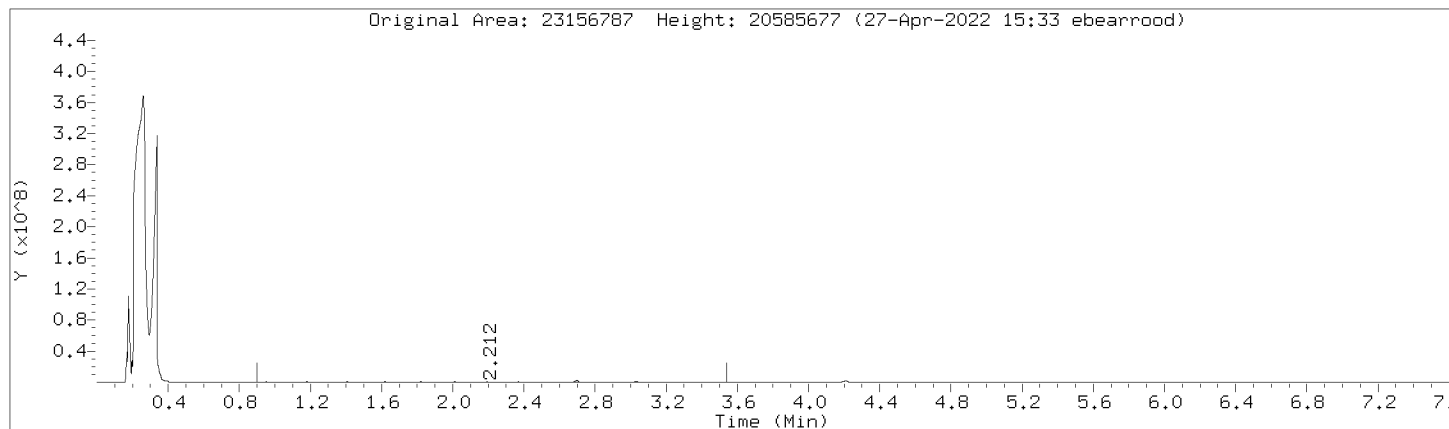
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



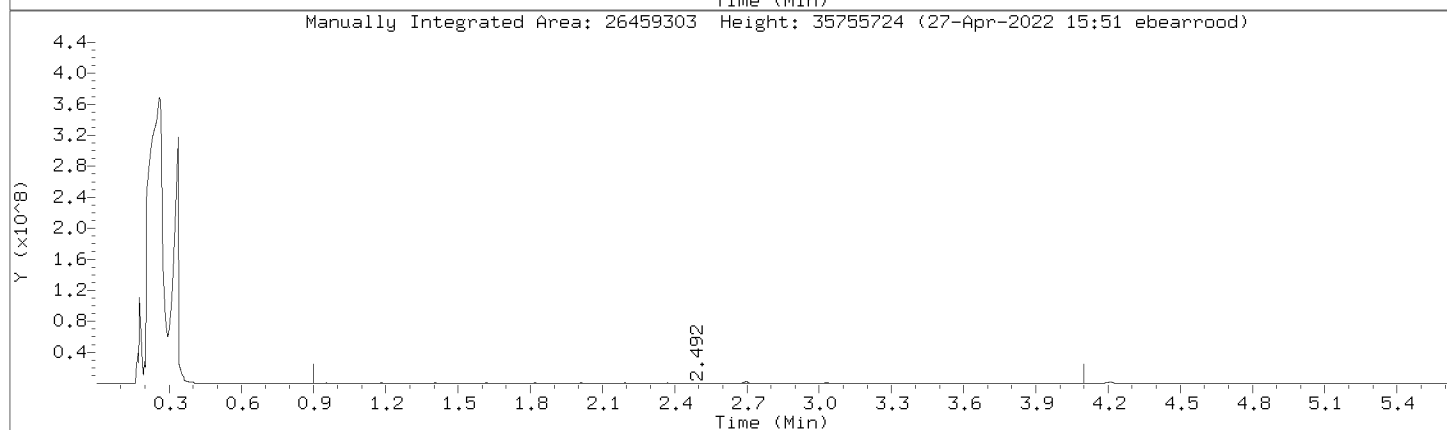
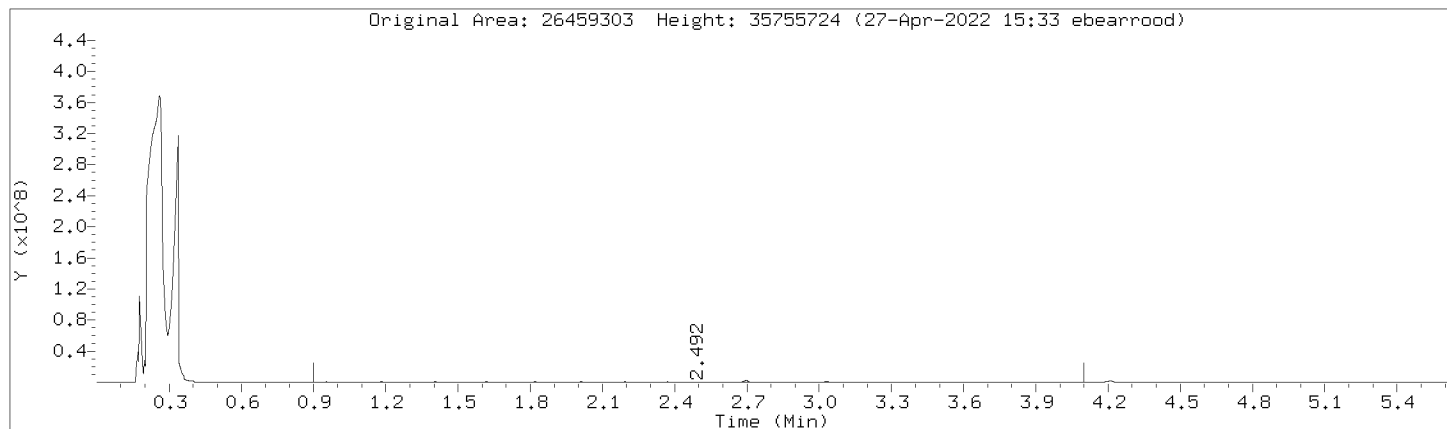
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Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

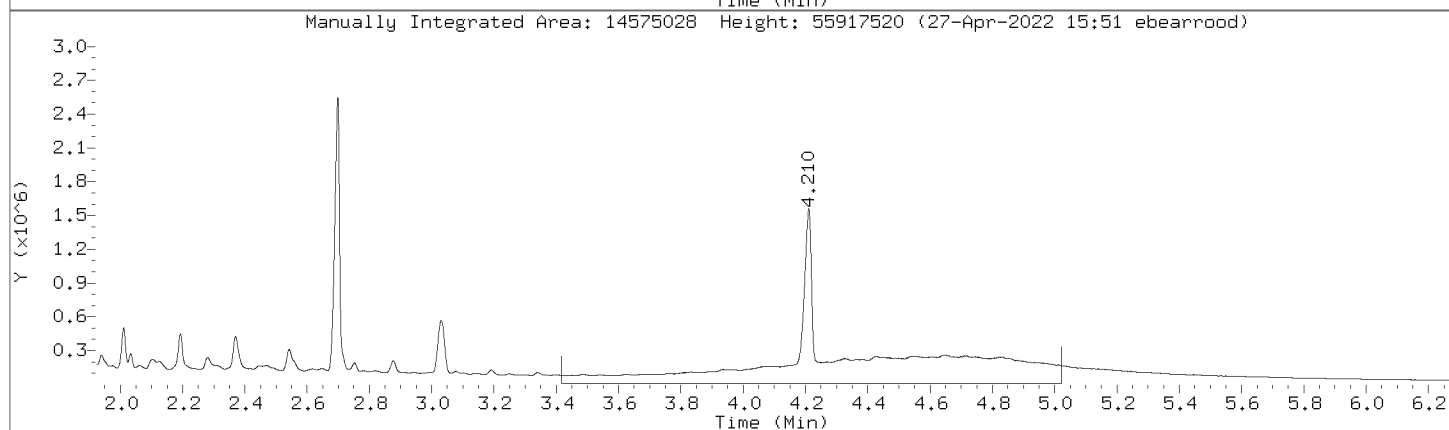
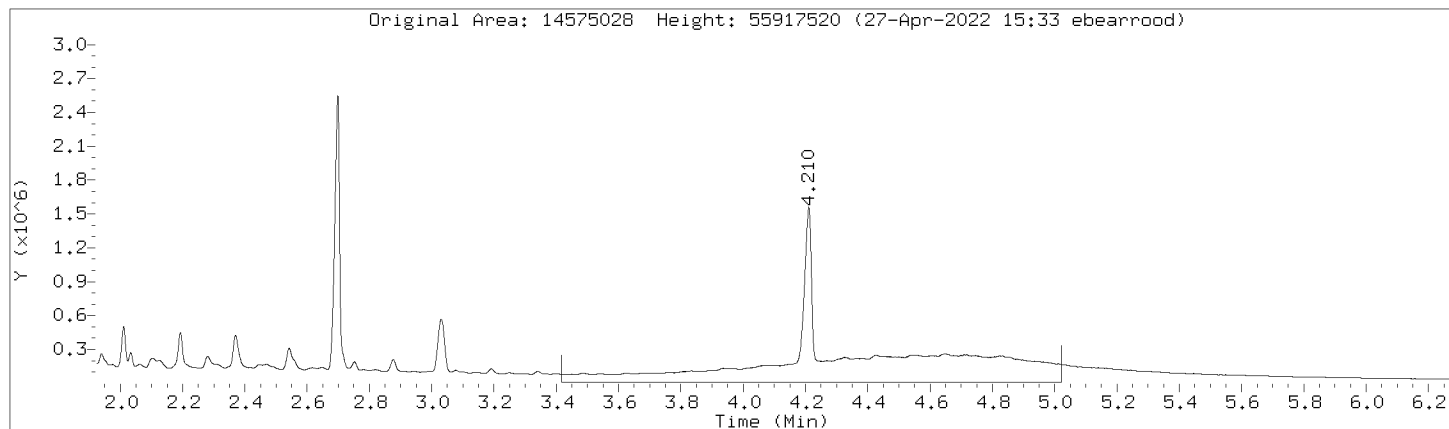
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

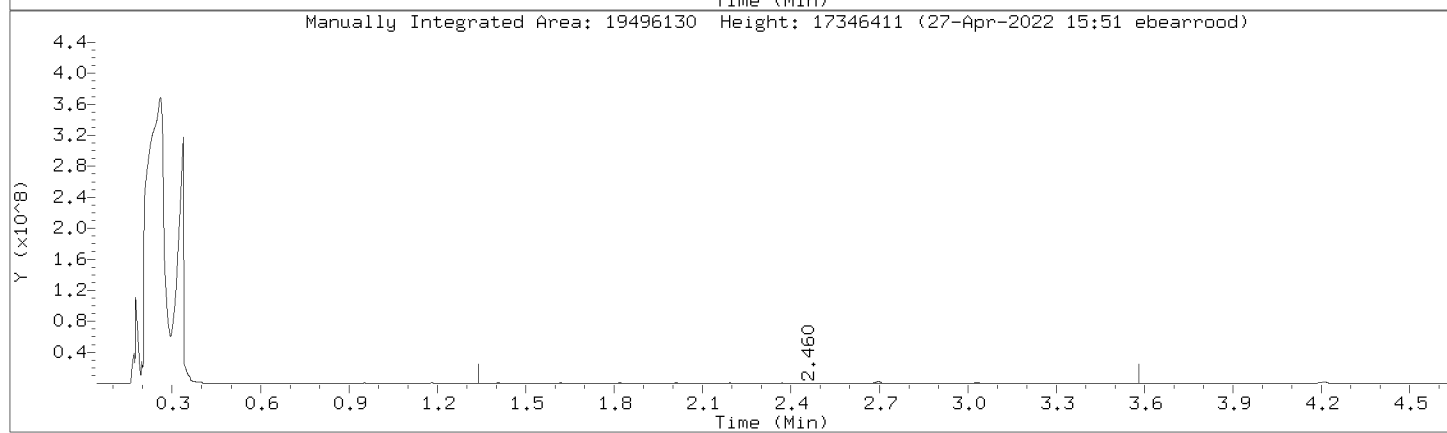
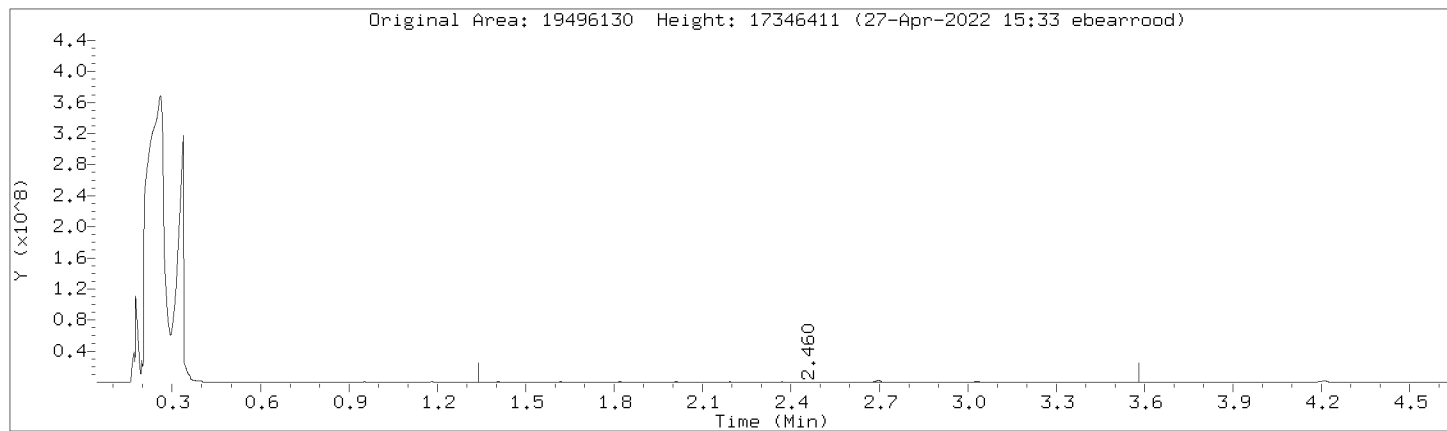
Compound: Motor Oil Range (C24-C36)  
CAS Number:

Review Code: RNG



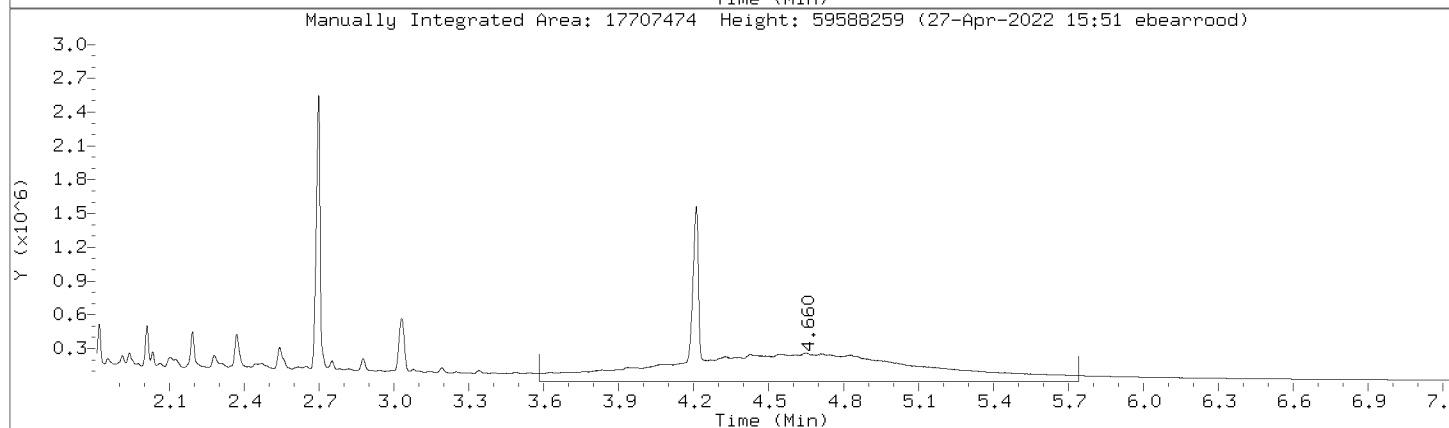
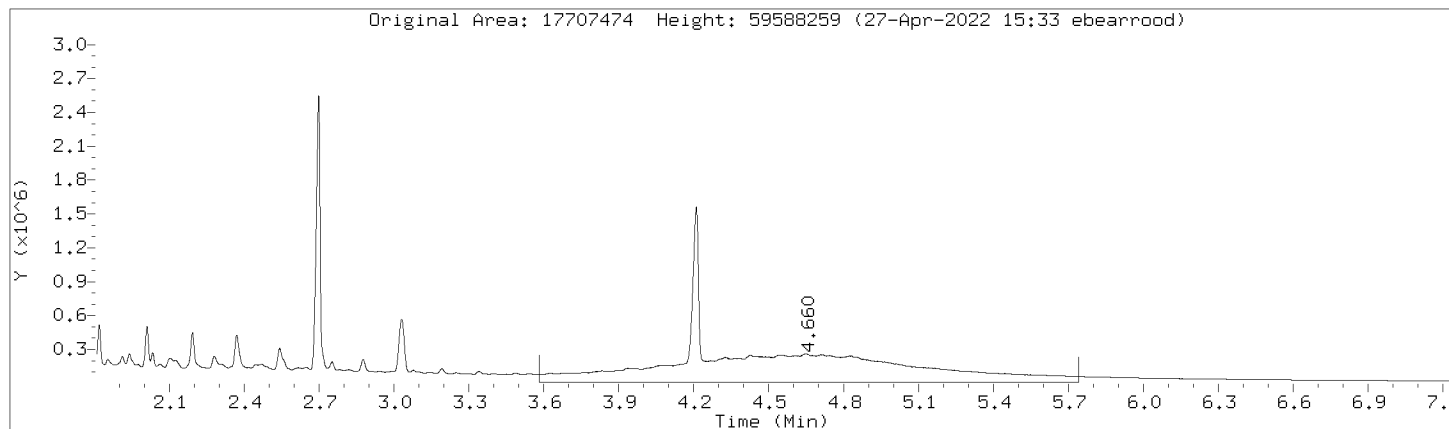
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



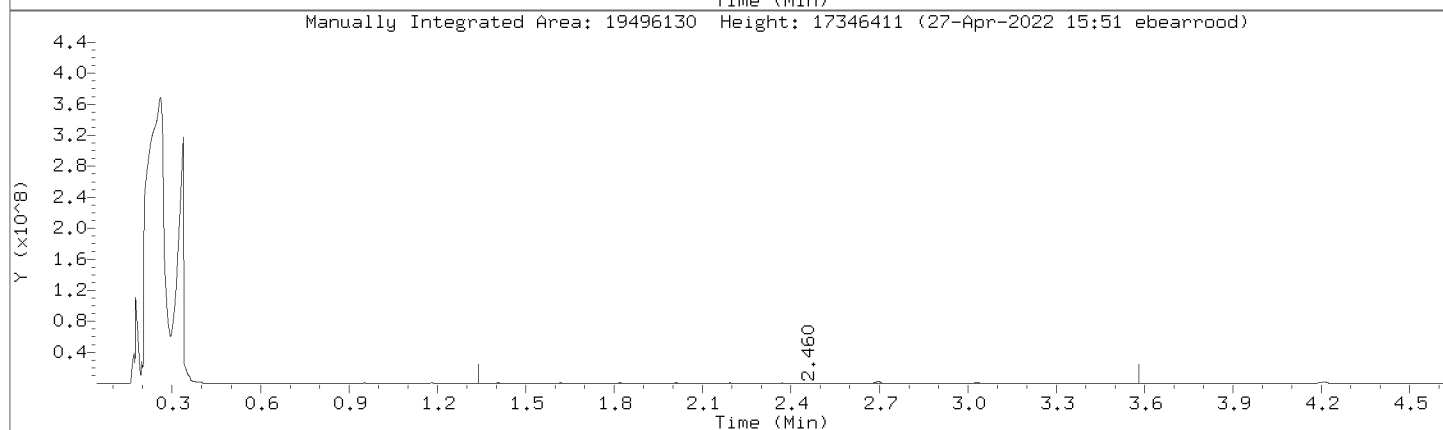
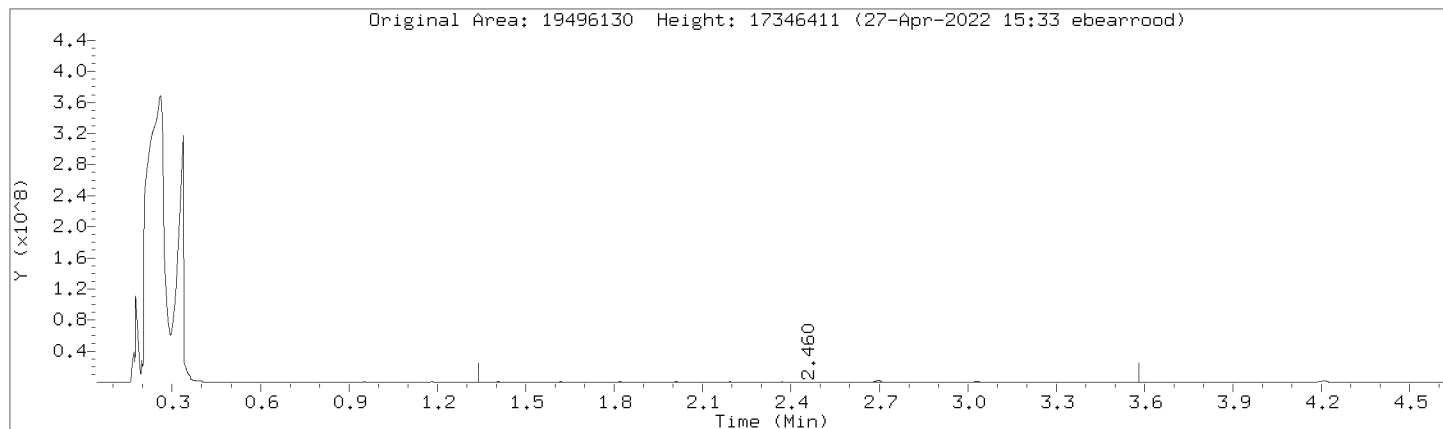
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



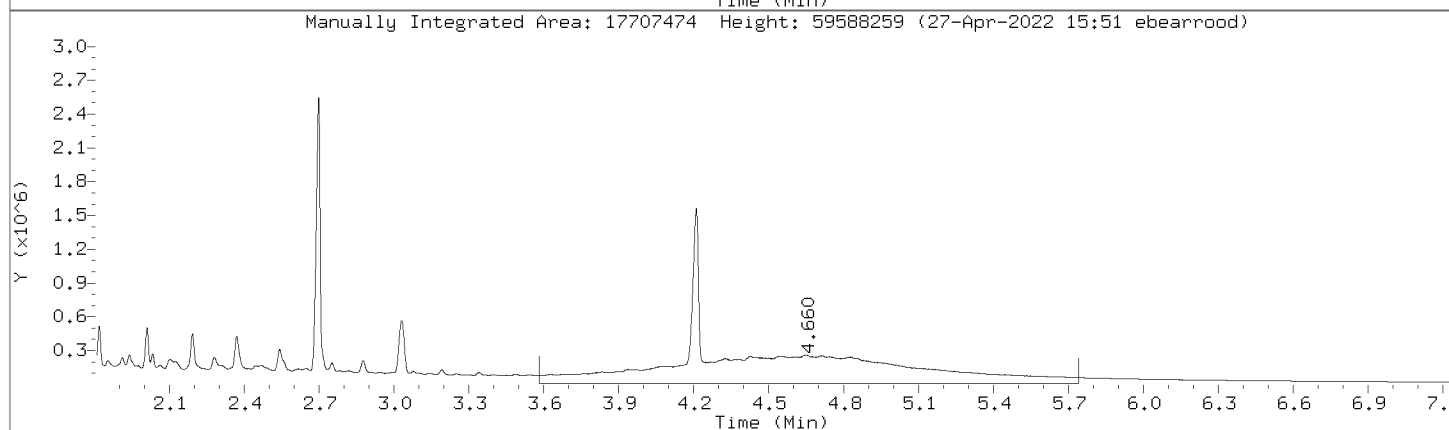
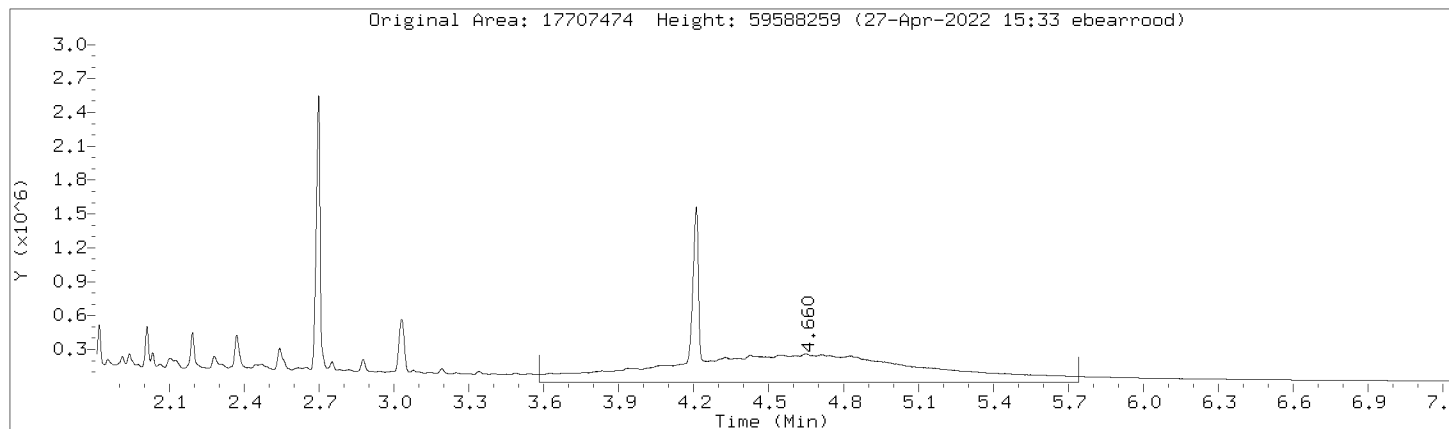
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D

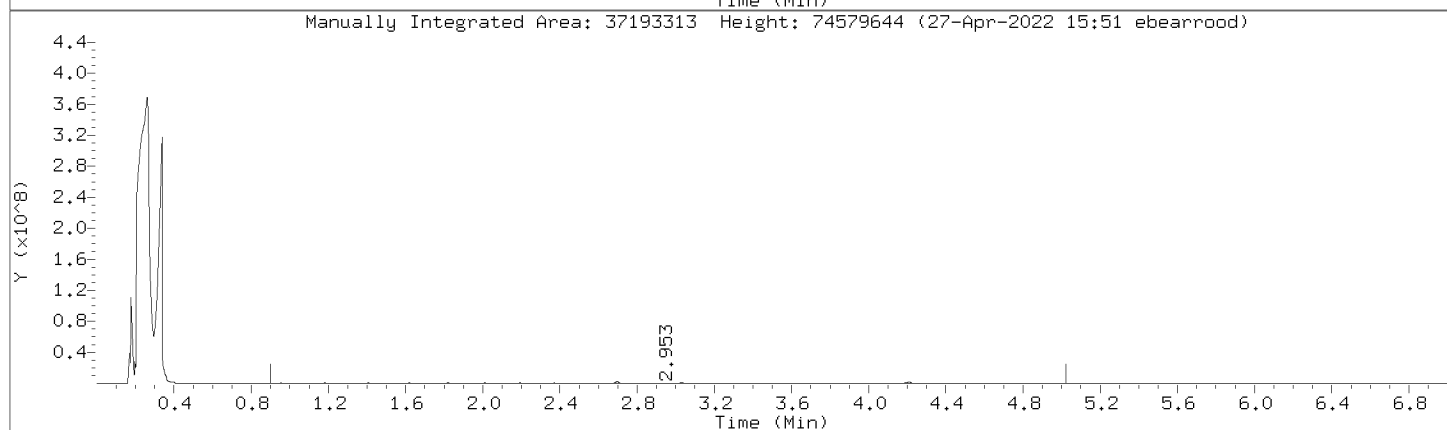
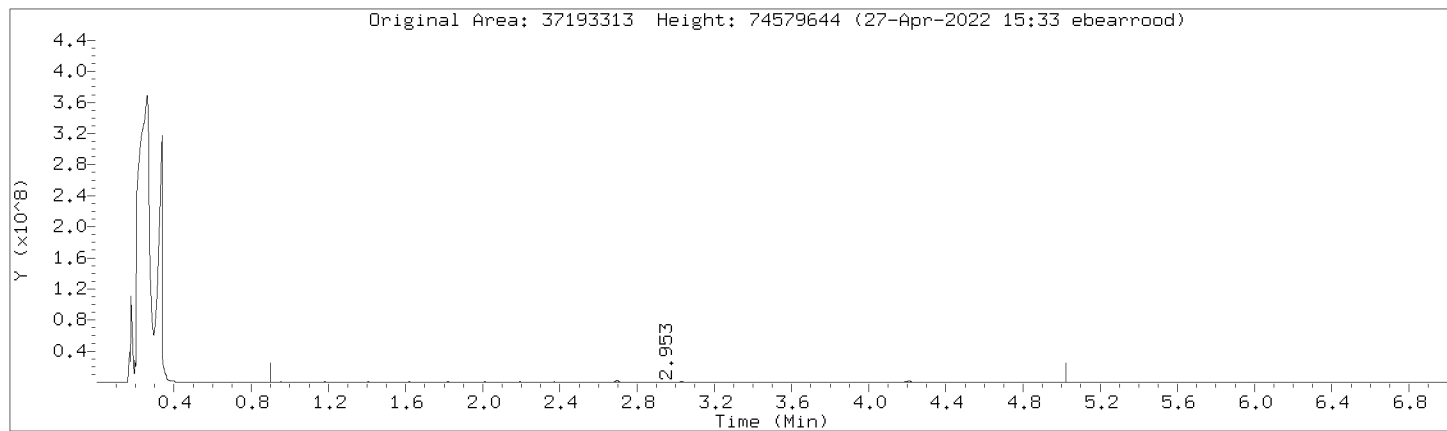
Injection Date: 27-APR-2022 14:42

Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL10,362378:2

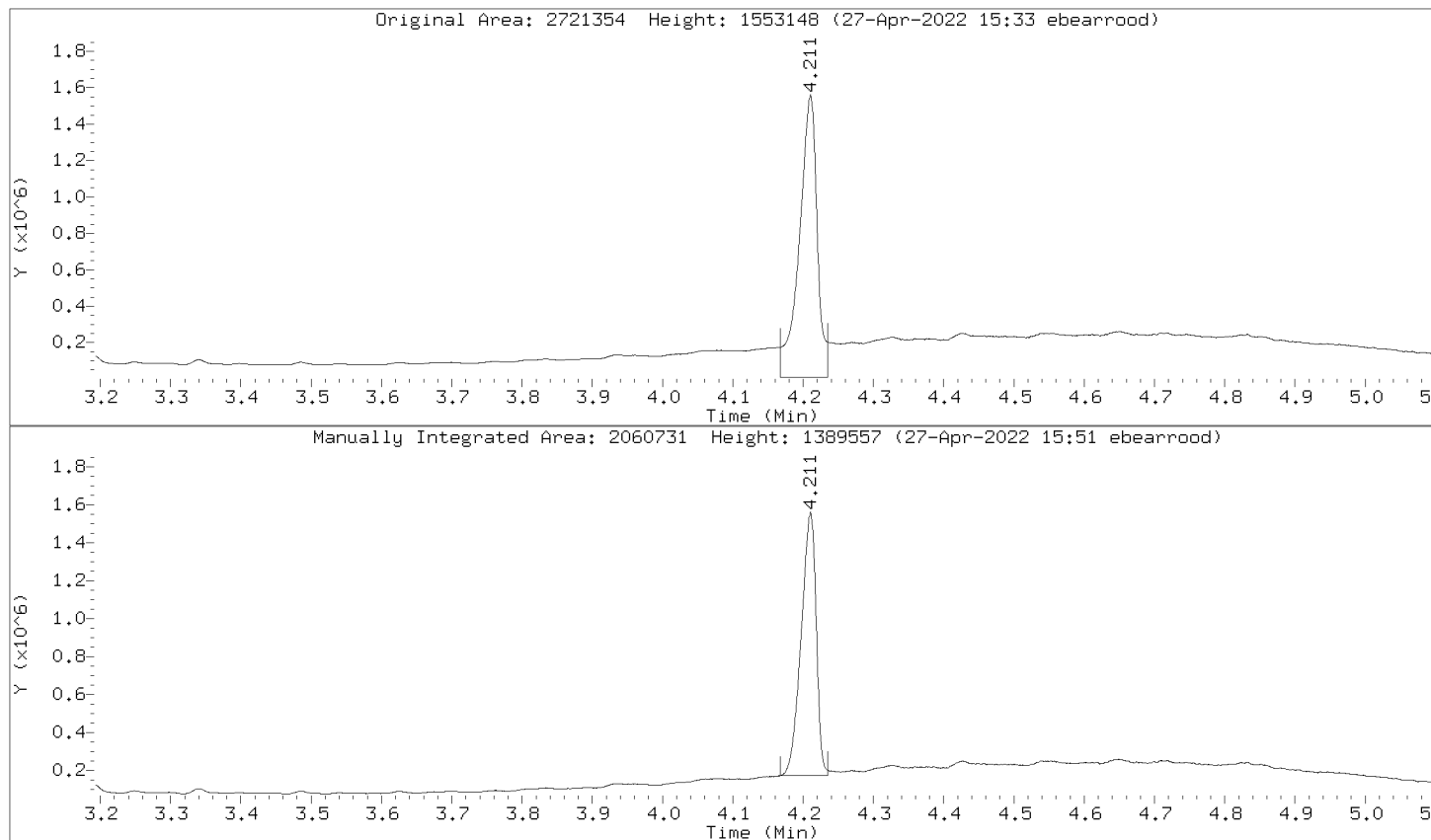
Compound: C10-C36      Review Code: RNG

CAS Number:



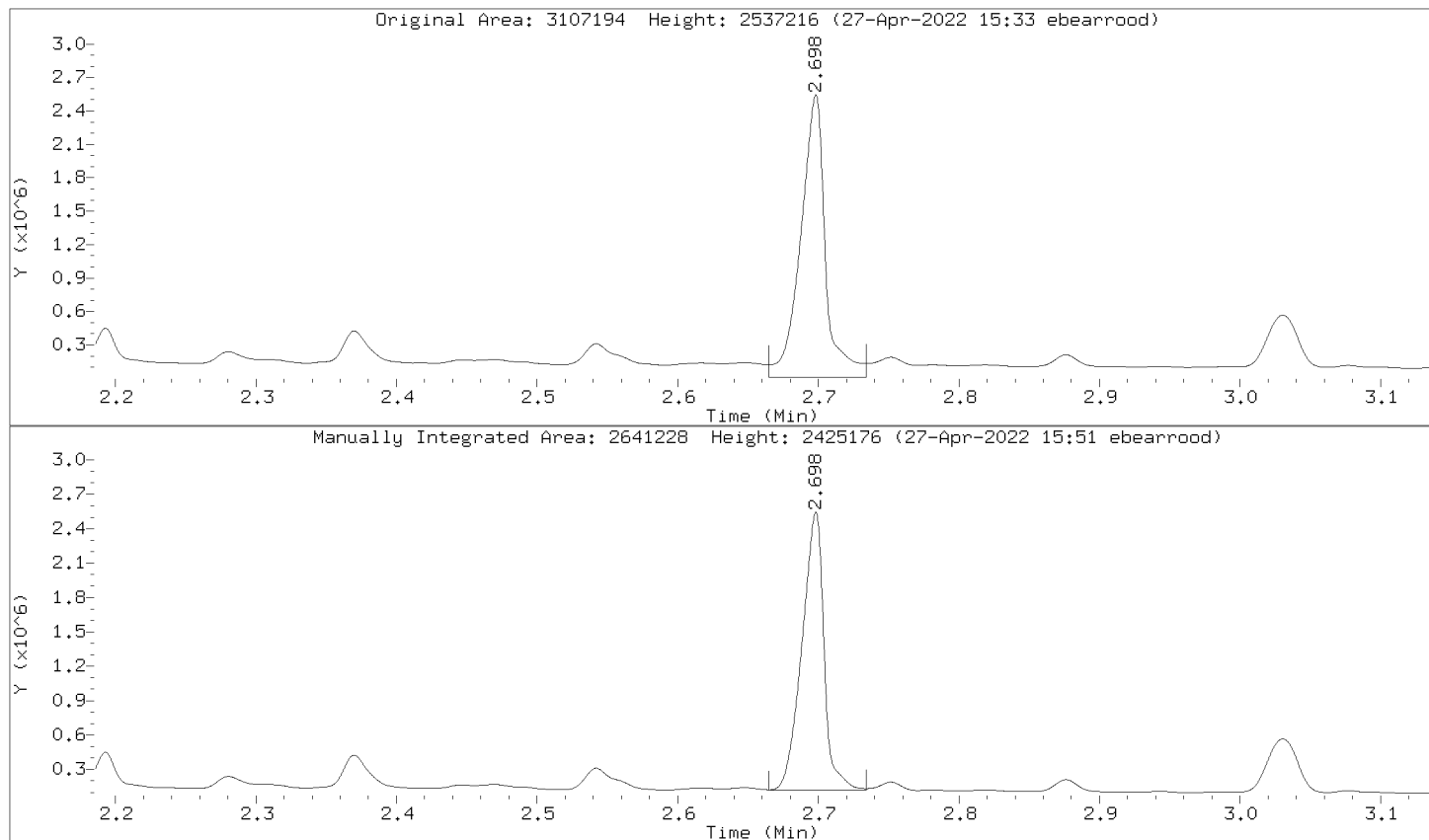
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Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
 Lab Smp Id: PBLK,349203:2 Client Smp ID: PBLK,349203:2  
 Inj Date : 27-APR-2022 15:15  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : pblk,349203:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 89  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			RESPONSE	CAS #:	
=====	=====	=====	(ug/mL)	(ug/mL)	=====
S 1	DRO by AK 102				
0.885	- 3.540		316955		(M) RNG
-----					
\$ 2	o-Terphenyl (S)				
2.684	2.685 -0.001		322293 48.2082	48.2	(RM) BA
-----					
\$ 3	n-Triacontane (S)				
4.192	4.193 -0.001		256654 49.0505	49.0	(RM) BA
-----					
S 4	Residual Range Organics AK103				
3.541	- 5.020		105170		(M) RNG
-----					
S 5	TPH-DRO (C10-C28)				
0.885	- 4.099		355128		(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)				
3.400	- 5.020		376803 68.6955	68.7	(M) RNG
-----					
S 7	C10-C36				
0.885	- 5.020		678780 43.5931	43.6	(M) RNG
-----					
S 8	Diesel Fuel Range				
1.340	- 3.580		285316		(M) RNG
-----					
S 9	Diesel Fuel Range SG				
1.340	- 3.580		285316		(M) RNG
-----					
S 10	Motor Oil Range				
3.581	- 5.740		415690 67.8385	67.8	(M) RNG
-----					
S 11	Motor Oil Range SG				
3.581	- 5.740		415690 67.8385	67.8	(M) RNG
-----					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.  
M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 15:15

Client ID: PBLK,349203;2

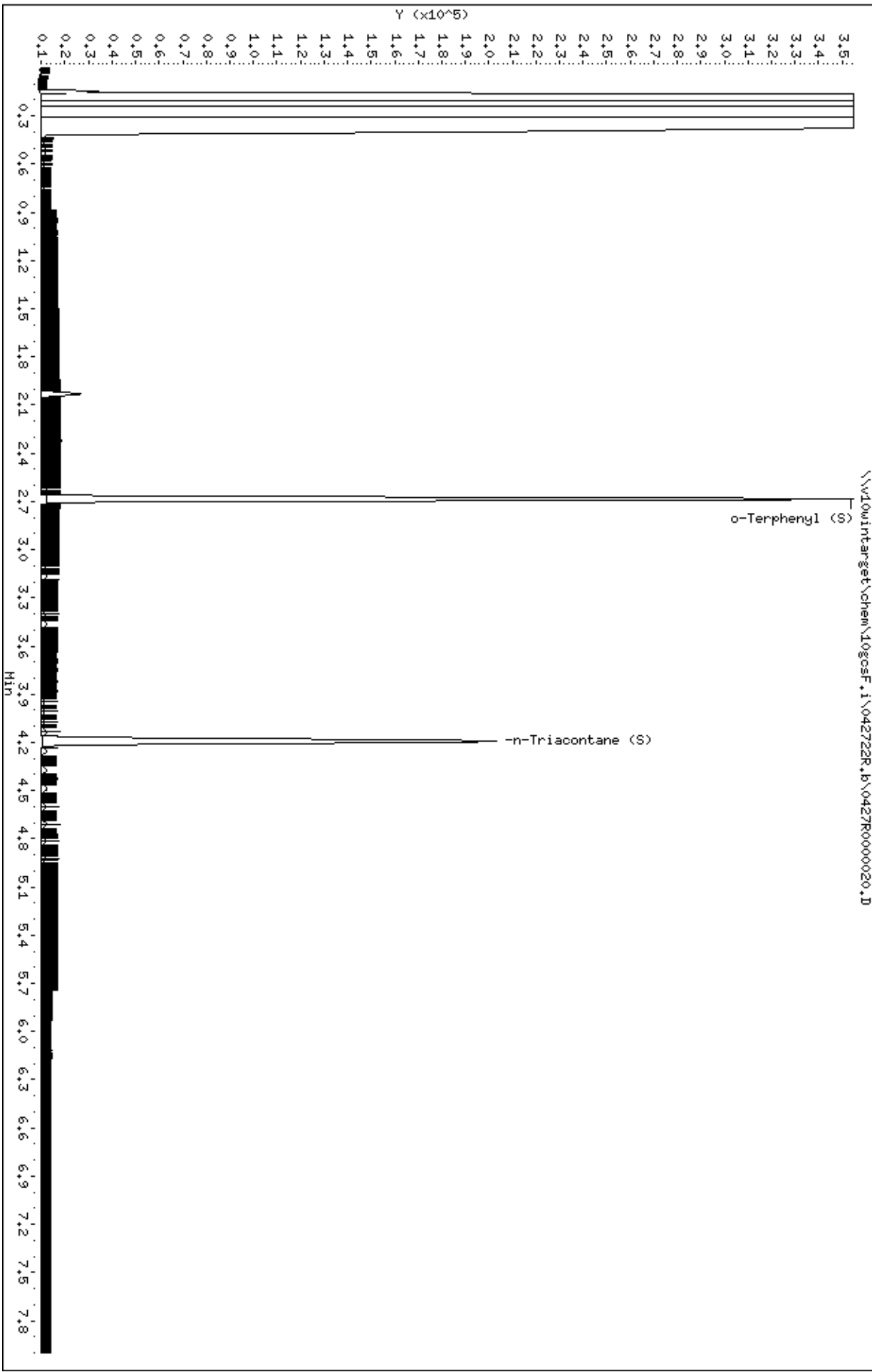
Sample Info: PBLK,349203;2

Instrument: 10gosf.i

Operator: EB3

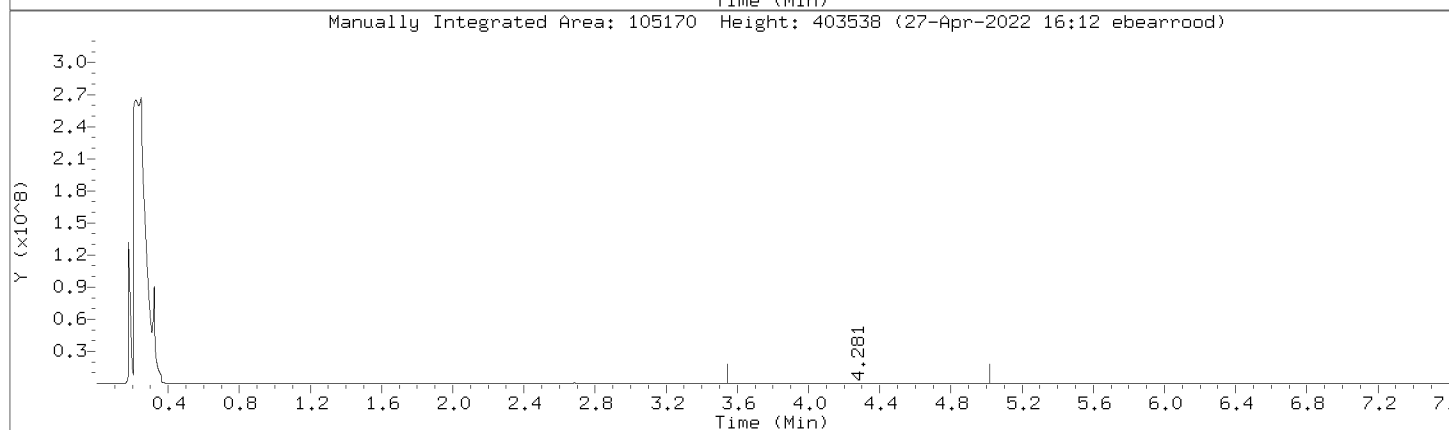
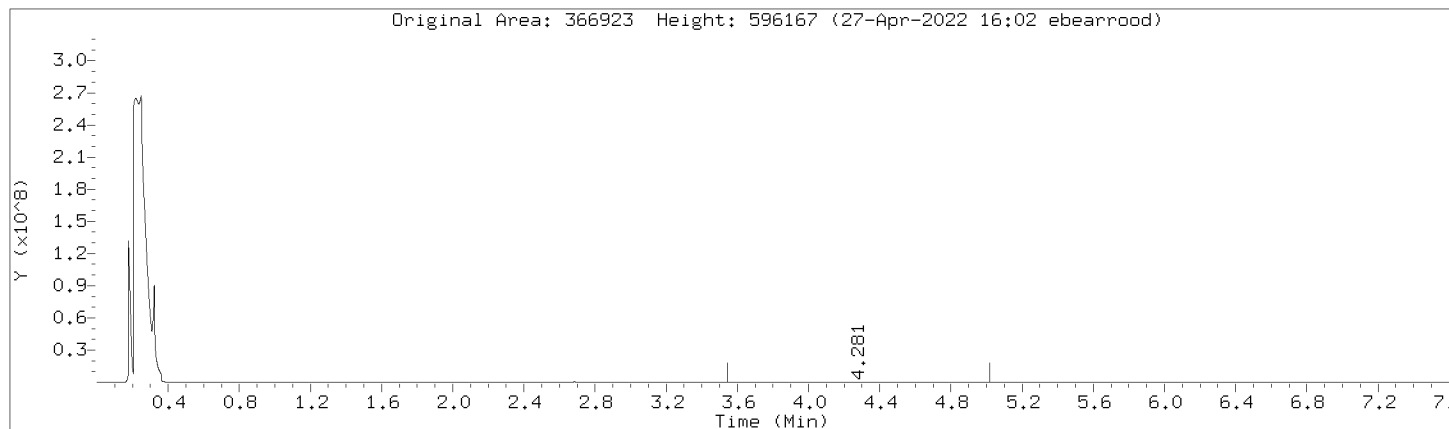
Column diameter: 0.32

Column phase: DB-5-MS21430033



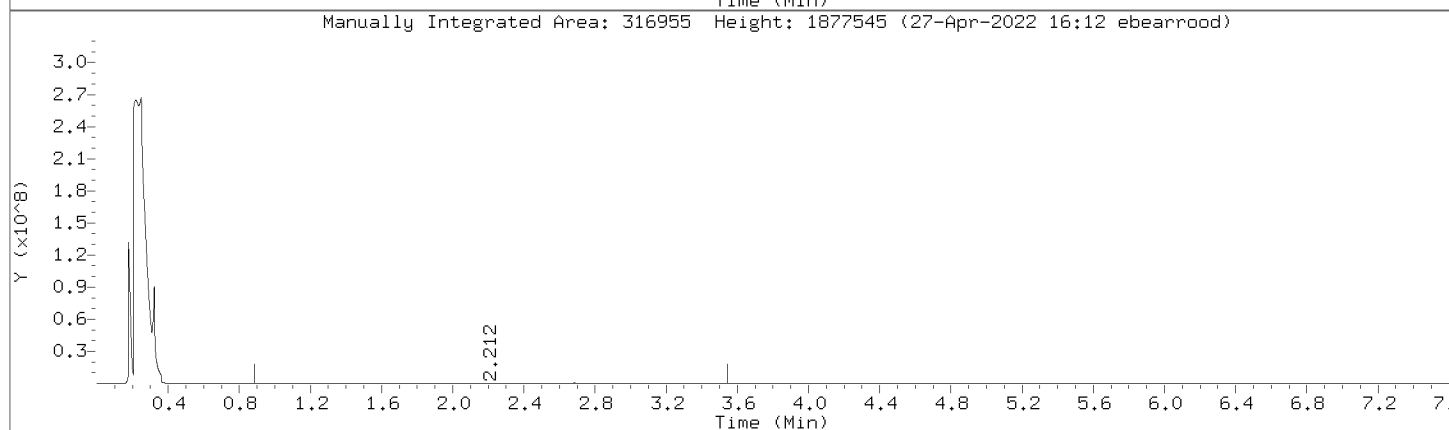
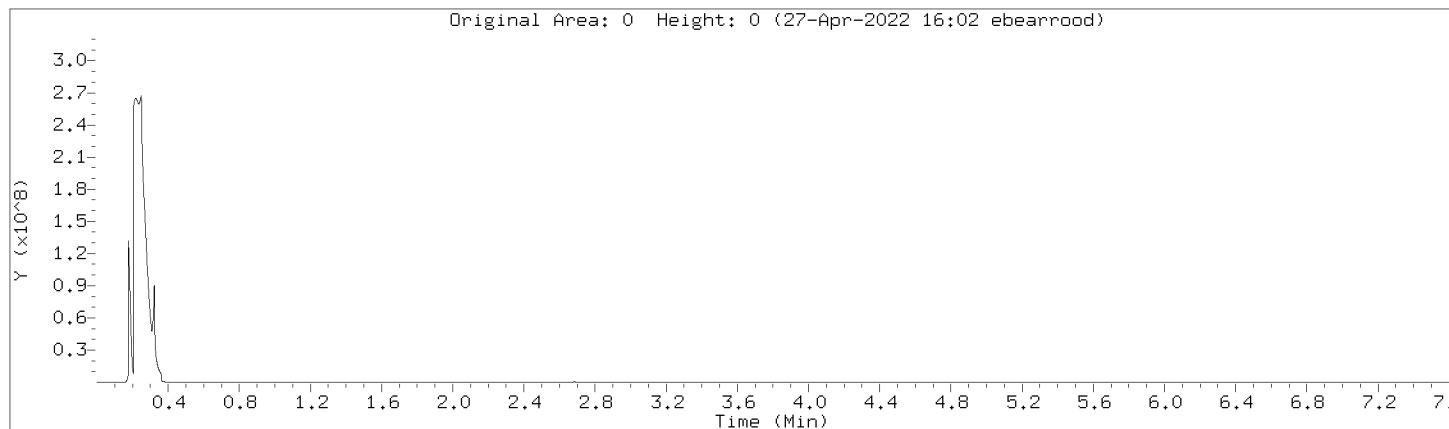
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

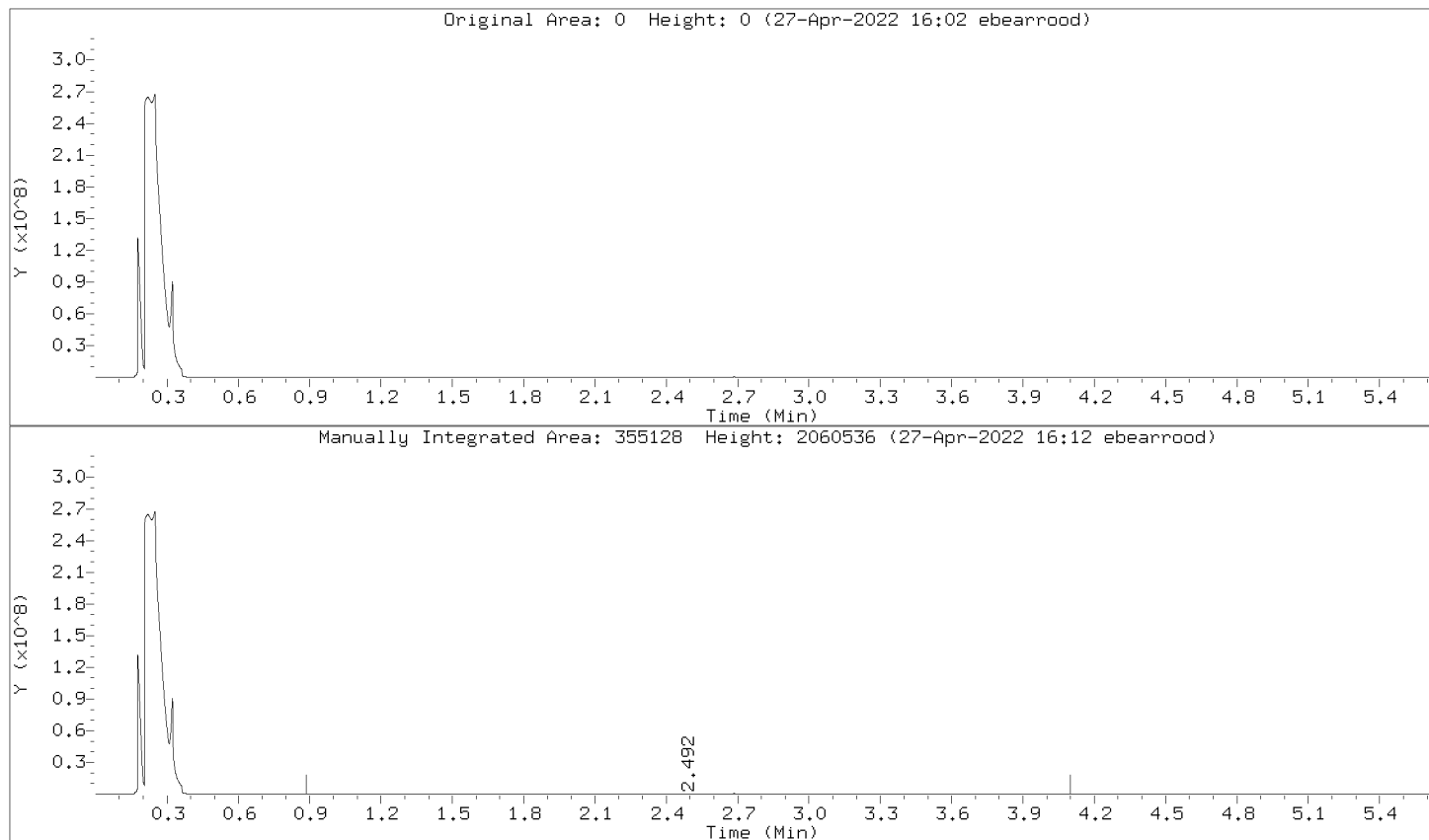
Compound: DRO by AK 102      Review Code: RNG  
CAS Number:





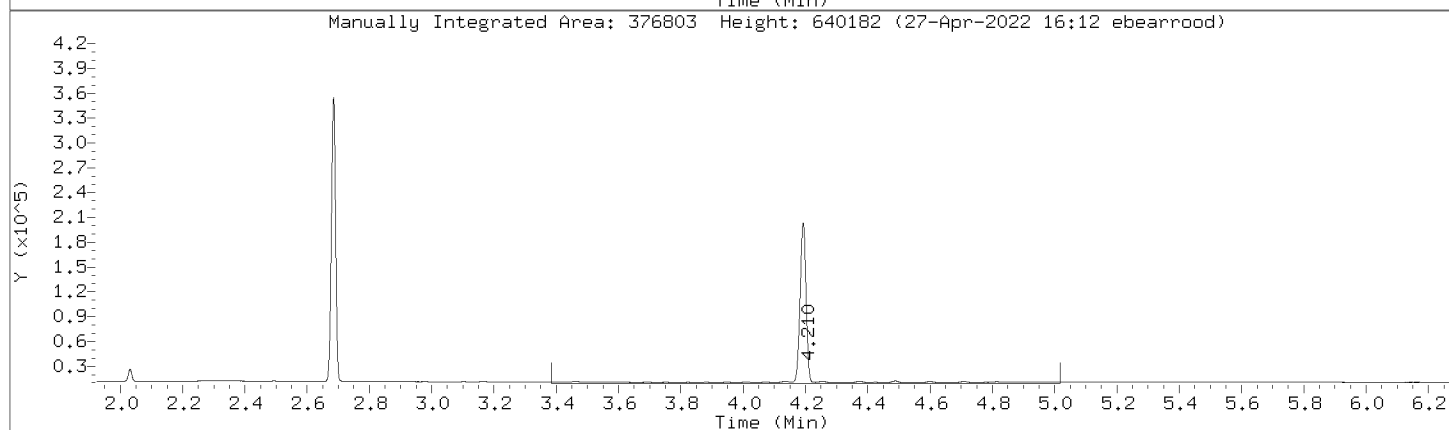
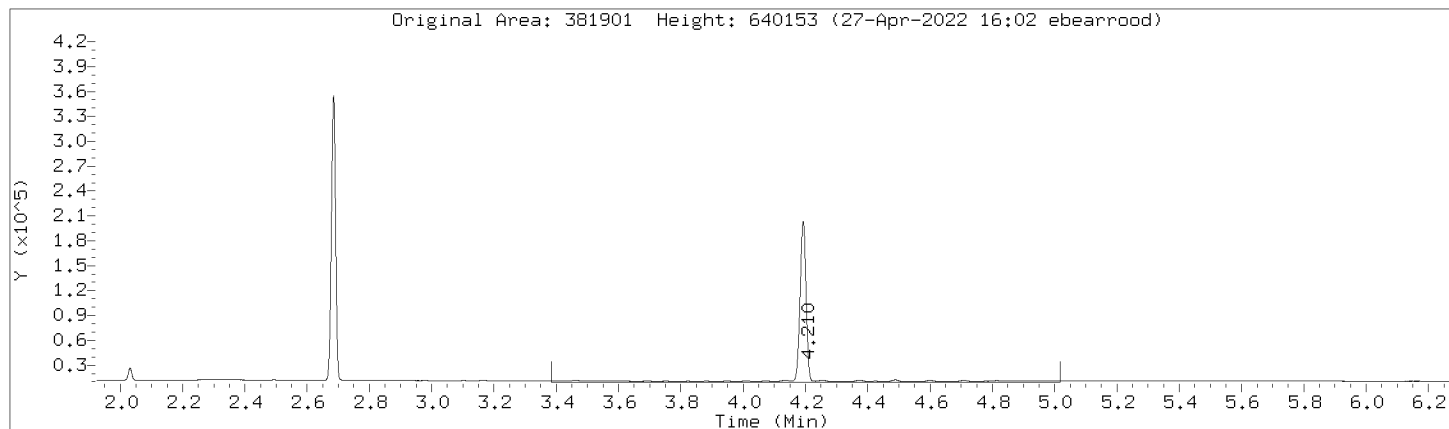
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



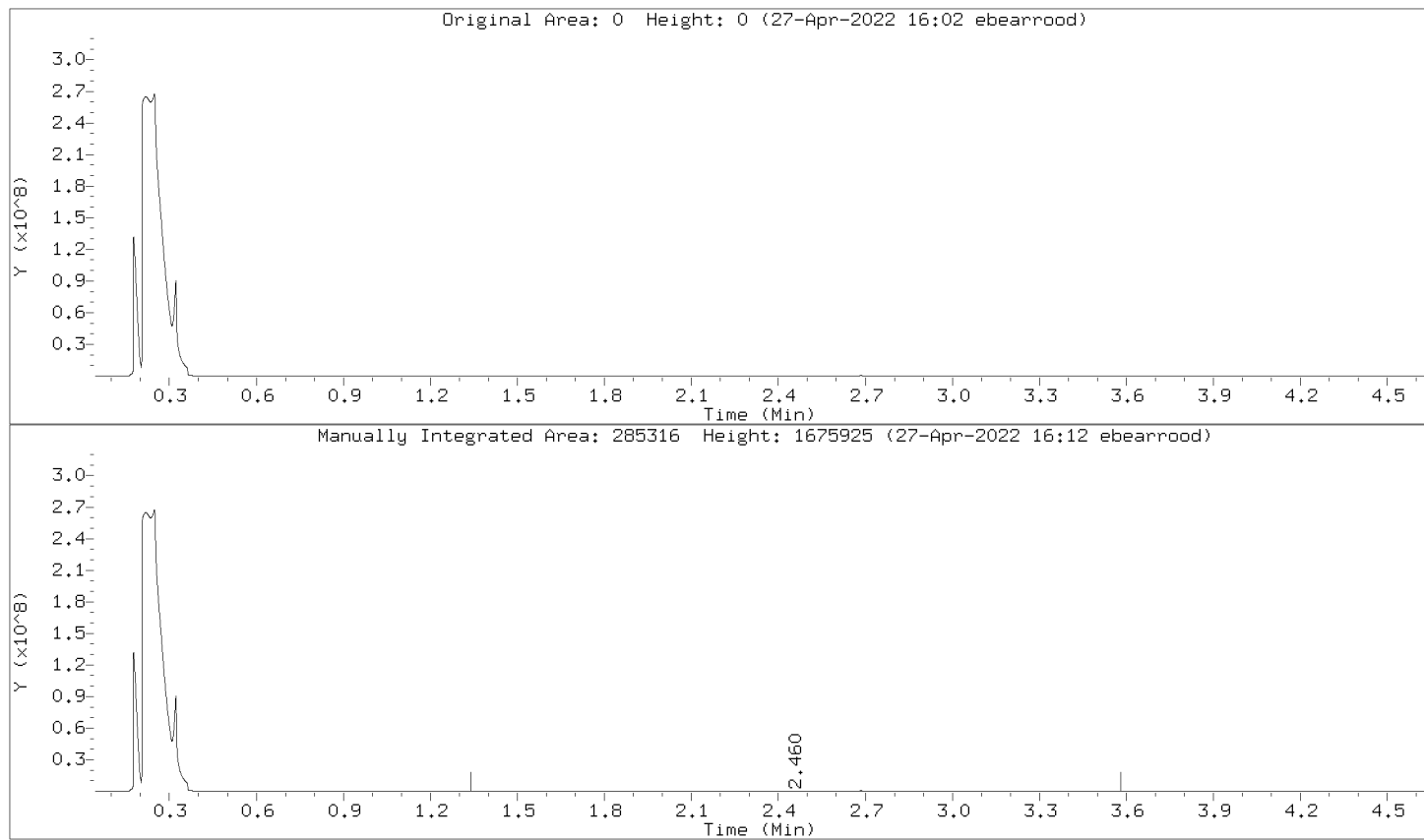
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



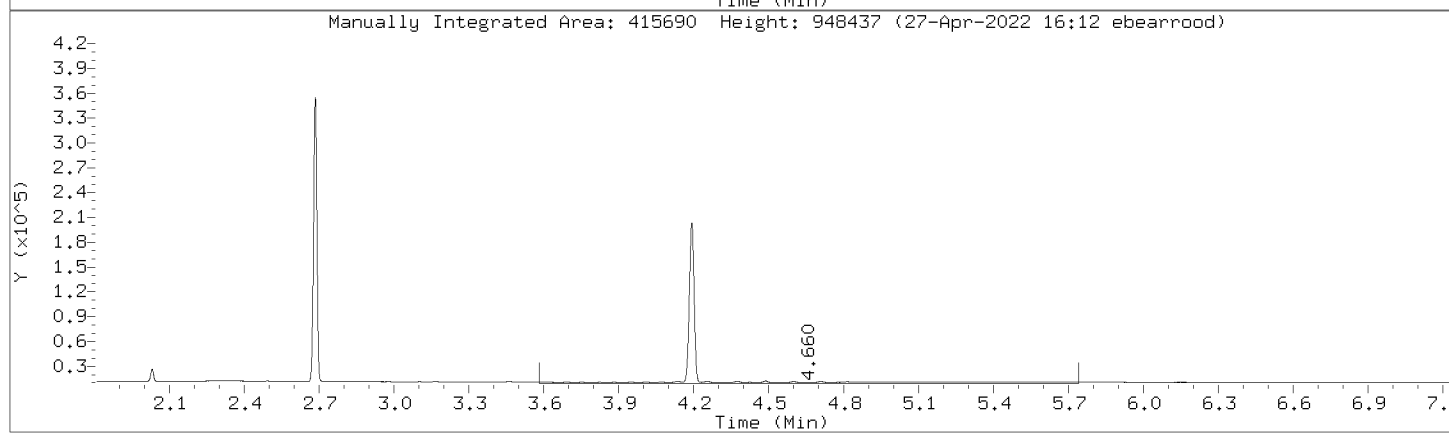
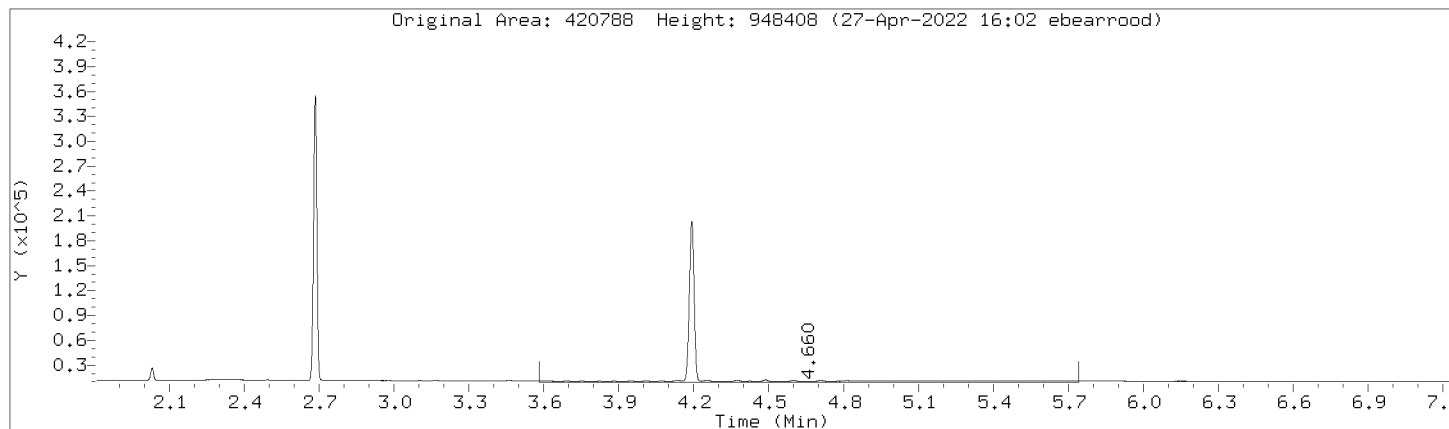
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Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



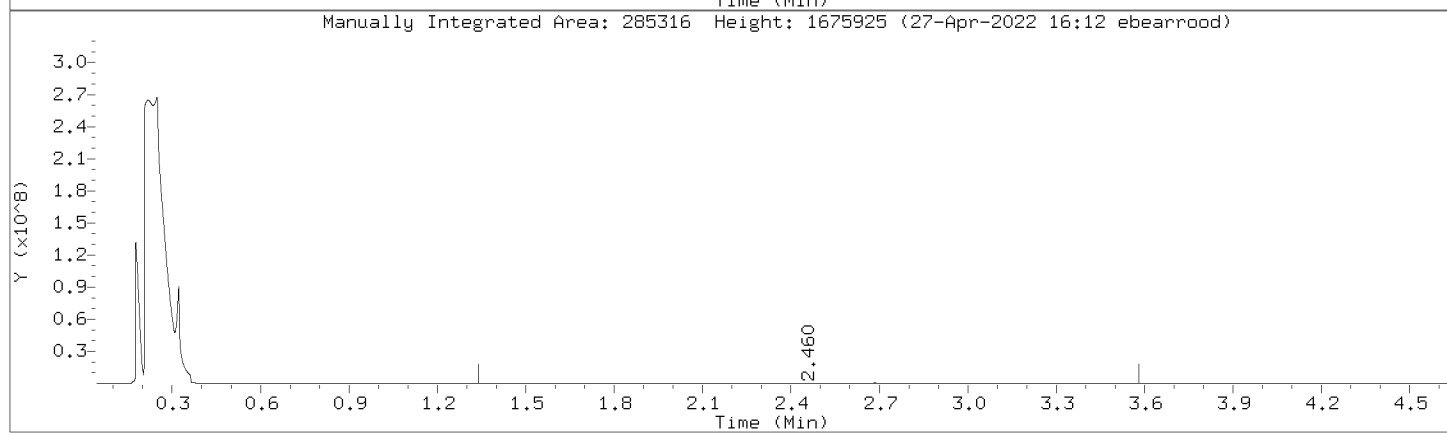
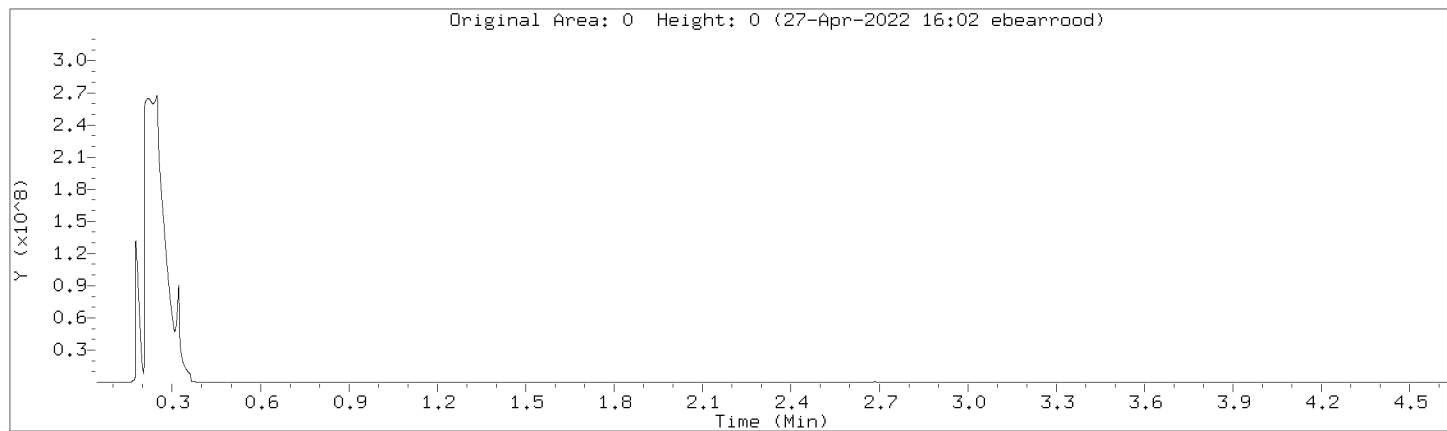
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Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



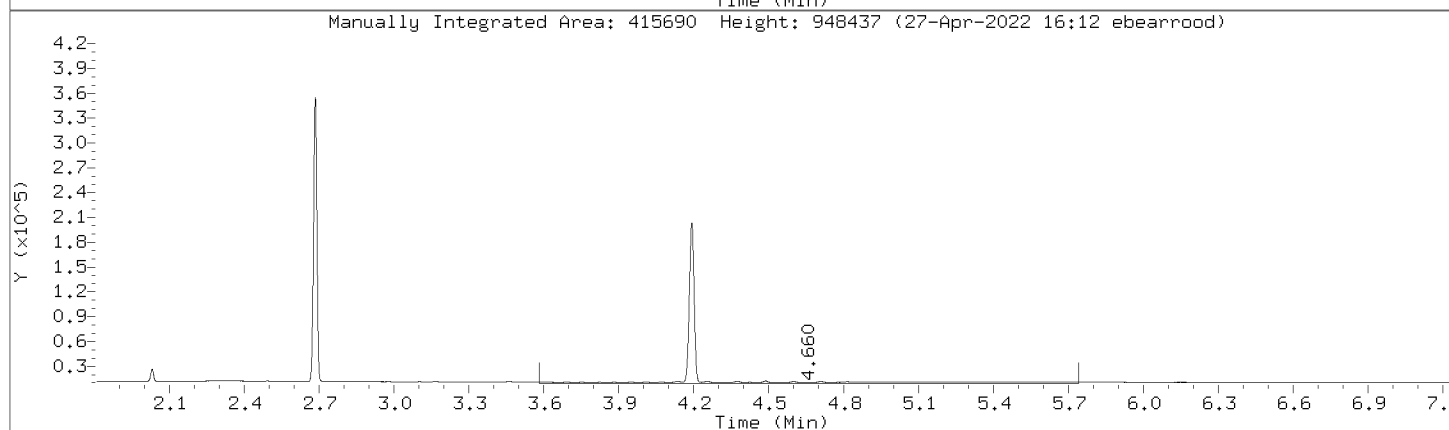
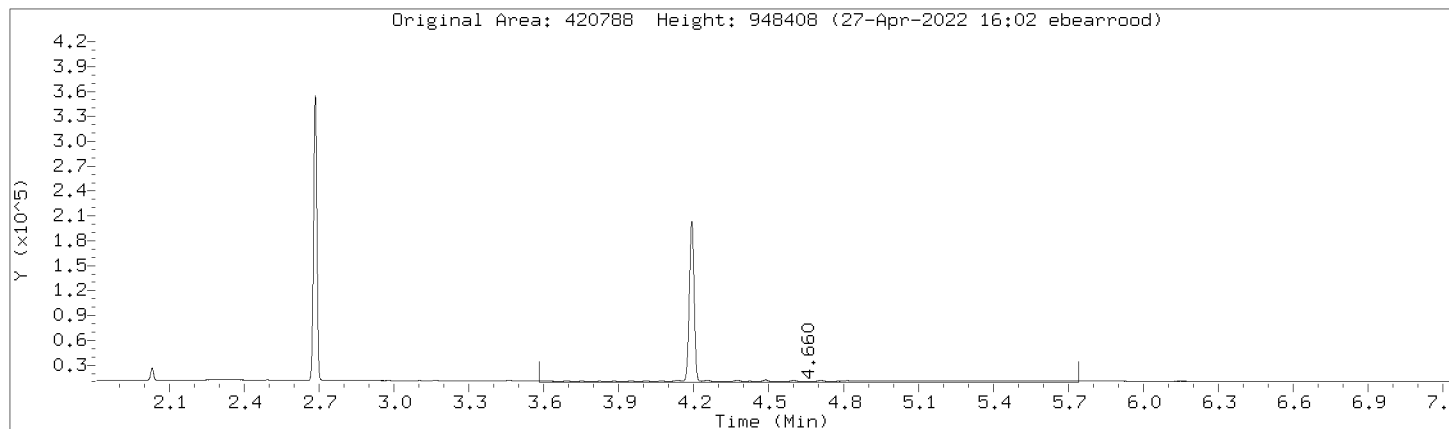
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Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



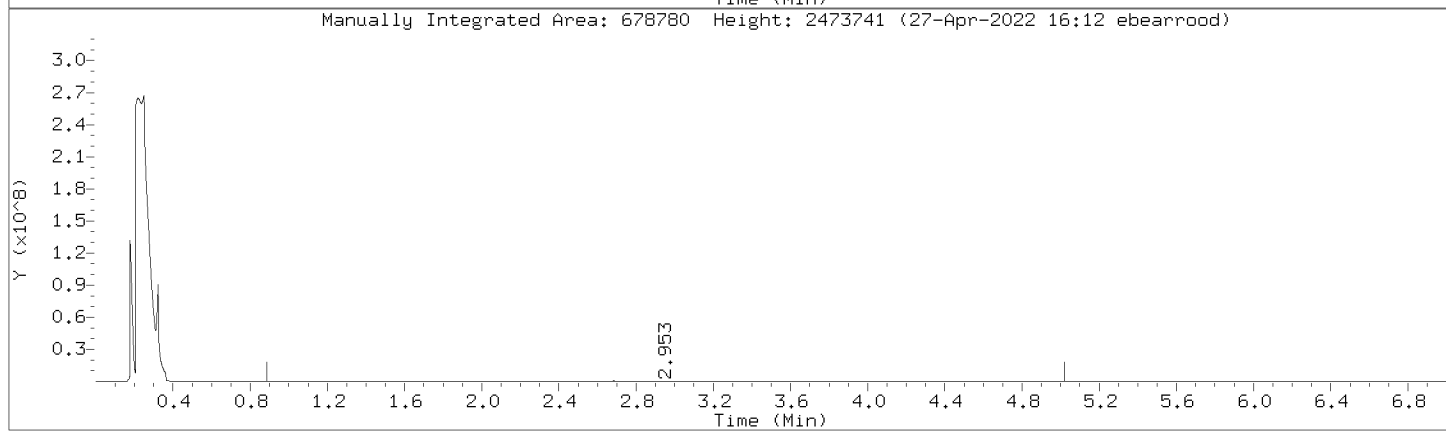
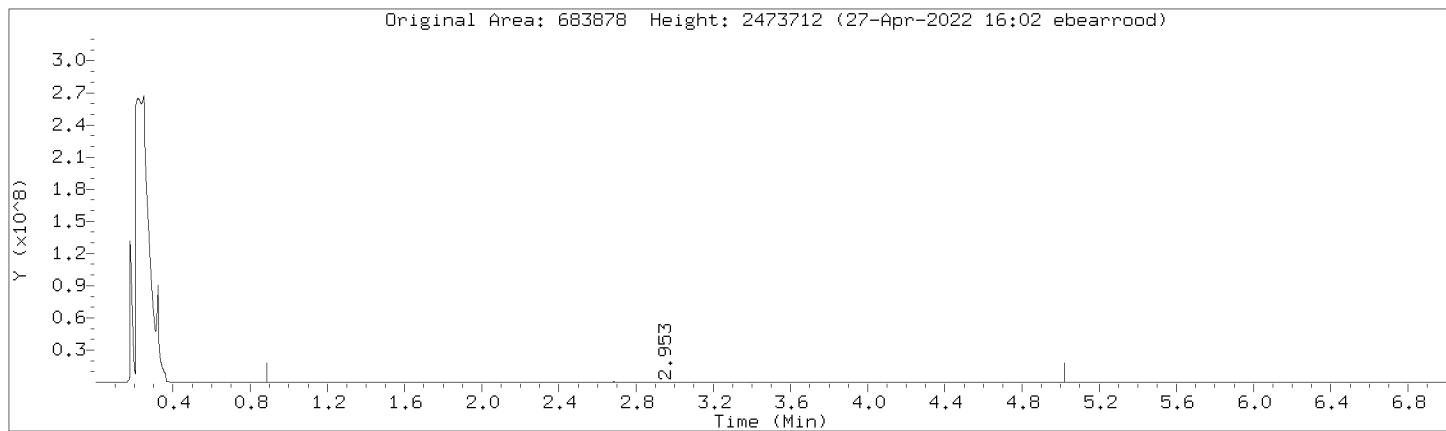
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Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



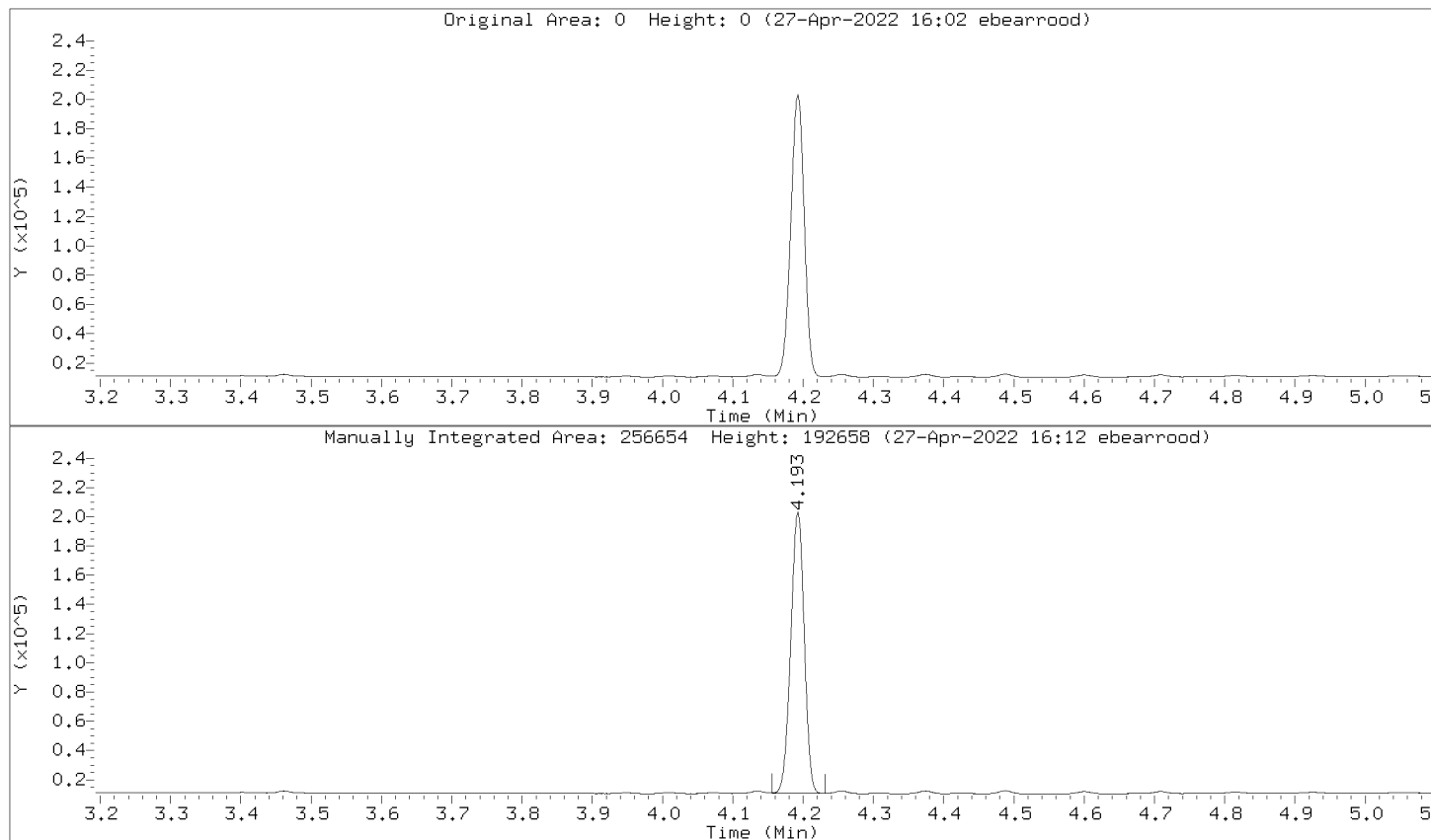
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Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

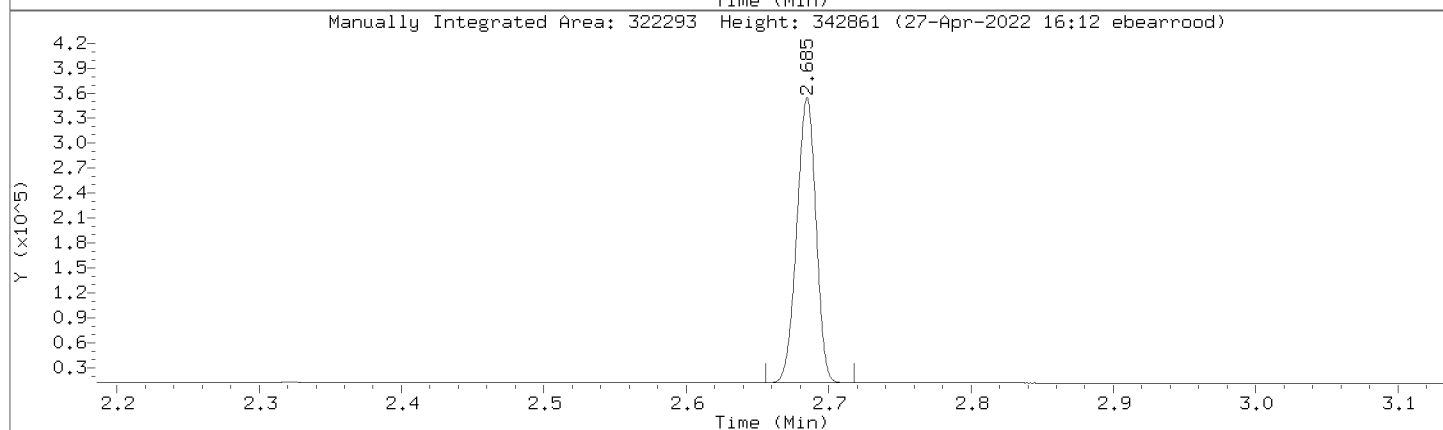
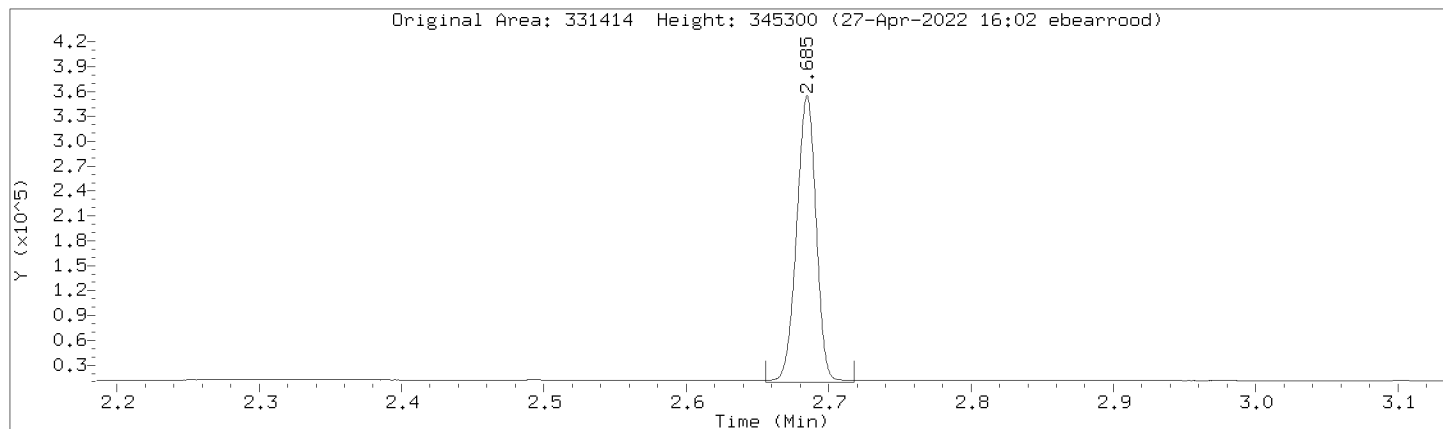
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000003.D  
 Lab Smp Id: DMO-RTM,362402:2 Client Smp ID: DMO-RTM,362402:2  
 Inj Date : 04-MAY-2022 11:17  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-rtm,362402:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050422R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 04-May-2022 14:06 tthao Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL		FINAL	REVIEW CODE
			RESPONSE	(ug/mL)	(ug/mL)	
====	=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102				CAS #:	
0.880	- 3.590		2527776	377.766	378	
-----						
\$ 2	o-Terphenyl (S)				CAS #:	
Compound Not Detected.						
-----						
\$ 3	n-Triacontane (S)				CAS #:	
Compound Not Detected.						
-----						
S 4	Residual Range Organics AK103				CAS #:	
3.591	- 5.150		2467245	675.103	675	
-----						
S 5	TPH-DRO (C10-C28)				CAS #:	
0.880	- 4.170		4110004	565.991	566	
-----						
S 6	Motor Oil Range (C24-C36)				CAS #:	
3.440	- 5.150		3244340	860.468	860	
-----						
S 7	C10-C36				CAS #:	
0.880	- 5.150		4995021	980.874	981	
-----						
S 8	Diesel Fuel Range				CAS #:	
1.340	- 3.640		1769937	302.454	302	
-----						
S 9	Diesel Fuel Range SG				CAS #:	
1.340	- 3.640		1769937	302.454	302	
-----						
S 10	Motor Oil Range				CAS #:	
3.641	- 6.100		3208737	701.219	701	
-----						

CONCENTRATIONS					
		ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/mL)	(ug/mL)	REVIEW CODE
====	=====	=====	=====	=====	=====
S	11	Motor Oil Range SG		CAS #:	
3.641	-	6.100	3208737	701.219	701

---

Date : 04-MAY-2022 11:17

Client ID: DMO-RTM,362402:2

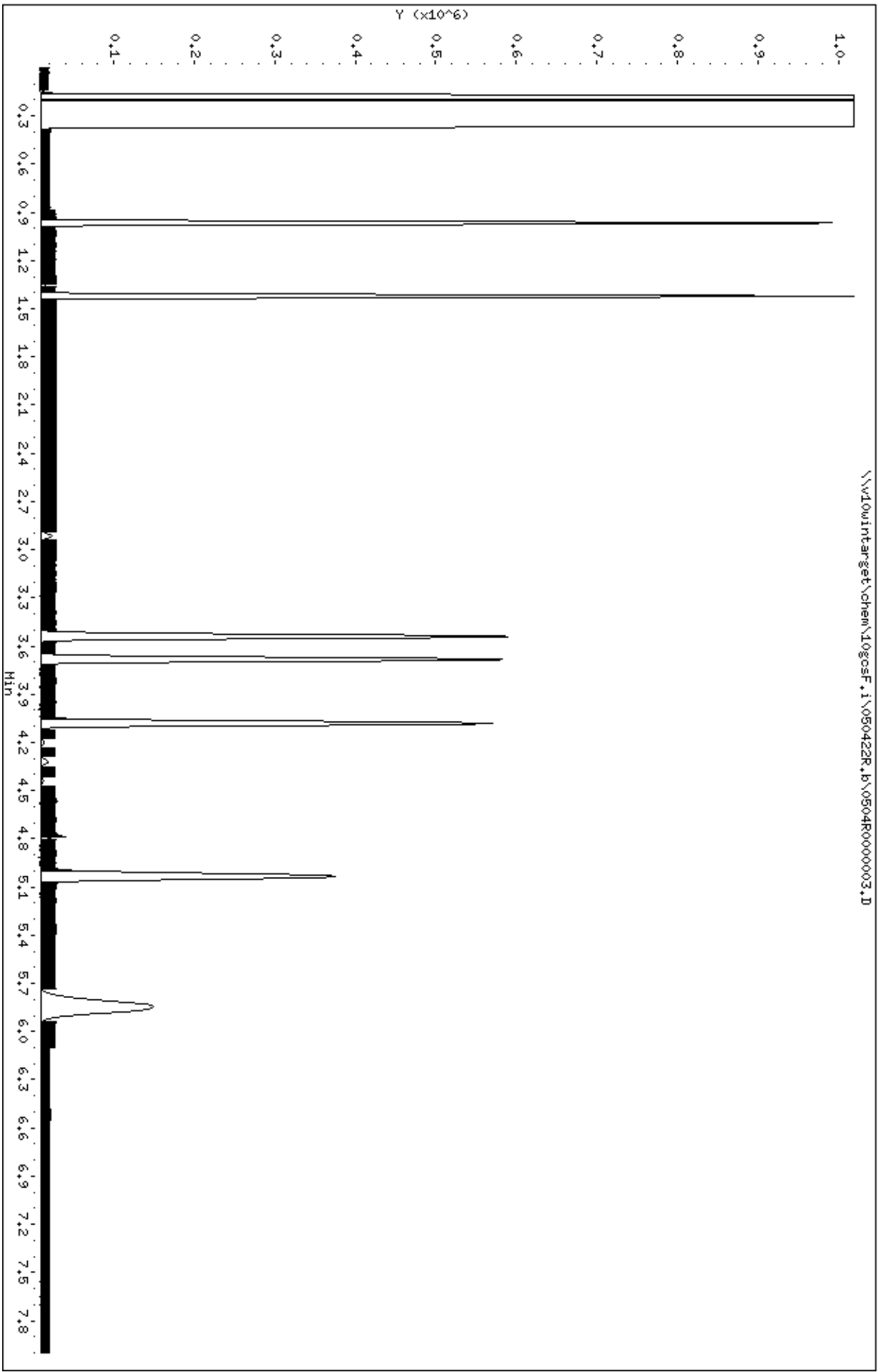
Sample Info: DMO-RTM,362402:2

Instrument: logsf.1

Operator: TT2

Column diameter: 0.32

Column phase: DB-5-US21430033



Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000003.D  
Injection Date: 04-MAY-2022 11:17  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-RTM,362402:2  
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	2467245	2467245
DRO by AK 102	2527776	2527776
TPH-DRO (C10-C28)	4110004	4110004
Motor Oil Range (C24-C36)	3244340	3244340
Diesel Fuel Range	1769937	1769937
Motor Oil Range	3208737	3208737
Diesel Fuel Range SG	1769937	1769937
Motor Oil Range SG	3208737	3208737
C10-C36	4995021	4995021
n-Triacontane (S)	0	0
o-Terphenyl (S)	0	0

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO INITIAL CALIBRATION DATA

SAMPLE NO.

29831781ICV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 04/26/2022 Time: 09:58

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 04/26/2022 04/26/2022

Lab File ID: 042622F.B\0426F0000015.D

Init. Calib. Time(s): 07:55 09:36

SDG No.: 10605661

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	552.1662	0.0100	10.4332	15.0000
Motor Oil Range	Linear	500	538.4717	0.0100	7.6944	15.0000
n-Triacontane (S)	Averaged	4770.689	4707.140	0.0100	-1.3321	15.0000
o-Terphenyl (S)	Averaged	5522.589	5788.280	0.0100	4.8110	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29833377CCV

Lab Name: Pace Analytical - Minnesota Calibration Date: 04/26/2022 Time: 13:36  
 Instrument ID: 10GCSF GC Column: FID Init. Calib. Date(s): 04/26/2022 04/26/2022  
 Lab File ID: 042622F.B\0426F0000018.D Init. Calib. Time(s): 07:55 09:36  
 SDG No.: 10605661

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	490.1963	0.0100	-1.9607	15.0000
Motor Oil Range	Linear	500	481.5424	0.0100	-3.6915	15.0000
n-Triacontane (S)	Averaged	4770.689	4743.600	0.0100	-0.5678	15.0000
o-Terphenyl (S)	Averaged	5522.589	5725.060	0.0100	3.6662	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO INITIAL CALIBRATION DATA

SAMPLE NO.

29844123ICV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 04/27/2022 Time: 15:04

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 04/27/2022 04/27/2022

Lab File ID: 042722R.B\0427R0000019.D

Init. Calib. Time(s): 13:00 14:42

SDG No.: 10605661

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	551.8944	0.0100	10.3789	15.0000
Motor Oil Range	Linear	500	549.0625	0.0100	9.8125	15.0000
n-Triacontane (S)	Linear	50	49.29993	0.0100	-1.4001	15.0000
o-Terphenyl (S)	Linear	50	52.07765	0.0100	4.1553	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.



GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29844734CCV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 04/27/2022 Time: 15:27

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 04/27/2022 04/27/2022

Lab File ID: 042722R.B\0427R0000021.D

Init. Calib. Time(s): 13:00 14:42

SDG No.: 10605661

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	498.6252	0.0100	-0.2750	15.0000
Motor Oil Range	Linear	500	552.9237	0.0100	10.5848	15.0000
n-Triacontane (S)	Linear	50	50.58088	0.0100	1.1618	15.0000
o-Terphenyl (S)	Linear	50	51.88532	0.0100	3.7706	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29847766CCV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 04/27/2022 Time: 15:38

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 04/26/2022 04/26/2022

Lab File ID: 042722F.B\0427F0000022.D

Init. Calib. Time(s): 07:55 09:36

SDG No.: 10605661

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	515.2007	0.0100	3.0401	15.0000
Motor Oil Range	Linear	500	503.9604	0.0100	0.7921	15.0000
n-Triacontane (S)	Averaged	4770.689	4913.720	0.0100	2.9981	15.0000
o-Terphenyl (S)	Averaged	5522.589	6015.960	0.0100	8.9337	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29848007CCV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 04/27/2022 Time: 17:08

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 04/26/2022 04/26/2022

Lab File ID: 042722F.B\0427F0000030.D

Init. Calib. Time(s): 07:55 09:36

SDG No.: 10605661

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	510.6948	0.0100	2.1390	15.0000
Motor Oil Range	Linear	500	514.3625	0.0100	2.8725	15.0000
n-Triacontane (S)	Averaged	4770.689	4934.620	0.0100	3.4362	15.0000
o-Terphenyl (S)	Averaged	5522.589	5977.040	0.0100	8.2289	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29981167CCV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 05/04/2022 Time: 12:13

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 04/27/2022 04/27/2022

Lab File ID: 050422R.B\0504R0000009.D

Init. Calib. Time(s): 13:00 14:42

SDG No.: 10605661

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	510.9122	0.0100	2.1824	15.0000
Motor Oil Range	Linear	500	522.6417	0.0100	4.5284	15.0000
n-Triacontane (S)	Linear	50	48.00425	0.0100	-3.9915	15.0000
o-Terphenyl (S)	Linear	50	48.47987	0.0100	-3.0403	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29981166CCV

Lab Name: Pace Analytical - Minnesota Calibration Date: 05/04/2022 Time: 13:09  
 Instrument ID: 10GCSF GC Column: FID Init. Calib. Date(s): 04/27/2022 04/27/2022  
 Lab File ID: 050422R.B\0504R0000015.D Init. Calib. Time(s): 13:00 14:42  
 SDG No.: 10605661

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	512.8422	0.0100	2.5684	15.0000
Motor Oil Range	Linear	500	535.1452	0.0100	7.0290	15.0000
n-Triacontane (S)	Linear	50	50.57294	0.0100	1.1459	15.0000
o-Terphenyl (S)	Linear	50	48.80698	0.0100	-2.3860	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000015.D  
 Lab Smp Id: DMO-ICV,355155:2 Client Smp ID: DMO-ICV,355155:2  
 Inj Date : 26-APR-2022 09:58  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-icv,355155:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 12:58 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 13 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		3245998 500.000	552	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.582	2.582 0.000		289414 50.0000	52.4	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.064	4.064 0.000		235357 50.0000	49.3	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		1833034 500.000	537	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		3702121 500.000	550	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		1909006 500.000	539	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		5079033 1000.00	1090	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		2746438 500.000	552	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		2746438 500.000	552	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		2263227 500.000	538	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		2263227 500.000	538	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 09:58

Client ID: DM0-ICV,355155;2

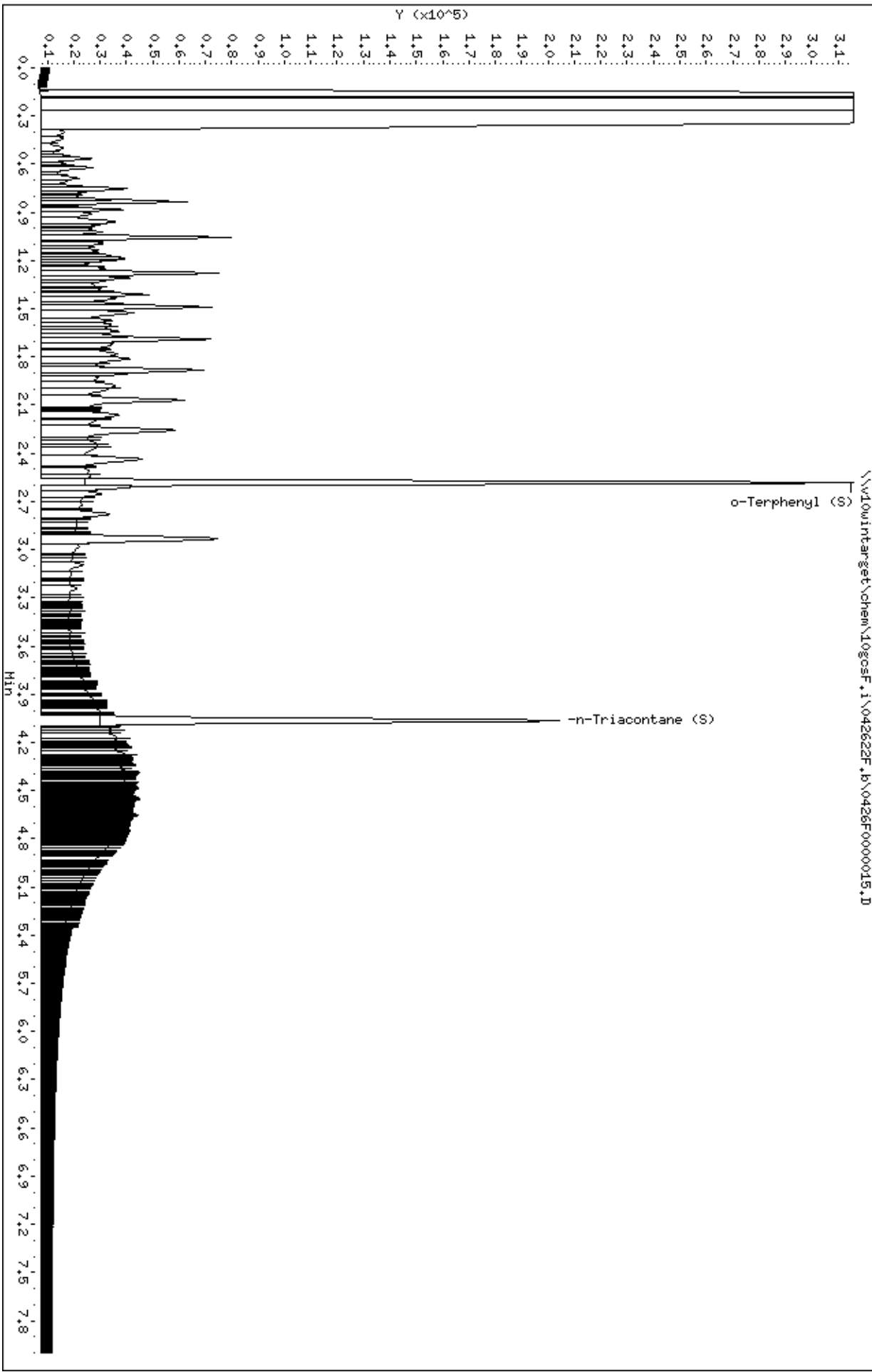
Sample Info: DM0-ICV,355155;2

Instrument: 10goscF.1

Operator: EB3

Column diameter: 0.32

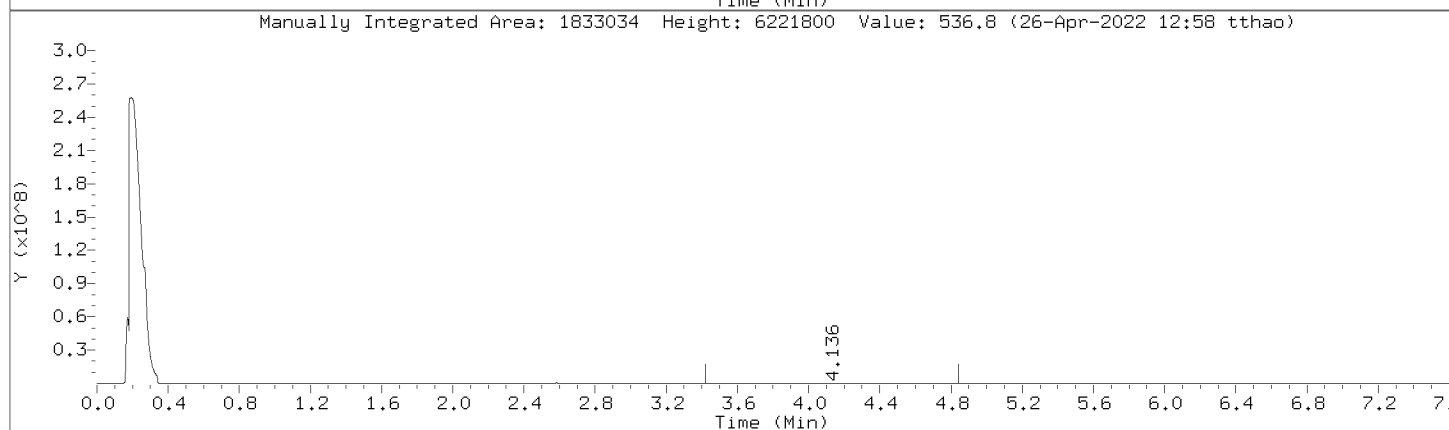
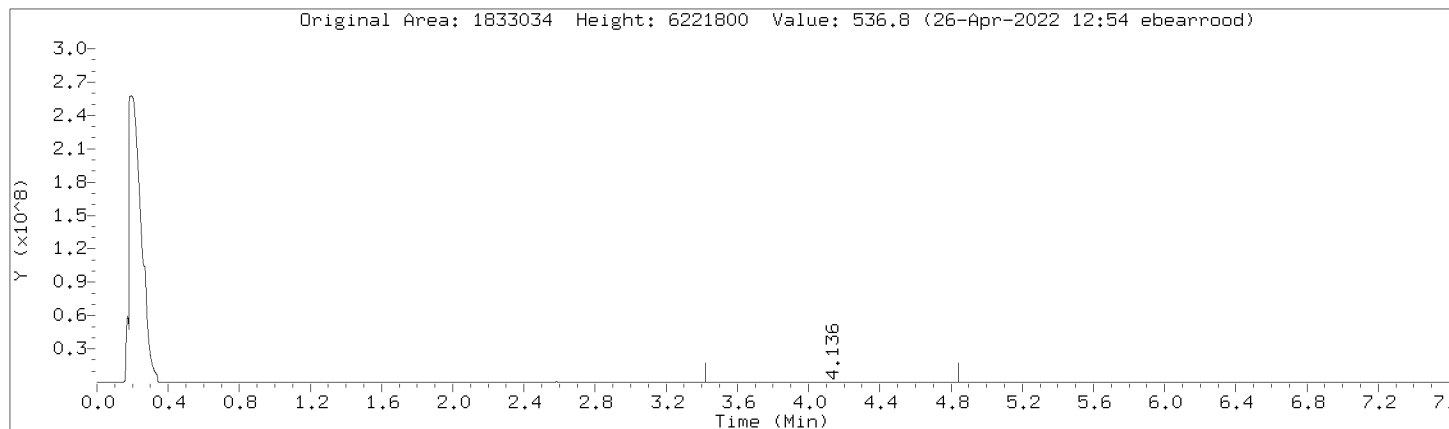
Column phase: DB-5-MS21250010





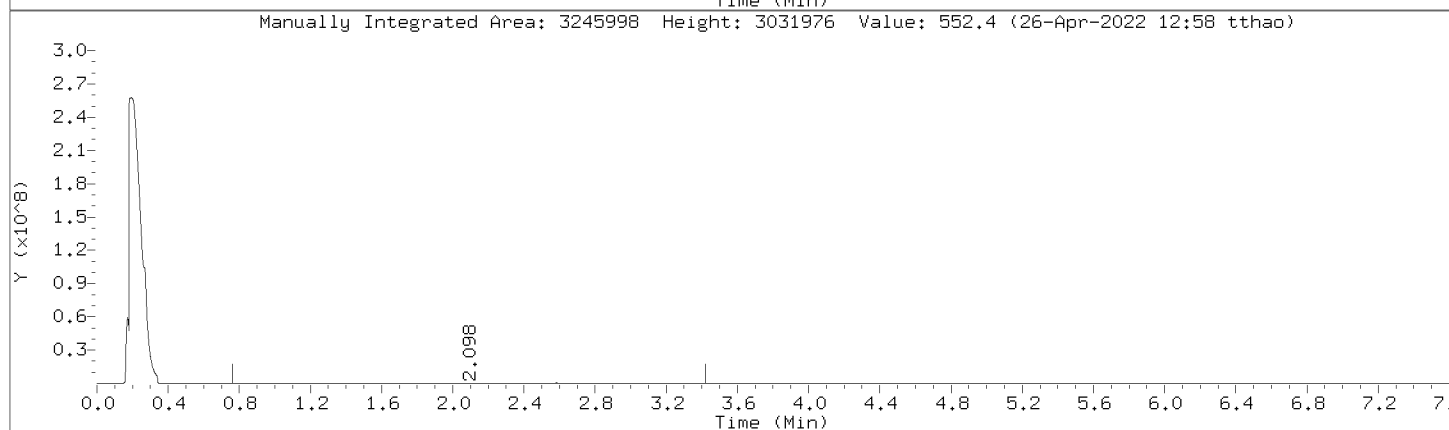
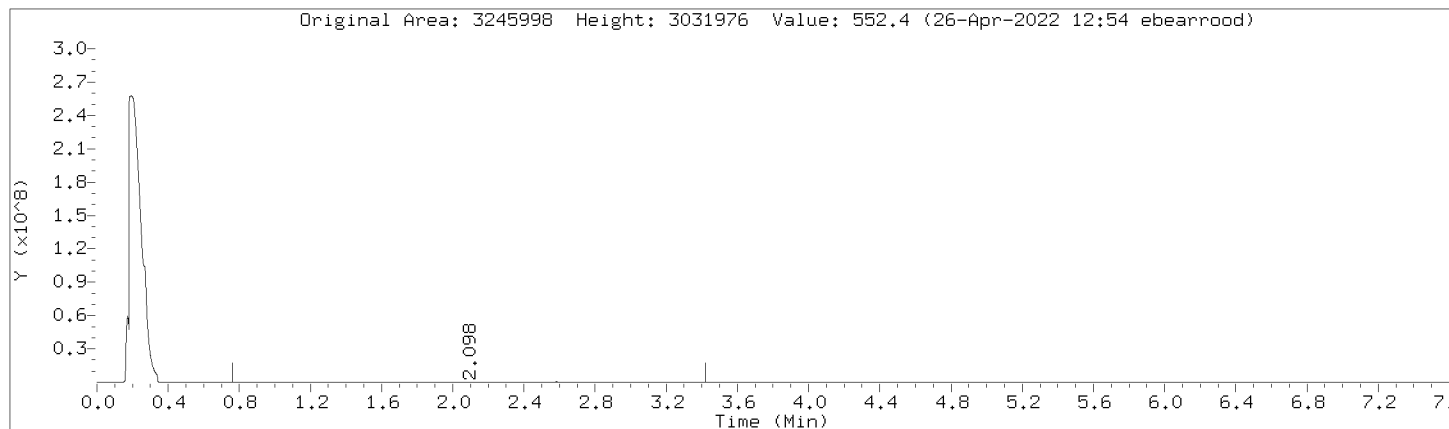
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



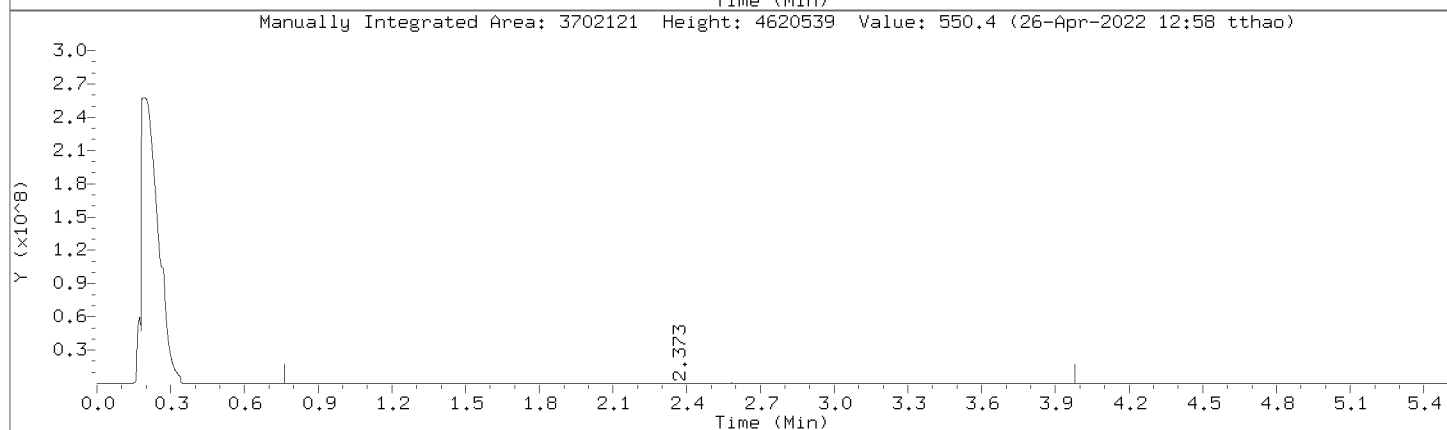
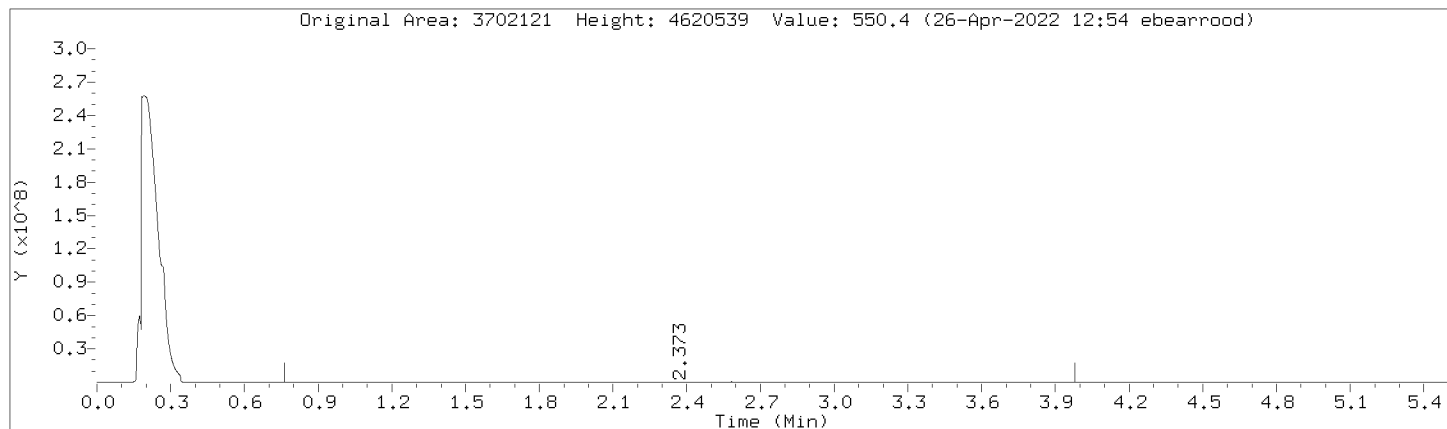
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



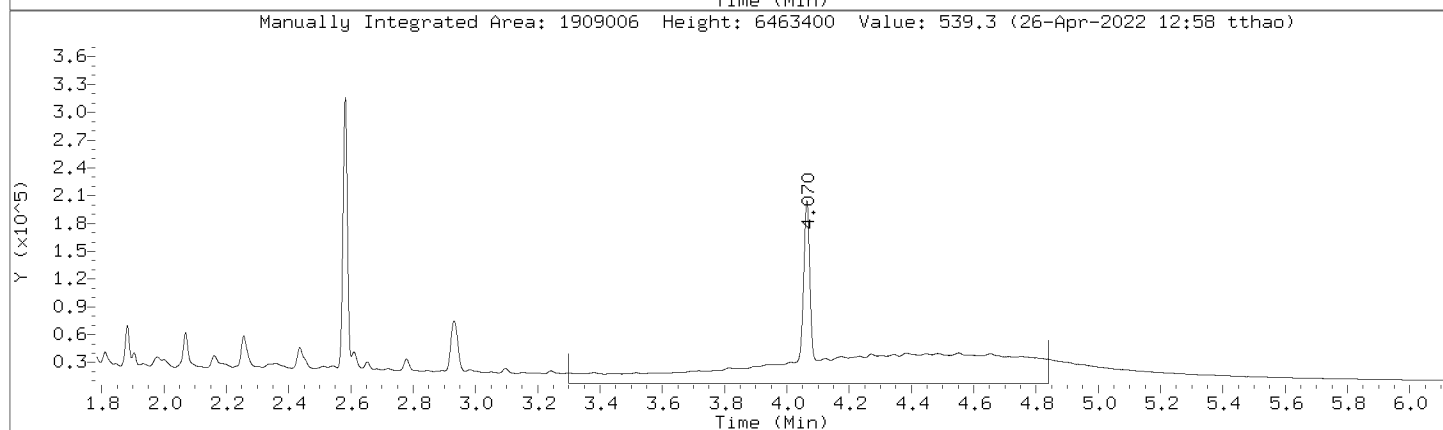
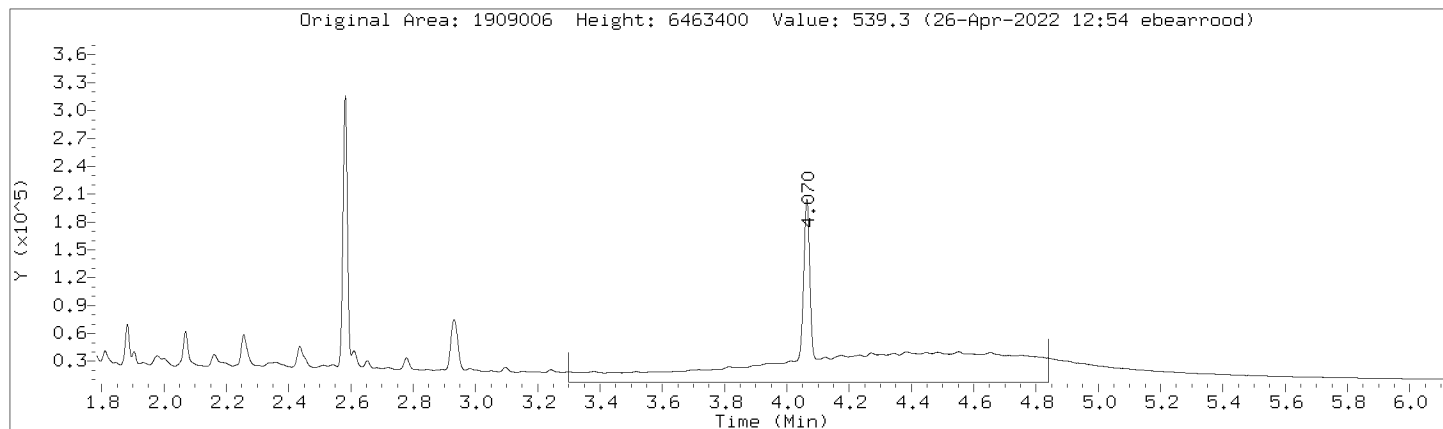
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



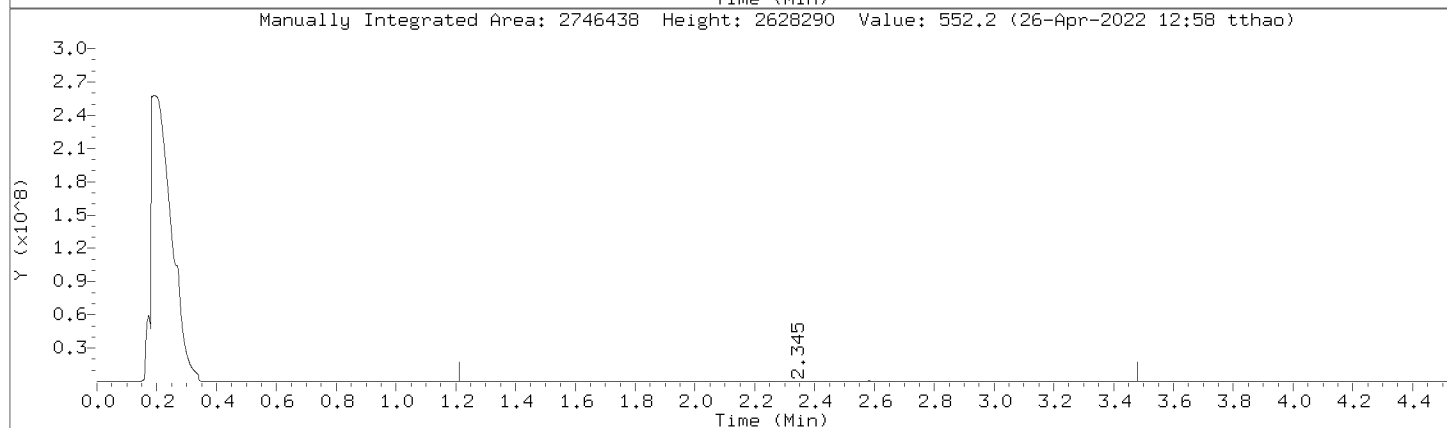
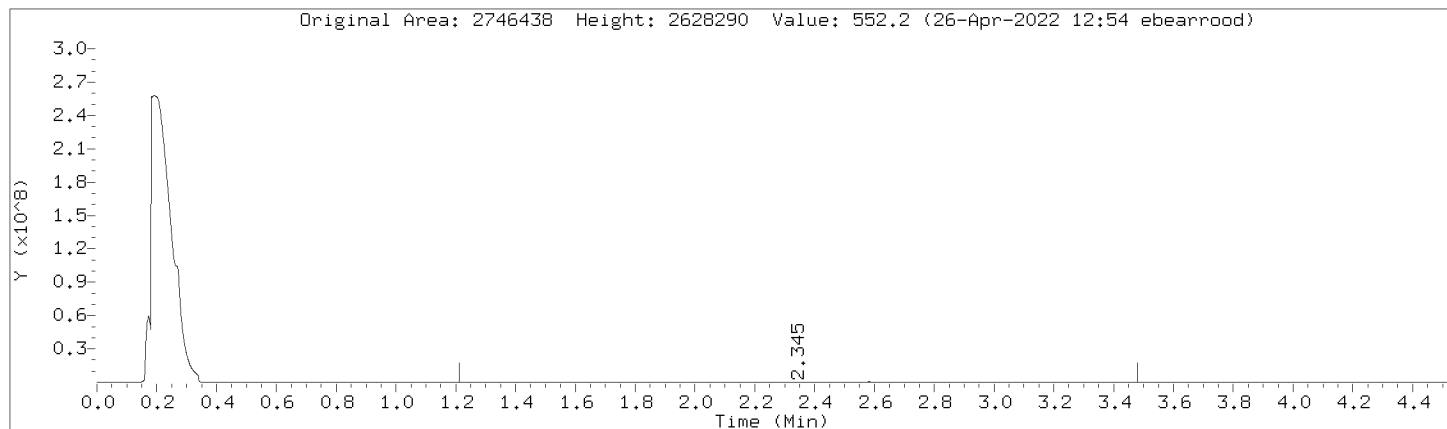
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



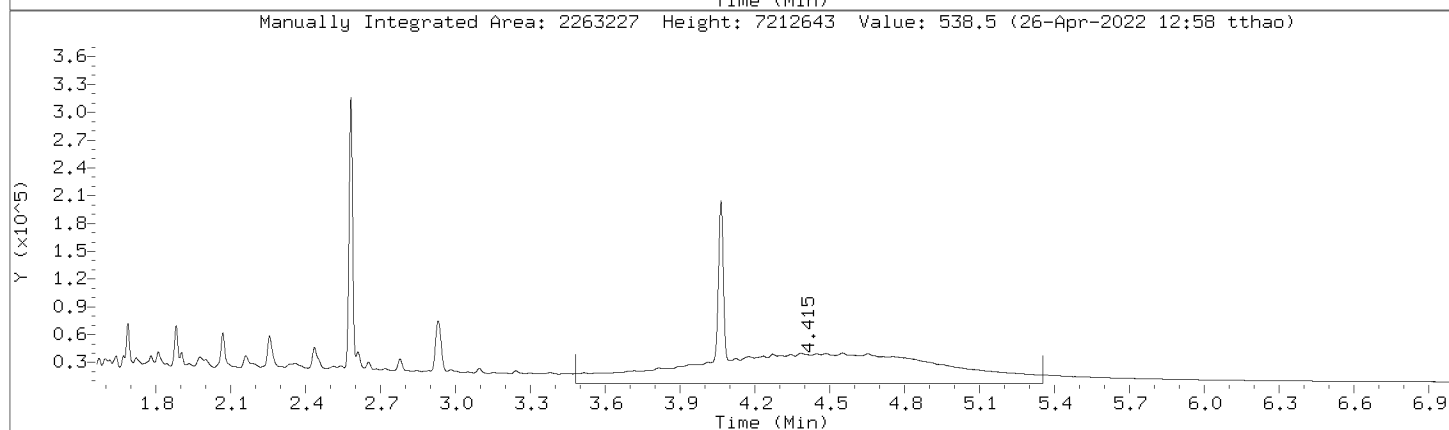
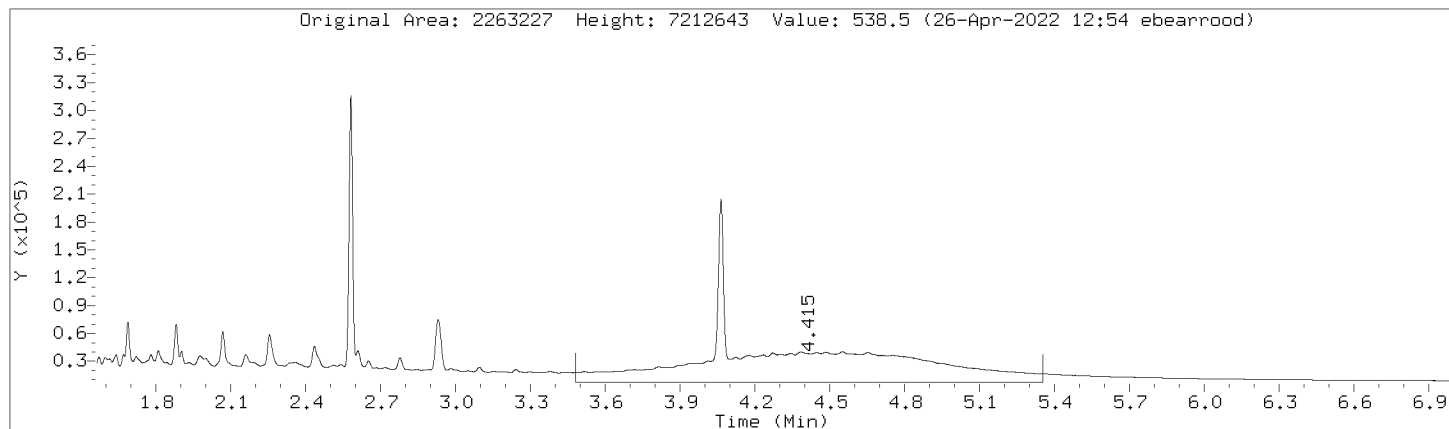
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



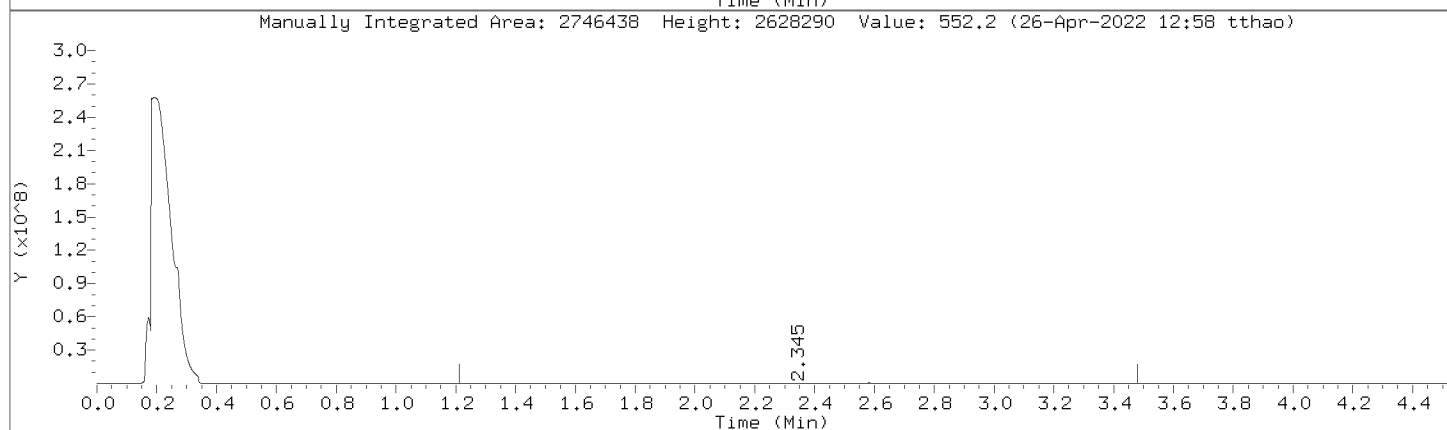
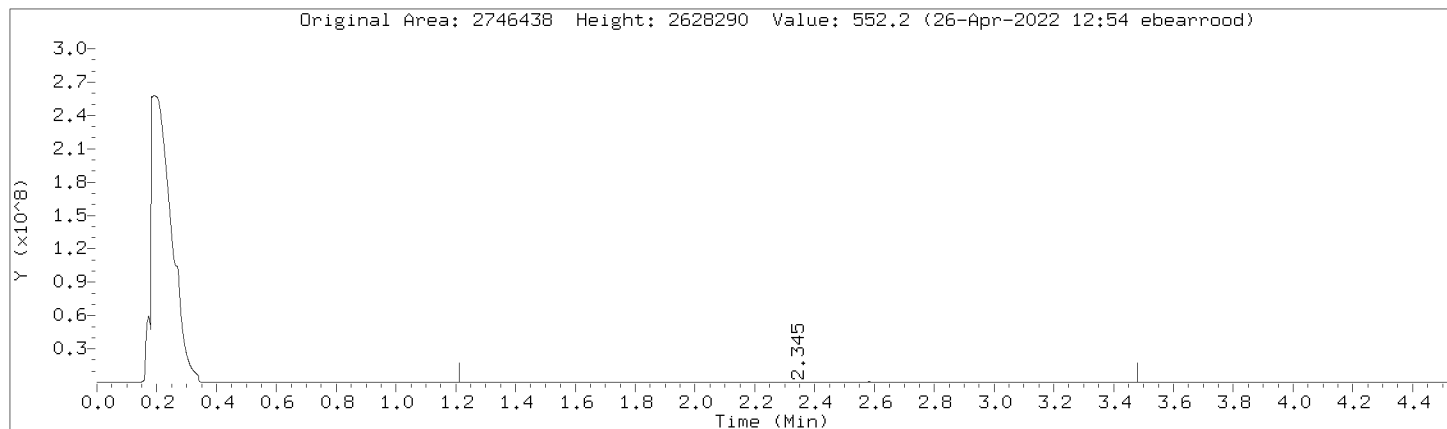
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



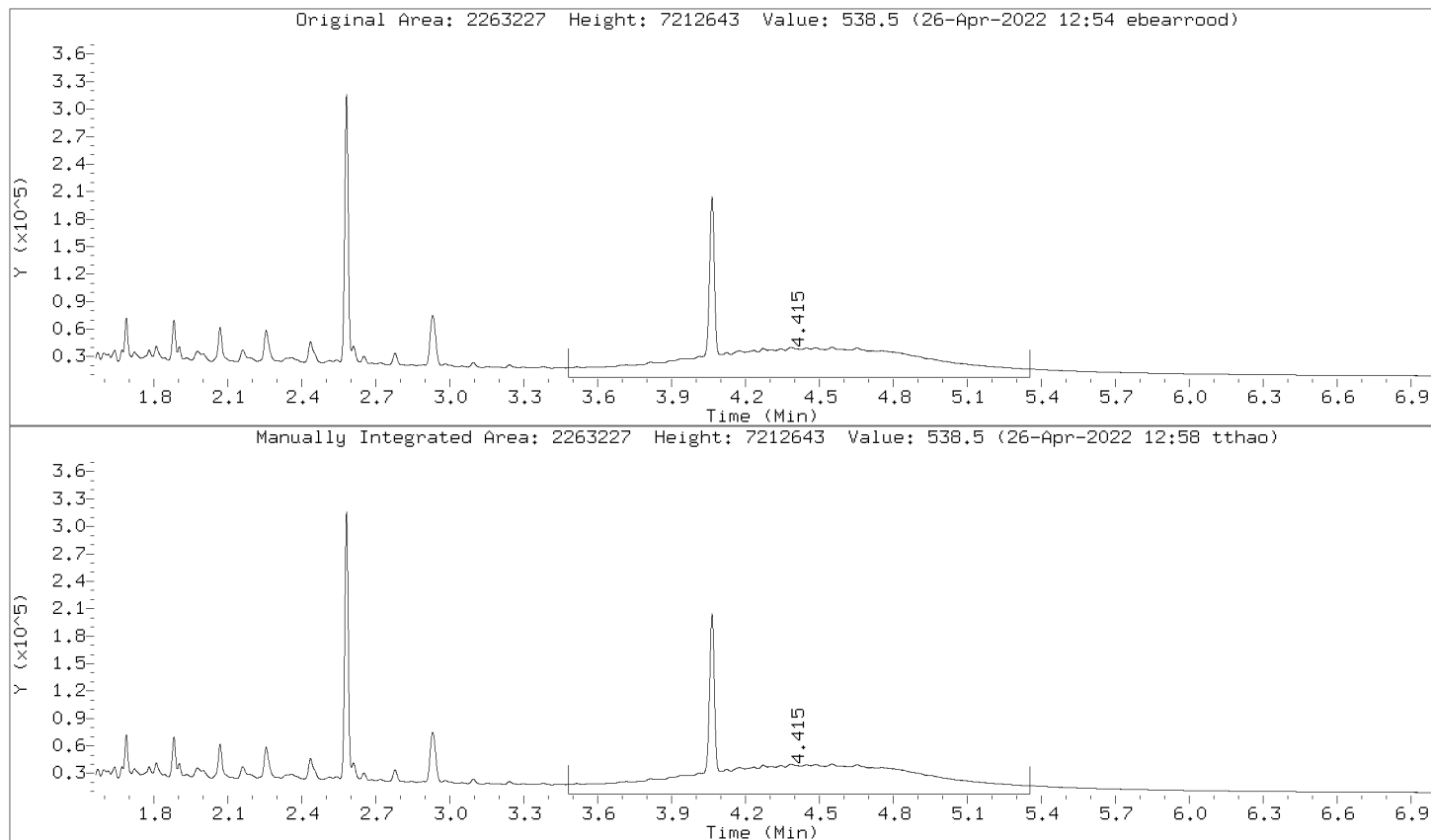
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000015.D  
Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

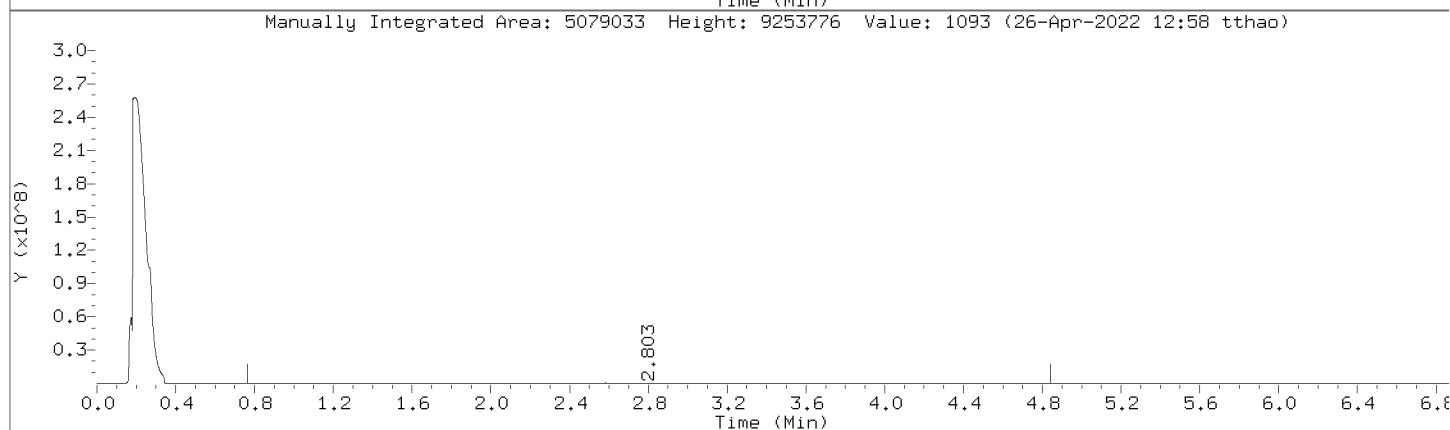
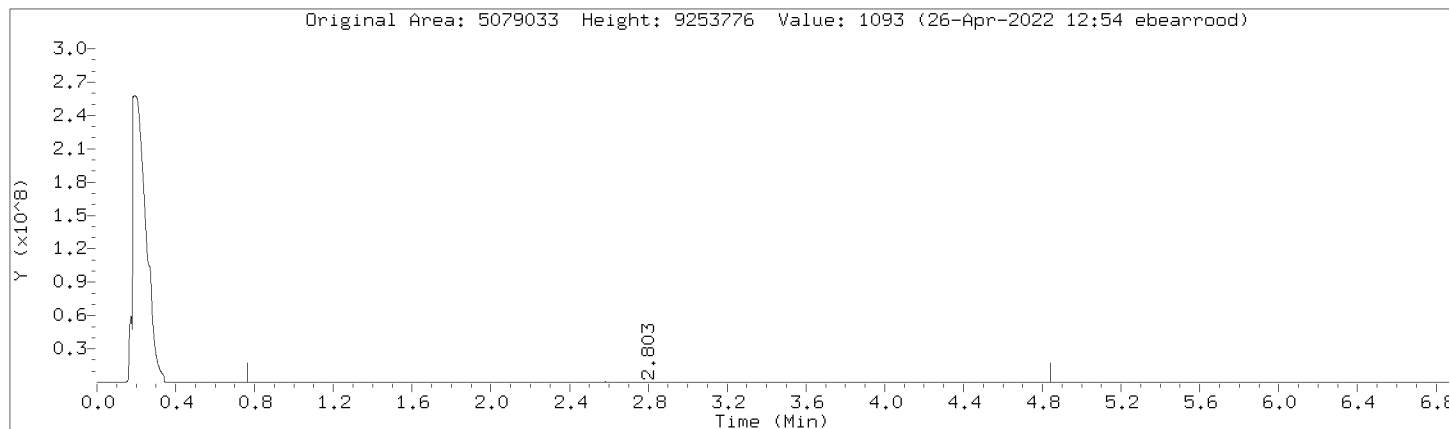
Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





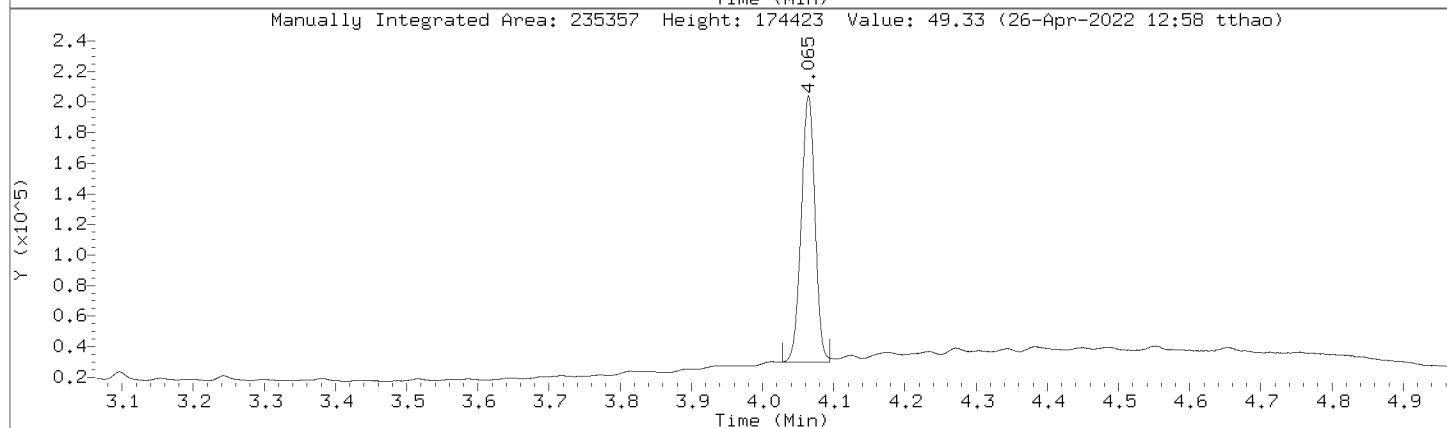
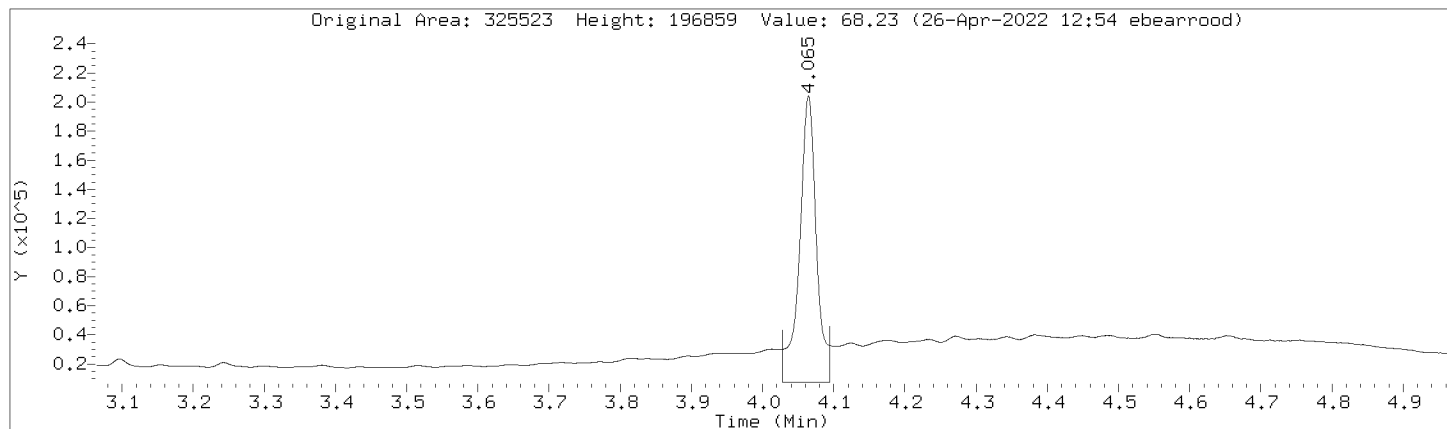
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



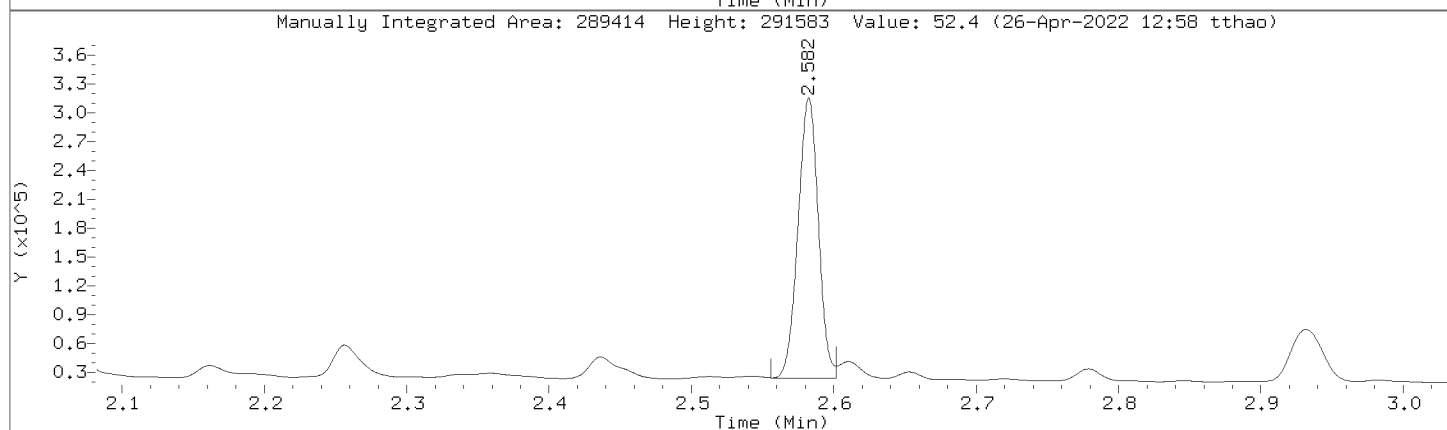
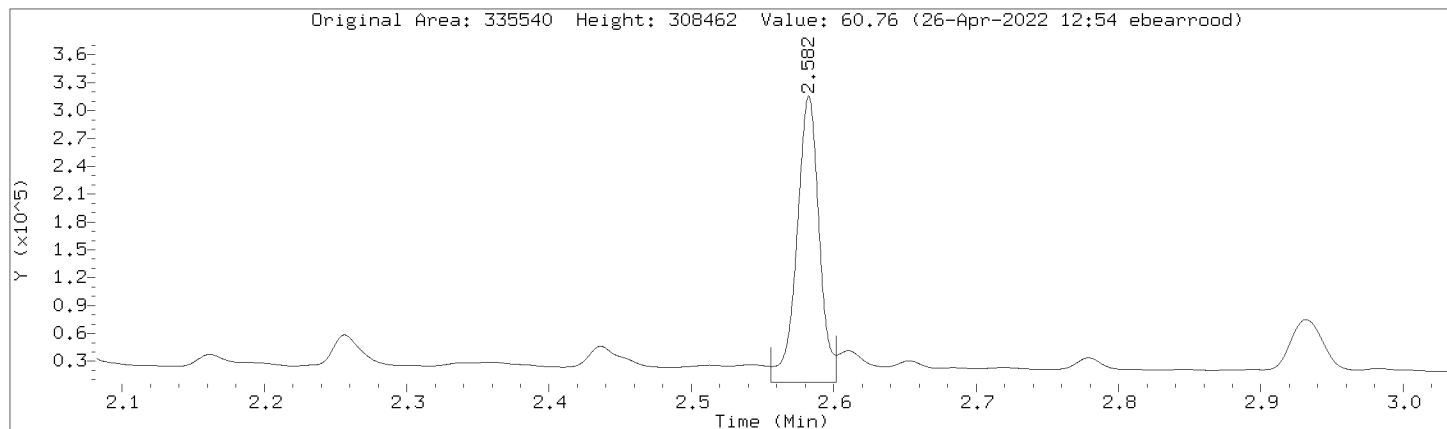
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Injection Date: 26-APR-2022 09:58  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000015.D  
 Injection Date: 26-APR-2022 09:58  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-ICV,355155:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1833034	1833034
DRO by AK 102	3245998	3245998
TPH-DRO (C10-C28)	3702121	3702121
Motor Oil Range (C24-C36)	1909006	1909006
Diesel Fuel Range	2746438	2746438
Motor Oil Range	2263227	2263227
Diesel Fuel Range SG	2746438	2746438
Motor Oil Range SG	2263227	2263227
C10-C36	5079033	5079033
n-Triacontane (S)	325523	235357
o-Terphenyl (S)	335540	289414

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000018.D  
 Lab Smp Id: DMO-CCV,362365:2 Client Smp ID: DMO-CCV,362365:2  
 Inj Date : 26-APR-2022 13:36  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,362365:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042622F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 26-Apr-2022 15:01 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 2 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.765	- 3.430		2923086 500.000	491	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.581	2.572 0.009		286253 50.0000	51.8	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.070	4.071 -0.001		237180 50.0000	49.7	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.431	- 4.840		1642080 500.000	478	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.765	- 3.980		3332626 500.000	490	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.300	- 4.840		1707415 500.000	479	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.765	- 4.840		4565167 1000.00	972	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.210	- 3.480		2470676 500.000	490	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.210	- 3.480		2470676 500.000	490	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.481	- 5.350		2036178 500.000	482	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.481	- 5.350		2036178 500.000	482	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 26-APR-2022 13:36

Client ID: DM0-CCV,362365;2

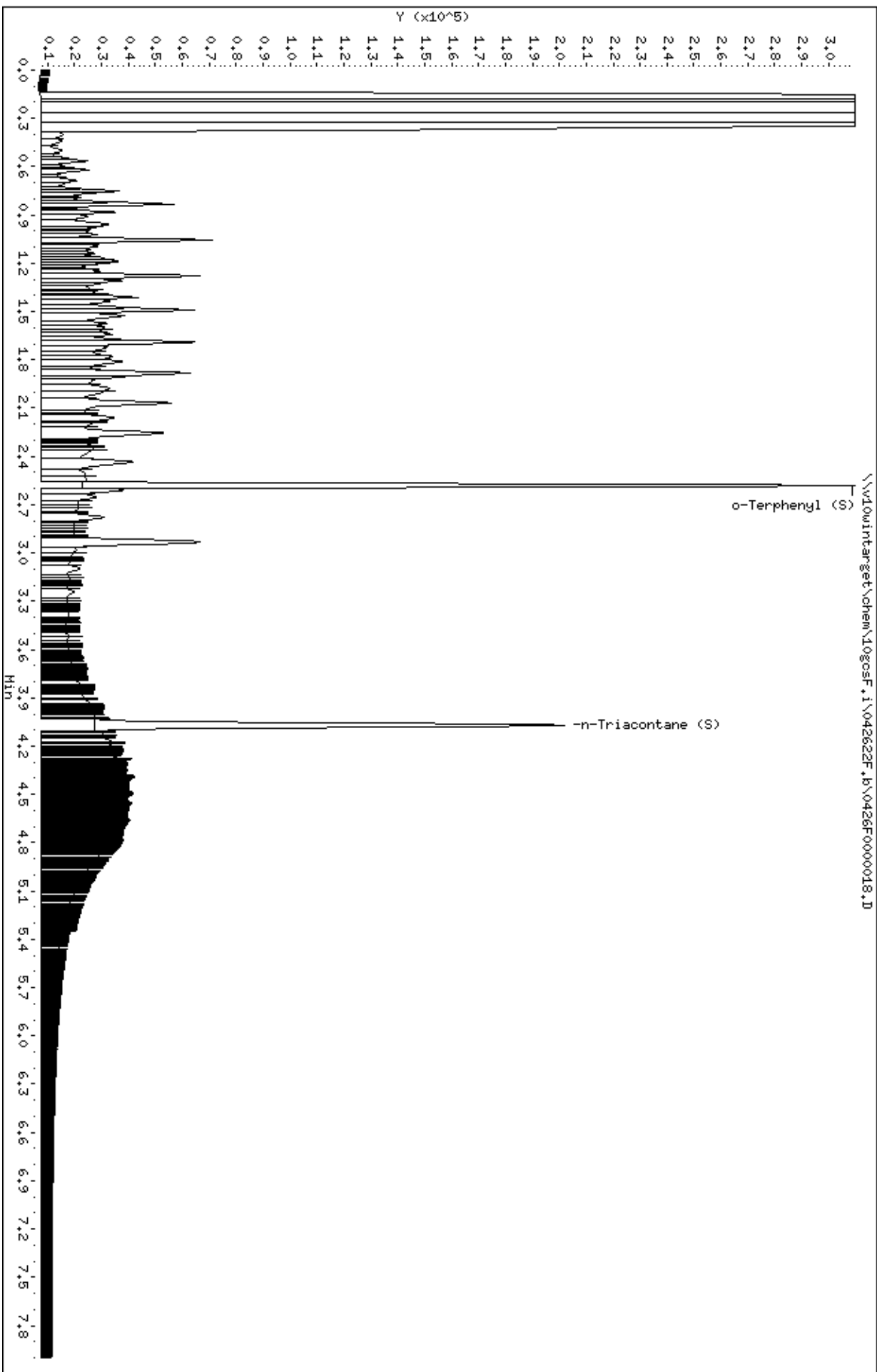
Sample Info: DM0-CCV,362365;2

Instrument: 10gocsf.1

Operator: EB3

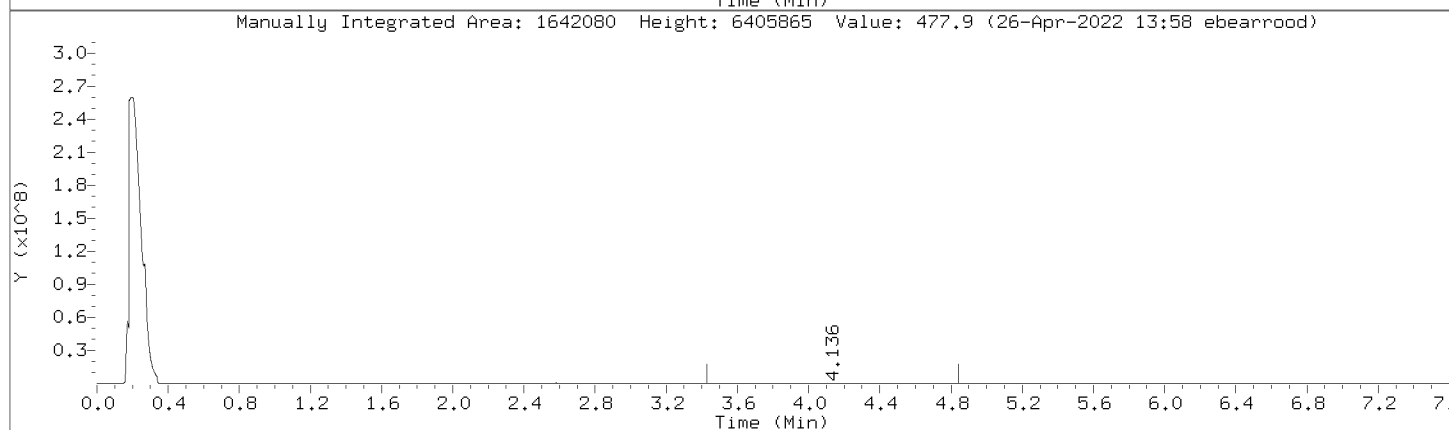
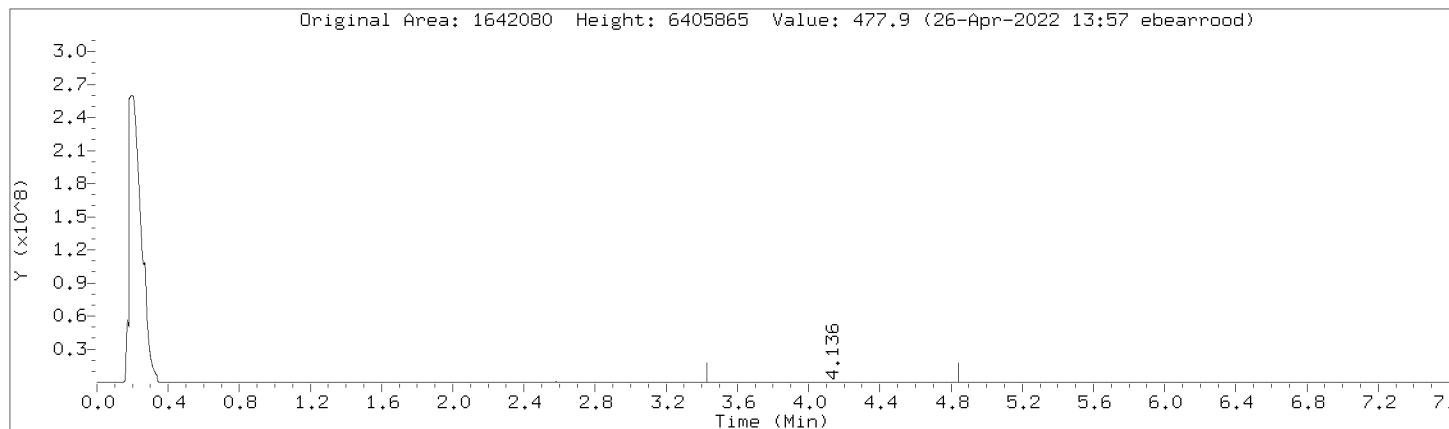
Column diameter: 0.32

Column phase: DB-5-MS21250010



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000018.D  
Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000018.D

Injection Date: 26-APR-2022 13:36

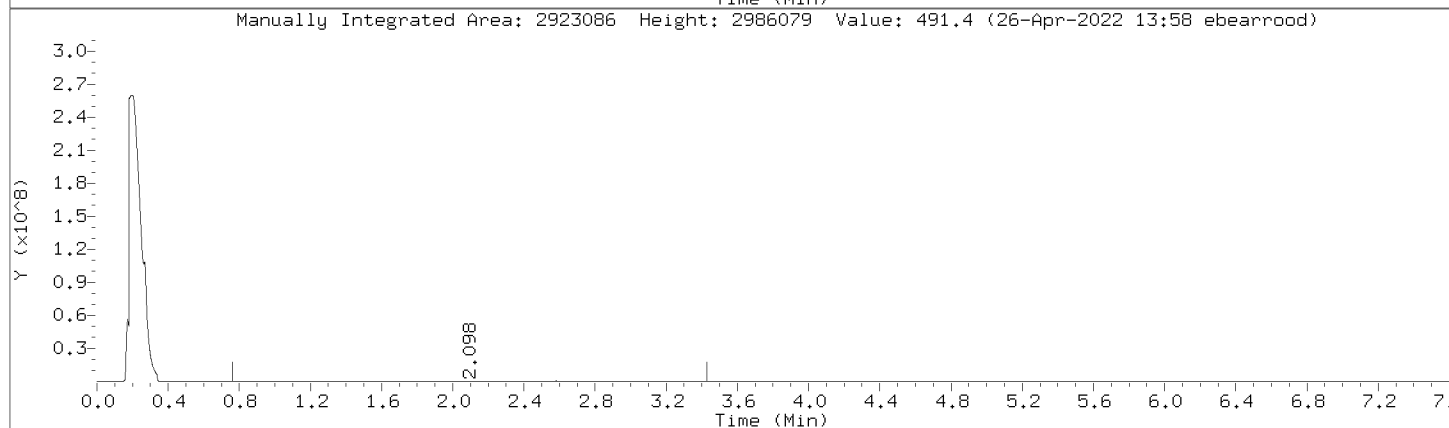
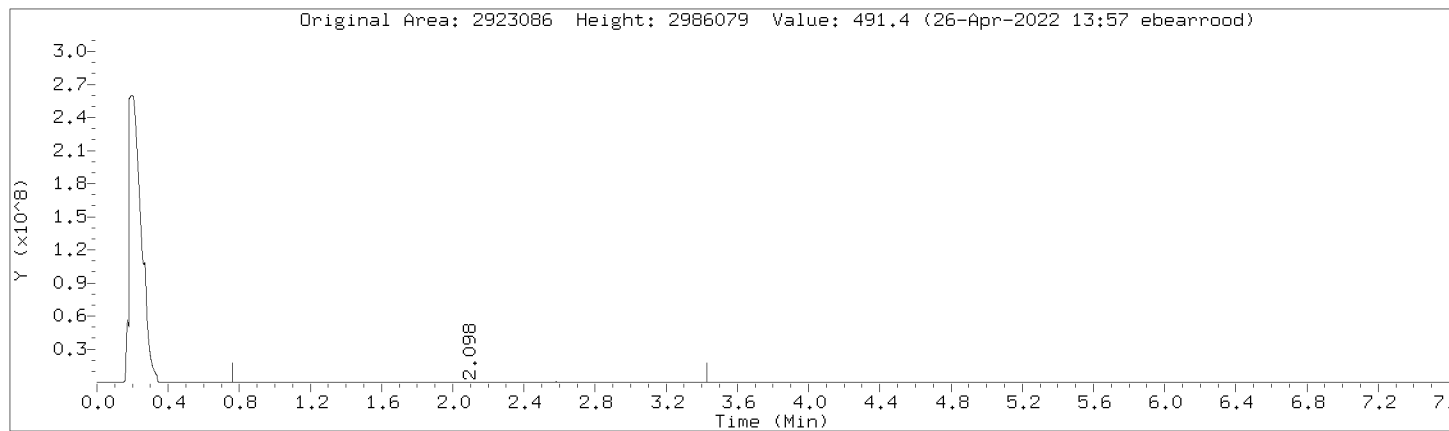
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Lab Sample ID: DMO-CCV,362365:2

Compound: DRO by AK 102

Review Code: RNG

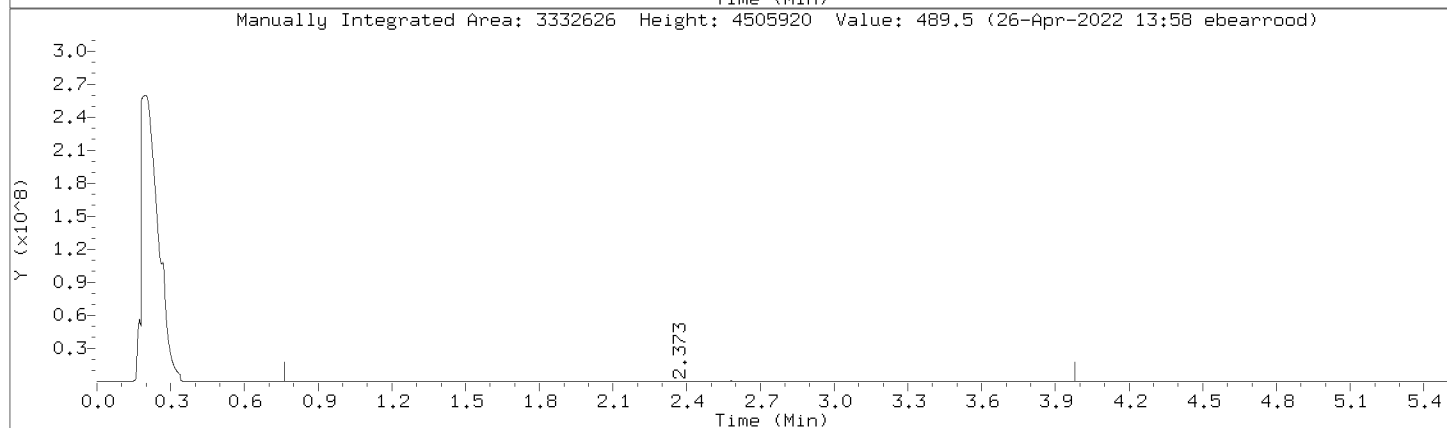
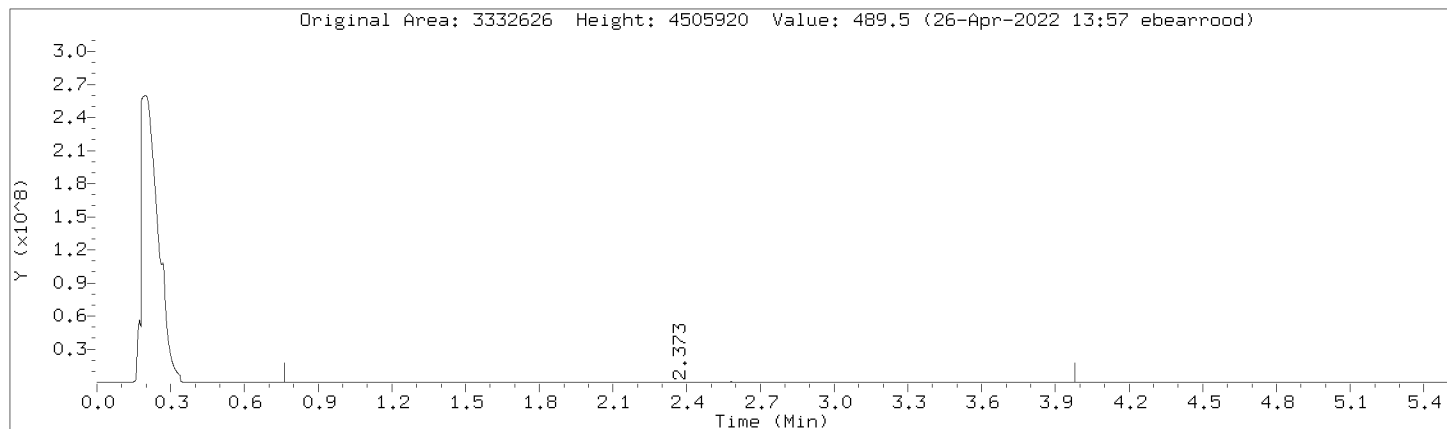
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000018.D  
Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

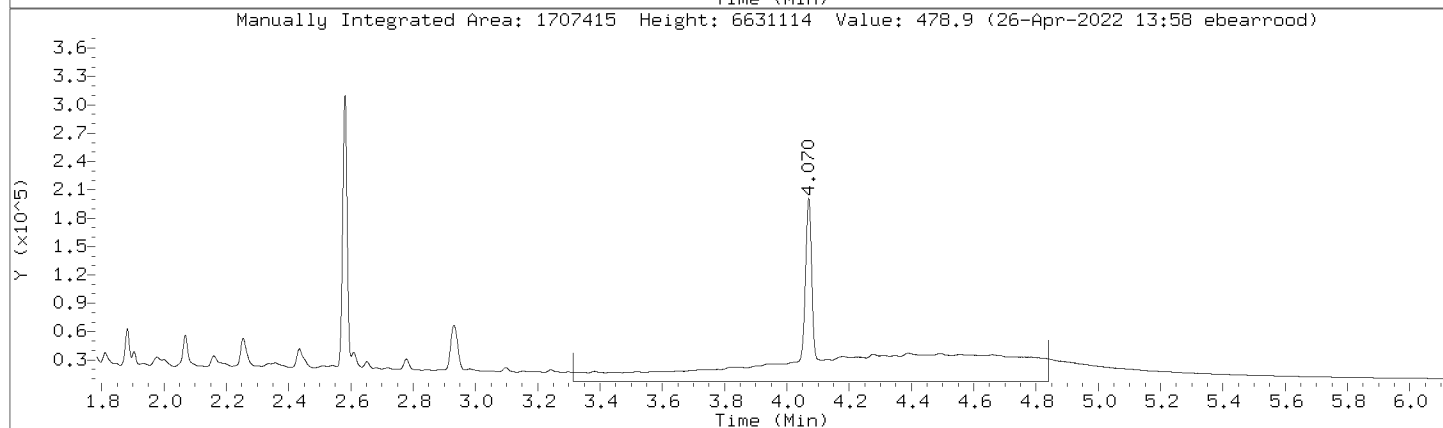
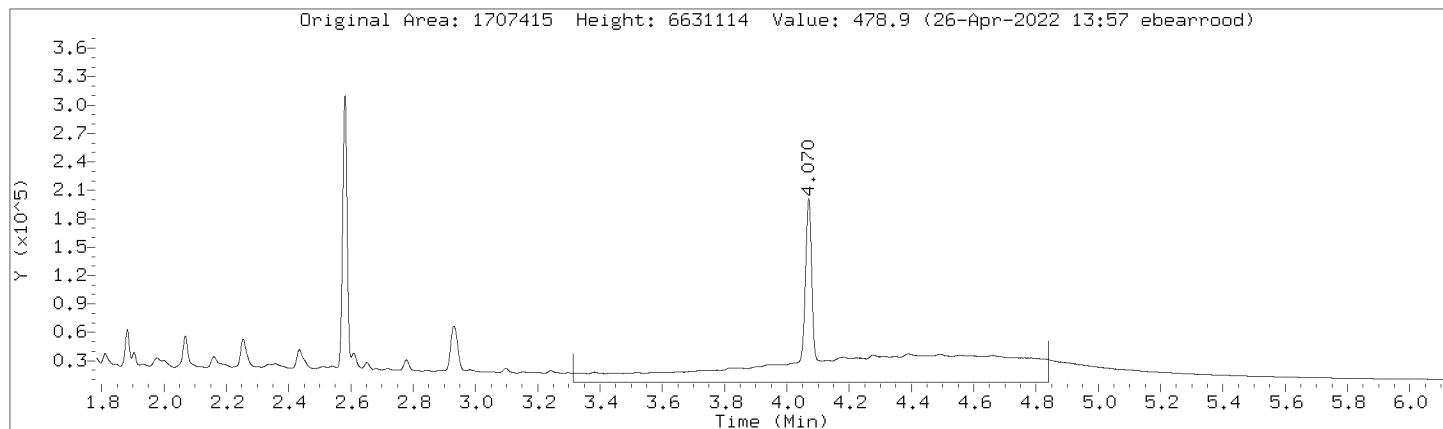
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000018.D  
Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

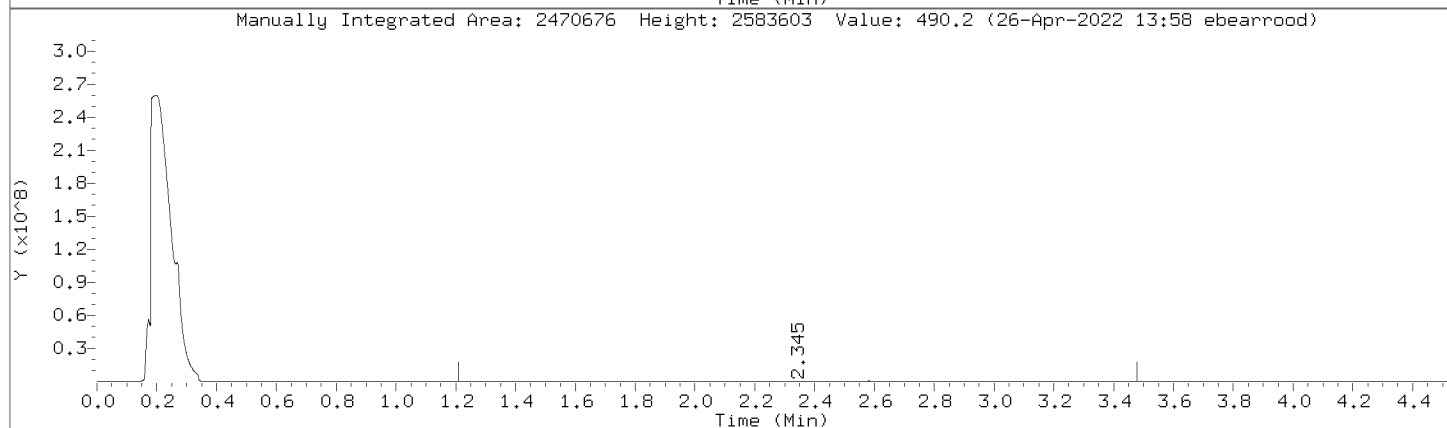
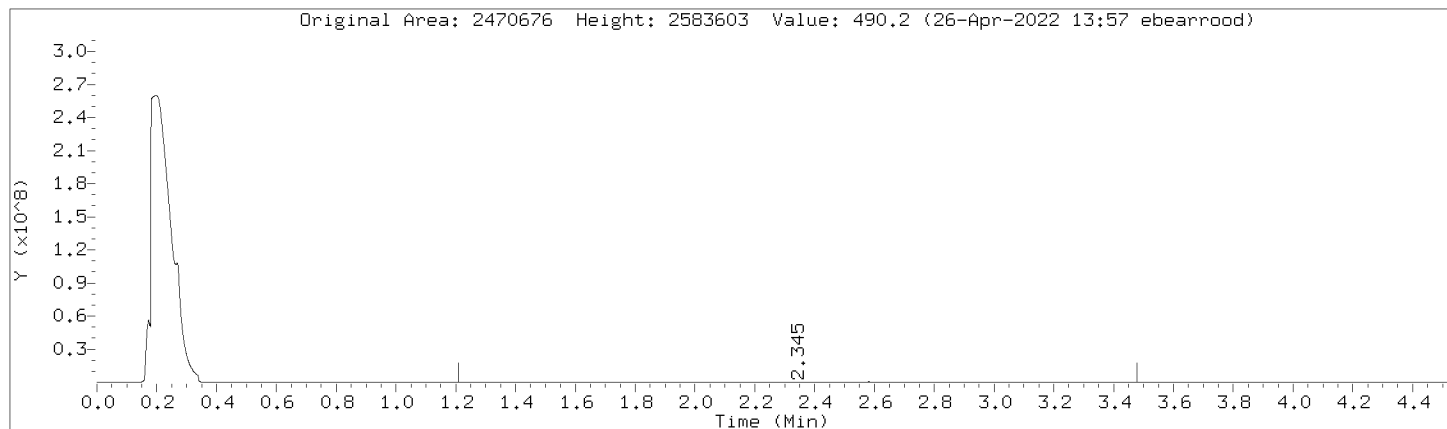
Compound: Motor Oil Range (C24-C36)  
CAS Number:

Review Code: RNG



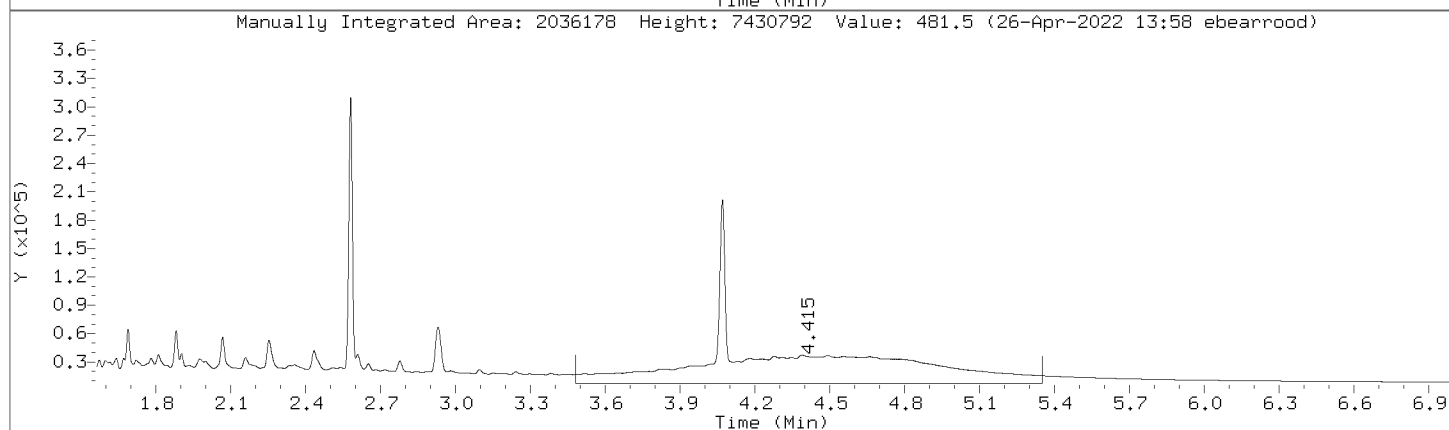
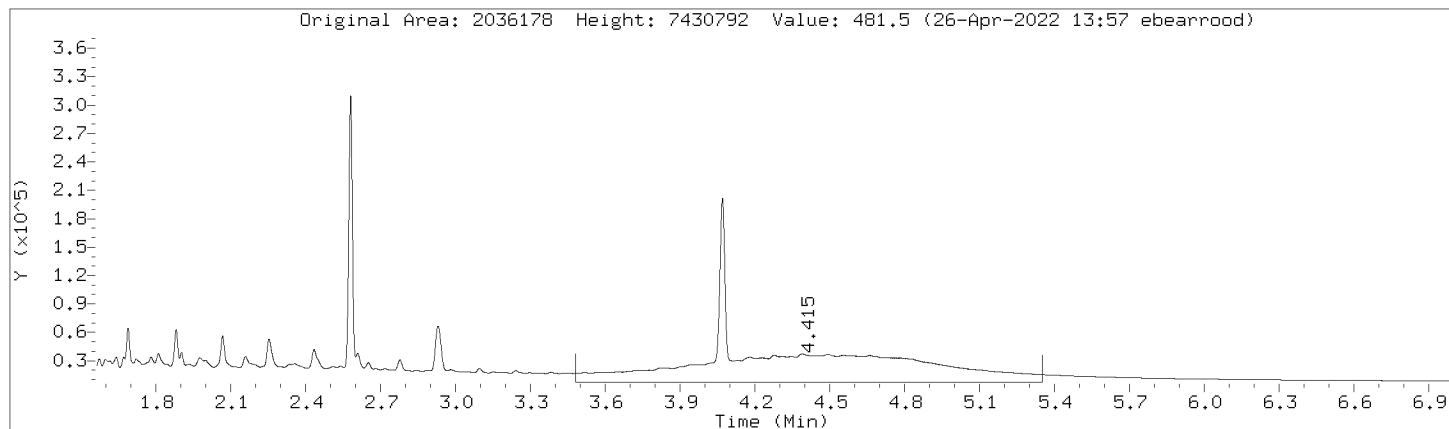
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Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



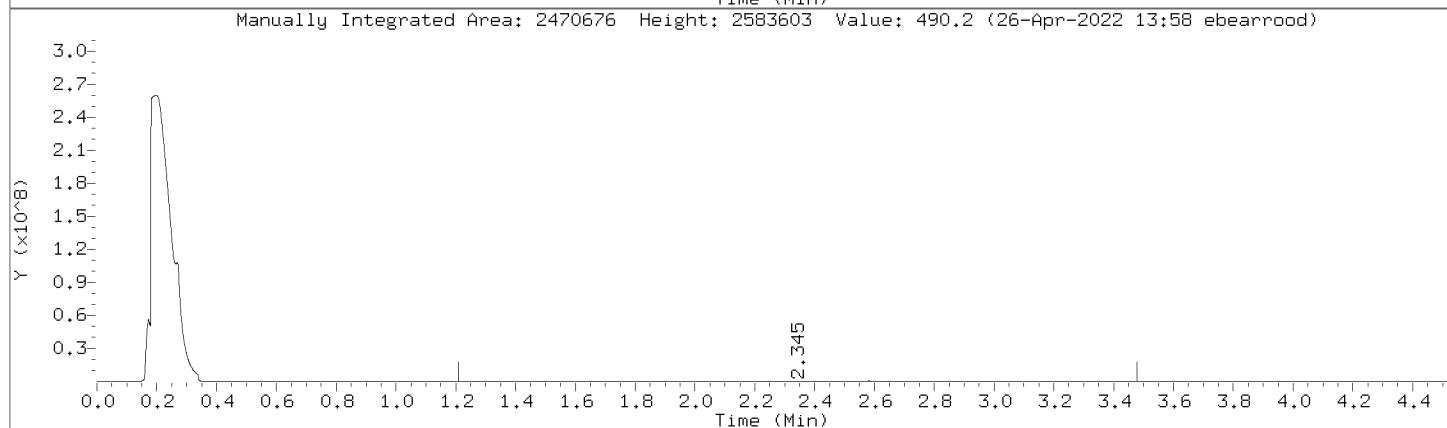
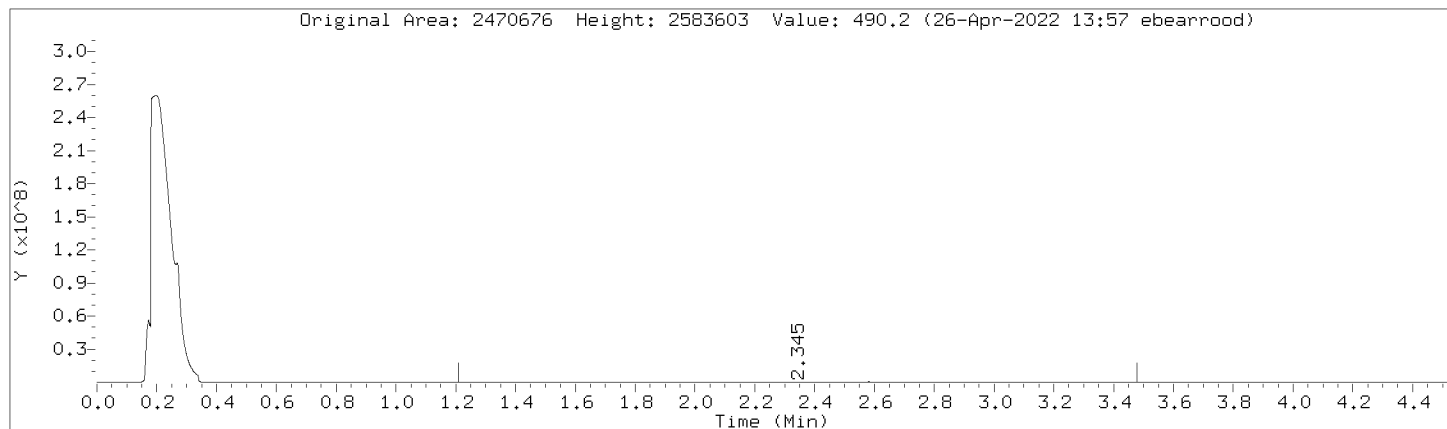
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Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



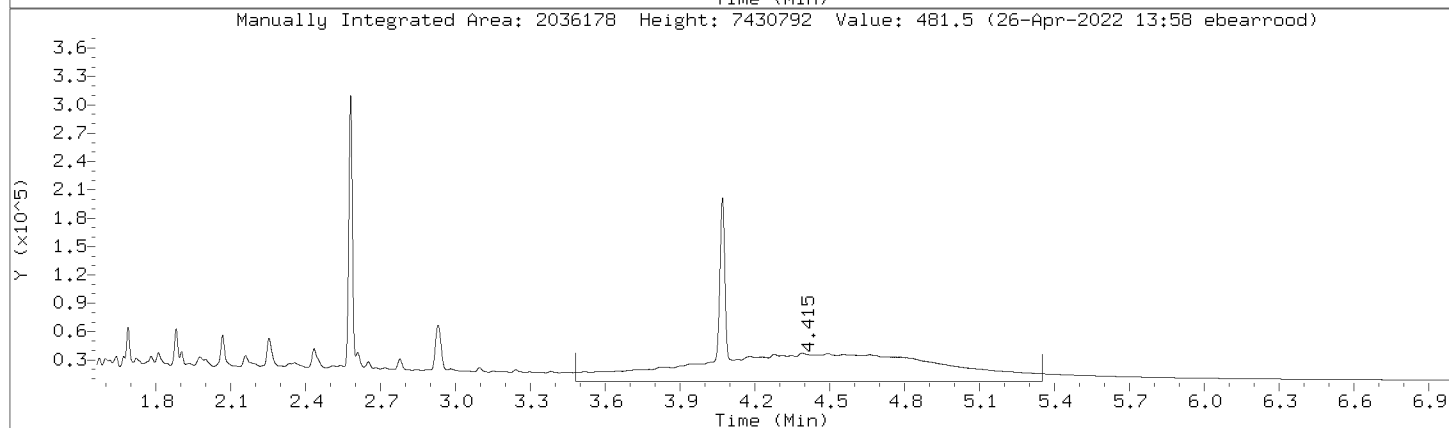
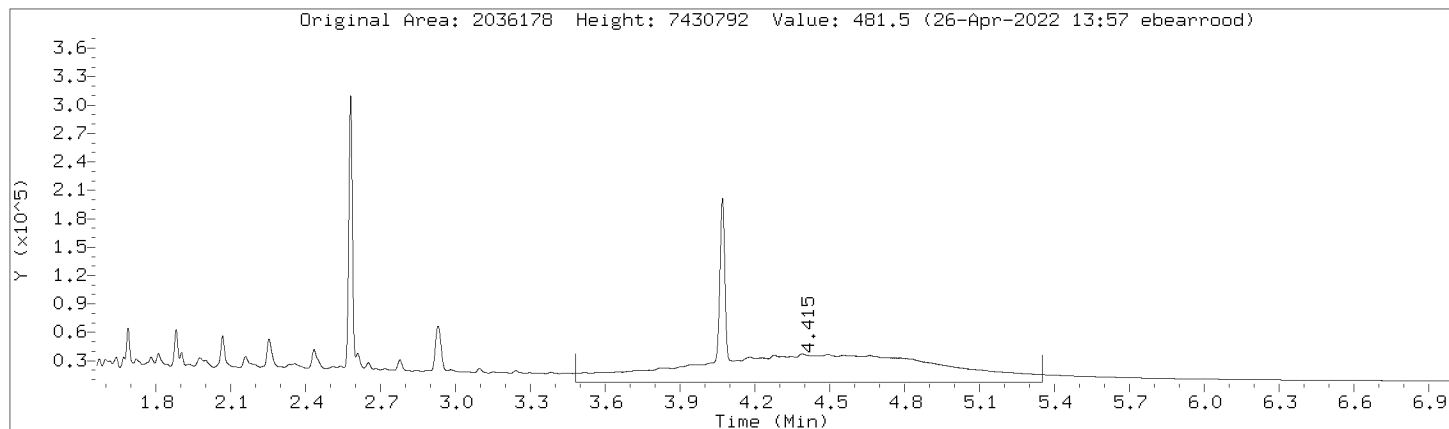
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Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



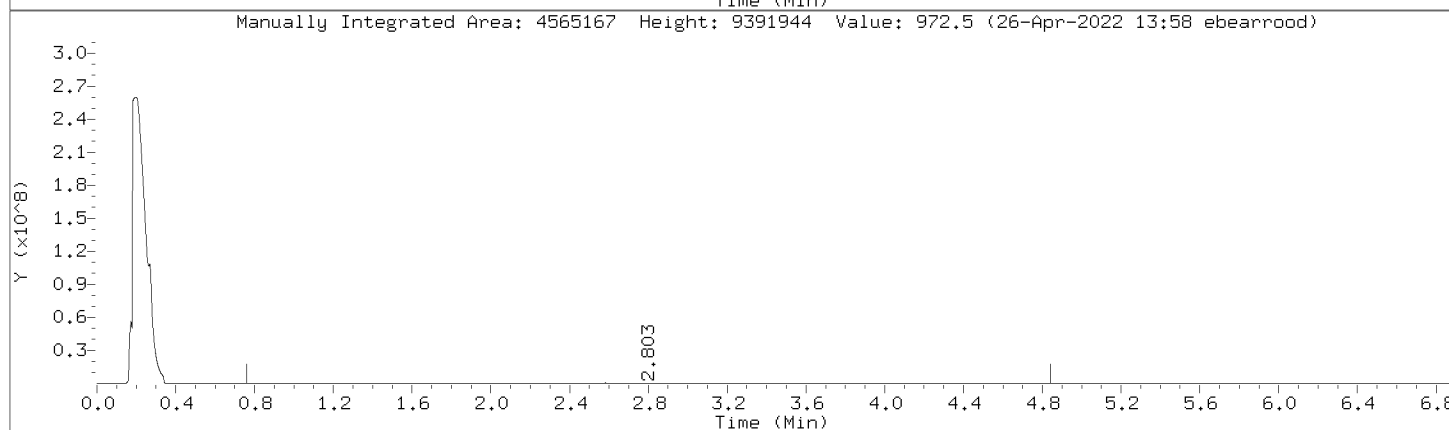
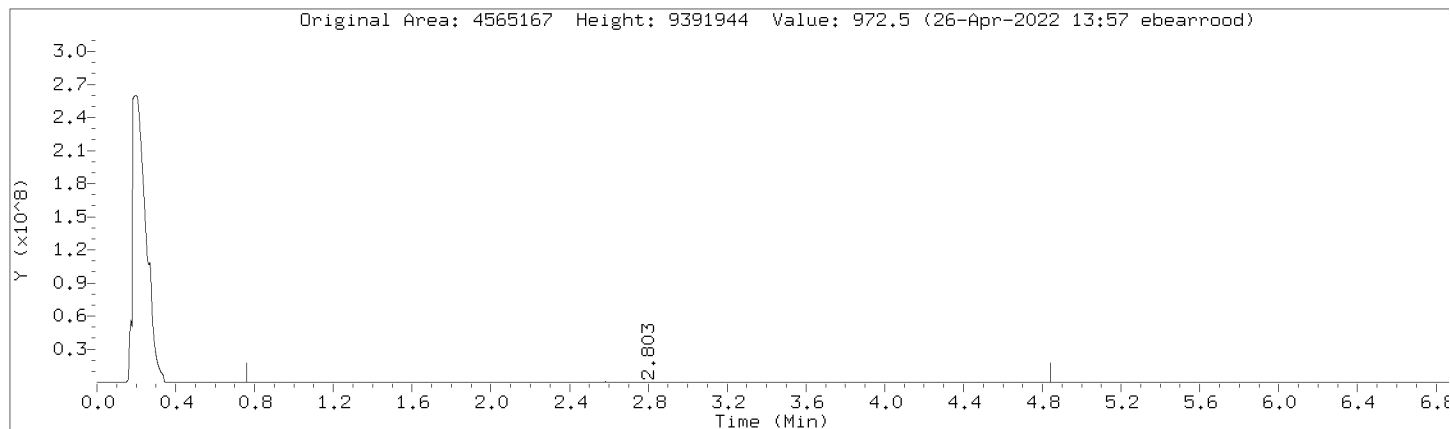
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Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



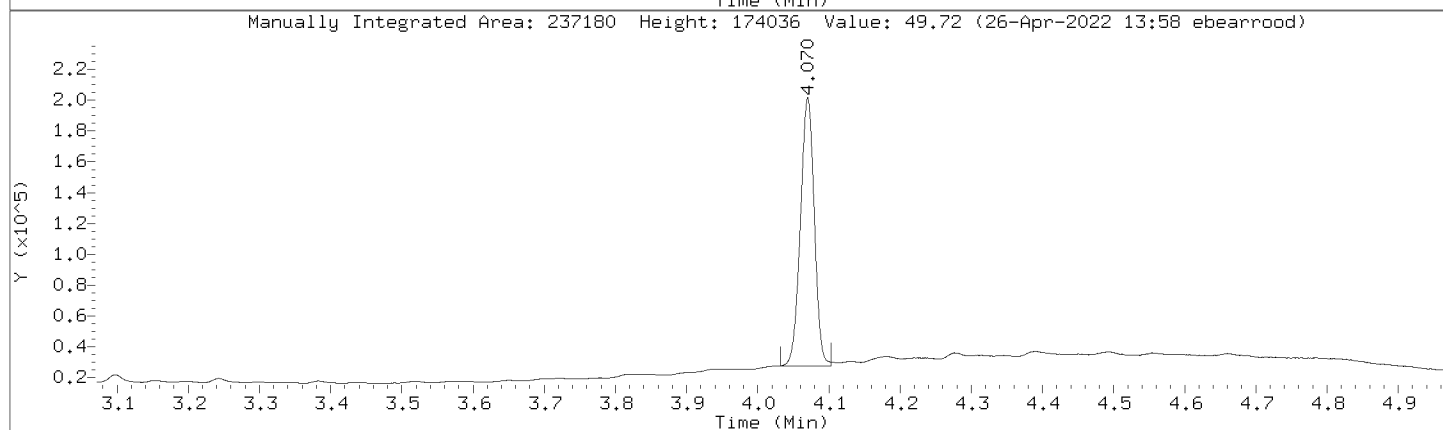
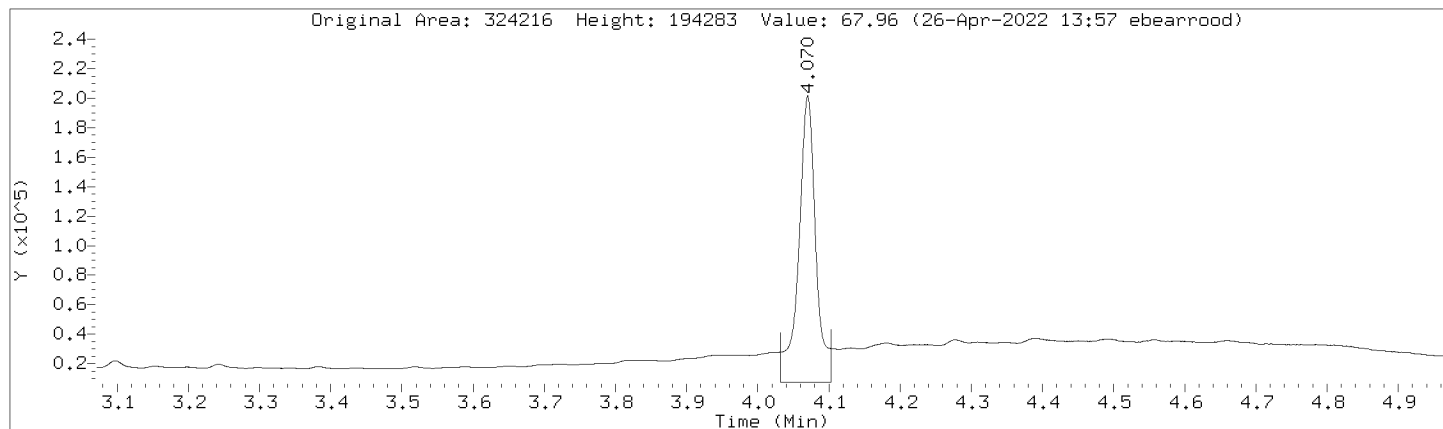
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Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000018.D  
Injection Date: 26-APR-2022 13:36  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

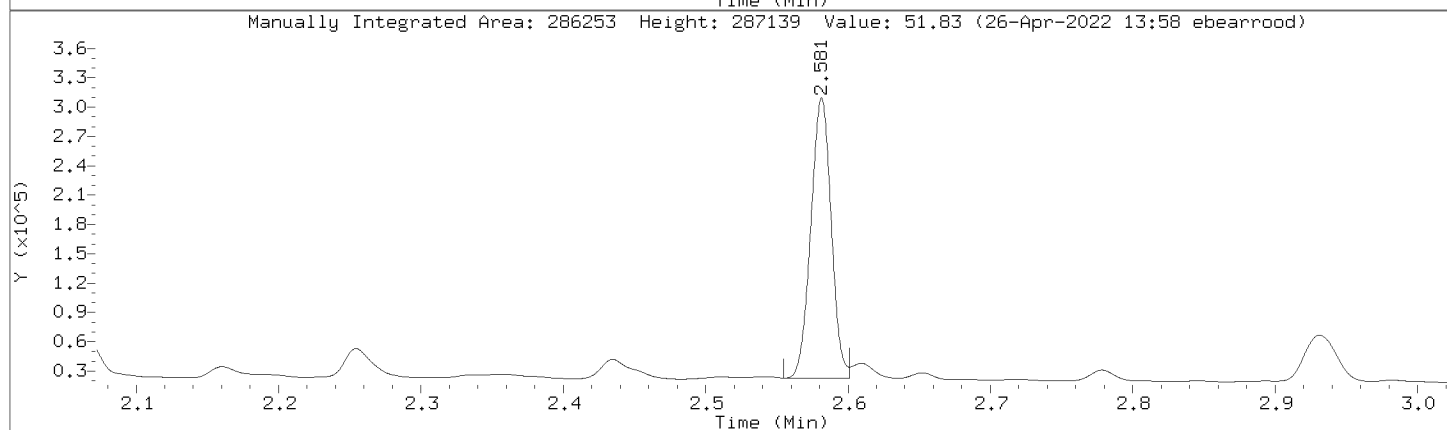
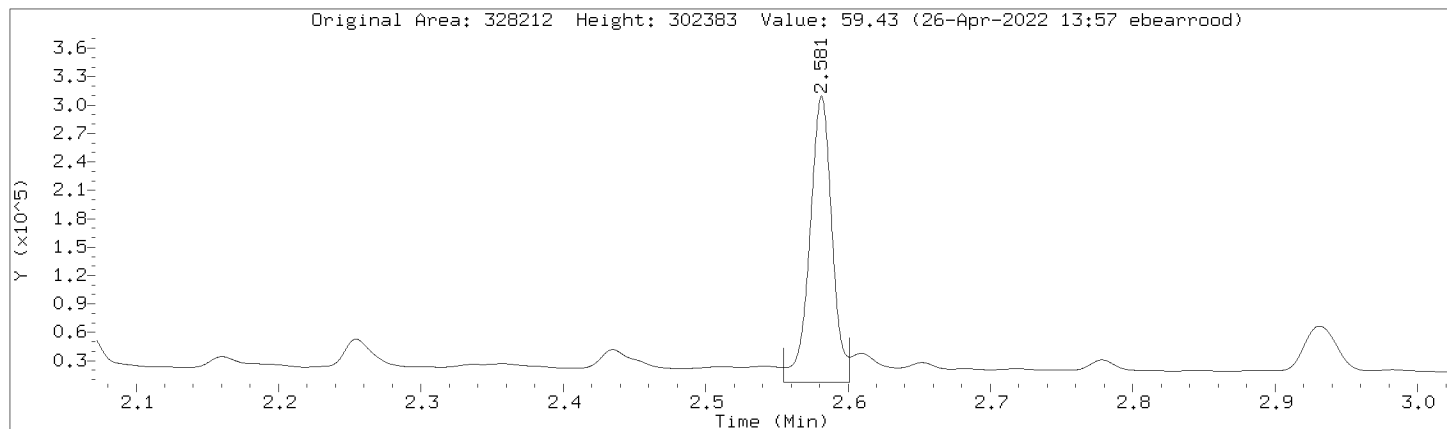
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042622F.b\0426F0000018.D  
 Injection Date: 26-APR-2022 13:36  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,362365:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1642080	1642080
DRO by AK 102	2923086	2923086
TPH-DRO (C10-C28)	3332626	3332626
Motor Oil Range (C24-C36)	1707415	1707415
Diesel Fuel Range	2470676	2470676
Motor Oil Range	2036178	2036178
Diesel Fuel Range SG	2470676	2470676
Motor Oil Range SG	2036178	2036178
C10-C36	4565167	4565167
n-Triacontane (S)	324216	237180
o-Terphenyl (S)	328212	286253

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000019.D  
 Lab Smp Id: DMO-ICV,355155:2 Client Smp ID: DMO-ICV,355155:2  
 Inj Date : 27-APR-2022 15:04  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-icv,355155:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 88 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		3511427 500.000	550	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.685	2.685 0.000		347844 50.0000	52.1	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.192	4.193 -0.001		257941 50.0000	49.3	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		2016357 500.000	546	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		3998930 500.000	549	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		2116930 500.000	549	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		5533336 1000.00	1100	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		2969593 500.000	552	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		2969593 500.000	552	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		2537766 500.000	549	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		2537766 500.000	549	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 15:04

Client ID: DMO-ICV,355155:2

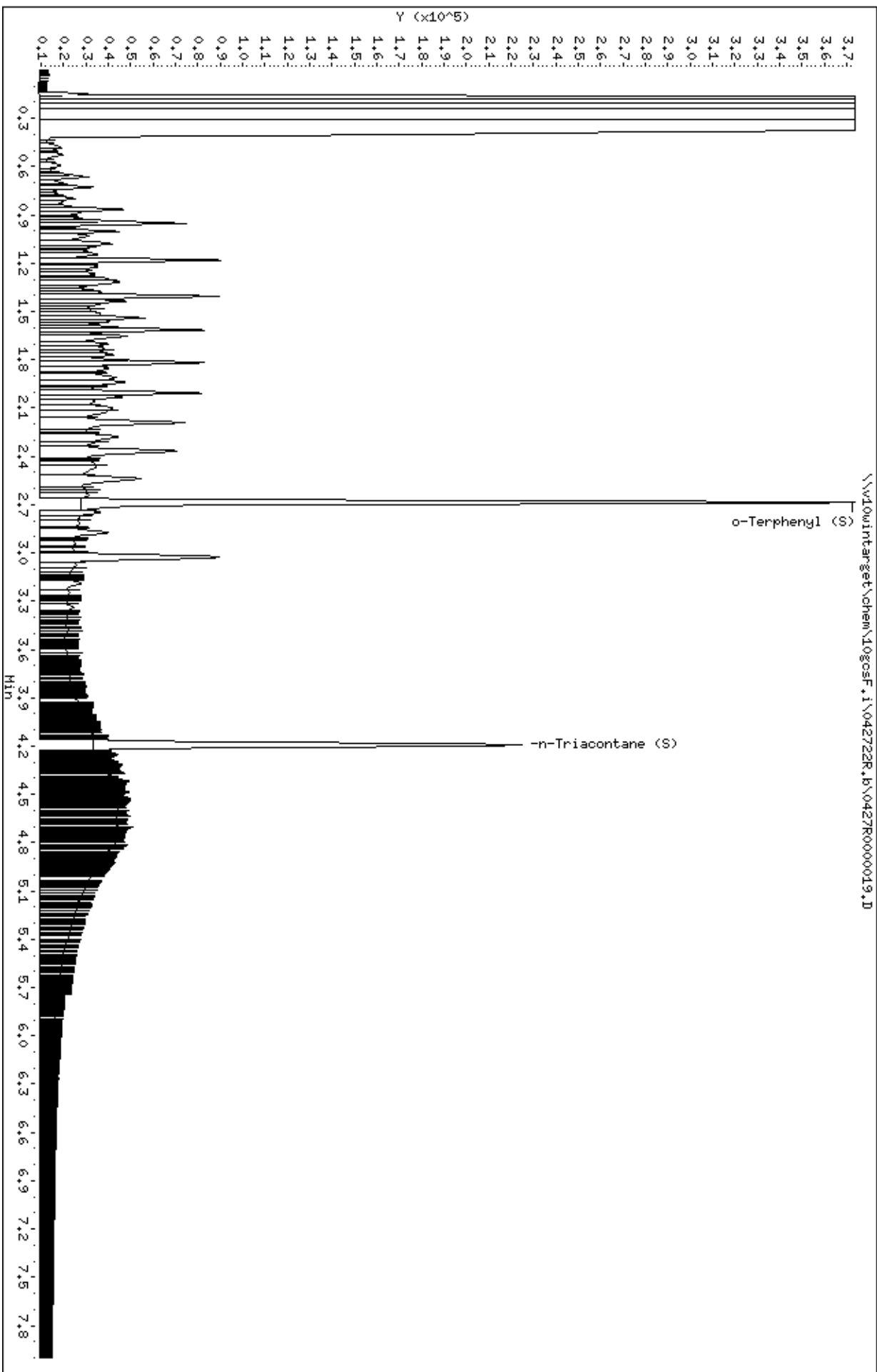
Sample Info: DMO-ICV,355155:2

Instrument: 10goscF.1

Operator: EB3

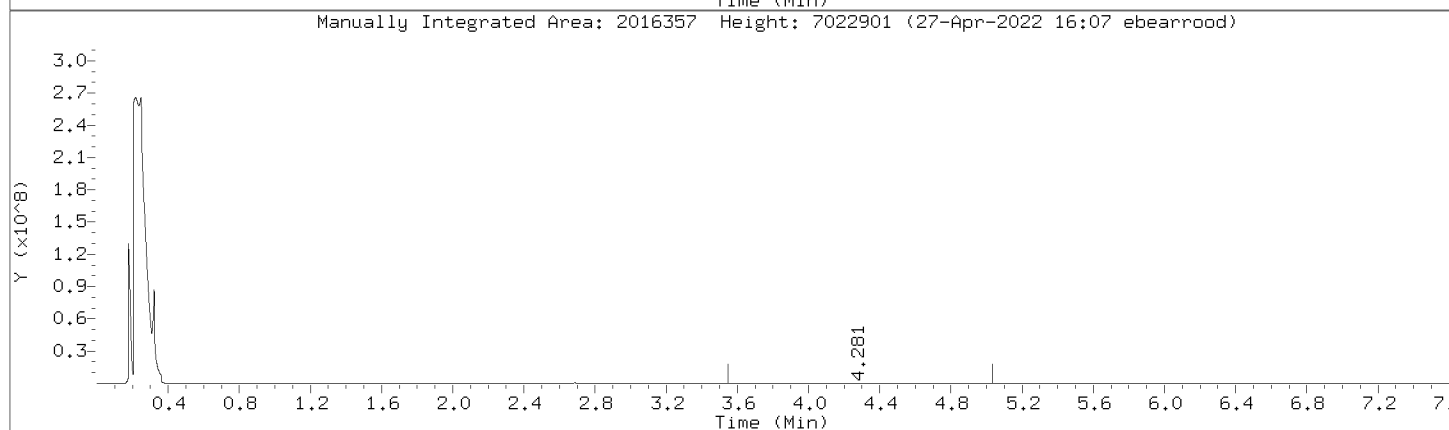
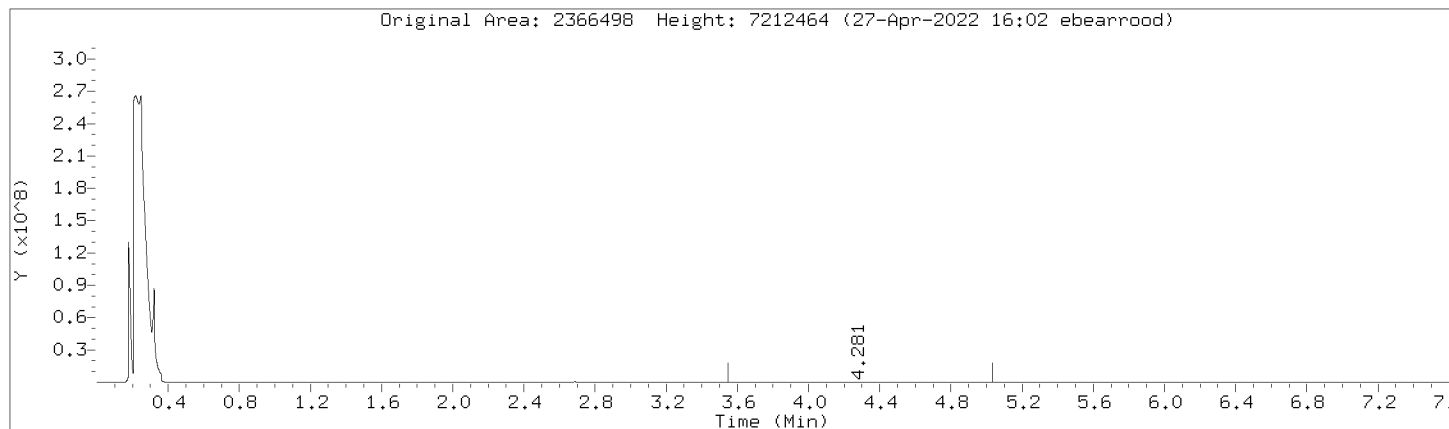
Column diameter: 0.32

Column phase: DB-5-US21430033



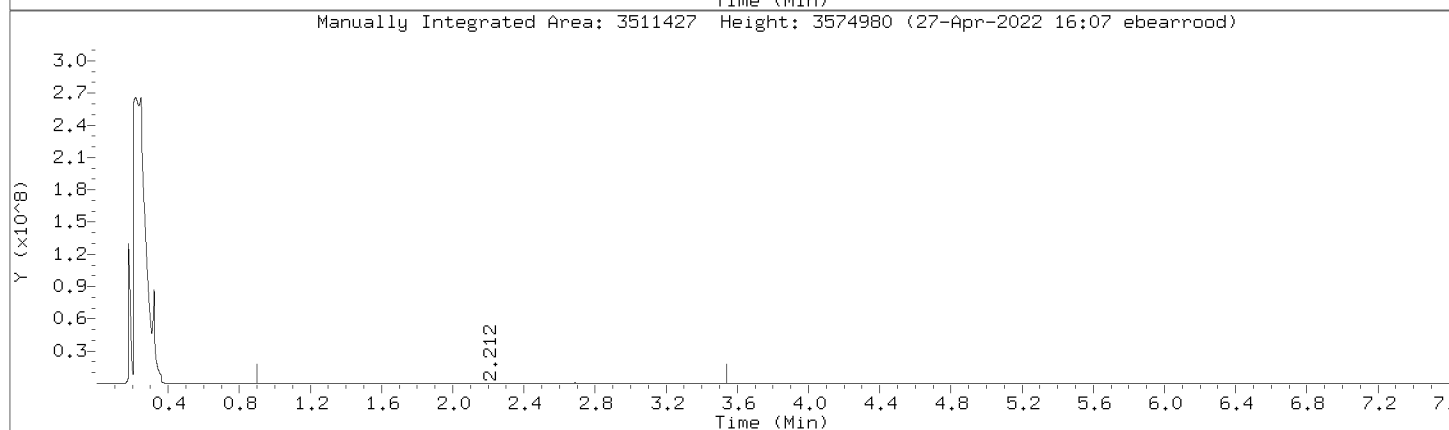
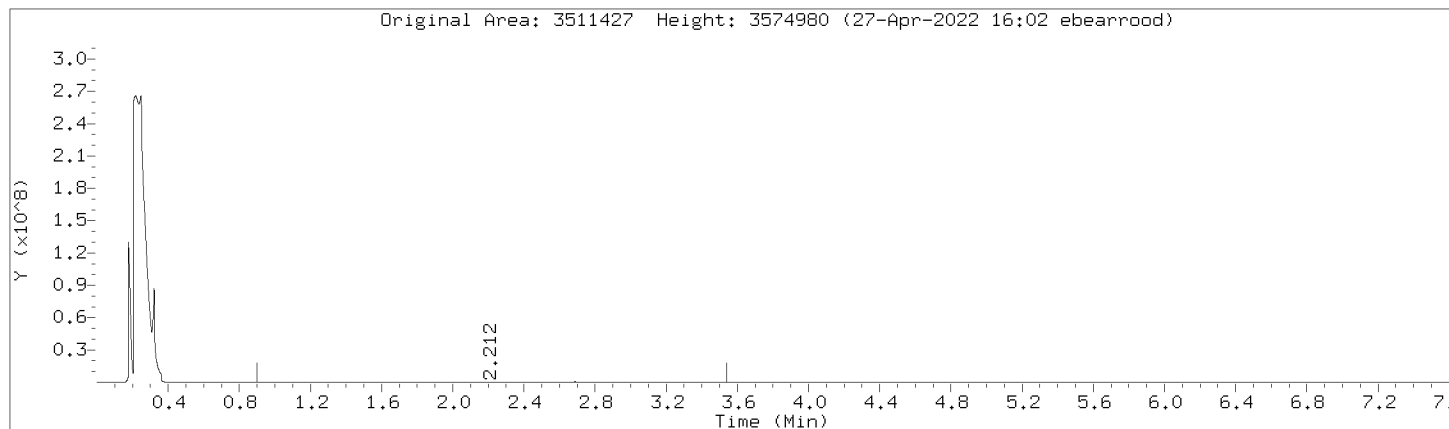
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Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



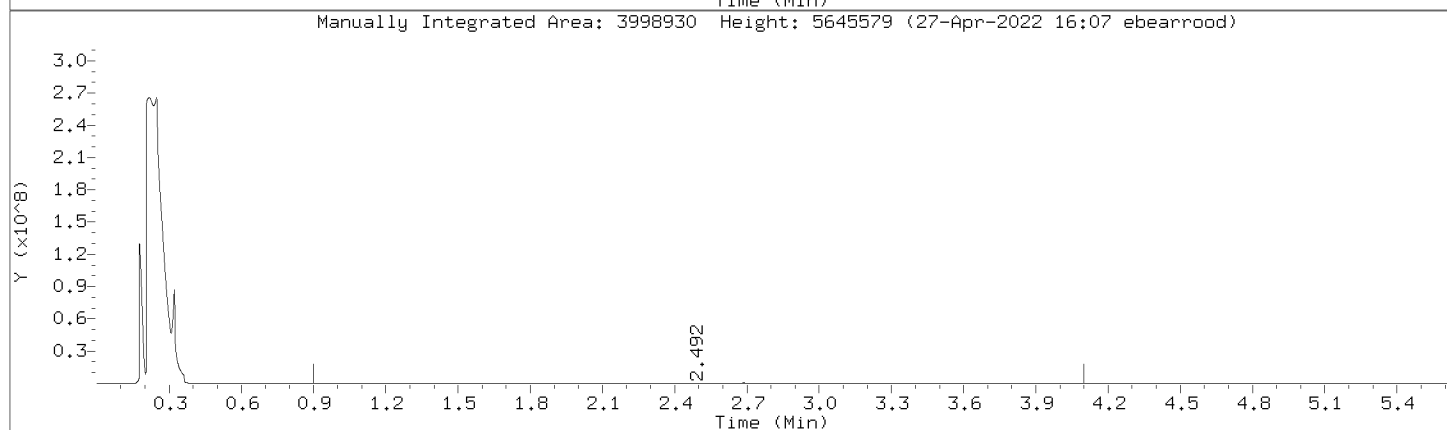
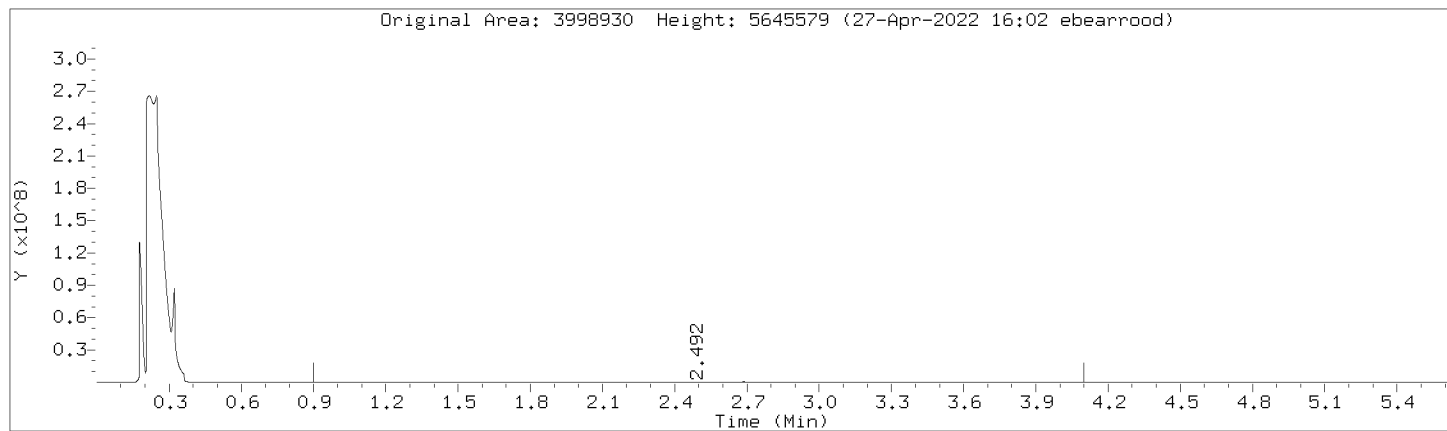
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Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



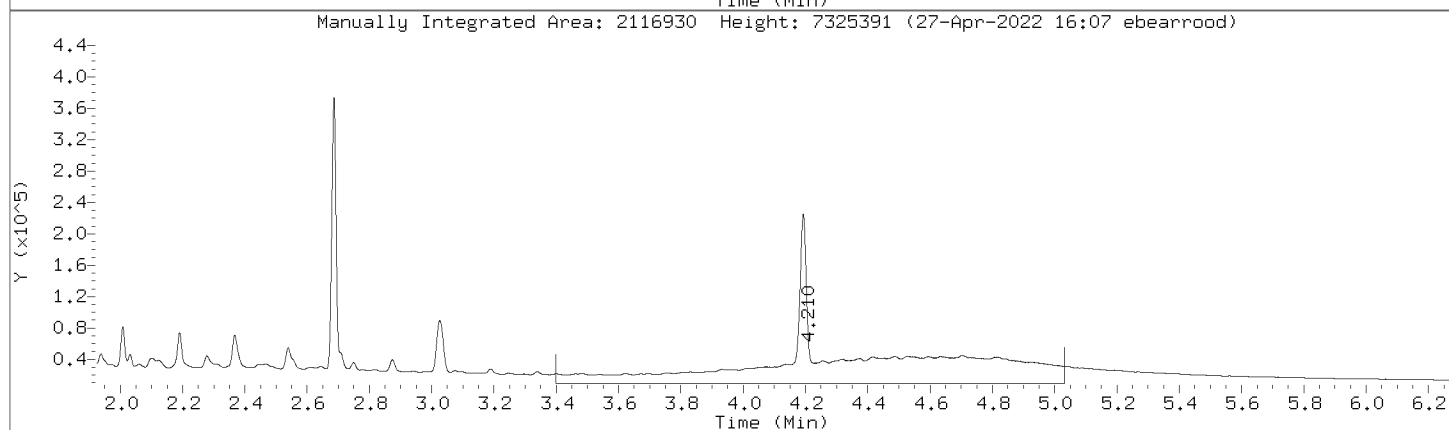
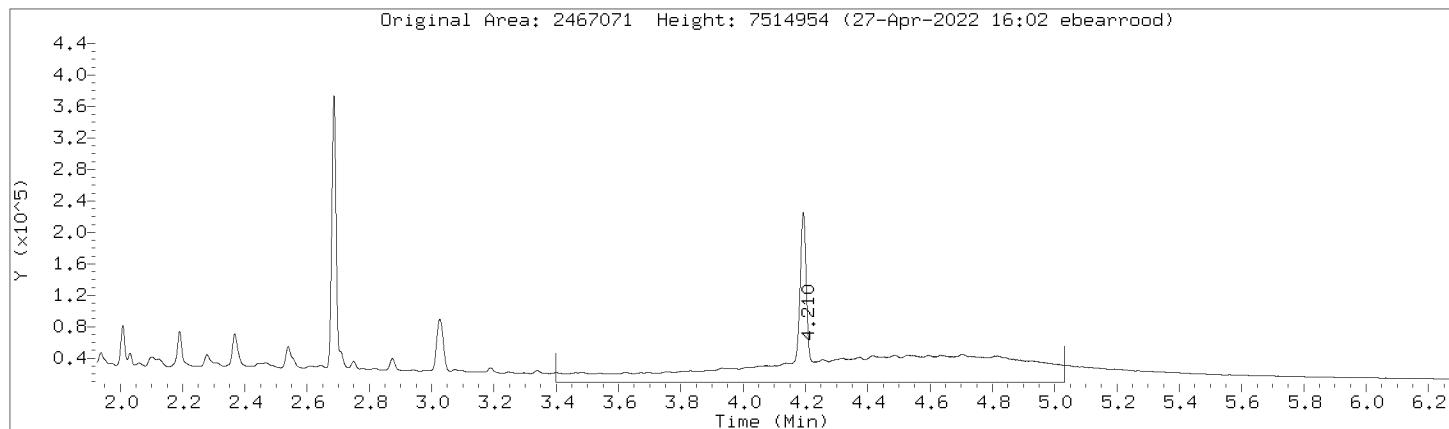
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000019.D  
Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000019.D  
Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

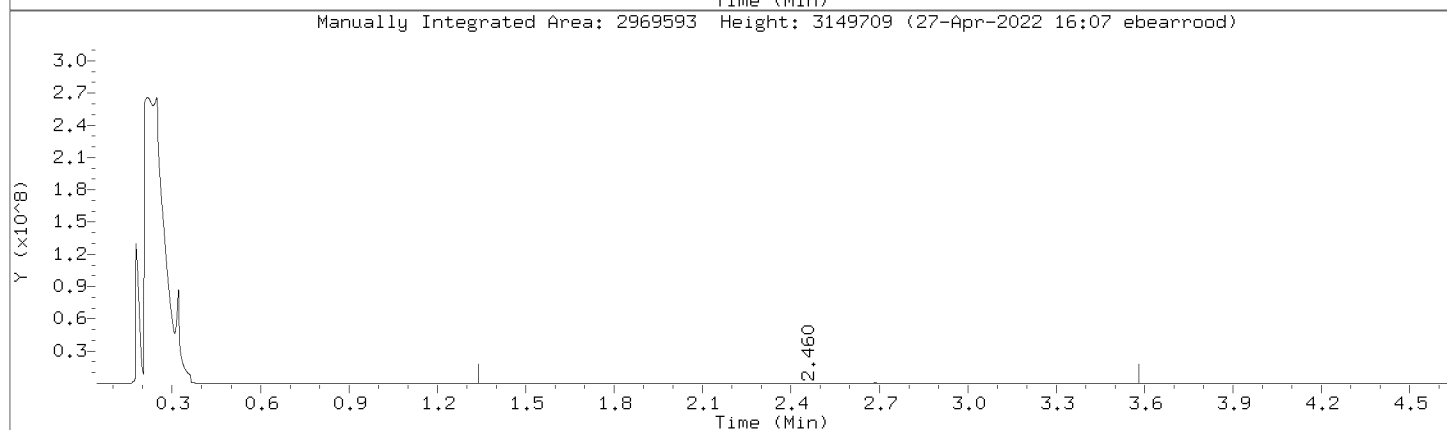
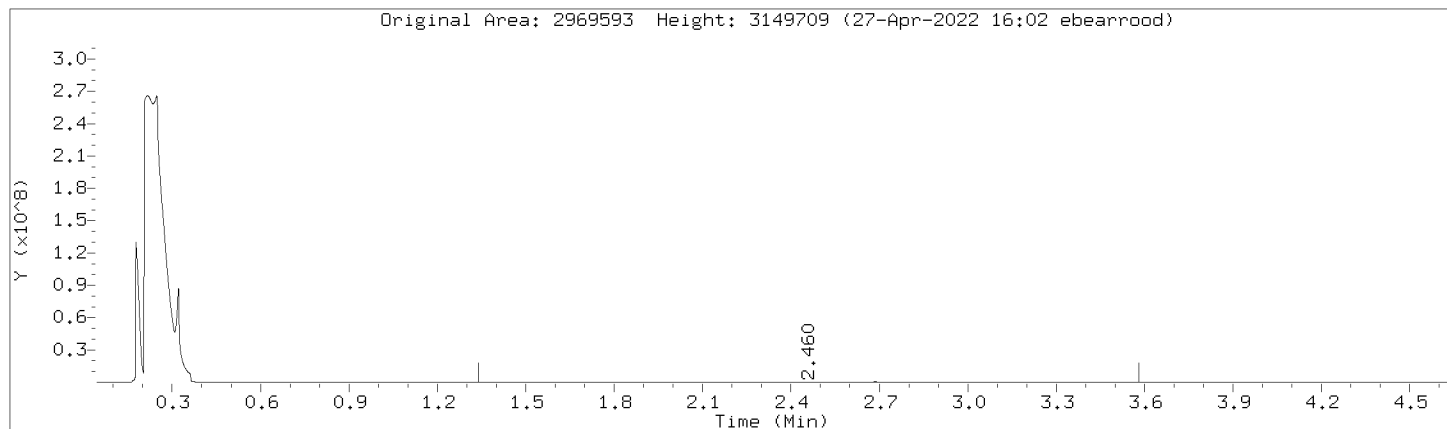
Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:





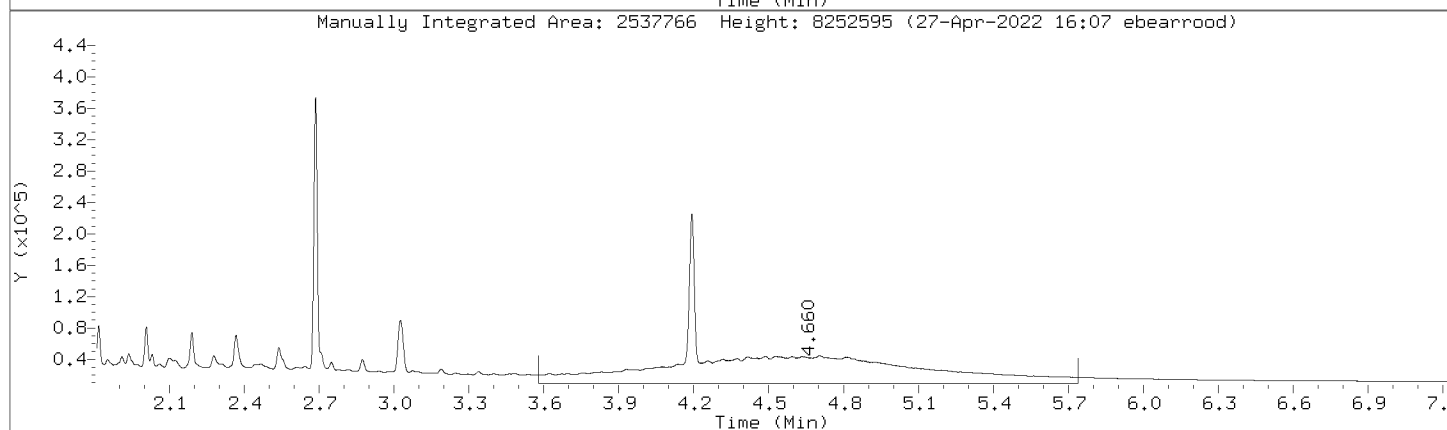
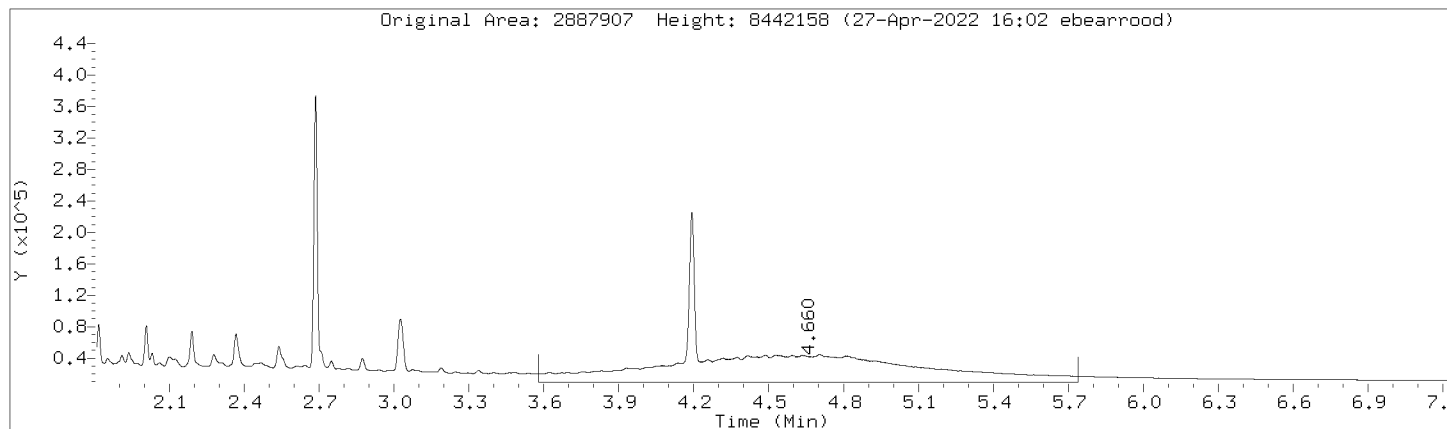
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Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



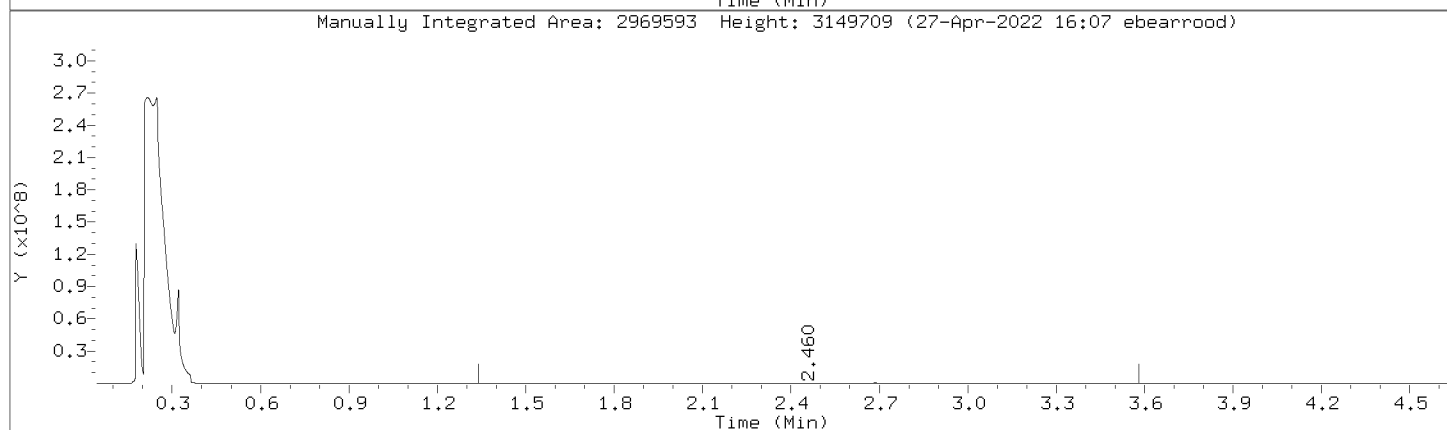
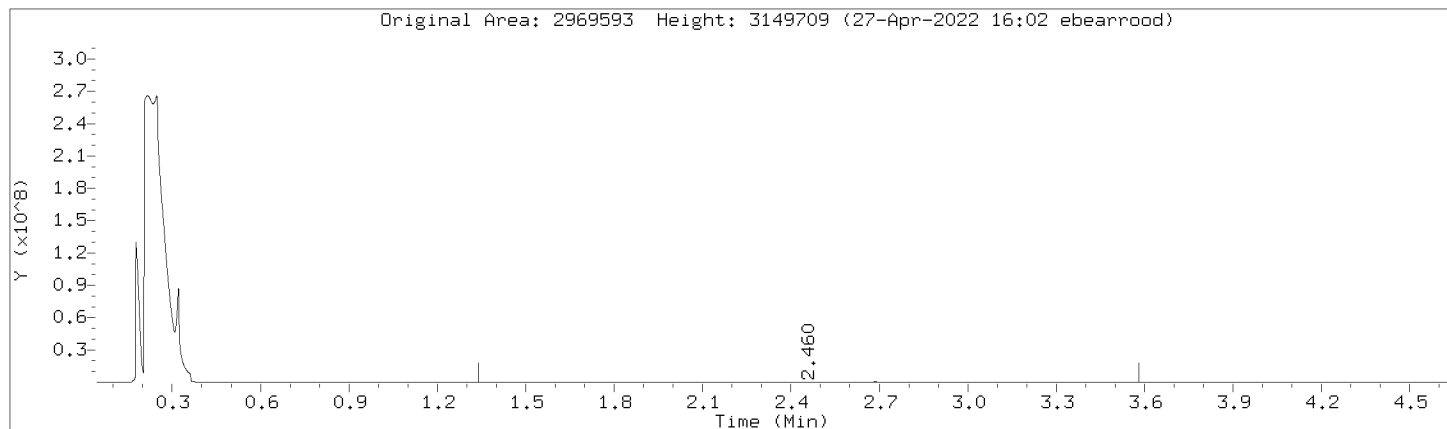
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Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



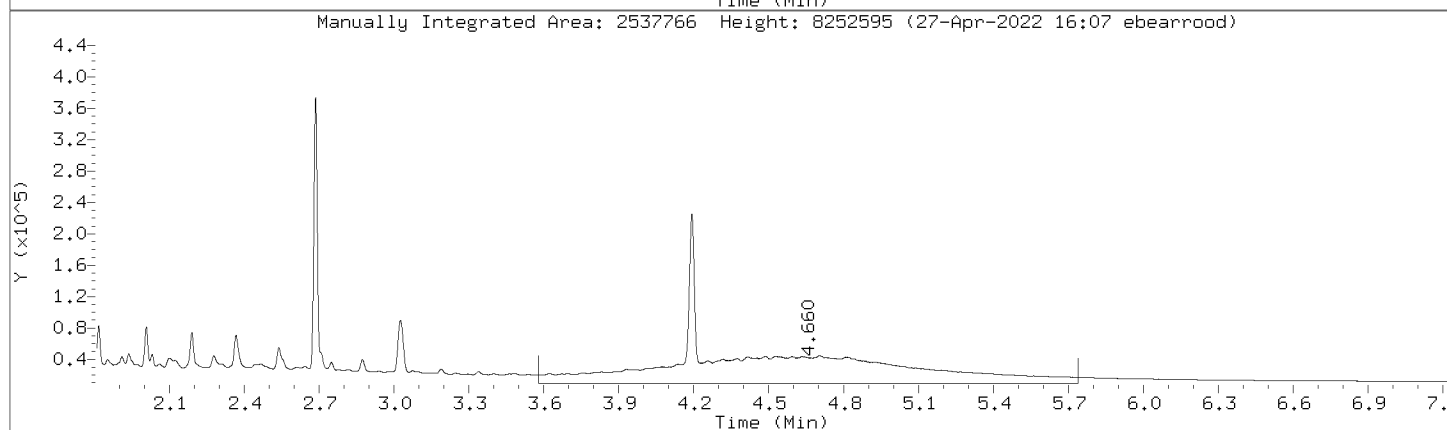
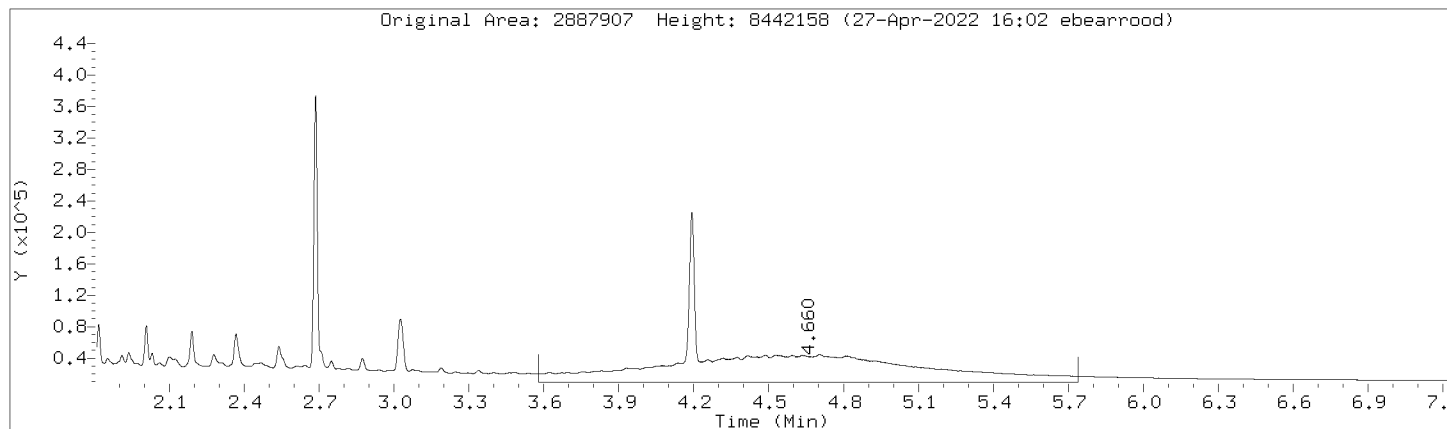
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Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



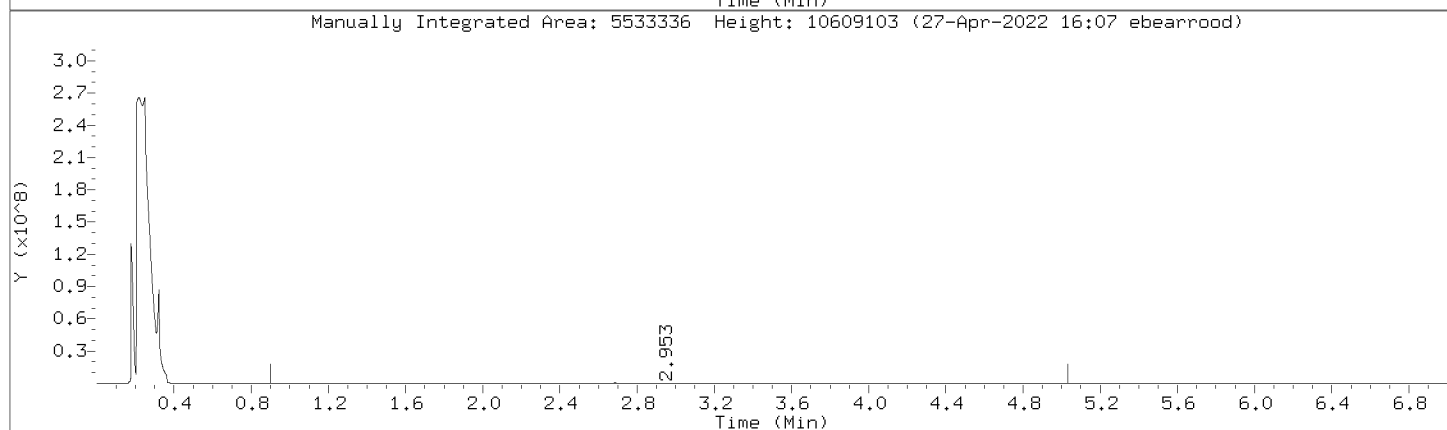
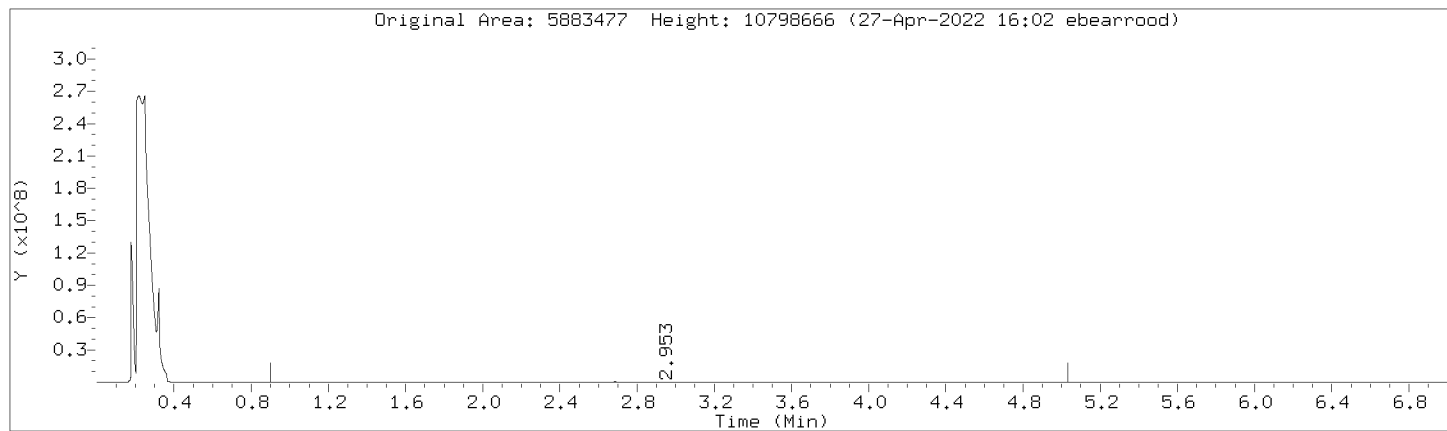
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000019.D  
Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



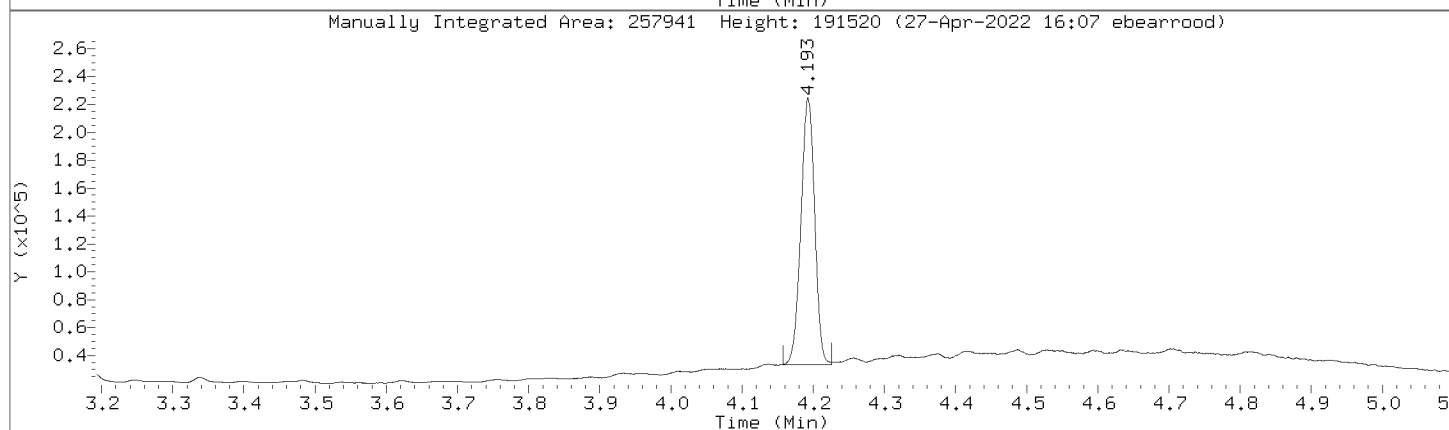
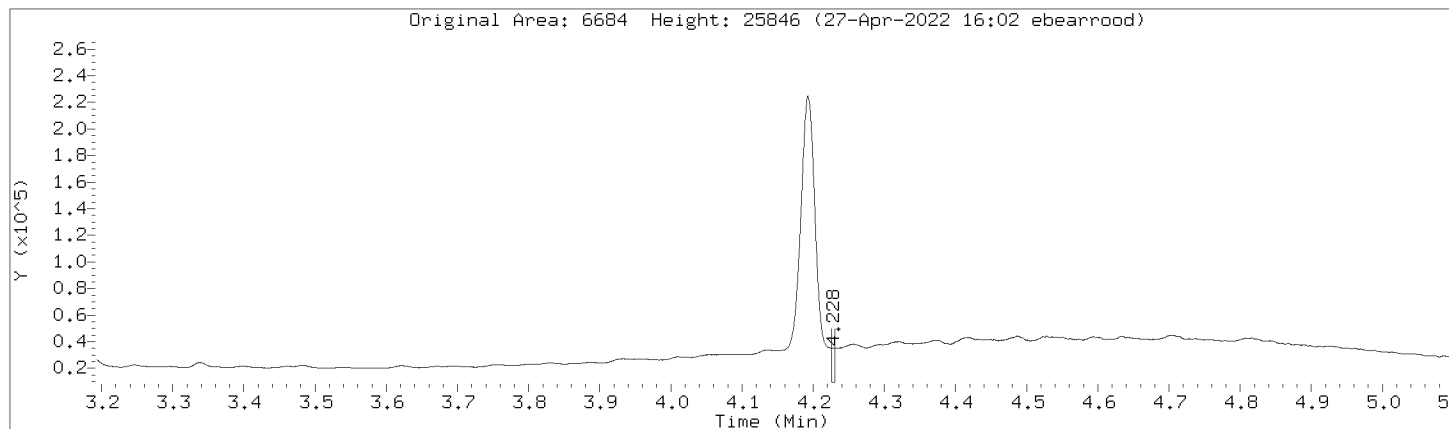
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Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



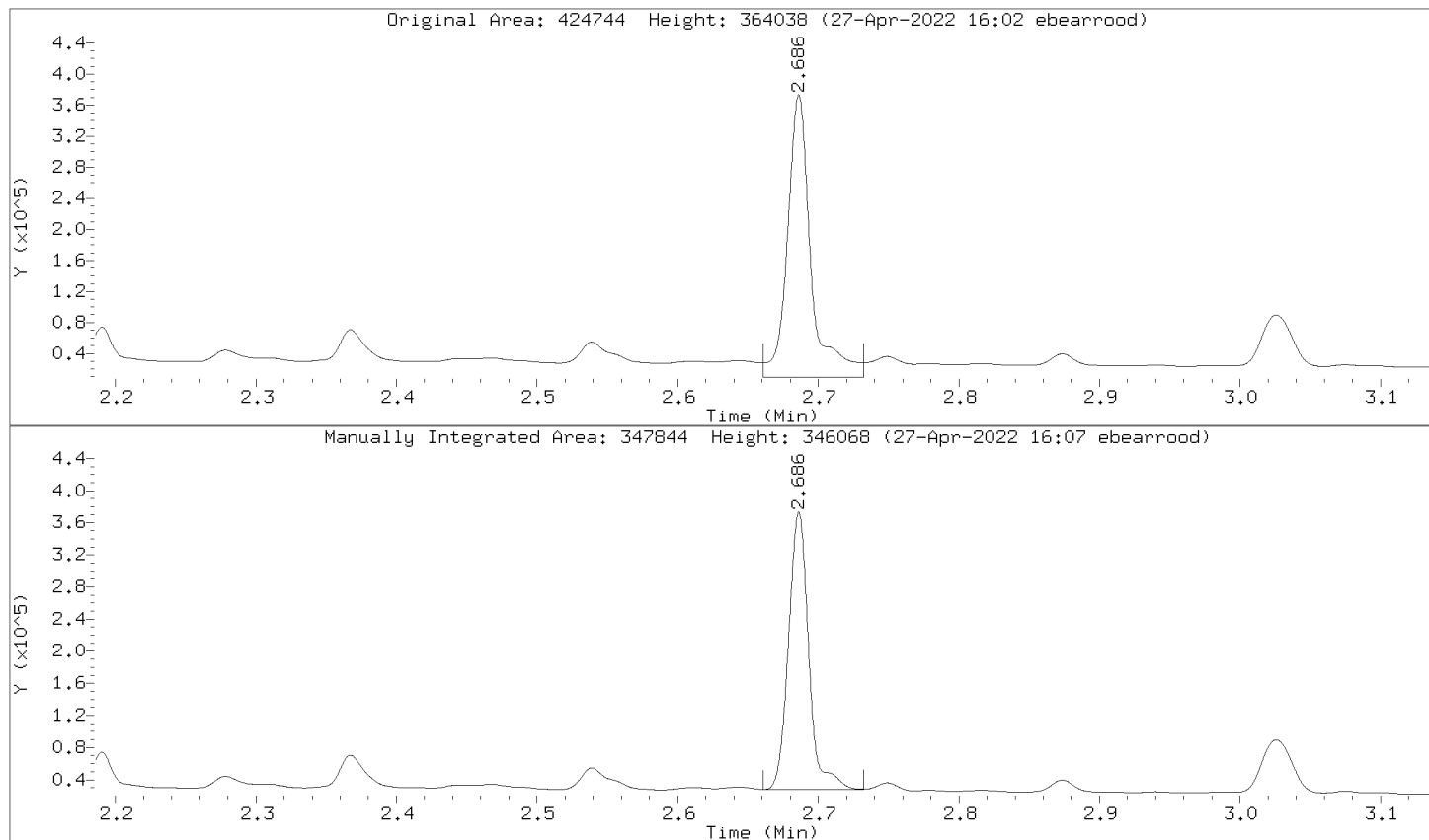
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Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000019.D  
Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000021.D  
 Lab Smp Id: DMO-CCV,362365:2 Client Smp ID: DMO-CCV,362365:2  
 Inj Date : 27-APR-2022 15:27  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,362365:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:33 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 2 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	(ug/mL)	(ug/mL)	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		3215247 500.000	498	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.685	2.684 0.001		346574 50.0000	51.9	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.193	4.190 0.003		264551 50.0000	50.6	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		1820384 500.000	490	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		3659043 500.000	497	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		2167259 500.000	563	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		5294933 1000.00	1050	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		2713401 500.000	499	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		2713401 500.000	499	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		2554793 500.000	553	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		2554793 500.000	553	(M) RNG
-----					



QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 15:27

Client ID: DM0-CCV,362365;2

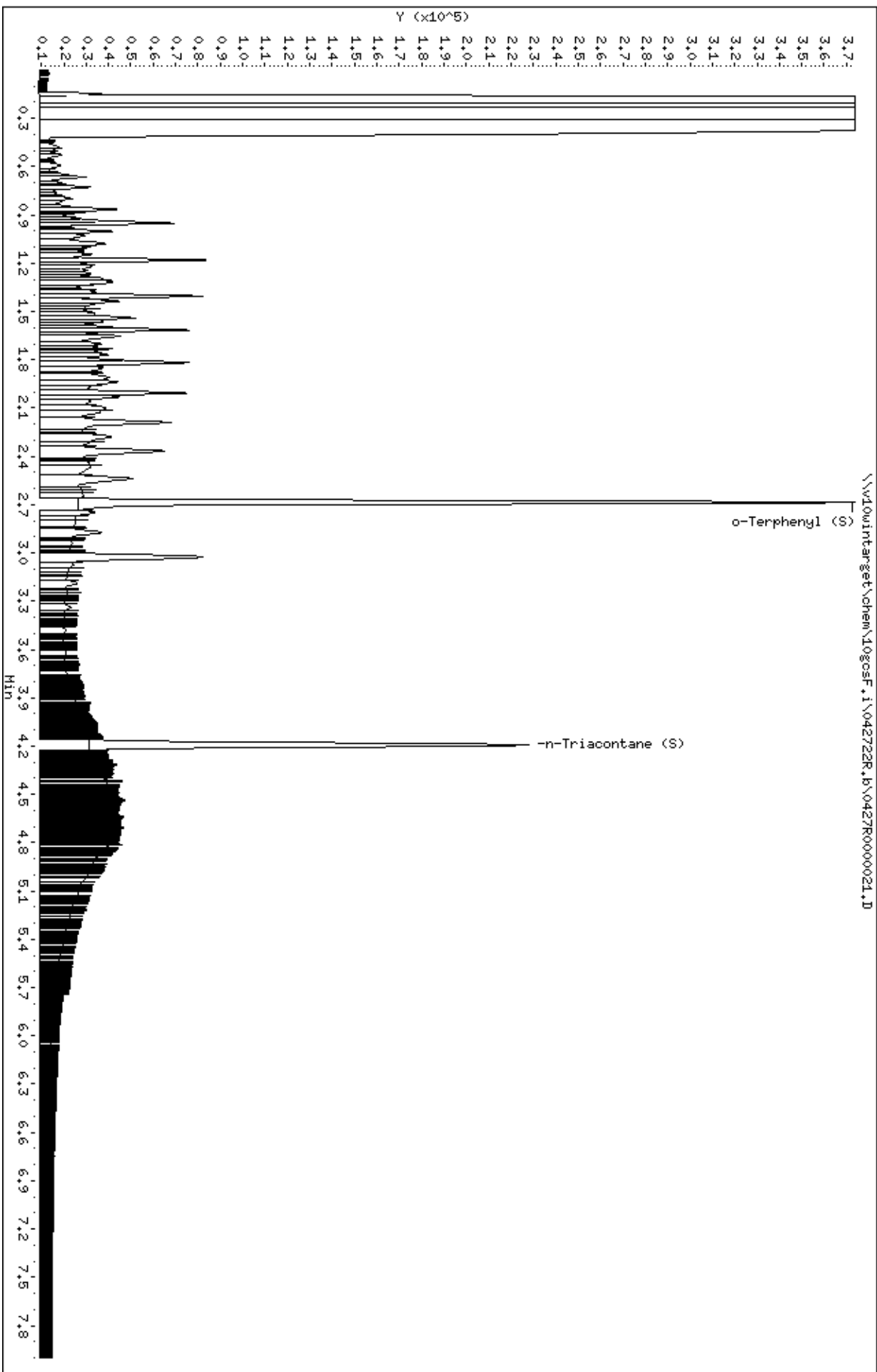
Sample Info: DM0-CCV,362365;2

Column phase: DB-5-MS21430033

Instrument: 10gocsf.1

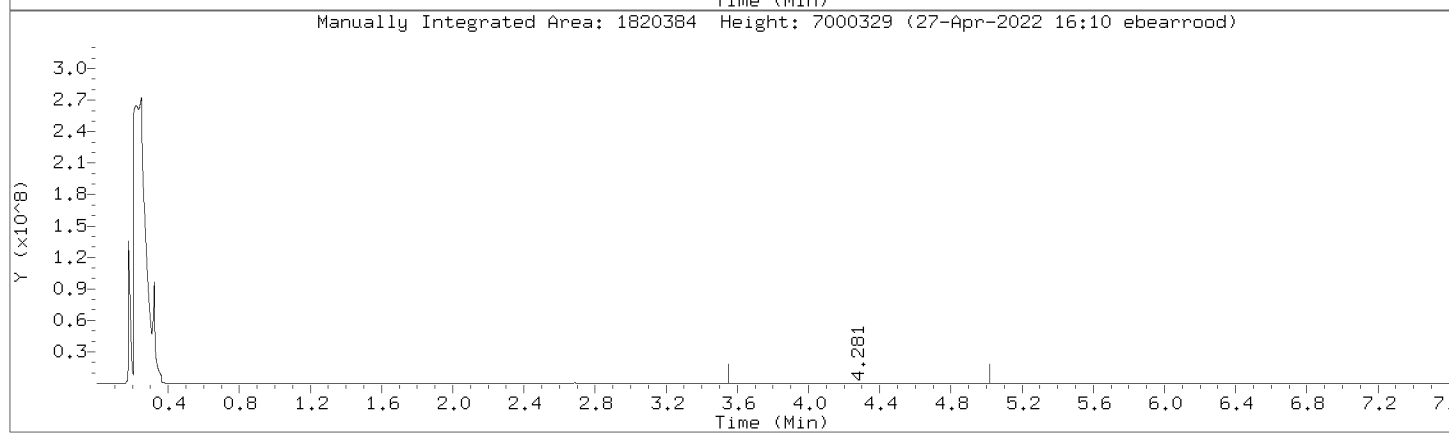
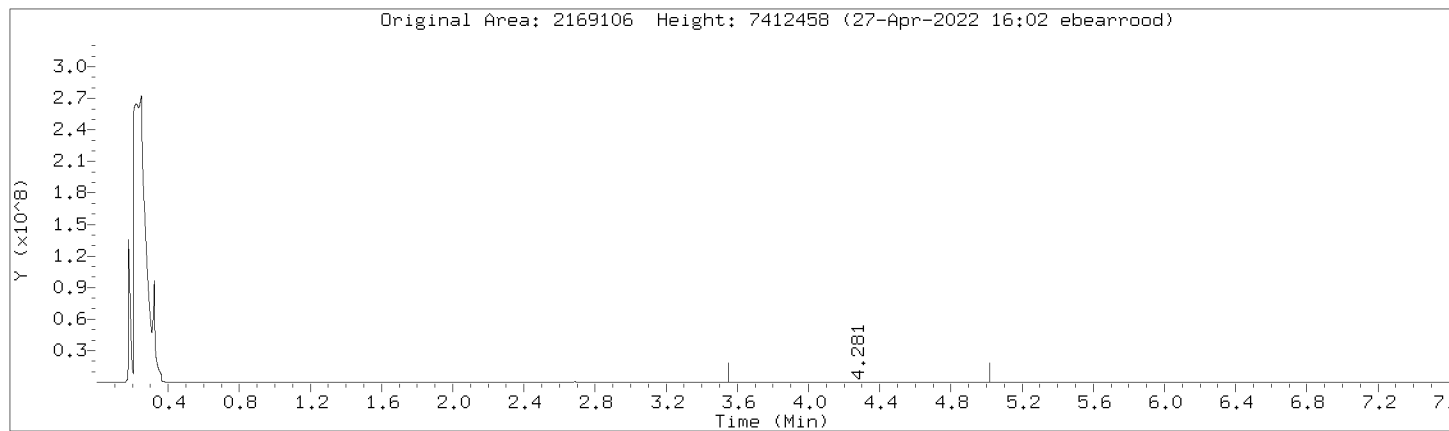
Operator: EB3

Column diameter: 0.32



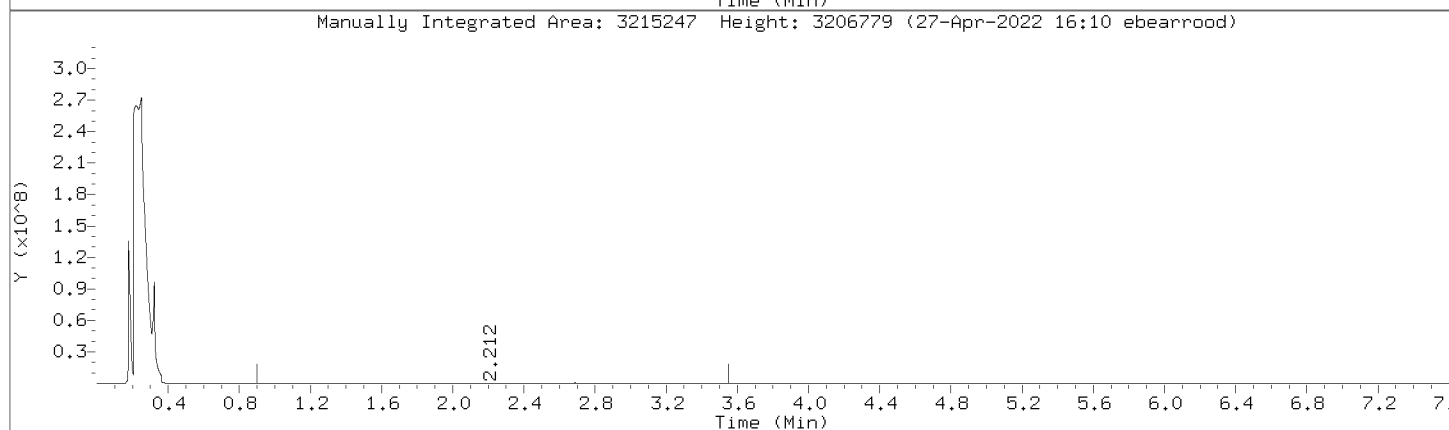
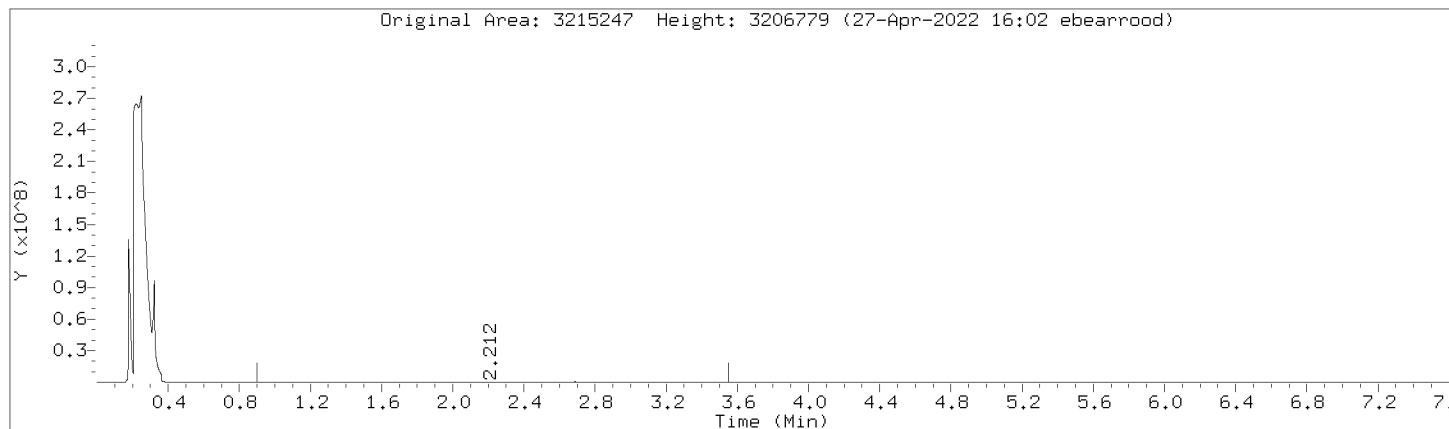
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Injection Date: 27-APR-2022 15:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



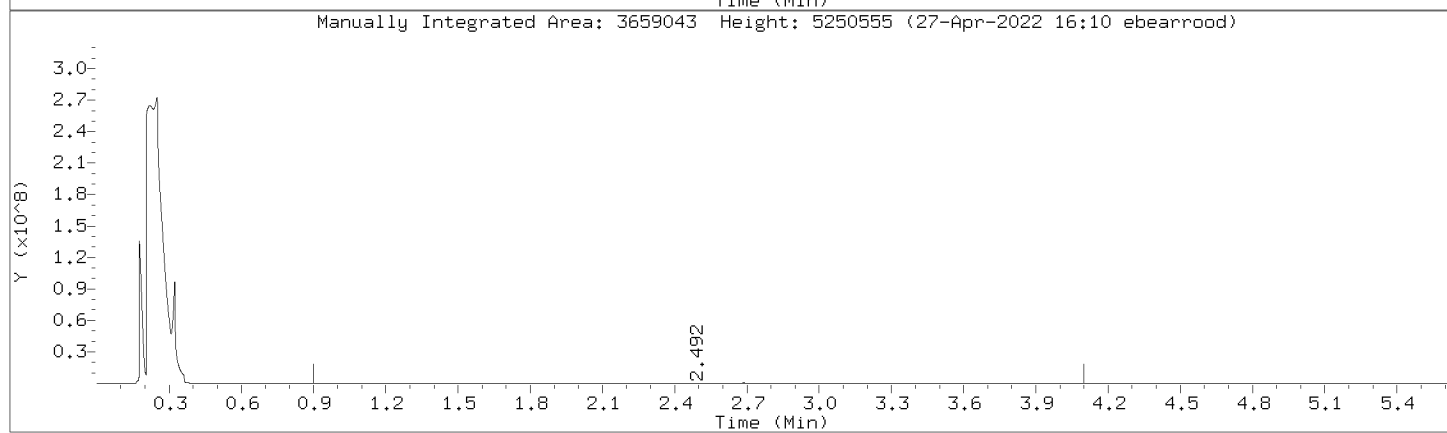
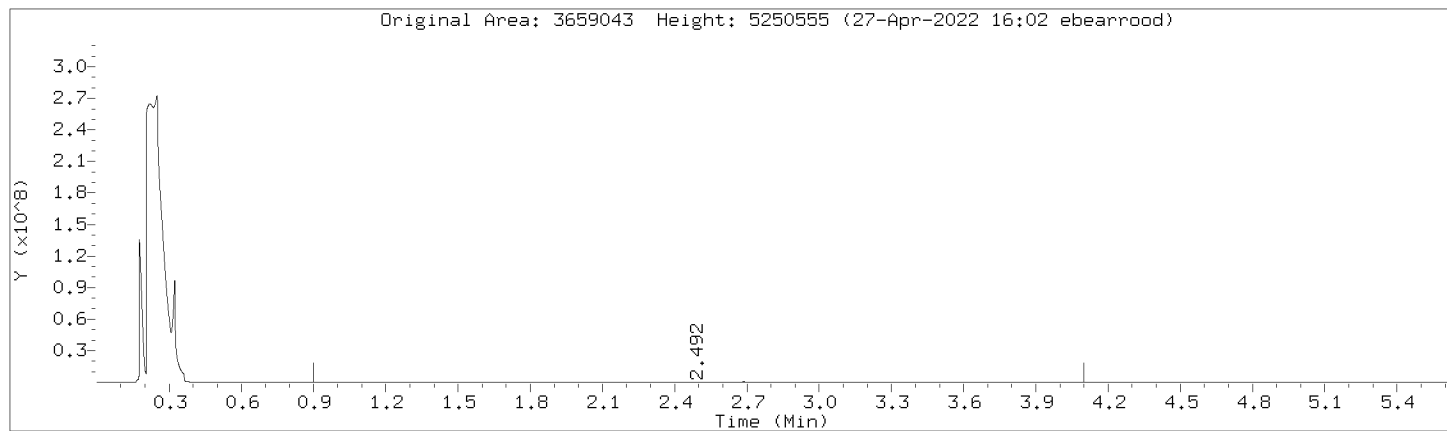
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Injection Date: 27-APR-2022 15:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



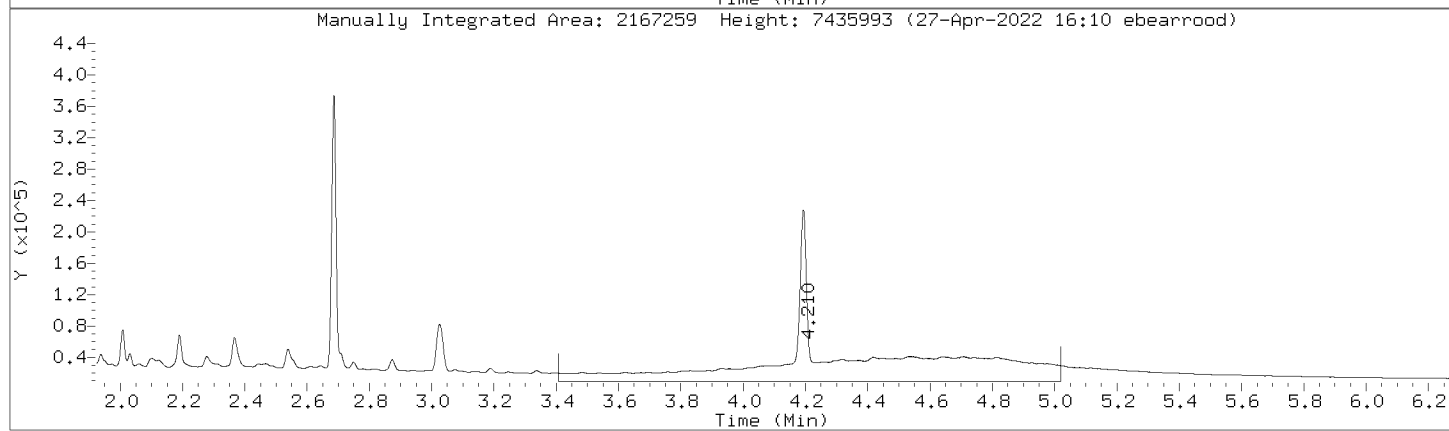
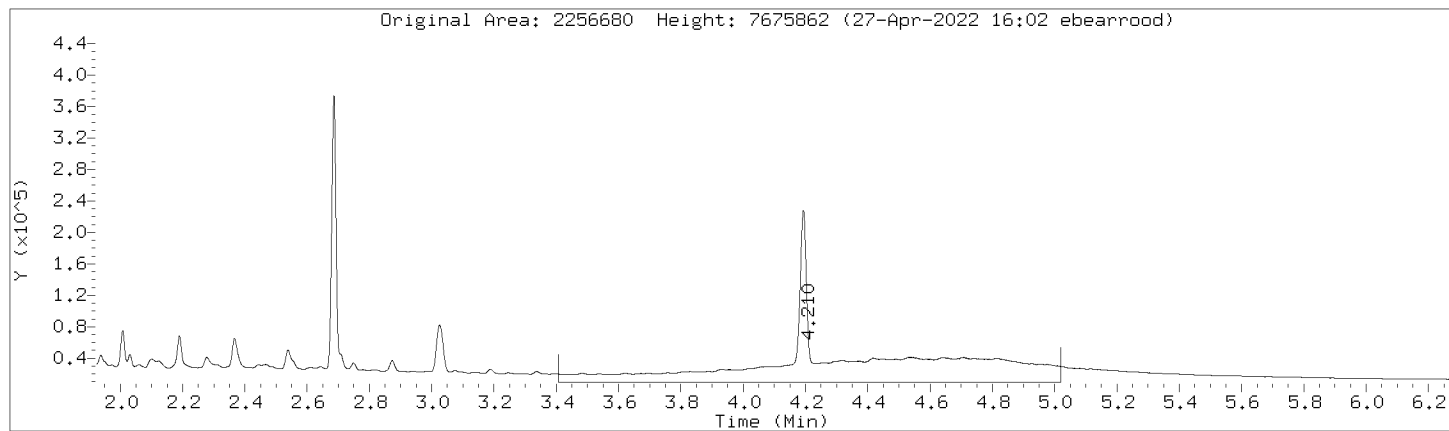
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Injection Date: 27-APR-2022 15:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



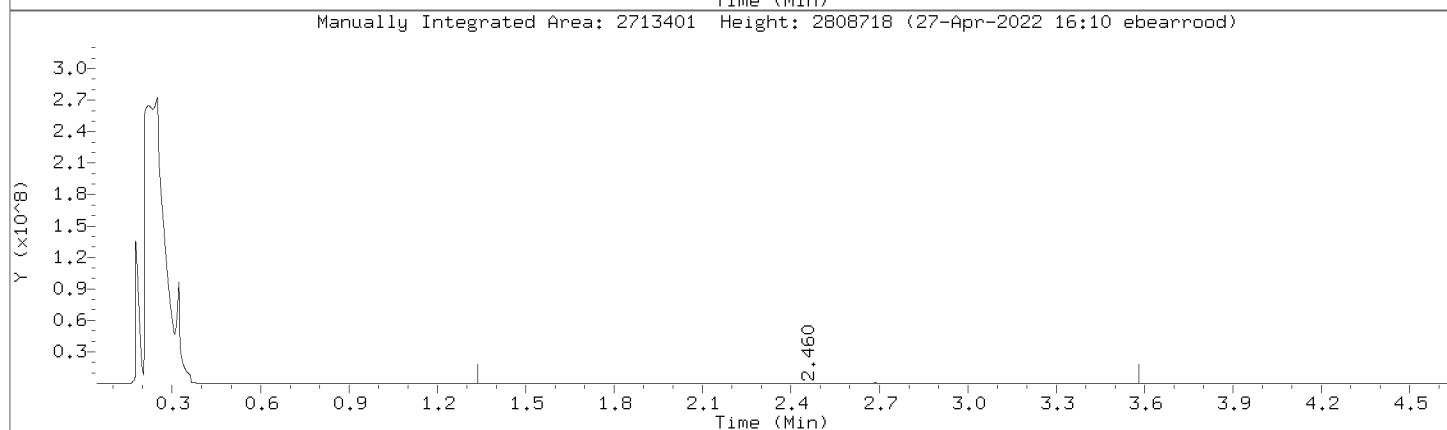
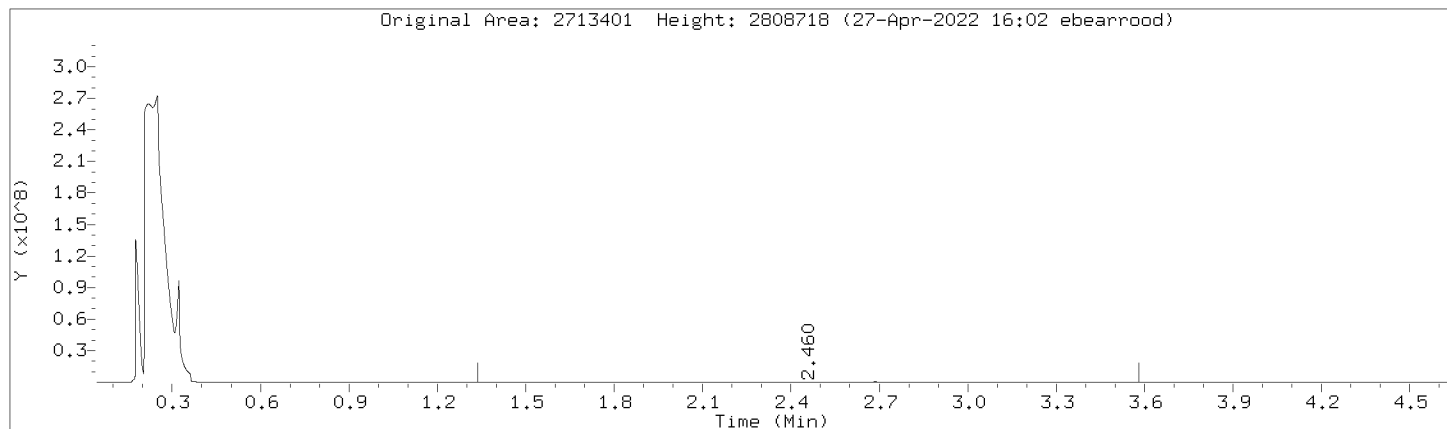
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Injection Date: 27-APR-2022 15:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



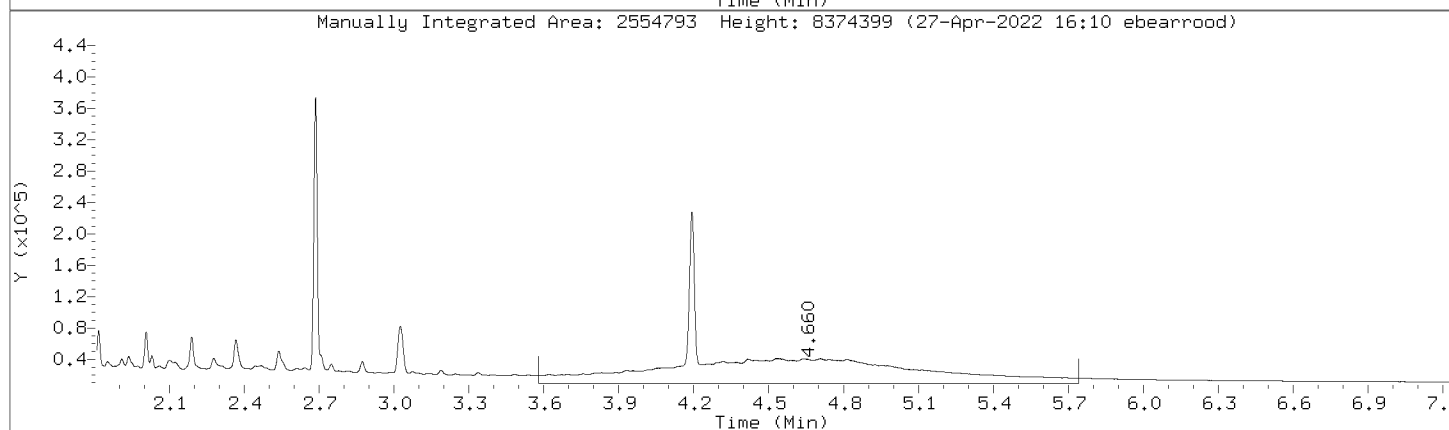
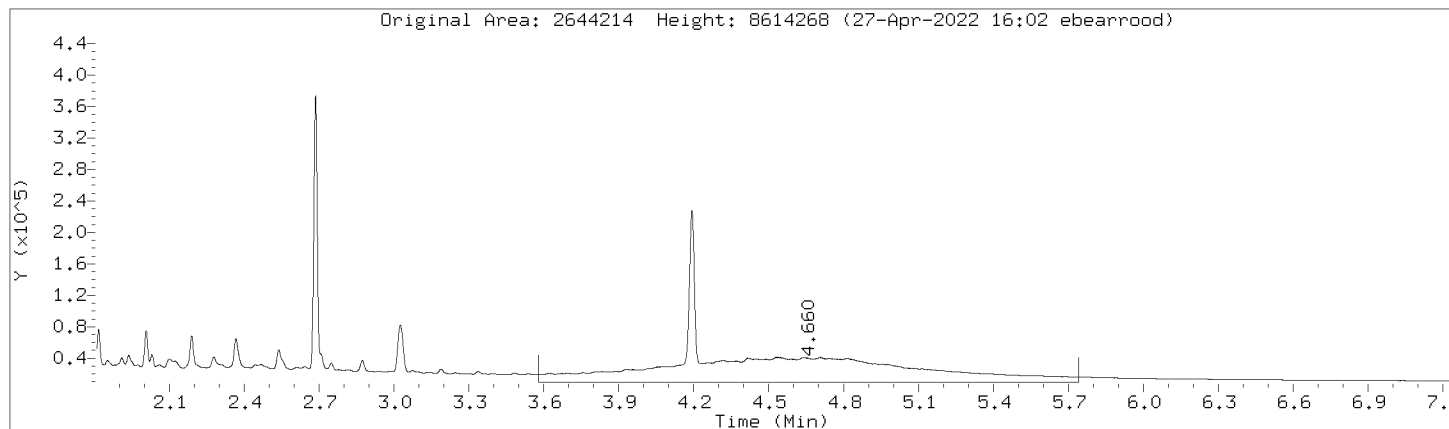
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000021.D  
Injection Date: 27-APR-2022 15:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000021.D  
Injection Date: 27-APR-2022 15:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

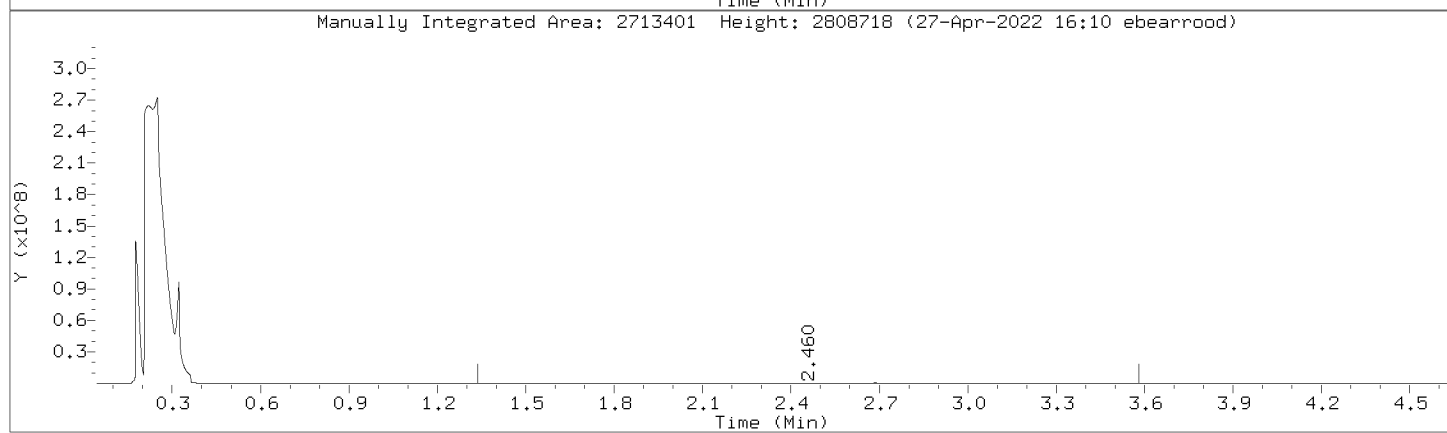
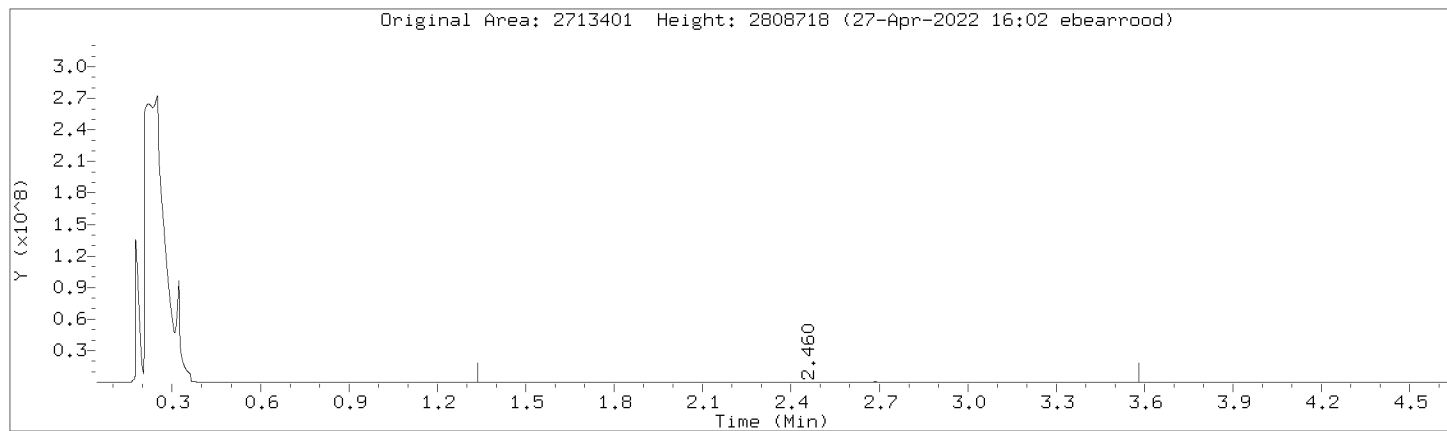
Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





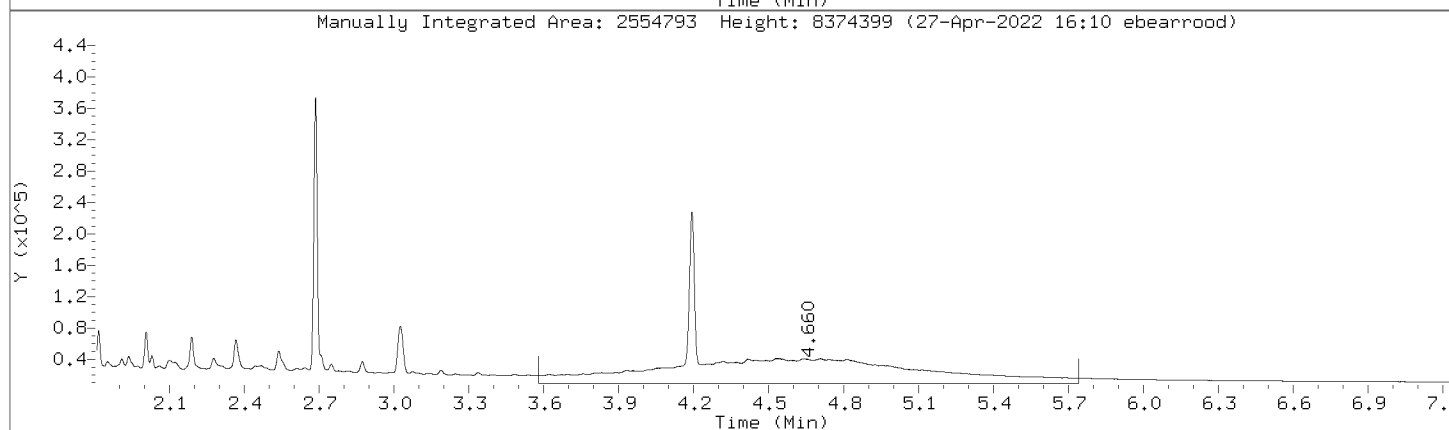
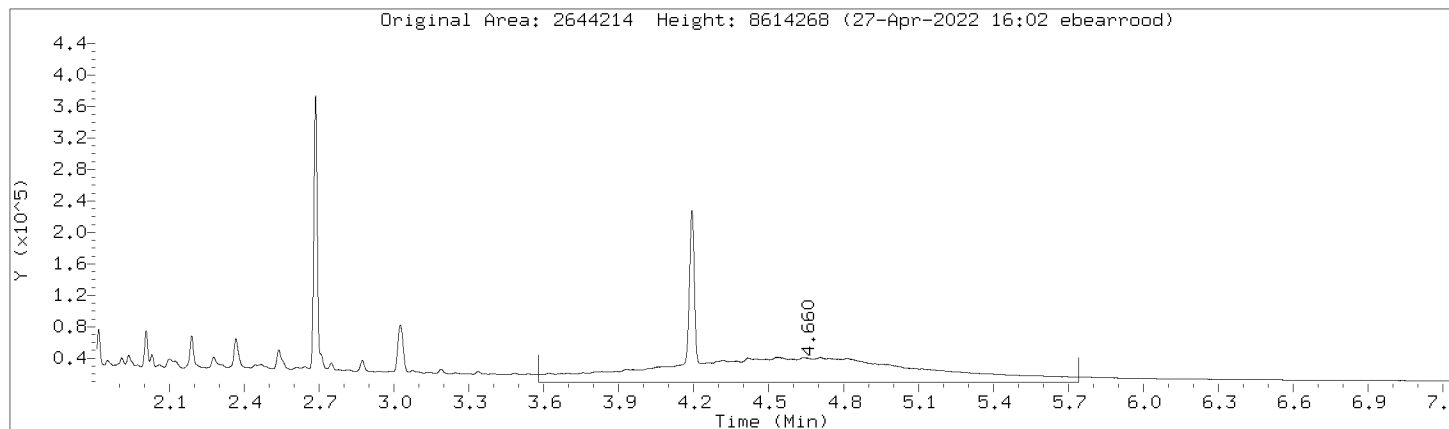
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000021.D  
Injection Date: 27-APR-2022 15:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



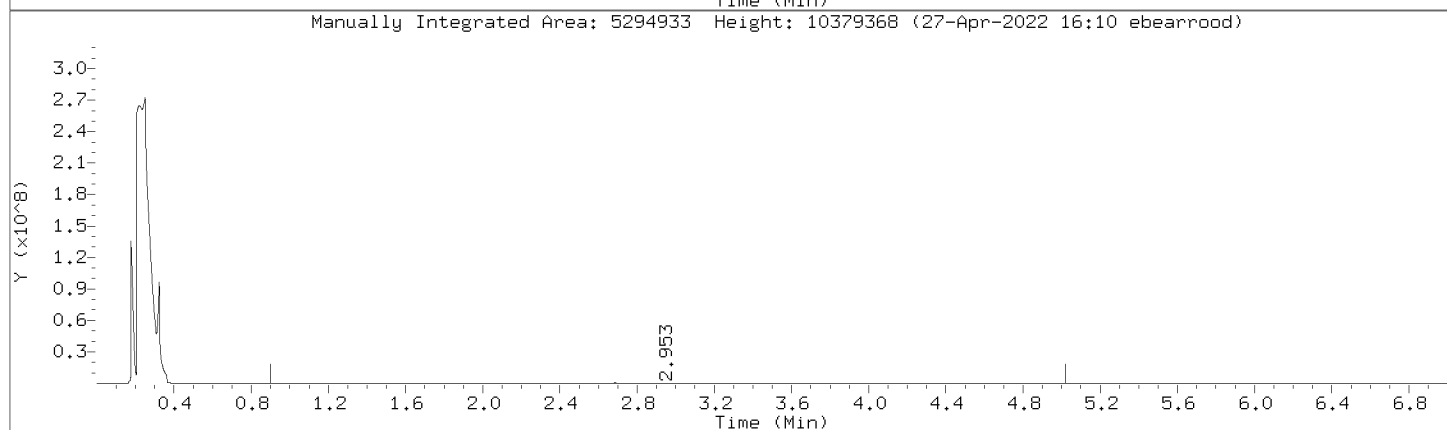
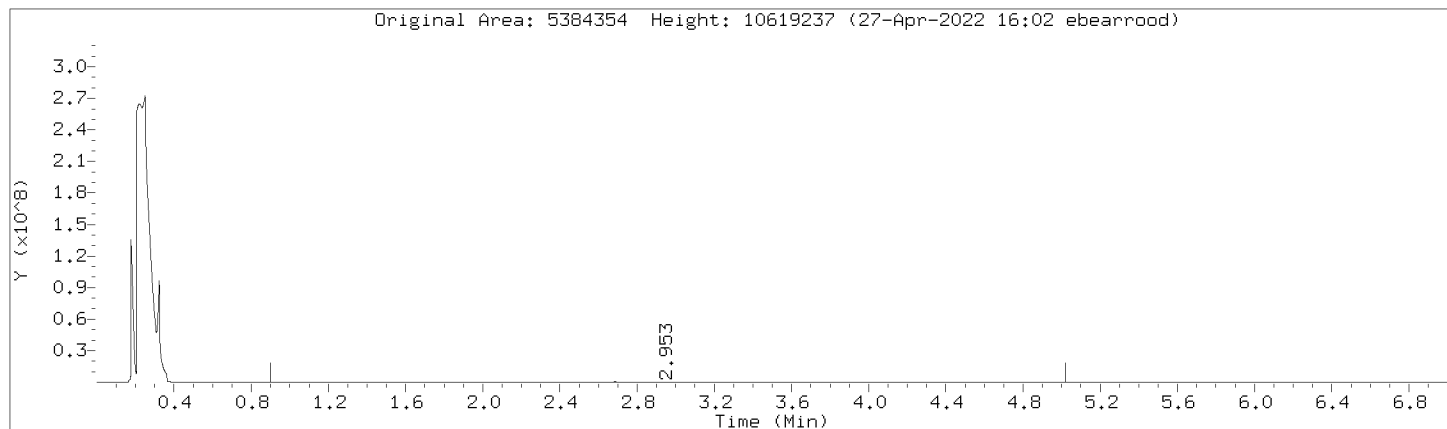
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Injection Date: 27-APR-2022 15:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



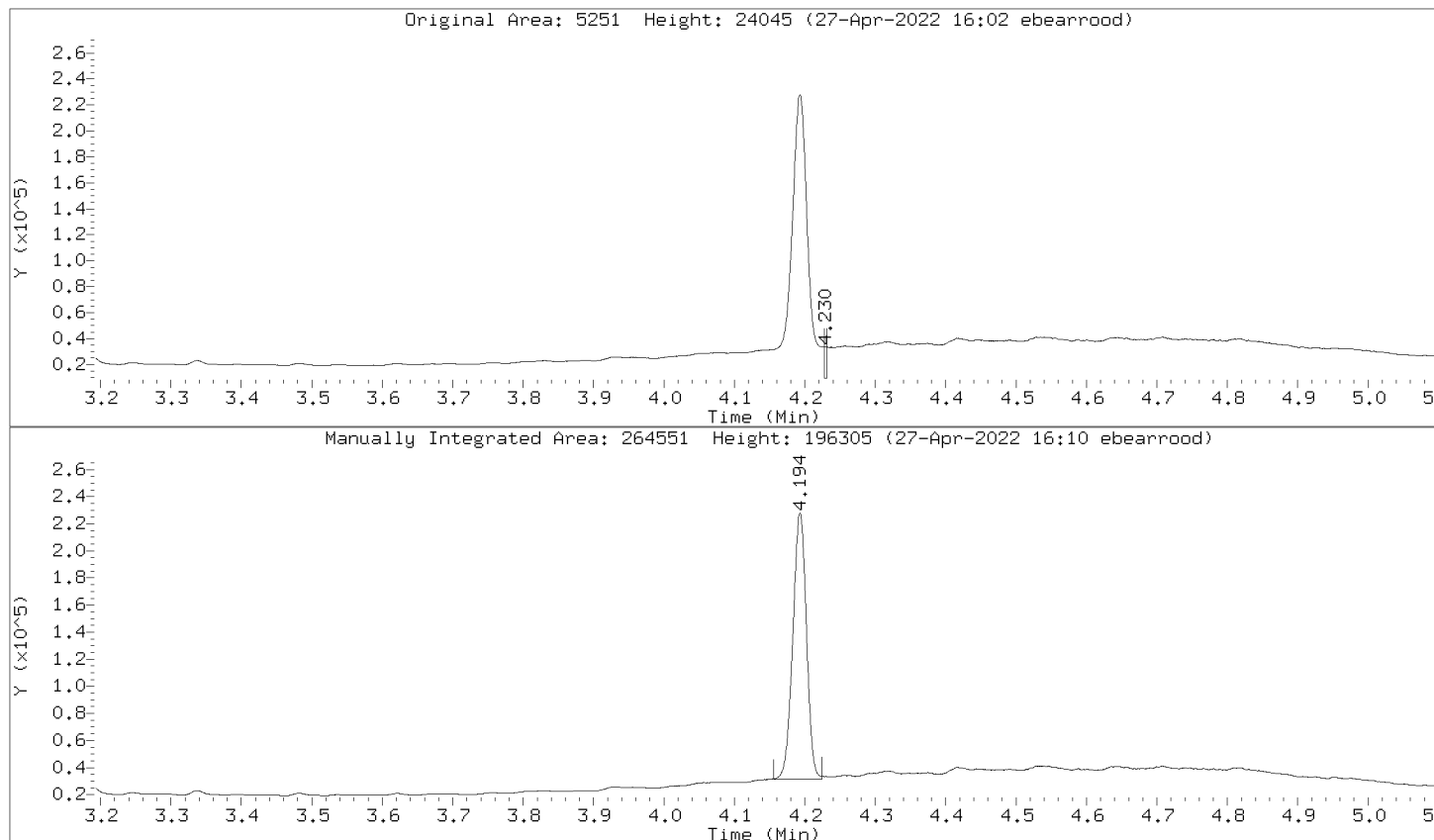
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Injection Date: 27-APR-2022 15:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



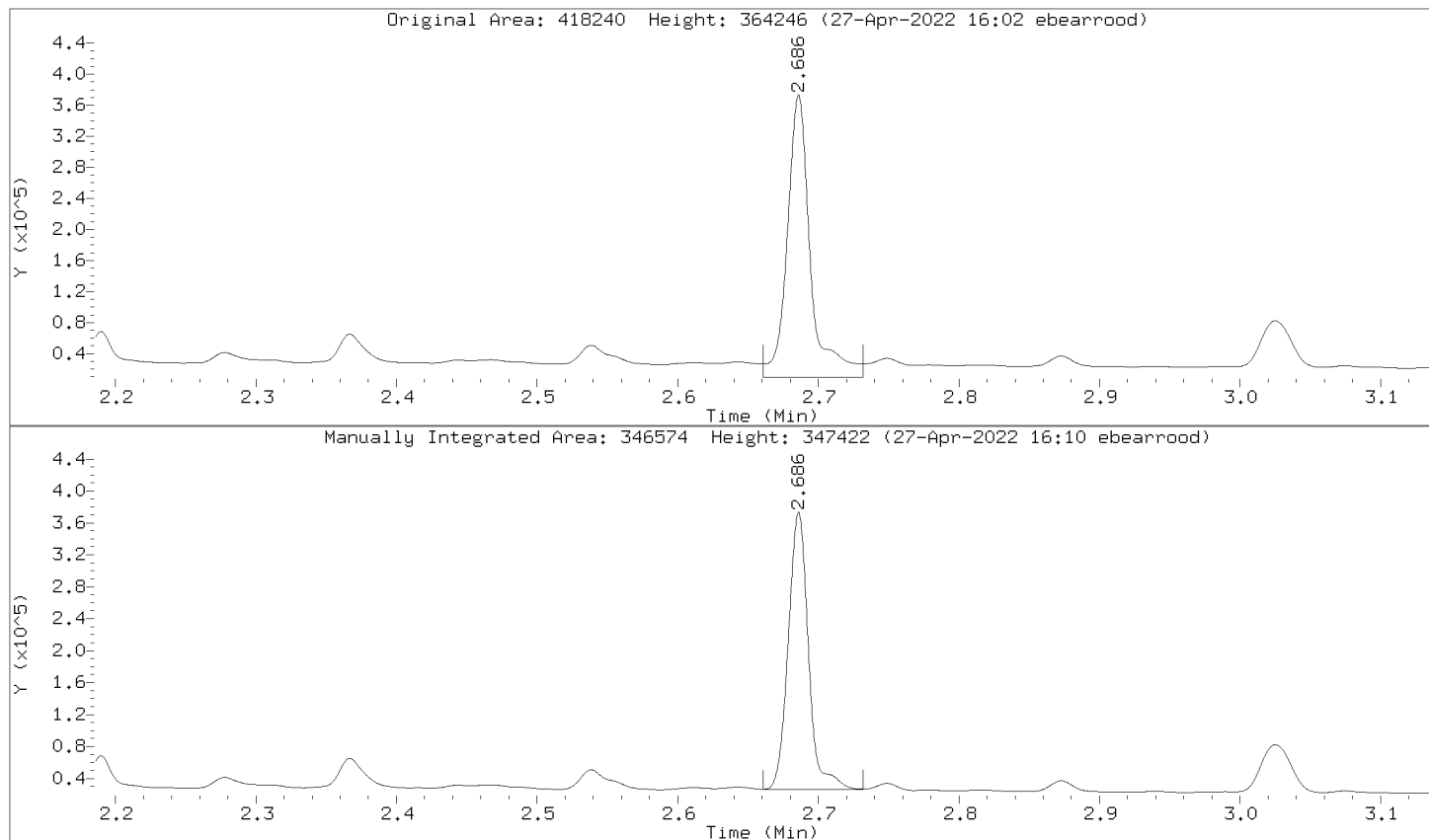
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Injection Date: 27-APR-2022 15:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000021.D  
Injection Date: 27-APR-2022 15:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
 Lab Smp Id: DMO-CCV,362365:2 Client Smp ID: DMO-CCV,362365:2  
 Inj Date : 27-APR-2022 15:38  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,362365:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 28-Apr-2022 09:09 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 2 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	(ug/mL)	(ug/mL)	=====
S 1	DRO by AK 102			CAS #:	
0.755	- 3.420		3057152 500.000	517	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.527	2.524 0.003		300798 50.0000	54.5	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.060	4.057 0.003		245686 50.0000	51.5	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.421	- 4.880		1758466 500.000	514	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.755	- 4.000		3498048 500.000	517	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.280	- 4.880		1839665 500.000	518	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.755	- 4.880		4818084 1000.00	1030	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.200	- 3.470		2581944 500.000	515	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.200	- 3.470		2581944 500.000	515	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.471	- 5.370		2125587 500.000	504	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.471	- 5.370		2125587 500.000	504	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 15:38

Client ID: DM0-CCV,362365;2

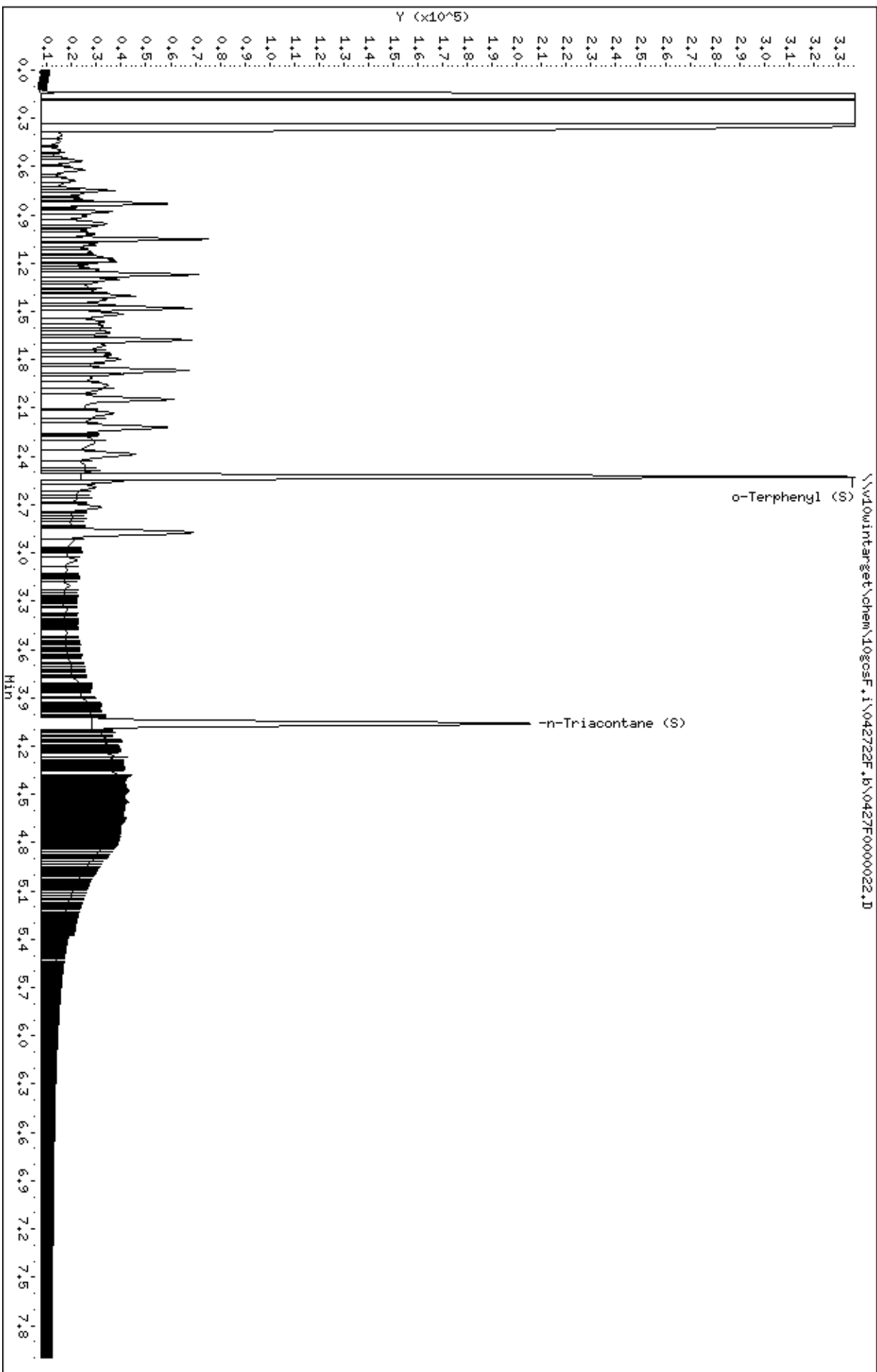
Sample Info: DM0-CCV,362365;2

Column phase: DB-5-MS21250010

Instrument: logosf.i

Operator: EB3

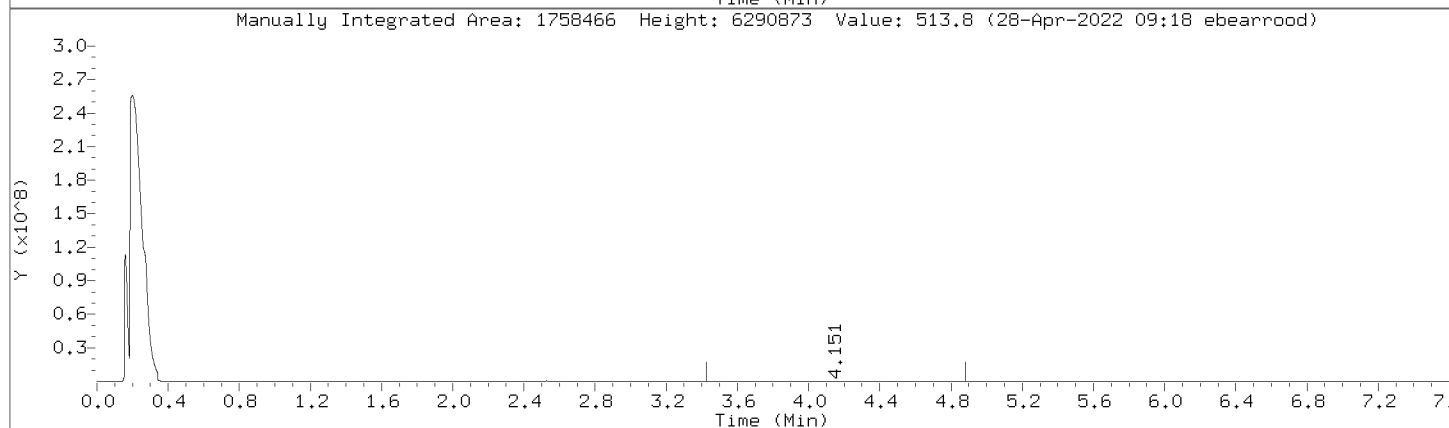
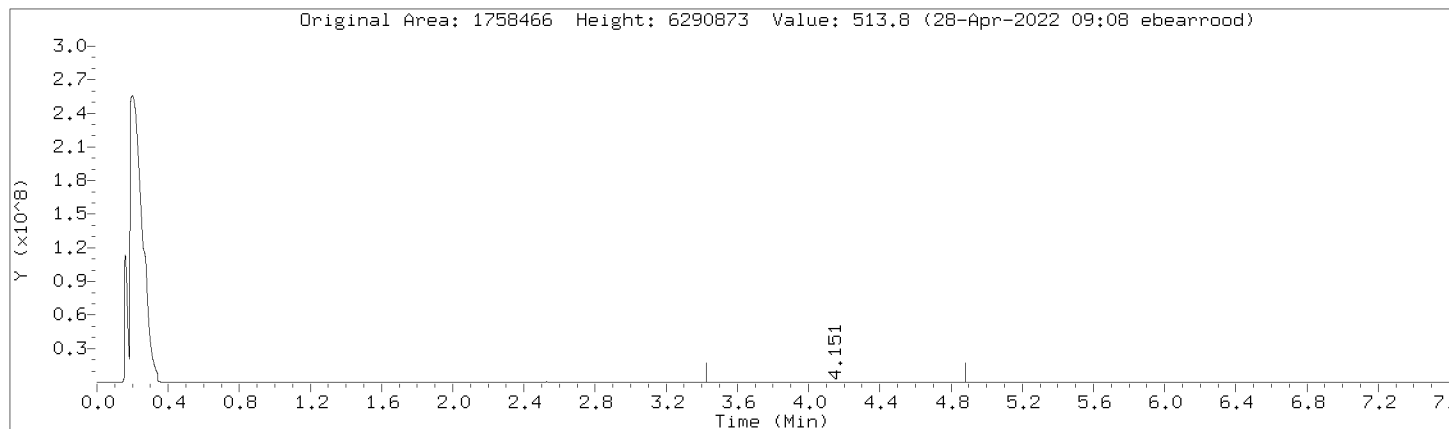
Column diameter: 0.32





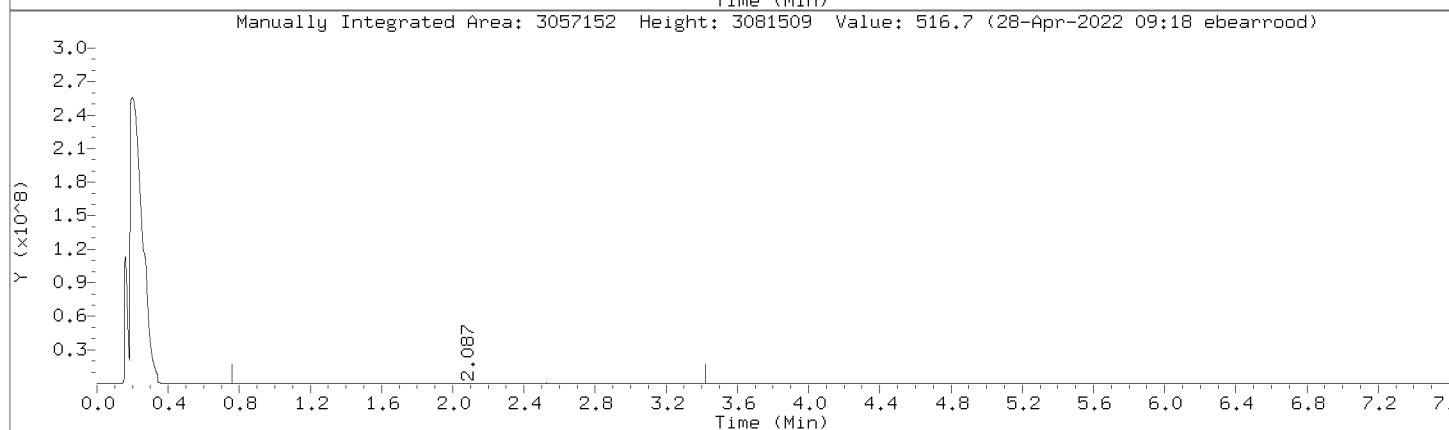
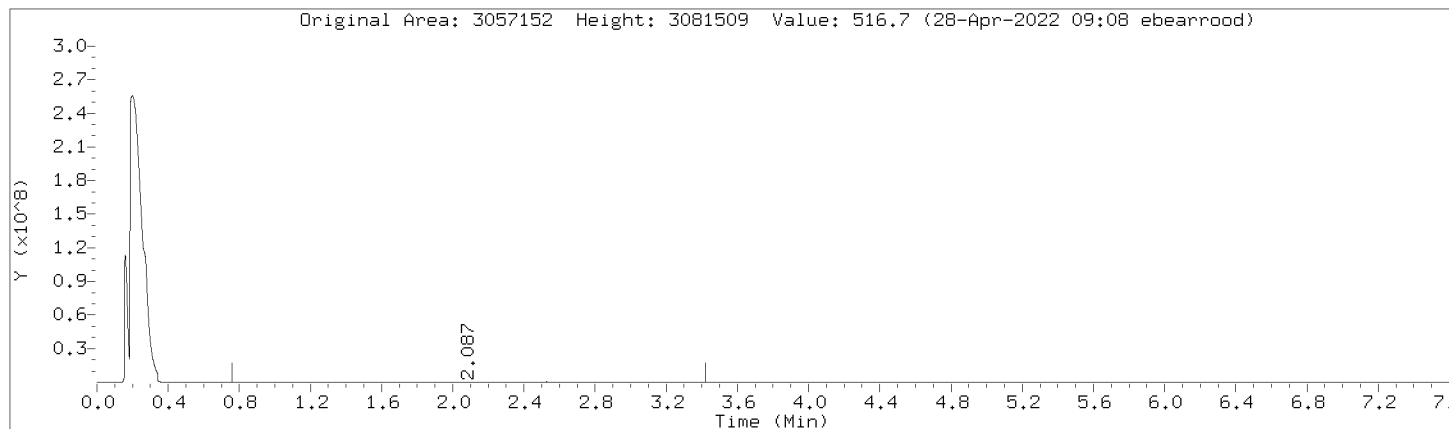
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D

Injection Date: 27-APR-2022 15:38

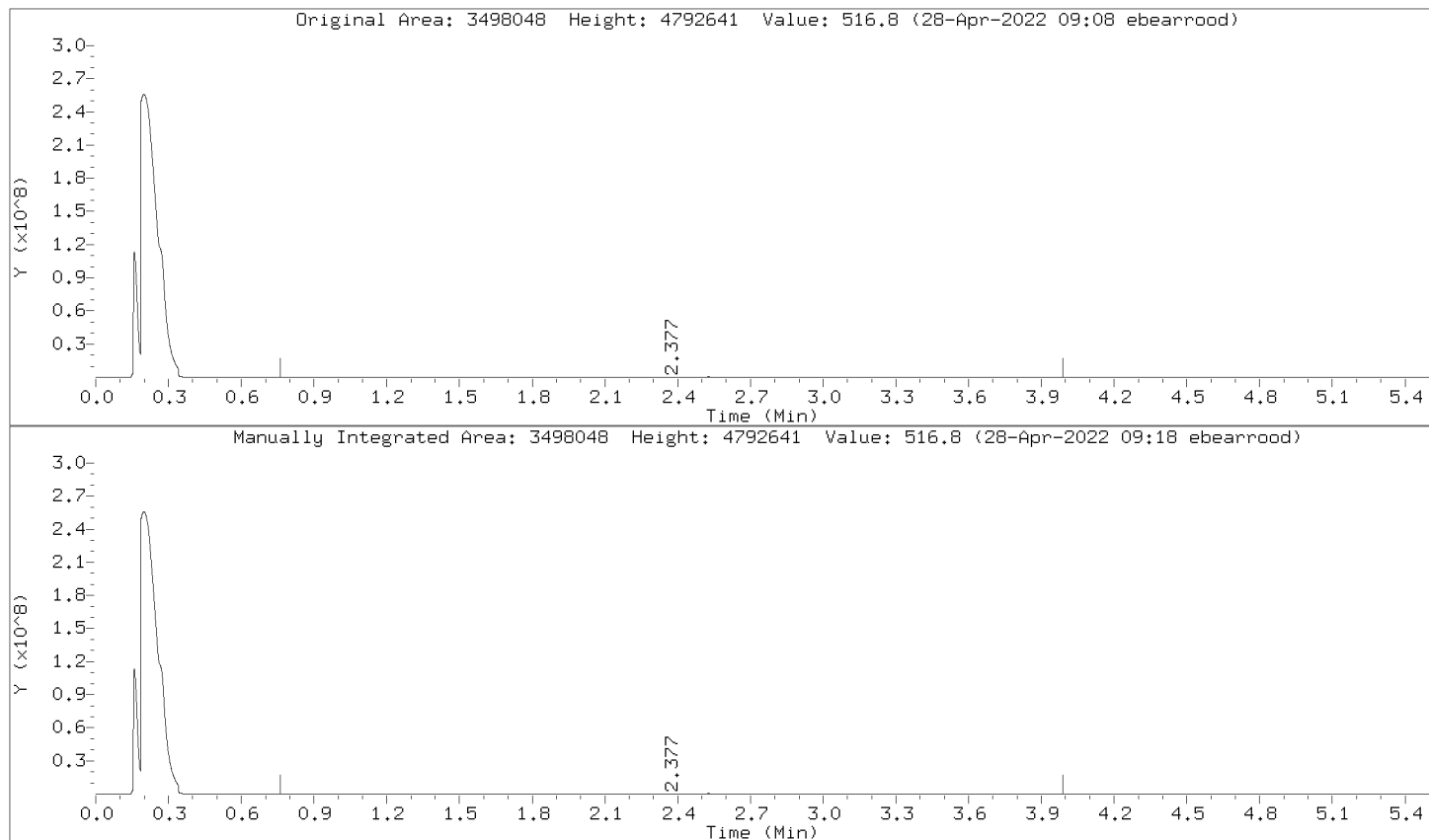
Instrument: 10gcsF.i

Lab Sample ID: DMO-CCV,362365:2

Compound: TPH-DRO (C10-C28)

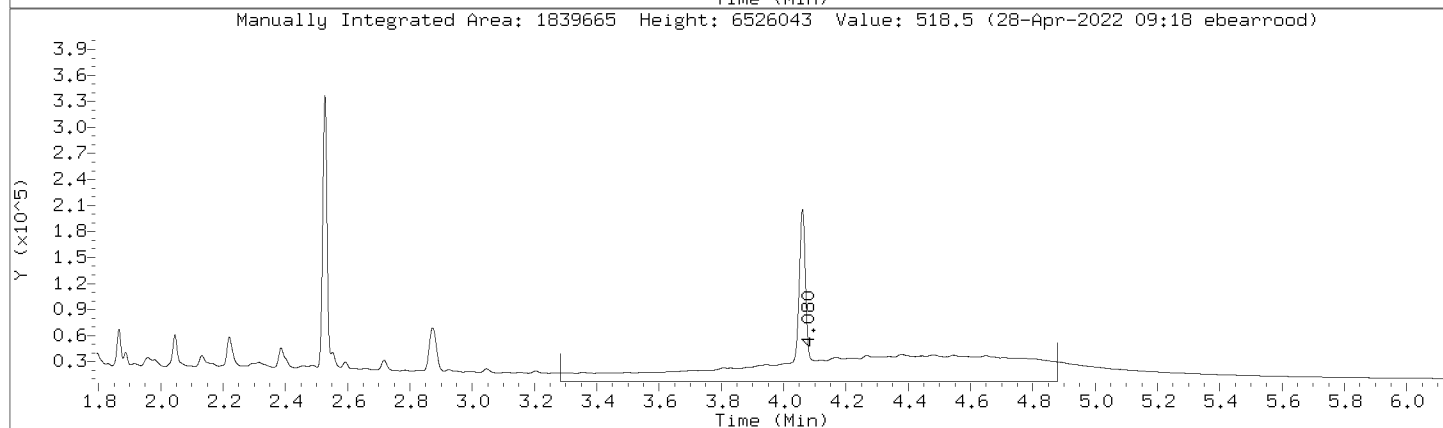
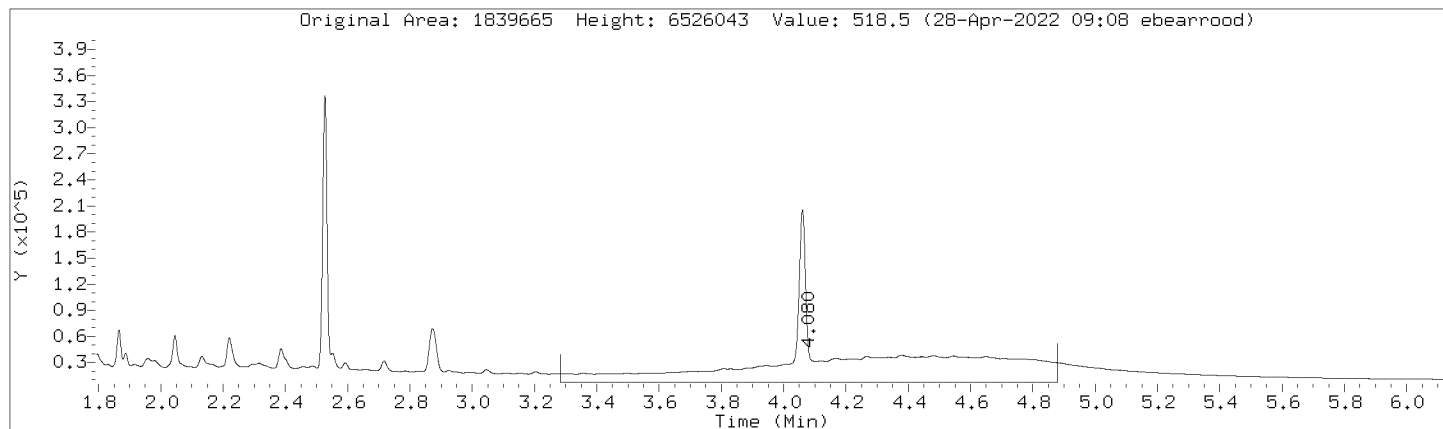
Review Code: RNG

CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D

Injection Date: 27-APR-2022 15:38

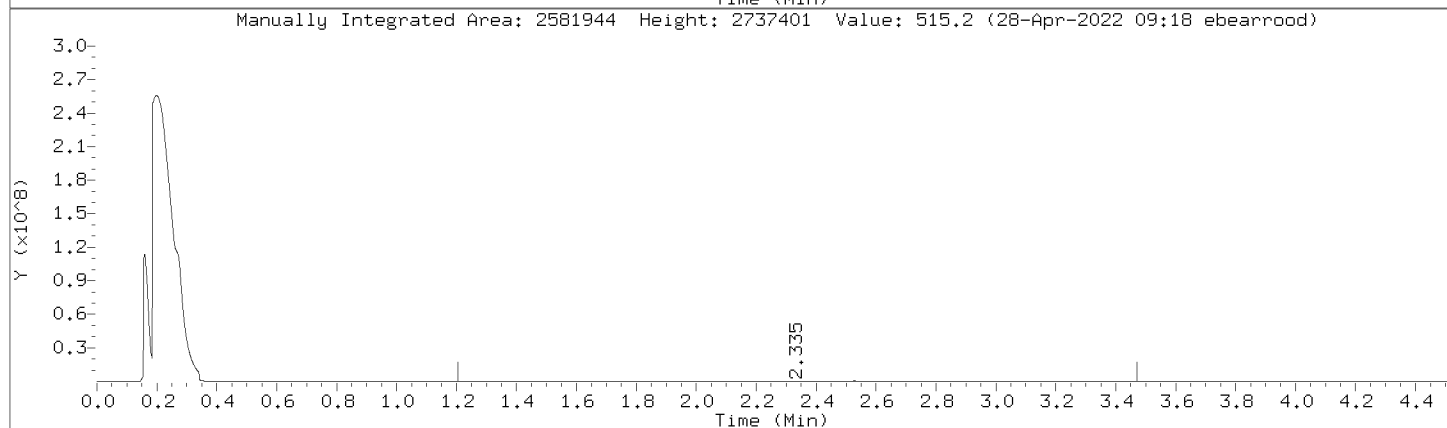
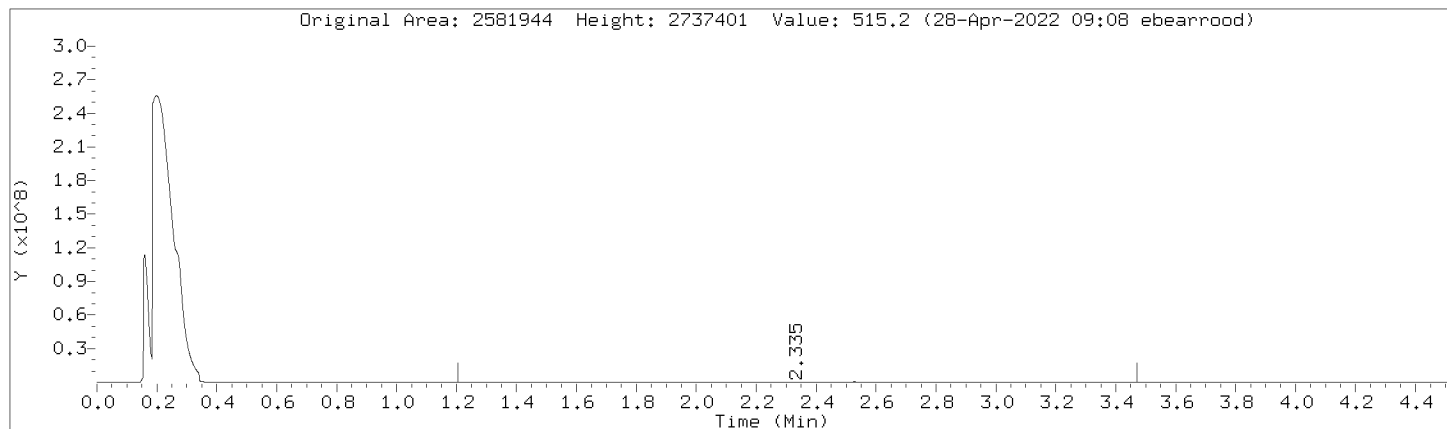
Instrument: 10gcsF.i

Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range

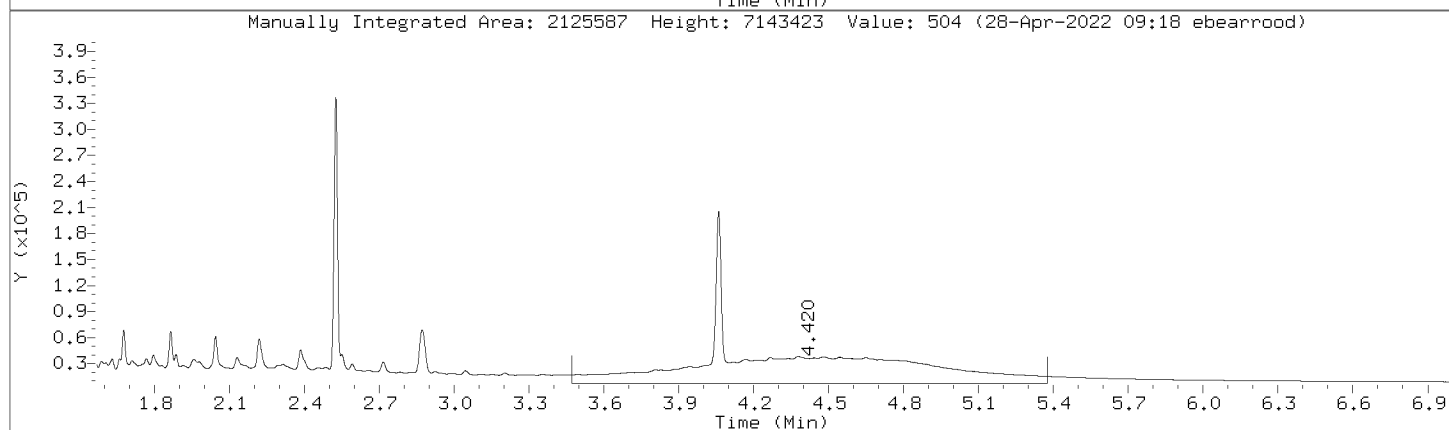
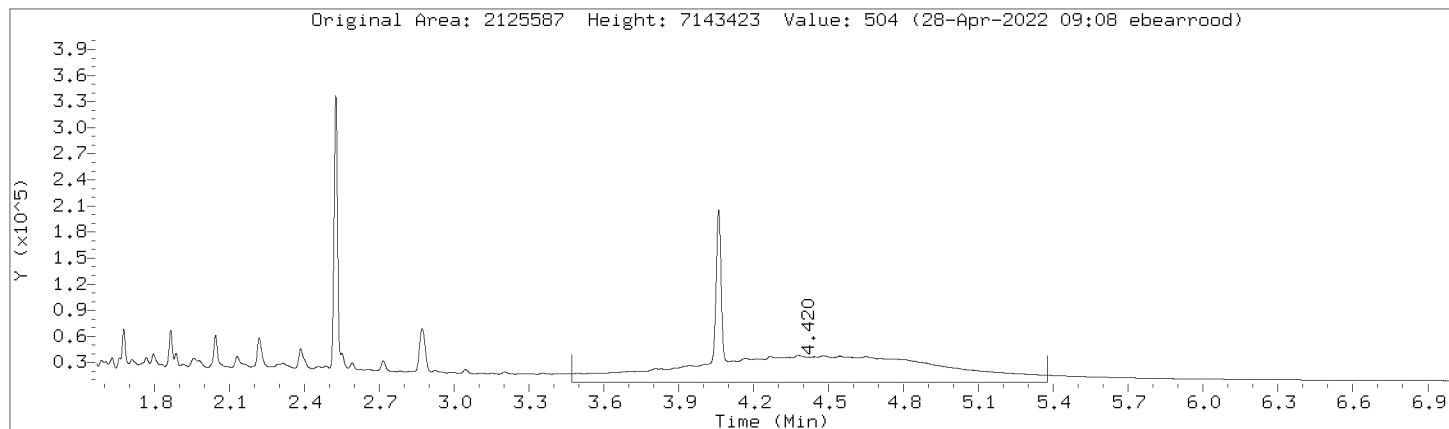
Review Code: RNG

CAS Number:



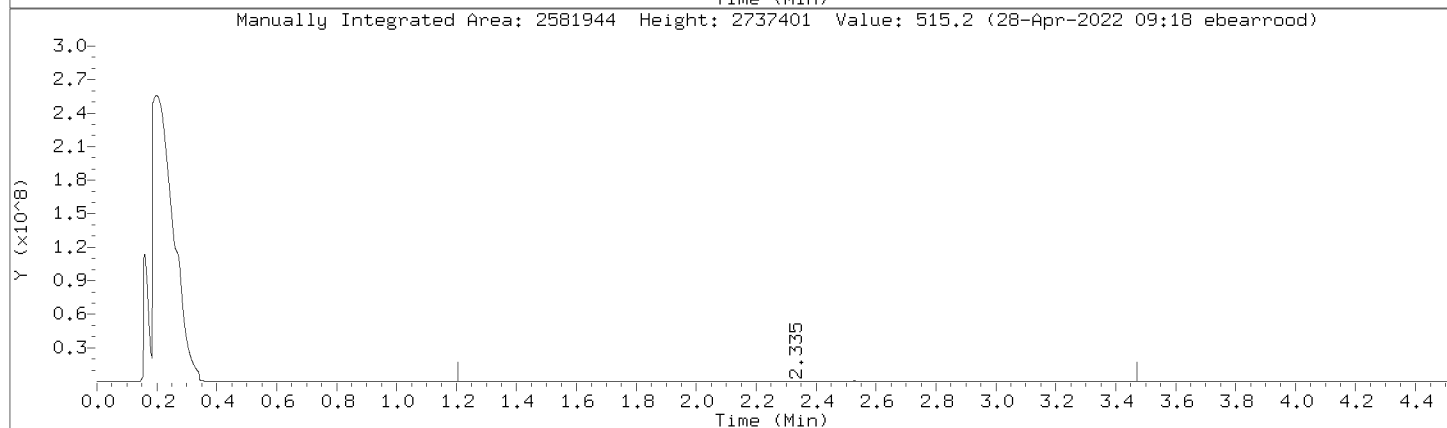
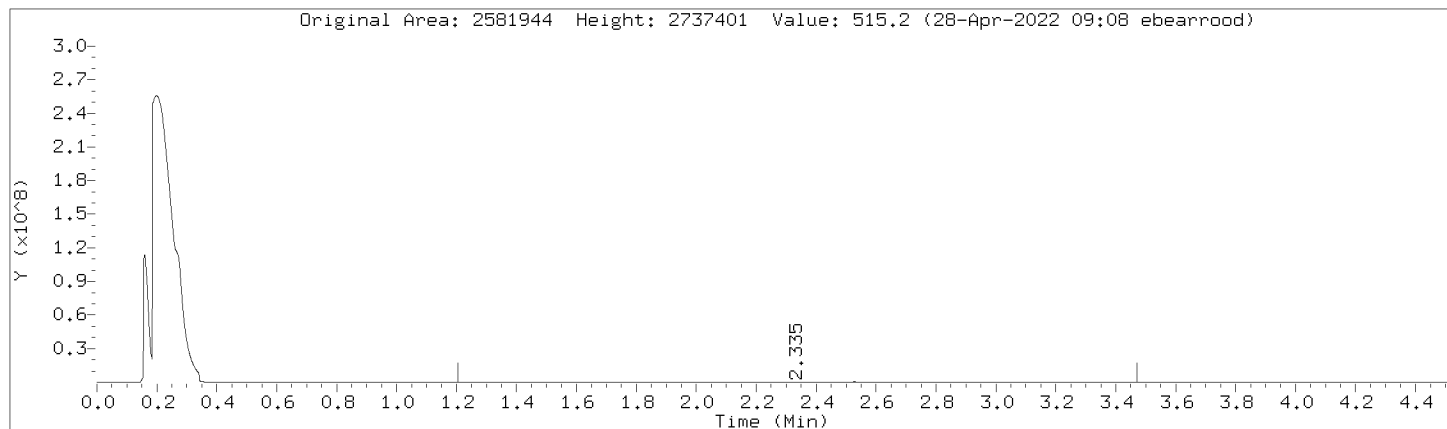
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



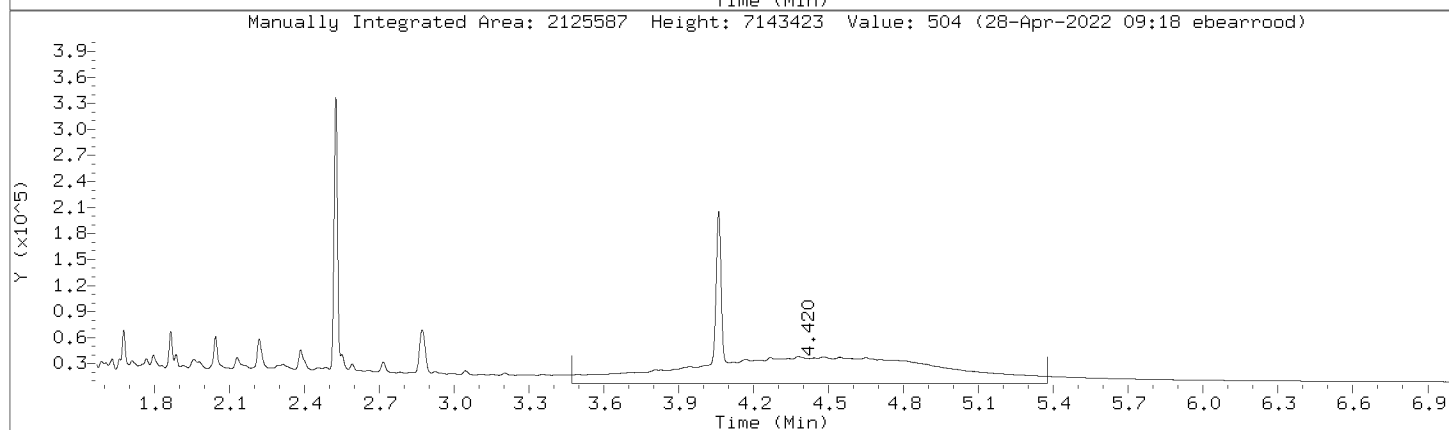
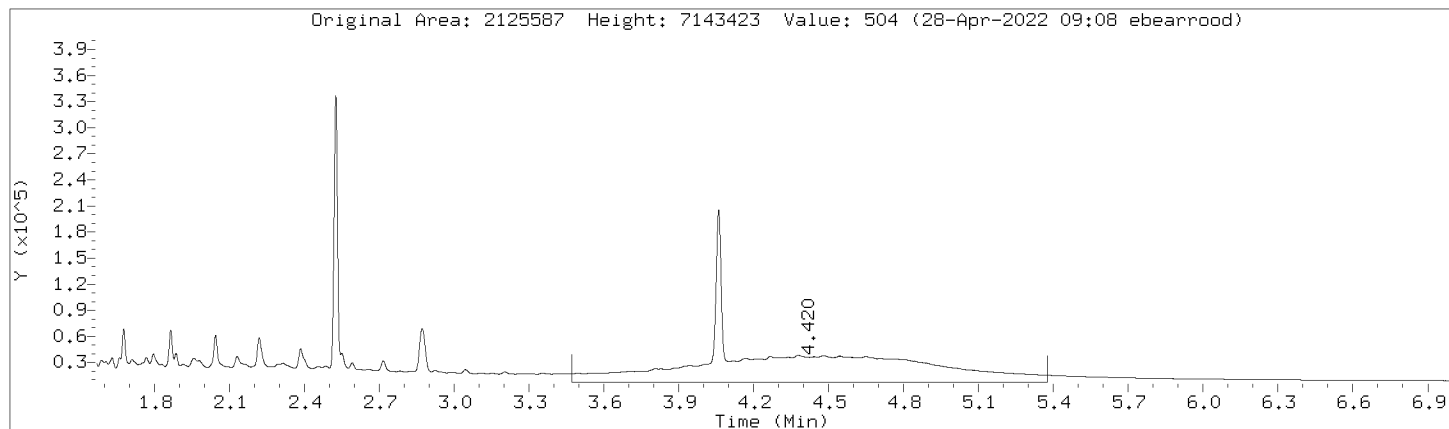
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Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

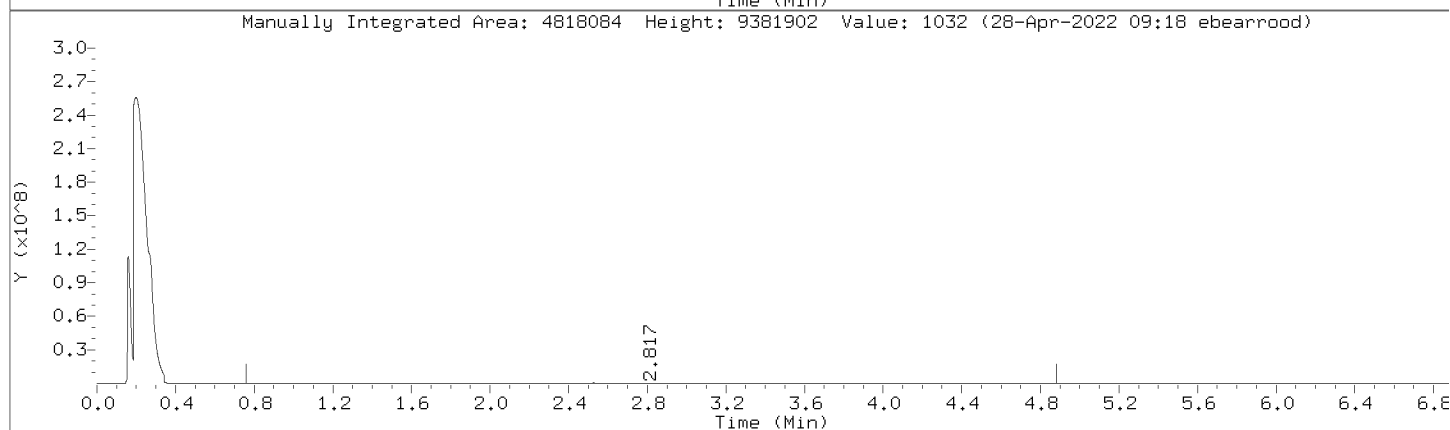
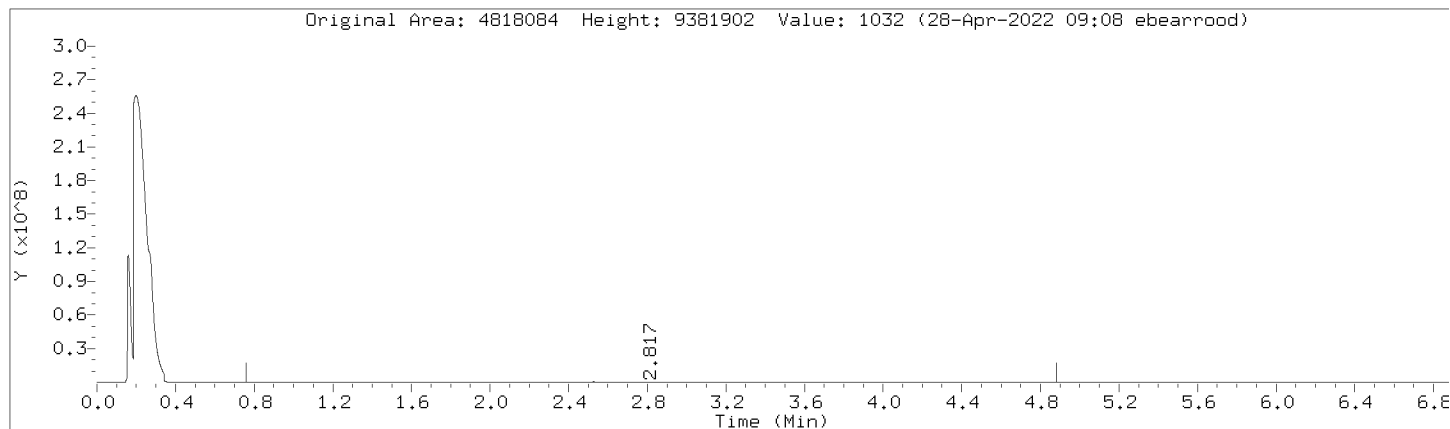
Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





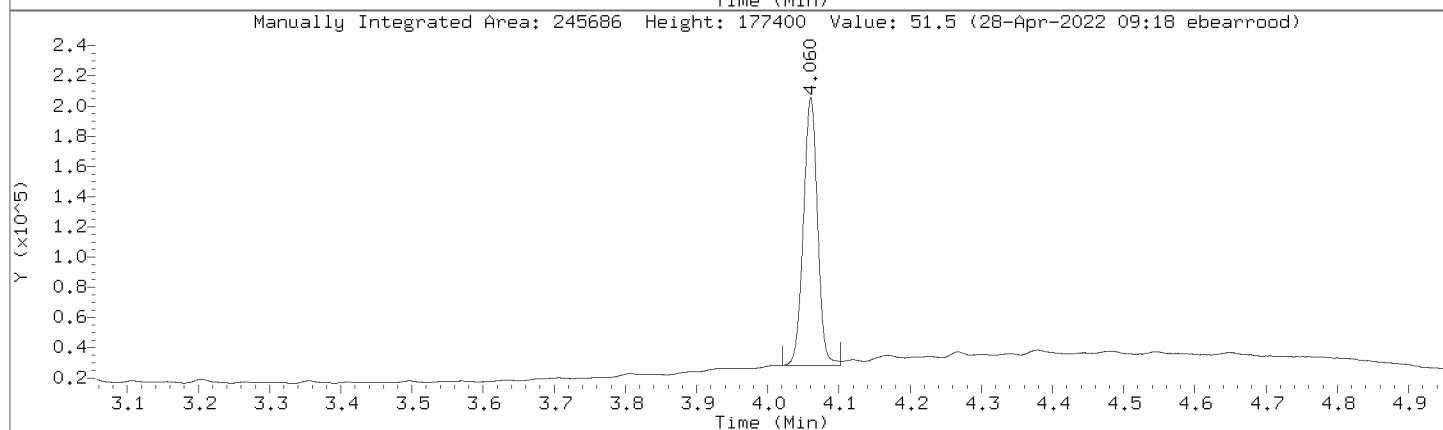
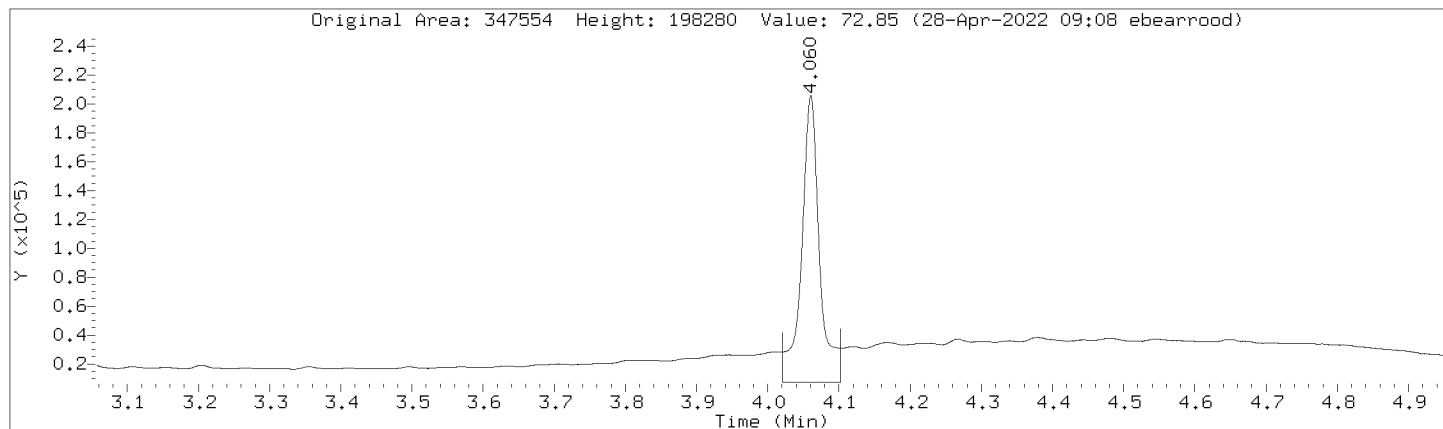
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Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



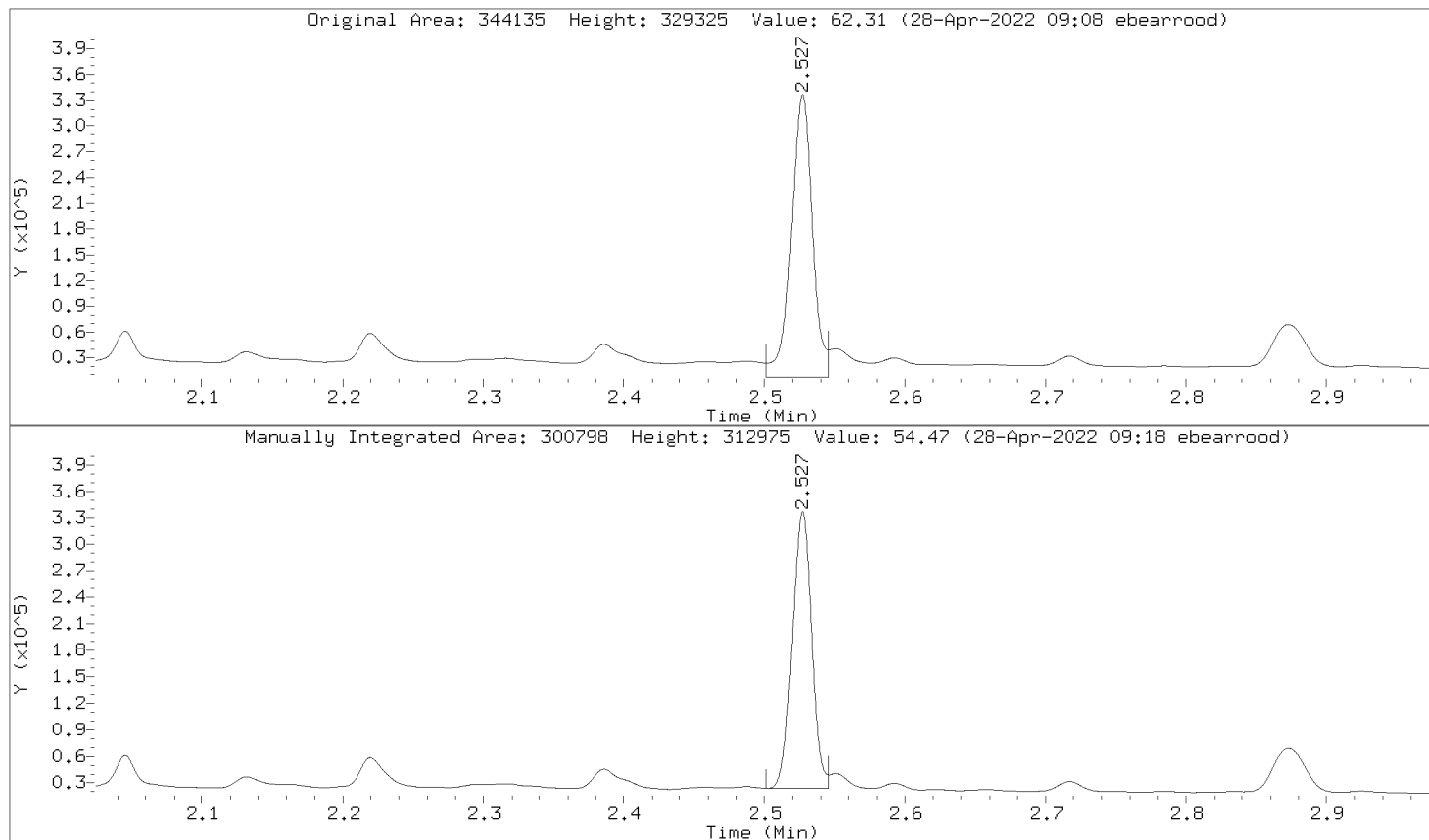
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
Injection Date: 27-APR-2022 15:38  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000022.D  
 Injection Date: 27-APR-2022 15:38  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,362365:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1758466	1758466
DRO by AK 102	3057152	3057152
TPH-DRO (C10-C28)	3498048	3498048
Motor Oil Range (C24-C36)	1839665	1839665
Diesel Fuel Range	2581944	2581944
Motor Oil Range	2125587	2125587
Diesel Fuel Range SG	2581944	2581944
Motor Oil Range SG	2125587	2125587
C10-C36	4818084	4818084
n-Triacontane (S)	347554	245686
o-Terphenyl (S)	344135	300798

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000030.D  
 Lab Smp Id: DMO-CCV,362365:2 Client Smp ID: DMO-CCV,362365:2  
 Inj Date : 27-APR-2022 17:08  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,362365:2  
 Misc Info : 39180  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 28-Apr-2022 09:09 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 2 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.755	- 3.420		3032614 500.000	512	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.524	2.524 0.000		298852 50.0000	54.1	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.057	4.057 0.000		246731 50.0000	51.7	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.421	- 4.880		1780951 500.000	521	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.755	- 4.000		3457569 500.000	510	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.280	- 4.880		1860439 500.000	525	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.755	- 4.880		4813565 1000.00	1030	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.200	- 3.470		2561893 500.000	511	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.200	- 3.470		2561893 500.000	511	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.471	- 5.370		2167073 500.000	514	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.471	- 5.370		2167073 500.000	514	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 17:08

Client ID: DMO-CCV,362365;2

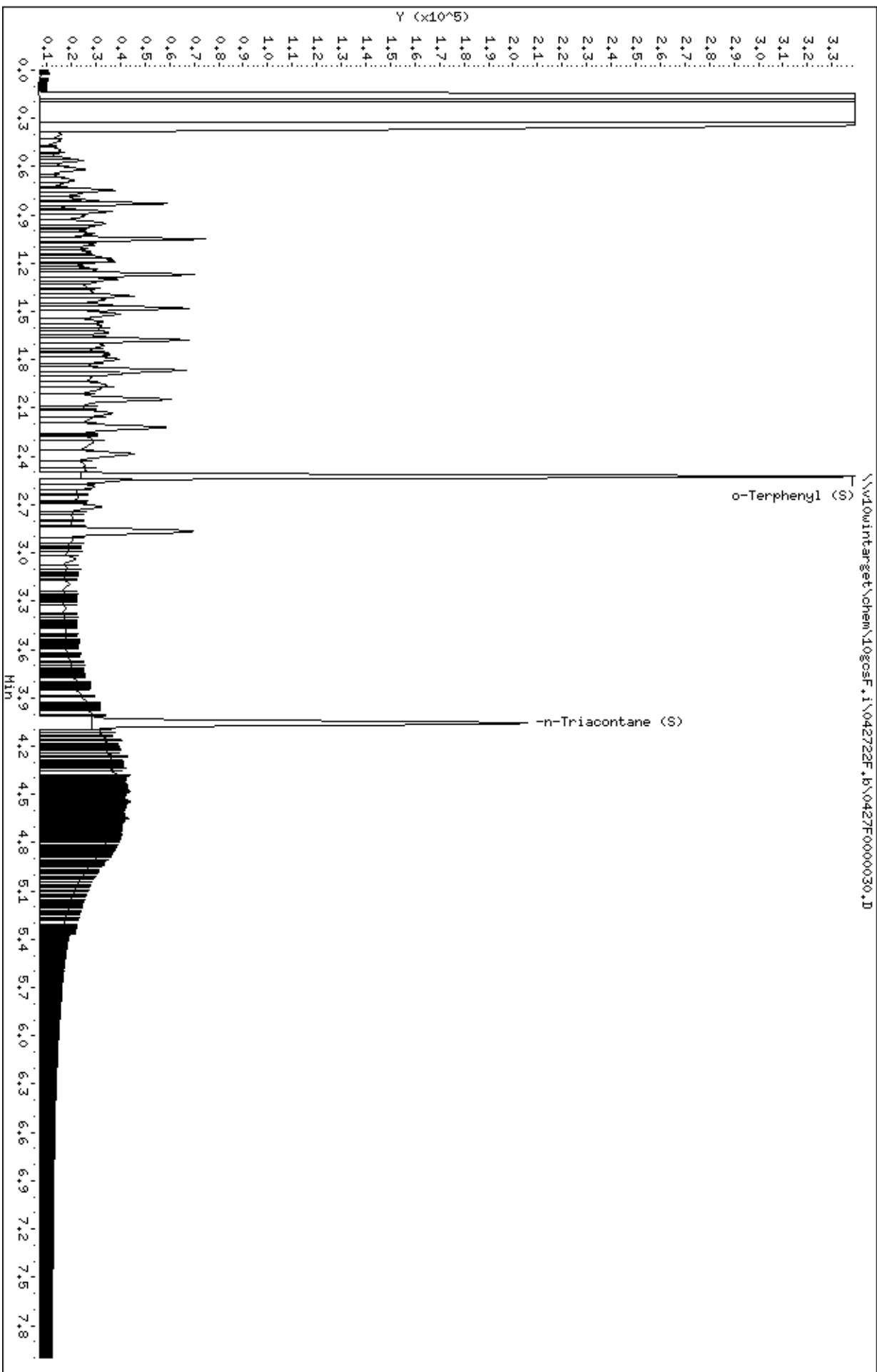
Sample Info: DMO-CCV,362365;2

Instrument: 10gosc.f.1

Operator: EB3

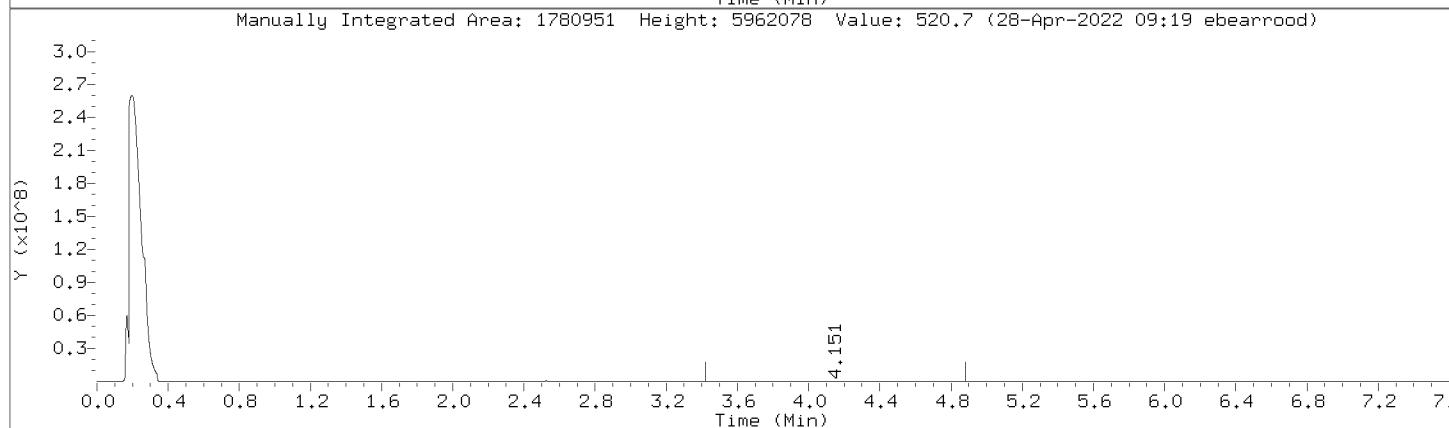
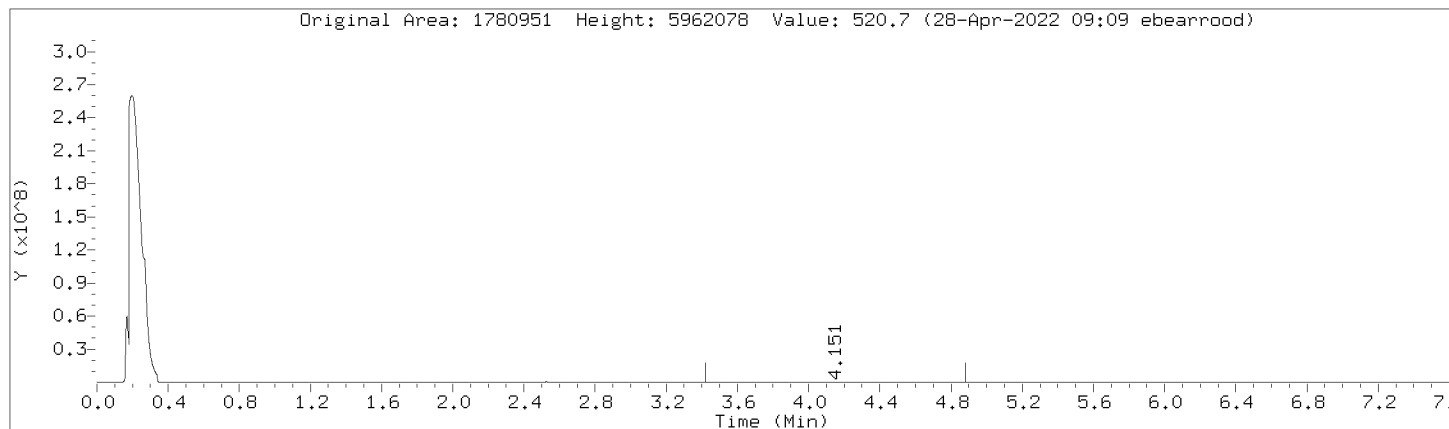
Column diameter: 0.32

Column phase: DB-5-MS21250010



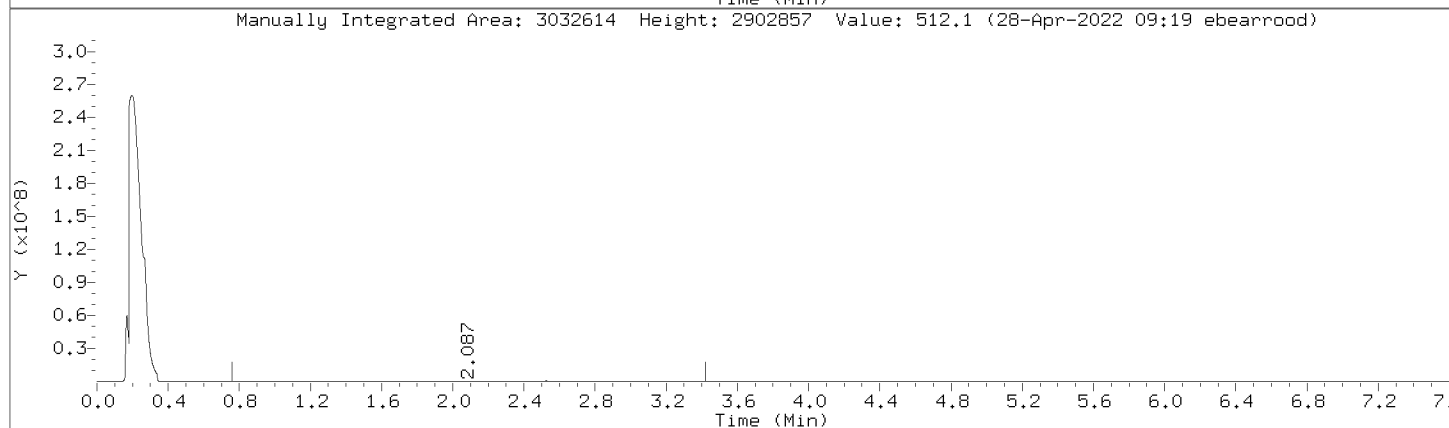
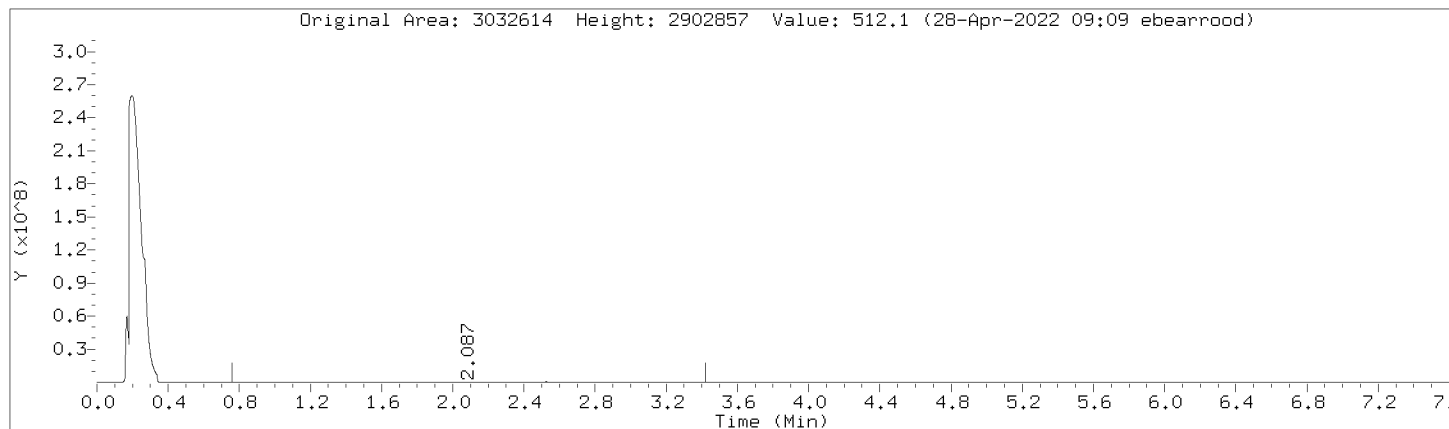
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Injection Date: 27-APR-2022 17:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000030.D  
Injection Date: 27-APR-2022 17:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

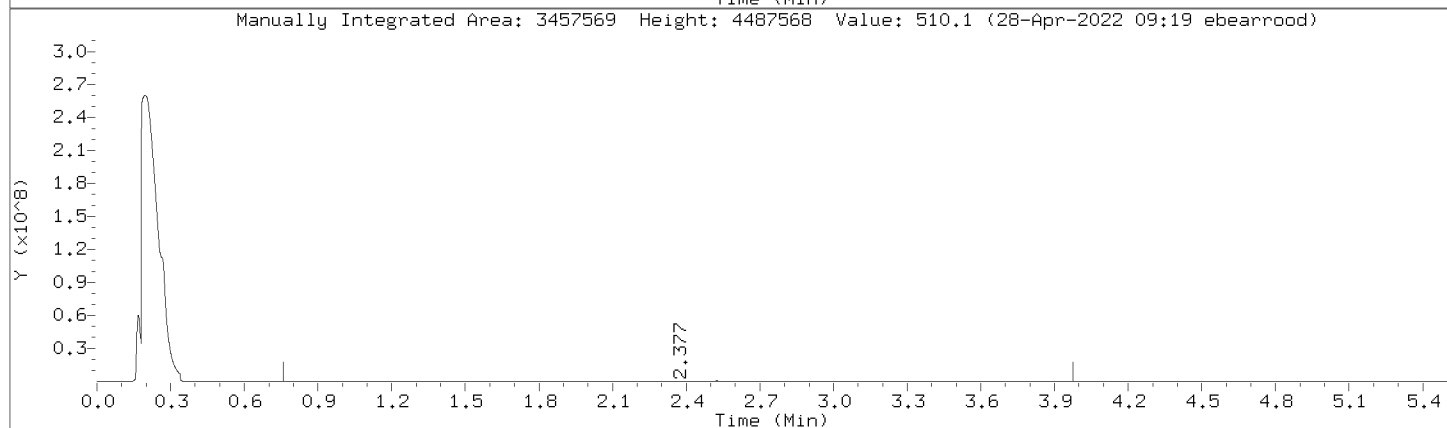
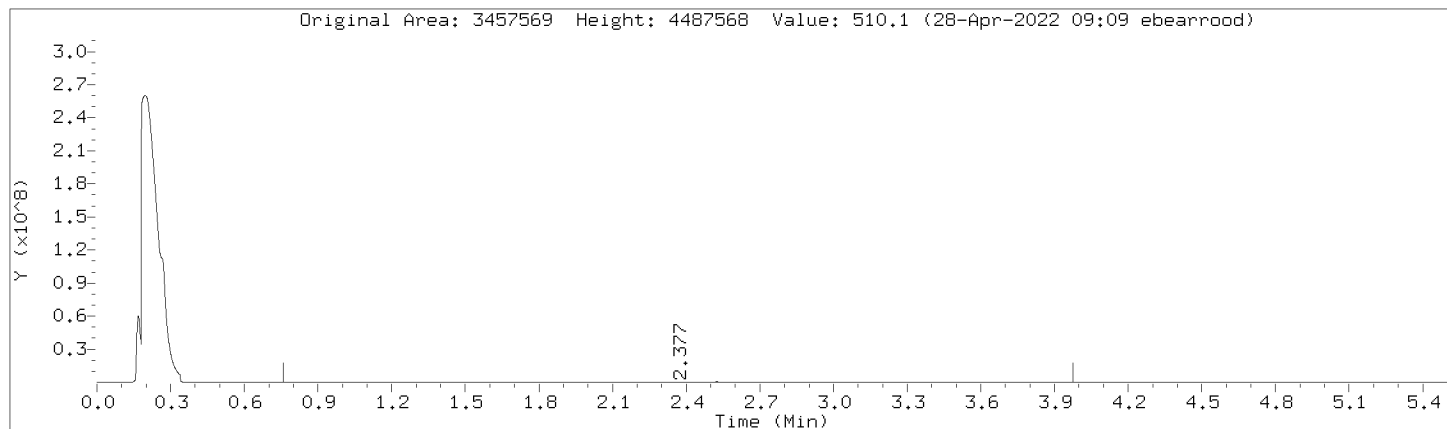
Compound: DRO by AK 102      Review Code: RNG  
CAS Number:





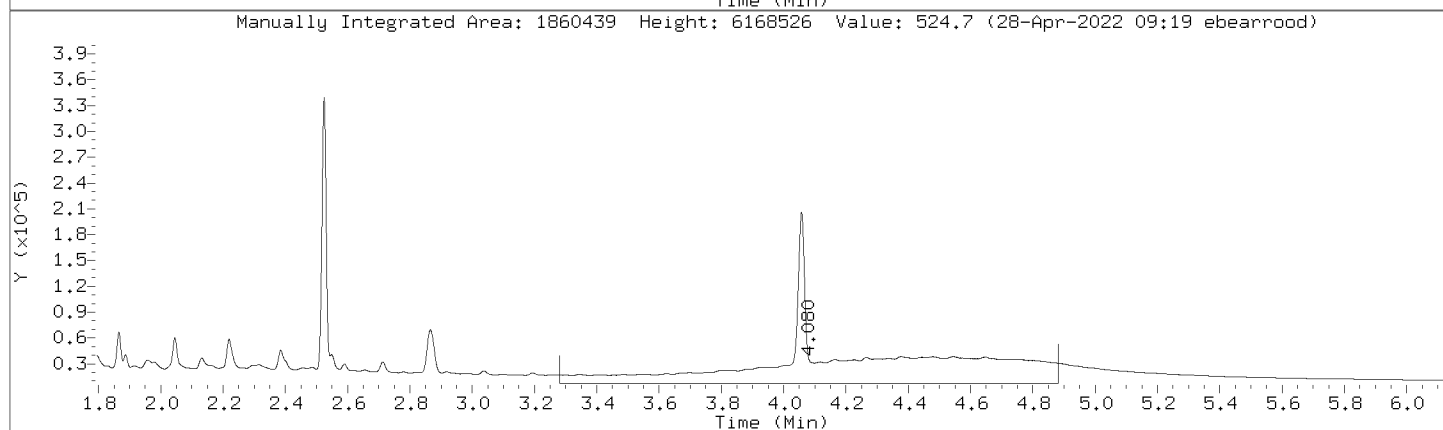
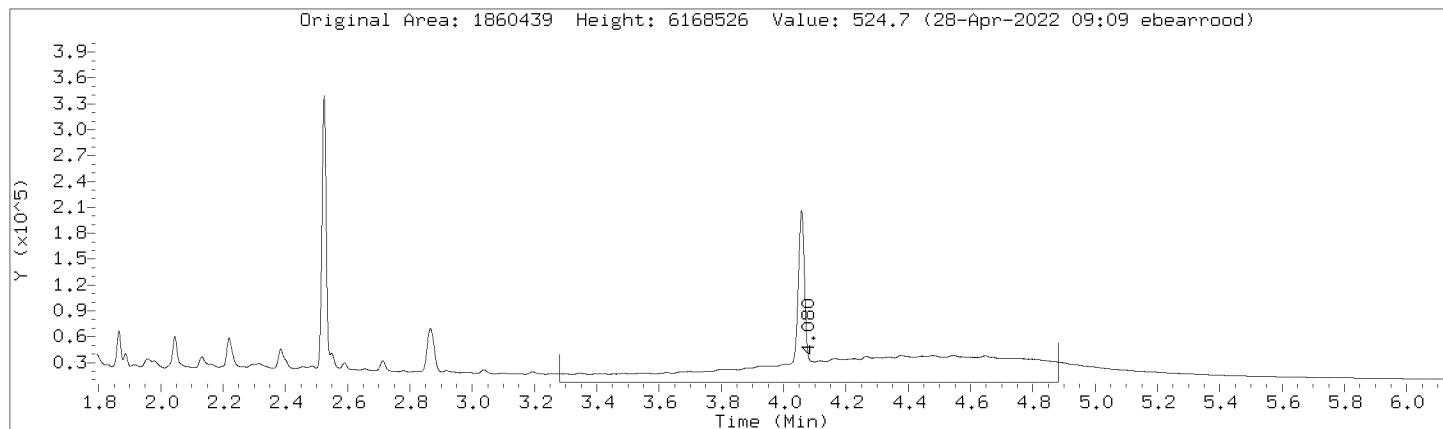
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Injection Date: 27-APR-2022 17:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



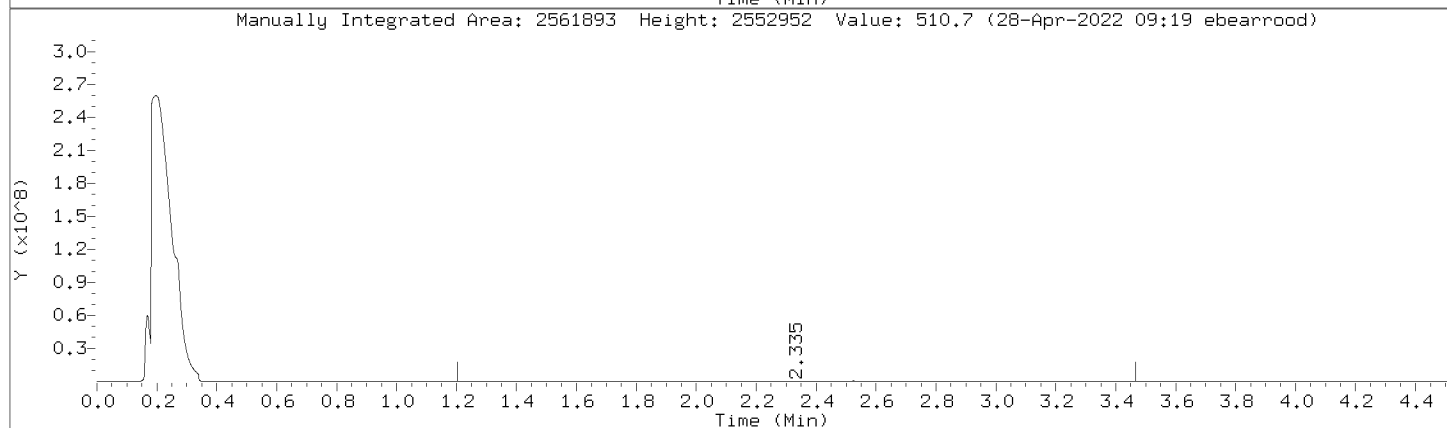
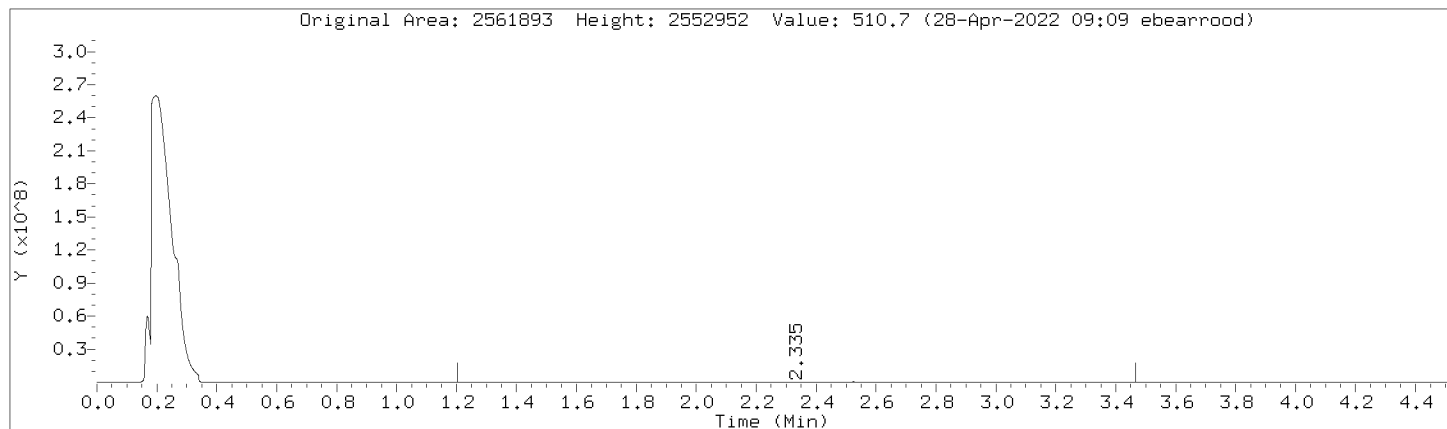
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Injection Date: 27-APR-2022 17:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



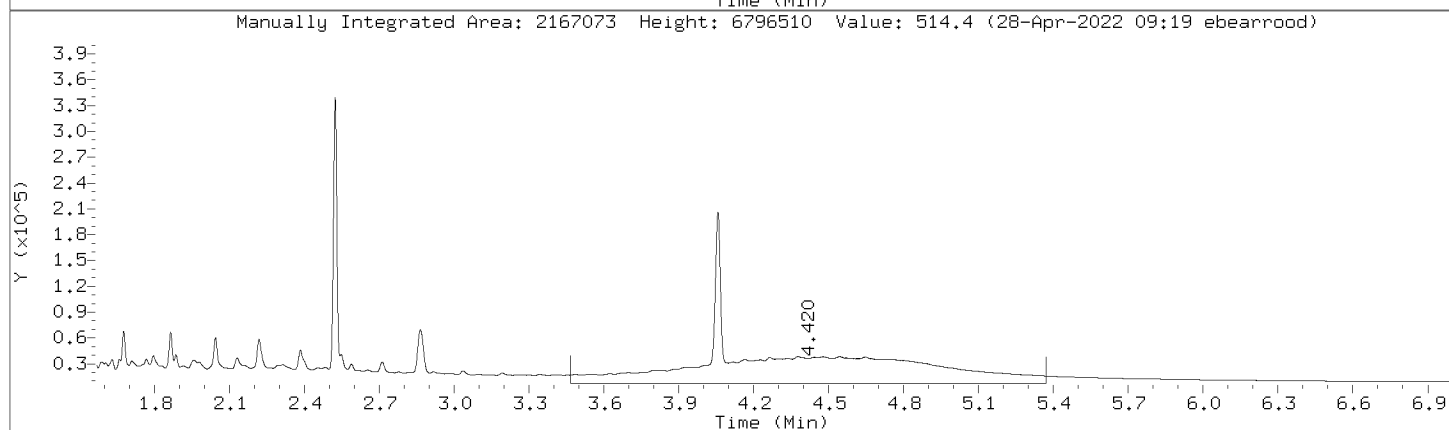
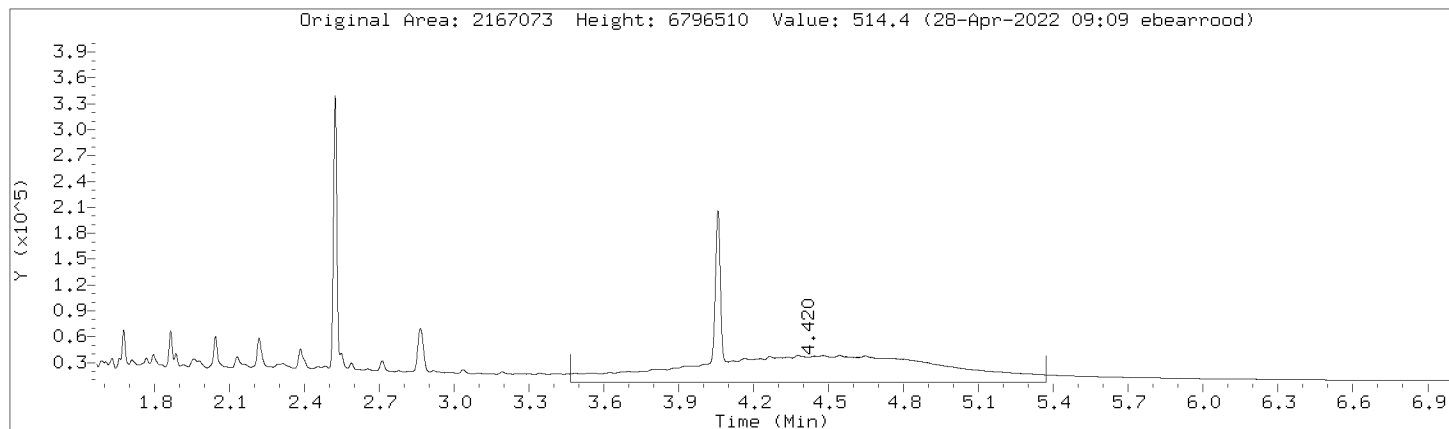
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000030.D  
Injection Date: 27-APR-2022 17:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



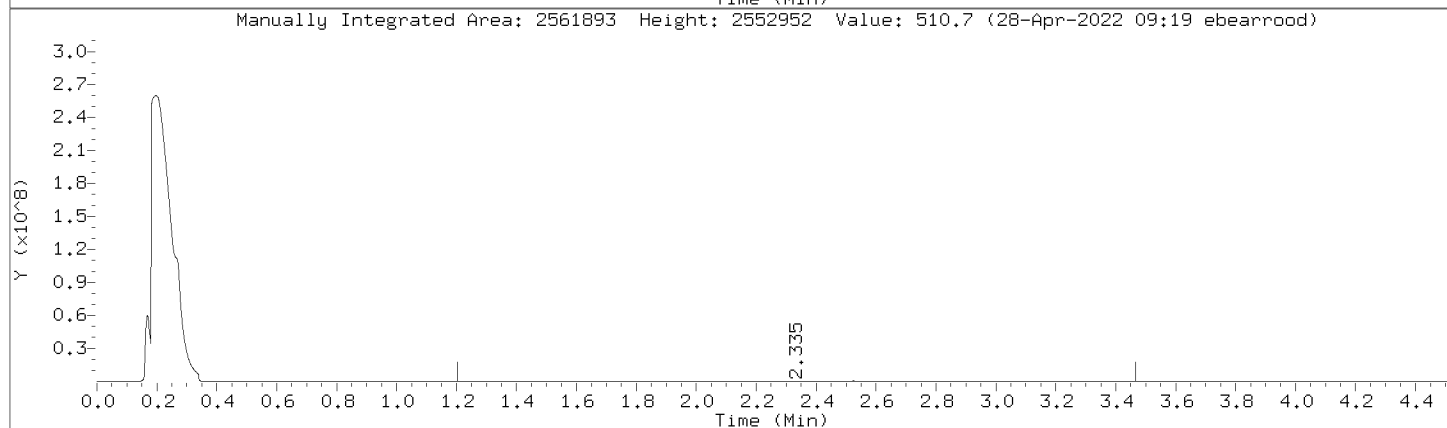
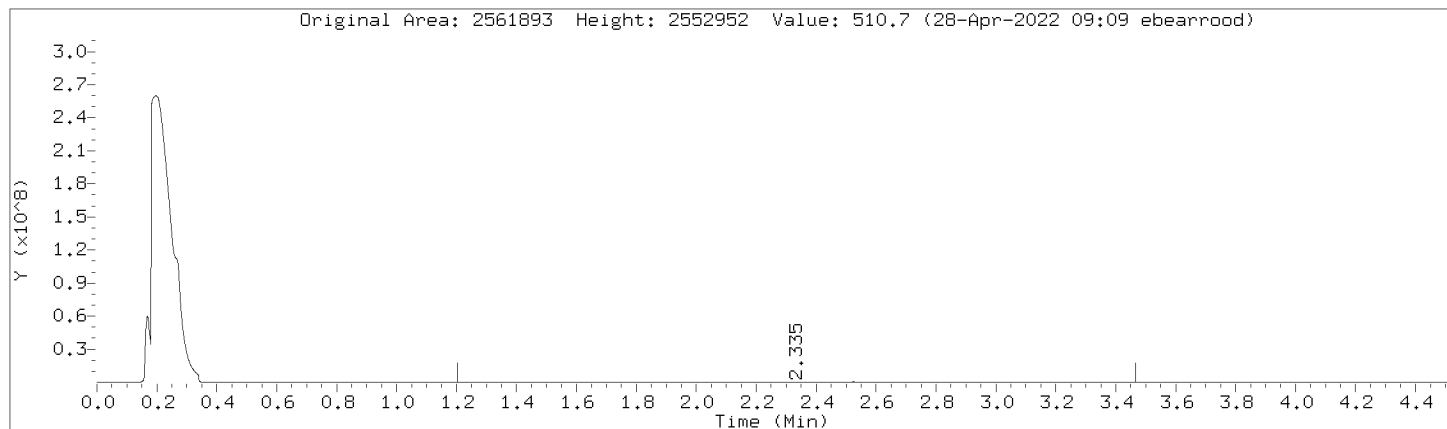
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Injection Date: 27-APR-2022 17:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



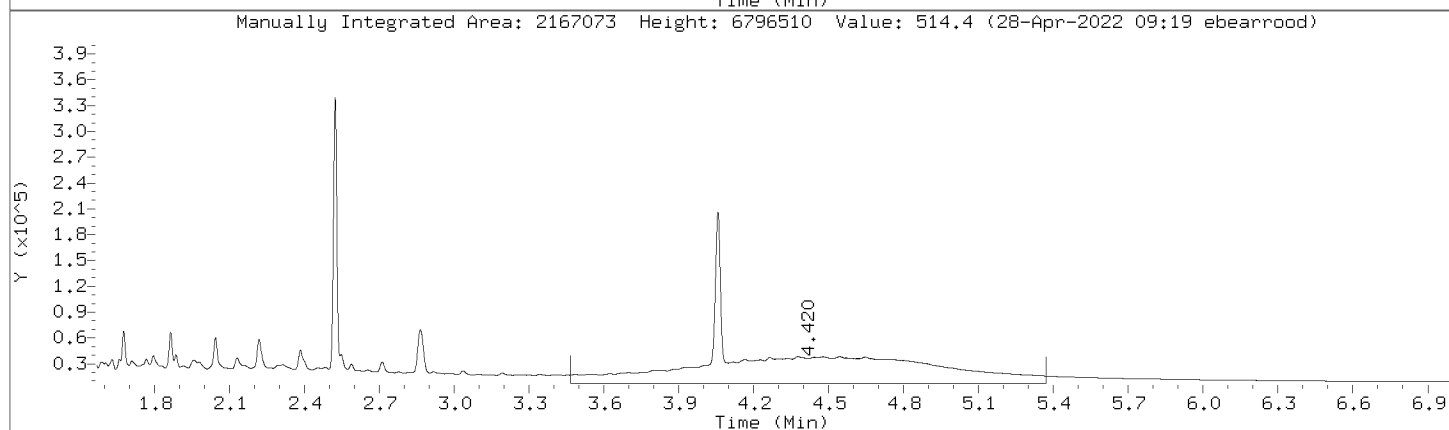
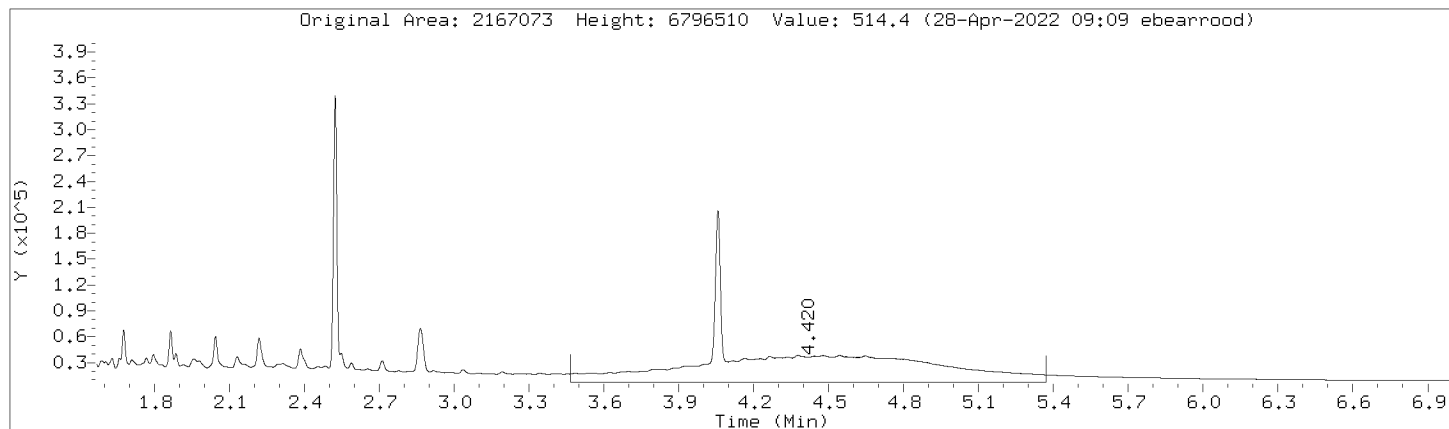
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000030.D  
Injection Date: 27-APR-2022 17:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



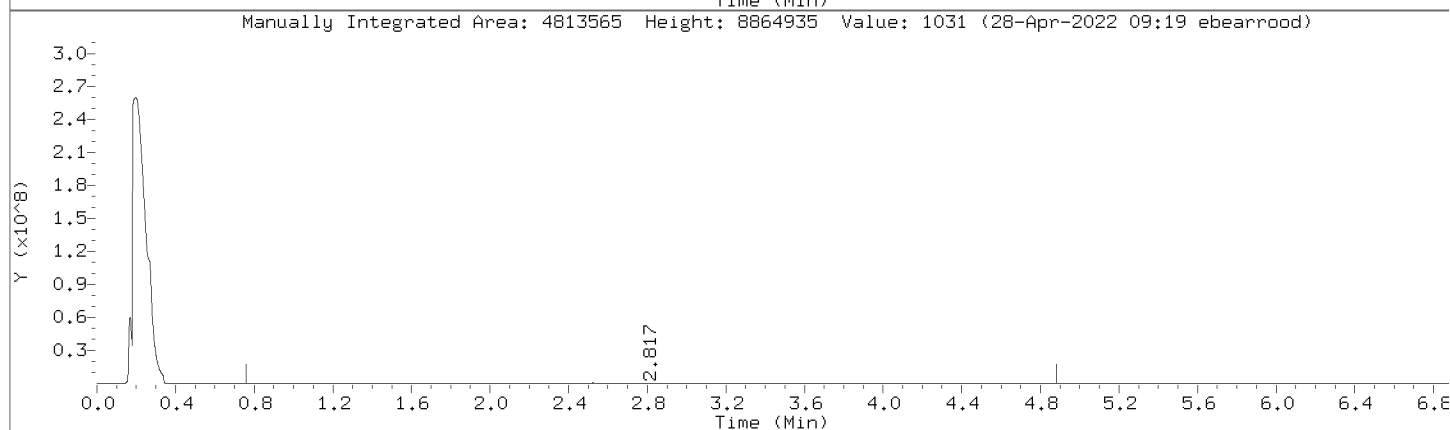
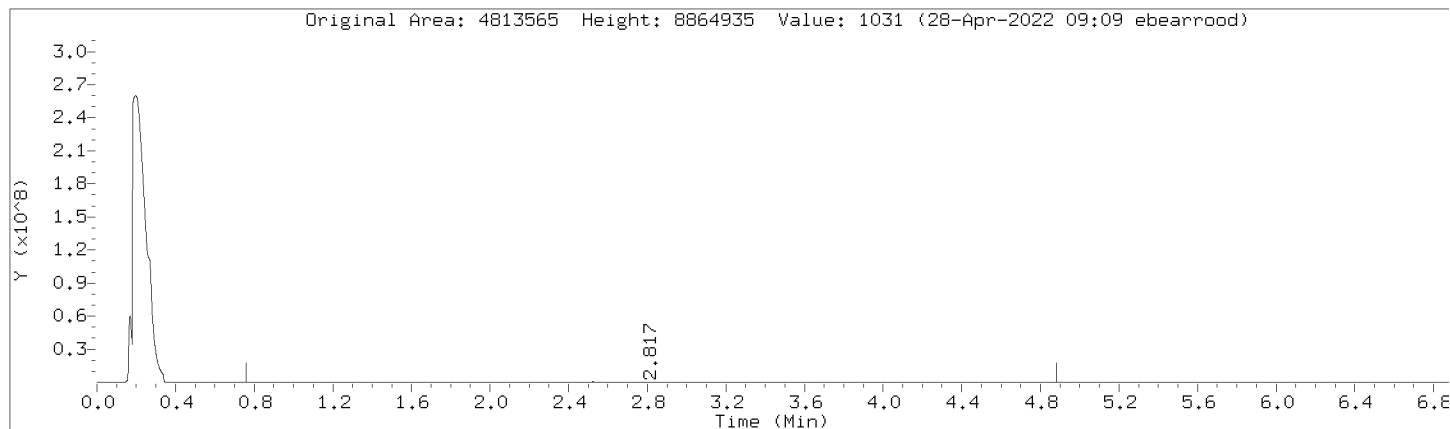
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000030.D  
Injection Date: 27-APR-2022 17:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



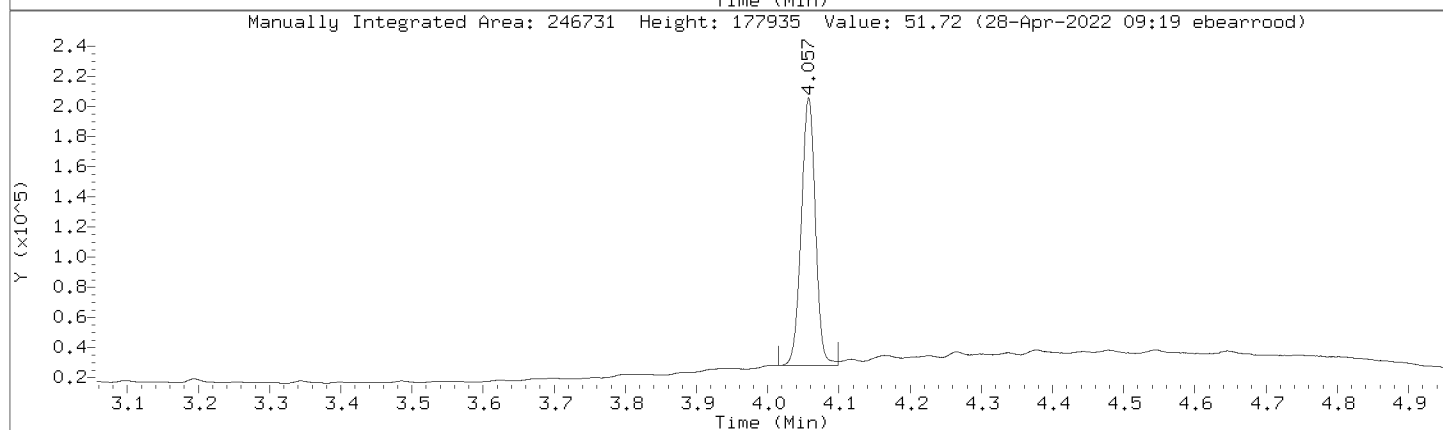
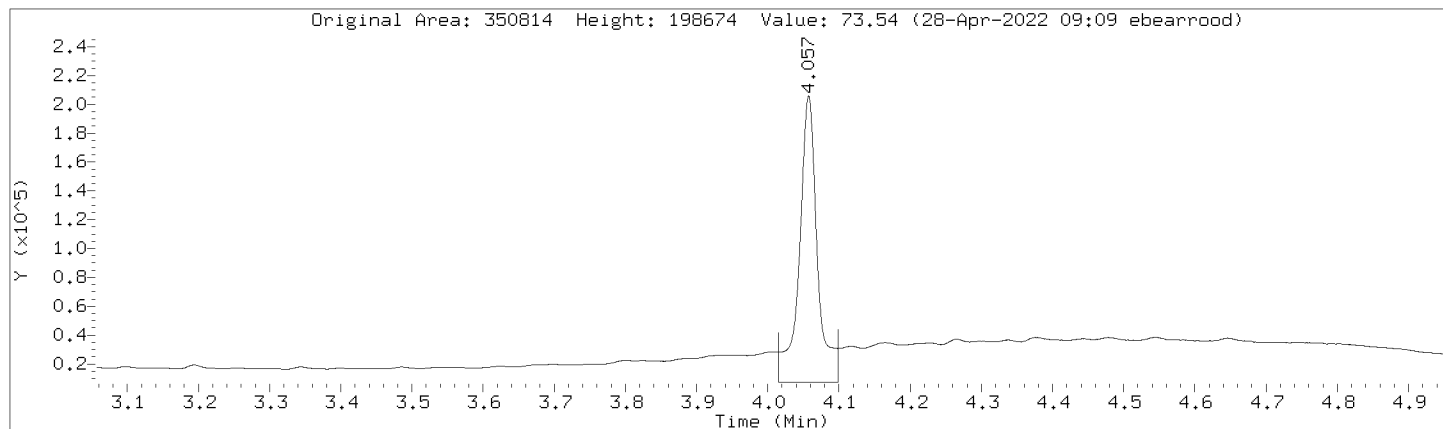
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000030.D  
Injection Date: 27-APR-2022 17:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000030.D  
Injection Date: 27-APR-2022 17:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,362365:2

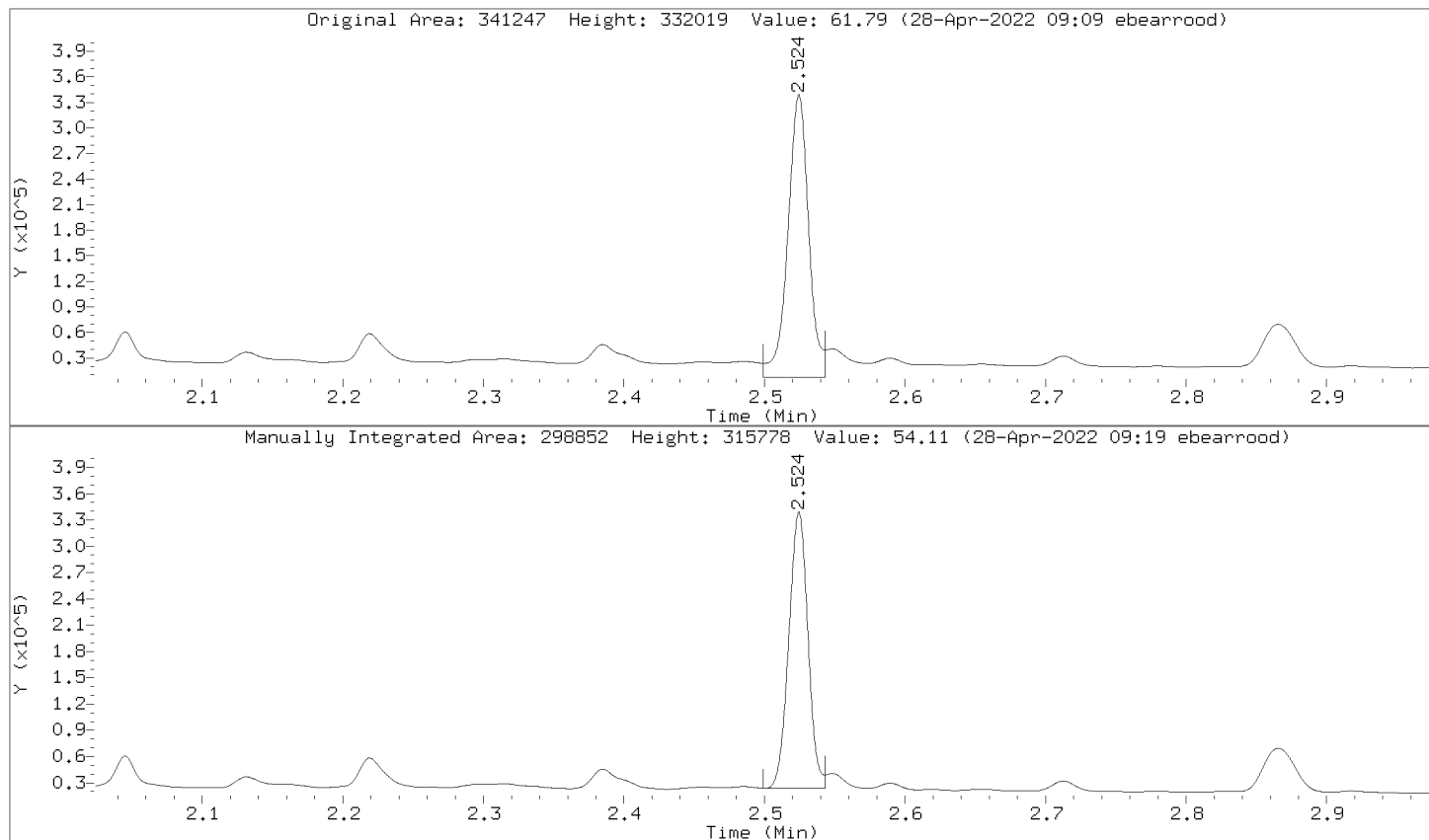
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





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 Injection Date: 27-APR-2022 17:08  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,362365:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1780951	1780951
DRO by AK 102	3032614	3032614
TPH-DRO (C10-C28)	3457569	3457569
Motor Oil Range (C24-C36)	1860439	1860439
Diesel Fuel Range	2561893	2561893
Motor Oil Range	2167073	2167073
Diesel Fuel Range SG	2561893	2561893
Motor Oil Range SG	2167073	2167073
C10-C36	4813565	4813565
n-Triacontane (S)	350814	246731
o-Terphenyl (S)	341247	298852

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000009.D  
 Lab Smp Id: DMO-CCV,363721:2 Client Smp ID: DMO-CCV,363721:2  
 Inj Date : 04-MAY-2022 12:13  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,363721:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050422R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 05-May-2022 11:33 tthao Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 3 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.880	- 3.590		3279555 500.000	509	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.717	2.715 0.002		324087 50.0000	48.5	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.252	4.255 -0.003		251255 50.0000	48.0	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.591	- 5.150		1907718 500.000	515	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.880	- 4.170		3753620 500.000	511	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.440	- 5.150		2006027 500.000	518	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.880	- 5.150		5187273 1000.00	1020	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.640		2772494 500.000	511	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.640		2772494 500.000	511	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.641	- 6.100		2421257 500.000	523	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.641	- 6.100		2421257 500.000	523	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 04-MAY-2022 12:13

Client ID: DMO-CCV,363721:2

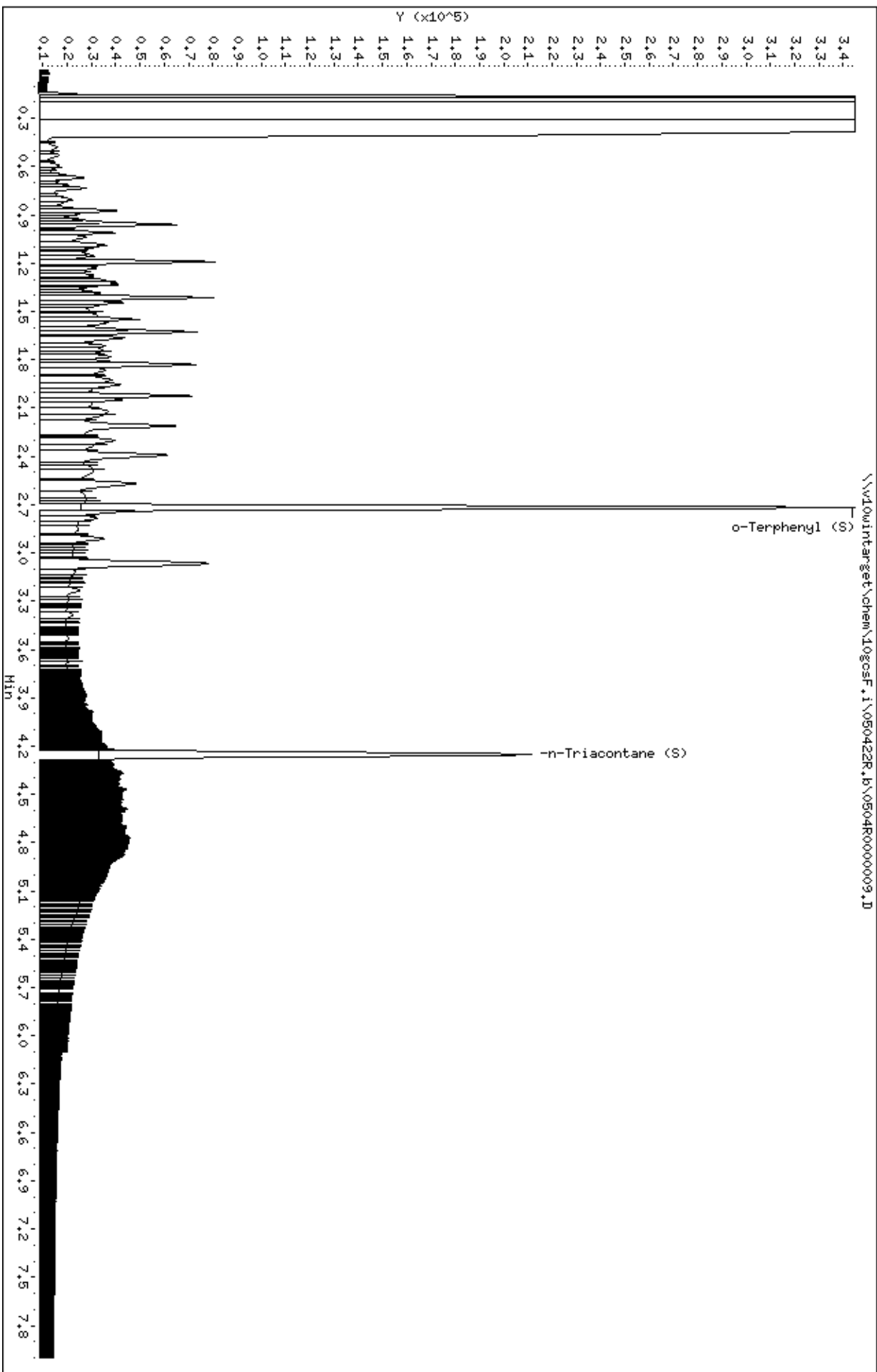
Sample Info: DMO-CCV,363721:2

Instrument: 10gocsf.1

Operator: TT2

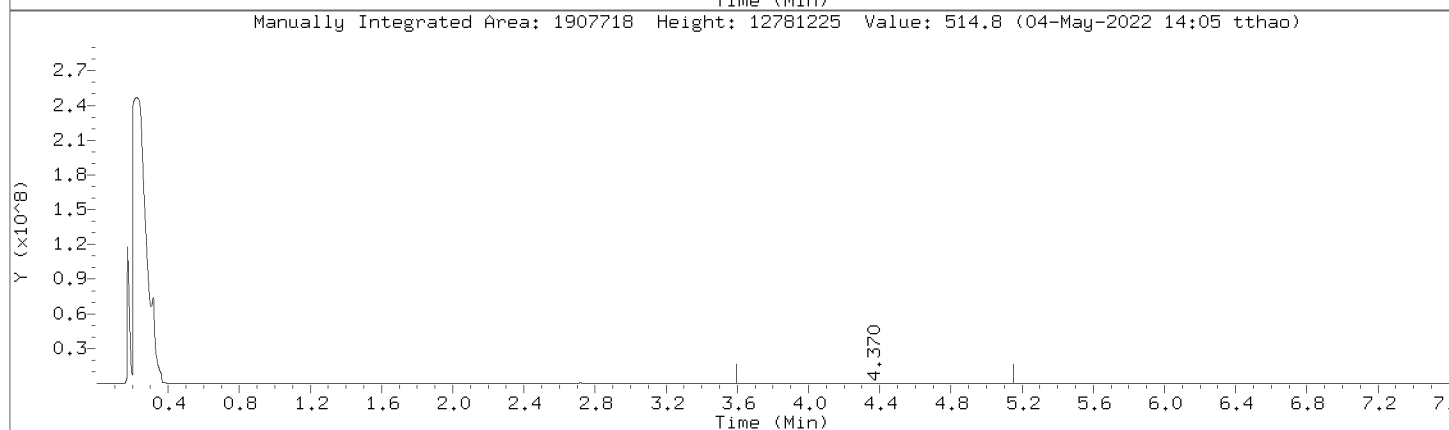
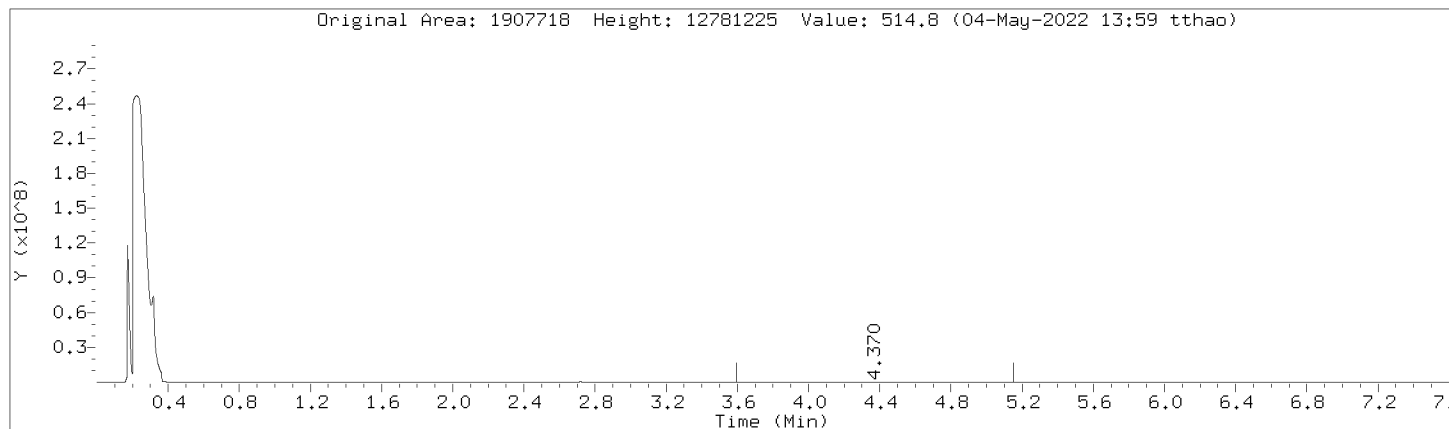
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Column phase: DB-5-MS21430033



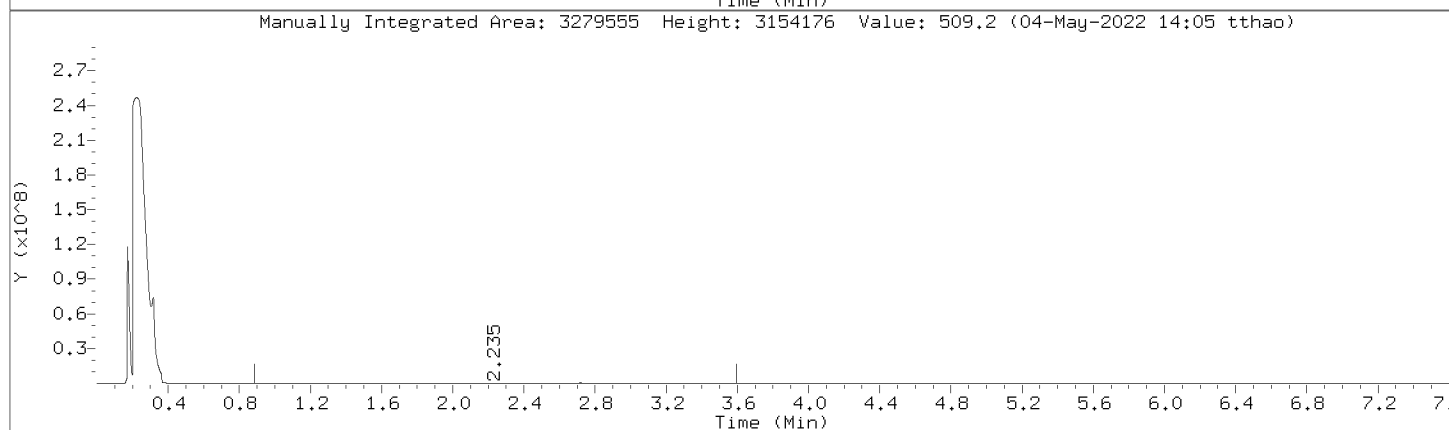
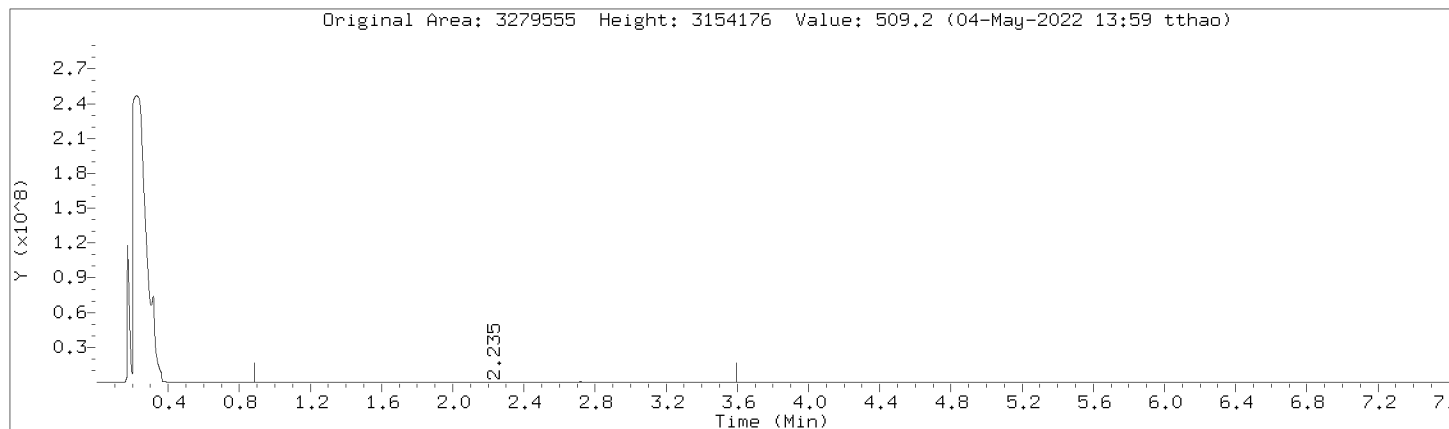
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Injection Date: 04-MAY-2022 12:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



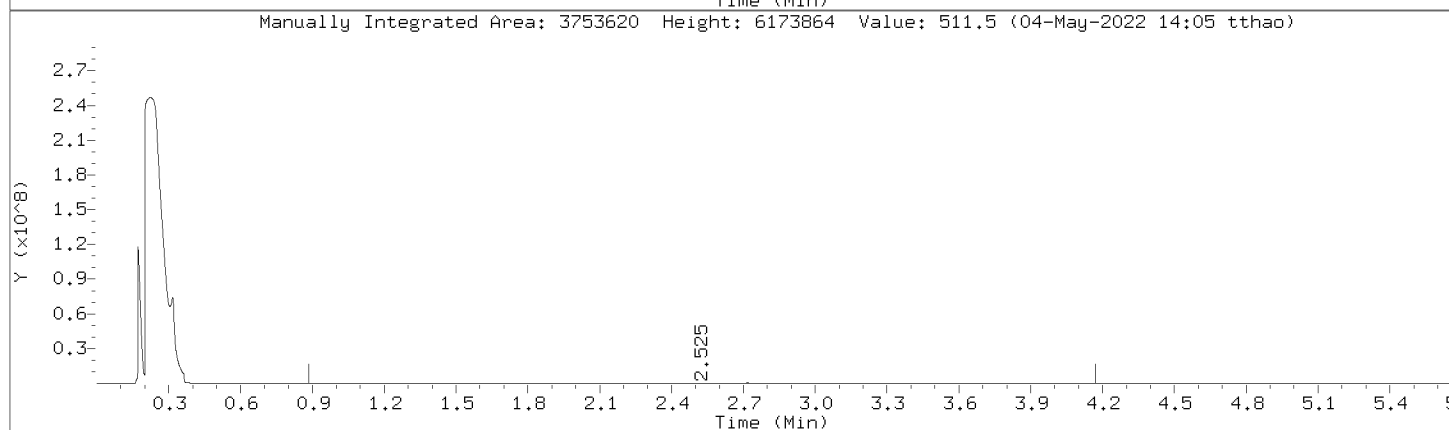
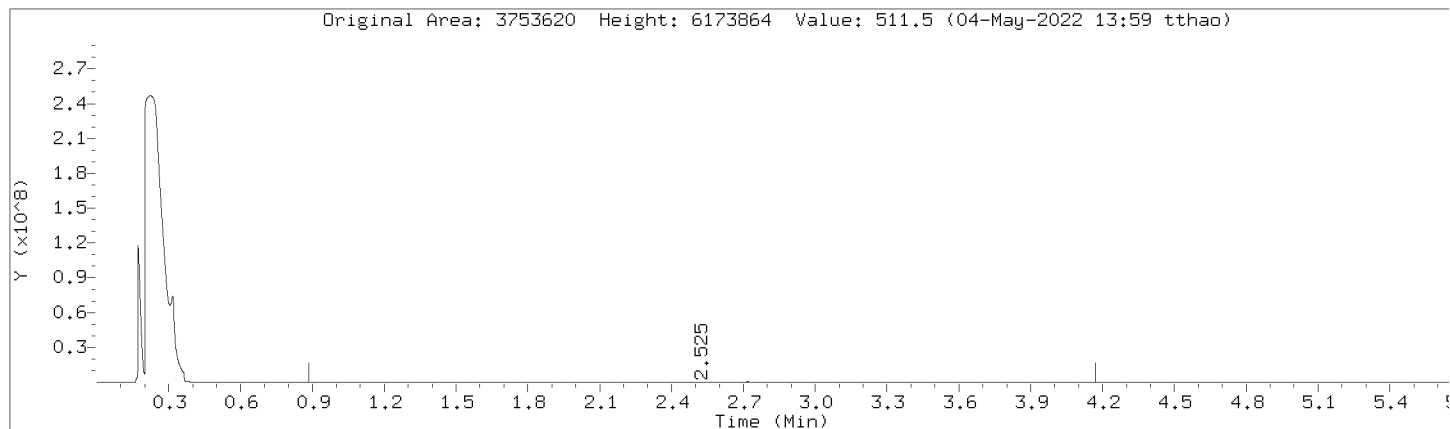
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Injection Date: 04-MAY-2022 12:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



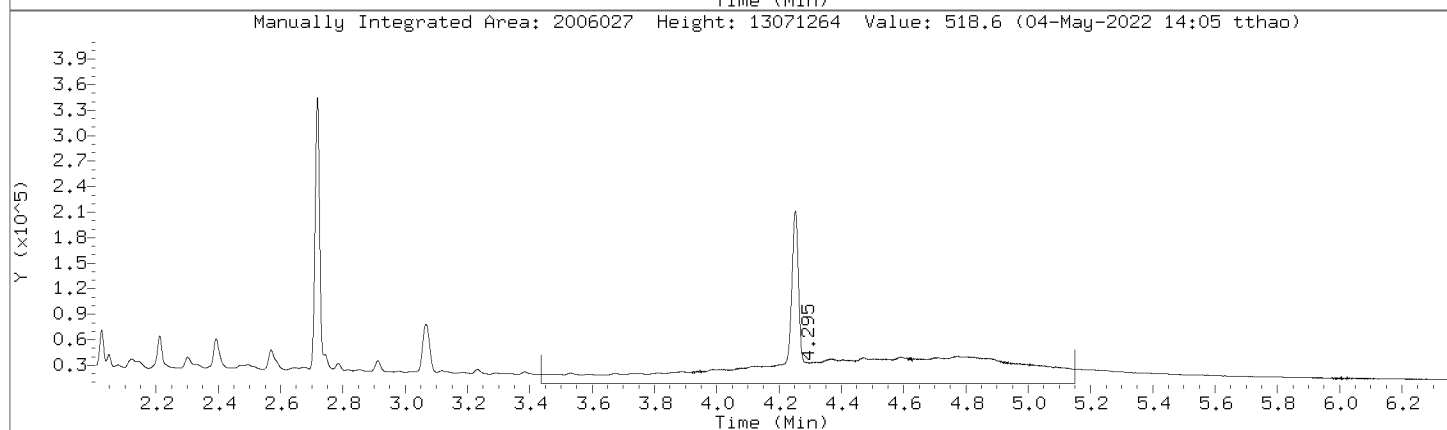
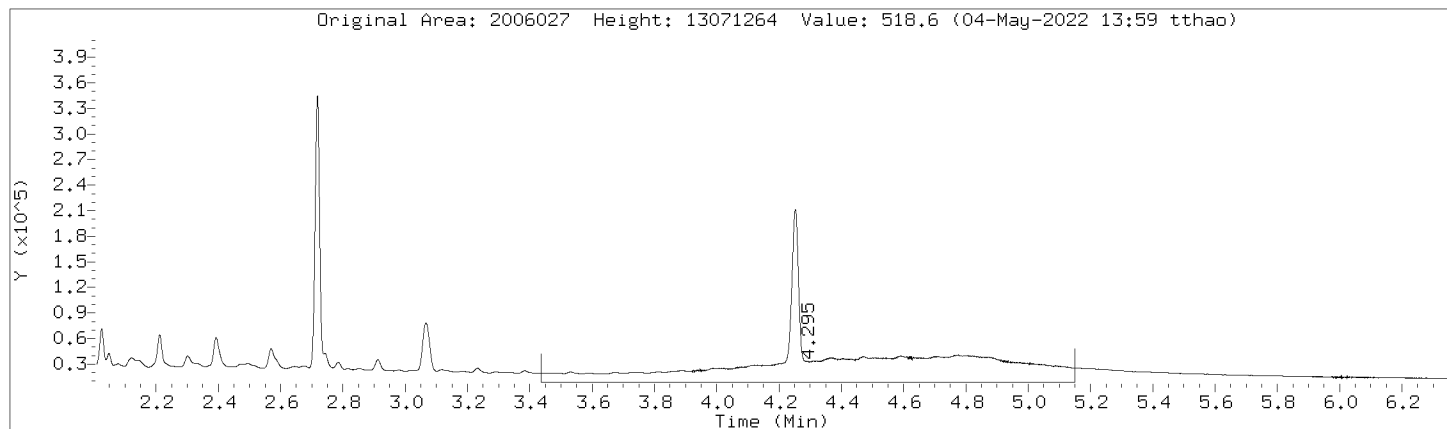
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Injection Date: 04-MAY-2022 12:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000009.D  
Injection Date: 04-MAY-2022 12:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

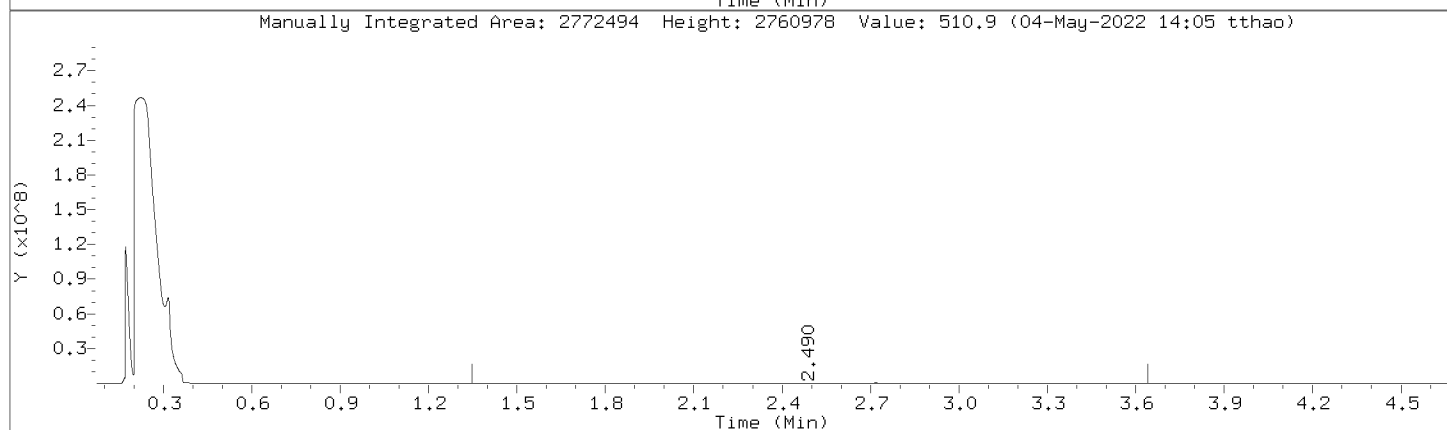
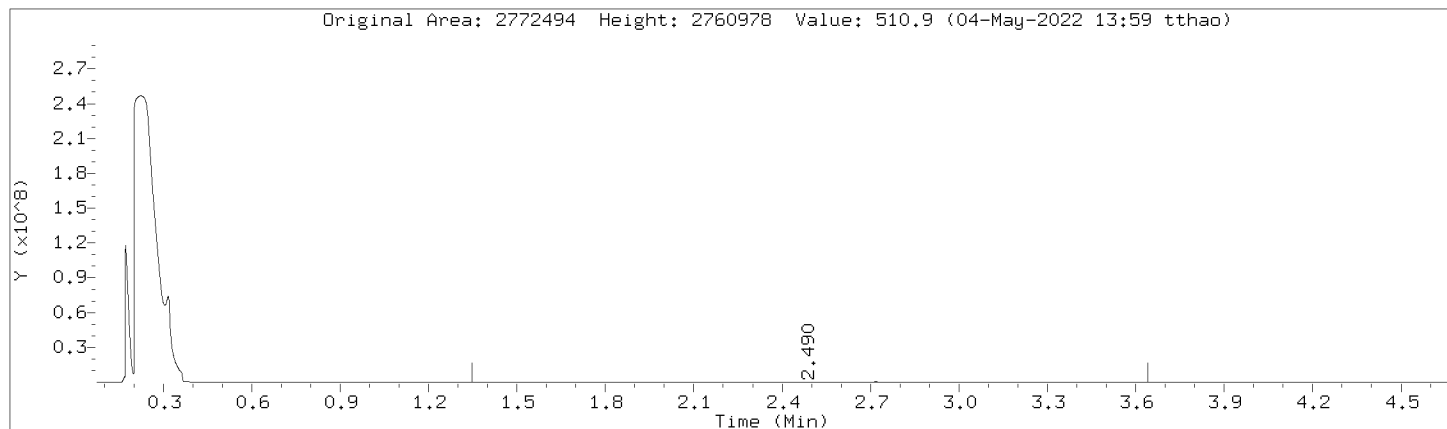
Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:





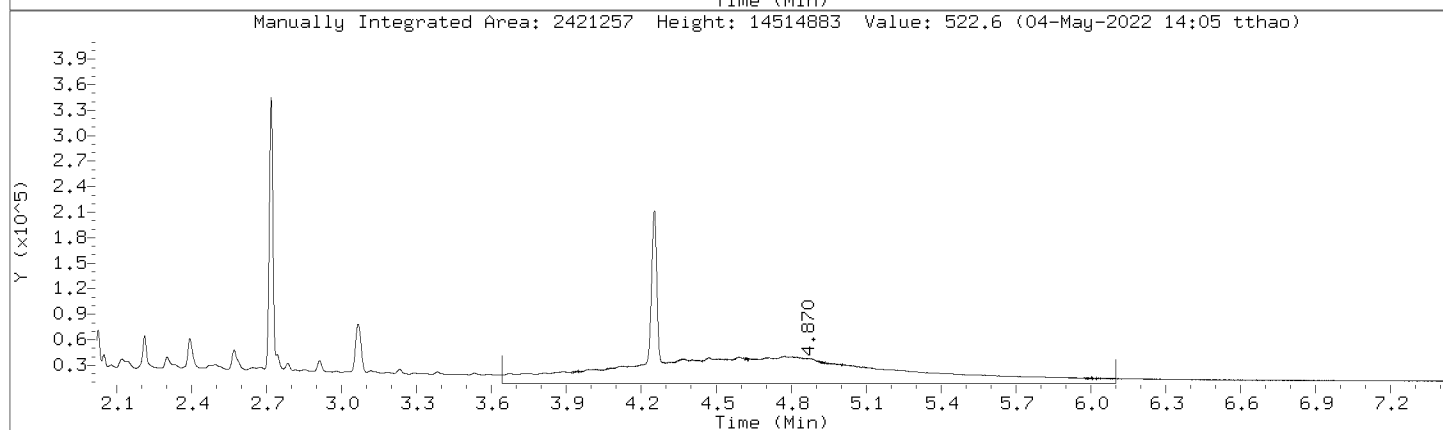
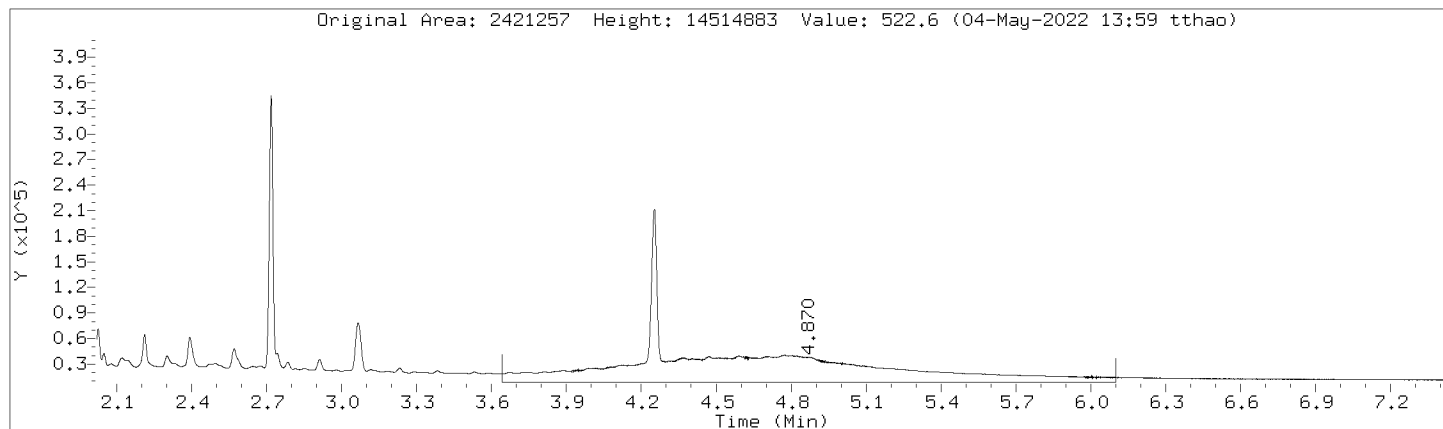
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Injection Date: 04-MAY-2022 12:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



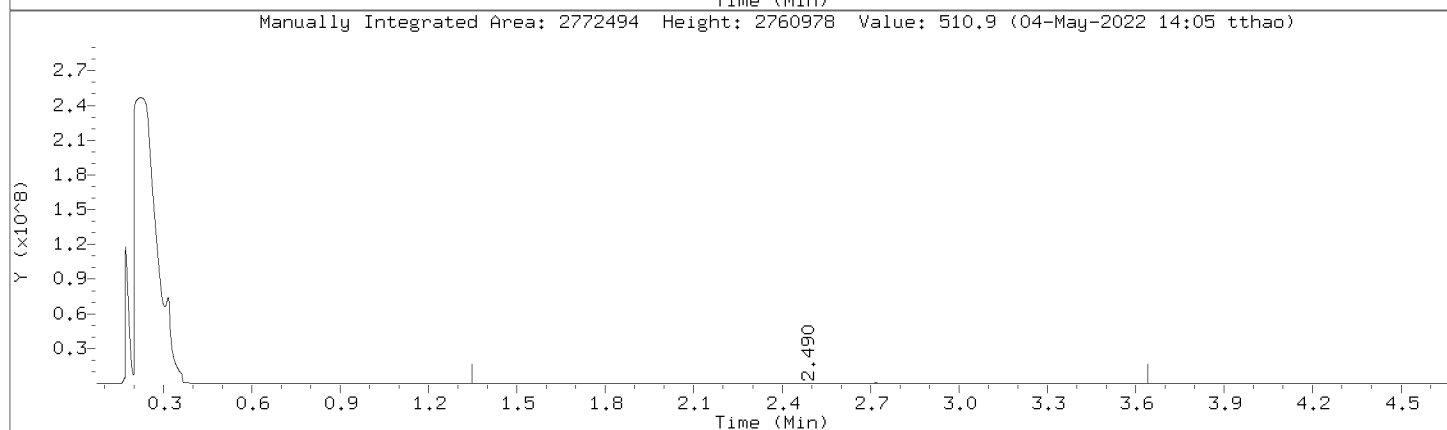
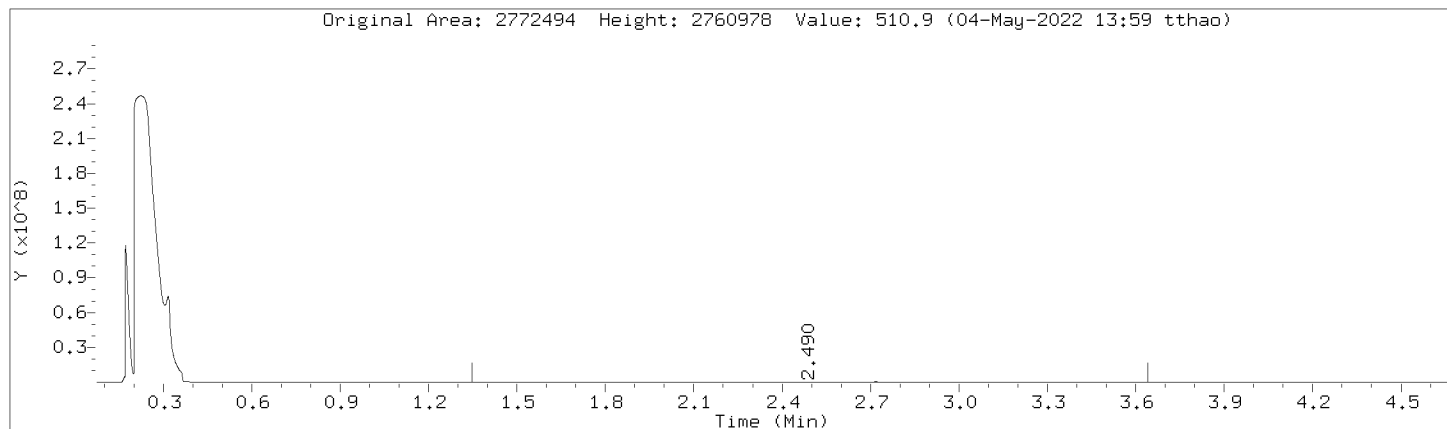
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Injection Date: 04-MAY-2022 12:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



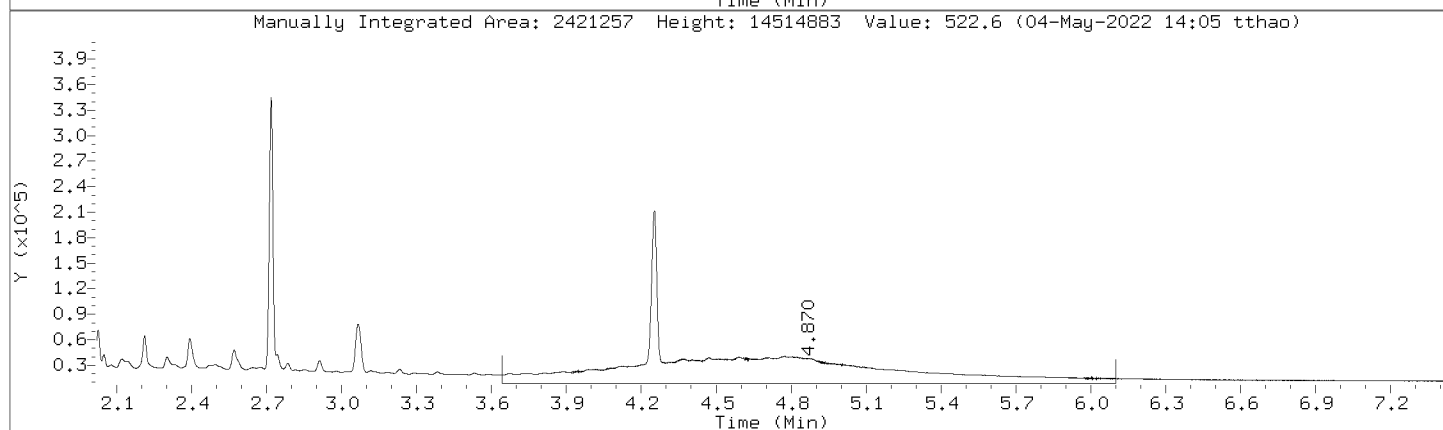
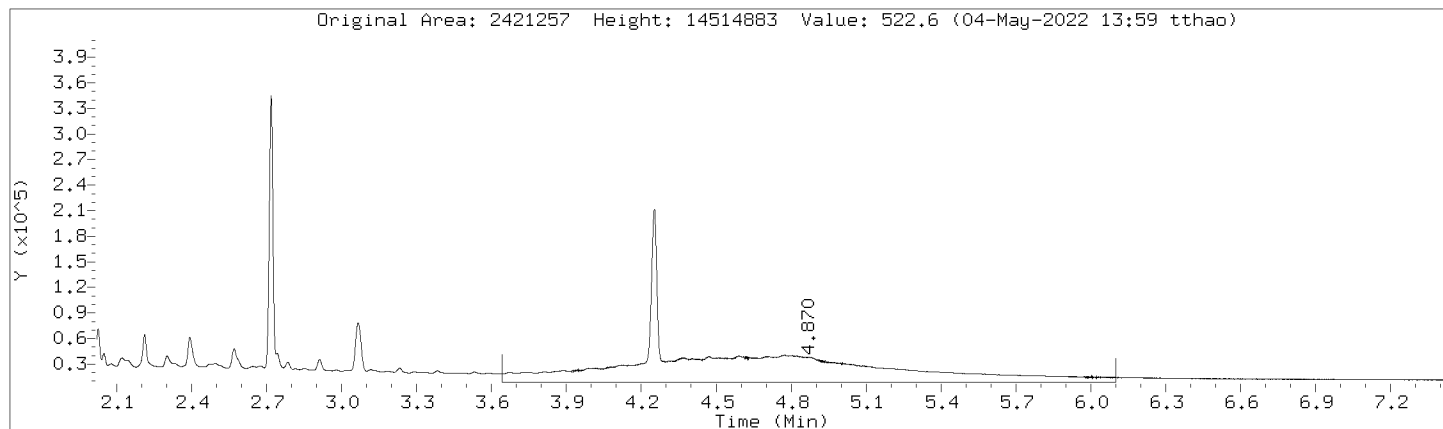
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Injection Date: 04-MAY-2022 12:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



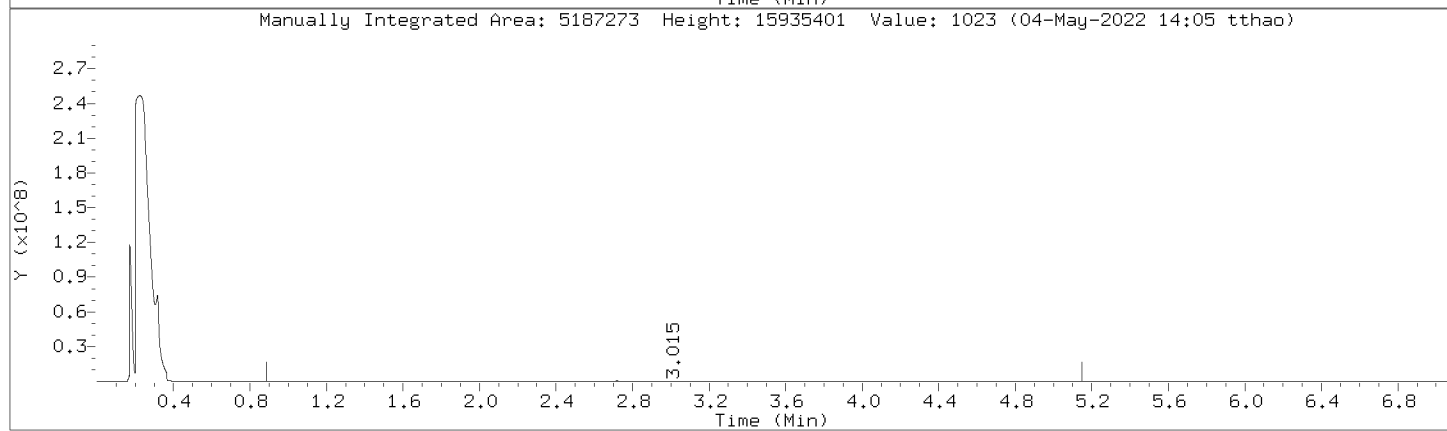
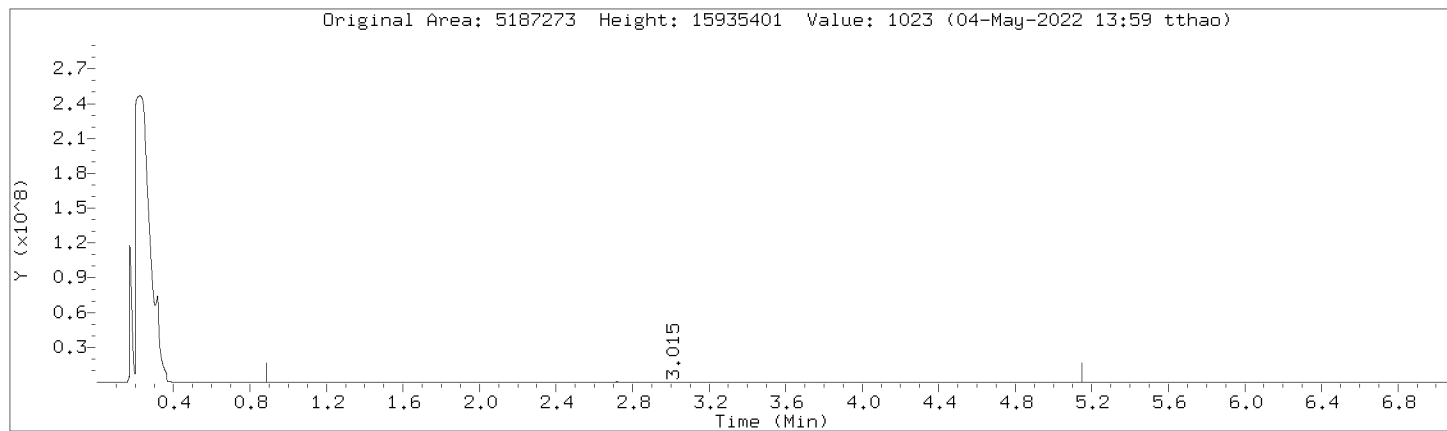
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Injection Date: 04-MAY-2022 12:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



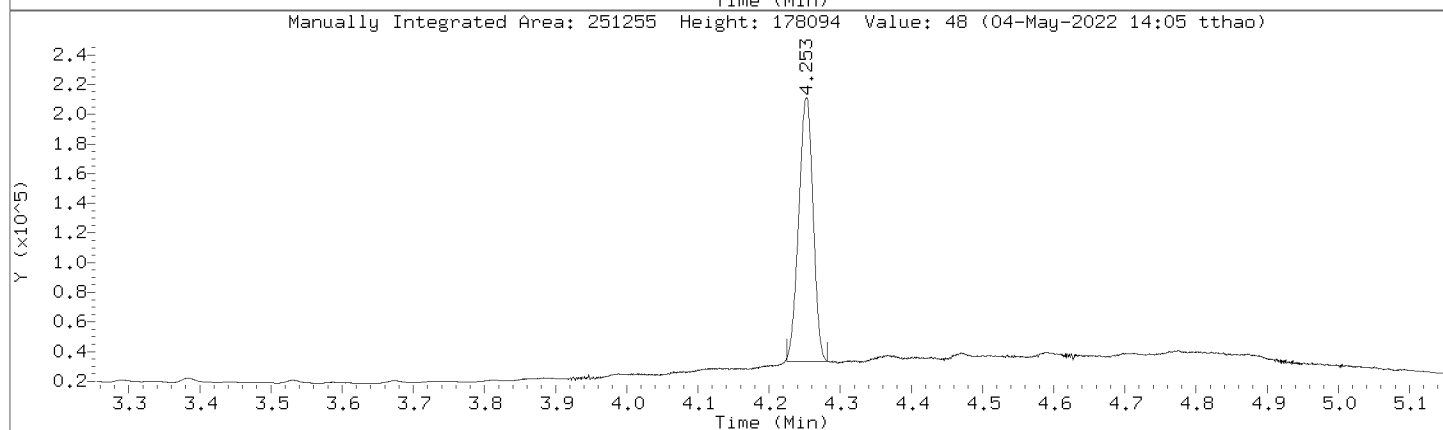
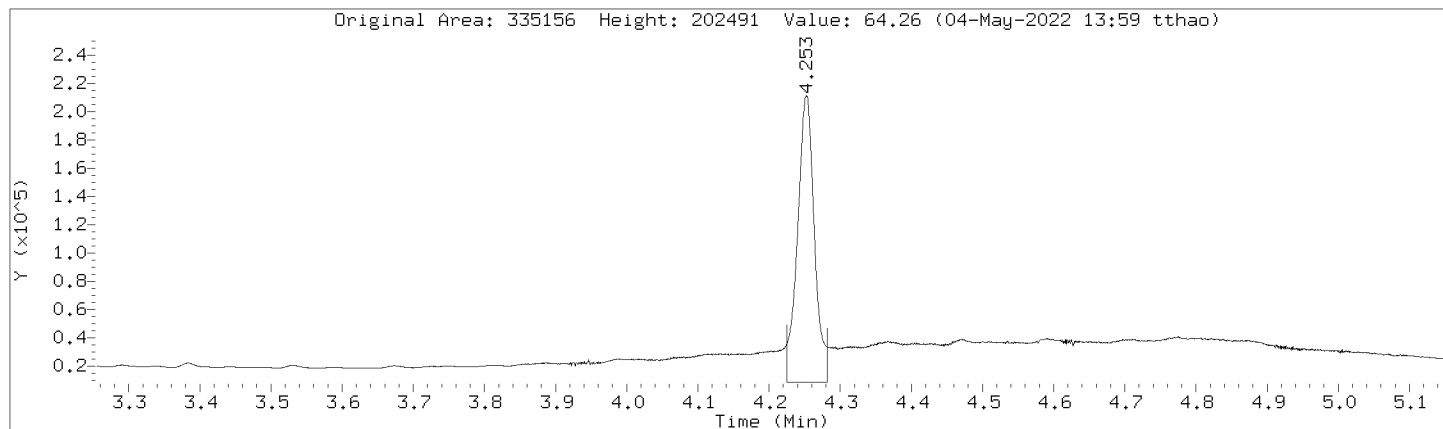
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Injection Date: 04-MAY-2022 12:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



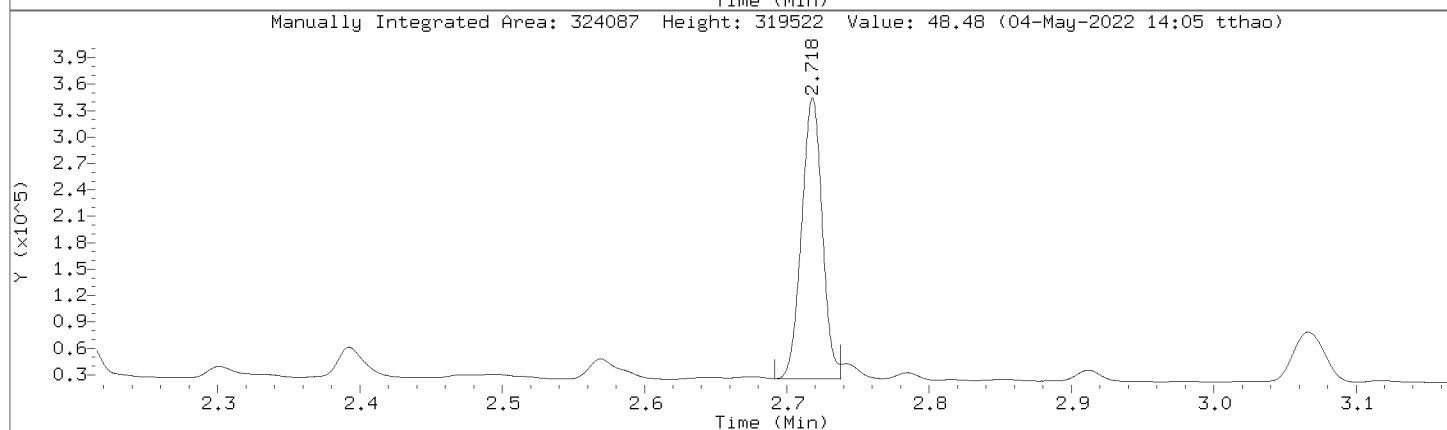
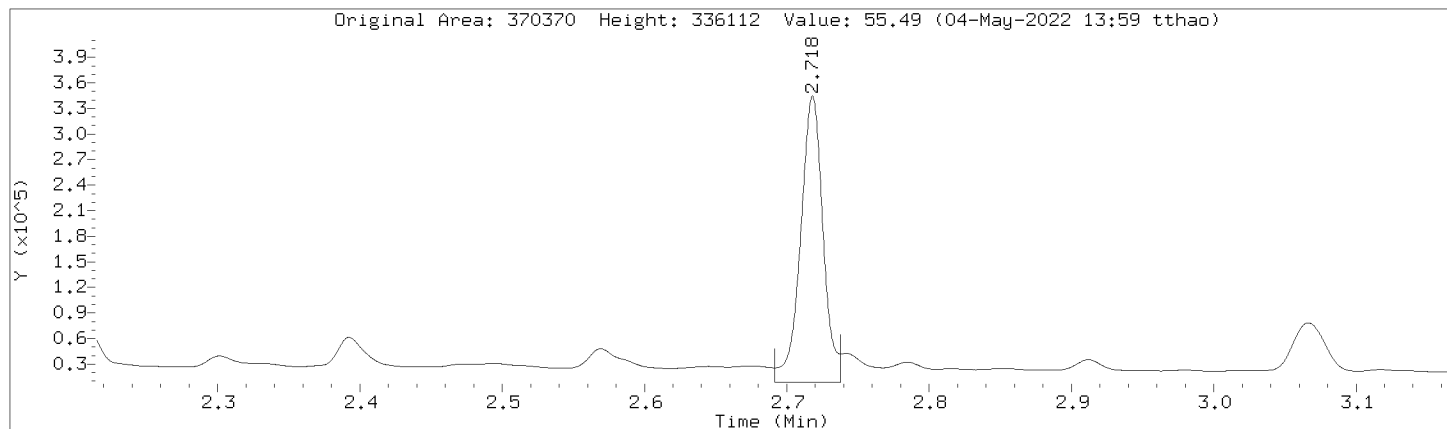
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Injection Date: 04-MAY-2022 12:13  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000009.D  
 Injection Date: 04-MAY-2022 12:13  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,363721:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1907718	1907718
DRO by AK 102	3279555	3279555
TPH-DRO (C10-C28)	3753620	3753620
Motor Oil Range (C24-C36)	2006027	2006027
Diesel Fuel Range	2772494	2772494
Motor Oil Range	2421257	2421257
Diesel Fuel Range SG	2772494	2772494
Motor Oil Range SG	2421257	2421257
C10-C36	5187273	5187273
n-Triacontane (S)	335156	251255
o-Terphenyl (S)	370370	324087

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000015.D  
 Lab Smp Id: DMO-CCV,363721:2 Client Smp ID: DMO-CCV,363721:2  
 Inj Date : 04-MAY-2022 13:09  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,363721:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050422R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 05-May-2022 11:33 tthao Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 3 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.880	- 3.590		3293348 500.000	512	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.715	2.715 0.000		326247 50.0000	48.8	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.249	4.255 -0.006		264510 50.0000	50.6	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.591	- 5.150		1925987 500.000	520	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.880	- 4.170		3771433 500.000	514	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.440	- 5.150		2021466 500.000	523	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.880	- 5.150		5219336 1000.00	1030	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.640		2781776 500.000	513	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.640		2781776 500.000	513	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.641	- 6.100		2476394 500.000	535	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.641	- 6.100		2476394 500.000	535	(M) RNG
-----					



QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 04-MAY-2022 13:09

Client ID: DMO-CCV,363721:2

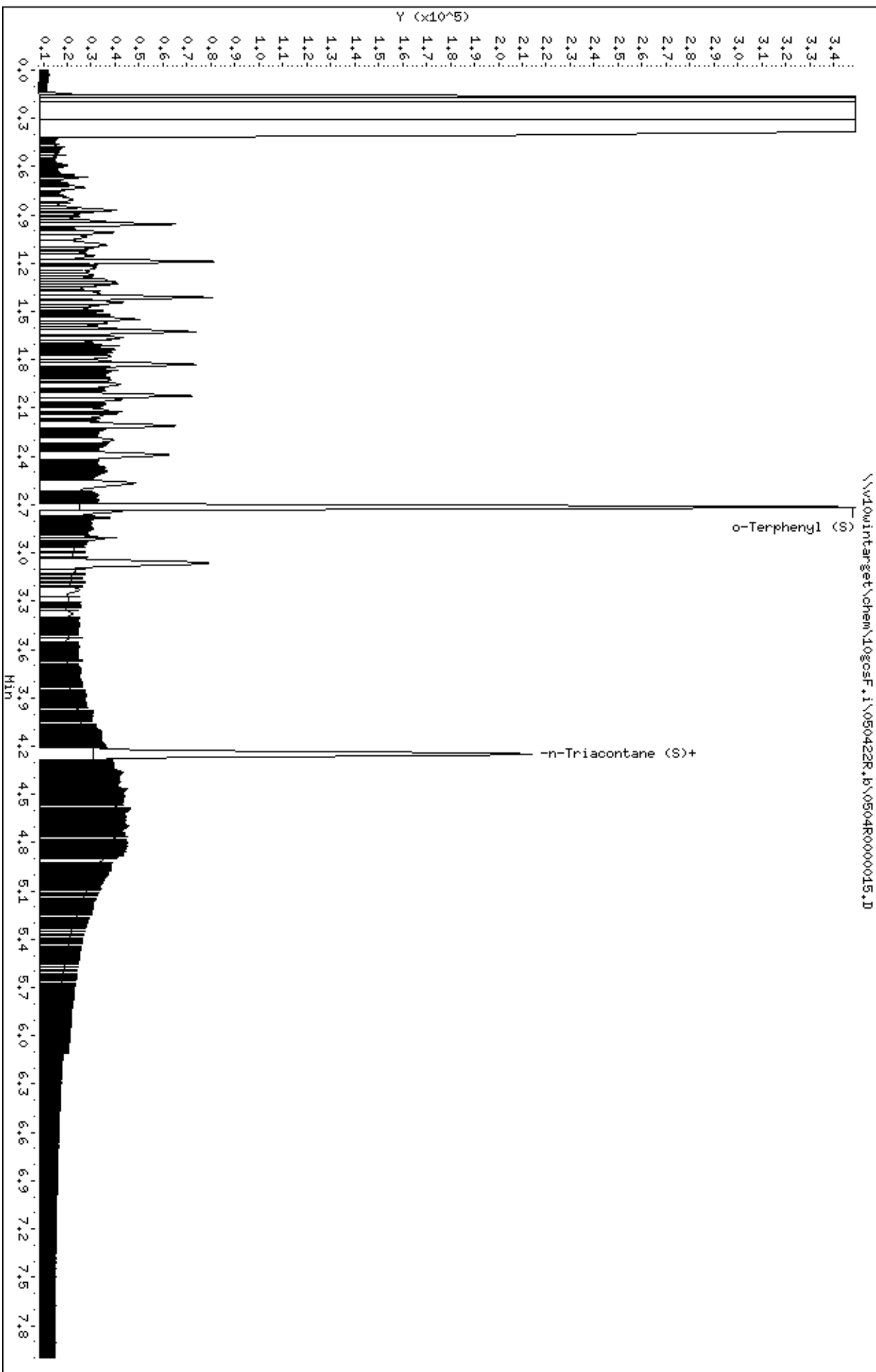
Sample Info: DMO-CCV,363721:2

Instrument: 10gocsf.1

Operator: TT2

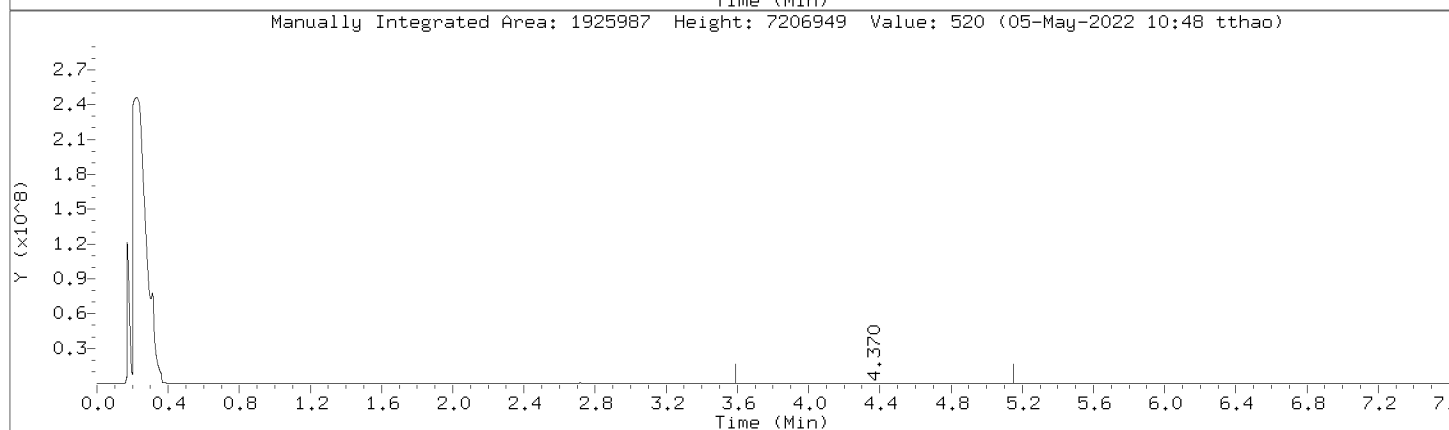
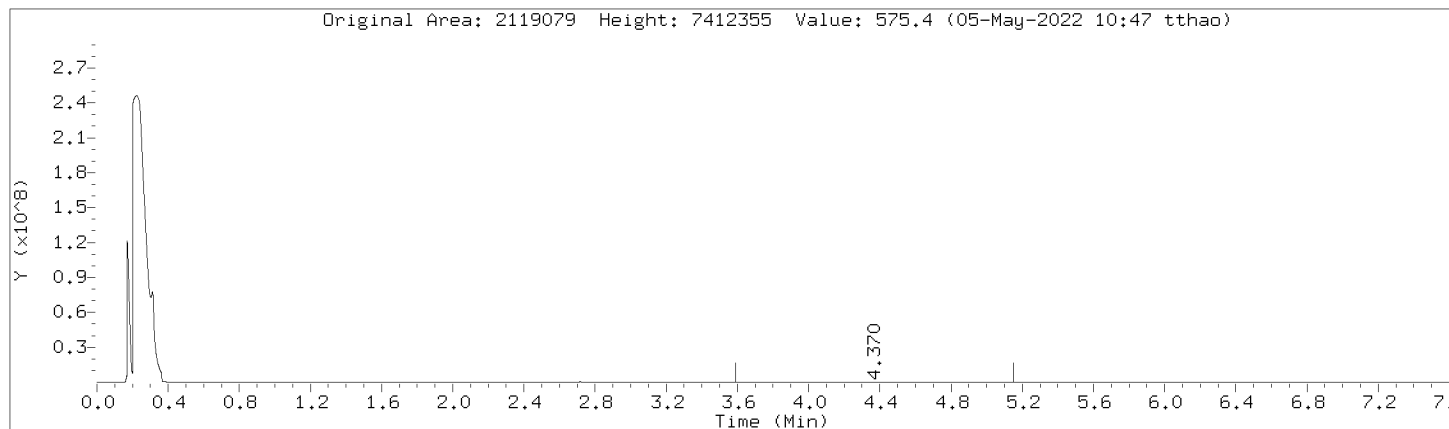
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Column phase: DB-5-MS21430033



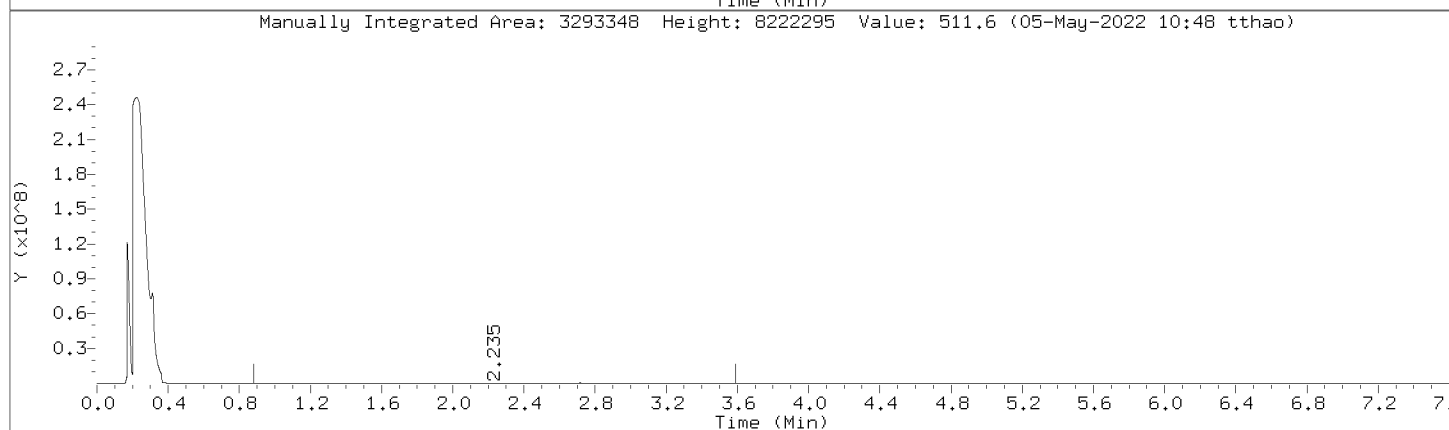
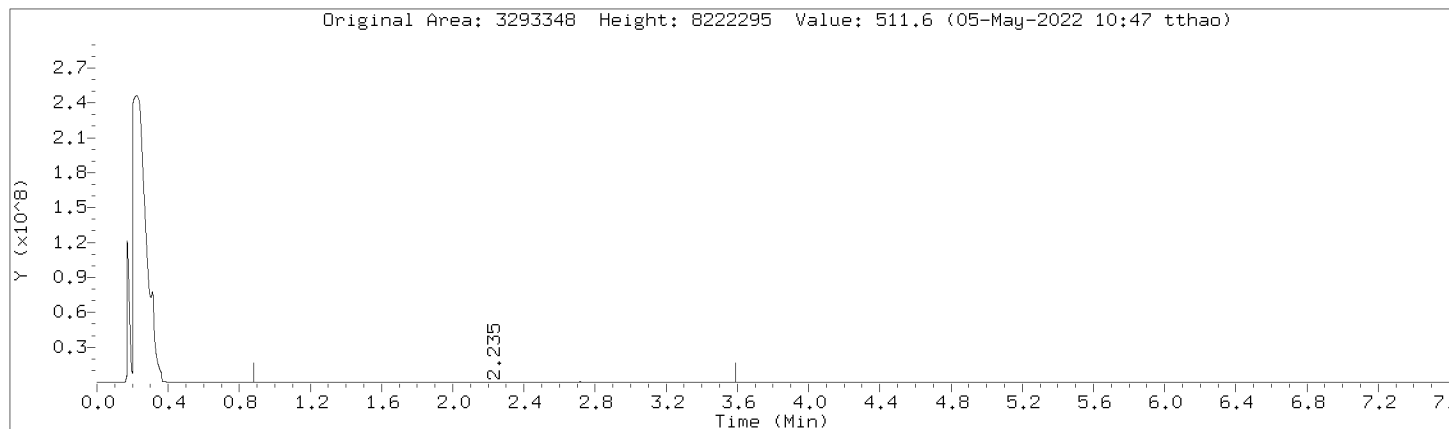
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Injection Date: 04-MAY-2022 13:09  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



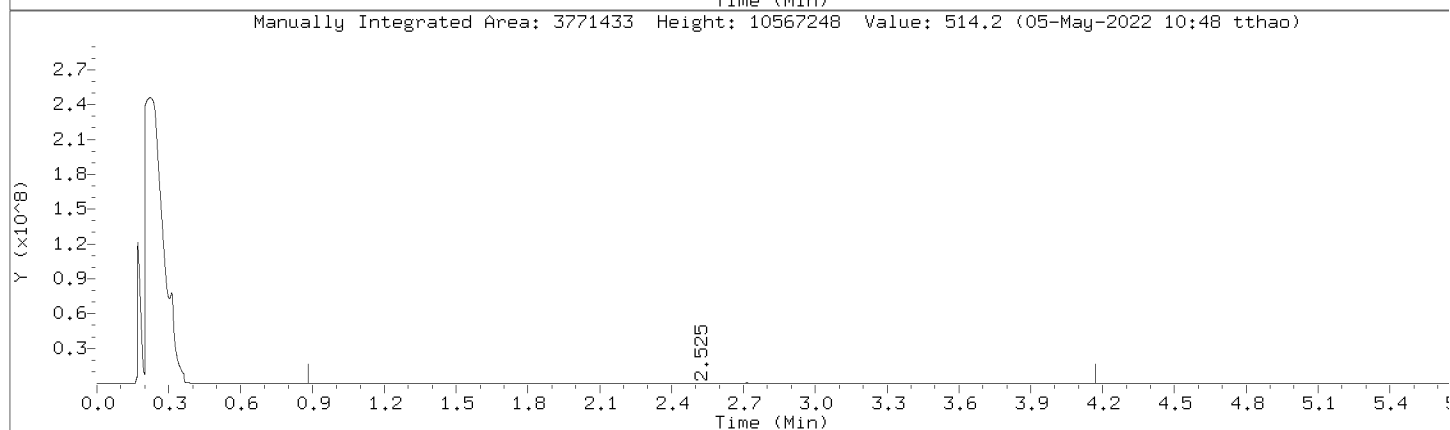
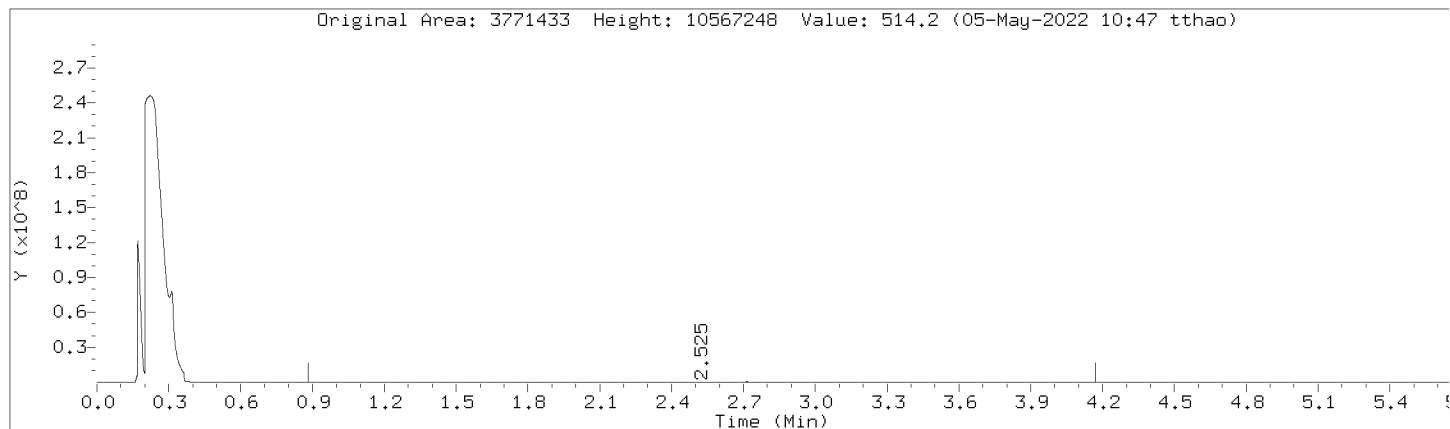
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Injection Date: 04-MAY-2022 13:09  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



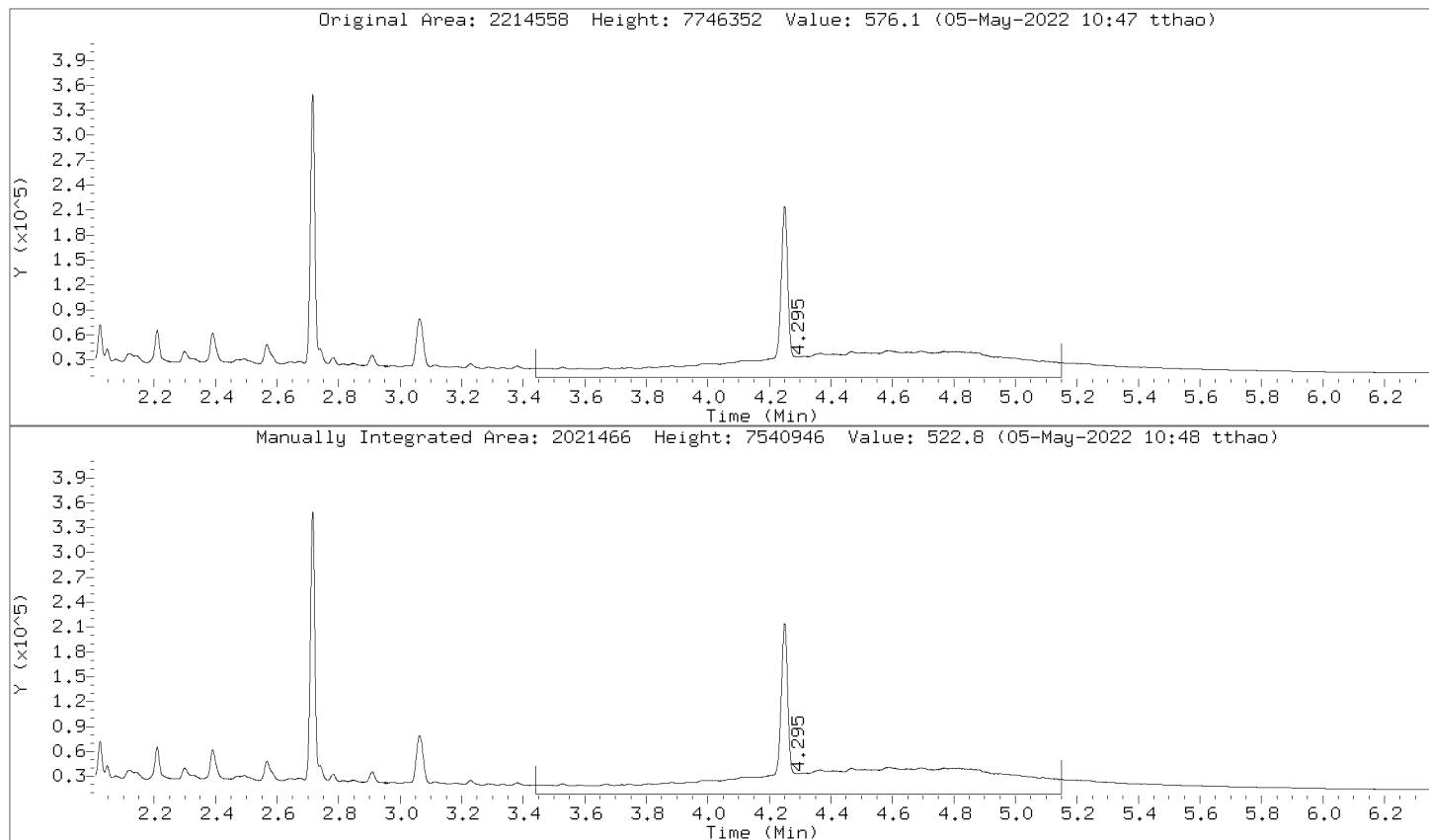
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Injection Date: 04-MAY-2022 13:09  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



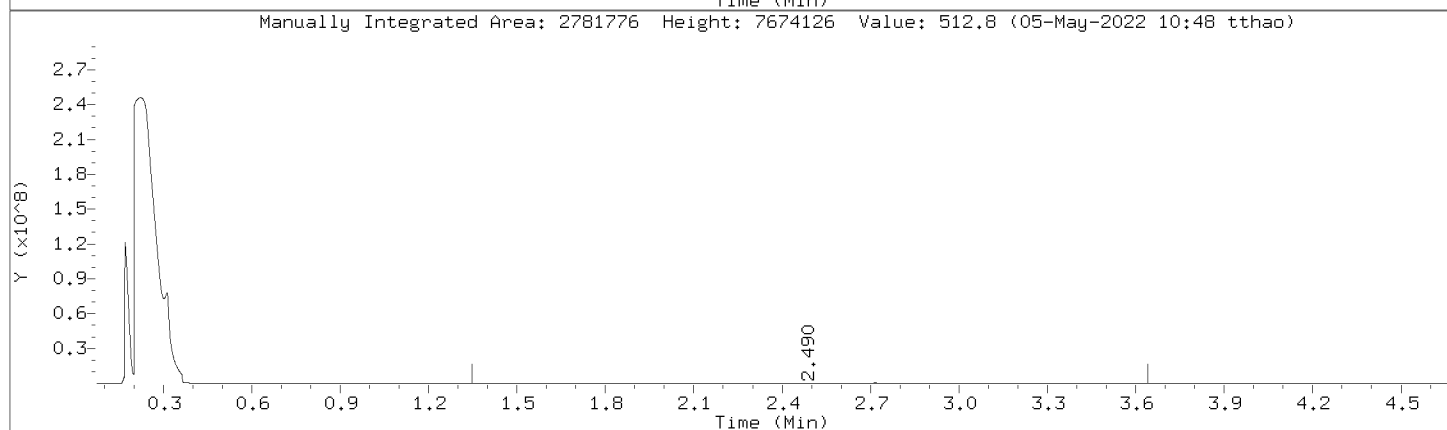
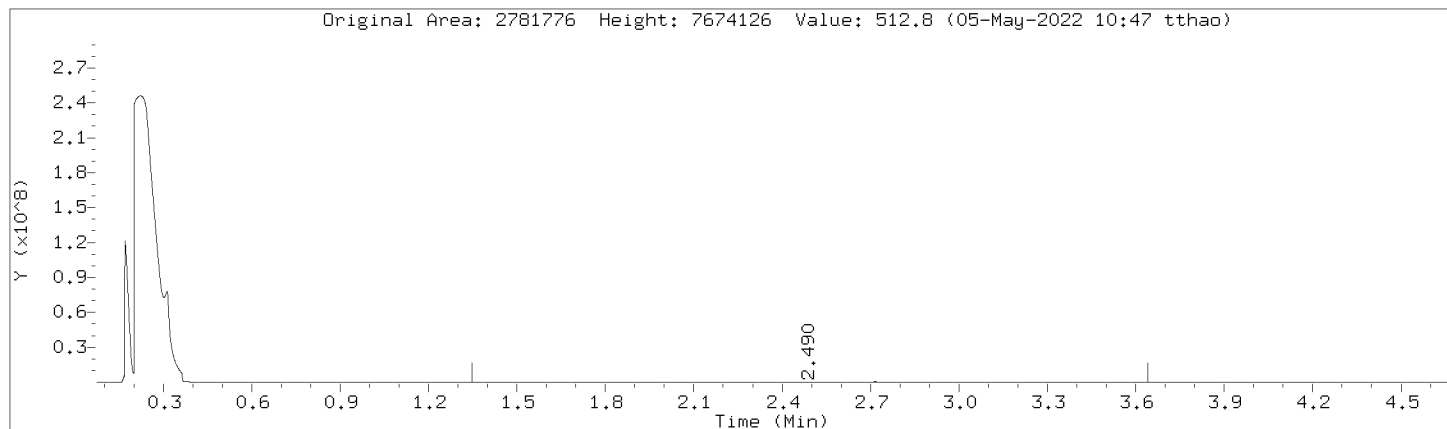
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Injection Date: 04-MAY-2022 13:09  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



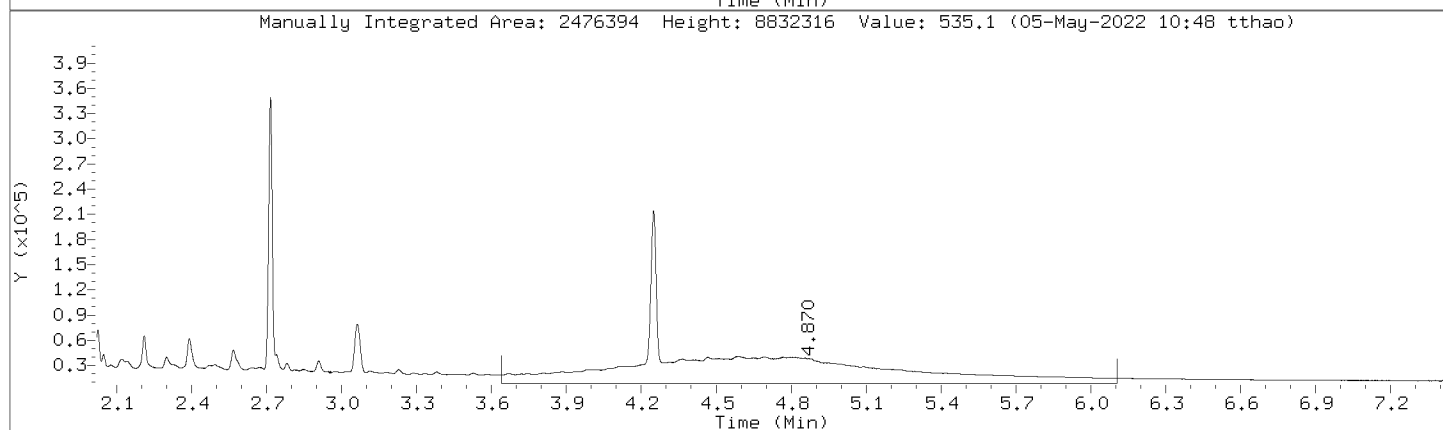
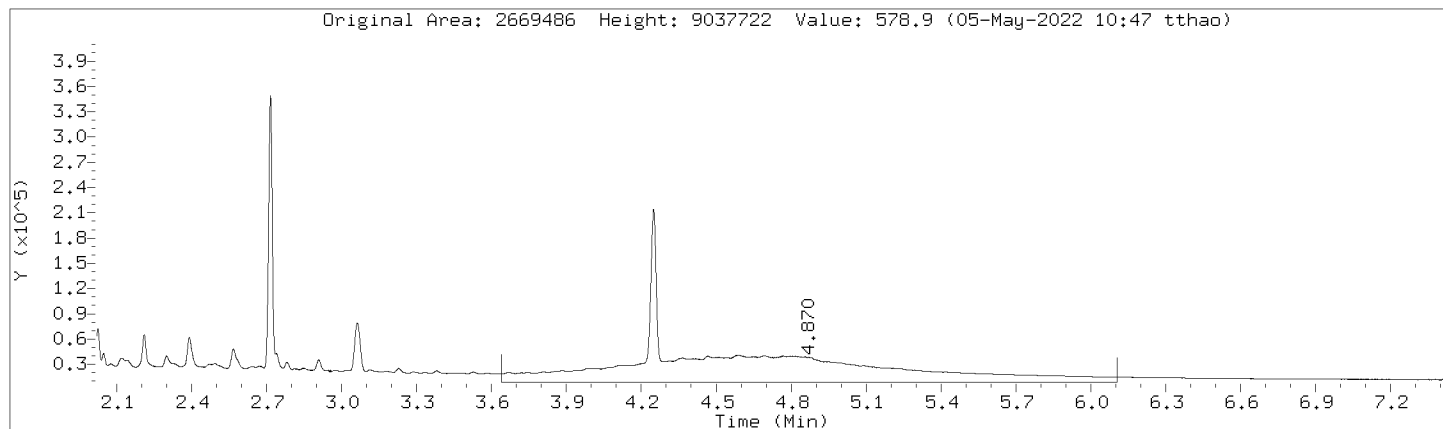
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Injection Date: 04-MAY-2022 13:09  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000015.D  
Injection Date: 04-MAY-2022 13:09  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

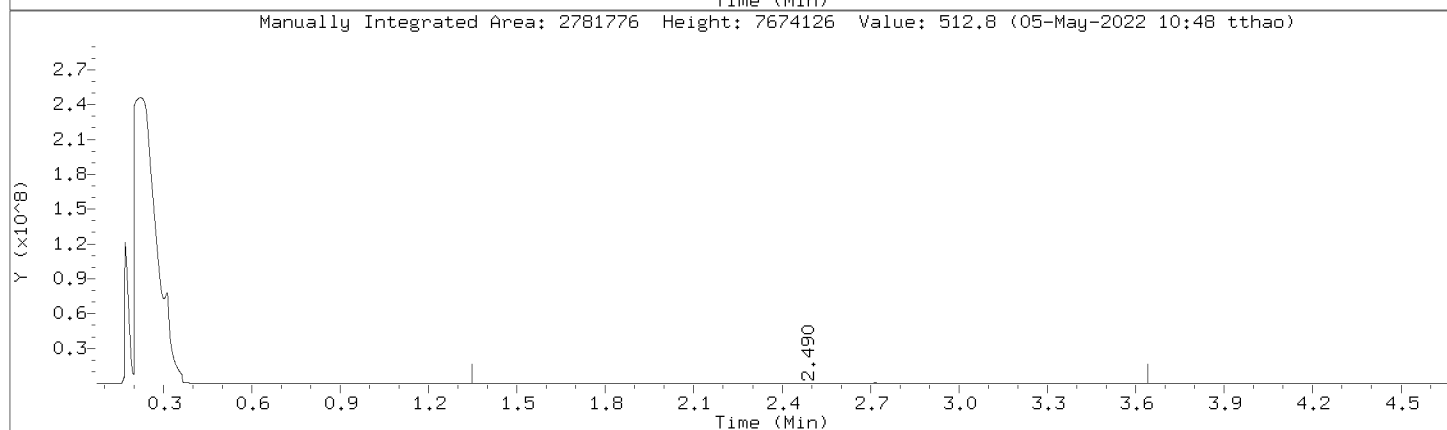
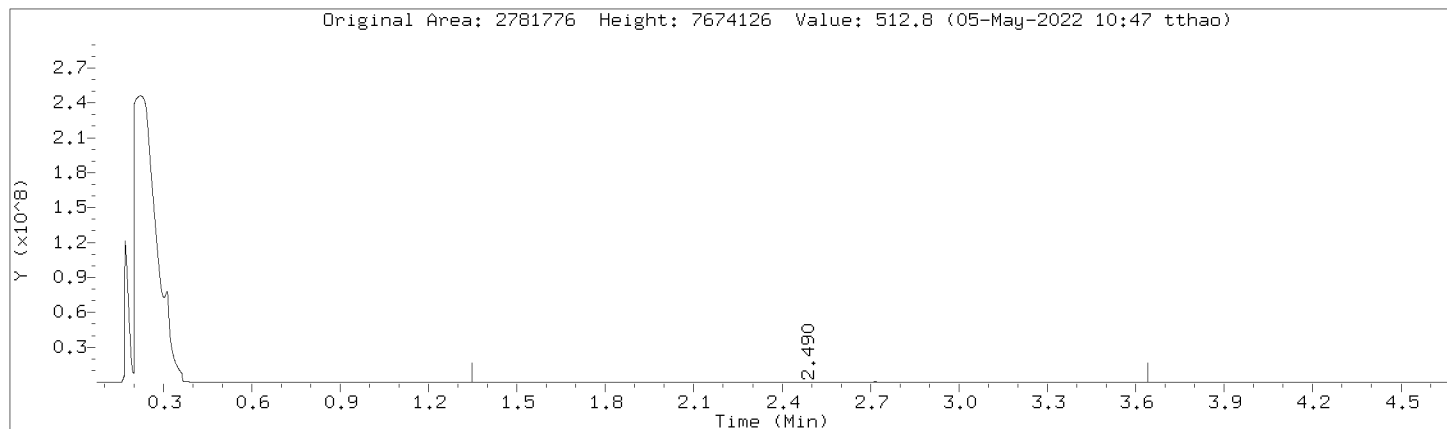
Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





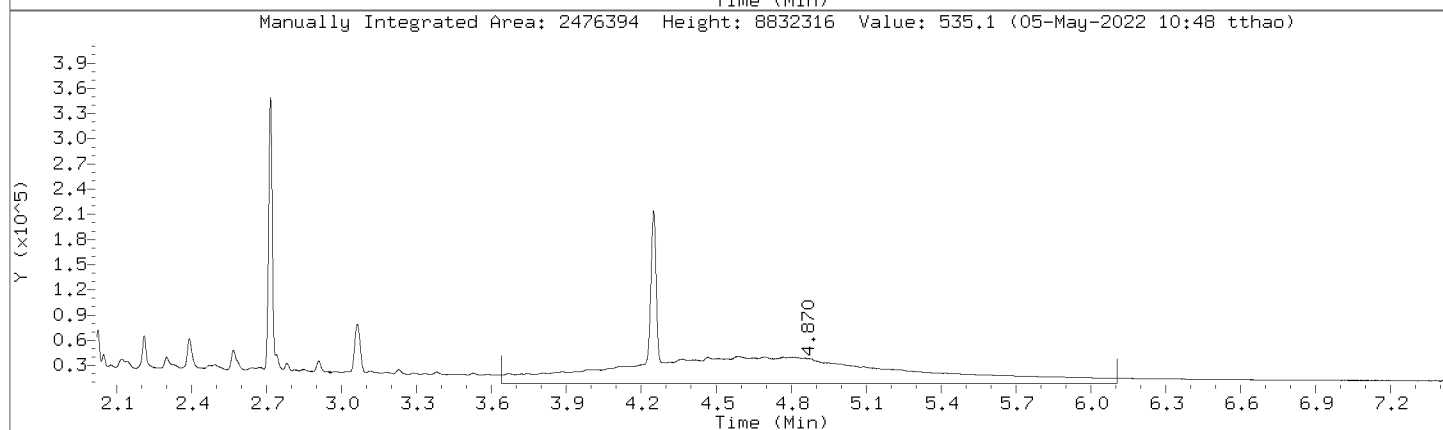
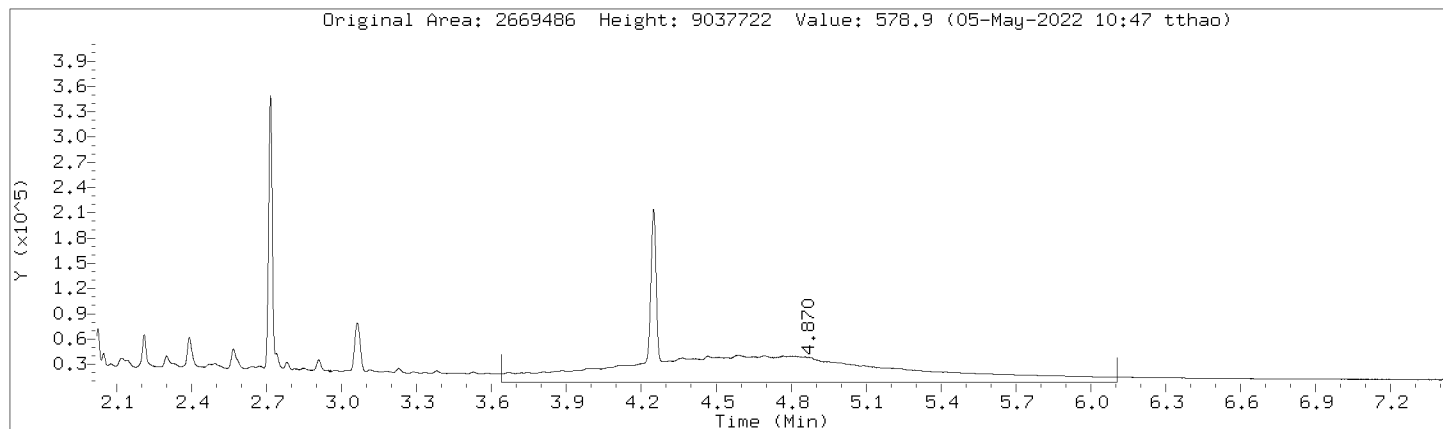
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Injection Date: 04-MAY-2022 13:09  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



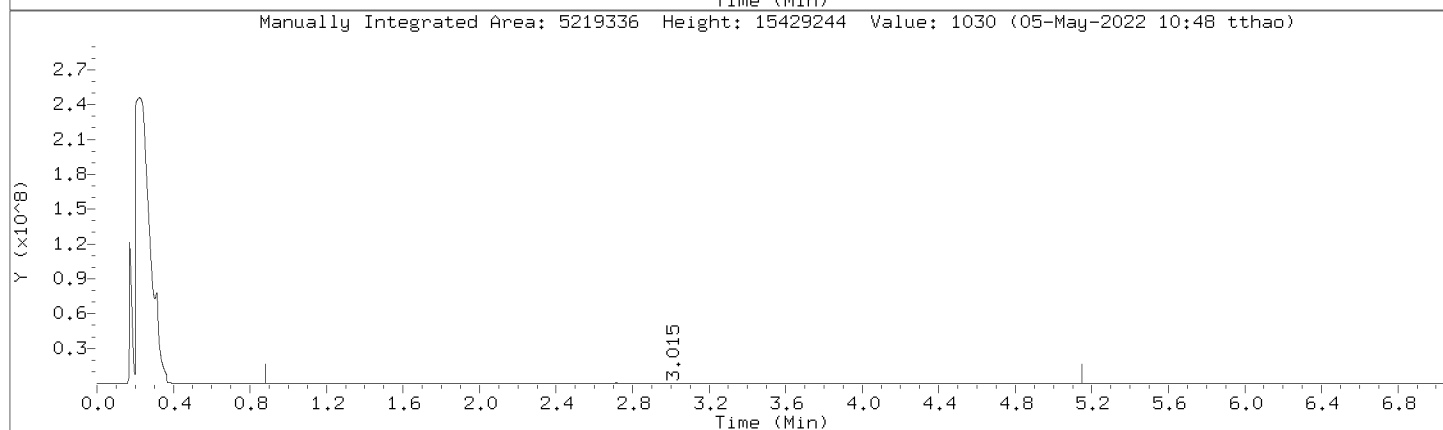
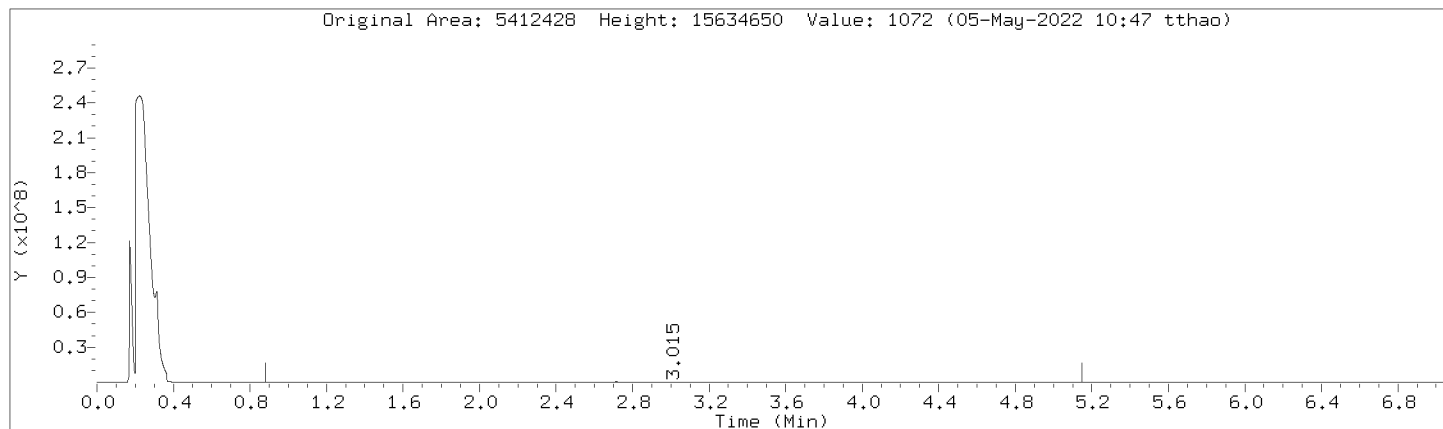
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Injection Date: 04-MAY-2022 13:09  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



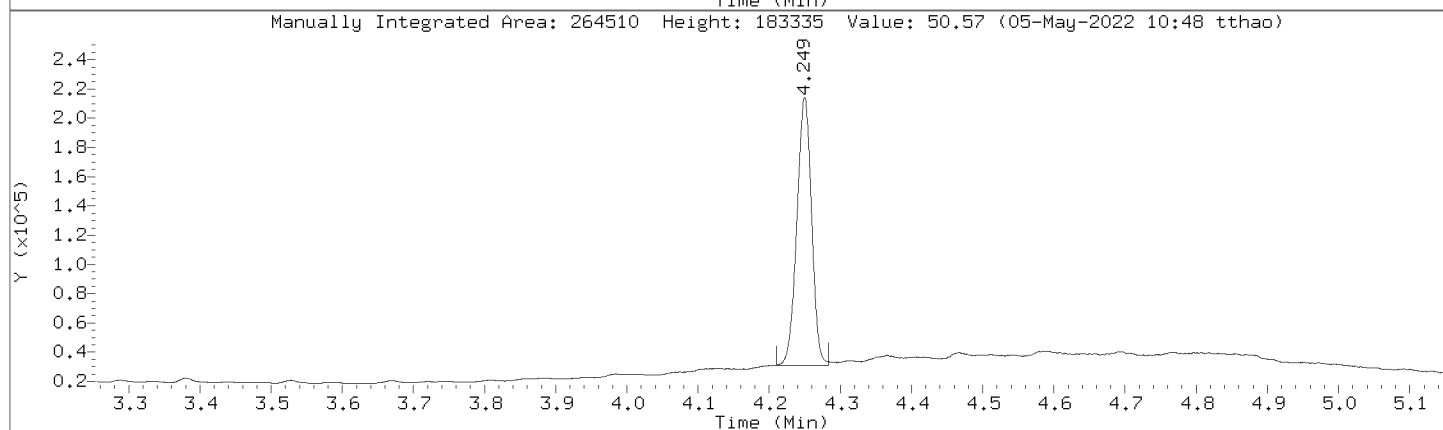
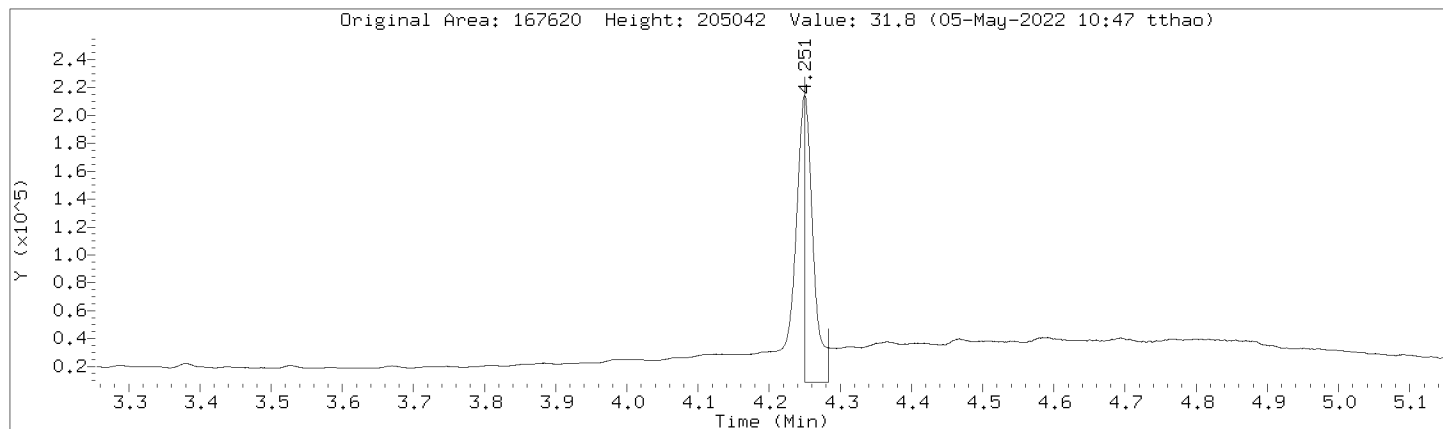
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Injection Date: 04-MAY-2022 13:09  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



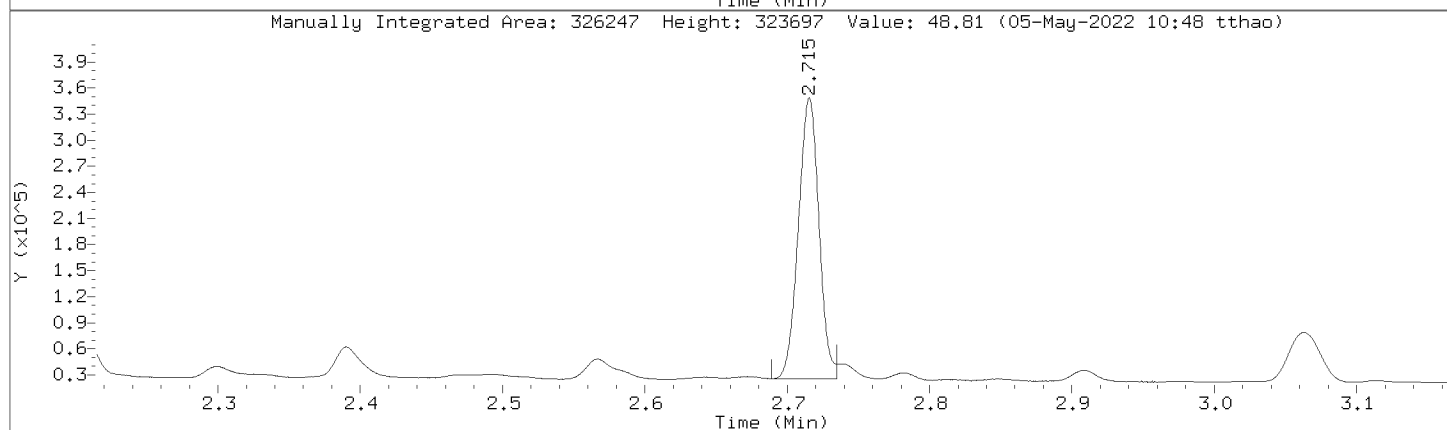
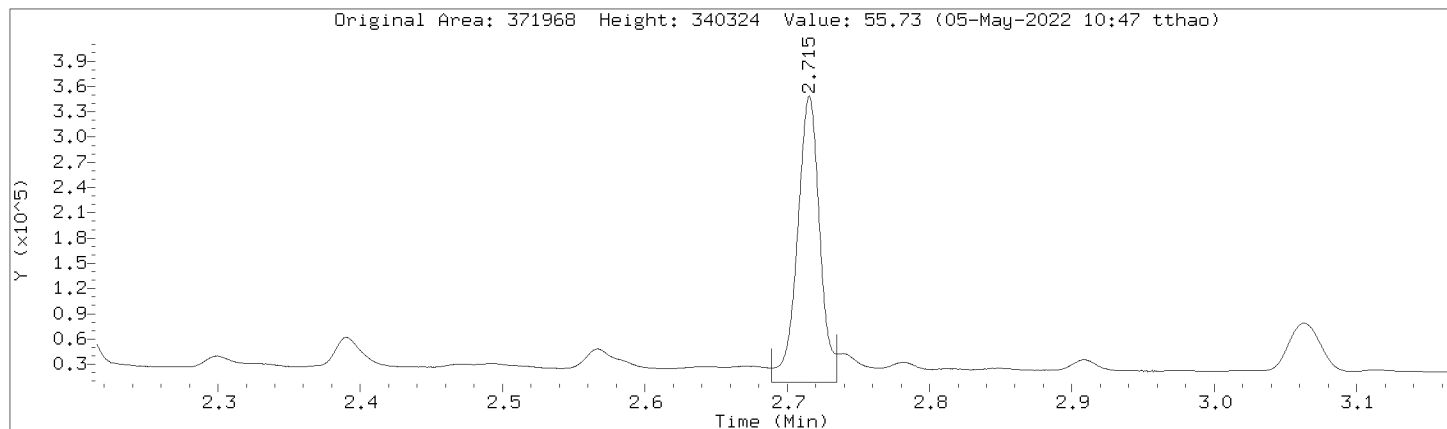
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Injection Date: 04-MAY-2022 13:09  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000015.D  
 Injection Date: 04-MAY-2022 13:09  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,363721:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	2119079	1925987
DRO by AK 102	3293348	3293348
TPH-DRO (C10-C28)	3771433	3771433
Motor Oil Range (C24-C36)	2214558	2021466
Diesel Fuel Range	2781776	2781776
Motor Oil Range	2669486	2476394
Diesel Fuel Range SG	2781776	2781776
Motor Oil Range SG	2669486	2476394
C10-C36	5412428	5219336
n-Triacontane (S)	167620	264510
o-Terphenyl (S)	371968	326247

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BLANK

Lab Name: Pace Analytical - Minnesota  
Date Received: \_\_\_\_\_  
Date Extracted: 04/26/2022 10:34  
Date Analyzed: 04/27/2022 15:49  
Initial wt/vol: 10 g Final wt/vol: 1 mL Dilution: 1

Contract: D3593500  
Matrix: Solid SDG No.: 10605661  
Lab Sample ID: 4303622  
Lab File ID: 042722F.B\0427F0000023.D  
Instrument: 10GCSF Percent Moisture: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	ND	U
	Motor Oil Range	7.6	J

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000023.D  
 Lab Smp Id: 4303622 Client Smp ID: MB  
 Inj Date : 27-APR-2022 15:49  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : 4303622  
 Misc Info : 39215  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 28-Apr-2022 09:09 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 18 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10MNLABS0070

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
S 1	DRO by AK 102					CAS #:
0.755	- 3.420		407445	16.3194	1.63	(M) RNG
\$ 2	o-Terphenyl (S)					CAS #:
2.525	2.524	0.001	252255	45.6769	4.57	(M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.059	4.057	0.002	211832	44.4028	4.44	(M) BA
S 4	Residual Range Organics AK103					CAS #:
3.421	- 4.880		363202	83.4698	8.35	(M) RNG
S 5	TPH-DRO (C10-C28)					CAS #:
0.755	- 4.000		580220	36.2648	3.63	(M) RNG
S 6	Motor Oil Range (C24-C36)					CAS #:
3.280	- 4.880		391986	84.9785	8.50	(M) RNG

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			ON-COL RESPONSE (ug/mL)	FINAL (mg/Kg)	
S 7	C10-C36			CAS #:	
0.755	- 4.880		770648 83.6257	8.36	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.200	- 3.470		368873 17.8738	1.79	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.200	- 3.470		368873 17.8738	1.79	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.471	- 5.370		419897 76.2830	7.63	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.471	- 5.370		419897 76.2830	7.63	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

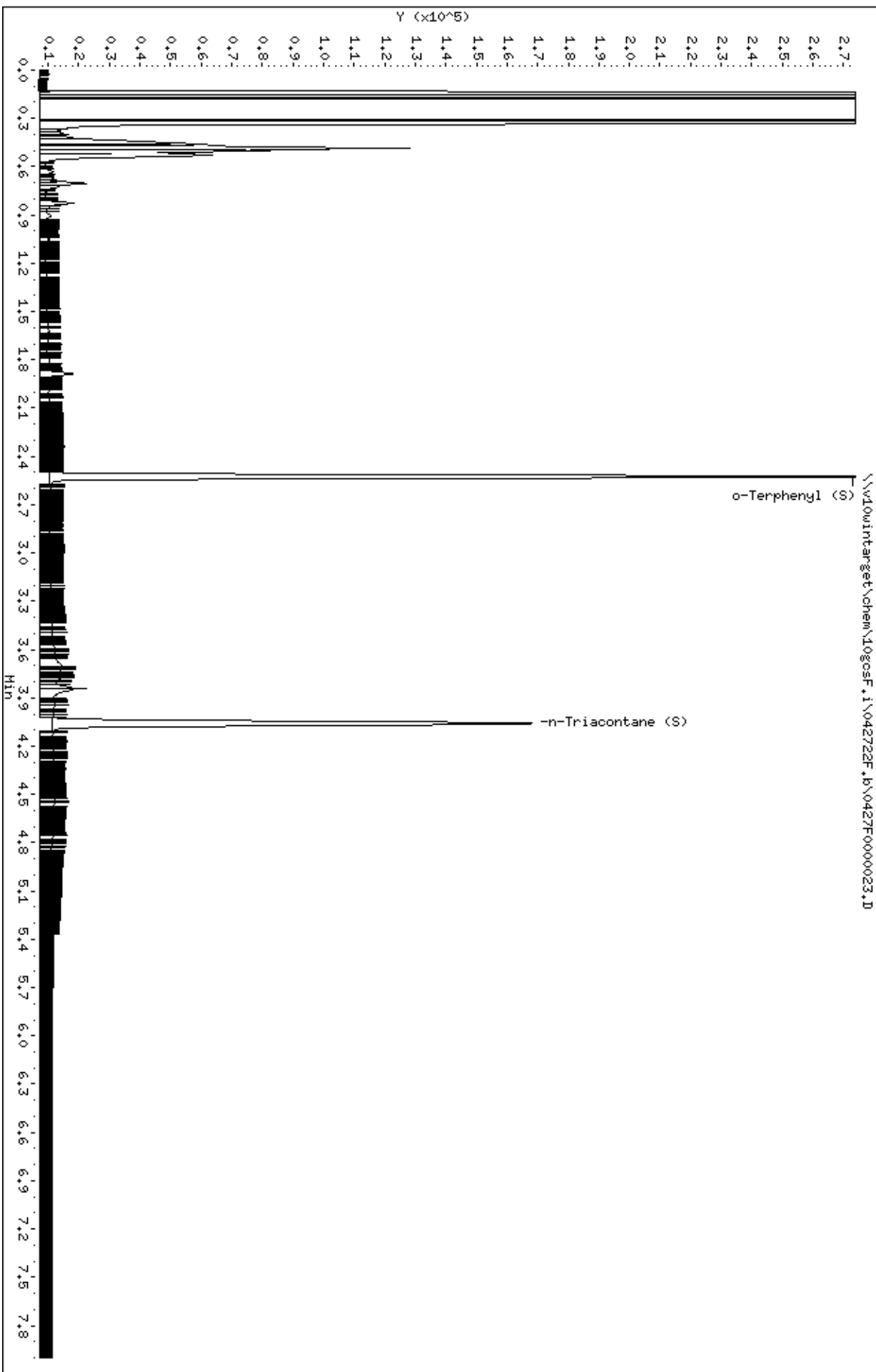
RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.



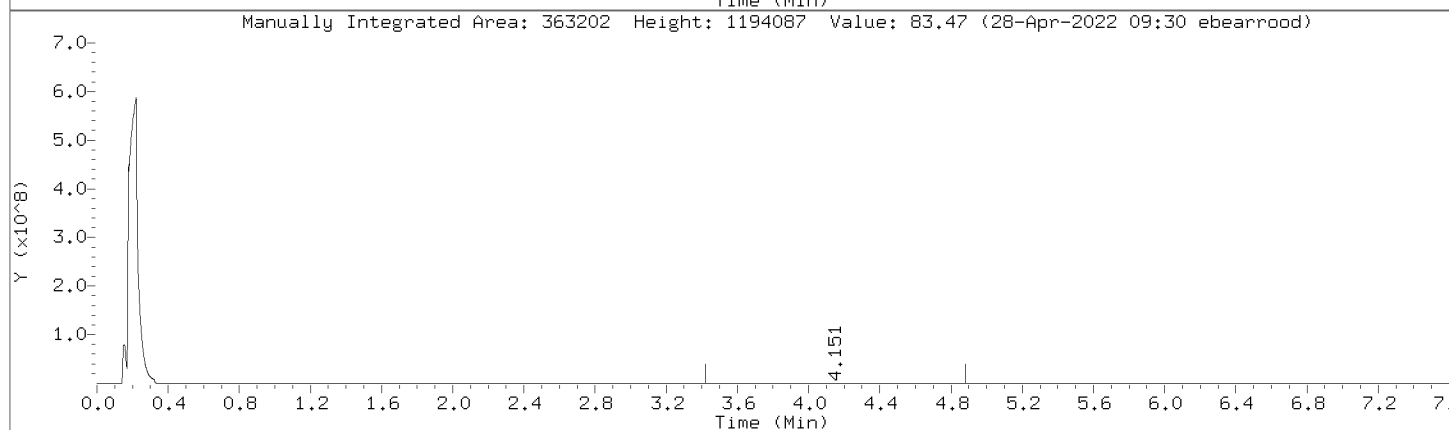
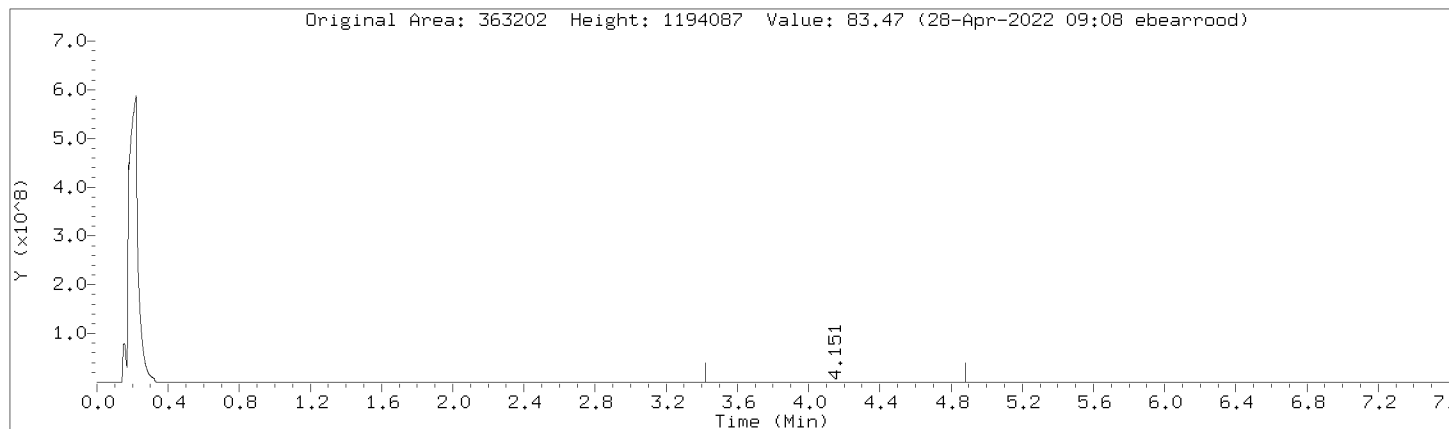
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Date : 27-APR-2022 15:49  
Client ID: HB  
Sample Info: 4303622  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21250010

Instrument: 10goscF.1  
Operator: EB3  
Column diameter: 0.32



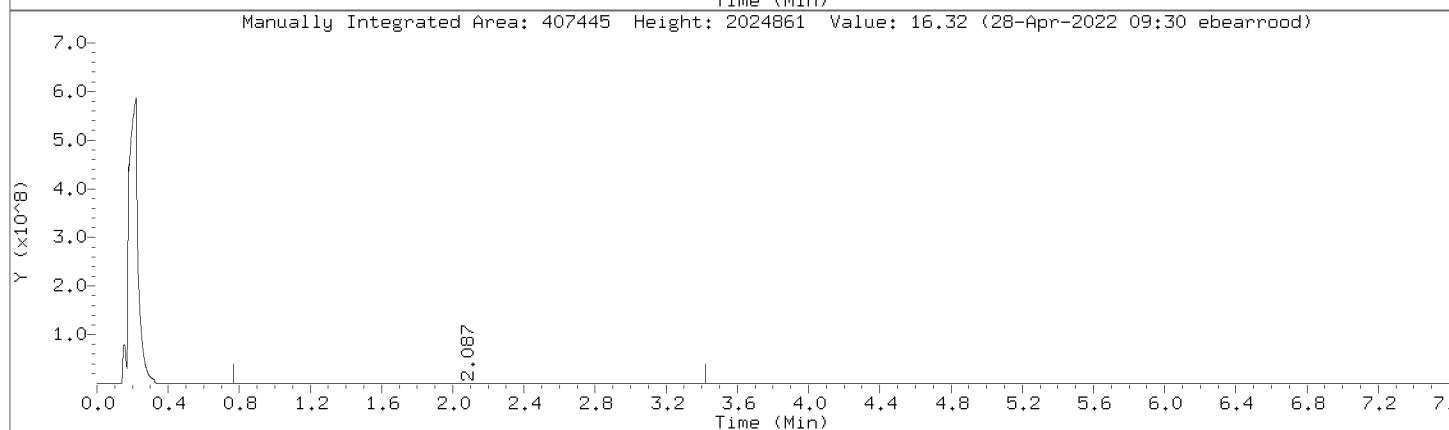
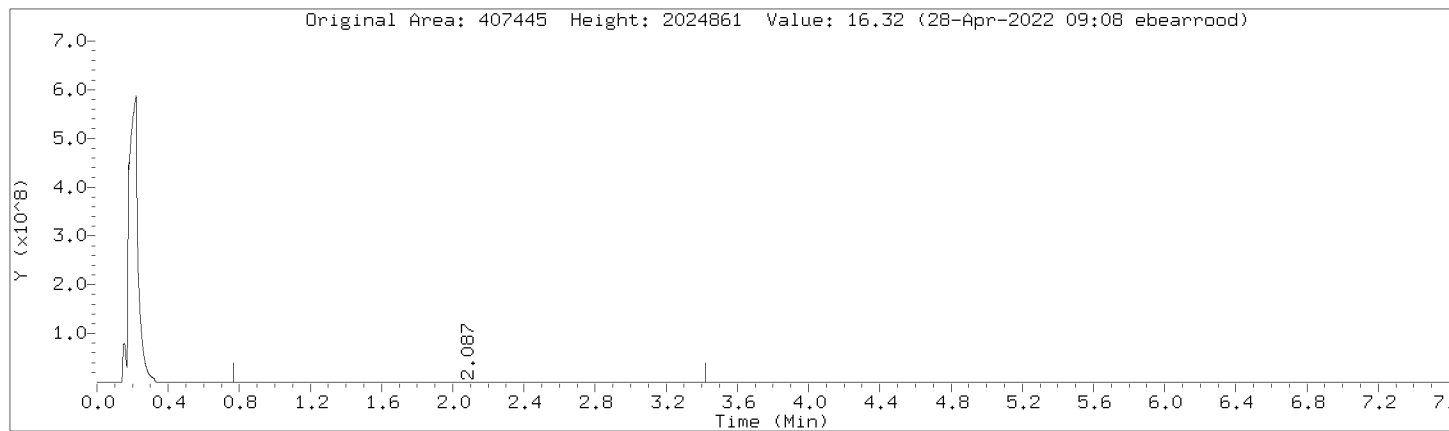
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000023.D  
Injection Date: 27-APR-2022 15:49  
Instrument: 10gcsF.i  
Lab Sample ID: 4303622

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



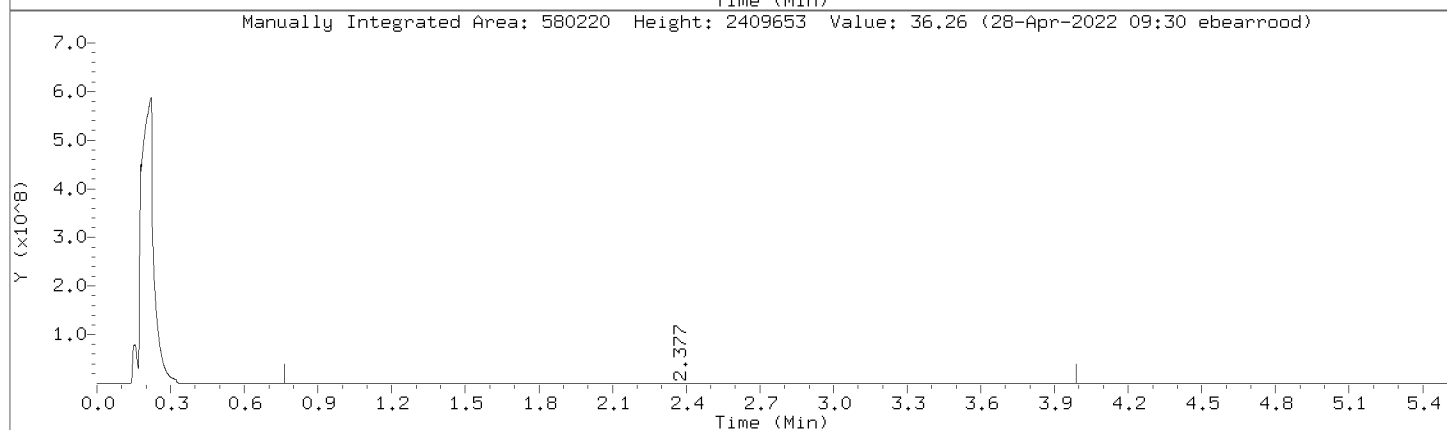
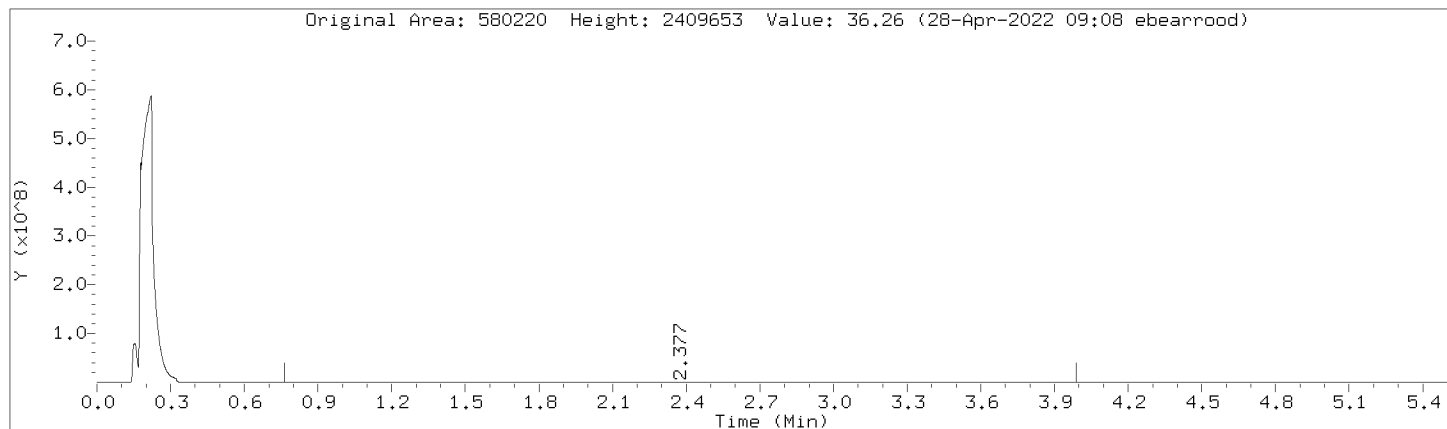
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Injection Date: 27-APR-2022 15:49  
Instrument: 10gcsF.i  
Lab Sample ID: 4303622

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



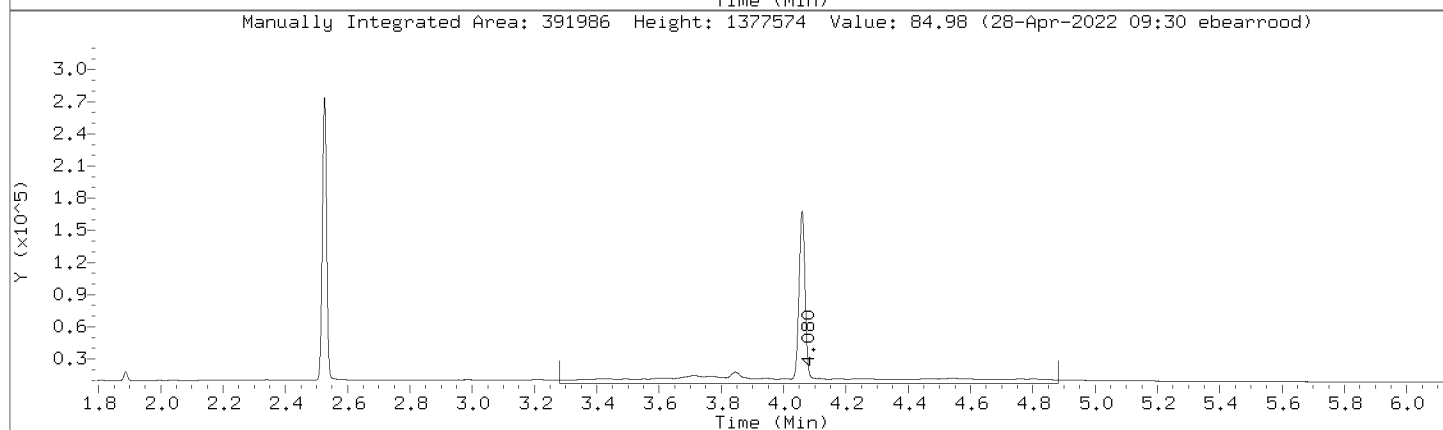
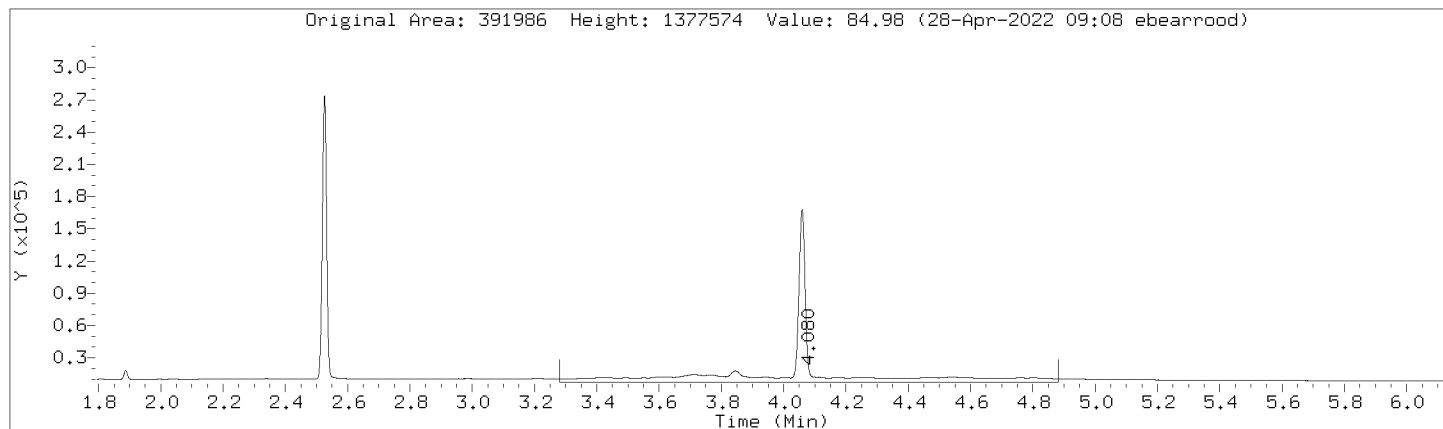
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000023.D  
Injection Date: 27-APR-2022 15:49  
Instrument: 10gcsF.i  
Lab Sample ID: 4303622

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



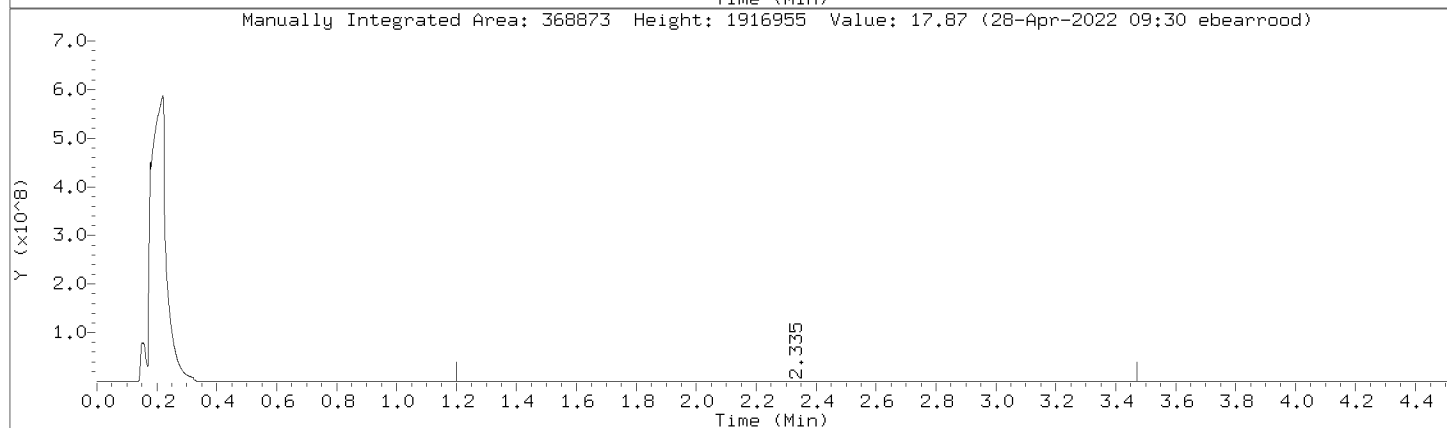
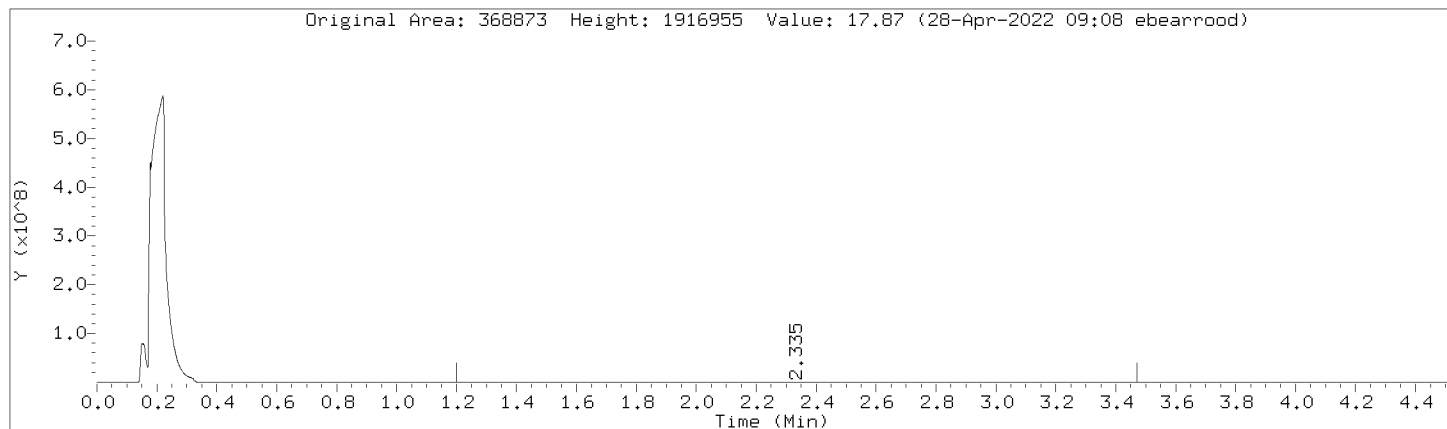
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000023.D  
Injection Date: 27-APR-2022 15:49  
Instrument: 10gcsF.i  
Lab Sample ID: 4303622

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



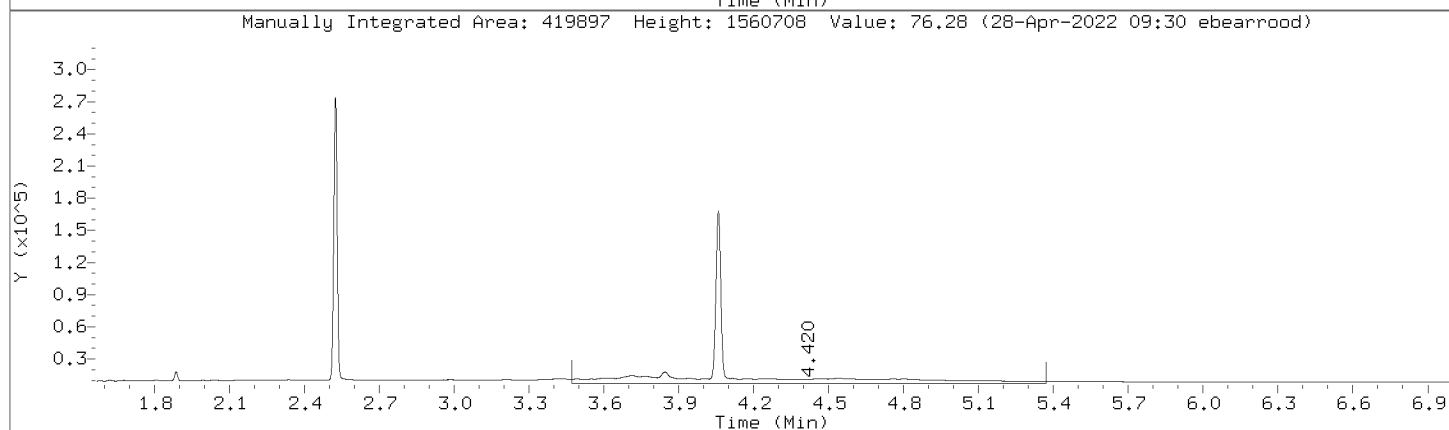
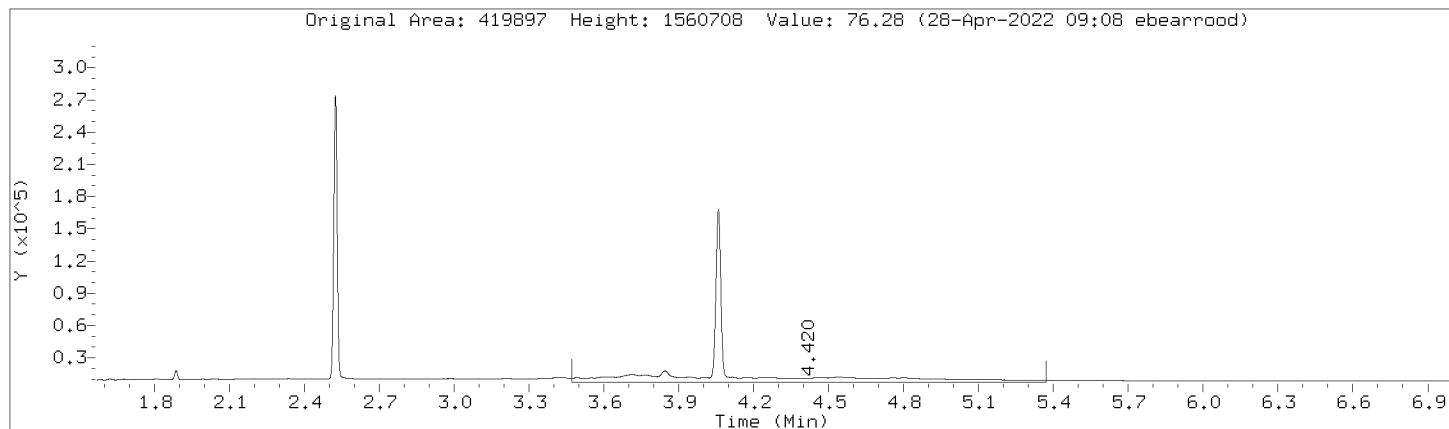
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Injection Date: 27-APR-2022 15:49  
Instrument: 10gcsF.i  
Lab Sample ID: 4303622

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



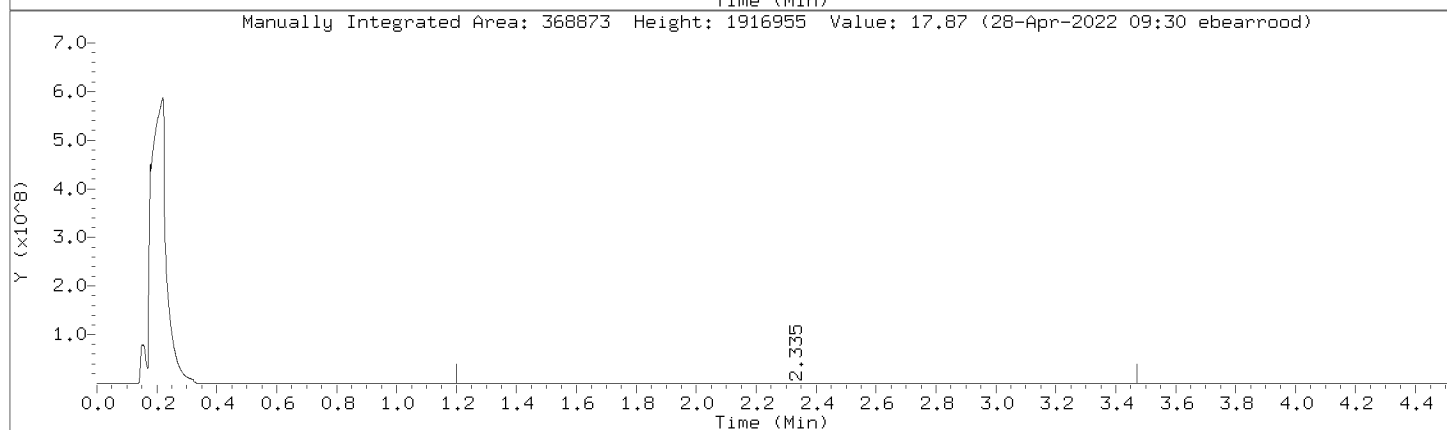
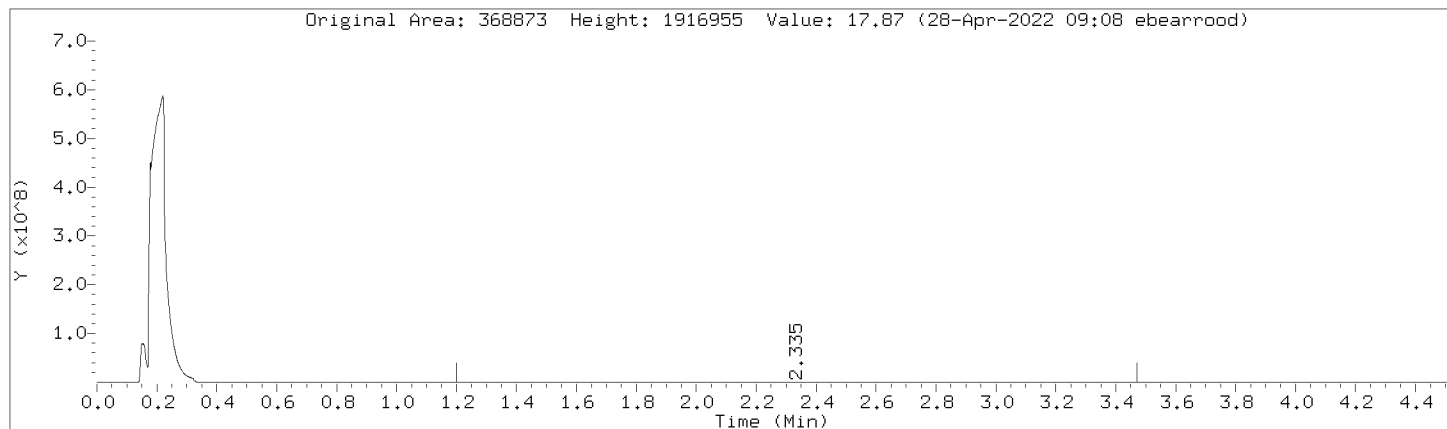
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Injection Date: 27-APR-2022 15:49  
Instrument: 10gcsF.i  
Lab Sample ID: 4303622

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000023.D  
Injection Date: 27-APR-2022 15:49  
Instrument: 10gcsF.i  
Lab Sample ID: 4303622

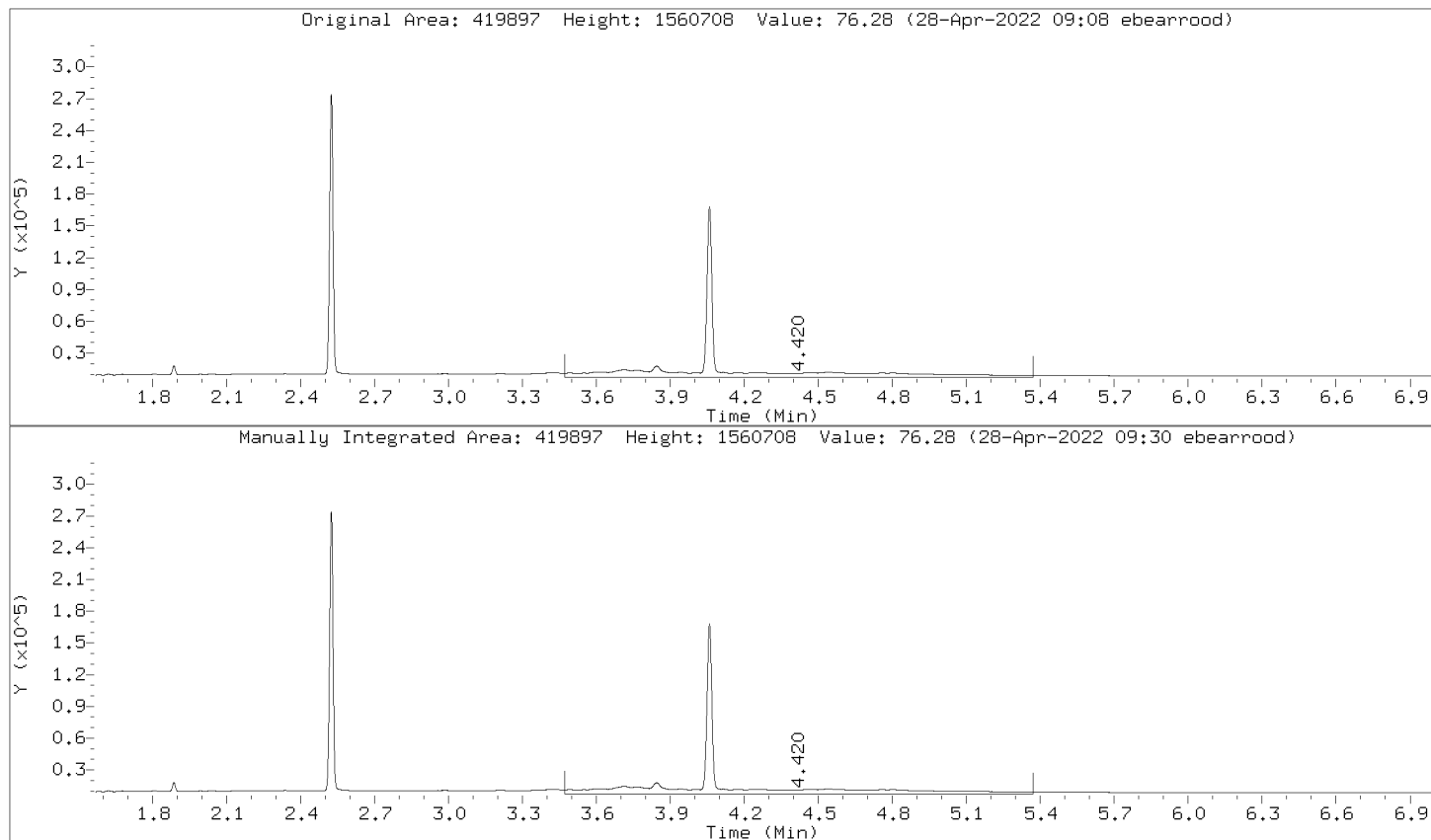
Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:





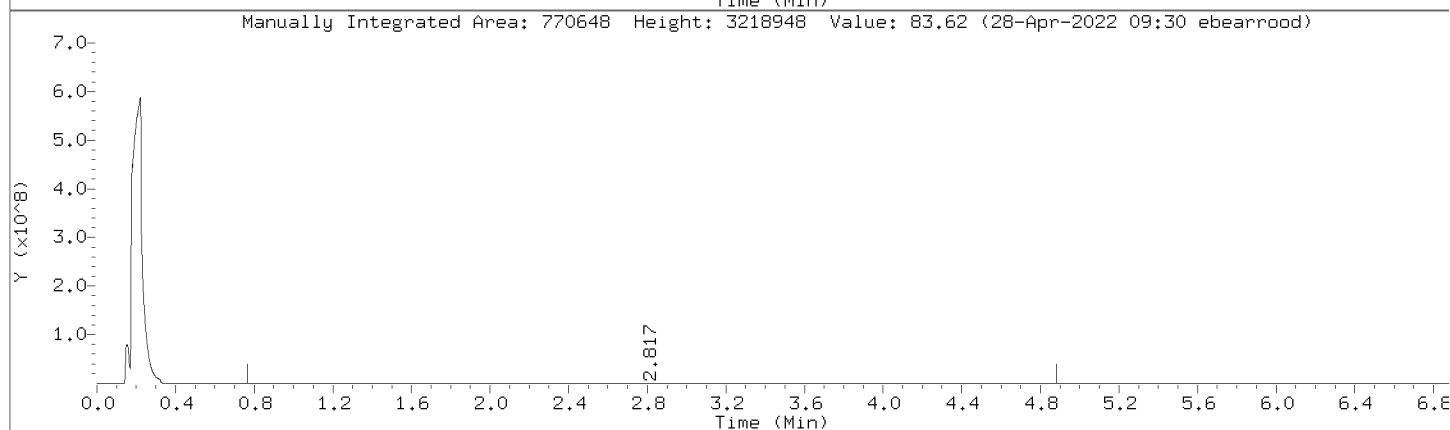
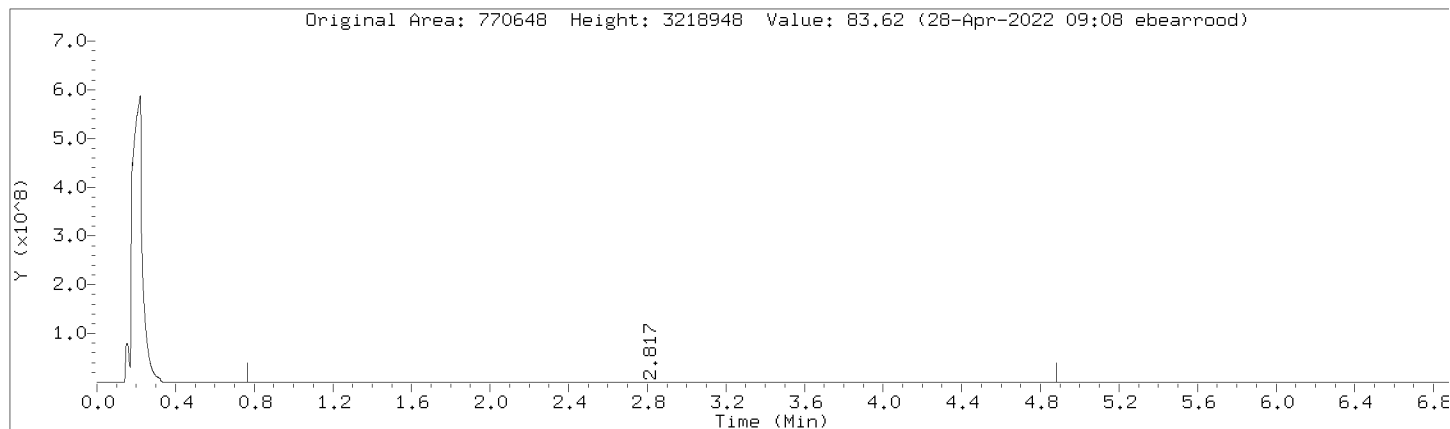
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Injection Date: 27-APR-2022 15:49  
Instrument: 10gcsF.i  
Lab Sample ID: 4303622

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



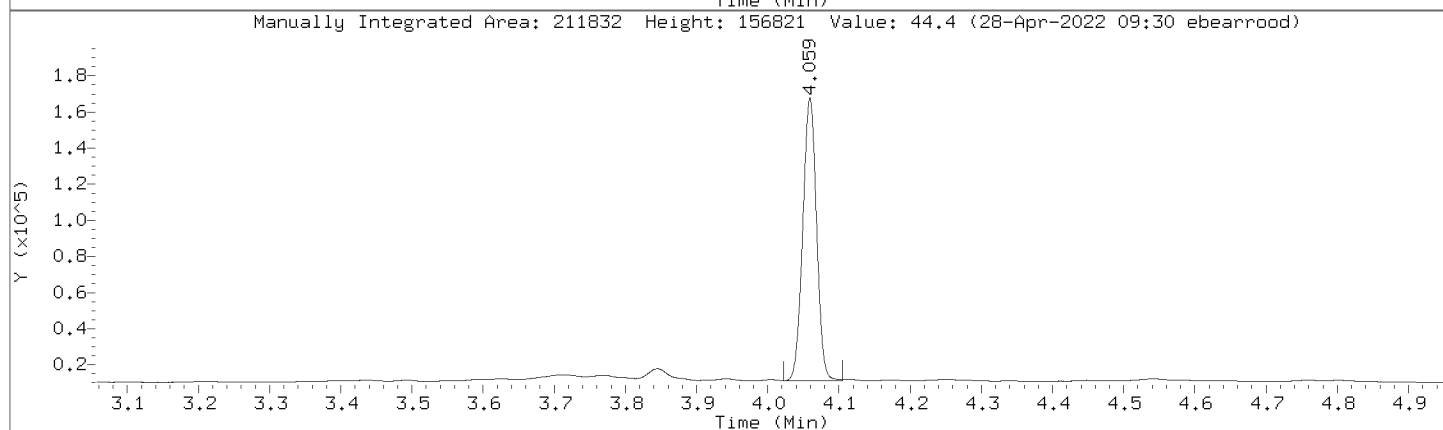
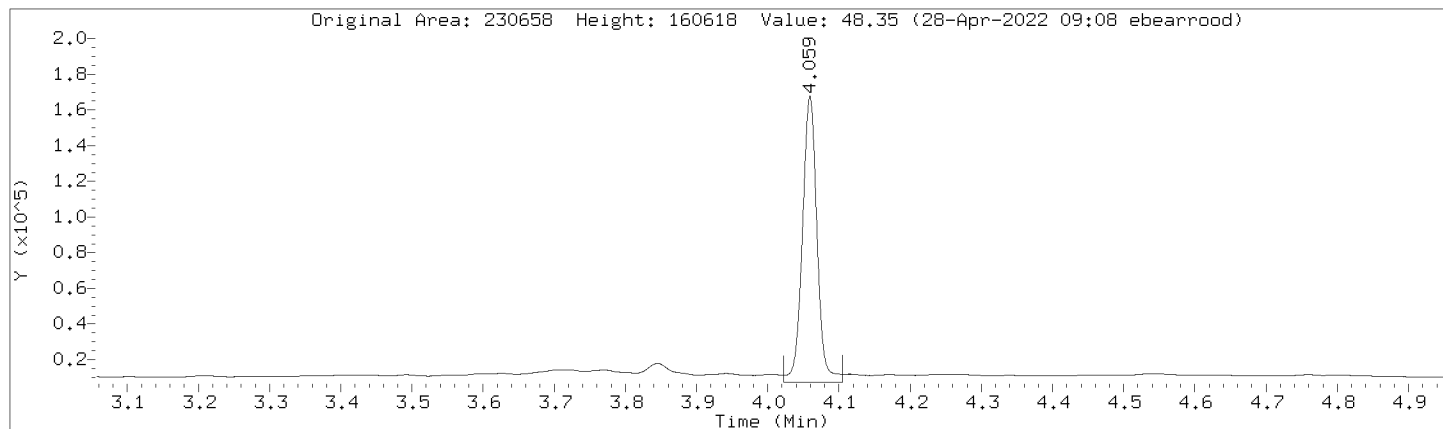
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Injection Date: 27-APR-2022 15:49  
Instrument: 10gcsF.i  
Lab Sample ID: 4303622

Compound: C10-C36      Review Code: RNG  
CAS Number:



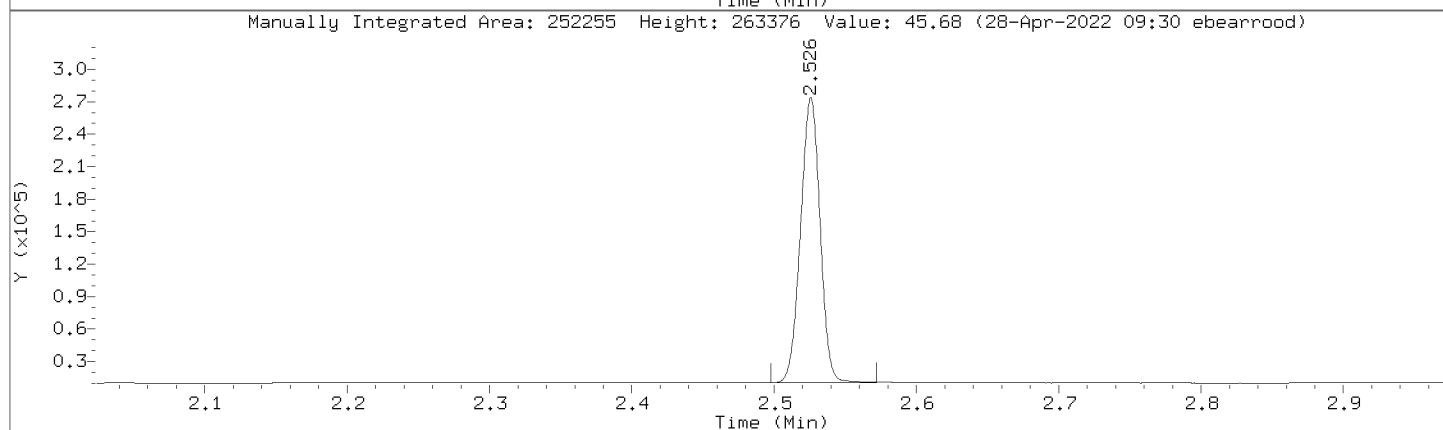
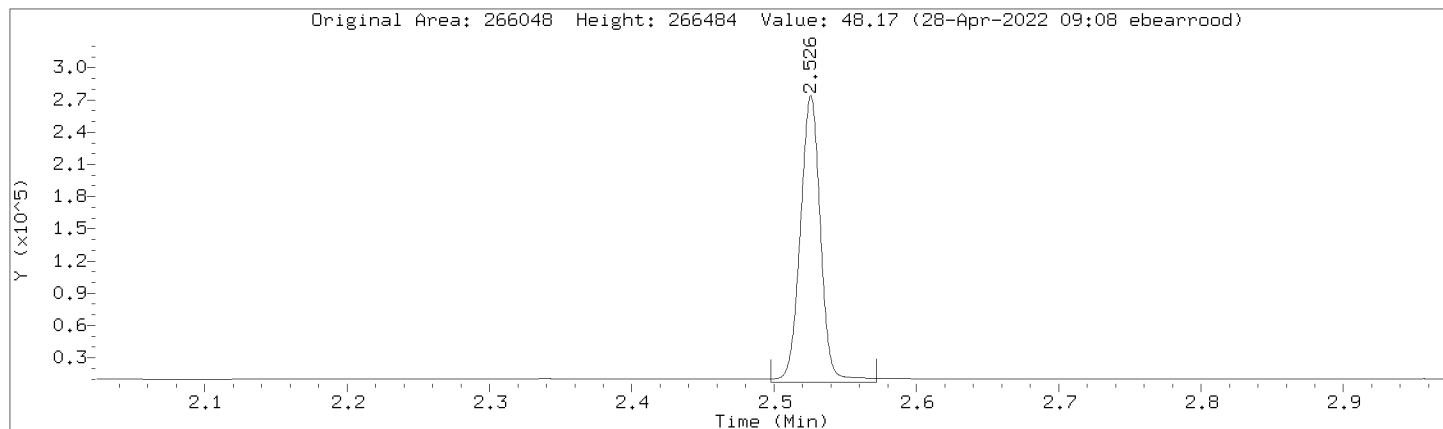
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Injection Date: 27-APR-2022 15:49  
Instrument: 10gcsF.i  
Lab Sample ID: 4303622

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000023.D  
 Injection Date: 27-APR-2022 15:49  
 Instrument: 10gcsF.i  
 Lab Sample ID: 4303622

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	363202	363202
DRO by AK 102	407445	407445
TPH-DRO (C10-C28)	580220	580220
Motor Oil Range (C24-C36)	391986	391986
Diesel Fuel Range	368873	368873
Motor Oil Range	419897	419897
Diesel Fuel Range SG	368873	368873
Motor Oil Range SG	419897	419897
C10-C36	770648	770648
n-Triacontane (S)	230658	211832
o-Terphenyl (S)	266048	252255

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

LCS

Lab Name: Pace Analytical - Minnesota  
Date Received: \_\_\_\_\_  
Date Extracted: 04/26/2022 10:34  
Date Analyzed: 04/27/2022 16:00  
Initial wt/vol: 10 g Final wt/vol: 1 mL Dilution: 1

Contract: D3593500  
Matrix: Solid SDG No.: 10605661  
Lab Sample ID: 4303623  
Lab File ID: 042722F.B\0427F0000024.D  
Instrument: 10GCSF Percent Moisture: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	43.1	
	Motor Oil Range	45.8	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000024.D  
 Lab Smp Id: 4303623 Client Smp ID: MBLCS  
 Inj Date : 27-APR-2022 16:00  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : 4303623  
 Misc Info : 39215  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722F.b\GCSFakNW8015-042622\_3918  
 Meth Date : 28-Apr-2022 09:09 ebearrood Quant Type: ESTD  
 Cal Date : 26-APR-2022 07:55 Cal File: 0426F0000004.D  
 Als bottle: 19 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10MNLABS0070

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
S 1	DRO by AK 102					CAS #:
0.755	- 3.420		2534350	417.968		41.8 (M) RNG
\$ 2	o-Terphenyl (S)					CAS #:
2.525	2.524	0.001	240551	43.5576		4.36 (M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.059	4.057	0.002	204268	42.8173		4.28 (M) BA
S 4	Residual Range Organics AK103					CAS #:
3.421	- 4.880		1610945	468.270		46.8 (M) RNG
S 5	TPH-DRO (C10-C28)					CAS #:
0.755	- 4.000		2935150	424.086		42.4 (M) RNG
S 6	Motor Oil Range (C24-C36)					CAS #:
3.280	- 4.880		1689138	473.433		47.3 (M) RNG

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			ON-COL RESPONSE (ug/mL)	FINAL (mg/Kg)	
S 7	C10-C36			CAS #:	
0.755	- 4.880		4145295 874.128	87.4	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.200	- 3.470		2205982 430.714	43.1	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.200	- 3.470		2205982 430.714	43.1	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.471	- 5.370		1943928 458.412	45.8	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.471	- 5.370		1943928 458.412	45.8	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

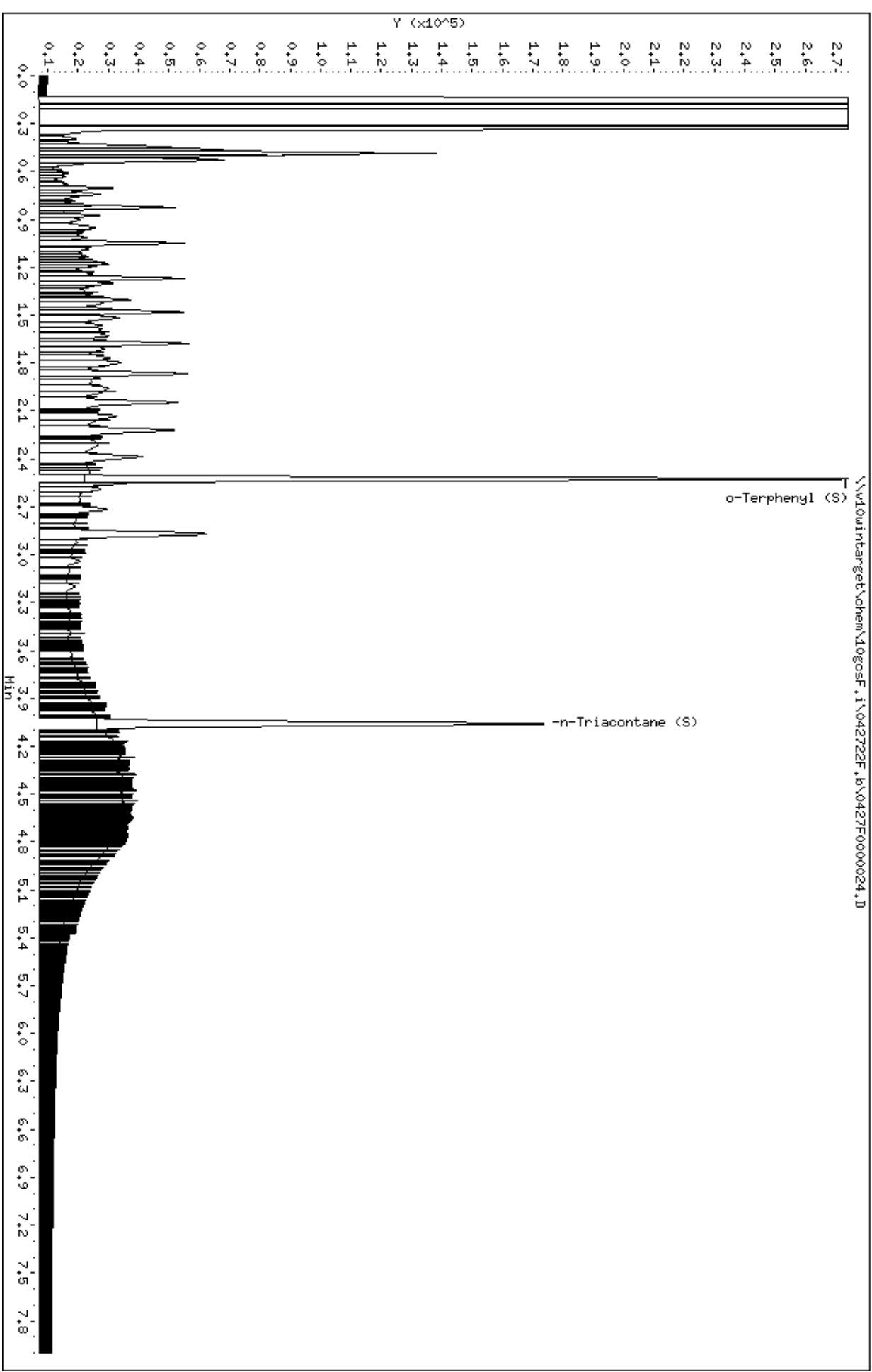
Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Data File: \\10win\target\chem\10gocsf.1\042722F.1\0427F0000024.D  
Date : 27-APR-2022 16:00  
Client ID: HBLCS  
Sample Info: 4303623  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21250010

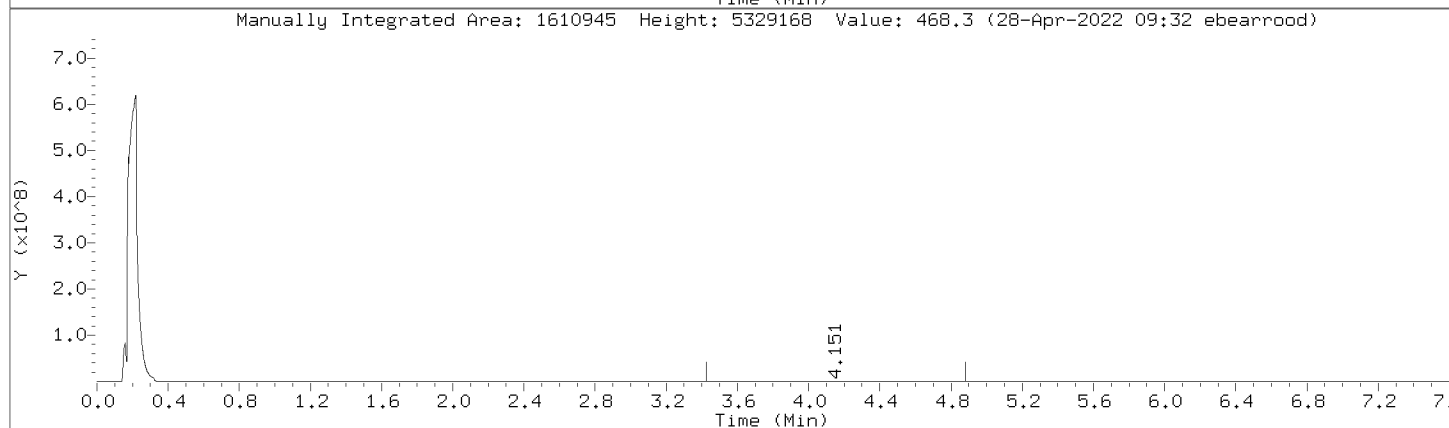
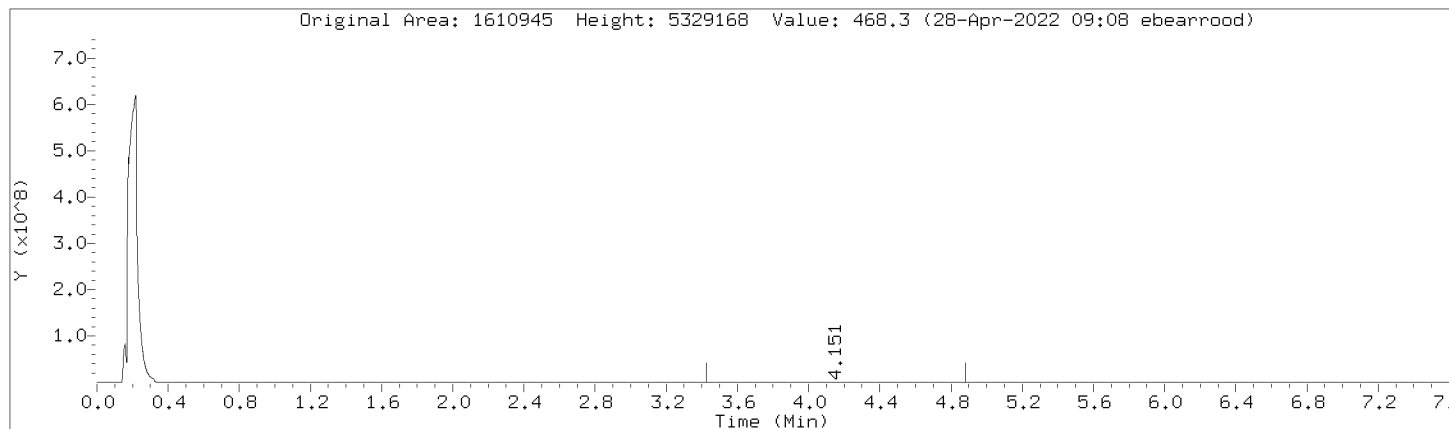
Instrument: 10gocsf.1  
Operator: EBS  
Column diameter: 0.32





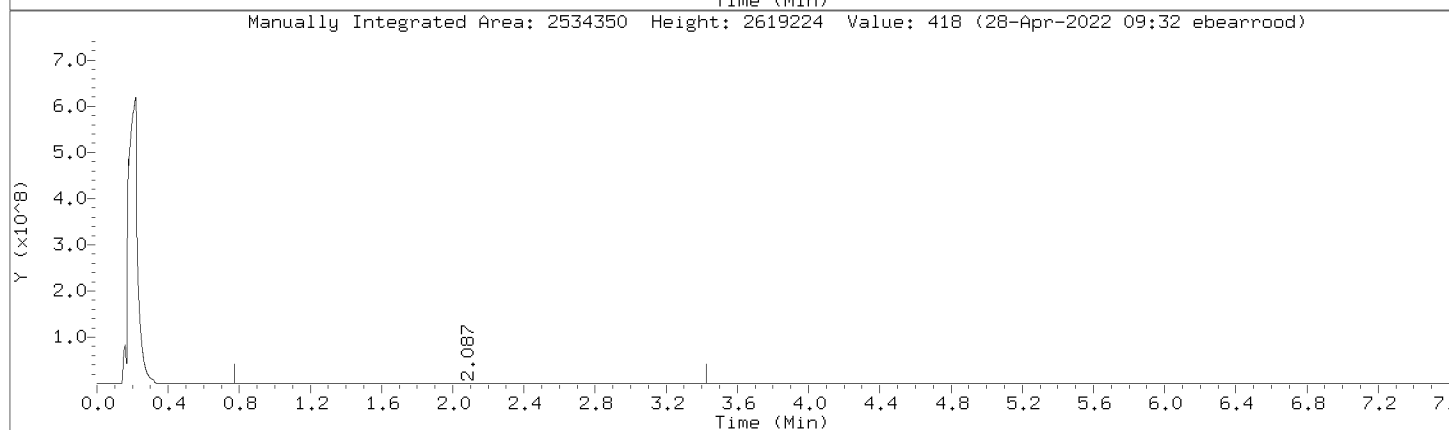
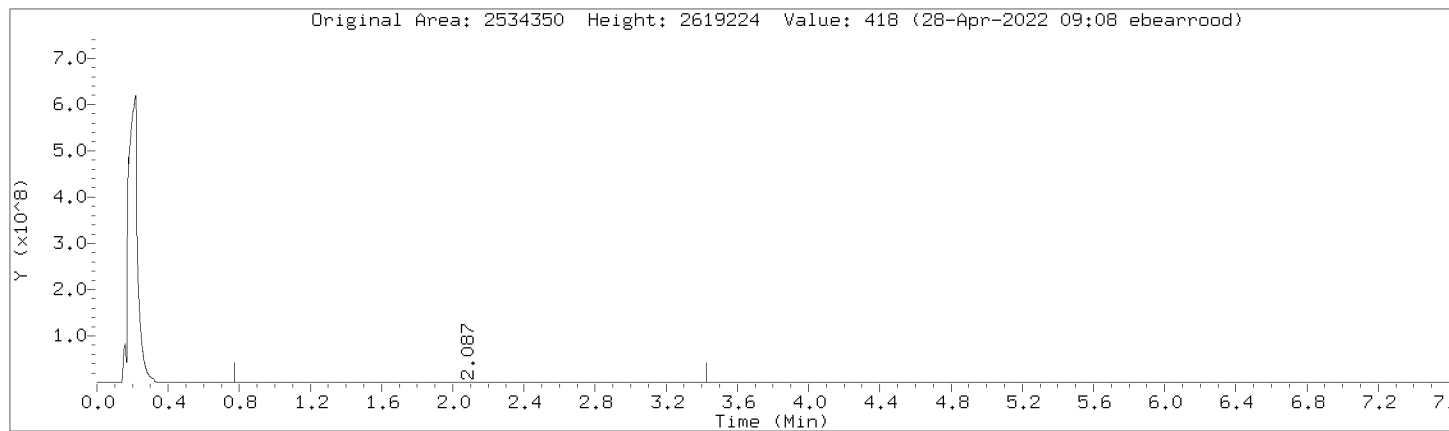
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000024.D  
Injection Date: 27-APR-2022 16:00  
Instrument: 10gcsF.i  
Lab Sample ID: 4303623

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



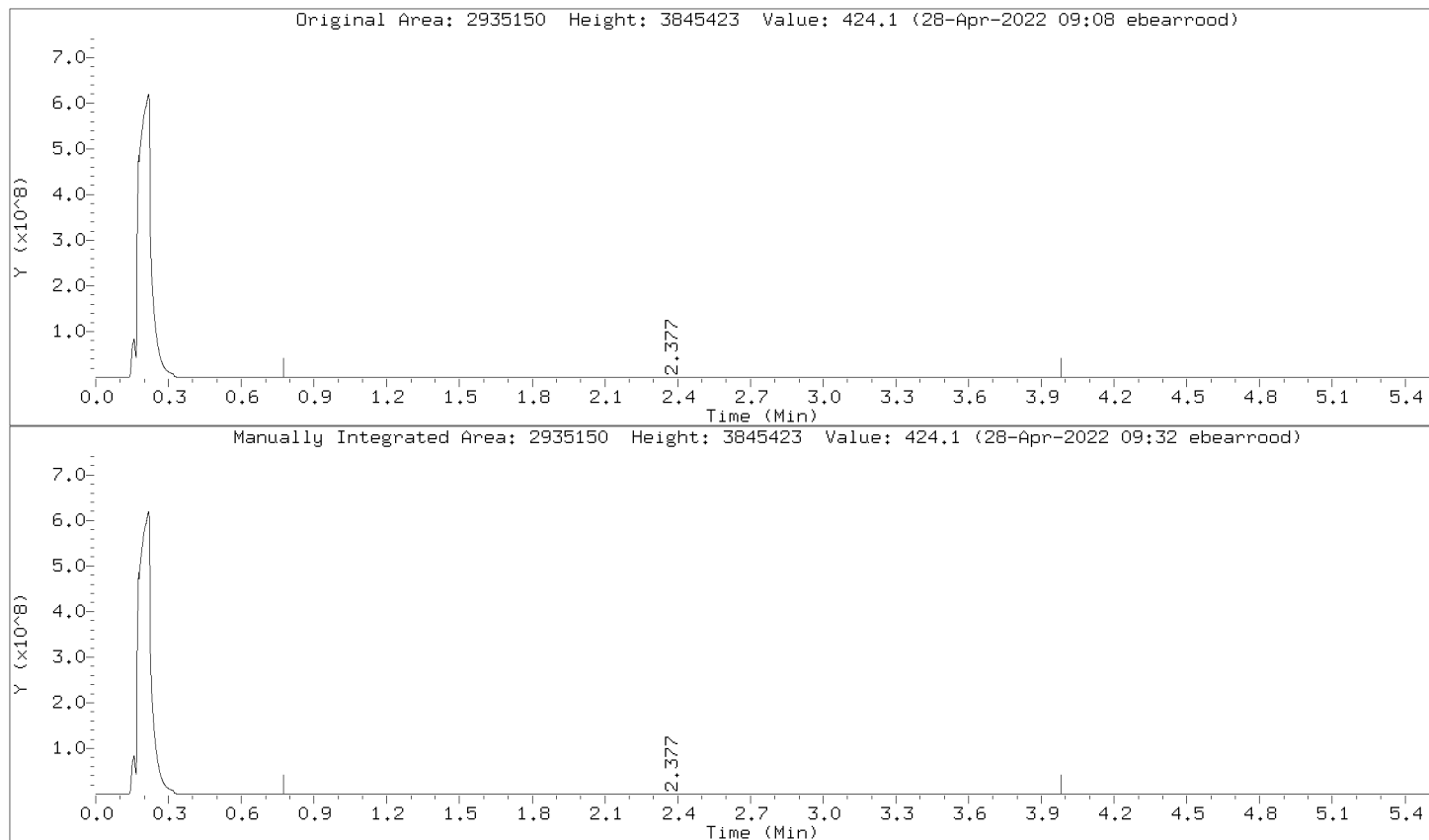
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000024.D  
Injection Date: 27-APR-2022 16:00  
Instrument: 10gcsF.i  
Lab Sample ID: 4303623

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



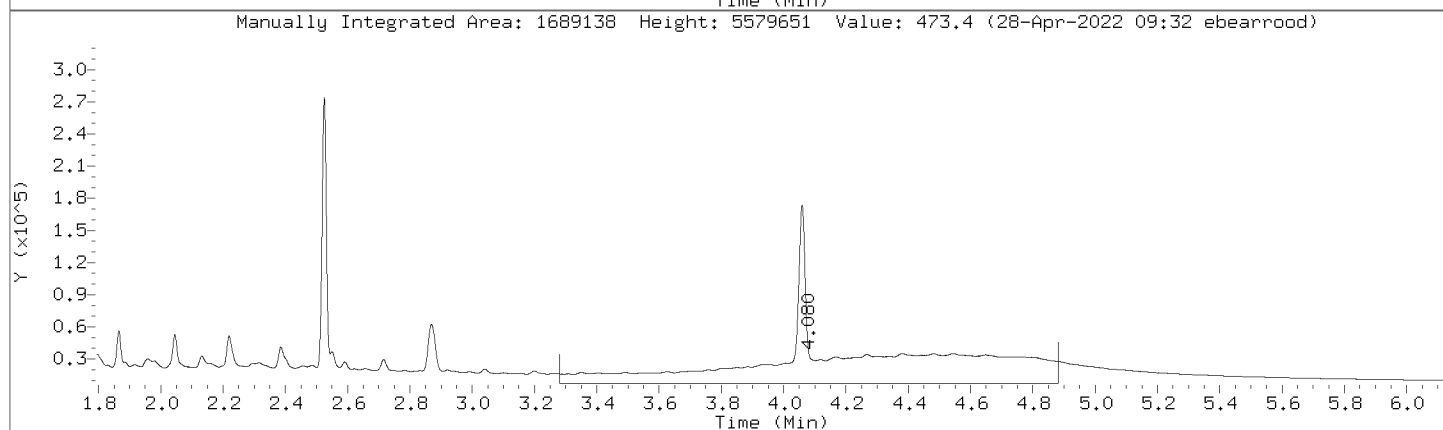
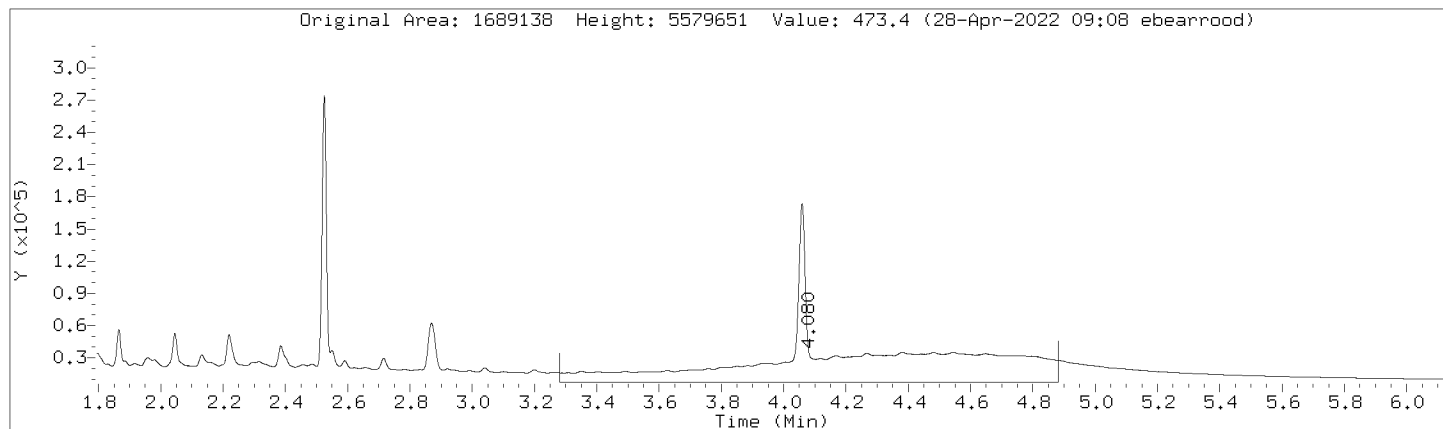
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000024.D  
Injection Date: 27-APR-2022 16:00  
Instrument: 10gcsF.i  
Lab Sample ID: 4303623

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



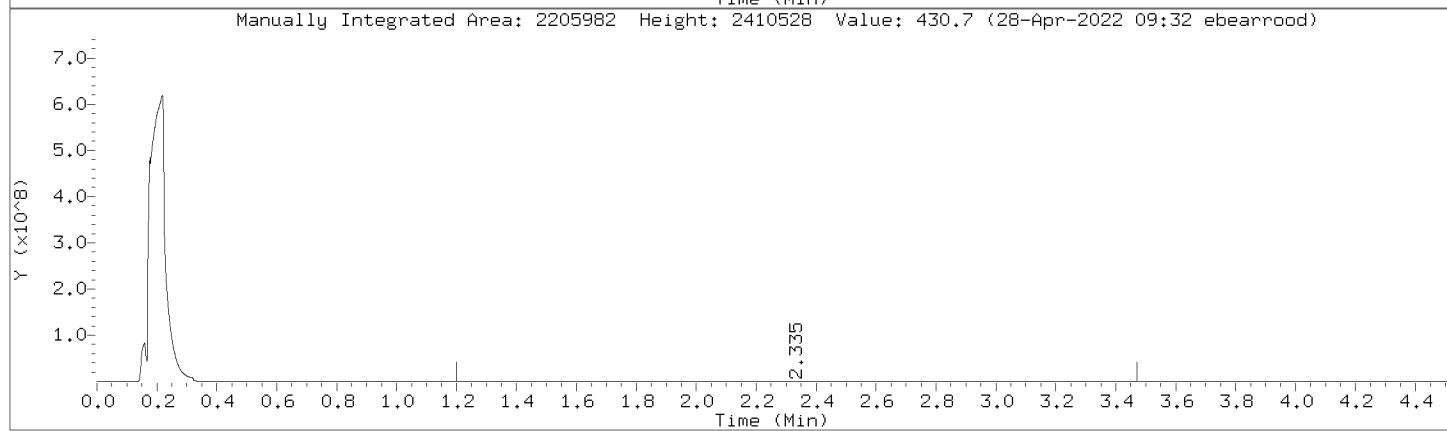
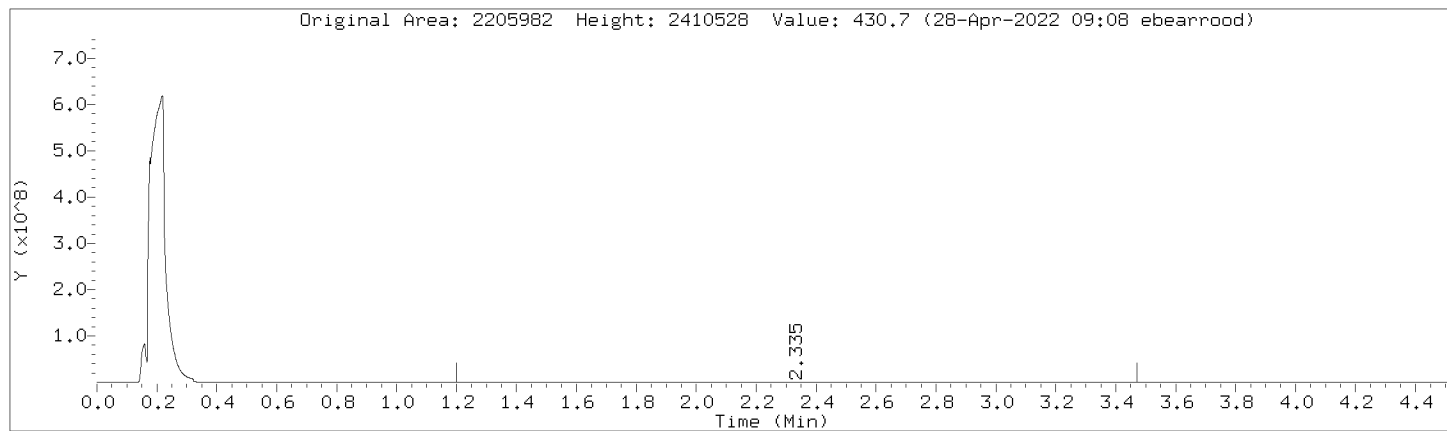
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000024.D  
Injection Date: 27-APR-2022 16:00  
Instrument: 10gcsF.i  
Lab Sample ID: 4303623

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



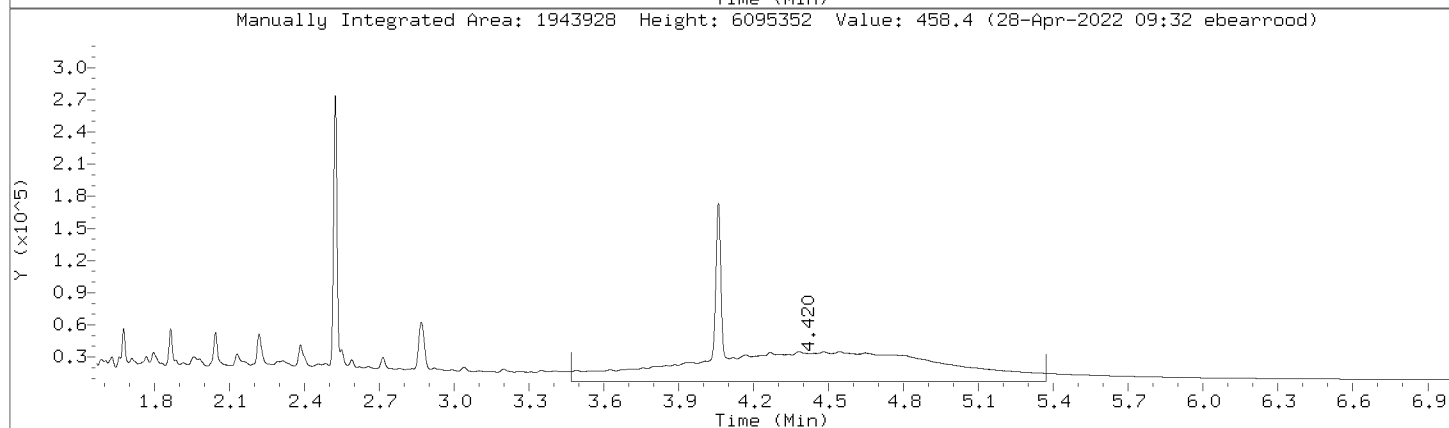
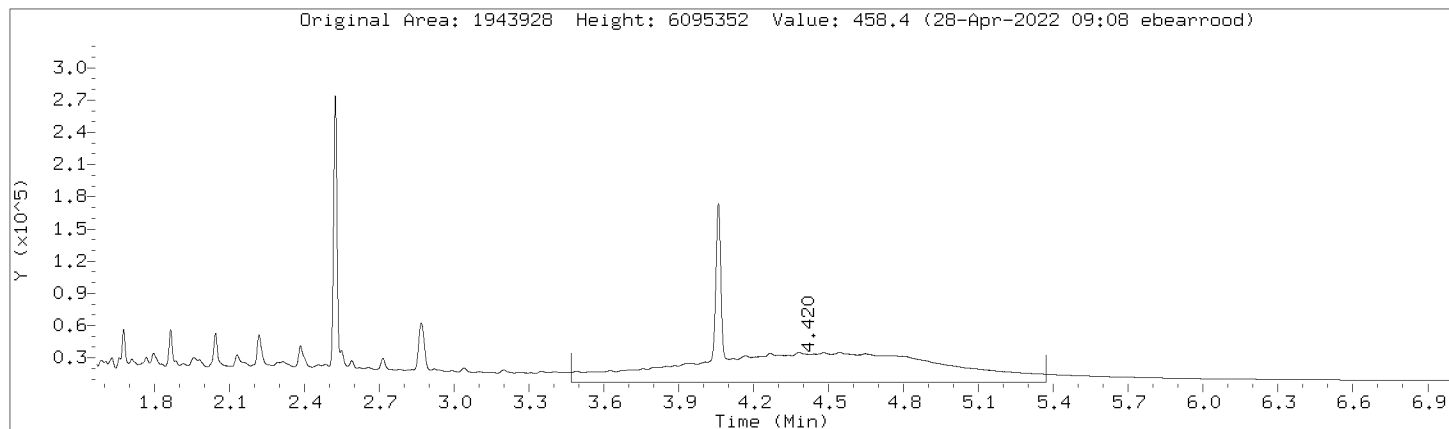
Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000024.D  
Injection Date: 27-APR-2022 16:00  
Instrument: 10gcsF.i  
Lab Sample ID: 4303623

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



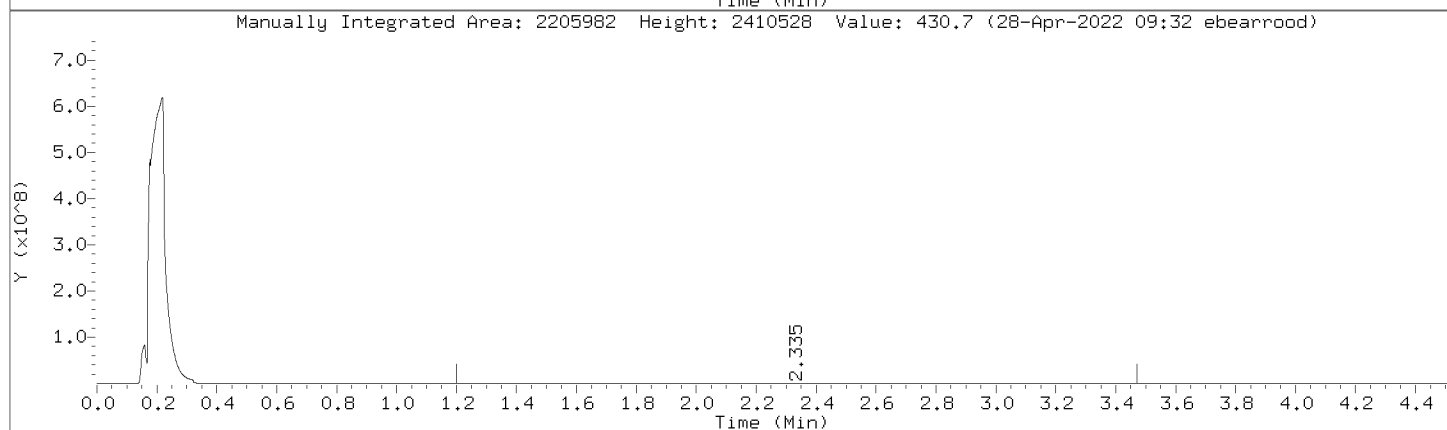
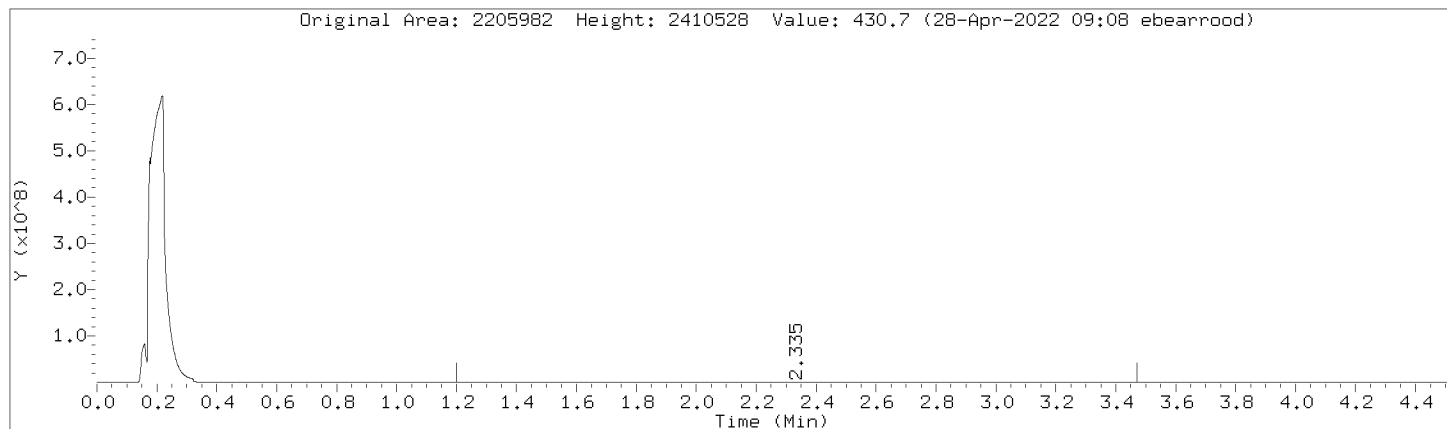
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Injection Date: 27-APR-2022 16:00  
Instrument: 10gcsF.i  
Lab Sample ID: 4303623

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



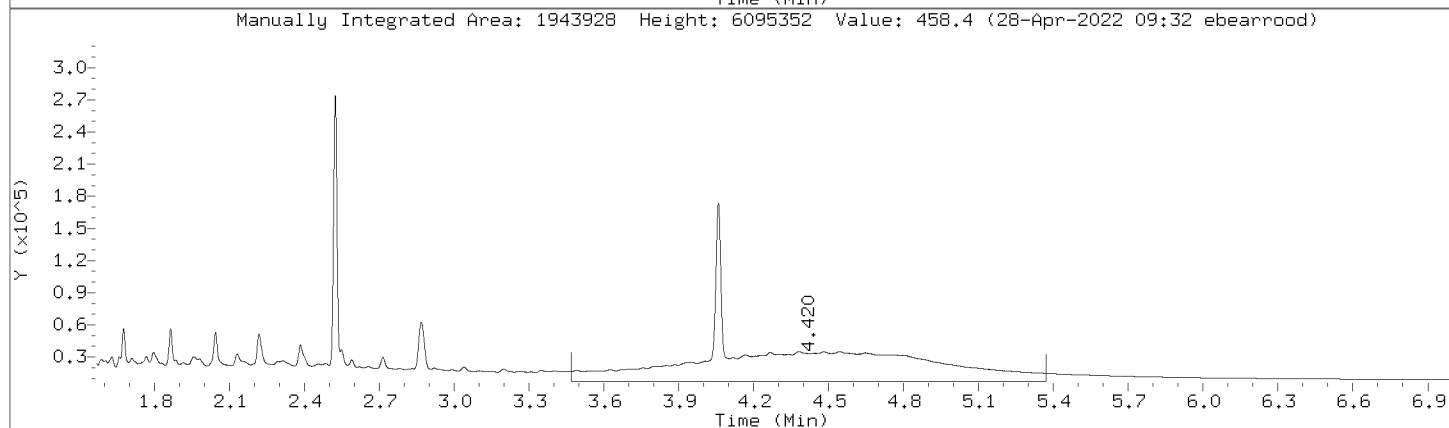
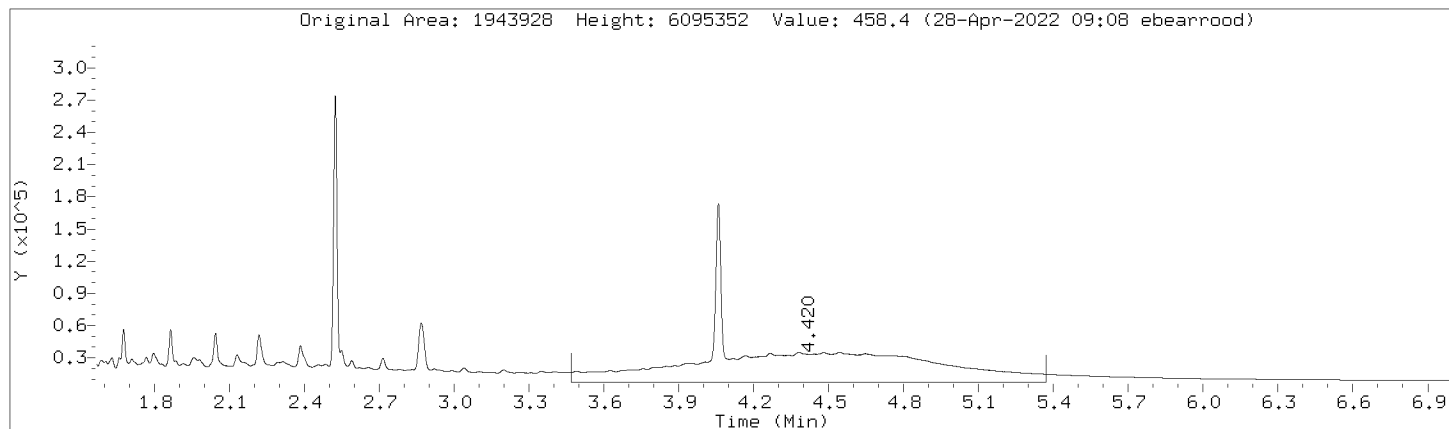
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Injection Date: 27-APR-2022 16:00  
Instrument: 10gcsF.i  
Lab Sample ID: 4303623

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



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Injection Date: 27-APR-2022 16:00  
Instrument: 10gcsF.i  
Lab Sample ID: 4303623

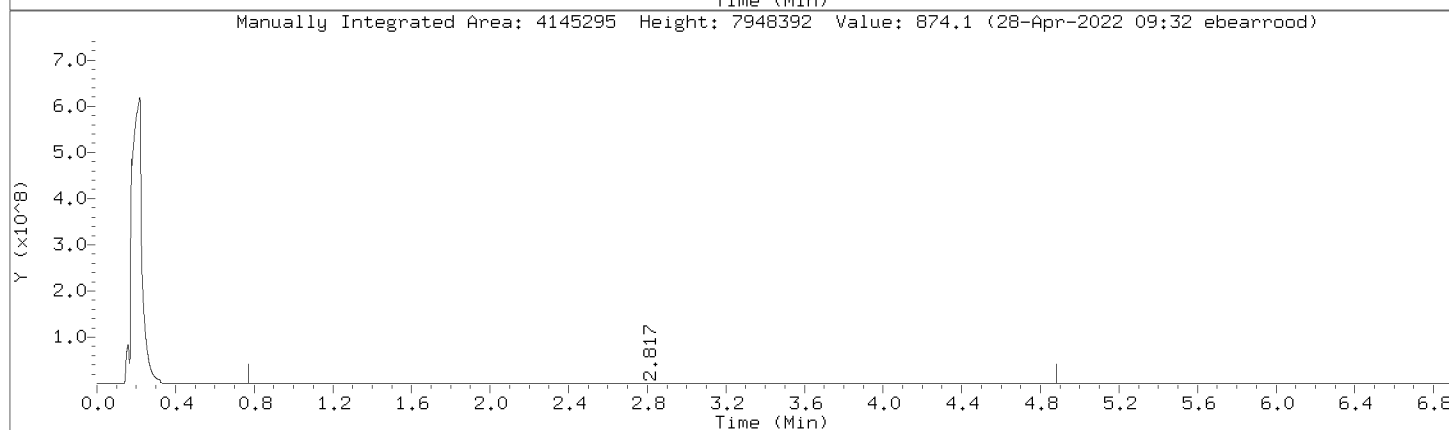
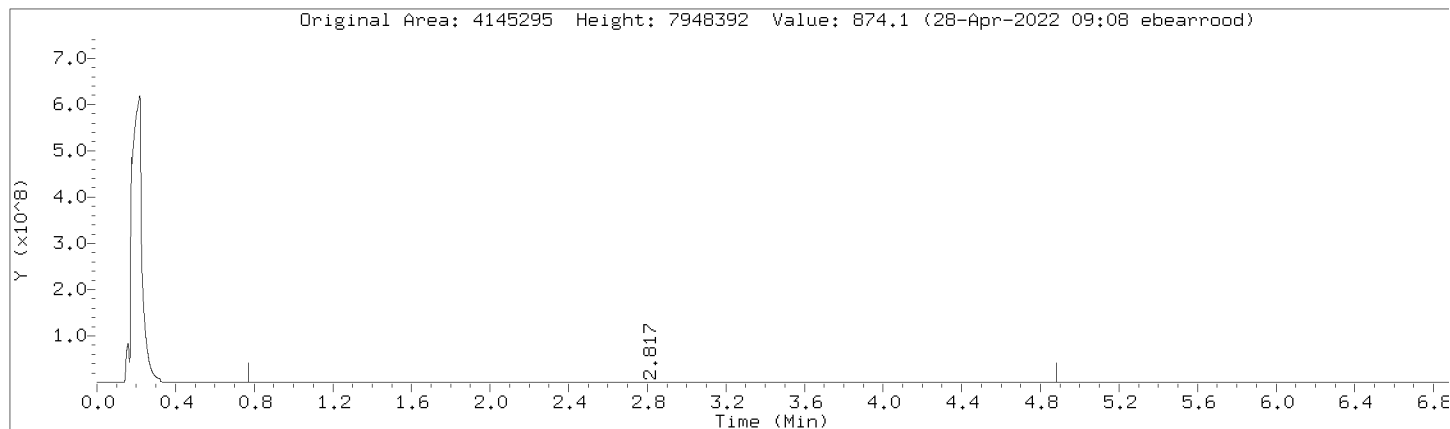
Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





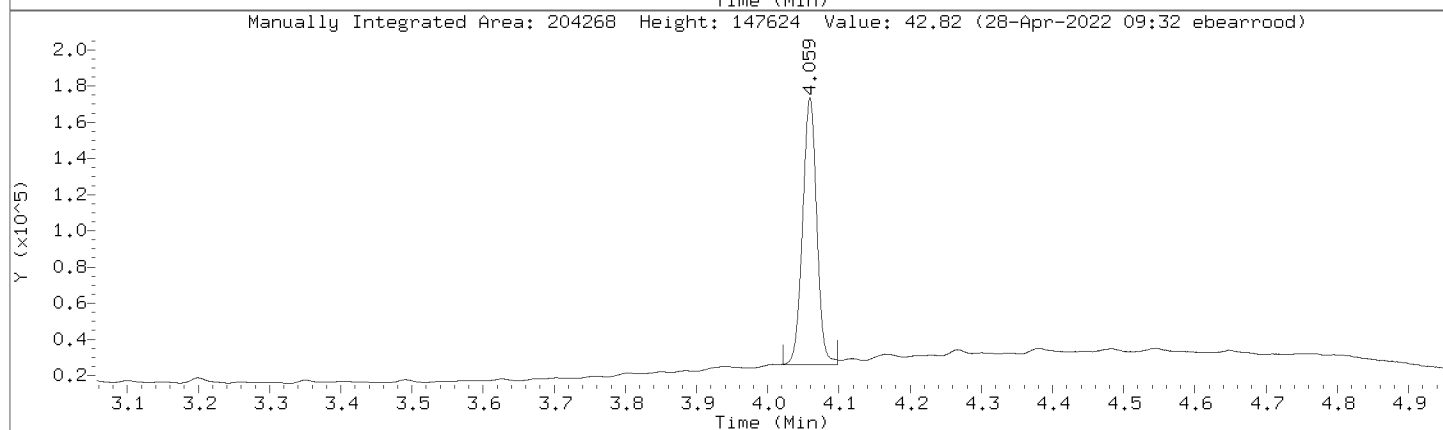
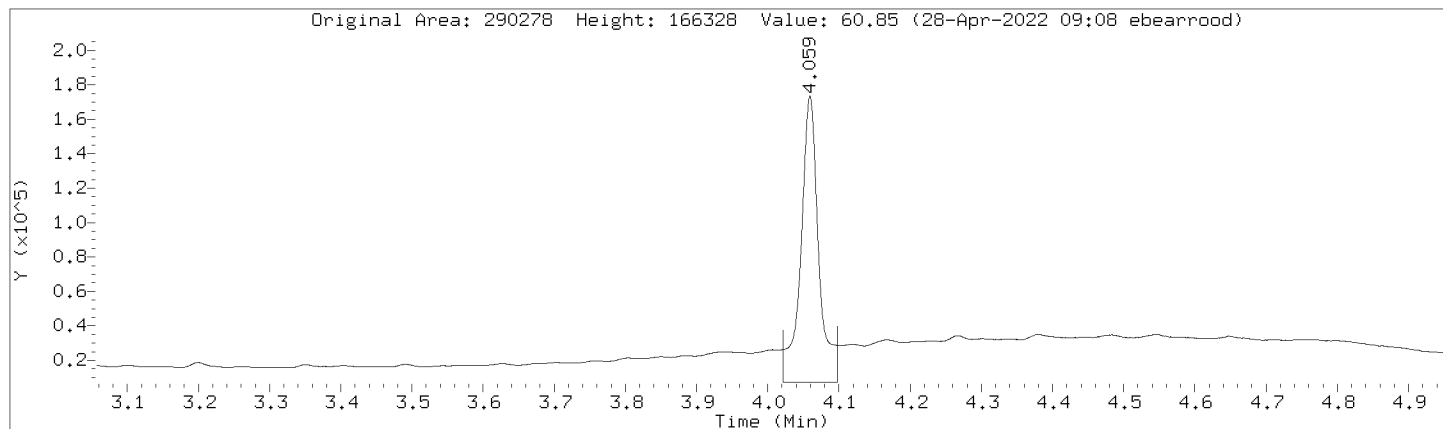
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Injection Date: 27-APR-2022 16:00  
Instrument: 10gcsF.i  
Lab Sample ID: 4303623

Compound: C10-C36      Review Code: RNG  
CAS Number:



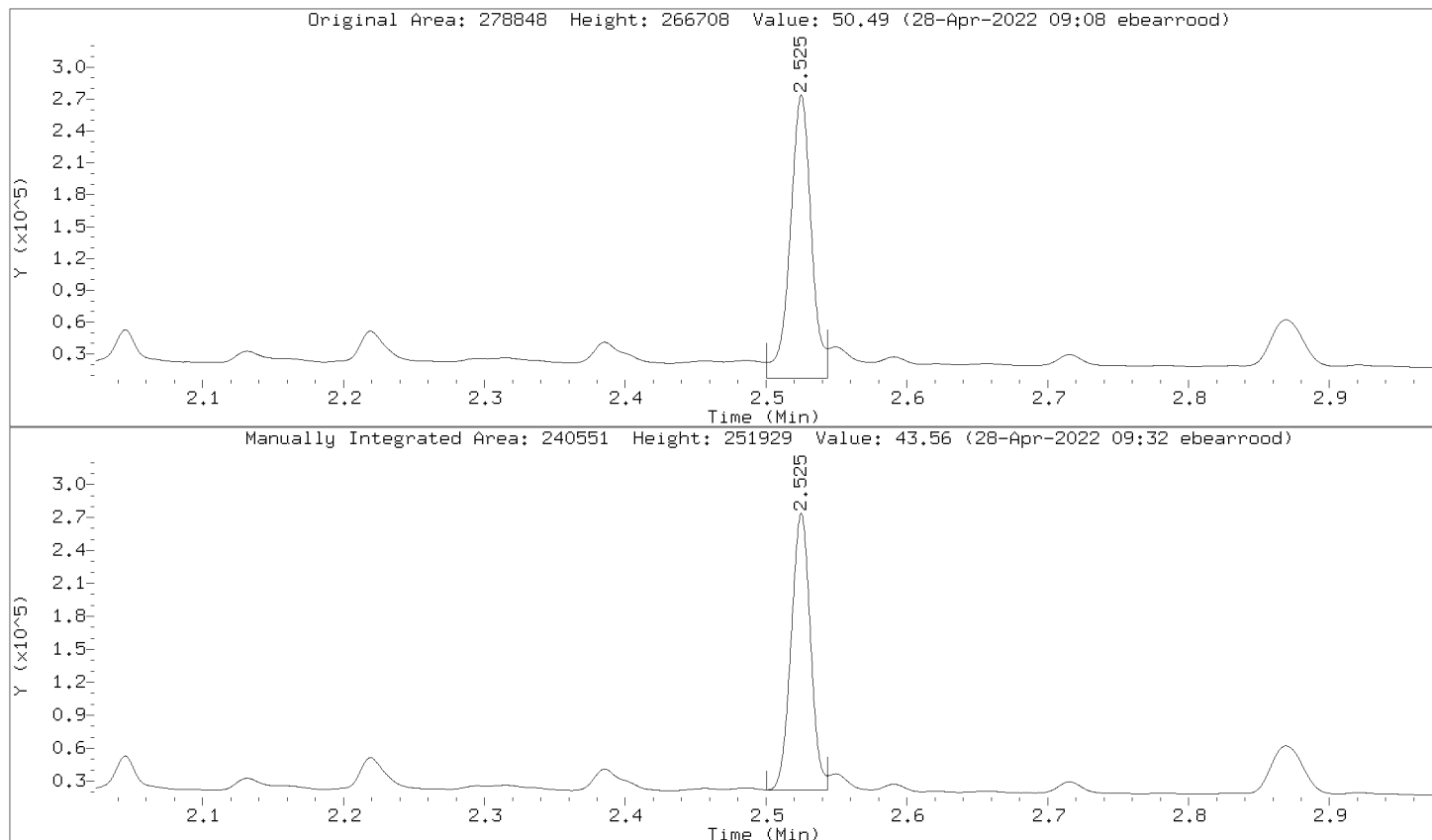
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Injection Date: 27-APR-2022 16:00  
Instrument: 10gcsF.i  
Lab Sample ID: 4303623

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722F.b\0427F0000024.D  
 Injection Date: 27-APR-2022 16:00  
 Instrument: 10gcsF.i  
 Lab Sample ID: 4303623

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1610945	1610945
DRO by AK 102	2534350	2534350
TPH-DRO (C10-C28)	2935150	2935150
Motor Oil Range (C24-C36)	1689138	1689138
Diesel Fuel Range	2205982	2205982
Motor Oil Range	1943928	1943928
Diesel Fuel Range SG	2205982	2205982
Motor Oil Range SG	1943928	1943928
C10-C36	4145295	4145295
n-Triacontane (S)	290278	204268
o-Terphenyl (S)	278848	240551

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

MS

Lab Name: Pace Analytical - Minnesota  
Date Received: 04/23/2022 09:00  
Date Extracted: 04/26/2022 10:34  
Date Analyzed: 05/04/2022 12:41  
Initial wt/vol: 10.03 g Final wt/vol: 1 mL Dilution: 1

Contract: D3593500  
Matrix: Solid SDG No.: 10605661  
Lab Sample ID: 4303624  
Lab File ID: 050422R.B\0504R0000012.D  
Instrument: 10GCSF Percent Moisture: 33.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	78.9	
	Motor Oil Range	106	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000012.D  
 Lab Smp Id: 4303624 Client Smp ID: BNSF-BG13-042122-0-  
 Inj Date : 04-MAY-2022 12:41  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 4303624  
 Misc Info : 39215  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050422R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 05-May-2022 11:33 tthao Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 10 QC Sample: MS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.030	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	33.062	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE	ON-COL	FINAL	REVIEW CODE
				(ug/mL)	(mg/Kg)	
====	=====	=====	=====	=====	=====	=====
\$ 2	o-Terphenyl (S)				CAS #:	
2.715	2.715	0.000	286497	42.7872	6.37	(M) BA
\$ 3	n-Triacontane (S)				CAS #:	
4.250	4.255	-0.005	236595	45.1633	6.73	(M) BA
S 10	Motor Oil Range				CAS #:	
3.641	- 6.100		3256432	712.035	106	(M) RNG
S 11	Motor Oil Range SG				CAS #:	
3.641	- 6.100		3256432	712.035	106	(M) RNG
S 8	Diesel Fuel Range				CAS #:	
1.340	- 3.640		2861646	529.449	78.8	(M) RNG
S 9	Diesel Fuel Range SG				CAS #:	
1.340	- 3.640		2861646	529.449	78.8	(M) RNG

QC Flag Legend

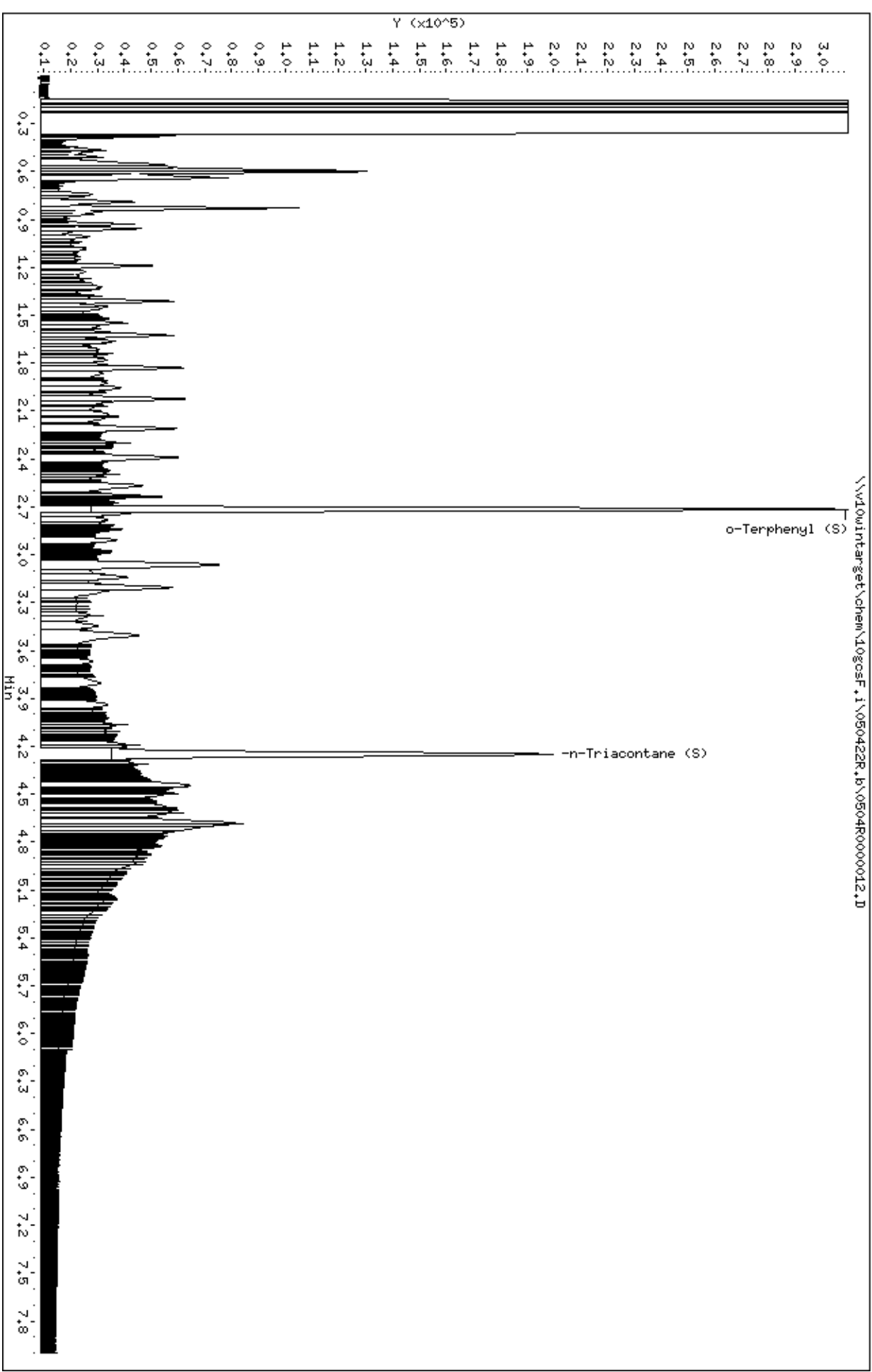
M - Compound response manually integrated.

Review Codes Legend

- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.

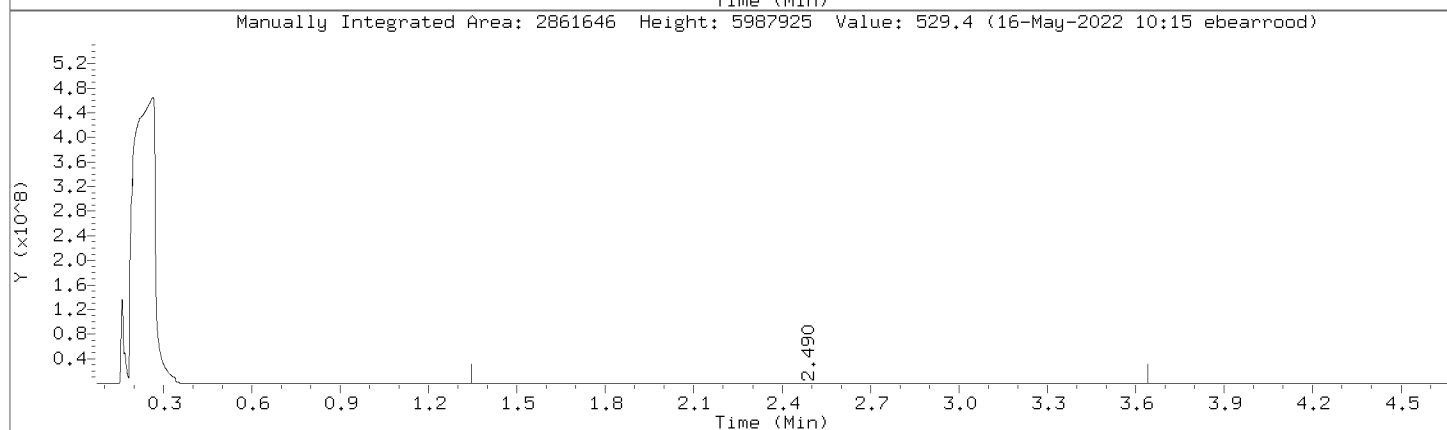
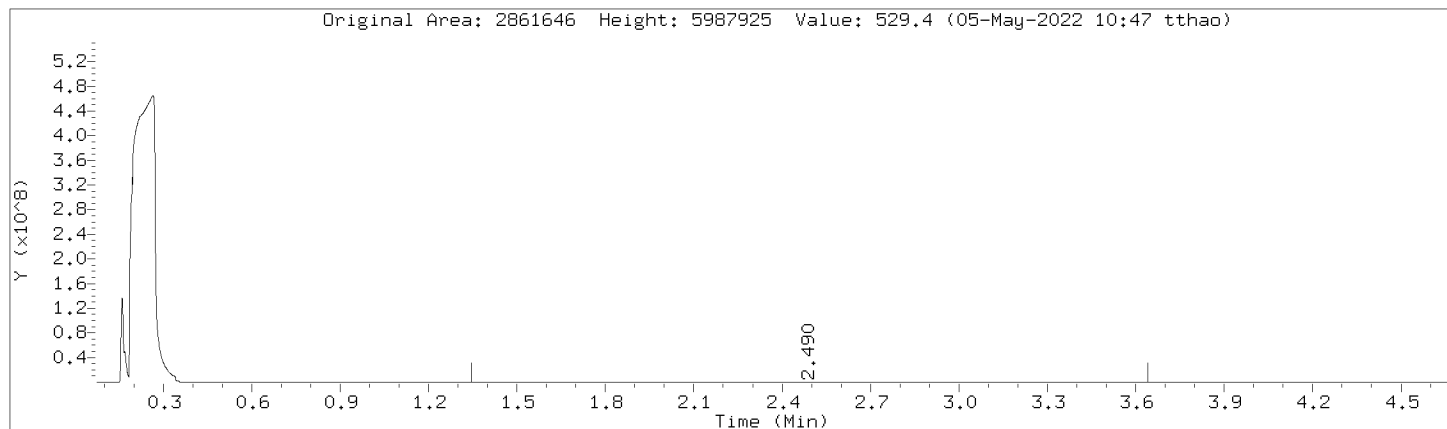
Data File: \\10win\target\chem\10gcsf.1\050422R.b\0504R0000012.D  
Date: 04-MAY-2022 12:41  
Client ID: BNSF-BGL3-042122-0-  
Sample Info: 4303624  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21430033

Instrument: 10gcsf.1  
Operator: TT2  
Column diameter: 0.32



Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000012.D  
Injection Date: 04-MAY-2022 12:41  
Instrument: 10gcsF.i  
Lab Sample ID: 4303624

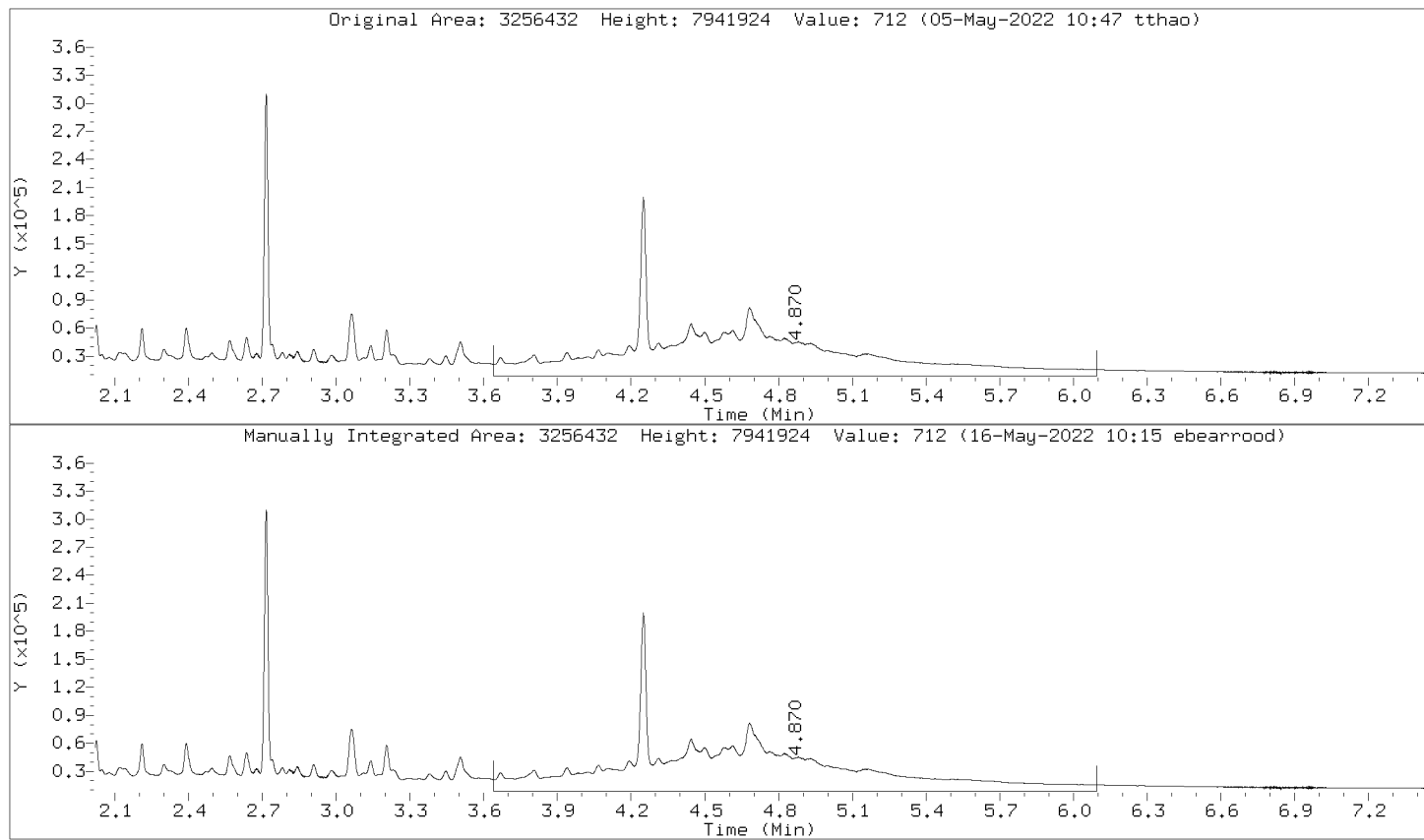
Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:





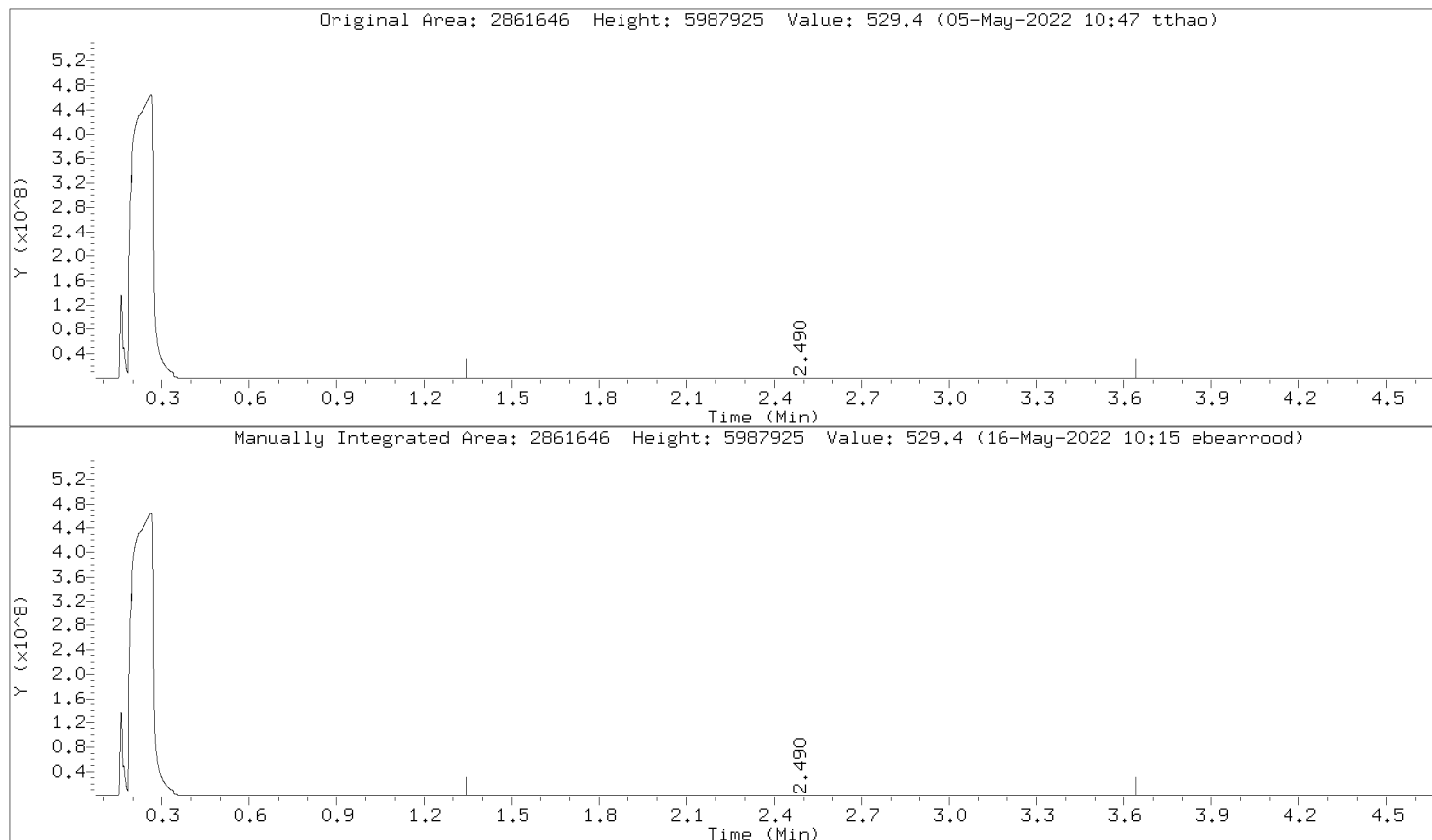
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Injection Date: 04-MAY-2022 12:41  
Instrument: 10gcsF.i  
Lab Sample ID: 4303624

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



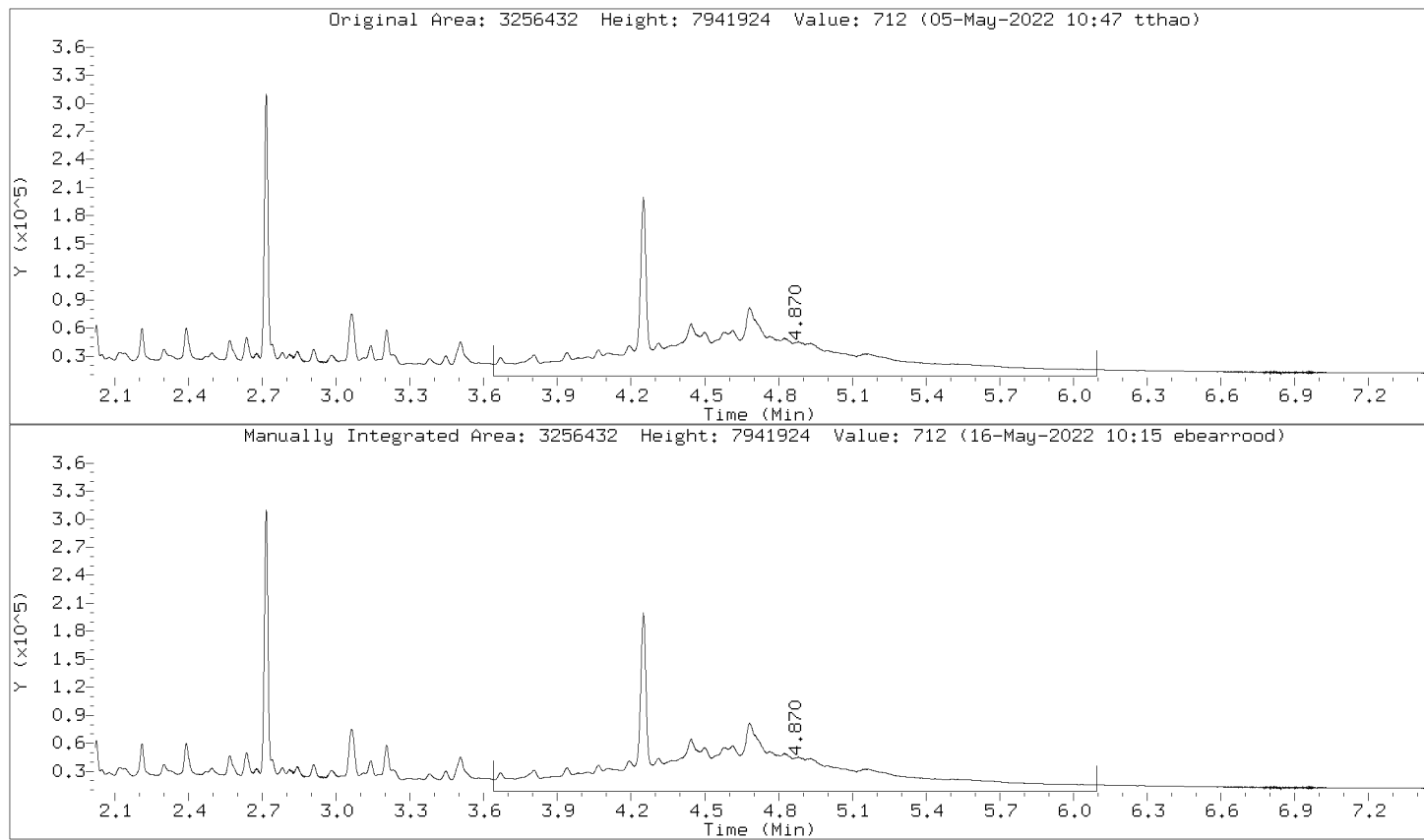
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Injection Date: 04-MAY-2022 12:41  
Instrument: 10gcsF.i  
Lab Sample ID: 4303624

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



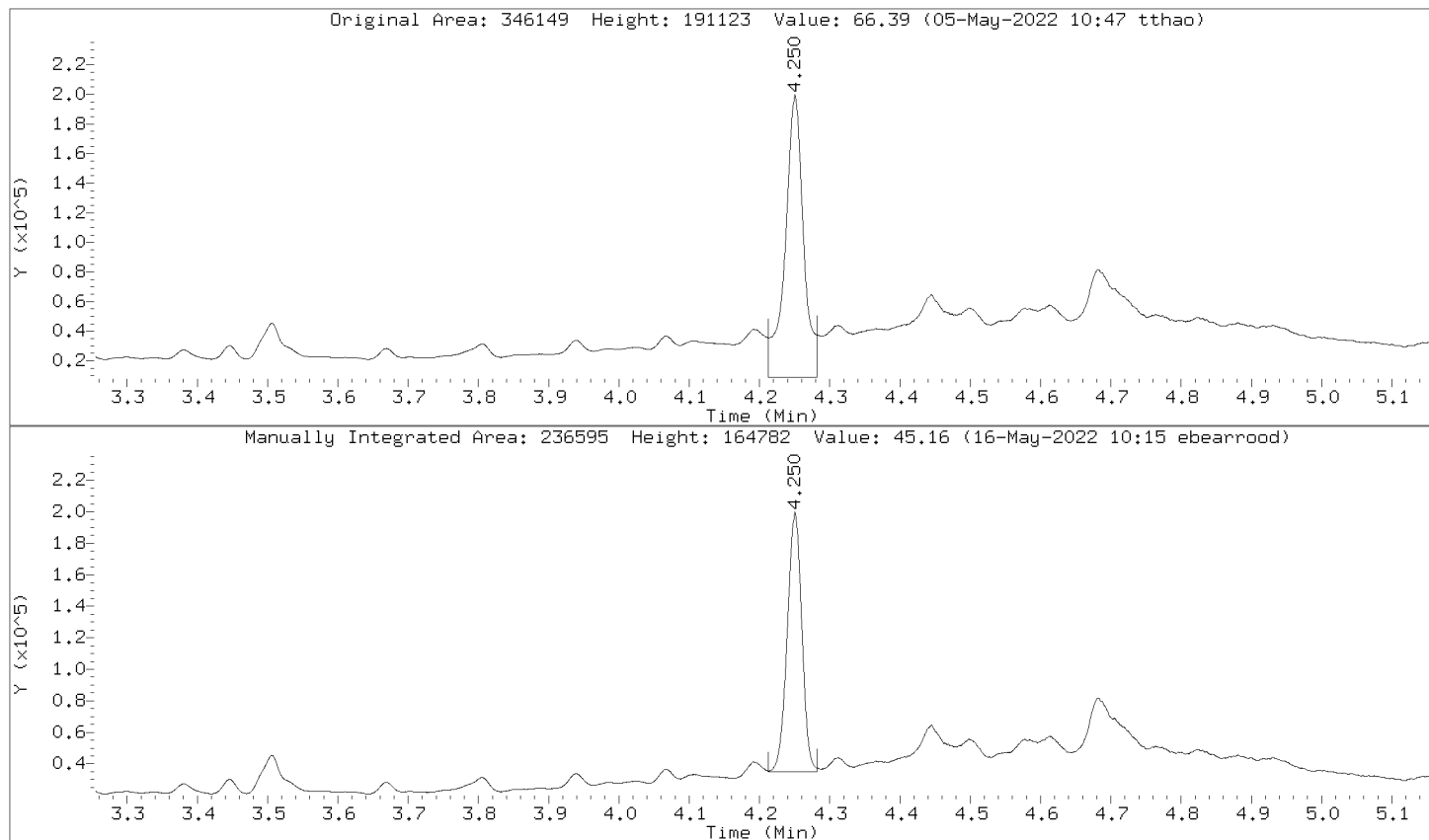
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Injection Date: 04-MAY-2022 12:41  
Instrument: 10gcsF.i  
Lab Sample ID: 4303624

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



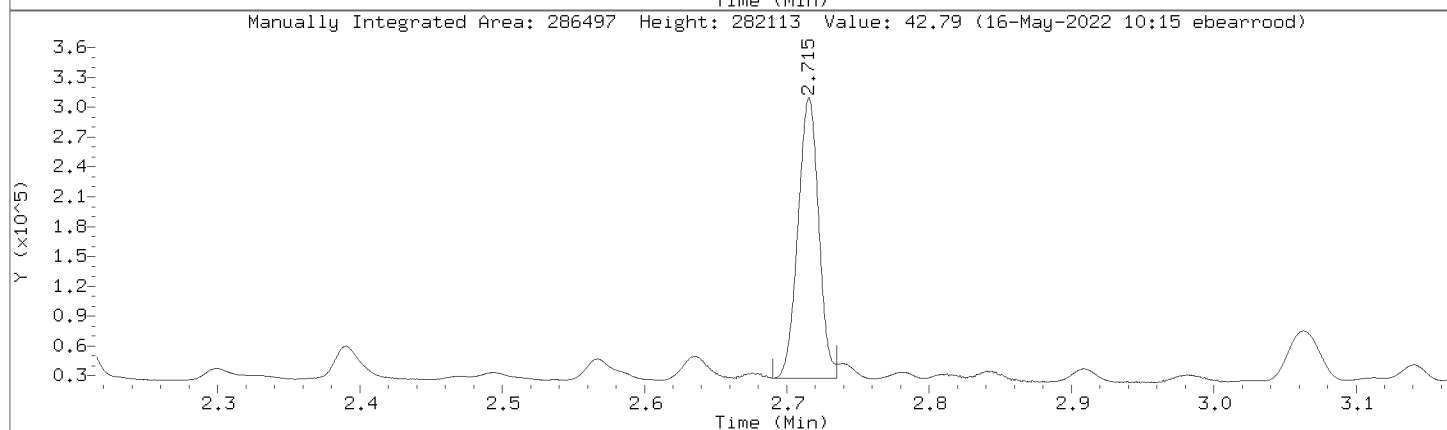
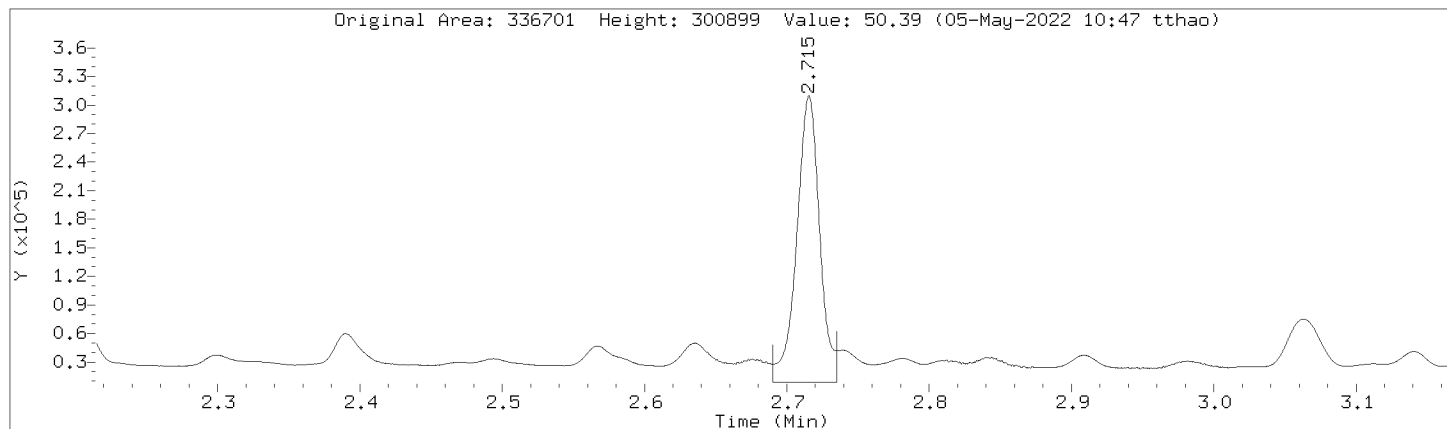
Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000012.D  
Injection Date: 04-MAY-2022 12:41  
Instrument: 10gcsF.i  
Lab Sample ID: 4303624

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000012.D  
 Injection Date: 04-MAY-2022 12:41  
 Instrument: 10gcsF.i  
 Lab Sample ID: 4303624

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	2861646	2861646
Motor Oil Range	3256432	3256432
Diesel Fuel Range SG	2861646	2861646
Motor Oil Range SG	3256432	3256432
n-Triacontane (S)	346149	236595
o-Terphenyl (S)	336701	286497

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

MSD

Lab Name: Pace Analytical - Minnesota Contract: D3593500  
Date Received: 04/23/2022 09:00 Matrix: Solid SDG No.: 10605661  
Date Extracted: 04/26/2022 10:34 Lab Sample ID: 4303625  
Date Analyzed: 05/04/2022 12:50 Lab File ID: 050422R.B\0504R0000013.D  
Initial wt/vol: 10.04 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: 33.1%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	84.1	
	Motor Oil Range	117	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000013.D  
 Lab Smp Id: 4303625 Client Smp ID: BNSF-BG13-042122-0-  
 Inj Date : 04-MAY-2022 12:50  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 4303625  
 Misc Info : 39215  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050422R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 05-May-2022 11:33 tthao Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 11 QC Sample: MSD  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.040	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	33.062	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL		FINAL	REVIEW CODE
			RESPONSE	(ug/mL)	(mg/Kg)	
====	=====	=====	=====	=====	=====	=====
\$ 2	o-Terphenyl (S)				CAS #:	
2.716	2.715	0.001	295204	44.1058	6.56	(M) BA
\$ 3	n-Triacontane (S)				CAS #:	
4.252	4.255	-0.003	240422	45.9049	6.83	(M) BA
S 10	Motor Oil Range				CAS #:	
3.641	- 6.100		3577421	784.826	117	(RM) RNG
S 11	Motor Oil Range SG				CAS #:	
3.641	- 6.100		3577421	784.826	117	(RM) RNG
S 8	Diesel Fuel Range				CAS #:	
1.340	- 3.640		3033383	565.158	84.1	(M) RNG
S 9	Diesel Fuel Range SG				CAS #:	
1.340	- 3.640		3033383	565.158	84.1	(M) RNG

QC Flag Legend

R - Spike/Surrogate failed recovery limits.  
M - Compound response manually integrated.

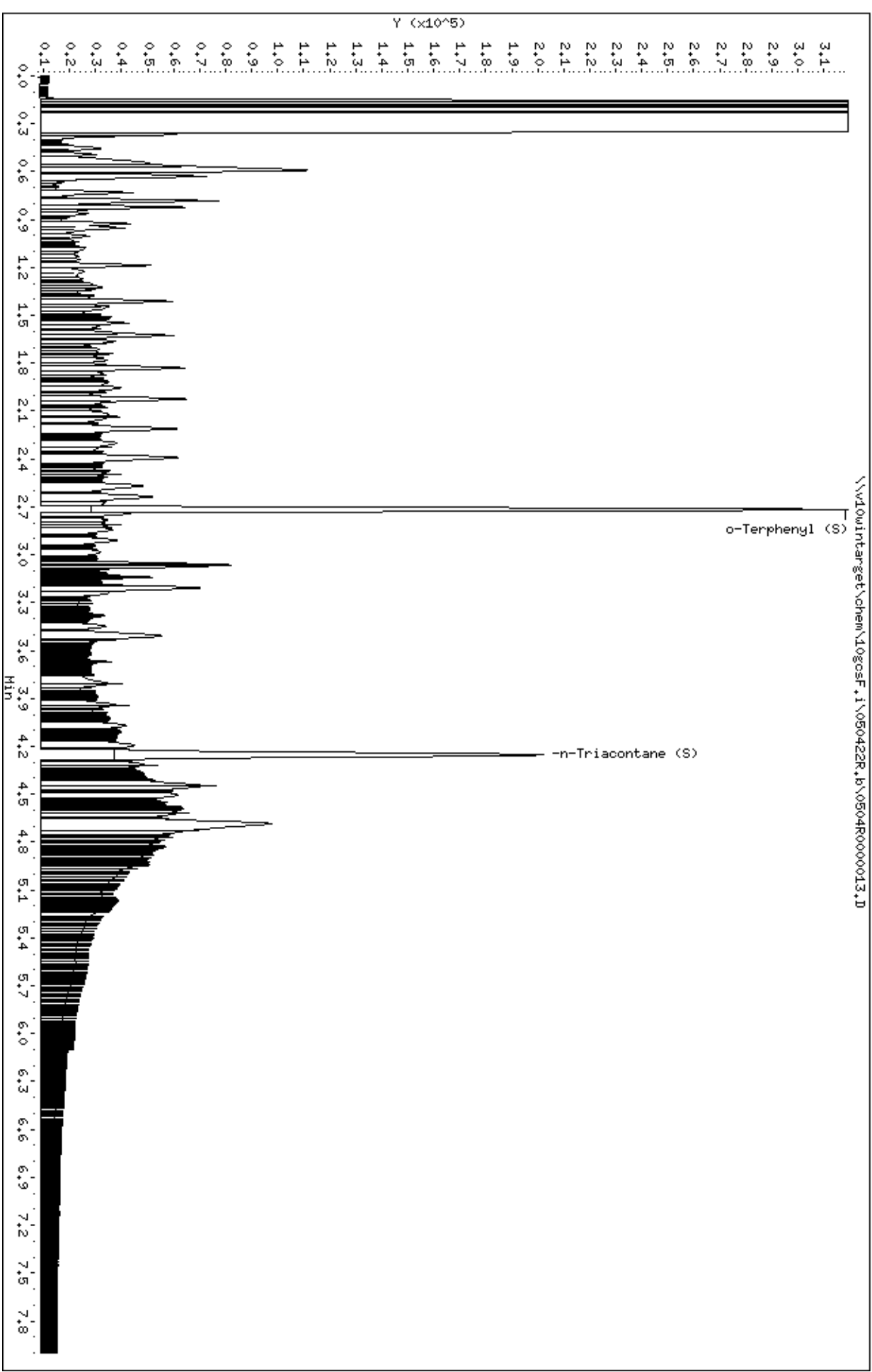
Review Codes Legend

BA: Indicates that the baseline had to be adjusted correctly by the analyst.  
RNG: Indicates that the analyst integrated a surrogate within the range.



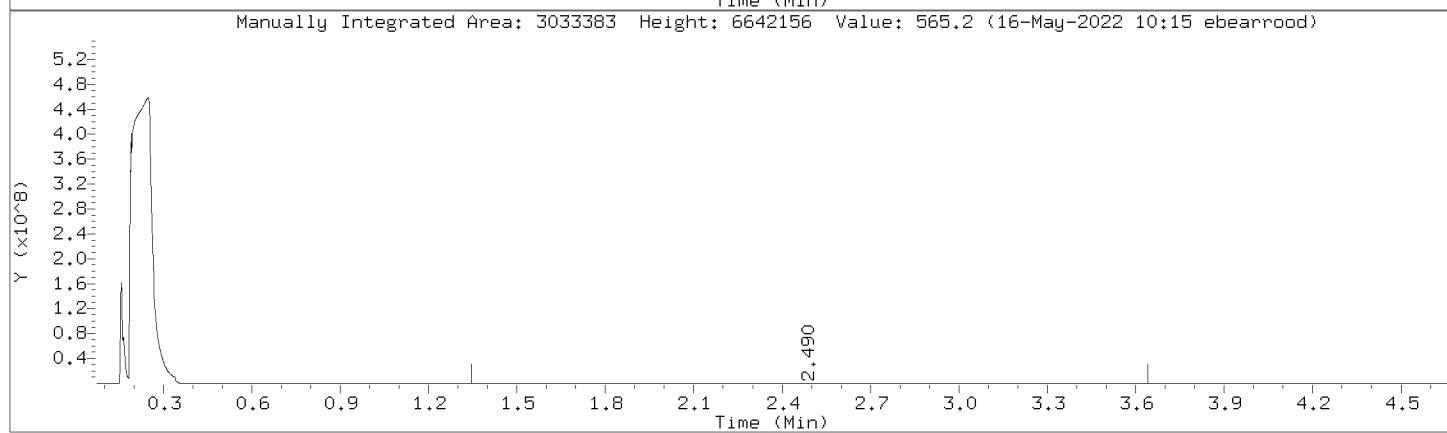
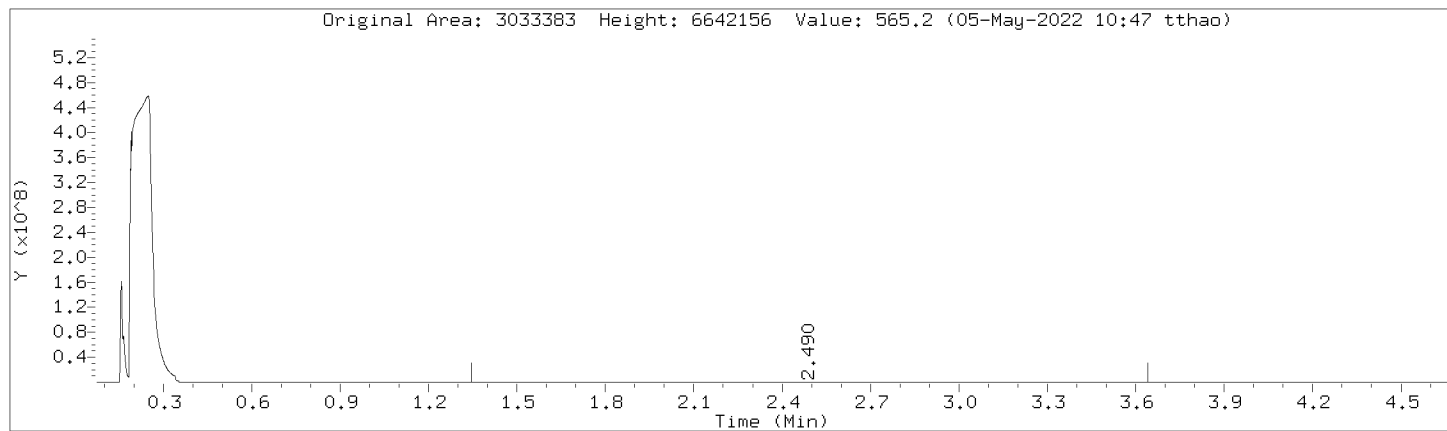
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Date: 04-MAY-2022 12:50  
Client ID: BNSF-BGL3-042122-0-  
Sample Info: 4303625  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21430033

Instrument: 10gcsf.1  
Operator: TT2  
Column diameter: 0.32



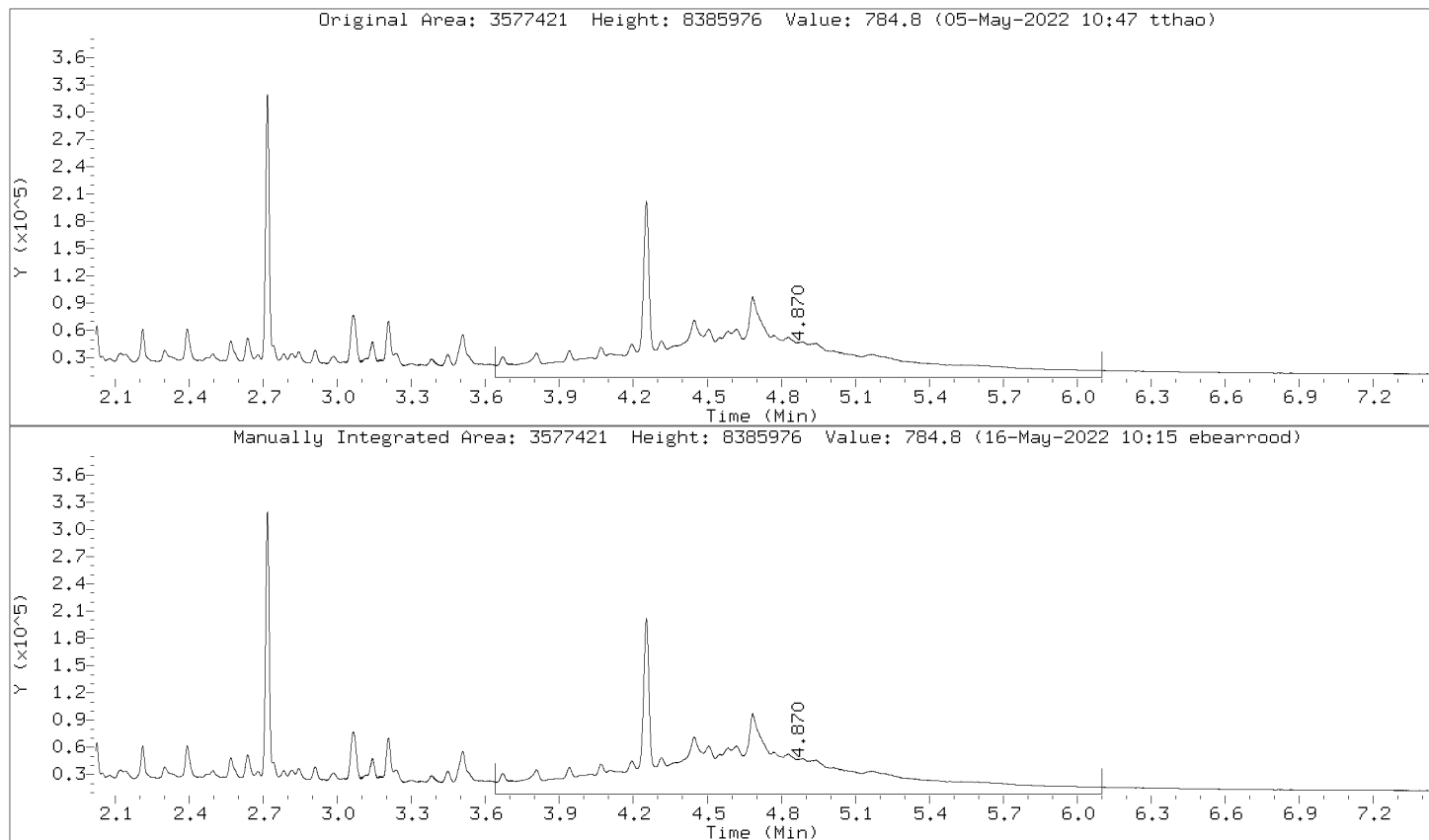
Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000013.D  
Injection Date: 04-MAY-2022 12:50  
Instrument: 10gcsF.i  
Lab Sample ID: 4303625

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



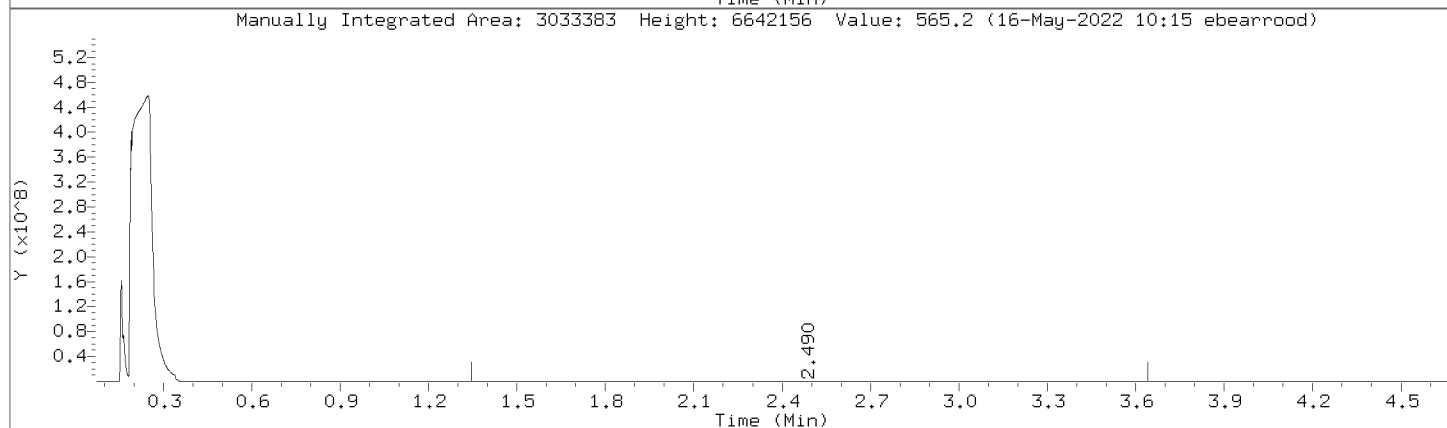
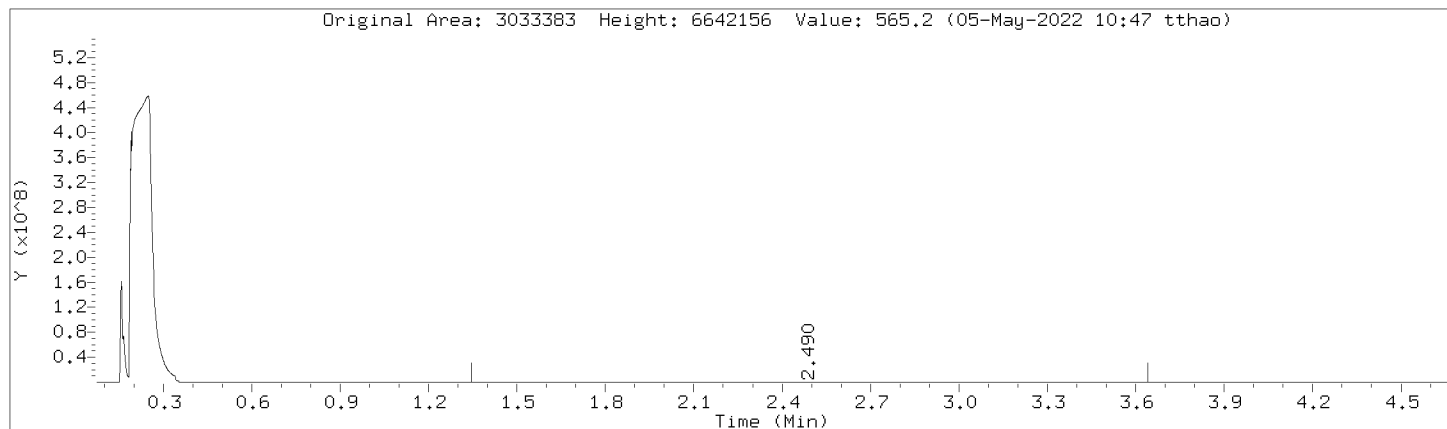
Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000013.D  
Injection Date: 04-MAY-2022 12:50  
Instrument: 10gcsF.i  
Lab Sample ID: 4303625

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



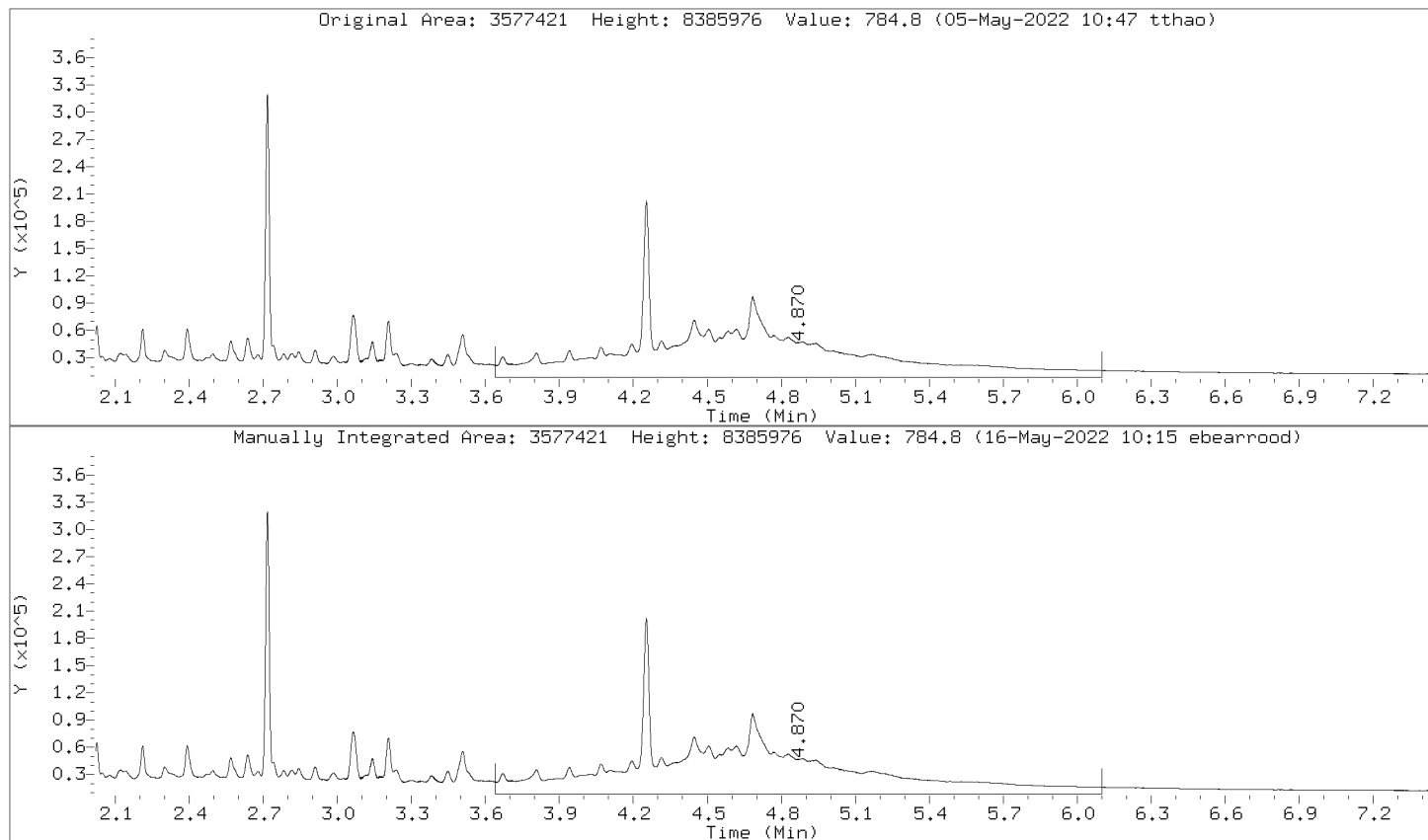
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Injection Date: 04-MAY-2022 12:50  
Instrument: 10gcsF.i  
Lab Sample ID: 4303625

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



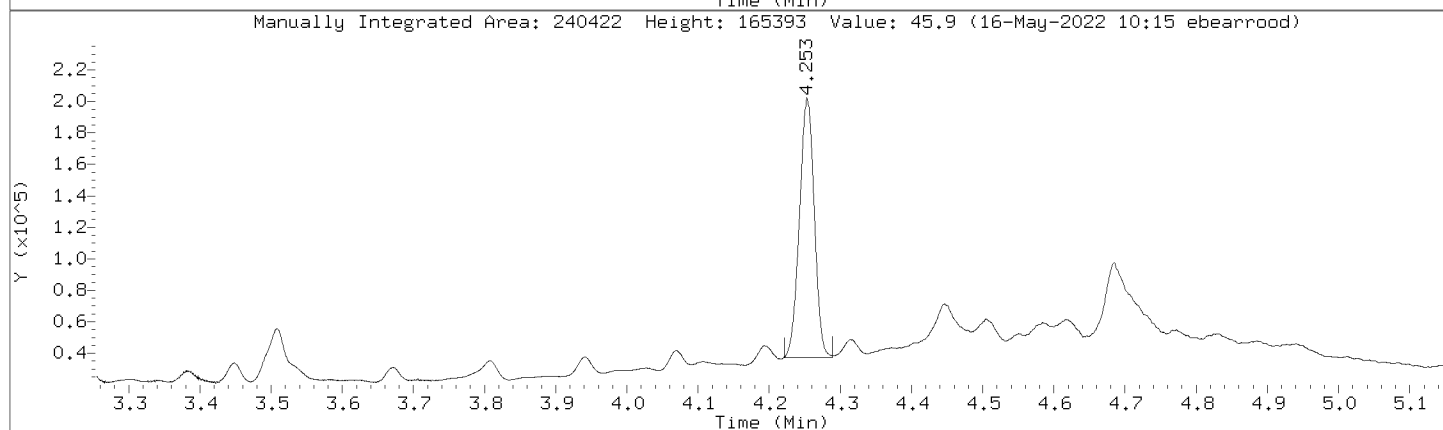
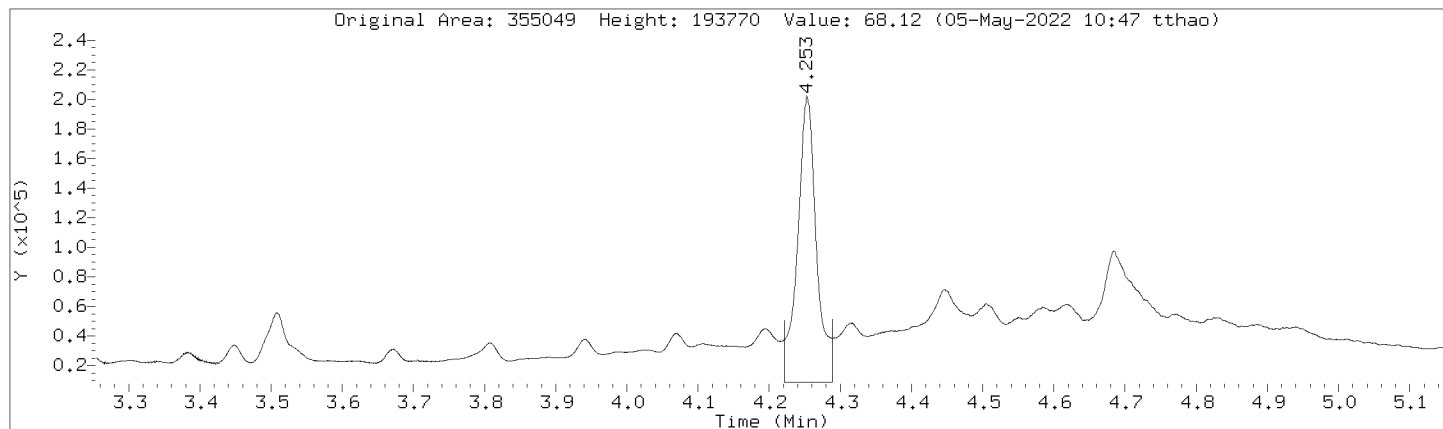
Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000013.D  
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Instrument: 10gcsF.i  
Lab Sample ID: 4303625

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



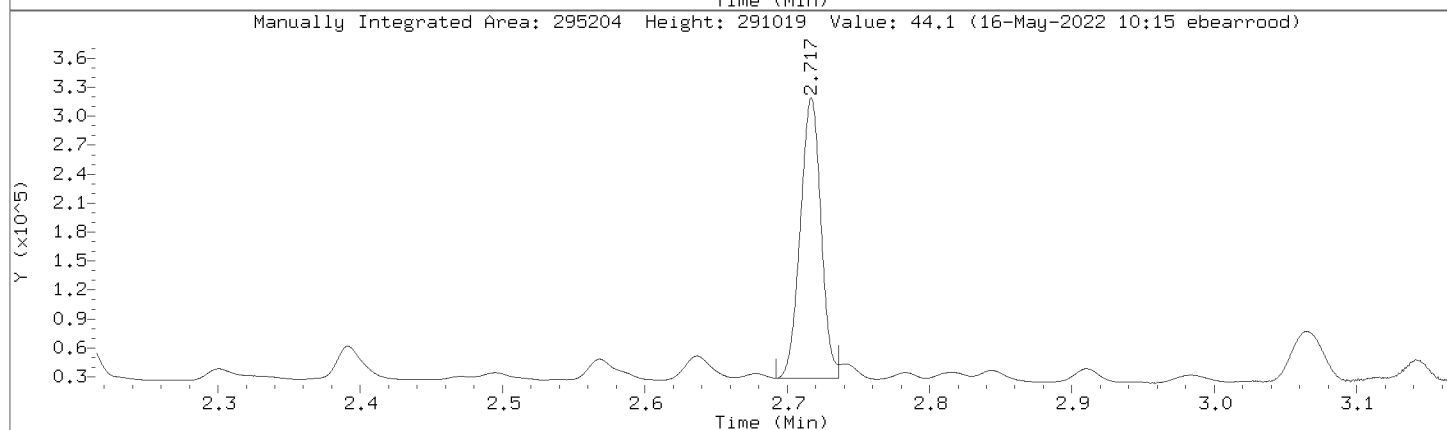
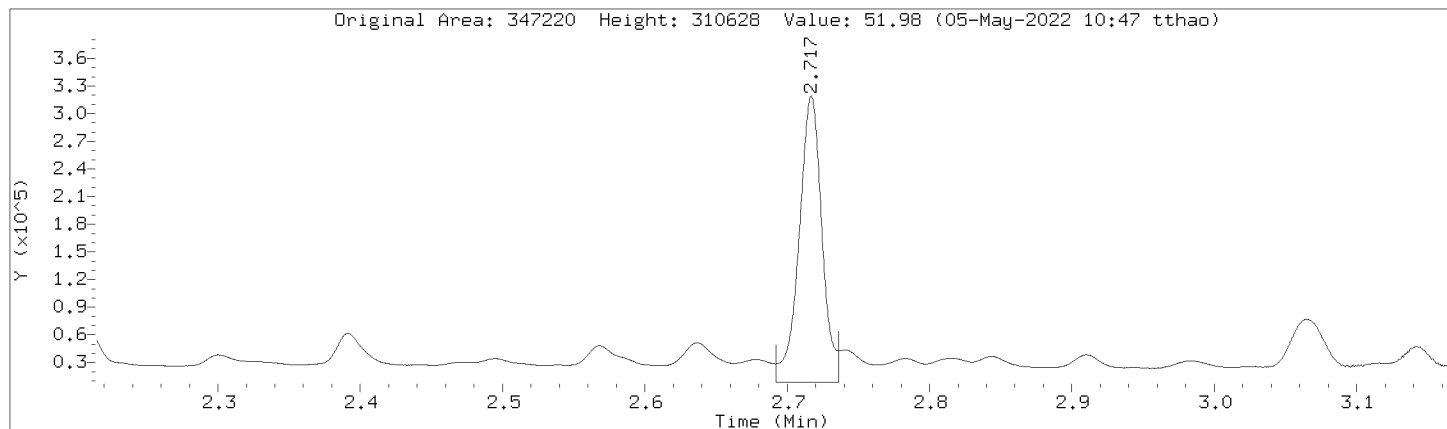
Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000013.D  
Injection Date: 04-MAY-2022 12:50  
Instrument: 10gcsF.i  
Lab Sample ID: 4303625

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050422R.b\0504R0000013.D  
 Injection Date: 04-MAY-2022 12:50  
 Instrument: 10gcsF.i  
 Lab Sample ID: 4303625

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	3033383	3033383
Motor Oil Range	3577421	3577421
Diesel Fuel Range SG	3033383	3033383
Motor Oil Range SG	3577421	3577421
n-Triacontane (S)	355049	240422
o-Terphenyl (S)	347220	295204



# Prep Log Report

Batch Information: OEXT 64437 811397 NWDROS

Template Version: ENV-EPL-MIN4-0072-Rev.00 (03Jan2021)

Prep Method	EPA 3550	Analysis Method	NWTPH-Dx
Instrument	10BALW	Calibrated	Yes
Dispenser ID 1	Q617	Dispenser ID 2	
Syringe ID 3		Pipette ID 1	PP1-42
Concentration		Methylene Chloride	362509
Date/Time	04/26/2022 17:13:39:161	Glass Wool	361057
Sodium Sulfate	355640-05	Reviewed By Date	04/26/2022 17:14
Reviewed By	ACV		

Prepared By	KG2	Sonicator Tune Date	04/26/2022 10:46:22:709
Syringe ID 1		Syringe ID 2	
Conc. Method	Bucci	Concentrated By	ACV
MeCl/Acetone 80:20	362934	Ottawa Sand	357927
Gravity Filters	None Added	Vial Lot #	22025312
Batch Notes	syringes Q833 Q823 & Q825		

Extracted Date/Time	04/26/2022 10:34:27:289
Spiked By	KG2

## Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	Matrix	Sample ID Verified By	Spike Verified	Container + Sample Wt (g)	Container Wt (g)	Initial Amount (g   mL   wipe)	Final Volume (mL)	Sonicator ID	Evap. ID	Position	Sample Notes
NWDROS_P	BLANK	4303622	Y	Solid	scanner	no one to verify			10	1	100P37			
NWDROS_P	LCS	4303623	Y	Solid	scanner	no one to verify			10	1	100P04			
NWDROS_P	RQS	10605661001	Y	Solid	scanner	no one to verify			10.1	1	100P04			1*
NWDROS_P	MS	4303624	Y	Solid	scanner	no one to verify			10.03	1	100P01			1*
NWDROS_P	MSD	4303625	Y	Solid	scanner	no one to verify			10.04	1	100P37			1*
NWDROS_P	PS	10605661002	Y	Solid	scanner	no one to verify			10.01	1	100P04			1*

QC Rule	Sample Type	Lab Sample ID	DMSO-SPK (uL)	ntcs-SS (uL)	oter-SS (uL)
NWDROS_P	BLANK	4303622		358165 (10)	352758 (25)
NWDROS_P	LCS	4303623	358262 (250)	358165 (10)	352758 (25)
NWDROS_P	RQS	10605661001		358165 (10)	352758 (25)
NWDROS_P	MS	4303624	358262 (250)	358165 (10)	352758 (25)
NWDROS_P	MSD	4303625	358262 (250)	358165 (10)	352758 (25)





# Prep Log Report

QC Rule	Sample Type	Lab Sample ID	DMSO-SPK (uL)	ntcs-SS (uL)	over-SS (uL)
10605661	PS	10605661002		358165 (10)	352758 (25)

**Sample Notes:**

1\*: wet sample, decanted

**Standard Notes:**

352758: received 2/21/22, opened 04/20/22 GY1

358165: Received 3/25/22, opened 04/26/22 GY1

### Instrument Run Log

 Instrument: 10GCSEF  
 Column: DB-5-US21250010 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0426F0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042622_	4/26/22 07:22	EB3	
0426F0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042622_	4/26/22 07:33	EB3	
0426F0000003.D	DMO-RTM,357103	/39180	Sample	1		GCSFAKNW8015-042622_	4/26/22 07:44	EB3	
0426F0000004.D	DMO-CAL1,362369	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 07:55	EB3	
0426F0000005.D	DMO-CAL2,362370	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 08:06	EB3	
0426F0000006.D	DMO-CAL3,362371	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 08:18	EB3	Pass 40% for all target analytes
0426F0000007.D	DMO-CAL4,362372	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 08:29	EB3	
0426F0000008.D	DMO-CAL5,362373	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 08:40	EB3	
0426F0000009.D	DMO-CAL6,362374	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 08:51	EB3	
0426F0000010.D	DMO-CAL7,362375	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 09:02	EB3	
0426F0000011.D	DMO-CAL8,362376	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 09:13	EB3	
0426F0000012.D	DMO-CAL9,362377	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 09:25	EB3	
0426F0000013.D	DMO-CAL10,362378	/39180	Ical	1		GCSFAKNW8015-042622_	4/26/22 09:36	EB3	ICAL passing
0426F0000014.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042622_	4/26/22 09:47	EB3	ran to eliminate the possibility of carryover
0426F0000015.D	DMO-ICV,355155	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 09:58	EB3	Pass 15% for all ranges
0426F0000016.D	PBLK,349203	/39180	Sample	1		GCSFAKNW8015-042622_	4/26/22 10:09	EB3	Clean for all ranges
0426F0000017.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042622_	4/26/22 13:26	EB3	ran to stabilize baseline
0426F0000018.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 13:36	EB3	Pass 15% for all ranges
0426F0000019.D	4298684	L/39151	Blank	1		GCSFAKNW8015-042622_	4/26/22 13:47	EB3	ok
0426F0000020.D	4298685	L/39151	LCS	1		GCSFAKNW8015-042622_	4/26/22 13:58	EB3	pass
0426F0000021.D	4298686	L/39151	LCSD	1		GCSFAKNW8015-042622_	4/26/22 14:09	EB3	pass
0426F0000022.D	10603288001	L/39151	Sample	1		GCSFAKNW8015-042622_	4/26/22 14:19	EB3	
0426F0000023.D	AK LCS CHK	/	LCS	1		GCSFAKNW8015-042622_	4/26/22 14:30	EB3	
0426F0000024.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 14:41	EB3	Pass 15% for all ranges
0426F0000025B.	4301503	S/39195	Blank	1		GCSFAKNW8015-042622_	4/26/22 14:52	EB3	ok
0426F0000025.D	4301183	S/39192	Blank	1		GCSFAKNW8015-042622_	4/26/22 14:52	EB3	ok
0426F0000026B.	4301504	S/39195	LCS	1		GCSFAKNW8015-042622_	4/26/22 15:02	EB3	pass
0426F0000026.D	4301184	S/39192	LCS	1		GCSFAKNW8015-042622_	4/26/22 15:02	EB3	pass
0426F0000027B.	10605529001	S/39195	Sample	20		GCSFAKNW8015-042622_	4/26/22 15:13	EB3	
0426F0000027.D	10605172001	S/39192	Sample	20		GCSFAKNW8015-042622_	4/26/22 15:13	EB3	
0426F0000028B.	4301505	S/39195	MS	20		GCSFAKNW8015-042622_	4/26/22 15:24	EB3	
0426F0000028.D	4301185	S/39192	MS	20		GCSFAKNW8015-042622_	4/26/22 15:24	EB3	
0426F0000029B.	4301506	S/39195	MSD	20		GCSFAKNW8015-042622_	4/26/22 15:35	EB3	
0426F0000029.D	4301186	S/39192	MSD	20		GCSFAKNW8015-042622_	4/26/22 15:35	EB3	
0426F0000030.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 15:45	EB3	Pass 15% for all ranges
0426F0000031.D	4301183	S/39192	Blank	1		GCSFAKNW8015-042622_	4/26/22 15:56	EB3	ok
0426F0000032.D	10605330003	S/39192	Sample	20		GCSFAKNW8015-042622_	4/26/22 16:07	EB3	rr 100X
0426F0000033.D	10605330001	S/39192	Sample	20		GCSFAKNW8015-042622_	4/26/22 16:18	EB3	
0426F0000034.D	10605330002	S/39192	Sample	1		GCSFAKNW8015-042622_	4/26/22 16:28	EB3	rr 20X
0426F0000035.D	10605435001	S/39195	Sample	10		GCSFAKNW8015-042622_	4/26/22 16:39	EB3	rr 1X
0426F0000036.D	10605435002	S/39195	Sample	10		GCSFAKNW8015-042622_	4/26/22 16:50	EB3	rr 1X
0426F0000037.D	10605435003	S/39195	Sample	10		GCSFAKNW8015-042622_	4/26/22 17:01	EB3	rr 1X
0426F0000038.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 17:11	EB3	Pass 15% for all ranges
0426F0000039.D	4297942	L/39196	Blank	1		GCSFAKNW8015-042622_	4/26/22 17:22	EB3	ok
0426F0000040.D	4297943	L/39196	LCS	1		GCSFAKNW8015-042622_	4/26/22 17:33	EB3	pass
0426F0000041.D	4297944	L/39196	LCSD	1		GCSFAKNW8015-042622_	4/26/22 17:44	EB3	pass

### Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21250010 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0426F0000042.D	10604705001	L/39196	Sample	1		GCSFAKNW8015-042622_	4/26/22 17:54	EB3	
0426F0000043.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 18:05	EB3	Pass 15% for all ranges
0426F0000044.D	4296980	S/39197	Blank	1		GCSFAKNW8015-042622_	4/26/22 18:16	EB3	ok
0426F0000045.D	4296981	S/39197	LCS	1		GCSFAKNW8015-042622_	4/26/22 18:27	EB3	pass
0426F0000046.D	10604857002	S/39197	Sample	1		GCSFAKNW8015-042622_	4/26/22 18:37	EB3	
0426F0000047.D	4297058	S/39197	MS	1		GCSFAKNW8015-042622_	4/26/22 18:48	EB3	
0426F0000048.D	4297059	S/39197	MSD	1		GCSFAKNW8015-042622_	4/26/22 18:59	EB3	
0426F0000049.D	10604859002	S/39197	Sample	10		GCSFAKNW8015-042622_	4/26/22 19:10	EB3	rr 100X
0426F0000050.D	10604859003	S/39197	Sample	10		GCSFAKNW8015-042622_	4/26/22 19:21	EB3	
0426F0000051.D	10604858002	S/39197	Sample	10		GCSFAKNW8015-042622_	4/26/22 19:31	EB3	
0426F0000052.D	10604859001	S/39197	Sample	1		GCSFAKNW8015-042622_	4/26/22 19:42	EB3	rr 10X
0426F0000053.D	10604857001	S/39197	Sample	1		GCSFAKNW8015-042622_	4/26/22 19:53	EB3	
0426F0000054.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 20:04	EB3	Pass 15% for all ranges
0426F0000055.D	4296980	S/39197	Blank	1		GCSFAKNW8015-042622_	4/26/22 20:14	EB3	ok
0426F0000056.D	10604858001	S/39197	Sample	1		GCSFAKNW8015-042622_	4/26/22 20:25	EB3	
0426F0000057.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/26/22 20:36	EB3	Pass 15% for all ranges
0426F0000058.D	PBLK,4296980	/	Sample	1		GCSFAKNW8015-042622_	4/26/22 20:46	EB3	clean

**Check Maintenance Items Performed:**

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\V10WINTARGET\CHEM\10GCSF.I\042622F.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 05/09/2022 17:02

ReviewedBy/Date:

## Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21250010 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0427F0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042622_	4/27/22 11:41	EB3	
0427F0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042622_	4/27/22 11:53	EB3	
0427F0000003.D	DMO-RTM,362403	/39180	Sample	1		GCSFAKNW8015-042622_	4/27/22 12:04	EB3	
0427F0000004.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/27/22 12:15	EB3	Pass 15% for all ranges
0427F0000005.D	4295161	L/39115	Blank	1		GCSFAKNW8015-042622_	4/27/22 12:26	EB3	ok
0427F0000006.D	10604482006	L/39115	Sample	1		GCSFAKNW8015-042622_	4/27/22 12:38	EB3	8015W MDL - passing
0427F0000007.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/27/22 12:49	EB3	Pass 15% for all ranges
0427F0000008.D	4295166	L/39113	Blank	1		GCSFAKNW8015-042622_	4/27/22 13:00	EB3	ok
0427F0000008B.	4295167	L/39114	Blank	1		GCSFAKNW8015-042622_	4/27/22 13:00	EB3	ok
0427F0000009.D	10604482010	L/39113	Sample	1		GCSFAKNW8015-042622_	4/27/22 13:11	EB3	AK W MDL - passing
0427F0000009B.	10604482014	L/39114	Sample	1		GCSFAKNW8015-042622_	4/27/22 13:11	EB3	NW W MDL - passing
0427F0000010.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/27/22 13:23	EB3	Pass 15% for all ranges
0427F0000011.D	4295299	S/39116	Blank	1		GCSFAKNW8015-042622_	4/27/22 13:34	EB3	ok
0427F0000011B.	4295310	S/39118	Blank	1		GCSFAKNW8015-042622_	4/27/22 13:34	EB3	ok
0427F0000011C.	4295311	S/39117	Blank	1		GCSFAKNW8015-042622_	4/27/22 13:34	EB3	ok
0427F0000012.D	10604453010	S/39116	Sample	1		GCSFAKNW8015-042622_	4/27/22 13:45	EB3	8015 S MDL - failing high
0427F0000012B.	10604453006	S/39118	Sample	1		GCSFAKNW8015-042622_	4/27/22 13:45	EB3	AK S MDL - failing high
0427F0000012C.	10604453014	S/39117	Sample	1		GCSFAKNW8015-042622_	4/27/22 13:45	EB3	NW S MDL - failing high
0427F0000013.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/27/22 13:57	EB3	Pass 15% for all ranges
0427F0000014.D	4301183	S/39192	Blank	1		GCSFAKNW8015-042622_	4/27/22 14:08	EB3	ok
0427F0000015.D	10605330003	S/39192	Sample	100		GCSFAKNW8015-042622_	4/27/22 14:19	EB3	
0427F0000016.D	10605330002	S/39192	Sample	20		GCSFAKNW8015-042622_	4/27/22 14:30	EB3	
0427F0000017.D	10605435001	S/39195	Sample	1		GCSFAKNW8015-042622_	4/27/22 14:42	EB3	
0427F0000018.D	10605435002	S/39195	Sample	1		GCSFAKNW8015-042622_	4/27/22 14:53	EB3	
0427F0000019.D	10605435003	S/39195	Sample	1		GCSFAKNW8015-042622_	4/27/22 15:04	EB3	
0427F0000020.D	10604859002	S/39197	Sample	100		GCSFAKNW8015-042622_	4/27/22 15:15	EB3	
0427F0000021.D	10604859001	S/39197	Sample	10		GCSFAKNW8015-042622_	4/27/22 15:27	EB3	
0427F0000022.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/27/22 15:38	EB3	Pass 15% for all ranges
0427F0000023.D	4303622	S/39215	Blank	1		GCSFAKNW8015-042622_	4/27/22 15:49	EB3	ok
0427F0000023B.	4303626	S/39216	Sample	1		GCSFAKNW8015-042622_	4/27/22 15:49	EB3	ok
0427F0000024.D	4303623	S/39215	LCS	1		GCSFAKNW8015-042622_	4/27/22 16:00	EB3	pass
0427F0000024B.	4303627	S/39216	Sample	1		GCSFAKNW8015-042622_	4/27/22 16:00	EB3	pass
0427F0000025.D	10605661001	S/39215	Sample	10		GCSFAKNW8015-042622_	4/27/22 16:12	EB3	rr 1X
0427F0000026.D	4303624	S/39215	MS	10		GCSFAKNW8015-042622_	4/27/22 16:23	EB3	rr 1X
0427F0000027.D	4303625	S/39215	MSD	10		GCSFAKNW8015-042622_	4/27/22 16:34	EB3	rr 1X
0427F0000028.D	10605661002	S/39215	Sample	10		GCSFAKNW8015-042622_	4/27/22 16:45	EB3	rr 1X
0427F0000029.D	10605699001	S/39216	Sample	1		GCSFAKNW8015-042622_	4/27/22 16:57	EB3	
0427F0000030.D	DMO-CCV,362365	/39180	CCal	1		GCSFAKNW8015-042622_	4/27/22 17:08	EB3	Pass 15% for all ranges
0427F0000031.D	PBLK,4303622	/	Sample	1		GCSFAKNW8015-042622_	4/27/22 17:19	EB3	clean

**Instrument Run Log**Instrument: 10GCSF  
Column: DB-5-US21250010 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

Surrogate Lot: See extract sheet  
ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
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## Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\V10WINTARGET\CHEM\10GCSF.I\042722F.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 04/28/2022 11:04

ReviewedBy/Date:

### Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0427R0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 11:41	EB3	ran to stabilize baseline
0427R0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 11:53	EB3	
0427R0000003.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:04	EB3	
0427R0000004.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:15	EB3	
0427R0000005.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:26	EB3	
0427R0000006.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:38	EB3	V
0427R0000007.D	DMO-RTM,362403	/39205	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:49	EB3	
0427R0000008.D	DMO-CAL1,362369	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:00	EB3	level 1 dropped
0427R0000009.D	DMO-CAL2,362370	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:11	EB3	
0427R0000010.D	DMO-CAL3,362371	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:23	EB3	Pass 40% for all target analytes
0427R0000011.D	DMO-CAL4,362372	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:34	EB3	
0427R0000012.D	DMO-CAL5,362373	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:45	EB3	
0427R0000013.D	DMO-CAL6,362374	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:57	EB3	
0427R0000014.D	DMO-CAL7,362375	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:08	EB3	
0427R0000015.D	DMO-CAL8,362376	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:19	EB3	
0427R0000016.D	DMO-CAL9,362377	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:30	EB3	
0427R0000017.D	DMO-CAL10,362378	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:42	EB3	ICAL passing
0427R0000018.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 14:53	EB3	ran to eliminate the possibility of carryover
0427R0000019.D	DMO-ICV,355155	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 15:04	EB3	Pass 15% for all ranges
0427R0000020.D	PBLK,349203	/39205	Sample	1		GCSFAKNW8015-042722_	4/27/22 15:15	EB3	Clean for all ranges
0427R0000021.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 15:27	EB3	Pass 15% for all ranges
0427R0000022.D	4295161	L/39115	Blank	1		GCSFAKNW8015-042722_	4/27/22 15:38	EB3	ok
0427R0000023.D	10604482008	L/39115	Sample	1		GCSFAKNW8015-042722_	4/27/22 15:49	EB3	8015W MDL - passing
0427R0000024.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 16:00	EB3	Pass 15% for all ranges
0427R0000025.D	4295166	L/39113	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:12	EB3	ok
0427R0000025B.	4295167	L/39114	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:12	EB3	ok
0427R0000026.D	10604482012	L/39113	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:23	EB3	AK W MDL - passing
0427R0000026B.	10604482016	L/39114	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:23	EB3	NW W MDL - passing
0427R0000027.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 16:34	EB3	Pass 15% for all ranges
0427R0000028.D	4295299	S/39116	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000028B.	4295310	S/39118	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000028C.	4295311	S/39117	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000028D.	4325687	S/39417	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000029.D	10604453012	S/39116	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	8015S MDL - passing
0427R0000029B.	10604453008	S/39118	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	AK S MDL - passing
0427R0000029C.	10604453016	S/39117	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	NW S MDL - passing
0427R0000029D.	10604453076	S/39417	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	1036S MDL - passing
0427R0000030.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 17:19	EB3	Pass 15% for all ranges
0427R0000031.D	PBLK,4301183	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 17:30	EB3	NR

**Instrument Run Log**Instrument: 10GCSF  
Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

Surrogate Lot: See extract sheet  
ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
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## Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\W10WINTARGET\CHEM\10GCSF.I\042722R.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 05/19/2022 15:13

ReviewedBy/Date:

### Instrument Run Log

 Instrument: 10GCSE  
 Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot: MECL2-362509

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0504R0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	5/04/22 10:58	TT2	
0504R0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	5/04/22 11:08	TT2	
0504R0000003.D	DMO-RTM,362402	/39205	Sample	1		GCSFAKNW8015-042722_	5/04/22 11:17	TT2	
0504R0000004.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/04/22 11:26	TT2	Pass 15% for all ranges
0504R0000005.D	4309158	L/39266	Blank	1		GCSFAKNW8015-042722_	5/04/22 11:36	TT2	OK
0504R0000006.D	4309159	L/39266	LCS	1		GCSFAKNW8015-042722_	5/04/22 11:45	TT2	Passes
0504R0000007.D	4309160	L/39266	LCS	1		GCSFAKNW8015-042722_	5/04/22 11:54	TT2	Passes
0504R0000008.D	10606514001	L/39266	Sample	1		GCSFAKNW8015-042722_	5/04/22 12:03	TT2	
0504R0000009.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/04/22 12:13	TT2	Pass 15% for all ranges
0504R0000010.D	4303622	S/39215	Blank	1		GCSFAKNW8015-042722_	5/04/22 12:22	TT2	
0504R0000011.D	10605661001	S/39215	Sample	1		GCSFAKNW8015-042722_	5/04/22 12:31	TT2	
0504R0000012.D	4303624	S/39215	MS	1		GCSFAKNW8015-042722_	5/04/22 12:41	TT2	
0504R0000013.D	4303625	S/39215	MSD	1		GCSFAKNW8015-042722_	5/04/22 12:50	TT2	
0504R0000014.D	10605661002	S/39215	Sample	1		GCSFAKNW8015-042722_	5/04/22 12:59	TT2	
0504R0000015.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/04/22 13:09	TT2	Pass 15% for all ranges
0504R0000016.D	4307795	S/39249	Blank	1		GCSFAKNW8015-042722_	5/04/22 13:18	TT2	OK
0504R0000017.D	10606398001	S/39249	Sample	2		GCSFAKNW8015-042722_	5/04/22 13:27	TT2	
0504R0000018.D	10606394001	S/39248	Sample	1		GCSFAKNW8015-042722_	5/04/22 13:37	TT2	rr with pbk
0504R0000019.D	10606394002	S/39248	Sample	1		GCSFAKNW8015-042722_	5/04/22 13:46	TT2	
0504R0000020.D	10606394003	S/39248	Sample	1		GCSFAKNW8015-042722_	5/04/22 13:55	TT2	
0504R0000021.D	10606394004	S/39248	Sample	1		GCSFAKNW8015-042722_	5/04/22 14:05	TT2	
0504R0000022.D	10606395001	S/39248	Sample	1		GCSFAKNW8015-042722_	5/04/22 14:14	TT2	
0504R0000023.D	10606395002	S/39248	Sample	1		GCSFAKNW8015-042722_	5/04/22 14:23	TT2	
0504R0000024.D	10606395003	S/39248	Sample	1		GCSFAKNW8015-042722_	5/04/22 14:32	TT2	
0504R0000025.D	10606395004	S/39248	Sample	1		GCSFAKNW8015-042722_	5/04/22 14:42	TT2	V
0504R0000026.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/04/22 14:51	TT2	Pass 15% for all ranges except Motor oil for NWT
0504R0000027.D	4308714	S/39267	Blank	1		GCSFAKNW8015-042722_	5/04/22 15:00	TT2	OK
0504R0000028.D	4308715	S/39267	LCS	1		GCSFAKNW8015-042722_	5/04/22 15:10	TT2	Passes
0504R0000029.D	10606437001	S/39267	Sample	100		GCSFAKNW8015-042722_	5/04/22 15:19	TT2	
0504R0000030.D	4308716	S/39267	MS	100		GCSFAKNW8015-042722_	5/04/22 15:28	TT2	
0504R0000031.D	4308717	S/39267	MSD	100		GCSFAKNW8015-042722_	5/04/22 15:38	TT2	
0504R0000032.D	10606437002	S/39267	Sample	40		GCSFAKNW8015-042722_	5/04/22 15:47	TT2	
0504R0000033.D	10606438001	S/39267	Sample	100		GCSFAKNW8015-042722_	5/04/22 15:56	TT2	
0504R0000034.D	10606438002	S/39267	Sample	40		GCSFAKNW8015-042722_	5/04/22 16:06	TT2	
0504R0000035.D	10606438003	S/39267	Sample	40		GCSFAKNW8015-042722_	5/04/22 16:15	TT2	
0504R0000036.D	10606538001	S/39267	Sample	10		GCSFAKNW8015-042722_	5/04/22 16:24	TT2	
0504R0000037.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/04/22 16:33	TT2	Pass 20% for all ranges except Motor oil for NWT
0504R0000038.D	4308714	S/39267	Blank	1		GCSFAKNW8015-042722_	5/04/22 16:43	TT2	OK
0504R0000039.D	10606494001	S/39267	Sample	100		GCSFAKNW8015-042722_	5/04/22 16:52	TT2	
0504R0000040.D	10606494002	S/39267	Sample	40		GCSFAKNW8015-042722_	5/04/22 17:01	TT2	
0504R0000041.D	10606541001	S/39267	Sample	1		GCSFAKNW8015-042722_	5/04/22 17:11	TT2	
0504R0000042.D	10606541011	S/39267	Sample	20		GCSFAKNW8015-042722_	5/04/22 17:20	TT2	
0504R0000043.D	10606541002	S/39267	Sample	1		GCSFAKNW8015-042722_	5/04/22 17:29	TT2	
0504R0000044.D	10606541003	S/39267	Sample	1		GCSFAKNW8015-042722_	5/04/22 17:39	TT2	
0504R0000045.D	10606541004	S/39267	Sample	1		GCSFAKNW8015-042722_	5/04/22 17:48	TT2	
0504R0000046.D	10606541005	S/39267	Sample	1		GCSFAKNW8015-042722_	5/04/22 17:57	TT2	



### Instrument Run Log

Instrument: 10GCSF  
 Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot: MECL2-362509

Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0504R0000047.D	10606541006	S/39267	Sample	1		GCSFAKNW8015-042722_	5/04/22 18:07	TT2	
0504R0000048.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/04/22 18:16	TT2	Pass 15% for all ranges
0504R0000049.D	4308714	S/39267	Blank	1		GCSFAKNW8015-042722_	5/04/22 18:25	TT2	OK
0504R0000050.D	10606541007	S/39267	Sample	1		GCSFAKNW8015-042722_	5/04/22 18:34	TT2	
0504R0000051.D	10606541008	S/39267	Sample	1		GCSFAKNW8015-042722_	5/04/22 18:44	TT2	
0504R0000052.D	10606541009	S/39267	Sample	1		GCSFAKNW8015-042722_	5/04/22 18:53	TT2	
0504R0000053.D	10606541010	S/39267	Sample	1		GCSFAKNW8015-042722_	5/04/22 19:02	TT2	
0504R0000054.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/04/22 19:12	TT2	Pass 15% for all ranges
0504R0000055.D	PBLK,4308714	/39205	Sample	1		GCSFAKNW8015-042722_	5/04/22 19:21	TT2	Clean

**Check Maintenance Items Performed:**

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\W10WINTARGET\CHEM\10GCSF.I\050422R.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 05/13/2022 07:08

ReviewedBy/Date:

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG13-042122-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500  
 Lab Sample ID: 10605661001 Percent Moisture: 33.1

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-38-2	Arsenic	ND	U	mg/kg	1	05/09/2022 23:23
7440-43-9	Cadmium	ND	U	mg/kg	1	05/09/2022 23:23
7440-47-3	Chromium	ND	U	mg/kg	1	05/09/2022 23:23
7440-50-8	Copper	1.6		mg/kg	1	05/09/2022 23:23
7439-92-1	Lead	0.092	J	mg/kg	1	05/09/2022 23:23
7440-02-0	Nickel	ND	U	mg/kg	1	05/09/2022 23:23
7782-49-2	Selenium	ND	U	mg/kg	1	05/09/2022 23:23
7440-22-4	Silver	ND	U	mg/kg	1	05/09/2022 23:23
7440-66-6	Zinc	2.0	J	mg/kg	1	05/09/2022 23:23

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-SG23-042122-0-6

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500  
 Lab Sample ID: 10605661002 Percent Moisture: 23.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-38-2	Arsenic	2.4		mg/kg	1	05/09/2022 23:41
7440-43-9	Cadmium	0.17		mg/kg	1	05/09/2022 23:41
7440-47-3	Chromium	9.9		mg/kg	1	05/09/2022 23:41
7440-50-8	Copper	9.0		mg/kg	1	05/09/2022 23:41
7439-92-1	Lead	5.2		mg/kg	1	05/09/2022 23:41
7440-02-0	Nickel	11.1		mg/kg	1	05/09/2022 23:41
7782-49-2	Selenium	0.12	J	mg/kg	1	05/09/2022 23:41
7440-22-4	Silver	0.22	J	mg/kg	1	05/09/2022 23:41
7440-66-6	Zinc	65.3		mg/kg	1	05/09/2022 23:41

FORM II INORGANIC-1  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Initial Calibration Verification Source: 364940

Continuing Calibration Verification Source: 364940

Concentration Units: ug/L Instrument ID: 10ICMC

Analyte	Initial Calibration Verification				Continuing Calibration Verification						
	05/09/2022 14:44				05/09/2022 15:07			05/09/2022 22:34			Control Limit
	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Arsenic	80	80.5	100.6	90-110	80	79.5	99.4	80	78.2	97.8	90-110
Cadmium	80	81.2	101.5	90-110	80	80.7	100.9	80	77.8	97.2	90-110
Chromium	80	81.9	102.3	90-110	80	81.5	101.9	80	80.5	100.6	90-110
Copper	80	83.8	104.8	90-110	80	83.5	104.4	80	81.8	102.3	90-110
Lead	80	83.5	104.4	90-110	80	82.5	103.1	80	80.3	100.4	90-110
Nickel	80	84.4	105.4	90-110	80	84.0	105.1	80	82.1	102.6	90-110
Selenium	80	81.8	102.2	90-110	80	82.4	103.0	80	80.0	100.0	90-110
Silver	40	40.8	101.9	90-110	40	40.5	101.2	40	39.6	98.9	90-110
Zinc	80	83.3	104.1	90-110	80	82.5	103.1	80	79.8	99.8	90-110

FORM II INORGANIC-2  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Initial Calibration Verification Source: \_\_\_\_\_

Continuing Calibration Verification Source: 364940

Concentration Units: ug/L Instrument ID: 10ICMC

Analyte	Continuing Calibration Verification						Control Limit
	05/09/2022 23:15			05/09/2022 23:49			
	True	Found	%R	True	Found	%R	
Arsenic	80	79.1	98.9	80	78.5	98.2	90-110
Cadmium	80	79.6	99.5	80	79.0	98.7	90-110
Chromium	80	82.6	103.3	80	81.4	101.8	90-110
Copper	80	82.5	103.1	80	82.1	102.7	90-110
Lead	80	81.4	101.7	80	81.0	101.2	90-110
Nickel	80	83.1	103.9	80	82.2	102.7	90-110
Selenium	80	79.1	98.9	80	79.2	99.0	90-110
Silver	40	40.5	101.3	40	40.2	100.5	90-110
Zinc	80	80.6	100.7	80	80.2	100.2	90-110

FORM II INORGANIC-1  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Initial Calibration Verification Source: 365170

Continuing Calibration Verification Source: 365170

Concentration Units: ug/L Instrument ID: 10ICMC

Analyte	Initial Calibration Verification				Continuing Calibration Verification						
	05/10/2022 09:13				05/10/2022 09:38			05/10/2022 10:24			Control Limit
	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Arsenic	80	81.0	101.3	90-110	80	80.3	100.4	80	80.6	100.8	90-110
Cadmium	80	81.4	101.8	90-110	80	81.3	101.6	80	80.6	100.7	90-110
Chromium	80	82.6	103.2	90-110	80	82.6	103.3	80	82.0	102.5	90-110
Copper	80	84.4	105.5	90-110	80	84.4	105.5	80	84.3	105.4	90-110
Lead	80	82.7	103.4	90-110	80	81.7	102.2	80	82.3	102.9	90-110
Nickel	80	84.2	105.3	90-110	80	84.7	105.9	80	84.0	105.0	90-110
Selenium	80	81.9	102.3	90-110	80	82.1	102.6	80	82.3	102.9	90-110
Silver	40	41.2	103.0	90-110	40	41.3	103.2	40	40.5	101.2	90-110
Zinc	80	83.0	103.7	90-110	80	82.7	103.4	80	83.0	103.8	90-110

FORM II INORGANIC-2  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Initial Calibration Verification Source: \_\_\_\_\_

Continuing Calibration Verification Source: 365170

Concentration Units: ug/L Instrument ID: 10ICMC

Analyte	Continuing Calibration Verification			Control Limit
	True	Found	%R	
Arsenic	80	79.4	99.2	90-110
Cadmium	80	79.7	99.6	90-110
Chromium	80	81.7	102.1	90-110
Copper	80	82.8	103.5	90-110
Lead	80	81.1	101.4	90-110
Nickel	80	82.8	103.5	90-110
Selenium	80	82.1	102.6	90-110
Silver	40	40.2	100.6	90-110
Zinc	80	81.5	101.8	90-110

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

CRDL Check Standard Source: 364939 Analysis Date/Time: 05/09/2022 14:55

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Arsenic	0.5	0.50	100.6	80-120
Cadmium	0.08	0.088	110.0	80-120
Chromium	2.0	2.1	103.2	80-120
Copper	1.0	1.1	109.1	80-120
Lead	0.5	0.54	108.8	80-120
Nickel	0.5	0.58	115.2	80-120
Selenium	0.5	0.53	106.8	80-120
Silver	0.5	0.40	80.8	80-120
Zinc	5.0	5.3	106.7	80-120



FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

CRDL Check Standard Source: 364939 Analysis Date/Time: 05/09/2022 22:42

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Arsenic	0.5	0.48	95.8	80-120
Cadmium	0.08	0.090	112.5	80-120
Chromium	2.0	2.0	100.5	80-120
Copper	1.0	1.1	109.8	80-120
Lead	0.5	0.53	106.4	80-120
Nickel	0.5	0.56	111.4	80-120
Selenium	0.5	0.46	91.8	80-120
Silver	0.5	0.45	90.8	80-120
Zinc	5.0	5.5	110.9	80-120

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

CRDL Check Standard Source: 365169 Analysis Date/Time: 05/10/2022 09:27

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Arsenic	0.5	0.50	99.6	80-120
Cadmium	0.08	0.080	100.0	80-120
Chromium	2.0	2.0	101.6	80-120
Copper	1.0	1.1	110.5	80-120
Lead	0.5	0.52	103.0	80-120
Nickel	0.5	0.45	89.6	80-120
Selenium	0.5	0.53	105.2	80-120
Silver	0.5	0.41	81.4	80-120
Zinc	5.0	5.3	106.5	80-120

FORM III INORGANIC-1  
BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract : D3593500

Method Blank Matrix: Solid Instrument ID: 10ICMC

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	05/09/2022 14:52	C	05/09/2022 15:16	C	05/09/2022 22:38	C	05/09/2022 23:19	C	4303384	C
Arsenic	0.11	U	0.11	U	0.11	U	0.11	U	ND	U
Cadmium	0.031	U	0.031	U	0.031	U	0.031	U	ND	U
Chromium	0.14	U	0.14	U	0.14	U	0.14	U	ND	U
Copper	0.24	U	0.24	U	0.24	U	0.24	U	ND	U
Lead	0.029	U	0.029	U	0.056	J	0.029	U	0.047	J
Nickel	0.20	U	0.20	U	0.20	U	0.20	U	ND	U
Selenium	0.086	U	0.086	U	0.086	U	0.086	U	ND	U
Silver	0.14	U	0.14	U	0.16	J	0.14	U	ND	U
Zinc	0.90	U	0.90	U	0.90	U	0.90	U	ND	U

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract : D3593500

Method Blank Matrix: \_\_\_\_\_ Instrument ID: 10ICMC

Method Blank Concentration Units: \_\_\_\_\_

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	05/09/2022 23:53	C		C		C
Arsenic			0.11	U				
Cadmium			0.031	U				
Chromium			0.14	U				
Copper			0.24	U				
Lead			0.029	U				
Nickel			0.20	U				
Selenium			0.086	U				
Silver			0.15	J				
Zinc			0.90	U				

FORM III INORGANIC-1  
BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract : D3593500

Method Blank Matrix: \_\_\_\_\_ Instrument ID: 10ICMC

Method Blank Concentration Units: \_\_\_\_\_

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)					
	05/10/2022 09:23	C	05/10/2022 09:42	C	05/10/2022 10:29	C	05/10/2022 11:03	C
Arsenic	0.11	U	0.11	U	0.11	U	0.11	U
Cadmium	0.031	U	0.031	U	0.031	U	0.031	U
Chromium	0.14	U	0.14	U	0.14	U	0.14	U
Copper	0.24	U	0.24	U	0.24	U	0.24	U
Lead	0.029	U	0.029	U	0.029	U	0.029	U
Nickel	0.20	U	0.20	U	0.20	U	0.20	U
Selenium	0.086	U	0.086	U	0.086	U	0.086	U
Silver	0.14	U	0.14	U	0.14	U	0.14	U
Zinc	0.90	U	0.90	U	0.90	U	0.90	U

FORM IV INORGANIC-1  
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Instrument ID: 10ICMC Solution A Run Date: 05/09/2022 14:59

ICS Source: 364938,364937 Solution AB Run Date: 05/09/2022 15:03

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	25000	27500	25297.225	101.2	27470.471	99.9	80-120
Arsenic		100	0.03		99.509	99.5	80-120
Cadmium		100	0.023		100.569	100.6	80-120
Calcium	25000	27500	24949.281	99.8	27596.125	100.3	80-120
Chromium		100	0.241		101.081	101.1	80-120
Copper		100	0.074		100.457	100.5	80-120
Iron	25000	26250	25760.547	103	26703.081	101.7	80-120
Lead		100	0.009		99.373	99.4	80-120
Magnesium	25000	27500	25396.101	101.6	27512.366	100	80-120
Molybdenum	500	600	515.335	103.1	612.622	102.1	80-120
Nickel		100	0.066		103.14	103.1	80-120
Potassium	25000	27500	25397.431	101.6	27751.162	100.9	80-120
Selenium		100	0.052		101.105	101.1	80-120
Silver		50	0.039		49.009	98	80-120
Sodium	25000	27500	25625.218	102.5	27821.734	101.2	80-120
Titanium	500	600	500.43	100.1	598.402	99.7	80-120
Zinc		100	0.149		100.651	100.7	80-120

FORM IV INORGANIC-1  
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Instrument ID: 10ICMC Solution A Run Date: 05/10/2022 09:31

ICS Source: 365168,365167 Solution AB Run Date: 05/10/2022 09:35

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	25000	27500	25304.338	101.2	27128.943	98.7	80-120
Arsenic		100	0.035		100.041	100	80-120
Cadmium		100	0		100.554	100.6	80-120
Calcium	25000	27500	25023.755	100.1	27277.092	99.2	80-120
Chromium		100	0.25		99.967	100	80-120
Copper		100	0.077		100.873	100.9	80-120
Iron	25000	26250	25707.235	102.8	26292.574	100.2	80-120
Lead		100	0.002		98.841	98.8	80-120
Magnesium	25000	27500	25226.267	100.9	27078.144	98.5	80-120
Molybdenum	500	600	527.163	105.4	622.214	103.7	80-120
Nickel		100	-0.068		102.596	102.6	80-120
Potassium	25000	27500	25488.37	102	27317.712	99.3	80-120
Selenium		100	0.051		101.198	101.2	80-120
Silver		50	0.038		49.611	99.2	80-120
Sodium	25000	27500	25527.407	102.1	27398.406	99.6	80-120
Titanium	500	600	510.236	102	604.438	100.7	80-120
Zinc		100	0.228		100.866	100.9	80-120

FORM V INORGANIC-1  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4303386MS
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Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Matrix: Solid Basis: Dry Parent Sample ID: BNSF-BG13-042122-0-10

Percent Moisture: 33.1

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Arsenic	mg/kg	75-125	72.0	ND	72.0	100
Cadmium	mg/kg	75-125	70.8	ND	72.0	98
Chromium	mg/kg	75-125	83.1	ND	72.0	115
Copper	mg/kg	75-125	79.3	1.6	72.0	108
Lead	mg/kg	75-125	74.2	0.092J	72.0	103
Nickel	mg/kg	75-125	83.7	ND	72.0	116
Selenium	mg/kg	75-125	74.8	ND	72.0	104
Silver	mg/kg	75-125	35.0	ND	36.0	97
Zinc	mg/kg	75-125	113	2.0J	72.0	154*

\* Spike Recovery outside QC Limits



FORM V INORGANIC-2  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4303387MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Matrix: Solid Basis: Dry Parent Sample ID: BNSF-BG13-042122-0-10

Percent Moisture: 33.1

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Arsenic	mg/kg	75-125	77.7	ND	73.4	106
Cadmium	mg/kg	75-125	76.4	ND	73.4	104
Chromium	mg/kg	75-125	89.9	ND	73.4	122
Copper	mg/kg	75-125	86.4	1.6	73.4	116
Lead	mg/kg	75-125	79.7	0.092J	73.4	109
Nickel	mg/kg	75-125	89.6	ND	73.4	122
Selenium	mg/kg	75-125	78.5	ND	73.4	107
Silver	mg/kg	75-125	37.9	ND	36.8	103
Zinc	mg/kg	75-125	122	2.0J	73.4	164*

\* Spike Recovery outside QC Limits

FORM V INORGANIC-1  
POST-DIGESTION SPIKE SAMPLE RECOVERY

SAMPLE NO.

4305431PDS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Matrix: Solid Parent Sample ID: BNSF-BG13-042122-0-10

Analyte	Units	Control Limit %R	DF	Spiked Sample Result (SSR)	DF	Sample Result (SR)	Spike Added (SA)	%R
Arsenic	ug/L	80-120	1	84.6	1	2.2U	80	105.7
Cadmium	ug/L	80-120	1	85.4	1	0.63U	80	106.7
Chromium	ug/L	80-120	1	87.7	1	2.8U	80	109.6
Copper	ug/L	80-120	1	88.4	1	4.8U	80	110.5
Lead	ug/L	80-120	1	86.2	1	0.59U	80	107.8
Nickel	ug/L	80-120	1	89.0	1	4.0U	80	111.3
Selenium	ug/L	80-120	1	86.5	1	1.7U	80	108.1
Silver	ug/L	80-120	1	31.3	1	2.9U	40	78.3*
Zinc	ug/L	80-120	1	87.3J	1	18.0U	80	109.1

FORM VI INORGANIC-1  
DUPLICATES

SAMPLE NO.

4303387MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 33.1 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Arsenic	20	72.0	77.7	8
Cadmium	20	70.8	76.4	8
Chromium	20	83.1	89.9	8
Copper	20	79.3	86.4	9
Lead	20	74.2	79.7	7
Nickel	20	83.7	89.6	7
Selenium	20	74.8	78.5	5
Silver	20	35.0	37.9	8
Zinc	20	113	122	8

FORM VII INORGANIC-1  
LABORATORY CONTROL SAMPLE

SAMPLE NO.

4303385LCS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Arsenic	mg/kg	49.1	45.5	93	80	120
Cadmium	mg/kg	49.1	45.4	92	80	120
Chromium	mg/kg	49.1	47.7	97	80	120
Copper	mg/kg	49.1	47.1	96	80	120
Lead	mg/kg	49.1	45.7	93	80	120
Nickel	mg/kg	49.1	48.1	98	80	120
Selenium	mg/kg	49.1	48.8	99	80	120
Silver	mg/kg	24.6	22.9	93	80	120
Zinc	mg/kg	49.1	46.3	94	80	120

FORM VIII INORGANIC-1  
SERIAL DILUTIONS

4305432SD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500Matrix: Solid Parent Sample ID: BNSF-BG13-042122-0-10

Analyte	Units	Initial Sample Result	Serial Dilution Result	% Difference	Control Limit %D
Arsenic	ug/L	2.2U	10.9U		10
Cadmium	ug/L	0.63U	3.1U		10
Chromium	ug/L	2.8U	14.0U		10
Copper	ug/L	4.8U	24.2U		10
Lead	ug/L	0.59U	2.9U		10
Nickel	ug/L	4.0U	19.9U		10
Selenium	ug/L	1.7U	8.6U		10
Silver	ug/L	2.9U	14.5U		10
Zinc	ug/L	18.0U	89.9U		10

\* Indicates that the % Difference exceeds the control limit.  
No difference is calculated if either result is a non-detect.

FORM IX INORGANIC-1  
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Preparation Method: None Instrument ID: 10ICMC

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Arsenic	0.50	0.11	04/01/2022
Cadmium	0.080	0.031	04/01/2022
Chromium	2.0	0.14	04/01/2022
Copper	1.0	0.24	04/01/2022
Lead	0.50	0.029	04/01/2022
Nickel	0.50	0.20	04/01/2022
Selenium	0.50	0.086	04/01/2022
Silver	0.50	0.14	04/01/2022
Zinc	5.0	0.90	04/01/2022

FORM IX INORGANIC-2  
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Preparation Method: EPA 3050B Instrument ID: 10ICMC

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Arsenic	0.50	0.11	07/19/2021
Cadmium	0.080	0.031	07/19/2021
Chromium	2.0	0.14	07/19/2021
Copper	1.0	0.24	07/19/2021
Lead	0.50	0.029	07/19/2021
Nickel	0.50	0.20	07/19/2021
Selenium	0.50	0.086	07/19/2021
Silver	0.50	0.14	07/19/2021
Zinc	5.0	0.90	07/19/2021

FORM XI - INORGANIC-1  
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract : D3593500

Instrument ID: 10ICMC Effective Date:05/06/2022

<b>Analyte</b>	<b>Concentration (ug/L)</b>
Arsenic	450
Cadmium	450
Chromium	450
Copper	450
Lead	450
Nickel	450
Selenium	450
Silver	225
Zinc	450



FORM XII INORGANIC-1  
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Preparation Method: EPA 3050B Batch: MPRP 123798

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
4303384	4303384	04/26/2022	1.006	50
4303385	4303385	04/26/2022	1.018	50
4303386	4303386	04/26/2022	1.038	50
4303387	4303387	04/26/2022	1.018	50
10605661001	BNSF-BG13-042122-0-10	04/26/2022	1.027	50
10605661002	BNSF-SG23-042122-0-6	04/26/2022	1.025	50

FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Instrument ID: 10ICMC Analysis Method: EPA 6020B

Start Date: 05/09/2022 14:05 End Date: 05/09/2022 23:53

Sample Name	Lab Sample ID	D/F	Date	Time	Ag	As	Cd	Cr	Cu	Ni	Pb	Se	Zn
29929122CAL0	29929122CAL0	1	05/09/2022	14:05	X	X	X	X	X	X	X	X	X
29929123CAL1	29929123CAL1	1	05/09/2022	14:09	X	X	X	X	X	X	X	X	X
29929124CAL2	29929124CAL2	1	05/09/2022	14:13	X	X	X	X	X	X	X	X	X
29929125CAL3	29929125CAL3	1	05/09/2022	14:17	X	X	X	X	X	X	X	X	X
29929126CAL4	29929126CAL4	1	05/09/2022	14:21	X	X	X	X	X	X	X	X	X
29929127CAL5	29929127CAL5	1	05/09/2022	14:25	X	X	X	X	X	X	X	X	X
29929128CAL6	29929128CAL6	1	05/09/2022	14:29	X	X	X	X	X	X	X	X	X
29929129CAL7	29929129CAL7	1	05/09/2022	14:35	X	X	X	X	X	X	X	X	X
29929130ICV	29929130ICV	1	05/09/2022	14:44	X	X	X	X	X	X	X	X	X
29929131ICB	29929131ICB	1	05/09/2022	14:52	X	X	X	X	X	X	X	X	X
29929132CRDL	29929132CRDL	1	05/09/2022	14:55	X	X	X	X	X	X	X	X	X
29929133ICSA	29929133ICSA	1	05/09/2022	14:59	X	X	X	X	X	X	X	X	X
29929134ICSAB	29929134ICSAB	1	05/09/2022	15:03	X	X	X	X	X	X	X	X	X
29929135CCV	29929135CCV	1	05/09/2022	15:07	X	X	X	X	X	X	X	X	X
29929136CCB	29929136CCB	1	05/09/2022	15:16	X	X	X	X	X	X	X	X	X
29929251CCV	29929251CCV	1	05/09/2022	22:34	X	X	X	X	X	X	X	X	X
29929252CCB	29929252CCB	1	05/09/2022	22:38	X	X	X	X	X	X	X	X	X
29929253CRDL	29929253CRDL	1	05/09/2022	22:42	X	X	X	X	X	X	X	X	X
4303384BLANK	4303384	1	05/09/2022	22:45	X	X	X	X	X	X	X	X	X
4303385LCS	4303385	1	05/09/2022	22:49	X	X	X	X	X	X	X	X	X
29929254CCV	29929254CCV	1	05/09/2022	23:15	X	X	X	X	X	X	X	X	X
29929255CCB	29929255CCB	1	05/09/2022	23:19	X	X	X	X	X	X	X	X	X
BNSF-BG13-042122-0-10	10605661001	1	05/09/2022	23:23	X	X	X	X	X	X	X	X	X
4305431PDS	4305431	1	05/09/2022	23:27	X	X	X	X	X	X	X	X	X
4305432SD	4305432	5	05/09/2022	23:30	X	X	X	X	X	X	X	X	X
BNSF-SG23-042122-0-6	10605661002	1	05/09/2022	23:41	X	X	X	X	X	X	X	X	X
29929256CCV	29929256CCV	1	05/09/2022	23:49	X	X	X	X	X	X	X	X	X
29929257CCB	29929257CCB	1	05/09/2022	23:53	X	X	X	X	X	X	X	X	X

FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Instrument ID: 10ICMC Analysis Method: EPA 6020B

Start Date: 05/10/2022 08:38 End Date: 05/10/2022 11:03

Sample Name	Lab Sample ID	D/F	Date	Time	Ag	As	Cd	Cr	Cu	Ni	Pb	Se	Zn
29935268CAL0	29935268CAL0	1	05/10/2022	08:38	X	X	X	X	X	X	X	X	X
29935269CAL1	29935269CAL1	1	05/10/2022	08:42	X	X	X	X	X	X	X	X	X
29935270CAL2	29935270CAL2	1	05/10/2022	08:46	X	X	X	X	X	X	X	X	X
29935271CAL3	29935271CAL3	1	05/10/2022	08:50	X	X	X	X	X	X	X	X	X
29935272CAL4	29935272CAL4	1	05/10/2022	08:54	X	X	X	X	X	X	X	X	X
29935273CAL5	29935273CAL5	1	05/10/2022	08:58	X	X	X	X	X	X	X	X	X
29935274CAL6	29935274CAL6	1	05/10/2022	09:03	X	X	X	X	X	X	X	X	X
29935275CAL7	29935275CAL7	1	05/10/2022	09:08	X	X	X	X	X	X	X	X	X
29935276ICV	29935276ICV	1	05/10/2022	09:13	X	X	X	X	X	X	X	X	X
29935277ICB	29935277ICB	1	05/10/2022	09:23	X	X	X	X	X	X	X	X	X
29935278CRDL	29935278CRDL	1	05/10/2022	09:27	X	X	X	X	X	X	X	X	X
29935279ICSA	29935279ICSA	1	05/10/2022	09:31	X	X	X	X	X	X	X	X	X
29935280ICSAB	29935280ICSAB	1	05/10/2022	09:35	X	X	X	X	X	X	X	X	X
29935281CCV	29935281CCV	1	05/10/2022	09:38	X	X	X	X	X	X	X	X	X
29935282CCB	29935282CCB	1	05/10/2022	09:42	X	X	X	X	X	X	X	X	X
29935283CCV	29935283CCV	1	05/10/2022	10:24	X	X	X	X	X	X	X	X	X
29935284CCB	29935284CCB	1	05/10/2022	10:29	X	X	X	X	X	X	X	X	X
4303386MS	4303386	1	05/10/2022	10:51	X	X	X	X	X	X	X	X	X
4303387MSD	4303387	1	05/10/2022	10:55	X	X	X	X	X	X	X	X	X
29935285CCV	29935285CCV	1	05/10/2022	10:59	X	X	X	X	X	X	X	X	X
29935286CCB	29935286CCB	1	05/10/2022	11:03	X	X	X	X	X	X	X	X	X

# US EPA 200.8/6020 Tune Check Report

Acq/Data Batch  
Report Comment  
Instrument Name

D:\DATA\050922.b  
ICMC RJS  
G8403A SG19304531

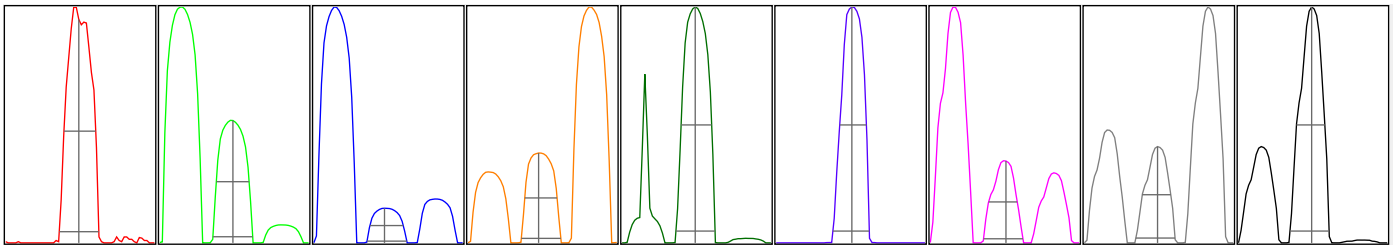
[He]

## Sensitivity

Mass	Count	RSD%	RSD%(Rqd)	RSD%(Flag)	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	23	3.837	5.000		22	23	24	23	23
24	12877	0.552	5.000		12983	12911	12859	12808	12826
25	1916	0.799	5.000		1941	1911	1920	1902	1908
26	2381	0.353	5.000		2385	2389	2385	2368	2378
59	8246	0.692	5.000		8182	8247	8258	8333	8212
115	294529	1.479	5.000		289294	291711	298077	293794	299770
206	8579	1.835	5.000		8386	8493	8572	8640	8805
207	7243	1.784	5.000		7045	7197	7266	7337	7370
208	17684	2.114	5.000		17182	17475	17703	17920	18139

Integration Time [sec] 0.1

## Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Required)	W-5% (Flag)
9	37.70	9.00	8.90 - 9.10		0.785	0.900	
24	20673.90	24.00	23.90 - 24.10		0.790	0.900	
25	3039.58	24.95	24.90 - 25.10		0.789	0.900	
26	3849.70	25.95	25.90 - 26.10		0.784	0.900	
59	14130.25	59.00	58.90 - 59.10		0.776	0.900	
115	566056.72	115.05	114.90 - 115.10		0.723	0.900	
206	16072.39	206.05	205.90 - 206.10		0.782	0.900	
207	13751.16	207.00	206.90 - 207.10		0.778	0.900	
208	33673.06	208.00	207.90 - 208.10		0.776	0.900	

Integration Time [sec] 0.1 Acquisition Time [sec] 212.5 Y Axis Linear

## Tune Parameters

### Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.78 L/min	Dilution Gas	0.15 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	7.0 mm	S/C Temp	2 °C		

### Lens Parameters

Extract 1	0.0 V	Omega Lens	14.2 V	Deflect	1.2 V
Extract 2	-185.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-100 V	Cell Exit	-70 V		

### Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

# US EPA 200.8/6020 Tune Check Report

Acq/Data Batch  
Report Comment  
Instrument Name

D:\DATA\050922.b  
ICMC RJS  
G8403A SG19304531

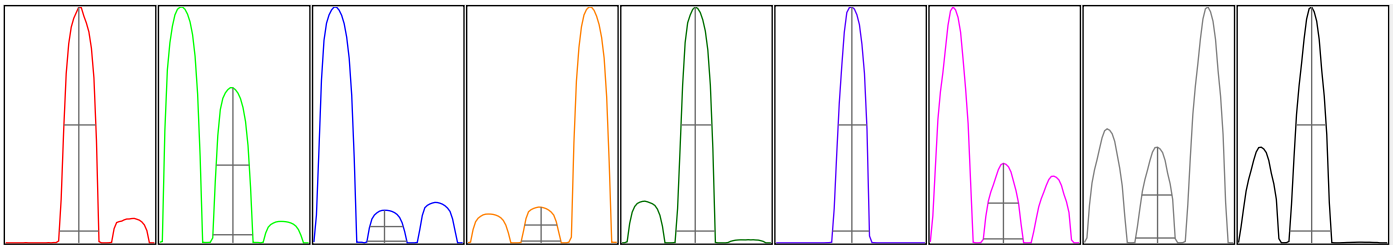
[H2]

## Sensitivity

Mass	Count	RSD%	RSD%(Rqd)	RSD%(Flag)	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	300	1.257	5.000		304	300	294	301	301
24	126375	0.294	5.000		126140	126078	126475	126199	126981
25	17589	0.353	5.000		17631	17542	17546	17549	17678
26	21133	0.247	5.000		21209	21068	21119	21153	21116
59	11050	0.755	5.000		11104	11123	11103	10982	10940
115	717608	0.975	5.000		721540	709184	724815	711069	721432
206	10133	0.515	5.000		10177	10177	10056	10150	10105
207	8496	0.621	5.000		8556	8546	8464	8479	8435
208	20905	0.461	5.000		21055	20912	20788	20898	20874

Integration Time [sec] 0.1

## Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Required)	W-5% (Flag)
9	501.14	9.00	8.90 - 9.10		0.783	0.900	
24	200818.53	24.00	23.90 - 24.10		0.790	0.900	
25	27779.37	24.95	24.90 - 25.10		0.790	0.900	
26	34363.38	26.00	25.90 - 26.10		0.785	0.900	
59	18751.00	59.00	58.90 - 59.10		0.777	0.900	
115	1321895.44	115.05	114.90 - 115.10		0.731	0.900	
206	18193.49	206.00	205.90 - 206.10		0.789	0.900	
207	15266.90	207.00	206.90 - 207.10		0.785	0.900	
208	37608.69	208.00	207.90 - 208.10		0.821	0.900	

Integration Time [sec] 0.1 Acquisition Time [sec] 212.5 Y Axis Linear

## Tune Parameters

### Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.78 L/min	Dilution Gas	0.15 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	7.0 mm	S/C Temp	2 °C		

### Lens Parameters

Extract 1	0.0 V	Omega Lens	13.7 V	Deflect	3.8 V
Extract 2	-180.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-100 V	Cell Exit	-70 V		

### Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	3.5 mL/min	OctP RF	200 V		

# US EPA 200.8/6020 Tune Check Report

Acq/Data Batch  
Report Comment  
Instrument Name

D:\DATA\051022.b  
ICMC RJS  
G8403A SG19304531

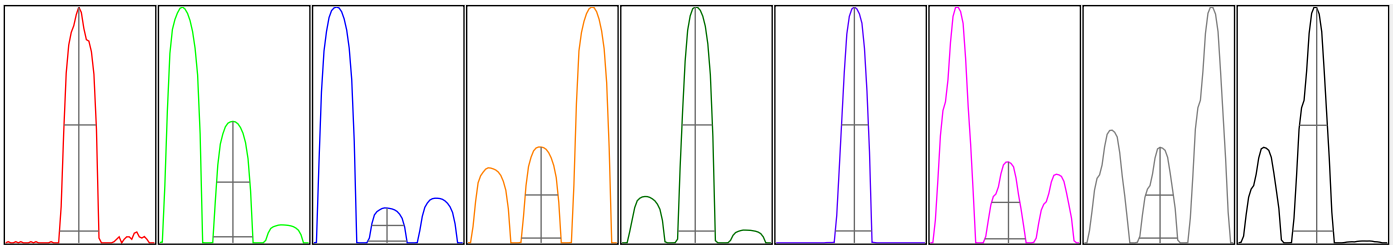
[He]

## Sensitivity

Mass	Count	RSD%	RSD%(Rqd)	RSD%(Flag)	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	23	1.770	5.000		23	23	23	23	23
24	12156	0.900	5.000		12306	12157	12177	12139	11999
25	1762	0.599	5.000		1774	1772	1758	1755	1751
26	2261	0.561	5.000		2282	2252	2263	2255	2253
59	7995	0.628	5.000		7945	8009	8021	8057	7941
115	296075	1.443	5.000		289275	295589	296221	300371	298918
206	8074	2.386	5.000		7766	8023	8153	8167	8264
207	6684	2.813	5.000		6403	6588	6781	6779	6870
208	16459	2.824	5.000		15698	16384	16579	16746	16886

Integration Time [sec] 0.1

## Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Required)	W-5% (Flag)
9	39.05	9.00	8.90 - 9.10		0.781	0.900	
24	19283.75	24.00	23.90 - 24.10		0.787	0.900	
25	2847.25	25.00	24.90 - 25.10		0.777	0.900	
26	3647.04	26.00	25.90 - 26.10		0.786	0.900	
59	13759.09	59.00	58.90 - 59.10		0.740	0.900	
115	569760.83	115.10	114.90 - 115.10		0.722	0.900	
206	15297.31	206.10	205.90 - 206.10		0.807	0.900	
207	12972.27	207.05	206.90 - 207.10		0.762	0.900	
208	31892.80	208.10	207.90 - 208.10		0.807	0.900	

Integration Time [sec] 0.1 Acquisition Time [sec] 212.5 Y Axis Linear

## Tune Parameters

### Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.78 L/min	Dilution Gas	0.15 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	7.0 mm	S/C Temp	2 °C		

### Lens Parameters

Extract 1	0.0 V	Omega Lens	13.2 V	Deflect	1.0 V
Extract 2	-175.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-100 V	Cell Exit	-70 V		

### Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

# US EPA 200.8/6020 Tune Check Report

Acq/Data Batch  
Report Comment  
Instrument Name

D:\DATA\051022.b  
ICMC RJS  
G8403A SG19304531

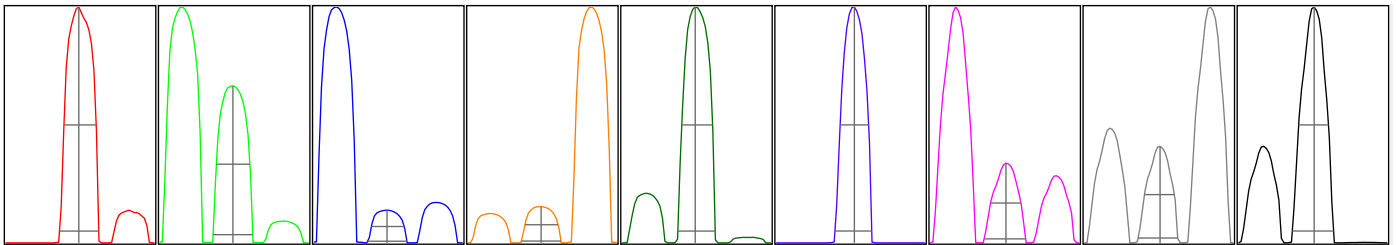
[H2]

## Sensitivity

Mass	Count	RSD%	RSD%(Rqd)	RSD%(Flag)	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	285	1.525	5.000		285	283	279	291	286
24	132286	0.379	5.000		132389	132281	132197	131578	132983
25	17974	0.187	5.000		18021	17991	17936	17950	17971
26	22333	0.111	5.000		22306	22327	22314	22366	22350
59	10350	0.779	5.000		10305	10245	10435	10341	10425
115	679404	1.481	5.000		667644	671258	692072	680412	685636
206	8557	1.475	5.000		8492	8369	8640	8679	8605
207	7063	1.820	5.000		6963	6892	7155	7186	7120
208	17301	1.655	5.000		17137	16896	17355	17580	17539

Integration Time [sec] 0.1

## Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Required)	W-5% (Flag)
9	471.73	9.00	8.90 - 9.10		0.779	0.900	
24	208682.73	24.00	23.90 - 24.10		0.788	0.900	
25	28942.89	25.00	24.90 - 25.10		0.780	0.900	
26	35723.10	26.00	25.90 - 26.10		0.787	0.900	
59	17688.83	59.00	58.90 - 59.10		0.741	0.900	
115	1265000.72	115.10	114.90 - 115.10		0.730	0.900	
206	15313.19	206.05	205.90 - 206.10		0.824	0.900	
207	12905.32	207.05	206.90 - 207.10		0.786	0.900	
208	31465.93	208.05	207.90 - 208.10		0.820	0.900	

Integration Time [sec] 0.1 Acquisition Time [sec] 212.5 Y Axis Linear

## Tune Parameters

### Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.78 L/min	Dilution Gas	0.15 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	7.0 mm	S/C Temp	2 °C		

### Lens Parameters

Extract 1	0.0 V	Omega Lens	12.7 V	Deflect	2.8 V
Extract 2	-165.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-95 V	Cell Exit	-70 V		

### Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	3.5 mL/min	OctP RF	200 V		

FORM XV INORGANIC-1  
INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Minnesota      SDG No. : 10605661      Contract: D3593500

Instrument ID: 10ICMC      Start Date: 05/09/2022 14:05      End Date: 05/09/2022 23:53

Sample Name	Time	Ge-72	Ge-72-IS1	In-115	Ir-193-IS	Sc-45-IS	Sc-45-IS1	Tb-159
29929122CAL0	14:05	100.0	100.0	100.0	100.0	100.0	100.0	100.0
29929123CAL1	14:09	98.4	98.3	98.1	97.6	98.0	98.4	98.6
29929124CAL2	14:13	97.5	97.6	98.0	96.8	97.1	97.1	98.1
29929125CAL3	14:17	98.0	97.1	98.6	97.7	96.7	96.9	98.9
29929126CAL4	14:21	95.2	95.6	95.3	95.1	93.8	94.5	97.6
29929127CAL5	14:25	94.1	96.2	93.6	94.5	92.2	95.3	96.5
29929128CAL6	14:29	94.5	97.8	92.6	93.6	92.9	97.9	96.8
29929129CAL7	14:35	96.9	101.8	95.6	97.7	95.9	103.3	100.1
29929130ICV	14:44	100.6	100.6	100.5	99.4	99.1	99.8	100.6
29929131ICB	14:52	97.4	100.6	98.2	97.6	96.8	100.2	98.7
29929132CRDL	14:55	100.6	99.7	100.5	99.8	99.7	99.4	100.6
29929133ICSA	14:59	94.5	97.4	94.5	96.1	93.9	95.8	98.3
29929134ICSAB	15:03	96.1	99.9	94.9	96.0	94.1	98.5	98.7
29929135CCV	15:07	100.5	100.4	101.2	101.6	98.8	99.4	102.4
29929136CCB	15:16	100.5	103.5	102.1	104.2	98.2	102.3	103.5
29929251CCV	22:34	103.3	104.0	105.1	103.6	100.1	101.8	104.4
29929252CCB	22:38	101.1	98.6	104.0	103.3	97.9	96.5	103.4
29929253CRDL	22:42	101.8	105.1	104.3	103.8	98.6	103.0	104.9
4303384	22:45	97.5	101.5	100.5	101.2	94.6	99.1	101.3
4303385	22:49	99.2	102.3	101.0	101.6	95.5	99.3	103.5
29929254CCV	23:15	101.4	104.5	102.4	102.1	96.2	101.7	102.4
29929255CCB	23:19	101.5	104.3	104.0	104.5	97.5	101.3	105.2
BNSF-BG13-042122-0-	23:23	98.3	102.5	101.0	103.0	94.5	99.8	102.4
4305431	23:27	99.7	101.6	101.1	101.5	94.7	98.5	102.8
4305432	23:30	98.5	102.1	101.7	102.5	94.4	99.0	102.5
BNSF-SG23-042122-0-6	23:41	96.7	100.3	98.9	100.9	92.7	98.0	101.6
29929256CCV	23:49	100.4	103.0	102.1	102.8	95.6	100.0	102.9
29929257CCB	23:53	99.4	103.2	102.9	103.7	95.0	100.0	103.6



FORM XV INORGANIC-1  
INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

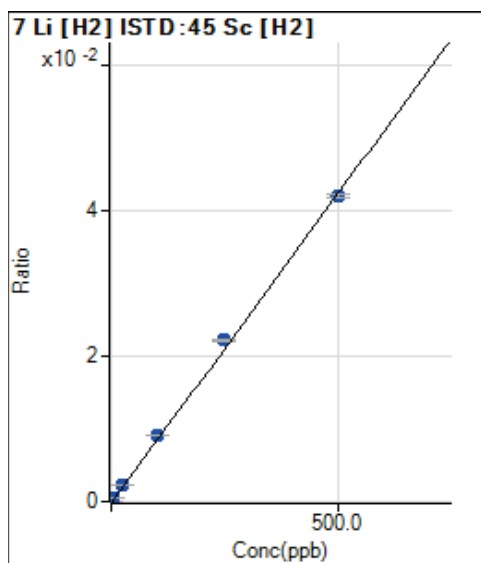
Instrument ID: 10ICMC Start Date: 05/10/2022 08:38 End Date: 05/10/2022 11:03

Sample Name	Time	Ge-72	Ge-72-IS1	In-115	Ir-193-IS	Sc-45-IS	Sc-45-IS1	Tb-159
29935268CAL0	08:38	100.0	100.0	100.0	100.0	100.0	100.0	100.0
29935269CAL1	08:42	99.7	98.8	99.1	99.0	100.5	99.3	98.7
29935270CAL2	08:46	99.2	99.6	98.6	98.8	99.5	99.2	99.1
29935271CAL3	08:50	98.5	98.3	98.4	97.7	98.4	97.3	98.1
29935272CAL4	08:54	98.4	97.6	97.0	97.5	97.3	97.1	98.0
29935273CAL5	08:58	96.3	97.9	94.5	96.6	95.9	97.7	97.5
29935274CAL6	09:03	96.8	99.7	94.7	98.8	96.7	100.0	99.0
29935275CAL7	09:08	97.0	101.6	94.9	98.0	97.8	103.7	99.8
29935276ICV	09:13	102.3	102.6	101.2	102.8	101.9	102.1	102.5
29935277ICB	09:23	100.4	100.7	101.3	103.0	100.3	100.3	101.5
29935278CRDL	09:27	100.3	101.9	100.7	100.9	100.7	101.4	100.2
29935279ICSA	09:31	96.9	101.1	95.0	97.0	97.3	99.5	98.4
29935280ICSAB	09:35	99.2	102.1	95.9	97.8	99.4	101.2	99.1
29935281CCV	09:38	102.2	102.7	101.1	101.9	102.1	102.2	102.0
29935282CCB	09:42	102.4	104.3	102.0	102.8	102.3	103.0	102.5
29935283CCV	10:24	99.9	99.8	99.7	101.0	100.1	99.8	100.1
29935284CCB	10:29	98.6	100.9	98.4	100.5	98.7	100.4	99.0
4303386	10:51	96.4	97.3	95.5	98.6	96.0	96.8	98.6
4303387	10:55	96.8	98.0	96.4	99.1	96.4	97.4	99.8
29935285CCV	10:59	101.3	101.1	101.3	102.9	99.9	99.2	102.7
29935286CCB	11:03	98.8	100.4	99.7	101.5	97.8	99.3	100.1

Calibration for 251\_CC.V.d

Batch Folder: D:\DATA\050922B\  
 Analysis File: 050922B.batch.bin  
 DA Date-Time: 05/10/22 05:40:26  
 Calibration Title:  
 Calibration Method: External Calibration  
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	005CALB.d	CAL0	05/09/22 14:05:28
2	006CALS.d	CAL1	05/09/22 14:09:47
3	007CALS.d	CAL2	05/09/22 14:13:45
4	008CALS.d	CAL3	05/09/22 14:17:42
5	009CALS.d	CAL4	05/09/22 14:21:40
6	010CALS.d	CAL5	05/09/22 14:25:35
7	011CALS.d	CAL6	05/09/22 14:29:26
8	012CALS.d	CAL7	05/09/22 14:35:20



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	73.33	0.0000	P	11.2	
2	<input type="checkbox"/>	0.500	0.549	276.00	0.0001	P	2.3	9.8
3	<input type="checkbox"/>	5.000	5.441	2064.64	0.0005	P	0.6	8.8
4	<input type="checkbox"/>	25.000	27.399	10086.01	0.0024	P	1.6	9.6
5	<input type="checkbox"/>	100.000	105.885	37809.61	0.0090	P	0.0	5.9
6	<input type="checkbox"/>	250.000	260.351	93667.13	0.0222	P	0.5	4.1
7	<input type="checkbox"/>	500.000	493.523	182446.48	0.0421	P	0.7	-1.3
8	<input type="checkbox"/>			153.00	0.0000	P	6.1	

$y = 8.5282E-005 * x + 1.6578E-005$

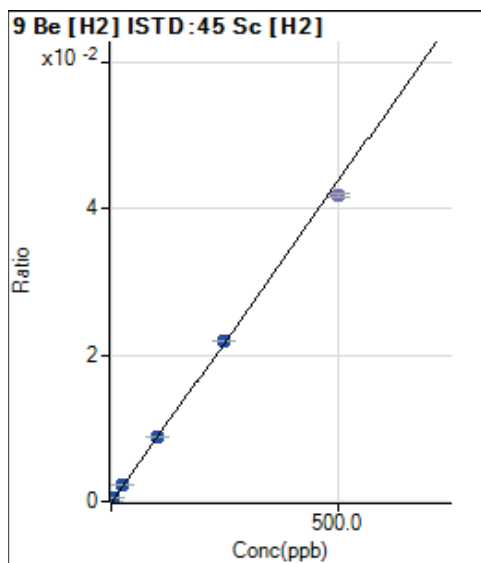
R = 0.9996

DL = 0.06532 ppb

BEC = 0.1944 ppb

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	21.17	0.0000	P	40.7	
2	<input type="checkbox"/>	0.200	0.212	101.83	0.0000	P	6.0	5.8
3	<input type="checkbox"/>	5.000	5.267	2009.13	0.0005	P	3.7	5.3
4	<input type="checkbox"/>	25.000	26.452	9986.62	0.0023	P	0.9	5.8
5	<input type="checkbox"/>	100.000	101.366	37256.48	0.0089	P	0.7	1.4
6	<input type="checkbox"/>	250.000	249.303	92391.59	0.0219	P	0.3	-0.3
7	<input checked="" type="checkbox"/>	500.000		181239.70	0.0418	P	0.9	
8	<input type="checkbox"/>			91.83	0.0000	P	6.3	

$y = 8.7895E-005 * x + 4.7840E-006$

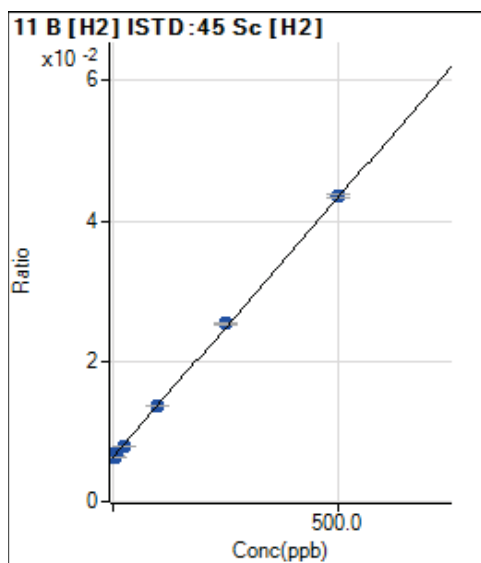
R = 1.0000

DL = 0.06642 ppb

BEC = 0.05443 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	28845.41	0.0065	P	0.2	
2	<input type="checkbox"/>	10.000	7.682	30867.05	0.0071	P	1.0	-23.2
3	<input type="checkbox"/>	5.000	-1.901	27401.24	0.0064	P	1.0	-138.
4	<input type="checkbox"/>	25.000	17.522	33516.33	0.0078	P	0.6	-29.9
5	<input type="checkbox"/>	100.000	96.322	57120.85	0.0137	P	0.3	-3.7
6	<input type="checkbox"/>	250.000	253.736	106856.80	0.0253	P	0.2	1.5
7	<input type="checkbox"/>	500.000	499.357	188819.52	0.0436	P	0.7	-0.1
8	<input type="checkbox"/>			21510.59	0.0047	P	0.9	

$y = 7.4209E-005 * x + 0.0065$

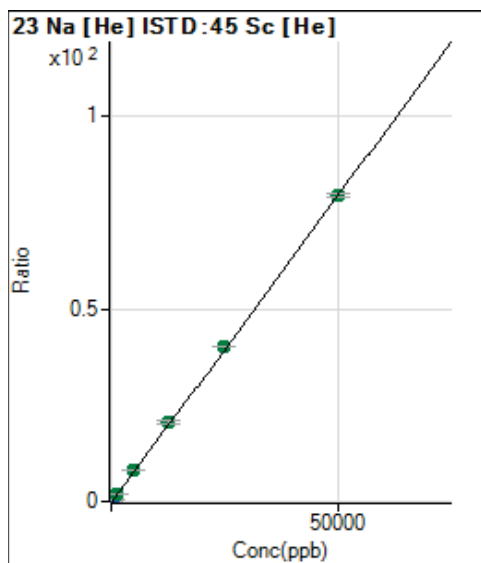
R = 0.9998

DL = 0.6058 ppb

BEC = 87.85 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	12210.05	0.0203	P	0.4	
2	<input type="checkbox"/>	50.000	54.122	62990.42	0.1067	P	0.5	8.2
3	<input type="checkbox"/>	250.000	262.066	256580.53	0.4389	P	0.5	4.8
4	<input type="checkbox"/>	1250.000	1316.713	1235872.40	2.1235	A	1.2	5.3
5	<input type="checkbox"/>	5000.000	5101.526	4612466.70	8.1692	A	0.4	2.0
6	<input type="checkbox"/>	12500.00	12852.60	11399108.16	20.5503	A	4.5	2.8
7	<input type="checkbox"/>	25000.00	25232.60	22566006.33	40.3255	A	0.7	0.9
8	<input type="checkbox"/>	50000.00	49783.66	45936382.65	79.5420	A	1.4	-0.4

$y = 0.0016 * x + 0.0203$

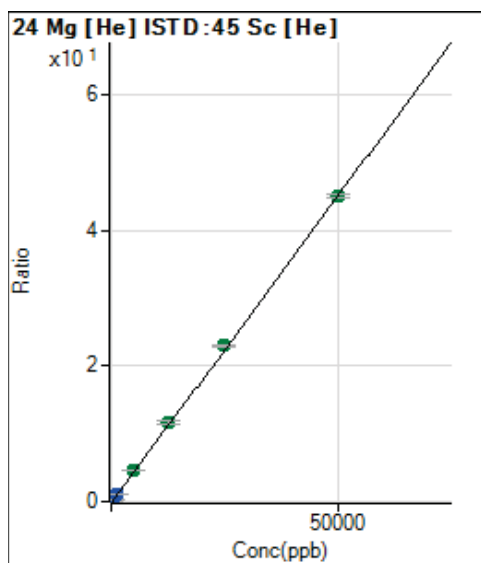
R = 1.0000

DL = 0.1512 ppb

BEC = 12.69 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	4910.85	0.0082	P	0.9	
2	<input type="checkbox"/>	30.000	31.289	21547.28	0.0365	P	1.2	4.3
3	<input type="checkbox"/>	250.000	265.085	145207.48	0.2484	P	0.2	6.0
4	<input type="checkbox"/>	1250.000	1316.405	699045.59	1.2011	P	1.3	5.3
5	<input type="checkbox"/>	5000.000	5095.986	2612084.23	4.6263	A	0.5	1.9
6	<input type="checkbox"/>	12500.00	12914.63	6496482.40	11.7117	A	4.5	3.3
7	<input type="checkbox"/>	25000.00	25314.28	12841915.23	22.9486	A	0.9	1.3
8	<input type="checkbox"/>	50000.00	49727.86	26029896.28	45.0729	A	1.5	-0.5

$y = 9.0623E-004 * x + 0.0082$

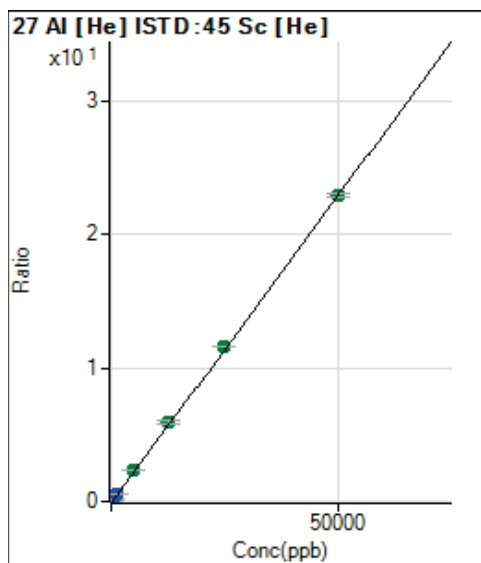
R = 0.9999

DL = 0.2511 ppb

BEC = 8.999 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	80.00	0.0001	P	9.1	
2	<input type="checkbox"/>	30.000	33.317	9147.14	0.0155	P	0.3	11.1
3	<input type="checkbox"/>	250.000	262.955	70975.99	0.1214	P	0.4	5.2
4	<input type="checkbox"/>	1250.000	1313.398	352608.75	0.6059	P	1.1	5.1
5	<input type="checkbox"/>	5000.000	5067.684	1319707.17	2.3373	A	0.6	1.4
6	<input type="checkbox"/>	12500.00	12813.08	3277874.42	5.9095	A	4.6	2.5
7	<input type="checkbox"/>	25000.00	25225.51	6510387.00	11.6341	A	0.7	0.9
8	<input type="checkbox"/>	50000.00	49800.54	13264396.33	22.9680	A	1.2	-0.4

$y = 4.6120E-004 * x + 1.3283E-004$

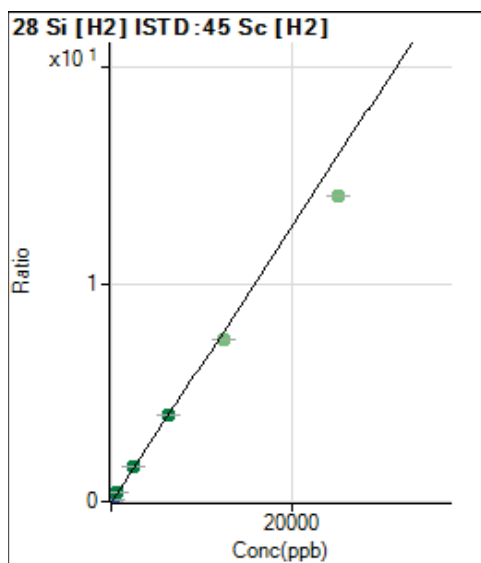
R = 1.0000

DL = 0.07885 ppb

BEC = 0.288 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	14027.27	0.0032	P	1.2	
2	<input type="checkbox"/>	100.000	105.789	308859.66	0.0709	P	1.1	5.8
3	<input type="checkbox"/>	125.000	130.225	371997.50	0.0866	P	0.8	4.2
4	<input type="checkbox"/>	625.000	656.272	1815510.84	0.4236	A	0.4	5.0
5	<input type="checkbox"/>	2500.000	2520.205	6760479.67	1.6176	A	0.8	0.8
6	<input type="checkbox"/>	6250.000	6238.594	16859747.33	3.9995	A	1.0	-0.2
7	<input checked="" type="checkbox"/>	12500.00		32409836.67	7.4796	A	0.7	
8	<input checked="" type="checkbox"/>	25000.00		64374644.00	14.0891	A	0.2	

$y = 6.4059E-004 * x + 0.0032$

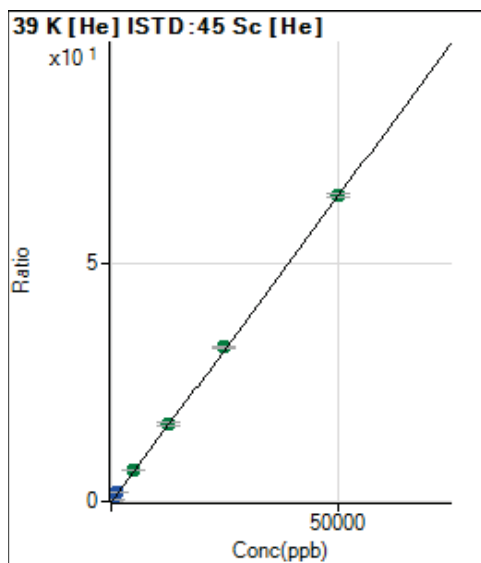
R = 1.0000

DL = 0.1796 ppb

BEC = 4.949 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	73846.83	0.1226	P	1.1	
2	<input type="checkbox"/>	100.000	107.263	154024.65	0.2610	P	0.8	7.3
3	<input type="checkbox"/>	250.000	260.875	268384.51	0.4591	P	0.8	4.4
4	<input type="checkbox"/>	1250.000	1298.132	1045778.84	1.7969	P	0.5	3.9
5	<input type="checkbox"/>	5000.000	5016.012	3721940.78	6.5919	A	0.6	0.3
6	<input type="checkbox"/>	12500.00	12678.78	9139026.53	16.4749	A	4.3	1.4
7	<input type="checkbox"/>	25000.00	25088.51	18175589.31	32.4801	A	1.0	0.4
8	<input type="checkbox"/>	50000.00	49908.17	37244505.28	64.4908	A	1.3	-0.2

$y = 0.0013 * x + 0.1226$

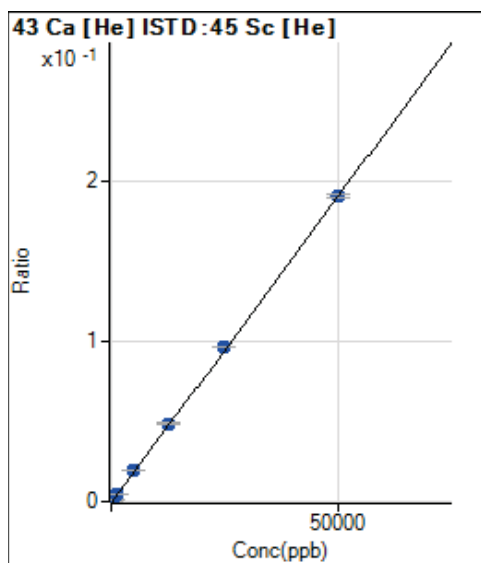
R = 1.0000

DL = 3.028 ppb

BEC = 95.09 ppb

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	13.85	0.0000	P	15.1	
2	<input type="checkbox"/>	100.000	112.544	268.28	0.0005	P	2.8	12.5
3	<input type="checkbox"/>	250.000	258.579	593.05	0.0010	P	4.2	3.4
4	<input type="checkbox"/>	1250.000	1304.183	2923.72	0.0050	P	0.4	4.3
5	<input type="checkbox"/>	5000.000	5041.903	10927.96	0.0194	P	0.3	0.8
6	<input type="checkbox"/>	12500.00	12719.42	27069.85	0.0488	P	3.8	1.8
7	<input type="checkbox"/>	25000.00	25175.34	54030.54	0.0966	P	0.4	0.7
8	<input type="checkbox"/>	50000.00	49851.86	110399.49	0.1912	P	1.6	-0.3

$y = 3.8342E-006 * x + 2.3007E-005$

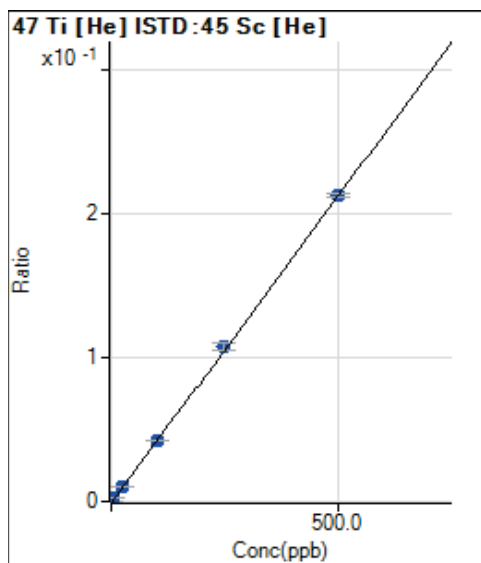
R = 1.0000

DL = 2.715 ppb

BEC = 6 ppb

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2.00	0.0000	P	0.4	
2	<input type="checkbox"/>	1.000	1.076	272.33	0.0005	P	7.9	7.6
3	<input type="checkbox"/>	5.000	4.970	1239.39	0.0021	P	5.8	-0.6
4	<input type="checkbox"/>	25.000	24.924	6179.97	0.0106	P	2.2	-0.3
5	<input type="checkbox"/>	100.000	99.487	23927.38	0.0424	P	0.6	-0.5
6	<input type="checkbox"/>	250.000	252.276	59612.97	0.1075	P	4.0	0.9
7	<input type="checkbox"/>	500.000	498.969	118930.55	0.2125	P	0.8	-0.2
8	<input type="checkbox"/>			632.01	0.0011	P	5.8	

$y = 4.2593E-004 * x + 3.3213E-006$

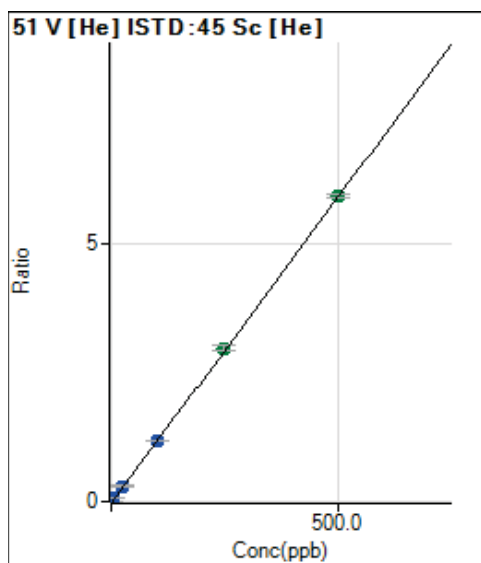
R = 1.0000

DL = 8.411E-05 ppb

BEC = 0.007798 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	-635.52	-0.0011	P	-81.	
2	<input type="checkbox"/>	1.000	0.994	6334.81	0.0107	P	9.8	-0.6
3	<input type="checkbox"/>	5.000	4.917	33465.72	0.0572	P	2.8	-1.7
4	<input type="checkbox"/>	25.000	25.379	174546.33	0.2999	P	2.1	1.5
5	<input type="checkbox"/>	100.000	98.931	661766.09	1.1721	P	0.1	-1.1
6	<input type="checkbox"/>	250.000	251.171	1651789.23	2.9773	A	3.9	0.5
7	<input type="checkbox"/>	500.000	499.610	3314632.13	5.9233	A	1.0	-0.1
8	<input type="checkbox"/>			228.39	0.0004	P	238.	

$y = 0.0119 * x - 0.0011$

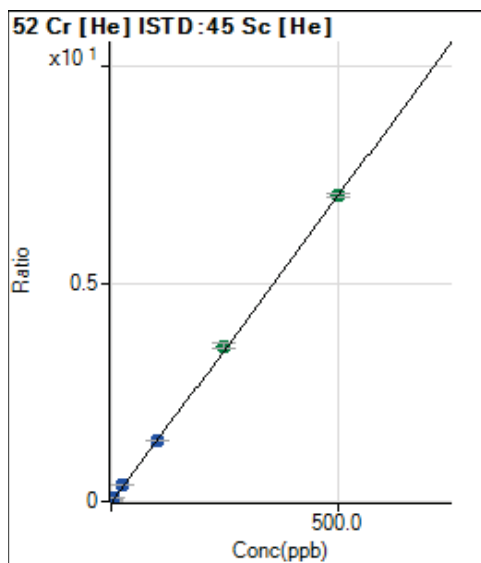
R = 1.0000

DL = 0.2184 ppb

BEC = -0.08899 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2482.89	0.0041	P	3.6	
2	<input type="checkbox"/>	2.000	2.081	19753.32	0.0335	P	1.3	4.0
3	<input type="checkbox"/>	5.000	5.042	43982.33	0.0752	P	0.8	0.8
4	<input type="checkbox"/>	25.000	25.609	212625.61	0.3653	P	0.3	2.4
5	<input type="checkbox"/>	100.000	99.521	794884.58	1.4078	P	0.2	-0.5
6	<input type="checkbox"/>	250.000	252.976	1981708.25	3.5723	A	4.2	1.2
7	<input type="checkbox"/>	500.000	498.577	3937521.08	7.0364	A	0.9	-0.3
8	<input type="checkbox"/>			4817.47	0.0083	P	3.5	

$y = 0.0141 * x + 0.0041$

R = 1.0000

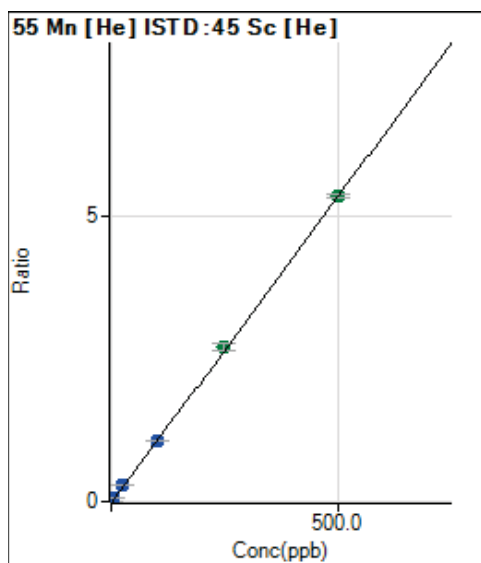
DL = 0.03193 ppb

BEC = 0.2923 ppb

Weight: <None>

Min Conc: <None>





	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	286.00	0.0005	P	17.5	
2	<input type="checkbox"/>	0.500	0.530	3632.46	0.0062	P	2.6	6.1
3	<input type="checkbox"/>	5.000	5.079	32069.05	0.0549	P	1.0	1.6
4	<input type="checkbox"/>	25.000	25.674	160249.07	0.2753	P	0.5	2.7
5	<input type="checkbox"/>	100.000	99.525	601876.89	1.0660	P	0.1	-0.5
6	<input type="checkbox"/>	250.000	253.033	1502954.08	2.7095	A	4.5	1.2
7	<input type="checkbox"/>	500.000	498.544	2987060.08	5.3379	A	0.9	-0.3
8	<input type="checkbox"/>			4512.04	0.0078	P	0.6	

$y = 0.0107 * x + 4.7511E-004$

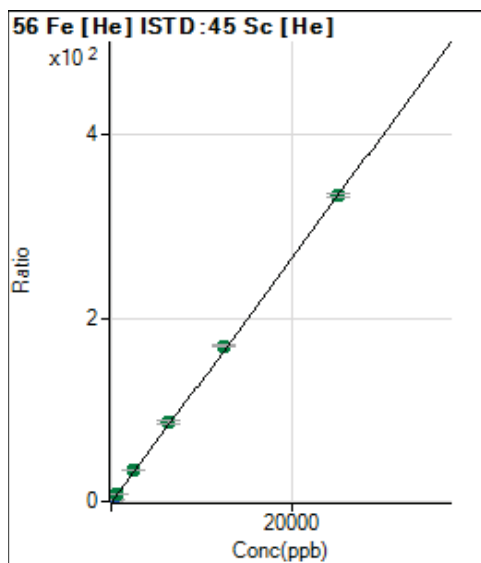
R = 1.0000

DL = 0.02331 ppb

BEC = 0.04438 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	11824.80	0.0196	P	1.6	
2	<input type="checkbox"/>	50.000	53.304	433700.05	0.7348	P	0.1	6.6
3	<input type="checkbox"/>	125.000	129.841	1029938.15	1.7618	P	0.3	3.9
4	<input type="checkbox"/>	625.000	651.669	5100200.33	8.7634	A	0.8	4.3
5	<input type="checkbox"/>	2500.000	2532.130	19193714.67	33.9943	A	0.1	1.3
6	<input type="checkbox"/>	6250.000	6434.642	47904225.33	86.3560	A	4.3	3.0
7	<input type="checkbox"/>	12500.00	12630.17	94842410.67	169.484	A	0.8	1.0
8	<input type="checkbox"/>	25000.00	24884.84	192838704.0	333.910	A	1.3	-0.5

$y = 0.0134 * x + 0.0196$

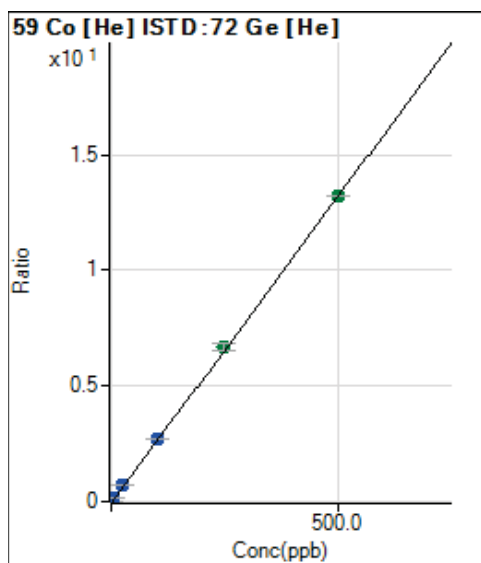
R = 1.0000

DL = 0.06849 ppb

BEC = 1.464 ppb

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	57.33	0.0001	P	12.0	
2	<input type="checkbox"/>	0.500	0.549	7197.79	0.0147	P	1.4	9.7
3	<input type="checkbox"/>	5.000	5.240	67638.48	0.1391	P	0.4	4.8
4	<input type="checkbox"/>	25.000	26.215	339804.48	0.6956	P	0.1	4.9
5	<input type="checkbox"/>	100.000	100.914	1271395.58	2.6774	P	0.4	0.9
6	<input type="checkbox"/>	250.000	252.986	3144966.83	6.7118	A	4.5	1.2
7	<input type="checkbox"/>	500.000	498.261	6232114.50	13.2189	A	0.5	-0.3
8	<input type="checkbox"/>			9395.05	0.0194	P	3.1	

$y = 0.0265 * x + 1.1496E-004$

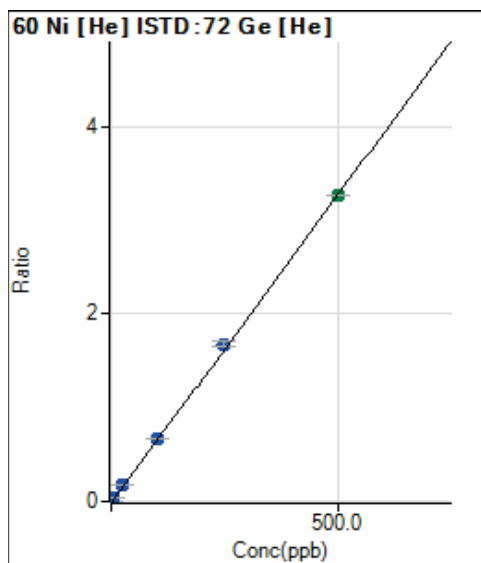
R = 1.0000

DL = 0.001565 ppb

BEC = 0.004333 ppb

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	206.00	0.0004	P	10.4	
2	<input type="checkbox"/>	0.500	0.561	2013.48	0.0041	P	2.4	12.3
3	<input type="checkbox"/>	5.000	5.326	17224.18	0.0354	P	1.7	6.5
4	<input type="checkbox"/>	25.000	26.335	84775.29	0.1735	P	0.4	5.3
5	<input type="checkbox"/>	100.000	102.254	319406.52	0.6726	P	0.5	2.3
6	<input type="checkbox"/>	250.000	255.637	787770.39	1.6809	P	3.8	2.3
7	<input type="checkbox"/>	500.000	496.661	1539494.75	3.2654	A	0.4	-0.7
8	<input type="checkbox"/>			4245.97	0.0088	P	2.9	

$y = 0.0066 * x + 4.1320E-004$

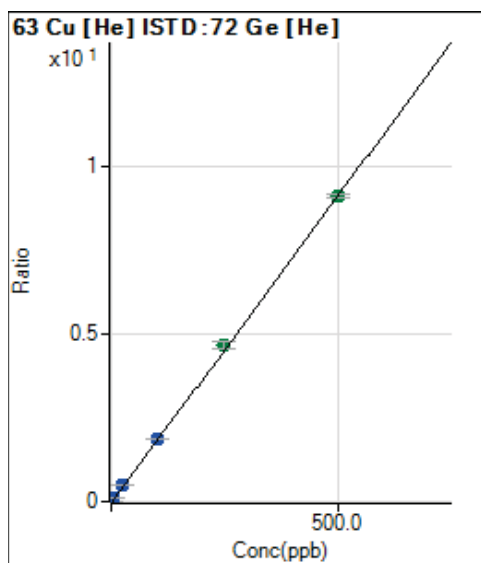
R = 0.9999

DL = 0.01968 ppb

BEC = 0.06285 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	327.34	0.0007	P	11.4	
2	<input type="checkbox"/>	1.000	1.060	9862.69	0.0201	P	1.0	6.0
3	<input type="checkbox"/>	5.000	5.241	47064.43	0.0968	P	0.6	4.8
4	<input type="checkbox"/>	25.000	26.338	236345.47	0.4838	P	0.3	5.4
5	<input type="checkbox"/>	100.000	101.451	884092.58	1.8618	P	0.4	1.5
6	<input type="checkbox"/>	250.000	254.727	2189904.83	4.6736	A	4.5	1.9
7	<input type="checkbox"/>	500.000	497.277	4301117.17	9.1231	A	0.6	-0.5
8	<input type="checkbox"/>			3367.73	0.0070	P	5.2	

$y = 0.0183 * x + 6.5633E-004$

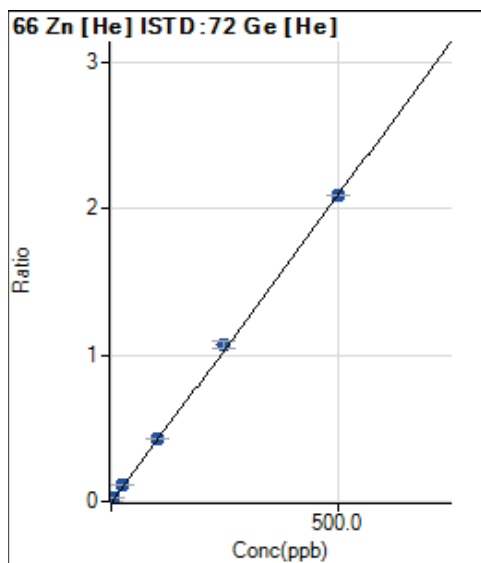
R = 0.9999

DL = 0.01226 ppb

BEC = 0.03578 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	217.33	0.0004	P	10.4	
2	<input type="checkbox"/>	5.000	5.452	11461.21	0.0234	P	0.9	9.0
3	<input type="checkbox"/>	5.000	5.188	10819.38	0.0223	P	2.3	3.8
4	<input type="checkbox"/>	25.000	26.106	53842.59	0.1102	P	0.2	4.4
5	<input type="checkbox"/>	100.000	101.349	202596.81	0.4266	P	0.3	1.3
6	<input type="checkbox"/>	250.000	254.735	502193.46	1.0717	P	4.2	1.9
7	<input type="checkbox"/>	500.000	497.301	986155.33	2.0917	P	0.6	-0.5
8	<input type="checkbox"/>			3273.71	0.0068	P	1.4	

$y = 0.0042 * x + 4.3576E-004$

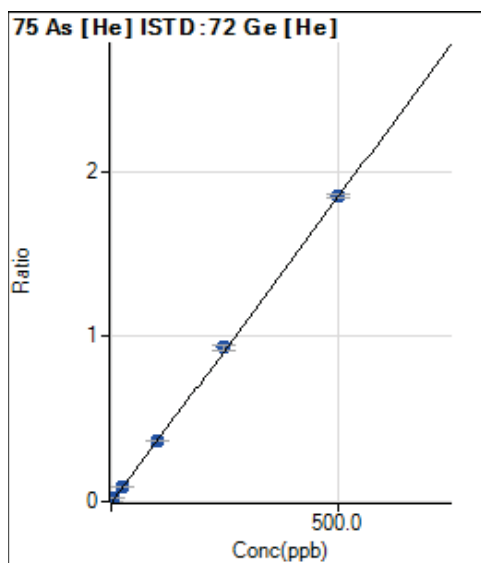
R = 0.9999

DL = 0.03236 ppb

BEC = 0.1036 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	170.00	0.0003	P	7.0	
2	<input type="checkbox"/>	0.500	0.478	1037.54	0.0021	P	2.1	-4.4
3	<input type="checkbox"/>	5.000	4.999	9187.58	0.0189	P	0.7	0.0
4	<input type="checkbox"/>	25.000	25.063	45617.25	0.0934	P	0.1	0.3
5	<input type="checkbox"/>	100.000	98.950	174591.19	0.3677	P	0.2	-1.0
6	<input type="checkbox"/>	250.000	251.546	437733.55	0.9341	P	4.2	0.6
7	<input type="checkbox"/>	500.000	499.434	874230.65	1.8543	P	0.7	-0.1
8	<input type="checkbox"/>			447.01	0.0009	P	11.3	

$y = 0.0037 * x + 3.4095E-004$

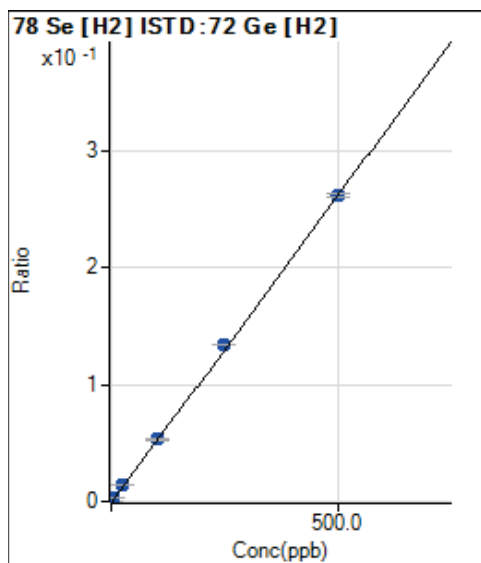
R = 1.0000

DL = 0.01927 ppb

BEC = 0.09185 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	41.00	0.0000	P	20.3	
2	<input type="checkbox"/>	0.500	0.531	468.68	0.0003	P	4.4	6.2
3	<input type="checkbox"/>	5.000	5.010	4052.91	0.0027	P	1.8	0.2
4	<input type="checkbox"/>	25.000	25.726	20534.92	0.0136	P	0.9	2.9
5	<input type="checkbox"/>	100.000	100.566	78935.97	0.0529	P	0.8	0.6
6	<input type="checkbox"/>	250.000	254.277	200839.18	0.1338	P	0.5	1.7
7	<input type="checkbox"/>	500.000	497.712	399569.19	0.2618	P	0.8	-0.5
8	<input type="checkbox"/>			143.33	0.0001	P	10.6	

$y = 5.2602E-004 * x + 2.6295E-005$

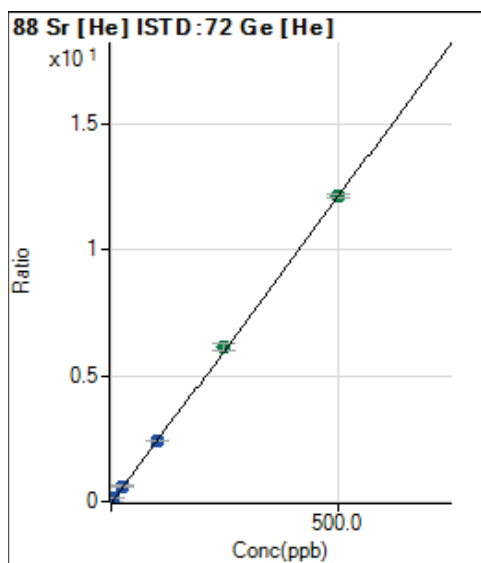
R = 0.9999

DL = 0.03046 ppb

BEC = 0.04999 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	150.00	0.0003	P	27.2	
2	<input type="checkbox"/>	0.500	0.507	6194.73	0.0126	P	2.5	1.3
3	<input type="checkbox"/>	5.000	5.075	60187.78	0.1238	P	0.8	1.5
4	<input type="checkbox"/>	25.000	25.483	303062.00	0.6204	P	0.6	1.9
5	<input type="checkbox"/>	100.000	100.033	1156045.48	2.4345	P	0.2	0.0
6	<input type="checkbox"/>	250.000	252.473	2878802.04	6.1439	A	4.5	1.0
7	<input type="checkbox"/>	500.000	498.732	5721647.83	12.1362	A	0.6	-0.3
8	<input type="checkbox"/>			6618.25	0.0137	P	4.3	

$y = 0.0243 * x + 3.0081E-004$

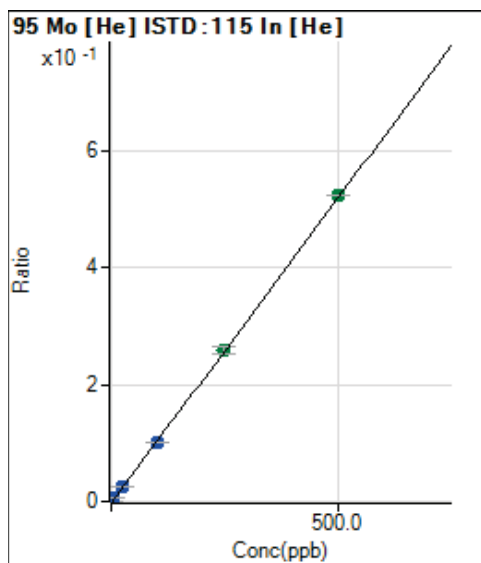
R = 1.0000

DL = 0.0101 ppb

BEC = 0.01236 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	11.33	0.0000	P	53.8	
2	<input type="checkbox"/>	0.500	0.486	3070.34	0.0005	P	1.7	-2.7
3	<input type="checkbox"/>	5.000	4.773	29992.80	0.0050	P	2.0	-4.5
4	<input type="checkbox"/>	25.000	24.442	154472.50	0.0256	P	1.6	-2.2
5	<input type="checkbox"/>	100.000	96.359	588629.44	0.1007	P	0.5	-3.6
6	<input type="checkbox"/>	250.000	247.545	1482994.04	0.2588	A	5.1	-1.0
7	<input type="checkbox"/>	500.000	501.986	2979856.50	0.5248	A	0.2	0.4
8	<input type="checkbox"/>			819.36	0.0001	P	13.0	

$y = 0.0010 * x + 1.8477E-006$

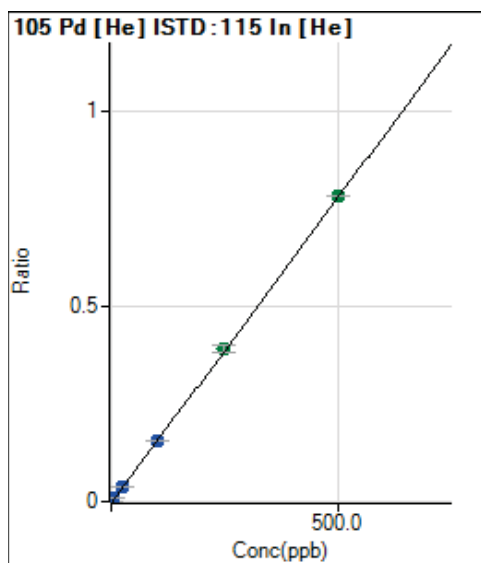
R = 1.0000

DL = 0.002851 ppb

BEC = 0.001767 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	193.33	0.0000	P	21.6	
2	<input type="checkbox"/>	0.500	0.510	4987.59	0.0008	P	2.6	1.9
3	<input type="checkbox"/>	5.000	5.080	47967.86	0.0080	P	0.3	1.6
4	<input type="checkbox"/>	25.000	25.445	240915.66	0.0399	P	0.7	1.8
5	<input type="checkbox"/>	100.000	98.952	905057.59	0.1549	P	0.5	-1.0
6	<input type="checkbox"/>	250.000	250.203	2244312.52	0.3916	A	4.6	0.1
7	<input type="checkbox"/>	500.000	500.085	4444071.81	0.7827	A	0.6	0.0
8	<input type="checkbox"/>			1123.39	0.0002	P	4.6	

$y = 0.0016 * x + 3.1530E-005$

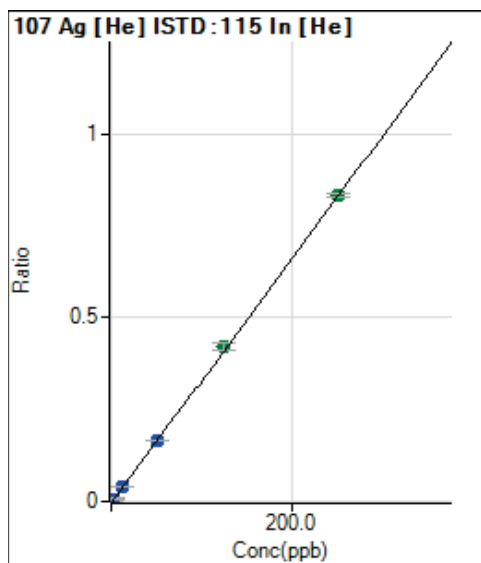
R = 1.0000

DL = 0.01302 ppb

BEC = 0.02015 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	98.33	0.0000	P	32.5	
2	<input type="checkbox"/>	0.500	0.388	7888.93	0.0013	P	4.0	-22.4
3	<input type="checkbox"/>	2.500	2.247	45185.72	0.0075	P	5.9	-10.1
4	<input type="checkbox"/>	12.500	12.564	253704.23	0.0420	P	1.1	0.5
5	<input type="checkbox"/>	50.000	49.735	970414.70	0.1661	P	0.8	-0.5
6	<input type="checkbox"/>	125.000	126.225	2415735.12	0.4215	A	4.3	1.0
7	<input type="checkbox"/>	250.000	249.440	4729247.12	0.8329	A	0.7	-0.2
8	<input type="checkbox"/>			1696.79	0.0003	P	4.1	

$y = 0.0033 * x + 1.6037E-005$

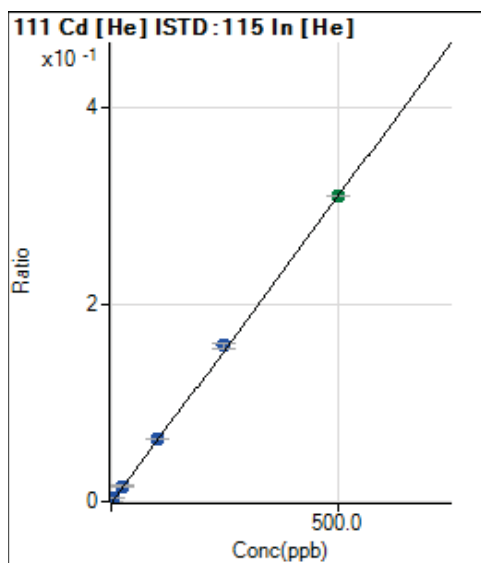
R = 1.0000

DL = 0.00469 ppb

BEC = 0.004803 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	21.67	0.0000	P	7.0	
2	<input type="checkbox"/>	0.080	0.083	331.79	0.0001	P	6.0	3.5
3	<input type="checkbox"/>	5.000	5.012	18800.10	0.0031	P	0.6	0.2
4	<input type="checkbox"/>	25.000	25.431	95873.36	0.0159	P	0.6	1.7
5	<input type="checkbox"/>	100.000	100.749	367068.05	0.0628	P	0.3	0.7
6	<input type="checkbox"/>	250.000	253.796	906982.39	0.1583	P	4.3	1.5
7	<input type="checkbox"/>	500.000	497.930	1762830.29	0.3105	A	0.4	-0.4
8	<input type="checkbox"/>			303.52	0.0001	P	26.0	

$y = 6.2353E-004 * x + 3.5344E-006$

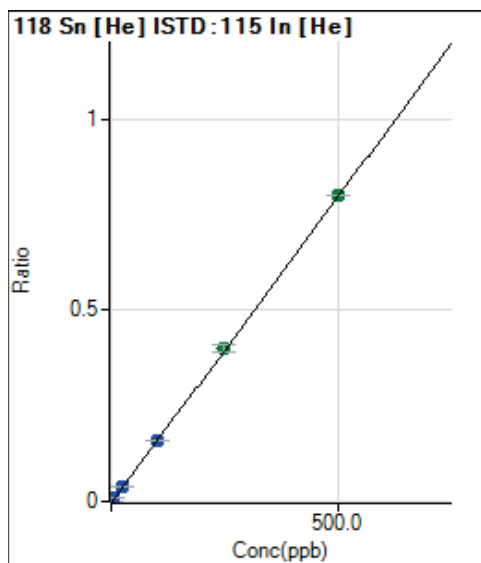
R = 1.0000

DL = 0.001194 ppb

BEC = 0.005668 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	141.67	0.0000	P	14.4	
2	<input type="checkbox"/>	0.500	0.483	4797.52	0.0008	P	6.1	-3.4
3	<input type="checkbox"/>	5.000	4.793	46302.99	0.0077	P	0.7	-4.1
4	<input type="checkbox"/>	25.000	24.616	238647.66	0.0395	P	1.0	-1.5
5	<input type="checkbox"/>	100.000	98.126	919138.97	0.1573	P	0.3	-1.9
6	<input type="checkbox"/>	250.000	251.079	2306480.75	0.4025	A	4.7	0.4
7	<input type="checkbox"/>	500.000	499.857	4549410.45	0.8013	A	0.3	0.0
8	<input type="checkbox"/>			8497.63	0.0014	P	0.6	

$y = 0.0016 * x + 2.3113E-005$

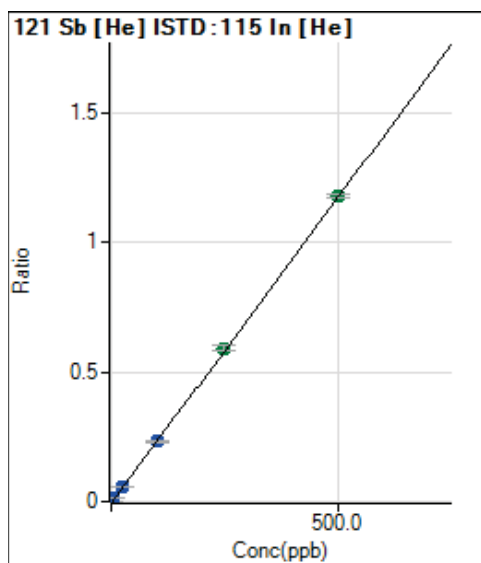
R = 1.0000

DL = 0.006243 ppb

BEC = 0.01442 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	38.33	0.0000	P	61.6	
2	<input type="checkbox"/>	0.500	0.510	7273.63	0.0012	P	3.5	1.9
3	<input type="checkbox"/>	5.000	4.836	68612.45	0.0114	P	0.8	-3.3
4	<input type="checkbox"/>	25.000	24.679	352101.62	0.0583	P	1.0	-1.3
5	<input type="checkbox"/>	100.000	97.914	1350173.00	0.2311	P	0.3	-2.1
6	<input type="checkbox"/>	250.000	251.224	3397831.62	0.5929	A	4.6	0.5
7	<input type="checkbox"/>	500.000	499.823	6697498.65	1.1796	A	0.9	0.0
8	<input type="checkbox"/>			2723.62	0.0005	P	11.9	

$y = 0.0024 * x + 6.2534E-006$

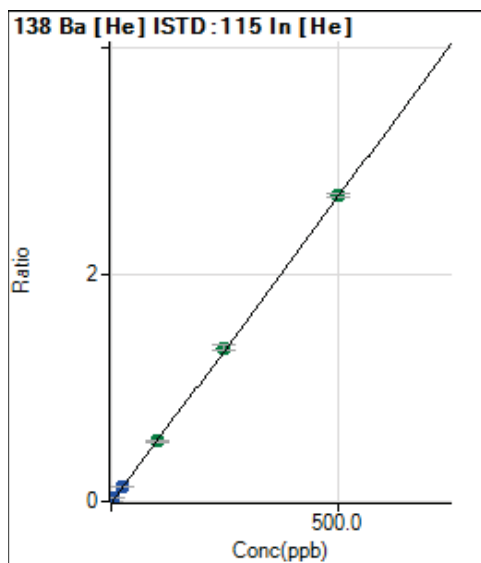
R = 1.0000

DL = 0.004897 ppb

BEC = 0.00265 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	75.00	0.0000	P	6.6	
2	<input type="checkbox"/>	0.300	0.309	10113.78	0.0017	P	1.7	3.0
3	<input type="checkbox"/>	5.000	4.873	158188.03	0.0263	P	0.8	-2.5
4	<input type="checkbox"/>	25.000	24.737	807527.46	0.1336	P	1.3	-1.1
5	<input type="checkbox"/>	100.000	97.934	3090003.18	0.5289	A	0.3	-2.1
6	<input type="checkbox"/>	250.000	250.789	7762084.05	1.3543	A	4.2	0.3
7	<input type="checkbox"/>	500.000	500.033	15331241.44	2.7002	A	0.9	0.0
8	<input type="checkbox"/>			3650.53	0.0006	P	12.5	

$y = 0.0054 * x + 1.2234E-005$

R = 1.0000

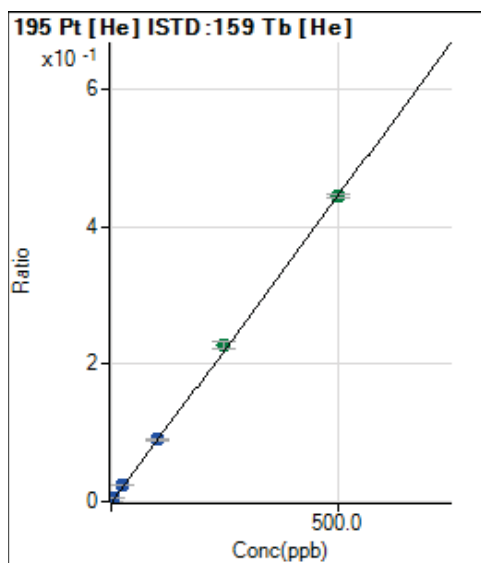
DL = 0.0004487 ppb

BEC = 0.002266 ppb

Weight: <None>

Min Conc: <None>





	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	210.00	0.0000	P	18.3	
2	<input type="checkbox"/>	0.500	0.528	6947.82	0.0005	P	2.7	5.6
3	<input type="checkbox"/>	5.000	5.036	64211.26	0.0045	P	1.2	0.7
4	<input type="checkbox"/>	25.000	25.616	328308.22	0.0229	P	1.2	2.5
5	<input type="checkbox"/>	100.000	100.454	1269941.67	0.0899	P	0.9	0.5
6	<input type="checkbox"/>	250.000	254.798	3179974.42	0.2281	A	4.4	1.9
7	<input type="checkbox"/>	500.000	497.479	6236672.83	0.4453	A	1.2	-0.5
8	<input type="checkbox"/>			968.04	0.0001	P	24.2	

$y = 8.9500E-004 * x + 1.4506E-005$

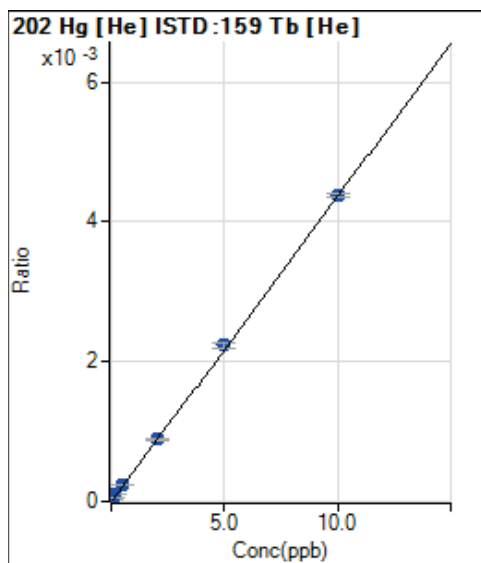
R = 0.9999

DL = 0.008887 ppb

BEC = 0.01621 ppb

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	226.33	0.0000	P	4.9	
2	<input type="checkbox"/>	0.200	0.226	1632.77	0.0001	P	1.0	12.9
3	<input type="checkbox"/>	0.100	0.100	842.03	0.0001	P	7.3	-0.2
4	<input type="checkbox"/>	0.500	0.497	3334.75	0.0002	P	2.4	-0.7
5	<input type="checkbox"/>	2.000	1.996	12556.91	0.0009	P	1.8	-0.2
6	<input type="checkbox"/>	5.000	5.062	31115.52	0.0022	P	4.1	1.2
7	<input type="checkbox"/>	10.000	9.969	61338.09	0.0044	P	1.5	-0.3
8	<input type="checkbox"/>			492.68	0.0000	P	4.7	

$y = 4.3769E-004 * x + 1.5641E-005$

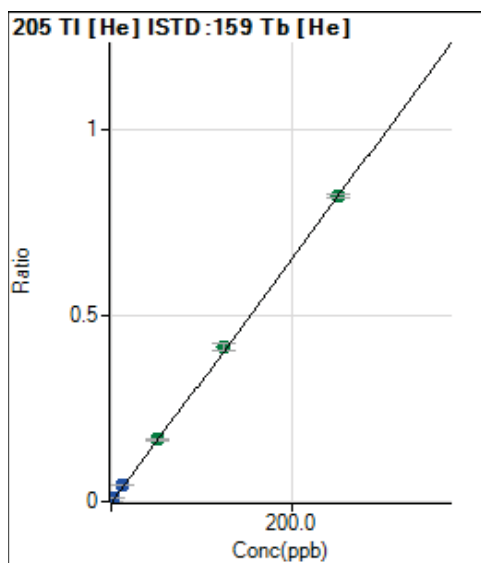
R = 1.0000

DL = 0.00524 ppb

BEC = 0.03573 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	485.01	0.0000	P	13.4	
2	<input type="checkbox"/>	0.100	0.095	4957.63	0.0003	P	4.9	-4.8
3	<input type="checkbox"/>	2.500	2.536	119209.77	0.0084	P	3.3	1.4
4	<input type="checkbox"/>	12.500	13.180	622523.51	0.0435	P	1.4	5.4
5	<input type="checkbox"/>	50.000	50.600	2357158.98	0.1669	A	1.9	1.2
6	<input type="checkbox"/>	125.000	126.635	5823185.96	0.4177	A	4.7	1.3
7	<input type="checkbox"/>	250.000	249.028	11503623.58	0.8213	A	1.3	-0.4
8	<input type="checkbox"/>			4477.50	0.0003	P	26.9	

$y = 0.0033 * x + 3.3515E-005$

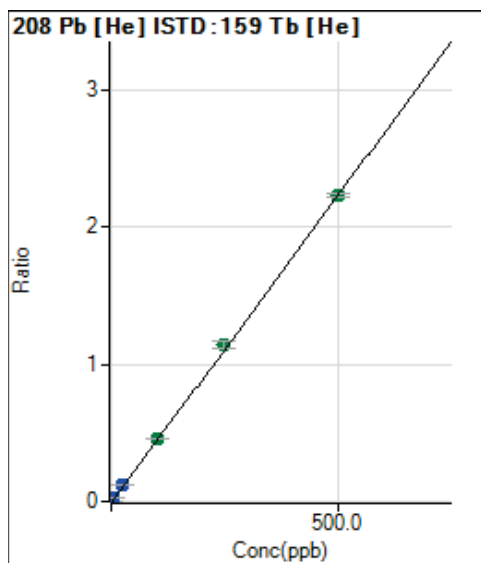
R = 1.0000

DL = 0.00409 ppb

BEC = 0.01016 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2803.48	0.0002	P	0.5	
2	<input type="checkbox"/>	0.500	0.545	37697.53	0.0026	P	1.5	9.0
3	<input type="checkbox"/>	5.000	5.159	331785.14	0.0234	P	0.6	3.2
4	<input type="checkbox"/>	25.000	26.230	1688614.86	0.1180	P	0.5	4.9
5	<input type="checkbox"/>	100.000	101.443	6436804.28	0.4558	A	0.5	1.4
6	<input type="checkbox"/>	250.000	254.204	15920672.57	1.1418	A	4.5	1.7
7	<input type="checkbox"/>	500.000	497.546	31300822.24	2.2347	A	1.1	-0.5
8	<input type="checkbox"/>			20979.78	0.0014	P	6.1	

$y = 0.0045 * x + 1.9376E-004$

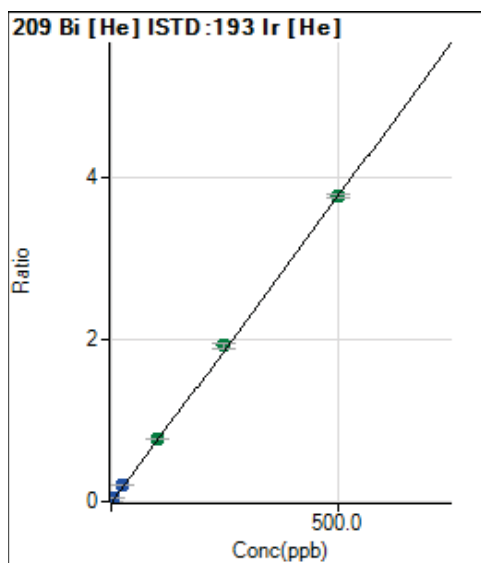
R = 0.9999

DL = 0.0005889 ppb

BEC = 0.04314 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2210.22	0.0003	P	9.5	
2	<input type="checkbox"/>	0.500	0.525	30886.34	0.0043	P	2.0	5.0
3	<input type="checkbox"/>	5.000	5.077	277495.07	0.0387	P	0.3	1.5
4	<input type="checkbox"/>	25.000	26.299	1441746.91	0.1994	P	1.2	5.2
5	<input type="checkbox"/>	100.000	101.635	5421596.58	0.7696	A	1.2	1.6
6	<input type="checkbox"/>	250.000	253.471	13410106.88	1.9188	A	3.9	1.4
7	<input type="checkbox"/>	500.000	497.872	26129140.44	3.7686	A	1.6	-0.4
8	<input type="checkbox"/>			5691.35	0.0008	P	18.1	

$y = 0.0076 * x + 2.9837E-004$

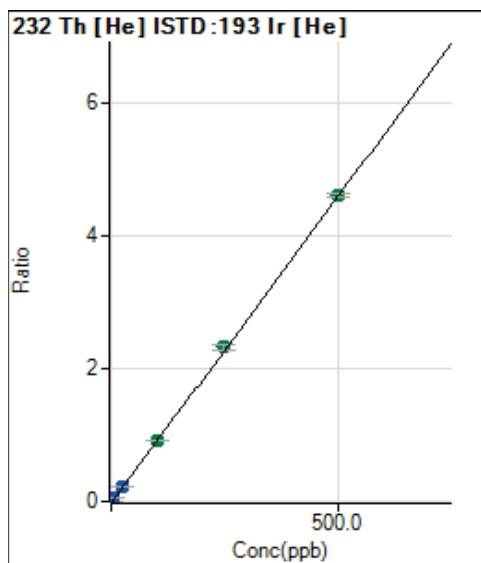
R = 1.0000

DL = 0.01125 ppb

BEC = 0.03942 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	1001.72	0.0001	P	3.5	
2	<input type="checkbox"/>	0.500	0.484	33309.20	0.0046	P	0.8	-3.2
3	<input type="checkbox"/>	5.000	4.764	316382.57	0.0442	P	0.8	-4.7
4	<input type="checkbox"/>	25.000	24.932	1666997.94	0.2305	P	0.4	-0.3
5	<input type="checkbox"/>	100.000	99.056	6448923.24	0.9154	A	0.8	-0.9
6	<input type="checkbox"/>	250.000	251.277	16228392.68	2.3218	A	3.5	0.5
7	<input type="checkbox"/>	500.000	499.556	32003298.69	4.6158	A	1.3	-0.1
8	<input type="checkbox"/>			18122.75	0.0025	P	8.6	

$y = 0.0092 * x + 1.3525E-004$

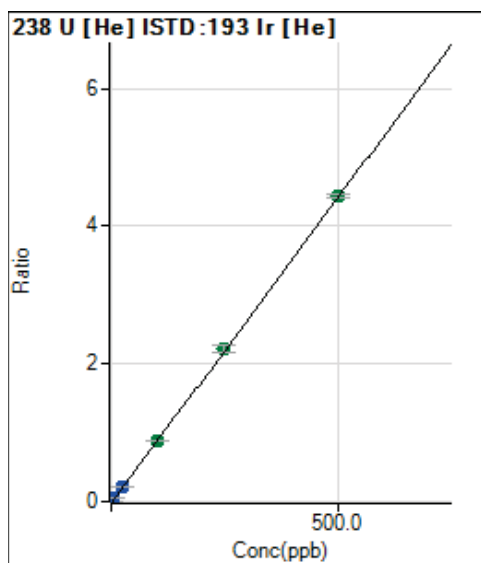
R = 1.0000

DL = 0.001538 ppb

BEC = 0.01464 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	965.04	0.0001	P	4.6	
2	<input type="checkbox"/>	0.500	0.510	33670.39	0.0047	P	2.7	2.0
3	<input type="checkbox"/>	5.000	4.982	317705.60	0.0443	P	0.5	-0.4
4	<input type="checkbox"/>	25.000	25.314	1625305.50	0.2247	P	0.3	1.3
5	<input type="checkbox"/>	100.000	99.368	6212261.37	0.8818	A	0.8	-0.6
6	<input type="checkbox"/>	250.000	249.899	15496221.44	2.2174	A	4.0	0.0
7	<input type="checkbox"/>	500.000	500.161	30768874.54	4.4378	A	1.5	0.0
8	<input type="checkbox"/>			5652.97	0.0008	P	17.0	

$y = 0.0089 * x + 1.3030E-004$

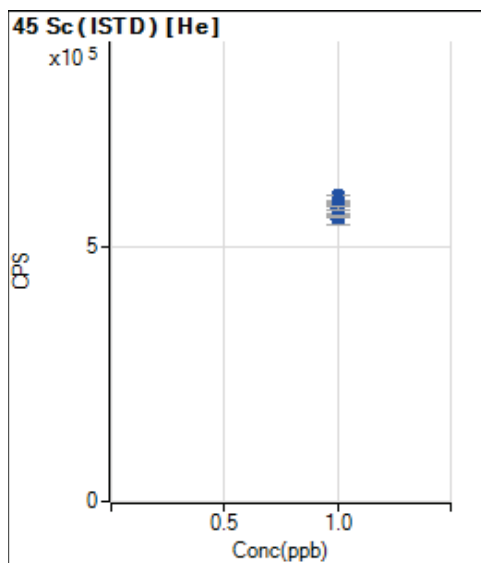
R = 1.0000

DL = 0.002006 ppb

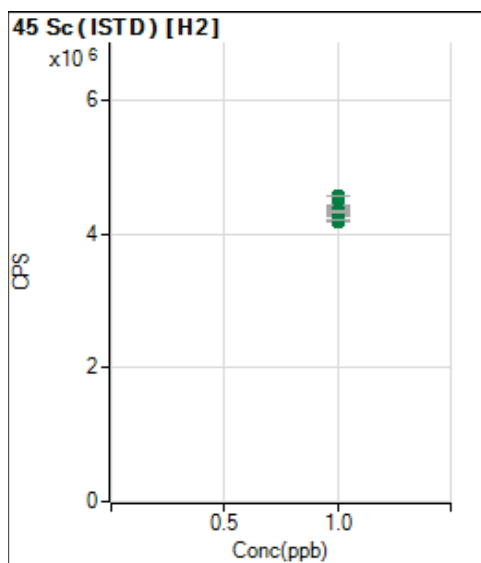
BEC = 0.01469 ppb

Weight: <None>

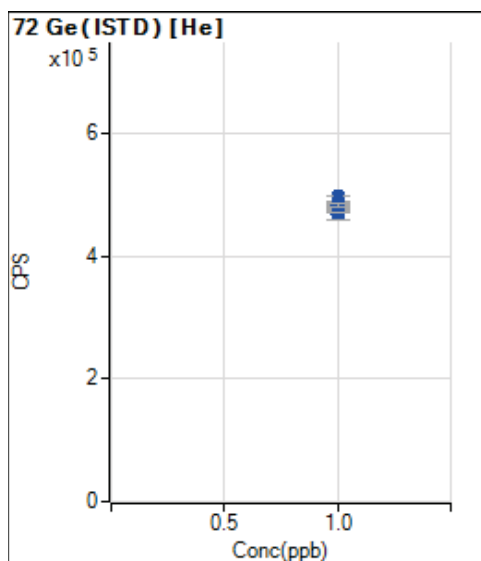
Min Conc: <None>



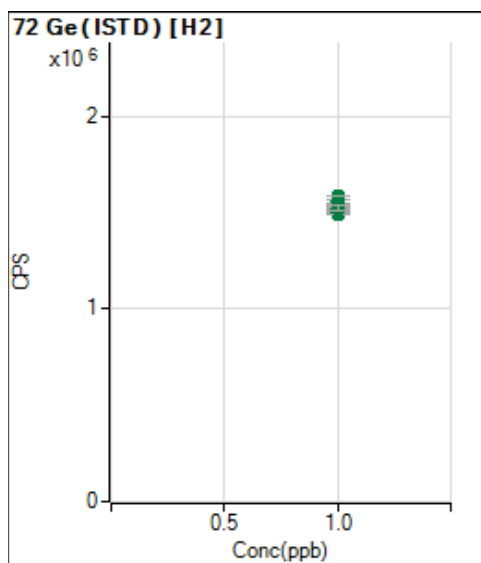
	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		602180.29		P	0.4	
2	<input type="checkbox"/>	1.000		590196.88		P	0.5	
3	<input type="checkbox"/>	1.000		584609.83		P	0.6	
4	<input type="checkbox"/>	1.000		582009.92		P	0.7	
5	<input type="checkbox"/>	1.000		564614.31		P	0.3	
6	<input type="checkbox"/>	1.000		555345.31		P	3.9	
7	<input type="checkbox"/>	1.000		559616.81		P	0.7	
8	<input type="checkbox"/>	1.000		577557.98		P	0.9	



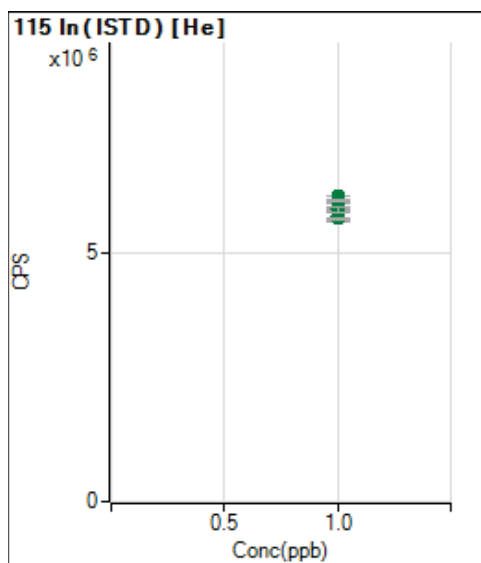
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		4424594.50		A	0.3	
2	<input type="checkbox"/>	1.000		4354265.00		A	0.9	
3	<input type="checkbox"/>	1.000		4296243.00		A	0.8	
4	<input type="checkbox"/>	1.000		4286310.00		A	0.7	
5	<input type="checkbox"/>	1.000		4179409.67		A	0.3	
6	<input type="checkbox"/>	1.000		4215473.67		A	0.1	
7	<input type="checkbox"/>	1.000		4333191.00		A	0.4	
8	<input type="checkbox"/>	1.000		4569077.00		A	0.6	



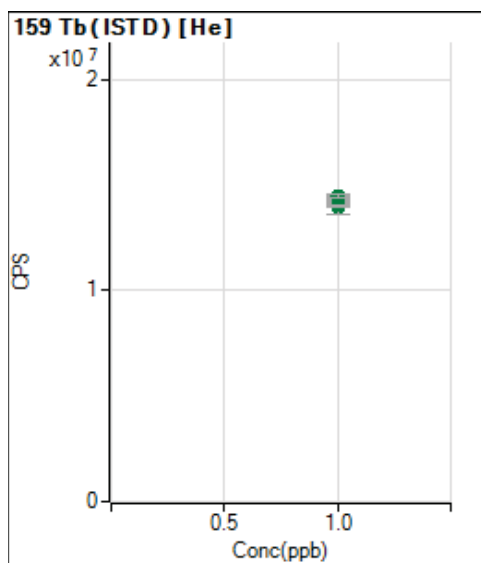
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		498652.22		P	0.3	
2	<input type="checkbox"/>	1.000		490603.75		P	0.1	
3	<input type="checkbox"/>	1.000		486152.98		P	0.7	
4	<input type="checkbox"/>	1.000		488508.14		P	0.1	
5	<input type="checkbox"/>	1.000		474867.88		P	0.2	
6	<input type="checkbox"/>	1.000		469117.87		P	3.9	
7	<input type="checkbox"/>	1.000		471459.16		P	0.3	
8	<input type="checkbox"/>	1.000		483349.63		P	0.9	



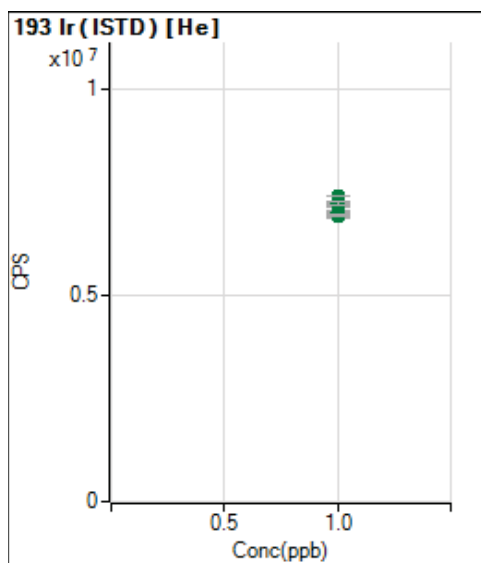
	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	1.000		1559776.58		A	1.7	
2	<input type="checkbox"/>	1.000		1532684.71		A	1.5	
3	<input type="checkbox"/>	1.000		1522692.00		A	0.7	
4	<input type="checkbox"/>	1.000		1514438.12		A	1.3	
5	<input type="checkbox"/>	1.000		1491397.71		A	0.4	
6	<input type="checkbox"/>	1.000		1501215.79		A	1.2	
7	<input type="checkbox"/>	1.000		1526085.54		A	1.3	
8	<input type="checkbox"/>	1.000		1588444.66		A	0.2	



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	1.000		6130191.13		A	0.2	
2	<input type="checkbox"/>	1.000		6016673.43		A	0.4	
3	<input type="checkbox"/>	1.000		6008811.67		A	0.4	
4	<input type="checkbox"/>	1.000		6044773.65		A	0.4	
5	<input type="checkbox"/>	1.000		5842761.83		A	0.5	
6	<input type="checkbox"/>	1.000		5738128.98		A	4.2	
7	<input type="checkbox"/>	1.000		5677817.45		A	0.3	
8	<input type="checkbox"/>	1.000		5863001.84		A	1.9	



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		14468615.62		A	0.5	
2	<input type="checkbox"/>	1.000		14267676.04		A	0.2	
3	<input type="checkbox"/>	1.000		14200629.79		A	0.5	
4	<input type="checkbox"/>	1.000		14311656.87		A	0.7	
5	<input type="checkbox"/>	1.000		14122981.87		A	0.2	
6	<input type="checkbox"/>	1.000		13962002.71		A	4.5	
7	<input type="checkbox"/>	1.000		14007444.79		A	0.6	
8	<input type="checkbox"/>	1.000		14477038.95		A	0.7	



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		7406368.85		A	0.3	
2	<input type="checkbox"/>	1.000		7230607.60		A	0.7	
3	<input type="checkbox"/>	1.000		7166060.52		A	0.5	
4	<input type="checkbox"/>	1.000		7232512.19		A	0.5	
5	<input type="checkbox"/>	1.000		7045397.61		A	0.6	
6	<input type="checkbox"/>	1.000		6995688.44		A	3.8	
7	<input type="checkbox"/>	1.000		6933892.40		A	0.7	
8	<input type="checkbox"/>	1.000		7234135.73		A	1.5	

Sample Name CAL0  
 Sample Type CalBlk  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 005CALB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:05:28  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.000000	N/A	73.333
Be	9	2	H2	0.000000	N/A	21.167
B	11	2	H2	0.000000	N/A	28845.407
Na	23	1	He	0.000000	N/A	12210.050
Mg	24	1	He	0.000000	N/A	4910.850
Al	27	1	He	0.000000	N/A	80.000
Si	28	2	H2	0.000000	N/A	14027.270
K	39	1	He	0.000000	N/A	73846.830
Ca	43	1	He	0.000000	N/A	13.850
Ti	47	1	He	0.000000	N/A	2.000
V	51	1	He	0.000000	N/A	-635.523
Cr	52	1	He	0.000000	N/A	2482.887
Mn	55	1	He	0.000000	N/A	286.000
Fe	56	1	He	0.000000	N/A	11824.803
Co	59	1	He	0.000000	N/A	57.333
Ni	60	1	He	0.000000	N/A	206.000
Cu	63	1	He	0.000000	N/A	327.337
Zn	66	1	He	0.000000	N/A	217.333
As	75	1	He	0.000000	N/A	170.000
Se	78	2	H2	0.000000	N/A	41.000
Sr	88	1	He	0.000000	N/A	150.000
Mo	95	1	He	0.000000	N/A	11.333
Pd	105	1	He	0.000000	N/A	193.333
Ag	107	1	He	0.000000	N/A	98.333
Cd	111	1	He	0.000000	N/A	21.667
Sn	118	1	He	0.000000	N/A	141.667
Sb	121	1	He	0.000000	N/A	38.333
Ba	138	1	He	0.000000	N/A	75.000
Pt	195	1	He	0.000000	N/A	210.000
Hg	202	1	He	0.000000	N/A	226.333
Tl	205	1	He	0.000000	N/A	485.013
Pb	208	1	He	0.000000	N/A	2803.477
Bi	209	1	He	0.000000	N/A	2210.223
Th	232	1	He	0.000000	N/A	1001.717
U	238	1	He	0.000000	N/A	965.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100	602180.287
Sc	45	2	H2	100	4424594.500
Ge	72	1	He	100	498652.220
Ge	72	2	H2	100	1559776.583
In	115	1	He	100	6130191.130
Tb	159	1	He	100	14468615.617
Ir	193	1	He	100	7406368.850



Sample Name CAL1  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 006CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:09:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.548858	3.1	276.000
Be	9	2	H2	0.211647	7.5	101.833
B	11	2	H2	7.681650	12.8	30867.050
Na	23	1	He	54.122238	0.6	62990.417
Mg	24	1	He	31.288782	1.6	21547.277
Al	27	1	He	33.316766	0.3	9147.140
Si	28	2	H2	105.789420	1.1	308859.660
K	39	1	He	107.263077	1.4	154024.653
Ca	43	1	He	112.543696	2.9	268.283
Ti	47	1	He	1.075626	8.0	272.333
V	51	1	He	0.993868	8.9	6334.807
Cr	52	1	He	2.080667	1.5	19753.317
Mn	55	1	He	0.530446	2.8	3632.463
Fe	56	1	He	53.304274	0.1	433700.053
Co	59	1	He	0.548671	1.4	7197.793
Ni	60	1	He	0.561446	2.7	2013.480
Cu	63	1	He	1.060083	1.1	9862.690
Zn	66	1	He	5.451692	0.9	11461.210
As	75	1	He	0.477842	2.5	1037.540
Se	78	2	H2	0.531223	4.8	468.677
Sr	88	1	He	0.506532	2.6	6194.730
Mo	95	1	He	0.486344	1.7	3070.340
Pd	105	1	He	0.509532	2.7	4987.587
Ag	107	1	He	0.387885	4.0	7888.933
Cd	111	1	He	0.082772	6.5	331.787
Sn	118	1	He	0.483107	6.3	4797.523
Sb	121	1	He	0.509547	3.5	7273.630
Ba	138	1	He	0.309008	1.7	10113.783
Pt	195	1	He	0.527874	2.8	6947.823
Hg	202	1	He	0.225724	1.2	1632.770
Tl	205	1	He	0.095206	5.5	4957.627
Pb	208	1	He	0.545190	1.6	37697.530
Bi	209	1	He	0.524999	2.2	30886.340
Th	232	1	He	0.483968	0.8	33309.203
U	238	1	He	0.510221	2.7	33670.387

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.00999629	590196.877
Sc	45	2	H2	98.41048710	4354265.000
Ge	72	1	He	98.38595524	490603.750
Ge	72	2	H2	98.26309270	1532684.710
In	115	1	He	98.14821929	6016673.433
Tb	159	1	He	98.61120384	14267676.040
Ir	193	1	He	97.62689040	7230607.600

Sample Name CAL2  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 007CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:13:45  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.440821	0.6	2064.640
Be	9	2	H2	5.266736	3.8	2009.133
B	11	2	H2	-1.900727		27401.237
Na	23	1	He	262.066388	0.5	256580.530
Mg	24	1	He	265.084845	0.2	145207.483
Al	27	1	He	262.954770	0.4	70975.993
Si	28	2	H2	130.224544	0.8	371997.500
K	39	1	He	260.875209	1.1	268384.507
Ca	43	1	He	258.579353	4.3	593.050
Ti	47	1	He	4.969874	5.8	1239.387
V	51	1	He	4.916773	2.8	33465.717
Cr	52	1	He	5.041745	0.8	43982.327
Mn	55	1	He	5.079291	1.1	32069.050
Fe	56	1	He	129.840850	0.3	1029938.147
Co	59	1	He	5.239943	0.4	67638.483
Ni	60	1	He	5.326198	1.7	17224.183
Cu	63	1	He	5.241354	0.6	47064.430
Zn	66	1	He	5.188336	2.3	10819.383
As	75	1	He	4.999264	0.8	9187.580
Se	78	2	H2	5.009679	1.8	4052.907
Sr	88	1	He	5.075275	0.8	60187.777
Mo	95	1	He	4.772646	2.0	29992.797
Pd	105	1	He	5.080462	0.3	47967.857
Ag	107	1	He	2.247178	5.9	45185.720
Cd	111	1	He	5.012201	0.6	18800.097
Sn	118	1	He	4.792984	0.7	46302.987
Sb	121	1	He	4.835607	0.8	68612.453
Ba	138	1	He	4.872917	0.8	158188.027
Pt	195	1	He	5.036175	1.2	64211.260
Hg	202	1	He	0.099760	9.9	842.027
Tl	205	1	He	2.535550	3.3	119209.773
Pb	208	1	He	5.159381	0.6	331785.137
Bi	209	1	He	5.076771	0.3	277495.073
Th	232	1	He	4.763917	0.8	316382.567
U	238	1	He	4.982280	0.5	317705.597

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.08219386	584609.833
Sc	45	2	H2	97.09913529	4296243.000
Ge	72	1	He	97.49339529	486152.980
Ge	72	2	H2	97.62244282	1522692.003
In	115	1	He	98.01997261	6008811.667
Tb	159	1	He	98.14781293	14200629.790
Ir	193	1	He	96.75538263	7166060.520

Sample Name CAL3  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 008CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:17:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	27.399036	1.6	10086.013
Be	9	2	H2	26.452381	0.9	9986.620
B	11	2	H2	17.521633	3.4	33516.327
Na	23	1	He	1316.712965	1.2	1235872.403
Mg	24	1	He	1316.404848	1.3	699045.587
Al	27	1	He	1313.397691	1.1	352608.750
Si	28	2	H2	656.271799	0.4	1815510.837
K	39	1	He	1298.131977	0.5	1045778.840
Ca	43	1	He	1304.182968	0.4	2923.720
Ti	47	1	He	24.924384	2.2	6179.967
V	51	1	He	25.379146	2.1	174546.330
Cr	52	1	He	25.609310	0.3	212625.613
Mn	55	1	He	25.673857	0.5	160249.070
Fe	56	1	He	651.669153	0.8	5100200.333
Co	59	1	He	26.215024	0.1	339804.477
Ni	60	1	He	26.335387	0.4	84775.293
Cu	63	1	He	26.337533	0.3	236345.473
Zn	66	1	He	26.105951	0.2	53842.590
As	75	1	He	25.063328	0.1	45617.247
Se	78	2	H2	25.725884	0.9	20534.920
Sr	88	1	He	25.482640	0.6	303062.003
Mo	95	1	He	24.441813	1.6	154472.500
Pd	105	1	He	25.445294	0.7	240915.663
Ag	107	1	He	12.564267	1.1	253704.227
Cd	111	1	He	25.431122	0.6	95873.360
Sn	118	1	He	24.615699	1.0	238647.660
Sb	121	1	He	24.679399	1.0	352101.623
Ba	138	1	He	24.737148	1.3	807527.463
Pt	195	1	He	25.616166	1.2	328308.220
Hg	202	1	He	0.496675	2.5	3334.753
Tl	205	1	He	13.180305	1.4	622523.507
Pb	208	1	He	26.229706	0.5	1688614.857
Bi	209	1	He	26.298985	1.2	1441746.907
Th	232	1	He	24.931631	0.4	1666997.943
U	238	1	He	25.313525	0.3	1625305.497

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.65044332	582009.917
Sc	45	2	H2	96.87464015	4286310.000
Ge	72	1	He	97.96569975	488508.137
Ge	72	2	H2	97.09327217	1514438.123
In	115	1	He	98.60660978	6044773.647
Tb	159	1	He	98.91517787	14311656.873
Ir	193	1	He	97.65260592	7232512.187

Sample Name CAL4  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 009CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:21:40  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	105.884674	0.0	37809.613
Be	9	2	H2	101.365674	0.7	37256.480
B	11	2	H2	96.321687	0.6	57120.847
Na	23	1	He	5101.525707	0.4	4612466.703
Mg	24	1	He	5095.986393	0.5	2612084.233
Al	27	1	He	5067.684366	0.6	1319707.167
Si	28	2	H2	2520.204995	0.8	6760479.667
K	39	1	He	5016.012147	0.6	3721940.777
Ca	43	1	He	5041.902588	0.3	10927.957
Ti	47	1	He	99.486796	0.6	23927.377
V	51	1	He	98.930971	0.1	661766.090
Cr	52	1	He	99.520928	0.2	794884.583
Mn	55	1	He	99.524843	0.1	601876.893
Fe	56	1	He	2532.129626	0.1	19193714.667
Co	59	1	He	100.914367	0.4	1271395.580
Ni	60	1	He	102.253634	0.5	319406.520
Cu	63	1	He	101.451397	0.4	884092.583
Zn	66	1	He	101.349397	0.3	202596.813
As	75	1	He	98.950218	0.2	174591.187
Se	78	2	H2	100.566217	0.8	78935.973
Sr	88	1	He	100.032888	0.2	1156045.477
Mo	95	1	He	96.358710	0.5	588629.437
Pd	105	1	He	98.951561	0.5	905057.590
Ag	107	1	He	49.734632	0.8	970414.700
Cd	111	1	He	100.749473	0.3	367068.047
Sn	118	1	He	98.125942	0.3	919138.973
Sb	121	1	He	97.914382	0.3	1350173.000
Ba	138	1	He	97.933780	0.3	3090003.180
Pt	195	1	He	100.454017	0.9	1269941.667
Hg	202	1	He	1.995657	1.8	12556.913
Tl	205	1	He	50.600293	1.9	2357158.977
Pb	208	1	He	101.442549	0.5	6436804.283
Bi	209	1	He	101.635293	1.2	5421596.583
Th	232	1	He	99.055985	0.8	6448923.237
U	238	1	He	99.368261	0.8	6212261.367

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.76167279	564614.310
Sc	45	2	H2	94.45859200	4179409.667
Ge	72	1	He	95.23027425	474867.877
Ge	72	2	H2	95.61611104	1491397.710
In	115	1	He	95.31125054	5842761.827
Tb	159	1	He	97.61114848	14122981.873
Ir	193	1	He	95.12620488	7045397.607

Sample Name CAL5  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 010CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:25:35  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	260.351395	0.5	93667.130
Be	9	2	H2	249.303148	0.3	92391.587
B	11	2	H2	253.735684	0.3	106856.797
Na	23	1	He	12852.60562	4.6	11399108.163
Mg	24	1	He	12914.63069	4.5	6496482.400
Al	27	1	He	12813.08500	4.6	3277874.417
Si	28	2	H2	6238.593700	1.0	16859747.333
K	39	1	He	12678.78627	4.4	9139026.530
Ca	43	1	He	12719.42107	3.8	27069.847
Ti	47	1	He	252.275672	4.0	59612.973
V	51	1	He	251.171388	3.9	1651789.233
Cr	52	1	He	252.975617	4.2	1981708.250
Mn	55	1	He	253.032943	4.5	1502954.083
Fe	56	1	He	6434.641702	4.3	47904225.333
Co	59	1	He	252.986340	4.5	3144966.833
Ni	60	1	He	255.637206	3.8	787770.393
Cu	63	1	He	254.726732	4.5	2189904.833
Zn	66	1	He	254.734822	4.2	502193.460
As	75	1	He	251.545944	4.2	437733.553
Se	78	2	H2	254.276589	0.5	200839.183
Sr	88	1	He	252.473139	4.5	2878802.043
Mo	95	1	He	247.545263	5.1	1482994.043
Pd	105	1	He	250.202646	4.6	2244312.523
Ag	107	1	He	126.224917	4.3	2415735.120
Cd	111	1	He	253.796010	4.3	906982.393
Sn	118	1	He	251.078625	4.7	2306480.747
Sb	121	1	He	251.223589	4.6	3397831.617
Ba	138	1	He	250.789055	4.2	7762084.047
Pt	195	1	He	254.798219	4.4	3179974.417
Hg	202	1	He	5.062157	4.1	31115.523
Tl	205	1	He	126.635362	4.7	5823185.957
Pb	208	1	He	254.204254	4.5	15920672.573
Bi	209	1	He	253.470958	3.9	13410106.883
Th	232	1	He	251.277089	3.5	16228392.677
U	238	1	He	249.899354	4.0	15496221.437

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.22243331	555345.313
Sc	45	2	H2	95.27367234	4215473.667
Ge	72	1	He	94.07716397	469117.867
Ge	72	2	H2	96.24556529	1501215.790
In	115	1	He	93.60440571	5738128.977
Tb	159	1	He	96.49853915	13962002.707
Ir	193	1	He	94.45503698	6995688.437

Sample Name CAL6  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 011CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:29:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	493.522959	0.7	182446.483
Be	9	2	H2	475.820038	0.9	181239.703
B	11	2	H2	499.357113	0.8	188819.517
Na	23	1	He	25232.60071	0.7	22566006.327
Mg	24	1	He	25314.28327	0.9	12841915.227
Al	27	1	He	25225.51825	0.7	6510387.000
Si	28	2	H2	11671.21907	0.7	32409836.667
K	39	1	He	25088.51065	1.0	18175589.313
Ca	43	1	He	25175.34445	0.4	54030.537
Ti	47	1	He	498.968736	0.8	118930.547
V	51	1	He	499.609999	1.0	3314632.133
Cr	52	1	He	498.576800	0.9	3937521.083
Mn	55	1	He	498.544044	0.9	2987060.083
Fe	56	1	He	12630.17383	0.8	94842410.667
Co	59	1	He	498.260757	0.5	6232114.500
Ni	60	1	He	496.660577	0.4	1539494.750
Cu	63	1	He	497.276944	0.6	4301117.167
Zn	66	1	He	497.301012	0.6	986155.330
As	75	1	He	499.433847	0.7	874230.647
Se	78	2	H2	497.712040	0.8	399569.187
Sr	88	1	He	498.731961	0.6	5721647.830
Mo	95	1	He	501.985823	0.2	2979856.500
Pd	105	1	He	500.085286	0.6	4444071.810
Ag	107	1	He	249.440154	0.7	4729247.117
Cd	111	1	He	497.930422	0.4	1762830.290
Sn	118	1	He	499.856801	0.3	4549410.450
Sb	121	1	He	499.822994	0.9	6697498.650
Ba	138	1	He	500.033125	0.9	15331241.437
Pt	195	1	He	497.478889	1.2	6236672.833
Hg	202	1	He	9.969444	1.5	61338.087
Tl	205	1	He	249.027891	1.3	11503623.580
Pb	208	1	He	497.546239	1.1	31300822.243
Bi	209	1	He	497.871721	1.6	26129140.443
Th	232	1	He	499.556054	1.3	32003298.690
U	238	1	He	500.161162	1.5	30768874.543

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.93177238	559616.813
Sc	45	2	H2	97.93419487	4333191.000
Ge	72	1	He	94.54668760	471459.157
Ge	72	2	H2	97.84000860	1526085.543
In	115	1	He	92.62056151	5677817.447
Tb	159	1	He	96.81261263	14007444.790
Ir	193	1	He	93.62067346	6933892.397

Sample Name CAL7  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 012CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:35:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.198348	12.0	153.000
Be	9	2	H2	0.174235	8.2	91.833
B	11	2	H2	-24.411234		21510.587
Na	23	1	He	49783.66338	1.4	45936382.650
Mg	24	1	He	49727.86573	1.5	26029896.277
Al	27	1	He	49800.54947	1.2	13264396.333
Si	28	2	H2	21989.18520	0.2	64374644.000
K	39	1	He	49908.17468	1.3	37244505.277
Ca	43	1	He	49851.85968	1.6	110399.490
Ti	47	1	He	2.562266	5.8	632.013
V	51	1	He	0.122482	65.1	228.387
Cr	52	1	He	0.299069	6.9	4817.467
Mn	55	1	He	0.685334	0.7	4512.040
Fe	56	1	He	24884.84215	1.3	192838704.000
Co	59	1	He	0.728429	3.2	9395.047
Ni	60	1	He	1.273581	3.0	4245.967
Cu	63	1	He	0.344116	5.8	3367.733
Zn	66	1	He	1.506973	1.5	3273.710
As	75	1	He	0.157366	17.9	447.010
Se	78	2	H2	0.121560	15.0	143.333
Sr	88	1	He	0.550446	4.4	6618.247
Mo	95	1	He	0.131946	13.2	819.360
Pd	105	1	He	0.102333	5.5	1123.387
Ag	107	1	He	0.081898	4.3	1696.787
Cd	111	1	He	0.077366	27.9	303.523
Sn	118	1	He	0.889810	0.6	8497.630
Sb	121	1	He	0.194245	12.1	2723.623
Ba	138	1	He	0.113025	12.8	3650.527
Pt	195	1	He	0.058516	30.9	968.040
Hg	202	1	He	0.042034	8.7	492.677
Tl	205	1	He	0.083608	30.2	4477.500
Pb	208	1	He	0.279530	7.1	20979.780
Bi	209	1	He	0.064552	29.2	5691.347
Th	232	1	He	0.256530	9.1	18122.750
U	238	1	He	0.073404	20.4	5652.967

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.91113981	577557.977
Sc	45	2	H2	103.2654404	4569077.000
Ge	72	1	He	96.93120922	483349.627
Ge	72	2	H2	101.8379606	1588444.663
In	115	1	He	95.64141991	5863001.840
Tb	159	1	He	100.0582179	14477038.950
Ir	193	1	He	97.67452679	7234135.727

Sample Name ICV  
 Sample Type ICV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 013\_ICV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:40:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	92.533945	11.9	32480.667
Be	9	2	H2	89.582184	12.4	32346.920
B	11	2	H2	69.647022	26.0	48017.393
Na	23	1	He	1043.742268	3.1	1007872.773
Mg	24	1	He	1043.127460	3.5	569436.137
Al	27	1	He	1045.320318	2.7	288025.457
Si	28	2	H2	567.700883	12.0	1506610.083
K	39	1	He	1050.408399	3.1	882392.617
Ca	43	1	He	1047.482914	2.6	2412.803
Ti	47	1	He	80.750006	1.9	20547.620
V	51	1	He	80.807925	2.7	571694.447
Cr	52	1	He	82.129841	2.2	694405.437
Mn	55	1	He	80.460557	1.9	514838.687
Fe	56	1	He	527.285944	2.6	4237480.083
Co	59	1	He	84.016790	1.7	1117638.877
Ni	60	1	He	84.634471	2.1	279160.903
Cu	63	1	He	84.312439	2.0	775807.207
Zn	66	1	He	83.026179	1.5	175282.627
As	75	1	He	80.880017	2.1	150703.733
Se	78	2	H2	89.522816	11.6	69146.757
Sr	88	1	He	82.299046	2.2	1004224.253
Mo	95	1	He	77.354157	1.7	502475.033
Pd	105	1	He	82.233520	1.6	799835.743
Ag	107	1	He	40.449166	0.5	839342.253
Cd	111	1	He	80.999047	1.6	313812.657
Sn	118	1	He	78.005190	2.0	776983.817
Sb	121	1	He	78.779879	1.2	1155213.133
Ba	138	1	He	78.839403	1.3	2645300.897
Pt	195	1	He	83.835970	2.4	1108947.873
Hg	202	1	He	3.948548	2.7	25767.500
Tl	205	1	He	42.752495	2.4	2083857.727
Pb	208	1	He	83.753987	2.0	5561094.713
Bi	209	1	He	82.073658	1.3	4703227.740
Th	232	1	He	78.453944	1.4	5486572.210
U	238	1	He	79.264978	1.1	5323140.340

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.21679490	597463.980
Sc	45	2	H2	93.63230159	4142849.667
Ge	72	1	He	100.5662617	501475.897
Ge	72	2	H2	94.91307766	1480431.960
In	115	1	He	101.3622170	6213697.640
Tb	159	1	He	102.1582748	14780888.113
Ir	193	1	He	102.1849100	7568191.347



Sample Name ICV  
 Sample Type ICV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 014\_ICV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:44:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.951019	1.8	32072.623
Be	9	2	H2	81.859602	2.0	31800.433
B	11	2	H2	55.997123	3.6	47151.513
Na	23	1	He	1035.105313	0.8	998919.960
Mg	24	1	He	1037.593415	0.7	566068.807
Al	27	1	He	1042.252503	0.9	286966.387
Si	28	2	H2	516.338094	1.6	1474953.500
K	39	1	He	1044.148095	0.4	876943.813
Ca	43	1	He	1039.890595	0.7	2393.440
Ti	47	1	He	80.106807	1.4	20365.710
V	51	1	He	80.471624	1.9	568871.647
Cr	52	1	He	81.873645	1.1	691681.607
Mn	55	1	He	80.017383	0.6	511579.123
Fe	56	1	He	522.730098	0.7	4197743.417
Co	59	1	He	83.592723	0.2	1112960.623
Ni	60	1	He	84.355646	0.4	278494.233
Cu	63	1	He	83.828533	0.2	772044.230
Zn	66	1	He	83.314681	0.4	176039.707
As	75	1	He	80.466073	0.4	150068.540
Se	78	2	H2	81.790089	2.1	67566.970
Sr	88	1	He	81.609754	0.8	996715.037
Mo	95	1	He	77.637397	0.7	500226.000
Pd	105	1	He	82.133455	0.8	792363.610
Ag	107	1	He	40.755872	1.9	838716.293
Cd	111	1	He	81.225606	0.7	312134.377
Sn	118	1	He	77.463805	0.4	765371.630
Sb	121	1	He	78.541677	0.3	1142369.957
Ba	138	1	He	78.963370	0.4	2627896.313
Pt	195	1	He	82.923805	0.3	1080595.500
Hg	202	1	He	4.013736	1.1	25802.577
Tl	205	1	He	42.767946	0.0	2053664.813
Pb	208	1	He	83.480604	0.1	5460421.273
Bi	209	1	He	82.895524	1.0	4623194.827
Th	232	1	He	78.866340	1.2	5367707.420
U	238	1	He	79.916570	1.1	5223147.733

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.11402612	596845.127
Sc	45	2	H2	99.84476920	4417726.167
Ge	72	1	He	100.6362416	501824.853
Ge	72	2	H2	100.6259150	1569539.460
In	115	1	He	100.5310082	6162742.953
Tb	159	1	He	100.6118904	14557147.697
Ir	193	1	He	99.44834073	7365510.930

Sample Name ICB  
 Sample Type ICB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 015\_ICB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:48:17  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.189945	10.2	146.167
Be	9	2	H2	0.140247	19.6	76.333
B	11	2	H2	-32.354266		18367.953
Na	23	1	He	2.978759	14.4	15050.977
Mg	24	1	He	-4.346235		2535.243
Al	27	1	He	1.897276	44.2	606.017
Si	28	2	H2	1.857278	3.4	19446.027
K	39	1	He	-1.708492		72406.657
Ca	43	1	He	0.394043	344.2	14.733
Ti	47	1	He	0.045574	38.6	13.667
V	51	1	He	0.056374	91.4	-232.163
Cr	52	1	He	0.066666	59.5	3044.327
Mn	55	1	He	0.062529	37.1	688.020
Fe	56	1	He	1.196807	30.2	21461.263
Co	59	1	He	0.069293	34.8	984.037
Ni	60	1	He	0.074778	40.4	456.010
Cu	63	1	He	0.076344	34.5	1036.710
Zn	66	1	He	0.044188	66.6	313.337
As	75	1	He	0.061129	30.8	286.333
Se	78	2	H2	0.040819	34.1	75.333
Sr	88	1	He	0.057394	42.9	855.040
Mo	95	1	He	0.065925	31.3	440.673
Pd	105	1	He	0.095737	13.1	1130.053
Ag	107	1	He	0.152033	20.7	3262.083
Cd	111	1	He	0.063516	39.3	268.590
Sn	118	1	He	0.061362	32.8	756.697
Sb	121	1	He	0.064505	38.0	986.717
Ba	138	1	He	0.060094	35.2	2096.860
Pt	195	1	He	0.059492	45.2	999.380
Hg	202	1	He	0.025910	32.8	398.010
Tl	205	1	He	0.078519	23.5	4312.427
Pb	208	1	He	0.073221	37.5	7705.910
Bi	209	1	He	0.056033	52.5	5414.627
Th	232	1	He	0.061156	35.6	5249.500
U	238	1	He	0.055404	44.5	4659.277

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.84264513	601232.727
Sc	45	2	H2	100.8020961	4460084.000
Ge	72	1	He	101.1756436	504514.593
Ge	72	2	H2	100.9607544	1574762.207
In	115	1	He	101.6482391	6231231.340
Tb	159	1	He	101.9100105	14744967.697
Ir	193	1	He	101.3460374	7506061.347

Sample Name ICB  
 Sample Type ICB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 016\_ICB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:52:02  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.140704	16.2	126.667
Be	9	2	H2	0.109001	3.1	63.667
B	11	2	H2	-34.524961		17539.477
Na	23	1	He	1.252719	29.4	12980.720
Mg	24	1	He	-5.363311		1913.477
Al	27	1	He	0.601727	5.3	239.000
Si	28	2	H2	1.182006	4.9	17407.500
K	39	1	He	1.429688	323.8	72463.353
Ca	43	1	He	2.503749	48.5	19.067
Ti	47	1	He	0.040533	116.8	11.667
V	51	1	He	0.070699	80.6	-118.167
Cr	52	1	He	0.017135	98.4	2541.560
Mn	55	1	He	0.014206	14.7	365.343
Fe	56	1	He	0.496314	8.0	15329.397
Co	59	1	He	0.018822	12.2	298.667
Ni	60	1	He	0.017552	12.2	256.667
Cu	63	1	He	0.023499	36.4	526.010
Zn	66	1	He	0.007432	44.0	226.667
As	75	1	He	0.007972	50.2	179.833
Se	78	2	H2	0.026314	16.2	63.000
Sr	88	1	He	0.016062	18.1	336.673
Mo	95	1	He	0.018954	10.6	130.667
Pd	105	1	He	0.042206	14.5	588.350
Ag	107	1	He	0.037697	8.8	853.367
Cd	111	1	He	0.016203	13.2	82.310
Sn	118	1	He	0.013870	44.0	273.337
Sb	121	1	He	0.015649	7.4	260.003
Ba	138	1	He	0.015289	8.6	571.683
Pt	195	1	He	0.014197	21.9	389.343
Hg	202	1	He	0.009580	38.4	282.667
Tl	205	1	He	0.017531	7.6	1303.407
Pb	208	1	He	0.018218	29.8	3938.587
Bi	209	1	He	0.009702	43.8	2690.323
Th	232	1	He	0.014516	9.7	1950.160
U	238	1	He	0.012330	10.6	1733.467

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.80585082	582945.750
Sc	45	2	H2	100.1721287	4432210.500
Ge	72	1	He	97.36900399	485532.700
Ge	72	2	H2	100.6067963	1569241.250
In	115	1	He	98.23388660	6021925.003
Tb	159	1	He	98.68596046	14278492.287
Ir	193	1	He	97.64956516	7232286.977

Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 017CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:55:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.656879	1.1	319.167
Be	9	2	H2	0.275880	11.5	127.500
B	11	2	H2	-25.147787		20449.790
Na	23	1	He	53.398459	1.9	63390.483
Mg	24	1	He	25.725694	2.2	18895.387
Al	27	1	He	32.659161	1.7	9123.797
Si	28	2	H2	105.583078	2.8	311159.427
K	39	1	He	103.640531	1.4	153898.170
Ca	43	1	He	101.396465	2.8	247.250
Ti	47	1	He	1.087013	3.8	280.000
V	51	1	He	1.016243	4.0	6601.957
Cr	52	1	He	2.063255	1.2	19949.643
Mn	55	1	He	0.537481	2.9	3740.490
Fe	56	1	He	52.984929	0.7	438663.510
Co	59	1	He	0.546568	1.6	7327.853
Ni	60	1	He	0.575577	4.1	2104.160
Cu	63	1	He	1.091498	1.5	10368.383
Zn	66	1	He	5.333689	0.9	11464.533
As	75	1	He	0.503309	1.9	1107.707
Se	78	2	H2	0.534412	4.5	478.010
Sr	88	1	He	0.537741	2.9	6711.633
Mo	95	1	He	0.506287	3.1	3271.057
Pd	105	1	He	0.558820	6.7	5579.480
Ag	107	1	He	0.403962	5.1	8407.570
Cd	111	1	He	0.088094	1.9	360.090
Sn	118	1	He	0.488754	2.9	4967.593
Sb	121	1	He	0.518536	2.5	7575.437
Ba	138	1	He	0.313535	4.5	10502.417
Pt	195	1	He	0.527792	1.9	7085.897
Hg	202	1	He	0.227174	2.0	1674.777
Tl	205	1	He	0.098635	5.8	5224.413
Pb	208	1	He	0.543603	2.0	38349.883
Bi	209	1	He	0.524849	1.7	31578.053
Th	232	1	He	0.491147	2.3	34547.407
U	238	1	He	0.500764	1.8	33809.020

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.71326859	600453.647
Sc	45	2	H2	99.36293597	4396407.000
Ge	72	1	He	100.5503601	501396.603
Ge	72	2	H2	99.72146117	1555432.000
In	115	1	He	100.4685309	6158912.973
Tb	159	1	He	100.6013821	14555627.283
Ir	193	1	He	99.82933323	7393728.640

Sample Name ICSA  
 Sample Type ICSA  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 018ICSA.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 14:59:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.209660	12.6	146.000
Be	9	2	H2	0.073975	33.1	47.833
B	11	2	H2	-36.128869		16262.220
Na	23	1	He	25625.21842	0.8	23158332.153
Mg	24	1	He	25396.10112	0.9	13019222.307
Al	27	1	He	25297.22479	0.7	6597710.500
Si	28	2	H2	3.211484	10.0	22147.527
K	39	1	He	25397.43148	0.9	18592540.970
Ca	43	1	He	24949.28142	0.8	54108.643
Ti	47	1	He	500.430247	0.8	120535.887
V	51	1	He	0.019191	637.8	-466.760
Cr	52	1	He	0.240923	5.4	4253.297
Mn	55	1	He	0.053515	4.9	592.677
Fe	56	1	He	25760.54658	0.6	195469685.333
Co	59	1	He	0.061884	4.9	828.027
Ni	60	1	He	0.066042	15.8	399.343
Cu	63	1	He	0.074014	3.6	949.367
Zn	66	1	He	0.149320	6.9	501.343
As	75	1	He	0.030075	2.0	213.333
Se	78	2	H2	0.051896	21.4	81.333
Sr	88	1	He	0.247485	3.8	2980.327
Mo	95	1	He	515.335273	0.1	3121153.500
Pd	105	1	He	0.024190	29.7	401.677
Ag	107	1	He	0.038564	15.3	838.367
Cd	111	1	He	0.023051	43.3	103.547
Sn	118	1	He	0.017720	12.8	298.343
Sb	121	1	He	0.017093	8.6	270.007
Ba	138	1	He	0.017338	6.4	613.353
Pt	195	1	He	0.003762	37.0	254.000
Hg	202	1	He	0.005305	56.7	255.333
Tl	205	1	He	0.016442	14.8	1246.733
Pb	208	1	He	0.008800	41.6	3315.180
Bi	209	1	He	0.003591	90.1	2316.917
Th	232	1	He	0.014049	6.8	1886.820
U	238	1	He	0.007808	47.4	1420.093

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.91037244	565509.750
Sc	45	2	H2	95.75847760	4236924.333
Ge	72	1	He	94.52603192	471356.157
Ge	72	2	H2	97.36735800	1518713.250
In	115	1	He	94.49983777	5793020.673
Tb	159	1	He	98.25676427	14216393.540
Ir	193	1	He	96.10122995	7117611.560

Sample Name ICSAB  
 Sample Type ICSB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 019ICSB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:03:21  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	100.230343	1.5	37331.267
Be	9	2	H2	99.288752	1.4	38061.147
B	11	2	H2	65.068185	3.9	49463.870
Na	23	1	He	27821.73445	3.0	25192643.790
Mg	24	1	He	27512.36628	2.8	14132328.540
Al	27	1	He	27470.47145	2.9	7178798.833
Si	28	2	H2	1262.988914	1.5	3540392.333
K	39	1	He	27751.16189	3.1	20349103.450
Ca	43	1	He	27596.12544	3.3	59963.667
Ti	47	1	He	598.402133	2.8	144424.877
V	51	1	He	100.699299	3.3	675952.013
Cr	52	1	He	101.080780	3.0	810167.730
Mn	55	1	He	99.707164	3.0	605116.983
Fe	56	1	He	26703.08122	3.4	203005525.333
Co	59	1	He	102.116460	1.9	1297304.543
Ni	60	1	He	103.140468	1.8	324873.957
Cu	63	1	He	100.457360	2.2	882719.627
Zn	66	1	He	100.651451	2.0	202887.580
As	75	1	He	99.508576	2.5	177030.343
Se	78	2	H2	101.104581	0.5	82877.890
Sr	88	1	He	100.125758	2.5	1166697.770
Mo	95	1	He	612.622253	2.4	3723987.833
Pd	105	1	He	98.886014	2.0	900088.163
Ag	107	1	He	49.009006	2.6	951652.743
Cd	111	1	He	100.568876	2.3	364630.600
Sn	118	1	He	99.541723	2.5	927845.873
Sb	121	1	He	99.782283	2.3	1369264.720
Ba	138	1	He	99.697275	2.2	3130404.850
Pt	195	1	He	100.602350	2.9	1285193.587
Hg	202	1	He	4.085474	3.6	25741.120
Tl	205	1	He	49.484671	3.0	2329445.277
Pb	208	1	He	99.373062	2.5	6372217.977
Bi	209	1	He	108.628280	2.5	5843667.620
Th	232	1	He	111.345992	2.5	7310339.270
U	238	1	He	100.290862	2.5	6322995.530

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.14888739	566946.040
Sc	45	2	H2	98.52752608	4359443.500
Ge	72	1	He	96.05495923	478980.187
Ge	72	2	H2	99.86412028	1557657.163
In	115	1	He	94.88120446	5816399.180
Tb	159	1	He	98.68303170	14278068.537
Ir	193	1	He	95.95942348	7107108.850

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 020\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:07:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.519009	0.6	31774.837
Be	9	2	H2	81.419459	0.3	31496.297
B	11	2	H2	44.073978	1.6	43058.200
Na	23	1	He	1038.441184	1.8	998433.267
Mg	24	1	He	1033.542191	1.9	561807.400
Al	27	1	He	1028.520755	1.3	282163.117
Si	28	2	H2	514.401407	0.8	1463215.833
K	39	1	He	1031.162260	2.0	863753.603
Ca	43	1	He	1035.539939	2.6	2374.567
Ti	47	1	He	79.503576	1.1	20139.730
V	51	1	He	79.912205	1.5	562873.643
Cr	52	1	He	81.514369	1.2	686174.420
Mn	55	1	He	79.834054	1.0	508581.980
Fe	56	1	He	528.720213	1.2	4230368.667
Co	59	1	He	83.243549	0.5	1107029.750
Ni	60	1	He	84.043770	0.8	277141.773
Cu	63	1	He	83.537460	0.5	768474.357
Zn	66	1	He	82.507651	0.7	174133.073
As	75	1	He	79.543194	0.6	148177.767
Se	78	2	H2	82.376089	1.0	67912.983
Sr	88	1	He	81.300009	1.1	991750.770
Mo	95	1	He	77.052606	0.8	499579.407
Pd	105	1	He	81.562606	0.3	791828.870
Ag	107	1	He	40.475515	2.1	838202.540
Cd	111	1	He	80.704627	0.6	312083.900
Sn	118	1	He	76.971505	0.6	765270.793
Sb	121	1	He	78.395818	0.2	1147397.093
Ba	138	1	He	78.838183	0.9	2640165.583
Pt	195	1	He	82.158616	0.5	1089372.123
Hg	202	1	He	3.912954	0.3	25599.863
Tl	205	1	He	42.360373	0.2	2069705.073
Pb	208	1	He	82.482527	0.5	5489646.013
Bi	209	1	He	82.045243	1.1	4674929.413
Th	232	1	He	77.575109	0.6	5394409.710
U	238	1	He	78.305265	0.9	5228886.900

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.76499887	594743.353
Sc	45	2	H2	99.40419022	4398232.333
Ge	72	1	He	100.5220405	501255.387
Ge	72	2	H2	100.4152062	1566252.873
In	115	1	He	101.1621748	6201434.667
Tb	159	1	He	102.3734215	14812016.863
Ir	193	1	He	101.6003990	7524900.307

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 021\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:10:53  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.152794	6.7	132.000
Be	9	2	H2	0.117421	14.0	67.333
B	11	2	H2	-42.486569		15008.260
Na	23	1	He	9.387200	24.5	21041.717
Mg	24	1	He	0.461333	499.4	5117.620
Al	27	1	He	7.679286	30.7	2194.510
Si	28	2	H2	0.235328	32.7	14806.030
K	39	1	He	7.303180	27.1	78740.400
Ca	43	1	He	6.538046	40.6	28.683
Ti	47	1	He	0.183552	28.0	48.667
V	51	1	He	0.098723	83.2	71.440
Cr	52	1	He	0.044668	62.0	2836.283
Mn	55	1	He	0.051059	33.8	610.013
Fe	56	1	He	7.917151	28.1	75136.790
Co	59	1	He	0.057331	40.8	818.027
Ni	60	1	He	0.050737	38.3	373.340
Cu	63	1	He	0.067828	32.2	950.037
Zn	66	1	He	0.052376	45.2	328.003
As	75	1	He	0.040694	31.9	245.833
Se	78	2	H2	0.018831	47.6	57.000
Sr	88	1	He	0.049257	42.7	750.030
Mo	95	1	He	0.208614	27.3	1372.740
Pd	105	1	He	0.080696	9.8	983.377
Ag	107	1	He	0.166468	21.4	3567.167
Cd	111	1	He	0.051813	45.0	223.753
Sn	118	1	He	0.049250	24.6	636.687
Sb	121	1	He	0.052346	22.4	810.027
Ba	138	1	He	0.053252	33.4	1871.820
Pt	195	1	He	0.049596	33.9	864.033
Hg	202	1	He	0.029329	19.7	417.343
Tl	205	1	He	0.077580	20.5	4244.073
Pb	208	1	He	0.058901	27.0	6722.363
Bi	209	1	He	0.055710	35.9	5374.553
Th	232	1	He	0.060331	27.7	5169.443
U	238	1	He	0.047516	36.6	4119.057

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.02830982	596328.960
Sc	45	2	H2	100.7612147	4458275.167
Ge	72	1	He	100.2049671	499674.293
Ge	72	2	H2	101.0267870	1575792.167
In	115	1	He	101.6348205	6230408.753
Tb	159	1	He	101.2989033	14656548.947
Ir	193	1	He	100.8302904	7467863.223



Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 022\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:16:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.095759	15.1	112.000
Be	9	2	H2	0.063270	23.6	46.833
B	11	2	H2	-46.156535		14005.303
Na	23	1	He	1.717901	31.5	13619.617
Mg	24	1	He	-5.402396		1928.473
Al	27	1	He	1.396381	29.8	459.673
Si	28	2	H2	-0.153547		13905.183
K	39	1	He	0.631294	130.7	73034.517
Ca	43	1	He	2.691495	26.2	19.717
Ti	47	1	He	0.046432	40.3	13.667
V	51	1	He	0.064553	120.7	-171.583
Cr	52	1	He	0.018582	25.6	2594.237
Mn	55	1	He	0.006038	69.7	319.337
Fe	56	1	He	1.698314	25.8	25101.150
Co	59	1	He	0.012861	34.6	228.667
Ni	60	1	He	0.011196	84.0	244.000
Cu	63	1	He	0.013089	36.8	449.343
Zn	66	1	He	0.008025	140.0	235.333
As	75	1	He	-0.002893		165.500
Se	78	2	H2	0.000961	1058.4	43.333
Sr	88	1	He	0.009627	48.2	268.337
Mo	95	1	He	0.044913	22.4	305.340
Pd	105	1	He	0.034986	14.6	540.013
Ag	107	1	He	0.017850	13.7	473.347
Cd	111	1	He	0.011663	26.4	67.613
Sn	118	1	He	0.006024	79.7	205.003
Sb	121	1	He	0.012019	45.5	216.670
Ba	138	1	He	0.012336	26.0	493.350
Pt	195	1	He	0.010663	25.5	360.010
Hg	202	1	He	0.011697	35.0	311.000
Tl	205	1	He	0.010965	4.4	1043.383
Pb	208	1	He	0.013100	19.6	3781.910
Bi	209	1	He	0.008951	39.2	2827.017
Th	232	1	He	0.010210	20.9	1771.803
U	238	1	He	0.008981	26.7	1620.117

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.24455340	591609.333
Sc	45	2	H2	102.3032468	4526503.833
Ge	72	1	He	100.5033421	501162.147
Ge	72	2	H2	103.5446984	1615065.960
In	115	1	He	102.0831000	6257889.143
Tb	159	1	He	103.4999547	14975010.613
Ir	193	1	He	104.2469866	7720916.343

Sample Name LDR-800-364507  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 023SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:22:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.123426	2.1	117.500
Be	9	2	H2	0.056311	23.2	42.167
B	11	2	H2	-45.876871		13501.513
Na	23	1	He	4.182347	11.9	15573.240
Mg	24	1	He	-5.102873		2040.153
Al	27	1	He	8.044041	2.4	2219.837
Si	28	2	H2	2.929607	151.8	21954.060
K	39	1	He	1.633845	70.8	72051.223
Ca	43	1	He	19.135529	3.7	55.667
Ti	47	1	He	0.054375	61.7	15.333
V	51	1	He	0.042901	111.1	-315.483
Cr	52	1	He	0.034793	52.7	2665.583
Mn	55	1	He	785.739492	0.6	4859265.333
Fe	56	1	He	1.145003	24.3	20225.433
Co	59	1	He	0.052817	4.0	742.020
Ni	60	1	He	808.000234	0.5	2599854.333
Cu	63	1	He	828.049644	0.7	7434913.000
Zn	66	1	He	808.649339	0.5	1664546.377
As	75	1	He	731.967540	0.2	1330015.957
Se	78	2	H2	788.281843	0.7	644534.607
Sr	88	1	He	0.088676	7.1	1203.390
Mo	95	1	He	0.036664	22.2	248.000
Pd	105	1	He	0.029709	23.4	481.677
Ag	107	1	He	0.016223	8.3	433.343
Cd	111	1	He	0.005145	28.5	41.620
Sn	118	1	He	0.003941	29.5	181.667
Sb	121	1	He	0.006846	2.7	138.333
Ba	138	1	He	741.870276	0.6	24727968.797
Pt	195	1	He	0.003940	91.4	267.337
Hg	202	1	He	0.004990	86.1	264.333
Tl	205	1	He	0.006641	12.3	821.700
Pb	208	1	He	809.206558	0.9	53889361.277
Bi	209	1	He	0.012264	28.5	2997.063
Th	232	1	He	0.009520	19.4	1710.130
U	238	1	He	0.004713	40.3	1318.413

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.92231808	577625.290
Sc	45	2	H2	97.97608195	4335044.333
Ge	72	1	He	98.14886415	489421.490
Ge	72	2	H2	99.65297914	1554363.833
In	115	1	He	100.6900550	6172492.823
Tb	159	1	He	102.4828480	14827849.363
Ir	193	1	He	103.4678852	7663213.220

Sample Name BLANK-364936  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 024\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:26:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.079156	42.0	97.833
Be	9	2	H2	0.043093	10.9	36.167
B	11	2	H2	-46.704298		12831.937
Na	23	1	He	-0.311376		11432.783
Mg	24	1	He	-6.339713		1393.413
Al	27	1	He	0.176967	40.8	124.000
Si	28	2	H2	-0.004740		13299.343
K	39	1	He	-0.629983		70410.210
Ca	43	1	He	0.578783	175.8	14.583
Ti	47	1	He	-0.001020		1.667
V	51	1	He	0.021466	376.2	-463.070
Cr	52	1	He	0.002660	504.4	2404.870
Mn	55	1	He	0.201026	24.5	1519.417
Fe	56	1	He	0.561246	20.7	15698.983
Co	59	1	He	0.005407	9.0	126.000
Ni	60	1	He	0.198623	28.3	838.693
Cu	63	1	He	0.202561	24.9	2133.500
Zn	66	1	He	0.190349	39.5	603.347
As	75	1	He	0.370240	14.5	836.693
Se	78	2	H2	0.108353	19.4	123.667
Sr	88	1	He	0.000276	522.8	150.000
Mo	95	1	He	0.009197	29.8	70.000
Pd	105	1	He	0.021531	24.4	398.343
Ag	107	1	He	0.003125	29.9	161.667
Cd	111	1	He	0.002558	50.8	31.323
Sn	118	1	He	-0.000800		133.333
Sb	121	1	He	0.006254	52.4	128.333
Ba	138	1	He	0.173509	23.0	5796.317
Pt	195	1	He	0.001054	135.4	226.000
Hg	202	1	He	0.000659	156.5	233.000
Tl	205	1	He	0.002898	18.5	630.020
Pb	208	1	He	0.216985	18.1	17087.700
Bi	209	1	He	-0.002474		2096.873
Th	232	1	He	0.000109	844.6	1021.713
U	238	1	He	-0.000707		930.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.98278557	577989.413
Sc	45	2	H2	95.19950170	4212191.917
Ge	72	1	He	97.76895475	487527.063
Ge	72	2	H2	95.69633898	1492649.087
In	115	1	He	99.62456858	6107176.467
Tb	159	1	He	101.0927185	14626716.863
Ir	193	1	He	101.2481627	7498812.387

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 025\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:29:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.481028	0.2	31690.983
Be	9	2	H2	81.570620	1.2	31484.603
B	11	2	H2	35.882263	2.6	40295.820
Na	23	1	He	1020.786689	0.7	975783.917
Mg	24	1	He	1014.288364	0.6	548137.440
Al	27	1	He	1015.005402	0.7	276779.217
Si	28	2	H2	508.201119	0.4	1442593.123
K	39	1	He	1020.818622	0.4	850706.863
Ca	43	1	He	1012.505221	1.1	2308.297
Ti	47	1	He	78.781581	0.4	19836.330
V	51	1	He	79.601766	0.9	557314.910
Cr	52	1	He	80.916471	0.2	677046.917
Mn	55	1	He	79.044020	0.2	500491.133
Fe	56	1	He	514.091136	0.3	4088814.167
Co	59	1	He	82.460977	0.7	1092612.750
Ni	60	1	He	83.441786	0.3	274155.883
Cu	63	1	He	82.894998	0.6	759781.687
Zn	66	1	He	81.446279	0.9	171266.833
As	75	1	He	79.395429	0.4	147363.733
Se	78	2	H2	81.579892	1.1	67024.507
Sr	88	1	He	80.540680	0.5	978920.870
Mo	95	1	He	76.771447	0.3	496261.813
Pd	105	1	He	81.321056	0.4	787104.257
Ag	107	1	He	40.312809	1.1	832367.357
Cd	111	1	He	80.184212	0.4	309142.317
Sn	118	1	He	76.390589	1.0	757219.390
Sb	121	1	He	77.575467	0.5	1131975.453
Ba	138	1	He	77.773135	0.4	2596717.773
Pt	195	1	He	82.595375	0.8	1082409.000
Hg	202	1	He	3.888356	1.1	25144.993
Tl	205	1	He	42.340692	0.4	2044712.677
Pb	208	1	He	82.859526	0.3	5450637.263
Bi	209	1	He	81.036874	0.9	4590991.287
Th	232	1	He	76.949985	0.5	5320099.090
U	238	1	He	78.288134	0.3	5197565.860

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.15790327	591087.543
Sc	45	2	H2	99.18585759	4388572.000
Ge	72	1	He	100.1538941	499419.617
Ge	72	2	H2	100.0634411	1560766.123
In	115	1	He	100.8570654	6182730.880
Tb	159	1	He	101.1848893	14640052.697
Ir	193	1	He	101.0121749	7481334.263

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 026\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:34:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.090366	26.4	106.167
Be	9	2	H2	0.064007	12.5	45.500
B	11	2	H2	-50.017930		12270.137
Na	23	1	He	-1.038517		10830.657
Mg	24	1	He	-6.437711		1350.070
Al	27	1	He	0.254830	32.4	145.667
Si	28	2	H2	-0.226182		13222.540
K	39	1	He	-0.329718		71083.480
Ca	43	1	He	0.328343	175.5	14.117
Ti	47	1	He	0.017700	91.0	6.333
V	51	1	He	0.082392	67.3	-44.740
Cr	52	1	He	0.014549	41.6	2517.557
Mn	55	1	He	0.046451	47.1	566.013
Fe	56	1	He	0.411956	16.7	14639.343
Co	59	1	He	0.015999	31.2	264.003
Ni	60	1	He	0.049873	32.8	362.673
Cu	63	1	He	0.053916	38.2	805.363
Zn	66	1	He	0.036618	67.8	288.667
As	75	1	He	0.096674	31.4	342.503
Se	78	2	H2	0.035152	44.9	69.667
Sr	88	1	He	0.011004	48.2	278.340
Mo	95	1	He	0.024151	23.4	166.667
Pd	105	1	He	0.033180	13.8	513.347
Ag	107	1	He	0.058741	11.2	1305.073
Cd	111	1	He	0.014488	39.6	77.303
Sn	118	1	He	0.012118	45.2	261.670
Sb	121	1	He	0.015149	43.3	258.337
Ba	138	1	He	0.045107	37.3	1573.443
Pt	195	1	He	0.009861	40.8	345.340
Hg	202	1	He	0.009858	28.6	295.333
Tl	205	1	He	0.028961	15.1	1910.153
Pb	208	1	He	0.053114	35.0	6402.300
Bi	209	1	He	0.010763	45.2	2887.050
Th	232	1	He	0.016149	13.2	2161.870
U	238	1	He	0.007057	63.1	1466.763

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.60079374	581710.937
Sc	45	2	H2	98.78092406	4370655.333
Ge	72	1	He	98.14692960	489411.843
Ge	72	2	H2	99.90199985	1558248.000
In	115	1	He	100.3115332	6149288.717
Tb	159	1	He	102.2955374	14800748.113
Ir	193	1	He	102.5903690	7598221.137

Sample Name 4315068\_B70055Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 027SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:38:24  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.122652	2.0	116.167
Be	9	2	H2	0.049367	18.1	39.167
B	11	2	H2	-47.660922		12813.080
Na	23	1	He	1.316852	13.8	12985.720
Mg	24	1	He	-3.619305		2828.627
Al	27	1	He	5.680716	7.4	1597.087
Si	28	2	H2	3.001009	6.3	21876.703
K	39	1	He	0.511214	193.6	71538.947
Ca	43	1	He	8.143314	7.6	31.467
Ti	47	1	He	0.085302	29.8	23.000
V	51	1	He	0.050093	52.5	-267.930
Cr	52	1	He	0.154236	10.1	3654.473
Mn	55	1	He	0.070787	6.9	715.353
Fe	56	1	He	2.013978	3.0	27072.310
Co	59	1	He	0.022443	10.0	346.007
Ni	60	1	He	0.069366	20.7	423.343
Cu	63	1	He	0.121943	10.8	1409.407
Zn	66	1	He	0.435547	2.8	1104.713
As	75	1	He	0.089625	8.6	328.167
Se	78	2	H2	0.022634	21.6	58.000
Sr	88	1	He	0.028970	16.0	490.010
Mo	95	1	He	0.028923	3.2	197.333
Pd	105	1	He	0.034388	16.7	525.013
Ag	107	1	He	0.034503	14.0	806.700
Cd	111	1	He	0.015533	23.4	81.297
Sn	118	1	He	0.029885	24.7	436.677
Sb	121	1	He	0.023064	33.0	373.343
Ba	138	1	He	0.060385	18.8	2080.183
Pt	195	1	He	0.016970	21.4	433.343
Hg	202	1	He	0.002560	100.2	244.667
Tl	205	1	He	0.015811	4.1	1250.077
Pb	208	1	He	0.053595	21.6	6340.607
Bi	209	1	He	0.015041	32.1	3100.420
Th	232	1	He	0.013601	20.5	1961.837
U	238	1	He	0.008610	48.6	1553.443

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.35474671	580229.290
Sc	45	2	H2	97.10843181	4296654.333
Ge	72	1	He	97.70355713	487200.957
Ge	72	2	H2	97.44322357	1519896.583
In	115	1	He	100.3123438	6149338.403
Tb	159	1	He	100.8679936	14594202.280
Ir	193	1	He	101.5652997	7522300.723

Sample Name 4315069\_B70055Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 028SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:42:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	111.201609	0.7	40874.880
Be	9	2	H2	108.614872	0.3	41096.540
B	11	2	H2	63.486255	0.8	48320.683
Na	23	1	He	2166.036470	0.2	2014293.773
Mg	24	1	He	2142.292475	0.3	1128393.417
Al	27	1	He	2136.915610	0.1	570500.623
Si	28	2	H2	545.533415	0.3	1517235.170
K	39	1	He	2149.742751	0.4	1675763.100
Ca	43	1	He	2131.034092	1.3	4742.837
Ti	47	1	He	105.370577	0.6	25978.170
V	51	1	He	105.582984	0.7	724049.487
Cr	52	1	He	108.738649	0.4	890109.460
Mn	55	1	He	106.073479	0.3	657573.040
Fe	56	1	He	2164.812630	0.6	16822745.667
Co	59	1	He	110.015208	0.7	1437215.043
Ni	60	1	He	111.470024	0.3	361032.397
Cu	63	1	He	108.981053	0.3	984751.397
Zn	66	1	He	108.480500	0.7	224845.293
As	75	1	He	105.502251	0.3	193015.513
Se	78	2	H2	108.076390	1.4	87160.897
Sr	88	1	He	106.812379	0.3	1279959.800
Mo	95	1	He	103.753931	0.5	655803.560
Pd	105	1	He	21.506093	1.0	203681.583
Ag	107	1	He	51.641146	1.1	1042581.913
Cd	111	1	He	106.899350	0.2	402989.663
Sn	118	1	He	102.209999	0.2	990624.777
Sb	121	1	He	104.759776	0.0	1494720.917
Ba	138	1	He	104.661217	0.1	3416923.803
Pt	195	1	He	21.749057	1.2	284492.553
Hg	202	1	He	-0.000891		222.667
Tl	205	1	He	111.102954	0.7	5351681.797
Pb	208	1	He	108.489501	1.0	7118505.573
Bi	209	1	He	105.701413	0.9	5911476.580
Th	232	1	He	107.384656	0.8	7329514.683
U	238	1	He	104.850526	1.0	6872268.650

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.11589244	578790.957
Sc	45	2	H2	97.24321629	4302618.000
Ge	72	1	He	98.74778658	492408.030
Ge	72	2	H2	98.23912003	1532310.790
In	115	1	He	98.61975701	6045579.597
Tb	159	1	He	100.9441959	14605227.697
Ir	193	1	He	99.73359639	7386638.017

Sample Name 10607364001\_B70055Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 029SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:45:53  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.043286	12.5	771.353
Be	9	2	H2	0.116681	28.6	60.500
B	11	2	H2	-48.845675		11707.190
Na	23	1	He	17836.37007	0.7	15987773.510
Mg	24	1	He	2891.270098	0.7	1473826.540
Al	27	1	He	18.151407	1.1	4768.767
Si	28	2	H2	376.620989	11.7	987886.937
K	39	1	He	6626.683162	0.5	4861302.637
Ca	43	1	He	116275.4141	0.6	250011.547
Ti	47	1	He	0.099680	28.1	25.667
V	51	1	He	0.667666	6.2	3847.667
Cr	52	1	He	0.168900	5.0	3647.800
Mn	55	1	He	17.403803	0.9	104749.313
Fe	56	1	He	2.058647	2.2	26499.950
Co	59	1	He	0.053181	7.8	718.020
Ni	60	1	He	0.112539	8.1	542.677
Cu	63	1	He	0.320532	1.8	3076.337
Zn	66	1	He	0.265264	5.1	730.020
As	75	1	He	0.429708	2.1	911.197
Se	78	2	H2	0.670880	10.3	544.677
Sr	88	1	He	592.366313	1.1	6784018.440
Mo	95	1	He	171.632574	0.5	1050346.690
Pd	105	1	He	0.414351	4.6	3980.593
Ag	107	1	He	0.194104	24.7	3883.927
Cd	111	1	He	0.048290	11.0	196.950
Sn	118	1	He	0.036570	21.9	478.343
Sb	121	1	He	0.064344	9.8	925.043
Ba	138	1	He	6.210986	1.4	196392.443
Pt	195	1	He	0.006836	16.3	294.000
Hg	202	1	He	0.028694	12.3	402.010
Tl	205	1	He	0.033327	22.1	2043.513
Pb	208	1	He	0.031494	12.4	4777.030
Bi	209	1	He	0.017201	46.9	3020.397
Th	232	1	He	0.059786	7.0	4847.603
U	238	1	He	0.840639	1.0	53508.170

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.12033385	560752.293
Sc	45	2	H2	92.03854161	4072332.250
Ge	72	1	He	94.38057316	470630.823
Ge	72	2	H2	92.74669625	1446641.250
In	115	1	He	95.48302191	5853291.740
Tb	159	1	He	98.50750238	14252671.873
Ir	193	1	He	95.20242302	7051042.603



Sample Name 4315629\_B70055Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 030SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:49:38  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	80.895405	1.8	30624.480
Be	9	2	H2	77.858100	1.1	30327.093
B	11	2	H2	25.890104	6.7	37379.353
Na	23	1	He	19666.37421	0.5	17861775.983
Mg	24	1	He	4749.809520	0.7	2450518.717
Al	27	1	He	1913.339313	0.4	501488.387
Si	28	2	H2	1327.736504	1.6	3780533.083
K	39	1	He	8476.432710	0.8	6281767.197
Ca	43	1	He	117858.7489	0.3	256790.873
Ti	47	1	He	77.378851	1.5	18730.217
V	51	1	He	79.359611	0.8	534113.823
Cr	52	1	He	78.654823	0.5	632724.207
Mn	55	1	He	94.964940	0.3	577980.480
Fe	56	1	He	975.474001	0.8	7448270.333
Co	59	1	He	80.056901	1.0	1018311.250
Ni	60	1	He	81.482071	1.0	257001.990
Cu	63	1	He	78.963589	0.6	694799.603
Zn	66	1	He	79.204150	1.1	159893.890
As	75	1	He	79.417047	1.1	141502.407
Se	78	2	H2	82.763955	0.6	68715.363
Sr	88	1	He	668.271242	0.6	7796294.463
Mo	95	1	He	250.767057	1.4	1562330.000
Pd	105	1	He	75.936542	1.9	708424.237
Ag	107	1	He	21.096173	2.9	419884.317
Cd	111	1	He	78.340543	1.3	291110.060
Sn	118	1	He	75.705333	1.1	723294.963
Sb	121	1	He	75.471035	1.4	1061447.743
Ba	138	1	He	82.617321	1.3	2658656.107
Pt	195	1	He	77.340714	1.4	1005365.543
Hg	202	1	He	0.026946	7.2	398.343
Tl	205	1	He	39.216083	1.6	1878547.630
Pb	208	1	He	78.232821	1.6	5104881.023
Bi	209	1	He	76.778370	0.6	4229188.270
Th	232	1	He	7.082111	0.5	476964.617
U	238	1	He	78.687626	0.6	5079582.530

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.36133816	568225.377
Sc	45	2	H2	100.0971689	4428893.833
Ge	72	1	He	96.14666510	479437.480
Ge	72	2	H2	101.1376550	1577521.460
In	115	1	He	97.21063308	5959197.607
Tb	159	1	He	100.3629003	14521122.280
Ir	193	1	He	98.21375297	7274072.807

Sample Name 4315630\_B70055Dx25  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 031SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:53:22  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.496969	6.4	268.333
Be	9	2	H2	0.099365	7.9	61.500
B	11	2	H2	-56.535071		10574.523
Na	23	1	He	3660.379485	2.0	3449478.283
Mg	24	1	He	590.104530	1.8	319207.527
Al	27	1	He	5.515243	10.5	1572.090
Si	28	2	H2	69.863828	1.2	218068.637
K	39	1	He	1354.387864	1.8	1099118.420
Ca	43	1	He	23623.70885	1.6	53269.233
Ti	47	1	He	0.042798	19.7	12.667
V	51	1	He	0.156266	51.7	471.587
Cr	52	1	He	0.077319	15.4	3064.993
Mn	55	1	He	3.620795	2.2	23069.470
Fe	56	1	He	1.191683	12.1	20938.337
Co	59	1	He	0.022984	18.7	362.010
Ni	60	1	He	0.073465	9.4	448.010
Cu	63	1	He	0.100243	10.3	1247.393
Zn	66	1	He	0.422281	0.3	1106.043
As	75	1	He	0.098870	19.4	353.837
Se	78	2	H2	0.133893	4.9	157.333
Sr	88	1	He	117.603554	1.0	1431255.653
Mo	95	1	He	34.059737	1.0	222712.403
Pd	105	1	He	0.119298	3.5	1365.080
Ag	107	1	He	0.177383	30.8	3798.913
Cd	111	1	He	0.020469	22.0	101.910
Sn	118	1	He	0.021981	29.4	365.010
Sb	121	1	He	0.026399	15.2	428.343
Ba	138	1	He	1.250130	1.0	42301.290
Pt	195	1	He	0.007252	46.6	314.670
Hg	202	1	He	-0.001381		225.667
Tl	205	1	He	0.064116	27.6	3667.223
Pb	208	1	He	0.019698	30.8	4231.950
Bi	209	1	He	0.012822	61.3	2993.730
Th	232	1	He	0.009093	37.6	1660.123
U	238	1	He	0.170969	3.3	12496.080

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.65511586	588059.857
Sc	45	2	H2	102.8456732	4550504.000
Ge	72	1	He	100.2953501	500124.990
Ge	72	2	H2	104.2858246	1626625.873
In	115	1	He	102.0292529	6254588.217
Tb	159	1	He	103.7650313	15013363.523
Ir	193	1	He	102.4731079	7589536.347

Sample Name 4315070\_B70055Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 032SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 15:57:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	23.936376	10.7	8354.967
Be	9	2	H2	21.578327	11.8	7713.633
B	11	2	H2	-31.331197		17024.223
Na	23	1	He	18012.23350	0.4	16661764.333
Mg	24	1	He	3230.567619	0.7	1698937.110
Al	27	1	He	397.500296	0.6	106166.597
Si	28	2	H2	499.619348	10.8	1312153.167
K	39	1	He	6928.726222	0.8	5242353.570
Ca	43	1	He	115309.4977	0.8	255870.830
Ti	47	1	He	18.973090	2.2	4678.747
V	51	1	He	20.107962	2.0	137383.210
Cr	52	1	He	19.718758	0.9	163338.650
Mn	55	1	He	36.160087	0.8	224309.270
Fe	56	1	He	389.087670	0.4	3032458.000
Co	59	1	He	20.151619	1.2	258465.963
Ni	60	1	He	20.261476	1.3	64580.823
Cu	63	1	He	19.969253	1.7	177384.530
Zn	66	1	He	20.365450	1.9	41606.007
As	75	1	He	19.988674	1.8	36030.360
Se	78	2	H2	23.175322	11.4	17732.217
Sr	88	1	He	608.001249	2.0	7151253.230
Mo	95	1	He	190.366320	0.9	1203944.957
Pd	105	1	He	4.161525	2.1	39592.040
Ag	107	1	He	8.778364	5.2	177468.170
Cd	111	1	He	19.323377	0.3	72902.143
Sn	118	1	He	18.755165	1.7	182009.443
Sb	121	1	He	19.193128	1.5	274056.840
Ba	138	1	He	25.225933	1.1	824123.270
Pt	195	1	He	3.888772	2.1	51551.013
Hg	202	1	He	0.023980	16.7	385.343
Tl	205	1	He	20.249219	0.9	985425.270
Pb	208	1	He	19.559899	1.0	1298475.637
Bi	209	1	He	19.314834	0.9	1085003.580
Th	232	1	He	19.800265	1.4	1356046.177
U	238	1	He	20.297569	1.1	1334855.500

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.09770575	578681.440
Sc	45	2	H2	92.40382178	4088494.417
Ge	72	1	He	96.93202341	483353.687
Ge	72	2	H2	93.63977287	1460571.250
In	115	1	He	98.67218604	6048793.597
Tb	159	1	He	101.9338062	14748410.613
Ir	193	1	He	99.99961740	7406340.513

Sample Name 4315071\_B70055Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 033SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:00:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	21.307906	1.7	8044.633
Be	9	2	H2	19.092768	1.5	7382.633
B	11	2	H2	-37.434382		16412.050
Na	23	1	He	16934.98364	0.6	15461556.853
Mg	24	1	He	3047.569103	0.5	1582028.207
Al	27	1	He	385.345492	1.0	101580.973
Si	28	2	H2	433.865487	1.2	1233110.793
K	39	1	He	6511.454401	1.2	4866650.657
Ca	43	1	He	107975.1424	0.9	236471.413
Ti	47	1	He	18.981220	2.1	4619.727
V	51	1	He	19.579125	1.5	132003.553
Cr	52	1	He	19.326667	0.6	158047.040
Mn	55	1	He	34.770146	1.0	212884.333
Fe	56	1	He	383.335842	0.7	2948801.667
Co	59	1	He	19.521233	1.3	250482.543
Ni	60	1	He	21.530605	1.5	68641.197
Cu	63	1	He	19.353265	1.3	171987.323
Zn	66	1	He	19.362718	0.9	39582.363
As	75	1	He	19.398702	1.6	34985.300
Se	78	2	H2	20.973266	0.7	17343.073
Sr	88	1	He	564.628363	1.5	6643730.320
Mo	95	1	He	177.917775	0.6	1122887.750
Pd	105	1	He	4.053004	0.9	38480.690
Ag	107	1	He	8.680671	3.9	175106.190
Cd	111	1	He	18.901525	0.9	71167.907
Sn	118	1	He	18.368804	1.5	177890.357
Sb	121	1	He	18.772850	2.0	267506.713
Ba	138	1	He	24.261457	1.0	790971.863
Pt	195	1	He	3.776566	0.7	50259.403
Hg	202	1	He	0.021094	15.6	368.340
Tl	205	1	He	19.501492	0.6	952716.157
Pb	208	1	He	18.881796	0.9	1258414.343
Bi	209	1	He	18.850581	0.9	1051491.913
Th	232	1	He	19.384777	0.8	1318341.203
U	238	1	He	19.767922	0.9	1290992.950

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.84404576	571132.147
Sc	45	2	H2	99.14285930	4386669.500
Ge	72	1	He	96.96680651	483527.133
Ge	72	2	H2	100.5440281	1568262.207
In	115	1	He	98.47029114	6036417.053
Tb	159	1	He	102.3281051	14805460.197
Ir	193	1	He	99.30100978	7354599.057

Sample Name 10607364001\_B70055Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 034SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:04:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.537026	6.0	274.833
Be	9	2	H2	0.083289	10.8	53.333
B	11	2	H2	-58.186315		9699.773
Na	23	1	He	4409.607737	1.0	4095114.213
Mg	24	1	He	709.949785	1.1	377706.777
Al	27	1	He	5.715006	4.8	1605.090
Si	28	2	H2	88.257388	1.2	263080.250
K	39	1	He	1642.034415	0.6	1298822.613
Ca	43	1	He	28585.54419	0.9	63553.170
Ti	47	1	He	0.042168	34.0	12.333
V	51	1	He	0.188696	33.5	686.137
Cr	52	1	He	0.093348	15.4	3153.683
Mn	55	1	He	4.315580	1.5	27060.300
Fe	56	1	He	1.004032	19.2	19195.313
Co	59	1	He	0.026620	35.4	404.007
Ni	60	1	He	0.076740	21.5	451.343
Cu	63	1	He	0.106996	8.3	1288.060
Zn	66	1	He	0.075935	20.3	371.340
As	75	1	He	0.104055	18.3	357.670
Se	78	2	H2	0.156878	4.9	171.667
Sr	88	1	He	144.289411	0.4	1726655.703
Mo	95	1	He	41.452685	1.2	266979.550
Pd	105	1	He	0.125069	10.9	1400.083
Ag	107	1	He	0.138539	26.8	2948.677
Cd	111	1	He	0.022086	42.8	106.610
Sn	118	1	He	0.019000	44.8	330.007
Sb	121	1	He	0.026238	34.1	420.013
Ba	138	1	He	1.513139	1.4	50409.860
Pt	195	1	He	0.004140	18.1	268.667
Hg	202	1	He	-0.001213		223.000
Tl	205	1	He	0.021028	32.8	1516.770
Pb	208	1	He	0.014369	56.7	3810.233
Bi	209	1	He	0.013491	64.3	2970.387
Th	232	1	He	0.027098	27.0	2860.347
U	238	1	He	0.207321	1.9	14616.653

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.27157007	579728.417
Sc	45	2	H2	99.58596582	4406275.167
Ge	72	1	He	98.61321316	491736.977
Ge	72	2	H2	101.1386513	1577537.000
In	115	1	He	100.4878570	6160097.700
Tb	159	1	He	101.9738872	14754209.780
Ir	193	1	He	100.1954313	7420843.220

Sample Name 4315629\_B70055Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 035SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:08:19  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	80.365541	0.4	30122.303
Be	9	2	H2	77.031989	0.2	29706.537
B	11	2	H2	22.819009	3.1	36007.870
Na	23	1	He	6345.282685	0.8	5802315.537
Mg	24	1	He	2590.448261	0.4	1345871.333
Al	27	1	He	1869.343952	0.3	492641.907
Si	28	2	H2	1043.358927	0.7	2944273.083
K	39	1	He	3512.102256	0.3	2657995.480
Ca	43	1	He	30821.06127	0.6	67529.647
Ti	47	1	He	77.237888	1.2	18797.297
V	51	1	He	76.680672	0.6	518895.310
Cr	52	1	He	77.524219	0.6	627076.460
Mn	55	1	He	81.028278	0.4	495895.827
Fe	56	1	He	958.405117	0.9	7358086.000
Co	59	1	He	78.500493	0.9	1013670.103
Ni	60	1	He	79.839209	0.7	255652.017
Cu	63	1	He	78.331786	1.2	699679.853
Zn	66	1	He	77.429309	1.2	158685.783
As	75	1	He	76.326931	1.1	138068.093
Se	78	2	H2	78.924141	1.1	64958.810
Sr	88	1	He	221.945136	1.2	2628639.753
Mo	95	1	He	119.055304	1.8	748217.413
Pd	105	1	He	77.823643	1.6	732369.520
Ag	107	1	He	22.149708	2.8	444703.900
Cd	111	1	He	76.734256	1.0	287642.663
Sn	118	1	He	76.512447	0.9	737419.050
Sb	121	1	He	76.199603	0.6	1081132.330
Ba	138	1	He	77.029342	0.7	2500753.453
Pt	195	1	He	77.820727	0.9	1022522.250
Hg	202	1	He	-0.001750		218.333
Tl	205	1	He	38.944138	1.0	1885593.773
Pb	208	1	He	77.636515	0.7	5120320.837
Bi	209	1	He	76.218696	0.7	4252939.623
Th	232	1	He	6.658918	0.8	454326.347
U	238	1	He	76.138416	0.3	4978786.070

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.87702315	571330.730
Sc	45	2	H2	99.09155893	4384399.667
Ge	72	1	He	97.61005509	486734.707
Ge	72	2	H2	100.2452248	1563601.543
In	115	1	He	98.06929945	6011835.497
Tb	159	1	He	101.4449147	14677674.780
Ir	193	1	He	99.48919242	7368536.557

Sample Name 4315630\_B70055Dx100  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 036SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:12:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.213804	15.7	152.000
Be	9	2	H2	0.086355	27.7	54.000
B	11	2	H2	-59.407663		9222.310
Na	23	1	He	903.783341	0.3	850339.260
Mg	24	1	He	143.761711	0.6	80411.920
Al	27	1	He	3.608481	17.5	1044.040
Si	28	2	H2	18.079790	1.9	64445.833
K	39	1	He	332.187182	0.8	320090.793
Ca	43	1	He	5779.482726	1.1	12885.163
Ti	47	1	He	0.056848	42.4	16.000
V	51	1	He	0.136889	43.2	330.723
Cr	52	1	He	0.122064	26.5	3395.070
Mn	55	1	He	0.935322	1.4	6092.620
Fe	56	1	He	1.367934	21.1	22070.087
Co	59	1	He	0.055868	40.6	787.360
Ni	60	1	He	0.093947	26.7	508.010
Cu	63	1	He	0.091132	23.9	1147.387
Zn	66	1	He	0.131566	10.0	487.343
As	75	1	He	0.062570	36.8	282.500
Se	78	2	H2	0.051518	3.4	83.333
Sr	88	1	He	29.256434	0.7	350919.473
Mo	95	1	He	8.375647	0.7	54598.730
Pd	105	1	He	0.080162	15.7	978.380
Ag	107	1	He	0.179500	25.1	3837.243
Cd	111	1	He	0.046180	39.5	201.503
Sn	118	1	He	0.058332	31.0	726.690
Sb	121	1	He	0.057822	46.4	890.043
Ba	138	1	He	0.349660	6.2	11846.803
Pt	195	1	He	0.043634	52.1	790.030
Hg	202	1	He	-0.008751		174.333
Tl	205	1	He	0.078227	28.5	4300.763
Pb	208	1	He	0.051890	41.9	6297.277
Bi	209	1	He	0.050300	53.3	5051.110
Th	232	1	He	0.013708	34.0	1948.497
U	238	1	He	0.083116	25.5	6455.033

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.45938481	580859.400
Sc	45	2	H2	98.75233010	4369390.167
Ge	72	1	He	98.80906041	492713.573
Ge	72	2	H2	100.0649347	1560789.420
In	115	1	He	101.6910639	6233856.580
Tb	159	1	He	102.0169431	14760439.363
Ir	193	1	He	100.4891285	7442595.513

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 037\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:15:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.842175	2.5	31216.187
Be	9	2	H2	82.284755	2.3	31152.753
B	11	2	H2	24.757280	11.5	35969.617
Na	23	1	He	1025.658859	1.1	962173.370
Mg	24	1	He	1025.360671	1.5	543760.240
Al	27	1	He	1016.948146	1.2	272155.377
Si	28	2	H2	514.050308	2.9	1430979.790
K	39	1	He	1029.064918	1.6	841058.530
Ca	43	1	He	1016.564435	2.2	2274.403
Ti	47	1	He	80.199627	1.3	19818.633
V	51	1	He	80.571309	0.7	553659.693
Cr	52	1	He	82.318709	1.1	675947.957
Mn	55	1	He	80.323516	0.9	499146.803
Fe	56	1	He	522.530242	1.5	4078375.250
Co	59	1	He	83.328940	0.9	1093662.873
Ni	60	1	He	84.602016	1.0	275331.227
Cu	63	1	He	83.703486	0.9	759924.020
Zn	66	1	He	82.449325	0.7	171740.530
As	75	1	He	79.744110	0.9	146607.780
Se	78	2	H2	82.948907	2.3	67546.193
Sr	88	1	He	81.571545	0.8	982067.147
Mo	95	1	He	78.087009	1.2	499711.417
Pd	105	1	He	82.447030	0.4	790051.630
Ag	107	1	He	40.814901	0.9	834317.800
Cd	111	1	He	81.440855	0.7	310849.730
Sn	118	1	He	77.854219	1.2	763994.180
Sb	121	1	He	78.659933	1.0	1136309.307
Ba	138	1	He	79.092530	0.6	2614390.483
Pt	195	1	He	83.298424	0.7	1101419.750
Hg	202	1	He	3.910535	1.2	25512.680
Tl	205	1	He	42.378393	0.3	2064887.730
Pb	208	1	He	83.119050	1.0	5516537.287
Bi	209	1	He	81.528335	1.7	4661824.620
Th	232	1	He	77.297669	1.5	5394026.377
U	238	1	He	78.754721	1.9	5277169.503

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.34422605	580165.937
Sc	45	2	H2	97.32031187	4306029.167
Ge	72	1	He	99.21135750	494719.637
Ge	72	2	H2	99.21060254	1547463.747
In	115	1	He	99.85298941	6121179.100
Tb	159	1	He	102.0930935	14771457.280
Ir	193	1	He	101.9769921	7552792.183



Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 038\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:19:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.093694	33.7	106.000
Be	9	2	H2	0.066323	10.8	45.833
B	11	2	H2	-61.440315		8464.700
Na	23	1	He	0.485623	7.5	12054.940
Mg	24	1	He	-7.097343		986.707
Al	27	1	He	0.051596	89.0	89.667
Si	28	2	H2	-0.387003		12623.363
K	39	1	He	-2.832151		68114.723
Ca	43	1	He	1.030683	121.3	15.467
Ti	47	1	He	0.004431	154.5	3.000
V	51	1	He	0.059903	9.8	-197.963
Cr	52	1	He	0.009928	33.8	2440.873
Mn	55	1	He	-0.002136		259.337
Fe	56	1	He	0.205393	14.7	12825.627
Co	59	1	He	0.011981	33.0	210.667
Ni	60	1	He	0.035238	16.0	313.337
Cu	63	1	He	0.011328	36.9	420.010
Zn	66	1	He	0.009618	34.6	231.333
As	75	1	He	-0.010476		146.667
Se	78	2	H2	0.015807	51.0	53.667
Sr	88	1	He	0.013821	42.4	310.007
Mo	95	1	He	0.020702	23.3	142.667
Pd	105	1	He	0.035643	23.2	530.013
Ag	107	1	He	0.139956	13.2	2933.663
Cd	111	1	He	0.008149	29.2	52.310
Sn	118	1	He	0.005469	44.9	193.333
Sb	121	1	He	0.010132	36.0	183.333
Ba	138	1	He	0.011008	13.8	435.010
Pt	195	1	He	0.004461	82.3	270.003
Hg	202	1	He	0.012054	25.4	304.667
Tl	205	1	He	0.053762	21.3	3077.057
Pb	208	1	He	0.009861	40.4	3468.537
Bi	209	1	He	0.005270	156.9	2553.643
Th	232	1	He	0.015588	18.9	2105.187
U	238	1	He	0.003688	60.7	1230.070

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.09433459	572639.337
Sc	45	2	H2	97.61850116	4319222.833
Ge	72	1	He	97.39236228	485649.177
Ge	72	2	H2	99.37748841	1550066.793
In	115	1	He	98.89985529	6062750.157
Tb	159	1	He	100.6864340	14567933.117
Ir	193	1	He	101.7833327	7538449.053

Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 039CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:23:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.570844	2.3	287.333
Be	9	2	H2	0.271905	2.2	126.333
B	11	2	H2	-52.504848		11549.237
Na	23	1	He	52.854507	1.4	60903.560
Mg	24	1	He	24.353503	2.5	17583.807
Al	27	1	He	32.064853	1.2	8679.193
Si	28	2	H2	101.287359	1.6	299632.560
K	39	1	He	100.974278	2.2	147084.943
Ca	43	1	He	106.488069	3.3	250.833
Ti	47	1	He	1.048752	6.0	261.667
V	51	1	He	1.028809	5.0	6483.270
Cr	52	1	He	2.081237	2.1	19472.913
Mn	55	1	He	0.520767	2.4	3520.437
Fe	56	1	He	54.249322	1.2	434816.947
Co	59	1	He	0.537740	1.8	7081.740
Ni	60	1	He	0.553705	1.5	1996.143
Cu	63	1	He	1.062731	2.1	9923.397
Zn	66	1	He	5.608081	0.6	11828.840
As	75	1	He	0.473067	1.4	1032.707
Se	78	2	H2	0.553649	4.1	495.677
Sr	88	1	He	0.510503	3.0	6264.753
Mo	95	1	He	0.488506	1.5	3159.030
Pd	105	1	He	0.504872	3.2	5064.287
Ag	107	1	He	0.435366	9.6	9056.313
Cd	111	1	He	0.088352	8.0	361.100
Sn	118	1	He	0.475057	1.0	4835.877
Sb	121	1	He	0.512393	0.9	7492.060
Ba	138	1	He	0.308434	1.3	10340.583
Pt	195	1	He	0.510475	2.3	6943.153
Hg	202	1	He	0.212623	2.7	1601.097
Tl	205	1	He	0.105804	6.1	5632.907
Pb	208	1	He	0.524924	1.4	37578.997
Bi	209	1	He	0.498324	2.5	30936.543
Th	232	1	He	0.489556	1.9	35408.047
U	238	1	He	0.491411	1.2	34133.213

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.60464419	581734.123
Sc	45	2	H2	99.53051818	4403821.833
Ge	72	1	He	98.76452369	492491.490
Ge	72	2	H2	100.1029502	1561382.377
In	115	1	He	100.5461366	6163670.353
Tb	159	1	He	101.8139059	14731062.697
Ir	193	1	He	102.6341095	7601460.720

Sample Name 4314160\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 040SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:27:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.077382	37.3	101.667
Be	9	2	H2	0.033336	19.3	33.833
B	11	2	H2	-61.165804		8686.663
Na	23	1	He	4.865910	8.5	16287.280
Mg	24	1	He	-4.142751		2555.243
Al	27	1	He	13.605963	1.2	3720.800
Si	28	2	H2	2.902767	1.4	22064.317
K	39	1	He	-0.432540		70884.173
Ca	43	1	He	9.470601	13.5	34.450
Ti	47	1	He	0.077058	32.5	21.000
V	51	1	He	0.046063	146.4	-295.710
Cr	52	1	He	0.251226	7.1	4451.353
Mn	55	1	He	0.059536	4.4	646.020
Fe	56	1	He	4.790401	1.8	48722.747
Co	59	1	He	0.011341	2.2	203.333
Ni	60	1	He	0.091641	9.2	496.677
Cu	63	1	He	0.099118	3.5	1210.053
Zn	66	1	He	1.458975	0.7	3213.033
As	75	1	He	-0.007478		153.167
Se	78	2	H2	0.001504	420.1	42.333
Sr	88	1	He	0.029940	7.5	503.347
Mo	95	1	He	0.050437	3.0	336.677
Pd	105	1	He	0.008855	22.0	280.010
Ag	107	1	He	0.054433	12.8	1220.063
Cd	111	1	He	0.004371	33.2	38.607
Sn	118	1	He	0.033433	17.2	473.343
Sb	121	1	He	0.011886	13.1	211.667
Ba	138	1	He	0.047628	2.4	1661.777
Pt	195	1	He	0.011130	12.1	360.677
Hg	202	1	He	-0.005251		196.667
Tl	205	1	He	0.012061	5.5	1080.053
Pb	208	1	He	0.001352	404.3	2945.153
Bi	209	1	He	0.001689	31.7	2346.920
Th	232	1	He	0.001528	41.9	1126.723
U	238	1	He	-0.001463		885.037

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.42556604	580655.750
Sc	45	2	H2	99.14310791	4386680.500
Ge	72	1	He	98.05873520	488972.060
Ge	72	2	H2	100.2493226	1563665.460
In	115	1	He	100.6170629	6168018.270
Tb	159	1	He	101.8616558	14737971.447
Ir	193	1	He	101.8401785	7542659.263

Sample Name 4314161\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 041SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:30:49  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	111.810231	0.4	41155.777
Be	9	2	H2	108.093469	0.3	40956.160
B	11	2	H2	49.776304	0.9	44004.420
Na	23	1	He	2151.830848	0.7	1996778.307
Mg	24	1	He	2131.439103	0.6	1120254.383
Al	27	1	He	2133.362962	0.6	568317.123
Si	28	2	H2	553.096061	0.5	1540223.750
K	39	1	He	2141.037352	0.9	1665609.247
Ca	43	1	He	2153.455744	1.7	4781.910
Ti	47	1	He	106.926591	1.2	26305.070
V	51	1	He	107.261574	0.4	733961.177
Cr	52	1	He	109.653617	0.6	895610.127
Mn	55	1	He	106.793275	0.2	660589.813
Fe	56	1	He	2184.753489	0.6	16940962.000
Co	59	1	He	110.295443	0.4	1442466.790
Ni	60	1	He	112.030141	0.3	363241.720
Cu	63	1	He	108.736116	0.3	983601.190
Zn	66	1	He	109.641984	0.4	227497.197
As	75	1	He	106.961140	0.6	195892.910
Se	78	2	H2	110.943852	0.7	90292.040
Sr	88	1	He	107.986054	0.9	1295439.460
Mo	95	1	He	105.609574	0.3	670645.603
Pd	105	1	He	21.978830	1.3	209118.083
Ag	107	1	He	52.136717	2.0	1057407.430
Cd	111	1	He	107.823566	0.7	408362.523
Sn	118	1	He	105.174741	0.5	1024119.983
Sb	121	1	He	107.234583	0.6	1537146.277
Ba	138	1	He	105.344293	0.6	3455228.177
Pt	195	1	He	22.007429	0.6	290085.730
Hg	202	1	He	-0.000292		228.333
Tl	205	1	He	110.785974	0.3	5377374.503
Pb	208	1	He	108.519116	0.6	7175125.620
Bi	209	1	He	106.085636	0.7	6023929.287
Th	232	1	He	106.723313	0.7	7396079.680
U	238	1	He	103.916989	0.7	6915531.770

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.90741390	577535.540
Sc	45	2	H2	97.37852060	4308604.667
Ge	72	1	He	98.85401693	492937.750
Ge	72	2	H2	99.14297832	1546408.960
In	115	1	He	99.08187022	6073908.020
Tb	159	1	He	101.7167070	14716999.363
Ir	193	1	He	101.2596055	7499659.887

Sample Name 60398600002\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 042SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:34:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	7.081621	0.9	2729.250
Be	9	2	H2	0.106917	21.2	62.333
B	11	2	H2	-15.583411		23587.340
Na	23	1	He	9931.636421	1.7	9007222.990
Mg	24	1	He	17894.62889	2.0	9199972.570
Al	27	1	He	132.282285	2.7	34672.043
Si	28	2	H2	4529.401643	1.6	12775062.333
K	39	1	He	8671.005374	1.6	6410950.737
Ca	43	1	He	84403.49588	1.6	183521.567
Ti	47	1	He	2.870821	8.2	695.360
V	51	1	He	0.551077	6.9	3107.167
Cr	52	1	He	0.707395	5.4	7994.883
Mn	55	1	He	2.969733	2.4	18297.440
Fe	56	1	He	75.957405	1.5	589047.603
Co	59	1	He	0.542343	3.2	6979.683
Ni	60	1	He	1.575057	2.2	5182.933
Cu	63	1	He	0.290855	3.3	2884.293
Zn	66	1	He	3.700867	3.4	7700.060
As	75	1	He	0.192595	3.2	508.177
Se	78	2	H2	0.766169	5.7	671.020
Sr	88	1	He	243.247718	2.1	2848880.583
Mo	95	1	He	4.097313	1.2	25350.510
Pd	105	1	He	0.197495	1.4	2015.160
Ag	107	1	He	0.204559	26.3	4130.673
Cd	111	1	He	0.046786	5.4	193.437
Sn	118	1	He	0.078054	15.3	876.700
Sb	121	1	He	0.112595	7.6	1608.440
Ba	138	1	He	44.312841	1.4	1415543.467
Pt	195	1	He	0.011934	17.3	364.677
Hg	202	1	He	-0.006131		187.667
Tl	205	1	He	0.098858	16.4	5204.417
Pb	208	1	He	0.142289	3.5	12058.787
Bi	209	1	He	0.039813	6.7	4377.480
Th	232	1	He	0.087551	10.6	6890.233
U	238	1	He	1.134532	0.9	74435.270

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.17249272	567088.187
Sc	45	2	H2	99.41282378	4398614.333
Ge	72	1	He	96.52654308	481331.750
Ge	72	2	H2	100.2748229	1564063.207
In	115	1	He	96.49964165	5915612.473
Tb	159	1	He	100.0907884	14481751.450
Ir	193	1	He	98.57008764	7300464.267

Sample Name 4315278\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 043SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:38:18  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	86.564396	1.6	31934.500
Be	9	2	H2	79.186852	0.7	30062.397
B	11	2	H2	66.349386	1.8	49390.450
Na	23	1	He	11817.21332	0.8	10578337.757
Mg	24	1	He	19639.49717	1.1	9967860.267
Al	27	1	He	2101.009324	1.2	542507.503
Si	28	2	H2	5438.244446	0.8	15049980.667
K	39	1	He	10551.18793	1.0	7686383.427
Ca	43	1	He	85936.34809	0.6	184464.797
Ti	47	1	He	83.574148	1.2	19928.787
V	51	1	He	82.122704	0.8	544538.997
Cr	52	1	He	82.649823	0.4	654897.790
Mn	55	1	He	83.470255	0.2	500525.647
Fe	56	1	He	1080.345722	0.3	8125498.167
Co	59	1	He	81.377800	0.7	1029745.190
Ni	60	1	He	83.354670	0.6	261549.873
Cu	63	1	He	80.205757	1.2	702038.770
Zn	66	1	He	84.197341	1.2	169073.960
As	75	1	He	81.342061	1.2	144173.610
Se	78	2	H2	81.670259	0.4	66331.690
Sr	88	1	He	321.455356	0.8	3730870.570
Mo	95	1	He	85.176799	1.4	520680.790
Pd	105	1	He	79.726409	1.1	729771.160
Ag	107	1	He	22.001937	2.2	429633.303
Cd	111	1	He	81.296535	1.3	296405.420
Sn	118	1	He	80.106014	1.3	750918.763
Sb	121	1	He	80.024549	1.1	1104286.883
Ba	138	1	He	124.354555	0.9	3926511.193
Pt	195	1	He	81.056142	0.6	1043132.563
Hg	202	1	He	-0.007820		175.667
Tl	205	1	He	40.796449	0.8	1934704.607
Pb	208	1	He	81.124147	1.2	5240265.180
Bi	209	1	He	78.037930	1.7	4272495.460
Th	232	1	He	8.165365	1.2	546448.520
U	238	1	He	82.034465	1.6	5263245.757

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.96194440	559798.503
Sc	45	2	H2	97.55329744	4316337.833
Ge	72	1	He	95.65116278	476966.647
Ge	72	2	H2	98.92615774	1543027.043
In	115	1	He	95.38780166	5847454.557
Tb	159	1	He	99.36327992	14376491.037
Ir	193	1	He	97.63181575	7230972.390

Sample Name 4315279\_B70041Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 044SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:42:03  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.584971	5.9	658.683
Be	9	2	H2	0.086658	16.8	53.833
B	11	2	H2	-53.865497		10947.960
Na	23	1	He	2025.516605	0.7	1855829.137
Mg	24	1	He	3657.916604	0.8	1894225.337
Al	27	1	He	31.504025	18.1	8364.063
Si	28	2	H2	923.412313	1.7	2581483.833
K	39	1	He	1754.174521	0.5	1359538.420
Ca	43	1	He	17109.82079	0.4	37408.193
Ti	47	1	He	0.537685	36.7	132.337
V	51	1	He	0.139690	71.0	343.660
Cr	52	1	He	0.188999	9.8	3869.187
Mn	55	1	He	0.594527	3.3	3899.197
Fe	56	1	He	15.765717	1.2	131768.643
Co	59	1	He	0.124440	3.1	1652.097
Ni	60	1	He	0.341182	3.7	1284.727
Cu	63	1	He	0.062446	6.2	871.363
Zn	66	1	He	0.795435	6.8	1828.123
As	75	1	He	0.042234	20.5	240.667
Se	78	2	H2	0.162313	2.9	173.000
Sr	88	1	He	49.037574	0.7	577229.860
Mo	95	1	He	0.815983	0.9	5178.287
Pd	105	1	He	0.060560	11.6	765.030
Ag	107	1	He	0.170318	20.1	3540.483
Cd	111	1	He	0.013679	3.7	73.067
Sn	118	1	He	0.021475	40.7	348.343
Sb	121	1	He	0.024175	15.8	383.343
Ba	138	1	He	8.694774	0.6	284459.263
Pt	195	1	He	0.007399	61.4	307.337
Hg	202	1	He	-0.007120		182.333
Tl	205	1	He	0.067532	24.0	3727.237
Pb	208	1	He	0.029835	12.4	4770.347
Bi	209	1	He	0.010895	59.8	2803.693
Th	232	1	He	0.012253	3.3	1831.823
U	238	1	He	0.228807	3.6	15924.880

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.66070144	570028.083
Sc	45	2	H2	98.10956310	4340950.333
Ge	72	1	He	96.98813734	483633.500
Ge	72	2	H2	99.32605711	1549264.580
In	115	1	He	98.80475526	6056920.343
Tb	159	1	He	100.6148883	14557581.447
Ir	193	1	He	99.53245478	7371740.727

Sample Name 4314162\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 045SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:45:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	113.775253	1.4	41529.137
Be	9	2	H2	105.062053	1.1	39477.743
B	11	2	H2	94.558936	2.1	57838.573
Na	23	1	He	12084.17697	0.6	10777066.507
Mg	24	1	He	19978.45314	0.6	10102356.517
Al	27	1	He	2234.008336	0.6	574719.460
Si	28	2	H2	5132.892192	0.7	14063014.667
K	39	1	He	10812.39900	0.2	7846091.343
Ca	43	1	He	87679.10261	0.4	187513.737
Ti	47	1	He	107.575362	0.9	25557.103
V	51	1	He	107.472670	0.7	710195.780
Cr	52	1	He	108.566613	0.4	856359.877
Mn	55	1	He	107.327682	0.5	641136.523
Fe	56	1	He	2223.996543	0.4	16653965.000
Co	59	1	He	107.158672	0.7	1349752.253
Ni	60	1	He	108.329635	0.2	338299.143
Cu	63	1	He	104.916028	0.2	914065.647
Zn	66	1	He	109.561651	0.7	218945.413
As	75	1	He	106.458002	0.6	187782.740
Se	78	2	H2	110.005544	0.1	88458.467
Sr	88	1	He	352.299307	0.3	4070135.043
Mo	95	1	He	111.855270	0.5	678438.560
Pd	105	1	He	21.547021	0.4	195822.297
Ag	107	1	He	51.904279	1.2	1005572.690
Cd	111	1	He	107.369748	0.2	388410.100
Sn	118	1	He	105.474958	0.3	980963.917
Sb	121	1	He	107.413197	0.2	1470664.250
Ba	138	1	He	151.511096	0.4	4746587.013
Pt	195	1	He	21.586328	0.7	280007.167
Hg	202	1	He	-0.004341		199.000
Tl	205	1	He	109.389104	1.0	5224728.463
Pb	208	1	He	106.268308	0.3	6914370.367
Bi	209	1	He	104.027827	0.8	5732293.457
Th	232	1	He	108.700300	1.0	7309865.517
U	238	1	He	107.148829	1.7	6918865.520

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.61963164	557737.163
Sc	45	2	H2	96.57464655	4273036.500
Ge	72	1	He	95.20941736	474763.873
Ge	72	2	H2	97.96111034	1527974.460
In	115	1	He	94.63537188	5801329.173
Tb	159	1	He	100.0941520	14482238.117
Ir	193	1	He	98.26808688	7278096.977



Sample Name 4314163\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 046SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:49:32  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	114.685160	0.6	41539.490
Be	9	2	H2	105.909645	0.2	39489.440
B	11	2	H2	96.431826	0.3	57982.623
Na	23	1	He	12171.75786	2.3	10680656.090
Mg	24	1	He	20136.40522	2.3	10018440.267
Al	27	1	He	2276.939667	2.7	576308.167
Si	28	2	H2	5091.748938	0.8	13842950.000
K	39	1	He	10869.93281	2.7	7760115.300
Ca	43	1	He	87663.26571	3.2	184437.503
Ti	47	1	He	109.323952	3.0	25552.100
V	51	1	He	109.788189	2.2	713875.640
Cr	52	1	He	110.719445	2.4	859238.583
Mn	55	1	He	109.590510	3.0	644046.353
Fe	56	1	He	2280.127811	3.1	16797292.000
Co	59	1	He	109.352327	2.8	1353494.500
Ni	60	1	He	110.805942	2.7	340028.193
Cu	63	1	He	107.158368	2.5	917445.167
Zn	66	1	He	111.983465	2.4	219912.947
As	75	1	He	108.567305	2.5	188188.747
Se	78	2	H2	109.917780	0.7	87741.100
Sr	88	1	He	355.599488	2.6	4037153.377
Mo	95	1	He	113.504339	1.8	678193.977
Pd	105	1	He	21.825240	1.3	195409.517
Ag	107	1	He	53.231314	2.2	1015883.760
Cd	111	1	He	109.271830	2.1	389394.530
Sn	118	1	He	107.124961	2.3	981413.190
Sb	121	1	He	108.940649	2.4	1469259.820
Ba	138	1	He	153.250320	2.0	4729466.490
Pt	195	1	He	21.734197	2.3	278514.553
Hg	202	1	He	-0.004480		195.667
Tl	205	1	He	110.851830	3.2	5230132.320
Pb	208	1	He	107.990875	2.9	6940946.147
Bi	209	1	He	105.331132	2.9	5768400.747
Th	232	1	He	110.531949	2.4	7388058.640
U	238	1	He	108.072469	1.9	6937226.773

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.16475893	548976.207
Sc	45	2	H2	95.82586607	4239906.000
Ge	72	1	He	93.59821827	466729.593
Ge	72	2	H2	97.24804882	1516852.293
In	115	1	He	93.24936931	5716364.567
Tb	159	1	He	98.92265956	14312739.370
Ir	193	1	He	97.69672898	7235780.103

Sample Name 60398600002\_B70041Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 047SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:53:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.968835	1.3	430.677
Be	9	2	H2	0.133797	13.2	71.833
B	11	2	H2	-59.507956		9131.087
Na	23	1	He	1035.180558	0.7	952706.157
Mg	24	1	He	1865.212369	0.6	966735.923
Al	27	1	He	15.415523	3.4	4122.600
Si	28	2	H2	474.086961	0.4	1332194.000
K	39	1	He	904.033315	0.7	733456.867
Ca	43	1	He	8725.126179	0.3	19054.753
Ti	47	1	He	0.313803	36.6	78.000
V	51	1	He	0.071958	40.0	-115.300
Cr	52	1	He	0.149358	5.5	3545.773
Mn	55	1	He	0.346665	7.2	2382.870
Fe	56	1	He	9.589567	0.2	84413.647
Co	59	1	He	0.087624	5.8	1184.720
Ni	60	1	He	0.212370	0.8	878.697
Cu	63	1	He	0.061288	12.2	864.697
Zn	66	1	He	0.427463	4.4	1084.710
As	75	1	He	0.042762	17.5	242.667
Se	78	2	H2	0.106241	15.1	127.667
Sr	88	1	He	25.086248	0.6	296611.270
Mo	95	1	He	0.455621	3.0	2914.973
Pd	105	1	He	0.036263	4.7	538.347
Ag	107	1	He	0.198145	28.2	4130.673
Cd	111	1	He	0.037449	17.3	163.810
Sn	118	1	He	0.053122	20.8	660.023
Sb	121	1	He	0.044412	16.5	676.690
Ba	138	1	He	4.507474	1.7	148462.570
Pt	195	1	He	0.006941	46.1	304.673
Hg	202	1	He	-0.010829		160.333
Tl	205	1	He	0.059623	17.7	3383.800
Pb	208	1	He	0.044855	3.1	5813.850
Bi	209	1	He	0.039560	20.7	4454.173
Th	232	1	He	0.053883	9.8	4717.560
U	238	1	He	0.137922	4.8	10090.653

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.52171649	569191.143
Sc	45	2	H2	98.11866752	4341353.167
Ge	72	1	He	97.39438507	485659.263
Ge	72	2	H2	99.63638489	1554105.000
In	115	1	He	99.45381980	6096709.240
Tb	159	1	He	101.6819220	14711966.447
Ir	193	1	He	100.6385072	7453659.053

Sample Name 4315278\_B70041Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 048SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 16:57:03  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	91.673057	14.1	30751.240
Be	9	2	H2	88.186592	13.4	30460.190
B	11	2	H2	34.529367	50.8	35638.507
Na	23	1	He	3044.693718	0.0	2727448.707
Mg	24	1	He	3848.627182	0.4	1952392.470
Al	27	1	He	2034.821820	0.4	524184.727
Si	28	2	H2	1592.751923	14.4	4016011.917
K	39	1	He	2903.732125	0.6	2160006.740
Ca	43	1	He	10616.10236	0.3	22745.530
Ti	47	1	He	83.186466	1.2	19790.253
V	51	1	He	82.653724	0.1	546780.657
Cr	52	1	He	84.057998	0.2	664439.707
Mn	55	1	He	83.056356	0.3	496866.543
Fe	56	1	He	1050.020059	0.4	7879207.167
Co	59	1	He	82.936395	0.2	1053626.083
Ni	60	1	He	84.958280	0.3	267630.170
Cu	63	1	He	83.579491	0.3	734486.457
Zn	66	1	He	83.582363	0.4	168513.067
As	75	1	He	81.072463	0.2	144270.500
Se	78	2	H2	88.904114	12.8	66172.247
Sr	88	1	He	106.564955	0.2	1241805.580
Mo	95	1	He	81.986701	0.8	510877.103
Pd	105	1	He	83.120095	0.5	775536.473
Ag	107	1	He	31.548402	0.8	627959.927
Cd	111	1	He	82.118380	0.5	305192.783
Sn	118	1	He	80.959431	1.1	773578.583
Sb	121	1	He	81.009012	0.6	1139483.133
Ba	138	1	He	84.401509	1.3	2716419.333
Pt	195	1	He	84.107037	0.9	1091068.750
Hg	202	1	He	-0.010458		160.333
Tl	205	1	He	41.664718	0.9	1991666.847
Pb	208	1	He	83.587676	0.8	5442750.390
Bi	209	1	He	81.405789	0.8	4555302.223
Th	232	1	He	7.473024	1.1	511229.083
U	238	1	He	80.441209	1.2	5274984.193

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.74278191	558478.750
Sc	45	2	H2	89.76699258	3971825.417
Ge	72	1	He	96.02549247	478833.250
Ge	72	2	H2	91.67639318	1429946.913
In	115	1	He	97.22509609	5960084.217
Tb	159	1	He	100.1605256	14491841.450
Ir	193	1	He	99.77573072	7389758.640

Sample Name 4315279\_B70041Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 049SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:00:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.334592	3.7	195.000
Be	9	2	H2	0.098236	6.5	58.000
B	11	2	H2	-65.664847		7117.177
Na	23	1	He	204.637882	0.8	197037.190
Mg	24	1	He	365.262210	1.2	192501.423
Al	27	1	He	4.949573	8.8	1370.737
Si	28	2	H2	92.043530	0.5	268590.270
K	39	1	He	173.696905	1.2	196755.493
Ca	43	1	He	1680.112316	1.8	3669.253
Ti	47	1	He	0.151279	119.7	38.337
V	51	1	He	0.087448	101.6	-9.580
Cr	52	1	He	0.095132	9.4	3101.670
Mn	55	1	He	0.102349	14.3	891.367
Fe	56	1	He	2.562200	5.8	30656.463
Co	59	1	He	0.048697	19.1	682.683
Ni	60	1	He	0.067930	7.3	417.343
Cu	63	1	He	0.040298	21.7	677.350
Zn	66	1	He	0.174624	6.4	568.010
As	75	1	He	0.035442	33.4	229.333
Se	78	2	H2	0.029232	30.4	64.667
Sr	88	1	He	4.827533	1.9	57172.173
Mo	95	1	He	0.134860	6.1	867.363
Pd	105	1	He	0.048096	13.0	648.353
Ag	107	1	He	0.189165	29.2	3932.280
Cd	111	1	He	0.032979	28.0	146.177
Sn	118	1	He	0.044499	26.9	573.350
Sb	121	1	He	0.027044	29.7	425.010
Ba	138	1	He	0.908654	0.2	29877.350
Pt	195	1	He	0.012791	31.6	382.677
Hg	202	1	He	-0.011872		154.000
Tl	205	1	He	0.079419	20.2	4355.773
Pb	208	1	He	0.032330	14.0	4997.047
Bi	209	1	He	0.036262	24.2	4287.453
Th	232	1	He	0.019407	35.3	2353.573
U	238	1	He	0.046718	18.9	4077.350

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.25612936	567591.830
Sc	45	2	H2	97.70409092	4323009.833
Ge	72	1	He	97.35683051	485471.997
Ge	72	2	H2	99.39306478	1550309.750
In	115	1	He	99.07906329	6073735.950
Tb	159	1	He	101.9097974	14744936.863
Ir	193	1	He	101.0896476	7487072.177

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 050\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:04:32  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.554389	0.7	31052.017
Be	9	2	H2	81.384141	1.2	30752.950
B	11	2	H2	16.934233	6.3	33407.760
Na	23	1	He	1030.051327	0.4	953195.793
Mg	24	1	He	1024.456962	0.2	535961.070
Al	27	1	He	1020.443121	0.8	269404.020
Si	28	2	H2	512.258973	0.6	1423443.837
K	39	1	He	1032.644442	0.4	832353.660
Ca	43	1	He	1010.255214	2.3	2230.003
Ti	47	1	He	79.035561	1.2	19267.240
V	51	1	He	80.799043	1.0	547708.640
Cr	52	1	He	82.674906	0.6	669696.400
Mn	55	1	He	81.030431	0.5	496728.167
Fe	56	1	He	527.762536	0.5	4063646.083
Co	59	1	He	84.245481	0.2	1088465.540
Ni	60	1	He	84.859891	0.2	271867.783
Cu	63	1	He	84.473289	0.4	754961.227
Zn	66	1	He	82.508190	0.5	169177.250
As	75	1	He	79.945565	0.5	144686.993
Se	78	2	H2	82.413149	1.2	66976.670
Sr	88	1	He	82.035673	0.6	972242.250
Mo	95	1	He	77.647542	0.2	497116.313
Pd	105	1	He	82.468488	0.9	790550.953
Ag	107	1	He	40.800129	1.5	834343.840
Cd	111	1	He	81.183691	0.6	309994.407
Sn	118	1	He	77.782263	0.8	763620.850
Sb	121	1	He	78.549101	0.3	1135196.753
Ba	138	1	He	78.590990	0.2	2598879.910
Pt	195	1	He	83.559410	0.5	1098368.750
Hg	202	1	He	3.947354	0.7	25600.200
Tl	205	1	He	42.651454	0.4	2065943.617
Pb	208	1	He	83.409560	0.5	5503301.923
Bi	209	1	He	81.995896	0.9	4687677.533
Th	232	1	He	77.717502	1.2	5422061.583
U	238	1	He	78.783342	1.5	5278122.423

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.03326096	572271.563
Sc	45	2	H2	97.10217135	4296377.333
Ge	72	1	He	97.65971228	486982.323
Ge	72	2	H2	98.98177447	1543894.540
In	115	1	He	99.89102085	6123510.500
Tb	159	1	He	101.4890908	14684066.447
Ir	193	1	He	101.9404188	7550083.427

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 051\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:08:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.144037	17.0	124.500
Be	9	2	H2	0.091073	1.1	55.167
B	11	2	H2	-67.769846		6428.203
Na	23	1	He	-0.384918		11192.607
Mg	24	1	He	-6.449750		1315.070
Al	27	1	He	0.137485	44.7	111.667
Si	28	2	H2	-0.305815		12830.863
K	39	1	He	-4.249888		66667.993
Ca	43	1	He	1.541698	66.7	16.500
Ti	47	1	He	0.007270	83.3	3.667
V	51	1	He	0.101908	29.7	89.417
Cr	52	1	He	0.019839	87.6	2506.220
Mn	55	1	He	0.003783	81.4	293.333
Fe	56	1	He	0.183336	16.6	12575.443
Co	59	1	He	0.015548	13.9	254.000
Ni	60	1	He	0.018834	67.4	258.667
Cu	63	1	He	0.004535	117.9	356.673
Zn	66	1	He	-0.000036		210.000
As	75	1	He	-0.003448		158.167
Se	78	2	H2	-0.003094		38.000
Sr	88	1	He	0.008826	25.0	248.337
Mo	95	1	He	0.024179	13.0	164.000
Pd	105	1	He	0.034021	31.5	515.013
Ag	107	1	He	0.144059	15.3	3007.013
Cd	111	1	He	0.010786	30.0	61.970
Sn	118	1	He	0.012037	47.0	256.670
Sb	121	1	He	0.014344	12.5	243.337
Ba	138	1	He	0.014165	11.7	536.680
Pt	195	1	He	0.005119	44.6	280.000
Hg	202	1	He	0.007461	75.6	276.667
Tl	205	1	He	0.057677	19.5	3277.103
Pb	208	1	He	0.011175	21.3	3575.213
Bi	209	1	He	0.007849	65.1	2710.327
Th	232	1	He	0.019049	15.3	2355.237
U	238	1	He	0.005649	35.2	1366.750

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.53958600	569298.750
Sc	45	2	H2	97.49356315	4313694.833
Ge	72	1	He	96.61850163	481790.303
Ge	72	2	H2	98.75588485	1540371.167
In	115	1	He	98.81515999	6057558.173
Tb	159	1	He	101.3739565	14667408.113
Ir	193	1	He	102.2662533	7574215.930

Sample Name 60398600003\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 052SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:12:02  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.542252	2.1	1005.700
Be	9	2	H2	0.103923	21.6	60.000
B	11	2	H2	545.786213	0.7	202616.847
Na	23	1	He	35743.12397	0.8	31494651.197
Mg	24	1	He	41644.79311	0.7	20815451.357
Al	27	1	He	27.053728	1.4	6953.290
Si	28	2	H2	3668.522137	0.4	10140000.000
K	39	1	He	4130.902893	0.8	3005522.247
Ca	43	1	He	251015.8999	0.9	530737.890
Ti	47	1	He	0.203724	15.9	49.667
V	51	1	He	0.115657	49.4	172.643
Cr	52	1	He	0.466023	0.8	5898.533
Mn	55	1	He	0.562317	1.9	3581.787
Fe	56	1	He	9.856820	1.4	83755.437
Co	59	1	He	0.096987	4.2	1239.390
Ni	60	1	He	0.308402	3.8	1125.380
Cu	63	1	He	0.121475	1.4	1330.067
Zn	66	1	He	3.728773	0.4	7430.577
As	75	1	He	0.144289	2.7	404.177
Se	78	2	H2	2.302697	3.7	1896.460
Sr	88	1	He	430.906171	1.3	4834401.597
Mo	95	1	He	0.305817	2.5	1834.793
Pd	105	1	He	0.316737	2.4	3008.680
Ag	107	1	He	0.060402	13.1	1241.730
Cd	111	1	He	0.009603	5.0	54.340
Sn	118	1	He	0.030957	1.2	415.010
Sb	121	1	He	0.049324	3.3	700.023
Ba	138	1	He	57.616234	0.8	1775330.913
Pt	195	1	He	0.009569	10.7	326.673
Hg	202	1	He	-0.001638		211.333
Tl	205	1	He	0.034378	2.8	2080.183
Pb	208	1	He	0.021396	3.9	4105.263
Bi	209	1	He	0.006299	3.1	2456.947
Th	232	1	He	0.016654	14.2	2053.513
U	238	1	He	1.954930	0.7	124080.350

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.57601505	551452.710
Sc	45	2	H2	97.38930124	4309081.667
Ge	72	1	He	92.46295410	461068.573
Ge	72	2	H2	98.24688567	1532431.917
In	115	1	He	93.08085907	5706034.567
Tb	159	1	He	97.88620647	14162778.957
Ir	193	1	He	95.86516065	7100127.397

Sample Name 60398600003\_B70041Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 053SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:15:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.414409	5.0	228.167
Be	9	2	H2	0.083172	9.1	53.167
B	11	2	H2	2.424220	22.1	29443.730
Na	23	1	He	3718.475536	0.3	3441175.990
Mg	24	1	He	4370.511623	0.6	2291533.350
Al	27	1	He	4.393657	3.2	1246.720
Si	28	2	H2	385.368733	0.8	1098913.377
K	39	1	He	423.533505	0.8	386202.663
Ca	43	1	He	25676.34546	0.7	56856.113
Ti	47	1	He	0.051865	44.8	14.667
V	51	1	He	0.016530	480.3	-495.253
Cr	52	1	He	0.128829	14.0	3429.743
Mn	55	1	He	0.063700	11.8	668.020
Fe	56	1	He	1.813490	1.8	25387.313
Co	59	1	He	0.019310	13.1	306.003
Ni	60	1	He	0.058762	6.6	390.010
Cu	63	1	He	1.352967	1.5	12427.983
Zn	66	1	He	1.292318	3.2	2863.627
As	75	1	He	0.027706	13.7	216.500
Se	78	2	H2	0.242102	8.1	241.667
Sr	88	1	He	43.206456	0.4	513026.253
Mo	95	1	He	0.053089	11.7	353.343
Pd	105	1	He	0.052086	12.0	696.690
Ag	107	1	He	0.026252	23.8	638.357
Cd	111	1	He	0.003165	29.0	33.937
Sn	118	1	He	0.013423	8.2	275.003
Sb	121	1	He	0.010405	24.3	190.000
Ba	138	1	He	5.703792	0.7	189892.410
Pt	195	1	He	-0.000126		213.333
Hg	202	1	He	-0.005684		195.000
Tl	205	1	He	0.010159	3.8	993.380
Pb	208	1	He	0.053396	9.2	6425.630
Bi	209	1	He	0.002435	115.5	2376.923
Th	232	1	He	0.003709	28.5	1271.743
U	238	1	He	0.191071	1.3	13697.277

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.88188556	577381.813
Sc	45	2	H2	99.33561896	4395198.333
Ge	72	1	He	97.82848187	487823.897
Ge	72	2	H2	100.8275170	1572684.000
In	115	1	He	100.5269392	6162493.513
Tb	159	1	He	102.4428160	14822057.280
Ir	193	1	He	101.3019902	7502799.053



Sample Name 60398600004\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 054SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:19:31  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.519723	2.8	997.197
Be	9	2	H2	0.102316	18.2	59.333
B	11	2	H2	573.946900	1.1	211597.267
Na	23	1	He	37176.62387	0.8	32871378.677
Mg	24	1	He	43487.61789	0.9	21811720.507
Al	27	1	He	18.932870	1.2	4905.167
Si	28	2	H2	3857.072975	0.7	10659222.333
K	39	1	He	4309.614668	0.3	3143541.933
Ca	43	1	He	261507.3125	0.3	554850.050
Ti	47	1	He	0.249654	10.3	60.667
V	51	1	He	0.136039	41.4	309.297
Cr	52	1	He	0.593110	2.5	6910.973
Mn	55	1	He	0.701672	2.2	4420.013
Fe	56	1	He	9.624219	0.8	82321.333
Co	59	1	He	0.101171	7.4	1298.063
Ni	60	1	He	1.234598	1.3	3955.877
Cu	63	1	He	0.151578	1.0	1594.090
Zn	66	1	He	3.001921	1.6	6057.280
As	75	1	He	0.161111	3.6	435.510
Se	78	2	H2	2.355590	3.7	1939.467
Sr	88	1	He	447.667747	0.1	5052579.300
Mo	95	1	He	0.338415	0.2	2058.823
Pd	105	1	He	0.342094	3.4	3282.077
Ag	107	1	He	0.018118	16.4	443.343
Cd	111	1	He	0.008727	25.4	51.963
Sn	118	1	He	0.040554	4.9	510.013
Sb	121	1	He	0.084326	4.7	1188.393
Ba	138	1	He	59.523864	0.7	1860708.567
Pt	195	1	He	0.007720	23.8	306.003
Hg	202	1	He	-0.000659		219.333
Tl	205	1	He	0.023481	10.3	1585.113
Pb	208	1	He	0.026999	12.6	4501.990
Bi	209	1	He	0.002166	225.1	2266.907
Th	232	1	He	0.009943	12.7	1636.787
U	238	1	He	2.011932	1.0	129585.050

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.89259688	553359.103
Sc	45	2	H2	97.38090123	4308710.000
Ge	72	1	He	93.01301549	463811.467
Ge	72	2	H2	98.23520131	1532249.667
In	115	1	He	94.43032819	5788759.603
Tb	159	1	He	98.76689716	14290202.707
Ir	193	1	He	97.29962418	7206369.057

Sample Name 60398600004\_B70041Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 055SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:23:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.366151	1.3	203.000
Be	9	2	H2	0.058070	20.5	42.000
B	11	2	H2	6.434761	3.0	29712.587
Na	23	1	He	3872.484782	0.7	3526041.407
Mg	24	1	He	4551.731304	1.0	2348270.537
Al	27	1	He	3.126284	1.3	894.697
Si	28	2	H2	402.738011	0.5	1109033.873
K	39	1	He	441.056366	0.8	392876.233
Ca	43	1	He	26755.30240	0.9	58299.630
Ti	47	1	He	0.029368	23.8	9.000
V	51	1	He	-0.060600		-1010.250
Cr	52	1	He	0.142067	3.0	3481.090
Mn	55	1	He	0.081797	8.3	767.357
Fe	56	1	He	1.542217	2.5	22913.257
Co	59	1	He	0.013533	32.4	228.667
Ni	60	1	He	0.167504	3.1	730.020
Cu	63	1	He	0.025821	16.0	544.677
Zn	66	1	He	0.351189	1.6	922.030
As	75	1	He	0.025981	19.3	210.833
Se	78	2	H2	0.247334	4.2	237.333
Sr	88	1	He	44.758880	0.6	525190.863
Mo	95	1	He	0.049349	17.2	324.007
Pd	105	1	He	0.032557	15.1	500.013
Ag	107	1	He	0.011006	27.4	320.007
Cd	111	1	He	0.002698	64.1	31.607
Sn	118	1	He	0.010282	17.8	240.000
Sb	121	1	He	0.010633	5.5	190.000
Ba	138	1	He	5.916965	0.8	193738.990
Pt	195	1	He	-0.001313		195.333
Hg	202	1	He	-0.010847		159.667
Tl	205	1	He	0.003562	41.6	663.357
Pb	208	1	He	-0.000300		2820.147
Bi	209	1	He	0.002221	194.2	2346.920
Th	232	1	He	-0.000492		973.380
U	238	1	He	0.203602	0.7	14423.067

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.35220413	568170.373
Sc	45	2	H2	95.97615856	4246555.833
Ge	72	1	He	96.67587896	482076.417
Ge	72	2	H2	97.27400852	1517257.207
In	115	1	He	98.87142246	6061007.170
Tb	159	1	He	101.2994418	14656626.863
Ir	193	1	He	100.5488153	7447016.137

Sample Name 60398600001\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 056SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:27:00  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.862613	1.5	1854.947
Be	9	2	H2	0.076685	30.8	49.500
B	11	2	H2	18.997333	12.0	34101.813
Na	23	1	He	33089.17251	0.5	29095688.737
Mg	24	1	He	29740.93672	0.4	14835447.280
Al	27	1	He	33.461116	0.5	8565.123
Si	28	2	H2	4831.777927	1.4	13326484.333
K	39	1	He	2149.882003	0.5	1593266.693
Ca	43	1	He	59380.79962	0.4	125298.827
Ti	47	1	He	0.336385	4.2	80.667
V	51	1	He	1.957955	3.2	12194.427
Cr	52	1	He	0.747918	1.6	8073.573
Mn	55	1	He	0.363805	3.1	2404.870
Fe	56	1	He	10.893581	0.4	91235.880
Co	59	1	He	0.043560	6.5	587.347
Ni	60	1	He	1.550636	3.7	4901.503
Cu	63	1	He	0.718107	1.9	6391.423
Zn	66	1	He	5.476297	1.2	10843.393
As	75	1	He	0.668761	0.2	1304.727
Se	78	2	H2	1.129962	3.1	949.697
Sr	88	1	He	154.044563	0.4	1732249.610
Mo	95	1	He	9.975603	0.7	59732.610
Pd	105	1	He	0.120070	3.8	1256.737
Ag	107	1	He	0.009410	21.7	271.673
Cd	111	1	He	0.035846	10.2	148.247
Sn	118	1	He	0.103639	10.9	1083.383
Sb	121	1	He	1.496053	1.8	20254.773
Ba	138	1	He	48.285696	1.1	1493170.500
Pt	195	1	He	0.006835	6.8	293.333
Hg	202	1	He	-0.002860		204.667
Tl	205	1	He	0.014426	9.2	1153.393
Pb	208	1	He	0.035249	8.0	5005.390
Bi	209	1	He	0.005473	105.0	2436.947
Th	232	1	He	0.006789	17.9	1421.757
U	238	1	He	10.409227	1.1	664179.547

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.38101144	550278.437
Sc	45	2	H2	97.22376818	4301757.500
Ge	72	1	He	92.66945674	462098.303
Ge	72	2	H2	98.14155264	1530788.957
In	115	1	He	93.41154202	5726306.063
Tb	159	1	He	98.28831820	14220958.957
Ir	193	1	He	96.97321312	7182193.850

Sample Name 60398600001\_B70041Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 057SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:30:45  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.574072	4.3	281.167
Be	9	2	H2	0.049804	47.4	39.333
B	11	2	H2	-57.451408		9678.923
Na	23	1	He	3442.582341	0.4	3122082.973
Mg	24	1	He	3104.138568	0.4	1595884.767
Al	27	1	He	7.448079	6.5	2017.810
Si	28	2	H2	501.029141	0.7	1390585.667
K	39	1	He	219.889045	0.5	229792.693
Ca	43	1	He	6094.575138	1.0	13231.377
Ti	47	1	He	0.050295	21.6	14.000
V	51	1	He	0.240618	35.6	1017.370
Cr	52	1	He	0.128016	19.1	3354.397
Mn	55	1	He	0.044809	12.0	540.010
Fe	56	1	He	1.811663	1.2	24857.757
Co	59	1	He	0.007335	25.2	148.000
Ni	60	1	He	0.171091	7.5	735.353
Cu	63	1	He	0.077311	8.0	992.037
Zn	66	1	He	0.674469	0.6	1564.757
As	75	1	He	0.077360	11.6	300.333
Se	78	2	H2	0.101342	13.3	122.333
Sr	88	1	He	15.538378	0.9	180955.420
Mo	95	1	He	1.028691	2.4	6458.820
Pd	105	1	He	0.015563	26.2	335.010
Ag	107	1	He	0.009437	32.3	285.007
Cd	111	1	He	0.005520	50.4	41.837
Sn	118	1	He	0.015410	15.3	286.673
Sb	121	1	He	0.159086	7.3	2288.543
Ba	138	1	He	4.841453	0.6	156806.673
Pt	195	1	He	-0.001394		191.333
Hg	202	1	He	-0.008438		172.333
Tl	205	1	He	0.002376	60.9	596.683
Pb	208	1	He	0.006093	35.3	3190.177
Bi	209	1	He	0.002162	100.9	2303.583
Th	232	1	He	-0.000394		963.380
U	238	1	He	1.052734	0.8	69312.197

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.93742303	565672.643
Sc	45	2	H2	96.96807997	4290444.333
Ge	72	1	He	95.90271819	478221.033
Ge	72	2	H2	98.59636970	1537883.087
In	115	1	He	97.79407590	5994963.767
Tb	159	1	He	99.74605381	14431873.120
Ir	193	1	He	98.81882626	7318886.767

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 058\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:34:30  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	85.034770	0.5	31000.237
Be	9	2	H2	82.085591	0.8	30792.020
B	11	2	H2	17.194621	1.3	33247.413
Na	23	1	He	1026.242821	0.7	954336.417
Mg	24	1	He	1024.031666	0.8	538352.947
Al	27	1	He	1013.777209	1.1	268945.353
Si	28	2	H2	512.802410	0.6	1414567.500
K	39	1	He	1015.724910	0.9	823848.713
Ca	43	1	He	1016.632176	1.7	2254.993
Ti	47	1	He	79.255482	1.7	19413.763
V	51	1	He	80.177768	0.9	546110.113
Cr	52	1	He	81.512696	1.0	663517.603
Mn	55	1	He	79.480441	0.6	489591.813
Fe	56	1	He	517.378649	0.7	4003173.417
Co	59	1	He	83.512964	0.7	1076894.170
Ni	60	1	He	84.349064	1.0	269705.800
Cu	63	1	He	83.865191	0.7	748067.857
Zn	66	1	He	81.908682	0.5	167623.413
As	75	1	He	79.028077	0.4	142750.367
Se	78	2	H2	81.737933	1.0	65578.173
Sr	88	1	He	80.903880	0.5	956979.883
Mo	95	1	He	76.447341	1.5	486473.103
Pd	105	1	He	81.140356	1.5	773128.373
Ag	107	1	He	40.290626	2.3	818952.957
Cd	111	1	He	80.391643	1.2	305123.423
Sn	118	1	He	76.872160	0.7	750161.860
Sb	121	1	He	77.627281	1.7	1115094.253
Ba	138	1	He	77.760798	0.8	2556000.120
Pt	195	1	He	81.744573	1.7	1073187.003
Hg	202	1	He	3.870143	1.8	25072.517
Tl	205	1	He	42.088997	1.4	2036267.573
Pb	208	1	He	82.200378	1.7	5416921.147
Bi	209	1	He	81.436182	0.7	4575590.767
Th	232	1	He	77.350666	0.3	5303647.007
U	238	1	He	78.371938	0.5	5160150.133

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.49525218	575053.583
Sc	45	2	H2	96.39386162	4265037.500
Ge	72	1	He	97.46846676	486028.673
Ge	72	2	H2	97.71947574	1524205.500
In	115	1	He	99.29588775	6087027.703
Tb	159	1	He	101.3763295	14667751.447
Ir	193	1	He	100.1789422	7419621.973

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 059\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:38:15  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.087880	20.5	103.500
Be	9	2	H2	0.083117	13.6	52.000
B	11	2	H2	-68.593790		6145.083
Na	23	1	He	3.114266	3.3	14383.670
Mg	24	1	He	-4.201729		2476.893
Al	27	1	He	0.598679	17.8	233.000
Si	28	2	H2	-0.405636		12515.943
K	39	1	He	-2.050168		68349.103
Ca	43	1	He	24.363306	117.7	66.173
Ti	47	1	He	0.048478	55.0	13.667
V	51	1	He	0.053108	145.9	-241.200
Cr	52	1	He	0.060696	9.2	2836.283
Mn	55	1	He	0.046101	36.4	552.010
Fe	56	1	He	0.405894	19.7	14288.993
Co	59	1	He	0.059900	21.6	820.030
Ni	60	1	He	0.064027	26.4	401.343
Cu	63	1	He	0.055904	21.3	809.360
Zn	66	1	He	0.048913	15.9	308.667
As	75	1	He	0.041848	36.6	238.833
Se	78	2	H2	0.013719	14.2	51.333
Sr	88	1	He	0.065353	17.6	910.040
Mo	95	1	He	0.059293	25.4	382.673
Pd	105	1	He	0.042877	3.2	591.687
Ag	107	1	He	0.176041	15.9	3622.170
Cd	111	1	He	0.051118	19.2	212.263
Sn	118	1	He	0.045421	27.9	575.017
Sb	121	1	He	0.058015	25.5	858.370
Ba	138	1	He	0.054250	11.7	1830.143
Pt	195	1	He	0.051609	19.2	880.700
Hg	202	1	He	0.016448	43.6	331.337
Tl	205	1	He	0.070238	15.6	3847.263
Pb	208	1	He	0.053566	15.5	6302.260
Bi	209	1	He	0.049732	23.3	5034.400
Th	232	1	He	0.057062	14.7	4942.653
U	238	1	He	0.045502	18.4	3983.990

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.59255629	569617.727
Sc	45	2	H2	97.18854838	4300199.167
Ge	72	1	He	96.49546130	481176.760
Ge	72	2	H2	98.24531494	1532407.417
In	115	1	He	97.85576631	5998745.507
Tb	159	1	He	100.2527770	14505188.950
Ir	193	1	He	100.7220305	7459845.093

Sample Name 4314465\_B70047Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 060SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:41:59  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.074670	25.5	99.833
Be	9	2	H2	0.045778	10.7	38.333
B	11	2	H2	-67.807627		6472.883
Na	23	1	He	4.927160	5.4	16103.763
Mg	24	1	He	-2.980953		3120.343
Al	27	1	He	6.082357	3.1	1680.760
Si	28	2	H2	2.707798	1.3	21347.280
K	39	1	He	-2.461291		68343.997
Ca	43	1	He	8.807304	18.3	32.483
Ti	47	1	He	0.053755	39.6	15.000
V	51	1	He	0.102866	60.1	93.600
Cr	52	1	He	0.237653	2.0	4276.637
Mn	55	1	He	0.050953	17.8	584.017
Fe	56	1	He	2.429881	2.7	29885.927
Co	59	1	He	0.012939	2.7	219.333
Ni	60	1	He	0.024185	26.9	274.000
Cu	63	1	He	0.024110	15.3	526.010
Zn	66	1	He	0.899267	1.6	2018.813
As	75	1	He	0.008055	130.7	177.500
Se	78	2	H2	-0.005842		35.667
Sr	88	1	He	0.025559	3.6	441.677
Mo	95	1	He	0.023945	7.3	162.667
Pd	105	1	He	0.020865	20.9	388.343
Ag	107	1	He	0.053849	12.0	1185.063
Cd	111	1	He	0.008464	36.4	53.303
Sn	118	1	He	0.013761	5.9	273.340
Sb	121	1	He	0.016842	13.9	278.337
Ba	138	1	He	0.030274	8.9	1063.387
Pt	195	1	He	0.012494	15.9	372.010
Hg	202	1	He	0.005329	28.8	260.333
Tl	205	1	He	0.016084	12.8	1253.403
Pb	208	1	He	0.010664	4.3	3500.200
Bi	209	1	He	0.010155	30.2	2803.683
Th	232	1	He	0.010712	9.6	1750.137
U	238	1	He	0.003502	43.3	1205.070

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.00689511	572112.793
Sc	45	2	H2	98.36693509	4352338.000
Ge	72	1	He	95.99991085	478705.687
Ge	72	2	H2	98.52384329	1536751.837
In	115	1	He	98.71228386	6051251.670
Tb	159	1	He	100.1069700	14484092.700
Ir	193	1	He	100.8733670	7471053.637

Sample Name 4314466\_B70047Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 061SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:45:44  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	110.712529	1.1	39601.000
Be	9	2	H2	106.316303	0.6	39146.060
B	11	2	H2	43.184334	3.1	40713.080
Na	23	1	He	2117.693588	0.6	1910259.400
Mg	24	1	He	2118.436558	0.5	1082248.810
Al	27	1	He	2104.393599	0.9	544882.683
Si	28	2	H2	541.467171	0.9	1465524.127
K	39	1	He	2075.009738	0.7	1571110.653
Ca	43	1	He	2101.804897	2.2	4536.713
Ti	47	1	He	104.198405	1.0	24914.690
V	51	1	He	103.675397	0.7	689531.263
Cr	52	1	He	107.260200	0.5	851560.020
Mn	55	1	He	104.258076	0.2	626839.833
Fe	56	1	He	2137.064086	0.7	16106817.000
Co	59	1	He	108.873508	0.6	1372124.540
Ni	60	1	He	109.884454	0.5	343343.133
Cu	63	1	He	107.820623	0.4	939896.543
Zn	66	1	He	108.247252	0.6	216444.257
As	75	1	He	104.318730	1.0	184113.960
Se	78	2	H2	108.285934	0.6	85520.130
Sr	88	1	He	105.610290	0.8	1220895.530
Mo	95	1	He	102.813701	1.8	635160.710
Pd	105	1	He	21.581857	1.7	199783.890
Ag	107	1	He	51.346991	0.5	1013343.970
Cd	111	1	He	105.387667	1.4	388320.460
Sn	118	1	He	101.510429	2.0	961584.727
Sb	121	1	He	104.453642	1.2	1456726.387
Ba	138	1	He	102.635688	1.6	3275121.827
Pt	195	1	He	21.613163	0.8	278491.773
Hg	202	1	He	0.003331	5.0	246.000
Tl	205	1	He	109.563990	1.2	5198593.467
Pb	208	1	He	107.306642	0.9	6935706.093
Bi	209	1	He	103.815399	1.4	5783112.413
Th	232	1	He	104.702289	1.3	7118151.767
U	238	1	He	101.556263	1.2	6630154.280

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.21950846	561349.503
Sc	45	2	H2	94.63149108	4187059.750
Ge	72	1	He	95.26443433	475038.217
Ge	72	2	H2	96.20709824	1500615.790
In	115	1	He	96.40430808	5909768.343
Tb	159	1	He	99.43404516	14386729.787
Ir	193	1	He	99.34522569	7357873.850



Sample Name 10606718001\_B70047Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 062SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:49:29  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	149.605293	0.3	53134.150
Be	9	2	H2	0.150273	9.1	74.833
B	11	2	H2	1974.316017	0.4	636477.437
Na	23	1	He	127056.9403	0.5	109545478.367
Mg	24	1	He	9610.706420	0.5	4705083.263
Al	27	1	He	278.661179	0.3	69435.110
Si	28	2	H2	2163.491353	1.2	5777390.333
K	39	1	He	6750.609085	0.4	4765157.117
Ca	43	1	He	27620.84454	0.5	57170.457
Ti	47	1	He	4.550135	1.8	1047.707
V	51	1	He	8.968763	2.0	56834.907
Cr	52	1	He	2.586701	0.3	21916.340
Mn	55	1	He	189.104286	0.1	1092935.000
Fe	56	1	He	3429.588701	0.2	24846288.667
Co	59	1	He	24.456205	0.7	295012.593
Ni	60	1	He	7.681074	1.5	23143.687
Cu	63	1	He	23.995842	0.2	200417.470
Zn	66	1	He	998.243737	0.4	1908602.250
As	75	1	He	2.060087	1.8	3631.627
Se	78	2	H2	0.441076	4.5	383.010
Sr	88	1	He	95.735572	0.3	1059199.177
Mo	95	1	He	536.738104	0.8	3125909.583
Pd	105	1	He	0.101636	4.0	1061.717
Ag	107	1	He	0.268183	30.0	5074.343
Cd	111	1	He	0.142924	5.2	516.043
Sn	118	1	He	2.907033	1.0	26086.023
Sb	121	1	He	14.270042	0.8	187636.387
Ba	138	1	He	16.495238	0.3	496282.073
Pt	195	1	He	0.311748	18.3	4066.643
Hg	202	1	He	0.140329	2.1	1068.710
Tl	205	1	He	0.062613	23.0	3325.457
Pb	208	1	He	8.944045	1.3	559678.700
Bi	209	1	He	0.196289	6.5	12546.157
Th	232	1	He	0.116348	5.8	8511.173
U	238	1	He	0.327326	2.1	21349.310

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.62654019	539713.357
Sc	45	2	H2	94.00027505	4159131.000
Ge	72	1	He	91.16864455	454614.470
Ge	72	2	H2	95.07349872	1482934.170
In	115	1	He	90.87263194	5570666.023
Tb	159	1	He	95.84078503	13866834.790
Ir	193	1	He	94.99126750	7035403.647

Sample Name 4315307\_B70047Dx25  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 063SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:53:16  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	31.344686	1.7	11414.787
Be	9	2	H2	0.069872	19.3	46.333
B	11	2	H2	359.333678	1.9	140834.270
Na	23	1	He	26030.17984	0.7	23343182.150
Mg	24	1	He	1970.925073	0.6	1006831.677
Al	27	1	He	65.931053	1.0	17137.150
Si	28	2	H2	443.751345	2.0	1219780.333
K	39	1	He	1385.421574	0.5	1071481.367
Ca	43	1	He	5625.497310	0.3	12116.447
Ti	47	1	He	1.008967	8.3	243.000
V	51	1	He	1.647842	5.3	10372.707
Cr	52	1	He	12.400582	0.5	100460.840
Mn	55	1	He	39.583373	0.1	238069.630
Fe	56	1	He	745.443255	0.8	5623509.833
Co	59	1	He	5.074423	0.4	63991.450
Ni	60	1	He	6.042062	1.3	19059.787
Cu	63	1	He	5.210021	0.8	45702.790
Zn	66	1	He	201.717460	0.5	403074.627
As	75	1	He	0.441158	0.6	939.697
Se	78	2	H2	0.126272	7.6	139.667
Sr	88	1	He	19.724183	0.8	228083.440
Mo	95	1	He	105.235872	0.6	647221.210
Pd	105	1	He	0.029806	17.9	460.010
Ag	107	1	He	0.063012	9.9	1331.743
Cd	111	1	He	0.049732	13.8	203.173
Sn	118	1	He	0.627711	1.6	6054.697
Sb	121	1	He	2.834056	1.5	39380.423
Ba	138	1	He	3.274664	1.4	104095.440
Pt	195	1	He	0.049767	19.7	848.030
Hg	202	1	He	0.022747	19.3	367.677
Tl	205	1	He	0.029255	21.8	1866.823
Pb	208	1	He	1.827048	0.9	120632.433
Bi	209	1	He	0.055475	28.1	5244.490
Th	232	1	He	0.040592	24.4	3725.583
U	238	1	He	0.084728	8.6	6443.337

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.18538524	561144.020
Sc	45	2	H2	95.92869282	4244455.667
Ge	72	1	He	95.24447051	474938.667
Ge	72	2	H2	96.52780144	1505618.043
In	115	1	He	95.96063823	5882570.533
Tb	159	1	He	99.26699395	14362559.790
Ir	193	1	He	98.69029666	7309367.390

Sample Name 4314467\_B70047Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 064SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 17:57:01  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	174.724522	1.0	62996.187
Be	9	2	H2	21.319534	1.5	7933.410
B	11	2	H2	2053.848262	0.8	671171.897
Na	23	1	He	130821.7308	0.5	113988184.967
Mg	24	1	He	10278.18447	0.3	5084773.150
Al	27	1	He	699.999548	0.6	176157.473
Si	28	2	H2	2386.745657	0.7	6469968.667
K	39	1	He	7356.668195	0.4	5241987.837
Ca	43	1	He	28872.33798	0.4	60393.373
Ti	47	1	He	26.183367	1.6	6084.600
V	51	1	He	30.399421	1.0	196038.520
Cr	52	1	He	24.553504	0.3	191141.637
Mn	55	1	He	215.043452	0.5	1255987.000
Fe	56	1	He	3898.180930	0.2	28538608.000
Co	59	1	He	46.663095	0.3	566212.480
Ni	60	1	He	29.798584	0.5	89777.037
Cu	63	1	He	45.993607	0.3	386167.363
Zn	66	1	He	1034.814922	0.8	1990310.583
As	75	1	He	23.948220	0.4	40812.487
Se	78	2	H2	17.950721	1.5	14168.963
Sr	88	1	He	119.339665	0.7	1328179.463
Mo	95	1	He	571.039878	0.6	3326107.583
Pd	105	1	He	1.203541	5.0	10672.653
Ag	107	1	He	9.720261	3.6	180904.523
Cd	111	1	He	21.508560	0.9	74736.057
Sn	118	1	He	23.971551	0.7	214208.617
Sb	121	1	He	34.795312	1.0	457523.560
Ba	138	1	He	38.277937	0.8	1151648.890
Pt	195	1	He	2.949133	0.5	37070.860
Hg	202	1	He	0.143037	7.7	1092.710
Tl	205	1	He	21.382778	0.7	985443.320
Pb	208	1	He	29.938032	0.4	1880685.750
Bi	209	1	He	20.475811	1.1	1090215.710
Th	232	1	He	19.942193	0.2	1294739.460
U	238	1	He	21.447611	1.4	1336941.283

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.57571606	545429.107
Sc	45	2	H2	95.44457689	4223035.500
Ge	72	1	He	91.71399390	457333.867
Ge	72	2	H2	95.92984721	1496291.293
In	115	1	He	90.88400494	5571363.210
Tb	159	1	He	96.53833218	13967760.207
Ir	193	1	He	94.80902282	7021905.933

Sample Name 4314468\_B70047Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 065SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:00:47  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	165.382984	0.2	59743.433
Be	9	2	H2	20.857314	0.9	7776.497
B	11	2	H2	1943.235432	0.7	637694.123
Na	23	1	He	122001.6940	0.5	107782525.060
Mg	24	1	He	9590.305804	0.7	4810765.763
Al	27	1	He	665.146845	0.4	169719.087
Si	28	2	H2	2259.126145	0.8	6136155.167
K	39	1	He	6888.686908	0.2	4981164.613
Ca	43	1	He	26853.15554	0.3	56952.237
Ti	47	1	He	25.002410	1.0	5891.187
V	51	1	He	28.690656	1.0	187563.973
Cr	52	1	He	23.219717	0.2	183397.420
Mn	55	1	He	199.301656	0.2	1180260.663
Fe	56	1	He	3630.018622	0.2	26945980.667
Co	59	1	He	44.301801	0.5	544204.857
Ni	60	1	He	28.332947	0.1	86426.943
Cu	63	1	He	43.210748	0.5	367303.333
Zn	66	1	He	974.261009	0.5	1897049.833
As	75	1	He	22.886588	0.4	39492.493
Se	78	2	H2	17.654845	1.3	14040.830
Sr	88	1	He	111.702500	0.7	1258577.117
Mo	95	1	He	535.747588	0.7	3139925.500
Pd	105	1	He	1.438956	0.9	12802.600
Ag	107	1	He	9.652929	1.8	180805.200
Cd	111	1	He	20.754687	0.3	72567.107
Sn	118	1	He	22.990342	1.4	206708.427
Sb	121	1	He	33.145667	1.5	438530.867
Ba	138	1	He	36.125989	0.9	1093657.380
Pt	195	1	He	2.889555	1.0	36144.193
Hg	202	1	He	0.125428	4.7	980.373
Tl	205	1	He	20.828339	0.7	955100.090
Pb	208	1	He	28.542917	0.5	1784207.383
Bi	209	1	He	19.912651	0.3	1057283.653
Th	232	1	He	19.466480	0.4	1260186.100
U	238	1	He	20.815269	0.5	1293924.487

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.83626712	553019.897
Sc	45	2	H2	95.62196791	4230884.333
Ge	72	1	He	92.84811366	462989.180
Ge	72	2	H2	96.65567488	1507612.583
In	115	1	He	91.44911245	5606005.380
Tb	159	1	He	96.05455231	13897763.957
Ir	193	1	He	94.53177841	7001372.190

Sample Name 10606718001\_B70047Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 066SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:04:34  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	15.675227	1.7	5816.450
Be	9	2	H2	0.055493	31.4	41.500
B	11	2	H2	160.422833	0.3	79177.767
Na	23	1	He	12709.33459	2.2	11647997.747
Mg	24	1	He	954.965348	2.1	500734.340
Al	27	1	He	29.221828	2.4	7801.043
Si	28	2	H2	215.624672	1.2	607219.520
K	39	1	He	671.688788	3.4	566786.447
Ca	43	1	He	2681.727594	2.3	5906.867
Ti	47	1	He	0.437755	13.2	108.667
V	51	1	He	0.934066	3.3	5745.733
Cr	52	1	He	0.294426	8.2	4742.113
Mn	55	1	He	18.674395	2.5	114865.687
Fe	56	1	He	336.442623	2.1	2598771.417
Co	59	1	He	2.417713	2.0	30998.823
Ni	60	1	He	0.776650	1.2	2662.917
Cu	63	1	He	2.400481	1.9	21561.280
Zn	66	1	He	97.683696	2.1	198380.687
As	75	1	He	0.209286	7.8	539.010
Se	78	2	H2	0.120574	9.8	137.000
Sr	88	1	He	9.310039	1.2	109449.057
Mo	95	1	He	50.452436	2.4	316559.177
Pd	105	1	He	0.005550	55.6	241.667
Ag	107	1	He	0.158244	29.4	3280.440
Cd	111	1	He	0.018376	6.7	90.020
Sn	118	1	He	0.290637	1.3	2935.333
Sb	121	1	He	1.360214	2.5	19301.737
Ba	138	1	He	1.555354	2.7	50475.163
Pt	195	1	He	0.011546	28.2	359.343
Hg	202	1	He	0.000092	2716.9	226.333
Tl	205	1	He	0.054003	25.5	3063.730
Pb	208	1	He	0.867131	3.1	59030.853
Bi	209	1	He	0.020706	21.6	3323.827
Th	232	1	He	0.023348	3.2	2561.940
U	238	1	He	0.031354	4.7	2982.040

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.21931765	573391.960
Sc	45	2	H2	97.12832064	4297534.333
Ge	72	1	He	96.77393060	482565.353
Ge	72	2	H2	97.94517045	1527725.833
In	115	1	He	97.92650635	6003082.007
Tb	159	1	He	99.83859031	14445261.870
Ir	193	1	He	98.54619208	7298694.473

Sample Name 4315307\_B70047Dx250  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 067SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:08:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.292058	1.8	1276.387
Be	9	2	H2	0.044985	15.1	37.500
B	11	2	H2	-12.935670		23865.610
Na	23	1	He	2491.894184	1.0	2275121.787
Mg	24	1	He	181.449250	2.0	98146.847
Al	27	1	He	7.457717	4.9	2031.477
Si	28	2	H2	41.391372	0.6	127436.500
K	39	1	He	128.935368	1.9	164307.097
Ca	43	1	He	517.615963	1.5	1141.830
Ti	47	1	He	0.098163	26.7	25.667
V	51	1	He	0.109764	115.6	142.197
Cr	52	1	He	0.224426	7.4	4145.263
Mn	55	1	He	3.670964	1.2	22622.130
Fe	56	1	He	66.688587	1.2	520012.103
Co	59	1	He	0.483940	2.2	6193.330
Ni	60	1	He	0.213440	10.5	868.693
Cu	63	1	He	0.478113	1.4	4507.377
Zn	66	1	He	18.995676	0.9	38402.547
As	75	1	He	0.056880	10.8	264.000
Se	78	2	H2	0.045078	23.7	76.333
Sr	88	1	He	1.808543	2.5	21184.140
Mo	95	1	He	9.748315	1.4	60872.593
Pd	105	1	He	0.005884	32.9	243.333
Ag	107	1	He	0.041001	0.8	913.373
Cd	111	1	He	0.008672	27.4	53.373
Sn	118	1	He	0.074192	5.9	848.367
Sb	121	1	He	0.268290	3.8	3818.893
Ba	138	1	He	0.298203	1.5	9690.143
Pt	195	1	He	-0.000340		202.667
Hg	202	1	He	-0.010182		159.667
Tl	205	1	He	0.011451	21.1	1016.717
Pb	208	1	He	0.170681	1.9	13706.080
Bi	209	1	He	0.009178	62.7	2656.983
Th	232	1	He	0.008869	32.6	1570.107
U	238	1	He	0.005979	57.3	1323.417

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.44075734	568703.623
Sc	45	2	H2	97.02571614	4292994.500
Ge	72	1	He	95.88776054	478146.447
Ge	72	2	H2	97.95748803	1527917.960
In	115	1	He	97.41884910	5971961.647
Tb	159	1	He	98.64851734	14273074.787
Ir	193	1	He	97.59427207	7228191.767

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 068\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:12:03  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	86.093267	0.2	31443.483
Be	9	2	H2	82.553486	0.3	31025.157
B	11	2	H2	28.656076	1.1	36942.947
Na	23	1	He	1068.872594	1.6	982113.343
Mg	24	1	He	1030.639503	0.6	535564.290
Al	27	1	He	1024.704431	0.2	268721.550
Si	28	2	H2	515.273944	0.7	1423925.083
K	39	1	He	1030.562801	0.6	825269.467
Ca	43	1	He	1009.231983	3.0	2212.797
Ti	47	1	He	79.944557	0.5	19358.020
V	51	1	He	81.109544	0.1	546137.547
Cr	52	1	He	82.651328	0.2	665028.853
Mn	55	1	He	80.767392	0.5	491805.740
Fe	56	1	He	525.054492	0.4	4015800.417
Co	59	1	He	83.991438	0.8	1075783.793
Ni	60	1	He	84.342514	0.3	267868.240
Cu	63	1	He	84.102094	0.2	745121.227
Zn	66	1	He	82.551706	0.6	167798.057
As	75	1	He	79.525427	0.3	142678.947
Se	78	2	H2	82.138800	1.4	65503.870
Sr	88	1	He	81.087062	0.3	952675.273
Mo	95	1	He	77.472296	1.3	486732.217
Pd	105	1	He	81.986302	1.0	771302.123
Ag	107	1	He	40.561371	2.9	813919.570
Cd	111	1	He	80.676799	1.2	302310.780
Sn	118	1	He	76.993193	1.7	741749.493
Sb	121	1	He	78.358796	1.3	1111302.797
Ba	138	1	He	78.635576	1.2	2551833.870
Pt	195	1	He	82.794813	0.6	1064829.873
Hg	202	1	He	3.907171	0.8	24794.343
Tl	205	1	He	42.138414	0.7	1997031.690
Pb	208	1	He	82.364999	0.6	5317209.217
Bi	209	1	He	81.548064	0.7	4491158.683
Th	232	1	He	77.389176	0.5	5201457.630
U	238	1	He	78.768483	0.8	5083945.757

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.39903783	568452.397
Sc	45	2	H2	96.57224332	4272930.167
Ge	72	1	He	96.81167568	482753.570
Ge	72	2	H2	97.13494480	1515088.123
In	115	1	He	98.03273599	6009594.087
Tb	159	1	He	99.29945211	14367256.037
Ir	193	1	He	98.20190510	7273195.310

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 069\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:15:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.213004	22.0	149.167
Be	9	2	H2	0.054179	20.6	41.000
B	11	2	H2	-60.402348		8747.693
Na	23	1	He	8.136649	22.9	18716.850
Mg	24	1	He	-6.491554		1278.403
Al	27	1	He	0.246714	85.2	138.333
Si	28	2	H2	-0.721816		11629.230
K	39	1	He	-1.992745		67588.897
Ca	43	1	He	1.588180	124.3	16.367
Ti	47	1	He	0.021394	19.2	7.000
V	51	1	He	0.070465	26.8	-122.430
Cr	52	1	He	0.031424	49.5	2569.563
Mn	55	1	He	0.034086	49.7	472.010
Fe	56	1	He	0.229446	50.2	12780.280
Co	59	1	He	0.025213	51.6	371.337
Ni	60	1	He	0.015432	34.3	244.667
Cu	63	1	He	0.016867	95.2	458.013
Zn	66	1	He	0.041948	52.2	290.667
As	75	1	He	0.016937	69.8	191.833
Se	78	2	H2	0.029696	39.6	64.000
Sr	88	1	He	0.017691	57.3	346.673
Mo	95	1	He	0.040085	41.6	260.003
Pd	105	1	He	0.026203	32.7	431.677
Ag	107	1	He	0.159336	22.3	3260.417
Cd	111	1	He	0.018546	70.8	89.617
Sn	118	1	He	0.024112	82.4	366.677
Sb	121	1	He	0.022906	44.2	358.343
Ba	138	1	He	0.018906	66.8	678.360
Pt	195	1	He	0.015515	62.1	403.340
Hg	202	1	He	0.009205	33.0	280.000
Tl	205	1	He	0.057331	29.1	3163.750
Pb	208	1	He	0.012212	90.4	3535.220
Bi	209	1	He	0.016558	75.8	3090.427
Th	232	1	He	0.027548	35.8	2842.013
U	238	1	He	0.014274	100.3	1870.180

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.49242562	562992.957
Sc	45	2	H2	97.06093217	4294552.667
Ge	72	1	He	95.34204620	475425.230
Ge	72	2	H2	97.83518419	1526010.293
In	115	1	He	97.18171147	5957424.657
Tb	159	1	He	98.44840608	14244121.457
Ir	193	1	He	98.66912398	7307799.263



Sample Name 4312078\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 070SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:19:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.211729	11.7	149.667
Be	9	2	H2	0.056163	21.1	42.000
B	11	2	H2	-61.095962		8580.930
Na	23	1	He	23.965230	5.9	33328.923
Mg	24	1	He	7.361345	7.0	8439.113
Al	27	1	He	13.520456	2.0	3624.777
Si	28	2	H2	8.708718	0.9	37813.070
K	39	1	He	2.453035	60.3	71606.003
Ca	43	1	He	57.252147	2.5	138.050
Ti	47	1	He	0.249355	11.3	62.333
V	51	1	He	-0.003519		-624.447
Cr	52	1	He	2.700630	0.4	24028.313
Mn	55	1	He	0.406302	3.9	2746.267
Fe	56	1	He	48.968907	0.6	385156.687
Co	59	1	He	0.048994	22.6	675.353
Ni	60	1	He	1.470721	2.1	4814.810
Cu	63	1	He	0.232479	2.2	2350.197
Zn	66	1	He	3.516193	1.9	7270.503
As	75	1	He	0.021350	33.3	200.667
Se	78	2	H2	0.032785	17.6	67.000
Sr	88	1	He	0.128656	11.3	1638.440
Mo	95	1	He	0.046301	13.4	303.337
Pd	105	1	He	0.013171	76.1	315.003
Ag	107	1	He	0.058297	14.0	1271.733
Cd	111	1	He	0.036749	21.5	159.613
Sn	118	1	He	0.127499	8.2	1373.413
Sb	121	1	He	0.029170	14.3	453.347
Ba	138	1	He	1.503888	0.7	49103.620
Pt	195	1	He	0.016586	39.8	422.010
Hg	202	1	He	-0.000195		224.000
Tl	205	1	He	0.031840	12.2	1993.500
Pb	208	1	He	0.062252	6.0	6814.030
Bi	209	1	He	0.041346	21.5	4524.193
Th	232	1	He	0.028900	24.0	2975.373
U	238	1	He	0.018056	30.9	2148.537

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.52261600	569196.560
Sc	45	2	H2	97.67967814	4321929.667
Ge	72	1	He	95.77818183	477600.030
Ge	72	2	H2	98.67952498	1539180.123
In	115	1	He	98.48402937	6037259.233
Tb	159	1	He	99.52333034	14399648.117
Ir	193	1	He	100.0461004	7409783.220

Sample Name 4312079\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 071SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:23:18  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	114.423830	0.7	41981.707
Be	9	2	H2	110.578238	0.4	41763.003
B	11	2	H2	51.763373	2.4	44496.523
Na	23	1	He	2216.597414	0.1	2036660.907
Mg	24	1	He	2179.186442	0.4	1134173.160
Al	27	1	He	2170.077351	0.5	572501.897
Si	28	2	H2	554.700981	0.9	1539703.417
K	39	1	He	2178.997069	0.1	1677494.190
Ca	43	1	He	2189.618536	1.3	4815.000
Ti	47	1	He	107.504885	0.4	26190.883
V	51	1	He	108.519374	0.5	735402.857
Cr	52	1	He	111.063441	0.3	898310.190
Mn	55	1	He	107.953755	0.3	661307.627
Fe	56	1	He	2223.803224	0.2	17076691.333
Co	59	1	He	113.607570	0.2	1455424.210
Ni	60	1	He	114.882011	0.4	364872.283
Cu	63	1	He	112.778727	0.6	999322.043
Zn	66	1	He	112.473155	0.3	228598.387
As	75	1	He	108.168823	0.3	194057.343
Se	78	2	H2	111.700145	0.7	89988.850
Sr	88	1	He	110.008875	0.6	1292736.830
Mo	95	1	He	106.078113	1.6	662779.730
Pd	105	1	He	22.210531	1.6	207925.527
Ag	107	1	He	51.538999	0.9	1028610.220
Cd	111	1	He	109.543018	0.8	408226.637
Sn	118	1	He	104.871440	0.8	1004774.620
Sb	121	1	He	106.654994	0.5	1504352.167
Ba	138	1	He	107.068980	0.7	3455573.697
Pt	195	1	He	22.114627	1.3	287565.217
Hg	202	1	He	-0.000531		223.667
Tl	205	1	He	113.184149	0.8	5419667.000
Pb	208	1	He	110.640131	1.0	7216626.247
Bi	209	1	He	108.088879	0.8	6004615.747
Th	232	1	He	109.663607	1.4	7434658.430
U	238	1	He	106.223118	1.2	6915506.150

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.97913100	571945.603
Sc	45	2	H2	97.06667658	4294806.833
Ge	72	1	He	96.83564896	482873.113
Ge	72	2	H2	98.14197214	1530795.500
In	115	1	He	97.49458491	5976604.397
Tb	159	1	He	100.3432342	14518276.863
Ir	193	1	He	99.07016117	7337501.557

Sample Name 10604943026\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 072SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:27:02  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.636428	1.8	1057.207
Be	9	2	H2	0.107937	11.2	62.500
B	11	2	H2	-39.842345		15601.197
Na	23	1	He	8893.690946	1.5	7975154.673
Mg	24	1	He	12581.42964	1.4	6396097.613
Al	27	1	He	41.542275	1.7	10816.253
Si	28	2	H2	1097.647646	0.6	3092992.333
K	39	1	He	1626.106041	1.4	1244428.627
Ca	43	1	He	36505.62781	1.5	78476.653
Ti	47	1	He	0.216988	20.1	53.667
V	51	1	He	0.422006	31.9	2205.923
Cr	52	1	He	0.405764	5.7	5519.723
Mn	55	1	He	6.527635	1.6	39441.600
Fe	56	1	He	44.973269	2.5	349241.103
Co	59	1	He	0.339270	2.6	4333.990
Ni	60	1	He	50.290295	2.2	157387.330
Cu	63	1	He	115.943819	1.9	1011632.837
Zn	66	1	He	159.365298	1.3	318875.813
As	75	1	He	0.708289	1.3	1412.737
Se	78	2	H2	0.249540	3.9	246.000
Sr	88	1	He	125.614620	1.6	1453555.083
Mo	95	1	He	1.221462	4.4	7461.973
Pd	105	1	He	0.107528	9.0	1166.727
Ag	107	1	He	0.279025	12.4	5526.150
Cd	111	1	He	0.116566	15.1	445.000
Sn	118	1	He	7.752263	0.4	72659.063
Sb	121	1	He	3.585611	2.2	49418.847
Ba	138	1	He	20.076605	1.5	632724.443
Pt	195	1	He	0.022652	20.4	493.343
Hg	202	1	He	-0.004973		190.667
Tl	205	1	He	0.158269	4.4	7869.057
Pb	208	1	He	0.573557	3.9	39232.617
Bi	209	1	He	0.080862	10.7	6531.740
Th	232	1	He	0.116890	7.5	8721.313
U	238	1	He	0.240859	5.0	16266.957

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.10667183	560670.023
Sc	45	2	H2	98.97287386	4379148.333
Ge	72	1	He	95.37152366	475572.220
Ge	72	2	H2	100.1100290	1561492.790
In	115	1	He	95.20707439	5836375.630
Tb	159	1	He	97.94852526	14171795.623
Ir	193	1	He	96.88154090	7175404.267

Sample Name 4315177\_B70039Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 073SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:30:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.659609	5.7	321.500
Be	9	2	H2	0.063194	13.2	45.667
B	11	2	H2	-62.376370		8344.967
Na	23	1	He	1761.603155	1.2	1649180.550
Mg	24	1	He	2490.343894	1.3	1317960.033
Al	27	1	He	9.982567	4.7	2756.260
Si	28	2	H2	218.251465	1.4	631154.750
K	39	1	He	316.110381	1.5	308599.233
Ca	43	1	He	7151.005206	0.9	15968.480
Ti	47	1	He	0.051446	33.2	14.667
V	51	1	He	0.162076	73.9	499.680
Cr	52	1	He	0.139103	9.8	3540.440
Mn	55	1	He	1.293799	2.4	8336.393
Fe	56	1	He	8.833467	4.0	80390.327
Co	59	1	He	0.081335	20.7	1113.383
Ni	60	1	He	10.040802	0.4	32530.840
Cu	63	1	He	23.185595	0.7	208638.437
Zn	66	1	He	32.025360	0.9	66173.787
As	75	1	He	0.156381	11.8	451.343
Se	78	2	H2	0.044534	27.3	78.333
Sr	88	1	He	24.681135	0.6	294293.850
Mo	95	1	He	0.267038	5.2	1727.443
Pd	105	1	He	0.037376	8.5	553.350
Ag	107	1	He	0.075352	12.0	1645.110
Cd	111	1	He	0.024695	42.1	116.353
Sn	118	1	He	1.545963	2.6	15373.650
Sb	121	1	He	0.695846	4.2	10132.080
Ba	138	1	He	3.884546	0.2	129013.143
Pt	195	1	He	0.005190	70.9	280.667
Hg	202	1	He	-0.008569		174.333
Tl	205	1	He	0.041345	42.5	2486.947
Pb	208	1	He	0.114241	13.0	10364.927
Bi	209	1	He	0.020381	73.0	3333.837
Th	232	1	He	0.028429	44.0	2930.387
U	238	1	He	0.047229	32.3	4047.370

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.63708242	581929.460
Sc	45	2	H2	99.77809265	4414776.000
Ge	72	1	He	98.21870641	489769.760
Ge	72	2	H2	100.8997551	1573810.753
In	115	1	He	100.2683630	6146642.300
Tb	159	1	He	101.4081167	14672350.613
Ir	193	1	He	99.62122689	7378315.517

Sample Name 4312080\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 074SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:34:31  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	109.485879	0.4	40497.860
Be	9	2	H2	105.148692	0.2	40035.370
B	11	2	H2	65.745975	1.3	49350.007
Na	23	1	He	10435.73378	1.1	9490772.567
Mg	24	1	He	13843.95740	1.4	7138803.643
Al	27	1	He	2112.560298	1.2	554120.023
Si	28	2	H2	1577.989491	0.2	4390276.833
K	39	1	He	3613.893132	1.1	2720241.000
Ca	43	1	He	36414.98326	1.1	79411.263
Ti	47	1	He	103.711392	1.3	25121.687
V	51	1	He	106.122754	0.6	715020.773
Cr	52	1	He	107.761862	1.4	866664.373
Mn	55	1	He	110.075395	1.0	670426.017
Fe	56	1	He	2183.138361	0.8	16668648.000
Co	59	1	He	107.017660	0.8	1370299.793
Ni	60	1	He	155.234414	0.9	492710.397
Cu	63	1	He	214.574199	1.1	1900032.707
Zn	66	1	He	253.456413	0.9	514611.503
As	75	1	He	105.475741	0.8	189132.907
Se	78	2	H2	106.254564	0.4	86600.160
Sr	88	1	He	223.344469	0.9	2623070.953
Mo	95	1	He	106.328257	1.2	655162.393
Pd	105	1	He	21.078486	1.1	194611.950
Ag	107	1	He	49.966512	0.5	983480.220
Cd	111	1	He	106.575796	1.0	391666.987
Sn	118	1	He	110.334174	0.4	1042507.093
Sb	121	1	He	107.832583	1.2	1499849.200
Ba	138	1	He	122.740919	1.0	3906383.173
Pt	195	1	He	21.174420	0.9	273423.927
Hg	202	1	He	0.001438	333.1	234.667
Tl	205	1	He	108.378852	1.0	5153257.943
Pb	208	1	He	106.327295	0.9	6887026.673
Bi	209	1	He	102.859691	0.6	5671851.793
Th	232	1	He	106.976218	0.6	7199347.183
U	238	1	He	104.455085	0.4	6750297.813

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.43854704	568690.313
Sc	45	2	H2	97.85366772	4329628.000
Ge	72	1	He	96.78863958	482638.700
Ge	72	2	H2	99.28457959	1548617.623
In	115	1	He	96.14628328	5893950.930
Tb	159	1	He	99.64762523	14417631.867
Ir	193	1	He	98.33057814	7282725.310

Sample Name 4312081\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 075SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:38:16  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	108.265343	0.5	39539.500
Be	9	2	H2	104.131583	0.2	39145.717
B	11	2	H2	64.533303	0.9	48339.247
Na	23	1	He	10277.84374	0.8	9219276.740
Mg	24	1	He	13635.90552	1.2	6935319.063
Al	27	1	He	2094.149246	0.8	541768.873
Si	28	2	H2	1562.645320	0.1	4292622.000
K	39	1	He	3570.023716	0.8	2651231.837
Ca	43	1	He	35978.27848	1.1	77384.140
Ti	47	1	He	104.355593	0.3	24931.683
V	51	1	He	105.520051	0.6	701198.430
Cr	52	1	He	106.518350	0.6	844964.627
Mn	55	1	He	108.844329	0.4	653845.500
Fe	56	1	He	2164.992532	0.1	16303587.000
Co	59	1	He	106.660384	0.7	1345778.580
Ni	60	1	He	153.576458	0.9	480330.113
Cu	63	1	He	211.286581	0.1	1843660.707
Zn	66	1	He	252.588155	0.3	505365.883
As	75	1	He	105.085394	0.5	185682.763
Se	78	2	H2	106.142207	0.7	85722.010
Sr	88	1	He	222.669528	0.8	2576957.513
Mo	95	1	He	105.417461	0.8	642167.040
Pd	105	1	He	21.128662	1.6	192850.390
Ag	107	1	He	49.403588	0.5	961294.700
Cd	111	1	He	105.525184	0.9	383390.070
Sn	118	1	He	109.955226	0.5	1027081.730
Sb	121	1	He	107.782753	0.5	1482145.657
Ba	138	1	He	121.962371	0.5	3837496.610
Pt	195	1	He	21.081256	0.5	268988.770
Hg	202	1	He	-0.002323		208.333
Tl	205	1	He	107.849186	0.6	5067224.507
Pb	208	1	He	105.315110	0.7	6740445.733
Bi	209	1	He	101.591626	1.2	5531201.793
Th	232	1	He	105.790268	0.7	7029293.020
U	238	1	He	103.244297	0.2	6587906.570

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.14026752	560872.330
Sc	45	2	H2	96.61328286	4274746.000
Ge	72	1	He	95.37335526	475581.353
Ge	72	2	H2	98.38659051	1534611.000
In	115	1	He	95.04913571	5826693.687
Tb	159	1	He	98.45843641	14245572.707
Ir	193	1	He	97.08821833	7190711.560

Sample Name 10604943027\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 076SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:42:01  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.567622	1.4	1026.703
Be	9	2	H2	0.128706	15.8	70.167
B	11	2	H2	-43.964138		14194.813
Na	23	1	He	8589.086973	0.4	7775400.713
Mg	24	1	He	12199.04629	0.3	6260661.157
Al	27	1	He	34.972886	1.3	9203.173
Si	28	2	H2	1090.036552	0.5	3057229.250
K	39	1	He	1569.162741	0.6	1214648.837
Ca	43	1	He	35471.13786	0.3	76977.433
Ti	47	1	He	0.149849	8.2	38.000
V	51	1	He	0.354923	38.9	1787.333
Cr	52	1	He	0.538066	3.7	6628.177
Mn	55	1	He	8.777053	0.6	53444.440
Fe	56	1	He	35.341865	0.8	279467.417
Co	59	1	He	0.327733	7.5	4226.623
Ni	60	1	He	68.339150	0.5	215717.333
Cu	63	1	He	102.256837	0.4	900221.503
Zn	66	1	He	91.990489	0.6	185788.040
As	75	1	He	0.656874	3.5	1333.397
Se	78	2	H2	0.200822	11.7	205.333
Sr	88	1	He	121.839150	0.9	1422413.677
Mo	95	1	He	1.150130	1.9	7170.487
Pd	105	1	He	0.095176	11.7	1075.050
Ag	107	1	He	0.242169	20.9	4914.257
Cd	111	1	He	0.067347	31.0	271.377
Sn	118	1	He	0.131336	13.1	1391.750
Sb	121	1	He	2.972689	1.6	41812.403
Ba	138	1	He	18.966492	0.6	609895.150
Pt	195	1	He	0.009166	31.8	324.670
Hg	202	1	He	-0.006345		184.000
Tl	205	1	He	0.136574	12.1	6920.213
Pb	208	1	He	0.402703	4.2	28640.277
Bi	209	1	He	0.051272	43.3	4957.737
Th	232	1	He	0.080306	18.0	6339.957
U	238	1	He	0.187542	10.5	12974.917

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.97544819	565901.623
Sc	45	2	H2	98.50872586	4358611.667
Ge	72	1	He	96.20543151	479730.520
Ge	72	2	H2	99.71513014	1555333.250
In	115	1	He	97.12907477	5954197.927
Tb	159	1	He	98.87188299	14305392.703
Ir	193	1	He	97.70302982	7236246.767

Sample Name 10604943028\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 077SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:45:46  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.420111	1.6	977.530
Be	9	2	H2	0.095634	7.7	57.833
B	11	2	H2	-44.574623		14079.707
Na	23	1	He	8390.196111	1.4	7683866.970
Mg	24	1	He	12001.06893	1.5	6230598.450
Al	27	1	He	45.595313	1.6	12113.913
Si	28	2	H2	1099.642219	1.1	3102170.417
K	39	1	He	1520.747783	1.5	1193014.357
Ca	43	1	He	35037.85871	1.4	76920.587
Ti	47	1	He	0.175263	22.2	44.667
V	51	1	He	0.320106	14.0	1567.220
Cr	52	1	He	0.343962	0.8	5138.247
Mn	55	1	He	18.486313	1.0	113576.883
Fe	56	1	He	64.046107	1.2	503191.553
Co	59	1	He	0.436395	3.6	5635.770
Ni	60	1	He	235.629236	1.2	746973.833
Cu	63	1	He	180.470151	1.5	1596361.047
Zn	66	1	He	940.300320	1.6	1906449.377
As	75	1	He	0.602886	3.8	1243.057
Se	78	2	H2	0.192555	7.4	200.000
Sr	88	1	He	121.615452	1.2	1426889.770
Mo	95	1	He	1.127207	0.5	7035.753
Pd	105	1	He	0.105256	12.0	1170.057
Ag	107	1	He	0.086363	10.0	1813.463
Cd	111	1	He	0.087992	3.2	348.070
Sn	118	1	He	2.537507	2.3	24381.307
Sb	121	1	He	6.427332	1.1	90452.247
Ba	138	1	He	20.931916	0.6	673835.223
Pt	195	1	He	0.011446	16.1	356.010
Hg	202	1	He	-0.002056		212.000
Tl	205	1	He	0.145995	3.8	7405.470
Pb	208	1	He	1.579458	1.2	104807.030
Bi	209	1	He	0.045029	20.4	4624.237
Th	232	1	He	0.044984	10.9	3985.647
U	238	1	He	0.192887	2.6	13333.590

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.07926712	572548.603
Sc	45	2	H2	99.08977346	4384320.667
Ge	72	1	He	96.69562151	482174.863
Ge	72	2	H2	100.5130033	1567778.290
In	115	1	He	97.23711512	5960821.007
Tb	159	1	He	99.41568643	14384073.533
Ir	193	1	He	97.76824397	7241076.767



Sample Name 10604943029\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 078SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:49:31  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.396006	2.0	959.197
Be	9	2	H2	0.080502	4.8	51.500
B	11	2	H2	-45.154392		13756.747
Na	23	1	He	10332.91920	10.1	8574407.163
Mg	24	1	He	13417.01363	10.1	6313056.157
Al	27	1	He	60.479921	10.5	14538.070
Si	28	2	H2	956.883123	0.8	2675112.083
K	39	1	He	1680.556929	10.0	1188712.510
Ca	43	1	He	38412.17132	9.8	76443.433
Ti	47	1	He	0.201046	20.7	46.000
V	51	1	He	0.224119	9.6	831.873
Cr	52	1	He	0.495876	15.0	5770.483
Mn	55	1	He	1.210154	9.9	6971.677
Fe	56	1	He	30.934677	10.2	225589.813
Co	59	1	He	0.069012	14.9	852.030
Ni	60	1	He	4.995183	11.3	14584.640
Cu	63	1	He	39.919426	10.5	321630.520
Zn	66	1	He	45.892757	9.9	84907.103
As	75	1	He	0.432793	9.8	855.863
Se	78	2	H2	0.172481	19.5	181.000
Sr	88	1	He	135.030065	9.1	1443133.833
Mo	95	1	He	1.209583	9.5	6913.027
Pd	105	1	He	0.099820	20.9	1021.713
Ag	107	1	He	0.038896	13.6	796.700
Cd	111	1	He	0.043357	24.3	165.753
Sn	118	1	He	0.107588	13.1	1066.713
Sb	121	1	He	0.211700	11.1	2760.303
Ba	138	1	He	21.847912	10.2	643805.233
Pt	195	1	He	0.008143	43.6	286.670
Hg	202	1	He	-0.004755		179.000
Tl	205	1	He	0.030321	14.4	1758.467
Pb	208	1	He	0.176556	11.3	13005.817
Bi	209	1	He	0.032897	15.8	3643.893
Th	232	1	He	0.027020	16.0	2556.943
U	238	1	He	0.365199	10.8	22354.313

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	86.69614812	522067.113
Sc	45	2	H2	98.13084566	4341892.000
Ge	72	1	He	88.55030131	441558.043
Ge	72	2	H2	99.29235314	1548738.873
In	115	1	He	89.56236122	5490343.923
Tb	159	1	He	91.53509790	13243861.470
Ir	193	1	He	90.12713182	6675147.817

Sample Name 10604943029\_B70039Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 079SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:53:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.377466	7.3	211.667
Be	9	2	H2	0.048678	13.8	39.333
B	11	2	H2	-68.810007		6132.743
Na	23	1	He	955.927353	0.6	884627.877
Mg	24	1	He	1233.049623	0.6	643552.113
Al	27	1	He	7.433726	2.0	2036.147
Si	28	2	H2	95.282662	0.4	278671.263
K	39	1	He	152.195706	0.6	182346.990
Ca	43	1	He	3520.314836	1.3	7730.517
Ti	47	1	He	0.022316	28.1	7.333
V	51	1	He	-0.026684		-784.533
Cr	52	1	He	0.092883	11.5	3106.337
Mn	55	1	He	0.130537	4.3	1070.710
Fe	56	1	He	3.363998	0.8	37034.063
Co	59	1	He	0.012202	10.9	212.667
Ni	60	1	He	0.472041	2.7	1704.103
Cu	63	1	He	3.702757	0.7	33238.487
Zn	66	1	He	4.408907	2.5	9196.267
As	75	1	He	0.048955	5.6	253.333
Se	78	2	H2	0.019737	54.8	57.000
Sr	88	1	He	12.344904	1.6	145726.320
Mo	95	1	He	0.126945	4.7	811.360
Pd	105	1	He	0.017142	32.1	351.677
Ag	107	1	He	0.020867	10.4	516.680
Cd	111	1	He	0.003782	41.5	35.520
Sn	118	1	He	0.023371	27.5	365.010
Sb	121	1	He	0.024764	3.1	390.010
Ba	138	1	He	1.989141	1.7	64831.217
Pt	195	1	He	0.000476	564.6	214.667
Hg	202	1	He	-0.012171		148.333
Tl	205	1	He	0.006542	47.7	791.697
Pb	208	1	He	0.018853	5.7	4003.603
Bi	209	1	He	0.003871	79.6	2383.593
Th	232	1	He	0.004367	45.2	1276.743
U	238	1	He	0.030908	8.4	2942.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.94666564	571750.103
Sc	45	2	H2	98.09264253	4340201.667
Ge	72	1	He	97.19411122	484660.593
Ge	72	2	H2	99.67605403	1554723.750
In	115	1	He	98.34277885	6028600.307
Tb	159	1	He	99.37961701	14378854.787
Ir	193	1	He	98.19863652	7272953.227

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 080\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 18:57:00  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	90.466740	11.2	30918.903
Be	9	2	H2	87.471055	11.3	30761.800
B	11	2	H2	19.751091	55.2	31953.640
Na	23	1	He	1041.427527	0.6	954964.673
Mg	24	1	He	1039.304790	0.6	538810.017
Al	27	1	He	1027.144962	0.3	268748.437
Si	28	2	H2	547.876501	10.8	1416621.373
K	39	1	He	1041.424946	0.5	831324.130
Ca	43	1	He	1048.220126	1.7	2292.457
Ti	47	1	He	81.455433	0.7	19679.780
V	51	1	He	81.833127	0.3	549768.873
Cr	52	1	He	83.665000	0.1	671627.770
Mn	55	1	He	81.323998	0.5	494071.917
Fe	56	1	He	527.863177	0.4	4028111.000
Co	59	1	He	84.985007	0.7	1084838.670
Ni	60	1	He	85.322390	0.4	270066.197
Cu	63	1	He	85.335576	0.7	753510.210
Zn	66	1	He	83.574992	0.2	169306.443
As	75	1	He	81.075876	0.2	144970.053
Se	78	2	H2	88.250137	11.1	66595.813
Sr	88	1	He	83.082936	0.3	972851.467
Mo	95	1	He	78.167726	0.6	489107.353
Pd	105	1	He	83.609922	1.1	783327.567
Ag	107	1	He	41.022124	1.9	819868.060
Cd	111	1	He	82.136931	0.3	306533.473
Sn	118	1	He	77.712333	1.2	745637.150
Sb	121	1	He	79.139509	0.8	1117811.130
Ba	138	1	He	80.179132	0.9	2591300.690
Pt	195	1	He	84.626140	0.4	1076598.747
Hg	202	1	He	3.955043	1.6	24824.410
Tl	205	1	He	43.157116	1.0	2023178.460
Pb	208	1	He	84.356595	0.1	5386662.130
Bi	209	1	He	82.522086	0.4	4558819.933
Th	232	1	He	77.660538	0.4	5235743.360
U	238	1	He	79.207417	0.9	5127729.717

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.18457382	567160.937
Sc	45	2	H2	91.03084098	4027745.583
Ge	72	1	He	96.48671506	481133.147
Ge	72	2	H2	92.50233711	1442829.793
In	115	1	He	97.62913928	5984852.837
Tb	159	1	He	98.22195617	14211357.290
Ir	193	1	He	98.50298328	7295494.270

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 081\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:00:45  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.143761	34.4	124.500
Be	9	2	H2	0.079529	25.1	50.833
B	11	2	H2	-72.300688		4981.987
Na	23	1	He	1.797520	8.8	13129.187
Mg	24	1	He	-5.460537		1818.460
Al	27	1	He	0.711275	18.0	261.333
Si	28	2	H2	-0.641115		11914.110
K	39	1	He	-2.693578		67582.167
Ca	43	1	He	3.740458	17.7	21.183
Ti	47	1	He	0.048811	30.2	13.667
V	51	1	He	0.025372	179.5	-427.760
Cr	52	1	He	0.075071	6.2	2938.970
Mn	55	1	He	0.058932	15.9	627.350
Fe	56	1	He	0.474179	14.4	14745.450
Co	59	1	He	0.064807	17.7	882.697
Ni	60	1	He	0.067987	20.2	414.010
Cu	63	1	He	0.057865	26.1	826.693
Zn	66	1	He	0.079173	22.6	370.007
As	75	1	He	0.047137	28.0	248.333
Se	78	2	H2	0.029827	8.6	65.333
Sr	88	1	He	0.067205	22.6	931.700
Mo	95	1	He	0.064807	20.0	418.677
Pd	105	1	He	0.043971	18.1	603.350
Ag	107	1	He	0.189972	17.7	3912.260
Cd	111	1	He	0.056017	19.1	231.257
Sn	118	1	He	0.058880	17.7	706.690
Sb	121	1	He	0.060296	11.1	893.370
Ba	138	1	He	0.058759	14.7	1981.830
Pt	195	1	He	0.056793	14.9	937.370
Hg	202	1	He	0.015000	15.9	318.667
Tl	205	1	He	0.073023	18.1	3935.623
Pb	208	1	He	0.051866	15.8	6122.240
Bi	209	1	He	0.058898	17.9	5507.910
Th	232	1	He	0.064310	12.7	5399.490
U	238	1	He	0.051346	18.0	4335.770

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.18623445	567170.937
Sc	45	2	H2	97.57447829	4317275.000
Ge	72	1	He	96.55170491	481457.220
Ge	72	2	H2	99.75221323	1555911.663
In	115	1	He	98.08108419	6012557.923
Tb	159	1	He	99.18134881	14350168.123
Ir	193	1	He	100.0409557	7409402.183

Sample Name 10604943037\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 082SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:04:30  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.552041	3.7	1013.533
Be	9	2	H2	0.049861	16.3	39.667
B	11	2	H2	-47.196645		13056.627
Na	23	1	He	9443.322911	1.7	8537742.580
Mg	24	1	He	12062.48151	2.2	6183237.200
Al	27	1	He	148.021803	2.1	38662.510
Si	28	2	H2	948.428674	1.2	2642925.250
K	39	1	He	1536.790930	1.1	1189737.847
Ca	43	1	He	34802.23575	1.4	75441.063
Ti	47	1	He	0.192820	7.5	48.333
V	51	1	He	0.235431	42.9	986.917
Cr	52	1	He	0.300085	4.3	4722.773
Mn	55	1	He	3.906363	2.2	23907.483
Fe	56	1	He	91.202874	1.5	702811.727
Co	59	1	He	0.258904	4.6	3328.390
Ni	60	1	He	0.799341	8.4	2700.927
Cu	63	1	He	155.659562	1.0	1361633.333
Zn	66	1	He	77.431330	1.3	155437.377
As	75	1	He	0.384046	1.4	842.193
Se	78	2	H2	0.123578	19.4	141.667
Sr	88	1	He	123.982587	1.0	1438399.870
Mo	95	1	He	1.093523	1.8	6750.287
Pd	105	1	He	0.102365	5.6	1130.053
Ag	107	1	He	0.076490	17.9	1598.440
Cd	111	1	He	0.033859	19.8	145.120
Sn	118	1	He	0.195366	4.8	1981.823
Sb	121	1	He	0.191881	7.2	2705.287
Ba	138	1	He	19.945874	0.5	635087.697
Pt	195	1	He	0.010317	53.4	338.670
Hg	202	1	He	0.004905	67.5	254.000
Tl	205	1	He	0.023570	28.3	1586.777
Pb	208	1	He	0.580300	1.8	40009.807
Bi	209	1	He	0.148316	6.2	10187.400
Th	232	1	He	0.025530	22.3	2658.627
U	238	1	He	0.325779	1.5	21658.147

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.88061612	565330.563
Sc	45	2	H2	97.81150943	4327762.667
Ge	72	1	He	95.61100052	476766.377
Ge	72	2	H2	99.47815987	1551637.043
In	115	1	He	96.17539254	5895735.383
Tb	159	1	He	98.77507863	14291386.453
Ir	193	1	He	96.81535912	7170502.600

Sample Name 10604943038\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 083SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:08:14  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.385899	1.9	964.863
Be	9	2	H2	0.056768	26.2	42.833
B	11	2	H2	-48.408960		12834.270
Na	23	1	He	9222.885629	0.7	8485043.413
Mg	24	1	He	12126.56877	0.8	6325406.783
Al	27	1	He	87.253376	0.3	23222.000
Si	28	2	H2	960.291411	0.1	2711320.083
K	39	1	He	1513.671118	0.5	1193404.540
Ca	43	1	He	34647.02045	0.8	76421.043
Ti	47	1	He	0.240829	28.6	61.000
V	51	1	He	0.246783	44.0	1079.257
Cr	52	1	He	0.394650	5.6	5573.743
Mn	55	1	He	1.099177	0.7	7041.707
Fe	56	1	He	24.241594	1.8	198363.080
Co	59	1	He	0.075616	2.4	1028.040
Ni	60	1	He	0.740331	3.3	2558.900
Cu	63	1	He	32.561494	0.2	289834.863
Zn	66	1	He	48.166076	0.1	98384.490
As	75	1	He	0.383702	3.7	855.527
Se	78	2	H2	0.157853	4.4	171.000
Sr	88	1	He	122.184904	0.7	1441223.050
Mo	95	1	He	1.117871	1.3	7007.073
Pd	105	1	He	0.096932	14.3	1096.720
Ag	107	1	He	0.026049	14.0	616.683
Cd	111	1	He	0.024987	9.6	114.407
Sn	118	1	He	0.114472	1.0	1236.733
Sb	121	1	He	0.182938	3.4	2621.933
Ba	138	1	He	20.074022	0.7	648958.010
Pt	195	1	He	0.006784	25.3	300.670
Hg	202	1	He	-0.002490		212.667
Tl	205	1	He	0.017122	3.0	1315.077
Pb	208	1	He	0.066700	4.9	7209.083
Bi	209	1	He	0.054188	2.5	5214.450
Th	232	1	He	0.014237	7.4	1963.503
U	238	1	He	0.326681	5.2	22287.560

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.51566743	575176.520
Sc	45	2	H2	99.10424559	4384961.000
Ge	72	1	He	97.19856055	484682.780
Ge	72	2	H2	100.2613222	1563852.627
In	115	1	He	97.64747237	5985976.690
Tb	159	1	He	101.0126630	14615133.947
Ir	193	1	He	99.37604655	7360156.557

Sample Name 10604943039\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 084SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:11:59  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.290324	4.5	916.697
Be	9	2	H2	0.045475	32.0	38.000
B	11	2	H2	-47.635383		12911.167
Na	23	1	He	9615.489514	0.8	8798616.743
Mg	24	1	He	12321.30547	0.7	6392769.280
Al	27	1	He	81.904349	1.3	21686.370
Si	28	2	H2	952.981025	0.9	2654769.000
K	39	1	He	1546.026089	1.6	1210863.630
Ca	43	1	He	35050.09060	1.3	76895.320
Ti	47	1	He	0.161745	6.2	41.333
V	51	1	He	0.151710	40.5	422.397
Cr	52	1	He	0.445369	2.9	5952.557
Mn	55	1	He	1.215971	1.4	7720.723
Fe	56	1	He	88.776443	1.1	692678.040
Co	59	1	He	0.120963	3.0	1605.427
Ni	60	1	He	1.654848	1.4	5454.367
Cu	63	1	He	74.941614	1.2	664257.997
Zn	66	1	He	75.960740	1.2	154479.913
As	75	1	He	0.387570	5.4	859.360
Se	78	2	H2	0.139857	14.8	154.667
Sr	88	1	He	121.348253	1.2	1426192.167
Mo	95	1	He	1.071631	2.5	6682.920
Pd	105	1	He	0.093087	2.8	1055.050
Ag	107	1	He	0.020547	20.1	503.350
Cd	111	1	He	0.030021	6.5	132.463
Sn	118	1	He	0.074184	15.8	845.033
Sb	121	1	He	0.192748	2.0	2745.297
Ba	138	1	He	19.394187	1.6	623582.397
Pt	195	1	He	0.005673	36.2	280.667
Hg	202	1	He	-0.003154		204.333
Tl	205	1	He	0.008210	22.3	868.370
Pb	208	1	He	0.173541	1.4	13944.527
Bi	209	1	He	0.055124	5.2	5197.773
Th	232	1	He	0.010907	21.4	1715.130
U	238	1	He	0.342306	1.3	23008.780

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.01060717	572135.147
Sc	45	2	H2	97.77995851	4326366.667
Ge	72	1	He	96.85900793	482989.593
Ge	72	2	H2	99.31329118	1549065.460
In	115	1	He	97.12834097	5954152.943
Tb	159	1	He	99.03801270	14329429.373
Ir	193	1	He	98.08326563	7264408.433

Sample Name 10604943040\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 085SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:15:44  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.515877	1.4	998.697
Be	9	2	H2	0.053090	6.6	40.833
B	11	2	H2	-47.807086		12839.103
Na	23	1	He	9837.320294	1.1	8939632.157
Mg	24	1	He	12552.75071	1.1	6467950.943
Al	27	1	He	76.383204	1.6	20090.143
Si	28	2	H2	965.947496	0.5	2687121.000
K	39	1	He	1580.774007	0.8	1228083.890
Ca	43	1	He	35737.20689	1.3	77865.533
Ti	47	1	He	0.180597	21.1	45.667
V	51	1	He	0.158881	48.2	472.707
Cr	52	1	He	0.376650	5.2	5360.327
Mn	55	1	He	1.234829	2.0	7780.743
Fe	56	1	He	90.311799	1.1	699641.397
Co	59	1	He	0.122848	7.1	1611.427
Ni	60	1	He	1.728420	0.7	5625.767
Cu	63	1	He	74.990343	1.1	657521.313
Zn	66	1	He	85.951932	1.2	172884.353
As	75	1	He	0.388399	3.3	851.693
Se	78	2	H2	0.140964	8.8	155.000
Sr	88	1	He	124.525713	1.4	1447711.593
Mo	95	1	He	1.109194	0.8	6853.667
Pd	105	1	He	0.093862	14.4	1051.717
Ag	107	1	He	0.013975	14.0	370.010
Cd	111	1	He	0.042489	6.3	177.100
Sn	118	1	He	0.089016	2.4	978.377
Sb	121	1	He	0.195313	8.1	2755.293
Ba	138	1	He	19.590081	1.4	624289.940
Pt	195	1	He	0.004794	19.5	269.333
Hg	202	1	He	-0.001644		213.667
Tl	205	1	He	0.013631	6.4	1123.393
Pb	208	1	He	0.181152	3.4	14423.027
Bi	209	1	He	0.054409	6.7	5111.090
Th	232	1	He	0.015940	17.3	2033.517
U	238	1	He	0.359930	2.3	23922.173

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.36017849	568218.393
Sc	45	2	H2	97.65065853	4320645.667
Ge	72	1	He	95.81072422	477762.303
Ge	72	2	H2	98.87275800	1542194.127
In	115	1	He	96.26391197	5901161.793
Tb	159	1	He	98.98761625	14322137.703
Ir	193	1	He	97.18585390	7197942.810



Sample Name 10604943041\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 086SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:19:28  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.504506	2.6	991.197
Be	9	2	H2	0.041098	47.7	36.167
B	11	2	H2	-47.288778		12962.877
Na	23	1	He	10007.53549	0.5	9110657.777
Mg	24	1	He	13100.88328	0.1	6762553.230
Al	27	1	He	52.704496	1.3	13911.807
Si	28	2	H2	1059.582468	0.7	2936711.167
K	39	1	He	1637.427823	0.7	1271882.380
Ca	43	1	He	37494.46344	0.5	81844.977
Ti	47	1	He	0.162723	18.5	41.333
V	51	1	He	0.242312	4.3	1034.953
Cr	52	1	He	0.376901	3.1	5372.997
Mn	55	1	He	2.734438	1.7	16933.803
Fe	56	1	He	68.877522	0.2	537220.417
Co	59	1	He	0.146307	2.4	1910.133
Ni	60	1	He	22.380428	0.1	70520.030
Cu	63	1	He	177.013044	1.1	1552441.750
Zn	66	1	He	2706.609203	0.2	5440519.833
As	75	1	He	0.386932	3.1	849.527
Se	78	2	H2	0.141334	6.1	154.667
Sr	88	1	He	131.174780	0.2	1525804.507
Mo	95	1	He	1.151296	2.9	7066.440
Pd	105	1	He	0.096673	5.8	1071.717
Ag	107	1	He	0.016056	20.6	408.343
Cd	111	1	He	0.212601	4.9	797.753
Sn	118	1	He	0.056175	15.8	663.357
Sb	121	1	He	0.546862	2.1	7602.110
Ba	138	1	He	20.482732	0.7	648437.480
Pt	195	1	He	0.005692	32.7	280.000
Hg	202	1	He	-0.007641		175.667
Tl	205	1	He	0.015785	10.3	1221.733
Pb	208	1	He	1.771134	0.2	116365.357
Bi	209	1	He	0.024637	9.6	3493.873
Th	232	1	He	0.010169	7.4	1651.787
U	238	1	He	0.327424	0.3	21875.237

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.52548059	569213.810
Sc	45	2	H2	97.33143907	4306521.500
Ge	72	1	He	95.85305900	477973.407
Ge	72	2	H2	98.50364766	1536436.830
In	115	1	He	95.62182536	5861800.657
Tb	159	1	He	98.70794196	14281672.707
Ir	193	1	He	97.30514591	7206778.017

Sample Name 10604943042\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 087SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:23:13  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.485390	4.7	987.533
Be	9	2	H2	0.048252	16.6	39.000
B	11	2	H2	-48.547576		12602.073
Na	23	1	He	9725.218547	0.7	8838363.617
Mg	24	1	He	12775.67877	0.6	6583248.237
Al	27	1	He	204.259265	0.8	53602.707
Si	28	2	H2	1021.070905	0.4	2839840.167
K	39	1	He	1589.562895	0.8	1234569.590
Ca	43	1	He	36575.14725	0.9	79696.307
Ti	47	1	He	0.256829	14.7	64.000
V	51	1	He	0.320176	15.0	1559.907
Cr	52	1	He	0.502117	5.1	6367.397
Mn	55	1	He	3.245236	1.1	20011.670
Fe	56	1	He	259.580653	0.7	1990162.957
Co	59	1	He	0.130506	1.5	1707.437
Ni	60	1	He	2.525759	2.7	8120.950
Cu	63	1	He	198.148576	1.0	1735203.710
Zn	66	1	He	118.727220	0.9	238505.223
As	75	1	He	0.424600	3.9	914.863
Se	78	2	H2	0.135747	22.5	150.333
Sr	88	1	He	127.042033	1.2	1475562.893
Mo	95	1	He	1.118930	2.2	6919.027
Pd	105	1	He	0.088683	11.0	1006.710
Ag	107	1	He	0.013440	15.1	360.010
Cd	111	1	He	0.054635	14.3	221.753
Sn	118	1	He	0.187432	2.9	1911.813
Sb	121	1	He	0.260682	1.2	3670.517
Ba	138	1	He	19.270545	1.8	614633.063
Pt	195	1	He	0.014838	9.3	395.343
Hg	202	1	He	-0.001416		213.667
Tl	205	1	He	0.017837	4.7	1313.413
Pb	208	1	He	0.802071	0.8	53999.633
Bi	209	1	He	0.061453	2.2	5494.553
Th	232	1	He	0.013845	13.0	1893.493
U	238	1	He	0.352606	4.4	23447.920

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.36272202	568233.710
Sc	45	2	H2	97.65425208	4320804.667
Ge	72	1	He	95.72143286	477317.050
Ge	72	2	H2	98.51866605	1536671.083
In	115	1	He	96.35691223	5906862.887
Tb	159	1	He	98.32296215	14225971.457
Ir	193	1	He	97.16175302	7196157.810

Sample Name 10604943043\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 088SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:26:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.468209	0.9	997.197
Be	9	2	H2	0.032360	4.3	33.500
B	11	2	H2	-49.636061		12454.120
Na	23	1	He	9464.780071	0.9	8740342.370
Mg	24	1	He	12405.04300	1.1	6495060.317
Al	27	1	He	76.919719	0.9	20559.117
Si	28	2	H2	1011.933809	0.3	2860680.833
K	39	1	He	1564.188433	0.7	1235557.897
Ca	43	1	He	35373.46610	0.8	78319.410
Ti	47	1	He	0.156282	11.2	40.333
V	51	1	He	0.281115	21.2	1316.327
Cr	52	1	He	0.724647	2.4	8281.687
Mn	55	1	He	2.389028	1.5	15041.070
Fe	56	1	He	91.772520	0.9	722250.833
Co	59	1	He	0.276547	3.0	3611.790
Ni	60	1	He	22.666664	0.9	72417.227
Cu	63	1	He	174.760812	1.5	1554018.877
Zn	66	1	He	1717.729847	0.3	3501239.750
As	75	1	He	0.418317	0.8	917.863
Se	78	2	H2	0.132657	18.4	149.333
Sr	88	1	He	122.650789	0.6	1446639.823
Mo	95	1	He	1.080814	1.0	6741.610
Pd	105	1	He	0.084779	9.2	978.377
Ag	107	1	He	0.018068	10.7	455.010
Cd	111	1	He	0.209687	6.0	799.810
Sn	118	1	He	0.507263	3.6	4980.923
Sb	121	1	He	0.394828	2.1	5587.833
Ba	138	1	He	19.423160	0.2	624824.833
Pt	195	1	He	0.005905	43.7	289.333
Hg	202	1	He	-0.007339		181.667
Tl	205	1	He	0.013311	17.8	1131.727
Pb	208	1	He	0.860072	2.1	59275.280
Bi	209	1	He	0.262028	3.9	16787.587
Th	232	1	He	0.011662	8.0	1788.473
U	238	1	He	0.322709	0.9	22033.783

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.87993431	577370.063
Sc	45	2	H2	99.25377719	4391577.167
Ge	72	1	He	97.19722562	484676.123
Ge	72	2	H2	99.74780854	1555842.960
In	115	1	He	97.16526619	5956416.530
Tb	159	1	He	101.0035917	14613821.447
Ir	193	1	He	99.37339118	7359959.890

Sample Name 10604943044\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 089SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:30:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.277512	2.3	910.197
Be	9	2	H2	0.031675	38.7	32.667
B	11	2	H2	-49.940657		12147.370
Na	23	1	He	9494.326699	0.5	8717172.370
Mg	24	1	He	12234.33377	0.6	6368940.530
Al	27	1	He	74.609415	0.1	19828.803
Si	28	2	H2	958.759484	0.8	2665550.833
K	39	1	He	1546.593973	0.9	1215386.937
Ca	43	1	He	34906.93233	0.2	76842.727
Ti	47	1	He	0.122908	39.6	32.000
V	51	1	He	0.281266	25.9	1306.207
Cr	52	1	He	0.435981	1.7	5896.537
Mn	55	1	He	2.779373	0.5	17353.627
Fe	56	1	He	122.936436	0.3	958129.480
Co	59	1	He	0.159950	5.8	2108.830
Ni	60	1	He	2.370502	1.8	7742.073
Cu	63	1	He	107.820949	0.6	957550.460
Zn	66	1	He	335.049118	0.3	682094.920
As	75	1	He	0.394219	2.5	873.197
Se	78	2	H2	0.129160	16.4	145.000
Sr	88	1	He	123.377984	0.5	1453087.320
Mo	95	1	He	1.139288	0.7	7087.780
Pd	105	1	He	0.082979	12.1	958.373
Ag	107	1	He	0.010069	21.3	295.007
Cd	111	1	He	0.108487	9.2	422.737
Sn	118	1	He	0.217986	3.4	2213.527
Sb	121	1	He	0.257140	4.0	3642.170
Ba	138	1	He	19.449162	0.6	624026.580
Pt	195	1	He	0.005548	10.5	280.000
Hg	202	1	He	-0.007286		179.000
Tl	205	1	He	0.013246	4.1	1110.060
Pb	208	1	He	0.276666	2.5	20652.920
Bi	209	1	He	0.024671	6.2	3520.540
Th	232	1	He	0.009476	18.2	1616.777
U	238	1	He	0.328331	0.5	22085.507

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.32705781	574040.750
Sc	45	2	H2	97.58873195	4317905.667
Ge	72	1	He	97.05448685	483964.353
Ge	72	2	H2	98.63020959	1538410.913
In	115	1	He	96.91492713	5941070.267
Tb	159	1	He	99.37864364	14378713.953
Ir	193	1	He	97.98095504	7256830.933

Sample Name 10604943045\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 090SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:34:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.389130	1.3	950.863
Be	9	2	H2	0.025535	41.7	30.333
B	11	2	H2	-50.024986		12114.007
Na	23	1	He	9370.464261	0.6	8559059.873
Mg	24	1	He	12244.18750	0.5	6341166.573
Al	27	1	He	207.348021	0.2	54685.923
Si	28	2	H2	966.032335	0.6	2684274.833
K	39	1	He	1536.556375	0.1	1201747.247
Ca	43	1	He	35041.17538	0.2	76738.950
Ti	47	1	He	0.219658	23.9	55.333
V	51	1	He	0.153620	59.4	434.907
Cr	52	1	He	0.457727	3.6	6041.263
Mn	55	1	He	2.029707	2.1	12680.187
Fe	56	1	He	57.345997	0.4	450607.117
Co	59	1	He	0.147793	2.0	1938.803
Ni	60	1	He	1.394547	1.2	4602.740
Cu	63	1	He	53.182799	0.4	469011.980
Zn	66	1	He	63.601478	0.4	128698.243
As	75	1	He	0.394244	2.0	866.863
Se	78	2	H2	0.136112	13.3	150.333
Sr	88	1	He	126.718542	0.5	1481458.520
Mo	95	1	He	1.098718	1.5	6825.643
Pd	105	1	He	0.081626	10.2	945.040
Ag	107	1	He	0.006385	35.3	221.667
Cd	111	1	He	0.033369	8.1	144.440
Sn	118	1	He	0.233741	6.0	2360.223
Sb	121	1	He	0.186886	2.9	2653.610
Ba	138	1	He	22.482771	1.0	720340.770
Pt	195	1	He	0.006376	29.8	290.000
Hg	202	1	He	-0.008450		171.333
Tl	205	1	He	0.008788	1.4	896.707
Pb	208	1	He	0.152621	3.2	12613.997
Bi	209	1	He	0.156157	1.7	10624.443
Th	232	1	He	0.003838	31.8	1225.070
U	238	1	He	0.329202	2.0	21900.187

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.83342103	571068.167
Sc	45	2	H2	97.53756342	4315641.667
Ge	72	1	He	96.34035587	480403.323
Ge	72	2	H2	98.49939256	1536370.460
In	115	1	He	96.77855465	5932710.373
Tb	159	1	He	99.16591022	14347934.373
Ir	193	1	He	96.90979361	7177496.767

Sample Name 10604943045\_B70039Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 091SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:38:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.321767	1.2	193.000
Be	9	2	H2	0.008708	32.7	24.333
B	11	2	H2	-73.469234		4679.390
Na	23	1	He	950.793646	1.1	893360.430
Mg	24	1	He	1233.620043	1.1	653663.543
Al	27	1	He	22.960232	2.6	6223.640
Si	28	2	H2	95.695142	0.7	282672.587
K	39	1	He	150.872473	1.6	184137.320
Ca	43	1	He	3490.518480	1.0	7782.060
Ti	47	1	He	0.039414	56.7	11.667
V	51	1	He	0.074956	46.1	-96.303
Cr	52	1	He	0.089282	0.5	3124.340
Mn	55	1	He	0.232276	4.6	1719.440
Fe	56	1	He	6.348434	1.5	60843.187
Co	59	1	He	0.016753	11.5	274.667
Ni	60	1	He	2.466533	2.2	8161.633
Cu	63	1	He	5.452878	2.1	49421.530
Zn	66	1	He	7.435421	4.3	15559.687
As	75	1	He	0.050105	6.1	258.667
Se	78	2	H2	0.003864	291.5	44.333
Sr	88	1	He	12.565302	1.2	150233.320
Mo	95	1	He	0.129889	6.1	841.360
Pd	105	1	He	0.011592	60.0	303.340
Ag	107	1	He	0.004981	40.8	200.000
Cd	111	1	He	0.005041	19.3	40.850
Sn	118	1	He	0.040532	12.0	538.350
Sb	121	1	He	0.024136	8.6	386.677
Ba	138	1	He	2.224207	1.7	73509.423
Pt	195	1	He	-0.001861		188.667
Hg	202	1	He	-0.011774		154.000
Tl	205	1	He	-0.000148		485.010
Pb	208	1	He	0.042296	5.3	5633.817
Bi	209	1	He	0.019307	8.1	3280.477
Th	232	1	He	-0.000014		996.717
U	238	1	He	0.031527	4.9	3025.380

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.39730097	580485.543
Sc	45	2	H2	99.09512611	4384557.500
Ge	72	1	He	98.44560603	490901.200
Ge	72	2	H2	100.3868340	1565810.330
In	115	1	He	99.75014248	6114874.387
Tb	159	1	He	101.4923046	14684531.447
Ir	193	1	He	99.64898170	7380371.140

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 092\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:41:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.830462	0.7	30860.950
Be	9	2	H2	81.690171	0.4	30579.770
B	11	2	H2	8.292056	1.2	30365.713
Na	23	1	He	1032.739223	0.7	953687.590
Mg	24	1	He	1032.948661	0.7	539260.550
Al	27	1	He	1022.697881	0.4	269441.343
Si	28	2	H2	511.489271	0.2	1408007.670
K	39	1	He	1029.531517	0.7	828313.243
Ca	43	1	He	1012.312611	0.4	2229.830
Ti	47	1	He	79.326108	0.4	19297.943
V	51	1	He	80.585312	0.4	545123.103
Cr	52	1	He	82.268562	0.6	665010.253
Mn	55	1	He	80.065308	0.6	489790.877
Fe	56	1	He	521.423958	0.2	4006685.500
Co	59	1	He	83.384404	0.5	1073140.790
Ni	60	1	He	84.325617	0.1	269101.750
Cu	63	1	He	83.502925	0.3	743374.957
Zn	66	1	He	82.198658	0.4	167887.453
As	75	1	He	79.532382	0.5	143379.960
Se	78	2	H2	82.484057	1.4	65773.110
Sr	88	1	He	81.588480	0.4	963190.117
Mo	95	1	He	77.979781	0.6	489272.907
Pd	105	1	He	82.717879	1.0	777079.287
Ag	107	1	He	40.792851	1.3	817525.223
Cd	111	1	He	81.086716	0.9	303436.920
Sn	118	1	He	77.210694	0.3	742864.937
Sb	121	1	He	78.156109	0.6	1106986.807
Ba	138	1	He	78.626928	0.3	2548106.890
Pt	195	1	He	82.906587	0.6	1065130.957
Hg	202	1	He	3.886067	1.4	24635.720
Tl	205	1	He	42.404794	0.6	2007496.483
Pb	208	1	He	82.965610	0.2	5350157.030
Bi	209	1	He	80.397234	1.4	4505813.580
Th	232	1	He	76.419081	1.2	5226738.360
U	238	1	He	77.614192	1.0	5097652.110

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.83722665	571091.083
Sc	45	2	H2	96.19140993	4256079.833
Ge	72	1	He	97.27747126	485076.270
Ge	72	2	H2	97.12251781	1514894.290
In	115	1	He	97.89581889	6001200.807
Tb	159	1	He	99.19160088	14351651.457
Ir	193	1	He	99.93584629	7401617.390

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 093\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:45:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.096948	28.1	107.500
Be	9	2	H2	0.049454	9.5	39.500
B	11	2	H2	-76.279498		3714.957
Na	23	1	He	1.669145	36.9	13154.203
Mg	24	1	He	-5.233475		1956.810
Al	27	1	He	0.545385	11.8	220.333
Si	28	2	H2	-0.637277		11949.473
K	39	1	He	-1.891153		68923.450
Ca	43	1	He	2.632288	55.1	18.967
Ti	47	1	He	0.044059	28.2	12.667
V	51	1	He	0.071719	78.3	-116.387
Cr	52	1	He	0.061062	30.1	2857.617
Mn	55	1	He	0.039700	20.7	516.010
Fe	56	1	He	0.349260	20.5	13945.990
Co	59	1	He	0.055423	15.8	764.690
Ni	60	1	He	0.039536	22.6	324.670
Cu	63	1	He	0.049062	17.0	750.690
Zn	66	1	He	0.117927	27.0	449.343
As	75	1	He	0.039030	3.8	234.333
Se	78	2	H2	0.008794	110.5	47.667
Sr	88	1	He	0.054806	16.1	788.363
Mo	95	1	He	0.054597	12.8	357.340
Pd	105	1	He	0.039210	25.6	563.350
Ag	107	1	He	0.197072	17.4	4087.310
Cd	111	1	He	0.046546	12.1	197.270
Sn	118	1	He	0.047696	15.3	603.350
Sb	121	1	He	0.045963	15.3	695.023
Ba	138	1	He	0.048235	21.8	1651.783
Pt	195	1	He	0.049476	10.5	856.033
Hg	202	1	He	0.016033	54.5	329.673
Tl	205	1	He	0.067155	20.3	3710.560
Pb	208	1	He	0.041327	2.9	5525.470
Bi	209	1	He	0.048628	14.7	4954.357
Th	232	1	He	0.057199	9.7	4935.987
U	238	1	He	0.044376	19.9	3895.637

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.23242945	573470.917
Sc	45	2	H2	97.77650810	4326214.000
Ge	72	1	He	96.72627882	482327.737
Ge	72	2	H2	98.74446249	1540193.003
In	115	1	He	98.88863236	6062062.170
Tb	159	1	He	100.6779990	14566712.697
Ir	193	1	He	100.4267582	7437976.140



Sample Name 10604943030\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 094SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:49:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.679832	3.3	1062.707
Be	9	2	H2	0.034325	24.3	33.833
B	11	2	H2	-49.935494		12199.580
Na	23	1	He	9763.491813	0.4	8877408.200
Mg	24	1	He	12481.81360	0.7	6434917.820
Al	27	1	He	346.017359	0.6	90795.053
Si	28	2	H2	979.391332	1.0	2733961.333
K	39	1	He	1577.152850	0.4	1226073.707
Ca	43	1	He	35812.13521	0.3	78072.720
Ti	47	1	He	0.319798	10.5	79.333
V	51	1	He	0.242314	46.4	1035.083
Cr	52	1	He	0.445730	0.9	5917.877
Mn	55	1	He	6.237365	0.4	38233.107
Fe	56	1	He	214.947111	0.8	1650664.083
Co	59	1	He	0.351111	2.1	4527.387
Ni	60	1	He	3.189866	1.5	10266.297
Cu	63	1	He	342.322842	0.3	3015407.167
Zn	66	1	He	293.748440	0.3	593301.623
As	75	1	He	0.411071	0.6	896.363
Se	78	2	H2	0.148905	6.7	161.667
Sr	88	1	He	126.560567	0.3	1478763.727
Mo	95	1	He	1.110369	0.8	6872.337
Pd	105	1	He	0.102558	7.2	1135.057
Ag	107	1	He	0.066393	10.0	1405.083
Cd	111	1	He	0.055772	3.7	226.430
Sn	118	1	He	1.119270	1.3	10740.850
Sb	121	1	He	0.241012	3.2	3398.777
Ba	138	1	He	21.802951	0.7	695962.490
Pt	195	1	He	0.014439	3.6	394.010
Hg	202	1	He	0.006393	60.8	264.667
Tl	205	1	He	0.019949	18.0	1425.090
Pb	208	1	He	10.979436	0.6	711053.950
Bi	209	1	He	0.344907	0.4	21193.960
Th	232	1	He	0.024264	1.9	2618.623
U	238	1	He	0.359119	0.6	24162.507

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.40531004	568490.167
Sc	45	2	H2	97.99618172	4335933.667
Ge	72	1	He	96.28466642	480125.627
Ge	72	2	H2	99.03744783	1544762.920
In	115	1	He	96.41633990	5910505.917
Tb	159	1	He	99.28263698	14364823.120
Ir	193	1	He	98.37035810	7285671.560

Sample Name 10604943031\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 095SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:53:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.717918	3.8	1075.873
Be	9	2	H2	0.030049	16.8	32.167
B	11	2	H2	-49.629150		12286.150
Na	23	1	He	9935.504429	0.9	8881507.990
Mg	24	1	He	13007.09960	0.8	6592711.153
Al	27	1	He	735.918227	0.8	189770.900
Si	28	2	H2	1026.452196	0.5	2861868.167
K	39	1	He	1638.049846	0.2	1249342.873
Ca	43	1	He	37315.38548	0.6	79979.780
Ti	47	1	He	0.681299	11.3	164.000
V	51	1	He	0.254272	34.4	1095.210
Cr	52	1	He	0.556294	3.1	6689.537
Mn	55	1	He	27.210591	0.4	163088.747
Fe	56	1	He	497.759686	0.2	3743810.667
Co	59	1	He	0.441486	1.7	5578.410
Ni	60	1	He	70.144770	0.8	217683.760
Cu	63	1	He	629.078931	0.1	5443263.333
Zn	66	1	He	612.193905	0.2	1214437.127
As	75	1	He	0.491784	4.7	1021.873
Se	78	2	H2	0.154357	11.2	165.333
Sr	88	1	He	133.676017	0.8	1534322.687
Mo	95	1	He	1.161313	0.1	7081.777
Pd	105	1	He	0.101815	5.8	1111.723
Ag	107	1	He	0.063420	0.6	1326.740
Cd	111	1	He	0.152217	3.4	573.400
Sn	118	1	He	5.067160	0.6	47438.470
Sb	121	1	He	0.407600	4.4	5637.847
Ba	138	1	He	24.385412	1.1	767012.697
Pt	195	1	He	0.006299	12.6	285.333
Hg	202	1	He	-0.001171		214.333
Tl	205	1	He	0.026481	14.7	1711.793
Pb	208	1	He	3.155050	0.3	203404.220
Bi	209	1	He	0.973388	1.9	54679.850
Th	232	1	He	0.012773	5.4	1806.810
U	238	1	He	0.379622	1.3	24957.343

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.81653778	558922.893
Sc	45	2	H2	97.89856072	4331614.333
Ge	72	1	He	94.58464391	471648.427
Ge	72	2	H2	98.64407418	1538627.170
In	115	1	He	95.00315786	5823875.157
Tb	159	1	He	97.87619054	14161329.790
Ir	193	1	He	96.32273130	7134016.767

Sample Name 10604943032\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 096SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 19:56:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.297058	2.9	919.197
Be	9	2	H2	0.022327	42.4	29.167
B	11	2	H2	-51.912814		11537.563
Na	23	1	He	9753.191170	7.1	8481301.333
Mg	24	1	He	12747.99645	7.0	6285700.740
Al	27	1	He	81.382585	6.5	20484.343
Si	28	2	H2	960.682244	2.0	2676197.000
K	39	1	He	1600.105088	7.4	1188703.470
Ca	43	1	He	36349.04248	7.1	75786.373
Ti	47	1	He	0.301775	8.2	72.000
V	51	1	He	0.220227	59.4	875.807
Cr	52	1	He	0.722534	9.7	7783.413
Mn	55	1	He	1.001250	5.4	6091.280
Fe	56	1	He	19.155106	6.9	150453.630
Co	59	1	He	0.065446	4.9	852.030
Ni	60	1	He	20.418317	6.7	61911.333
Cu	63	1	He	61.032682	6.8	515093.033
Zn	66	1	He	122.153047	7.4	236325.843
As	75	1	He	0.411623	8.6	859.527
Se	78	2	H2	0.149599	8.3	160.667
Sr	88	1	He	128.451541	7.1	1437157.060
Mo	95	1	He	1.134395	6.9	6808.310
Pd	105	1	He	0.091447	8.2	1001.713
Ag	107	1	He	0.023558	6.4	543.350
Cd	111	1	He	0.029866	21.2	126.440
Sn	118	1	He	10.236419	7.0	94176.113
Sb	121	1	He	0.235966	3.6	3232.070
Ba	138	1	He	20.771265	6.6	643081.553
Pt	195	1	He	0.005056	48.1	264.003
Hg	202	1	He	-0.003698		192.667
Tl	205	1	He	0.011383	10.0	983.383
Pb	208	1	He	0.516042	8.9	34569.173
Bi	209	1	He	0.087547	7.4	6725.153
Th	232	1	He	0.008866	15.7	1520.107
U	238	1	He	0.339556	7.4	21970.297

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.56243931	545349.157
Sc	45	2	H2	97.80088322	4327292.500
Ge	72	1	He	92.47352393	461121.280
Ge	72	2	H2	98.20517820	1531781.373
In	115	1	He	93.75313006	5747246.063
Tb	159	1	He	95.47664056	13814148.127
Ir	193	1	He	94.66810243	7011468.850

Sample Name 10604943033\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 097SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:00:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.532075	5.6	1013.203
Be	9	2	H2	0.019211	46.6	28.167
B	11	2	H2	-51.047334		11904.513
Na	23	1	He	9440.815996	0.6	8600354.457
Mg	24	1	He	12084.16258	0.9	6241651.160
Al	27	1	He	379.371170	0.7	99725.547
Si	28	2	H2	944.005930	3.7	2649547.583
K	39	1	He	1534.993322	1.1	1197356.910
Ca	43	1	He	34645.35564	0.7	75669.793
Ti	47	1	He	0.342614	13.4	85.000
V	51	1	He	0.282164	25.3	1301.953
Cr	52	1	He	0.392736	2.9	5503.050
Mn	55	1	He	6.584364	0.5	40419.593
Fe	56	1	He	196.837466	0.9	1515395.793
Co	59	1	He	0.358084	2.0	4602.073
Ni	60	1	He	2.738271	0.8	8813.350
Cu	63	1	He	347.396736	1.1	3050422.500
Zn	66	1	He	196.368116	0.5	395443.937
As	75	1	He	0.391895	5.7	859.360
Se	78	2	H2	0.105755	4.9	127.667
Sr	88	1	He	125.010777	1.1	1456038.677
Mo	95	1	He	1.061778	2.6	6632.893
Pd	105	1	He	0.092463	9.4	1051.713
Ag	107	1	He	0.020702	8.3	508.347
Cd	111	1	He	0.041861	5.5	176.807
Sn	118	1	He	0.728447	3.2	7105.207
Sb	121	1	He	0.201441	1.0	2873.650
Ba	138	1	He	21.342008	1.7	687529.313
Pt	195	1	He	0.005175	41.7	277.333
Hg	202	1	He	-0.007993		176.000
Tl	205	1	He	0.007106	25.7	825.037
Pb	208	1	He	2.272358	0.8	150740.723
Bi	209	1	He	0.354553	1.0	21931.840
Th	232	1	He	0.005002	19.0	1335.080
U	238	1	He	0.328436	0.5	22391.010

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.58278292	569558.873
Sc	45	2	H2	98.58623956	4362041.333
Ge	72	1	He	95.98398860	478626.290
Ge	72	2	H2	99.85074785	1557448.583
In	115	1	He	97.31968313	5965882.583
Tb	159	1	He	100.1921400	14496415.617
Ir	193	1	He	99.30369891	7354798.223

Sample Name 10604943033\_B70039Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 098SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:04:23  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.327231	10.9	192.667
Be	9	2	H2	0.007785	193.3	23.667
B	11	2	H2	-75.131750		4088.220
Na	23	1	He	991.783738	7.0	890338.193
Mg	24	1	He	1261.952790	6.5	639222.830
Al	27	1	He	41.618067	7.4	10722.860
Si	28	2	H2	95.001746	0.5	277329.320
K	39	1	He	160.073963	10.1	182649.300
Ca	43	1	He	3608.403334	6.5	7691.283
Ti	47	1	He	0.057156	18.2	15.333
V	51	1	He	0.083230	61.6	-25.643
Cr	52	1	He	0.103485	21.4	3100.337
Mn	55	1	He	0.723037	8.8	4557.390
Fe	56	1	He	21.279224	6.6	169376.680
Co	59	1	He	0.046013	18.8	628.013
Ni	60	1	He	0.304120	9.0	1138.047
Cu	63	1	He	36.234313	6.0	313893.180
Zn	66	1	He	20.940537	5.9	41750.410
As	75	1	He	0.055931	25.7	258.500
Se	78	2	H2	-0.000280		40.333
Sr	88	1	He	12.847891	5.9	147638.540
Mo	95	1	He	0.132892	6.4	823.363
Pd	105	1	He	0.015330	51.4	323.340
Ag	107	1	He	0.012211	22.7	331.677
Cd	111	1	He	0.007939	25.1	49.850
Sn	118	1	He	0.093915	9.3	1015.050
Sb	121	1	He	0.024311	7.1	373.343
Ba	138	1	He	2.195442	6.4	69409.907
Pt	195	1	He	0.000635	385.2	212.000
Hg	202	1	He	-0.008687		167.000
Tl	205	1	He	0.000054	1094.8	476.680
Pb	208	1	He	0.244944	4.7	18238.187
Bi	209	1	He	0.041244	9.5	4360.797
Th	232	1	He	0.000905	83.1	1025.050
U	238	1	He	0.034894	13.8	3133.737

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.38518856	556325.393
Sc	45	2	H2	97.89406313	4331415.333
Ge	72	1	He	94.78642917	472654.633
Ge	72	2	H2	99.05349158	1545013.167
In	115	1	He	95.59301587	5860034.580
Tb	159	1	He	97.56979746	14116998.953
Ir	193	1	He	96.50665800	7147639.057

Sample Name 10604943034\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 099SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:08:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.627827	0.0	1014.703
Be	9	2	H2	0.029229	16.1	31.000
B	11	2	H2	-50.311152		11742.220
Na	23	1	He	9855.434764	0.3	8863937.787
Mg	24	1	He	12542.31584	0.2	6396138.237
Al	27	1	He	326.722805	0.5	84809.160
Si	28	2	H2	996.141131	1.4	2703267.167
K	39	1	He	1605.242708	0.5	1233177.223
Ca	43	1	He	36139.99650	0.7	77934.927
Ti	47	1	He	0.285829	5.7	70.333
V	51	1	He	0.203634	45.7	764.087
Cr	52	1	He	0.639992	2.5	7394.547
Mn	55	1	He	5.491052	1.4	33325.807
Fe	56	1	He	163.652595	0.4	1245805.830
Co	59	1	He	0.331250	3.0	4220.623
Ni	60	1	He	1.208403	2.2	3961.887
Cu	63	1	He	237.515177	0.3	2065926.460
Zn	66	1	He	90.034266	0.2	179700.170
As	75	1	He	0.410016	1.2	883.197
Se	78	2	H2	0.123441	16.7	137.333
Sr	88	1	He	130.722879	0.9	1508147.890
Mo	95	1	He	1.120739	1.1	6927.033
Pd	105	1	He	0.087757	6.3	996.710
Ag	107	1	He	0.013211	9.2	355.010
Cd	111	1	He	0.047174	15.5	194.420
Sn	118	1	He	0.609333	2.9	5901.290
Sb	121	1	He	0.190710	0.7	2693.610
Ba	138	1	He	22.260101	0.4	709616.760
Pt	195	1	He	0.010339	5.0	338.677
Hg	202	1	He	-0.006778		180.667
Tl	205	1	He	0.015545	19.0	1208.397
Pb	208	1	He	0.320768	1.3	23296.260
Bi	209	1	He	0.321273	0.9	19688.143
Th	232	1	He	0.006197	11.5	1388.420
U	238	1	He	0.337547	1.1	22537.947

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.38208713	562328.520
Sc	45	2	H2	95.28350564	4215908.750
Ge	72	1	He	95.07117806	474074.540
Ge	72	2	H2	96.48709305	1504983.083
In	115	1	He	96.28853703	5902671.357
Tb	159	1	He	98.51962344	14254425.623
Ir	193	1	He	97.37238538	7211758.020

Sample Name 10604943035\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 100SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:11:52  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.192781	4.1	888.193
Be	9	2	H2	0.013433	55.3	26.000
B	11	2	H2	-53.643686		11071.383
Na	23	1	He	9168.194574	1.8	8253865.917
Mg	24	1	He	12065.25986	2.1	6158230.950
Al	27	1	He	49.476184	2.7	12915.917
Si	28	2	H2	936.388227	1.6	2629961.500
K	39	1	He	1519.512701	2.0	1172035.533
Ca	43	1	He	34531.99882	2.0	74531.983
Ti	47	1	He	0.142431	7.2	36.000
V	51	1	He	0.138133	43.4	326.827
Cr	52	1	He	0.576820	2.3	6900.970
Mn	55	1	He	0.786424	2.8	5005.537
Fe	56	1	He	11.629099	2.2	98869.040
Co	59	1	He	0.045505	3.8	626.687
Ni	60	1	He	0.650812	4.3	2223.510
Cu	63	1	He	11.075504	2.1	96628.927
Zn	66	1	He	25.434402	2.3	50909.367
As	75	1	He	0.371362	4.0	815.020
Se	78	2	H2	0.099381	12.1	121.333
Sr	88	1	He	121.821508	1.8	1405468.570
Mo	95	1	He	1.060133	3.2	6508.837
Pd	105	1	He	0.086526	14.0	978.377
Ag	107	1	He	0.005758	13.3	206.667
Cd	111	1	He	0.029665	6.4	129.160
Sn	118	1	He	0.032100	24.0	436.677
Sb	121	1	He	0.178015	2.7	2500.247
Ba	138	1	He	19.514845	2.0	617928.843
Pt	195	1	He	0.008720	27.9	316.670
Hg	202	1	He	-0.012289		145.667
Tl	205	1	He	0.019432	3.7	1386.753
Pb	208	1	He	0.050407	2.6	5967.203
Bi	209	1	He	0.016406	6.7	3007.077
Th	232	1	He	0.006461	13.6	1388.417
U	238	1	He	0.322078	3.2	21262.443

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.48765518	562964.230
Sc	45	2	H2	98.58411507	4361947.333
Ge	72	1	He	95.09350959	474185.897
Ge	72	2	H2	99.01185890	1544363.790
In	115	1	He	95.66443963	5864412.993
Tb	159	1	He	98.17759288	14204938.537
Ir	193	1	He	96.10360687	7117787.603

Sample Name 10604943036\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 101SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:15:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.372690	2.0	952.363
Be	9	2	H2	0.020936	41.0	28.833
B	11	2	H2	-52.431507		11433.653
Na	23	1	He	9402.730021	0.2	8629065.083
Mg	24	1	He	12166.17516	0.1	6330523.450
Al	27	1	He	93.906240	0.5	24925.423
Si	28	2	H2	961.828516	0.9	2693894.750
K	39	1	He	1541.521307	0.5	1211061.153
Ca	43	1	He	35008.17520	0.5	77027.793
Ti	47	1	He	0.155944	16.7	40.000
V	51	1	He	0.239013	65.0	1020.303
Cr	52	1	He	0.751356	3.0	8446.453
Mn	55	1	He	2.160810	1.8	13546.277
Fe	56	1	He	52.614840	0.3	416315.937
Co	59	1	He	0.154760	1.5	2024.147
Ni	60	1	He	0.706080	2.1	2424.210
Cu	63	1	He	93.180672	0.3	820069.207
Zn	66	1	He	45.303527	0.8	91571.813
As	75	1	He	0.386013	0.5	850.697
Se	78	2	H2	0.127001	10.0	143.667
Sr	88	1	He	124.431875	0.4	1452203.883
Mo	95	1	He	1.092440	0.8	6789.637
Pd	105	1	He	0.079261	8.5	923.373
Ag	107	1	He	0.007648	14.8	246.667
Cd	111	1	He	0.034278	11.5	147.777
Sn	118	1	He	0.092469	5.4	1016.713
Sb	121	1	He	0.181137	6.5	2573.597
Ba	138	1	He	20.068930	0.3	643303.467
Pt	195	1	He	0.004246	13.4	263.333
Hg	202	1	He	-0.009796		163.333
Tl	205	1	He	0.012816	6.8	1090.057
Pb	208	1	He	0.155079	2.2	12804.077
Bi	209	1	He	0.082427	5.9	6685.143
Th	232	1	He	0.005151	27.6	1325.080
U	238	1	He	0.328264	1.1	22060.490

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.27966392	573755.353
Sc	45	2	H2	98.31718665	4350136.833
Ge	72	1	He	96.17216049	479564.613
Ge	72	2	H2	98.85333449	1541891.163
In	115	1	He	96.82077085	5935298.307
Tb	159	1	He	99.41366196	14383780.620
Ir	193	1	He	97.88602269	7249799.893



Sample Name 4312082\_B70039Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 102SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:19:22  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	111.162480	0.2	40265.407
Be	9	2	H2	106.790173	1.1	39816.797
B	11	2	H2	59.950891	1.0	46504.197
Na	23	1	He	11655.31477	3.2	10295426.307
Mg	24	1	He	14434.47020	3.3	7230152.600
Al	27	1	He	2247.466190	3.0	572661.293
Si	28	2	H2	1489.575227	0.5	4059171.500
K	39	1	He	3721.215035	3.5	2718753.607
Ca	43	1	He	37666.15019	2.9	79794.390
Ti	47	1	He	106.317442	3.2	25016.520
V	51	1	He	109.443810	2.5	716399.450
Cr	52	1	He	111.162402	3.0	868442.520
Mn	55	1	He	108.687136	3.3	643033.083
Fe	56	1	He	2246.763050	3.2	16663040.000
Co	59	1	He	110.429309	3.3	1368922.500
Ni	60	1	He	111.554247	2.8	342878.543
Cu	63	1	He	201.932292	3.0	1731247.083
Zn	66	1	He	152.981655	3.1	300805.000
As	75	1	He	107.524788	3.4	186656.973
Se	78	2	H2	106.660296	1.5	85084.027
Sr	88	1	He	234.480300	3.2	2666146.527
Mo	95	1	He	108.486970	3.5	645100.997
Pd	105	1	He	21.433957	2.5	191003.780
Ag	107	1	He	51.092019	3.6	970378.057
Cd	111	1	He	109.714359	3.2	389117.517
Sn	118	1	He	105.255537	3.4	959712.563
Sb	121	1	He	107.745841	3.4	1446261.697
Ba	138	1	He	128.571960	3.4	3948893.067
Pt	195	1	He	21.486351	1.6	270008.707
Hg	202	1	He	-0.005107		188.000
Tl	205	1	He	112.115329	1.2	5188007.217
Pb	208	1	He	109.079241	1.8	6875507.030
Bi	209	1	He	105.550327	2.6	5679038.873
Th	232	1	He	108.634827	3.2	7132815.727
U	238	1	He	106.756385	2.5	6731794.273

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.78954081	552738.520
Sc	45	2	H2	95.82640473	4239929.833
Ge	72	1	He	93.76625456	467567.510
Ge	72	2	H2	97.16796235	1515603.123
In	115	1	He	92.83451694	5690933.323
Tb	159	1	He	96.98022541	14031696.040
Ir	193	1	He	95.97944009	7108591.353

Sample Name 10604943036\_B70039Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 103SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:23:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.382606	8.0	209.833
Be	9	2	H2	0.062081	13.0	43.667
B	11	2	H2	-74.825783		4122.063
Na	23	1	He	977.894649	0.6	889715.483
Mg	24	1	He	1261.985751	0.8	647636.867
Al	27	1	He	15.652174	4.2	4133.910
Si	28	2	H2	102.155574	2.3	292605.937
K	39	1	He	158.339451	2.1	183773.103
Ca	43	1	He	3591.337184	0.1	7755.847
Ti	47	1	He	0.104794	23.2	27.000
V	51	1	He	-0.011500		-668.783
Cr	52	1	He	0.183155	8.9	3771.830
Mn	55	1	He	0.329269	5.9	2249.517
Fe	56	1	He	8.691352	4.1	76626.633
Co	59	1	He	0.048175	39.5	668.687
Ni	60	1	He	0.141633	14.1	645.350
Cu	63	1	He	9.833985	0.7	86925.103
Zn	66	1	He	5.523330	1.2	11360.460
As	75	1	He	0.065454	33.5	280.333
Se	78	2	H2	-0.000670		39.667
Sr	88	1	He	12.745293	0.9	149039.480
Mo	95	1	He	0.171501	9.9	1084.043
Pd	105	1	He	0.020250	24.0	378.343
Ag	107	1	He	0.231466	33.3	4720.887
Cd	111	1	He	0.027872	56.0	125.137
Sn	118	1	He	0.057344	39.1	688.357
Sb	121	1	He	0.076192	21.2	1113.393
Ba	138	1	He	2.125563	2.2	68763.787
Pt	195	1	He	0.003440	114.0	252.000
Hg	202	1	He	-0.013593		139.000
Tl	205	1	He	0.044448	47.6	2578.637
Pb	208	1	He	0.165241	13.1	13416.017
Bi	209	1	He	0.030178	63.0	3837.313
Th	232	1	He	0.053631	33.3	4595.893
U	238	1	He	0.046414	37.8	3949.003

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.37786691	562303.107
Sc	45	2	H2	96.38503972	4264647.167
Ge	72	1	He	96.27936213	480099.177
Ge	72	2	H2	97.94233907	1527681.670
In	115	1	He	97.62243661	5984441.950
Tb	159	1	He	99.12388823	14341854.373
Ir	193	1	He	98.43311098	7290319.270

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 104\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:26:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.829290	0.8	30545.823
Be	9	2	H2	81.393755	0.6	30158.087
B	11	2	H2	6.356082	2.9	29451.580
Na	23	1	He	1021.661039	1.6	938791.810
Mg	24	1	He	1019.055442	1.5	529371.217
Al	27	1	He	1012.532180	1.4	265419.980
Si	28	2	H2	508.469105	0.2	1385516.880
K	39	1	He	1016.059522	1.6	814323.763
Ca	43	1	He	1007.506148	3.2	2207.953
Ti	47	1	He	78.306272	0.7	18955.840
V	51	1	He	79.151376	1.5	532710.417
Cr	52	1	He	81.325572	1.7	654093.710
Mn	55	1	He	78.959229	1.9	480569.053
Fe	56	1	He	515.529159	1.9	3941261.333
Co	59	1	He	82.163879	1.2	1056508.333
Ni	60	1	He	83.277283	1.2	265528.820
Cu	63	1	He	82.725550	1.5	735800.060
Zn	66	1	He	80.836226	0.9	164968.860
As	75	1	He	78.740778	1.0	141834.073
Se	78	2	H2	82.048745	0.6	64864.000
Sr	88	1	He	80.120086	0.6	945102.510
Mo	95	1	He	76.986125	1.7	483730.270
Pd	105	1	He	81.425239	1.6	766076.550
Ag	107	1	He	40.462562	3.0	811990.690
Cd	111	1	He	80.001310	1.7	299811.257
Sn	118	1	He	76.446063	2.0	736566.630
Sb	121	1	He	77.377585	1.7	1097520.400
Ba	138	1	He	77.333091	0.8	2510096.263
Pt	195	1	He	81.391576	1.8	1051042.250
Hg	202	1	He	3.872259	2.7	24672.443
Tl	205	1	He	41.826022	1.3	1990360.283
Pb	208	1	He	81.866041	1.8	5306402.810
Bi	209	1	He	80.512519	0.9	4478793.473
Th	232	1	He	76.398270	1.2	5186384.613
U	238	1	He	77.416849	1.2	5046763.883

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.38082291	568342.710
Sc	45	2	H2	95.21239366	4212762.333
Ge	72	1	He	97.20593509	484719.553
Ge	72	2	H2	96.29028345	1501913.293
In	115	1	He	98.05465179	6010937.567
Tb	159	1	He	99.71987644	14428085.617
Ir	193	1	He	99.18942510	7346334.683

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 105\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:30:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.130630	30.5	107.833
Be	9	2	H2	0.087887	27.4	48.500
B	11	2	H2	-76.756702		3210.513
Na	23	1	He	2.470313	66.9	13681.387
Mg	24	1	He	-3.621713		2751.957
Al	27	1	He	0.650283	71.1	244.337
Si	28	2	H2	-0.354071		11455.120
K	39	1	He	-2.558870		67408.180
Ca	43	1	He	7.887519	76.1	30.067
Ti	47	1	He	0.031021	91.5	9.333
V	51	1	He	0.058444	158.8	-204.507
Cr	52	1	He	0.036260	95.8	2617.577
Mn	55	1	He	0.034131	59.9	474.677
Fe	56	1	He	0.523851	59.5	15060.573
Co	59	1	He	0.045702	60.4	630.020
Ni	60	1	He	0.041378	63.8	325.337
Cu	63	1	He	0.057308	60.4	810.693
Zn	66	1	He	0.067962	31.9	342.670
As	75	1	He	0.031070	77.3	216.667
Se	78	2	H2	0.005847	96.2	41.000
Sr	88	1	He	0.058633	52.3	820.037
Mo	95	1	He	0.042191	45.4	272.670
Pd	105	1	He	0.030452	18.7	470.017
Ag	107	1	He	0.193801	24.1	3935.603
Cd	111	1	He	0.044779	57.1	186.620
Sn	118	1	He	0.042012	58.9	536.683
Sb	121	1	He	0.044375	60.0	658.360
Ba	138	1	He	0.042272	63.8	1426.770
Pt	195	1	He	0.023852	75.0	508.683
Hg	202	1	He	0.009250	74.5	279.667
Tl	205	1	He	0.071941	35.2	3843.960
Pb	208	1	He	0.032789	78.1	4840.397
Bi	209	1	He	0.039426	74.0	4350.873
Th	232	1	He	0.049037	48.4	4289.160
U	238	1	He	0.032726	80.8	3067.140

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.80379472	564867.960
Sc	45	2	H2	88.69112563	3924222.667
Ge	72	1	He	95.25731781	475002.730
Ge	72	2	H2	89.69555928	1399050.330
In	115	1	He	96.82308970	5935440.457
Tb	159	1	He	98.21845146	14210850.207
Ir	193	1	He	98.40531391	7288260.517

Sample Name 4310629\_B70030Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 106SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:34:21  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.083942	29.6	102.333
Be	9	2	H2	0.030018	9.6	32.000
B	11	2	H2	-76.772632		3544.583
Na	23	1	He	11.395076	8.8	21649.067
Mg	24	1	He	-1.013610		4067.260
Al	27	1	He	7.990932	6.6	2147.823
Si	28	2	H2	3.079680	3.0	22174.467
K	39	1	He	-0.473872		68672.103
Ca	43	1	He	21.323390	22.9	58.883
Ti	47	1	He	0.091420	47.2	23.667
V	51	1	He	0.054579	86.0	-233.413
Cr	52	1	He	0.169814	16.7	3666.470
Mn	55	1	He	0.116541	6.6	969.370
Fe	56	1	He	2.895945	9.1	32903.593
Co	59	1	He	0.032262	42.4	459.343
Ni	60	1	He	0.059980	49.9	382.670
Cu	63	1	He	0.075874	42.5	970.037
Zn	66	1	He	1.501345	0.7	3207.030
As	75	1	He	0.015628	80.9	189.333
Se	78	2	H2	-0.016017		27.333
Sr	88	1	He	0.058739	48.0	818.367
Mo	95	1	He	0.031559	37.7	208.000
Pd	105	1	He	0.015634	44.4	335.010
Ag	107	1	He	0.052381	18.4	1143.390
Cd	111	1	He	0.026015	46.3	117.963
Sn	118	1	He	0.240957	13.3	2451.903
Sb	121	1	He	0.028837	48.5	443.343
Ba	138	1	He	0.058796	27.6	1971.830
Pt	195	1	He	0.012506	57.6	366.673
Hg	202	1	He	-0.005795		187.333
Tl	205	1	He	0.027250	37.1	1760.140
Pb	208	1	He	0.020302	70.6	4066.947
Bi	209	1	He	0.026443	42.6	3633.910
Th	232	1	He	0.021606	57.7	2433.600
U	238	1	He	0.015756	89.5	1958.520

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.47619350	562895.210
Sc	45	2	H2	97.44554369	4311570.167
Ge	72	1	He	95.29577347	475194.490
Ge	72	2	H2	98.04353647	1529260.123
In	115	1	He	97.84514190	5998094.210
Tb	159	1	He	98.96716681	14319178.953
Ir	193	1	He	98.72278842	7311773.850

Sample Name 4310630\_B70030Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 107SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:38:05  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	109.508179	1.4	39155.170
Be	9	2	H2	106.512224	0.7	39202.367
B	11	2	H2	33.807501	4.4	37784.353
Na	23	1	He	2108.544208	1.2	1900000.490
Mg	24	1	He	2099.408132	1.2	1071418.003
Al	27	1	He	2077.343937	1.2	537313.230
Si	28	2	H2	530.231944	1.4	1434779.250
K	39	1	He	2089.110818	1.4	1579635.447
Ca	43	1	He	2055.680247	1.3	4433.130
Ti	47	1	He	102.711896	1.8	24532.367
V	51	1	He	104.184710	1.9	692146.227
Cr	52	1	He	106.813741	1.5	847098.440
Mn	55	1	He	103.624905	1.7	622340.687
Fe	56	1	He	2125.051881	1.6	15998866.667
Co	59	1	He	107.996141	1.1	1363016.127
Ni	60	1	He	109.425526	0.9	342399.727
Cu	63	1	He	106.884025	1.0	933059.957
Zn	66	1	He	106.878538	1.3	214009.887
As	75	1	He	103.182518	1.2	182370.813
Se	78	2	H2	106.207598	0.8	83636.570
Sr	88	1	He	105.206234	1.6	1217913.443
Mo	95	1	He	100.918018	0.8	619192.293
Pd	105	1	He	21.086165	1.7	193848.207
Ag	107	1	He	49.610907	1.6	972269.570
Cd	111	1	He	104.891398	0.8	383844.777
Sn	118	1	He	100.261167	0.5	943299.177
Sb	121	1	He	102.445411	0.5	1418913.000
Ba	138	1	He	102.766604	0.4	3256878.700
Pt	195	1	He	21.275792	1.1	270639.710
Hg	202	1	He	-0.002138		208.667
Tl	205	1	He	108.705394	1.1	5091429.087
Pb	208	1	He	106.491316	1.0	6794572.347
Bi	209	1	He	103.957927	1.3	5628291.377
Th	232	1	He	104.684391	1.5	6916868.023
U	238	1	He	102.231958	0.8	6486760.320

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.12833201	560800.457
Sc	45	2	H2	94.59535595	4185460.917
Ge	72	1	He	95.40581409	475743.210
Ge	72	2	H2	95.94451256	1496520.040
In	115	1	He	95.73596894	5868797.877
Tb	159	1	He	98.15658767	14201899.373
Ir	193	1	He	96.55149558	7150959.893

Sample Name 10606170001\_B70030Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 108SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:41:50  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	7.288612	1.5	2640.900
Be	9	2	H2	0.142152	4.1	71.500
B	11	2	H2	1053.228847	0.5	350433.343
Na	23	1	He	55764.23190	0.5	48241745.947
Mg	24	1	He	22727.19838	0.2	11156565.247
Al	27	1	He	82.266023	2.0	20615.003
Si	28	2	H2	2654.680486	0.6	7050827.667
K	39	1	He	7470.646601	0.4	5283579.713
Ca	43	1	He	50881.19655	0.5	105647.543
Ti	47	1	He	6.282279	1.8	1450.740
V	51	1	He	2.456071	1.3	15198.920
Cr	52	1	He	1.926545	2.6	16945.147
Mn	55	1	He	2066.084991	0.9	11977106.000
Fe	56	1	He	3567.063555	0.5	25925604.667
Co	59	1	He	0.385128	4.8	4753.453
Ni	60	1	He	1.184542	2.1	3773.167
Cu	63	1	He	0.747001	4.1	6606.850
Zn	66	1	He	8.259155	0.3	16183.020
As	75	1	He	4.533926	1.1	7901.490
Se	78	2	H2	0.154260	9.5	159.667
Sr	88	1	He	478.547884	0.5	5358621.587
Mo	95	1	He	3.867979	1.1	22918.397
Pd	105	1	He	0.351885	5.9	3298.750
Ag	107	1	He	0.263904	30.1	5074.343
Cd	111	1	He	0.096104	14.8	359.217
Sn	118	1	He	0.093606	17.8	980.047
Sb	121	1	He	0.151657	9.5	2061.833
Ba	138	1	He	70.044888	0.8	2142767.417
Pt	195	1	He	0.010082	35.9	326.673
Hg	202	1	He	-0.003537		196.000
Tl	205	1	He	0.074656	28.3	3878.963
Pb	208	1	He	0.295314	4.8	21123.193
Bi	209	1	He	0.041002	49.4	4274.123
Th	232	1	He	0.117886	10.1	8597.907
U	238	1	He	0.428480	2.3	27617.767

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.91897033	541474.313
Sc	45	2	H2	93.53337539	4138472.583
Ge	72	1	He	92.28316948	460172.073
Ge	72	2	H2	95.23477972	1485449.793
In	115	1	He	92.41168330	5665012.813
Tb	159	1	He	96.08914157	13902768.543
Ir	193	1	He	94.83956811	7024168.230

Sample Name 10606170001\_B70030Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 109SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:45:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.873038	3.7	385.840
Be	9	2	H2	0.060123	23.1	42.667
B	11	2	H2	41.224636	1.9	40600.610
Na	23	1	He	5783.733061	5.4	4991645.030
Mg	24	1	He	2349.380587	5.2	1152283.603
Al	27	1	He	10.496499	4.7	2684.257
Si	28	2	H2	258.136071	0.6	714342.667
K	39	1	He	779.938095	5.5	608522.843
Ca	43	1	He	5185.674129	5.0	10733.330
Ti	47	1	He	0.744715	19.2	172.000
V	51	1	He	0.353061	1.6	1690.190
Cr	52	1	He	0.270014	3.8	4285.310
Mn	55	1	He	209.523131	5.2	1209656.960
Fe	56	1	He	367.620508	5.0	2670156.000
Co	59	1	He	0.065681	6.0	860.027
Ni	60	1	He	0.147219	14.4	636.683
Cu	63	1	He	0.165958	4.9	1713.443
Zn	66	1	He	1.198016	5.1	2526.893
As	75	1	He	0.470324	3.6	963.863
Se	78	2	H2	0.009463	107.4	47.667
Sr	88	1	He	48.369492	4.9	543368.247
Mo	95	1	He	0.406528	5.3	2448.883
Pd	105	1	He	0.045975	9.9	593.353
Ag	107	1	He	0.065484	1.4	1348.413
Cd	111	1	He	0.024689	23.4	109.557
Sn	118	1	He	0.056472	8.1	651.687
Sb	121	1	He	0.039957	20.2	581.683
Ba	138	1	He	6.970210	5.4	215987.890
Pt	195	1	He	0.004698	35.7	257.333
Hg	202	1	He	-0.010391		152.000
Tl	205	1	He	0.037421	26.4	2166.873
Pb	208	1	He	0.050498	11.3	5778.850
Bi	209	1	He	0.024889	36.1	3410.507
Th	232	1	He	0.037519	20.2	3373.817
U	238	1	He	0.060843	9.3	4684.233

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.69770603	540141.903
Sc	45	2	H2	95.79992396	4238758.167
Ge	72	1	He	92.72196027	462360.113
Ge	72	2	H2	97.72131895	1524234.250
In	115	1	He	93.76290028	5747844.997
Tb	159	1	He	94.82970873	13720546.047
Ir	193	1	He	94.13266520	6971812.393



Sample Name 10606599001\_B70030Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 110SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:49:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	25.358537	1.8	9771.980
Be	9	2	H2	0.075460	31.3	51.167
B	11	2	H2	201.727741	1.9	96364.120
Na	23	1	He	213508.4140	1.8	189510643.840
Mg	24	1	He	41932.47728	2.0	21118023.850
Al	27	1	He	68.220717	2.1	17554.970
Si	28	2	H2	9797.339179	1.5	28157778.667
K	39	1	He	45815.37691	1.5	32901743.680
Ca	43	1	He	106885.0447	1.5	227733.397
Ti	47	1	He	0.325840	4.7	79.000
V	51	1	He	4.618389	1.6	29845.130
Cr	52	1	He	0.573740	2.4	6787.583
Mn	55	1	He	94.545211	2.2	562637.480
Fe	56	1	He	139.195463	2.0	1048602.207
Co	59	1	He	1.143872	2.3	14145.530
Ni	60	1	He	10.688241	1.8	32820.827
Cu	63	1	He	0.390235	2.2	3631.130
Zn	66	1	He	49.420400	2.1	96704.807
As	75	1	He	4.724272	2.0	8302.047
Se	78	2	H2	29.881067	1.3	25106.120
Sr	88	1	He	478.095409	1.8	5402540.543
Mo	95	1	He	53.210432	1.5	311591.937
Pd	105	1	He	0.346222	3.6	3210.390
Ag	107	1	He	0.061283	13.4	1235.067
Cd	111	1	He	0.011327	66.7	58.910
Sn	118	1	He	0.076848	10.4	818.363
Sb	121	1	He	1.367046	3.9	18098.433
Ba	138	1	He	106.399746	2.2	3217694.013
Pt	195	1	He	0.037340	13.4	660.683
Hg	202	1	He	-0.006471		176.333
Tl	205	1	He	0.334183	2.9	15651.000
Pb	208	1	He	0.256065	5.3	18518.377
Bi	209	1	He	0.007744	58.0	2483.603
Th	232	1	He	0.050902	18.4	4207.397
U	238	1	He	0.670957	2.2	42333.840

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.29878808	555805.107
Sc	45	2	H2	101.3547041	4484534.667
Ge	72	1	He	93.15492335	464519.093
Ge	72	2	H2	102.2432590	1594766.413
In	115	1	He	91.38689394	5602191.267
Tb	159	1	He	95.28982241	13787118.127
Ir	193	1	He	93.99062816	6961292.607

Sample Name 4315140\_B70030Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 111SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:53:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.518728	2.0	2183.490
Be	9	2	H2	0.053132	37.9	42.333
B	11	2	H2	-15.587391		24033.537
Na	23	1	He	44500.85157	1.2	41682418.550
Mg	24	1	He	8725.490662	0.9	4640230.347
Al	27	1	He	15.746637	0.1	4335.300
Si	28	2	H2	2028.731907	0.5	5838510.833
K	39	1	He	9434.547228	1.0	7205085.517
Ca	43	1	He	21882.60514	1.0	49199.473
Ti	47	1	He	0.093675	13.9	25.333
V	51	1	He	0.974976	13.8	6160.910
Cr	52	1	He	0.186744	1.4	3961.210
Mn	55	1	He	19.553000	0.8	122997.007
Fe	56	1	He	29.429395	1.0	242992.713
Co	59	1	He	0.237861	4.4	3160.350
Ni	60	1	He	2.201373	0.9	7321.190
Cu	63	1	He	0.135062	4.7	1541.420
Zn	66	1	He	10.449780	2.6	21827.710
As	75	1	He	0.943069	0.2	1889.620
Se	78	2	H2	5.892255	1.5	4969.863
Sr	88	1	He	94.787401	0.8	1134613.810
Mo	95	1	He	10.510843	1.0	65821.160
Pd	105	1	He	0.064322	6.9	791.697
Ag	107	1	He	0.026706	6.3	630.020
Cd	111	1	He	0.003660	34.6	34.820
Sn	118	1	He	0.023948	11.7	368.343
Sb	121	1	He	0.271384	6.9	3873.903
Ba	138	1	He	21.022050	1.5	679911.683
Pt	195	1	He	0.005063	37.2	273.333
Hg	202	1	He	-0.012446		146.333
Tl	205	1	He	0.071973	3.7	3888.933
Pb	208	1	He	0.057806	7.8	6508.967
Bi	209	1	He	0.001983	69.0	2270.230
Th	232	1	He	0.005133	9.3	1323.413
U	238	1	He	0.132530	2.1	9463.510

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.35242024	586237.083
Sc	45	2	H2	101.2934367	4481823.833
Ge	72	1	He	98.63776133	491859.387
Ge	72	2	H2	101.9262722	1589822.127
In	115	1	He	97.69498013	5988889.007
Tb	159	1	He	99.23387629	14357768.123
Ir	193	1	He	97.81570591	7244591.973

Sample Name 4310631\_B70030Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 112SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 20:56:51  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	127.220753	0.6	51329.960
Be	9	2	H2	102.408436	1.4	42539.170
B	11	2	H2	313.347497	0.5	140643.343
Na	23	1	He	224875.7955	0.3	211462516.847
Mg	24	1	He	45569.51327	0.8	24312771.307
Al	27	1	He	2153.746440	1.0	584747.917
Si	28	2	H2	10560.05860	0.5	31970022.667
K	39	1	He	49582.52952	0.8	37714160.270
Ca	43	1	He	113261.8096	1.0	255633.953
Ti	47	1	He	105.802204	1.0	26527.463
V	51	1	He	113.630733	1.0	792499.333
Cr	52	1	He	108.229515	0.7	901002.000
Mn	55	1	He	200.452627	0.7	1263513.670
Fe	56	1	He	2259.043810	0.8	17853354.667
Co	59	1	He	108.798810	1.2	1422640.710
Ni	60	1	He	118.160140	1.1	383044.760
Cu	63	1	He	105.391150	1.2	953192.687
Zn	66	1	He	137.561844	1.0	285328.873
As	75	1	He	112.528055	1.2	206045.520
Se	78	2	H2	139.007858	1.1	122323.143
Sr	88	1	He	594.811421	1.3	7133643.640
Mo	95	1	He	163.148308	0.9	997390.333
Pd	105	1	He	19.901539	1.3	182310.987
Ag	107	1	He	48.948750	0.7	955938.993
Cd	111	1	He	105.693956	1.0	385375.140
Sn	118	1	He	104.425117	0.9	978902.330
Sb	121	1	He	107.190437	0.7	1479276.020
Ba	138	1	He	214.689378	0.5	6779392.190
Pt	195	1	He	20.894322	1.2	267645.020
Hg	202	1	He	-0.001935		211.333
Tl	205	1	He	104.098973	0.8	4910114.927
Pb	208	1	He	103.690798	1.1	6662298.333
Bi	209	1	He	101.598774	0.7	5493050.750
Th	232	1	He	107.773660	0.8	7111381.143
U	238	1	He	106.464351	1.0	6745789.900

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.75587749	588666.623
Sc	45	2	H2	106.7685034	4724073.333
Ge	72	1	He	98.84869191	492911.197
Ge	72	2	H2	107.2141207	1672300.750
In	115	1	He	95.39311895	5847780.517
Tb	159	1	He	98.84602530	14301651.453
Ir	193	1	He	96.41345839	7140736.350

Sample Name 4310632\_B70030Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 113SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:00:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	123.577631	0.6	50964.097
Be	9	2	H2	99.529022	0.2	42260.223
B	11	2	H2	297.885858	1.0	138203.227
Na	23	1	He	208523.2048	0.3	203666910.300
Mg	24	1	He	42323.16735	0.8	23455169.650
Al	27	1	He	2063.368396	0.5	581915.353
Si	28	2	H2	9977.884101	0.6	30875960.000
K	39	1	He	46165.99930	0.5	36479750.293
Ca	43	1	He	105627.8326	0.8	247636.350
Ti	47	1	He	102.443011	1.1	26679.753
V	51	1	He	108.152198	1.1	783454.370
Cr	52	1	He	103.542046	1.0	895430.400
Mn	55	1	He	189.694038	0.9	1241979.503
Fe	56	1	He	2167.531413	1.0	17793238.000
Co	59	1	He	105.120342	1.5	1419830.540
Ni	60	1	He	113.657693	1.6	380588.530
Cu	63	1	He	101.619423	1.2	949398.020
Zn	66	1	He	132.969703	1.1	284903.757
As	75	1	He	108.244162	0.9	204750.120
Se	78	2	H2	133.533423	0.7	119659.323
Sr	88	1	He	556.831866	0.9	6898545.317
Mo	95	1	He	157.058696	0.8	982179.897
Pd	105	1	He	19.341700	1.0	181252.730
Ag	107	1	He	47.472315	0.7	948276.157
Cd	111	1	He	102.870463	1.1	383677.927
Sn	118	1	He	100.735963	0.7	965984.100
Sb	121	1	He	103.433760	0.5	1460161.227
Ba	138	1	He	204.501902	0.8	6605499.070
Pt	195	1	He	20.177227	0.5	263224.827
Hg	202	1	He	-0.001269		219.667
Tl	205	1	He	100.012614	1.7	4803614.093
Pb	208	1	He	99.919231	1.2	6537909.017
Bi	209	1	He	99.380115	1.3	5413121.167
Th	232	1	He	104.408219	1.2	6940379.900
U	238	1	He	103.042794	0.6	6577822.403

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.5357737	611428.413
Sc	45	2	H2	109.1220826	4828209.667
Ge	72	1	He	102.1065844	509156.750
Ge	72	2	H2	109.1760175	1702901.957
In	115	1	He	97.57699566	5981656.333
Tb	159	1	He	100.6606800	14564206.867
Ir	193	1	He	97.13379847	7194087.393

Sample Name 10606599001\_B70030Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 114SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:04:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.063568	4.1	1323.223
Be	9	2	H2	0.101678	8.3	65.333
B	11	2	H2	-43.824944		15561.653
Na	23	1	He	22758.21325	0.9	22812920.493
Mg	24	1	He	4431.903856	1.4	2524123.973
Al	27	1	He	12.235883	2.4	3622.777
Si	28	2	H2	1036.355437	1.1	3177145.750
K	39	1	He	4801.171497	0.5	3960610.773
Ca	43	1	He	10998.62671	0.5	26463.973
Ti	47	1	He	0.065795	13.8	19.667
V	51	1	He	0.550807	18.1	3437.060
Cr	52	1	He	0.130715	8.5	3742.493
Mn	55	1	He	9.818314	0.7	66226.323
Fe	56	1	He	15.209719	1.8	140315.613
Co	59	1	He	0.152437	6.8	2187.507
Ni	60	1	He	1.155162	2.0	4210.620
Cu	63	1	He	0.130139	5.9	1600.757
Zn	66	1	He	5.303731	0.2	11958.263
As	75	1	He	0.514548	4.5	1183.883
Se	78	2	H2	2.940565	1.4	2650.913
Sr	88	1	He	48.263302	0.5	617760.393
Mo	95	1	He	5.299157	0.4	35592.980
Pd	105	1	He	0.039548	2.9	600.020
Ag	107	1	He	0.194369	25.2	4272.387
Cd	111	1	He	0.026929	24.9	130.593
Sn	118	1	He	0.040133	12.2	561.683
Sb	121	1	He	0.161798	11.1	2493.580
Ba	138	1	He	10.418693	0.6	361399.930
Pt	195	1	He	0.007580	41.2	324.007
Hg	202	1	He	-0.010665		167.000
Tl	205	1	He	0.086442	21.1	4852.620
Pb	208	1	He	0.047827	23.9	6220.583
Bi	209	1	He	0.031089	40.4	4024.033
Th	232	1	He	0.058575	14.2	5101.043
U	238	1	He	0.092917	10.3	7198.717

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	104.1526915	627186.977
Sc	45	2	H2	107.6568560	4763379.333
Ge	72	1	He	105.4606341	525881.793
Ge	72	2	H2	108.0230024	1684917.497
In	115	1	He	104.7639519	6422230.490
Tb	159	1	He	105.1481686	15213484.357
Ir	193	1	He	101.8047389	7540034.473

Sample Name 4315140\_B70030Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 115SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:08:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.770305	2.1	391.173
Be	9	2	H2	0.063231	11.9	49.167
B	11	2	H2	-69.492340		6471.883
Na	23	1	He	4482.817456	1.6	4488542.120
Mg	24	1	He	863.791950	1.2	494392.063
Al	27	1	He	4.005088	11.6	1237.720
Si	28	2	H2	198.644014	3.5	619487.647
K	39	1	He	942.213405	1.5	836234.023
Ca	43	1	He	2164.930893	2.9	5202.977
Ti	47	1	He	0.029767	65.6	10.000
V	51	1	He	0.203339	24.7	847.030
Cr	52	1	He	0.095098	27.9	3415.743
Mn	55	1	He	2.039982	2.5	13948.673
Fe	56	1	He	4.157104	8.4	47141.230
Co	59	1	He	0.050573	31.4	762.023
Ni	60	1	He	0.240226	9.6	1042.710
Cu	63	1	He	0.107924	21.1	1379.407
Zn	66	1	He	1.191318	1.2	2850.290
As	75	1	He	0.112088	17.2	396.173
Se	78	2	H2	0.569355	5.5	545.010
Sr	88	1	He	9.323588	2.4	118901.977
Mo	95	1	He	1.042168	1.4	7063.100
Pd	105	1	He	0.007675	77.4	281.670
Ag	107	1	He	0.054451	12.0	1280.067
Cd	111	1	He	0.023701	49.9	118.393
Sn	118	1	He	0.035279	59.5	515.017
Sb	121	1	He	0.049095	20.1	790.027
Ba	138	1	He	2.046916	0.8	71612.717
Pt	195	1	He	0.003210	74.1	262.667
Hg	202	1	He	-0.010927		164.333
Tl	205	1	He	0.036349	44.4	2313.573
Pb	208	1	He	0.029023	46.3	4895.370
Bi	209	1	He	0.019970	75.0	3380.510
Th	232	1	He	0.029692	47.0	3078.753
U	238	1	He	0.032733	47.3	3162.110

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.7995929	625060.687
Sc	45	2	H2	107.4410208	4753829.500
Ge	72	1	He	104.9661565	523416.070
Ge	72	2	H2	107.3584228	1674551.540
In	115	1	He	105.5707897	6471691.187
Tb	159	1	He	104.5648227	15129082.273
Ir	193	1	He	101.7125378	7533205.720

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 116\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:11:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	85.019975	4.1	33493.847
Be	9	2	H2	82.162520	4.2	33305.493
B	11	2	H2	9.498767	45.9	33292.007
Na	23	1	He	1052.559414	0.6	1049049.673
Mg	24	1	He	1024.253004	0.8	577281.607
Al	27	1	He	1015.517767	0.3	288827.250
Si	28	2	H2	513.898817	4.3	1531758.043
K	39	1	He	1032.812619	0.4	896826.157
Ca	43	1	He	1007.312622	1.4	2395.290
Ti	47	1	He	79.376695	0.6	20845.377
V	51	1	He	79.518858	1.2	580676.450
Cr	52	1	He	81.207859	0.4	708704.623
Mn	55	1	He	78.912964	0.3	521153.300
Fe	56	1	He	516.164000	0.3	4281835.000
Co	59	1	He	83.253703	0.6	1142448.083
Ni	60	1	He	83.795792	0.7	285132.303
Cu	63	1	He	83.337324	0.5	791073.770
Zn	66	1	He	81.728014	0.4	177989.967
As	75	1	He	79.792428	0.3	153381.093
Se	78	2	H2	82.076944	2.9	70449.350
Sr	88	1	He	80.156904	0.9	1008987.143
Mo	95	1	He	77.818156	0.8	511678.580
Pd	105	1	He	82.222705	0.3	809529.363
Ag	107	1	He	40.941596	1.1	859879.417
Cd	111	1	He	80.452352	0.7	315510.720
Sn	118	1	He	76.481676	0.7	771161.943
Sb	121	1	He	77.518208	0.8	1150588.523
Ba	138	1	He	78.082200	0.6	2651890.587
Pt	195	1	He	82.233582	0.3	1095821.373
Hg	202	1	He	3.850556	0.2	25321.323
Tl	205	1	He	41.588474	0.5	2042178.250
Pb	208	1	He	81.166827	0.4	5429149.260
Bi	209	1	He	81.223167	0.6	4603778.890
Th	232	1	He	76.348903	0.7	5281105.130
U	238	1	He	77.411445	0.8	5141891.383

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.3797219	616510.503
Sc	45	2	H2	104.2766517	4613819.000
Ge	72	1	He	103.7256400	517230.207
Ge	72	2	H2	104.6191444	1631824.917
In	115	1	He	102.5944970	6289238.760
Tb	159	1	He	102.8845393	14885968.530
Ir	193	1	He	101.0653611	7485273.430

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 117\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:15:40  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.150170	8.6	134.667
Be	9	2	H2	0.065987	12.4	48.500
B	11	2	H2	-76.416177		3889.503
Na	23	1	He	16.661157	4.2	28811.160
Mg	24	1	He	-4.654653		2415.213
Al	27	1	He	0.271793	5.0	158.667
Si	28	2	H2	0.094243	1292.7	14795.283
K	39	1	He	-1.283696		74337.583
Ca	43	1	He	2.382025	13.5	19.767
Ti	47	1	He	0.019148	62.7	7.000
V	51	1	He	0.023166	254.6	-487.353
Cr	52	1	He	0.020283	75.2	2711.597
Mn	55	1	He	0.028534	7.3	480.010
Fe	56	1	He	0.253870	7.1	14163.540
Co	59	1	He	0.031171	11.4	484.677
Ni	60	1	He	0.019459	70.5	278.670
Cu	63	1	He	0.032267	7.7	640.687
Zn	66	1	He	0.013494	46.2	252.667
As	75	1	He	0.007857	66.6	190.167
Se	78	2	H2	0.005354	127.4	47.333
Sr	88	1	He	0.030154	27.0	533.347
Mo	95	1	He	0.035558	13.0	246.667
Pd	105	1	He	0.030486	28.5	498.347
Ag	107	1	He	0.145784	20.8	3187.073
Cd	111	1	He	0.022013	8.8	108.957
Sn	118	1	He	0.022968	21.9	378.343
Sb	121	1	He	0.023029	20.1	383.343
Ba	138	1	He	0.024012	18.7	898.370
Pt	195	1	He	0.020432	21.8	486.010
Hg	202	1	He	0.011266	35.2	304.333
Tl	205	1	He	0.045373	20.9	2716.973
Pb	208	1	He	0.015922	31.2	3930.253
Bi	209	1	He	0.021822	17.2	3490.517
Th	232	1	He	0.032585	13.3	3287.117
U	238	1	He	0.020193	20.5	2331.903

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.0875575	614751.147
Sc	45	2	H2	103.5922764	4583538.167
Ge	72	1	He	102.9905692	513564.760
Ge	72	2	H2	104.2699837	1626378.790
In	115	1	He	102.8818910	6306856.560
Tb	159	1	He	102.2274850	14790901.860
Ir	193	1	He	101.5476628	7520994.470



Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 118CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:19:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.577469	2.3	306.333
Be	9	2	H2	0.248009	9.2	123.667
B	11	2	H2	-67.070760		7175.700
Na	23	1	He	67.346616	0.7	77640.417
Mg	24	1	He	26.393949	2.2	19477.813
Al	27	1	He	31.826731	0.9	8994.383
Si	28	2	H2	99.511685	0.3	311390.167
K	39	1	He	103.382475	0.4	155440.613
Ca	43	1	He	107.657106	5.2	264.617
Ti	47	1	He	1.010399	6.1	263.333
V	51	1	He	0.988935	4.3	6480.790
Cr	52	1	He	2.066886	0.7	20207.237
Mn	55	1	He	0.520285	1.1	3671.140
Fe	56	1	He	53.391628	0.1	446952.407
Co	59	1	He	0.540946	1.2	7398.560
Ni	60	1	He	0.534823	1.3	2009.477
Cu	63	1	He	1.072560	1.3	10399.063
Zn	66	1	He	5.605926	1.7	12279.867
As	75	1	He	0.484419	3.4	1094.043
Se	78	2	H2	0.488442	2.4	464.677
Sr	88	1	He	0.519420	2.3	6618.243
Mo	95	1	He	0.485270	1.4	3189.697
Pd	105	1	He	0.500614	4.7	5105.960
Ag	107	1	He	0.463364	4.8	9793.470
Cd	111	1	He	0.086034	6.9	358.100
Sn	118	1	He	0.483603	7.4	5000.940
Sb	121	1	He	0.487766	2.0	7250.277
Ba	138	1	He	0.310906	2.5	10592.483
Pt	195	1	He	0.502284	2.4	6883.790
Hg	202	1	He	0.217197	1.5	1642.440
Tl	205	1	He	0.111823	2.6	5968.060
Pb	208	1	He	0.508712	2.1	36764.997
Bi	209	1	He	0.503808	2.3	30906.303
Th	232	1	He	0.499285	3.3	35690.713
U	238	1	He	0.482390	2.7	33150.613

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.8434356	607259.290
Sc	45	2	H2	105.1720370	4653436.167
Ge	72	1	He	102.5661565	511448.417
Ge	72	2	H2	105.1855851	1640660.127
In	115	1	He	102.1821114	6263958.730
Tb	159	1	He	102.5344223	14835311.447
Ir	193	1	He	101.4988816	7517381.557

Sample Name 4310648\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 119SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:23:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.170572	13.0	141.000
Be	9	2	H2	0.040144	8.1	37.667
B	11	2	H2	-78.012782		3307.530
Na	23	1	He	42.987114	47.0	52218.367
Mg	24	1	He	6.213938	82.5	8094.127
Al	27	1	He	4.548227	8.8	1308.727
Si	28	2	H2	0.143808	44.0	14781.360
K	39	1	He	6.099032	89.9	76571.230
Ca	43	1	He	33.577256	33.5	89.117
Ti	47	1	He	0.058830	30.7	16.667
V	51	1	He	0.028153	414.5	-420.180
Cr	52	1	He	0.164928	7.1	3783.827
Mn	55	1	He	0.146631	22.5	1200.057
Fe	56	1	He	3.045518	15.0	35501.953
Co	59	1	He	0.031607	45.2	467.343
Ni	60	1	He	0.182701	149.0	791.840
Cu	63	1	He	0.075654	22.6	1002.703
Zn	66	1	He	0.276935	14.3	785.357
As	75	1	He	0.039396	27.9	239.000
Se	78	2	H2	-0.001140		41.333
Sr	88	1	He	0.157784	46.7	2028.517
Mo	95	1	He	0.051961	42.8	346.670
Pd	105	1	He	0.020753	32.3	395.010
Ag	107	1	He	0.079452	17.5	1735.123
Cd	111	1	He	0.018557	72.7	93.270
Sn	118	1	He	0.814762	4.3	8194.150
Sb	121	1	He	0.022062	37.1	360.010
Ba	138	1	He	0.060835	46.2	2103.537
Pt	195	1	He	0.008497	29.3	322.003
Hg	202	1	He	0.004208	9.4	254.667
Tl	205	1	He	0.028409	44.1	1851.820
Pb	208	1	He	0.032217	47.1	4927.053
Bi	209	1	He	0.029894	52.4	3860.653
Th	232	1	He	0.026108	55.1	2767.010
U	238	1	He	0.020797	88.5	2310.267

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.43725475	586747.940
Sc	45	2	H2	102.3976020	4530678.667
Ge	72	1	He	98.40243767	490685.940
Ge	72	2	H2	103.1309345	1608612.167
In	115	1	He	100.5882126	6166249.690
Tb	159	1	He	100.6750415	14566284.780
Ir	193	1	He	99.59594738	7376443.223

Sample Name 4310649\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 120SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:26:55  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	49.753094	1.6	18927.617
Be	9	2	H2	47.917186	1.3	18736.063
B	11	2	H2	-27.016699		20060.097
Na	23	1	He	930.632057	2.1	877542.720
Mg	24	1	He	902.419083	2.3	481009.953
Al	27	1	He	887.549442	1.9	238465.827
Si	28	2	H2	240.727581	1.5	699307.790
K	39	1	He	925.416648	2.0	766508.607
Ca	43	1	He	917.072817	1.6	2061.163
Ti	47	1	He	44.475410	2.2	11034.130
V	51	1	He	44.401055	1.5	306013.280
Cr	52	1	He	45.924585	2.7	379635.417
Mn	55	1	He	44.834138	2.4	279813.510
Fe	56	1	He	920.678920	2.1	7205627.667
Co	59	1	He	46.639727	2.7	613736.397
Ni	60	1	He	47.308040	2.8	154448.747
Cu	63	1	He	46.180206	3.6	420474.220
Zn	66	1	He	45.416732	3.1	94939.423
As	75	1	He	44.265661	2.8	81667.017
Se	78	2	H2	48.567515	1.0	40607.247
Sr	88	1	He	45.007789	3.3	543314.573
Mo	95	1	He	43.522357	2.6	278744.607
Pd	105	1	He	9.301618	3.3	89371.083
Ag	107	1	He	23.030837	3.7	471194.133
Cd	111	1	He	44.453995	2.7	169820.303
Sn	118	1	He	43.470994	2.3	426997.037
Sb	121	1	He	43.316317	3.0	626264.690
Ba	138	1	He	43.789990	2.7	1448579.513
Pt	195	1	He	9.067084	2.5	118495.970
Hg	202	1	He	3.747797	3.1	24138.827
Tl	205	1	He	46.899855	1.5	2254788.040
Pb	208	1	He	45.614213	2.1	2988694.703
Bi	209	1	He	44.920267	1.7	2490433.817
Th	232	1	He	44.633533	2.5	3019260.580
U	238	1	He	43.601747	1.7	2832276.103

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.71195590	582380.333
Sc	45	2	H2	100.4291805	4443584.000
Ge	72	1	He	99.47016981	496010.210
Ge	72	2	H2	101.8072086	1587965.000
In	115	1	He	99.92658026	6125690.360
Tb	159	1	He	100.7248937	14573497.700
Ir	193	1	He	98.80330188	7317736.973

Sample Name 10606414001\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 121SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:30:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.568507	0.8	2229.833
Be	9	2	H2	0.489736	7.1	217.000
B	11	2	H2	-73.510486		4828.103
Na	23	1	He	210.840969	0.7	204322.143
Mg	24	1	He	3434.906268	0.5	1785943.200
Al	27	1	He	3858.547539	0.9	1018372.980
Si	28	2	H2	3306.040278	0.1	9622715.000
K	39	1	He	1188.688361	1.2	947463.423
Ca	43	1	He	9962.683438	0.3	21872.620
Ti	47	1	He	202.577467	0.5	49380.047
V	51	1	He	16.163817	0.5	109084.930
Cr	52	1	He	5.276422	1.2	44946.557
Mn	55	1	He	22479.10482	1.0	137732154.667
Fe	56	1	He	48242.81908	1.4	370444842.667
Co	59	1	He	3.794694	0.7	49432.700
Ni	60	1	He	2.842711	2.5	9368.357
Cu	63	1	He	3842.979361	1.4	34578409.333
Zn	66	1	He	15749.51534	1.4	32485240.667
As	75	1	He	520.296394	1.0	947480.670
Se	78	2	H2	0.283424	8.4	286.667
Sr	88	1	He	56.879943	0.4	678981.107
Mo	95	1	He	3.884871	0.9	25142.163
Pd	105	1	He	0.080199	5.1	971.707
Ag	107	1	He	19.820881	1.2	409637.547
Cd	111	1	He	3.671718	0.9	14186.940
Sn	118	1	He	3.677166	1.6	36614.543
Sb	121	1	He	9.519038	0.7	139036.337
Ba	138	1	He	192.611354	0.6	6435889.070
Pt	195	1	He	0.005137	83.4	280.003
Hg	202	1	He	0.692946	0.3	4684.830
Tl	205	1	He	0.326686	7.2	16306.793
Pb	208	1	He	1290.755696	0.5	85150179.980
Bi	209	1	He	4.181169	0.7	234661.820
Th	232	1	He	2.874946	1.0	196134.353
U	238	1	He	3.795952	0.7	248371.570

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.03138556	572260.270
Sc	45	2	H2	102.5396865	4536965.333
Ge	72	1	He	98.35430927	490445.947
Ge	72	2	H2	104.7988336	1634627.667
In	115	1	He	100.9311784	6187274.147
Tb	159	1	He	101.5251545	14689284.363
Ir	193	1	He	99.18766702	7346204.473

Sample Name 10606414001\_B69994Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 122SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:34:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.663018	8.3	329.833
Be	9	2	H2	0.064170	19.8	47.000
B	11	2	H2	-78.603676		3095.317
Na	23	1	He	28.291298	2.7	38892.213
Mg	24	1	He	351.739633	0.7	194204.730
Al	27	1	He	406.346091	0.6	111409.637
Si	28	2	H2	339.071510	0.2	993955.043
K	39	1	He	123.509862	2.4	167478.660
Ca	43	1	He	1065.264878	3.9	2439.833
Ti	47	1	He	21.266455	0.7	5382.990
V	51	1	He	1.757140	3.1	11752.940
Cr	52	1	He	0.590087	0.8	7393.877
Mn	55	1	He	2390.172486	0.7	15201912.333
Fe	56	1	He	5091.326766	0.7	40593505.333
Co	59	1	He	0.423546	2.9	5723.137
Ni	60	1	He	0.352681	5.7	1377.400
Cu	63	1	He	414.609750	0.4	3834869.167
Zn	66	1	He	1679.995161	0.3	3561987.333
As	75	1	He	54.852830	0.7	102827.563
Se	78	2	H2	0.018575	122.4	58.333
Sr	88	1	He	6.030753	1.7	74131.133
Mo	95	1	He	0.438789	2.8	2916.973
Pd	105	1	He	0.015500	15.8	353.343
Ag	107	1	He	2.063801	2.1	43741.157
Cd	111	1	He	0.398217	5.5	1594.900
Sn	118	1	He	0.397767	1.4	4183.997
Sb	121	1	He	1.022257	2.0	15316.823
Ba	138	1	He	19.936475	1.2	681851.603
Pt	195	1	He	0.000772	340.0	226.000
Hg	202	1	He	0.065376	5.1	658.353
Tl	205	1	He	0.046998	13.2	2803.657
Pb	208	1	He	135.709878	0.3	9069820.177
Bi	209	1	He	0.443256	4.6	27632.520
Th	232	1	He	0.294742	2.8	21621.287
U	238	1	He	0.394451	1.6	27459.100

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.65430057	594076.750
Sc	45	2	H2	101.9362866	4510267.333
Ge	72	1	He	101.1047545	504161.103
Ge	72	2	H2	103.5684867	1615437.003
In	115	1	He	103.3056028	6332830.900
Tb	159	1	He	102.8201327	14876649.780
Ir	193	1	He	102.1394958	7564827.803

Sample Name 10606414002\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 123SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:38:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	6.474010	4.3	2616.060
Be	9	2	H2	0.093204	18.2	59.667
B	11	2	H2	-79.289715		2924.120
Na	23	1	He	43.315376	2.1	53080.557
Mg	24	1	He	1540.034905	2.7	832831.080
Al	27	1	He	2952.138692	2.2	807852.517
Si	28	2	H2	603.870487	1.6	1794516.417
K	39	1	He	1346.106322	2.0	1102790.557
Ca	43	1	He	1095.626645	2.4	2505.980
Ti	47	1	He	416.313926	2.8	105202.610
V	51	1	He	42.192875	2.1	296212.027
Cr	52	1	He	8.091892	1.7	70162.043
Mn	55	1	He	98.095910	2.2	623367.043
Fe	56	1	He	13767.00436	2.5	109601613.333
Co	59	1	He	3.188223	1.9	42652.750
Ni	60	1	He	2.586646	2.4	8771.320
Cu	63	1	He	1394.434408	1.6	12882306.333
Zn	66	1	He	558.553532	1.9	1183088.167
As	75	1	He	16.618251	1.5	31237.757
Se	78	2	H2	0.055238	8.2	90.667
Sr	88	1	He	6.165191	3.3	75702.767
Mo	95	1	He	0.330905	5.4	2182.840
Pd	105	1	He	0.017189	46.6	366.677
Ag	107	1	He	0.270381	6.1	5766.227
Cd	111	1	He	34.086459	2.7	133409.757
Sn	118	1	He	0.893444	2.9	9133.043
Sb	121	1	He	0.104031	3.2	1580.100
Ba	138	1	He	31.310796	2.7	1061219.307
Pt	195	1	He	0.000686	87.0	224.000
Hg	202	1	He	0.057200	9.1	602.680
Tl	205	1	He	0.106924	3.2	5721.283
Pb	208	1	He	5.921976	2.7	396917.410
Bi	209	1	He	0.132446	1.5	9680.380
Th	232	1	He	5.976771	2.8	411947.883
U	238	1	He	1.073156	4.3	71825.877

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.53190533	593339.710
Sc	45	2	H2	104.0138141	4602189.500
Ge	72	1	He	100.9855018	503566.447
Ge	72	2	H2	105.0755531	1638943.873
In	115	1	He	102.3734236	6275686.533
Tb	159	1	He	102.4006759	14815960.197
Ir	193	1	He	100.4826813	7442118.013

Sample Name 10606414002\_B69994Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 124SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:41:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.746172	4.9	368.337
Be	9	2	H2	0.027322	17.5	33.000
B	11	2	H2	-80.057322		2655.900
Na	23	1	He	8.782465	0.8	20492.453
Mg	24	1	He	166.259349	0.7	94876.117
Al	27	1	He	325.717446	0.2	89815.253
Si	28	2	H2	61.942331	1.3	196776.637
K	39	1	He	141.980817	1.0	182647.623
Ca	43	1	He	132.031686	2.4	316.167
Ti	47	1	He	45.649447	0.6	11616.580
V	51	1	He	4.650972	0.9	32314.037
Cr	52	1	He	0.929270	1.2	10292.283
Mn	55	1	He	10.314658	1.2	66251.743
Fe	56	1	He	1525.811906	0.2	12241232.000
Co	59	1	He	0.354635	0.1	4846.817
Ni	60	1	He	0.262908	7.2	1090.043
Cu	63	1	He	151.173690	0.6	1411732.460
Zn	66	1	He	61.203036	1.1	131209.077
As	75	1	He	1.791017	0.4	3557.273
Se	78	2	H2	-0.009453		35.000
Sr	88	1	He	0.722964	2.2	9106.290
Mo	95	1	He	0.057548	8.9	392.010
Pd	105	1	He	-0.000106		198.333
Ag	107	1	He	0.047152	6.8	1096.720
Cd	111	1	He	3.746690	1.5	14791.677
Sn	118	1	He	0.099715	8.2	1156.720
Sb	121	1	He	0.013100	13.4	235.000
Ba	138	1	He	3.446525	0.5	117738.567
Pt	195	1	He	-0.001391		198.000
Hg	202	1	He	-0.001238		225.667
Tl	205	1	He	0.010076	19.4	996.717
Pb	208	1	He	0.599806	0.9	43143.997
Bi	209	1	He	0.011332	39.2	2883.717
Th	232	1	He	0.640096	1.0	45432.347
U	238	1	He	0.116702	2.5	8754.690

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.19957581	597360.290
Sc	45	2	H2	103.7876088	4592180.833
Ge	72	1	He	102.0626372	508937.607
Ge	72	2	H2	105.2016317	1640910.417
In	115	1	He	103.1285267	6321975.797
Tb	159	1	He	103.2656746	14941113.530
Ir	193	1	He	101.4061601	7510514.260

Sample Name 10606414003\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 125SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:45:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.786270	1.5	2315.843
Be	9	2	H2	0.084667	10.0	55.500
B	11	2	H2	-79.817556		2706.743
Na	23	1	He	39.294277	3.7	49030.090
Mg	24	1	He	1346.608149	3.6	725271.710
Al	27	1	He	2795.827624	4.1	761303.227
Si	28	2	H2	559.806561	1.1	1642558.917
K	39	1	He	1016.169486	3.8	846147.410
Ca	43	1	He	1121.788837	3.7	2552.983
Ti	47	1	He	341.429350	3.3	85858.970
V	51	1	He	27.266348	3.8	190256.743
Cr	52	1	He	5.862100	3.3	51249.790
Mn	55	1	He	87.239827	3.8	551684.250
Fe	56	1	He	9724.469016	4.0	77040530.667
Co	59	1	He	1.859147	3.6	24913.250
Ni	60	1	He	1.961224	6.2	6704.223
Cu	63	1	He	103.652793	3.8	958490.627
Zn	66	1	He	216.470385	3.7	458922.117
As	75	1	He	13.787666	3.7	25961.733
Se	78	2	H2	0.118027	6.2	144.000
Sr	88	1	He	4.224248	3.4	51945.850
Mo	95	1	He	0.493440	4.5	3260.383
Pd	105	1	He	0.018247	30.9	378.343
Ag	107	1	He	0.062890	2.7	1423.420
Cd	111	1	He	1.026368	3.4	4052.333
Sn	118	1	He	0.894694	1.3	9176.403
Sb	121	1	He	0.072951	5.9	1123.390
Ba	138	1	He	23.877748	3.2	812064.807
Pt	195	1	He	0.002851	42.2	253.333
Hg	202	1	He	0.002933	95.4	251.333
Tl	205	1	He	0.074445	4.3	4144.013
Pb	208	1	He	5.556711	4.1	373494.187
Bi	209	1	He	0.049532	13.5	5041.053
Th	232	1	He	12.745235	4.4	882726.733
U	238	1	He	0.817854	4.5	55307.243

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.06269314	590514.207
Sc	45	2	H2	102.6170119	4540386.667
Ge	72	1	He	101.0641331	503958.543
Ge	72	2	H2	104.4252679	1628800.877
In	115	1	He	102.7190894	6296876.513
Tb	159	1	He	102.6569548	14853040.197
Ir	193	1	He	101.1030455	7488064.470



Sample Name 10606414003\_B69994Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 126SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:49:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.569684	1.7	290.333
Be	9	2	H2	0.007407	84.7	24.167
B	11	2	H2	-80.427122		2452.200
Na	23	1	He	7.733266	8.9	19180.713
Mg	24	1	He	128.486984	2.5	73252.033
Al	27	1	He	273.097730	3.3	74117.457
Si	28	2	H2	53.299668	3.5	166167.800
K	39	1	He	96.237304	5.5	145063.297
Ca	43	1	He	128.640578	0.4	303.583
Ti	47	1	He	32.830627	3.1	8222.300
V	51	1	He	2.700971	4.5	18203.760
Cr	52	1	He	0.597439	2.1	7379.873
Mn	55	1	He	8.816652	2.9	55769.757
Fe	56	1	He	946.054684	2.8	7473785.000
Co	59	1	He	0.181102	5.6	2478.887
Ni	60	1	He	0.173085	2.4	782.020
Cu	63	1	He	10.274913	3.4	95317.090
Zn	66	1	He	21.553030	1.9	45901.543
As	75	1	He	1.292086	4.1	2588.900
Se	78	2	H2	-0.010263		33.333
Sr	88	1	He	0.485920	2.2	6111.353
Mo	95	1	He	0.066657	11.5	450.010
Pd	105	1	He	0.003695	115.7	235.003
Ag	107	1	He	0.013896	14.9	393.343
Cd	111	1	He	0.105589	10.2	436.263
Sn	118	1	He	0.087741	6.1	1030.050
Sb	121	1	He	0.009056	42.7	173.333
Ba	138	1	He	2.319790	3.1	78891.943
Pt	195	1	He	-0.000534		208.667
Hg	202	1	He	-0.007704		182.667
Tl	205	1	He	0.006495	16.1	816.700
Pb	208	1	He	0.538559	4.1	38828.967
Bi	209	1	He	0.000323	423.7	2263.563
Th	232	1	He	1.202927	3.4	84622.687
U	238	1	He	0.075221	7.8	5999.773

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.65972356	588087.603
Sc	45	2	H2	100.7206611	4456480.833
Ge	72	1	He	101.0964722	504119.803
Ge	72	2	H2	102.3562750	1596529.210
In	115	1	He	102.6604848	6293283.933
Tb	159	1	He	102.7682330	14869140.610
Ir	193	1	He	101.5847255	7523739.470

Sample Name 10606414004\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 127SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:53:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	9.179632	0.5	3619.930
Be	9	2	H2	0.325097	9.0	151.000
B	11	2	H2	-79.178115		2914.450
Na	23	1	He	221.767614	1.5	219239.657
Mg	24	1	He	2772.107883	1.9	1475377.373
Al	27	1	He	5693.757414	1.5	1537294.587
Si	28	2	H2	718.718334	1.5	2098936.543
K	39	1	He	1906.830580	1.7	1511453.363
Ca	43	1	He	4593.806899	1.5	10324.503
Ti	47	1	He	539.766202	1.2	134586.613
V	51	1	He	46.673744	1.5	323375.213
Cr	52	1	He	11.991027	1.0	101421.913
Mn	55	1	He	725.234600	1.2	4545565.833
Fe	56	1	He	15056.06870	1.5	118269906.667
Co	59	1	He	4.028943	1.4	53555.757
Ni	60	1	He	7.876896	1.3	26124.023
Cu	63	1	He	46.192075	1.8	424450.657
Zn	66	1	He	129.083948	1.3	271910.470
As	75	1	He	13.773616	1.7	25761.857
Se	78	2	H2	0.107957	7.4	134.333
Sr	88	1	He	22.724706	1.4	276916.557
Mo	95	1	He	0.946344	2.6	6148.677
Pd	105	1	He	0.040444	1.9	588.353
Ag	107	1	He	0.391992	8.9	8220.810
Cd	111	1	He	0.340986	4.6	1340.957
Sn	118	1	He	1.298314	0.7	13054.487
Sb	121	1	He	0.219115	2.4	3247.073
Ba	138	1	He	78.964183	1.8	2645580.687
Pt	195	1	He	-0.001719		192.000
Hg	202	1	He	0.067287	1.7	667.687
Tl	205	1	He	0.158413	2.8	8232.617
Pb	208	1	He	31.521946	1.9	2099156.910
Bi	209	1	He	0.322551	4.4	20422.667
Th	232	1	He	7.393300	2.8	510272.387
U	238	1	He	1.126046	2.1	75451.190

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.21313471	585398.333
Sc	45	2	H2	102.3374571	4528017.500
Ge	72	1	He	100.3704499	500499.477
Ge	72	2	H2	103.6249633	1616317.913
In	115	1	He	101.2025097	6203907.273
Tb	159	1	He	102.3331879	14806195.613
Ir	193	1	He	100.6406169	7453815.307

Sample Name 10606414004\_B69994Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 128SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 21:56:55  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.946195	5.2	438.343
Be	9	2	H2	0.024649	43.0	31.333
B	11	2	H2	-80.654214		2406.357
Na	23	1	He	25.119688	5.8	35522.210
Mg	24	1	He	274.823723	2.6	151304.040
Al	27	1	He	574.165395	1.9	155868.257
Si	28	2	H2	68.218323	1.7	211175.097
K	39	1	He	187.667172	4.3	214507.360
Ca	43	1	He	473.712678	2.7	1082.273
Ti	47	1	He	53.960694	2.7	13521.533
V	51	1	He	4.808404	0.7	32932.587
Cr	52	1	He	1.382064	2.4	13894.593
Mn	55	1	He	72.087455	2.6	454272.563
Fe	56	1	He	1525.628545	2.9	12052514.000
Co	59	1	He	0.416220	6.7	5561.743
Ni	60	1	He	0.791408	2.9	2801.613
Cu	63	1	He	4.752558	2.3	43826.330
Zn	66	1	He	13.182643	3.6	27867.987
As	75	1	He	1.379058	4.3	2723.257
Se	78	2	H2	-0.007008		36.667
Sr	88	1	He	2.419552	3.7	29515.563
Mo	95	1	He	0.116615	6.0	769.357
Pd	105	1	He	0.003683	67.2	231.670
Ag	107	1	He	0.064089	3.6	1431.753
Cd	111	1	He	0.032627	2.7	148.530
Sn	118	1	He	0.130153	1.8	1441.753
Sb	121	1	He	0.026622	13.7	430.010
Ba	138	1	He	7.829409	2.4	263030.453
Pt	195	1	He	-0.000480		208.000
Hg	202	1	He	-0.003803		206.333
Tl	205	1	He	0.010916	24.5	1025.050
Pb	208	1	He	3.202908	3.0	215241.777
Bi	209	1	He	0.026683	20.2	3747.257
Th	232	1	He	0.734088	3.6	51804.240
U	238	1	He	0.108750	7.2	8197.640

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.73265632	588526.790
Sc	45	2	H2	101.8353244	4505800.167
Ge	72	1	He	100.0927185	499114.563
Ge	72	2	H2	103.8938777	1620512.377
In	115	1	He	101.4982099	6222034.263
Tb	159	1	He	102.0907033	14771111.450
Ir	193	1	He	101.1515567	7491657.390

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 129\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:00:40  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	77.598495	0.1	30326.383
Be	9	2	H2	75.062921	0.2	30180.640
B	11	2	H2	-2.059386		29102.083
Na	23	1	He	992.326185	0.7	965598.943
Mg	24	1	He	986.887523	1.1	542834.407
Al	27	1	He	981.804199	1.1	272427.897
Si	28	2	H2	491.748766	0.4	1454423.040
K	39	1	He	1016.645747	0.6	862419.963
Ca	43	1	He	1002.271728	0.9	2325.267
Ti	47	1	He	79.702125	0.8	20420.790
V	51	1	He	80.236419	1.1	571629.253
Cr	52	1	He	81.743957	0.8	695962.250
Mn	55	1	He	80.042532	0.8	515715.187
Fe	56	1	He	520.323411	1.2	4210893.583
Co	59	1	He	82.277467	1.1	1125985.790
Ni	60	1	He	83.306799	0.8	282697.500
Cu	63	1	He	82.667480	0.8	782576.210
Zn	66	1	He	80.966099	0.6	175851.330
As	75	1	He	79.547998	0.3	152495.040
Se	78	2	H2	81.009482	0.6	70061.800
Sr	88	1	He	80.582634	0.3	1011601.730
Mo	95	1	He	76.805276	1.3	513211.250
Pd	105	1	He	80.580403	0.9	806237.123
Ag	107	1	He	40.486511	0.5	864208.240
Cd	111	1	He	79.760516	0.9	317879.170
Sn	118	1	He	76.244672	1.0	781249.727
Sb	121	1	He	76.619393	1.4	1155690.867
Ba	138	1	He	77.415450	1.2	2671956.940
Pt	195	1	He	81.740671	0.7	1090152.587
Hg	202	1	He	3.851458	0.6	25348.040
Tl	205	1	He	41.545826	0.5	2041744.603
Pb	208	1	He	81.269608	0.4	5440374.550
Bi	209	1	He	81.323886	1.5	4609144.930
Th	232	1	He	76.927023	1.3	5320633.257
U	238	1	He	77.788763	1.4	5166571.280

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.88472223	601486.107
Sc	45	2	H2	103.3114899	4571114.500
Ge	72	1	He	103.4431057	515821.343
Ge	72	2	H2	105.3385130	1643045.460
In	115	1	He	104.2634278	6391547.407
Tb	159	1	He	102.9687100	14898146.863
Ir	193	1	He	101.0646326	7485219.470

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 130\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:04:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.048241	60.4	93.833
Be	9	2	H2	0.044136	30.1	39.333
B	11	2	H2	-80.477885		2482.370
Na	23	1	He	1.287890	25.8	13386.077
Mg	24	1	He	-6.752358		1220.063
Al	27	1	He	0.490850	26.1	215.333
Si	28	2	H2	-0.959376		11595.860
K	39	1	He	-5.507716		69244.673
Ca	43	1	He	1.252900	65.4	16.667
Ti	47	1	He	0.062664	28.2	18.000
V	51	1	He	0.118057	23.6	206.087
Cr	52	1	He	0.020566	26.8	2644.913
Mn	55	1	He	0.188125	7.4	1492.080
Fe	56	1	He	0.994108	10.8	19765.363
Co	59	1	He	0.037464	20.1	568.013
Ni	60	1	He	0.025058	28.0	296.000
Cu	63	1	He	0.053841	17.9	842.027
Zn	66	1	He	0.105015	22.8	449.343
As	75	1	He	0.005105	119.2	184.333
Se	78	2	H2	-0.002867		40.667
Sr	88	1	He	0.033505	15.9	571.683
Mo	95	1	He	0.038705	14.4	268.667
Pd	105	1	He	0.031687	36.1	515.013
Ag	107	1	He	0.151243	27.8	3308.763
Cd	111	1	He	0.032364	32.3	150.617
Sn	118	1	He	0.030773	17.8	460.010
Sb	121	1	He	0.029824	18.0	486.680
Ba	138	1	He	0.034188	13.0	1250.070
Pt	195	1	He	0.029980	18.0	618.683
Hg	202	1	He	0.010775	51.6	304.667
Tl	205	1	He	0.042733	24.0	2610.290
Pb	208	1	He	0.029791	33.3	4902.043
Bi	209	1	He	0.027033	21.0	3793.953
Th	232	1	He	0.041783	9.7	3932.303
U	238	1	He	0.027535	16.9	2825.337

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.53221816	599363.397
Sc	45	2	H2	102.5446927	4537186.833
Ge	72	1	He	102.7051264	512141.393
Ge	72	2	H2	104.9492825	1636974.333
In	115	1	He	103.5678952	6348909.927
Tb	159	1	He	103.4989755	14974868.943
Ir	193	1	He	101.8853114	7546001.970

Sample Name 10606414005\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 131SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:08:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	6.818280	2.4	2765.753
Be	9	2	H2	1.134855	4.4	483.510
B	11	2	H2	-42.872369		15435.020
Na	23	1	He	703.563102	6.1	653605.590
Mg	24	1	He	2131.146319	6.3	1107944.903
Al	27	1	He	5617.596507	6.8	1479951.497
Si	28	2	H2	1048.751734	3.0	3121129.333
K	39	1	He	1448.779816	6.9	1137350.970
Ca	43	1	He	8355.974009	7.7	18307.557
Ti	47	1	He	354.942808	6.3	86365.667
V	51	1	He	24.066511	6.7	162398.847
Cr	52	1	He	6.080738	6.5	51351.493
Mn	55	1	He	24249.42234	6.8	148307408.000
Fe	56	1	He	30205.26524	6.7	231524133.333
Co	59	1	He	5.001914	5.9	64701.440
Ni	60	1	He	4.819083	4.1	15639.060
Cu	63	1	He	2433.101740	4.9	21746421.333
Zn	66	1	He	4487.098843	5.1	9193548.667
As	75	1	He	1512.126196	5.2	2735127.500
Se	78	2	H2	0.771524	2.6	718.687
Sr	88	1	He	88.393788	5.3	1048095.867
Mo	95	1	He	2.916916	5.3	18538.063
Pd	105	1	He	0.098419	10.5	1126.727
Ag	107	1	He	25.631779	6.7	520037.690
Cd	111	1	He	9.155090	5.9	34704.210
Sn	118	1	He	5.560687	5.6	54291.647
Sb	121	1	He	10.092431	6.0	144732.630
Ba	138	1	He	245.441613	5.5	8053560.923
Pt	195	1	He	-0.000612		198.667
Hg	202	1	He	16.224565	5.9	101430.270
Tl	205	1	He	0.309330	4.5	15016.957
Pb	208	1	He	1421.114317	5.4	90957851.977
Bi	209	1	He	16.112717	4.7	869130.403
Th	232	1	He	5.517995	5.4	363388.367
U	238	1	He	6.705244	5.0	423894.093

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.03264874	572267.877
Sc	45	2	H2	104.5532458	4626057.167
Ge	72	1	He	97.79603574	487662.103
Ge	72	2	H2	106.5851445	1662490.127
In	115	1	He	99.22206819	6082502.423
Tb	159	1	He	98.60049388	14266126.457
Ir	193	1	He	96.06238955	7114734.897

Sample Name 4312115\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 132SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:11:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	76.396651	1.2	30670.080
Be	9	2	H2	69.533094	1.6	28718.640
B	11	2	H2	28.216393	8.0	40441.857
Na	23	1	He	2304.598389	3.0	2249660.020
Mg	24	1	He	3577.119199	3.2	1975151.167
Al	27	1	He	6734.710682	3.5	1887829.500
Si	28	2	H2	1936.497628	1.9	5839458.333
K	39	1	He	3048.115885	3.1	2463830.277
Ca	43	1	He	9410.377467	3.6	21943.350
Ti	47	1	He	392.021618	3.2	101483.990
V	51	1	He	89.659908	2.8	645532.003
Cr	52	1	He	73.877126	2.7	635809.560
Mn	55	1	He	22250.62531	3.6	144782336.000
Fe	56	1	He	28338.42254	3.8	231104810.667
Co	59	1	He	73.828861	3.3	1013521.647
Ni	60	1	He	74.997156	2.8	255313.637
Cu	63	1	He	2283.469696	3.5	21675353.333
Zn	66	1	He	4159.318968	3.3	9050450.333
As	75	1	He	1454.407495	3.3	2793747.083
Se	78	2	H2	75.041037	1.3	66730.103
Sr	88	1	He	150.065955	4.0	1889600.023
Mo	95	1	He	69.321565	2.3	462270.737
Pd	105	1	He	68.521244	2.7	684228.583
Ag	107	1	He	43.168409	2.2	919511.600
Cd	111	1	He	75.479139	2.7	300219.030
Sn	118	1	He	70.437375	2.3	720318.687
Sb	121	1	He	74.327744	2.7	1118943.057
Ba	138	1	He	291.727191	3.0	10048870.893
Pt	195	1	He	67.281547	2.6	905318.790
Hg	202	1	He	14.956179	3.3	98633.527
Tl	205	1	He	34.888931	2.7	1729926.850
Pb	208	1	He	1361.023178	3.6	91880565.717
Bi	209	1	He	81.830488	3.0	4621905.453
Th	232	1	He	11.025279	2.1	760734.180
U	238	1	He	72.816833	3.3	4820035.970

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.9246472	607748.330
Sc	45	2	H2	106.1241807	4695564.667
Ge	72	1	He	103.7570440	517386.803
Ge	72	2	H2	108.3169257	1689502.043
In	115	1	He	104.0343594	6377505.077
Tb	159	1	He	103.8721482	15028861.860
Ir	193	1	He	100.6764532	7456469.473

Sample Name 4312116\_B69994Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 133SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:15:47  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.402444	1.8	635.010
Be	9	2	H2	0.263921	4.6	130.500
B	11	2	H2	-72.896199		5175.220
Na	23	1	He	141.839667	0.7	150508.593
Mg	24	1	He	423.712699	1.1	239098.367
Al	27	1	He	1121.677342	0.5	315503.917
Si	28	2	H2	205.103651	2.5	627503.937
K	39	1	He	284.669575	0.7	298636.873
Ca	43	1	He	1707.219783	0.6	4005.260
Ti	47	1	He	70.986282	1.2	18437.520
V	51	1	He	4.897716	1.0	34767.803
Cr	52	1	He	1.275926	1.4	13486.893
Mn	55	1	He	4897.714210	0.4	31972037.333
Fe	56	1	He	6082.483694	0.1	49773140.000
Co	59	1	He	1.033762	0.8	14221.613
Ni	60	1	He	0.983864	0.4	3553.107
Cu	63	1	He	498.780588	0.5	4725040.000
Zn	66	1	He	912.028200	0.3	1980650.920
As	75	1	He	301.270947	0.4	577671.083
Se	78	2	H2	0.149445	20.6	175.000
Sr	88	1	He	17.763519	0.8	223355.913
Mo	95	1	He	0.608505	2.9	4113.937
Pd	105	1	He	0.035005	6.3	556.683
Ag	107	1	He	5.095822	1.2	109839.140
Cd	111	1	He	1.847498	0.9	7451.233
Sn	118	1	He	1.123361	2.1	11760.013
Sb	121	1	He	2.040226	0.7	31089.573
Ba	138	1	He	49.153017	0.3	1711734.037
Pt	195	1	He	0.006403	49.6	308.670
Hg	202	1	He	3.272634	1.5	22096.607
Tl	205	1	He	0.094818	11.2	5281.093
Pb	208	1	He	282.320833	0.9	19349232.940
Bi	209	1	He	3.227497	0.6	189786.907
Th	232	1	He	1.078122	0.8	77490.453
U	238	1	He	1.318761	1.0	90815.163

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.2543557	609733.770
Sc	45	2	H2	105.3938087	4663248.667
Ge	72	1	He	103.5533930	516371.293
Ge	72	2	H2	106.9302955	1667873.710
In	115	1	He	105.1946315	6448631.973
Tb	159	1	He	105.4609491	15258739.353
Ir	193	1	He	103.6322763	7675388.637



Sample Name 4310650\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 134SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:19:31  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	53.801717	2.2	21200.610
Be	9	2	H2	46.841051	2.3	18976.857
B	11	2	H2	-10.718079		26353.063
Na	23	1	He	1447.376830	1.0	1415410.187
Mg	24	1	He	3292.225696	1.3	1815600.857
Al	27	1	He	7078.217959	1.2	1981235.290
Si	28	2	H2	1434.060291	1.9	4244007.333
K	39	1	He	2519.355521	1.4	2046391.897
Ca	43	1	He	8639.867879	1.7	20118.713
Ti	47	1	He	410.591679	1.7	106136.313
V	51	1	He	71.436765	1.3	513451.257
Cr	52	1	He	54.341126	1.3	467658.070
Mn	55	1	He	18253.89620	1.9	118604082.667
Fe	56	1	He	29008.68384	1.7	236227290.667
Co	59	1	He	51.754686	1.1	706334.437
Ni	60	1	He	53.346851	1.0	180606.183
Cu	63	1	He	2061.449495	1.5	19453132.000
Zn	66	1	He	3909.495175	1.6	8457129.500
As	75	1	He	1208.194379	1.7	2307254.417
Se	78	2	H2	49.442621	0.6	42956.643
Sr	88	1	He	107.883907	1.4	1350536.800
Mo	95	1	He	48.502074	1.5	323460.540
Pd	105	1	He	8.482065	2.2	84880.463
Ag	107	1	He	46.561321	2.1	991844.333
Cd	111	1	He	52.484745	1.7	208768.530
Sn	118	1	He	47.088160	1.7	481603.510
Sb	121	1	He	39.940718	1.5	601291.827
Ba	138	1	He	244.500690	1.9	8422002.373
Pt	195	1	He	9.107467	2.1	123594.153
Hg	202	1	He	17.890076	2.0	118756.557
Tl	205	1	He	46.665047	2.4	2329872.517
Pb	208	1	He	1294.575754	1.9	88001444.520
Bi	209	1	He	59.660297	1.3	3407082.243
Th	232	1	He	51.467345	1.5	3586451.510
U	238	1	He	50.346193	1.3	3368899.120

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.7813490	606885.417
Sc	45	2	H2	104.0670129	4604543.333
Ge	72	1	He	103.1542237	514380.827
Ge	72	2	H2	105.7903861	1650093.670
In	115	1	He	104.0458730	6378210.883
Tb	159	1	He	104.6033457	15134656.023
Ir	193	1	He	101.7971666	7539473.640

Sample Name 4310651\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 135SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:23:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	49.577509	1.4	19952.090
Be	9	2	H2	43.700049	0.9	18077.597
B	11	2	H2	-19.414204		23872.120
Na	23	1	He	1288.514015	3.0	1258134.563
Mg	24	1	He	2993.452547	3.1	1647009.403
Al	27	1	He	5884.326534	3.1	1642810.707
Si	28	2	H2	1745.533418	2.1	5270759.500
K	39	1	He	2182.692577	3.2	1778243.620
Ca	43	1	He	9202.616444	3.1	21372.533
Ti	47	1	He	324.315846	2.5	83616.847
V	51	1	He	62.664497	2.9	449158.427
Cr	52	1	He	49.107785	2.9	421766.533
Mn	55	1	He	23204.85515	2.7	150379424.000
Fe	56	1	He	28913.16249	3.1	234839877.333
Co	59	1	He	47.982740	3.3	654730.310
Ni	60	1	He	47.727647	3.8	161572.790
Cu	63	1	He	1981.465481	3.9	18694045.333
Zn	66	1	He	4180.925647	3.4	9042156.667
As	75	1	He	1114.808618	3.6	2128480.167
Se	78	2	H2	46.101280	0.4	40953.537
Sr	88	1	He	95.035467	3.0	1189460.140
Mo	95	1	He	42.881103	4.3	285408.240
Pd	105	1	He	7.645006	3.9	76370.287
Ag	107	1	He	41.983852	4.8	892556.810
Cd	111	1	He	48.232061	3.8	191474.197
Sn	118	1	He	42.822431	3.5	437129.397
Sb	121	1	He	35.894956	3.7	539329.890
Ba	138	1	He	240.986850	3.9	8284543.420
Pt	195	1	He	8.334746	2.5	112932.463
Hg	202	1	He	16.015160	2.6	106155.580
Tl	205	1	He	42.906369	1.9	2138409.757
Pb	208	1	He	1286.324199	2.3	87286866.610
Bi	209	1	He	53.813797	2.8	3082325.580
Th	232	1	He	46.504911	3.5	3250679.950
U	238	1	He	46.677341	2.8	3132980.580

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.5115444	605260.707
Sc	45	2	H2	106.2418714	4700772.000
Ge	72	1	He	103.1323240	514271.623
Ge	72	2	H2	108.1574447	1687014.497
In	115	1	He	103.8510987	6366270.847
Tb	159	1	He	104.4013223	15105426.023
Ir	193	1	He	102.0847119	7560770.303

Sample Name 10606414006\_B69994Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 136SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:27:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	8.306416	1.4	3332.033
Be	9	2	H2	0.235577	4.2	117.167
B	11	2	H2	-78.868540		3063.813
Na	23	1	He	77.183880	1.7	86155.140
Mg	24	1	He	2137.993518	1.1	1167647.560
Al	27	1	He	3887.363099	1.4	1075993.453
Si	28	2	H2	740.350455	1.9	2194240.667
K	39	1	He	1553.441221	0.9	1275951.597
Ca	43	1	He	2316.797932	1.8	5344.880
Ti	47	1	He	437.282114	2.0	111774.220
V	51	1	He	32.059448	1.1	227508.673
Cr	52	1	He	6.508275	1.5	57563.043
Mn	55	1	He	1578.747320	1.2	10143597.667
Fe	56	1	He	13740.87671	1.7	110652162.667
Co	59	1	He	4.038533	1.5	54579.517
Ni	60	1	He	3.737625	2.1	12713.550
Cu	63	1	He	318.038971	1.6	2969241.667
Zn	66	1	He	416.248507	1.5	890961.397
As	75	1	He	235.071706	1.4	444226.040
Se	78	2	H2	0.127864	5.3	153.667
Sr	88	1	He	15.506599	1.7	192164.277
Mo	95	1	He	0.929584	1.2	6146.007
Pd	105	1	He	0.027447	24.7	470.013
Ag	107	1	He	2.181015	1.0	46070.087
Cd	111	1	He	1.481881	0.7	5854.787
Sn	118	1	He	2.286833	1.5	23284.433
Sb	121	1	He	2.743782	2.4	40916.503
Ba	138	1	He	84.834244	1.8	2891923.500
Pt	195	1	He	0.003661	123.0	270.003
Hg	202	1	He	0.425007	1.4	3065.357
Tl	205	1	He	0.203931	2.4	10732.773
Pb	208	1	He	211.967687	2.2	14475010.407
Bi	209	1	He	4.250452	2.9	248315.817
Th	232	1	He	10.304608	1.8	729154.573
U	238	1	He	2.006354	1.9	137136.903

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.66004533	600133.147
Sc	45	2	H2	103.8846384	4596474.000
Ge	72	1	He	102.0478400	508863.820
Ge	72	2	H2	105.3563119	1643323.083
In	115	1	He	102.9667706	6312059.843
Tb	159	1	He	105.0637129	15201264.773
Ir	193	1	He	103.2569603	7647591.347

Sample Name 10606414006\_B69994Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 137SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:30:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.882597	7.0	418.843
Be	9	2	H2	0.044945	30.3	39.833
B	11	2	H2	-80.843452		2371.353
Na	23	1	He	13.922039	2.9	25209.680
Mg	24	1	He	224.386851	1.8	125410.443
Al	27	1	He	426.182391	0.3	116628.763
Si	28	2	H2	74.387336	3.6	231762.030
K	39	1	He	164.108966	1.2	198225.237
Ca	43	1	He	269.192845	3.6	625.663
Ti	47	1	He	47.214083	2.7	11926.160
V	51	1	He	3.576473	0.6	24522.010
Cr	52	1	He	0.740880	1.2	8641.237
Mn	55	1	He	172.060647	1.9	1092581.873
Fe	56	1	He	1483.749802	0.9	11816483.000
Co	59	1	He	0.449391	3.6	6096.620
Ni	60	1	He	0.447079	3.2	1698.103
Cu	63	1	He	34.023724	2.1	316474.760
Zn	66	1	He	45.752893	2.0	97675.100
As	75	1	He	25.279565	1.4	47706.767
Se	78	2	H2	-0.000153		43.000
Sr	88	1	He	1.747801	1.6	21694.867
Mo	95	1	He	0.123983	7.5	830.027
Pd	105	1	He	0.011560	11.5	313.343
Ag	107	1	He	0.275729	5.4	5914.613
Cd	111	1	He	0.176497	3.1	717.203
Sn	118	1	He	0.250672	3.9	2683.617
Sb	121	1	He	0.312710	5.1	4699.167
Ba	138	1	He	8.952084	0.4	305347.437
Pt	195	1	He	0.007215	80.0	316.003
Hg	202	1	He	0.099412	9.7	893.030
Tl	205	1	He	0.032086	14.0	2101.853
Pb	208	1	He	22.726632	1.4	1543615.133
Bi	209	1	He	0.468988	4.2	29503.187
Th	232	1	He	1.083674	1.3	77812.340
U	238	1	He	0.218638	2.6	15873.103

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.47020897	592968.187
Sc	45	2	H2	103.0658666	4560246.667
Ge	72	1	He	101.5853193	506557.450
Ge	72	2	H2	105.1215133	1639660.750
In	115	1	He	103.0105750	6314745.133
Tb	159	1	He	104.3410568	15096706.443
Ir	193	1	He	103.5361878	7668271.967

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 138\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:34:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	78.162406	0.5	30112.463
Be	9	2	H2	75.555352	0.6	29946.840
B	11	2	H2	-2.093285		28676.267
Na	23	1	He	972.120757	4.1	947270.847
Mg	24	1	He	963.682574	4.3	530773.480
Al	27	1	He	960.012936	4.1	266691.177
Si	28	2	H2	490.970778	0.9	1431492.917
K	39	1	He	992.107015	3.8	844465.430
Ca	43	1	He	990.923690	6.1	2301.163
Ti	47	1	He	77.073975	5.0	19766.900
V	51	1	He	78.221703	4.0	557913.093
Cr	52	1	He	80.494249	3.7	686217.667
Mn	55	1	He	80.308129	3.8	518056.897
Fe	56	1	He	515.151544	3.8	4174329.167
Co	59	1	He	81.081936	2.7	1107728.707
Ni	60	1	He	82.105183	2.9	278137.367
Cu	63	1	He	81.809697	2.8	773130.083
Zn	66	1	He	79.832865	3.5	173079.603
As	75	1	He	78.229209	2.8	149712.163
Se	78	2	H2	79.995515	1.1	68288.033
Sr	88	1	He	79.274224	2.5	993489.987
Mo	95	1	He	74.976656	4.3	504624.510
Pd	105	1	He	79.545676	4.2	801664.050
Ag	107	1	He	39.578577	4.1	850928.633
Cd	111	1	He	77.764879	4.2	312179.123
Sn	118	1	He	74.160612	3.7	765523.350
Sb	121	1	He	74.716977	4.4	1135160.090
Ba	138	1	He	75.995862	4.2	2642134.390
Pt	195	1	He	80.217039	3.4	1083787.877
Hg	202	1	He	3.834454	3.3	25567.117
Tl	205	1	He	41.218811	3.5	2052135.283
Pb	208	1	He	80.316043	3.5	5446660.360
Bi	209	1	He	79.124335	3.4	4592589.203
Th	232	1	He	74.546164	4.3	5279203.047
U	238	1	He	75.628895	4.3	5143317.737

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.0873188	602706.103
Sc	45	2	H2	101.8459130	4506268.667
Ge	72	1	He	103.3052515	515133.930
Ge	72	2	H2	103.9674699	1621660.250
In	115	1	He	105.1300530	6444673.190
Tb	159	1	He	104.3998104	15105207.277
Ir	193	1	He	103.5778609	7671358.427

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 139\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:38:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.099565	25.1	106.333
Be	9	2	H2	0.045168	37.5	37.167
B	11	2	H2	-80.356604		2345.183
Na	23	1	He	-0.530603		11449.470
Mg	24	1	He	-7.469485		816.697
Al	27	1	He	0.312241	94.9	163.000
Si	28	2	H2	-0.735030		11391.177
K	39	1	He	-7.661551		66448.807
Ca	43	1	He	1.044559	67.9	15.917
Ti	47	1	He	0.033388	45.4	10.333
V	51	1	He	0.046546	78.0	-296.510
Cr	52	1	He	-0.005225		2386.200
Mn	55	1	He	1.052589	19.0	6919.033
Fe	56	1	He	1.354378	26.6	22277.197
Co	59	1	He	0.024338	71.5	384.007
Ni	60	1	He	0.012088	168.8	248.667
Cu	63	1	He	0.095965	32.4	1219.393
Zn	66	1	He	0.194603	20.9	632.680
As	75	1	He	0.030783	90.6	229.667
Se	78	2	H2	-0.017412		25.667
Sr	88	1	He	0.019528	74.1	391.677
Mo	95	1	He	0.028735	45.7	203.333
Pd	105	1	He	0.018758	41.5	388.343
Ag	107	1	He	0.154976	24.9	3402.133
Cd	111	1	He	0.020987	60.3	105.967
Sn	118	1	He	0.016407	80.7	315.007
Sb	121	1	He	0.024264	58.3	405.010
Ba	138	1	He	0.025815	60.0	966.717
Pt	195	1	He	0.019127	89.7	472.677
Hg	202	1	He	0.049141	21.9	555.680
Tl	205	1	He	0.042908	36.3	2616.967
Pb	208	1	He	0.056211	45.4	6672.383
Bi	209	1	He	0.016352	97.8	3227.157
Th	232	1	He	0.025934	47.1	2865.367
U	238	1	He	0.013879	107.3	1936.867

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.86774155	589340.247
Sc	45	2	H2	96.45306291	4267656.917
Ge	72	1	He	101.1447390	504360.487
Ge	72	2	H2	98.60266034	1537981.207
In	115	1	He	104.0480134	6378342.090
Tb	159	1	He	103.4096615	14961946.447
Ir	193	1	He	103.3070719	7651302.800

Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 140CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:42:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.503479	1.6	271.167
Be	9	2	H2	0.220272	5.2	110.000
B	11	2	H2	-71.834748		5415.303
Na	23	1	He	49.377170	1.8	58852.063
Mg	24	1	He	22.194978	1.4	16779.490
Al	27	1	He	30.296229	0.5	8372.350
Si	28	2	H2	93.322353	0.9	286824.540
K	39	1	He	94.247854	0.8	144933.740
Ca	43	1	He	103.773431	0.4	249.817
Ti	47	1	He	1.052338	0.8	268.000
V	51	1	He	0.982965	14.6	6288.717
Cr	52	1	He	2.010098	1.2	19273.980
Mn	55	1	He	1.407988	9.7	9233.617
Fe	56	1	He	53.721059	0.3	439487.450
Co	59	1	He	0.528460	4.1	7177.780
Ni	60	1	He	0.557146	2.7	2069.487
Cu	63	1	He	1.098410	3.6	10565.870
Zn	66	1	He	5.545380	2.6	12062.363
As	75	1	He	0.478753	0.4	1075.540
Se	78	2	H2	0.459441	4.6	439.010
Sr	88	1	He	0.526959	1.7	6663.277
Mo	95	1	He	0.486949	2.1	3267.053
Pd	105	1	He	0.483418	1.7	5039.283
Ag	107	1	He	0.454091	6.2	9796.810
Cd	111	1	He	0.089572	5.2	379.757
Sn	118	1	He	0.471666	5.2	4982.593
Sb	121	1	He	0.491725	1.8	7460.383
Ba	138	1	He	0.312372	4.1	10864.343
Pt	195	1	He	0.513283	4.8	7192.623
Hg	202	1	He	0.243756	2.2	1857.133
Tl	205	1	He	0.110348	2.1	6033.080
Pb	208	1	He	0.532388	5.3	39229.363
Bi	209	1	He	0.486858	3.9	30612.510
Th	232	1	He	0.489936	2.7	35827.607
U	238	1	He	0.471184	3.6	33127.290

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.56549162	593541.960
Sc	45	2	H2	102.9785667	4556384.000
Ge	72	1	He	101.8268697	507761.947
Ge	72	2	H2	105.0593889	1638691.747
In	115	1	He	104.3052041	6394108.370
Tb	159	1	He	104.9225452	15180839.773
Ir	193	1	He	103.7787747	7686238.843

Sample Name 4303384\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 141SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:45:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.117064	22.1	116.500
Be	9	2	H2	0.019496	29.9	28.500
B	11	2	H2	-81.267253		2143.153
Na	23	1	He	-0.561945		11034.140
Mg	24	1	He	-3.732715		2716.937
Al	27	1	He	2.253085	3.4	667.353
Si	28	2	H2	-0.122394		13563.517
K	39	1	He	-5.300859		65936.513
Ca	43	1	He	5.153282	38.7	24.333
Ti	47	1	He	0.036173	5.8	10.667
V	51	1	He	0.096791	24.2	53.150
Cr	52	1	He	0.099298	9.1	3145.013
Mn	55	1	He	1.009738	6.2	6427.427
Fe	56	1	He	1.728760	6.3	24391.650
Co	59	1	He	0.017211	42.8	278.003
Ni	60	1	He	0.017229	70.9	256.000
Cu	63	1	He	0.111609	10.5	1314.733
Zn	66	1	He	0.372359	9.0	973.370
As	75	1	He	0.038414	24.4	235.167
Se	78	2	H2	-0.010737		32.667
Sr	88	1	He	0.025668	18.3	450.010
Mo	95	1	He	0.018722	23.1	132.000
Pd	105	1	He	0.019580	48.5	383.343
Ag	107	1	He	0.081223	24.3	1770.130
Cd	111	1	He	0.012012	64.2	67.977
Sn	118	1	He	0.883451	1.3	8869.527
Sb	121	1	He	0.020839	37.1	341.673
Ba	138	1	He	0.026480	27.3	956.710
Pt	195	1	He	0.012567	40.7	377.343
Hg	202	1	He	0.024279	18.3	385.010
Tl	205	1	He	0.011052	37.2	1025.050
Pb	208	1	He	0.046858	21.7	5923.887
Bi	209	1	He	0.013245	77.8	2987.077
Th	232	1	He	0.011244	44.3	1791.810
U	238	1	He	0.006339	86.3	1396.757

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.55991103	569421.143
Sc	45	2	H2	99.14530774	4386777.833
Ge	72	1	He	97.51845417	486277.937
Ge	72	2	H2	101.5048071	1583248.213
In	115	1	He	100.5286702	6162599.627
Tb	159	1	He	101.3274017	14660672.280
Ir	193	1	He	101.2383542	7498085.930



Sample Name 4303385\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 142SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:49:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	47.923768	1.1	18034.360
Be	9	2	H2	46.755737	1.8	18081.267
B	11	2	H2	-32.122484		18174.733
Na	23	1	He	916.062207	1.9	852815.977
Mg	24	1	He	897.309314	2.1	472140.383
Al	27	1	He	889.674654	1.9	235946.443
Si	28	2	H2	241.547767	1.8	693931.857
K	39	1	He	937.977082	1.4	765905.900
Ca	43	1	He	941.134149	2.8	2087.657
Ti	47	1	He	45.710028	2.6	11194.253
V	51	1	He	46.358372	1.7	315397.297
Cr	52	1	He	48.568432	1.9	396165.343
Mn	55	1	He	47.471171	2.2	292431.167
Fe	56	1	He	960.645929	2.4	7420866.500
Co	59	1	He	47.987520	2.7	629771.813
Ni	60	1	He	48.990379	2.1	159506.390
Cu	63	1	He	47.992040	2.9	435800.927
Zn	66	1	He	47.163245	2.7	98316.303
As	75	1	He	46.321531	2.6	85223.210
Se	78	2	H2	49.703246	1.2	41763.823
Sr	88	1	He	47.032583	2.4	566240.083
Mo	95	1	He	45.253773	3.7	292977.543
Pd	105	1	He	9.588941	2.5	93129.793
Ag	107	1	He	23.284857	3.5	481563.783
Cd	111	1	He	46.195404	3.3	178387.847
Sn	118	1	He	45.443153	3.6	451197.687
Sb	121	1	He	45.278507	3.7	661708.350
Ba	138	1	He	45.530285	2.9	1522566.437
Pt	195	1	He	9.347425	2.1	125495.107
Hg	202	1	He	4.004562	2.6	26483.280
Tl	205	1	He	47.693632	1.3	2355612.727
Pb	208	1	He	46.552503	1.9	3133557.880
Bi	209	1	He	45.912006	2.5	2616341.317
Th	232	1	He	45.742531	3.4	3180513.597
U	238	1	He	44.617427	3.2	2979073.187

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.45648306	574820.123
Sc	45	2	H2	99.32889141	4394900.667
Ge	72	1	He	99.19347529	494630.467
Ge	72	2	H2	102.3147250	1595881.123
In	115	1	He	101.0159807	6192472.690
Tb	159	1	He	103.4758133	14971517.693
Ir	193	1	He	101.5629228	7522124.680

Sample Name 10605435001\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 143SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:53:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.848212	1.2	1938.457
Be	9	2	H2	0.211864	3.3	105.500
B	11	2	H2	-80.838277		2345.683
Na	23	1	He	301.749158	1.7	290046.030
Mg	24	1	He	2362.095215	2.4	1240832.377
Al	27	1	He	5378.707808	2.3	1432579.250
Si	28	2	H2	824.435053	1.5	2394635.167
K	39	1	He	722.953396	1.7	609252.893
Ca	43	1	He	3016.236490	2.0	6691.690
Ti	47	1	He	797.900031	2.2	196256.013
V	51	1	He	35.859422	2.8	244946.057
Cr	52	1	He	9.872700	2.7	82794.880
Mn	55	1	He	153.018244	2.3	946304.187
Fe	56	1	He	12027.74000	2.1	93204146.667
Co	59	1	He	5.443589	2.0	71709.070
Ni	60	1	He	8.962312	3.9	29436.993
Cu	63	1	He	7.066981	2.2	64646.080
Zn	66	1	He	68.040390	2.4	142178.157
As	75	1	He	1.517099	2.4	2963.307
Se	78	2	H2	0.128057	16.0	151.000
Sr	88	1	He	23.214658	1.6	280415.280
Mo	95	1	He	0.171998	5.4	1120.047
Pd	105	1	He	0.041341	17.5	593.350
Ag	107	1	He	0.190873	28.1	4025.650
Cd	111	1	He	0.305104	4.0	1194.853
Sn	118	1	He	1.100445	4.6	11019.427
Sb	121	1	He	0.075599	6.1	1138.387
Ba	138	1	He	73.571066	1.9	2449694.237
Pt	195	1	He	0.002885	52.3	255.333
Hg	202	1	He	0.054528	13.1	590.347
Tl	205	1	He	0.121711	2.1	6501.633
Pb	208	1	He	5.006492	2.3	339129.003
Bi	209	1	He	0.050476	14.4	5144.427
Th	232	1	He	1.745081	2.7	123010.153
U	238	1	He	0.504942	2.3	34878.470

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.89423291	577456.167
Sc	45	2	H2	101.8729399	4507464.500
Ge	72	1	He	99.49392718	496128.677
Ge	72	2	H2	103.4540895	1613652.663
In	115	1	He	100.5777247	6165606.760
Tb	159	1	He	103.3424413	14952220.610
Ir	193	1	He	102.1347195	7564474.053

Sample Name 10605435001\_B69848Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 144SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 22:57:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.534531	1.3	280.833
Be	9	2	H2	0.039218	23.7	37.167
B	11	2	H2	-81.775887		2036.307
Na	23	1	He	31.489885	3.5	41367.210
Mg	24	1	He	257.881628	0.8	141756.323
Al	27	1	He	596.779231	0.4	161402.230
Si	28	2	H2	83.706473	1.3	256546.537
K	39	1	He	71.041794	0.7	125585.763
Ca	43	1	He	324.904380	0.6	743.653
Ti	47	1	He	87.980444	0.4	21966.663
V	51	1	He	3.973302	1.7	26997.950
Cr	52	1	He	1.123854	1.1	11708.027
Mn	55	1	He	17.814485	0.3	112067.437
Fe	56	1	He	1342.373306	0.4	10568541.667
Co	59	1	He	0.619510	1.2	8304.380
Ni	60	1	He	1.099439	3.2	3833.850
Cu	63	1	He	0.875337	1.3	8386.437
Zn	66	1	He	7.964131	0.2	17023.310
As	75	1	He	0.190839	10.1	526.510
Se	78	2	H2	-0.002446		40.667
Sr	88	1	He	2.620053	1.7	32141.177
Mo	95	1	He	0.033027	21.2	230.000
Pd	105	1	He	0.017751	42.2	375.010
Ag	107	1	He	0.034668	17.3	833.363
Cd	111	1	He	0.043106	21.9	192.293
Sn	118	1	He	0.133732	3.4	1501.763
Sb	121	1	He	0.022036	29.7	368.343
Ba	138	1	He	7.927392	0.7	270795.067
Pt	195	1	He	0.000311	1158.8	222.667
Hg	202	1	He	0.022130	23.4	381.677
Tl	205	1	He	0.021687	24.7	1581.777
Pb	208	1	He	0.578587	1.2	42067.653
Bi	209	1	He	0.016244	65.2	3223.793
Th	232	1	He	0.195374	2.4	14860.237
U	238	1	He	0.057602	7.6	4910.967

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.33484854	586131.270
Sc	45	2	H2	102.1018988	4517595.000
Ge	72	1	He	100.6238937	501763.280
Ge	72	2	H2	104.2709644	1626394.087
In	115	1	He	103.1593758	6323866.907
Tb	159	1	He	104.1331873	15066630.610
Ir	193	1	He	103.4143079	7659245.093

Sample Name 10605435002\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 145SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:00:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.105280	1.1	2033.970
Be	9	2	H2	0.205548	2.0	102.833
B	11	2	H2	-81.299461		2187.993
Na	23	1	He	310.126468	2.5	298738.130
Mg	24	1	He	2477.318357	2.3	1305339.693
Al	27	1	He	5653.132601	2.5	1510526.877
Si	28	2	H2	851.275730	0.9	2468324.833
K	39	1	He	763.989741	1.7	641886.397
Ca	43	1	He	3161.058336	2.0	7034.997
Ti	47	1	He	815.889154	3.2	201330.050
V	51	1	He	35.945624	3.3	246328.647
Cr	52	1	He	9.953921	2.1	83725.383
Mn	55	1	He	151.581677	2.6	940449.980
Fe	56	1	He	12534.90413	2.8	97448010.667
Co	59	1	He	5.672219	2.4	74745.563
Ni	60	1	He	9.264722	3.1	30434.397
Cu	63	1	He	7.611511	2.2	69627.633
Zn	66	1	He	71.520934	2.3	149492.753
As	75	1	He	1.449575	2.1	2839.780
Se	78	2	H2	0.102370	12.8	129.000
Sr	88	1	He	23.362233	2.5	282303.380
Mo	95	1	He	0.174349	1.8	1140.717
Pd	105	1	He	0.033139	4.9	516.677
Ag	107	1	He	0.046916	2.6	1070.050
Cd	111	1	He	0.308802	6.7	1215.183
Sn	118	1	He	1.070031	6.0	10772.560
Sb	121	1	He	0.061491	12.9	938.373
Ba	138	1	He	82.937143	2.7	2775217.357
Pt	195	1	He	0.002734	33.6	253.333
Hg	202	1	He	0.030075	6.4	430.343
Tl	205	1	He	0.111919	2.8	6016.417
Pb	208	1	He	5.296133	3.2	358341.837
Bi	209	1	He	0.039346	5.7	4524.203
Th	232	1	He	1.812556	2.7	128126.250
U	238	1	He	0.520835	3.2	36061.807

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.20461227	579325.210
Sc	45	2	H2	101.7112340	4500309.667
Ge	72	1	He	99.52610124	496289.113
Ge	72	2	H2	103.2639636	1610687.123
In	115	1	He	101.0679271	6195657.103
Tb	159	1	He	103.2720879	14942041.447
Ir	193	1	He	102.4604555	7588599.263

Sample Name 10605435002\_B69848Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 146SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:04:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.535766	3.2	281.333
Be	9	2	H2	0.033341	33.6	34.833
B	11	2	H2	-82.075046		1936.127
Na	23	1	He	30.605009	2.2	40601.753
Mg	24	1	He	255.879853	0.3	140906.900
Al	27	1	He	592.205892	0.5	160399.610
Si	28	2	H2	83.132365	1.2	254888.157
K	39	1	He	72.058311	1.8	126536.870
Ca	43	1	He	340.562432	2.1	779.987
Ti	47	1	He	85.564472	0.9	21394.833
V	51	1	He	3.823192	2.3	25991.290
Cr	52	1	He	1.051559	1.1	11126.240
Mn	55	1	He	16.368339	0.4	103144.640
Fe	56	1	He	1320.388768	0.9	10410622.667
Co	59	1	He	0.606515	2.6	8132.283
Ni	60	1	He	0.987125	2.5	3463.753
Cu	63	1	He	0.855414	2.1	8203.663
Zn	66	1	He	7.802942	2.1	16684.247
As	75	1	He	0.143471	2.2	438.343
Se	78	2	H2	-0.006543		37.333
Sr	88	1	He	2.450649	0.3	30075.017
Mo	95	1	He	0.019546	21.9	142.000
Pd	105	1	He	0.003414	26.0	235.003
Ag	107	1	He	0.011956	7.8	356.677
Cd	111	1	He	0.033581	5.7	155.977
Sn	118	1	He	0.107616	5.1	1246.733
Sb	121	1	He	0.008322	41.8	165.000
Ba	138	1	He	8.344396	0.6	287268.927
Pt	195	1	He	-0.002434		185.333
Hg	202	1	He	0.011501	19.1	310.667
Tl	205	1	He	0.009678	2.6	983.377
Pb	208	1	He	0.567238	0.1	41198.077
Bi	209	1	He	0.005109	29.9	2566.960
Th	232	1	He	0.184888	0.7	14042.653
U	238	1	He	0.050845	1.6	4429.127

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.48008079	587005.830
Sc	45	2	H2	102.1019138	4517595.667
Ge	72	1	He	100.6319929	501803.667
Ge	72	2	H2	104.6662719	1632560.000
In	115	1	He	103.9675963	6373412.367
Tb	159	1	He	103.8739279	15029119.363
Ir	193	1	He	102.8468937	7617220.303

Sample Name 10605435003\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 147SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:08:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.635885	0.8	1860.450
Be	9	2	H2	0.205372	10.6	103.167
B	11	2	H2	-81.399580		2161.990
Na	23	1	He	194.497751	0.3	192221.697
Mg	24	1	He	1930.106731	2.4	1020648.943
Al	27	1	He	5413.752365	1.6	1450248.333
Si	28	2	H2	849.272425	1.4	2471304.167
K	39	1	He	665.158244	2.1	569486.840
Ca	43	1	He	2359.575372	1.5	5268.100
Ti	47	1	He	653.198647	2.1	161595.507
V	51	1	He	28.382772	3.5	194871.347
Cr	52	1	He	8.368067	2.3	70947.913
Mn	55	1	He	205.931695	2.4	1280819.417
Fe	56	1	He	10724.90352	1.7	83590706.667
Co	59	1	He	4.371911	1.0	57487.940
Ni	60	1	He	8.156086	1.1	26753.157
Cu	63	1	He	9.461564	1.7	86269.853
Zn	66	1	He	58.047869	2.1	121087.743
As	75	1	He	1.863632	1.6	3594.450
Se	78	2	H2	0.228150	7.8	236.000
Sr	88	1	He	16.634955	2.3	200577.420
Mo	95	1	He	0.160487	3.6	1058.043
Pd	105	1	He	0.038392	26.9	571.680
Ag	107	1	He	0.039692	11.4	926.707
Cd	111	1	He	0.257434	5.3	1023.180
Sn	118	1	He	1.042202	3.5	10564.047
Sb	121	1	He	0.067200	5.4	1028.380
Ba	138	1	He	57.949139	1.8	1951958.927
Pt	195	1	He	-0.000103		216.000
Hg	202	1	He	0.016641	20.2	343.670
Tl	205	1	He	0.076373	3.9	4277.383
Pb	208	1	He	5.966871	2.3	404599.683
Bi	209	1	He	0.068762	3.2	6244.887
Th	232	1	He	1.415810	2.5	100829.030
U	238	1	He	0.818804	3.0	56417.097

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.45024026	580804.333
Sc	45	2	H2	102.0767138	4516480.667
Ge	72	1	He	99.29638870	495143.647
Ge	72	2	H2	103.4051806	1612889.793
In	115	1	He	101.7541445	6237723.543
Tb	159	1	He	103.5934588	14988539.363
Ir	193	1	He	102.9831728	7627313.637

Sample Name 10605435003\_B69848Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 148SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:12:03  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.509240	0.8	270.667
Be	9	2	H2	0.030910	4.7	33.833
B	11	2	H2	-82.359072		1838.280
Na	23	1	He	19.550027	2.4	30137.093
Mg	24	1	He	210.589849	1.6	116440.127
Al	27	1	He	605.020388	1.6	163355.737
Si	28	2	H2	87.246137	0.9	266393.220
K	39	1	He	66.690855	2.4	122088.510
Ca	43	1	He	264.126612	3.8	606.077
Ti	47	1	He	73.109431	1.2	18223.247
V	51	1	He	3.198316	2.9	21571.477
Cr	52	1	He	0.974749	0.7	10457.077
Mn	55	1	He	23.335812	0.5	146465.363
Fe	56	1	He	1200.826646	0.9	9439145.667
Co	59	1	He	0.487369	1.3	6566.157
Ni	60	1	He	0.941567	1.4	3323.720
Cu	63	1	He	1.088548	1.8	10382.377
Zn	66	1	He	6.731561	2.1	14469.220
As	75	1	He	0.189992	4.8	526.677
Se	78	2	H2	-0.007809		36.000
Sr	88	1	He	1.826381	0.2	22521.107
Mo	95	1	He	0.017143	19.6	124.667
Pd	105	1	He	-0.000566		193.333
Ag	107	1	He	0.008578	26.3	281.670
Cd	111	1	He	0.027292	5.7	129.643
Sn	118	1	He	0.111513	5.6	1273.400
Sb	121	1	He	0.007312	14.3	148.333
Ba	138	1	He	6.308503	0.8	214941.600
Pt	195	1	He	-0.002286		187.333
Hg	202	1	He	0.002664	114.1	253.000
Tl	205	1	He	0.006425	17.2	823.370
Pb	208	1	He	0.671746	1.7	48317.523
Bi	209	1	He	0.001318	186.7	2376.923
Th	232	1	He	0.147738	1.8	11566.890
U	238	1	He	0.082073	2.0	6618.417

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.16798268	585126.437
Sc	45	2	H2	101.9434021	4510582.167
Ge	72	1	He	100.9415713	503347.387
Ge	72	2	H2	104.0799699	1623415.000
In	115	1	He	102.8896294	6307330.937
Tb	159	1	He	104.0209991	15050398.527
Ir	193	1	He	104.0948568	7709649.050

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 149\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:15:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	75.271873	0.1	28967.743
Be	9	2	H2	72.919771	0.2	28869.260
B	11	2	H2	-5.482976		27510.437
Na	23	1	He	985.143834	2.4	923446.027
Mg	24	1	He	976.722345	2.5	517538.700
Al	27	1	He	972.422183	2.9	259892.893
Si	28	2	H2	480.566615	0.6	1399819.830
K	39	1	He	1010.634419	2.8	826197.203
Ca	43	1	He	996.395220	3.8	2226.330
Ti	47	1	He	78.965392	2.7	19487.200
V	51	1	He	80.902478	2.6	555173.777
Cr	52	1	He	82.638369	2.8	677651.627
Mn	55	1	He	80.567437	2.6	499998.843
Fe	56	1	He	527.221186	2.4	4109799.500
Co	59	1	He	81.850513	2.5	1097760.253
Ni	60	1	He	83.080518	3.2	276268.260
Cu	63	1	He	82.506020	2.6	765415.540
Zn	66	1	He	80.552879	2.4	171457.637
As	75	1	He	79.118737	2.5	148636.707
Se	78	2	H2	79.092905	1.1	67883.880
Sr	88	1	He	79.838144	2.1	982255.403
Mo	95	1	He	76.581850	3.2	502126.167
Pd	105	1	He	81.388247	2.6	799116.523
Ag	107	1	He	40.532338	2.2	849195.717
Cd	111	1	He	79.607864	2.7	311338.857
Sn	118	1	He	76.191940	2.3	766172.357
Sb	121	1	He	76.937086	2.7	1138821.183
Ba	138	1	He	77.725245	3.2	2632256.423
Pt	195	1	He	82.160360	1.9	1089114.873
Hg	202	1	He	3.906140	1.7	25550.763
Tl	205	1	He	41.843781	2.3	2043803.567
Pb	208	1	He	81.361326	2.8	5412827.443
Bi	209	1	He	80.552667	3.2	4609442.117
Th	232	1	He	75.943090	2.6	5303811.170
U	238	1	He	77.020297	2.8	5165217.007

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.24129509	579546.107
Sc	45	2	H2	101.7258606	4500956.833
Ge	72	1	He	101.4073435	505669.970
Ge	72	2	H2	104.5321794	1630468.457
In	115	1	He	102.3569326	6274675.603
Tb	159	1	He	102.3801458	14812989.777
Ir	193	1	He	102.0864784	7560901.137



Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 150\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:19:32  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.034581	39.1	87.500
Be	9	2	H2	0.019630	38.1	29.167
B	11	2	H2	-81.827353		2002.967
Na	23	1	He	-1.676033		10325.290
Mg	24	1	He	-6.965517		1081.717
Al	27	1	He	1.252552	40.6	417.340
Si	28	2	H2	-1.035986		11232.087
K	39	1	He	-9.020578		65137.937
Ca	43	1	He	3.805236	49.8	22.033
Ti	47	1	He	0.157562	27.2	41.333
V	51	1	He	0.104412	47.1	105.527
Cr	52	1	He	-0.008084		2352.200
Mn	55	1	He	0.343226	7.1	2436.210
Fe	56	1	He	2.703701	35.4	32839.593
Co	59	1	He	0.022169	23.5	356.007
Ni	60	1	He	0.013237	92.7	253.333
Cu	63	1	He	0.027101	19.3	584.013
Zn	66	1	He	0.087081	11.3	406.010
As	75	1	He	-0.006369		160.667
Se	78	2	H2	-0.015739		29.333
Sr	88	1	He	0.017655	49.0	370.010
Mo	95	1	He	0.022338	7.7	160.667
Pd	105	1	He	0.021930	28.9	420.010
Ag	107	1	He	0.138196	26.5	3045.370
Cd	111	1	He	0.017536	28.2	92.303
Sn	118	1	He	0.012006	25.6	270.007
Sb	121	1	He	0.019725	22.9	336.673
Ba	138	1	He	0.029806	29.5	1105.057
Pt	195	1	He	0.013295	22.1	402.010
Hg	202	1	He	0.016083	35.7	345.337
Tl	205	1	He	0.037523	29.2	2395.243
Pb	208	1	He	0.016732	16.7	4093.590
Bi	209	1	He	0.010991	33.5	2953.727
Th	232	1	He	0.021532	27.9	2586.950
U	238	1	He	0.009248	40.1	1643.453

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.45295437	586842.480
Sc	45	2	H2	101.2716570	4480860.167
Ge	72	1	He	101.5107362	506185.540
Ge	72	2	H2	104.2935527	1626746.413
In	115	1	He	103.9912492	6374862.340
Tb	159	1	He	105.2026630	15221368.937
Ir	193	1	He	104.5462279	7743079.260

Sample Name 10605661001\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 151SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:23:17  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.067647	57.7	98.667
Be	9	2	H2	0.007819	121.1	24.167
B	11	2	H2	-82.108742		1881.283
Na	23	1	He	1.503295	14.6	12900.620
Mg	24	1	He	-4.666052		2233.523
Al	27	1	He	3.298111	10.5	940.700
Si	28	2	H2	-0.145119		13585.350
K	39	1	He	-5.407991		65797.607
Ca	43	1	He	3.381741	33.9	20.467
Ti	47	1	He	0.058339	71.2	16.000
V	51	1	He	0.072165	15.9	-113.343
Cr	52	1	He	0.052310	29.2	2764.937
Mn	55	1	He	0.415896	5.7	2802.947
Fe	56	1	He	1.721435	22.4	24303.787
Co	59	1	He	0.010223	25.6	189.333
Ni	60	1	He	0.017612	37.4	259.333
Cu	63	1	He	1.090715	1.2	10132.207
Zn	66	1	He	1.409457	4.5	3119.680
As	75	1	He	-0.010985		147.167
Se	78	2	H2	-0.018754		26.333
Sr	88	1	He	0.021309	27.7	401.677
Mo	95	1	He	0.009246	11.5	71.333
Pd	105	1	He	0.005293	74.8	246.667
Ag	107	1	He	0.041763	18.3	963.373
Cd	111	1	He	0.005203	22.7	41.990
Sn	118	1	He	0.026533	14.2	406.677
Sb	121	1	He	0.008977	26.5	170.000
Ba	138	1	He	0.057376	6.4	1995.160
Pt	195	1	He	0.025705	166.0	556.020
Hg	202	1	He	0.005227	69.1	265.667
Tl	205	1	He	0.007277	41.6	851.700
Pb	208	1	He	0.062680	7.4	7040.747
Bi	209	1	He	0.001113	358.0	2340.247
Th	232	1	He	0.008326	32.1	1618.450
U	238	1	He	-0.001708		878.373

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.47073231	568884.127
Sc	45	2	H2	99.78669985	4415156.833
Ge	72	1	He	98.32581981	490303.883
Ge	72	2	H2	102.5428214	1599438.917
In	115	1	He	101.0453726	6194274.473
Tb	159	1	He	102.4136321	14817834.780
Ir	193	1	He	103.0297375	7630762.387

Sample Name 4305431\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 152SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:27:01  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.844121	0.4	30852.433
Be	9	2	H2	80.381384	0.5	30801.053
B	11	2	H2	0.188958	225.0	28463.370
Na	23	1	He	2025.948177	0.2	1857186.740
Mg	24	1	He	2018.878198	0.2	1048080.403
Al	27	1	He	1995.258853	0.6	524879.113
Si	28	2	H2	1019.842791	0.6	2859976.000
K	39	1	He	2073.963647	0.4	1595454.093
Ca	43	1	He	2056.087148	0.5	4509.233
Ti	47	1	He	83.594904	1.3	20307.967
V	51	1	He	85.783851	0.8	579535.410
Cr	52	1	He	87.670424	0.3	707582.103
Mn	55	1	He	87.411435	0.3	533991.393
Fe	56	1	He	1082.085449	0.4	8291511.333
Co	59	1	He	87.246238	0.4	1150326.040
Ni	60	1	He	89.010804	0.2	291000.133
Cu	63	1	He	88.372720	0.3	805978.960
Zn	66	1	He	87.317359	0.2	182696.087
As	75	1	He	84.559435	0.3	156164.530
Se	78	2	H2	86.492829	1.4	72144.683
Sr	88	1	He	85.466681	0.6	1033681.963
Mo	95	1	He	81.567848	0.5	528486.960
Pd	105	1	He	85.115075	0.3	825737.410
Ag	107	1	He	31.336063	0.8	648557.580
Cd	111	1	He	85.384562	0.6	329951.540
Sn	118	1	He	80.864852	0.6	803416.527
Sb	121	1	He	80.984754	0.2	1184466.623
Ba	138	1	He	83.452624	0.4	2792819.020
Pt	195	1	He	85.251263	0.6	1135432.080
Hg	202	1	He	0.008384	35.2	287.333
Tl	205	1	He	42.823575	0.4	2101691.013
Pb	208	1	He	86.218551	0.2	5763933.427
Bi	209	1	He	83.989666	1.8	4780239.510
Th	232	1	He	7.256899	0.9	504968.430
U	238	1	He	82.853351	1.2	5526168.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.70874187	570317.373
Sc	45	2	H2	98.46465026	4356661.500
Ge	72	1	He	99.66083108	496960.947
Ge	72	2	H2	101.5978890	1584700.083
In	115	1	He	101.0918663	6197124.627
Tb	159	1	He	102.8319744	14878363.113
Ir	193	1	He	101.4814445	7516090.097

Sample Name 4305432\_B69848Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 153SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:30:45  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.093991	23.8	107.667
Be	9	2	H2	0.049462	17.7	40.000
B	11	2	H2	-81.849514		1950.293
Na	23	1	He	0.466084	82.1	11951.513
Mg	24	1	He	-4.732494		2198.517
Al	27	1	He	2.161042	18.1	642.013
Si	28	2	H2	-0.430324		12674.743
K	39	1	He	-4.870269		66157.420
Ca	43	1	He	2.860237	20.2	19.317
Ti	47	1	He	0.056993	47.7	15.667
V	51	1	He	0.010017	489.4	-532.813
Cr	52	1	He	0.028912	38.5	2576.233
Mn	55	1	He	0.379709	6.6	2581.570
Fe	56	1	He	1.967519	26.3	26169.910
Co	59	1	He	0.025796	58.8	392.007
Ni	60	1	He	0.020219	72.4	268.000
Cu	63	1	He	0.057000	26.8	835.363
Zn	66	1	He	0.479882	1.6	1204.717
As	75	1	He	0.002537	321.7	172.000
Se	78	2	H2	-0.008612		34.667
Sr	88	1	He	0.024633	59.3	441.680
Mo	95	1	He	0.024166	49.0	168.667
Pd	105	1	He	0.019852	20.0	390.010
Ag	107	1	He	0.150744	25.6	3233.747
Cd	111	1	He	0.015461	51.6	81.970
Sn	118	1	He	0.025180	59.5	395.007
Sb	121	1	He	0.022118	64.3	363.340
Ba	138	1	He	0.025029	49.1	916.713
Pt	195	1	He	0.012768	84.4	384.003
Hg	202	1	He	-0.004398		203.333
Tl	205	1	He	0.040158	32.3	2458.593
Pb	208	1	He	0.030797	47.2	4920.393
Bi	209	1	He	0.014889	82.9	3117.113
Th	232	1	He	0.005101	73.0	1383.420
U	238	1	He	0.009849	104.2	1648.470

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.42204479	568590.940
Sc	45	2	H2	98.97139349	4379082.833
Ge	72	1	He	98.45917327	490968.853
Ge	72	2	H2	102.1139189	1592748.997
In	115	1	He	101.6715047	6232657.567
Tb	159	1	He	102.4790870	14827305.197
Ir	193	1	He	102.5396272	7594463.010

Sample Name 4303386\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 154SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:34:30  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	52.260151	1.0	19537.220
Be	9	2	H2	46.613418	1.4	17914.237
B	11	2	H2	-32.844078		17827.483
Na	23	1	He	1332.156436	1.5	1222211.987
Mg	24	1	He	3105.100702	1.5	1605614.767
Al	27	1	He	6256.881633	1.4	1641860.083
Si	28	2	H2	928.754282	1.5	2612168.083
K	39	1	He	1659.822256	1.4	1287724.330
Ca	43	1	He	3779.436730	1.0	8257.753
Ti	47	1	He	746.952998	1.1	181011.247
V	51	1	He	74.836925	1.1	504290.637
Cr	52	1	He	56.014087	1.9	451848.863
Mn	55	1	He	174.655333	1.5	1064120.147
Fe	56	1	He	10908.79549	1.4	83286274.667
Co	59	1	He	52.297565	1.5	678862.020
Ni	60	1	He	56.445406	1.3	181747.043
Cu	63	1	He	53.493041	1.5	480432.083
Zn	66	1	He	76.817446	1.6	158258.770
As	75	1	He	48.539943	1.5	88322.797
Se	78	2	H2	50.447605	0.3	41929.043
Sr	88	1	He	71.166698	1.7	847407.930
Mo	95	1	He	46.271156	1.7	294386.083
Pd	105	1	He	9.073687	1.1	86605.240
Ag	107	1	He	24.106786	1.7	489930.060
Cd	111	1	He	47.540753	1.4	180401.380
Sn	118	1	He	47.329337	1.4	461786.687
Sb	121	1	He	33.430196	1.8	480134.967
Ba	138	1	He	96.584160	2.2	3173932.660
Pt	195	1	He	9.635819	2.9	128081.977
Hg	202	1	He	4.165368	2.9	27263.153
Tl	205	1	He	49.243905	3.0	2408412.097
Pb	208	1	He	49.657598	1.4	3309306.667
Bi	209	1	He	47.069644	1.9	2679657.197
Th	232	1	He	48.897770	1.6	3396313.283
U	238	1	He	46.130843	2.2	3076927.457

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.47817748	568928.960
Sc	45	2	H2	98.71015675	4367524.167
Ge	72	1	He	98.11186241	489236.980
Ge	72	2	H2	101.2015556	1578518.167
In	115	1	He	99.25608333	6084587.617
Tb	159	1	He	102.4670581	14825564.780
Ir	193	1	He	101.4651662	7514884.470

Sample Name 4303387\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 155SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:38:14  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	40.395140	0.9	15220.293
Be	9	2	H2	35.619026	2.0	13787.617
B	11	2	H2	-43.471413		14481.427
Na	23	1	He	969.118206	4.8	887053.813
Mg	24	1	He	2196.633826	4.1	1130591.310
Al	27	1	He	4429.751754	3.9	1155667.290
Si	28	2	H2	696.456870	1.6	1975659.417
K	39	1	He	1239.952854	4.7	973920.820
Ca	43	1	He	2713.358341	5.0	5897.417
Ti	47	1	He	518.054549	4.2	124811.090
V	51	1	He	52.955786	5.3	354571.827
Cr	52	1	He	39.895008	4.0	320617.763
Mn	55	1	He	128.851045	5.0	780524.020
Fe	56	1	He	7586.790450	5.2	57587377.333
Co	59	1	He	37.254400	4.6	483780.440
Ni	60	1	He	40.094218	4.7	129201.827
Cu	63	1	He	38.060681	4.9	342040.667
Zn	66	1	He	53.835617	4.6	111013.917
As	75	1	He	34.916737	4.9	63604.127
Se	78	2	H2	39.168609	0.9	32907.383
Sr	88	1	He	50.631012	4.9	603123.183
Mo	95	1	He	32.959786	4.0	209798.220
Pd	105	1	He	6.951046	4.3	66423.887
Ag	107	1	He	17.437941	5.5	354603.340
Cd	111	1	He	33.965047	4.1	128954.457
Sn	118	1	He	33.377841	5.1	325871.570
Sb	121	1	He	24.123524	3.9	346638.510
Ba	138	1	He	68.975334	4.7	2267718.663
Pt	195	1	He	7.083651	4.4	93123.380
Hg	202	1	He	3.095635	4.5	20085.797
Tl	205	1	He	36.666049	3.9	1772510.807
Pb	208	1	He	36.415810	4.2	2399515.253
Bi	209	1	He	34.299178	3.7	1938263.040
Th	232	1	He	34.742313	4.3	2394923.557
U	238	1	He	33.172308	5.1	2195971.320

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.94699602	565730.290
Sc	45	2	H2	99.37165240	4396792.667
Ge	72	1	He	98.15072115	489430.750
Ge	72	2	H2	102.2686127	1595161.873
In	115	1	He	99.30266170	6087442.960
Tb	159	1	He	101.2731752	14652826.447
Ir	193	1	He	100.6815980	7456850.513

Sample Name 10605661002\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 156SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:41:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.890347	1.5	1510.910
Be	9	2	H2	0.176411	7.7	88.000
B	11	2	H2	-81.487540		2048.140
Na	23	1	He	348.327989	1.4	321949.977
Mg	24	1	He	2240.427413	0.9	1138078.837
Al	27	1	He	4329.167420	0.4	1114790.457
Si	28	2	H2	784.701950	1.1	2193891.250
K	39	1	He	486.963456	0.2	419118.223
Ca	43	1	He	10207.38979	0.4	21863.823
Ti	47	1	He	769.503961	0.5	182994.270
V	51	1	He	35.423686	1.5	233926.887
Cr	52	1	He	7.707634	0.2	62998.537
Mn	55	1	He	291.997780	0.2	1745662.920
Fe	56	1	He	11677.26037	0.3	87485986.667
Co	59	1	He	4.835791	0.9	61894.497
Ni	60	1	He	8.640788	1.4	27579.353
Cu	63	1	He	6.990122	0.4	62125.860
Zn	66	1	He	50.941674	0.5	103468.820
As	75	1	He	1.852213	2.5	3478.587
Se	78	2	H2	0.093357	14.7	118.000
Sr	88	1	He	25.447649	0.4	298623.410
Mo	95	1	He	0.199702	6.7	1277.397
Pd	105	1	He	0.042017	8.4	590.020
Ag	107	1	He	0.170946	30.5	3555.510
Cd	111	1	He	0.133396	5.1	525.780
Sn	118	1	He	1.086570	2.1	10700.843
Sb	121	1	He	0.060602	4.9	905.040
Ba	138	1	He	61.111569	0.4	2001099.140
Pt	195	1	He	0.006182	19.8	294.667
Hg	202	1	He	0.031188	13.6	430.677
Tl	205	1	He	0.081374	4.0	4439.127
Pb	208	1	He	4.064131	1.0	271236.717
Bi	209	1	He	0.032771	8.6	4084.037
Th	232	1	He	1.541300	0.6	107447.227
U	238	1	He	0.300535	1.2	20903.600

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.71576896	558316.083
Sc	45	2	H2	98.02405998	4337167.167
Ge	72	1	He	96.66328100	482013.597
Ge	72	2	H2	100.3223564	1564804.623
In	115	1	He	98.91278474	6063542.757
Tb	159	1	He	101.6305694	14704536.447
Ir	193	1	He	100.9142356	7474080.517

Sample Name 10605661002\_B69848Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 157SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:45:43  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.370020	7.7	210.000
Be	9	2	H2	0.040718	36.3	36.500
B	11	2	H2	-82.187068		1833.947
Na	23	1	He	30.342382	3.6	38870.500
Mg	24	1	He	201.252827	1.9	107737.463
Al	27	1	He	400.197723	0.7	104441.813
Si	28	2	H2	73.599543	1.2	219541.597
K	39	1	He	37.769263	4.4	96888.793
Ca	43	1	He	923.758905	1.1	2015.790
Ti	47	1	He	70.046657	2.6	16871.647
V	51	1	He	3.340046	1.9	21798.580
Cr	52	1	He	0.724184	4.5	8106.920
Mn	55	1	He	26.823926	1.5	162653.923
Fe	56	1	He	1077.882085	0.9	8188949.333
Co	59	1	He	0.449896	2.1	5871.200
Ni	60	1	He	0.813500	1.6	2806.947
Cu	63	1	He	0.682149	0.5	6416.767
Zn	66	1	He	5.068008	5.0	10595.230
As	75	1	He	0.164348	5.4	463.343
Se	78	2	H2	-0.016794		27.667
Sr	88	1	He	2.321414	2.7	27668.537
Mo	95	1	He	0.022802	8.2	160.000
Pd	105	1	He	0.009090	19.8	285.010
Ag	107	1	He	0.028055	2.7	683.360
Cd	111	1	He	0.011752	16.9	67.637
Sn	118	1	He	0.107801	8.0	1220.063
Sb	121	1	He	0.009028	7.5	171.667
Ba	138	1	He	5.481277	1.8	184425.903
Pt	195	1	He	-0.002743		179.333
Hg	202	1	He	0.008824	47.5	290.333
Tl	205	1	He	0.008376	9.8	910.043
Pb	208	1	He	0.369840	3.2	27606.147
Bi	209	1	He	0.002021	249.9	2390.257
Th	232	1	He	0.143817	5.1	11159.273
U	238	1	He	0.022208	9.3	2495.267

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.90328375	565467.063
Sc	45	2	H2	98.61350006	4363247.500
Ge	72	1	He	97.70811141	487223.667
Ge	72	2	H2	101.4624904	1582588.167
In	115	1	He	101.6008808	6228328.187
Tb	159	1	He	102.8817546	14885565.613
Ir	193	1	He	102.9238376	7622919.053



Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 158\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:49:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	75.509803	0.7	28565.810
Be	9	2	H2	73.234061	0.9	28501.400
B	11	2	H2	-5.370034		27082.347
Na	23	1	He	968.298805	0.4	902209.077
Mg	24	1	He	962.076758	0.1	506684.707
Al	27	1	He	956.135726	0.3	253968.197
Si	28	2	H2	475.599362	0.5	1362031.000
K	39	1	He	994.348358	0.3	808990.977
Ca	43	1	He	979.552739	2.6	2175.663
Ti	47	1	He	77.459594	0.4	18997.887
V	51	1	He	80.037192	1.0	545840.563
Cr	52	1	He	81.404117	0.6	663457.957
Mn	55	1	He	79.207423	0.3	488527.937
Fe	56	1	He	515.626050	0.3	3994643.667
Co	59	1	He	81.038056	0.3	1076475.247
Ni	60	1	He	82.181651	1.0	270687.593
Cu	63	1	He	82.143161	0.7	754774.650
Zn	66	1	He	80.154937	1.0	168977.507
As	75	1	He	78.544802	1.2	146147.370
Se	78	2	H2	79.226540	1.0	66983.293
Sr	88	1	He	79.839959	0.7	972824.883
Mo	95	1	He	75.980270	0.6	497270.113
Pd	105	1	He	80.839626	0.9	792199.363
Ag	107	1	He	40.187892	1.1	840148.763
Cd	111	1	He	78.980590	0.3	308299.283
Sn	118	1	He	75.630881	0.4	759045.013
Sb	121	1	He	76.343827	0.5	1127891.990
Ba	138	1	He	76.997625	0.1	2602894.807
Pt	195	1	He	81.800005	0.6	1090399.873
Hg	202	1	He	3.875267	1.0	25491.980
Tl	205	1	He	41.560342	0.5	2041570.493
Pb	208	1	He	80.969663	0.3	5417846.610
Bi	209	1	He	79.575433	0.6	4587442.017
Th	232	1	He	75.517611	0.5	5312808.257
U	238	1	He	76.218419	0.1	5149101.277

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.61374880	575767.147
Sc	45	2	H2	100.0018457	4424676.167
Ge	72	1	He	100.4060425	500676.960
Ge	72	2	H2	102.9755703	1606188.833
In	115	1	He	102.1155989	6259881.387
Tb	159	1	He	102.9224922	14891459.780
Ir	193	1	He	102.7869932	7612783.847

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 159\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:53:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.033633	30.5	86.000
Be	9	2	H2	0.030015	38.3	32.833
B	11	2	H2	-81.978354		1927.457
Na	23	1	He	-2.465969		9344.653
Mg	24	1	He	-7.089832		990.043
Al	27	1	He	0.559900	64.5	224.000
Si	28	2	H2	-1.244532		10495.700
K	39	1	He	-8.801734		63648.120
Ca	43	1	He	1.334287	61.7	16.083
Ti	47	1	He	0.071351	81.6	19.333
V	51	1	He	0.068584	22.6	-137.997
Cr	52	1	He	-0.018014		2212.840
Mn	55	1	He	0.213433	15.1	1579.427
Fe	56	1	He	1.597941	55.5	23517.740
Co	59	1	He	0.017073	44.3	281.337
Ni	60	1	He	0.011236	48.4	241.333
Cu	63	1	He	0.011840	51.9	432.677
Zn	66	1	He	0.059888	19.7	340.673
As	75	1	He	-0.014363		142.500
Se	78	2	H2	-0.016880		28.000
Sr	88	1	He	0.013352	65.0	310.007
Mo	95	1	He	0.016827	25.2	122.667
Pd	105	1	He	0.019700	6.2	393.343
Ag	107	1	He	0.148073	21.5	3222.070
Cd	111	1	He	0.013629	51.8	75.977
Sn	118	1	He	0.011446	73.3	261.670
Sb	121	1	He	0.014016	37.2	248.337
Ba	138	1	He	0.018167	51.5	696.697
Pt	195	1	He	0.009506	62.1	344.673
Hg	202	1	He	0.018560	22.0	356.007
Tl	205	1	He	0.037894	30.9	2373.580
Pb	208	1	He	0.009625	85.0	3550.207
Bi	209	1	He	0.004540	161.6	2553.640
Th	232	1	He	0.018043	33.3	2316.900
U	238	1	He	0.006457	89.9	1438.430

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.98044898	571953.540
Sc	45	2	H2	99.96064046	4422853.000
Ge	72	1	He	99.35793059	495450.527
Ge	72	2	H2	103.1956978	1609622.330
In	115	1	He	102.8932363	6307552.050
Tb	159	1	He	103.5584289	14983471.030
Ir	193	1	He	103.7280272	7682480.300

Sample Name 4312068\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 160SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/09/22 23:56:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.052454	30.0	92.833
Be	9	2	H2	0.040564	53.7	36.833
B	11	2	H2	-80.697849		2341.017
Na	23	1	He	5.778043	5.0	16916.350
Mg	24	1	He	-3.789555		2706.937
Al	27	1	He	9.312606	2.8	2538.550
Si	28	2	H2	2.017935	0.7	19682.317
K	39	1	He	-6.172788		65745.627
Ca	43	1	He	11.555650	12.2	38.600
Ti	47	1	He	0.102789	10.8	27.000
V	51	1	He	0.052873	64.9	-246.050
Cr	52	1	He	0.113273	9.1	3279.710
Mn	55	1	He	0.415743	4.4	2824.283
Fe	56	1	He	4.400436	3.4	45111.290
Co	59	1	He	0.021053	3.5	332.670
Ni	60	1	He	0.026654	10.5	290.667
Cu	63	1	He	0.340703	4.4	3411.080
Zn	66	1	He	2.082511	4.6	4541.390
As	75	1	He	-0.009752		150.500
Se	78	2	H2	-0.011951		32.000
Sr	88	1	He	0.031040	1.7	521.677
Mo	95	1	He	0.020752	12.9	147.333
Pd	105	1	He	0.013036	10.7	325.010
Ag	107	1	He	0.043695	17.3	1013.380
Cd	111	1	He	0.015594	0.2	82.973
Sn	118	1	He	0.039748	15.3	543.353
Sb	121	1	He	0.017889	11.2	303.343
Ba	138	1	He	0.057757	3.1	2028.497
Pt	195	1	He	0.003254	89.5	262.667
Hg	202	1	He	0.005320	23.2	271.000
Tl	205	1	He	0.018385	11.6	1420.087
Pb	208	1	He	0.035354	4.8	5317.100
Bi	209	1	He	0.012673	12.5	3030.413
Th	232	1	He	0.008432	25.9	1638.453
U	238	1	He	0.000871	218.9	1060.057

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.20795560	573323.540
Sc	45	2	H2	99.67281747	4410118.000
Ge	72	1	He	99.05585700	493944.230
Ge	72	2	H2	102.5434279	1599448.377
In	115	1	He	102.0920543	6258438.060
Tb	159	1	He	104.2341760	15081242.277
Ir	193	1	He	103.7806734	7686379.470

Sample Name 4312069\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 161SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:00:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	100.892483	0.6	37762.327
Be	9	2	H2	98.167264	0.6	37816.357
B	11	2	H2	22.506056	2.9	35873.393
Na	23	1	He	2052.067860	0.5	1881090.597
Mg	24	1	He	2028.479330	0.5	1053103.137
Al	27	1	He	2017.964204	0.6	530889.857
Si	28	2	H2	510.569811	0.6	1446532.253
K	39	1	He	2092.175182	0.2	1608924.510
Ca	43	1	He	2094.971700	2.3	4594.610
Ti	47	1	He	102.209587	1.2	24831.873
V	51	1	He	105.603905	0.6	713614.497
Cr	52	1	He	108.375144	0.3	874179.980
Mn	55	1	He	105.435107	0.5	644073.187
Fe	56	1	He	2162.322144	0.2	16558510.333
Co	59	1	He	107.376287	0.9	1419942.627
Ni	60	1	He	109.196762	0.9	358008.627
Cu	63	1	He	106.941845	0.8	978168.003
Zn	66	1	He	107.888882	0.4	226358.077
As	75	1	He	103.307918	0.7	191319.180
Se	78	2	H2	105.137515	0.9	88229.630
Sr	88	1	He	105.297548	0.9	1277260.087
Mo	95	1	He	101.487741	0.5	655211.707
Pd	105	1	He	21.076466	0.5	203892.883
Ag	107	1	He	52.372012	1.5	1079950.453
Cd	111	1	He	105.068327	0.3	404573.013
Sn	118	1	He	100.311555	0.4	993067.590
Sb	121	1	He	102.374562	0.1	1491996.490
Ba	138	1	He	102.799542	0.4	3428041.513
Pt	195	1	He	21.327961	0.9	284500.190
Hg	202	1	He	0.008492	24.2	288.333
Tl	205	1	He	108.348470	0.7	5322039.090
Pb	208	1	He	106.261123	0.7	7110109.267
Bi	209	1	He	103.768850	0.9	5923040.540
Th	232	1	He	104.681856	1.0	7292805.307
U	238	1	He	101.058743	0.8	6760256.563

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.71312207	570343.750
Sc	45	2	H2	99.00261293	4380464.167
Ge	72	1	He	99.95674005	498436.503
Ge	72	2	H2	102.2250994	1594483.163
In	115	1	He	100.7333034	6175144.033
Tb	159	1	He	102.9381928	14893731.447
Ir	193	1	He	101.7869023	7538713.430

Sample Name 10601164001\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 162SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:04:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.491772	1.0	1016.033
Be	9	2	H2	0.074252	11.4	50.167
B	11	2	H2	-55.672699		10591.040
Na	23	1	He	8197.685454	1.3	7418838.847
Mg	24	1	He	11652.39117	1.7	5977910.537
Al	27	1	He	56.095903	1.2	14710.230
Si	28	2	H2	1014.967711	0.4	2897757.333
K	39	1	He	1462.182357	0.9	1136201.077
Ca	43	1	He	33699.30672	1.0	73107.567
Ti	47	1	He	0.170769	17.5	43.000
V	51	1	He	0.307500	2.0	1466.327
Cr	52	1	He	0.647502	5.7	7497.270
Mn	55	1	He	1.689955	3.2	10501.780
Fe	56	1	He	8.251476	3.3	73729.300
Co	59	1	He	0.171634	2.6	2296.857
Ni	60	1	He	0.998272	1.5	3432.417
Cu	63	1	He	184.695267	0.9	1667391.377
Zn	66	1	He	27.842293	0.8	57822.413
As	75	1	He	0.371965	1.1	847.193
Se	78	2	H2	0.123232	6.9	146.667
Sr	88	1	He	118.125605	0.2	1414453.573
Mo	95	1	He	1.053477	1.0	6754.957
Pd	105	1	He	0.080179	7.6	961.710
Ag	107	1	He	0.175981	28.2	3690.540
Cd	111	1	He	0.032284	14.6	144.783
Sn	118	1	He	0.107762	11.8	1198.393
Sb	121	1	He	0.192585	6.6	2820.307
Ba	138	1	He	20.415598	1.1	675079.887
Pt	195	1	He	0.007305	24.1	308.003
Hg	202	1	He	0.003204	30.1	249.333
Tl	205	1	He	0.041313	16.4	2480.257
Pb	208	1	He	1.886111	0.6	126729.533
Bi	209	1	He	0.025911	28.3	3673.927
Th	232	1	He	0.051440	10.0	4535.837
U	238	1	He	0.294471	2.3	20386.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.95104409	565754.667
Sc	45	2	H2	100.2417396	4435290.500
Ge	72	1	He	98.67360729	492038.133
Ge	72	2	H2	103.1692867	1609210.377
In	115	1	He	99.87913791	6122782.053
Tb	159	1	He	101.0964997	14627263.947
Ir	193	1	He	100.3586917	7432934.887

Sample Name 4315153\_B70034Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 163SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:08:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.560671	8.5	282.000
Be	9	2	H2	0.042080	19.3	37.167
B	11	2	H2	-76.764526		3603.600
Na	23	1	He	1677.269912	1.2	1529539.663
Mg	24	1	He	2376.961174	1.2	1225136.103
Al	27	1	He	13.327808	3.3	3557.763
Si	28	2	H2	204.847432	0.4	588657.913
K	39	1	He	288.839424	0.7	280571.440
Ca	43	1	He	6795.291472	0.3	14776.553
Ti	47	1	He	0.134632	24.8	34.333
V	51	1	He	0.078137	79.9	-73.563
Cr	52	1	He	0.146556	11.4	3507.097
Mn	55	1	He	0.527577	4.9	3469.087
Fe	56	1	He	3.802659	20.3	40009.947
Co	59	1	He	0.047744	15.3	680.683
Ni	60	1	He	0.262718	25.7	1054.097
Cu	63	1	He	37.393225	0.8	338395.613
Zn	66	1	He	5.661092	1.4	11947.607
As	75	1	He	0.070256	15.7	296.500
Se	78	2	H2	0.014039	28.7	53.667
Sr	88	1	He	23.957781	0.4	287465.927
Mo	95	1	He	0.210066	4.1	1374.073
Pd	105	1	He	0.020355	34.9	393.343
Ag	107	1	He	0.047902	16.1	1091.720
Cd	111	1	He	0.014093	47.6	76.417
Sn	118	1	He	0.034862	25.8	490.013
Sb	121	1	He	0.048017	22.6	741.693
Ba	138	1	He	4.100652	1.1	137468.477
Pt	195	1	He	0.001728	111.2	239.333
Hg	202	1	He	-0.001560		223.000
Tl	205	1	He	0.018423	31.0	1405.090
Pb	208	1	He	0.384572	1.9	28643.683
Bi	209	1	He	0.009945	44.9	2813.700
Th	232	1	He	0.015450	37.0	2091.860
U	238	1	He	0.062782	10.2	5176.067

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.09851156	566642.687
Sc	45	2	H2	98.99652197	4380194.667
Ge	72	1	He	98.83738877	492854.833
Ge	72	2	H2	102.1858899	1593871.583
In	115	1	He	101.2129790	6204549.067
Tb	159	1	He	103.0741624	14913404.363
Ir	193	1	He	101.7611390	7536805.303

Sample Name 4312070\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 164SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:11:55  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	101.511622	0.8	37377.040
Be	9	2	H2	97.624532	0.5	36997.180
B	11	2	H2	47.600590	1.3	43315.610
Na	23	1	He	10400.44973	0.2	9285206.323
Mg	24	1	He	13862.50830	0.3	7017374.893
Al	27	1	He	2009.109421	0.1	517324.917
Si	28	2	H2	1558.114257	0.7	4314733.000
K	39	1	He	3522.041762	0.5	2604179.493
Ca	43	1	He	36457.07981	0.4	78043.687
Ti	47	1	He	100.957392	0.9	24006.493
V	51	1	He	104.239637	0.2	689427.683
Cr	52	1	He	106.151183	0.2	838099.810
Mn	55	1	He	103.585203	0.5	619327.877
Fe	56	1	He	2110.388769	0.4	15817584.333
Co	59	1	He	103.833397	0.6	1333185.707
Ni	60	1	He	105.500395	0.6	335842.137
Cu	63	1	He	290.599760	0.2	2580249.750
Zn	66	1	He	132.002344	0.8	268854.253
As	75	1	He	103.071452	0.2	185334.710
Se	78	2	H2	103.941081	0.7	85780.067
Sr	88	1	He	224.980818	0.2	2649573.817
Mo	95	1	He	103.184815	0.7	643344.543
Pd	105	1	He	20.706091	1.3	193449.857
Ag	107	1	He	51.169516	0.8	1019040.087
Cd	111	1	He	103.853298	0.3	386191.453
Sn	118	1	He	99.912263	0.5	955212.743
Sb	121	1	He	101.967272	0.5	1435132.790
Ba	138	1	He	123.373559	0.3	3973139.107
Pt	195	1	He	20.679162	0.6	272807.177
Hg	202	1	He	0.005307	57.9	264.667
Tl	205	1	He	106.214698	1.2	5159466.070
Pb	208	1	He	104.398014	0.3	6908574.637
Bi	209	1	He	100.399148	0.3	5634273.667
Th	232	1	He	103.901340	0.6	7116212.183
U	238	1	He	101.308082	0.3	6662968.443

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.70117975	558228.230
Sc	45	2	H2	97.39451453	4309312.333
Ge	72	1	He	97.05208304	483952.367
Ge	72	2	H2	100.5287376	1568023.710
In	115	1	He	97.28080919	5963499.537
Tb	159	1	He	101.8000829	14729062.697
Ir	193	1	He	100.0714109	7411657.807

Sample Name 4312071\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 165SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:15:40  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	99.552631	0.7	36635.913
Be	9	2	H2	95.441354	0.6	36149.643
B	11	2	H2	45.698529	2.9	42681.983
Na	23	1	He	9966.660518	0.5	8865350.287
Mg	24	1	He	13244.49743	0.6	6679796.773
Al	27	1	He	1968.329576	0.6	50496.740
Si	28	2	H2	1496.771349	0.6	4143002.667
K	39	1	He	3410.717384	0.3	2514680.170
Ca	43	1	He	34694.45094	0.5	73996.260
Ti	47	1	He	99.078884	0.5	23472.313
V	51	1	He	102.696475	0.2	676682.497
Cr	52	1	He	104.271453	0.5	820240.437
Mn	55	1	He	102.129620	0.4	608364.333
Fe	56	1	He	2076.948355	0.5	15509440.000
Co	59	1	He	101.360055	1.0	1308198.373
Ni	60	1	He	102.822805	1.1	329024.950
Cu	63	1	He	277.515784	0.5	2476924.750
Zn	66	1	He	127.392286	0.9	260820.720
As	75	1	He	100.329558	0.8	181345.960
Se	78	2	H2	101.259672	0.7	83550.810
Sr	88	1	He	216.672229	0.8	2564986.053
Mo	95	1	He	100.406837	1.4	624878.373
Pd	105	1	He	20.301456	0.9	189326.580
Ag	107	1	He	49.978099	0.6	993535.870
Cd	111	1	He	101.852205	0.8	378065.160
Sn	118	1	He	97.851127	0.7	933813.083
Sb	121	1	He	100.448942	0.8	1411182.530
Ba	138	1	He	120.773616	0.4	3882471.713
Pt	195	1	He	20.307451	0.5	266790.323
Hg	202	1	He	0.004229	77.0	256.667
Tl	205	1	He	104.791200	0.2	5069246.693
Pb	208	1	He	103.200935	0.4	6800648.437
Bi	209	1	He	98.238987	0.7	5555987.837
Th	232	1	He	101.156520	0.9	6981844.900
U	238	1	He	99.158020	0.8	6572171.983

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.35683714	556154.667
Sc	45	2	H2	97.33763926	4306795.833
Ge	72	1	He	97.55924078	486481.320
Ge	72	2	H2	100.5102814	1567735.833
In	115	1	He	97.10657417	5952818.597
Tb	159	1	He	101.3730292	14667273.947
Ir	193	1	He	100.8532155	7469561.140



Sample Name 10601164002\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 166SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:19:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.567673	3.2	1038.037
Be	9	2	H2	0.085408	14.1	54.167
B	11	2	H2	-54.439592		10925.943
Na	23	1	He	8464.394318	0.7	7616834.053
Mg	24	1	He	12075.13275	0.6	6160023.033
Al	27	1	He	43.011409	1.2	11232.897
Si	28	2	H2	1046.223319	0.5	2967294.083
K	39	1	He	1489.067964	0.5	1149283.423
Ca	43	1	He	34662.25524	0.5	74772.250
Ti	47	1	He	0.223342	39.0	55.333
V	51	1	He	0.228220	40.5	928.593
Cr	52	1	He	0.629126	2.8	7310.503
Mn	55	1	He	1.051543	3.8	6599.503
Fe	56	1	He	9.252426	4.9	80870.907
Co	59	1	He	0.185379	10.8	2456.883
Ni	60	1	He	1.504968	1.1	5032.880
Cu	63	1	He	223.934713	1.1	2006168.043
Zn	66	1	He	140.925339	0.3	289589.123
As	75	1	He	0.413156	8.3	915.197
Se	78	2	H2	0.150235	9.5	168.333
Sr	88	1	He	119.680734	0.1	1422175.760
Mo	95	1	He	1.057268	3.3	6722.937
Pd	105	1	He	0.076346	13.9	916.703
Ag	107	1	He	0.197340	27.8	4095.657
Cd	111	1	He	0.044414	33.8	189.453
Sn	118	1	He	0.235763	3.6	2435.230
Sb	121	1	He	0.218415	8.2	3167.057
Ba	138	1	He	19.207660	0.7	629902.217
Pt	195	1	He	0.010546	55.7	356.007
Hg	202	1	He	-0.002940		213.333
Tl	205	1	He	0.058393	33.1	3362.143
Pb	208	1	He	1.573629	0.1	107915.483
Bi	209	1	He	0.036271	40.7	4330.803
Th	232	1	He	0.063437	24.8	5452.877
U	238	1	He	0.316300	4.6	22232.467

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.41333469	562516.687
Sc	45	2	H2	99.59468978	4406661.167
Ge	72	1	He	97.92255813	488293.010
Ge	72	2	H2	102.4931829	1598664.667
In	115	1	He	99.05496752	6072258.833
Tb	159	1	He	102.7222714	14862490.613
Ir	193	1	He	102.2604334	7573784.890

Sample Name 10601164003\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 167SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:23:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.558927	4.2	1027.867
Be	9	2	H2	0.061659	9.1	44.667
B	11	2	H2	-54.603609		10801.187
Na	23	1	He	8556.627862	0.3	7665715.513
Mg	24	1	He	12085.83878	0.3	6138247.407
Al	27	1	He	47.829607	1.4	12428.170
Si	28	2	H2	1055.601166	0.5	2974164.417
K	39	1	He	1501.693174	0.5	1153325.813
Ca	43	1	He	34577.45851	0.6	74259.350
Ti	47	1	He	0.136236	25.1	34.333
V	51	1	He	0.247286	21.2	1049.837
Cr	52	1	He	0.262941	3.3	4386.003
Mn	55	1	He	1.374742	2.5	8509.163
Fe	56	1	He	8.549521	2.2	75238.260
Co	59	1	He	0.164015	4.0	2155.500
Ni	60	1	He	0.742415	5.9	2554.900
Cu	63	1	He	205.575076	0.9	1820636.333
Zn	66	1	He	114.751843	0.3	233143.343
As	75	1	He	0.372922	2.0	832.857
Se	78	2	H2	0.129975	16.1	150.000
Sr	88	1	He	121.728549	0.4	1429935.240
Mo	95	1	He	1.054871	2.7	6691.593
Pd	105	1	He	0.068796	4.0	843.367
Ag	107	1	He	0.053718	6.9	1183.393
Cd	111	1	He	0.017152	18.3	86.130
Sn	118	1	He	0.065168	20.0	771.697
Sb	121	1	He	0.204526	10.3	2960.343
Ba	138	1	He	19.739306	0.9	645735.823
Pt	195	1	He	0.006305	27.7	295.337
Hg	202	1	He	-0.001960		216.667
Tl	205	1	He	0.016900	43.6	1308.413
Pb	208	1	He	1.648589	0.8	111357.173
Bi	209	1	He	0.010938	43.1	2843.697
Th	232	1	He	0.016144	20.2	2121.867
U	238	1	He	0.296865	3.1	20636.473

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.00087903	560032.960
Sc	45	2	H2	98.94441174	4377889.000
Ge	72	1	He	96.80219479	482706.293
Ge	72	2	H2	101.7369130	1586868.547
In	115	1	He	98.81678153	6057657.577
Tb	159	1	He	101.3027795	14657109.780
Ir	193	1	He	100.8275168	7467657.803

Sample Name 10601164004\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 168SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:26:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.450714	1.1	986.197
Be	9	2	H2	0.061365	4.7	44.500
B	11	2	H2	-55.867097		10376.557
Na	23	1	He	8279.029918	0.2	7407331.763
Mg	24	1	He	11801.36648	0.4	5985738.453
Al	27	1	He	48.577319	0.9	12603.980
Si	28	2	H2	1036.419099	0.7	2916431.833
K	39	1	He	1455.263920	0.7	1118263.447
Ca	43	1	He	33546.64785	0.8	71948.270
Ti	47	1	He	0.154519	9.5	38.667
V	51	1	He	0.284540	12.9	1297.050
Cr	52	1	He	0.283331	7.8	4540.717
Mn	55	1	He	0.870717	3.1	5479.043
Fe	56	1	He	4.591370	3.3	45434.263
Co	59	1	He	0.143605	1.4	1896.797
Ni	60	1	He	0.749307	2.2	2580.240
Cu	63	1	He	267.170044	0.6	2368964.000
Zn	66	1	He	81.638515	0.6	166127.060
As	75	1	He	0.371122	4.1	830.523
Se	78	2	H2	0.139635	5.2	157.333
Sr	88	1	He	116.712373	0.5	1372688.103
Mo	95	1	He	1.024616	2.0	6472.817
Pd	105	1	He	0.072224	14.0	871.703
Ag	107	1	He	0.034819	8.6	798.360
Cd	111	1	He	0.011494	34.6	64.503
Sn	118	1	He	0.053842	8.0	660.020
Sb	121	1	He	0.261368	1.3	3758.870
Ba	138	1	He	18.385681	0.7	598987.480
Pt	195	1	He	0.005280	20.9	281.333
Hg	202	1	He	-0.000548		225.333
Tl	205	1	He	0.011636	48.4	1050.057
Pb	208	1	He	1.584002	1.1	106910.707
Bi	209	1	He	0.007655	59.4	2666.983
Th	232	1	He	0.010212	16.2	1718.463
U	238	1	He	0.282769	2.8	19748.407

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.87336296	559265.083
Sc	45	2	H2	98.81194385	4372027.833
Ge	72	1	He	96.91927505	483290.117
Ge	72	2	H2	101.0996337	1576928.413
In	115	1	He	98.40550431	6032445.497
Tb	159	1	He	101.1251940	14631415.613
Ir	193	1	He	101.0301775	7482667.597

Sample Name 10601164004\_B70034Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 169SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:30:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.322976	7.7	190.167
Be	9	2	H2	0.033098	61.7	33.167
B	11	2	H2	-79.121814		2791.593
Na	23	1	He	880.810297	6.2	766964.883
Mg	24	1	He	1248.575352	5.8	612505.917
Al	27	1	He	7.352696	6.1	1894.127
Si	28	2	H2	104.361651	0.2	301760.490
K	39	1	He	153.436376	9.9	172244.417
Ca	43	1	He	3526.416531	5.5	7280.207
Ti	47	1	He	0.033215	27.5	9.333
V	51	1	He	0.007088	775.7	-524.380
Cr	52	1	He	0.043838	21.8	2552.230
Mn	55	1	He	0.239382	12.1	1630.100
Fe	56	1	He	1.146906	5.5	18848.823
Co	59	1	He	0.023466	9.3	345.340
Ni	60	1	He	0.105631	7.8	517.343
Cu	63	1	He	28.259699	4.6	242461.527
Zn	66	1	He	8.864220	3.8	17620.680
As	75	1	He	0.047641	16.4	241.833
Se	78	2	H2	-0.003786		38.000
Sr	88	1	He	12.340920	4.1	140435.163
Mo	95	1	He	0.120808	7.0	755.357
Pd	105	1	He	0.011470	57.8	291.673
Ag	107	1	He	0.020368	12.1	496.680
Cd	111	1	He	0.003993	48.5	35.530
Sn	118	1	He	0.023000	14.3	353.343
Sb	121	1	He	0.032126	3.9	485.013
Ba	138	1	He	1.921636	5.7	61250.020
Pt	195	1	He	0.000345	773.6	210.000
Hg	202	1	He	-0.004757		192.667
Tl	205	1	He	0.005248	46.8	723.360
Pb	208	1	He	0.169344	4.3	13564.373
Bi	209	1	He	0.006877	47.3	2540.290
Th	232	1	He	0.002109	54.0	1120.063
U	238	1	He	0.028518	6.7	2773.657

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.44689078	538631.543
Sc	45	2	H2	97.39824745	4309477.500
Ge	72	1	He	93.79317914	467701.770
Ge	72	2	H2	100.2257855	1563298.333
In	115	1	He	96.31394336	5904228.813
Tb	159	1	He	98.31757978	14225192.703
Ir	193	1	He	97.75758872	7240287.600

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 170\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:34:24  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	79.020601	0.7	28562.303
Be	9	2	H2	76.259058	0.6	28358.953
B	11	2	H2	-2.805985		26683.297
Na	23	1	He	993.787380	5.2	888992.617
Mg	24	1	He	988.045196	5.0	499645.750
Al	27	1	He	974.452064	4.4	248626.773
Si	28	2	H2	487.590922	0.3	1333970.620
K	39	1	He	1003.431627	4.7	783585.017
Ca	43	1	He	990.969274	4.8	2114.170
Ti	47	1	He	78.564143	5.9	18501.930
V	51	1	He	80.445275	3.9	527019.310
Cr	52	1	He	82.256148	4.3	643924.710
Mn	55	1	He	80.091316	4.3	474478.343
Fe	56	1	He	520.615432	4.3	3874179.083
Co	59	1	He	81.790679	4.0	1044834.207
Ni	60	1	He	82.787899	3.7	262261.577
Cu	63	1	He	82.634109	4.2	730174.980
Zn	66	1	He	80.993914	4.1	164203.000
As	75	1	He	78.820158	4.4	141031.610
Se	78	2	H2	80.168946	0.7	64905.573
Sr	88	1	He	80.300572	4.1	940978.163
Mo	95	1	He	76.304542	5.0	484186.343
Pd	105	1	He	81.550243	5.3	774755.640
Ag	107	1	He	40.521397	5.3	821304.700
Cd	111	1	He	79.642514	4.8	301430.650
Sn	118	1	He	76.653431	4.9	745890.767
Sb	121	1	He	77.393681	4.4	1108773.653
Ba	138	1	He	78.080716	5.5	2558737.463
Pt	195	1	He	83.058826	4.7	1082815.753
Hg	202	1	He	3.933320	4.4	25303.623
Tl	205	1	He	42.402545	4.2	2037229.293
Pb	208	1	He	82.450242	4.4	5395534.870
Bi	209	1	He	80.356122	5.5	4553356.287
Th	232	1	He	76.470931	4.9	5289027.840
U	238	1	He	77.380844	4.9	5139648.777

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.93600138	553620.477
Sc	45	2	H2	95.55579236	4227956.333
Ge	72	1	He	96.65038959	481949.313
Ge	72	2	H2	98.60878323	1538076.710
In	115	1	He	99.14749814	6077931.137
Tb	159	1	He	100.7793218	14581372.697
Ir	193	1	He	101.2153306	7496380.720

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 171\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:38:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.088906	44.5	92.167
Be	9	2	H2	0.074921	30.1	43.167
B	11	2	H2	-81.052472		1913.457
Na	23	1	He	0.283105	216.9	11279.320
Mg	24	1	He	-4.954851		1995.160
Al	27	1	He	0.444872	27.2	184.000
Si	28	2	H2	-0.595836		10588.457
K	39	1	He	-6.318129		62292.470
Ca	43	1	He	6.366830	16.2	25.800
Ti	47	1	He	0.032444	76.5	9.333
V	51	1	He	0.064579	33.4	-156.993
Cr	52	1	He	-0.000270		2241.513
Mn	55	1	He	0.164197	11.8	1215.387
Fe	56	1	He	0.606264	15.5	15112.537
Co	59	1	He	0.036150	37.6	506.013
Ni	60	1	He	0.032701	51.0	296.003
Cu	63	1	He	0.070673	48.3	920.037
Zn	66	1	He	0.075381	45.5	354.670
As	75	1	He	0.011995	89.2	181.667
Se	78	2	H2	-0.009981		29.333
Sr	88	1	He	0.044333	38.7	650.020
Mo	95	1	He	0.036394	37.6	239.337
Pd	105	1	He	0.024187	24.8	416.677
Ag	107	1	He	0.151022	27.5	3123.720
Cd	111	1	He	0.030239	48.4	134.290
Sn	118	1	He	0.025921	59.2	388.340
Sb	121	1	He	0.033941	33.9	518.347
Ba	138	1	He	0.033276	46.2	1151.730
Pt	195	1	He	0.027194	43.4	565.350
Hg	202	1	He	0.013103	17.6	311.000
Tl	205	1	He	0.049046	30.1	2842.013
Pb	208	1	He	0.026088	55.6	4525.330
Bi	209	1	He	0.025063	51.3	3670.590
Th	232	1	He	0.038907	27.7	3720.580
U	238	1	He	0.024010	43.2	2581.963

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.35313543	544088.770
Sc	45	2	H2	87.44858050	3869245.083
Ge	72	1	He	94.51003613	471276.393
Ge	72	2	H2	90.68158746	1414430.167
In	115	1	He	98.01734490	6008650.583
Tb	159	1	He	100.5680282	14550801.447
Ir	193	1	He	101.5825821	7523580.720

Sample Name 10601164016\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 172SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:41:53  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.072858	1.4	820.020
Be	9	2	H2	0.047960	35.0	38.167
B	11	2	H2	-58.975956		9087.227
Na	23	1	He	8043.180888	0.2	7018403.023
Mg	24	1	He	11122.81532	0.3	5502109.503
Al	27	1	He	54.785513	1.0	13853.420
Si	28	2	H2	992.046127	0.8	2708431.000
K	39	1	He	1420.493052	0.3	1066115.297
Ca	43	1	He	32647.33621	0.3	68286.220
Ti	47	1	He	0.165823	18.2	40.333
V	51	1	He	0.284520	8.5	1264.620
Cr	52	1	He	0.296544	2.4	4530.043
Mn	55	1	He	3.809078	0.8	22501.253
Fe	56	1	He	66.719736	0.4	498968.847
Co	59	1	He	0.048069	9.4	656.683
Ni	60	1	He	0.927050	2.2	3074.333
Cu	63	1	He	23.963949	0.5	207999.927
Zn	66	1	He	61.539041	0.5	122467.597
As	75	1	He	0.334897	3.5	748.353
Se	78	2	H2	0.120235	7.1	137.333
Sr	88	1	He	115.642778	0.8	1329567.900
Mo	95	1	He	0.966259	0.7	5992.607
Pd	105	1	He	0.075713	4.9	888.370
Ag	107	1	He	0.045467	15.6	993.380
Cd	111	1	He	0.029518	9.1	129.920
Sn	118	1	He	0.063199	3.4	736.690
Sb	121	1	He	0.172911	2.5	2453.573
Ba	138	1	He	19.187320	0.4	613581.110
Pt	195	1	He	0.008484	8.1	320.003
Hg	202	1	He	0.004609	47.6	255.667
Tl	205	1	He	0.016741	13.6	1285.073
Pb	208	1	He	2.184633	0.5	144886.493
Bi	209	1	He	0.006064	29.7	2503.637
Th	232	1	He	0.017087	5.0	2131.863
U	238	1	He	0.292325	2.5	19810.817

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.57332475	545414.707
Sc	45	2	H2	95.84792459	4240882.000
Ge	72	1	He	94.74507236	472448.407
Ge	72	2	H2	98.29752049	1533221.707
In	115	1	He	96.59108127	5921217.897
Tb	159	1	He	100.0933342	14482119.783
Ir	193	1	He	98.21411869	7274099.893

Sample Name 10601164017\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 173SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:45:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.256696	1.3	1245.717
Be	9	2	H2	0.045482	42.4	37.167
B	11	2	H2	-50.568195		11710.357
Na	23	1	He	8480.181054	0.6	7454856.343
Mg	24	1	He	12567.30835	0.6	6262900.947
Al	27	1	He	61.687478	0.6	15706.920
Si	28	2	H2	1092.358723	0.6	2975176.167
K	39	1	He	1499.789499	0.2	1130350.117
Ca	43	1	He	34388.04372	0.1	72468.470
Ti	47	1	He	0.158821	28.4	39.000
V	51	1	He	0.294993	43.8	1341.430
Cr	52	1	He	1.750181	0.4	15831.200
Mn	55	1	He	3.115485	0.8	18590.480
Fe	56	1	He	8.798428	0.3	75663.687
Co	59	1	He	0.271642	1.5	3477.760
Ni	60	1	He	3.204094	1.3	10200.917
Cu	63	1	He	113.257738	1.0	987174.647
Zn	66	1	He	116.558735	0.2	233034.547
As	75	1	He	0.390132	4.3	849.860
Se	78	2	H2	0.124177	4.8	140.333
Sr	88	1	He	120.661597	0.8	1394779.510
Mo	95	1	He	1.067274	0.7	6601.543
Pd	105	1	He	0.075055	4.6	880.037
Ag	107	1	He	0.029508	15.6	676.690
Cd	111	1	He	0.020169	22.3	95.143
Sn	118	1	He	0.056700	3.4	673.357
Sb	121	1	He	0.212473	4.0	2998.687
Ba	138	1	He	20.234236	1.2	645461.320
Pt	195	1	He	0.004265	34.5	265.333
Hg	202	1	He	0.000198	150.3	227.667
Tl	205	1	He	0.014347	6.5	1170.067
Pb	208	1	He	1.468312	1.2	98251.883
Bi	209	1	He	0.216304	1.2	14271.273
Th	232	1	He	0.014021	17.7	1951.830
U	238	1	He	0.280796	0.2	19331.133

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.25595863	549525.393
Sc	45	2	H2	95.66061552	4232594.333
Ge	72	1	He	95.25739268	475003.103
Ge	72	2	H2	98.21661937	1531959.830
In	115	1	He	96.35087843	5906493.003
Tb	159	1	He	100.0465144	14475345.617
Ir	193	1	He	99.55953170	7373746.143



Sample Name 10601164018\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 174SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:49:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.220838	2.8	877.197
Be	9	2	H2	0.034158	29.8	33.167
B	11	2	H2	-57.777736		9504.487
Na	23	1	He	8214.666914	0.5	7238151.977
Mg	24	1	He	11542.75920	0.6	5765693.037
Al	27	1	He	42.039269	1.1	10751.540
Si	28	2	H2	1041.416086	0.6	2854653.583
K	39	1	He	1442.269192	0.7	1092050.300
Ca	43	1	He	33399.88927	0.8	70545.137
Ti	47	1	He	0.111567	17.6	28.000
V	51	1	He	0.267463	20.7	1165.570
Cr	52	1	He	0.554038	1.7	6574.820
Mn	55	1	He	0.969408	1.1	5977.900
Fe	56	1	He	8.500328	0.9	73631.463
Co	59	1	He	0.112941	3.4	1488.743
Ni	60	1	He	2.634044	3.6	8483.157
Cu	63	1	He	203.521928	0.5	1786736.663
Zn	66	1	He	250.819821	0.2	504892.330
As	75	1	He	0.363071	1.6	808.020
Se	78	2	H2	0.132319	15.5	148.333
Sr	88	1	He	115.474319	0.5	1344614.667
Mo	95	1	He	1.013507	1.8	6334.757
Pd	105	1	He	0.067261	10.7	816.700
Ag	107	1	He	0.018792	10.2	470.010
Cd	111	1	He	0.068646	6.8	276.527
Sn	118	1	He	0.441316	6.5	4359.050
Sb	121	1	He	0.263824	6.8	3753.867
Ba	138	1	He	18.661108	0.5	601439.820
Pt	195	1	He	0.004122	6.9	262.667
Hg	202	1	He	0.000832	220.3	231.000
Tl	205	1	He	0.012035	3.8	1056.717
Pb	208	1	He	2.755951	0.2	181464.373
Bi	209	1	He	0.006502	25.2	2576.967
Th	232	1	He	0.005316	22.6	1366.753
U	238	1	He	0.295676	1.6	20416.090

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.46240013	550768.543
Sc	45	2	H2	96.25489974	4258889.000
Ge	72	1	He	95.95515487	478482.510
Ge	72	2	H2	99.23112898	1547783.913
In	115	1	He	97.35003977	5967743.503
Tb	159	1	He	99.77143634	14435545.620
Ir	193	1	He	100.1046086	7414116.553

Sample Name 10601164019\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 175SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:53:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.129748	4.0	849.190
Be	9	2	H2	0.026998	81.7	30.667
B	11	2	H2	-58.929437		9195.793
Na	23	1	He	8274.314103	0.5	7329776.977
Mg	24	1	He	11818.95598	0.5	5935362.203
Al	27	1	He	27.652809	2.2	7135.377
Si	28	2	H2	1020.610961	1.2	2814846.083
K	39	1	He	1342.605288	0.5	1026746.417
Ca	43	1	He	34005.50978	0.1	72210.830
Ti	47	1	He	0.119404	0.6	30.000
V	51	1	He	0.290715	6.5	1324.977
Cr	52	1	He	0.340872	3.4	4945.517
Mn	55	1	He	0.989286	1.9	6127.963
Fe	56	1	He	8.823030	0.9	76422.960
Co	59	1	He	0.202167	1.1	2620.910
Ni	60	1	He	0.902544	3.6	3035.657
Cu	63	1	He	176.968021	1.2	1553303.417
Zn	66	1	He	117.817930	0.7	237222.663
As	75	1	He	0.353863	2.7	791.520
Se	78	2	H2	0.122722	13.7	141.000
Sr	88	1	He	117.600881	0.3	1369097.220
Mo	95	1	He	0.998156	2.7	6275.403
Pd	105	1	He	0.073214	12.0	876.700
Ag	107	1	He	0.016985	4.8	436.677
Cd	111	1	He	0.014156	3.9	74.203
Sn	118	1	He	0.069582	12.2	808.367
Sb	121	1	He	0.168059	5.0	2418.560
Ba	138	1	He	19.632211	1.0	636412.050
Pt	195	1	He	0.004886	15.9	275.333
Hg	202	1	He	-0.002375		213.000
Tl	205	1	He	0.008256	22.9	885.040
Pb	208	1	He	1.171334	0.2	79545.550
Bi	209	1	He	0.006443	41.9	2566.960
Th	232	1	He	0.003533	43.9	1241.737
U	238	1	He	0.244777	2.2	17019.537

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.95413105	553729.650
Sc	45	2	H2	96.84155613	4284846.167
Ge	72	1	He	95.93556273	478384.813
Ge	72	2	H2	99.56120596	1552932.377
In	115	1	He	97.91810232	6002566.823
Tb	159	1	He	100.7976949	14584031.033
Ir	193	1	He	99.82337269	7393287.180

Sample Name 10601164020\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 176SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 00:56:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.807955	4.6	1085.040
Be	9	2	H2	0.075310	8.4	48.333
B	11	2	H2	-53.169961		10907.260
Na	23	1	He	8464.051295	0.8	7516769.890
Mg	24	1	He	12419.52566	0.8	6252617.617
Al	27	1	He	45.337947	0.4	11681.903
Si	28	2	H2	1100.557518	0.6	3001308.333
K	39	1	He	1492.555820	0.3	1136750.817
Ca	43	1	He	34651.97533	0.2	73771.803
Ti	47	1	He	0.167052	22.3	41.333
V	51	1	He	0.297930	16.2	1375.500
Cr	52	1	He	0.443111	0.9	5758.480
Mn	55	1	He	3.992214	0.3	23991.640
Fe	56	1	He	17.465378	0.4	140994.393
Co	59	1	He	0.281030	3.2	3647.800
Ni	60	1	He	1.588776	2.2	5231.617
Cu	63	1	He	345.153016	0.2	3051255.083
Zn	66	1	He	83.264369	0.3	168928.410
As	75	1	He	0.405479	2.7	889.530
Se	78	2	H2	0.147115	6.6	159.667
Sr	88	1	He	118.159351	0.3	1385569.513
Mo	95	1	He	1.078413	2.1	6780.293
Pd	105	1	He	0.063763	11.3	788.367
Ag	107	1	He	0.019972	3.8	496.677
Cd	111	1	He	0.050815	11.0	211.447
Sn	118	1	He	0.141285	4.1	1498.427
Sb	121	1	He	0.211335	4.3	3032.017
Ba	138	1	He	18.184720	0.6	589647.740
Pt	195	1	He	0.004500	17.3	268.667
Hg	202	1	He	-0.004048		201.000
Tl	205	1	He	0.034397	4.9	2130.193
Pb	208	1	He	3.100940	1.0	204671.823
Bi	209	1	He	0.041156	11.9	4510.847
Th	232	1	He	0.010928	12.2	1748.470
U	238	1	He	0.302333	1.4	20811.753

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.19027185	555151.643
Sc	45	2	H2	95.78716949	4238193.833
Ge	72	1	He	96.63059022	481850.583
Ge	72	2	H2	98.70516178	1539580.000
In	115	1	He	97.94018108	6003920.293
Tb	159	1	He	100.1820981	14494962.697
Ir	193	1	He	99.90112955	7399046.140

Sample Name 10601164021\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 177SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:00:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.265856	1.3	902.363
Be	9	2	H2	0.052718	26.8	40.500
B	11	2	H2	-56.727152		9933.427
Na	23	1	He	9123.732273	0.9	8016207.177
Mg	24	1	He	12653.92444	1.0	6303213.033
Al	27	1	He	50.540831	1.6	12876.210
Si	28	2	H2	1139.460923	0.4	3152904.333
K	39	1	He	1628.922703	0.2	1221372.117
Ca	43	1	He	37205.37053	0.7	78370.473
Ti	47	1	He	0.116244	19.1	29.000
V	51	1	He	0.318004	12.7	1490.477
Cr	52	1	He	0.367802	1.8	5114.240
Mn	55	1	He	2.605413	1.1	15582.307
Fe	56	1	He	57.956191	0.8	437920.590
Co	59	1	He	0.085621	1.0	1132.717
Ni	60	1	He	3.369019	2.1	10707.290
Cu	63	1	He	266.245950	1.3	2318421.333
Zn	66	1	He	751.200724	0.8	1499556.337
As	75	1	He	0.429835	1.3	919.197
Se	78	2	H2	0.125475	7.4	144.333
Sr	88	1	He	133.511191	1.1	1542081.333
Mo	95	1	He	1.130068	1.6	6983.727
Pd	105	1	He	0.087972	8.1	998.377
Ag	107	1	He	0.014062	12.4	371.677
Cd	111	1	He	0.108310	8.6	419.420
Sn	118	1	He	0.750975	3.5	7241.933
Sb	121	1	He	0.260643	2.2	3667.173
Ba	138	1	He	23.109630	0.7	736611.420
Pt	195	1	He	0.016404	19.1	422.010
Hg	202	1	He	-0.002576		209.667
Tl	205	1	He	0.023379	5.5	1598.447
Pb	208	1	He	5.188383	1.0	339565.553
Bi	209	1	He	0.067991	7.9	5954.787
Th	232	1	He	0.012389	21.7	1828.477
U	238	1	He	0.319405	1.1	21708.240

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.21948783	549305.773
Sc	45	2	H2	97.20271917	4300826.167
Ge	72	1	He	95.18747087	474654.437
Ge	72	2	H2	100.2514622	1563698.833
In	115	1	He	96.28134286	5902230.340
Tb	159	1	He	99.89189822	14452974.787
Ir	193	1	He	98.87533169	7323071.767

Sample Name 10601164021\_B70034Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 178SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:04:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.265494	10.1	168.833
Be	9	2	H2	0.004999	132.3	22.500
B	11	2	H2	-79.784965		2576.883
Na	23	1	He	901.412913	0.5	831926.340
Mg	24	1	He	1247.381668	0.5	648709.793
Al	27	1	He	6.640809	4.8	1820.447
Si	28	2	H2	117.220736	0.5	336936.977
K	39	1	He	153.798906	1.0	182895.563
Ca	43	1	He	3685.677956	0.9	8064.627
Ti	47	1	He	0.027963	38.0	8.667
V	51	1	He	0.014273	111.1	-505.373
Cr	52	1	He	0.089911	1.7	3071.663
Mn	55	1	He	0.356292	3.2	2444.210
Fe	56	1	He	6.968414	1.8	64455.793
Co	59	1	He	0.010829	23.8	197.333
Ni	60	1	He	0.334125	4.7	1280.730
Cu	63	1	He	27.433513	0.7	247287.800
Zn	66	1	He	75.992203	0.6	157036.173
As	75	1	He	0.043952	23.3	247.333
Se	78	2	H2	0.000237	1263.8	41.333
Sr	88	1	He	13.117184	0.7	156782.923
Mo	95	1	He	0.105117	7.3	697.353
Pd	105	1	He	0.007189	79.3	266.670
Ag	107	1	He	0.008636	5.0	280.007
Cd	111	1	He	0.009800	11.7	60.207
Sn	118	1	He	0.068742	3.3	831.700
Sb	121	1	He	0.028133	13.2	453.343
Ba	138	1	He	2.205712	1.4	74397.267
Pt	195	1	He	0.000031	7286.0	216.667
Hg	202	1	He	-0.006709		189.333
Tl	205	1	He	0.002988	38.0	646.687
Pb	208	1	He	0.632972	1.9	45249.903
Bi	209	1	He	0.006809	79.6	2643.643
Th	232	1	He	-0.001984		883.373
U	238	1	He	0.028183	5.2	2873.673

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.61801932	569771.060
Sc	45	2	H2	97.30687561	4305434.667
Ge	72	1	He	98.41435646	490745.373
Ge	72	2	H2	100.3009458	1564470.667
In	115	1	He	101.7921839	6240055.430
Tb	159	1	He	103.0093238	14904023.113
Ir	193	1	He	102.0079086	7555081.970

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 179\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:08:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	78.556009	0.4	28530.250
Be	9	2	H2	75.230837	1.0	28110.333
B	11	2	H2	-3.699325		26528.190
Na	23	1	He	981.277732	0.4	889570.067
Mg	24	1	He	970.845742	1.3	497506.440
Al	27	1	He	969.987535	0.7	250719.463
Si	28	2	H2	483.933029	0.2	1330377.917
K	39	1	He	998.213962	1.0	790027.777
Ca	43	1	He	983.156798	0.8	2124.957
Ti	47	1	He	78.279908	1.0	18682.823
V	51	1	He	79.661817	1.2	528661.780
Cr	52	1	He	81.790192	0.9	648660.687
Mn	55	1	He	79.637053	1.2	477955.533
Fe	56	1	He	520.415072	0.8	3923212.000
Co	59	1	He	81.824880	0.2	1055082.500
Ni	60	1	He	83.142142	1.1	265843.860
Cu	63	1	He	82.836443	0.4	738857.437
Zn	66	1	He	81.096282	0.6	165957.483
As	75	1	He	79.342956	0.3	143310.363
Se	78	2	H2	80.312362	0.8	65310.717
Sr	88	1	He	80.191621	0.2	948513.733
Mo	95	1	He	76.286204	0.7	487402.177
Pd	105	1	He	81.543289	1.0	780080.927
Ag	107	1	He	40.414788	0.6	824813.217
Cd	111	1	He	79.535410	0.9	303081.770
Sn	118	1	He	76.033843	1.2	744917.147
Sb	121	1	He	76.897618	0.7	1109069.280
Ba	138	1	He	77.515914	0.4	2558110.223
Pt	195	1	He	81.973691	0.6	1075489.127
Hg	202	1	He	3.874229	0.5	25082.197
Tl	205	1	He	41.580809	1.1	2010221.167
Pb	208	1	He	81.176134	0.7	5345882.780
Bi	209	1	He	79.942490	0.3	4528056.080
Th	232	1	He	75.624351	0.3	5227369.713
U	238	1	He	76.586420	0.3	5083595.863

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.04288583	560285.917
Sc	45	2	H2	96.01153280	4248121.000
Ge	72	1	He	97.46382157	486005.510
Ge	72	2	H2	99.04983999	1544956.210
In	115	1	He	99.68877957	6111112.723
Tb	159	1	He	101.2989062	14656549.363
Ir	193	1	He	100.9923525	7479866.140

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 180\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:11:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.051226	20.9	88.000
Be	9	2	H2	0.030007	18.5	31.167
B	11	2	H2	-82.057542		1805.943
Na	23	1	He	-0.677409		10650.550
Mg	24	1	He	-6.334191		1340.073
Al	27	1	He	0.123013	51.0	105.333
Si	28	2	H2	-0.970628		10705.190
K	39	1	He	-7.460655		62695.847
Ca	43	1	He	1.038662	139.5	15.017
Ti	47	1	He	0.014707	71.5	5.333
V	51	1	He	0.019864	199.9	-451.113
Cr	52	1	He	-0.022125		2113.493
Mn	55	1	He	0.103712	3.0	879.363
Fe	56	1	He	0.286139	9.5	13023.143
Co	59	1	He	0.010636	28.9	191.333
Ni	60	1	He	0.007378	63.7	222.000
Cu	63	1	He	0.017103	9.8	466.677
Zn	66	1	He	0.048691	26.9	308.003
As	75	1	He	-0.010038		146.000
Se	78	2	H2	-0.014785		28.333
Sr	88	1	He	0.008154	22.3	240.000
Mo	95	1	He	0.014603	47.4	104.667
Pd	105	1	He	0.016099	6.4	345.010
Ag	107	1	He	0.159153	22.1	3338.770
Cd	111	1	He	0.006556	12.0	46.313
Sn	118	1	He	0.007796	21.7	216.667
Sb	121	1	He	0.008115	38.6	155.000
Ba	138	1	He	0.008503	28.7	353.343
Pt	195	1	He	0.006495	17.6	297.337
Hg	202	1	He	0.011239	23.6	300.667
Tl	205	1	He	0.034768	16.9	2170.200
Pb	208	1	He	0.000986	225.9	2900.147
Bi	209	1	He	0.005554	49.7	2556.963
Th	232	1	He	0.022069	20.9	2548.613
U	238	1	He	0.002390	106.2	1138.397

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.13235730	554802.893
Sc	45	2	H2	94.93558863	4200514.833
Ge	72	1	He	96.44132337	480906.800
Ge	72	2	H2	98.00920484	1528724.627
In	115	1	He	99.20423106	6081408.973
Tb	159	1	He	101.0885745	14626117.283
Ir	193	1	He	101.3752830	7508227.387

Sample Name 10601164005\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 181SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:15:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.858616	1.1	1119.040
Be	9	2	H2	0.015717	43.3	26.500
B	11	2	H2	-53.229452		11042.027
Na	23	1	He	8475.384853	0.7	7462366.970
Mg	24	1	He	12526.55798	1.2	6252309.073
Al	27	1	He	40.305188	0.9	10304.227
Si	28	2	H2	1075.389257	0.4	2974334.000
K	39	1	He	1483.249076	1.0	1120372.980
Ca	43	1	He	34687.51243	1.0	73213.283
Ti	47	1	He	0.126004	30.3	31.333
V	51	1	He	0.211217	46.1	795.380
Cr	52	1	He	0.409250	1.1	5446.357
Mn	55	1	He	1.890800	2.1	11402.457
Fe	56	1	He	6.973049	2.2	62299.977
Co	59	1	He	0.292425	2.0	3764.497
Ni	60	1	He	1.133282	1.7	3759.830
Cu	63	1	He	250.068876	0.6	2193863.667
Zn	66	1	He	123.346175	0.7	248235.177
As	75	1	He	0.374287	3.5	827.357
Se	78	2	H2	0.111127	21.7	132.667
Sr	88	1	He	118.931497	0.6	1383972.320
Mo	95	1	He	1.038634	1.9	6512.840
Pd	105	1	He	0.080344	7.3	941.710
Ag	107	1	He	0.050799	11.1	1111.720
Cd	111	1	He	0.008838	23.4	54.160
Sn	118	1	He	0.047411	8.1	593.353
Sb	121	1	He	0.198134	4.1	2836.980
Ba	138	1	He	18.294581	1.1	591584.237
Pt	195	1	He	0.004144	22.3	264.667
Hg	202	1	He	0.002217	103.3	241.333
Tl	205	1	He	0.013114	23.7	1115.057
Pb	208	1	He	1.531053	0.9	102735.497
Bi	209	1	He	0.004423	98.6	2453.607
Th	232	1	He	0.010189	11.4	1696.790
U	238	1	He	0.273581	1.0	18922.190

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.40145825	550401.563
Sc	45	2	H2	97.13606147	4297876.833
Ge	72	1	He	95.89256750	478170.417
Ge	72	2	H2	100.2054272	1562980.790
In	115	1	He	97.67204354	5987482.950
Tb	159	1	He	100.4378384	14531964.783
Ir	193	1	He	99.88637027	7397953.013



Sample Name 10601164006\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 182SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:19:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.817145	2.8	1092.373
Be	9	2	H2	0.043971	29.2	36.833
B	11	2	H2	-53.759485		10760.660
Na	23	1	He	8320.977452	1.1	7363574.263
Mg	24	1	He	12309.65441	0.7	6175381.990
Al	27	1	He	46.781463	1.2	12008.157
Si	28	2	H2	1054.293935	1.7	2885969.000
K	39	1	He	1469.793130	0.4	1116441.803
Ca	43	1	He	34032.84429	0.3	72195.160
Ti	47	1	He	0.138212	43.9	34.333
V	51	1	He	0.283453	20.8	1277.430
Cr	52	1	He	0.405604	2.0	5445.690
Mn	55	1	He	1.966581	1.2	11908.860
Fe	56	1	He	8.036427	0.6	70511.567
Co	59	1	He	0.308336	4.9	3965.213
Ni	60	1	He	1.378294	0.9	4527.380
Cu	63	1	He	254.504227	0.1	2231512.000
Zn	66	1	He	199.903733	0.7	401948.260
As	75	1	He	0.395459	0.9	864.530
Se	78	2	H2	0.151563	9.5	163.667
Sr	88	1	He	117.615287	0.9	1367791.077
Mo	95	1	He	1.071347	1.0	6677.580
Pd	105	1	He	0.072513	16.8	863.367
Ag	107	1	He	0.027054	19.9	633.357
Cd	111	1	He	0.032364	3.3	141.133
Sn	118	1	He	0.087593	3.4	973.377
Sb	121	1	He	0.202041	2.2	2875.323
Ba	138	1	He	18.403980	0.7	591584.313
Pt	195	1	He	0.008633	14.1	321.340
Hg	202	1	He	0.000471	690.5	229.000
Tl	205	1	He	0.018304	10.6	1356.750
Pb	208	1	He	1.199944	1.1	80673.670
Bi	209	1	He	0.023537	12.4	3510.547
Th	232	1	He	0.016461	6.0	2116.860
U	238	1	He	0.288312	0.9	19800.173

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.86164712	553172.730
Sc	45	2	H2	96.14530777	4254040.000
Ge	72	1	He	95.83697230	477893.190
Ge	72	2	H2	98.95221917	1543433.543
In	115	1	He	97.09255443	5951959.160
Tb	159	1	He	99.87619179	14450702.283
Ir	193	1	He	99.44941526	7365590.513

Sample Name 10601164007\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 183SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:23:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.967379	1.2	1162.547
Be	9	2	H2	0.063901	18.7	44.833
B	11	2	H2	-52.897363		11183.467
Na	23	1	He	8432.743303	0.8	7557475.513
Mg	24	1	He	12473.37651	0.6	6337176.573
Al	27	1	He	44.741431	0.8	11634.197
Si	28	2	H2	1076.131209	1.0	2985822.333
K	39	1	He	1489.251830	1.3	1144686.780
Ca	43	1	He	34651.21527	1.1	74441.733
Ti	47	1	He	0.119144	22.8	30.333
V	51	1	He	0.289787	35.1	1330.637
Cr	52	1	He	1.377292	2.0	13193.957
Mn	55	1	He	1.889670	2.6	11598.613
Fe	56	1	He	12.806761	1.7	107258.290
Co	59	1	He	0.330881	2.7	4295.977
Ni	60	1	He	1.388731	3.7	4609.403
Cu	63	1	He	241.877780	1.0	2143990.750
Zn	66	1	He	230.812535	1.0	469136.407
As	75	1	He	0.402955	2.7	887.530
Se	78	2	H2	0.136767	3.6	154.000
Sr	88	1	He	120.122825	0.8	1412321.803
Mo	95	1	He	1.071713	2.5	6758.287
Pd	105	1	He	0.075526	3.6	901.707
Ag	107	1	He	0.020892	4.5	516.677
Cd	111	1	He	0.070234	3.8	285.117
Sn	118	1	He	0.085964	11.1	968.377
Sb	121	1	He	0.225072	4.3	3237.070
Ba	138	1	He	19.176673	1.5	623683.543
Pt	195	1	He	0.009132	15.5	331.337
Hg	202	1	He	-0.003890		203.667
Tl	205	1	He	0.043776	4.2	2598.613
Pb	208	1	He	1.352353	0.8	91555.663
Bi	209	1	He	0.050798	1.6	5071.070
Th	232	1	He	0.014368	10.6	1990.173
U	238	1	He	0.276080	0.8	19157.537

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.03599089	560244.397
Sc	45	2	H2	97.44737060	4311651.000
Ge	72	1	He	96.89068465	483147.550
Ge	72	2	H2	100.5317428	1568070.583
In	115	1	He	98.24559200	6022642.567
Tb	159	1	He	100.9722653	14609288.947
Ir	193	1	He	100.2663276	7426094.057

Sample Name 10601164008\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 184SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:26:52  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.879182	2.6	1131.373
Be	9	2	H2	0.016287	35.2	26.833
B	11	2	H2	-53.516913		10997.827
Na	23	1	He	7944.170582	0.4	7108159.060
Mg	24	1	He	11794.19627	0.6	5982097.830
Al	27	1	He	59.532152	2.2	15429.633
Si	28	2	H2	1020.988225	1.0	2836738.583
K	39	1	He	1398.925194	0.8	1077629.880
Ca	43	1	He	32490.51743	0.1	69683.587
Ti	47	1	He	0.171335	12.2	42.667
V	51	1	He	0.249068	43.6	1062.213
Cr	52	1	He	0.343099	4.9	5012.203
Mn	55	1	He	3.217029	0.2	19527.683
Fe	56	1	He	6.734295	0.5	61515.263
Co	59	1	He	0.300231	3.5	3881.860
Ni	60	1	He	0.977662	2.3	3286.380
Cu	63	1	He	212.583656	0.7	1873929.793
Zn	66	1	He	35.452463	0.5	71836.443
As	75	1	He	0.367089	4.4	818.523
Se	78	2	H2	0.120130	4.8	141.000
Sr	88	1	He	112.603724	0.4	1316564.357
Mo	95	1	He	1.070754	1.3	6704.260
Pd	105	1	He	0.059981	9.3	750.027
Ag	107	1	He	0.015146	6.9	398.343
Cd	111	1	He	0.012959	9.7	69.460
Sn	118	1	He	0.088195	4.6	983.377
Sb	121	1	He	0.256851	3.1	3662.183
Ba	138	1	He	18.818286	0.7	607682.163
Pt	195	1	He	0.008203	9.0	320.003
Hg	202	1	He	-0.004744		198.667
Tl	205	1	He	0.005991	7.7	780.030
Pb	208	1	He	1.352280	0.9	91777.047
Bi	209	1	He	0.006626	21.2	2566.960
Th	232	1	He	0.004393	26.3	1295.080
U	238	1	He	0.260856	2.1	18005.917

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.87270535	559261.123
Sc	45	2	H2	97.55655574	4316482.000
Ge	72	1	He	96.34752520	480439.073
Ge	72	2	H2	101.0013585	1575395.540
In	115	1	He	97.53715476	5979214.010
Tb	159	1	He	101.2163942	14644611.030
Ir	193	1	He	99.44524096	7365281.350

Sample Name 10601164008\_B70034Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 185SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:30:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.343790	4.4	196.000
Be	9	2	H2	0.004207	198.9	22.000
B	11	2	H2	-79.567312		2625.063
Na	23	1	He	811.666015	0.6	738535.900
Mg	24	1	He	1205.663911	1.0	617365.810
Al	27	1	He	7.571846	1.3	2033.140
Si	28	2	H2	103.707741	1.1	297224.377
K	39	1	He	138.244644	0.5	168784.010
Ca	43	1	He	3316.235296	1.8	7144.027
Ti	47	1	He	0.034038	24.0	10.000
V	51	1	He	0.081069	128.6	-49.733
Cr	52	1	He	0.061637	23.5	2799.607
Mn	55	1	He	0.422197	0.9	2801.610
Fe	56	1	He	1.192339	1.0	19986.310
Co	59	1	He	0.031664	7.2	464.010
Ni	60	1	He	0.105174	3.1	536.677
Cu	63	1	He	21.663139	0.6	193395.267
Zn	66	1	He	3.656443	1.6	7682.053
As	75	1	He	0.035773	25.4	230.167
Se	78	2	H2	-0.005300		36.667
Sr	88	1	He	11.523936	0.6	136386.220
Mo	95	1	He	0.114002	6.4	742.020
Pd	105	1	He	0.004868	18.7	240.000
Ag	107	1	He	0.009609	17.8	295.007
Cd	111	1	He	0.001099	23.8	25.867
Sn	118	1	He	0.009834	34.4	238.333
Sb	121	1	He	0.026494	32.7	421.680
Ba	138	1	He	1.901193	1.8	63014.380
Pt	195	1	He	0.000454	533.8	218.667
Hg	202	1	He	-0.006884		185.333
Tl	205	1	He	0.000345	126.1	508.347
Pb	208	1	He	0.135634	1.6	11780.377
Bi	209	1	He	-0.003644		2023.523
Th	232	1	He	-0.002602		831.703
U	238	1	He	0.023388	6.9	2525.270

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.14069707	560874.917
Sc	45	2	H2	96.51549236	4270419.167
Ge	72	1	He	97.43228724	485848.263
Ge	72	2	H2	99.97165213	1559334.420
In	115	1	He	100.0049110	6130492.187
Tb	159	1	He	101.4038315	14671730.613
Ir	193	1	He	100.9317543	7475378.013

Sample Name 10601164010\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 186SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:34:21  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.068020	2.4	830.187
Be	9	2	H2	0.010337	122.1	24.500
B	11	2	H2	-59.730512		8978.997
Na	23	1	He	8226.133230	0.6	7319862.393
Mg	24	1	He	11637.13259	0.3	5870260.120
Al	27	1	He	48.341158	0.2	12474.540
Si	28	2	H2	1016.856456	1.0	2816425.917
K	39	1	He	1447.255738	0.5	1106417.717
Ca	43	1	He	33864.61194	0.7	72233.620
Ti	47	1	He	0.130119	15.2	32.667
V	51	1	He	0.217499	21.1	847.317
Cr	52	1	He	0.479443	1.4	6054.597
Mn	55	1	He	0.557993	2.5	3587.120
Fe	56	1	He	15.278675	0.5	124946.350
Co	59	1	He	0.106620	2.2	1412.070
Ni	60	1	He	8.053475	1.1	25597.107
Cu	63	1	He	253.525156	1.0	2231462.750
Zn	66	1	He	534.645887	0.8	1078803.247
As	75	1	He	0.366702	3.1	816.687
Se	78	2	H2	0.125512	12.0	145.000
Sr	88	1	He	118.351150	0.4	1381743.310
Mo	95	1	He	1.054039	2.3	6613.550
Pd	105	1	He	0.060205	4.5	753.363
Ag	107	1	He	0.007439	22.7	245.003
Cd	111	1	He	0.007401	15.3	48.810
Sn	118	1	He	0.044269	16.9	563.350
Sb	121	1	He	0.176313	2.0	2530.250
Ba	138	1	He	19.110908	0.7	618365.417
Pt	195	1	He	0.008727	26.4	326.670
Hg	202	1	He	-0.004724		198.667
Tl	205	1	He	0.002058	70.7	590.017
Pb	208	1	He	1.860624	1.1	125154.293
Bi	209	1	He	0.026271	11.0	3723.910
Th	232	1	He	-0.001087		938.377
U	238	1	He	0.288205	1.2	20132.373

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.36630606	556211.687
Sc	45	2	H2	97.24890796	4302869.833
Ge	72	1	He	96.20791086	479742.883
Ge	72	2	H2	100.6345913	1569674.790
In	115	1	He	97.73005946	5991039.437
Tb	159	1	He	101.1717891	14638157.280
Ir	193	1	He	101.1569827	7492059.263

Sample Name 10601164013\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 187SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:38:05  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.122931	4.6	848.690
Be	9	2	H2	-0.001000		20.167
B	11	2	H2	-60.018408		8870.097
Na	23	1	He	8159.532601	1.0	7252553.227
Mg	24	1	He	11206.66996	0.9	5646974.293
Al	27	1	He	49.759459	1.3	12823.830
Si	28	2	H2	982.685385	0.9	2717008.167
K	39	1	He	1447.711492	0.6	1105513.263
Ca	43	1	He	33059.90073	1.2	70438.650
Ti	47	1	He	0.113366	12.3	28.667
V	51	1	He	0.212111	25.1	810.480
Cr	52	1	He	0.406686	1.2	5477.703
Mn	55	1	He	0.337066	5.5	2268.850
Fe	56	1	He	18.059815	0.6	145538.463
Co	59	1	He	0.020681	11.8	317.337
Ni	60	1	He	0.515032	1.4	1816.787
Cu	63	1	He	10.822595	1.0	95260.000
Zn	66	1	He	26.611430	1.3	53725.527
As	75	1	He	0.359627	1.0	801.520
Se	78	2	H2	0.110478	19.4	132.667
Sr	88	1	He	119.792226	0.6	1394171.903
Mo	95	1	He	0.996129	0.9	6215.367
Pd	105	1	He	0.070659	3.8	846.700
Ag	107	1	He	0.003328	64.1	161.667
Cd	111	1	He	0.020858	11.6	98.550
Sn	118	1	He	0.013335	11.0	265.007
Sb	121	1	He	0.175546	5.3	2505.247
Ba	138	1	He	19.885328	0.3	639788.220
Pt	195	1	He	0.005057	29.7	277.333
Hg	202	1	He	-0.005870		190.333
Tl	205	1	He	-0.000066		485.010
Pb	208	1	He	2.907982	0.3	193054.250
Bi	209	1	He	0.009570	25.5	2737.003
Th	232	1	He	-0.001815		875.037
U	238	1	He	0.280569	0.8	19341.113

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.26407699	555596.083
Sc	45	2	H2	97.06342204	4294662.833
Ge	72	1	He	95.90611268	478237.960
Ge	72	2	H2	100.8531189	1573083.333
In	115	1	He	97.18067594	5957361.177
Tb	159	1	He	100.6758766	14566405.613
Ir	193	1	He	99.68809501	7383268.017

Sample Name 10601164014\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 188SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:41:50  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.041776	2.4	821.687
Be	9	2	H2	0.025675	17.1	30.333
B	11	2	H2	-59.713182		8997.340
Na	23	1	He	8084.498269	2.8	7232052.600
Mg	24	1	He	11379.60822	3.0	5770591.993
Al	27	1	He	47.836583	3.1	12410.153
Si	28	2	H2	1010.505076	0.9	2802815.750
K	39	1	He	1653.503214	3.2	1260949.460
Ca	43	1	He	33403.07172	2.9	71625.080
Ti	47	1	He	0.117605	29.6	30.000
V	51	1	He	0.194029	31.1	698.727
Cr	52	1	He	0.346755	5.6	5040.217
Mn	55	1	He	0.760473	3.8	4817.467
Fe	56	1	He	10.784188	3.1	91887.180
Co	59	1	He	0.059812	5.1	817.357
Ni	60	1	He	1.043091	2.5	3491.763
Cu	63	1	He	41.210192	1.8	363408.980
Zn	66	1	He	71.878107	1.3	145391.427
As	75	1	He	0.414110	3.0	902.030
Se	78	2	H2	0.115910	6.6	136.667
Sr	88	1	He	118.582443	2.2	1385991.173
Mo	95	1	He	0.994360	1.7	6264.057
Pd	105	1	He	0.064697	12.2	798.363
Ag	107	1	He	0.010302	9.8	303.343
Cd	111	1	He	0.059861	2.8	245.870
Sn	118	1	He	0.052144	4.1	641.687
Sb	121	1	He	0.198206	4.5	2850.320
Ba	138	1	He	19.826372	2.3	644000.460
Pt	195	1	He	0.007317	10.0	307.333
Hg	202	1	He	-0.005459		193.333
Tl	205	1	He	0.010963	7.2	1016.713
Pb	208	1	He	2.856566	1.7	189938.527
Bi	209	1	He	0.016545	26.8	3127.090
Th	232	1	He	0.009730	5.5	1663.453
U	238	1	He	0.261657	4.8	18102.683

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.89267113	559381.353
Sc	45	2	H2	97.38815990	4309031.167
Ge	72	1	He	96.33318454	480367.563
Ge	72	2	H2	100.3672910	1565505.503
In	115	1	He	98.13556057	6015897.430
Tb	159	1	He	100.8349422	14589420.200
Ir	193	1	He	99.73910688	7387046.143

Sample Name 4312072\_B70034Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 189SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:45:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	103.020064	0.3	36980.923
Be	9	2	H2	99.542159	0.7	36777.320
B	11	2	H2	47.231211	1.1	42114.233
Na	23	1	He	10392.86972	0.4	9077381.740
Mg	24	1	He	13749.71068	0.4	6809497.607
Al	27	1	He	2060.572836	0.7	519085.353
Si	28	2	H2	1556.354117	0.2	4201891.000
K	39	1	He	3778.353672	0.4	2728335.687
Ca	43	1	He	36752.59595	0.7	76971.193
Ti	47	1	He	103.614043	0.6	24104.663
V	51	1	He	106.317538	0.7	687933.253
Cr	52	1	He	108.306703	1.0	836527.710
Mn	55	1	He	104.662828	0.7	612221.893
Fe	56	1	He	2149.893917	0.1	15764514.333
Co	59	1	He	104.516057	0.3	1325669.043
Ni	60	1	He	107.098648	0.4	336790.730
Cu	63	1	He	145.236566	0.0	1274068.380
Zn	66	1	He	177.170718	0.5	356400.417
As	75	1	He	103.564443	0.2	183960.090
Se	78	2	H2	105.572019	0.6	85136.580
Sr	88	1	He	224.989329	0.7	2617515.793
Mo	95	1	He	104.696806	1.3	638134.730
Pd	105	1	He	20.731410	1.5	189338.820
Ag	107	1	He	52.039201	0.8	1013176.757
Cd	111	1	He	105.688129	0.8	384208.887
Sn	118	1	He	101.435309	0.5	948051.287
Sb	121	1	He	103.990351	0.5	1430836.543
Ba	138	1	He	124.741126	0.6	3927250.777
Pt	195	1	He	20.990174	0.6	270616.090
Hg	202	1	He	-0.002444		209.667
Tl	205	1	He	107.993209	0.8	5126495.967
Pb	208	1	He	108.145146	0.5	6993208.857
Bi	209	1	He	100.645037	0.7	5604412.833
Th	232	1	He	104.931887	0.5	7131065.933
U	238	1	He	102.789080	1.1	6707960.737

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.69312221	546136.103
Sc	45	2	H2	94.95284068	4201278.167
Ge	72	1	He	95.87394797	478077.570
Ge	72	2	H2	98.23867958	1532303.920
In	115	1	He	95.10351226	5830027.073
Tb	159	1	He	99.48062586	14393469.370
Ir	193	1	He	99.29885227	7354439.263



Sample Name 10601164014\_B70034Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 190SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:49:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.312583	9.0	182.333
Be	9	2	H2	0.045398	20.8	37.000
B	11	2	H2	-79.597272		2582.890
Na	23	1	He	832.059444	0.8	740463.427
Mg	24	1	He	1175.982969	0.6	589276.917
Al	27	1	He	12.753619	2.4	3300.703
Si	28	2	H2	104.270879	1.1	295015.790
K	39	1	He	164.186350	0.2	183496.347
Ca	43	1	He	3415.902624	0.8	7199.620
Ti	47	1	He	0.032100	50.2	9.333
V	51	1	He	0.011866	307.9	-501.300
Cr	52	1	He	0.071858	23.0	2818.947
Mn	55	1	He	0.164010	10.2	1224.060
Fe	56	1	He	1.734299	0.5	23544.927
Co	59	1	He	0.017050	14.9	271.333
Ni	60	1	He	0.115424	7.1	560.677
Cu	63	1	He	4.299685	1.3	38055.547
Zn	66	1	He	7.439829	1.3	15178.613
As	75	1	He	0.047605	10.1	247.667
Se	78	2	H2	0.000750	891.7	41.333
Sr	88	1	He	12.106320	0.2	141108.070
Mo	95	1	He	0.118994	3.1	759.353
Pd	105	1	He	0.011553	46.9	298.340
Ag	107	1	He	0.185655	35.5	3823.930
Cd	111	1	He	0.010116	7.9	59.197
Sn	118	1	He	0.026726	5.0	396.677
Sb	121	1	He	0.028939	9.4	448.343
Ba	138	1	He	2.033171	0.4	66108.763
Pt	195	1	He	0.000271	817.5	214.667
Hg	202	1	He	-0.008156		175.667
Tl	205	1	He	0.020120	19.7	1453.430
Pb	208	1	He	0.292565	3.3	21942.007
Bi	209	1	He	0.009529	20.8	2730.330
Th	232	1	He	0.041401	6.2	3815.593
U	238	1	He	0.028530	9.6	2825.340

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.12644039	548745.460
Sc	45	2	H2	95.30617061	4216911.583
Ge	72	1	He	95.95995982	478506.470
Ge	72	2	H2	99.16575402	1546764.210
In	115	1	He	98.11245613	6014481.083
Tb	159	1	He	100.5848059	14553228.947
Ir	193	1	He	99.50524558	7369725.513

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 191\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:53:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	79.138613	0.5	28316.507
Be	9	2	H2	77.086375	0.4	28377.663
B	11	2	H2	-1.869234		26704.843
Na	23	1	He	981.212675	0.3	879234.570
Mg	24	1	He	981.749551	0.9	497220.667
Al	27	1	He	966.873232	0.4	247025.133
Si	28	2	H2	491.132951	0.7	1330022.750
K	39	1	He	996.651124	0.6	779775.487
Ca	43	1	He	981.705265	2.7	2097.390
Ti	47	1	He	78.377749	0.7	18489.580
V	51	1	He	79.503029	1.1	521494.723
Cr	52	1	He	81.967906	0.6	642546.583
Mn	55	1	He	79.674083	0.9	472644.597
Fe	56	1	He	518.753200	0.7	3865503.500
Co	59	1	He	82.527768	0.7	1047906.937
Ni	60	1	He	83.532670	0.2	263014.087
Cu	63	1	He	83.109514	0.5	729991.647
Zn	66	1	He	81.572183	0.8	164383.770
As	75	1	He	79.636666	0.4	141647.887
Se	78	2	H2	81.896180	0.8	66015.540
Sr	88	1	He	80.685654	0.5	939797.303
Mo	95	1	He	76.515831	0.5	482806.667
Pd	105	1	He	81.375904	0.4	768843.840
Ag	107	1	He	40.604582	1.1	818401.083
Cd	111	1	He	80.106342	0.4	301472.697
Sn	118	1	He	76.678646	0.5	741938.480
Sb	121	1	He	77.451596	0.4	1103204.697
Ba	138	1	He	77.868742	0.2	2537881.263
Pt	195	1	He	82.163439	0.6	1074289.417
Hg	202	1	He	3.890501	0.6	25100.907
Tl	205	1	He	41.836228	0.1	2015732.780
Pb	208	1	He	81.276578	0.5	5334386.873
Bi	209	1	He	79.926500	1.5	4519865.037
Th	232	1	He	75.894933	1.4	5237741.903
U	238	1	He	76.271204	0.3	5054978.677

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.96848445	553816.083
Sc	45	2	H2	94.59217863	4185320.333
Ge	72	1	He	95.97885008	478600.667
Ge	72	2	H2	98.18279295	1531432.213
In	115	1	He	98.45076091	6035219.813
Tb	159	1	He	100.9531002	14606516.030
Ir	193	1	He	100.8404843	7468618.223

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 192\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 01:56:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.048646	41.5	88.000
Be	9	2	H2	0.043832	47.5	36.667
B	11	2	H2	-82.261665		1761.103
Na	23	1	He	-0.581322		10470.407
Mg	24	1	He	-5.643894		1645.103
Al	27	1	He	0.013538	101.5	75.333
Si	28	2	H2	-1.089195		10498.380
K	39	1	He	-4.893450		62955.183
Ca	43	1	He	3.047270	58.0	18.800
Ti	47	1	He	0.008087	111.7	3.667
V	51	1	He	0.065729	137.0	-157.770
Cr	52	1	He	-0.006516		2181.503
Mn	55	1	He	0.075756	3.3	696.020
Fe	56	1	He	0.272773	4.6	12610.123
Co	59	1	He	0.008827	25.2	164.667
Ni	60	1	He	0.013135	32.2	235.333
Cu	63	1	He	0.008022	49.7	379.340
Zn	66	1	He	0.034453	41.0	273.333
As	75	1	He	-0.018932		127.500
Se	78	2	H2	-0.019333		25.000
Sr	88	1	He	0.007311	54.9	225.003
Mo	95	1	He	0.011352	19.4	81.333
Pd	105	1	He	0.016842	49.3	343.343
Ag	107	1	He	0.166627	24.6	3388.780
Cd	111	1	He	0.003741	36.7	34.987
Sn	118	1	He	0.003213	68.5	168.333
Sb	121	1	He	0.005531	14.9	115.000
Ba	138	1	He	0.005437	35.4	248.337
Pt	195	1	He	0.003857	40.8	255.333
Hg	202	1	He	0.014235	42.0	311.003
Tl	205	1	He	0.037253	18.3	2220.207
Pb	208	1	He	-0.002040		2625.130
Bi	209	1	He	0.000733	196.8	2233.563
Th	232	1	He	0.022279	20.3	2503.597
U	238	1	He	-0.001561		855.037

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.89528529	541331.687
Sc	45	2	H2	95.96243226	4245948.500
Ge	72	1	He	94.54375703	471444.543
Ge	72	2	H2	99.35534293	1549721.373
In	115	1	He	96.98114056	5945129.277
Tb	159	1	He	98.41699614	14239576.873
Ir	193	1	He	99.24846492	7350707.390

Sample Name 4312083\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 193SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:00:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.044051	21.7	86.167
Be	9	2	H2	0.012726	123.6	25.000
B	11	2	H2	-81.467364		2007.467
Na	23	1	He	8.351289	8.1	17762.277
Mg	24	1	He	-1.981897		3357.077
Al	27	1	He	13.967849	2.6	3474.743
Si	28	2	H2	1.963017	7.7	18764.463
K	39	1	He	-1.123379		64028.067
Ca	43	1	He	15.906644	27.5	44.350
Ti	47	1	He	0.073341	34.4	18.333
V	51	1	He	0.095783	70.2	32.793
Cr	52	1	He	0.169191	10.6	3439.743
Mn	55	1	He	0.219862	5.2	1494.750
Fe	56	1	He	3.525102	4.6	35367.313
Co	59	1	He	0.008671	23.6	158.000
Ni	60	1	He	0.025218	27.6	264.667
Cu	63	1	He	0.039142	10.5	629.347
Zn	66	1	He	2.128472	3.5	4294.643
As	75	1	He	-0.009429		139.833
Se	78	2	H2	-0.013414		29.667
Sr	88	1	He	0.025093	9.3	416.677
Mo	95	1	He	0.021645	6.4	142.667
Pd	105	1	He	0.005563	59.5	235.000
Ag	107	1	He	0.043288	10.9	935.040
Cd	111	1	He	0.008028	31.4	49.973
Sn	118	1	He	0.050953	2.2	611.687
Sb	121	1	He	0.010587	25.4	181.667
Ba	138	1	He	0.040439	8.2	1343.413
Pt	195	1	He	0.006105	19.9	280.667
Hg	202	1	He	-0.002595		204.000
Tl	205	1	He	0.010683	6.1	966.710
Pb	208	1	He	0.000859	228.3	2778.470
Bi	209	1	He	-0.001396		2093.543
Th	232	1	He	0.005686	26.5	1365.080
U	238	1	He	-0.000964		886.703

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.80950517	528771.530
Sc	45	2	H2	95.77748499	4237765.333
Ge	72	1	He	91.82971584	457910.917
Ge	72	2	H2	98.87549856	1542236.873
In	115	1	He	95.20968035	5836535.380
Tb	159	1	He	97.24777865	14070407.290
Ir	193	1	He	98.30099775	7280534.477

Sample Name 4312084\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 194SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:04:19  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	102.896389	0.6	36727.640
Be	9	2	H2	100.119798	0.4	36781.990
B	11	2	H2	23.956384	1.1	34661.240
Na	23	1	He	2065.227156	0.3	1805653.773
Mg	24	1	He	2041.569625	0.6	1010894.437
Al	27	1	He	2057.699042	0.4	516341.167
Si	28	2	H2	511.897507	0.5	1383109.043
K	39	1	He	2084.568985	0.5	1529333.467
Ca	43	1	He	2106.086267	0.5	4405.463
Ti	47	1	He	102.807550	0.9	23823.203
V	51	1	He	106.291257	0.1	685105.047
Cr	52	1	He	108.430398	0.8	834216.250
Mn	55	1	He	105.593508	0.8	615241.063
Fe	56	1	He	2166.557971	1.1	15824041.667
Co	59	1	He	107.143151	0.8	1357336.540
Ni	60	1	He	109.069780	0.2	342578.627
Cu	63	1	He	107.164192	0.9	939026.563
Zn	66	1	He	107.867047	0.8	216805.480
As	75	1	He	103.335984	0.6	183333.040
Se	78	2	H2	106.245454	0.5	85154.290
Sr	88	1	He	105.097385	0.7	1221298.160
Mo	95	1	He	100.695536	0.8	630893.957
Pd	105	1	He	21.079381	0.7	197900.687
Ag	107	1	He	51.984287	0.4	1040361.290
Cd	111	1	He	104.874065	0.7	391894.803
Sn	118	1	He	100.392490	0.8	964498.657
Sb	121	1	He	102.215060	0.2	1445685.550
Ba	138	1	He	102.575415	0.3	3319584.427
Pt	195	1	He	21.242805	0.4	277782.550
Hg	202	1	He	-0.001728		217.333
Tl	205	1	He	108.574266	0.6	5227742.213
Pb	208	1	He	106.755362	0.2	7002189.010
Bi	209	1	He	104.014016	1.8	5831623.870
Th	232	1	He	104.924601	1.7	7179196.350
U	238	1	He	101.808718	0.8	6689858.023

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.34046647	544012.480
Sc	45	2	H2	94.41546375	4177501.417
Ge	72	1	He	95.76052624	477511.990
Ge	72	2	H2	97.63615184	1522905.833
In	115	1	He	97.76025265	5992890.337
Tb	159	1	He	100.9031962	14599295.613
Ir	193	1	He	99.98935038	7405580.100

Sample Name 10604943025\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 195SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:08:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.187994	1.2	852.193
Be	9	2	H2	0.068965	18.8	45.500
B	11	2	H2	-59.253099		8900.783
Na	23	1	He	8467.098342	0.1	7293804.890
Mg	24	1	He	11524.51384	0.2	5628204.293
Al	27	1	He	70.931219	0.4	17687.120
Si	28	2	H2	1099.805035	0.9	2968243.583
K	39	1	He	1489.865687	0.4	1100743.630
Ca	43	1	He	34181.50550	0.4	70585.167
Ti	47	1	He	0.127292	18.5	31.000
V	51	1	He	0.243811	18.8	987.857
Cr	52	1	He	0.401959	1.9	5272.963
Mn	55	1	He	4.875670	0.3	28364.087
Fe	56	1	He	13.955592	0.3	111402.850
Co	59	1	He	0.070862	7.6	935.367
Ni	60	1	He	11.464053	1.4	35537.113
Cu	63	1	He	114.062883	0.2	981609.773
Zn	66	1	He	142.091623	0.3	280429.283
As	75	1	He	0.392233	2.6	842.690
Se	78	2	H2	0.145470	10.0	157.667
Sr	88	1	He	120.346382	0.5	1373487.010
Mo	95	1	He	1.008535	3.8	6220.040
Pd	105	1	He	0.089816	1.7	1013.383
Ag	107	1	He	0.192122	28.4	3872.263
Cd	111	1	He	0.031789	5.6	137.547
Sn	118	1	He	5.894822	2.2	55779.083
Sb	121	1	He	2.585716	1.2	35971.167
Ba	138	1	He	20.055020	1.2	637779.977
Pt	195	1	He	0.004939	31.9	273.333
Hg	202	1	He	-0.003154		206.000
Tl	205	1	He	0.049772	13.4	2853.663
Pb	208	1	He	0.161791	3.6	13292.600
Bi	209	1	He	0.007260	47.7	2596.970
Th	232	1	He	0.044032	7.7	3983.977
U	238	1	He	0.262143	0.7	18057.657

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.42171836	538479.960
Sc	45	2	H2	94.79734432	4194398.083
Ge	72	1	He	94.04835097	468974.190
Ge	72	2	H2	98.31559466	1533503.623
In	115	1	He	96.05588643	5888409.430
Tb	159	1	He	99.83919507	14445349.370
Ir	193	1	He	99.27029298	7352324.057

Sample Name 10604943048\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 196SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:11:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.228063	3.2	862.860
Be	9	2	H2	0.047718	10.2	37.500
B	11	2	H2	-58.323812		9151.770
Na	23	1	He	8839.070088	0.6	7795906.757
Mg	24	1	He	11567.74076	0.7	5784451.370
Al	27	1	He	55.898499	0.5	14287.500
Si	28	2	H2	928.618769	0.8	2497798.417
K	39	1	He	1479.988080	0.1	1120052.457
Ca	43	1	He	33887.88875	0.4	71653.423
Ti	47	1	He	0.141238	8.0	35.000
V	51	1	He	0.278027	28.1	1236.290
Cr	52	1	He	0.411620	0.9	5474.370
Mn	55	1	He	4.153647	1.6	24780.680
Fe	56	1	He	53.708440	0.4	408154.677
Co	59	1	He	0.108950	4.0	1432.077
Ni	60	1	He	1.384506	3.2	4533.383
Cu	63	1	He	63.493244	0.5	555292.643
Zn	66	1	He	196.138010	0.6	393203.153
As	75	1	He	0.352301	6.0	785.520
Se	78	2	H2	0.121084	17.8	137.000
Sr	88	1	He	119.995023	0.4	1391401.073
Mo	95	1	He	1.202979	23.2	7534.873
Pd	105	1	He	0.101765	49.9	1142.130
Ag	107	1	He	0.039559	12.8	885.037
Cd	111	1	He	0.051113	2.9	211.643
Sn	118	1	He	18.440000	1.8	176803.140
Sb	121	1	He	0.452715	5.8	6424.857
Ba	138	1	He	18.858573	0.2	608783.860
Pt	195	1	He	0.006525	11.4	298.000
Hg	202	1	He	-0.004173		202.333
Tl	205	1	He	0.008922	2.7	921.707
Pb	208	1	He	0.338992	0.6	25134.310
Bi	209	1	He	0.014410	15.7	3027.070
Th	232	1	He	0.010910	19.4	1753.463
U	238	1	He	0.309919	0.6	21396.010

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.56122491	551363.647
Sc	45	2	H2	94.39904605	4176775.000
Ge	72	1	He	95.55184038	476471.373
Ge	72	2	H2	97.55686954	1521669.207
In	115	1	He	97.50493842	5977239.087
Tb	159	1	He	101.2217679	14645388.530
Ir	193	1	He	100.3069429	7429102.177

Sample Name 4315145\_B70031Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 197SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:15:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.501027	5.7	248.333
Be	9	2	H2	0.018484	26.7	26.833
B	11	2	H2	-77.673364		3162.667
Na	23	1	He	1831.776700	0.3	1605361.487
Mg	24	1	He	2400.093514	0.3	1189573.343
Al	27	1	He	12.721611	1.9	3269.363
Si	28	2	H2	186.780406	0.8	514296.780
K	39	1	He	300.692883	0.1	278134.533
Ca	43	1	He	6975.961424	0.9	14586.417
Ti	47	1	He	0.038192	26.5	10.667
V	51	1	He	0.041879	372.6	-303.403
Cr	52	1	He	0.101959	6.5	3030.323
Mn	55	1	He	0.918016	1.7	5614.423
Fe	56	1	He	11.363407	0.5	93776.337
Co	59	1	He	0.027699	9.0	402.010
Ni	60	1	He	0.288444	3.7	1092.043
Cu	63	1	He	13.243980	1.1	115193.323
Zn	66	1	He	40.565645	0.8	80870.247
As	75	1	He	0.068504	8.8	281.500
Se	78	2	H2	0.003591	300.5	43.333
Sr	88	1	He	24.690173	0.7	284235.387
Mo	95	1	He	0.208278	4.1	1310.730
Pd	105	1	He	0.011072	26.9	291.673
Ag	107	1	He	0.023059	21.2	555.017
Cd	111	1	He	0.009046	7.2	54.763
Sn	118	1	He	3.765138	0.3	36158.257
Sb	121	1	He	0.092823	9.0	1345.077
Ba	138	1	He	3.842050	1.1	123902.113
Pt	195	1	He	0.001040	81.1	222.000
Hg	202	1	He	-0.006558		183.667
Tl	205	1	He	0.002630	11.3	606.687
Pb	208	1	He	0.067734	2.7	7160.787
Bi	209	1	He	-0.000090		2190.233
Th	232	1	He	0.003626	7.5	1241.737
U	238	1	He	0.061070	0.6	4945.987

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.48518670	544883.957
Sc	45	2	H2	94.64139406	4187497.917
Ge	72	1	He	94.83083687	472876.073
Ge	72	2	H2	98.41365357	1535033.123
In	115	1	He	97.35969727	5968335.527
Tb	159	1	He	99.39298216	14380788.540
Ir	193	1	He	99.35619314	7358686.140



Sample Name 4312085\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 198SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:19:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	101.730964	0.9	35943.097
Be	9	2	H2	98.508807	0.6	35822.880
B	11	2	H2	45.358397	2.0	40875.860
Na	23	1	He	11224.31902	0.6	9628045.273
Mg	24	1	He	13985.09791	0.4	6802552.187
Al	27	1	He	2030.527859	0.1	502402.960
Si	28	2	H2	1446.782125	0.6	3845392.833
K	39	1	He	3572.899712	0.3	2537587.410
Ca	43	1	He	37454.75123	0.2	77046.013
Ti	47	1	He	102.042780	0.9	23315.727
V	51	1	He	105.607348	0.2	671177.077
Cr	52	1	He	107.487459	0.4	815441.833
Mn	55	1	He	107.058038	0.3	615067.167
Fe	56	1	He	2176.020763	0.4	15671700.667
Co	59	1	He	103.520440	0.4	1287937.623
Ni	60	1	He	106.099786	0.1	327277.313
Cu	63	1	He	167.297224	0.7	1439485.667
Zn	66	1	He	305.837926	0.5	603318.933
As	75	1	He	103.847455	0.7	180934.017
Se	78	2	H2	104.503441	0.5	83112.913
Sr	88	1	He	227.095933	0.8	2591492.410
Mo	95	1	He	104.328168	0.7	628905.733
Pd	105	1	He	20.767254	1.3	187579.960
Ag	107	1	He	51.600942	1.7	993522.513
Cd	111	1	He	104.946576	0.7	377318.760
Sn	118	1	He	120.577924	0.9	1114515.477
Sb	121	1	He	103.805717	0.6	1412542.480
Ba	138	1	He	122.865030	1.1	3825478.277
Pt	195	1	He	20.691458	0.4	267041.387
Hg	202	1	He	-0.000697		221.000
Tl	205	1	He	106.603529	1.2	5065666.903
Pb	208	1	He	103.921917	0.6	6727228.597
Bi	209	1	He	99.198506	1.1	5526892.417
Th	232	1	He	103.258451	0.7	7021312.603
U	238	1	He	101.004934	0.5	6595378.653

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.07815735	536411.103
Sc	45	2	H2	93.45661883	4135076.417
Ge	72	1	He	94.04221576	468943.597
Ge	72	2	H2	96.88133754	1511132.417
In	115	1	He	94.05606830	5765816.757
Tb	159	1	He	99.58527766	14408611.037
Ir	193	1	He	99.35622411	7358688.433

Sample Name 4312086\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 199SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:23:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	104.661120	0.9	36794.300
Be	9	2	H2	101.396539	0.8	36690.937
B	11	2	H2	48.831081	2.8	41734.683
Na	23	1	He	10861.77522	3.1	9487161.107
Mg	24	1	He	13549.72121	3.7	6710098.653
Al	27	1	He	2039.001654	3.0	513684.643
Si	28	2	H2	1443.340237	0.4	3817443.833
K	39	1	He	3517.676649	3.0	2544937.620
Ca	43	1	He	36070.76499	2.5	75559.547
Ti	47	1	He	102.911234	3.2	23942.060
V	51	1	He	105.218602	3.0	680880.893
Cr	52	1	He	108.207028	3.0	835845.563
Mn	55	1	He	107.686153	3.7	629849.333
Fe	56	1	He	2186.174652	3.7	16029365.333
Co	59	1	He	104.516549	2.1	1320459.583
Ni	60	1	He	107.050077	2.4	335293.947
Cu	63	1	He	167.063803	2.7	1459607.957
Zn	66	1	He	301.604449	2.3	604162.603
As	75	1	He	105.312838	2.0	186329.827
Se	78	2	H2	107.670980	0.8	85758.887
Sr	88	1	He	224.397291	1.3	2600600.223
Mo	95	1	He	105.074404	3.1	643675.127
Pd	105	1	He	21.161497	2.9	194248.897
Ag	107	1	He	52.263606	2.8	1022680.740
Cd	111	1	He	105.817563	2.8	386634.627
Sn	118	1	He	121.318098	2.8	1139609.097
Sb	121	1	He	105.542406	2.9	1459516.540
Ba	138	1	He	123.330947	2.2	3902930.250
Pt	195	1	He	21.021028	2.3	275505.010
Hg	202	1	He	-0.000865		223.333
Tl	205	1	He	108.039225	2.7	5213705.130
Pb	208	1	He	105.253793	3.3	6918489.793
Bi	209	1	He	100.954113	1.7	5701870.957
Th	232	1	He	104.361205	2.5	7192898.433
U	238	1	He	102.069852	3.4	6754837.400

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.75675598	546519.293
Sc	45	2	H2	92.99856178	4114809.250
Ge	72	1	He	95.52365641	476330.833
Ge	72	2	H2	97.03001546	1513451.460
In	115	1	He	95.63127846	5862380.150
Tb	159	1	He	101.1644399	14637093.950
Ir	193	1	He	100.7333861	7460686.137

Sample Name 10604943049\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 200SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:26:50  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.466438	0.8	954.030
Be	9	2	H2	0.100218	23.9	57.167
B	11	2	H2	-56.993952		9626.893
Na	23	1	He	9102.409447	0.7	7864296.967
Mg	24	1	He	11819.60543	0.6	5789887.410
Al	27	1	He	68.390959	0.7	17108.440
Si	28	2	H2	936.903775	0.6	2536516.333
K	39	1	He	1525.925996	1.3	1129217.900
Ca	43	1	He	34748.51699	0.6	71976.187
Ti	47	1	He	0.137071	19.2	33.333
V	51	1	He	0.226735	13.5	882.687
Cr	52	1	He	0.345662	4.5	4860.150
Mn	55	1	He	2.425108	1.8	14280.977
Fe	56	1	He	36.634886	0.6	276106.367
Co	59	1	He	0.128910	6.8	1656.103
Ni	60	1	He	1.579054	2.0	5056.223
Cu	63	1	He	110.285003	0.8	948088.063
Zn	66	1	He	144.661953	1.0	285189.843
As	75	1	He	0.390536	2.2	838.857
Se	78	2	H2	0.121493	16.6	138.667
Sr	88	1	He	124.930206	1.2	1424246.907
Mo	95	1	He	1.082280	3.5	6677.580
Pd	105	1	He	0.082157	4.9	943.373
Ag	107	1	He	0.175038	28.0	3538.840
Cd	111	1	He	0.043272	3.1	179.797
Sn	118	1	He	0.096401	16.3	1046.717
Sb	121	1	He	0.193710	3.8	2730.290
Ba	138	1	He	19.837809	0.1	631244.367
Pt	195	1	He	0.004730	39.0	269.333
Hg	202	1	He	-0.008076		174.000
Tl	205	1	He	0.033372	12.3	2063.513
Pb	208	1	He	0.119725	8.8	10513.277
Bi	209	1	He	0.048160	12.9	4890.997
Th	232	1	He	0.047730	2.4	4255.737
U	238	1	He	0.314545	1.6	21574.653

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.69697812	540137.520
Sc	45	2	H2	95.01914054	4204211.667
Ge	72	1	He	93.95146648	468491.073
Ge	72	2	H2	98.44024136	1535447.833
In	115	1	He	96.11213280	5891857.440
Tb	159	1	He	99.36682495	14377003.953
Ir	193	1	He	99.70894698	7384812.390

Sample Name 10604943050\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 201SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:30:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.088389	1.8	813.520
Be	9	2	H2	0.060849	14.5	42.333
B	11	2	H2	-58.475687		9109.573
Na	23	1	He	9065.067048	0.8	7828405.507
Mg	24	1	He	11356.23627	1.4	5560349.920
Al	27	1	He	83.198964	1.9	20786.757
Si	28	2	H2	879.609443	0.1	2367970.083
K	39	1	He	1497.317424	1.1	1108791.543
Ca	43	1	He	33687.80720	1.0	69746.710
Ti	47	1	He	0.135624	30.2	33.000
V	51	1	He	0.236955	55.4	944.333
Cr	52	1	He	0.260900	1.7	4212.617
Mn	55	1	He	4.545415	0.6	26529.323
Fe	56	1	He	177.855228	0.6	1298952.287
Co	59	1	He	0.141038	2.7	1807.450
Ni	60	1	He	1.279136	2.0	4134.600
Cu	63	1	He	76.342034	0.2	656654.543
Zn	66	1	He	259.392432	0.8	511427.427
As	75	1	He	0.359275	5.6	784.853
Se	78	2	H2	0.117940	18.3	135.000
Sr	88	1	He	121.083983	0.3	1381003.103
Mo	95	1	He	1.009152	2.5	6190.030
Pd	105	1	He	0.060959	7.5	743.360
Ag	107	1	He	0.042251	7.6	920.037
Cd	111	1	He	0.073067	10.7	287.550
Sn	118	1	He	0.039926	18.1	510.013
Sb	121	1	He	0.176271	2.5	2473.573
Ba	138	1	He	19.922220	0.9	630185.773
Pt	195	1	He	0.003685	70.5	256.000
Hg	202	1	He	-0.008593		171.000
Tl	205	1	He	0.011176	21.2	1011.713
Pb	208	1	He	0.090299	3.9	8622.777
Bi	209	1	He	0.008686	30.4	2660.313
Th	232	1	He	0.013509	8.1	1900.157
U	238	1	He	0.307229	1.3	20873.537

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.65654892	539894.063
Sc	45	2	H2	94.44928983	4178998.083
Ge	72	1	He	93.98539928	468660.280
Ge	72	2	H2	98.01431754	1528804.373
In	115	1	He	95.54817333	5857285.647
Tb	159	1	He	99.45452913	14389693.533
Ir	193	1	He	98.67309016	7308093.013

Sample Name 10604943050\_B70031Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 202SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:34:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.321200	9.8	182.333
Be	9	2	H2	0.058050	17.3	41.000
B	11	2	H2	-79.740965		2496.040
Na	23	1	He	931.149384	0.5	812330.747
Mg	24	1	He	1168.709526	0.4	575057.117
Al	27	1	He	22.191227	0.4	5586.050
Si	28	2	H2	90.804668	0.8	254398.937
K	39	1	He	148.100322	1.5	168998.090
Ca	43	1	He	3472.175772	0.9	7185.727
Ti	47	1	He	0.021225	30.6	6.667
V	51	1	He	0.062919	170.9	-167.587
Cr	52	1	He	0.040801	17.2	2531.560
Mn	55	1	He	0.544732	0.5	3398.407
Fe	56	1	He	18.723410	0.8	145943.217
Co	59	1	He	0.019890	9.8	300.000
Ni	60	1	He	0.145129	11.7	638.683
Cu	63	1	He	7.961956	1.4	68511.540
Zn	66	1	He	27.007883	0.7	53241.047
As	75	1	He	0.032403	32.1	215.333
Se	78	2	H2	-0.001555		38.667
Sr	88	1	He	12.538159	1.0	142614.853
Mo	95	1	He	0.103618	4.1	654.687
Pd	105	1	He	0.002440	62.1	210.000
Ag	107	1	He	0.021823	11.5	528.350
Cd	111	1	He	0.009055	33.0	54.550
Sn	118	1	He	0.020936	23.5	336.677
Sb	121	1	He	0.022312	3.6	350.010
Ba	138	1	He	2.003761	1.0	64365.813
Pt	195	1	He	0.000060	3000.4	209.333
Hg	202	1	He	-0.004995		193.333
Tl	205	1	He	0.005350	33.5	735.030
Pb	208	1	He	0.005177	41.1	3118.503
Bi	209	1	He	0.004557	25.2	2443.623
Th	232	1	He	0.004845	21.0	1321.747
U	238	1	He	0.029405	1.8	2872.007

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.47786157	538818.043
Sc	45	2	H2	93.73894225	4147568.083
Ge	72	1	He	93.65119641	466993.770
Ge	72	2	H2	97.41838027	1519509.083
In	115	1	He	96.92927627	5941949.897
Tb	159	1	He	99.34937050	14374478.537
Ir	193	1	He	99.12504920	7341566.767

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 203\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:38:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	81.070873	1.0	28493.173
Be	9	2	H2	78.564554	1.2	28409.723
B	11	2	H2	-1.295279		26407.990
Na	23	1	He	989.731290	1.8	869483.057
Mg	24	1	He	986.639234	1.6	489958.823
Al	27	1	He	971.828306	1.9	243449.473
Si	28	2	H2	497.451564	0.7	1323158.707
K	39	1	He	1000.843235	1.9	767526.840
Ca	43	1	He	966.536607	2.6	2024.670
Ti	47	1	He	78.200057	2.7	18086.413
V	51	1	He	79.246777	1.1	509747.057
Cr	52	1	He	82.012049	1.5	630391.020
Mn	55	1	He	79.694876	1.4	463584.853
Fe	56	1	He	522.277774	1.3	3816106.583
Co	59	1	He	81.723956	1.1	1034265.647
Ni	60	1	He	82.479907	1.1	258836.680
Cu	63	1	He	82.354099	0.8	720964.900
Zn	66	1	He	80.422044	1.1	161528.617
As	75	1	He	78.695603	1.3	139509.983
Se	78	2	H2	82.487579	0.6	65036.430
Sr	88	1	He	79.739160	1.1	925690.740
Mo	95	1	He	75.559744	2.0	476522.320
Pd	105	1	He	81.217278	2.6	766879.467
Ag	107	1	He	40.308979	2.9	811900.403
Cd	111	1	He	79.679402	1.9	299709.880
Sn	118	1	He	75.783857	1.9	732899.570
Sb	121	1	He	76.724176	2.1	1092257.433
Ba	138	1	He	77.640886	2.1	2529120.690
Pt	195	1	He	81.566417	2.3	1074273.750
Hg	202	1	He	3.824626	2.3	24859.457
Tl	205	1	He	41.685027	2.9	2022932.000
Pb	208	1	He	81.296504	2.6	5374291.113
Bi	209	1	He	80.104236	1.0	4561247.640
Th	232	1	He	76.077482	1.0	5286483.880
U	238	1	He	76.119314	1.2	5079310.967

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.19169818	543116.627
Sc	45	2	H2	92.92399940	4111510.167
Ge	72	1	He	95.66486371	477034.967
Ge	72	2	H2	96.04241120	1498047.040
In	115	1	He	98.42358150	6033553.663
Tb	159	1	He	101.7121569	14716341.030
Ir	193	1	He	101.5260148	7519391.137

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 204\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:41:50  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.036032	51.2	81.833
Be	9	2	H2	0.048438	26.1	37.667
B	11	2	H2	-82.132813		1767.267
Na	23	1	He	-0.885623		10070.123
Mg	24	1	He	-5.390040		1745.117
Al	27	1	He	0.051819	23.8	83.667
Si	28	2	H2	-1.033223		10447.023
K	39	1	He	-6.752346		60814.707
Ca	43	1	He	2.372381	39.9	17.150
Ti	47	1	He	0.011181	97.4	4.333
V	51	1	He	0.086356	55.6	-13.993
Cr	52	1	He	-0.017453		2069.487
Mn	55	1	He	0.053405	18.9	559.343
Fe	56	1	He	0.247117	8.5	12254.500
Co	59	1	He	0.014450	11.8	231.333
Ni	60	1	He	0.018852	11.5	249.333
Cu	63	1	He	0.007385	108.3	368.007
Zn	66	1	He	0.039568	38.8	279.333
As	75	1	He	-0.014324		133.667
Se	78	2	H2	-0.008094		33.333
Sr	88	1	He	0.011074	28.1	265.003
Mo	95	1	He	0.016586	38.0	114.667
Pd	105	1	He	0.022549	39.6	398.347
Ag	107	1	He	0.155128	25.6	3190.400
Cd	111	1	He	0.008653	35.8	53.313
Sn	118	1	He	0.018565	12.2	315.010
Sb	121	1	He	0.008947	16.3	163.333
Ba	138	1	He	0.009724	24.2	386.677
Pt	195	1	He	0.004320	93.6	264.670
Hg	202	1	He	0.011937	13.5	300.667
Tl	205	1	He	0.038595	16.3	2316.897
Pb	208	1	He	-0.000032		2790.130
Bi	209	1	He	0.005839	85.4	2566.967
Th	232	1	He	0.022310	17.3	2556.940
U	238	1	He	0.002006	63.5	1110.060

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.65749208	533877.940
Sc	45	2	H2	94.12783099	4164774.833
Ge	72	1	He	93.10562847	464273.283
Ge	72	2	H2	97.15434416	1515390.710
In	115	1	He	97.25013212	5961618.973
Tb	159	1	He	99.58568947	14408670.620
Ir	193	1	He	101.1961354	7494959.053

Sample Name 10604943051\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 205SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:45:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.335227	2.8	885.697
Be	9	2	H2	0.043500	25.1	35.333
B	11	2	H2	-57.530573		9237.487
Na	23	1	He	9176.773997	0.9	7777016.967
Mg	24	1	He	11919.67877	1.3	5727249.080
Al	27	1	He	117.552135	1.5	28793.317
Si	28	2	H2	961.238010	0.9	2540949.750
K	39	1	He	1526.113607	0.4	1107836.467
Ca	43	1	He	35118.59280	0.7	71354.033
Ti	47	1	He	0.170832	12.0	40.333
V	51	1	He	0.272295	36.8	1148.823
Cr	52	1	He	0.358686	5.8	4864.820
Mn	55	1	He	1.675025	2.3	9753.270
Fe	56	1	He	37.345634	0.5	275890.710
Co	59	1	He	0.123181	1.5	1554.757
Ni	60	1	He	1.279337	1.6	4055.240
Cu	63	1	He	51.036821	0.4	430600.957
Zn	66	1	He	55.580251	0.4	107621.357
As	75	1	He	0.365637	3.2	780.520
Se	78	2	H2	0.123338	5.2	137.333
Sr	88	1	He	127.261901	0.3	1423378.780
Mo	95	1	He	1.076688	3.3	6551.523
Pd	105	1	He	0.079553	2.7	906.703
Ag	107	1	He	0.048200	20.6	1028.380
Cd	111	1	He	0.027310	2.1	119.487
Sn	118	1	He	0.119614	3.9	1248.400
Sb	121	1	He	0.180164	3.8	2506.910
Ba	138	1	He	21.734437	0.3	682059.233
Pt	195	1	He	0.006897	20.0	293.333
Hg	202	1	He	0.006032	21.7	259.333
Tl	205	1	He	0.014171	9.3	1138.393
Pb	208	1	He	0.134781	1.1	11335.227
Bi	209	1	He	0.081141	4.2	6601.777
Th	232	1	He	0.017749	10.0	2165.197
U	238	1	He	0.316017	2.5	21229.100

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.98627781	529836.020
Sc	45	2	H2	92.78711303	4105453.500
Ge	72	1	He	92.16720690	459593.823
Ge	72	2	H2	96.53756523	1505770.337
In	115	1	He	94.78803248	5810687.560
Tb	159	1	He	98.04305458	14185472.707
Ir	193	1	He	97.69037463	7235309.477



Sample Name 10604943052\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 206SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:49:21  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.132603	2.7	827.520
Be	9	2	H2	0.039266	15.8	34.333
B	11	2	H2	-59.852365		8665.150
Na	23	1	He	8709.816216	2.3	7344418.850
Mg	24	1	He	11371.56684	2.5	5436384.917
Al	27	1	He	126.085147	2.5	30722.150
Si	28	2	H2	889.391707	0.7	2389144.000
K	39	1	He	1455.476097	2.5	1054154.333
Ca	43	1	He	33446.01601	1.4	67618.763
Ti	47	1	He	0.251439	19.6	58.333
V	51	1	He	0.160612	37.8	444.963
Cr	52	1	He	0.381036	3.4	5008.203
Mn	55	1	He	1.886728	2.5	10898.067
Fe	56	1	He	41.938503	2.1	306979.583
Co	59	1	He	0.107896	4.5	1362.067
Ni	60	1	He	1.143711	0.3	3629.793
Cu	63	1	He	45.485621	1.4	382097.023
Zn	66	1	He	52.487643	1.4	101194.307
As	75	1	He	0.343821	4.6	739.853
Se	78	2	H2	0.120824	7.2	136.333
Sr	88	1	He	119.709689	1.7	1332942.273
Mo	95	1	He	1.026185	2.6	6194.027
Pd	105	1	He	0.076146	11.0	868.367
Ag	107	1	He	0.025958	10.1	591.683
Cd	111	1	He	0.023142	5.9	103.553
Sn	118	1	He	0.126599	12.5	1303.407
Sb	121	1	He	0.177835	2.9	2455.240
Ba	138	1	He	20.183336	1.5	628301.240
Pt	195	1	He	0.007105	47.3	294.003
Hg	202	1	He	0.001451	198.0	230.000
Tl	205	1	He	0.008379	31.2	861.703
Pb	208	1	He	0.129793	4.8	10961.770
Bi	209	1	He	0.068795	4.6	5958.133
Th	232	1	He	0.006755	11.9	1438.423
U	238	1	He	0.289751	1.5	19646.610

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.56044742	527271.753
Sc	45	2	H2	94.25504039	4170403.333
Ge	72	1	He	91.77042401	457615.257
Ge	72	2	H2	97.25988535	1517036.917
In	115	1	He	94.03666951	5764627.573
Tb	159	1	He	97.59951984	14121299.370
Ir	193	1	He	98.21642522	7274270.723

Sample Name 10604943053\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 207SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:53:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.167036	2.6	827.520
Be	9	2	H2	0.027685	39.4	29.667
B	11	2	H2	-59.215256		8732.353
Na	23	1	He	8718.290158	0.3	7409007.390
Mg	24	1	He	11418.44474	0.4	5501532.210
Al	27	1	He	108.553456	0.3	26667.393
Si	28	2	H2	910.007806	0.8	2408459.667
K	39	1	He	1450.804922	0.2	1059197.903
Ca	43	1	He	33207.95187	0.6	67654.633
Ti	47	1	He	0.155706	17.6	37.000
V	51	1	He	0.187742	6.7	622.067
Cr	52	1	He	0.644213	5.0	7017.703
Mn	55	1	He	1.696712	1.0	9902.700
Fe	56	1	He	38.851677	0.4	287367.280
Co	59	1	He	0.109969	2.4	1398.737
Ni	60	1	He	1.167829	2.2	3731.820
Cu	63	1	He	46.822411	0.6	396524.187
Zn	66	1	He	52.233306	0.4	101526.700
As	75	1	He	0.360752	4.2	775.187
Se	78	2	H2	0.123751	16.1	136.333
Sr	88	1	He	119.413554	1.2	1340485.553
Mo	95	1	He	1.033677	0.2	6273.403
Pd	105	1	He	0.075597	13.1	868.367
Ag	107	1	He	0.012852	8.5	341.677
Cd	111	1	He	0.020033	4.8	92.870
Sn	118	1	He	0.092684	6.5	995.043
Sb	121	1	He	0.170180	1.8	2363.553
Ba	138	1	He	20.083585	1.2	628562.570
Pt	195	1	He	0.004244	60.2	259.333
Hg	202	1	He	-0.001434		212.667
Tl	205	1	He	0.001932	23.3	565.020
Pb	208	1	He	0.109411	3.3	9703.050
Bi	209	1	He	0.066516	10.9	5818.050
Th	232	1	He	0.002724	40.5	1163.400
U	238	1	He	0.300611	2.3	20290.980

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.22101925	531249.587
Sc	45	2	H2	92.87440351	4109315.750
Ge	72	1	He	92.50993207	461302.830
Ge	72	2	H2	95.59774538	1491111.247
In	115	1	He	94.53221235	5795005.297
Tb	159	1	He	97.89129795	14163515.623
Ir	193	1	He	97.92538917	7252715.520

Sample Name 10604943054\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 208SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 02:56:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.475190	2.4	942.530
Be	9	2	H2	0.012895	59.0	24.500
B	11	2	H2	-57.499891		9325.207
Na	23	1	He	9189.419584	0.2	7860039.257
Mg	24	1	He	11752.48980	0.4	5699499.500
Al	27	1	He	159.527897	0.5	39413.107
Si	28	2	H2	929.131312	0.7	2477313.333
K	39	1	He	1505.956020	0.3	1104178.787
Ca	43	1	He	34363.45797	0.1	70467.473
Ti	47	1	He	0.243943	1.6	57.333
V	51	1	He	0.250211	17.2	1023.343
Cr	52	1	He	0.361723	9.7	4932.177
Mn	55	1	He	3.143172	0.7	18248.050
Fe	56	1	He	65.296305	0.3	478982.387
Co	59	1	He	0.246980	1.2	3089.670
Ni	60	1	He	1.035459	4.3	3345.727
Cu	63	1	He	133.396405	0.2	1134326.333
Zn	66	1	He	83.473735	1.4	162869.630
As	75	1	He	0.366436	5.1	788.353
Se	78	2	H2	0.124173	5.7	138.000
Sr	88	1	He	123.883001	0.8	1397086.020
Mo	95	1	He	1.062524	1.6	6485.490
Pd	105	1	He	0.070281	5.1	825.030
Ag	107	1	He	0.010615	8.9	300.010
Cd	111	1	He	0.027662	8.0	121.167
Sn	118	1	He	0.190006	3.7	1910.150
Sb	121	1	He	0.208805	0.8	2908.670
Ba	138	1	He	20.749656	0.5	653149.613
Pt	195	1	He	0.006611	34.8	291.333
Hg	202	1	He	-0.004562		194.667
Tl	205	1	He	0.004963	21.9	711.693
Pb	208	1	He	0.108882	2.4	9739.717
Bi	209	1	He	0.126757	5.1	9189.993
Th	232	1	He	0.001884	71.0	1115.057
U	238	1	He	0.307680	1.9	20900.173

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.80001584	534736.190
Sc	45	2	H2	93.57422847	4140280.167
Ge	72	1	He	92.93239217	463409.437
Ge	72	2	H2	96.61107170	1506916.873
In	115	1	He	95.07585217	5828331.457
Tb	159	1	He	98.59903095	14265914.790
Ir	193	1	He	98.65429161	7306700.723

Sample Name 10604943055\_B70031Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 209SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:00:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.257891	5.9	856.193
Be	9	2	H2	0.024818	88.4	28.500
B	11	2	H2	-58.294819		8982.330
Na	23	1	He	9080.792910	0.1	7766030.300
Mg	24	1	He	11916.01735	0.2	5777856.370
Al	27	1	He	130.882121	0.8	32343.560
Si	28	2	H2	955.578970	1.7	2519752.833
K	39	1	He	1509.782946	0.6	1106648.760
Ca	43	1	He	34646.92902	0.5	71037.617
Ti	47	1	He	0.178136	19.0	42.333
V	51	1	He	0.209545	45.5	763.550
Cr	52	1	He	0.332721	2.7	4713.437
Mn	55	1	He	1.955520	2.4	11447.163
Fe	56	1	He	32.339764	0.4	242491.280
Co	59	1	He	0.103586	1.3	1316.730
Ni	60	1	He	0.542915	3.1	1831.453
Cu	63	1	He	38.287982	0.7	323323.407
Zn	66	1	He	52.061879	1.1	100886.240
As	75	1	He	0.365844	2.7	781.353
Se	78	2	H2	0.112906	9.1	128.000
Sr	88	1	He	124.005037	0.8	1387897.117
Mo	95	1	He	1.089227	1.7	6614.220
Pd	105	1	He	0.069866	8.4	816.697
Ag	107	1	He	0.008551	21.3	258.337
Cd	111	1	He	0.020382	10.2	94.143
Sn	118	1	He	0.091196	1.0	981.707
Sb	121	1	He	0.182582	4.6	2535.253
Ba	138	1	He	20.435715	0.5	640057.893
Pt	195	1	He	0.009672	14.0	330.673
Hg	202	1	He	-0.006596		182.000
Tl	205	1	He	0.002272	77.5	585.017
Pb	208	1	He	0.046121	0.8	5722.163
Bi	209	1	He	0.060872	1.3	5547.933
Th	232	1	He	0.001086	65.0	1061.720
U	238	1	He	0.313166	2.3	21259.133

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.78582685	534650.747
Sc	45	2	H2	92.56667663	4095700.083
Ge	72	1	He	92.22893195	459901.617
Ge	72	2	H2	95.71013348	1492864.250
In	115	1	He	94.59988952	5799154.037
Tb	159	1	He	98.65343606	14273786.457
Ir	193	1	He	98.67788621	7308448.227

Sample Name 10604943055\_B70031Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 210SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:04:22  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.271305	16.1	161.167
Be	9	2	H2	0.012421	115.8	23.833
B	11	2	H2	-80.475352		2221.667
Na	23	1	He	929.452413	0.6	804363.273
Mg	24	1	He	1223.246329	0.7	596850.710
Al	27	1	He	24.449536	1.8	6097.583
Si	28	2	H2	97.617956	1.7	266660.543
K	39	1	He	152.449335	0.9	170636.430
Ca	43	1	He	3533.718941	0.6	7254.140
Ti	47	1	He	0.028805	17.5	8.333
V	51	1	He	0.036538	319.5	-334.990
Cr	52	1	He	0.273156	6.4	4262.627
Mn	55	1	He	0.292713	2.4	1928.803
Fe	56	1	He	5.091552	1.5	47007.880
Co	59	1	He	0.012888	25.7	212.667
Ni	60	1	He	0.064103	9.9	388.677
Cu	63	1	He	3.908176	1.0	33691.503
Zn	66	1	He	6.486371	2.1	12904.413
As	75	1	He	0.041115	11.4	229.833
Se	78	2	H2	-0.000540		38.667
Sr	88	1	He	12.480586	0.8	141560.727
Mo	95	1	He	0.113500	2.9	710.020
Pd	105	1	He	0.001706	226.9	201.667
Ag	107	1	He	0.004933	28.3	191.667
Cd	111	1	He	0.001198	72.6	25.207
Sn	118	1	He	0.015918	26.3	286.670
Sb	121	1	He	0.019067	21.8	301.673
Ba	138	1	He	2.051140	0.5	65320.093
Pt	195	1	He	0.000243	387.6	210.667
Hg	202	1	He	-0.014005		136.000
Tl	205	1	He	-0.000725		445.010
Pb	208	1	He	-0.001993		2643.457
Bi	209	1	He	0.004321	20.7	2430.267
Th	232	1	He	-0.001809		870.037
U	238	1	He	0.027387	3.7	2740.320

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.75949919	534492.207
Sc	45	2	H2	91.73277912	4058803.500
Ge	72	1	He	93.38675426	465675.123
Ge	72	2	H2	95.41644591	1488283.380
In	115	1	He	96.09699727	5890929.603
Tb	159	1	He	98.86159062	14303903.540
Ir	193	1	He	99.11839951	7341074.267

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 211\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:08:07  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.194328	5.2	28073.900
Be	9	2	H2	80.947065	4.1	28112.005
B	11	2	H2	0.583442	675.3	25910.880
Na	23	1	He	1001.686594	1.0	862242.360
Mg	24	1	He	996.563972	1.0	484930.863
Al	27	1	He	982.073460	1.0	241098.160
Si	28	2	H2	510.257593	4.3	1303099.435
K	39	1	He	1009.965131	1.0	758436.523
Ca	43	1	He	980.329691	2.8	2012.360
Ti	47	1	He	78.648067	1.0	17827.760
V	51	1	He	80.641458	0.5	508320.953
Cr	52	1	He	82.719983	1.0	623083.123
Mn	55	1	He	80.406815	1.2	458345.583
Fe	56	1	He	524.753182	1.0	3757243.583
Co	59	1	He	83.006789	1.1	1019072.770
Ni	60	1	He	83.957409	0.9	255592.973
Cu	63	1	He	83.515010	1.3	709239.147
Zn	66	1	He	81.901996	1.2	159578.737
As	75	1	He	79.964797	1.1	137517.237
Se	78	2	H2	86.067585	4.1	64767.620
Sr	88	1	He	80.750016	1.5	909371.523
Mo	95	1	He	77.632980	1.3	472991.977
Pd	105	1	He	82.724362	1.1	754680.430
Ag	107	1	He	41.115225	1.9	800157.593
Cd	111	1	He	80.989536	1.1	294306.933
Sn	118	1	He	77.175204	0.9	721050.510
Sb	121	1	He	78.414510	0.8	1078503.813
Ba	138	1	He	79.414775	1.1	2499175.223
Pt	195	1	He	83.024823	1.1	1063577.837
Hg	202	1	He	3.925403	1.2	24810.707
Tl	205	1	He	41.884255	0.7	1977218.250
Pb	208	1	He	82.324635	0.8	5293725.937
Bi	209	1	He	81.268406	1.2	4487438.477
Th	232	1	He	76.921956	1.6	5183172.320
U	238	1	He	77.556783	2.1	5018104.197

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.37431886	532172.727
Sc	45	2	H2	89.31614806	3951877.375
Ge	72	1	He	92.80410703	462769.740
Ge	72	2	H2	91.77147645	1431430.000
In	115	1	He	95.06843342	5827876.673
Tb	159	1	He	98.91550614	14311704.370
Ir	193	1	He	98.46834804	7292929.057

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 212\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:11:52  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.026570	57.0	77.833
Be	9	2	H2	0.021772	63.3	27.667
B	11	2	H2	-82.554400		1623.257
Na	23	1	He	-0.853053		10151.840
Mg	24	1	He	-5.380410		1760.117
Al	27	1	He	0.032537	61.8	79.333
Si	28	2	H2	-1.085419		10221.520
K	39	1	He	-7.812156		60418.160
Ca	43	1	He	2.394223	70.5	17.267
Ti	47	1	He	0.003872	131.1	2.667
V	51	1	He	0.017451	366.7	-455.363
Cr	52	1	He	-0.023200		2037.483
Mn	55	1	He	0.043215	4.1	503.343
Fe	56	1	He	0.172096	17.1	11780.090
Co	59	1	He	0.008196	46.3	154.667
Ni	60	1	He	-0.000813		190.000
Cu	63	1	He	0.001584	214.1	319.337
Zn	66	1	He	0.028079	56.8	258.000
As	75	1	He	-0.012138		137.833
Se	78	2	H2	-0.019650		24.000
Sr	88	1	He	0.008080	10.0	231.667
Mo	95	1	He	0.012740	36.9	89.333
Pd	105	1	He	0.020660	11.4	376.677
Ag	107	1	He	0.159468	24.6	3232.080
Cd	111	1	He	0.004391	43.2	36.987
Sn	118	1	He	0.000928	551.9	145.000
Sb	121	1	He	0.003694	53.0	88.333
Ba	138	1	He	0.007104	5.5	298.343
Pt	195	1	He	0.000235	709.8	210.667
Hg	202	1	He	0.010019	18.2	286.667
Tl	205	1	He	0.035529	25.3	2156.870
Pb	208	1	He	-0.006356		2365.110
Bi	209	1	He	0.000273	1468.0	2226.897
Th	232	1	He	0.017288	6.2	2186.873
U	238	1	He	-0.000901		906.707

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.13471959	536751.710
Sc	45	2	H2	93.34109788	4129965.083
Ge	72	1	He	93.41569293	465819.427
Ge	72	2	H2	96.50556513	1505271.207
In	115	1	He	96.19312707	5896822.543
Tb	159	1	He	98.93806937	14314968.957
Ir	193	1	He	100.0925216	7413221.347

Sample Name 4312177\_B70029Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 213SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:15:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.032273	19.1	80.000
Be	9	2	H2	0.037659	35.0	33.500
B	11	2	H2	-81.534364		1939.960
Na	23	1	He	1.857477	16.9	12533.657
Mg	24	1	He	-2.345297		3252.053
Al	27	1	He	2.621408	8.6	723.353
Si	28	2	H2	2.157123	5.1	18839.903
K	39	1	He	-5.643596		62205.463
Ca	43	1	He	6.745648	12.8	26.350
Ti	47	1	He	0.073430	23.6	18.667
V	51	1	He	0.048314	121.0	-260.087
Cr	52	1	He	0.188994	8.9	3660.470
Mn	55	1	He	0.094993	2.2	804.690
Fe	56	1	He	1.776873	4.9	23443.427
Co	59	1	He	0.015740	26.2	246.667
Ni	60	1	He	0.024256	14.4	265.333
Cu	63	1	He	0.026185	6.9	526.677
Zn	66	1	He	0.512447	7.8	1200.720
As	75	1	He	-0.003004		152.833
Se	78	2	H2	-0.018292		25.000
Sr	88	1	He	0.046483	19.0	663.357
Mo	95	1	He	0.021685	15.7	146.667
Pd	105	1	He	0.004215	129.9	228.337
Ag	107	1	He	0.042858	11.2	951.710
Cd	111	1	He	0.013179	6.2	70.307
Sn	118	1	He	0.037358	8.9	496.677
Sb	121	1	He	0.029103	22.0	448.343
Ba	138	1	He	0.027243	1.5	953.373
Pt	195	1	He	0.009602	27.5	336.673
Hg	202	1	He	-0.004280		200.667
Tl	205	1	He	0.019060	7.0	1405.090
Pb	208	1	He	0.008943	23.1	3411.863
Bi	209	1	He	0.016067	18.3	3143.773
Th	232	1	He	0.013043	1.9	1915.160
U	238	1	He	0.002689	89.1	1153.393

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.55196341	539264.270
Sc	45	2	H2	93.53651880	4138611.667
Ge	72	1	He	92.92527298	463373.937
Ge	72	2	H2	96.12532093	1499340.247
In	115	1	He	97.59283824	5982627.513
Tb	159	1	He	100.7906797	14583016.030
Ir	193	1	He	101.0978135	7487676.970



Sample Name 4312178\_B70029Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 214SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:19:22  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	104.780960	0.6	36670.837
Be	9	2	H2	101.943683	0.2	36722.687
B	11	2	H2	25.174505	2.0	34356.890
Na	23	1	He	2091.303323	1.0	1785791.017
Mg	24	1	He	2078.245590	0.9	1005075.503
Al	27	1	He	2042.066634	1.3	500496.647
Si	28	2	H2	521.556357	0.5	1381538.293
K	39	1	He	2081.173196	2.0	1491349.770
Ca	43	1	He	2082.164452	0.5	4254.537
Ti	47	1	He	103.383174	1.0	23400.203
V	51	1	He	107.112534	0.8	674352.223
Cr	52	1	He	110.221163	1.2	828250.020
Mn	55	1	He	106.751875	1.1	607536.267
Fe	56	1	He	2200.283670	1.1	15697259.333
Co	59	1	He	109.636438	1.5	1344756.333
Ni	60	1	He	111.088876	1.1	337822.710
Cu	63	1	He	108.886886	1.2	923788.917
Zn	66	1	He	109.000154	0.9	212122.927
As	75	1	He	105.454650	1.1	181143.750
Se	78	2	H2	107.396563	1.5	84886.423
Sr	88	1	He	107.447889	1.3	1208907.850
Mo	95	1	He	102.459813	1.6	623965.127
Pd	105	1	He	21.640762	1.6	197469.197
Ag	107	1	He	50.966452	2.6	991329.310
Cd	111	1	He	107.115883	1.2	389073.440
Sn	118	1	He	102.107690	1.3	953517.850
Sb	121	1	He	104.500306	1.9	1436521.540
Ba	138	1	He	104.875821	1.4	3298977.137
Pt	195	1	He	21.922950	1.2	280733.157
Hg	202	1	He	-0.000084		223.000
Tl	205	1	He	111.497652	1.8	5257222.840
Pb	208	1	He	109.457972	1.1	7031023.173
Bi	209	1	He	104.794000	1.4	5832016.580
Th	232	1	He	105.585171	1.0	7172142.187
U	238	1	He	103.498845	1.5	6750795.313

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.24342007	531384.480
Sc	45	2	H2	92.57751567	4096179.667
Ge	72	1	He	92.72246831	462362.647
Ge	72	2	H2	96.28456148	1501824.043
In	115	1	He	95.03300076	5825704.583
Tb	159	1	He	98.82796321	14299038.120
Ir	193	1	He	99.25811881	7351422.393

Sample Name 10606726001\_B70029Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 215SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:23:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	32.745279	0.5	11625.450
Be	9	2	H2	0.079327	20.1	48.667
B	11	2	H2	-43.694677		13560.570
Na	23	1	He	21649.90519	0.7	18165150.147
Mg	24	1	He	39367.24777	0.8	18732542.220
Al	27	1	He	6.918399	4.0	1744.447
Si	28	2	H2	2131.568929	1.1	5663828.167
K	39	1	He	2035.927586	1.3	1442792.427
Ca	43	1	He	66751.75339	0.7	134372.283
Ti	47	1	He	0.114508	12.0	27.333
V	51	1	He	0.092130	114.1	17.190
Cr	52	1	He	0.097077	8.7	2882.960
Mn	55	1	He	45.983744	0.2	258701.853
Fe	56	1	He	2.640201	5.7	28899.830
Co	59	1	He	0.048782	14.5	644.680
Ni	60	1	He	1.066438	4.2	3399.743
Cu	63	1	He	1.441576	1.2	12408.637
Zn	66	1	He	11.451862	1.3	22251.020
As	75	1	He	0.103127	7.4	331.333
Se	78	2	H2	3.489312	1.0	2819.610
Sr	88	1	He	302.500286	0.5	3370509.950
Mo	95	1	He	1.200297	0.8	7197.833
Pd	105	1	He	0.185478	4.9	1843.470
Ag	107	1	He	0.184709	32.3	3620.530
Cd	111	1	He	0.032821	20.3	137.373
Sn	118	1	He	0.131550	8.4	1340.077
Sb	121	1	He	0.031399	20.6	460.013
Ba	138	1	He	4.181251	0.8	129391.380
Pt	195	1	He	0.000743	250.0	212.667
Hg	202	1	He	-0.005029		188.333
Tl	205	1	He	0.037738	23.8	2210.210
Pb	208	1	He	0.142513	4.1	11680.337
Bi	209	1	He	0.008297	82.5	2576.967
Th	232	1	He	0.047853	9.1	4122.360
U	238	1	He	12.224868	0.6	775786.213

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.18080752	524985.637
Sc	45	2	H2	93.53274256	4138444.583
Ge	72	1	He	91.82544165	457889.603
Ge	72	2	H2	97.09415905	1514451.957
In	115	1	He	93.43103108	5727500.780
Tb	159	1	He	96.84556038	14012211.873
Ir	193	1	He	96.45946330	7144143.643

Sample Name 10606727001\_B70029Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 216SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:26:52  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	7.770967	1.8	2799.093
Be	9	2	H2	0.060165	15.3	41.500
B	11	2	H2	-66.516590		6523.743
Na	23	1	He	5002.474736	0.7	4231997.123
Mg	24	1	He	9239.399752	0.2	4427531.913
Al	27	1	He	3.506264	2.7	924.363
Si	28	2	H2	2099.472315	0.5	5554847.667
K	39	1	He	1043.992460	0.2	776078.737
Ca	43	1	He	22417.06000	0.3	45418.323
Ti	47	1	He	0.052910	20.7	13.667
V	51	1	He	-0.068721		-989.640
Cr	52	1	He	0.206284	1.6	3715.143
Mn	55	1	He	87.827478	0.7	496966.417
Fe	56	1	He	135.475991	0.2	970626.270
Co	59	1	He	0.038781	12.4	526.010
Ni	60	1	He	0.128962	6.1	580.010
Cu	63	1	He	0.418397	0.2	3832.520
Zn	66	1	He	2.583468	1.5	5197.610
As	75	1	He	0.698336	2.2	1349.230
Se	78	2	H2	-0.008311		33.000
Sr	88	1	He	94.053343	0.7	1052889.020
Mo	95	1	He	0.413853	1.1	2513.567
Pd	105	1	He	0.058484	19.5	711.697
Ag	107	1	He	0.042131	16.7	906.707
Cd	111	1	He	0.008156	47.4	49.880
Sn	118	1	He	0.024049	6.0	356.677
Sb	121	1	He	0.020175	14.8	311.677
Ba	138	1	He	5.718931	1.1	178714.927
Pt	195	1	He	0.000266	263.1	209.333
Hg	202	1	He	-0.006280		183.000
Tl	205	1	He	0.011446	6.9	1011.717
Pb	208	1	He	0.048119	7.0	5818.843
Bi	209	1	He	0.002480	48.0	2310.243
Th	232	1	He	0.011414	4.8	1753.470
U	238	1	He	0.697090	1.6	46006.163

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.72603294	528268.877
Sc	45	2	H2	93.13001451	4120625.500
Ge	72	1	He	92.24715173	459992.470
Ge	72	2	H2	96.46771271	1504680.793
In	115	1	He	94.36464911	5784733.350
Tb	159	1	He	98.11316610	14195616.873
Ir	193	1	He	98.36025976	7284923.640

Sample Name 4315138\_B70029Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 217SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:30:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	85.891500	1.0	29866.483
Be	9	2	H2	77.201648	0.6	27625.280
B	11	2	H2	12.793565	8.5	30383.580
Na	23	1	He	6745.704399	0.8	5696640.750
Mg	24	1	He	10775.73655	0.8	5157247.943
Al	27	1	He	1893.161663	0.7	460793.480
Si	28	2	H2	3004.857917	1.4	7843407.667
K	39	1	He	2957.486587	0.5	2077452.157
Ca	43	1	He	23654.86873	0.5	47870.927
Ti	47	1	He	80.503358	0.4	18095.093
V	51	1	He	82.866467	0.8	517945.613
Cr	52	1	He	83.997800	0.6	627333.853
Mn	55	1	He	167.306848	1.1	945379.727
Fe	56	1	He	1148.284320	0.9	8140005.833
Co	59	1	He	80.664231	0.8	994570.937
Ni	60	1	He	82.140913	1.8	251129.073
Cu	63	1	He	81.669429	0.8	696559.670
Zn	66	1	He	83.850419	0.9	164070.840
As	75	1	He	81.771644	0.6	141228.173
Se	78	2	H2	82.155848	0.4	64959.120
Sr	88	1	He	171.085291	0.3	1934900.337
Mo	95	1	He	80.381021	0.5	489325.823
Pd	105	1	He	79.978571	0.3	729027.777
Ag	107	1	He	14.698373	2.2	285874.643
Cd	111	1	He	81.517167	0.6	295970.140
Sn	118	1	He	78.971123	0.9	737191.317
Sb	121	1	He	79.174957	0.4	1088012.170
Ba	138	1	He	85.953847	0.5	2702678.187
Pt	195	1	He	81.696695	1.0	1049955.623
Hg	202	1	He	-0.007568		177.000
Tl	205	1	He	40.988928	1.0	1941157.313
Pb	208	1	He	82.056096	0.4	5293453.567
Bi	209	1	He	77.508157	1.4	4289998.167
Th	232	1	He	6.825333	1.3	461920.107
U	238	1	He	79.537997	1.3	5159169.920

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.62843648	527681.170
Sc	45	2	H2	91.94842412	4068344.917
Ge	72	1	He	93.19831765	464735.480
Ge	72	2	H2	96.30770026	1502184.957
In	115	1	He	94.98302842	5822641.183
Tb	159	1	He	99.22803319	14356922.707
Ir	193	1	He	98.70098566	7310159.057

Sample Name 4315139\_B70029Dx25  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 218SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:34:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.564113	2.0	624.677
Be	9	2	H2	0.062517	18.8	42.833
B	11	2	H2	-79.159999		2686.073
Na	23	1	He	970.250906	0.3	846296.887
Mg	24	1	He	1795.210959	0.6	881285.690
Al	27	1	He	1.881447	2.9	539.343
Si	28	2	H2	409.905384	0.9	1106787.250
K	39	1	He	198.991195	0.1	204436.117
Ca	43	1	He	4338.962484	0.9	8979.690
Ti	47	1	He	0.042965	71.8	11.667
V	51	1	He	0.115508	58.3	168.337
Cr	52	1	He	0.063136	10.7	2702.260
Mn	55	1	He	17.095861	0.4	98911.790
Fe	56	1	He	26.648123	0.5	203306.270
Co	59	1	He	0.025275	16.4	372.673
Ni	60	1	He	0.050648	28.0	354.003
Cu	63	1	He	0.105086	14.3	1226.057
Zn	66	1	He	0.568596	2.2	1341.400
As	75	1	He	0.135257	9.4	400.010
Se	78	2	H2	-0.009100		33.000
Sr	88	1	He	18.118411	0.7	209345.687
Mo	95	1	He	0.102800	12.0	654.683
Pd	105	1	He	0.039606	12.3	560.017
Ag	107	1	He	0.149087	28.7	3077.053
Cd	111	1	He	0.015993	36.2	80.883
Sn	118	1	He	0.034023	20.5	465.013
Sb	121	1	He	0.017400	2.5	283.340
Ba	138	1	He	1.123629	1.9	36407.830
Pt	195	1	He	0.011461	16.3	359.343
Hg	202	1	He	-0.009612		166.000
Tl	205	1	He	0.052660	25.6	3003.713
Pb	208	1	He	0.017731	25.6	3966.917
Bi	209	1	He	0.015510	63.7	3073.750
Th	232	1	He	0.004440	37.2	1305.077
U	238	1	He	0.146265	3.8	10566.030

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.50999425	539011.540
Sc	45	2	H2	94.13231540	4164973.250
Ge	72	1	He	95.15823406	474508.647
Ge	72	2	H2	98.33797778	1533852.750
In	115	1	He	97.68296343	5988152.360
Tb	159	1	He	100.3316575	14516601.867
Ir	193	1	He	99.91753997	7400261.557

Sample Name 4312179\_B70029Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 219SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:38:08  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	27.821166	0.7	9844.523
Be	9	2	H2	20.064001	0.7	7286.083
B	11	2	H2	-45.808393		12855.287
Na	23	1	He	5319.370942	0.8	4545643.790
Mg	24	1	He	9423.242394	1.0	4562012.637
Al	27	1	He	411.008602	1.1	101238.687
Si	28	2	H2	2152.323251	0.6	5693989.500
K	39	1	He	1464.428188	0.6	1073453.397
Ca	43	1	He	22511.06098	0.3	46077.273
Ti	47	1	He	20.462567	2.6	4653.070
V	51	1	He	21.995359	2.3	138634.377
Cr	52	1	He	22.318933	0.9	170212.243
Mn	55	1	He	107.772141	0.3	616038.520
Fe	56	1	He	571.021778	0.4	4099474.833
Co	59	1	He	21.553637	0.8	267302.253
Ni	60	1	He	21.960905	0.1	67667.273
Cu	63	1	He	21.907671	0.4	188138.923
Zn	66	1	He	23.900826	0.3	47178.953
As	75	1	He	21.867912	0.5	38099.290
Se	78	2	H2	20.996086	1.5	16916.570
Sr	88	1	He	114.196736	1.0	1298853.053
Mo	95	1	He	21.162423	0.2	128904.087
Pd	105	1	He	4.237778	1.8	38821.660
Ag	107	1	He	10.052651	3.1	195630.793
Cd	111	1	He	21.629195	0.2	78587.643
Sn	118	1	He	20.718545	0.9	193611.007
Sb	121	1	He	20.895262	0.7	287322.817
Ba	138	1	He	26.913587	0.3	846745.067
Pt	195	1	He	4.259852	0.2	54932.973
Hg	202	1	He	-0.007280		178.667
Tl	205	1	He	22.482951	0.9	1064698.293
Pb	208	1	He	21.746636	0.7	1404574.650
Bi	209	1	He	21.055635	1.6	1163630.217
Th	232	1	He	21.517334	1.0	1449968.363
U	238	1	He	21.892744	1.8	1416558.310

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.62748944	533697.270
Sc	45	2	H2	93.12423808	4120369.917
Ge	72	1	He	93.72735838	467373.553
Ge	72	2	H2	97.95995890	1527956.500
In	115	1	He	95.03203733	5825645.523
Tb	159	1	He	99.20618127	14353761.037
Ir	193	1	He	98.41513375	7288987.810

Sample Name 4312180\_B70029Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 220SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:41:53  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	28.257304	0.4	9925.247
Be	9	2	H2	20.394600	1.3	7352.287
B	11	2	H2	-44.911531		13033.777
Na	23	1	He	5433.809459	0.3	4607284.410
Mg	24	1	He	9672.998512	1.0	4646588.367
Al	27	1	He	408.054434	0.9	99733.367
Si	28	2	H2	2226.928305	0.8	5848040.500
K	39	1	He	1475.261841	0.4	1072566.443
Ca	43	1	He	22898.88887	0.5	46508.607
Ti	47	1	He	21.292461	1.8	4804.453
V	51	1	He	22.101885	1.9	138236.863
Cr	52	1	He	22.277000	0.6	168580.370
Mn	55	1	He	110.012121	0.3	623984.603
Fe	56	1	He	574.709426	0.1	4094009.417
Co	59	1	He	21.357751	0.3	264948.230
Ni	60	1	He	21.810753	0.4	67223.990
Cu	63	1	He	21.736252	0.3	186720.703
Zn	66	1	He	23.652906	1.0	46704.703
As	75	1	He	21.697485	0.2	37814.533
Se	78	2	H2	21.620788	0.9	17290.343
Sr	88	1	He	115.655831	0.6	1315830.503
Mo	95	1	He	21.304314	1.4	129635.030
Pd	105	1	He	4.187073	0.4	38323.527
Ag	107	1	He	10.065937	0.9	195717.510
Cd	111	1	He	21.493054	0.3	78016.670
Sn	118	1	He	20.661409	1.2	192872.943
Sb	121	1	He	20.924563	0.5	287433.297
Ba	138	1	He	26.847648	0.3	843864.803
Pt	195	1	He	4.251891	1.3	54890.150
Hg	202	1	He	-0.003466		203.000
Tl	205	1	He	22.250012	1.6	1054831.493
Pb	208	1	He	21.622949	0.2	1398113.670
Bi	209	1	He	20.721702	0.9	1155671.937
Th	232	1	He	21.196123	1.1	1441341.230
U	238	1	He	21.628460	1.6	1412285.187

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.94282848	529574.377
Sc	45	2	H2	92.44903497	4090494.917
Ge	72	1	He	93.75324884	467502.657
Ge	72	2	H2	97.23904347	1516711.830
In	115	1	He	94.93969643	5819984.850
Tb	159	1	He	99.30931832	14368683.540
Ir	193	1	He	99.30826142	7355136.140

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 221\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:45:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	78.211020	1.4	27739.953
Be	9	2	H2	75.967695	0.7	27721.627
B	11	2	H2	-3.676091		25914.303
Na	23	1	He	986.739934	1.0	862364.493
Mg	24	1	He	980.440942	0.6	484364.770
Al	27	1	He	963.865224	0.9	240200.813
Si	28	2	H2	483.641039	1.5	1298426.960
K	39	1	He	1003.139356	1.2	765125.250
Ca	43	1	He	988.912101	3.0	2060.703
Ti	47	1	He	79.033997	1.0	18186.530
V	51	1	He	79.601277	1.0	509330.843
Cr	52	1	He	82.574836	1.1	631374.103
Mn	55	1	He	80.209621	1.1	464122.070
Fe	56	1	He	523.476501	1.1	3804676.833
Co	59	1	He	81.986903	0.6	1032460.773
Ni	60	1	He	82.792629	0.7	258530.877
Cu	63	1	He	82.697777	0.8	720367.103
Zn	66	1	He	80.542813	0.7	160976.757
As	75	1	He	79.366038	0.5	140004.673
Se	78	2	H2	80.987113	0.3	64954.067
Sr	88	1	He	80.113744	0.2	925452.120
Mo	95	1	He	76.269923	0.5	478824.157
Pd	105	1	He	81.403765	0.6	765217.853
Ag	107	1	He	40.648296	0.3	815138.453
Cd	111	1	He	80.133414	0.6	300049.330
Sn	118	1	He	76.595575	1.0	737395.253
Sb	121	1	He	77.550074	0.4	1099025.790
Ba	138	1	He	78.136296	0.6	2533803.247
Pt	195	1	He	82.799700	0.5	1080430.790
Hg	202	1	He	3.901527	1.1	25119.947
Tl	205	1	He	41.971573	1.3	2018084.293
Pb	208	1	He	81.737168	0.7	5353659.977
Bi	209	1	He	79.069875	1.1	4528164.513
Th	232	1	He	75.061147	1.6	5245667.420
U	238	1	He	76.190749	1.1	5113293.050

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.70805288	540204.210
Sc	45	2	H2	93.76691091	4148805.583
Ge	72	1	He	95.18725228	474653.347
Ge	72	2	H2	97.69236972	1523782.707
In	115	1	He	97.95516723	6004838.973
Tb	159	1	He	100.7486174	14576930.197
Ir	193	1	He	102.1165764	7563130.307



Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 222\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:49:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.092356	34.0	102.333
Be	9	2	H2	0.064291	18.6	43.667
B	11	2	H2	-82.531131		1651.760
Na	23	1	He	-1.235823		9859.980
Mg	24	1	He	-5.345676		1783.460
Al	27	1	He	0.149476	56.5	108.667
Si	28	2	H2	-1.022993		10522.393
K	39	1	He	-6.265063		61711.750
Ca	43	1	He	0.026964	148.5	12.450
Ti	47	1	He	0.006748	163.2	3.333
V	51	1	He	0.003094	2211.3	-549.377
Cr	52	1	He	-0.009682		2147.497
Mn	55	1	He	0.053066	5.2	562.010
Fe	56	1	He	0.260606	13.9	12461.987
Co	59	1	He	0.021336	10.8	319.337
Ni	60	1	He	0.024103	59.2	268.000
Cu	63	1	He	0.012120	46.7	412.010
Zn	66	1	He	0.018043	23.4	240.000
As	75	1	He	-0.006560		148.500
Se	78	2	H2	-0.014795		28.333
Sr	88	1	He	0.015114	52.4	313.340
Mo	95	1	He	0.024634	28.3	164.667
Pd	105	1	He	0.027319	37.8	443.343
Ag	107	1	He	0.187410	26.5	3828.903
Cd	111	1	He	0.016263	22.9	81.637
Sn	118	1	He	0.014833	20.2	280.003
Sb	121	1	He	0.016298	40.7	266.670
Ba	138	1	He	0.015369	26.0	568.350
Pt	195	1	He	0.012386	48.4	370.673
Hg	202	1	He	0.009071	24.3	284.000
Tl	205	1	He	0.043579	28.5	2565.280
Pb	208	1	He	0.005321	28.0	3151.837
Bi	209	1	He	0.009824	42.4	2797.013
Th	232	1	He	0.027564	6.8	2927.020
U	238	1	He	0.009621	24.3	1618.450

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.46141744	538719.020
Sc	45	2	H2	94.56046763	4183917.250
Ge	72	1	He	94.06280259	469046.253
Ge	72	2	H2	98.06411655	1529581.127
In	115	1	He	97.47204771	5975222.823
Tb	159	1	He	100.0911311	14481801.033
Ir	193	1	He	101.3661214	7507548.847

Sample Name 4308538\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 223SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:53:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.054818	13.2	88.333
Be	9	2	H2	0.042751	6.4	35.500
B	11	2	H2	-82.362422		1692.760
Na	23	1	He	3.423731	15.4	13858.177
Mg	24	1	He	-2.343923		3247.053
Al	27	1	He	26.899870	1.4	6749.530
Si	28	2	H2	0.215500	42.3	13749.690
K	39	1	He	-5.483715		62206.983
Ca	43	1	He	15.131961	4.3	43.617
Ti	47	1	He	0.059129	48.1	15.333
V	51	1	He	0.112091	40.1	148.290
Cr	52	1	He	0.069182	9.0	2744.930
Mn	55	1	He	0.084026	2.8	740.020
Fe	56	1	He	1.759864	2.4	23283.177
Co	59	1	He	0.009434	16.1	170.000
Ni	60	1	He	0.011233	72.2	226.667
Cu	63	1	He	0.033494	8.0	591.343
Zn	66	1	He	1.751542	1.7	3630.467
As	75	1	He	-0.015787		131.333
Se	78	2	H2	-0.011482		30.667
Sr	88	1	He	0.033428	24.3	518.347
Mo	95	1	He	0.010651	13.1	78.000
Pd	105	1	He	0.009956	10.4	283.343
Ag	107	1	He	0.048439	17.7	1068.390
Cd	111	1	He	0.004642	32.5	38.653
Sn	118	1	He	0.032080	11.3	448.343
Sb	121	1	He	0.033780	5.0	516.680
Ba	138	1	He	0.069962	1.7	2345.223
Pt	195	1	He	0.008386	12.5	318.670
Hg	202	1	He	-0.002010		213.667
Tl	205	1	He	0.012476	12.7	1080.053
Pb	208	1	He	0.001021	129.2	2870.147
Bi	209	1	He	0.002389	151.9	2376.927
Th	232	1	He	0.007077	15.4	1506.770
U	238	1	He	-0.000027		976.713

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.39404448	538313.313
Sc	45	2	H2	93.93245904	4156130.417
Ge	72	1	He	93.32734880	465378.897
Ge	72	2	H2	97.02983936	1513448.713
In	115	1	He	98.07444519	6012150.940
Tb	159	1	He	100.0339009	14473520.617
Ir	193	1	He	101.4470709	7513544.263

Sample Name 4308539\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 224SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 03:56:53  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	96.552729	0.6	33585.877
Be	9	2	H2	93.792408	0.6	33577.247
B	11	2	H2	16.342366	3.8	31474.637
Na	23	1	He	1946.726714	0.4	1661124.820
Mg	24	1	He	1933.076807	0.5	934072.903
Al	27	1	He	1902.220848	0.4	465681.020
Si	28	2	H2	506.954631	0.3	1334849.917
K	39	1	He	1955.315801	0.1	1403480.813
Ca	43	1	He	1963.330057	0.4	4007.490
Ti	47	1	He	103.334349	0.4	23360.470
V	51	1	He	100.065918	1.1	629213.713
Cr	52	1	He	103.173438	0.2	774519.727
Mn	55	1	He	99.514298	0.4	565699.687
Fe	56	1	He	2057.955663	0.4	14665256.000
Co	59	1	He	102.567671	0.5	1261643.120
Ni	60	1	He	103.704813	0.6	316261.303
Cu	63	1	He	101.865551	0.8	866659.293
Zn	66	1	He	102.077415	0.6	199220.837
As	75	1	He	104.184736	0.4	179465.117
Se	78	2	H2	105.576215	1.6	83402.287
Sr	88	1	He	100.324009	0.1	1131947.040
Mo	95	1	He	101.785069	1.3	624013.123
Pd	105	1	He	21.380808	0.6	196422.203
Ag	107	1	He	49.436006	0.9	968129.983
Cd	111	1	He	99.611251	0.8	364236.040
Sn	118	1	He	100.778023	0.6	947421.107
Sb	121	1	He	103.427661	0.8	1431392.167
Ba	138	1	He	98.079722	0.8	3105879.850
Pt	195	1	He	21.442834	0.1	276475.490
Hg	202	1	He	-0.001926		213.000
Tl	205	1	He	103.661848	0.5	4921702.117
Pb	208	1	He	101.012801	0.6	6533015.993
Bi	209	1	He	96.629653	0.6	5413849.503
Th	232	1	He	98.126377	1.2	6709070.320
U	238	1	He	95.340783	0.6	6260013.243

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.13389141	530724.920
Sc	45	2	H2	92.00141768	4070689.667
Ge	72	1	He	92.97517817	463622.790
Ge	72	2	H2	96.22875476	1500953.583
In	115	1	He	95.66205608	5864266.877
Tb	159	1	He	99.49308386	14395271.870
Ir	193	1	He	99.90820675	7399570.303

Sample Name 10606181001\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 225SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:00:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	26.239539	0.2	9319.193
Be	9	2	H2	0.089590	9.9	52.333
B	11	2	H2	23.963156	3.4	34301.093
Na	23	1	He	44706.26738	0.6	36791881.120
Mg	24	1	He	31674.10395	0.5	14788467.697
Al	27	1	He	8.926369	1.3	2188.830
Si	28	2	H2	12820.46208	0.5	33962880.000
K	39	1	He	5345.992809	0.8	3614431.403
Ca	43	1	He	81577.82010	0.5	161116.707
Ti	47	1	He	0.274828	3.5	62.000
V	51	1	He	1.157721	17.8	6526.480
Cr	52	1	He	1.489649	0.8	12945.720
Mn	55	1	He	1.584117	0.9	8980.110
Fe	56	1	He	7.560765	0.4	62365.470
Co	59	1	He	0.096004	1.9	1192.720
Ni	60	1	He	0.719678	2.0	2304.857
Cu	63	1	He	0.552149	1.4	4832.150
Zn	66	1	He	1.642828	2.5	3290.387
As	75	1	He	0.936315	3.1	1709.937
Se	78	2	H2	0.551412	3.0	475.343
Sr	88	1	He	321.966786	0.7	3510316.927
Mo	95	1	He	1.679663	2.2	9875.443
Pd	105	1	He	0.205274	4.2	1981.823
Ag	107	1	He	0.224849	27.4	4304.053
Cd	111	1	He	0.014976	31.9	72.223
Sn	118	1	He	0.043904	12.0	525.013
Sb	121	1	He	0.100185	7.4	1363.413
Ba	138	1	He	184.628577	1.1	5601297.003
Pt	195	1	He	0.010248	11.5	333.340
Hg	202	1	He	-0.006735		178.667
Tl	205	1	He	0.034227	24.2	2060.183
Pb	208	1	He	0.028494	20.1	4528.653
Bi	209	1	He	0.005942	51.9	2446.937
Th	232	1	He	0.041805	4.2	3718.897
U	238	1	He	11.835077	1.2	749436.837

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	85.53300920	515062.920
Sc	45	2	H2	93.42978586	4133889.167
Ge	72	1	He	89.85119328	448044.970
Ge	72	2	H2	96.34537403	1502772.583
In	115	1	He	91.65137379	5618404.387
Tb	159	1	He	97.30919607	14079293.540
Ir	193	1	He	96.25491241	7128993.850

Sample Name 4309028\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 226SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:04:24  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	100.448360	0.7	35445.773
Be	9	2	H2	74.927790	0.7	27217.043
B	11	2	H2	99.952057	2.6	57551.313
Na	23	1	He	45699.77060	0.3	38053441.100
Mg	24	1	He	32914.04042	0.3	15548811.437
Al	27	1	He	1848.955518	0.6	444469.803
Si	28	2	H2	13587.87269	1.3	35957438.667
K	39	1	He	7133.815217	0.5	4858879.197
Ca	43	1	He	82446.28085	0.2	164756.130
Ti	47	1	He	79.974564	0.1	17754.010
V	51	1	He	83.111623	1.0	513066.597
Cr	52	1	He	83.962030	0.1	619324.127
Mn	55	1	He	81.188416	0.3	453235.980
Fe	56	1	He	1003.114936	0.6	7024408.833
Co	59	1	He	80.060359	0.4	959468.480
Ni	60	1	He	81.894734	0.1	243369.367
Cu	63	1	He	80.308375	0.2	665762.833
Zn	66	1	He	82.553294	0.5	157010.653
As	75	1	He	81.913663	0.5	137508.253
Se	78	2	H2	81.629700	1.1	64355.420
Sr	88	1	He	397.337680	0.2	4367499.727
Mo	95	1	He	82.199524	0.5	479691.167
Pd	105	1	He	77.918136	0.8	680856.473
Ag	107	1	He	15.992959	0.9	298172.373
Cd	111	1	He	81.327398	0.6	283064.893
Sn	118	1	He	79.859066	0.4	714636.240
Sb	121	1	He	79.495583	1.1	1047203.890
Ba	138	1	He	267.237858	0.4	8055074.880
Pt	195	1	He	80.517653	0.2	1012733.333
Hg	202	1	He	-0.005494		186.000
Tl	205	1	He	40.255753	0.9	1865754.763
Pb	208	1	He	80.138451	0.6	5059347.030
Bi	209	1	He	75.331443	1.0	4065644.003
Th	232	1	He	6.965276	1.2	459612.413
U	238	1	He	90.881114	1.0	5747648.873

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	86.54352218	521148.030
Sc	45	2	H2	93.34038972	4129933.750
Ge	72	1	He	90.58506882	451704.457
Ge	72	2	H2	96.02658094	1497800.123
In	115	1	He	91.05310457	5581729.340
Tb	159	1	He	97.11106320	14050626.457
Ir	193	1	He	96.23748939	7127703.437

Sample Name 4309029\_B69934Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 227SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:08:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.678563	1.7	2069.643
Be	9	2	H2	0.069921	18.9	45.167
B	11	2	H2	-59.154856		8799.390
Na	23	1	He	9154.552734	0.4	7739290.093
Mg	24	1	He	6521.708354	0.8	3127984.640
Al	27	1	He	3.184961	8.6	846.373
Si	28	2	H2	2654.253275	0.9	7038868.167
K	39	1	He	1085.688850	0.2	804869.830
Ca	43	1	He	16561.96329	0.6	33574.463
Ti	47	1	He	0.078099	32.9	19.333
V	51	1	He	0.286393	31.7	1237.687
Cr	52	1	He	0.333454	2.8	4664.757
Mn	55	1	He	0.377588	2.3	2387.537
Fe	56	1	He	1.927544	3.3	24048.413
Co	59	1	He	0.028024	12.4	395.343
Ni	60	1	He	0.153883	3.7	656.020
Cu	63	1	He	0.145141	8.3	1528.087
Zn	66	1	He	0.403534	3.4	982.037
As	75	1	He	0.177890	5.4	461.010
Se	78	2	H2	0.094698	16.8	114.667
Sr	88	1	He	64.237432	0.7	719865.847
Mo	95	1	He	0.319553	3.6	1960.143
Pd	105	1	He	0.069091	7.2	815.030
Ag	107	1	He	0.171189	28.7	3433.813
Cd	111	1	He	0.010270	7.8	57.980
Sn	118	1	He	0.019784	26.6	320.010
Sb	121	1	He	0.027240	13.6	411.677
Ba	138	1	He	36.599000	1.1	1152972.690
Pt	195	1	He	0.004687	35.3	268.000
Hg	202	1	He	-0.006877		181.000
Tl	205	1	He	0.046455	26.6	2675.297
Pb	208	1	He	0.005390	30.6	3123.503
Bi	209	1	He	0.007967	104.0	2603.650
Th	232	1	He	0.005756	13.9	1368.420
U	238	1	He	2.347702	0.5	152237.253

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.76718175	528516.667
Sc	45	2	H2	93.39064856	4132157.500
Ge	72	1	He	92.33622984	460436.660
Ge	72	2	H2	96.58766023	1506551.707
In	115	1	He	95.16359304	5833710.140
Tb	159	1	He	99.04666649	14330681.457
Ir	193	1	He	98.06497903	7263054.060

Sample Name 4308540\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 228SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:11:55  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	124.417051	1.1	43527.030
Be	9	2	H2	97.915514	1.1	35269.410
B	11	2	H2	130.805881	1.8	66459.957
Na	23	1	He	47304.00078	1.8	38919245.253
Mg	24	1	He	34099.31905	1.9	15916311.427
Al	27	1	He	1970.223696	2.0	467954.343
Si	28	2	H2	13636.16042	0.6	35791064.000
K	39	1	He	7396.563045	2.4	4974940.653
Ca	43	1	He	84709.79306	2.4	167245.517
Ti	47	1	He	103.665383	3.0	22733.817
V	51	1	He	107.973673	3.3	658598.847
Cr	52	1	He	108.680079	2.6	791361.563
Mn	55	1	He	103.550742	2.3	571061.063
Fe	56	1	He	2129.564323	2.3	14722102.667
Co	59	1	He	104.197115	1.3	1235486.917
Ni	60	1	He	105.286581	1.9	309495.643
Cu	63	1	He	103.409913	1.8	848066.893
Zn	66	1	He	104.167216	1.9	195956.150
As	75	1	He	105.868083	2.1	175778.293
Se	78	2	H2	106.405370	0.4	82848.763
Sr	88	1	He	427.620202	1.5	4650464.513
Mo	95	1	He	106.832363	2.1	617895.603
Pd	105	1	He	20.953282	1.8	181597.067
Ag	107	1	He	52.200925	2.8	964320.637
Cd	111	1	He	105.325646	2.0	363332.950
Sn	118	1	He	103.192661	1.6	915225.483
Sb	121	1	He	105.165588	1.7	1373091.283
Ba	138	1	He	294.515714	2.0	8798283.620
Pt	195	1	He	21.029523	2.5	263225.487
Hg	202	1	He	-0.004613		190.333
Tl	205	1	He	106.965789	2.7	4929755.550
Pb	208	1	He	103.302597	2.5	648589.330
Bi	209	1	He	101.102872	1.7	5366840.337
Th	232	1	He	107.077912	2.6	6935924.480
U	238	1	He	115.759822	2.6	7200302.393

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	85.53449491	515071.867
Sc	45	2	H2	92.57265646	4095964.667
Ge	72	1	He	89.63865570	446985.147
Ge	72	2	H2	94.85209115	1479480.707
In	115	1	He	90.26167617	5533213.267
Tb	159	1	He	96.60912912	13978003.543
Ir	193	1	He	94.67741312	7012158.433

Sample Name 4308541\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 229SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:15:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	127.907420	0.9	44703.930
Be	9	2	H2	100.618088	0.8	36208.283
B	11	2	H2	138.408946	0.7	68706.943
Na	23	1	He	48491.33719	0.1	40240682.733
Mg	24	1	He	34999.49990	0.2	16477762.667
Al	27	1	He	1994.241146	0.1	477766.323
Si	28	2	H2	14194.51303	1.0	37220376.000
K	39	1	He	7647.368209	0.2	5186408.153
Ca	43	1	He	87496.90817	0.3	174256.917
Ti	47	1	He	105.467821	1.3	23333.760
V	51	1	He	108.958365	0.5	670508.560
Cr	52	1	He	109.985169	0.1	807864.663
Mn	55	1	He	104.695971	0.3	582413.917
Fe	56	1	He	2150.440531	0.5	14996104.000
Co	59	1	He	105.621821	0.3	1259857.087
Ni	60	1	He	106.751978	0.6	315694.500
Cu	63	1	He	104.197610	0.3	859671.710
Zn	66	1	He	105.006047	0.8	198722.187
As	75	1	He	107.439994	0.3	179465.353
Se	78	2	H2	108.590107	0.4	84219.247
Sr	88	1	He	442.671514	0.8	4842942.843
Mo	95	1	He	108.327725	0.6	629001.457
Pd	105	1	He	21.166356	1.1	184160.980
Ag	107	1	He	52.464679	0.6	973086.107
Cd	111	1	He	106.778924	0.3	369791.440
Sn	118	1	He	104.751277	0.3	932693.320
Sb	121	1	He	106.725457	0.2	1398918.990
Ba	138	1	He	301.571002	1.0	9044295.700
Pt	195	1	He	21.439691	1.1	268767.177
Hg	202	1	He	-0.004831		189.333
Tl	205	1	He	108.172475	0.9	4993489.510
Pb	208	1	He	104.158207	0.3	6549961.570
Bi	209	1	He	101.230376	0.8	5428018.040
Th	232	1	He	106.853779	0.1	6992765.730
U	238	1	He	116.533950	0.3	7323110.933

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	86.25057448	519383.957
Sc	45	2	H2	92.48455611	4092066.583
Ge	72	1	He	90.16101977	449589.927
Ge	72	2	H2	94.48094569	1473691.667
In	115	1	He	90.59854946	5553864.243
Tb	159	1	He	96.73927285	13996833.540
Ir	193	1	He	95.61948803	7081931.977



Sample Name 10606181002\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 230SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:19:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	19.470688	0.8	6921.583
Be	9	2	H2	0.123357	20.6	64.500
B	11	2	H2	-5.962251		25081.063
Na	23	1	He	44973.96125	0.2	36764832.783
Mg	24	1	He	28939.01894	0.1	13421666.467
Al	27	1	He	13.817576	2.3	3328.377
Si	28	2	H2	20236.63566	0.4	53516140.000
K	39	1	He	8888.483349	0.3	5927857.203
Ca	43	1	He	101029.5811	0.5	198198.997
Ti	47	1	He	0.438793	21.8	97.333
V	51	1	He	0.166743	39.0	471.540
Cr	52	1	He	0.808086	0.6	7940.830
Mn	55	1	He	274.960914	0.4	1506330.250
Fe	56	1	He	666.084053	0.1	4582488.167
Co	59	1	He	0.057758	8.5	732.023
Ni	60	1	He	0.522839	3.1	1711.437
Cu	63	1	He	0.184184	1.4	1793.450
Zn	66	1	He	2.604681	1.8	5062.227
As	75	1	He	1.488026	0.9	2606.737
Se	78	2	H2	0.022131	18.8	56.000
Sr	88	1	He	370.576136	0.1	4008087.130
Mo	95	1	He	2.825137	1.0	16556.960
Pd	105	1	He	0.231087	7.0	2201.863
Ag	107	1	He	0.194905	27.8	3730.553
Cd	111	1	He	0.011616	7.5	60.357
Sn	118	1	He	0.057430	15.9	645.023
Sb	121	1	He	0.043015	9.9	603.353
Ba	138	1	He	624.349408	1.0	18887621.803
Pt	195	1	He	0.018195	4.7	428.677
Hg	202	1	He	-0.007579		171.667
Tl	205	1	He	0.044931	20.9	2526.937
Pb	208	1	He	0.058141	5.4	6332.277
Bi	209	1	He	0.014857	19.7	2890.373
Th	232	1	He	0.044466	3.0	3842.263
U	238	1	He	0.043028	6.0	3602.200

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	84.96179433	511623.177
Sc	45	2	H2	93.27952727	4127240.833
Ge	72	1	He	89.13387437	444468.043
Ge	72	2	H2	94.62495926	1475937.957
In	115	1	He	91.39243140	5602530.723
Tb	159	1	He	96.21936306	13921609.790
Ir	193	1	He	95.00997604	7036789.270

Sample Name 10606181003\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 231SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:23:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	46.314495	2.1	16222.490
Be	9	2	H2	0.099028	9.5	55.167
B	11	2	H2	347.878155	1.9	132251.650
Na	23	1	He	109021.7294	1.4	89663638.663
Mg	24	1	He	56266.71106	1.5	26254702.943
Al	27	1	He	15.299282	1.2	3701.130
Si	28	2	H2	14948.49342	1.1	39179470.667
K	39	1	He	8653.750629	1.2	5809081.370
Ca	43	1	He	143937.4161	1.4	284133.950
Ti	47	1	He	0.463440	13.0	103.333
V	51	1	He	0.317796	35.4	1399.983
Cr	52	1	He	0.708831	1.6	7269.813
Mn	55	1	He	1539.733574	1.4	8486735.333
Fe	56	1	He	5596.013280	1.4	38665021.333
Co	59	1	He	1.204903	1.9	14172.233
Ni	60	1	He	5.850759	1.1	17173.433
Cu	63	1	He	0.243945	6.4	2266.187
Zn	66	1	He	2.483549	2.2	4806.147
As	75	1	He	59.388687	1.1	97541.267
Se	78	2	H2	0.106480	13.0	121.000
Sr	88	1	He	667.852269	1.0	7179237.810
Mo	95	1	He	1.209618	1.7	6929.693
Pd	105	1	He	0.416209	2.6	3737.190
Ag	107	1	He	0.562567	5.8	10367.237
Cd	111	1	He	0.014691	28.7	69.420
Sn	118	1	He	0.159251	5.0	1523.433
Sb	121	1	He	0.082926	1.7	1105.057
Ba	138	1	He	517.886044	2.0	15298773.937
Pt	195	1	He	0.009383	8.8	317.337
Hg	202	1	He	-0.009555		158.667
Tl	205	1	He	0.014329	15.2	1118.393
Pb	208	1	He	0.070404	5.6	7062.413
Bi	209	1	He	0.006890	16.2	2466.943
Th	232	1	He	0.018996	2.7	2186.870
U	238	1	He	0.057516	6.1	4505.827

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	85.50048682	514867.077
Sc	45	2	H2	92.44533406	4090331.167
Ge	72	1	He	88.59745709	441793.187
Ge	72	2	H2	94.16933311	1468831.207
In	115	1	He	89.25158319	5471292.637
Tb	159	1	He	95.74194468	13852533.960
Ir	193	1	He	95.01555682	7037202.603

Sample Name 10606181003\_B69934Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 232SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:26:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.121602	0.4	1855.947
Be	9	2	H2	0.065541	18.3	43.167
B	11	2	H2	-33.560429		16493.143
Na	23	1	He	11394.34463	0.7	9637527.150
Mg	24	1	He	5895.263130	1.2	2830008.810
Al	27	1	He	2.896023	2.5	776.687
Si	28	2	H2	1560.256739	0.8	4104468.000
K	39	1	He	896.059629	0.3	676139.420
Ca	43	1	He	14813.04926	1.0	30054.030
Ti	47	1	He	0.070685	32.7	17.667
V	51	1	He	0.026701	284.2	-391.477
Cr	52	1	He	0.112316	8.1	3018.987
Mn	55	1	He	156.780537	0.8	888052.103
Fe	56	1	He	578.237081	0.8	4114034.167
Co	59	1	He	0.130912	3.8	1640.767
Ni	60	1	He	0.589495	2.1	1960.807
Cu	63	1	He	0.028578	20.5	540.010
Zn	66	1	He	0.364271	6.9	899.363
As	75	1	He	5.981952	0.3	10308.500
Se	78	2	H2	-0.002727		37.000
Sr	88	1	He	67.250808	0.8	748303.373
Mo	95	1	He	0.124654	2.3	762.020
Pd	105	1	He	0.042104	3.1	561.687
Ag	107	1	He	0.112692	3.4	2261.867
Cd	111	1	He	0.006348	40.8	43.193
Sn	118	1	He	0.029767	10.1	408.343
Sb	121	1	He	0.014002	28.7	226.670
Ba	138	1	He	51.058907	0.8	1589714.300
Pt	195	1	He	0.002316	80.6	234.000
Hg	202	1	He	-0.010321		157.000
Tl	205	1	He	0.006673	19.6	783.363
Pb	208	1	He	0.004618	51.7	3026.827
Bi	209	1	He	0.002556	66.2	2293.577
Th	232	1	He	0.005651	14.0	1353.413
U	238	1	He	0.007790	28.8	1438.423

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.83715304	528938.020
Sc	45	2	H2	92.52223565	4093733.750
Ge	72	1	He	91.68790825	457203.790
Ge	72	2	H2	95.21079381	1485075.667
In	115	1	He	94.04913519	5765391.743
Tb	159	1	He	97.54031125	14112732.707
Ir	193	1	He	97.46069335	7218298.433

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 233\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:30:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	80.654824	0.7	28488.000
Be	9	2	H2	77.808851	0.2	28276.643
B	11	2	H2	0.920210	82.5	27217.747
Na	23	1	He	1000.593273	1.5	877902.407
Mg	24	1	He	984.708684	1.1	488459.057
Al	27	1	He	973.257274	1.1	243542.427
Si	28	2	H2	491.974482	1.2	1315198.873
K	39	1	He	1001.037898	1.2	766819.837
Ca	43	1	He	969.192096	1.5	2028.180
Ti	47	1	He	78.223630	1.8	18072.393
V	51	1	He	80.298814	1.0	515922.487
Cr	52	1	He	81.743715	1.8	627573.603
Mn	55	1	He	79.151645	1.8	459865.220
Fe	56	1	He	518.280469	1.9	3782248.750
Co	59	1	He	81.425204	0.8	1018003.293
Ni	60	1	He	82.677220	0.7	256316.853
Cu	63	1	He	82.246212	0.8	711307.480
Zn	66	1	He	80.720265	0.3	160171.690
As	75	1	He	78.733094	0.6	137889.643
Se	78	2	H2	81.810887	0.8	64561.967
Sr	88	1	He	80.243430	1.0	920248.557
Mo	95	1	He	75.700473	0.6	472489.053
Pd	105	1	He	81.010696	1.4	757068.163
Ag	107	1	He	40.236719	2.7	802078.503
Cd	111	1	He	79.316637	0.9	295261.537
Sn	118	1	He	75.913693	1.7	726526.003
Sb	121	1	He	77.011081	1.2	1085003.760
Ba	138	1	He	77.383504	1.7	2494562.563
Pt	195	1	He	81.599404	0.9	1059854.123
Hg	202	1	He	3.819397	0.4	24482.760
Tl	205	1	He	41.648519	1.1	1993363.930
Pb	208	1	He	80.912907	0.6	5275218.900
Bi	209	1	He	79.527433	0.7	4475850.457
Th	232	1	He	75.485633	1.4	5184429.507
U	238	1	He	76.251427	0.5	5029169.403

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.08772821	542490.540
Sc	45	2	H2	93.38098478	4131729.917
Ge	72	1	He	94.50574991	471255.020
Ge	72	2	H2	96.11839174	1499232.167
In	115	1	He	97.38839034	5970094.467
Tb	159	1	He	100.2828650	14509542.280
Ir	193	1	He	100.3503037	7432313.637

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 234\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:34:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.160748	11.7	125.833
Be	9	2	H2	0.062863	5.3	42.833
B	11	2	H2	-80.398535		2297.673
Na	23	1	He	7.535830	8.1	17381.827
Mg	24	1	He	-3.353926		2751.947
Al	27	1	He	0.105900	49.5	97.667
Si	28	2	H2	-0.501814		11836.057
K	39	1	He	-4.609037		62764.290
Ca	43	1	He	3.687052	62.9	19.983
Ti	47	1	He	0.013989	81.6	5.000
V	51	1	He	0.058103	168.6	-194.910
Cr	52	1	He	-0.007489		2160.830
Mn	55	1	He	0.091886	1.8	784.690
Fe	56	1	He	0.276363	22.3	12557.393
Co	59	1	He	0.013642	18.8	223.333
Ni	60	1	He	0.006201	45.8	212.667
Cu	63	1	He	-0.001806		292.000
Zn	66	1	He	0.016490	31.9	236.667
As	75	1	He	-0.013064		137.000
Se	78	2	H2	-0.014066		28.667
Sr	88	1	He	0.022163	45.8	393.343
Mo	95	1	He	0.015797	36.1	109.333
Pd	105	1	He	0.022644	8.0	398.343
Ag	107	1	He	0.175175	29.7	3577.177
Cd	111	1	He	0.007181	13.9	47.650
Sn	118	1	He	0.007773	29.4	211.667
Sb	121	1	He	0.007560	9.7	143.333
Ba	138	1	He	0.022367	23.6	791.697
Pt	195	1	He	0.003056	75.7	247.333
Hg	202	1	He	0.007848	15.8	273.667
Tl	205	1	He	0.040258	20.5	2385.240
Pb	208	1	He	-0.003576		2548.453
Bi	209	1	He	0.001600	214.2	2300.247
Th	232	1	He	0.015231	6.0	2045.177
U	238	1	He	0.001593	121.1	1070.053

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.31886267	537860.583
Sc	45	2	H2	93.90120194	4154747.417
Ge	72	1	He	93.95596193	468513.490
Ge	72	2	H2	97.45930514	1520147.420
In	115	1	He	97.03878188	5948662.800
Tb	159	1	He	99.15613331	14346519.790
Ir	193	1	He	100.0760437	7412000.930

Sample Name 10606199001\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 235SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:38:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	63.143708	0.6	22201.873
Be	9	2	H2	0.060948	13.2	41.667
B	11	2	H2	204.488007	0.5	89166.997
Na	23	1	He	61595.21636	1.9	50458977.583
Mg	24	1	He	25530.26994	1.9	11867168.987
Al	27	1	He	76.753749	1.6	18219.427
Si	28	2	H2	13577.96712	0.1	35763192.000
K	39	1	He	4626.423645	1.3	3122619.643
Ca	43	1	He	113025.3063	2.0	222216.413
Ti	47	1	He	2.599148	50.4	568.823
V	51	1	He	2.927086	0.4	17259.460
Cr	52	1	He	1.124274	2.6	10244.927
Mn	55	1	He	2.068492	1.7	11599.270
Fe	56	1	He	52.593131	2.0	371895.123
Co	59	1	He	0.062449	4.2	785.357
Ni	60	1	He	0.412159	4.7	1383.403
Cu	63	1	He	0.799799	2.9	6791.597
Zn	66	1	He	3.129304	2.7	6024.600
As	75	1	He	5.010031	2.1	8392.097
Se	78	2	H2	5.488542	0.8	4337.990
Sr	88	1	He	775.536392	1.8	8362565.290
Mo	95	1	He	15.196526	2.0	88584.750
Pd	105	1	He	0.472555	4.9	4299.017
Ag	107	1	He	0.081209	6.2	1601.777
Cd	111	1	He	0.034325	1.8	139.053
Sn	118	1	He	0.058378	12.0	650.023
Sb	121	1	He	0.329746	2.3	4374.057
Ba	138	1	He	51.466104	1.6	1549481.123
Pt	195	1	He	0.009733	17.8	320.007
Hg	202	1	He	0.006640	85.8	255.333
Tl	205	1	He	0.037480	2.6	2165.197
Pb	208	1	He	0.104215	7.7	9117.910
Bi	209	1	He	0.001632	96.6	2170.220
Th	232	1	He	0.028539	6.7	2785.320
U	238	1	He	48.205961	2.0	2987405.373

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	85.16997174	512876.780
Sc	45	2	H2	92.89586311	4110265.250
Ge	72	1	He	88.88324879	443218.293
Ge	72	2	H2	95.45901055	1488947.293
In	115	1	He	90.95833884	5575920.020
Tb	159	1	He	95.25717130	13782393.963
Ir	193	1	He	94.29464012	6983808.853

Sample Name 10606199002\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 236SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:41:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	70.642388	1.1	25017.067
Be	9	2	H2	0.051833	54.9	38.667
B	11	2	H2	515.007527	0.9	185262.547
Na	23	1	He	75278.75802	0.3	62225629.073
Mg	24	1	He	15037.96615	0.3	7055209.267
Al	27	1	He	6.658091	1.8	1657.430
Si	28	2	H2	11736.20841	0.9	31146134.667
K	39	1	He	4959.978642	0.4	3373239.843
Ca	43	1	He	95974.69525	0.5	190406.810
Ti	47	1	He	0.281202	8.6	63.667
V	51	1	He	0.004457	704.2	-517.763
Cr	52	1	He	0.339895	3.0	4613.400
Mn	55	1	He	19.009391	1.4	105538.933
Fe	56	1	He	99.656783	0.4	701988.707
Co	59	1	He	0.073542	5.7	924.700
Ni	60	1	He	0.311467	1.5	1101.377
Cu	63	1	He	0.223341	3.0	2127.493
Zn	66	1	He	1.223691	2.0	2498.223
As	75	1	He	17.896132	0.4	29886.760
Se	78	2	H2	0.015511	56.1	51.667
Sr	88	1	He	845.720565	0.3	9210955.697
Mo	95	1	He	24.157296	0.8	142947.077
Pd	105	1	He	0.495086	6.6	4564.113
Ag	107	1	He	0.037621	2.4	801.697
Cd	111	1	He	0.044471	1.9	176.937
Sn	118	1	He	0.052831	8.5	610.020
Sb	121	1	He	0.029299	5.5	426.677
Ba	138	1	He	28.511990	0.4	871436.990
Pt	195	1	He	0.010349	6.9	330.677
Hg	202	1	He	0.004810	72.7	247.000
Tl	205	1	He	0.037777	8.2	2200.210
Pb	208	1	He	0.016895	7.6	3751.893
Bi	209	1	He	-0.000141		2090.203
Th	232	1	He	0.011081	11.4	1670.123
U	238	1	He	8.546937	0.8	533955.980

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	85.92174494	517403.810
Sc	45	2	H2	93.59373874	4141143.417
Ge	72	1	He	89.75699536	447575.250
Ge	72	2	H2	96.06434297	1498389.127
In	115	1	He	92.31982059	5659381.453
Tb	159	1	He	96.17047275	13914536.040
Ir	193	1	He	94.91110843	7029466.770

Sample Name 10606199003\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 237SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:45:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	61.852345	0.4	22001.413
Be	9	2	H2	0.057755	14.7	41.000
B	11	2	H2	408.685555	1.1	153209.143
Na	23	1	He	84244.53291	0.7	70595487.280
Mg	24	1	He	12521.59064	0.5	5956359.913
Al	27	1	He	13.239152	3.4	3272.700
Si	28	2	H2	13542.91906	0.7	36084998.667
K	39	1	He	4591.342502	0.4	3170379.227
Ca	43	1	He	79404.06832	0.0	159708.390
Ti	47	1	He	0.317380	13.6	72.667
V	51	1	He	0.158803	27.1	434.620
Cr	52	1	He	0.803073	1.9	8104.260
Mn	55	1	He	264.305686	1.0	1484474.207
Fe	56	1	He	555.778626	0.8	3921731.167
Co	59	1	He	0.045192	7.1	596.013
Ni	60	1	He	0.254375	2.4	946.030
Cu	63	1	He	0.299513	0.8	2790.277
Zn	66	1	He	1.780880	2.6	3595.123
As	75	1	He	5.260383	0.5	9013.137
Se	78	2	H2	-0.001399		38.333
Sr	88	1	He	915.640503	0.5	10107555.473
Mo	95	1	He	22.120596	1.8	130651.930
Pd	105	1	He	0.550097	3.6	5040.933
Ag	107	1	He	0.023132	13.1	526.680
Cd	111	1	He	0.017067	20.0	80.147
Sn	118	1	He	0.049084	15.2	575.020
Sb	121	1	He	0.046107	4.6	650.020
Ba	138	1	He	66.828775	0.9	2038793.043
Pt	195	1	He	0.009780	21.5	325.340
Hg	202	1	He	0.007830	27.1	266.667
Tl	205	1	He	0.006754	23.2	780.033
Pb	208	1	He	0.090081	7.2	8367.713
Bi	209	1	He	0.002342	72.3	2226.893
Th	232	1	He	0.009183	5.4	1550.107
U	238	1	He	5.942549	0.8	372278.260

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.10589031	524534.500
Sc	45	2	H2	93.97307105	4157927.333
Ge	72	1	He	90.97326121	453640.187
Ge	72	2	H2	96.16176846	1499908.747
In	115	1	He	92.16209875	5649712.803
Tb	159	1	He	96.68328097	13988732.290
Ir	193	1	He	95.10280155	7043664.270



Sample Name 10606199004\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 238SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:49:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	51.657618	0.5	19121.360
Be	9	2	H2	0.267022	5.5	122.167
B	11	2	H2	50.022730	1.5	44241.760
Na	23	1	He	56447.20293	0.2	47996075.950
Mg	24	1	He	29628.89549	0.1	14293911.873
Al	27	1	He	6424.391106	0.3	1576893.670
Si	28	2	H2	32865.84403	0.7	91050650.667
K	39	1	He	4467.852854	0.6	3131904.017
Ca	43	1	He	88431.72664	0.8	180458.760
Ti	47	1	He	136.421172	0.5	30925.017
V	51	1	He	14.569987	2.1	91383.167
Cr	52	1	He	5.010757	1.2	39807.123
Mn	55	1	He	93.652795	0.8	533849.393
Fe	56	1	He	4086.017454	0.7	29186965.333
Co	59	1	He	1.512274	1.3	18290.793
Ni	60	1	He	3.214992	3.3	9795.310
Cu	63	1	He	8.191349	1.0	68610.007
Zn	66	1	He	23.610693	0.7	45334.440
As	75	1	He	4.777247	0.6	8217.163
Se	78	2	H2	1.153531	1.9	957.363
Sr	88	1	He	604.013451	0.9	6681613.233
Mo	95	1	He	1.494332	1.4	8953.493
Pd	105	1	He	0.366347	2.6	3462.117
Ag	107	1	He	0.051343	13.7	1073.383
Cd	111	1	He	0.165123	7.3	609.733
Sn	118	1	He	0.483820	4.3	4570.790
Sb	121	1	He	0.152961	3.9	2101.843
Ba	138	1	He	108.256303	0.3	3346296.827
Pt	195	1	He	0.008934	45.6	316.003
Hg	202	1	He	0.000525	332.1	223.000
Tl	205	1	He	0.110747	3.9	5606.223
Pb	208	1	He	3.139852	0.9	200929.190
Bi	209	1	He	0.055261	10.3	4974.373
Th	232	1	He	1.954045	1.4	126301.343
U	238	1	He	12.302589	0.7	758787.777

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.37713529	532189.687
Sc	45	2	H2	97.72807429	4324071.000
Ge	72	1	He	91.16688982	454605.720
Ge	72	2	H2	96.96034715	1512364.790
In	115	1	He	93.37484724	5724056.603
Tb	159	1	He	97.15624433	14057163.540
Ir	193	1	He	93.74689649	6943240.940

Sample Name 10606199004\_B69934Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 239SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:53:13  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.877527	1.9	2168.157
Be	9	2	H2	0.035236	17.7	33.000
B	11	2	H2	-63.955625		7425.150
Na	23	1	He	5891.581635	0.4	5091140.030
Mg	24	1	He	3099.402732	0.5	1520632.687
Al	27	1	He	677.287943	0.4	168690.587
Si	28	2	H2	3570.051876	1.0	9588943.333
K	39	1	He	467.582670	0.4	391729.933
Ca	43	1	He	9155.558025	0.9	18962.350
Ti	47	1	He	15.087947	2.2	3471.100
V	51	1	He	1.554935	3.9	9382.150
Cr	52	1	He	0.525143	3.2	6224.000
Mn	55	1	He	9.997502	0.8	58033.057
Fe	56	1	He	436.126581	0.5	3169361.917
Co	59	1	He	0.159656	3.0	2036.150
Ni	60	1	He	0.334790	5.9	1223.390
Cu	63	1	He	0.870674	0.9	7782.767
Zn	66	1	He	2.614507	3.0	5350.333
As	75	1	He	0.465422	2.4	968.197
Se	78	2	H2	0.086071	33.2	110.000
Sr	88	1	He	60.981676	0.9	694651.737
Mo	95	1	He	0.153514	3.6	966.037
Pd	105	1	He	0.038553	4.7	546.683
Ag	107	1	He	0.016755	7.7	428.343
Cd	111	1	He	0.017287	17.4	85.160
Sn	118	1	He	0.054077	4.5	653.353
Sb	121	1	He	0.017292	13.7	280.007
Ba	138	1	He	10.900383	0.9	350338.013
Pt	195	1	He	0.002027	42.8	235.333
Hg	202	1	He	-0.000516		222.333
Tl	205	1	He	0.016015	4.2	1245.073
Pb	208	1	He	0.323160	1.3	23725.007
Bi	209	1	He	0.006878	56.3	2546.963
Th	232	1	He	0.196571	1.1	14177.827
U	238	1	He	1.214681	0.9	79250.237

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.64269316	539810.627
Sc	45	2	H2	94.63688329	4187298.333
Ge	72	1	He	93.86269586	468048.417
Ge	72	2	H2	98.46259776	1535796.543
In	115	1	He	97.06817673	5950464.760
Tb	159	1	He	99.67414242	14421468.537
Ir	193	1	He	98.09626967	7265371.560

Sample Name 10606199005\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 240SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 04:56:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	40.898864	0.9	14287.387
Be	9	2	H2	0.041871	48.5	34.500
B	11	2	H2	33.634567	2.0	36753.990
Na	23	1	He	58236.41192	0.4	49001182.603
Mg	24	1	He	24045.13907	0.7	11480164.830
Al	27	1	He	766.675843	0.6	186286.170
Si	28	2	H2	14518.23137	0.7	37928302.667
K	39	1	He	2883.802831	0.7	2023359.763
Ca	43	1	He	89660.77663	0.4	181062.780
Ti	47	1	He	15.334254	0.4	3441.410
V	51	1	He	3.370600	1.2	20493.620
Cr	52	1	He	1.204803	1.1	11120.890
Mn	55	1	He	12.806491	0.7	72458.140
Fe	56	1	He	446.019902	0.4	3162037.917
Co	59	1	He	0.194746	1.7	2388.207
Ni	60	1	He	0.586953	4.9	1931.470
Cu	63	1	He	1.022305	1.1	8776.660
Zn	66	1	He	2.701904	4.4	5334.997
As	75	1	He	2.769965	1.5	4803.800
Se	78	2	H2	1.851681	1.8	1473.410
Sr	88	1	He	821.295398	0.3	9036782.157
Mo	95	1	He	1.820514	1.4	10889.517
Pd	105	1	He	0.490430	3.9	4567.447
Ag	107	1	He	0.060957	11.6	1255.067
Cd	111	1	He	0.017725	14.7	83.373
Sn	118	1	He	0.065260	15.5	730.023
Sb	121	1	He	0.065310	12.1	916.707
Ba	138	1	He	122.915627	0.8	3793916.090
Pt	195	1	He	0.008238	4.9	308.667
Hg	202	1	He	0.006263	20.2	259.333
Tl	205	1	He	0.019860	2.1	1396.753
Pb	208	1	He	0.287317	0.3	20936.513
Bi	209	1	He	0.016713	26.1	3027.073
Th	232	1	He	0.193934	4.6	13732.313
U	238	1	He	7.851765	0.5	497283.653

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.45627320	526644.437
Sc	45	2	H2	92.14026468	4076833.083
Ge	72	1	He	90.67903009	452172.997
Ge	72	2	H2	94.42238239	1472778.210
In	115	1	He	93.23896126	5715726.533
Tb	159	1	He	97.50207043	14107199.790
Ir	193	1	He	96.20087392	7124991.560

Sample Name 10606199006\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 241SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:00:43  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	97.434595	2.0	34563.247
Be	9	2	H2	0.029732	27.1	30.667
B	11	2	H2	103.749727	5.1	59016.303
Na	23	1	He	188211.0905	0.9	158568037.640
Mg	24	1	He	28601.75847	1.2	13674025.217
Al	27	1	He	39.999551	1.8	9799.557
Si	28	2	H2	6864.963068	2.5	18267085.333
K	39	1	He	3557.128920	0.7	2484296.580
Ca	43	1	He	118758.3471	0.7	240166.637
Ti	47	1	He	0.844921	9.5	191.667
V	51	1	He	0.603085	29.6	3214.463
Cr	52	1	He	6.275487	0.8	48857.670
Mn	55	1	He	1.982185	2.1	11442.493
Fe	56	1	He	38.878210	0.8	285474.470
Co	59	1	He	0.085601	7.4	1068.043
Ni	60	1	He	0.962679	5.6	3018.320
Cu	63	1	He	0.547324	2.8	4788.803
Zn	66	1	He	4.135157	2.1	7980.210
As	75	1	He	0.438395	4.3	881.197
Se	78	2	H2	3.069250	2.0	2467.883
Sr	88	1	He	1248.436312	0.2	13600037.717
Mo	95	1	He	3.550566	0.4	20936.030
Pd	105	1	He	0.743419	0.7	6736.653
Ag	107	1	He	0.268989	4.8	5154.313
Cd	111	1	He	0.036488	10.6	148.233
Sn	118	1	He	0.069632	18.3	760.027
Sb	121	1	He	0.067007	2.0	926.707
Ba	138	1	He	75.944334	0.4	2311824.237
Pt	195	1	He	0.011141	17.6	341.340
Hg	202	1	He	0.004958	99.1	248.333
Tl	205	1	He	0.005493	22.3	720.027
Pb	208	1	He	0.056304	2.4	6225.573
Bi	209	1	He	-0.000666		2060.197
Th	232	1	He	0.014266	2.8	1875.150
U	238	1	He	36.083864	0.1	2248712.517

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.58747366	527434.500
Sc	45	2	H2	93.85491145	4152699.250
Ge	72	1	He	89.77710356	447675.520
Ge	72	2	H2	96.44168334	1504274.793
In	115	1	He	91.95558600	5637053.177
Tb	159	1	He	96.34580915	13939904.790
Ir	193	1	He	94.79663771	7020988.647

Sample Name 10606211001\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 242SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:04:31  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.428234	2.4	2043.807
Be	9	2	H2	0.026088	39.1	30.167
B	11	2	H2	255.070496	0.5	108457.037
Na	23	1	He	141627.0454	1.1	121362644.857
Mg	24	1	He	23934.84657	1.1	11639410.247
Al	27	1	He	23.464625	3.3	5875.840
Si	28	2	H2	5700.465393	0.5	15576741.667
K	39	1	He	17507.16739	1.3	12177643.153
Ca	43	1	He	99049.73592	1.0	203733.247
Ti	47	1	He	0.598288	18.4	138.333
V	51	1	He	-8.397150		-53998.360
Cr	52	1	He	284.139158	1.1	2151993.167
Mn	55	1	He	18.929482	0.9	108966.967
Fe	56	1	He	41.331831	0.5	308027.030
Co	59	1	He	1.079070	1.6	13137.943
Ni	60	1	He	273.530623	0.2	822103.877
Cu	63	1	He	6.187606	0.4	52183.737
Zn	66	1	He	42.704533	0.5	82284.737
As	75	1	He	1.695724	1.4	3033.150
Se	78	2	H2	1.059929	3.7	899.363
Sr	88	1	He	257.017063	0.8	2858826.523
Mo	95	1	He	3.150941	1.0	18668.230
Pd	105	1	He	0.148358	4.6	1493.427
Ag	107	1	He	0.037870	11.4	806.700
Cd	111	1	He	0.160939	3.6	588.317
Sn	118	1	He	0.040279	6.1	496.677
Sb	121	1	He	0.574294	1.4	7712.187
Ba	138	1	He	75.291443	0.5	2302877.673
Pt	195	1	He	0.010048	39.6	328.007
Hg	202	1	He	0.015577	23.6	313.333
Tl	205	1	He	0.074816	3.1	3910.607
Pb	208	1	He	0.098725	3.0	8889.503
Bi	209	1	He	0.007334	53.4	2490.277
Th	232	1	He	0.006065	30.2	1346.750
U	238	1	He	1.190609	0.5	75241.617

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	89.08450595	536449.333
Sc	45	2	H2	96.32301897	4261903.000
Ge	72	1	He	91.66438886	457086.510
Ge	72	2	H2	98.77945917	1540738.873
In	115	1	He	92.39099194	5663744.393
Tb	159	1	He	96.43365446	13952614.790
Ir	193	1	He	94.99920549	7035991.563

Sample Name 10606291001\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 243SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:08:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	8.649940	2.6	3206.507
Be	9	2	H2	0.013819	35.4	25.500
B	11	2	H2	-44.615944		13639.637
Na	23	1	He	47097.46201	0.4	40229136.900
Mg	24	1	He	15898.78474	0.5	7706786.137
Al	27	1	He	38.335180	1.8	9522.377
Si	28	2	H2	12555.22783	0.4	34204568.000
K	39	1	He	5410.590293	0.8	3796075.880
Ca	43	1	He	53938.09929	0.4	110573.597
Ti	47	1	He	1.578865	37.1	361.023
V	51	1	He	3.747215	6.6	23193.890
Cr	52	1	He	15.839302	0.7	121636.760
Mn	55	1	He	0.537852	3.9	3332.393
Fe	56	1	He	39.886632	0.5	296604.313
Co	59	1	He	0.036389	7.1	497.343
Ni	60	1	He	0.239686	3.8	915.363
Cu	63	1	He	0.594846	1.0	5324.990
Zn	66	1	He	3.125339	2.8	6250.030
As	75	1	He	4.408694	1.0	7689.877
Se	78	2	H2	5.424594	2.4	4383.673
Sr	88	1	He	300.308099	0.8	3363605.050
Mo	95	1	He	3.863007	0.4	23387.837
Pd	105	1	He	0.166597	2.5	1691.787
Ag	107	1	He	0.016583	14.7	413.343
Cd	111	1	He	0.002214	34.9	28.453
Sn	118	1	He	0.089251	9.7	961.710
Sb	121	1	He	0.295350	1.4	4070.623
Ba	138	1	He	63.098716	0.6	1972326.690
Pt	195	1	He	0.010813	26.5	343.340
Hg	202	1	He	0.003006	126.0	240.667
Tl	205	1	He	0.010569	13.7	970.047
Pb	208	1	He	0.037891	11.7	5163.740
Bi	209	1	He	0.002933	84.3	2280.247
Th	232	1	He	0.009726	7.1	1601.780
U	238	1	He	7.104401	1.3	449345.633

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.77683563	534596.603
Sc	45	2	H2	96.08103070	4251196.000
Ge	72	1	He	92.30556786	460283.763
Ge	72	2	H2	97.58544201	1522114.873
In	115	1	He	94.42066863	5788167.453
Tb	159	1	He	98.08524072	14191576.457
Ir	193	1	He	96.05894652	7114479.893

Sample Name 10606291001\_B69934Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 244SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:12:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.078684	0.8	460.343
Be	9	2	H2	0.012650	64.2	25.000
B	11	2	H2	-75.691987		3825.817
Na	23	1	He	4846.796295	0.3	4284486.083
Mg	24	1	He	1631.018733	0.3	820345.690
Al	27	1	He	5.290593	1.1	1420.070
Si	28	2	H2	1314.433770	0.4	3583599.667
K	39	1	He	543.975558	0.3	454946.633
Ca	43	1	He	5431.208114	0.9	11507.673
Ti	47	1	He	0.148095	15.4	36.667
V	51	1	He	0.428762	34.5	2221.470
Cr	52	1	He	1.640944	0.3	15051.063
Mn	55	1	He	0.091710	11.0	804.023
Fe	56	1	He	4.546140	1.1	44505.993
Co	59	1	He	0.005262	17.5	121.333
Ni	60	1	He	0.015867	25.0	246.667
Cu	63	1	He	0.066068	3.7	890.697
Zn	66	1	He	0.380568	4.5	970.703
As	75	1	He	0.420162	5.6	906.030
Se	78	2	H2	0.523727	6.6	465.677
Sr	88	1	He	30.031489	0.8	348499.450
Mo	95	1	He	0.386021	4.1	2462.883
Pd	105	1	He	0.009127	44.0	278.340
Ag	107	1	He	0.009163	27.6	283.340
Cd	111	1	He	-0.001472		15.887
Sn	118	1	He	0.009206	6.2	230.000
Sb	121	1	He	0.031665	12.8	491.680
Ba	138	1	He	6.190923	0.4	203126.993
Pt	195	1	He	0.002939	66.1	248.000
Hg	202	1	He	-0.001067		219.667
Tl	205	1	He	0.001043	6.7	535.017
Pb	208	1	He	0.000179	173.2	2816.813
Bi	209	1	He	-0.002008		2073.543
Th	232	1	He	0.000245	495.1	1006.717
U	238	1	He	0.705392	2.6	46767.317

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.66168596	551968.603
Sc	45	2	H2	95.82922984	4240054.833
Ge	72	1	He	95.59922678	476707.667
Ge	72	2	H2	98.90803015	1542744.293
In	115	1	He	99.07927927	6073749.190
Tb	159	1	He	100.0624138	14477646.033
Ir	193	1	He	98.83988080	7320446.143

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 245\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:15:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	79.317732	1.5	28209.820
Be	9	2	H2	76.458243	2.0	27975.590
B	11	2	H2	-0.432900		26987.330
Na	23	1	He	1013.297625	0.5	901309.127
Mg	24	1	He	987.448893	0.7	496620.303
Al	27	1	He	971.572567	0.9	246504.590
Si	28	2	H2	486.739940	1.4	1310300.503
K	39	1	He	1005.270398	0.7	780483.347
Ca	43	1	He	995.503766	2.1	2111.903
Ti	47	1	He	78.085126	1.0	18292.997
V	51	1	He	79.988547	1.1	521064.883
Cr	52	1	He	81.772160	0.7	636577.397
Mn	55	1	He	79.371156	0.2	467590.240
Fe	56	1	He	520.443274	1.1	3851213.833
Co	59	1	He	81.685608	0.8	1036395.543
Ni	60	1	He	82.589633	0.2	259832.867
Cu	63	1	He	82.121062	0.6	720733.833
Zn	66	1	He	80.640083	0.9	162374.307
As	75	1	He	78.943143	0.8	140304.093
Se	78	2	H2	80.561279	2.7	64435.497
Sr	88	1	He	79.783949	0.7	928552.510
Mo	95	1	He	75.605521	1.0	478185.563
Pd	105	1	He	80.718469	0.6	764408.087
Ag	107	1	He	40.082163	1.5	809726.550
Cd	111	1	He	78.878358	0.3	297546.617
Sn	118	1	He	75.450139	0.7	731754.523
Sb	121	1	He	76.238208	0.5	1088468.630
Ba	138	1	He	77.613522	0.5	2535464.910
Pt	195	1	He	81.673209	0.5	1061813.167
Hg	202	1	He	3.864473	0.6	24792.670
Tl	205	1	He	41.722429	0.7	1998787.420
Pb	208	1	He	81.406626	0.4	5312438.410
Bi	209	1	He	79.931273	1.1	4505390.973
Th	232	1	He	75.448973	0.6	5190003.570
U	238	1	He	75.870341	1.2	5011529.200

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.32749480	549956.170
Sc	45	2	H2	94.03186928	4160528.917
Ge	72	1	He	95.89928761	478203.927
Ge	72	2	H2	97.42488483	1519610.540
In	115	1	He	98.68198796	6049394.473
Tb	159	1	He	100.3779070	14523293.530
Ir	193	1	He	100.5069482	7443915.307



Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 246\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:19:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.141948	16.4	120.833
Be	9	2	H2	0.040565	36.8	35.167
B	11	2	H2	-80.333486		2349.853
Na	23	1	He	13.191431	3.7	22430.207
Mg	24	1	He	-3.328644		2786.953
Al	27	1	He	0.047824	21.8	84.000
Si	28	2	H2	-0.623613		11671.267
K	39	1	He	-4.556391		63330.080
Ca	43	1	He	1.626219	107.4	15.883
Ti	47	1	He	0.003719	241.2	2.667
V	51	1	He	0.048521	70.6	-261.347
Cr	52	1	He	-0.012506		2140.830
Mn	55	1	He	0.022470	24.9	388.010
Fe	56	1	He	0.196863	19.8	12085.683
Co	59	1	He	0.008950	33.9	164.667
Ni	60	1	He	0.004571	71.4	207.333
Cu	63	1	He	-0.002365		286.667
Zn	66	1	He	0.002113	780.3	208.000
As	75	1	He	-0.023716		118.333
Se	78	2	H2	-0.017229		26.333
Sr	88	1	He	0.024941	19.5	425.010
Mo	95	1	He	0.015101	16.5	105.333
Pd	105	1	He	0.015663	41.3	335.010
Ag	107	1	He	0.168798	22.2	3467.140
Cd	111	1	He	0.004160	44.5	36.647
Sn	118	1	He	0.004203	47.6	178.333
Sb	121	1	He	0.006910	22.3	135.000
Ba	138	1	He	0.011003	11.8	428.343
Pt	195	1	He	0.006313	30.7	292.000
Hg	202	1	He	0.015798	27.4	326.337
Tl	205	1	He	0.037756	26.1	2283.553
Pb	208	1	He	-0.001774		2688.463
Bi	209	1	He	0.003177	164.7	2396.927
Th	232	1	He	0.020374	7.3	2405.240
U	238	1	He	0.002699	118.6	1146.730

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.07826260	542433.540
Sc	45	2	H2	95.19973713	4212202.333
Ge	72	1	He	93.83143894	467892.553
Ge	72	2	H2	97.98202146	1528300.627
In	115	1	He	97.52003860	5978164.757
Tb	159	1	He	100.0267648	14472488.117
Ir	193	1	He	100.4286681	7438117.597

Sample Name 10606348001\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 247SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:23:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.894318	2.2	1789.103
Be	9	2	H2	0.041240	25.3	34.667
B	11	2	H2	38.268127	2.4	38584.357
Na	23	1	He	11326.97716	0.9	9208988.197
Mg	24	1	He	61541.12522	1.2	28357961.243
Al	27	1	He	23.468793	3.2	5570.047
Si	28	2	H2	11708.70037	0.7	30934213.333
K	39	1	He	7016.429673	0.6	4663108.263
Ca	43	1	He	209864.5311	0.5	409113.753
Ti	47	1	He	0.450655	25.7	99.333
V	51	1	He	0.336015	33.9	1490.740
Cr	52	1	He	0.591989	0.5	6341.387
Mn	55	1	He	1928.473388	0.9	10496963.667
Fe	56	1	He	18092.24214	0.7	123426546.667
Co	59	1	He	0.154959	2.3	1874.123
Ni	60	1	He	3.599427	0.8	10676.583
Cu	63	1	He	2.447183	0.7	20199.333
Zn	66	1	He	477.058396	0.6	889825.940
As	75	1	He	5.091569	0.8	8533.013
Se	78	2	H2	0.158562	8.9	164.667
Sr	88	1	He	500.706276	0.8	5403070.960
Mo	95	1	He	0.714007	2.7	4160.620
Pd	105	1	He	0.324622	15.8	3002.200
Ag	107	1	He	0.046935	21.0	960.040
Cd	111	1	He	0.004781	30.4	36.250
Sn	118	1	He	0.233609	5.7	2210.197
Sb	121	1	He	0.137981	3.8	1845.140
Ba	138	1	He	164.804777	0.6	4948501.173
Pt	195	1	He	0.008616	4.3	305.333
Hg	202	1	He	0.006691	61.0	255.000
Tl	205	1	He	0.016541	25.4	1208.400
Pb	208	1	He	0.109364	7.0	9407.970
Bi	209	1	He	-0.000637		2050.200
Th	232	1	He	0.023662	3.1	2471.927
U	238	1	He	2.708432	1.8	168746.963

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	84.42917089	508415.823
Sc	45	2	H2	93.17479074	4122606.667
Ge	72	1	He	88.93082036	443455.510
Ge	72	2	H2	96.19408655	1500412.837
In	115	1	He	90.70328437	5560284.693
Tb	159	1	He	94.99733591	13744799.380
Ir	193	1	He	94.30989168	6984938.440

Sample Name 10606348001\_B69934Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 248SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:27:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.664091	2.8	302.667
Be	9	2	H2	0.018063	77.4	26.333
B	11	2	H2	-67.510064		6240.120
Na	23	1	He	1154.073807	0.5	995186.650
Mg	24	1	He	6342.254792	0.4	3073392.453
Al	27	1	He	3.296233	4.3	882.697
Si	28	2	H2	1240.958004	1.0	3299385.417
K	39	1	He	706.856726	0.9	552282.897
Ca	43	1	He	21346.91596	0.3	43717.473
Ti	47	1	He	0.044980	39.3	12.000
V	51	1	He	0.081827	101.3	-44.893
Cr	52	1	He	0.102612	19.6	2974.313
Mn	55	1	He	193.167770	0.7	1104543.707
Fe	56	1	He	1851.715993	0.2	13277237.667
Co	59	1	He	0.016908	6.0	263.333
Ni	60	1	He	0.377395	6.2	1352.067
Cu	63	1	He	0.243924	4.8	2397.540
Zn	66	1	He	50.260283	0.5	98952.303
As	75	1	He	0.489065	1.3	1007.540
Se	78	2	H2	-0.004587		36.333
Sr	88	1	He	50.362473	0.4	572709.613
Mo	95	1	He	0.073193	5.3	464.677
Pd	105	1	He	0.034811	6.5	510.013
Ag	107	1	He	0.023393	2.3	558.350
Cd	111	1	He	-0.001012		17.250
Sn	118	1	He	0.030993	29.6	431.677
Sb	121	1	He	0.015092	23.6	248.337
Ba	138	1	He	16.267611	0.7	521044.573
Pt	195	1	He	0.001243	43.4	226.000
Hg	202	1	He	0.001044	219.7	233.000
Tl	205	1	He	0.003422	50.8	648.357
Pb	208	1	He	0.004030	64.3	3065.163
Bi	209	1	He	-0.002752		2043.527
Th	232	1	He	0.003114	9.7	1208.397
U	238	1	He	0.271774	2.1	18725.200

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.67347567	533974.190
Sc	45	2	H2	93.43463941	4134103.917
Ge	72	1	He	93.69779937	467226.157
Ge	72	2	H2	97.61535826	1522581.500
In	115	1	He	96.74210571	5930475.983
Tb	159	1	He	100.0090742	14469928.533
Ir	193	1	He	99.47857651	7367750.303

Sample Name 10606348002\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 249SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:30:50  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.802056	2.6	1441.237
Be	9	2	H2	0.024487	26.2	29.333
B	11	2	H2	-34.458749		16753.257
Na	23	1	He	21112.66779	1.5	17713651.823
Mg	24	1	He	38268.30854	1.4	18209185.563
Al	27	1	He	58.552932	1.9	14245.130
Si	28	2	H2	11990.26349	0.4	32490007.333
K	39	1	He	5196.632104	1.4	3582679.947
Ca	43	1	He	103434.4583	1.8	208191.420
Ti	47	1	He	1.819179	5.3	408.343
V	51	1	He	0.447404	5.2	2232.247
Cr	52	1	He	0.817899	1.4	8221.000
Mn	55	1	He	1386.151577	1.8	7790203.167
Fe	56	1	He	1662.497891	1.6	11719695.000
Co	59	1	He	3.068570	2.5	37072.913
Ni	60	1	He	10.378737	1.1	31217.983
Cu	63	1	He	654.313527	1.1	5459267.333
Zn	66	1	He	52.414067	1.3	100439.830
As	75	1	He	3.248141	2.0	5638.433
Se	78	2	H2	0.303915	11.6	284.000
Sr	88	1	He	248.912220	1.8	2754632.457
Mo	95	1	He	0.568226	3.5	3382.410
Pd	105	1	He	0.148341	3.8	1496.757
Ag	107	1	He	0.021050	9.0	490.010
Cd	111	1	He	0.019914	19.9	90.723
Sn	118	1	He	4.841943	1.8	44192.810
Sb	121	1	He	0.344775	6.0	4652.480
Ba	138	1	He	459.321837	1.6	14081746.873
Pt	195	1	He	0.006988	16.5	294.000
Hg	202	1	He	0.002518	140.0	237.333
Tl	205	1	He	0.010002	40.2	941.707
Pb	208	1	He	110.653665	1.0	7042539.793
Bi	209	1	He	0.044939	6.9	4600.897
Th	232	1	He	0.017329	3.2	2128.520
U	238	1	He	0.292356	2.6	19631.570

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	87.18606785	525017.313
Sc	45	2	H2	95.56424888	4228330.500
Ge	72	1	He	91.21251881	454833.250
Ge	72	2	H2	97.86838852	1526528.207
In	115	1	He	92.62787569	5678265.820
Tb	159	1	He	97.91931549	14167569.373
Ir	193	1	He	97.30552847	7206806.350

Sample Name 10606348002\_B69934Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 250SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:34:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.479780	4.0	238.500
Be	9	2	H2	0.005459	80.2	21.833
B	11	2	H2	-76.488540		3497.903
Na	23	1	He	2167.758386	0.4	1858389.347
Mg	24	1	He	3953.038001	0.5	1915785.387
Al	27	1	He	7.017515	2.3	1797.780
Si	28	2	H2	1231.659577	0.4	3286160.417
K	39	1	He	522.466637	0.2	424974.513
Ca	43	1	He	10475.97259	1.1	21444.497
Ti	47	1	He	0.174091	13.1	41.333
V	51	1	He	0.093337	84.0	27.007
Cr	52	1	He	0.095212	20.2	2916.300
Mn	55	1	He	140.124255	0.2	800703.083
Fe	56	1	He	171.343426	0.6	1237147.043
Co	59	1	He	0.319379	2.5	3979.887
Ni	60	1	He	1.109219	1.5	3571.113
Cu	63	1	He	66.650904	1.5	566949.710
Zn	66	1	He	5.548340	0.5	11015.527
As	75	1	He	0.316584	0.6	702.687
Se	78	2	H2	0.007875	65.9	46.000
Sr	88	1	He	25.143453	0.3	283700.737
Mo	95	1	He	0.058874	2.0	370.677
Pd	105	1	He	0.009726	17.9	273.343
Ag	107	1	He	0.010569	34.2	300.003
Cd	111	1	He	-0.000381		19.263
Sn	118	1	He	0.486471	2.8	4694.153
Sb	121	1	He	0.033959	14.4	505.013
Ba	138	1	He	45.358293	0.6	1432082.790
Pt	195	1	He	-0.000364		204.000
Hg	202	1	He	-0.007786		176.000
Tl	205	1	He	0.000299	648.0	496.680
Pb	208	1	He	11.284206	0.9	731864.103
Bi	209	1	He	0.002951	81.8	2350.257
Th	232	1	He	0.000543	310.1	1028.390
U	238	1	He	0.027643	7.9	2751.983

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.60590177	533567.273
Sc	45	2	H2	93.75819448	4148419.917
Ge	72	1	He	92.94418730	463468.253
Ge	72	2	H2	96.86121436	1510818.540
In	115	1	He	95.37134616	5846445.803
Tb	159	1	He	99.43589396	14386997.283
Ir	193	1	He	98.95522630	7328989.057

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 251\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:38:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	77.706571	0.1	27365.107
Be	9	2	H2	74.899482	0.7	27136.067
B	11	2	H2	-3.145198		25891.423
Na	23	1	He	995.188084	0.4	860607.410
Mg	24	1	He	981.200403	0.3	479690.763
Al	27	1	He	974.137173	0.6	240234.563
Si	28	2	H2	484.903174	0.4	1292512.460
K	39	1	He	1015.826419	0.8	765907.097
Ca	43	1	He	1011.650817	2.1	2085.923
Ti	47	1	He	79.391560	0.5	18078.403
V	51	1	He	80.661255	0.3	510739.130
Cr	52	1	He	83.049106	0.2	628381.980
Mn	55	1	He	80.715865	0.7	462196.843
Fe	56	1	He	529.644778	0.6	3809349.917
Co	59	1	He	81.976272	1.1	1024382.083
Ni	60	1	He	83.076454	1.3	257422.007
Cu	63	1	He	82.887635	0.6	716483.440
Zn	66	1	He	81.024689	0.4	160688.257
As	75	1	He	79.552429	0.5	139251.927
Se	78	2	H2	80.305453	1.1	63607.453
Sr	88	1	He	80.483910	0.8	922563.607
Mo	95	1	He	76.577852	0.7	477218.177
Pd	105	1	He	81.285842	0.9	758475.327
Ag	107	1	He	40.355032	0.7	803317.253
Cd	111	1	He	79.725210	0.6	296324.133
Sn	118	1	He	76.459415	0.7	730657.877
Sb	121	1	He	76.986220	1.2	1082988.890
Ba	138	1	He	77.672541	0.5	2500142.100
Pt	195	1	He	81.465880	0.3	1049283.603
Hg	202	1	He	3.869420	0.8	24593.617
Tl	205	1	He	41.583230	0.8	1973618.773
Pb	208	1	He	81.096180	0.6	5242975.207
Bi	209	1	He	80.122264	0.4	4447407.123
Th	232	1	He	75.747988	0.5	5131235.760
U	238	1	He	76.726003	0.4	4991038.053

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.77192680	534567.043
Sc	45	2	H2	93.09483803	4119069.083
Ge	72	1	He	94.45423973	470998.163
Ge	72	2	H2	96.47126813	1504736.250
In	115	1	He	97.23316984	5960579.153
Tb	159	1	He	99.44366368	14388121.453
Ir	193	1	He	98.97169020	7330208.433

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050922B.b  
 Data File Name 252\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 05:42:05  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.072937	13.6	93.167
Be	9	2	H2	0.030550	41.7	30.500
B	11	2	H2	-81.370809		1965.463
Na	23	1	He	5.111446	10.9	15219.493
Mg	24	1	He	-3.994781		2426.887
Al	27	1	He	0.049652	53.4	83.333
Si	28	2	H2	-0.526131		11580.213
K	39	1	He	-6.326599		61261.507
Ca	43	1	He	2.825321	78.4	18.117
Ti	47	1	He	0.008300	81.2	3.667
V	51	1	He	0.064891	49.6	-152.537
Cr	52	1	He	-0.017514		2074.150
Mn	55	1	He	0.097936	2.2	815.360
Fe	56	1	He	0.327540	3.5	12860.340
Co	59	1	He	0.009985	20.8	177.333
Ni	60	1	He	0.001629	327.9	198.000
Cu	63	1	He	0.002903	181.3	331.337
Zn	66	1	He	0.014087	102.9	231.333
As	75	1	He	-0.020538		123.667
Se	78	2	H2	-0.008354		32.667
Sr	88	1	He	0.018466	44.4	350.010
Mo	95	1	He	0.014901	28.7	103.333
Pd	105	1	He	0.020246	29.5	375.010
Ag	107	1	He	0.184634	28.2	3750.557
Cd	111	1	He	0.004970	77.4	39.317
Sn	118	1	He	0.007124	39.9	205.000
Sb	121	1	He	0.009609	26.1	171.667
Ba	138	1	He	0.012670	24.6	478.347
Pt	195	1	He	0.005407	65.2	276.670
Hg	202	1	He	0.019986	8.4	349.007
Tl	205	1	He	0.039396	17.4	2336.900
Pb	208	1	He	0.001438	101.9	2865.153
Bi	209	1	He	0.006813	74.8	2570.307
Th	232	1	He	0.018938	19.9	2278.553
U	238	1	He	0.005272	17.6	1301.743

**ISTD**

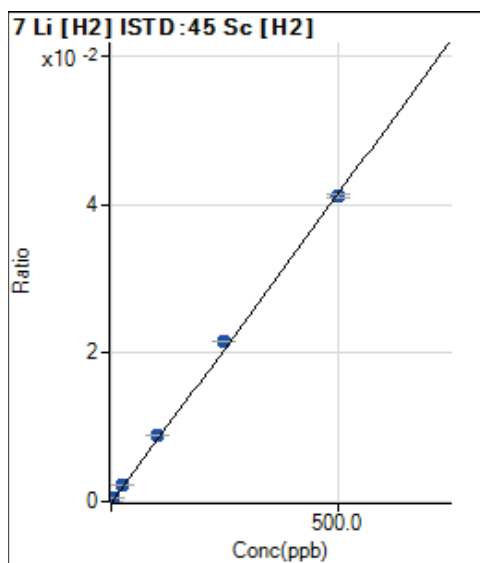
Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.86868243	535149.687
Sc	45	2	H2	92.38429269	4087630.333
Ge	72	1	He	93.70691126	467271.593
Ge	72	2	H2	95.84782158	1495011.877
In	115	1	He	96.80392471	5934265.607
Tb	159	1	He	98.91353924	14311419.787
Ir	193	1	He	99.28279631	7353250.100

Calibration for 024CAL.S.d

Batch Folder: D:\DATA\051022.b\  
 Analysis File: 051022.batch.bin  
 DA Date-Time: 05/10/22 12:00:07  
 Calibration Title:  
 Calibration Method: External Calibration  
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	019CALB.d	CAL0	05/10/22 08:38:00
2	020CAL.S.d	CAL1	05/10/22 08:42:09
3	021CAL.S.d	CAL2	05/10/22 08:46:07
4	022CAL.S.d	CAL3	05/10/22 08:50:05
5	023CAL.S.d	CAL4	05/10/22 08:54:04
6	024CAL.S.d	CAL5	05/10/22 08:58:00
7	025CAL.S.d	CAL6	05/10/22 09:03:30
8	026CAL.S.d	CAL7	05/10/22 09:08:34





	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	115.50	0.0000	P	8.6	
2	<input type="checkbox"/>	0.500	0.520	313.00	0.0001	P	4.6	4.1
3	<input type="checkbox"/>	5.000	5.243	2110.15	0.0005	P	2.8	4.9
4	<input type="checkbox"/>	25.000	27.469	10360.54	0.0023	P	2.9	9.9
5	<input type="checkbox"/>	100.000	105.983	39617.06	0.0088	P	0.6	6.0
6	<input type="checkbox"/>	250.000	258.842	97146.49	0.0215	P	0.8	3.5
7	<input type="checkbox"/>	500.000	494.257	189858.74	0.0411	P	0.8	-1.1
8	<input type="checkbox"/>			225.17	0.0000	P	6.1	

$y = 8.3155E-005 * x + 2.5034E-005$

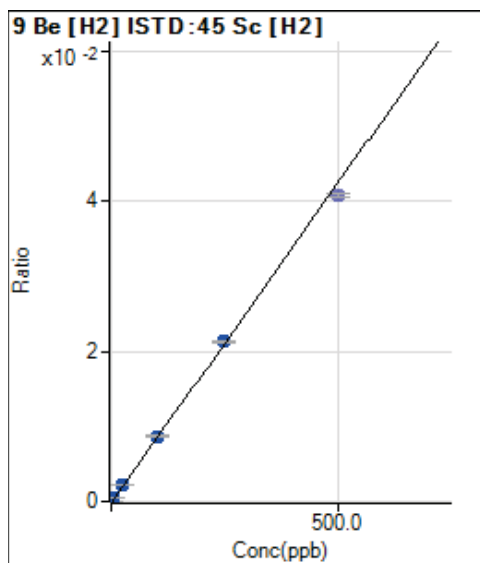
R = 0.9997

DL = 0.07766 ppb

BEC = 0.3011 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	45.33	0.0000	P	8.2	
2	<input type="checkbox"/>	0.200	0.198	122.33	0.0000	P	5.0	-1.1
3	<input type="checkbox"/>	5.000	5.168	2063.14	0.0005	P	0.9	3.4
4	<input type="checkbox"/>	25.000	26.518	10194.59	0.0023	P	2.8	6.1
5	<input type="checkbox"/>	100.000	101.824	38982.82	0.0087	P	1.1	1.8
6	<input type="checkbox"/>	250.000	249.115	95854.66	0.0213	P	1.0	-0.4
7	<input checked="" type="checkbox"/>	500.000		188372.21	0.0408	P	0.9	
8	<input type="checkbox"/>			134.83	0.0000	P	0.6	

$y = 8.5312E-005 * x + 9.8238E-006$

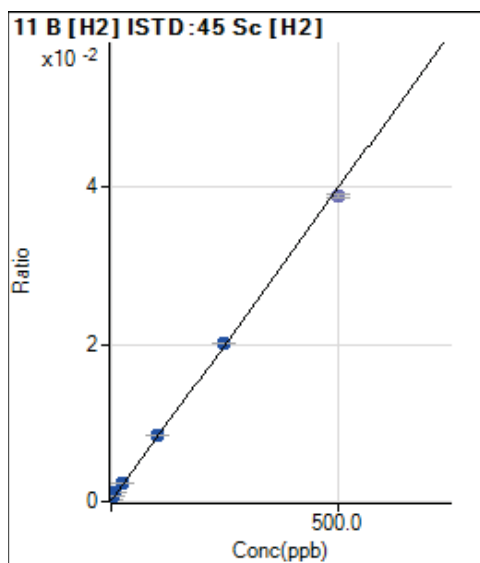
R = 1.0000

DL = 0.02846 ppb

BEC = 0.1152 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	1304.56	0.0003	P	1.8	
2	<input type="checkbox"/>	10.000	9.933	4915.30	0.0011	P	0.6	-0.7
3	<input type="checkbox"/>	5.000	4.959	3098.98	0.0007	P	1.4	-0.8
4	<input type="checkbox"/>	25.000	25.926	10518.66	0.0023	P	2.2	3.7
5	<input type="checkbox"/>	100.000	101.534	37456.39	0.0084	P	0.9	1.5
6	<input type="checkbox"/>	250.000	249.297	90638.33	0.0201	P	0.5	-0.3
7	<input checked="" type="checkbox"/>	500.000		179405.09	0.0389	P	0.9	
8	<input type="checkbox"/>			1971.80	0.0004	P	3.0	

$y = 7.9514E-005 * x + 2.8265E-004$

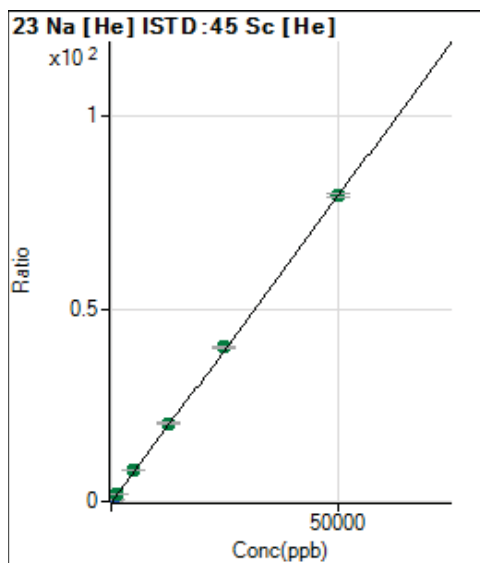
R = 1.0000

DL = 0.1956 ppb

BEC = 3.555 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	10823.98	0.0180	P	2.9	
2	<input type="checkbox"/>	50.000	54.041	62918.49	0.1041	P	0.9	8.1
3	<input type="checkbox"/>	250.000	261.035	259750.36	0.4338	P	0.2	4.4
4	<input type="checkbox"/>	1250.000	1326.567	1262512.19	2.1313	A	0.4	6.1
5	<input type="checkbox"/>	5000.000	5146.475	4808656.81	8.2165	A	2.8	2.9
6	<input type="checkbox"/>	12500.00	12732.60	11708630.66	20.3015	A	0.9	1.9
7	<input type="checkbox"/>	25000.00	25119.31	23286279.65	40.0341	A	0.3	0.5
8	<input type="checkbox"/>	50000.00	49865.57	46774354.31	79.4559	A	1.0	-0.3

$y = 0.0016 * x + 0.0180$

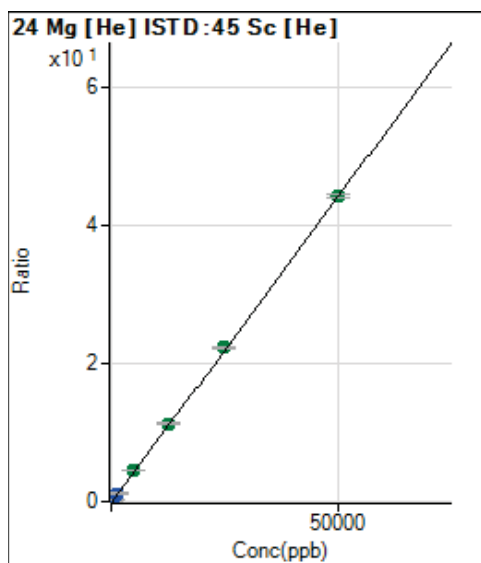
R = 1.0000

DL = 0.9687 ppb

BEC = 11.29 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	6626.53	0.0110	P	2.6	
2	<input type="checkbox"/>	30.000	30.509	23029.52	0.0381	P	1.8	1.7
3	<input type="checkbox"/>	250.000	265.733	147841.34	0.2469	P	0.7	6.3
4	<input type="checkbox"/>	1250.000	1339.814	711133.77	1.2005	P	0.3	7.2
5	<input type="checkbox"/>	5000.000	5129.735	2671683.87	4.5651	A	2.8	2.6
6	<input type="checkbox"/>	12500.00	12730.67	6524704.90	11.3130	A	0.7	1.8
7	<input type="checkbox"/>	25000.00	25097.40	12966286.06	22.2920	A	0.6	0.4
8	<input type="checkbox"/>	50000.00	49878.33	26073306.28	44.2919	A	1.2	-0.2

$y = 8.8778E-004 * x + 0.0110$

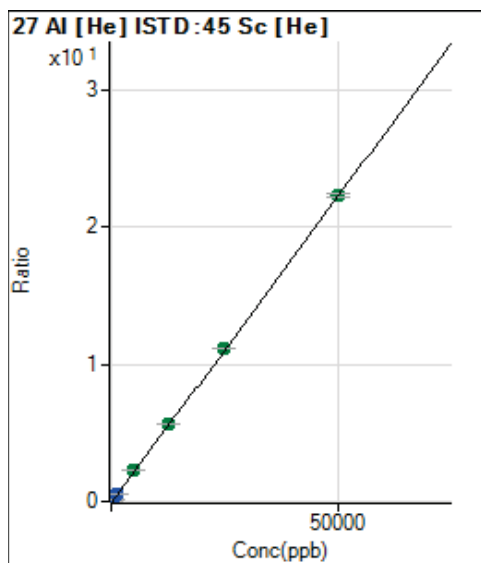
R = 1.0000

DL = 0.9766 ppb

BEC = 12.4 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	89.33	0.0001	P	4.8	
2	<input type="checkbox"/>	30.000	31.613	8633.50	0.0143	P	1.6	5.4
3	<input type="checkbox"/>	250.000	259.418	69530.56	0.1161	P	0.6	3.8
4	<input type="checkbox"/>	1250.000	1320.220	349736.69	0.5904	P	0.3	5.6
5	<input type="checkbox"/>	5000.000	5109.061	1336851.00	2.2843	A	3.1	2.2
6	<input type="checkbox"/>	12500.00	12694.05	3273252.00	5.6754	A	0.7	1.6
7	<input type="checkbox"/>	25000.00	25010.08	6503993.33	11.1817	A	0.2	0.0
8	<input type="checkbox"/>	50000.00	49933.73	13142509.00	22.3246	A	0.9	-0.1

$y = 4.4708E-004 * x + 1.4842E-004$

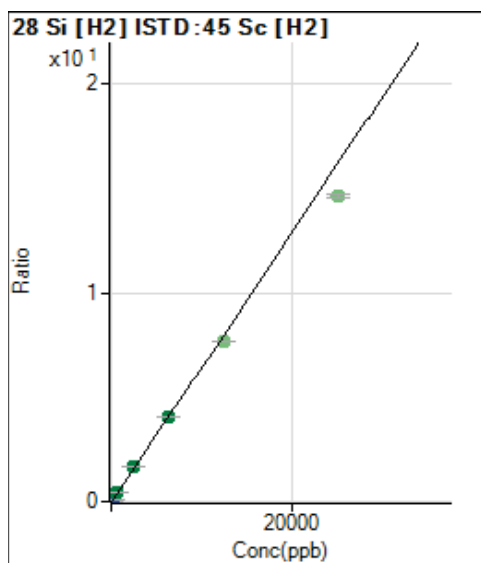
R = 1.0000

DL = 0.04792 ppb

BEC = 0.332 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	15888.57	0.0034	P	10.8	
2	<input type="checkbox"/>	100.000	100.875	316731.50	0.0691	P	0.2	0.9
3	<input type="checkbox"/>	125.000	129.934	402937.03	0.0880	P	0.4	3.9
4	<input type="checkbox"/>	625.000	668.497	1967761.96	0.4386	A	3.1	7.0
5	<input type="checkbox"/>	2500.000	2575.248	7529733.00	1.6798	A	0.6	3.0
6	<input type="checkbox"/>	6250.000	6215.438	18255154.00	4.0493	A	0.7	-0.6
7	<input checked="" type="checkbox"/>	12500.00		35416380.00	7.6714	A	0.7	
8	<input checked="" type="checkbox"/>	25000.00		70066773.33	14.6353	A	0.7	

$y = 6.5094E-004 * x + 0.0034$

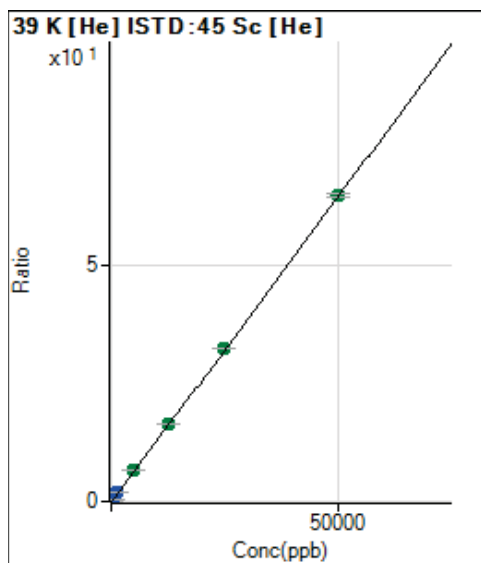
R = 0.9999

DL = 1.707 ppb

BEC = 5.291 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	71609.36	0.1190	P	0.7	
2	<input type="checkbox"/>	100.000	100.735	150751.41	0.2494	P	1.5	0.7
3	<input type="checkbox"/>	250.000	258.856	271843.42	0.4540	P	0.9	3.5
4	<input type="checkbox"/>	1250.000	1318.026	1081019.93	1.8249	P	0.4	5.4
5	<input type="checkbox"/>	5000.000	5056.207	3899651.50	6.6631	A	2.5	1.1
6	<input type="checkbox"/>	12500.00	12614.12	9484536.32	16.4451	A	0.7	0.9
7	<input type="checkbox"/>	25000.00	24873.79	18794955.97	32.3124	A	0.5	-0.5
8	<input type="checkbox"/>	50000.00	50027.20	38186427.77	64.8677	A	1.0	0.1

$y = 0.0013 * x + 0.1190$

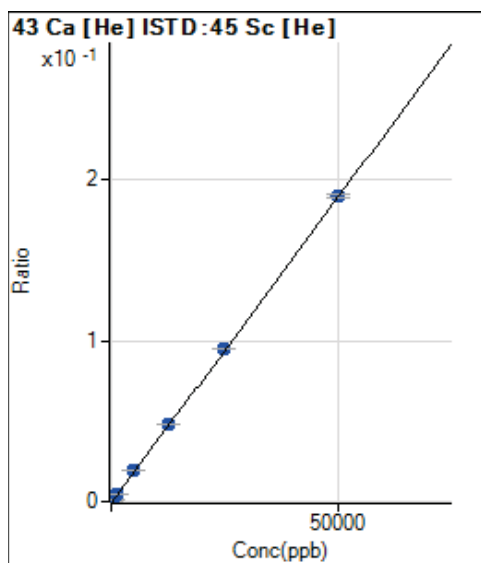
R = 1.0000

DL = 1.897 ppb

BEC = 91.95 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	14.40	0.0000	P	24.9	
2	<input type="checkbox"/>	100.000	102.324	249.77	0.0004	P	2.3	2.3
3	<input type="checkbox"/>	250.000	259.262	604.73	0.0010	P	1.2	3.7
4	<input type="checkbox"/>	1250.000	1315.775	2978.78	0.0050	P	0.5	5.3
5	<input type="checkbox"/>	5000.000	5045.144	11243.95	0.0192	P	3.2	0.9
6	<input type="checkbox"/>	12500.00	12632.81	27725.29	0.0481	P	1.1	1.1
7	<input type="checkbox"/>	25000.00	24981.84	55282.84	0.0950	P	0.3	-0.1
8	<input type="checkbox"/>	50000.00	49969.66	111888.78	0.1901	P	1.8	-0.1

$y = 3.8035E-006 * x + 2.3900E-005$

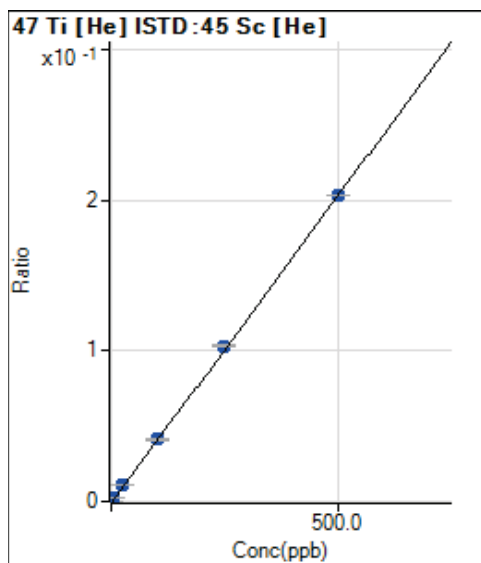
R = 1.0000

DL = 4.703 ppb

BEC = 6.284 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2.33	0.0000	P	25.5	
2	<input type="checkbox"/>	1.000	1.028	256.00	0.0004	P	5.1	2.8
3	<input type="checkbox"/>	5.000	5.001	1224.06	0.0020	P	5.2	0.0
4	<input type="checkbox"/>	25.000	25.740	6224.32	0.0105	P	1.5	3.0
5	<input type="checkbox"/>	100.000	100.877	24093.65	0.0412	P	2.6	0.9
6	<input type="checkbox"/>	250.000	253.143	59579.12	0.1033	P	0.4	1.3
7	<input type="checkbox"/>	500.000	498.216	118256.13	0.2033	P	0.2	-0.4
8	<input type="checkbox"/>			597.34	0.0010	P	4.1	

$y = 4.0806E-004 * x + 3.8821E-006$

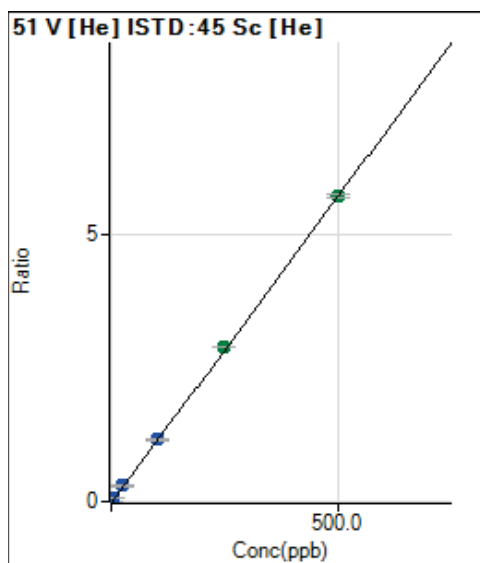
R = 1.0000

DL = 0.007265 ppb

BEC = 0.009513 ppb

Weight: <None>

Min Conc: <None>



	R <sub>j</sub> c <sub>t</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	-517.37	-0.0009	P	-39.	
2	<input type="checkbox"/>	1.000	1.004	6440.80	0.0107	P	1.5	0.4
3	<input type="checkbox"/>	5.000	5.099	34496.48	0.0576	P	4.4	2.0
4	<input type="checkbox"/>	25.000	25.569	173192.78	0.2924	P	0.5	2.3
5	<input type="checkbox"/>	100.000	100.588	674624.21	1.1527	P	2.2	0.6
6	<input type="checkbox"/>	250.000	253.091	1673466.83	2.9015	A	0.4	1.2
7	<input type="checkbox"/>	500.000	498.307	3323353.06	5.7136	A	0.7	-0.3
8	<input type="checkbox"/>			429.03	0.0007	P	84.5	

$y = 0.0115 * x - 8.5773E-004$

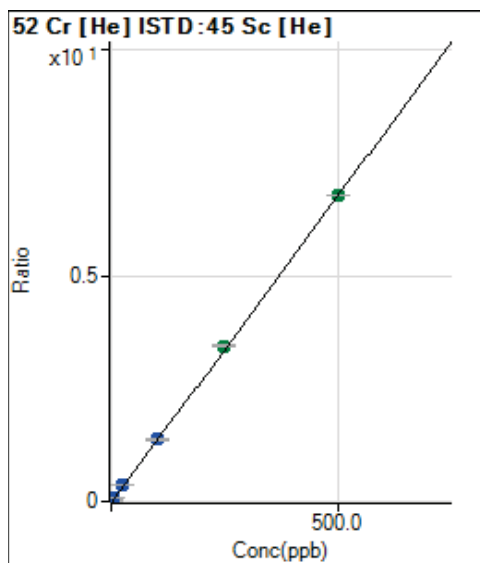
R = 1.0000

DL = 0.08941 ppb

BEC = -0.07479 ppb

Weight: <None>

Min Conc: <None>



	R <sub>j</sub> c <sub>t</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2345.53	0.0039	P	1.4	
2	<input type="checkbox"/>	2.000	2.023	18987.63	0.0314	P	1.7	1.2
3	<input type="checkbox"/>	5.000	5.061	43543.72	0.0727	P	0.5	1.2
4	<input type="checkbox"/>	25.000	26.150	212974.63	0.3595	P	0.5	4.6
5	<input type="checkbox"/>	100.000	101.450	809742.47	1.3835	P	2.3	1.4
6	<input type="checkbox"/>	250.000	252.862	1985567.96	3.4426	A	0.5	1.1
7	<input type="checkbox"/>	500.000	498.221	3943264.17	6.7793	A	0.4	-0.4
8	<input type="checkbox"/>			4406.01	0.0075	P	3.9	

$y = 0.0136 * x + 0.0039$

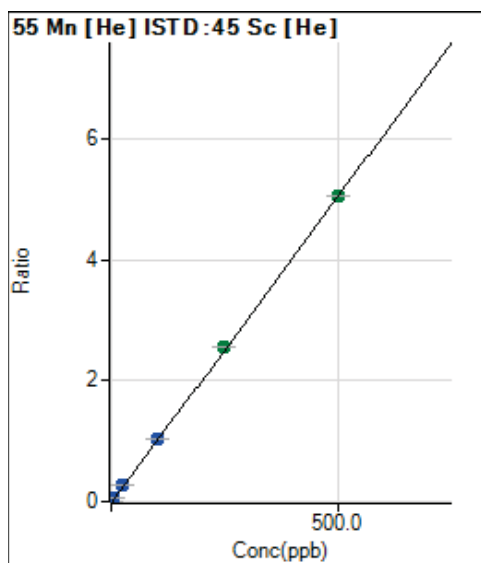
R = 1.0000

DL = 0.01168 ppb

BEC = 0.2866 ppb

Weight: <None>

Min Conc: <None>



	R <sub>j</sub> c <sub>t</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	430.01	0.0007	P	3.9	
2	<input type="checkbox"/>	0.500	0.504	3521.10	0.0058	P	1.8	0.9
3	<input type="checkbox"/>	5.000	5.179	31843.20	0.0532	P	1.1	3.6
4	<input type="checkbox"/>	25.000	26.523	159594.08	0.2694	P	0.5	6.1
5	<input type="checkbox"/>	100.000	102.304	606997.94	1.0371	P	2.4	2.3
6	<input type="checkbox"/>	250.000	252.164	1473753.00	2.5553	A	0.8	0.9
7	<input type="checkbox"/>	500.000	498.380	2937217.92	5.0497	A	0.4	-0.3
8	<input type="checkbox"/>			4311.32	0.0073	P	2.1	

$y = 0.0101 * x + 7.1454E-004$

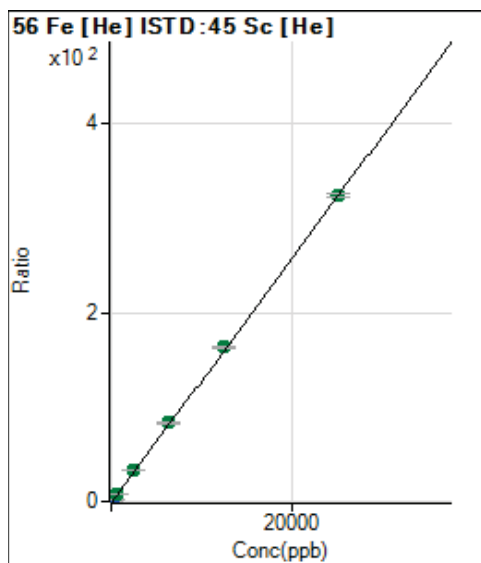
R = 1.0000

DL = 0.00825 ppb

BEC = 0.07053 ppb

Weight: <None>

Min Conc: <None>



	R <sub>j</sub> c <sub>t</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	14170.21	0.0236	P	1.8	
2	<input type="checkbox"/>	50.000	51.170	416277.40	0.6886	P	0.3	2.3
3	<input type="checkbox"/>	125.000	130.323	1028209.81	1.7173	P	0.9	4.3
4	<input type="checkbox"/>	625.000	664.195	5127480.00	8.6558	A	0.8	6.3
5	<input type="checkbox"/>	2500.000	2561.783	19499424.00	33.3180	A	2.6	2.5
6	<input type="checkbox"/>	6250.000	6383.529	47861705.33	82.9876	A	1.0	2.1
7	<input type="checkbox"/>	12500.00	12560.61	94966770.67	163.268	A	0.6	0.5
8	<input type="checkbox"/>	25000.00	24929.12	190732608.0	324.016	A	1.5	-0.3

$y = 0.0130 * x + 0.0236$

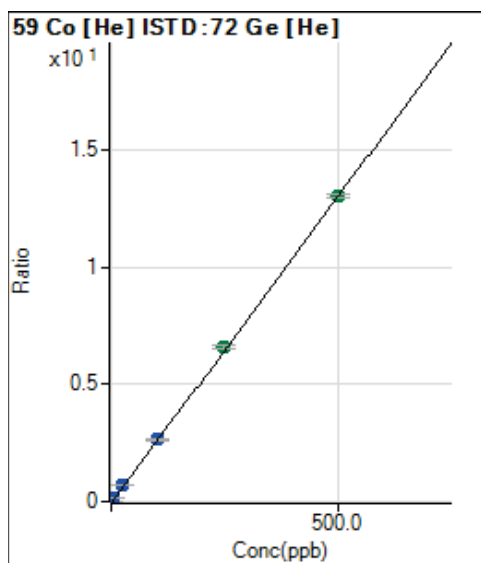
R = 1.0000

DL = 0.09563 ppb

BEC = 1.812 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	159.33	0.0003	P	4.9	
2	<input type="checkbox"/>	0.500	0.519	6782.26	0.0139	P	3.4	3.8
3	<input type="checkbox"/>	5.000	5.247	66752.44	0.1376	P	0.5	4.9
4	<input type="checkbox"/>	25.000	26.548	334790.28	0.6948	P	0.4	6.2
5	<input type="checkbox"/>	100.000	100.914	1270441.81	2.6402	P	1.4	0.9
6	<input type="checkbox"/>	250.000	252.309	3110505.83	6.6007	A	1.4	0.9
7	<input type="checkbox"/>	500.000	498.583	6178744.00	13.0432	A	0.7	-0.3
8	<input type="checkbox"/>			8775.33	0.0185	P	2.2	

$y = 0.0262 * x + 3.2575E-004$

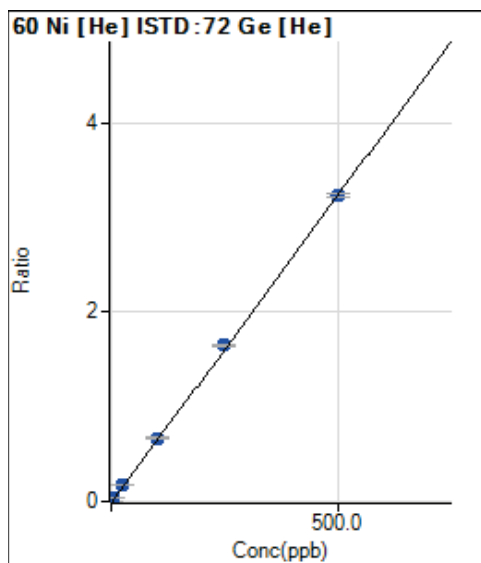
R = 1.0000

DL = 0.001813 ppb

BEC = 0.01245 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	881.36	0.0018	P	6.4	
2	<input type="checkbox"/>	0.500	0.534	2570.90	0.0053	P	3.4	6.7
3	<input type="checkbox"/>	5.000	5.322	17660.03	0.0364	P	1.0	6.4
4	<input type="checkbox"/>	25.000	26.790	84793.47	0.1760	P	1.2	7.2
5	<input type="checkbox"/>	100.000	102.319	320964.16	0.6670	P	1.6	2.3
6	<input type="checkbox"/>	250.000	254.071	779284.98	1.6537	P	1.3	1.6
7	<input type="checkbox"/>	500.000	497.408	1532778.96	3.2357	P	1.2	-0.5
8	<input type="checkbox"/>			4315.99	0.0091	P	2.0	

$y = 0.0065 * x + 0.0018$

R = 0.9999

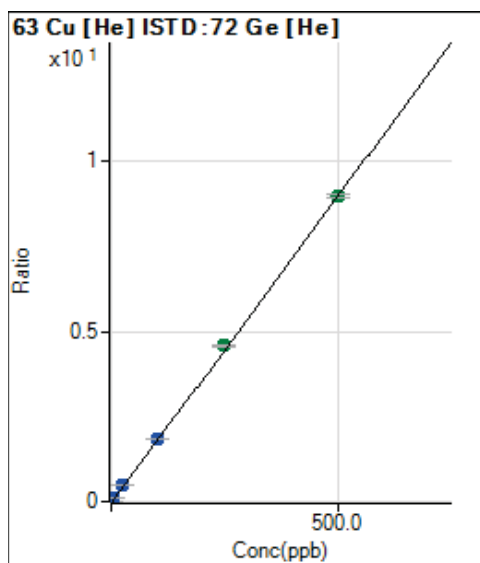
DL = 0.05296 ppb

BEC = 0.2771 ppb

Weight: <None>

Min Conc: <None>





	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	238.67	0.0005	P	3.0	
2	<input type="checkbox"/>	1.000	1.102	9934.07	0.0204	P	2.1	10.2
3	<input type="checkbox"/>	5.000	5.281	46445.74	0.0957	P	0.9	5.6
4	<input type="checkbox"/>	25.000	26.958	234489.79	0.4867	P	0.5	7.8
5	<input type="checkbox"/>	100.000	102.045	885752.63	1.8408	P	2.0	2.0
6	<input type="checkbox"/>	250.000	253.598	2155479.00	4.5740	A	1.0	1.4
7	<input type="checkbox"/>	500.000	497.691	4252033.17	8.9761	A	0.9	-0.5
8	<input type="checkbox"/>			2988.32	0.0063	P	3.6	

$y = 0.0180 * x + 4.8773E-004$

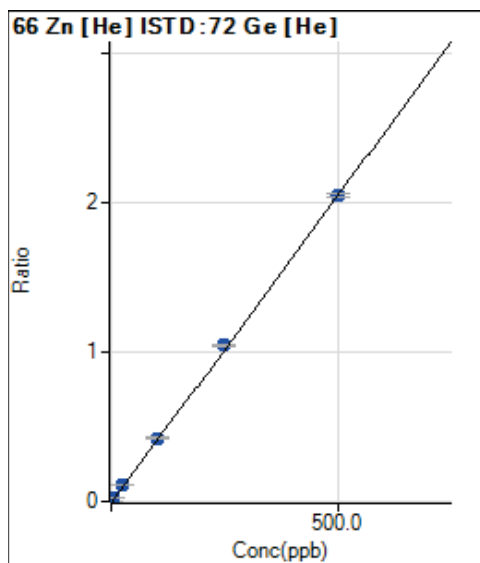
R = 1.0000

DL = 0.00245 ppb

BEC = 0.02704 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	210.00	0.0004	P	12.2	
2	<input type="checkbox"/>	5.000	5.277	10792.69	0.0221	P	0.8	5.5
3	<input type="checkbox"/>	5.000	5.245	10671.94	0.0220	P	1.9	4.9
4	<input type="checkbox"/>	25.000	26.463	52642.25	0.1093	P	0.4	5.9
5	<input type="checkbox"/>	100.000	102.371	202764.24	0.4214	P	2.2	2.4
6	<input type="checkbox"/>	250.000	253.446	491345.90	1.0427	P	1.0	1.4
7	<input type="checkbox"/>	500.000	497.725	969770.48	2.0472	P	0.8	-0.5
8	<input type="checkbox"/>			3357.73	0.0071	P	3.0	

$y = 0.0041 * x + 4.2892E-004$

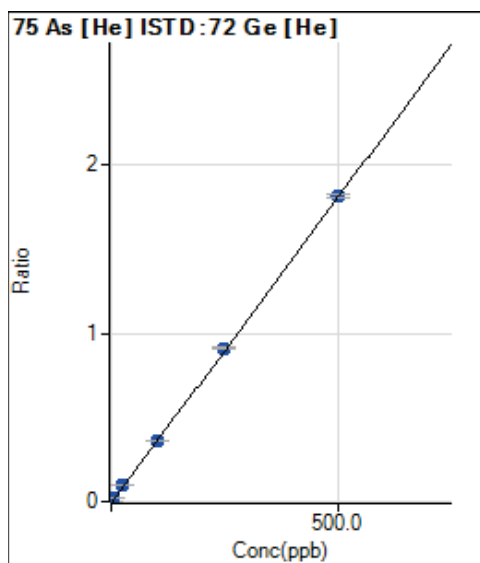
R = 1.0000

DL = 0.03822 ppb

BEC = 0.1043 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	123.83	0.0003	P	6.1	
2	<input type="checkbox"/>	0.500	0.487	986.20	0.0020	P	2.7	-2.5
3	<input type="checkbox"/>	5.000	4.956	8847.87	0.0182	P	0.2	-0.9
4	<input type="checkbox"/>	25.000	25.720	45095.62	0.0936	P	0.9	2.9
5	<input type="checkbox"/>	100.000	99.442	173773.29	0.3611	P	1.3	-0.6
6	<input type="checkbox"/>	250.000	250.380	428303.61	0.9089	P	1.4	0.2
7	<input type="checkbox"/>	500.000	499.886	859493.62	1.8144	P	0.7	0.0
8	<input type="checkbox"/>			354.00	0.0007	P	4.6	

$y = 0.0036 * x + 2.5317E-004$

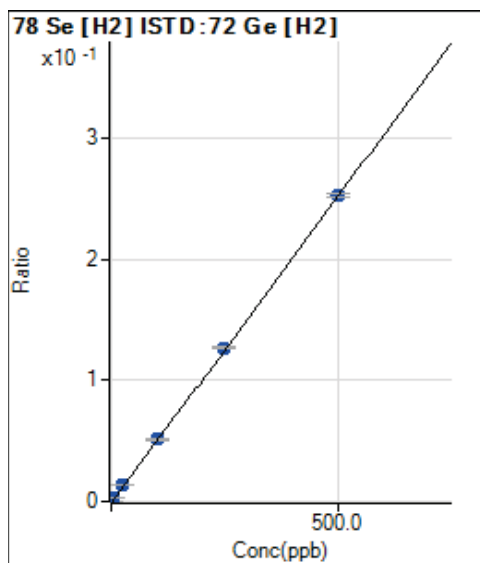
R = 1.0000

DL = 0.01273 ppb

BEC = 0.06976 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	26.67	0.0000	P	29.8	
2	<input type="checkbox"/>	0.500	0.498	409.68	0.0003	P	5.0	-0.5
3	<input type="checkbox"/>	5.000	5.063	3958.55	0.0026	P	1.5	1.3
4	<input type="checkbox"/>	25.000	26.061	19985.81	0.0132	P	1.2	4.2
5	<input type="checkbox"/>	100.000	101.558	77264.64	0.0515	P	1.7	1.6
6	<input type="checkbox"/>	250.000	250.955	191612.32	0.1272	P	1.3	0.4
7	<input type="checkbox"/>	500.000	499.157	388028.25	0.2529	P	1.4	-0.2
8	<input type="checkbox"/>			104.33	0.0001	P	16.5	

$y = 5.0665E-004 * x + 1.7367E-005$

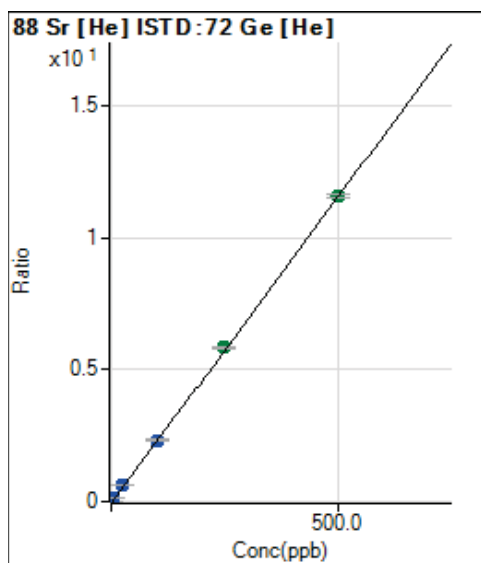
R = 1.0000

DL = 0.03065 ppb

BEC = 0.03428 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	166.67	0.0003	P	26.2	
2	<input type="checkbox"/>	0.500	0.510	5941.29	0.0122	P	1.9	2.0
3	<input type="checkbox"/>	5.000	5.047	57046.72	0.1176	P	2.1	0.9
4	<input type="checkbox"/>	25.000	25.891	289960.07	0.6018	P	0.5	3.6
5	<input type="checkbox"/>	100.000	100.453	1122939.64	2.3338	P	2.1	0.5
6	<input type="checkbox"/>	250.000	251.708	2755464.85	5.8473	A	1.3	0.7
7	<input type="checkbox"/>	500.000	499.010	5491169.50	11.5919	A	1.0	-0.2
8	<input type="checkbox"/>			6263.09	0.0132	P	2.2	

$y = 0.0232 * x + 3.4010E-004$

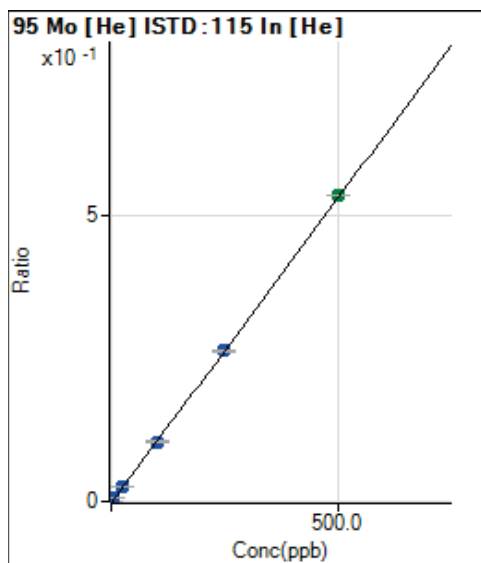
R = 1.0000

DL = 0.01151 ppb

BEC = 0.01464 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	22.67	0.0000	P	40.5	
2	<input type="checkbox"/>	0.500	0.483	2861.63	0.0005	P	2.1	-3.3
3	<input type="checkbox"/>	5.000	4.850	28368.86	0.0052	P	1.3	-3.0
4	<input type="checkbox"/>	25.000	24.846	144910.73	0.0265	P	1.8	-0.6
5	<input type="checkbox"/>	100.000	98.181	564156.00	0.1048	P	2.8	-1.8
6	<input type="checkbox"/>	250.000	247.122	1383755.71	0.2639	P	1.4	-1.2
7	<input type="checkbox"/>	500.000	501.812	2817057.08	0.5358	A	0.6	0.4
8	<input type="checkbox"/>			584.01	0.0001	P	5.4	

$y = 0.0011 * x + 4.0802E-006$

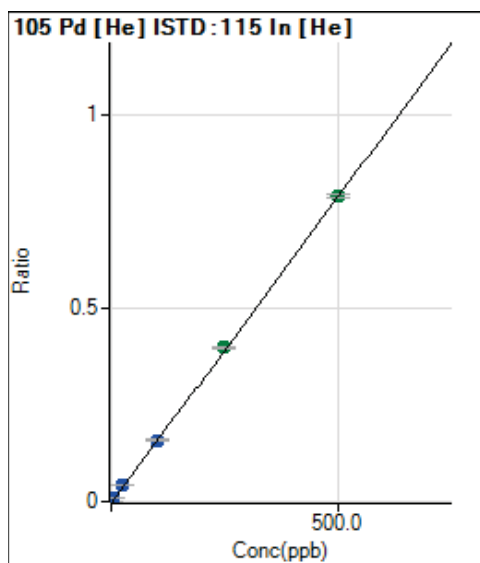
R = 1.0000

DL = 0.004646 ppb

BEC = 0.003821 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	260.00	0.0000	P	8.8	
2	<input type="checkbox"/>	0.500	0.490	4529.10	0.0008	P	7.6	-2.0
3	<input type="checkbox"/>	5.000	5.097	44476.55	0.0081	P	0.7	1.9
4	<input type="checkbox"/>	25.000	25.964	225025.15	0.0412	P	0.3	3.9
5	<input type="checkbox"/>	100.000	99.754	851068.82	0.1582	P	2.6	-0.2
6	<input type="checkbox"/>	250.000	252.103	2095654.40	0.3996	A	1.1	0.8
7	<input type="checkbox"/>	500.000	498.949	4157937.65	0.7909	A	0.7	-0.2
8	<input type="checkbox"/>			936.71	0.0002	P	8.9	

$y = 0.0016 * x + 4.6846E-005$

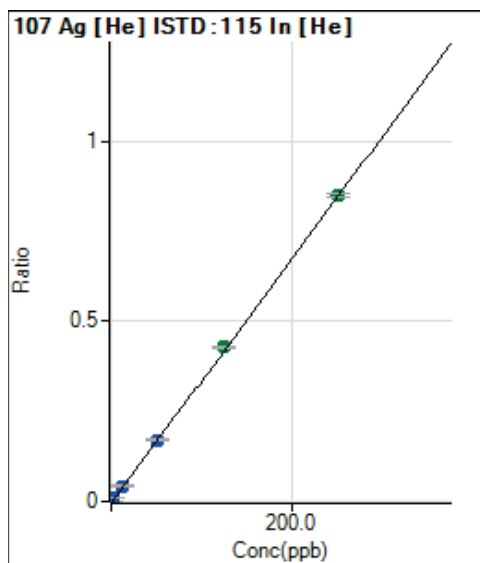
R = 1.0000

DL = 0.007795 ppb

BEC = 0.02956 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	160.00	0.0000	P	11.1	
2	<input type="checkbox"/>	0.500	0.386	7388.67	0.0013	P	8.7	-22.
3	<input type="checkbox"/>	2.500	2.297	42955.43	0.0078	P	2.9	-8.1
4	<input type="checkbox"/>	12.500	12.721	236661.98	0.0433	P	2.6	1.8
5	<input type="checkbox"/>	50.000	50.175	919276.32	0.1708	P	3.7	0.4
6	<input type="checkbox"/>	125.000	125.671	2243746.58	0.4279	A	1.4	0.5
7	<input type="checkbox"/>	250.000	249.621	4468059.73	0.8499	A	0.9	-0.2
8	<input type="checkbox"/>			2185.19	0.0004	P	7.8	

$y = 0.0034 * x + 2.8835E-005$

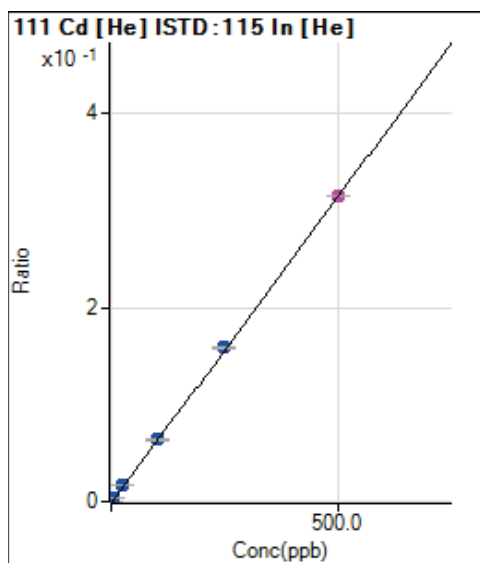
R = 1.0000

DL = 0.002829 ppb

BEC = 0.00847 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	20.66	0.0000	P	9.4	
2	<input type="checkbox"/>	0.080	0.080	299.48	0.0001	P	7.0	0.2
3	<input type="checkbox"/>	5.000	5.041	17469.02	0.0032	P	0.9	0.8
4	<input type="checkbox"/>	25.000	25.746	88945.12	0.0163	P	1.4	3.0
5	<input type="checkbox"/>	100.000	100.838	343191.58	0.0638	P	2.7	0.8
6	<input type="checkbox"/>	250.000	252.168	836318.78	0.1595	P	1.3	0.9
7	<input type="checkbox"/>	500.000	498.711	1658203.01	0.3154	M	0.4	-0.3
8	<input type="checkbox"/>			160.56	0.0000	P	1.4	

$y = 6.3243E-004 * x + 3.7211E-006$

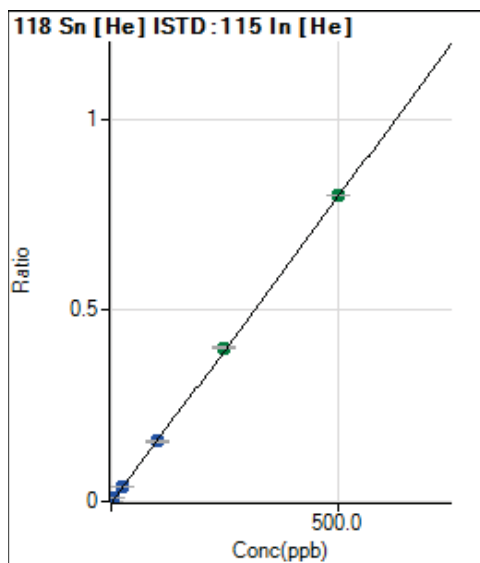
R = 1.0000

DL = 0.001665 ppb

BEC = 0.005884 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	96.67	0.0000	P	8.4	
2	<input type="checkbox"/>	0.500	0.489	4400.73	0.0008	P	2.9	-2.3
3	<input type="checkbox"/>	5.000	4.869	42776.90	0.0078	P	0.4	-2.6
4	<input type="checkbox"/>	25.000	25.132	219935.62	0.0403	P	1.1	0.5
5	<input type="checkbox"/>	100.000	98.603	849876.32	0.1579	P	2.9	-1.4
6	<input type="checkbox"/>	250.000	250.291	2102209.60	0.4009	A	1.2	0.1
7	<input type="checkbox"/>	500.000	500.128	4211263.89	0.8010	A	0.5	0.0
8	<input type="checkbox"/>			7558.78	0.0014	P	1.6	

$y = 0.0016 * x + 1.7422E-005$

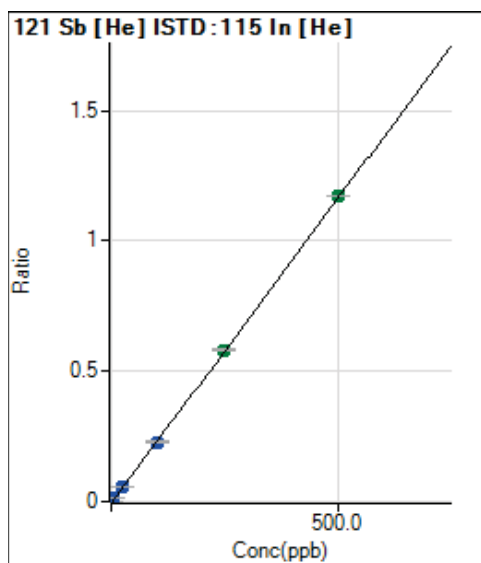
R = 1.0000

DL = 0.002727 ppb

BEC = 0.01088 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	75.00	0.0000	P	13.4	
2	<input type="checkbox"/>	0.500	0.493	6418.18	0.0012	P	3.4	-1.3
3	<input type="checkbox"/>	5.000	4.854	62182.62	0.0114	P	2.2	-2.9
4	<input type="checkbox"/>	25.000	24.953	318691.93	0.0584	P	1.2	-0.2
5	<input type="checkbox"/>	100.000	97.435	1225869.83	0.2278	P	2.7	-2.6
6	<input type="checkbox"/>	250.000	248.576	3047688.50	0.5812	A	0.9	-0.6
7	<input type="checkbox"/>	500.000	501.229	6160837.62	1.1718	A	0.2	0.2
8	<input type="checkbox"/>			2068.51	0.0004	P	7.7	

$y = 0.0023 * x + 1.3514E-005$

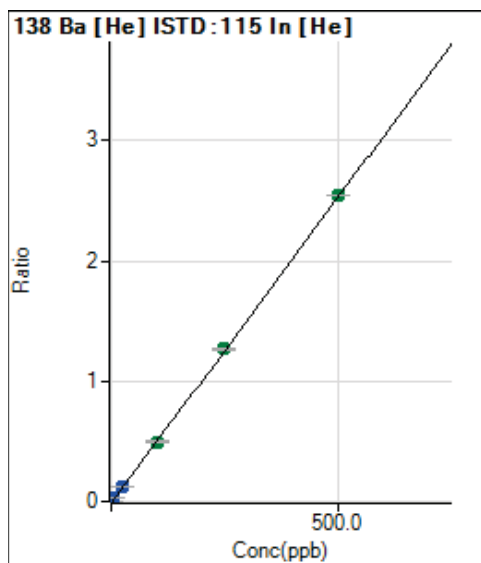
R = 1.0000

DL = 0.002331 ppb

BEC = 0.005781 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	146.67	0.0000	P	8.3	
2	<input type="checkbox"/>	0.300	0.301	8562.72	0.0016	P	5.4	0.4
3	<input type="checkbox"/>	5.000	4.904	136576.52	0.0250	P	0.7	-1.9
4	<input type="checkbox"/>	25.000	25.066	696019.47	0.1274	P	0.8	0.3
5	<input type="checkbox"/>	100.000	97.560	2668838.24	0.4959	A	1.9	-2.4
6	<input type="checkbox"/>	250.000	249.290	6644941.98	1.2671	A	1.2	-0.3
7	<input type="checkbox"/>	500.000	500.841	13384108.55	2.5458	A	0.2	0.2
8	<input type="checkbox"/>			2135.18	0.0004	P	0.6	

$y = 0.0051 * x + 2.6432E-005$

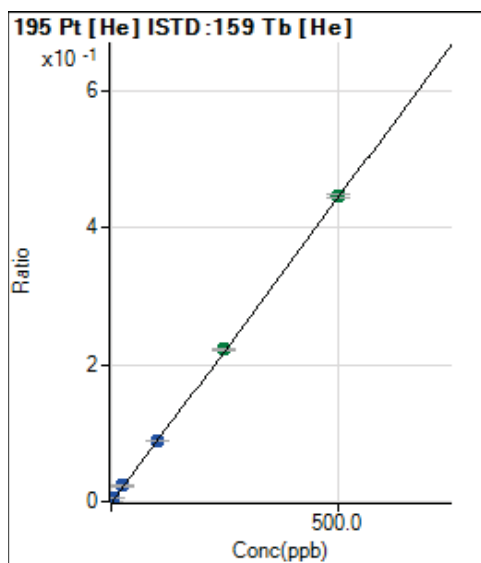
R = 1.0000

DL = 0.001289 ppb

BEC = 0.0052 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	196.00	0.0000	P	6.4	
2	<input type="checkbox"/>	0.500	0.507	5865.97	0.0005	P	4.0	1.4
3	<input type="checkbox"/>	5.000	4.955	55899.71	0.0044	P	1.0	-0.9
4	<input type="checkbox"/>	25.000	25.761	286973.05	0.0230	P	1.1	3.0
5	<input type="checkbox"/>	100.000	99.675	1107776.13	0.0890	P	1.9	-0.3
6	<input type="checkbox"/>	250.000	248.897	2752110.75	0.2222	A	0.8	-0.4
7	<input type="checkbox"/>	500.000	500.579	5620947.17	0.4469	A	0.7	0.1
8	<input type="checkbox"/>			364.01	0.0000	P	5.8	

$y = 8.9274E-004 * x + 1.5428E-005$

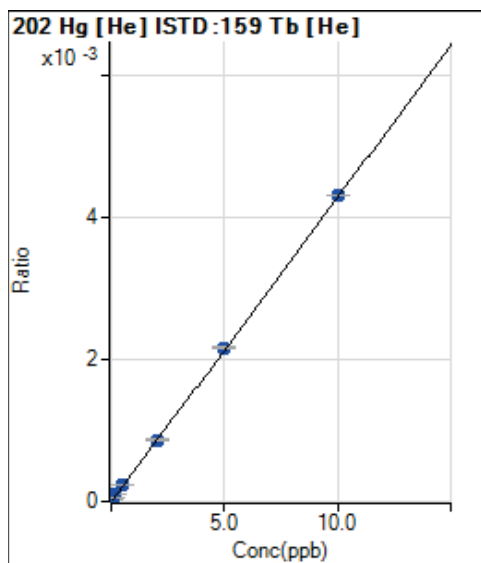
R = 1.0000

DL = 0.003314 ppb

BEC = 0.01728 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	193.00	0.0000	P	2.1	
2	<input type="checkbox"/>	0.200	0.210	1323.07	0.0001	P	2.8	5.1
3	<input type="checkbox"/>	0.100	0.100	732.02	0.0001	P	3.9	-0.1
4	<input type="checkbox"/>	0.500	0.501	2876.65	0.0002	P	1.9	0.3
5	<input type="checkbox"/>	2.000	1.981	10787.87	0.0009	P	1.1	-1.0
6	<input type="checkbox"/>	5.000	4.997	26790.52	0.0022	P	1.2	-0.1
7	<input type="checkbox"/>	10.000	10.005	54281.36	0.0043	P	0.5	0.0
8	<input type="checkbox"/>			454.68	0.0000	P	2.8	

$y = 4.2984E-004 * x + 1.5190E-005$

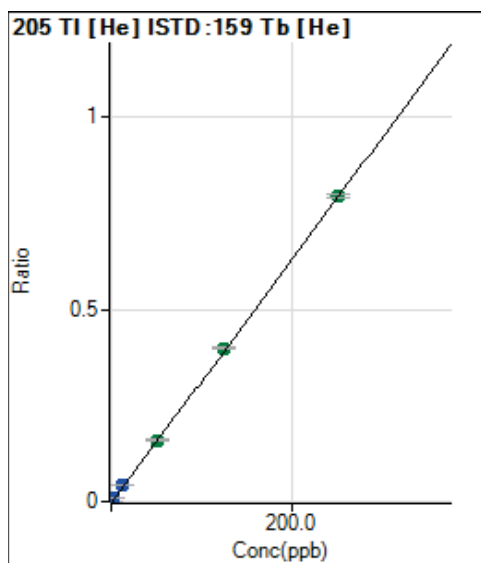
R = 1.0000

DL = 0.002251 ppb

BEC = 0.03534 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	523.35	0.0000	P	12.0	
2	<input type="checkbox"/>	0.100	0.091	4157.36	0.0003	P	2.6	-8.8
3	<input type="checkbox"/>	2.500	2.471	99587.94	0.0079	P	2.4	-1.2
4	<input type="checkbox"/>	12.500	13.096	520453.24	0.0417	P	2.9	4.8
5	<input type="checkbox"/>	50.000	50.340	1995880.44	0.1603	A	0.6	0.7
6	<input type="checkbox"/>	125.000	125.513	4950245.76	0.3997	A	0.1	0.4
7	<input type="checkbox"/>	250.000	249.646	9998925.27	0.7950	A	0.6	-0.1
8	<input type="checkbox"/>			3027.05	0.0002	P	19.7	

$y = 0.0032 * x + 4.1197E-005$

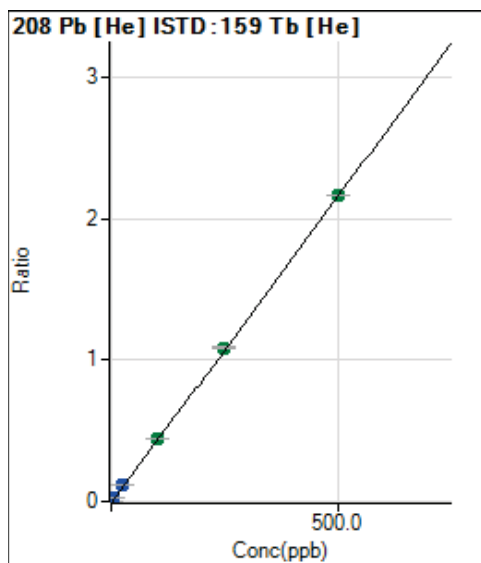
R = 1.0000

DL = 0.004659 ppb

BEC = 0.01294 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2761.80	0.0002	P	3.8	
2	<input type="checkbox"/>	0.500	0.514	30640.45	0.0024	P	1.0	2.8
3	<input type="checkbox"/>	5.000	5.054	278567.87	0.0221	P	0.9	1.1
4	<input type="checkbox"/>	25.000	26.204	1418737.83	0.1138	P	1.5	4.8
5	<input type="checkbox"/>	100.000	101.403	5473021.67	0.4397	A	1.2	1.4
6	<input type="checkbox"/>	250.000	250.817	13464817.20	1.0872	A	0.5	0.3
7	<input type="checkbox"/>	500.000	499.250	27216436.47	2.1639	A	0.1	-0.1
8	<input type="checkbox"/>			15358.49	0.0012	P	2.4	

$y = 0.0043 * x + 2.1737E-004$

R = 1.0000

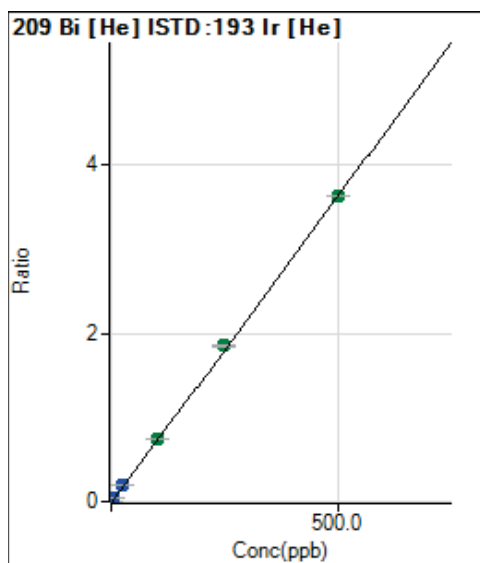
DL = 0.005674 ppb

BEC = 0.05016 ppb

Weight: <None>

Min Conc: <None>





	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	1740.15	0.0003	P	4.2	
2	<input type="checkbox"/>	0.500	0.514	24960.59	0.0040	P	2.5	2.8
3	<input type="checkbox"/>	5.000	5.098	231552.28	0.0375	P	1.0	2.0
4	<input type="checkbox"/>	25.000	26.749	1194571.47	0.1958	P	1.4	7.0
5	<input type="checkbox"/>	100.000	102.334	4554706.03	0.7483	A	1.3	2.3
6	<input type="checkbox"/>	250.000	253.526	11180589.00	1.8535	A	0.2	1.4
7	<input type="checkbox"/>	500.000	497.682	22444866.33	3.6381	A	0.2	-0.5
8	<input type="checkbox"/>			3067.09	0.0005	P	7.9	

$y = 0.0073 * x + 2.7866E-004$

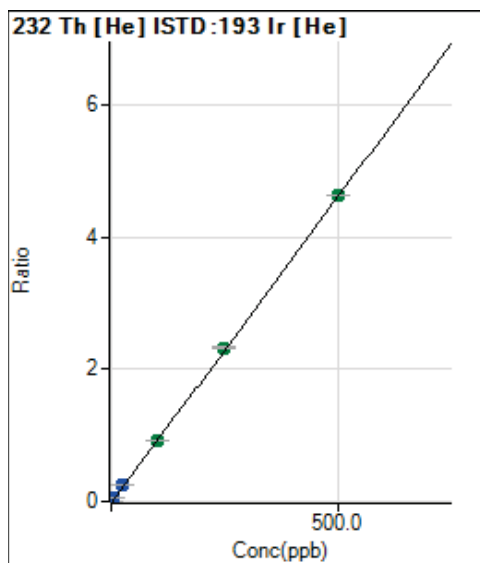
R = 1.0000

DL = 0.004817 ppb

BEC = 0.03812 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	830.03	0.0001	P	7.7	
2	<input type="checkbox"/>	0.500	0.488	28818.60	0.0047	P	1.4	-2.4
3	<input type="checkbox"/>	5.000	4.864	279150.94	0.0453	P	0.9	-2.7
4	<input type="checkbox"/>	25.000	25.700	1455586.54	0.2386	P	0.5	2.8
5	<input type="checkbox"/>	100.000	99.252	5605031.80	0.9210	A	2.5	-0.7
6	<input type="checkbox"/>	250.000	250.741	14033654.79	2.3264	A	0.7	0.3
7	<input type="checkbox"/>	500.000	499.745	28604835.41	4.6366	A	0.4	-0.1
8	<input type="checkbox"/>			13121.70	0.0021	P	3.4	

$y = 0.0093 * x + 1.3299E-004$

R = 1.0000

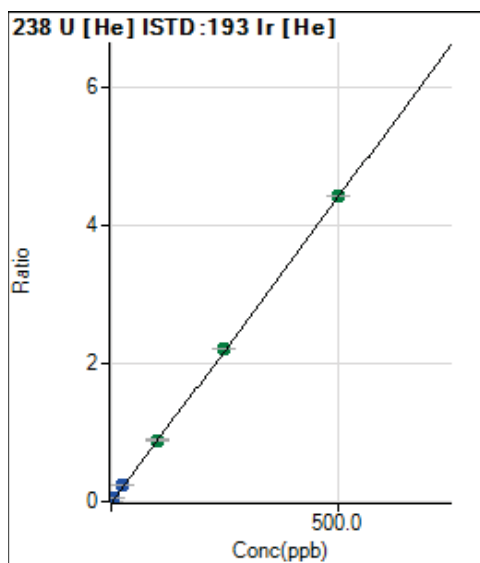
DL = 0.003309 ppb

BEC = 0.01433 ppb

Weight: <None>

Min Conc: <None>

Calibration for 024CAL.S.d



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	1008.38	0.0002	P	10.0	
2	<input type="checkbox"/>	0.500	0.502	28569.78	0.0046	P	2.1	0.5
3	<input type="checkbox"/>	5.000	4.984	273746.83	0.0444	P	0.4	-0.3
4	<input type="checkbox"/>	25.000	25.757	1395284.04	0.2287	P	1.2	3.0
5	<input type="checkbox"/>	100.000	100.275	5416338.67	0.8899	A	1.7	0.3
6	<input type="checkbox"/>	250.000	250.141	13389411.05	2.2197	A	0.5	0.1
7	<input type="checkbox"/>	500.000	499.837	27361818.76	4.4352	A	0.3	0.0
8	<input type="checkbox"/>			3118.73	0.0005	P	3.8	

$y = 0.0089 * x + 1.6159E-004$

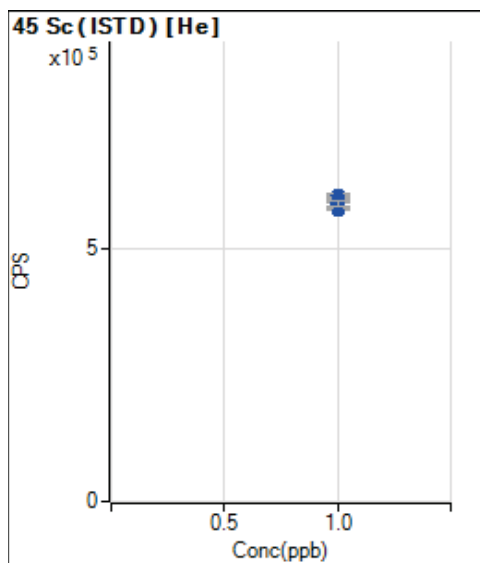
R = 1.0000

DL = 0.005458 ppb

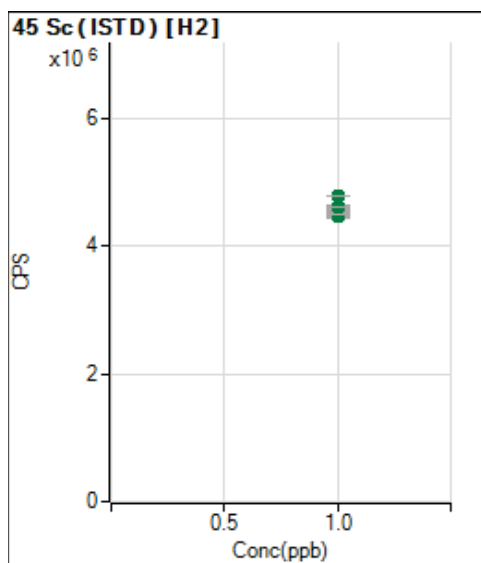
BEC = 0.01821 ppb

Weight: <None>

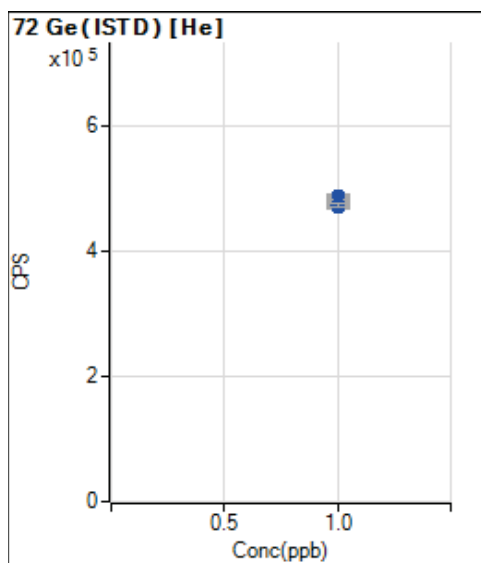
Min Conc: <None>



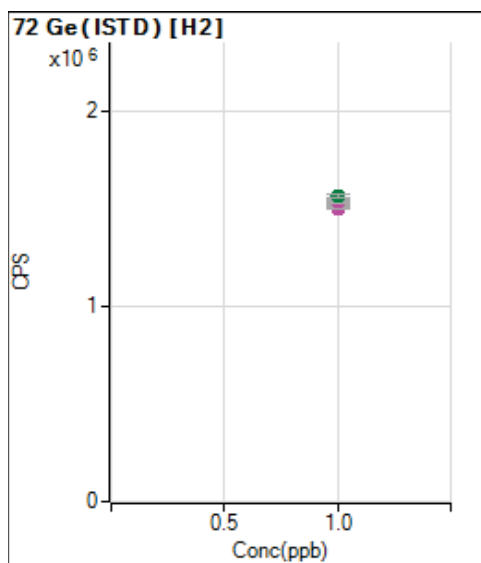
	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		601726.75		P	0.9	
2	<input type="checkbox"/>	1.000		604553.31		P	0.8	
3	<input type="checkbox"/>	1.000		598741.29		P	0.3	
4	<input type="checkbox"/>	1.000		592379.85		P	0.2	
5	<input type="checkbox"/>	1.000		585395.19		P	1.8	
6	<input type="checkbox"/>	1.000		576761.35		P	0.8	
7	<input type="checkbox"/>	1.000		581666.09		P	0.4	
8	<input type="checkbox"/>	1.000		588756.79		P	1.9	



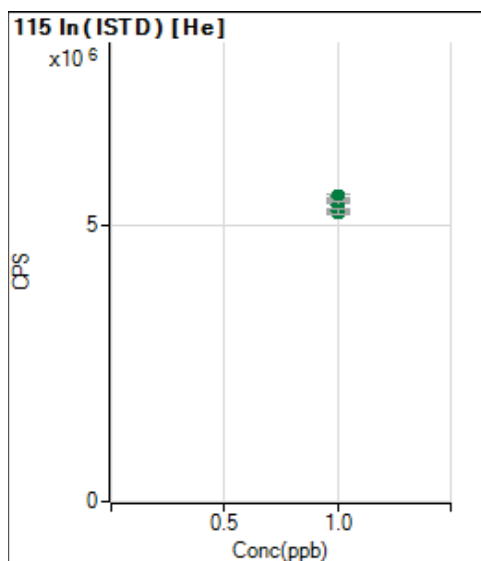
	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	1.000		4615868.83		A	0.8	
2	<input type="checkbox"/>	1.000		4583156.67		A	0.3	
3	<input type="checkbox"/>	1.000		4577649.17		A	0.3	
4	<input type="checkbox"/>	1.000		4489003.83		A	2.7	
5	<input type="checkbox"/>	1.000		4482561.33		A	0.2	
6	<input type="checkbox"/>	1.000		4508245.00		A	0.4	
7	<input type="checkbox"/>	1.000		4616736.50		A	0.4	
8	<input type="checkbox"/>	1.000		4787465.67		A	0.3	



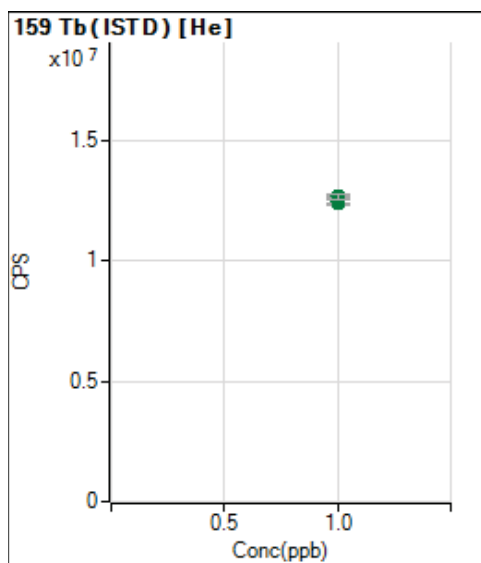
	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	1.000		489259.38		P	0.9	
2	<input type="checkbox"/>	1.000		487731.59		P	0.4	
3	<input type="checkbox"/>	1.000		485151.46		P	0.2	
4	<input type="checkbox"/>	1.000		481842.19		P	0.4	
5	<input type="checkbox"/>	1.000		481205.71		P	0.7	
6	<input type="checkbox"/>	1.000		471276.13		P	1.0	
7	<input type="checkbox"/>	1.000		473726.30		P	0.6	
8	<input type="checkbox"/>	1.000		474790.19		P	1.0	



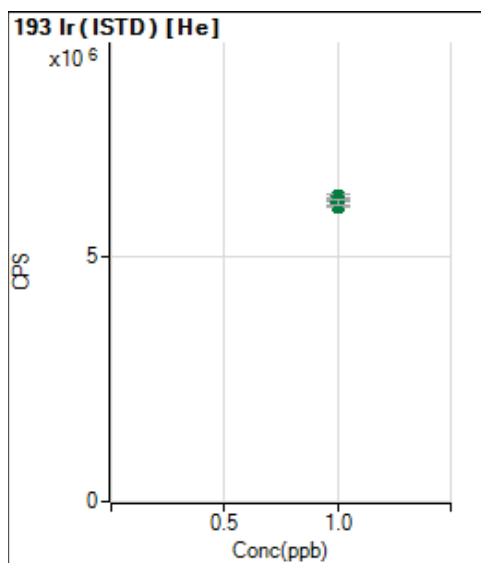
	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		1538701.21		A	1.2	
2	<input type="checkbox"/>	1.000		1519846.92		A	0.5	
3	<input type="checkbox"/>	1.000		1532905.38		A	0.8	
4	<input type="checkbox"/>	1.000		1511844.54		M	1.9	
5	<input type="checkbox"/>	1.000		1501180.13		M	0.4	
6	<input type="checkbox"/>	1.000		1506754.88		M	0.6	
7	<input type="checkbox"/>	1.000		1534158.83		M	0.6	
8	<input type="checkbox"/>	1.000		1564082.16		A	0.9	



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		5550040.77		A	0.6	
2	<input type="checkbox"/>	1.000		5500062.88		A	1.0	
3	<input type="checkbox"/>	1.000		5473823.16		A	1.3	
4	<input type="checkbox"/>	1.000		5462019.75		A	1.2	
5	<input type="checkbox"/>	1.000		5382751.14		A	2.2	
6	<input type="checkbox"/>	1.000		5244390.96		A	0.9	
7	<input type="checkbox"/>	1.000		5257423.96		A	0.2	
8	<input type="checkbox"/>	1.000		5267919.07		A	1.5	



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	1.000		12705930.64		A	0.3	
2	<input type="checkbox"/>	1.000		12536276.89		A	0.1	
3	<input type="checkbox"/>	1.000		12592602.31		A	0.9	
4	<input type="checkbox"/>	1.000		12470634.40		A	1.2	
5	<input type="checkbox"/>	1.000		12448833.57		A	1.5	
6	<input type="checkbox"/>	1.000		12384806.48		A	0.3	
7	<input type="checkbox"/>	1.000		12577736.89		A	0.4	
8	<input type="checkbox"/>	1.000		12684522.31		A	1.9	



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	1.000		6244576.37		A	1.1	
2	<input type="checkbox"/>	1.000		6184289.28		A	1.0	
3	<input type="checkbox"/>	1.000		6168177.20		A	1.2	
4	<input type="checkbox"/>	1.000		6101421.37		A	1.2	
5	<input type="checkbox"/>	1.000		6087492.72		A	1.9	
6	<input type="checkbox"/>	1.000		6032277.62		A	0.3	
7	<input type="checkbox"/>	1.000		6169302.20		A	0.4	
8	<input type="checkbox"/>	1.000		6118186.37		A	1.7	

Sample Name SysBlk-EPA Tune-352695  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 017SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:30:29  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2			121.000
Be	9	2	H2			51.667
B	11	2	H2			1462.070
Na	23	1	He			10849.033
Mg	24	1	He			7178.453
Al	27	1	He			128.000
Si	28	2	H2			16506.570
K	39	1	He			71895.610
Ca	43	1	He			16.317
Ti	47	1	He			1.667
V	51	1	He			-357.117
Cr	52	1	He			2266.850
Mn	55	1	He			388.010
Fe	56	1	He			15282.833
Co	59	1	He			176.000
Ni	60	1	He			942.700
Cu	63	1	He			193.333
Zn	66	1	He			212.000
As	75	1	He			120.500
Se	78	2	H2			21.000
Sr	88	1	He			185.000
Mo	95	1	He			44.667
Pd	105	1	He			275.010
Ag	107	1	He			240.003
Cd	111	1	He			25.990
Sn	118	1	He			146.667
Sb	121	1	He			75.000
Ba	138	1	He			133.333
Pt	195	1	He			189.333
Hg	202	1	He			230.667
Tl	205	1	He			600.020
Pb	208	1	He			2663.463
Bi	209	1	He			1680.137
Th	232	1	He			890.040
U	238	1	He			940.040

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He		608809.560
Sc	45	2	H2		4597464.833
Ge	72	1	He		493916.447
Ge	72	2	H2		1539022.583
In	115	1	He		5628810.853
Tb	159	1	He		12845161.893
Ir	193	1	He		6310918.867

Sample Name SysBlk-EPA Tune-352695  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 018SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:34:15  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2			118.000
Be	9	2	H2			50.167
B	11	2	H2			1391.900
Na	23	1	He			10528.770
Mg	24	1	He			6804.930
Al	27	1	He			118.333
Si	28	2	H2			15939.297
K	39	1	He			71607.510
Ca	43	1	He			16.067
Ti	47	1	He			4.000
V	51	1	He			-22.887
Cr	52	1	He			2346.860
Mn	55	1	He			389.343
Fe	56	1	He			14462.493
Co	59	1	He			189.333
Ni	60	1	He			815.357
Cu	63	1	He			203.333
Zn	66	1	He			186.000
As	75	1	He			119.500
Se	78	2	H2			22.333
Sr	88	1	He			223.333
Mo	95	1	He			28.667
Pd	105	1	He			216.670
Ag	107	1	He			160.000
Cd	111	1	He			20.993
Sn	118	1	He			131.667
Sb	121	1	He			101.667
Ba	138	1	He			121.667
Pt	195	1	He			201.333
Hg	202	1	He			215.667
Tl	205	1	He			520.017
Pb	208	1	He			2485.117
Bi	209	1	He			1763.483
Th	232	1	He			790.030
U	238	1	He			905.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He		603277.083
Sc	45	2	H2		4679873.167
Ge	72	1	He		488571.080
Ge	72	2	H2		1561325.663
In	115	1	He		5561898.580
Tb	159	1	He		12650683.977
Ir	193	1	He		6258329.073

Sample Name CAL0  
 Sample Type CalBlk  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 019CALB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:38:00  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.000000	N/A	115.500
Be	9	2	H2	0.000000	N/A	45.333
B	11	2	H2	0.000000	N/A	1304.560
Na	23	1	He	0.000000	N/A	10823.983
Mg	24	1	He	0.000000	N/A	6626.527
Al	27	1	He	0.000000	N/A	89.333
Si	28	2	H2	0.000000	N/A	15888.573
K	39	1	He	0.000000	N/A	71609.360
Ca	43	1	He	0.000000	N/A	14.400
Ti	47	1	He	0.000000	N/A	2.333
V	51	1	He	0.000000	N/A	-517.370
Cr	52	1	He	0.000000	N/A	2345.527
Mn	55	1	He	0.000000	N/A	430.010
Fe	56	1	He	0.000000	N/A	14170.213
Co	59	1	He	0.000000	N/A	159.333
Ni	60	1	He	0.000000	N/A	881.363
Cu	63	1	He	0.000000	N/A	238.667
Zn	66	1	He	0.000000	N/A	210.000
As	75	1	He	0.000000	N/A	123.833
Se	78	2	H2	0.000000	N/A	26.667
Sr	88	1	He	0.000000	N/A	166.667
Mo	95	1	He	0.000000	N/A	22.667
Pd	105	1	He	0.000000	N/A	260.003
Ag	107	1	He	0.000000	N/A	160.000
Cd	111	1	He	0.000000	N/A	20.660
Sn	118	1	He	0.000000	N/A	96.667
Sb	121	1	He	0.000000	N/A	75.000
Ba	138	1	He	0.000000	N/A	146.667
Pt	195	1	He	0.000000	N/A	196.000
Hg	202	1	He	0.000000	N/A	193.000
Tl	205	1	He	0.000000	N/A	523.350
Pb	208	1	He	0.000000	N/A	2761.800
Bi	209	1	He	0.000000	N/A	1740.147
Th	232	1	He	0.000000	N/A	830.033
U	238	1	He	0.000000	N/A	1008.383

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100	601726.753
Sc	45	2	H2	100	4615868.833
Ge	72	1	He	100	489259.377
Ge	72	2	H2	100	1538701.210
In	115	1	He	100	5550040.770
Tb	159	1	He	100	12705930.643
Ir	193	1	He	100	6244576.367



Sample Name CAL1  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 020CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:42:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.520296	7.2	313.000
Be	9	2	H2	0.197703	7.9	122.333
B	11	2	H2	9.933168	0.8	4915.300
Na	23	1	He	54.040725	1.1	62918.490
Mg	24	1	He	30.509336	2.5	23029.520
Al	27	1	He	31.613110	1.7	8633.503
Si	28	2	H2	100.874679	0.2	316731.503
K	39	1	He	100.735422	2.9	150751.407
Ca	43	1	He	102.323522	2.5	249.767
Ti	47	1	He	1.028336	5.1	256.000
V	51	1	He	1.003796	1.4	6440.797
Cr	52	1	He	2.023097	1.9	18987.630
Mn	55	1	He	0.504414	2.0	3521.100
Fe	56	1	He	51.169586	0.3	416277.397
Co	59	1	He	0.519093	3.5	6782.257
Ni	60	1	He	0.533681	5.1	2570.903
Cu	63	1	He	1.102408	2.2	9934.067
Zn	66	1	He	5.276853	0.8	10792.690
As	75	1	He	0.487427	3.1	986.203
Se	78	2	H2	0.497715	5.4	409.677
Sr	88	1	He	0.509752	1.9	5941.287
Mo	95	1	He	0.483499	2.1	2861.630
Pd	105	1	He	0.490217	8.1	4529.097
Ag	107	1	He	0.386345	8.8	7388.667
Cd	111	1	He	0.080175	7.5	299.483
Sn	118	1	He	0.488650	2.9	4400.730
Sb	121	1	He	0.493461	3.4	6418.177
Ba	138	1	He	0.301171	5.5	8562.723
Pt	195	1	He	0.506864	4.1	5865.970
Hg	202	1	He	0.210187	3.3	1323.067
Tl	205	1	He	0.091207	2.9	4157.363
Pb	208	1	He	0.513813	1.1	30640.450
Bi	209	1	He	0.514130	2.7	24960.593
Th	232	1	He	0.487972	1.4	28818.600
U	238	1	He	0.502451	2.1	28569.783

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.4697414	604553.313
Sc	45	2	H2	99.29131074	4583156.667
Ge	72	1	He	99.68773550	487731.593
Ge	72	2	H2	98.77466204	1519846.920
In	115	1	He	99.09950415	5500062.883
Tb	159	1	He	98.66476722	12536276.893
Ir	193	1	He	99.03456888	6184289.283

Sample Name CAL2  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 021CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:46:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.242676	3.0	2110.150
Be	9	2	H2	5.167745	0.9	2063.143
B	11	2	H2	4.959404	2.4	3098.983
Na	23	1	He	261.034877	0.2	259750.360
Mg	24	1	He	265.733418	0.8	147841.343
Al	27	1	He	259.417584	0.6	69530.557
Si	28	2	H2	129.933644	0.4	402937.033
K	39	1	He	258.855866	1.2	271843.420
Ca	43	1	He	259.262496	1.2	604.733
Ti	47	1	He	5.000545	5.2	1224.057
V	51	1	He	5.098938	4.3	34496.480
Cr	52	1	He	5.061112	0.5	43543.723
Mn	55	1	He	5.179097	1.1	31843.200
Fe	56	1	He	130.322847	0.9	1028209.813
Co	59	1	He	5.247174	0.5	66752.437
Ni	60	1	He	5.321738	1.0	17660.027
Cu	63	1	He	5.281324	0.9	46445.737
Zn	66	1	He	5.244820	2.0	10671.937
As	75	1	He	4.955584	0.2	8847.870
Se	78	2	H2	5.062629	1.5	3958.547
Sr	88	1	He	5.047367	2.1	57046.720
Mo	95	1	He	4.850367	1.3	28368.857
Pd	105	1	He	5.096776	0.7	44476.553
Ag	107	1	He	2.296526	2.9	42955.433
Cd	111	1	He	5.040731	0.9	17469.023
Sn	118	1	He	4.868500	0.4	42776.897
Sb	121	1	He	4.853744	2.2	62182.617
Ba	138	1	He	4.903885	0.7	136576.523
Pt	195	1	He	4.955386	1.0	55899.710
Hg	202	1	He	0.099930	5.3	732.020
Tl	205	1	He	2.470576	2.4	99587.937
Pb	208	1	He	5.054377	0.9	278567.867
Bi	209	1	He	5.097663	1.0	231552.283
Th	232	1	He	4.863814	0.9	279150.943
U	238	1	He	4.983698	0.4	273746.830

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.50385065	598741.290
Sc	45	2	H2	99.17199409	4577649.167
Ge	72	1	He	99.16038059	485151.460
Ge	72	2	H2	99.62332951	1532905.377
In	115	1	He	98.62671987	5473823.163
Tb	159	1	He	99.10806743	12592602.310
Ir	193	1	He	98.77655159	6168177.197

Sample Name CAL3  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 022CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:50:05  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	27.468673	2.9	10360.537
Be	9	2	H2	26.518237	2.8	10194.593
B	11	2	H2	25.926124	2.5	10518.657
Na	23	1	He	1326.567375	0.4	1262512.193
Mg	24	1	He	1339.813967	0.3	711133.767
Al	27	1	He	1320.220339	0.3	349736.687
Si	28	2	H2	668.497484	3.2	1967761.960
K	39	1	He	1318.026182	0.4	1081019.933
Ca	43	1	He	1315.775062	0.5	2978.780
Ti	47	1	He	25.740291	1.5	6224.323
V	51	1	He	25.569470	0.5	173192.777
Cr	52	1	He	26.150246	0.5	212974.633
Mn	55	1	He	26.523009	0.5	159594.083
Fe	56	1	He	664.195189	0.8	5127480.000
Co	59	1	He	26.547964	0.4	334790.280
Ni	60	1	He	26.790375	1.2	84793.470
Cu	63	1	He	26.957865	0.5	234489.793
Zn	66	1	He	26.463244	0.4	52642.247
As	75	1	He	25.719711	0.9	45095.623
Se	78	2	H2	26.060952	1.2	19985.810
Sr	88	1	He	25.891168	0.5	289960.067
Mo	95	1	He	24.845980	1.8	144910.733
Pd	105	1	He	25.963734	0.3	225025.153
Ag	107	1	He	12.720899	2.6	236661.977
Cd	111	1	He	25.745889	1.4	88945.123
Sn	118	1	He	25.131630	1.1	219935.617
Sb	121	1	He	24.953471	1.2	318691.933
Ba	138	1	He	25.066315	0.8	696019.467
Pt	195	1	He	25.760750	1.1	286973.050
Hg	202	1	He	0.501386	2.1	2876.647
Tl	205	1	He	13.096247	2.9	520453.243
Pb	208	1	He	26.203844	1.5	1418737.830
Bi	209	1	He	26.749099	1.4	1194571.467
Th	232	1	He	25.700295	0.5	1455586.540
U	238	1	He	25.756992	1.2	1395284.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.44665374	592379.853
Sc	45	2	H2	97.25154668	4489003.833
Ge	72	1	He	98.48399635	481842.187
Ge	72	2	H2	98.25458857	1511844.543
In	115	1	He	98.41404738	5462019.753
Tb	159	1	He	98.14813845	12470634.400
Ir	193	1	He	97.70753063	6101421.367

Sample Name CAL4  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 023CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:54:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	105.982690	0.6	39617.060
Be	9	2	H2	101.823802	1.1	38982.820
B	11	2	H2	101.534451	0.9	37456.387
Na	23	1	He	5146.474536	2.8	4808656.805
Mg	24	1	He	5129.734647	2.8	2671683.865
Al	27	1	He	5109.060625	3.1	1336851.000
Si	28	2	H2	2575.247964	0.6	7529733.000
K	39	1	He	5056.206627	2.5	3899651.500
Ca	43	1	He	5045.143633	3.2	11243.950
Ti	47	1	He	100.876556	2.6	24093.645
V	51	1	He	100.587838	2.2	674624.205
Cr	52	1	He	101.449666	2.3	809742.470
Mn	55	1	He	102.303616	2.4	606997.940
Fe	56	1	He	2561.782627	2.6	19499424.000
Co	59	1	He	100.914450	1.4	1270441.810
Ni	60	1	He	102.318671	1.6	320964.160
Cu	63	1	He	102.045283	2.0	885752.630
Zn	66	1	He	102.370557	2.2	202764.235
As	75	1	He	99.442182	1.3	173773.290
Se	78	2	H2	101.558340	1.7	77264.643
Sr	88	1	He	100.452578	2.1	1122939.635
Mo	95	1	He	98.181170	2.8	564156.000
Pd	105	1	He	99.753798	2.6	851068.815
Ag	107	1	He	50.175425	3.7	919276.315
Cd	111	1	He	100.838072	2.7	343191.580
Sn	118	1	He	98.603177	2.9	849876.315
Sb	121	1	He	97.434876	2.7	1225869.825
Ba	138	1	He	97.560341	1.9	2668838.240
Pt	195	1	He	99.674879	1.9	1107776.125
Hg	202	1	He	1.980865	1.1	10787.865
Tl	205	1	He	50.339698	0.6	1995880.440
Pb	208	1	He	101.403458	1.2	5473021.670
Bi	209	1	He	102.334354	1.3	4554706.025
Th	232	1	He	99.251826	2.5	5605031.795
U	238	1	He	100.275397	1.7	5416338.665

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.28588379	585395.190
Sc	45	2	H2	97.11197382	4482561.333
Ge	72	1	He	98.35390550	481205.705
Ge	72	2	H2	97.56150946	1501180.127
In	115	1	He	96.98579448	5382751.135
Tb	159	1	He	97.97655846	12448833.565
Ir	193	1	He	97.48447873	6087492.720

Sample Name CAL5  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 024CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 08:58:00  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	258.841947	0.8	97146.493
Be	9	2	H2	249.115302	1.0	95854.660
B	11	2	H2	249.297092	0.5	90638.333
Na	23	1	He	12732.60690	0.9	11708630.660
Mg	24	1	He	12730.67463	0.7	6524704.903
Al	27	1	He	12694.05441	0.7	3273252.000
Si	28	2	H2	6215.438398	0.7	18255154.000
K	39	1	He	12614.12365	0.7	9484536.317
Ca	43	1	He	12632.81292	1.1	27725.293
Ti	47	1	He	253.142876	0.4	59579.123
V	51	1	He	253.091229	0.4	1673466.827
Cr	52	1	He	252.862124	0.6	1985567.960
Mn	55	1	He	252.163544	0.8	1473753.000
Fe	56	1	He	6383.529129	1.0	47861705.333
Co	59	1	He	252.308896	1.4	3110505.833
Ni	60	1	He	254.070702	1.3	779284.980
Cu	63	1	He	253.598353	1.0	2155479.000
Zn	66	1	He	253.445662	1.0	491345.903
As	75	1	He	250.379652	1.4	428303.607
Se	78	2	H2	250.955426	1.3	191612.317
Sr	88	1	He	251.708439	1.3	2755464.853
Mo	95	1	He	247.122162	1.4	1383755.707
Pd	105	1	He	252.102612	1.1	2095654.397
Ag	107	1	He	125.671050	1.4	2243746.580
Cd	111	1	He	252.168294	1.3	836318.780
Sn	118	1	He	250.291321	1.2	2102209.603
Sb	121	1	He	248.576419	0.9	3047688.497
Ba	138	1	He	249.289855	1.2	6644941.983
Pt	195	1	He	248.896848	0.8	2752110.750
Hg	202	1	He	4.997132	1.2	26790.520
Tl	205	1	He	125.512978	0.1	4950245.760
Pb	208	1	He	250.817033	0.5	13464817.197
Bi	209	1	He	253.526088	0.2	11180588.997
Th	232	1	He	250.741444	0.7	14033654.790
U	238	1	He	250.141257	0.5	13389411.050

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.85104038	576761.353
Sc	45	2	H2	97.66839489	4508245.000
Ge	72	1	He	96.32439338	471276.127
Ge	72	2	H2	97.92381177	1506754.877
In	115	1	He	94.49283661	5244390.957
Tb	159	1	He	97.47264353	12384806.483
Ir	193	1	He	96.60026983	6032277.620

Sample Name CAL6  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 025CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:03:30  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	494.256608	0.8	189858.737
Be	9	2	H2	478.163614	0.9	188372.213
B	11	2	H2	485.173719	0.9	179405.090
Na	23	1	He	25119.31247	0.3	23286279.650
Mg	24	1	He	25097.40484	0.6	12966286.060
Al	27	1	He	25010.08737	0.2	6503993.333
Si	28	2	H2	11779.81034	0.7	35416380.000
K	39	1	He	24873.79791	0.5	18794955.970
Ca	43	1	He	24981.84800	0.3	55282.837
Ti	47	1	He	498.216174	0.2	118256.133
V	51	1	He	498.307347	0.7	3323353.057
Cr	52	1	He	498.220789	0.4	3943264.167
Mn	55	1	He	498.379559	0.4	2937217.917
Fe	56	1	He	12560.61017	0.6	94966770.667
Co	59	1	He	498.582773	0.7	6178744.000
Ni	60	1	He	497.408145	1.2	1532778.960
Cu	63	1	He	497.690856	0.9	4252033.167
Zn	66	1	He	497.724679	0.8	969770.480
As	75	1	He	499.886209	0.7	859493.623
Se	78	2	H2	499.156947	1.4	388028.250
Sr	88	1	He	499.010223	1.0	5491169.500
Mo	95	1	He	501.811899	0.6	2817057.083
Pd	105	1	He	498.948790	0.7	4157937.647
Ag	107	1	He	249.620607	0.9	4468059.727
Cd	111	1	He	498.710537	0.4	1658203.010
Sn	118	1	He	500.128449	0.5	4211263.893
Sb	121	1	He	501.228611	0.2	6160837.617
Ba	138	1	He	500.840649	0.2	13384108.550
Pt	195	1	He	500.579002	0.7	5620947.167
Hg	202	1	He	10.004988	0.5	54281.357
Tl	205	1	He	249.646057	0.6	9998925.267
Pb	208	1	He	499.250042	0.1	27216436.467
Bi	209	1	He	497.681640	0.2	22444866.333
Th	232	1	He	499.745272	0.4	28604835.407
U	238	1	He	499.836603	0.3	27361818.757

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.66615011	581666.087
Sc	45	2	H2	100.0187974	4616736.500
Ge	72	1	He	96.82518637	473726.303
Ge	72	2	H2	99.70479150	1534158.833
In	115	1	He	94.72766383	5257423.963
Tb	159	1	He	98.99107154	12577736.893
Ir	193	1	He	98.79456728	6169302.200

Sample Name CAL7  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 026CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:08:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.264570	13.1	225.167
Be	9	2	H2	0.214977	1.0	134.833
B	11	2	H2	1.625186	9.5	1971.797
Na	23	1	He	49865.57118	1.0	46774354.307
Mg	24	1	He	49878.33113	1.2	26073306.277
Al	27	1	He	49933.73308	0.9	13142509.000
Si	28	2	H2	22477.98602	0.7	70066773.333
K	39	1	He	50027.20306	1.0	38186427.767
Ca	43	1	He	49969.66306	1.8	111888.777
Ti	47	1	He	2.477713	4.1	597.343
V	51	1	He	0.138420	38.8	429.033
Cr	52	1	He	0.263937	8.1	4406.013
Mn	55	1	He	0.652433	2.3	4311.317
Fe	56	1	He	24929.12553	1.5	190732608.000
Co	59	1	He	0.694011	2.3	8775.327
Ni	60	1	He	1.121207	2.4	4315.987
Cu	63	1	He	0.321868	3.9	2988.320
Zn	66	1	He	1.615293	3.2	3357.733
As	75	1	He	0.135733	7.0	354.003
Se	78	2	H2	0.097435	22.3	104.333
Sr	88	1	He	0.553163	2.3	6263.093
Mo	95	1	He	0.099997	5.6	584.013
Pd	105	1	He	0.082543	12.1	936.710
Ag	107	1	He	0.113468	8.4	2185.190
Cd	111	1	He	0.042315	1.6	160.560
Sn	118	1	He	0.885145	1.6	7558.777
Sb	121	1	He	0.162163	7.9	2068.510
Ba	138	1	He	0.074546	0.7	2135.183
Pt	195	1	He	0.014867	12.5	364.010
Hg	202	1	He	0.048079	4.9	454.677
Tl	205	1	He	0.062144	23.8	3027.050
Pb	208	1	He	0.229307	2.9	15358.493
Bi	209	1	He	0.030521	17.8	3067.087
Th	232	1	He	0.216923	3.6	13121.697
U	238	1	He	0.039225	5.5	3118.733

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.84454323	588756.793
Sc	45	2	H2	103.7175413	4787465.667
Ge	72	1	He	97.04263477	474790.190
Ge	72	2	H2	101.6495049	1564082.163
In	115	1	He	94.91676346	5267919.070
Tb	159	1	He	99.83150912	12684522.310
Ir	193	1	He	97.97600361	6118186.367

Sample Name ICV  
 Sample Type ICV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 027\_ICV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:13:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.548565	0.5	33252.143
Be	9	2	H2	82.142909	0.5	33072.977
B	11	2	H2	81.418176	1.0	31842.253
Na	23	1	He	1027.784832	0.2	1014862.877
Mg	24	1	He	1024.320714	0.2	564282.660
Al	27	1	He	1022.343951	0.7	280324.760
Si	28	2	H2	522.115987	0.9	1617962.913
K	39	1	He	1020.521040	0.7	882758.687
Ca	43	1	He	1016.371836	1.7	2384.850
Ti	47	1	He	81.988764	0.8	20514.587
V	51	1	He	81.185266	0.8	570286.153
Cr	52	1	He	82.598116	0.9	691069.353
Mn	55	1	He	82.171722	0.7	510823.613
Fe	56	1	He	519.001785	0.6	4149916.667
Co	59	1	He	84.027518	0.3	1100353.460
Ni	60	1	He	84.225728	0.3	274984.127
Cu	63	1	He	84.415297	0.9	762181.187
Zn	66	1	He	82.980902	0.5	171003.920
As	75	1	He	81.027799	0.5	147301.107
Se	78	2	H2	81.874591	0.9	65508.943
Sr	88	1	He	82.422345	0.1	958440.767
Mo	95	1	He	79.169634	1.2	474923.857
Pd	105	1	He	82.914493	0.9	738547.357
Ag	107	1	He	41.184641	2.7	787768.713
Cd	111	1	He	81.432138	1.2	289335.353
Sn	118	1	He	79.084086	1.7	711621.733
Sb	121	1	He	79.611025	1.1	1045679.100
Ba	138	1	He	79.247385	1.1	2263029.707
Pt	195	1	He	82.181071	0.6	955362.520
Hg	202	1	He	3.839880	0.8	21685.940
Tl	205	1	He	42.353725	1.4	1756245.187
Pb	208	1	He	82.721100	1.2	4669958.210
Bi	209	1	He	82.840351	0.8	3888071.293
Th	232	1	He	76.921889	0.2	4581223.890
U	238	1	He	80.124123	1.2	4563835.453

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.8900118	613099.460
Sc	45	2	H2	102.1017567	4712883.167
Ge	72	1	He	102.2992105	500508.480
Ge	72	2	H2	102.5932611	1578603.750
In	115	1	He	101.2265890	5618116.963
Tb	159	1	He	102.4687322	13019606.057
Ir	193	1	He	102.7801190	6418183.027



Sample Name ICB  
 Sample Type ICB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 028\_ICB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:18:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.144334	14.6	173.833
Be	9	2	H2	0.116729	10.9	92.833
B	11	2	H2	0.961528	9.8	1685.597
Na	23	1	He	2.324639	22.8	13124.187
Mg	24	1	He	-2.881599		5114.250
Al	27	1	He	0.125192	27.6	123.667
Si	28	2	H2	4.215086	16.9	29032.127
K	39	1	He	-0.119772		71910.903
Ca	43	1	He	-0.282745		13.817
Ti	47	1	He	-0.001441		2.000
V	51	1	He	0.066846	137.3	-52.400
Cr	52	1	He	0.008860	61.9	2431.547
Mn	55	1	He	-0.006829		390.677
Fe	56	1	He	0.246849	15.8	16190.967
Co	59	1	He	0.006855	32.8	248.000
Ni	60	1	He	-0.074316		648.020
Cu	63	1	He	0.009745	18.6	326.007
Zn	66	1	He	0.002636	226.1	216.000
As	75	1	He	0.006837	130.3	136.500
Se	78	2	H2	0.003193	257.8	30.000
Sr	88	1	He	-0.001358		151.667
Mo	95	1	He	0.008730	7.5	75.333
Pd	105	1	He	0.042444	37.5	641.687
Ag	107	1	He	0.049144	16.4	1101.720
Cd	111	1	He	0.003588	28.9	33.657
Sn	118	1	He	0.005422	25.8	146.667
Sb	121	1	He	0.001068	32.6	90.000
Ba	138	1	He	0.002606	106.7	223.337
Pt	195	1	He	0.002099	113.0	222.000
Hg	202	1	He	0.025187	18.8	334.003
Tl	205	1	He	0.019541	22.3	1326.743
Pb	208	1	He	0.007974	44.3	3235.167
Bi	209	1	He	0.003042	169.8	1933.503
Th	232	1	He	0.010504	17.6	1480.097
U	238	1	He	0.001394	161.4	1116.723

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.5593131	605092.290
Sc	45	2	H2	101.6822546	4693519.500
Ge	72	1	He	100.4196029	491312.323
Ge	72	2	H2	102.5245613	1577546.667
In	115	1	He	101.2682879	5620431.270
Tb	159	1	He	101.1416847	12850992.310
Ir	193	1	He	102.8156733	6420403.237

Sample Name ICB  
 Sample Type ICB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 029\_ICB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:23:43  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.097692	5.0	153.500
Be	9	2	H2	0.065957	15.2	71.500
B	11	2	H2	0.634737	20.7	1541.920
Na	23	1	He	1.161559	13.0	11974.890
Mg	24	1	He	-2.571591		5267.640
Al	27	1	He	0.144573	61.6	128.667
Si	28	2	H2	1.998305	10.9	21969.093
K	39	1	He	0.128547	877.6	71927.487
Ca	43	1	He	0.021632	4120.8	14.467
Ti	47	1	He	-0.001411		2.000
V	51	1	He	0.020549	390.5	-377.940
Cr	52	1	He	0.006226	124.9	2403.537
Mn	55	1	He	-0.008287		380.677
Fe	56	1	He	0.117008	8.3	15133.190
Co	59	1	He	0.003269	45.4	202.000
Ni	60	1	He	-0.097678		573.347
Cu	63	1	He	0.004466	69.2	279.333
Zn	66	1	He	0.004889	102.7	220.667
As	75	1	He	0.003206	198.3	130.167
Se	78	2	H2	-0.002902		24.667
Sr	88	1	He	0.001567	53.0	185.000
Mo	95	1	He	0.003506	24.0	44.000
Pd	105	1	He	0.017922	54.8	423.343
Ag	107	1	He	0.010265	35.5	358.343
Cd	111	1	He	0.003019	45.7	31.657
Sn	118	1	He	0.003387	135.5	128.333
Sb	121	1	He	0.000814	73.1	86.667
Ba	138	1	He	0.000399	117.0	160.000
Pt	195	1	He	0.003386	35.2	238.000
Hg	202	1	He	0.019106	14.4	301.667
Tl	205	1	He	0.005528	5.1	758.363
Pb	208	1	He	0.004250	86.4	3038.483
Bi	209	1	He	-0.000347		1776.817
Th	232	1	He	0.004649	50.3	1133.393
U	238	1	He	-0.000900		988.377

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.3098815	603591.393
Sc	45	2	H2	100.2916135	4629329.333
Ge	72	1	He	100.4245934	491336.740
Ge	72	2	H2	100.7042003	1549536.750
In	115	1	He	101.2933153	5621820.297
Tb	159	1	He	101.4905867	12895323.557
Ir	193	1	He	103.0489223	6434968.650

Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 030CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:27:29  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.550873	2.5	331.667
Be	9	2	H2	0.236478	13.5	140.500
B	11	2	H2	10.079753	2.3	5075.687
Na	23	1	He	54.337278	1.5	63338.577
Mg	24	1	He	28.466528	2.3	21982.900
Al	27	1	He	31.636258	0.5	8658.850
Si	28	2	H2	102.179057	0.8	327535.033
K	39	1	He	104.500712	1.6	154032.800
Ca	43	1	He	110.823029	1.9	269.833
Ti	47	1	He	1.075997	3.0	268.333
V	51	1	He	1.089660	5.8	7050.953
Cr	52	1	He	2.030788	0.5	19093.087
Mn	55	1	He	0.540715	3.8	3751.157
Fe	56	1	He	52.190648	0.5	425202.157
Co	59	1	He	0.536228	3.0	7045.050
Ni	60	1	He	0.448398	5.8	2315.527
Cu	63	1	He	1.104717	0.7	10018.793
Zn	66	1	He	5.323998	1.6	10956.820
As	75	1	He	0.497512	1.4	1010.537
Se	78	2	H2	0.525959	5.1	445.010
Sr	88	1	He	0.516263	2.1	6052.993
Mo	95	1	He	0.484297	1.2	2912.977
Pd	105	1	He	0.531038	1.5	4965.917
Ag	107	1	He	0.407265	3.6	7897.270
Cd	111	1	He	0.079974	3.1	303.477
Sn	118	1	He	0.493589	3.1	4515.763
Sb	121	1	He	0.490203	3.0	6479.887
Ba	138	1	He	0.300681	1.0	8689.463
Pt	195	1	He	0.501480	2.6	5895.980
Hg	202	1	He	0.225470	2.7	1427.410
Tl	205	1	He	0.092464	8.9	4274.057
Pb	208	1	He	0.515034	2.1	31182.637
Bi	209	1	He	0.515828	2.8	25508.223
Th	232	1	He	0.485016	2.2	29187.673
U	238	1	He	0.491601	0.2	28504.623

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.6830614	605836.917
Sc	45	2	H2	101.4356741	4682137.667
Ge	72	1	He	100.3275679	490862.033
Ge	72	2	H2	101.9177671	1568209.917
In	115	1	He	100.6974909	5588751.800
Tb	159	1	He	100.2040812	12731861.060
Ir	193	1	He	100.9114475	6301492.403

Sample Name ICSA  
 Sample Type ICSA  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 031ICSA.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:31:14  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.170846	14.8	180.167
Be	9	2	H2	0.017579	97.6	52.000
B	11	2	H2	0.371501	25.0	1433.237
Na	23	1	He	25527.40694	0.6	23809203.810
Mg	24	1	He	25226.26720	0.4	13112663.133
Al	27	1	He	25304.33782	0.4	6620743.667
Si	28	2	H2	16.744713	1.0	65851.880
K	39	1	He	25488.36988	0.5	19375303.877
Ca	43	1	He	25023.75453	0.5	55714.007
Ti	47	1	He	510.236195	0.7	121848.237
V	51	1	He	0.095416	80.1	137.600
Cr	52	1	He	0.250263	3.0	4272.633
Mn	55	1	He	0.035288	5.5	627.353
Fe	56	1	He	25707.23470	0.6	195537712.000
Co	59	1	He	0.057683	10.9	870.027
Ni	60	1	He	-0.068049		644.687
Cu	63	1	He	0.077486	4.2	894.030
Zn	66	1	He	0.227582	9.9	647.350
As	75	1	He	0.035117	10.2	180.500
Se	78	2	H2	0.051212	24.2	67.333
Sr	88	1	He	0.235652	5.9	2756.960
Mo	95	1	He	527.163121	1.1	2968431.250
Pd	105	1	He	0.001150	333.3	256.670
Ag	107	1	He	0.038406	12.4	841.700
Cd	111	1	He	-0.000274		18.690
Sn	118	1	He	0.025043	18.3	303.343
Sb	121	1	He	0.013409	31.1	236.670
Ba	138	1	He	0.019921	11.1	673.353
Pt	195	1	He	0.000879	182.9	202.667
Hg	202	1	He	0.004809	32.2	215.667
Tl	205	1	He	0.012488	9.5	1011.720
Pb	208	1	He	0.001907	38.7	2820.133
Bi	209	1	He	0.000734	386.3	1720.143
Th	232	1	He	0.010535	10.1	1398.417
U	238	1	He	0.003342	36.9	1158.397

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.25799848	585227.397
Sc	45	2	H2	99.46161092	4591017.500
Ge	72	1	He	96.93216780	474249.720
Ge	72	2	H2	101.1059948	1555719.167
In	115	1	He	95.01797293	5273536.237
Tb	159	1	He	98.36601894	12498318.143
Ir	193	1	He	97.02445793	6058766.370

Sample Name ICSAB  
 Sample Type ICSB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 032ICSB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:35:02  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	100.345976	1.0	39093.360
Be	9	2	H2	100.391156	1.2	40050.413
B	11	2	H2	95.666139	0.9	36851.230
Na	23	1	He	27398.40612	0.4	26103452.943
Mg	24	1	He	27078.14413	0.4	14377688.953
Al	27	1	He	27128.94328	0.6	7250790.333
Si	28	2	H2	1271.272911	0.4	3881487.000
K	39	1	He	27317.71198	0.3	21207786.350
Ca	43	1	He	27277.09162	0.4	62037.233
Ti	47	1	He	604.438110	0.7	147451.297
V	51	1	He	99.746288	0.6	683296.050
Cr	52	1	He	99.966688	0.2	815044.897
Mn	55	1	He	100.513713	0.1	609173.750
Fe	56	1	He	26292.57424	0.5	204293989.333
Co	59	1	He	101.790715	0.1	1292122.210
Ni	60	1	He	102.596022	0.6	324508.230
Cu	63	1	He	100.873390	0.1	882877.687
Zn	66	1	He	100.866336	0.4	201453.640
As	75	1	He	100.040976	0.2	176271.173
Se	78	2	H2	101.197630	0.5	80545.800
Sr	88	1	He	99.930491	0.5	1126412.717
Mo	95	1	He	622.214445	0.7	3535395.000
Pd	105	1	He	99.438811	0.4	838937.020
Ag	107	1	He	49.610629	0.1	898920.873
Cd	111	1	He	100.553983	0.4	338418.100
Sn	118	1	He	99.422801	0.5	847417.797
Sb	121	1	He	99.456363	0.5	1237376.153
Ba	138	1	He	100.463795	0.3	2717464.230
Pt	195	1	He	98.827795	0.7	1110743.707
Hg	202	1	He	4.029034	0.6	21992.450
Tl	205	1	He	49.454759	0.5	1982779.033
Pb	208	1	He	98.841107	0.5	5394812.603
Bi	209	1	He	109.218885	0.5	4876826.387
Th	232	1	He	104.643962	1.0	5928974.703
U	238	1	He	100.264388	0.2	5433517.837

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.35032416	597817.480
Sc	45	2	H2	101.1963186	4671089.333
Ge	72	1	He	99.16674872	485182.617
Ge	72	2	H2	102.0599946	1570398.373
In	115	1	He	95.87999873	5321379.020
Tb	159	1	He	99.07196880	12588015.643
Ir	193	1	He	97.78965860	6106549.910

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 033\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:38:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.670648	1.1	32941.807
Be	9	2	H2	81.472992	1.1	32837.140
B	11	2	H2	79.766353	1.4	31255.013
Na	23	1	He	1018.776745	0.7	1007691.990
Mg	24	1	He	1019.927303	1.1	562810.017
Al	27	1	He	1013.662157	0.5	278392.480
Si	28	2	H2	509.750283	1.1	1581678.080
K	39	1	He	1021.949328	0.7	885321.393
Ca	43	1	He	1040.163524	2.2	2444.217
Ti	47	1	He	81.509471	1.1	20427.460
V	51	1	He	81.480712	0.8	573284.017
Cr	52	1	He	82.631036	1.0	692454.103
Mn	55	1	He	81.739839	0.6	508961.750
Fe	56	1	He	515.555275	0.2	4129195.750
Co	59	1	He	83.752673	0.3	1095692.790
Ni	60	1	He	84.712798	0.7	276293.187
Cu	63	1	He	84.365785	0.2	761015.603
Zn	66	1	He	82.727393	0.3	170316.593
As	75	1	He	80.330688	0.2	145894.783
Se	78	2	H2	82.060025	0.4	65715.900
Sr	88	1	He	81.488923	0.7	946653.710
Mo	95	1	He	79.216928	0.7	474622.407
Pd	105	1	He	82.781938	1.0	736445.223
Ag	107	1	He	41.286860	0.5	788837.567
Cd	111	1	He	81.286960	0.7	288464.077
Sn	118	1	He	78.294970	0.3	703694.027
Sb	121	1	He	79.115240	0.8	1037890.220
Ba	138	1	He	78.821299	0.4	2248102.933
Pt	195	1	He	81.290343	0.3	940295.250
Hg	202	1	He	3.857782	0.8	21677.917
Tl	205	1	He	41.894181	1.3	1728572.630
Pb	208	1	He	81.736216	0.7	4591461.703
Bi	209	1	He	82.525418	0.5	3840258.483
Th	232	1	He	76.928364	0.6	4542452.747
U	238	1	He	79.243142	0.5	4475128.060

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.0565979	614101.853
Sc	45	2	H2	102.2127867	4718008.167
Ge	72	1	He	102.1991866	500019.103
Ge	72	2	H2	102.6796839	1579933.540
In	115	1	He	101.0977273	5610965.083
Tb	159	1	He	101.9548974	12954318.560
Ir	193	1	He	101.9018870	6363341.153

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 034\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:42:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.098632	14.2	158.000
Be	9	2	H2	0.069353	15.4	74.833
B	11	2	H2	0.772284	0.8	1635.590
Na	23	1	He	1.597327	8.0	12635.413
Mg	24	1	He	-4.661382		4228.963
Al	27	1	He	0.156337	19.0	134.333
Si	28	2	H2	0.185919	83.4	16948.397
K	39	1	He	-0.469448		72851.997
Ca	43	1	He	-0.256875		14.100
Ti	47	1	He	0.009070	25.2	4.667
V	51	1	He	0.039135	92.3	-251.847
Cr	52	1	He	-0.001919		2382.200
Mn	55	1	He	-0.016837		334.673
Fe	56	1	He	0.445524	1.5	18055.143
Co	59	1	He	0.002053	95.2	190.000
Ni	60	1	He	-0.133729		467.343
Cu	63	1	He	0.004238	35.0	282.667
Zn	66	1	He	0.003518	472.8	222.000
As	75	1	He	0.002231	364.5	130.833
Se	78	2	H2	0.006713	36.7	33.333
Sr	88	1	He	-0.001744		150.000
Mo	95	1	He	0.022422	10.7	158.667
Pd	105	1	He	0.020225	37.8	446.677
Ag	107	1	He	0.083258	23.6	1768.463
Cd	111	1	He	0.002766	66.5	30.970
Sn	118	1	He	0.010996	20.6	198.333
Sb	121	1	He	0.003286	89.8	120.000
Ba	138	1	He	0.002155	69.7	211.670
Pt	195	1	He	0.001642	85.3	220.000
Hg	202	1	He	0.021419	27.4	317.670
Tl	205	1	He	0.027423	18.6	1673.457
Pb	208	1	He	-0.002164		2708.463
Bi	209	1	He	-0.000825		1750.147
Th	232	1	He	0.011021	10.9	1510.100
U	238	1	He	-0.001142		971.713

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.2617514	615336.317
Sc	45	2	H2	102.9878773	4753785.333
Ge	72	1	He	102.4104521	501052.740
Ge	72	2	H2	104.2734876	1604457.417
In	115	1	He	102.0134488	5661788.000
Tb	159	1	He	102.4735332	13020216.057
Ir	193	1	He	102.7926266	6418964.070

Sample Name 4315579\_B70071Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 035\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:47:03  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.118881	6.3	165.167
Be	9	2	H2	0.043089	26.9	63.833
B	11	2	H2	2.338432	5.0	2216.330
Na	23	1	He	7.233714	2.4	18067.653
Mg	24	1	He	-2.099002		5601.093
Al	27	1	He	6.662014	2.6	1914.457
Si	28	2	H2	3.409238	1.8	26788.010
K	39	1	He	0.728968	76.1	73431.527
Ca	43	1	He	7.932500	38.8	33.117
Ti	47	1	He	0.194681	13.7	51.000
V	51	1	He	0.107338	13.1	228.100
Cr	52	1	He	0.167253	8.4	3778.497
Mn	55	1	He	0.051990	9.6	760.020
Fe	56	1	He	2.885920	2.0	37380.240
Co	59	1	He	0.040048	1.2	676.020
Ni	60	1	He	-0.104232		553.343
Cu	63	1	He	0.060618	9.7	778.023
Zn	66	1	He	0.910833	2.5	2054.820
As	75	1	He	0.171735	3.5	431.343
Se	78	2	H2	0.170594	3.7	165.333
Sr	88	1	He	0.042046	16.1	648.353
Mo	95	1	He	0.197573	6.5	1212.057
Pd	105	1	He	0.031054	22.8	541.680
Ag	107	1	He	0.032345	7.2	783.360
Cd	111	1	He	0.037446	7.9	154.450
Sn	118	1	He	0.072738	13.3	755.027
Sb	121	1	He	0.146890	4.2	2011.830
Ba	138	1	He	0.033547	8.1	1110.057
Pt	195	1	He	0.017699	4.7	405.343
Hg	202	1	He	0.010306	17.6	254.667
Tl	205	1	He	0.030732	8.4	1805.137
Pb	208	1	He	0.026671	6.0	4321.957
Bi	209	1	He	0.022978	8.3	2867.040
Th	232	1	He	0.015529	4.0	1778.473
U	238	1	He	0.024372	5.3	2425.247

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.7420797	612209.313
Sc	45	2	H2	102.4785402	4730275.000
Ge	72	1	He	100.6027041	492208.163
Ge	72	2	H2	103.5347774	1593090.873
In	115	1	He	101.5682164	5637077.420
Tb	159	1	He	102.1580276	12980128.143
Ir	193	1	He	102.7943881	6419074.070



Sample Name 10607356001\_B70071Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 036SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:50:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	116.391616	1.5	46241.557
Be	9	2	H2	0.060718	18.5	71.500
B	11	2	H2	1511.896101	0.9	574231.933
Na	23	1	He	200650.8461	4.7	186445363.890
Mg	24	1	He	7389.627036	4.6	3832888.900
Al	27	1	He	2.738019	7.8	800.353
Si	28	2	H2	2113.493751	1.0	6572530.500
K	39	1	He	2073.562786	5.0	1634675.600
Ca	43	1	He	54830.08800	4.7	121650.960
Ti	47	1	He	0.090780	46.2	23.667
V	51	1	He	3.840993	5.2	25187.033
Cr	52	1	He	0.466908	6.4	5979.233
Mn	55	1	He	3.997361	3.3	24044.380
Fe	56	1	He	1.586589	24.4	25725.117
Co	59	1	He	0.054670	9.2	823.360
Ni	60	1	He	0.118611	23.6	1206.720
Cu	63	1	He	0.118360	6.5	1230.723
Zn	66	1	He	1.172825	5.0	2464.220
As	75	1	He	0.738663	5.0	1376.567
Se	78	2	H2	4.018477	2.0	3301.050
Sr	88	1	He	1707.546573	5.0	18609385.973
Mo	95	1	He	1.459098	5.9	8042.297
Pd	105	1	He	1.081565	3.1	9072.977
Ag	107	1	He	0.019267	9.9	486.680
Cd	111	1	He	0.006502	36.8	40.217
Sn	118	1	He	0.036127	21.7	386.677
Sb	121	1	He	0.040960	1.6	563.353
Ba	138	1	He	8.497350	4.9	222556.553
Pt	195	1	He	0.001393	214.6	201.333
Hg	202	1	He	0.009206	19.3	231.000
Tl	205	1	He	0.011238	29.7	928.373
Pb	208	1	He	0.011641	5.5	3230.177
Bi	209	1	He	0.005070	12.5	1843.500
Th	232	1	He	0.010495	13.8	1343.420
U	238	1	He	7.611504	5.1	394811.257

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.03334280	583875.583
Sc	45	2	H2	103.2404625	4765444.333
Ge	72	1	He	95.99431080	469661.167
Ge	72	2	H2	104.4827416	1607677.210
In	115	1	He	92.88715915	5155275.203
Tb	159	1	He	94.94888774	12064139.823
Ir	193	1	He	93.51180972	5839416.370

Sample Name 4316208\_B70071Dx25  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 037SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:54:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	24.720786	3.5	9823.850
Be	9	2	H2	0.011909	82.6	51.167
B	11	2	H2	324.255430	3.2	123073.267
Na	23	1	He	39543.87504	0.9	39518471.913
Mg	24	1	He	1449.368035	0.2	813878.010
Al	27	1	He	2.155040	8.3	697.350
Si	28	2	H2	430.614887	2.9	1339862.710
K	39	1	He	401.497039	0.6	400525.747
Ca	43	1	He	10620.02659	0.5	25347.583
Ti	47	1	He	0.033361	70.1	11.000
V	51	1	He	0.797918	10.0	5198.160
Cr	52	1	He	0.107207	12.6	3359.060
Mn	55	1	He	0.781951	3.1	5415.683
Fe	56	1	He	0.825957	6.0	21501.103
Co	59	1	He	0.014264	10.3	352.007
Ni	60	1	He	-0.084524		630.683
Cu	63	1	He	0.048276	4.5	684.020
Zn	66	1	He	0.387063	5.0	1017.373
As	75	1	He	0.151942	2.9	405.177
Se	78	2	H2	0.820439	2.7	689.687
Sr	88	1	He	326.066253	1.1	3814137.030
Mo	95	1	He	0.278962	0.9	1694.110
Pd	105	1	He	0.207228	10.6	2105.183
Ag	107	1	He	0.004612	39.2	250.000
Cd	111	1	He	0.003230	73.2	32.360
Sn	118	1	He	0.016031	26.9	241.667
Sb	121	1	He	0.012388	18.7	238.337
Ba	138	1	He	1.616561	0.8	46250.503
Pt	195	1	He	-0.002004		174.667
Hg	202	1	He	0.000576	330.5	197.667
Tl	205	1	He	0.000468	97.7	546.683
Pb	208	1	He	0.017752	24.5	3770.227
Bi	209	1	He	0.003525	69.7	1886.843
Th	232	1	He	0.002892	72.1	990.050
U	238	1	He	1.458473	2.7	81170.153

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	104.2269939	627161.707
Sc	45	2	H2	102.3525690	4724460.333
Ge	72	1	He	102.9238124	503564.403
Ge	72	2	H2	103.5437055	1593228.250
In	115	1	He	101.0918711	5610640.067
Tb	159	1	He	100.7556084	12801937.727
Ir	193	1	He	99.22150443	6195962.617

Sample Name 4315581\_B70071Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 038SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 09:58:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	128.484619	1.1	51521.110
Be	9	2	H2	19.336099	1.1	7983.437
B	11	2	H2	1438.305144	1.1	551565.127
Na	23	1	He	180552.6297	1.0	175002277.393
Mg	24	1	He	7008.202888	1.1	3792015.360
Al	27	1	He	370.304895	1.0	100814.730
Si	28	2	H2	2068.320281	1.1	6493832.500
K	39	1	He	2200.733729	0.9	1805341.223
Ca	43	1	He	49179.29308	0.8	113819.237
Ti	47	1	He	19.298750	2.0	4793.787
V	51	1	He	22.705381	1.3	157891.290
Cr	52	1	He	19.127476	1.4	160628.973
Mn	55	1	He	21.523733	0.8	133097.093
Fe	56	1	He	368.261446	0.9	2926220.583
Co	59	1	He	19.297545	0.4	246437.137
Ni	60	1	He	19.219357	0.5	61839.707
Cu	63	1	He	18.906886	1.0	166587.410
Zn	66	1	He	19.503454	1.5	39337.730
As	75	1	He	19.850052	1.5	35268.483
Se	78	2	H2	23.353538	0.2	18917.710
Sr	88	1	He	1521.572668	1.0	17243534.327
Mo	95	1	He	20.420201	1.5	116192.650
Pd	105	1	He	4.632471	1.4	39366.457
Ag	107	1	He	8.354275	6.0	151718.037
Cd	111	1	He	18.551139	1.6	62529.927
Sn	118	1	He	18.449872	0.9	157523.120
Sb	121	1	He	18.600837	0.5	231759.587
Ba	138	1	He	26.129718	0.9	707763.610
Pt	195	1	He	3.650326	0.3	40878.973
Hg	202	1	He	0.003913	25.4	210.667
Tl	205	1	He	18.320119	1.4	728874.700
Pb	208	1	He	18.007539	0.8	977102.930
Bi	209	1	He	18.637247	1.0	819016.630
Th	232	1	He	19.168449	0.8	1067777.537
U	238	1	He	25.689479	0.8	1368539.927

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.1092759	608401.563
Sc	45	2	H2	104.2286116	4811056.000
Ge	72	1	He	99.71118046	487846.300
Ge	72	2	H2	103.7584591	1596532.667
In	115	1	He	95.99520167	5327772.830
Tb	159	1	He	98.26327492	12485263.560
Ir	193	1	He	96.07619841	5999551.580

Sample Name 4315582\_B70071Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 039SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:02:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	131.982697	1.5	53547.443
Be	9	2	H2	19.817175	1.1	8277.927
B	11	2	H2	1477.760658	1.6	573368.647
Na	23	1	He	180860.1353	1.8	178468310.677
Mg	24	1	He	7023.587135	1.4	3868991.503
Al	27	1	He	371.802852	1.4	103051.577
Si	28	2	H2	2117.775652	1.7	6727421.667
K	39	1	He	2205.164101	1.7	1841502.423
Ca	43	1	He	49393.20469	1.7	116378.767
Ti	47	1	He	19.041321	1.4	4815.123
V	51	1	He	22.449617	1.2	158930.337
Cr	52	1	He	19.179031	1.7	163964.057
Mn	55	1	He	21.566174	1.4	135769.340
Fe	56	1	He	369.352682	1.7	2987865.917
Co	59	1	He	19.195095	0.9	248765.593
Ni	60	1	He	19.092556	1.4	62348.523
Cu	63	1	He	18.856035	1.2	168599.750
Zn	66	1	He	19.504891	1.5	39922.640
As	75	1	He	19.732769	1.2	35579.407
Se	78	2	H2	23.712730	0.4	19315.563
Sr	88	1	He	1520.733311	0.9	17489223.907
Mo	95	1	He	20.220188	1.5	116179.227
Pd	105	1	He	4.606720	0.4	39535.387
Ag	107	1	He	8.544518	4.6	156646.653
Cd	111	1	He	18.617174	1.3	63363.957
Sn	118	1	He	18.509246	2.0	159576.010
Sb	121	1	He	18.690408	1.2	235158.830
Ba	138	1	He	26.336602	1.9	720335.663
Pt	195	1	He	3.632838	1.5	40780.670
Hg	202	1	He	-0.001814		180.333
Tl	205	1	He	18.503818	1.2	737872.827
Pb	208	1	He	18.233480	0.9	991601.927
Bi	209	1	He	18.603490	1.1	815813.970
Th	232	1	He	19.228303	0.9	1068839.670
U	238	1	He	25.901084	0.0	1376801.700

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.9387225	619409.833
Sc	45	2	H2	105.4668039	4868209.333
Ge	72	1	He	101.1901083	495082.093
Ge	72	2	H2	104.3369502	1605433.917
In	115	1	He	96.93831462	5380115.983
Tb	159	1	He	98.48753046	12513757.313
Ir	193	1	He	95.86879507	5986600.120

Sample Name 4315580\_B70071Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 040SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:05:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	109.535206	0.4	43975.653
Be	9	2	H2	107.192735	0.8	44077.363
B	11	2	H2	128.888882	0.7	50704.787
Na	23	1	He	2136.514861	0.4	2174042.417
Mg	24	1	He	2078.380750	0.8	1179362.923
Al	27	1	He	2077.024849	1.0	590113.313
Si	28	2	H2	532.782565	0.2	1686423.043
K	39	1	He	2082.795598	0.5	1788437.840
Ca	43	1	He	2100.829541	0.7	5092.410
Ti	47	1	He	102.988982	0.8	26704.803
V	51	1	He	102.604803	0.3	747093.980
Cr	52	1	He	105.042408	0.3	910150.440
Mn	55	1	He	103.959029	0.7	669639.607
Fe	56	1	He	2070.944544	0.4	17116756.000
Co	59	1	He	107.567779	0.2	1432535.583
Ni	60	1	He	108.805814	0.4	361001.670
Cu	63	1	He	106.576651	0.3	978616.730
Zn	66	1	He	107.101861	0.3	224408.183
As	75	1	He	103.916269	0.5	192089.723
Se	78	2	H2	104.690694	0.4	85371.633
Sr	88	1	He	104.312529	0.1	1233581.467
Mo	95	1	He	101.945881	1.2	611760.980
Pd	105	1	He	21.265816	0.6	189698.680
Ag	107	1	He	50.616648	0.8	968595.323
Cd	111	1	He	104.142531	0.8	370160.010
Sn	118	1	He	100.745990	0.9	906869.203
Sb	121	1	He	103.055317	1.6	1354016.803
Ba	138	1	He	102.713994	0.5	2934244.333
Pt	195	1	He	20.568251	1.3	238048.350
Hg	202	1	He	0.000341	300.5	198.667
Tl	205	1	He	106.034621	1.3	4374041.913
Pb	208	1	He	103.948995	0.2	5838359.030
Bi	209	1	He	104.297964	0.7	4821167.323
Th	232	1	He	103.665237	0.6	6080812.617
U	238	1	He	101.204505	0.2	5677836.583

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	105.5963762	635401.647
Sc	45	2	H2	104.3104958	4814835.667
Ge	72	1	He	104.0399791	509025.353
Ge	72	2	H2	104.5664483	1608965.207
In	115	1	He	101.2630448	5620140.277
Tb	159	1	He	101.9496997	12953658.143
Ir	193	1	He	101.2357590	6321744.283

Sample Name FiltBlk-050922\_B70071Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 041SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:09:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.326228	16.3	248.167
Be	9	2	H2	0.113948	14.0	93.000
B	11	2	H2	18.581786	1.1	8376.983
Na	23	1	He	27.919125	5.1	38915.647
Mg	24	1	He	-0.015381		6851.627
Al	27	1	He	15.325065	0.2	4360.977
Si	28	2	H2	9.358556	0.7	45382.097
K	39	1	He	4.309578	24.8	77612.717
Ca	43	1	He	20.439691	10.3	63.317
Ti	47	1	He	0.137298	19.9	37.333
V	51	1	He	0.127555	47.5	376.367
Cr	52	1	He	0.373871	1.6	5595.750
Mn	55	1	He	0.109368	5.0	1135.380
Fe	56	1	He	3.669538	0.9	44383.697
Co	59	1	He	0.064306	11.5	1008.040
Ni	60	1	He	-0.055081		724.687
Cu	63	1	He	0.130257	5.8	1424.077
Zn	66	1	He	1.223685	1.3	2741.600
As	75	1	He	0.081464	9.5	275.500
Se	78	2	H2	0.074076	14.1	86.667
Sr	88	1	He	0.092715	5.4	1251.737
Mo	95	1	He	0.093865	10.2	592.017
Pd	105	1	He	0.005849	29.1	318.343
Ag	107	1	He	0.157036	31.0	3192.073
Cd	111	1	He	0.055888	10.0	221.563
Sn	118	1	He	0.067286	9.5	710.027
Sb	121	1	He	0.064456	2.8	931.707
Ba	138	1	He	0.090174	4.0	2750.297
Pt	195	1	He	0.009396	26.8	307.340
Hg	202	1	He	-0.001201		189.333
Tl	205	1	He	0.056868	10.1	2867.007
Pb	208	1	He	0.057664	4.0	6028.880
Bi	209	1	He	0.062265	5.3	4717.587
Th	232	1	He	0.058316	6.3	4330.757
U	238	1	He	0.024635	2.2	2443.587

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.5347921	622996.543
Sc	45	2	H2	103.1051250	4759197.333
Ge	72	1	He	102.6078185	502018.373
Ge	72	2	H2	102.6700358	1579785.083
In	115	1	He	102.2416243	5674451.837
Tb	159	1	He	101.5328504	12900693.560
Ir	193	1	He	102.9305162	6427574.693

Sample Name BottleTopFilt-It-211125-345-A  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 042SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:13:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	-0.063035		98.667
Be	9	2	H2	-0.006988		46.000
B	11	2	H2	10.117676	1.8	5419.140
Na	23	1	He	18.936541	1.8	31142.500
Mg	24	1	He	-2.508830		5681.117
Al	27	1	He	1.065243	5.4	404.010
Si	28	2	H2	11.436645	0.8	54274.877
K	39	1	He	-1.620148		75602.210
Ca	43	1	He	23.759306	6.3	73.900
Ti	47	1	He	0.020788	54.3	8.000
V	51	1	He	0.001990	406.3	-539.957
Cr	52	1	He	0.090341	7.3	3315.047
Mn	55	1	He	-0.019940		331.337
Fe	56	1	He	0.306389	8.8	17805.520
Co	59	1	He	0.001463	121.7	189.333
Ni	60	1	He	-0.145249		446.010
Cu	63	1	He	0.030091	7.3	536.010
Zn	66	1	He	1.163634	3.8	2712.263
As	75	1	He	-0.014658		104.000
Se	78	2	H2	-0.010984		19.333
Sr	88	1	He	0.019845	22.2	416.677
Mo	95	1	He	0.005307	36.5	56.667
Pd	105	1	He	-0.021240		76.667
Ag	107	1	He	-0.000224		163.333
Cd	111	1	He	0.006357	12.7	44.990
Sn	118	1	He	0.008094	26.3	176.667
Sb	121	1	He	0.004024	56.5	133.333
Ba	138	1	He	0.010880	8.6	475.010
Pt	195	1	He	0.004437	53.4	256.667
Hg	202	1	He	0.000555	401.5	204.333
Tl	205	1	He	0.007011	32.0	841.703
Pb	208	1	He	-0.008942		2365.107
Bi	209	1	He	0.001291	302.8	1893.507
Th	232	1	He	-0.001478		783.367
U	238	1	He	-0.004884		776.700

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	107.4729822	646693.687
Sc	45	2	H2	107.9887813	4984620.500
Ge	72	1	He	106.3179412	520170.497
Ge	72	2	H2	106.6439632	1640931.953
In	115	1	He	104.7157696	5811767.910
Tb	159	1	He	104.2369157	13244270.217
Ir	193	1	He	105.1865606	6568455.110

Sample Name 10606181002\_B69934Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 043SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:17:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.424574	1.1	1042.873
Be	9	2	H2	0.016047	28.4	51.500
B	11	2	H2	16.743091	0.9	7426.157
Na	23	1	He	4709.780470	0.1	4482491.287
Mg	24	1	He	3027.404227	0.6	1608453.153
Al	27	1	He	2.770841	5.2	826.693
Si	28	2	H2	2168.590574	1.6	6510713.500
K	39	1	He	899.666403	0.1	764925.353
Ca	43	1	He	10080.94723	0.4	22866.980
Ti	47	1	He	0.059022	4.4	16.667
V	51	1	He	0.067397	24.1	-50.420
Cr	52	1	He	0.125414	6.1	3339.723
Mn	55	1	He	27.872214	0.4	168720.477
Fe	56	1	He	66.661469	0.3	530400.207
Co	59	1	He	0.007933	10.9	257.333
Ni	60	1	He	-0.060822		678.687
Cu	63	1	He	0.070082	7.0	845.360
Zn	66	1	He	0.532670	5.3	1264.057
As	75	1	He	0.175776	0.4	430.010
Se	78	2	H2	0.012692	20.2	36.667
Sr	88	1	He	36.671809	0.9	411244.020
Mo	95	1	He	0.272281	4.5	1619.433
Pd	105	1	He	0.020196	27.6	433.343
Ag	107	1	He	0.028641	31.3	693.360
Cd	111	1	He	0.004486	18.1	36.043
Sn	118	1	He	0.016376	29.2	240.000
Sb	121	1	He	0.007577	43.1	171.667
Ba	138	1	He	60.041413	0.3	1676856.487
Pt	195	1	He	-0.000341		190.667
Hg	202	1	He	-0.003612		172.000
Tl	205	1	He	0.004032	41.4	681.690
Pb	208	1	He	0.005712	18.3	3053.483
Bi	209	1	He	0.006548	41.6	1996.850
Th	232	1	He	0.011546	9.6	1468.430
U	238	1	He	0.005140	23.2	1266.737

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.04957524	596007.793
Sc	45	2	H2	99.68138537	4601162.000
Ge	72	1	He	98.63467103	482579.377
Ge	72	2	H2	100.0837420	1539989.750
In	115	1	He	98.99053948	5494015.300
Tb	159	1	He	99.25971905	12611871.060
Ir	193	1	He	97.91152099	6114159.700



Sample Name 10606181003\_B69934Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 044SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:21:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.509774	3.8	2198.660
Be	9	2	H2	0.015825	67.4	50.833
B	11	2	H2	51.835960	1.6	20041.580
Na	23	1	He	11462.86732	0.7	10802154.007
Mg	24	1	He	5940.315566	0.6	3123082.040
Al	27	1	He	3.205720	3.6	934.697
Si	28	2	H2	1630.936480	0.6	4846693.167
K	39	1	He	885.807286	0.8	747852.230
Ca	43	1	He	14545.23174	0.7	32708.130
Ti	47	1	He	0.080292	26.2	21.667
V	51	1	He	0.061054	165.6	-93.760
Cr	52	1	He	0.132723	15.5	3369.733
Mn	55	1	He	155.706670	0.9	932634.523
Fe	56	1	He	555.971171	0.7	4284045.333
Co	59	1	He	0.126144	3.4	1724.777
Ni	60	1	He	0.453764	4.9	2260.183
Cu	63	1	He	0.063735	6.1	778.690
Zn	66	1	He	0.506522	6.3	1194.720
As	75	1	He	5.974455	0.5	10433.920
Se	78	2	H2	0.017995	41.4	40.333
Sr	88	1	He	66.799023	0.7	738266.813
Mo	95	1	He	0.129081	1.0	762.687
Pd	105	1	He	0.038577	21.4	580.017
Ag	107	1	He	0.059199	3.5	1238.400
Cd	111	1	He	0.006030	26.9	40.527
Sn	118	1	He	0.024776	27.2	306.677
Sb	121	1	He	0.011069	24.9	211.667
Ba	138	1	He	50.559902	0.6	1381435.243
Pt	195	1	He	0.001424	121.5	209.333
Hg	202	1	He	-0.001554		182.000
Tl	205	1	He	0.004598	22.9	700.023
Pb	208	1	He	0.007923	26.3	3155.170
Bi	209	1	He	0.006366	54.1	1993.523
Th	232	1	He	0.009425	13.1	1351.750
U	238	1	He	0.005808	3.1	1306.747

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.21111992	590962.583
Sc	45	2	H2	98.58606250	4550603.333
Ge	72	1	He	97.22264699	475670.917
Ge	72	2	H2	98.89953705	1521768.373
In	115	1	He	96.84257196	5374802.227
Tb	159	1	He	98.63473859	12532461.477
Ir	193	1	He	98.18304327	6131115.117

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 045\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:24:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	86.711651	1.3	33324.983
Be	9	2	H2	83.518431	0.4	32863.187
B	11	2	H2	87.940871	1.1	33507.827
Na	23	1	He	1030.679397	1.0	999961.470
Mg	24	1	He	1024.748432	1.1	554686.257
Al	27	1	He	1015.645896	0.9	273636.187
Si	28	2	H2	512.815231	1.0	1553347.417
K	39	1	He	1020.430727	0.8	867324.283
Ca	43	1	He	1020.295131	1.2	2352.213
Ti	47	1	He	81.954429	0.9	20148.750
V	51	1	He	80.309694	0.4	554306.913
Cr	52	1	He	81.992710	0.7	674070.000
Mn	55	1	He	81.627701	0.3	498611.377
Fe	56	1	He	511.356766	0.5	4017820.333
Co	59	1	He	83.688364	0.1	1070065.960
Ni	60	1	He	83.998253	0.2	267770.717
Cu	63	1	He	84.316601	0.5	743356.773
Zn	66	1	He	83.011440	1.1	167032.970
As	75	1	He	80.604337	0.1	143078.030
Se	78	2	H2	82.314782	1.0	64055.380
Sr	88	1	He	82.180222	0.1	933080.143
Mo	95	1	He	78.479413	0.0	463789.103
Pd	105	1	He	82.652086	0.4	725265.220
Ag	107	1	He	40.478722	0.7	762844.180
Cd	111	1	He	80.593058	0.6	282096.090
Sn	118	1	He	78.084550	0.3	692206.500
Sb	121	1	He	78.865847	0.7	1020481.183
Ba	138	1	He	78.692735	0.3	2213785.383
Pt	195	1	He	81.730331	0.7	928537.853
Hg	202	1	He	3.826534	1.1	21121.703
Tl	205	1	He	42.191158	0.5	1709918.983
Pb	208	1	He	82.319310	0.3	4541945.950
Bi	209	1	He	82.222296	1.4	3790980.570
Th	232	1	He	76.429737	1.4	4471389.310
U	238	1	He	78.923017	1.5	4415965.870

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.1170858	602431.290
Sc	45	2	H2	99.78571748	4605977.833
Ge	72	1	He	99.88578314	488700.560
Ge	72	2	H2	99.77475050	1535235.293
In	115	1	He	99.71626070	5534293.123
Tb	159	1	He	100.1389311	12723583.143
Ir	193	1	He	100.9677898	6305010.743

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 046\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:29:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.096623	15.3	153.333
Be	9	2	H2	0.024339	35.4	55.167
B	11	2	H2	5.988422	1.9	3517.910
Na	23	1	He	5.950030	11.7	16312.283
Mg	24	1	He	-5.380282		3702.157
Al	27	1	He	0.054881	66.6	102.667
Si	28	2	H2	-0.031297		15886.667
K	39	1	He	1.958010	120.9	72187.027
Ca	43	1	He	-0.390807		13.350
Ti	47	1	He	0.000200	3275.4	2.333
V	51	1	He	0.097786	82.9	157.713
Cr	52	1	He	0.004625	207.1	2353.530
Mn	55	1	He	-0.008594		372.677
Fe	56	1	He	-0.052628		13584.990
Co	59	1	He	0.001619	80.7	177.333
Ni	60	1	He	-0.163662		356.007
Cu	63	1	He	0.001362	201.6	247.333
Zn	66	1	He	-0.002799		201.333
As	75	1	He	0.004625	40.3	130.167
Se	78	2	H2	-0.001623		25.667
Sr	88	1	He	0.008190	67.5	255.003
Mo	95	1	He	0.008536	25.3	72.000
Pd	105	1	He	0.003596	118.6	286.673
Ag	107	1	He	0.086371	14.6	1765.130
Cd	111	1	He	0.001554	64.6	25.657
Sn	118	1	He	0.008151	35.7	166.667
Sb	121	1	He	0.000468	347.1	80.000
Ba	138	1	He	0.001468	31.1	185.000
Pt	195	1	He	-0.000634		186.667
Hg	202	1	He	0.009382	24.9	241.667
Tl	205	1	He	0.025617	1.9	1543.437
Pb	208	1	He	-0.007566		2321.763
Bi	209	1	He	-0.001735		1670.140
Th	232	1	He	0.012313	11.5	1551.777
U	238	1	He	-0.001582		926.707

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.74300918	594163.103
Sc	45	2	H2	100.4382418	4636097.500
Ge	72	1	He	98.58617051	482342.083
Ge	72	2	H2	100.9065327	1552650.040
In	115	1	He	98.40885541	5461731.597
Tb	159	1	He	98.96041659	12573841.897
Ir	193	1	He	100.5149468	6276732.617

Sample Name DJM-6020S-IDC-BLK  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 047SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:32:55  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.208117	6.4	191.667
Be	9	2	H2	0.001354	1370.2	45.000
B	11	2	H2	5.097937	7.3	3114.160
Na	23	1	He	23.416813	3.1	32299.917
Mg	24	1	He	-1.930878		5431.037
Al	27	1	He	3.030136	2.8	878.030
Si	28	2	H2	-0.111417		15261.143
K	39	1	He	5.152222	23.5	73411.363
Ca	43	1	He	10.959476	22.8	38.317
Ti	47	1	He	0.012825	81.5	5.333
V	51	1	He	0.020314	439.5	-363.400
Cr	52	1	He	0.082069	11.9	2928.967
Mn	55	1	He	0.022422	33.4	550.010
Fe	56	1	He	1.075561	2.8	21923.727
Co	59	1	He	0.004391	52.3	209.333
Ni	60	1	He	-0.135077		438.677
Cu	63	1	He	0.035909	7.4	539.343
Zn	66	1	He	0.342065	5.1	872.030
As	75	1	He	0.019661	17.2	154.167
Se	78	2	H2	0.004292	187.8	29.667
Sr	88	1	He	0.156058	8.6	1883.473
Mo	95	1	He	0.007580	31.3	66.000
Pd	105	1	He	0.013431	49.4	368.343
Ag	107	1	He	0.042428	19.4	936.707
Cd	111	1	He	0.002494	33.5	28.657
Sn	118	1	He	0.023555	28.9	298.343
Sb	121	1	He	0.002788	44.1	108.333
Ba	138	1	He	0.014953	18.9	555.017
Pt	195	1	He	-0.002669		164.000
Hg	202	1	He	0.010015	28.7	245.000
Tl	205	1	He	0.009600	18.0	901.707
Pb	208	1	He	0.024075	8.1	4046.923
Bi	209	1	He	0.006405	60.3	2033.537
Th	232	1	He	0.011296	10.4	1486.767
U	238	1	He	0.001503	118.0	1093.390

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.08453935	584183.647
Sc	45	2	H2	98.06720749	4526653.667
Ge	72	1	He	97.10112249	475076.347
Ge	72	2	H2	98.59977645	1517155.953
In	115	1	He	97.52927340	5412914.437
Tb	159	1	He	98.97851181	12576141.063
Ir	193	1	He	100.1521920	6254080.113

Sample Name DJM-6021S-IDC-1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 048SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:36:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.128001	6.8	161.667
Be	9	2	H2	-0.010393		40.500
B	11	2	H2	4.334158	2.8	2842.437
Na	23	1	He	32.756399	1.2	40556.587
Mg	24	1	He	-1.473398		5607.773
Al	27	1	He	2.885442	1.7	831.353
Si	28	2	H2	0.019330	213.7	15662.883
K	39	1	He	5.588989	18.2	72959.193
Ca	43	1	He	7.726115	2.7	30.800
Ti	47	1	He	0.024420	35.2	8.000
V	51	1	He	4.315070	3.4	28100.623
Cr	52	1	He	0.082543	2.7	2901.630
Mn	55	1	He	0.019624	36.4	528.010
Fe	56	1	He	0.574614	5.5	17927.660
Co	59	1	He	0.003863	2.9	201.333
Ni	60	1	He	-0.152356		382.677
Cu	63	1	He	0.040185	11.0	572.010
Zn	66	1	He	23.121475	0.3	45052.183
As	75	1	He	0.016708	28.1	148.000
Se	78	2	H2	-0.002995		24.000
Sr	88	1	He	0.100068	3.6	1256.733
Mo	95	1	He	0.003747	24.3	43.333
Pd	105	1	He	0.001629	154.8	265.007
Ag	107	1	He	0.018449	8.4	491.677
Cd	111	1	He	0.003174	70.3	30.657
Sn	118	1	He	7.878783	1.2	67786.703
Sb	121	1	He	0.001538	123.0	91.667
Ba	138	1	He	0.017233	15.1	611.717
Pt	195	1	He	0.000365	64.4	196.000
Hg	202	1	He	2.124524	0.7	11552.340
Tl	205	1	He	0.002885	40.6	626.687
Pb	208	1	He	0.018588	15.3	3706.893
Bi	209	1	He	0.004021	104.7	1893.507
Th	232	1	He	0.006311	33.9	1178.400
U	238	1	He	0.000033	5340.1	995.047

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.05413312	577983.417
Sc	45	2	H2	98.16885683	4531345.667
Ge	72	1	He	96.41166202	471703.097
Ge	72	2	H2	98.34544962	1513242.623
In	115	1	He	96.67191940	5365330.940
Tb	159	1	He	97.93187459	12443156.063
Ir	193	1	He	98.49680552	6150708.240

Sample Name DJM-6021S-IDC-2  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 049SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:40:24  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.096429	15.2	148.833
Be	9	2	H2	-0.017976		37.333
B	11	2	H2	3.678383	1.6	2589.723
Na	23	1	He	11.103011	5.4	20757.850
Mg	24	1	He	-2.877104		4920.857
Al	27	1	He	2.224346	4.9	665.017
Si	28	2	H2	0.004714	3867.0	15521.770
K	39	1	He	1.908774	23.0	70678.120
Ca	43	1	He	5.469259	65.5	26.017
Ti	47	1	He	0.010147	63.7	4.667
V	51	1	He	4.148835	1.9	27184.397
Cr	52	1	He	0.086924	19.4	2955.643
Mn	55	1	He	0.004788	94.5	444.010
Fe	56	1	He	0.335802	9.0	16242.420
Co	59	1	He	0.001872	42.1	176.667
Ni	60	1	He	-0.158583		363.340
Cu	63	1	He	0.016322	24.7	368.673
Zn	66	1	He	22.250678	1.0	43339.693
As	75	1	He	0.020041	38.7	153.667
Se	78	2	H2	0.002314	246.4	28.000
Sr	88	1	He	0.067694	3.1	901.703
Mo	95	1	He	0.005046	13.1	51.333
Pd	105	1	He	0.004387	63.1	291.673
Ag	107	1	He	0.009952	9.6	340.010
Cd	111	1	He	0.001797	12.3	26.323
Sn	118	1	He	7.823014	1.0	68005.970
Sb	121	1	He	0.000134	1834.4	75.000
Ba	138	1	He	0.010040	10.8	420.010
Pt	195	1	He	0.000940	93.3	204.000
Hg	202	1	He	2.093707	2.7	11479.620
Tl	205	1	He	0.001419	132.6	573.353
Pb	208	1	He	0.013625	21.3	3466.863
Bi	209	1	He	0.005413	38.9	1983.523
Th	232	1	He	0.002516	73.8	973.383
U	238	1	He	-0.001437		928.373

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.69588288	581844.997
Sc	45	2	H2	97.55121580	4502836.167
Ge	72	1	He	96.35978088	471449.263
Ge	72	2	H2	98.06615043	1508945.043
In	115	1	He	97.65824206	5420072.250
Tb	159	1	He	98.71229752	12542316.060
Ir	193	1	He	99.78592756	6231208.450

Sample Name DJM-6021S-IDC-3  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 050SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:44:29  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.084192	19.3	144.333
Be	9	2	H2	-0.013408		39.167
B	11	2	H2	3.280282	1.8	2449.200
Na	23	1	He	12.656670	5.5	22224.947
Mg	24	1	He	-2.951227		4890.843
Al	27	1	He	2.667906	3.3	781.353
Si	28	2	H2	-0.111104		15192.820
K	39	1	He	2.279422	23.2	71058.427
Ca	43	1	He	6.150408	48.8	27.517
Ti	47	1	He	0.017128	120.9	6.333
V	51	1	He	4.297475	2.4	28211.827
Cr	52	1	He	0.168326	4.3	3604.453
Mn	55	1	He	0.022601	35.6	550.010
Fe	56	1	He	1.092638	3.8	21994.517
Co	59	1	He	0.000920	180.7	165.333
Ni	60	1	He	-0.100720		542.010
Cu	63	1	He	0.030297	22.9	488.677
Zn	66	1	He	23.048136	0.7	45006.737
As	75	1	He	0.024773	10.0	162.167
Se	78	2	H2	-0.006415		21.333
Sr	88	1	He	0.077207	8.9	1008.377
Mo	95	1	He	0.003499	11.9	42.667
Pd	105	1	He	-0.004913		213.333
Ag	107	1	He	0.004983	24.5	250.000
Cd	111	1	He	0.002707	108.4	29.657
Sn	118	1	He	7.901023	2.1	69178.217
Sb	121	1	He	0.002705	79.3	108.333
Ba	138	1	He	0.013115	20.6	508.353
Pt	195	1	He	-0.000051		194.667
Hg	202	1	He	2.188560	1.7	12103.830
Tl	205	1	He	0.000045	2773.7	523.347
Pb	208	1	He	0.010270	27.5	3316.847
Bi	209	1	He	0.005839	41.4	2013.517
Th	232	1	He	0.003934	35.8	1061.720
U	238	1	He	-0.003312		828.367

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.83166655	582662.043
Sc	45	2	H2	97.63553362	4506728.167
Ge	72	1	He	96.62084009	472726.520
Ge	72	2	H2	98.30304914	1512590.207
In	115	1	He	98.37083136	5459621.247
Tb	159	1	He	99.65479375	12662068.977
Ir	193	1	He	100.3324117	6265334.073

Sample Name DJM-6021S-IDC-4  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 051SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:48:13  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.086018	12.8	144.000
Be	9	2	H2	-0.033534		31.167
B	11	2	H2	3.008843	4.2	2335.180
Na	23	1	He	12.664509	1.7	22084.713
Mg	24	1	He	-2.214676		5234.287
Al	27	1	He	2.390570	1.0	704.353
Si	28	2	H2	6.378009	179.2	33893.683
K	39	1	He	3.416421	18.9	71423.283
Ca	43	1	He	5.423072	42.9	25.767
Ti	47	1	He	0.031402	40.9	9.667
V	51	1	He	4.308822	2.3	28097.733
Cr	52	1	He	0.084172	25.4	2917.637
Mn	55	1	He	0.035565	6.0	622.017
Fe	56	1	He	0.644800	2.0	18478.330
Co	59	1	He	0.002773	28.3	187.333
Ni	60	1	He	-0.111420		506.677
Cu	63	1	He	0.024051	6.3	433.343
Zn	66	1	He	23.101399	0.9	44878.323
As	75	1	He	0.017436	49.3	148.833
Se	78	2	H2	0.003371	122.6	28.667
Sr	88	1	He	0.075531	11.4	985.047
Mo	95	1	He	0.004976	24.7	50.667
Pd	105	1	He	-0.001494		240.000
Ag	107	1	He	0.004691	68.1	241.670
Cd	111	1	He	-0.000904		16.990
Sn	118	1	He	8.044173	2.3	69598.570
Sb	121	1	He	0.002014	114.9	98.333
Ba	138	1	He	0.009266	24.6	396.677
Pt	195	1	He	-0.000335		190.000
Hg	202	1	He	2.201225	2.9	12072.807
Tl	205	1	He	-0.000310		505.017
Pb	208	1	He	0.011640	9.4	3363.517
Bi	209	1	He	0.002470	112.8	1846.840
Th	232	1	He	0.004144	38.2	1066.720
U	238	1	He	0.000204	82.6	1016.720

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.16975204	578679.127
Sc	45	2	H2	96.93106891	4474211.000
Ge	72	1	He	96.12366686	470294.053
Ge	72	2	H2	97.69415921	1503221.210
In	115	1	He	97.20266409	5394787.487
Tb	159	1	He	98.83675384	12558129.393
Ir	193	1	He	99.63733195	6221929.283



Sample Name 4303386\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 052SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:51:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	57.216776	1.1	21374.517
Be	9	2	H2	51.252112	1.4	19583.963
B	11	2	H2	52.681229	1.7	19982.840
Na	23	1	He	1420.472899	1.3	1316933.520
Mg	24	1	He	3314.824126	1.0	1705519.087
Al	27	1	He	6759.113424	1.4	1744880.793
Si	28	2	H2	998.853038	1.2	2921080.500
K	39	1	He	1692.263854	1.4	1333317.687
Ca	43	1	He	3923.143688	2.1	8629.227
Ti	47	1	He	786.625310	1.4	185341.990
V	51	1	He	77.404444	1.1	512018.980
Cr	52	1	He	57.766517	1.7	455834.667
Mn	55	1	He	182.439780	1.7	1067587.087
Fe	56	1	He	11060.09563	1.9	83008504.000
Co	59	1	He	53.873709	1.5	664672.377
Ni	60	1	He	58.134208	0.7	179063.167
Cu	63	1	He	55.080630	1.1	468603.740
Zn	66	1	He	78.192879	1.2	151814.253
As	75	1	He	50.038203	1.2	85742.147
Se	78	2	H2	51.939088	0.3	39432.997
Sr	88	1	He	74.129480	1.8	812089.883
Mo	95	1	He	48.033262	1.3	271874.980
Pd	105	1	He	9.941906	2.0	83772.003
Ag	107	1	He	24.332125	2.8	439239.237
Cd	111	1	He	49.204256	1.4	164959.657
Sn	118	1	He	49.175611	1.7	417550.303
Sb	121	1	He	34.723986	2.0	430372.960
Ba	138	1	He	100.201940	2.2	2699774.023
Pt	195	1	He	9.819375	2.6	110056.527
Hg	202	1	He	4.297022	1.3	23338.073
Tl	205	1	He	50.920767	2.3	2032594.607
Pb	208	1	He	51.552542	2.0	2802724.320
Bi	209	1	He	50.016185	2.0	2252173.297
Th	232	1	He	51.452458	2.2	2939165.893
U	238	1	He	49.095069	2.0	2682425.063

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.95770895	577403.207
Sc	45	2	H2	96.82073216	4469118.000
Ge	72	1	He	96.37094947	471503.907
Ge	72	2	H2	97.32436682	1497531.210
In	115	1	He	95.50109064	5300349.467
Tb	159	1	He	98.63194462	12532106.477
Ir	193	1	He	98.56613902	6155037.823

Sample Name 4303387\_B69848Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 053SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:55:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	58.727196	0.9	22076.193
Be	9	2	H2	52.571275	1.4	20214.957
B	11	2	H2	53.733822	0.7	20487.337
Na	23	1	He	1489.345201	0.4	1387259.147
Mg	24	1	He	3447.755751	0.5	1782605.237
Al	27	1	He	7108.120564	0.7	1844227.543
Si	28	2	H2	1004.905974	1.8	2957367.417
K	39	1	He	1816.533852	1.0	1433383.677
Ca	43	1	He	4138.628385	1.8	9148.363
Ti	47	1	He	810.677040	0.2	191971.907
V	51	1	He	80.396534	0.7	534534.740
Cr	52	1	He	61.233252	0.4	485499.950
Mn	55	1	He	199.127378	1.0	1171059.587
Fe	56	1	He	11508.80827	0.5	86812520.000
Co	59	1	He	57.187180	0.6	708311.437
Ni	60	1	He	61.070920	0.7	188805.613
Cu	63	1	He	58.857041	1.1	502675.843
Zn	66	1	He	83.459428	1.0	162661.927
As	75	1	He	52.935089	0.7	91054.993
Se	78	2	H2	53.503488	0.1	40921.117
Sr	88	1	He	78.507051	0.3	863415.927
Mo	95	1	He	50.537182	2.1	288794.987
Pd	105	1	He	10.336896	2.3	87925.073
Ag	107	1	He	25.826503	2.4	470672.050
Cd	111	1	He	52.073207	1.5	176261.260
Sn	118	1	He	52.371009	1.0	448979.240
Sb	121	1	He	37.173505	2.1	465154.070
Ba	138	1	He	106.701108	1.6	2902591.413
Pt	195	1	He	10.316790	1.1	116979.740
Hg	202	1	He	4.530495	1.3	24885.843
Tl	205	1	He	53.638719	1.0	2166158.563
Pb	208	1	He	54.328555	1.2	2988155.033
Bi	209	1	He	52.796170	0.6	2390184.130
Th	232	1	He	54.409288	0.4	3124902.243
U	238	1	He	52.267991	0.1	2871258.500

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.44050007	580308.290
Sc	45	2	H2	97.43905562	4497659.000
Ge	72	1	He	96.75250236	473370.690
Ge	72	2	H2	98.04628519	1508639.377
In	115	1	He	96.43396739	5352124.507
Tb	159	1	He	99.79402335	12679759.393
Ir	193	1	He	99.10844632	6188902.617

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 054\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 10:59:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.149523	0.5	31781.187
Be	9	2	H2	81.173836	0.6	31761.017
B	11	2	H2	81.643679	0.2	31026.220
Na	23	1	He	992.808052	2.0	961381.600
Mg	24	1	He	995.538937	1.7	537829.657
Al	27	1	He	988.559185	1.6	265734.323
Si	28	2	H2	504.452062	0.2	1519664.667
K	39	1	He	999.383546	1.8	848960.400
Ca	43	1	He	1009.916605	1.4	2323.210
Ti	47	1	He	80.552563	2.1	19758.220
V	51	1	He	80.167761	3.1	551958.553
Cr	52	1	He	81.693872	2.1	670057.607
Mn	55	1	He	80.941773	2.0	493270.530
Fe	56	1	He	508.390271	1.6	3985498.333
Co	59	1	He	81.992647	1.0	1062930.627
Ni	60	1	He	82.839278	1.0	267751.113
Cu	63	1	He	82.763841	1.2	739803.563
Zn	66	1	He	81.479585	1.4	166224.513
As	75	1	He	79.352422	1.3	142808.893
Se	78	2	H2	82.077151	0.9	64733.767
Sr	88	1	He	80.586029	1.1	927668.160
Mo	95	1	He	77.180650	1.5	463250.500
Pd	105	1	He	81.806410	2.1	729051.163
Ag	107	1	He	40.228094	2.8	769906.343
Cd	111	1	He	79.711410	1.2	283384.220
Sn	118	1	He	77.344762	1.2	696393.947
Sb	121	1	He	77.898899	0.6	1023806.937
Ba	138	1	He	77.612967	1.5	2217574.187
Pt	195	1	He	80.876442	1.6	942191.917
Hg	202	1	He	3.853771	2.9	21808.140
Tl	205	1	He	41.605956	2.8	1728848.570
Pb	208	1	He	81.092773	2.1	4587805.970
Bi	209	1	He	81.907102	2.2	3847394.423
Th	232	1	He	76.021161	1.6	4531335.140
U	238	1	He	78.222775	2.1	4459163.057

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.90647360	601163.980
Sc	45	2	H2	99.22020458	4579874.500
Ge	72	1	He	101.2779853	495512.040
Ge	72	2	H2	101.1212187	1555953.417
In	115	1	He	101.2862398	5621427.607
Tb	159	1	He	102.6945520	13048298.557
Ir	193	1	He	102.8768430	6424223.027

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 055\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:03:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.057834	75.7	136.833
Be	9	2	H2	0.027211	28.7	55.667
B	11	2	H2	2.790184	1.7	2312.677
Na	23	1	He	1.045027	17.7	11566.207
Mg	24	1	He	-7.678363		2468.557
Al	27	1	He	0.034177	129.6	96.333
Si	28	2	H2	-1.003886		12792.243
K	39	1	He	-1.966347		68531.397
Ca	43	1	He	0.030043	1518.3	14.133
Ti	47	1	He	0.009916	63.9	4.667
V	51	1	He	0.028433	352.5	-312.623
Cr	52	1	He	-0.001692		2280.187
Mn	55	1	He	-0.008018		372.677
Fe	56	1	He	0.109689	35.7	14698.057
Co	59	1	He	0.005478	29.5	226.667
Ni	60	1	He	-0.162984		358.673
Cu	63	1	He	0.001641	195.2	250.000
Zn	66	1	He	-0.009033		189.333
As	75	1	He	0.005034	69.2	131.167
Se	78	2	H2	-0.006587		21.667
Sr	88	1	He	0.003628	76.3	205.000
Mo	95	1	He	0.012090	5.4	94.000
Pd	105	1	He	0.007691	66.6	326.677
Ag	107	1	He	0.136556	23.1	2731.963
Cd	111	1	He	0.003160	60.1	31.647
Sn	118	1	He	0.010184	36.6	186.667
Sb	121	1	He	0.003370	59.2	118.333
Ba	138	1	He	0.000312	302.6	155.000
Pt	195	1	He	-0.000550		190.000
Hg	202	1	He	0.047065	14.3	450.677
Tl	205	1	He	0.040045	22.9	2146.870
Pb	208	1	He	-0.005444		2465.110
Bi	209	1	He	0.000897	122.8	1806.823
Th	232	1	He	0.014955	6.0	1721.800
U	238	1	He	-0.001577		935.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.79655246	588468.020
Sc	45	2	H2	99.30884806	4583966.167
Ge	72	1	He	98.76225502	483203.593
Ge	72	2	H2	100.4151932	1545089.793
In	115	1	He	99.68702386	5532670.467
Tb	159	1	He	100.1194914	12721113.143
Ir	193	1	He	101.4556731	6335476.990

Sample Name 4314160\_B70041Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 056\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:06:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.035263	41.2	128.167
Be	9	2	H2	-0.002180		44.167
B	11	2	H2	3.890161	3.1	2712.410
Na	23	1	He	5.143779	5.6	15463.087
Mg	24	1	He	-4.286038		4255.643
Al	27	1	He	12.634218	1.0	3423.397
Si	28	2	H2	2.131624	9.8	22136.553
K	39	1	He	-0.949756		69551.170
Ca	43	1	He	6.791524	16.4	29.367
Ti	47	1	He	0.081785	23.3	22.000
V	51	1	He	0.038919	242.4	-243.450
Cr	52	1	He	0.210117	2.8	3989.223
Mn	55	1	He	0.036554	9.7	640.687
Fe	56	1	He	3.958763	3.3	44291.427
Co	59	1	He	0.008265	10.7	260.667
Ni	60	1	He	-0.146215		409.343
Cu	63	1	He	0.041834	12.4	597.350
Zn	66	1	He	1.205436	3.3	2590.240
As	75	1	He	0.007299	111.8	134.500
Se	78	2	H2	0.003123	256.2	29.333
Sr	88	1	He	0.031745	10.8	518.347
Mo	95	1	He	0.042047	11.5	270.667
Pd	105	1	He	-0.008439		185.000
Ag	107	1	He	0.034328	5.2	805.030
Cd	111	1	He	0.000677	215.2	22.953
Sn	118	1	He	0.026965	12.8	335.010
Sb	121	1	He	0.004797	32.3	136.667
Ba	138	1	He	0.038118	4.5	1216.730
Pt	195	1	He	0.011523	51.5	329.337
Hg	202	1	He	0.023815	14.6	325.670
Tl	205	1	He	0.010445	30.0	953.377
Pb	208	1	He	-0.007665		2358.440
Bi	209	1	He	0.002373	61.6	1880.163
Th	232	1	He	0.005525	55.7	1170.063
U	238	1	He	-0.002093		908.373

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.14268465	590550.790
Sc	45	2	H2	99.26920222	4582136.167
Ge	72	1	He	98.30665347	480974.520
Ge	72	2	H2	100.7381196	1550058.667
In	115	1	He	99.55527714	5525358.470
Tb	159	1	He	100.8084413	12808650.643
Ir	193	1	He	101.7206364	6352022.823

Sample Name BottleTopFilt-It-211125-345-A  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 057\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:10:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	-0.158242		56.833
Be	9	2	H2	-0.035970		32.333
B	11	2	H2	1.380548	2.7	1878.287
Na	23	1	He	8.216729	5.7	19252.467
Mg	24	1	He	-4.649873		4263.977
Al	27	1	He	0.977538	3.8	362.670
Si	28	2	H2	10.851197	2.6	50290.423
K	39	1	He	-4.527693		70087.097
Ca	43	1	He	16.140489	10.8	52.833
Ti	47	1	He	0.002357	168.5	3.000
V	51	1	He	0.102218	35.4	194.403
Cr	52	1	He	0.091484	6.6	3185.023
Mn	55	1	He	-0.020805		312.003
Fe	56	1	He	0.253149	5.5	16626.780
Co	59	1	He	-0.002000		138.000
Ni	60	1	He	-0.168315		357.340
Cu	63	1	He	0.025575	26.3	479.343
Zn	66	1	He	0.293543	4.8	826.027
As	75	1	He	-0.020011		91.167
Se	78	2	H2	-0.012095		18.000
Sr	88	1	He	0.013484	24.8	330.010
Mo	95	1	He	0.002417	48.8	38.000
Pd	105	1	He	-0.022928		60.000
Ag	107	1	He	-0.003322		100.000
Cd	111	1	He	0.002516	64.8	30.323
Sn	118	1	He	0.002064	188.9	118.333
Sb	121	1	He	0.001964	172.6	103.333
Ba	138	1	He	0.010027	17.9	441.677
Pt	195	1	He	0.002927	87.2	236.000
Hg	202	1	He	0.022739	22.3	326.673
Tl	205	1	He	0.004862	3.3	741.693
Pb	208	1	He	-0.013422		2083.417
Bi	209	1	He	-0.003122		1683.467
Th	232	1	He	-0.002537		720.027
U	238	1	He	-0.004473		801.700

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.9444073	619444.040
Sc	45	2	H2	103.6954978	4786448.167
Ge	72	1	He	103.2038663	504934.593
Ge	72	2	H2	103.9950684	1600173.377
In	115	1	He	102.7804466	5704356.693
Tb	159	1	He	102.9916048	13086041.887
Ir	193	1	He	105.3582630	6579177.193

Sample Name 60398600001\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 058SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:14:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.807574	1.3	1928.790
Be	9	2	H2	0.012182	58.8	49.333
B	11	2	H2	80.376890	1.4	30299.413
Na	23	1	He	32914.10407	0.7	30086085.383
Mg	24	1	He	29654.35846	0.3	15107311.440
Al	27	1	He	33.936421	1.1	8787.930
Si	28	2	H2	4880.285884	1.1	14438727.333
K	39	1	He	2164.216376	0.4	1674974.450
Ca	43	1	He	59342.20391	0.4	129481.510
Ti	47	1	He	0.350793	16.4	84.333
V	51	1	He	2.007972	2.7	12717.240
Cr	52	1	He	0.752817	3.0	8108.257
Mn	55	1	He	0.324666	4.8	2296.853
Fe	56	1	He	10.620040	1.5	92677.440
Co	59	1	He	0.035343	5.4	585.347
Ni	60	1	He	1.362419	3.3	4990.207
Cu	63	1	He	0.547503	1.1	4850.153
Zn	66	1	He	5.207986	1.0	10225.610
As	75	1	He	0.689763	0.8	1290.227
Se	78	2	H2	1.123031	1.0	891.363
Sr	88	1	He	153.997035	0.4	1674652.633
Mo	95	1	He	9.984167	0.6	56046.347
Pd	105	1	He	0.090279	16.0	998.377
Ag	107	1	He	0.014458	16.6	410.010
Cd	111	1	He	0.039232	8.9	149.910
Sn	118	1	He	0.104372	6.4	970.043
Sb	121	1	He	1.465819	2.6	18078.410
Ba	138	1	He	48.227968	0.2	1288402.197
Pt	195	1	He	0.007993	16.8	279.333
Hg	202	1	He	0.012887	21.5	256.667
Tl	205	1	He	0.016572	12.4	1163.397
Pb	208	1	He	0.021631	25.2	3851.903
Bi	209	1	He	0.005043	59.8	1890.180
Th	232	1	He	0.010999	6.7	1408.420
U	238	1	He	10.562575	0.8	562443.313

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.32735971	573610.227
Sc	45	2	H2	98.36485821	4540392.833
Ge	72	1	He	95.67524691	468100.117
Ge	72	2	H2	98.80300564	1520283.043
In	115	1	He	94.68884177	5255269.323
Tb	159	1	He	97.47693939	12385352.313
Ir	193	1	He	95.94429392	5991314.703

Sample Name 4314161\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 059SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:18:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	111.986705	0.9	42069.940
Be	9	2	H2	109.834711	0.7	42263.233
B	11	2	H2	109.143248	0.4	40375.527
Na	23	1	He	2143.571768	1.4	2039744.553
Mg	24	1	He	2120.699434	1.3	1125241.990
Al	27	1	He	2121.211315	0.9	563617.750
Si	28	2	H2	555.360740	0.6	1644342.460
K	39	1	He	2121.739332	0.5	1702550.650
Ca	43	1	He	2127.113676	1.3	4822.080
Ti	47	1	He	108.647131	0.7	26348.823
V	51	1	He	107.005937	1.4	728634.690
Cr	52	1	He	109.634787	0.9	888265.750
Mn	55	1	He	108.017228	1.3	650650.750
Fe	56	1	He	2150.546297	1.1	16621885.333
Co	59	1	He	110.409038	0.4	1404390.123
Ni	60	1	He	111.809833	0.4	354302.363
Cu	63	1	He	109.280851	0.1	958411.957
Zn	66	1	He	109.452312	0.3	219033.007
As	75	1	He	107.868806	0.3	190444.590
Se	78	2	H2	111.494575	0.7	86032.807
Sr	88	1	He	107.615980	0.5	1215537.353
Mo	95	1	He	105.344291	0.2	614951.563
Pd	105	1	He	21.798170	0.4	189131.573
Ag	107	1	He	52.023886	1.6	968360.740
Cd	111	1	He	106.901031	0.6	369610.100
Sn	118	1	He	105.299291	0.8	922026.600
Sb	121	1	He	106.331772	0.8	1359056.593
Ba	138	1	He	104.337361	0.8	2899348.187
Pt	195	1	He	21.732136	0.6	246222.363
Hg	202	1	He	0.014249	7.2	270.333
Tl	205	1	He	109.890392	1.8	4437720.870
Pb	208	1	He	108.272884	1.5	5953124.883
Bi	209	1	He	108.731214	1.1	4947903.260
Th	232	1	He	108.180374	1.0	6246945.950
U	238	1	He	105.868238	1.0	5846942.830

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.75909456	594259.893
Sc	45	2	H2	97.61391255	4505730.167
Ge	72	1	He	99.37082180	486181.063
Ge	72	2	H2	98.94753229	1522506.877
In	115	1	He	98.50073762	5466831.097
Tb	159	1	He	99.80699629	12681407.727
Ir	193	1	He	99.66088572	6223400.117



Sample Name 60398600002\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 060SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:21:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	7.220113	1.6	2819.263
Be	9	2	H2	0.051290	20.6	64.000
B	11	2	H2	49.667993	1.0	19077.170
Na	23	1	He	9976.376730	0.5	9061458.820
Mg	24	1	He	17994.94972	0.3	9104687.780
Al	27	1	He	107.505036	0.5	27457.977
Si	28	2	H2	4536.793984	0.6	13328375.000
K	39	1	He	8738.529474	0.5	6509058.653
Ca	43	1	He	84820.95407	0.4	183750.300
Ti	47	1	He	1.858202	8.3	434.010
V	51	1	He	0.582959	8.8	3319.377
Cr	52	1	He	0.646647	5.5	7228.463
Mn	55	1	He	2.972868	1.8	17559.213
Fe	56	1	He	71.130966	1.2	539904.147
Co	59	1	He	0.501456	0.3	6281.370
Ni	60	1	He	1.369127	1.9	5000.870
Cu	63	1	He	0.251371	5.1	2346.193
Zn	66	1	He	3.754170	1.9	7413.243
As	75	1	He	0.176998	10.8	418.343
Se	78	2	H2	0.760570	4.9	610.347
Sr	88	1	He	246.661020	0.4	2677245.900
Mo	95	1	He	4.018142	1.2	22574.523
Pd	105	1	He	0.146069	8.3	1463.420
Ag	107	1	He	0.171546	20.3	3220.413
Cd	111	1	He	0.021365	12.4	90.600
Sn	118	1	He	0.052867	4.1	536.680
Sb	121	1	He	0.078166	5.8	1031.717
Ba	138	1	He	44.385161	0.7	1186063.917
Pt	195	1	He	0.007429	18.5	270.667
Hg	202	1	He	0.019139	17.5	287.333
Tl	205	1	He	0.066051	14.8	3085.390
Pb	208	1	He	0.102986	2.5	8144.317
Bi	209	1	He	0.013648	23.3	2290.237
Th	232	1	He	0.058137	6.8	4069.000
U	238	1	He	1.112159	2.2	60699.337

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.64794058	569521.980
Sc	45	2	H2	97.66384176	4508034.833
Ge	72	1	He	95.49799328	467232.887
Ge	72	2	H2	98.52772716	1516047.330
In	115	1	He	94.71216551	5256563.800
Tb	159	1	He	96.58403948	12271901.070
Ir	193	1	He	96.91423220	6051883.240

Sample Name 4315278\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 061SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:25:38  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	88.003908	0.7	32807.360
Be	9	2	H2	80.717251	0.6	30810.567
B	11	2	H2	127.222538	0.7	46459.407
Na	23	1	He	11885.58493	0.8	10682903.590
Mg	24	1	He	19836.80409	0.7	9932986.520
Al	27	1	He	2082.758605	0.6	524971.543
Si	28	2	H2	5443.899514	0.6	15848036.333
K	39	1	He	10508.29317	0.8	7733399.470
Ca	43	1	He	86036.52498	1.0	184471.267
Ti	47	1	He	84.945702	0.7	19541.260
V	51	1	He	82.692159	1.5	534020.433
Cr	52	1	He	83.122778	1.0	639370.977
Mn	55	1	He	84.526429	0.7	483098.530
Fe	56	1	He	1062.506623	1.2	7796846.500
Co	59	1	He	80.471894	0.9	976894.563
Ni	60	1	He	82.590960	0.7	249984.053
Cu	63	1	He	80.318205	0.8	672299.543
Zn	66	1	He	84.415056	0.4	161269.453
As	75	1	He	80.792055	1.0	136156.230
Se	78	2	H2	81.809280	0.9	62739.667
Sr	88	1	He	323.748940	0.8	3489478.073
Mo	95	1	He	86.072181	0.8	472467.333
Pd	105	1	He	80.733266	1.0	658022.803
Ag	107	1	He	32.842575	2.2	574883.977
Cd	111	1	He	81.173102	0.9	263912.923
Sn	118	1	He	81.221405	1.2	668775.613
Sb	121	1	He	81.023260	0.8	973812.643
Ba	138	1	He	124.314542	0.7	3248373.177
Pt	195	1	He	79.444552	1.7	870735.710
Hg	202	1	He	0.008000	6.6	228.667
Tl	205	1	He	40.500039	0.7	1583460.027
Pb	208	1	He	80.570167	1.0	4288631.423
Bi	209	1	He	79.092825	0.7	3469915.990
Th	232	1	He	6.526601	0.9	364050.487
U	238	1	He	82.834688	0.9	4410074.310

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.68190188	563709.067
Sc	45	2	H2	96.79544981	4467951.000
Ge	72	1	He	94.83774363	464002.553
Ge	72	2	H2	98.33319101	1513054.000
In	115	1	He	92.62510522	5140731.103
Tb	159	1	He	96.60868349	12275032.320
Ir	193	1	He	96.06708383	5998982.413

Sample Name 4315279\_B70041Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 062SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:29:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.454183	2.5	659.680
Be	9	2	H2	0.045302	20.6	61.833
B	11	2	H2	11.499359	0.4	5409.303
Na	23	1	He	1789.607259	0.9	1651774.193
Mg	24	1	He	3206.328673	1.4	1645219.243
Al	27	1	He	21.150222	6.0	5529.877
Si	28	2	H2	839.442574	1.1	2484804.417
K	39	1	He	1532.751050	1.4	1210672.973
Ca	43	1	He	14870.75568	1.5	32578.653
Ti	47	1	He	0.362194	5.9	87.333
V	51	1	He	0.174495	21.6	658.293
Cr	52	1	He	0.132171	8.6	3279.047
Mn	55	1	He	0.547092	5.2	3602.457
Fe	56	1	He	12.982247	2.4	110700.010
Co	59	1	He	0.102879	6.2	1422.077
Ni	60	1	He	0.106306	20.7	1175.383
Cu	63	1	He	0.067687	4.4	805.357
Zn	66	1	He	0.833216	2.0	1817.450
As	75	1	He	0.048221	1.0	201.833
Se	78	2	H2	0.152040	20.6	144.000
Sr	88	1	He	43.177972	1.5	472955.670
Mo	95	1	He	0.710030	2.0	4100.600
Pd	105	1	He	0.040613	5.3	598.353
Ag	107	1	He	0.142345	19.3	2761.967
Cd	111	1	He	0.010657	48.8	56.263
Sn	118	1	He	0.033235	8.4	380.010
Sb	121	1	He	0.021895	23.0	348.340
Ba	138	1	He	7.667368	1.7	209813.350
Pt	195	1	He	0.003961	39.7	236.667
Hg	202	1	He	0.001461	310.7	197.333
Tl	205	1	He	0.055502	17.7	2720.310
Pb	208	1	He	0.023149	10.7	3963.583
Bi	209	1	He	0.012411	26.9	2293.580
Th	232	1	He	0.014861	6.8	1681.793
U	238	1	He	0.199384	2.1	11988.960

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.68357123	575753.647
Sc	45	2	H2	97.90390129	4519115.667
Ge	72	1	He	96.34729262	471388.163
Ge	72	2	H2	99.03045677	1523782.837
In	115	1	He	96.93630905	5380004.673
Tb	159	1	He	98.19876111	12477066.480
Ir	193	1	He	99.43440251	6209257.200

Sample Name 4314162\_B70041Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 063SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:33:07  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	22.810184	1.3	8571.087
Be	9	2	H2	20.919752	0.1	8003.617
B	11	2	H2	31.447973	0.7	12412.917
Na	23	1	He	2330.372907	2.0	2119925.803
Mg	24	1	He	3856.288107	2.2	1951754.763
Al	27	1	He	431.754436	2.0	109785.857
Si	28	2	H2	998.817562	0.8	2915115.250
K	39	1	He	2067.610399	2.6	1588296.903
Ca	43	1	He	16444.83786	2.3	35557.660
Ti	47	1	He	20.860745	4.1	4838.467
V	51	1	He	20.621464	3.2	133880.727
Cr	52	1	He	20.899651	2.3	163727.970
Mn	55	1	He	20.892719	1.8	120691.500
Fe	56	1	He	421.131520	1.8	3123848.333
Co	59	1	He	20.547438	1.4	251805.757
Ni	60	1	He	20.592598	1.4	63525.517
Cu	63	1	He	20.382658	1.2	172331.357
Zn	66	1	He	21.205582	2.0	41024.347
As	75	1	He	20.152925	1.5	34358.957
Se	78	2	H2	20.869486	1.4	15947.807
Sr	88	1	He	67.005391	1.8	728884.807
Mo	95	1	He	20.654411	2.0	117071.513
Pd	105	1	He	4.087238	3.5	34625.693
Ag	107	1	He	9.572647	5.9	173071.320
Cd	111	1	He	19.895943	1.8	66797.157
Sn	118	1	He	19.599073	1.2	166690.857
Sb	121	1	He	19.892801	1.2	246908.793
Ba	138	1	He	28.068199	1.4	757327.933
Pt	195	1	He	3.983248	2.2	44253.643
Hg	202	1	He	0.006351	43.3	222.000
Tl	205	1	He	20.754536	3.2	819339.963
Pb	208	1	He	20.206872	2.0	1087852.750
Bi	209	1	He	20.192585	2.8	906374.390
Th	232	1	He	20.238752	1.9	1151726.417
U	238	1	He	20.235429	1.5	1101520.843

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.46566959	568425.207
Sc	45	2	H2	96.62299401	4459990.667
Ge	72	1	He	95.70287779	468235.303
Ge	72	2	H2	97.86140243	1505794.583
In	115	1	He	95.63573854	5307822.480
Tb	159	1	He	97.53861663	12393188.980
Ir	193	1	He	98.17314802	6130497.200

Sample Name 4314163\_B70041Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 064SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:36:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	22.341351	1.7	8358.300
Be	9	2	H2	20.796324	2.4	7918.903
B	11	2	H2	30.873181	2.0	12151.877
Na	23	1	He	2248.492364	0.3	2067038.093
Mg	24	1	He	3721.201861	0.4	1903222.787
Al	27	1	He	426.802858	0.5	109649.177
Si	28	2	H2	989.209269	2.6	2873461.750
K	39	1	He	2003.568108	0.4	1557301.697
Ca	43	1	He	15831.49497	0.1	34588.757
Ti	47	1	He	20.206630	1.2	4736.767
V	51	1	He	20.045584	2.3	131497.510
Cr	52	1	He	20.454936	0.9	161961.297
Mn	55	1	He	20.588203	0.7	120172.567
Fe	56	1	He	415.067232	0.4	3110954.083
Co	59	1	He	20.207465	0.9	250437.033
Ni	60	1	He	20.526531	1.8	64037.083
Cu	63	1	He	20.089257	0.9	171764.147
Zn	66	1	He	21.005140	0.9	41099.233
As	75	1	He	19.788173	0.9	34120.243
Se	78	2	H2	20.410949	0.1	15584.737
Sr	88	1	He	64.613441	1.1	710773.973
Mo	95	1	He	20.234445	0.4	115058.130
Pd	105	1	He	4.001968	0.6	34020.987
Ag	107	1	He	9.489104	2.0	172191.773
Cd	111	1	He	19.784070	0.4	66636.140
Sn	118	1	He	19.444262	0.9	165889.503
Sb	121	1	He	19.425240	0.9	241858.070
Ba	138	1	He	27.598324	0.7	747018.377
Pt	195	1	He	3.902086	1.3	43752.640
Hg	202	1	He	-0.000989		184.667
Tl	205	1	He	20.573685	1.2	819747.123
Pb	208	1	He	19.788593	0.6	1075136.013
Bi	209	1	He	19.858535	0.6	892530.483
Th	232	1	He	19.962742	0.6	1137437.537
U	238	1	He	19.976292	0.5	1088791.673

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.42372128	574190.060
Sc	45	2	H2	96.18018102	4439551.000
Ge	72	1	He	96.77346875	473473.270
Ge	72	2	H2	97.77955309	1504535.167
In	115	1	He	95.93411395	5324382.437
Tb	159	1	He	98.41620219	12504694.393
Ir	193	1	He	98.27819582	6137056.990

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 065\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:40:35  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.831051	1.1	31639.047
Be	9	2	H2	82.109186	0.4	31351.837
B	11	2	H2	81.508176	1.3	30229.273
Na	23	1	He	1015.643755	0.3	953042.460
Mg	24	1	He	1015.800694	0.3	531783.677
Al	27	1	He	1007.097245	0.5	262384.713
Si	28	2	H2	506.207911	1.0	1488101.790
K	39	1	He	1010.751396	0.3	831420.767
Ca	43	1	He	1008.329169	1.3	2248.170
Ti	47	1	He	80.355753	1.6	19104.020
V	51	1	He	81.106922	0.5	541344.913
Cr	52	1	He	82.506074	0.6	655907.980
Mn	55	1	He	81.468646	0.6	481219.393
Fe	56	1	He	511.708016	0.7	3887959.833
Co	59	1	He	83.018994	0.7	1039320.167
Ni	60	1	He	83.963446	1.3	262062.637
Cu	63	1	He	83.946465	0.9	724634.273
Zn	66	1	He	82.172057	1.3	161895.500
As	75	1	He	79.833536	0.4	138750.787
Se	78	2	H2	81.352116	0.9	62552.870
Sr	88	1	He	81.622101	1.4	907342.697
Mo	95	1	He	77.741870	1.0	453236.437
Pd	105	1	He	82.247896	1.1	711985.720
Ag	107	1	He	40.965682	2.0	761566.393
Cd	111	1	He	80.765267	0.8	278893.227
Sn	118	1	He	78.221691	1.1	684080.173
Sb	121	1	He	78.559973	0.7	1002844.413
Ba	138	1	He	78.131188	1.0	2168368.980
Pt	195	1	He	81.837928	1.3	920544.833
Hg	202	1	He	3.875190	0.8	21175.117
Tl	205	1	He	42.489450	0.7	1704888.200
Pb	208	1	He	82.876718	0.8	4527304.770
Bi	209	1	He	81.915592	1.3	3755544.943
Th	232	1	He	76.030500	1.0	4422971.080
U	238	1	He	79.341064	0.8	4414353.477

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.81597836	582567.643
Sc	45	2	H2	96.82845551	4469474.500
Ge	72	1	He	97.80145927	478502.810
Ge	72	2	H2	98.59033970	1517010.750
In	115	1	He	98.37658664	5459940.667
Tb	159	1	He	99.14716990	12597570.643
Ir	193	1	He	100.3943922	6269204.490

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 066\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:44:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.061836	38.2	135.333
Be	9	2	H2	0.018129	42.8	51.000
B	11	2	H2	2.131394	3.8	2027.803
Na	23	1	He	1.243307	4.7	11597.887
Mg	24	1	He	-7.082028		2743.607
Al	27	1	He	0.091718	55.3	110.000
Si	28	2	H2	-0.970060		12614.757
K	39	1	He	-1.642481		67876.937
Ca	43	1	He	1.005622	111.3	16.100
Ti	47	1	He	-0.003889		1.333
V	51	1	He	-0.050000		-830.857
Cr	52	1	He	-0.014028		2152.833
Mn	55	1	He	-0.011267		348.673
Fe	56	1	He	-0.088134		13012.507
Co	59	1	He	0.003020	72.0	192.667
Ni	60	1	He	-0.141843		418.677
Cu	63	1	He	0.001776	252.6	247.333
Zn	66	1	He	-0.006208		192.000
As	75	1	He	0.005984	108.8	130.833
Se	78	2	H2	-0.000701		25.667
Sr	88	1	He	0.005108	74.0	218.337
Mo	95	1	He	0.010148	19.9	81.333
Pd	105	1	He	0.010348	18.3	345.010
Ag	107	1	He	0.116913	22.8	2328.547
Cd	111	1	He	0.005118	48.0	37.983
Sn	118	1	He	0.009712	62.9	180.003
Sb	121	1	He	0.002060	31.9	100.000
Ba	138	1	He	0.003283	54.6	235.003
Pt	195	1	He	0.001374	190.4	210.000
Hg	202	1	He	0.019078	10.1	295.000
Tl	205	1	He	0.038625	30.0	2070.187
Pb	208	1	He	-0.008921		2253.430
Bi	209	1	He	0.005242	45.7	2000.183
Th	232	1	He	0.014502	3.5	1688.460
U	238	1	He	0.000660	85.5	1056.717

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.51485608	580755.710
Sc	45	2	H2	97.16631534	4485069.667
Ge	72	1	He	97.28857998	475993.500
Ge	72	2	H2	98.07222958	1509038.583
In	115	1	He	98.27788814	5454462.860
Tb	159	1	He	99.25853522	12611720.643
Ir	193	1	He	101.0700418	6311395.950

Sample Name 60398600003\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 067SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:48:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.483789	1.3	1038.040
Be	9	2	H2	0.041749	23.8	60.000
B	11	2	H2	575.758179	1.0	206475.110
Na	23	1	He	35927.62029	0.5	31775945.360
Mg	24	1	He	41855.52723	0.4	20629797.607
Al	27	1	He	27.690415	1.2	6953.630
Si	28	2	H2	3681.627647	1.1	10757605.000
K	39	1	He	4154.577691	0.5	3050417.140
Ca	43	1	He	251352.6939	0.6	530617.133
Ti	47	1	He	0.245040	6.1	57.667
V	51	1	He	0.054774	239.5	-129.573
Cr	52	1	He	0.493066	2.4	5884.533
Mn	55	1	He	0.552616	1.2	3503.763
Fe	56	1	He	9.932701	1.8	84714.247
Co	59	1	He	0.082606	6.6	1117.380
Ni	60	1	He	0.094091	6.2	1084.710
Cu	63	1	He	0.108521	2.8	1098.713
Zn	66	1	He	3.767929	1.4	7156.440
As	75	1	He	0.127838	5.9	322.333
Se	78	2	H2	2.172825	1.2	1691.437
Sr	88	1	He	434.963531	0.6	4541073.890
Mo	95	1	He	0.314981	0.7	1728.110
Pd	105	1	He	0.271245	4.2	2420.230
Ag	107	1	He	0.049592	9.1	1003.380
Cd	111	1	He	0.005335	69.9	36.023
Sn	118	1	He	0.038317	7.1	400.010
Sb	121	1	He	0.046043	9.1	615.020
Ba	138	1	He	57.770577	0.8	1490840.707
Pt	195	1	He	0.004922	55.2	240.667
Hg	202	1	He	0.016790	15.2	272.000
Tl	205	1	He	0.028675	6.9	1608.447
Pb	208	1	He	0.009485	16.2	3138.500
Bi	209	1	He	0.003067	149.1	1786.823
Th	232	1	He	0.017356	6.1	1745.133
U	238	1	He	1.950453	0.4	103646.890

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.23867260	555024.770
Sc	45	2	H2	97.11099531	4482516.167
Ge	72	1	He	91.85944744	449430.960
Ge	72	2	H2	98.30091271	1512557.333
In	115	1	He	91.46873696	5076552.193
Tb	159	1	He	95.56277427	12142139.820
Ir	193	1	He	95.02306121	5933787.623



Sample Name rinse  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 068SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:51:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	-0.020104		106.667
Be	9	2	H2	0.010307	232.7	48.833
B	11	2	H2	6.620687	1.4	3692.453
Na	23	1	He	4.938722	8.5	15269.537
Mg	24	1	He	-5.668706		3530.450
Al	27	1	He	0.122607	40.1	120.000
Si	28	2	H2	-0.793860		13356.693
K	39	1	He	-0.629765		69792.383
Ca	43	1	He	9.527071	17.5	35.517
Ti	47	1	He	-0.008128		0.333
V	51	1	He	-0.050962		-851.687
Cr	52	1	He	-0.016045		2172.837
Mn	55	1	He	-0.030195		241.333
Fe	56	1	He	-0.089706		13219.313
Co	59	1	He	-0.002988		118.667
Ni	60	1	He	-0.139565		428.677
Cu	63	1	He	-0.006988		173.333
Zn	66	1	He	-0.014004		178.000
As	75	1	He	0.005167	110.2	130.333
Se	78	2	H2	-0.005022		22.667
Sr	88	1	He	0.018592	25.5	370.010
Mo	95	1	He	0.004351	61.1	48.000
Pd	105	1	He	-0.011587		156.667
Ag	107	1	He	0.007995	11.7	308.343
Cd	111	1	He	-0.001191		16.323
Sn	118	1	He	0.007850	50.0	165.000
Sb	121	1	He	0.001347	130.0	91.667
Ba	138	1	He	0.002370	65.0	211.667
Pt	195	1	He	0.000118	366.2	197.333
Hg	202	1	He	0.003784	76.3	213.667
Tl	205	1	He	0.001195	89.7	571.683
Pb	208	1	He	-0.009861		2218.430
Bi	209	1	He	0.001960	71.8	1860.163
Th	232	1	He	0.002108	73.8	968.380
U	238	1	He	-0.002821		866.707

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.13913653	590529.440
Sc	45	2	H2	98.86559818	4563506.333
Ge	72	1	He	97.95958534	479276.457
Ge	72	2	H2	99.21661204	1526647.210
In	115	1	He	99.11178994	5500744.750
Tb	159	1	He	99.98525950	12704057.727
Ir	193	1	He	101.6628029	6348411.367

Sample Name 60398600003\_B70041Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 069SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:55:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.250164	5.2	205.667
Be	9	2	H2	-0.001090		43.667
B	11	2	H2	63.289364	0.5	23848.413
Na	23	1	He	3563.464291	1.0	3275423.077
Mg	24	1	He	4189.427586	1.0	2145537.573
Al	27	1	He	4.465670	0.9	1233.717
Si	28	2	H2	374.978393	0.7	1110672.877
K	39	1	He	414.783729	0.5	377223.393
Ca	43	1	He	24679.97026	0.8	54005.107
Ti	47	1	He	0.060011	53.3	16.333
V	51	1	He	0.046632	118.3	-185.967
Cr	52	1	He	0.079917	9.0	2866.953
Mn	55	1	He	0.052918	6.5	719.353
Fe	56	1	He	1.330969	4.4	23495.157
Co	59	1	He	0.007612	13.2	247.333
Ni	60	1	He	-0.128062		456.677
Cu	63	1	He	0.022767	9.8	423.343
Zn	66	1	He	0.563585	7.9	1294.063
As	75	1	He	0.025254	34.8	162.500
Se	78	2	H2	0.245323	4.1	215.000
Sr	88	1	He	41.507056	0.7	454495.500
Mo	95	1	He	0.032248	3.6	206.667
Pd	105	1	He	0.022936	26.1	446.677
Ag	107	1	He	0.011597	15.5	366.677
Cd	111	1	He	0.001866	90.4	26.293
Sn	118	1	He	0.008909	18.7	170.000
Sb	121	1	He	0.004182	8.3	125.000
Ba	138	1	He	5.503365	0.9	150253.023
Pt	195	1	He	-0.000357		188.667
Hg	202	1	He	0.001808	283.9	199.333
Tl	205	1	He	0.004171	49.6	680.023
Pb	208	1	He	0.003781	112.6	2918.487
Bi	209	1	He	0.002405	111.3	1820.157
Th	232	1	He	0.005145	21.9	1110.063
U	238	1	He	0.187965	1.8	11238.280

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.58777359	575177.207
Sc	45	2	H2	97.20843454	4487013.833
Ge	72	1	He	96.31293457	471220.063
Ge	72	2	H2	98.61790602	1517434.913
In	115	1	He	96.68955422	5366309.680
Tb	159	1	He	98.30167565	12490142.730
Ir	193	1	He	98.38841482	6143939.700

Sample Name 60398600004\_B70041Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 070SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 11:59:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.484436	3.8	1030.870
Be	9	2	H2	0.007686	104.1	46.667
B	11	2	H2	593.486614	3.6	211217.507
Na	23	1	He	36612.79601	0.7	32319965.353
Mg	24	1	He	42667.49791	0.6	20989686.773
Al	27	1	He	19.333416	4.5	4870.517
Si	28	2	H2	3790.724400	3.4	10994349.000
K	39	1	He	4220.612279	0.5	3091990.267
Ca	43	1	He	257264.9631	0.4	542070.340
Ti	47	1	He	0.238210	3.6	56.000
V	51	1	He	0.089056	45.7	90.317
Cr	52	1	He	0.568258	3.6	6440.097
Mn	55	1	He	0.695218	3.5	4297.310
Fe	56	1	He	8.949444	1.7	77478.123
Co	59	1	He	0.084096	9.1	1130.047
Ni	60	1	He	1.039893	3.6	3830.510
Cu	63	1	He	0.138142	5.6	1332.730
Zn	66	1	He	2.960488	2.6	5637.107
As	75	1	He	0.130560	3.0	325.167
Se	78	2	H2	2.254117	4.2	1739.443
Sr	88	1	He	450.383893	1.1	4679872.847
Mo	95	1	He	0.316047	1.5	1730.780
Pd	105	1	He	0.267894	6.4	2388.560
Ag	107	1	He	0.012380	25.4	360.010
Cd	111	1	He	0.008369	4.9	45.687
Sn	118	1	He	0.047056	11.0	470.010
Sb	121	1	He	0.078355	4.0	996.717
Ba	138	1	He	59.178727	0.8	1524379.873
Pt	195	1	He	0.007257	35.7	264.000
Hg	202	1	He	0.005206	58.7	210.000
Tl	205	1	He	0.016296	16.2	1121.727
Pb	208	1	He	0.019472	17.2	3635.207
Bi	209	1	He	0.005461	11.2	1870.173
Th	232	1	He	0.009688	10.8	1308.413
U	238	1	He	2.035854	1.4	106980.250

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.06220823	553962.937
Sc	45	2	H2	96.45578822	4452272.667
Ge	72	1	He	91.42602635	447310.407
Ge	72	2	H2	97.53938843	1500839.750
In	115	1	He	91.30559245	5067497.607
Tb	159	1	He	94.82307376	12048153.987
Ir	193	1	He	94.00069396	5869945.120

Sample Name rinse  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 071SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:03:03  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	-0.045749		96.500
Be	9	2	H2	-0.009392		41.000
B	11	2	H2	7.928884	4.7	4151.070
Na	23	1	He	5.289052	12.5	15438.070
Mg	24	1	He	-5.945196		3350.407
Al	27	1	He	0.072434	34.2	105.667
Si	28	2	H2	-0.841105		13165.823
K	39	1	He	0.968648	60.0	70276.250
Ca	43	1	He	4.538428	20.4	24.050
Ti	47	1	He	-0.003929		1.333
V	51	1	He	0.028977	99.8	-306.530
Cr	52	1	He	-0.007842		2215.507
Mn	55	1	He	-0.025817		264.667
Fe	56	1	He	-0.112651		12907.723
Co	59	1	He	-0.003217		115.333
Ni	60	1	He	-0.157393		372.007
Cu	63	1	He	-0.008244		162.000
Zn	66	1	He	-0.023731		158.000
As	75	1	He	0.005839	117.5	131.000
Se	78	2	H2	-0.002745		24.333
Sr	88	1	He	0.009256	14.6	265.003
Mo	95	1	He	0.000635	377.0	26.000
Pd	105	1	He	-0.015495		121.667
Ag	107	1	He	0.000762	331.9	171.667
Cd	111	1	He	-0.001059		16.663
Sn	118	1	He	0.007422	34.2	160.000
Sb	121	1	He	-0.000298		70.000
Ba	138	1	He	0.000985	110.4	171.667
Pt	195	1	He	0.000877	87.2	204.667
Hg	202	1	He	-0.003276		174.000
Tl	205	1	He	-0.002080		436.680
Pb	208	1	He	-0.012480		2061.753
Bi	209	1	He	0.002999	141.5	1886.837
Th	232	1	He	-0.000179		825.033
U	238	1	He	-0.003831		801.700

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.11944556	584393.687
Sc	45	2	H2	98.47801495	4545616.000
Ge	72	1	He	97.60167430	477525.343
Ge	72	2	H2	98.99398900	1523221.707
In	115	1	He	98.38540771	5460430.240
Tb	159	1	He	99.38179787	12627382.310
Ir	193	1	He	100.5830092	6280982.823

Sample Name 60398600004\_B70041Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 072SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:06:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.219554	1.7	193.000
Be	9	2	H2	-0.014355		38.333
B	11	2	H2	61.689754	2.4	23125.803
Na	23	1	He	3332.200817	2.7	3055498.807
Mg	24	1	He	3890.114776	2.2	1987608.410
Al	27	1	He	3.900548	1.6	1085.707
Si	28	2	H2	359.451694	1.9	1058403.210
K	39	1	He	384.162689	2.9	353513.537
Ca	43	1	He	22862.96557	2.5	49900.287
Ti	47	1	He	0.048861	18.1	13.667
V	51	1	He	0.053607	80.1	-139.613
Cr	52	1	He	0.102038	29.3	3034.423
Mn	55	1	He	0.061315	15.9	766.690
Fe	56	1	He	1.208285	2.6	22524.673
Co	59	1	He	0.007499	9.7	245.333
Ni	60	1	He	-0.049186		696.687
Cu	63	1	He	0.051484	17.7	666.023
Zn	66	1	He	0.913993	3.6	1967.473
As	75	1	He	0.030132	43.0	170.167
Se	78	2	H2	0.203397	6.8	181.667
Sr	88	1	He	38.680689	2.1	422295.737
Mo	95	1	He	0.031829	13.3	204.000
Pd	105	1	He	0.017819	34.3	401.677
Ag	107	1	He	0.002218	60.3	195.000
Cd	111	1	He	0.001500	104.1	24.963
Sn	118	1	He	0.014611	34.8	218.333
Sb	121	1	He	0.006859	36.2	158.333
Ba	138	1	He	5.110260	2.9	139186.820
Pt	195	1	He	0.000862	399.3	201.333
Hg	202	1	He	-0.002936		173.333
Tl	205	1	He	0.000221	205.8	521.683
Pb	208	1	He	0.008909	14.5	3188.503
Bi	209	1	He	0.001978	200.7	1793.493
Th	232	1	He	0.002930	20.4	980.043
U	238	1	He	0.174710	4.4	10474.300

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.36759115	573852.310
Sc	45	2	H2	96.58836348	4458392.167
Ge	72	1	He	96.04359618	469902.300
Ge	72	2	H2	97.99955465	1507920.333
In	115	1	He	96.47097673	5354178.540
Tb	159	1	He	98.02236383	12454653.563
Ir	193	1	He	97.98149835	6118529.490

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 073\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:10:32  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	86.928438	3.8	31363.817
Be	9	2	H2	84.676573	3.1	31282.530
B	11	2	H2	86.385738	3.2	30927.513
Na	23	1	He	1032.405821	0.5	945840.507
Mg	24	1	He	1027.199460	1.1	525019.430
Al	27	1	He	1025.655660	1.0	260938.600
Si	28	2	H2	520.867692	3.3	1481081.290
K	39	1	He	1025.713826	0.4	822915.143
Ca	43	1	He	1036.802363	2.9	2256.667
Ti	47	1	He	81.991357	1.5	19034.267
V	51	1	He	82.049272	0.6	534776.420
Cr	52	1	He	83.872092	0.8	651058.353
Mn	55	1	He	82.974086	0.7	478589.477
Fe	56	1	He	518.733976	0.6	3848564.167
Co	59	1	He	84.000084	0.7	1034021.940
Ni	60	1	He	84.612957	0.5	259676.010
Cu	63	1	He	84.582415	0.6	717915.210
Zn	66	1	He	83.077375	0.9	160934.280
As	75	1	He	80.816631	0.8	138107.383
Se	78	2	H2	84.628880	2.5	62572.260
Sr	88	1	He	82.536682	0.5	902211.003
Mo	95	1	He	79.488819	1.2	451046.400
Pd	105	1	He	83.712944	0.9	705316.083
Ag	107	1	He	41.546537	2.2	751733.140
Cd	111	1	He	82.141178	0.6	276070.027
Sn	118	1	He	78.914994	0.3	671729.260
Sb	121	1	He	80.354177	0.1	998371.733
Ba	138	1	He	80.097733	0.3	2163631.843
Pt	195	1	He	82.855425	1.7	921618.857
Hg	202	1	He	3.894606	3.5	21040.247
Tl	205	1	He	42.998762	2.1	1706062.683
Pb	208	1	He	83.678325	1.8	4520113.480
Bi	209	1	He	83.309849	0.5	3763940.463
Th	232	1	He	77.526558	0.7	4444494.203
U	238	1	He	79.936703	0.6	4382995.143

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.54319038	568891.670
Sc	45	2	H2	93.74174879	4326996.167
Ge	72	1	He	96.16614126	470501.863
Ge	72	2	H2	94.85016154	1459460.583
In	115	1	He	95.74774475	5314038.870
Tb	159	1	He	98.05371076	12458636.483
Ir	193	1	He	98.93641031	6178159.697

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 074\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:14:17  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	-0.002080		109.667
Be	9	2	H2	-0.016394		37.167
B	11	2	H2	4.038734	3.1	2663.570
Na	23	1	He	1.814827	6.9	11858.110
Mg	24	1	He	-7.565699		2438.550
Al	27	1	He	0.078895	38.4	104.333
Si	28	2	H2	0.195196	977.8	15732.193
K	39	1	He	0.838382	171.0	68194.863
Ca	43	1	He	0.661850	122.1	15.000
Ti	47	1	He	0.003416	217.1	3.000
V	51	1	He	-0.007133		-532.543
Cr	52	1	He	-0.011656		2123.493
Mn	55	1	He	-0.014201		324.007
Fe	56	1	He	-0.153995		12237.807
Co	59	1	He	0.001392	90.3	168.667
Ni	60	1	He	-0.169052		327.337
Cu	63	1	He	-0.000141		226.000
Zn	66	1	He	-0.008612		183.333
As	75	1	He	0.010299	27.8	135.333
Se	78	2	H2	-0.006576		21.000
Sr	88	1	He	0.006157	28.1	225.000
Mo	95	1	He	0.009055	15.1	73.333
Pd	105	1	He	0.003976	76.5	283.340
Ag	107	1	He	0.143664	25.4	2760.303
Cd	111	1	He	0.000045	5958.9	19.990
Sn	118	1	He	0.005128	37.6	136.667
Sb	121	1	He	0.001171	38.2	86.667
Ba	138	1	He	0.001073	53.2	170.000
Pt	195	1	He	0.001619	78.4	209.333
Hg	202	1	He	0.018045	12.6	284.667
Tl	205	1	He	0.041682	25.9	2156.877
Pb	208	1	He	-0.007217		2308.427
Bi	209	1	He	0.001466	94.5	1786.817
Th	232	1	He	0.015162	12.2	1690.127
U	238	1	He	-0.001389		921.707

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.37572733	567884.000
Sc	45	2	H2	95.57845249	4411776.000
Ge	72	1	He	95.20660455	465807.240
Ge	72	2	H2	97.33767068	1497735.917
In	115	1	He	96.07835901	5332388.097
Tb	159	1	He	97.64064250	12406152.317
Ir	193	1	He	98.89192173	6175381.573

Sample Name 4310629\_B70030Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 075\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:18:01  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	-0.038192		96.667
Be	9	2	H2	-0.018386		36.500
B	11	2	H2	5.091599	2.0	3038.973
Na	23	1	He	10.797492	4.2	20060.193
Mg	24	1	He	-4.214538		4143.943
Al	27	1	He	8.204688	3.0	2175.493
Si	28	2	H2	2.817713	4.3	23327.557
K	39	1	He	1.369332	74.5	68844.557
Ca	43	1	He	14.960740	15.6	46.067
Ti	47	1	He	0.079319	17.2	20.667
V	51	1	He	-0.046689		-794.420
Cr	52	1	He	0.127712	10.1	3211.697
Mn	55	1	He	0.090628	3.9	930.697
Fe	56	1	He	2.383562	1.5	31083.590
Co	59	1	He	0.006452	18.2	230.000
Ni	60	1	He	-0.130740		442.677
Cu	63	1	He	0.049981	7.6	646.020
Zn	66	1	He	1.443240	4.2	2959.643
As	75	1	He	0.009737	80.1	134.167
Se	78	2	H2	0.003001	435.1	28.000
Sr	88	1	He	0.028713	21.0	468.347
Mo	95	1	He	0.011667	20.2	89.333
Pd	105	1	He	-0.006584		196.667
Ag	107	1	He	0.033587	8.9	773.363
Cd	111	1	He	0.005723	46.4	39.650
Sn	118	1	He	0.145778	7.2	1355.077
Sb	121	1	He	0.004779	9.8	133.333
Ba	138	1	He	0.039363	14.1	1223.397
Pt	195	1	He	0.004467	17.6	242.000
Hg	202	1	He	0.010649	26.7	246.333
Tl	205	1	He	0.011890	18.2	985.043
Pb	208	1	He	0.003637	71.9	2905.147
Bi	209	1	He	0.011778	30.0	2276.907
Th	232	1	He	0.008285	5.0	1310.080
U	238	1	He	0.002276	70.6	1135.060

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.73327444	570035.457
Sc	45	2	H2	95.76030341	4420170.000
Ge	72	1	He	95.05718415	465076.187
Ge	72	2	H2	96.39214403	1483187.087
In	115	1	He	97.31916383	5401253.270
Tb	159	1	He	98.08048629	12462038.563
Ir	193	1	He	99.97525522	6243031.160



Sample Name 4310630\_B70030Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 076SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:21:46  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	108.426515	0.1	39580.777
Be	9	2	H2	106.545981	0.2	39836.020
B	11	2	H2	106.062545	0.5	38157.287
Na	23	1	He	2098.041026	0.3	1896237.107
Mg	24	1	He	2091.908114	0.5	1054230.973
Al	27	1	He	2071.816893	0.5	522786.647
Si	28	2	H2	526.986295	0.2	1516836.957
K	39	1	He	2074.459087	0.3	1582268.360
Ca	43	1	He	2097.279980	2.5	4514.837
Ti	47	1	He	103.932261	0.4	23935.063
V	51	1	He	105.835130	0.9	684396.980
Cr	52	1	He	108.115473	0.6	831887.730
Mn	55	1	He	105.982335	0.3	606287.897
Fe	56	1	He	2116.046362	0.5	15532492.667
Co	59	1	He	107.801078	0.4	1318081.543
Ni	60	1	He	108.776265	0.1	331358.137
Cu	63	1	He	107.422167	0.2	905612.893
Zn	66	1	He	106.746622	0.6	205345.640
As	75	1	He	103.008205	0.4	174821.000
Se	78	2	H2	105.011578	1.4	79254.737
Sr	88	1	He	105.404792	0.3	1144421.210
Mo	95	1	He	101.118897	0.6	571763.020
Pd	105	1	He	21.056456	0.8	176971.423
Ag	107	1	He	49.673819	0.7	895646.417
Cd	111	1	He	105.307021	0.4	352678.570
Sn	118	1	He	100.611071	0.8	853347.460
Sb	121	1	He	103.066511	0.5	1276010.347
Ba	138	1	He	102.756372	0.8	2765838.187
Pt	195	1	He	21.089642	0.1	233860.287
Hg	202	1	He	0.009593	24.5	239.667
Tl	205	1	He	108.891753	0.3	4303847.747
Pb	208	1	He	106.523323	0.4	5732178.460
Bi	209	1	He	105.606542	1.1	4753566.283
Th	232	1	He	105.485414	0.6	6025330.537
U	238	1	He	103.447349	0.9	5651338.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.78172127	564309.707
Sc	45	2	H2	94.84289938	4377823.833
Ge	72	1	He	95.52091091	467345.013
Ge	72	2	H2	96.77619867	1489096.540
In	115	1	He	95.41053875	5295323.800
Tb	159	1	He	97.67912191	12411041.483
Ir	193	1	He	98.58381436	6156141.573

Sample Name 10606599001\_B70030Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 077SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:25:30  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.578756	1.0	2141.650
Be	9	2	H2	0.031595	62.1	54.833
B	11	2	H2	56.295817	0.5	20845.490
Na	23	1	He	43457.55595	1.4	38334736.097
Mg	24	1	He	8552.999016	1.4	4209605.977
Al	27	1	He	15.866649	4.2	4008.207
Si	28	2	H2	2020.197305	0.6	5775269.000
K	39	1	He	9189.152002	1.7	6649671.360
Ca	43	1	He	21604.27625	1.1	45504.057
Ti	47	1	He	0.064214	20.5	16.667
V	51	1	He	0.979955	15.3	5754.873
Cr	52	1	He	0.143709	4.5	3239.697
Mn	55	1	He	19.777772	1.8	111311.910
Fe	56	1	He	28.266446	1.5	216408.853
Co	59	1	He	0.228807	2.8	2884.293
Ni	60	1	He	2.041071	1.8	6886.980
Cu	63	1	He	0.086820	6.6	938.033
Zn	66	1	He	10.338350	2.3	19620.573
As	75	1	He	0.977195	1.0	1736.270
Se	78	2	H2	5.776730	0.3	4393.677
Sr	88	1	He	95.641564	1.1	1015364.543
Mo	95	1	He	10.380496	1.6	57840.847
Pd	105	1	He	0.063310	13.2	768.357
Ag	107	1	He	0.215749	31.2	3985.640
Cd	111	1	He	0.007330	27.4	43.587
Sn	118	1	He	0.031076	23.2	350.010
Sb	121	1	He	0.273743	2.2	3408.780
Ba	138	1	He	21.111587	1.8	559902.363
Pt	195	1	He	0.007457	29.5	272.000
Hg	202	1	He	-0.001113		181.333
Tl	205	1	He	0.095633	2.1	4262.407
Pb	208	1	He	0.046414	6.7	5158.730
Bi	209	1	He	0.008630	50.1	2086.877
Th	232	1	He	0.062556	12.0	4347.437
U	238	1	He	0.134610	4.7	8274.383

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.01115017	553655.707
Sc	45	2	H2	94.89647543	4380296.833
Ge	72	1	He	93.40522807	456993.837
Ge	72	2	H2	96.98792225	1492354.333
In	115	1	He	94.00535328	5217335.433
Tb	159	1	He	97.01865933	12327123.567
Ir	193	1	He	97.69422912	6100590.743

Sample Name 4315140\_B70030Dx25  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 078SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:29:15  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.129438	2.6	526.843
Be	9	2	H2	-0.007474		40.667
B	11	2	H2	12.996070	1.6	5828.290
Na	23	1	He	10002.46956	25.1	7729070.930
Mg	24	1	He	1956.349900	24.9	847224.467
Al	27	1	He	6.046341	28.5	1377.733
Si	28	2	H2	389.533282	0.7	1138241.000
K	39	1	He	2131.823999	27.0	1392891.177
Ca	43	1	He	4911.655936	26.1	9050.050
Ti	47	1	He	0.034527	68.7	8.333
V	51	1	He	0.286183	19.3	1176.160
Cr	52	1	He	0.105573	62.8	2617.580
Mn	55	1	He	4.466055	26.0	22249.570
Fe	56	1	He	6.943221	35.0	54915.327
Co	59	1	He	0.054991	28.1	711.353
Ni	60	1	He	0.350753	51.3	1631.430
Cu	63	1	He	0.060566	45.7	628.680
Zn	66	1	He	2.615905	24.5	4504.047
As	75	1	He	0.238755	29.4	451.343
Se	78	2	H2	1.167324	4.6	912.030
Sr	88	1	He	21.839550	25.4	203843.210
Mo	95	1	He	2.316102	24.9	11369.227
Pd	105	1	He	0.013466	128.6	306.673
Ag	107	1	He	0.045001	29.6	836.700
Cd	111	1	He	0.004421	57.1	29.953
Sn	118	1	He	0.036002	33.2	345.010
Sb	121	1	He	0.065682	35.6	758.363
Ba	138	1	He	4.740387	25.3	110637.587
Pt	195	1	He	0.004776	56.3	216.667
Hg	202	1	He	0.010738	113.6	212.000
Tl	205	1	He	0.023932	26.5	1273.410
Pb	208	1	He	0.017130	81.4	3146.837
Bi	209	1	He	0.004540	93.3	1716.817
Th	232	1	He	0.015603	35.9	1490.103
U	238	1	He	0.034314	42.9	2465.257

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	83.53975630	502681.063
Sc	45	2	H2	95.94972604	4428913.500
Ge	72	1	He	85.13521045	416532.000
Ge	72	2	H2	97.39557926	1498626.957
In	115	1	He	85.66181439	4754265.623
Tb	159	1	He	87.40766369	11105957.127
Ir	193	1	He	88.01603568	5496228.563

Sample Name 4310631\_B70030Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 079SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:32:59  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	27.543383	1.4	10175.240
Be	9	2	H2	22.100025	0.6	8328.957
B	11	2	H2	79.183603	0.2	28912.040
Na	23	1	He	45435.31897	0.3	40506850.233
Mg	24	1	He	9250.729186	0.5	4601142.430
Al	27	1	He	437.816117	0.4	109599.377
Si	28	2	H2	2217.022954	0.4	6357370.333
K	39	1	He	9973.048074	0.1	7288534.057
Ca	43	1	He	22843.69154	0.6	48626.810
Ti	47	1	He	21.840663	1.8	4988.513
V	51	1	He	23.155216	0.8	148088.453
Cr	52	1	He	22.209407	0.7	171166.883
Mn	55	1	He	42.531530	0.3	241476.470
Fe	56	1	He	463.869282	0.4	3386236.833
Co	59	1	He	22.369684	1.0	269894.103
Ni	60	1	He	24.288517	1.3	73619.280
Cu	63	1	He	22.086412	0.6	183832.507
Zn	66	1	He	29.111886	1.0	55379.610
As	75	1	He	22.630475	0.5	37975.137
Se	78	2	H2	27.885189	2.5	21149.137
Sr	88	1	He	121.344837	0.5	1299480.527
Mo	95	1	He	32.142848	0.2	178942.257
Pd	105	1	He	3.972641	1.8	33070.353
Ag	107	1	He	9.650467	3.5	171434.333
Cd	111	1	He	21.514988	0.6	70951.850
Sn	118	1	He	21.044138	0.9	175792.127
Sb	121	1	He	21.598659	0.6	263306.130
Ba	138	1	He	43.434903	0.4	1151068.653
Pt	195	1	He	4.179129	1.4	46325.260
Hg	202	1	He	-0.004102		166.000
Tl	205	1	He	21.423608	1.4	844062.463
Pb	208	1	He	21.416454	0.9	1150436.927
Bi	209	1	He	21.241911	0.3	950765.323
Th	232	1	He	21.642525	0.7	1228135.947
U	238	1	He	21.666704	0.9	1176071.830

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.98272295	559501.920
Sc	45	2	H2	95.20836326	4394693.167
Ge	72	1	He	94.21886535	460974.633
Ge	72	2	H2	97.16132889	1495022.543
In	115	1	He	93.92934741	5213117.077
Tb	159	1	He	97.32605518	12366181.070
Ir	193	1	He	97.88186522	6112307.823

Sample Name 4310632\_B70030Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 080SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:36:43  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	26.334245	0.9	9828.347
Be	9	2	H2	21.311276	0.3	8111.507
B	11	2	H2	75.273067	0.9	27813.830
Na	23	1	He	42322.91120	0.9	38101349.430
Mg	24	1	He	8663.421459	1.0	4351473.270
Al	27	1	He	423.620045	1.1	107083.013
Si	28	2	H2	2064.962516	0.5	5980093.000
K	39	1	He	9281.619435	0.8	6854177.397
Ca	43	1	He	21172.89196	1.0	45510.717
Ti	47	1	He	20.724396	2.2	4779.777
V	51	1	He	22.142309	0.8	142974.270
Cr	52	1	He	21.330746	1.4	166086.763
Mn	55	1	He	39.683025	0.7	227534.153
Fe	56	1	He	442.736948	0.7	3264191.750
Co	59	1	He	21.354598	0.7	260575.090
Ni	60	1	He	23.243597	0.8	71289.157
Cu	63	1	He	21.254151	0.3	178915.843
Zn	66	1	He	27.737411	0.6	53372.813
As	75	1	He	21.586193	0.5	36637.193
Se	78	2	H2	26.519965	0.7	20202.113
Sr	88	1	He	113.304953	0.7	1227128.053
Mo	95	1	He	30.593531	1.1	170783.917
Pd	105	1	He	3.889513	0.6	32470.647
Ag	107	1	He	9.554545	2.7	170191.337
Cd	111	1	He	20.711393	0.8	68489.580
Sn	118	1	He	20.413773	1.4	170993.893
Sb	121	1	He	20.972606	0.4	256378.800
Ba	138	1	He	41.214741	0.8	1095217.277
Pt	195	1	He	4.056559	1.2	45063.017
Hg	202	1	He	-0.001608		179.667
Tl	205	1	He	20.837812	0.2	822656.577
Pb	208	1	He	20.642524	0.6	1111167.333
Bi	209	1	He	20.609583	0.8	923242.513
Th	232	1	He	20.993543	0.6	1192253.187
U	238	1	He	20.802968	0.5	1130113.030

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.89495761	564991.080
Sc	45	2	H2	96.13644061	4437532.000
Ge	72	1	He	95.28226108	466177.397
Ge	72	2	H2	97.58591034	1501555.583
In	115	1	He	94.18699819	5227416.800
Tb	159	1	He	97.51867521	12390655.237
Ir	193	1	He	97.95849172	6117092.823

Sample Name 10606170001\_B70030Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 081SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:40:28  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.799301	3.2	408.843
Be	9	2	H2	-0.000167		43.833
B	11	2	H2	106.797161	1.2	39206.967
Na	23	1	He	5566.832553	0.7	5123516.173
Mg	24	1	He	2260.745856	0.6	1163554.200
Al	27	1	He	9.040674	3.6	2415.867
Si	28	2	H2	260.015730	0.3	771671.190
K	39	1	He	739.732753	0.7	620631.593
Ca	43	1	He	4940.045045	1.4	10847.117
Ti	47	1	He	0.649226	5.5	155.000
V	51	1	He	0.265316	34.5	1259.443
Cr	52	1	He	0.225325	5.3	4013.900
Mn	55	1	He	204.292381	0.5	1193715.040
Fe	56	1	He	345.271019	0.6	2600855.083
Co	59	1	He	0.035638	3.6	596.680
Ni	60	1	He	-0.066749		648.687
Cu	63	1	He	0.092605	7.1	1023.373
Zn	66	1	He	0.931266	1.4	2019.480
As	75	1	He	0.452543	3.6	898.863
Se	78	2	H2	0.023145	63.4	44.000
Sr	88	1	He	46.682844	1.1	514346.853
Mo	95	1	He	0.378774	4.8	2198.847
Pd	105	1	He	0.025143	2.1	466.677
Ag	107	1	He	0.120606	30.0	2365.230
Cd	111	1	He	0.006144	17.3	40.940
Sn	118	1	He	0.018715	46.6	255.003
Sb	121	1	He	0.013288	28.6	240.003
Ba	138	1	He	6.783110	1.6	185728.767
Pt	195	1	He	0.000854	206.0	202.667
Hg	202	1	He	-0.000911		185.333
Tl	205	1	He	0.018371	21.6	1248.403
Pb	208	1	He	0.025190	15.3	4088.600
Bi	209	1	He	0.005680	58.2	1983.527
Th	232	1	He	0.026575	1.9	2350.233
U	238	1	He	0.041796	2.5	3297.123

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.82117134	576581.623
Sc	45	2	H2	96.80292763	4468296.167
Ge	72	1	He	96.92265138	474203.160
Ge	72	2	H2	98.18551538	1510781.713
In	115	1	He	96.98425897	5382665.913
Tb	159	1	He	98.57719004	12525149.397
Ir	193	1	He	99.15765569	6191975.533

Sample Name 10606181001\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 082SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:44:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	28.635300	1.1	10880.563
Be	9	2	H2	-0.003245		43.167
B	11	2	H2	110.564169	0.3	41033.773
Na	23	1	He	46958.59164	0.3	41792112.713
Mg	24	1	He	33395.56189	0.5	16565426.000
Al	27	1	He	11.687218	4.6	3001.307
Si	28	2	H2	13706.33745	0.7	40361049.333
K	39	1	He	5484.614158	0.7	4031241.603
Ca	43	1	He	83146.39059	0.0	176648.307
Ti	47	1	He	0.334188	15.2	78.333
V	51	1	He	1.146199	17.8	6862.560
Cr	52	1	He	1.574304	0.4	14134.830
Mn	55	1	He	1.635241	1.5	9651.860
Fe	56	1	He	7.296436	0.8	66119.207
Co	59	1	He	0.085985	4.8	1168.717
Ni	60	1	He	0.593428	2.4	2568.903
Cu	63	1	He	0.622983	1.5	5320.987
Zn	66	1	He	1.818921	2.2	3589.790
As	75	1	He	0.987674	0.4	1741.777
Se	78	2	H2	0.601790	5.4	482.010
Sr	88	1	He	330.295850	0.7	3482523.700
Mo	95	1	He	1.678148	0.7	9219.670
Pd	105	1	He	0.194163	5.9	1820.137
Ag	107	1	He	0.048754	3.4	1000.047
Cd	111	1	He	0.009318	26.8	49.340
Sn	118	1	He	0.037153	14.1	395.010
Sb	121	1	He	0.088239	4.7	1128.387
Ba	138	1	He	188.771973	0.2	4925814.717
Pt	195	1	He	0.007197	4.7	269.333
Hg	202	1	He	-0.001486		179.333
Tl	205	1	He	0.005406	20.1	720.027
Pb	208	1	He	0.019105	12.2	3700.217
Bi	209	1	He	0.007488	23.2	2003.520
Th	232	1	He	0.006932	37.5	1186.733
U	238	1	He	12.260029	0.4	654800.747

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.82157118	558532.227
Sc	45	2	H2	97.96800985	4522074.833
Ge	72	1	He	92.77021793	453886.990
Ge	72	2	H2	97.24762461	1496350.377
In	115	1	He	92.49572966	5133550.707
Tb	159	1	He	97.00765400	12325725.237
Ir	193	1	He	96.25212099	6010537.200

Sample Name 4309028\_B69934Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 083SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:47:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	108.210637	0.9	40829.573
Be	9	2	H2	80.660454	0.4	31182.323
B	11	2	H2	187.343590	0.8	68683.997
Na	23	1	He	47713.37639	1.2	42923686.027
Mg	24	1	He	34541.25800	1.0	17319262.657
Al	27	1	He	1965.448240	0.9	496197.343
Si	28	2	H2	14462.95977	1.3	42615132.000
K	39	1	He	7315.609499	0.6	5413033.250
Ca	43	1	He	83978.29160	0.8	180351.957
Ti	47	1	He	82.176105	0.3	18935.143
V	51	1	He	82.845427	1.6	535884.583
Cr	52	1	He	83.518403	1.4	643439.460
Mn	55	1	He	82.560972	1.4	472620.157
Fe	56	1	He	994.254734	0.8	7308935.333
Co	59	1	He	80.896796	0.1	972386.960
Ni	60	1	He	82.480327	0.8	247184.283
Cu	63	1	He	81.043877	0.7	671679.767
Zn	66	1	He	83.203337	0.4	157383.533
As	75	1	He	82.569855	0.8	137776.807
Se	78	2	H2	82.231402	1.3	62543.907
Sr	88	1	He	403.772853	0.4	4309063.897
Mo	95	1	He	84.699919	0.9	460081.493
Pd	105	1	He	79.735000	1.3	643085.563
Ag	107	1	He	31.874535	0.4	552222.583
Cd	111	1	He	82.023898	1.3	263885.703
Sn	118	1	He	82.314979	1.3	670686.947
Sb	121	1	He	81.651254	0.8	971134.803
Ba	138	1	He	269.759528	0.9	6975089.897
Pt	195	1	He	79.711247	0.5	873673.623
Hg	202	1	He	0.002817	88.1	201.333
Tl	205	1	He	40.171754	0.9	1570575.290
Pb	208	1	He	80.478573	0.7	4283706.897
Bi	209	1	He	79.419291	1.2	3454032.240
Th	232	1	He	6.391349	0.8	353438.733
U	238	1	He	94.419145	1.2	4983119.717

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.83277268	564616.897
Sc	45	2	H2	98.03173927	4525016.500
Ge	72	1	He	93.89960933	459412.643
Ge	72	2	H2	97.51680184	1500492.210
In	115	1	He	91.66275241	5087320.130
Tb	159	1	He	96.60855559	12275016.070
Ir	193	1	He	95.24387613	5947576.580



Sample Name 4309029\_B69934Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 084SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:51:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	6.102432	2.3	2365.853
Be	9	2	H2	0.010600	82.6	47.667
B	11	2	H2	25.857279	0.9	10390.900
Na	23	1	He	9501.709031	0.5	8622618.413
Mg	24	1	He	6780.399513	0.2	3431250.887
Al	27	1	He	4.028641	5.0	1109.040
Si	28	2	H2	2796.086725	0.6	8102148.833
K	39	1	He	1112.152917	0.7	886700.637
Ca	43	1	He	16810.75926	0.4	36393.980
Ti	47	1	He	0.069367	28.7	18.333
V	51	1	He	0.300675	26.8	1473.633
Cr	52	1	He	0.366353	3.1	5052.883
Mn	55	1	He	0.389236	1.6	2650.247
Fe	56	1	He	1.762389	1.3	26432.497
Co	59	1	He	0.024665	7.3	451.343
Ni	60	1	He	0.006520	181.1	857.363
Cu	63	1	He	0.149554	5.4	1480.747
Zn	66	1	He	0.559737	2.4	1269.393
As	75	1	He	0.218463	4.7	486.177
Se	78	2	H2	0.124032	17.1	119.667
Sr	88	1	He	65.749891	0.7	710131.447
Mo	95	1	He	0.339660	3.8	1950.140
Pd	105	1	He	0.056642	7.7	726.693
Ag	107	1	He	0.139652	24.0	2683.623
Cd	111	1	He	0.006989	15.5	43.313
Sn	118	1	He	0.021196	15.6	273.340
Sb	121	1	He	0.022785	10.1	355.010
Ba	138	1	He	37.237034	1.5	1006562.720
Pt	195	1	He	0.005647	50.2	254.000
Hg	202	1	He	0.000031	2994.1	188.667
Tl	205	1	He	0.040615	25.4	2115.190
Pb	208	1	He	0.006839	17.2	3065.153
Bi	209	1	He	0.010847	31.5	2176.887
Th	232	1	He	0.009703	10.7	1356.753
U	238	1	He	2.438320	1.4	132605.503

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.55930678	568988.647
Sc	45	2	H2	96.25712212	4443102.500
Ge	72	1	He	95.01294449	464859.740
Ge	72	2	H2	97.00281837	1492583.540
In	115	1	He	95.81518605	5317781.890
Tb	159	1	He	97.66938562	12409804.397
Ir	193	1	He	97.42941601	6084054.287

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 085\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:55:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	86.871467	0.6	32078.637
Be	9	2	H2	84.936848	0.9	32110.080
B	11	2	H2	84.870160	0.5	31114.897
Na	23	1	He	1035.019409	1.4	968443.920
Mg	24	1	He	1022.326077	1.5	533726.957
Al	27	1	He	1022.275341	1.3	265635.997
Si	28	2	H2	517.650611	0.4	1506429.877
K	39	1	He	1023.830622	1.7	839042.070
Ca	43	1	He	1033.045546	2.0	2297.253
Ti	47	1	He	81.479771	2.6	19317.300
V	51	1	He	81.468337	1.9	542286.293
Cr	52	1	He	83.260948	2.1	660094.833
Mn	55	1	He	82.012595	1.9	483133.073
Fe	56	1	He	516.052143	1.8	3910331.500
Co	59	1	He	83.674716	1.6	1046226.460
Ni	60	1	He	84.402592	1.8	263098.697
Cu	63	1	He	84.661822	1.3	729913.377
Zn	66	1	He	82.811483	1.6	162946.700
As	75	1	He	80.571385	1.5	139856.733
Se	78	2	H2	82.946320	1.4	62878.627
Sr	88	1	He	82.388431	1.8	914728.033
Mo	95	1	He	78.693008	0.9	457195.760
Pd	105	1	He	83.021456	1.7	716176.810
Ag	107	1	He	41.191122	3.1	763017.150
Cd	111	1	He	81.326119	1.5	279844.800
Sn	118	1	He	78.975008	1.5	688242.620
Sb	121	1	He	79.719961	0.8	1014127.797
Ba	138	1	He	79.592338	1.2	2201240.177
Pt	195	1	He	82.474170	1.8	930003.250
Hg	202	1	He	3.897030	1.9	21345.730
Tl	205	1	He	42.651580	1.7	1715625.910
Pb	208	1	He	83.153040	1.5	4553710.717
Bi	209	1	He	83.012130	1.2	3808052.340
Th	232	1	He	76.888057	0.7	4475476.497
U	238	1	He	79.442022	1.2	4422543.893

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.57540737	581120.063
Sc	45	2	H2	95.87427617	4425430.833
Ge	72	1	He	97.69284544	477971.407
Ge	72	2	H2	97.19208795	1495495.833
In	115	1	He	98.03860966	5441182.807
Tb	159	1	He	99.40310682	12630089.810
Ir	193	1	He	100.4517152	6272784.073

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 086\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 12:59:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.029979	39.9	123.500
Be	9	2	H2	0.005923	169.2	46.333
B	11	2	H2	2.700801	3.9	2231.500
Na	23	1	He	4.655354	4.8	14645.570
Mg	24	1	He	-7.680270		2416.880
Al	27	1	He	0.021199	315.9	91.000
Si	28	2	H2	-0.808932		13087.287
K	39	1	He	0.725792	150.0	69135.827
Ca	43	1	He	1.615321	107.6	17.300
Ti	47	1	He	-0.003834		1.333
V	51	1	He	0.048099	28.0	-176.923
Cr	52	1	He	-0.012786		2146.830
Mn	55	1	He	-0.010229		352.007
Fe	56	1	He	-0.207081		12024.290
Co	59	1	He	0.001875	88.5	176.000
Ni	60	1	He	-0.186245		277.333
Cu	63	1	He	0.001072	447.8	238.000
Zn	66	1	He	-0.001429		198.667
As	75	1	He	0.001160	540.1	120.833
Se	78	2	H2	0.000571	1197.1	26.667
Sr	88	1	He	0.003838	74.1	201.667
Mo	95	1	He	0.012635	15.5	95.333
Pd	105	1	He	0.012904	52.8	365.010
Ag	107	1	He	0.110159	22.2	2191.863
Cd	111	1	He	0.002271	13.2	27.980
Sn	118	1	He	0.005621	46.6	143.333
Sb	121	1	He	0.001313	102.6	90.000
Ba	138	1	He	0.002475	22.0	211.667
Pt	195	1	He	0.002222	90.7	218.000
Hg	202	1	He	0.014959	13.2	270.667
Tl	205	1	He	0.031266	22.3	1761.803
Pb	208	1	He	-0.009402		2211.757
Bi	209	1	He	0.001238	249.0	1800.160
Th	232	1	He	0.014802	6.8	1691.793
U	238	1	He	-0.001463		930.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.79955688	576451.563
Sc	45	2	H2	97.19039171	4486181.000
Ge	72	1	He	95.94886115	469438.800
Ge	72	2	H2	98.03075543	1508400.420
In	115	1	He	97.75135153	5425239.863
Tb	159	1	He	98.54250148	12520741.893
Ir	193	1	He	100.2107195	6257734.910

Sample Name 4312705\_B70019Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 087SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:02:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.053055	29.9	131.000
Be	9	2	H2	0.015328	130.7	49.500
B	11	2	H2	3.839037	1.5	2615.393
Na	23	1	He	10.692302	2.0	19985.130
Mg	24	1	He	-4.621645		3942.230
Al	27	1	He	5.664080	1.5	1529.747
Si	28	2	H2	1.364292	4.5	19271.103
K	39	1	He	2.062446	1.6	69430.663
Ca	43	1	He	7.227015	34.1	29.317
Ti	47	1	He	0.092109	9.4	23.667
V	51	1	He	0.005466	2779.3	-452.100
Cr	52	1	He	0.572755	2.8	6668.867
Mn	55	1	He	0.170041	1.2	1390.737
Fe	56	1	He	15.875453	0.7	131178.747
Co	59	1	He	0.017987	23.3	371.340
Ni	60	1	He	-0.150299		384.677
Cu	63	1	He	0.039526	11.5	560.010
Zn	66	1	He	1.472278	4.2	3023.657
As	75	1	He	0.007724	103.7	131.167
Se	78	2	H2	0.007166	86.9	31.333
Sr	88	1	He	0.031508	6.3	500.010
Mo	95	1	He	0.049044	8.2	302.670
Pd	105	1	He	0.005548	52.5	298.340
Ag	107	1	He	0.036554	4.5	821.697
Cd	111	1	He	0.015930	9.0	73.947
Sn	118	1	He	0.025044	17.4	308.343
Sb	121	1	He	0.005392	20.4	140.000
Ba	138	1	He	0.103248	2.3	2955.340
Pt	195	1	He	0.008372	13.6	287.333
Hg	202	1	He	0.008496	34.7	236.333
Tl	205	1	He	0.018140	22.6	1241.737
Pb	208	1	He	0.012234	5.1	3391.850
Bi	209	1	He	0.025146	20.0	2907.043
Th	232	1	He	0.018466	12.4	1913.490
U	238	1	He	0.008534	25.0	1491.770

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.83375638	570640.083
Sc	45	2	H2	96.37549637	4448566.500
Ge	72	1	He	95.32594071	466391.103
Ge	72	2	H2	96.96927016	1492067.333
In	115	1	He	96.59608302	5361121.990
Tb	159	1	He	98.73225867	12544852.310
Ir	193	1	He	100.6886008	6287576.573

Sample Name 10607060001\_B70019Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 088SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:06:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	143.936058	1.3	53927.457
Be	9	2	H2	0.302859	8.9	160.333
B	11	2	H2	408.571611	1.0	147340.427
Na	23	1	He	158113.6912	1.1	137914094.610
Mg	24	1	He	4963.489597	0.9	2418577.360
Al	27	1	He	6052.956129	1.3	1481680.543
Si	28	2	H2	13613.38033	0.9	39858928.000
K	39	1	He	2701.360497	1.2	1979349.657
Ca	43	1	He	18398.70621	1.3	38326.267
Ti	47	1	He	102.670001	2.8	22937.843
V	51	1	He	20.608832	2.3	128915.697
Cr	52	1	He	10.145905	1.9	77672.380
Mn	55	1	He	289.882701	1.1	1608239.460
Fe	56	1	He	5300.480425	1.2	37728693.333
Co	59	1	He	3.932315	1.8	45853.717
Ni	60	1	He	13.478678	0.8	39741.253
Cu	63	1	He	13.950122	1.3	112004.623
Zn	66	1	He	65.376383	1.6	119646.420
As	75	1	He	3.987263	1.4	6542.147
Se	78	2	H2	1.037552	1.4	809.353
Sr	88	1	He	438.113216	1.8	4522116.913
Mo	95	1	He	7.013480	1.1	37564.010
Pd	105	1	He	0.284523	5.6	2495.243
Ag	107	1	He	0.058415	3.5	1141.723
Cd	111	1	He	0.622303	4.3	1992.050
Sn	118	1	He	0.280389	1.2	2338.553
Sb	121	1	He	0.063769	3.4	815.030
Ba	138	1	He	78.777297	1.3	2007510.803
Pt	195	1	He	0.002970	114.5	218.000
Hg	202	1	He	0.069692	7.2	544.343
Tl	205	1	He	0.320876	1.9	12814.580
Pb	208	1	He	18.551628	1.5	971869.760
Bi	209	1	He	0.103867	3.4	6034.830
Th	232	1	He	4.282774	0.3	231811.580
U	238	1	He	13.723385	1.1	708949.443

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.99272335	547527.560
Sc	45	2	H2	97.40996756	4496316.333
Ge	72	1	He	90.82327177	444361.373
Ge	72	2	H2	96.86623651	1490481.953
In	115	1	He	90.33131048	5013424.560
Tb	159	1	He	94.87994025	12055379.403
Ir	193	1	He	93.11209619	5814455.953

Sample Name 4313472\_B70019Dx25  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 089SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:10:25  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	29.951245	1.2	11266.180
Be	9	2	H2	0.034045	38.5	57.000
B	11	2	H2	87.944076	0.7	32583.140
Na	23	1	He	31888.18397	0.5	29102800.400
Mg	24	1	He	1000.032589	0.4	514750.880
Al	27	1	He	1214.789100	0.0	311126.200
Si	28	2	H2	2762.026480	0.9	8067386.167
K	39	1	He	547.232757	0.3	473783.963
Ca	43	1	He	3671.509650	0.8	8011.277
Ti	47	1	He	20.765183	2.1	4855.147
V	51	1	He	4.170436	1.6	26897.230
Cr	52	1	He	2.048402	1.6	18185.930
Mn	55	1	He	58.086473	0.6	337417.230
Fe	56	1	He	1059.840380	0.7	7902029.667
Co	59	1	He	0.788848	2.3	9838.663
Ni	60	1	He	2.567801	2.3	8681.933
Cu	63	1	He	2.831158	1.2	24196.743
Zn	66	1	He	13.376789	0.9	26021.933
As	75	1	He	0.810476	1.8	1499.577
Se	78	2	H2	0.202383	5.8	180.333
Sr	88	1	He	85.335137	1.2	930590.247
Mo	95	1	He	1.388762	2.1	7890.203
Pd	105	1	He	0.051892	3.7	685.020
Ag	107	1	He	0.016444	11.0	450.010
Cd	111	1	He	0.136336	3.2	477.257
Sn	118	1	He	0.057180	8.0	578.350
Sb	121	1	He	0.016923	8.3	281.670
Ba	138	1	He	15.393511	0.9	415340.827
Pt	195	1	He	0.001402	214.6	207.333
Hg	202	1	He	0.013593	38.7	261.333
Tl	205	1	He	0.071313	7.3	3333.793
Pb	208	1	He	3.712495	2.0	202672.763
Bi	209	1	He	0.027589	2.4	2913.707
Th	232	1	He	0.822332	0.5	47086.467
U	238	1	He	2.663545	1.8	144338.487

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.17672766	572703.833
Sc	45	2	H2	97.02606728	4478596.000
Ge	72	1	He	95.94447425	469417.337
Ge	72	2	H2	97.75368171	1504137.083
In	115	1	He	95.61132563	5306467.553
Tb	159	1	He	97.83251154	12430531.063
Ir	193	1	He	97.14024833	6065996.990

Sample Name 4312707\_B70019Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 090SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:14:10  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	158.029630	0.8	61348.323
Be	9	2	H2	21.288870	0.9	8508.557
B	11	2	H2	415.067089	0.8	155101.113
Na	23	1	He	151246.4071	0.7	137110417.957
Mg	24	1	He	5386.662530	0.6	2727402.980
Al	27	1	He	7987.730961	0.9	2032118.917
Si	28	2	H2	18984.16081	0.9	57597813.333
K	39	1	He	3250.617768	0.4	2461725.170
Ca	43	1	He	18039.01368	0.4	39054.900
Ti	47	1	He	177.253025	3.1	41157.923
V	51	1	He	41.368874	1.6	269462.667
Cr	52	1	He	31.121456	0.9	243041.403
Mn	55	1	He	298.962628	1.1	1723764.497
Fe	56	1	He	5973.879620	0.7	44191592.000
Co	59	1	He	25.254737	0.5	303790.343
Ni	60	1	He	34.484650	0.2	103874.963
Cu	63	1	He	34.443439	0.3	285715.573
Zn	66	1	He	84.501551	0.4	159903.143
As	75	1	He	24.898864	0.8	41646.683
Se	78	2	H2	21.827488	0.7	16888.870
Sr	88	1	He	440.264881	0.2	4700511.803
Mo	95	1	He	27.003809	0.6	147560.813
Pd	105	1	He	4.362037	0.6	35616.633
Ag	107	1	He	9.783057	3.4	170560.380
Cd	111	1	He	21.761788	0.9	70440.580
Sn	118	1	He	16.274082	1.1	133456.747
Sb	121	1	He	10.429690	1.6	124837.397
Ba	138	1	He	98.357332	1.2	2558256.993
Pt	195	1	He	4.051635	0.7	44700.423
Hg	202	1	He	0.071744	4.4	566.343
Tl	205	1	He	21.331309	0.7	836382.463
Pb	208	1	He	37.942035	1.0	2026164.503
Bi	209	1	He	21.323762	0.2	918387.407
Th	232	1	He	26.179804	0.8	1429316.750
U	238	1	He	34.445681	1.2	1798502.317

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.56555269	569026.230
Sc	45	2	H2	100.9497092	4659706.167
Ge	72	1	He	93.93912961	459606.000
Ge	72	2	H2	99.09171211	1524725.373
In	115	1	He	92.19618765	5116926.003
Tb	159	1	He	96.85465458	12306285.237
Ir	193	1	He	94.18668539	5881559.497

Sample Name 4312708\_B70019Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 091SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:17:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	157.451725	0.5	62133.987
Be	9	2	H2	20.605454	0.5	8372.980
B	11	2	H2	418.511766	0.4	158959.753
Na	23	1	He	152280.1336	0.5	141827914.550
Mg	24	1	He	5216.563361	1.0	2713808.603
Al	27	1	He	6775.394554	1.2	1770914.540
Si	28	2	H2	15309.48558	0.7	47219417.333
K	39	1	He	3005.300532	0.8	2343576.213
Ca	43	1	He	17987.69849	0.5	40011.070
Ti	47	1	He	131.499965	1.4	31374.960
V	51	1	He	39.345114	0.7	263268.240
Cr	52	1	He	29.449432	0.4	236415.920
Mn	55	1	He	293.458169	0.3	1738466.670
Fe	56	1	He	5486.585412	0.3	41700441.333
Co	59	1	He	24.270652	0.5	298277.893
Ni	60	1	He	33.082986	0.8	101842.743
Cu	63	1	He	33.221531	0.1	281556.773
Zn	66	1	He	80.774115	0.8	156168.110
As	75	1	He	24.033847	0.5	41074.030
Se	78	2	H2	21.203455	0.5	16584.183
Sr	88	1	He	434.969623	0.4	4744625.450
Mo	95	1	He	25.734864	1.1	143296.397
Pd	105	1	He	4.217699	1.6	35098.637
Ag	107	1	He	9.464804	1.6	168173.543
Cd	111	1	He	20.723450	0.9	68354.877
Sn	118	1	He	14.653987	1.3	122473.400
Sb	121	1	He	8.892651	0.7	108479.550
Ba	138	1	He	94.744051	0.9	2511074.390
Pt	195	1	He	3.926560	0.9	43981.423
Hg	202	1	He	0.068337	4.3	556.677
Tl	205	1	He	20.428501	0.5	813100.640
Pb	208	1	He	36.791456	0.2	1994503.903
Bi	209	1	He	20.254955	0.8	885385.820
Th	232	1	He	24.862897	0.8	1377634.197
U	238	1	He	33.619717	1.1	1781505.597

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.15625961	584615.207
Sc	45	2	H2	102.6150548	4736576.333
Ge	72	1	He	95.97319930	469557.877
Ge	72	2	H2	100.1708581	1541330.207
In	115	1	He	93.95056293	5214294.547
Tb	159	1	He	98.31516670	12491856.893
Ir	193	1	He	95.58194278	5968687.410



Sample Name 10607060001\_B70019Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 092SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:21:43  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	38.028590	1.2	14787.690
Be	9	2	H2	0.068759	31.8	72.833
B	11	2	H2	113.032007	0.7	43011.583
Na	23	1	He	41766.16965	3.3	38604804.423
Mg	24	1	He	1316.548365	3.5	684340.407
Al	27	1	He	1584.485352	3.9	410959.373
Si	28	2	H2	3512.410288	0.8	10624151.000
K	39	1	He	719.303052	3.9	609027.077
Ca	43	1	He	4839.726852	4.0	10690.737
Ti	47	1	He	26.584901	3.1	6296.373
V	51	1	He	5.336750	4.0	34998.987
Cr	52	1	He	2.684159	3.0	23437.350
Mn	55	1	He	75.991581	2.8	447012.300
Fe	56	1	He	1385.940485	3.0	10462733.000
Co	59	1	He	1.064898	2.3	13275.380
Ni	60	1	He	3.367181	5.1	11154.280
Cu	63	1	He	3.740299	3.9	31992.413
Zn	66	1	He	17.542495	4.3	34167.397
As	75	1	He	1.033286	3.6	1885.123
Se	78	2	H2	0.277227	4.1	243.000
Sr	88	1	He	112.043844	4.0	1225618.213
Mo	95	1	He	1.797131	3.4	10201.007
Pd	105	1	He	0.069970	5.8	836.697
Ag	107	1	He	0.128677	27.8	2466.920
Cd	111	1	He	0.165918	2.3	576.507
Sn	118	1	He	0.084560	10.4	810.030
Sb	121	1	He	0.025986	15.2	393.343
Ba	138	1	He	20.107455	1.9	542441.150
Pt	195	1	He	0.002527	68.6	221.333
Hg	202	1	He	0.016198	16.4	276.667
Tl	205	1	He	0.093924	3.8	4250.717
Pb	208	1	He	4.817616	2.5	263580.397
Bi	209	1	He	0.034356	17.9	3170.457
Th	232	1	He	1.100397	3.9	61959.913
U	238	1	He	3.500911	2.9	187111.893

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.45114333	580372.333
Sc	45	2	H2	100.5212489	4639929.000
Ge	72	1	He	96.32404796	471274.437
Ge	72	2	H2	100.0862142	1540027.790
In	115	1	He	95.63608310	5307841.603
Tb	159	1	He	98.38669500	12500945.230
Ir	193	1	He	96.03022507	5996680.740

Sample Name 4313472\_B70019Dx100  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 093SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:25:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	7.424996	1.2	2970.127
Be	9	2	H2	-0.005702		43.167
B	11	2	H2	25.264452	0.6	10593.870
Na	23	1	He	7739.075634	0.3	7366110.310
Mg	24	1	He	240.209232	0.7	133797.373
Al	27	1	He	295.311916	1.3	78860.017
Si	28	2	H2	657.209631	0.5	1993708.500
K	39	1	He	134.019326	1.6	174480.877
Ca	43	1	He	910.790377	4.0	2081.220
Ti	47	1	He	5.001965	1.1	1220.053
V	51	1	He	1.056063	7.3	6714.723
Cr	52	1	He	0.519894	1.4	6543.477
Mn	55	1	He	13.965364	1.0	84833.410
Fe	56	1	He	255.913910	0.2	1998382.833
Co	59	1	He	0.192622	4.1	2608.910
Ni	60	1	He	0.462350	5.4	2338.863
Cu	63	1	He	0.699845	0.7	6376.747
Zn	66	1	He	3.377154	1.4	6964.353
As	75	1	He	0.182727	3.9	445.677
Se	78	2	H2	0.043176	17.6	61.000
Sr	88	1	He	20.299241	1.0	229520.267
Mo	95	1	He	0.309468	3.6	1868.130
Pd	105	1	He	0.001687	259.7	276.670
Ag	107	1	He	0.027396	13.0	681.690
Cd	111	1	He	0.032899	8.7	136.997
Sn	118	1	He	0.029927	12.3	365.010
Sb	121	1	He	0.004442	51.7	133.333
Ba	138	1	He	3.620107	0.6	102892.017
Pt	195	1	He	-0.001670		180.000
Hg	202	1	He	-0.002049		184.667
Tl	205	1	He	0.016224	2.4	1198.403
Pb	208	1	He	0.885954	1.4	52359.930
Bi	209	1	He	0.008508	23.8	2130.210
Th	232	1	He	0.196430	0.7	12222.470
U	238	1	He	0.620788	0.5	35440.020

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.14989376	596611.437
Sc	45	2	H2	100.1564385	4623089.833
Ge	72	1	He	99.42289234	486435.823
Ge	72	2	H2	100.9593153	1553462.207
In	115	1	He	100.6061622	5583683.023
Tb	159	1	He	101.5755044	12906113.143
Ir	193	1	He	100.1000367	6250823.240

Sample Name 10607060002\_B70019Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 094SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:29:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	119.859730	1.5	46061.980
Be	9	2	H2	0.011555	84.5	49.833
B	11	2	H2	646.517009	1.2	238288.650
Na	23	1	He	166222.8026	0.1	152579357.727
Mg	24	1	He	3130.904886	0.1	1607838.360
Al	27	1	He	984.451209	2.6	253699.000
Si	28	2	H2	5405.082636	2.9	16234383.333
K	39	1	He	1322.489702	0.5	1054790.377
Ca	43	1	He	20455.68469	0.3	44842.233
Ti	47	1	He	24.444474	6.3	5748.030
V	51	1	He	5.253981	1.2	34219.790
Cr	52	1	He	3.318025	1.0	28245.133
Mn	55	1	He	30.938608	0.6	181001.577
Fe	56	1	He	978.041322	0.3	7337443.167
Co	59	1	He	0.321087	2.0	4075.247
Ni	60	1	He	1.232213	2.5	4583.403
Cu	63	1	He	2.405056	0.8	20487.070
Zn	66	1	He	4.677453	1.7	9184.923
As	75	1	He	2.091756	0.5	3663.967
Se	78	2	H2	1.820292	3.7	1445.407
Sr	88	1	He	949.394555	0.6	10301043.597
Mo	95	1	He	4.326290	1.6	24117.050
Pd	105	1	He	0.593862	3.2	5154.320
Ag	107	1	He	0.021287	10.0	528.350
Cd	111	1	He	0.017966	12.3	78.660
Sn	118	1	He	0.078678	11.9	748.357
Sb	121	1	He	0.058327	4.7	781.697
Ba	138	1	He	12.666762	0.8	335980.073
Pt	195	1	He	0.000950	289.8	202.000
Hg	202	1	He	0.014045	18.7	263.667
Tl	205	1	He	0.021347	4.9	1356.750
Pb	208	1	He	0.498915	0.8	29566.007
Bi	209	1	He	0.008247	53.3	2036.867
Th	232	1	He	0.444735	1.5	25606.880
U	238	1	He	8.273146	0.6	442288.550

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.75240757	576167.853
Sc	45	2	H2	99.87770449	4610223.833
Ge	72	1	He	95.46714257	467081.947
Ge	72	2	H2	100.0060195	1538793.833
In	115	1	He	93.98418791	5216160.747
Tb	159	1	He	97.79250070	12425447.313
Ir	193	1	He	96.27222510	6011792.617

Sample Name 10607060002\_B70019Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 095SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:32:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	31.989871	0.7	12286.633
Be	9	2	H2	-0.024598		35.333
B	11	2	H2	177.017227	1.1	65697.483
Na	23	1	He	44011.01475	0.2	41285506.883
Mg	24	1	He	823.786885	0.6	437023.820
Al	27	1	He	270.594201	5.1	71306.243
Si	28	2	H2	1399.797097	1.0	4185393.417
K	39	1	He	350.892876	1.0	337418.210
Ca	43	1	He	5366.362871	0.3	12030.153
Ti	47	1	He	6.389362	10.6	1537.113
V	51	1	He	1.430430	8.3	9151.807
Cr	52	1	He	0.912902	1.4	9603.153
Mn	55	1	He	8.186855	0.9	49247.870
Fe	56	1	He	256.727065	1.9	1978101.247
Co	59	1	He	0.090983	3.0	1299.397
Ni	60	1	He	0.220420	7.2	1553.423
Cu	63	1	He	0.679451	2.2	6118.643
Zn	66	1	He	2.122735	1.3	4398.010
As	75	1	He	0.550933	2.7	1081.707
Se	78	2	H2	0.441428	6.4	370.673
Sr	88	1	He	245.443994	0.4	2738240.790
Mo	95	1	He	1.112217	1.1	6438.803
Pd	105	1	He	0.147152	4.0	1513.433
Ag	107	1	He	0.008752	31.6	316.673
Cd	111	1	He	0.007819	25.2	46.840
Sn	118	1	He	0.028018	13.1	336.677
Sb	121	1	He	0.019811	21.8	323.340
Ba	138	1	He	3.217868	0.9	88511.783
Pt	195	1	He	-0.000127		193.333
Hg	202	1	He	-0.001802		182.000
Tl	205	1	He	0.005389	23.1	736.693
Pb	208	1	He	0.133897	2.9	10071.503
Bi	209	1	He	0.007508	20.1	2050.187
Th	232	1	He	0.113823	3.7	7308.770
U	238	1	He	2.129812	0.1	117170.447

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.83599782	588705.373
Sc	45	2	H2	99.13408501	4575899.333
Ge	72	1	He	98.15769976	480245.750
Ge	72	2	H2	99.94461757	1537849.040
In	115	1	He	97.34985364	5402956.567
Tb	159	1	He	99.36325338	12625026.060
Ir	193	1	He	98.44882725	6147712.200

Sample Name 4312706\_B70019Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 096SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:36:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	110.086288	0.9	42018.317
Be	9	2	H2	107.565279	0.6	42051.977
B	11	2	H2	112.271791	0.7	42158.700
Na	23	1	He	2119.460384	0.2	2024625.593
Mg	24	1	He	2079.014880	0.5	1107466.597
Al	27	1	He	2072.348971	0.3	552727.813
Si	28	2	H2	529.967729	0.7	1594950.543
K	39	1	He	2072.269873	0.4	1670734.197
Ca	43	1	He	2046.311282	2.2	4657.097
Ti	47	1	He	103.102432	0.8	25096.627
V	51	1	He	102.517341	0.3	700726.103
Cr	52	1	He	106.049021	0.1	862540.937
Mn	55	1	He	104.697822	0.2	633078.710
Fe	56	1	He	2088.951612	0.2	16207819.000
Co	59	1	He	107.831307	0.1	1371362.250
Ni	60	1	He	109.107554	0.9	345688.657
Cu	63	1	He	106.823525	0.7	936679.393
Zn	66	1	He	106.976637	0.4	214043.057
As	75	1	He	102.912914	0.5	181665.533
Se	78	2	H2	105.406146	0.8	81713.583
Sr	88	1	He	105.037186	0.8	1186148.107
Mo	95	1	He	100.223128	0.4	591245.770
Pd	105	1	He	20.841113	1.3	182749.887
Ag	107	1	He	50.724943	0.6	954213.267
Cd	111	1	He	103.293274	0.3	360919.543
Sn	118	1	He	99.439113	0.4	879944.857
Sb	121	1	He	101.148988	0.7	1306510.710
Ba	138	1	He	100.938280	1.0	2834618.917
Pt	195	1	He	20.723548	0.6	236761.303
Hg	202	1	He	-0.001431		186.333
Tl	205	1	He	107.082377	0.1	4360431.183
Pb	208	1	He	105.278811	1.0	5836744.527
Bi	209	1	He	105.263780	0.8	4833333.260
Th	232	1	He	104.633262	0.0	6096542.407
U	238	1	He	102.531835	0.5	5713691.167

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.12608062	596468.147
Sc	45	2	H2	99.17320729	4577705.167
Ge	72	1	He	99.35313997	486094.553
Ge	72	2	H2	99.40864607	1529602.040
In	115	1	He	99.54262444	5524656.240
Tb	159	1	He	100.6349790	12786610.643
Ir	193	1	He	100.5561125	6279303.240

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 097\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:40:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	85.687095	0.0	32743.047
Be	9	2	H2	83.230212	0.2	32560.040
B	11	2	H2	86.707572	0.7	32865.243
Na	23	1	He	1041.778516	2.5	992960.663
Mg	24	1	He	1029.029745	2.0	547276.007
Al	27	1	He	1026.680159	2.4	271779.687
Si	28	2	H2	512.847685	0.7	1544456.667
K	39	1	He	1024.474913	1.7	855341.470
Ca	43	1	He	1025.804428	1.2	2324.040
Ti	47	1	He	82.395149	1.8	19904.747
V	51	1	He	81.696710	1.5	554083.490
Cr	52	1	He	83.228978	1.9	672295.167
Mn	55	1	He	82.227654	1.8	493525.393
Fe	56	1	He	517.085538	2.1	3991868.250
Co	59	1	He	84.018926	1.7	1069661.457
Ni	60	1	He	84.863414	1.5	269359.897
Cu	63	1	He	84.754423	1.5	744007.230
Zn	66	1	He	82.556291	1.5	165404.793
As	75	1	He	81.084944	1.4	143313.887
Se	78	2	H2	82.022217	0.4	64005.550
Sr	88	1	He	82.220266	1.2	929559.547
Mo	95	1	He	79.078910	1.7	462682.657
Pd	105	1	He	83.648947	1.0	726753.377
Ag	107	1	He	41.429617	1.3	773007.227
Cd	111	1	He	82.072792	1.5	284423.603
Sn	118	1	He	78.917291	0.9	692677.593
Sb	121	1	He	79.545313	1.0	1019112.823
Ba	138	1	He	79.423433	1.3	2212210.593
Pt	195	1	He	82.504714	2.3	936249.690
Hg	202	1	He	3.897577	1.6	21486.273
Tl	205	1	He	42.900773	1.6	1736755.340
Pb	208	1	He	83.273269	1.8	4589451.397
Bi	209	1	He	83.474165	1.3	3854349.110
Th	232	1	He	77.466197	2.1	4538169.827
U	238	1	He	79.847794	2.4	4473635.350

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.39067318	592043.003
Sc	45	2	H2	99.20659934	4579246.500
Ge	72	1	He	99.47012972	486666.937
Ge	72	2	H2	100.0605161	1539632.373
In	115	1	He	98.73983135	5480100.897
Tb	159	1	He	100.0566795	12713132.313
Ir	193	1	He	101.1332533	6315343.237

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 098\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:44:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.120181	17.0	159.167
Be	9	2	H2	0.003098	401.6	45.833
B	11	2	H2	5.523821	1.7	3280.023
Na	23	1	He	10.721987	6.7	20654.343
Mg	24	1	He	-8.925730		1820.127
Al	27	1	He	0.023049	135.1	93.667
Si	28	2	H2	-0.592247		13895.953
K	39	1	He	1.543235	132.2	71281.177
Ca	43	1	He	1.345748	82.5	17.067
Ti	47	1	He	-0.001105		2.000
V	51	1	He	0.075768	149.7	12.910
Cr	52	1	He	-0.001897		2280.183
Mn	55	1	He	-0.009962		362.007
Fe	56	1	He	-0.139344		12806.290
Co	59	1	He	0.003011	51.3	194.000
Ni	60	1	He	-0.194983		256.667
Cu	63	1	He	0.000974	428.8	242.000
Zn	66	1	He	-0.013275		179.333
As	75	1	He	-0.001356		119.167
Se	78	2	H2	0.001795	455.2	28.000
Sr	88	1	He	0.007178	56.6	243.337
Mo	95	1	He	0.008848	41.4	74.000
Pd	105	1	He	0.002233	104.2	276.673
Ag	107	1	He	0.123017	22.4	2455.243
Cd	111	1	He	0.001011	152.0	23.987
Sn	118	1	He	0.010891	10.9	191.667
Sb	121	1	He	0.001974	76.1	100.000
Ba	138	1	He	0.004044	5.2	258.337
Pt	195	1	He	0.002571	43.9	224.000
Hg	202	1	He	0.017215	19.2	285.667
Tl	205	1	He	0.033676	24.8	1871.817
Pb	208	1	He	-0.005572		2443.443
Bi	209	1	He	0.004725	95.6	1976.857
Th	232	1	He	0.016931	7.3	1833.487
U	238	1	He	-0.001004		965.047

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.93176056	589281.603
Sc	45	2	H2	98.43883489	4543807.500
Ge	72	1	He	98.14245426	480171.160
Ge	72	2	H2	99.46067328	1530402.583
In	115	1	He	99.03997786	5496759.150
Tb	159	1	He	99.62019376	12657672.727
Ir	193	1	He	101.1486034	6316301.783

Sample Name 4312073\_B70036Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 099SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:47:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.099161	27.4	152.667
Be	9	2	H2	-0.001903		44.333
B	11	2	H2	6.156697	4.0	3543.247
Na	23	1	He	11.272812	1.9	21141.687
Mg	24	1	He	-5.382290		3667.140
Al	27	1	He	6.186392	2.3	1713.767
Si	28	2	H2	2.033986	7.7	21878.030
K	39	1	He	1.576112	71.9	71185.470
Ca	43	1	He	8.248515	12.5	32.517
Ti	47	1	He	0.062735	10.8	17.333
V	51	1	He	0.034931	189.4	-265.367
Cr	52	1	He	0.201127	1.3	3901.197
Mn	55	1	He	0.020816	30.1	544.010
Fe	56	1	He	2.779444	20.9	35086.693
Co	59	1	He	0.006818	10.1	240.667
Ni	60	1	He	-0.180713		299.333
Cu	63	1	He	0.023532	3.7	435.343
Zn	66	1	He	0.844425	4.6	1862.793
As	75	1	He	0.005376	69.4	130.167
Se	78	2	H2	0.003314	120.4	29.333
Sr	88	1	He	0.027908	6.4	471.677
Mo	95	1	He	0.007912	19.9	68.667
Pd	105	1	He	-0.003818		223.333
Ag	107	1	He	0.035652	22.6	823.363
Cd	111	1	He	0.011531	19.4	60.323
Sn	118	1	He	0.022178	5.6	290.010
Sb	121	1	He	0.004761	6.1	135.000
Ba	138	1	He	0.041441	8.6	1298.407
Pt	195	1	He	0.009818	6.0	307.333
Hg	202	1	He	0.003804	95.9	213.667
Tl	205	1	He	0.014141	8.1	1095.053
Pb	208	1	He	0.001023	237.8	2816.807
Bi	209	1	He	0.013606	21.2	2386.927
Th	232	1	He	0.009543	8.7	1398.423
U	238	1	He	-0.000952		966.713

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.74571986	588162.147
Sc	45	2	H2	99.41959644	4589078.167
Ge	72	1	He	97.56669626	477354.210
Ge	72	2	H2	100.0701294	1539780.293
In	115	1	He	98.68258162	5476923.513
Tb	159	1	He	99.97209964	12702385.643
Ir	193	1	He	101.0871900	6312466.780



Sample Name 4312074\_B70036Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 100SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:51:40  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	106.559681	0.7	39908.973
Be	9	2	H2	103.849220	0.8	39834.673
B	11	2	H2	105.469892	0.6	38934.590
Na	23	1	He	2073.108369	0.5	1946121.843
Mg	24	1	He	2043.249801	0.7	1069584.073
Al	27	1	He	2031.159570	0.6	532306.647
Si	28	2	H2	526.495841	0.5	1554702.373
K	39	1	He	2035.041878	0.5	1613429.457
Ca	43	1	He	2046.976514	1.8	4577.027
Ti	47	1	He	103.216172	0.9	24687.293
V	51	1	He	102.681481	1.1	689623.180
Cr	52	1	He	105.318143	0.8	841701.830
Mn	55	1	He	103.559779	0.6	615303.733
Fe	56	1	He	2065.542055	0.3	15747291.000
Co	59	1	He	105.978439	0.1	1328715.373
Ni	60	1	He	107.518626	0.8	335846.720
Cu	63	1	He	105.613142	0.4	912973.917
Zn	66	1	He	106.616853	0.2	210307.573
As	75	1	He	103.564169	0.1	180228.933
Se	78	2	H2	104.977446	1.1	81083.167
Sr	88	1	He	103.812441	0.5	1155777.507
Mo	95	1	He	100.527442	1.5	581857.187
Pd	105	1	He	20.783958	0.8	178821.930
Ag	107	1	He	50.870826	0.7	938949.283
Cd	111	1	He	102.526498	0.7	351499.020
Sn	118	1	He	100.079462	0.5	868960.220
Sb	121	1	He	101.614543	0.9	1287833.523
Ba	138	1	He	100.485414	1.5	2768672.980
Pt	195	1	He	20.514523	0.1	234173.593
Hg	202	1	He	0.006355	29.8	229.000
Tl	205	1	He	105.445973	0.3	4290180.667
Pb	208	1	He	103.256727	0.2	5719883.533
Bi	209	1	He	103.310940	0.6	4739779.823
Th	232	1	He	102.806399	0.9	5985033.247
U	238	1	He	100.585284	0.6	5600613.877

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.40105179	586088.187
Sc	45	2	H2	97.30121591	4491296.500
Ge	72	1	He	97.94628497	479211.383
Ge	72	2	H2	99.04161878	1523954.587
In	115	1	He	97.67200611	5420836.160
Tb	159	1	He	100.5498023	12775788.143
Ir	193	1	He	100.4778713	6274417.407

Sample Name 10604943001\_B70036Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 101SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:55:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.573233	1.5	1081.540
Be	9	2	H2	0.078697	21.5	74.833
B	11	2	H2	29.709441	0.6	11968.567
Na	23	1	He	10125.94446	0.1	9315362.363
Mg	24	1	He	12771.33314	0.1	6546606.570
Al	27	1	He	58.575925	1.3	15191.717
Si	28	2	H2	989.843516	0.5	2931215.167
K	39	1	He	1636.000310	0.3	1290058.940
Ca	43	1	He	36607.15876	0.5	80330.320
Ti	47	1	He	0.180290	14.5	44.667
V	51	1	He	0.364244	32.0	1913.443
Cr	52	1	He	0.494502	5.3	6127.293
Mn	55	1	He	0.927825	3.6	5834.517
Fe	56	1	He	21.406207	0.4	174065.500
Co	59	1	He	0.143340	1.1	1922.797
Ni	60	1	He	1.047461	2.9	4062.577
Cu	63	1	He	85.156924	1.1	724765.937
Zn	66	1	He	122.117500	1.0	237117.933
As	75	1	He	0.474412	1.9	931.863
Se	78	2	H2	0.193946	6.7	175.667
Sr	88	1	He	132.194251	1.0	1448911.903
Mo	95	1	He	1.196952	1.6	6871.007
Pd	105	1	He	0.085645	5.3	978.377
Ag	107	1	He	0.155623	25.3	2990.353
Cd	111	1	He	0.096816	1.2	348.100
Sn	118	1	He	0.099416	13.6	946.707
Sb	121	1	He	0.313808	7.4	4005.617
Ba	138	1	He	21.331796	0.6	581208.113
Pt	195	1	He	0.008701	8.5	292.000
Hg	202	1	He	0.006298	48.4	225.333
Tl	205	1	He	0.062466	6.7	3022.033
Pb	208	1	He	0.249098	0.4	16325.600
Bi	209	1	He	0.075791	3.5	5151.083
Th	232	1	He	0.077972	3.2	5297.793
U	238	1	He	0.349554	3.6	20184.140

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.86386846	576838.543
Sc	45	2	H2	98.03251919	4525052.500
Ge	72	1	He	96.43437254	471814.210
Ge	72	2	H2	98.77086251	1519788.457
In	115	1	He	96.56141871	5359198.107
Tb	159	1	He	99.07225738	12588052.310
Ir	193	1	He	99.06220620	6186015.117

Sample Name 4315164\_B70036Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 102SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 13:59:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.597458	3.2	334.500
Be	9	2	H2	0.017484	71.8	50.667
B	11	2	H2	8.301711	2.4	4219.923
Na	23	1	He	2057.973415	2.0	1908069.710
Mg	24	1	He	2581.259641	2.4	1332775.503
Al	27	1	He	13.132524	1.1	3484.747
Si	28	2	H2	198.614017	0.9	594146.273
K	39	1	He	329.477427	2.6	315717.640
Ca	43	1	He	7298.016422	1.5	16081.967
Ti	47	1	He	0.028589	15.1	9.000
V	51	1	He	0.080982	61.0	40.070
Cr	52	1	He	0.132760	8.6	3301.050
Mn	55	1	He	0.189525	4.9	1524.753
Fe	56	1	He	4.135459	0.9	44749.527
Co	59	1	He	0.031051	7.9	540.677
Ni	60	1	He	0.067623	37.7	1064.043
Cu	63	1	He	17.303514	1.5	148423.947
Zn	66	1	He	24.494855	0.9	48040.383
As	75	1	He	0.097143	5.1	287.667
Se	78	2	H2	0.046091	13.6	61.667
Sr	88	1	He	26.561813	1.1	293181.333
Mo	95	1	He	0.240285	0.5	1421.410
Pd	105	1	He	0.009588	4.0	338.343
Ag	107	1	He	0.038527	22.5	871.707
Cd	111	1	He	0.017615	17.4	81.077
Sn	118	1	He	0.022526	11.2	291.677
Sb	121	1	He	0.060614	6.3	846.700
Ba	138	1	He	4.252366	1.0	118007.283
Pt	195	1	He	0.000796	286.4	204.000
Hg	202	1	He	0.000292	1173.0	193.667
Tl	205	1	He	0.010854	4.0	958.377
Pb	208	1	He	0.042752	5.0	5093.727
Bi	209	1	He	0.019446	18.6	2633.643
Th	232	1	He	0.013782	14.2	1633.450
U	238	1	He	0.066140	1.0	4684.220

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.21451876	578948.500
Sc	45	2	H2	96.98180331	4476552.833
Ge	72	1	He	97.07253643	474936.487
Ge	72	2	H2	98.36871339	1513600.583
In	115	1	He	98.25465636	5453173.487
Tb	159	1	He	99.55211860	12649023.143
Ir	193	1	He	100.2188498	6258242.613

Sample Name 4312075\_B70036Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 103SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 14:02:53  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	110.093127	1.0	40444.543
Be	9	2	H2	107.397808	0.9	40410.383
B	11	2	H2	131.813157	0.9	47422.203
Na	23	1	He	11883.35514	0.4	10746585.257
Mg	24	1	He	14454.54561	0.3	7284065.100
Al	27	1	He	2130.935746	0.3	540402.083
Si	28	2	H2	1496.762421	1.1	4307709.667
K	39	1	He	3655.972064	0.6	2751108.603
Ca	43	1	He	37736.25568	0.3	81415.667
Ti	47	1	He	105.723418	0.5	24469.600
V	51	1	He	107.096346	0.6	696050.210
Cr	52	1	He	108.479132	0.4	838880.520
Mn	55	1	He	106.819789	0.3	614149.190
Fe	56	1	He	2136.998024	0.5	15764959.667
Co	59	1	He	106.233369	0.6	1303027.250
Ni	60	1	He	107.874027	0.5	329655.373
Cu	63	1	He	185.050109	0.9	1564786.417
Zn	66	1	He	221.905363	0.8	428004.763
As	75	1	He	105.287105	0.6	179251.970
Se	78	2	H2	106.075726	1.2	80997.287
Sr	88	1	He	233.094228	0.5	2538620.167
Mo	95	1	He	105.563986	0.7	589172.393
Pd	105	1	He	20.950669	1.1	173803.303
Ag	107	1	He	52.136288	1.7	927842.330
Cd	111	1	He	106.237870	0.9	351187.313
Sn	118	1	He	102.704351	0.5	859844.103
Sb	121	1	He	105.181037	1.3	1285297.403
Ba	138	1	He	125.162823	1.3	3325249.433
Pt	195	1	He	20.842499	0.6	231541.377
Hg	202	1	He	0.005270	61.5	217.000
Tl	205	1	He	108.539490	0.3	4297663.893
Pb	208	1	He	105.611350	0.4	5693490.850
Bi	209	1	He	104.890238	1.5	4695062.847
Th	232	1	He	106.766147	0.6	6064546.370
U	238	1	He	105.254201	0.8	5717930.330

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.25251248	567142.583
Sc	45	2	H2	95.45100447	4405893.167
Ge	72	1	He	95.82409025	468828.347
Ge	72	2	H2	97.91135776	1506563.247
In	115	1	He	94.17795153	5226914.707
Tb	159	1	He	97.85517812	12433411.063
Ir	193	1	He	98.03018060	6121569.490

Sample Name 4312076\_B70036Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 104SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 14:06:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	108.598211	1.2	39437.403
Be	9	2	H2	105.932636	0.7	39402.567
B	11	2	H2	129.248632	0.8	45989.637
Na	23	1	He	11314.66936	0.9	10189315.057
Mg	24	1	He	13711.32699	0.8	6880482.813
Al	27	1	He	2069.666721	0.6	522633.913
Si	28	2	H2	1445.922716	0.9	4114130.083
K	39	1	He	3509.249733	0.7	2632113.400
Ca	43	1	He	35861.04388	0.5	77040.367
Ti	47	1	He	102.883333	0.4	23710.690
V	51	1	He	104.196159	0.9	674301.217
Cr	52	1	He	105.711998	1.0	814037.397
Mn	55	1	He	103.971657	0.7	595230.187
Fe	56	1	He	2088.881112	0.8	15344483.000
Co	59	1	He	104.022409	0.4	1266569.667
Ni	60	1	He	105.271052	0.2	319364.583
Cu	63	1	He	179.603881	0.4	1507633.873
Zn	66	1	He	213.539324	0.5	408862.637
As	75	1	He	102.871437	0.4	173858.997
Se	78	2	H2	103.632384	1.5	78361.860
Sr	88	1	He	226.454536	0.2	2448253.247
Mo	95	1	He	103.059341	0.8	574600.627
Pd	105	1	He	20.369641	1.4	168815.790
Ag	107	1	He	51.194270	0.5	910177.640
Cd	111	1	He	103.549194	0.4	341952.150
Sn	118	1	He	100.700555	0.4	842196.317
Sb	121	1	He	102.277764	0.4	1248580.113
Ba	138	1	He	122.204377	0.5	3243407.137
Pt	195	1	He	20.216145	0.7	226027.583
Hg	202	1	He	0.004636	52.9	215.000
Tl	205	1	He	105.744130	0.3	4213903.790
Pb	208	1	He	102.895953	0.3	5582748.643
Bi	209	1	He	102.873913	0.7	4606238.993
Th	232	1	He	104.910463	1.1	5960672.623
U	238	1	He	103.128849	1.2	5604036.167

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.85112598	564727.333
Sc	45	2	H2	94.35550829	4355326.500
Ge	72	1	He	95.12089609	465387.903
Ge	72	2	H2	96.95603410	1491863.670
In	115	1	He	94.07880109	5221411.817
Tb	159	1	He	98.48470042	12513397.730
Ir	193	1	He	98.05820161	6123319.283

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 105\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 14:10:22  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	87.346432	0.8	31435.960
Be	9	2	H2	85.201231	1.0	31393.420
B	11	2	H2	86.572008	1.5	30908.810
Na	23	1	He	1038.511557	3.1	946498.270
Mg	24	1	He	1031.010472	2.6	524312.557
Al	27	1	He	1027.284456	2.9	260026.953
Si	28	2	H2	522.101993	0.8	1480738.880
K	39	1	He	1028.019150	3.6	820359.623
Ca	43	1	He	1018.377789	3.6	2205.520
Ti	47	1	He	81.672149	3.4	18863.047
V	51	1	He	81.935926	1.9	531412.633
Cr	52	1	He	84.035272	2.7	649041.667
Mn	55	1	He	82.974900	2.8	476177.280
Fe	56	1	He	523.574114	2.7	3864754.083
Co	59	1	He	84.509485	1.8	1037438.103
Ni	60	1	He	85.124664	2.3	260504.267
Cu	63	1	He	85.172010	2.0	720909.897
Zn	66	1	He	83.434270	1.9	161179.523
As	75	1	He	81.422344	1.8	138760.073
Se	78	2	H2	83.366535	1.1	62445.080
Sr	88	1	He	82.932734	1.8	904036.680
Mo	95	1	He	79.129235	2.7	454453.873
Pd	105	1	He	83.790814	2.3	714581.450
Ag	107	1	He	41.544729	1.7	760989.493
Cd	111	1	He	82.133020	2.3	279402.567
Sn	118	1	He	79.886272	2.9	688210.223
Sb	121	1	He	80.259682	2.9	1009222.953
Ba	138	1	He	80.107302	2.5	2190147.727
Pt	195	1	He	83.362204	3.1	933386.020
Hg	202	1	He	3.915197	2.2	21297.643
Tl	205	1	He	43.407118	3.5	1733538.620
Pb	208	1	He	83.941885	3.0	4564446.363
Bi	209	1	He	83.560012	3.4	3809032.237
Th	232	1	He	78.085919	3.1	4516906.703
U	238	1	He	80.463275	3.0	4451533.683

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.10626338	566262.563
Sc	45	2	H2	93.44756438	4313417.000
Ge	72	1	He	95.91979749	469296.603
Ge	72	2	H2	96.03915412	1477755.627
In	115	1	He	96.94613012	5380549.747
Tb	159	1	He	98.74993089	12547097.730
Ir	193	1	He	99.88074979	6237129.697

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 051022.b  
 Data File Name 106\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/10/22 14:14:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.128645	22.3	154.333
Be	9	2	H2	0.073783	9.6	69.667
B	11	2	H2	3.564148	9.0	2445.700
Na	23	1	He	5.117000	8.6	14755.690
Mg	24	1	He	-8.929532		1740.123
Al	27	1	He	0.082889	98.9	104.667
Si	28	2	H2	-0.752479		12761.453
K	39	1	He	-0.499101		66818.680
Ca	43	1	He	-0.415573		12.600
Ti	47	1	He	0.003534	125.5	3.000
V	51	1	He	0.102761	62.4	179.313
Cr	52	1	He	-0.010499		2119.493
Mn	55	1	He	-0.006526		366.010
Fe	56	1	He	-0.135424		12301.857
Co	59	1	He	0.006591	16.1	231.333
Ni	60	1	He	-0.190564		261.333
Cu	63	1	He	0.005520	26.1	272.667
Zn	66	1	He	-0.001652		196.000
As	75	1	He	0.007580	21.1	130.333
Se	78	2	H2	0.004943	119.7	29.333
Sr	88	1	He	0.006840	28.0	231.670
Mo	95	1	He	0.013680	16.0	100.667
Pd	105	1	He	0.017312	38.7	400.010
Ag	107	1	He	0.110897	24.9	2186.860
Cd	111	1	He	0.005171	16.2	37.647
Sn	118	1	He	0.014635	17.5	220.003
Sb	121	1	He	0.003761	90.5	120.000
Ba	138	1	He	0.004545	4.5	266.677
Pt	195	1	He	0.002585	108.1	222.667
Hg	202	1	He	0.018535	12.6	290.667
Tl	205	1	He	0.040229	20.8	2123.527
Pb	208	1	He	-0.002881		2571.780
Bi	209	1	He	0.006491	58.0	2053.523
Th	232	1	He	0.018287	5.7	1906.830
U	238	1	He	0.000568	172.8	1050.057

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.82426882	564565.727
Sc	45	2	H2	93.66537097	4323470.667
Ge	72	1	He	94.90596238	464336.320
Ge	72	2	H2	95.90194685	1475644.417
In	115	1	He	96.99268046	5383133.310
Tb	159	1	He	98.77721471	12550564.393
Ir	193	1	He	100.9100730	6301406.573



# Prep Log Report

Batch Information: MPRP 811306 6020BS\_P

Template Version: ENV-EPL-MIN4-0015-Rev.00 (13Dec2020)

Prep Method	EPA 3050B	Analysis Method	EPA 6020B	Prepared By	NJ1	Instrument	10BALT
Block ID	10MET50	Thermometer ID	210354356	Correction Factor (C)	.5	Block Temp (C)	92.7
Corrected Temp. (C)	93.20	Digestion Start Date/Time	04/26/2022 14:58:06:444	Digestion End Date/Time	04/26/2022 17:09:31:064	Block End Temp (C)	93.4
Corrected End Temp. (C)	93.90	Digestion Vessel	360488	Resin Pellets Solid Matrix	344615	Metals Pipette 1	Q473
Metals Pipette 2		Bottle Disp. 1	Q814	Bottle Disp. 2	Q791	Bottle Disp. 3	Q452
Reviewed By	BT	Reviewed By Date	04/27/2022 07:54	Batch Notes			

## Sample Information:

QC Rule	Sample Type	Lab Sample ID	Matrix	Initial Weight (g)	Conc. HNO3 (mL)	H2O2 (mL)	Conc. HCL (mL)	Final Volume (mL)	Sample Notes	Hg-SPK (mL)	METALS-STK1 (mL)	METALS-STK2 (mL)
6020BS_P	BLANK	4303384	Solid	1.006	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	LCS	4303385	Solid	1.018	357589 (7.5)	332176 (2.5)	357590 (5)	50		353891 (.25)	343315 (.5)	343316 (.5)
6020BS_P	PS	10605435001	Solid	1.082	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10605435002	Solid	1.001	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10605435003	Solid	1.051	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	RQS	10605661001	Solid	1.027	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	MS	4303386	Solid	1.038	357589 (7.5)	332176 (2.5)	357590 (5)	50		353891 (.25)	343315 (.5)	343316 (.5)
6020BS_P	MSD	4303387	Solid	1.018	357589 (7.5)	332176 (2.5)	357590 (5)	50		353891 (.25)	343315 (.5)	343316 (.5)
6020BS_P	PS	10605661002	Solid	1.025	357589 (7.5)	332176 (2.5)	357590 (5)	50				

## Standard Notes:

343315: ZPACEMN-116 (MIX 1)

343316: ZPACEMN-106

353891: Intermediate Spike for ICPMS Soil



FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG13-042122-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500  
Lab Sample ID: 10605661001 Percent Moisture: 33.1

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	ND	U	mg/kg	1	05/10/2022 14:22

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-SG23-042122-0-6

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500  
Lab Sample ID: 10605661002 Percent Moisture: 23.9

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	ND	U	mg/kg	1	05/10/2022 14:27

FORM II INORGANIC-1  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Initial Calibration Verification Source: 365356

Continuing Calibration Verification Source: 365356

Concentration Units: ug/L Instrument ID: 10HG09

	Initial Calibration Verification				Continuing Calibration Verification						
	05/10/2022 12:08				05/10/2022 12:23			05/10/2022 13:54			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Mercury	5.0	5.0	101.0	90-110	5.0	4.9	98.6	5.0	4.9	97.8	90-110

FORM II INORGANIC-2  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Initial Calibration Verification Source: \_\_\_\_\_

Continuing Calibration Verification Source: 365356

Concentration Units: ug/L Instrument ID: 10HG09

Analyte	Continuing Calibration Verification						Control Limit
	05/10/2022 14:11			05/10/2022 14:30			
	True	Found	%R	True	Found	%R	
Mercury	5.0	4.9	98.0	5.0	4.9	98.0	90-110

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

CRDL Check Standard Source: 365084,365351 Analysis Date/Time: 05/10/2022 12:11

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.2	0.19	95.0	70-130

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

CRDL Check Standard Source: 365084,365351 Analysis Date/Time: 05/10/2022 14:09

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.2	0.18	90.0	70-130

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

CRDL Check Standard Source: 365084,365351 Analysis Date/Time: 05/10/2022 14:29

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.2	0.18	90.0	70-130

FORM III INORGANIC-1  
BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract : D3593500

Method Blank Matrix: Solid Instrument ID: 10HG09

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	05/10/2022 12:09	C	05/10/2022 12:25	C	05/10/2022 13:56	C	05/10/2022 14:12	C	4303400	C
Mercury	0.087	U	0.087	U	0.087	U	0.087	U	ND	U



FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract : D3593500

Method Blank Matrix: \_\_\_\_\_ Instrument ID: 10HG09

Method Blank Concentration Units: \_\_\_\_\_

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	05/10/2022 14:32	C		C		C
Mercury			0.087	U				

FORM V INORGANIC-1  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4303402MS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Matrix: Solid Basis: Dry Parent Sample ID: BNSF-BG13-042122-0-10

Percent Moisture: 33.1

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Mercury	mg/kg	80-120	0.64	ND	0.73	87

FORM V INORGANIC-2  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4303403MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Matrix: Solid Basis: Dry Parent Sample ID: BNSF-BG13-042122-0-10

Percent Moisture: 33.1

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Mercury	mg/kg	80-120	0.62	ND	0.70	87

FORM VI INORGANIC-1  
DUPLICATES

SAMPLE NO.

4303403MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 33.1 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Mercury	20	0.64	0.62	4

FORM VII INORGANIC-1  
LABORATORY CONTROL SAMPLE

SAMPLE NO.

4303401LCS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Mercury	mg/kg	0.48	0.49	102	80	120

FORM IX INORGANIC-1  
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Preparation Method: None Instrument ID: 10HG09

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Mercury	0.20	0.087	03/30/2021

FORM IX INORGANIC-2  
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Preparation Method: EPA 7471B Instrument ID: 10HG09

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Mercury	0.020	0.0087	03/30/2021

FORM XII INORGANIC-1  
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Preparation Method: EPA 7471B Batch: MERP 37030

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
4303400	4303400	04/26/2022	0.314	30
4303401	4303401	04/26/2022	0.312	30
4303402	4303402	04/26/2022	0.307	30
4303403	4303403	04/26/2022	0.319	30
10605661001	BNSF-BG13-042122-0-10	04/26/2022	0.314	30
10605661002	BNSF-SG23-042122-0-6	04/26/2022	0.318	30



FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Instrument ID: 10HG09 Analysis Method: EPA 7471B

Start Date: 05/10/2022 11:40 End Date: 05/10/2022 14:32

Sample Name	Lab Sample ID	D/F	Date	Time	Hg
29937326CAL0	29937326CAL0	1	05/10/2022	11:40	X
29937327CAL1	29937327CAL1	1	05/10/2022	11:41	X
29937328CAL2	29937328CAL2	1	05/10/2022	11:43	X
29937329CAL3	29937329CAL3	1	05/10/2022	11:45	X
29937330CAL4	29937330CAL4	1	05/10/2022	11:46	X
29937331CAL5	29937331CAL5	1	05/10/2022	11:48	X
29937332ICV	29937332ICV	1	05/10/2022	12:08	X
29937333ICB	29937333ICB	1	05/10/2022	12:09	X
29937334CRDL	29937334CRDL	1	05/10/2022	12:11	X
29937337CCV	29937337CCV	1	05/10/2022	12:23	X
29937341CCB	29937341CCB	1	05/10/2022	12:25	X
29937364CCV	29937364CCV	1	05/10/2022	13:54	X
29937365CCB	29937365CCB	1	05/10/2022	13:56	X
29937367CRDL	29937367CRDL	1	05/10/2022	14:09	X
29937368CCV	29937368CCV	1	05/10/2022	14:11	X
29937369CCB	29937369CCB	1	05/10/2022	14:12	X
4303400BLANK	4303400	1	05/10/2022	14:14	X
4303401LCS	4303401	1	05/10/2022	14:16	X
BNSF-BG13-042122-0-10	10605661001	1	05/10/2022	14:22	X
4303402MS	4303402	1	05/10/2022	14:24	X
4303403MSD	4303403	1	05/10/2022	14:25	X
BNSF-SG23-042122-0-6	10605661002	1	05/10/2022	14:27	X
29937371CRDL	29937371CRDL	1	05/10/2022	14:29	X
29937372CCV	29937372CCV	1	05/10/2022	14:30	X
29937373CCB	29937373CCB	1	05/10/2022	14:32	X

Report Generated By Teledyne Leeman QuickTrace

Analyst: 10metalsuser,LENA WIGER

Worksheet file: S:\DATA\Metals\10HG09\10MAY22SOLIDSB10HG09.wszf

Creation Date: 5/10/2022 11:37:52 AM

Comment: EPA 7471/7471B

## Results

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
Calibration Blank	STD	05/10/22 11:40:16 am	0.00	396	3.07			1.0000	N/A
Replicates			387.3 394.0 413.5 388.5						
Standard #1 (0.2 ug/L)	STD	05/10/22 11:41:53 am	0.20	2001	0.59	-8.65%		1.0000	N/A
Replicates			2007.6 1983.7 2009.2 2002.2						
Standard #2 (1 ug/L)	STD	05/10/22 11:43:30 am	1.00	8271	0.43	-1.69%		1.0000	N/A
Replicates			8222.4 8275.4 8307.4 8278.9						
Standard #3 (3 ug/L)	STD	05/10/22 11:45:08 am	3.00	24464	0.48	1.67%		1.0000	N/A
Replicates			24298.3 24465.4 24534.6 24557.6						
Standard #4 (5 ug/L)	STD	05/10/22 11:46:46 am	5.00	40040	0.28	0.77%		1.0000	N/A
Replicates			40170.4 39908.9 39995.1 40084.9						
Standard #5 (10 ug/L)	STD	05/10/22 11:48:24 am	10.00	78656	1.20	-0.32%		1.0000	N/A
Replicates			79916.4 77791.3 78108.6 78809.6						
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Calibration</p> <p>Equation: Abs = 7833.940x + 569.366</p> <p>R2: 0.99992 RSE: 5.20%</p> <p>SEE: 305.9292</p> <p>Flags:</p> </div> <div style="width: 50%;"> </div> </div>									
ICV	ICV	05/10/22 12:08:01 pm	5.05	40149	0.17			1.0000	101.05
Replicates			40126.1 40249.5 40091.5 40128.0						
ICB	ICB	05/10/22 12:09:40 pm	-0.02	419	7.42			1.0000	N/A
Replicates			418.1 404.3 426.0 429.3						
CRDL	CRDL	05/10/22 12:11:17 pm	0.19	2089	1.96			1.0000	96.98
Replicates			2116.6 2078.5 2108.5 2051.5						
4312191_43583	UNK	05/10/22 12:14:10 pm	-0.01	506	32.13			1.0000	N/A
Replicates			530.4 497.9 512.9 482.9						
4312192_43583	UNK	05/10/22 12:15:46 pm	4.92	39076	0.32			1.0000	N/A
Replicates			39232.3 38930.6 39057.1 39085.3						
10605980004_43583	UNK	05/10/22 12:17:23 pm	0.11	1428	1.12			1.0000	N/A
Replicates			1426.4 1432.7 1415.2 1437.4						
4312193_43583	UNK	05/10/22 12:19:00 pm	5.22	41466	0.23			1.0000	N/A
Replicates			41491.5 41533.0 41515.0 41325.5						

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
4312194_43583	UNK	05/10/22 12:20:36 pm	5.11	40610	0.13			1.0000	N/A
Replicates		40566.2 40570.3 40678.5 40626.5							
CRDL	CRDL	05/10/22 12:22:14 pm	0.18	1984	1.24			1.0000	90.26
Replicates		1983.0 2007.2 1979.0 1965.0							
CCV	CCV	05/10/22 12:23:52 pm	4.93	39184	0.61			1.0000	98.58
Replicates		39116.9 38928.1 39198.3 39493.6							
CCB	CCB	05/10/22 12:25:31 pm	-0.02	449	12.78			1.0000	N/A
Replicates		426.2 458.7 457.2 454.4							
4308604_43535	UNK	05/10/22 12:27:08 pm	0.00	557	89.73			1.0000	N/A
Replicates		557.7 554.7 571.5 545.2							
4308605_43535	UNK	05/10/22 12:28:45 pm	5.07	40296	0.09			1.0000	N/A
Replicates		40267.4 40326.1 40325.8 40265.8							
10606046001_43535	UNK	05/10/22 12:30:22 pm	0.05	993	2.85			1.0000	N/A
Replicates		980.1 991.1 1009.1 990.6							
10606394001_43535	UNK	05/10/22 12:32:00 pm	0.15	1711	1.07			1.0000	N/A
Replicates		1714.8 1699.9 1726.2 1702.2							
4308606_43535	UNK	05/10/22 12:33:38 pm	5.26	41794	0.31			1.0000	N/A
Replicates		41722.1 41957.4 41826.7 41668.9							
4308607_43535	UNK	05/10/22 12:35:15 pm	5.14	40829	0.19			1.0000	N/A
Replicates		40717.3 40859.9 40877.1 40863.4							
10606394002_43535	UNK	05/10/22 12:36:53 pm	0.03	798	3.64			1.0000	N/A
Replicates		794.2 793.8 810.3 793.0							
10606394003_43535	UNK	05/10/22 12:38:30 pm	0.01	623	44.08			1.0000	N/A
Replicates		610.2 610.1 612.8 658.1							
CCV	CCV	05/10/22 12:40:08 pm	4.86	38633	0.19			1.0000	97.18
Replicates		38527.9 38659.3 38690.6 38653.3							
CCB	CCB	05/10/22 12:41:47 pm	-0.02	389	14.59			1.0000	N/A
Replicates		390.5 418.4 392.6 354.4							
10606394004_43535	UNK	05/10/22 12:43:24 pm	0.33	3174	0.71			1.0000	N/A
Replicates		3179.3 3197.9 3156.9 3162.6							
10606395001_43535	UNK	05/10/22 12:45:00 pm	0.02	761	9.48			1.0000	N/A
Replicates		780.4 766.3 761.8 736.8							
10606395002_43535	UNK	05/10/22 12:46:37 pm	0.05	979	3.03			1.0000	N/A
Replicates		983.0 976.6 964.1 993.9							
10606395003_43535	UNK	05/10/22 12:48:14 pm	0.03	803	2.59			1.0000	N/A
Replicates		794.5 808.8 804.8 802.3							
10606395004_43535	UNK	05/10/22 12:49:51 pm	0.20	2160	0.92			1.0000	N/A
Replicates		2159.0 2148.4 2181.2 2152.4							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
CRDL	CRDL	05/10/22 12:51:28 pm	0.19	2081	1.12			1.0000	96.47
Replicates		2096.8 2094.3 2065.8 2066.5							
CCV	CCV	05/10/22 12:53:07 pm	4.86	38665	1.38			1.0000	97.26
Replicates		38681.9 38050.6 38595.4 39330.6							
CCB	CCB	05/10/22 12:54:45 pm	-0.02	445	5.62			1.0000	N/A
Replicates		448.0 448.1 434.3 448.8							
4315272_43568	UNK	05/10/22 12:56:23 pm	0.00	551	67.67			1.0000	N/A
Replicates		558.9 564.1 538.1 543.9							
4315273_43568	UNK	05/10/22 12:58:00 pm	5.22	41441	0.38			1.0000	N/A
Replicates		41215.3 41509.3 41465.5 41574.8							
10607417001_43568	UNK	05/10/22 12:59:38 pm	0.09	1253	1.58			1.0000	N/A
Replicates		1267.6 1243.7 1246.0 1254.0							
4315274_43568	UNK	05/10/22 01:01:15 pm	5.23	41505	0.72			1.0000	N/A
Replicates		41262.0 41341.9 41489.9 41925.4							
4315275_43568	UNK	05/10/22 01:02:53 pm	5.45	43284	0.71			1.0000	N/A
Replicates		42838.2 43370.9 43516.4 43410.7							
CRDL	CRDL	05/10/22 01:04:30 pm	0.18	1958	1.45			1.0000	88.61
Replicates		1928.9 1975.9 1964.4 1961.9							
CCV	CCV	05/10/22 01:06:09 pm	4.90	38934	0.60			1.0000	97.95
Replicates		39132.4 38685.6 38790.8 39128.6							
CCB	CCB	05/10/22 01:07:48 pm	-0.02	439	11.05			1.0000	N/A
Replicates		427.5 459.5 438.0 430.8							
4315290_43569	UNK	05/10/22 01:09:26 pm	0.00	550	40.95			1.0000	N/A
Replicates		560.8 542.1 550.1 547.4							
4315291_43569	UNK	05/10/22 01:11:03 pm	5.29	42015	0.70			1.0000	N/A
Replicates		41667.1 41885.5 42280.5 42228.0							
10606264001_43569	UNK	05/10/22 01:12:39 pm	0.01	680	2.85			1.0000	N/A
Replicates		683.3 677.0 681.0 677.0							
4315292_43569	UNK	05/10/22 01:14:16 pm	5.27	41893	0.56			1.0000	N/A
Replicates		41672.8 41787.0 41903.5 42207.3							
4315293_43569	UNK	05/10/22 01:15:53 pm	5.09	40440	1.22			1.0000	N/A
Replicates		39786.0 40366.8 40714.8 40891.1							
CRDL	CRDL	05/10/22 01:17:30 pm	0.18	1977	1.56			1.0000	89.85
Replicates		1983.1 1947.2 1999.7 1978.5							
CCV	CCV	05/10/22 01:19:09 pm	5.00	39757	0.38			1.0000	100.05
Replicates		39598.0 39884.5 39663.8 39881.5							
CCB	CCB	05/10/22 01:20:47 pm	-0.02	438	16.45			1.0000	N/A
Replicates		421.6 459.3 416.3 452.8							

Sample Name	Type	Date/Time	Conc (ug/L)	$\mu$ Abs	%RSD	Residual	Flags	DF	% Recovery
4315282_43570	UNK	05/10/22 01:22:24 pm	-0.01	473	20.24			1.0000	N/A
Replicates		465.5 486.5 490.0 448.0							
4315283_43570	UNK	05/10/22 01:24:01 pm	5.24	41611	0.18			1.0000	N/A
Replicates		41513.3 41591.0 41668.2 41671.0							
10607169001_43570	UNK	05/10/22 01:25:38 pm	0.34	3212	0.84			1.0000	N/A
Replicates		3194.7 3194.1 3219.8 3240.3							
4315284_43570	UNK	05/10/22 01:27:16 pm	5.67	44955	0.77			1.0000	N/A
Replicates		44529.7 44896.5 45043.3 45351.3							
4315285_43570	UNK	05/10/22 01:28:53 pm	5.49	43547	0.17			1.0000	N/A
Replicates		43456.8 43576.0 43630.7 43522.7							
10607169002_43570	UNK	05/10/22 01:30:31 pm	0.34	3224	0.65			1.0000	N/A
Replicates		3218.0 3248.1 3224.6 3207.3							
10607169003_43570	UNK	05/10/22 01:32:09 pm	0.56	4957	1.23			1.0000	N/A
Replicates		5008.8 4951.3 4884.5 4984.5							
10607169004_43570	UNK	05/10/22 01:33:47 pm	0.46	4190	0.45			1.0000	N/A
Replicates		4180.0 4197.3 4209.8 4174.3							
10607169005_43570	UNK	05/10/22 01:35:24 pm	0.34	3231	0.30			1.0000	N/A
Replicates		3225.6 3227.3 3242.5 3227.8							
CRDL	CRDL	05/10/22 01:37:01 pm	0.19	2028	1.11			1.0000	93.10
Replicates		2024.5 2024.8 2012.3 2050.8							
CCV	CCV	05/10/22 01:38:39 pm	5.03	39955	0.31			1.0000	100.55
Replicates		39786.6 39938.6 40042.1 40054.4							
CCB	CCB	05/10/22 01:40:18 pm	-0.02	393	5.74			1.0000	N/A
Replicates		381.7 406.3 391.8 393.8							
4312183_43584	UNK	05/10/22 01:41:55 pm	0.00	540	93.12			1.0000	N/A
Replicates		507.0 528.7 552.0 570.7							
4312184_43584	UNK	05/10/22 01:43:32 pm	5.25	41671	0.53			1.0000	N/A
Replicates		41971.0 41677.7 41480.9 41553.7							
10606797001_43584	UNK	05/10/22 01:45:08 pm	-0.01	529	34.03			1.0000	N/A
Replicates		533.1 514.2 545.9 522.2							
4312185_43584	UNK	05/10/22 01:46:45 pm	4.74	37674	0.18			1.0000	N/A
Replicates		37578.2 37676.7 37712.9 37727.9							
4312186_43584	UNK	05/10/22 01:48:22 pm	4.91	38999	0.13			1.0000	N/A
Replicates		38947.0 39037.6 39042.6 38969.4							
10606981001_43584	UNK	05/10/22 01:50:00 pm	0.19	2038	1.60			1.0000	N/A
Replicates		2016.3 2034.3 2071.6 2031.1							
10606796001_43584	UNK	05/10/22 01:51:37 pm	-0.01	515	38.28			1.0000	N/A
Replicates		508.8 545.3 497.8 507.5							

Sample Name	Type	Date/Time	Conc (ug/L)	$\mu$ Abs	%RSD	Residual	Flags	DF	% Recovery
CRDL	CRDL	05/10/22 01:53:14 pm	0.19	2038	0.43			1.0000	93.72
Replicates		2031.9 2032.8 2044.1 2042.1							
CCV	CCV	05/10/22 01:54:52 pm	4.89	38845	0.32			1.0000	97.72
Replicates		38665.9 38864.6 38926.8 38922.8							
CCB	CCB	05/10/22 01:56:31 pm	-0.02	439	11.70			1.0000	N/A
Replicates		423.6 429.1 453.4 451.4							
4307147_43503	UNK	05/10/22 01:58:09 pm	0.00	573	365.90			1.0000	N/A
Replicates		582.6 584.9 557.2 567.2							
4307148_43503	UNK	05/10/22 01:59:47 pm	5.14	40847	1.97			1.0000	N/A
Replicates		40175.4 40237.0 41142.0 41833.8							
10606192001_43503	UNK	05/10/22 02:01:24 pm	0.21	2253	0.61			1.0000	N/A
Replicates		2260.7 2239.8 2261.3 2248.8							
4307149_43503	UNK	05/10/22 02:03:02 pm	5.26	41809	0.12			1.0000	N/A
Replicates		41809.1 41868.8 41750.8 41806.0							
4307150_43503	UNK	05/10/22 02:04:39 pm	5.03	39978	2.15			1.0000	N/A
Replicates		39078.3 39487.0 40409.0 40937.5							
10606192002_43503	UNK	05/10/22 02:06:16 pm	0.15	1781	1.32			1.0000	N/A
Replicates		1790.0 1798.0 1767.8 1766.3							
10606192003_43503	UNK	05/10/22 02:07:53 pm	0.21	2204	1.19			1.0000	N/A
Replicates		2194.5 2181.1 2216.8 2222.8							
CRDL	CRDL	05/10/22 02:09:30 pm	0.18	2009	1.50			1.0000	91.89
Replicates		2004.6 2004.6 1987.9 2039.1							
CCV	CCV	05/10/22 02:11:09 pm	4.90	38994	1.05			1.0000	98.10
Replicates		38441.2 38961.5 39198.0 39373.5							
CCB	CCB	05/10/22 02:12:48 pm	-0.02	417	8.43			1.0000	N/A
Replicates		400.7 421.3 414.0 431.3							
4303400_43454	UNK	05/10/22 02:14:25 pm	0.00	566	420.64			1.0000	N/A
Replicates		550.7 574.2 581.2 557.9							
4303401_43454	UNK	05/10/22 02:16:02 pm	5.09	40449	0.12			1.0000	N/A
Replicates		40380.8 40466.3 40486.3 40462.3							
10605435001_43454	UNK	05/10/22 02:17:39 pm	0.14	1678	1.50			1.0000	N/A
Replicates		1681.3 1692.9 1653.9 1682.1							
10605435002_43454	UNK	05/10/22 02:19:16 pm	0.17	1903	0.94			1.0000	N/A
Replicates		1918.3 1903.0 1887.7 1901.7							
10605435003_43454	UNK	05/10/22 02:20:54 pm	0.18	1954	0.62			1.0000	N/A
Replicates		1942.7 1951.6 1958.9 1961.9							
10605661001_43454	UNK	05/10/22 02:22:31 pm	0.04	853	3.54			1.0000	N/A
Replicates		843.4 862.1 844.8 860.8							

Sample Name	Type	Date/Time	Conc (ug/L)	$\mu$ Abs	%RSD	Residual	Flags	DF	% Recovery
4303402_43454	UNK	05/10/22 02:24:09 pm	4.38	34852	1.03			1.0000	N/A
Replicates		34790.8 34555.1 34699.1 35361.3							
4303403_43454	UNK	05/10/22 02:25:47 pm	4.38	34861	0.16			1.0000	N/A
Replicates		34787.8 34853.5 34919.2 34884.7							
10605661002_43454	UNK	05/10/22 02:27:25 pm	0.07	1093	2.82			1.0000	N/A
Replicates		1075.3 1106.8 1086.8 1103.5							
CRDL	CRDL	05/10/22 02:29:02 pm	0.18	1968	2.42			1.0000	89.30
Replicates		1955.4 1944.2 1955.5 2018.7							
CCV	CCV	05/10/22 02:30:41 pm	4.90	38983	0.66			1.0000	98.07
Replicates		39184.7 38683.6 38861.3 39201.8							
CCB	CCB	05/10/22 02:32:20 pm	-0.02	398	9.58			1.0000	N/A
Replicates		403.1 377.9 417.1 395.1							
4310680_43571	UNK	05/10/22 02:33:57 pm	0.01	652	20.04			1.0000	N/A
Replicates		642.0 634.8 670.3 661.8							
4310681_43571	UNK	05/10/22 02:35:34 pm	5.25	41670	1.82			1.0000	N/A
Replicates		41550.1 42443.9 41991.9 40693.2							
10606360001_43571	UNK	05/10/22 02:37:12 pm	0.22	2260	0.97			1.0000	N/A
Replicates		2270.8 2256.7 2239.0 2275.2							
4310682_43571	UNK	05/10/22 02:38:49 pm	4.35	34679	0.10			1.0000	N/A
Replicates		34631.9 34679.9 34706.6 34696.6							
4310683_43571	UNK	05/10/22 02:40:26 pm	4.65	36984	0.06			1.0000	N/A
Replicates		36999.3 36977.2 36957.2 37003.2							
10606360002_43571	UNK	05/10/22 02:42:03 pm	0.10	1385	3.17			1.0000	N/A
Replicates		1371.0 1420.5 1361.5 1385.3							
10606361001_43571	UNK	05/10/22 02:43:41 pm	0.12	1480	2.33			1.0000	N/A
Replicates		1477.1 1452.6 1484.6 1503.9							
10606361002_43571	UNK	05/10/22 02:45:18 pm	0.11	1466	1.88			1.0000	N/A
Replicates		1444.2 1478.1 1462.4 1480.9							
CRDL	CRDL	05/10/22 02:46:55 pm	0.18	1995	2.55			1.0000	91.01
Replicates		1947.2 1995.3 2035.0 2003.5							
CCV	CCV	05/10/22 02:48:34 pm	4.88	38837	0.78			1.0000	97.70
Replicates		38527.6 38661.9 38965.4 39193.6							
CCB	CCB	05/10/22 02:50:13 pm	-0.02	442	3.01			1.0000	N/A
Replicates		436.9 445.6 442.4 444.1							
4310663_43573	UNK	05/10/22 02:51:50 pm	0.00	604	20.13			1.0000	N/A
Replicates		596.6 613.0 606.3 601.3							
4310664_43573	UNK	05/10/22 02:53:28 pm	5.15	40896	0.14			1.0000	N/A
Replicates		40813.5 40910.2 40922.9 40936.2							

Sample Name	Type	Date/Time	Conc (ug/L)	$\mu$ Abs	%RSD	Residual	Flags	DF	% Recovery
10606414001_43573	UNK	05/10/22 02:55:06 pm	1.43	11802	1.54			1.0000	N/A
Replicates		11979.1 11903.1 11731.8 11593.6							
10606414002_43573	UNK	05/10/22 02:56:44 pm	0.60	5245	1.75			1.0000	N/A
Replicates		5251.8 5152.8 5226.5 5350.8							
10606414003_43573	UNK	05/10/22 02:58:22 pm	0.06	1011	1.14			1.0000	N/A
Replicates		1012.3 1015.2 1003.5 1011.7							
10606414004_43573	UNK	05/10/22 02:59:59 pm	0.57	5041	0.24			1.0000	N/A
Replicates		5054.7 5033.7 5031.7 5042.9							
10606414005_43573	UNK	05/10/22 03:01:36 pm	85.61	671274	0.51	O		1.0000	N/A
Replicates		667007.4 670233.3 672841.3 675012.6							
4310665_43573	UNK	05/10/22 03:05:41 pm	97.17	761807	0.20	O		1.0000	N/A
Replicates		759682.8 761888.7 762611.7 763044.2							
4310666_43573	UNK	05/10/22 03:10:05 pm	95.98	752484	1.05	O		1.0000	N/A
Replicates		744199.6 749091.8 753994.3 762651.3							
10606414006_43573	UNK	05/10/22 03:14:46 pm	5.06	40192	0.06			1.0000	N/A
Replicates		40177.7 40178.0 40182.3 40229.8							
CRDL	CRDL	05/10/22 03:16:24 pm	0.17	1887	1.03			1.0000	84.12
Replicates		1868.5 1892.6 1887.9 1900.1							
CCV	CCV	05/10/22 03:18:02 pm	4.95	39375	0.91			1.0000	99.07
Replicates		39893.8 39253.6 39116.6 39234.3							
CCB	CCB	05/10/22 03:19:41 pm	-0.02	390	9.04			1.0000	N/A
Replicates		376.3 399.6 407.6 375.8							
4315286_43581	UNK	05/10/22 03:21:19 pm	-0.01	473	19.16			1.0000	N/A
Replicates		448.8 473.9 476.1 493.6							
4315287_43581	UNK	05/10/22 03:22:56 pm	5.14	40845	0.20			1.0000	N/A
Replicates		40731.4 40852.0 40906.7 40891.0							
10606158001_43581	UNK	05/10/22 03:24:34 pm	0.26	2623	1.40			1.0000	N/A
Replicates		2585.9 2632.9 2654.2 2617.7							
4315288_43581	UNK	05/10/22 03:26:11 pm	5.82	46131	0.13			1.0000	N/A
Replicates		46141.2 46201.1 46128.1 46053.1							
4315289_43581	UNK	05/10/22 03:27:49 pm	5.54	43955	0.23			1.0000	N/A
Replicates		43824.2 43953.9 43977.4 44063.4							
10607008001_43581	UNK	05/10/22 03:29:27 pm	1.67	13674	0.31			1.0000	N/A
Replicates		13619.3 13666.1 13709.3 13699.6							
10607011001_43581	UNK	05/10/22 03:31:05 pm	0.50	4470	0.47			1.0000	N/A
Replicates		4487.7 4479.2 4445.7 4469.2							
10607172001_43581	UNK	05/10/22 03:32:43 pm	0.02	721	6.01			1.0000	N/A
Replicates		725.8 715.9 710.9 730.9							



Sample Name	Type	Date/Time	Conc (ug/L)	$\mu$ Abs	%RSD	Residual	Flags	DF	% Recovery
CCV	CCV	05/10/22 03:34:21 pm	4.91	39003	0.45			1.0000	98.12
Replicates		38759.0 39013.3 39074.6 39163.8							
CCB	CCB	05/10/22 03:36:00 pm	-0.03	372	3.57			1.0000	N/A
Replicates		371.0 366.9 369.2 382.7							
10607172003_43581	UNK	05/10/22 03:37:38 pm	0.02	717	14.15			1.0000	N/A
Replicates		701.9 748.0 707.3 711.8							
10607172005_43581	UNK	05/10/22 03:39:15 pm	0.03	827	4.59			1.0000	N/A
Replicates		839.0 826.1 811.4 832.6							
10607172007_43581	UNK	05/10/22 03:40:53 pm	0.01	631	28.38			1.0000	N/A
Replicates		613.9 619.9 639.9 651.9							
10607223002_43581	UNK	05/10/22 03:42:31 pm	0.40	3694	0.57			1.0000	N/A
Replicates		3684.0 3675.5 3714.5 3703.0							
10607223003_43581	UNK	05/10/22 03:44:08 pm	0.60	5249	0.47			1.0000	N/A
Replicates		5222.0 5241.2 5262.2 5270.7							
10607223004_43581	UNK	05/10/22 03:45:46 pm	0.61	5339	1.87			1.0000	N/A
Replicates		5217.0 5329.8 5415.5 5394.8							
10606445002_43581	UNK	05/10/22 03:47:23 pm	-0.01	478	26.95			1.0000	N/A
Replicates		485.2 449.2 507.5 469.0							
10607170001_43581	UNK	05/10/22 03:49:21 pm	0.03	804	10.82			1.0000	N/A
Replicates		817.3 821.8 809.8 766.5							
CCV	CCV	05/10/22 03:50:59 pm	4.85	38555	0.35			1.0000	96.98
Replicates		38359.7 38570.0 38646.3 38642.0							
CCB	CCB	05/10/22 03:52:38 pm	-0.02	378	4.56			1.0000	N/A
Replicates		369.3 373.6 389.1 381.1							
10607170003_43581	UNK	05/10/22 03:54:16 pm	0.01	609	48.62			1.0000	N/A
Replicates		609.6 633.4 585.7 609.2							
10607170004_43581	UNK	05/10/22 03:55:54 pm	0.03	768	2.75			1.0000	N/A
Replicates		769.3 761.5 766.2 774.5							
10607170005_43581	UNK	05/10/22 03:57:32 pm	0.04	852	3.65			1.0000	N/A
Replicates		858.7 862.0 844.7 841.0							
10607170007_43581	UNK	05/10/22 03:59:10 pm	0.07	1120	3.10			1.0000	N/A
Replicates		1114.6 1099.3 1139.6 1125.8							
10607170008_43581	UNK	05/10/22 04:00:47 pm	0.01	672	16.07			1.0000	N/A
Replicates		682.5 650.4 667.4 686.7							
10606414005Dx50_43573	UNK	05/10/22 04:03:24 pm	2.60	20956	1.13			1.0000	N/A
Replicates		21201.9 21080.3 20859.3 20681.5							
4310665Dx50_43573	UNK	05/10/22 04:05:02 pm	3.26	26111	1.86			1.0000	N/A
Replicates		26567.1 26381.8 26006.5 25488.8							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
4310666Dx50_43573	UNK	05/10/22 04:06:39 pm	3.34	26701	1.11			1.0000	N/A
Replicates		26338.5 26621.8 26831.3 27012.6							
CRDL	CRDL	05/10/22 04:08:35 pm	0.18	1977	0.35			1.0000	89.82
Replicates		1976.6 1981.0 1979.2 1969.7							
CCV	CCV	05/10/22 04:10:13 pm	4.93	39199	0.45			1.0000	98.62
Replicates		38964.2 39195.1 39263.3 39372.3							
CCB	CCB	05/10/22 04:11:52 pm	-0.02	403	16.85			1.0000	N/A
Replicates		390.4 406.3 441.1 376.1							



# Prep Log Report

Batch Information: MPRP 811310 7471B S\_P

Template Version: ENV-EPL-MIN4-0028-Rev.00 (13Dec2020)

Prep Method	EPA 7471B	Analysis Method	EPA 7471B	Prepared By	NJ1	Instrument	10BALT
Block ID	10MET54	Thermometer ID	210354363	Correction Factor (C)	.8	Block Temp (C)	94.1
Corrected Temp. (C)	94.90	Digestion Start Date/Time	04/26/2022 18:49:25:279	Digestion End Date/Time	04/26/2022 19:29:25:279	Block End Temp (C)	96
Corrected End Temp. (C)	96.80	Digestion Vessel	360488	Resin Pellets Solid Matrix	344615	Metals Pipette 1	Q765
Metals Pipette 2	Q778	Bottle Disp. 1	Q814	Bottle Disp. 2	Q791	Bottle Disp. 3	Q452
Bottle Disp. 4		Bottle Disp. 5		Reviewed By	BT	Reviewed By Date	04/27/2022 07:56
Batch Notes							

## Sample Information:

QC Rule	Sample Type	Lab Sample ID	Matrix	Initial Weight (g)	Aqua Regia (mL)	5% KMnO4 (mL)	12% NH2OH-HCL (mL)	Final Volume (mL)	Sample Notes	MERCURY-SPK (mL)
7471B S_P	BLANK	4303400	Solid	0.314	363124 (3)	362589 (9)	359597 (3.6)	30		
7471B S_P	LCS	4303401	Solid	0.312	363124 (3)	362589 (9)	359597 (3.6)	30		350870 (.15)
7471B S_P	PS	10605435001	Solid	0.3	363124 (3)	362589 (9)	359597 (3.6)	30		
7471B S_P	PS	10605435002	Solid	0.326	363124 (3)	362589 (9)	359597 (3.6)	30		
7471B S_P	PS	10605435003	Solid	0.331	363124 (3)	362589 (9)	359597 (3.6)	30		
7471B S_P	RQS	10605661001	Solid	0.314	363124 (3)	362589 (9)	359597 (3.6)	30		
7471B S_P	MS	4303402	Solid	0.307	363124 (3)	362589 (9)	359597 (3.6)	30		350870 (.15)
7471B S_P	MSD	4303403	Solid	0.319	363124 (3)	362589 (9)	359597 (3.6)	30		350870 (.15)
7471B S_P	PS	10605661002	Solid	0.318	363124 (3)	362589 (9)	359597 (3.6)	30		

## Standard Notes:

350870: LCS, MS, MSD Spike Solution

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG13-042122-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500  
Lab Sample ID: 10605661001 Percent Moisture: \_\_\_\_\_

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	33.1		%	1	04/26/2022 14:24

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-SG23-042122-0-6

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500  
Lab Sample ID: 10605661002 Percent Moisture: \_\_\_\_\_

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	23.9		%	1	04/26/2022 14:24

FORM VI INORGANIC-1  
DUPLICATES

SAMPLE NO.

4303422DUP

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Matrix: Solid Concentration Units: %

Percent Moisture: \_\_\_\_\_ Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	30	33.1	33.5	1

FORM IX INORGANIC-1  
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Preparation Method: ASTM D2974 Instrument ID: 10BALP

Concentration Units: %

Analyte	PQL	MDL	MDL Date
Percent Moisture	0.10	0.10	01/01/2003

FORM XII INORGANIC-1  
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Preparation Method: ASTM D2974 Batch: MPRP 123803

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
4303422	4303422	04/26/2022	1	1
10605661001	BNSF-BG13-042122-0-10	04/26/2022	1	1
10605661002	BNSF-SG23-042122-0-6	04/26/2022	1	1



FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10605661 Contract: D3593500

Instrument ID: 10BALP

Analysis Method: ASTM D2974

Start Date: 04/26/2022 14:24

End Date: 04/26/2022 14:24

Sample Name	Lab Sample ID	D/F	Date	Time	MO IST
BNSF-BG13-042122-0-10	10605661001	1	04/26/2022	14:24	X
4303422DUP	4303422	1	04/26/2022	14:24	X
BNSF-SG23-042122-0-6	10605661002	1	04/26/2022	14:24	X



# Prep Log Report

Batch Information: 811326 123803 DW

Template Version: ENV-EPL-MIN4-0033-Rev.00 (13Dec2020)

Analysis Method	ASTM D2974	Analyzed By	JDL	Instrument	10BALP	Oven ID	10WET49
Acceptance Range	100-110 C	Thermometer ID	559926	Oven Correction Factor (C)	0	Oven Temp In1 (C)   Corr   Date/Time   Init	105.0   105.0   04/26/2022 14:30   JDL
Oven Temp Out1 (C)   Corr   Date/Time   Init	103.0   103.0   04/27/2022 09:01   JDL	Desic. In 1 ID   Date/Time   Init	10MET41   04/27/2022 09:01   JDL	Desic. Out 1 Date/Time   Init	04/27/2022 09:33   JDL	Reviewed By	CR2
Reviewed By Date	04/27/2022 10:03	Batch Notes					

## Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	ID	TS Posted (%)	Percent Moisture	Run Date/Time	Posted Dry Weight w/ Dish (g)	Dish Weight (g)	Wet Weight w/ Dish (g)	Dry Weight 1 (g)	Dry Wt Use 1	Sample Notes
DRY WEIGHT	PS	10605435001	Y		66.24	33.76	04/26/2022 14:23:26	6.5713	1.2841	9.2659	6.5713	M	
DRY WEIGHT	PS	10605435002	Y		71.11	28.89	04/26/2022 14:23:38	7.4126	1.2841	9.9028	7.4126	M	
DRY WEIGHT	PS	10605435003	Y		46.14	53.86	04/26/2022 14:23:49	5.1981	1.2871	9.7631	5.1981	M	
DRY WEIGHT	RQS	10605661001	Y		66.94	33.06	04/26/2022 14:24:00	7.1146	1.2839	9.9945	7.1146	M	
DRY WEIGHT	DUP	4303422	Y		66.46	33.54	04/26/2022 14:24:10	7.0608	1.2863	9.9756	7.0608	M	
DRY WEIGHT	PS	10605661002	Y		76.08	23.92	04/26/2022 14:24:21	7.6593	1.2871	9.6633	7.6593	M	

## Pace Analytical - Minnesota

Sample Delivery Group: L1486885  
Samples Received: 04/27/2022  
Project Number: 10605661  
Description: D3593500  
Site: 001  
Report To: Kongmeng Vang  
1700 Elm Street Suite 200  
Minneapolis, MN 55414

Entire Report Reviewed By:



Nancy McLain  
Project Manager

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Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com









# TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	10
Cn: Case Narrative	11
Su: Summary Results	12
2540 G-2011 Total Solids	13
Sample Result Inorganic Analysis Data Sheet	13
L1486885-01 04/29/22 08:19 LOGBAL4	13
L1486885-02 04/29/22 17:30 LOGBAL1	14
BLANK(R3786597-1) WG1855693 04/29/22 08:19 LOGBAL4	15
BLANK(R3786687-1) WG1855863 04/29/22 17:30 LOGBAL1	16
LCS(R3786597-2) WG1855693 04/29/22 08:19 LOGBAL4	17
LCS(R3786687-2) WG1855863 04/29/22 17:30 LOGBAL1	18
DUP(R3786597-3) WG1855693 04/29/22 08:19 LOGBAL4	19
DUP(R3786687-3) WG1855863 04/29/22 17:30 LOGBAL1	20
Blank	21
LOGBAL1 WG1855863	21
LOGBAL4 WG1855693	22
Laboratory Duplicate	23
WG1855693 DUP(R3786597-3)	23
WG1855863 DUP(R3786687-3)	24
Laboratory Control Sample / Duplicate	25
WG1855693 LCS(R3786597-2)	25
WG1855863 LCS(R3786687-2)	26
Detection Limit Summary	27
2540 G-2011 - Solid	27
Analysis Log	28
LOGBAL1 WG1855863	28
LOGBAL4 WG1855693	29
Preparation Logs	30
WG1855693	30
WG1855863	31
8270E Semi Volatile Organic Compounds (GC/MS)	33
Surrogate Recovery	33
Solid Surrogate Summary	33
Matrix Spike / Duplicate	34
WG1857484 MS(R3787994-3) MSD(R3787994-4)	34
WG1857248 MS(R3788258-1) MSD(R3788258-2)	35
Laboratory Control Sample / Duplicate	36
WG1857248 LCS(R3787713-1)	36



WG1857484 LCS(R3787994-1)	37
<b>Method Blank</b>	<b>38</b>
WG1857484 R3787994-2 BNAMS11 05/04/22 06:23	38
WG1857248 R3788334-1 BNAMS24 05/04/22 18:14	39
WG1857248 R3787713-2 BNAMS4 05/03/22 15:52	40
<b>GC/MS Performance Check</b>	<b>41</b>
BNAMS4 020922 02/09/22 10:23	41
<b>0209_05</b>	<b>42</b>
BNAMS4 050322A 05/03/22 12:48	43
<b>0503A_01T-1</b>	<b>44</b>
BNAMS4 050422 05/04/22 04:39	45
<b>0504_02T-1</b>	<b>46</b>
BNAMS11 011422 01/14/22 13:14	47
<b>0114_05</b>	<b>48</b>
BNAMS11 050422 05/04/22 04:32	49
<b>0504_02T-1</b>	<b>50</b>
BNAMS24 033122 03/31/22 17:02	51
<b>0331_02</b>	<b>52</b>
BNAMS24 050422A 05/04/22 16:09	53
<b>0504A_02T-1</b>	<b>54</b>
<b>Internal Standard &amp; Retention Time</b>	<b>55</b>
BNAMS4 05/03/22 13:09	55
BNAMS4 05/04/22 04:59	57
BNAMS11 05/04/22 04:53	59
<b>Sample Result Summary Organic Analysis Data Sheet</b>	<b>61</b>
L1486885-01 05/04/22 13:22 BNAMS4	61
<b>Raw Data - 0504_26</b>	<b>62</b>
L1486885-02 05/04/22 14:13 BNAMS11	64
<b>Raw Data - 0504_29</b>	<b>65</b>
<b>GC/MS Initial Calibration</b>	<b>68</b>
BNAMS4 02/09/22 10:43	68
<b>Calibration Plots</b>	<b>70</b>
2,4-Dinitrophenol	70
4,6-Dinitro-2-methylphenol	71
Benzidine	72
Hydroquinone	73
<b>Calibration Summary</b>	<b>74</b>
<b>Raw Data</b>	<b>76</b>
0209_06	76
0209_07	82



0209_08	87	
0209_09	92	
0209_10	103	
0209_11	106	
0209_12	117	
0209_13	126	
0209_15	137	
0209_16	141	
0209_17	147	
0209_18	154	
0209_19	162	
0209_20	168	
BNAMS11 01/14/22 13:34	174	
<b>Calibration Plots</b>	176	
Benzidine	176	
Diphenyl Ether	177	
Diphenyl Oxide	178	
<b>Calibration Summary</b>	179	
<b>Raw Data</b>	184	
0114_06	184	
0114_07	203	
0114_08	220	
0114_09	229	
0114_10	244	
0114_11	257	
0114_12	270	
0114_13	281	
0114_15	292	
0114_16	294	
0114_17	298	
0114_18	300	
0114_19	304	
0114_20	308	
BNAMS24 03/31/22 17:24	312	
<b>Calibration Plots</b>	314	
2,4-Dinitrophenol	314	
2-nitrodiphenylamine	315	
4,6-Dinitro-2-methylphenol	316	
Benzidine	317	
Benzoic Acid	318	

Di-n-octyl phthalate	319
Pentachlorophenol	320
Calibration Summary	321
Raw Data	326
0331_03	326
0331_04	341
0331_05	356
0331_06	363
0331_07	374
0331_08	381
0331_09	388
0331_10	397
0331_12	406
0331_13	408
0331_14	412
0331_15	414
0331_16	416
0331_17	418
GC/MS Calibration Verification	420
BNAMS4 02/09/22 15:56	420
BNAMS4 - 020922	421
1_bis(2-Chloroethyl)ether	424
2_bis(2-Chloroethyl)ether	425
3_Benzo(b)fluoranthene	426
BNAMS4 02/09/22 16:16	427
BNAMS4 - 020922	428
BNAMS4 05/03/22 13:09	430
BNAMS4 - 050322A	431
1_bis(2-Chloroethyl)ether	434
3_Nitrobenzene-d5	435
4_Nitrobenzene-d5	436
5_Benzo(b)fluoranthene	437
5_bis(2-Chloroethyl)ether	438
BNAMS4 05/03/22 13:30	439
BNAMS4 - 050322A	440
1_Hydroquinone	442
2_Hydroquinone	443
BNAMS4 05/04/22 04:59	444
BNAMS4 - 050422	445
1_bis(2-Chloroethyl)ether	448



2_bis(2-Chloroethyl)ether	449
3_2-Methylphenol	450
4_2-Methylphenol	451
5_Benzo(b)fluoranthene	452
BNAMS4 05/04/22 05:20	453
BNAMS4 - 050422	454
1_Hydroquinone	456
3_Hydroquinone	457
BNAMS11 01/14/22 18:38	458
BNAMS11 - 011422	459
1_bis(2-Chloroethyl)ether	462
2_bis(2-Chloroethyl)ether	463
3_Naphthalene	464
4_Naphthalene	465
5_Benzo(b)fluoranthene	466
6_4-Nitrophenol	467
7_4-Nitrophenol	468
BNAMS11 01/19/22 10:49	469
BNAMS11 - 011422	470
BNAMS11 01/19/22 11:10	472
BNAMS11 - 011422	473
1_N-Nitrosodimethylamine	477
2_N-Nitrosodimethylamine	478
3_bis(2-Chloroethyl)ether	479
4_bis(2-Chloroethyl)ether	480
5_Naphthalene	481
6_Naphthalene	482
7_4-Nitrophenol	483
8_4-Nitrophenol	484
BNAMS11 05/04/22 04:53	485
BNAMS11 - 050422	486
1_Phenol	489
2_Phenol	490
3_2-Methylphenol	491
4_2-Methylphenol	492
5_Nitrobenzene-d5	493
6_Nitrobenzene-d5	494
7_Naphthalene	495
8_Naphthalene	496
9_Benzo(b)fluoranthene	497





BNAMS11 05/04/22 05:13	498
<b>BNAMS11 - 050422</b>	<b>499</b>
1_alpha-terpineol	501
2_alpha-terpineol	502
BNAMS24 03/31/22 22:44	503
<b>BNAMS24 - 033122</b>	<b>504</b>
5_Benzo(b)fluoranthene	507
6_bis(2-Chloroethyl)ether	508
7_bis(2-Chloroethyl)ether	509
8_Nitrobenzene-d5	510
9_Nitrobenzene-d5	511
BNAMS24 03/31/22 23:06	512
<b>BNAMS24 - 033122</b>	<b>513</b>
BNAMS24 05/04/22 16:30	515
<b>BNAMS24 - 050422A</b>	<b>516</b>
1_bis(2-Chloroethyl)ether	519
2_bis(2-Chloroethyl)ether	520
3_Nitrobenzene-d5	521
4_Nitrobenzene-d5	522
5_Benzo(b)fluoranthene	523
BNAMS24 05/04/22 16:52	524
<b>BNAMS24 - 050422A</b>	<b>525</b>
<b>Analytical Sequence</b>	<b>527</b>
BNAMS4 02/09/22 10:43	527
BNAMS11 01/14/22 13:34	528
BNAMS24 03/31/22 17:24	529
<b>Detection Limit Summary</b>	<b>530</b>
8270E - Solid	530
<b>QC Result Summary Organic Analysis Data Sheet</b>	<b>531</b>
BLANK(R3787713-2) WG1857248 05/03/22 15:52 BNAMS4	531
<b>Raw Data - 0503A_05</b>	<b>532</b>
BLANK(R3787994-2) WG1857484 05/04/22 06:23 BNAMS11	534
<b>Raw Data - 0504_06</b>	<b>535</b>
BLANK(R3788334-1) WG1857248 05/04/22 18:14 BNAMS24	537
<b>Raw Data - 0504A_07</b>	<b>538</b>
LCS(R3787713-1) WG1857248 05/03/22 15:31 BNAMS4	540
<b>Raw Data - 0503A_04</b>	<b>541</b>
1_bis(2-Chloroethyl)ether	545
2_bis(2-Chloroethyl)ether	546
3_Phenol	547



4_Phenol	548
5_Nitrobenzene-d5	549
6_Nitrobenzene-d5	550
7_Hydroquinone	551
8_Hydroquinone	552
LCS(R3787994-1) WG1857484 05/04/22 06:03 BNAMS11	553
Raw Data - 0504_05	554
1_bis(2-Chloroethyl)ether	558
2_bis(2-Chloroethyl)ether	559
3_Phenol	560
4_Phenol	561
5_Naphthalene	562
6_Naphthalene	563
MS(R3787994-3) WG1857484 05/04/22 14:54 BNAMS11	564
Raw Data - 0504_31	565
1_Phenol	568
2_Phenol	569
3_2,4-Dimethylphenol	570
4_2,4-Dimethylphenol	571
MS(R3788258-1) WG1857248 05/04/22 13:43 BNAMS4	572
Raw Data - 0504_27	573
1_bis(2-Chloroethyl)ether	576
2_bis(2-Chloroethyl)ether	577
3_Hydroquinone	578
4_Hydroquinone	579
5_Indeno(1,2,3-cd)pyrene	580
6_Indeno(1,2,3-cd)pyrene	581
MSD(R3787994-4) WG1857484 05/04/22 15:14 BNAMS11	582
Raw Data - 0504_32	583
1_bis(2-Chloroethyl)ether	586
2_bis(2-Chloroethyl)ether	587
3_Phenol	588
4_Phenol	589
5_Di-n-octyl phthalate	590
6_Di-n-octyl phthalate	591
MSD(R3788258-2) WG1857248 05/04/22 14:03 BNAMS4	592
Raw Data - 0504_28	593
1_bis(2-Chloroethyl)ether	596
2_bis(2-Chloroethyl)ether	597
3_Phenol	598



4_Phenol	599
5_Hydroquinone	600
6_Hydroquinone	601
<b>Preparation Logs</b>	<b>602</b>
WG1857248	602
WG1857484	603
<b>9034/9030B Wet Chemistry</b>	<b>605</b>
<b>Sample Result Inorganic Analysis Data Sheet</b>	<b>605</b>
L1486885-01 05/01/22 17:00 MAN TITR	605
L1486885-02 05/01/22 17:00 MAN TITR	606
BLANK(R3786887-1) WG1857111 05/01/22 17:00 MAN TITR	607
LCS(R3786887-2) WG1857111 05/01/22 17:00 MAN TITR	608
MS(R3786887-3) WG1857111 05/01/22 17:00 MAN TITR	609
MSD(R3786887-4) WG1857111 05/01/22 17:00 MAN TITR	610
<b>Blank</b>	<b>611</b>
MAN TITR WG1857111	611
<b>Matrix Spike / Duplicate</b>	<b>612</b>
WG1857111 MS(R3786887-3) MSD(R3786887-4)	612
<b>Laboratory Control Sample / Duplicate</b>	<b>613</b>
WG1857111 LCS(R3786887-2)	613
<b>Detection Limit Summary</b>	<b>614</b>
9034/9030B - Solid	614
<b>Analysis Log</b>	<b>615</b>
MAN TITR WG1857111	615
<b>Preparation Logs</b>	<b>616</b>
WG1857111	616
<b>Gl: Glossary of Terms</b>	<b>618</b>
<b>Al: Accreditations &amp; Locations</b>	<b>620</b>
<b>Sc: Sample Chain of Custody</b>	<b>621</b>



# SAMPLE SUMMARY

## BNSF-BG13-042122-0-10 L1486885-01 Solid

Collected by: [Redacted]      Collected date/time: 04/21/22 09:50      Received date/time: 04/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1855693	1	04/29/22 08:12	04/29/22 08:19	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9034/9030B	WG1857111	1	04/27/22 14:39	05/01/22 17:00	BMD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1857248	2	05/03/22 09:05	05/04/22 13:22	JNJ	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Su
- 6 Gl
- 7 Al
- 8 Sc

## BNSF-SG23-042122-0-6 L1486885-02 Solid

Collected by: [Redacted]      Collected date/time: 04/21/22 14:40      Received date/time: 04/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1855863	1	04/29/22 17:12	04/29/22 17:30	KDW	Mt. Juliet, TN
Wet Chemistry by Method 9034/9030B	WG1857111	1	04/27/22 14:39	05/01/22 17:00	BMD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1857484	1	05/03/22 09:11	05/04/22 14:13	JNJ	Mt. Juliet, TN

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Nancy McLain  
Project Manager



## Report Revision History

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Level II Report - Version 1: 05/06/22 10:17

2540 G-2011 Total Solids

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1486885-01  
Client Sample ID: BNSF-BG13-042122-0-10  
Lab File ID: 08  
Instrument ID: LOGBAL4  
Analytical Batch: WG1855693  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): 75.6

SDG: L1486885  
Collected Date/Time: 04/21/22 09:50  
Received Date/Time: 04/27/22 09:00  
Preparation Date/Time: 04/29/22 08:12  
Analysis Date/Time: 04/29/22 08:19  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 14.531 g  
Final Wt/Vol: 11.296 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	75.6	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1486885-02  
Client Sample ID: BNSF-SG23-042122-0-6  
Lab File ID: 11  
Instrument ID: LOGBAL1  
Analytical Batch: WG1855863  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): 79.1

SDG: L1486885  
Collected Date/Time: 04/21/22 14:40  
Received Date/Time: 04/27/22 09:00  
Preparation Date/Time: 04/29/22 17:12  
Analysis Date/Time: 04/29/22 17:30  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 9.167 g  
Final Wt/Vol: 7.515 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	79.1	%



SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3786597-1  
Client Sample ID: BLANK  
Lab File ID: 01  
Instrument ID: LOGBAL4  
Analytical Batch: WG1855693  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1486885  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 04/29/22 08:11  
Analysis Date/Time: 04/29/22 08:19  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 1.25 g  
Final Wt/Vol: 1.251 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	0.00100 %	

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3786687-1  
Client Sample ID: BLANK  
Lab File ID: 01  
Instrument ID: LOGBAL1  
Analytical Batch: WG1855863  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1486885  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 04/29/22 17:11  
Analysis Date/Time: 04/29/22 17:30  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 1.271 g  
Final Wt/Vol: 1.271 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	0.000	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3786597-2  
Client Sample ID: LCS  
Lab File ID: 03  
Instrument ID: LOGBAL4  
Analytical Batch: WG1855693  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1486885  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 04/29/22 08:11  
Analysis Date/Time: 04/29/22 08:19  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 11.264 g  
Final Wt/Vol: 6.266 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	50.0	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3786687-2  
Client Sample ID: LCS  
Lab File ID: 03  
Instrument ID: LOGBAL1  
Analytical Batch: WG1855863  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1486885  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 04/29/22 17:11  
Analysis Date/Time: 04/29/22 17:30  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 11.271 g  
Final Wt/Vol: 6.271 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	50.0	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3786597-3  
Client Sample ID: DUP  
Lab File ID: 02  
Instrument ID: LOGBAL4  
Analytical Batch: WG1855693  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): 90.9

SDG: L1486885  
Collected Date/Time: 04/22/22 15:30  
Received Date/Time: 04/27/22 09:00  
Preparation Date/Time: 04/29/22 08:11  
Analysis Date/Time: 04/29/22 08:19  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 9.669 g  
Final Wt/Vol: 8.997 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	92.0	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3786687-3  
Client Sample ID: DUP  
Lab File ID: 02  
Instrument ID: LOGBAL1  
Analytical Batch: WG1855863  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): 76.0

SDG: L1486885  
Collected Date/Time: 04/22/22 08:20  
Received Date/Time: 04/26/22 09:00  
Preparation Date/Time: 04/29/22 17:11  
Analysis Date/Time: 04/29/22 17:30  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 7.714 g  
Final Wt/Vol: 6.347 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	78.8	%

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	_____
<b>Instrument ID:</b>	LOGBAL1	<b>Calibration (end) date/time:</b>	_____
<b>Analytical Method:</b>	2540 G-2011	<b>Analytical Run:</b>	WG1855863

---

	Sample ID: BLANK	Result	BLANK Qual
	File ID:	01	
<b>Analyte</b>		%	
TOTAL SOLIDS		0.000	

---

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	_____
<b>Instrument ID:</b>	LOGBAL4	<b>Calibration (end) date/time:</b>	_____
<b>Analytical Method:</b>	2540 G-2011	<b>Analytical Run:</b>	WG1855693

---

	Sample ID: BLANK	Result	BLANK Qual
	File ID:	01	
<b>Analyte</b>		%	
TOTAL SOLIDS		0.00100	

---



**DUP Sample / File ID:** R3786597-3 / 02  
**OS Sample / File ID:** L1486465-03 / 06  
**Instrument ID:** LOGBAL4  
**Analytical Method:** 2540 G-2011

**SDG:** L1486885  
**Analytical Batch:** WG1855693  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	OS Result %	DUP Result %	RPD %	RPD Limits %
Total Solids	90.9	92.0	1.19	10

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

**DUP Sample / File ID:** R3786687-3 / 02  
**OS Sample / File ID:** L1486961-01 / 12  
**Instrument ID:** LOGBAL1  
**Analytical Method:** 2540 G-2011

**SDG:** L1486885  
**Analytical Batch:** WG1855863  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	OS Result	DUP Result	RPD	RPD Limits
	%	%	%	%
Total Solids	76.0	78.8	3.71	10

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE  
 LABORATORY CONTROL SAMPLE DUPLICATE  
 RECOVERY  
 L1486885-01

SAMPLE NO.:  
 R3786597-2

**LCS Sample / File ID:** R3786597-2 / 03  
**LCSD Sample / File ID:** \_\_\_\_\_  
**Instrument ID:** LOGBAL4  
**Analytical Method:** 2540 G-2011

**SDG:** L1486885  
**Analytical Batch:** WG1855693  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	%	%		%	%	%	%	%
Total Solids	50.0	50.0		100		85.0 - 115		

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE  
 LABORATORY CONTROL SAMPLE DUPLICATE  
 RECOVERY  
 L1486885-02

SAMPLE NO.:  
 R3786687-2

**LCS Sample / File ID:** R3786687-2 / 03  
**LCSD Sample / File ID:** \_\_\_\_\_  
**Instrument ID:** LOGBAL1  
**Analytical Method:** 2540 G-2011

**SDG:** L1486885  
**Analytical Batch:** WG1855863  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	%	%		%	%	%	%	%
Total Solids	50.0	50.0		100		85.0 - 115		

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

### DETECTION LIMIT SUMMARY

**Lab Sample IDs:** L1486885-01,02  
**Matrix:** Solid

**Analytical Method:** 2540 G-2011  
**Prep Method:** SM 2540 G

---

Analyte	CAS	Wavelength	Mass	MDL %	RDL %
Total Solids	TSOLIDS				

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ANALYSIS LOG

**SDG:** L1486885 **Analytical Method:** 2540 G-2011  
**Instrument ID:** LOGBAL1 **Calibration Start Date:** \_\_\_\_\_  
**Analytical Run:** WG1855863 **Calibration End Date:** \_\_\_\_\_

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3786687-1	01	04/29/22 17:30	1	WG1855863
DUP	R3786687-3	02	04/29/22 17:30	1	WG1855863
LCS	R3786687-2	03	04/29/22 17:30	1	WG1855863
OS	L1486961-01	12	04/29/22 17:30		
BNSF-SG23-042122-0-6	L1486885-02	11	04/29/22 17:30	1	WG1855863

ANALYSIS LOG

**SDG:** L1486885 **Analytical Method:** 2540 G-2011  
**Instrument ID:** LOGBAL4 **Calibration Start Date:** \_\_\_\_\_  
**Analytical Run:** WG1855693 **Calibration End Date:** \_\_\_\_\_

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3786597-1	01	04/29/22 08:19	1	WG1855693
DUP	R3786597-3	02	04/29/22 08:19	1	WG1855693
LCS	R3786597-2	03	04/29/22 08:19	1	WG1855693
OS	L1486465-03	06	04/29/22 08:19		
BNSF-BG13-042122-0-1 0	L1486885-01	08	04/29/22 08:19	1	WG1855693

# Total Solids WetChem Prep Benchsheet

Batch: WG1855693

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1486465	WG1855325	BJM688	PREPREPBAL1	27-APR-22
L1486885	WG1855466	KMT967	PREPREPBAL3	27-APR-22
L1486957	WG1855487	KMT967	PREPREPBAL1	27-APR-22
L1486976	WG1855490	KMT967	PREPREPBAL3	27-APR-22

Analyst: KDW475    Prep Start Date/Time: 04/29/22 08:11-08:12    Prep End Date/Time: 04/29/22 16:18    SOP: 0178    Method: SM 2540G    Oven ID: 2305  
 Balance ID: LOGBAL4    LCS True Value: 50

LCS: 22D11416 Amt. Used: 50 Exp. Date:10/11/22

Sample Number	Matrix	State	Collect Date	Vessel ID	Vessel Wt (g)	Sample + Vessel Wt (g)	Oven Wt1 (g)	Oven Wt2 (g)	Wt Diff (g)	% TS Result	% Moisture Result	TS % Recovery	Moisture % Rec.	TS RPD	% Moisture RPD	Box ID	Review Analyst	Review Date
BLANK				F1	1.250	1.250	1.251	1.251	0	0.001	99.999						CMK3616	04/29/22 16:18:14
LCS				F2	1.263	11.264	6.264	6.266	0.002	50.025	49.975	100.05	99.95				CMK3616	04/29/22 16:18:14
DUP(L1486465-03)				F3	1.274	9.669	8.995	8.997	0.002	91.9952	8.0048			1.19	12.72	WED BOX 6, 0427 PP1	CMK3616	04/29/22 16:18:14
1. L1486465-01	SS	NC	04/22/22 13:05	F4	1.268	11.519	9.600	9.605	0.005	81.3287	18.6713					WED BOX 6, 0427 PP1	CMK3616	04/29/22 16:18:14
2. L1486465-02	SS	NC	04/22/22 14:35	F5	1.260	9.001	8.201	8.206	0.005	89.73	10.27					WED BOX 6, 0427 PP1	CMK3616	04/29/22 16:18:14
3. L1486465-03	SS	NC	04/22/22 15:30	F6	1.263	9.402	8.661	8.662	0.001	90.908	9.092						CMK3616	04/29/22 16:18:14
4. L1486465-04	SS	NC	04/22/22 17:00	F7	1.256	8.474	6.370	6.369	0.001	70.8368	29.1632					WED BOX 6, 0427 PP1	CMK3616	04/29/22 16:18:14
5. L1486885-01	SS	WA	04/21/22 09:50	F8	1.266	14.531	11.294	11.296	0.002	75.6125	24.3875					4/27 PP3 WED 5	CMK3616	04/29/22 16:18:14
6. L1486957-03	SS	TN	04/26/22 11:10	F9	1.257	10.023	8.416	8.418	0.002	81.6906	18.3094					WED BOX 6, 0427 PP1	CMK3616	04/29/22 16:18:14
7. L1486957-06	SS	TN	04/26/22 10:20	F10	1.255	12.332	10.398	10.398	0	82.5404	17.4596					WED BOX 6, 0427 PP1	CMK3616	04/29/22 16:18:14
8. L1486957-07	SS	TN	04/26/22 09:00	F11	1.257	13.697	11.031	11.034	0.003	78.5932	21.4068					WED BOX 6, 0427 PP1	CMK3616	04/29/22 16:18:14
9. L1486976-11	SS	WA	04/23/22 10:35	F12	1.266	7.799	6.700	6.701	0.001	83.193	16.807					4/27 PP3 WED 6	CMK3616	04/29/22 16:18:14

Comments:

Reviewed By:CMK3616 on 04/29/22 16:18:14

#	Type	Time In	Obs. Temp In (°C)	Corrected Temp In (°C)	Time Out	Obs. Temp Out (°C)	Corrected Temp Out (°C)	Samples
1	Oven-04/29/22 4hr	08:19:25	104	104	04/29/22 14:52:32	104	104	BLANK, LCS, DUP(L1486465-03), L1486465-01, L1486976-11, L1486957-07, L1486957-06, L1486957-03, L1486885-01, L1486465-04, L1486465-03, L1486465-02
2	Oven-04/29/22 1hr	14:55:26	104	104	04/29/22 16:16:12	104	104	BLANK, LCS, DUP(L1486465-03), L1486465-01, L1486465-02, L1486465-03, L1486465-04, L1486885-01, L1486957-03, L1486957-06, L1486957-07, L1486976-11



# Total Solids WetChem Prep Benchsheet

Batch: WG1855863

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1486791	WG1855482	KMT967	PREPREPBAL4	27-APR-22
L1486818	WG1855523	KMT967	PREPREPBAL2	28-APR-22
L1486885	WG1855466	KMT967	PREPREPBAL3	27-APR-22
L1486961	WG1855490	KMT967	PREPREPBAL3	27-APR-22
L1486966	WG1855487	KMT967	PREPREPBAL1	27-APR-22

Analyst: MT3521    Prep Start Date/Time: 04/29/22 17:11-17:12    Prep End Date/Time: 04/30/22 09:29    SOP: 0178    Method: SM 2540G    Oven ID: 2305  
 Balance ID: LOGBAL1    LCS True Value: 50

LCS: 22B23211 Amt. Used: 50 Exp. Date:08/23/22

Sample Number	Matrix	State	Collect Date	Vessel ID	Vessel Wt (g)	Sample + Vessel Wt (g)	Oven Wt1 (g)	Oven Wt2 (g)	Wt Diff (g)	% TS Result	% Moisture Result	TS % Recovery	Moisture % Rec.	TS RPD	% Moisture RPD	Box ID	Review Analyst	Review Date
BLANK				NN1	1.271	1.271	1.271	1.271	0	0	100						KDW475	04/30/22 09:29:40
LCS				NN2	1.271	11.271	6.270	6.271	0.001	50	50	100	100				KDW475	04/30/22 09:29:40
DUP(L1486961-01)				NN3	1.255	7.714	6.345	6.347	0.002	78.835721.1643				3.71	12.71	4/27 PP3 WED 6	KDW475	04/30/22 09:29:40
1. L1486791-02	SS	PA	04/19/22 11:48	NN4	1.260	13.993	13.551	13.553	0.002	96.5444	3.4556					PP4 0427	KDW475	04/30/22 09:29:40
2. L1486791-03	SS	PA	04/19/22 12:12	NN5	1.268	10.259	6.617	6.619	0.002	59.5151	40.4849					PP4 0427	KDW475	04/30/22 09:29:40
3. L1486791-04	SS	PA	04/19/22 12:55	NN6	1.270	12.313	6.013	6.015	0.002	42.9684	57.0316					PP4 0427	KDW475	04/30/22 09:29:40
4. L1486818-01	SS	NC	04/22/22 14:30	NN7	1.263	8.285	6.366	6.367	0.001	72.6858	27.3142					Thu02 / 0428PP02	KDW475	04/30/22 09:29:40
5. L1486818-02	SS	NC	04/22/22 14:45	NN8	1.255	10.248	7.465	7.462	0.003	69.0203	30.9797					Thu02 / 0428PP02	KDW475	04/30/22 09:29:40
6. L1486818-03	SS	NC	04/22/22 12:35	NN9	1.251	10.071	8.752	8.754	0.002	85.068	14.932					Thu02 / 0428PP02	KDW475	04/30/22 09:29:40
7. L1486818-04	SS	NC	04/22/22 00:00	NN10	1.253	11.234	9.080	9.083	0.003	78.4491	21.5509					Thu02 / 0428PP02	KDW475	04/30/22 09:29:40
8. L1486885-02	SS	WA	04/21/22 14:40	NN11	1.254	9.167	7.513	7.515	0.002	79.123	20.877					4/27 PP3 WED 5	KDW475	04/30/22 09:29:40
9. L1486961-01	SS	VA	04/22/22 08:20	NN12	1.257	9.644	7.628	7.628	0	75.9628	24.0372						KDW475	04/30/22 09:29:40
10. L1486966-05	SS	CA	04/25/22 09:20	NN13	1.248	9.476	7.973	7.975	0.002	81.7574	18.2426					WED BOX 6, 0427 PP1	KDW475	04/30/22 09:29:40

Comments:

Reviewed By:KDW475 on 04/30/22 09:29:40

#	Type	Time In	Obs. Temp In (°C)	Corrected Temp In (°C)	Time Out	Obs. Temp Out (°C)	Corrected Temp Out (°C)	Samples
1	Oven-4hr	04/29/22 17:30:18	104	104	04/30/22 05:33:32	104	104	BLANK, LCS, DUP(L1486961-01), L1486791-02, L1486966-05, L1486961-01, L1486885-02, L1486818-04, L1486818-03, L1486818-02, L1486818-01, L1486791-04, L1486791-03
2	Oven-1hr	04/30/22 05:35:38	104	104	04/30/22 09:26:59	104	104	BLANK, LCS, DUP(L1486961-01), L1486791-02, L1486791-03, L1486791-04, L1486818-01, L1486818-02, L1486818-03, L1486818-04, L1486885-02, L1486961-01, L1486966-05

8270E Semi Volatile Organic Compounds (GC/MS)

Analytical Method: 8270E  
 Matrix: Solid

SDG: L1486885

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	DMC-2 % Rec.	DMC-3 % Rec.	DMC-4 % Rec.	DMC-5 % Rec.	DMC-6 % Rec.	TOT Out
BNSF-BG13-042122-0-10	L1486885-01	BNAMS4	0504_26	66.0	68.5	69.9	63.0	85.7	68.4	0
BNSF-SG23-042122-2-0-6	L1486885-02	BNAMS11	0504_29	60.1	62.0	56.7	60.1	86.6	67.4	0
MS	R3788258-1	BNAMS4	0504_27	71.5	74.5	59.2	62.9	91.0	69.9	0
MSD	R3788258-2	BNAMS4	0504_28	54.8	58.0	49.8	50.8	82.1	76.6	0
MS	R3787994-3	BNAMS11	0504_31	71.5	61.4	67.1	66.1	65.8	68.7	0
MSD	R3787994-4	BNAMS11	0504_32	43.0	40.7	50.8	49.5	50.9	47.6	0
BLANK	R3787994-2	BNAMS11	0504_06	78.8	73.3	72.4	76.3	97.1	79.0	0
BLANK	R3788334-1	BNAMS24	0504A_07	67.7	65.6	66.1	68.5	70.3	61.6	0
BLANK	R3787713-2	BNAMS4	0503A_05	72.7	74.6	72.7	68.5	75.7	72.7	0
LCS	R3787994-1	BNAMS11	0504_05	75.5	73.1	58.3	75.4	99.5	78.4	0
LCS	R3787713-1	BNAMS4	0503A_04	60.8	61.7	52.6	56.8	68.6	62.5	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	2-Fluorophenol	12.0 - 120
DMC-2	Phenol-d5	10.0 - 120
DMC-3	Nitrobenzene-d5	10.0 - 122
DMC-4	2-Fluorobiphenyl	15.0 - 120
DMC-5	2,4,6-Tribromophenol	10.0 - 127
DMC-6	p-Terphenyl-d14	10.0 - 120

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

MATRIX SPIKE /  
MATRIX SPIKE DUPLICATE RECOVERY  
L1486885-02

MS Sample / File ID: R3787994-3 / 0504\_31  
MSD Sample / File ID: R3787994-4 / 0504\_32  
OS Sample / File ID: L1485528-168 / 0504\_30  
Instrument ID: BNAMS11  
Analytical Method: 8270E

SDG: L1486885  
Analytical Batch: WG1857484  
Matrix: Solid

Analyte	Spike Amount (dry) mg/kg	OS Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	RPD %	RPD Limit %
Acenaphthene	0.689	U	0.458	0.330	66.5	47.5	10	18.0 - 120	32.4*	32
Acenaphthylene	0.689	U	0.437	0.311	63.4	44.7	10	25.0 - 120	33.8*	32
Anthracene	0.689	U	0.565	0.351	82.0	50.5	10	22.0 - 120	46.7*	29
Benzoic Acid	1.37	U	U	U	29.6	11.8	10	10.0 - 152	84.7*	40
Benzo(a)anthracene	0.689	0.214	1.38	0.604	170*	56.1	10	25.0 - 120	78.5*	29
Benzo(b)fluoranthene	0.689	0.340	1.74	0.660	204*	45.9	10	19.0 - 122	90.2*	31
Benzo(k)fluoranthene	0.689	0.128	0.896	0.462	112	48.1	10	23.0 - 120	63.9*	30
Benzo(g,h,i)perylene	0.689	0.299	1.04	0.561	107	37.6	10	10.0 - 120	59.6*	33
Benzo(a)pyrene	0.689	0.231	1.38	0.579	167*	50.0	10	24.0 - 120	82.1*	30
Carbazole	0.689	U	0.490	0.318	71.0	45.8	10	31.0 - 120	42.4*	24
Chrysene	0.689	0.218	1.53	0.583	190*	52.5	10	21.0 - 120	89.4*	29
Dibenz(a,h)anthracene	0.689	U	0.562	0.347	81.5	49.8	10	10.0 - 120	47.3*	32
Dibenzofuran	0.689	U	0.453	0.317	65.7	45.6	10	24.0 - 120	35.1*	30
Fluoranthene	0.689	0.349	1.71	0.728	198*	54.5	10	18.0 - 126	80.6*	32
Fluorene	0.689	U	0.490	0.352	71.0	50.6	10	25.0 - 120	32.6*	30
Indeno(1,2,3-cd)pyrene	0.689	0.289	1.12	0.590	121*	43.3	10	10.0 - 120	62.3*	32
1-Methylnaphthalene	0.689	0.126	0.466	0.332	49.2	29.5	10	10.0 - 120	33.7	36
2-Methylnaphthalene	0.689	0.110	0.501	0.306	56.6	28.2	10	10.0 - 120	48.1*	37
Naphthalene	0.689	U	0.471	0.348	68.4	50.0	10	10.0 - 120	30.1	35
Phenanthrene	0.689	0.176	0.883	0.465	103	41.5	10	17.0 - 120	62.1*	31
Bis(2-ethylhexyl)phthalate	0.689	3.13	4.11	3.29	142*	23.5	10	17.0 - 126	22.1	30
Di-n-butyl phthalate	0.689	0.167	0.778	0.395	88.6	32.8	10	30.0 - 120	65.3*	29
Di-n-octyl phthalate	0.689	U	0.820	1.25	119	180*	10	21.0 - 123	41.9*	29
Pyrene	0.689	0.299	1.48	0.668	172*	53.1	10	16.0 - 121	75.7*	32
3&4-Methyl Phenol	0.689	U	0.447	0.250	64.9	35.9	10	12.0 - 123	56.7*	38
Pentachlorophenol	0.689	U	0.328	U	47.6	0.000*	10	10.0 - 160	200*	31
Phenol	0.689	U	0.367	0.228	53.3	32.8	10	12.0 - 120	46.9*	38

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

MATRIX SPIKE /  
MATRIX SPIKE DUPLICATE RECOVERY  
L1486885-01

**MS Sample / File ID:** R3788258-1 / 0504\_27  
**MSD Sample / File ID:** R3788258-2 / 0504\_28  
**OS Sample / File ID:** L1486885-01 / 0504\_26  
**Instrument ID:** BNAMS4  
**Analytical Method:** 8270E

**SDG:** L1486885  
**Analytical Batch:** WG1857248  
**Matrix:** Solid

Analyte	Spike Amount (dry) mg/kg	OS Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	RPD %	RPD Limit %
Acenaphthene	0.862	U	0.590	0.417	68.4	49.1	2	18.0 - 120	34.4*	32
Acenaphthylene	0.862	U	0.620	0.435	71.9	51.2	2	25.0 - 120	35.1*	32
Anthracene	0.862	U	0.677	0.555	78.5	65.4	2	22.0 - 120	19.7	29
Benzoic Acid	1.72	U	1.90	1.20	111	70.6	2	10.0 - 152	45.7*	40
Benzo(a)anthracene	0.862	U	0.705	0.599	81.7	70.6	2	25.0 - 120	16.2	29
Benzo(b)fluoranthene	0.862	U	0.678	0.589	78.7	69.3	2	19.0 - 122	14.2	31
Benzo(k)fluoranthene	0.862	U	0.688	0.599	79.8	70.6	2	23.0 - 120	13.8	30
Benzo(g,h,i)perylene	0.862	U	0.592	0.517	68.7	60.9	2	10.0 - 120	13.6	33
Benzo(a)pyrene	0.862	U	0.753	0.653	87.3	76.9	2	24.0 - 120	14.1	30
Carbazole	0.862	U	0.698	0.583	81.0	68.7	2	31.0 - 120	18.0	24
Chrysene	0.862	U	0.709	0.607	82.2	71.5	2	21.0 - 120	15.5	29
Dibenz(a,h)anthracene	0.862	U	0.648	0.548	75.2	64.5	2	10.0 - 120	16.8	32
Dibenzofuran	0.862	U	0.606	0.435	70.2	51.2	2	24.0 - 120	32.8*	30
Fluoranthene	0.862	U	0.717	0.592	83.1	69.8	2	18.0 - 126	19.0	32
Fluorene	0.862	U	0.635	0.469	73.6	55.3	2	25.0 - 120	29.9	30
Indeno(1,2,3-cd)pyrene	0.862	U	0.627	0.544	72.7	64.0	2	10.0 - 120	14.2	32
1-Methylnaphthalene	0.862	U	0.480	0.333	55.7	39.3	2	10.0 - 120	36.1*	36
2-Methylnaphthalene	0.862	U	0.452	0.313	52.5	36.9	2	10.0 - 120	36.3	37
Naphthalene	0.862	U	0.451	0.312	52.3	36.8	2	10.0 - 120	36.4*	35
Phenanthrene	0.862	U	0.671	0.546	77.8	64.3	2	17.0 - 120	20.4	31
Bis(2-ethylhexyl)phthalate	0.862	U	0.837	0.701	97.1	82.6	2	17.0 - 126	17.7	30
Di-n-butyl phthalate	0.862	U	0.796	0.639	92.3	75.2	2	30.0 - 120	21.9	29
Di-n-octyl phthalate	0.862	U	0.825	0.706	95.7	83.2	2	21.0 - 123	15.5	29
Pyrene	0.862	U	0.692	0.587	80.2	69.2	2	16.0 - 121	16.3	32
3&4-Methyl Phenol	0.862	U	0.734	0.480	85.1	56.5	2	12.0 - 123	41.8*	38
Pentachlorophenol	0.862	U	0.697	0.595	80.8	70.1	2	10.0 - 160	15.8	31
Phenol	0.862	U	0.622	0.406	72.1	47.8	2	12.0 - 120	42.0*	38

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE  
LABORATORY CONTROL SAMPLE DUPLICATE  
RECOVERY  
L1486885-01

**LCS Sample / File ID:** R3787713-1 / 0503A\_04  
**LCSD Sample / File ID:** \_\_\_\_\_  
**Instrument ID:** BNAMS4  
**Analytical Method:** 8270E

**SDG:** L1486885  
**Analytical Batch:** WG1857248  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	Spike Amount <i>mg/kg</i>	LCS Result <i>mg/kg</i>	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limit %
Acenaphthene	0.666	0.390		58.6		38.0 - 120		
Acenaphthylene	0.666	0.423		63.5		40.0 - 120		
Anthracene	0.666	0.418		62.8		42.0 - 120		
Benzoic Acid	1.33	0.179		13.5		10.0 - 120		
Benzo(a)anthracene	0.666	0.412		61.9		44.0 - 120		
Benzo(b)fluoranthene	0.666	0.389		58.4		43.0 - 120		
Benzo(k)fluoranthene	0.666	0.413		62.0		44.0 - 120		
Benzo(g,h,i)perylene	0.666	0.427		64.1		43.0 - 120		
Benzo(a)pyrene	0.666	0.447		67.1		45.0 - 120		
Carbazole	0.666	0.398		59.8		48.0 - 120		
Chrysene	0.666	0.414		62.2		43.0 - 120		
Dibenz(a,h)anthracene	0.666	0.422		63.4		44.0 - 120		
Dibenzofuran	0.666	0.401		60.2		44.0 - 120		
Fluoranthene	0.666	0.402		60.4		44.0 - 120		
Fluorene	0.666	0.391		58.7		41.0 - 120		
Indeno(1,2,3-cd)pyrene	0.666	0.411		61.7		45.0 - 120		
1-Methylnaphthalene	0.666	0.321		48.2		34.0 - 120		
2-Methylnaphthalene	0.666	0.312		46.8		34.0 - 120		
Naphthalene	0.666	0.309		46.4		18.0 - 120		
Phenanthrene	0.666	0.400		60.1		42.0 - 120		
Bis(2-ethylhexyl)phthalate	0.666	0.471		70.7		41.0 - 120		
Di-n-butyl phthalate	0.666	0.445		66.8		43.0 - 120		
Di-n-octyl phthalate	0.666	0.442		66.4		40.0 - 120		
Pyrene	0.666	0.408		61.3		41.0 - 120		
3&4-Methyl Phenol	0.666	0.464		69.7		42.0 - 120		
Pentachlorophenol	0.666	0.393		59.0		29.0 - 120		
Phenol	0.666	0.400		60.1		28.0 - 120		

\*: Value outside the established quality control limits.  
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE  
LABORATORY CONTROL SAMPLE DUPLICATE  
RECOVERY  
L1486885-02

**LCS Sample / File ID:** R3787994-1 / 0504\_05  
**LCSD Sample / File ID:** \_\_\_\_\_  
**Instrument ID:** BNAMS11  
**Analytical Method:** 8270E

**SDG:** L1486885  
**Analytical Batch:** WG1857484  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	Spike Amount <i>mg/kg</i>	LCS Result <i>mg/kg</i>	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limit %
Acenaphthene	0.666	0.487		73.1		38.0 - 120		
Acenaphthylene	0.666	0.506		76.0		40.0 - 120		
Anthracene	0.666	0.531		79.7		42.0 - 120		
Benzoic Acid	1.33	0.192		14.4		10.0 - 120		
Benzo(a)anthracene	0.666	0.560		84.1		44.0 - 120		
Benzo(b)fluoranthene	0.666	0.529		79.4		43.0 - 120		
Benzo(k)fluoranthene	0.666	0.538		80.8		44.0 - 120		
Benzo(g,h,i)perylene	0.666	0.556		83.5		43.0 - 120		
Benzo(a)pyrene	0.666	0.562		84.4		45.0 - 120		
Carbazole	0.666	0.523		78.5		48.0 - 120		
Chrysene	0.666	0.553		83.0		43.0 - 120		
Dibenz(a,h)anthracene	0.666	0.581		87.2		44.0 - 120		
Dibenzofuran	0.666	0.494		74.2		44.0 - 120		
Fluoranthene	0.666	0.562		84.4		44.0 - 120		
Fluorene	0.666	0.517		77.6		41.0 - 120		
Indeno(1,2,3-cd)pyrene	0.666	0.597		89.6		45.0 - 120		
1-Methylnaphthalene	0.666	0.387		58.1		34.0 - 120		
2-Methylnaphthalene	0.666	0.389		58.4		34.0 - 120		
Naphthalene	0.666	0.363		54.5		18.0 - 120		
Phenanthrene	0.666	0.507		76.1		42.0 - 120		
Bis(2-ethylhexyl)phthalate	0.666	0.584		87.7		41.0 - 120		
Di-n-butyl phthalate	0.666	0.589		88.4		43.0 - 120		
Di-n-octyl phthalate	0.666	0.601		90.2		40.0 - 120		
Pyrene	0.666	0.508		76.3		41.0 - 120		
3&4-Methyl Phenol	0.666	0.547		82.1		42.0 - 120		
Pentachlorophenol	0.666	0.605		90.8		29.0 - 120		
Phenol	0.666	0.453		68.0		28.0 - 120		

\*: Value outside the established quality control limits.  
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

**Lab Sample ID:** R3787994-2  
**Lab File ID:** 0504\_06  
**Instrument ID:** BNAMS11  
**Analytical Batch:** WG1857484  
**Analytical Method:** 8270E

**SDG:** L1486885  
**Preparation Date/Time:** 05/03/22 09:10  
**Analysis Date/Time:** 05/04/22 06:23  
**Dilution Factor:** 1  
**Matrix:** Solid

Sample ID	Lab Sample ID	Instrument	File ID	Analysis date/time
LCS	R3787994-1	BNAMS11	0504_05	05/04/22 06:03
BNSF-SG23-042122-0-6	L1486885-02	BNAMS11	0504_29	05/04/22 14:13
OS	L1485528-168	BNAMS11	0504_30	05/04/22 14:33
MS	R3787994-3	BNAMS11	0504_31	05/04/22 14:54
MSD	R3787994-4	BNAMS11	0504_32	05/04/22 15:14

## Sample Narrative:

Dilution due to matrix.



**Lab Sample ID:** R3788334-1  
**Lab File ID:** 0504A\_07  
**Instrument ID:** BNAMS24  
**Analytical Batch:** WG1857248  
**Analytical Method:** 8270E

**SDG:** L1486885  
**Preparation Date/Time:** 05/02/22 17:00  
**Analysis Date/Time:** 05/04/22 18:14  
**Dilution Factor:** 1  
**Matrix:** Solid

Sample ID	Lab Sample ID	Instrument	File ID	Analysis date/time
LCS	R3787713-1	BNAMS4	0503A_04	05/03/22 15:31
BNSF-BG13-042122-0-10	L1486885-01	BNAMS4	0504_26	05/04/22 13:22
MS	R3788258-1	BNAMS4	0504_27	05/04/22 13:43
MSD	R3788258-2	BNAMS4	0504_28	05/04/22 14:03

## Sample Narrative:

Dilution due to matrix.

Dilution due to matrix impact during extract concentration procedure

<b>Lab Sample ID:</b>	R3787713-2	<b>SDG:</b>	L1486885
<b>Lab File ID:</b>	0503A_05	<b>Preparation Date/Time:</b>	05/02/22 17:00
<b>Instrument ID:</b>	BNAMS4	<b>Analysis Date/Time:</b>	05/03/22 15:52
<b>Analytical Batch:</b>	WG1857248	<b>Dilution Factor:</b>	1
<b>Analytical Method:</b>	8270E	<b>Matrix:</b>	Solid

Sample ID	Lab Sample ID	Instrument	File ID	Analysis date/time
LCS	R3787713-1	BNAMS4	0503A_04	05/03/22 15:31
BNSF-BG13-042122-0-10	L1486885-01	BNAMS4	0504_26	05/04/22 13:22
MS	R3788258-1	BNAMS4	0504_27	05/04/22 13:43
MSD	R3788258-2	BNAMS4	0504_28	05/04/22 14:03

## Sample Narrative:

Dilution due to matrix.

Dilution due to matrix impact during extract concentration procedure

GC/MS INSTRUMENT  
PERFORMANCE CHECK

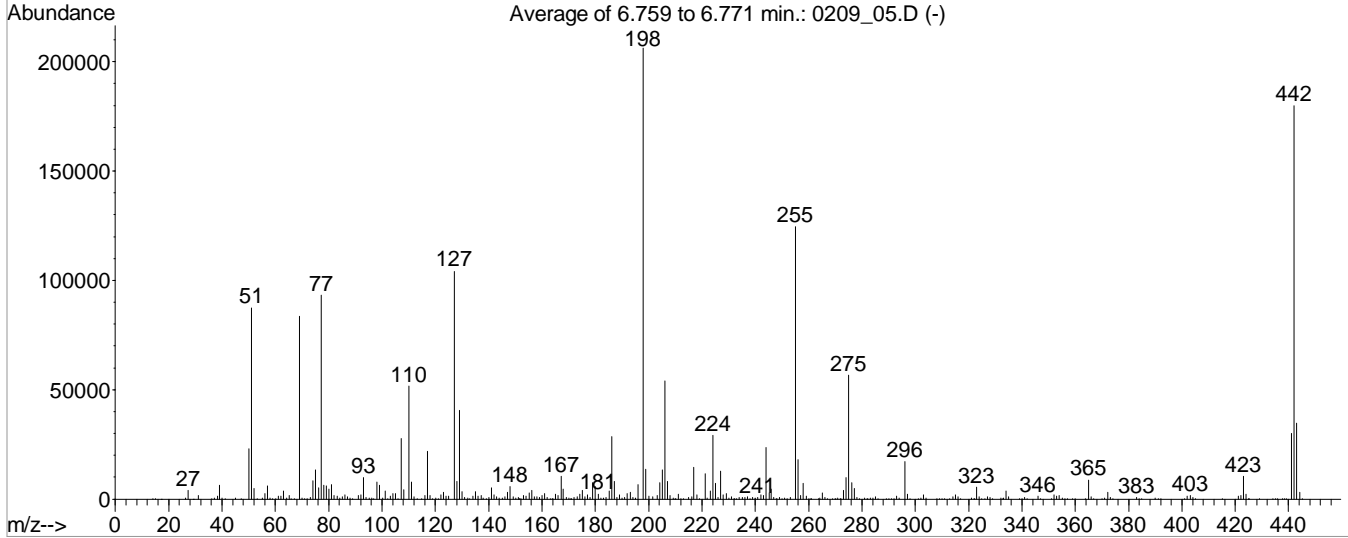
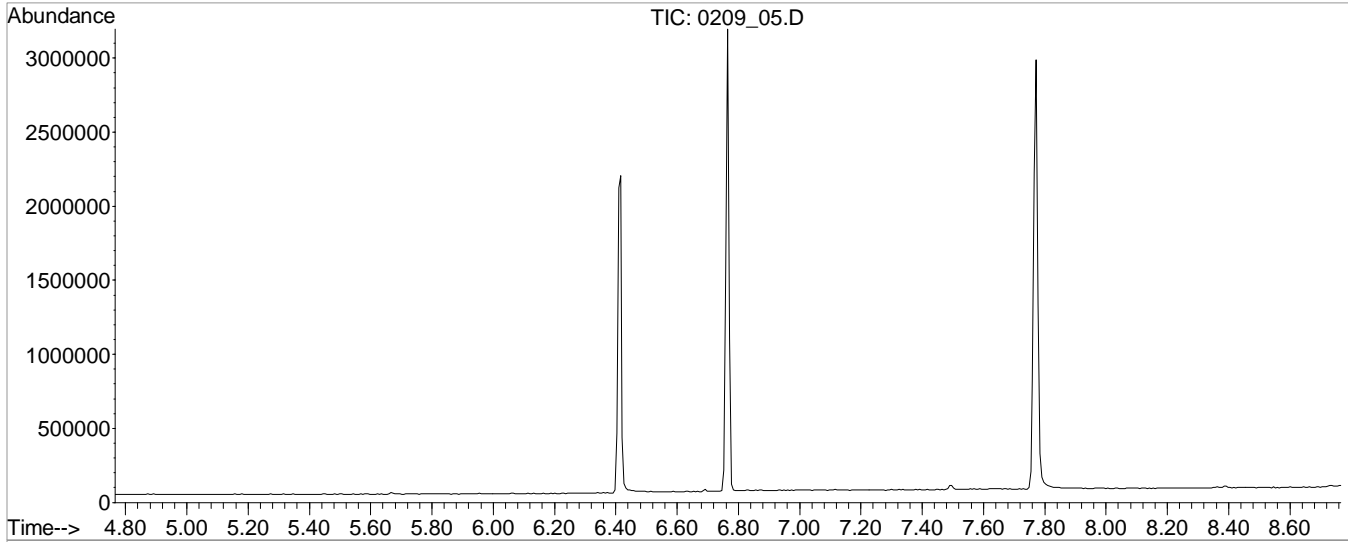
Lab File ID: 0209\_05  
Instrument ID: BNAMS4  
Analysis Date/Time: 02/09/22 10:23

SDG: L1486885  
Analytical Method: 8270E

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	198	10	80	42
68	69	0	2	0
69	69	100	100	100
70	69	0	2	1
127	198	10	80	50
197	198	0	2	0
198	198	50	100	100
199	198	5	9	7
275	198	10	60	28
365	198	1	100	4
441	442	0.0001	24	17
442	198	50	100	87
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-500	500	0209_06	02/09/22 10:43
STD-1000	1000	0209_07	02/09/22 11:04
STD-4000	4000	0209_08	02/09/22 11:25
STD-10000	10000	0209_09	02/09/22 11:46
STD-20000	20000	0209_10	02/09/22 12:07
STD-30000	30000	0209_11	02/09/22 12:27
STD-40000	40000	0209_12	02/09/22 12:48
STD-50000	50000	0209_13	02/09/22 13:09
STD-1K1	1K1	0209_14	02/09/22 13:30
STD-4K1	4K1	0209_15	02/09/22 13:51
STD-10K1	10K1	0209_16	02/09/22 14:11
STD-20K1	20K1	0209_17	02/09/22 14:32
STD-30K1	30K1	0209_18	02/09/22 14:53
STD-40K1	40K1	0209_19	02/09/22 15:14
STD-50K1	50K1	0209_20	02/09/22 15:35
SSCV	BNAMS40209220209_21572116	0209_21	02/09/22 15:56
SSCV	BNAMS40209220209_22572116	0209_22	02/09/22 16:16

Data File : C:\MSDCHEM\1\DATA\020922\0209\_05.D Vial: 2  
 Acq On : 9 Feb 2022 10:23 am Operator: 917  
 Sample : TUNE 50 PPM Inst : BNAMS4  
 Misc : DFTTP TUNE 22B07163 exp. 05/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Method : C:\MSDCHEM\1\METHODS\TUNED.M (RTE Integrator)  
 Title : 8270 BNA



Spectrum Information: Average of 6.759 to 6.771 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	42.4	87399	PASS
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	83556	PASS
70	69	0.00	2	0.7	564	PASS
127	198	10	80	50.5	104194	PASS
197	198	0.00	2	0.0	0	PASS
198	198	50	100	100.0	206269	PASS
199	198	5	9	6.6	13692	PASS
275	198	10	60	27.5	56626	PASS
365	198	1	100	4.3	8784	PASS
441	442	0.01	24	16.7	30103	PASS
442	198	50	100	87.1	179744	PASS
443	442	15	24	19.4	34822	PASS

GC/MS INSTRUMENT  
PERFORMANCE CHECK

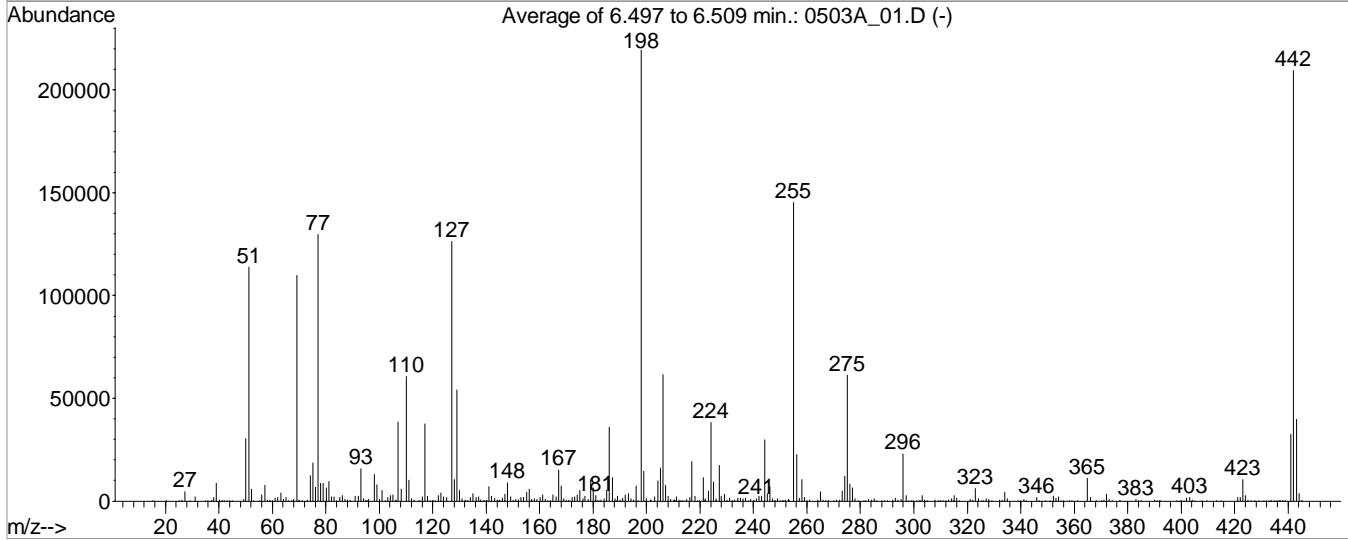
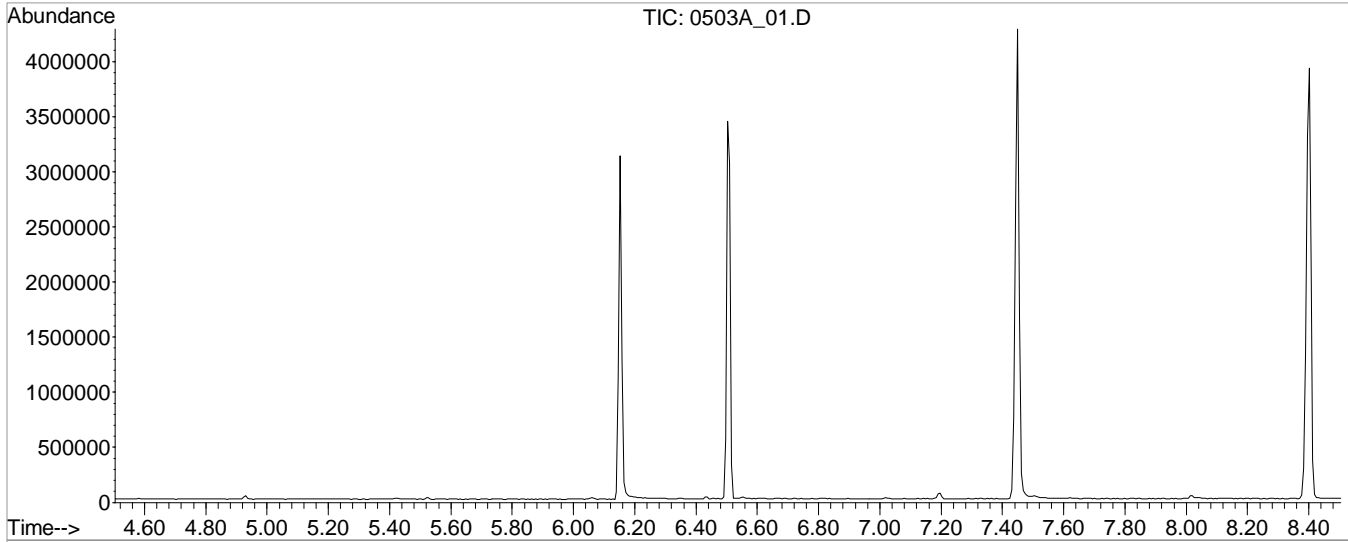
Lab File ID: 0503A\_01T-1  
Instrument ID: BNAMS4  
Analysis Date/Time: 05/03/22 12:48

SDG: L1486885  
Analytical Method: 8270E

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	198	10	80	52
68	69	0	2	1
69	69	100	100	100
70	69	0	2	0
127	198	10	80	58
197	198	0	2	0
198	198	50	100	100
199	198	5	9	7
275	198	10	60	28
365	198	1	100	5
441	442	0.0001	24	16
442	198	50	100	95
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	BNAMS4050322A0503A_02572116	0503A_02	05/03/22 13:09
ICV	BNAMS4050322A0503A_03572116	0503A_03	05/03/22 13:30
LCS	R3787713-1	0503A_04	05/03/22 15:31
BLANK	R3787713-2	0503A_05	05/03/22 15:52

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 01.D Vial: 2  
 Acq On : 3 May 2022 12:48 pm Operator: 3545  
 Sample : TUNE 50 PPM 22D18771 exp 08/11/22 Inst : BNAMS4  
 Misc : DFTTP TUNE Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Method : C:\MSDCHEM\1\METHODS\TUNED.M (RTE Integrator)  
 Title : 8270 BNA



Spectrum Information: Average of 6.497 to 6.509 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	51.8	113808	PASS
68	69	0.00	2	0.6	679	PASS
69	69	100	100	100.0	109720	PASS
70	69	0.00	2	0.4	462	PASS
127	198	10	80	57.6	126373	PASS
197	198	0.00	2	0.1	180	PASS
198	198	50	100	100.0	219522	PASS
199	198	5	9	6.7	14645	PASS
275	198	10	60	27.9	61249	PASS
365	198	1	100	5.0	11003	PASS
441	442	0.01	24	15.5	32482	PASS
442	198	50	100	95.4	209427	PASS
443	442	15	24	19.0	39730	PASS

GC/MS INSTRUMENT  
PERFORMANCE CHECK

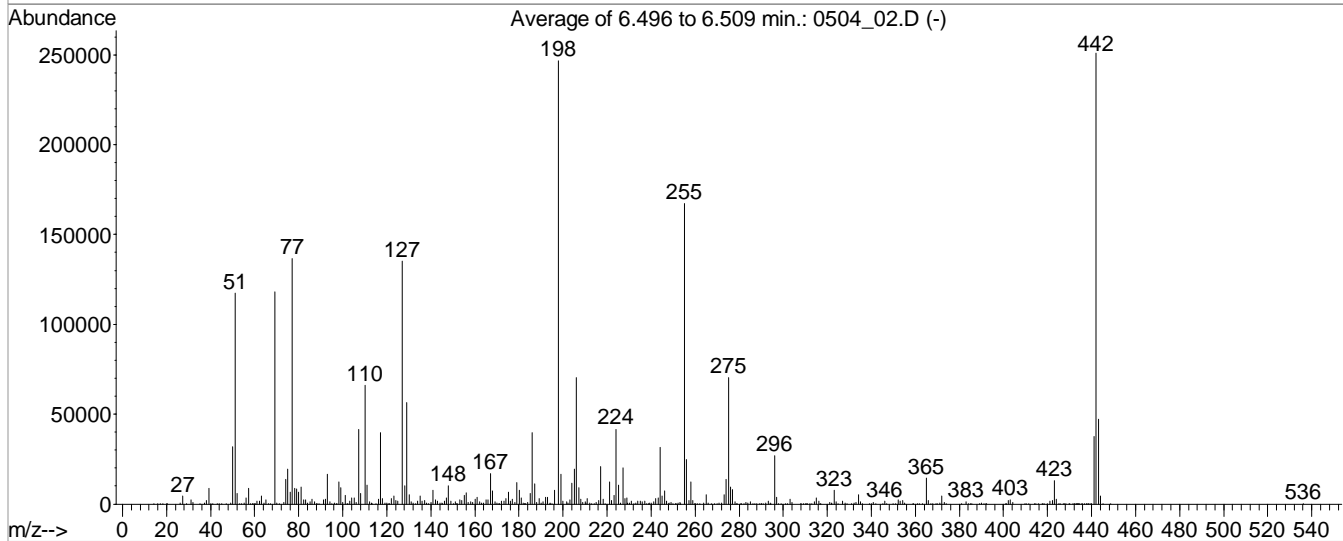
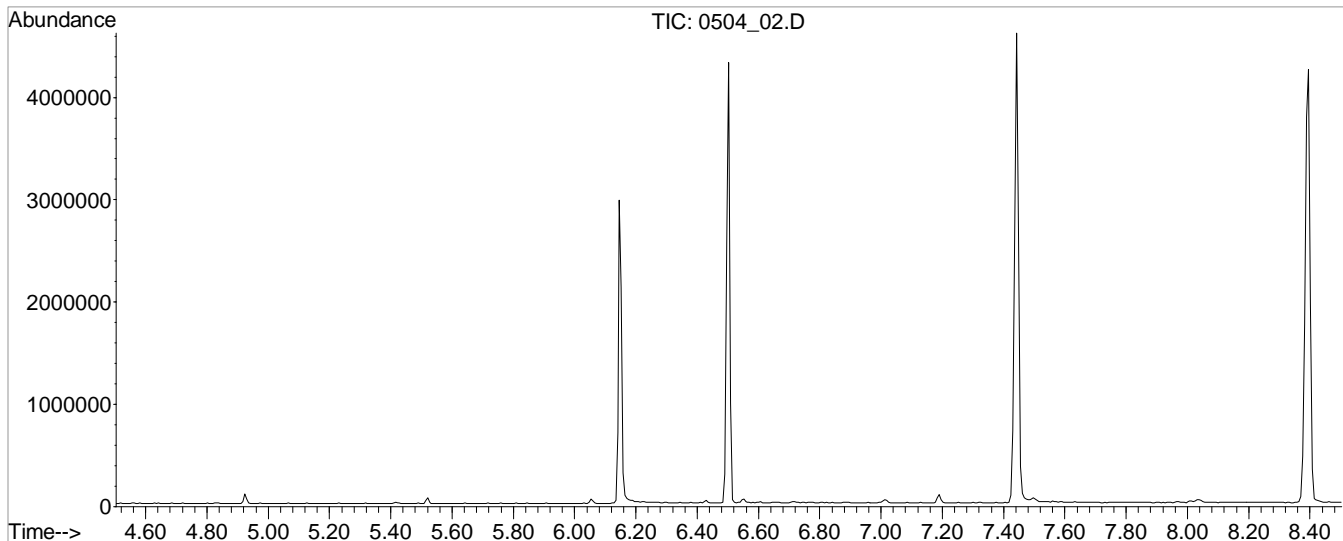
Lab File ID: 0504\_02T-1  
 Instrument ID: BNAMS4  
 Analysis Date/Time: 05/04/22 04:39

SDG: L1486885  
 Analytical Method: 8270E

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	442	10	80	47
68	69	0	2	0
69	69	100	100	100
70	69	0	2	1
127	442	10	80	54
197	198	0	2	0
198	442	50	100	98
199	198	5	9	7
275	442	10	60	28
365	198	1	100	6
441	442	0.0001	24	15
442	442	50	100	100
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	BNAMS40504220504_03572116	0504_03	05/04/22 04:59
ICV	BNAMS40504220504_04572116	0504_04	05/04/22 05:20
OS	L1486885-01	0504_26	05/04/22 13:22
BNSF-BG13-042122-0-10	L1486885-01	0504_26	05/04/22 13:22
MS	R3788258-1	0504_27	05/04/22 13:43
MSD	R3788258-2	0504_28	05/04/22 14:03

Data File : C:\MSDCHEM\1\DATA\050422\0504 02.D Vial: 2  
 Acq On : 4 May 2022 4:39 am Operator: 3545  
 Sample : TUNE 50 PPM 22D18771 exp 08/11/22 Inst : BNAMS4  
 Misc : DFTTP TUNE Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Method : C:\MSDCHEM\1\METHODS\TUNED.M (RTE Integrator)  
 Title : 8270 BNA



Spectrum Information: Average of 6.496 to 6.509 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	442	10	80	46.8	117513	PASS
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	117930	PASS
70	69	0.00	2	0.6	680	PASS
127	442	10	80	53.8	135090	PASS
197	198	0.00	2	0.0	0	PASS
198	442	50	100	98.2	246506	PASS
199	198	5	9	6.7	16610	PASS
275	442	10	60	28.0	70176	PASS
365	198	1	100	5.8	14303	PASS
441	442	0.01	24	15.0	37714	PASS
442	442	50	100	100.0	251002	PASS
443	442	15	24	18.8	47229	PASS



GC/MS INSTRUMENT  
PERFORMANCE CHECK

Lab File ID: 0114\_05  
Instrument ID: BNAMS11  
Analysis Date/Time: 01/14/22 13:14

SDG: L1486885  
Analytical Method: 8270E

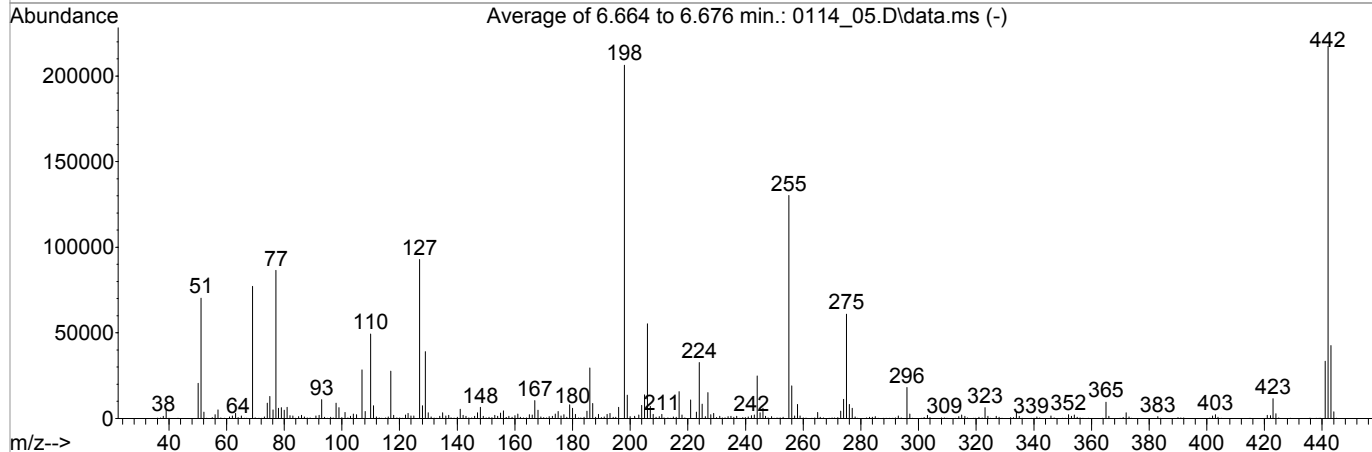
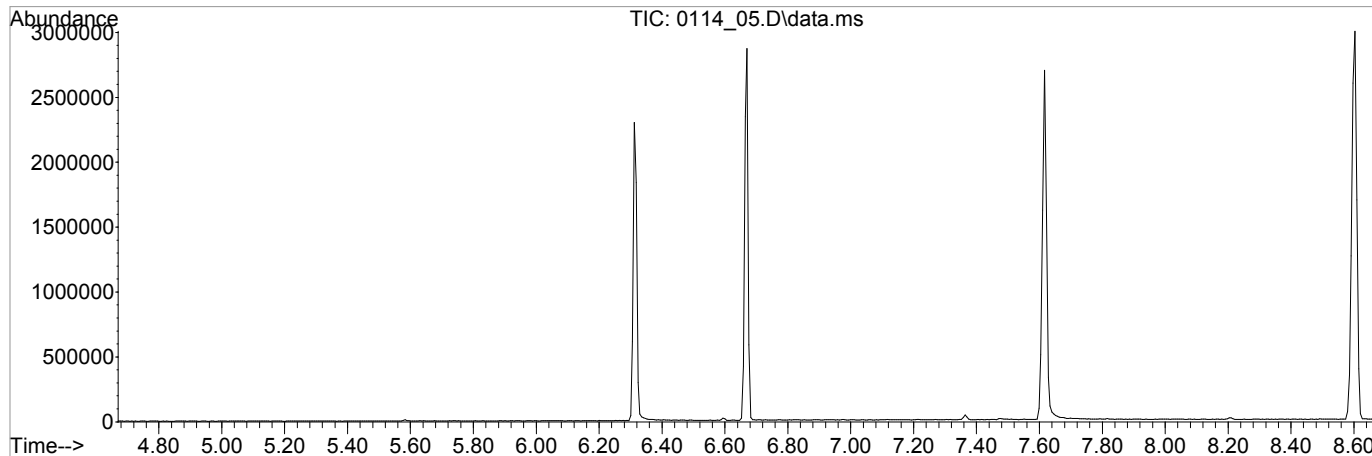
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	442	10	80	32
68	69	0	2	0
69	69	100	100	100
70	69	0	2	0
127	442	10	80	43
197	198	0	2	0
198	442	50	100	95
199	198	5	9	7
275	442	10	60	28
365	198	1	100	5
441	442	0.0001	24	15
442	442	50	100	100
443	442	15	24	20

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-500	500	0114_06	01/14/22 13:34
STD-1000	1000	0114_07	01/14/22 13:54
STD-4000	4000	0114_08	01/14/22 14:15
STD-10000	10000	0114_09	01/14/22 14:35
STD-20000	20000	0114_10	01/14/22 14:55
STD-30000	30000	0114_11	01/14/22 15:15
STD-40000	40000	0114_12	01/14/22 15:36
STD-50000	50000	0114_13	01/14/22 15:56
STD-1K1	1K1	0114_14	01/14/22 16:16
STD-4K1	4K1	0114_15	01/14/22 16:37
STD-10K1	10K1	0114_16	01/14/22 16:57
STD-20K1	20K1	0114_17	01/14/22 17:17
STD-30K1	30K1	0114_18	01/14/22 17:37
STD-40K1	40K1	0114_19	01/14/22 17:58
STD-50K1	50K1	0114_20	01/14/22 18:18
SSCV	BNAMS110114220114_21577302	0114_21	01/14/22 18:38
SSCV	BNAMS110114220114_26577302	0114_26	01/19/22 10:49
SSCV	BNAMS110114220114_27577302	0114_27	01/19/22 11:10

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_05.D  
Acq On : 14 Jan 2022 1:14 pm  
Operator : 917  
Sample : TUNE 50 PPM 22A11926 EXP 06/06/22  
Misc : DFTPP TUNE  
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\TUNED.M  
Title : 8270 BNA  
Last Update : Mon Nov 22 09:48:42 2021



Spectrum Information: Average of 6.664 to 6.676 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	442	10	80	32.3	70126	PASS
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	77106	PASS
70	69	0.00	2	0.3	227	PASS
127	442	10	80	42.7	92849	PASS
197	198	0.00	2	0.0	0	PASS
198	442	50	100	94.9	206365	PASS
199	198	5	9	6.6	13572	PASS
275	442	10	60	28.0	60771	PASS
365	198	1	100	4.6	9404	PASS
441	442	0.01	24	15.3	33333	PASS
442	442	50	100	100.0	217365	PASS
443	442	15	24	19.6	42600	PASS

GC/MS INSTRUMENT  
PERFORMANCE CHECK

Lab File ID: 0504\_02T-1  
Instrument ID: BNAMS11  
Analysis Date/Time: 05/04/22 04:32

SDG: L1486885  
Analytical Method: 8270E

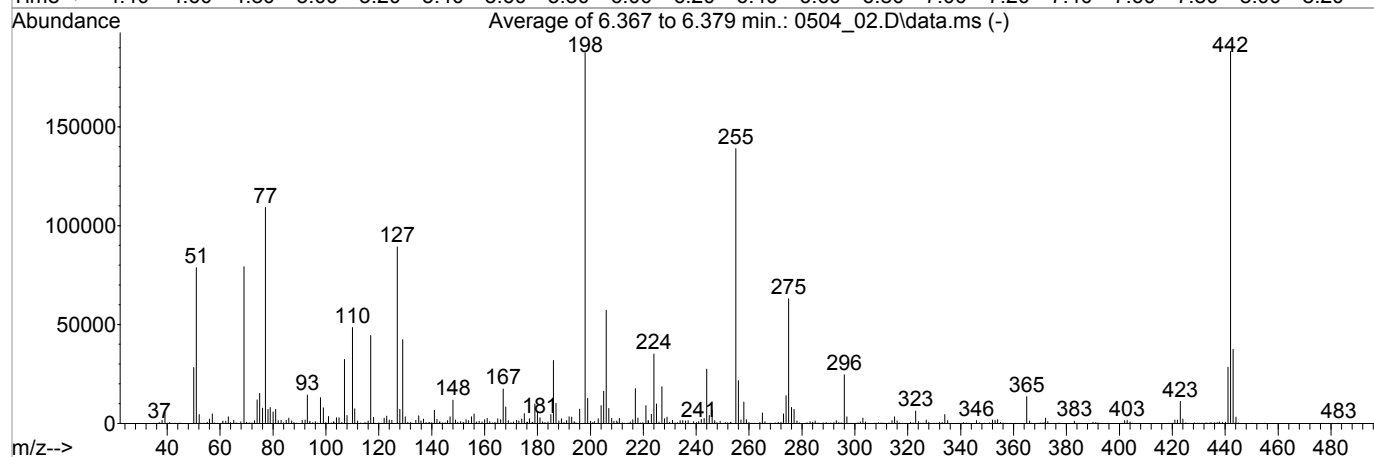
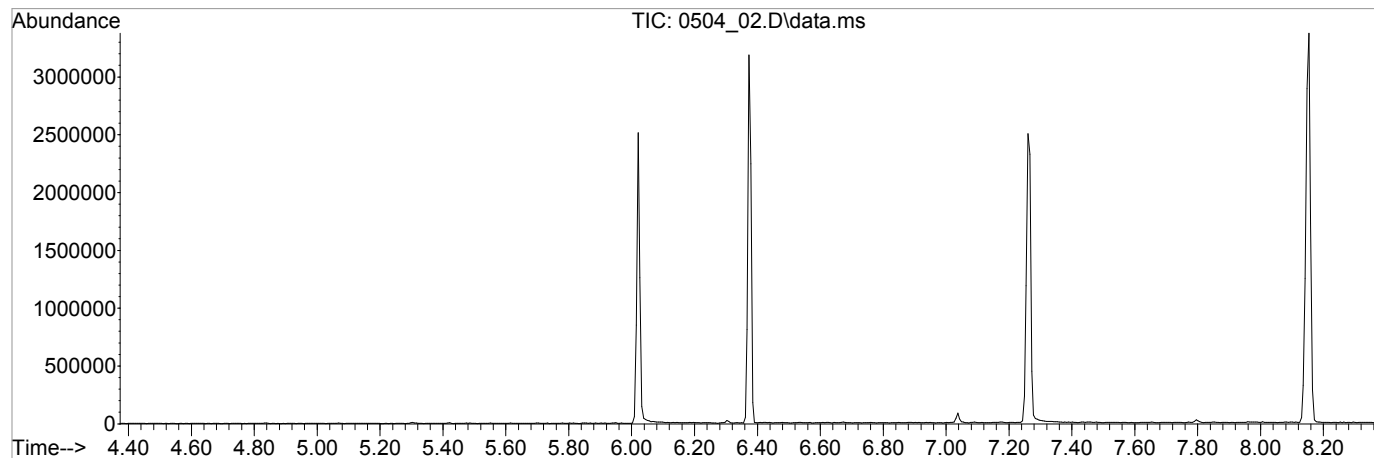
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	442	10	80	42
68	69	0	2	1
69	69	100	100	100
70	69	0	2	1
127	442	10	80	47
197	198	0	2	0
198	442	50	100	100
199	198	5	9	7
275	442	10	60	34
365	198	1	100	7
441	442	0.0001	24	15
442	442	50	100	100
443	442	15	24	20

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	BNAMS110504220504_03577302	0504_03	05/04/22 04:53
ICV	BNAMS110504220504_04577302	0504_04	05/04/22 05:13
LCS	R3787994-1	0504_05	05/04/22 06:03
BLANK	R3787994-2	0504_06	05/04/22 06:23
BNSF-SG23-042122-0-6	L1486885-02	0504_29	05/04/22 14:13
OS	L1485528-168	0504_30	05/04/22 14:33
MS	R3787994-3	0504_31	05/04/22 14:54
MSD	R3787994-4	0504_32	05/04/22 15:14

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_02.D  
 Acq On : 4 May 2022 4:32 am  
 Operator : 3545  
 Sample : TUNE 50 PPM 22C25374 exp 08/11/22  
 Misc : DFTPP TUNE  
 ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\TUNED.M  
 Title : 8270 BNA  
 Last Update : Mon Apr 11 11:12:20 2022



Spectrum Information: Average of 6.367 to 6.379 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	442	10	80	41.8	78723	PASS
68	69	0.00	2	0.9	673	PASS
69	69	100	100	100.0	79168	PASS
70	69	0.00	2	0.7	525	PASS
127	442	10	80	47.4	89287	PASS
197	198	0.00	2	0.0	0	PASS
198	442	50	100	99.5	187275	PASS
199	198	5	9	6.8	12754	PASS
275	442	10	60	33.5	63105	PASS
365	198	1	100	7.2	13471	PASS
441	442	0.01	24	15.1	28479	PASS
442	442	50	100	100.0	188216	PASS
443	442	15	24	19.9	37541	PASS

GC/MS INSTRUMENT  
PERFORMANCE CHECK

Lab File ID: 0331\_02  
Instrument ID: BNAMS24  
Analysis Date/Time: 03/31/22 17:02

SDG: L1486885  
Analytical Method: 8270E

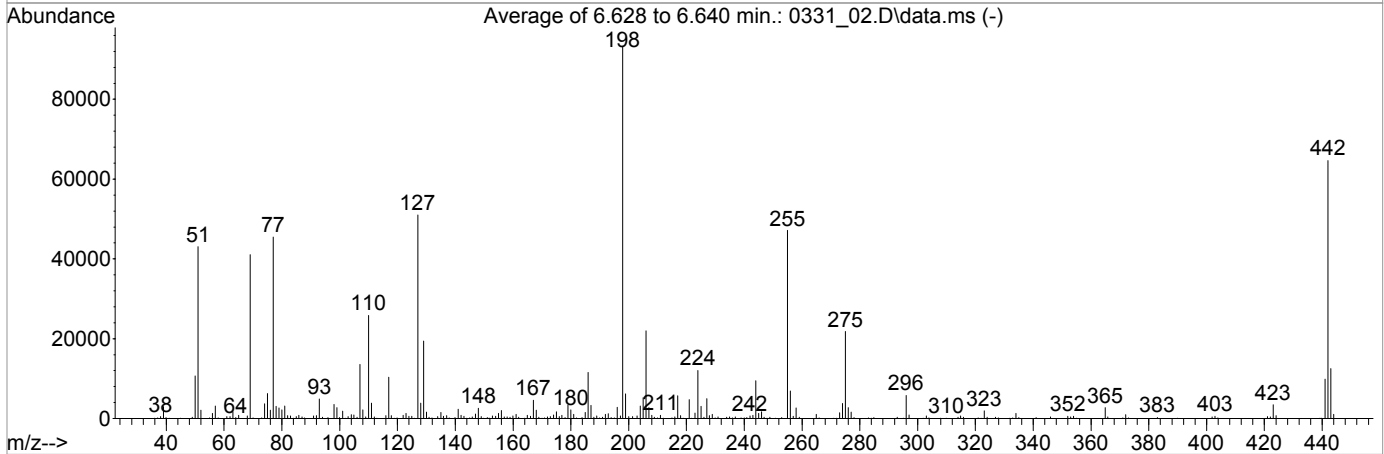
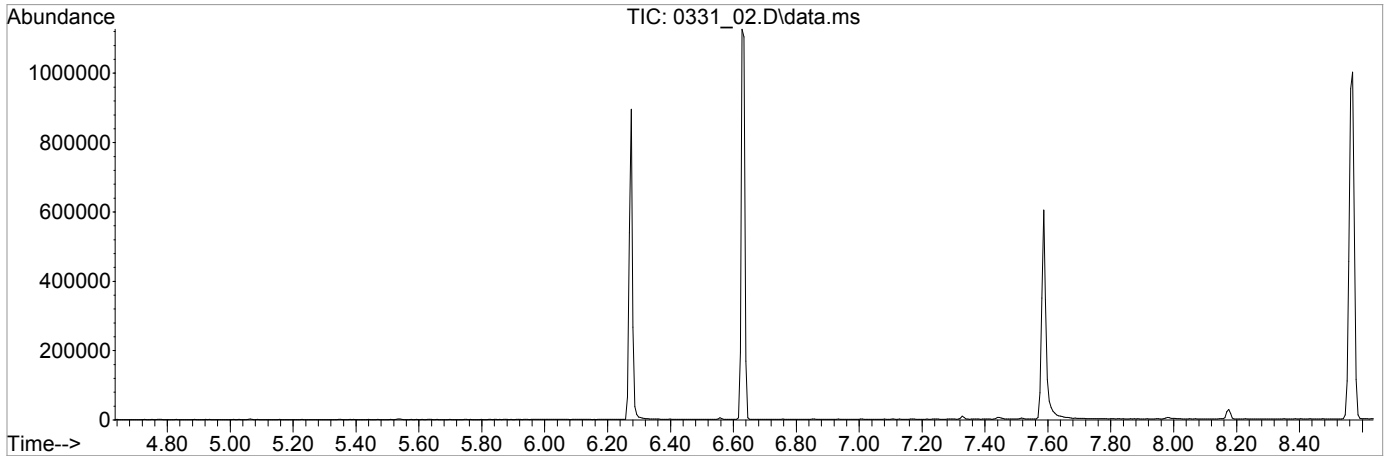
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	198	10	80	46
68	69	0	2	2
69	69	100	100	100
70	69	0	2	0
127	198	10	80	55
197	198	0	2	1
198	198	50	100	100
199	198	5	9	7
275	198	10	60	23
365	198	1	100	3
441	442	0.0001	24	15
442	198	50	100	69
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-500	500	0331_03	03/31/22 17:24
STD-1000	1000	0331_04	03/31/22 17:45
STD-4000	4000	0331_05	03/31/22 18:07
STD-10000	10000	0331_06	03/31/22 18:28
STD-20000	20000	0331_07	03/31/22 18:49
STD-30000	30000	0331_08	03/31/22 19:11
STD-40000	40000	0331_09	03/31/22 19:32
STD-50000	50000	0331_10	03/31/22 19:53
STD-1K1	1K1	0331_11	03/31/22 20:15
STD-4K1	4K1	0331_12	03/31/22 20:36
STD-10K1	10K1	0331_13	03/31/22 20:58
STD-20K1	20K1	0331_14	03/31/22 21:19
STD-30K1	30K1	0331_15	03/31/22 21:40
STD-40K1	40K1	0331_16	03/31/22 22:02
STD-50K1	50K1	0331_17	03/31/22 22:23
SSCV	BNAMS240331220331_18576947	0331_18	03/31/22 22:44
SSCV	BNAMS240331220331_19576947	0331_19	03/31/22 23:06

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_02.D  
 Acq On : 31 Mar 2022 5:02 pm  
 Operator : 3545  
 Sample : TUNE 50 PPM 22C25374 exp 8/11/22  
 Misc : DFTPP Tune  
 ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e

Method : C:\msdchem\1\methods\TUNED.M  
 Title :  
 Last Update : Mon Mar 28 16:39:56 2022



Spectrum Information: Average of 6.628 to 6.640 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	46.2	43070	PASS
68	69	0.00	2	1.5	616	PASS
69	69	100	100	100.0	41045	PASS
70	69	0.00	2	0.5	194	PASS
127	198	10	80	54.7	51035	PASS
197	198	0.00	2	0.7	627	PASS
198	198	50	100	100.0	93259	PASS
199	198	5	9	6.6	6186	PASS
275	198	10	60	23.4	21794	PASS
365	198	1	100	3.0	2770	PASS
441	442	0.01	24	15.3	9884	PASS
442	198	50	100	69.4	64677	PASS
443	442	15	24	19.3	12480	PASS

GC/MS INSTRUMENT  
PERFORMANCE CHECK

Lab File ID: 0504A\_02T-1  
Instrument ID: BNAMS24  
Analysis Date/Time: 05/04/22 16:09

SDG: L1486885  
Analytical Method: 8270E

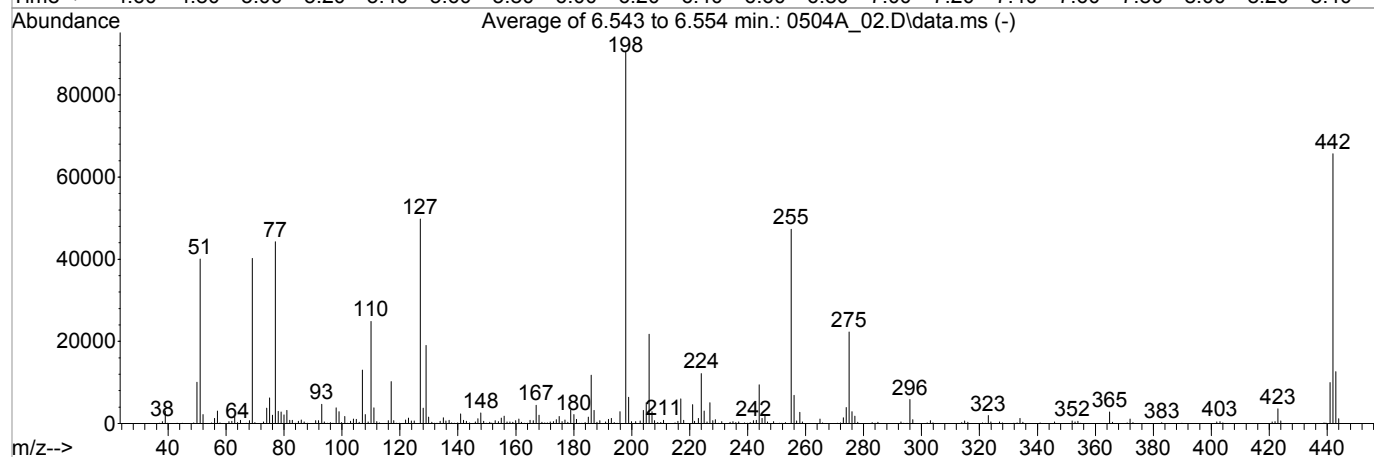
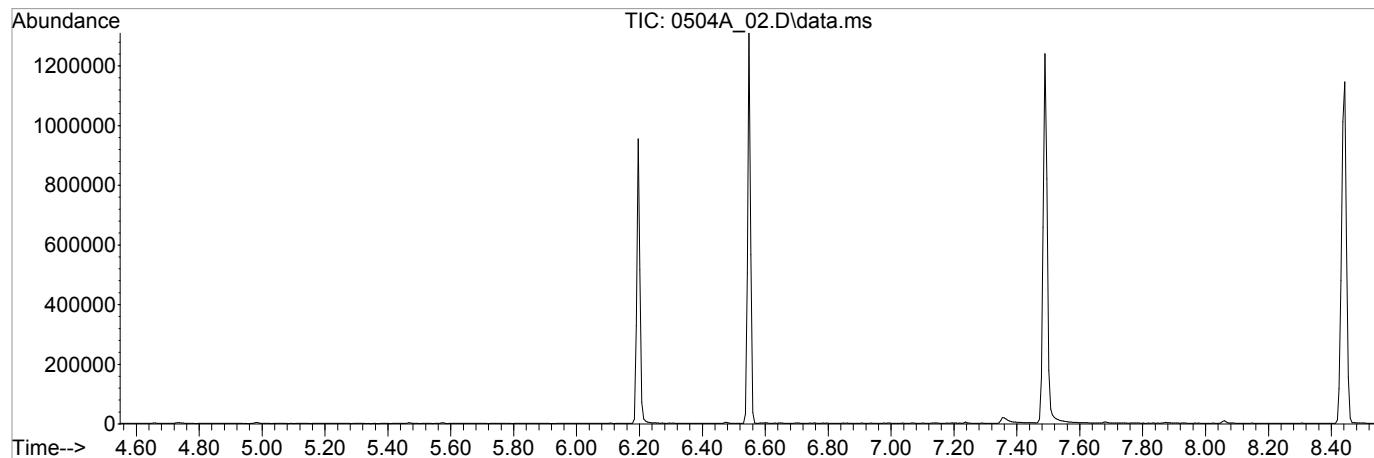
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	198	10	80	44
68	69	0	2	2
69	69	100	100	100
70	69	0	2	0
127	198	10	80	55
197	198	0	2	0
198	198	50	100	100
199	198	5	9	7
275	198	10	60	25
365	198	1	100	3
441	442	0.0001	24	15
442	198	50	100	72
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	BNAMS24050422A0504A_03576947	0504A_03	05/04/22 16:30
ICV	BNAMS24050422A0504A_04576947	0504A_04	05/04/22 16:52
BLANK	R3788334-1	0504A_07	05/04/22 18:14

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_02.D  
 Acq On : 4 May 2022 4:09 pm  
 Operator : 3545  
 Sample : TUNE 50 PPM 22D25444 exp 10/15/22  
 Misc : DFTPP Tune  
 ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e

Method : C:\msdchem\1\methods\TUNED.M  
 Title :  
 Last Update : Mon Mar 28 16:39:56 2022



Spectrum Information: Average of 6.543 to 6.554 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	44.2	40045	PASS
68	69	0.00	2	1.7	683	PASS
69	69	100	100	100.0	40235	PASS
70	69	0.00	2	0.5	217	PASS
127	198	10	80	54.9	49779	PASS
197	198	0.00	2	0.0	0	PASS
198	198	50	100	100.0	90619	PASS
199	198	5	9	7.0	6366	PASS
275	198	10	60	24.6	22294	PASS
365	198	1	100	3.1	2819	PASS
441	442	0.01	24	15.2	9970	PASS
442	198	50	100	72.5	65682	PASS
443	442	15	24	19.2	12608	PASS



INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1486885	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS4	<b>Calibration Start Date:</b>	02/09/22 10:43
<b>Std File:</b>	0503A_02	<b>Calibration End Date:</b>	02/09/22 15:35
		<b>Std Analysis Date:</b>	05/03/22 13:09

Sample ID	File ID	1,4-DCB		ACE		CHR		NAP	
		Response	RT	Response	RT	Response	RT	Response	RT
STANDARD		74619	3.28	154226	5.18	237512	9.07	298130	4.02
UPPER LIMIT		149238		308452		475024		596260	
LOWER LIMIT		37310		77113		118756		149065	
LCS R3787713-1 WG1857248 1x	0503A_04	82890	3.28	170754	5.18	287519	9.08	385068	4.02
BLANK R3787713-2 WG1857248 1x	0503A_05	84368	3.28	158867	5.18	255513	9.07	319717	4.02

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.  
 D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1486885	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS4	<b>Calibration Start Date:</b>	02/09/22 10:43
<b>Std File:</b>	0503A_02	<b>Calibration End Date:</b>	02/09/22 15:35
		<b>Std Analysis Date:</b>	05/03/22 13:09

Sample ID	File ID	PER		PHEN	
		Response	RT	Response	RT
STANDARD		241363	11.75	285680	6.30
UPPER LIMIT		482726		571360	
LOWER LIMIT		120682		142840	
LCS R3787713-1 WG1857248 1x	0503A_04	292231	11.77	320873	6.31
BLANK R3787713-2 WG1857248 1x	0503A_05	266216	11.75	295421	6.30

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1486885	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS4	<b>Calibration Start Date:</b>	02/09/22 10:43
<b>Std File:</b>	0504_03	<b>Calibration End Date:</b>	02/09/22 15:35
		<b>Std Analysis Date:</b>	05/04/22 04:59

Sample ID	File ID	1,4-DCB		ACE		CHR		NAP	
		Response	RT	Response	RT	Response	RT	Response	RT
STANDARD		72614	3.28	146746	5.18	245009	9.07	285391	4.02
UPPER LIMIT		145228		293492		490018		570782	
LOWER LIMIT		36307		73373		122505		142696	
L1486885-01 WG1857248 2x	0504_26	77143	3.28	141577	5.18	253623	9.06	297306	4.02
OS L1486885-01 WG1857248 2x	0504_26	77143	3.28	141577	5.18	253623	9.06	297306	4.02
MS R3788258-1 WG1857248 2x	0504_27	75706	3.28	162768	5.18	295235	9.07	350717	4.02
MSD R3788258-2 WG1857248 2x	0504_28	82044	3.28	167362	5.18	282631	9.07	356439	4.02

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.  
 D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1486885	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS4	<b>Calibration Start Date:</b>	02/09/22 10:43
<b>Std File:</b>	0504_03	<b>Calibration End Date:</b>	02/09/22 15:35
		<b>Std Analysis Date:</b>	05/04/22 04:59

Sample ID	File ID	PER		PHEN	
		Response	RT	Response	RT
STANDARD		246687	11.75	276509	6.30
UPPER LIMIT		493374		553018	
LOWER LIMIT		123344		138255	
L1486885-01 WG1857248 2x	0504_26	259723	11.75	273018	6.30
OS L1486885-01 WG1857248 2x	0504_26	259723	11.75	273018	6.30
MS R3788258-1 WG1857248 2x	0504_27	306410	11.75	314291	6.30
MSD R3788258-2 WG1857248 2x	0504_28	287421	11.75	316041	6.30

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.  
 D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1486885	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS11	<b>Calibration Start Date:</b>	01/14/22 13:34
<b>Std File:</b>	0504_03	<b>Calibration End Date:</b>	01/14/22 18:18
		<b>Std Analysis Date:</b>	05/04/22 04:53

Sample ID	File ID	1,4-DCB		ACE		CHR		NAP	
		Response	RT	Response	RT	Response	RT	Response	RT
STANDARD		39474	3.20	84515	5.06	187409	8.78	141104	3.92
UPPER LIMIT		78948		169030		374818		282208	
LOWER LIMIT		19737		42258		93705		70552	
LCS R3787994-1 WG1857484 1x	0504_05	39111	3.20	84966	5.06	189866	8.79	175829	3.92
BLANK R3787994-2 WG1857484 1x	0504_06	38696	3.20	87744	5.06	182463	8.78	144932	3.92
L1486885-02 WG1857484 1x	0504_29	35760	3.19	85698	5.06	182442	8.78	136115	3.92
OS L1485528-168 WG1857484 10x	0504_30	40095	3.20	89428	5.06	214166	8.78	152320	3.92
MS R3787994-3 WG1857484 10x	0504_31	41109	3.20	99310	5.06	224893	8.78	165269	3.92
MSD R3787994-4 WG1857484 10x	0504_32	41159	3.20	92862	5.06	213416	8.78	159293	3.92

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1486885	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS11	<b>Calibration Start Date:</b>	01/14/22 13:34
<b>Std File:</b>	0504_03	<b>Calibration End Date:</b>	01/14/22 18:18
		<b>Std Analysis Date:</b>	05/04/22 04:53

Sample ID	File ID	PER		PHEN	
		Response	RT	Response	RT
STANDARD		197834	11.30	167782	6.17
UPPER LIMIT		395668		335564	
LOWER LIMIT		98917		83891	
LCS R3787994-1 WG1857484 1x	0504_05	210449	11.31	175139	6.17
BLANK R3787994-2 WG1857484 1x	0504_06	205288	11.30	174073	6.17
L1486885-02 WG1857484 1x	0504_29	210405	11.30	163992	6.16
OS L1485528-168 WG1857484 10x	0504_30	241655	11.30	187594	6.17
MS R3787994-3 WG1857484 10x	0504_31	251781	11.30	200321	6.16
MSD R3787994-4 WG1857484 10x	0504_32	240657	11.30	196616	6.16

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.  
 D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

<b>Lab Sample ID:</b> L1486885-01	<b>SDG:</b> L1486885
<b>Client Sample ID:</b> BNSF-BG13-042122-0-10	<b>Collected Date/Time:</b> 04/21/22 09:50
<b>Lab File ID:</b> 0504_26	<b>Received Date/Time:</b> 04/27/22 09:00
<b>Instrument ID:</b> BNAMS4	<b>Preparation Date/Time:</b> 05/03/22 09:05
<b>Analytical Batch:</b> WG1857248	<b>Analysis Date/Time:</b> 05/04/22 13:22
<b>Dilution Factor:</b> 2	<b>Prep Method:</b> 3546
<b>Analytical Method:</b> 8270E	<b>Sample Vol Used:</b> _____
<b>Matrix:</b> Solid	<b>Initial Wt/Vol:</b> 15.07 g
<b>Total Solids (%):</b> 75.6	<b>Final Wt/Vol:</b> 1 mL

Analyte	CAS	RT	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Acenaphthene	83-32-9	0	U	J3	0.0143	0.0881
Acenaphthylene	208-96-8	0	U	J3	0.0124	0.0881
Anthracene	120-12-7	0	U		0.0157	0.0881
Benzoic Acid	65-85-0	3.82	U	J3	0.312	4.42
Benzo(a)anthracene	56-55-3	9.06	U		0.0155	0.0881
Benzo(b)fluoranthene	205-99-2	0	U		0.0164	0.0881
Benzo(k)fluoranthene	207-08-9	0	U		0.0156	0.0881
Benzo(g,h,i)perylene	191-24-2	0	U		0.0161	0.0881
Benzo(a)pyrene	50-32-8	11.75	U		0.0164	0.0881
Carbazole	86-74-8	0	U		0.0272	0.881
Chrysene	218-01-9	9.06	U		0.0175	0.0881
Dibenz(a,h)anthracene	53-70-3	0	U		0.0245	0.0881
Dibenzofuran	132-64-9	0	U	J3	0.0288	0.881
Fluoranthene	206-44-0	0	U		0.0159	0.0881
Fluorene	86-73-7	0	U		0.0143	0.0881
Indeno(1,2,3-cd)pyrene	193-39-5	0	U		0.0249	0.0881
1-Methylnaphthalene	90-12-0	0	U	J3	0.0113	0.0881
2-Methylnaphthalene	91-57-6	0	U		0.0114	0.0881
Naphthalene	91-20-3	0	U	J3	0.0221	0.0881
Phenanthrene	85-01-8	0	U		0.0175	0.0881
Bis(2-ethylhexyl)phthalate	117-81-7	9.14	U		0.112	0.881
Di-n-butyl phthalate	84-74-2	0	U		0.0302	0.881
Di-n-octyl phthalate	117-84-0	10.42	U		0.0595	0.881
Pyrene	129-00-0	0	U		0.0172	0.0881
3&4-Methyl Phenol	3&4-Methyl Phenol	0	U	J3	0.0275	0.881
Pentachlorophenol	87-86-5	0	U		0.0237	0.881
Phenol	108-95-2	0	U	J3	0.0354	0.881

## Sample Narrative:

Dilution due to matrix impact during extract concentration procedure

Data File : C:\MSDCHEM\1\DATA\050422\0504 26.D  
 Acq On : 4 May 2022 1:22 pm  
 Sample : L1486885-01 1x WG1857248  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 13:10 2022

Vial: 32  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	77143	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	297306	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	141577	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	273018	8000.00	ppb	-0.05
84) Chrysene-d12	9.06	240	253623	8000.00	ppb	-0.09
94) Perylene-d12	11.75	264	259723	8000.00	ppb	-0.12
System Monitoring Compounds						
4) 2-Fluorophenol	2.62	112	82756	6601.6960824	ppb	-0.03
Spiked Amount 20000.000	Range 20	- 120	Recovery =	33.01%		
7) Phenol-d5	3.06	99	102979	6844.5419401	ppb	-0.03
Spiked Amount 20000.000	Range 20	- 120	Recovery =	34.22%		
24) Nitrobenzene-d5	3.59	82	44036	3490.8308551	ppb	-0.04
Spiked Amount 10000.000	Range 18	- 125	Recovery =	34.91%		
50) 2-Fluorobiphenyl	4.70	172	75008	3140.6397231	ppb	-0.04
Spiked Amount 10000.000	Range 28	- 120	Recovery =	31.41%		
73) 2,4,6-Tribromophenol	5.76	330	26501	8574.7282051	ppb	-0.05
Spiked Amount 20000.000	Range 17	- 137	Recovery =	42.87%		
87) p-Terphenyl-d14	7.69	244	118703	3424.7354453	ppb	-0.07
Spiked Amount 10000.000	Range 13	- 131	Recovery =	34.25%		

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

0504\_26.D S804C29V.M Thu May 05 13:10:54 2022

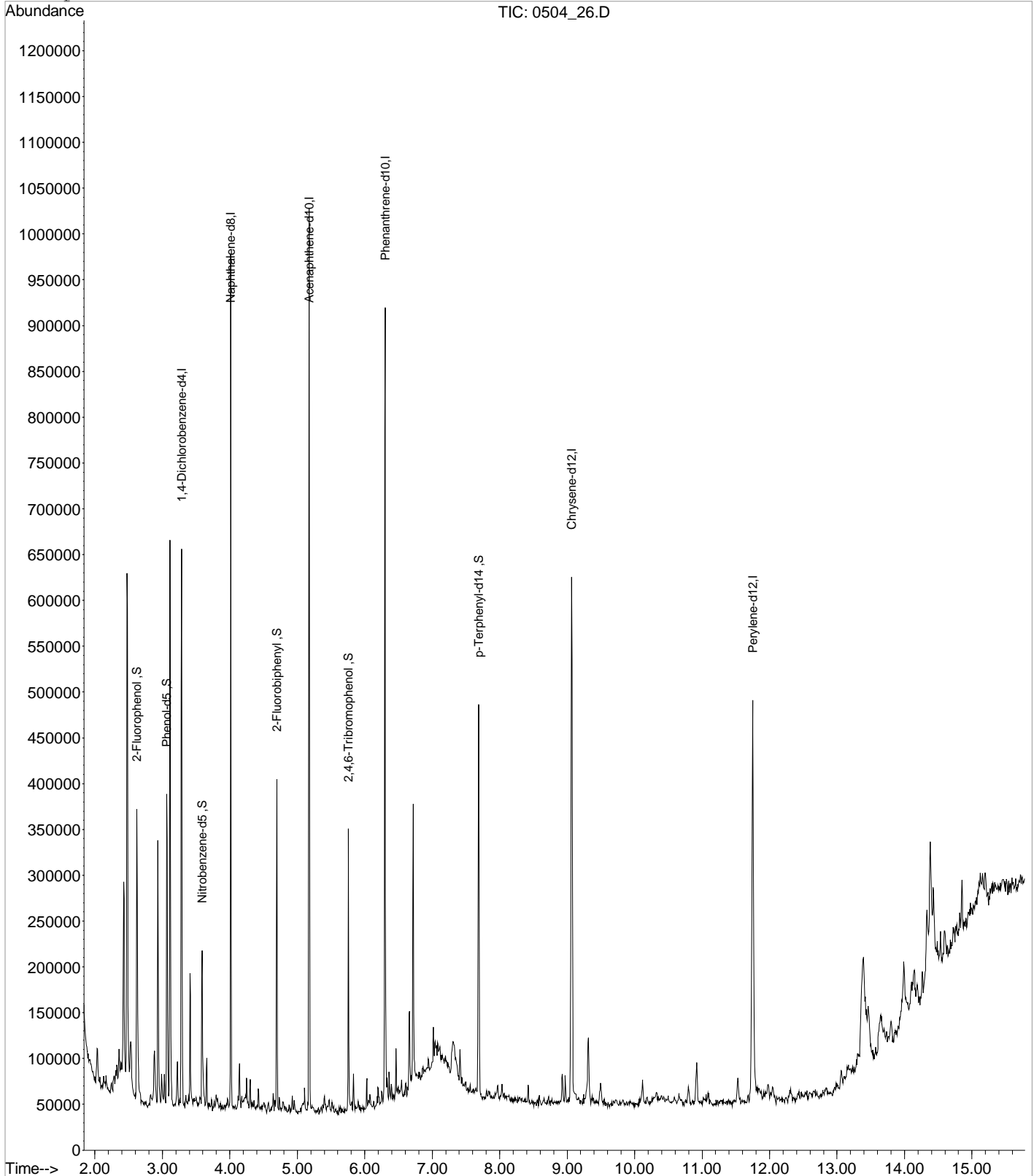


Data File : C:\MSDCHEM\1\DATA\050422\0504 26.D  
 Acq On : 4 May 2022 1:22 pm  
 Sample : L1486885-01 1x WG1857248  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 13:10 2022

Vial: 32  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804C29V.RES

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration



SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

<b>Lab Sample ID:</b> L1486885-02	<b>SDG:</b> L1486885
<b>Client Sample ID:</b> BNSF-SG23-042122-0-6	<b>Collected Date/Time:</b> 04/21/22 14:40
<b>Lab File ID:</b> 0504_29	<b>Received Date/Time:</b> 04/27/22 09:00
<b>Instrument ID:</b> BNAMS11	<b>Preparation Date/Time:</b> 05/03/22 09:11
<b>Analytical Batch:</b> WG1857484	<b>Analysis Date/Time:</b> 05/04/22 14:13
<b>Dilution Factor:</b> 1	<b>Prep Method:</b> 3546
<b>Analytical Method:</b> 8270E	<b>Sample Vol Used:</b> _____
<b>Matrix:</b> Solid	<b>Initial Wt/Vol:</b> 15.25 g
<b>Total Solids (%):</b> 79.1	<b>Final Wt/Vol:</b> 0.5 mL

Analyte	CAS	RT	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	0	U		0.00681	0.0421
Acenaphthylene	208-96-8	0	U		0.00593	0.0421
Anthracene	120-12-7	0	U		0.00749	0.0421
Benzoic Acid	65-85-0	3.74	U		0.149	2.11
Benzo(a)anthracene	56-55-3	8.76	U		0.00742	0.0421
Benzo(b)fluoranthene	205-99-2	0	U		0.00785	0.0421
Benzo(k)fluoranthene	207-08-9	0	U		0.00748	0.0421
Benzo(g,h,i)perylene	191-24-2	13.54	U		0.00770	0.0421
Benzo(a)pyrene	50-32-8	11.35	U		0.00782	0.0421
Carbazole	86-74-8	0	U		0.0130	0.421
Chrysene	218-01-9	8.76	U		0.00837	0.0421
Dibenz(a,h)anthracene	53-70-3	0	U		0.0117	0.0421
Dibenzofuran	132-64-9	0	U		0.0138	0.421
Fluoranthene	206-44-0	7.14	U		0.00760	0.0421
Fluorene	86-73-7	0	U		0.00685	0.0421
Indeno(1,2,3-cd)pyrene	193-39-5	0	U		0.0119	0.0421
1-Methylnaphthalene	90-12-0	0	U		0.00538	0.0421
2-Methylnaphthalene	91-57-6	0	U		0.00546	0.0421
Naphthalene	91-20-3	0	U		0.0106	0.0421
Phenanthrene	85-01-8	0	U		0.00835	0.0421
Bis(2-ethylhexyl)phthalate	117-81-7	8.84	U		0.0533	0.421
Di-n-butyl phthalate	84-74-2	6.61	U		0.0144	0.421
Di-n-octyl phthalate	117-84-0	9.89	U		0.0284	0.421
Pyrene	129-00-0	7.14	U		0.00819	0.0421
3&4-Methyl Phenol	3&4-Methyl Phenol	3.41	0.0195	J	0.0131	0.421
Pentachlorophenol	87-86-5	0	U		0.0113	0.421
Phenol	108-95-2	0	U		0.0169	0.421

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_29.D  
 Acq On : 4 May 2022 2:13 pm  
 Operator : 3545  
 Sample : L1486885-02 1x WG1857484  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 ALS Vial : 29 Sample Multiplier: 1  
 InstName : BNAMS11

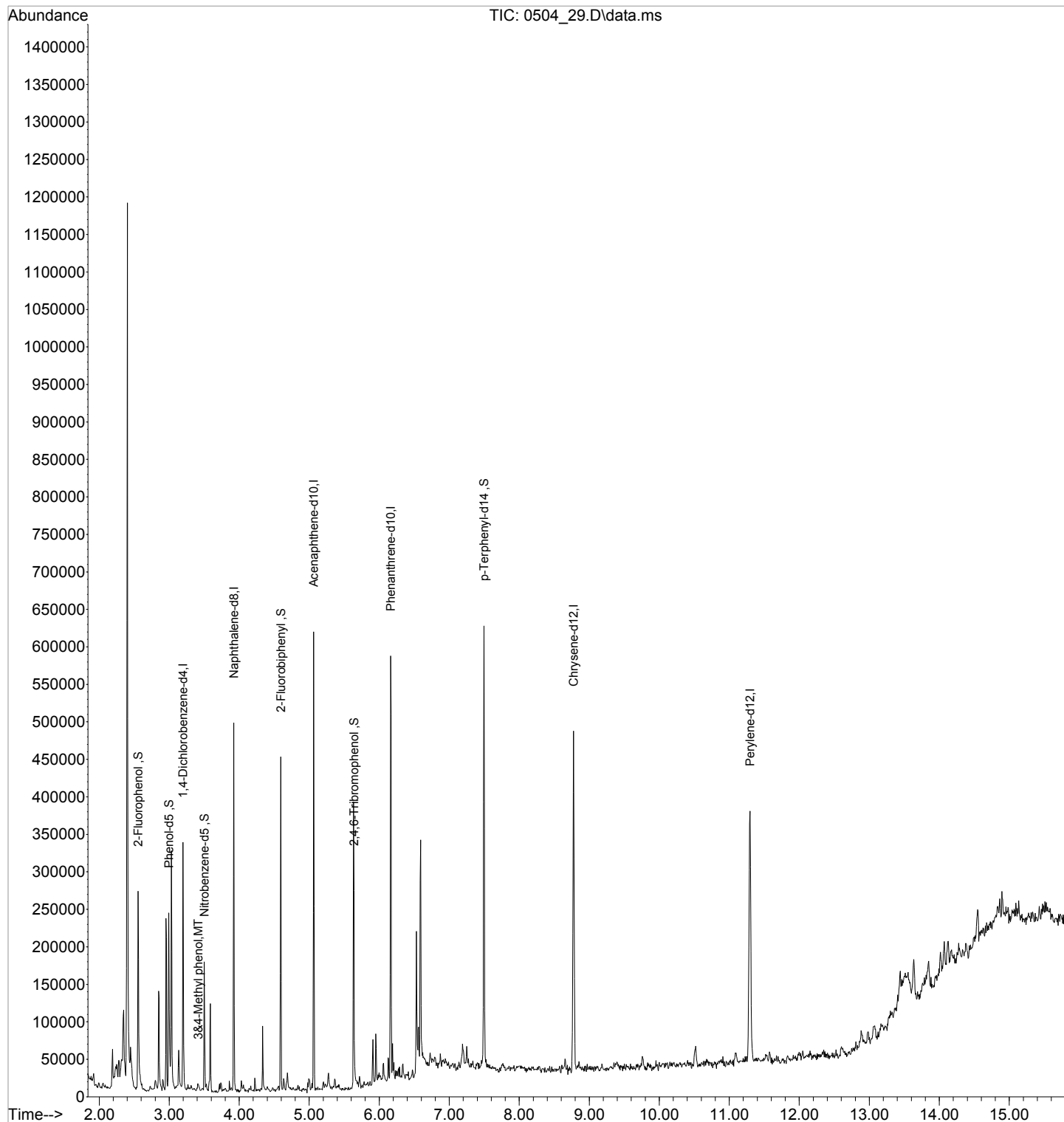
Quant Time: May 05 12:16:46 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

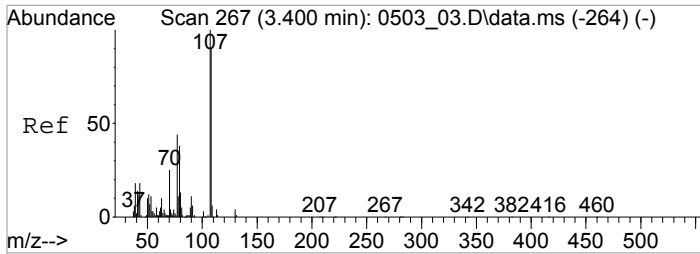
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.195	152	35760	8000.0000000	ppb	0.00
23) Naphthalene-d8	3.923	136	136115	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.063	164	85698	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.162	188	163992	8000.0000000	ppb	0.00
84) Chrysene-d12	8.776	240	182442	8000.0000000	ppb	0.00
94) Perylene-d12	11.297	264	210405	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.554	112	62835	12018.7717628	ppb	0.02
Spiked Amount	20000.000	Range 20 - 120	Recovery =	60.09%		
7) Phenol-d5	2.995	99	78894	12414.1214655	ppb	0.01
Spiked Amount	20000.000	Range 20 - 120	Recovery =	62.07%		
24) Nitrobenzene-d5	3.500	82	35249	5661.7365242	ppb	0.00
Spiked Amount	10000.000	Range 18 - 125	Recovery =	56.62%		
50) 2-Fluorobiphenyl	4.593	172	85962	6009.6626280	ppb	0.00
Spiked Amount	10000.000	Range 28 - 120	Recovery =	60.10%		
73) 2,4,6-Tribromophenol	5.639	330	38639	17326.7225785	ppb	0.00
Spiked Amount	20000.000	Range 17 - 137	Recovery =	86.63%		
87) p-Terphenyl-d14	7.496	244	149804	6725.7662558	ppb	0.00
Spiked Amount	10000.000	Range 13 - 131	Recovery =	67.26%		
Target Compounds						Qvalue
21) 3&4-Methyl phenol	3.412	107	2742	470.3640380	ppb	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

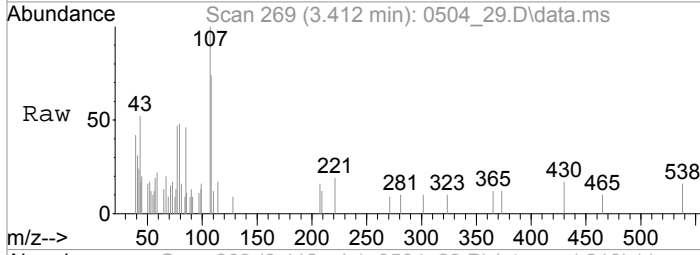
Data Path : C:\msdchem\1\data\050422\  
Data File : 0504\_29.D  
Acq On : 4 May 2022 2:13 pm  
Operator : 3545  
Sample : L1486885-02 1x WG1857484  
Misc : SOIL ISTD 22D28020 exp 10/28/22  
ALS Vial : 29 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: May 05 12:16:46 2022  
Quant Method : C:\msdchem\1\methods\S811E03V.M  
Quant Title : 8270 BNA  
QLast Update : Tue May 03 05:28:33 2022  
Response via : Initial Calibration

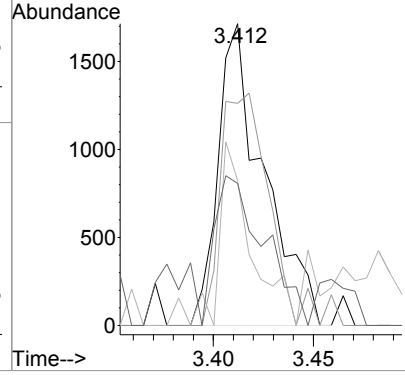
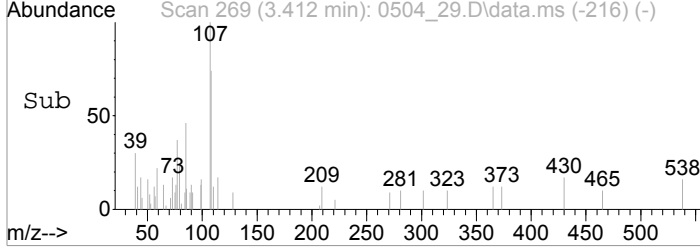




#21  
 3&4-Methyl phenol  
 Concen: 470.3640380 ppb  
 RT: 3.412 min Scan# 269  
 Delta R.T. 0.012 min  
 Lab File: 0504\_29.D  
 Acq: 4 May 2022 2:13 pm



Tgt Ion	Resp	Lower	Upper
107	100		
108	73.6	67.0	107.0
79	48.0	11.2	51.2
77	31.8	15.9	55.9



SDG: L1486885  
Instrument ID: BNAMS4

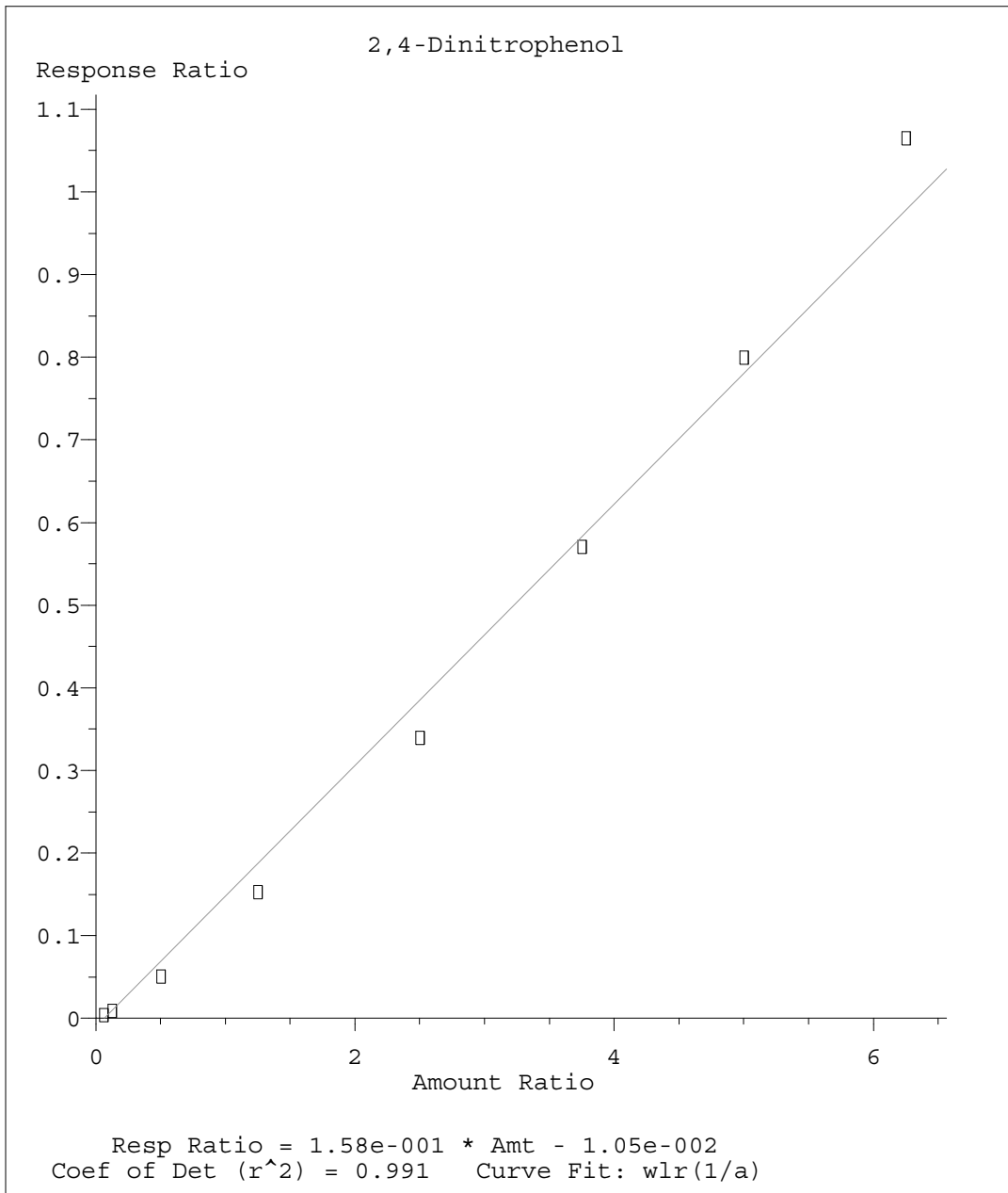
Analytical Method: 8270E

Analyte	RRF: 500	RRF: 1000	RRF: 4000	RRF: 10000	RRF: 20000	RRF: 30000	RRF: 40000	RRF: 50000	RRF: 4K1	RRF: 10K1
Analysis date/time	02/09/22 10:43	02/09/22 11:04	02/09/22 11:25	02/09/22 11:46	02/09/22 12:07	02/09/22 12:27	02/09/22 12:48	02/09/22 13:09	02/09/22 13:51	02/09/22 14:11
PHENOL	1.86	1.7610	1.6110	1.6190	1.5890	1.5540	1.5380	1.6160		
3&4-METHYL PHENOL	1.5470	1.4040	1.3310	1.3490	1.31	1.2870	1.2680	1.31		
NAPHTHALENE	1.1570	1.1090	0.9970	1.0020	0.9730	0.9690	0.9590	0.9840		
2-METHYLNAPHTHALENE	0.7650	0.7160	0.6390	0.6560	0.6250	0.6280	0.6270	0.6560		
1-METHYLNAPHTHALENE	0.7270	0.6540	0.6070	0.61	0.5920	0.59	0.5960	0.6150		
ACENAPHTHYLENE	1.9170	1.8280	1.7420	1.7820	1.7190	1.7290	1.74	1.7750		
ACENAPHTHENE	1.33	1.2470	1.1440	1.17	1.1090	1.1180	1.11	1.1350		
DIBENZOFURAN	1.8720	1.7490	1.5850	1.6110	1.5540	1.5280	1.5350	1.55		
FLUORENE	1.4190	1.3880	1.3130	1.3260	1.2610	1.2670	1.27	1.2890		
PHENANTHRENE	1.1840	1.1520	1.0180	1.0260	1.0090	1.0070	0.9990	1.0250		
ANTHRACENE	1.1850	1.1120	1.0030	1.0530	1.0410	1.0380	1.0290	1.0620		
CARBAZOLE	1.0770	1.0220	0.94	0.9840	0.9550	0.9160	0.9280	0.9550		
DI-N-BUTYL PHTHALATE	1.1590	1.0630	1.0420	1.1170	1.1170	1.1430	1.2090	1.2550		
FLUORANTHENE	1.2040	1.1390	1.0510	1.0870	1.0630	1.0850	1.1220	1.1950		
PYRENE	1.3430	1.3720	1.2060	1.2780	1.2960	1.2780	1.2720	1.2520		
BENZO(A)ANTHRACENE	1.27	1.23	1.0720	1.1390	1.1430	1.1290	1.1310	1.1030		
CHRYSENE	1.2320	1.2020	1.0740	1.1040	1.0990	1.0820	1.0840	1.0520		
BIS(2-ETHYLHEXYL)PHTHALATE	0.7150	0.6660	0.6360	0.7410	0.7620	0.7650	0.7620	0.7520		
DI-N-OCTYL PHTHALATE	1.1290	1.0730	1.0570	1.2150	1.2870	1.2960	1.3010	1.2770		
BENZO(B)FLUORANTHENE	1.3280	1.1770	1.0640	1.1090	1.1020	1.1070	1.0910	1.1410		
BENZO(K)FLUORANTHENE	1.2610	1.1670	1.0410	1.1050	1.1010	1.1030	1.0950	1.1080		
BENZO(A)PYRENE	1.0460	1.0160	0.9140	0.97	0.9830	0.9890	0.9780	1		
INDENO(1,2,3-CD)PYRENE	1.0370	1.0050	0.9320	0.9830	0.9830	0.9540	0.9270	0.9370		
DIBENZ(A,H)ANTHRACENE	1.0930	1.1170	0.99	1.0520	1.0270	1.0160	0.9840	0.9890		
BENZO(G,H,I)PERYLENE	1.15	1.0620	0.9870	1.04	1.0060	0.9740	0.93	0.9250		
2-FLUOROPHENOL	1.4680	1.4030	1.2730	1.2720	1.2630	1.2240	1.2140	1.2830		
PHENOL-D5	1.8550	1.5980	1.5240	1.5320	1.5050	1.4770	1.4580	1.5320		
NITROBENZENE-D5	0.39	0.3210	0.3390	0.3160	0.34	0.3450	0.3410	0.3230		
2-FLUOROBIPHENYL	1.5680	1.4650	1.3320	1.3440	1.2780	1.2630	1.2610	1.2850		
2,4,6-TRIBROMOPHENOL	0.0790	0.0770	0.0830	0.0910	0.0930	0.0940	0.1010	0.1070		
P-TERPHENYL-D14	1.1760	1.1190	0.9890	1.0850	1.1070	1.0910	1.1020	1.0760		
PENTACHLOROPHENOL		0.0960	0.1020	0.12	0.1250	0.1290	0.1350	0.1420		
BENZOIC ACID									0.1110	0.1390
File ID:	0209_06	0209_07	0209_08	0209_09	0209_10	0209_11	0209_12	0209_13	0209_15	0209_16

SDG: L1486885  
Instrument ID: BNAMS4

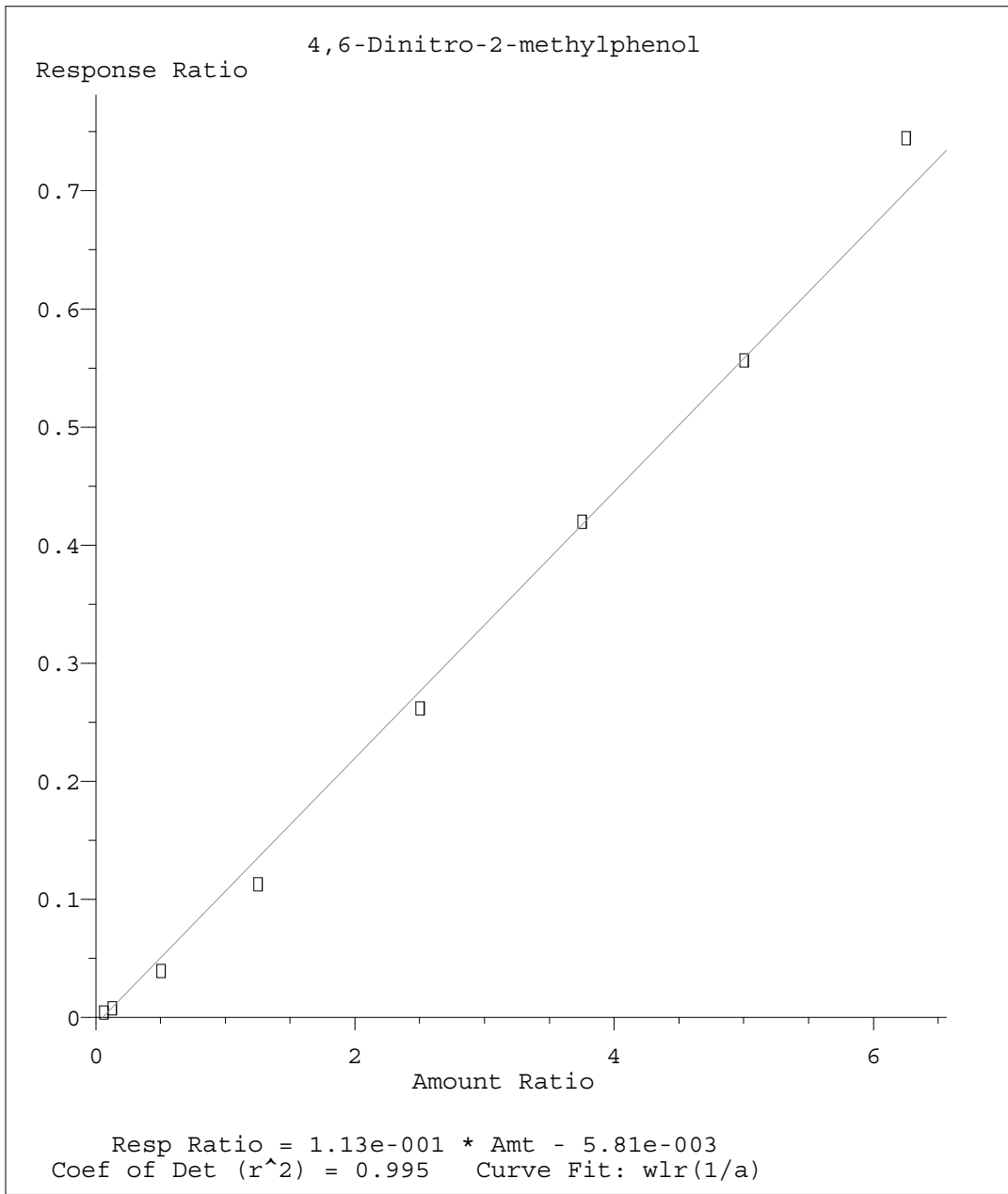
Analytical Method: 8270E

Analyte	RRF: 20K1	RRF: 30K1	RRF: 40K1	RRF: 50K1	RRF. Avg	%RSD	COD
Analysis date/time	02/09/22 14:32	02/09/22 14:53	02/09/22 15:14	02/09/22 15:35			
PHENOL					1.643512	6.71	
3&4-METHYL PHENOL					1.350649	6.63	
NAPHTHALENE					1.018747	7.18	
2-METHYLNAPHTHALENE					0.663826	7.61	
1-METHYLNAPHTHALENE					0.623837	7.43	
ACENAPHTHYLENE					1.779211	3.71	
ACENAPHTHENE					1.170435	6.73	
DIBENZOFURAN					1.623192	7.59	
FLUORENE					1.316666	4.46	
PHENANTHRENE					1.052577	6.87	
ANTHRACENE					1.065424	5.42	
CARBAZOLE					0.972084	5.54	
DI-N-BUTYL PHTHALATE					1.138017	6.21	
FLUORANTHENE					1.1182	5.15	
PYRENE					1.28723	3.99	
BENZO(A)ANTHRACENE					1.151953	5.68	
CHRYSENE					1.116357	5.8	
BIS(2-ETHYLHEXYL)PHTHALATE					0.724997	6.75	
DI-N-OCTYL PHTHALATE					1.204403	8.59	
BENZO(B)FLUORANTHENE					1.139642	7.29	
BENZO(K)FLUORANTHENE					1.122546	5.83	
BENZO(A)PYRENE					0.987052	3.86	
INDENO(1,2,3-CD)PYRENE					0.969769	4.03	
DIBENZ(A,H)ANTHRACENE					1.033545	4.86	
BENZO(G,H,I)PERYLENE					1.009366	7.35	
2-FLUOROPHENOL					1.299982	6.82	
PHENOL-D5					1.560263	8.09	
NITROBENZENE-D5					0.339442	6.83	
2-FLUOROBIPHENYL					1.349543	8.23	
2,4,6-TRIBROMOPHENOL					0.090561	11.74	
P-TERPHENYL-D14					1.093292	4.78	
PENTACHLOROPHENOL					0.121187	13.94	
BENZOIC ACID	0.1430	0.1360	0.1310	0.1260	0.13089	8.56	
File ID:	0209_17	0209_18	0209_19	0209_20			

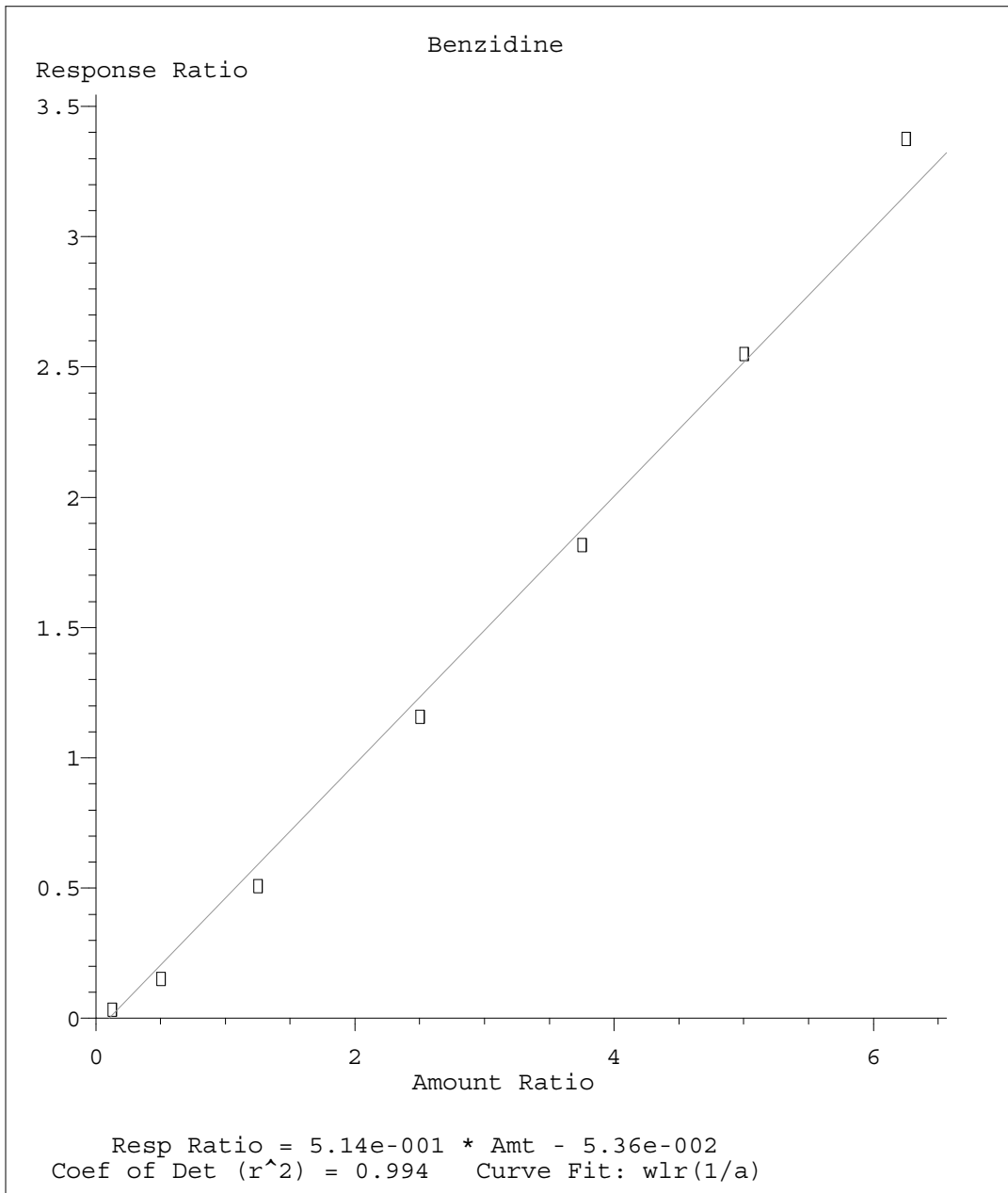


Method Name: C:\MSDCHEM\1\METHODS\S804B09V.M

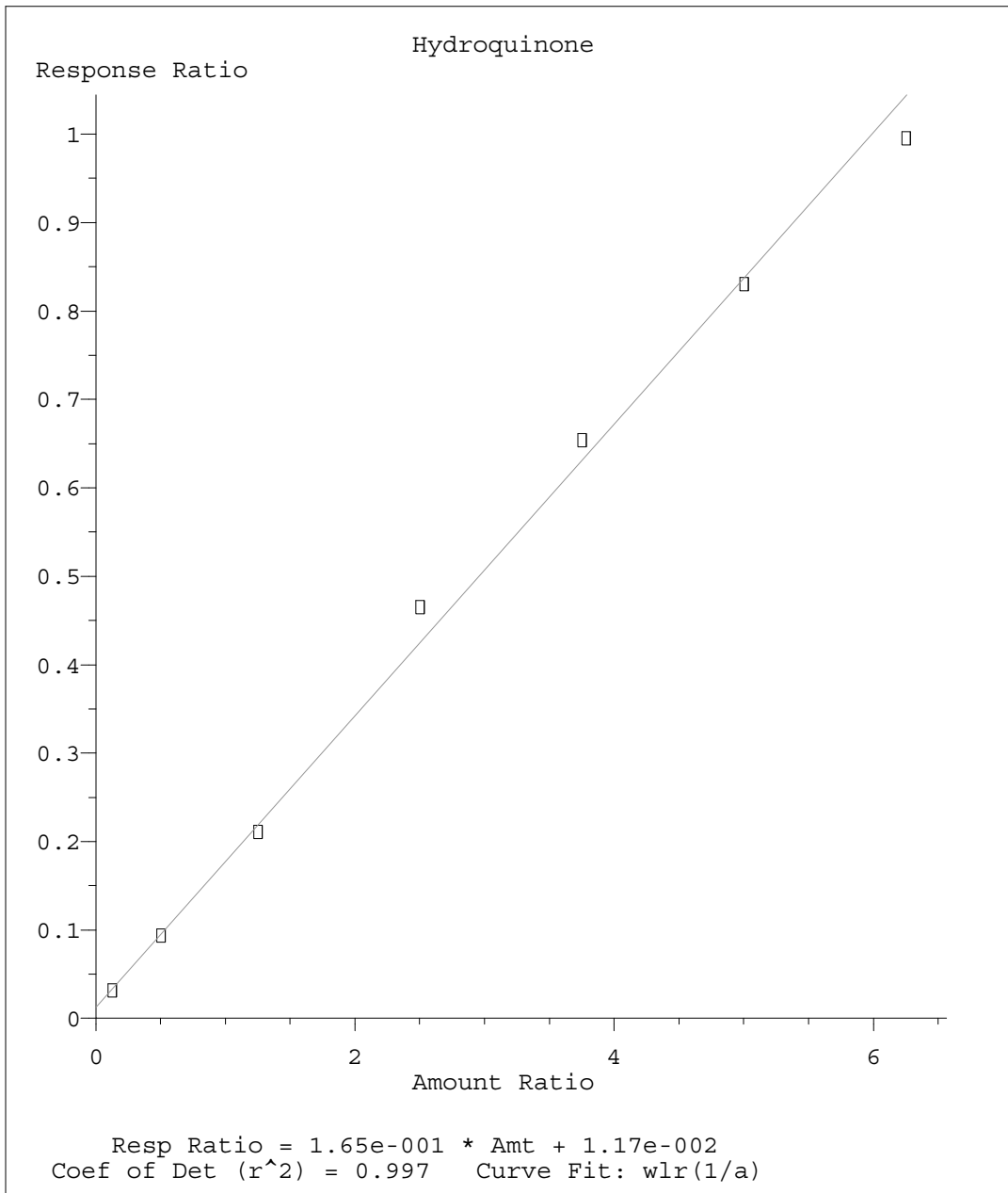




Method Name: C:\MSDCHEM\1\METHODS\S804B09V.M



Method Name: C:\MSDCHEM\1\METHODS\S804B09V.M



Method Name: C:\MSDCHEM\1\METHODS\S804B09V.M

Response Factor Report BNAMS4

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration

Calibration Files

500 =0209 06.D 1K =0209 07.D 4K =0209 08.D  
 10K =0209\_09.D 20K =0209\_10.D 30K =0209\_11.D

Compound	500	1K	4K	10K	20K	30K	Avg	%RSD
-----								
1) I 1,4-Dichlorobenzene-d	-----ISTD-----							
2) TM Pyridine	1.278	1.248	1.226	1.224	1.215	1.222	1.238	2.11
3) MT N-Nitrosodimeth	0.791	0.721	0.658	0.658	0.631	0.611	0.664	9.34
4) S 2-Fluorophenol	1.468	1.403	1.273	1.272	1.263	1.224	1.300	6.82
5) MT Aniline	0.809	0.804	0.729	0.745	0.717	0.697	0.740	6.02
6) MT bis(2-Chloroeth	1.328	1.237	1.062	1.037	1.077	1.116	1.150	8.78
7) S Phenol-d5	1.855	1.598	1.524	1.532	1.505	1.477	1.560	8.09
8) MC Phenol	1.860	1.761	1.611	1.619	1.589	1.554	1.644	6.71
9) Benzaldehyde							0.356	4.92
10) MT 2-Chlorophenol	1.477	1.400	1.305	1.295	1.266	1.249	1.316	6.22
11) T n-Decane	0.972	0.830	0.789	0.770	0.731	0.709	0.775	11.94
12) MT 1,3-Dichloroben	1.717	1.603	1.455	1.474	1.421	1.398	1.488	7.66
13) MTC 1,4-Dichloroben	1.747	1.661	1.518	1.503	1.485	1.442	1.531	7.38
14) MT Benzyl Alcohol	1.106	1.048	0.989	1.007	1.002	0.992	1.018	4.06
15) MT 1,2-Dichloroben	1.627	1.513	1.396	1.385	1.360	1.324	1.408	7.72
16) MT bis(2-Chloroiso	0.614	0.531	0.483	0.469	0.447	0.442	0.482	13.00
17) MT 2,2-oxybis(1-ch	0.614	0.531	0.483	0.469	0.447	0.442	0.482	13.00
18) MT 2-Methylphenol	1.336	1.276	1.157	1.194	1.153	1.132	1.189	6.54
19) MT Hexachloroethan	0.600	0.593	0.549	0.559	0.545	0.530	0.556	4.83
20) MP N-Nitrosodi-n-p	0.979	0.933	0.849	0.875	0.841	0.818	0.869	6.73
21) MT 3&4-Methyl phen	1.547	1.404	1.331	1.349	1.310	1.287	1.351	6.63
22) MT Acetophenone							1.654	2.40
-----								
23) I Naphthalene-d8	-----ISTD-----							
24) S Nitrobenzene-d5	0.390	0.321	0.339	0.316	0.340	0.345	0.339	6.83
25) MT Nitrobenzene	0.370	0.342	0.326	0.333	0.320	0.320	0.332	5.25
26) MT Isophorone	0.663	0.613	0.559	0.595	0.580	0.586	0.595	5.24
27) MCT 2-Nitrophenol	0.172	0.163	0.155	0.163	0.165	0.169	0.167	4.46
28) MT 2,4-Dimethylphe	0.342	0.334	0.302	0.302	0.297	0.303	0.311	5.62
29) MT bis(2-Chloretho	0.449	0.419	0.366	0.371	0.360	0.359	0.381	9.03
30) MCT 2,4-Dichlorophe	0.284	0.271	0.247	0.260	0.255	0.257	0.262	4.42
31) MT Benzoic Acid							0.131	8.56
32) MT 1,2,4-Trichloro	0.335	0.317	0.288	0.289	0.278	0.274	0.293	7.40
33) MT alpha-terpineol							0.251	14.78
34) MT Naphthalene	1.157	1.109	0.997	1.002	0.973	0.969	1.019	7.18
35) MT 4-Chloroaniline	0.127	0.128	0.116	0.119	0.113	0.115	0.118	5.02
36) MCT Hexachloro-1,3-	0.188	0.166	0.153	0.158	0.152	0.151	0.160	7.77
37) Hydroquinone							0.185	16.97
38) MT Quinoline							0.533	14.37
39) MT Caprolactam							0.055	10.67
40) MCT 4-Chloro-3-meth	0.283	0.267	0.250	0.262	0.259	0.262	0.264	3.75
41) MT 2-Methylnaphtha	0.765	0.716	0.639	0.656	0.625	0.628	0.664	7.61
42) MT 1-Methylnaphtha	0.727	0.654	0.607	0.610	0.592	0.590	0.624	7.43
43) MT 1,2,4,5-Tetrach							0.214	14.86
44) Diphenyl Ether							0.342	14.08
45) Diphenyl Oxide							0.342	14.08
-----								
46) I Acenaphthene-d10	-----ISTD-----							
47) MPT Hexachlorocyclo	0.392	0.376	0.366	0.371	0.367	0.370	0.375	2.29
48) MCT 2,4,6-Trichloro	0.395	0.343	0.318	0.333	0.327	0.352	0.347	6.74
49) MT 2,4,5-Trichloro	0.362	0.375	0.352	0.375	0.364	0.343	0.361	3.07
50) S 2-Fluorobipheny	1.568	1.465	1.332	1.344	1.278	1.263	1.350	8.23
51) MT Biphenyl	1.711	1.622	1.487	1.490	1.411	1.401	1.499	7.42
52) MT 2-Chloronaphtha	1.276	1.255	1.149	1.153	1.091	1.072	1.144	7.16
53) MT 2-Nitroaniline	0.334	0.327	0.326	0.364	0.362	0.370	0.355	6.12
54) MT Acenaphthylene	1.917	1.828	1.742	1.782	1.719	1.729	1.779	3.71

(#) = Out of Range ### Number of calibration levels exceeded format ###  
 S804B09V.M Sat Feb 19 13:22:02 2022

Response Factor Report BNAMS4

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration

Calibration Files

500 =0209 06.D 1K =0209 07.D 4K =0209 08.D  
 10K =0209\_09.D 20K =0209\_10.D 30K =0209\_11.D

Compound	500	1K	4K	10K	20K	30K	Avg	%RSD
55) MT Dimethyl phthal	1.249	1.203	1.131	1.200	1.165	1.172	1.185	3.02
56) MT 2,6-Dinitrotolu	0.255	0.251	0.256	0.286	0.283	0.287	0.275	6.29
57) MT 3-Nitroaniline	0.267	0.255	0.278	0.308	0.306	0.315	0.296	8.64
58) MCT Acenaphthene	1.330	1.247	1.144	1.170	1.109	1.118	1.170	6.73
59) MPT 2,4-Dinitrophen	0.062	0.072	0.100	0.122	0.136	0.152	0.122	33.30
60) MT Dibenzofuran	1.872	1.749	1.585	1.611	1.554	1.528	1.623	7.59
61) MT 2,4-Dinitrotolu	0.292	0.296	0.313	0.350	0.366	0.367	0.344	11.15
62) T 2,3,4,6-Tetrach							0.228	3.11
63) MPT 4-Nitrophenol	0.235	0.200	0.222	0.250	0.253	0.263	0.244	9.73
64) MT Fluorene	1.419	1.388	1.313	1.326	1.261	1.267	1.317	4.46
65) MT 4-Chlorophenyl-	0.726	0.679	0.607	0.624	0.592	0.580	0.624	8.28
66) MT Diethyl phthala	1.293	1.255	1.186	1.217	1.177	1.194	1.214	3.32
67) MT 4-Nitroaniline	0.274	0.262	0.287	0.298	0.303	0.298	0.277	8.67
68) MT Azobenzene	1.317	1.240	1.192	1.245	1.172	1.163	1.211	4.41
69) MT Atrazine							0.327	2.53
70) I Phenanthrene-d10	-----ISTD-----							
71) MT 4,6-Dinitro-2-m	0.062	0.063	0.079	0.090	0.105	0.112	0.093	24.46
72) MCT N-Nitrosodiphen	0.639	0.604	0.572	0.592	0.585	0.597	0.608	4.74
73) S 2,4,6-Tribromop	0.079	0.077	0.083	0.091	0.093	0.094	0.091	11.74
74) MT 4-Bromophenyl-p	0.199	0.199	0.191	0.194	0.192	0.193	0.197	3.66
75) MT Hexachlorobenze	0.243	0.233	0.202	0.209	0.207	0.212	0.220	6.70
76) T n-octadecane	0.153	0.127	0.114	0.120	0.113	0.113	0.122	10.82
77) MCT Pentachlorophen		0.096	0.102	0.120	0.125	0.129	0.121	13.94
78) MT Phenanthrene	1.184	1.152	1.018	1.026	1.009	1.007	1.053	6.87
79) MT Anthracene	1.185	1.112	1.003	1.053	1.041	1.038	1.065	5.42
80) MT Carbazole	1.077	1.022	0.940	0.984	0.955	0.916	0.972	5.54
81) MT Di-n-butyl phth	1.159	1.063	1.042	1.117	1.117	1.143	1.138	6.21
82) MT 2-nitrodiphenyl							0.202	14.20
83) MCT Fluoranthene	1.204	1.139	1.051	1.087	1.063	1.085	1.118	5.15
84) I Chrysene-d12	-----ISTD-----							
85) MT Benzidine							0.423	25.01
86) MT Pyrene	1.343	1.372	1.206	1.278	1.296	1.278	1.287	3.99
87) S p-Terphenyl-d14	1.176	1.119	0.989	1.085	1.107	1.091	1.093	4.78
88) MT Benzylbutyl pht	0.532	0.484	0.472	0.528	0.551	0.549	0.526	5.91
89) MT 3,3-Dichloroben							0.412	4.48
90) MT Benzo(a)anthrac	1.270	1.230	1.072	1.139	1.143	1.129	1.152	5.68
91) MT Chrysene	1.232	1.202	1.074	1.104	1.099	1.082	1.116	5.80
92) MT bis(2-Ethylhexy	0.715	0.666	0.636	0.741	0.762	0.765	0.725	6.75
93) MC Di-n-octyl phth	1.129	1.073	1.057	1.215	1.287	1.296	1.204	8.59
94) I Perylene-d12	-----ISTD-----							
95) MT Benzo(b)fluoran	1.328	1.177	1.064	1.109	1.102	1.107	1.140	7.29
96) MT Benzo(k)fluoran	1.261	1.167	1.041	1.105	1.101	1.103	1.123	5.83
97) MC Benzo(a)pyrene	1.046	1.016	0.914	0.970	0.983	0.989	0.987	3.86
98) MT Indeno(1,2,3-cd	1.037	1.005	0.932	0.983	0.983	0.954	0.970	4.03
99) MT Dibenz(a,h)anth	1.093	1.117	0.990	1.052	1.027	1.016	1.034	4.86
100) MT Benzo(g,h,i)per	1.150	1.062	0.987	1.040	1.006	0.974	1.009	7.35

Data File : C:\MSDCHEM\1\DATA\020922\0209 06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:40 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	73198m	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	291221	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	151021	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	282418	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	254847	8000.00	ppb	0.00
94) Perylene-d12	12.39	264	266366	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	6716	564.7582426	ppb	0.00
Spiked Amount 666.000			Recovery =	84.80%		
7) Phenol-d5	3.28	99	8487	594.6294949	ppb	0.00
Spiked Amount 666.000			Recovery =	89.28%		
24) Nitrobenzene-d5	3.82	82	7103	566.4718290	ppb	0.00
Spiked Amount 333.000			Recovery =	170.11%		
50) 2-Fluorobiphenyl	4.95	172	14804	581.0921036	ppb	0.00
Spiked Amount 333.000			Recovery =	174.50%		
73) 2,4,6-Tribromophenol	6.02	330	1390	434.7822532	ppb	0.00
Spiked Amount 666.000			Recovery =	65.28%		
87) p-Terphenyl-d14	8.04	244	18732	537.8468042	ppb	0.00
Spiked Amount 333.000			Recovery =	161.52%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue	#
2) Pyridine	2.31	79	5846	516.2841543	ppb		85
3) N-Nitrosodimethylamine	2.29	42	3617	595.1420623	ppb		89
5) Aniline	3.34	66	3700	546.4526374	ppb		87
6) bis(2-Chloroethyl)ether	3.36	93	6074m	280.2271058	ppb		
8) Phenol	3.29	94	8510	566.0388074	ppb		95
10) 2-Chlorophenol	3.41	128	6755	561.1658820	ppb		97
11) n-Decane	3.40	41	4449	627.4781303	ppb	#	89
12) 1,3-Dichlorobenzene	3.49	146	7856	577.2009286	ppb		95
13) 1,4-Dichlorobenzene	3.53	146	7993	570.5643647	ppb		92
14) Benzyl Alcohol	3.58	79	5058	543.2830139	ppb		94
15) 1,2-Dichlorobenzene	3.61	146	7444	578.0573187	ppb		94
16) bis(2-Chloroisopropyl)ethe	3.65	121	2809	637.4442809	ppb	#	55
17) 2,2-oxybis(1-chloropropane	3.65	121	2809	637.4442809	ppb	#	55
18) 2-Methylphenol	3.62	108	6113	561.9967038	ppb		97
19) Hexachloroethane	3.80	117	2744	539.6006744	ppb		98
20) N-Nitrosodi-n-propylamine	3.72	70	4481	563.7205314	ppb		99
21) 3&4-Methyl phenol	3.70	107	7078	572.8724821	ppb		95
25) Nitrobenzene	3.84	77	6737	557.6116506	ppb		91
26) Isophorone	3.96	82	12066	556.7216060	ppb		99
27) 2-Nitrophenol	4.02	139	3136	514.9782790	ppb		93
28) 2,4-Dimethylphenol	4.01	107	6231	550.9528074	ppb		95
29) bis(2-Chlorethoxy)methane	4.08	93	8179	590.2143618	ppb		94
30) 2,4-Dichlorophenol	4.15	162	5177	543.3798696	ppb		95
32) 1,2,4-Trichlorobenzene	4.22	180	6095	571.5118181	ppb		98
34) Naphthalene	4.27	128	21058	567.8297386	ppb		99
35) 4-Chloroaniline	4.29	65	2308	535.6261108	ppb		97
36) Hexachloro-1,3-butadiene	4.33	225	3425	588.6986796	ppb	#	84
40) 4-Chloro-3-methylphenol	4.57	107	5149	536.1373266	ppb		88
41) 2-Methylnaphthalene	4.71	142	13922	576.1219160	ppb		99
42) 1-Methylnaphthalene	4.78	142	13232	582.6684229	ppb		99
47) Hexachlorocyclopentadiene	4.81	237	3703	523.3554859	ppb		94
48) 2,4,6-Trichlorophenol	4.89	196	3726	568.8364160	ppb		87
49) 2,4,5-Trichlorophenol	4.91	196	3416	501.1076239	ppb		93

(#) = qualifier out of range (m) = manual integration

0209\_06.D S804B09V.M Mon Feb 14 15:44:29 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:40 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	16154	571.0219592	ppb	98
52) 2-Chloronaphthalene	5.05	162	12048	558.0401136	ppb	95
53) 2-Nitroaniline	5.10	138	3154	471.2803774	ppb #	93
54) Acenaphthylene	5.34	152	18097	538.8052071	ppb	98
55) Dimethyl phthalate	5.22	163	11792	527.1899145	ppb	93
56) 2,6-Dinitrotoluene	5.27	165	2406	463.9446622	ppb	92
57) 3-Nitroaniline	5.39	138	2518	450.9660011	ppb	89
58) Acenaphthene	5.46	153	12554	568.1820999	ppb	96
60) Dibenzofuran	5.59	168	17674	576.7899184	ppb #	97
61) 2,4-Dinitrotoluene	5.56	165	2753	423.9069814	ppb #	80
63) 4-Nitrophenol	5.49	139	2219	481.1339126	ppb	93
64) Fluorene	5.84	166	13394	538.8741946	ppb	99
65) 4-Chlorophenyl-phenylether	5.83	204	6853	581.3973883	ppb	96
66) Diethyl phthalate	5.73	149	12208	532.7351724	ppb	97
67) 4-Nitroaniline	5.84	138	2583	493.9183878	ppb	98
68) Azobenzene	5.95	77	12432	543.8645129	ppb	96
71) 4,6-Dinitro-2-methylphenol	5.86	198	1098	335.9892172	ppb	80
72) N-Nitrosodiphenylamine	5.92	169	11278	525.5181216	ppb	95
74) 4-Bromophenyl-phenylether	6.21	248	3507	503.5169622	ppb	90
75) Hexachlorobenzene	6.26	284	4283	552.6506620	ppb	97
76) n-octadecane	6.45	55	2700	624.8296052	ppb #	88
77) Pentachlorophenol	6.41	266	1641	395.0735832	ppb	87
78) Phenanthrene	6.59	178	20891	562.2158818	ppb	93
79) Anthracene	6.63	178	20925	556.3404017	ppb	99
80) Carbazole	6.75	167	19009	553.9274983	ppb	99
81) Di-n-butyl phthalate	7.02	149	20464	509.3768613	ppb	99
83) Fluoranthene	7.64	202	21245	538.1889960	ppb	98
86) Pyrene	7.88	202	21399	521.8526444	ppb	98
88) Benzylbutyl phthalate	8.68	149	8466	504.9149051	ppb	93
90) Benzo(a)anthracene	9.52	228	20222	551.0613246	ppb	94
91) Chrysene	9.58	228	19627	551.9009123	ppb	97
92) bis(2-Ethylhexyl)phthalate	9.62	149	11394	493.3450222	ppb	98
93) Di-n-octyl phthalate	10.92	149	17985	468.7583125	ppb	99
95) Benzo(b)fluoranthene	11.57	252	22101	582.4447660	ppb	95
96) Benzo(k)fluoranthene	11.62	252	20993	561.6702641	ppb	98
97) Benzo(a)pyrene	12.25	252	17410	529.7489985	ppb	97
98) Indeno(1,2,3-cd)pyrene	14.20	276	17264	534.6681369	ppb	98
99) Dibenz(a,h)anthracene	14.24	278	18203	528.7141684	ppb	95
100) Benzo(g,h,i)perylene	14.52	276	19143	569.6031683	ppb	95

(#) = qualifier out of range (m) = manual integration

0209\_06.D S804B09V.M Mon Feb 14 15:44:29 2022

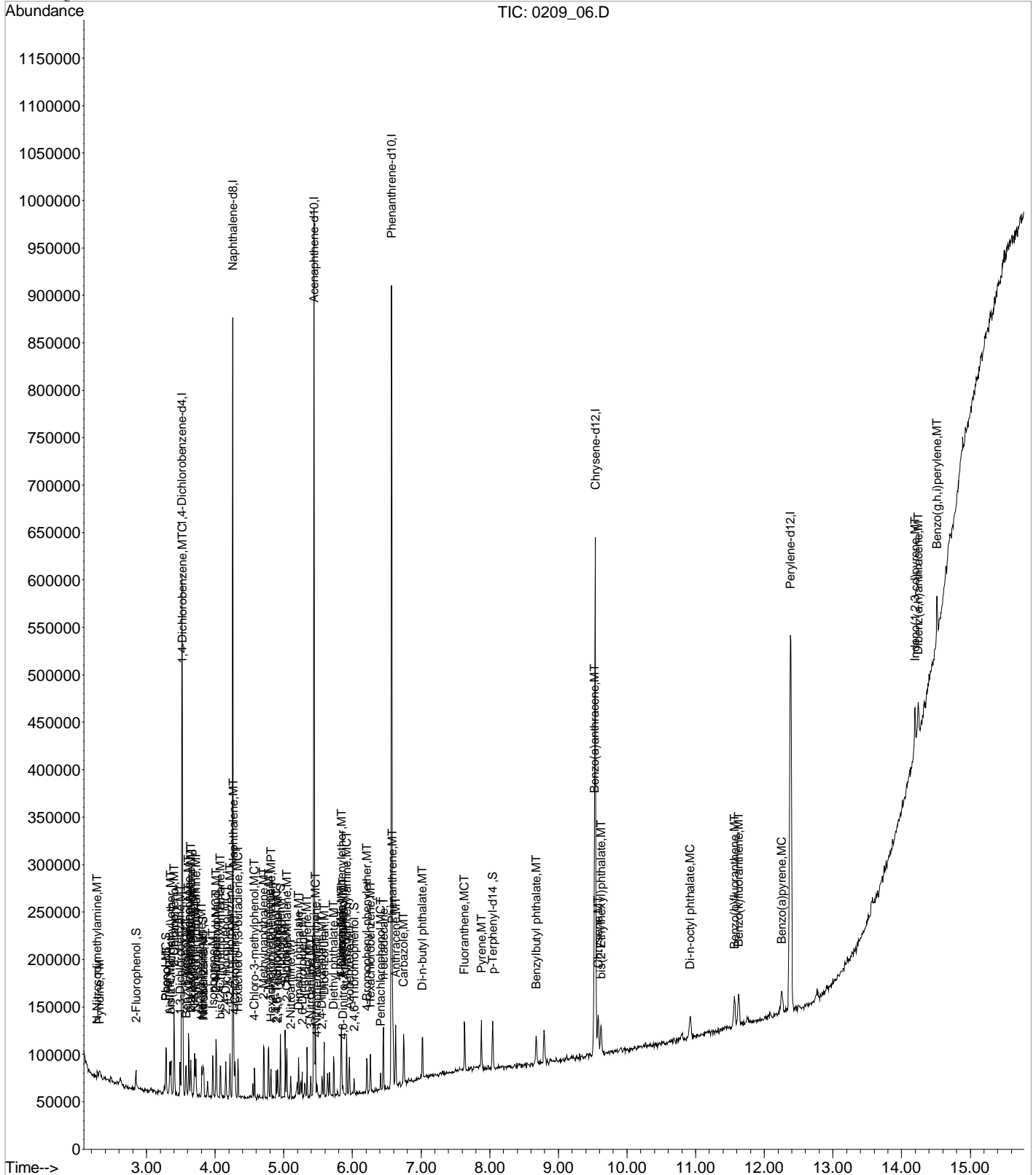
Page 2

Data File : C:\MSDCHEM\1\DATA\020922\0209 06.D
Acq On : 9 Feb 2022 10:43 am
Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:40 2022

Vial: 3
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:18:21 2022
Response via : Initial Calibration

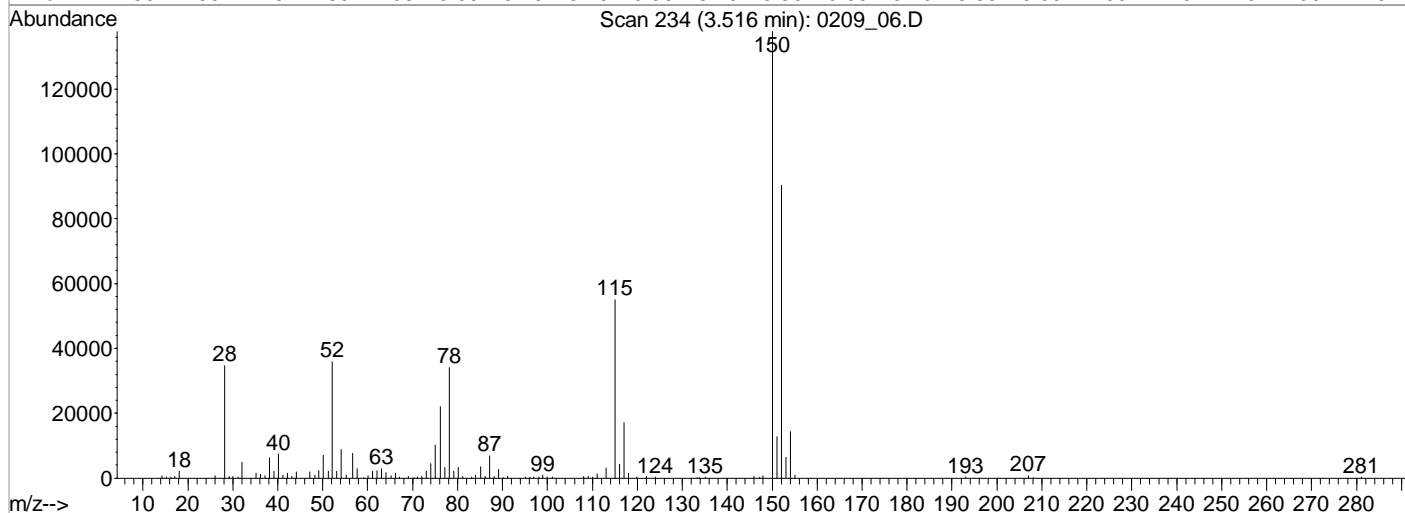
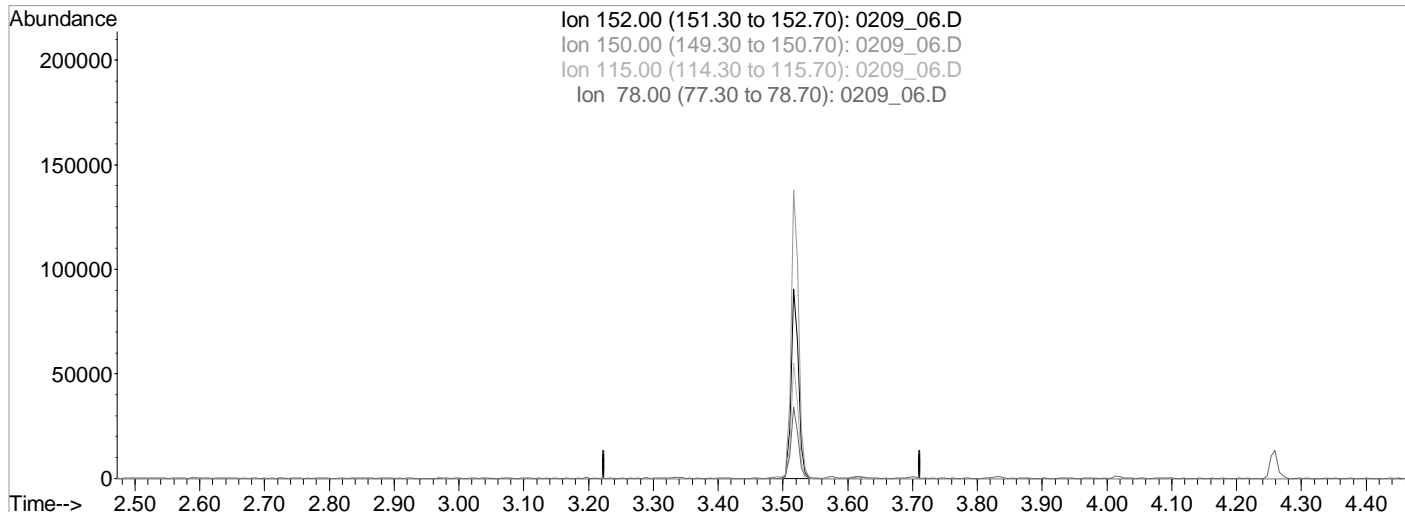




Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:37 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_06.D

(1) 1,4-Dichlorobenzene-d4 (I)  
 3.52min (-3.516) 0.0000000 ppb d

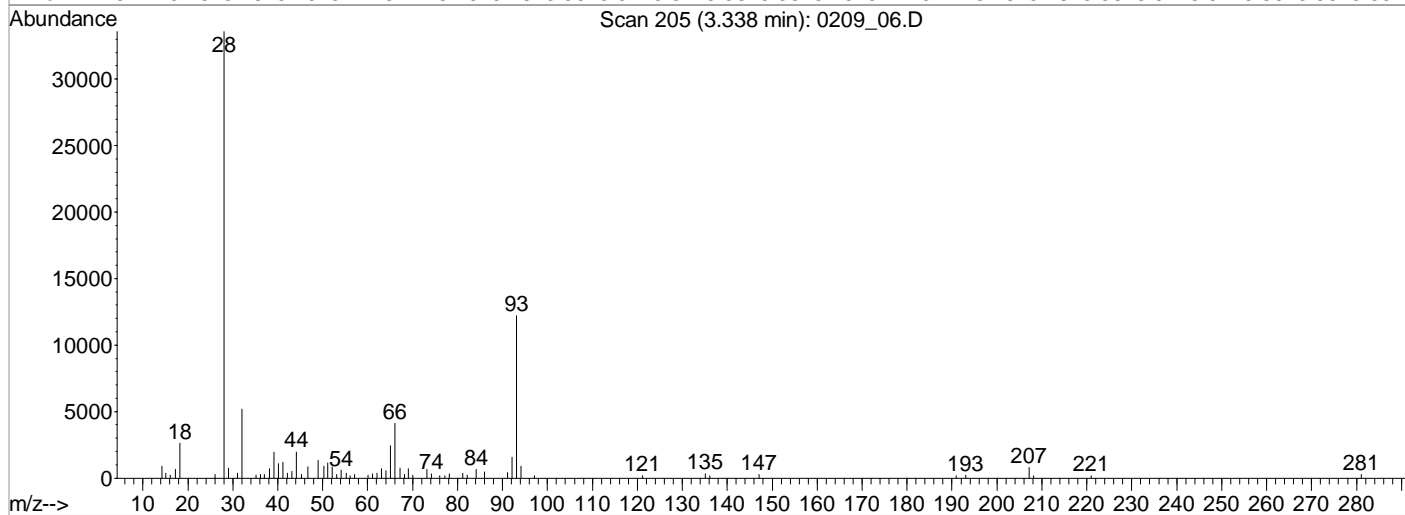
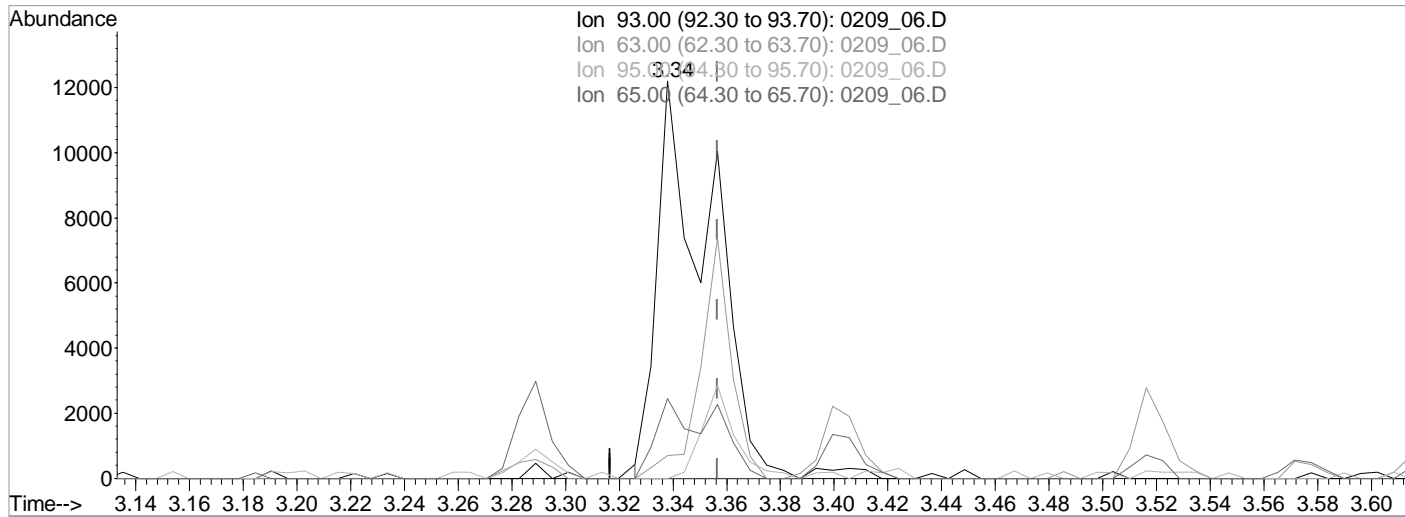
response 0

Ion	Exp%	Act%
152.00	100	0.00
150.00	155.20	0.00
115.00	59.30	0.00
78.00	35.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:38 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_06.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.018) 773.8770947 ppb

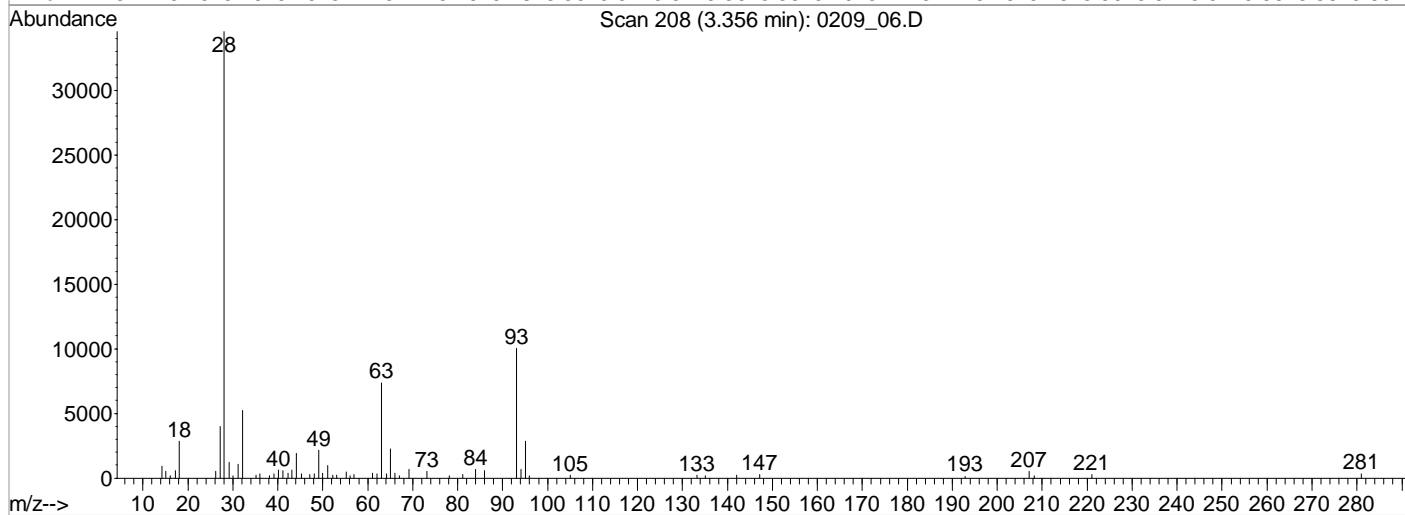
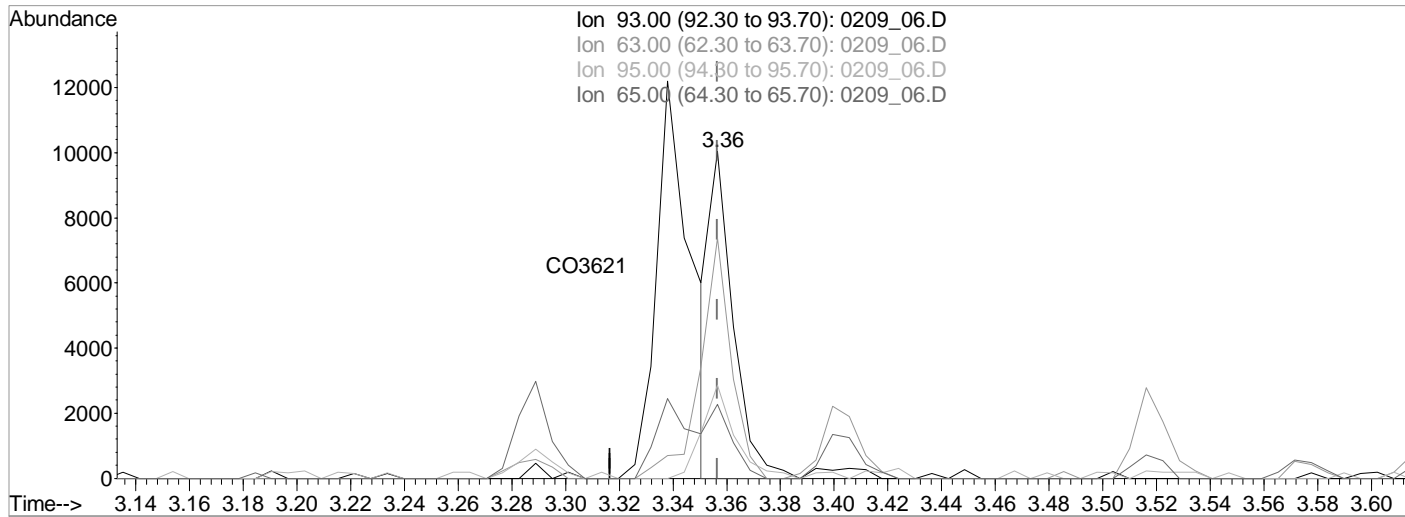
response 16774

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.71#
95.00	30.20	0.00#
65.00	24.00	20.09

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:40 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_06.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (0.000) 280.2271058 ppb m

response 6074

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	73.44
95.00	30.20	28.46
65.00	24.00	22.56

Data File : C:\MSDCHEM\1\DATA\020922\0209 07.D Vial: 4  
 Acq On : 9 Feb 2022 11:04 am Operator: 917  
 Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:47 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:19:47 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	76270	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	301288	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	154859	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	290690	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	252819	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	273649	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	13374	1024.1746086	ppb	0.00
Spiked Amount 666.000				Recovery = 153.78%		
7) Phenol-d5	3.28	99	15234	943.4936610	ppb	0.00
Spiked Amount 666.000				Recovery = 141.67%		
24) Nitrobenzene-d5	3.82	82	12081m	907.8777697	ppb	0.00
Spiked Amount 333.000				Recovery = 272.64%		
50) 2-Fluorobiphenyl	4.95	172	28365	1006.2816806	ppb	0.00
Spiked Amount 333.000				Recovery = 302.19%		
73) 2,4,6-Tribromophenol	6.02	330	2781	902.8887466	ppb	0.00
Spiked Amount 666.000				Recovery = 135.57%		
87) p-Terphenyl-d14	8.04	244	35378	990.0403797	ppb	0.00
Spiked Amount 333.000				Recovery = 297.31%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.31	79	11901	998.1129452	ppb	94
3) N-Nitrosodimethylamine	2.29	42	6873	995.7330245	ppb	90
5) Aniline	3.34	66	7669	1035.6691945	ppb	# 95
6) bis(2-Chloroethyl)ether	3.36	93	11795m	558.9513471	ppb	
8) Phenol	3.29	94	16788	1012.5031366	ppb	99
10) 2-Chlorophenol	3.41	128	13345	1010.2445624	ppb	99
11) n-Decane	3.40	41	7909	952.1233752	ppb	# 90
12) 1,3-Dichlorobenzene	3.49	146	15281	1004.7592285	ppb	96
13) 1,4-Dichlorobenzene	3.53	146	15836	1022.2006471	ppb	96
14) Benzyl Alcohol	3.58	79	9993	992.2878509	ppb	94
15) 1,2-Dichlorobenzene	3.61	146	14424	1004.8210774	ppb	99
16) bis(2-Chloroisopropyl)ethe	3.65	121	5060	980.4227239	ppb	68
17) 2,2-oxybis(1-chloropropane	3.65	121	5060	980.4227239	ppb	68
18) 2-Methylphenol	3.62	108	12162	1008.5121853	ppb	98
19) Hexachloroethane	3.80	117	5649	1022.8026899	ppb	95
20) N-Nitrosodi-n-propylamine	3.72	70	8897	1006.4466665	ppb	95
21) 3&4-Methyl phenol	3.70	107	13385	969.5977105	ppb	96
25) Nitrobenzene	3.84	77	12867	971.7918627	ppb	97
26) Isophorone	3.96	82	23074	973.7600763	ppb	99
27) 2-Nitrophenol	4.02	139	6136	971.3209513	ppb	95
28) 2,4-Dimethylphenol	4.01	107	12562	1035.6727790	ppb	99
29) bis(2-Chlorethoxy)methane	4.08	93	15787	1022.5280775	ppb	95
30) 2,4-Dichlorophenol	4.15	162	10201	995.5789595	ppb	97
32) 1,2,4-Trichlorobenzene	4.22	180	11941	1016.2429131	ppb	99
34) Naphthalene	4.27	128	41782	1027.7434603	ppb	99
35) 4-Chloroaniline	4.29	65	4826	1042.1949294	ppb	96
36) Hexachloro-1,3-butadiene	4.33	225	6244	957.7274149	ppb	92
40) 4-Chloro-3-methylphenol	4.57	107	10067	981.5027088	ppb	86
41) 2-Methylnaphthalene	4.71	142	26958	1007.7179044	ppb	99
42) 1-Methylnaphthalene	4.78	142	24628	978.4163804	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	7287	986.5856772	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	6640	943.0418676	ppb	95
49) 2,4,5-Trichlorophenol	4.91	196	7255	1017.6821826	ppb	93

(#) = qualifier out of range (m) = manual integration

0209\_07.D S804B09V.M Mon Feb 14 15:47:33 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 07.D Vial: 4  
 Acq On : 9 Feb 2022 11:04 am Operator: 917  
 Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:47 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:19:47 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	31396	1013.2193660	ppb	98
52) 2-Chloronaphthalene	5.05	162	24285	1032.7965655	ppb	97
53) 2-Nitroaniline	5.10	138	6335	936.9430644	ppb #	96
54) Acenaphthylene	5.34	152	35382	988.1131522	ppb	99
55) Dimethyl phthalate	5.22	163	23291	982.3490986	ppb	96
56) 2,6-Dinitrotoluene	5.27	165	4865	928.8368997	ppb	99
57) 3-Nitroaniline	5.39	138	4936	887.3217022	ppb	91
58) Acenaphthene	5.46	153	24135	997.3544259	ppb	99
59) 2,4-Dinitrophenol	5.46	184	1390	781.2926895	ppb #	1
60) Dibenzofuran	5.59	168	33852	1004.0506798	ppb	100
61) 2,4-Dinitrotoluene	5.56	165	5734	923.6569672	ppb #	77
63) 4-Nitrophenol	5.49	139	3863	823.0078370	ppb	97
64) Fluorene	5.84	166	26866	1011.0676989	ppb	98
65) 4-Chlorophenyl-phenylether	5.83	204	13151	1006.1449282	ppb	94
66) Diethyl phthalate	5.73	149	24302	1000.2320751	ppb	99
67) 4-Nitroaniline	5.84	138	5080	917.9528314	ppb	96
68) Azobenzene	5.95	77	23996	967.7887017	ppb	99
71) 4,6-Dinitro-2-methylphenol	5.86	198	2275	821.1747835	ppb	91
72) N-Nitrosodiphenylamine	5.92	169	21933	980.5621274	ppb	94
74) 4-Bromophenyl-phenylether	6.21	248	7249	1016.9661888	ppb	94
75) Hexachlorobenzene	6.26	284	8451	1030.4154727	ppb	97
76) n-octadecane	6.45	55	4622	932.7469322	ppb #	89
77) Pentachlorophenol	6.41	266	3482	901.2827855	ppb	97
78) Phenanthrene	6.59	178	41877	1043.2531380	ppb	98
79) Anthracene	6.63	178	40406	993.3957930	ppb	99
80) Carbazole	6.75	167	37131	991.6965643	ppb	98
81) Di-n-butyl phthalate	7.02	149	38609	933.6214592	ppb	99
83) Fluoranthene	7.64	202	41394	994.6744483	ppb	99
86) Pyrene	7.88	202	43345	1046.3115430	ppb	97
88) Benzylbutyl phthalate	8.68	149	15306	914.0065001	ppb	96
90) Benzo(a)anthracene	9.52	228	38865	1021.2752983	ppb	91
91) Chrysene	9.58	228	37999	1029.2590925	ppb	96
92) bis(2-Ethylhexyl)phthalate	9.62	149	21050	914.9946856	ppb	99
93) Di-n-octyl phthalate	10.92	149	33904	915.3989320	ppb	97
95) Benzo(b)fluoranthene	11.56	252	40261	966.1548100	ppb	98
96) Benzo(k)fluoranthene	11.62	252	39928	986.7291781	ppb	93
97) Benzo(a)pyrene	12.26	252	34757	1008.2775726	ppb	99
98) Indeno(1,2,3-cd)pyrene	14.20	276	34378	995.1350728	ppb	98
99) Dibenz(a,h)anthracene	14.24	278	38216	1041.3233414	ppb	97
100) Benzo(g,h,i)perylene	14.52	276	36328	970.1482120	ppb	88

(#) = qualifier out of range (m) = manual integration

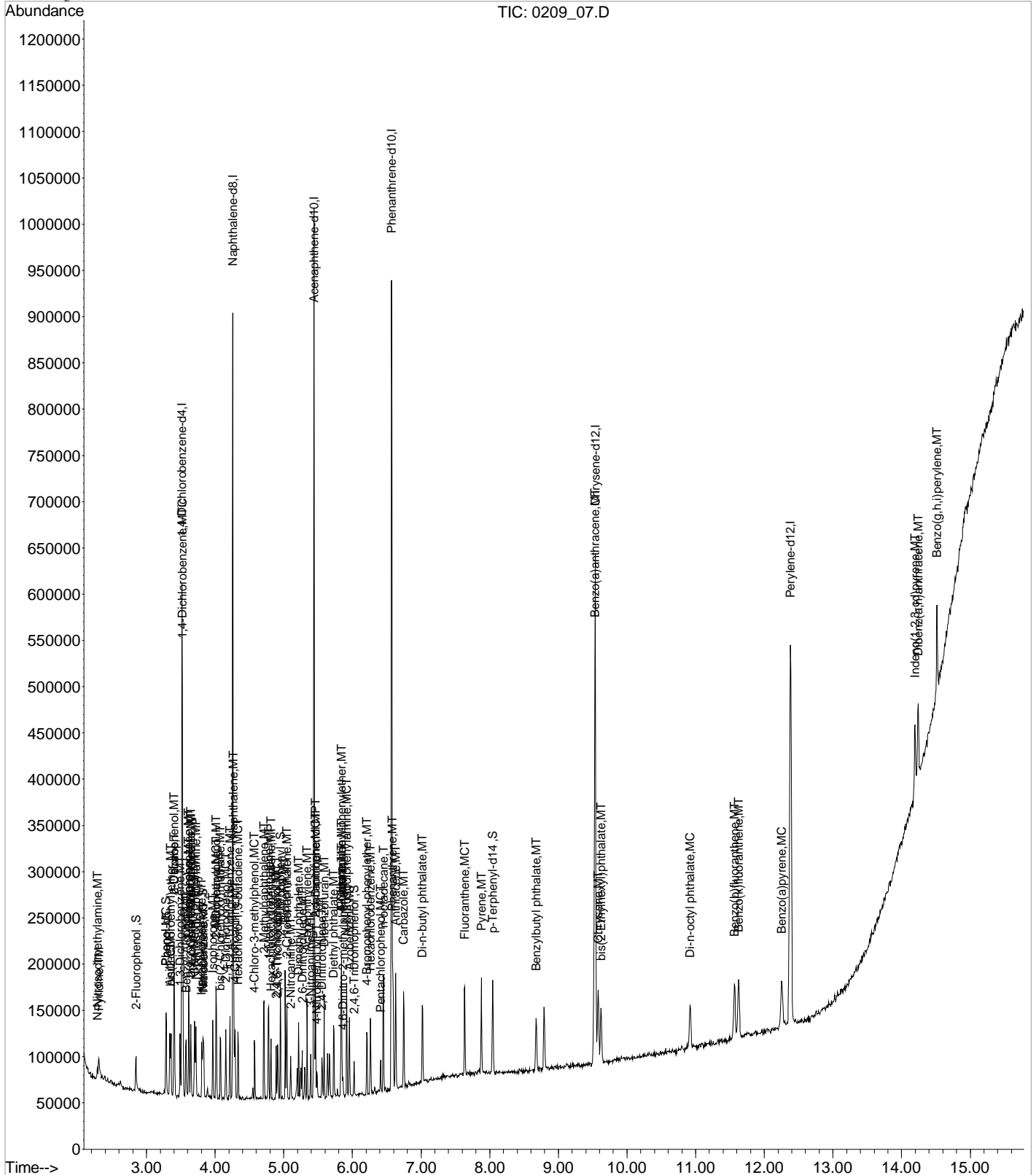
0209\_07.D S804B09V.M Mon Feb 14 15:47:33 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 07.D
Acq On : 9 Feb 2022 11:04 am
Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:47 2022

Vial: 4
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

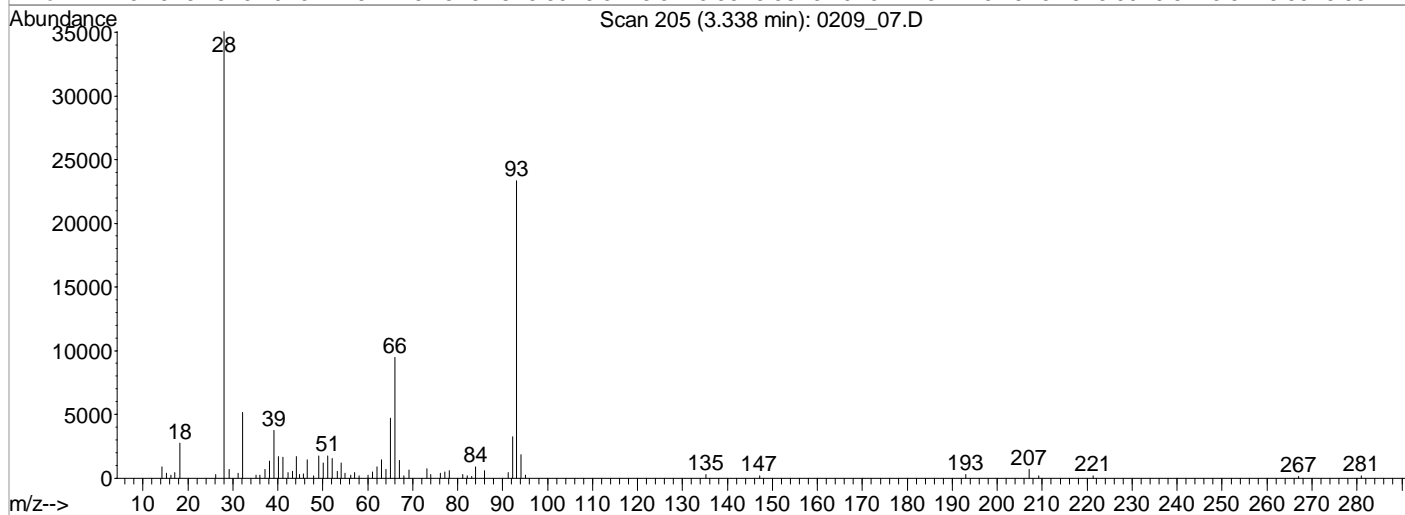
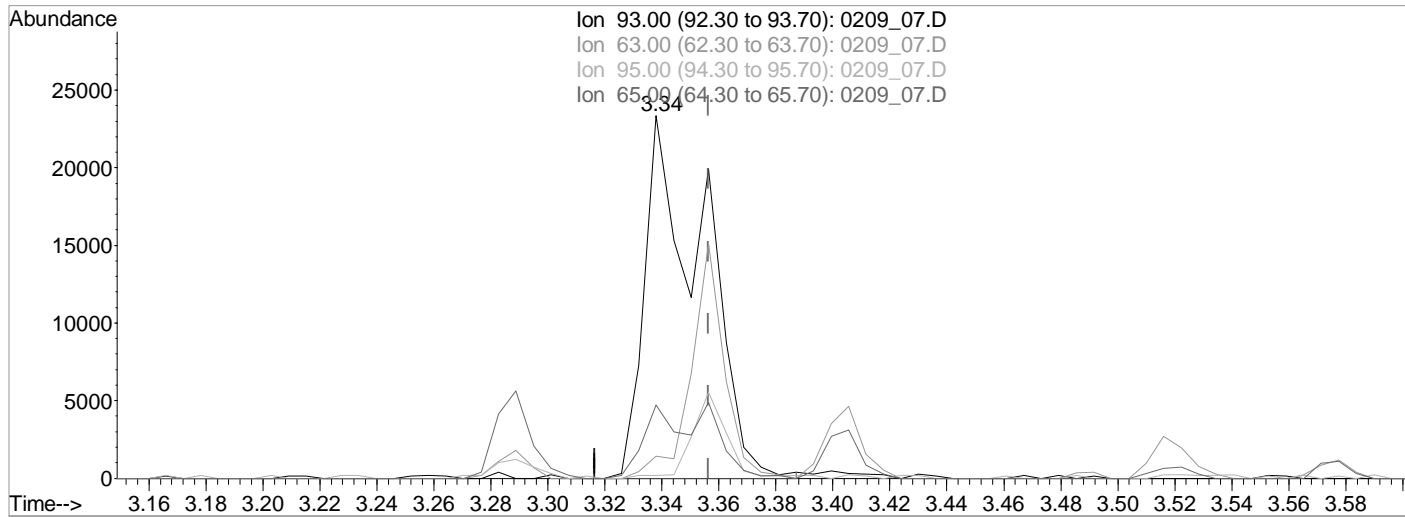
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:44:48 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_07.D Vial: 4  
 Acq On : 9 Feb 2022 11:04 am Operator: 917  
 Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:46 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:44:48 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_07.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.018) 1569.5183226 ppb m

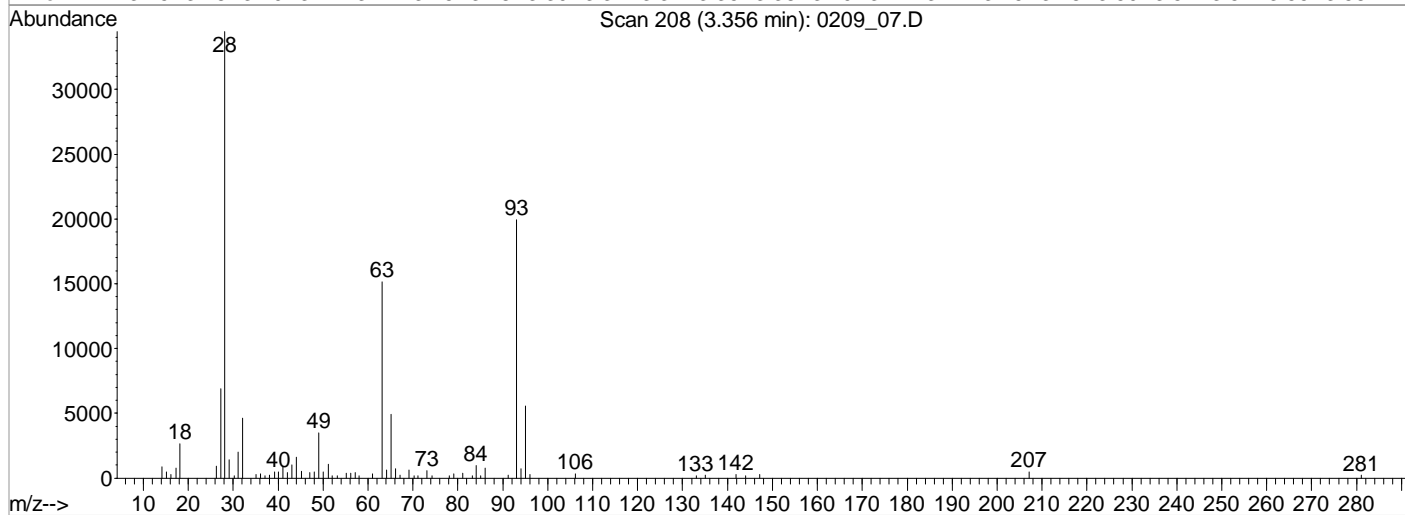
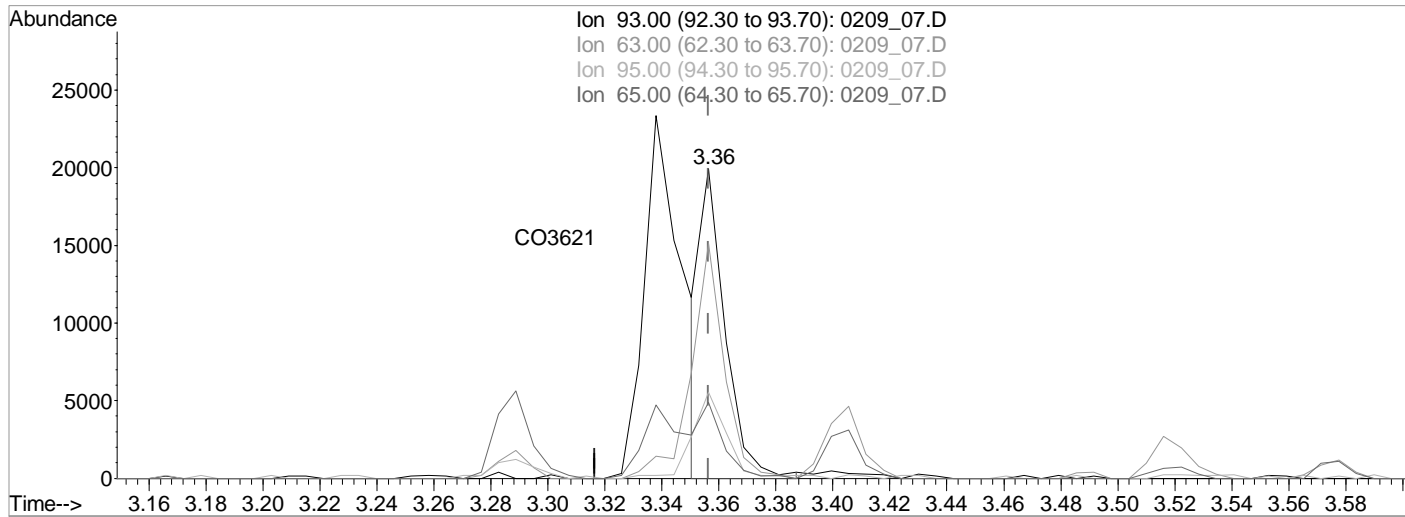
response 33120

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	6.09#
95.00	30.20	0.87#
65.00	24.00	20.20

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_07.D Vial: 4  
 Acq On : 9 Feb 2022 11:04 am Operator: 917  
 Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:47 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:44:48 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_07.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (-0.000) 558.9513471 ppb m

response 11795

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	75.97
95.00	30.20	27.78
65.00	24.00	24.57



Data File : C:\MSDCHEM\1\DATA\020922\0209 08.D Vial: 5  
 Acq On : 9 Feb 2022 11:25 am Operator: 917  
 Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:16 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:27:29 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	76560	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	308834	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	158910	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	298649	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	273094	8000.00	ppb	0.00
94) Perylene-d12	12.39	264	293434	8000.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	2.85	112	48725	3687.4891163	ppb	0.00
Spiked Amount 666.000			Recovery =	553.68%		
7) Phenol-d5	3.28	99	58350	3669.2378705	ppb	0.00
Spiked Amount 666.000			Recovery =	550.94%		
24) Nitrobenzene-d5	3.82	82	52297	3806.9552688	ppb	0.00
Spiked Amount 333.000			Recovery =	1143.23%		
50) 2-Fluorobiphenyl	4.95	172	105816	3650.6056885	ppb	0.00
Spiked Amount 333.000			Recovery =	1096.28%		
73) 2,4,6-Tribromophenol	6.02	330	12407	4051.9112414	ppb	0.00
Spiked Amount 666.000			Recovery =	608.40%		
87) p-Terphenyl-d14	8.04	244	135025	3509.7450349	ppb	0.00
Spiked Amount 333.000			Recovery =	1053.98%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.30	79	46914	3922.1462465	ppb	92
3) N-Nitrosodimethylamine	2.29	42	25194	3641.3603720	ppb	92
5) Aniline	3.34	66	27896	3708.8809048	ppb	97
6) bis(2-Chloroethyl)ether	3.36	93	40648m	2249.7087184	ppb	
8) Phenol	3.29	94	61675	3690.2190244	ppb	98
10) 2-Chlorophenol	3.41	128	49941	3753.5004602	ppb	98
11) n-Decane	3.40	41	30186	3678.8814437	ppb	# 100
12) 1,3-Dichlorobenzene	3.49	146	55691	3642.1568344	ppb	98
13) 1,4-Dichlorobenzene	3.53	146	58102	3708.7838455	ppb	99
14) Benzyl Alcohol	3.58	79	37857	3754.5482410	ppb	99
15) 1,2-Dichlorobenzene	3.61	146	53437	3702.5382219	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	18481	3590.7364409	ppb	70
17) 2,2-oxybis(1-chloropropane	3.65	121	18481	3590.7364409	ppb	70
18) 2-Methylphenol	3.62	108	44297	3648.9823869	ppb	97
19) Hexachloroethane	3.80	117	21006	3760.3383531	ppb	98
20) N-Nitrosodi-n-propylamine	3.72	70	32491	3653.6742608	ppb	97
21) 3&4-Methyl phenol	3.70	107	50954	3714.7273657	ppb	98
25) Nitrobenzene	3.84	77	50279	3739.7466534	ppb	97
26) Isophorone	3.96	82	86386	3587.9344294	ppb	100
27) 2-Nitrophenol	4.02	139	23882	3723.7157111	ppb	97
28) 2,4-Dimethylphenol	4.01	107	46618	3705.4455563	ppb	99
29) bis(2-Chlorethoxy)methane	4.08	93	56471	3541.6753632	ppb	94
30) 2,4-Dichlorophenol	4.15	162	38182	3640.7331375	ppb	98
32) 1,2,4-Trichlorobenzene	4.22	180	44416	3667.8194095	ppb	98
34) Naphthalene	4.27	128	153901	3659.2817273	ppb	100
35) 4-Chloroaniline	4.29	65	17865	3711.5524610	ppb	100
36) Hexachloro-1,3-butadiene	4.33	225	23634	3587.0389463	ppb	99
40) 4-Chloro-3-methylphenol	4.57	107	38533	3687.7972059	ppb	91
41) 2-Methylnaphthalene	4.71	142	98637	3587.8315328	ppb	99
42) 1-Methylnaphthalene	4.78	142	93691	3657.5057324	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	29092	3855.5923968	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	25288	3567.6924956	ppb	87
49) 2,4,5-Trichlorophenol	4.91	196	27944	3797.4870871	ppb	97

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\020922\0209 08.D Vial: 5  
 Acq On : 9 Feb 2022 11:25 am Operator: 917  
 Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:16 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:27:29 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	118174	3700.2138562	ppb	99
52) 2-Chloronaphthalene	5.05	162	91273	3741.8140427	ppb	98
53) 2-Nitroaniline	5.10	138	25895	3812.3559871	ppb	97
54) Acenaphthylene	5.34	152	138397	3781.4678851	ppb	98
55) Dimethyl phthalate	5.22	163	89878	3716.0291707	ppb	100
56) 2,6-Dinitrotoluene	5.27	165	20369	3881.8398479	ppb	95
57) 3-Nitroaniline	5.39	138	22058	4014.9800104	ppb	98
58) Acenaphthene	5.46	153	90926	3664.8708952	ppb	99
59) 2,4-Dinitrophenol	5.46	184	7954	4699.4207519	ppb	# 65
60) Dibenzofuran	5.59	168	125970	3636.1153668	ppb	99
61) 2,4-Dinitrotoluene	5.56	165	24897	4010.3299275	ppb	99
63) 4-Nitrophenol	5.49	139	17661	3896.6279998	ppb	97
64) Fluorene	5.84	166	104287	3810.5999505	ppb	98
65) 4-Chlorophenyl-phenylether	5.83	204	48245	3589.6378717	ppb	99
66) Diethyl phthalate	5.73	149	94239	3779.5583767	ppb	99
67) 4-Nitroaniline	5.84	138	22766	4121.6546071	ppb	99
68) Azobenzene	5.95	77	94745	3764.1896388	ppb	100
71) 4,6-Dinitro-2-methylphenol	5.86	198	11741	4386.5146094	ppb	93
72) N-Nitrosodiphenylamine	5.92	169	85367	3739.0321479	ppb	100
74) 4-Bromophenyl-phenylether	6.21	248	28452	3863.3232975	ppb	96
75) Hexachlorobenzene	6.26	284	30100	3536.3795647	ppb	97
76) n-octadecane	6.45	55	17047	3425.2915399	ppb	93
77) Pentachlorophenol	6.41	266	15204	3960.8681961	ppb	97
78) Phenanthrene	6.59	178	152049	3634.5438187	ppb	98
79) Anthracene	6.63	178	149791	3592.4300031	ppb	99
80) Carbazole	6.75	167	140338	3658.3915478	ppb	98
81) Di-n-butyl phthalate	7.02	149	155562	3744.3117272	ppb	100
83) Fluoranthene	7.64	202	156913	3676.5726891	ppb	99
86) Pyrene	7.88	202	164730	3625.2603146	ppb	99
88) Benzylbutyl phthalate	8.68	149	64453	3668.2506321	ppb	98
90) Benzo(a)anthracene	9.52	228	146345	3535.0092132	ppb	100
91) Chrysene	9.58	228	146632	3641.3605935	ppb	99
92) bis(2-Ethylhexyl)phthalate	9.62	149	86899	3598.8379231	ppb	99
93) Di-n-octyl phthalate	10.92	149	144282	3711.0126159	ppb	98
95) Benzo(b)fluoranthene	11.57	252	156039	3531.8820648	ppb	99
96) Benzo(k)fluoranthene	11.63	252	152687	3534.5271144	ppb	98
97) Benzo(a)pyrene	12.26	252	134154	3619.3303945	ppb	98
98) Indeno(1,2,3-cd)pyrene	14.20	276	136698	3696.1693366	ppb	97
99) Dibenz(a,h)anthracene	14.24	278	145241	3640.5893699	ppb	98
100) Benzo(g,h,i)perylene	14.52	276	144798	3642.3839778	ppb	99

(#) = qualifier out of range (m) = manual integration

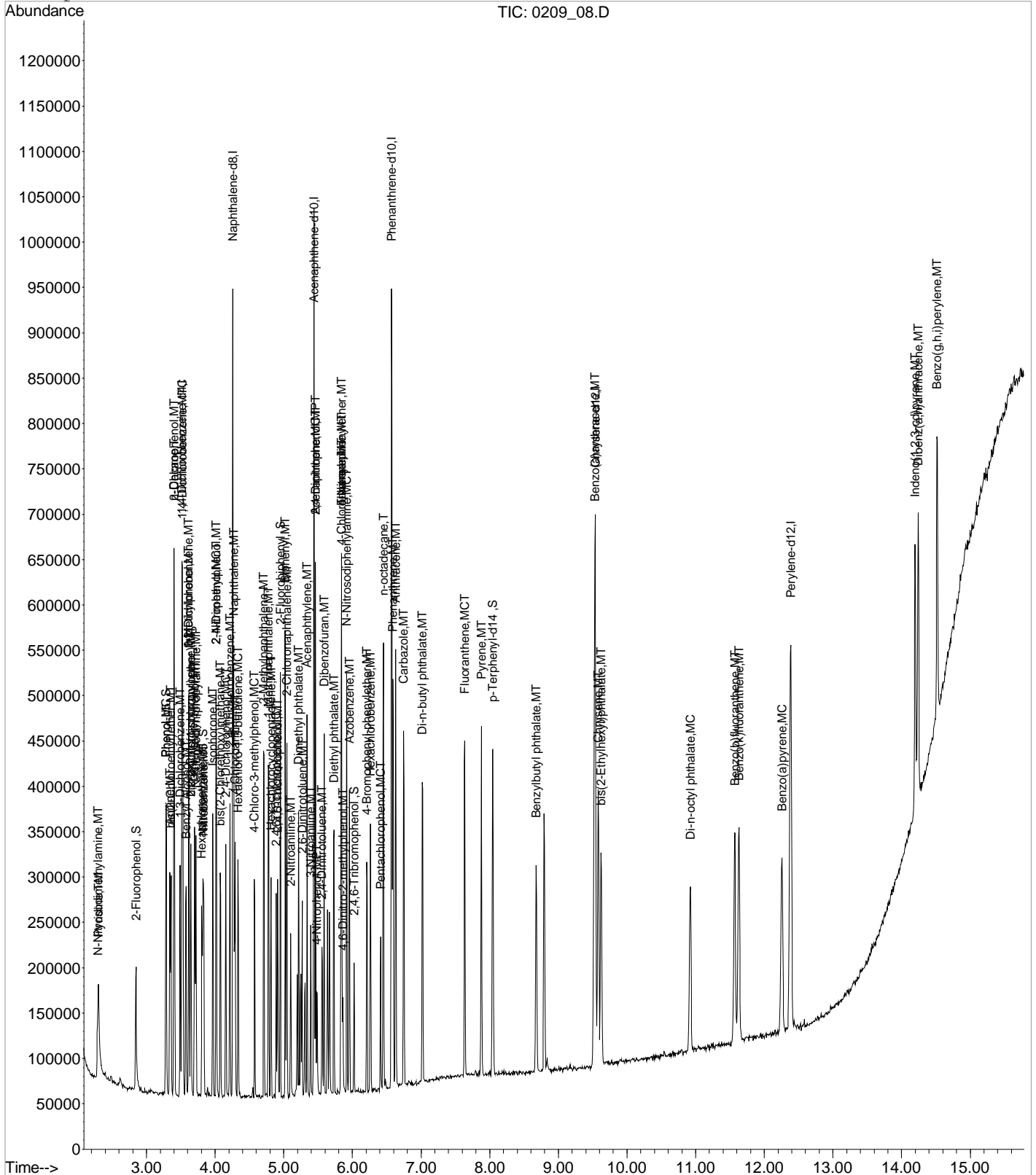
0209\_08.D S804B09V.M Mon Feb 14 15:48:50 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 08.D
Acq On : 9 Feb 2022 11:25 am
Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:16 2022

Vial: 5
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

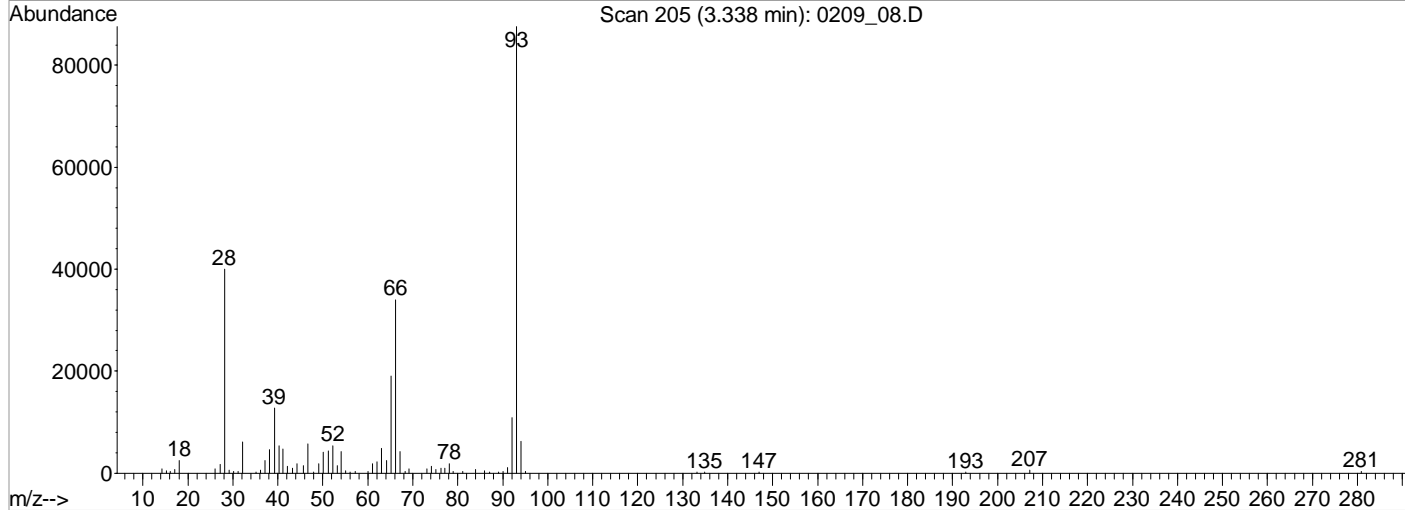
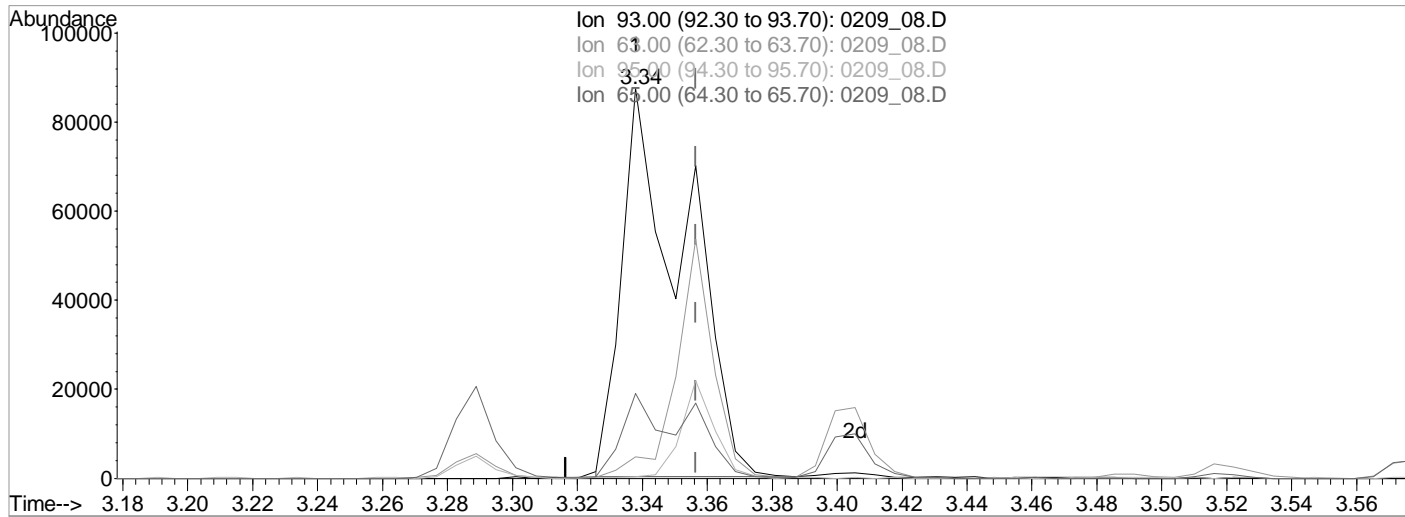
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:47:45 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 08.D Vial: 5  
 Acq On : 9 Feb 2022 11:25 am Operator: 917  
 Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:29 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:27:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_08.D

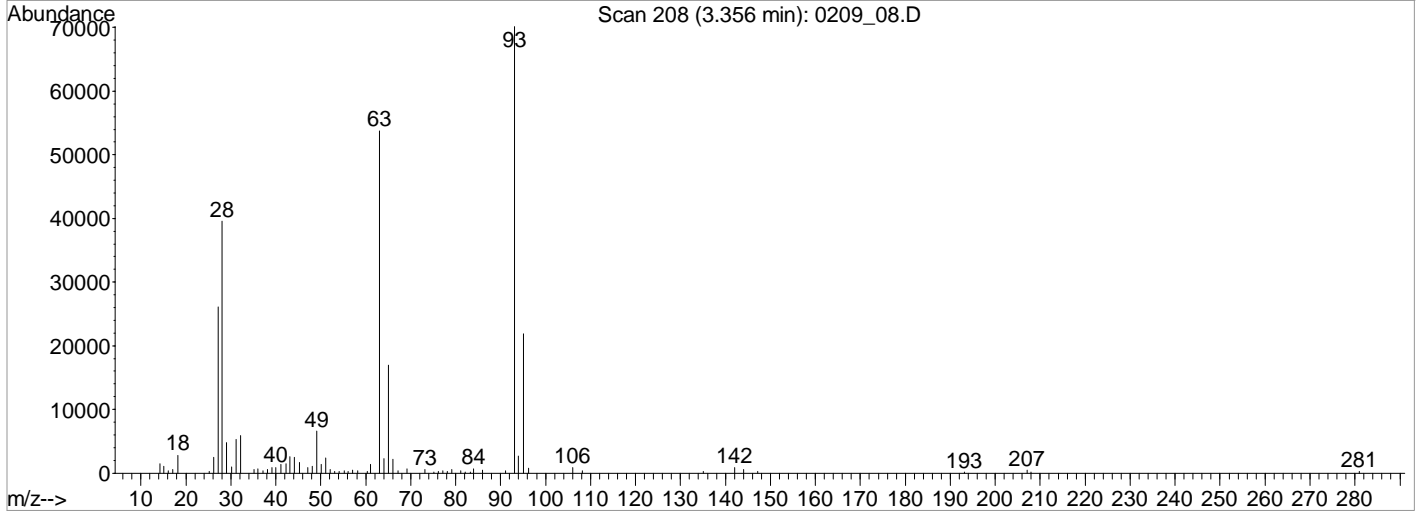
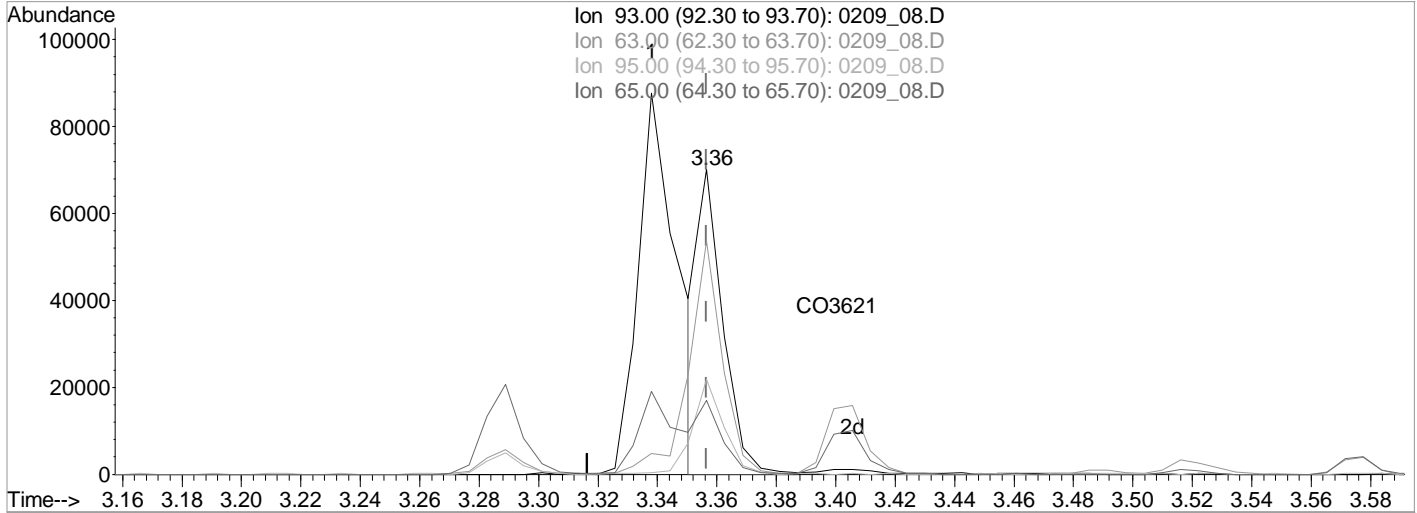
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.018) 6535.1580902 ppb  
 Qvalue = 38  
 response 118078

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.23#
95.00	30.20	0.18#
65.00	24.00	21.53

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_08.D Vial: 5  
 Acq On : 9 Feb 2022 11:25 am Operator: 917  
 Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:16 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 14:25:02 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_08.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (-0.000) 2249.7087184 ppb m

response 40648

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	76.56
95.00	30.20	31.18
65.00	24.00	24.14

Data File : C:\MSDCHEM\1\DATA\020922\0209 09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:51 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	79698	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	318573	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	166698	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	313275	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	276256	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	294444	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	126685	10000.0000000	ppb	0.00
Spiked Amount 666.000			Recovery = 1501.50%			
7) Phenol-d5	3.28	99	152664	10000.0000000	ppb	0.00
Spiked Amount 666.000			Recovery = 1501.50%			
24) Nitrobenzene-d5	3.82	82	126003m	9983.3614604	ppb	0.00
Spiked Amount 333.000			Recovery = 2998.01%			
50) 2-Fluorobiphenyl	4.95	172	280043	10000.0000000	ppb	0.00
Spiked Amount 333.000			Recovery = 3003.00%			
73) 2,4,6-Tribromophenol	6.02	330	35551	10000.0000000	ppb	0.00
Spiked Amount 666.000			Recovery = 1501.50%			
87) p-Terphenyl-d14	8.04	244	374818	10000.0000000	ppb	0.00
Spiked Amount 333.000			Recovery = 3003.00%			

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.29	79	121910	9699.8002912	ppb	99
3) N-Nitrosodimethylamine	2.28	42	65505	10000.0000000	ppb	100
5) Aniline	3.34	66	74198	10000.0000000	ppb	100
6) bis(2-Chloroethyl)ether	3.36	93	103260m	10000.0000000	ppb	100
8) Phenol	3.29	94	161240	10000.0000000	ppb	100
10) 2-Chlorophenol	3.41	128	128999	10000.0000000	ppb	100
11) n-Decane	3.40	41	76738	10000.0000000	ppb	100
12) 1,3-Dichlorobenzene	3.49	146	146804	10000.0000000	ppb	100
13) 1,4-Dichlorobenzene	3.53	146	149745	10000.0000000	ppb	100
14) Benzyl Alcohol	3.58	79	100344	10000.0000000	ppb	100
15) 1,2-Dichlorobenzene	3.61	146	137930	10000.0000000	ppb	100
16) bis(2-Chloroisopropyl)ethe	3.65	121	46703	10000.0000000	ppb	100
17) 2,2-oxybis(1-chloropropane	3.65	121	46703	10000.0000000	ppb	100
18) 2-Methylphenol	3.62	108	118936	10000.0000000	ppb	100
19) Hexachloroethane	3.80	117	55684	10000.0000000	ppb	100
20) N-Nitrosodi-n-propylamine	3.72	70	87187	10000.0000000	ppb	100
21) 3&4-Methyl phenol	3.70	107	134402	10000.0000000	ppb	100
25) Nitrobenzene	3.84	77	132607	10000.0000000	ppb	100
26) Isophorone	3.96	82	237119	10000.0000000	ppb	100
27) 2-Nitrophenol	4.02	139	64981	10000.0000000	ppb	100
28) 2,4-Dimethylphenol	4.01	107	120179	10000.0000000	ppb	100
29) bis(2-Chlorethoxy)methane	4.08	93	147555	10000.0000000	ppb	100
30) 2,4-Dichlorophenol	4.15	162	103418	10000.0000000	ppb	100
32) 1,2,4-Trichlorobenzene	4.22	180	115136	10000.0000000	ppb	100
34) Naphthalene	4.27	128	399013	10000.0000000	ppb	100
35) 4-Chloroaniline	4.29	65	47430	10000.0000000	ppb	100
36) Hexachloro-1,3-butadiene	4.33	225	62939	10000.0000000	ppb	100
40) 4-Chloro-3-methylphenol	4.58	107	104251	10000.0000000	ppb	100
41) 2-Methylnaphthalene	4.71	142	261134	10000.0000000	ppb	100
42) 1-Methylnaphthalene	4.78	142	242812	10000.0000000	ppb	100
47) Hexachlorocyclopentadiene	4.81	237	77267	10000.0000000	ppb	100
48) 2,4,6-Trichlorophenol	4.89	196	69331	10000.0000000	ppb	100
49) 2,4,5-Trichlorophenol	4.91	196	78067	10000.0000000	ppb	100

(#) = qualifier out of range (m) = manual integration

0209\_09.D S804B09V.M Mon Feb 14 15:53:06 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:51 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

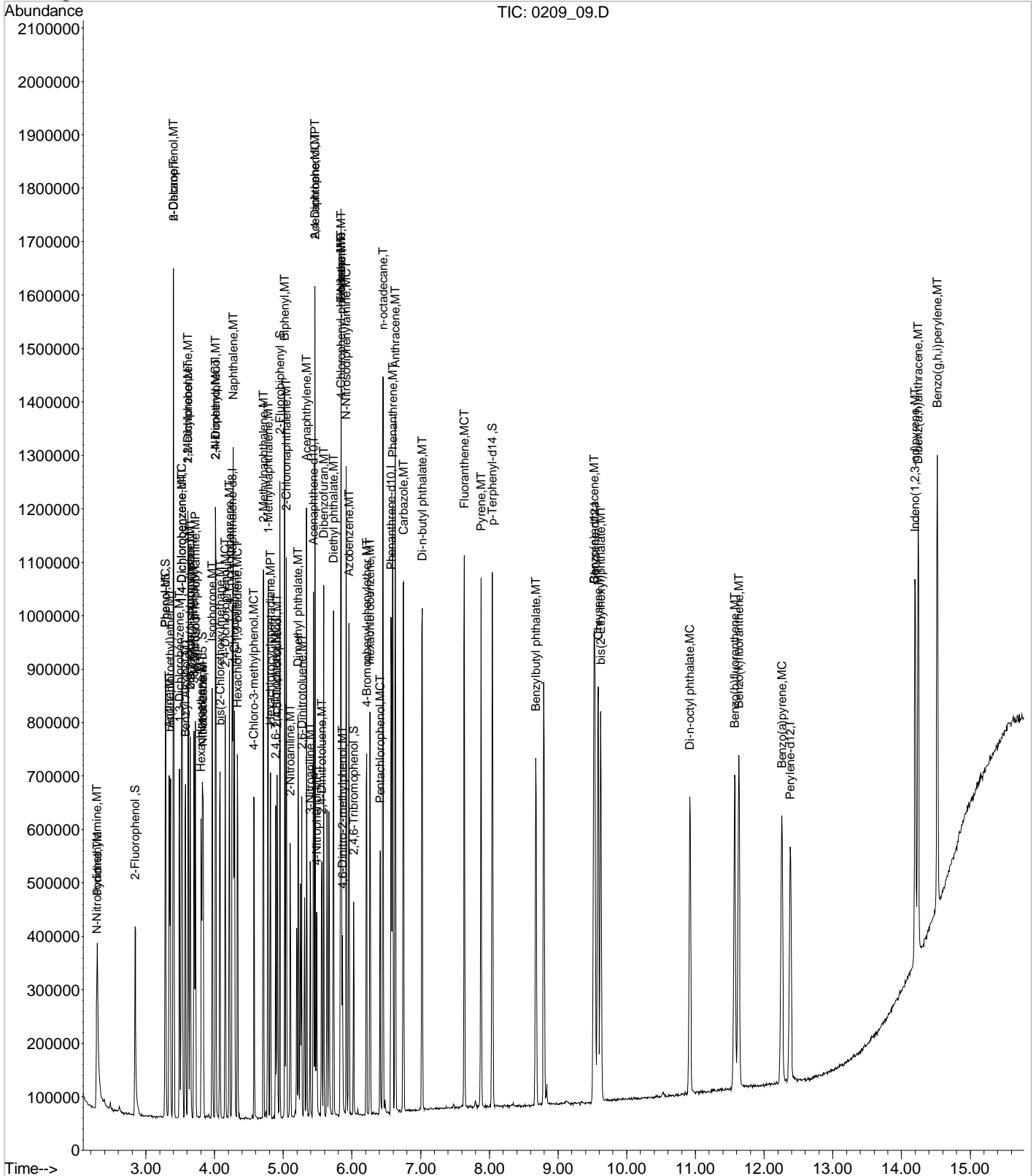
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	310488	10000.0000000	ppb	100
52) 2-Chloronaphthalene	5.05	162	240256	10000.0000000	ppb	100
53) 2-Nitroaniline	5.10	138	75937	10000.0000000	ppb	100
54) Acenaphthylene	5.34	152	371391	10000.0000000	ppb	100
55) Dimethyl phthalate	5.22	163	250120	10000.0000000	ppb	100
56) 2,6-Dinitrotoluene	5.27	165	59648	10000.0000000	ppb	100
57) 3-Nitroaniline	5.39	138	64174	10000.0000000	ppb	100
58) Acenaphthene	5.46	153	243837	10000.0000000	ppb	100
59) 2,4-Dinitrophenol	5.46	184	25454	10000.0000000	ppb	100
60) Dibenzofuran	5.59	168	335686	10000.0000000	ppb	100
61) 2,4-Dinitrotoluene	5.56	165	72875	10000.0000000	ppb	100
63) 4-Nitrophenol	5.49	139	52065	10000.0000000	ppb	100
64) Fluorene	5.84	166	276379	10000.0000000	ppb	100
65) 4-Chlorophenyl-phenylether	5.83	204	130111	10000.0000000	ppb	100
66) Diethyl phthalate	5.73	149	253571	10000.0000000	ppb	100
67) 4-Nitroaniline	5.84	138	62120	10000.0000000	ppb	100
68) Azobenzene	5.95	77	259354	10000.0000000	ppb	100
71) 4,6-Dinitro-2-methylphenol	5.86	198	35354	10000.0000000	ppb	100
72) N-Nitrosodiphenylamine	5.92	169	231908	10000.0000000	ppb	100
74) 4-Bromophenyl-phenylether	6.21	248	75834	10000.0000000	ppb	100
75) Hexachlorobenzene	6.26	284	81756	10000.0000000	ppb	100
76) n-octadecane	6.45	55	46905	10000.0000000	ppb	100
77) Pentachlorophenol	6.41	266	46865	10000.0000000	ppb	100
78) Phenanthrene	6.59	178	401719	10000.0000000	ppb	100
79) Anthracene	6.63	178	412471	10000.0000000	ppb	100
80) Carbazole	6.75	167	385300	10000.0000000	ppb	100
81) Di-n-butyl phthalate	7.02	149	437342	10000.0000000	ppb	100
83) Fluoranthene	7.64	202	425654	10000.0000000	ppb	100
86) Pyrene	7.88	202	441403	10000.0000000	ppb	100
88) Benzylbutyl phthalate	8.68	149	182425	10000.0000000	ppb	100
90) Benzo(a)anthracene	9.52	228	393248	10000.0000000	ppb	100
91) Chrysene	9.58	228	381309	10000.0000000	ppb	100
92) bis(2-Ethylhexyl)phthalate	9.62	149	255742	10000.0000000	ppb	100
93) Di-n-octyl phthalate	10.92	149	419500	10000.0000000	ppb	100
95) Benzo(b)fluoranthene	11.57	252	408147	10000.0000000	ppb	100
96) Benzo(k)fluoranthene	11.63	252	406682	10000.0000000	ppb	100
97) Benzo(a)pyrene	12.26	252	356920	10000.0000000	ppb	100
98) Indeno(1,2,3-cd)pyrene	14.20	276	361749	10000.0000000	ppb	100
99) Dibenz(a,h)anthracene	14.24	278	387330	10000.0000000	ppb	100
100) Benzo(g,h,i)perylene	14.52	276	382610	10000.0000000	ppb	100

(#) = qualifier out of range (m) = manual integration

0209\_09.D S804B09V.M Mon Feb 14 15:53:07 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 09.D Vial: 6
Acq On : 9 Feb 2022 11:46 am Operator: 917
Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:51 2022 Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:49:28 2022
Response via : Initial Calibration





Data File : C:\MSDCHEM\1\DATA\050422B\0504B 03.D Vial: 3  
 Acq On : 4 May 2022 8:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 16:03 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	72810	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	308811	8000.00	ppb	0.00
46) Acenaphthene-d10	5.15	164	153956	8000.00	ppb	0.00
70) Phenanthrene-d10	6.26	188	290793	8000.00	ppb	0.00
84) Chrysene-d12	9.01	240	239869	8000.00	ppb	0.00
94) Perylene-d12	11.67	264	248833	8000.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	2.58	112	125991	10648.8093607	ppb	0.00
Spiked Amount 20000.000			Recovery =	53.24%		
7) Phenol-d5	3.03	99	154852	10904.8081827	ppb	0.00
Spiked Amount 20000.000			Recovery =	54.52%		
24) Nitrobenzene-d5	3.56	82	148958m	11368.3042392	ppb	0.00
Spiked Amount 10000.000			Recovery =	113.68%		
50) 2-Fluorobiphenyl	4.67	172	266294	10253.4023911	ppb	0.00
Spiked Amount 10000.000			Recovery =	102.53%		
73) 2,4,6-Tribromophenol	5.72	330	38217	11609.7274995	ppb	0.00
Spiked Amount 20000.000			Recovery =	58.05%		
87) p-Terphenyl-d14	7.65	244	342371	10444.2393420	ppb	0.00
Spiked Amount 10000.000			Recovery =	104.44%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	1.99	79	148014	13138.2970554	ppb	91
3) N-Nitrosodimethylamine	1.98	42	78031	12904.7576433	ppb	92
5) Aniline	3.08	66	77309	11476.0102541	ppb	# 36
6) bis(2-Chloroethyl)ether	3.09	93	134334	12837.6695153	ppb	98
8) Phenol	3.04	94	159489	10662.4454340	ppb	91
10) 2-Chlorophenol	3.14	128	126641	10574.2456665	ppb	95
11) n-Decane	3.14	41	83245	11800.6717158	ppb	97
12) 1,3-Dichlorobenzene	3.22	146	137383	10145.3675510	ppb	93
13) 1,4-Dichlorobenzene	3.27	146	142112	10196.1300433	ppb	97
14) Benzyl Alcohol	3.32	79	102792	11097.2164608	ppb	96
15) 1,2-Dichlorobenzene	3.35	146	135933	10609.6074912	ppb	95
16) bis(2-Chloroisopropyl)ethe	3.38	121	46434	10591.0535705	ppb	# 39
17) 2,2-oxybis(1-chloropropane	3.38	121	46434	10591.0535705	ppb	# 39
18) 2-Methylphenol	3.37	108	122831	11350.0352901	ppb	95
19) Hexachloroethane	3.54	117	58879	11637.4411130	ppb	95
20) N-Nitrosodi-n-propylamine	3.46	70	100110	12658.3109219	ppb	93
21) 3&4-Methyl phenol	3.45	107	139627	11358.6276700	ppb	95
25) Nitrobenzene	3.57	77	149196	11645.3460556	ppb	93
26) Isophorone	3.70	82	273139	11884.7047612	ppb	96
27) 2-Nitrophenol	3.76	139	67830	10504.2391718	ppb	81
28) 2,4-Dimethylphenol	3.76	107	131358	10953.2526094	ppb	95
29) bis(2-Chlorethoxy)methane	3.82	93	162553	11062.0210610	ppb	98
30) 2,4-Dichlorophenol	3.89	162	100259	9923.8153739	ppb	95
32) 1,2,4-Trichlorobenzene	3.95	180	112134	9915.5942513	ppb	97
34) Naphthalene	4.00	128	374919m	9533.8516433	ppb	
35) 4-Chloroaniline	4.02	65	50343	11017.8017774	ppb	# 49
36) Hexachloro-1,3-butadiene	4.06	225	66952	10852.4043763	ppb	96
40) 4-Chloro-3-methylphenol	4.32	107	102521	10066.9036815	ppb	91
41) 2-Methylnaphthalene	4.43	142	242446	9461.4504064	ppb	96
42) 1-Methylnaphthalene	4.49	142	232320	9647.4495585	ppb	98
47) Hexachlorocyclopentadiene	4.53	237	49301	6835.0157549	ppb	95
48) 2,4,6-Trichlorophenol	4.61	196	68606	10274.1845518	ppb	90
49) 2,4,5-Trichlorophenol	4.64	196	71338	10265.3745585	ppb	91

(#) = qualifier out of range (m) = manual integration  
 0504B\_03.D S804E04BV.M Thu May 05 16:04:03 2022

Data File : C:\MSDCHEM\1\DATA\050422B\0504B 03.D Vial: 3  
 Acq On : 4 May 2022 8:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 16:03 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
51) Biphenyl	4.73	154	301118	10441.1941443	ppb		99
52) 2-Chloronaphthalene	4.76	162	225125	10228.5696808	ppb		97
53) 2-Nitroaniline	4.82	138	77356	11338.4162347	ppb		92
54) Acenaphthylene	5.05	152	349630	10211.1489350	ppb		99
55) Dimethyl phthalate	4.94	163	241288	10581.7152130	ppb		99
56) 2,6-Dinitrotoluene	4.99	165	57670	10908.4044924	ppb	#	77
57) 3-Nitroaniline	5.11	138	60805	10682.3816714	ppb		93
58) Acenaphthene	5.17	153	225966	10032.0397375	ppb		98
59) 2,4-Dinitrophenol	5.19	184	25739	8991.4846740	ppb	#	1
60) Dibenzofuran	5.29	168	313173	10025.5416474	ppb		96
61) 2,4-Dinitrotoluene	5.27	165	75641	11425.1613528	ppb	#	70
63) 4-Nitrophenol	5.22	139	45267	9627.8896252	ppb	#	76
64) Fluorene	5.54	166	256925	10139.6783842	ppb		97
65) 4-Chlorophenyl-phenylether	5.54	204	121190	10085.5561793	ppb		97
66) Diethyl phthalate	5.44	149	247489	10594.0855044	ppb		99
67) 4-Nitroaniline	5.56	138	65508	12287.5656579	ppb	#	84
68) Azobenzene	5.66	77	297244	12755.6777858	ppb		93
71) 4,6-Dinitro-2-methylphenol	5.58	198	37511	9563.0231518	ppb		99
72) N-Nitrosodiphenylamine	5.62	169	211635	9577.4859602	ppb		97
74) 4-Bromophenyl-phenylether	5.91	248	72523	10112.5929308	ppb	#	81
75) Hexachlorobenzene	5.96	284	77452	9706.0758801	ppb		98
76) n-octadecane	6.15	55	48116	10814.2343337	ppb	#	96
77) Pentachlorophenol	6.12	266	38231	8678.9089734	ppb		98
78) Phenanthrene	6.28	178	384570	10051.4266576	ppb		96
79) Anthracene	6.32	178	388432	10029.9451799	ppb		100
80) Carbazole	6.45	167	353123	9993.7408883	ppb		98
81) Di-n-butyl phthalate	6.71	149	434009	10491.9411679	ppb		98
83) Fluoranthene	7.27	202	378397	9309.6678860	ppb		99
86) Pyrene	7.49	202	390486	10117.3151564	ppb		98
88) Benzylbutyl phthalate	8.22	149	171356	10857.8701556	ppb		93
90) Benzo(a)anthracene	8.99	228	347193	10051.9932243	ppb		98
91) Chrysene	9.05	228	348883	10422.9918589	ppb		99
92) bis(2-Ethylhexyl)phthalate	9.08	149	240106	11045.4381754	ppb		98
93) Di-n-octyl phthalate	10.28	149	361907	10021.6890694	ppb		99
95) Benzo(b)fluoranthene	10.90	252	334061	9424.0897312	ppb		99
96) Benzo(k)fluoranthene	10.96	252	351862	10077.4373458	ppb		96
97) Benzo(a)pyrene	11.55	252	295004	9608.8207390	ppb		94
98) Indeno(1,2,3-cd)pyrene	13.68	276	275571	9135.8130051	ppb		97
99) Dibenz(a,h)anthracene	13.73	278	313847	9762.7192535	ppb		97
100) Benzo(g,h,i)perylene	14.03	276	325162	10356.9766358	ppb		95

(#) = qualifier out of range (m) = manual integration

0504B\_03.D S804E04BV.M Thu May 05 16:04:03 2022

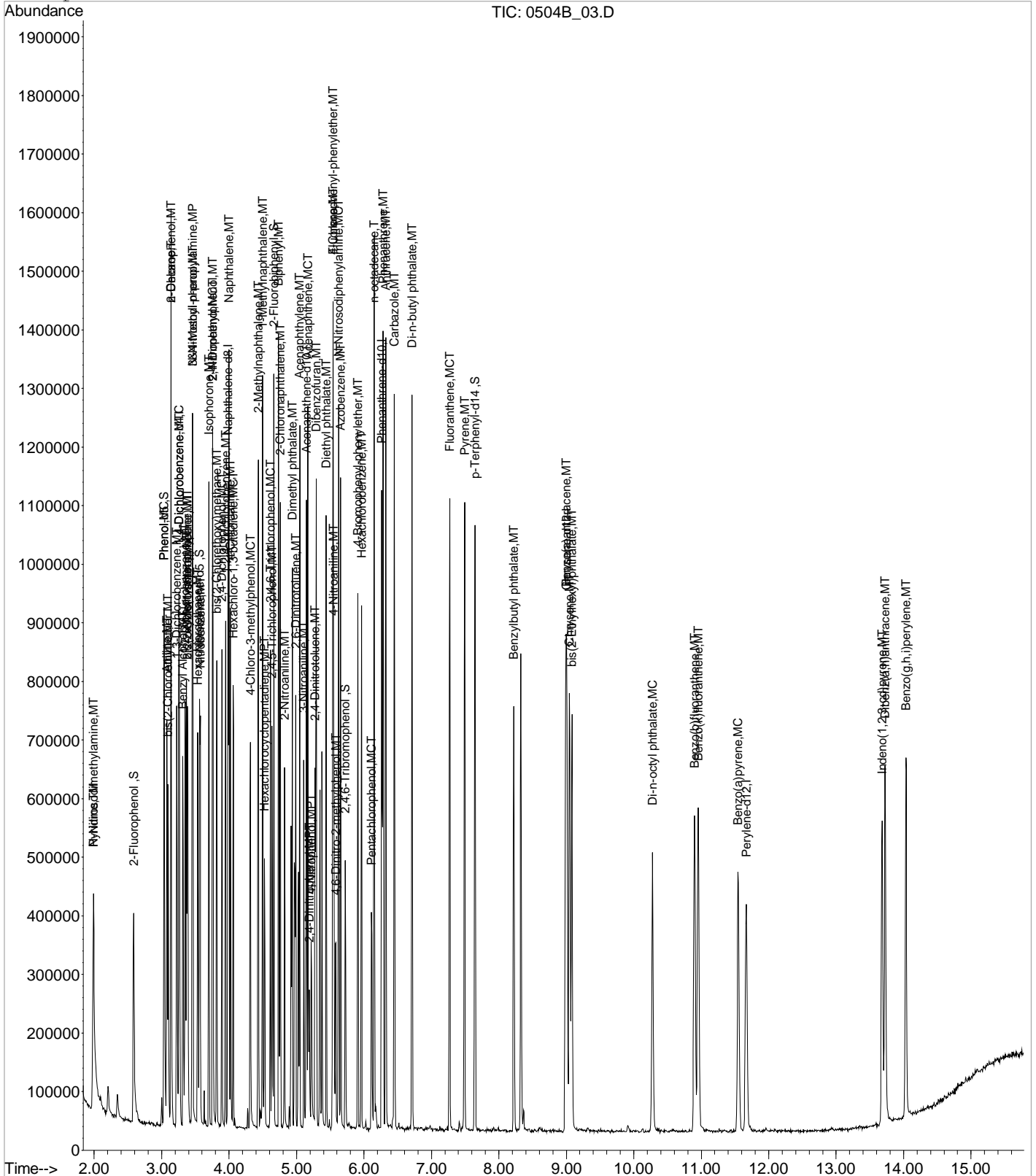
Page 2

Data File : C:\MSDCHEM\1\DATA\050422B\0504B 03.D
Acq On : 4 May 2022 8:09 pm
Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22
Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22
MS Integration Params: RTEINT.P
Quant Time: May 5 16:03 2022

Vial: 3
Operator: 3545
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804E04BV.RES

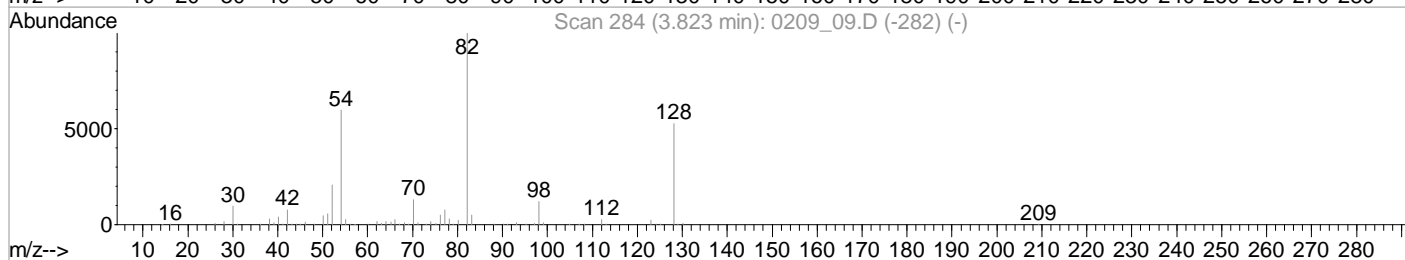
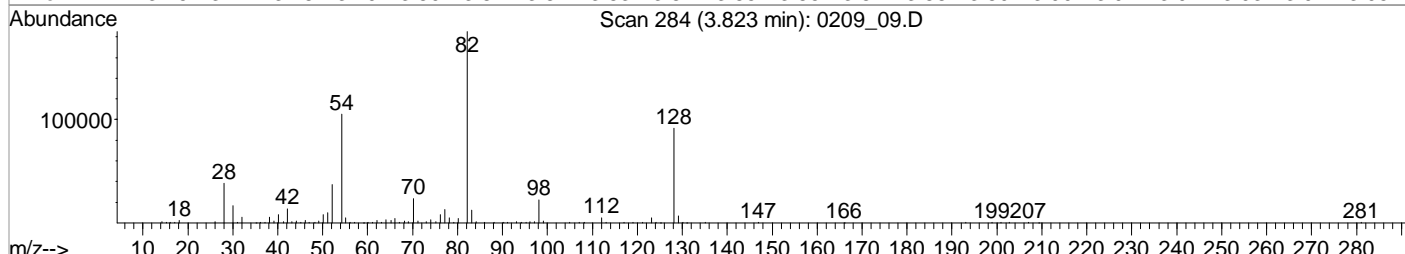
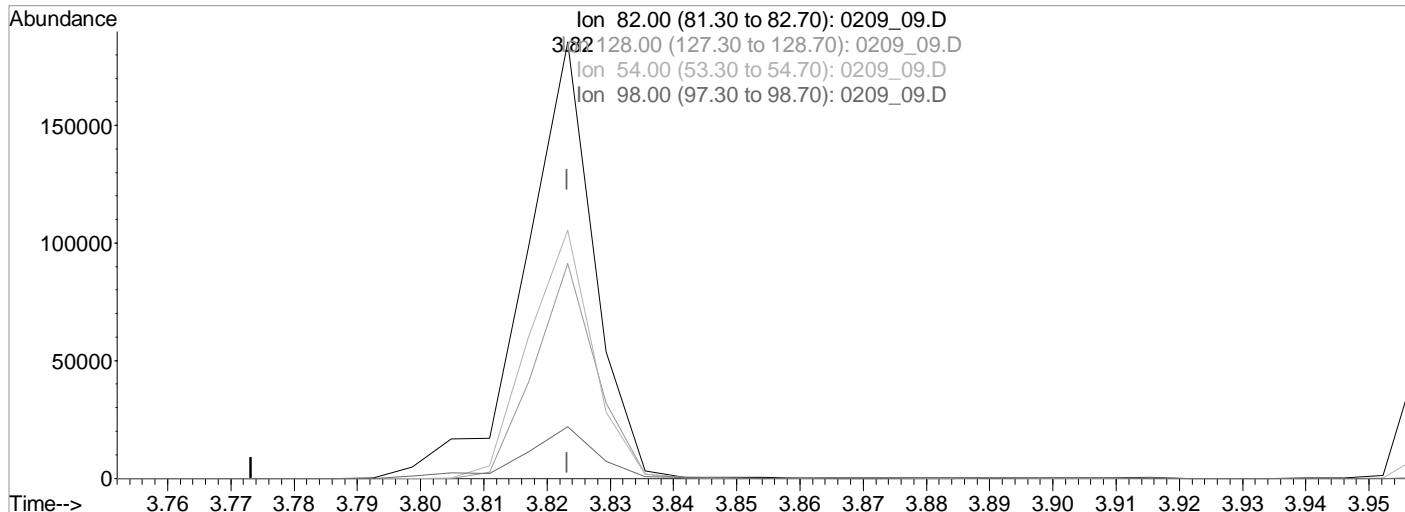
Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)
Title : 8270 BNA
Last Update : Thu May 05 15:59:02 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:46 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_09.D

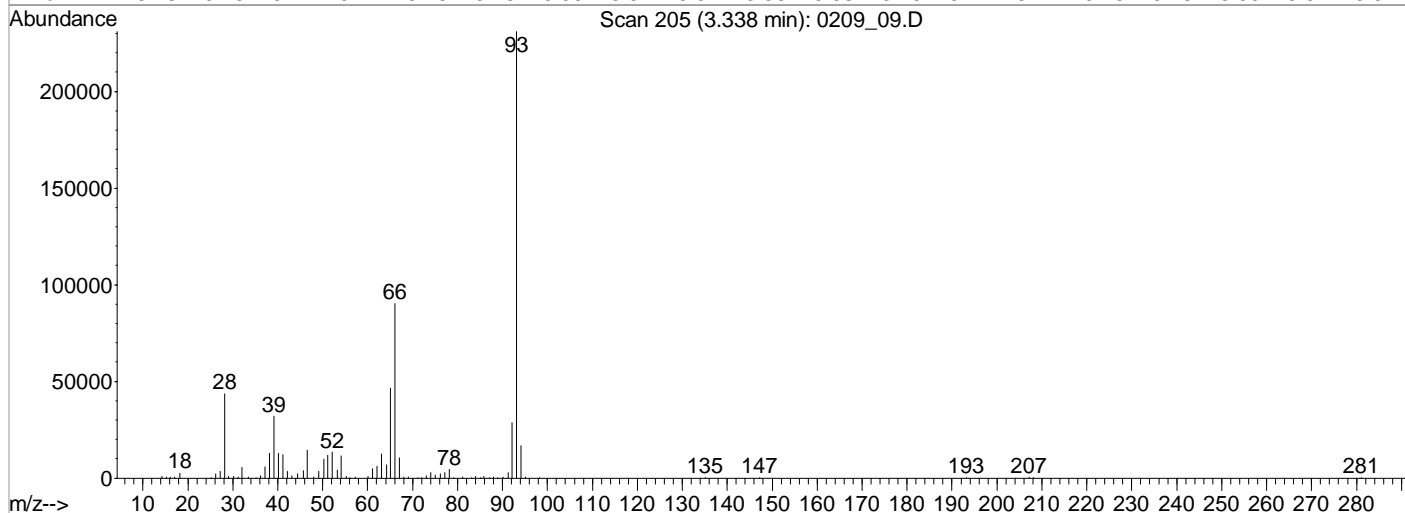
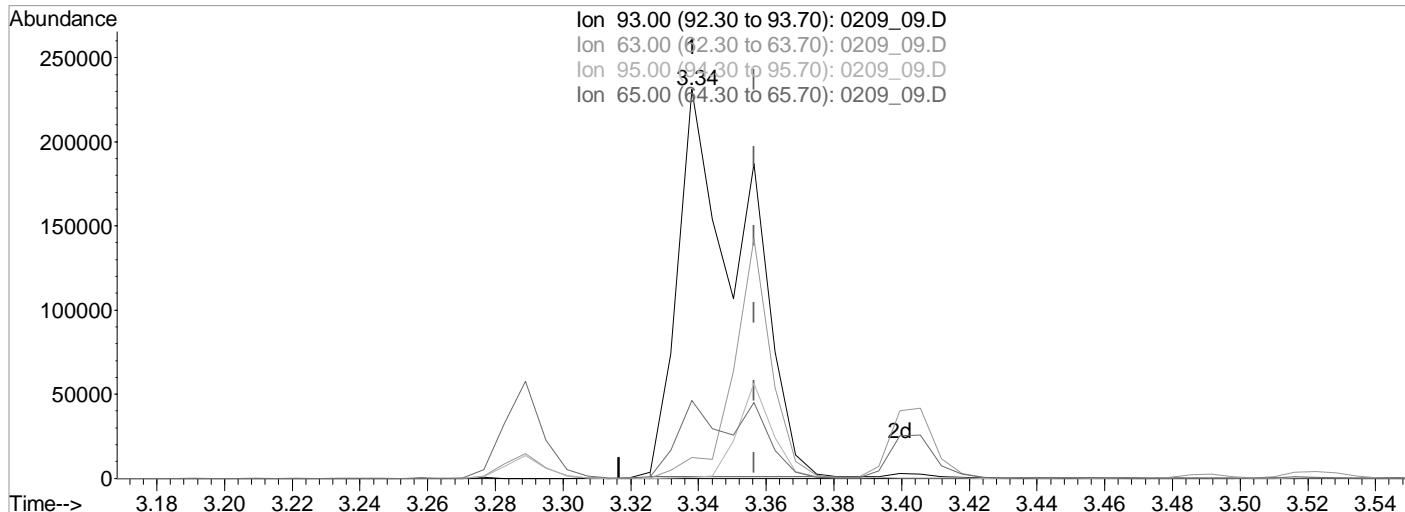
(24) Nitrobenzene-d5 (S)  
 3.82min (0.000) 11153.2092574 ppb  
 Qvalue = 100  
 response 140768

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	49.28
54.00	56.90	56.86
98.00	11.80	11.80

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:49:28 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_09.D

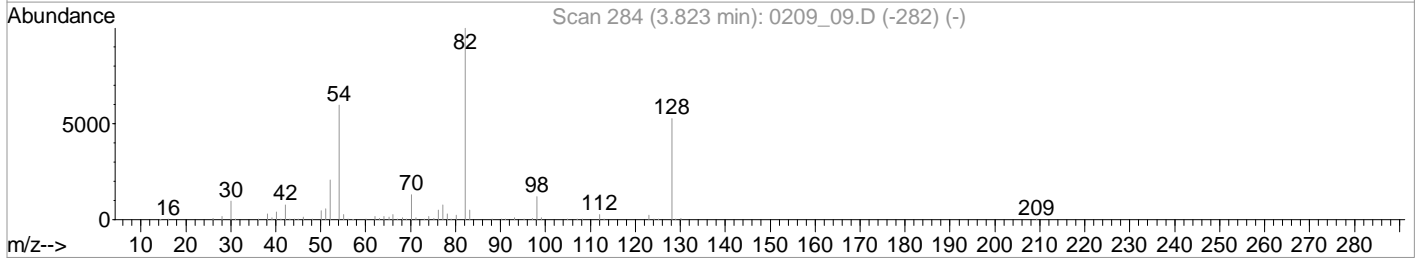
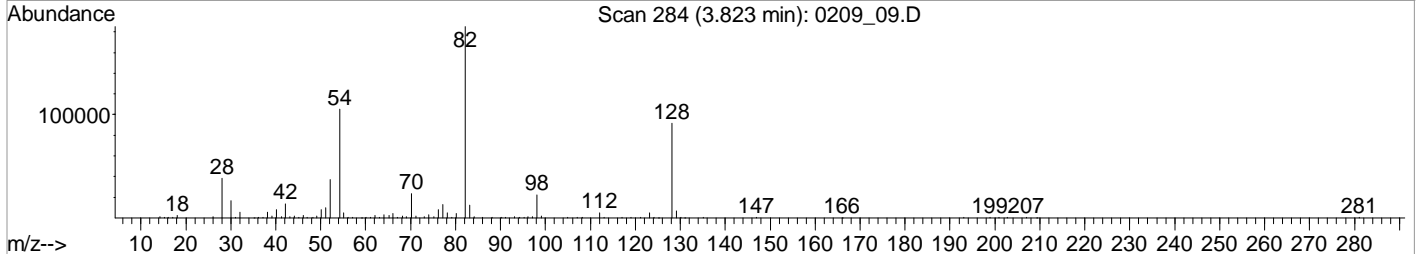
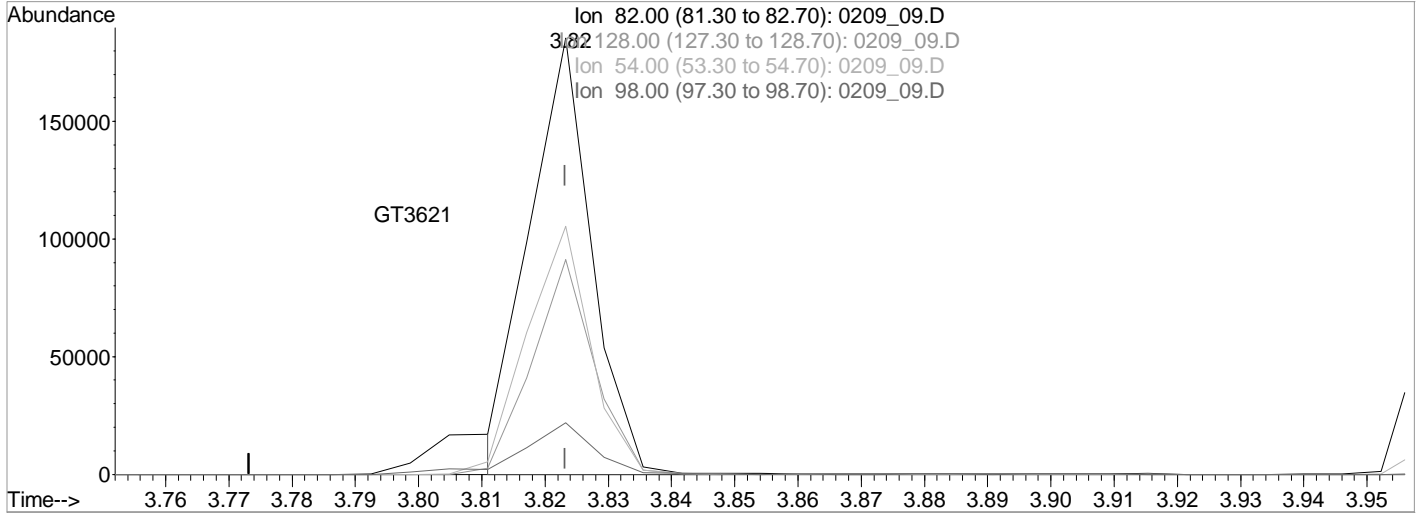
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.018) 29901.8981212 ppb  
 Qvalue = 37  
 response 308767

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.25#
95.00	30.20	0.25#
65.00	24.00	19.97

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_09.D

(24) Nitrobenzene-d5 (S)  
 3.82min (0.000) 9983.3614604 ppb m

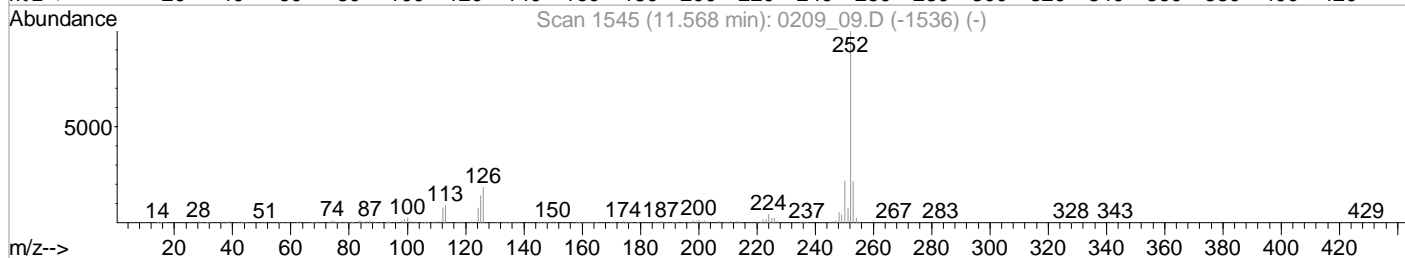
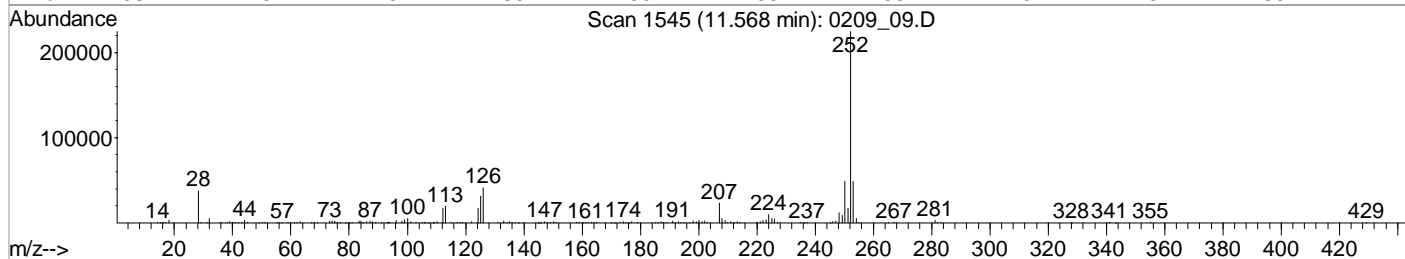
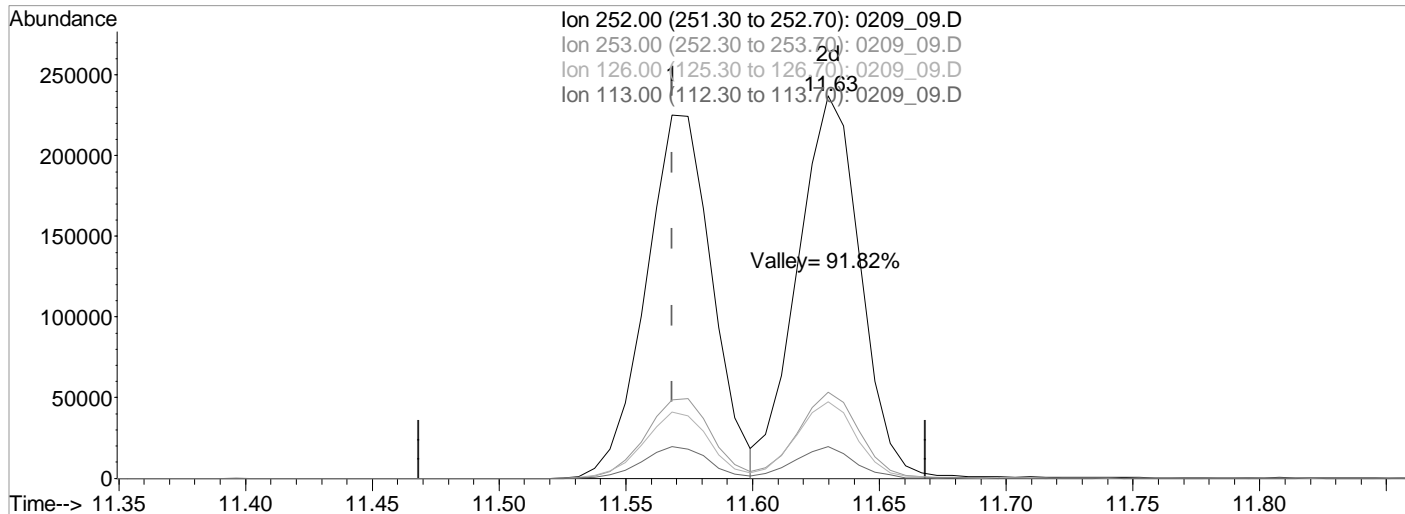
response 126003

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	49.28
54.00	56.90	56.86
98.00	11.80	11.80

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_09.D

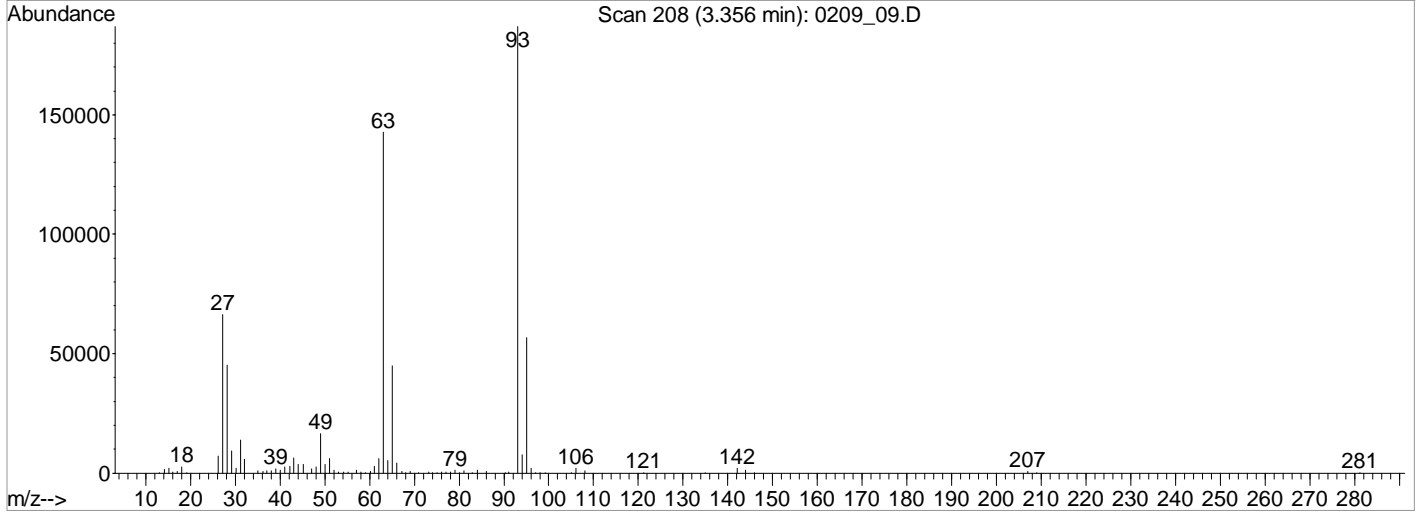
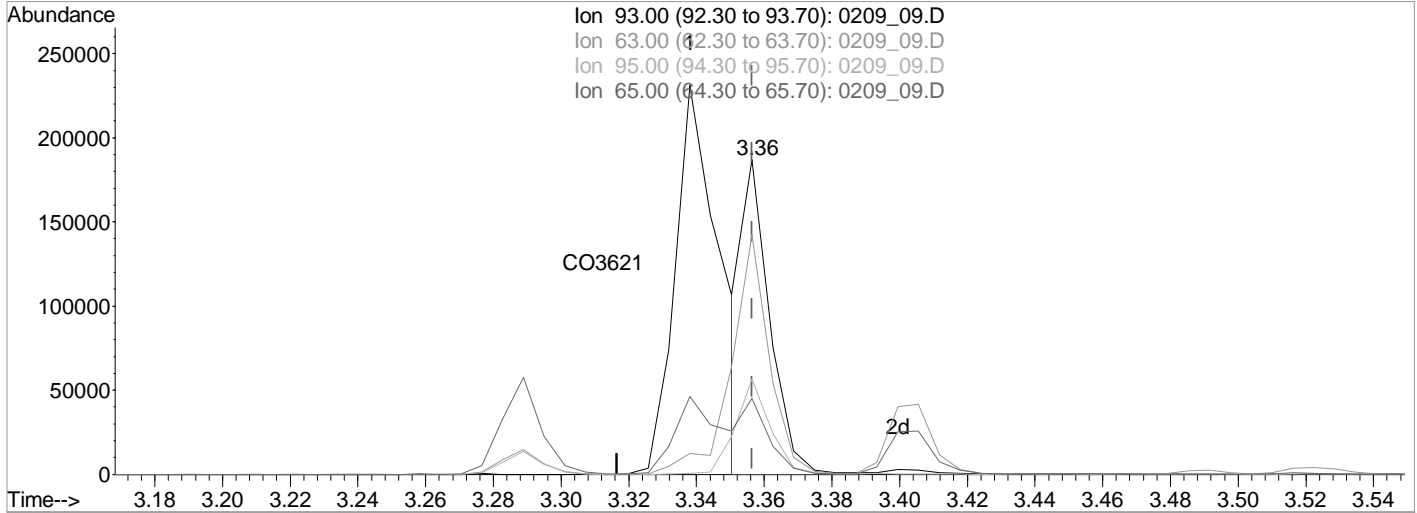
(95) Benzo(b)fluoranthene (MT)  
 11.57min (0.000) 10000.0000000 ppb  
 Qvalue = 100  
 response 408147

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.58
126.00	18.30	18.28
113.00	8.80	8.83

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:51 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:49:28 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_09.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (0.000) 10000.0000000 ppb m

response 103260

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	76.22
95.00	30.20	30.24
65.00	24.00	24.04



Data File : C:\MSDCHEM\1\DATA\020922\0209 10.D Vial: 7  
 Acq On : 9 Feb 2022 12:07 pm Operator: 917  
 Sample : STD SVMS 20K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:56 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:33:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	86208	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	347138	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	183569	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	330840	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	285073	8000.00	ppb	0.01
94) Perylene-d12	12.39	264	302743	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	272239	18661.6543157	ppb	0.00
Spiked Amount 666.000			Recovery = 2802.05%			
7) Phenol-d5	3.28	99	324364	18496.6942819	ppb	0.00
Spiked Amount 666.000			Recovery = 2777.28%			
24) Nitrobenzene-d5	3.82	82	295460	19368.4291281	ppb	0.00
Spiked Amount 333.000			Recovery = 5816.35%			
50) 2-Fluorobiphenyl	4.95	172	586401	17903.9561881	ppb	0.00
Spiked Amount 333.000			Recovery = 5376.56%			
73) 2,4,6-Tribromophenol	6.03	330	77136	22666.6083724	ppb	0.00
Spiked Amount 666.000			Recovery = 3403.39%			
87) p-Terphenyl-d14	8.04	244	789163	20272.1352079	ppb	0.00
Spiked Amount 333.000			Recovery = 6087.73%			

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.30	79	261928	19542.3134867	ppb	96
3) N-Nitrosodimethylamine	2.29	42	136057	17864.3509858	ppb	95
5) Aniline	3.34	66	154541	18585.4791613	ppb	96
6) bis(2-Chloroethyl)ether	3.36	93	232095m	9847.6121887	ppb	
8) Phenol	3.29	94	342395	18553.0677715	ppb	100
10) 2-Chlorophenol	3.41	128	272840	18496.2866686	ppb	99
11) n-Decane	3.40	41	157445	17389.9510473	ppb	99
12) 1,3-Dichlorobenzene	3.49	146	306344	18199.5524043	ppb	98
13) 1,4-Dichlorobenzene	3.53	146	320047	18479.3195352	ppb	99
14) Benzyl Alcohol	3.58	79	215987	19320.0163386	ppb	100
15) 1,2-Dichlorobenzene	3.61	146	293093	18376.6949746	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	96264	17046.2821911	ppb	# 60
17) 2,2-oxybis(1-chloropropane	3.65	121	96264	17046.2821911	ppb	# 60
18) 2-Methylphenol	3.62	108	248477	18585.3987464	ppb	98
19) Hexachloroethane	3.80	117	117446	18955.2970174	ppb	99
20) N-Nitrosodi-n-propylamine	3.72	70	181180	18494.1786409	ppb	94
21) 3&4-Methyl phenol	3.71	107	282323	18610.6871902	ppb	98
25) Nitrobenzene	3.84	77	277783	18685.5725230	ppb	99
26) Isophorone	3.97	82	502937	19075.1991737	ppb	92
27) 2-Nitrophenol	4.02	139	143139	20204.6602031	ppb	98
28) 2,4-Dimethylphenol	4.01	107	257480	18549.1054427	ppb	100
29) bis(2-Chlorethoxy)methane	4.08	93	312005	17922.1424470	ppb	99
30) 2,4-Dichlorophenol	4.15	162	221280	19202.5171699	ppb	97
32) 1,2,4-Trichlorobenzene	4.22	180	241090	18087.6469240	ppb	98
34) Naphthalene	4.27	128	844829	18259.7283814	ppb	100
35) 4-Chloroaniline	4.29	65	98492	18538.6186811	ppb	96
36) Hexachloro-1,3-butadiene	4.34	225	131833	18272.6824704	ppb	96
40) 4-Chloro-3-methylphenol	4.58	107	224609	19504.8371308	ppb	97
41) 2-Methylnaphthalene	4.71	142	542000	18003.1584047	ppb	100
42) 1-Methylnaphthalene	4.78	142	513619	18228.4010365	ppb	100
47) Hexachlorocyclopentadiene	4.81	237	168652	19525.3320136	ppb	98
48) 2,4,6-Trichlorophenol	4.89	196	150293	18865.1085833	ppb	99
49) 2,4,5-Trichlorophenol	4.91	196	167246	19927.2482835	ppb	97

(#) = qualifier out of range (m) = manual integration

0209\_10.D S804B09V.M Mon Feb 14 15:57:34 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 10.D Vial: 7  
 Acq On : 9 Feb 2022 12:07 pm Operator: 917  
 Sample : STD SVMS 20K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:56 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:33:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	647595	17888.5309328	ppb	100
52) 2-Chloronaphthalene	5.05	162	500906	18068.1297005	ppb	99
53) 2-Nitroaniline	5.11	138	166348	21452.1290308	ppb	100
54) Acenaphthylene	5.34	152	788960	18919.6543485	ppb	100
55) Dimethyl phthalate	5.22	163	534597	19479.6555890	ppb	95
56) 2,6-Dinitrotoluene	5.27	165	129766	21567.5036117	ppb #	79
57) 3-Nitroaniline	5.40	138	140498	22117.3384802	ppb #	85
58) Acenaphthene	5.46	153	508839	18134.1011029	ppb	99
59) 2,4-Dinitrophenol	5.47	184	62248	30503.8465152	ppb #	8
60) Dibenzofuran	5.59	168	713375	18240.2762900	ppb	99
61) 2,4-Dinitrotoluene	5.56	165	167911	23398.2738002	ppb	94
63) 4-Nitrophenol	5.49	139	116283	22354.0769151	ppb	90
64) Fluorene	5.84	166	578867	18529.5764942	ppb	98
65) 4-Chlorophenyl-phenylether	5.83	204	271726	17962.4414075	ppb	98
66) Diethyl phthalate	5.73	149	540003	19010.0642596	ppb	100
67) 4-Nitroaniline	5.84	138	139219	21654.3738027	ppb	98
68) Azobenzene	5.95	77	538003	18780.1955363	ppb	100
71) 4,6-Dinitro-2-methylphenol	5.86	198	86560	28504.1559685	ppb	91
72) N-Nitrosodiphenylamine	5.92	169	483553	19435.6144222	ppb	99
74) 4-Bromophenyl-phenylether	6.21	248	158468	19591.0940675	ppb	99
75) Hexachlorobenzene	6.26	284	171080	18685.5046189	ppb	98
76) n-octadecane	6.45	55	93724	17633.1560311	ppb	98
77) Pentachlorophenol	6.41	266	103486	24396.1140361	ppb	98
78) Phenanthrene	6.59	178	834889	18436.2632779	ppb	99
79) Anthracene	6.63	178	861133	19130.3122795	ppb	100
80) Carbazole	6.75	167	789748	18989.7533321	ppb	100
81) Di-n-butyl phthalate	7.02	149	923993	20402.1772648	ppb	100
83) Fluoranthene	7.64	202	879416	18984.1216772	ppb	100
86) Pyrene	7.88	202	923400	19934.4915246	ppb	99
88) Benzylbutyl phthalate	8.68	149	392900	21875.2708207	ppb	95
90) Benzo(a)anthracene	9.52	228	814305	19407.2635003	ppb	99
91) Chrysene	9.58	228	783536	19067.5727386	ppb	98
92) bis(2-Ethylhexyl)phthalate	9.62	149	543287	22108.5689402	ppb	99
93) Di-n-octyl phthalate	10.92	149	917409	23020.5211479	ppb	99
95) Benzo(b)fluoranthene	11.57	252	833715	18841.8209418	ppb	100
96) Benzo(k)fluoranthene	11.64	252	832949	19248.9008472	ppb	99
97) Benzo(a)pyrene	12.26	252	744155	19933.4238986	ppb	99
98) Indeno(1,2,3-cd)pyrene	14.20	276	743921	19873.7191700	ppb	97
99) Dibenz(a,h)anthracene	14.25	278	777012m	19311.3833174	ppb	
100) Benzo(g,h,i)perylene	14.53	276	761773	18997.7471488	ppb	99

(#) = qualifier out of range (m) = manual integration

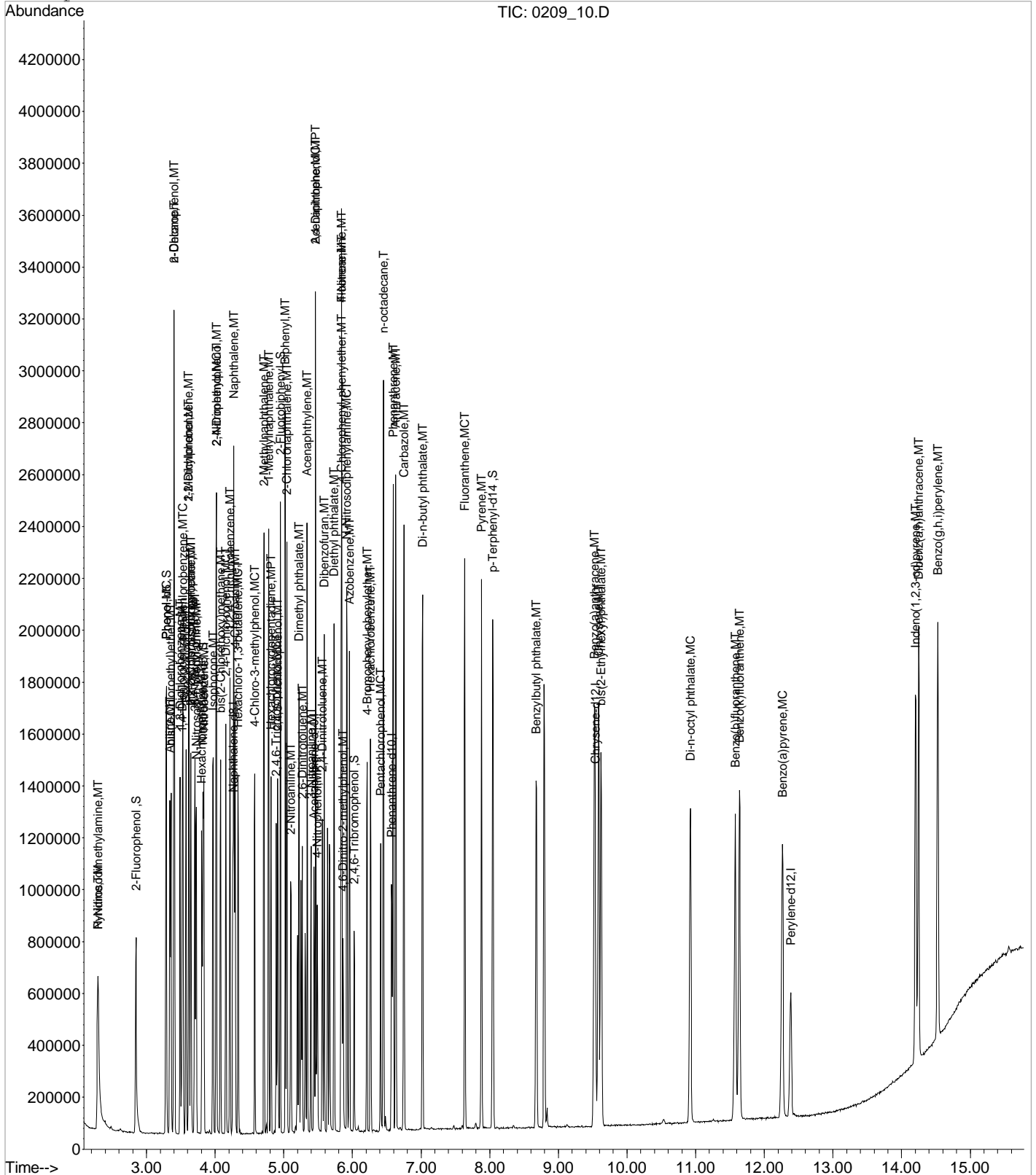
0209\_10.D S804B09V.M Mon Feb 14 15:57:34 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 10.D
Acq On : 9 Feb 2022 12:07 pm
Sample : STD SVMS 20K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:56 2022

Vial: 7
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:53:30 2022
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:00 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	86467	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	338831	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	181617	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	323775	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	286155	8000.00	ppb	0.01
94) Perylene-d12	12.39	264	297513	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	396904	27493.7551409	ppb	0.00
Spiked Amount	666.000		Recovery	= 4128.19%		
7) Phenol-d5	3.28	99	479003	27648.7325708	ppb	0.00
Spiked Amount	666.000		Recovery	= 4151.46%		
24) Nitrobenzene-d5	3.82	82	437748	29586.2873557	ppb	0.00
Spiked Amount	333.000		Recovery	= 8884.77%		
50) 2-Fluorobiphenyl	4.95	172	859895	27104.5580823	ppb	0.00
Spiked Amount	333.000		Recovery	= 8139.51%		
73) 2,4,6-Tribromophenol	6.03	330	114484	33482.6410351	ppb	0.00
Spiked Amount	666.000		Recovery	= 5027.42%		
87) p-Terphenyl-d14	8.05	244	1170779	29880.1096870	ppb	0.00
Spiked Amount	333.000		Recovery	= 8973.01%		

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.30	79	396351	29618.5269538	ppb	94
3) N-Nitrosodimethylamine	2.29	42	198133	26503.0481554	ppb	92
5) Aniline	3.34	66	225992	27485.7338400	ppb	95
6) bis(2-Chloroethyl)ether	3.36	93	361980m	14180.1077032	ppb	
8) Phenol	3.29	94	503929	27623.8813249	ppb	98
10) 2-Chlorophenol	3.41	128	404850	27781.0061873	ppb	99
11) n-Decane	3.40	41	230021	26008.7813892	ppb	100
12) 1,3-Dichlorobenzene	3.49	146	453285	27340.7451256	ppb	97
13) 1,4-Dichlorobenzene	3.53	146	467492	27327.4140627	ppb	99
14) Benzyl Alcohol	3.58	79	321645	28881.3226194	ppb	100
15) 1,2-Dichlorobenzene	3.61	146	429368	27283.2803134	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	143314	26071.8989188	ppb	# 61
17) 2,2-oxybis(1-chloropropane	3.65	121	143314	26071.8989188	ppb	# 61
18) 2-Methylphenol	3.62	108	367051	27764.9362732	ppb	99
19) Hexachloroethane	3.80	117	171733	27925.7118393	ppb	97
20) N-Nitrosodi-n-propylamine	3.72	70	265139	27395.8653183	ppb	97
21) 3&4-Methyl phenol	3.71	107	417216	27806.7541719	ppb	98
25) Nitrobenzene	3.84	77	406583	28393.2636833	ppb	99
26) Isophorone	3.97	82	744063	29182.2832651	ppb	95
27) 2-Nitrophenol	4.02	139	215234	31062.4386869	ppb	97
28) 2,4-Dimethylphenol	4.02	107	384614	28805.1997458	ppb	95
29) bis(2-Chlorethoxy)methane	4.08	93	456276	27421.6832015	ppb	98
30) 2,4-Dichlorophenol	4.15	162	325979	29214.7349032	ppb	95
32) 1,2,4-Trichlorobenzene	4.22	180	348647	27320.8062112	ppb	98
34) Naphthalene	4.27	128	1231112	27743.8370133	ppb	100
35) 4-Chloroaniline	4.29	65	145575	28488.9054183	ppb	98
36) Hexachloro-1,3-butadiene	4.34	225	192487	27814.1495195	ppb	96
40) 4-Chloro-3-methylphenol	4.58	107	332331	29713.9819067	ppb	96
41) 2-Methylnaphthalene	4.71	142	798214	27717.0946035	ppb	99
42) 1-Methylnaphthalene	4.78	142	749807	27754.8528533	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	252254	29658.8428408	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	239963	30793.8957639	ppb	99
49) 2,4,5-Trichlorophenol	4.92	196	233799	28176.8965672	ppb	90

(#) = qualifier out of range (m) = manual integration

0209\_11.D S804B09V.M Mon Feb 14 16:00:15 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:00 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

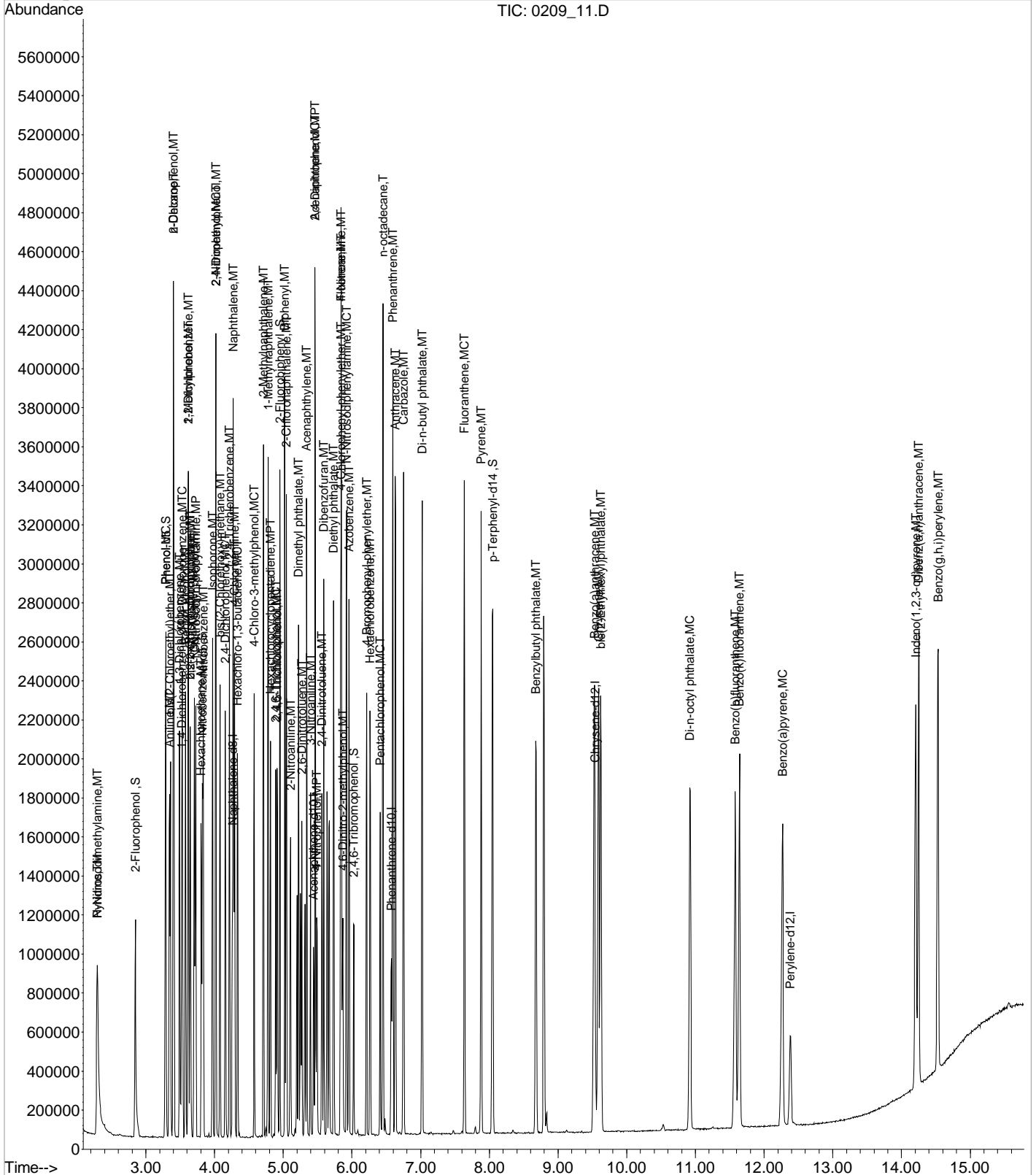
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
51) Biphenyl	5.02	154	954298	27218.6284076	ppb		100
52) 2-Chloronaphthalene	5.05	162	729917	27135.9728440	ppb		99
53) 2-Nitroaniline	5.11	138	252000	32376.8830601	ppb		99
54) Acenaphthylene	5.34	152	1177864	28861.1488889	ppb		100
55) Dimethyl phthalate	5.22	163	798035	29545.0865909	ppb		98
56) 2,6-Dinitrotoluene	5.27	165	195650	32359.8783339	ppb		87
57) 3-Nitroaniline	5.40	138	214569	33432.8235967	ppb		92
58) Acenaphthene	5.46	153	761361	27946.6119578	ppb		100
59) 2,4-Dinitrophenol	5.47	184	103583	46428.3381283	ppb	#	5
60) Dibenzofuran	5.59	168	1040729	27378.1723117	ppb		100
61) 2,4-Dinitrotoluene	5.56	165	250004	34055.0234732	ppb		91
63) 4-Nitrophenol	5.49	139	179386	34053.8922654	ppb		94
64) Fluorene	5.84	166	862949	28336.6208660	ppb		98
65) 4-Chlorophenyl-phenylether	5.83	204	395130	26949.9161147	ppb		98
66) Diethyl phthalate	5.73	149	813472	29234.3554715	ppb		99
67) 4-Nitroaniline	5.85	138	203025	31398.8262569	ppb		98
68) Azobenzene	5.95	77	792154	28294.2375148	ppb		99
71) 4,6-Dinitro-2-methylphenol	5.87	198	135786	42108.9352390	ppb		92
72) N-Nitrosodiphenylamine	5.92	169	724399	29920.2193573	ppb		99
74) 4-Bromophenyl-phenylether	6.21	248	234282	29717.3604968	ppb		98
75) Hexachlorobenzene	6.27	284	257996	29176.9503169	ppb		98
76) n-octadecane	6.45	55	136953	26966.7219366	ppb		98
77) Pentachlorophenol	6.41	266	156898	36203.1890934	ppb		96
78) Phenanthrene	6.59	178	1222718	28027.8670594	ppb		99
79) Anthracene	6.64	178	1260001	28852.9977991	ppb		100
80) Carbazole	6.75	167	1111930	27598.9585677	ppb		99
81) Di-n-butyl phthalate	7.02	149	1387515	31180.0704196	ppb		100
83) Fluoranthene	7.64	202	1317288	29355.2678784	ppb		100
86) Pyrene	7.88	202	1371296	29511.1301678	ppb		99
88) Benzylbutyl phthalate	8.68	149	589200	32078.9480949	ppb		96
90) Benzo(a)anthracene	9.53	228	1211731	28941.4341701	ppb		99
91) Chrysene	9.59	228	1161595	28425.9125421	ppb		99
92) bis(2-Ethylhexyl)phthalate	9.62	149	821035	32597.5941135	ppb		99
93) Di-n-octyl phthalate	10.92	149	1390793	33747.8146961	ppb		99
95) Benzo(b)fluoranthene	11.58	252	1234766	28728.7906567	ppb		99
96) Benzo(k)fluoranthene	11.64	252	1230724	29160.2102659	ppb		98
97) Benzo(a)pyrene	12.27	252	1103829	30107.7078810	ppb		99
98) Indeno(1,2,3-cd)pyrene	14.21	276	1064818	28983.0879255	ppb		98
99) Dibenz(a,h)anthracene	14.25	278	1133383m	28860.8413210	ppb		
100) Benzo(g,h,i)perylene	14.53	276	1087164	27868.5544106	ppb		94

(#) = qualifier out of range (m) = manual integration

0209\_11.D S804B09V.M Mon Feb 14 16:00:15 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8
Acq On : 9 Feb 2022 12:27 pm Operator: 917
Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 14 16:00 2022 Quant Results File: S804B09V.RES

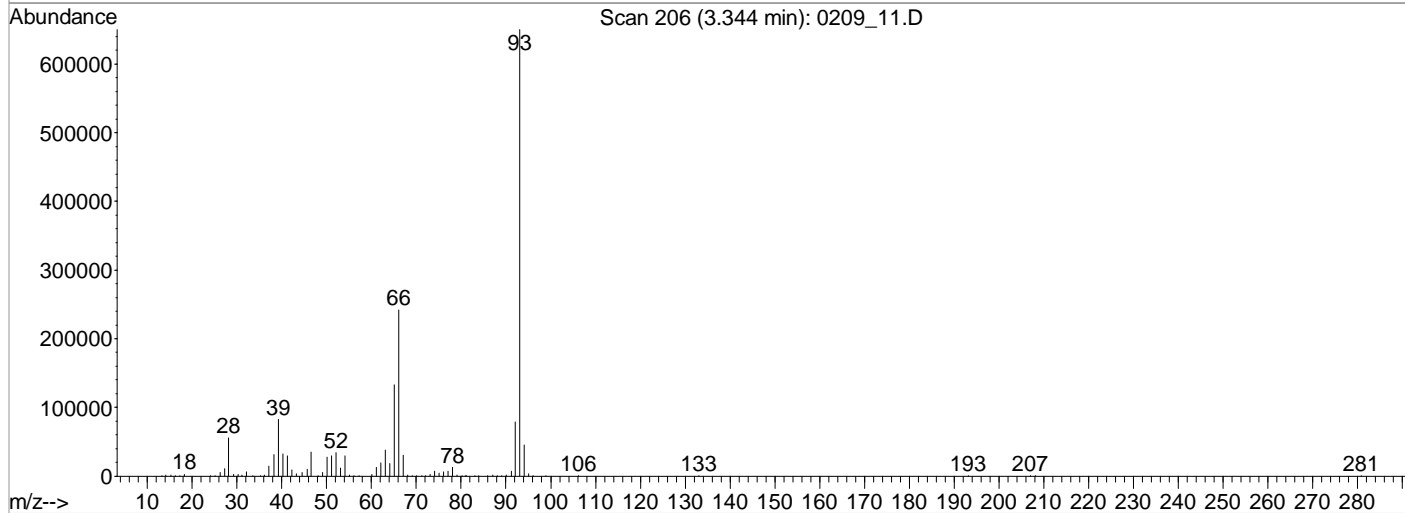
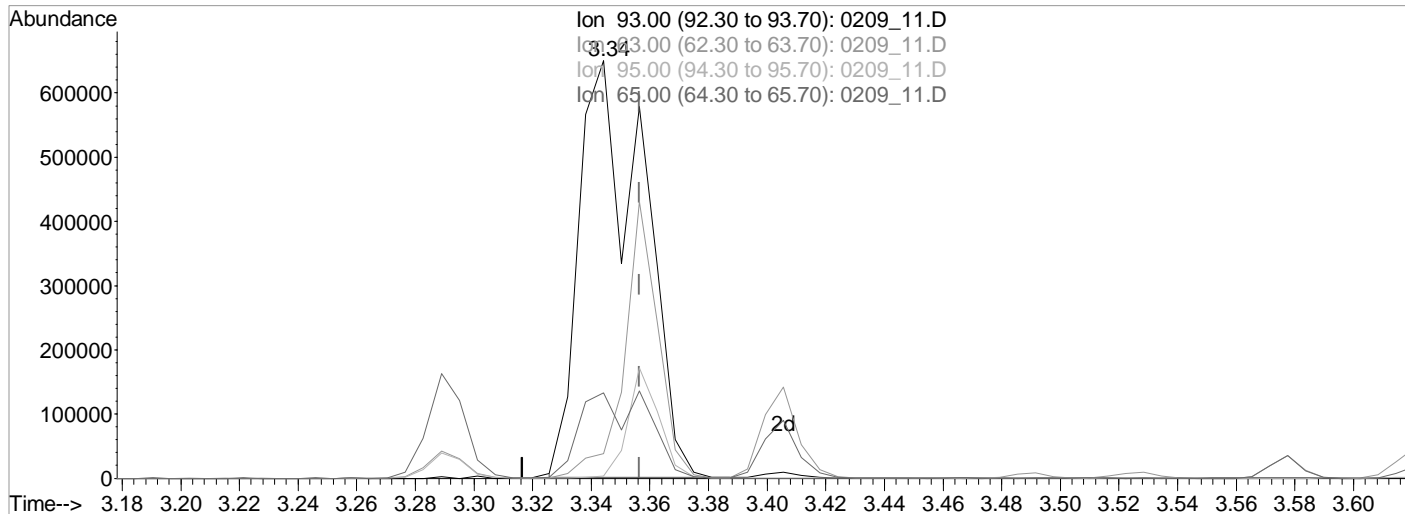
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:58:05 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:41 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

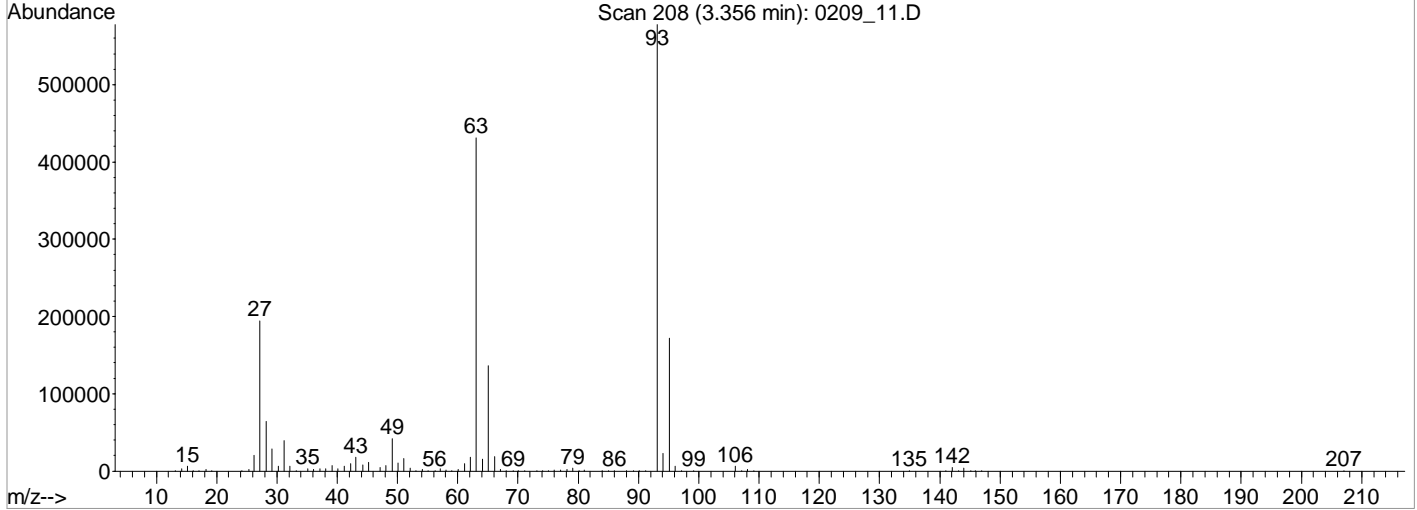
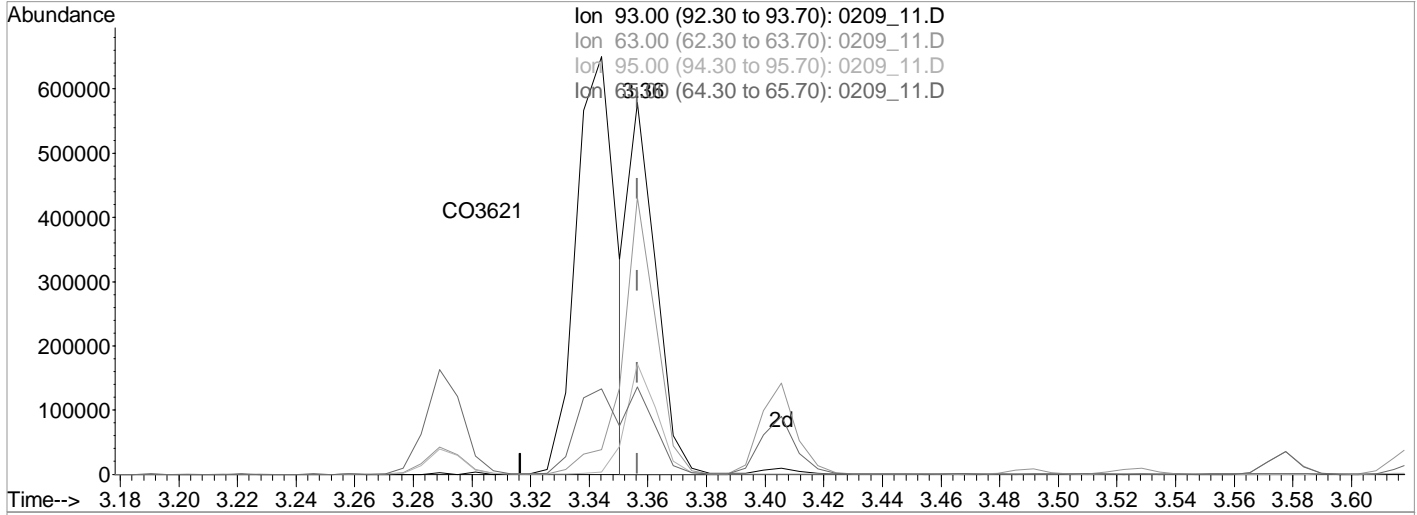
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 38212.7225291 ppb  
 Qvalue = 38  
 response 975468

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.77#
95.00	30.20	0.50#
65.00	24.00	20.39

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:41 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 38212.7225291 ppb  
 Qvalue = 38  
 response 975468

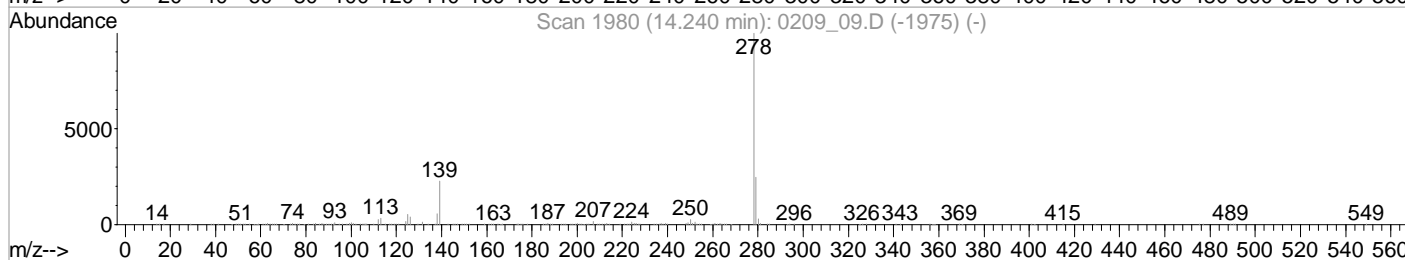
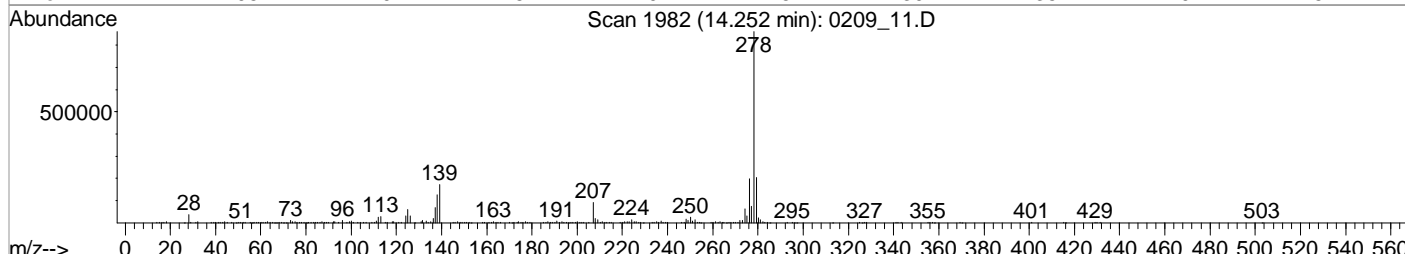
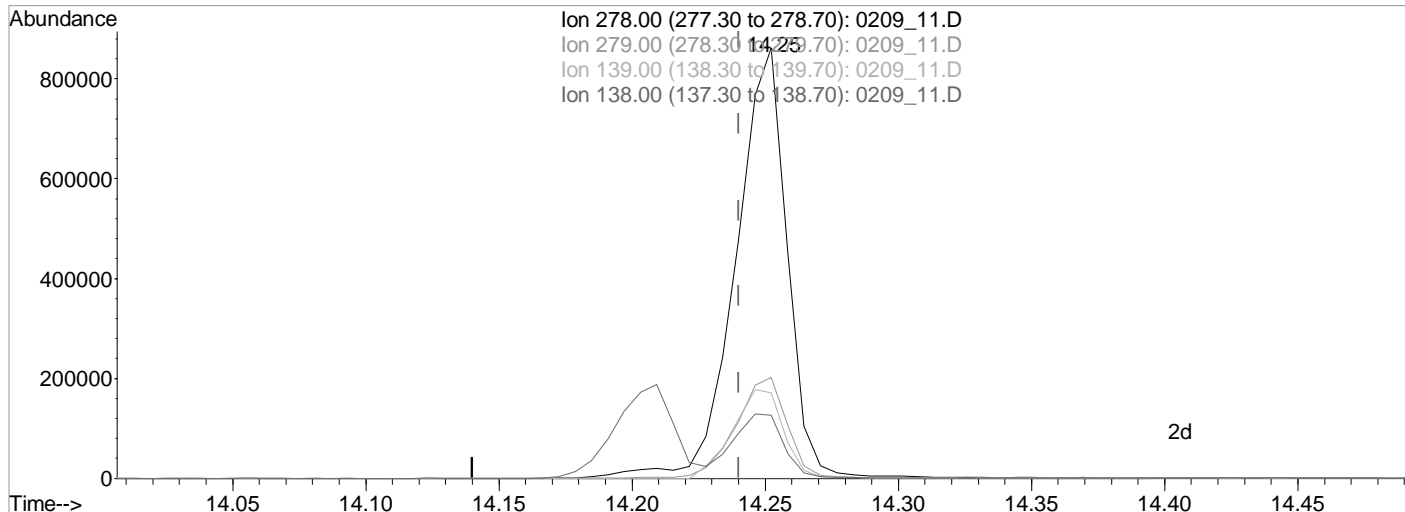
Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.77#
95.00	30.20	0.50#
65.00	24.00	20.39



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:41 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

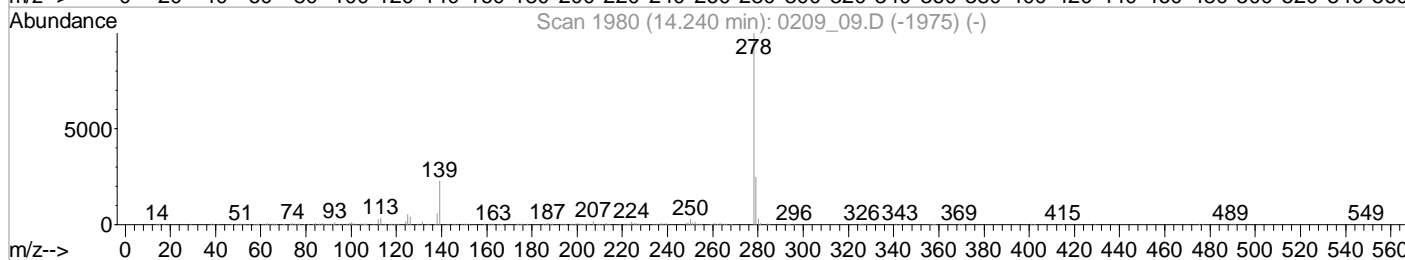
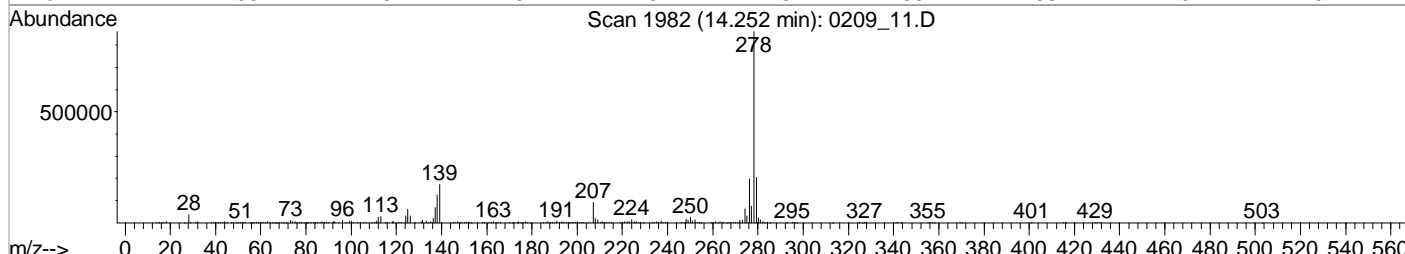
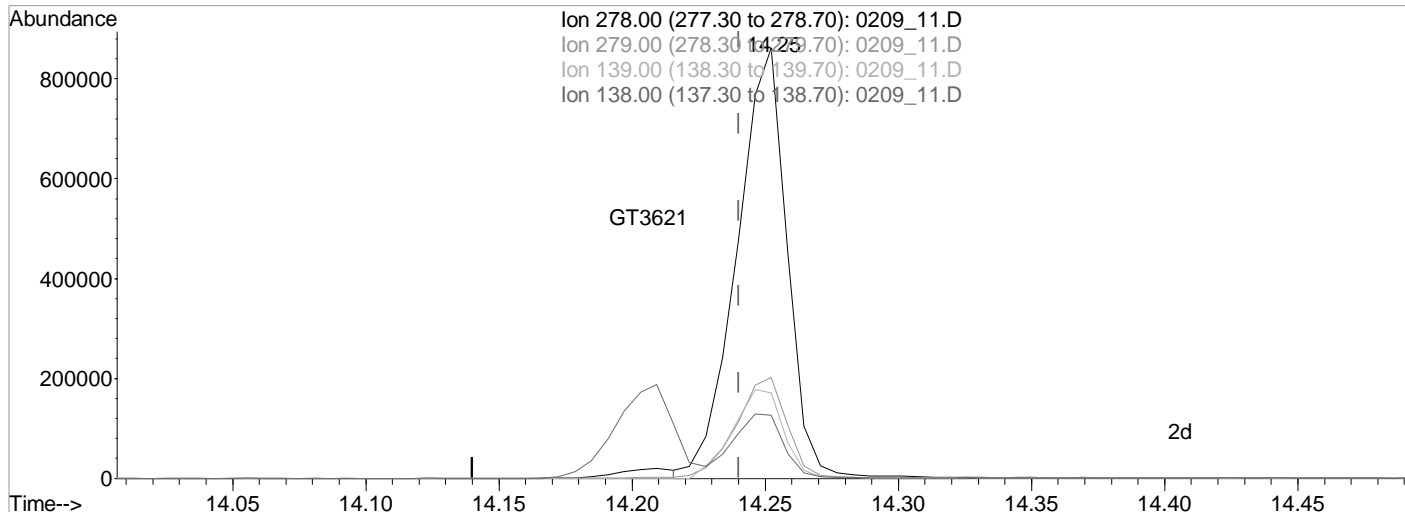
(99) Dibenz(a,h)anthracene (MT)  
 14.25min (+0.012) 29724.9225085 ppb  
 Qvalue = 96  
 response 1167316

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.43
139.00	22.10	19.81
138.00	16.70	14.55

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:46 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

(99) Dibenz(a,h)anthracene (MT)  
 14.25min (+0.012) 28882.0021811 ppb m

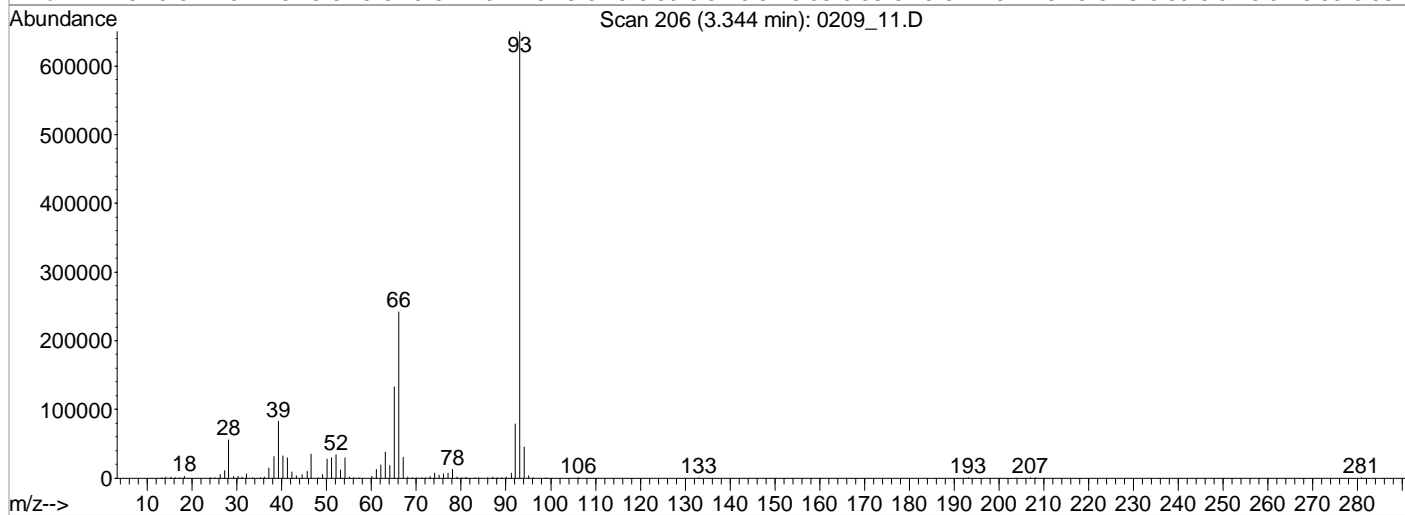
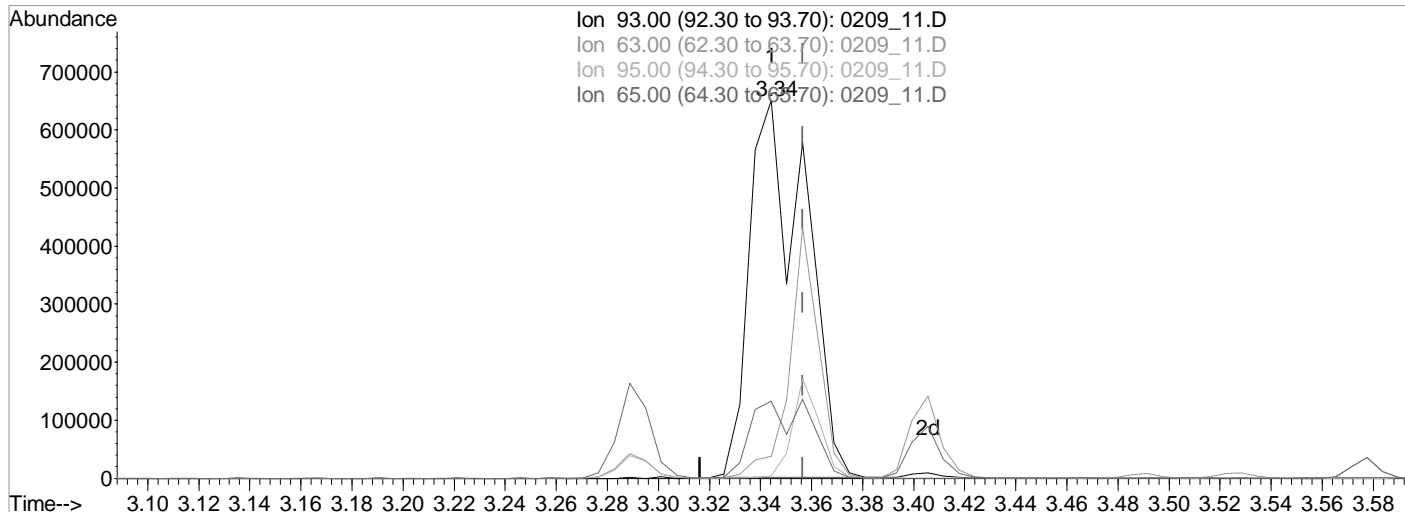
response 1134214

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.46
139.00	22.10	19.84
138.00	16.70	14.59

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:46 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:58:05 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

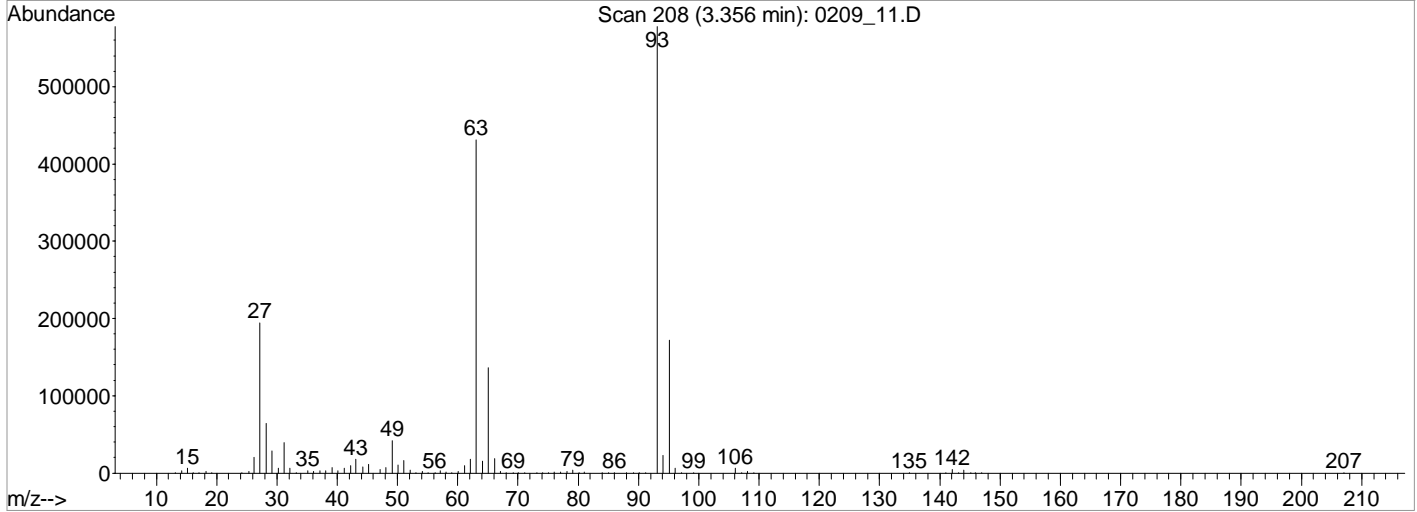
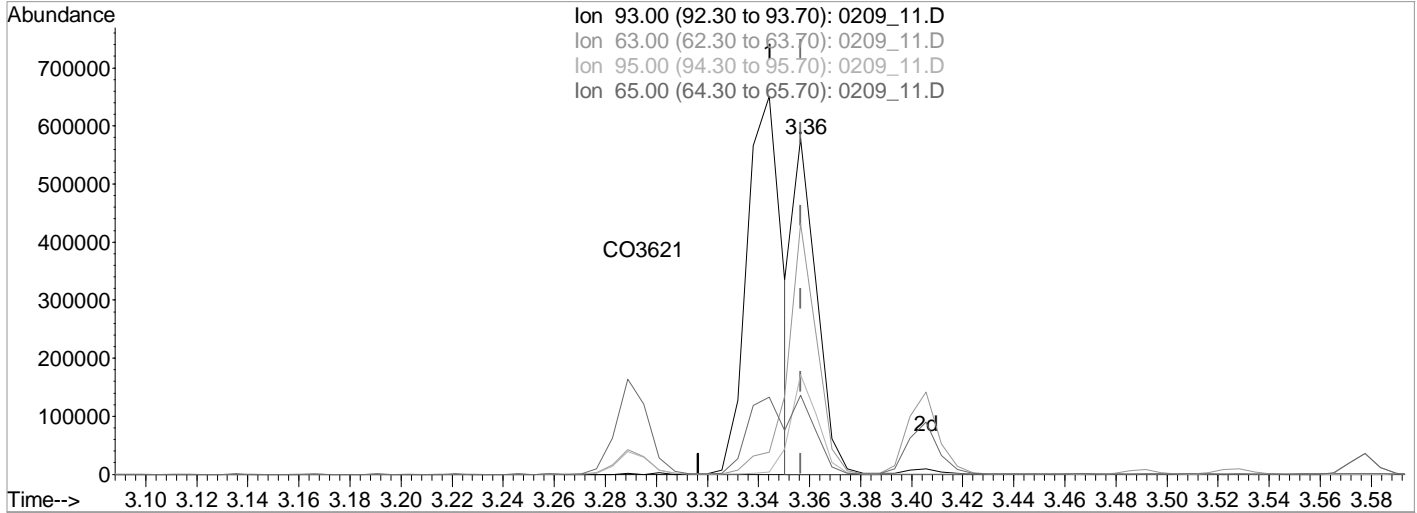
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 38212.7225291 ppb  
 Qvalue = 38  
 response 975468

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.77#
95.00	30.20	0.50#
65.00	24.00	20.39

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:59 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:58:05 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (-0.000) 14180.1077032 ppb m

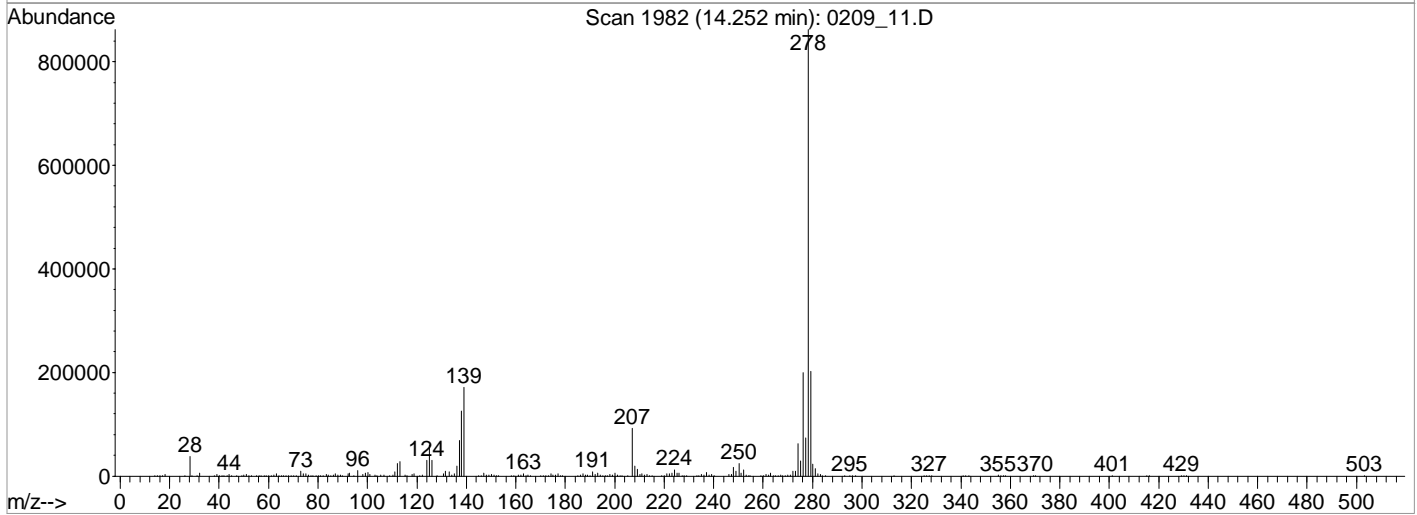
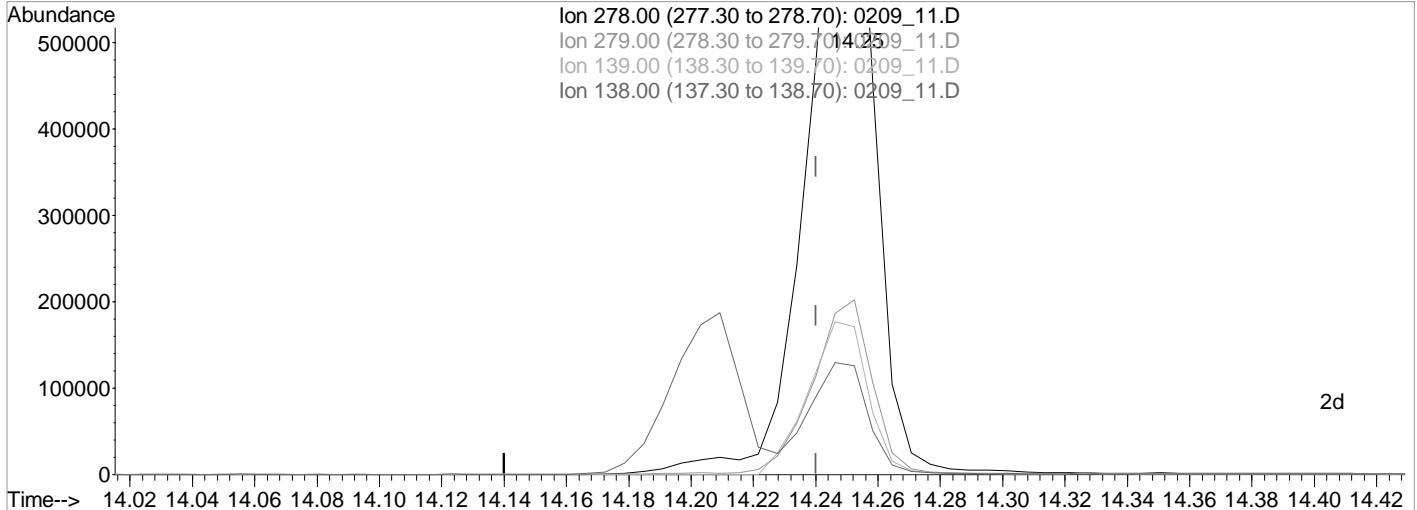
response 361980

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	74.57
95.00	30.20	29.67
65.00	24.00	23.57

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:59 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:58:05 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

(99) Dibenz(a,h)anthracene (MT)  
 14.25min (+0.012) 29577.4840246 ppb m

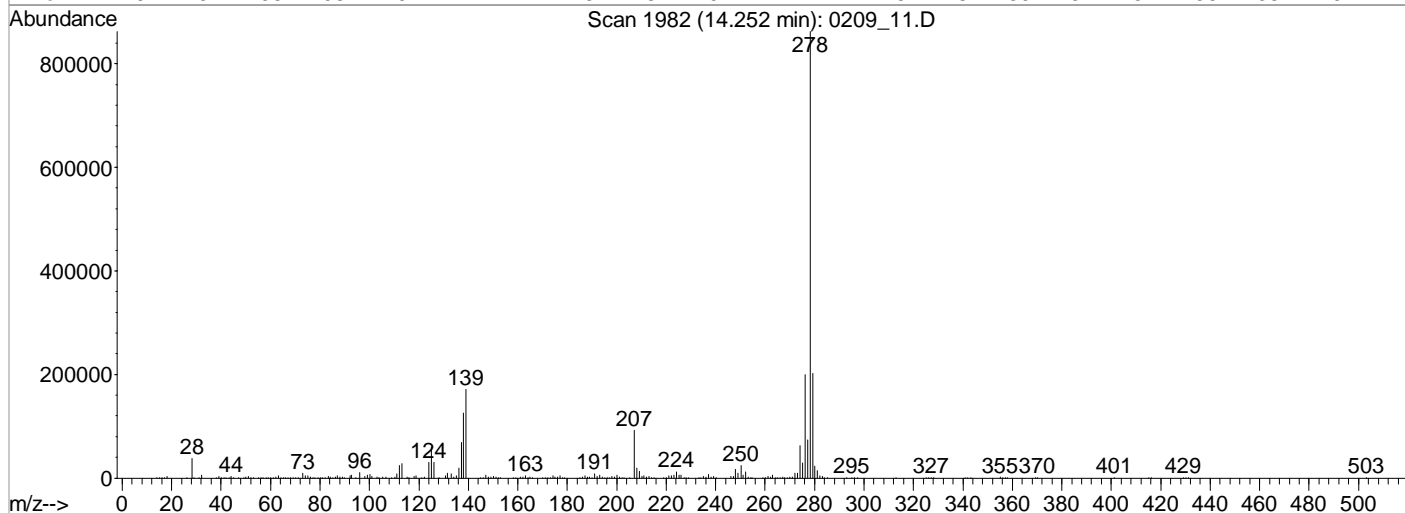
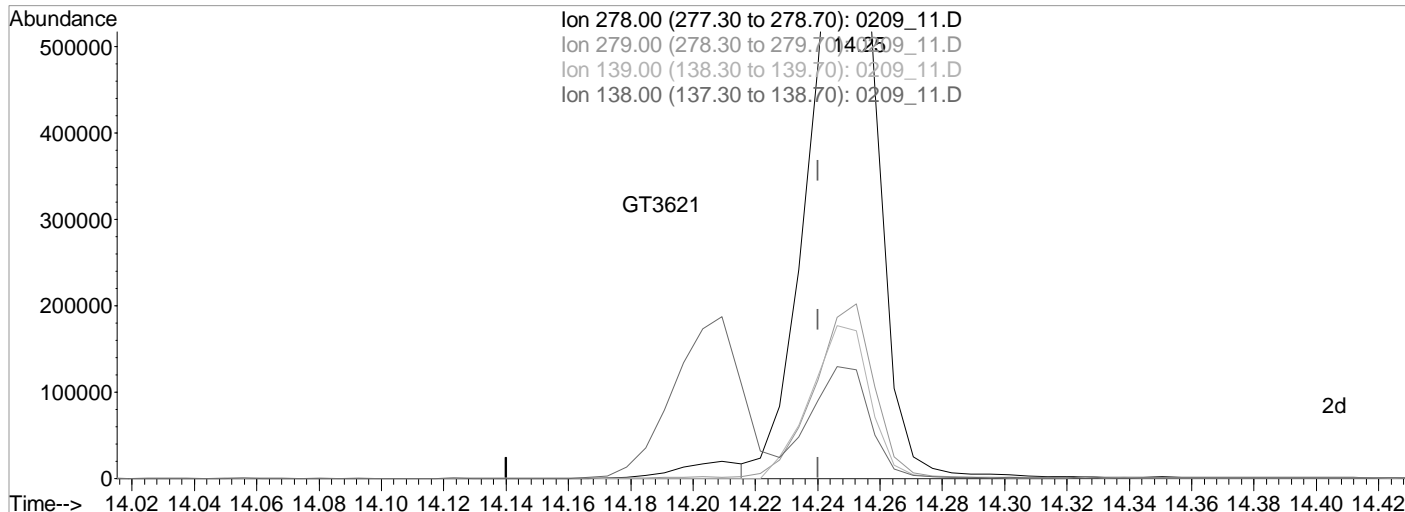
response 1161526

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.46
139.00	22.10	19.84
138.00	16.70	14.59

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
Acq On : 9 Feb 2022 12:27 pm Operator: 917  
Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Feb 14 16:00 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Mon Feb 14 15:58:05 2022  
Response via : Multiple Level Calibration



TIC: 0209\_11.D

(99) Dibenz(a,h)anthracene (MT)  
14.25min (+0.012) 28860.8413210 ppb m

response 1133383

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.46
139.00	22.10	19.84
138.00	16.70	14.59

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:10 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	87467m	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	341732	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	182560	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	318126	8000.00	ppb	0.00
84) Chrysene-d12	9.55	240	292226	8000.00	ppb	0.02
94) Perylene-d12	12.39	264	304548	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	531044	37370.2200771	ppb	0.00
Spiked Amount	666.000			Recovery = 5611.14%		
7) Phenol-d5	3.28	99	637749	37392.5144194	ppb	0.00
Spiked Amount	666.000			Recovery = 5614.49%		
24) Nitrobenzene-d5	3.82	82	583502	40242.1631535	ppb	0.00
Spiked Amount	333.000			Recovery = 12084.73%		
50) 2-Fluorobiphenyl	4.95	172	1151371	37386.3354702	ppb	0.00
Spiked Amount	333.000			Recovery = 11227.13%		
73) 2,4,6-Tribromophenol	6.03	330	159920	44407.1598699	ppb	0.00
Spiked Amount	666.000			Recovery = 6667.74%		
87) p-Terphenyl-d14	8.05	244	1610324	40322.5863908	ppb	0.00
Spiked Amount	333.000			Recovery = 12108.88%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.29	79	530979	39242.0417090	ppb	94
3) N-Nitrosodimethylamine	2.28	42	266600	36709.1991107	ppb	92
5) Aniline	3.34	66	302187	37348.2466300	ppb	94
6) bis(2-Chloroethyl)ether	3.36	93	492159m	27672.6256004	ppb	
8) Phenol	3.29	94	672710	37444.4764522	ppb	97
10) 2-Chlorophenol	3.41	128	540976	37608.6060560	ppb	99
11) n-Decane	3.40	41	301867	35628.1919174	ppb	98
12) 1,3-Dichlorobenzene	3.49	146	608753	37429.1238340	ppb	99
13) 1,4-Dichlorobenzene	3.53	146	623673	37255.8873494	ppb	99
14) Benzyl Alcohol	3.58	79	428419	38508.7772803	ppb	100
15) 1,2-Dichlorobenzene	3.61	146	571666	37149.2358810	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	186702	35455.3036766	ppb	# 59
17) 2,2-oxybis(1-chloropropane	3.65	121	186702	35455.3036766	ppb	# 59
18) 2-Methylphenol	3.62	108	484867	37303.1335811	ppb	98
19) Hexachloroethane	3.80	117	230924	38001.5428483	ppb	98
20) N-Nitrosodi-n-propylamine	3.72	70	356081	37487.0261982	ppb	99
21) 3&4-Methyl phenol	3.71	107	554387	37549.4457488	ppb	98
25) Nitrobenzene	3.84	77	541148	38169.6686673	ppb	97
26) Isophorone	3.97	82	988961	38885.7931128	ppb	97
27) 2-Nitrophenol	4.02	139	293528	41077.0676710	ppb	94
28) 2,4-Dimethylphenol	4.02	107	507150	38214.6705164	ppb	96
29) bis(2-Chlorethoxy)methane	4.08	93	608273	37406.3337815	ppb	97
30) 2,4-Dichlorophenol	4.15	162	436215	39017.8213772	ppb	94
32) 1,2,4-Trichlorobenzene	4.22	180	470672	37610.3096616	ppb	98
34) Naphthalene	4.27	128	1638066	37641.7190686	ppb	100
35) 4-Chloroaniline	4.29	65	192978	38165.4842430	ppb	98
36) Hexachloro-1,3-butadiene	4.34	225	260451	38150.0890158	ppb	96
40) 4-Chloro-3-methylphenol	4.58	107	441649	39189.2944371	ppb	95
41) 2-Methylnaphthalene	4.71	142	1071294	37779.6978255	ppb	99
42) 1-Methylnaphthalene	4.78	142	1018387	38216.0571488	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	340960	39863.7559909	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	320804	40515.0174392	ppb	97
49) 2,4,5-Trichlorophenol	4.92	196	322612	39149.4243208	ppb	90

(#) = qualifier out of range (m) = manual integration

0209\_12.D S804B09V.M Mon Feb 14 16:14:43 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:10 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	1303316	38111.3359445	ppb	99
52) 2-Chloronaphthalene	5.05	162	979007	37511.8057862	ppb	98
53) 2-Nitroaniline	5.11	138	342351	42317.5955894	ppb	98
54) Acenaphthylene	5.34	152	1588608	39126.7393856	ppb	99
55) Dimethyl phthalate	5.22	163	1058778	39157.6162617	ppb	100
56) 2,6-Dinitrotoluene	5.27	165	260810	41603.1785962	ppb	95
57) 3-Nitroaniline	5.40	138	286828	42495.3425702	ppb	96
58) Acenaphthene	5.47	153	1013503	37945.6657033	ppb	96
59) 2,4-Dinitrophenol	5.47	184	145907	52538.8415132	ppb	# 17
60) Dibenzofuran	5.59	168	1401121	37825.9781253	ppb	100
61) 2,4-Dinitrotoluene	5.57	165	344829	43923.7949054	ppb	97
63) 4-Nitrophenol	5.49	139	240093	43064.5466551	ppb	95
64) Fluorene	5.84	166	1159234	38581.5718380	ppb	99
65) 4-Chlorophenyl-phenylether	5.84	204	535116	37555.3657476	ppb	88
66) Diethyl phthalate	5.73	149	1089772	39339.9868130	ppb	99
67) 4-Nitroaniline	5.85	138	213656	33796.9567868	ppb	96
68) Azobenzene	5.95	77	1061155	38402.5673874	ppb	100
71) 4,6-Dinitro-2-methylphenol	5.87	198	176996	48081.6828813	ppb	99
72) N-Nitrosodiphenylamine	5.92	169	982230	40631.4208105	ppb	99
74) 4-Bromophenyl-phenylether	6.21	248	315621	40228.8334657	ppb	94
75) Hexachlorobenzene	6.27	284	348572	39928.9901746	ppb	99
76) n-octadecane	6.45	55	187466	38513.5503620	ppb	98
77) Pentachlorophenol	6.41	266	214451	45834.3096376	ppb	97
78) Phenanthrene	6.59	178	1588877	37960.1017014	ppb	99
79) Anthracene	6.64	178	1636676	38630.5645907	ppb	100
80) Carbazole	6.75	167	1476577	38198.2056116	ppb	99
81) Di-n-butyl phthalate	7.02	149	1922913	42491.4478801	ppb	100
83) Fluoranthene	7.64	202	1784764	40137.6631631	ppb	99
86) Pyrene	7.88	202	1858834	39532.6283317	ppb	99
88) Benzylbutyl phthalate	8.68	149	805471	41893.8726269	ppb	98
90) Benzo(a)anthracene	9.53	228	1652877	39280.5024417	ppb	99
91) Chrysene	9.59	228	1584261	38850.3193263	ppb	99
92) bis(2-Ethylhexyl)phthalate	9.62	149	1113109	42031.3076523	ppb	99
93) Di-n-octyl phthalate	10.92	149	1901374	43218.2087672	ppb	99
95) Benzo(b)fluoranthene	11.59	252	1661740	38302.6598317	ppb	99
96) Benzo(k)fluoranthene	11.65	252	1666940	39007.6629727	ppb	98
97) Benzo(a)pyrene	12.27	252	1488575	39615.4990577	ppb	100
98) Indeno(1,2,3-cd)pyrene	14.22	276	1411209	38225.8587590	ppb	98
99) Dibenz(a,h)anthracene	14.26	278	1497799m	38054.6751967	ppb	
100) Benzo(g,h,i)perylene	14.54	276	1416806	36871.9258324	ppb	94

(#) = qualifier out of range (m) = manual integration

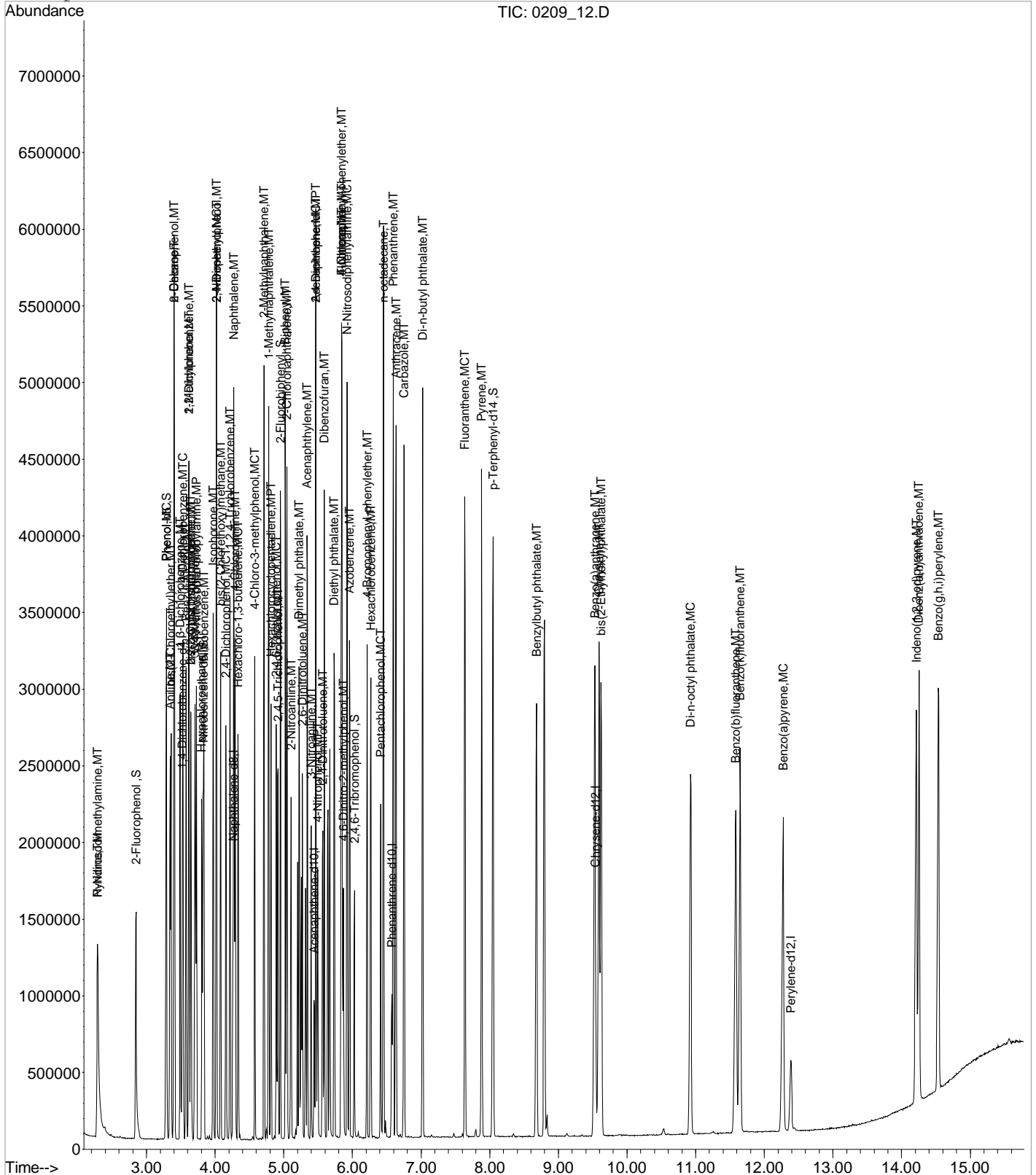


Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D
Acq On : 9 Feb 2022 12:48 pm
Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 16:10 2022

Vial: 9
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

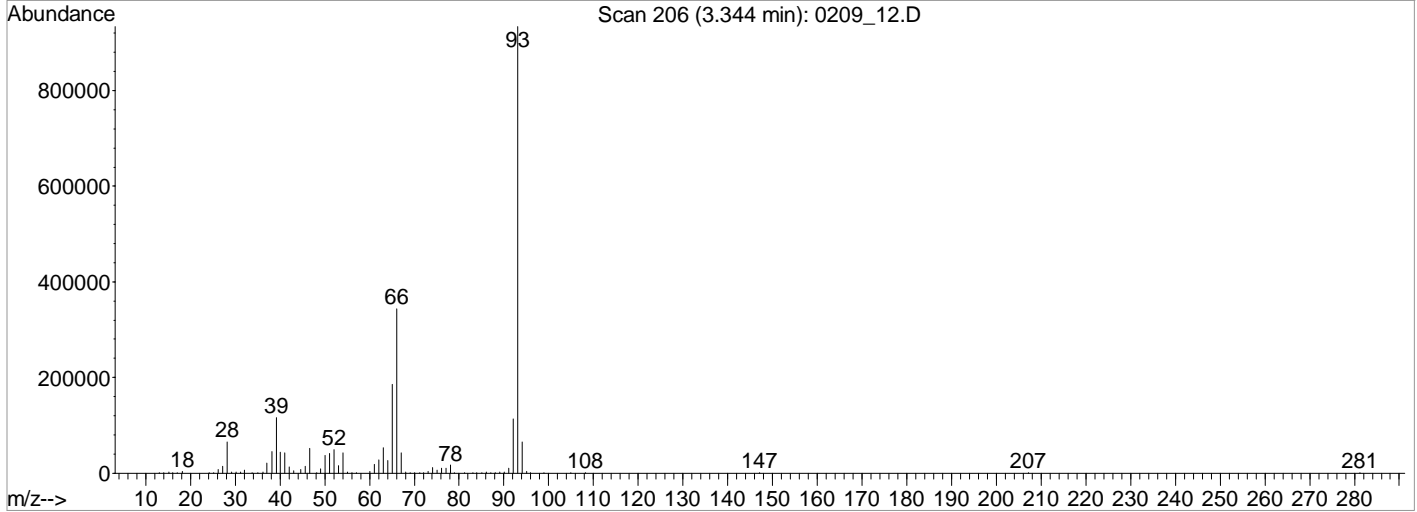
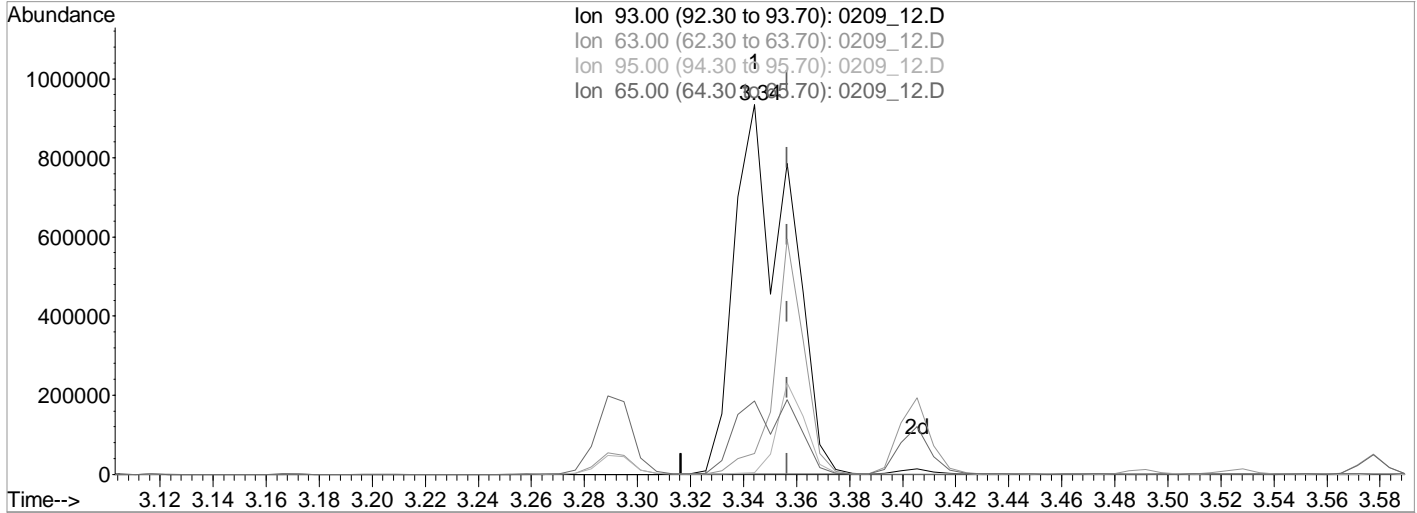
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 16:14:29 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:02 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 0.0000000 ppb

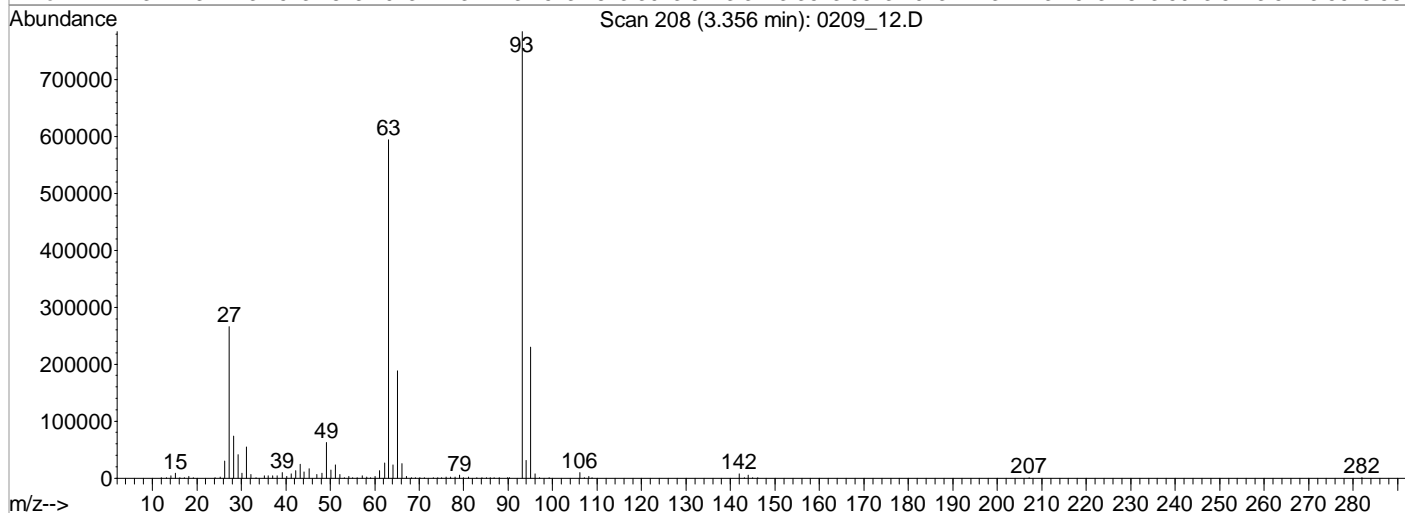
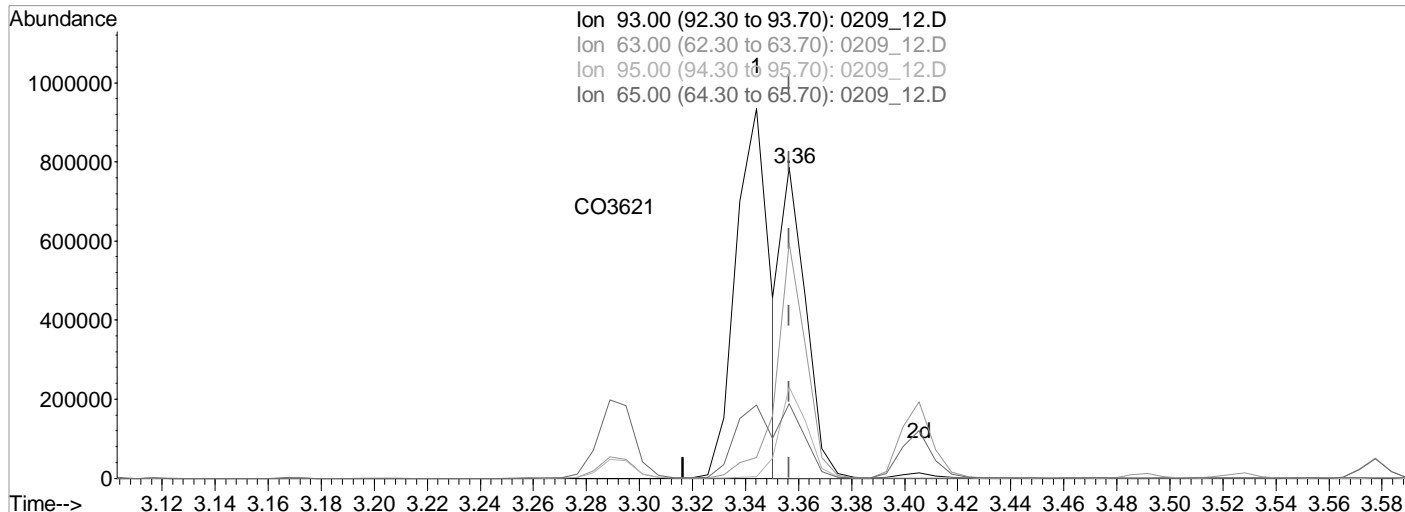
response 1313644

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.62#
95.00	30.20	0.39#
65.00	24.00	19.74

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:02 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 0.0000000 ppb

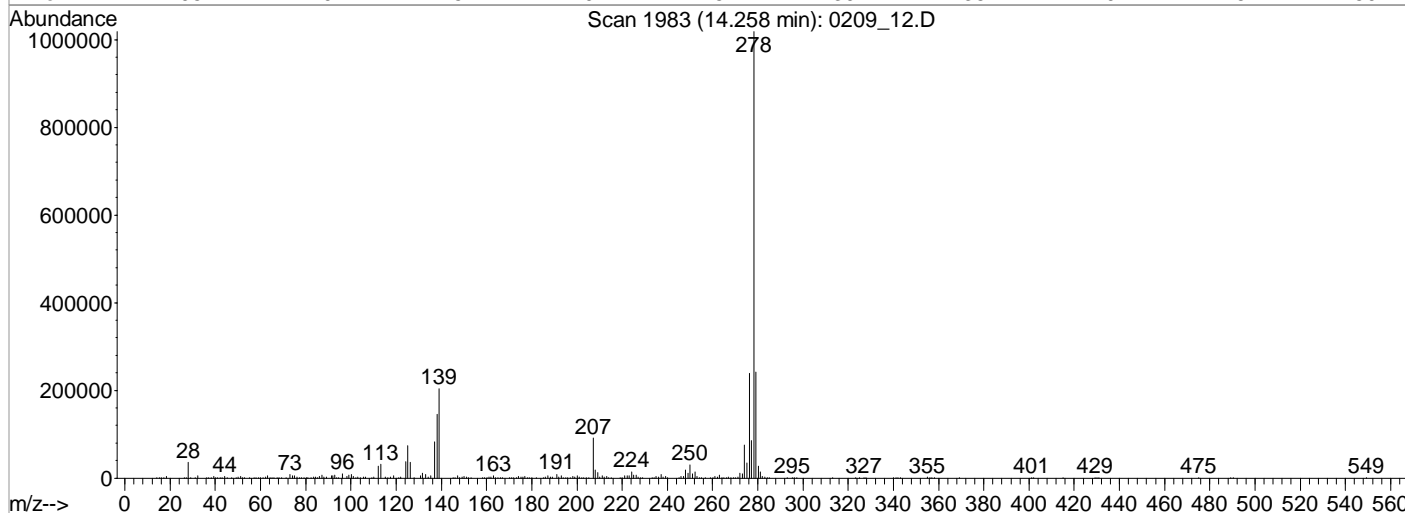
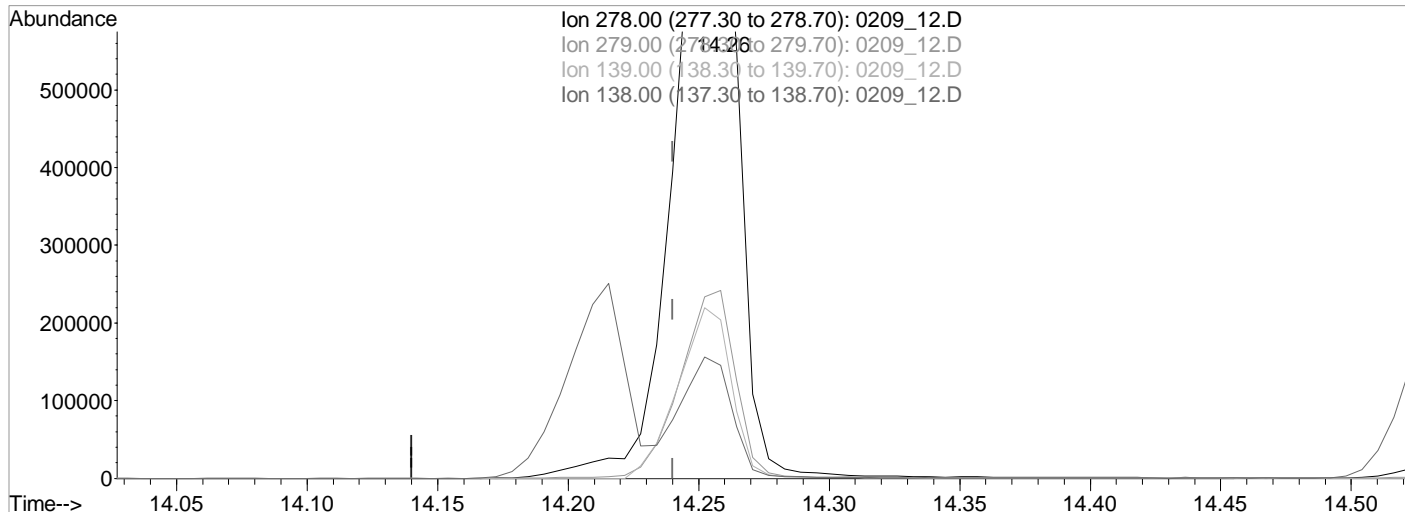
response 1313644

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.62#
95.00	30.20	0.39#
65.00	24.00	19.74

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:02 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

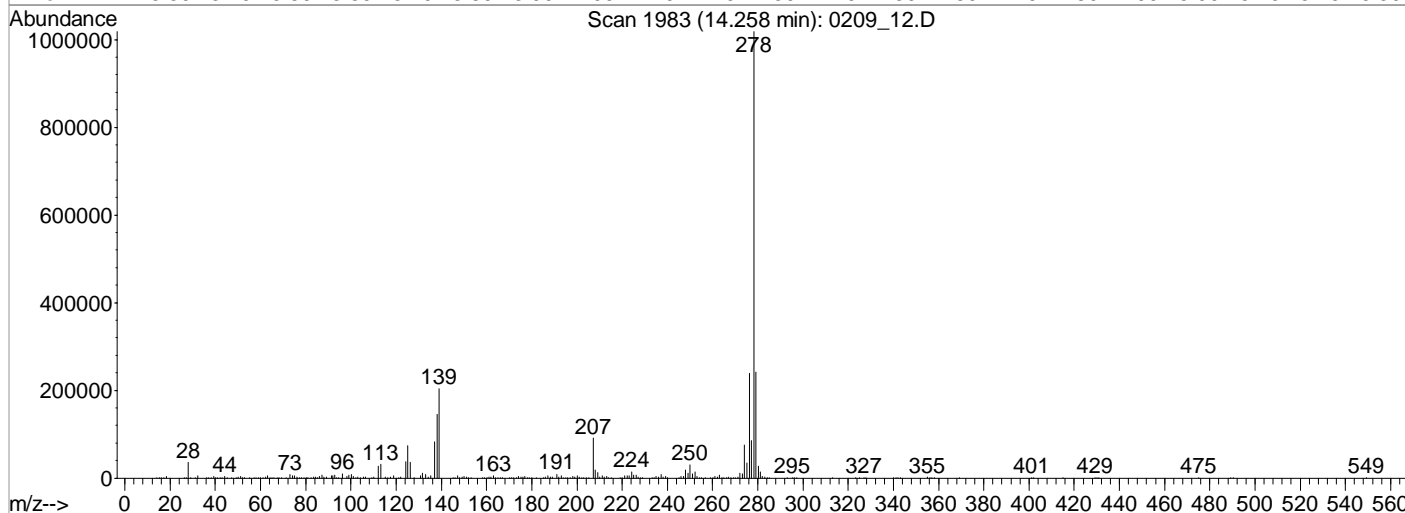
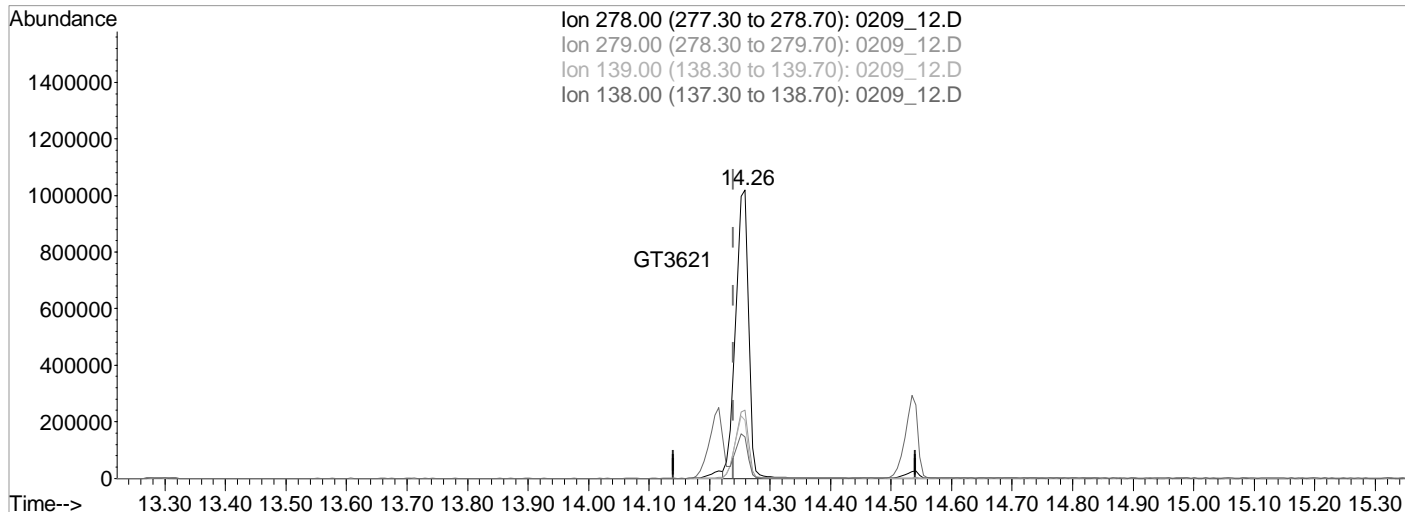
(99) Dibenz(a,h)anthracene (MT)  
 14.26min (+0.018) 39213.5930184 ppb  
 Qvalue = 96  
 response 1543413

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.68
139.00	22.10	20.02
138.00	16.70	14.26

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:03 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(99) Dibenz(a,h)anthracene (MT)  
 14.26min (+0.018) 38054.6751967 ppb m

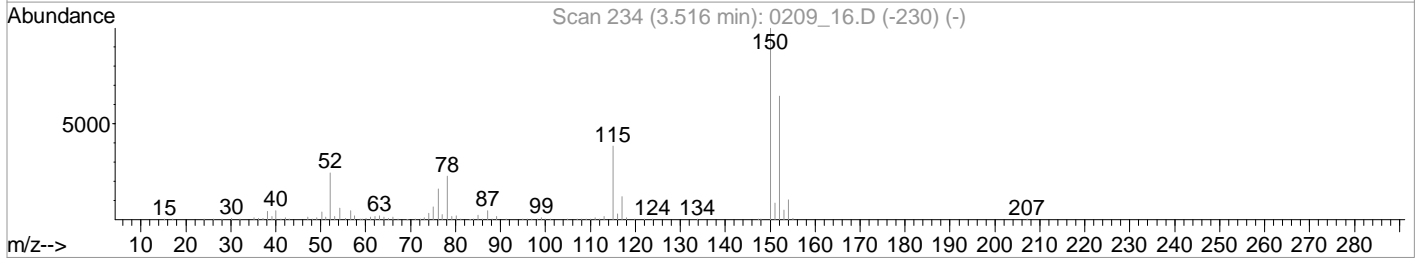
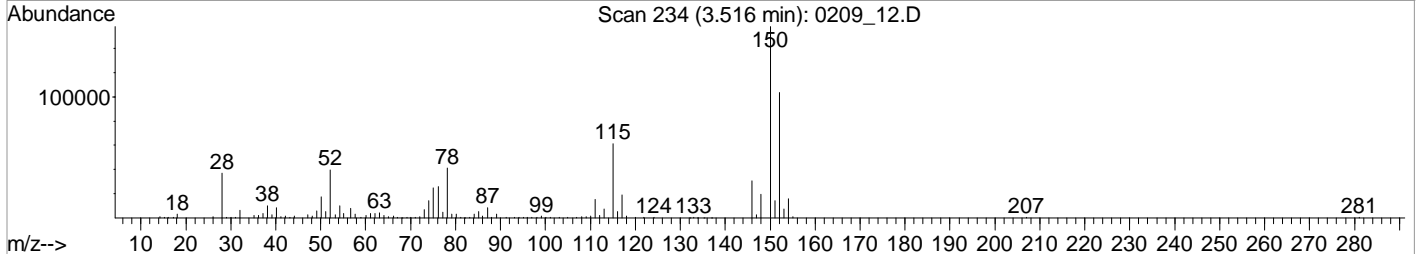
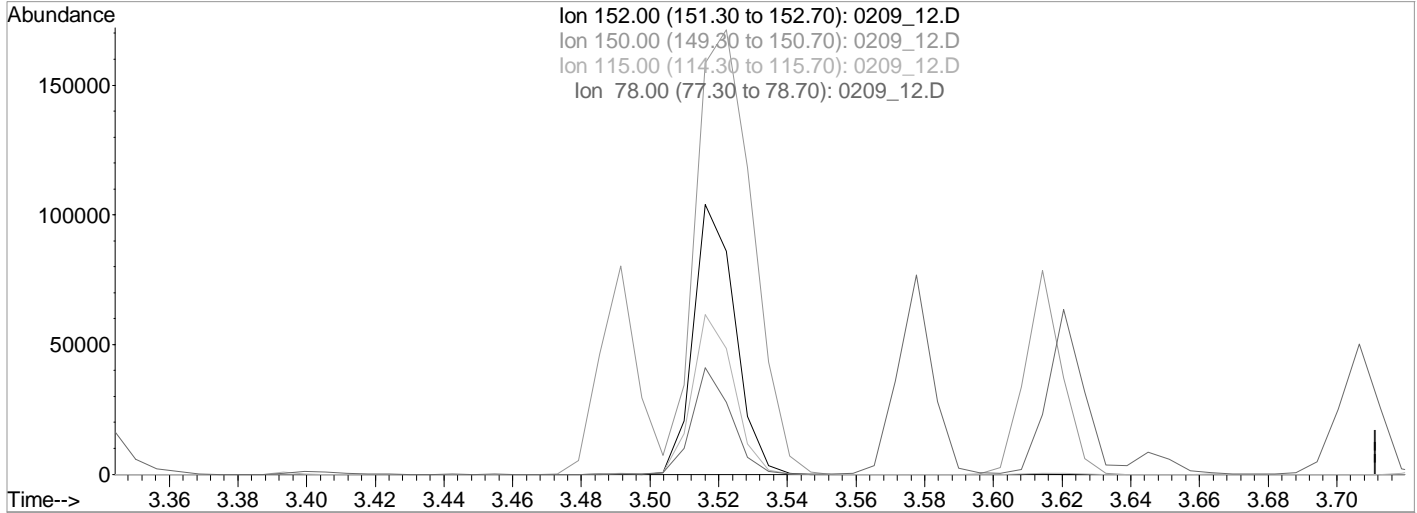
response 1497799

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.71
139.00	22.10	20.02
138.00	16.70	14.29

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:08 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(1) 1,4-Dichlorobenzene-d4 (I)  
 3.52min (-3.516) 0.0000000 ppb d

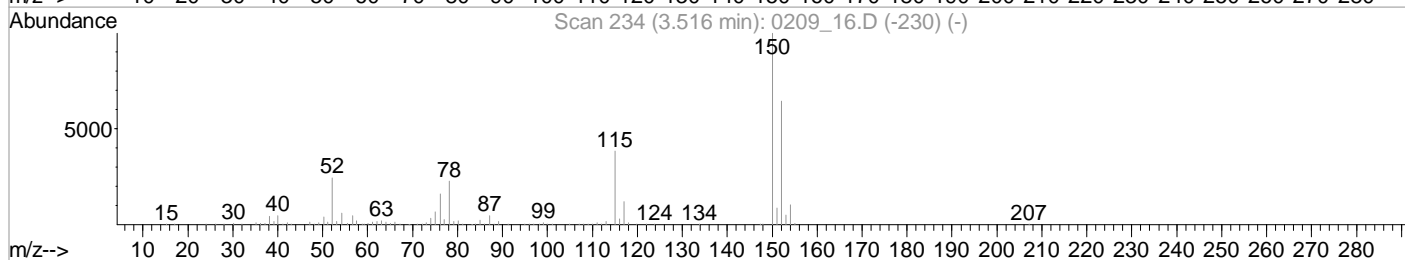
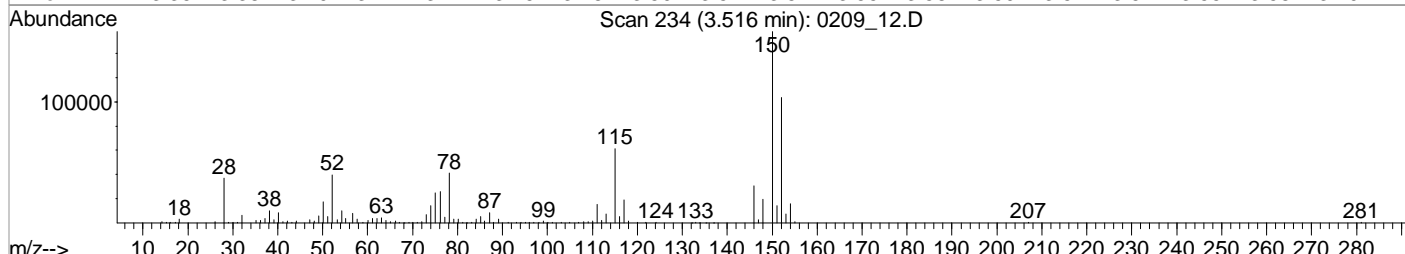
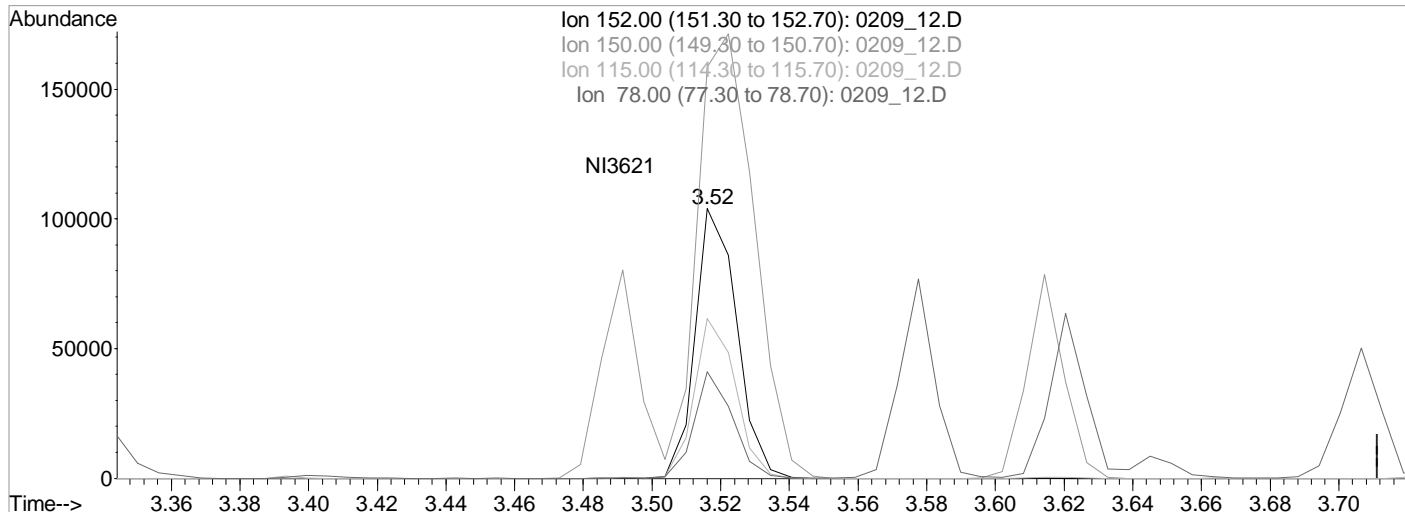
response 0

Ion	Exp%	Act%
152.00	100	0.00
150.00	155.20	0.00
115.00	59.30	0.00
78.00	35.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:10 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(1) 1,4-Dichlorobenzene-d4 (I)  
 3.52min (-0.000) 8000.0000000 ppb m

response 87467

Ion	Exp%	Act%
152.00	100	100
150.00	155.20	152.53
115.00	59.30	59.26
78.00	35.00	39.45

Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:18 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:51:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	85491	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	336033	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	182036	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	303150	8000.00	ppb	0.00
84) Chrysene-d12	9.55	240	299422	8000.00	ppb	0.02
94) Perylene-d12	12.39	264	295920	8000.00	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	2.85	112	685540	49268.3997408	ppb	0.00
Spiked Amount			Recovery	= 7397.66%		
7) Phenol-d5	3.28	99	818468	48972.9451566	ppb	0.00
Spiked Amount			Recovery	= 7353.30%		
24) Nitrobenzene-d5	3.82	82	678256m	46463.7671389	ppb	0.00
Spiked Amount			Recovery	= 13953.08%		
50) 2-Fluorobiphenyl	4.95	172	1462149	47291.9672001	ppb	0.00
Spiked Amount			Recovery	= 14201.79%		
73) 2,4,6-Tribromophenol	6.03	330	203186	60808.6198147	ppb	0.00
Spiked Amount			Recovery	= 9130.42%		
87) p-Terphenyl-d14	8.05	244	2013746	49101.9592081	ppb	0.00
Spiked Amount			Recovery	= 14745.33%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.29	79	681495	51757.7992292	ppb	97
3) N-Nitrosodimethylamine	2.29	42	339759	47575.2742185	ppb	91
5) Aniline	3.34	66	389920	49209.1195109	ppb	95
6) bis(2-Chloroethyl)ether	3.36	93	649750m	23889.2924070	ppb	
8) Phenol	3.30	94	863642	49070.2900117	ppb	97
10) 2-Chlorophenol	3.41	128	694562	49319.1896257	ppb	99
11) n-Decane	3.40	41	379161	45241.9961601	ppb	99
12) 1,3-Dichlorobenzene	3.49	146	771098	48302.1674606	ppb	98
13) 1,4-Dichlorobenzene	3.53	146	785122	47710.9860129	ppb	99
14) Benzyl Alcohol	3.58	79	544123	50046.4969320	ppb	99
15) 1,2-Dichlorobenzene	3.61	146	721401	47687.1870177	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	236106	45340.6582642	ppb	# 62
17) 2,2-oxybis(1-chloropropane	3.65	121	236106	45340.6582642	ppb	# 62
18) 2-Methylphenol	3.62	108	617710	48432.5889244	ppb	97
19) Hexachloroethane	3.80	117	291009	48857.5187075	ppb	98
20) N-Nitrosodi-n-propylamine	3.73	70	450158	48279.2340149	ppb	100
21) 3&4-Methyl phenol	3.71	107	699728	48282.1151226	ppb	99
25) Nitrobenzene	3.84	77	688841	49328.1690268	ppb	96
26) Isophorone	3.97	82	1236245	49353.4494025	ppb	98
27) 2-Nitrophenol	4.02	139	376131	54074.7423875	ppb	93
28) 2,4-Dimethylphenol	4.02	107	650314	49809.6897293	ppb	97
29) bis(2-Chlorethoxy)methane	4.08	93	768717	47811.7231221	ppb	97
30) 2,4-Dichlorophenol	4.16	162	555918	50650.3447239	ppb	92
32) 1,2,4-Trichlorobenzene	4.22	180	603526	48910.7083770	ppb	98
34) Naphthalene	4.27	128	2066329	48053.2072182	ppb	100
35) 4-Chloroaniline	4.29	65	244067	48960.4771090	ppb	97
36) Hexachloro-1,3-butadiene	4.34	225	331135	49231.5094775	ppb	96
40) 4-Chloro-3-methylphenol	4.58	107	567518	51390.2025153	ppb	94
41) 2-Methylnaphthalene	4.71	142	1377022	49298.2911741	ppb	100
42) 1-Methylnaphthalene	4.78	142	1292317	49222.1326390	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	433861	50998.3780748	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	404822	51460.1647062	ppb	97
49) 2,4,5-Trichlorophenol	4.92	196	414908	50566.0675110	ppb	92

(#) = qualifier out of range (m) = manual integration



Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:18 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:51:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.03	154	1635800	47695.0348514	ppb	100
52) 2-Chloronaphthalene	5.05	162	1229770	46888.0832571	ppb	98
53) 2-Nitroaniline	5.11	138	428726	53629.0313312	ppb	98
54) Acenaphthylene	5.35	152	2019937	49878.2058817	ppb	99
55) Dimethyl phthalate	5.23	163	1363440	50652.8594150	ppb	93
56) 2,6-Dinitrotoluene	5.27	165	333483	53864.1240120	ppb	99
57) 3-Nitroaniline	5.40	138	367978	55415.3653662	ppb #	84
58) Acenaphthene	5.47	153	1291393	48280.6520842	ppb	97
59) 2,4-Dinitrophenol	5.47	184	193721	74186.7854642	ppb #	30
60) Dibenzofuran	5.59	168	1763845	47451.1885412	ppb	100
61) 2,4-Dinitrotoluene	5.57	165	444272	57870.2558482	ppb	95
63) 4-Nitrophenol	5.49	139	304788	55592.5457447	ppb	88
64) Fluorene	5.85	166	1466642	48807.2477794	ppb	99
65) 4-Chlorophenyl-phenylether	5.84	204	682219	47746.6307713	ppb	90
66) Diethyl phthalate	5.74	149	1359007	49088.2502660	ppb	99
67) 4-Nitroaniline	5.86	138	295753	46508.5221381	ppb	98
68) Azobenzene	5.96	77	1359895	49264.7305857	ppb	99
71) 4,6-Dinitro-2-methylphenol	5.87	198	225615	67060.1415206	ppb	91
72) N-Nitrosodiphenylamine	5.92	169	1246858	54771.8942299	ppb	98
74) 4-Bromophenyl-phenylether	6.21	248	403603	54605.9256471	ppb	91
75) Hexachlorobenzene	6.27	284	439934	53323.4768919	ppb	99
76) n-octadecane	6.45	55	229571	49422.1734343	ppb	98
77) Pentachlorophenol	6.42	266	268709	62089.4694687	ppb	95
78) Phenanthrene	6.59	178	1942260	48514.3249917	ppb	98
79) Anthracene	6.64	178	2011440	49796.1324302	ppb	100
80) Carbazole	6.75	167	1809779	49009.1104903	ppb	99
81) Di-n-butyl phthalate	7.02	149	2377465	55951.5065493	ppb	99
83) Fluoranthene	7.64	202	2263702	53951.1908184	ppb	100
86) Pyrene	7.88	202	2343672	48458.5250985	ppb	99
88) Benzylbutyl phthalate	8.68	149	1016118	51813.7045194	ppb	98
90) Benzo(a)anthracene	9.53	228	2063460	47568.5271200	ppb	100
91) Chrysene	9.60	228	1968627	46730.6970697	ppb	99
92) bis(2-Ethylhexyl)phthalate	9.63	149	1407831	52163.0604523	ppb	99
93) Di-n-octyl phthalate	10.93	149	2390033	53481.2603710	ppb	99
95) Benzo(b)fluoranthene	11.59	252	2109399	50044.2348538	ppb	99
96) Benzo(k)fluoranthene	11.65	252	2049426	49265.8283619	ppb	98
97) Benzo(a)pyrene	12.28	252	1849955	50765.3229273	ppb	99
98) Indeno(1,2,3-cd)pyrene	14.22	276	1733830m	48105.1614875	ppb	
99) Dibenz(a,h)anthracene	14.26	278	1829680m	47566.6475034	ppb	
100) Benzo(g,h,i)perylene	14.54	276	1711126	45290.2795709	ppb	98

(#) = qualifier out of range (m) = manual integration

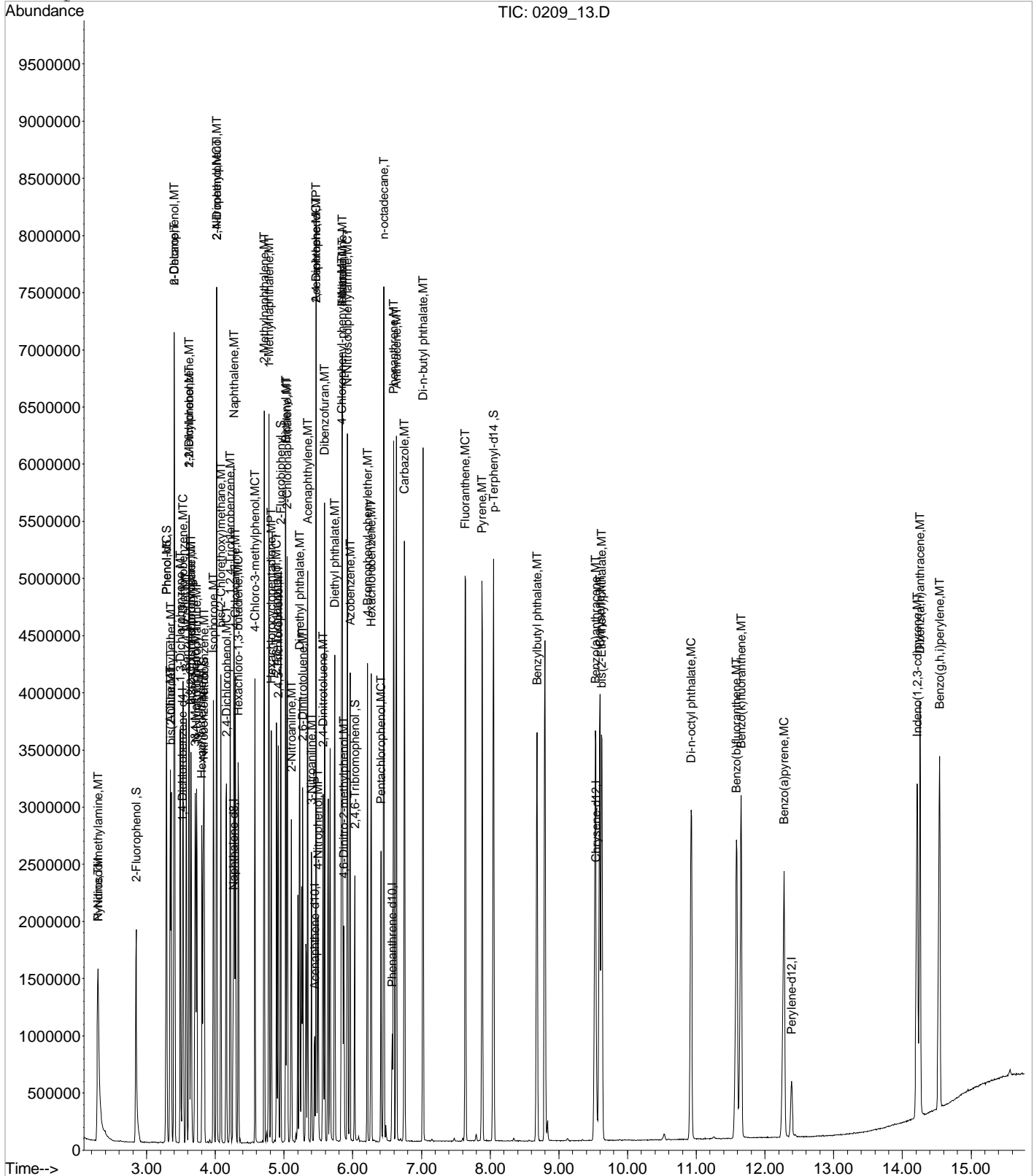
0209\_13.D S804B09V.M Mon Feb 14 16:18:48 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D
Acq On : 9 Feb 2022 1:09 pm
Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 16:18 2022

Vial: 10
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

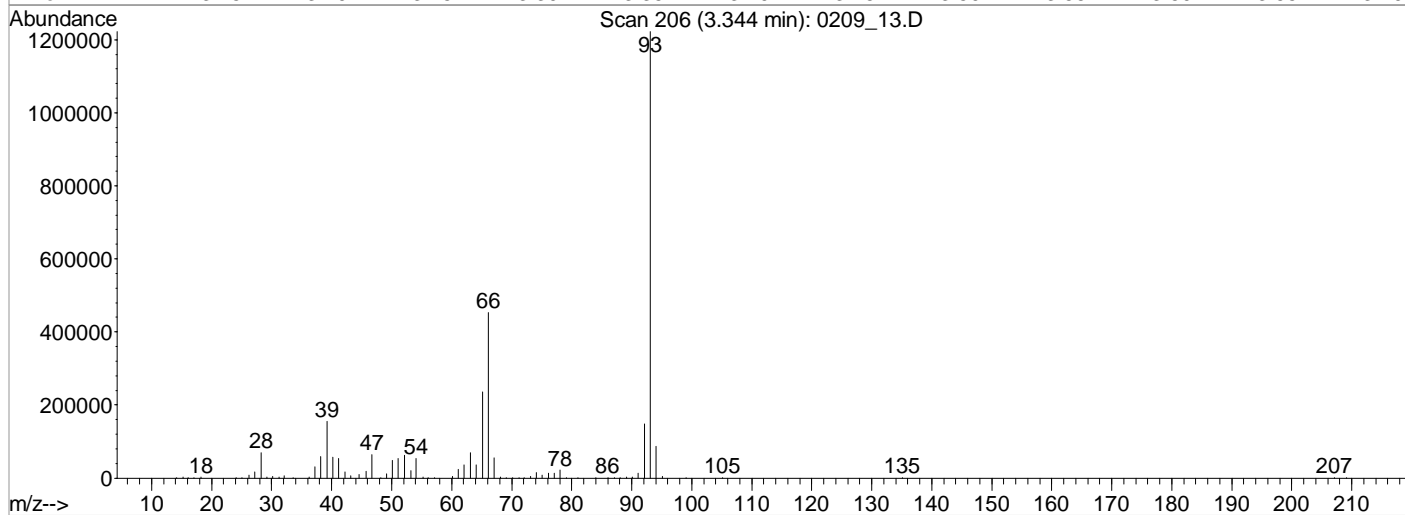
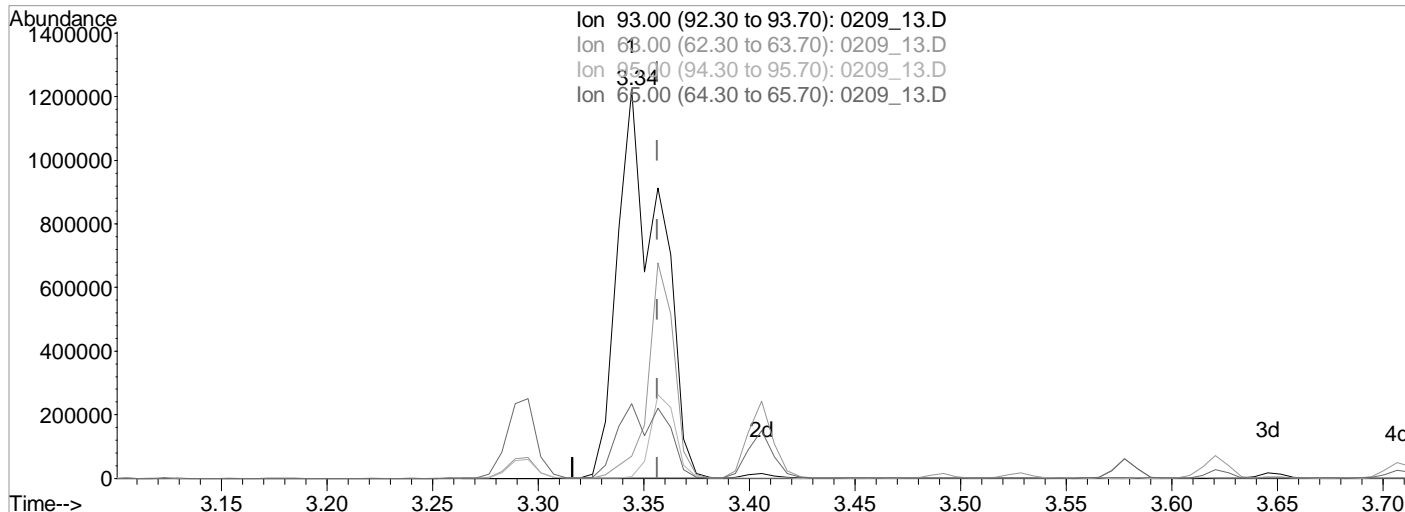
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 16:14:29 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:57 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

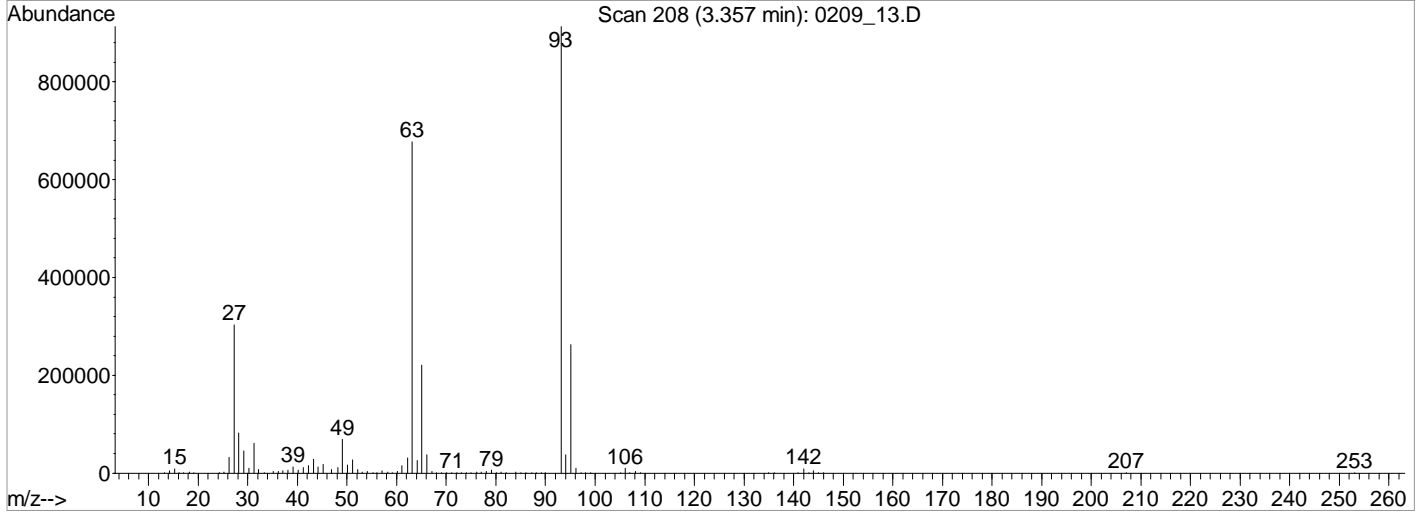
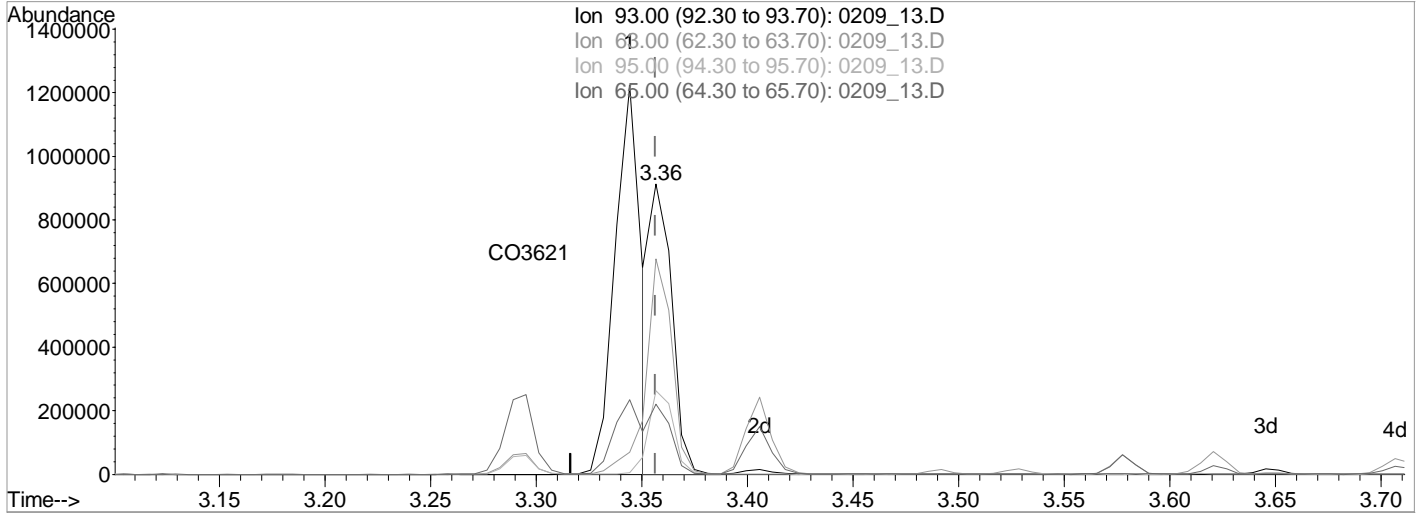
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 62045.3548033 ppb  
 Qvalue = 37  
 response 1687533

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.65#
95.00	30.20	0.34#
65.00	24.00	19.20

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:16 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (+0.000) 23889.2924070 ppb m

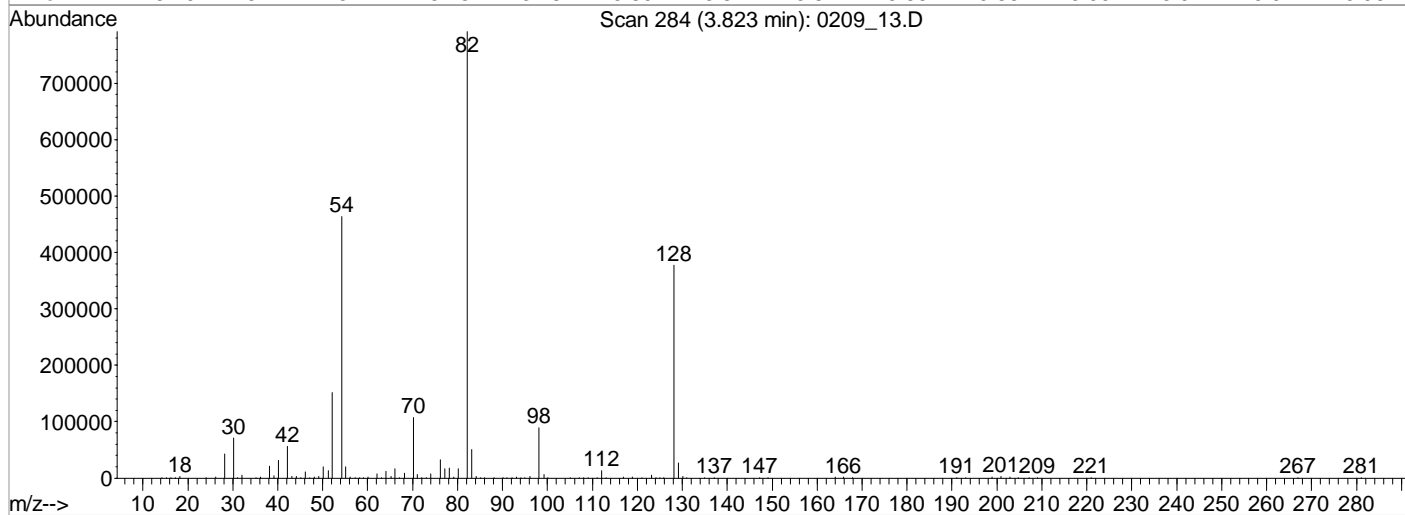
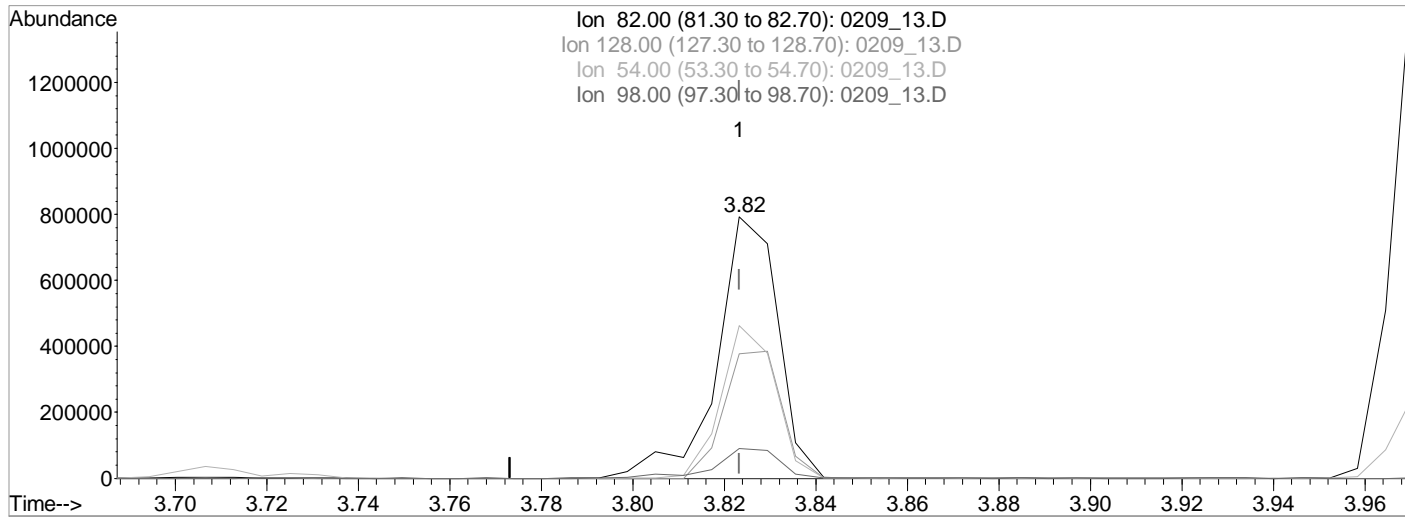
response 649750

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	74.11
95.00	30.20	28.75
65.00	24.00	24.19

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:16 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(24) Nitrobenzene-d5 (S)  
 3.82min (+0.000) 50604.5375924 ppb m

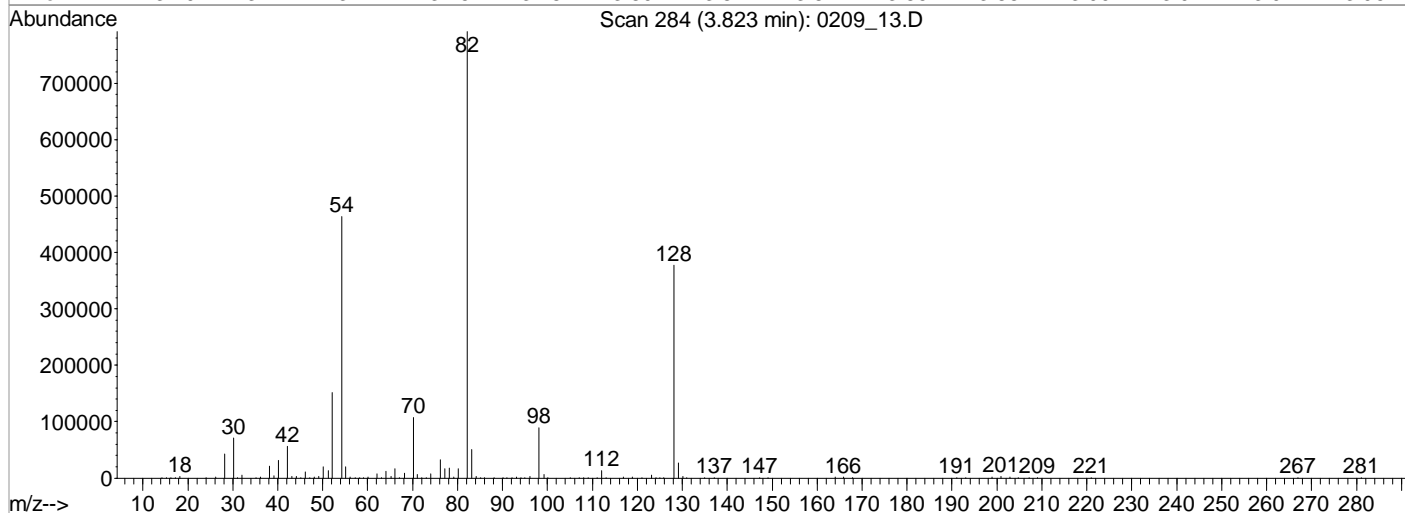
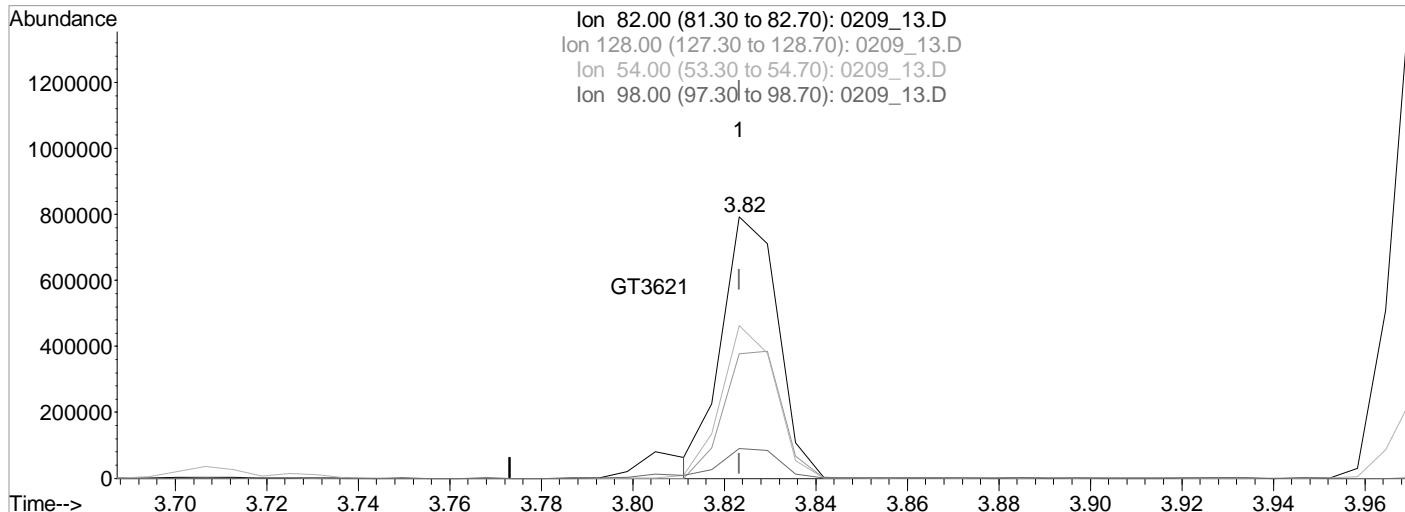
response 738701

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	47.68
54.00	56.90	58.54
98.00	11.80	11.31

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D Vial: 10
Acq On : 9 Feb 2022 1:09 pm Operator: 917
Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 14 16:17 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 16:14:29 2022
Response via : Multiple Level Calibration

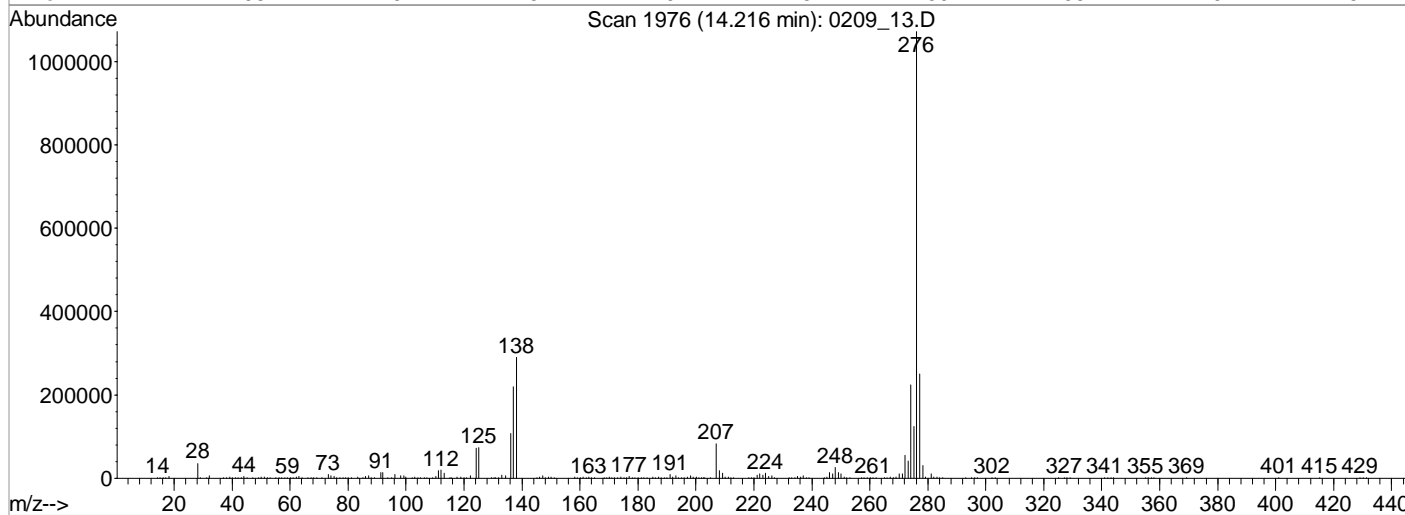
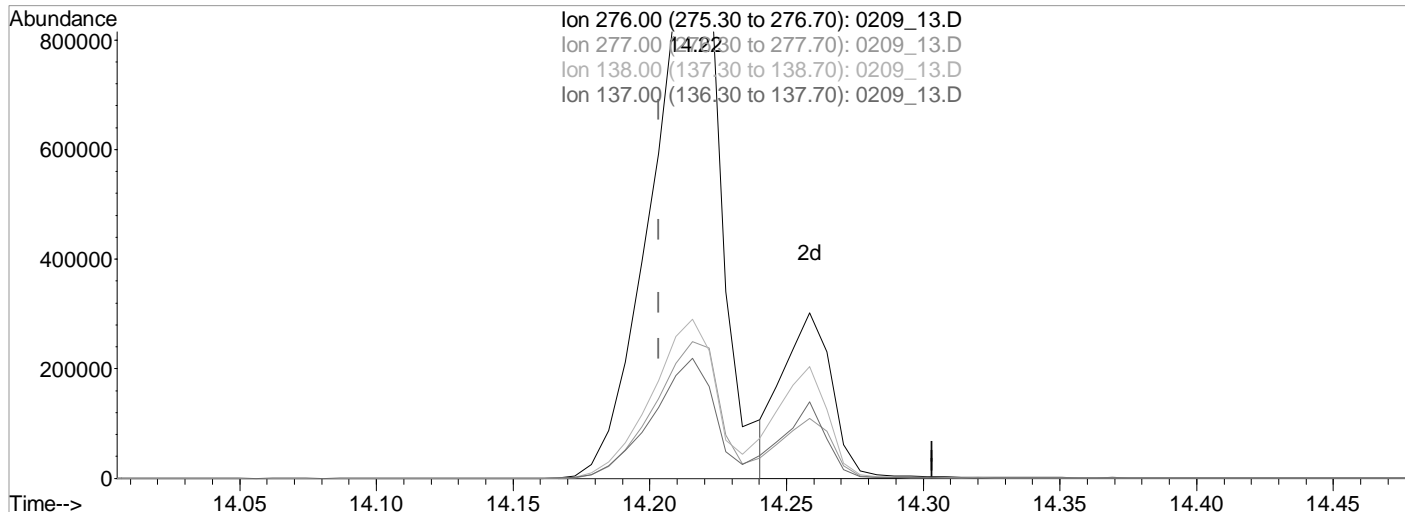


TIC: 0209\_13.D
(24) Nitrobenzene-d5 (S)
3.82min (+0.000) 46463.7671389 ppb m
response 678256
Table with 3 columns: Ion, Exp%, Act%
Rows: 82.00, 128.00, 54.00, 98.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:17 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(98) Indeno(1,2,3-cd)pyrene (MT)  
 14.22min (+0.012) 49190.5747186 ppb m

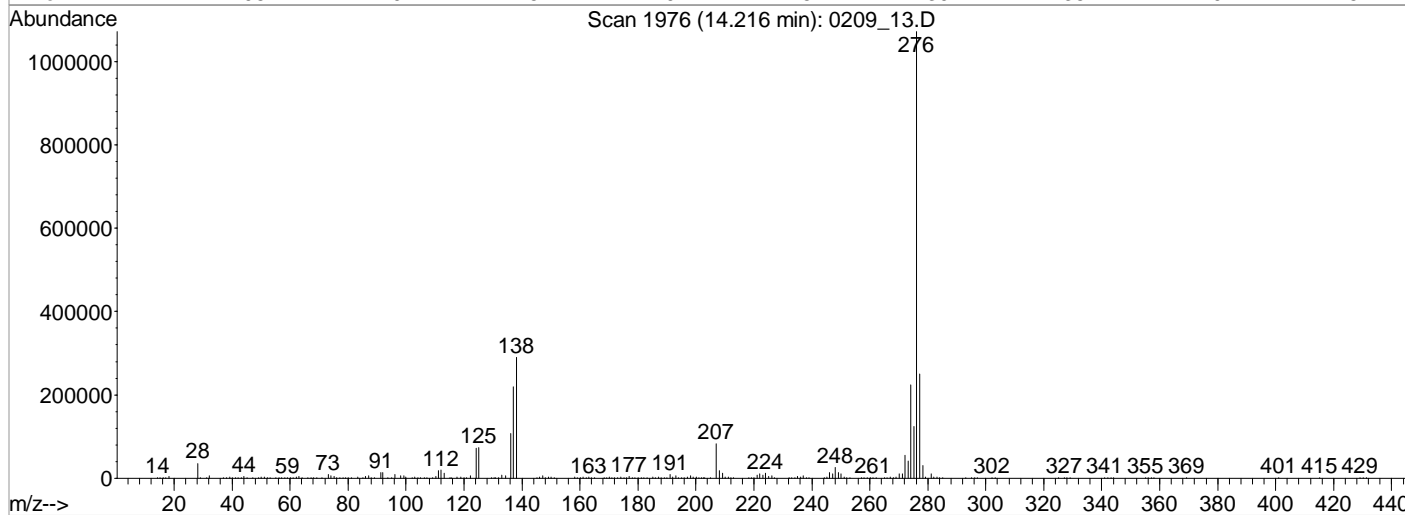
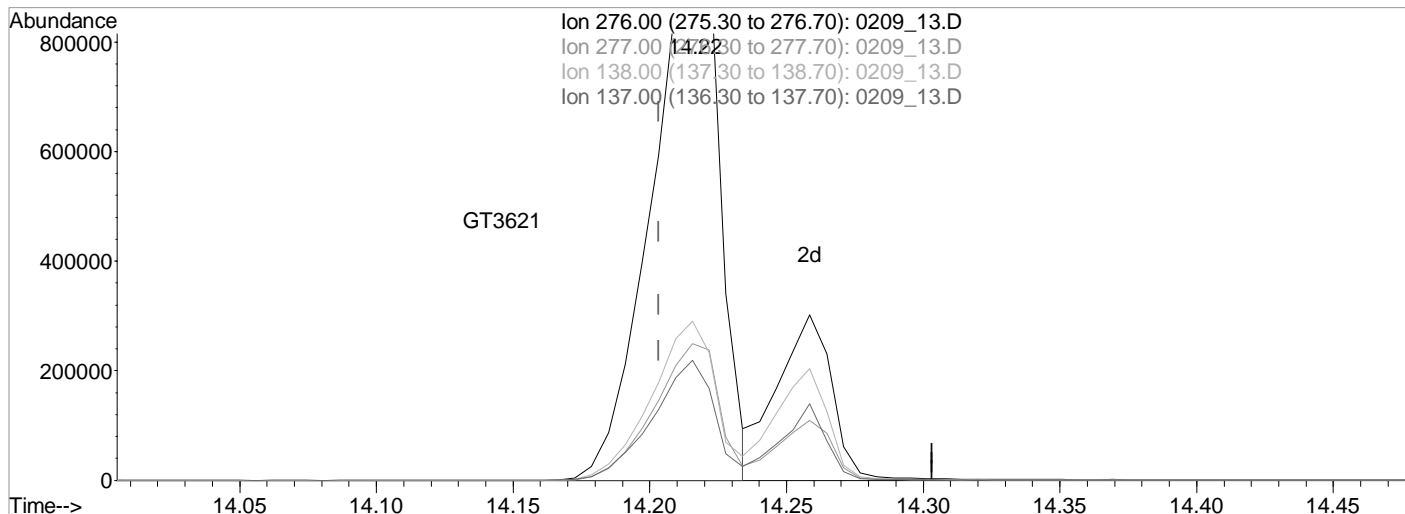
response 1772951

Ion	Exp%	Act%
276.00	100	100
277.00	24.10	23.27
138.00	25.30	27.03
137.00	18.00	20.45

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:17 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(98) Indeno(1,2,3-cd)pyrene (MT)  
 14.22min (+0.012) 48105.1614875 ppb m

response 1733830

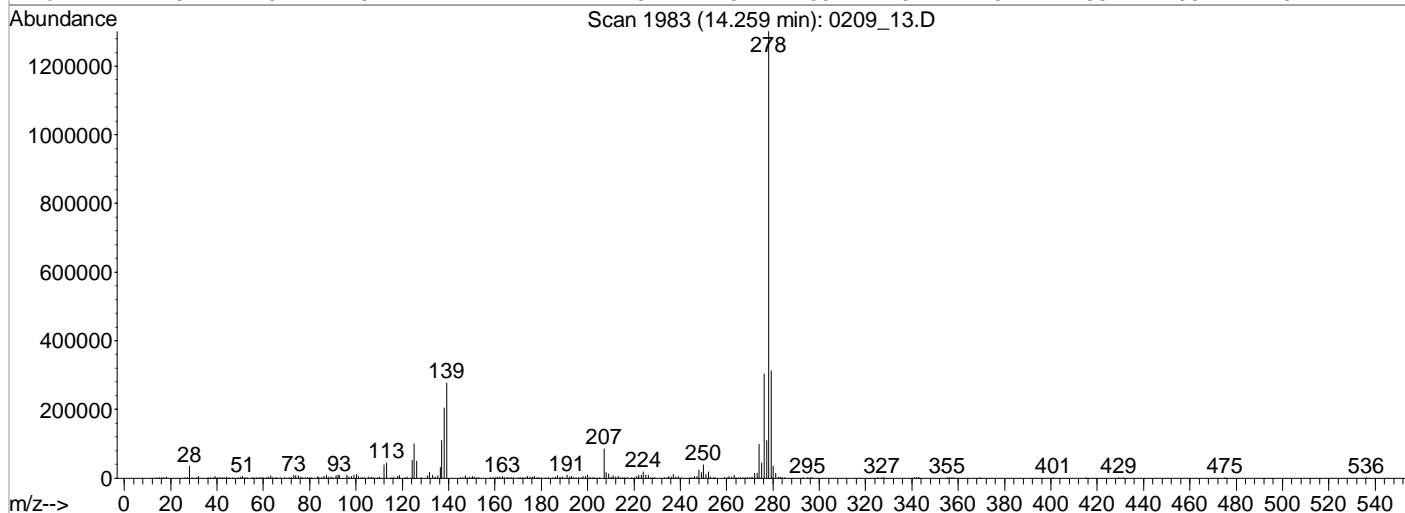
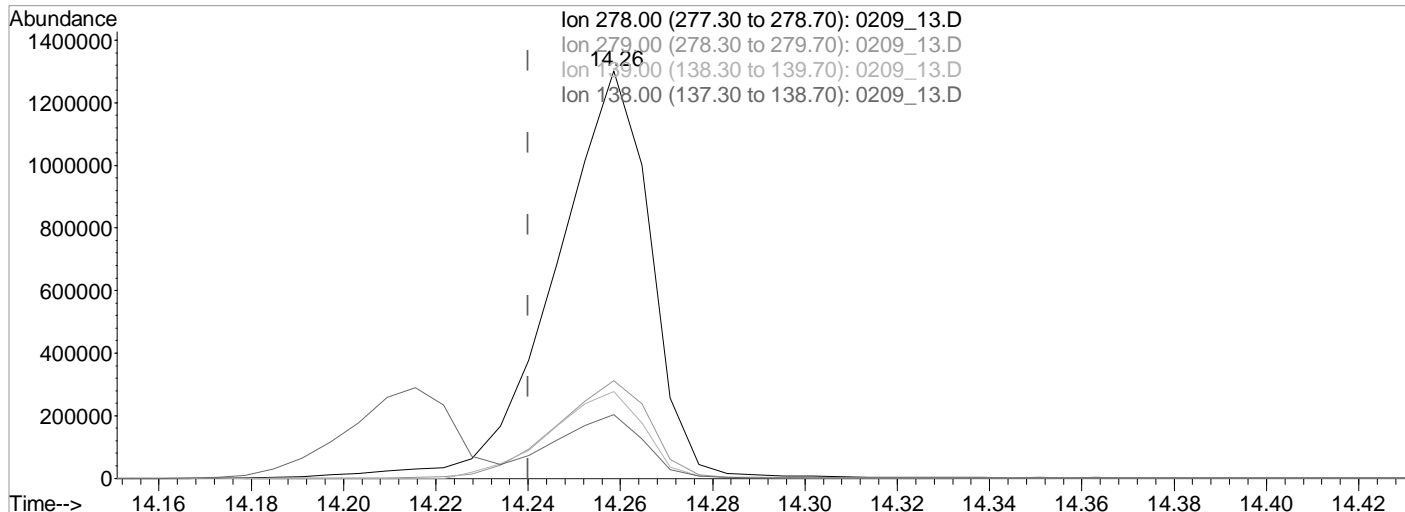
Ion	Exp%	Act%
276.00	100	100
277.00	24.10	23.27
138.00	25.30	27.03
137.00	18.00	20.45



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:18 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(99) Dibenz(a,h)anthracene (MT)  
 14.26min (+0.019) 48815.3733897 ppb m

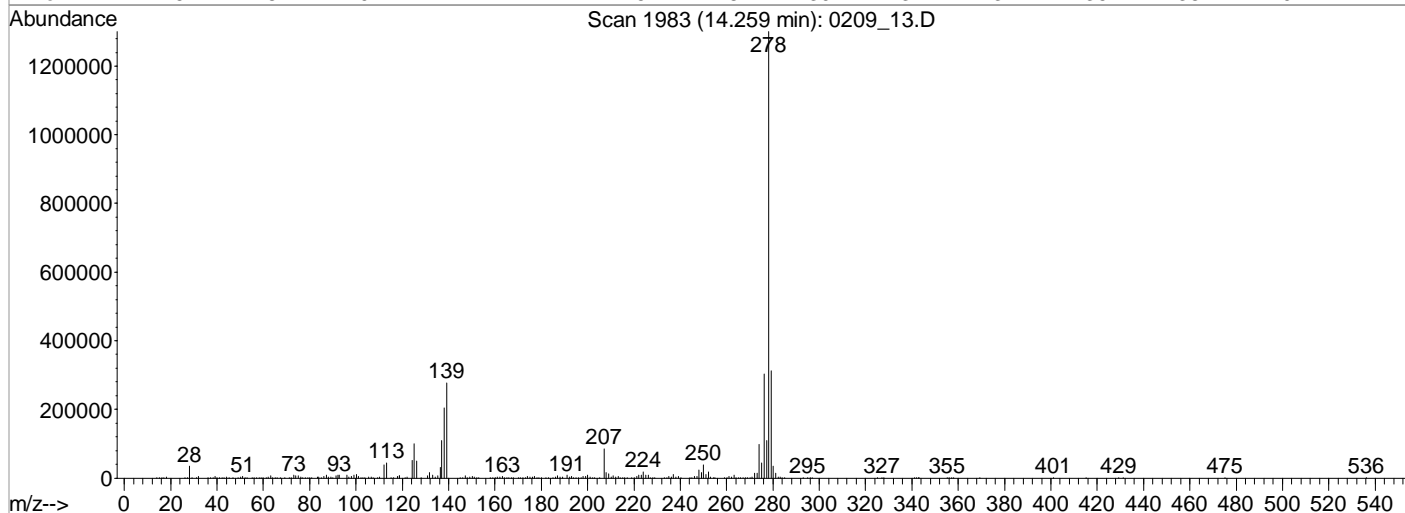
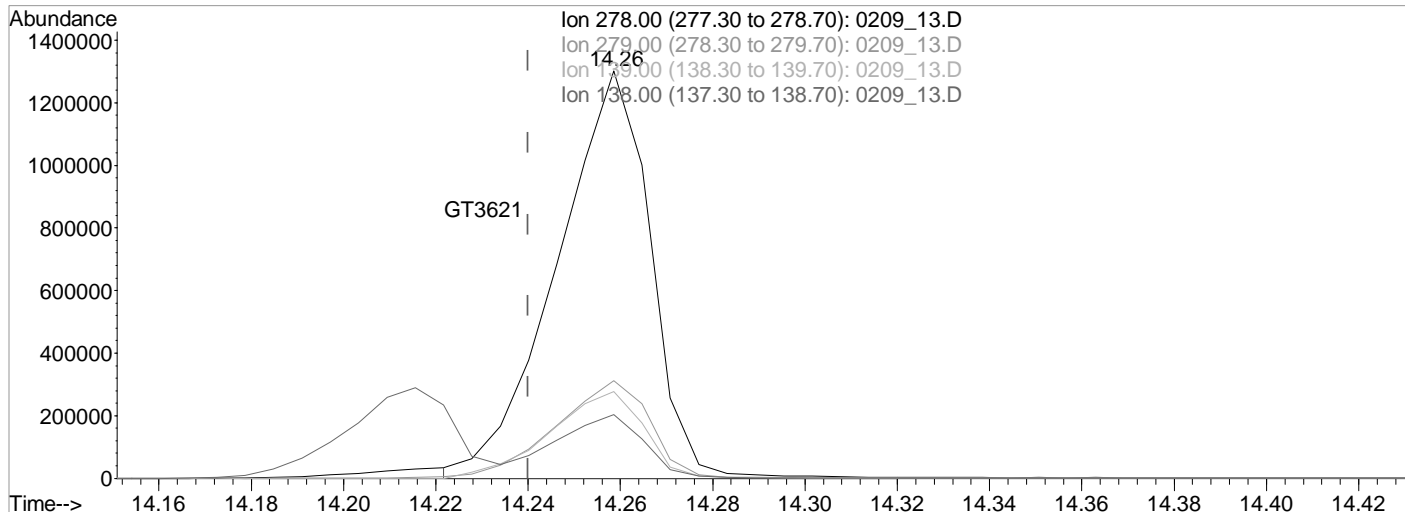
response 1877713

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	24.02
139.00	22.10	21.24
138.00	16.70	15.70

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:18 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(99) Dibenz(a,h)anthracene (MT)  
 14.26min (+0.019) 47566.6475034 ppb m

response 1829680

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	24.02
139.00	22.10	21.24
138.00	16.70	15.70

Data File : C:\MSDCHEM\1\DATA\020922\0209 15.D Vial: 12  
 Acq On : 9 Feb 2022 1:51 pm Operator: 917  
 Sample : STD TCL 4K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:24 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:23:05 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	81654	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	334983	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	163201	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	305950	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	267428	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	282139	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.00	172	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	14487	3988.9621728	ppb	93
22) Acetophenone	3.73	105	65150	3858.1826323	ppb	99
31) Benzoic Acid	4.03	105	18644	3581.9887151	ppb	99
33) alpha-terpineol	4.25	59	44003	4561.5078513	ppb	98
37) Hydroquinone	4.46	110	31357	3954.3453573	ppb	98
38) Quinoline	4.48	129	94131	4566.3745617	ppb	98
39) Caprolactam	4.49	113	8784	3805.5673121	ppb	95
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	42391	4650.8872010	ppb	100
44) Diphenyl Ether	5.09	170	60249	4582.2445482	ug/ml	97
45) Diphenyl Oxide	5.09	170	60249	4582.2445482	ug/ml	97
62) 2,3,4,6-Tetrachlorophenol	5.67	232	18117	3892.8021929	ppb	95
69) Atrazine	6.32	200	26177	3922.3101062	ppb	95
82) 2-nitrodiphenylamine	7.16	167	24613	3523.7990565	ppb #	100
85) Benzidine	7.76	184	40054	2829.4094773	ppb	99
89) 3,3-Dichlorobenzidine	9.49	252	52096	3783.8744076	ppb	98

(#) = qualifier out of range (m) = manual integration

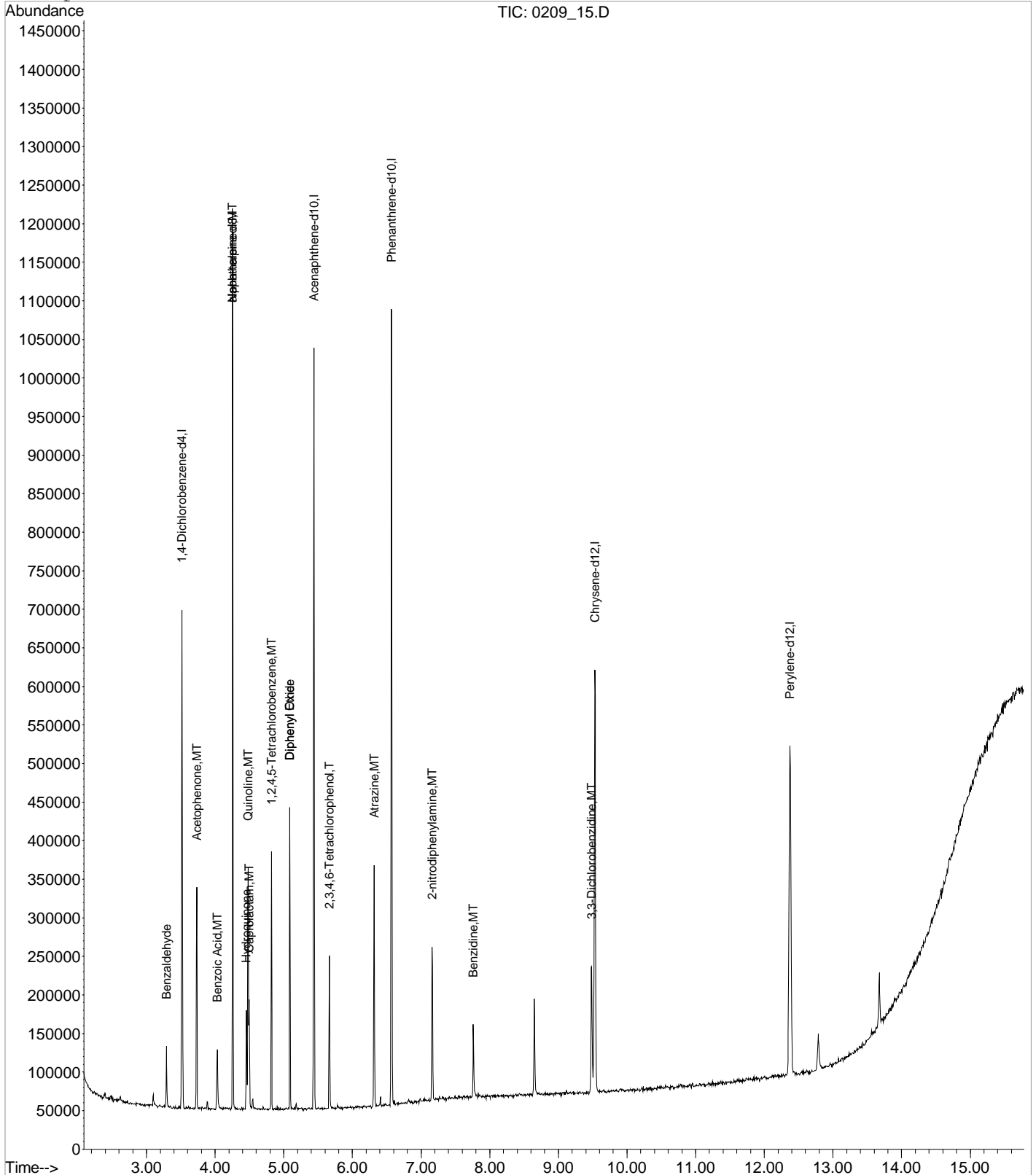
0209\_15.D S804B09V.M Fri Feb 18 15:25:33 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 15.D  
 Acq On : 9 Feb 2022 1:51 pm  
 Sample : STD TCL 4K1 PPB 22B06091 exp. 07/15/22  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:24 2022

Vial: 12  
 Operator: 917  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804B09V.RES

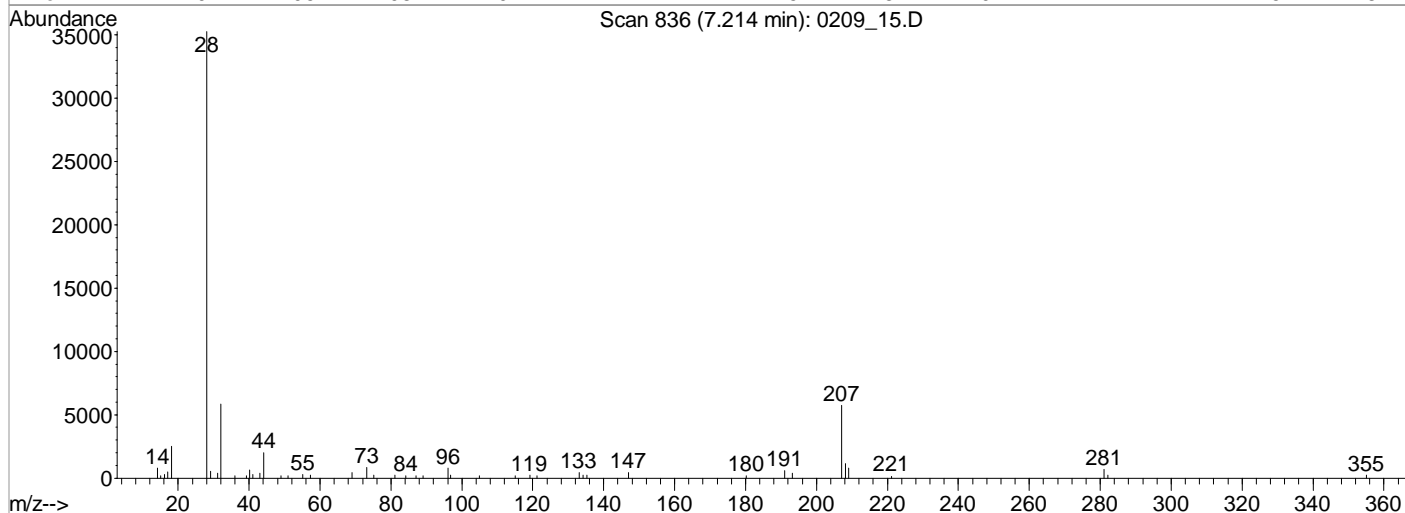
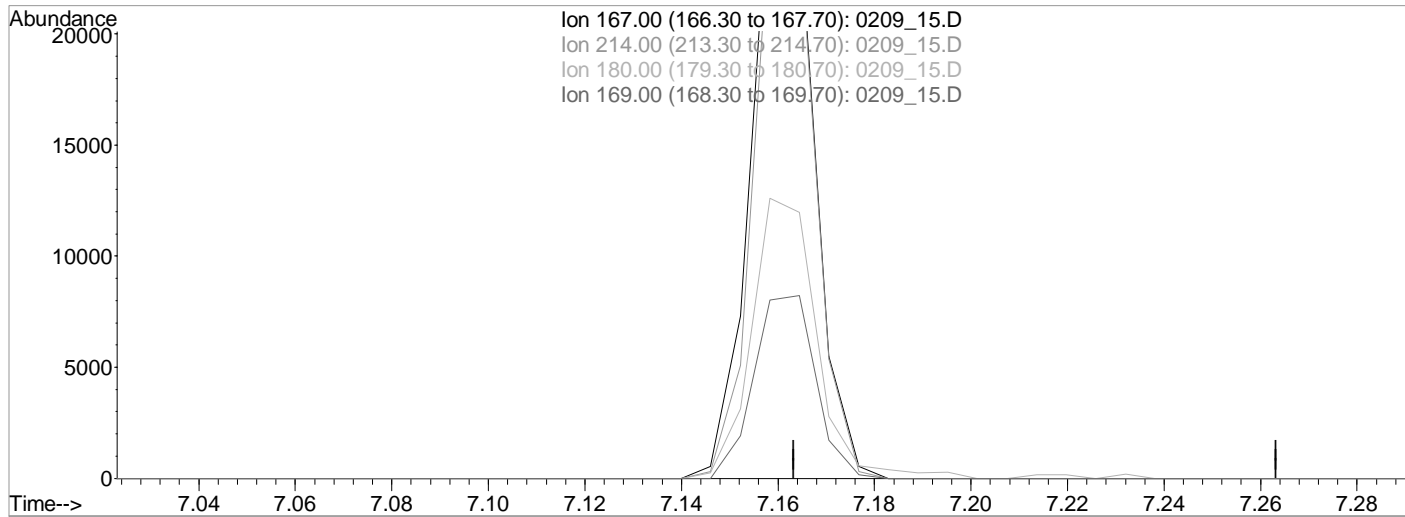
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:23:05 2022  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 15.D Vial: 12
Acq On : 9 Feb 2022 1:51 pm Operator: 917
Sample : STD TCL 4K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 14 13:57 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 16:26:53 2022
Response via : Single Level Calibration

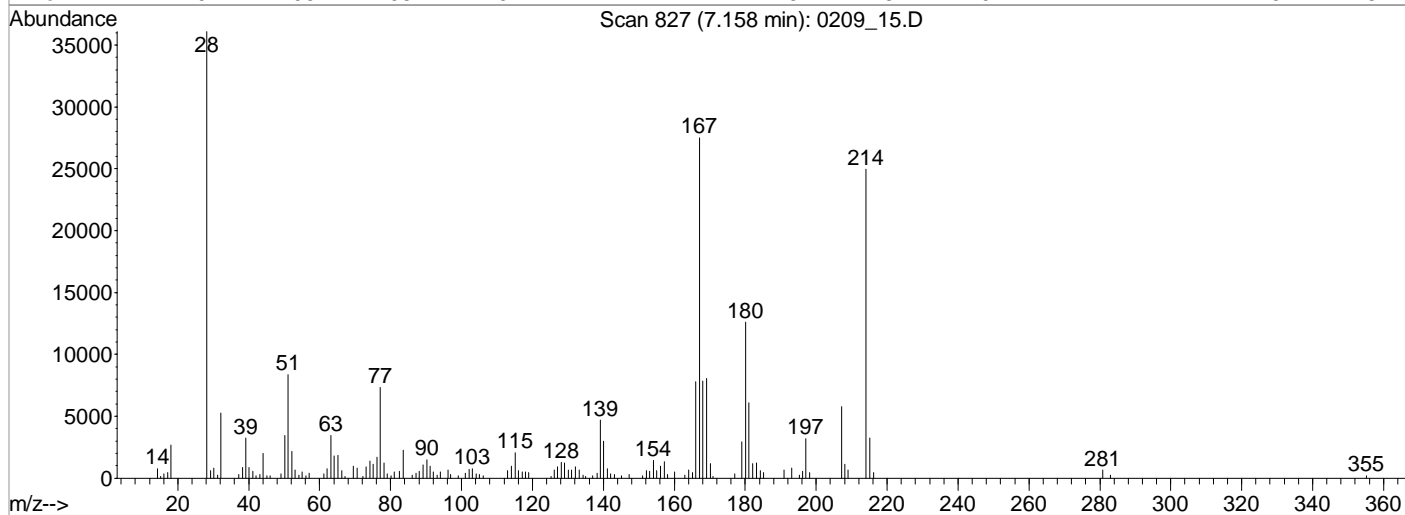
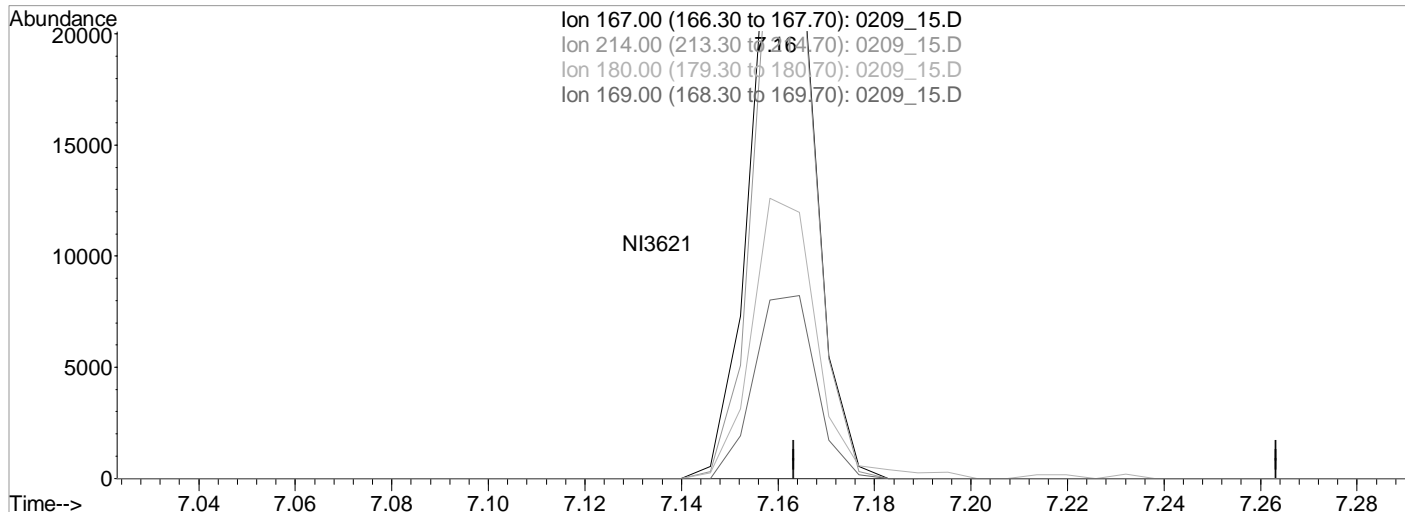


TIC: 0209\_15.D
(82) 2-nitrodiphenylamine (MT)
7.21min (-7.213) 0.0000000 ppb
Qvalue = 0
response 0
Table with 3 columns: Ion, Exp%, Act%
Rows: 167.00, 214.00, 180.00, 169.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_15.D Vial: 12  
 Acq On : 9 Feb 2022 1:51 pm Operator: 917  
 Sample : STD TCL 4K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:28 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:26:53 2022  
 Response via : Single Level Calibration



TIC: 0209\_15.D

(82) 2-nitrodiphenylamine (MT)  
 7.16min (-0.055) 0.0000000 ppb m

response 24613

Ion	Exp%	Act%
167.00	100	100
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 16.D Vial: 13  
 Acq On : 9 Feb 2022 2:11 pm Operator: 917  
 Sample : MSTD TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:12 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:11:22 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	80802	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	355632	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	160695	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	305525	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	266241	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	277583	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.00	172	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		

Target Compounds

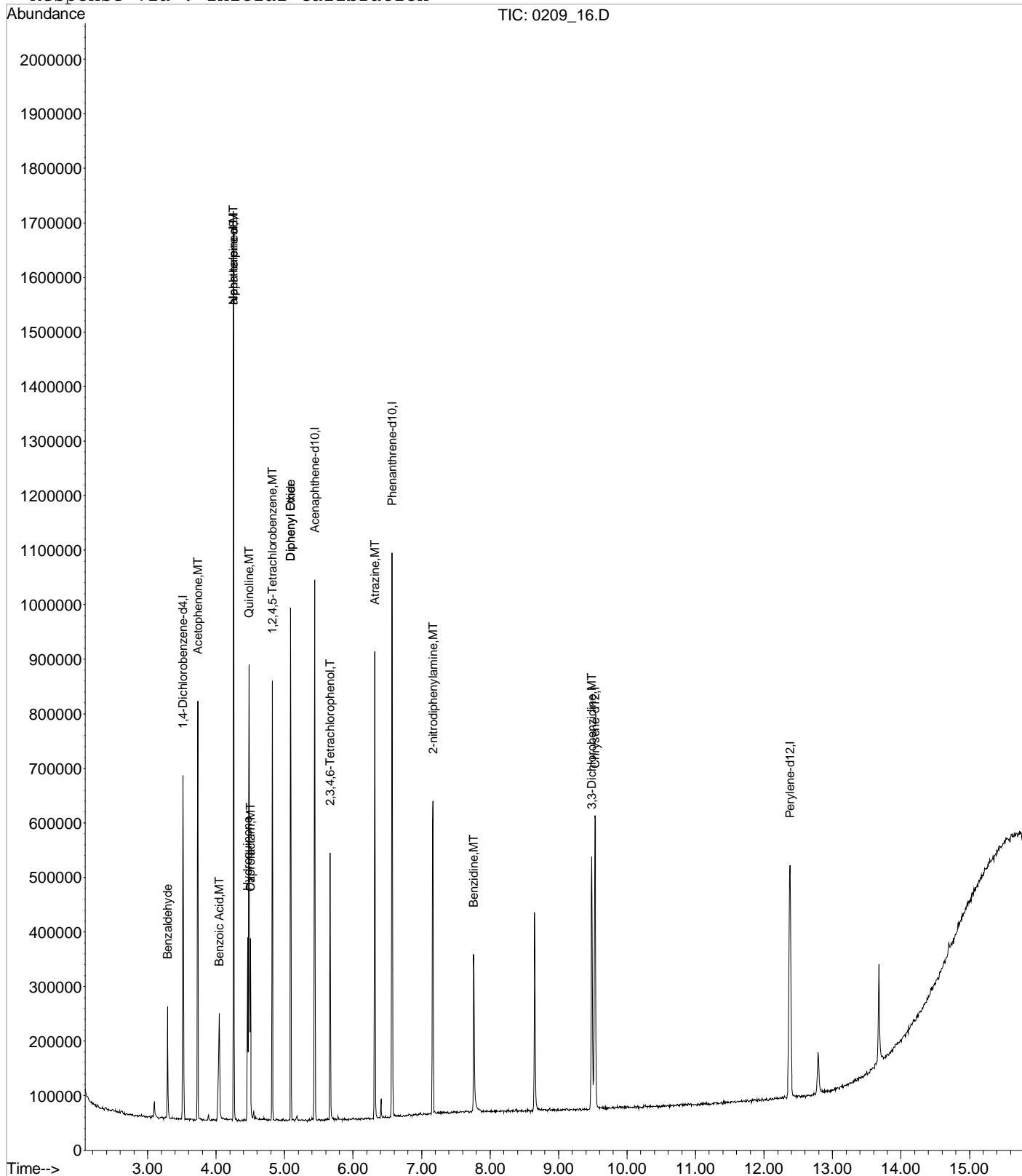
	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	34568	9618.5822945	ppb	100
22) Acetophenone	3.73	105	164650	9853.3849640	ppb	100
31) Benzoic Acid	4.04	105	61639	11154.8218541	ppb	100
33) alpha-terpineol	4.25	59	113780	11109.9986247	ppb	100
37) Hydroquinone	4.46	110	74981	8906.6267747	ppb	100
38) Quinoline	4.48	129	235712	10770.6642496	ppb	100
39) Caprolactam	4.50	113	23969	9781.3529859	ppb	100
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	105301	10882.1968071	ppb	100
44) Diphenyl Ether	5.09	170	155858	11165.5328771	ug/ml	100
45) Diphenyl Oxide	5.09	170	155858	11165.5328771	ug/ml	100
62) 2,3,4,6-Tetrachlorophenol	5.67	232	45074	9836.0924902	ppb	100
69) Atrazine	6.32	200	67082	10208.1844301	ppb	100
82) 2-nitrodiphenylamine	7.16	167	72572	10161.7203217	ppb	# 100
85) Benzidine	7.76	184	134678	9556.0521113	ppb	100
89) 3,3-Dichlorobenzidine	9.49	252	138838	10164.4628275	ppb	100

(#) = qualifier out of range (m) = manual integration

0209\_16.D S804B09V.M Fri Feb 18 15:13:48 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 16.D Vial: 13  
Acq On : 9 Feb 2022 2:11 pm Operator: 917  
Sample : MSTD TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Feb 18 15:12 2022 Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Fri Feb 18 15:11:22 2022  
Response via : Initial Calibration





Data File : C:\MSDCHEM\1\DATA\050422B\0504B 04.D Vial: 4  
 Acq On : 4 May 2022 8:30 pm Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 16:01 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	73015	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	326671	8000.00	ppb	0.00
46) Acenaphthene-d10	5.15	164	140220	8000.00	ppb	0.00
70) Phenanthrene-d10	6.26	188	265524	8000.00	ppb	0.00
84) Chrysene-d12	9.00	240	228051	8000.00	ppb	0.00
94) Perylene-d12	11.66	264	216467	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 20000.000			Recovery =		0.00%	
7) Phenol-d5	0.00	99	0d	0.0000000	ppb	
Spiked Amount 20000.000			Recovery =		0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 10000.000			Recovery =		0.00%	
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 10000.000			Recovery =		0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 20000.000			Recovery =		0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 10000.000			Recovery =		0.00%	

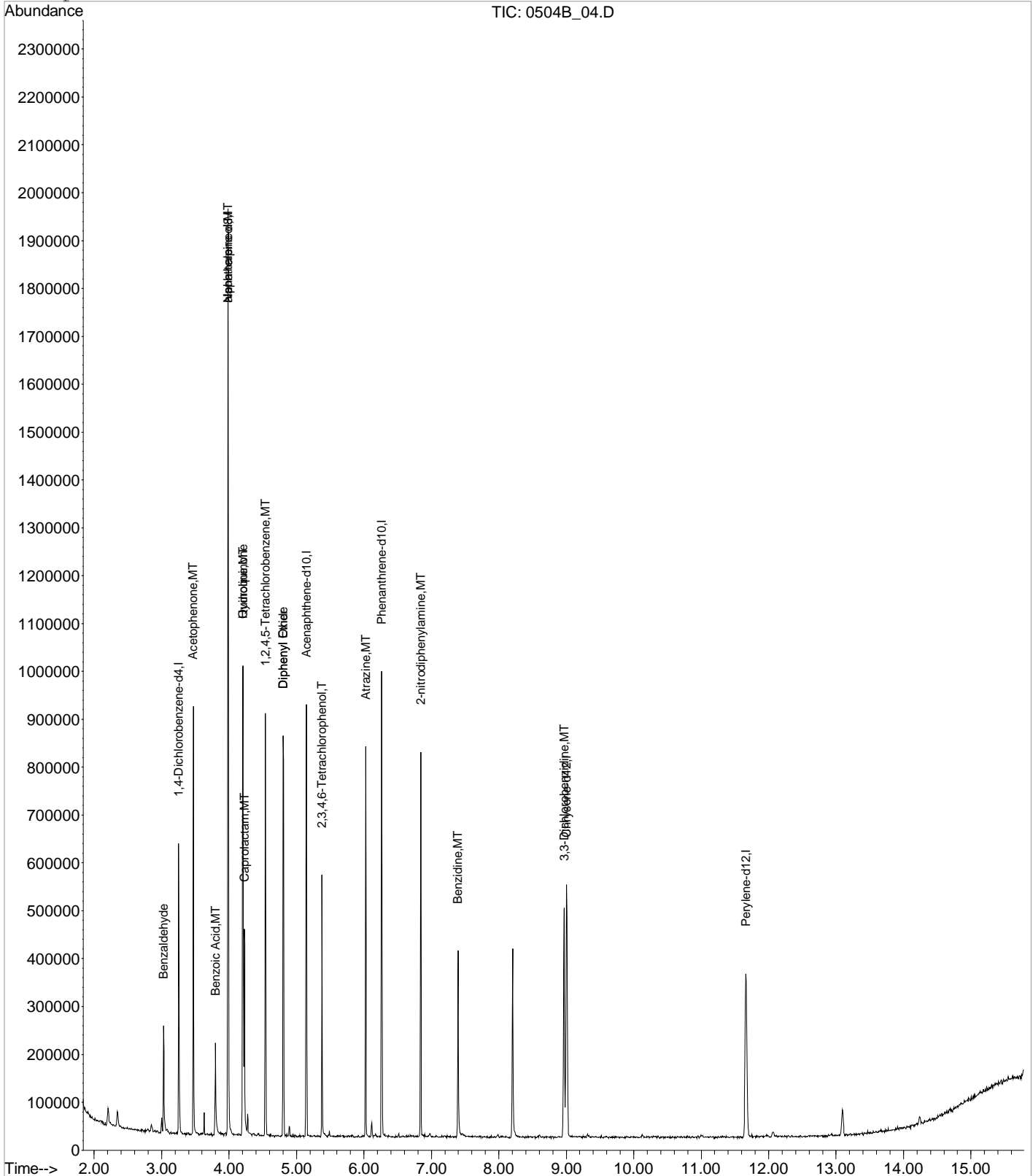
Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue	#
9) Benzaldehyde	3.03	105	37553	11563.5576519	ppb		88
22) Acetophenone	3.47	105	174657	11566.9732918	ppb		96
31) Benzoic Acid	3.80	105	51228	9584.7085299	ppb		94
33) alpha-terpineol	3.98	59	120439	11752.9375562	ppb		96
37) Hydroquinone	4.21	110	72844m	10246.0904601	ppb		
38) Quinoline	4.21	129	226702	10414.3753050	ppb		100
39) Caprolactam	4.23	113	30661	13621.5202940	ppb		81
43) 1,2,4,5-Tetrachlorobenzene	4.54	216	102104	11677.3256633	ppb		99
44) Diphenyl Ether	4.81	170	138570	9934.7053971	ug/ml#		87
45) Diphenyl Oxide	4.81	170	138570	9934.7053971	ug/ml#		87
62) 2,3,4,6-Tetrachlorophenol	5.38	232	46425	11610.2298348	ppb		99
69) Atrazine	6.02	200	60218	10501.7393261	ppb		98
82) 2-nitrodiphenylamine	6.84	167	76767	11463.4210047	ppb		100
85) Benzidine	7.39	184	138285	10272.0957612	ppb		99
89) 3,3-Dichlorobenzidine	8.97	252	124301	10587.2179159	ppb		99

(#) = qualifier out of range (m) = manual integration  
 0504B\_04.D S804E04BV.M Thu May 05 16:01:48 2022

Data File : C:\MSDCHEM\1\DATA\050422B\0504B 04.D Vial: 4  
 Acq On : 4 May 2022 8:30 pm Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 16:01 2022 Quant Results File: S804E04BV.RES

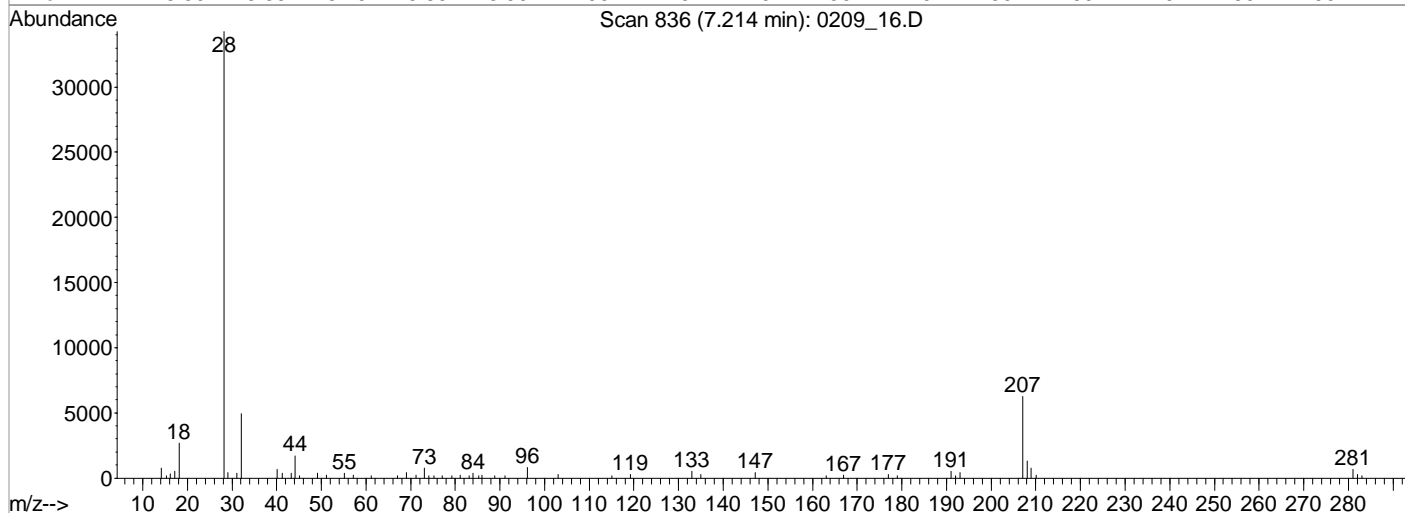
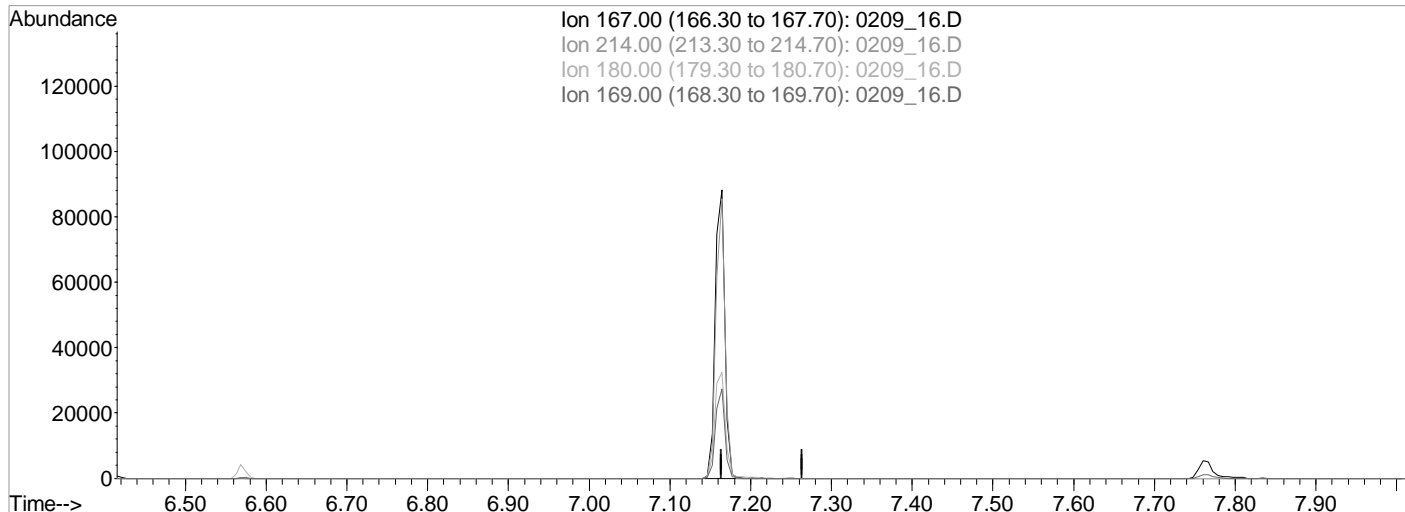
Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 16.D Vial: 13  
 Acq On : 9 Feb 2022 2:11 pm Operator: 917  
 Sample : MSTD TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:56 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:30:22 2022  
 Response via : Single Level Calibration



TIC: 0209\_16.D

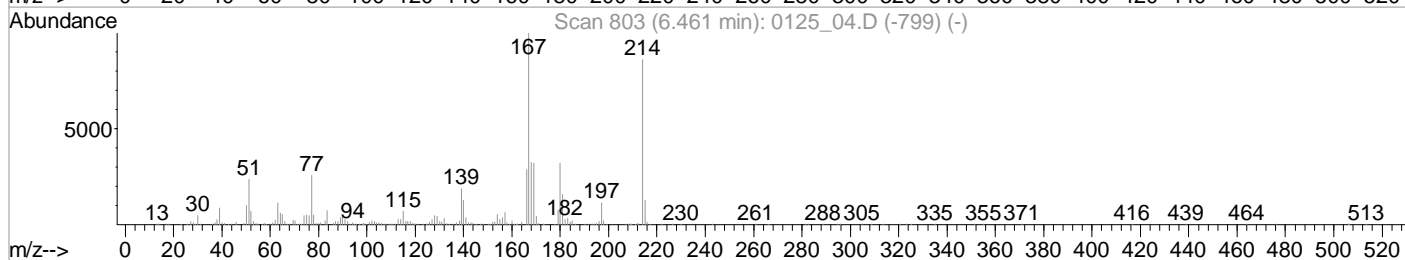
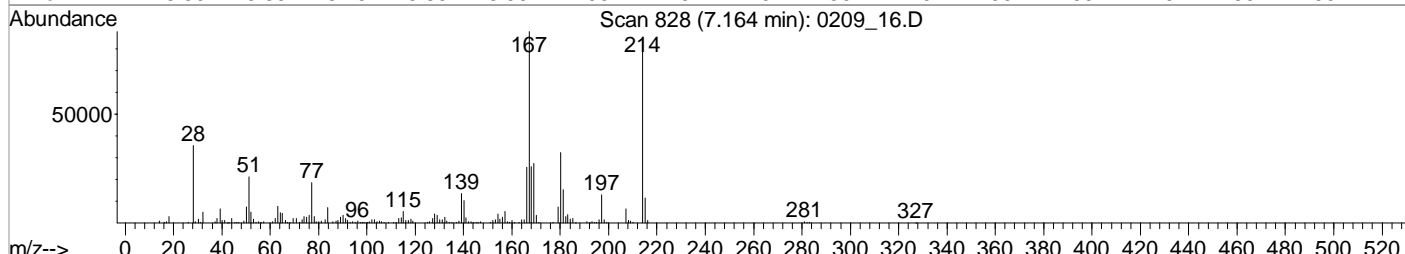
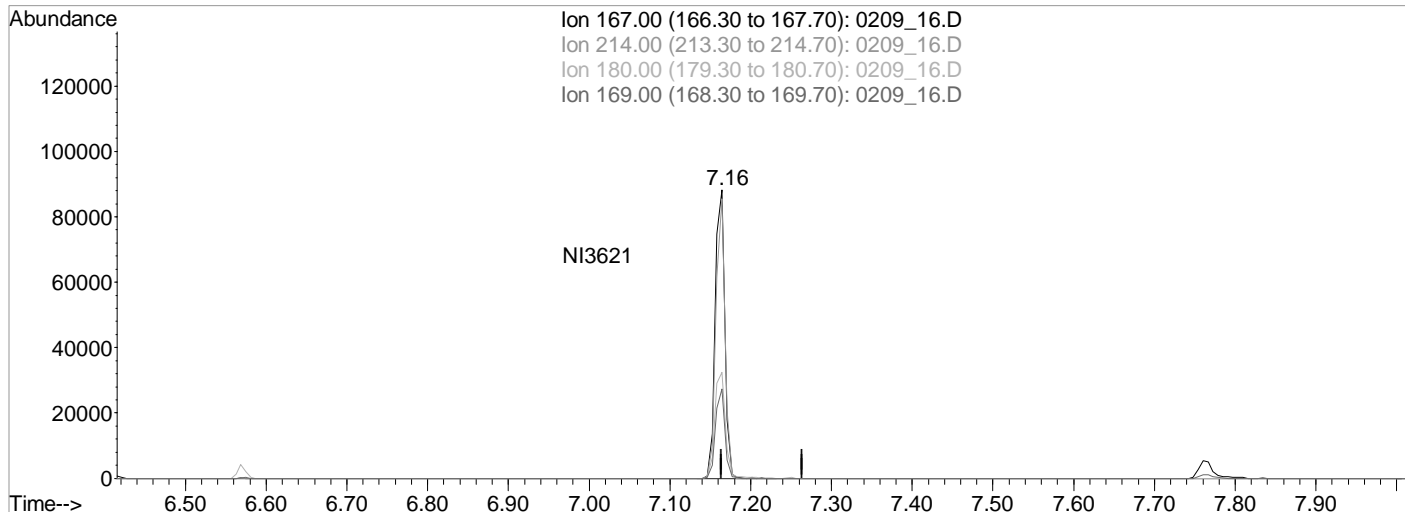
(82) 2-nitrodiphenylamine (MT)  
 7.21min (-7.213) 0.0000000 ppb  
 Qvalue = 0  
 response 0

Ion	Exp%	Act%
167.00	100	0.00
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 16.D Vial: 13
Acq On : 9 Feb 2022 2:11 pm Operator: 917
Sample : MSTD TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 14 11:56 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 16:30:22 2022
Response via : Single Level Calibration



TIC: 0209\_16.D
(82) 2-nitrodiphenylamine (MT)
7.21min (-7.213) 0.0000000 ppb
Qvalue = 0
response 0
Table with 3 columns: Ion, Exp%, Act%
Rows: 167.00, 214.00, 180.00, 169.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:27 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:25:47 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	80706	8000.00	ppb	0.00
23) Naphthalene-d8	4.25	136	399771	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	165153	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	310543	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	267602	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	278906	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.00	172	0	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	70662	19685.1634252	ppb	97
22) Acetophenone	3.73	105	331215	19844.9495807	ppb	100
31) Benzoic Acid	4.06	105	142776	22985.3864980	ppb	97
33) alpha-terpineol	4.25	59	228650	19861.3528537	ppb	100
37) Hydroquinone	4.47	110	185756	19628.8303703	ppb	97
38) Quinoline	4.48	129	490490	19937.9498035	ppb	99
39) Caprolactam	4.50	113	57125	20737.8999620	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	213585	19635.6089839	ppb	99
44) Diphenyl Ether	5.09	170	314838	20064.4401459	ug/ml	100
45) Diphenyl Oxide	5.09	170	314838	20064.4401459	ug/ml	100
62) 2,3,4,6-Tetrachlorophenol	5.67	232	91641	19458.1801546	ppb	98
69) Atrazine	6.32	200	137477	20355.8128288	ppb	99
82) 2-nitrodiphenylamine	7.16	167	162587	22933.0128430	ppb	# 100
85) Benzidine	7.76	184	309145	21823.7641043	ppb	99
89) 3,3-Dichlorobenzidine	9.49	252	286959	20829.0616750	ppb	99

(#) = qualifier out of range (m) = manual integration

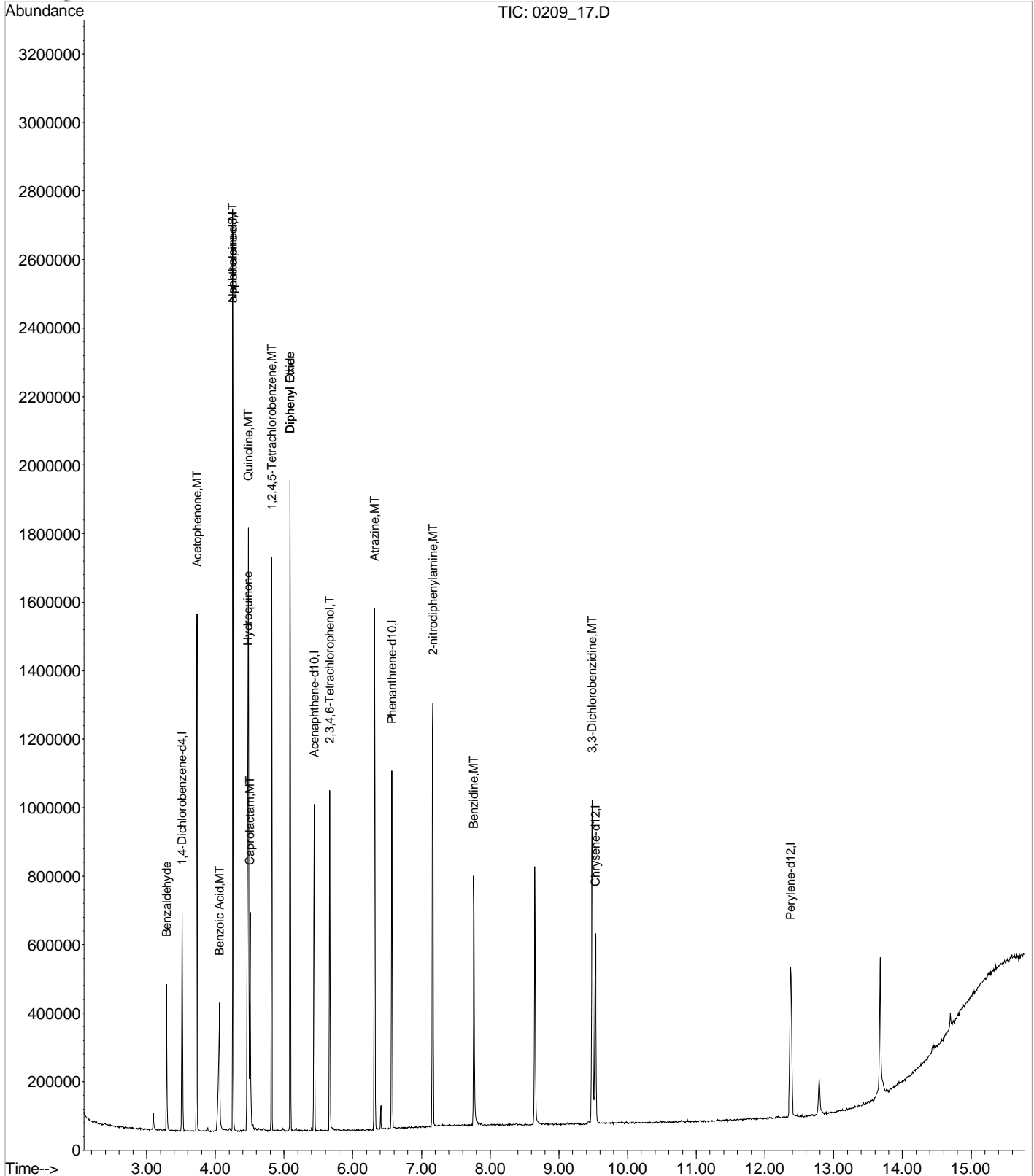
0209\_17.D S804B09V.M Fri Feb 18 15:28:47 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D  
 Acq On : 9 Feb 2022 2:32 pm  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:27 2022

Vial: 14  
 Operator: 917  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804B09V.RES

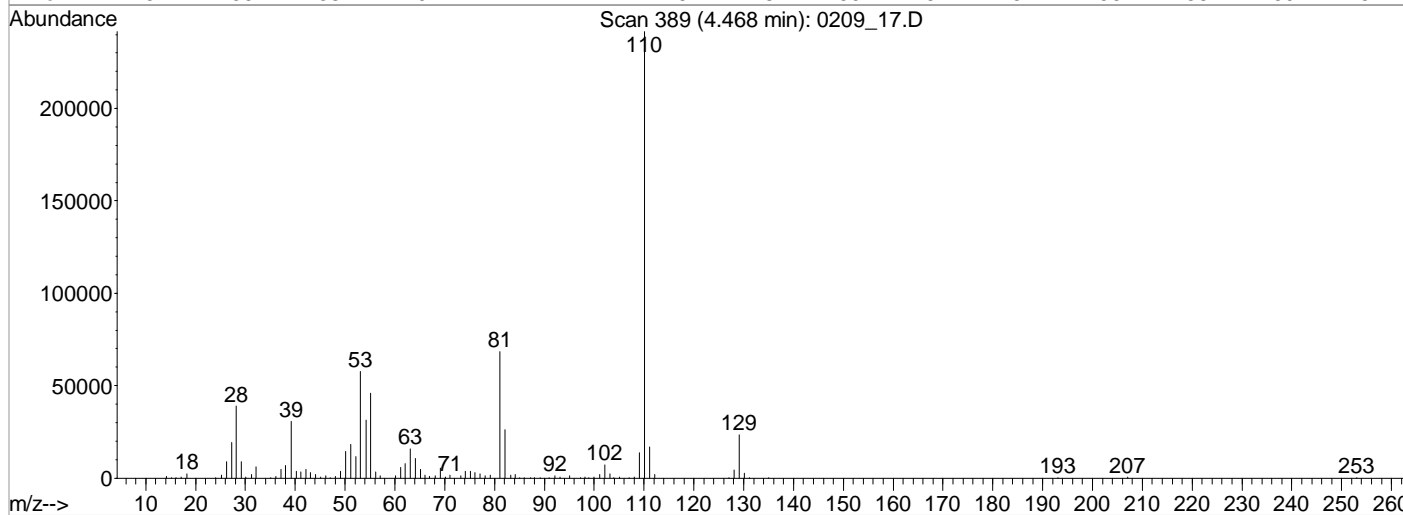
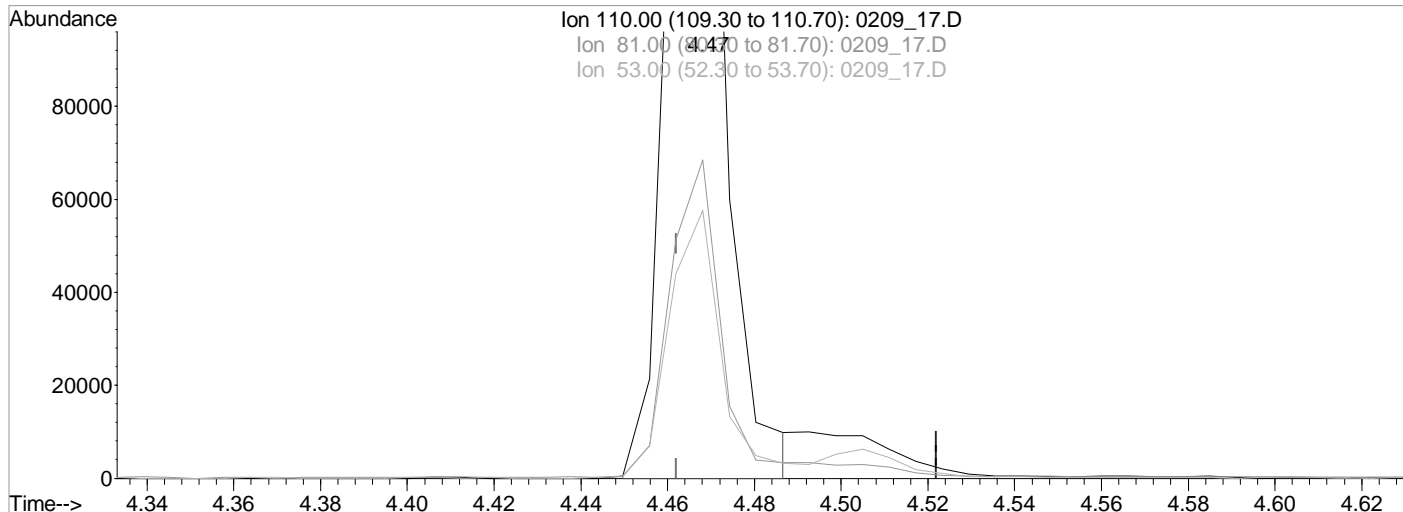
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:25:47 2022  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:36 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:34:51 2022  
 Response via : Single Level Calibration



TIC: 0209\_17.D

(37) Hydroquinone  
 4.47min (+0.006) 18327.5298072 ppb m

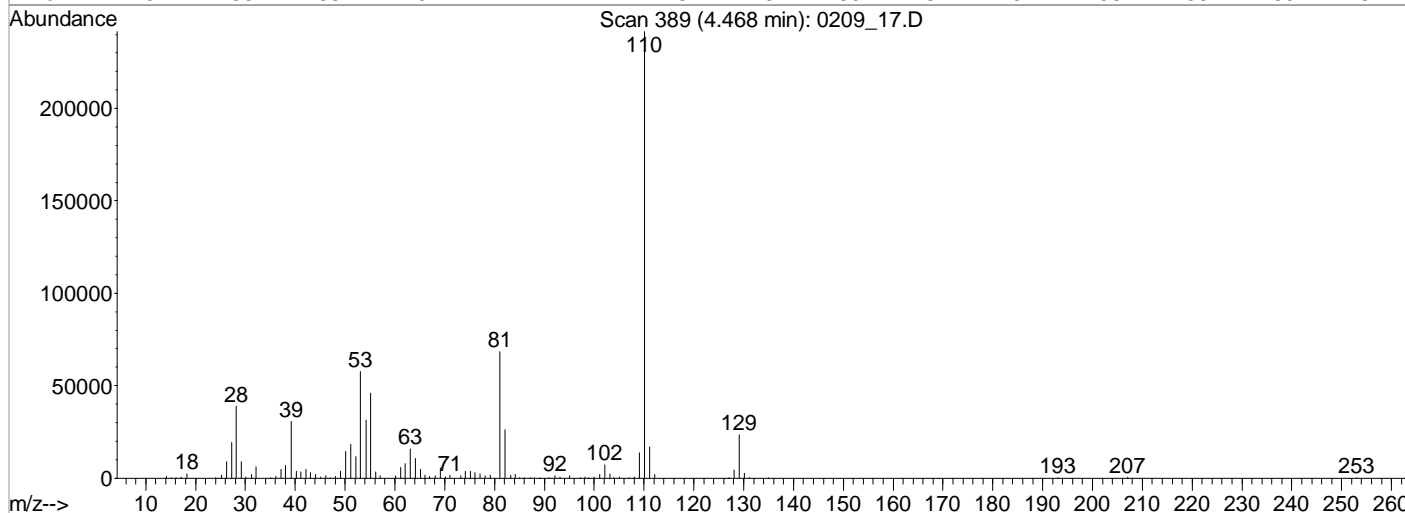
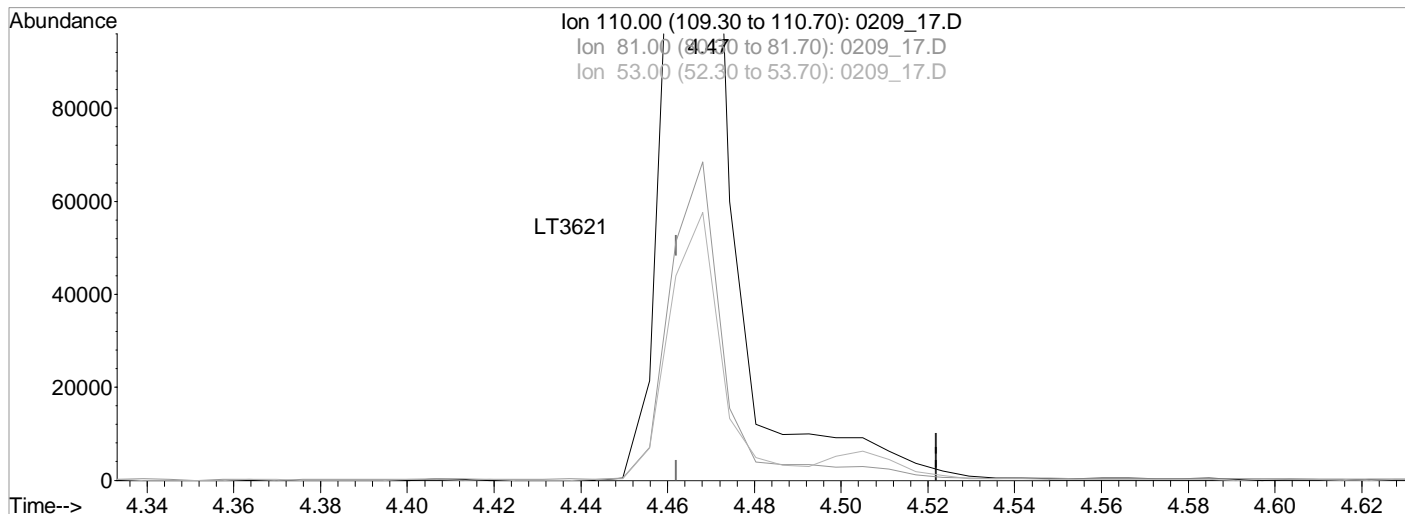
response 185555

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.35
53.00	25.90	23.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:36 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:34:51 2022  
 Response via : Single Level Calibration



TIC: 0209\_17.D

(37) Hydroquinone  
 4.47min (+0.006) 19899.5756395 ppb m

response 201471

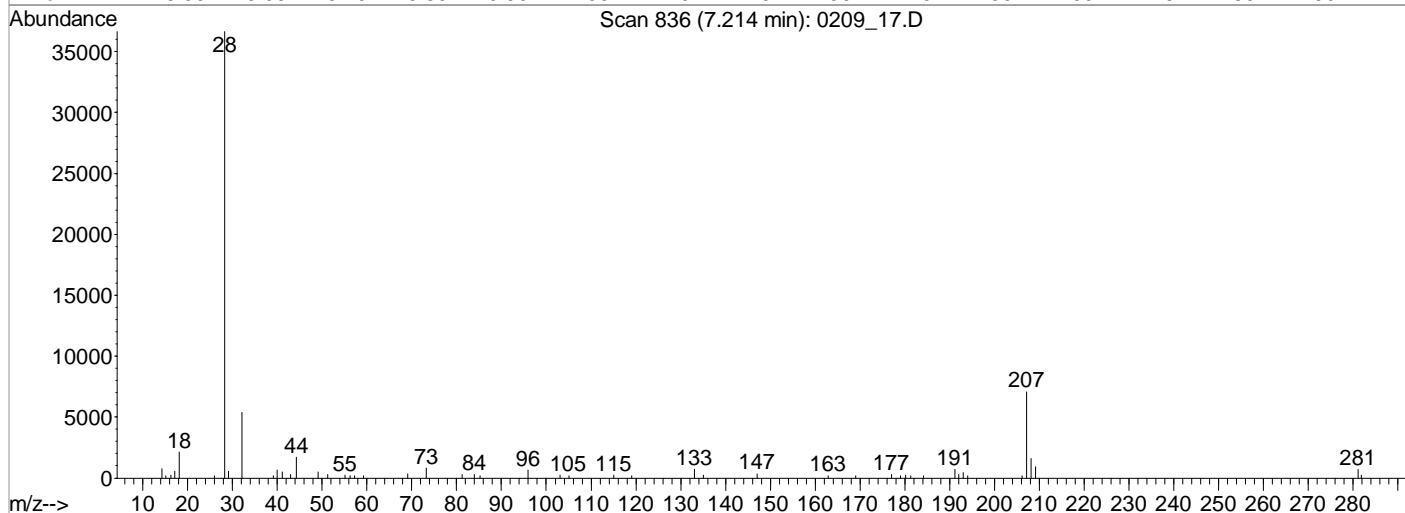
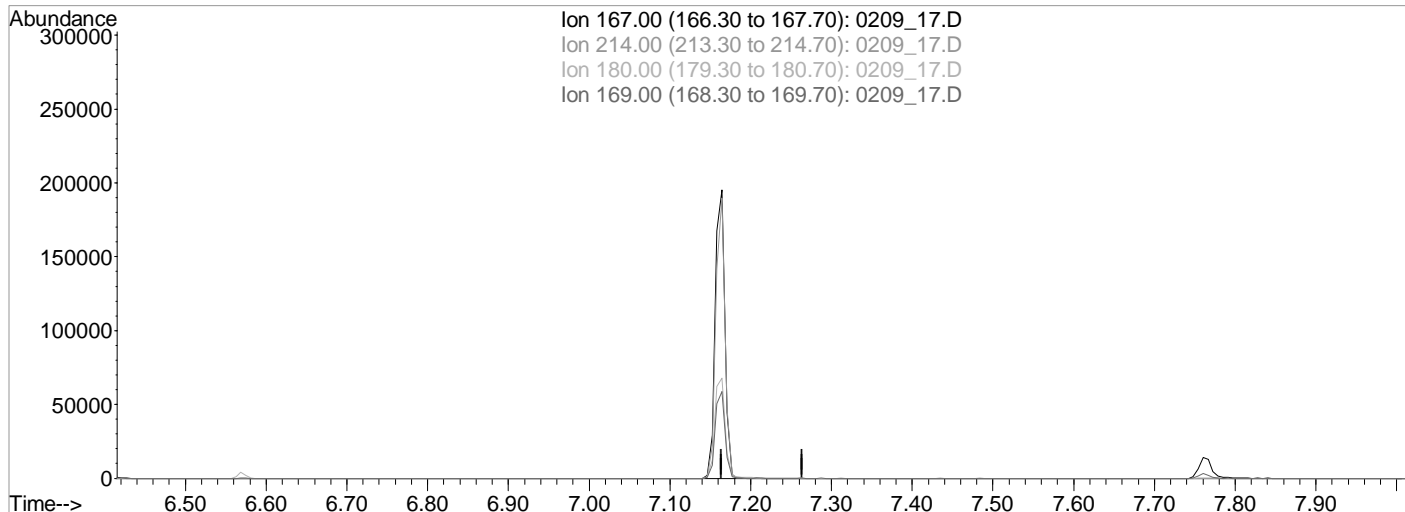
Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.35
53.00	25.90	23.82
0.00	0.00	0.00



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14
Acq On : 9 Feb 2022 2:32 pm Operator: 917
Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 14 16:36 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 16:34:51 2022
Response via : Single Level Calibration



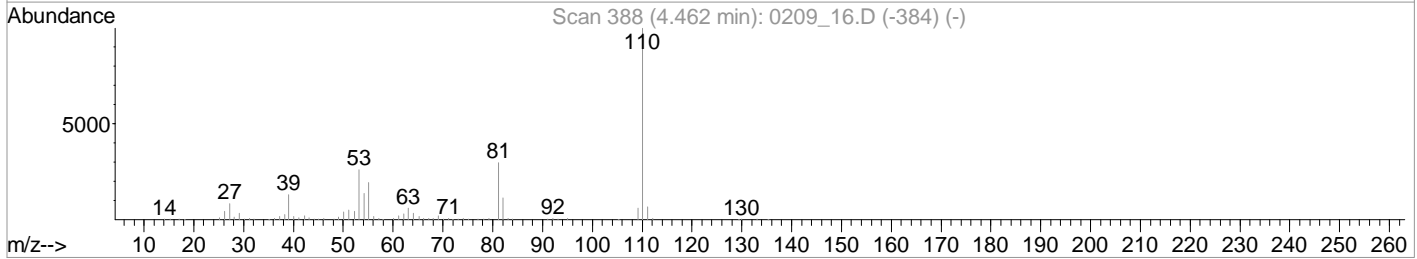
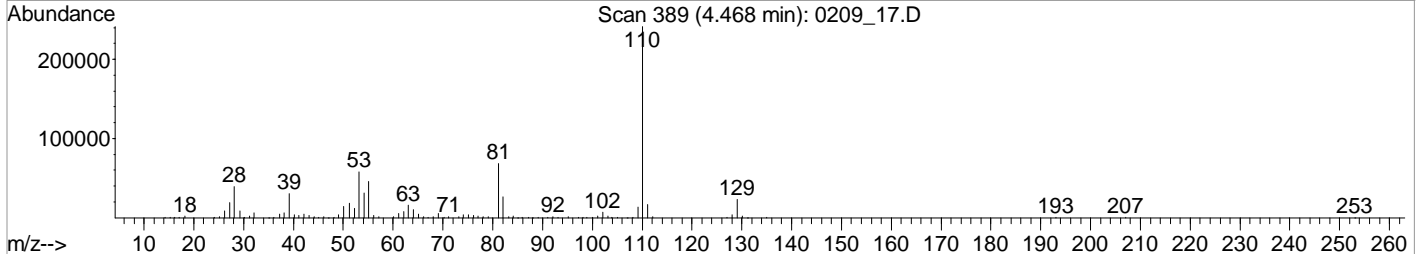
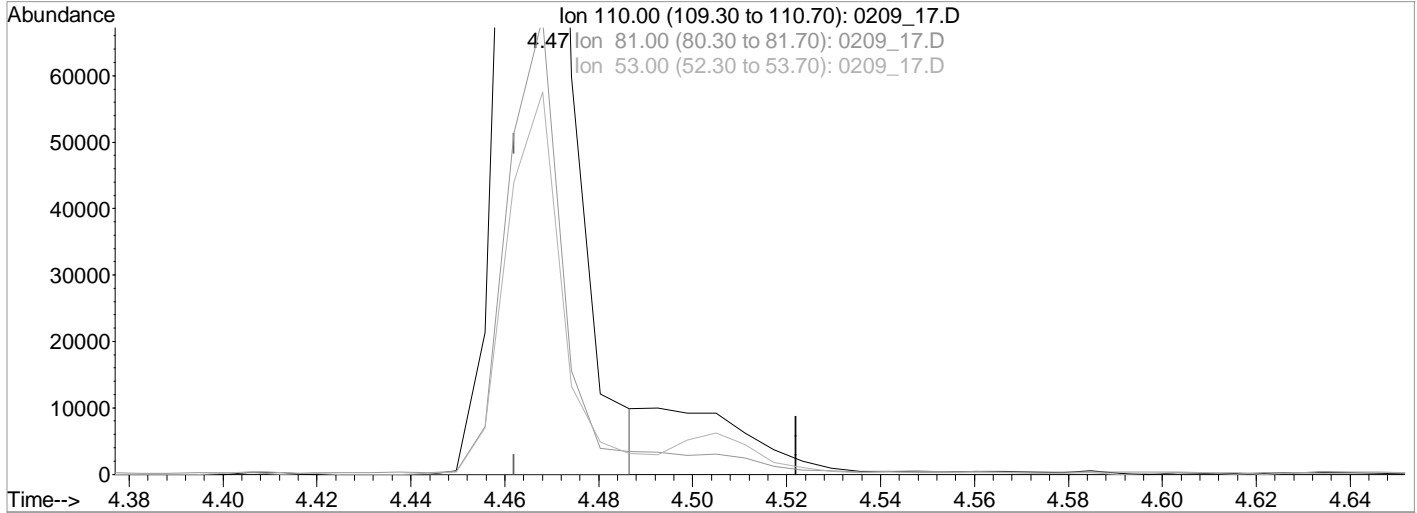
TIC: 0209\_17.D

(82) 2-nitrodiphenylamine (MT)
7.21min (-7.213) 0.0000000 ppb
Qvalue = 0
response 0
Ion Exp% Act%
167.00 100 0.00
214.00 0.00 0.00
180.00 0.00 0.00
169.00 0.00 0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:27 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:25:47 2022  
 Response via : Single Level Calibration



TIC: 0209\_17.D

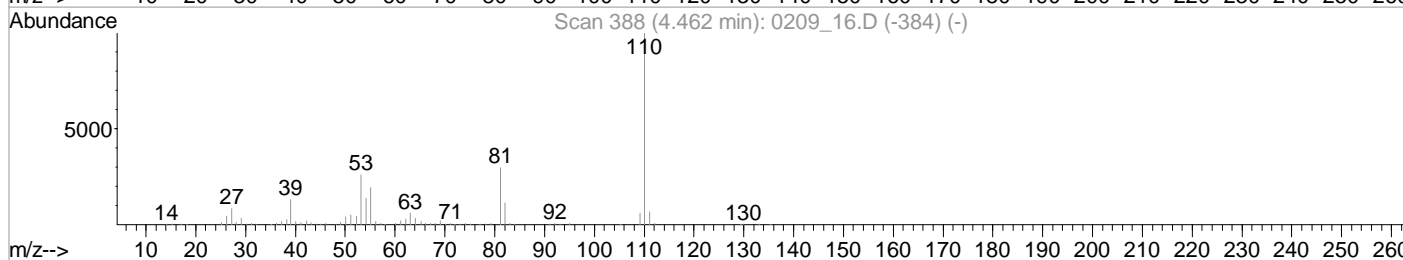
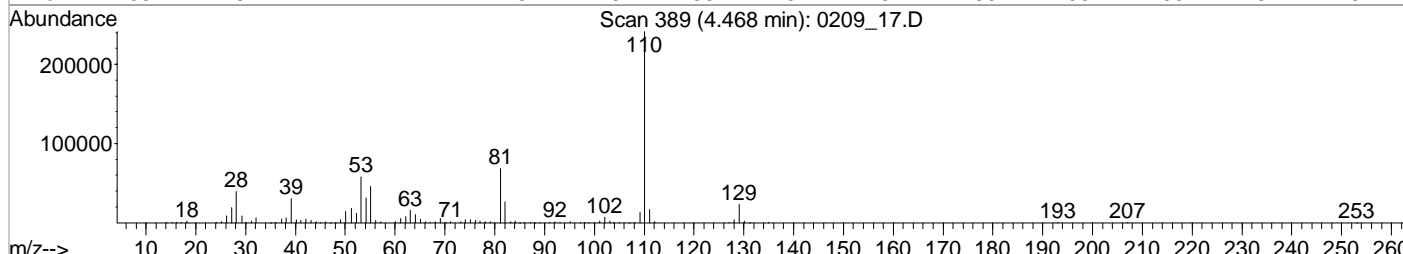
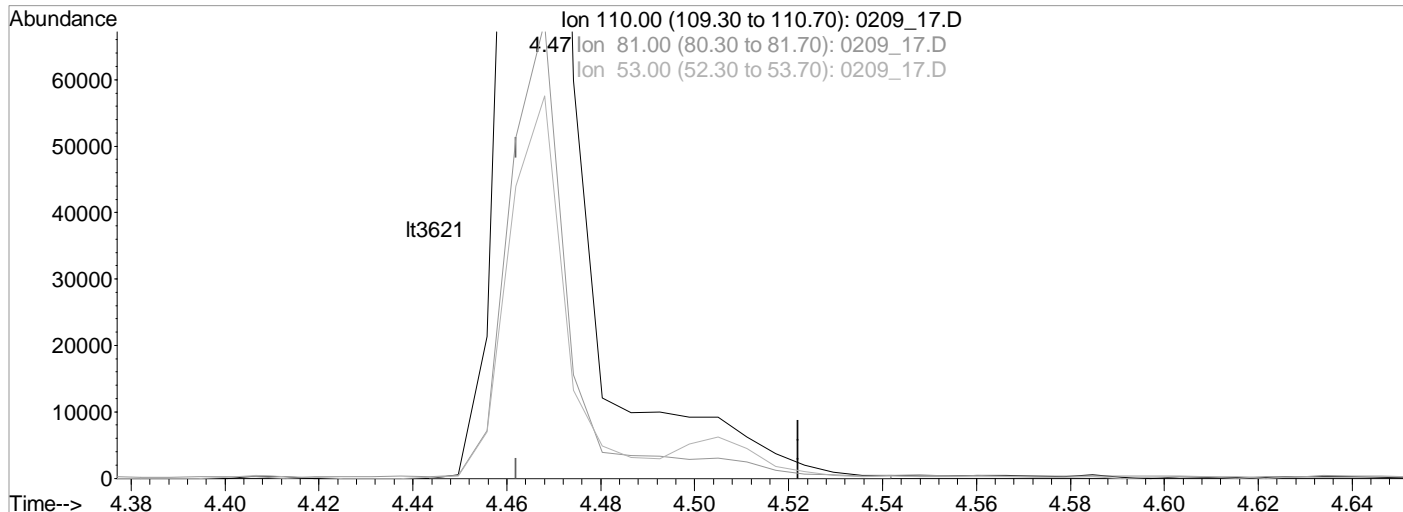
(37) Hydroquinone  
 4.47min (+0.006) 19628.8303703 ppb  
 Qvalue = 97  
 response 185756

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.22
53.00	25.90	23.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:27 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:25:47 2022  
 Response via : Single Level Calibration



TIC: 0209\_17.D

(37) Hydroquinone  
 4.47min (+0.006) 19628.8303703 ppb  
 Qvalue = 97  
 response 185756

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.22
53.00	25.90	23.82
0.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:30 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:28:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	82108	8000.00	ppb	0.00
23) Naphthalene-d8	4.25	136	454114	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	168401	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	315216	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	275976	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	284329	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	106225	29087.0842194	ppb	99
22) Acetophenone	3.73	105	505456	29767.5922833	ppb	99
31) Benzoic Acid	4.08	105	230790	32708.4514047	ppb	98
33) alpha-terpineol	4.25	59	348279	26632.4613626	ppb	100
37) Hydroquinone	4.47	110	296671	27928.9894085	ppb	96
38) Quinoline	4.48	129	748414	26781.7307239	ppb	99
39) Caprolactam	4.51	113	91827	29346.4351921	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	326532	26426.8725297	ppb	100
44) Diphenyl Ether	5.09	170	472571	26512.6637447	ug/ml	99
45) Diphenyl Oxide	5.09	170	472571	26512.6637447	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.67	232	141749	29517.1352371	ppb	99
69) Atrazine	6.32	200	207850	30182.1541051	ppb	99
82) 2-nitrodiphenylamine	7.16	167	262818	36543.3967385	ppb #	100
85) Benzidine	7.77	184	501082	34300.0121056	ppb	100
89) 3,3-Dichlorobenzidine	9.49	252	434215	30561.3628394	ppb	99

(#) = qualifier out of range (m) = manual integration

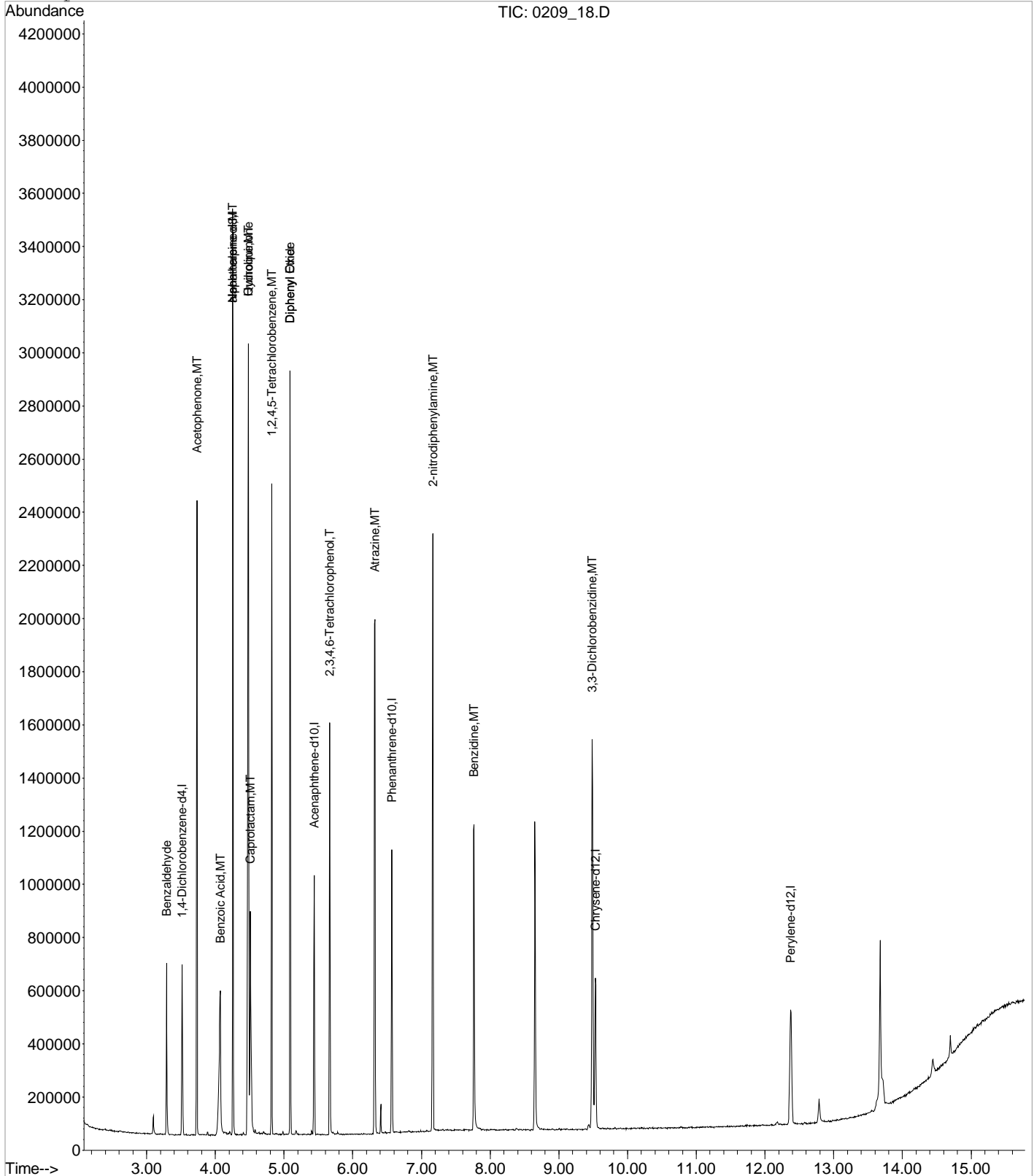
0209\_18.D S804B09V.M Fri Feb 18 15:31:52 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D  
Acq On : 9 Feb 2022 2:53 pm  
Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
MS Integration Params: RTEINT.P  
Quant Time: Feb 18 15:30 2022

Vial: 15  
Operator: 917  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804B09V.RES

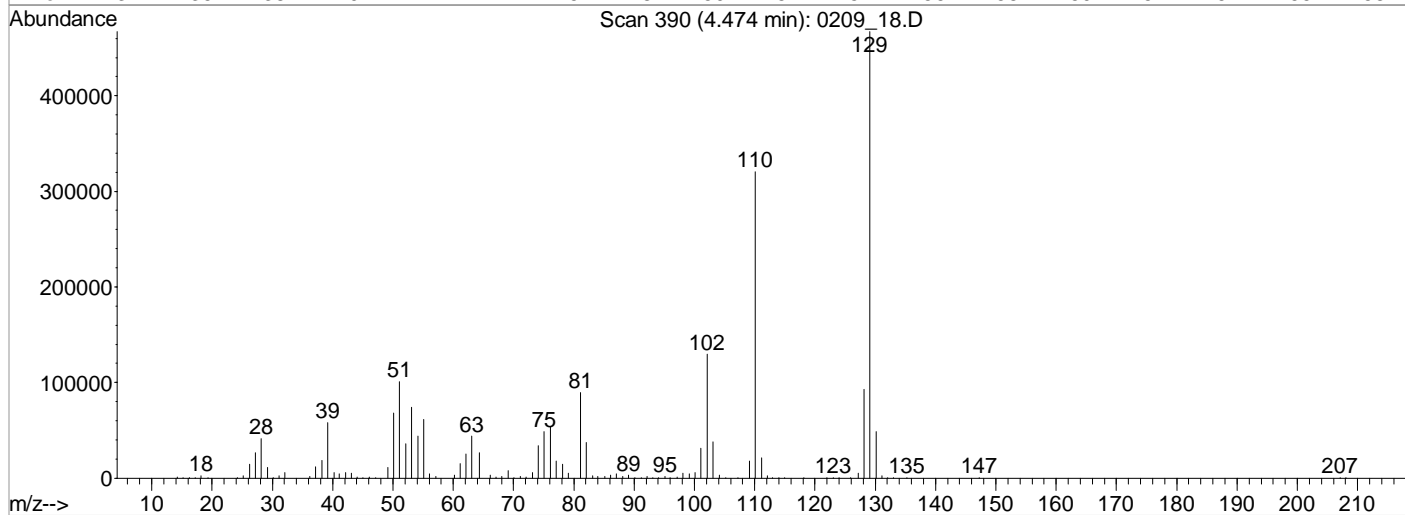
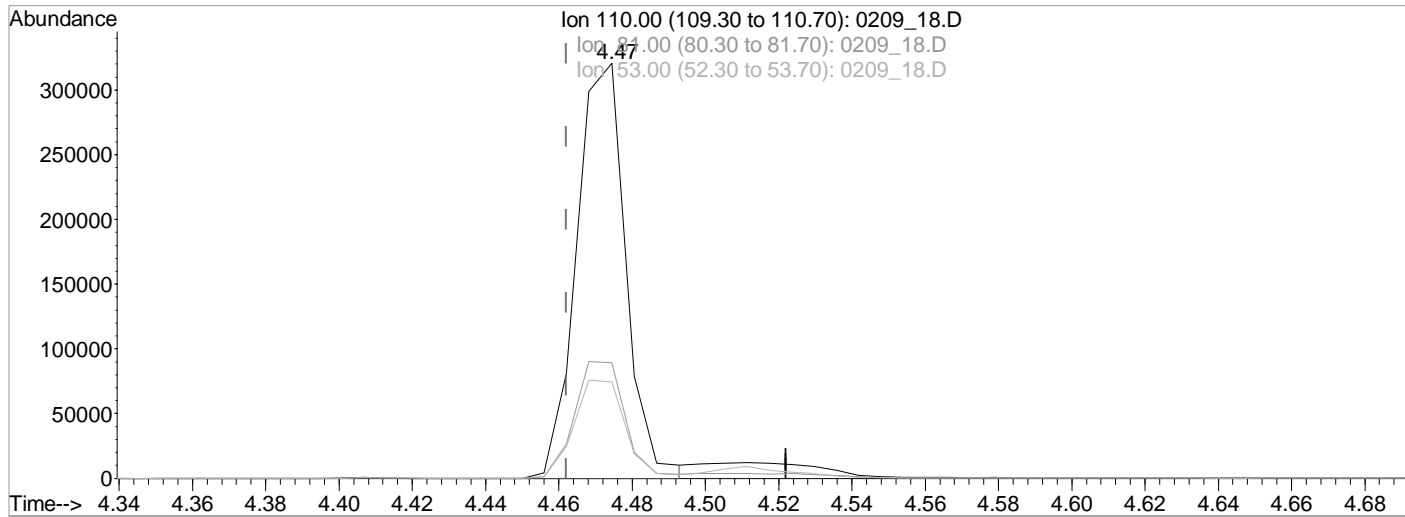
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Fri Feb 18 15:28:57 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:37:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

(37) Hydroquinone  
 4.47min (+0.012) 26335.0012438 ppb m

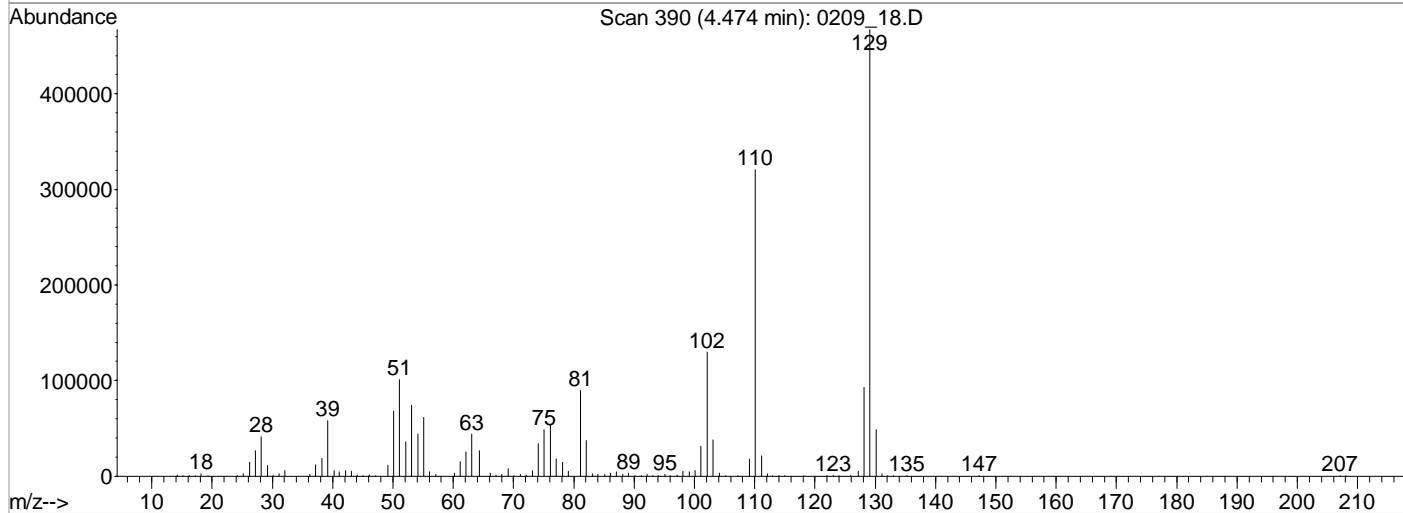
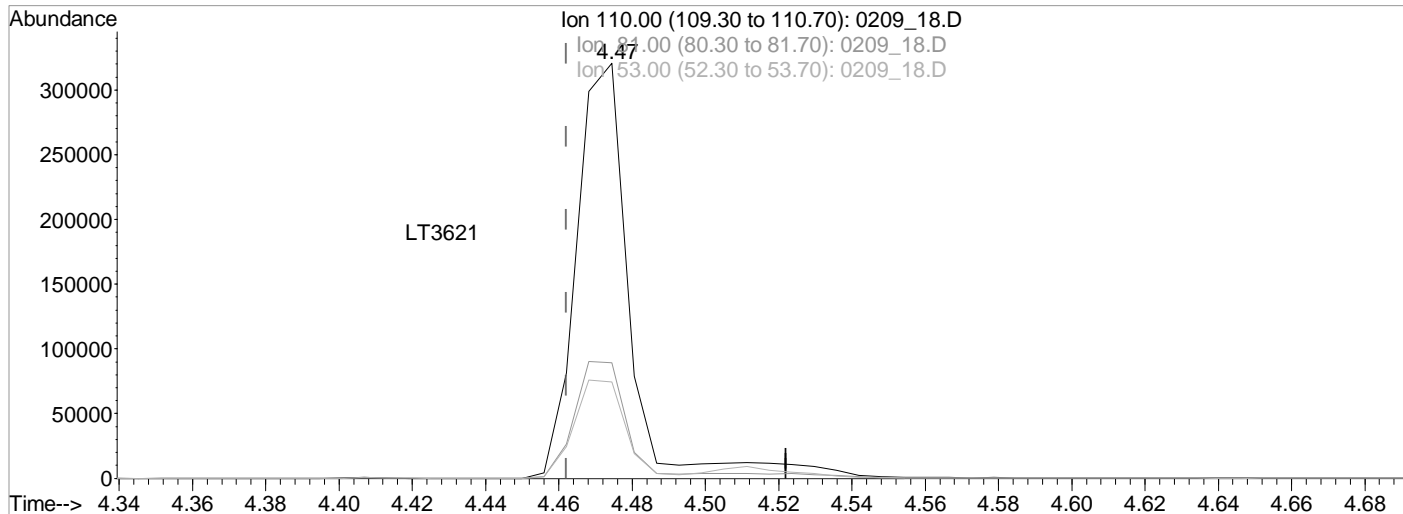
response 296613

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	27.93
53.00	25.90	23.20
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:37:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

(37) Hydroquinone  
 4.47min (+0.012) 28839.3802835 ppb m

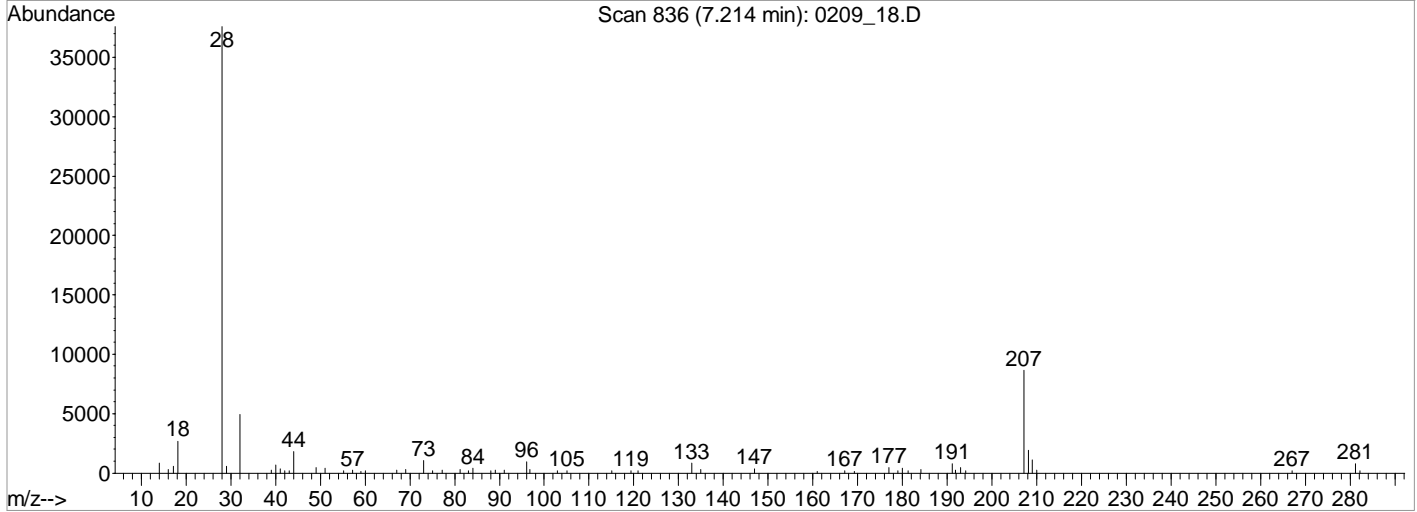
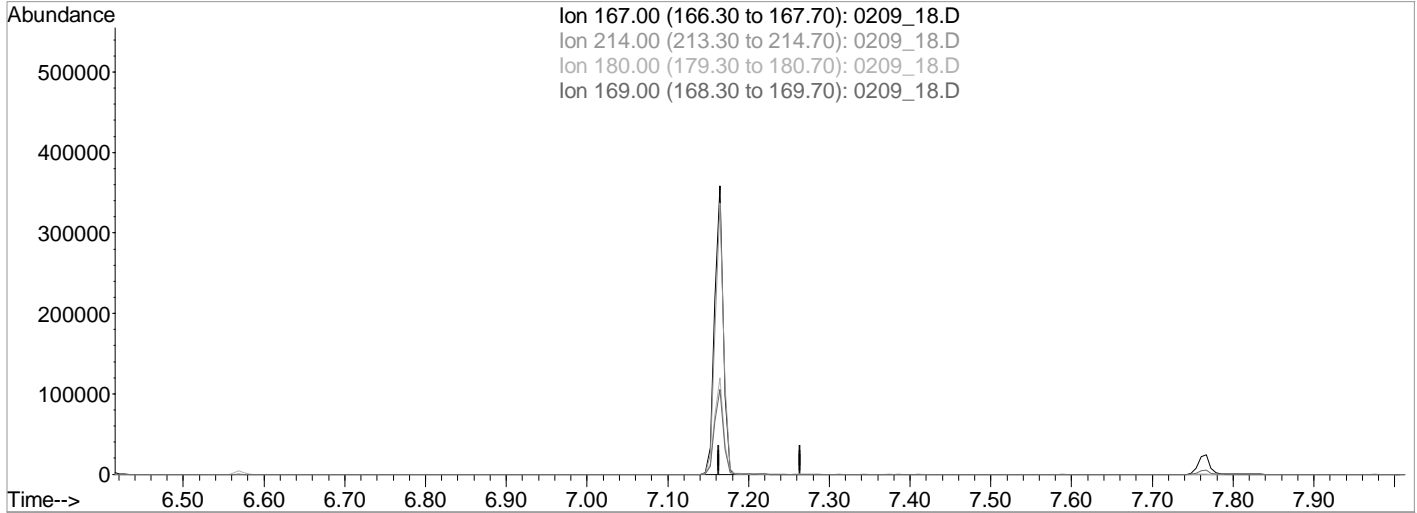
response 324820

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	27.93
53.00	25.90	23.20
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:37:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

(82) 2-nitrodiphenylamine (MT)  
 7.21min (-7.213) 0.0000000 ppb  
 Qvalue = 0  
 response 0

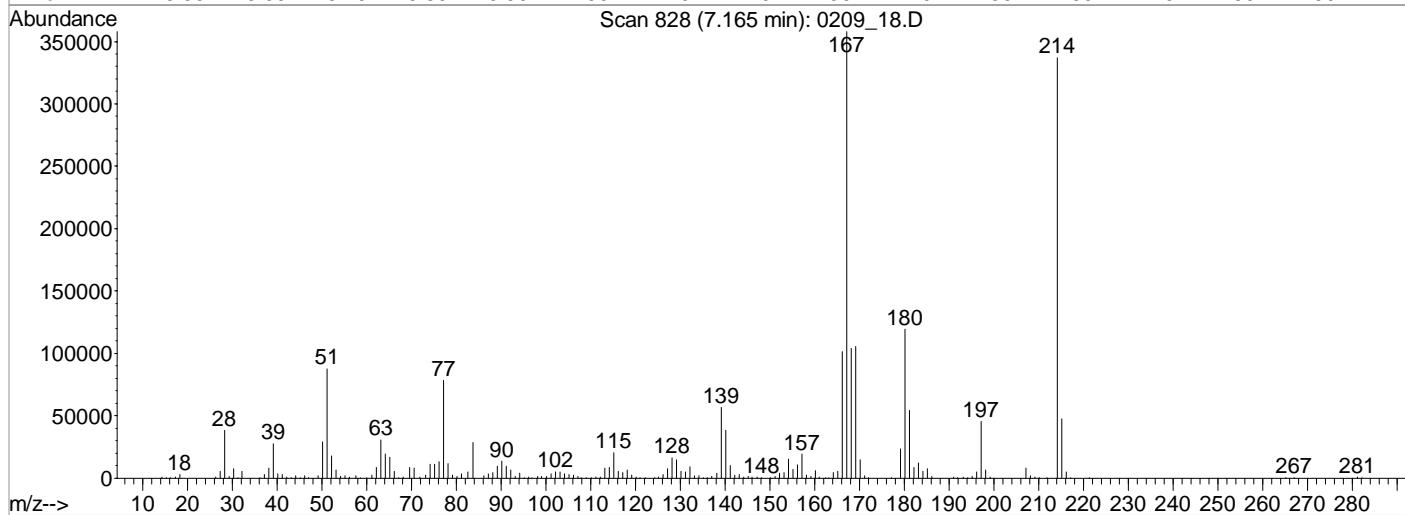
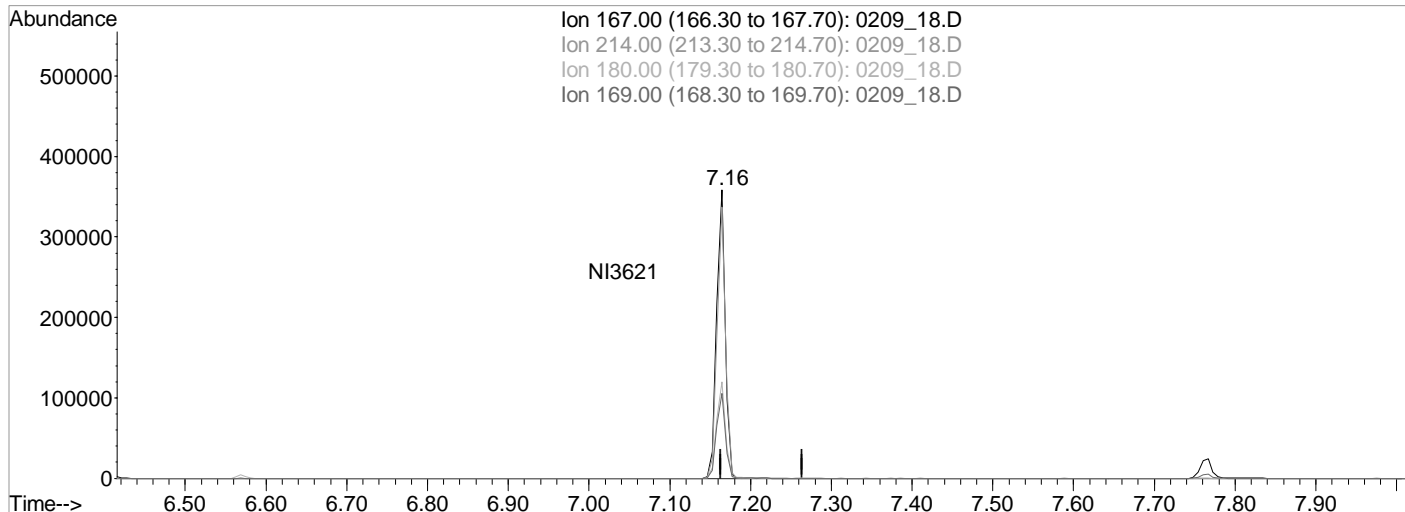
Ion	Exp%	Act%
167.00	100	0.00
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:40 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:37:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

(82) 2-nitrodiphenylamine (MT)  
 7.16min (-0.049) 0.0000000 ppb m

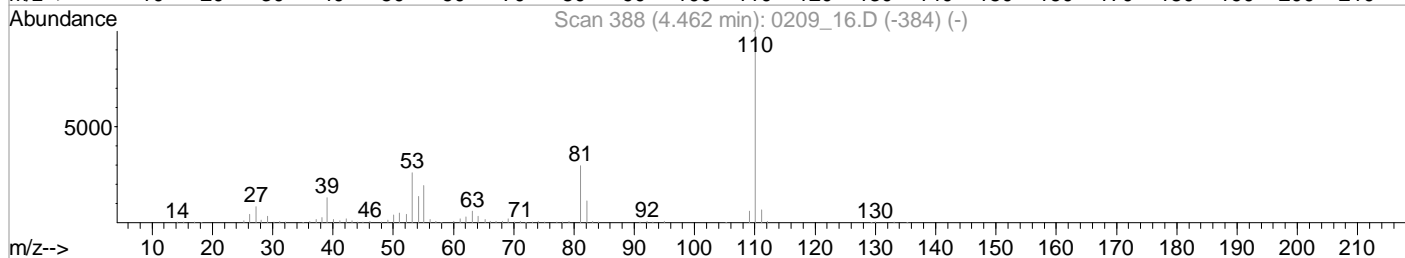
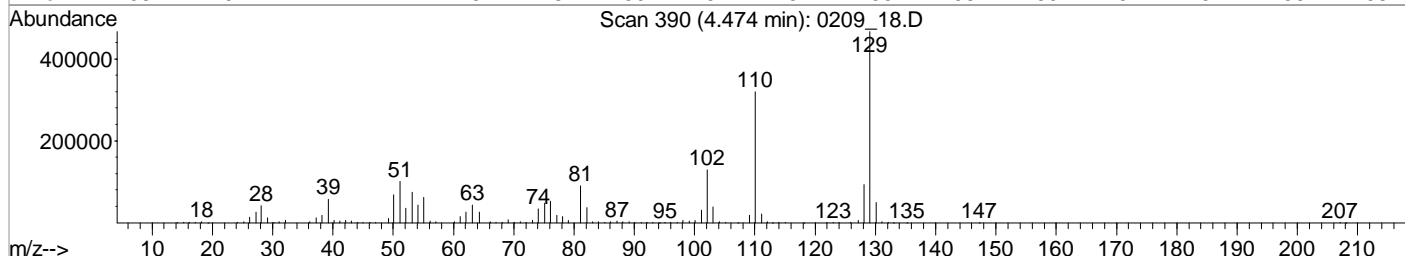
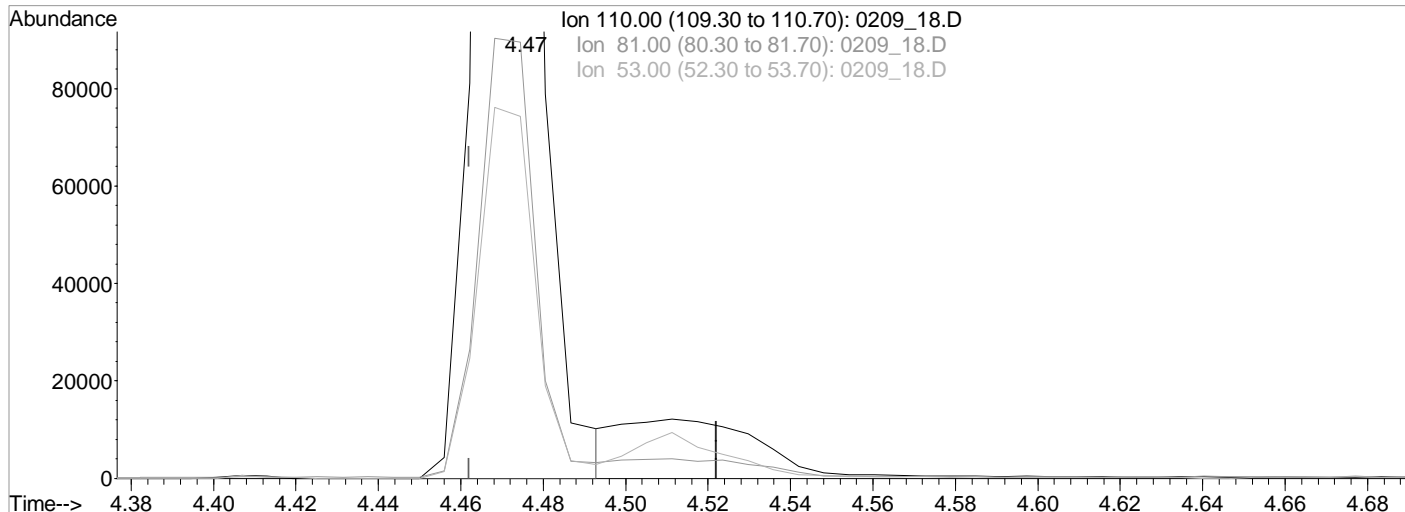
response 263020

Ion	Exp%	Act%
167.00	100	100
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:30 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:28:57 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

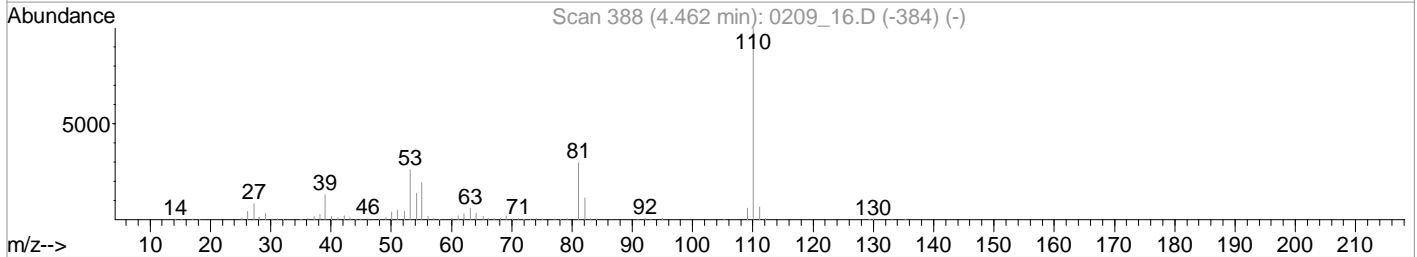
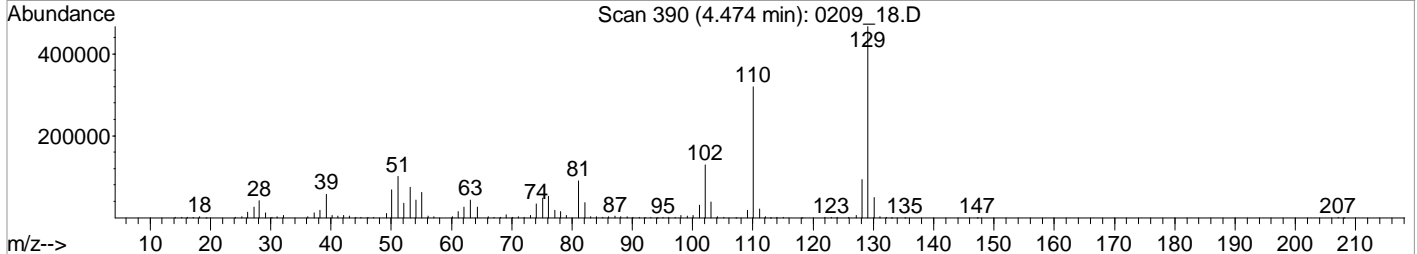
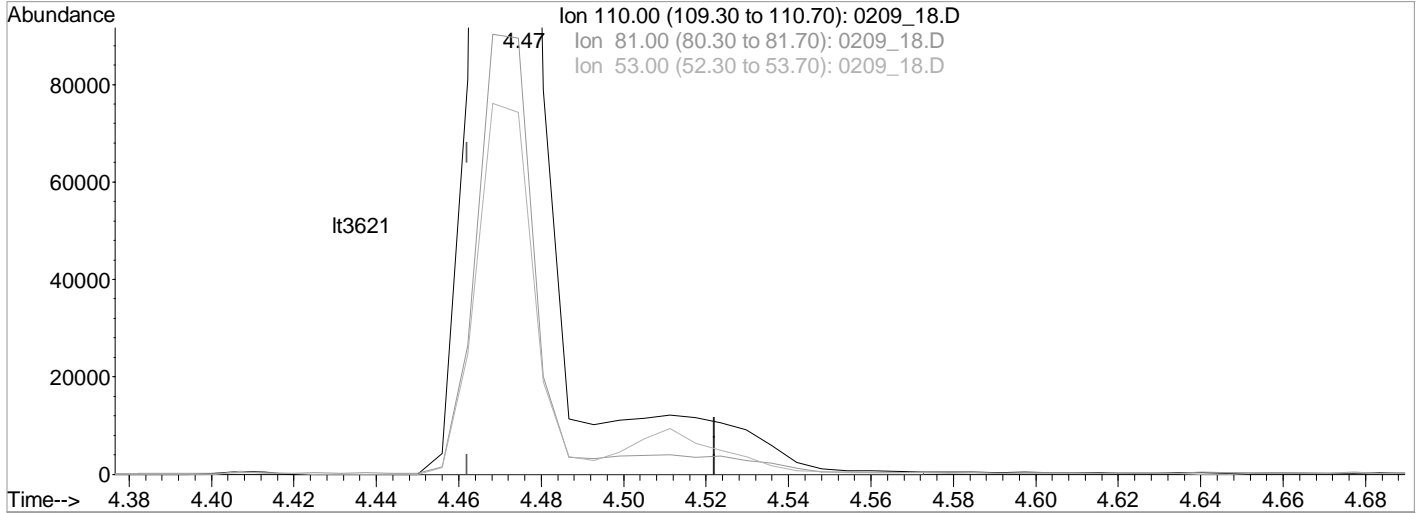
(37) Hydroquinone  
 4.47min (+0.012) 27928.9894085 ppb  
 Qvalue = 96  
 response 296671

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	27.88
53.00	25.90	23.20
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:30 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:28:57 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

(37) Hydroquinone  
 4.47min (+0.012) 27928.9894085 ppb  
 Qvalue = 96  
 response 296671

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	27.88
53.00	25.90	23.20
0.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:33 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:32:01 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	83834	8000.00	ppb	0.00
23) Naphthalene-d8	4.25	136	509998	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	170524	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	328342	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	284281	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	291842	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	146822	39375.8434486	ppb	99
22) Acetophenone	3.73	105	707524	40810.0206029	ppb	99
31) Benzoic Acid	4.08	105	332830	42001.2174148	ppb	98
33) alpha-terpineol	4.25	59	473632	32249.3875896	ppb	100
37) Hydroquinone	4.47	110	423227	35941.1634228	ppb	98
38) Quinoline	4.48	129	1027793	32749.0578074	ppb	99
39) Caprolactam	4.52	113	131001	37278.2903404	ppb	96
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	446831	32200.2864656	ppb	99
44) Diphenyl Ether	5.09	170	646081	32275.2551573	ug/ml	99
45) Diphenyl Oxide	5.09	170	646081	32275.2551573	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.67	232	194914	40082.6466467	ppb	98
69) Atrazine	6.32	200	283883	40709.7789465	ppb	98
82) 2-nitrodiphenylamine	7.16	167	372323	47622.4782969	ppb #	100
85) Benzidine	7.77	184	724521	48145.9688179	ppb	99
89) 3,3-Dichlorobenzidine	9.49	252	596043	40725.7384781	ppb	99

(#) = qualifier out of range (m) = manual integration

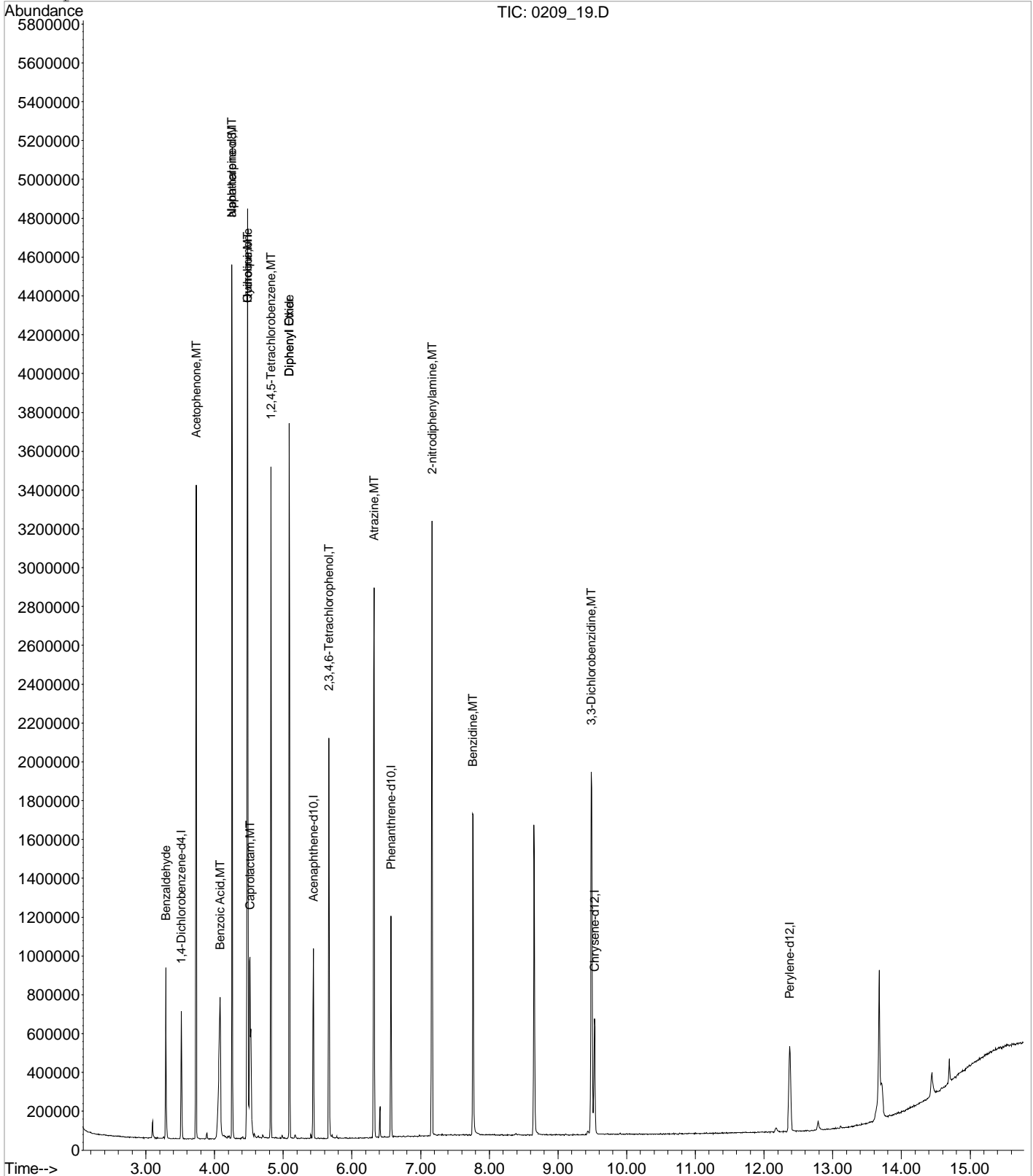
0209\_19.D S804B09V.M Fri Feb 18 15:34:19 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D  
 Acq On : 9 Feb 2022 3:14 pm  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:33 2022

Vial: 16  
 Operator: 917  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804B09V.RES

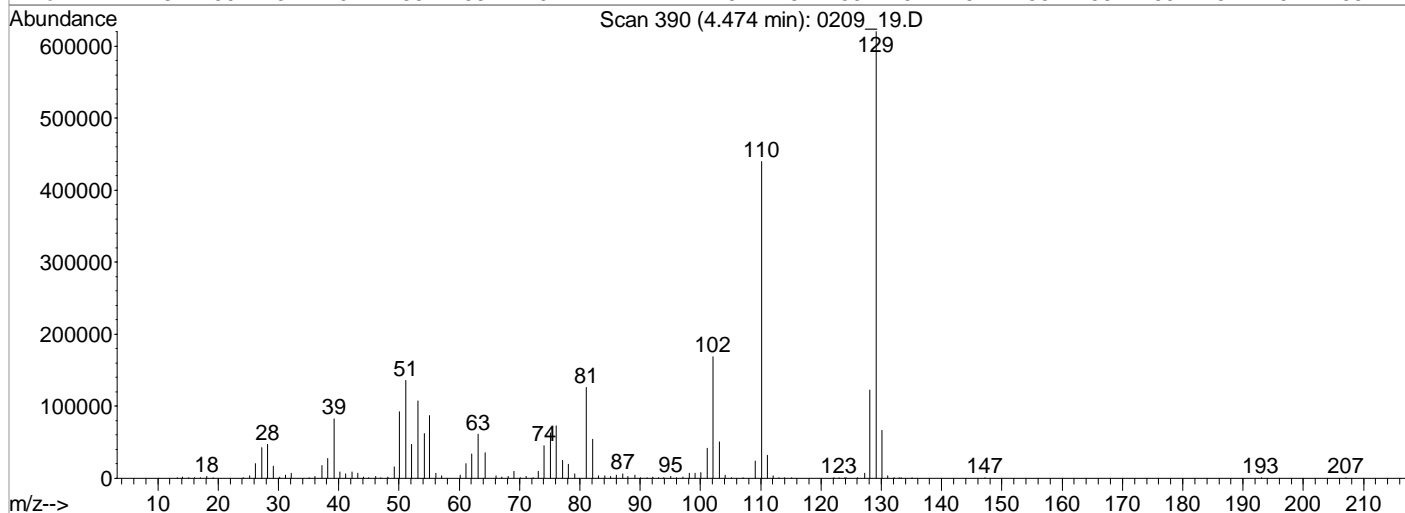
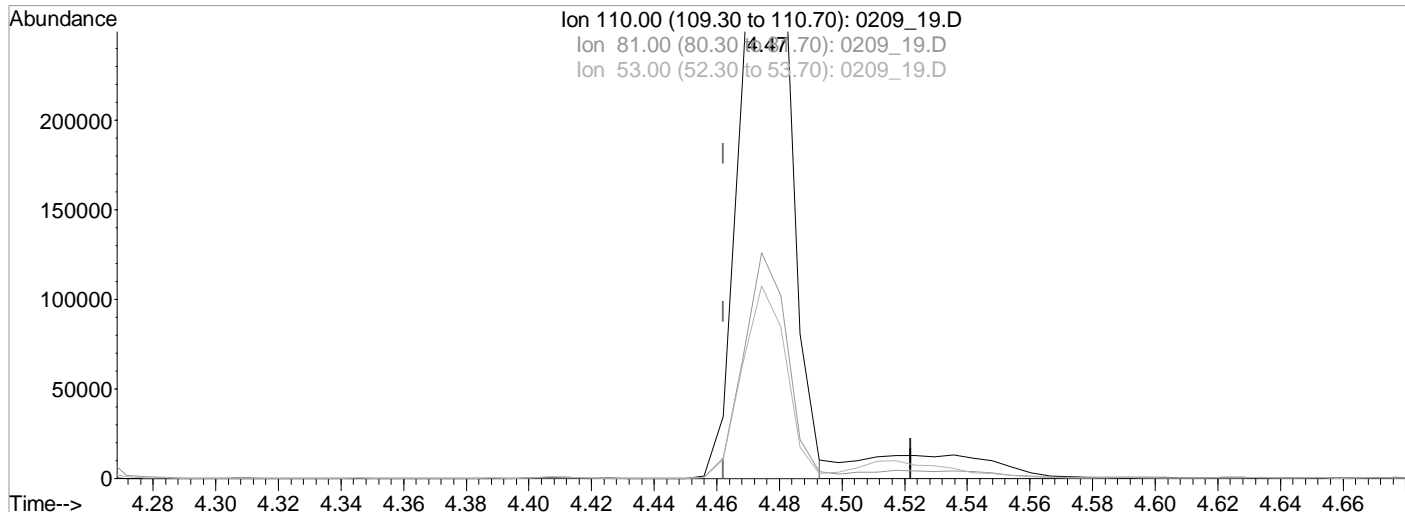
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:32:01 2022  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 14:12 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:41:34 2022  
 Response via : Single Level Calibration



TIC: 0209\_19.D

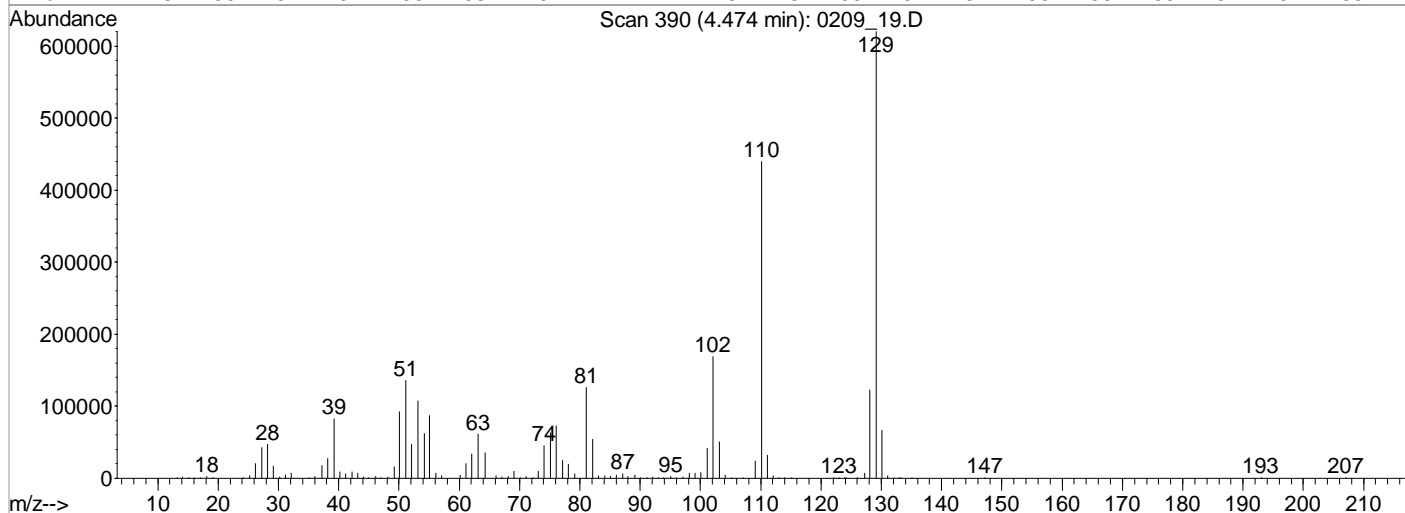
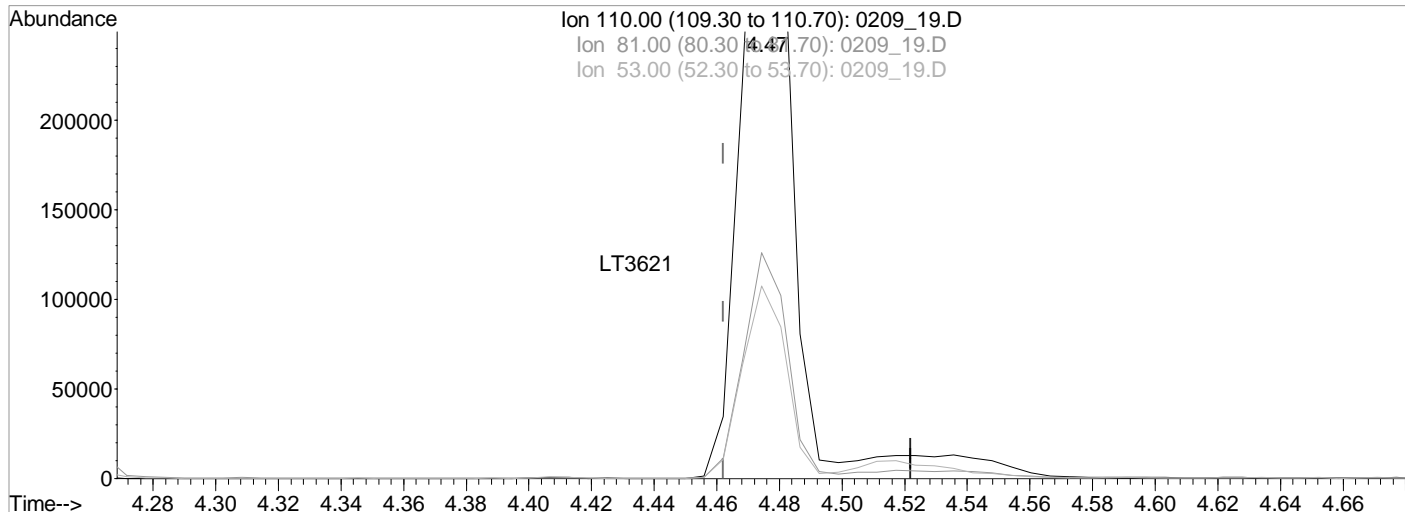
(37) Hydroquinone  
 4.47min (+0.012) 34295.7817388 ppb  
 Qvalue = 98  
 response 423227

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.68
53.00	25.90	24.49
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:42 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:41:34 2022  
 Response via : Single Level Calibration



TIC: 0209\_19.D

(37) Hydroquinone  
 4.47min (+0.012) 37693.9430263 ppb m

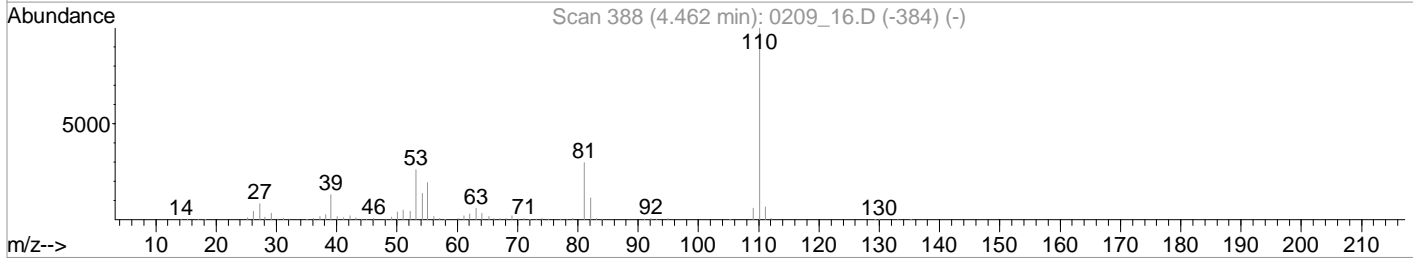
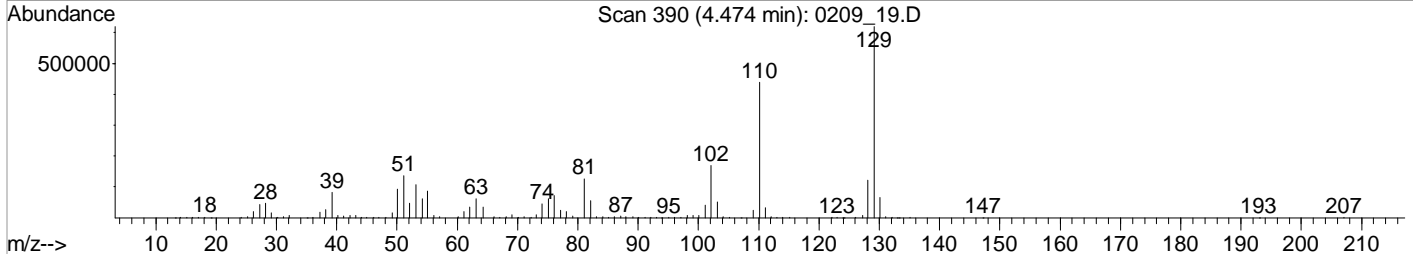
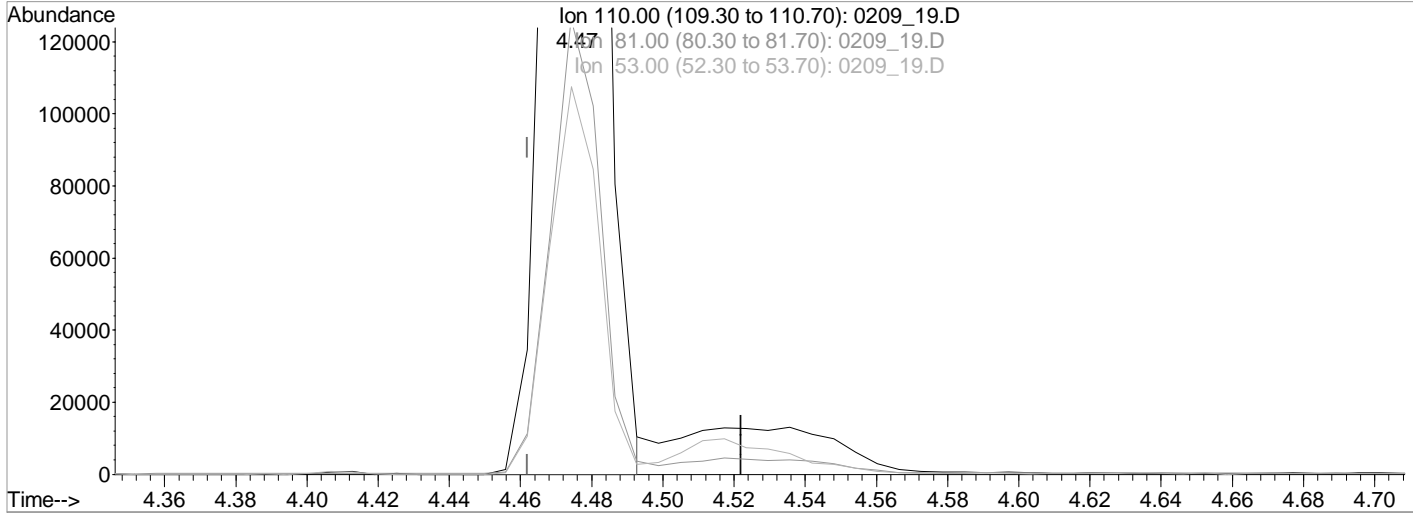
response 465162

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.73
53.00	25.90	24.49
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:33 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:32:01 2022  
 Response via : Single Level Calibration



TIC: 0209\_19.D

(37) Hydroquinone  
 4.47min (+0.012) 35941.1634228 ppb  
 Qvalue = 98  
 response 423227

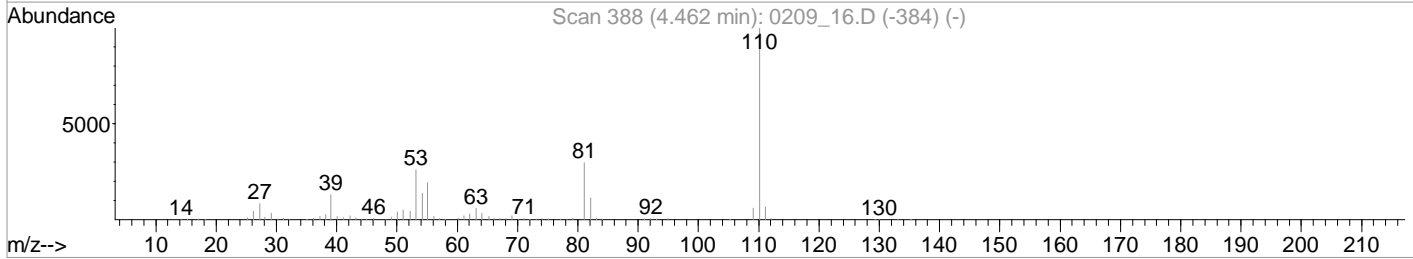
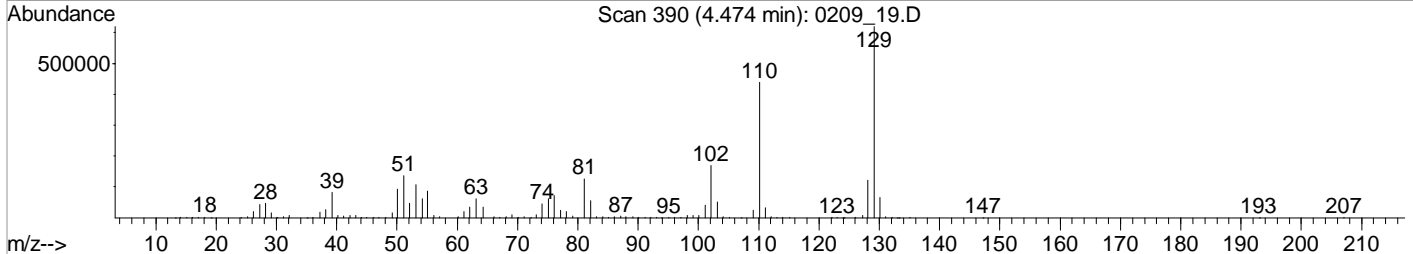
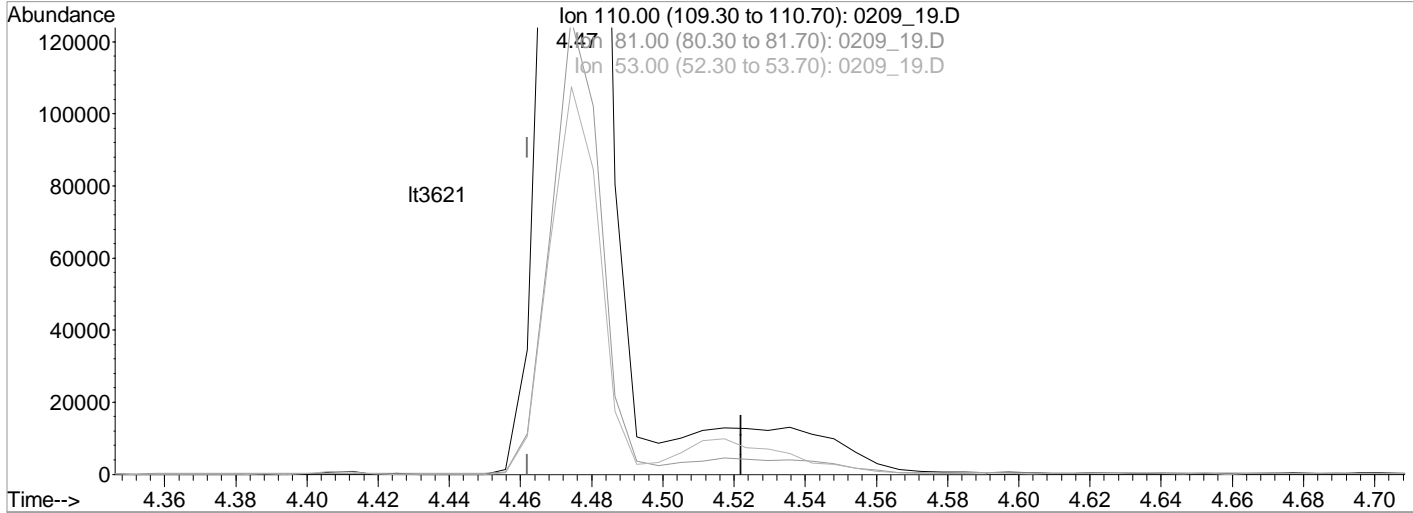
Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.68
53.00	25.90	24.49
0.00	0.00	0.00



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:33 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:32:01 2022  
 Response via : Single Level Calibration



TIC: 0209\_19.D

(37) Hydroquinone  
 4.47min (+0.012) 35941.1634228 ppb  
 Qvalue = 98  
 response 423227

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.68
53.00	25.90	24.49
0.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:35 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:34:26 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	83009	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	544163	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	169785	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	322067	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	282788	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	287879	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.00	82	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	183661	49745.1431448	ppb	99
22) Acetophenone	3.73	105	865298	50406.4769034	ppb	99
31) Benzoic Acid	4.09	105	430114	50870.0842217	ppb	99
33) alpha-terpineol	4.26	59	585384	37356.0327033	ppb	88
37) Hydroquinone	4.48	110	541268	43079.4928047	ppb	99
38) Quinoline	4.48	129	1284138	38348.1410544	ppb	98
39) Caprolactam	4.52	113	168983	45067.5402951	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	553375	37374.5040763	ppb	99
44) Diphenyl Ether	5.09	170	805278	37702.3146356	ug/ml	99
45) Diphenyl Oxide	5.09	170	805278	37702.3146356	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.67	232	249561	51543.7801154	ppb	98
69) Atrazine	6.32	200	349005	50266.3324683	ppb	97
82) 2-nitrodiphenylamine	7.16	167	469250	59305.8856301	ppb #	100
85) Benzidine	7.77	184	954392	63756.2258960	ppb	100
89) 3,3-Dichlorobenzidine	9.49	252	753855	51780.4778435	ppb	99

(#) = qualifier out of range (m) = manual integration

0209\_20.D S804B09V.M Fri Feb 18 15:37:53 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D

Vial: 17

Acq On : 9 Feb 2022 3:35 pm

Operator: 917

Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22

Inst : BNAMS4

Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Feb 18 15:35 2022

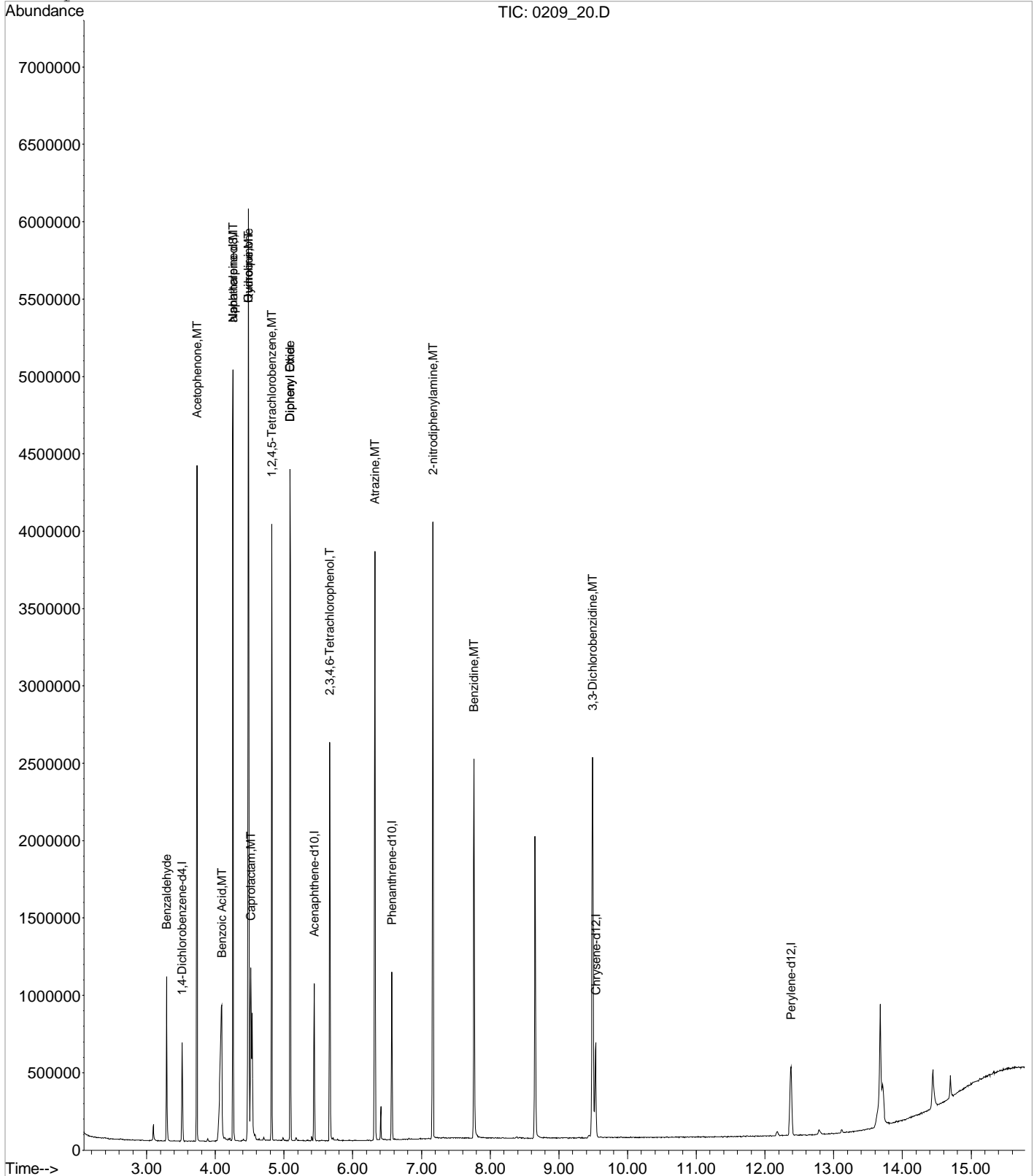
Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)

Title : 8270 BNA

Last Update : Fri Feb 18 15:34:26 2022

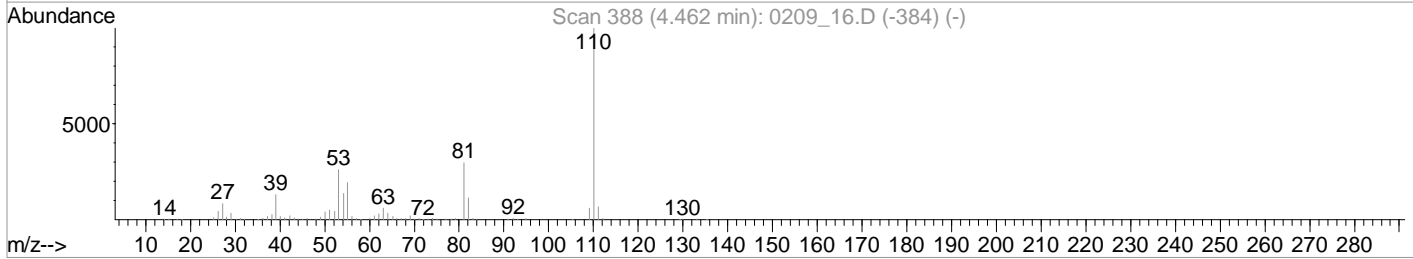
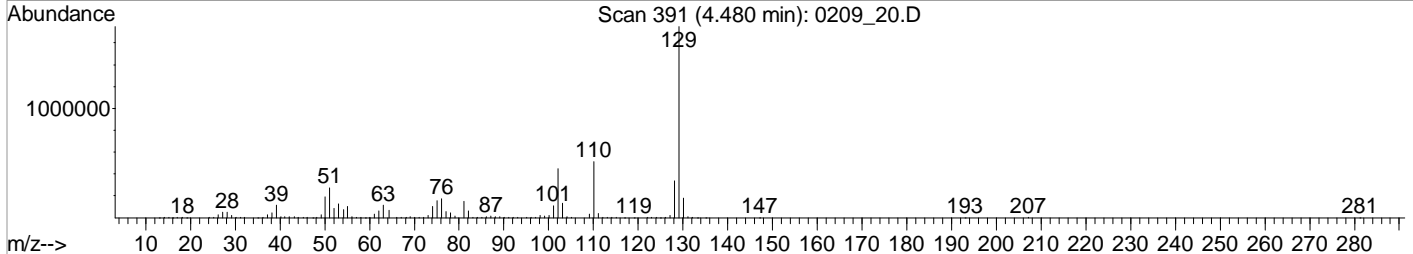
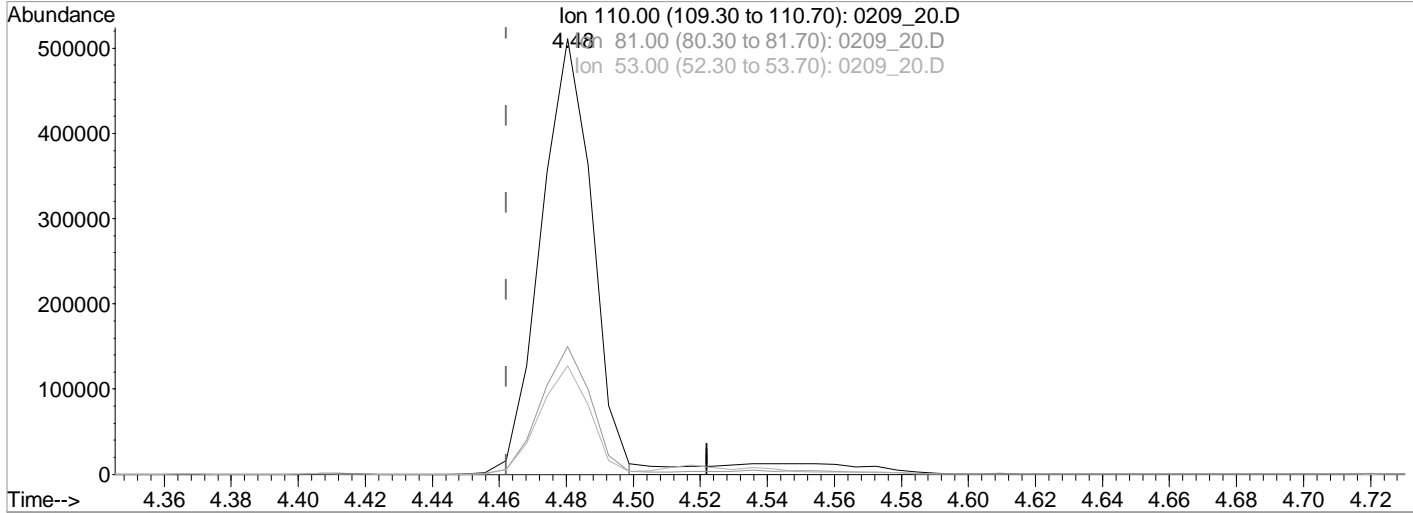
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 14:22 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 14:20:22 2022  
 Response via : Single Level Calibration



TIC: 0209\_20.D

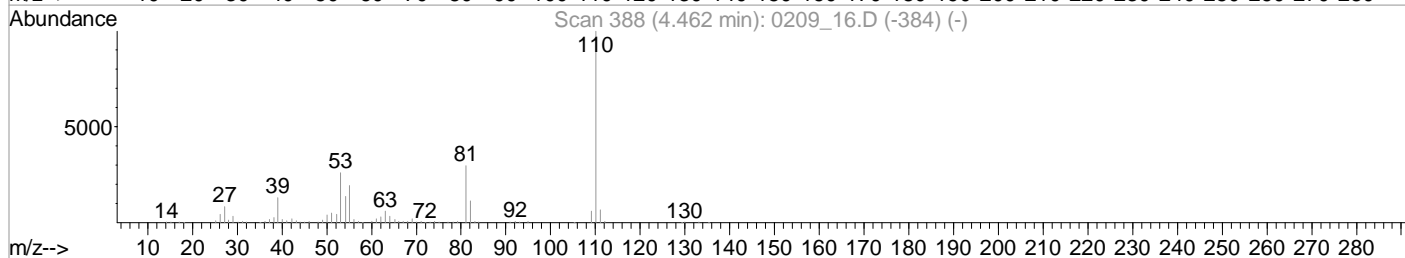
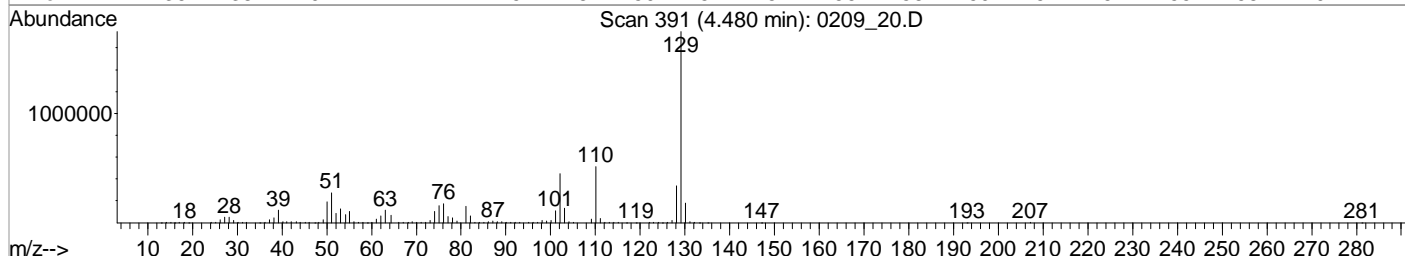
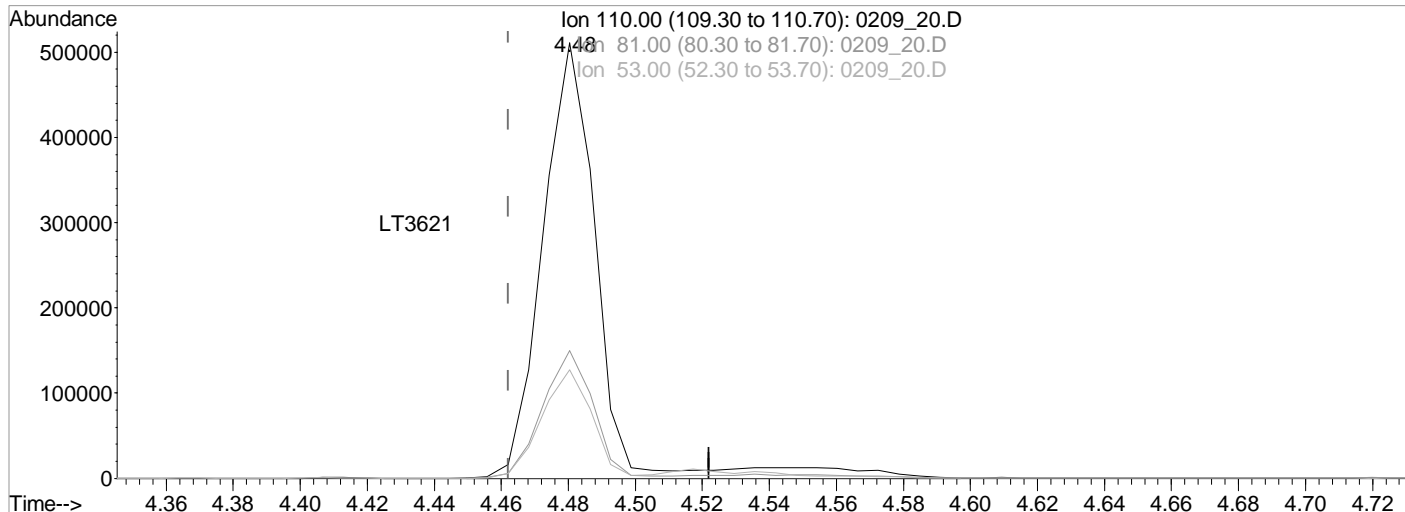
(37) Hydroquinone  
 4.48min (+0.018) 40935.8278868 ppb  
 Qvalue = 99  
 response 541268

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.30
53.00	25.90	24.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 14:22 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 14:20:22 2022  
 Response via : Single Level Calibration



TIC: 0209\_20.D

(37) Hydroquinone

4.48min (+0.018) 40935.8278868 ppb

Qvalue = 99

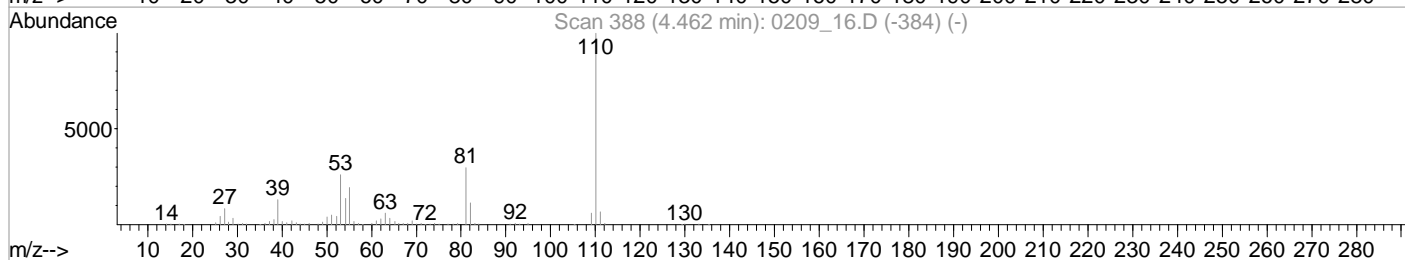
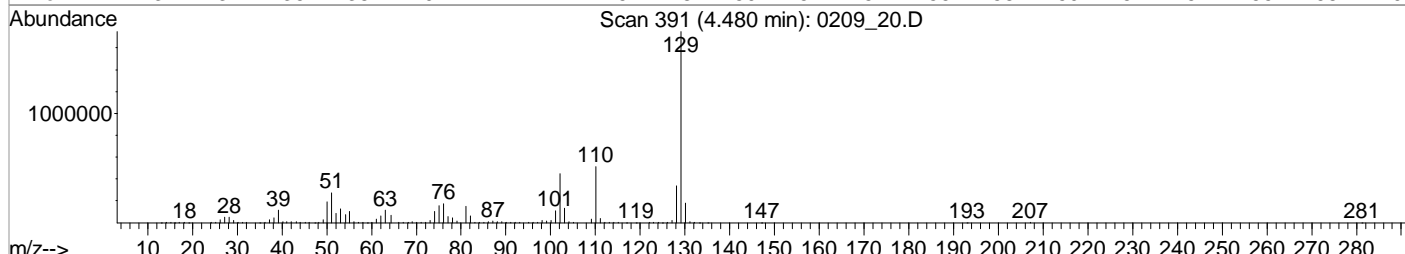
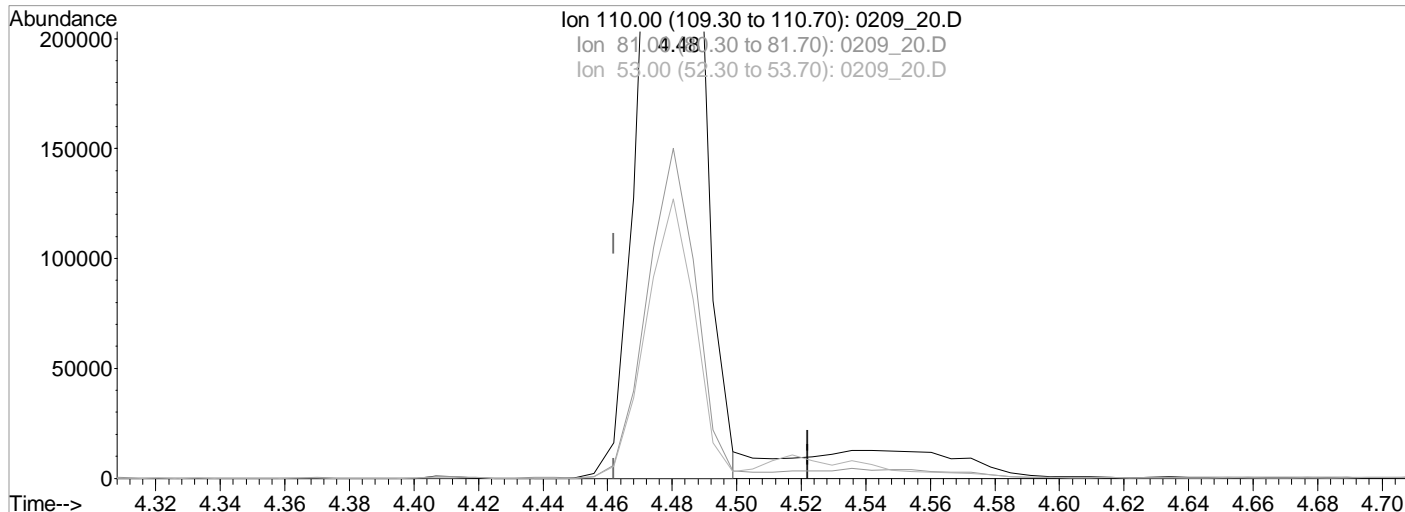
response 541268

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.30
53.00	25.90	24.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:35 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:34:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_20.D

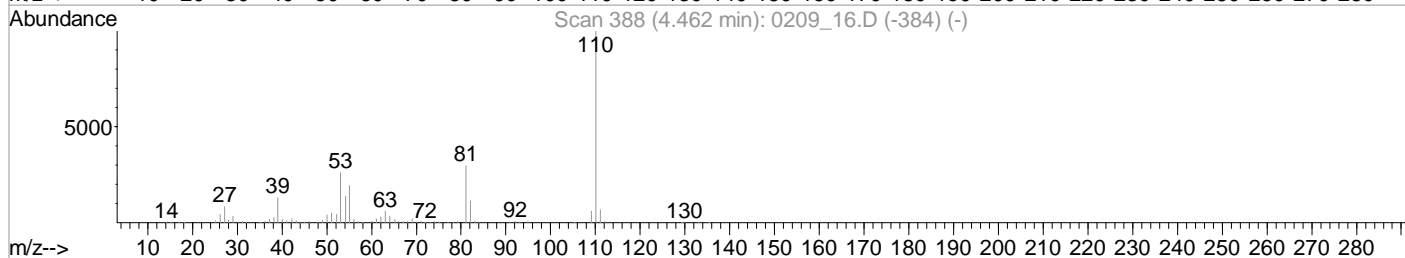
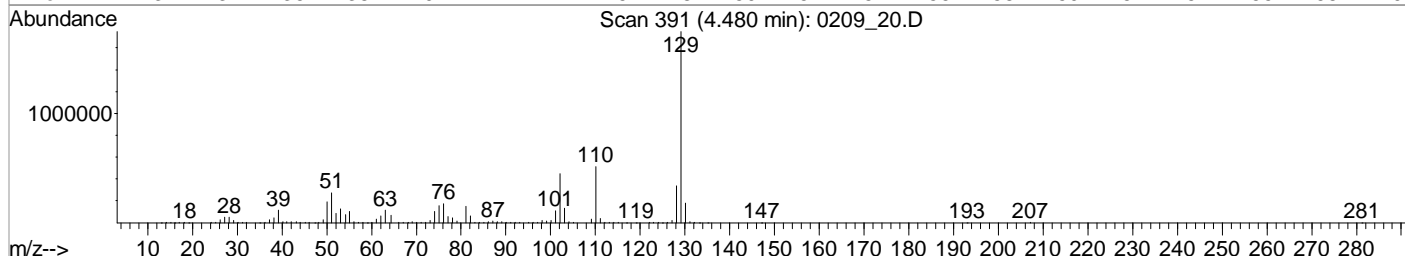
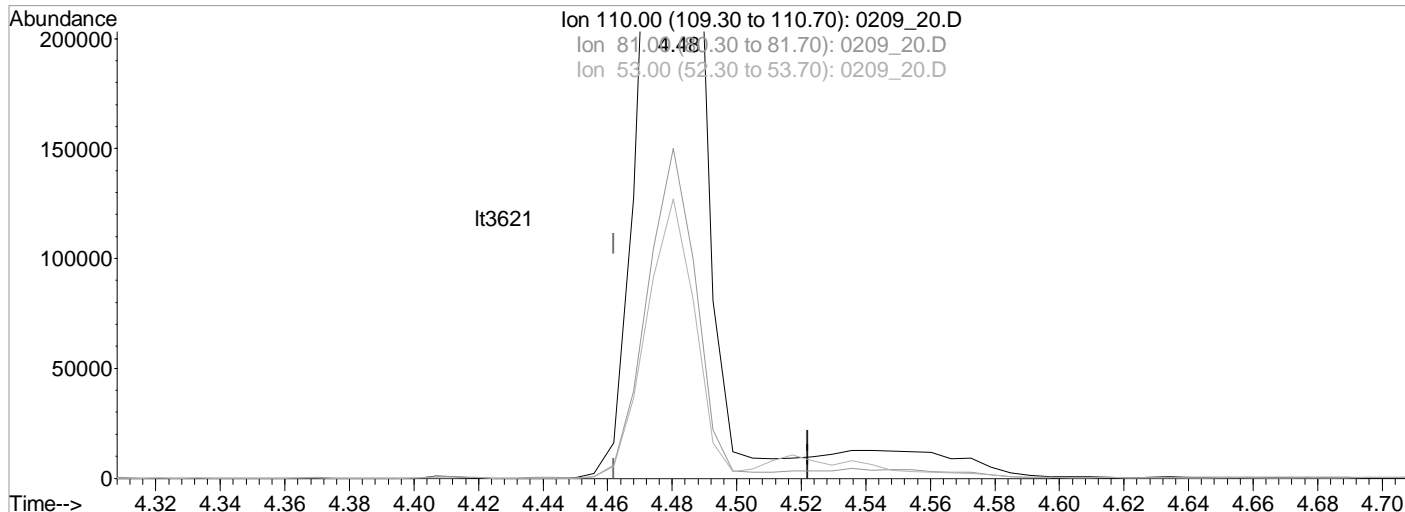
(37) Hydroquinone  
 4.48min (+0.018) 43079.4928047 ppb  
 Qvalue = 99  
 response 541268

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.30
53.00	25.90	24.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:35 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:34:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_20.D

(37) Hydroquinone

4.48min (+0.018) 43079.4928047 ppb

Qvalue = 99

response 541268

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.30
53.00	25.90	24.86
0.00	0.00	0.00

SDG: L1486885  
Instrument ID: BNAMS11

Analytical Method: 8270E

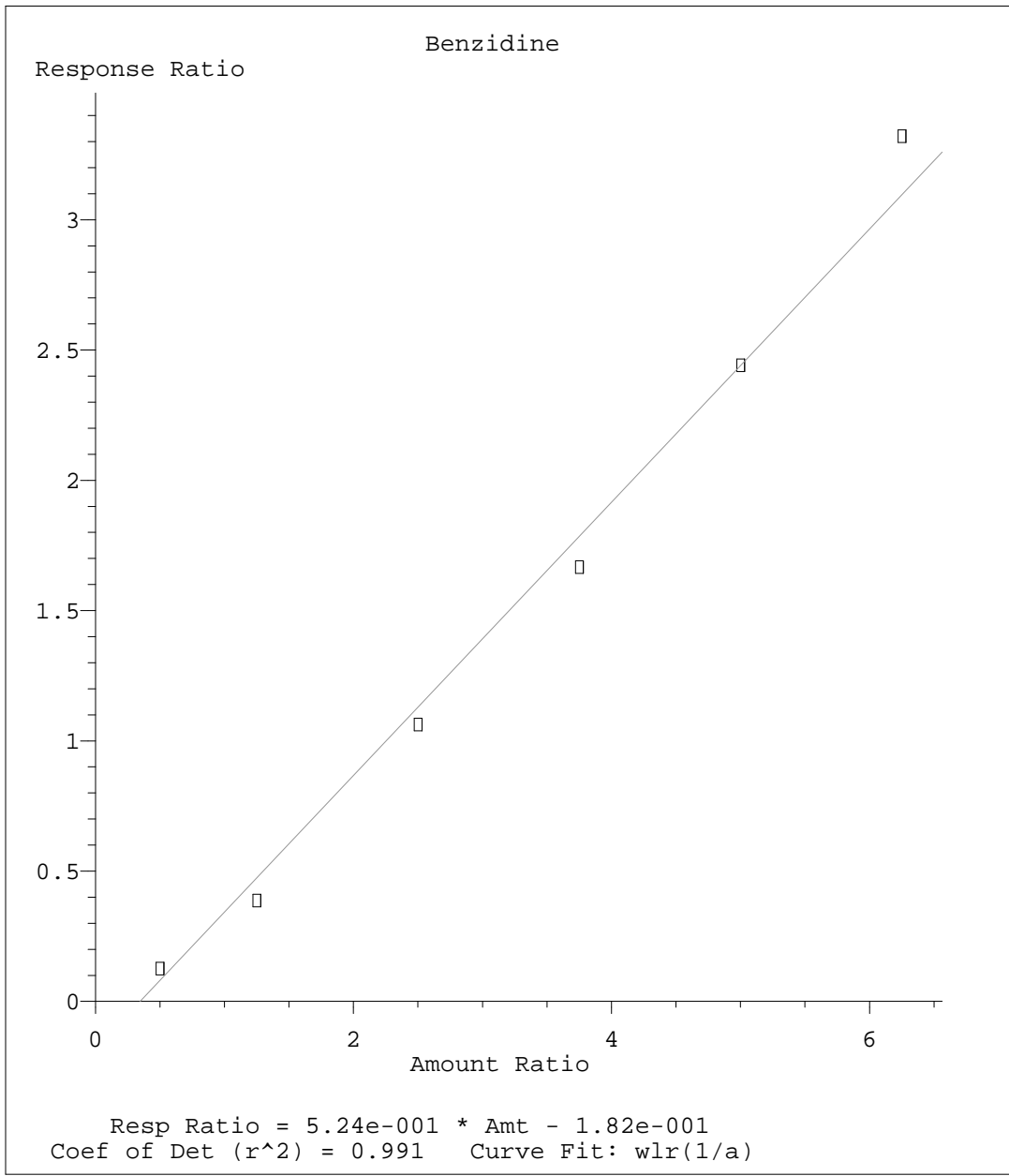
Analyte	RRF: 500	RRF: 1000	RRF: 4000	RRF: 10000	RRF: 20000	RRF: 30000	RRF: 40000	RRF: 50000	RRF: 4K1	RRF: 10K1
Analysis date/time	01/14/22 13:34	01/14/22 13:54	01/14/22 14:15	01/14/22 14:35	01/14/22 14:55	01/14/22 15:15	01/14/22 15:36	01/14/22 15:56	01/14/22 16:37	01/14/22 16:57
PHENOL	1.4970	1.5780	1.4740	1.4780	1.4980	1.5080	1.5160	1.4650		
3&4-METHYL PHENOL	1.2350	1.33	1.3090	1.3130	1.3240	1.3180	1.3280	1.2770		
NAPHTHALENE	1.0540	1.0540	0.9690	0.9740	0.9660	0.9450	0.9490	0.9330		
2-METHYLNAPHTHALENE	0.6910	0.69	0.6710	0.65	0.6460	0.63	0.6320	0.6280		
1-METHYLNAPHTHALENE	0.6240	0.6540	0.6120	0.6280	0.6180	0.6020	0.6090	0.5970		
ACENAPHTHYLENE	1.8390	1.9040	1.7770	1.8310	1.7970	1.7560	1.7830	1.7480		
ACENAPHTHENE	1.2670	1.2520	1.2010	1.1960	1.1450	1.1150	1.1260	1.1020		
DIBENZOFURAN	1.7220	1.8070	1.6250	1.6570	1.5940	1.5660	1.5610	1.5450		
FLUORENE	1.4250	1.4170	1.3560	1.33	1.2720	1.2430	1.2490	1.2290		
PENTACHLOROPHENOL	0.1030	0.1090	0.1190	0.1330	0.1360	0.1410	0.1430	0.1480		
PHENANTHRENE	0.9980	1.1390	1.0740	1.0360	1.0180	1.0150	1.0020	0.9860		
ANTHRACENE	1.0730	1.07	1.07	1.0630	1.0290	1.0250	1.0240	1.0070		
CARBAZOLE	0.9330	0.9560	0.9220	0.9260	0.8990	0.8910	0.8740	0.8520		
DI-N-BUTYL PHTHALATE	0.9750	1.0840	1.0680	1.1070	1.1240	1.17	1.2080	1.1820		
FLUORANTHENE	1.1090	1.1720	1.1530	1.1640	1.1570	1.1630	1.1770	1.1920		
PYRENE	1.2460	1.3030	1.2030	1.2160	1.2170	1.2090	1.2240	1.2190		
BENZO(A)ANTHRACENE	1.1640	1.2610	1.1250	1.1660	1.1620	1.1820	1.18	1.17		
CHRYSENE	1.1610	1.2080	1.1410	1.1350	1.1110	1.1290	1.1220	1.1110		
BIS(2-ETHYLHEXYL)PHTHALATE	0.6250	0.6390	0.6350	0.6780	0.7250	0.7520	0.7770	0.7610		
DI-N-OCTYL PHTHALATE	1.01	0.9970	0.99	1.1010	1.1960	1.2390	1.31	1.2990		
BENZO(B)FLUORANTHENE	1.1210	1.17	1.1630	1.1580	1.1640	1.1590	1.1490	1.2070		
BENZO(K)FLUORANTHENE	1.1320	1.22	1.1360	1.1810	1.1760	1.1390	1.1710	1.1750		
BENZO(A)PYRENE	1.0220	1.0310	1.0690	1.12	1.1310	1.1220	1.1210	1.1690		
INDENO(1,2,3-CD)PYRENE	0.9970	1.0040	1.03	1.0580	1.0270	1.01	1.0020	1.0020		
DIBENZ(A,H)ANTHRACENE	1.08	1.1320	1.1420	1.1470	1.1310	1.0820	1.0780	1.1060		
BENZO(G,H,I)PERYLENE	1.1140	1.2330	1.1740	1.1770	1.1490	1.0850	1.0530	1.0450		
2-FLUOROPHENOL	1.16	1.2260	1.1210	1.1480	1.1740	1.1930	1.1860	1.1490		
PHENOL-D5	1.5050	1.4540	1.3740	1.4110	1.42	1.4130	1.42	1.3770		
NITROBENZENE-D5	0.3660	0.3660	0.3570	0.3670	0.3610	0.3680	0.3770	0.3640		
2-FLUOROBIPHENYL	1.3780	1.4960	1.3790	1.3410	1.3090	1.2690	1.2690	1.2410		
2,4,6-TRIBROMOPHENOL	0.10	0.0920	0.10	0.1080	0.1110	0.1170	0.1170	0.1250		
P-TERPHENYL-D14	0.9690	1.0250	0.9750	0.9770	0.9610	0.9740	0.9620	0.97		
BENZOIC ACID									0.13	0.15
File ID:	0114_06	0114_07	0114_08	0114_09	0114_10	0114_11	0114_12	0114_13	0114_15	0114_16

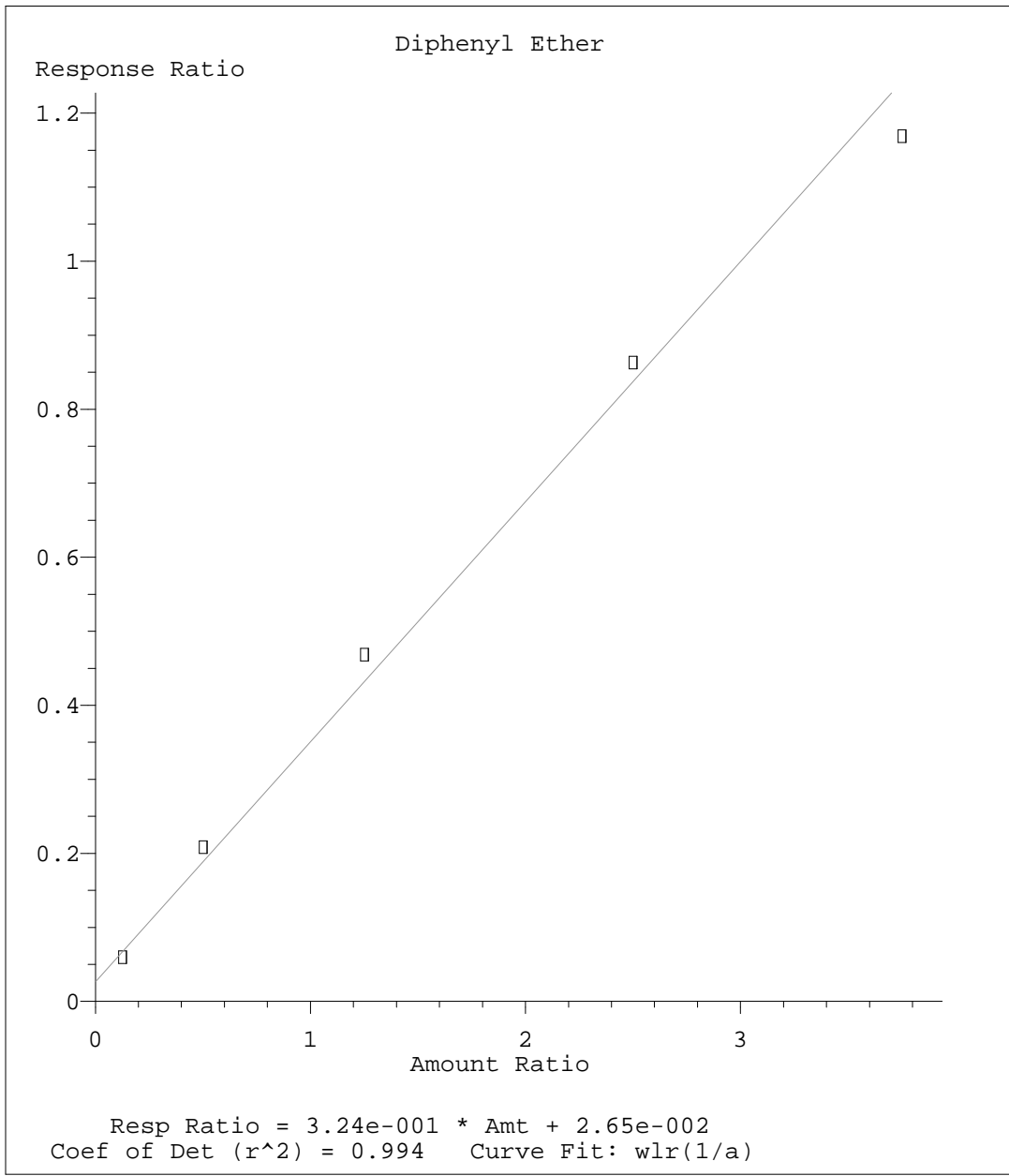


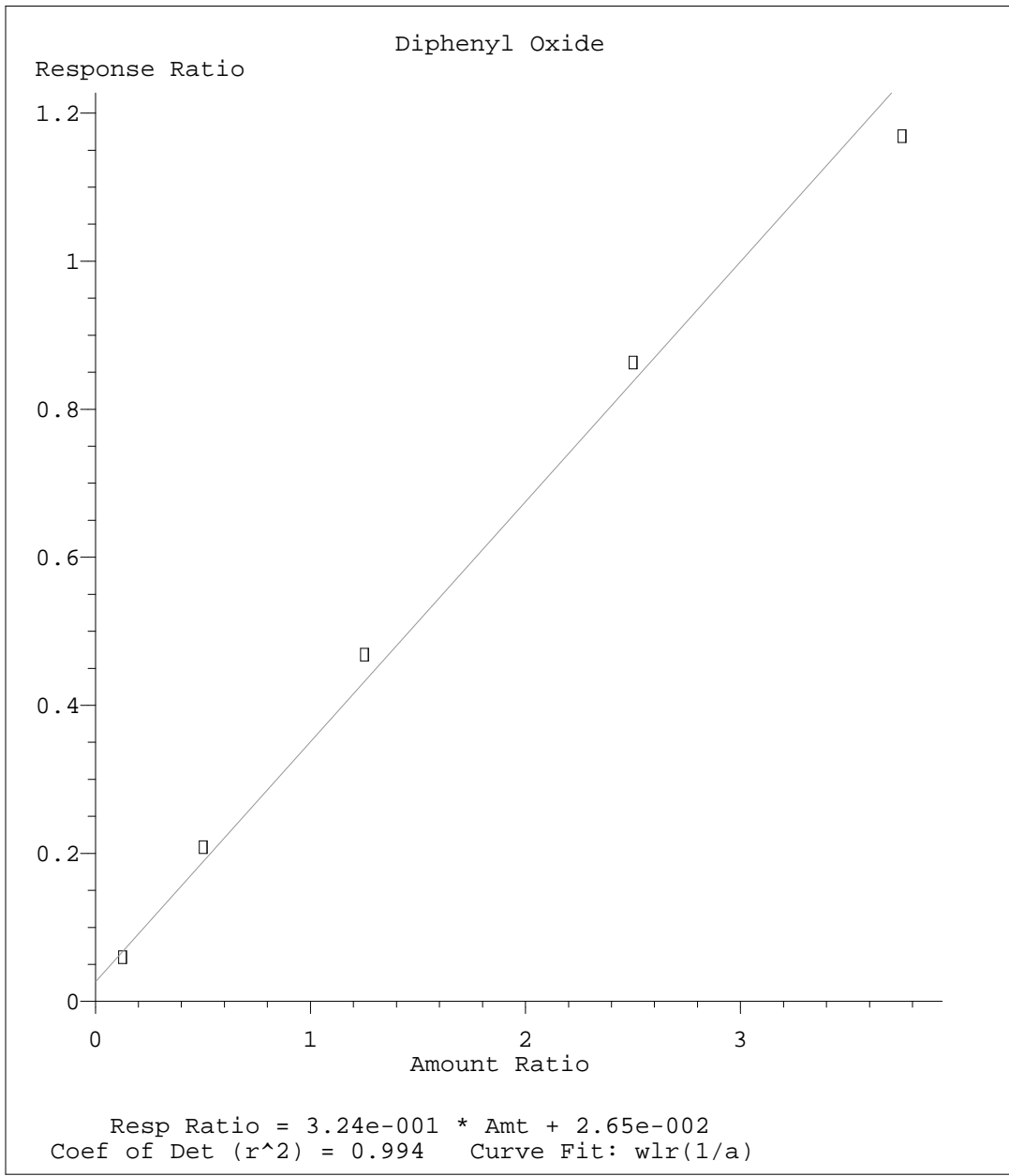
SDG: L1486885  
Instrument ID: BNAMS11

Analytical Method: 8270E

Analyte	RRF: 20K1	RRF: 30K1	RRF: 40K1	RRF: 50K1	RRF. Avg	%RSD	COD
Analysis date/time	01/14/22 17:17	01/14/22 17:37	01/14/22 17:58	01/14/22 18:18			
PHENOL					1.501544	2.36	
3&4-METHYL PHENOL					1.304145	2.5	
NAPHTHALENE					0.980336	4.82	
2-METHYLNAPHTHALENE					0.654609	4	
1-METHYLNAPHTHALENE					0.618011	2.92	
ACENAPHTHYLENE					1.804489	2.86	
ACENAPHTHENE					1.175522	5.35	
DIBENZOFURAN					1.634378	5.56	
FLUORENE					1.314982	5.98	
PENTACHLOROPHENOL					0.129003	12.93	
PHENANTHRENE					1.033526	4.9	
ANTHRACENE					1.045229	2.53	
CARBAZOLE					0.906727	3.77	
DI-N-BUTYL PHTHALATE					1.114709	6.7	
FLUORANTHENE					1.16095	2.1	
PYRENE					1.229759	2.62	
BENZO(A)ANTHRACENE					1.176199	3.28	
CHRYSENE					1.139964	2.83	
BIS(2-ETHYLHEXYL)PHTHALATE					0.69889	8.89	
DI-N-OCTYL PHTHALATE					1.14275	11.86	
BENZO(B)FLUORANTHENE					1.161097	2.04	
BENZO(K)FLUORANTHENE					1.166214	2.55	
BENZO(A)PYRENE					1.098192	4.73	
INDENO(1,2,3-CD)PYRENE					1.016082	2.06	
DIBENZ(A,H)ANTHRACENE					1.112188	2.62	
BENZO(G,H,I)PERYLENE					1.128771	5.84	
2-FLUOROPHENOL					1.169591	2.76	
PHENOL-D5					1.421741	2.97	
NITROBENZENE-D5					0.365916	1.56	
2-FLUOROBIPHENYL					1.33529	6.19	
2,4,6-TRIBROMOPHENOL					0.108787	10.12	
P-TERPHENYL-D14					0.976668	2.1	
BENZOIC ACID	0.1640	0.1580	0.1530	0.1430	0.14977	8.05	
File ID:	0114_17	0114_18	0114_19	0114_20			







Method Path : C:\msdchem\1\methods\  
Method File : S811A14V.M  
Title : 8270 BNA  
Last Update : Tue Jan 18 17:20:43 2022  
Response Via : Initial Calibration

Calibration Files

500 =0114\_06.D 1K =0114\_07.D 4K =0114\_08.D 10K =0114\_09.D 20K =0114\_10.D 30K =0114\_11.D 40K =0114\_12.D  
50K =0114\_13.D 1K1 =0114\_14.D 4K1 =0114\_15.D 10K1=0114\_16.D 20K1=0114\_17.D 30K1=0114\_18.D 40K1=0114\_19.D  
50K1=0114\_20.D

10605661

Compound 500 1K 4K 10K 20K 30K 40K 50K 1K1 4K1 10K1 20K1 30K1 40K1 50K1 Avg

%RSD

Compound	500	1K	4K	10K	20K	30K	40K	50K	1K1	4K1	10K1	20K1	30K1	40K1	50K1	Avg
1) I 1,4-Dichlorobenzen...																
2) TM Pyridine	1.071	1.300	1.269	1.345	1.371	1.402	1.354									1.302
3) MT N-Nitrosodimet...	0.916	0.667	0.664	0.625	0.657	0.684	0.636									0.693
4) S 2-Fluorophenol	1.160	1.226	1.121	1.148	1.174	1.186	1.149									1.170
5) MT Aniline	0.743	0.730	0.730	0.707	0.737	0.760	0.727									0.734
6) MT bis(2-Chloroet...	1.428	1.317	1.237	1.212	1.244											1.288
7) S Phenol-d5	1.505	1.454	1.374	1.411	1.420	1.413	1.420	1.377								1.422
8) MC Phenol	1.497	1.578	1.474	1.478	1.498	1.508	1.516	1.465								1.502
9) Benzaldehyde									0.369	0.362	0.353	0.382	0.381	0.395	0.415	0.380
10) MT 2-Chlorophenol	1.344	1.275	1.229	1.266	1.258	1.269	1.259	1.224								1.265
11) T n-Decane	0.746	0.818	0.702	0.663	0.670	0.691	0.726	0.671								0.711
12) MT 1,3-Dichlorobe...	1.487	1.489	1.490	1.468	1.485	1.467	1.463	1.414								1.470
13) MTC 1,4-Dichlorobe...	1.542	1.586	1.501	1.484	1.471	1.467	1.471	1.424								1.493
14) MT Benzyl Alcohol	1.052	1.185	1.112	1.114	1.122	1.136	1.162	1.109								1.124
15) MT 1,2-Dichlorobe...	1.408	1.570	1.407	1.425	1.415	1.385	1.381	1.317								1.413
16) MT bis(2-Chlorois...	0.466	0.463	0.415	0.424	0.436	0.428	0.428	0.407								0.433
17) MT 2,2-oxybis(1-c...	0.466	0.463	0.415	0.424	0.436	0.428	0.428	0.407								0.433
18) MT 2-Methylphenol	1.180	1.166	1.136	1.139	1.120	1.127	1.139	1.083								1.136
19) MT Hexachloroethane	0.513	0.577	0.548	0.559	0.557	0.544	0.557	0.536								0.549

Method Path : C:\msdchem\1\methods\  
Method File : S811A14V.M  
Title : 8270 BNA

Last Update : Tue Jan 18 17:20:43 2022

Peak #	Retention Time (min)	Compound Name	Response Factor
10	0.911	N-Nitrosodi-n...	0.884
11	1.235	3&4-Methyl phenol	1.277
22	1.769	Acetophenone	1.753
23	0.366	Naphthalene-d8	0.366
24	0.367	Nitrobenzene-d5	0.364
25	0.345	Nitrobenzene	0.348
26	0.574	Isophorone	0.618
27	0.165	2-Nitrophenol	0.170
28	0.347	2,4-Dimethylph...	0.321
29	0.371	bis(2-Chloreth...	0.343
30	0.273	2,4-Dichloroph...	0.274
31	0.130	Benzoic Acid	0.150
32	0.311	1,2,4-Trichlor...	0.301
33	0.219	alpha-terpineol	0.186
34	1.054	Naphthalene	0.980
35	0.119	4-Chloroaniline	0.119
36	0.179	Hexachloro-1,3...	0.198
37	0.250	Hydroquinone	0.206
38	0.631	Quinoline	0.538
39	0.070	Caprolactam	0.059
40	0.250	4-Chloro-3-met...	0.287
41	0.691	2-Methylnaphth...	0.628
42	0.624	1-Methylnaphth...	0.597
43	0.347	1,2,4,5-Tetrac...	0.237
44	0.477	Diphenyl Ether	0.312

Response Factor Report BNAMS11

Method Path : C:\msdchem\1\methods\  
Method File : S811A14V.M  
Title : 8270 BNA  
Last Update : Tue Jan 18 17:20:43 2022  
45) Diphenyl Oxide

46) I	Acenaphthene-d10	0.448	0.448	0.432	0.431	0.426	0.418	0.424	0.415	0.385	16
47) MPT	Hexachlorocycl...	0.363	0.365	0.354	0.364	0.374	0.390	0.394	0.390	0.430	2
.89	MCT 2,4,6-Trichlor...	0.385	0.397	0.389	0.407	0.403	0.371	0.380	0.380	0.374	4
.06	49) MT 2,4,5-Trichlor...	1.378	1.496	1.379	1.341	1.309	1.269	1.269	1.241	0.389	3
.20	50) S 2-Fluorobiphenyl	1.576	1.650	1.527	1.502	1.465	1.405	1.435	1.382	1.335	6
.19	51) MT Biphenyl	1.247	1.245	1.174	1.161	1.132	1.091	1.096	1.072	1.493	6
.06	52) MT 2-Chloronaphth...	0.282	0.306	0.310	0.348	0.355	0.356	0.369	0.368	1.152	5
.85	53) MT 2-Nitroaniline	1.839	1.904	1.777	1.831	1.797	1.756	1.783	1.748	0.337	9
.76	54) MT Acenaphthylene	1.338	1.319	1.259	1.286	1.261	1.244	1.273	1.246	1.804	2
.86	55) MT Dimethyl phtha...	0.233	0.233	0.285	0.300	0.299	0.295	0.302	0.298	1.278	2
.68	56) MT 2,6-Dinitrotol...	0.246	0.256	0.286	0.296	0.303	0.301	0.320	0.312	0.281	10
.63	57) MT 3-Nitroaniline	1.267	1.252	1.201	1.196	1.145	1.115	1.126	1.102	0.290	9
.03	58) MCT Acenaphthene	0.122	0.146	0.151	0.164	0.174	0.182			1.176	5
.35	59) MPT 2,4-Dinitrophenol	1.722	1.807	1.625	1.657	1.594	1.566	1.561	1.545	0.156	13
.80	60) MT Dibenzofuran	0.293	0.317	0.346	0.372	0.396	0.401	0.412	0.416	1.634	5
.56	61) MT 2,4-Dinitrotol...	0.195	0.205	0.219	0.233	0.240	0.246	0.252	0.247	0.369	12
.49	62) T 2,3,4,6-Tetrac...	1.425	1.417	1.356	1.330	1.272	1.243	1.249	1.229	0.288	3
.73	63) MPT 4-Nitrophenol	0.785	0.772	0.701	0.702	0.667	0.646	0.643	0.652	0.230	9
.18	64) MT Fluorene	1.334	1.317	1.291	1.317	1.294	1.263	1.295	1.250	1.315	5
.98	65) MT 4-Chlorophenyl...	0.261	0.253	0.284	0.278	0.273	0.250	0.232	0.248	0.696	8
.01	66) MT Diethyl phthalate	1.270	1.303	1.294	1.301	1.270	1.258	1.327	1.278	1.295	2
.67	67) MT 4-Nitroaniline	1.270	1.303	1.294	1.301	1.270	1.258	1.327	1.278	0.260	6
1237	72) MT Azobenzene									1.288	1

Method Path : C:\msdchem\1\methods\  
 Method File : S811A14V.M  
 Title : 8270 BNA  
 Last Update : Tue Jan 18 17:20:43 2022  
 89) MT Atrazine

Retention Time	Peak Name	Area	Height	Width	Height	Area	Height	Width
0.394	89) MT Atrazine	0.369	0.376	0.391	0.383	0.372	0.374	0.380
0.109	0) I Phenanthrene-d10	0.086	0.097	0.110	0.119	0.119	0.119	0.121
0.581	72) MCT N-Nitrosodiphe...	0.561	0.615	0.591	0.569	0.560	0.573	0.588
0.109	73) S 2,4,6-Tribromo...	0.100	0.092	0.100	0.108	0.111	0.117	0.125
0.221	74) MT 4-Bromophenyl-...	0.245	0.221	0.215	0.219	0.213	0.216	0.224
0.249	75) MT Hexachlorobenzene	0.268	0.265	0.241	0.248	0.237	0.246	0.247
0.100	76) T n-octadecane	0.116	0.109	0.096	0.091	0.093	0.094	0.103
0.129	77) MCT Pentachlorophenol	0.103	0.109	0.119	0.133	0.136	0.141	0.148
1.034	78) MT Phenanthrene	0.998	1.139	1.074	1.036	1.018	1.015	1.002
1.045	79) MT Anthracene	1.073	1.070	1.070	1.063	1.029	1.025	1.024
0.907	80) MT Carbazole	0.933	0.956	0.922	0.926	0.899	0.891	0.874
1.115	81) MT Di-n-butyl pht...	0.975	1.084	1.068	1.107	1.124	1.170	1.208
0.192	82) MT 2-nitrodipheny...	0.178	0.204	0.232	0.248	0.253	0.253	0.223
1.161	83) MCT Fluoranthene	1.109	1.172	1.153	1.164	1.157	1.163	1.177
0.252	84) I Chrysene-d12	0.309	0.425	0.444	0.444	0.488	0.531	0.408
1.230	85) MT Benzidine	1.246	1.303	1.203	1.216	1.217	1.209	1.224
0.977	86) MT Pyrene	0.969	1.025	0.975	0.977	0.961	0.974	0.962
0.475	87) S p-Terphenyl-d14	0.426	0.440	0.426	0.463	0.491	0.501	0.523
0.393	88) MT Benzylbutyl ph...	0.373	0.412	0.429	0.426	0.439	0.436	0.415
1.176	89) MT 3,3-Dichlororobe...	1.164	1.261	1.125	1.166	1.162	1.182	1.180
1.140	90) MT Benzo(a)anthra...	1.161	1.208	1.141	1.135	1.111	1.129	1.111
0.699	91) MT Chrysene	0.625	0.639	0.635	0.678	0.725	0.752	0.777
1.143	92) MT bis(2-Ethylhex...	1.010	0.997	0.990	1.101	1.196	1.239	1.310
	93) MC Di-n-octyl pht...							



Response Factor Report BNAMS11

Method Path : C:\msdchem\1\methods\  
Method File : S811A14V.M  
Title : 8270 BNA  
Last Update : Tue Jan 18 17:20:43 2022

94)	I	Perylene-d12							
95)	MT	Benzo(b)fluora...	1.121	1.170	1.163	1.158	1.164	1.159	1.149
96)	MT	Benzo(k)fluora...	1.132	1.220	1.136	1.181	1.176	1.139	1.171
97)	MC	Benzo(a)pyrene	1.022	1.031	1.069	1.120	1.131	1.122	1.121
98)	MT	Indeno(1,2,3-c...	0.997	1.004	1.030	1.058	1.027	1.010	1.002
99)	MT	Dibenz(a,h)ant...	1.080	1.132	1.142	1.147	1.131	1.082	1.078
100)	MT	Benzo(g,h,i)pe...	1.114	1.233	1.174	1.177	1.149	1.085	1.053

10605661

(#) = Out of Range

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:11:44 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.462	152	58871	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.191	136	224511	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.354	164	118128	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.470	188	238629	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.285	240	232195	8000.0000000	ppb	0.00	
94) Perylene-d12	11.987	264	242105	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.798	112	4269	505.3986496	ppb	0.00	
Spiked Amount	666.000		Recovery	=	75.89%		
7) Phenol-d5	3.227	99	5537	533.2773407	ppb	0.00	
Spiked Amount	666.000		Recovery	=	80.07%		
24) Nitrobenzene-d5	3.762	82	5138m	547.1536397	ppb	0.00	
Spiked Amount	333.000		Recovery	=	164.31%		
50) 2-Fluorobiphenyl	4.872	172	10171	513.6715322	ppb	0.00	
Spiked Amount	333.000		Recovery	=	154.26%		
73) 2,4,6-Tribromophenol	5.930	330	1496	462.5542110	ppb	0.00	
Spiked Amount	666.000		Recovery	=	69.45%		
87) p-Terphenyl-d14	7.880	244	14062	495.7331025	ppb	0.00	
Spiked Amount	333.000		Recovery	=	148.87%		
Target Compounds							
5) Aniline	3.286	66	2732	525.2243740	ppb	#	87
6) bis(2-Chloroethyl)ether	3.303	93	5256m	589.0880490	ppb		
8) Phenol	3.233	94	5509	506.5770760	ppb		94
10) 2-Chlorophenol	3.350	128	4944	530.8477612	ppb		89
11) n-Decane	3.350	41	2744	562.0814175	ppb	#	71
12) 1,3-Dichlorobenzene	3.433	146	5473	506.7024933	ppb		98
13) 1,4-Dichlorobenzene	3.474	146	5674	519.4986596	ppb		91
14) Benzyl Alcohol	3.521	79	3870	472.0502742	ppb		94
15) 1,2-Dichlorobenzene	3.556	146	5179	493.8945189	ppb		91
16) bis(2-Chloroisopropyl)...	3.591	121	1714	549.4822065	ppb		87
17) 2,2-oxybis(1-chloropro...	3.591	121	1714	549.4822065	ppb		87
18) 2-Methylphenol	3.568	108	4341	517.7876998	ppb		91
19) Hexachloroethane	3.750	117	1889	459.5594926	ppb		88
20) N-Nitrosodi-n-propylamine	3.662	70	3353	507.0815062	ppb		97
21) 3&4-Methyl phenol	3.644	107	4544	470.1168322	ppb		96
25) Nitrobenzene	3.773	77	4841	495.3297552	ppb		98
26) Isophorone	3.909	82	8055	470.3931130	ppb		95
27) 2-Nitrophenol	3.956	139	2309	507.0943899	ppb		98
28) 2,4-Dimethylphenol	3.956	107	4873	527.8774974	ppb		96
29) bis(2-Chlorethoxy)methane	4.020	93	5208	533.8667488	ppb		92
30) 2,4-Dichlorophenol	4.091	162	3835	498.2033743	ppb		98
32) 1,2,4-Trichlorobenzene	4.155	180	4369	483.0873194	ppb		91
34) Naphthalene	4.208	128	14785m	540.6693835	ppb		
35) 4-Chloroaniline	4.220	65	1667	488.2853382	ppb	#	82
36) Hexachloro-1,3-butadiene	4.273	225	2507	444.8533563	ppb	#	78
40) 4-Chloro-3-methylphenol	4.508	107	3505	453.5115805	ppb		82
41) 2-Methylnaphthalene	4.643	142	9702m	532.0208708	ppb		
42) 1-Methylnaphthalene	4.708	142	8762	497.0001882	ppb		93
47) Hexachlorocyclopentadiene	4.743	237	3309	519.7505575	ppb		97
48) 2,4,6-Trichlorophenol	4.813	196	2681m	498.7835841	ppb		
49) 2,4,5-Trichlorophenol	4.837	196	2843	472.8469495	ppb		100
51) Biphenyl	4.943	154	11639	524.7229002	ppb		97

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

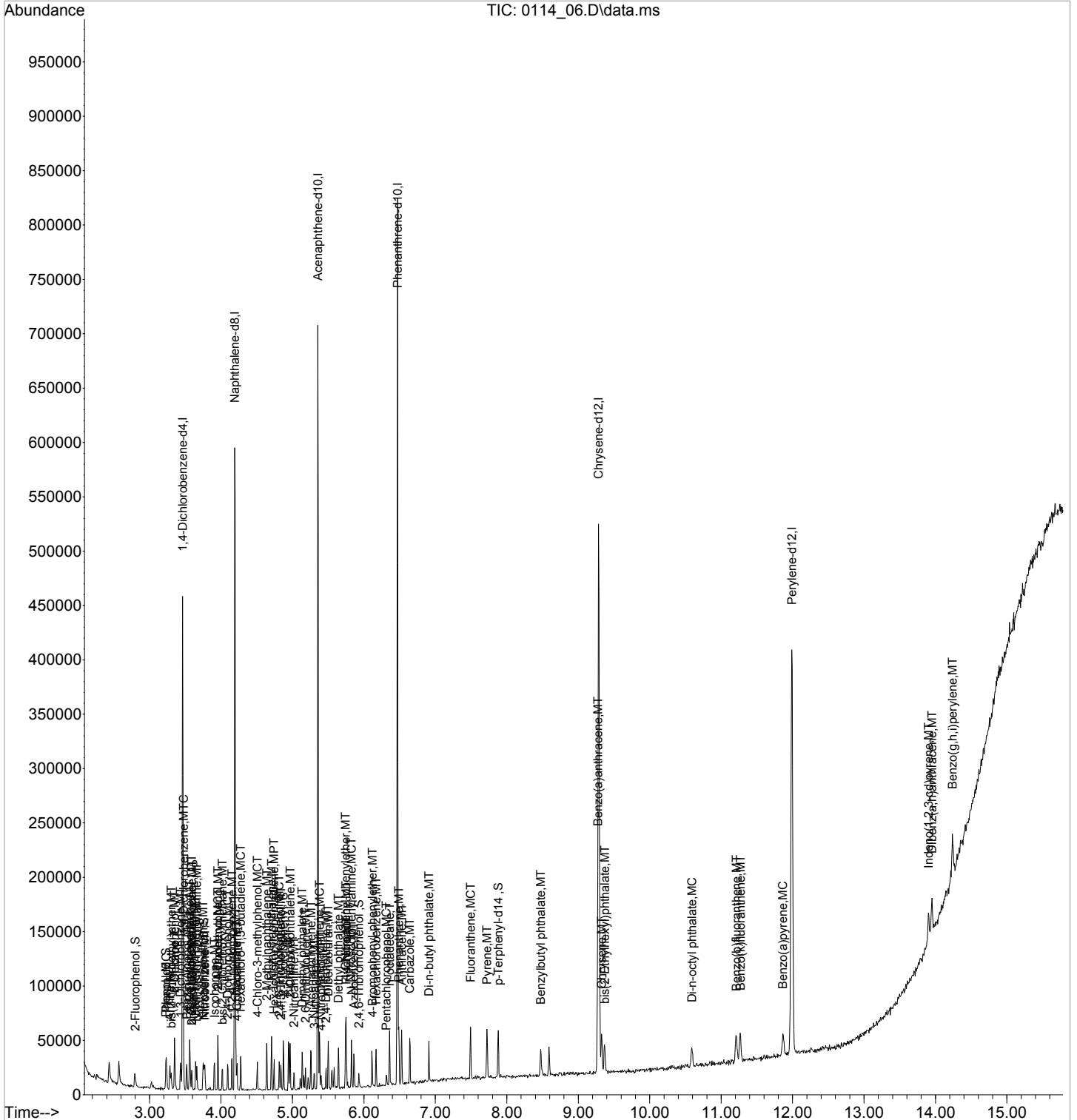
Quant Time: Jan 18 16:11:44 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
52) 2-Chloronaphthalene	4.966	162	9207	536.9078785	ppb		98
53) 2-Nitroaniline	5.019	138	2079	404.3916919	ppb	#	84
54) Acenaphthylene	5.260	152	13579	502.1431193	ppb		99
55) Dimethyl phthalate	5.137	163	9879	520.1665733	ppb		98
56) 2,6-Dinitrotoluene	5.184	165	1722	389.0637276	ppb		94
57) 3-Nitroaniline	5.307	138	1818	416.3797374	ppb		92
58) Acenaphthene	5.377	153	9352	529.6695815	ppb		95
60) Dibenzofuran	5.501	168	12711	519.6397097	ppb	#	96
61) 2,4-Dinitrotoluene	5.471	165	2163	393.8127323	ppb		93
63) 4-Nitrophenol	5.401	139	1441	416.5438367	ppb		91
64) Fluorene	5.753	166	10520	535.7350522	ppb		90
65) 4-Chlorophenyl-phenyle...	5.742	204	5797	558.9910004	ppb		98
66) Diethyl phthalate	5.642	149	9846	506.1481090	ppb		96
67) 4-Nitroaniline	5.748	138	1927	468.8746939	ppb		93
68) Azobenzene	5.859	77	9378	488.2098102	ppb		96
72) N-Nitrosodiphenylamine	5.824	169	8373	493.0591783	ppb		92
74) 4-Bromophenyl-phenylether	6.118	248	3652	560.1619793	ppb	#	76
75) Hexachlorobenzene	6.171	284	3990	540.2598839	ppb		93
76) n-octadecane	6.359	55	1729	633.5347175	ppb	#	30
77) Pentachlorophenol	6.312	266	1534	385.2634240	ppb		85
78) Phenanthrene	6.488	178	14883	481.7694136	ppb		97
79) Anthracene	6.529	178	16002	504.7976792	ppb		98
80) Carbazole	6.641	167	13914	503.5448298	ppb		99
81) Di-n-butyl phthalate	6.911	149	14538	440.2206698	ppb		99
83) Fluoranthene	7.493	202	16544	476.3584967	ppb		97
86) Pyrene	7.722	202	18089	512.6073523	ppb		99
88) Benzylbutyl phthalate	8.474	149	6179	459.6518431	ppb		95
90) Benzo(a)anthracene	9.273	228	16890	499.1629728	ppb		96
91) Chrysene	9.326	228	16850	511.3252126	ppb		96
92) bis(2-Ethylhexyl)phtha...	9.373	149	9071	460.9423587	ppb		98
93) Di-n-octyl phthalate	10.589	149	14658m	458.8837434	ppb		
95) Benzo(b)fluoranthene	11.212	252	16958	483.9624074	ppb		98
96) Benzo(k)fluoranthene	11.271	252	17130	479.1942099	ppb		94
97) Benzo(a)pyrene	11.864	252	15457m	456.0966261	ppb		
98) Indeno(1,2,3-cd)pyrene	13.903	276	15080	470.8985251	ppb		89
99) Dibenz(a,h)anthracene	13.950	278	16336m	469.5796406	ppb		
100) Benzo(g,h,i)perylene	14.238	276	16863	473.3666940	ppb		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

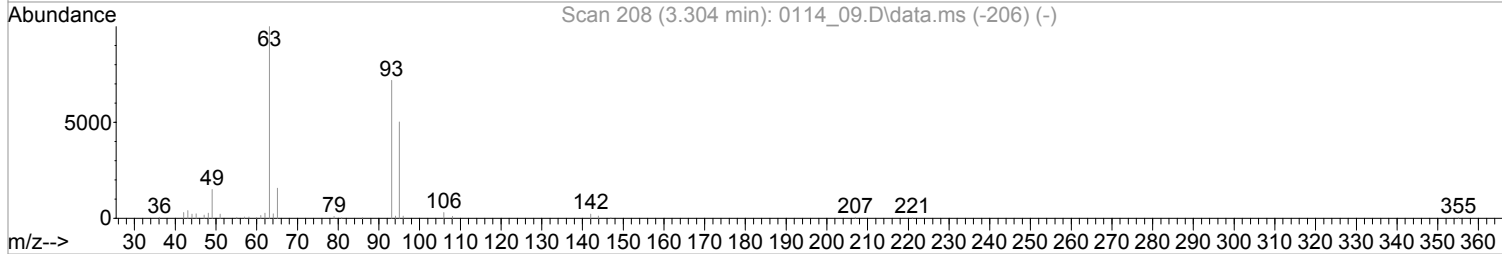
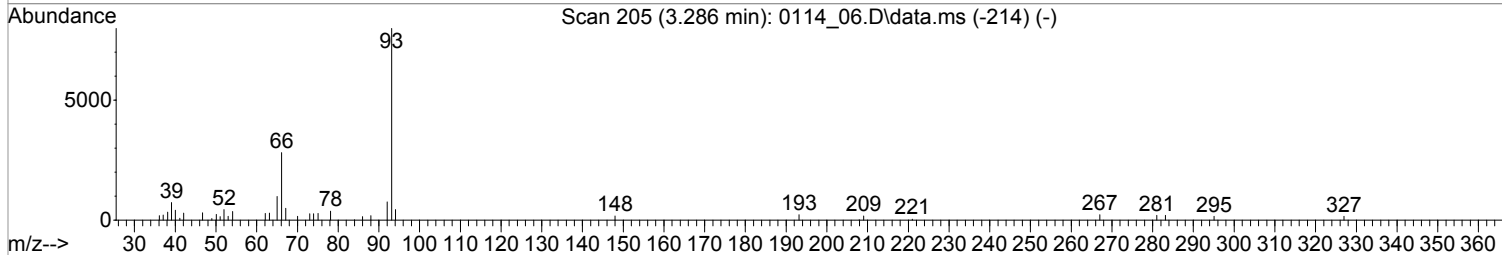
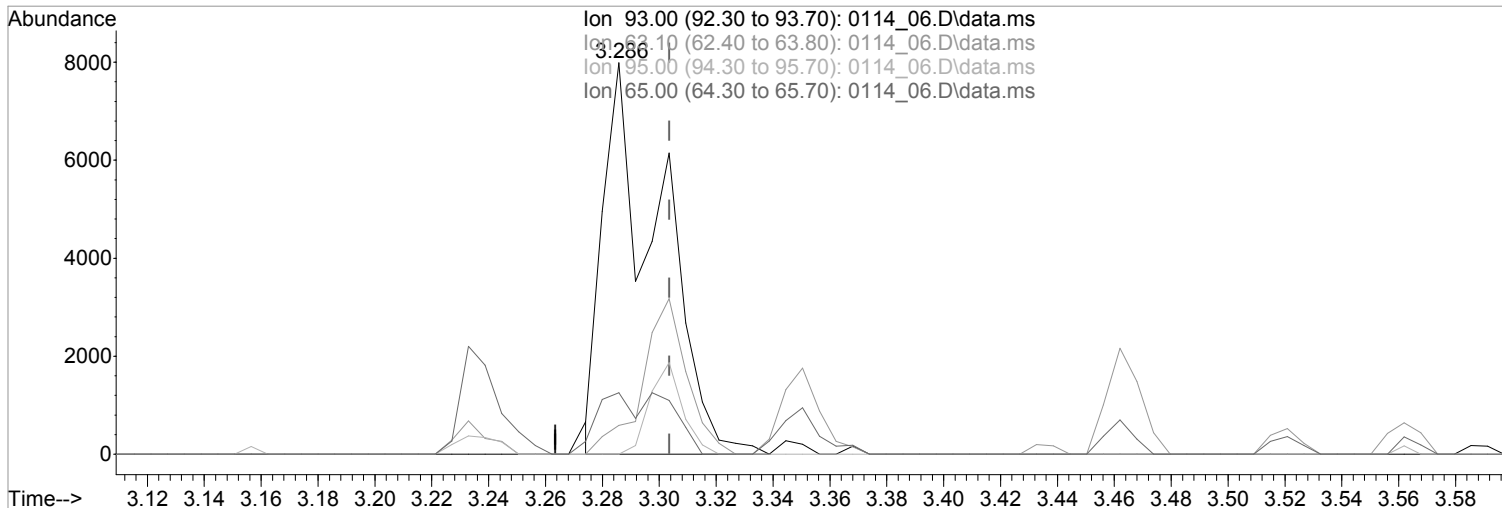
Quant Time: Jan 18 16:11:44 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 16:45:45 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

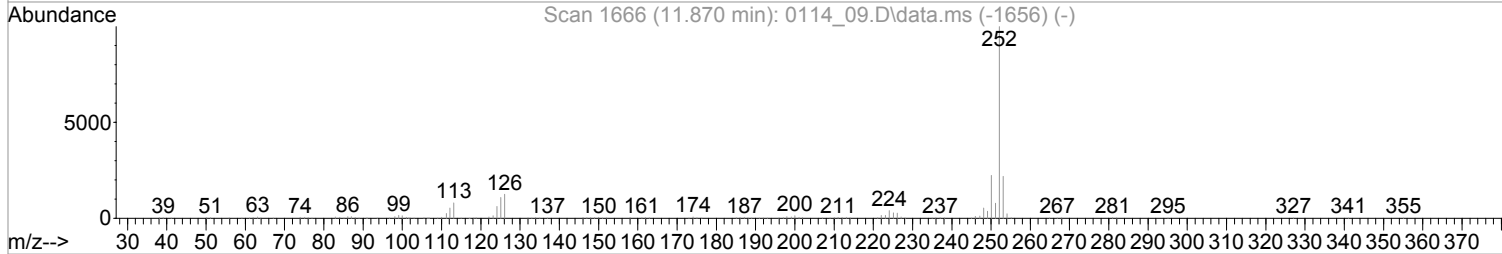
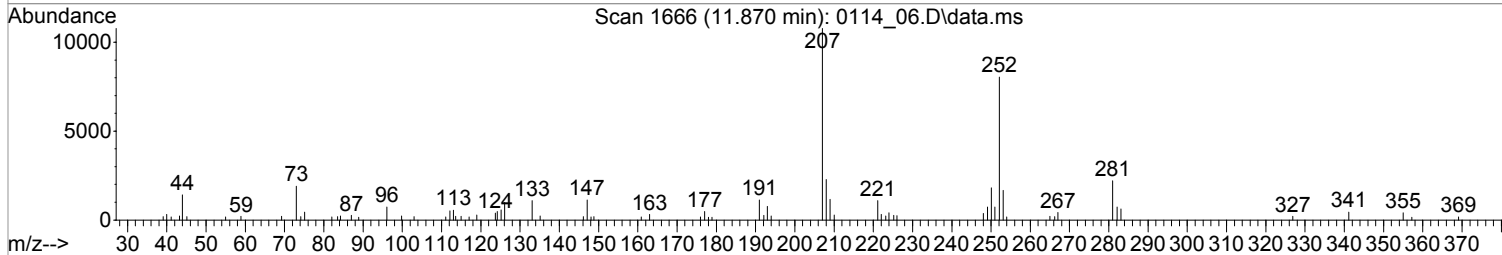
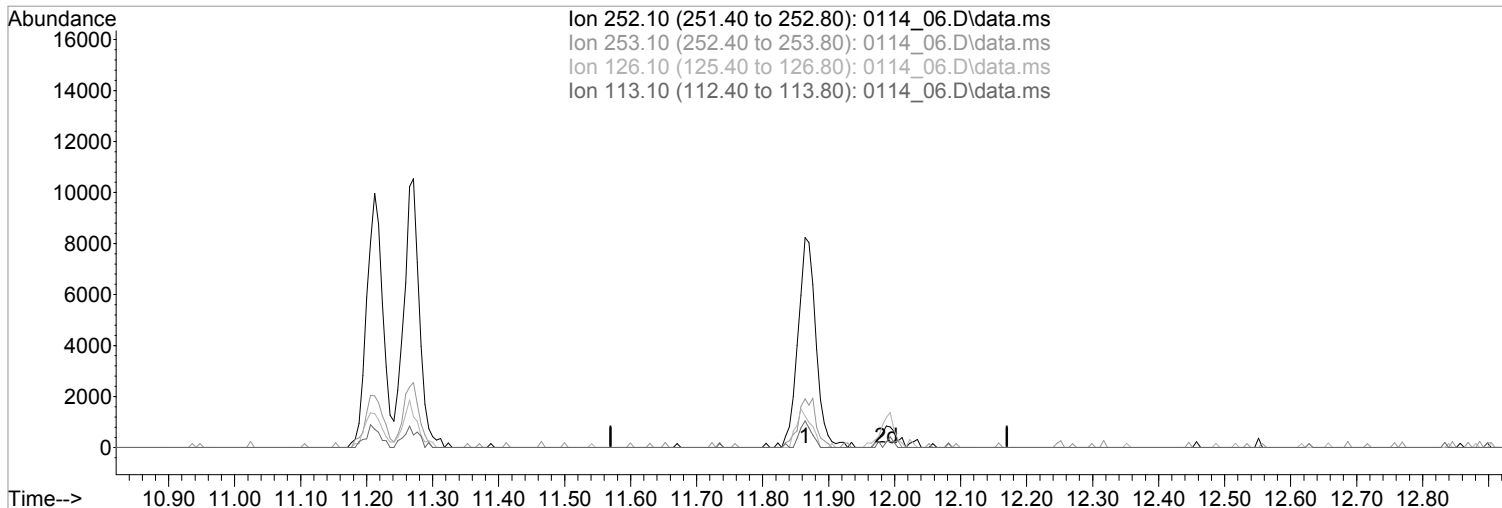
(6) bis(2-Chloroethyl)ether (MT)  
 3.286min (-0.018) 1240.0437926 ppb  
 Qvalue = 42  
 response 11064

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	7.38#
95.00	30.20	0.00#
65.00	21.40	12.44

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:03:10 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

(97) Benzo(a)pyrene (MC)

11.870min 0.0000000 ppb d

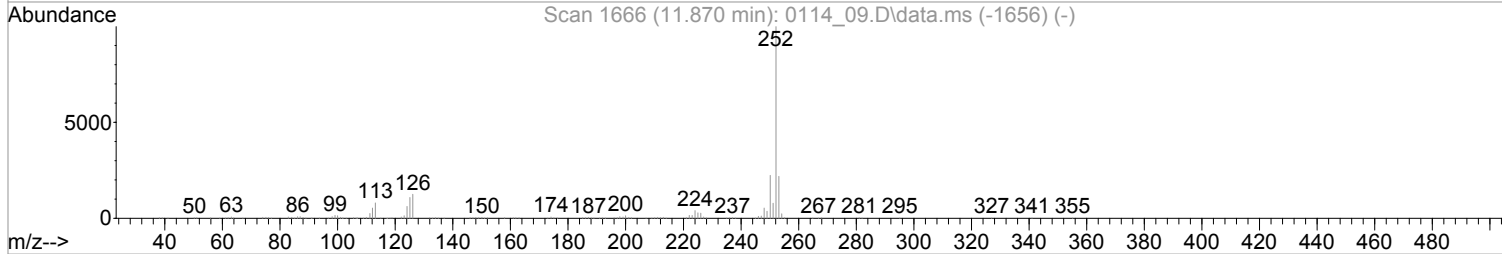
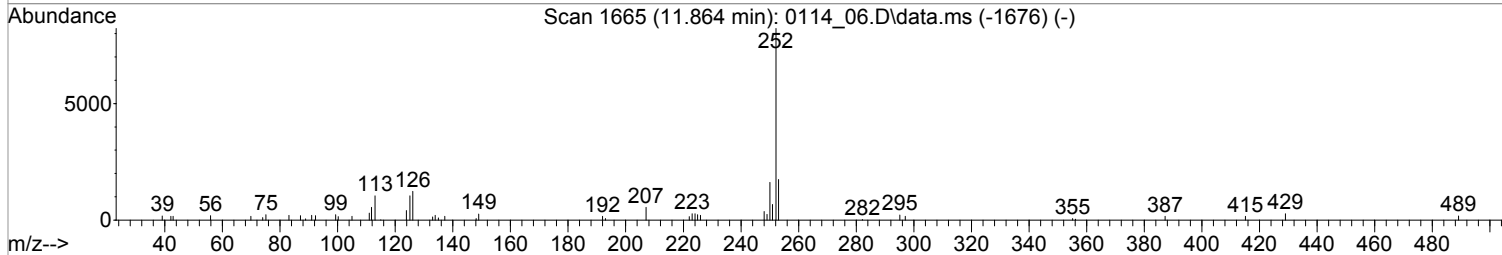
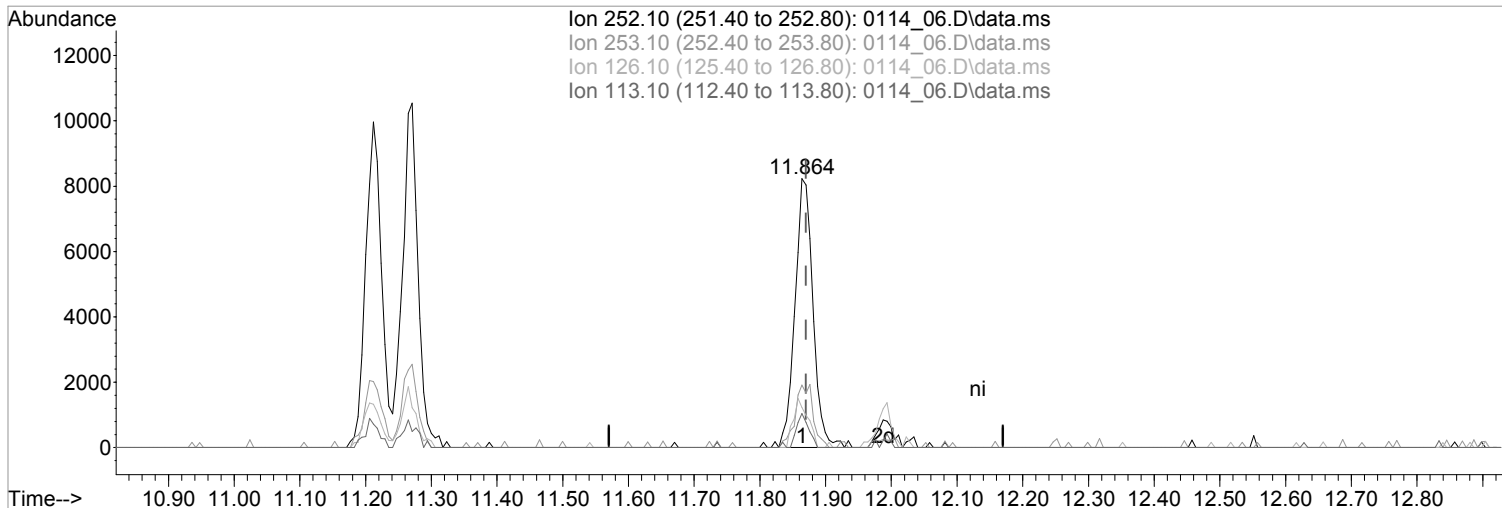
response 0

Ion	Exp%	Act%
252.10	100	0.00
253.10	21.70	0.00
126.10	12.40	0.00
113.10	8.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:03:10 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

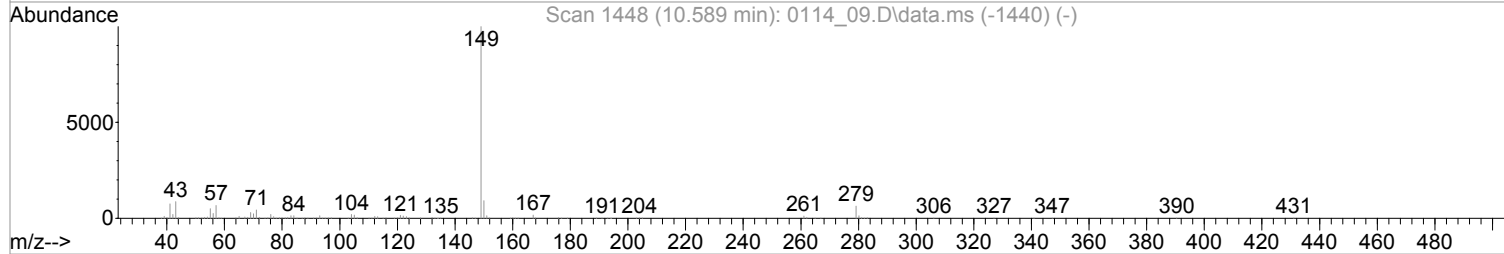
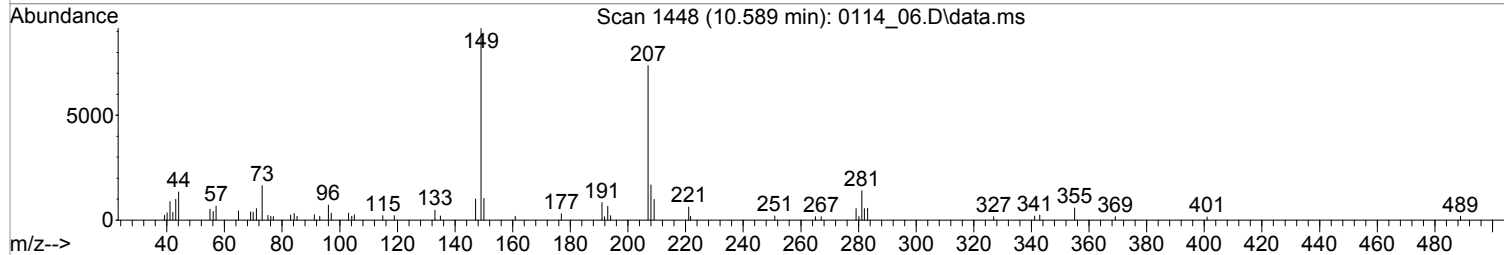
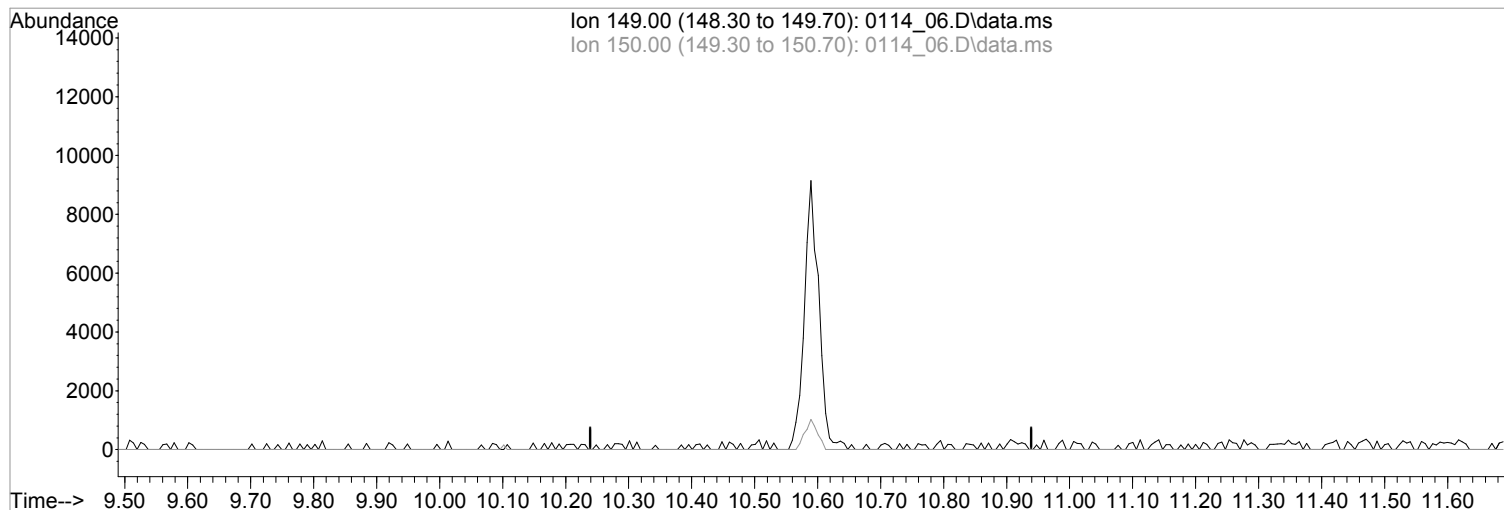
(97) Benzo(a)pyrene (MC)  
 11.864min (-0.006) 456.0966261 ppb m  
 response 15457  

Ion	Exp%	Act%
252.10	100	100
253.10	21.70	23.25
126.10	12.40	14.93
113.10	8.00	12.66

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_06.D  
Acq On : 14 Jan 2022 1:34 pm  
Operator : 917  
Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 3 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 17 16:57:17 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 16:45:04 2022  
Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

(93) Di-n-octyl phthalate (MC)  
10.589min 0.0000000 ppb d

response 0

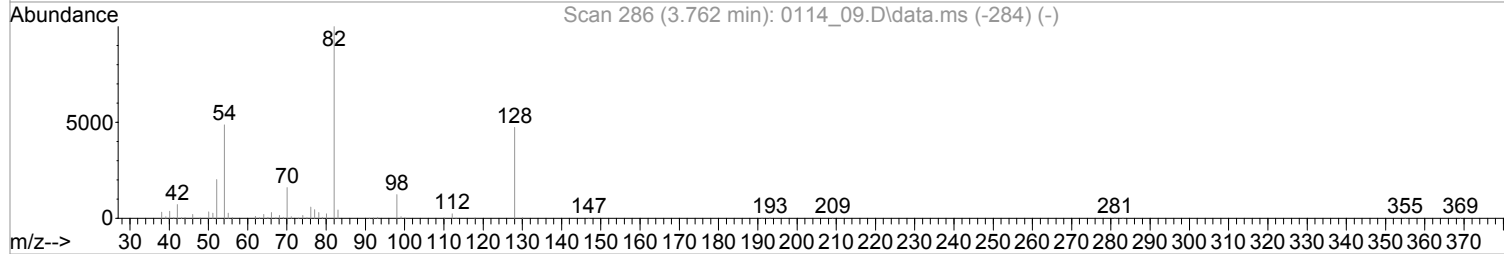
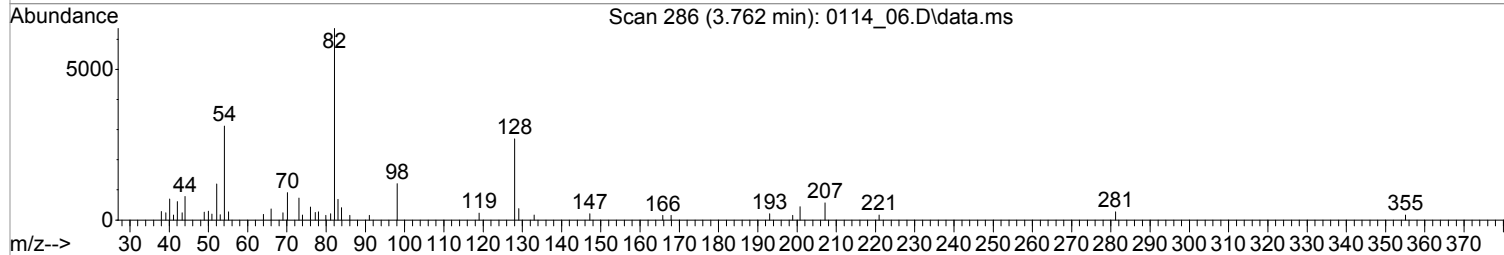
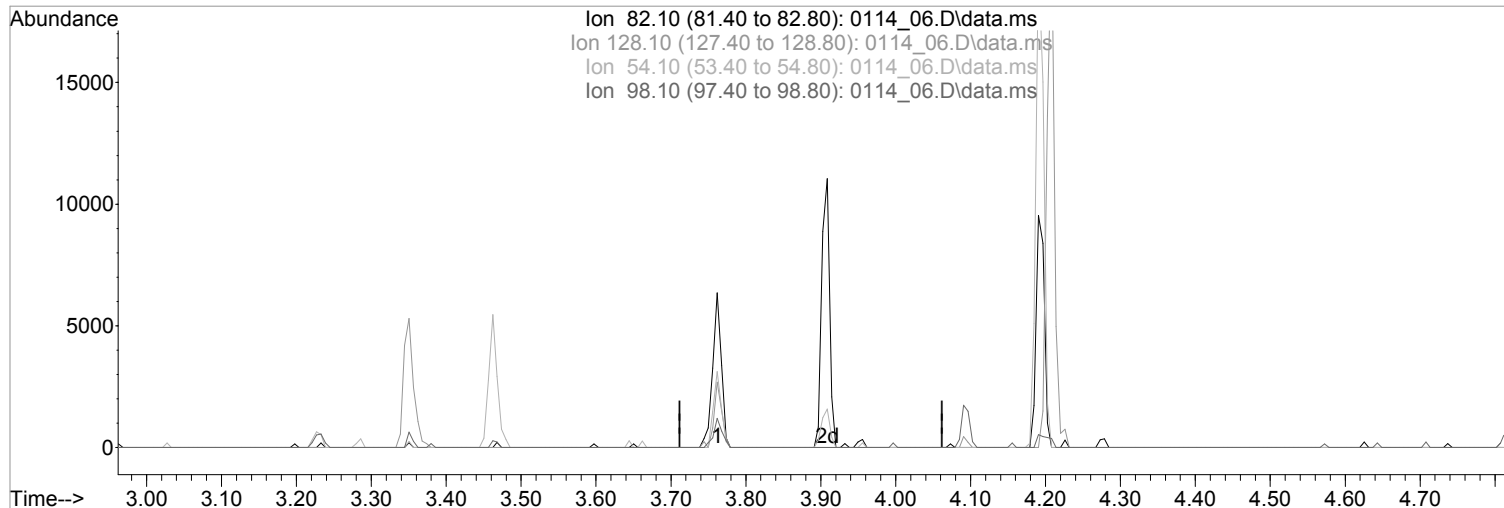
Ion	Exp%	Act%
149.00	100	0.00
150.00	9.10	0.00
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:05:46 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.762min 0.0000000 ppb d

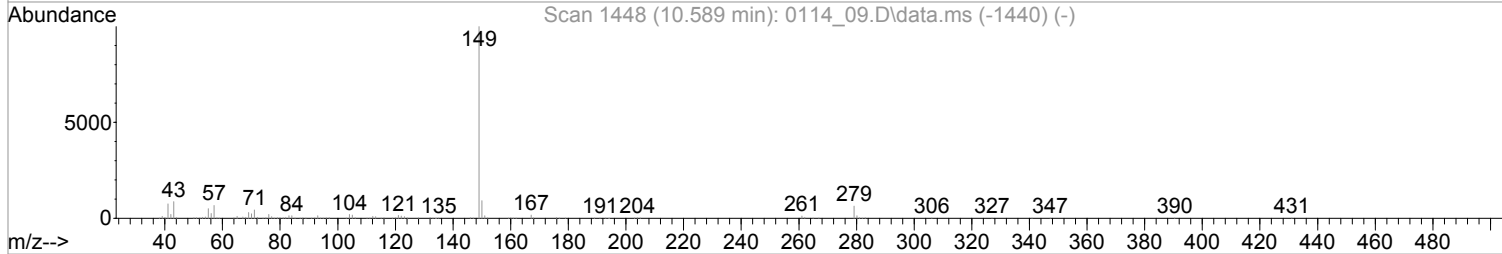
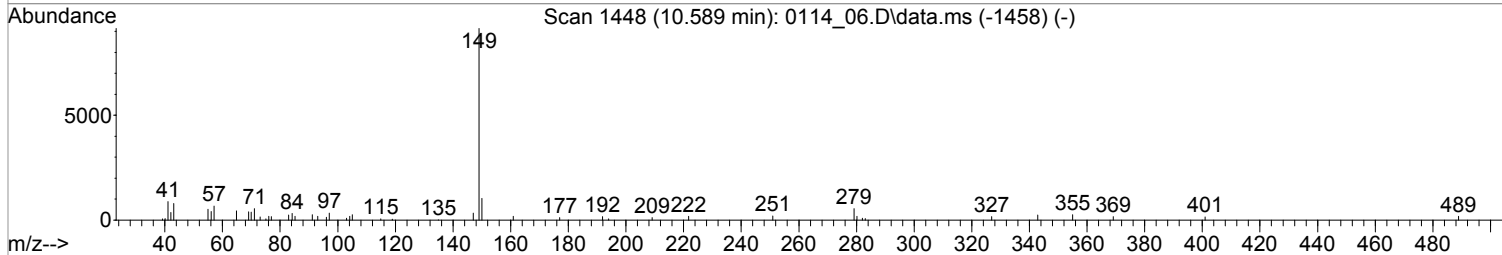
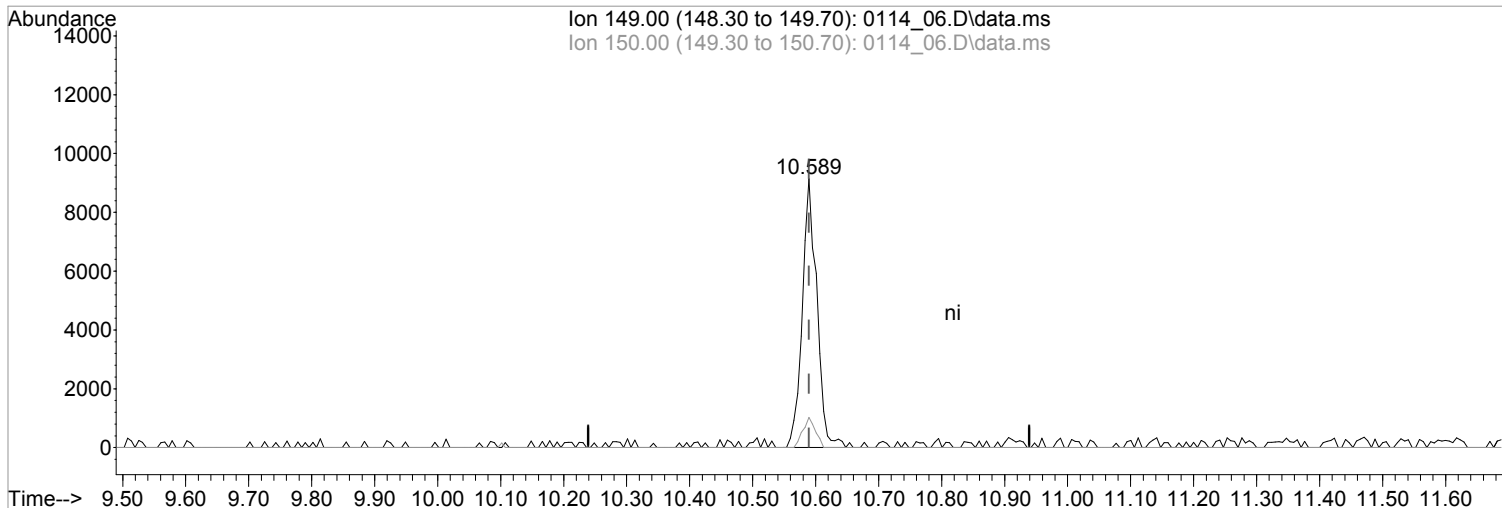
response 0

Ion	Exp%	Act%
82.10	100	0.00
128.10	43.00	0.00
54.10	44.70	0.00
98.10	12.60	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:03:10 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

(93) Di-n-octyl phthalate (MC)  
 10.589min (-0.000) 458.8837434 ppb m

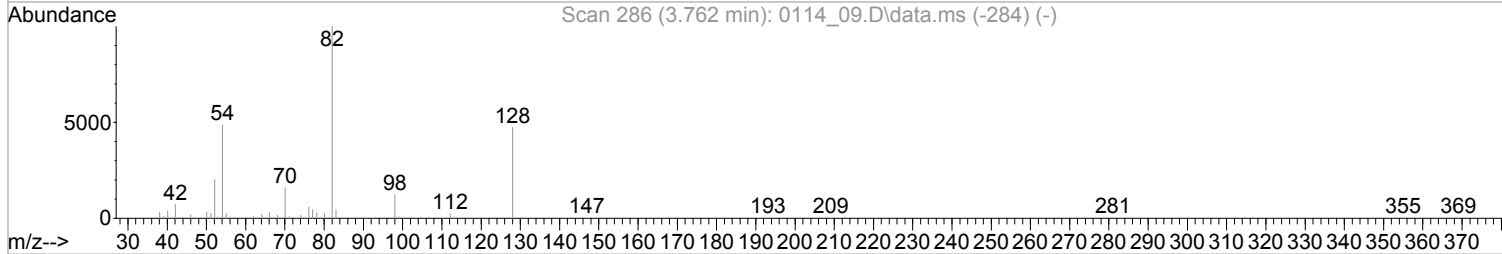
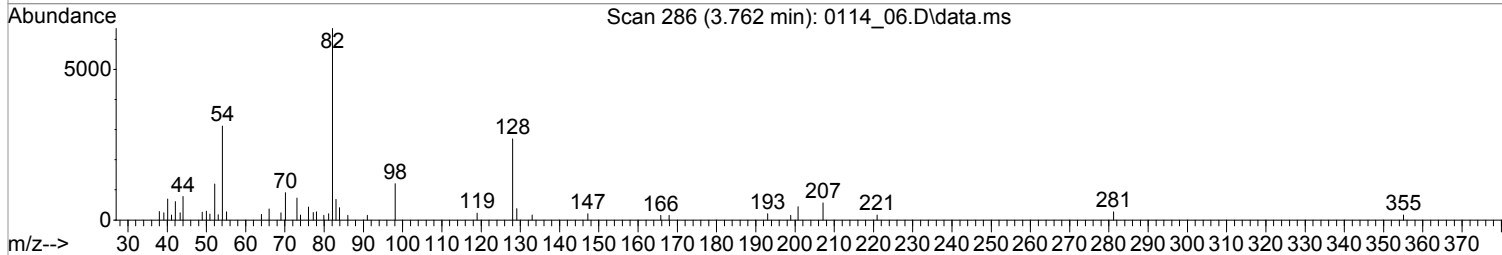
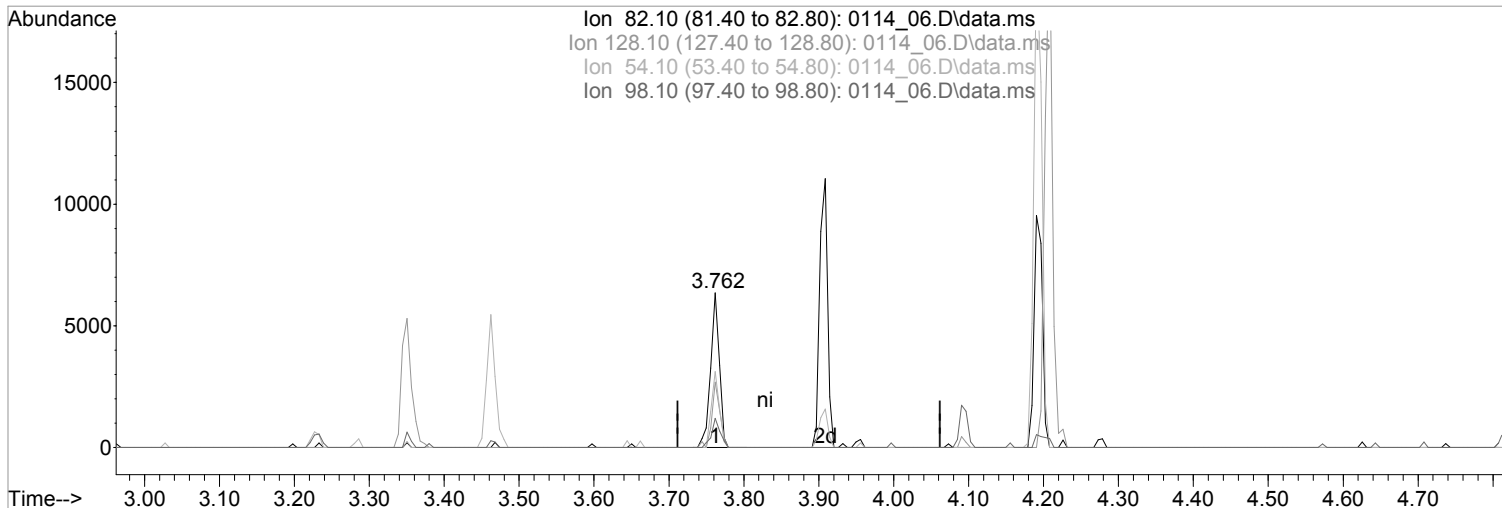
response 14658

Ion	Exp%	Act%
149.00	100	100
150.00	9.10	11.19
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:05:46 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.762min (-0.000) 547.1536397 ppb m

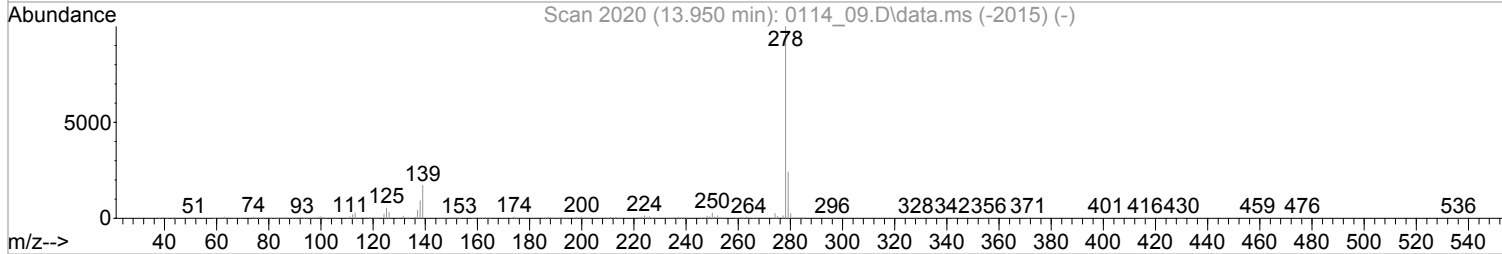
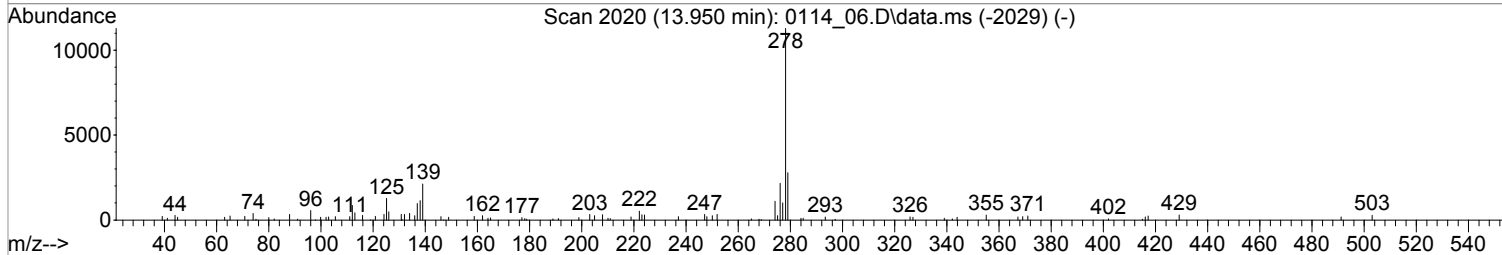
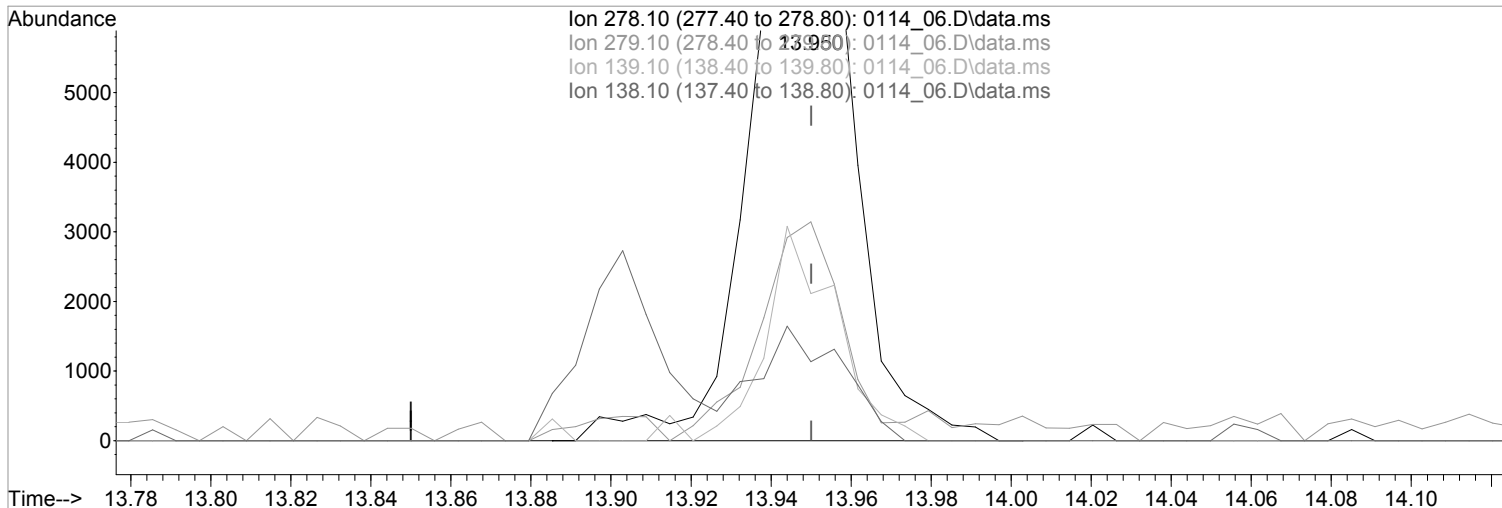
response 5138

Ion	Exp%	Act%
82.10	100	100
128.10	43.00	42.35
54.10	44.70	48.99
98.10	12.60	18.88

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 16:45:45 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

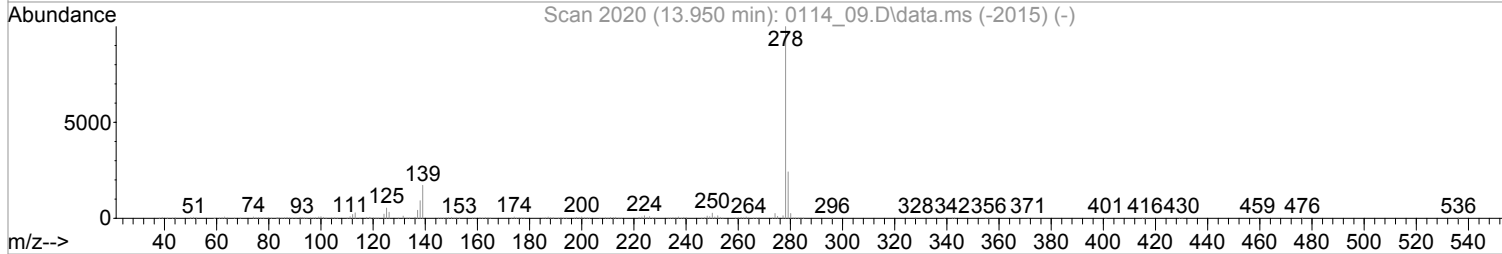
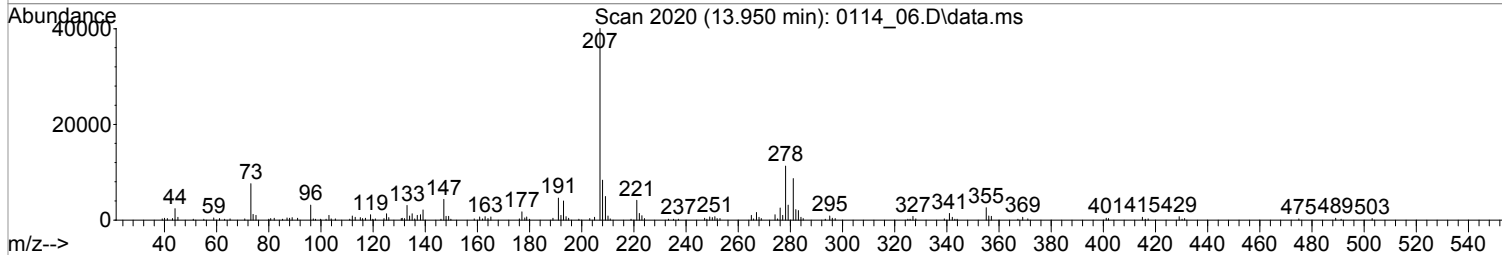
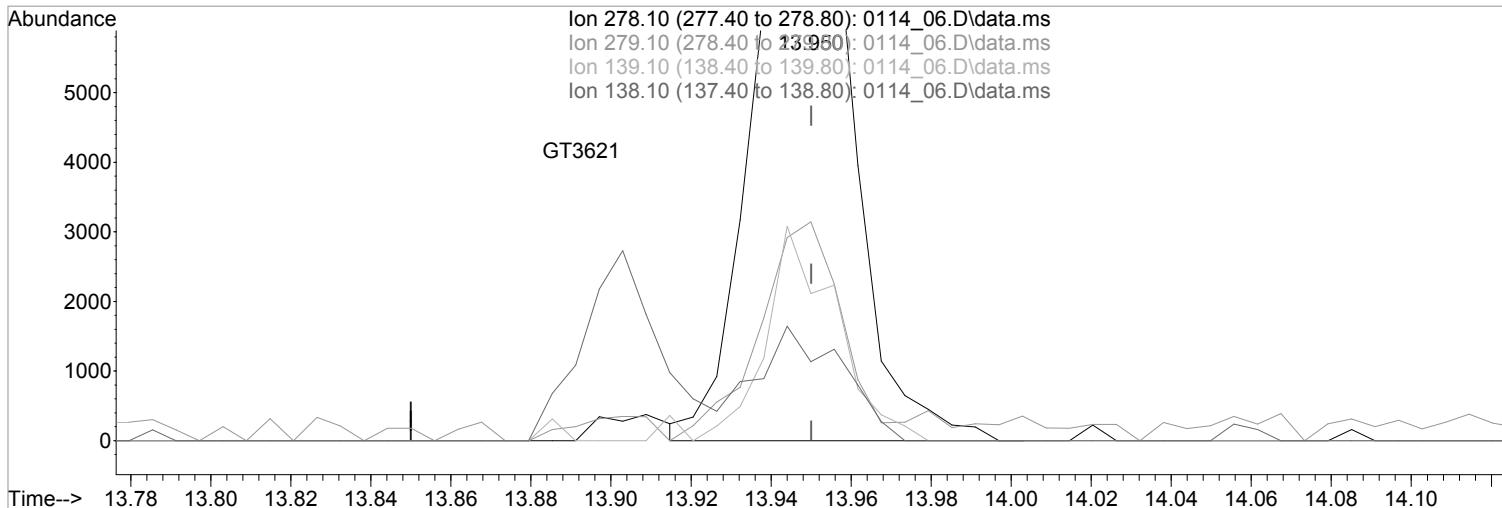
(99) Dibenz(a,h)anthracene (MT)  
 13.950min (-0.000) 482.1124959 ppb  
 Qvalue = 95  
 response 16772

Ion	Exp%	Act%
278.10	100	100
279.10	24.00	26.40
139.10	16.90	18.72
138.10	12.90	10.06

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 16:45:45 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

(99) Dibenz(a,h)anthracene (MT)  
 13.950min (-0.000) 469.5796406 ppb m

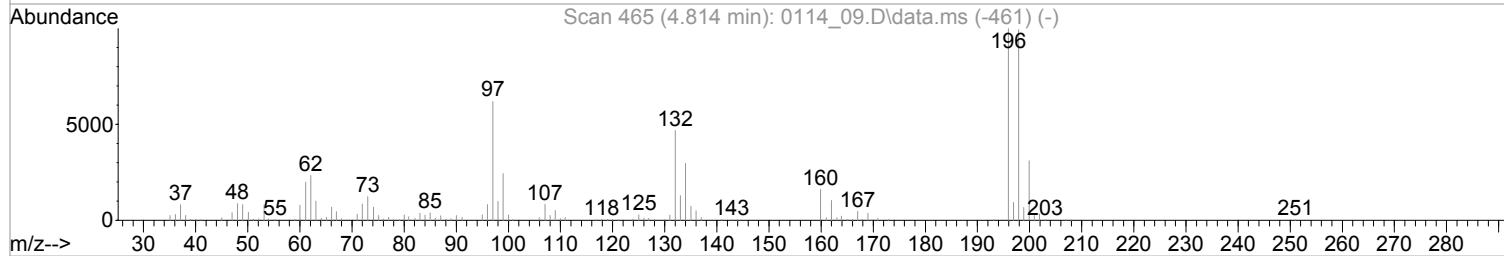
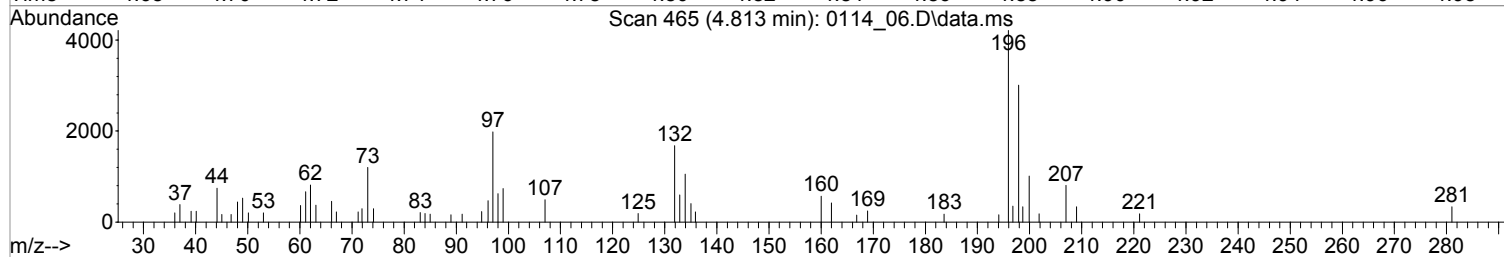
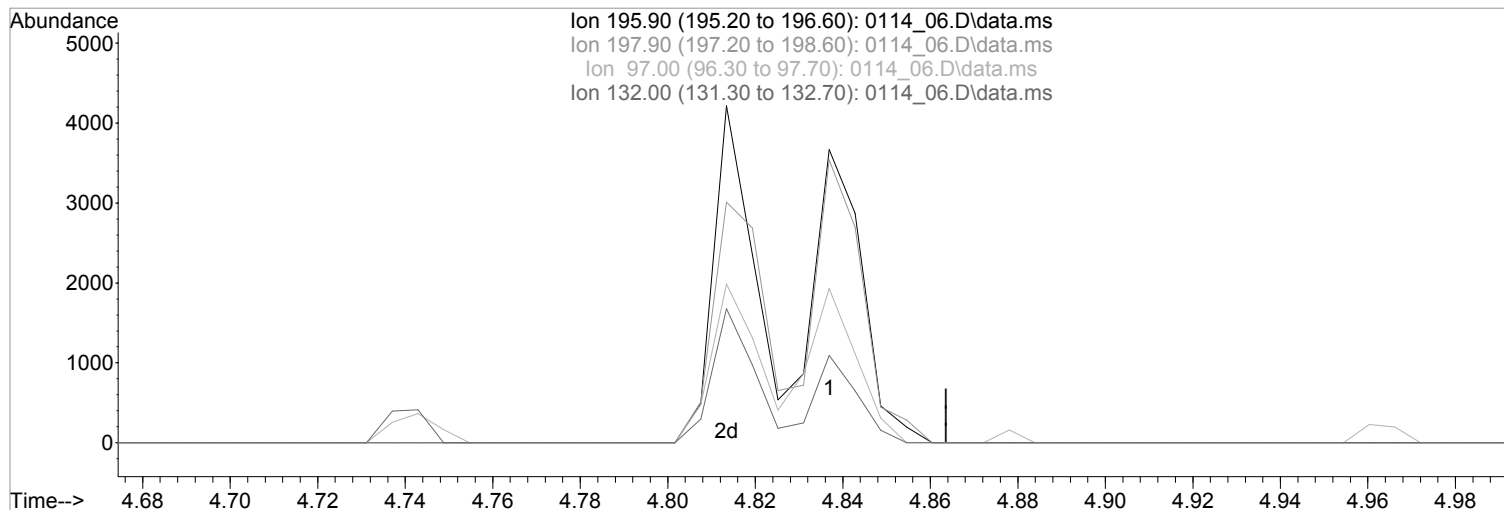
response 16336

Ion	Exp%	Act%
278.10	100	100
279.10	24.00	27.81
139.10	16.90	18.72
138.10	12.90	10.06

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 16:57:17 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

(48) 2,4,6-Trichlorophenol (MCT)

4.814min 0.000000 ppb d

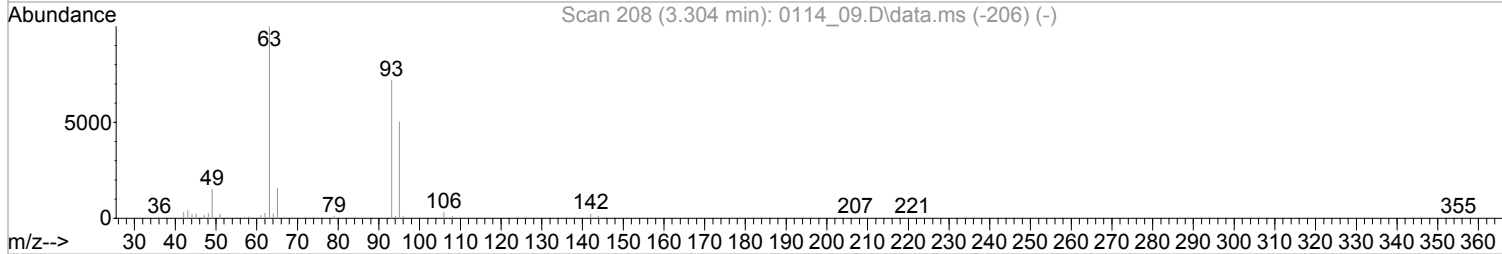
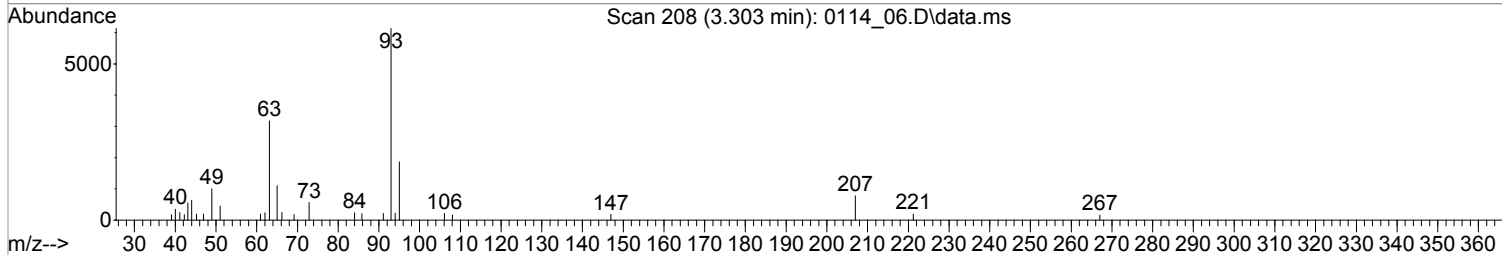
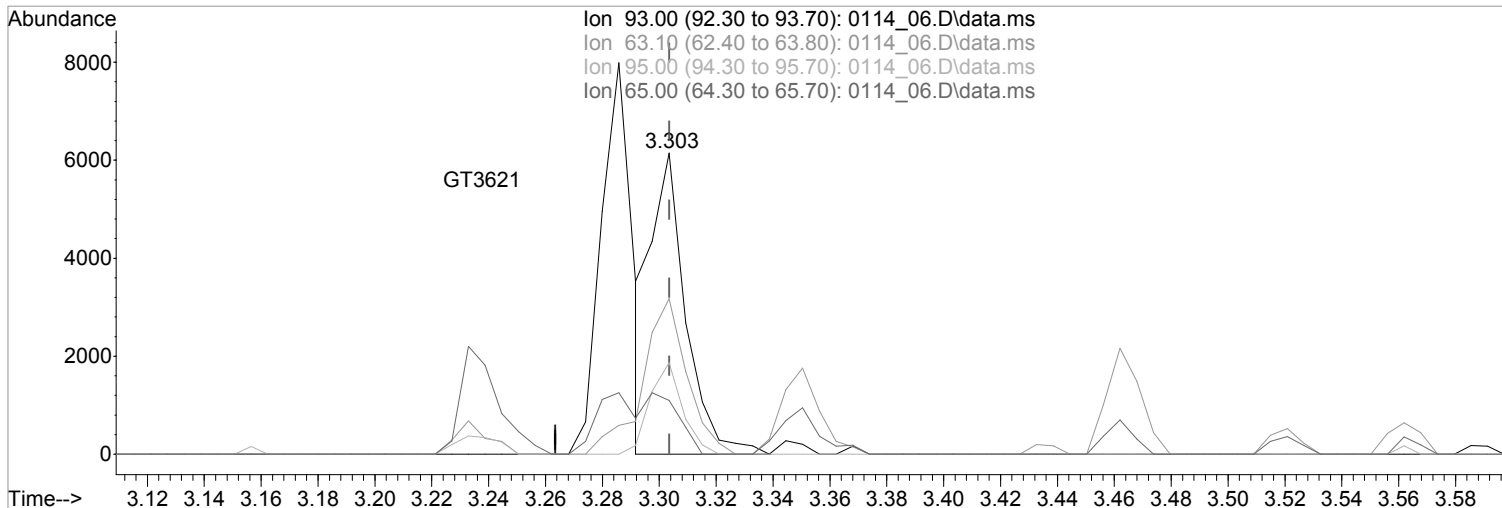
response 0

Ion	Exp%	Act%
195.90	100	0.00
197.90	99.40	0.00
97.00	61.90	0.00
132.00	46.80	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 16:45:45 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.303min (-0.000) 589.0880490 ppb m

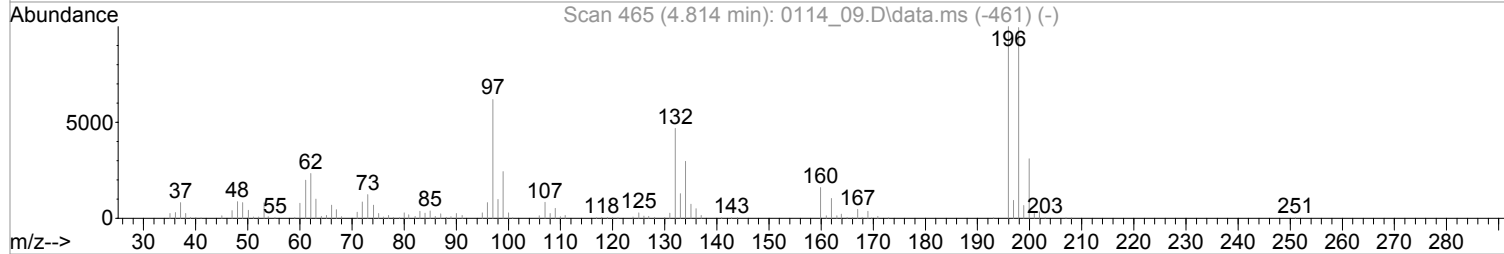
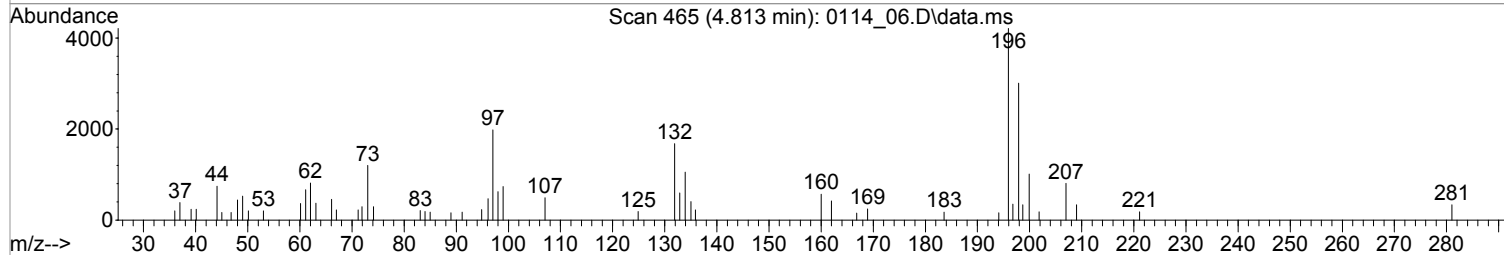
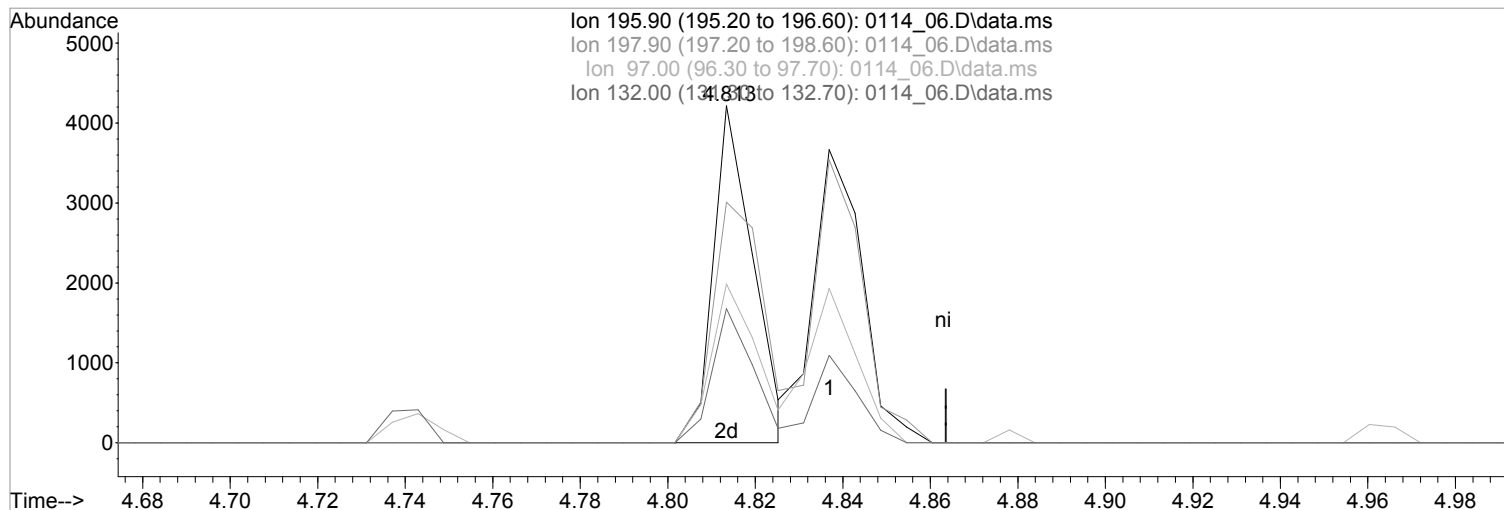
response 5256

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	51.67
95.00	30.20	30.36
65.00	21.40	17.87

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 16:57:17 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

(48) 2,4,6-Trichlorophenol (MCT)  
 4.813min (-0.000) 498.7835841 ppb m

response 2681

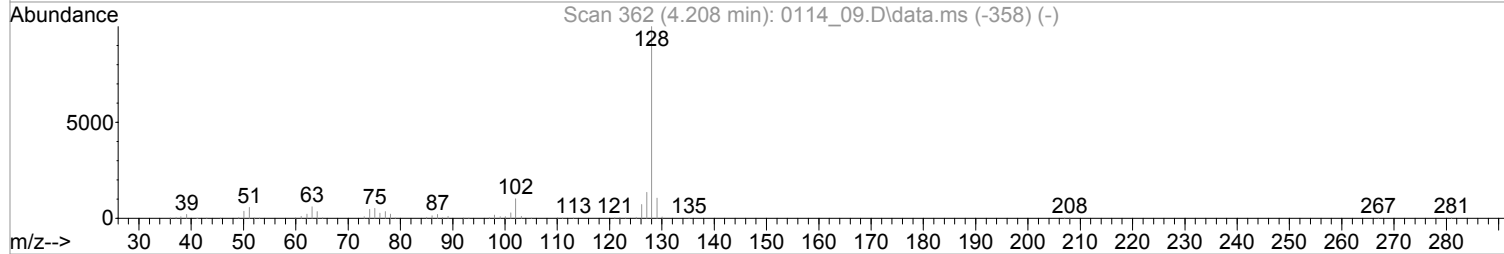
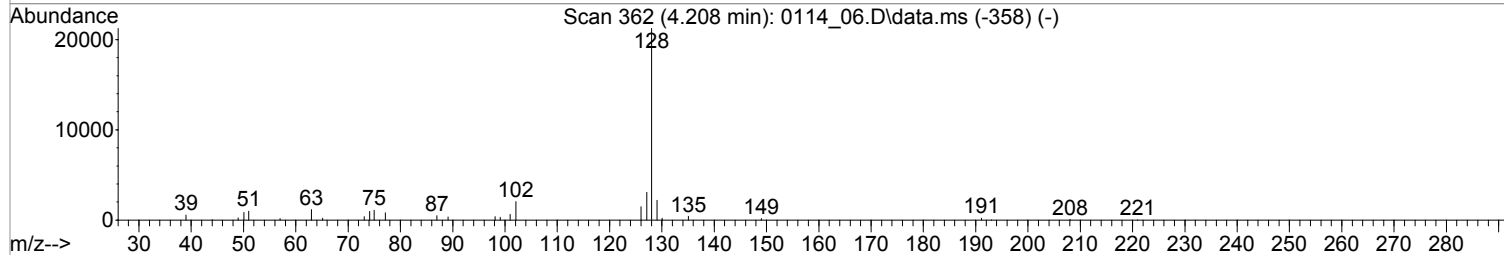
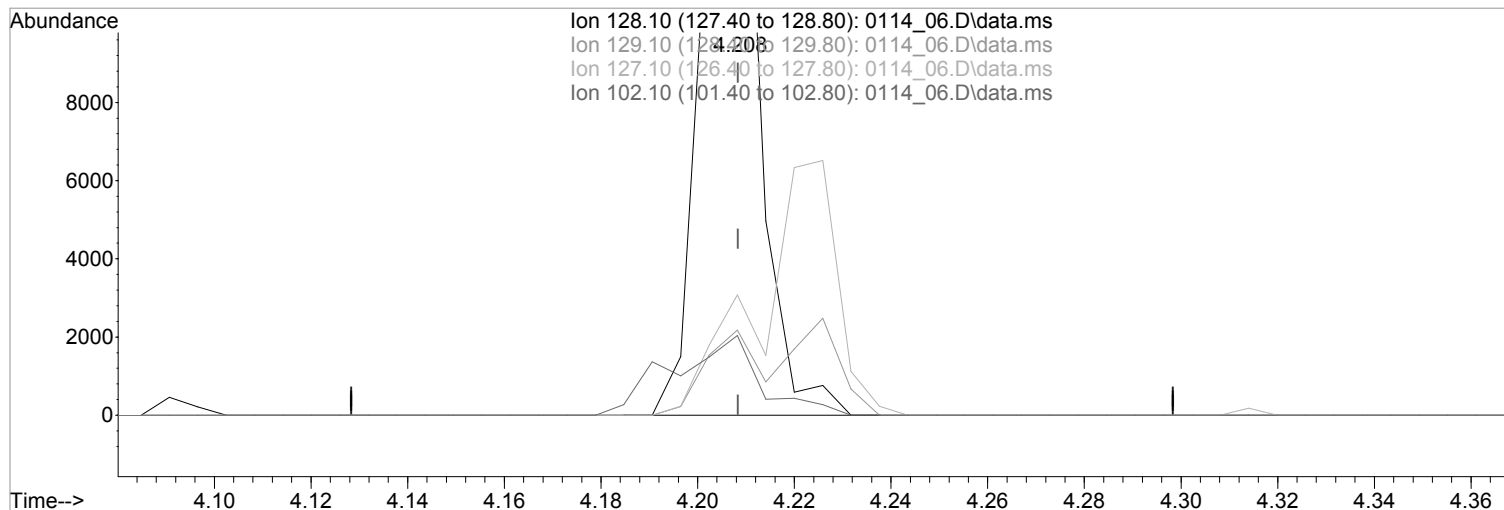
Ion	Exp%	Act%
195.90	100	100
197.90	99.40	71.39#
97.00	61.90	47.08
132.00	46.80	39.82



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 16:45:45 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



(34) Naphthalene (MT)

4.208min (-0.000) 550.5429535 ppb

Qvalue = 98

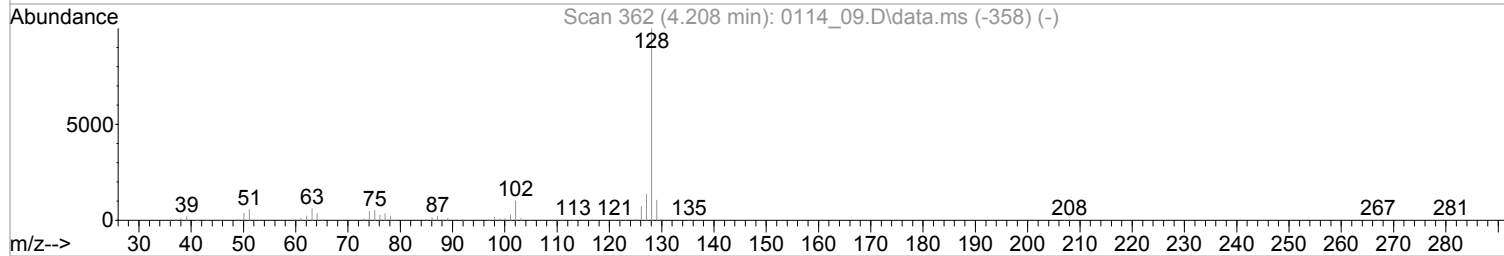
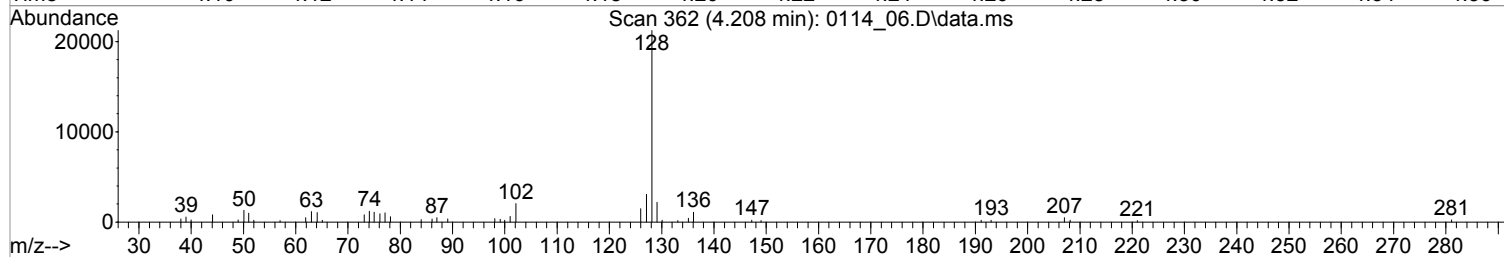
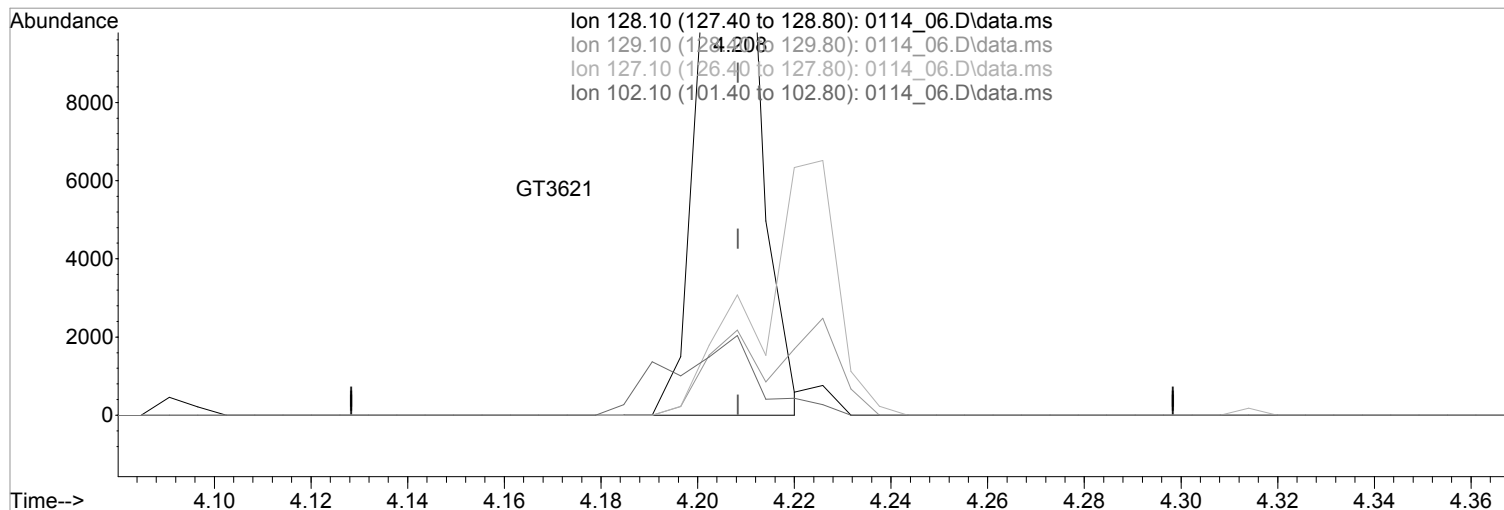
response 15055

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	10.23
127.10	13.50	14.47
102.10	10.10	9.58

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 16:45:45 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

(34) Naphthalene (MT)

4.208min (-0.000) 540.6693835 ppb m

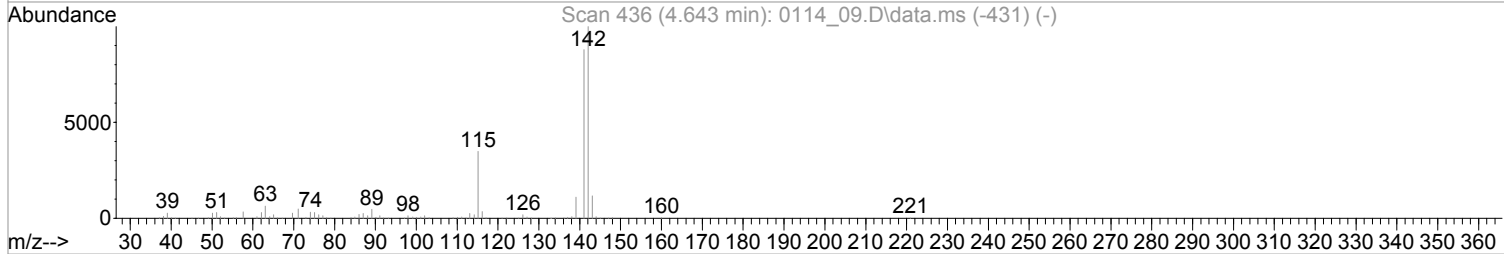
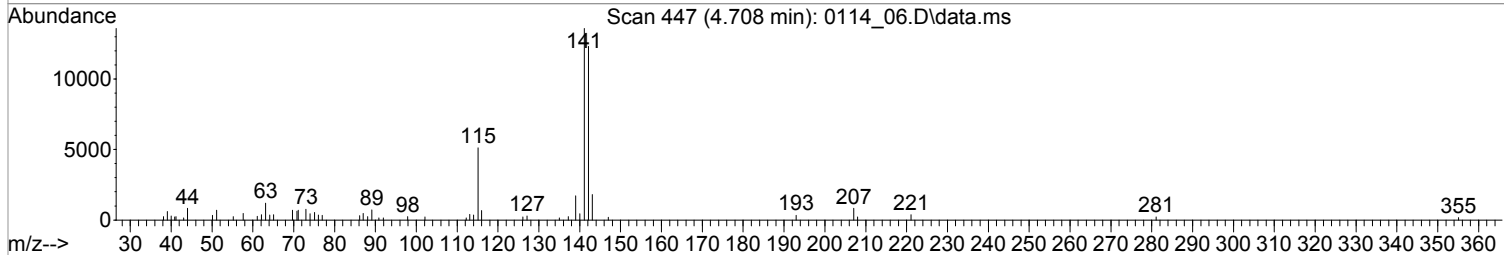
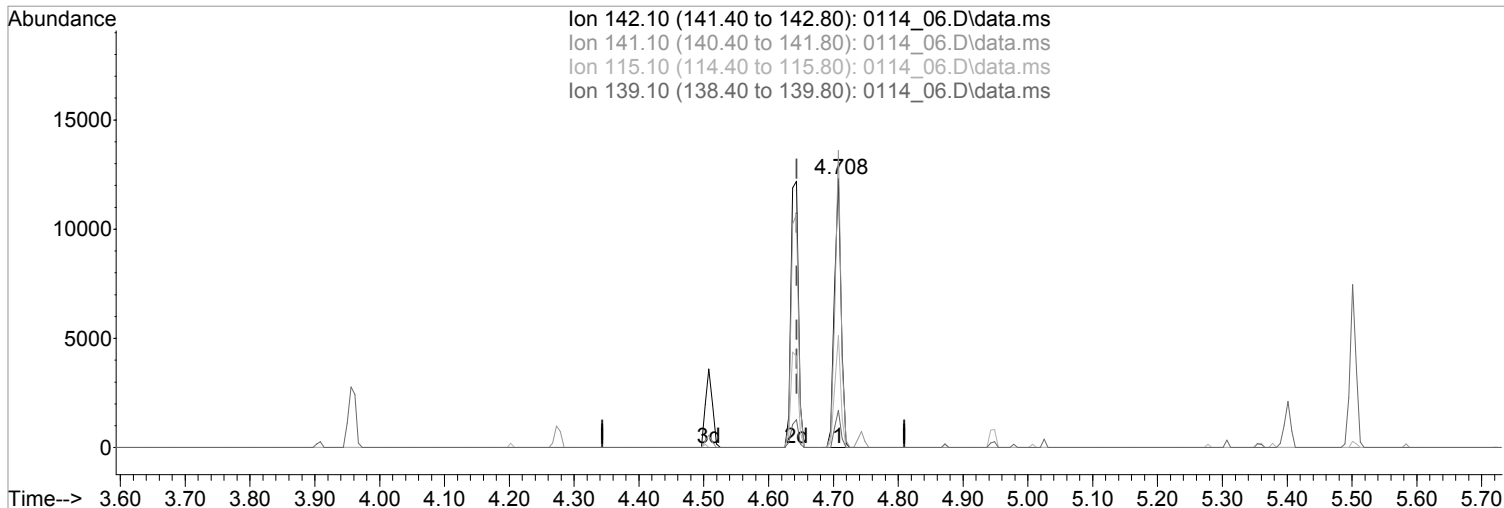
response 14785

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	10.23
127.10	13.50	14.47
102.10	10.10	9.58

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 16:45:45 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

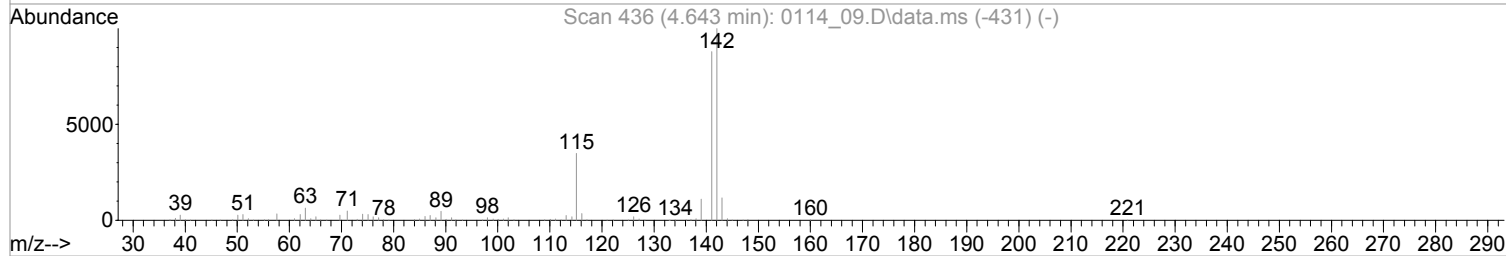
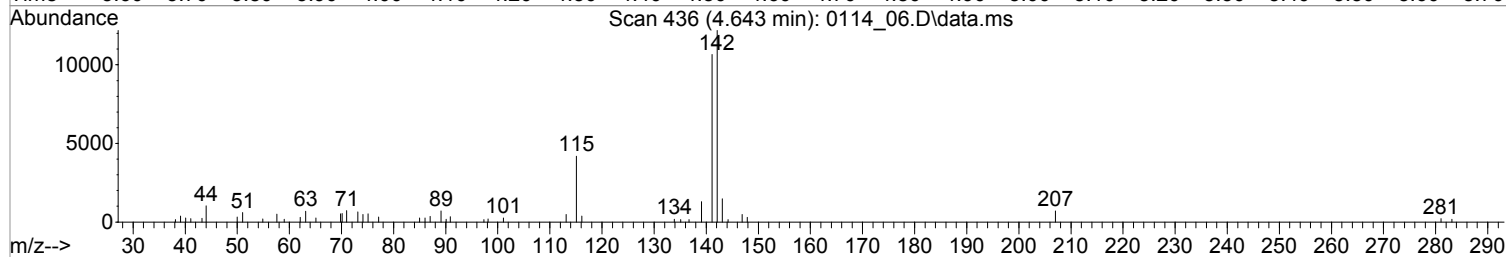
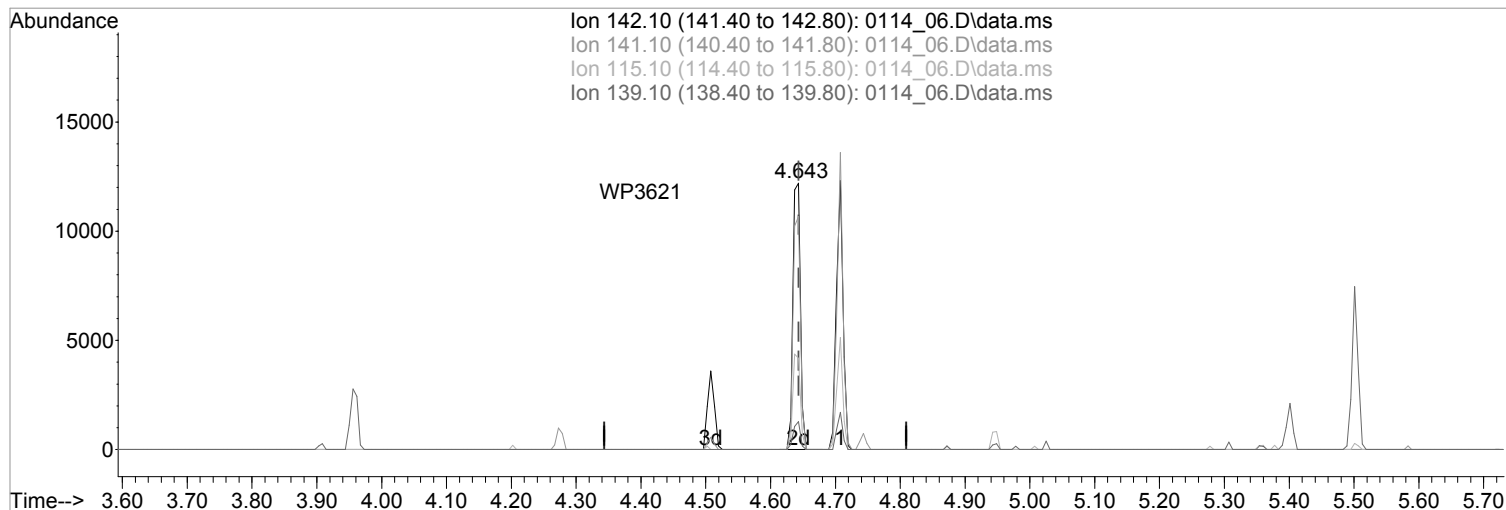
(41) 2-Methylnaphthalene (MT)  
 4.708min (+0.064) 480.4748372 ppb  
 Qvalue = 92  
 response 8762

Ion	Exp%	Act%
142.10	100	100
141.10	88.00	97.97
115.10	35.50	37.72
139.10	11.10	12.19

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_06.D  
 Acq On : 14 Jan 2022 1:34 pm  
 Operator : 917  
 Sample : STD SVMS 500 PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 16:45:45 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:45:04 2022  
 Response via : Initial Calibration



TIC: 0114\_06.D\data.ms

(41) 2-Methylnaphthalene (MT)  
 4.643min (-0.000) 532.0208708 ppb m

response 9702

Ion	Exp%	Act%
142.10	100	100
141.10	88.00	88.48
115.10	35.50	34.07
139.10	11.10	11.01

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_07.D  
 Acq On : 14 Jan 2022 1:54 pm  
 Operator : 917  
 Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:12:09 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:58:05 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.462	152	58674	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.191	136	230808	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.354	164	121513	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.471	188	243573	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.285	240	236274	8000.0000000	ppb	0.00	
94) Perylene-d12	11.988	264	246360	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.792	112	8989	1062.0298456	ppb	0.00	
Spiked Amount	666.000		Recovery	= 159.46%			
7) Phenol-d5	3.227	99	10662	997.1399034	ppb	0.00	
Spiked Amount	666.000		Recovery	= 149.72%			
24) Nitrobenzene-d5	3.762	82	10555m	1090.2418620	ppb	0.00	
Spiked Amount	333.000		Recovery	= 327.40%			
50) 2-Fluorobiphenyl	4.872	172	22719	1100.3831027	ppb	0.00	
Spiked Amount	333.000		Recovery	= 330.45%			
73) 2,4,6-Tribromophenol	5.930	330	2798m	880.5370482	ppb	0.00	
Spiked Amount	666.000		Recovery	= 132.21%			
87) p-Terphenyl-d14	7.881	244	30278	1053.4695704	ppb	0.00	
Spiked Amount	333.000		Recovery	= 316.36%			
Target Compounds							
2) Pyridine	2.252	79	7855	976.3886075	ppb	#	93
3) N-Nitrosodimethylamine	2.228	42	6715m	1434.9294269	ppb		
5) Aniline	3.280	66	5354	1007.3475574	ppb	#	91
6) bis(2-Chloroethyl)ether	3.304	93	9662m	997.6647156	ppb		
8) Phenol	3.233	94	11571	1060.6017395	ppb		94
10) 2-Chlorophenol	3.351	128	9352	977.3659630	ppb		91
11) n-Decane	3.351	41	5997	1160.5051593	ppb	#	94
12) 1,3-Dichlorobenzene	3.433	146	10924	1008.0077167	ppb		91
13) 1,4-Dichlorobenzene	3.474	146	11633	1048.2283113	ppb		93
14) Benzyl Alcohol	3.521	79	8693	1094.4954442	ppb		95
15) 1,2-Dichlorobenzene	3.556	146	11514	1108.4853085	ppb		98
16) bis(2-Chloroisopropyl)...	3.592	121	3395	1040.5506654	ppb		98
17) 2,2-oxybis(1-chloropro...	3.592	121	3395	1040.5506654	ppb		98
18) 2-Methylphenol	3.562	108	8552	1005.6066906	ppb		97
19) Hexachloroethane	3.750	117	4230	1076.0537393	ppb		94
20) N-Nitrosodi-n-propylamine	3.662	70	6485	977.1141315	ppb		95
21) 3&4-Methyl phenol	3.644	107	9754	1043.7149543	ppb		98
25) Nitrobenzene	3.774	77	10436	1043.5498125	ppb		95
26) Isophorone	3.903	82	18855	1103.7253249	ppb		95
27) 2-Nitrophenol	3.956	139	4871	1033.2361496	ppb		95
28) 2,4-Dimethylphenol	3.956	107	9621	986.2848462	ppb		92
29) bis(2-Chlorethoxy)methane	4.015	93	11127	1073.1543330	ppb		97
30) 2,4-Dichlorophenol	4.091	162	7581	959.7000688	ppb		94
32) 1,2,4-Trichlorobenzene	4.156	180	9553	1045.1485999	ppb		92
34) Naphthalene	4.208	128	30397m	1038.9990747	ppb		
35) 4-Chloroaniline	4.220	65	3285	947.0608241	ppb		80
36) Hexachloro-1,3-butadiene	4.273	225	6505	1188.3166846	ppb		94
40) 4-Chloro-3-methylphenol	4.508	107	7799	1029.4377119	ppb		88
41) 2-Methylnaphthalene	4.637	142	19900	1028.5342593	ppb		100
42) 1-Methylnaphthalene	4.708	142	18867	1044.1134254	ppb		97
47) Hexachlorocyclopentadiene	4.743	237	6807	1019.2720229	ppb		94
48) 2,4,6-Trichlorophenol	4.814	196	5545	1005.5953414	ppb		98

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_07.D  
 Acq On : 14 Jan 2022 1:54 pm  
 Operator : 917  
 Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

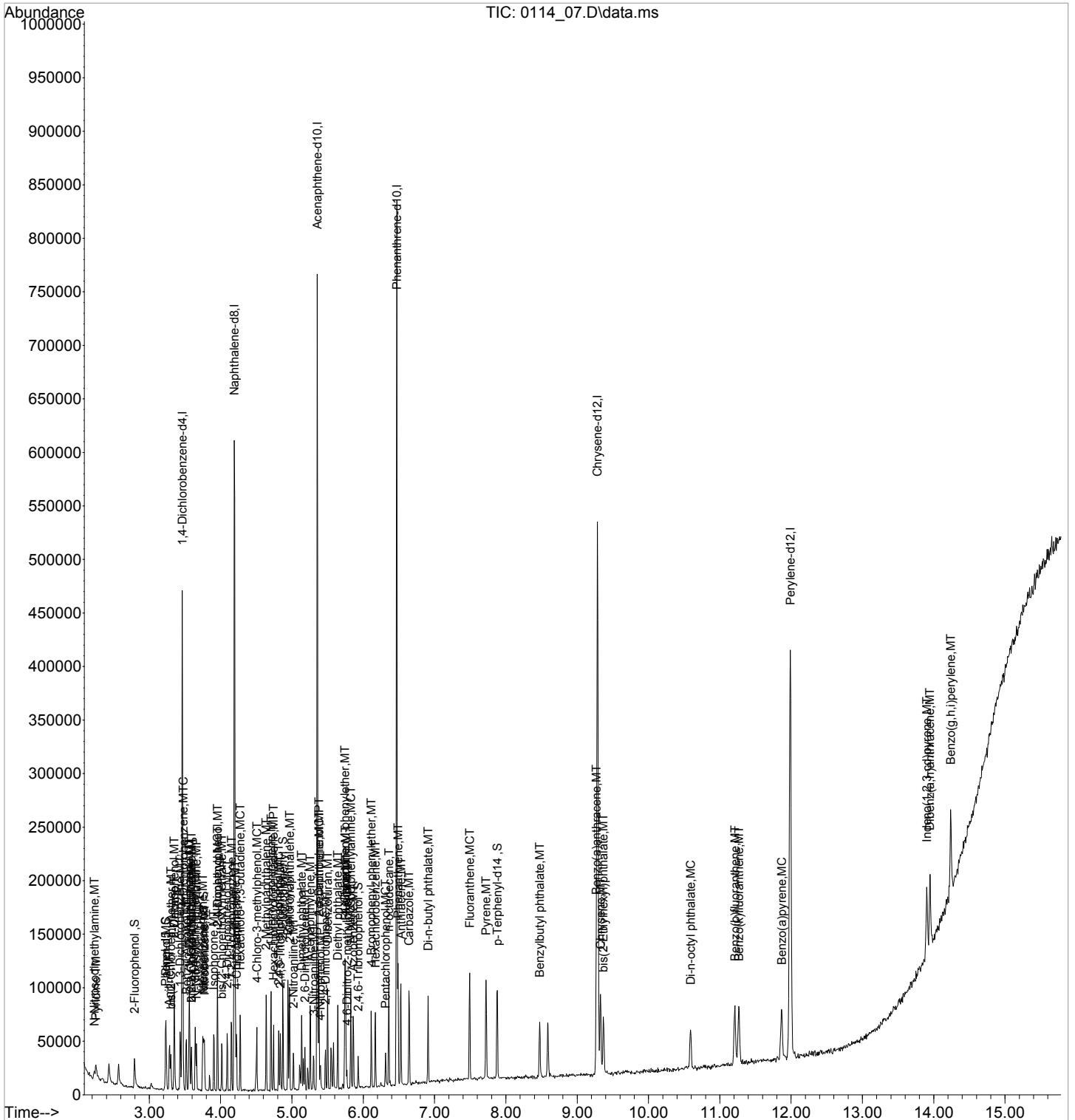
Quant Time: Jan 18 16:12:09 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:58:05 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
49) 2,4,5-Trichlorophenol	4.837	196	6030	1002.1820745	ppb		90
51) Biphenyl	4.943	154	25066	1072.0697737	ppb		99
52) 2-Chloronaphthalene	4.966	162	18905	1033.5898812	ppb		98
53) 2-Nitroaniline	5.019	138	4647	971.6144197	ppb	#	89
54) Acenaphthylene	5.254	152	28923	1037.5365965	ppb		96
55) Dimethyl phthalate	5.137	163	20035	1005.2586533	ppb		94
56) 2,6-Dinitrotoluene	5.184	165	3533	872.8275573	ppb		85
57) 3-Nitroaniline	5.307	138	3890	945.1482611	ppb		98
58) Acenaphthene	5.378	153	19022	1017.1592117	ppb		96
59) 2,4-Dinitrophenol	5.378	184	1337	894.0727297	ppb	#	1
60) Dibenzofuran	5.501	168	27449	1069.8736890	ppb		98
61) 2,4-Dinitrotoluene	5.472	165	4815	953.4833117	ppb		94
63) 4-Nitrophenol	5.401	139	3116	955.3687856	ppb		89
64) Fluorene	5.754	166	21518	1028.5316478	ppb		96
65) 4-Chlorophenyl-phenyle...	5.742	204	11723	1037.7150589	ppb		96
66) Diethyl phthalate	5.642	149	19997	993.2322817	ppb		96
67) 4-Nitroaniline	5.748	138	3850	939.9360435	ppb		98
68) Azobenzene	5.859	77	19795	1013.7543404	ppb		97
71) 4,6-Dinitro-2-methylph...	5.771	198	1807m	821.9484469	ppb		
72) N-Nitrosodiphenylamine	5.824	169	18722	1087.6499487	ppb		97
74) 4-Bromophenyl-phenylether	6.112	248	6718	952.2362486	ppb		95
75) Hexachlorobenzene	6.171	284	8080	1030.3704883	ppb		93
76) n-octadecane	6.359	55	3309	1047.9279960	ppb	#	94
77) Pentachlorophenol	6.312	266	3323m	923.6008348	ppb		
78) Phenanthrene	6.488	178	34689	1120.5341609	ppb		99
79) Anthracene	6.529	178	32584	1002.2196959	ppb		98
80) Carbazole	6.641	167	29120	1028.8091333	ppb		97
81) Di-n-butyl phthalate	6.911	149	32998	1041.1604574	ppb		99
83) Fluoranthene	7.493	202	35689	1031.1279045	ppb		96
86) Pyrene	7.722	202	38482	1058.3364672	ppb		97
88) Benzylbutyl phthalate	8.474	149	12986	989.2576953	ppb		93
90) Benzo(a)anthracene	9.267	228	37248	1082.7202762	ppb		97
91) Chrysene	9.326	228	35692	1052.4810427	ppb		98
92) bis(2-Ethylhexyl)phtha...	9.367	149	18869	980.5729971	ppb		97
93) Di-n-octyl phthalate	10.589	149	29438	952.5035718	ppb		99
95) Benzo(b)fluoranthene	11.212	252	36015	1026.5390469	ppb		99
96) Benzo(k)fluoranthene	11.265	252	37575	1054.9160856	ppb		94
97) Benzo(a)pyrene	11.870	252	31758	967.4999746	ppb		97
98) Indeno(1,2,3-cd)pyrene	13.903	276	30913	977.0726673	ppb		92
99) Dibenz(a,h)anthracene	13.944	278	34863	1015.7302018	ppb		96
100) Benzo(g,h,i)perylene	14.238	276	37959	1075.8078328	ppb		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_07.D  
Acq On : 14 Jan 2022 1:54 pm  
Operator : 917  
Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 4 Sample Multiplier: 1  
InstName : BNAMS11

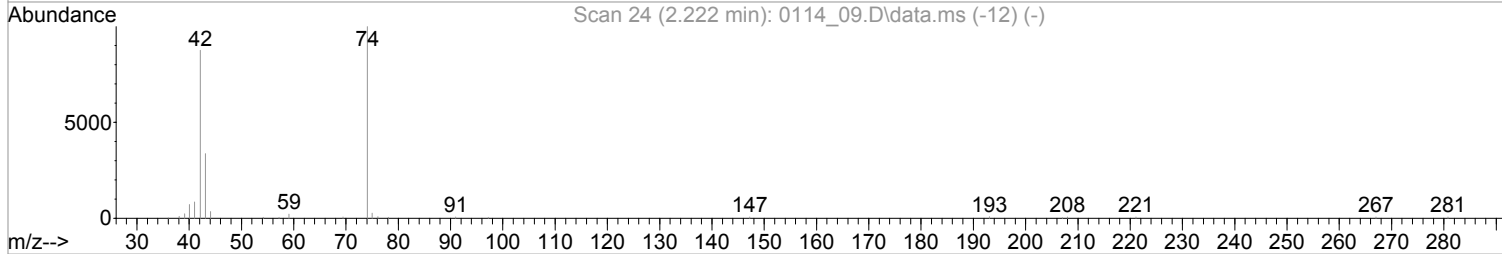
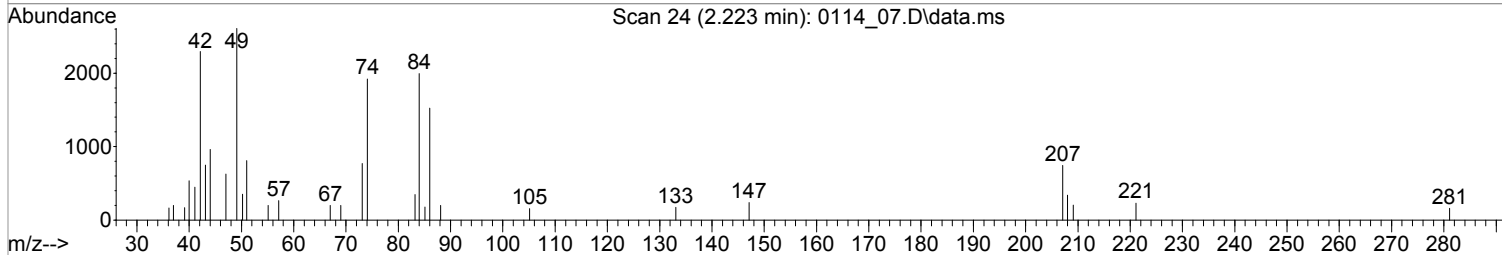
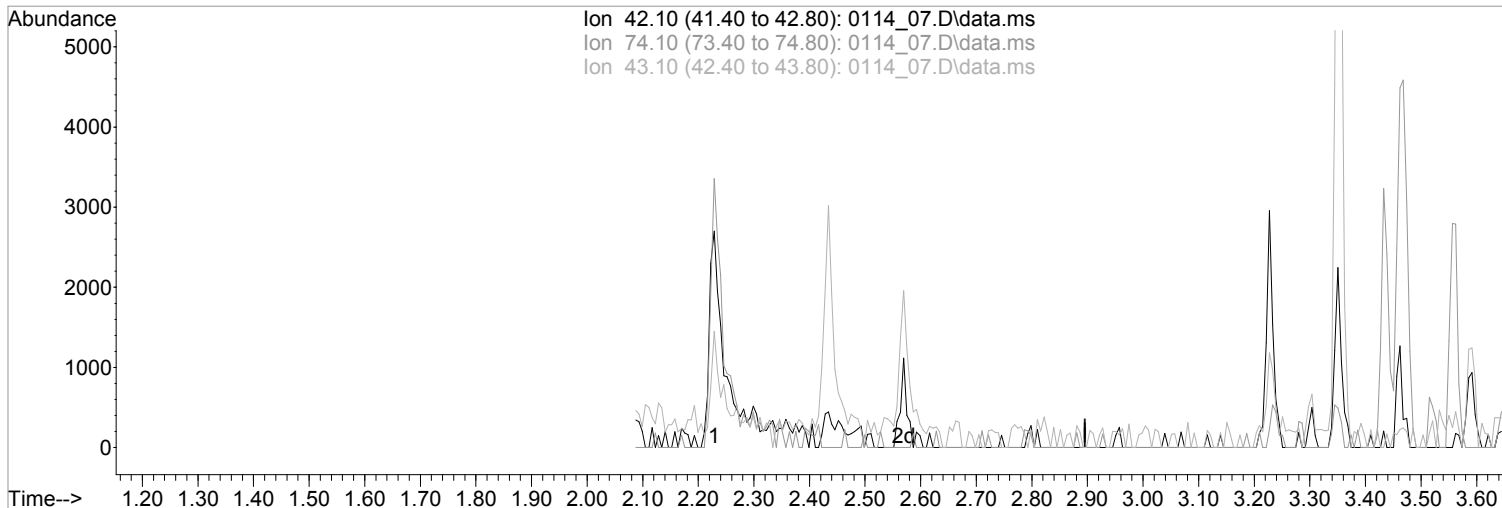
Quant Time: Jan 18 16:12:09 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 16:58:05 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_07.D  
 Acq On : 14 Jan 2022 1:54 pm  
 Operator : 917  
 Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:04:27 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:58:05 2022  
 Response via : Initial Calibration



TIC: 0114\_07.D\data.ms

(3) N-Nitrosodimethylamine (MT)

2.222min 0.000000 ppb d

response 0

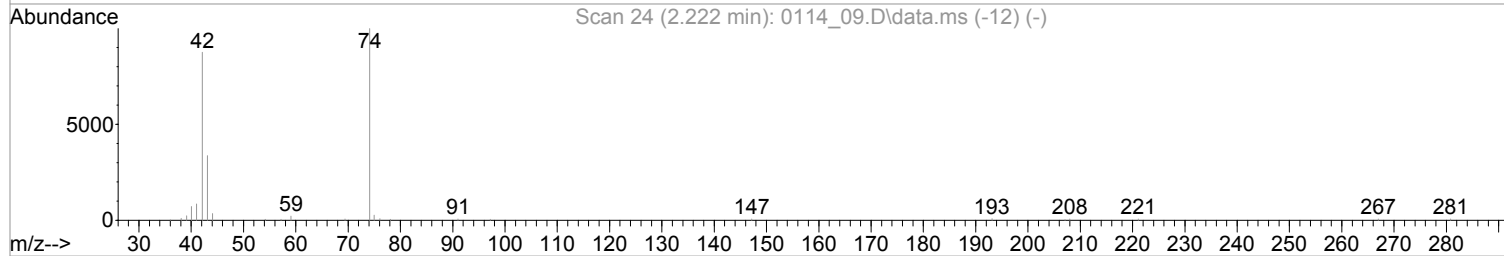
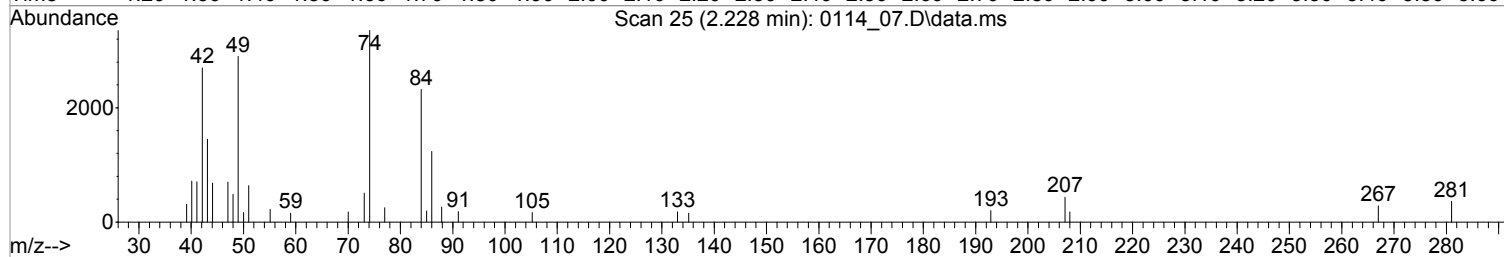
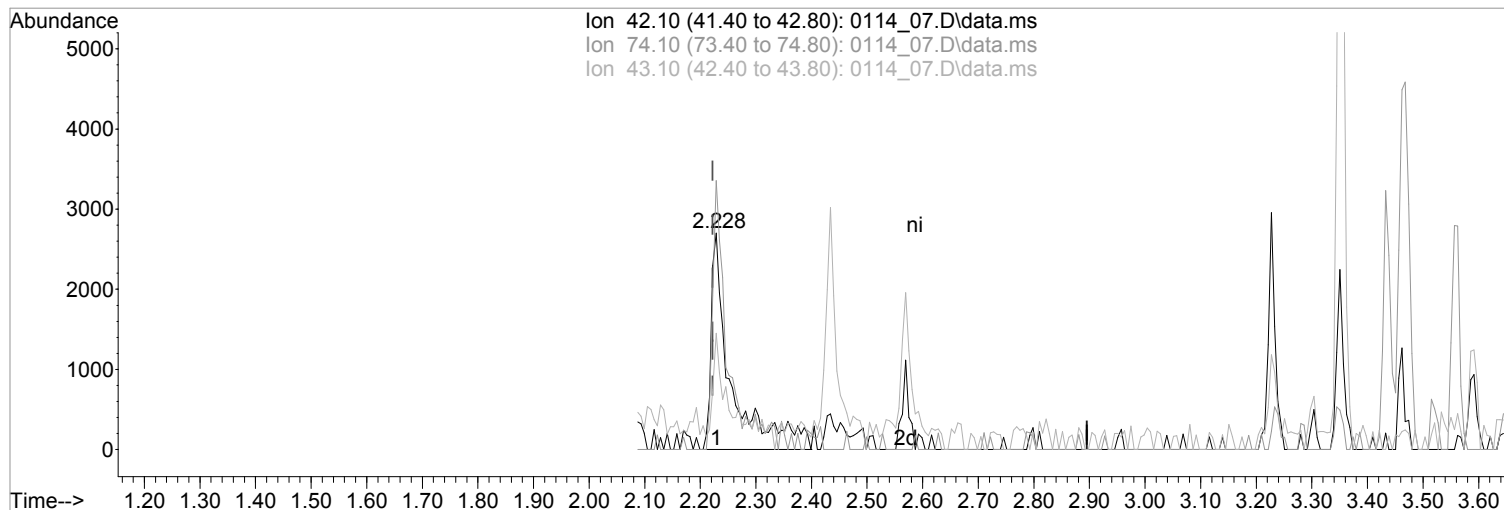
Ion	Exp%	Act%
42.10	100	0.00
74.10	121.40	0.00
43.10	34.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_07.D  
 Acq On : 14 Jan 2022 1:54 pm  
 Operator : 917  
 Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:04:27 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:58:05 2022  
 Response via : Initial Calibration



TIC: 0114\_07.D\data.ms

(3) N-Nitrosodimethylamine (MT)  
 2.228min (+0.006) 1434.9294269 ppb m

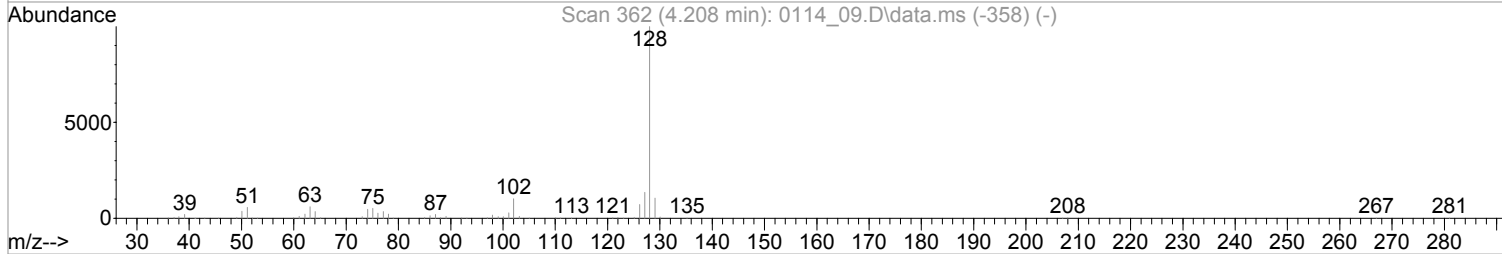
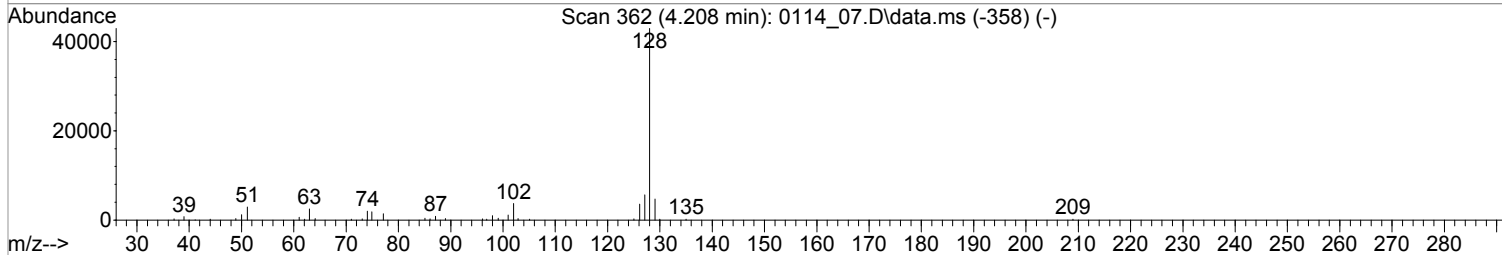
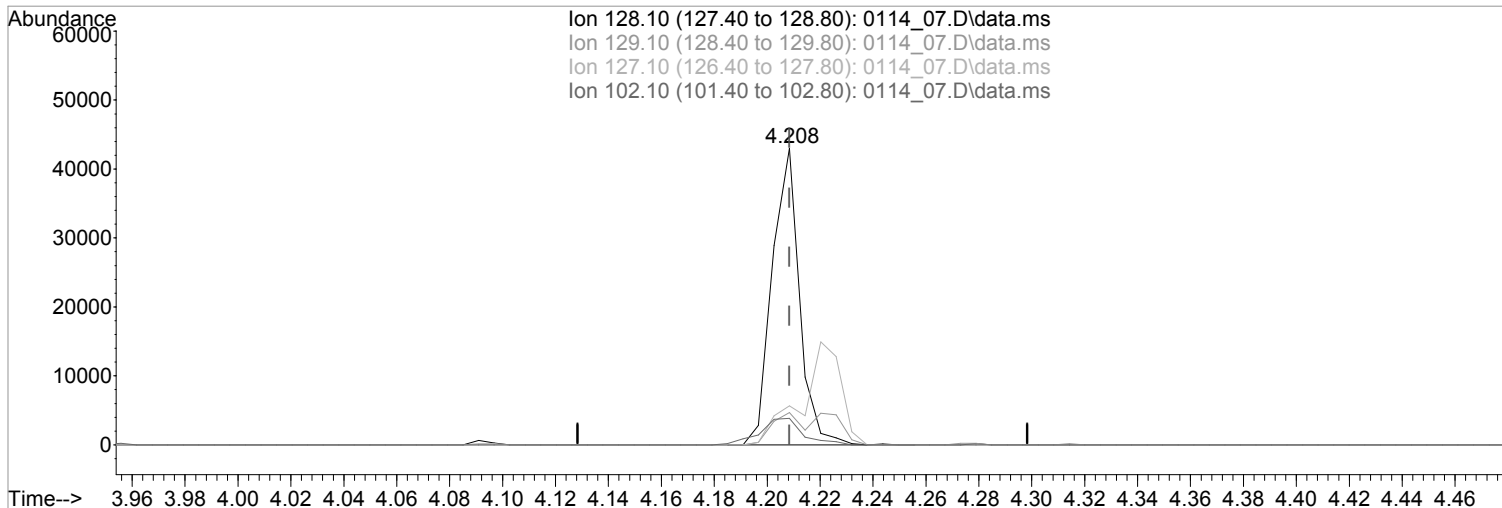
response 6715

Ion	Exp%	Act%
42.10	100	100
74.10	121.40	0.00#
43.10	34.00	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_07.D  
 Acq On : 14 Jan 2022 1:54 pm  
 Operator : 917  
 Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:04:27 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:58:05 2022  
 Response via : Initial Calibration



TIC: 0114\_07.D\data.ms

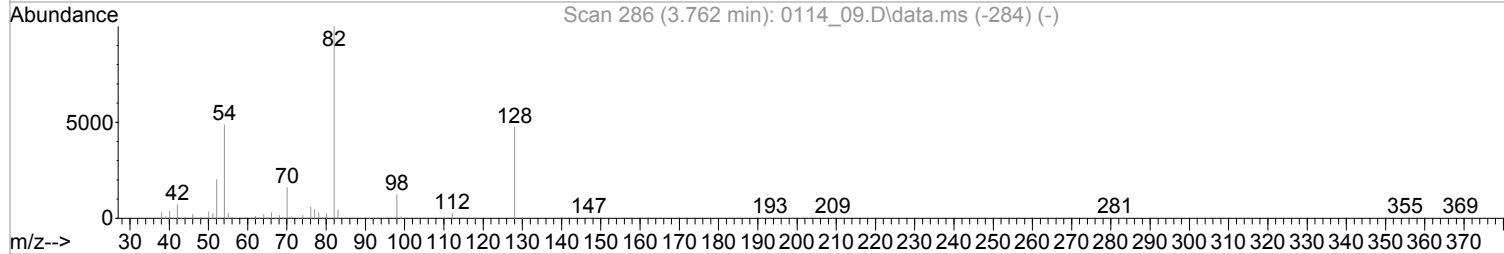
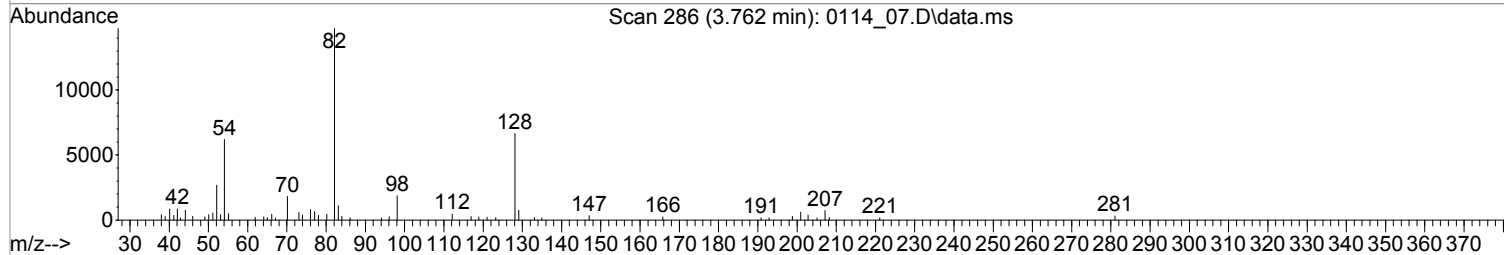
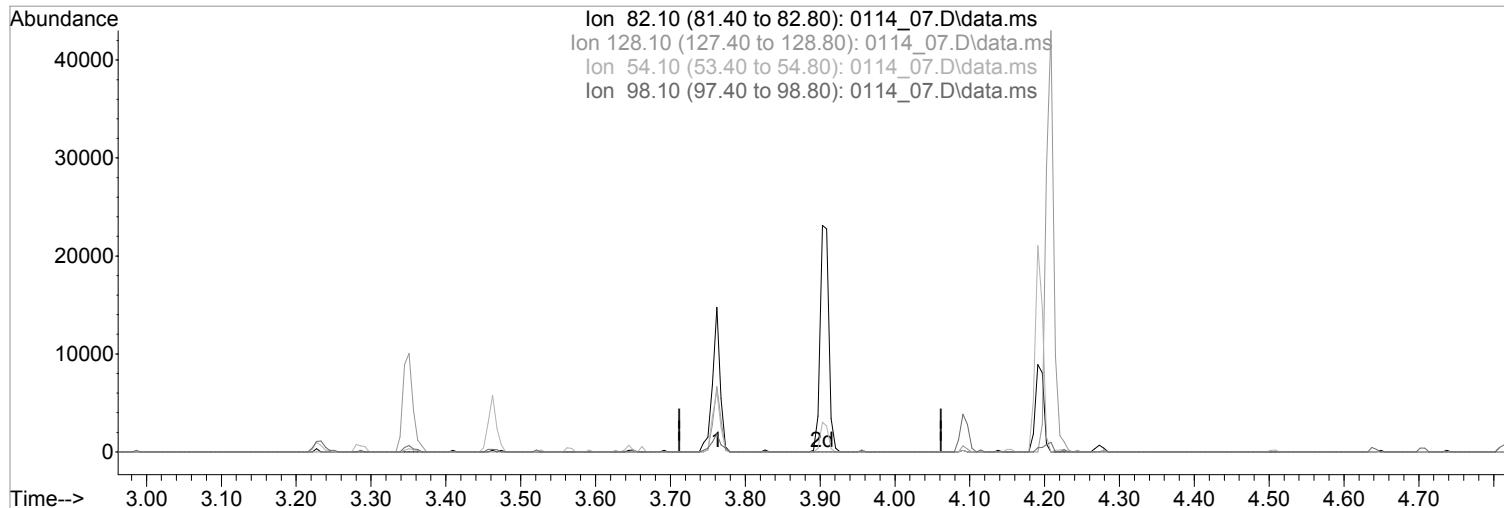
(34) Naphthalene (MT)  
 4.208min (+0.000) 1055.5426663 ppb  
 Qvalue = 98  
 response 30881

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	10.91
127.10	13.50	13.15
102.10	10.10	8.95

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_07.D  
 Acq On : 14 Jan 2022 1:54 pm  
 Operator : 917  
 Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:08:58 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:58:05 2022  
 Response via : Initial Calibration



TIC: 0114\_07.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.762min 0.000000 ppb d

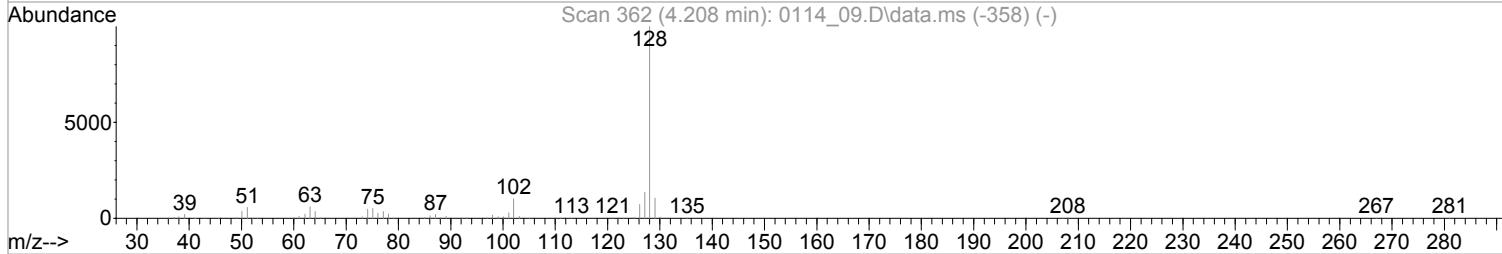
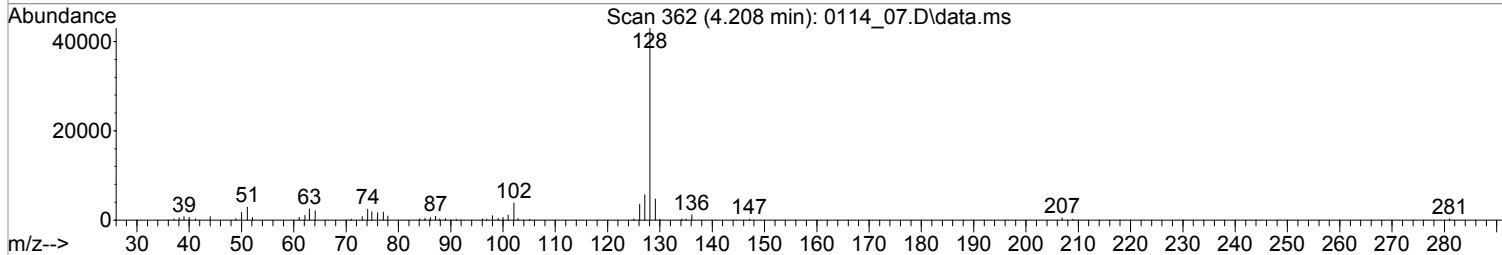
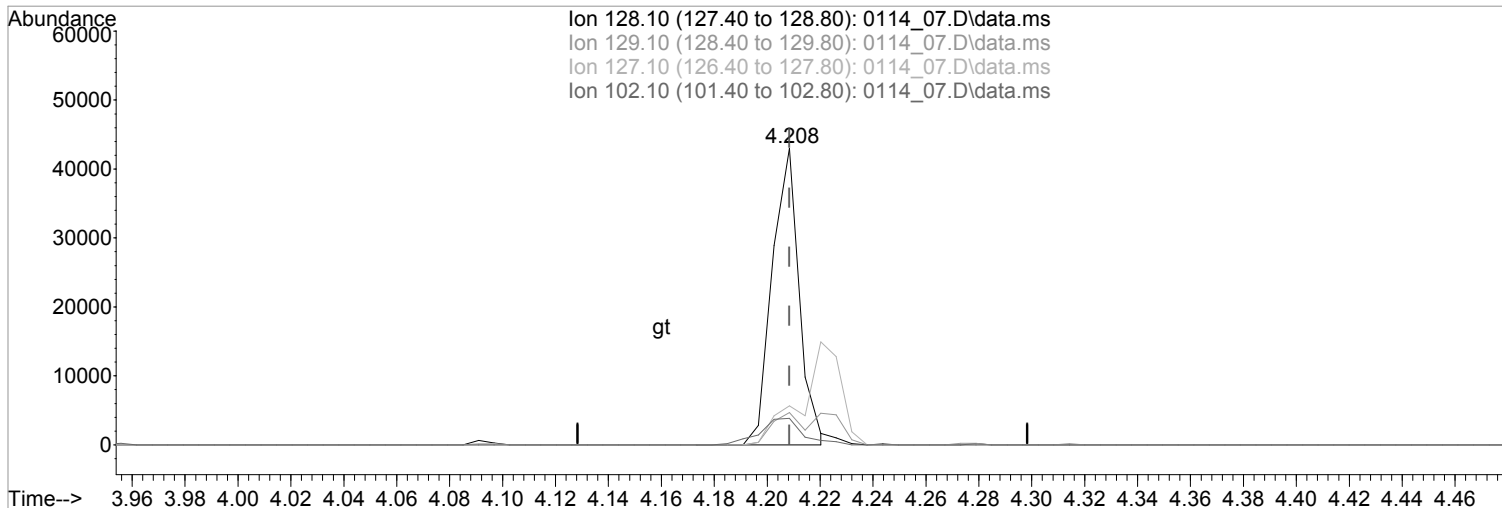
response 0

Ion	Exp%	Act%
82.10	100	0.00
128.10	43.00	0.00
54.10	44.70	0.00
98.10	12.60	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_07.D  
Acq On : 14 Jan 2022 1:54 pm  
Operator : 917  
Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 4 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 17 17:04:27 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 16:58:05 2022  
Response via : Initial Calibration



TIC: 0114\_07.D\data.ms

(34) Naphthalene (MT)  
4.208min (+0.000) 1038.9990747 ppb m

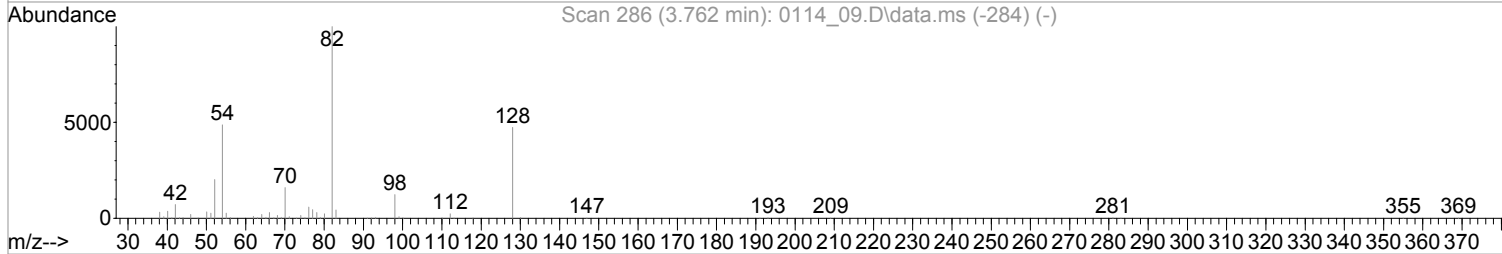
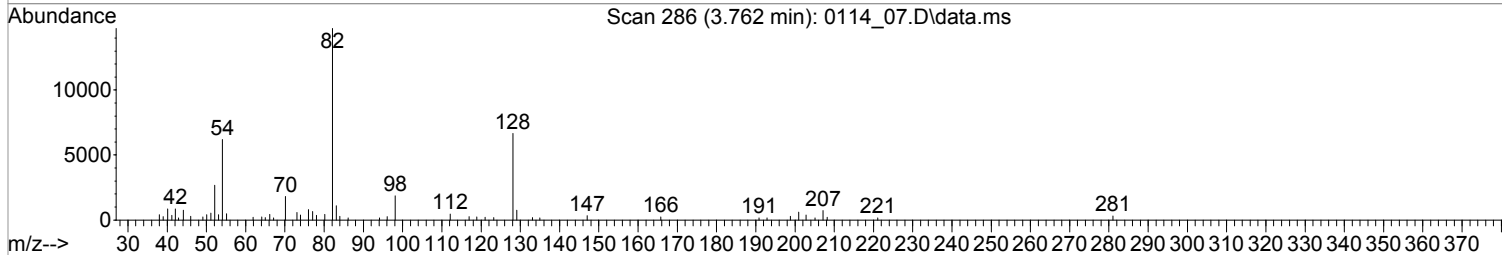
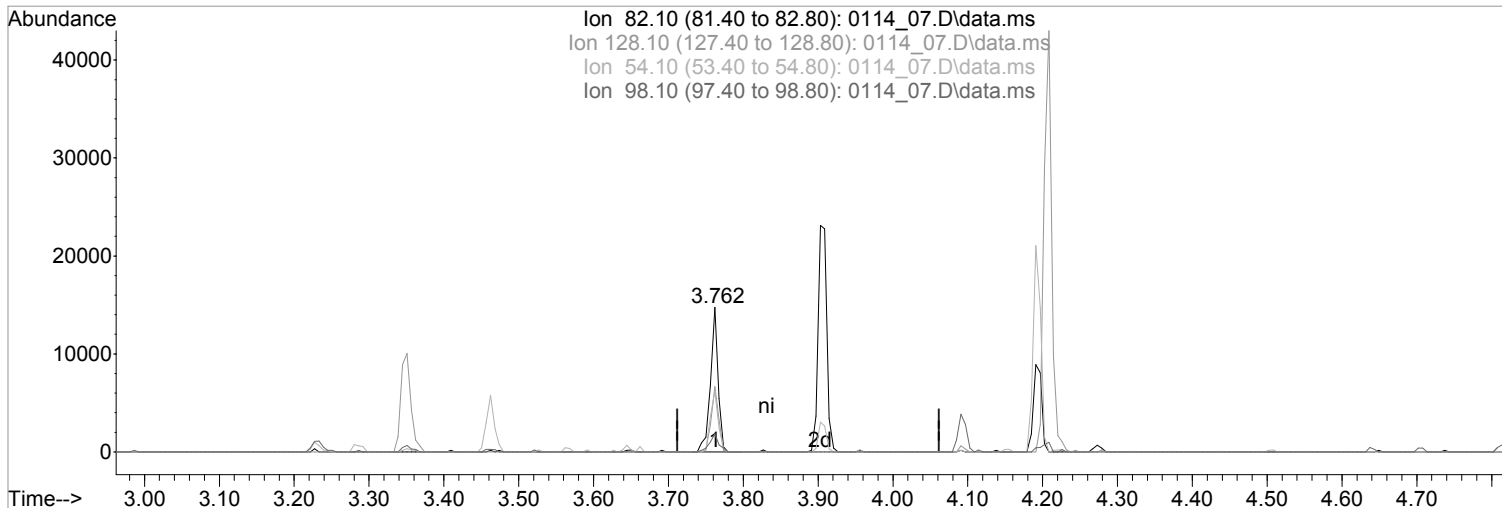
response 30397

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	10.91
127.10	13.50	13.15
102.10	10.10	8.95

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_07.D  
 Acq On : 14 Jan 2022 1:54 pm  
 Operator : 917  
 Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:08:58 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:58:05 2022  
 Response via : Initial Calibration



(24) Nitrobenzene-d5 (S)  
 3.762min (+0.000) 1090.2418620 ppb m

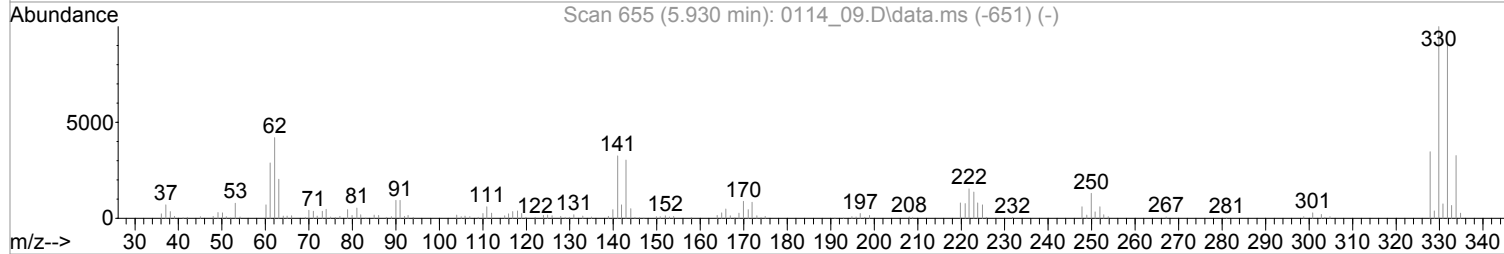
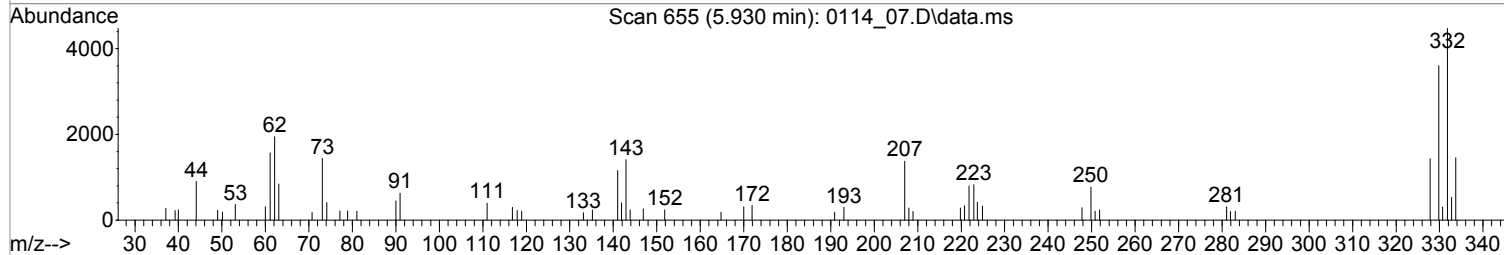
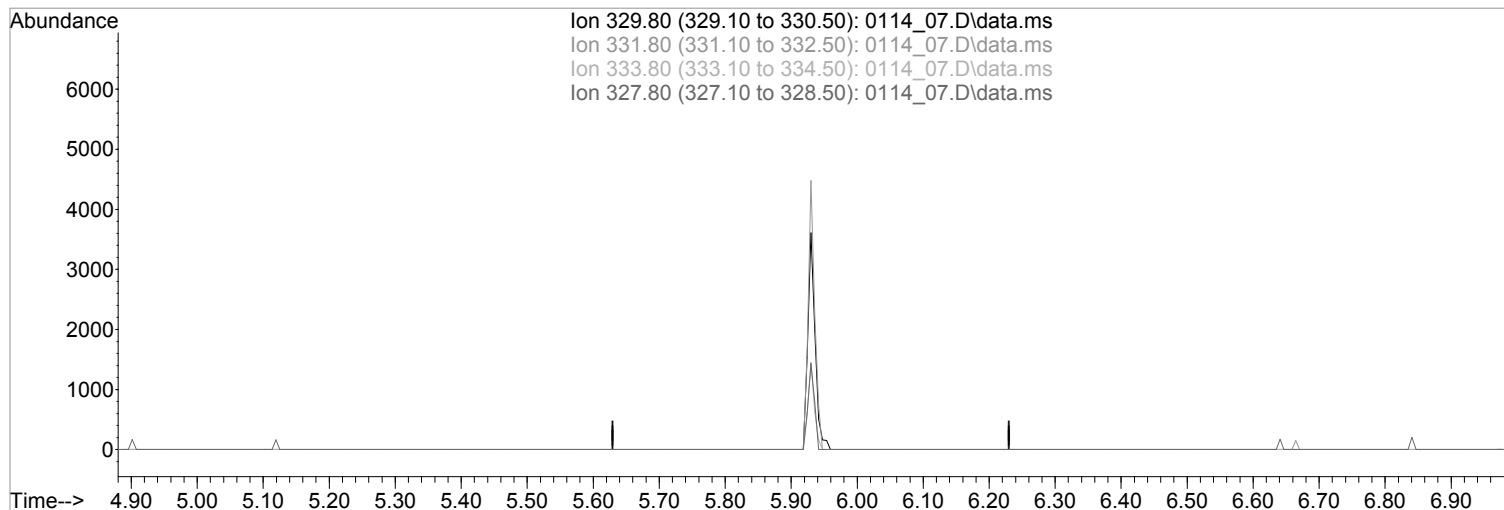
response 10555

Ion	Exp%	Act%
82.10	100	100
128.10	43.00	45.10
54.10	44.70	42.00
98.10	12.60	12.61

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_07.D  
 Acq On : 14 Jan 2022 1:54 pm  
 Operator : 917  
 Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:04:27 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:58:05 2022  
 Response via : Initial Calibration



TIC: 0114\_07.D\data.ms

(73) 2,4,6-Tribromophenol (S)  
 5.930min 0.000000 ppb d

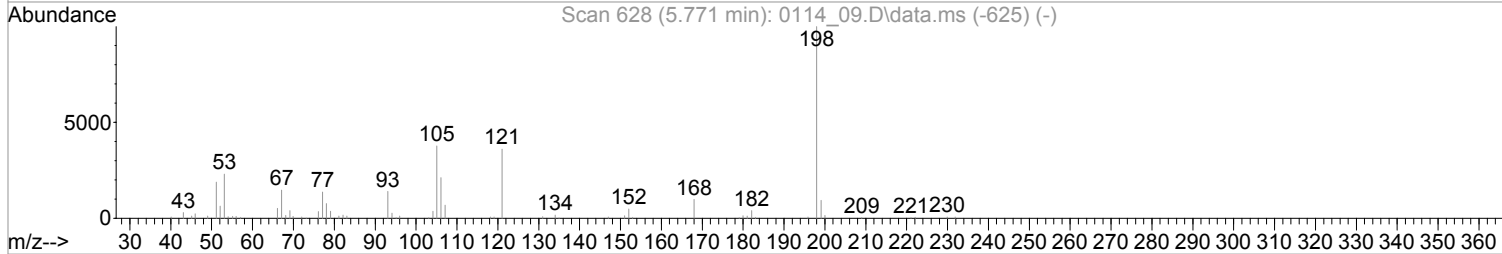
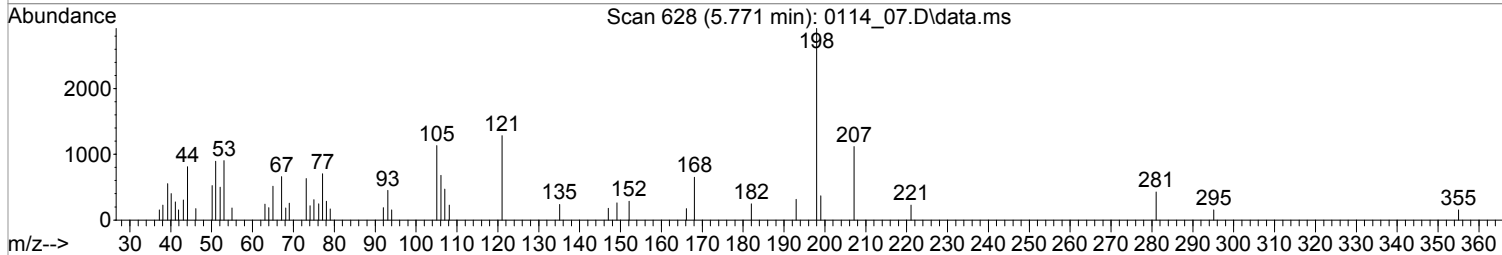
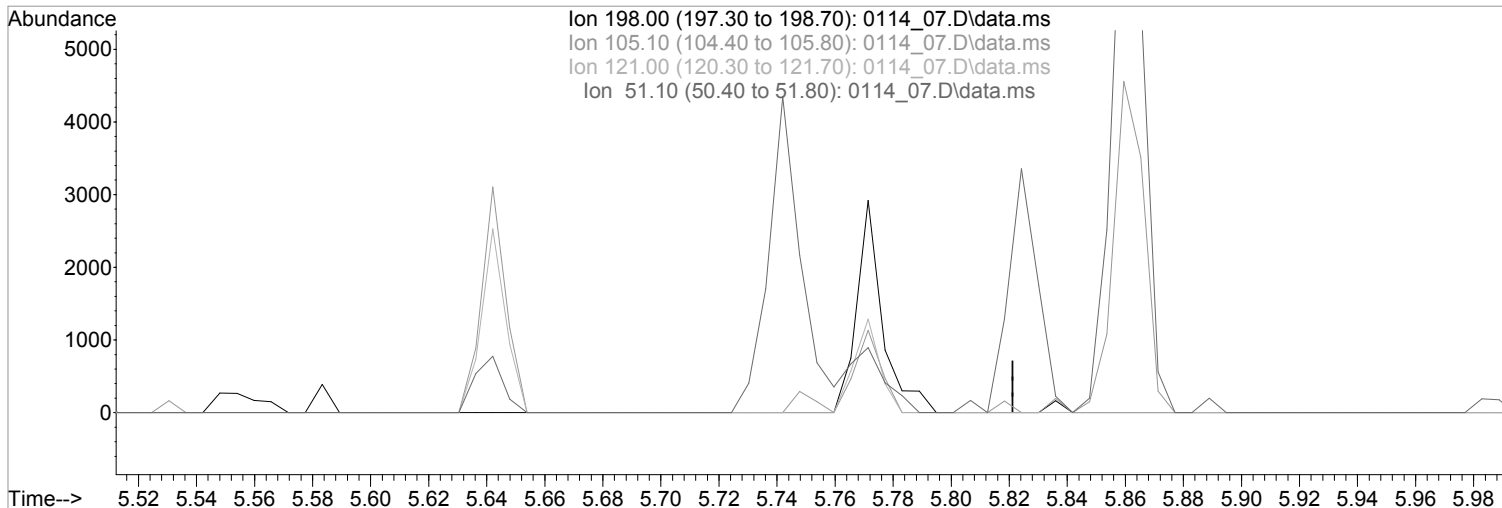
response 0

Ion	Exp%	Act%
329.80	100	0.00
331.80	91.70	0.00
333.80	32.60	0.00
327.80	34.70	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_07.D  
 Acq On : 14 Jan 2022 1:54 pm  
 Operator : 917  
 Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:04:27 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:58:05 2022  
 Response via : Initial Calibration



TIC: 0114\_07.D\data.ms

(71) 4,6-Dinitro-2-methylphenol (MT)

5.771min 0.000000 ppb d

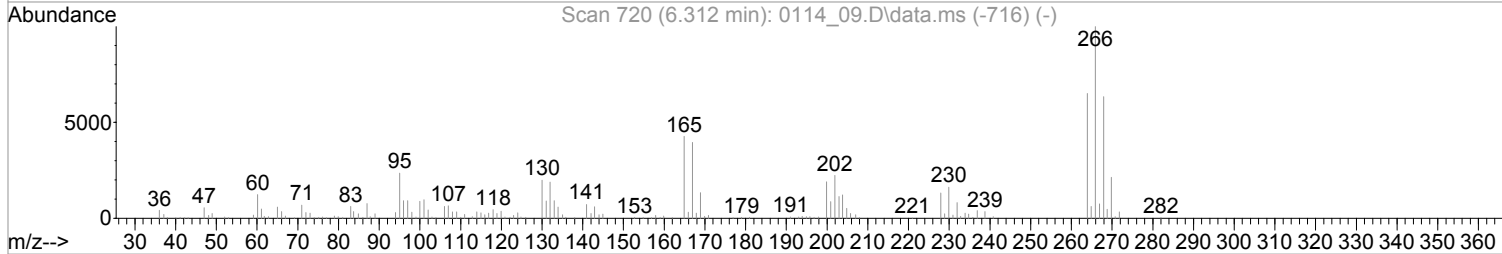
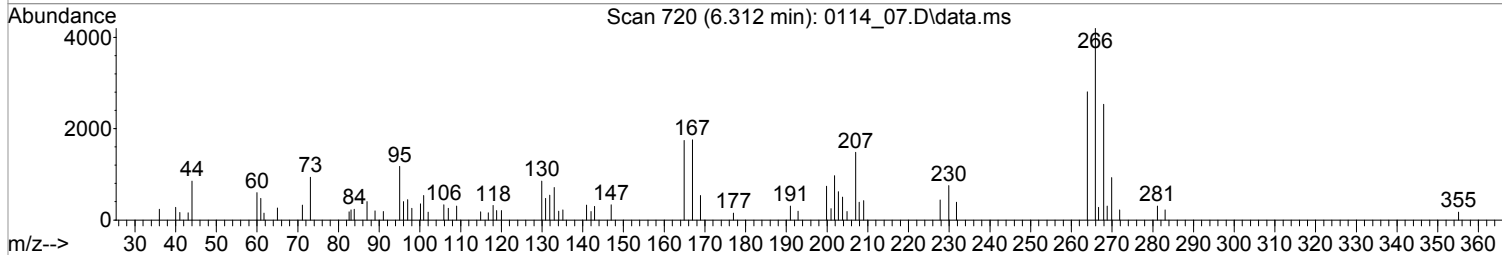
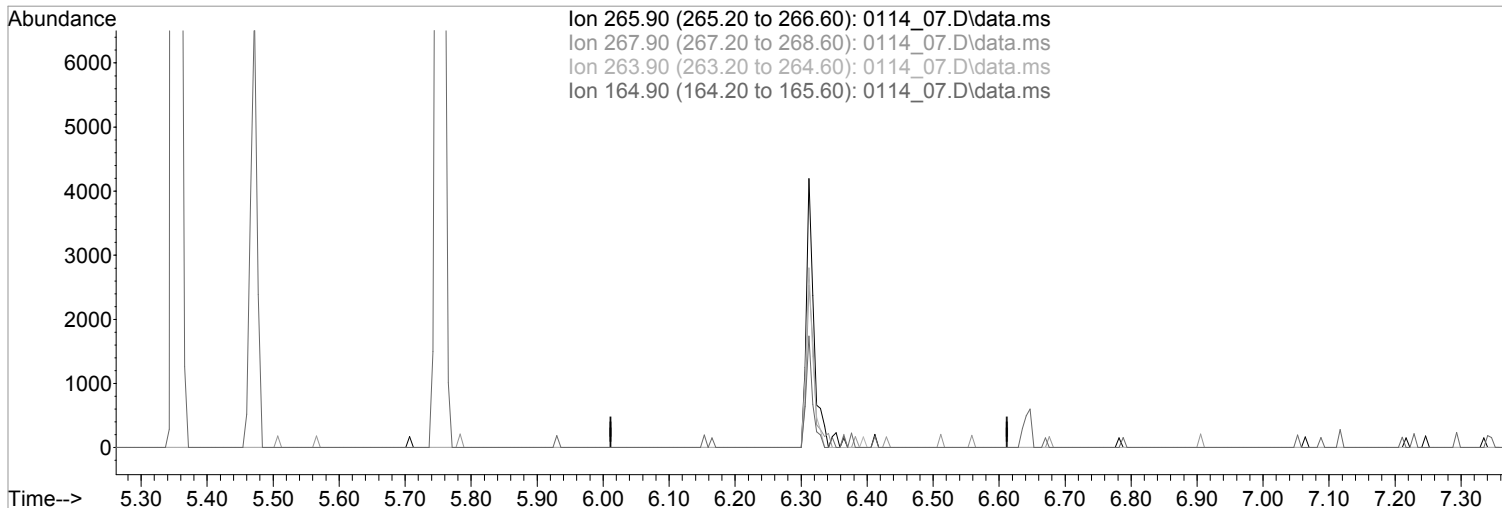
response 0

Ion	Exp%	Act%
198.00	100	0.00
105.10	38.60	0.00
121.00	36.10	0.00
51.10	35.60	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_07.D  
 Acq On : 14 Jan 2022 1:54 pm  
 Operator : 917  
 Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:04:27 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:58:05 2022  
 Response via : Initial Calibration



TIC: 0114\_07.D\data.ms

(77) Pentachlorophenol (MCT)  
 6.312min 0.0000000 ppb d

response 0

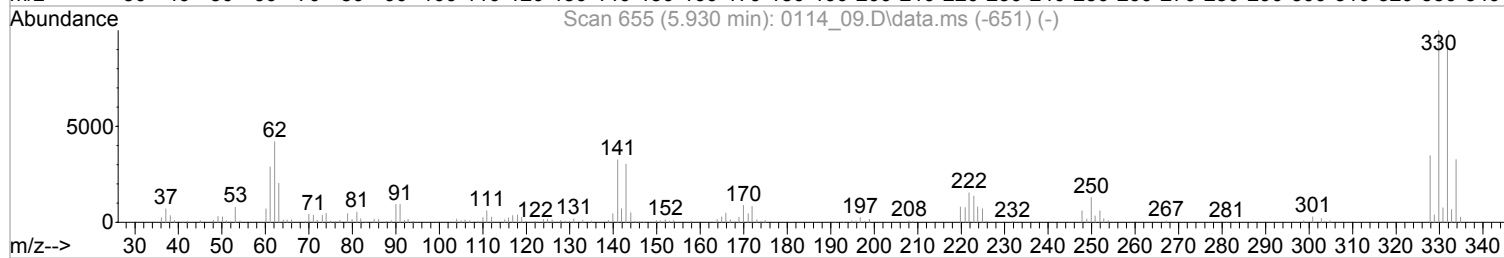
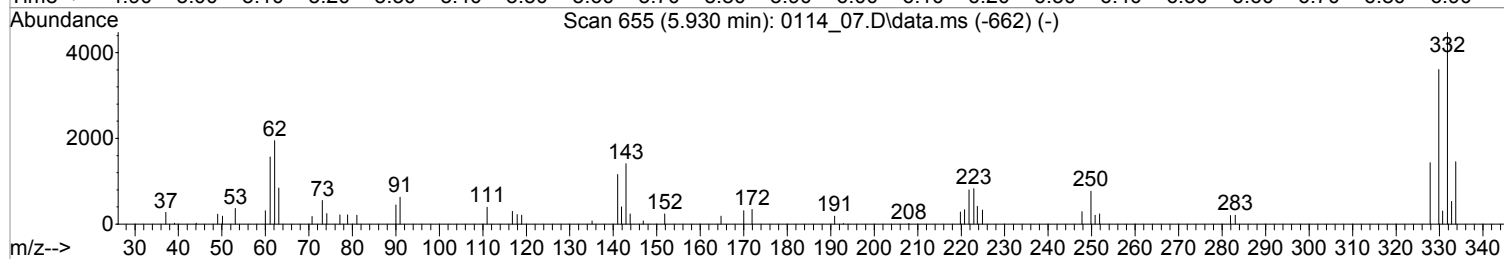
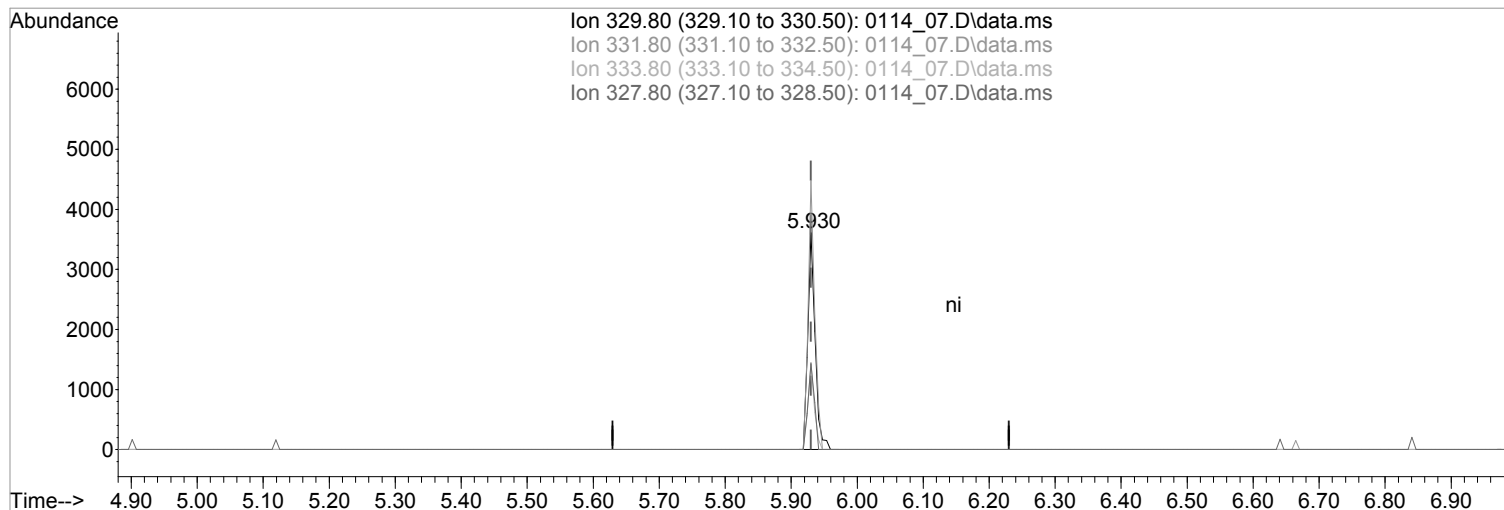
Ion	Exp%	Act%
265.90	100	0.00
267.90	63.60	0.00
263.90	65.10	0.00
164.90	42.60	0.00



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_07.D  
Acq On : 14 Jan 2022 1:54 pm  
Operator : 917  
Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 4 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 17 17:04:27 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 16:58:05 2022  
Response via : Initial Calibration



TIC: 0114\_07.D\data.ms

(73) 2,4,6-Tribromophenol (S)

5.930min (+0.000) 880.5370482 ppb m

response 2798

Ion	Exp%	Act%
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329.80	100	100
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331.80	91.70	124.04#
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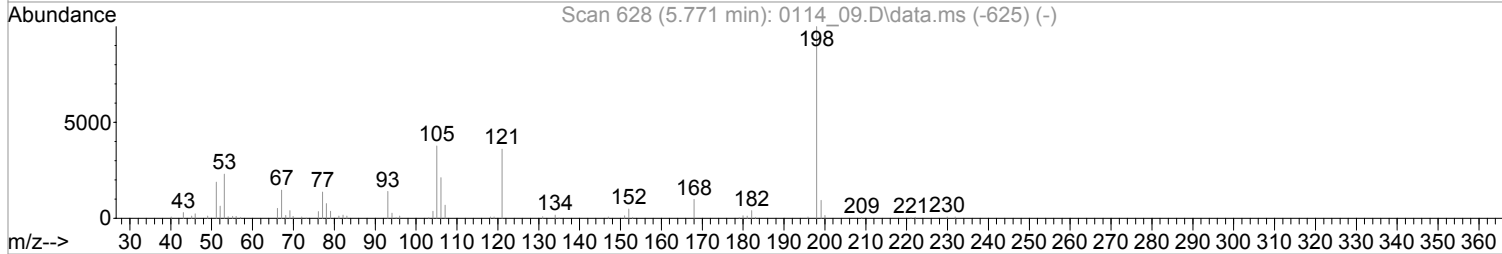
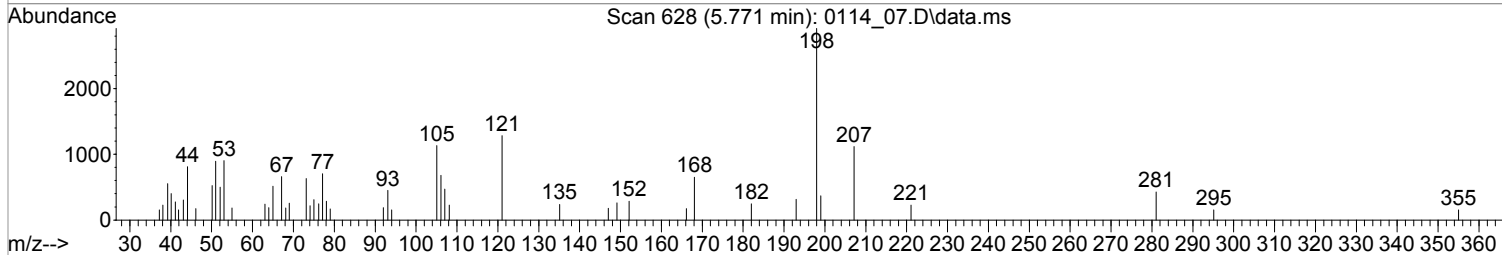
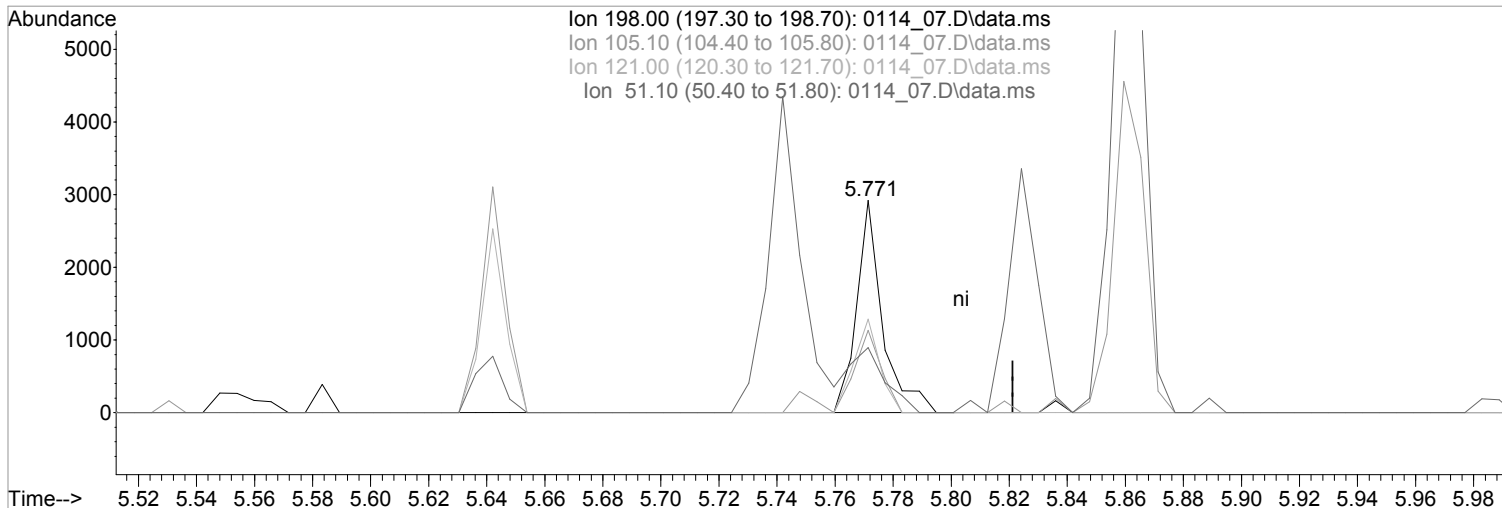
333.80	32.60	40.25
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327.80	34.70	39.58
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Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_07.D  
 Acq On : 14 Jan 2022 1:54 pm  
 Operator : 917  
 Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:04:27 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:58:05 2022  
 Response via : Initial Calibration



TIC: 0114\_07.D\data.ms

(71) 4,6-Dinitro-2-methylphenol (MT)  
 5.771min (+0.000) 821.9484469 ppb m

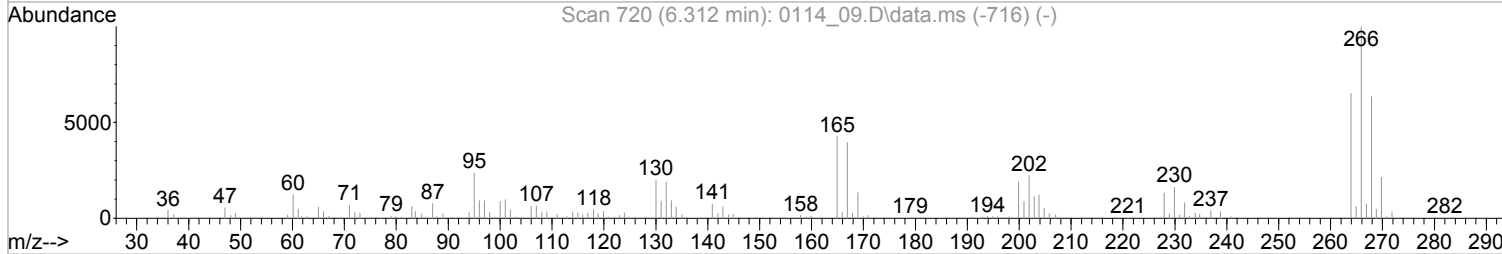
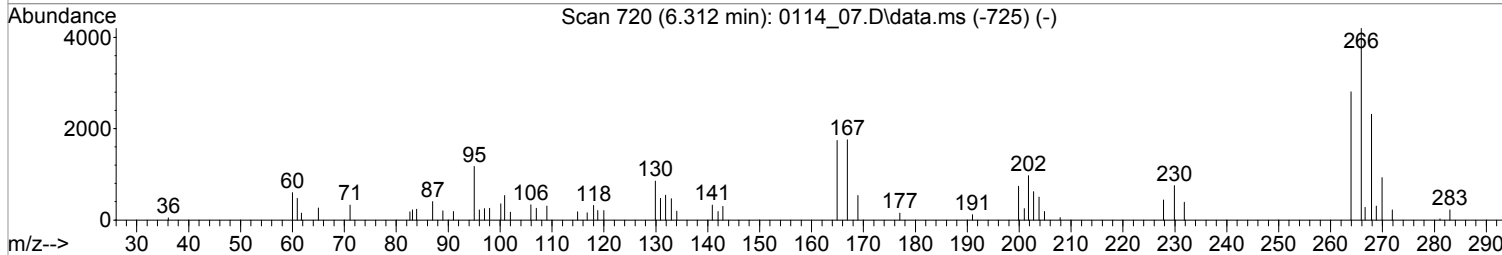
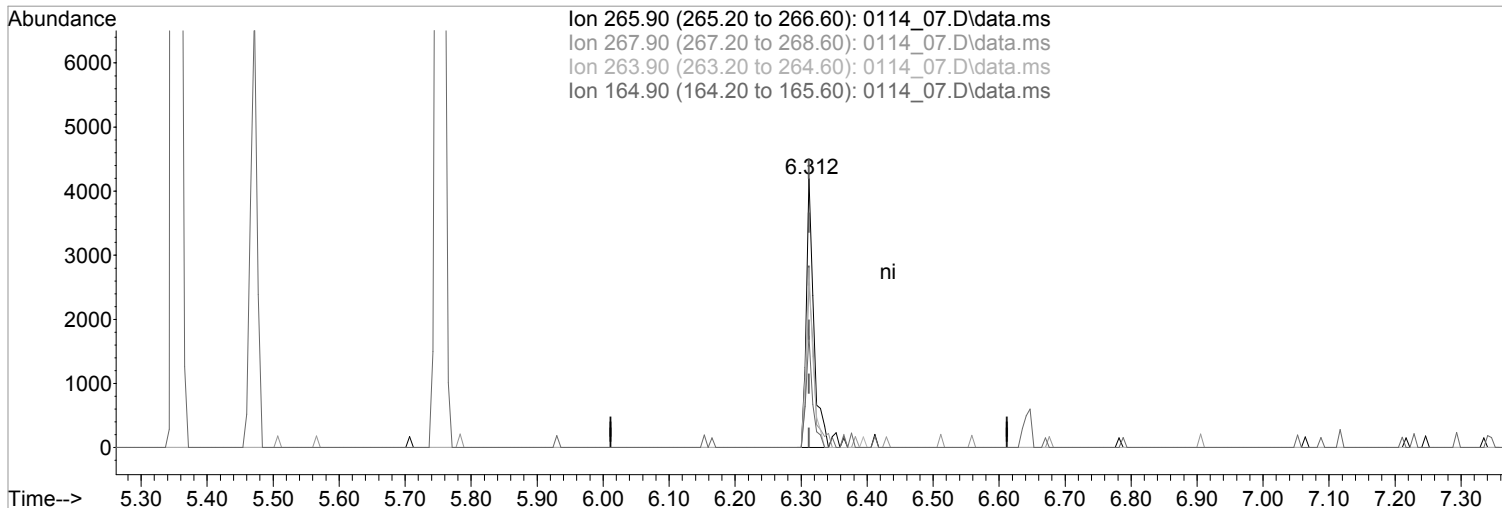
response 1807

Ion	Exp%	Act%
198.00	100	100
105.10	38.60	38.80
121.00	36.10	44.08
51.10	35.60	30.65

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_07.D  
 Acq On : 14 Jan 2022 1:54 pm  
 Operator : 917  
 Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:04:27 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:58:05 2022  
 Response via : Initial Calibration



TIC: 0114\_07.D\data.ms

(77) Pentachlorophenol (MCT)  
 6.312min (+0.000) 923.6008348 ppb m

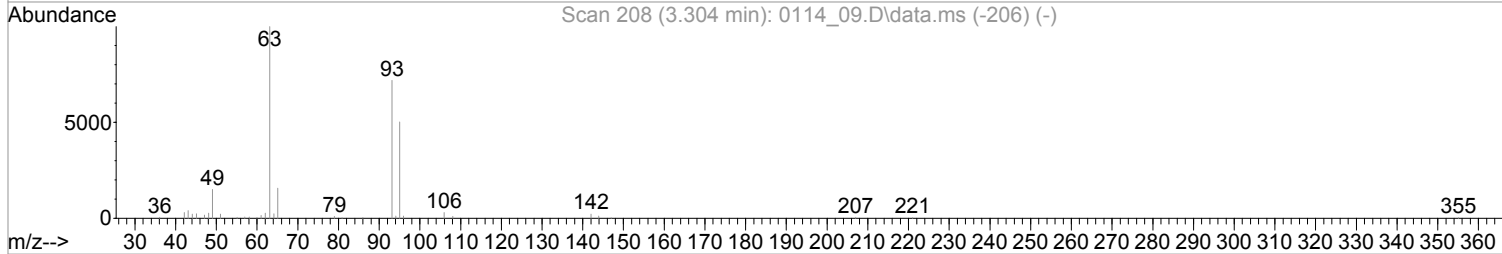
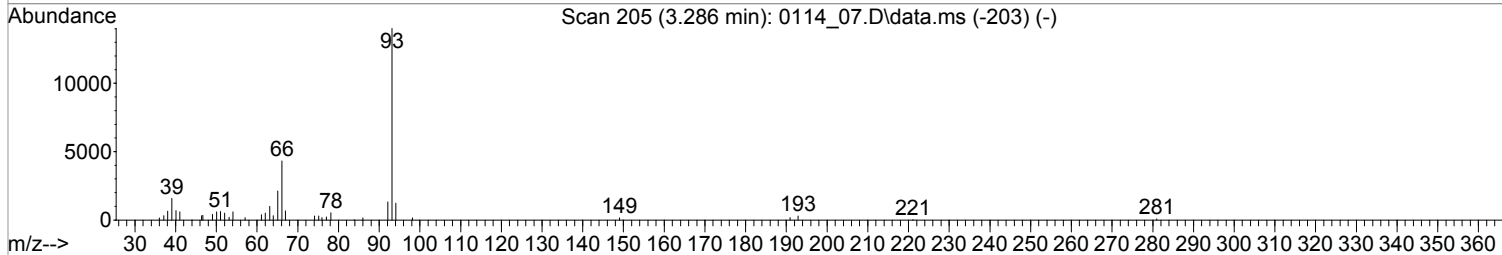
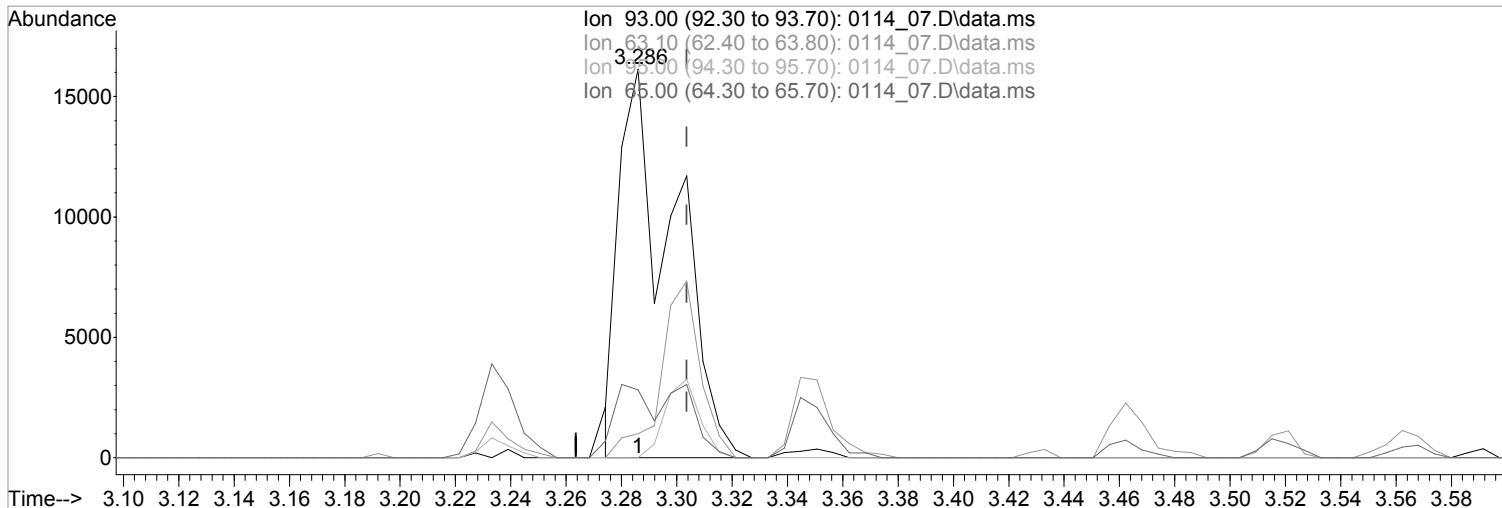
response 3323

Ion	Exp%	Act%
265.90	100	100
267.90	63.60	60.39
263.90	65.10	66.85
164.90	42.60	41.49

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_07.D  
 Acq On : 14 Jan 2022 1:54 pm  
 Operator : 917  
 Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 16:58:21 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:58:05 2022  
 Response via : Initial Calibration



TIC: 0114\_07.D\data.ms

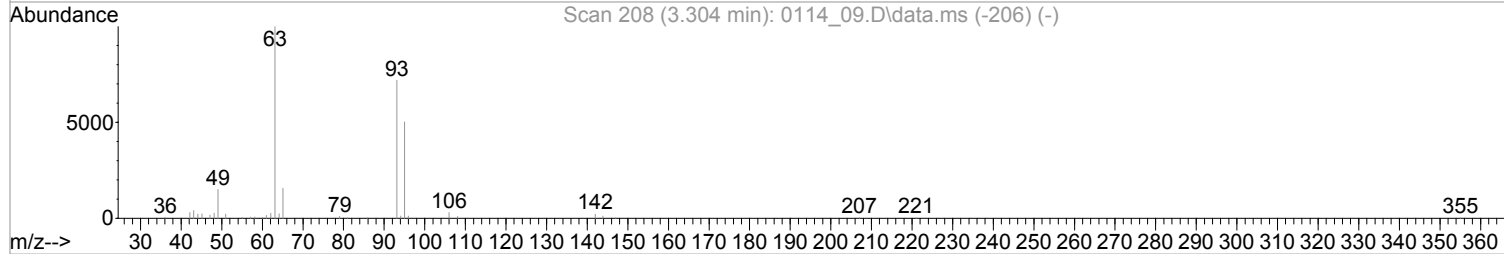
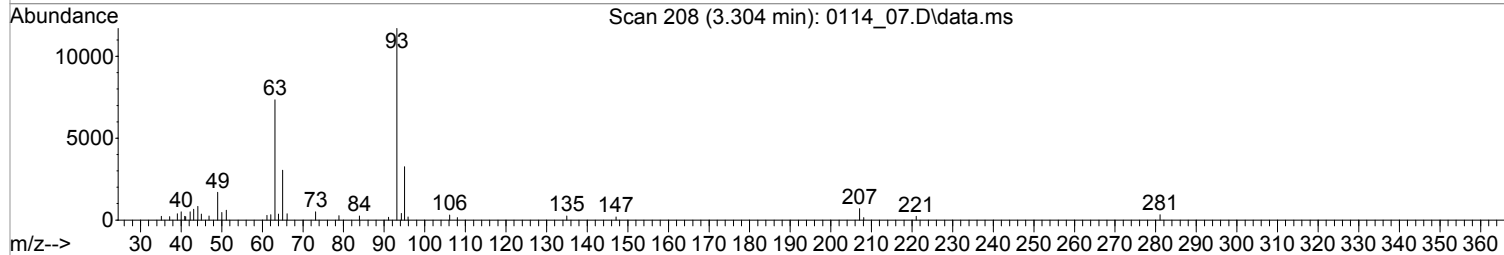
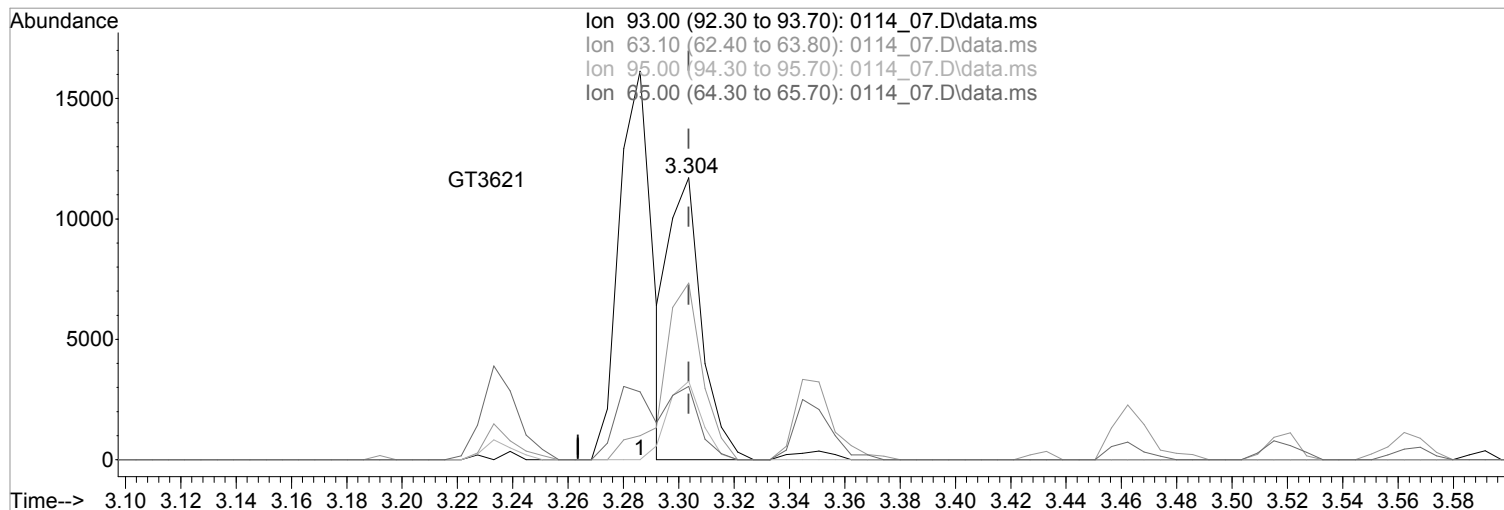
(6) bis(2-Chloroethyl)ether (MT)  
 3.286min (-0.018) 2288.5780125 ppb  
 Qvalue = 43  
 response 22164

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	6.18#
95.00	30.20	0.00#
65.00	21.40	17.50

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_07.D  
 Acq On : 14 Jan 2022 1:54 pm  
 Operator : 917  
 Sample : STD SVMS 1K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 16:58:21 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:58:05 2022  
 Response via : Initial Calibration



TIC: 0114\_07.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.304min (+0.000) 997.6647156 ppb m

response 9662

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	62.66
95.00	30.20	27.81
65.00	21.40	25.98

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_08.D  
 Acq On : 14 Jan 2022 2:15 pm  
 Operator : 917  
 Sample : STD SVMS 4K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 5 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:10:11 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:05:37 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.462	152	60673	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.191	136	236123	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.354	164	125335	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.470	188	250452	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.285	240	246882	8000.0000000	ppb	0.00	
94) Perylene-d12	11.988	264	257170	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.792	112	34012	3807.3216996	ppb	0.00	
Spiked Amount	666.000		Recovery	= 571.67%			
7) Phenol-d5	3.227	99	41678	3773.0169333	ppb	0.00	
Spiked Amount	666.000		Recovery	= 566.52%			
24) Nitrobenzene-d5	3.762	82	42185	4255.0715213	ppb	0.00	
Spiked Amount	333.000		Recovery	= 1277.80%			
50) 2-Fluorobiphenyl	4.872	172	86435	3927.3590623	ppb	0.00	
Spiked Amount	333.000		Recovery	= 1179.39%			
73) 2,4,6-Tribromophenol	5.930	330	12471	3999.1813821	ppb	0.00	
Spiked Amount	666.000		Recovery	= 600.48%			
87) p-Terphenyl-d14	7.881	244	120377	3938.1521563	ppb	0.00	
Spiked Amount	333.000		Recovery	= 1182.63%			
Target Compounds							
2) Pyridine	2.246	79	39446	4779.2674310	ppb	98	
3) N-Nitrosodimethylamine	2.228	42	20242	3960.6047193	ppb	94	
5) Aniline	3.286	66	22142	4018.8859064	ppb	93	
6) bis(2-Chloroethyl)ether	3.304	93	37527m	3750.1604795	ppb		
8) Phenol	3.233	94	44705	3884.2055266	ppb	97	
10) 2-Chlorophenol	3.350	128	37274	3795.7532794	ppb	98	
11) n-Decane	3.350	41	21282	3780.4234101	ppb	# 94	
12) 1,3-Dichlorobenzene	3.433	146	45212	4023.7261928	ppb	97	
13) 1,4-Dichlorobenzene	3.474	146	45536	3905.1977020	ppb	97	
14) Benzyl Alcohol	3.521	79	33745	3983.2296430	ppb	99	
15) 1,2-Dichlorobenzene	3.556	146	42675	3834.4220103	ppb	98	
16) bis(2-Chloroisopropyl)...	3.591	121	12590	3681.8697439	ppb	98	
17) 2,2-oxybis(1-chloropro...	3.591	121	12590	3681.8697439	ppb	98	
18) 2-Methylphenol	3.562	108	34475	3912.9479407	ppb	99	
19) Hexachloroethane	3.750	117	16617	3986.7938256	ppb	94	
20) N-Nitrosodi-n-propylamine	3.662	70	27304	4009.0141291	ppb	95	
21) 3&4-Methyl phenol	3.644	107	39712	4050.3114383	ppb	98	
25) Nitrobenzene	3.774	77	40560	3907.7832433	ppb	97	
26) Isophorone	3.903	82	71252	3940.7789094	ppb	90	
27) 2-Nitrophenol	3.956	139	18689	3832.6143705	ppb	97	
28) 2,4-Dimethylphenol	3.956	107	38769	3902.7374375	ppb	98	
29) bis(2-Chlorethoxy)methane	4.014	93	41675	3835.3866567	ppb	95	
30) 2,4-Dichlorophenol	4.091	162	30335	3804.8640698	ppb	99	
32) 1,2,4-Trichlorobenzene	4.155	180	38219	4026.6410289	ppb	97	
34) Naphthalene	4.208	128	114434m	3753.9197467	ppb		
35) 4-Chloroaniline	4.220	65	14241	4085.3352882	ppb	99	
36) Hexachloro-1,3-butadiene	4.273	225	24284	4080.1627481	ppb	95	
40) 4-Chloro-3-methylphenol	4.508	107	31300	3999.2383081	ppb	100	
41) 2-Methylnaphthalene	4.637	142	79203	3963.7718292	ppb	98	
42) 1-Methylnaphthalene	4.708	142	72312	3855.0338301	ppb	94	
47) Hexachlorocyclopentadiene	4.743	237	27085	3906.9025872	ppb	97	
48) 2,4,6-Trichlorophenol	4.814	196	22167	3890.1804515	ppb	98	

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_08.D  
 Acq On : 14 Jan 2022 2:15 pm  
 Operator : 917  
 Sample : STD SVMS 4K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 5 Sample Multiplier: 1  
 InstName : BNAMS11

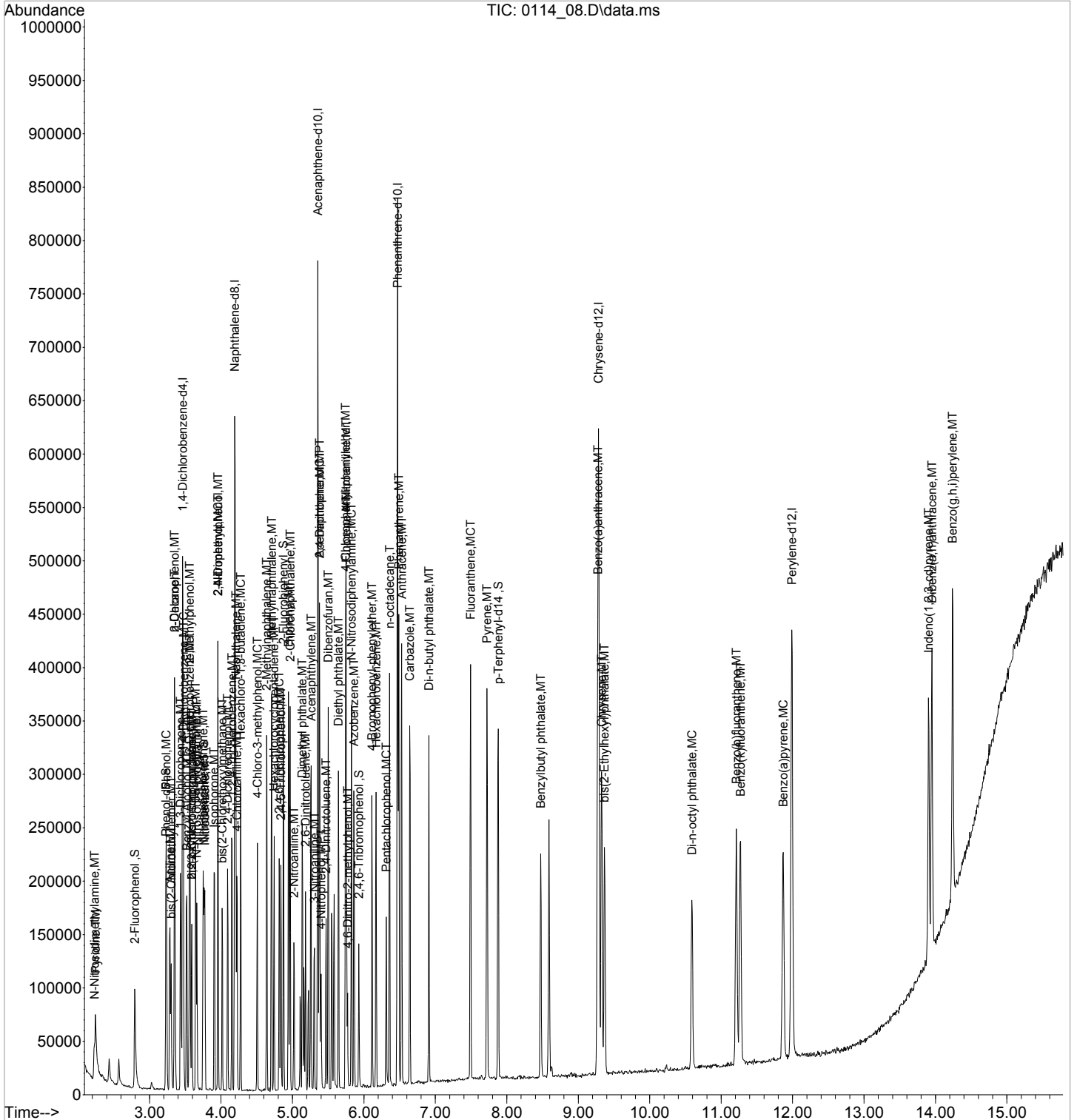
Quant Time: Jan 17 17:10:11 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:05:37 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
49) 2,4,5-Trichlorophenol	4.837	196	24392	3927.4560583	ppb		94
51) Biphenyl	4.943	154	95696	3875.0058145	ppb		99
52) 2-Chloronaphthalene	4.966	162	73559	3855.8679225	ppb		99
53) 2-Nitroaniline	5.019	138	19417	3973.5857097	ppb		95
54) Acenaphthylene	5.260	152	111366	3825.2764018	ppb		99
55) Dimethyl phthalate	5.137	163	78905	3831.6230201	ppb		93
56) 2,6-Dinitrotoluene	5.184	165	17863	4467.8777846	ppb		97
57) 3-Nitroaniline	5.307	138	17893	4293.3665701	ppb		99
58) Acenaphthene	5.378	153	75276	3880.2767127	ppb		98
59) 2,4-Dinitrophenol	5.378	184	7659	5147.2552160	ppb	#	75
60) Dibenzofuran	5.501	168	101828	3760.3158023	ppb		100
61) 2,4-Dinitrotoluene	5.472	165	21673	4226.4228629	ppb		97
63) 4-Nitrophenol	5.401	139	13716m	4138.6721595	ppb		
64) Fluorene	5.754	166	84995	3901.6530771	ppb		97
65) 4-Chlorophenyl-phenyle...	5.742	204	43956	3725.4789787	ppb		97
66) Diethyl phthalate	5.642	149	80880	3903.5373082	ppb		98
67) 4-Nitroaniline	5.748	138	17791	4297.0626310	ppb		92
68) Azobenzene	5.859	77	81075	4007.0795251	ppb		97
71) 4,6-Dinitro-2-methylph...	5.771	198	10796	5163.7859642	ppb		98
72) N-Nitrosodiphenylamine	5.824	169	73964	4060.2720230	ppb		96
74) 4-Bromophenyl-phenylether	6.112	248	26882	3765.6597329	ppb		95
75) Hexachlorobenzene	6.171	284	30124	3698.4934785	ppb		96
76) n-octadecane	6.359	55	11998	3637.1794288	ppb	#	94
77) Pentachlorophenol	6.312	266	14850	4253.2090971	ppb		97
78) Phenanthrene	6.488	178	134499	4062.0880286	ppb		99
79) Anthracene	6.529	178	134045	4006.7530974	ppb		99
80) Carbazole	6.641	167	115509	3931.0924184	ppb		99
81) Di-n-butyl phthalate	6.911	149	133797	4050.0742383	ppb		99
83) Fluoranthene	7.493	202	144373	4015.0020818	ppb		99
86) Pyrene	7.722	202	148540	3835.0589455	ppb		99
88) Benzylbutyl phthalate	8.474	149	52580	3847.1491703	ppb		99
90) Benzo(a)anthracene	9.273	228	138835	3758.5983473	ppb		99
91) Chrysene	9.326	228	140888	3907.6187774	ppb		98
92) bis(2-Ethylhexyl)phtha...	9.367	149	78328	3920.9931313	ppb		98
93) Di-n-octyl phthalate	10.589	149	122219	3845.5137428	ppb		98
95) Benzo(b)fluoranthene	11.212	252	149502	4046.3544286	ppb		99
96) Benzo(k)fluoranthene	11.271	252	146044	3857.2208414	ppb		99
97) Benzo(a)pyrene	11.870	252	137497	4056.6866405	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.903	276	132431	4040.7043842	ppb		93
99) Dibenz(a,h)anthracene	13.950	278	146787	4075.4903068	ppb		98
100) Benzo(g,h,i)perylene	14.238	276	150909	3996.1982677	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_08.D  
Acq On : 14 Jan 2022 2:15 pm  
Operator : 917  
Sample : STD SVMS 4K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 5 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 17 17:10:11 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 17:05:37 2022  
Response via : Initial Calibration

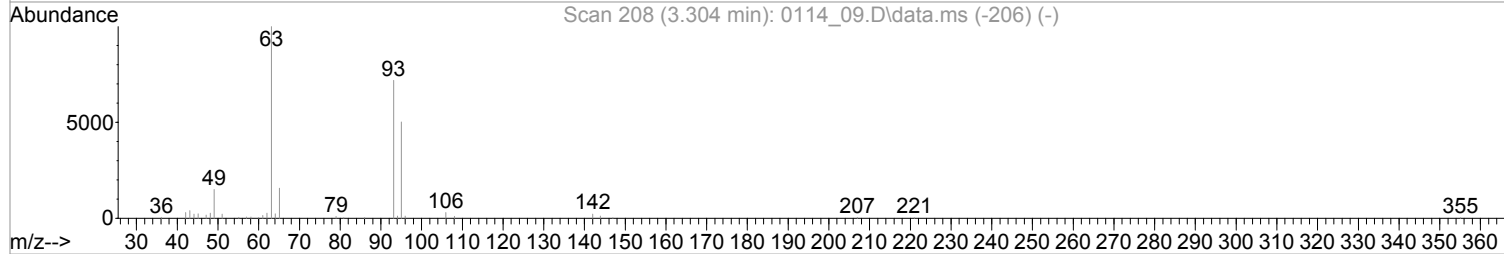
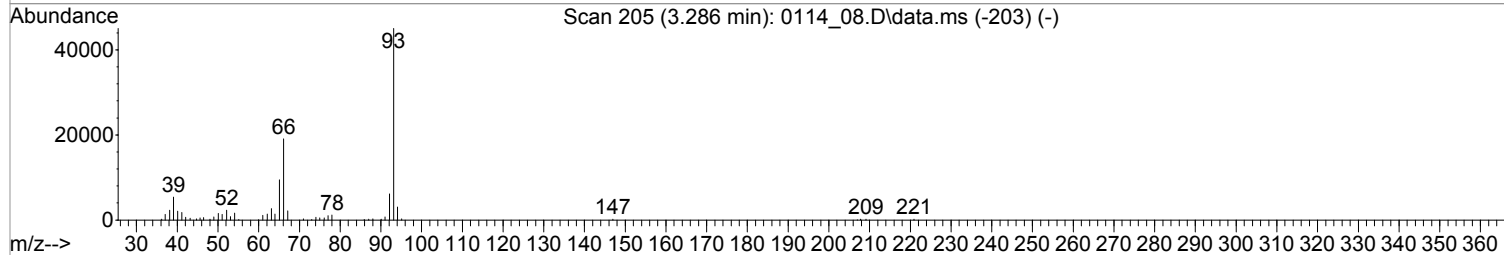
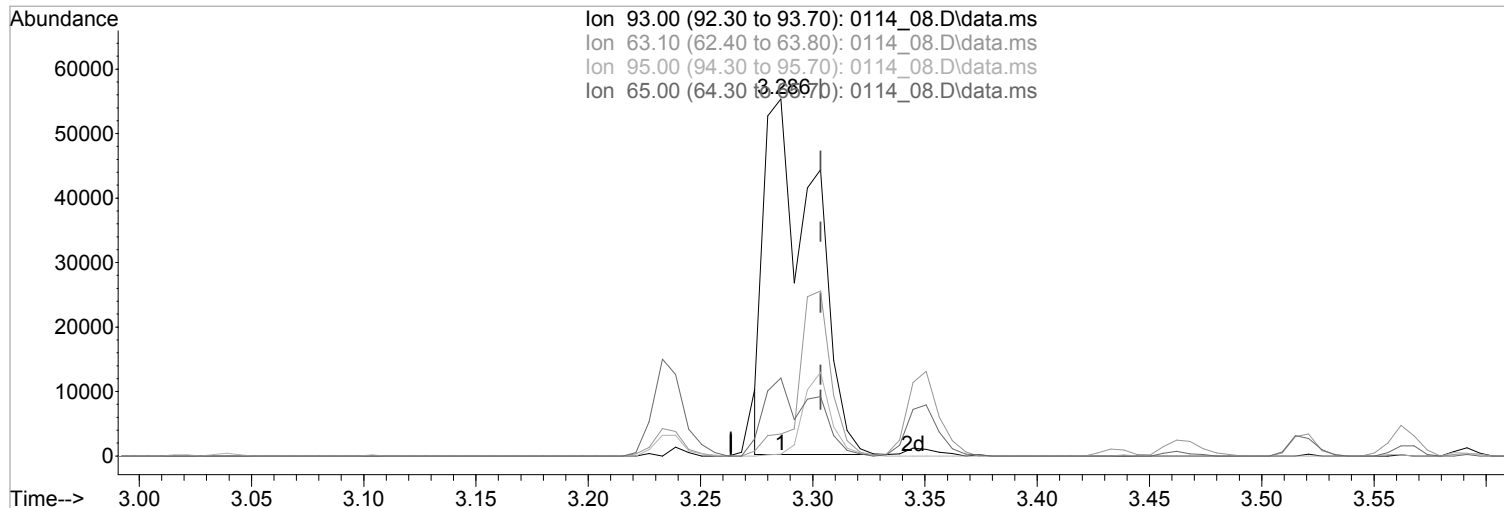




Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_08.D  
Acq On : 14 Jan 2022 2:15 pm  
Operator : 917  
Sample : STD SVMS 4K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 5 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 17 17:05:53 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 17:05:37 2022  
Response via : Initial Calibration



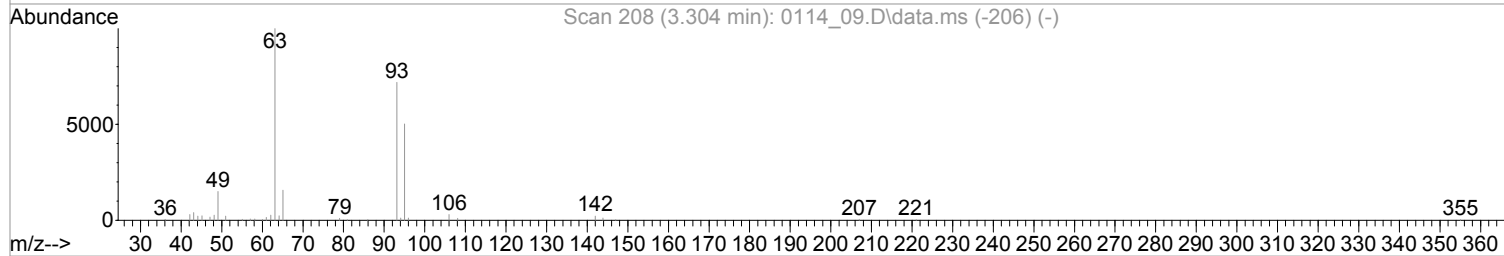
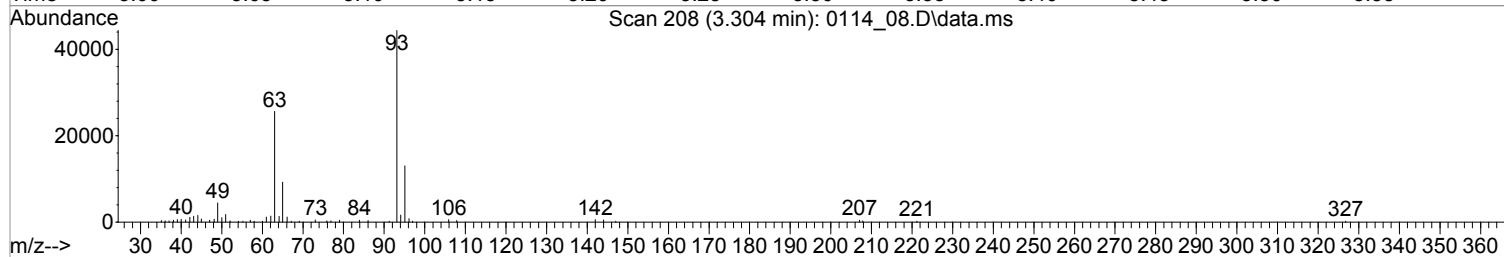
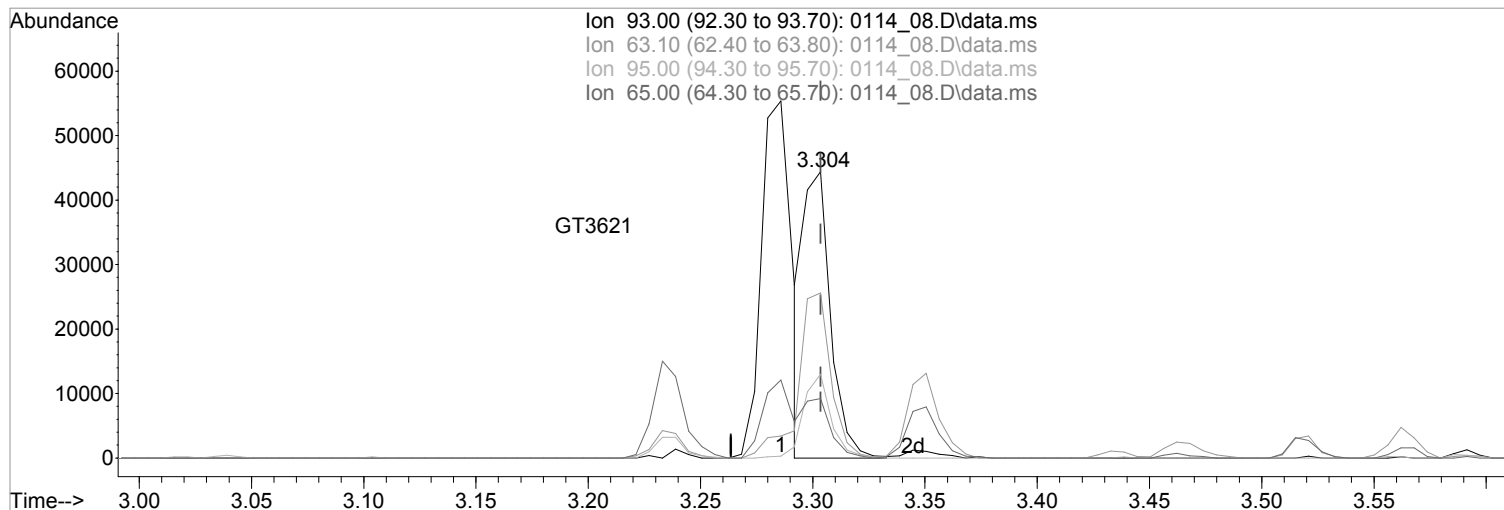
TIC: 0114\_08.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
3.286min (-0.018) 8416.1008144 ppb  
Qvalue = 45  
response 84218  
Ion Exp% Act%  
93.00 100 100  
63.10 63.50 5.68#  
95.00 30.20 0.47#  
65.00 21.40 21.63

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_08.D  
 Acq On : 14 Jan 2022 2:15 pm  
 Operator : 917  
 Sample : STD SVMS 4K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 5 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:05:53 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:05:37 2022  
 Response via : Initial Calibration



TIC: 0114\_08.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.304min (-0.000) 3750.1604795 ppb m

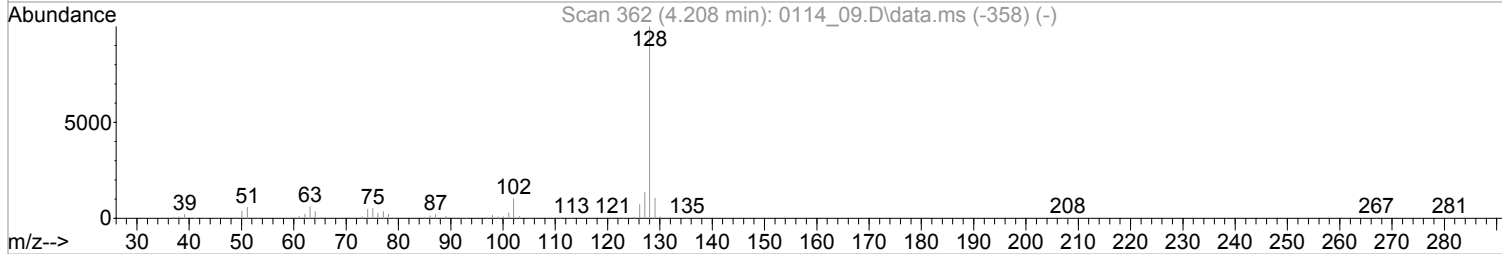
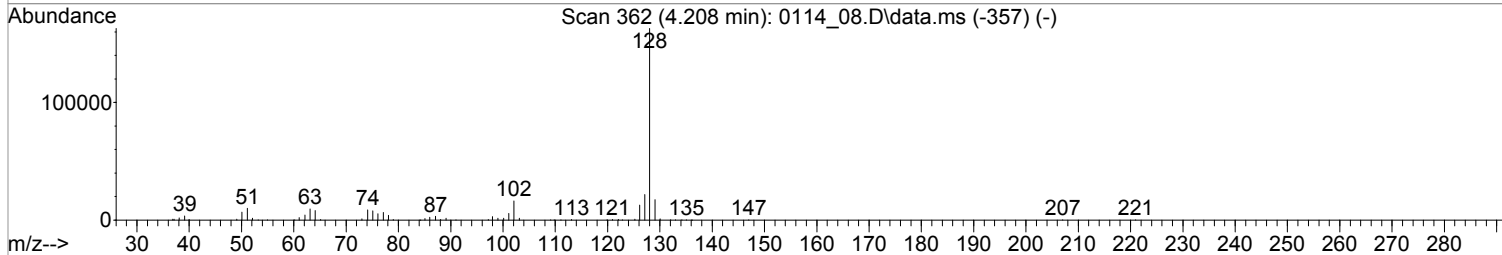
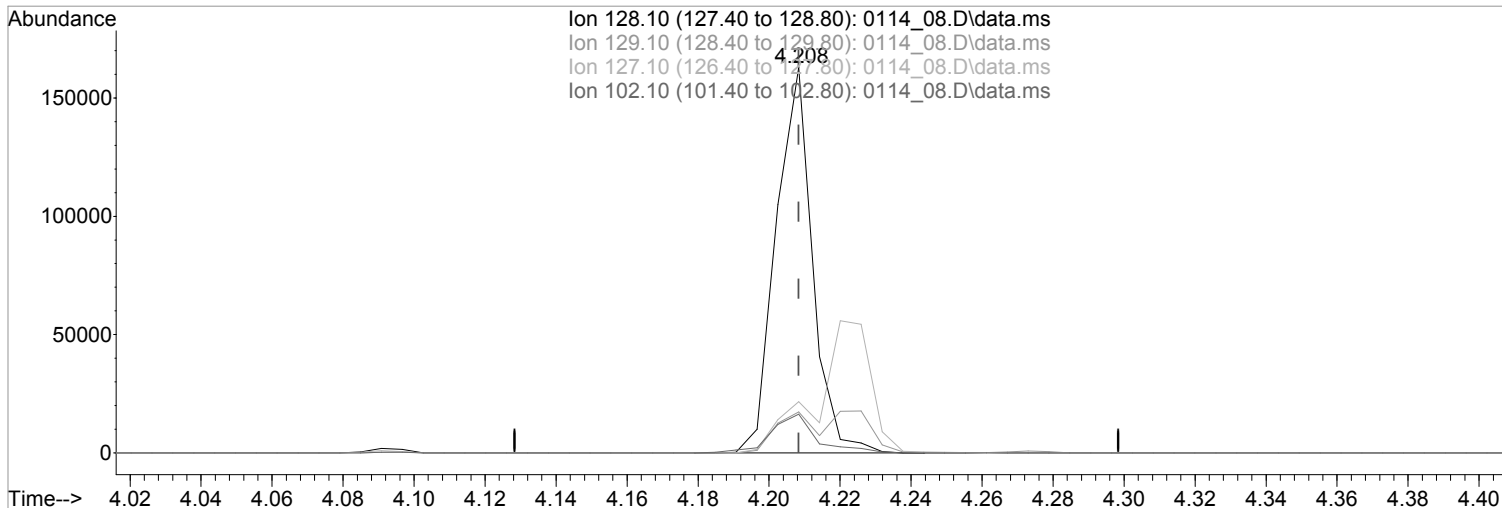
response 37527

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	57.63
95.00	30.20	29.27
65.00	21.40	20.74

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_08.D  
 Acq On : 14 Jan 2022 2:15 pm  
 Operator : 917  
 Sample : STD SVMS 4K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 5 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:05:53 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:05:37 2022  
 Response via : Initial Calibration



TIC: 0114\_08.D\data.ms

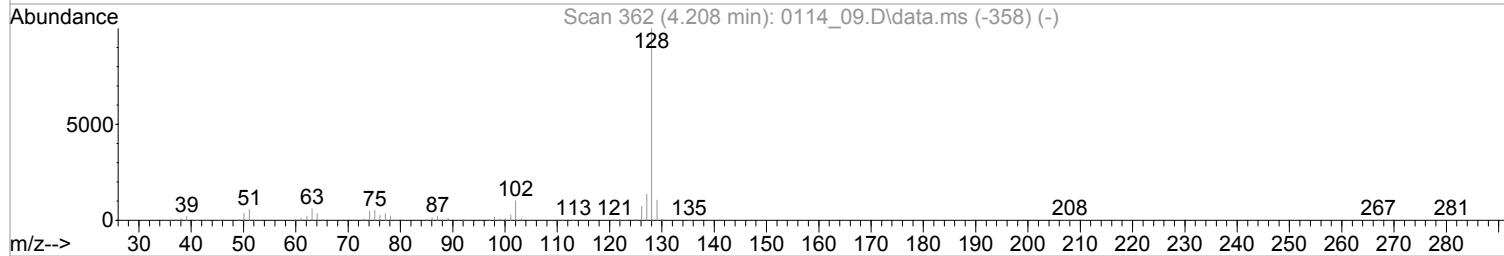
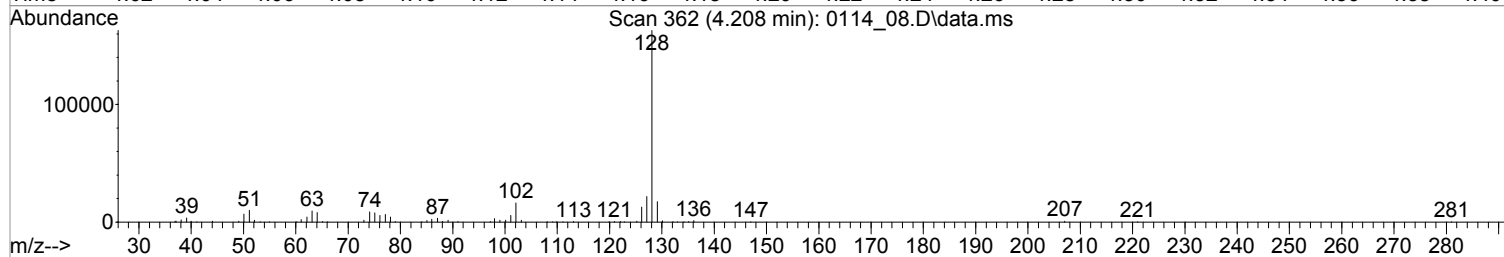
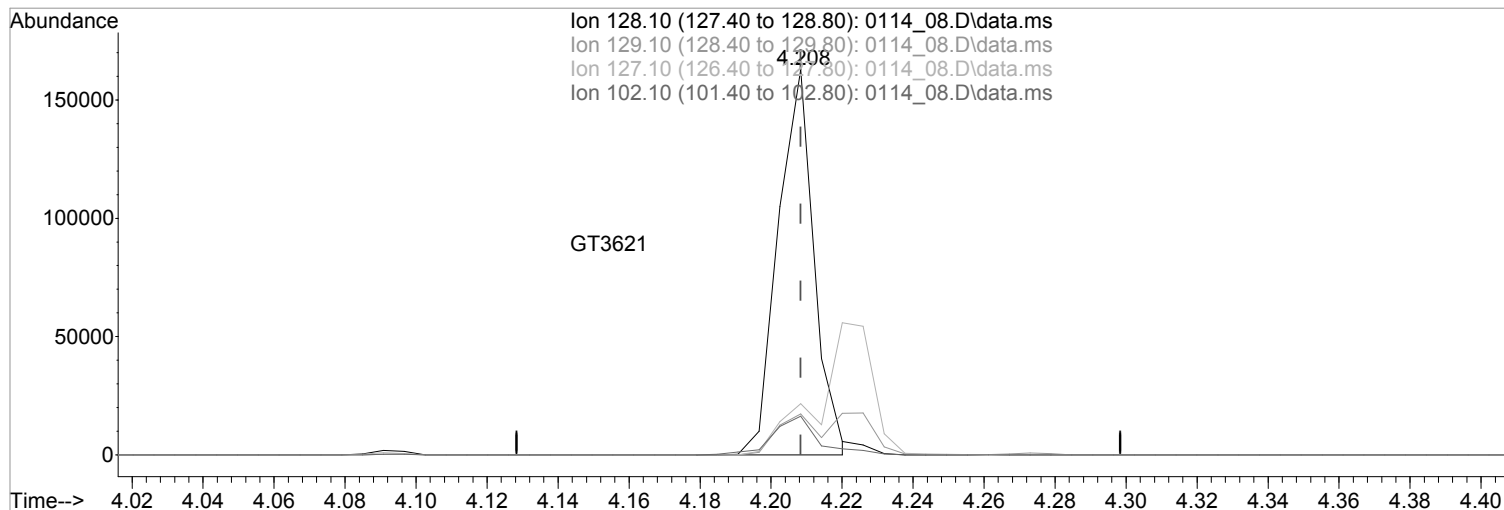
(34) Naphthalene (MT)  
 4.208min (-0.000) 3808.0795375 ppb  
 Qvalue = 100  
 response 116085

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	10.57
127.10	13.50	13.25
102.10	10.10	10.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_08.D  
 Acq On : 14 Jan 2022 2:15 pm  
 Operator : 917  
 Sample : STD SVMS 4K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 5 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:05:53 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:05:37 2022  
 Response via : Initial Calibration



TIC: 0114\_08.D\data.ms

(34) Naphthalene (MT)

4.208min (-0.000) 3753.9197467 ppb m

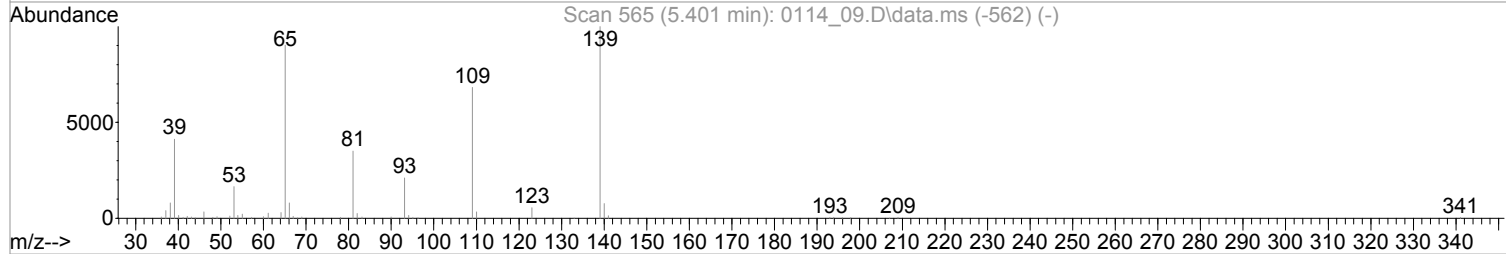
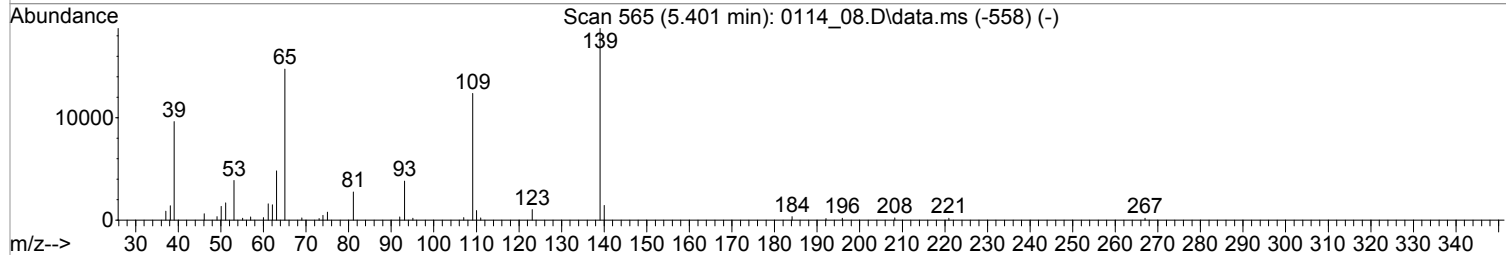
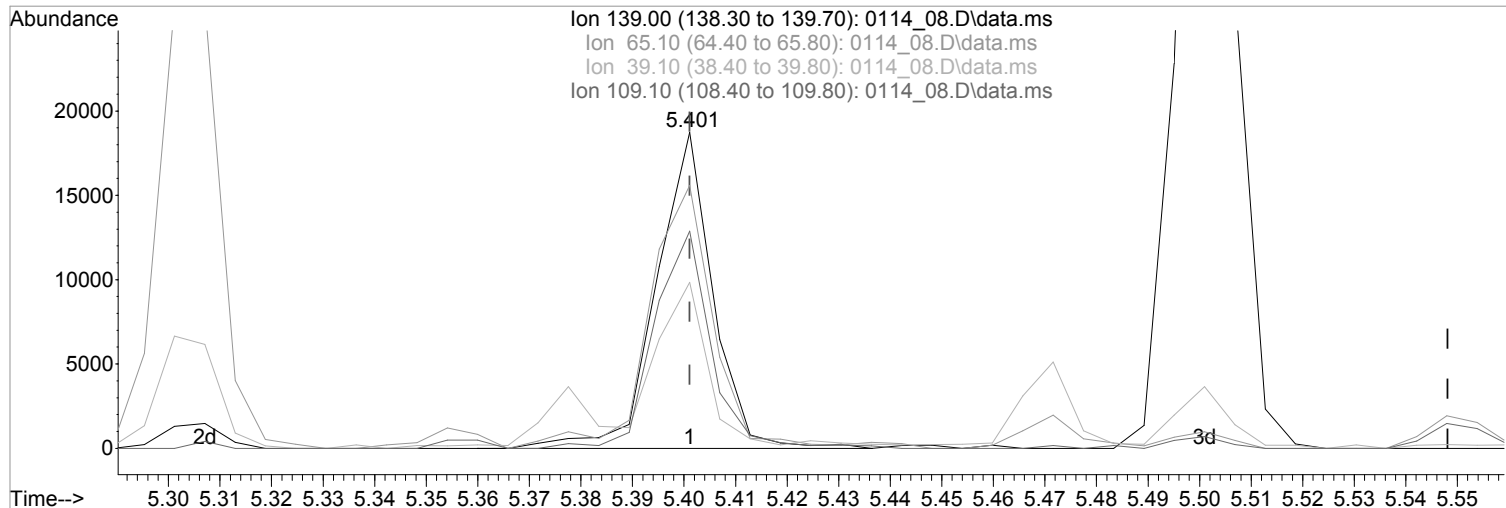
response 114434

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	10.57
127.10	13.50	13.25
102.10	10.10	10.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_08.D  
 Acq On : 14 Jan 2022 2:15 pm  
 Operator : 917  
 Sample : STD SVMS 4K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 5 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:05:53 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:05:37 2022  
 Response via : Initial Calibration



TIC: 0114\_08.D\data.ms

(63) 4-Nitrophenol (MPT)

5.401min (-0.000) 4299.8015655 ppb

Qvalue = 94

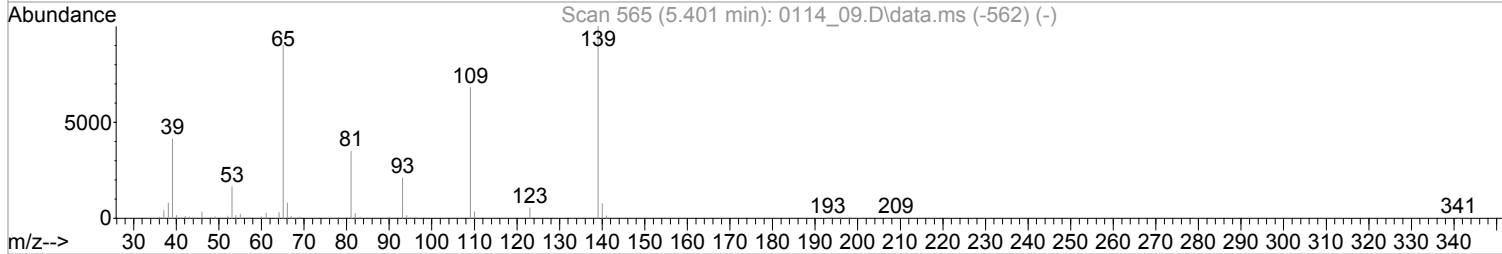
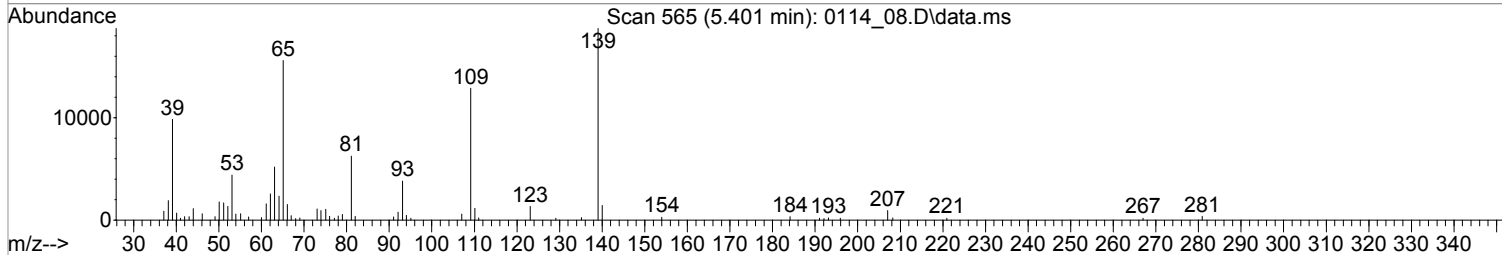
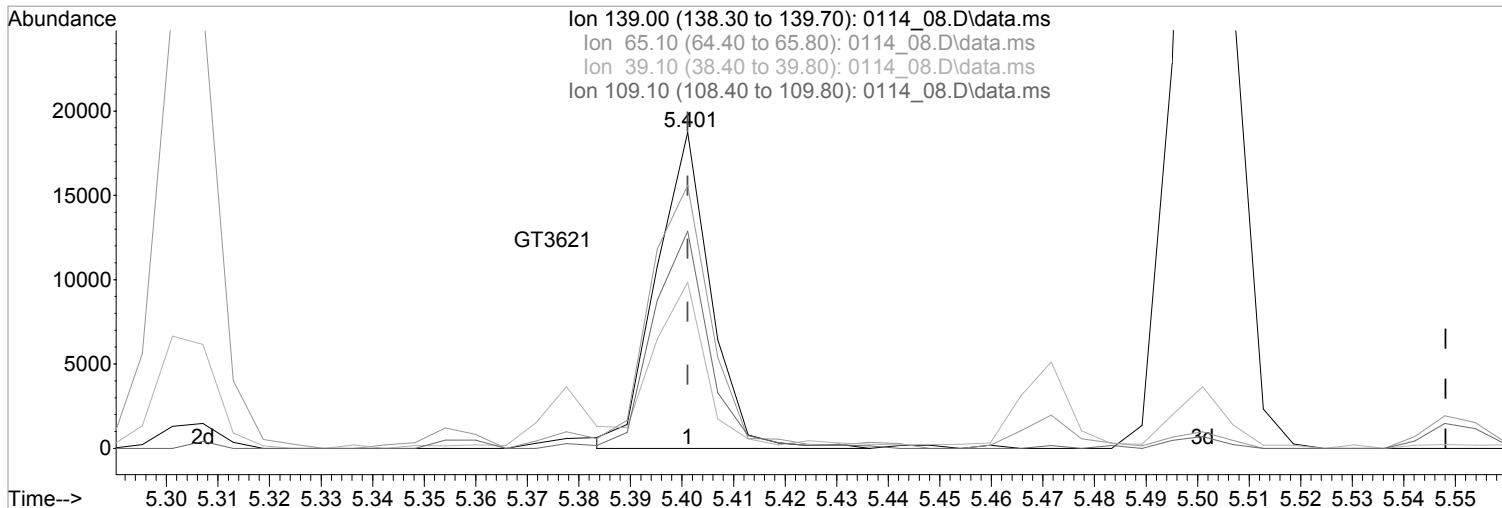
response 14250

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	81.28
39.10	47.40	51.41
109.10	67.50	67.90

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_08.D  
 Acq On : 14 Jan 2022 2:15 pm  
 Operator : 917  
 Sample : STD SVMS 4K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 5 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:05:53 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:05:37 2022  
 Response via : Initial Calibration



(63) 4-Nitrophenol (MPT)  
 5.401min (-0.000) 4138.6721595 ppb m  
 response 13716  

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	83.17
39.10	47.40	52.51
109.10	67.50	68.70

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_09.D  
 Acq On : 14 Jan 2022 2:35 pm  
 Operator : 917  
 Sample : MSTD SVMS 10K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 6 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:16:28 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 16:04:57 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.462	152	60596	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.191	136	238894	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.354	164	127405	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.470	188	260984	8000.0000000	ppb	0.00
84) Chrysene-d12	9.285	240	257633	8000.0000000	ppb	0.00
94) Perylene-d12	11.988	264	268930	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.792	112	86943	9814.0133263	ppb	0.00
Spiked Amount	666.000		Recovery	= 1473.58%		
7) Phenol-d5	3.227	99	106872	9924.0628194	ppb	0.00
Spiked Amount	666.000		Recovery	= 1490.10%		
24) Nitrobenzene-d5	3.762	82	109712m	10154.3009993	ppb	0.00
Spiked Amount	333.000		Recovery	= 3049.34%		
50) 2-Fluorobiphenyl	4.872	172	213556	10042.4475692	ppb	0.00
Spiked Amount	333.000		Recovery	= 3015.75%		
73) 2,4,6-Tribromophenol	5.930	330	35372	9966.8733450	ppb	0.00
Spiked Amount	666.000		Recovery	= 1496.53%		
87) p-Terphenyl-d14	7.881	244	314737	10006.6680873	ppb	0.00
Spiked Amount	333.000		Recovery	= 3005.01%		
<b>Target Compounds</b>						
					Qvalue	
2) Pyridine	2.240	79	96136	9749.7689137	ppb	100
3) N-Nitrosodimethylamine	2.222	42	50279	9584.3606659	ppb	100
5) Aniline	3.286	66	53540	9630.3088668	ppb	100
6) bis(2-Chloroethyl)ether	3.304	93	91837m	10606.1053957	ppb	100
8) Phenol	3.233	94	111936	9841.8754099	ppb	100
10) 2-Chlorophenol	3.351	128	95863	10002.4380096	ppb	100
11) n-Decane	3.351	41	50249	9332.9387630	ppb	100
12) 1,3-Dichlorobenzene	3.433	146	111177	9981.5465464	ppb	100
13) 1,4-Dichlorobenzene	3.474	146	112421	9939.3624873	ppb	100
14) Benzyl Alcohol	3.521	79	84385	9912.3152993	ppb	100
15) 1,2-Dichlorobenzene	3.556	146	107933	10082.0124288	ppb	100
16) bis(2-Chloroisopropyl)...	3.591	121	32107	9782.5998720	ppb	100
17) 2,2-oxybis(1-chloropro...	3.591	121	32107	9782.5998720	ppb	100
18) 2-Methylphenol	3.562	108	86294	10026.4371206	ppb	100
19) Hexachloroethane	3.750	117	42309	10178.4368599	ppb	100
20) N-Nitrosodi-n-propylamine	3.662	70	68061	9953.0451579	ppb	100
21) 3&4-Methyl phenol	3.644	107	99489	10071.5260044	ppb	100
25) Nitrobenzene	3.774	77	103994	9995.8450069	ppb	100
26) Isophorone	3.909	82	182210	9877.0500585	ppb	100
27) 2-Nitrophenol	3.956	139	48451	9763.6869925	ppb	100
28) 2,4-Dimethylphenol	3.956	107	98227	9925.9019457	ppb	100
29) bis(2-Chlorethoxy)methane	4.014	93	103802	9765.3845442	ppb	100
30) 2,4-Dichlorophenol	4.091	162	81908	10165.1021798	ppb	100
32) 1,2,4-Trichlorobenzene	4.156	180	96233	10211.3221207	ppb	100
34) Naphthalene	4.208	128	290976m	9939.5508078	ppb	100
35) 4-Chloroaniline	4.220	65	36327	10225.3605417	ppb	100
36) Hexachloro-1,3-butadiene	4.273	225	59966	10147.2667166	ppb	100
40) 4-Chloro-3-methylphenol	4.508	107	82237	9985.5277421	ppb	100
41) 2-Methylnaphthalene	4.643	142	194044	9926.6584074	ppb	100
42) 1-Methylnaphthalene	4.708	142	187592	10164.8884855	ppb	100
47) Hexachlorocyclopentadiene	4.743	237	68665	10018.5003504	ppb	100
48) 2,4,6-Trichlorophenol	4.814	196	57972	9727.5798778	ppb	100

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_09.D  
 Acq On : 14 Jan 2022 2:35 pm  
 Operator : 917  
 Sample : MSTD SVMS 10K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 6 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:16:28 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 16:04:57 2022  
 Response via : Initial Calibration

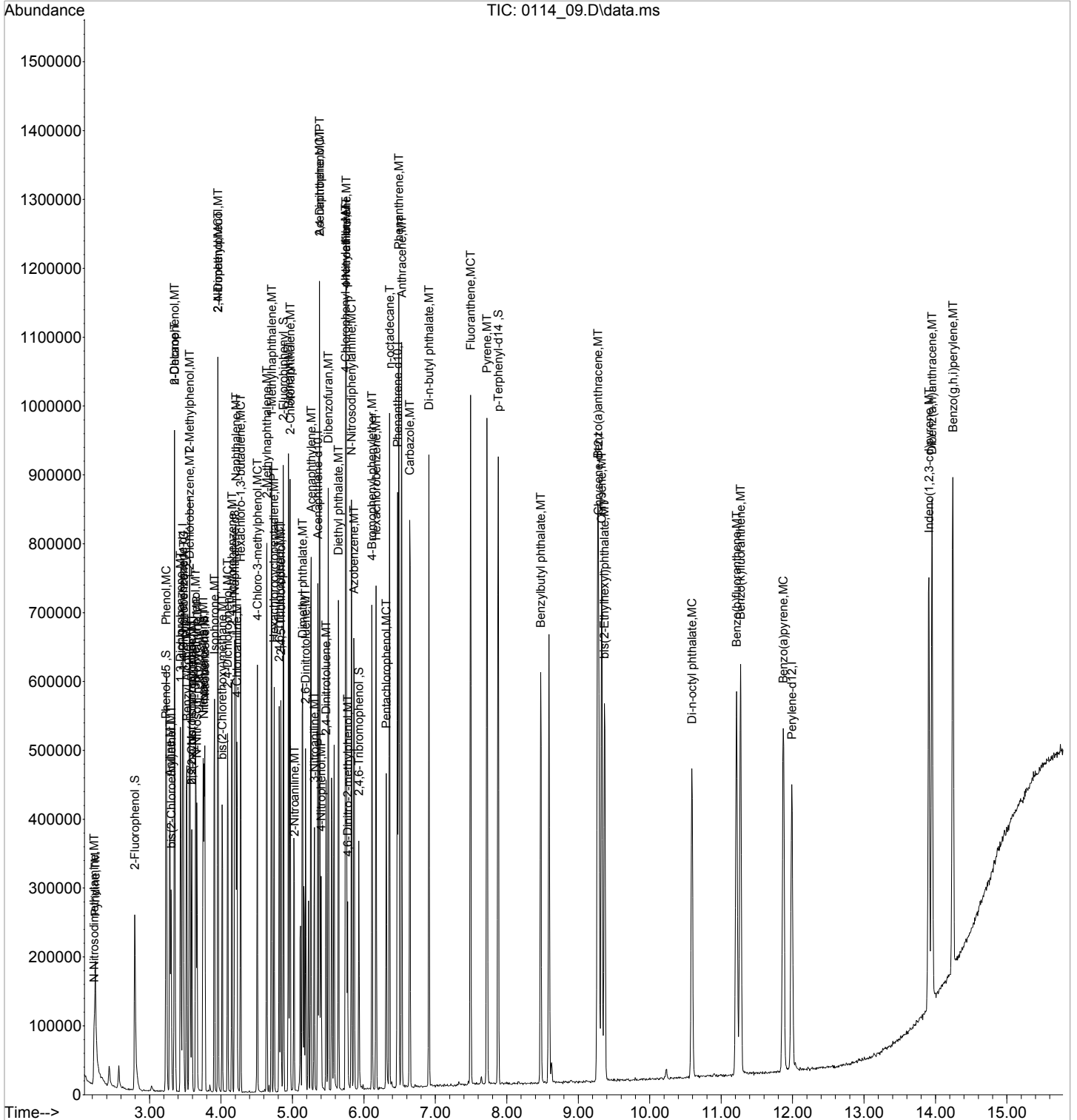
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) 2,4,5-Trichlorophenol	4.837	196	64847	10464.3029918	ppb	100
51) Biphenyl	4.943	154	239232	10063.3787508	ppb	100
52) 2-Chloronaphthalene	4.966	162	184949	10078.8927273	ppb	100
53) 2-Nitroaniline	5.025	138	55448	10340.7162940	ppb	100
54) Acenaphthylene	5.260	152	291658	10149.0002401	ppb	100
55) Dimethyl phthalate	5.143	163	204835	10061.8049251	ppb	100
56) 2,6-Dinitrotoluene	5.184	165	47736	10684.8190506	ppb	100
57) 3-Nitroaniline	5.307	138	47091	10198.5334120	ppb	100
58) Acenaphthene	5.378	153	190429	10171.9847824	ppb	100
59) 2,4-Dinitrophenol	5.378	184	23183	9926.8721552	ppb	100
60) Dibenzofuran	5.501	168	263822	10135.8910162	ppb	100
61) 2,4-Dinitrotoluene	5.472	165	59238	10075.6242563	ppb	100
63) 4-Nitrophenol	5.401	139	37150m	10147.0248536	ppb	100
64) Fluorene	5.754	166	211787	10113.0699476	ppb	100
65) 4-Chlorophenyl-phenyle...	5.742	204	111849	10088.3534179	ppb	100
66) Diethyl phthalate	5.642	149	209805	10173.1944622	ppb	100
67) 4-Nitroaniline	5.748	138	44326	10706.0303026	ppb	100
68) Azobenzene	5.859	77	207175	10102.9269558	ppb	100
71) 4,6-Dinitro-2-methylph...	5.771	198	31552	9518.9977194	ppb	100
72) N-Nitrosodiphenylamine	5.824	169	185726	9804.8903984	ppb	100
74) 4-Bromophenyl-phenylether	6.112	248	71303	9901.7673413	ppb	100
75) Hexachlorobenzene	6.171	284	80772	9933.1230990	ppb	100
76) n-octadecane	6.359	55	29848	9171.4500616	ppb	100
77) Pentachlorophenol	6.312	266	43547	10347.4661125	ppb	100
78) Phenanthrene	6.488	178	337864	10020.6712045	ppb	100
79) Anthracene	6.529	178	346695	10167.4589266	ppb	100
80) Carbazole	6.641	167	302207	10216.5478994	ppb	100
81) Di-n-butyl phthalate	6.911	149	361181	9932.0679184	ppb	100
83) Fluoranthene	7.493	202	379837	10029.0506340	ppb	100
86) Pyrene	7.722	202	391542	9886.5950014	ppb	100
88) Benzylbutyl phthalate	8.474	149	149155	9742.7396920	ppb	100
90) Benzo(a)anthracene	9.273	228	375436	9911.5930405	ppb	100
91) Chrysene	9.326	228	365638	9959.7587987	ppb	100
92) bis(2-Ethylhexyl)phtha...	9.367	149	218352	9701.4486126	ppb	100
93) Di-n-octyl phthalate	10.589	149	354422	9630.7039947	ppb	100
95) Benzo(b)fluoranthene	11.218	252	389223	9971.9604355	ppb	100
96) Benzo(k)fluoranthene	11.271	252	397083	10128.7031076	ppb	100
97) Benzo(a)pyrene	11.870	252	376447	10197.0887652	ppb	100
98) Indeno(1,2,3-cd)pyrene	13.909	276	355721	10414.3339282	ppb	100
99) Dibenz(a,h)anthracene	13.950	278	385593	10310.5057775	ppb	100
100) Benzo(g,h,i)perylene	14.244	276	395706	10428.3967338	ppb	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_09.D  
Acq On : 14 Jan 2022 2:35 pm  
Operator : 917  
Sample : MSTD SVMS 10K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 6 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 18 16:16:28 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Tue Jan 18 16:04:57 2022  
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\050322\  
 Data File : 0503\_03.D  
 Acq On : 3 May 2022 4:48 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 03 05:30:11 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.201	152	40684	8000.0000000	ppb	0.00	
23) Naphthalene-d8	3.923	136	149817	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.063	164	86985	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.168	188	173246	8000.0000000	ppb	0.00	
84) Chrysene-d12	8.776	240	178855	8000.0000000	ppb	0.00	
94) Perylene-d12	11.297	264	187780	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.537	112	60017	10090.3589543	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	50.45%		
7) Phenol-d5	2.983	99	74806	10346.2343685	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	51.73%		
24) Nitrobenzene-d5	3.506	82	77849m	11360.5873108	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	113.61%		
50) 2-Fluorobiphenyl	4.593	172	157219	10828.6652702	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	108.29%		
73) 2,4,6-Tribromophenol	5.639	330	27545	11692.1066130	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	58.46%		
87) p-Terphenyl-d14	7.496	244	237771	10889.3255883	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	108.89%		
<b>Target Compounds</b>							
							Qvalue
2) Pyridine	1.955	79	70594	10663.4165850	ppb	#	81
3) N-Nitrosodimethylamine	1.949	42	32062	9103.0606819	ppb		97
5) Aniline	3.024	66	38226	10240.9681649	ppb	#	30
6) bis(2-Chloroethyl)ether	3.042	93	59683	9113.0437234	ppb		87
8) Phenol	2.989	94	75476m	9884.1030934	ppb		
10) 2-Chlorophenol	3.089	128	63297	9836.9007749	ppb		94
11) n-Decane	3.089	41	36356	10057.4388096	ppb	#	92
12) 1,3-Dichlorobenzene	3.171	146	72838	9740.0505109	ppb		94
13) 1,4-Dichlorobenzene	3.212	146	79075	10412.8736177	ppb		99
14) Benzyl Alcohol	3.265	79	52337	9156.7000794	ppb		93
15) 1,2-Dichlorobenzene	3.295	146	70730	9840.4950993	ppb		97
16) bis(2-Chloroisopropyl)...	3.336	121	22590	10251.5870671	ppb		76
17) 2,2-oxybis(1-chloropro...	3.336	121	22590	10251.5870671	ppb		76
18) 2-Methylphenol	3.318	108	60836	10528.0271601	ppb		95
19) Hexachloroethane	3.483	117	30686	10995.3464568	ppb		96
20) N-Nitrosodi-n-propylamine	3.406	70	46959	10228.1432049	ppb		86
21) 3&4-Methyl phenol	3.400	107	69828	10528.5879003	ppb		92
25) Nitrobenzene	3.512	77	76815	11773.3867644	ppb		92
26) Isophorone	3.647	82	133187	11512.2716612	ppb		92
27) 2-Nitrophenol	3.700	139	34083	10951.9906321	ppb	#	76
28) 2,4-Dimethylphenol	3.706	107	70273	11323.2668068	ppb		88
29) bis(2-Chloroethoxy)methane	3.759	93	69792	10469.6802488	ppb		98
30) 2,4-Dichlorophenol	3.835	162	55734	11029.3466346	ppb		99
32) 1,2,4-Trichlorobenzene	3.888	180	63634	10766.9159080	ppb		97
34) Naphthalene	3.935	128	181651m	9894.4470239	ppb		
35) 4-Chloroaniline	3.959	65	25208	11314.4027043	ppb	#	52
36) Hexachloro-1,3-butadiene	4.006	225	46490	12544.3362713	ppb		96
40) 4-Chloro-3-methylphenol	4.252	107	57553	11143.3526867	ppb		88
41) 2-Methylnaphthalene	4.364	142	124259	10136.1927141	ppb	#	95
42) 1-Methylnaphthalene	4.429	142	119985	10367.1505827	ppb	#	93
47) Hexachlorocyclopentadiene	4.464	237	38080	8137.7873570	ppb		96
48) 2,4,6-Trichlorophenol	4.540	196	41920	10302.6726369	ppb		94

Data Path : C:\msdchem\1\data\050322\  
 Data File : 0503\_03.D  
 Acq On : 3 May 2022 4:48 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

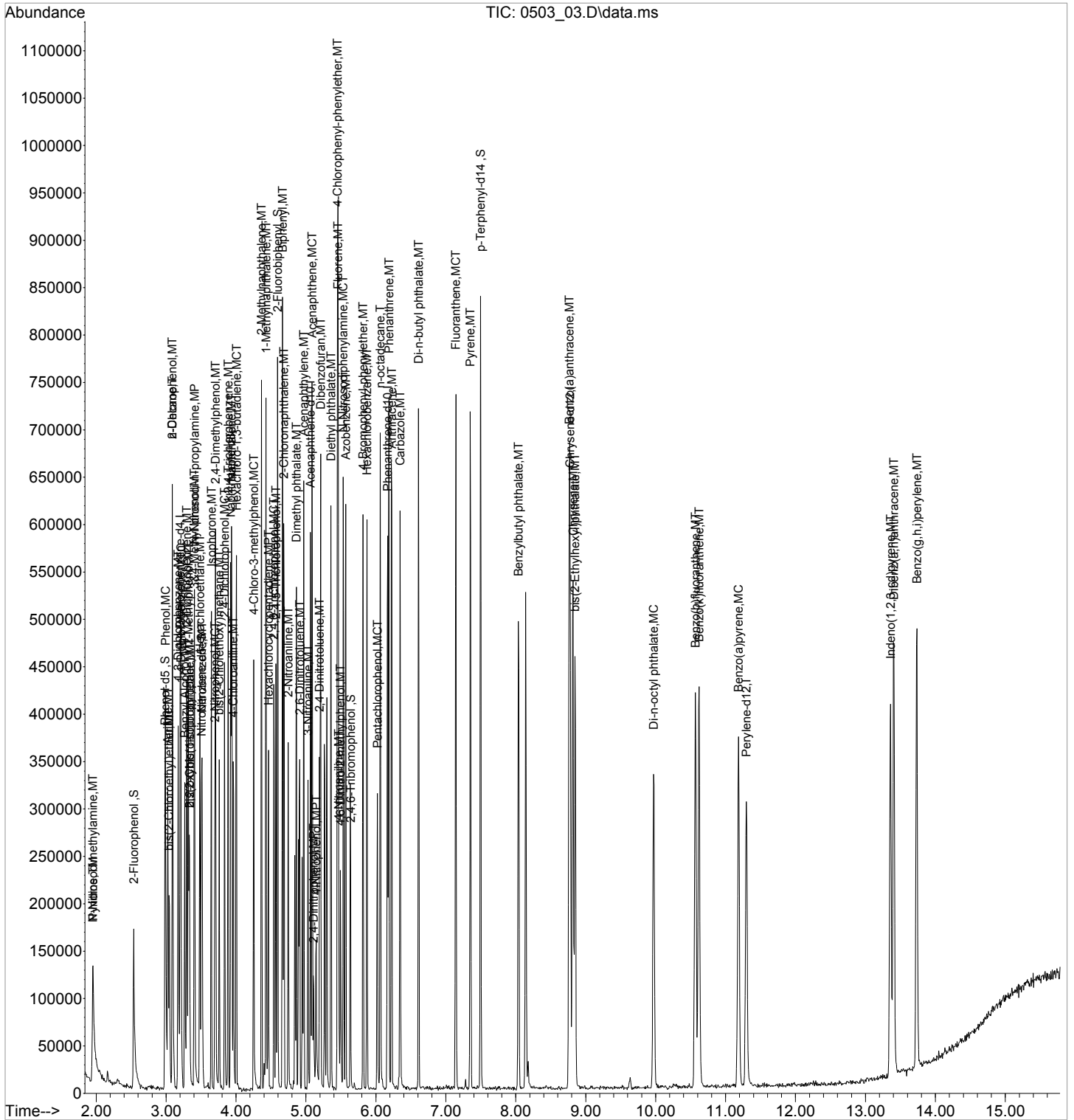
Quant Time: May 03 05:30:11 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
49) 2,4,5-Trichlorophenol	4.570	196	47788	11294.8736290	ppb		94
51) Biphenyl	4.664	154	160409	9883.1499148	ppb		97
52) 2-Chloronaphthalene	4.681	162	121555	9702.3238678	ppb		95
53) 2-Nitroaniline	4.746	138	40269	10999.6201146	ppb	#	90
54) Acenaphthylene	4.969	152	184070	9381.5475934	ppb		98
55) Dimethyl phthalate	4.863	163	142281	10236.7180149	ppb		93
56) 2,6-Dinitrotoluene	4.910	165	32379	10615.1633842	ppb		86
57) 3-Nitroaniline	5.028	138	31926	10127.1309043	ppb	#	82
58) Acenaphthene	5.087	153	123756	9682.3545836	ppb		92
59) 2,4-Dinitrophenol	5.110	184	17498	10288.7376138	ppb	#	1
60) Dibenzofuran	5.210	168	173211	9746.9445931	ppb		96
61) 2,4-Dinitrotoluene	5.192	165	43241	10772.3240493	ppb	#	78
63) 4-Nitrophenol	5.145	139	22045m	8824.1098394	ppb		
64) Fluorene	5.457	166	142854	9991.2131068	ppb		94
65) 4-Chlorophenyl-phenyle...	5.451	204	78828	10413.8374595	ppb		96
66) Diethyl phthalate	5.357	149	145768	10352.5136487	ppb		99
67) 4-Nitroaniline	5.469	138	30679	10853.0856401	ppb	#	72
68) Azobenzene	5.568	77	163935	11709.1037715	ppb		91
71) 4,6-Dinitro-2-methylph...	5.492	198	23901	10162.9690839	ppb		89
72) N-Nitrosodiphenylamine	5.533	169	121876	9692.5689038	ppb		94
74) 4-Bromophenyl-phenylether	5.815	248	52584	11000.4183314	ppb		94
75) Hexachlorobenzene	5.874	284	58878	10907.5872897	ppb		96
76) n-octadecane	6.062	55	21554	9977.0308500	ppb		92
77) Pentachlorophenol	6.021	266	27753	9934.2794856	ppb		93
78) Phenanthrene	6.185	178	214496	9583.5134713	ppb		97
79) Anthracene	6.226	178	218624	9658.5815550	ppb		99
80) Carbazole	6.344	167	195601	9961.4232582	ppb		99
81) Di-n-butyl phthalate	6.608	149	262398	10869.9105966	ppb		98
83) Fluoranthene	7.143	202	251971	10022.2165727	ppb		99
86) Pyrene	7.349	202	257384	9361.6055888	ppb		98
88) Benzylbutyl phthalate	8.036	149	117869	11090.2998087	ppb		97
90) Benzo(a)anthracene	8.765	228	263738	10029.5318410	ppb		95
91) Chrysene	8.818	228	254084	9969.5422713	ppb		97
92) bis(2-Ethylhexyl)phtha...	8.847	149	163499	10463.9322529	ppb		97
93) Di-n-octyl phthalate	9.969	149	259713	10165.5634812	ppb		98
95) Benzo(b)fluoranthene	10.569	252	270155	9912.5405739	ppb		97
96) Benzo(k)fluoranthene	10.621	252	280298	10239.5875358	ppb		96
97) Benzo(a)pyrene	11.185	252	240718	9338.3649594	ppb		97
98) Indeno(1,2,3-cd)pyrene	13.359	276	249819	10474.5983073	ppb		96
99) Dibenz(a,h)anthracene	13.406	278	270987	10380.3229066	ppb		95
100) Benzo(g,h,i)perylene	13.735	276	275765	10408.1602795	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050322\  
 Data File : 0503\_03.D  
 Acq On : 3 May 2022 4:48 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

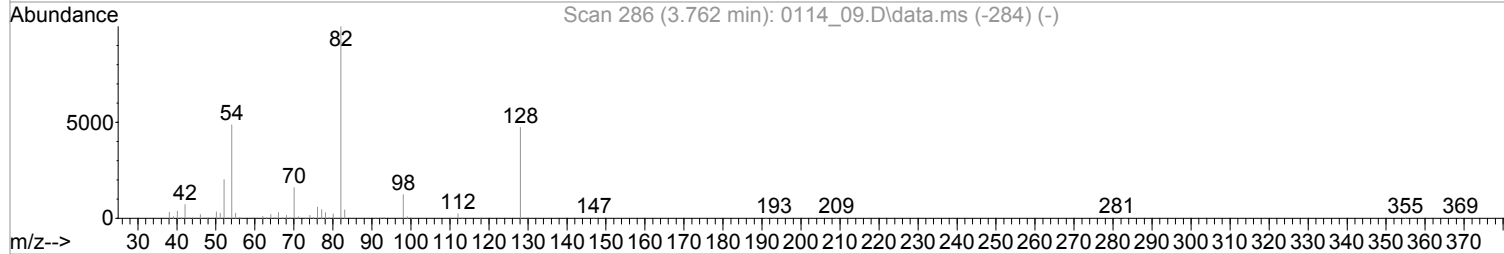
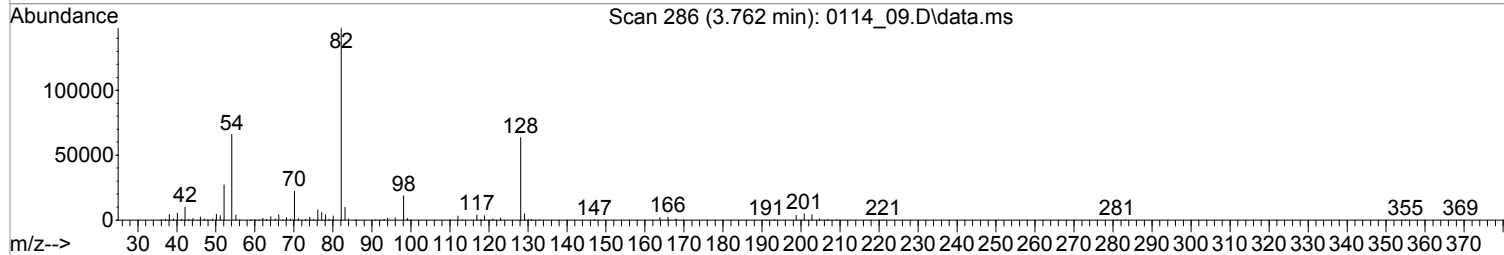
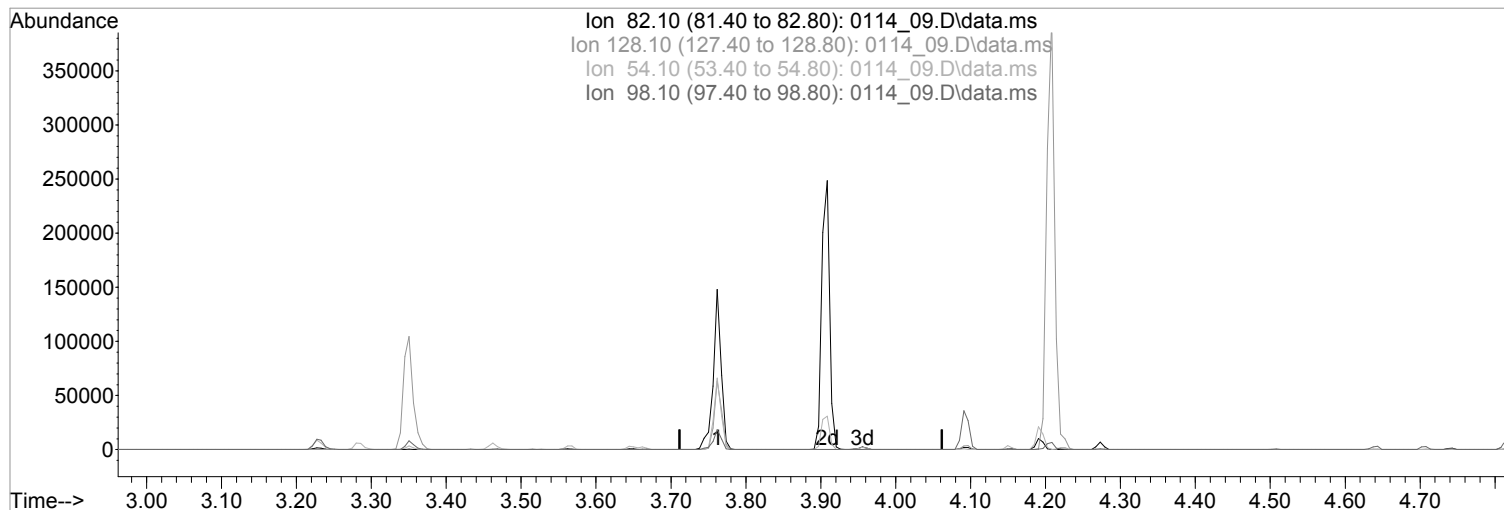
Quant Time: May 03 05:30:11 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_09.D  
 Acq On : 14 Jan 2022 2:35 pm  
 Operator : 917  
 Sample : MSTD SVMS 10K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 6 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:14:44 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 16:04:57 2022  
 Response via : Initial Calibration



TIC: 0114\_09.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.762min 0.0000000 ppb d

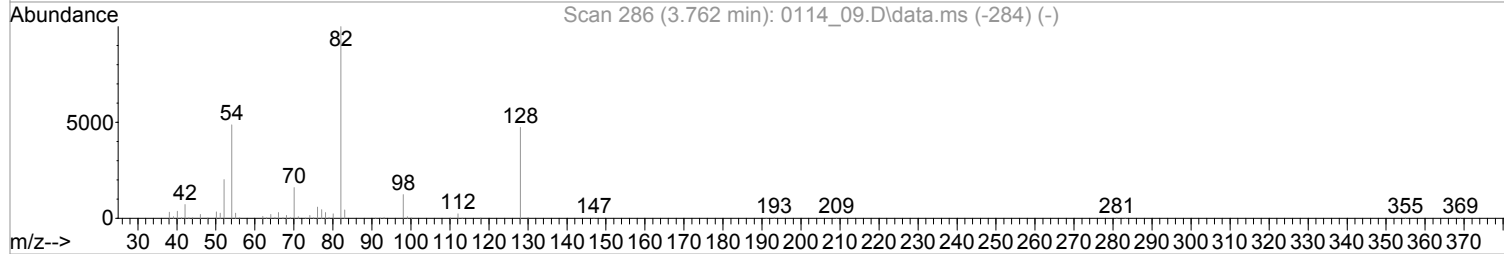
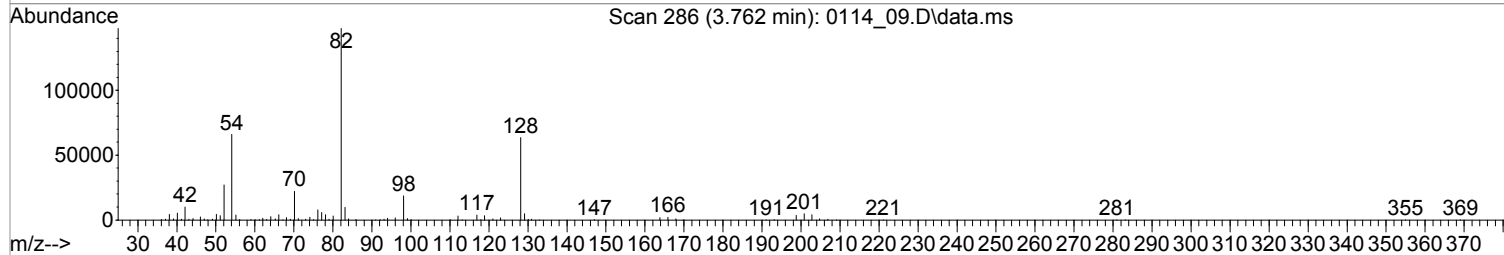
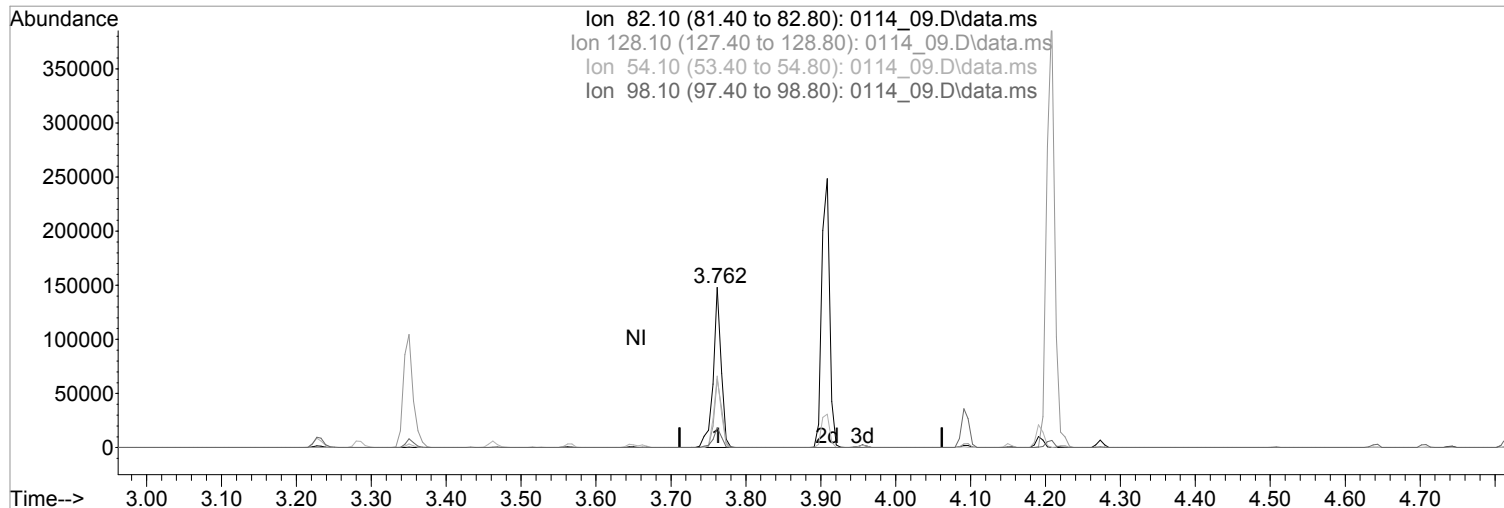
response 0

Ion	Exp%	Act%
82.10	100	0.00
128.10	43.00	0.00
54.10	44.70	0.00
98.10	12.60	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_09.D  
 Acq On : 14 Jan 2022 2:35 pm  
 Operator : 917  
 Sample : MSTD SVMS 10K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 6 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:14:44 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 16:04:57 2022  
 Response via : Initial Calibration



TIC: 0114\_09.D\data.ms

(24) Nitrobenzene-d5 (S)

3.762min (0.000) 10154.3009993 ppb m

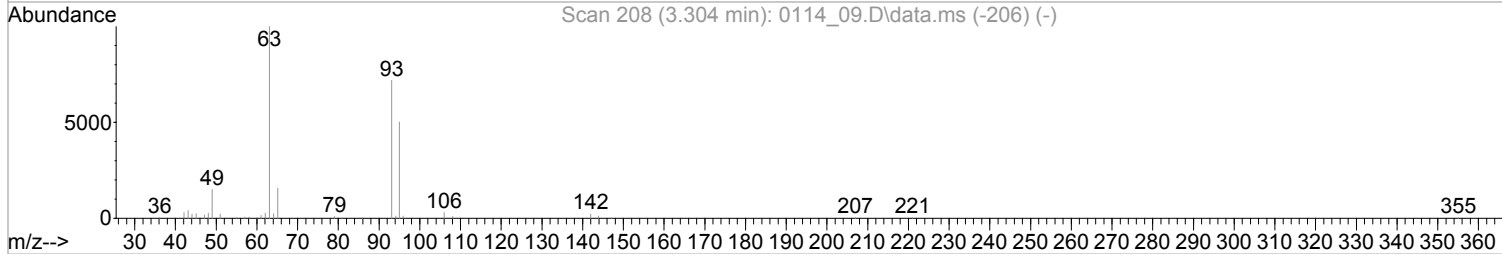
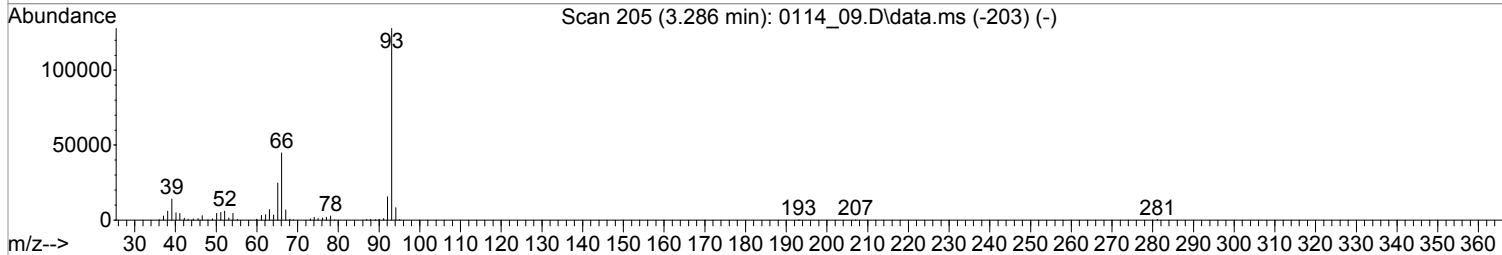
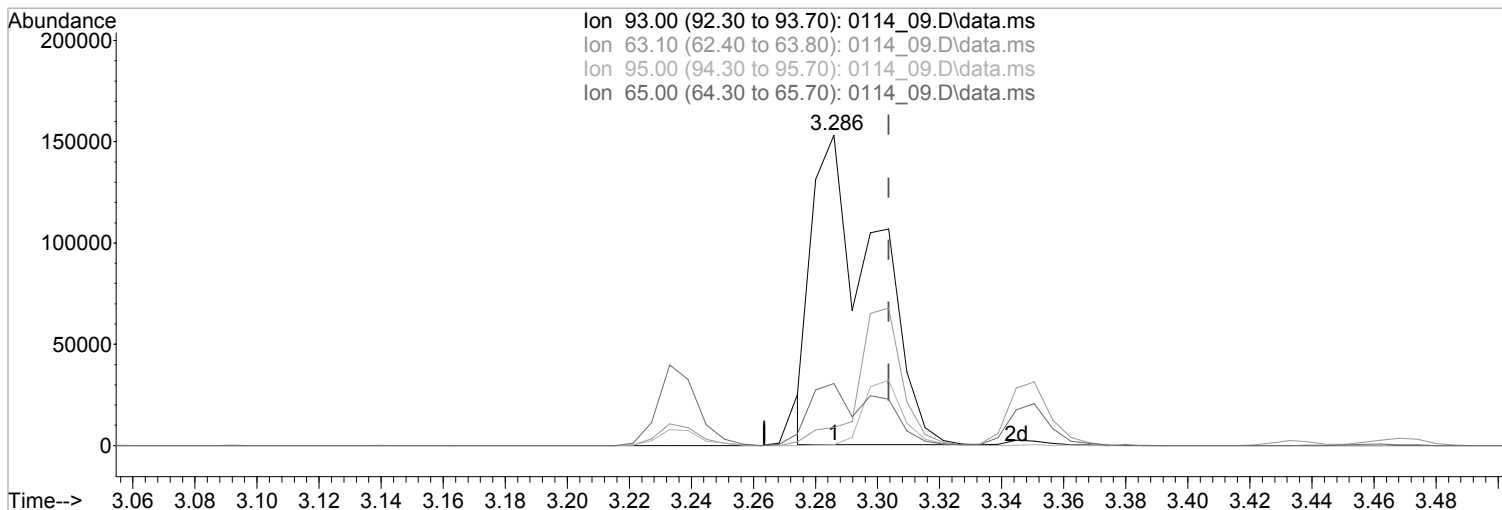
response 109712

Ion	Exp%	Act%
82.10	100	100
128.10	43.00	42.99
54.10	44.70	44.72
98.10	12.60	12.56

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_09.D  
 Acq On : 14 Jan 2022 2:35 pm  
 Operator : 917  
 Sample : MSTD SVMS 10K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 6 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:13:44 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 16:04:57 2022  
 Response via : Initial Calibration



TIC: 0114\_09.D\data.ms

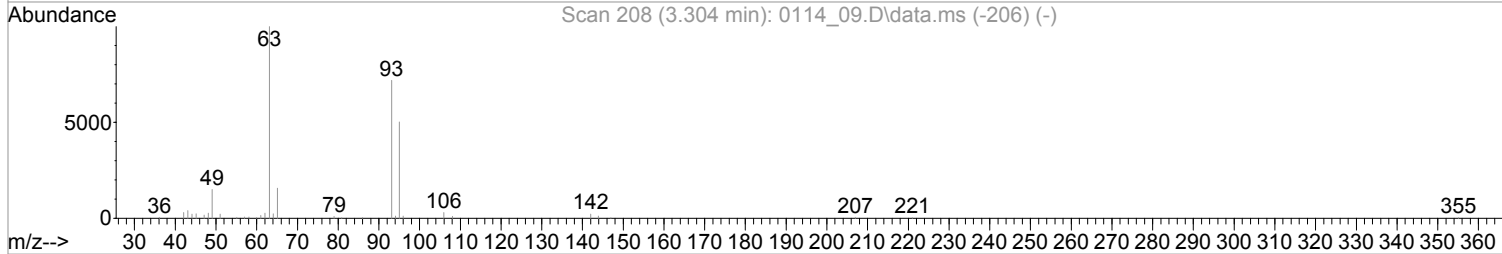
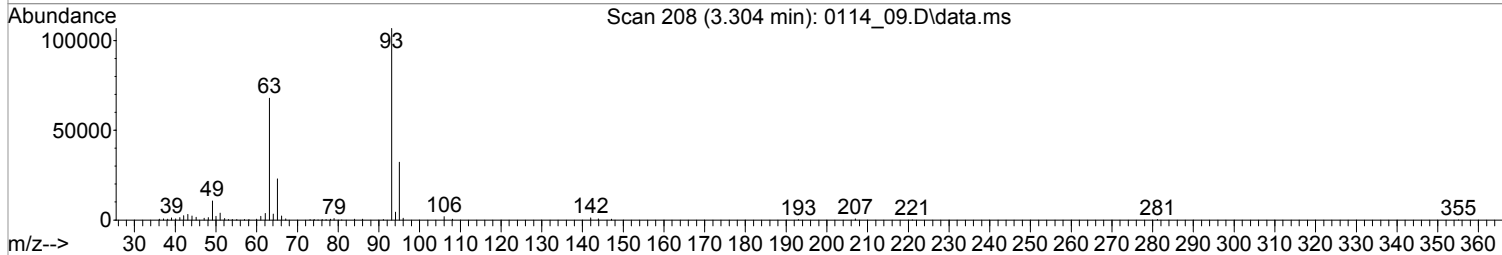
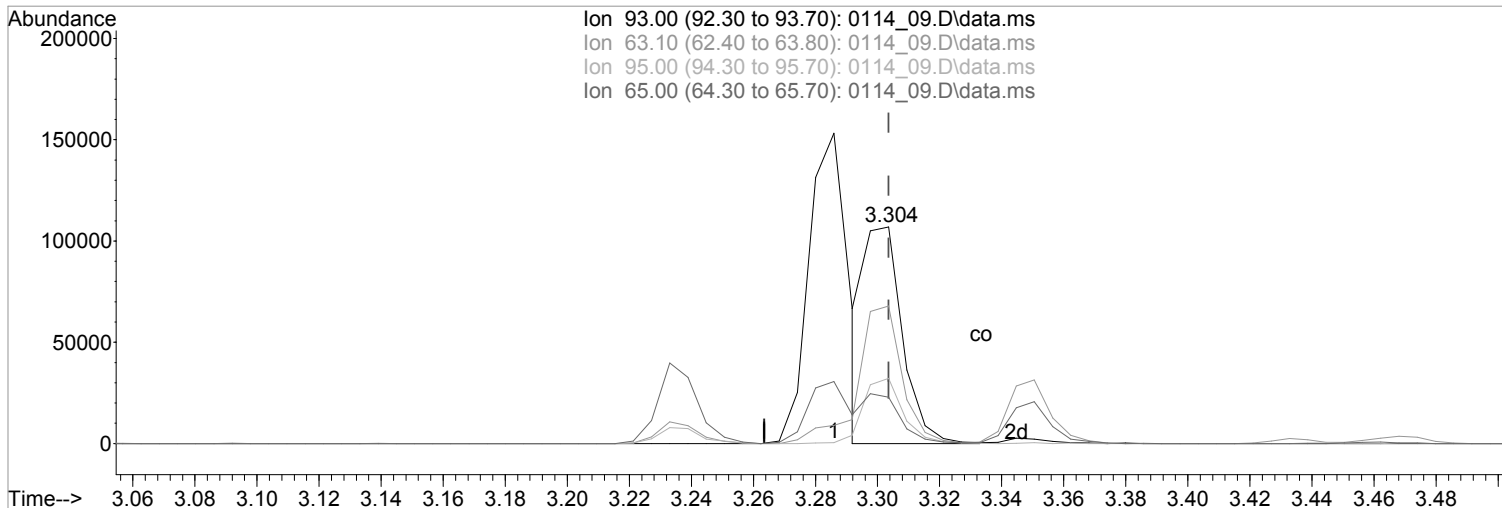
(6) bis(2-Chloroethyl)ether (MT)  
 3.286min (-0.018) 24746.5013652 ppb  
 Qvalue = 44  
 response 214277

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	5.36#
95.00	30.20	0.24#
65.00	21.40	19.80

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_09.D  
 Acq On : 14 Jan 2022 2:35 pm  
 Operator : 917  
 Sample : MSTD SVMS 10K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 6 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:13:44 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 16:04:57 2022  
 Response via : Initial Calibration



TIC: 0114\_09.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.304min (0.000) 10606.1053957 ppb m

response 91837

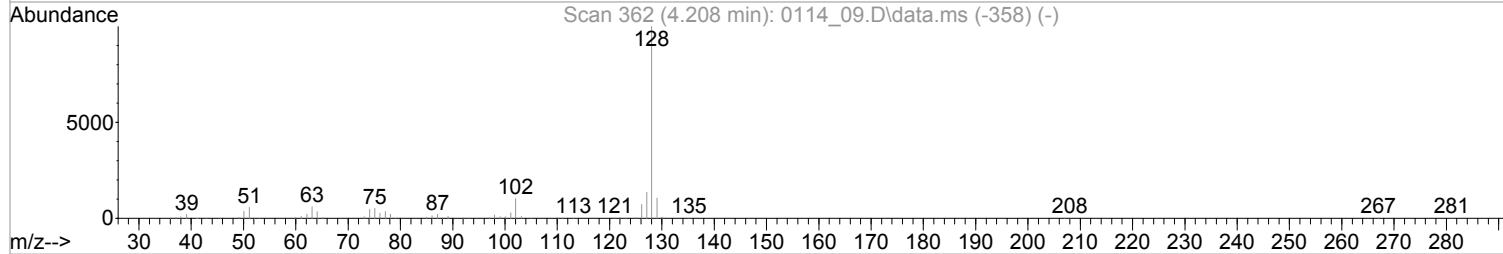
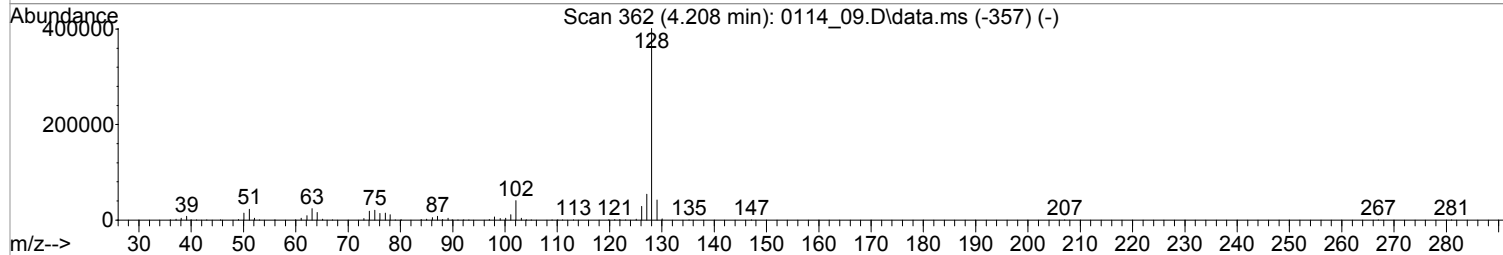
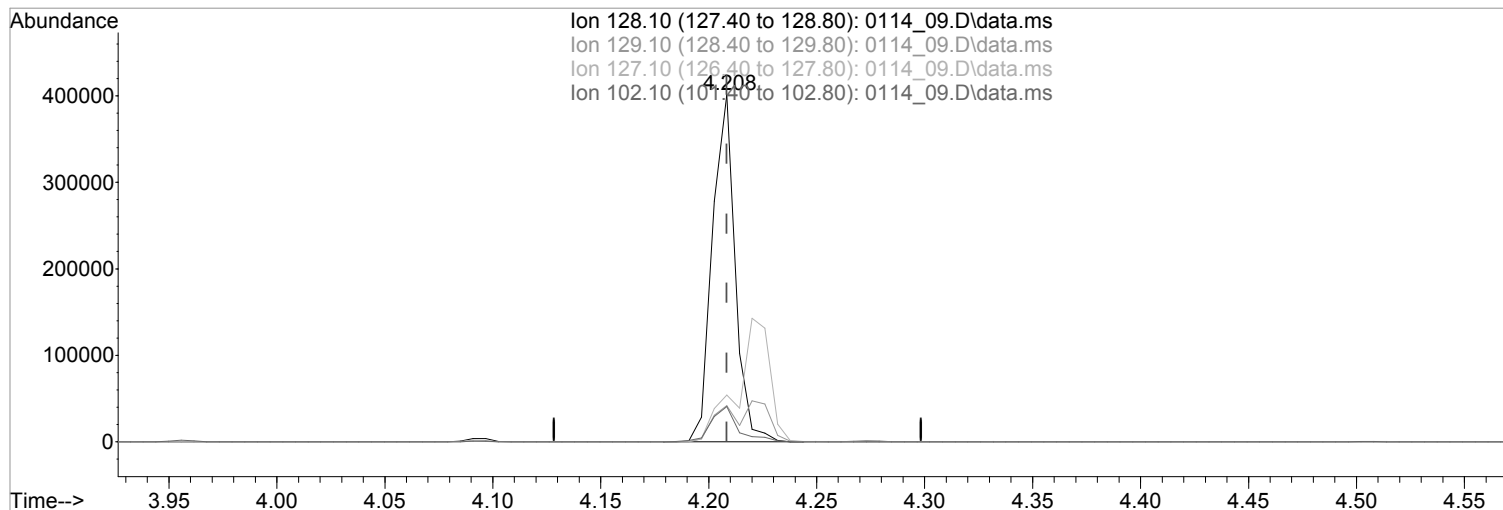
Ion	Exp%	Act%
93.00	100	100
63.10	63.50	63.50
95.00	30.20	30.18
65.00	21.40	21.40



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_09.D  
Acq On : 14 Jan 2022 2:35 pm  
Operator : 917  
Sample : MSTD SVMS 10K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 6 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 18 16:13:44 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Tue Jan 18 16:04:57 2022  
Response via : Initial Calibration



TIC: 0114\_09.D\data.ms

(34) Naphthalene (MT)

4.208min (0.000) 10079.0575901 ppb

Qvalue = 100

response 295060

Ion Exp% Act%

128.10 100 100

129.10 10.50 10.46

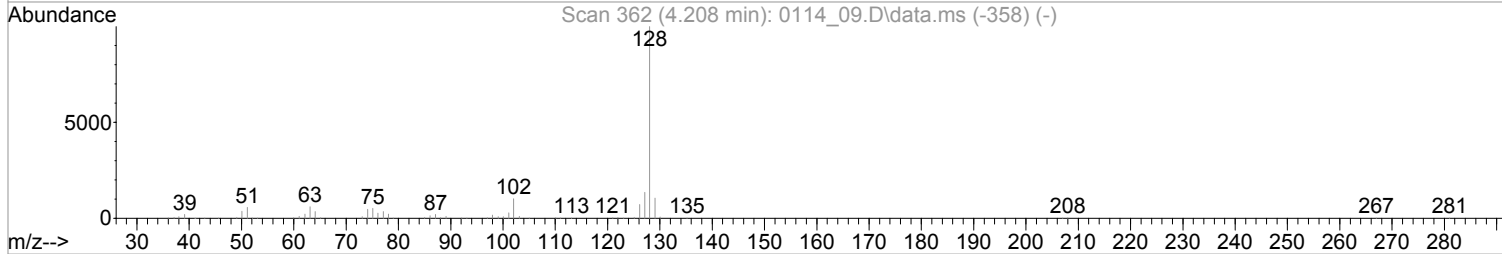
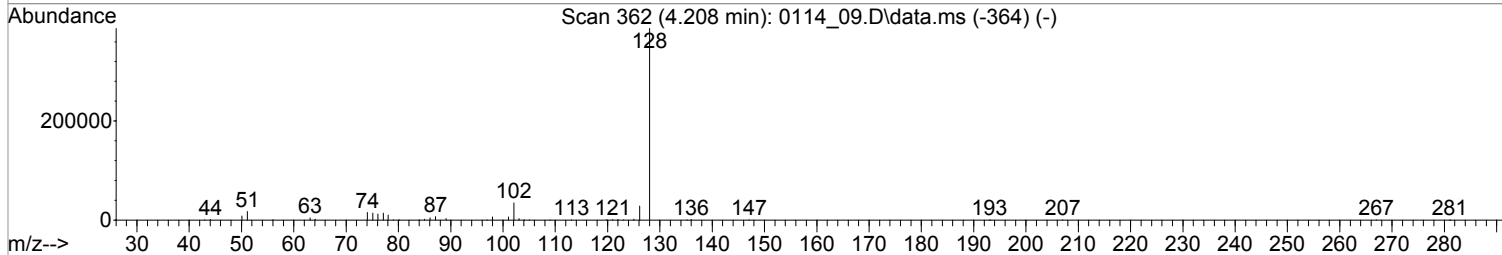
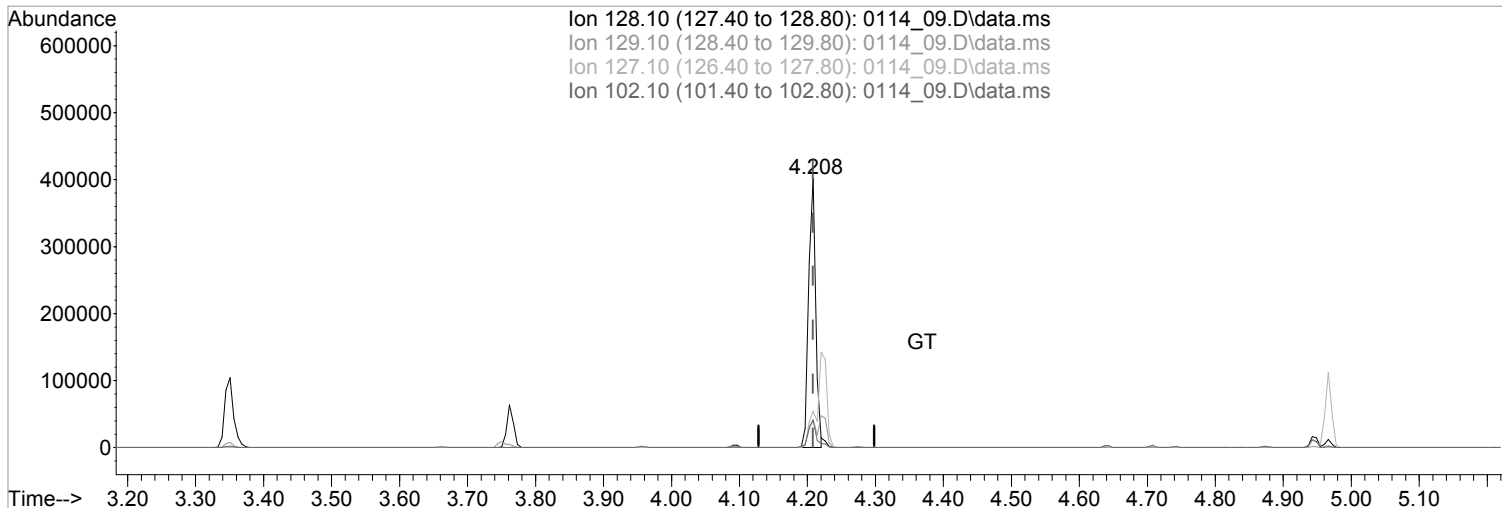
127.10 13.50 13.48

102.10 10.10 10.13

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_09.D  
 Acq On : 14 Jan 2022 2:35 pm  
 Operator : 917  
 Sample : MSTD SVMS 10K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 6 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:13:44 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 16:04:57 2022  
 Response via : Initial Calibration



TIC: 0114\_09.D\data.ms

(34) Naphthalene (MT)  
 4.208min (0.000) 9939.5508078 ppb m

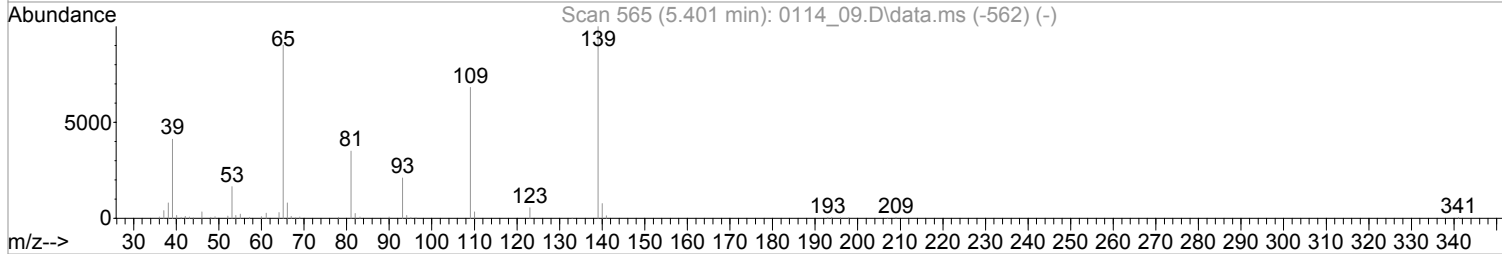
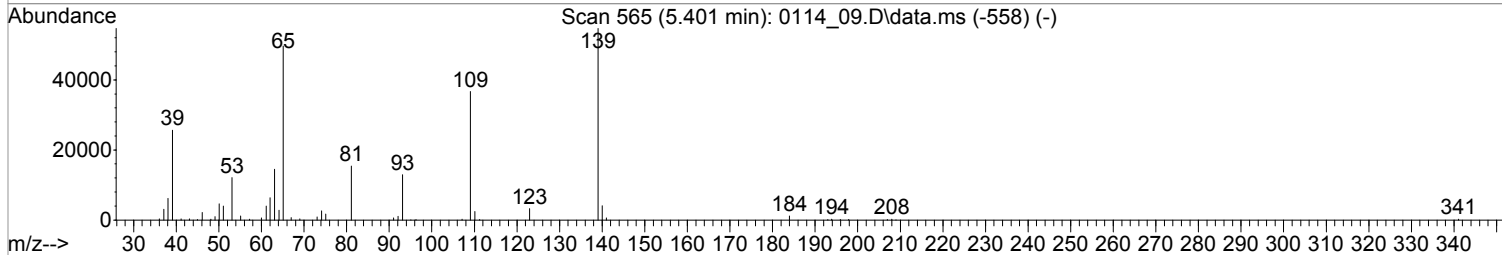
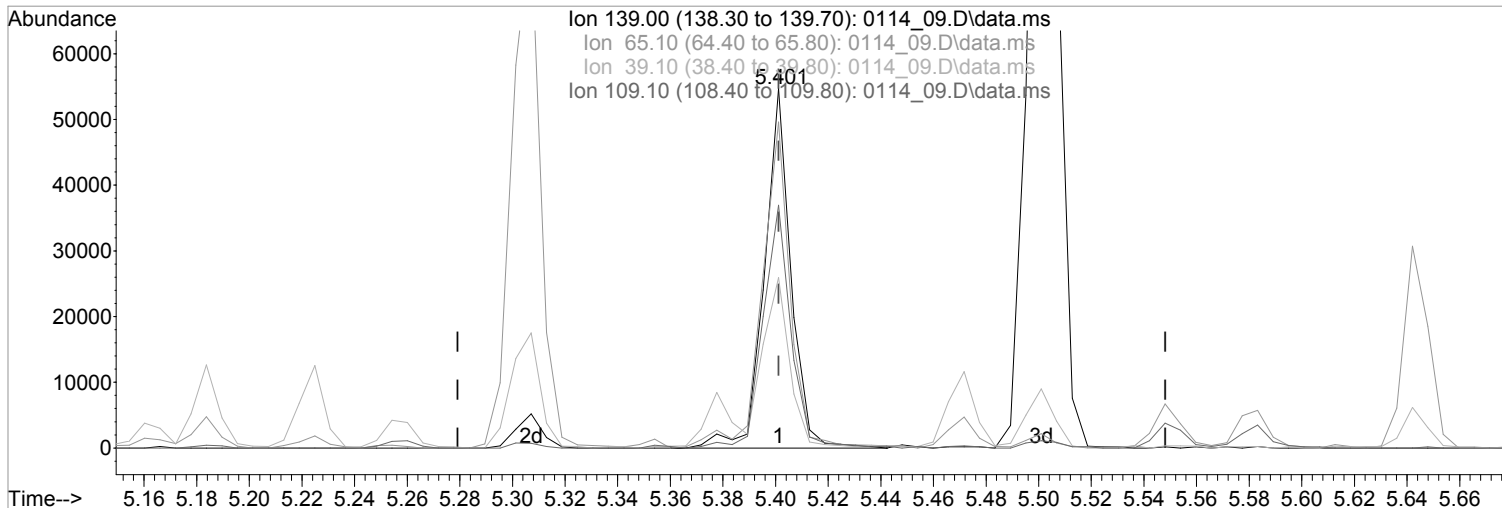
response 290976

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	10.46
127.10	13.50	13.48
102.10	10.10	10.13

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_09.D  
 Acq On : 14 Jan 2022 2:35 pm  
 Operator : 917  
 Sample : MSTD SVMS 10K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 6 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:13:44 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 16:04:57 2022  
 Response via : Initial Calibration



TIC: 0114\_09.D\data.ms

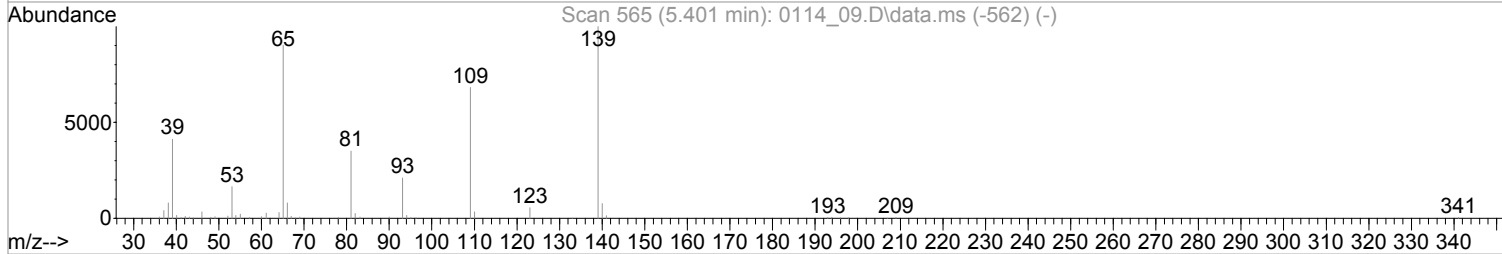
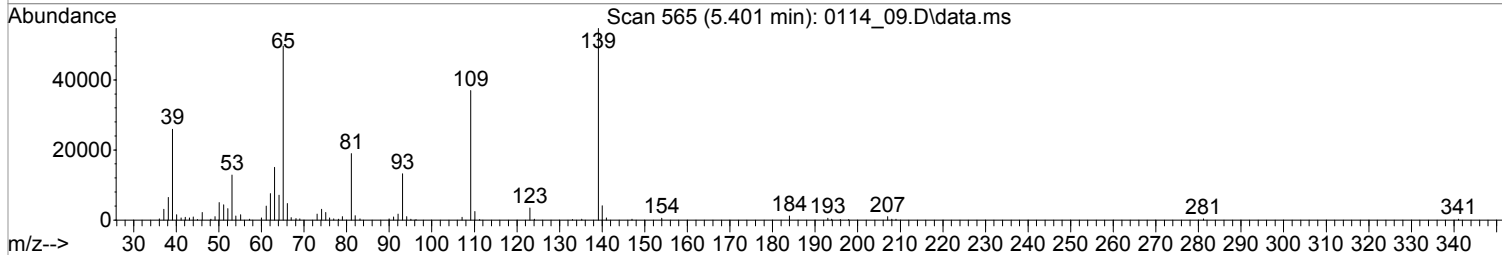
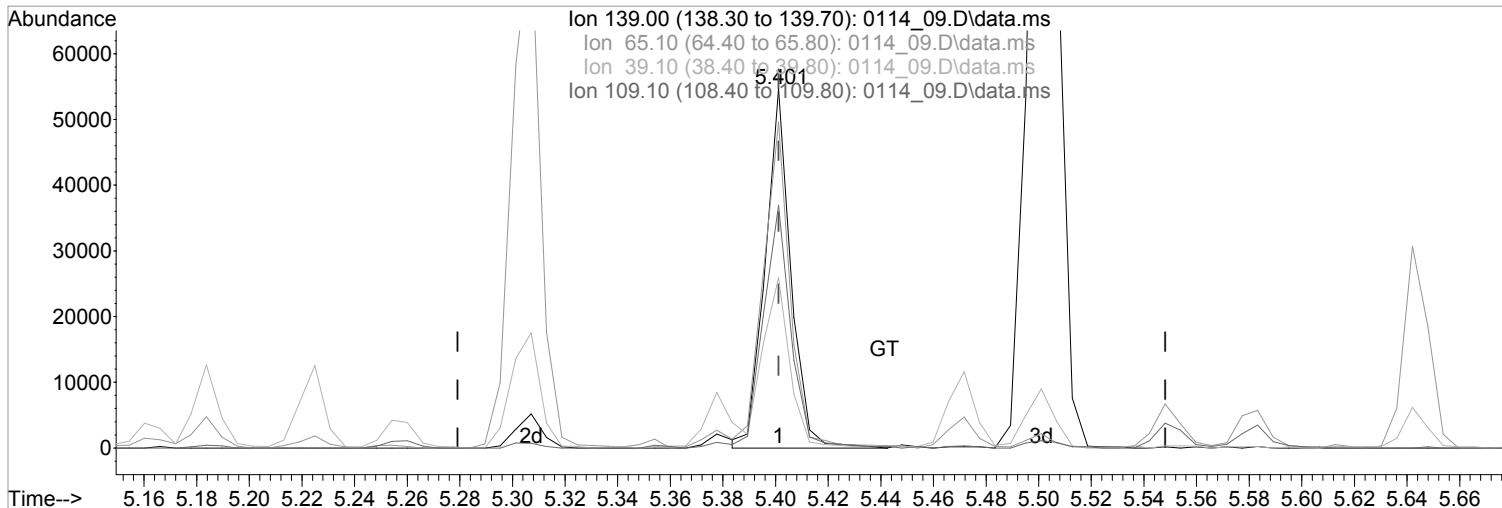
(63) 4-Nitrophenol (MPT)  
 5.401min (0.000) 10518.7637721 ppb  
 Qvalue = 100  
 response 38511

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	90.66
39.10	47.40	46.85
109.10	67.50	66.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_09.D  
 Acq On : 14 Jan 2022 2:35 pm  
 Operator : 917  
 Sample : MSTD SVMS 10K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 6 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 16:13:44 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 16:04:57 2022  
 Response via : Initial Calibration



TIC: 0114\_09.D\data.ms

(63) 4-Nitrophenol (MPT)

5.401min (0.000) 10147.0248536 ppb m

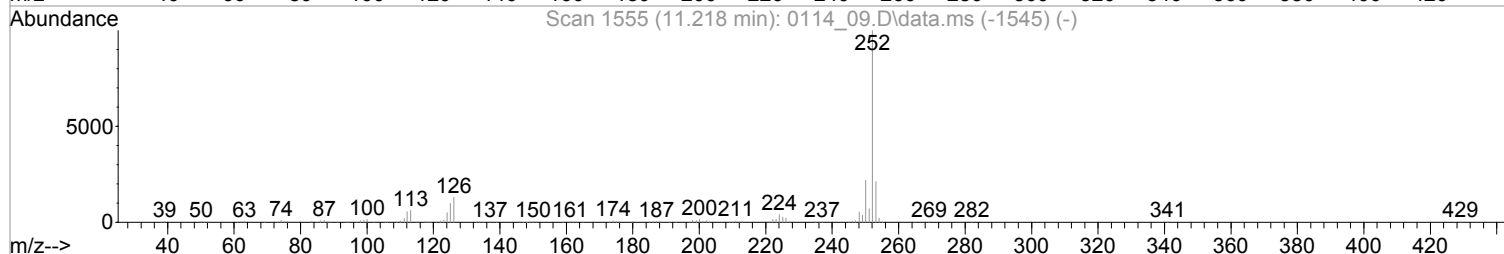
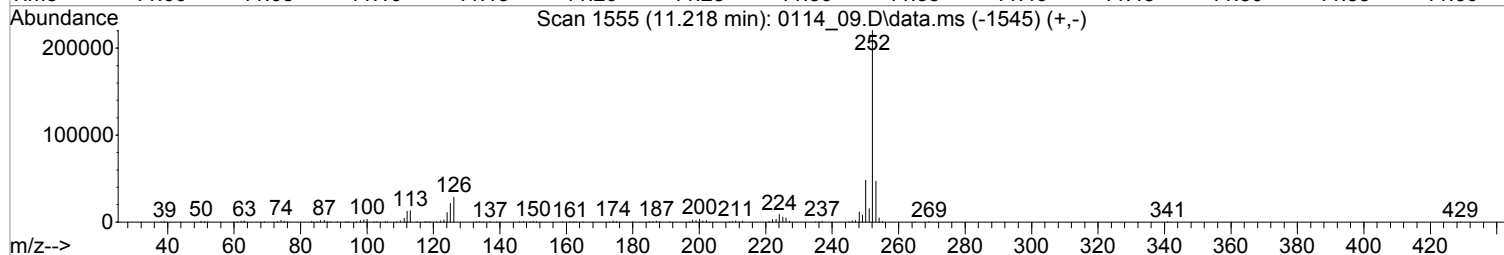
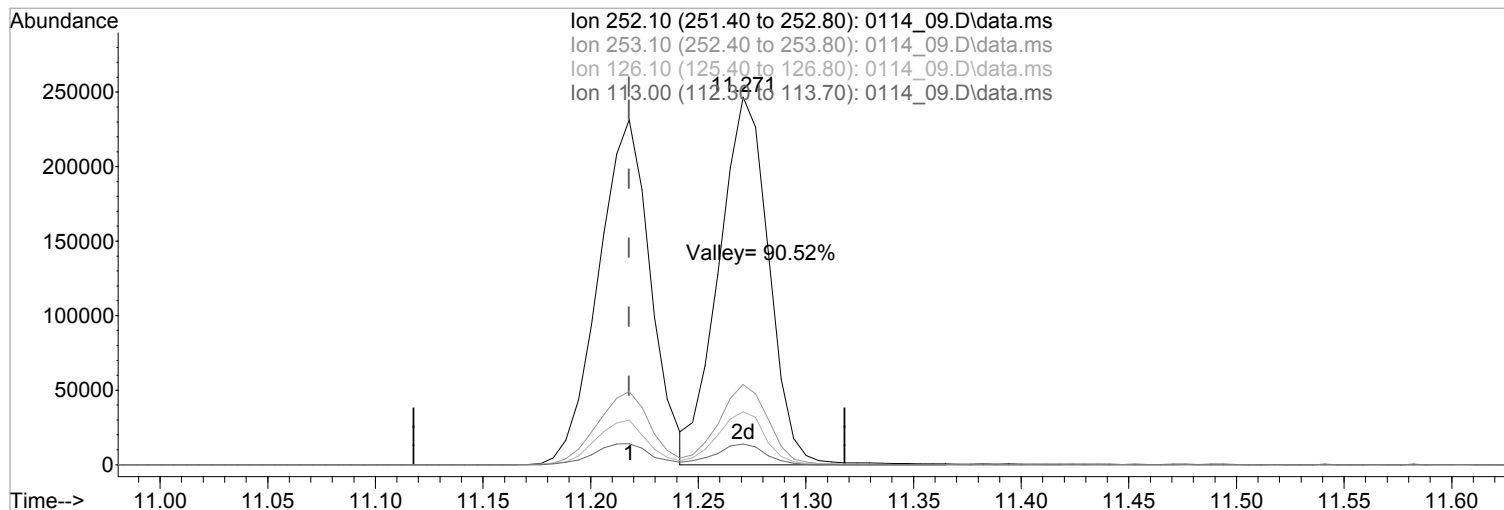
response 37150

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	90.66
39.10	47.40	47.36
109.10	67.50	67.50

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_09.D  
Acq On : 14 Jan 2022 2:35 pm  
Operator : 917  
Sample : MSTD SVMS 10K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 6 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 17 16:33:59 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 16:33:16 2022  
Response via : Initial Calibration



TIC: 0114\_09.D\data.ms

(95) Benzo(b)fluoranthene (MT)  
11.218min (0.000) 10000.0000000 ppb  
Qvalue = 100  
response 389223

Ion	Exp%	Act%
252.10	100	100
253.10	21.30	21.25
126.10	12.90	12.95
113.00	6.00	6.02

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_10.D  
 Acq On : 14 Jan 2022 2:55 pm  
 Operator : 917  
 Sample : STD SVMS 20K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 7 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:17:05 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:11:42 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.462	152	63345	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.191	136	249640	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.354	164	137489	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.471	188	272592	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.291	240	265971	8000.0000000	ppb	0.00	
94) Perylene-d12	11.988	264	272364	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.792	112	185909	20175.8870598	ppb	0.00	
Spiked Amount	666.000		Recovery	= 3029.41%			
7) Phenol-d5	3.227	99	224946	19785.5670184	ppb	0.00	
Spiked Amount	666.000		Recovery	= 2970.81%			
24) Nitrobenzene-d5	3.762	82	225572	21183.0854196	ppb	0.00	
Spiked Amount	333.000		Recovery	= 6361.29%			
50) 2-Fluorobiphenyl	4.872	172	450089	18727.9394088	ppb	0.00	
Spiked Amount	333.000		Recovery	= 5624.01%			
73) 2,4,6-Tribromophenol	5.930	330	75423	22223.2332311	ppb	0.00	
Spiked Amount	666.000		Recovery	= 3336.82%			
87) p-Terphenyl-d14	7.881	244	638718	19471.3151590	ppb	0.00	
Spiked Amount	333.000		Recovery	= 5847.24%			
<b>Target Compounds</b>							
							Qvalue
2) Pyridine	2.240	79	213031	23573.8916969	ppb		96
3) N-Nitrosodimethylamine	2.228	42	98901	18580.7197271	ppb		93
5) Aniline	3.286	66	116668	20258.6913074	ppb		92
6) bis(2-Chloroethyl)ether	3.304	93	196962m	19151.6668916	ppb		
8) Phenol	3.239	94	237216	19885.0961286	ppb		92
10) 2-Chlorophenol	3.351	128	199187	19679.5759215	ppb		99
11) n-Decane	3.351	41	106154	18312.5502019	ppb		96
12) 1,3-Dichlorobenzene	3.433	146	235137	20014.0633605	ppb		99
13) 1,4-Dichlorobenzene	3.474	146	232915	19246.4060886	ppb		97
14) Benzyl Alcohol	3.521	79	177619	20102.6775061	ppb		99
15) 1,2-Dichlorobenzene	3.556	146	224048	19483.5615031	ppb		100
16) bis(2-Chloroisopropyl)...	3.592	121	69054	19734.9849588	ppb		98
17) 2,2-oxybis(1-chloropro...	3.592	121	69054	19734.9849588	ppb		98
18) 2-Methylphenol	3.568	108	177341	19384.8041540	ppb		96
19) Hexachloroethane	3.750	117	88165	20277.2523689	ppb		99
20) N-Nitrosodi-n-propylamine	3.668	70	141416	19876.8877011	ppb		92
21) 3&4-Methyl phenol	3.650	107	209605	20412.1120932	ppb		96
25) Nitrobenzene	3.774	77	212320	19460.6733000	ppb		100
26) Isophorone	3.909	82	386980	20319.2696636	ppb		97
27) 2-Nitrophenol	3.956	139	104669	20517.2240882	ppb		98
28) 2,4-Dimethylphenol	3.956	107	207039	19833.9452163	ppb		96
29) bis(2-Chlorethoxy)methane	4.020	93	217122	19096.4572222	ppb		94
30) 2,4-Dichlorophenol	4.097	162	171346	20578.9140527	ppb		88
32) 1,2,4-Trichlorobenzene	4.156	180	199141	19811.8882703	ppb		99
34) Naphthalene	4.208	128	602593m	18989.3220406	ppb		
35) 4-Chloroaniline	4.220	65	72478	19561.7364213	ppb		93
36) Hexachloro-1,3-butadiene	4.273	225	125313	19815.5919519	ppb		96
40) 4-Chloro-3-methylphenol	4.508	107	176492	21330.5849203	ppb		99
41) 2-Methylnaphthalene	4.643	142	402857	19112.8969671	ppb		99
42) 1-Methylnaphthalene	4.708	142	385866	19635.0160849	ppb		98
47) Hexachlorocyclopentadiene	4.743	237	146332	19354.4941310	ppb		97
48) 2,4,6-Trichlorophenol	4.814	196	128501	20699.7403994	ppb		97

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_10.D  
 Acq On : 14 Jan 2022 2:55 pm  
 Operator : 917  
 Sample : STD SVMS 20K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 7 Sample Multiplier: 1  
 InstName : BNAMS11

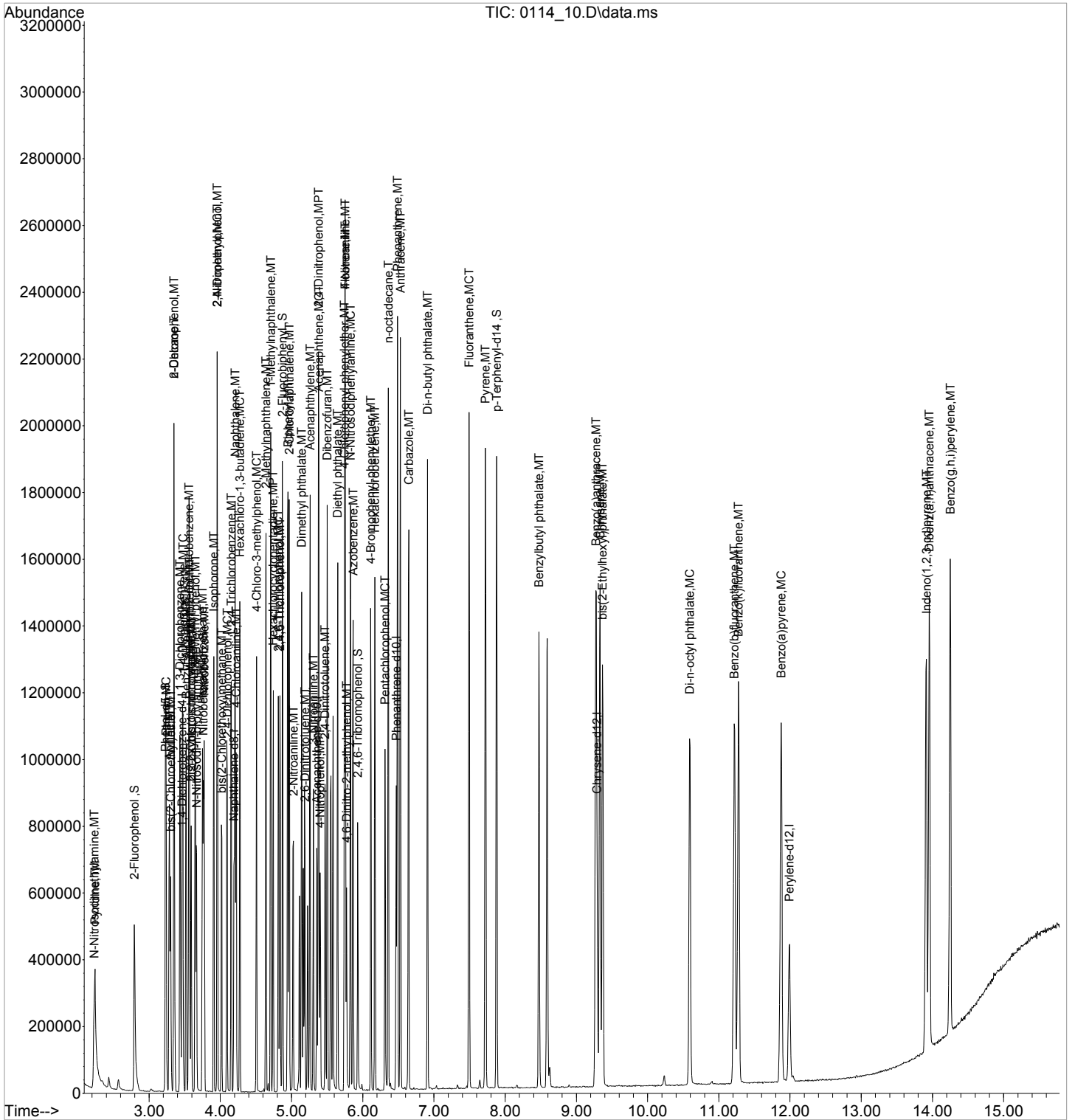
Quant Time: Jan 17 17:17:05 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:11:42 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
49) 2,4,5-Trichlorophenol	4.837	196	138612	20438.2041313	ppb		96
51) Biphenyl	4.949	154	503403	18728.5810413	ppb		99
52) 2-Chloronaphthalene	4.966	162	388953	18755.0330400	ppb		99
53) 2-Nitroaniline	5.025	138	122142	22823.7740856	ppb		98
54) Acenaphthylene	5.260	152	617721	19555.8031393	ppb		99
55) Dimethyl phthalate	5.143	163	433588	19397.8884978	ppb		97
56) 2,6-Dinitrotoluene	5.190	165	102849	22784.1966072	ppb		88
57) 3-Nitroaniline	5.307	138	104182	22377.9894732	ppb		91
58) Acenaphthene	5.384	153	393433	18627.0155592	ppb		98
59) 2,4-Dinitrophenol	5.378	184	51871	29652.2761802	ppb	#	60
60) Dibenzofuran	5.501	168	547817	18721.9935119	ppb		99
61) 2,4-Dinitrotoluene	5.472	165	136122	23860.7363868	ppb		97
63) 4-Nitrophenol	5.401	139	82557m	22513.5534359	ppb		
64) Fluorene	5.754	166	437155	18406.5689897	ppb		98
65) 4-Chlorophenyl-phenyle...	5.742	204	229116	18011.0853193	ppb		97
66) Diethyl phthalate	5.648	149	444636	19681.2409003	ppb		96
67) 4-Nitroaniline	5.754	138	93820	20280.6473252	ppb		99
68) Azobenzene	5.865	77	436580	19661.5219744	ppb		98
71) 4,6-Dinitro-2-methylph...	5.771	198	75033	30738.0249192	ppb		91
72) N-Nitrosodiphenylamine	5.830	169	381680	19178.4112914	ppb		97
74) 4-Bromophenyl-phenylether	6.112	248	145299	18978.4768581	ppb		95
75) Hexachlorobenzene	6.171	284	161708	18591.6154548	ppb		94
76) n-octadecane	6.359	55	63072	17974.8565173	ppb		98
77) Pentachlorophenol	6.312	266	92882	24061.0234825	ppb		98
78) Phenanthrene	6.488	178	693911	19180.6546702	ppb		99
79) Anthracene	6.529	178	701421	19255.2366767	ppb		100
80) Carbazole	6.647	167	612364	19230.6031152	ppb		99
81) Di-n-butyl phthalate	6.911	149	765698	21228.9471607	ppb		99
83) Fluoranthene	7.493	202	788285	20122.7549119	ppb		99
86) Pyrene	7.722	202	809346	19598.2948728	ppb		98
88) Benzylbutyl phthalate	8.474	149	326487	22387.6400196	ppb		98
90) Benzo(a)anthracene	9.273	228	772767	19716.6468937	ppb		99
91) Chrysene	9.332	228	738639	19126.7141423	ppb		98
92) bis(2-Ethylhexyl)phtha...	9.367	149	481934	22504.6145492	ppb		100
93) Di-n-octyl phthalate	10.589	149	795536	23460.8789189	ppb		98
95) Benzo(b)fluoranthene	11.218	252	792498	20194.3229093	ppb		99
96) Benzo(k)fluoranthene	11.277	252	800748	20148.8450569	ppb		99
97) Benzo(a)pyrene	11.876	252	770117	21378.1244846	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.915	276	699356m	20097.0759671	ppb		
99) Dibenz(a,h)anthracene	13.956	278	769958m	20090.2648295	ppb		
100) Benzo(g,h,i)perylene	14.250	276	782633	19573.2907556	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_10.D  
Acq On : 14 Jan 2022 2:55 pm  
Operator : 917  
Sample : STD SVMS 20K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 7 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 17 17:17:05 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 17:11:42 2022  
Response via : Initial Calibration

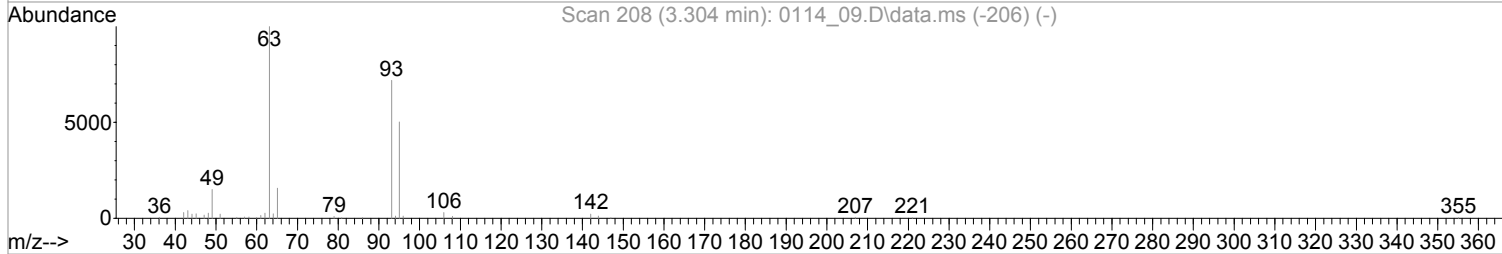
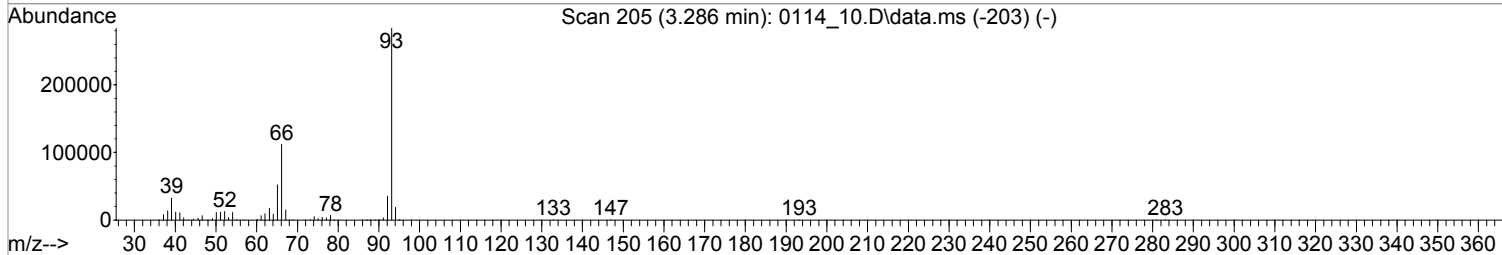
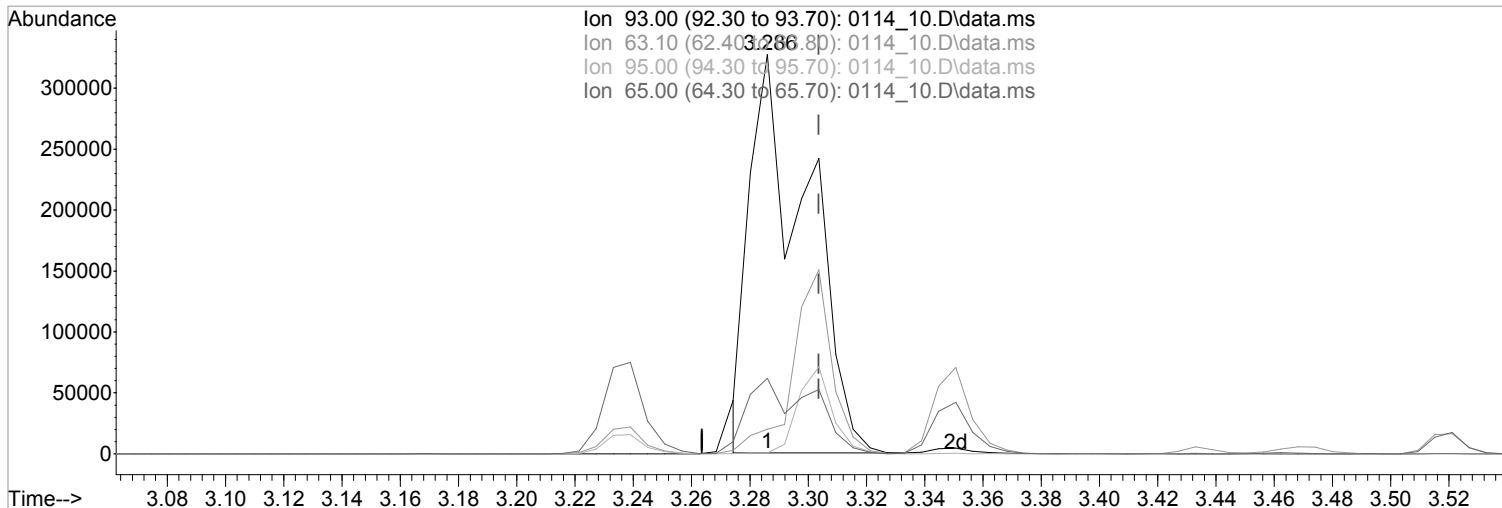




Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_10.D  
 Acq On : 14 Jan 2022 2:55 pm  
 Operator : 917  
 Sample : STD SVMS 20K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 7 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:12:15 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:11:42 2022  
 Response via : Initial Calibration



TIC: 0114\_10.D\data.ms

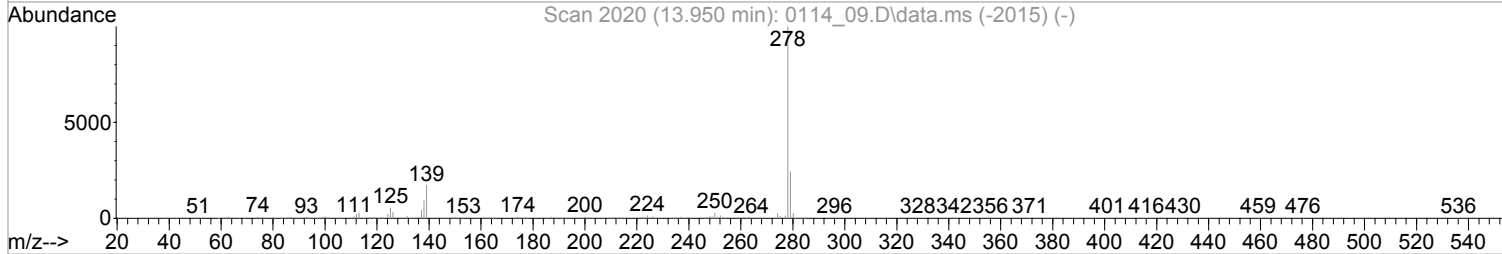
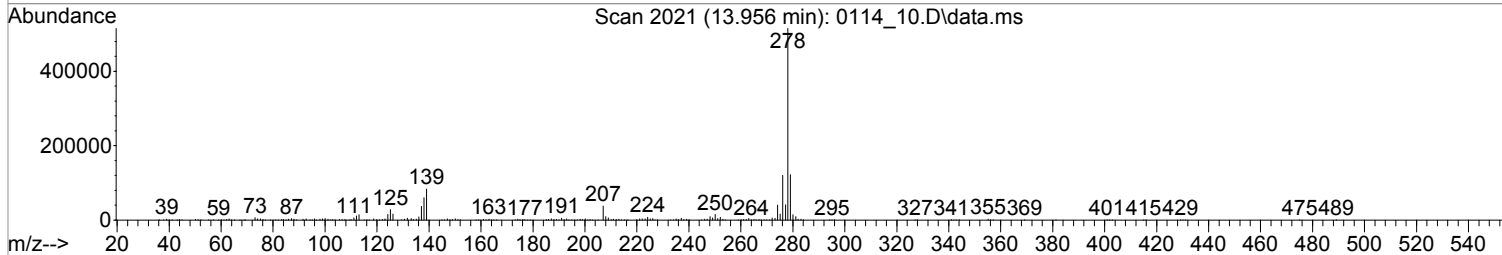
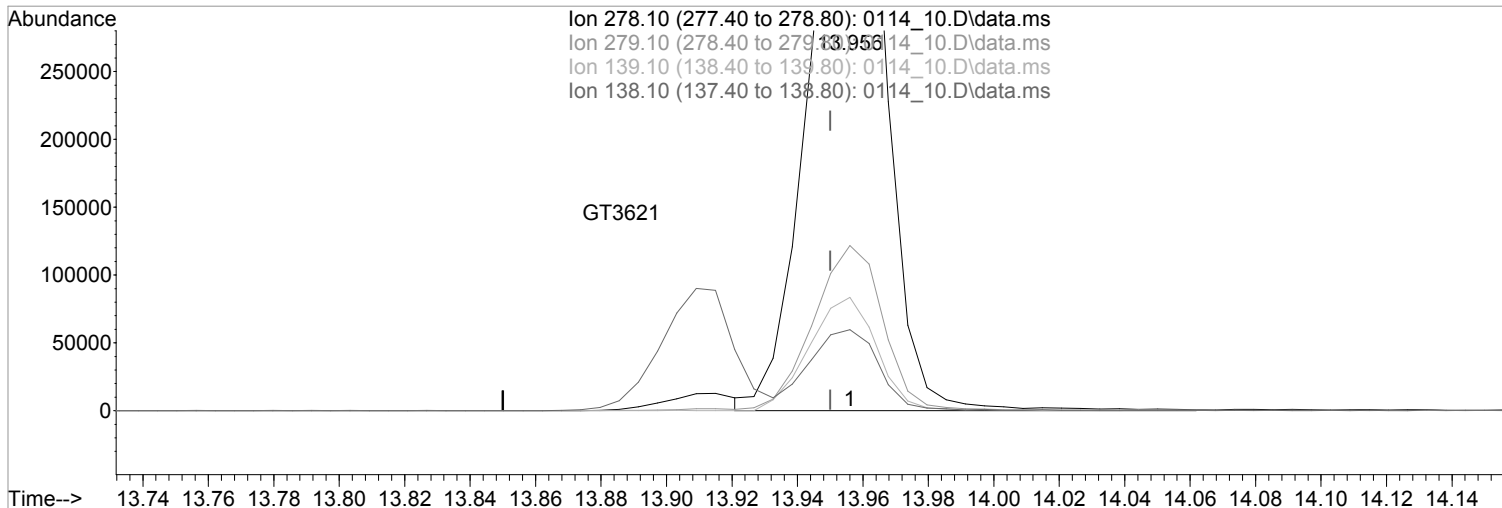
(6) bis(2-Chloroethyl)ether (MT)  
 3.286min (-0.018) 43520.6903819 ppb  
 Qvalue = 44  
 response 447581

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	5.92#
95.00	30.20	0.27#
65.00	21.40	18.79

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_10.D  
 Acq On : 14 Jan 2022 2:55 pm  
 Operator : 917  
 Sample : STD SVMS 20K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 7 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:12:15 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:11:42 2022  
 Response via : Initial Calibration



TIC: 0114\_10.D\data.ms

(99) Dibenz(a,h)anthracene (MT)  
 13.956min (+0.006) 20090.2648295 ppb m

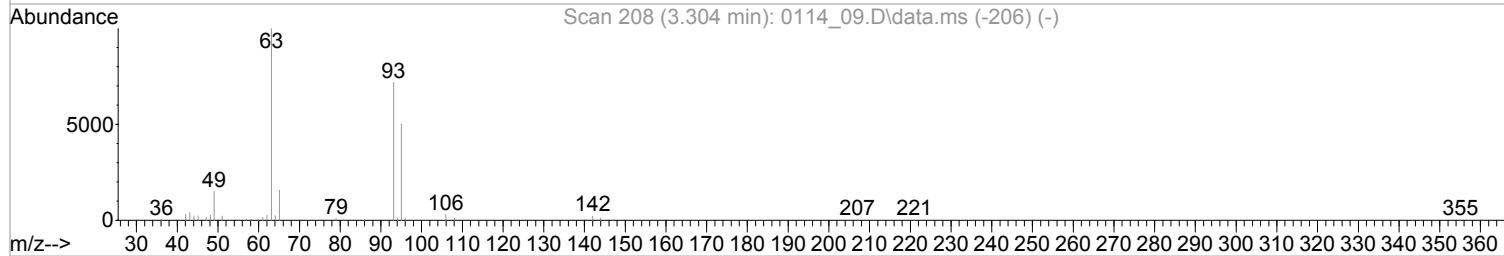
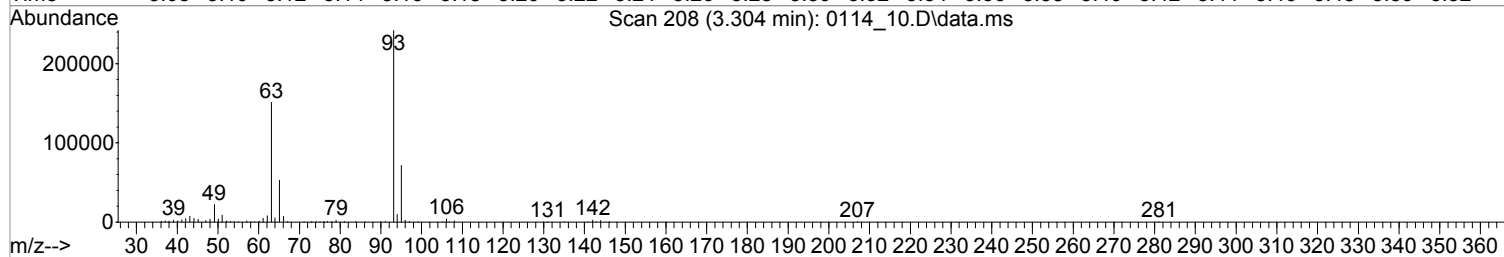
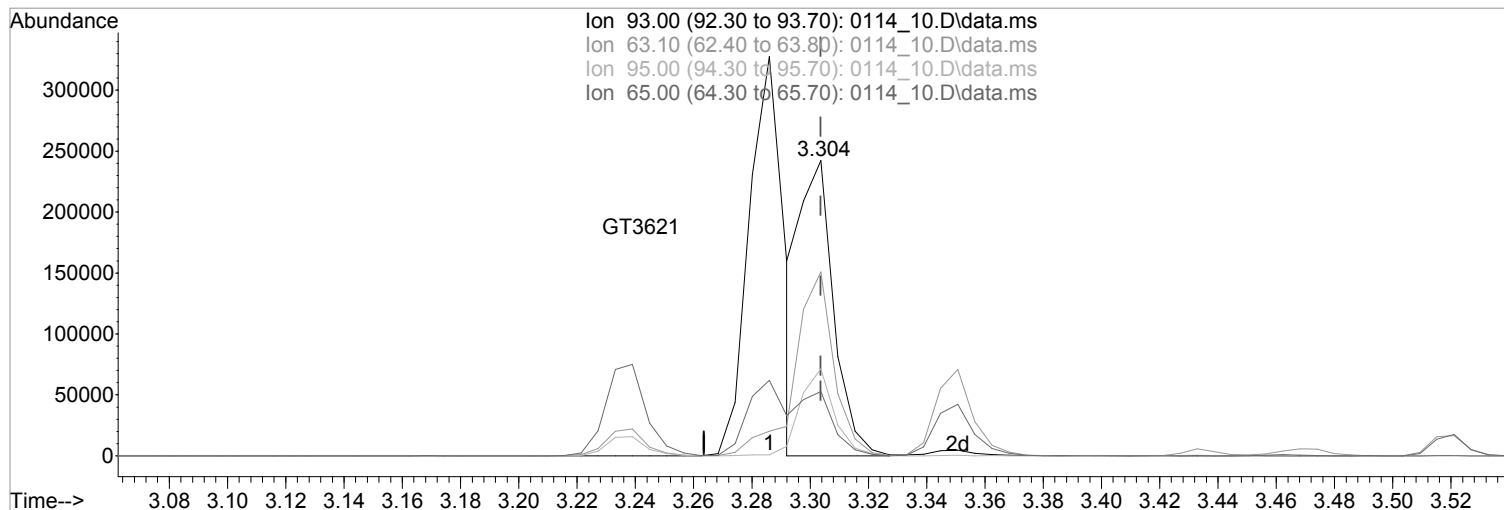
response 769958

Ion	Exp%	Act%
278.10	100	100
279.10	24.00	23.63
139.10	16.90	16.18
138.10	12.90	11.58

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_10.D  
 Acq On : 14 Jan 2022 2:55 pm  
 Operator : 917  
 Sample : STD SVMS 20K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 7 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:12:15 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:11:42 2022  
 Response via : Initial Calibration



TIC: 0114\_10.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.304min (+0.000) 19151.6668916 ppb m

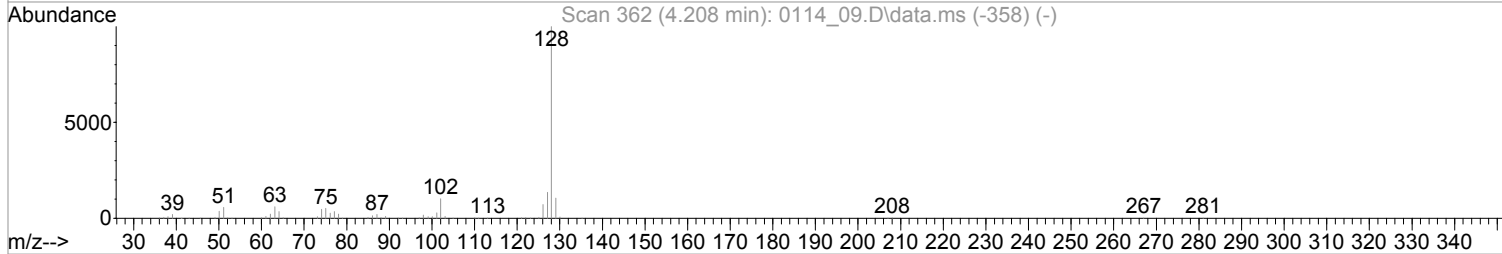
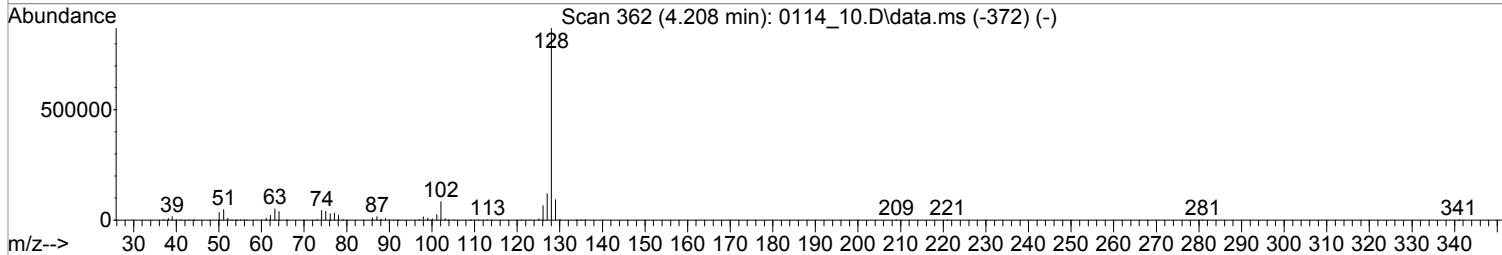
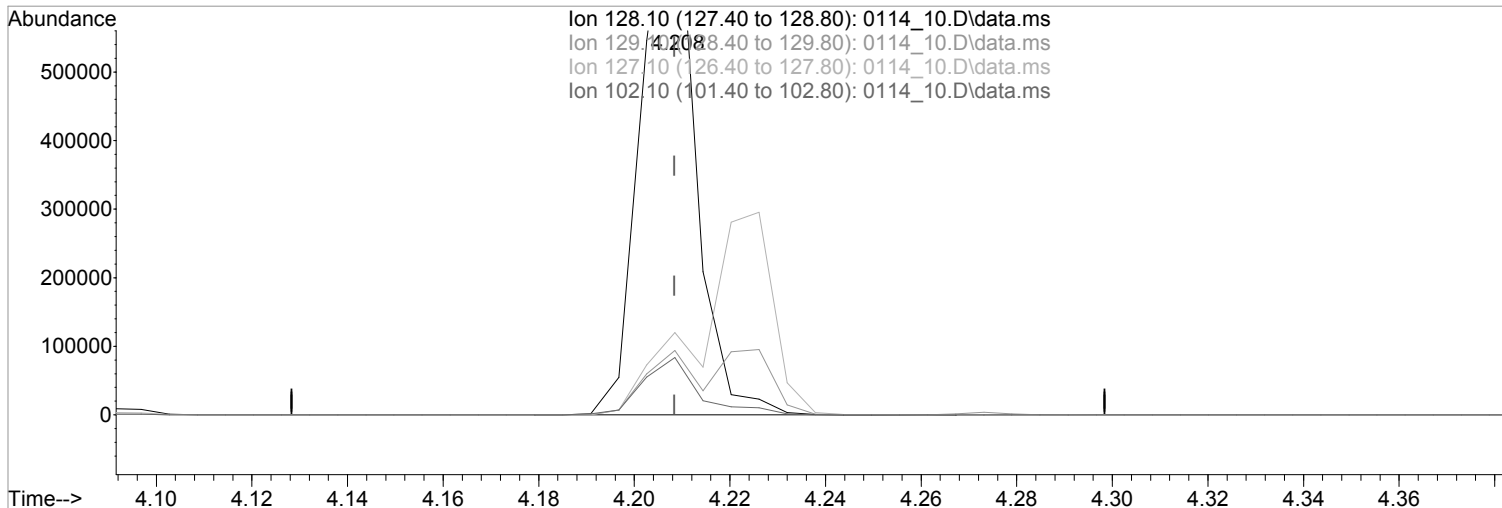
response 196962

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	62.35
95.00	30.20	29.52
65.00	21.40	21.82

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_10.D  
 Acq On : 14 Jan 2022 2:55 pm  
 Operator : 917  
 Sample : STD SVMS 20K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 7 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:12:15 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:11:42 2022  
 Response via : Initial Calibration



TIC: 0114\_10.D\data.ms

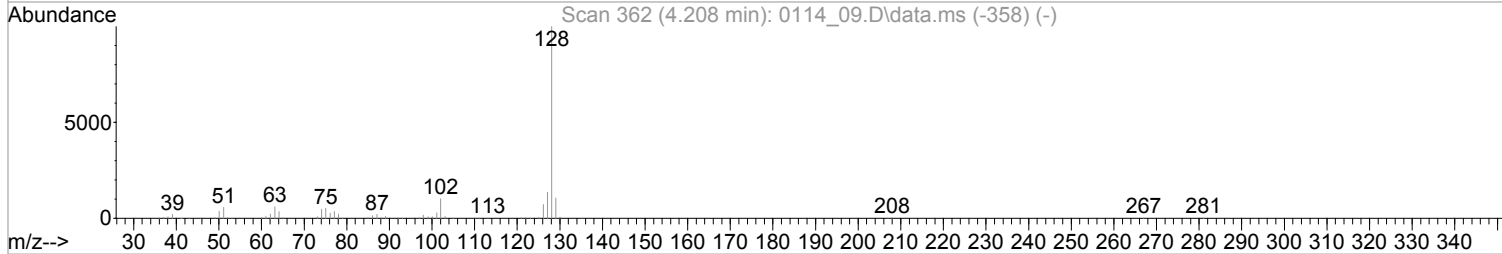
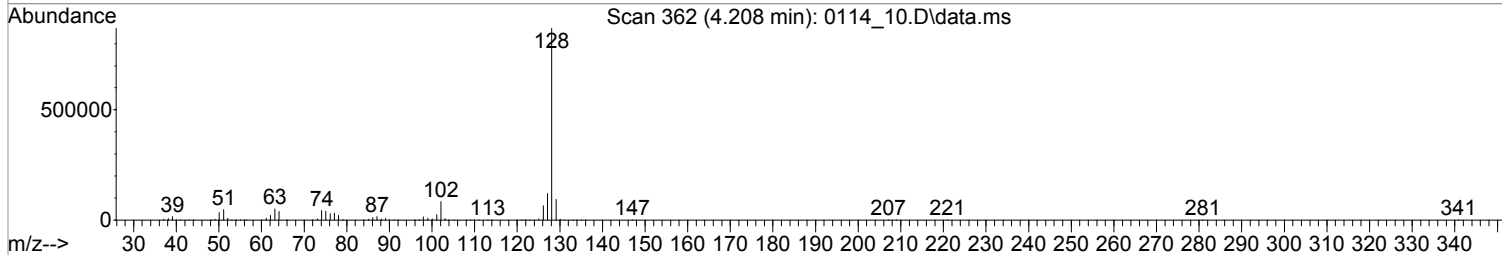
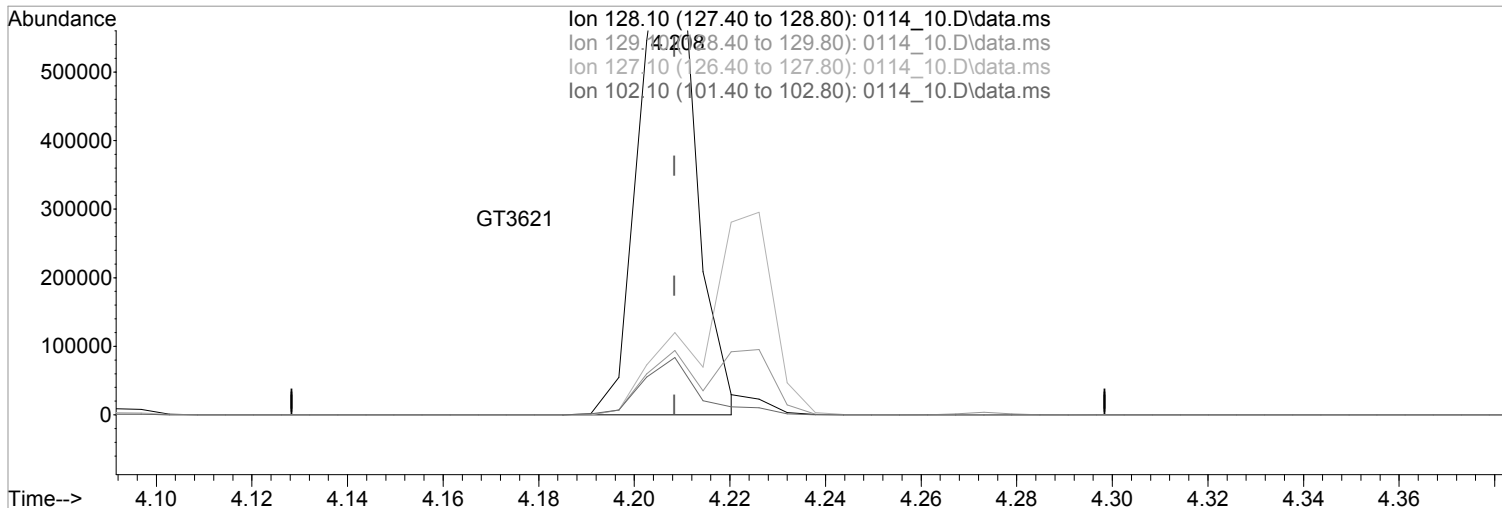
(34) Naphthalene (MT)  
 4.208min (+0.000) 19293.5139673 ppb  
 Qvalue = 99  
 response 612246

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	10.80
127.10	13.50	13.78
102.10	10.10	9.60

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_10.D  
Acq On : 14 Jan 2022 2:55 pm  
Operator : 917  
Sample : STD SVMS 20K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 7 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 17 17:12:15 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 17:11:42 2022  
Response via : Initial Calibration



TIC: 0114\_10.D\data.ms

(34) Naphthalene (MT)  
4.208min (+0.000) 18989.3220406 ppb m

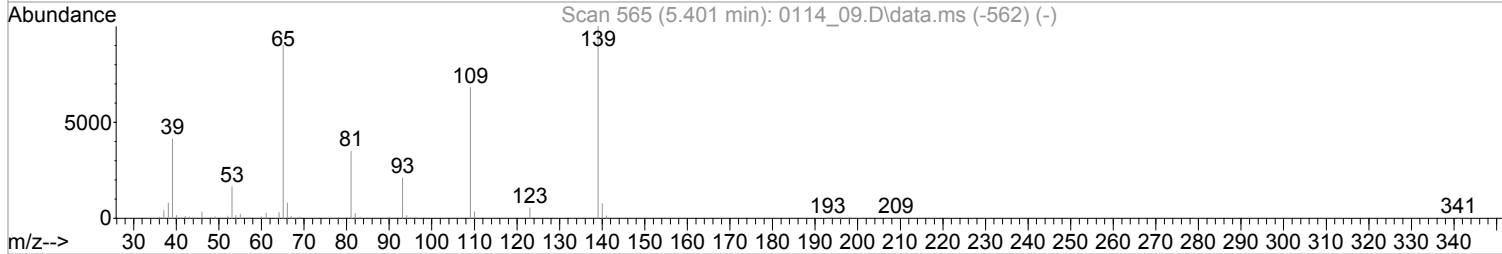
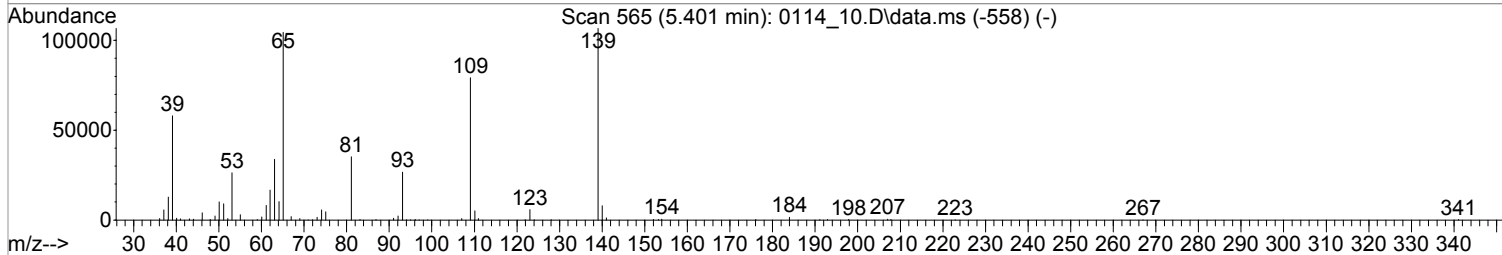
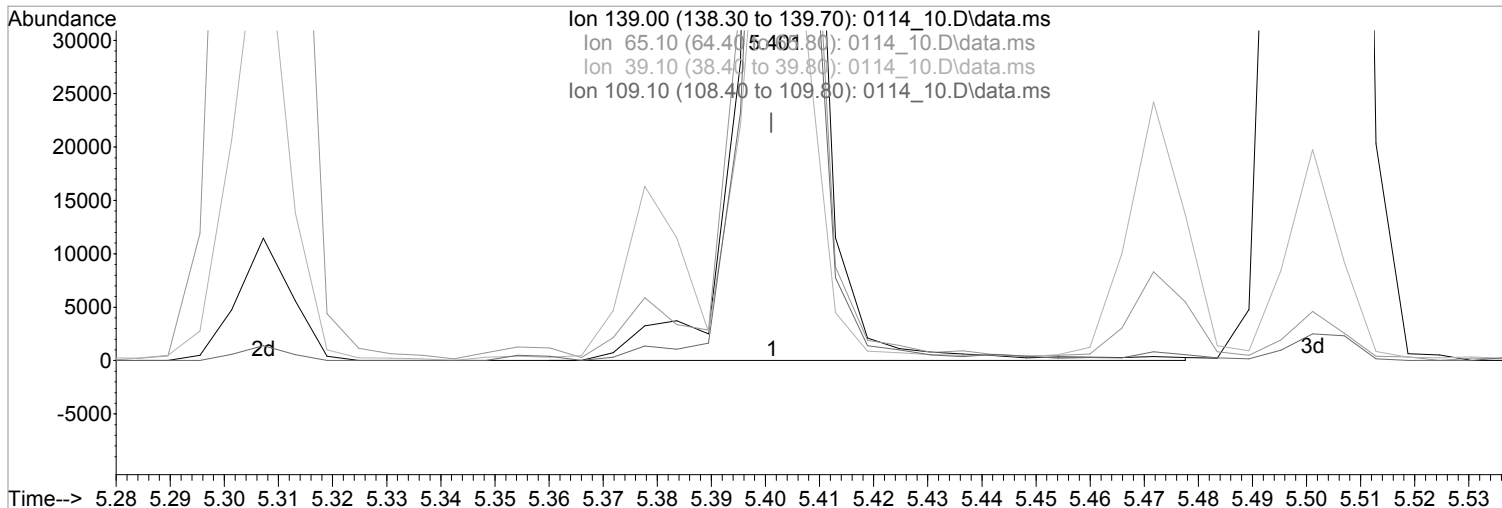
response 602593

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	10.80
127.10	13.50	13.78
102.10	10.10	9.60

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_10.D  
 Acq On : 14 Jan 2022 2:55 pm  
 Operator : 917  
 Sample : STD SVMS 20K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 7 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:12:15 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:11:42 2022  
 Response via : Initial Calibration



TIC: 0114\_10.D\data.ms

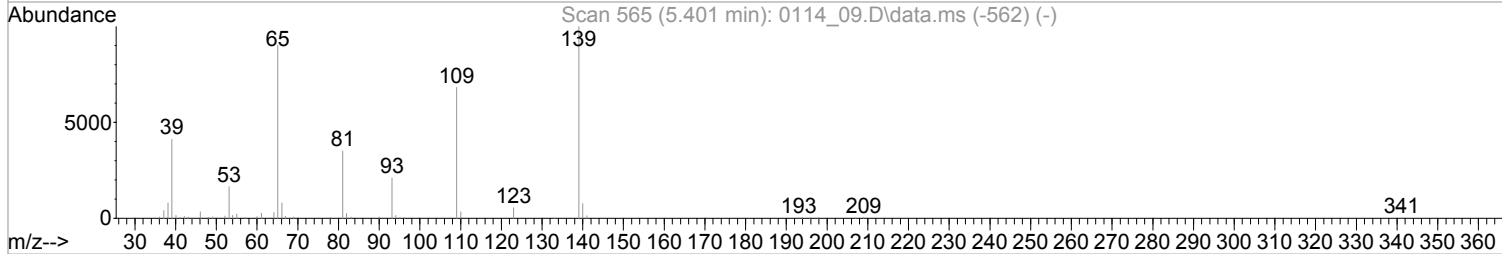
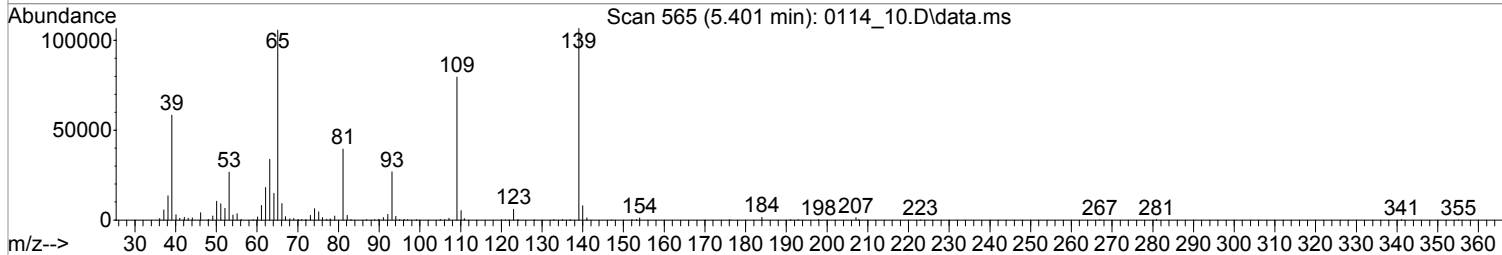
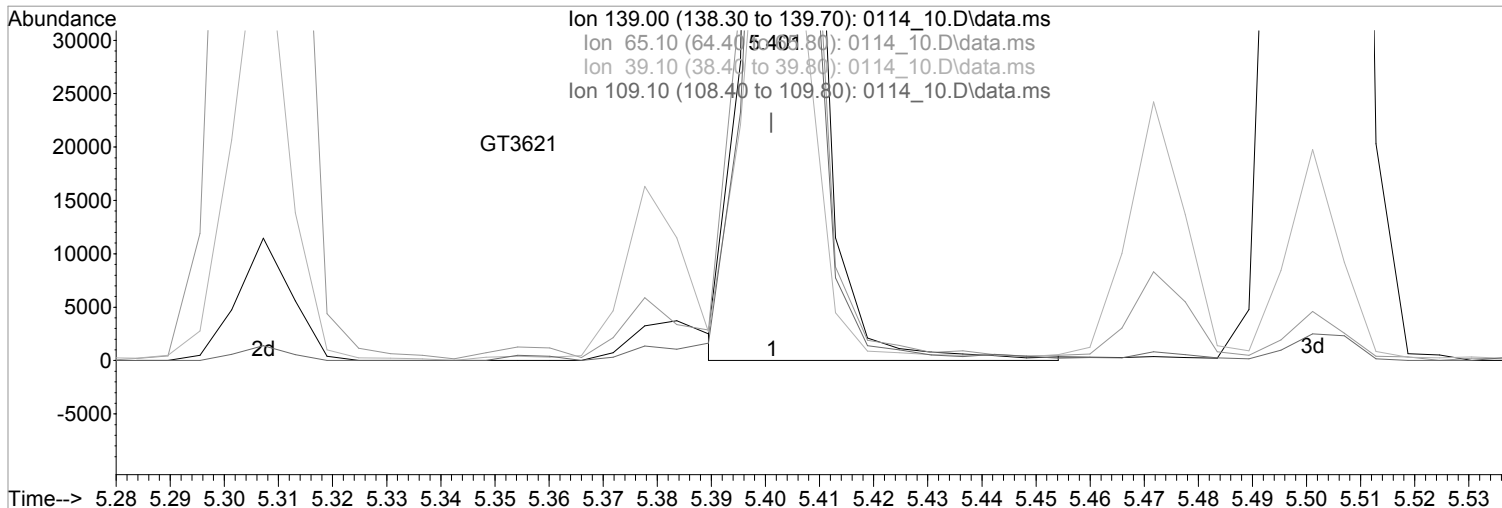
(63) 4-Nitrophenol (MPT)  
 5.401min (+0.000) 23611.7289956 ppb  
 Qvalue = 92  
 response 86584

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	97.97
39.10	47.40	54.37
109.10	67.50	74.15

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_10.D  
 Acq On : 14 Jan 2022 2:55 pm  
 Operator : 917  
 Sample : STD SVMS 20K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 7 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:12:15 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:11:42 2022  
 Response via : Initial Calibration



TIC: 0114\_10.D\data.ms

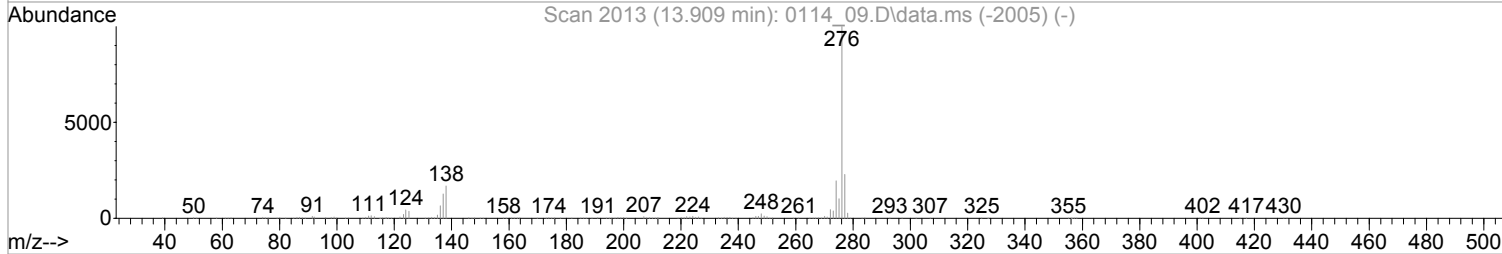
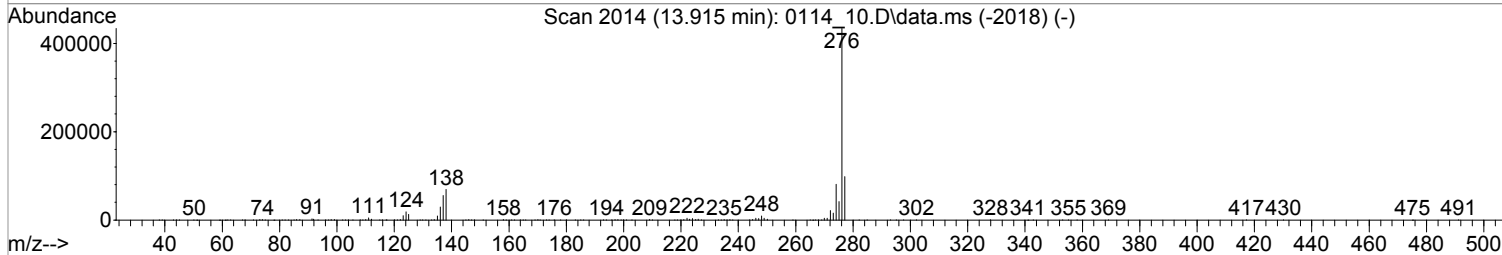
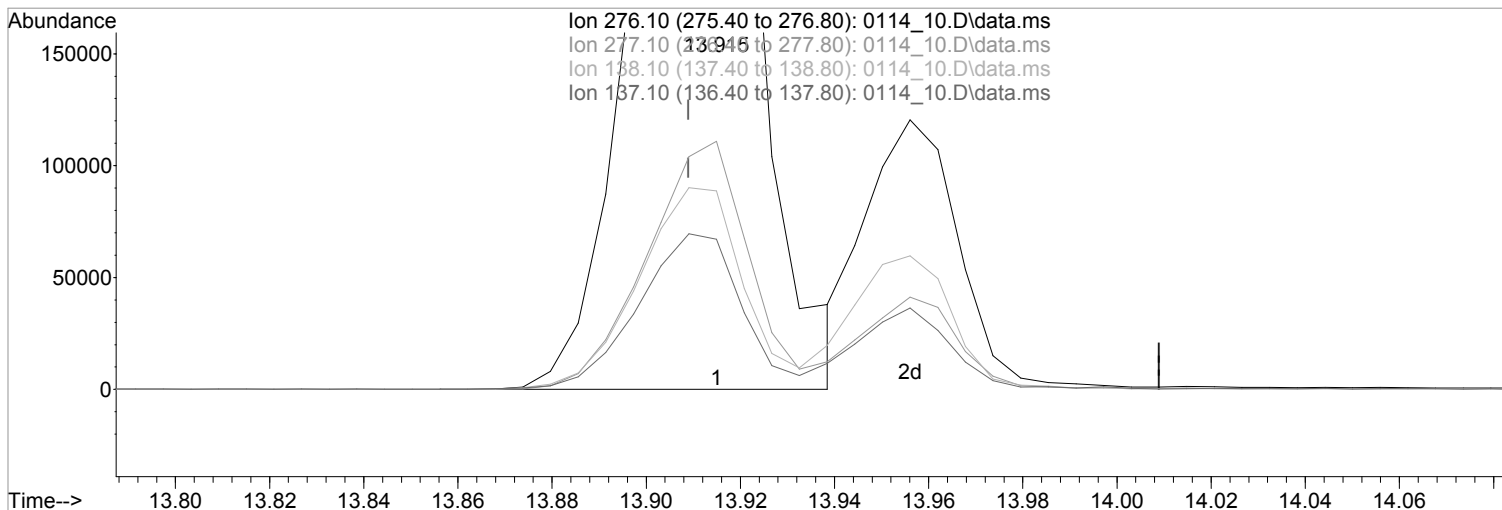
(63) 4-Nitrophenol (MPT)  
 5.401min (+0.000) 22513.5534359 ppb m  
 response 82557  

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	99.09
39.10	47.40	54.66
109.10	67.50	74.53

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_10.D  
 Acq On : 14 Jan 2022 2:55 pm  
 Operator : 917  
 Sample : STD SVMS 20K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 7 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:12:15 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:11:42 2022  
 Response via : Initial Calibration



TIC: 0114\_10.D\data.ms

(98) Indeno(1,2,3-cd)pyrene (MT)  
 13.915min (+0.006) 20485.8239634 ppb  
 Qvalue = 97  
 response 712884

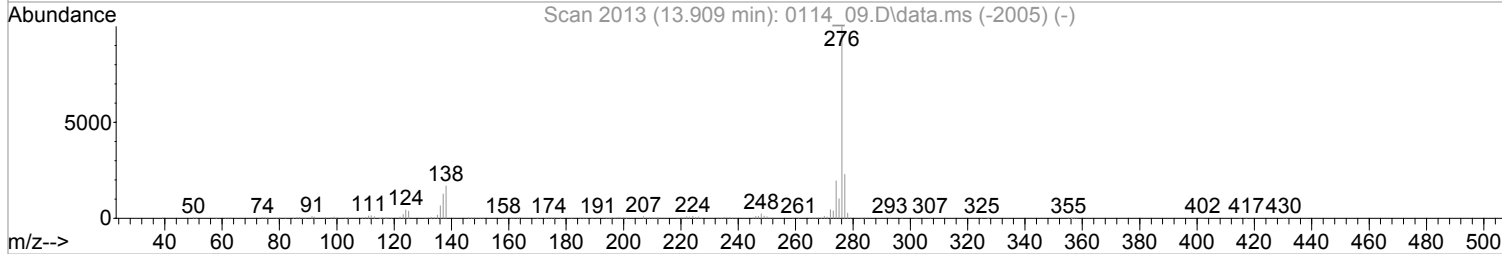
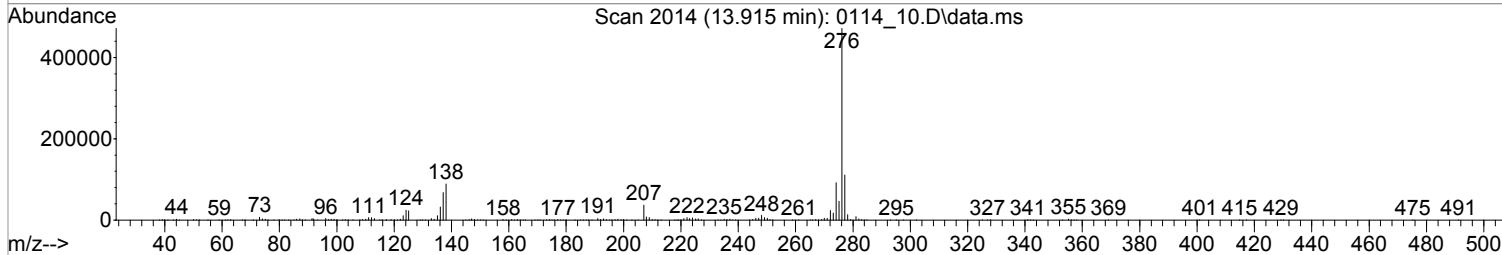
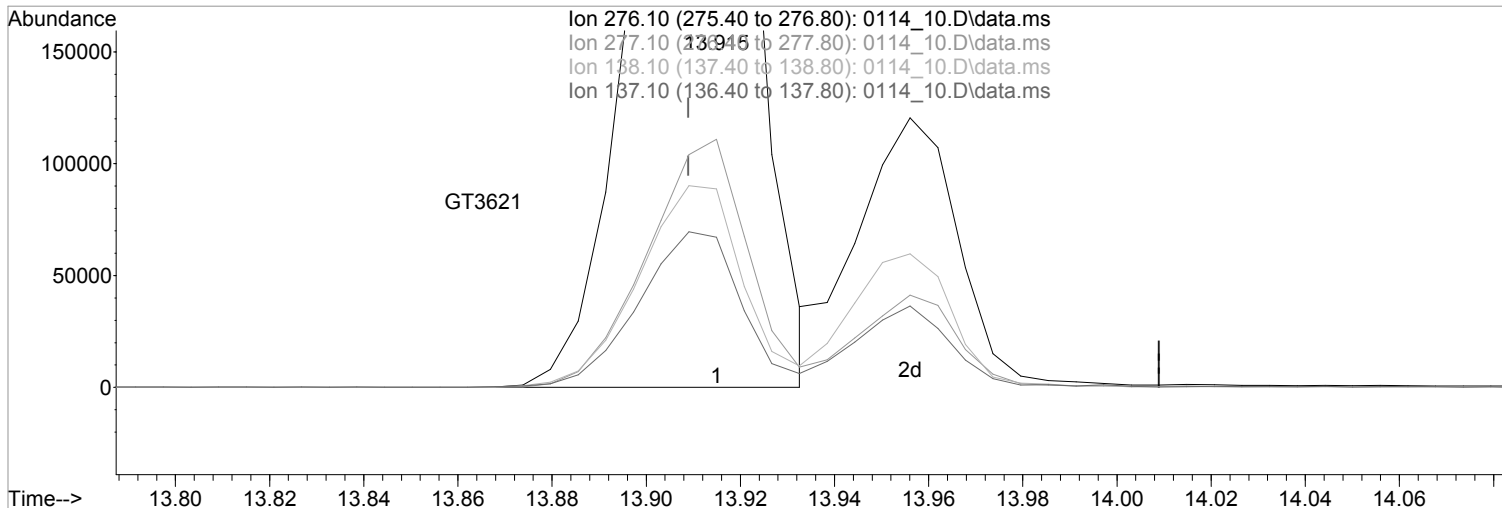
Ion	Exp%	Act%
276.10	100	100
277.10	22.80	23.48
138.10	16.80	18.80
137.10	12.50	14.23



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_10.D  
 Acq On : 14 Jan 2022 2:55 pm  
 Operator : 917  
 Sample : STD SVMS 20K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 7 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:12:15 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:11:42 2022  
 Response via : Initial Calibration



TIC: 0114\_10.D\data.ms

(98) Indeno(1,2,3-cd)pyrene (MT)  
 13.915min (+0.006) 20097.0759671 ppb m

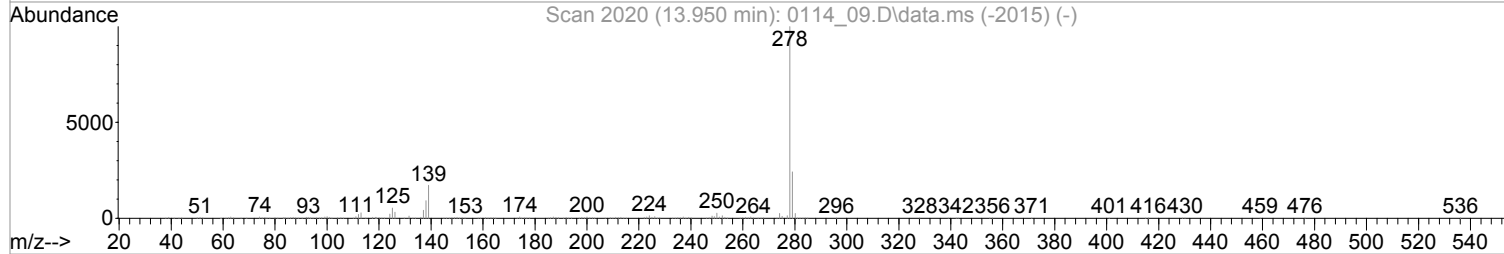
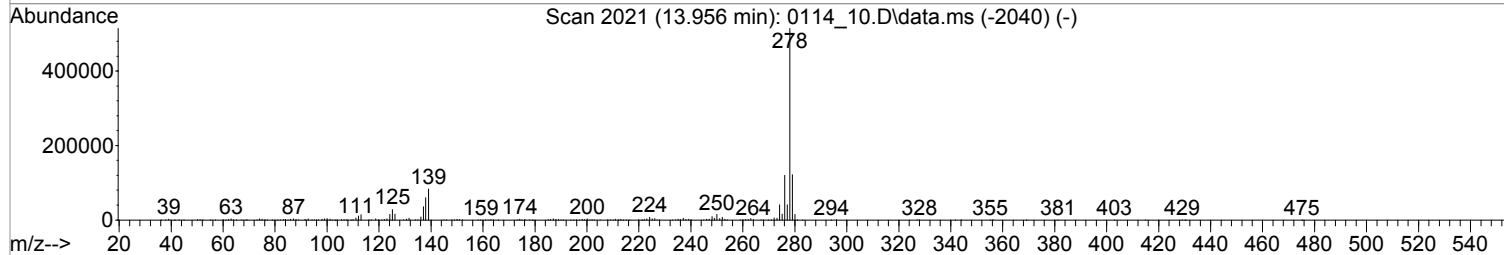
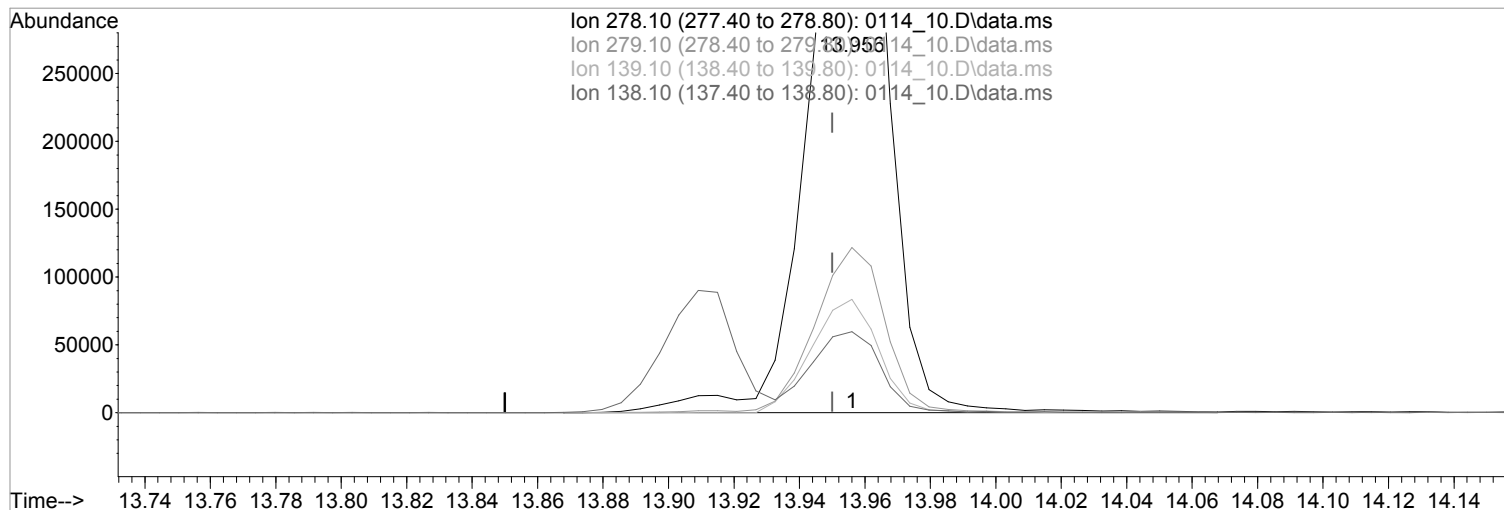
response 699356

Ion	Exp%	Act%
276.10	100	100
277.10	22.80	23.48
138.10	16.80	18.80
137.10	12.50	14.23

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_10.D  
 Acq On : 14 Jan 2022 2:55 pm  
 Operator : 917  
 Sample : STD SVMS 20K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 7 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:12:15 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:11:42 2022  
 Response via : Initial Calibration



TIC: 0114\_10.D\data.ms

(99) Dibenz(a,h)anthracene (MT)  
 13.956min (+0.006) 20585.2168055 ppb  
 Qvalue = 98  
 response 788927

Ion	Exp%	Act%
278.10	100	100
279.10	24.00	23.63
139.10	16.90	16.18
138.10	12.90	11.55

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_11.D  
 Acq On : 14 Jan 2022 3:15 pm  
 Operator : 917  
 Sample : STD SVMS 30K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 8 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:23:46 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:17:24 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.462	152	61917	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.196	136	246043	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.360	164	136748	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.470	188	261748	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.291	240	262089	8000.0000000	ppb	0.00	
94) Perylene-d12	11.993	264	278548	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.792	112	277025	30703.6795531	ppb	0.00	
Spiked Amount	666.000		Recovery	= 4610.16%			
7) Phenol-d5	3.233	99	328111	29588.6888999	ppb	0.00	
Spiked Amount	666.000		Recovery	= 4442.75%			
24) Nitrobenzene-d5	3.762	82	339621	31981.1300547	ppb	0.00	
Spiked Amount	333.000		Recovery	= 9603.94%			
50) 2-Fluorobiphenyl	4.878	172	650514	27564.8187593	ppb	0.00	
Spiked Amount	333.000		Recovery	= 8277.72%			
73) 2,4,6-Tribromophenol	5.936	330	115062	34539.4550348	ppb	0.00	
Spiked Amount	666.000		Recovery	= 5186.10%			
87) p-Terphenyl-d14	7.880	244	956988	29763.2433524	ppb	0.00	
Spiked Amount	333.000		Recovery	= 8937.91%			
<b>Target Compounds</b>							
							Qvalue
2) Pyridine	2.240	79	318261	34787.5658087	ppb		96
3) N-Nitrosodimethylamine	2.222	42	152609	29754.4855875	ppb		99
5) Aniline	3.286	66	171576	30401.6094800	ppb		94
6) bis(2-Chloroethyl)ether	3.303	93	200949m	20161.0152485	ppb		
8) Phenol	3.239	94	350138	30062.4731525	ppb		95
10) 2-Chlorophenol	3.350	128	294625	29875.8722322	ppb		98
11) n-Decane	3.350	41	160550	28821.4779640	ppb		95
12) 1,3-Dichlorobenzene	3.433	146	340721	29665.6973485	ppb		99
13) 1,4-Dichlorobenzene	3.474	146	340649	29016.6285650	ppb		97
14) Benzyl Alcohol	3.521	79	263698	30501.9820839	ppb		99
15) 1,2-Dichlorobenzene	3.556	146	321479	28749.5462172	ppb		100
16) bis(2-Chloroisopropyl)...	3.591	121	99353	29126.2017080	ppb		96
17) 2,2-oxybis(1-chloropro...	3.591	121	99353	29126.2017080	ppb		96
18) 2-Methylphenol	3.568	108	261726	29449.7478642	ppb		98
19) Hexachloroethane	3.750	117	126329	29642.5773618	ppb		98
20) N-Nitrosodi-n-propylamine	3.668	70	211889	30506.7315592	ppb		97
21) 3&4-Methyl phenol	3.650	107	305932	30354.8118068	ppb		99
25) Nitrobenzene	3.773	77	322498	30154.0567164	ppb		97
26) Isophorone	3.909	82	577406	30663.3545471	ppb		95
27) 2-Nitrophenol	3.956	139	154486	30566.9656540	ppb		97
28) 2,4-Dimethylphenol	3.961	107	302299	29431.9193586	ppb		98
29) bis(2-Chlorethoxy)methane	4.020	93	318420	28674.4002711	ppb		98
30) 2,4-Dichlorophenol	4.097	162	250113	30302.6748784	ppb		91
32) 1,2,4-Trichlorobenzene	4.155	180	286800	29004.4892254	ppb		98
34) Naphthalene	4.208	128	871456m	28147.8774846	ppb		
35) 4-Chloroaniline	4.226	65	110369	30357.0109731	ppb		98
36) Hexachloro-1,3-butadiene	4.273	225	176632	28391.2872284	ppb		96
40) 4-Chloro-3-methylphenol	4.508	107	264489	32007.2207657	ppb		96
41) 2-Methylnaphthalene	4.643	142	581179	28226.5960138	ppb		99
42) 1-Methylnaphthalene	4.708	142	554990	28758.8205687	ppb		98
47) Hexachlorocyclopentadiene	4.743	237	214424	28699.5682310	ppb		97
48) 2,4,6-Trichlorophenol	4.819	196	200014	32168.9885174	ppb		91

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_11.D  
 Acq On : 14 Jan 2022 3:15 pm  
 Operator : 917  
 Sample : STD SVMS 30K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 8 Sample Multiplier: 1  
 InstName : BNAMS11

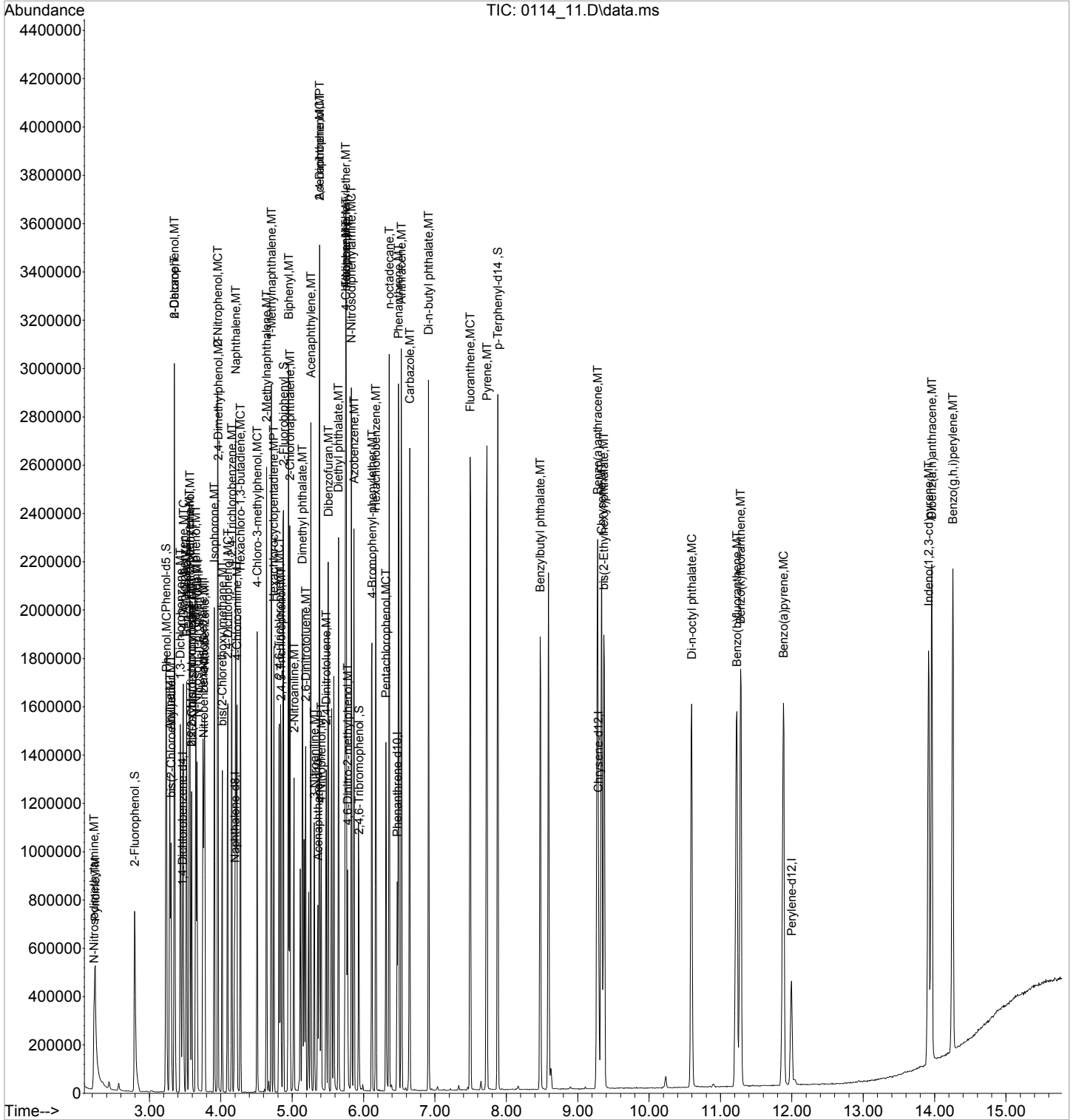
Quant Time: Jan 17 17:23:46 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:17:24 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
49) 2,4,5-Trichlorophenol	4.843	196	190497	28117.5887335	ppb		91
51) Biphenyl	4.949	154	720356	27292.3120215	ppb		99
52) 2-Chloronaphthalene	4.966	162	559534	27468.4985251	ppb		97
53) 2-Nitroaniline	5.025	138	182550	33354.7507591	ppb		99
54) Acenaphthylene	5.260	152	900540	28791.6589023	ppb		99
55) Dimethyl phthalate	5.142	163	638096	28875.7343506	ppb		94
56) 2,6-Dinitrotoluene	5.189	165	151138	32751.2546144	ppb	#	85
57) 3-Nitroaniline	5.313	138	154261	32540.5501107	ppb		96
58) Acenaphthene	5.383	153	572014	27607.7001515	ppb		99
59) 2,4-Dinitrophenol	5.383	184	84053	44057.1047020	ppb	#	72
60) Dibenzofuran	5.507	168	802837	27943.2565389	ppb		99
61) 2,4-Dinitrotoluene	5.477	165	205802	34922.1267791	ppb		91
63) 4-Nitrophenol	5.407	139	126386m	33802.9649972	ppb		
64) Fluorene	5.754	166	637375	27419.2327235	ppb		98
65) 4-Chlorophenyl-phenyle...	5.748	204	331518	26733.9634623	ppb		92
66) Diethyl phthalate	5.648	149	647869	28924.6817130	ppb		97
67) 4-Nitroaniline	5.754	138	128293	27804.7622697	ppb		98
68) Azobenzene	5.865	77	645053	29306.7831318	ppb		98
71) 4,6-Dinitro-2-methylph...	5.777	198	116336	44819.8847528	ppb		94
72) N-Nitrosodiphenylamine	5.830	169	562465	29677.0900593	ppb		98
74) 4-Bromophenyl-phenylether	6.118	248	211718	29096.8168127	ppb		88
75) Hexachlorobenzene	6.171	284	241771	29361.5907008	ppb		93
76) n-octadecane	6.359	55	92676	28074.4468817	ppb		98
77) Pentachlorophenol	6.312	266	138525	35913.0539962	ppb		99
78) Phenanthrene	6.488	178	996042m	28909.4659808	ppb		
79) Anthracene	6.529	178	1006260	28983.8858838	ppb		100
80) Carbazole	6.647	167	874623	28826.2567602	ppb		99
81) Di-n-butyl phthalate	6.911	149	1148399	32755.8416653	ppb		100
83) Fluoranthene	7.493	202	1141288	30303.7496340	ppb		100
86) Pyrene	7.728	202	1188345	29319.7454350	ppb		98
88) Benzylbutyl phthalate	8.474	149	492425	33467.2844454	ppb		99
90) Benzo(a)anthracene	9.279	228	1161384	30156.3069732	ppb		99
91) Chrysene	9.332	228	1109864	29422.0330666	ppb		98
92) bis(2-Ethylhexyl)phtha...	9.367	149	739239	34175.1916569	ppb		99
93) Di-n-octyl phthalate	10.595	149	1217436	35215.9906180	ppb		99
95) Benzo(b)fluoranthene	11.230	252	1210157	30093.9630358	ppb		99
96) Benzo(k)fluoranthene	11.282	252	1189275	29217.3146795	ppb		98
97) Benzo(a)pyrene	11.882	252	1172143	31383.3208092	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.915	276	1054592	29603.7896438	ppb		94
99) Dibenz(a,h)anthracene	13.962	278	1130608m	28819.6366374	ppb		
100) Benzo(g,h,i)perylene	14.255	276	1133195	27830.2520702	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_11.D  
Acq On : 14 Jan 2022 3:15 pm  
Operator : 917  
Sample : STD SVMS 30K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 8 Sample Multiplier: 1  
InstName : BNAMS11

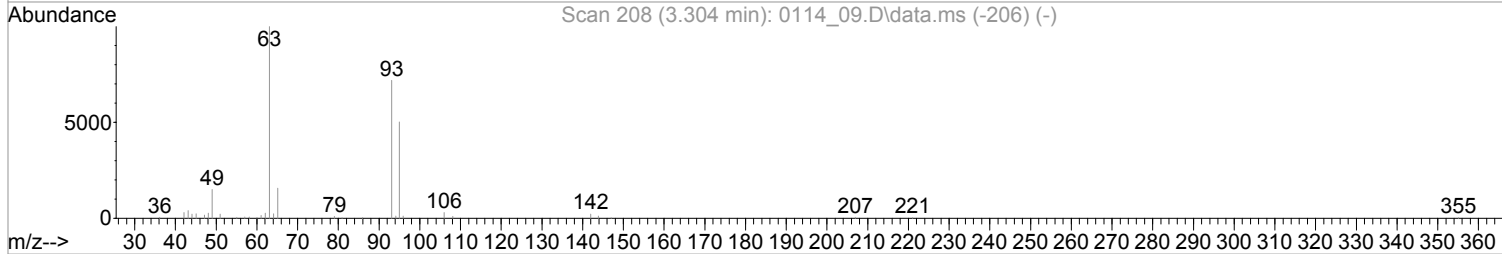
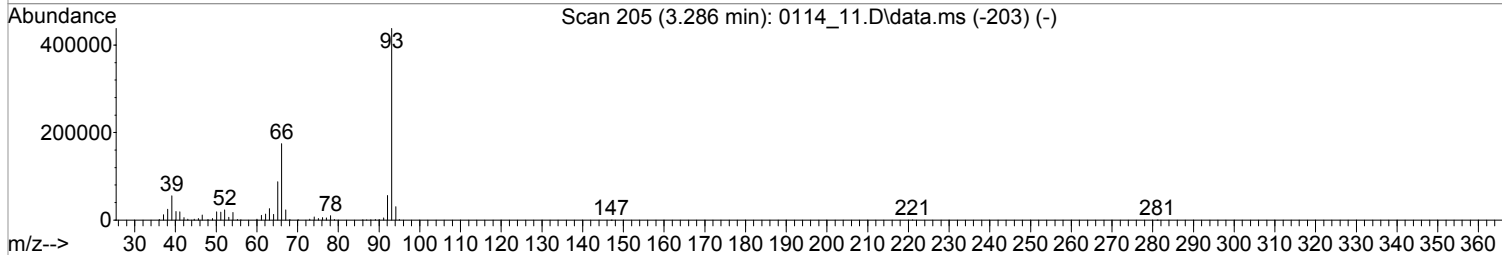
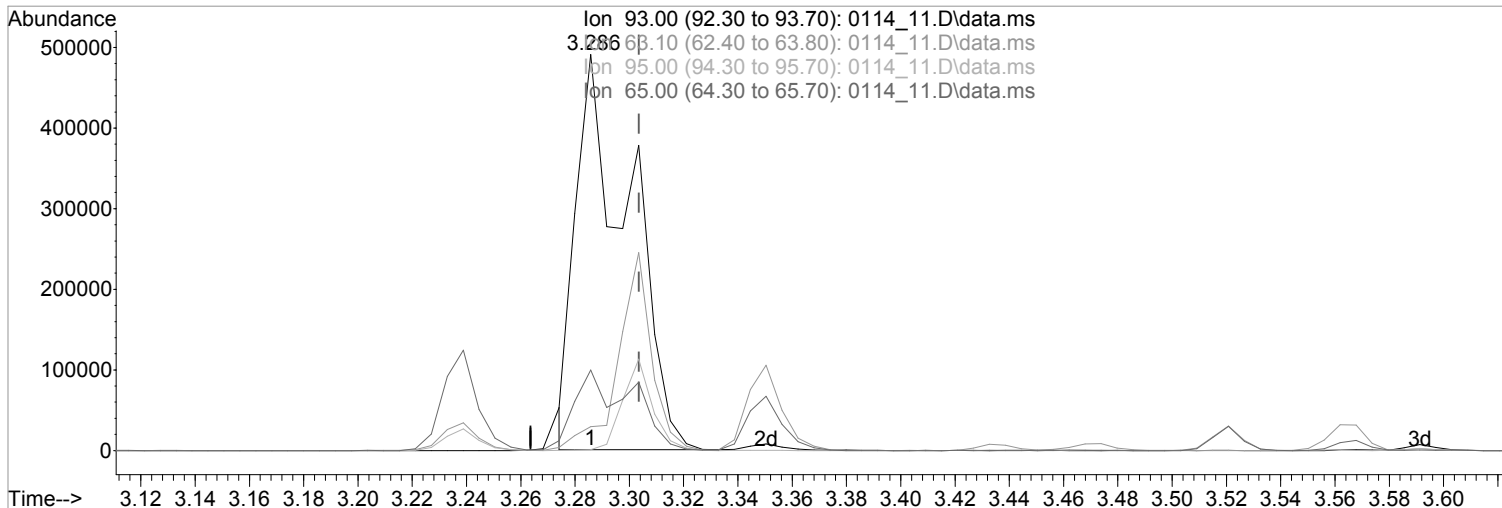
Quant Time: Jan 17 17:23:46 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 17:17:24 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_11.D  
 Acq On : 14 Jan 2022 3:15 pm  
 Operator : 917  
 Sample : STD SVMS 30K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 8 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:17:38 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:17:24 2022  
 Response via : Initial Calibration



TIC: 0114\_11.D\data.ms

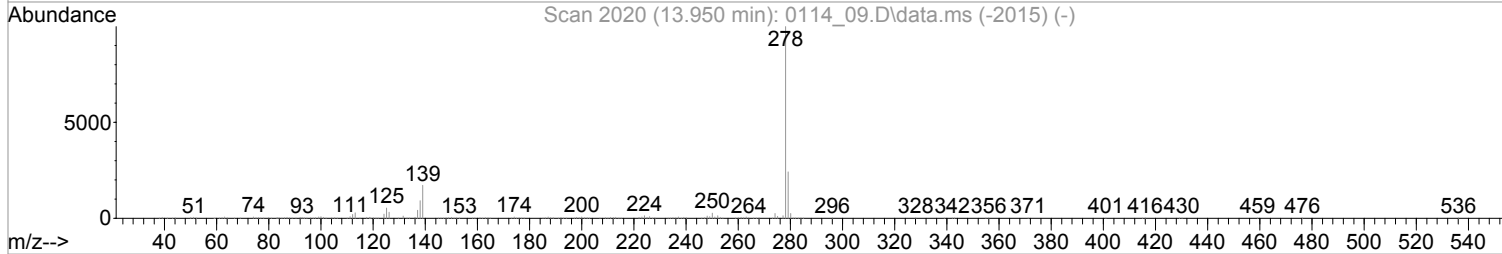
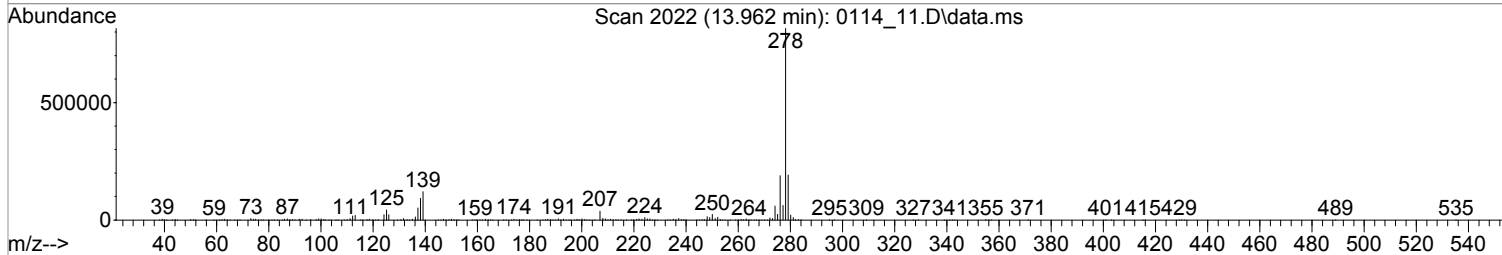
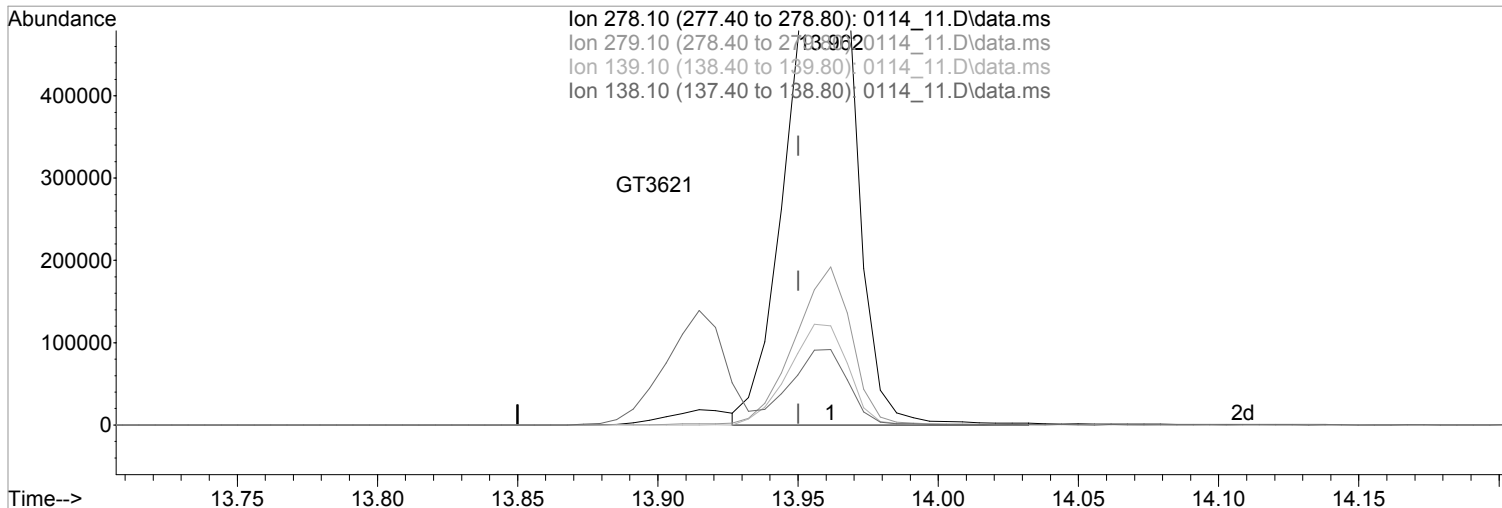
(6) bis(2-Chloroethyl)ether (MT)  
 3.286min (-0.018) 67178.0009207 ppb  
 Qvalue = 44  
 response 669577

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	5.88#
95.00	30.20	0.23#
65.00	21.40	20.18

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_11.D  
 Acq On : 14 Jan 2022 3:15 pm  
 Operator : 917  
 Sample : STD SVMS 30K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 8 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:17:38 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:17:24 2022  
 Response via : Initial Calibration



TIC: 0114\_11.D\data.ms

(99) Dibenz(a,h)anthracene (MT)  
 13.962min (+0.012) 28819.6366374 ppb m

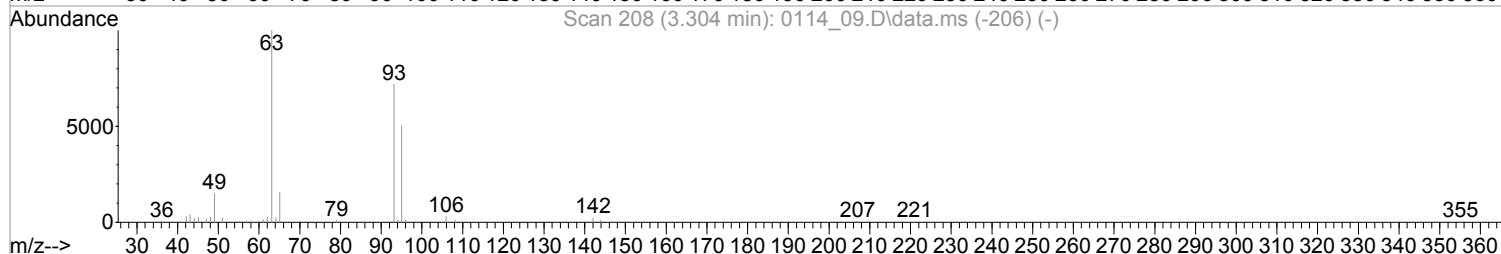
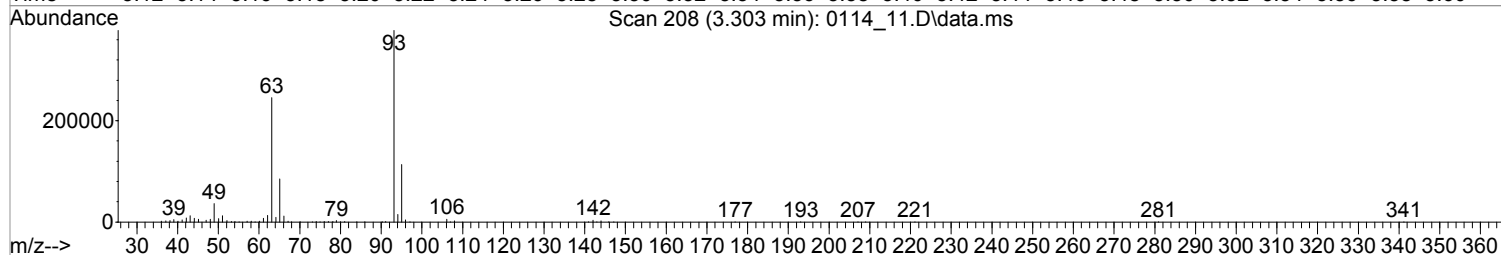
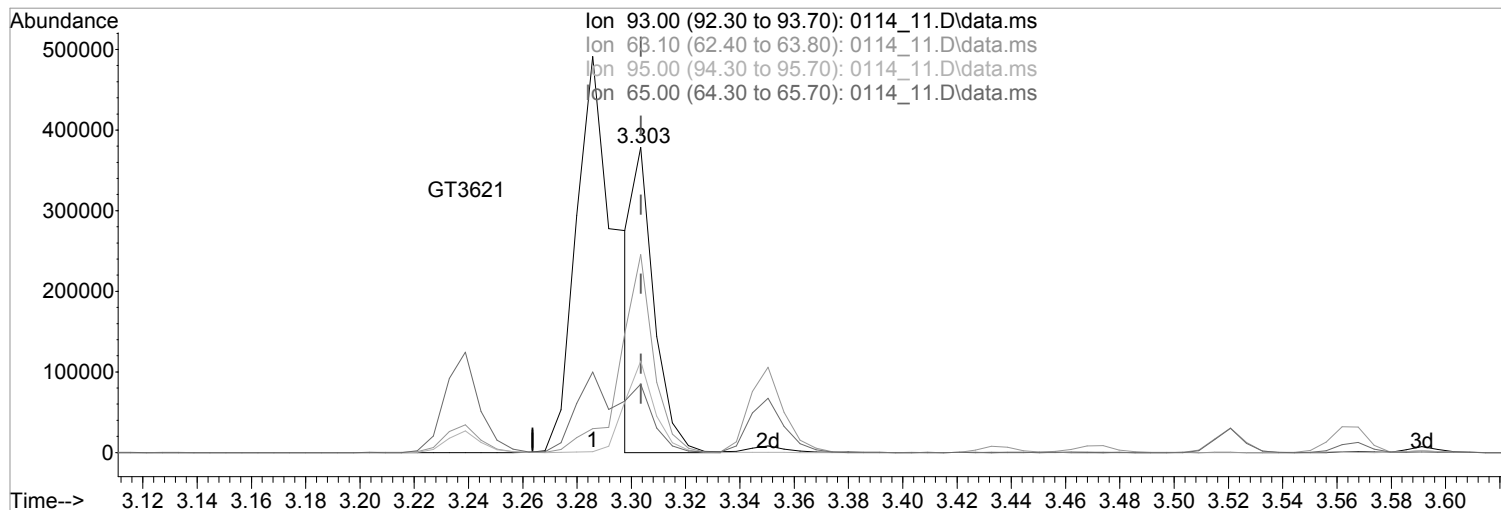
response 1130608

Ion	Exp%	Act%
278.10	100	100
279.10	24.00	23.54
139.10	16.90	14.75
138.10	12.90	11.23

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_11.D  
 Acq On : 14 Jan 2022 3:15 pm  
 Operator : 917  
 Sample : STD SVMS 30K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 8 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:17:38 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:17:24 2022  
 Response via : Initial Calibration



TIC: 0114\_11.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.303min (-0.000) 20161.0152485 ppb m

response 200949

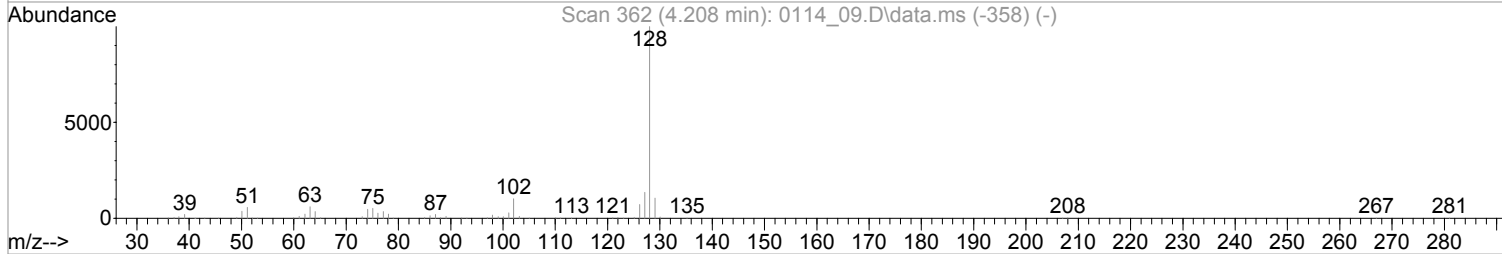
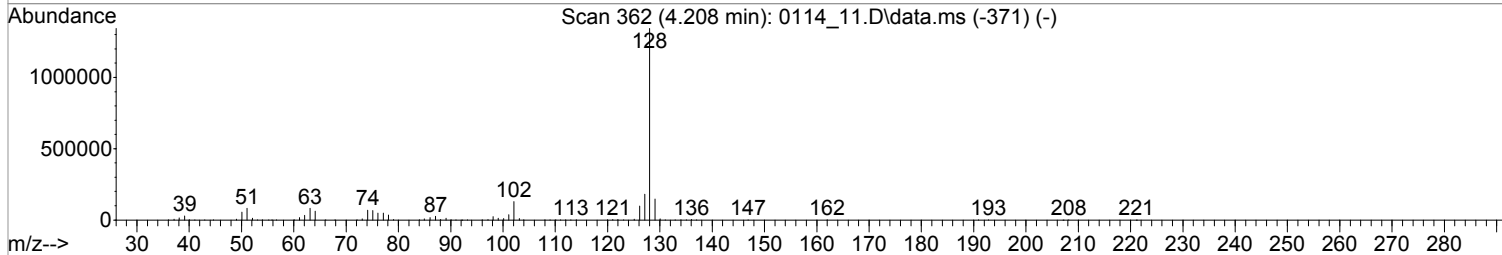
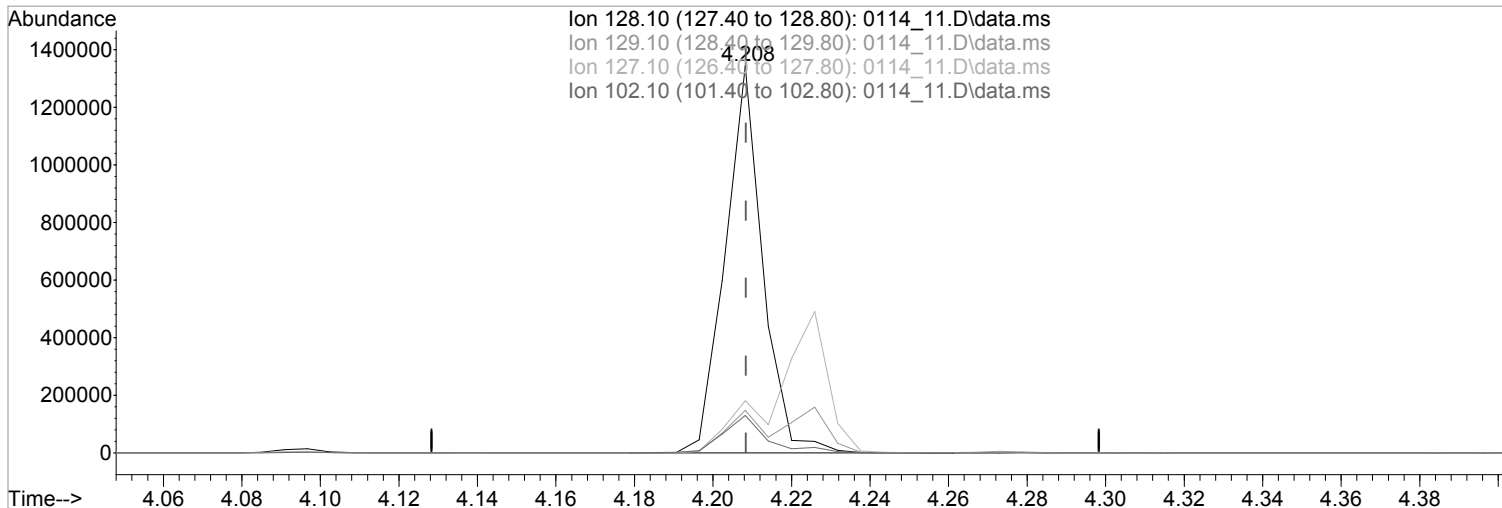
Ion	Exp%	Act%
93.00	100	100
63.10	63.50	64.90
95.00	30.20	29.92
65.00	21.40	22.40



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_11.D  
Acq On : 14 Jan 2022 3:15 pm  
Operator : 917  
Sample : STD SVMS 30K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 8 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 17 17:17:38 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 17:17:24 2022  
Response via : Initial Calibration



TIC: 0114\_11.D\data.ms

(34) Naphthalene (MT)

4.208min (-0.000) 28689.9654705 ppb

Qvalue = 99

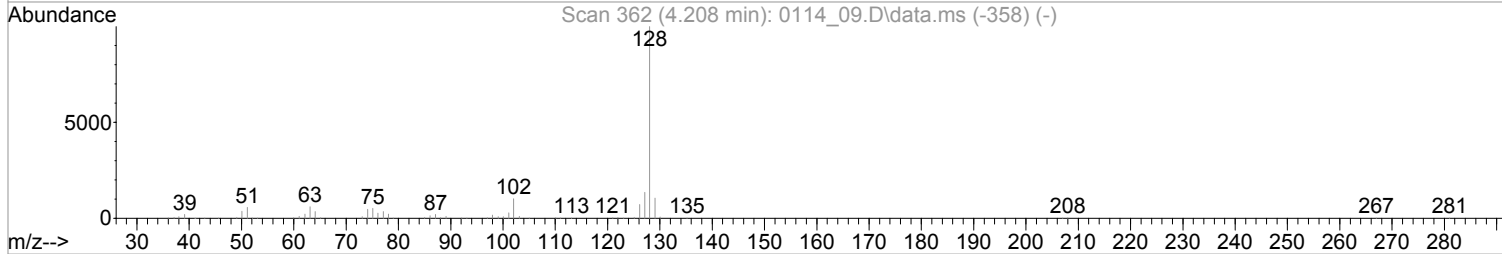
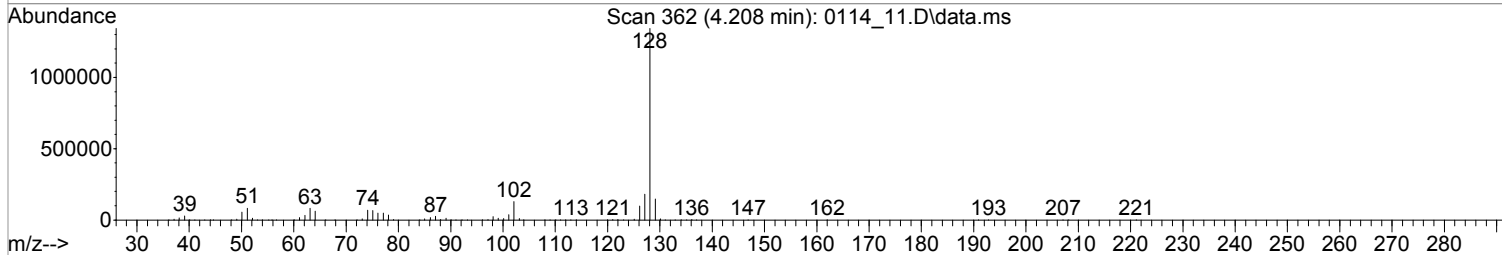
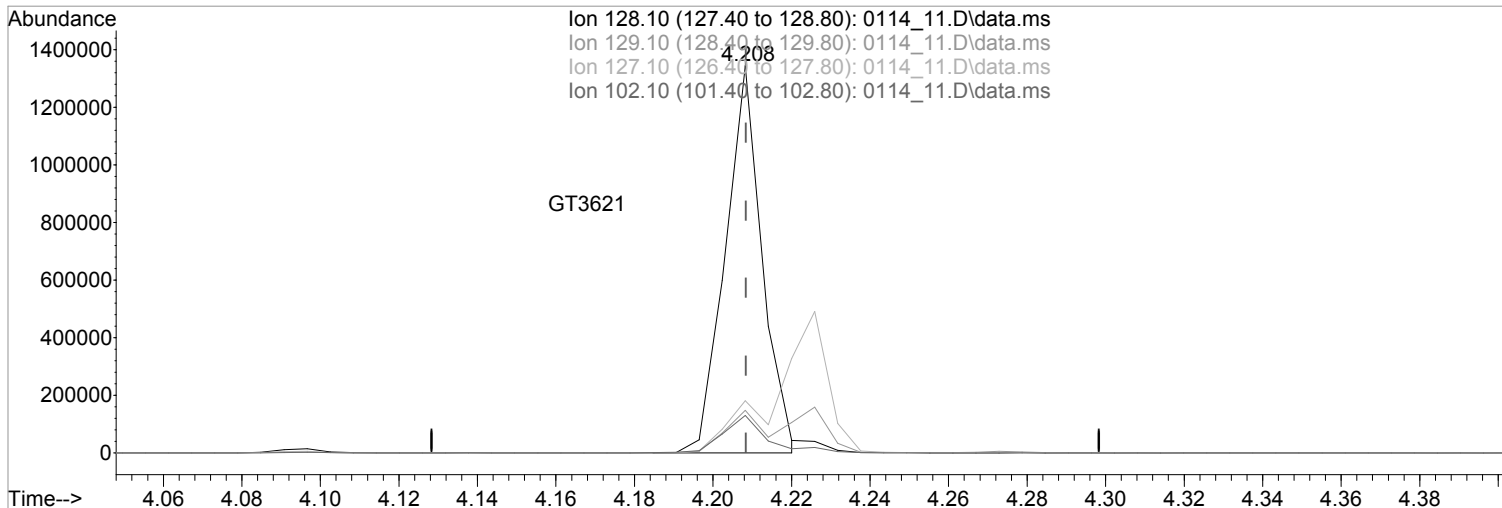
response 888239

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	10.96
127.10	13.50	13.43
102.10	10.10	9.67

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_11.D  
 Acq On : 14 Jan 2022 3:15 pm  
 Operator : 917  
 Sample : STD SVMS 30K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 8 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:17:38 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:17:24 2022  
 Response via : Initial Calibration



TIC: 0114\_11.D\data.ms

(34) Naphthalene (MT)  
 4.208min (-0.000) 28147.8774846 ppb m

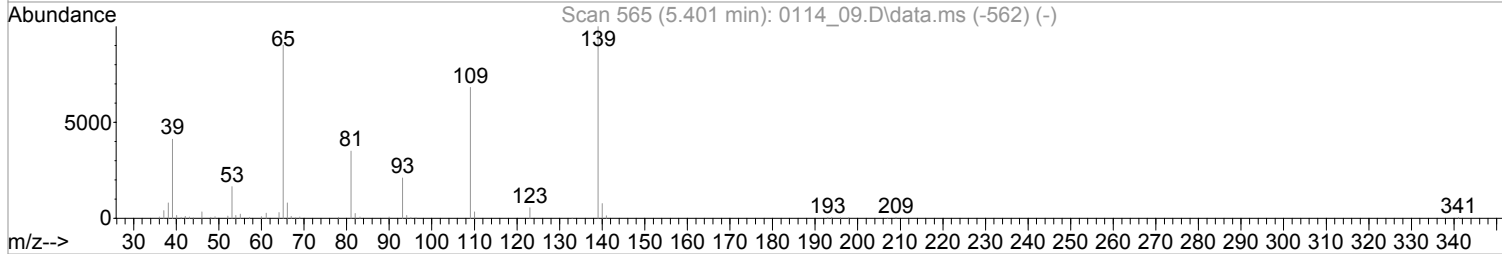
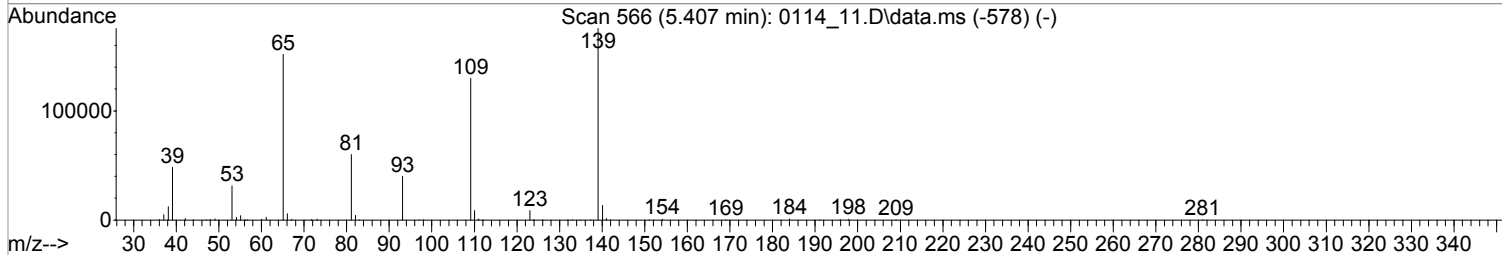
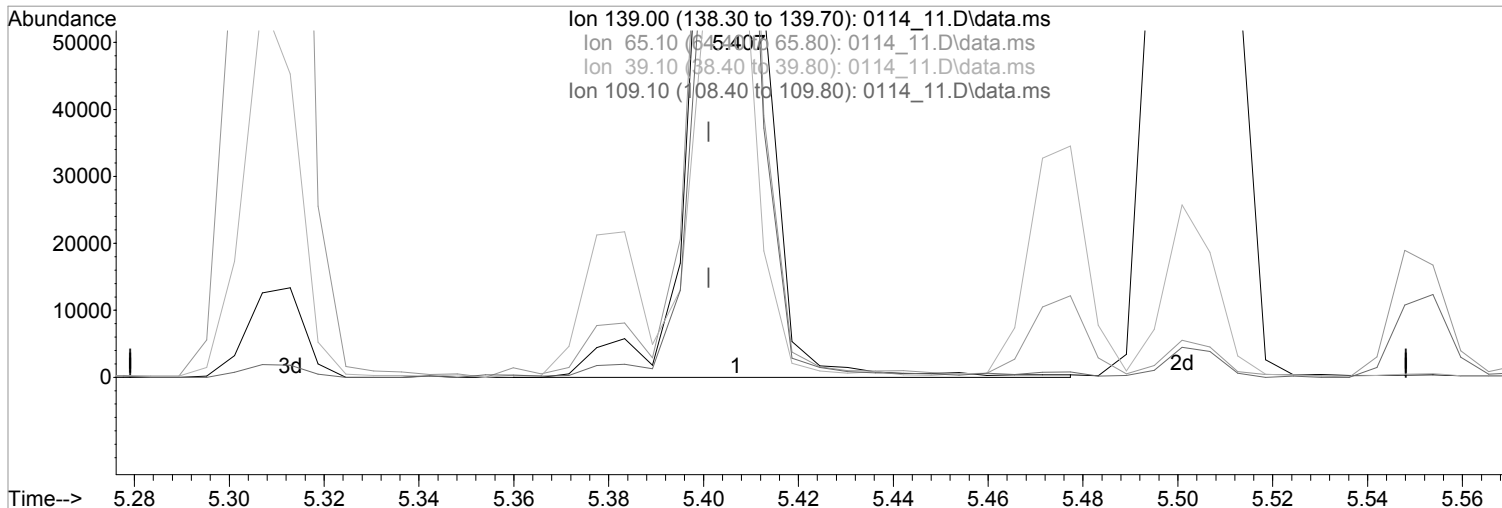
response 871456

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	10.96
127.10	13.50	13.43
102.10	10.10	9.67

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_11.D  
 Acq On : 14 Jan 2022 3:15 pm  
 Operator : 917  
 Sample : STD SVMS 30K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 8 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:17:38 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:17:24 2022  
 Response via : Initial Calibration



TIC: 0114\_11.D\data.ms

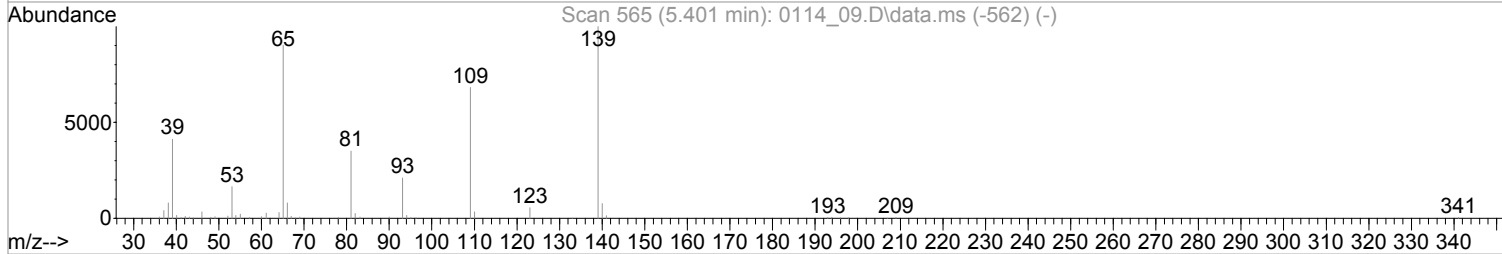
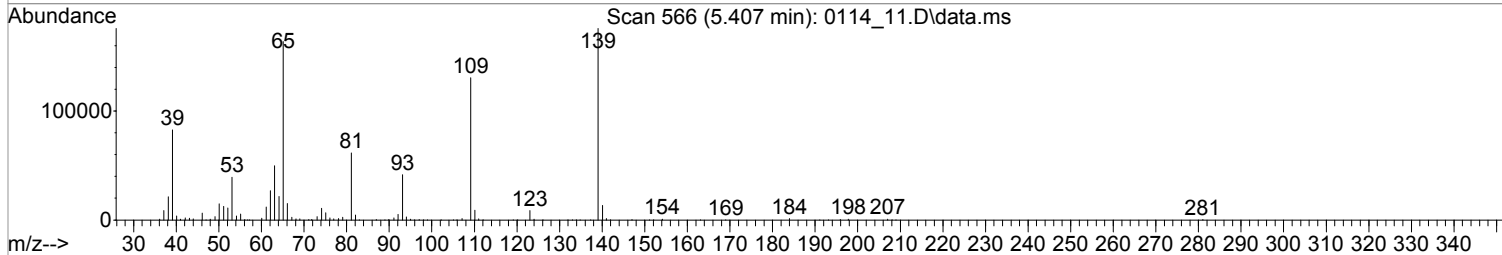
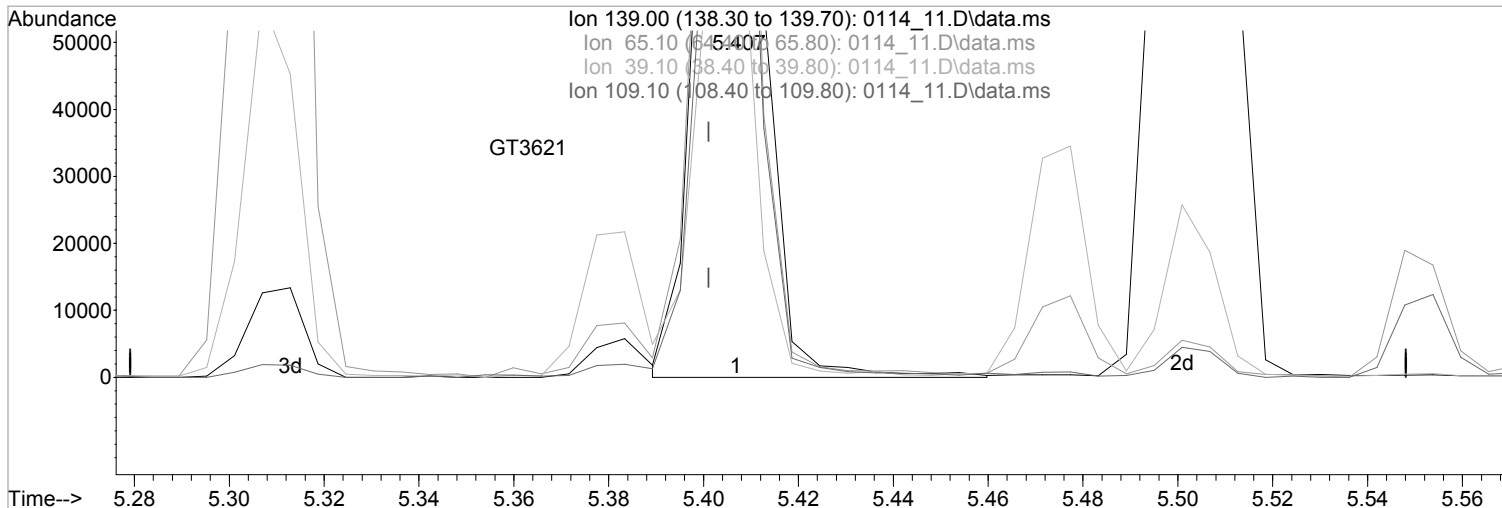
(63) 4-Nitrophenol (MPT)  
 5.407min (+0.006) 35098.2647890 ppb  
 Qvalue = 96  
 response 131229

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	92.32
39.10	47.40	46.81
109.10	67.50	73.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_11.D  
 Acq On : 14 Jan 2022 3:15 pm  
 Operator : 917  
 Sample : STD SVMS 30K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 8 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:17:38 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:17:24 2022  
 Response via : Initial Calibration



TIC: 0114\_11.D\data.ms

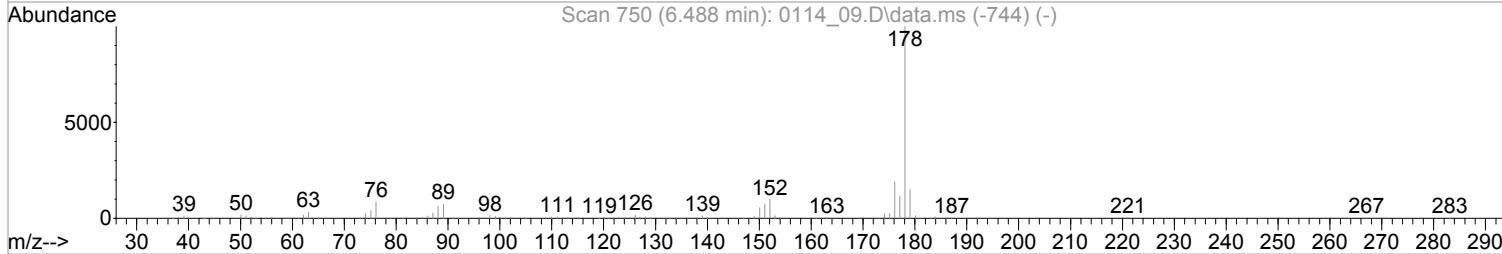
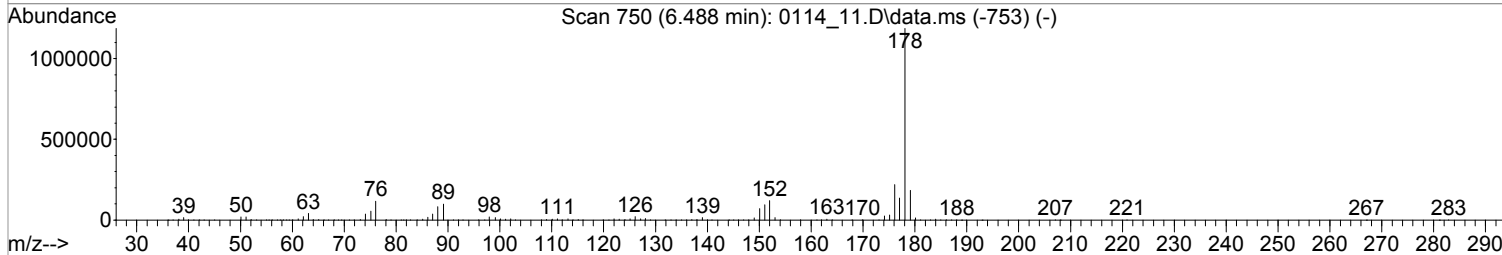
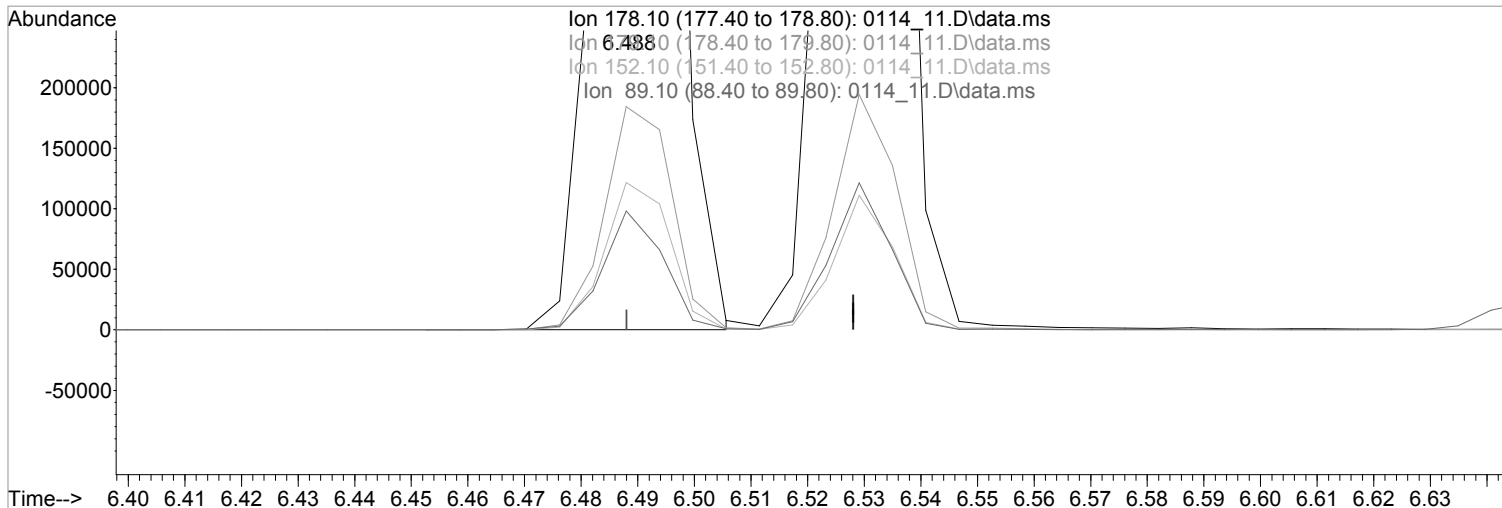
(63) 4-Nitrophenol (MPT)  
 5.407min (+0.006) 33802.9649972 ppb m  
 response 126386  

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	93.13
39.10	47.40	47.00
109.10	67.50	74.15

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_11.D  
 Acq On : 14 Jan 2022 3:15 pm  
 Operator : 917  
 Sample : STD SVMS 30K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 8 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:17:38 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:17:24 2022  
 Response via : Initial Calibration



TIC: 0114\_11.D\data.ms

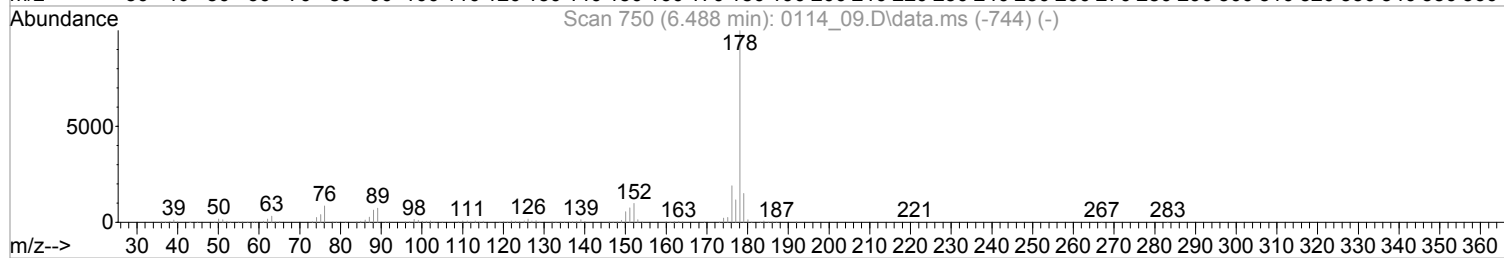
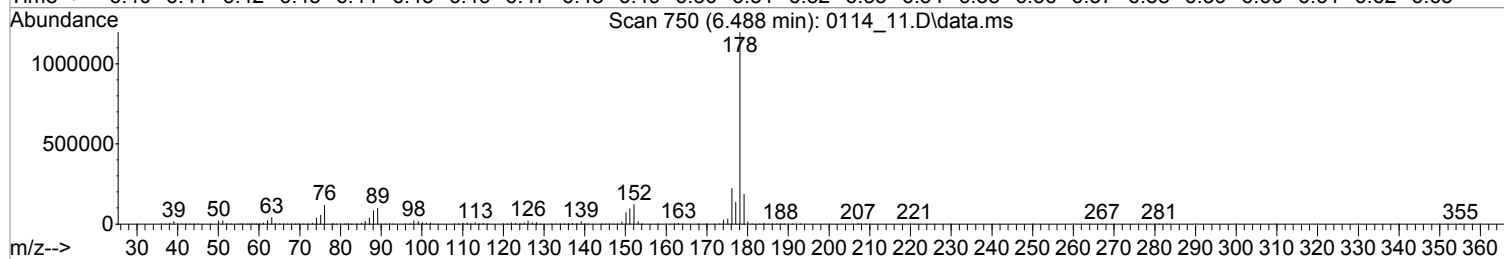
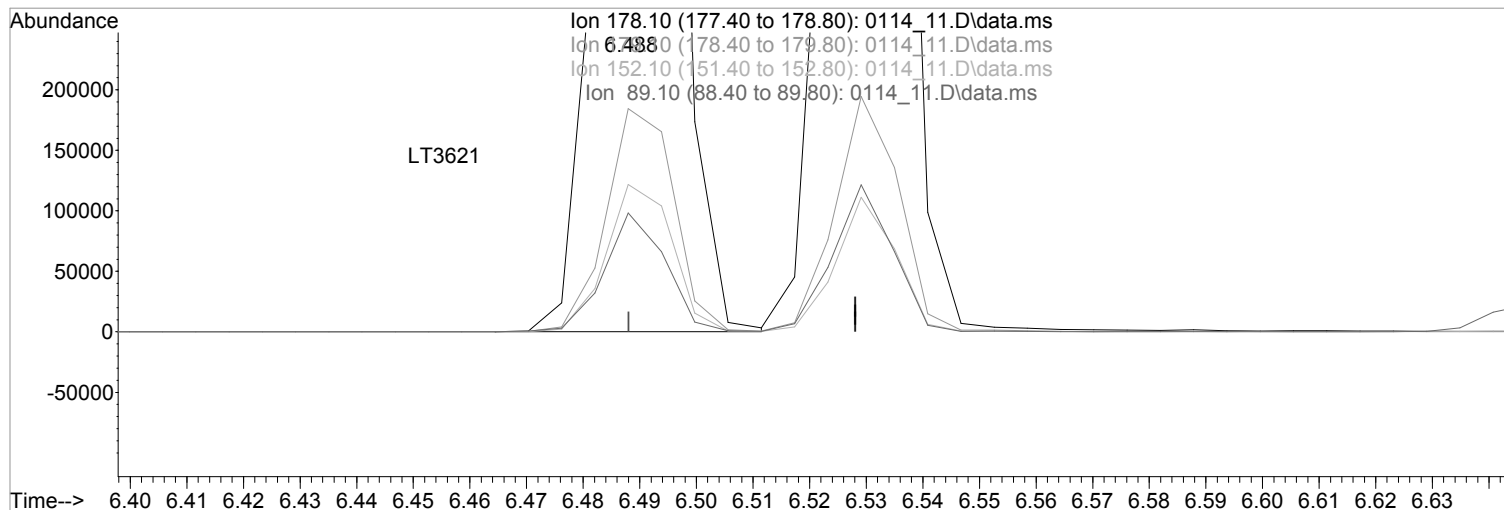
(78) Phenanthrene (MT)  
 6.488min (-0.000) 28873.7079885 ppb  
 Qvalue = 98  
 response 994810

Ion	Exp%	Act%
178.10	100	100
179.10	14.90	15.42
152.10	9.70	10.18
89.10	7.30	8.22

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_11.D  
 Acq On : 14 Jan 2022 3:15 pm  
 Operator : 917  
 Sample : STD SVMS 30K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 8 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:17:38 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:17:24 2022  
 Response via : Initial Calibration



TIC: 0114\_11.D\data.ms

(78) Phenanthrene (MT)

6.488min (-0.000) 28909.4659808 ppb m

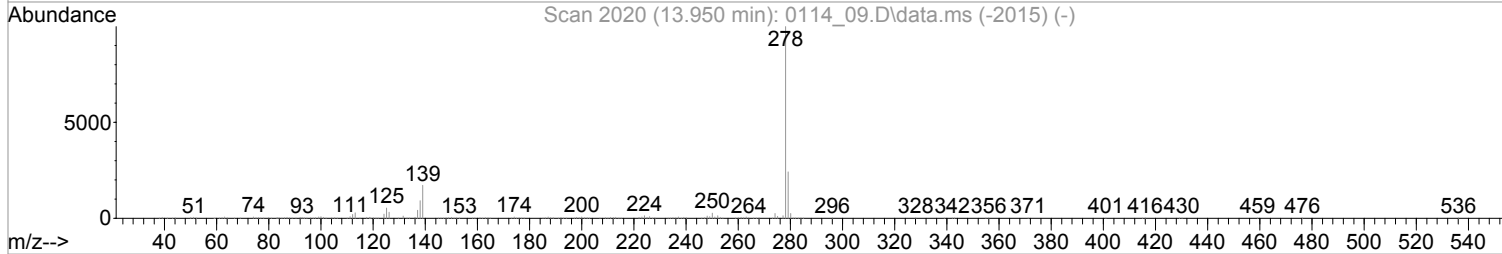
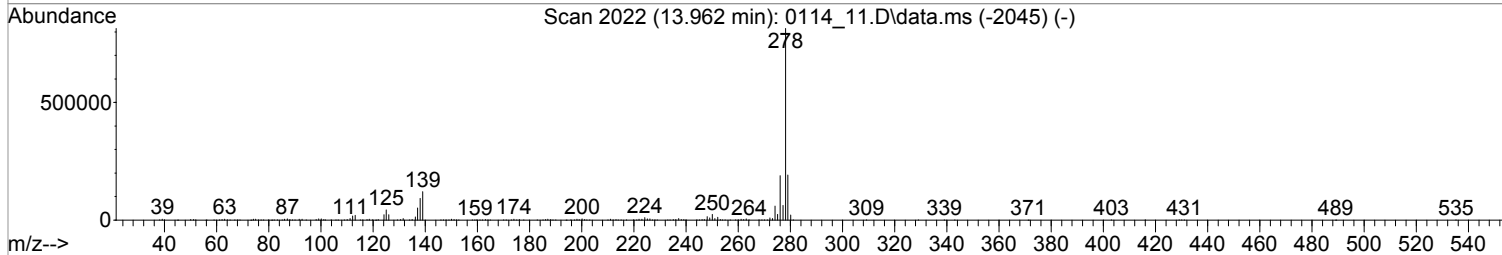
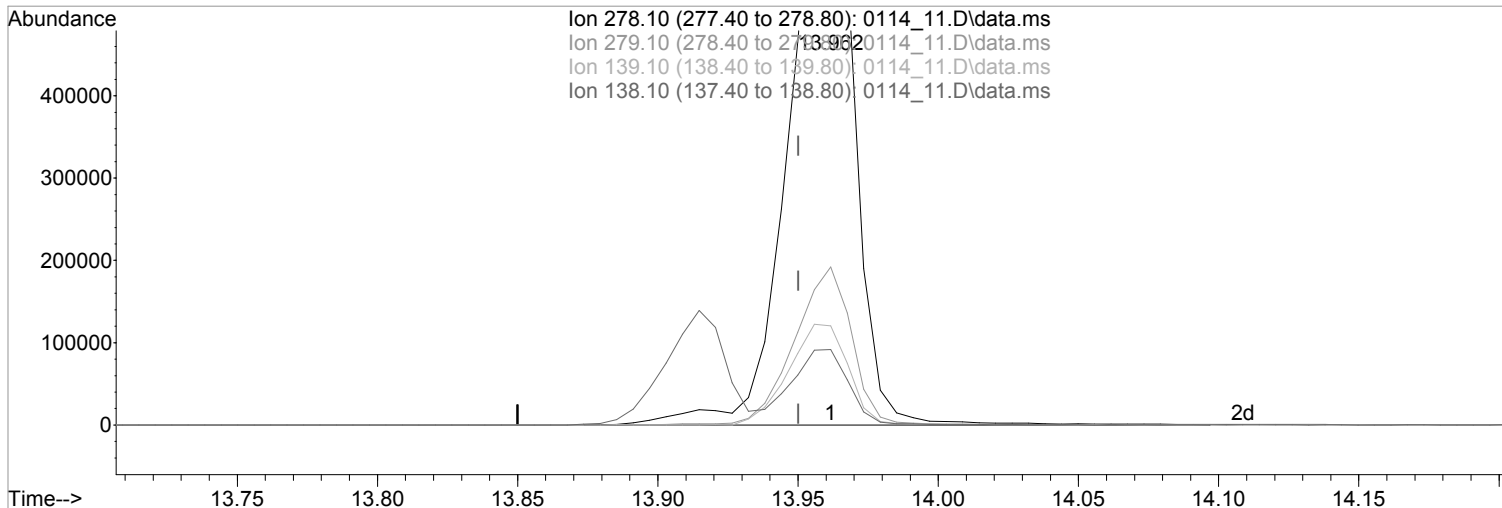
response 996042

Ion	Exp%	Act%
178.10	100	100
179.10	14.90	15.42
152.10	9.70	10.18
89.10	7.30	8.22

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_11.D  
 Acq On : 14 Jan 2022 3:15 pm  
 Operator : 917  
 Sample : STD SVMS 30K PPB 22A13138 EXP 06/20/22  
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 ALS Vial : 8 Sample Multiplier: 1  
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Quant Time: Jan 17 17:17:38 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:17:24 2022  
 Response via : Initial Calibration



TIC: 0114\_11.D\data.ms

(99) Dibenz(a,h)anthracene (MT)  
 13.962min (+0.012) 29677.8725122 ppb  
 Qvalue = 97  
 response 1164277

Ion	Exp%	Act%
278.10	100	100
279.10	24.00	23.54
139.10	16.90	14.75
138.10	12.90	11.20

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_12.D  
 Acq On : 14 Jan 2022 3:36 pm  
 Operator : 917  
 Sample : STD SVMS 40K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 9 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:29:39 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:24:03 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.462	152	59577	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.197	136	235226	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.360	164	128206	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.470	188	240372	8000.0000000	ppb	0.00
84) Chrysene-d12	9.297	240	239525	8000.0000000	ppb	0.01
94) Perylene-d12	11.994	264	248340	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.792	112	353158	40520.7331306	ppb	0.00
Spiked Amount	666.000		Recovery	= 6084.19%		
7) Phenol-d5	3.233	99	423106	39744.6718573	ppb	0.00
Spiked Amount	666.000		Recovery	= 5967.67%		
24) Nitrobenzene-d5	3.762	82	443384	43196.7550699	ppb	0.00
Spiked Amount	333.000		Recovery	= 12972.00%		
50) 2-Fluorobiphenyl	4.878	172	813676	37280.1984474	ppb	0.00
Spiked Amount	333.000		Recovery	= 11195.25%		
73) 2,4,6-Tribromophenol	5.936	330	140913	44928.0313999	ppb	0.00
Spiked Amount	666.000		Recovery	= 6745.95%		
87) p-Terphenyl-d14	7.881	244	1152500	39272.1115035	ppb	0.00
Spiked Amount	333.000		Recovery	= 11793.43%		
<b>Target Compounds</b>						
					Qvalue	
2) Pyridine	2.240	79	417698	46220.4372303	ppb	96
3) N-Nitrosodimethylamine	2.222	42	203735	41339.1923205	ppb	96
5) Aniline	3.286	66	226475	41612.4875358	ppb	92
6) bis(2-Chloroethyl)ether	3.304	93	274768m	30306.5439374	ppb	
8) Phenol	3.239	94	451464	40270.6976842	ppb	96
10) 2-Chlorophenol	3.351	128	374947	39541.3732904	ppb	96
11) n-Decane	3.351	41	216182	40598.4607881	ppb	95
12) 1,3-Dichlorobenzene	3.433	146	435819	39509.3998528	ppb	99
13) 1,4-Dichlorobenzene	3.474	146	438258	39010.3719478	ppb	98
14) Benzyl Alcohol	3.521	79	346143	41495.2689870	ppb	100
15) 1,2-Dichlorobenzene	3.556	146	411487	38511.7573903	ppb	98
16) bis(2-Chloroisopropyl)...	3.591	121	127498	39034.7051365	ppb	97
17) 2,2-oxybis(1-chloropro...	3.591	121	127498	39034.7051365	ppb	97
18) 2-Methylphenol	3.568	108	339168	39784.1891850	ppb	98
19) Hexachloroethane	3.750	117	166053	40574.5893260	ppb	94
20) N-Nitrosodi-n-propylamine	3.668	70	279764	41743.5592066	ppb	99
21) 3&4-Methyl phenol	3.650	107	395564	40709.4697283	ppb	99
25) Nitrobenzene	3.774	77	419515	40994.0064297	ppb	97
26) Isophorone	3.909	82	749428	41475.9567230	ppb	94
27) 2-Nitrophenol	3.956	139	200324	41329.1125000	ppb	96
28) 2,4-Dimethylphenol	3.962	107	391617	40007.5450648	ppb	98
29) bis(2-Chlorethoxy)methane	4.020	93	416721	39543.5134834	ppb	97
30) 2,4-Dichlorophenol	4.097	162	319718	40449.0023053	ppb	93
32) 1,2,4-Trichlorobenzene	4.156	180	359147	38202.5709136	ppb	99
34) Naphthalene	4.208	128	1116258m	38105.0306295	ppb	
35) 4-Chloroaniline	4.226	65	145082	41657.2503169	ppb	95
36) Hexachloro-1,3-butadiene	4.273	225	225304	38221.6256973	ppb	97
40) 4-Chloro-3-methylphenol	4.508	107	340775	42659.6860018	ppb	95
41) 2-Methylnaphthalene	4.643	142	743418	38142.3414201	ppb	99
42) 1-Methylnaphthalene	4.708	142	715794	39066.5159702	ppb	99
47) Hexachlorocyclopentadiene	4.743	237	271970	39109.7109051	ppb	96
48) 2,4,6-Trichlorophenol	4.819	196	252433	42789.1668174	ppb	93



Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_12.D  
 Acq On : 14 Jan 2022 3:36 pm  
 Operator : 917  
 Sample : STD SVMS 40K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 9 Sample Multiplier: 1  
 InstName : BNAMS11

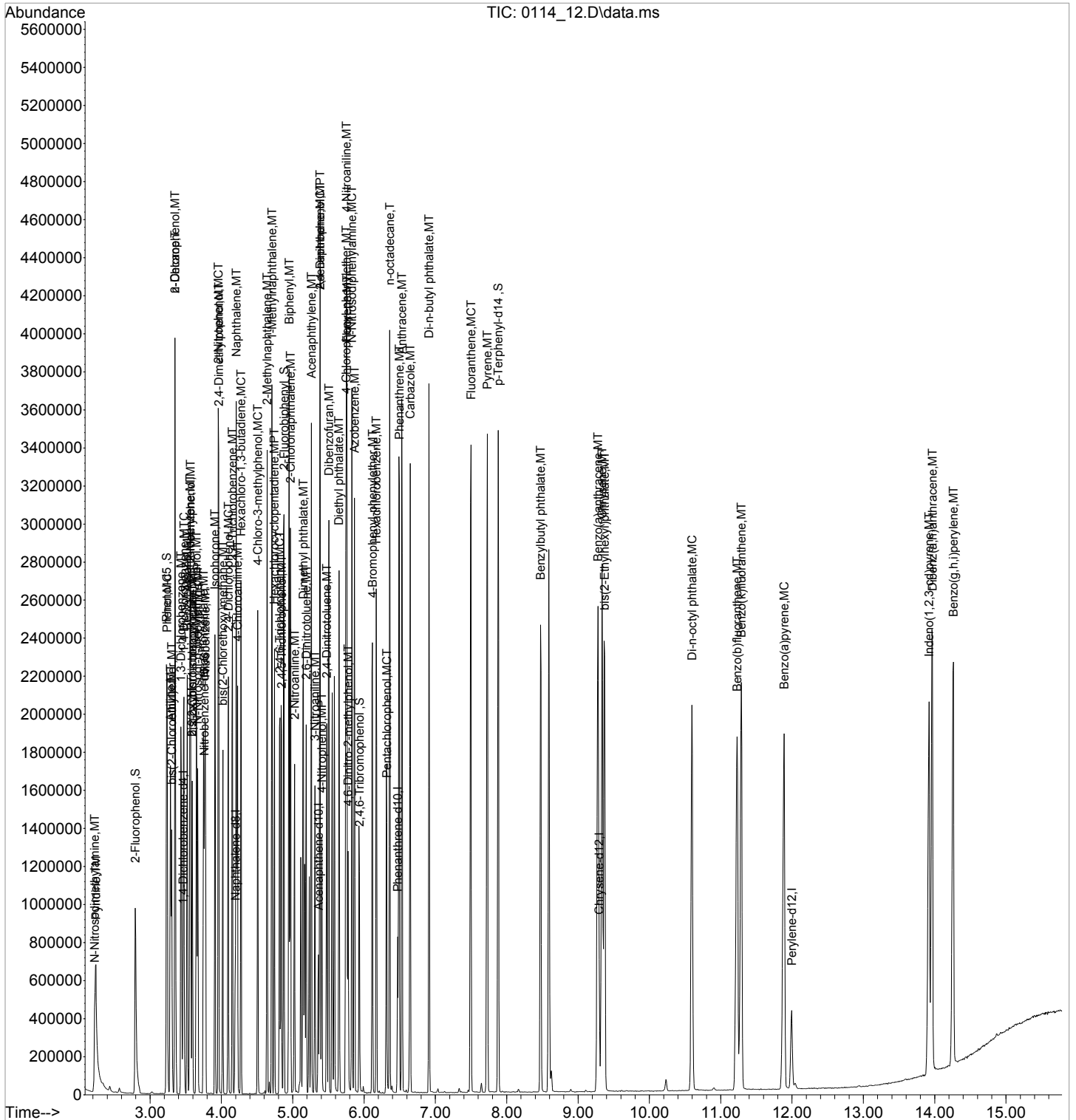
Quant Time: Jan 17 17:29:39 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:24:03 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
49) 2,4,5-Trichlorophenol	4.843	196	243338	38714.9050620	ppb		91
51) Biphenyl	4.949	154	919827	37739.3605822	ppb		100
52) 2-Chloronaphthalene	4.966	162	702854	37328.2322023	ppb		98
53) 2-Nitroaniline	5.025	138	236249	45200.0392752	ppb		98
54) Acenaphthylene	5.260	152	1142712	39231.8106650	ppb		99
55) Dimethyl phthalate	5.148	163	815774	39623.2945883	ppb		98
56) 2,6-Dinitrotoluene	5.190	165	193678	44091.9527069	ppb		95
57) 3-Nitroaniline	5.313	138	205375	45566.1260869	ppb		99
58) Acenaphthene	5.383	153	721673	37651.9415452	ppb		99
59) 2,4-Dinitrophenol	5.383	184	111568	57857.2746834	ppb	#	58
60) Dibenzofuran	5.507	168	1000420	37569.5166291	ppb		100
61) 2,4-Dinitrotoluene	5.478	165	264167	46539.9504079	ppb		98
63) 4-Nitrophenol	5.407	139	161590m	45144.3009687	ppb		
64) Fluorene	5.760	166	800423	37261.8380029	ppb		99
65) 4-Chlorophenyl-phenyle...	5.748	204	412434	36130.6535559	ppb		93
66) Diethyl phthalate	5.648	149	829997	39762.4188779	ppb		98
67) 4-Nitroaniline	5.754	138	148921	34850.8936152	ppb		100
68) Azobenzene	5.865	77	850498	41374.6627355	ppb		97
71) 4,6-Dinitro-2-methylph...	5.777	198	142987	55423.2361428	ppb		94
72) N-Nitrosodiphenylamine	5.830	169	706404	40659.1463119	ppb		98
74) 4-Bromophenyl-phenylether	6.118	248	257202	38685.3180277	ppb		91
75) Hexachlorobenzene	6.171	284	291162	38641.3793419	ppb		96
76) n-octadecane	6.359	55	124145	41394.5872497	ppb		99
77) Pentachlorophenol	6.318	266	171633	46912.3391429	ppb		94
78) Phenanthrene	6.494	178	1204540	38302.0769877	ppb		99
79) Anthracene	6.529	178	1230700	38820.1017802	ppb		99
80) Carbazole	6.647	167	1050418	37946.3690562	ppb		99
81) Di-n-butyl phthalate	6.911	149	1451395	44399.9327590	ppb		99
83) Fluoranthene	7.499	202	1414734	40835.9958339	ppb		99
86) Pyrene	7.728	202	1466206	39733.3315184	ppb		98
88) Benzylbutyl phthalate	8.474	149	638871	46612.8195129	ppb		97
90) Benzo(a)anthracene	9.279	228	1413185	40116.4334706	ppb		100
91) Chrysene	9.338	228	1343507	39096.4680000	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.373	149	930317	45993.4899293	ppb		98
93) Di-n-octyl phthalate	10.595	149	1569381	48274.0939578	ppb		98
95) Benzo(b)fluoranthene	11.230	252	1426873	39778.6192104	ppb		98
96) Benzo(k)fluoranthene	11.288	252	1453648	40231.2170421	ppb		98
97) Benzo(a)pyrene	11.888	252	1392023	41485.2042945	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.921	276	1243979	39254.2119267	ppb		96
99) Dibenz(a,h)anthracene	13.968	278	1338930m	38534.0790500	ppb		
100) Benzo(g,h,i)perylene	14.261	276	1307949	36468.9726551	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_12.D  
Acq On : 14 Jan 2022 3:36 pm  
Operator : 917  
Sample : STD SVMS 40K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 9 Sample Multiplier: 1  
InstName : BNAMS11

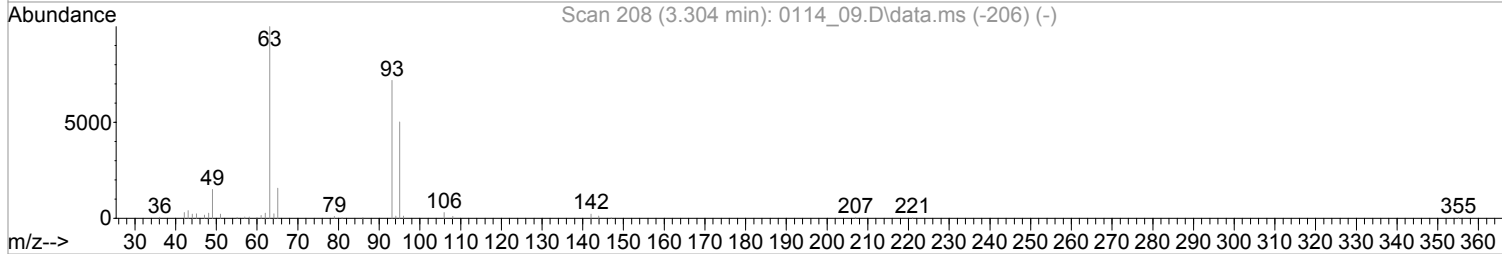
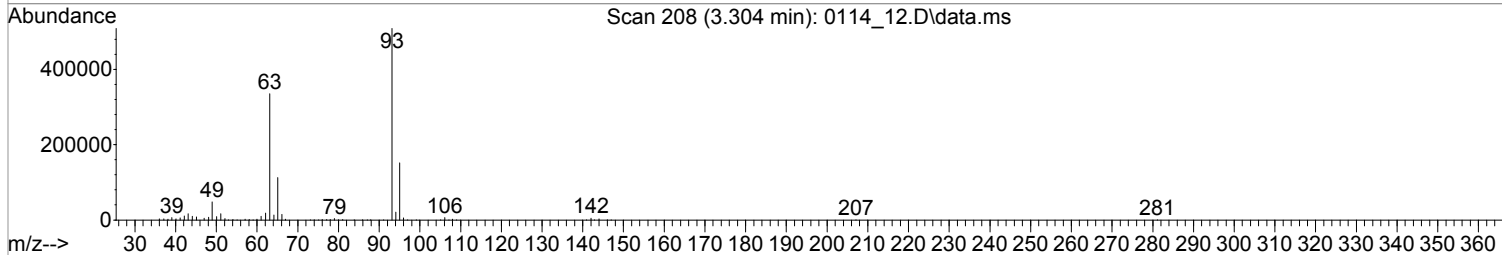
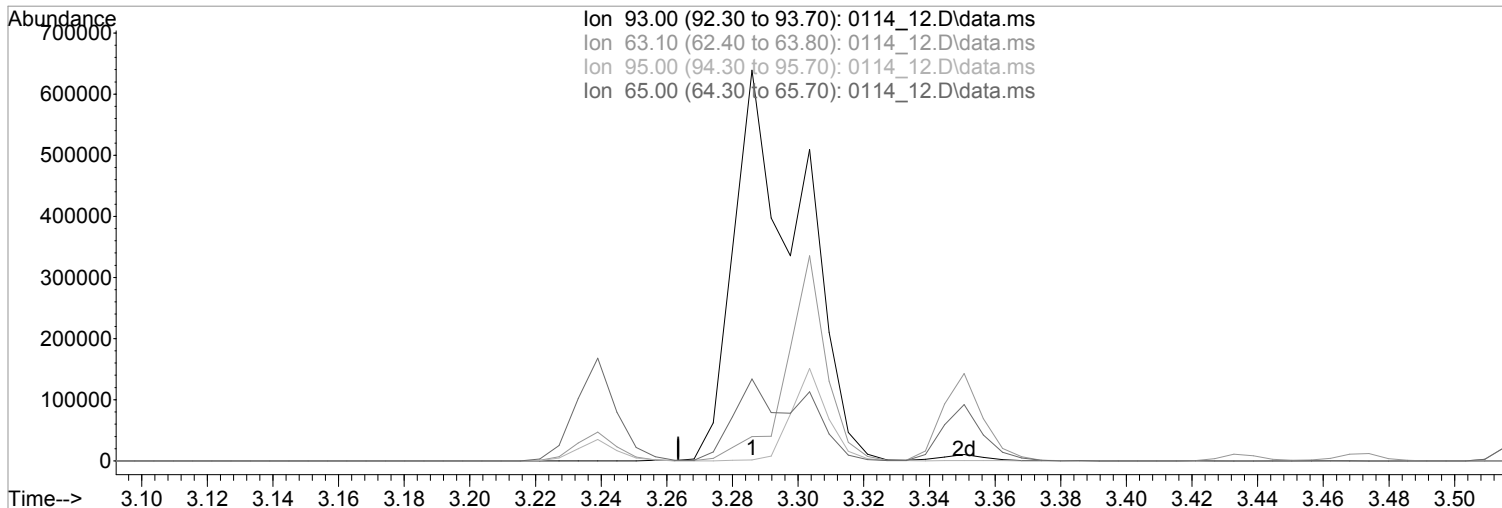
Quant Time: Jan 17 17:29:39 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 17:24:03 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_12.D  
 Acq On : 14 Jan 2022 3:36 pm  
 Operator : 917  
 Sample : STD SVMS 40K PPB 22A13138 EXP 06/20/22  
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Quant Time: Jan 17 17:24:19 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:24:03 2022  
 Response via : Initial Calibration



TIC: 0114\_12.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)

3.304min 0.000000 ppb d

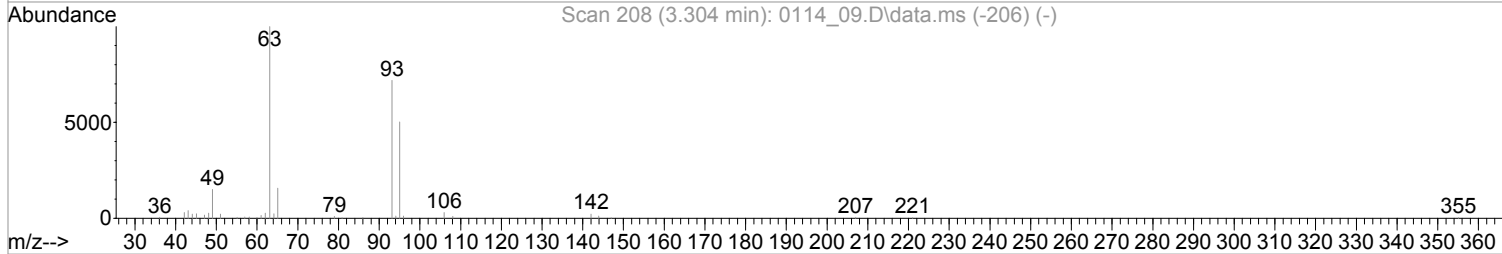
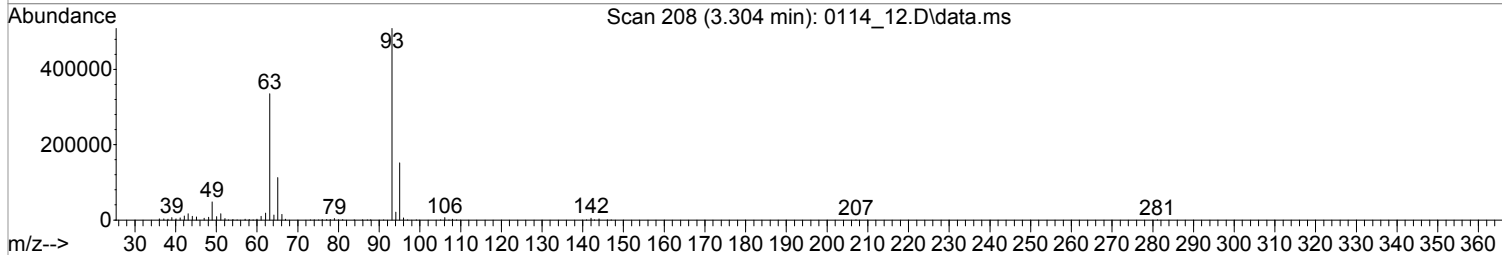
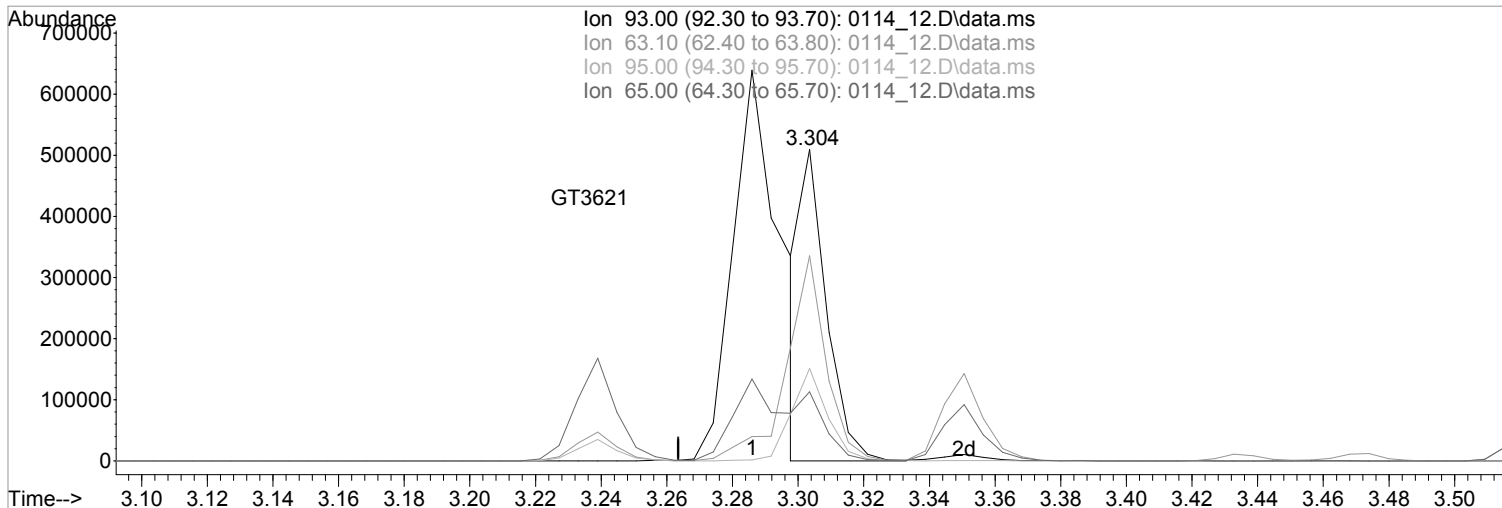
response 0

Ion	Exp%	Act%
93.00	100	0.00
63.10	63.50	0.00
95.00	30.20	0.00
65.00	21.40	0.00

Quantitation Report (Qedit)

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 Data File : 0114\_12.D  
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 Sample : STD SVMS 40K PPB 22A13138 EXP 06/20/22  
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 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:24:03 2022  
 Response via : Initial Calibration



(6) bis(2-Chloroethyl)ether (MT)  
 3.304min (0.000) 30306.5439374 ppb m

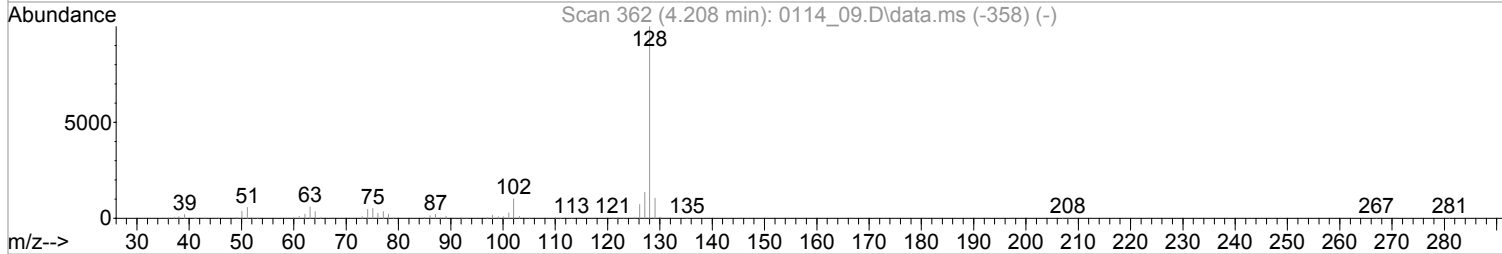
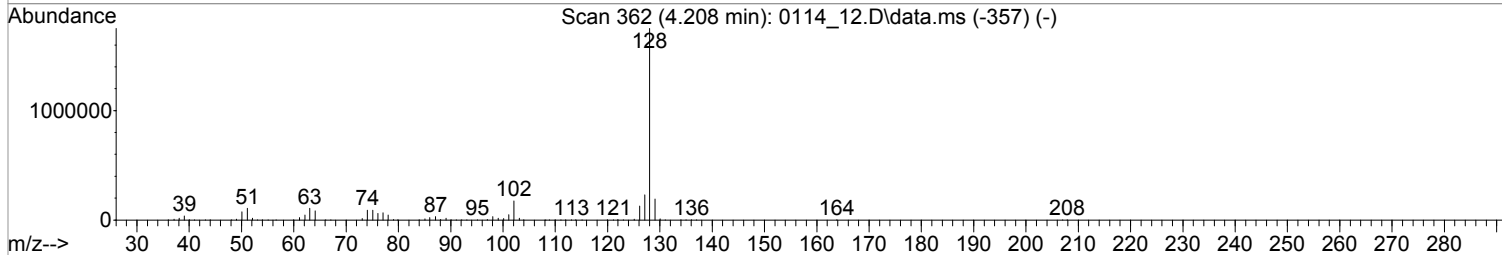
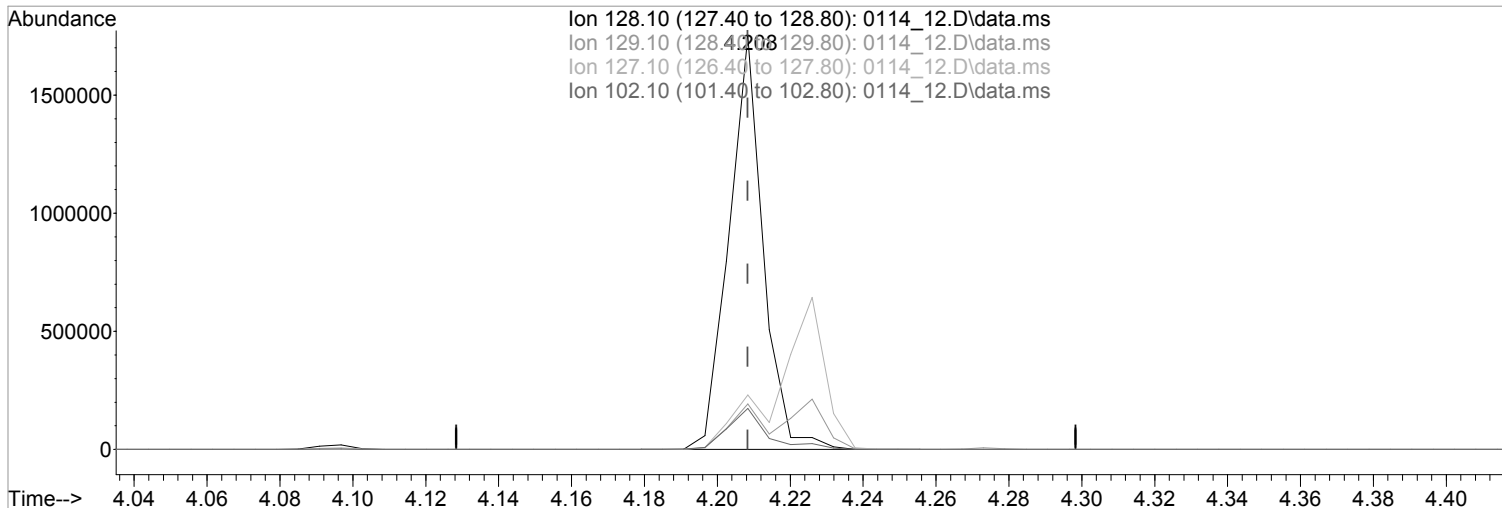
response 274768

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	65.86
95.00	30.20	29.74
65.00	21.40	22.19

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_12.D  
Acq On : 14 Jan 2022 3:36 pm  
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Sample : STD SVMS 40K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
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Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 17:24:03 2022  
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TIC: 0114\_12.D\data.ms

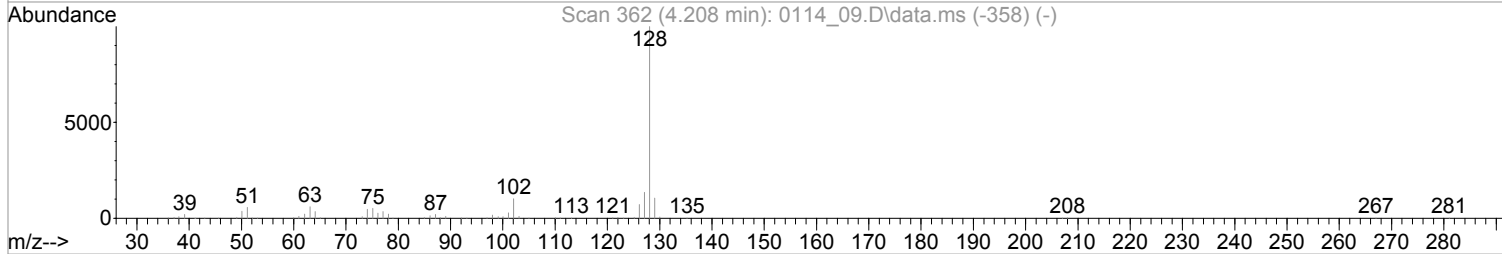
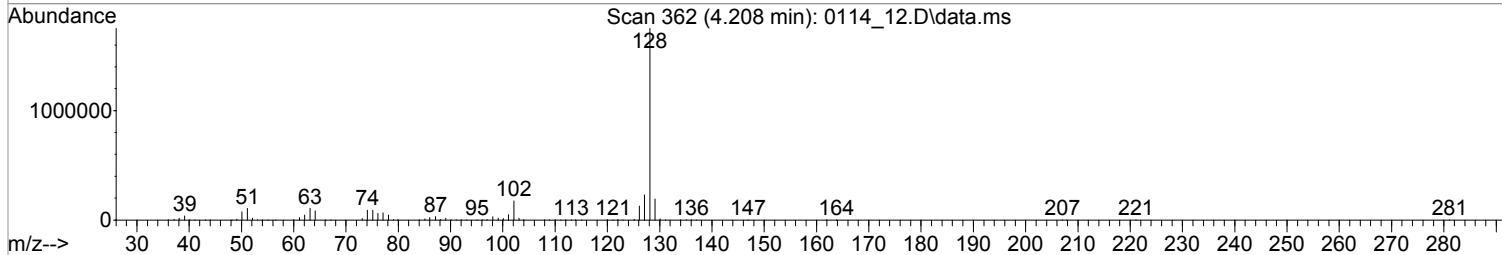
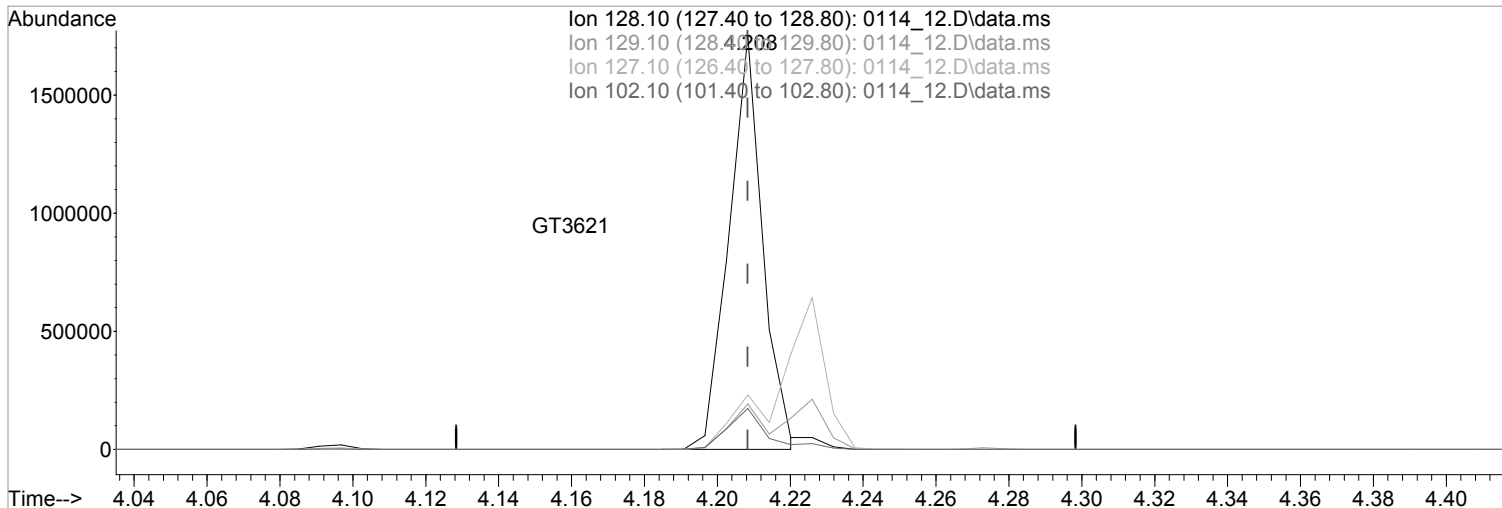
(34) Naphthalene (MT)  
4.208min (+0.000) 38866.3747794 ppb  
Qvalue = 99  
response 1138561

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	10.97
127.10	13.50	13.17
102.10	10.10	9.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_12.D  
 Acq On : 14 Jan 2022 3:36 pm  
 Operator : 917  
 Sample : STD SVMS 40K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 9 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:24:19 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:24:03 2022  
 Response via : Initial Calibration



TIC: 0114\_12.D\data.ms

(34) Naphthalene (MT)  
 4.208min (+0.000) 38105.0306295 ppb m

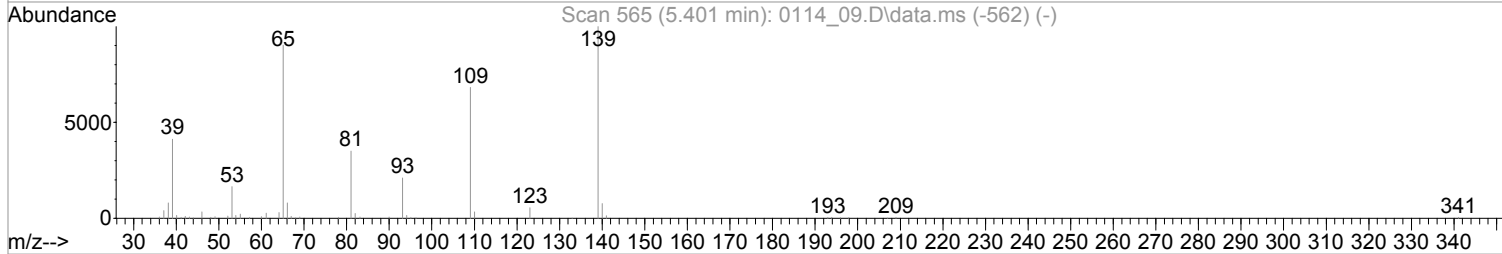
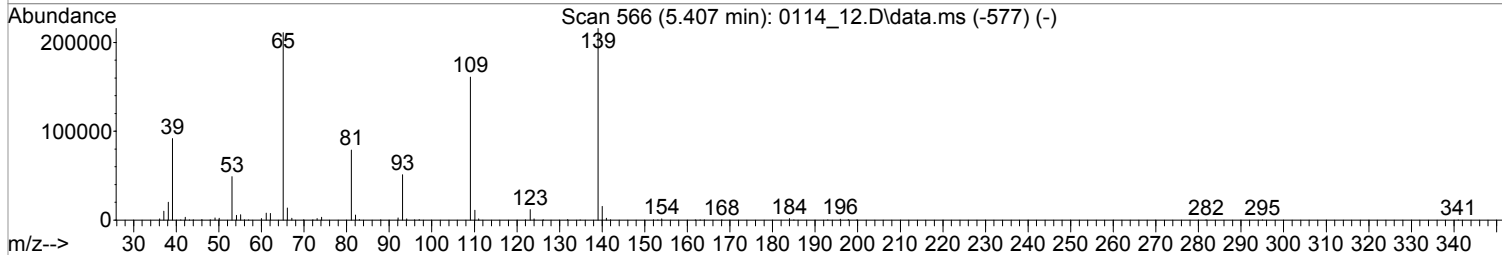
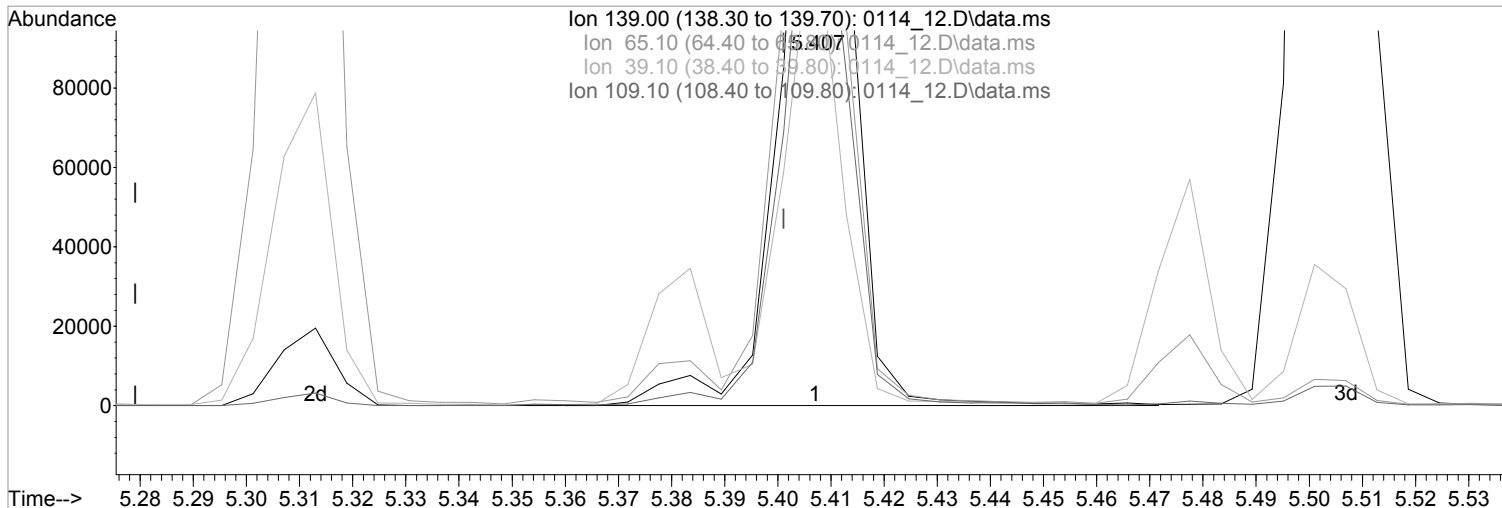
response 1116258

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	10.97
127.10	13.50	13.17
102.10	10.10	9.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_12.D  
 Acq On : 14 Jan 2022 3:36 pm  
 Operator : 917  
 Sample : STD SVMS 40K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 9 Sample Multiplier: 1  
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Quant Time: Jan 17 17:24:19 2022  
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TIC: 0114\_12.D\data.ms

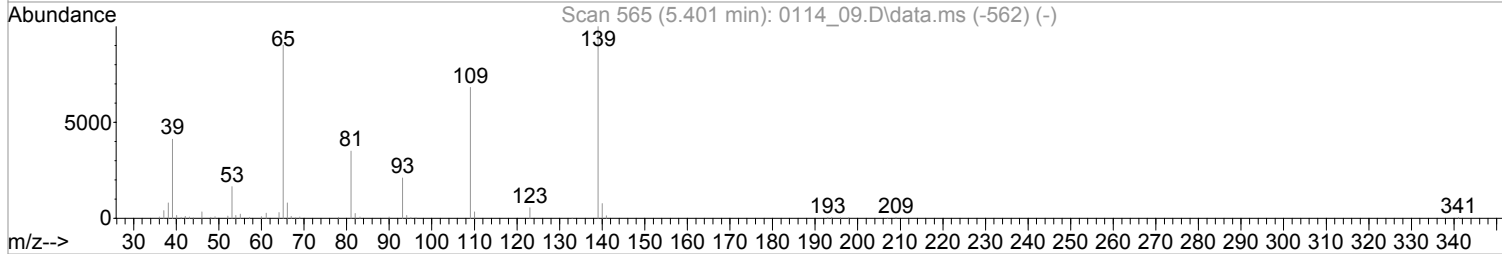
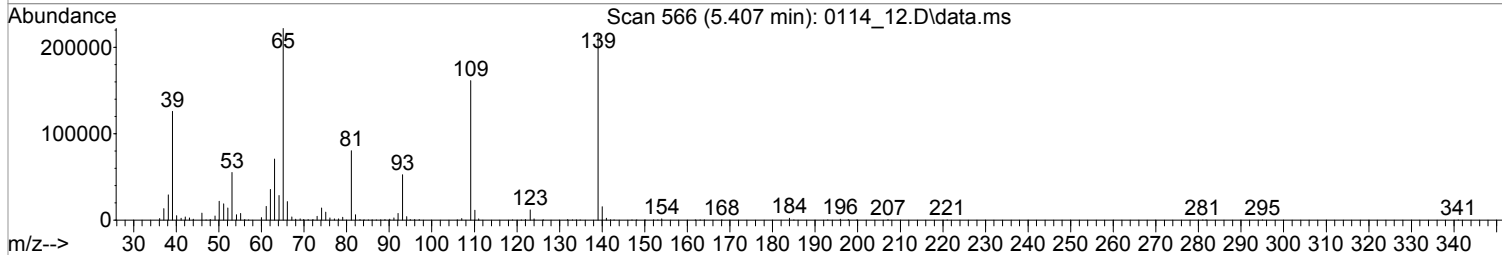
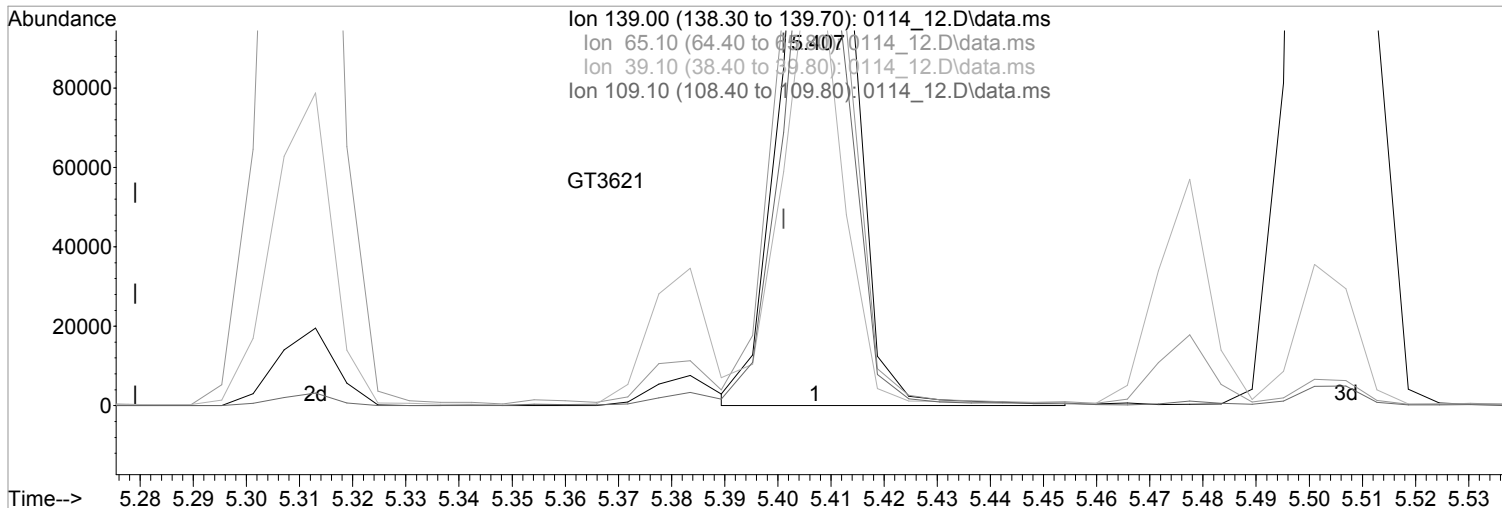
(63) 4-Nitrophenol (MPT)  
 5.407min (+0.006) 46947.1116262 ppb  
 Qvalue = 88  
 response 168043

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	102.11
39.10	47.40	58.05
109.10	67.50	74.51

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_12.D  
 Acq On : 14 Jan 2022 3:36 pm  
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 Sample : STD SVMS 40K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
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 Quant Title : 8270 BNA  
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TIC: 0114\_12.D\data.ms

(63) 4-Nitrophenol (MPT)  
 5.407min (+0.006) 45144.3009687 ppb m  
 response 161590  

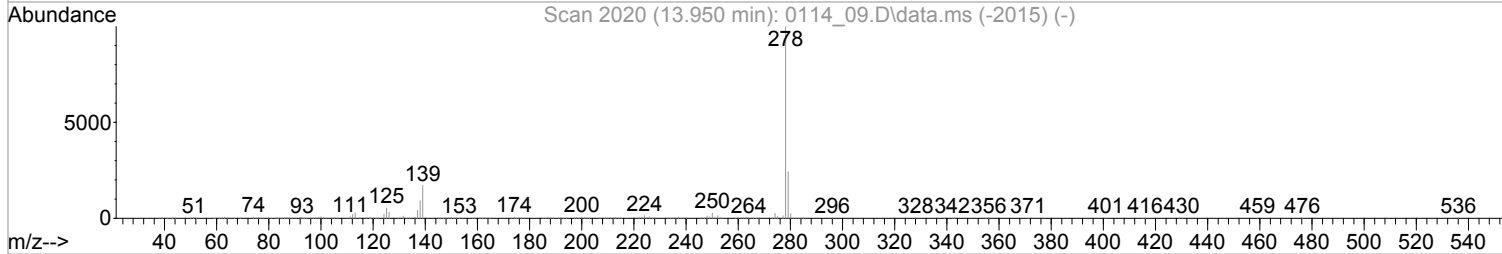
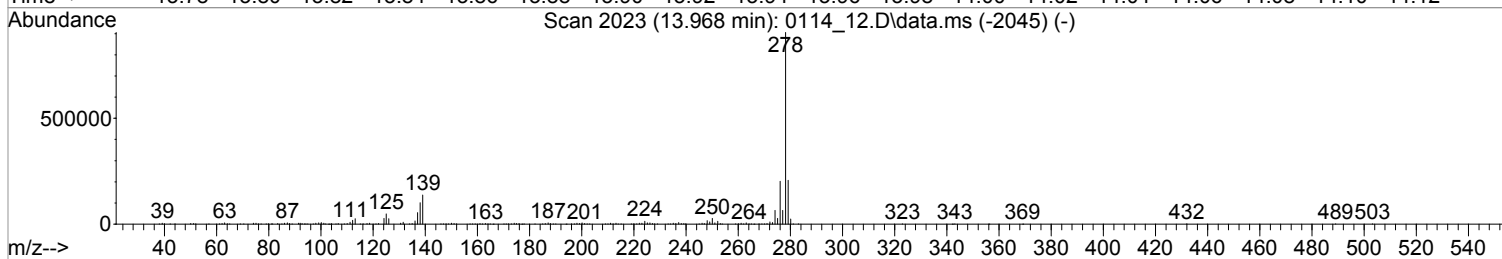
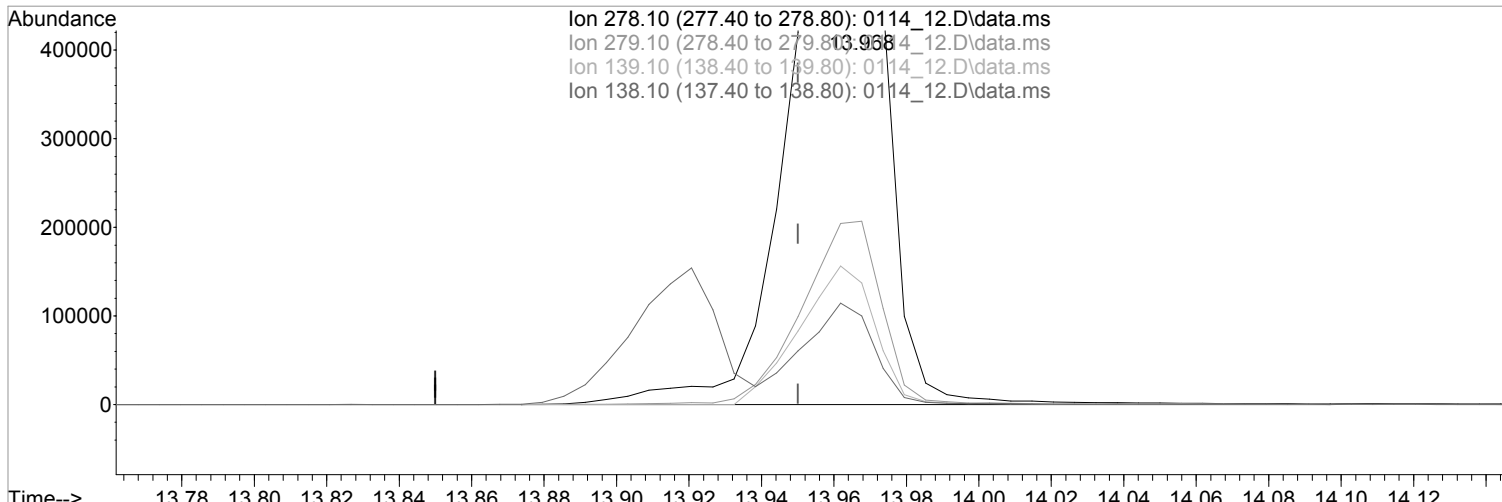
Ion	Exp%	Act%
139.00	100	100
65.10	90.70	102.69
39.10	47.40	58.19
109.10	67.50	74.62



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_12.D  
 Acq On : 14 Jan 2022 3:36 pm  
 Operator : 917  
 Sample : STD SVMS 40K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
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TIC: 0114\_12.D\data.ms

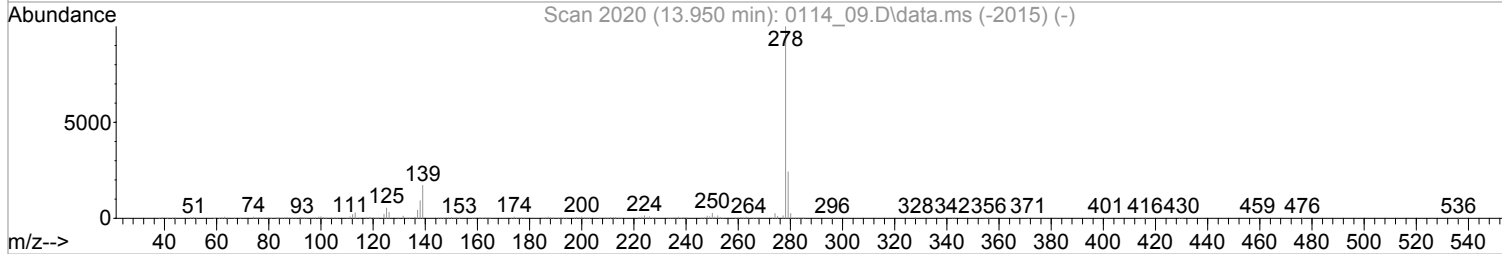
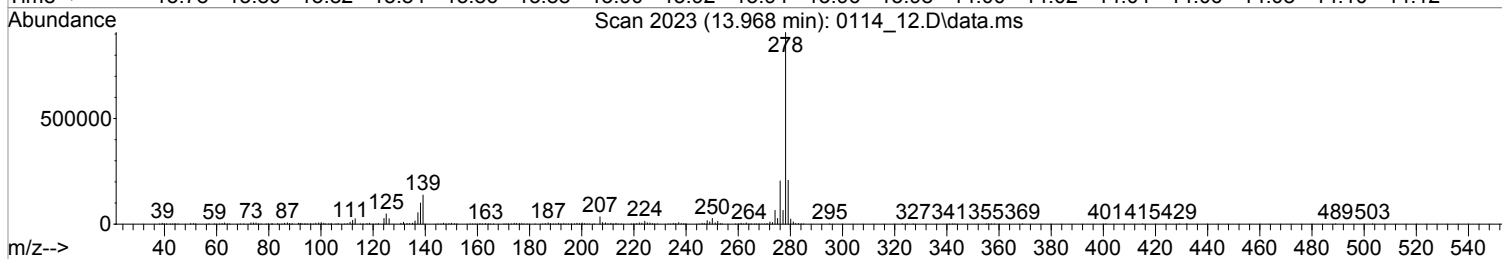
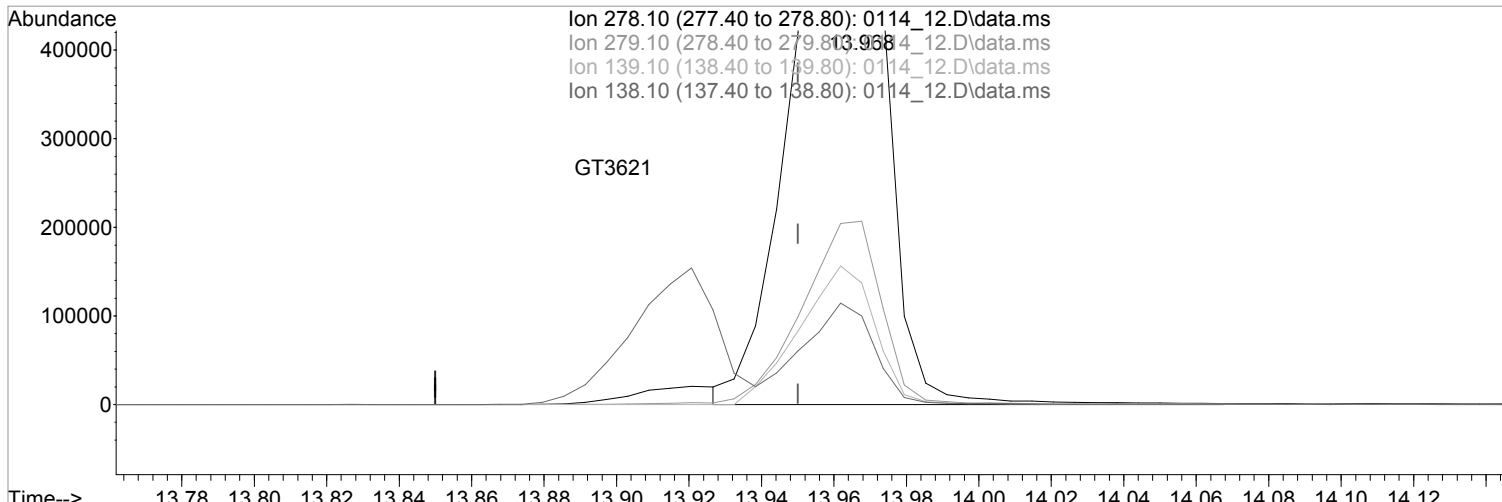
(99) Dibenz(a,h)anthracene (MT)  
 13.968min (+0.018) 39531.9883186 ppb  
 Qvalue = 96  
 response 1373604

Ion	Exp%	Act%
278.10	100	100
279.10	24.00	22.79
139.10	16.90	15.11
138.10	12.90	11.01

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_12.D  
 Acq On : 14 Jan 2022 3:36 pm  
 Operator : 917  
 Sample : STD SVMS 40K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
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Quant Time: Jan 17 17:24:19 2022  
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 Response via : Initial Calibration



TIC: 0114\_12.D\data.ms

(99) Dibenz(a,h)anthracene (MT)  
 13.968min (+0.018) 38534.0790500 ppb m

response 1338930

Ion	Exp%	Act%
278.10	100	100
279.10	24.00	22.79
139.10	16.90	15.11
138.10	12.90	11.02

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_13.D  
 Acq On : 14 Jan 2022 3:56 pm  
 Operator : 917  
 Sample : STD SVMS 50K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 10 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:34:01 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:29:58 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.462	152	65785	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.197	136	254621	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.360	164	141172	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.471	188	264981	8000.0000000	ppb	0.00
84) Chrysene-d12	9.297	240	266371	8000.0000000	ppb	0.01
94) Perylene-d12	11.994	264	268459	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.792	112	472534	49010.1606194	ppb	0.00
Spiked Amount	666.000		Recovery	= 7358.88%		
7) Phenol-d5	3.233	99	566002	48194.2977860	ppb	0.00
Spiked Amount	666.000		Recovery	= 7236.38%		
24) Nitrobenzene-d5	3.768	82	579411	51560.6881967	ppb	0.00
Spiked Amount	333.000		Recovery	= 15483.69%		
50) 2-Fluorobiphenyl	4.878	172	1095331	46022.5890349	ppb	0.00
Spiked Amount	333.000		Recovery	= 13820.60%		
73) 2,4,6-Tribromophenol	5.936	330	206902	58806.1860360	ppb	0.00
Spiked Amount	666.000		Recovery	= 8829.76%		
87) p-Terphenyl-d14	7.881	244	1615000	49614.6823506	ppb	0.00
Spiked Amount	333.000		Recovery	= 14899.30%		
<b>Target Compounds</b>						
					Qvalue	
2) Pyridine	2.240	79	556644	54570.5496192	ppb	98
3) N-Nitrosodimethylamine	2.222	42	261381	47802.4224086	ppb	93
5) Aniline	3.286	66	298774	49431.5336836	ppb	93
6) bis(2-Chloroethyl)ether	3.304	93	377593m	39070.3605159	ppb	
8) Phenol	3.239	94	602147	48596.0134750	ppb	97
10) 2-Chlorophenol	3.351	128	503202	48137.9855723	ppb	96
11) n-Decane	3.351	41	275732	46795.2430691	ppb	96
12) 1,3-Dichlorobenzene	3.433	146	581225	47802.6446394	ppb	99
13) 1,4-Dichlorobenzene	3.474	146	585283	47348.4300296	ppb	97
14) Benzyl Alcohol	3.521	79	455806	49222.2827922	ppb	99
15) 1,2-Dichlorobenzene	3.556	146	541520	46144.2900010	ppb	99
16) bis(2-Chloroisopropyl)...	3.591	121	167275	46540.4019659	ppb	96
17) 2,2-oxybis(1-chloropro...	3.591	121	167275	46540.4019659	ppb	96
18) 2-Methylphenol	3.568	108	445266	47337.1153773	ppb	98
19) Hexachloroethane	3.750	117	220182	48623.9981074	ppb	98
20) N-Nitrosodi-n-propylamine	3.668	70	363272	48784.8931551	ppb	99
21) 3&4-Methyl phenol	3.650	107	524904	48799.0409478	ppb	99
25) Nitrobenzene	3.779	77	544613	48990.6220236	ppb	95
26) Isophorone	3.915	82	983245	50007.6073132	ppb	99
27) 2-Nitrophenol	3.956	139	270561	51324.2664017	ppb	96
28) 2,4-Dimethylphenol	3.962	107	510418	48171.0097309	ppb	98
29) bis(2-Chlorethoxy)methane	4.020	93	545733	47919.2265510	ppb	98
30) 2,4-Dichlorophenol	4.097	162	435907	50866.2598619	ppb	94
32) 1,2,4-Trichlorobenzene	4.156	180	478995	47373.9201668	ppb	97
34) Naphthalene	4.208	128	1484150m	47123.3131829	ppb	
35) 4-Chloroaniline	4.226	65	187326	49397.3130190	ppb	99
36) Hexachloro-1,3-butadiene	4.273	225	300383	47377.6870383	ppb	97
40) 4-Chloro-3-methylphenol	4.508	107	455964	52235.4987945	ppb	95
41) 2-Methylnaphthalene	4.643	142	998662	47651.3085276	ppb	99
42) 1-Methylnaphthalene	4.708	142	949464	48032.6486633	ppb	97
47) Hexachlorocyclopentadiene	4.743	237	366230	47980.0160477	ppb	96
48) 2,4,6-Trichlorophenol	4.819	196	344170	52458.4868472	ppb	92

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_13.D  
 Acq On : 14 Jan 2022 3:56 pm  
 Operator : 917  
 Sample : STD SVMS 50K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 10 Sample Multiplier: 1  
 InstName : BNAMS11

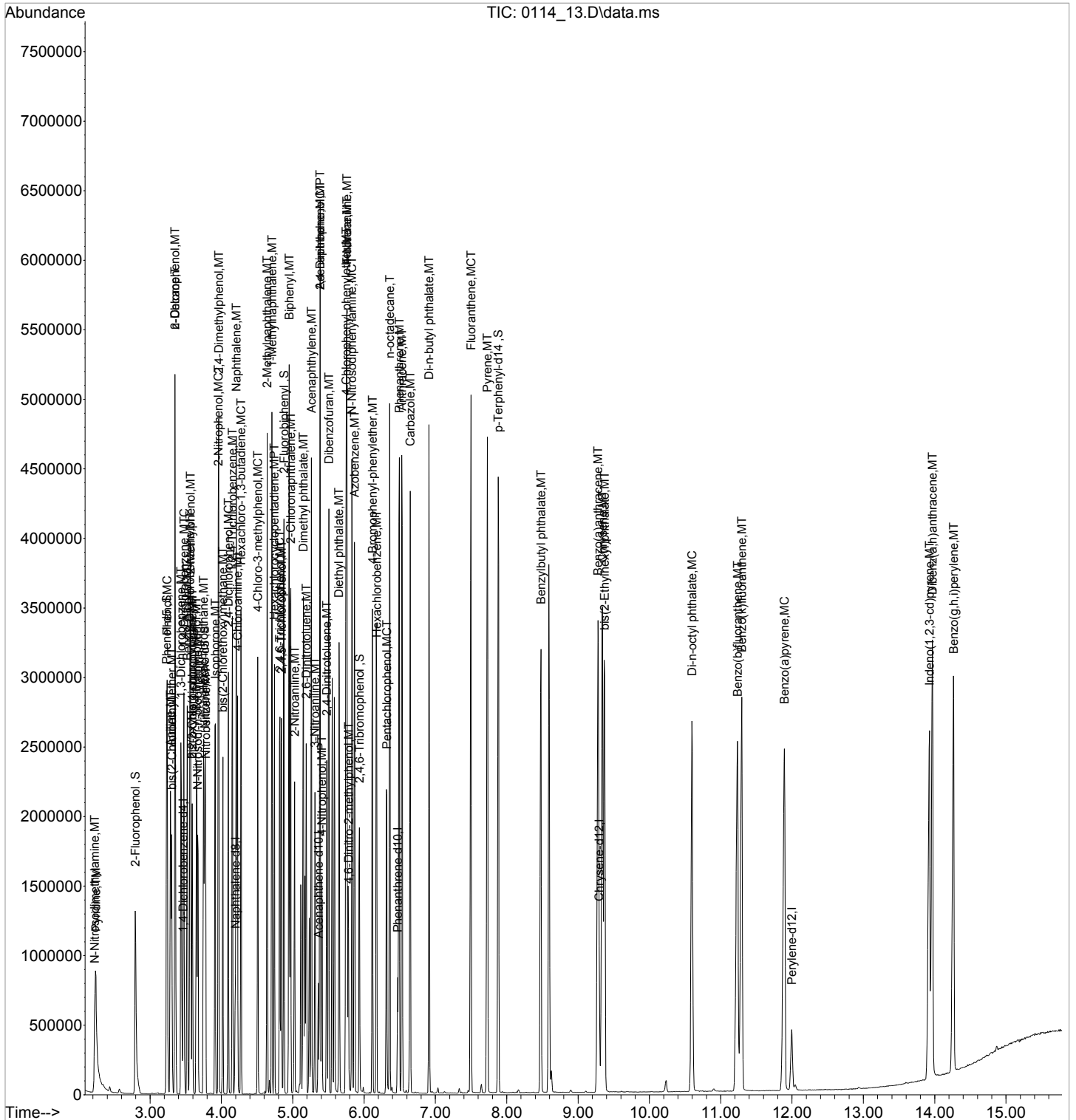
Quant Time: Jan 17 17:34:01 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:29:58 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
49) 2,4,5-Trichlorophenol	4.843	196	335390	48682.8498842	ppb	92	
51) Biphenyl	4.949	154	1219031	45791.3573569	ppb	99	
52) 2-Chloronaphthalene	4.972	162	945793	46056.6269868	ppb	99	
53) 2-Nitroaniline	5.025	138	324826	55409.9618077	ppb	99	
54) Acenaphthylene	5.260	152	1542435	48223.7920424	ppb	100	
55) Dimethyl phthalate	5.149	163	1099017	48543.3339250	ppb	96	
56) 2,6-Dinitrotoluene	5.190	165	262531	53495.6558725	ppb	98	
57) 3-Nitroaniline	5.313	138	274963	54322.5205651	ppb	96	
58) Acenaphthene	5.384	153	972603	46472.8838194	ppb	100	
59) 2,4-Dinitrophenol	5.384	184	160430	71025.3710521	ppb	#	51
60) Dibenzofuran	5.507	168	1362961	46890.2681546	ppb	99	
61) 2,4-Dinitrotoluene	5.478	165	367197	57408.8846440	ppb	99	
63) 4-Nitrophenol	5.407	139	217876m	54281.3904093	ppb		
64) Fluorene	5.760	166	1084164	46287.8930307	ppb	98	
65) 4-Chlorophenyl-phenyle...	5.748	204	575447	46422.6449681	ppb	93	
66) Diethyl phthalate	5.648	149	1102810	48020.3597224	ppb	98	
67) 4-Nitroaniline	5.760	138	218517	47311.1892674	ppb	98	
68) Azobenzene	5.865	77	1127801	49582.2775668	ppb	98	
71) 4,6-Dinitro-2-methylph...	5.783	198	200496	66816.4751712	ppb	89	
72) N-Nitrosodiphenylamine	5.830	169	973753	50722.6445560	ppb	99	
74) 4-Bromophenyl-phenylether	6.118	248	371339	50904.4181748	ppb	90	
75) Hexachlorobenzene	6.177	284	409313	49517.0800753	ppb	98	
76) n-octadecane	6.359	55	158816	47799.1321476	ppb	99	
77) Pentachlorophenol	6.318	266	244659	59200.5086699	ppb	96	
78) Phenanthrene	6.494	178	1632984m	47390.7687882	ppb		
79) Anthracene	6.529	178	1667915	47927.1358108	ppb	100	
80) Carbazole	6.647	167	1411122	46584.2172363	ppb	99	
81) Di-n-butyl phthalate	6.911	149	1958105	53497.1135769	ppb	99	
83) Fluoranthene	7.499	202	1974681	51551.3103433	ppb	99	
86) Pyrene	7.728	202	2029323	49498.1408888	ppb	98	
88) Benzylbutyl phthalate	8.480	149	870720	55808.0754628	ppb	96	
90) Benzo(a)anthracene	9.279	228	1948199	49709.5650682	ppb	98	
91) Chrysene	9.344	228	1850431	48577.8271516	ppb	98	
92) bis(2-Ethylhexyl)phtha...	9.373	149	1266711	55132.6339260	ppb	98	
93) Di-n-octyl phthalate	10.595	149	2162640	58101.3596484	ppb	98	
95) Benzo(b)fluoranthene	11.236	252	2024362	52247.4113467	ppb	99	
96) Benzo(k)fluoranthene	11.294	252	1971894	50442.6284057	ppb	99	
97) Benzo(a)pyrene	11.894	252	1962092	53806.8238745	ppb	98	
98) Indeno(1,2,3-cd)pyrene	13.927	276	1680562	49187.5012735	ppb	96	
99) Dibenz(a,h)anthracene	13.968	278	1855293	49653.2886614	ppb	98	
100) Benzo(g,h,i)perylene	14.267	276	1752973	45791.8603201	ppb	95	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_13.D  
Acq On : 14 Jan 2022 3:56 pm  
Operator : 917  
Sample : STD SVMS 50K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 10 Sample Multiplier: 1  
InstName : BNAMS11

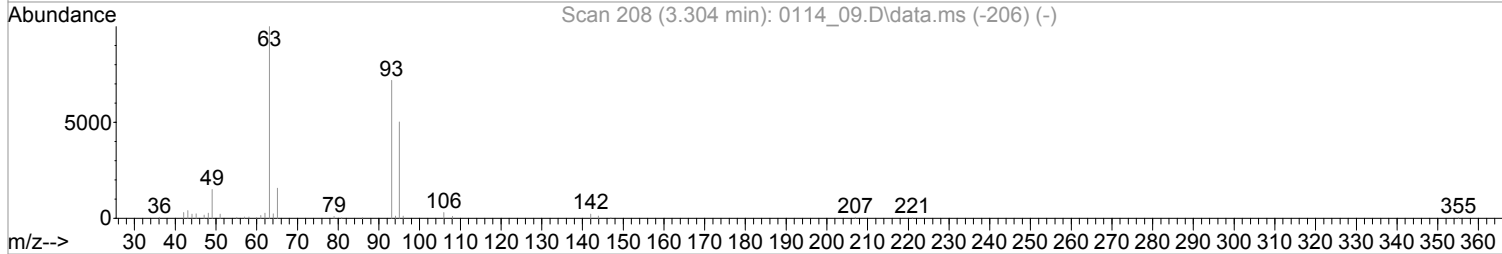
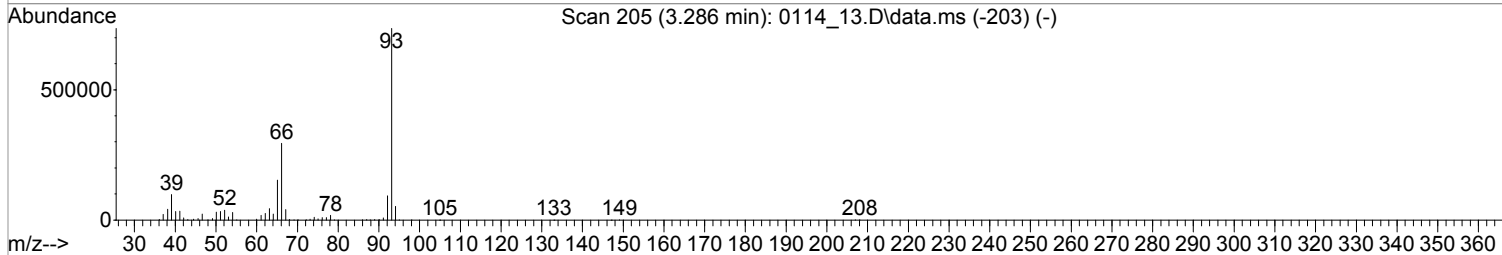
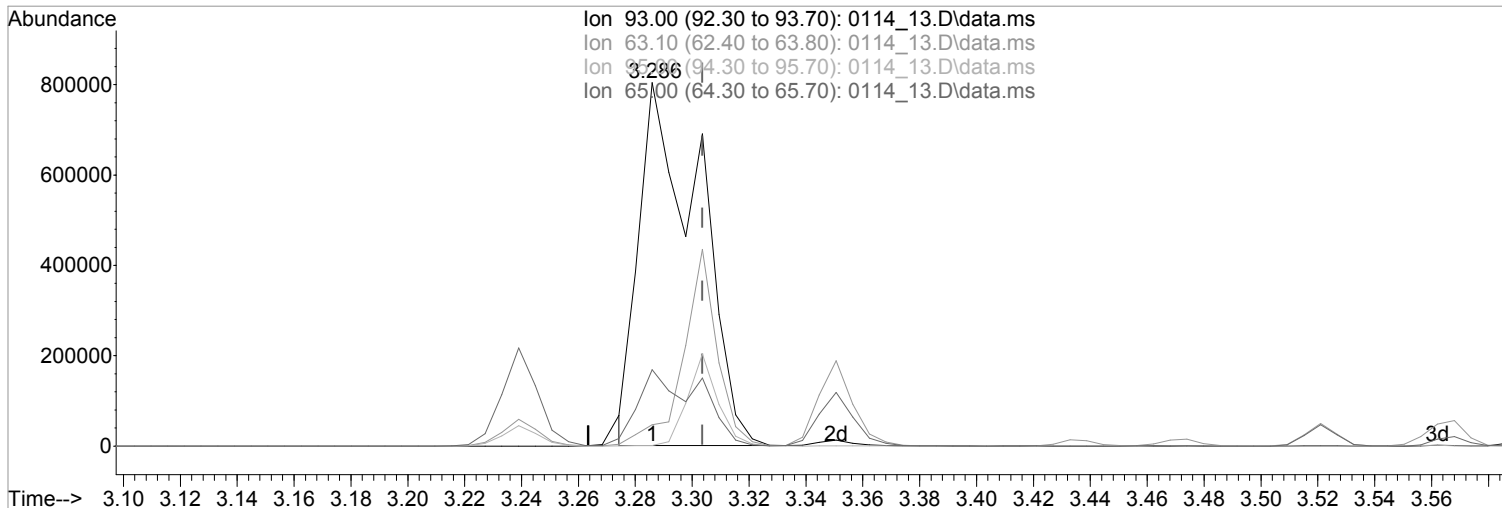
Quant Time: Jan 17 17:34:01 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 17:29:58 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_13.D  
 Acq On : 14 Jan 2022 3:56 pm  
 Operator : 917  
 Sample : STD SVMS 50K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 10 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:30:12 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:29:58 2022  
 Response via : Initial Calibration



TIC: 0114\_13.D\data.ms

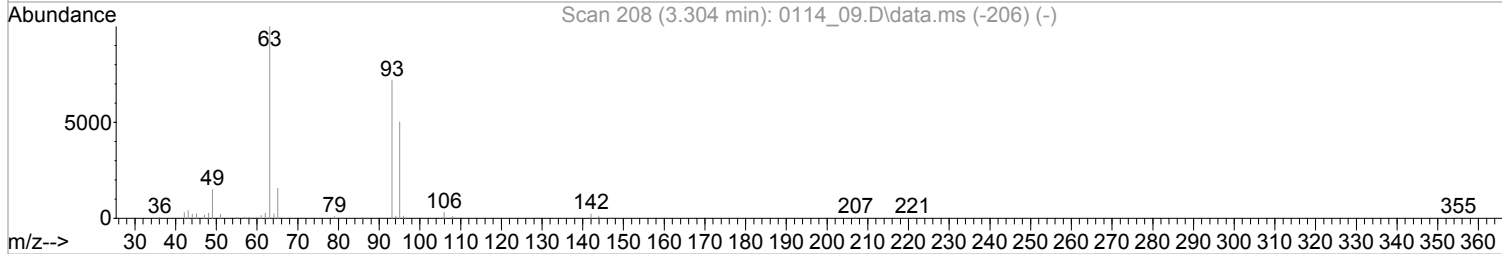
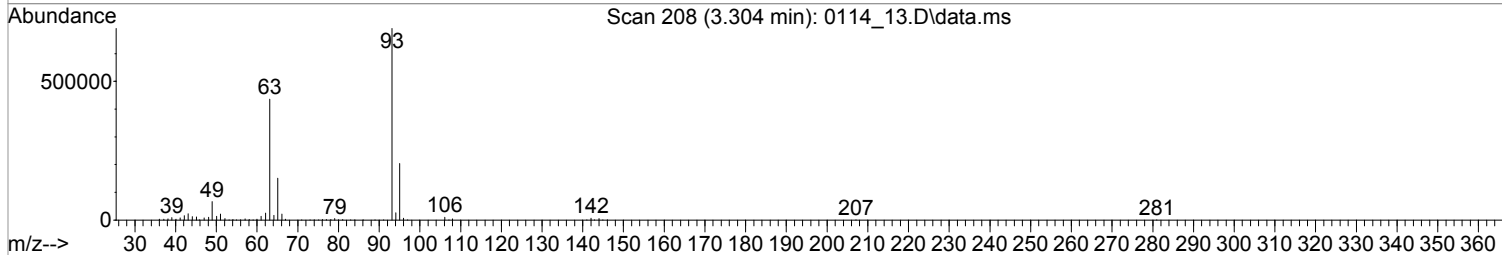
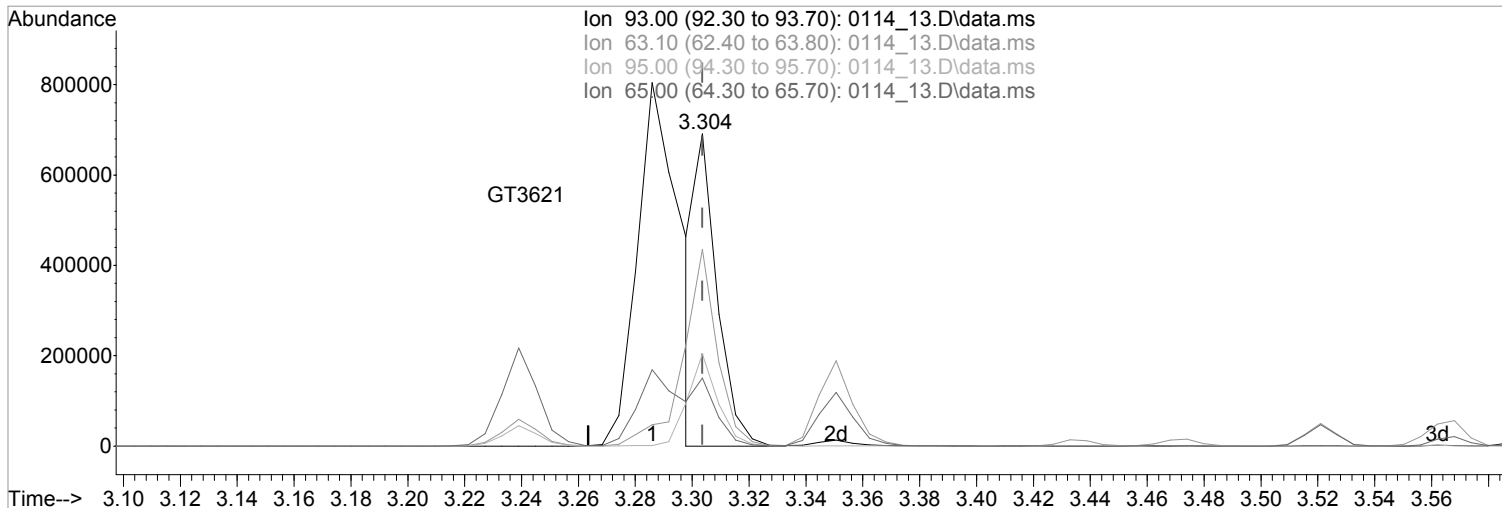
(6) bis(2-Chloroethyl)ether (MT)  
 3.286min (-0.018) 121117.5691967 ppb  
 Qvalue = 44  
 response 1170533

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	5.77#
95.00	30.20	0.16#
65.00	21.40	20.93

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_13.D  
Acq On : 14 Jan 2022 3:56 pm  
Operator : 917  
Sample : STD SVMS 50K PPB 22A13138 EXP 06/20/22  
Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 10 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 17 17:30:12 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 17:29:58 2022  
Response via : Initial Calibration



(6) bis(2-Chloroethyl)ether (MT)  
3.304min (+0.000) 39070.3605159 ppb m

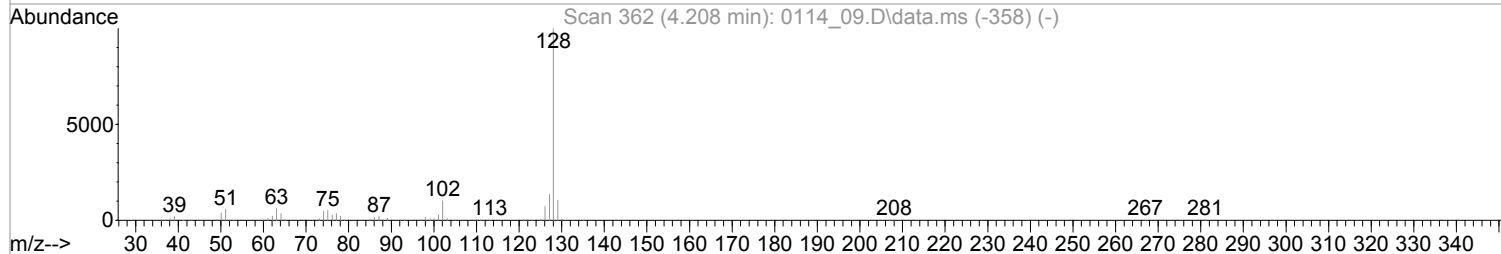
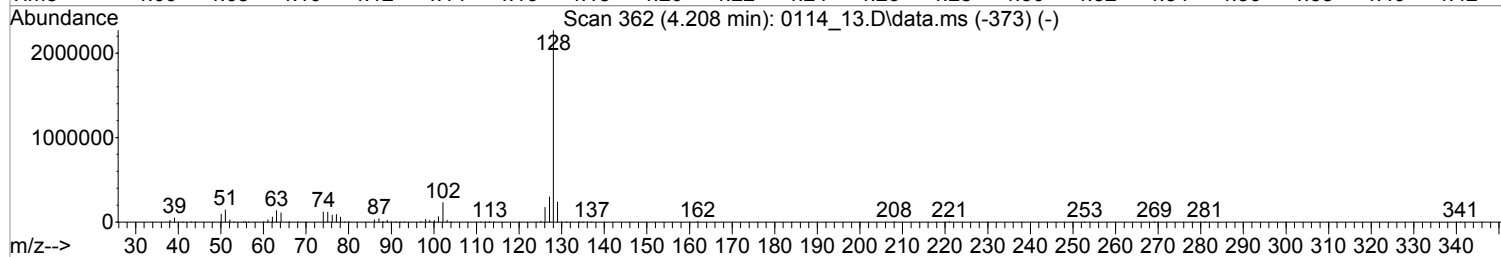
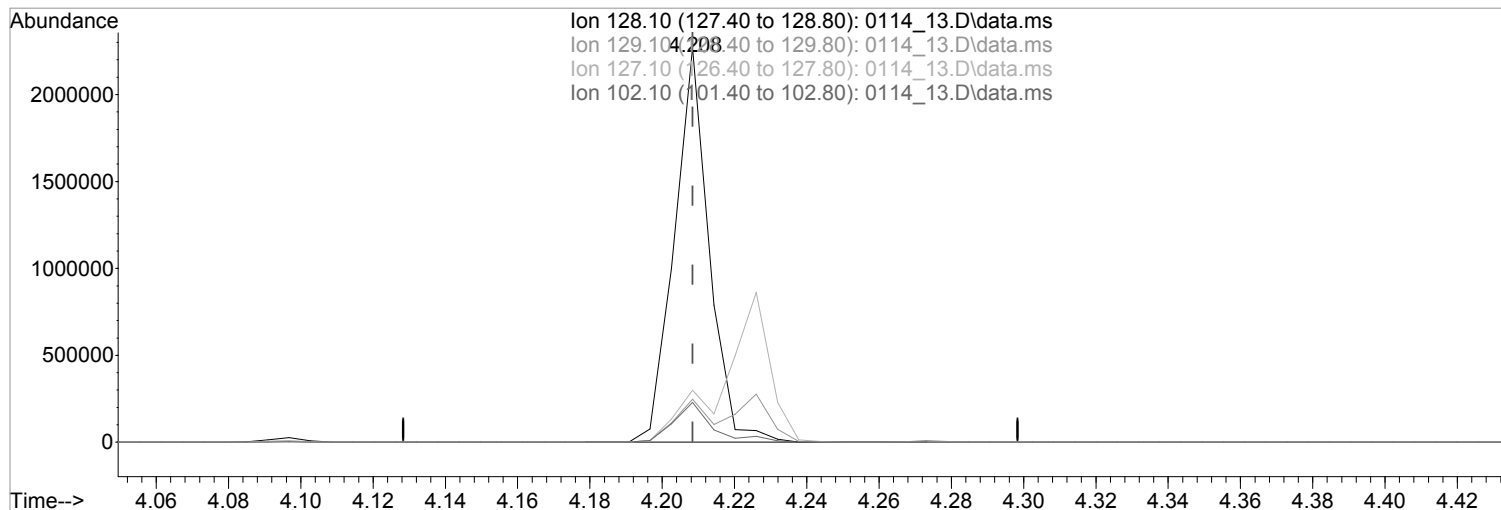
response 377593

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	63.04
95.00	30.20	29.45
65.00	21.40	21.80

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_13.D  
 Acq On : 14 Jan 2022 3:56 pm  
 Operator : 917  
 Sample : STD SVMS 50K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 10 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:30:12 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:29:58 2022  
 Response via : Initial Calibration



TIC: 0114\_13.D\data.ms

(34) Naphthalene (MT)

4.208min (+0.000) 48117.1208860 ppb

Qvalue = 99

response 1515450

Ion	Exp%	Act%
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128.10	100	100
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129.10	10.50	10.87
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127.10	13.50	13.20
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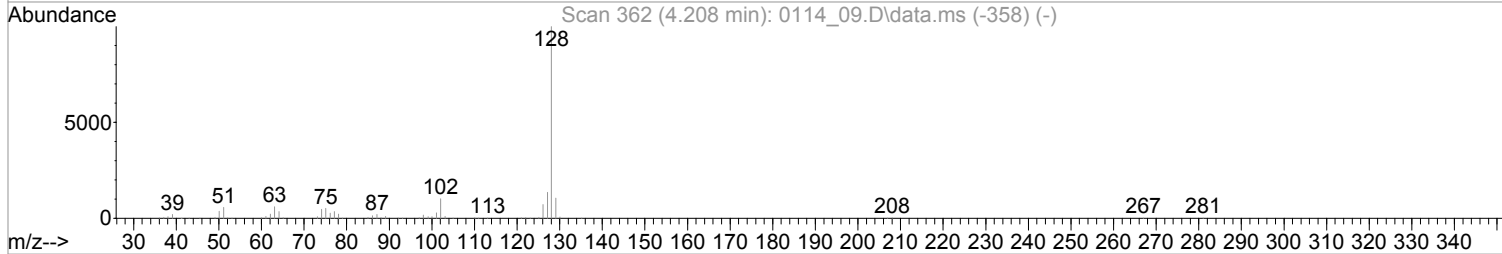
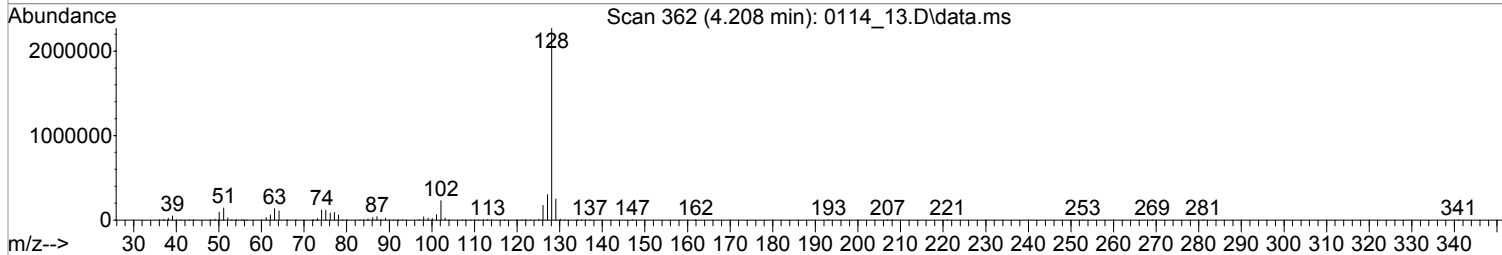
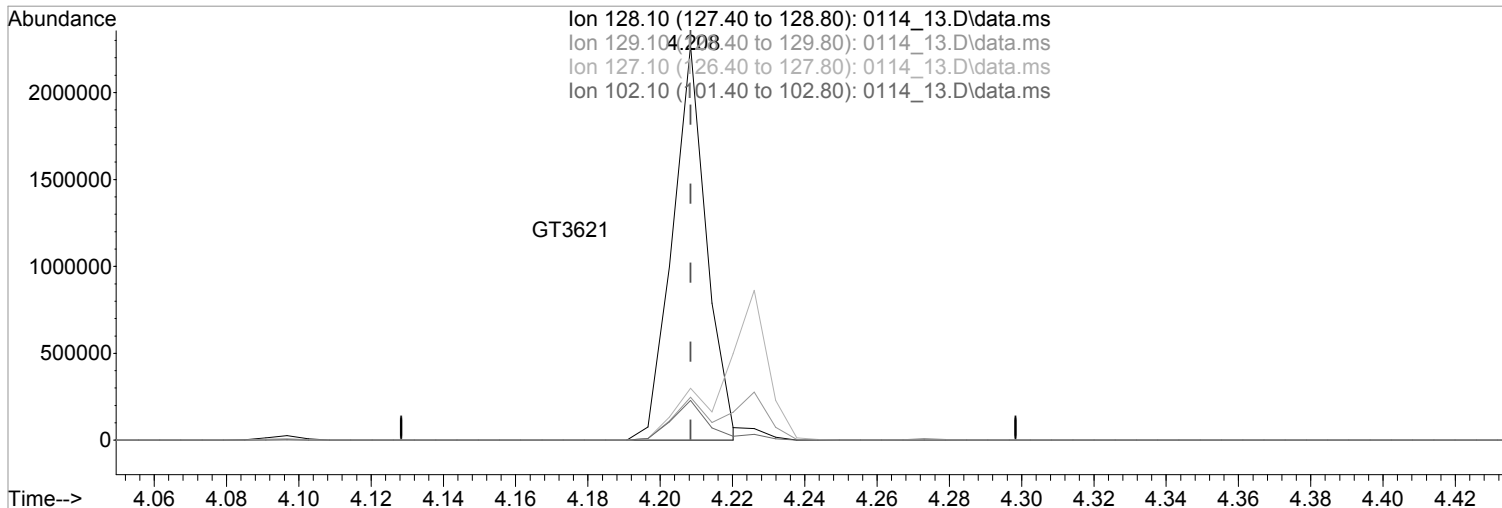
102.10	10.10	10.06
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Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_13.D  
 Acq On : 14 Jan 2022 3:56 pm  
 Operator : 917  
 Sample : STD SVMS 50K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 10 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:30:12 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:29:58 2022  
 Response via : Initial Calibration



TIC: 0114\_13.D\data.ms

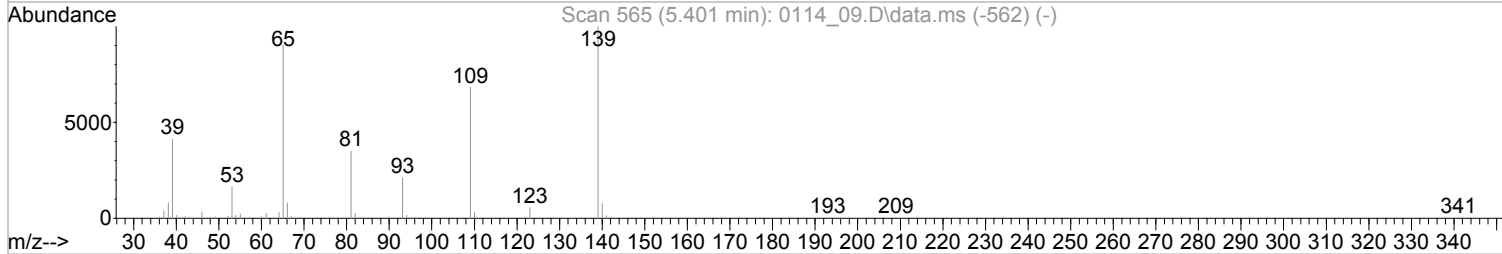
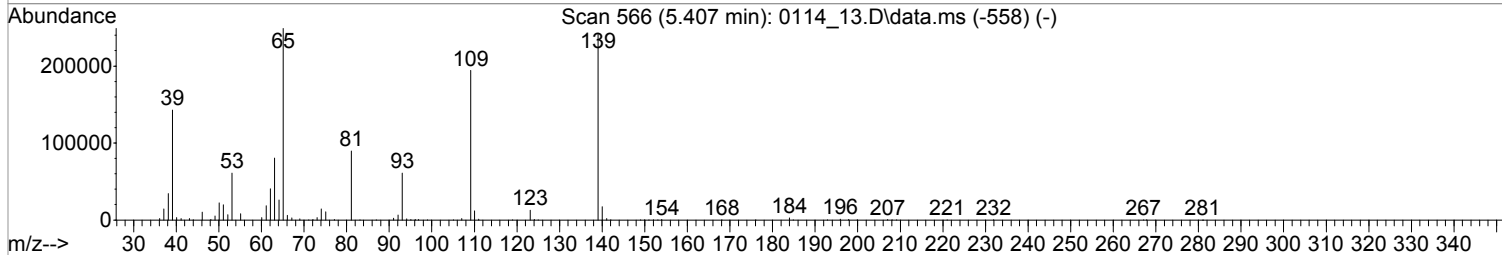
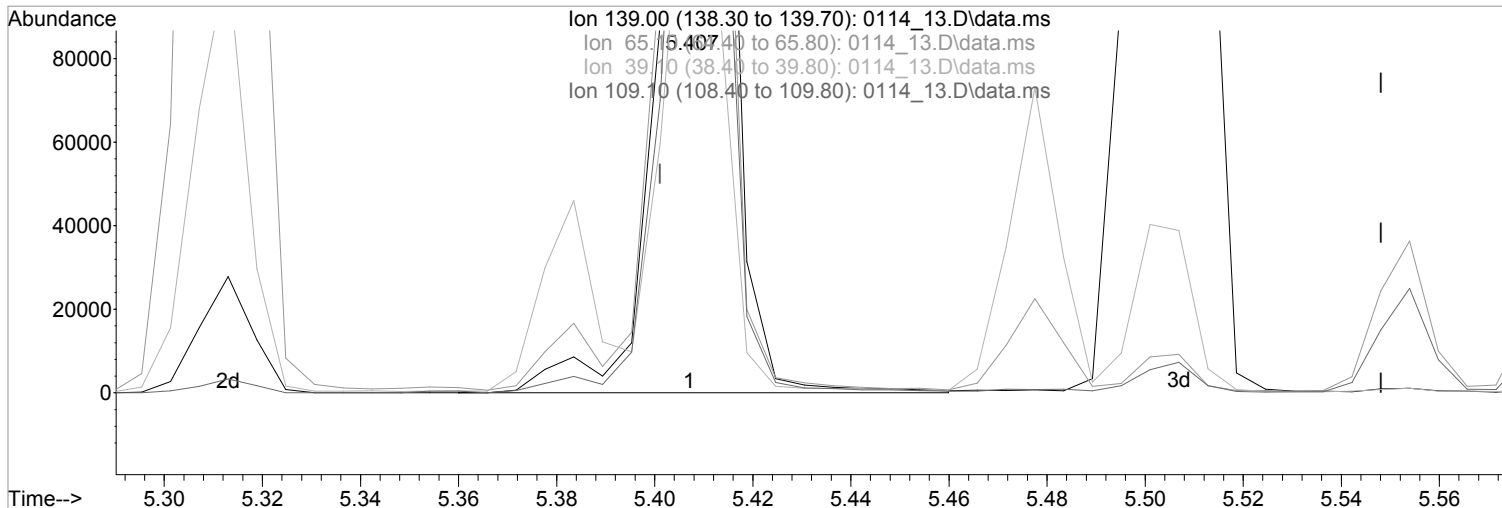
(34) Naphthalene (MT)  
 4.208min (+0.000) 47123.3131829 ppb m  
 response 1484150  

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	10.87
127.10	13.50	13.20
102.10	10.10	10.06

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_13.D  
 Acq On : 14 Jan 2022 3:56 pm  
 Operator : 917  
 Sample : STD SVMS 50K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 10 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:30:12 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:29:58 2022  
 Response via : Initial Calibration



TIC: 0114\_13.D\data.ms

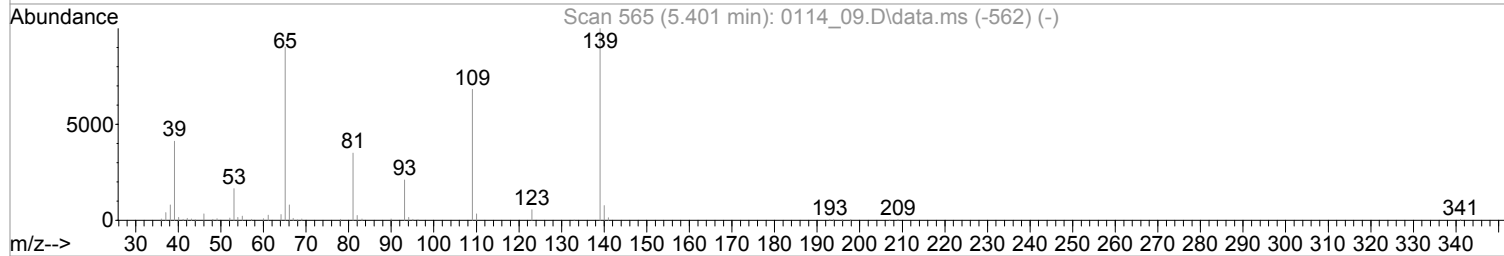
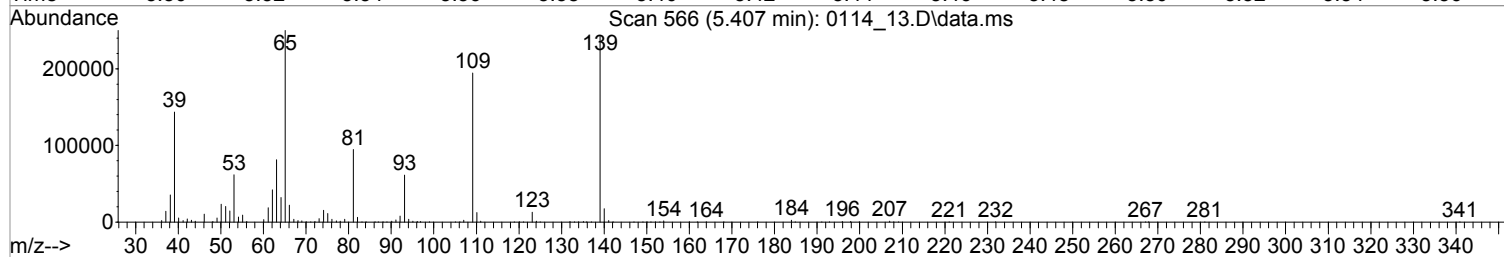
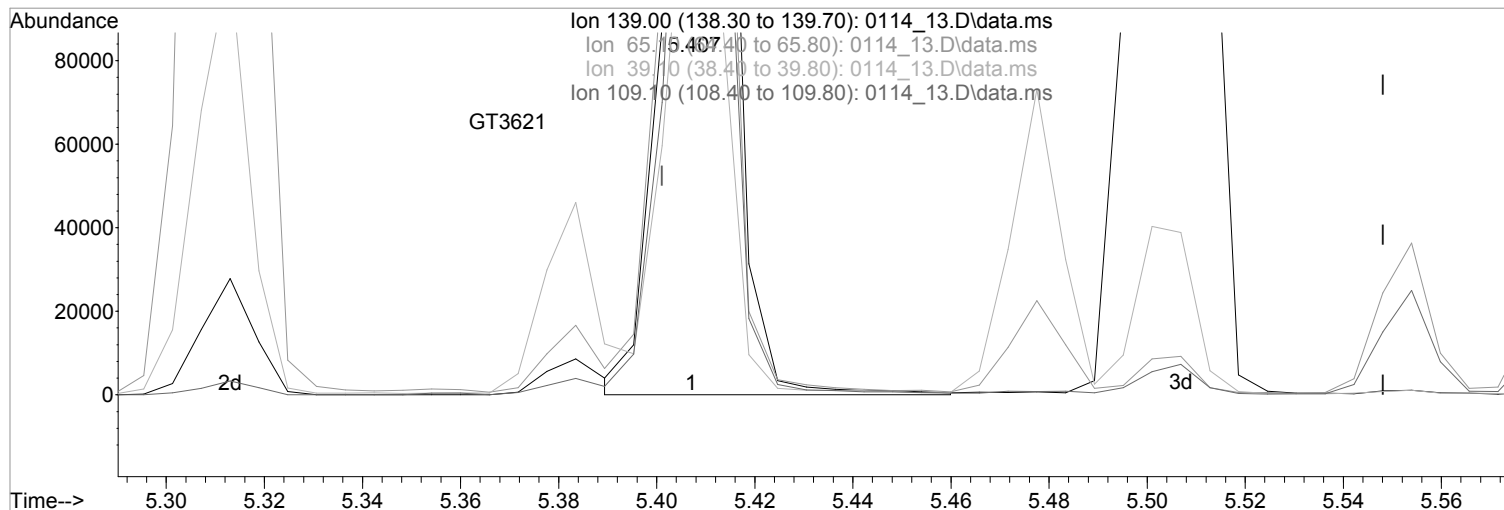
(63) 4-Nitrophenol (MPT)  
 5.407min (+0.006) 55928.4477813 ppb  
 Qvalue = 85  
 response 224487

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	102.91
39.10	47.40	58.96
109.10	67.50	80.10

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_13.D  
 Acq On : 14 Jan 2022 3:56 pm  
 Operator : 917  
 Sample : STD SVMS 50K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 10 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:30:12 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:29:58 2022  
 Response via : Initial Calibration



TIC: 0114\_13.D\data.ms

(63) 4-Nitrophenol (MPT)

5.407min (+0.006) 54281.3904093 ppb m

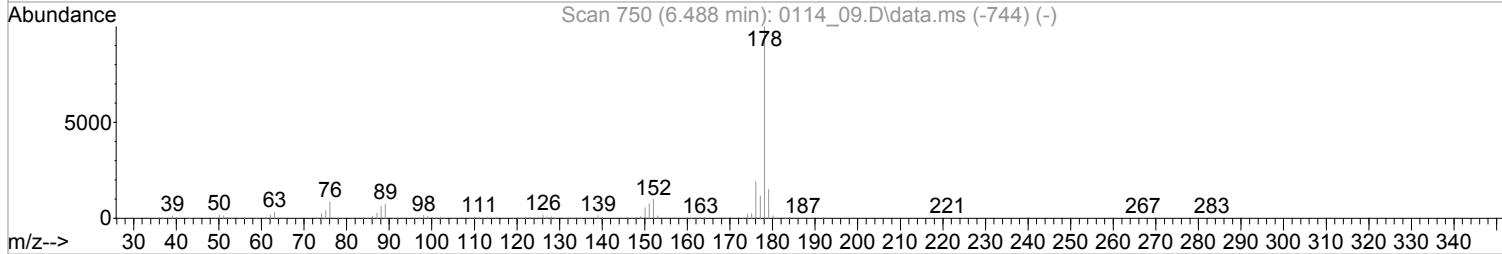
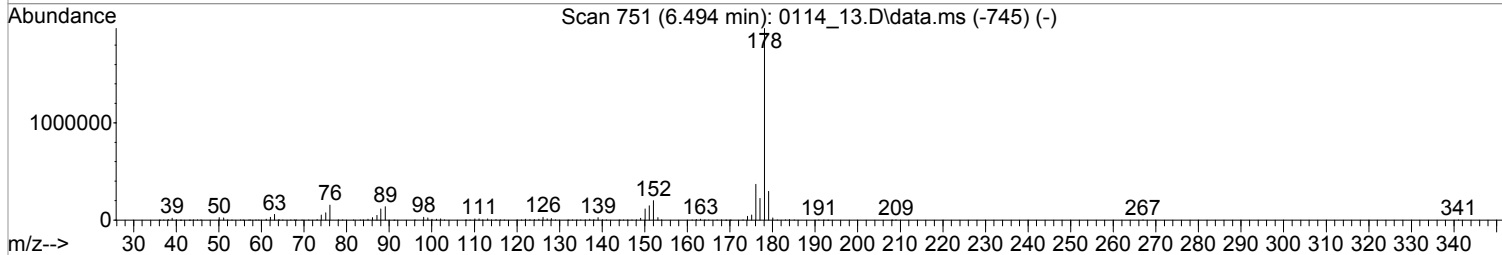
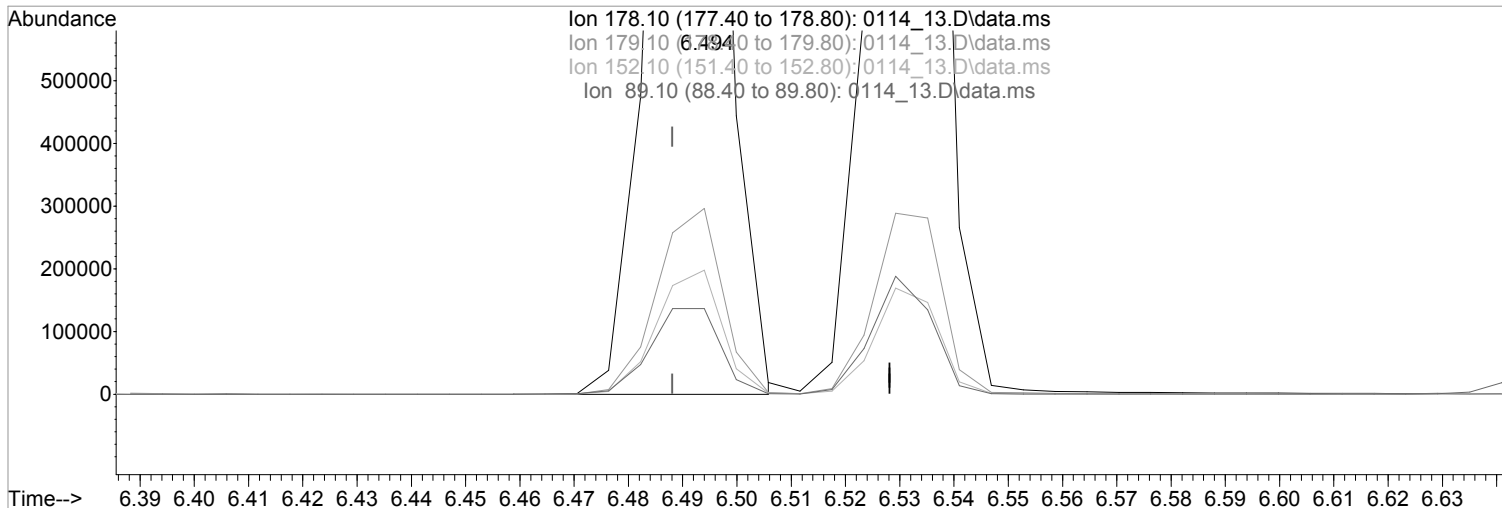
response 217876

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	103.22
39.10	47.40	59.17
109.10	67.50	80.26

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_13.D  
 Acq On : 14 Jan 2022 3:56 pm  
 Operator : 917  
 Sample : STD SVMS 50K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 10 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:30:12 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:29:58 2022  
 Response via : Initial Calibration



TIC: 0114\_13.D\data.ms

(78) Phenanthrene (MT)

6.494min (+0.006) 47341.4041296 ppb

Qvalue = 99

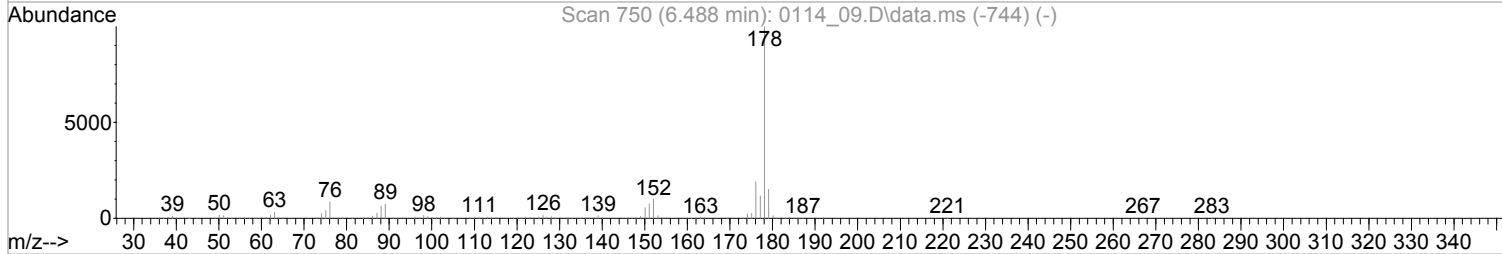
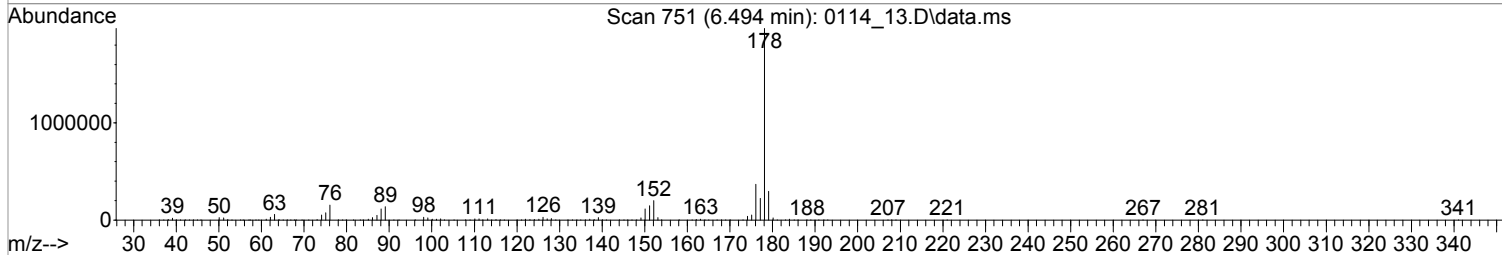
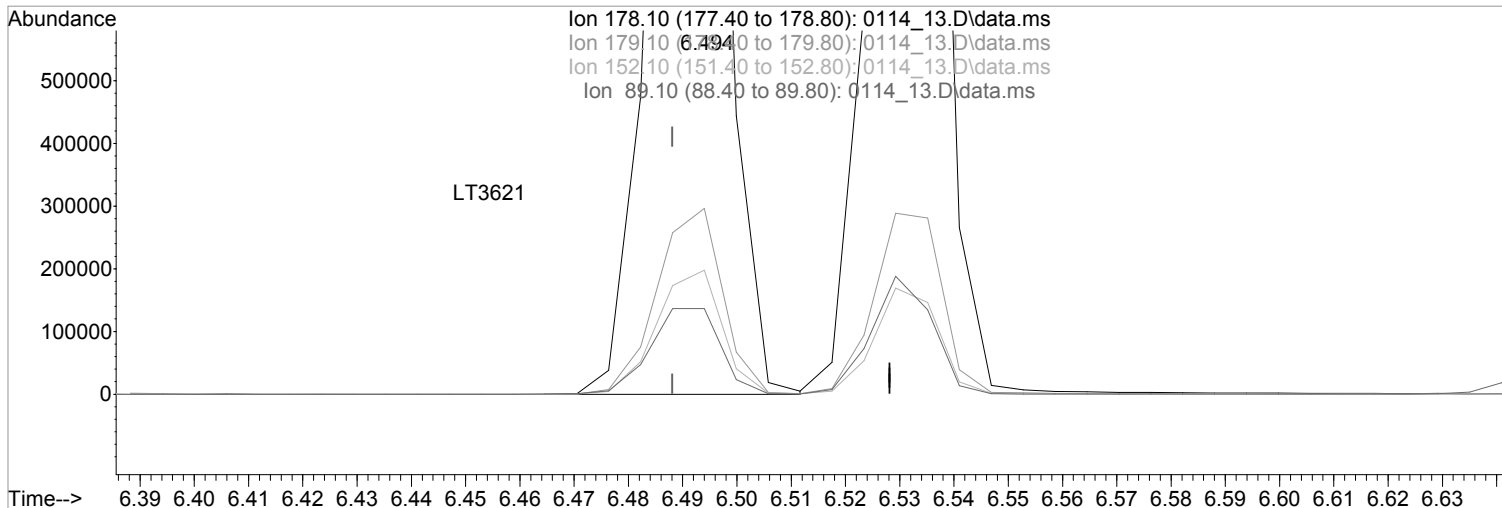
response 1631283

Ion	Exp%	Act%
178.10	100	100
179.10	14.90	15.03
152.10	9.70	10.03
89.10	7.30	6.92

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_13.D  
 Acq On : 14 Jan 2022 3:56 pm  
 Operator : 917  
 Sample : STD SVMS 50K PPB 22A13138 EXP 06/20/22  
 Misc : SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 10 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 17:30:12 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 17:29:58 2022  
 Response via : Initial Calibration



TIC: 0114\_13.D\data.ms

(78) Phenanthrene (MT)  
 6.494min (+0.006) 47390.7687882 ppb m

response 1632984

Ion	Exp%	Act%
178.10	100	100
179.10	14.90	15.03
152.10	9.70	10.03
89.10	7.30	6.92

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_15.D  
 Acq On : 14 Jan 2022 4:37 pm  
 Operator : 917  
 Sample : STD TCL 4K1 PPB 22A13139 06/06/22  
 Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 12 Sample Multiplier: 1  
 InstName : BNAMS11

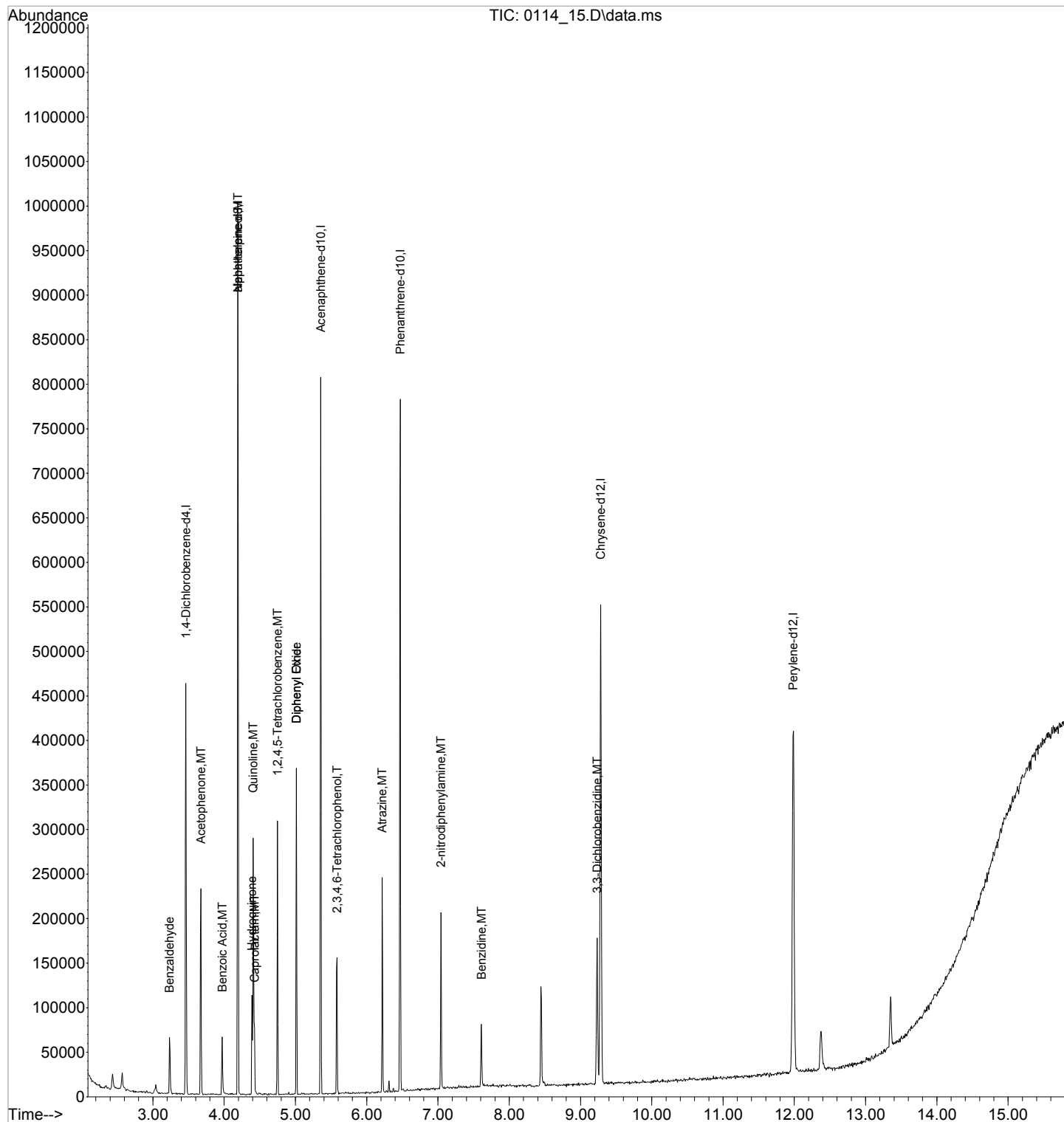
Quant Time: Jan 18 15:12:47 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 15:08:57 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.462	152	60731	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.191	136	250905	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.354	164	125739	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.470	188	253725	8000.0000000	ppb	0.00
84) Chrysene-d12	9.285	240	247554	8000.0000000	ppb	0.00
94) Perylene-d12	11.982	264	254323	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0d	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.233	105	11006	4018.1740462	ppb	95
22) Acetophenone	3.674	105	53173	4016.4003339	ppb	99
31) Benzoic Acid	3.973	105	16328	4315.1320726	ppb	96
33) alpha-terpineol	4.191	59	27029	4112.3319619	ppb	98
37) Hydroquinone	4.390	110	26887	3977.2850482	ppb	96
38) Quinoline	4.408	129	72332	3943.1199400	ppb	98
39) Caprolactam	4.426	113	8017	4078.0441905	ppb	97
43) 1,2,4,5-Tetrachloroben...	4.749	216	40119	4067.3067821	ppb	96
44) Diphenyl Ether	5.013	170	52239	3910.7547512	ppb	99
45) Diphenyl Oxide	5.013	170	52239	3910.7547512	ppb	99
62) 2,3,4,6-Tetrachlorophenol	5.583	232	16918	3811.2639672	ppb	97
69) Atrazine	6.218	200	23198	3830.2107751	ppb	98
82) 2-nitrodiphenylamine	7.040	167	22588	3603.7221841	ppb	98
85) Benzidine	7.610	184	31189	3681.2920794	ppb	97
89) 3,3-Dichlorobenzidine	9.232	252	46156	3739.4782069	ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_15.D  
Acq On : 14 Jan 2022 4:37 pm  
Operator : 917  
Sample : STD TCL 4K1 PPB 22A13139 06/06/22  
Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 12 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 18 15:12:47 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Tue Jan 18 15:08:57 2022  
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_16.D  
 Acq On : 14 Jan 2022 4:57 pm  
 Operator : 917  
 Sample : MSTD TCL 10K1 PPB 22A13139 06/06/22  
 Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 13 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 17 16:43:46 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Jan 17 16:42:10 2022  
 Response via : Initial Calibration

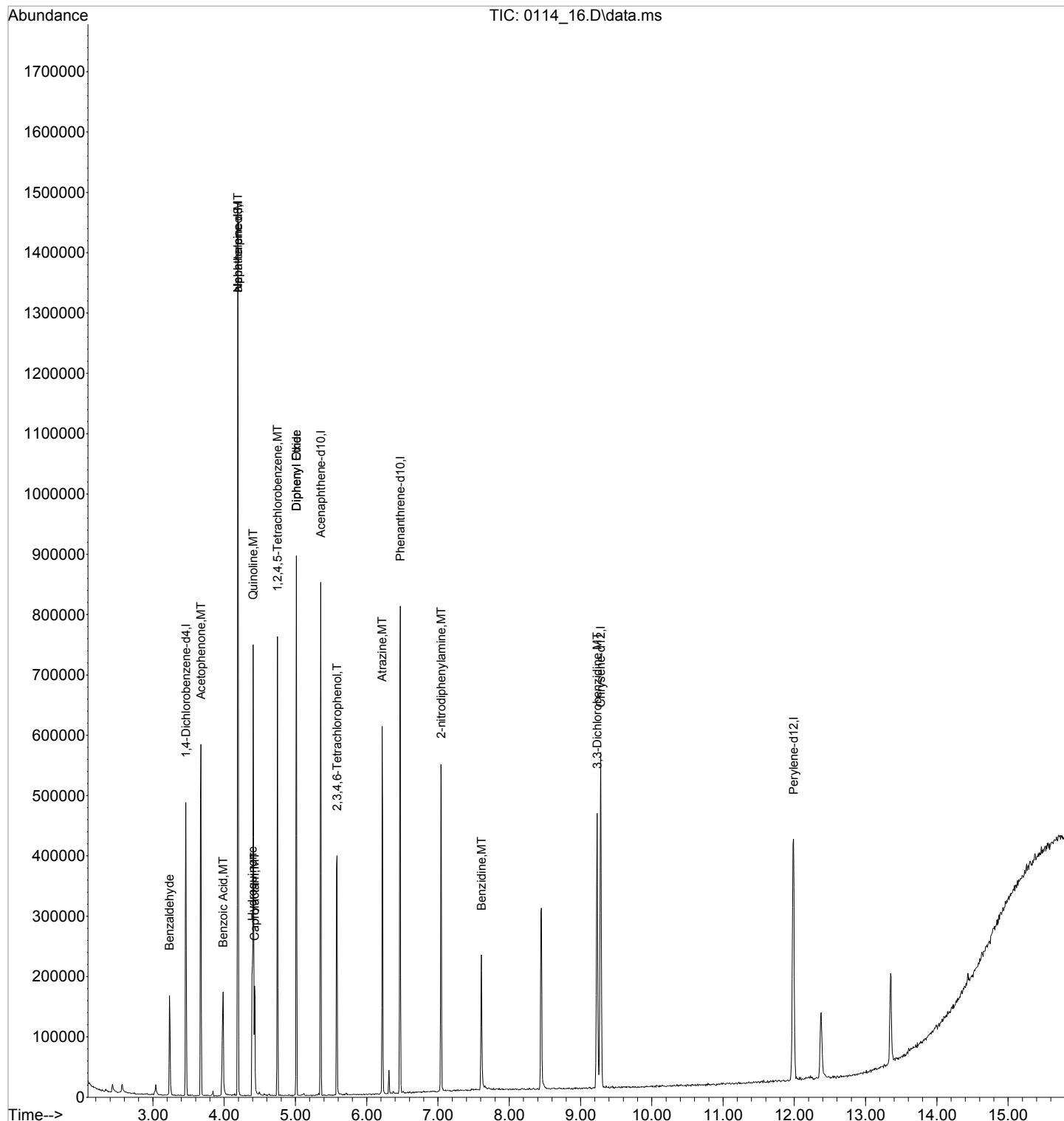
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.462	152	64238	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.191	136	281293	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.354	164	130759	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.471	188	265253	8000.0000000	ppb	0.00
84) Chrysene-d12	9.285	240	251661	8000.0000000	ppb	0.00
94) Perylene-d12	11.988	264	255268	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0d	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	
Target Compounds						
					Qvalue	
9) Benzaldehyde	3.233	105	28336	10000.0000000	ppb	99
22) Acetophenone	3.674	105	138015	10000.0000000	ppb	100
31) Benzoic Acid	3.985	105	52730	10000.0000000	ppb	100
33) alpha-terpineol	4.191	59	70545	10000.0000000	ppb	100
37) Hydroquinone	4.397	110	62294	10000.0000000	ppb	100
38) Quinoline	4.408	129	189505	10000.0000000	ppb	100
39) Caprolactam	4.426	113	19614	10000.0000000	ppb	100
43) 1,2,4,5-Tetrachloroben...	4.749	216	98987	10000.0000000	ppb	100
44) Diphenyl Ether	5.013	170	131683	10000.0000000	ppb	100
45) Diphenyl Oxide	5.013	170	131683	10000.0000000	ppb	100
62) 2,3,4,6-Tetrachlorophenol	5.583	232	46041	10000.0000000	ppb	100
69) Atrazine	6.218	200	61508	10000.0000000	ppb	100
82) 2-nitrodiphenylamine	7.046	167	67550	10000.0000000	ppb	100
85) Benzidine	7.610	184	97281	10000.0000000	ppb	99
89) 3,3-Dichlorobenzidine	9.232	252	129691	10000.0000000	ppb	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_16.D  
Acq On : 14 Jan 2022 4:57 pm  
Operator : 917  
Sample : MSTD TCL 10K1 PPB 22A13139 06/06/22  
Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 13 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 17 16:43:46 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Jan 17 16:42:10 2022  
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\050322\  
 Data File : 0503\_04.D  
 Acq On : 3 May 2022 5:09 am  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D05698 exp 09/10/22  
 Misc : TCL CAL ISTD 22D02367 exp 10/02/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

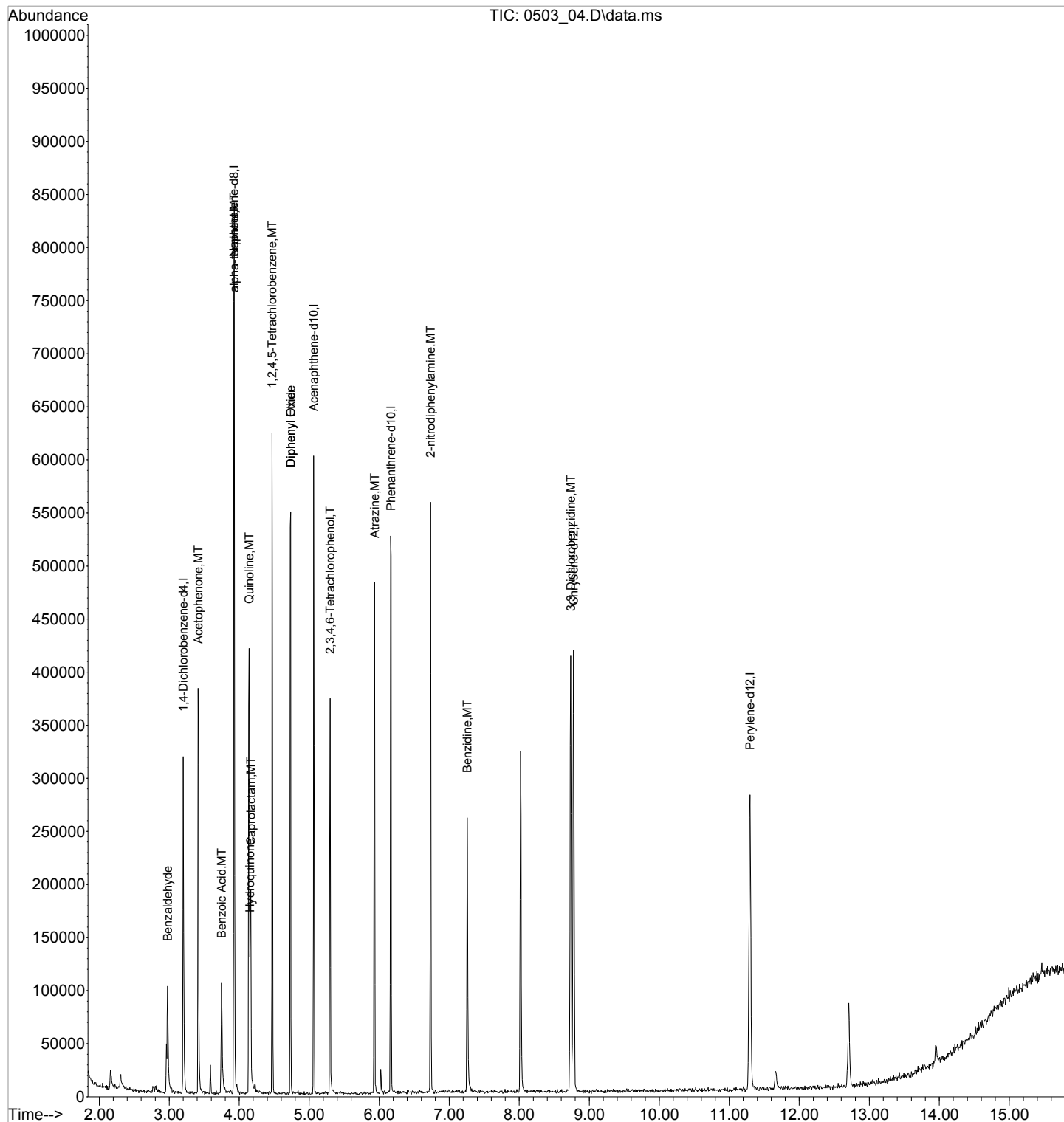
Quant Time: May 03 05:31:02 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.200	152	39827	8000.0000000	ppb		# 0.00
23) Naphthalene-d8	3.923	136	168164	8000.0000000	ppb		0.00
46) Acenaphthene-d10	5.063	164	84569	8000.0000000	ppb		0.00
70) Phenanthrene-d10	6.168	188	163901	8000.0000000	ppb		0.00
84) Chrysene-d12	8.776	240	166187	8000.0000000	ppb		0.00
94) Perylene-d12	11.297	264	175689	8000.0000000	ppb		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
Target Compounds							
						Qvalue	
9) Benzaldehyde	2.977	105	20455	10822.5987236	ppb		94
22) Acetophenone	3.412	105	88889	10186.1542452	ppb		94
31) Benzoic Acid	3.747	105	29987	9524.9912394	ppb		99
33) alpha-terpineol	3.929	59	46112	11815.8917309	ppb		92
37) Hydroquinone	4.152	110	36807	8509.9650406	ppb		87
38) Quinoline	4.141	129	111315	9835.6897551	ppb		96
39) Caprolactam	4.164	113	15937	12766.2938387	ppb		93
43) 1,2,4,5-Tetrachloroben...	4.470	216	73284	12039.5366051	ppb		98
44) Diphenyl Ether	4.734	170	90467	12617.7285918	ppb		97
45) Diphenyl Oxide	4.734	170	90467	12617.7285918	ppb		97
62) 2,3,4,6-Tetrachlorophenol	5.298	232	35605	11683.5261410	ppb		98
69) Atrazine	5.933	200	48310	12021.9359707	ppb		# 91
82) 2-nitrodiphenylamine	6.732	167	55836	12230.3618002	ppb		93
85) Benzidine	7.255	184	98599	11827.2474806	ppb		97
89) 3,3-Dichlorobenzidine	8.735	252	101768	11793.4226225	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050322\  
Data File : 0503\_04.D  
Acq On : 3 May 2022 5:09 am  
Operator : 3545  
Sample : ICV TCL 10K1 PPB 22D05698 exp 09/10/22  
Misc : TCL CAL ISTD 22D02367 exp 10/02/22  
ALS Vial : 4 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: May 03 05:31:02 2022  
Quant Method : C:\msdchem\1\methods\S811E03V.M  
Quant Title : 8270 BNA  
QLast Update : Tue May 03 05:28:33 2022  
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_17.D  
 Acq On : 14 Jan 2022 5:17 pm  
 Operator : 917  
 Sample : STD TCL 20K1 PPB 22A13139 06/06/22  
 Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 14 Sample Multiplier: 1  
 InstName : BNAMS11

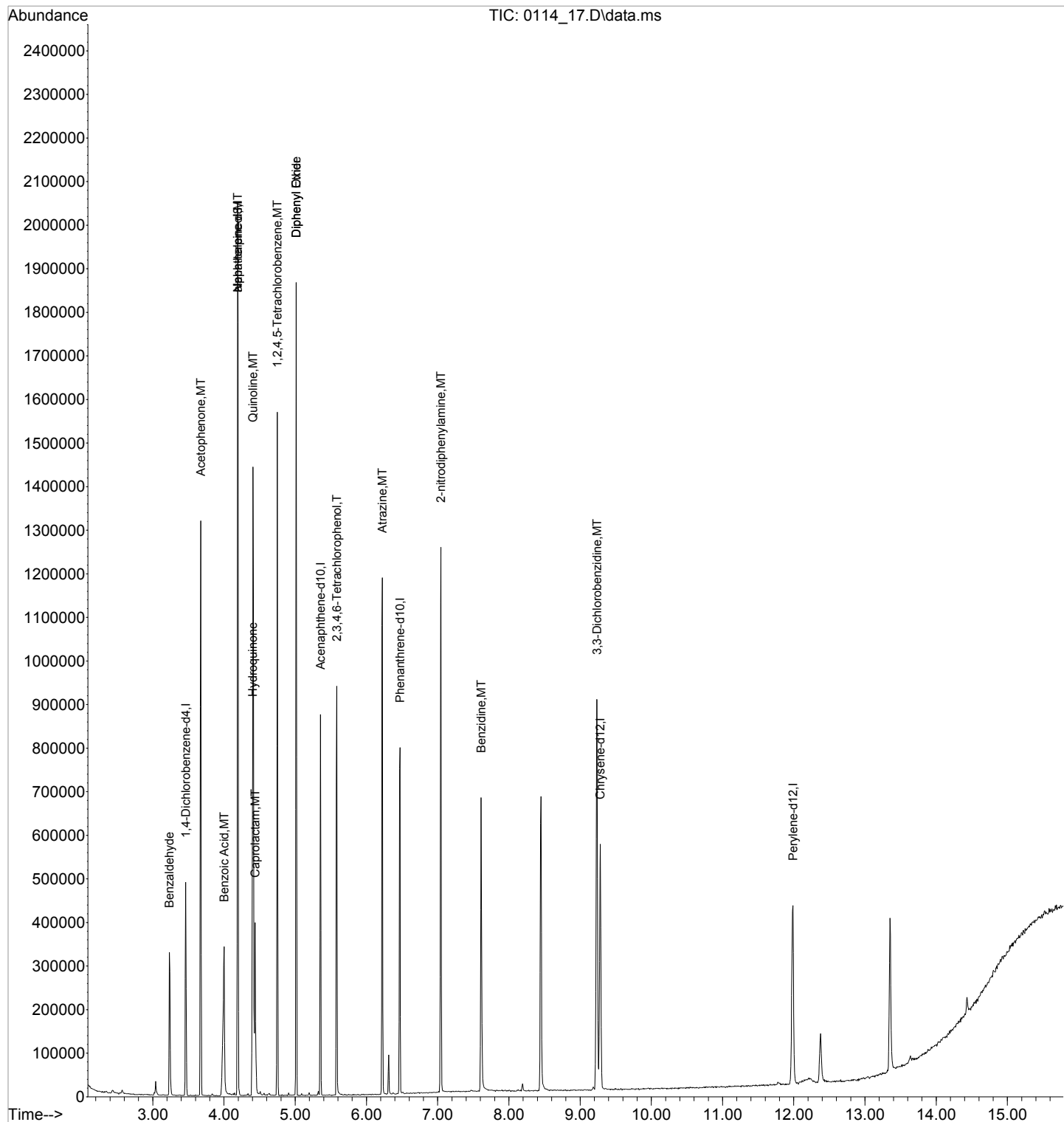
Quant Time: Jan 18 16:22:04 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 16:04:57 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.462	152	63957	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.191	136	312800	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.354	164	132931	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.470	188	268134	8000.0000000	ppb	0.00
84) Chrysene-d12	9.285	240	257654	8000.0000000	ppb	0.00
94) Perylene-d12	11.988	264	261428	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0d	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.233	105	61071	20121.3267404	ppb	98
22) Acetophenone	3.674	105	284948	20333.7439601	ppb	99
31) Benzoic Acid	4.003	105	128408	23221.9736049	ppb	100
33) alpha-terpineol	4.191	59	148298	20429.3299385	ppb	95
37) Hydroquinone	4.402	110	168408	20932.7534234	ppb	98
38) Quinoline	4.408	129	389645	20126.9842152	ppb	99
39) Caprolactam	4.437	113	47106	20286.2034192	ppb	96
43) 1,2,4,5-Tetrachloroben...	4.749	216	204909	19847.6108061	ppb	97
44) Diphenyl Ether	5.013	170	269854	19694.6910559	ppb	99
45) Diphenyl Oxide	5.013	170	269854	19694.6910559	ppb	99
62) 2,3,4,6-Tetrachlorophenol	5.583	232	98468	20556.2071192	ppb	100
69) Atrazine	6.224	200	130104	20597.4257264	ppb	99
82) 2-nitrodiphenylamine	7.046	167	155768	20856.0935449	ppb	97
85) Benzidine	7.610	184	273706	22128.0665996	ppb	98
89) 3,3-Dichlorobenzidine	9.238	252	276184	20643.6884652	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_17.D  
Acq On : 14 Jan 2022 5:17 pm  
Operator : 917  
Sample : STD TCL 20K1 PPB 22A13139 06/06/22  
Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 14 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 18 16:22:04 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Tue Jan 18 16:04:57 2022  
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_18.D  
 Acq On : 14 Jan 2022 5:37 pm  
 Operator : 917  
 Sample : STD TCL 30K1 PPB 22A13139 06/06/22  
 Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 15 Sample Multiplier: 1  
 InstName : BNAMS11

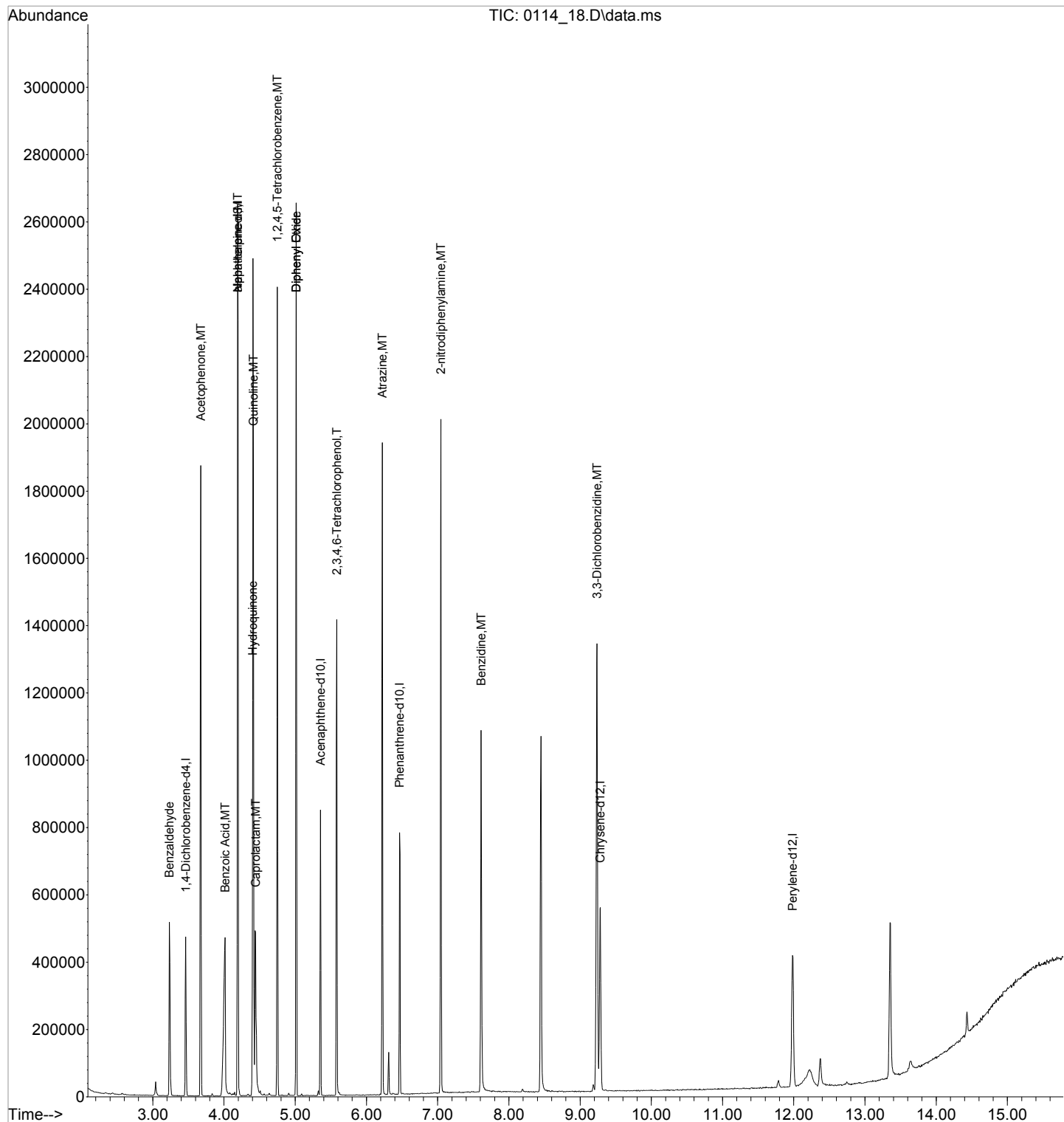
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 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 15:17:27 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.462	152	63090	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.191	136	337887	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.354	164	133559	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.465	188	260288	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.285	240	255011	8000.0000000	ppb	0.00	
94) Perylene-d12	11.982	264	261977	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	666.000		Recovery	=	0.00%		
7) Phenol-d5	0.000	99	0d	0.0000000	ppb		
Spiked Amount	666.000		Recovery	=	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	333.000		Recovery	=	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb		
Spiked Amount	333.000		Recovery	=	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	666.000		Recovery	=	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	333.000		Recovery	=	0.00%		
Target Compounds							
9) Benzaldehyde	3.233	105	90163	31194.4042996	ppb	98	Qvalue
22) Acetophenone	3.674	105	411682	29740.2759933	ppb	98	
31) Benzoic Acid	4.014	105	200552	35458.6206126	ppb	100	
33) alpha-terpineol	4.191	59	217423	24982.6307353	ppb	95	
37) Hydroquinone	4.402	110	259217m	28520.5483075	ppb		
38) Quinoline	4.414	129	566886	23918.4889821	ppb	99	
39) Caprolactam	4.443	113	74193	28161.8154898	ppb	100	
43) 1,2,4,5-Tetrachloroben...	4.749	216	300333	23490.8127046	ppb	96	
44) Diphenyl Ether	5.013	170	394863	23179.7950504	ppb	99	
45) Diphenyl Oxide	5.013	170	394863	23179.7950504	ppb	99	
62) 2,3,4,6-Tetrachlorophenol	5.583	232	147343	31234.5493803	ppb	99	
69) Atrazine	6.224	200	191992	30042.6001009	ppb	98	
82) 2-nitrodiphenylamine	7.046	167	241757	36890.0946819	ppb	96	
85) Benzidine	7.610	184	425020	43555.9977375	ppb	98	
89) 3,3-Dichlorobenzidine	9.238	252	406962	31928.8978349	ppb	99	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_18.D  
Acq On : 14 Jan 2022 5:37 pm  
Operator : 917  
Sample : STD TCL 30K1 PPB 22A13139 06/06/22  
Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 15 Sample Multiplier: 1  
InstName : BNAMS11

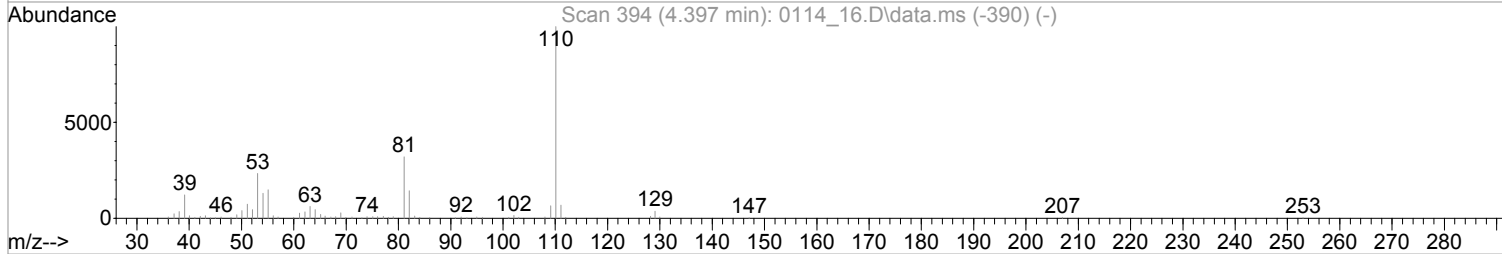
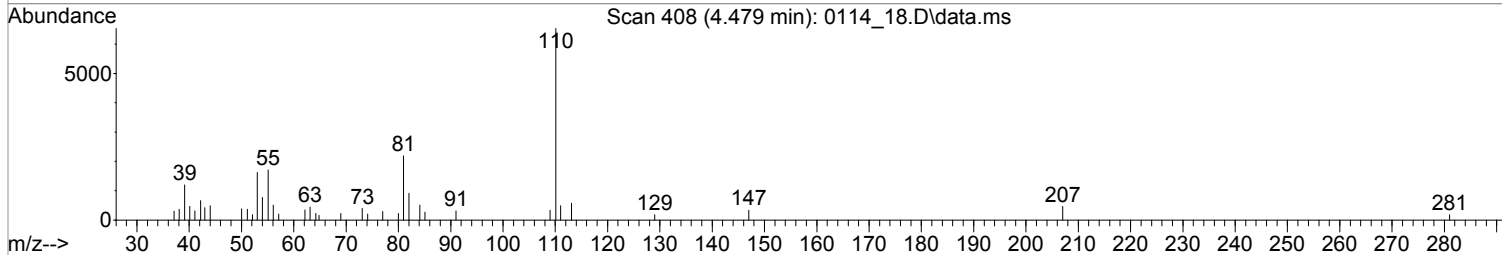
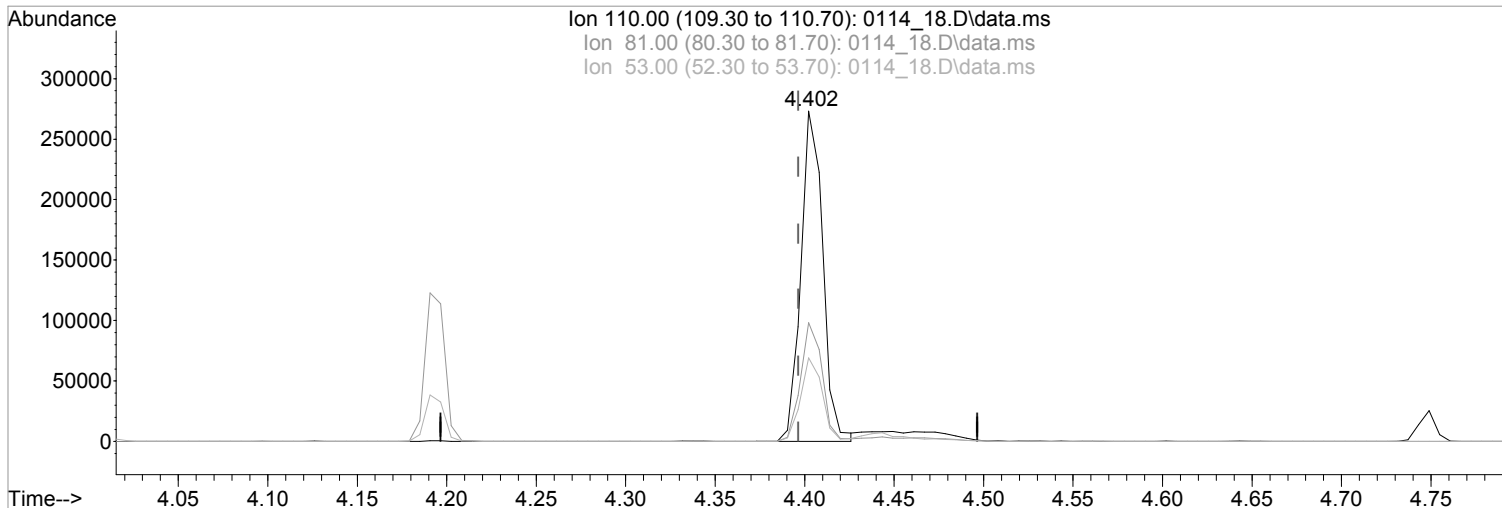
Quant Time: Jan 18 15:22:01 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Tue Jan 18 15:17:27 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_18.D  
 Acq On : 14 Jan 2022 5:37 pm  
 Operator : 917  
 Sample : STD TCL 30K1 PPB 22A13139 06/06/22  
 Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 15 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 15:17:53 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 15:17:27 2022  
 Response via : Initial Calibration



TIC: 0114\_18.D\data.ms

(37) Hydroquinone  
 4.402min (+0.006) 25507.8228545 ppb  
 Qvalue = 94  
 response 231835

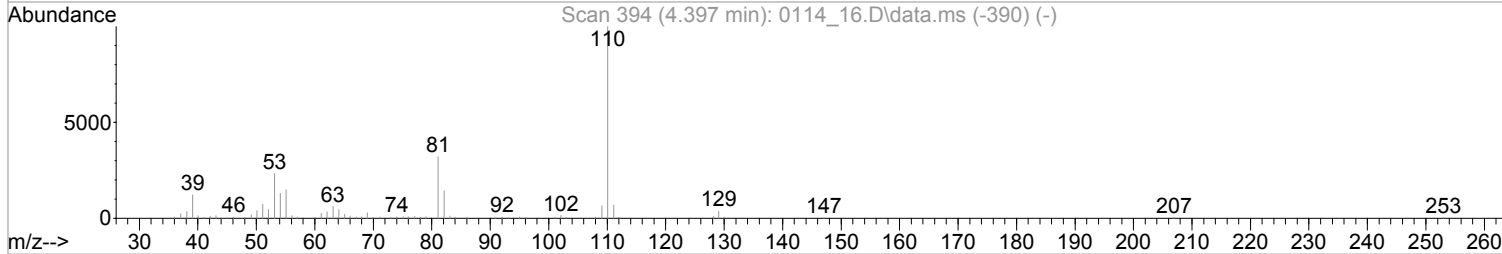
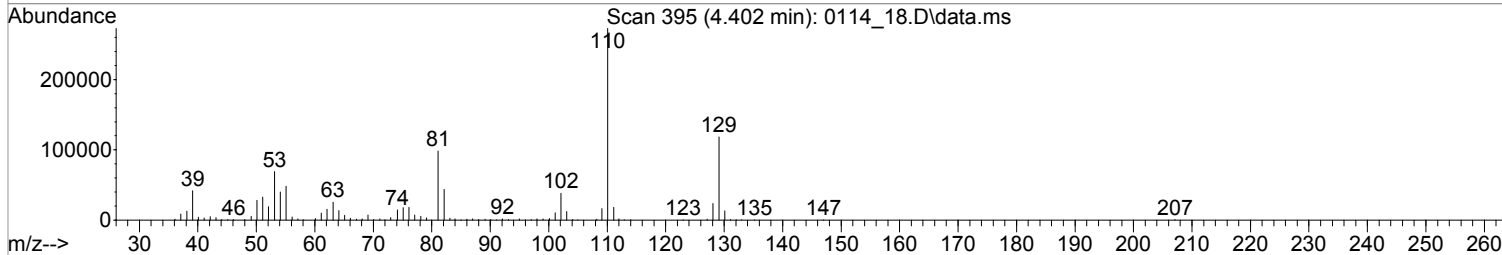
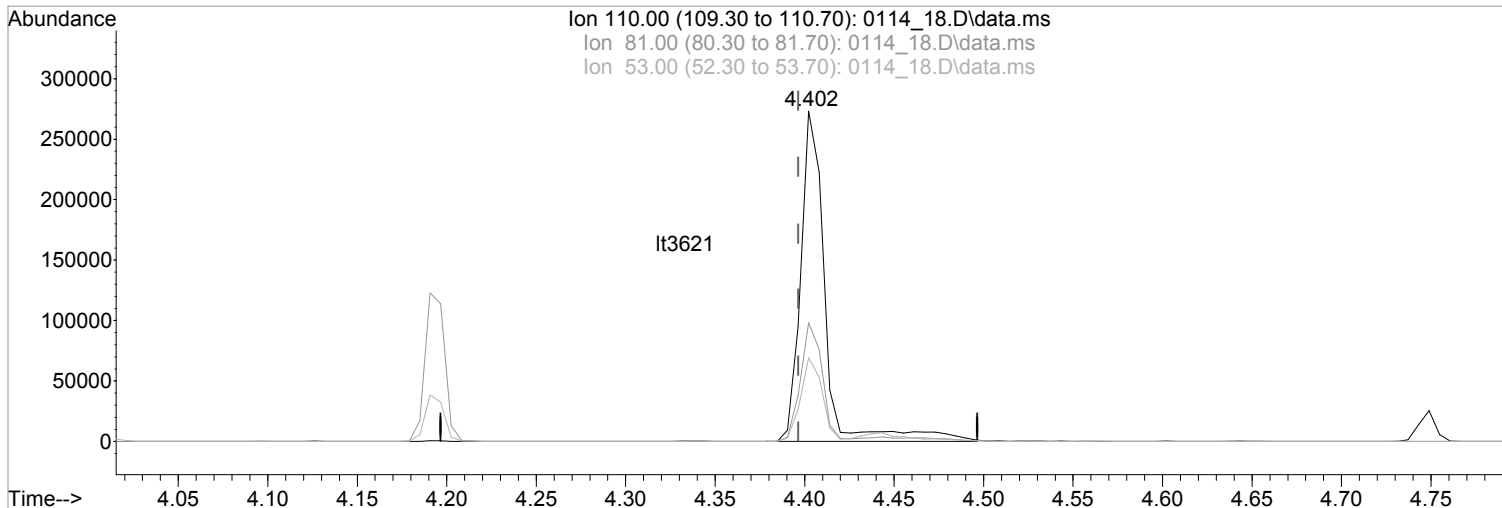
Ion	Exp%	Act%
110.00	100	100
81.00	31.90	35.95
53.00	23.40	25.33
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_18.D  
 Acq On : 14 Jan 2022 5:37 pm  
 Operator : 917  
 Sample : STD TCL 30K1 PPB 22A13139 06/06/22  
 Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 15 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 15:17:53 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 15:17:27 2022  
 Response via : Initial Calibration



TIC: 0114\_18.D\data.ms

(37) Hydroquinone  
 4.402min (+0.006) 28520.5483075 ppb m

response 259217

Ion	Exp%	Act%
110.00	100	100
81.00	31.90	35.95
53.00	23.40	25.33
0.00	0.00	0.00

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_19.D  
 Acq On : 14 Jan 2022 5:58 pm  
 Operator : 917  
 Sample : STD TCL 40K1 PPB 22A13139 06/06/22  
 Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 16 Sample Multiplier: 1  
 InstName : BNAMS11

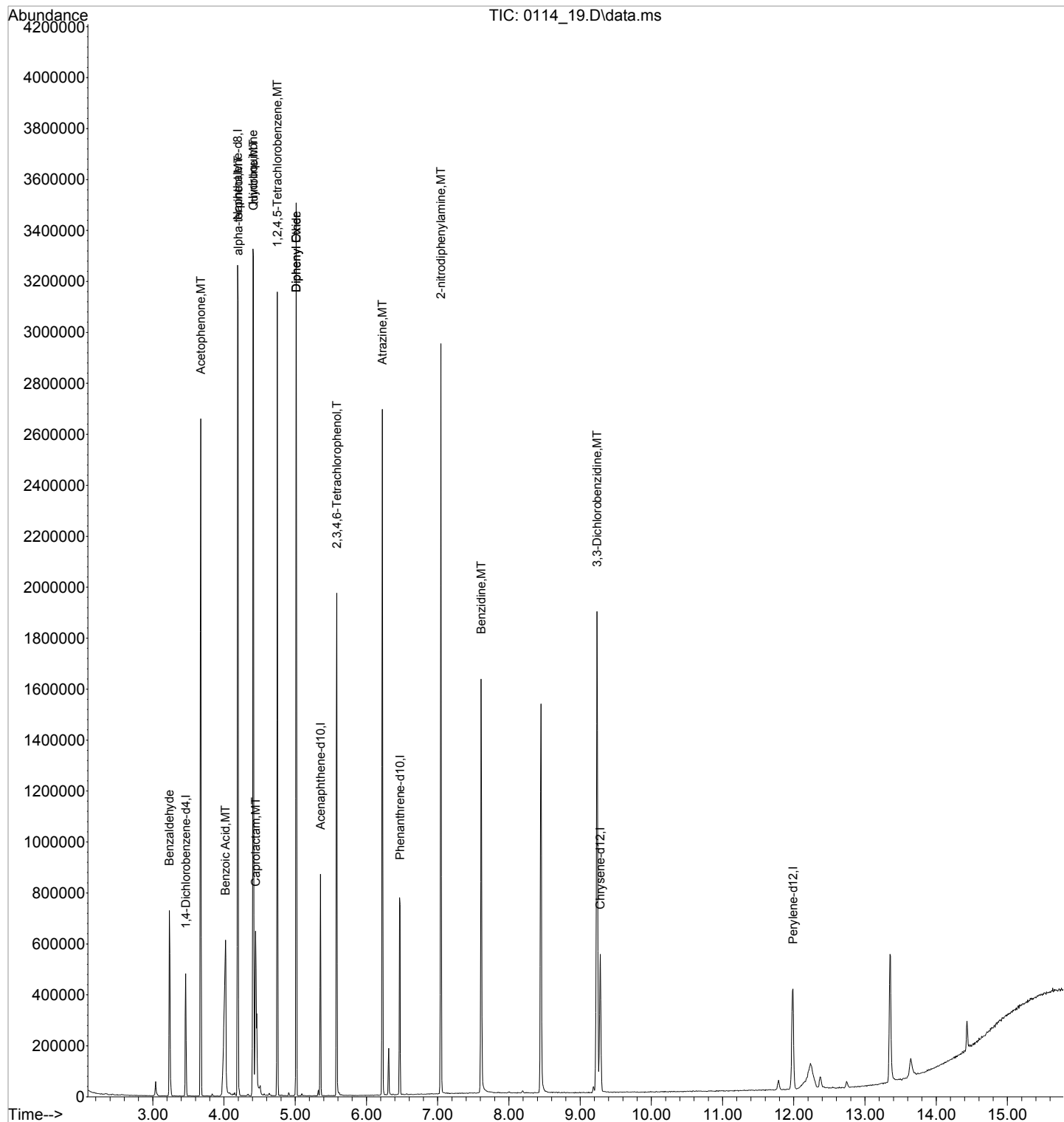
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 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 15:23:00 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.462	152	64851	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.191	136	379282	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.354	164	133621	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.471	188	263982	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.285	240	248359	8000.0000000	ppb	0.00	
94) Perylene-d12	11.988	264	253256	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	666.000		Recovery	=	0.00%		
7) Phenol-d5	0.000	99	0d	0.0000000	ppb		
Spiked Amount	666.000		Recovery	=	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	333.000		Recovery	=	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb		
Spiked Amount	333.000		Recovery	=	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	666.000		Recovery	=	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	333.000		Recovery	=	0.00%		
Target Compounds							
							Qvalue
9) Benzaldehyde	3.233	105	128073	42766.6582876	ppb		98
22) Acetophenone	3.674	105	572608	40312.2470634	ppb		98
31) Benzoic Acid	4.020	105	290547	44156.7330842	ppb		98
33) alpha-terpineol	4.197	59	301476	31927.8712165	ppb		91
37) Hydroquinone	4.408	110	369405m	36568.8350546	ppb		
38) Quinoline	4.414	129	768435	30104.3368579	ppb		99
39) Caprolactam	4.443	113	105603	36152.4880375	ppb		97
43) 1,2,4,5-Tetrachloroben...	4.749	216	398407	29020.0637724	ppb		97
44) Diphenyl Ether	5.013	170	524264	28723.1430260	ppb		98
45) Diphenyl Oxide	5.013	170	524264	28723.1430260	ppb		98
62) 2,3,4,6-Tetrachlorophenol	5.583	232	196667	41331.0000017	ppb		96
69) Atrazine	6.224	200	248782	38899.8975640	ppb		97
82) 2-nitrodiphenylamine	7.046	167	334167	48069.5257394	ppb		95
85) Benzidine	7.610	184	606158	58496.2784547	ppb		98
89) 3,3-Dichlorobenzidine	9.238	252	545189	43361.7734984	ppb		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_19.D  
Acq On : 14 Jan 2022 5:58 pm  
Operator : 917  
Sample : STD TCL 40K1 PPB 22A13139 06/06/22  
Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 16 Sample Multiplier: 1  
InstName : BNAMS11

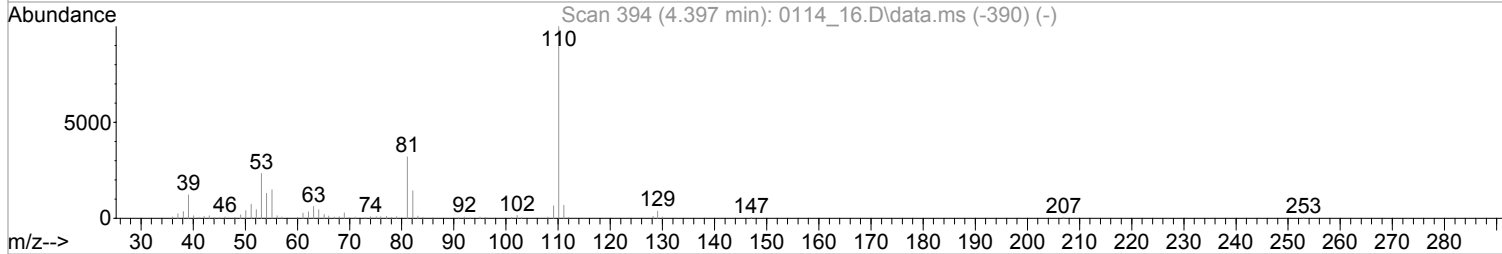
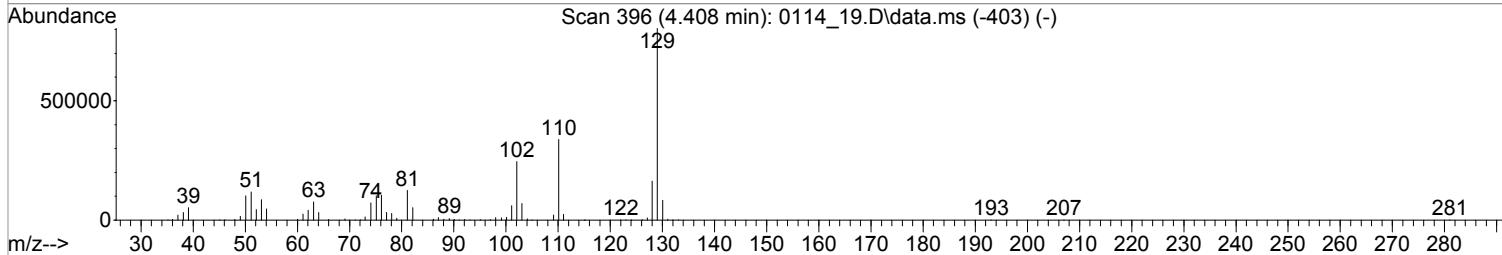
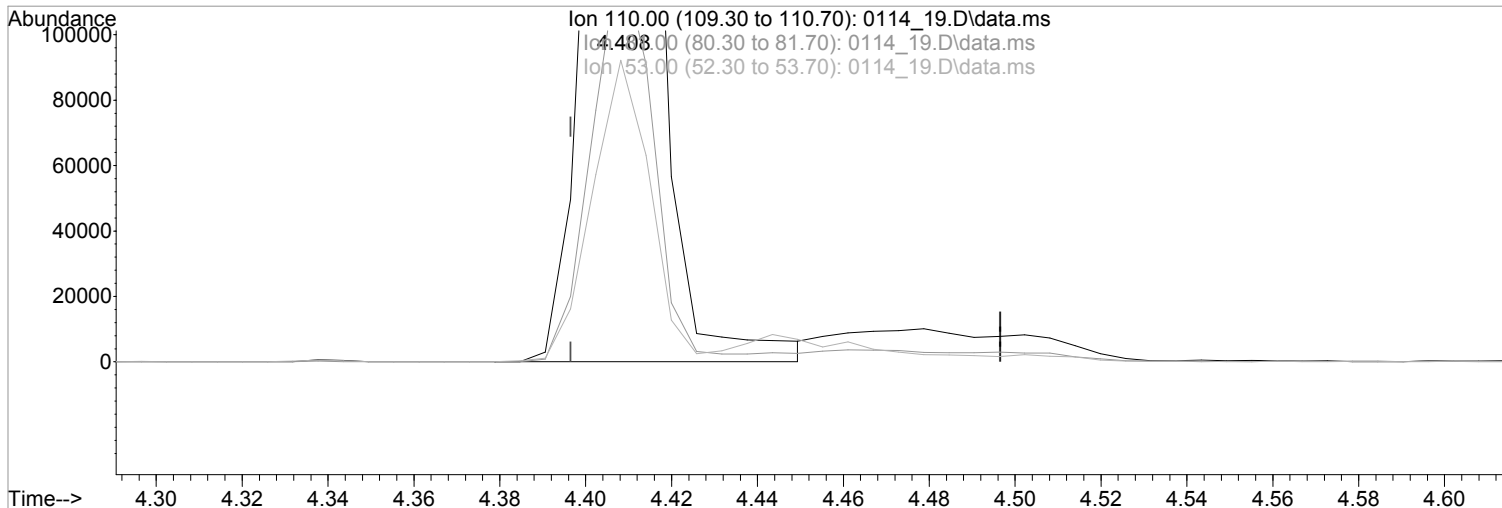
Quant Time: Jan 18 15:25:00 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Tue Jan 18 15:23:00 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_19.D  
 Acq On : 14 Jan 2022 5:58 pm  
 Operator : 917  
 Sample : STD TCL 40K1 PPB 22A13139 06/06/22  
 Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 16 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 15:23:20 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 15:23:00 2022  
 Response via : Initial Calibration



TIC: 0114\_19.D\data.ms

(37) Hydroquinone

4.408min (+0.012) 33260.9544809 ppb

Qvalue = 92

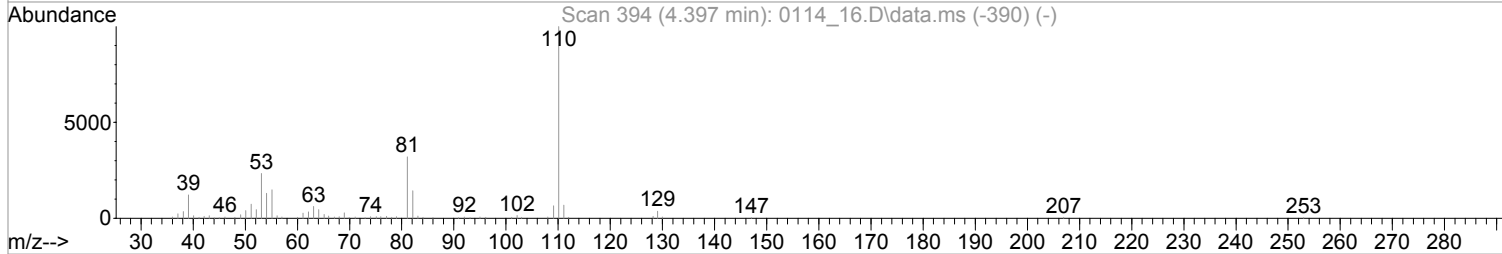
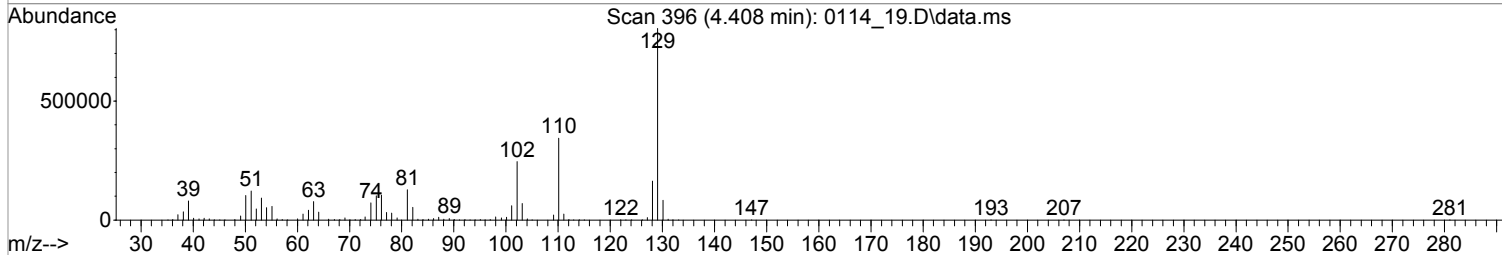
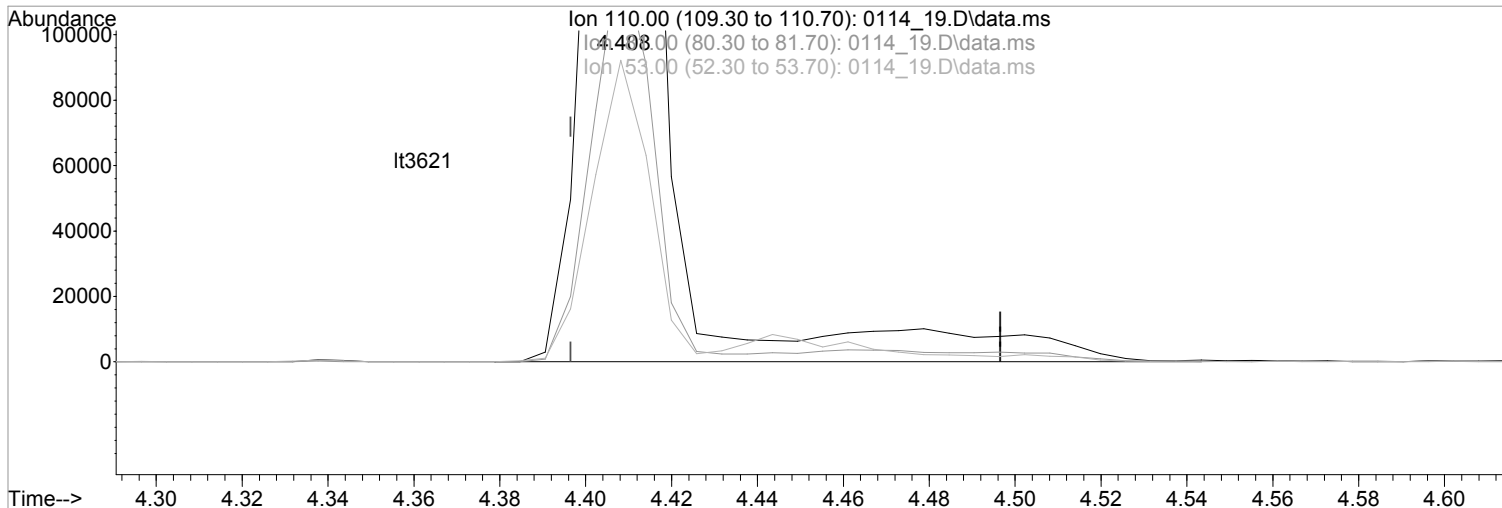
response 335990

Ion	Exp%	Act%
110.00	100	100
81.00	31.90	36.75
53.00	23.40	26.77
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_19.D  
 Acq On : 14 Jan 2022 5:58 pm  
 Operator : 917  
 Sample : STD TCL 40K1 PPB 22A13139 06/06/22  
 Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 16 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 15:23:20 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 15:23:00 2022  
 Response via : Initial Calibration



TIC: 0114\_19.D\data.ms

(37) Hydroquinone  
 4.408min (+0.012) 36568.8350546 ppb m

response 369405

Ion	Exp%	Act%
110.00	100	100
81.00	31.90	36.75
53.00	23.40	26.77
0.00	0.00	0.00

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_20.D  
 Acq On : 14 Jan 2022 6:18 pm  
 Operator : 917  
 Sample : STD TCL 50K1 PPB 22A13139 06/06/22  
 Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 17 Sample Multiplier: 1  
 InstName : BNAMS11

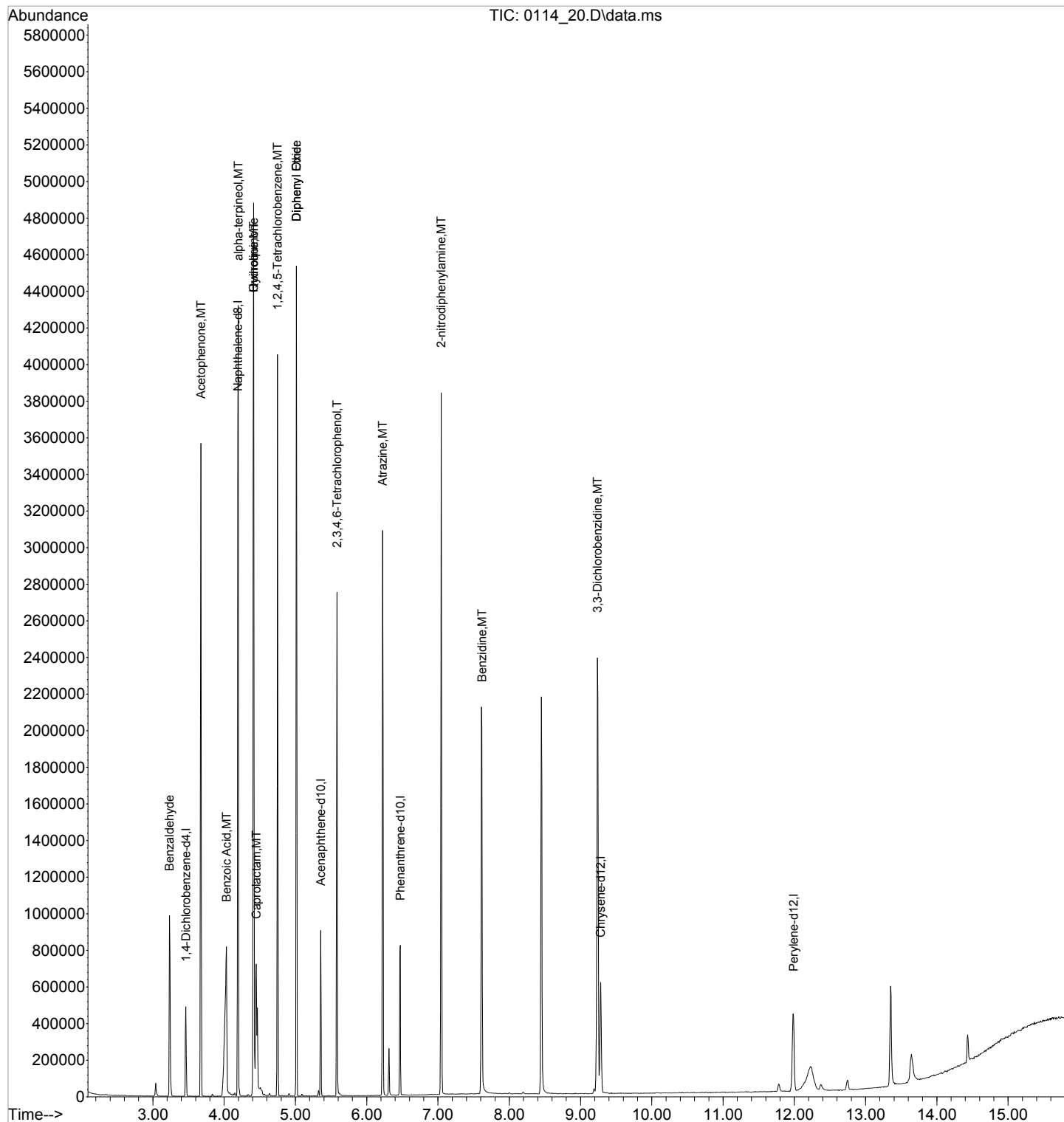
Quant Time: Jan 18 15:27:33 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 15:25:48 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.462	152	67212	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.191	136	430791	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.354	164	139963	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.470	188	281401	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.285	240	264279	8000.0000000	ppb	0.00	
94) Perylene-d12	11.987	264	273267	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	666.000		Recovery	=	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	666.000		Recovery	=	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	333.000		Recovery	=	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb		
Spiked Amount	333.000		Recovery	=	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	666.000		Recovery	=	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	333.000		Recovery	=	0.00%		
Target Compounds							
							Qvalue
9) Benzaldehyde	3.233	105	174513	55586.2758602	ppb		98
22) Acetophenone	3.674	105	732183	49671.1748989	ppb		98
31) Benzoic Acid	4.032	105	384510	50573.8860415	ppb		97
33) alpha-terpineol	4.196	59	389831	37613.8251517	ppb		95
37) Hydroquinone	4.414	110	485127m	42895.6372133	ppb		
38) Quinoline	4.414	129	992584	35708.4703205	ppb		99
39) Caprolactam	4.449	113	139926	42862.2220185	ppb		96
43) 1,2,4,5-Tetrachloroben...	4.749	216	512541	34445.5667918	ppb		97
44) Diphenyl Ether	5.013	170	677512	34292.2244896	ppb		98
45) Diphenyl Oxide	5.013	170	677512	34292.2244896	ppb		98
62) 2,3,4,6-Tetrachlorophenol	5.583	232	261706	52217.6958032	ppb		94
69) Atrazine	6.224	200	327247	49075.1832372	ppb		99
82) 2-nitrodiphenylamine	7.046	167	445501	58162.2855912	ppb		96
85) Benzidine	7.616	184	877620	73896.3694595	ppb		98
89) 3,3-Dichlorobenzidine	9.238	252	720926	53140.6384822	ppb		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_20.D  
Acq On : 14 Jan 2022 6:18 pm  
Operator : 917  
Sample : STD TCL 50K1 PPB 22A13139 06/06/22  
Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 17 Sample Multiplier: 1  
InstName : BNAMS11

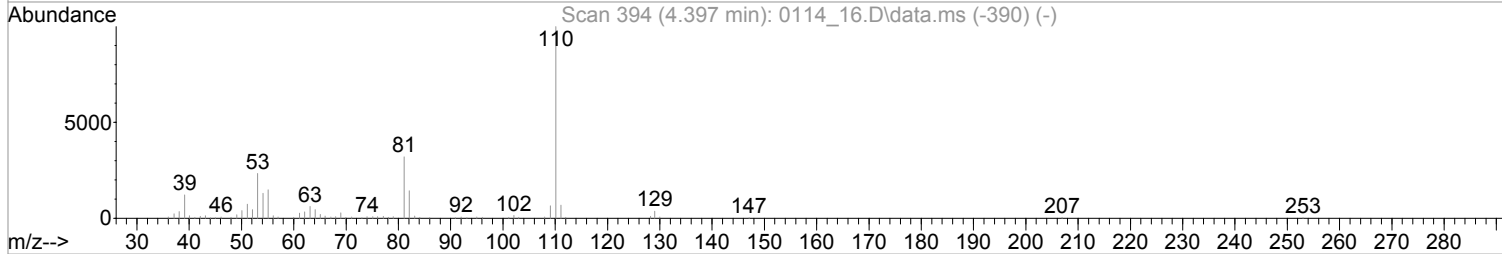
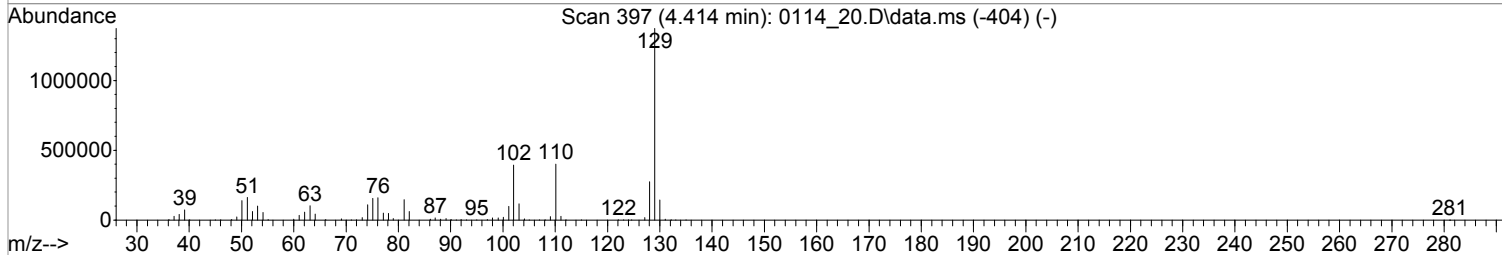
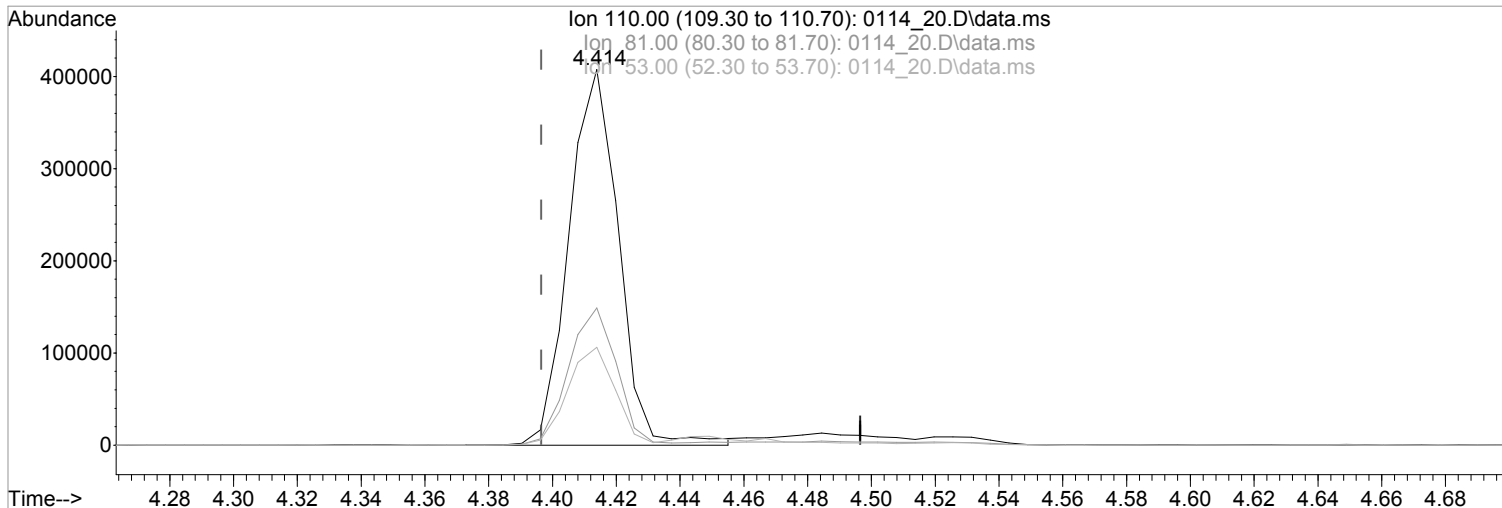
Quant Time: Jan 18 15:27:33 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Tue Jan 18 15:25:48 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_20.D  
 Acq On : 14 Jan 2022 6:18 pm  
 Operator : 917  
 Sample : STD TCL 50K1 PPB 22A13139 06/06/22  
 Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 17 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 15:26:01 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 15:25:48 2022  
 Response via : Initial Calibration



TIC: 0114\_20.D\data.ms

(37) Hydroquinone

4.414min (+0.017) 38890.4987996 ppb

Qvalue = 93

response 439831

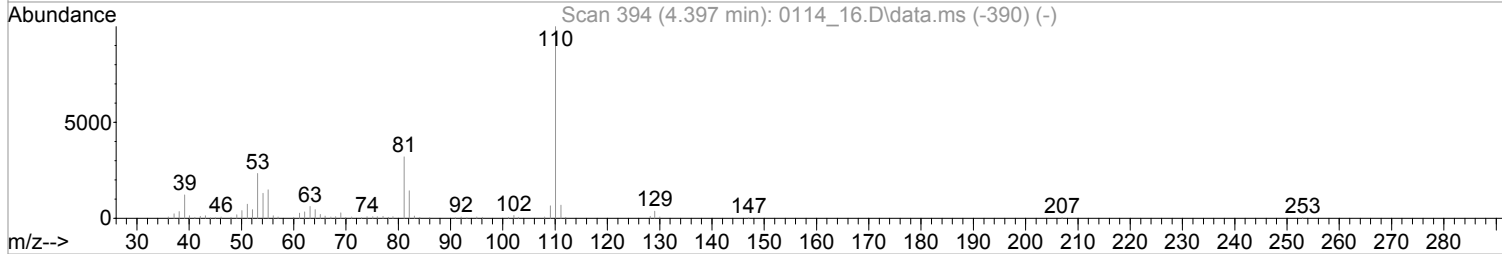
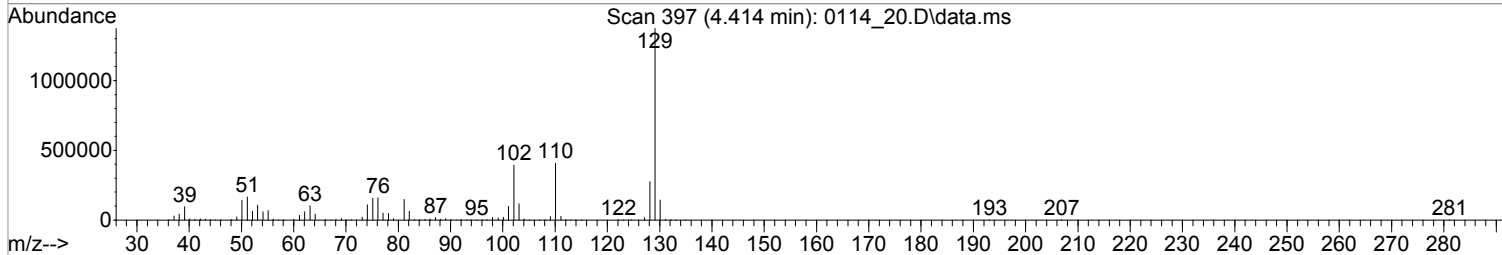
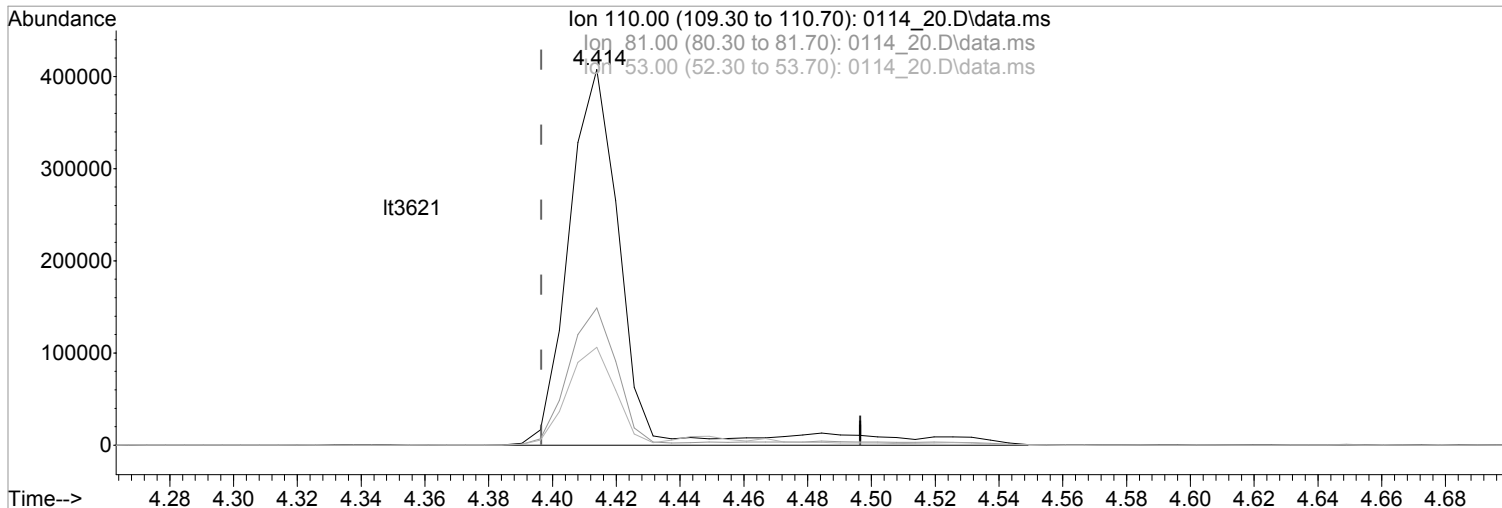
Ion	Exp%	Act%
110.00	100	100
81.00	31.90	36.56
53.00	23.40	26.03
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_20.D  
 Acq On : 14 Jan 2022 6:18 pm  
 Operator : 917  
 Sample : STD TCL 50K1 PPB 22A13139 06/06/22  
 Misc : TCL CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 17 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 18 15:26:01 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 15:25:48 2022  
 Response via : Initial Calibration



TIC: 0114\_20.D\data.ms

(37) Hydroquinone  
 4.414min (+0.017) 42895.6372133 ppb m

response 485127

Ion	Exp%	Act%
110.00	100	100
81.00	31.90	36.56
53.00	23.40	26.03
0.00	0.00	0.00

**SDG:** L1486885  
**Instrument ID:** BNAMS24

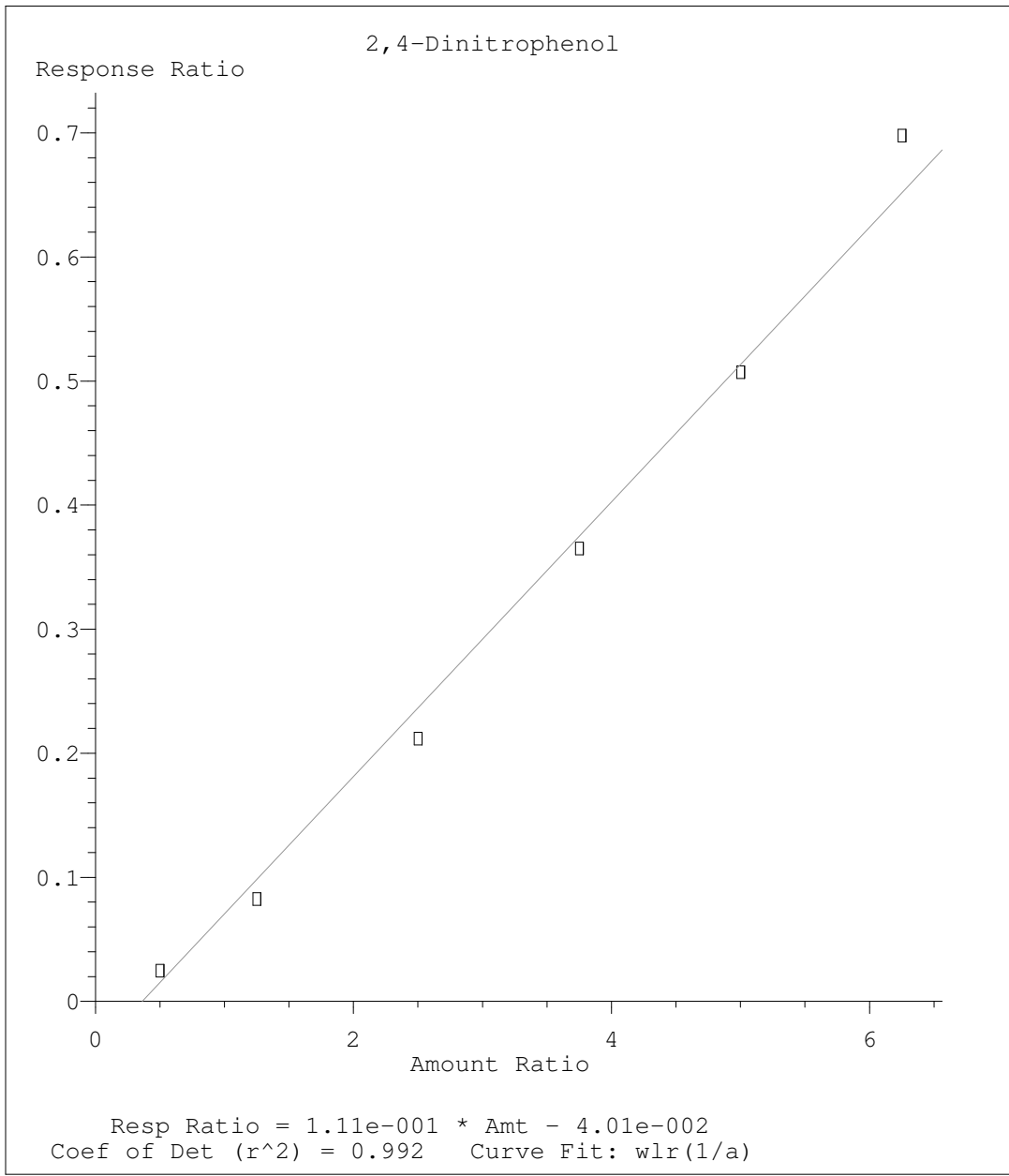
**Analytical Method:** 8270E

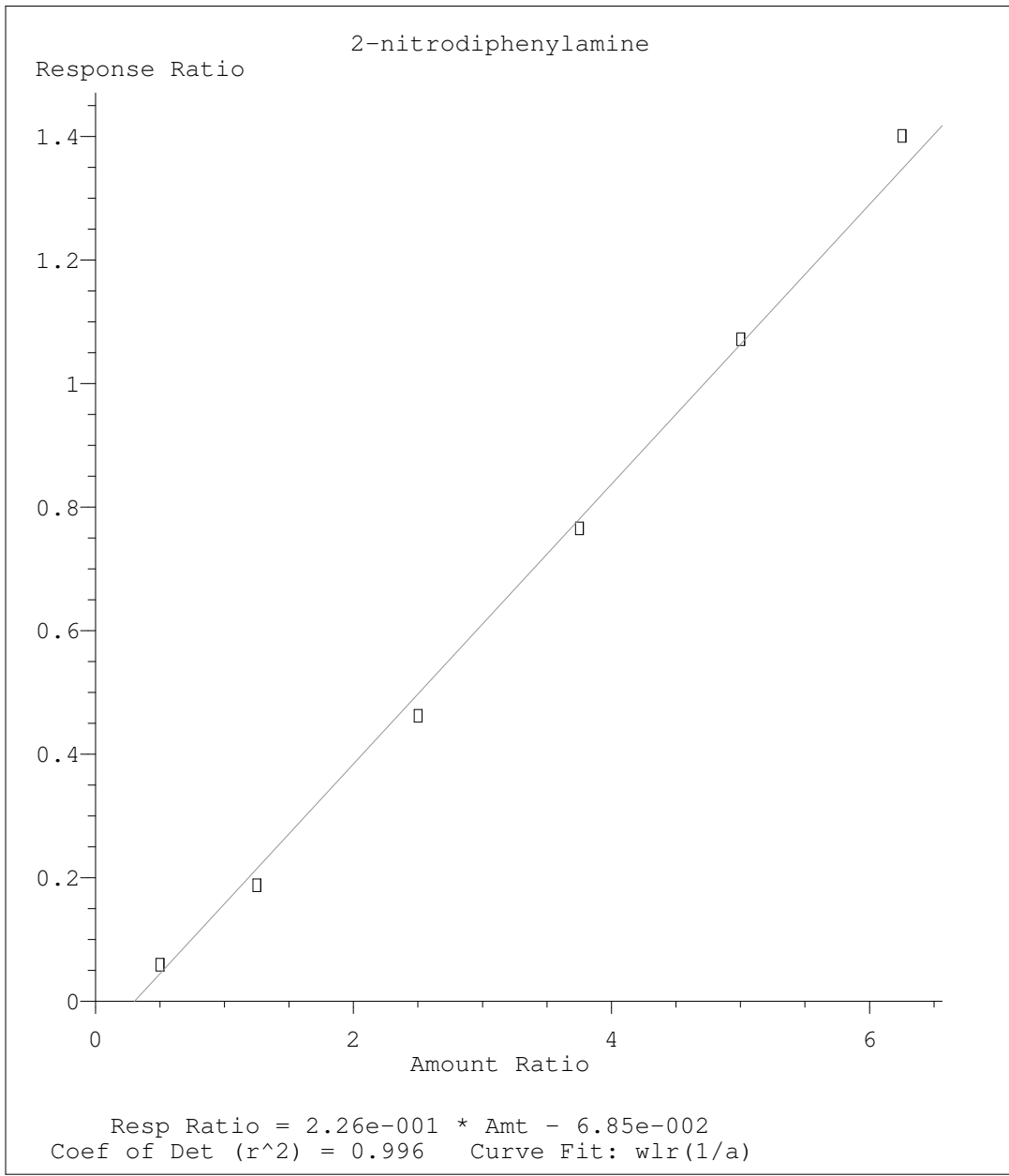
Analyte	RRF: 500	RRF: 1000	RRF: 4000	RRF: 10000	RRF: 20000	RRF: 30000	RRF: 40000	RRF: 50000	RRF: 4K1	RRF: 10K1
Analysis date/time	03/31/22 17:24	03/31/22 17:45	03/31/22 18:07	03/31/22 18:28	03/31/22 18:49	03/31/22 19:11	03/31/22 19:32	03/31/22 19:53	03/31/22 20:36	03/31/22 20:58
PHENOL	1.6010	1.4820	1.57	1.5980	1.6240	1.5830	1.5520	1.5950		
3&4-METHYL PHENOL	1.2840	1.2150	1.25	1.3490	1.3650	1.3210	1.3020	1.3260		
NAPHTHALENE	1.1320	1.0560	0.9950	1.0120	0.9840	0.9710	0.92	0.9180		
2-METHYLNAPHTHALENE	0.6570	0.6280	0.6150	0.6330	0.6320	0.6340	0.61	0.61		
1-METHYLNAPHTHALENE	0.6470	0.6310	0.5970	0.61	0.6130	0.6110	0.5890	0.5870		
ACENAPHTHYLENE	1.7480	1.6720	1.6690	1.7240	1.7160	1.7160	1.66	1.6580		
ACENAPHTHENE	1.2270	1.2160	1.14	1.1450	1.1430	1.1340	1.0890	1.0960		
DIBENZOFURAN	1.67	1.5920	1.5340	1.5580	1.5120	1.5070	1.4530	1.4390		
FLUORENE	1.33	1.2780	1.2650	1.3060	1.2780	1.2680	1.2160	1.21		
PHENANTHRENE	1.2170	1.0870	1.0560	1.0550	1.0490	1.0380	0.99	0.9910		
ANTHRACENE	1.0170	0.9560	0.9850	1.0270	1.0410	1.03	0.9950	1.0030		
CARBAZOLE	0.8390	0.7930	0.8460	0.8840	0.8890	0.9070	0.8560	0.8770		
DI-N-BUTYL PHTHALATE	1.1240	1.0760	1.2080	1.3430	1.4080	1.4320	1.3520	1.3760		
FLUORANTHENE	1.0230	0.9560	0.9940	1.0520	1.0770	1.0860	1.0510	1.06		
PYRENE	1.7080	1.5380	1.5110	1.5060	1.48	1.4410	1.4010	1.4030		
BENZO(A)ANTHRACENE	1.0880	1.0760	1.0630	1.1220	1.1430	1.1580	1.1270	1.1560		
CHRYSENE	1.2550	1.2220	1.1770	1.1820	1.1810	1.1590	1.1150	1.1450		
BENZO(B)FLUORANTHENE	1.0580	1.0570	1.1180	1.2060	1.2260	1.2690	1.2170	1.2290		
BENZO(K)FLUORANTHENE	1.0520	1.0420	1.1760	1.2870	1.2760	1.2720	1.2350	1.2510		
BENZO(A)PYRENE	0.8090	0.7610	0.88	0.9960	1.0210	1.0590	1.0250	1.0520		
INDENO(1,2,3-CD)PYRENE	0.7840	0.7330	0.8210	0.9050	0.9080	0.9490	0.9110	0.9090		
DIBENZ(A,H)ANTHRACENE	0.8410	0.8770	0.9470	1.0240	1.0220	1.0470	1.0010	0.9960		
BENZO(G,H,I)PERYLENE	0.9080	0.9740	1.0220	1.1050	1.0720	1.0840	1.0350	1.0150		
2-FLUOROPHENOL	1.2870	1.1960	1.2160	1.2670	1.2950	1.2550	1.2340	1.2710		
PHENOL-D5	1.48	1.4190	1.4560	1.5090	1.54	1.4980	1.4750	1.5120		
NITROBENZENE-D5	0.3150	0.2930	0.2820	0.30	0.3090	0.3140	0.3110	0.3090		
2-FLUOROBIPHENYL	1.3980	1.3490	1.2660	1.2910	1.2610	1.2260	1.18	1.1910		
P-TERPHENYL-D14	1.1680	1.1310	1.1060	1.1160	1.1180	1.0990	1.0520	1.0660		
DI-N-OCTYL PHTHALATE		0.9020	1.0920	1.3640	1.5790	1.6750	1.6490	1.7180		
2,4,6-TRIBROMOPHENOL		0.0630	0.0730	0.0820	0.0890	0.0940	0.0910	0.0940		
PENTACHLOROPHENOL			0.0760	0.0930	0.1090	0.1160	0.1160	0.1220		
BIS(2-ETHYLHEXYL)PHTHALATE			0.8310	0.9730	1.0620	1.0810	1.0540	1.0880		
BENZOIC ACID									0.0530	0.07
<b>File ID:</b>	0331_03	0331_04	0331_05	0331_06	0331_07	0331_08	0331_09	0331_10	0331_12	0331_13

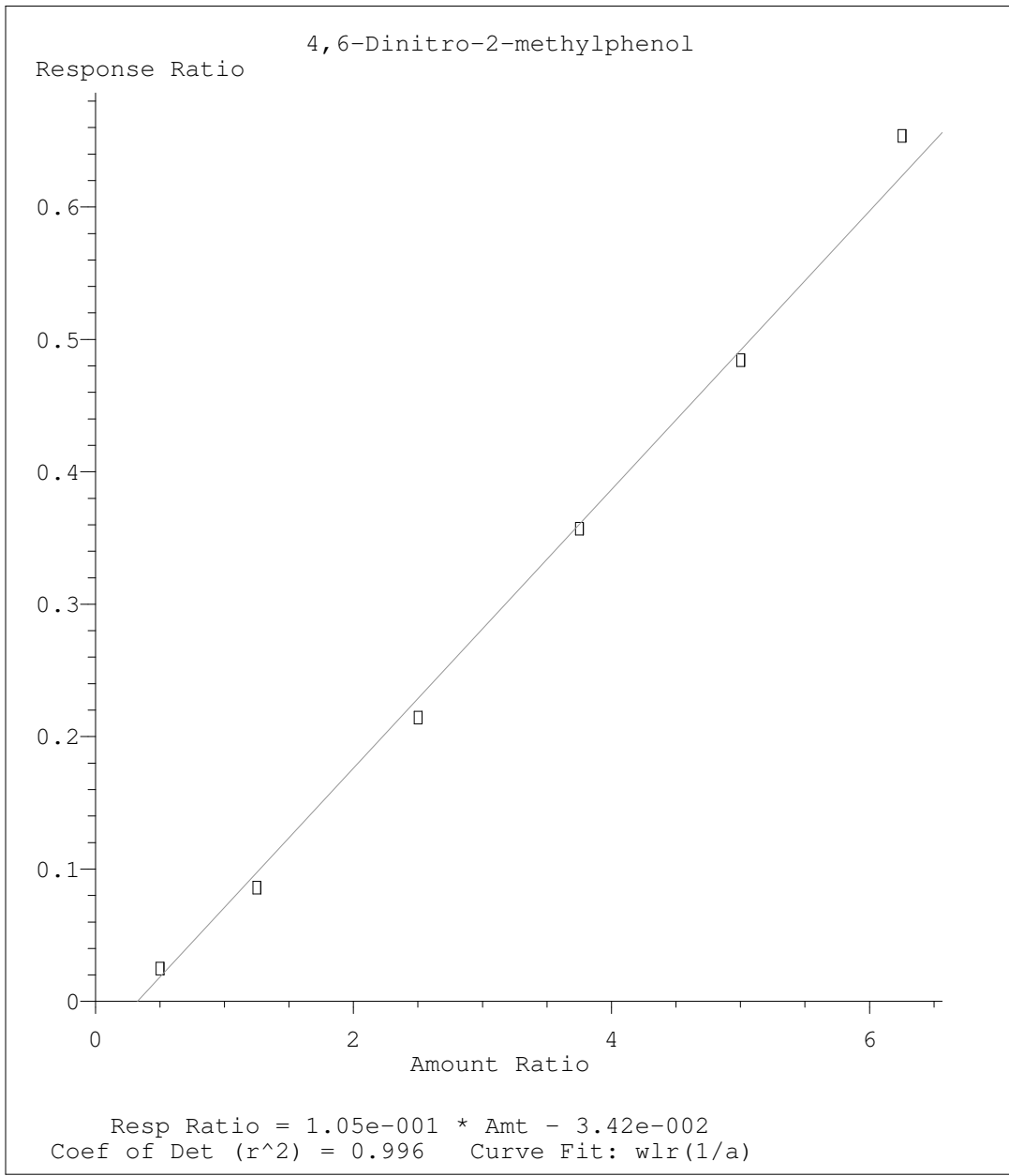
SDG: L1486885  
Instrument ID: BNAMS24

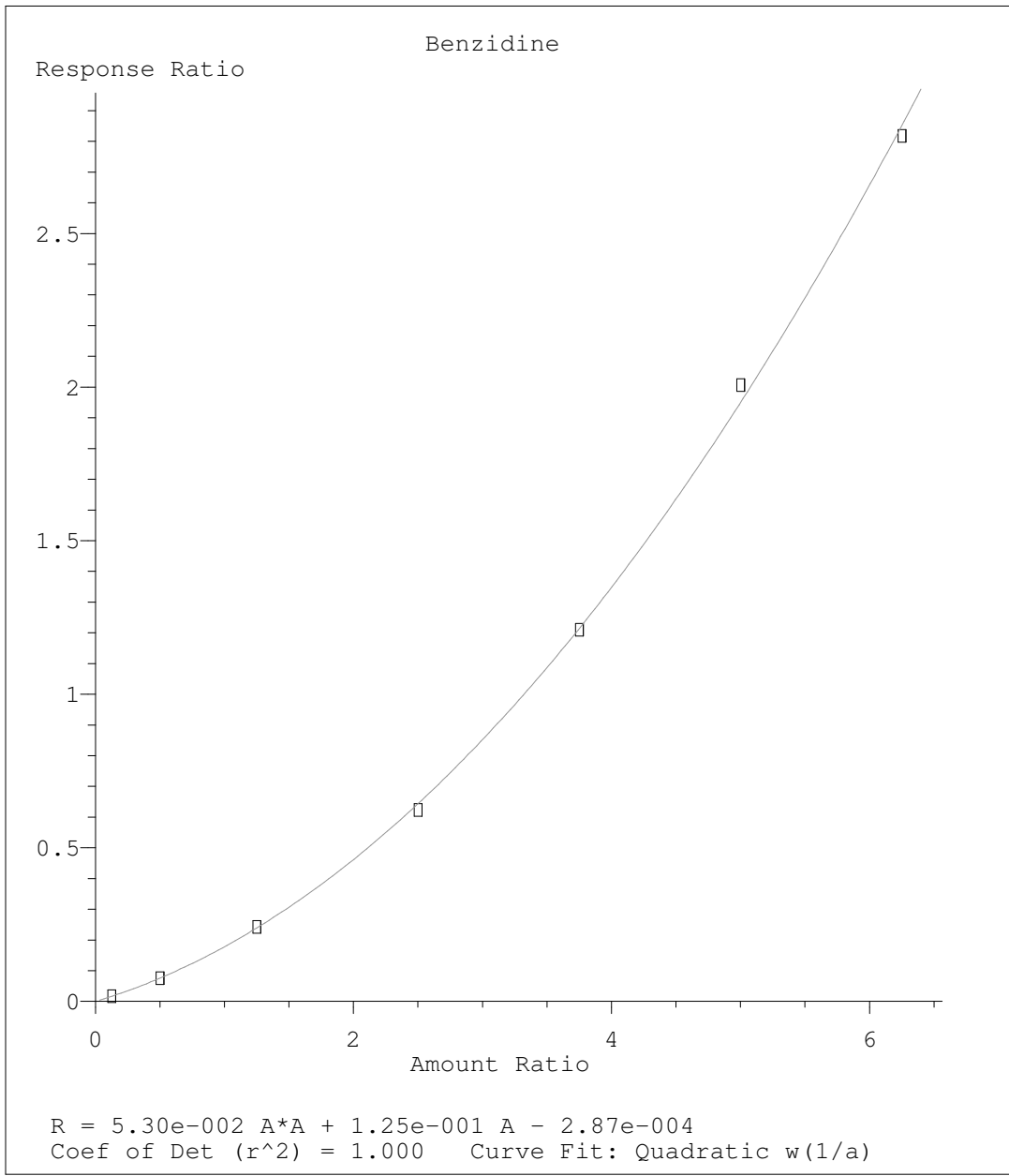
Analytical Method: 8270E

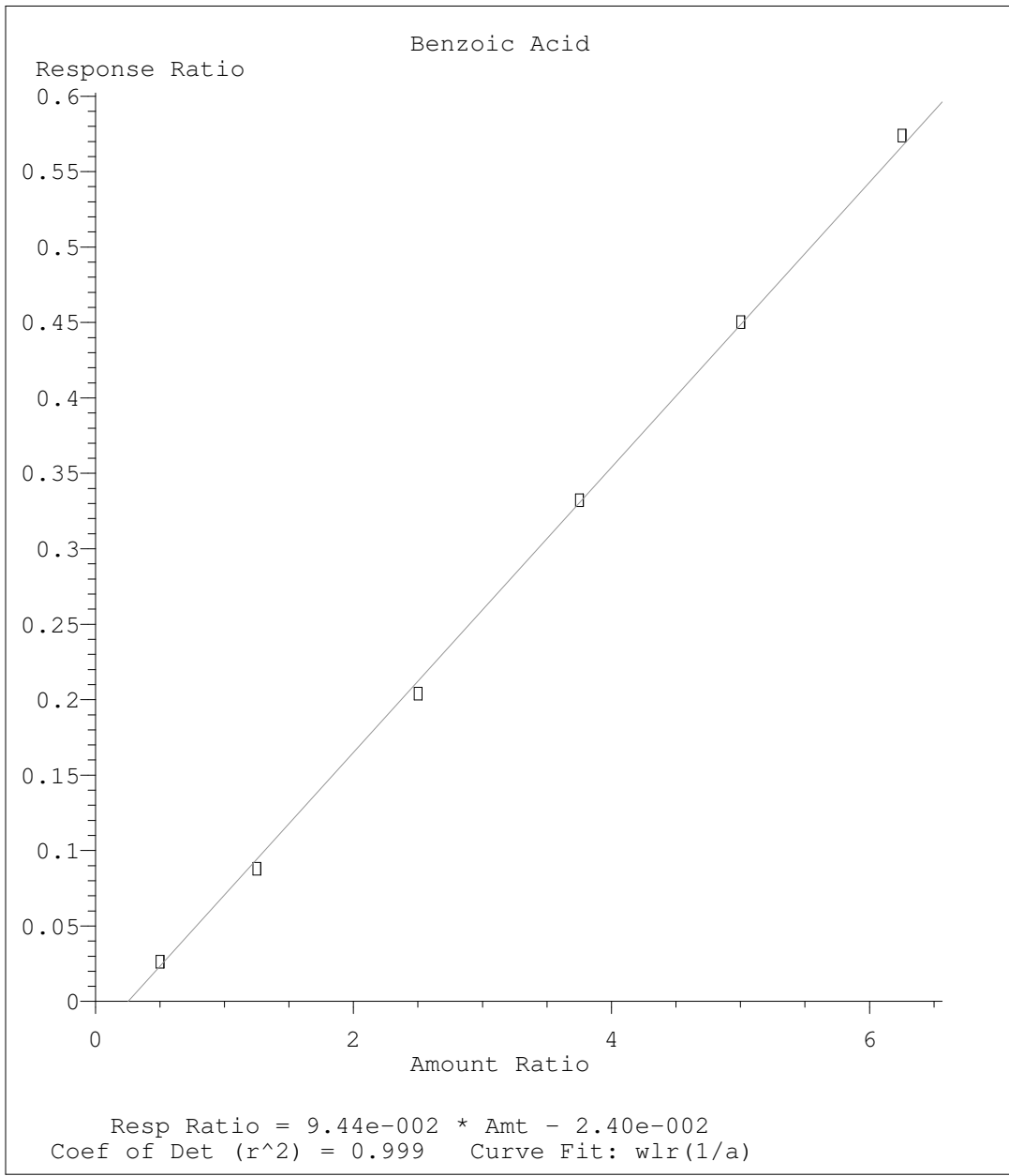
Analyte	RRF: 20K1	RRF: 30K1	RRF: 40K1	RRF: 50K1	RRF. Avg	%RSD	COD
Analysis date/time	03/31/22 21:19	03/31/22 21:40	03/31/22 22:02	03/31/22 22:23			
PHENOL					1.575372	2.77	
3&4-METHYL PHENOL					1.301686	3.86	
NAPHTHALENE					0.998617	7.08	
2-METHYLNAPHTHALENE					0.627399	2.53	
1-METHYLNAPHTHALENE					0.610754	3.34	
ACENAPHTHYLENE					1.695228	2.03	
ACENAPHTHENE					1.148837	4.33	
DIBENZOFURAN					1.532971	4.89	
FLUORENE					1.268965	3.21	
PHENANTHRENE					1.060304	6.75	
ANTHRACENE					1.006737	2.77	
CARBAZOLE					0.861194	4.17	
DI-N-BUTYL PHTHALATE					1.289953	10.48	
FLUORANTHENE					1.03753	4.25	
PYRENE					1.498492	6.58	
BENZO(A)ANTHRACENE					1.116712	3.28	
CHRYSENE					1.179486	3.71	
BENZO(B)FLUORANTHENE					1.172442	7.06	
BENZO(K)FLUORANTHENE					1.198822	8.32	
BENZO(A)PYRENE					0.950358	12.31	
INDENO(1,2,3-CD)PYRENE					0.86497	8.78	
DIBENZ(A,H)ANTHRACENE					0.969471	7.71	
BENZO(G,H,I)PERYLENE					1.02699	6.23	
2-FLUOROPHENOL					1.252515	2.77	
PHENOL-D5					1.486088	2.5	
NITROBENZENE-D5					0.30424	3.85	
2-FLUOROBIPHENYL					1.270391	5.89	
P-TERPHENYL-D14					1.107064	3.26	
DI-N-OCTYL PHTHALATE					1.425428	22.38	0.997
2,4,6-TRIBROMOPHENOL					0.083814	14.11	
PENTACHLOROPHENOL					0.105171	16.65	0.999
BIS(2-ETHYLHEXYL)PHTHALATE					1.014597	9.75	
BENZOIC ACID	0.0820	0.0890	0.09	0.0920	0.07914	19.21	0.999
File ID:	0331_14	0331_15	0331_16	0331_17			



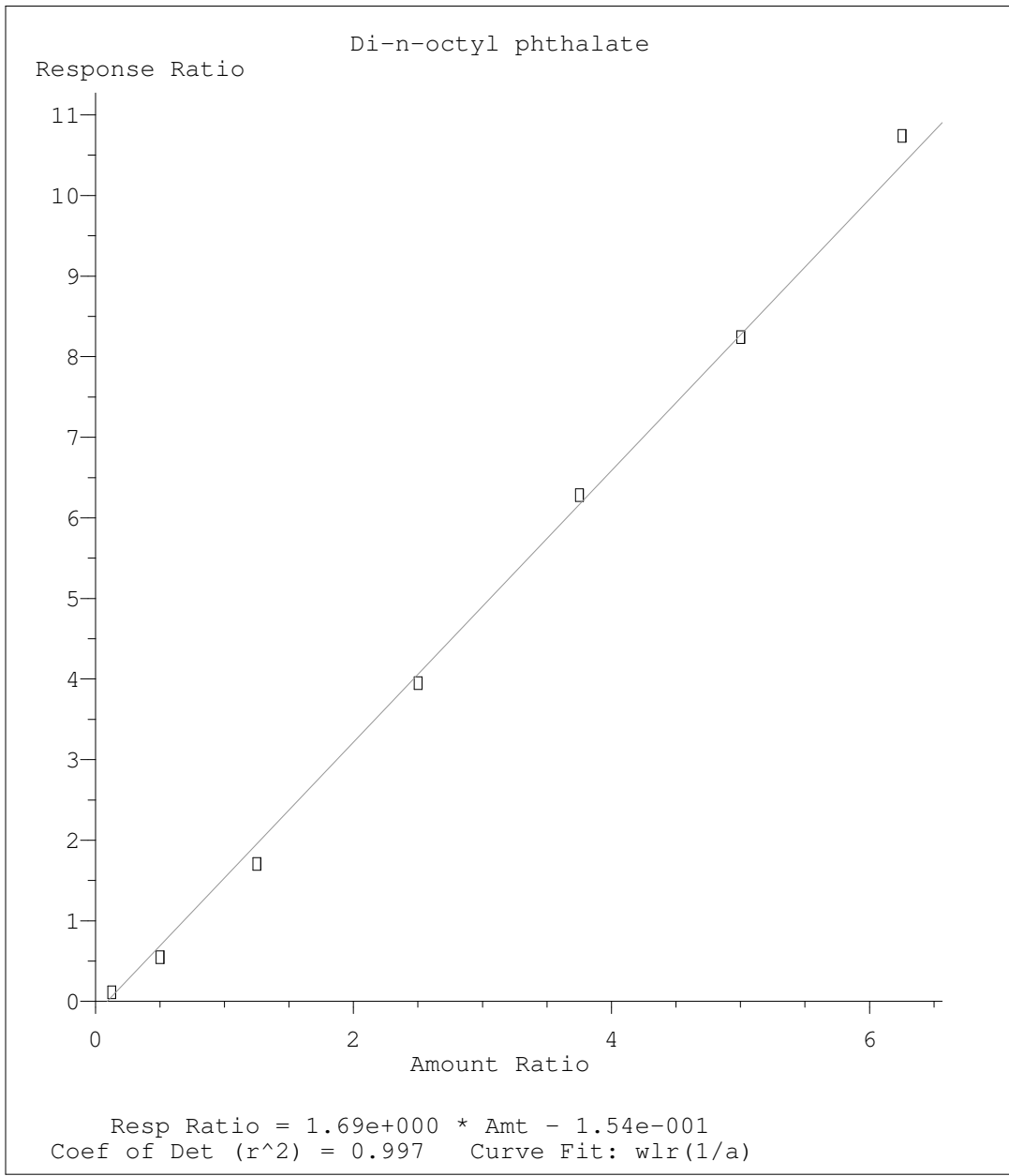


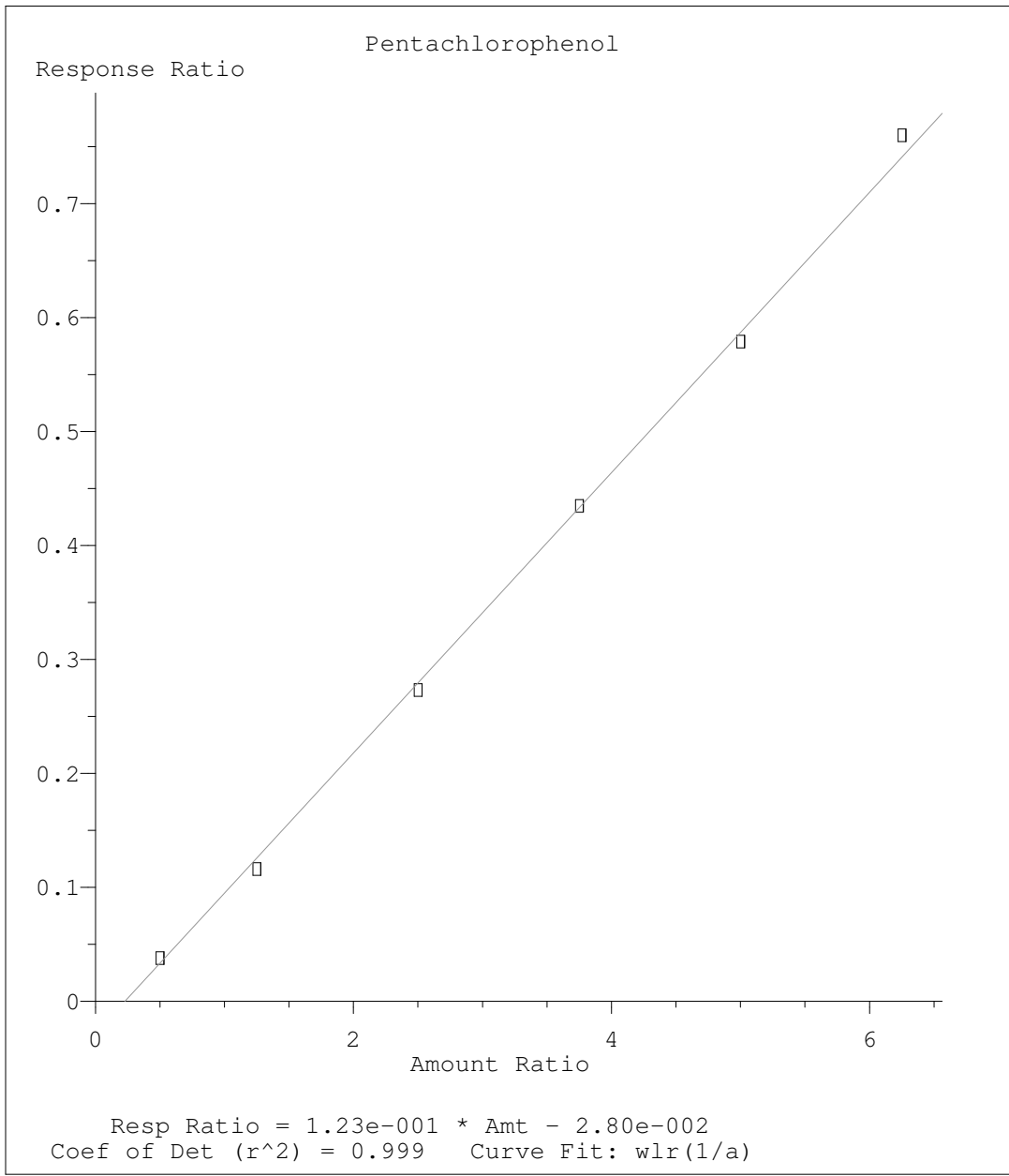












Method Path : C:\msdchem\1\methods\  
Method File : S824C31V.M  
Title : 8270 BNA  
Last Update : Mon Apr 04 16:54:30 2022  
Response Via : Initial Calibration

10605661

Calibration Files

500 =0331\_03.D 1K =0331\_04.D 4K =0331\_05.D 10K =0331\_06.D 20K =0331\_07.D 30K =0331\_08.D 40K =0331\_09.D  
50K =0331\_10.D 1K1 =0331\_11.D 4K1 =0331\_12.D 10K1 =0331\_13.D 20K1 =0331\_14.D 30K1 =0331\_15.D 40K1 =0331\_16.D  
50K1 =0331\_17.D

Compound 500 1K 4K 10K 20K 30K 40K 50K 1K1 4K1 10K1 20K1 30K1 40K1 50K1 Avg

%RSD

Compound	500	1K	4K	10K	20K	30K	40K	50K	1K1	4K1	10K1	20K1	30K1	40K1	50K1	Avg
1) I 1,4-Dichlorobenzene... -----ISTD-----																
2) TM Pyridine	1.368	1.258	1.308	1.360	1.358	1.325	1.303	1.336								1.327
3) MT N-Nitrosodimet...	0.884	0.802	0.684	0.678	0.667	0.627	0.616	0.628								0.698
4) S 2-Fluorophenol	1.287	1.196	1.216	1.267	1.295	1.255	1.234	1.271								1.253
5) MT Aniline	0.699	0.608	0.690	0.711	0.706	0.698	0.689	0.700								0.688
6) MT bis(2-Chloroet...	1.410	1.346	1.328	1.368	1.353	1.334	1.326	1.358								1.353
7) S Phenol-d5	1.480	1.419	1.456	1.509	1.540	1.498	1.475	1.512								1.486
8) MC Phenol	1.601	1.482	1.570	1.598	1.624	1.583	1.552	1.595								1.575
9) Benzaldehyde									0.316	0.313	0.324	0.339	0.380			0.335
10) MT 2-Chlorophenol	1.250	1.255	1.285	1.345	1.373	1.332	1.318	1.338								1.312
11) T n-Decane	0.981	0.866	0.859	0.852	0.842	0.800	0.768	0.779								0.843
12) MT 1,3-Dichlorobe...	1.581	1.584	1.528	1.528	1.507	1.445	1.417	1.437								1.504
13) MTC 1,4-Dichlorobe...	1.578	1.562	1.514	1.534	1.522	1.461	1.426	1.442								1.505
14) MT Benzyl Alcohol	0.936	0.879	0.900	0.977	1.007	0.992	0.983	1.014								0.961
15) MT 1,2-Dichlorobe...	1.624	1.492	1.457	1.469	1.449	1.392	1.355	1.370								1.451
16) MT bis(2-Chlorois...	0.540	0.503	0.500	0.507	0.504	0.490	0.476	0.487								0.501
17) MT 2,2-oxybis(1-c...	0.540	0.503	0.500	0.507	0.504	0.490	0.476	0.487								0.501
18) MT 2-Methylphenol	1.141	1.074	1.178	1.234	1.242	1.197	1.183	1.191								1.180
19) MT Hexachloroethane	0.665	0.625	0.628	0.635	0.635	0.613	0.601	0.619								0.628

Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA

Last Update : Mon Apr 04 16:54:30 2022

00) MP N-Nitrosodi-n-... 0.798 0.775 0.805 0.849 0.881 0.863 0.857 0.887  
 03  
 11) MT 3&4-Methyl phenol 1.284 1.215 1.250 1.349 1.365 1.321 1.302 1.326  
 06  
 22) MT Acetophenone  
 .42

1.735 1.675 1.724 1.710 1.742 1.749 1.720 1.722 1

Peak #	Retention Time	Area	Height	Width	Height	Area	Height	Area	Height
23) I	Naphthalene-d8	0.315	0.293	0.282	0.300	0.309	0.314	0.311	0.309
24) S	Nitrobenzene-d5	0.297	0.295	0.296	0.315	0.314	0.320	0.313	0.311
25) MT	Nitrobenzene	0.585	0.546	0.560	0.609	0.628	0.641	0.623	0.622
26) MT	Isophorone	0.114	0.122	0.144	0.156	0.161	0.161	0.160	0.161
27) MCT	2-Nitrophenol	0.291	0.282	0.288	0.310	0.308	0.314	0.303	0.299
28) MT	2,4-Dimethylph...	0.421	0.400	0.398	0.410	0.408	0.411	0.395	0.393
29) MT	bis(2-Chloreth...	0.225	0.212	0.222	0.243	0.249	0.252	0.243	0.246
30) MCT	2,4-Dichloroph...	0.309	0.301	0.278	0.283	0.281	0.279	0.267	0.265
31) MT	Benzoic Acid	0.300	0.269	0.254	0.238	0.220	0.198	0.246	0.246
32) MT	1,2,4-Trichlor...	1.132	1.056	0.995	1.012	0.984	0.971	0.920	0.918
33) MT	alpha-terpineol	0.094	0.099	0.103	0.108	0.110	0.109	0.111	0.111
34) MT	Naphthalene	0.169	0.156	0.151	0.153	0.152	0.152	0.145	0.142
35) MT	4-Chloroaniline	0.190	0.191	0.172	0.180	0.173	0.162	0.153	0.175
36) MCT	Hexachloro-1,3...	0.547	0.506	0.492	0.448	0.409	0.368	0.462	0.462
37) Hydroquinone		0.056	0.061	0.065	0.063	0.061	0.059	0.061	0.061
38) MT	Quinoline	0.227	0.216	0.220	0.247	0.262	0.271	0.268	0.269
39) MT	Caprolactam	0.657	0.628	0.615	0.633	0.632	0.634	0.610	0.610
40) MCT	4-Chloro-3-met...	0.647	0.631	0.597	0.610	0.613	0.611	0.589	0.587
41) MT	2-Methylnaphth...	0.249	0.230	0.223	0.198	0.176		0.215	0.215
42) MT	1-Methylnaphth...	0.372	0.348	0.331	0.295	0.266		0.322	0.322
43) MT	1,2,4,5-Tetrac...								
44) Diphenyl Ether									

10605661 1378 of 1776 S824C31V.M Mon Apr 04 17:02:57 2022

Response Factor Report BNAMS24

Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA  
 Last Update : Mon Apr 04 16:54:30 2022  
 (45) Diphenyl Oxide

10605661

0.372 0.348 0.331 0.295 0.266

Retention Time	Peak Label	Area	Height	Width	Height	Area	Height	Width	Height
46)	I Acenaphthene-d10	0.237	0.225	0.246	0.261	0.273	0.282	0.278	0.285
47)	MPT Hexachlorocycl...	0.254	0.252	0.277	0.307	0.320	0.326	0.324	0.330
48)	MCT 2,4,6-Trichlor...	0.255	0.244	0.276	0.318	0.335	0.336	0.334	0.344
49)	MT 2,4,5-Trichlor...	1.398	1.349	1.266	1.291	1.261	1.226	1.180	1.191
50)	S 2-Fluorobiphenyl	1.595	1.471	1.421	1.442	1.421	1.389	1.345	1.367
51)	MT Biphenyl	1.156	1.154	1.117	1.125	1.093	1.087	1.047	1.059
52)	MT 2-Chloronaphth...	0.247	0.301	0.338	0.357	0.358	0.364		
53)	MT 2-Nitroaniline	1.748	1.672	1.669	1.724	1.716	1.716	1.660	1.658
54)	MT Acenaphthylene	1.195	1.180	1.209	1.272	1.284	1.286	1.244	1.233
55)	MT Dimethyl phtha...	0.206	0.241	0.269	0.293	0.298	0.291	0.294	
56)	MT 2,6-Dinitrotol...	0.211	0.247	0.271	0.279	0.271	0.271	0.270	
57)	MT 3-Nitroaniline	1.227	1.216	1.140	1.145	1.143	1.134	1.089	1.096
58)	MCT Acenaphthene	0.049	0.066	0.085	0.097	0.101	0.112		
59)	MPT 2,4-Dinitrophenol	1.670	1.592	1.534	1.558	1.512	1.507	1.453	1.439
60)	MT Dibenzofuran	0.268	0.322	0.348	0.365	0.358	0.368		
61)	MT 2,4-Dinitrotol...	0.139	0.174	0.191	0.206	0.203	0.209		
62)	T 2,3,4,6-Tetrac...	1.330	1.278	1.265	1.306	1.278	1.268	1.216	1.210
63)	MPT 4-Nitrophenol	0.650	0.571	0.598	0.583	0.574	0.567	0.540	0.540
64)	MT Fluorene	1.276	1.231	1.264	1.346	1.329	1.330	1.270	1.256
65)	MT 4-Chlorophenyl...	0.168	0.192	0.148	0.137	0.146	0.149	0.153	
66)	MT Diethyl phthalate	1.230	1.233	1.287	1.356	1.347	1.335	1.280	1.287
67)	MT 4-Nitroaniline								
68)	MT Azobenzene								

0.169 0.200 0.219 0.231 0.241 0.241 0.241 0.217 12

Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA  
 Last Update : Mon Apr 04 16:54:30 2022  
 9) MT Atrazine

0) I Phenanthrene-d10	0.229	0.256	0.277	0.309	0.308	0.318	0.319	0.288	12
71) MT 4,6-Dinitro-2-...									
.93									
72) MCT N-Nitrosodiphe...									
.12									
.11									
74) MT 2,4,6-Tribromo...									
.93									
75) MT 4-Bromophenyl-...									
.72									
.99									
76) T Hexachlorobenzene									
.77) MCT Pentachlorophenol									
.65#									
78) MT Phenanthrene									
.75									
.77									
80) MT Anthracene									
.17									
81) MT Carbazole									
.48									
82) MT Di-n-butyl pht...									
.37									
83) MCT Fluoranthene									
.25									
.9									
84) I Chrysene-d12									
85) MT Benzidine									
.78									
86) MT Pyrene									
.58									
87) S p-Terphenyl-d14									
.26									
.88) MT Benzylbutyl ph...									
.16									
89) MT 3,3-Dichlororobe...									
.20									
90) MT Benzo(a)anthra...									
.28									
91) MT Chrysene									
.11									
92) MT bis(2-Ethylhex...									
.95									
93) MC Di-n-octyl pht...									

	0.049	0.069	0.086	0.095	0.097	0.105			
	0.625	0.589	0.613	0.637	0.650	0.639	0.609	0.615	
	0.063	0.073	0.082	0.089	0.094	0.091	0.094		
	0.195	0.193	0.190	0.191	0.192	0.194	0.184	0.187	
	0.253	0.236	0.221	0.221	0.221	0.219	0.207	0.208	
	0.162	0.138	0.146	0.148	0.155	0.153	0.146	0.145	
	0.076	0.093	0.109	0.116	0.116	0.116	0.122		
	1.217	1.087	1.056	1.055	1.049	1.038	0.990	0.991	
	1.017	0.956	0.985	1.027	1.041	1.030	0.995	1.003	
	0.839	0.793	0.846	0.884	0.889	0.907	0.856	0.877	
	1.124	1.076	1.208	1.343	1.408	1.432	1.352	1.376	
	1.023	0.956	0.994	1.052	1.077	1.086	1.051	1.060	
	1.708	1.538	1.511	1.506	1.480	1.441	1.401	1.403	
	1.168	1.131	1.106	1.116	1.118	1.099	1.052	1.066	
	0.562	0.651	0.709	0.733	0.724	0.748			
	1.088	1.076	1.063	1.122	1.143	1.158	1.127	1.156	
	1.255	1.222	1.177	1.182	1.181	1.159	1.115	1.145	
	0.831	0.973	1.062	1.081	1.054	1.088			
	0.902	1.092	1.364	1.579	1.675	1.649	1.718		

Response Factor Report BNAMS24

Method Path : C:\msdchem\1\methods\  
Method File : S824C31V.M  
Title : 8270 BNA  
Last Update : Mon Apr 04 16:54:30 2022

94)	I	Perylene-d12							
95)	MT	Benzo(b)fluora...	1.058	1.057	1.118	1.206	1.226	1.269	1.217
96)	MT	Benzo(k)fluora...	1.052	1.042	1.176	1.287	1.276	1.272	1.235
97)	MC	Benzo(a)pyrene	0.809	0.761	0.880	0.996	1.021	1.059	1.025
98)	MT	Indeno(1,2,3-c...	0.784	0.733	0.821	0.905	0.908	0.949	0.911
99)	MT	Dibenz(a,h)ant...	0.841	0.877	0.947	1.024	1.022	1.047	1.001
100)	MT	Benzo(g,h,i)pe...	0.908	0.974	1.022	1.105	1.072	1.084	1.035

10605661

(#) = Out of Range

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:01:33 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.410	152	31379	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.145	136	126523	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	63425	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.433	188	100259	8000.0000000	ppb	0.00
84) Chrysene-d12	9.251	240	65923	8000.0000000	ppb	0.00
94) Perylene-d12	11.957	264	60338	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.740	112	2524	507.9989337	ppb	0.00
Spiked Amount	20000.000		Recovery	=	2.54%	
7) Phenol-d5	3.175	99	2902	490.2811940	ppb	0.00
Spiked Amount	20000.000		Recovery	=	2.45%	
24) Nitrobenzene-d5	3.710	82	2493m	524.6305136	ppb	0.00
Spiked Amount	10000.000		Recovery	=	5.25%	
50) 2-Fluorobiphenyl	4.828	172	5540	541.1485688	ppb	0.00
Spiked Amount	10000.000		Recovery	=	5.41%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	7.845	244	4811	523.3093824	ppb	0.00
Spiked Amount	10000.000		Recovery	=	5.23%	
<b>Target Compounds</b>						
2) Pyridine	2.263	79	2682m	502.9288558	ppb	
3) N-Nitrosodimethylamine	2.204	42	1734m	651.9362692	ppb	
5) Aniline	3.228	66	1370	491.5376500	ppb	# 79
6) bis(2-Chloroethyl)ether	3.245	93	2765m	515.1374508	ppb	
8) Phenol	3.181	94	3140	501.1068373	ppb	93
10) 2-Chlorophenol	3.292	128	2452	464.8748538	ppb	95
11) n-Decane	3.292	41	1924	575.6723728	ppb	# 36
12) 1,3-Dichlorobenzene	3.381	146	3101	517.2524205	ppb	96
13) 1,4-Dichlorobenzene	3.416	146	3094	514.0708349	ppb	# 68
14) Benzyl Alcohol	3.469	79	1836	479.0055036	ppb	99
15) 1,2-Dichlorobenzene	3.504	146	3184	552.5060104	ppb	97
16) bis(2-Chloroisopropyl)...	3.539	121	1060	532.7713266	ppb	87
17) 2,2-oxybis(1-chloropro...	3.539	121	1060	532.7713266	ppb	87
18) 2-Methylphenol	3.510	108	2237	462.2064517	ppb	86
19) Hexachloroethane	3.698	117	1305	524.0277072	ppb	97
20) N-Nitrosodi-n-propylamine	3.610	70	1565	469.7971863	ppb	98
21) 3&4-Methyl phenol	3.592	107	2518	475.7854675	ppb	95
25) Nitrobenzene	3.722	77	2349	471.8104374	ppb	92
26) Isophorone	3.851	82	4629	480.4591456	ppb	99
28) 2,4-Dimethylphenol	3.904	107	2304	469.9159942	ppb	92
29) bis(2-Chlorethoxy)methane	3.969	93	3329	513.4626234	ppb	98
30) 2,4-Dichlorophenol	4.039	162	1782	464.4492046	ppb	84
32) 1,2,4-Trichlorobenzene	4.104	180	2444	545.7286958	ppb	94
34) Naphthalene	4.157	128	8954m	559.6849764	ppb	
36) Hexachloro-1,3-butadiene	4.222	225	1339	554.5918131	ppb	91
40) 4-Chloro-3-methylphenol	4.463	107	1795	460.1058487	ppb	92
41) 2-Methylnaphthalene	4.592	142	5197	519.2282987	ppb	# 95
42) 1-Methylnaphthalene	4.657	142	5117	530.1816916	ppb	# 96
47) Hexachlorocyclopentadiene	4.692	237	939m	453.4144396	ppb	
48) 2,4,6-Trichlorophenol	4.769	196	1005	412.4968894	ppb	93
49) 2,4,5-Trichlorophenol	4.792	196	1011	400.6238575	ppb	94
51) Biphenyl	4.898	154	6324	553.1433075	ppb	99



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

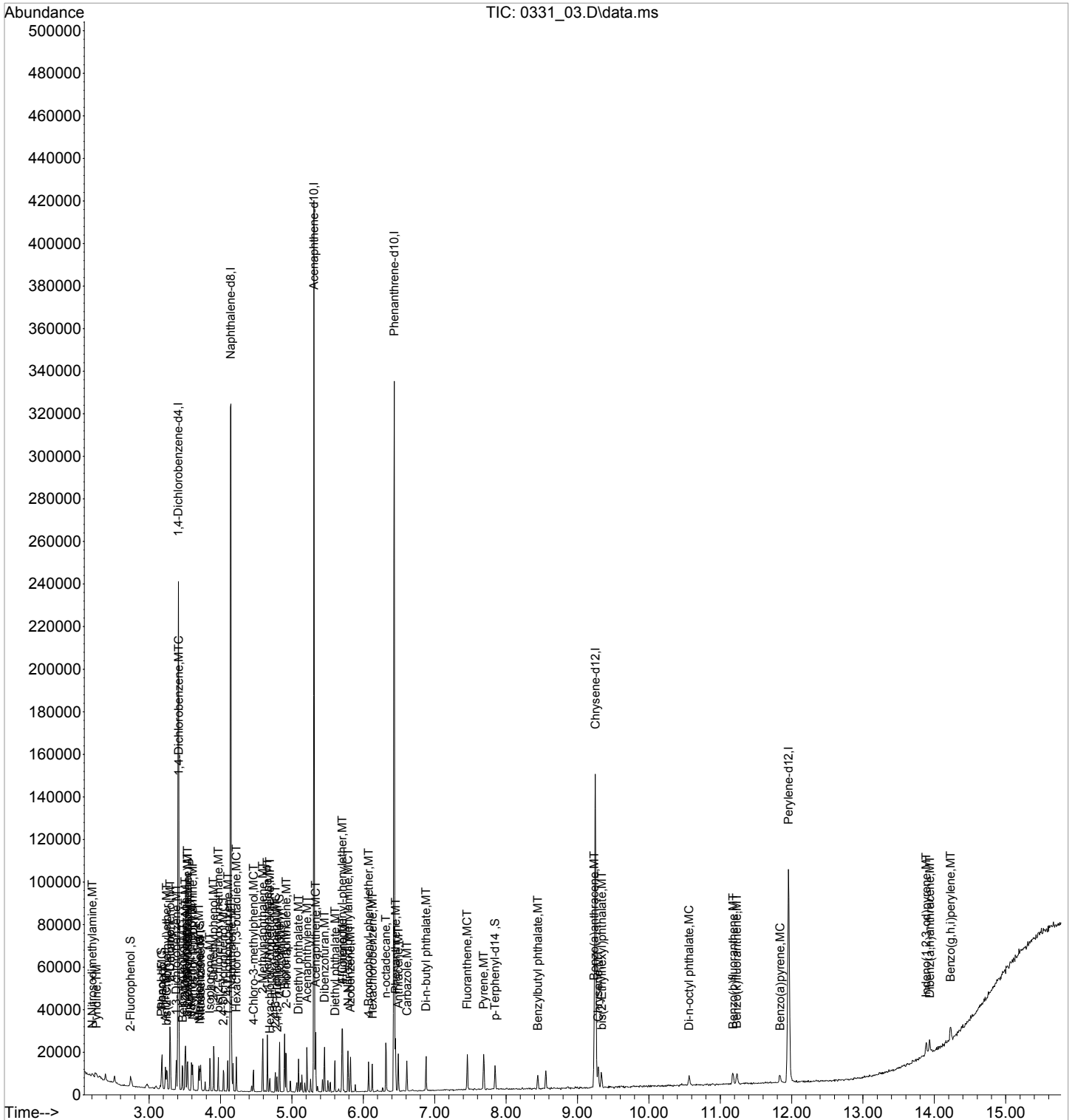
Quant Time: Apr 04 16:01:33 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
52) 2-Chloronaphthalene	4.922	162	4581	513.4164333	ppb		95
54) Acenaphthylene	5.210	152	6929	506.9901865	ppb		99
55) Dimethyl phthalate	5.092	163	4737	469.5927938	ppb		91
58) Acenaphthene	5.333	153	4864	535.9579409	ppb		98
60) Dibenzofuran	5.457	168	6619	535.9944213	ppb	#	89
64) Fluorene	5.710	166	5272	509.1051045	ppb		96
65) 4-Chlorophenyl-phenyle...	5.704	204	2576	557.7817146	ppb		99
66) Diethyl phthalate	5.604	149	5060	474.0047284	ppb		98
68) Azobenzene	5.822	77	4874	453.2199158	ppb	#	86
72) N-Nitrosodiphenylamine	5.786	169	3919	491.1822538	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	1225	512.3795821	ppb		96
75) Hexachlorobenzene	6.128	284	1585	573.4533593	ppb		94
76) n-octadecane	6.316	55	1016	548.9786212	ppb	#	29
78) Phenanthrene	6.451	178	7629	577.0254334	ppb		98
79) Anthracene	6.492	178	6370	494.8391331	ppb		97
80) Carbazole	6.610	167	5256	474.4175216	ppb	#	62
81) Di-n-butyl phthalate	6.880	149	7044	418.5148193	ppb		99
83) Fluoranthene	7.457	202	6410	485.9650062	ppb		99
86) Pyrene	7.686	202	7038	567.1001911	ppb		97
88) Benzylbutyl phthalate	8.445	149	2045	380.9486504	ppb		99
90) Benzo(a)anthracene	9.233	228	4484	484.9718122	ppb		93
91) Chrysene	9.292	228	5171	530.7402982	ppb		97
92) bis(2-Ethylhexyl)phtha...	9.339	149	2721	339.4590534	ppb		94
93) Di-n-octyl phthalate	10.563	149	3967	353.0003114	ppb		96
95) Benzo(b)fluoranthene	11.180	252	3990	438.5119188	ppb		99
96) Benzo(k)fluoranthene	11.233	252	3967	408.5899278	ppb		99
97) Benzo(a)pyrene	11.839	252	3050	406.0798426	ppb		95
98) Indeno(1,2,3-cd)pyrene	13.886	276	2955	433.0546037	ppb		93
99) Dibenz(a,h)anthracene	13.939	278	3172	410.5654286	ppb		98
100) Benzo(g,h,i)perylene	14.227	276	3424	410.7757987	ppb		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

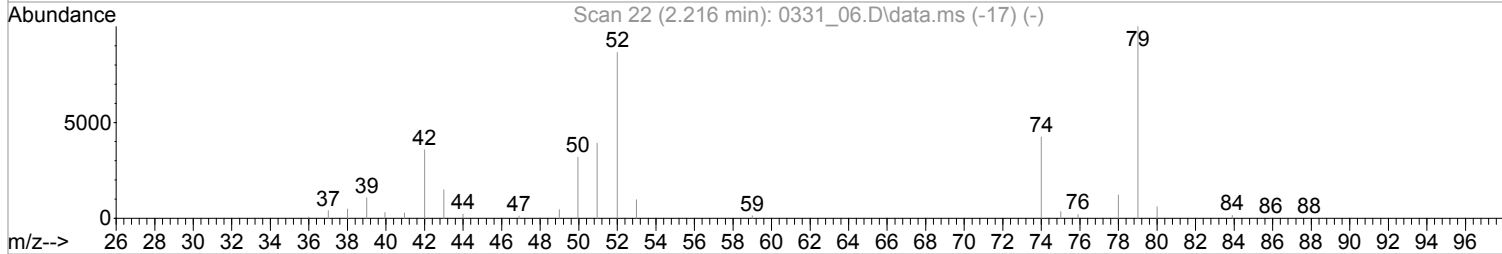
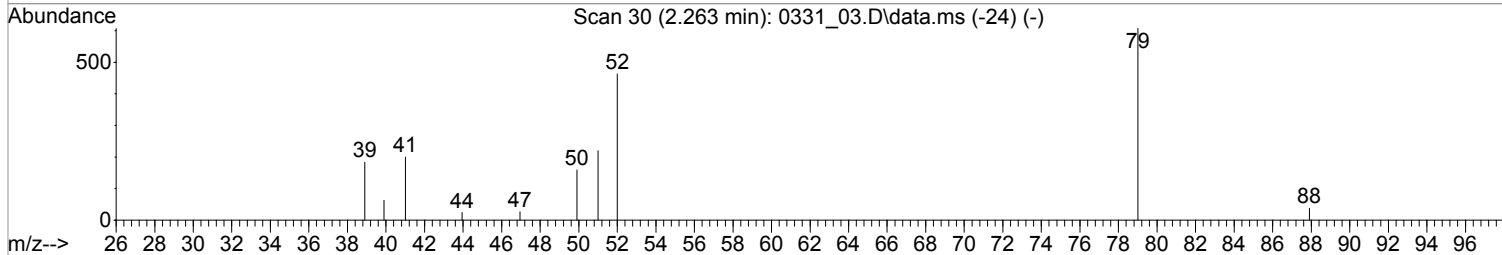
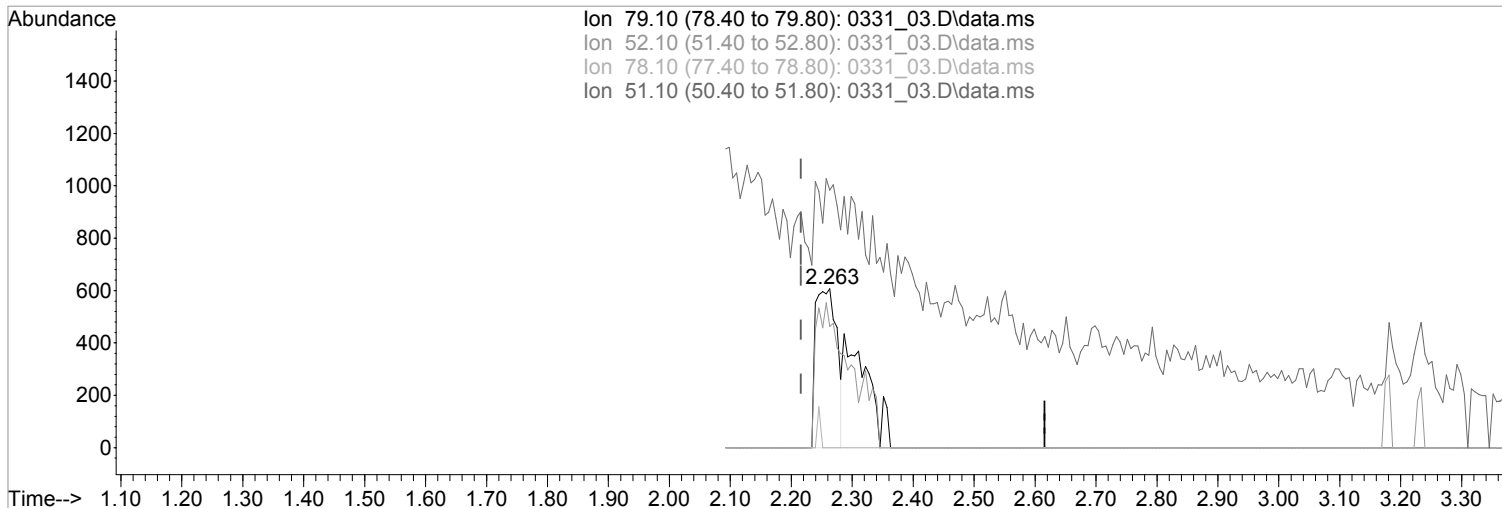
Quant Time: Apr 04 16:01:33 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

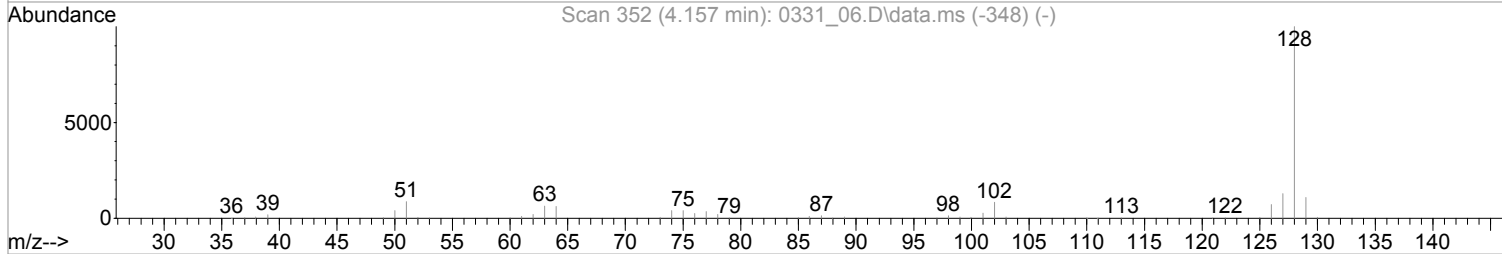
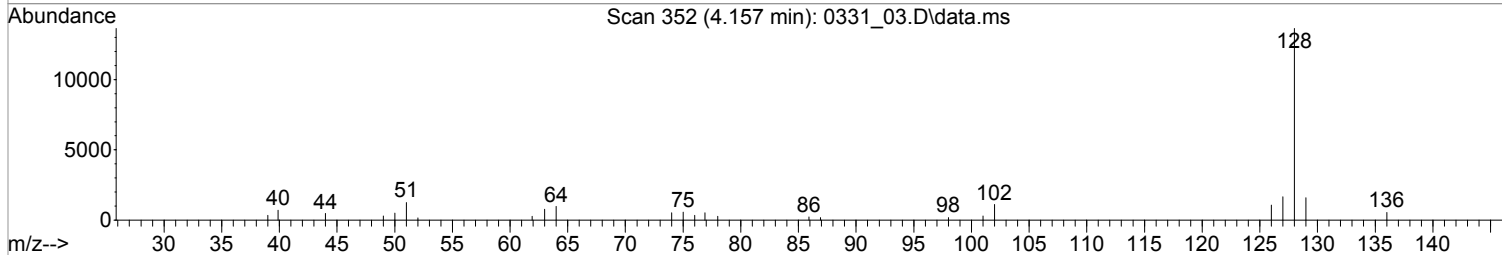
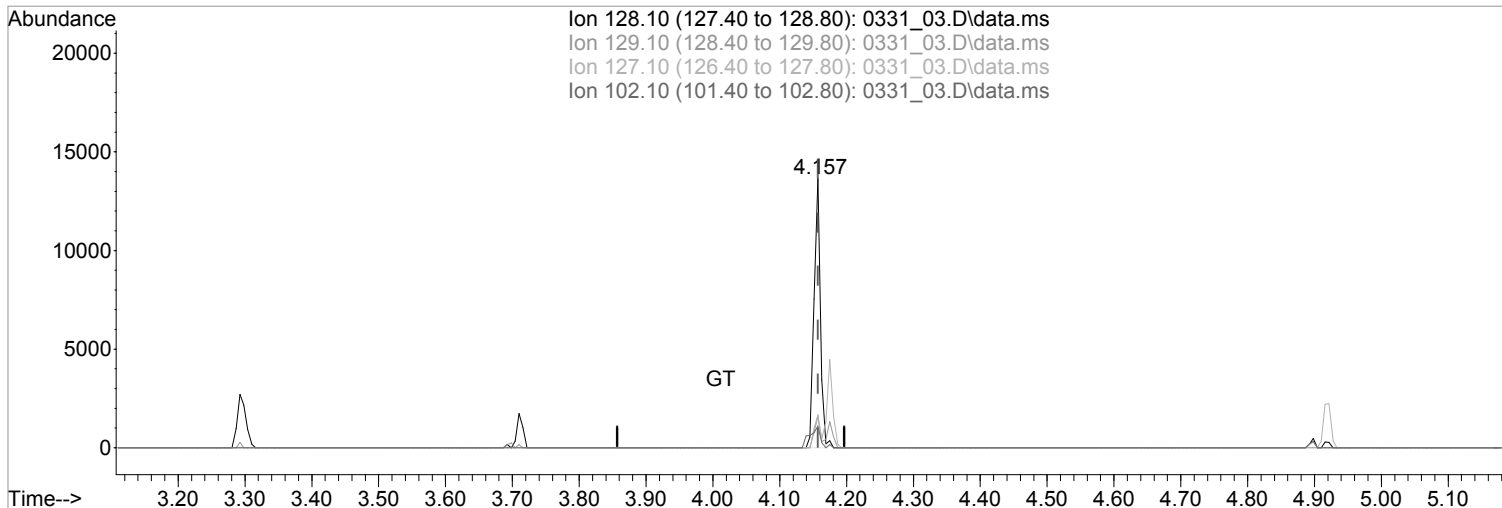
(2) Pyridine (TM)  
 2.263min (+0.047) 273.5917974 ppb  
 Qvalue = 88  
 response 1459

Ion	Exp%	Act%
79.10	100	100
52.10	86.50	76.28
78.10	12.30	0.00#
51.10	40.80	36.24

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

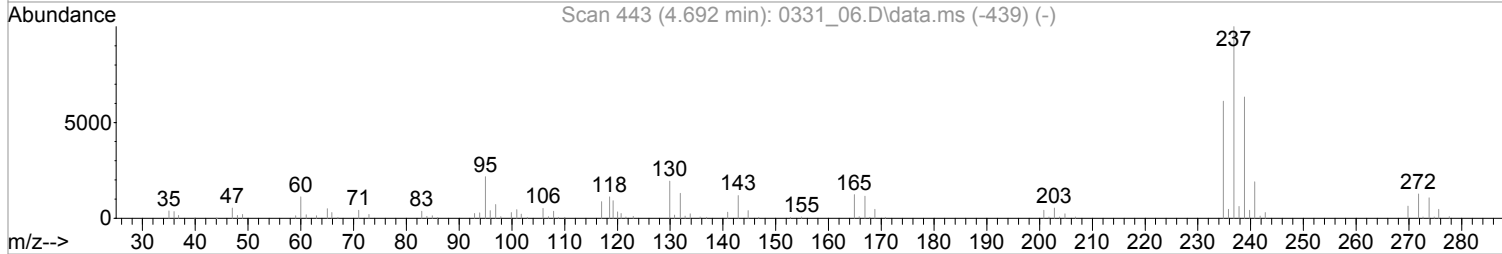
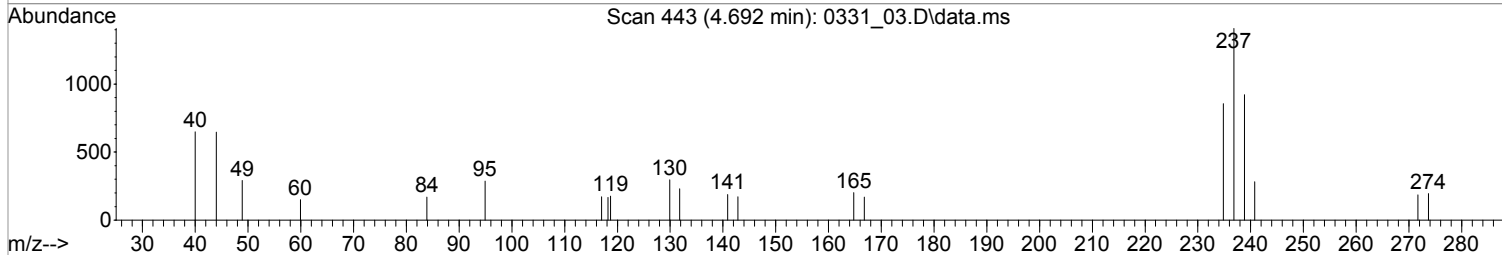
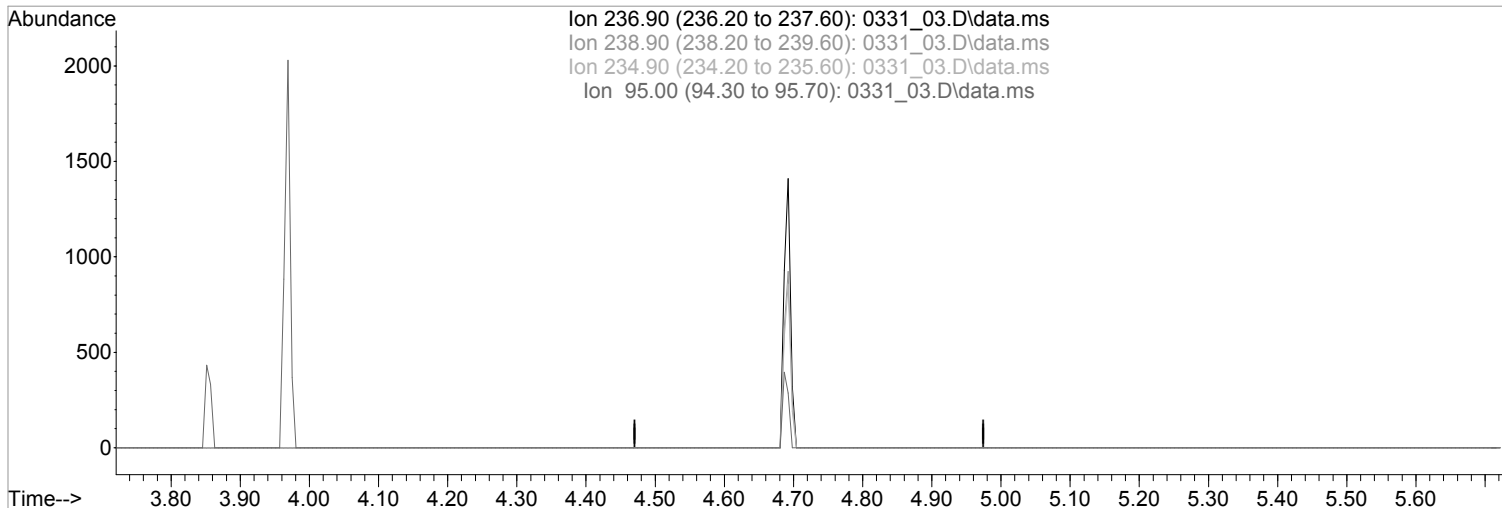
(34) Naphthalene (MT)  
 4.157min (-0.000) 559.6849764 ppb m  
 response 8954  

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.62
127.10	12.80	12.25
102.10	8.30	8.14

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_03.D  
Acq On : 31 Mar 2022 5:24 pm  
Operator : 3545  
Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 15:59:57 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



(47) Hexachlorocyclopentadiene (MPT)

4.692min (-4.692) 0.0000000 ppb

Qvalue = 0

response 0

Ion Exp% Act%

236.90 100 0.00

238.90 63.30 0.00#

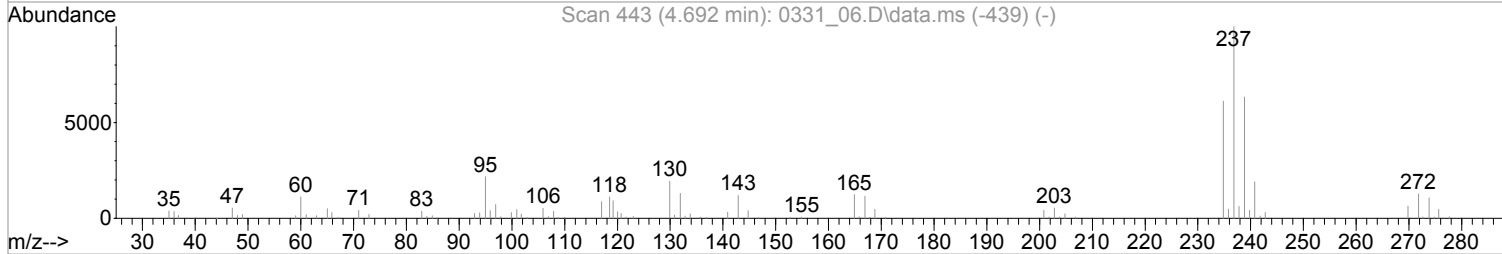
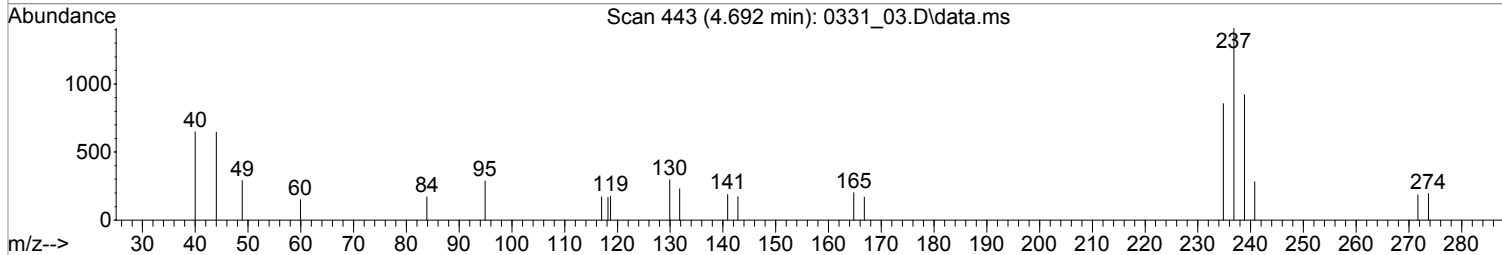
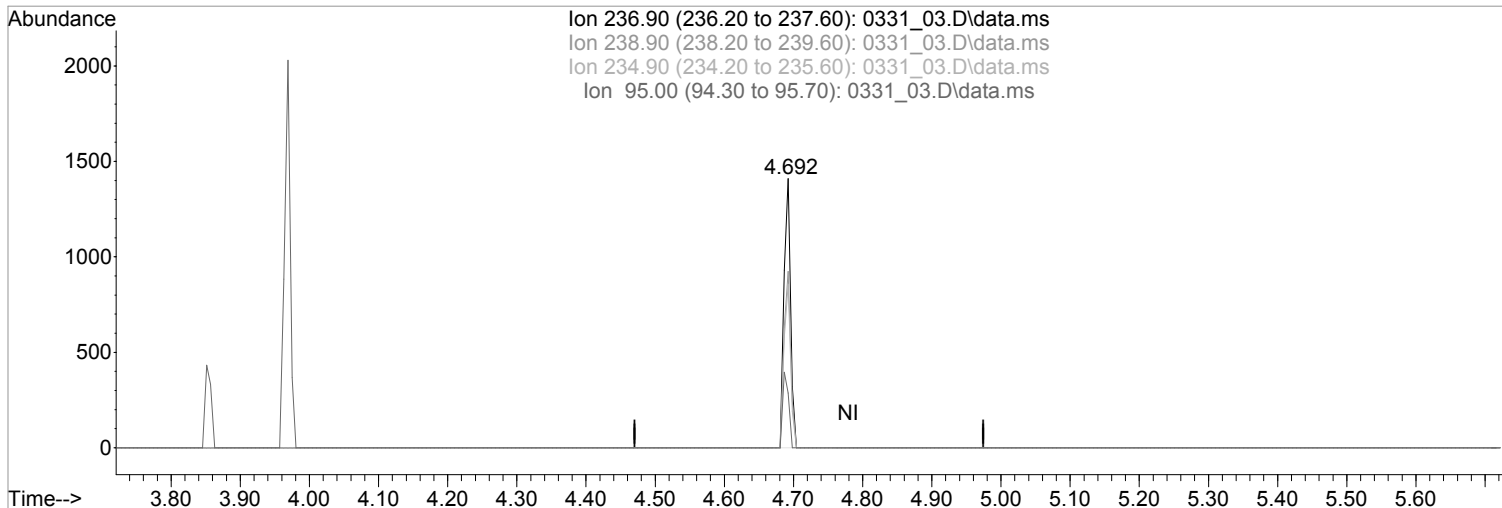
234.90 61.10 0.00#

95.00 21.70 0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_03.D  
Acq On : 31 Mar 2022 5:24 pm  
Operator : 3545  
Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 15:59:57 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



TIC: 0331\_03.D\data.ms

(47) Hexachlorocyclopentadiene (MPT)

4.692min (-0.000) 453.4144396 ppb m

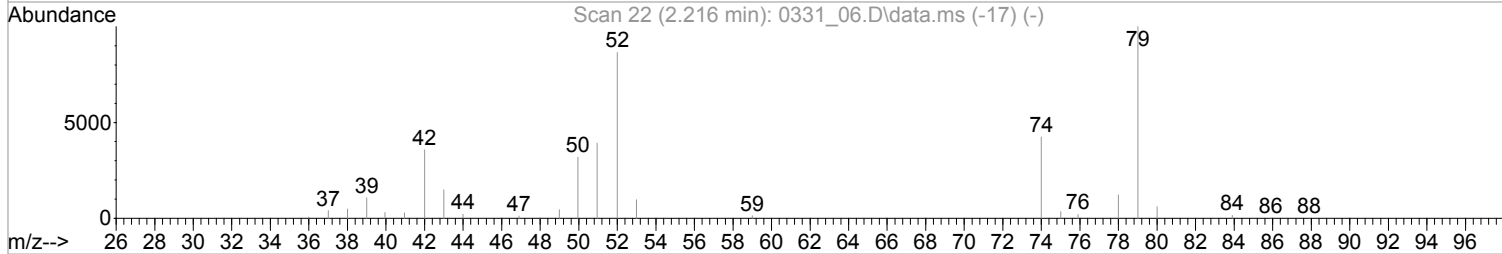
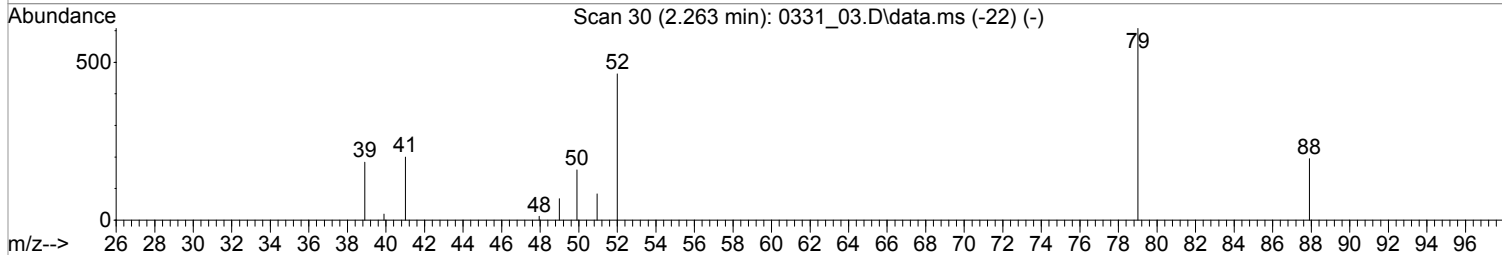
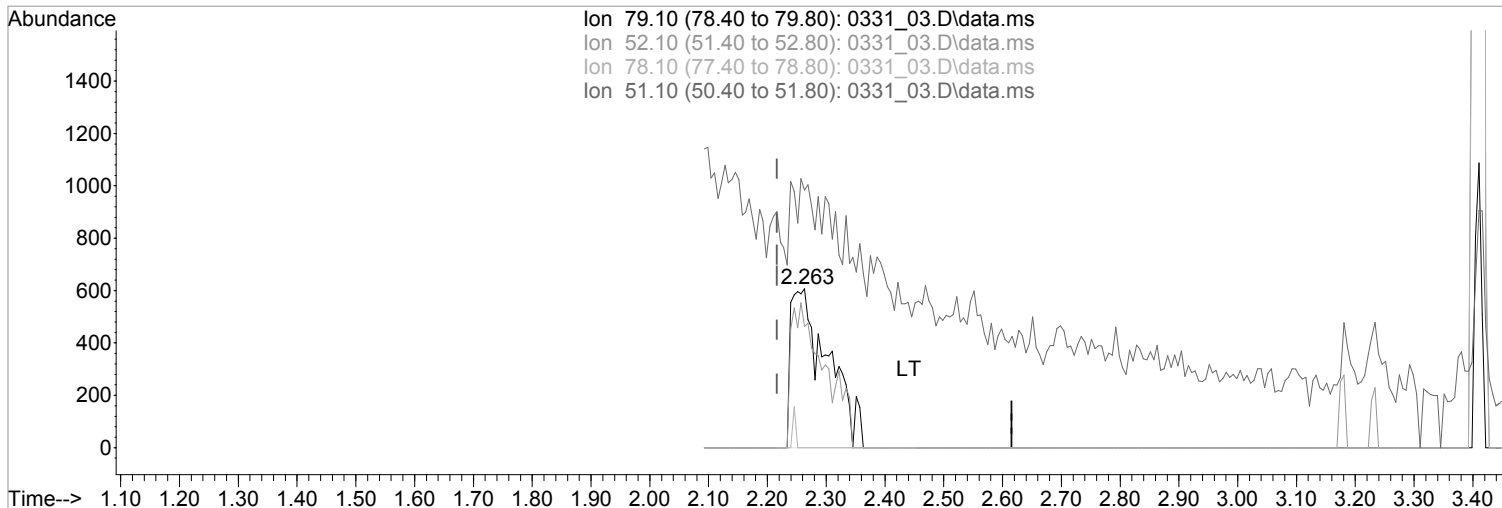
response 939

Ion	Exp%	Act%
236.90	100	100
238.90	63.30	65.51
234.90	61.10	60.75
95.00	21.70	20.37

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(2) Pyridine (TM)  
 2.263min (+0.047) 502.9288558 ppb m

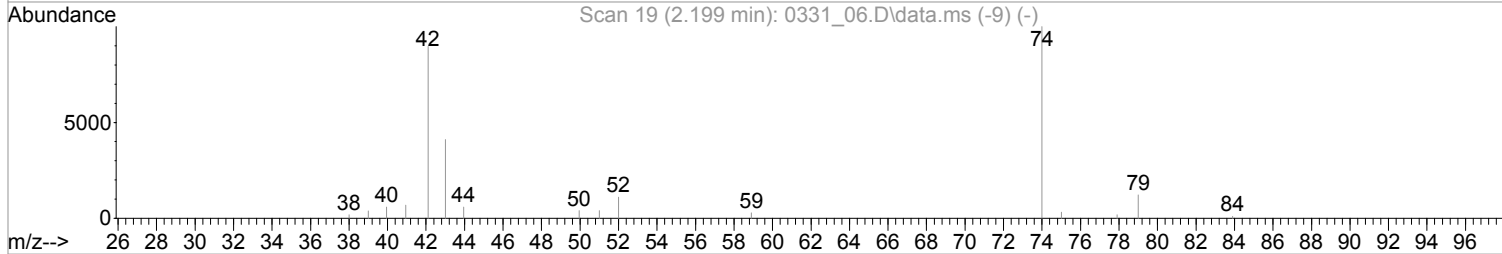
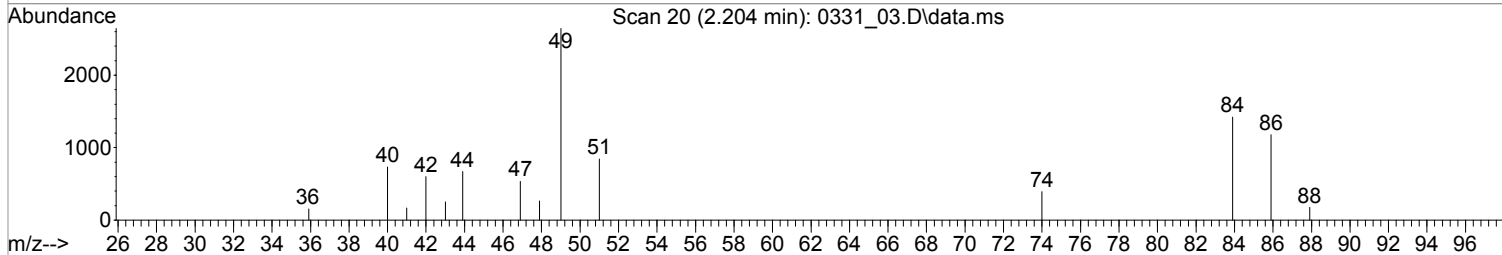
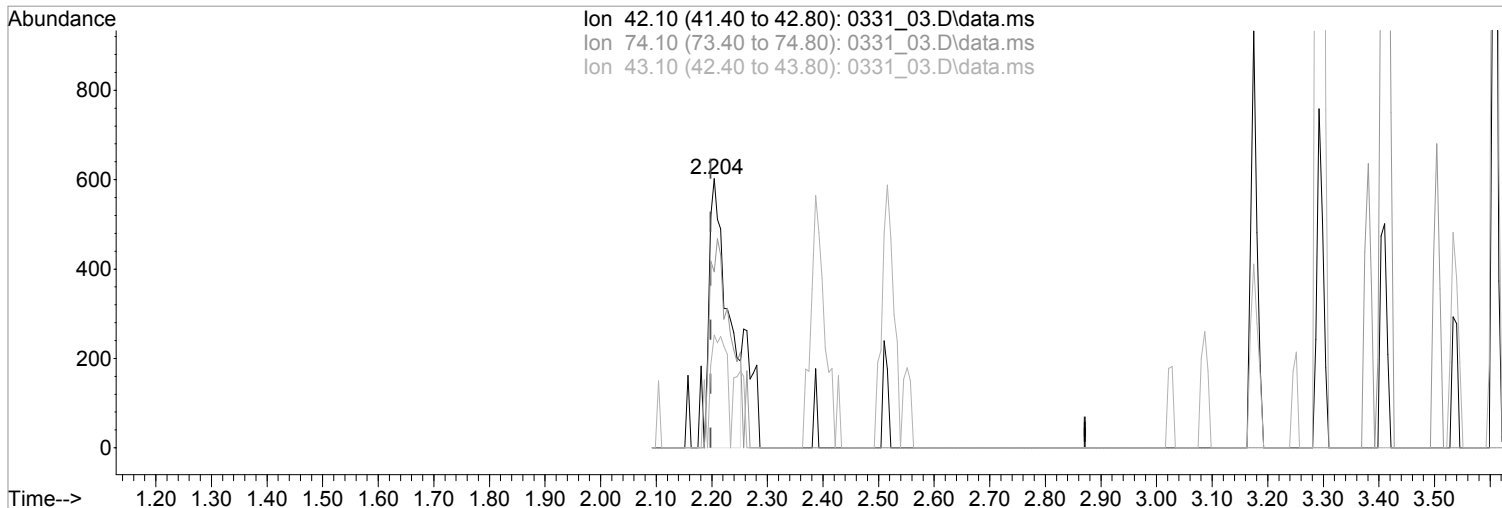
response 2682

Ion	Exp%	Act%
79.10	100	100
52.10	86.50	76.28
78.10	12.30	0.00#
51.10	40.80	162.11#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(3) N-Nitrosodimethylamine (MT)  
 2.204min (+0.006) 539.1445272 ppb  
 Qvalue = 64  
 response 1434

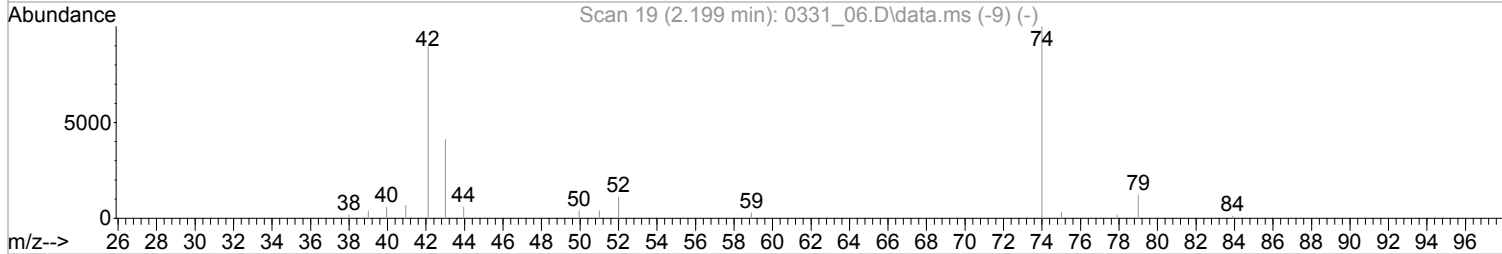
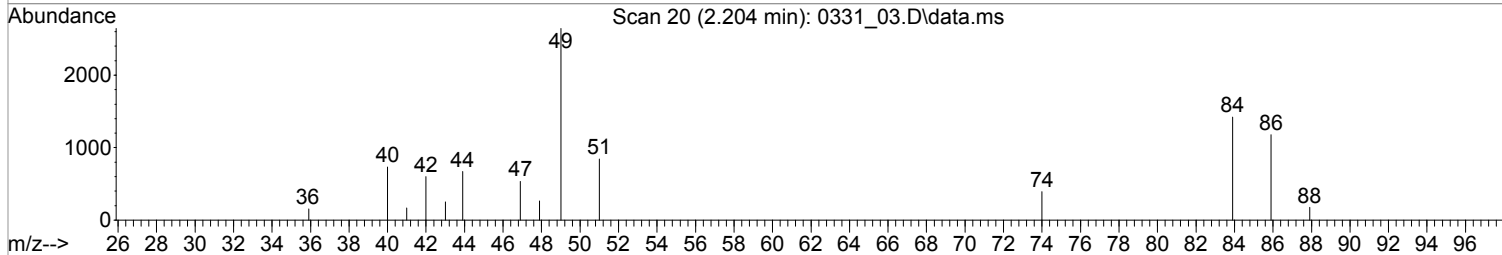
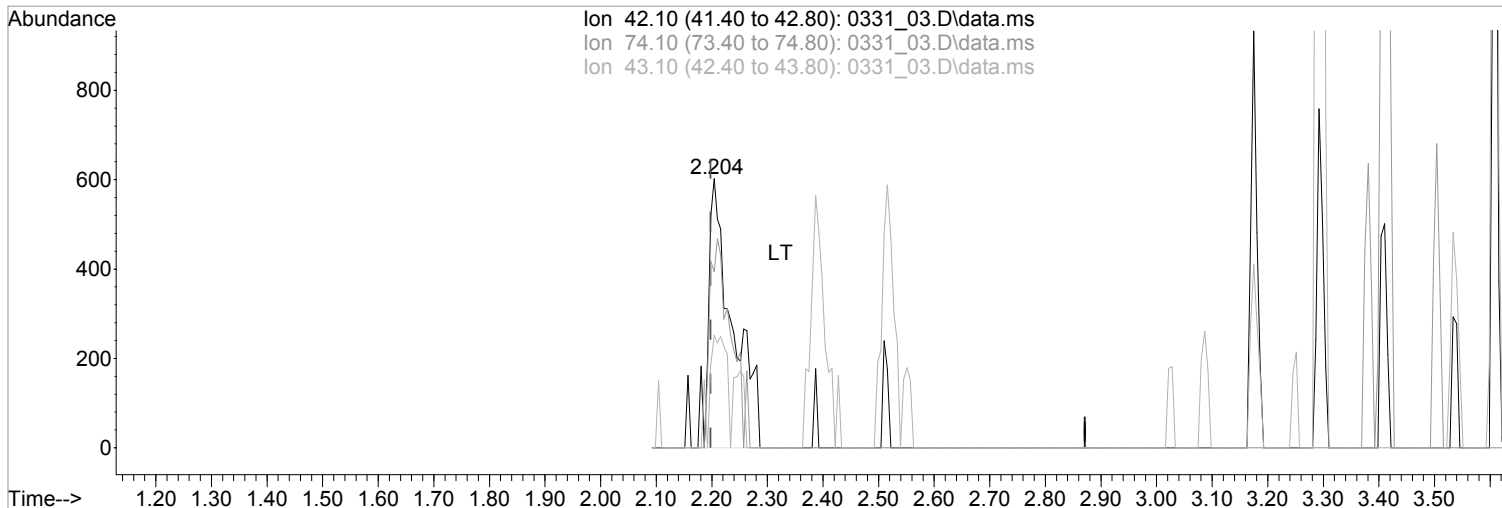
Ion	Exp%	Act%
42.10	100	100
74.10	109.30	86.75#
43.10	46.50	0.00#
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(3) N-Nitrosodimethylamine (MT)  
 2.204min (+0.006) 651.9362692 ppb m

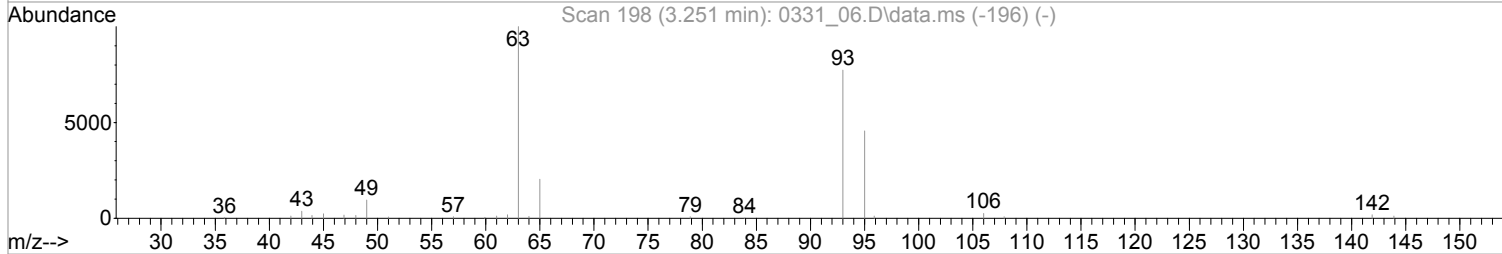
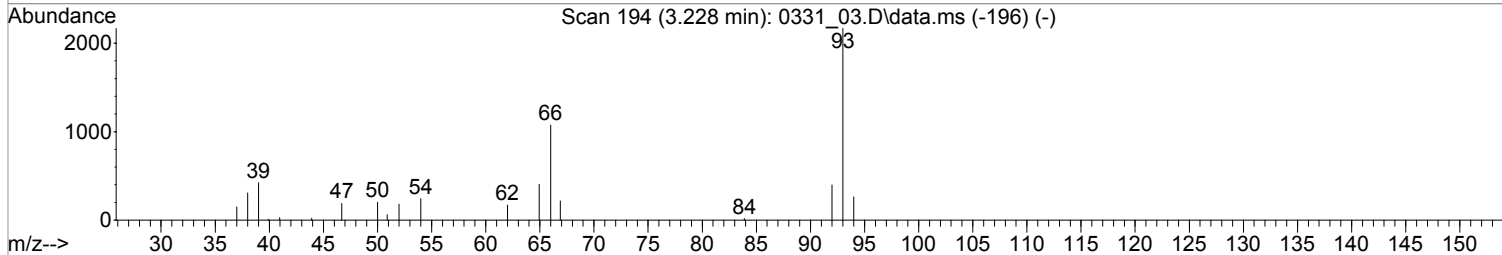
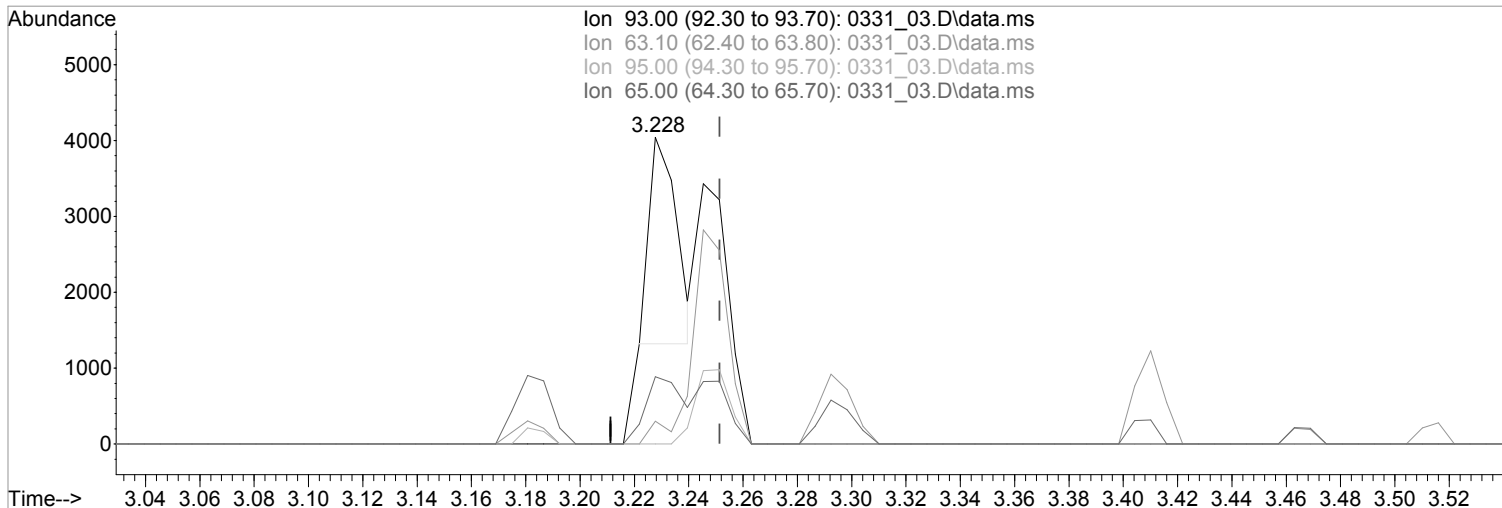
response 1734

Ion	Exp%	Act%
42.10	100	100
74.10	109.30	71.74#
43.10	46.50	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

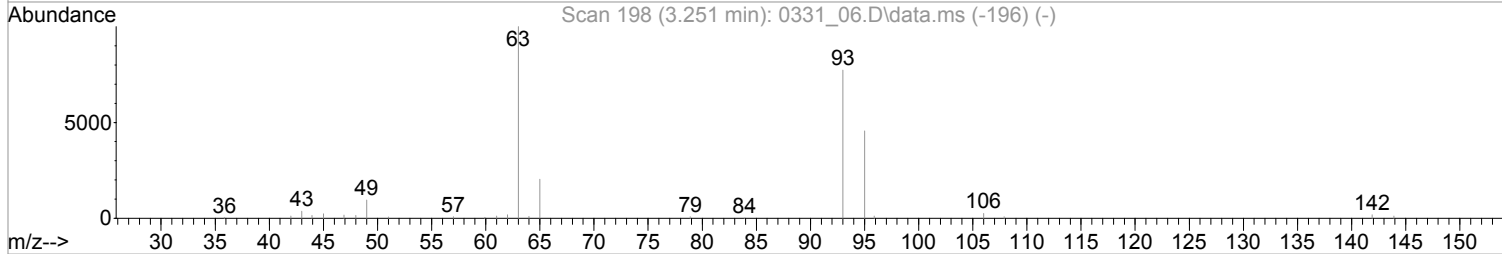
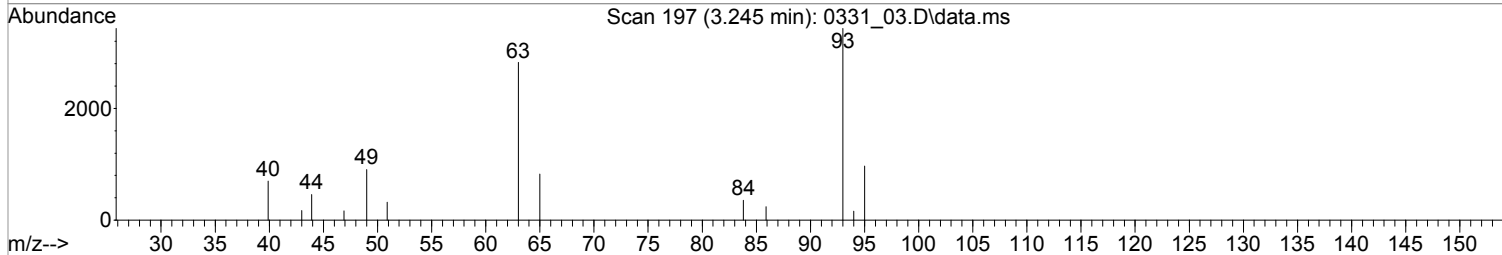
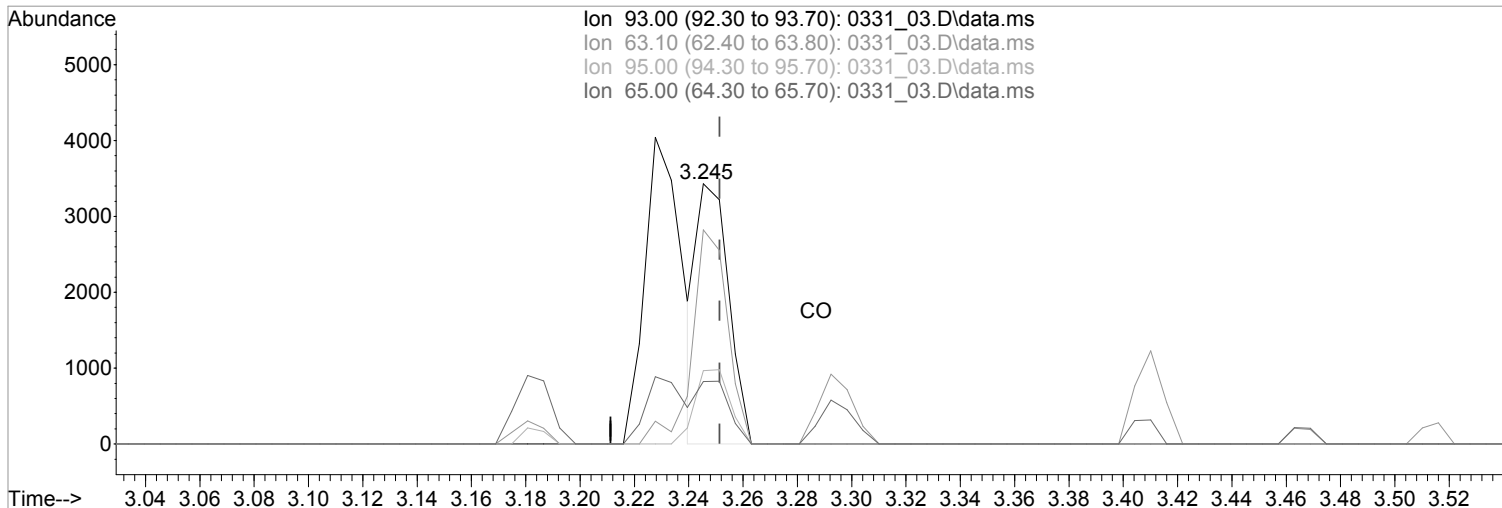
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 356.9632390 ppb  
 Qvalue = 42  
 response 1916

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	11.06#
95.00	31.90	0.00#
65.00	23.10	22.97

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.245min (-0.006) 515.1374508 ppb m

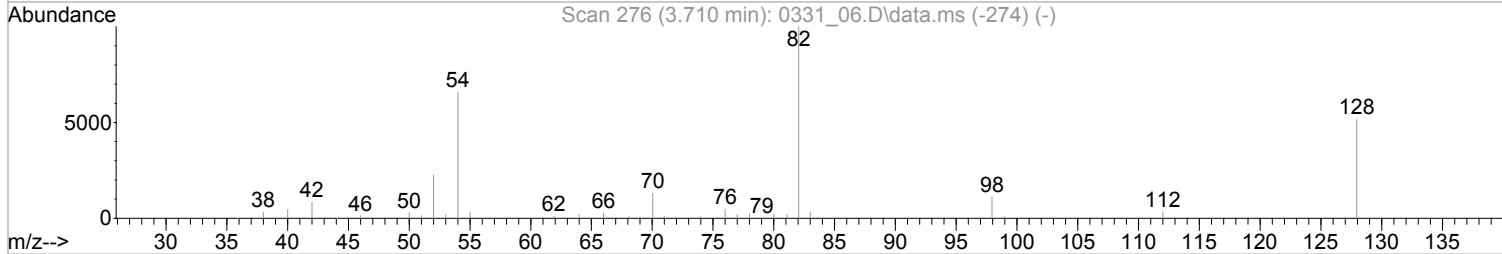
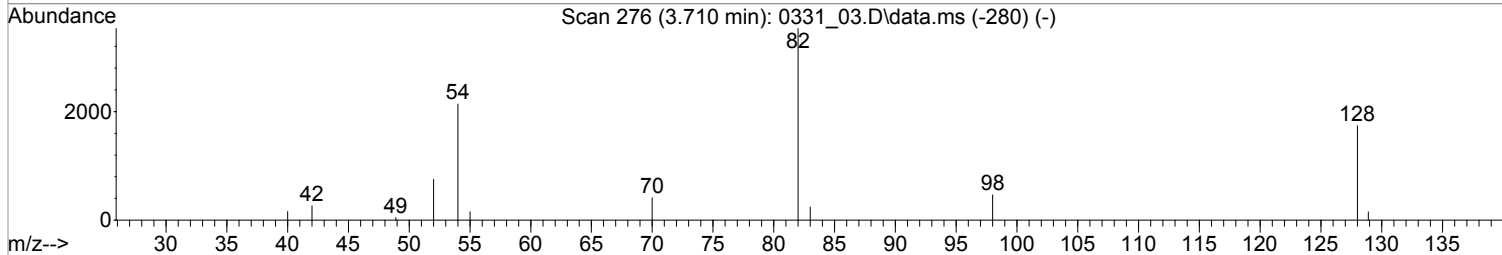
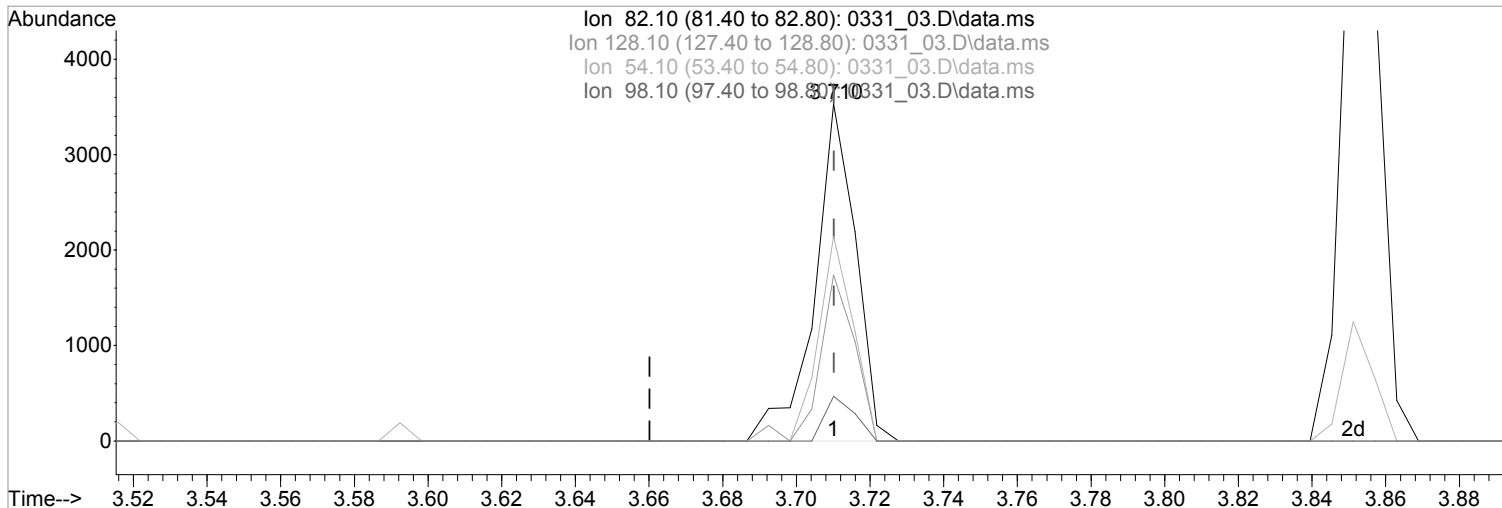
response 2765

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	82.25
95.00	31.90	28.18
65.00	23.10	24.05

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(24) Nitrobenzene-d5 (S)

3.710min (-0.000) 575.7677839 ppb

Qvalue = 98

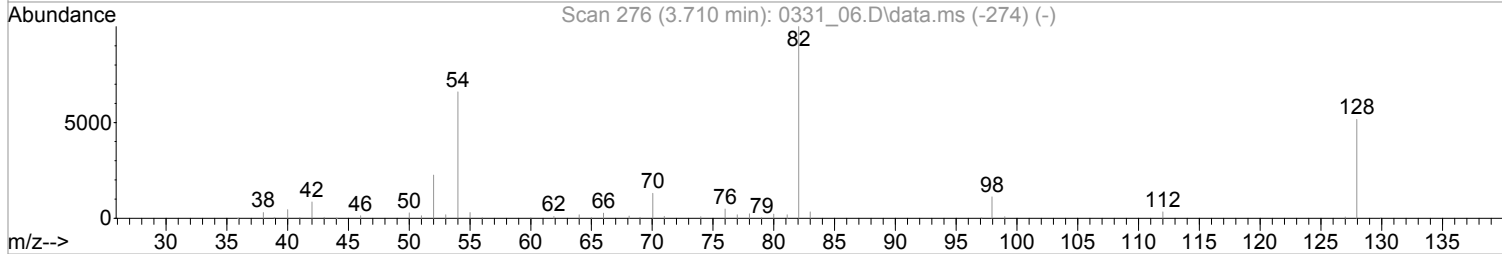
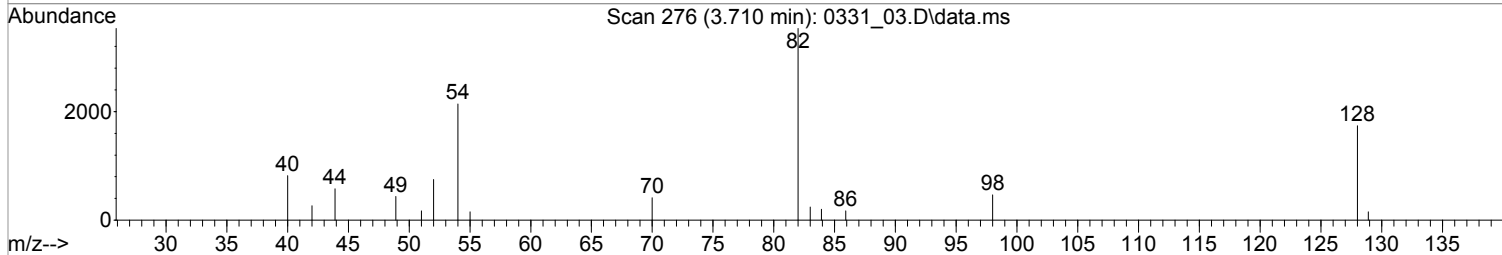
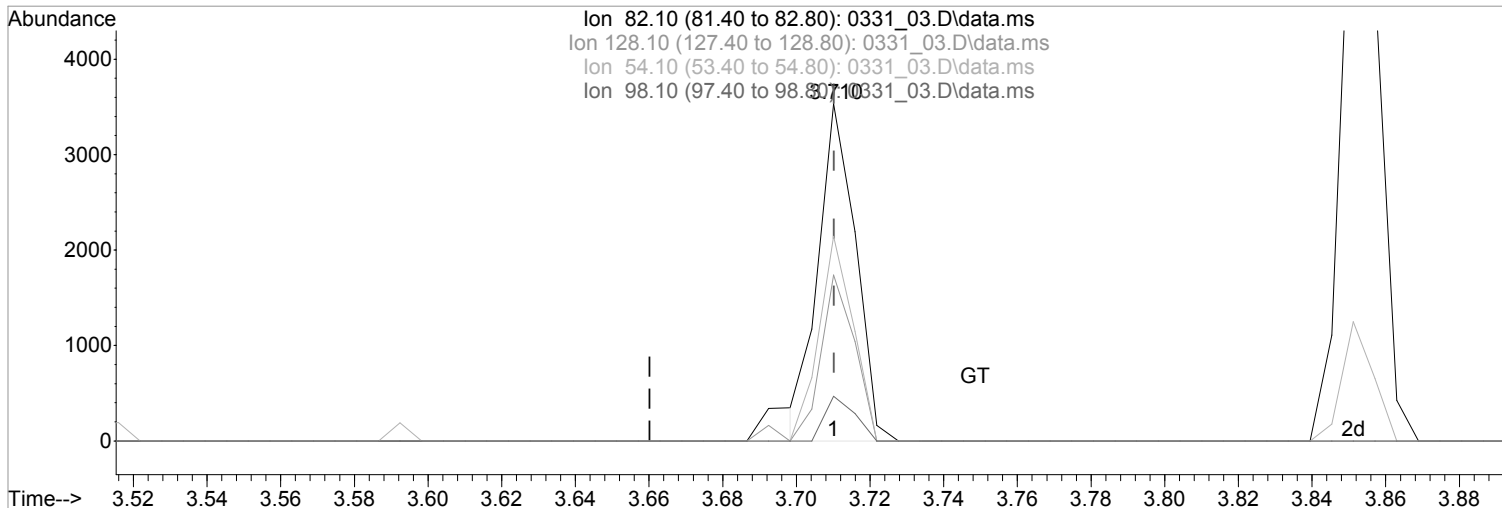
response 2736

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	49.19
54.10	60.00	60.68
98.10	11.40	13.25

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 524.6305136 ppb m

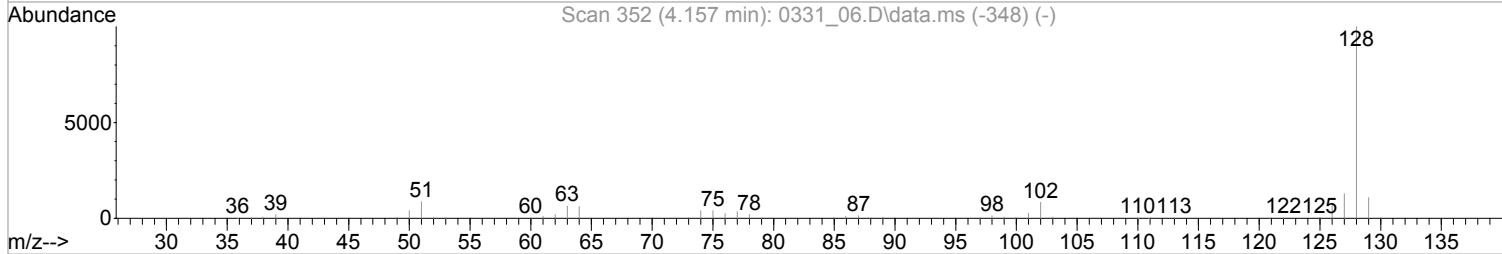
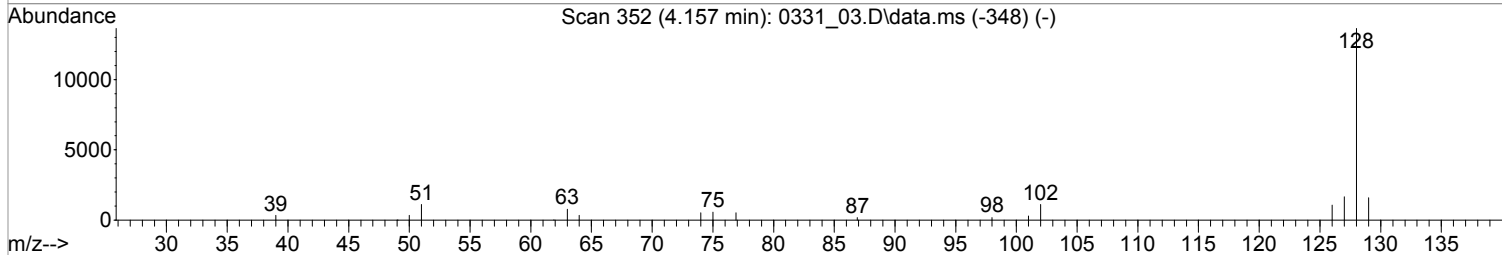
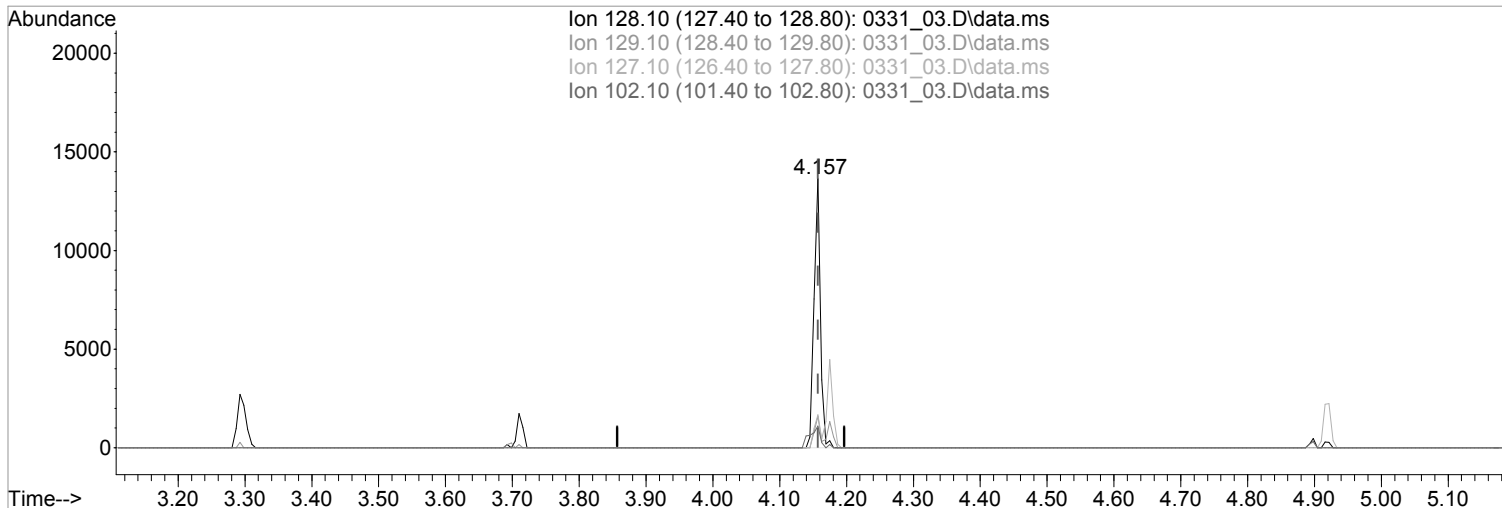
response 2493

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	49.19
54.10	60.00	60.68
98.10	11.40	13.25

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(34) Naphthalene (MT)  
 4.157min (-0.000) 567.6233271 ppb  
 Qvalue = 99  
 response 9081

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.62
127.10	12.80	12.25
102.10	8.30	8.14

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:03:57 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.410	152	32256	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.145	136	127295	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	64408	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.434	188	102417	8000.0000000	ppb	0.00
84) Chrysene-d12	9.251	240	66477	8000.0000000	ppb	0.00
94) Perylene-d12	11.957	264	60703	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.740	112	4822	936.6323900	ppb	0.00
Spiked Amount	20000.000		Recovery	=	4.68%	
7) Phenol-d5	3.175	99	5723	949.8206996	ppb	0.00
Spiked Amount	20000.000		Recovery	=	4.75%	
24) Nitrobenzene-d5	3.710	82	4668m	952.9123725	ppb	0.00
Spiked Amount	10000.000		Recovery	=	9.53%	
50) 2-Fluorobiphenyl	4.828	172	10861	1003.4240800	ppb	0.00
Spiked Amount	10000.000		Recovery	=	10.03%	
73) 2,4,6-Tribromophenol	5.887	330	805m	762.4927132	ppb	0.00
Spiked Amount	20000.000		Recovery	=	3.81%	
87) p-Terphenyl-d14	7.845	244	9398	990.6430560	ppb	0.00
Spiked Amount	10000.000		Recovery	=	9.91%	
<b>Target Compounds</b>						
2) Pyridine	2.240	79	5071	922.3587099	ppb #	95
3) N-Nitrosodimethylamine	2.199	42	3234	1026.8244509	ppb	87
5) Aniline	3.228	66	2453	863.4817222	ppb #	87
6) bis(2-Chloroethyl)ether	3.246	93	5429m	969.2851721	ppb	
8) Phenol	3.181	94	5974	926.4330927	ppb	95
10) 2-Chlorophenol	3.293	128	5060	967.2165217	ppb	98
11) n-Decane	3.293	41	3492	944.9158398	ppb #	99
12) 1,3-Dichlorobenzene	3.381	146	6386	1018.6606650	ppb	98
13) 1,4-Dichlorobenzene	3.416	146	6299	1004.0019603	ppb #	88
14) Benzyl Alcohol	3.463	79	3546	919.2846602	ppb	99
15) 1,2-Dichlorobenzene	3.504	146	6014	964.5647258	ppb	96
16) bis(2-Chloroisopropyl)...	3.540	121	2029	960.5974778	ppb	92
17) 2,2-oxybis(1-chloropro...	3.540	121	2029	960.5974778	ppb	92
18) 2-Methylphenol	3.510	108	4331	904.7290329	ppb	93
19) Hexachloroethane	3.698	117	2518	960.5419697	ppb	92
20) N-Nitrosodi-n-propylamine	3.610	70	3124	940.7078404	ppb	99
21) 3&4-Methyl phenol	3.593	107	4900	923.0511547	ppb	97
25) Nitrobenzene	3.722	77	4690	963.4605718	ppb	95
26) Isophorone	3.851	82	8692	914.5714399	ppb	99
27) 2-Nitrophenol	3.904	139	1821	795.4129864	ppb	93
28) 2,4-Dimethylphenol	3.904	107	4491	938.6524583	ppb	93
29) bis(2-Chlorethoxy)methane	3.969	93	6359	961.9096115	ppb	97
30) 2,4-Dichlorophenol	4.045	162	3374	906.2632690	ppb	98
32) 1,2,4-Trichlorobenzene	4.104	180	4786	1015.7513152	ppb	92
34) Naphthalene	4.157	128	16810m	985.5431213	ppb	
35) 4-Chloroaniline	4.175	65	1501	912.0664575	ppb #	88
36) Hexachloro-1,3-butadiene	4.222	225	2489	971.6089660	ppb	97
40) 4-Chloro-3-methylphenol	4.463	107	3435	911.5050154	ppb	94
41) 2-Methylnaphthalene	4.593	142	9991	973.4222268	ppb	99
42) 1-Methylnaphthalene	4.657	142	10035	1003.1618197	ppb	97
47) Hexachlorocyclopentadiene	4.693	237	1808	901.7104811	ppb	98
48) 2,4,6-Trichlorophenol	4.769	196	2025	896.9514026	ppb	91

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:03:57 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

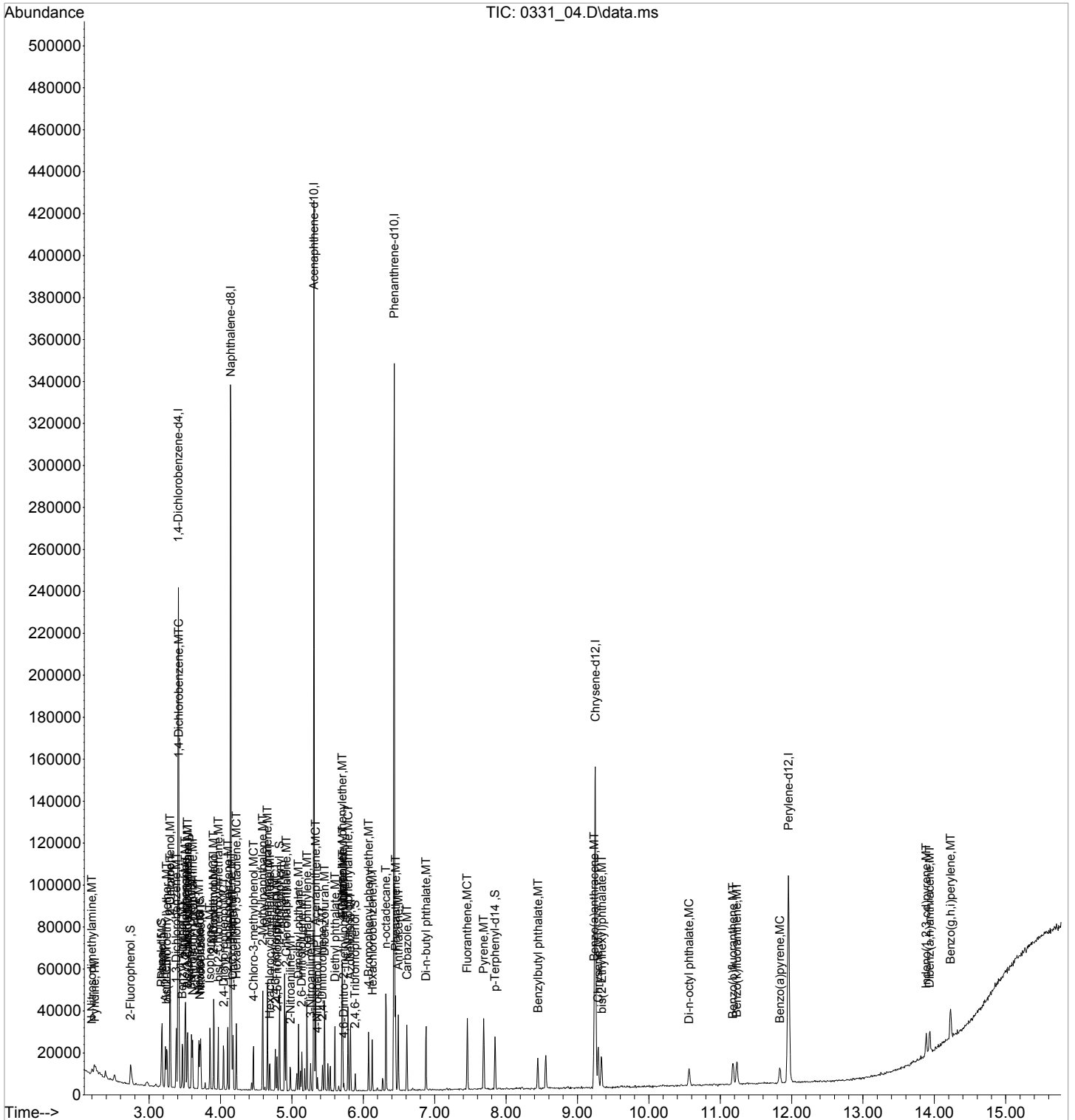
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.793	196	1963	850.5173304	ppb		91
51) Biphenyl	4.898	154	11839	968.2645048	ppb		98
52) 2-Chloronaphthalene	4.922	162	9292	1011.9321511	ppb		98
53) 2-Nitroaniline	4.981	138	1866	769.8225109	ppb	#	93
54) Acenaphthylene	5.210	152	13458	962.9526656	ppb		99
55) Dimethyl phthalate	5.092	163	9503	956.7755123	ppb		93
56) 2,6-Dinitrotoluene	5.140	165	1655	763.6081461	ppb		92
57) 3-Nitroaniline	5.263	138	1426	717.7969135	ppb		98
58) Acenaphthene	5.334	153	9791	1025.5166899	ppb		99
60) Dibenzofuran	5.457	168	12817	986.5464047	ppb	#	98
61) 2,4-Dinitrotoluene	5.428	165	1767	681.0093031	ppb	#	73
63) 4-Nitrophenol	5.357	139	902m	644.5700639	ppb		
64) Fluorene	5.710	166	10290	969.6872468	ppb		98
65) 4-Chlorophenyl-phenylether	5.704	204	4599	927.0569857	ppb		97
66) Diethyl phthalate	5.604	149	9914	938.9461138	ppb		98
67) 4-Nitroaniline	5.710	138	1350	1129.6086293	ppb	#	26
68) Azobenzene	5.822	77	9927	953.6061374	ppb		97
71) 4,6-Dinitro-2-methylph...	5.728	198	471m	535.7640762	ppb		
72) N-Nitrosodiphenylamine	5.787	169	7540	933.3328472	ppb		98
74) 4-Bromophenyl-phenylether	6.075	248	2477	1001.8199448	ppb		98
75) Hexachlorobenzene	6.128	284	3015	994.7736888	ppb		95
76) n-octadecane	6.316	55	1765	890.0022714	ppb	#	72
78) Phenanthrene	6.451	178	13916	956.6809370	ppb		99
79) Anthracene	6.492	178	12234	935.1720946	ppb		99
80) Carbazole	6.610	167	10150	920.4021822	ppb		98
81) Di-n-butyl phthalate	6.881	149	13780	872.5812197	ppb		99
83) Fluoranthene	7.457	202	12239	921.2610703	ppb		99
86) Pyrene	7.686	202	12779	956.9026432	ppb		99
88) Benzylbutyl phthalate	8.445	149	3894	816.5523448	ppb		98
90) Benzo(a)anthracene	9.233	228	8944	973.9225740	ppb		98
91) Chrysene	9.292	228	10158	1003.0718203	ppb		98
92) bis(2-Ethylhexyl)phtha...	9.339	149	5877	866.1250077	ppb		97
93) Di-n-octyl phthalate	10.563	149	7493	775.1486260	ppb		98
95) Benzo(b)fluoranthene	11.174	252	8017	933.1712569	ppb		97
96) Benzo(k)fluoranthene	11.233	252	7909	891.1685866	ppb		97
97) Benzo(a)pyrene	11.833	252	5772	843.0478053	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.886	276	5564	868.6523357	ppb		93
99) Dibenz(a,h)anthracene	13.933	278	6652	939.8770333	ppb		97
100) Benzo(g,h,i)perylene	14.227	276	7392	967.8372314	ppb		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_04.D  
Acq On : 31 Mar 2022 5:45 pm  
Operator : 3545  
Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 4 Sample Multiplier: 1

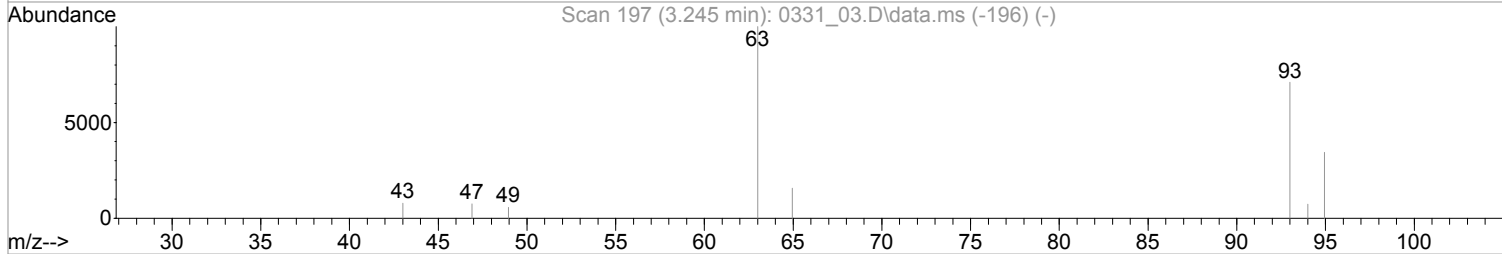
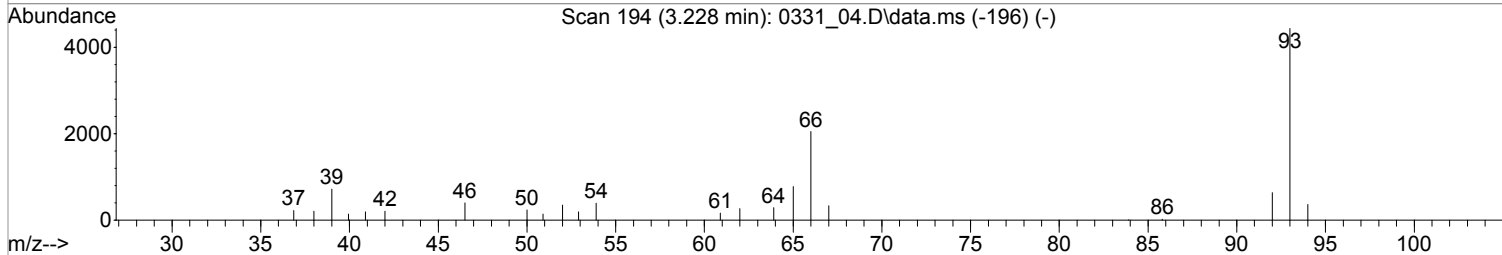
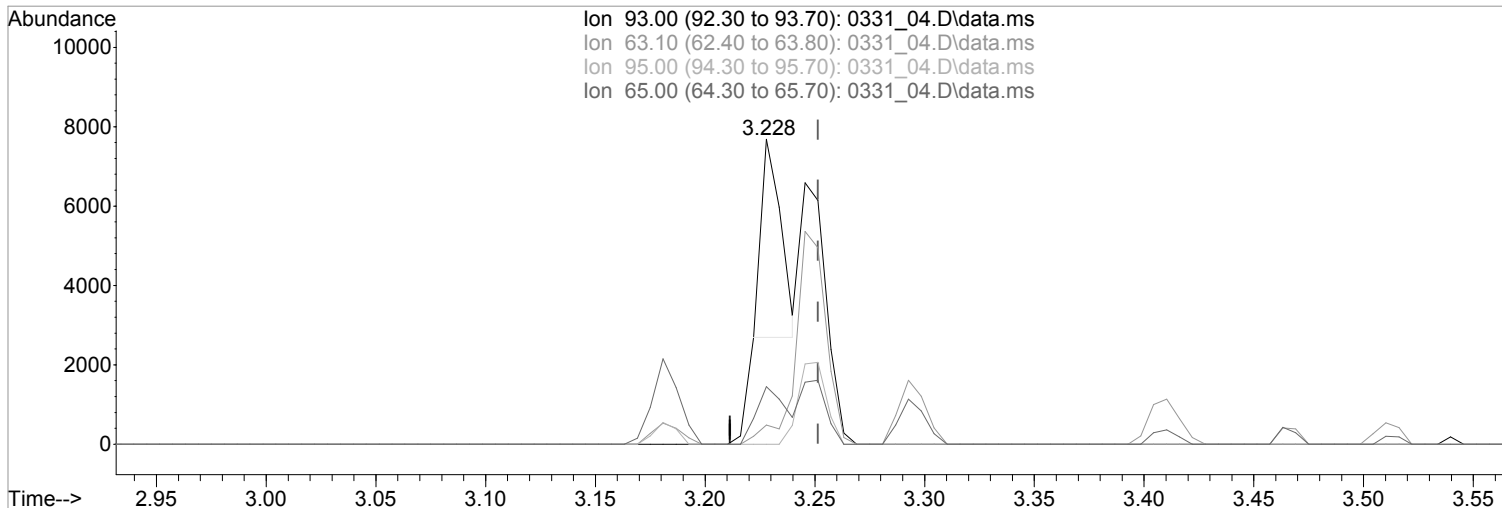
Quant Time: Apr 04 16:03:57 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:02:11 2022  
Response via : Initial Calibration  
DataAcq Meth: BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

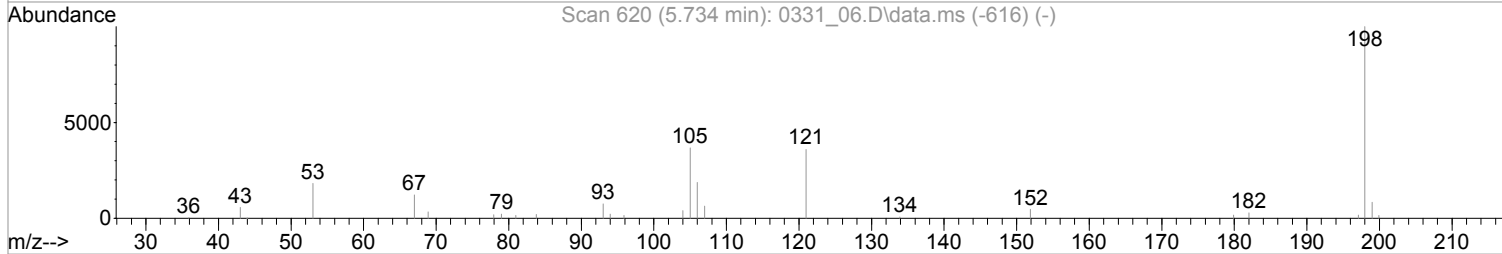
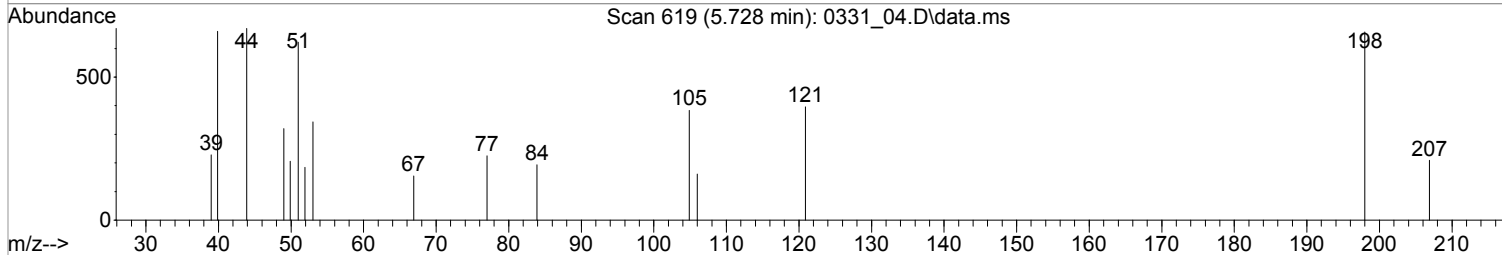
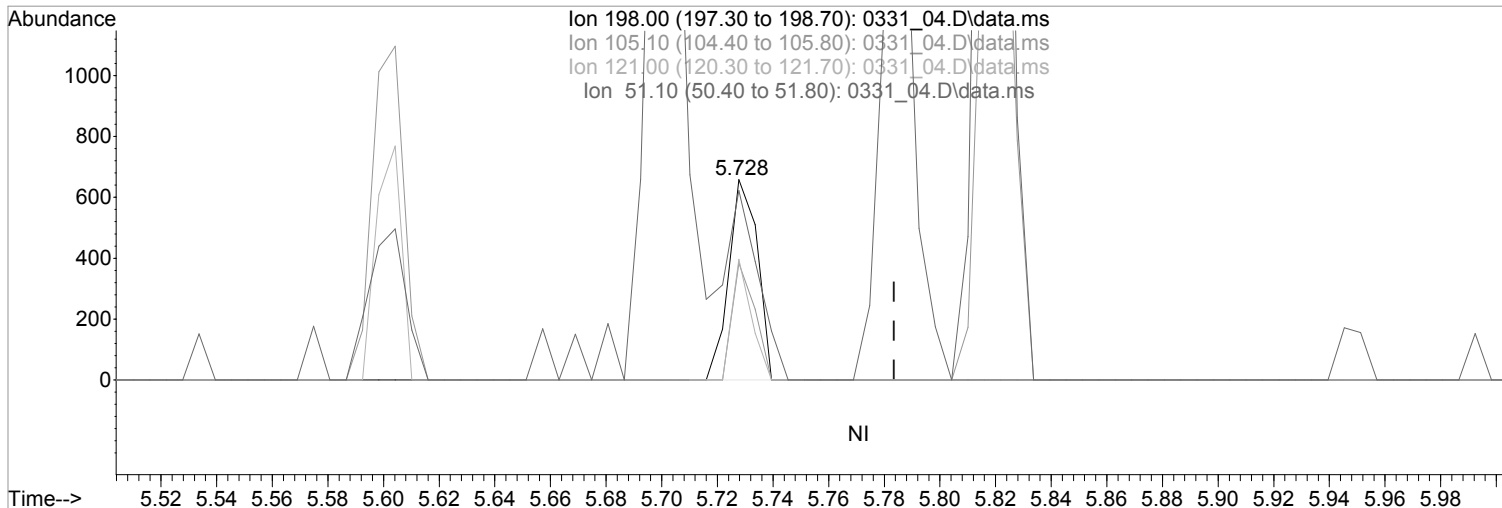
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.023) 555.9686915 ppb  
 Qvalue = 36  
 response 3114

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.69#
95.00	31.90	0.00#
65.00	23.10	15.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_04.D  
Acq On : 31 Mar 2022 5:45 pm  
Operator : 3545  
Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:02:11 2022  
Response via : Initial Calibration  
DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(71) 4,6-Dinitro-2-methylphenol (MT)  
5.728min (-0.006) 535.7640762 ppb m

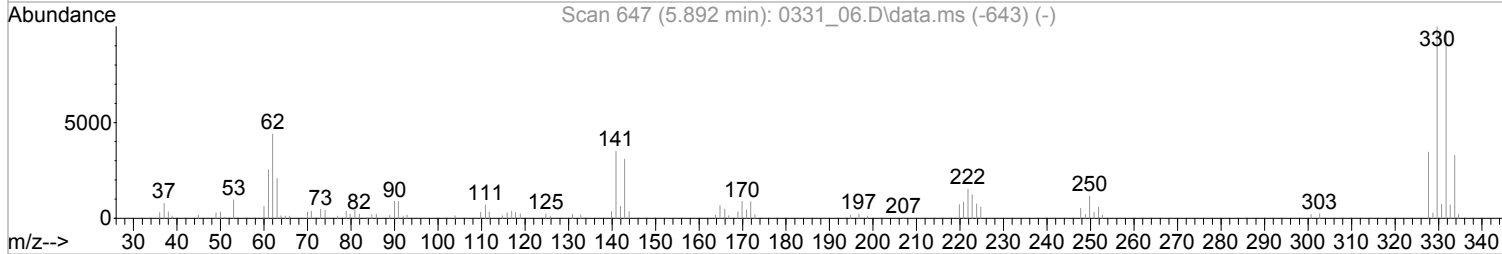
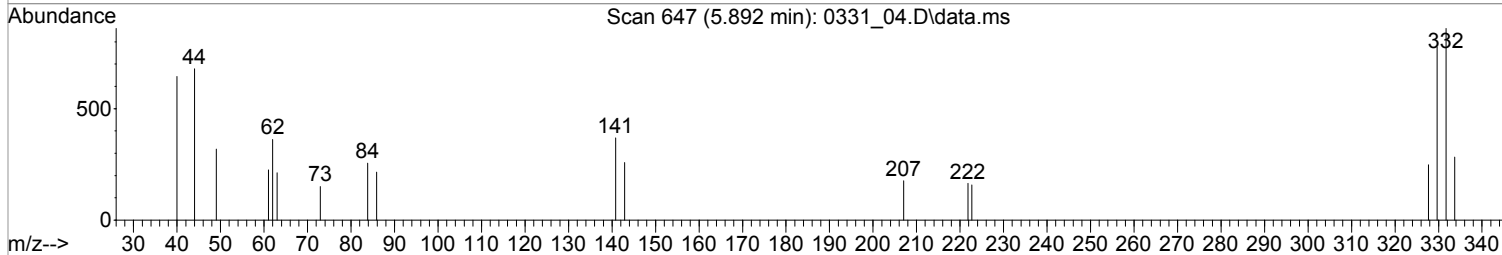
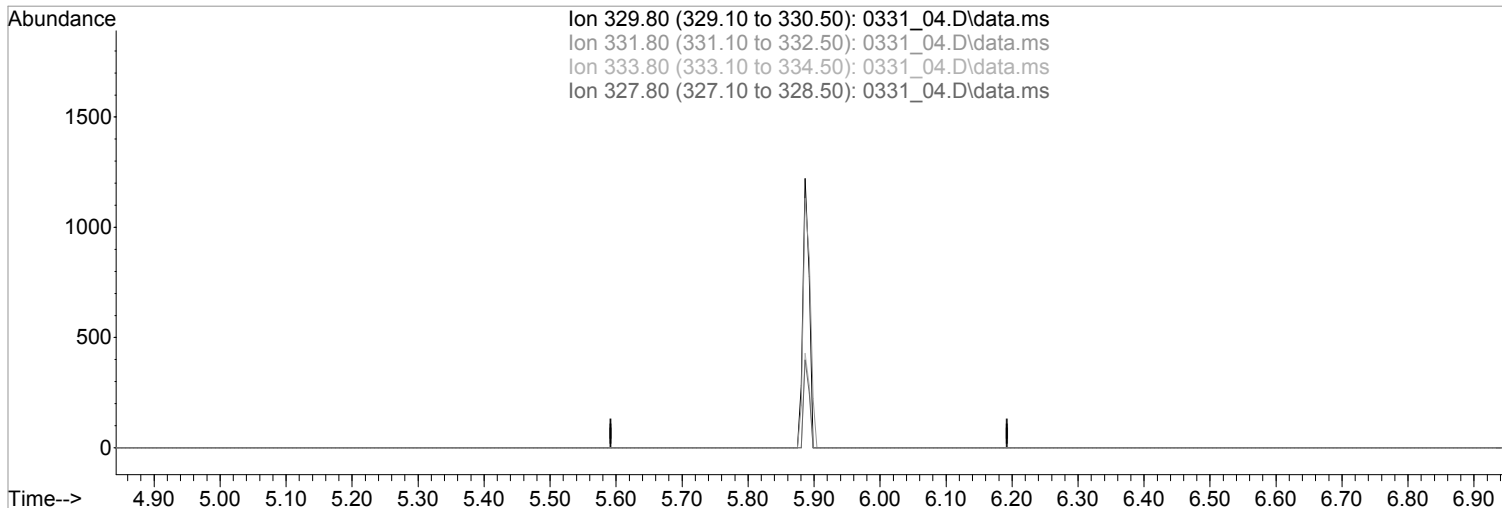
response 471

Ion	Exp%	Act%
198.00	100	100
105.10	38.30	58.36#
121.00	35.90	60.18#
51.10	39.60	94.53#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

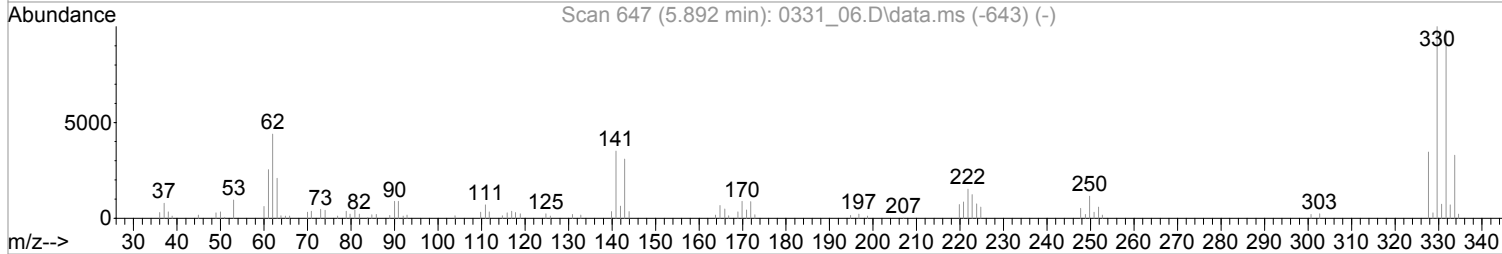
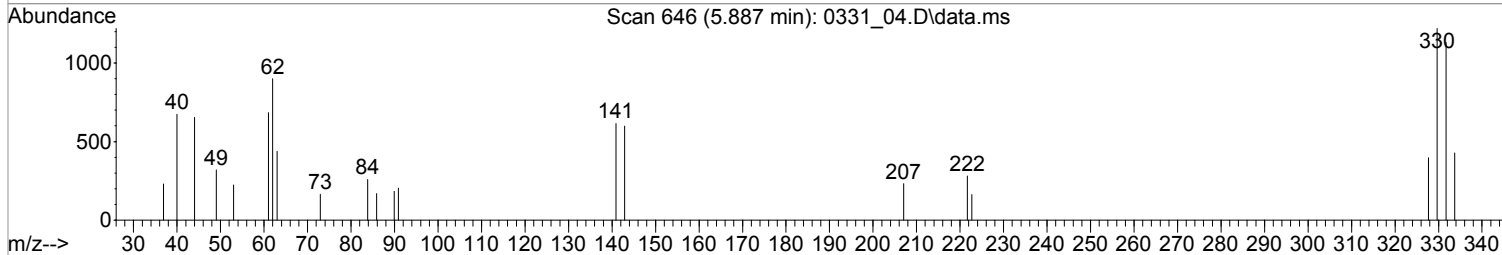
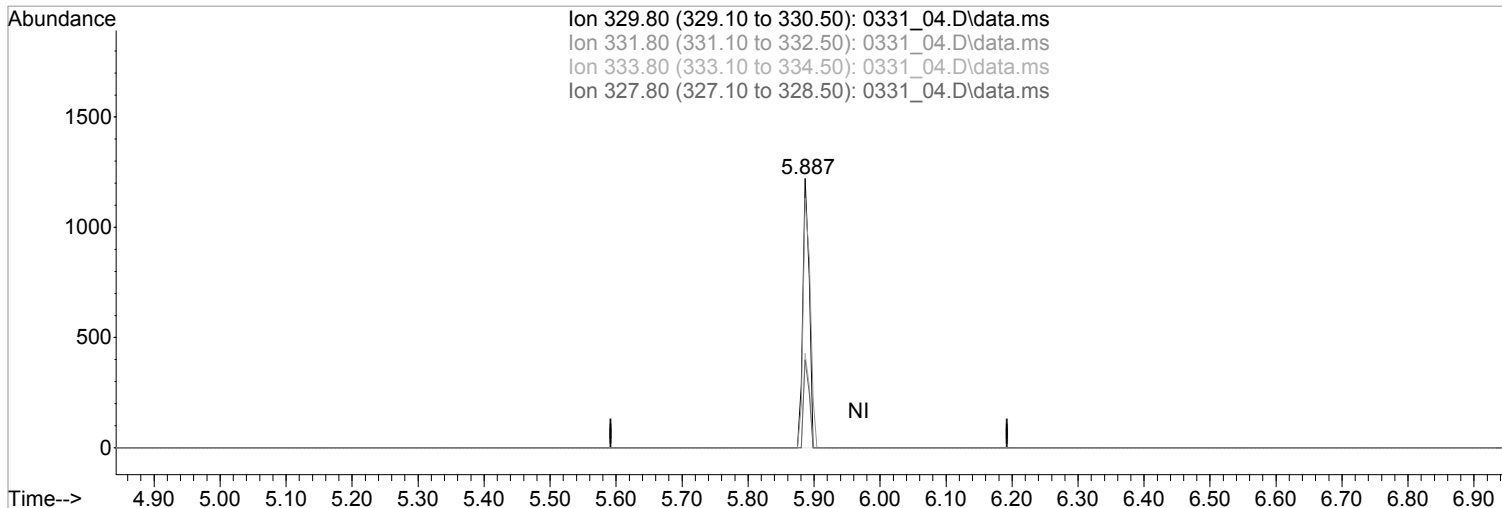
(73) 2,4,6-Tribromophenol (S)  
 5.892min (-5.892) 0.000000 ppb  
 Qvalue = 0  
 response 0

Ion	Exp%	Act%
329.80	100	0.00
331.80	98.20	0.00#
333.80	33.00	0.00#
327.80	34.60	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(73) 2,4,6-Tribromophenol (S)  
 5.887min (-0.006) 762.4927132 ppb m

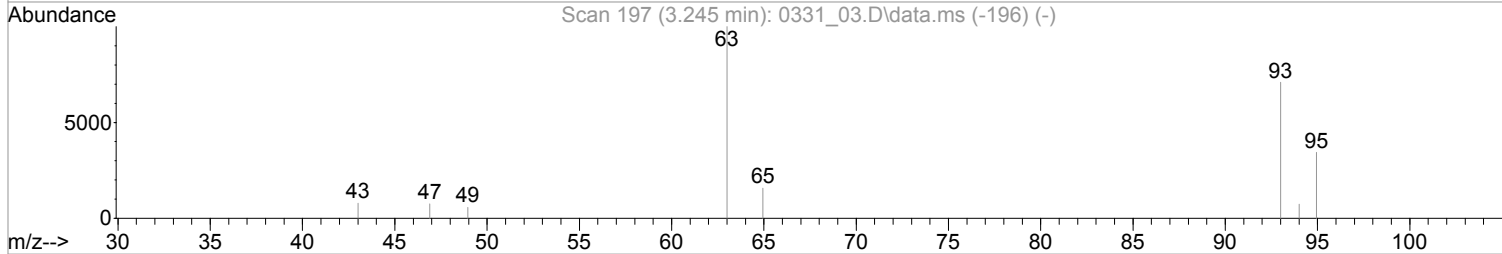
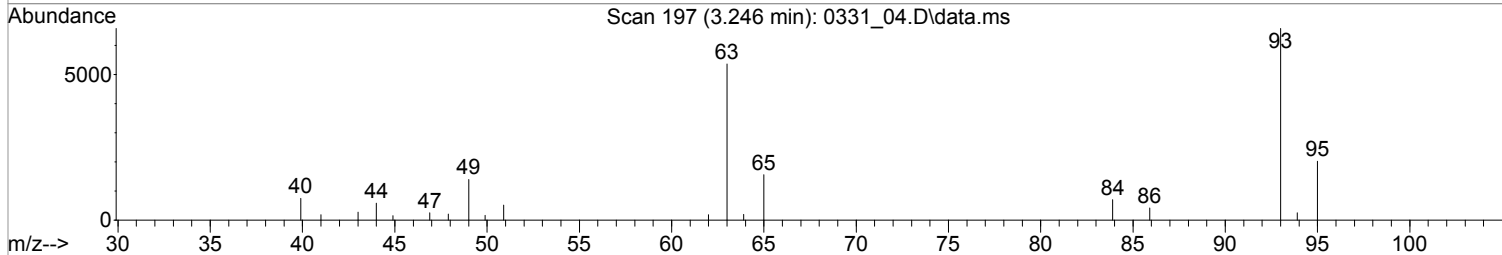
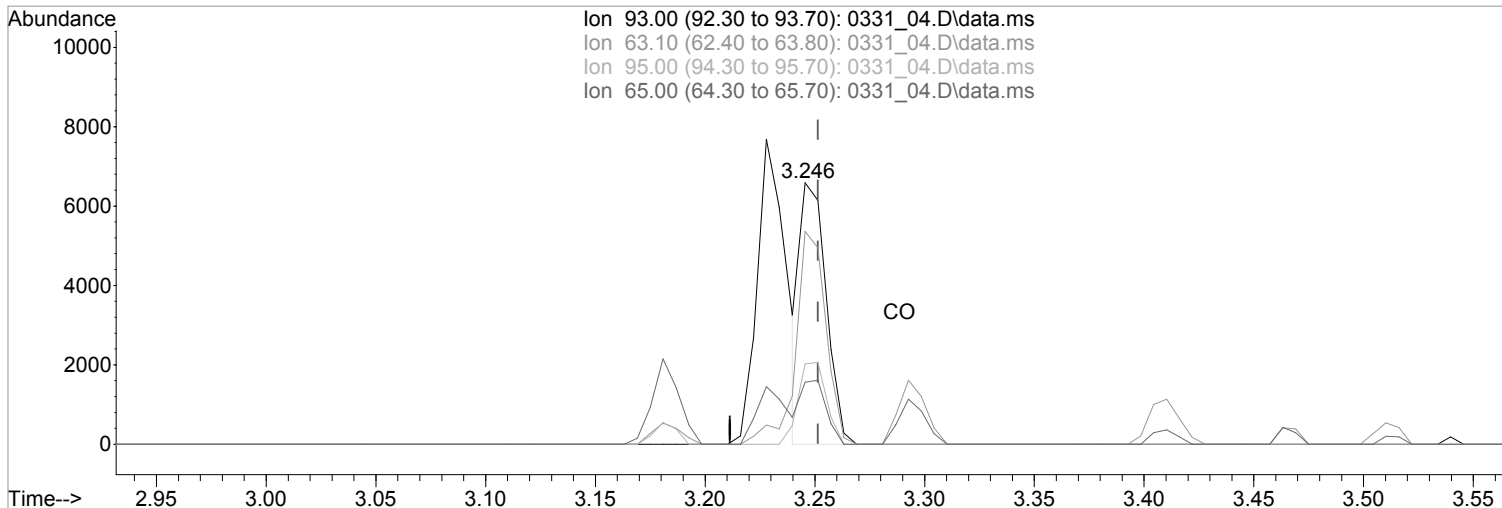
response 805

Ion	Exp%	Act%
329.80	100	100
331.80	98.20	92.62
333.80	33.00	35.08
327.80	34.60	32.62

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.246min (-0.006) 969.2851721 ppb m

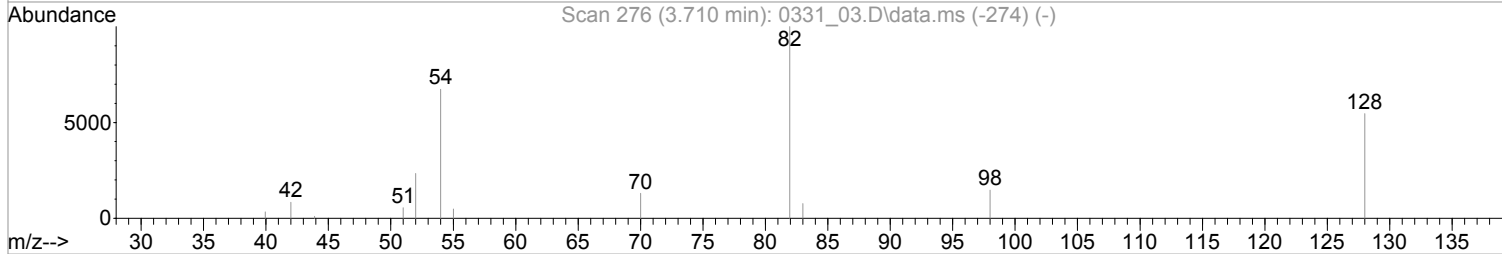
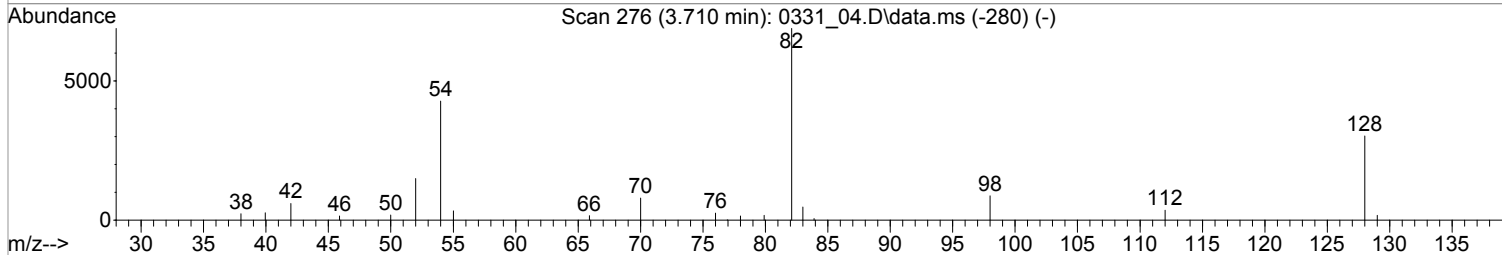
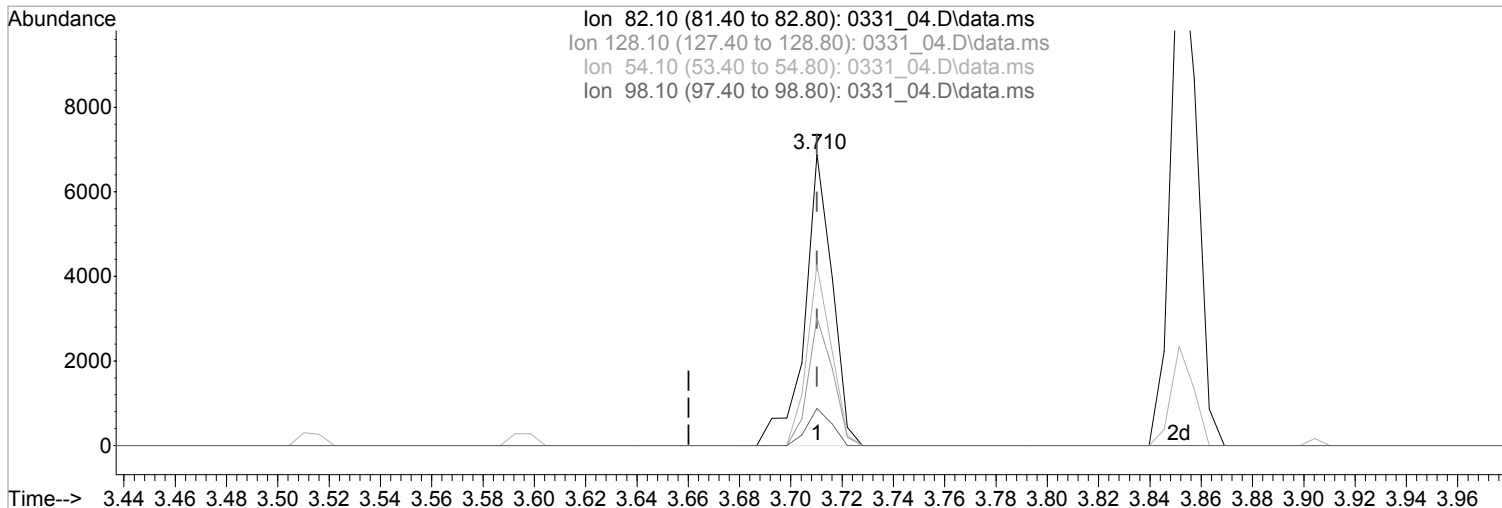
response 5429

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	81.46
95.00	31.90	30.67
65.00	23.10	23.69

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_04.D  
Acq On : 31 Mar 2022 5:45 pm  
Operator : 3545  
Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:02:11 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



TIC: 0331\_04.D\data.ms

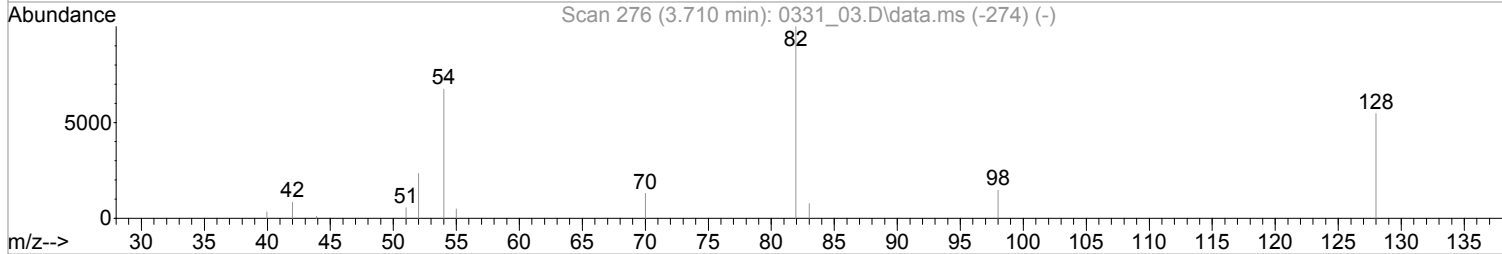
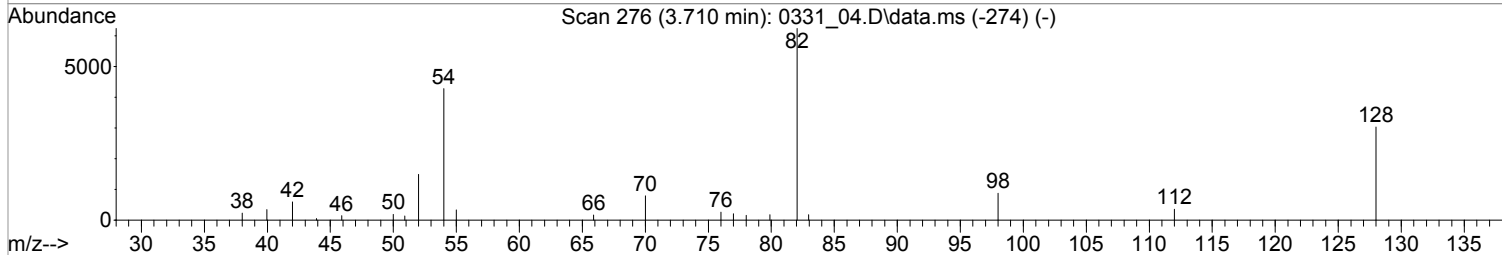
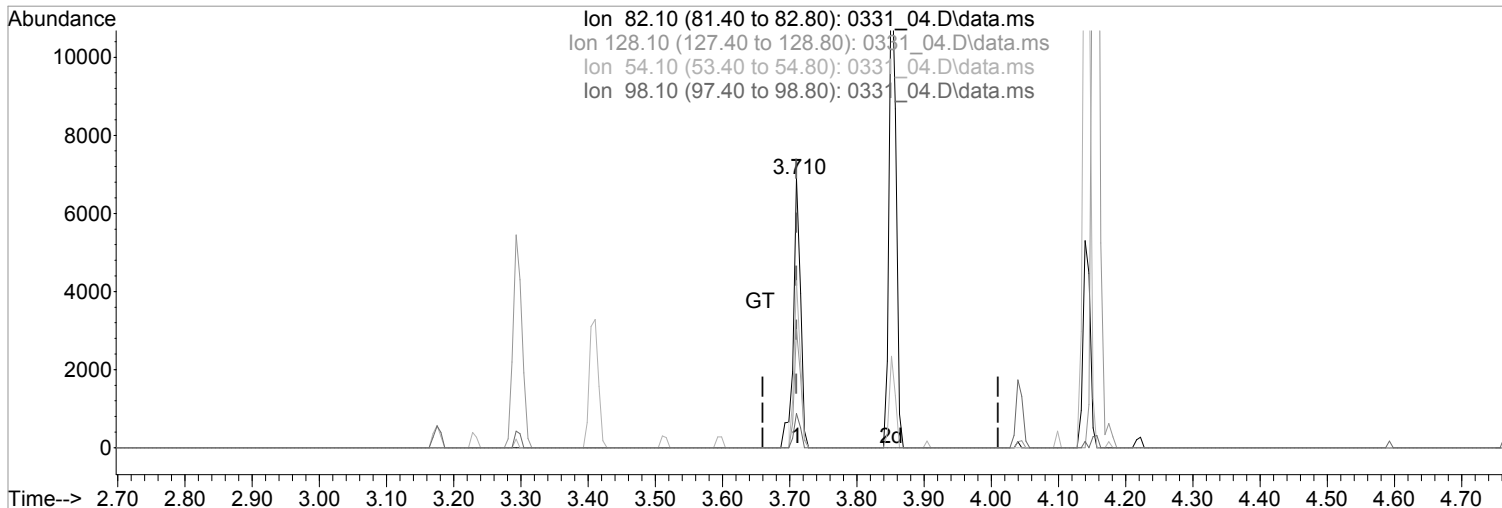
(24) Nitrobenzene-d5 (S)  
3.710min (+0.000) 1046.2030654 ppb  
Qvalue = 97  
response 5125

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	43.96
54.10	60.00	62.09
98.10	11.40	12.73

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 952.9123725 ppb m

response 4668

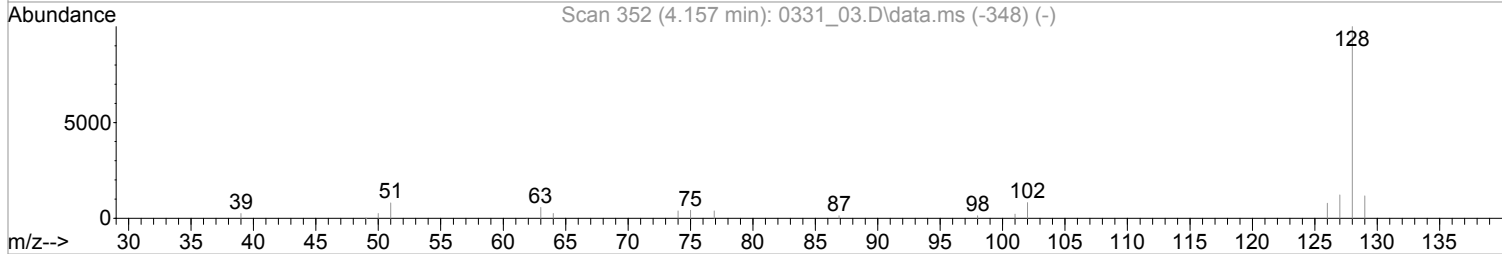
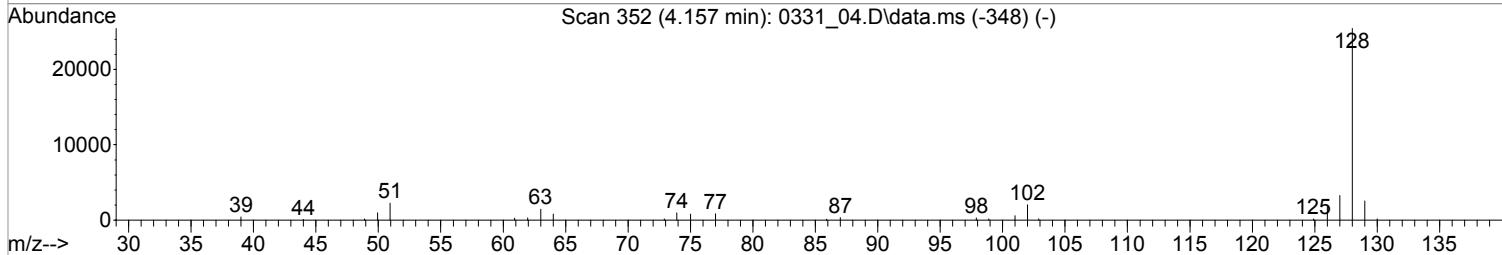
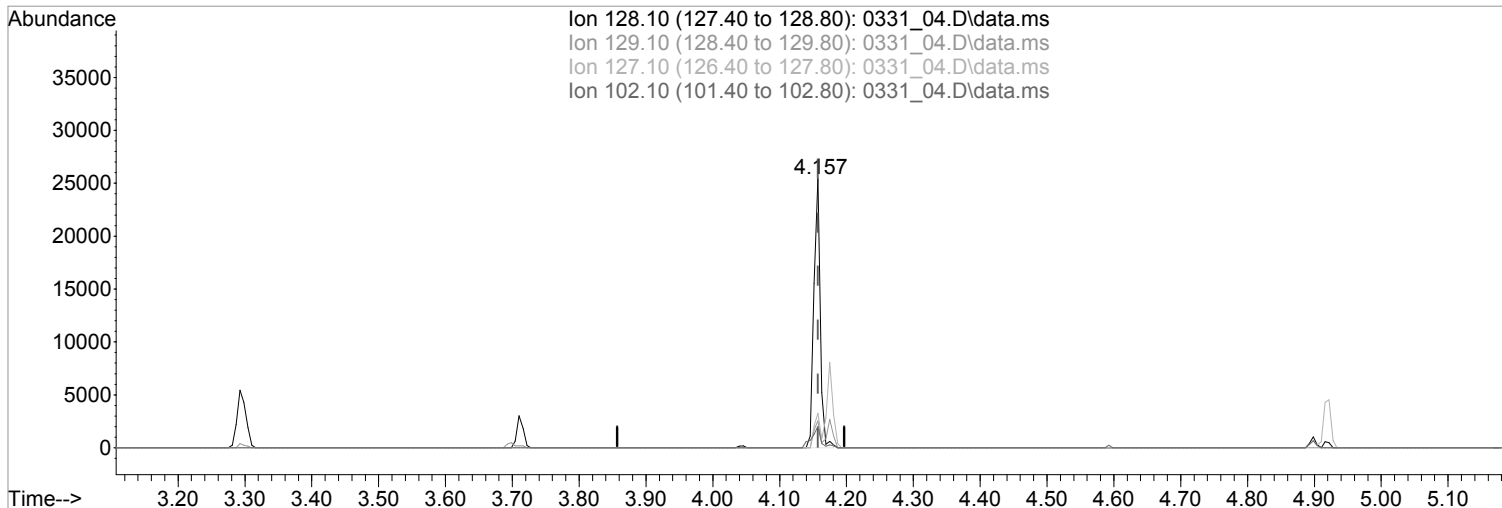
Ion	Exp%	Act%
82.10	100	100
128.10	46.80	43.96
54.10	60.00	62.09
98.10	11.40	12.73



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

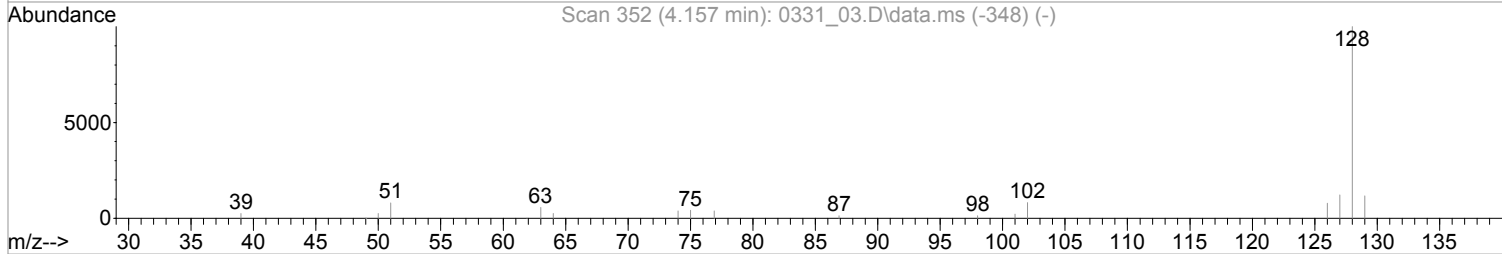
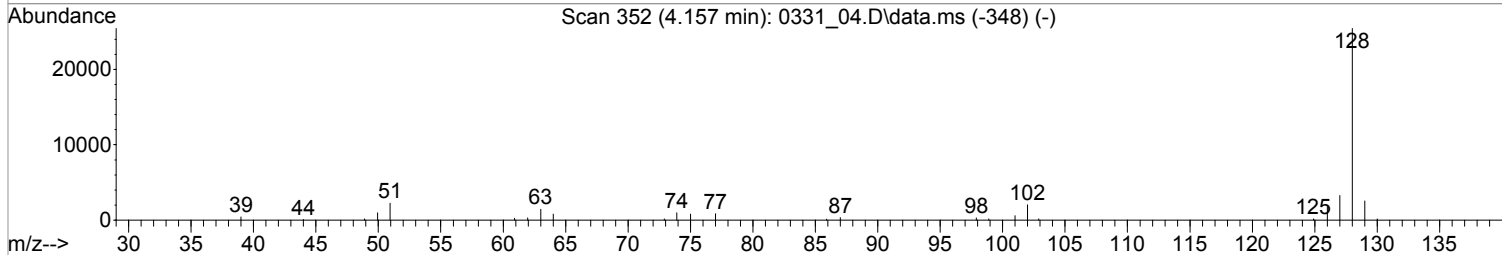
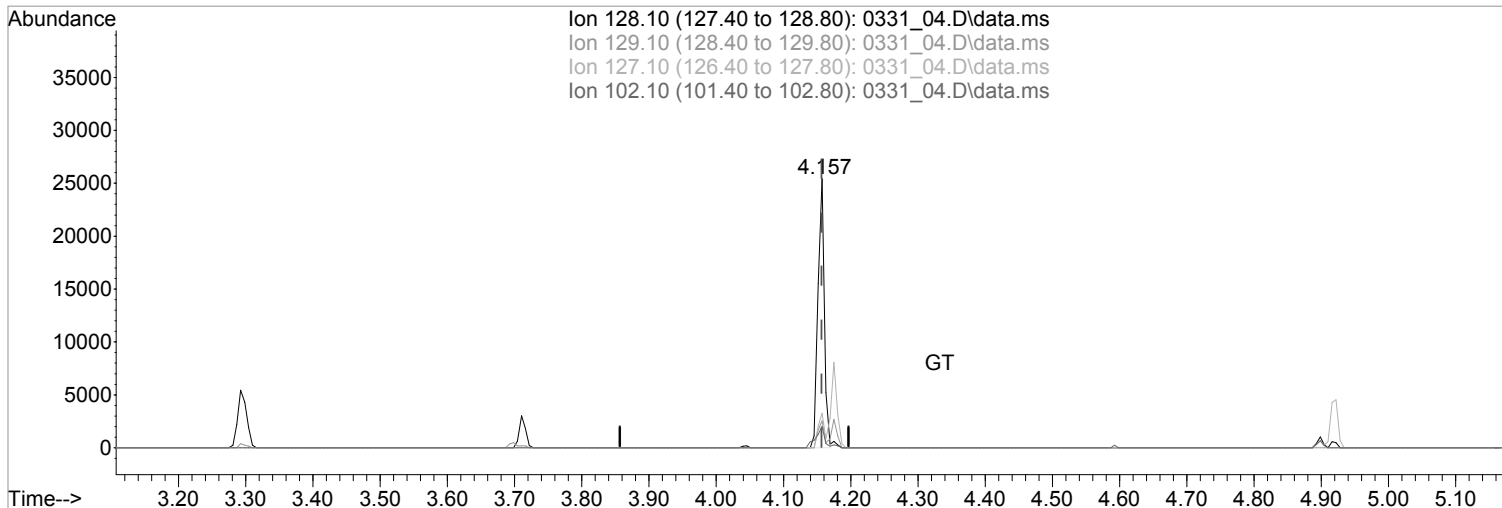
(34) Naphthalene (MT)  
 4.157min (+0.000) 1004.1869471 ppb  
 Qvalue = 99  
 response 17128

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	9.95
127.10	12.80	12.89
102.10	8.30	7.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_04.D  
Acq On : 31 Mar 2022 5:45 pm  
Operator : 3545  
Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:02:11 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



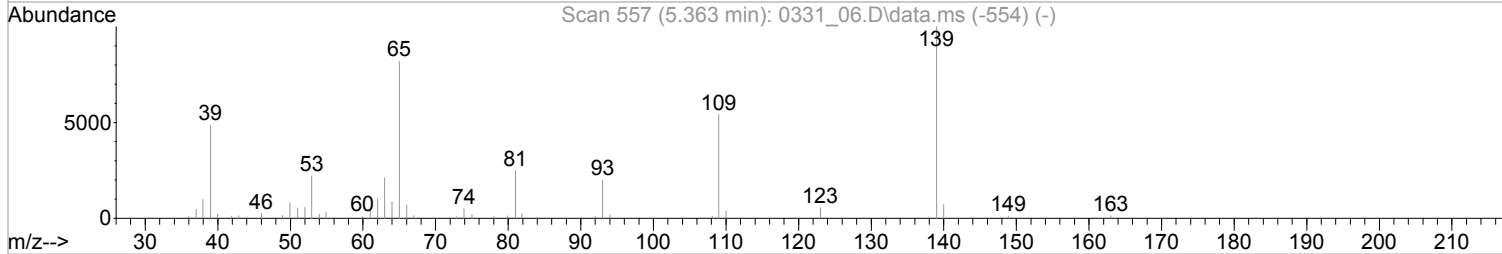
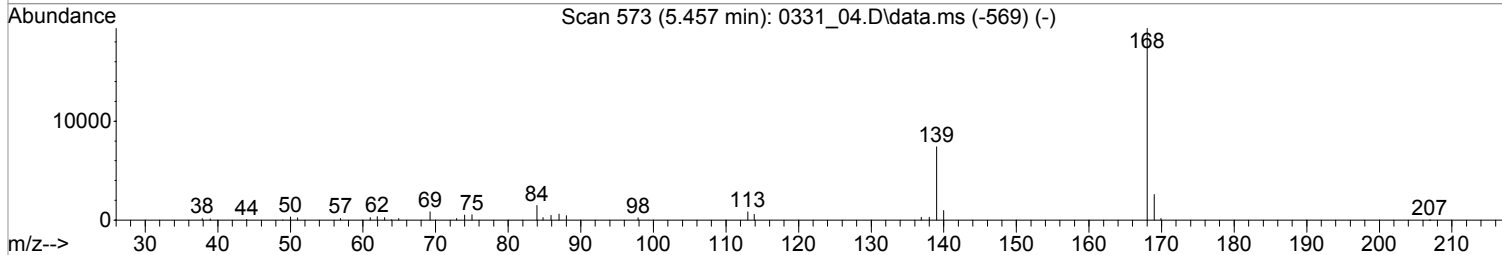
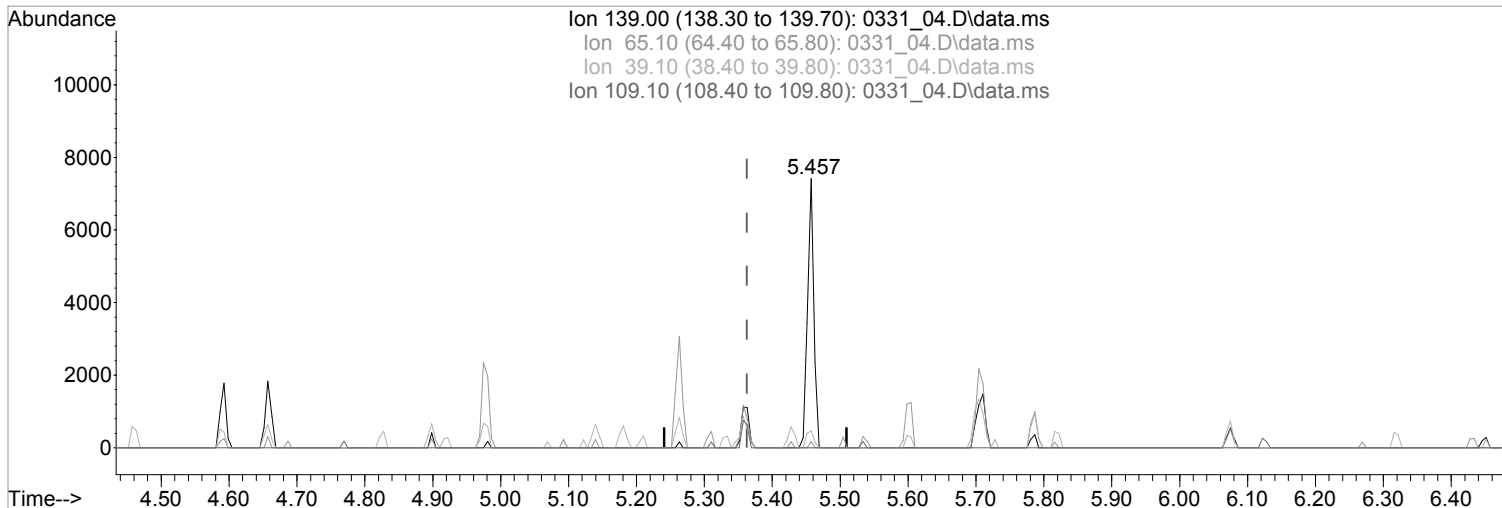
TIC: 0331\_04.D\data.ms

(34) Naphthalene (MT)  
4.157min (+0.000) 985.5431213 ppb m  
  
response 16810  
Ion Exp% Act%  
128.10 100 100  
129.10 10.90 9.95  
127.10 12.80 12.89  
102.10 8.30 7.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(63) 4-Nitrophenol (MPT)

5.457min (+0.094) 3396.4983522 ppb

Qvalue = 22

response 4753

Ion	Exp%	Act%
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139.00	100	100
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65.10	82.10	2.23#
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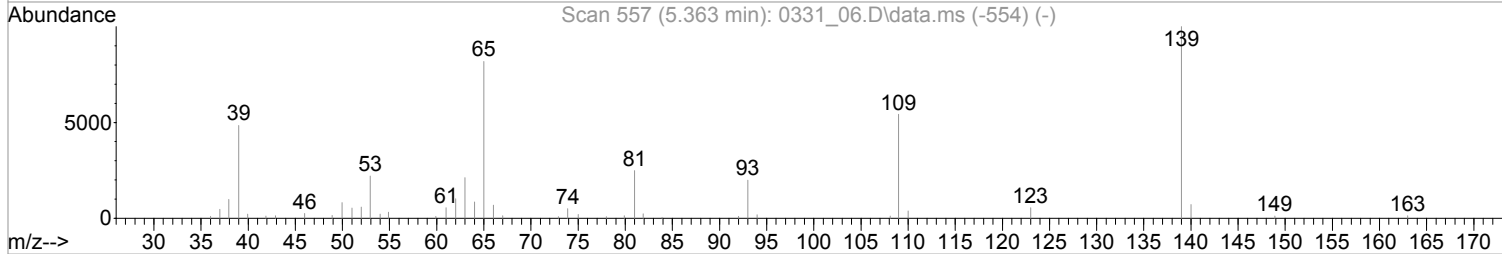
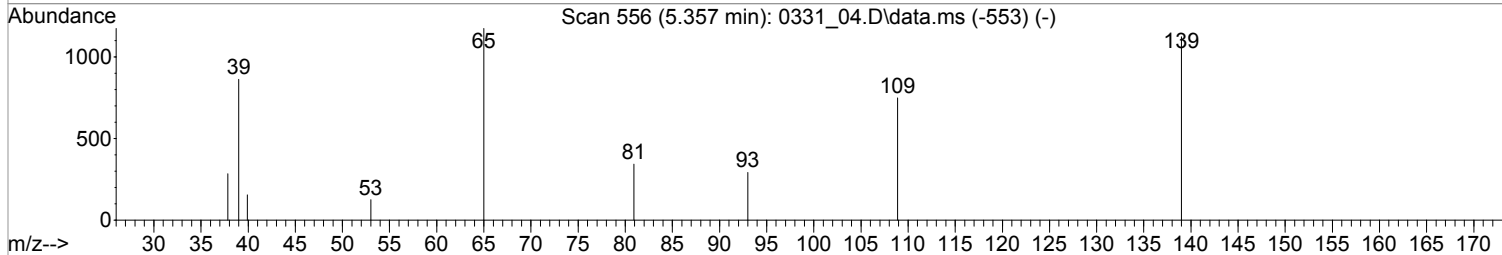
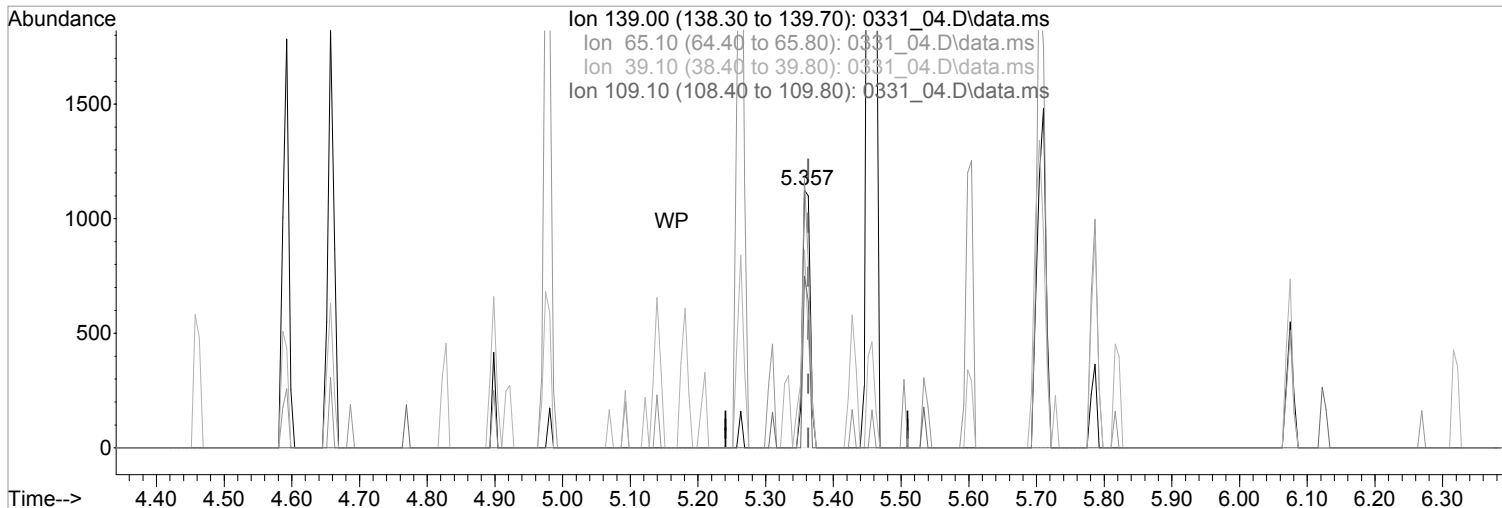
39.10	50.10	6.25#
-------	-------	-------

109.10	54.20	0.00#
--------	-------	-------

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(63) 4-Nitrophenol (MPT)  
 5.357min (-0.006) 644.5700639 ppb m

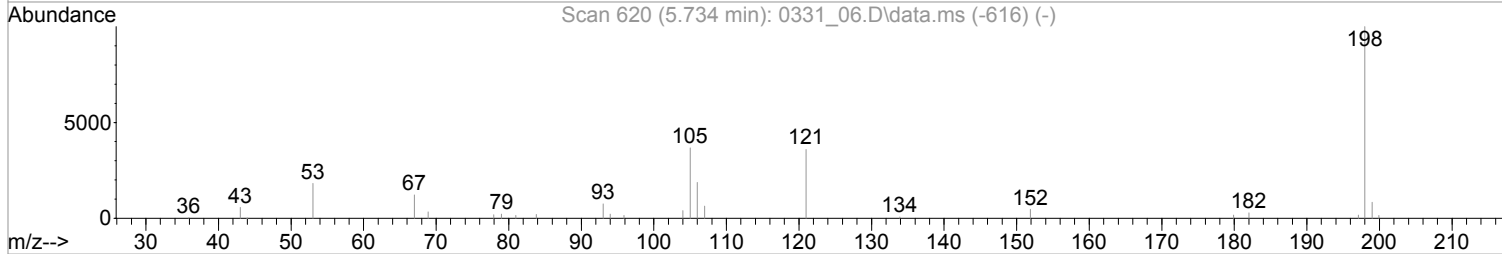
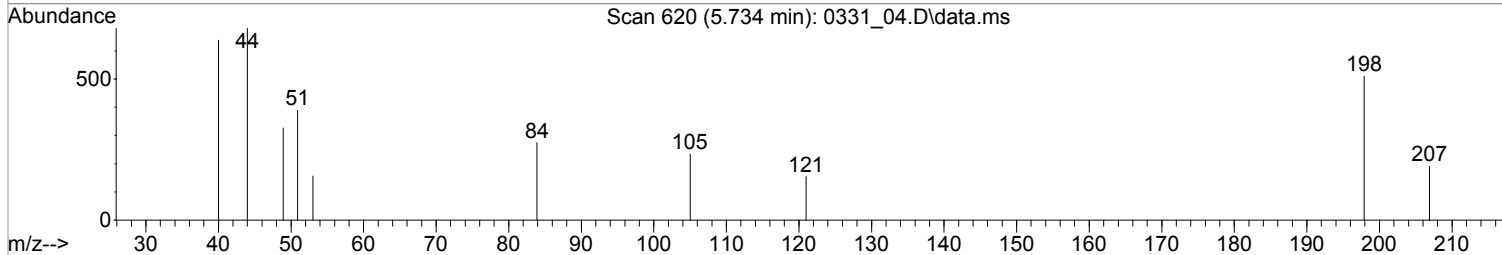
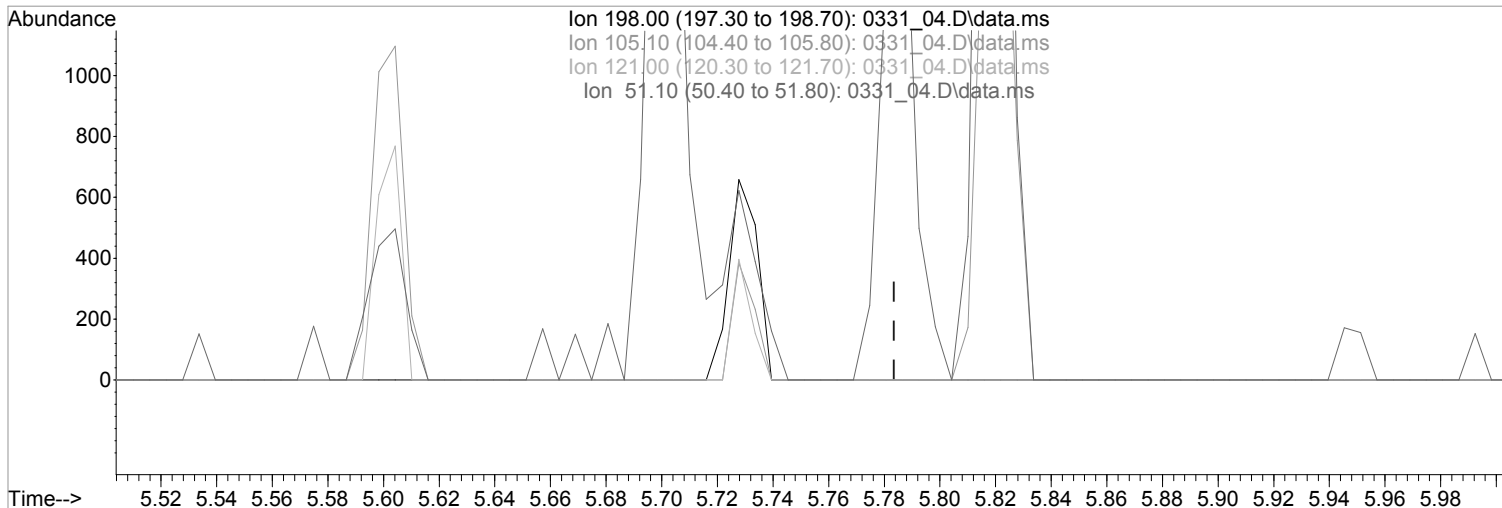
response 902

Ion	Exp%	Act%
139.00	100	100
65.10	82.10	104.45#
39.10	50.10	76.78#
109.10	54.20	66.64

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(71) 4,6-Dinitro-2-methylphenol (MT)

5.734min (-5.734) 0.0000000 ppb

Qvalue = 0

response 0

Ion	Exp%	Act%
198.00	100	0.00
105.10	38.30	0.00#
121.00	35.90	0.00#
51.10	39.60	0.00#

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:56 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32931	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	134192	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	68434	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	110035	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	75687	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	68115	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.740	112	20022	3891.5864703	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	19.46%		
7) Phenol-d5	3.175	99	23979	3964.4247535	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	19.82%		
24) Nitrobenzene-d5	3.710	82	18889m	3716.0923649	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	37.16%		
50) 2-Fluorobiphenyl	4.828	172	43311	3761.7107736	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	37.62%		
73) 2,4,6-Tribromophenol	5.887	330	4029	4030.7044309	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	20.15%		
87) p-Terphenyl-d14	7.845	244	41873	3888.8628771	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	38.89%		
Target Compounds							
2) Pyridine	2.216	79	21534	3938.4403708	ppb	94	
3) N-Nitrosodimethylamine	2.199	42	11264	3472.0697452	ppb	95	
5) Aniline	3.228	66	11366	4105.7800811	ppb	98	
6) bis(2-Chloroethyl)ether	3.246	93	21863m	3862.9262686	ppb		
8) Phenol	3.181	94	25852	4025.6057139	ppb	98	
10) 2-Chlorophenol	3.293	128	21155	4004.6431903	ppb	98	
11) n-Decane	3.293	41	14144	3818.9599168	ppb	# 99	
12) 1,3-Dichlorobenzene	3.381	146	25164	3907.4447803	ppb	98	
13) 1,4-Dichlorobenzene	3.416	146	24933	3887.4438033	ppb	94	
14) Benzyl Alcohol	3.463	79	14813	3865.4913504	ppb	98	
15) 1,2-Dichlorobenzene	3.504	146	23998	3815.1262164	ppb	98	
16) bis(2-Chloroisopropyl)...	3.540	121	8233	3868.6994504	ppb	96	
17) 2,2-oxybis(1-chloropro...	3.540	121	8233	3868.6994504	ppb	96	
18) 2-Methylphenol	3.510	108	19393	4098.2322025	ppb	93	
19) Hexachloroethane	3.699	117	10345	3916.9383750	ppb	97	
20) N-Nitrosodi-n-propylamine	3.610	70	13250	3986.8930302	ppb	99	
21) 3&4-Methyl phenol	3.593	107	20590	3899.2085753	ppb	99	
25) Nitrobenzene	3.722	77	19872	3920.2115447	ppb	99	
26) Isophorone	3.851	82	37595	3862.4180344	ppb	99	
27) 2-Nitrophenol	3.904	139	8158	3765.4491378	ppb	97	
28) 2,4-Dimethylphenol	3.904	107	19338	3914.0923671	ppb	99	
29) bis(2-Chlorethoxy)methane	3.969	93	26704	3881.1098229	ppb	99	
30) 2,4-Dichlorophenol	4.046	162	14915	3922.8669546	ppb	97	
32) 1,2,4-Trichlorobenzene	4.104	180	18671	3739.3208108	ppb	99	
34) Naphthalene	4.157	128	66762	3730.9538948	ppb	99	
35) 4-Chloroaniline	4.175	65	6627	3995.5309124	ppb	99	
36) Hexachloro-1,3-butadiene	4.222	225	10146	3792.9384009	ppb	97	
40) 4-Chloro-3-methylphenol	4.463	107	14789	3835.8318603	ppb	97	
41) 2-Methylnaphthalene	4.593	142	41264	3847.8046515	ppb	99	
42) 1-Methylnaphthalene	4.657	142	40069	3795.6779953	ppb	99	
47) Hexachlorocyclopentadiene	4.693	237	8420	4086.1645114	ppb	98	
48) 2,4,6-Trichlorophenol	4.769	196	9486	4095.1983274	ppb	97	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

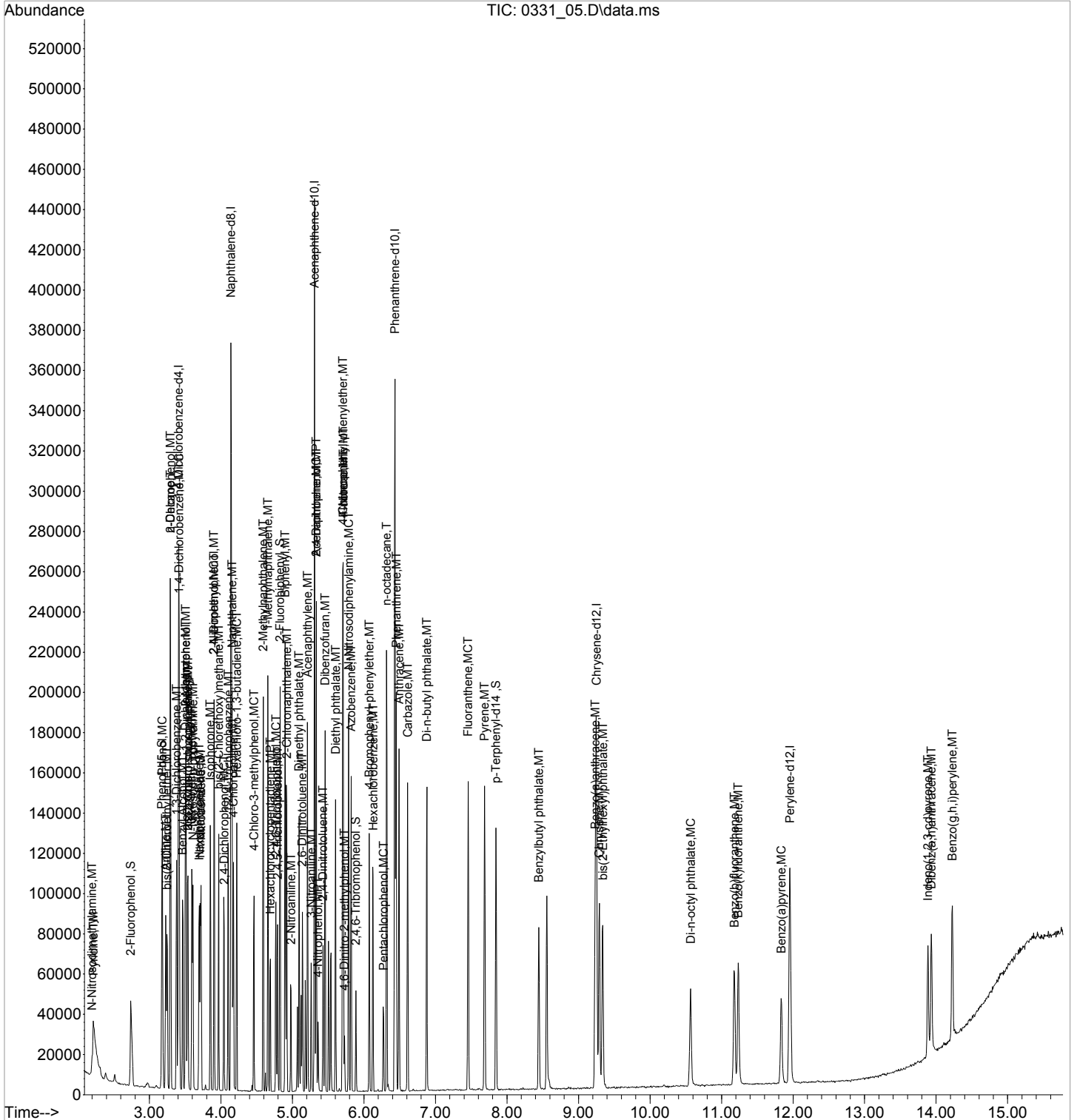
Quant Time: Apr 04 16:04:56 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.793	196	9443	4052.6426870	ppb		98
51) Biphenyl	4.898	154	48637	3783.8360827	ppb		99
52) 2-Chloronaphthalene	4.922	162	38216	3901.4979240	ppb		99
53) 2-Nitroaniline	4.981	138	8468	3715.5917121	ppb		98
54) Acenaphthylene	5.210	152	57104	3893.6362427	ppb		99
55) Dimethyl phthalate	5.093	163	41358	3976.3045598	ppb		94
56) 2,6-Dinitrotoluene	5.140	165	8241	4058.3383916	ppb		93
57) 3-Nitroaniline	5.263	138	7203	3973.0272299	ppb		97
58) Acenaphthene	5.334	153	39005	3812.6378437	ppb		99
59) 2,4-Dinitrophenol	5.334	184	1680	2974.9807456	ppb	#	1
60) Dibenzofuran	5.457	168	52497	3820.1946803	ppb		99
61) 2,4-Dinitrotoluene	5.428	165	9165	3955.2754297	ppb	#	77
63) 4-Nitrophenol	5.357	139	4753	3887.5582689	ppb	#	79
64) Fluorene	5.710	166	43283	3878.0382895	ppb		97
65) 4-Chlorophenyl-phenyle...	5.704	204	20472	3980.7165957	ppb		94
66) Diethyl phthalate	5.604	149	43240	3934.3678190	ppb		99
67) 4-Nitroaniline	5.710	138	6586	4870.9541902	ppb		96
68) Azobenzene	5.822	77	44023	4042.6599452	ppb		99
71) 4,6-Dinitro-2-methylph...	5.728	198	2707	3732.3952874	ppb	#	74
72) N-Nitrosodiphenylamine	5.787	169	33745	3976.2689220	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	10458	3934.5051940	ppb		94
75) Hexachlorobenzene	6.128	284	12174	3745.1457104	ppb		98
76) n-octadecane	6.316	55	8008	3901.5281337	ppb	#	96
77) Pentachlorophenol	6.275	266	4167	3264.5837369	ppb		98
78) Phenanthrene	6.451	178	58086	3771.2225902	ppb		99
79) Anthracene	6.492	178	54209	3942.0610534	ppb		99
80) Carbazole	6.610	167	46540	4035.1322148	ppb		99
81) Di-n-butyl phthalate	6.881	149	66469	4091.3433685	ppb		100
83) Fluoranthene	7.457	202	54696	3935.3597347	ppb		100
86) Pyrene	7.687	202	57163	3814.3474206	ppb		99
88) Benzylbutyl phthalate	8.445	149	21276	4173.7997939	ppb		99
90) Benzo(a)anthracene	9.233	228	40230	3881.3641678	ppb		98
91) Chrysene	9.292	228	44552	3860.0833542	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.339	149	31447	4260.6941032	ppb		98
93) Di-n-octyl phthalate	10.569	149	41318	4058.3889660	ppb		98
95) Benzo(b)fluoranthene	11.180	252	38068	4038.8782196	ppb		98
96) Benzo(k)fluoranthene	11.233	252	40040	4172.0316530	ppb		99
97) Benzo(a)pyrene	11.833	252	29980	4117.7691399	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.886	276	27978	4070.8609426	ppb		97
99) Dibenz(a,h)anthracene	13.933	278	32250	4143.8879049	ppb		98
100) Benzo(g,h,i)perylene	14.227	276	34820	4106.9338075	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_05.D  
Acq On : 31 Mar 2022 6:07 pm  
Operator : 3545  
Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:56 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:04:13 2022  
Response via : Initial Calibration  
DataAcq Meth: BNA24PS.M

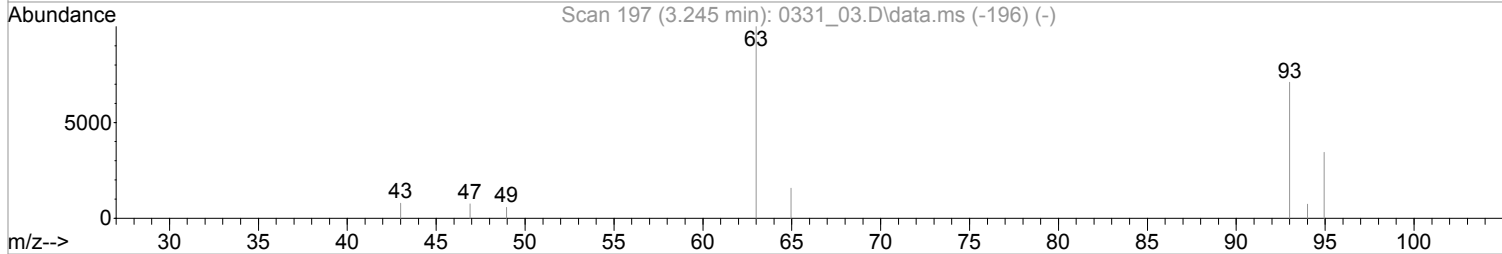
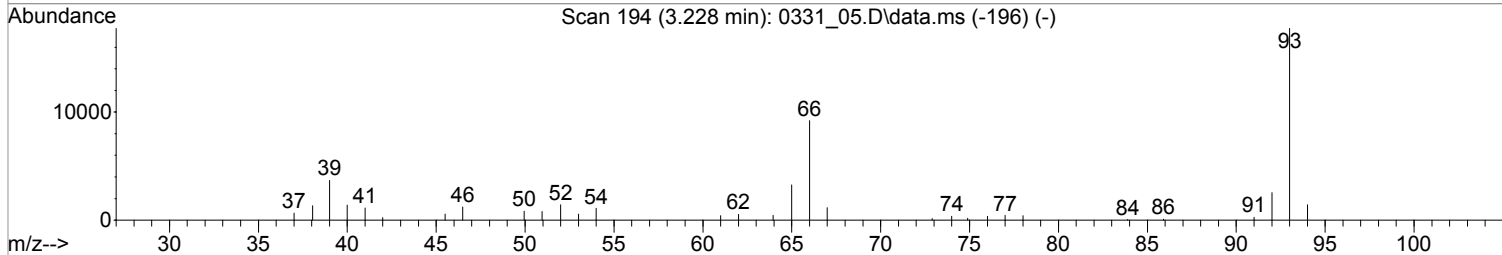
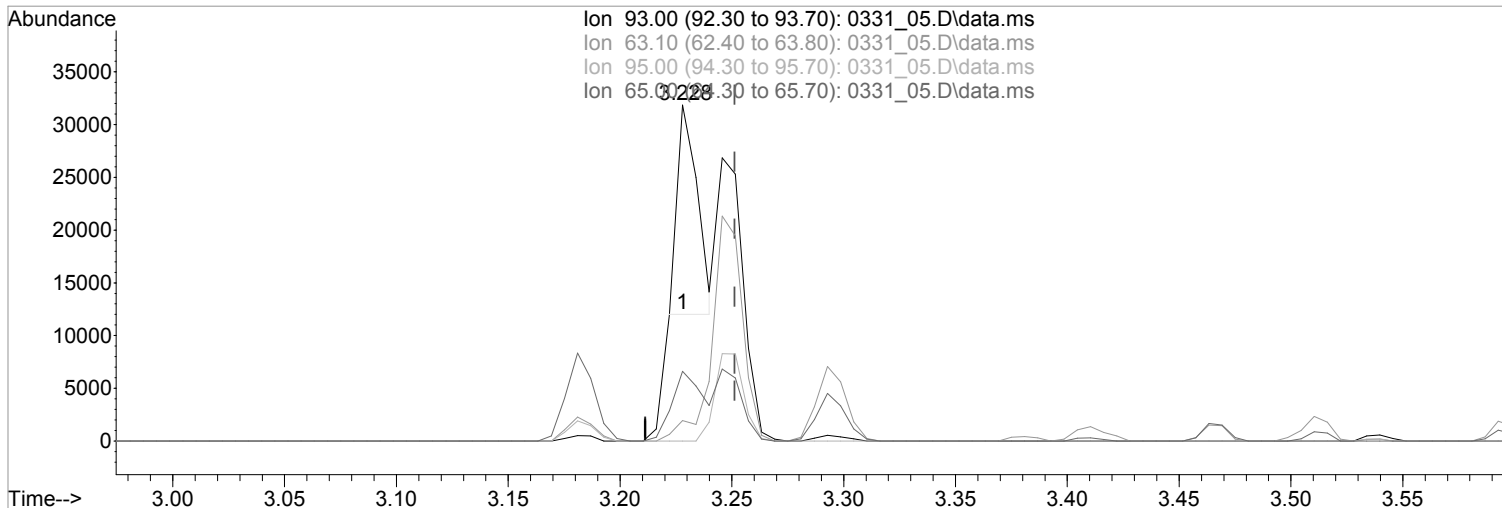




Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

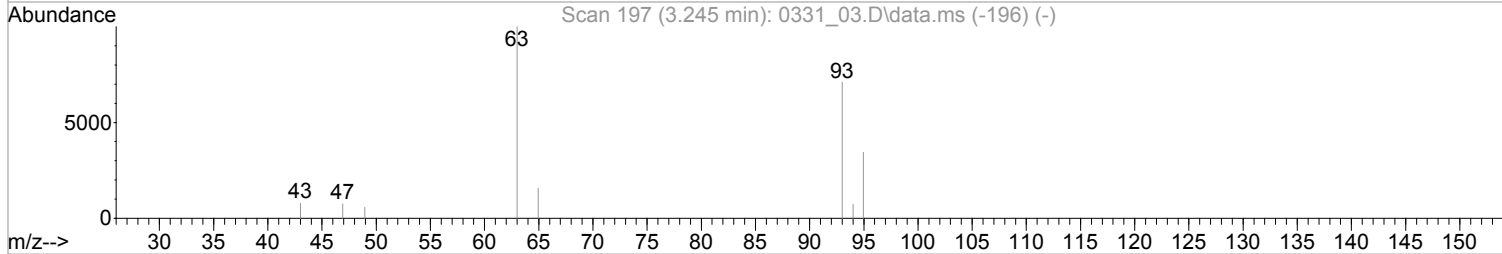
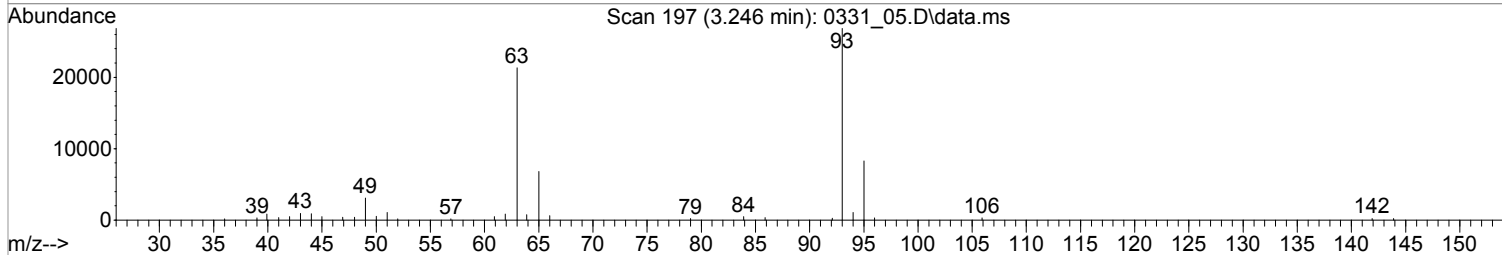
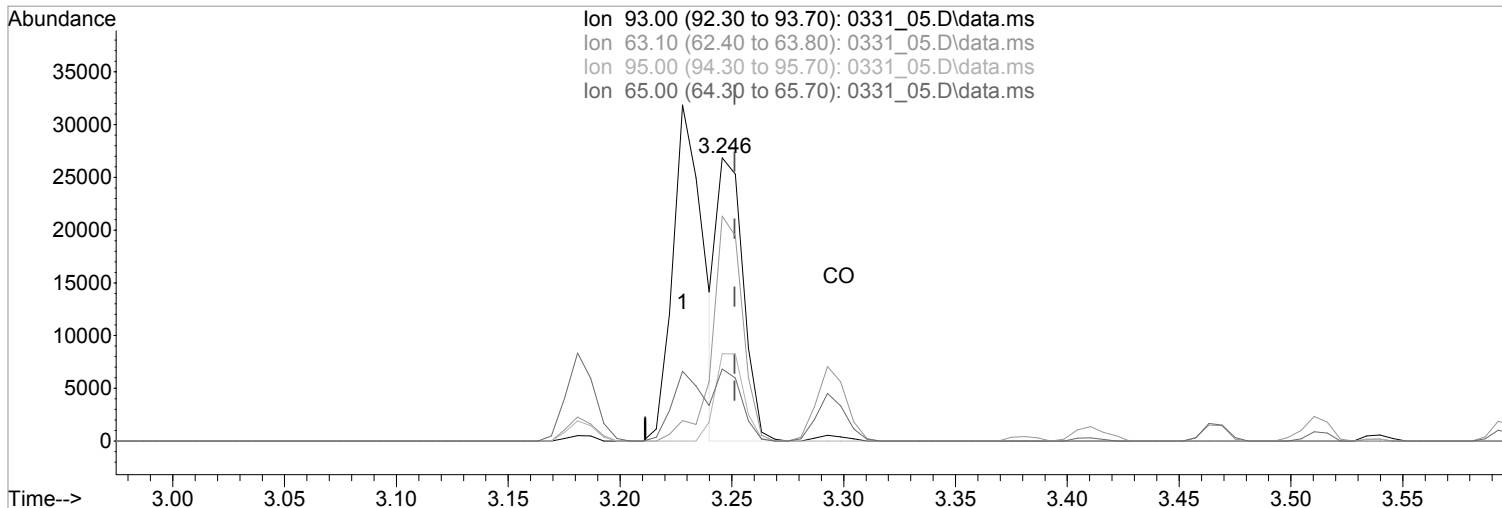
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.023) 2176.4408259 ppb  
 Qvalue = 37  
 response 12318

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	6.47#
95.00	31.90	0.00#
65.00	23.10	18.86

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_05.D  
Acq On : 31 Mar 2022 6:07 pm  
Operator : 3545  
Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:04:13 2022  
Response via : Initial Calibration  
DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
3.246min (-0.006) 3862.9262686 ppb m

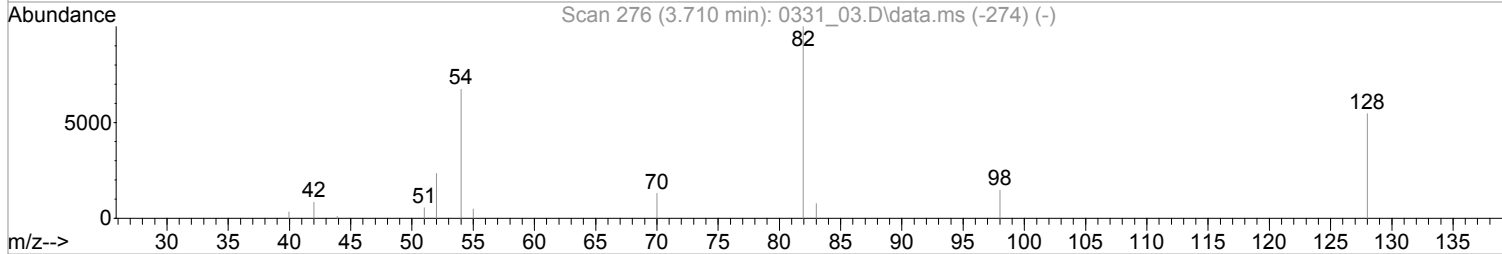
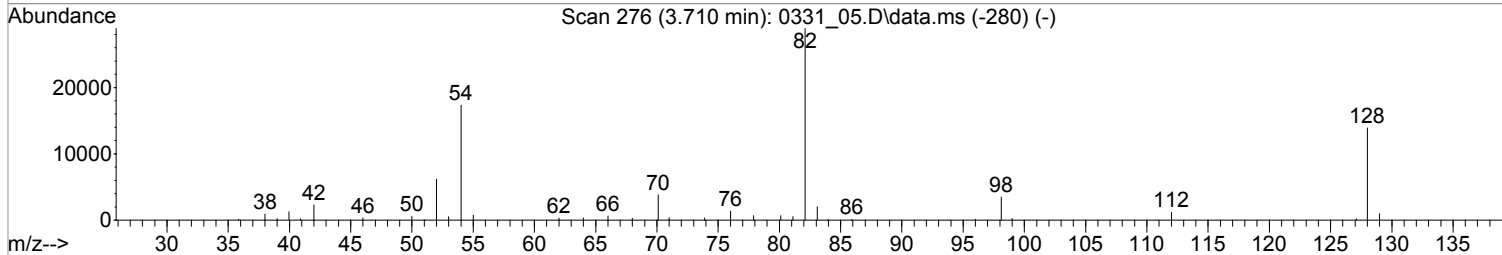
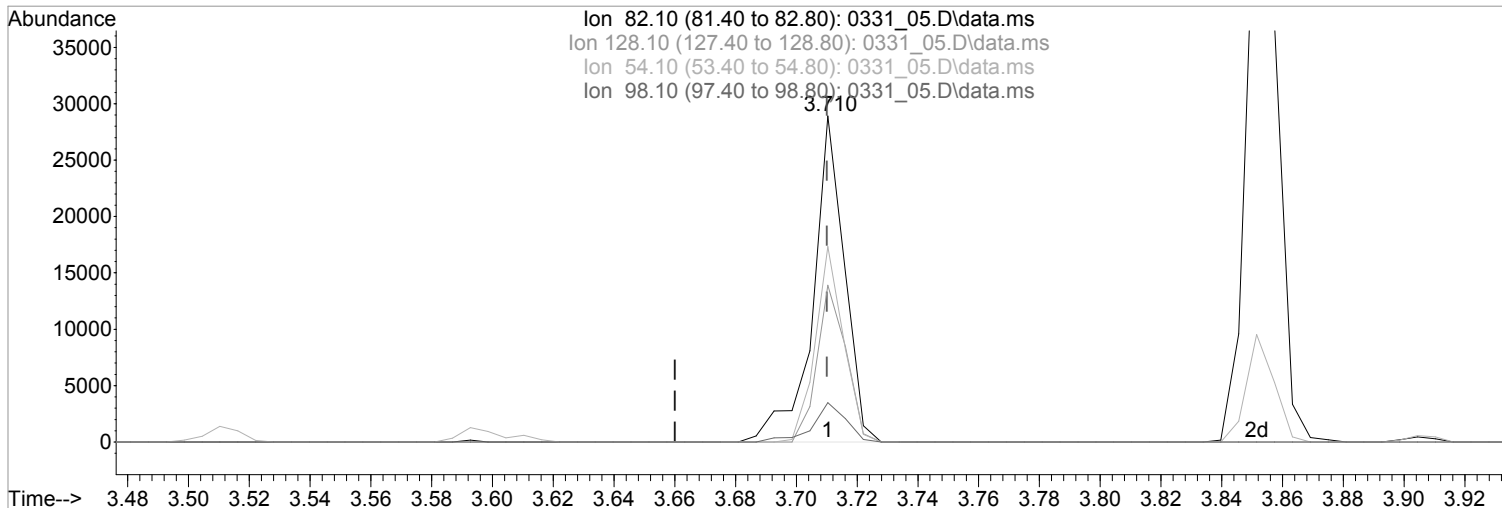
response 21863

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	79.43
95.00	31.90	30.91
65.00	23.10	25.46

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

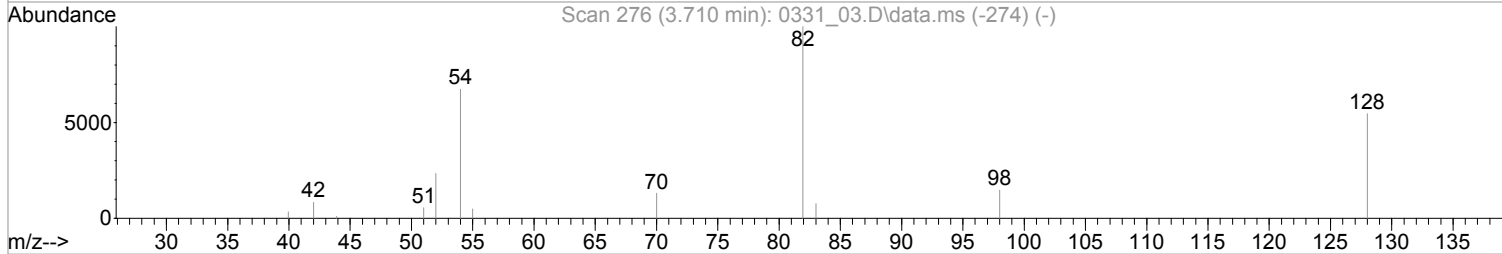
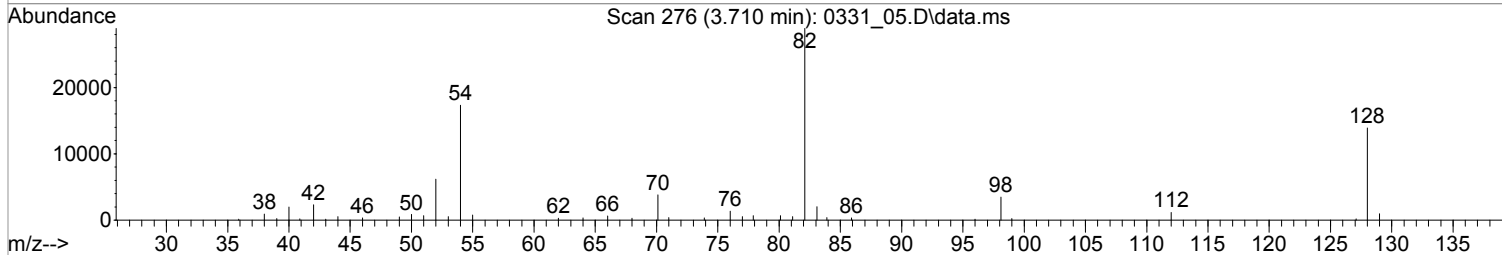
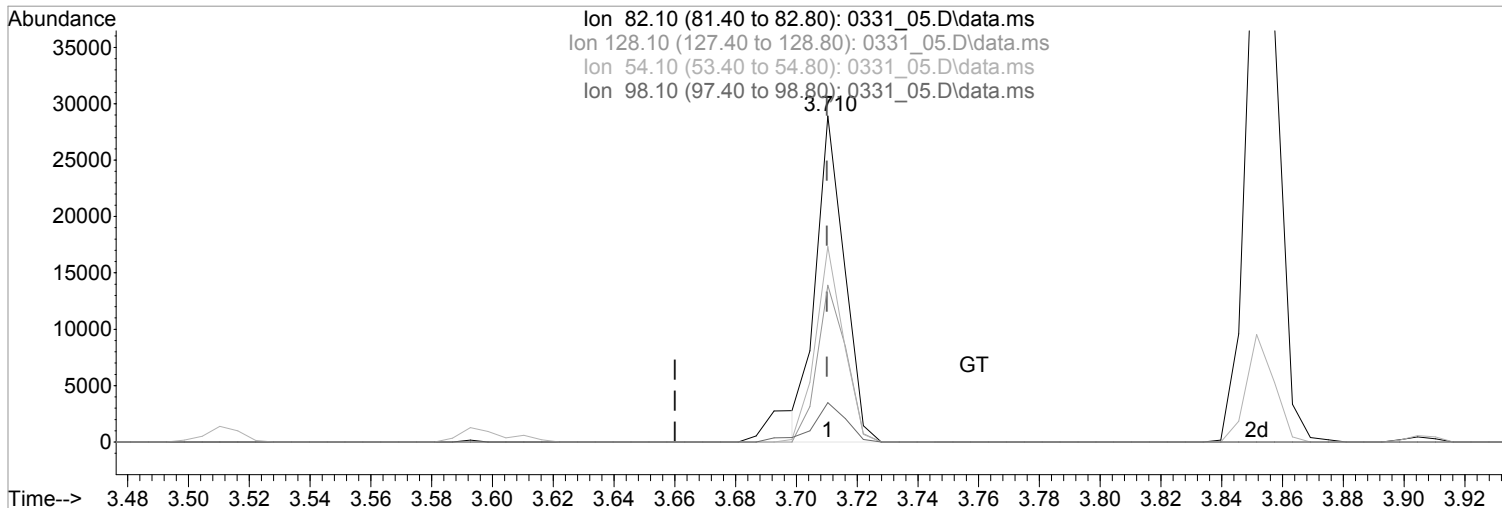
(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 4137.4947602 ppb  
 Qvalue = 99  
 response 21031

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	48.14
54.10	60.00	60.01
98.10	11.40	12.09

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 3716.0923649 ppb m

response 18889

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	48.14
54.10	60.00	60.01
98.10	11.40	12.09

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:57:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	31797	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	129715	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	67221	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	109300	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	79132	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	68335	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.740	112	50347	10000.0000000	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	50.00%		
7) Phenol-d5	3.175	99	59979	10000.0000000	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	50.00%		
24) Nitrobenzene-d5	3.710	82	48718m	10000.0000000	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	100.00%		
50) 2-Fluorobiphenyl	4.828	172	108502	10000.0000000	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	100.00%		
73) 2,4,6-Tribromophenol	5.892	330	11267	10000.0000000	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	50.00%		
87) p-Terphenyl-d14	7.845	244	110355	10000.0000000	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	100.00%		
Target Compounds							
2) Pyridine	2.216	79	54038	10000.0000000	ppb	100	
3) N-Nitrosodimethylamine	2.199	42	26952	10000.0000000	ppb	100	
5) Aniline	3.228	66	28243	10000.0000000	ppb	100	
6) bis(2-Chloroethyl)ether	3.251	93	54390m	10000.0000000	ppb	100	
8) Phenol	3.181	94	63496	10000.0000000	ppb	100	
10) 2-Chlorophenol	3.293	128	53448	10000.0000000	ppb	100	
11) n-Decane	3.293	41	33867	10000.0000000	ppb	100	#
12) 1,3-Dichlorobenzene	3.381	146	60750	10000.0000000	ppb	100	
13) 1,4-Dichlorobenzene	3.422	146	60988	10000.0000000	ppb	100	
14) Benzyl Alcohol	3.469	79	38840	10000.0000000	ppb	100	
15) 1,2-Dichlorobenzene	3.504	146	58396	10000.0000000	ppb	100	
16) bis(2-Chloroisopropyl)...	3.540	121	20161	10000.0000000	ppb	100	
17) 2,2-oxybis(1-chloropro...	3.540	121	20161	10000.0000000	ppb	100	
18) 2-Methylphenol	3.516	108	49043	10000.0000000	ppb	100	
19) Hexachloroethane	3.698	117	25235	10000.0000000	ppb	100	
20) N-Nitrosodi-n-propylamine	3.610	70	33756	10000.0000000	ppb	100	
21) 3&4-Methyl phenol	3.593	107	53628	10000.0000000	ppb	100	
25) Nitrobenzene	3.722	77	51043	10000.0000000	ppb	100	
26) Isophorone	3.851	82	98776	10000.0000000	ppb	100	
27) 2-Nitrophenol	3.904	139	23329	10000.0000000	ppb	100	
28) 2,4-Dimethylphenol	3.904	107	50267	10000.0000000	ppb	100	
29) bis(2-Chloroethoxy)methane	3.969	93	66470	10000.0000000	ppb	100	
30) 2,4-Dichlorophenol	4.045	162	39336	10000.0000000	ppb	100	
32) 1,2,4-Trichlorobenzene	4.104	180	45914	10000.0000000	ppb	100	
34) Naphthalene	4.157	128	164019	10000.0000000	ppb	100	
35) 4-Chloroaniline	4.175	65	16770	10000.0000000	ppb	100	
36) Hexachloro-1,3-butadiene	4.222	225	24753	10000.0000000	ppb	100	
40) 4-Chloro-3-methylphenol	4.463	107	39997	10000.0000000	ppb	100	
41) 2-Methylnaphthalene	4.593	142	102616	10000.0000000	ppb	100	
42) 1-Methylnaphthalene	4.657	142	98949	10000.0000000	ppb	100	
47) Hexachlorocyclopentadiene	4.692	237	21949	10000.0000000	ppb	100	
48) 2,4,6-Trichlorophenol	4.769	196	25822	10000.0000000	ppb	100	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

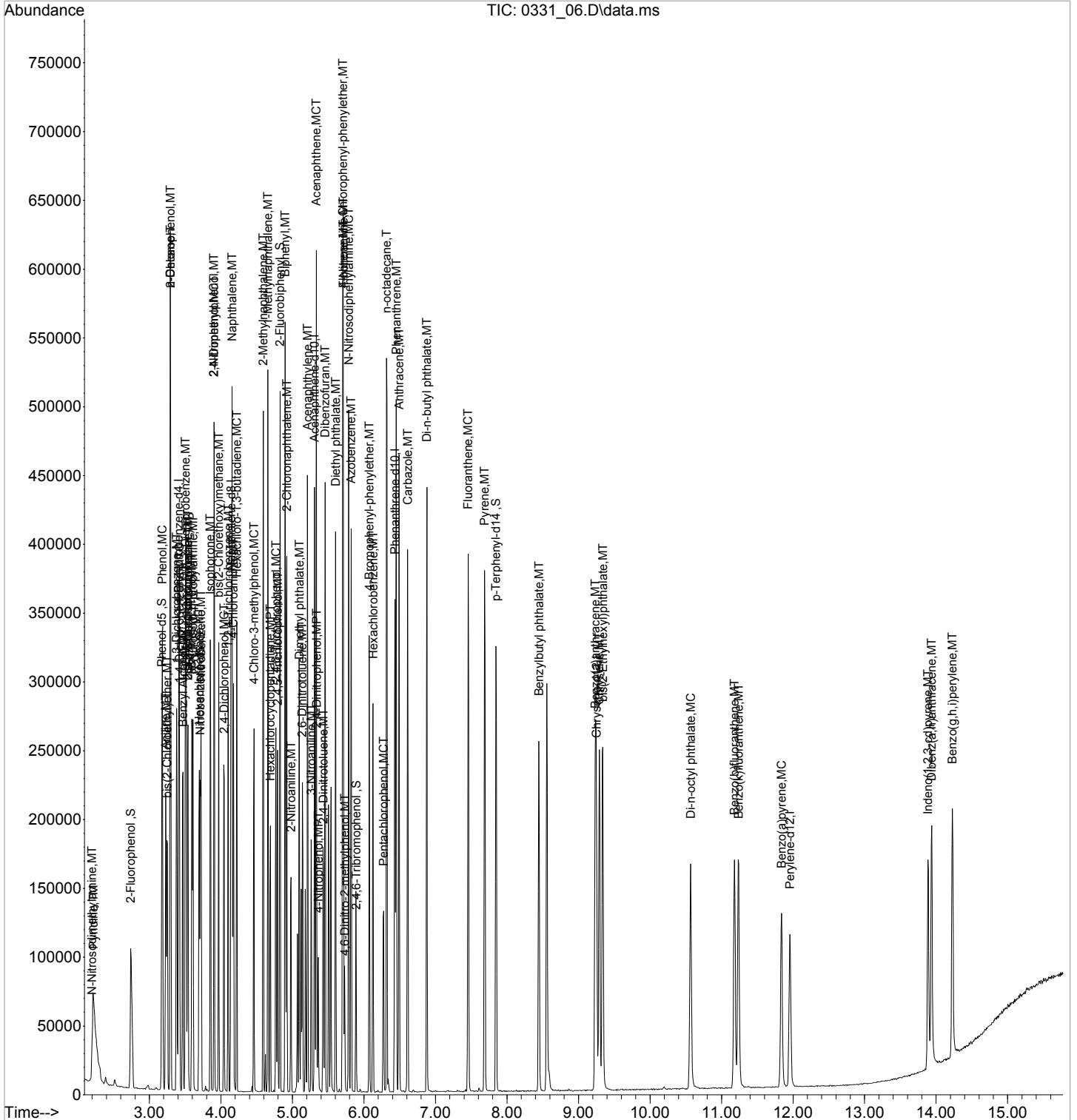
Quant Time: Apr 04 15:57:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
49) 2,4,5-Trichlorophenol	4.792	196	26746	10000.0000000	ppb	100
51) Biphenyl	4.898	154	121171	10000.0000000	ppb	100
52) 2-Chloronaphthalene	4.922	162	94566	10000.0000000	ppb	100
53) 2-Nitroaniline	4.981	138	25298	10000.0000000	ppb	100
54) Acenaphthylene	5.210	152	144849	10000.0000000	ppb	100
55) Dimethyl phthalate	5.098	163	106912	10000.0000000	ppb	100
56) 2,6-Dinitrotoluene	5.140	165	22620	10000.0000000	ppb	100
57) 3-Nitroaniline	5.263	138	20734	10000.0000000	ppb	100
58) Acenaphthene	5.334	153	96185	10000.0000000	ppb	100
59) 2,4-Dinitrophenol	5.340	184	5547	10000.0000000	ppb	100
60) Dibenzofuran	5.457	168	130881	10000.0000000	ppb	100
61) 2,4-Dinitrotoluene	5.434	165	27080	10000.0000000	ppb	100
63) 4-Nitrophenol	5.363	139	14605	10000.0000000	ppb	100
64) Fluorene	5.710	166	109752	10000.0000000	ppb	100
65) 4-Chlorophenyl-phenyle...	5.704	204	48947	10000.0000000	ppb	100
66) Diethyl phthalate	5.604	149	113139	10000.0000000	ppb	100
67) 4-Nitroaniline	5.710	138	12473	10000.0000000	ppb	100
68) Azobenzene	5.822	77	113978	10000.0000000	ppb	100
71) 4,6-Dinitro-2-methylph...	5.734	198	9382	10000.0000000	ppb	100
72) N-Nitrosodiphenylamine	5.787	169	86982	10000.0000000	ppb	100
74) 4-Bromophenyl-phenylether	6.075	248	26064	10000.0000000	ppb	100
75) Hexachlorobenzene	6.128	284	30132	10000.0000000	ppb	100
76) n-octadecane	6.316	55	20176	10000.0000000	ppb	100
77) Pentachlorophenol	6.275	266	12679	10000.0000000	ppb	100
78) Phenanthrene	6.451	178	144135	10000.0000000	ppb	100
79) Anthracene	6.492	178	140337	10000.0000000	ppb	100
80) Carbazole	6.610	167	120779	10000.0000000	ppb	100
81) Di-n-butyl phthalate	6.881	149	183487	10000.0000000	ppb	100
83) Fluoranthene	7.457	202	143797	10000.0000000	ppb	100
86) Pyrene	7.686	202	148972	10000.0000000	ppb	100
88) Benzylbutyl phthalate	8.445	149	64438	10000.0000000	ppb	100
90) Benzo(a) anthracene	9.233	228	110985	10000.0000000	ppb	100
91) Chrysene	9.292	228	116952	9997.5209649	ppb	100
92) bis(2-Ethylhexyl)phtha...	9.339	149	96218	10000.0000000	ppb	100
93) Di-n-octyl phthalate	10.569	149	134897	10000.0000000	ppb	100
95) Benzo(b) fluoranthene	11.180	252	103049	10000.0000000	ppb	100
96) Benzo(k) fluoranthene	11.239	252	109958	10000.0000000	ppb	100
97) Benzo(a) pyrene	11.839	252	85063	10000.0000000	ppb	100
98) Indeno(1,2,3-cd)pyrene	13.886	276	77280	10000.0000000	ppb	100
99) Dibenz(a,h) anthracene	13.939	278	87499	10000.0000000	ppb	100
100) Benzo(g,h,i) perylene	14.227	276	94402	10000.0000000	ppb	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_06.D  
Acq On : 31 Mar 2022 6:28 pm  
Operator : 3545  
Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:57:16 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 15:56:28 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\042922B\  
 Data File : 0429B\_02.D  
 Acq On : 29 Apr 2022 5:31 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 29 19:29:41 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.343	152	34721	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.072	136	141814	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.237	164	72983	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.348	188	122329	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.113	240	94191	8000.0000000	ppb	0.00	
94) Perylene-d12	11.766	264	87365	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.678	112	51787	9526.5470780	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	47.63%		
7) Phenol-d5	3.113	99	62394	9673.7789380	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	48.37%		
24) Nitrobenzene-d5	3.648	82	53608m	9939.9649697	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	99.40%		
50) 2-Fluorobiphenyl	4.754	172	110751	9556.0525709	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	95.56%		
73) 2,4,6-Tribromophenol	5.813	330	12747	9946.0609950	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	49.73%		
87) p-Terphenyl-d14	7.736	244	121362	9310.8734599	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	93.11%		
Target Compounds							
2) Pyridine	2.149	79	53826	9347.1354793	ppb	97	
3) N-Nitrosodimethylamine	2.131	42	24901	8213.8766926	ppb	93	
5) Aniline	3.166	66	30037	10064.5052197	ppb	#	24
6) bis(2-Chloroethyl)ether	3.184	93	59920m	10205.4074214	ppb		
8) Phenol	3.119	94	66790	9768.4580572	ppb	96	
10) 2-Chlorophenol	3.231	128	55720	9785.6997436	ppb	93	
11) n-Decane	3.225	41	30829	8422.3241625	ppb	#	96
12) 1,3-Dichlorobenzene	3.313	146	61737	9460.6674667	ppb	99	
13) 1,4-Dichlorobenzene	3.354	146	62717	9601.6296348	ppb	99	
14) Benzyl Alcohol	3.401	79	41147	9865.3111340	ppb	99	
15) 1,2-Dichlorobenzene	3.437	146	59098	9383.6062355	ppb	99	
16) bis(2-Chloroisopropyl)...	3.472	121	19823	9114.7355717	ppb	92	
17) 2,2-oxybis(1-chloropro...	3.472	121	19823	9114.7355717	ppb	92	
18) 2-Methylphenol	3.448	108	51422	10040.6622639	ppb	97	
19) Hexachloroethane	3.625	117	25427	9335.2205902	ppb	94	
20) N-Nitrosodi-n-propylamine	3.543	70	35264	9681.1510235	ppb	99	
21) 3&4-Methyl phenol	3.531	107	55759	9869.7553944	ppb	99	
25) Nitrobenzene	3.654	77	55107	10109.6027410	ppb	98	
26) Isophorone	3.784	82	102182	9576.8327252	ppb	100	
27) 2-Nitrophenol	3.837	139	25409	9852.4073272	ppb	87	
28) 2,4-Dimethylphenol	3.843	107	52260	9847.6018926	ppb	99	
29) bis(2-Chlorethoxy)methane	3.901	93	67640	9435.2004785	ppb	99	
30) 2,4-Dichlorophenol	3.978	162	42013	10020.5506012	ppb	96	
32) 1,2,4-Trichlorobenzene	4.031	180	46298	9233.9072755	ppb	95	
34) Naphthalene	4.090	128	166007	9377.7384495	ppb	100	
35) 4-Chloroaniline	4.107	65	18448	9916.6835713	ppb	97	
36) Hexachloro-1,3-butadiene	4.148	225	25433	9404.1037456	ppb	97	
40) 4-Chloro-3-methylphenol	4.395	107	42870	9773.1491472	ppb	97	
41) 2-Methylnaphthalene	4.519	142	105002	9441.1403741	ppb	99	
42) 1-Methylnaphthalene	4.584	142	101389	9364.7404413	ppb	100	
47) Hexachlorocyclopentadiene	4.619	237	21972	9229.5812969	ppb	96	
48) 2,4,6-Trichlorophenol	4.695	196	27403	10053.0413465	ppb	94	



Data Path : C:\msdchem\1\data\042922B\  
 Data File : 0429B\_02.D  
 Acq On : 29 Apr 2022 5:31 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1

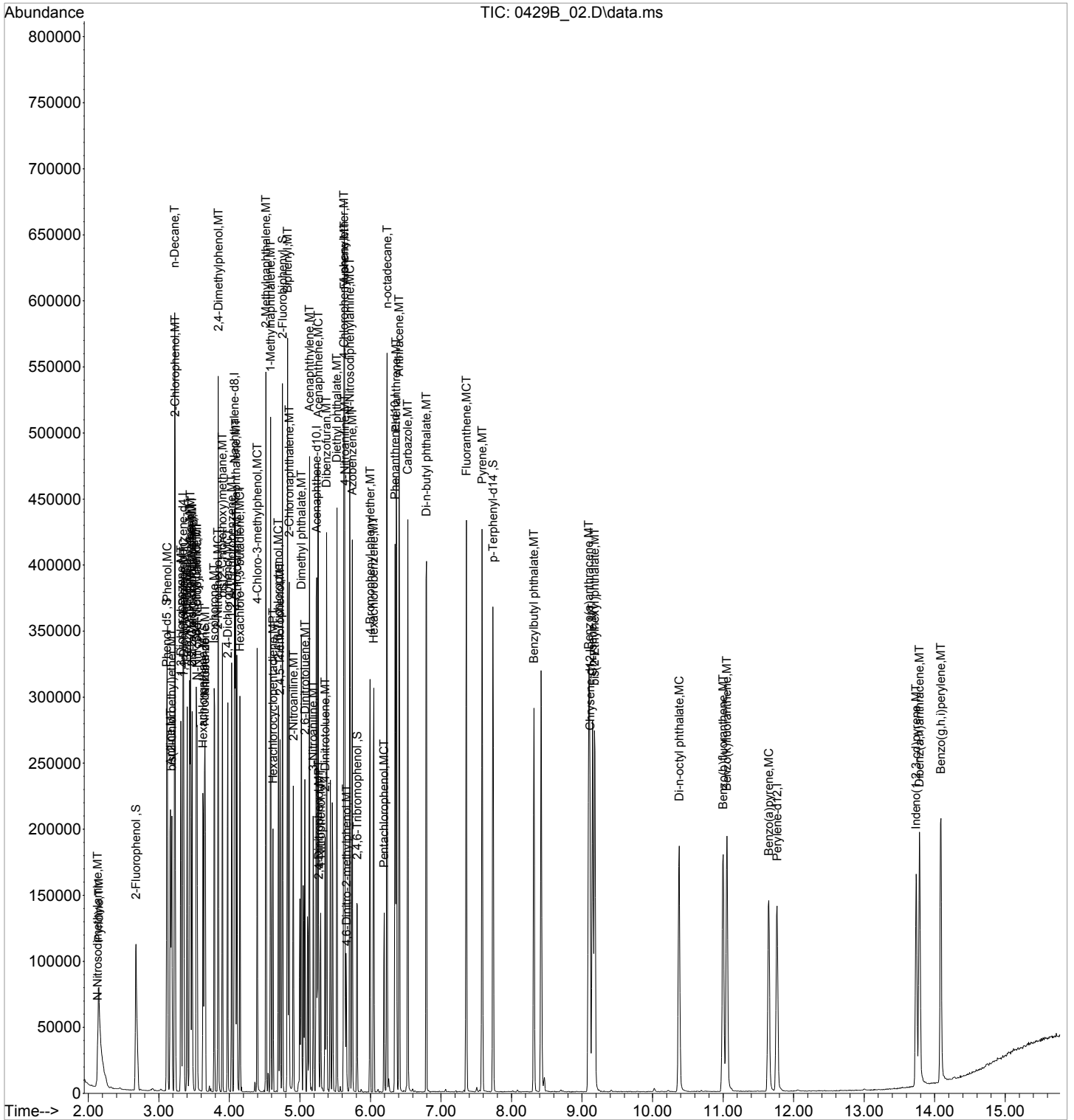
Quant Time: Apr 29 19:29:41 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.719	196	29365	10543.7507224	ppb		93
51) Biphenyl	4.825	154	124290	9517.3986670	ppb		99
52) 2-Chloronaphthalene	4.848	162	97251	9649.1517606	ppb		99
53) 2-Nitroaniline	4.907	138	31669	10592.9410083	ppb		99
54) Acenaphthylene	5.137	152	150810	9751.4770077	ppb		100
55) Dimethyl phthalate	5.019	163	109339	9682.2634147	ppb		92
56) 2,6-Dinitrotoluene	5.072	165	25467	10330.6989938	ppb		81
57) 3-Nitroaniline	5.189	138	25785	10953.1348418	ppb		97
58) Acenaphthene	5.260	153	99101	9455.5726306	ppb		98
59) 2,4-Dinitrophenol	5.266	184	5993	8840.0167598	ppb	#	1
60) Dibenzofuran	5.378	168	137045	9799.3572344	ppb		100
61) 2,4-Dinitrotoluene	5.360	165	30940	10024.9623613	ppb		97
63) 4-Nitrophenol	5.295	139	18931	11108.1142510	ppb		97
64) Fluorene	5.631	166	112911	9753.3710928	ppb		97
65) 4-Chlorophenyl-phenyle...	5.625	204	50189	9518.9986133	ppb		99
66) Diethyl phthalate	5.525	149	115221	9807.0550971	ppb		98
67) 4-Nitroaniline	5.637	138	21489	15075.5679791	ppb		99
68) Azobenzene	5.742	77	117275	9932.7788080	ppb		99
71) 4,6-Dinitro-2-methylph...	5.660	198	10709	9259.2700472	ppb		98
72) N-Nitrosodiphenylamine	5.707	169	91384	9604.8298764	ppb		100
74) 4-Bromophenyl-phenylether	5.995	248	27848	9535.9568611	ppb		90
75) Hexachlorobenzene	6.048	284	31371	9196.1430755	ppb		99
76) n-octadecane	6.236	55	19676	8631.4403952	ppb		100
77) Pentachlorophenol	6.195	266	11706	8043.4149505	ppb		98
78) Phenanthrene	6.366	178	151616	9351.3664803	ppb		99
79) Anthracene	6.407	178	152674	9917.6724685	ppb		98
80) Carbazole	6.531	167	135830	10314.6742137	ppb		99
81) Di-n-butyl phthalate	6.795	149	187224	9491.7916435	ppb		99
83) Fluoranthene	7.360	202	150751	9502.1110437	ppb		99
86) Pyrene	7.583	202	156977	8897.3825763	ppb		99
88) Benzylbutyl phthalate	8.319	149	73740	9107.1006176	ppb		97
90) Benzo(a)anthracene	9.095	228	128467	9770.8170872	ppb		99
91) Chrysene	9.148	228	131331	9457.0343856	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.177	149	104028	8708.3756522	ppb		99
93) Di-n-octyl phthalate	10.377	149	154290	8506.4476678	ppb		99
95) Benzo(b)fluoranthene	11.001	252	117962	9213.0472428	ppb		100
96) Benzo(k)fluoranthene	11.054	252	126080	9630.3948039	ppb		99
97) Benzo(a)pyrene	11.648	252	100734	9706.0216441	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.736	276	91330	9668.6280520	ppb		97
99) Dibenz(a,h)anthracene	13.783	278	104495	9869.9144856	ppb		98
100) Benzo(g,h,i)perylene	14.089	276	110936	9891.4243184	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\042922B\  
Data File : 0429B\_02.D  
Acq On : 29 Apr 2022 5:31 pm  
Operator : 3545  
Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
Misc : SVMS CAL ISTD 22D16229 exp. 10/16/22  
ALS Vial : 3 Sample Multiplier: 1

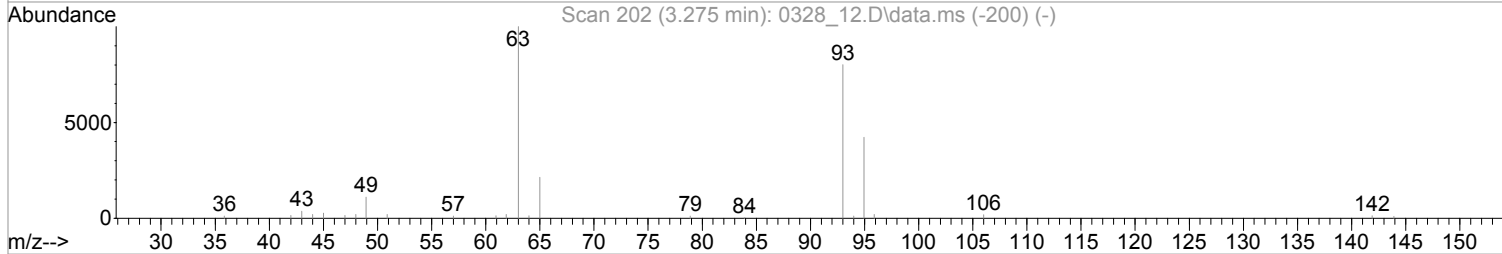
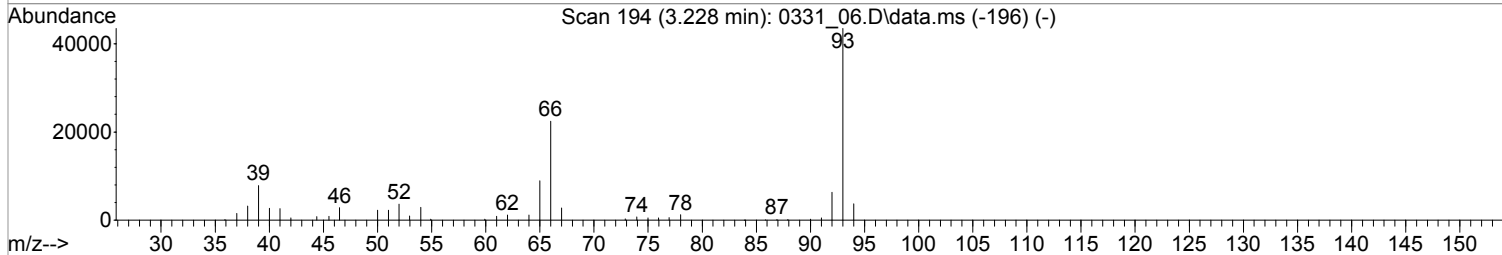
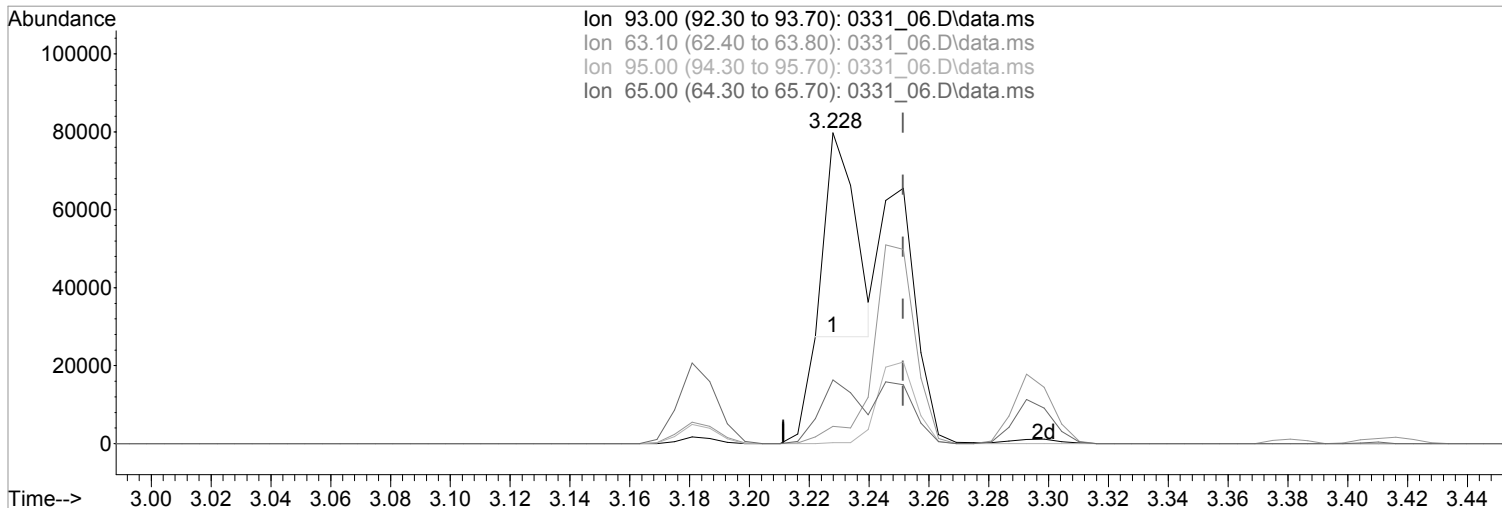
Quant Time: Apr 29 19:29:41 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

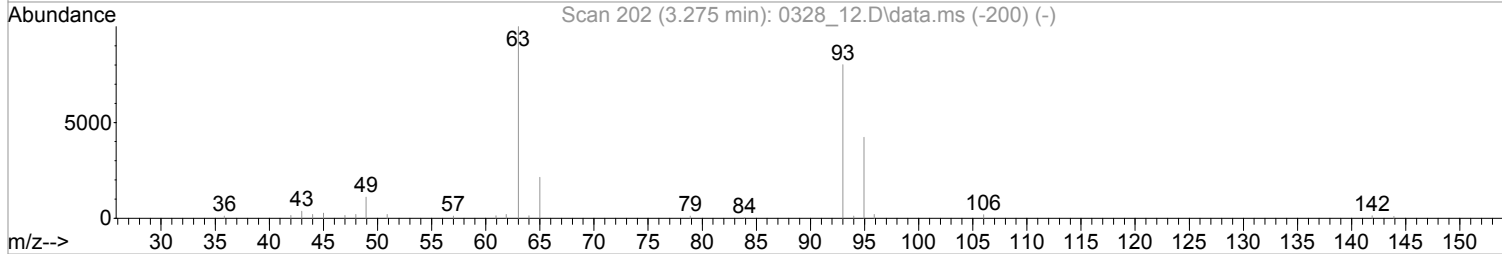
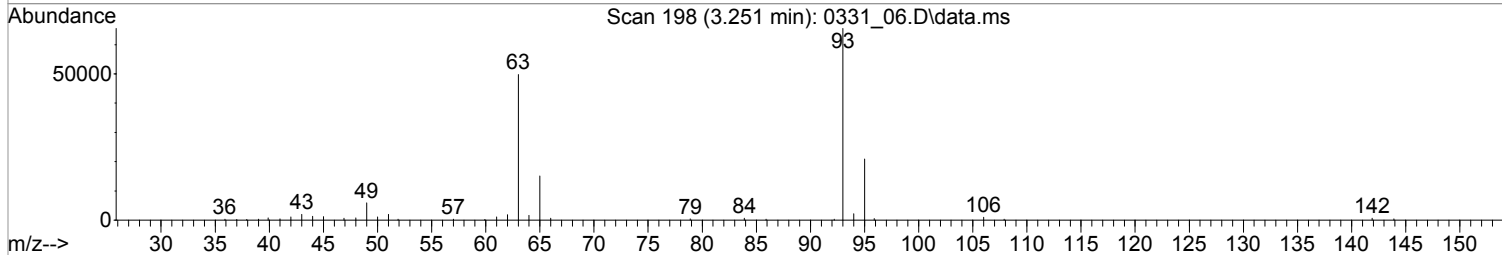
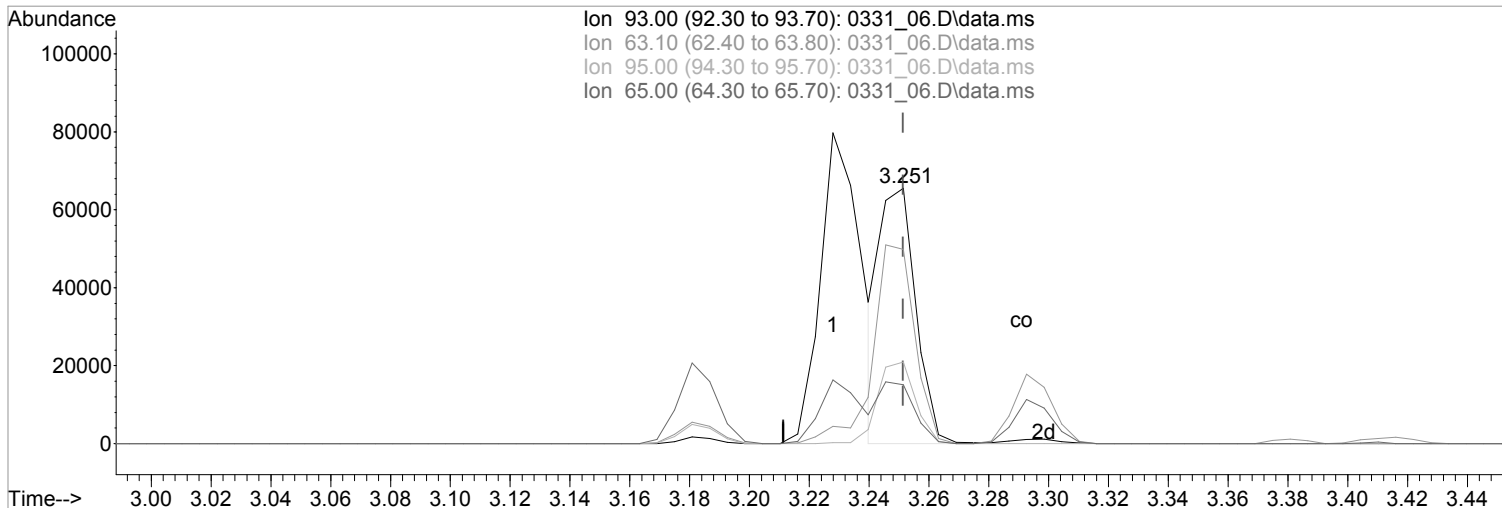
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 6479.8676227 ppb  
 Qvalue = 37  
 response 35244

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.09#
95.00	31.90	0.47#
65.00	23.10	19.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (0.000) 10000.000000 ppb m

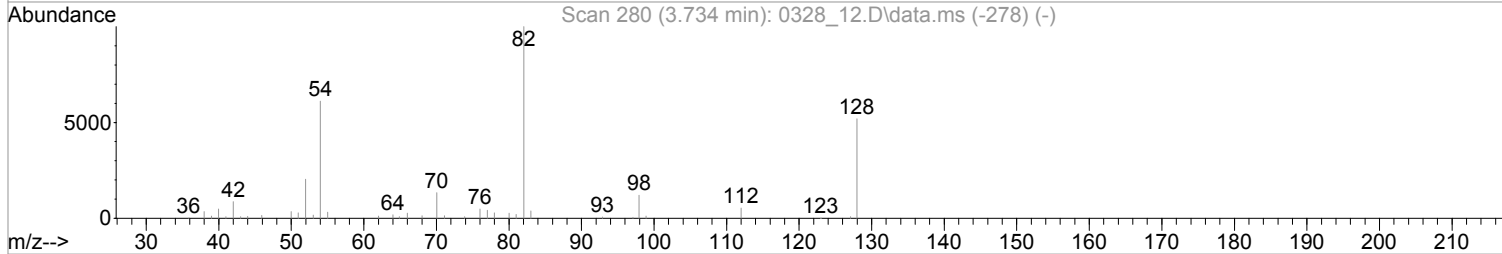
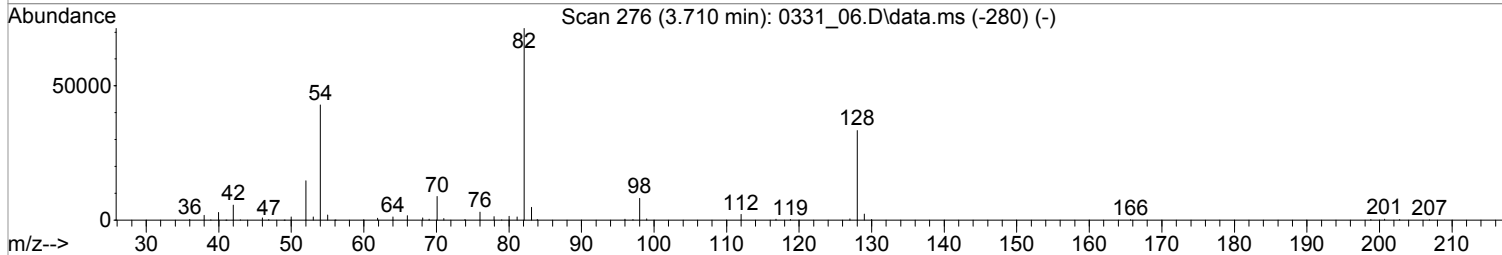
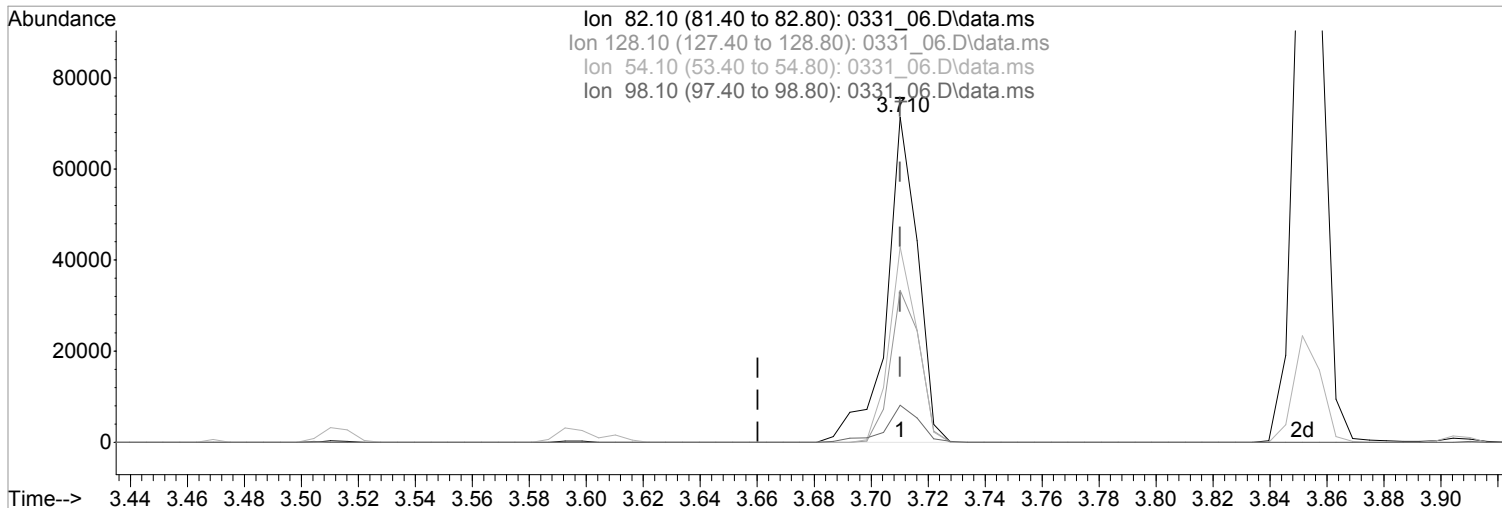
response 54390

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.04
95.00	31.90	31.89
65.00	23.10	23.09

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

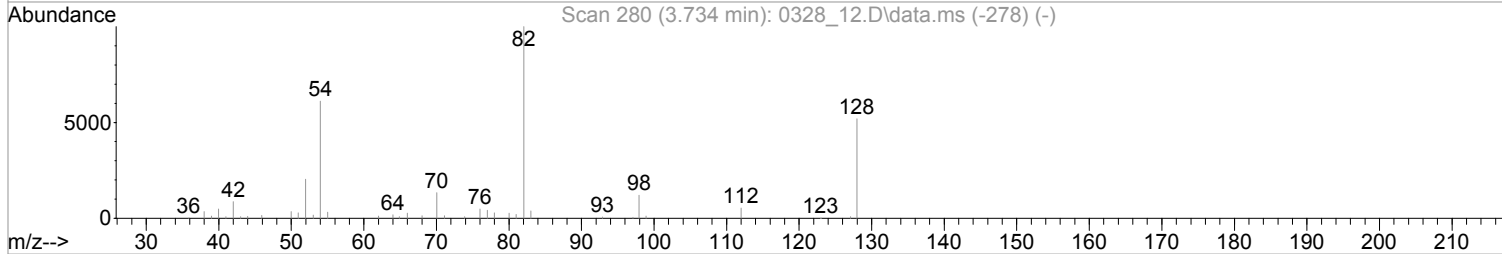
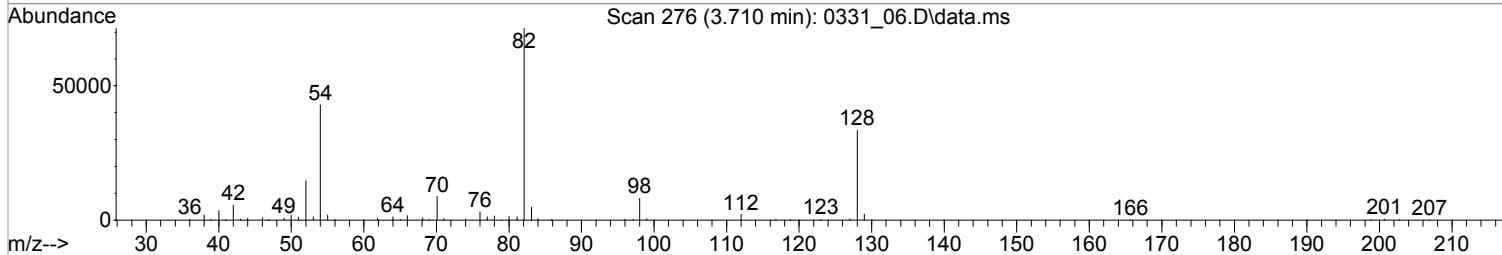
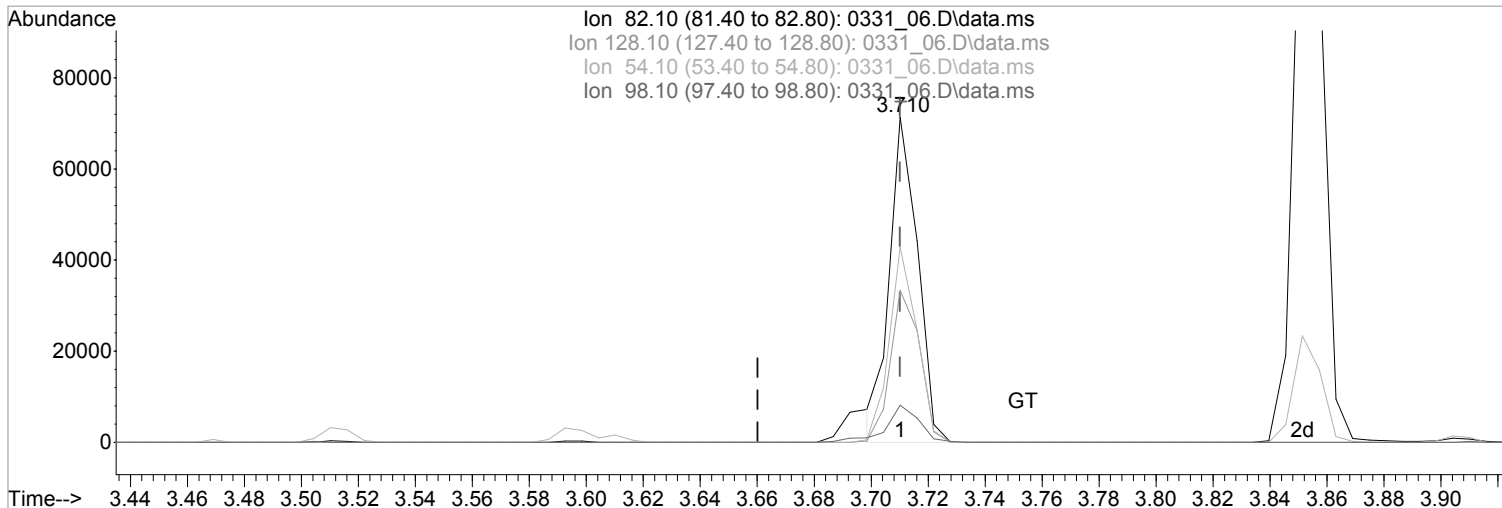
(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 11089.1251693 ppb  
 Qvalue = 100  
 response 54024

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	46.75
54.10	60.00	60.04
98.10	11.40	11.42

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 10000.0000000 ppb m

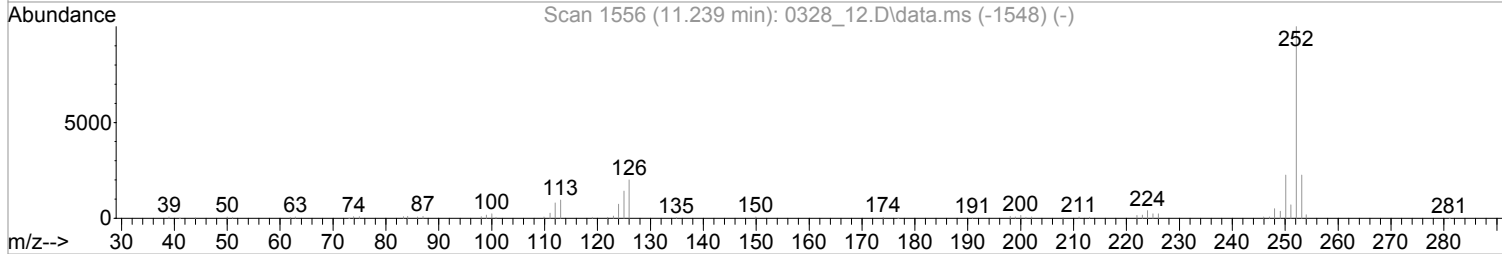
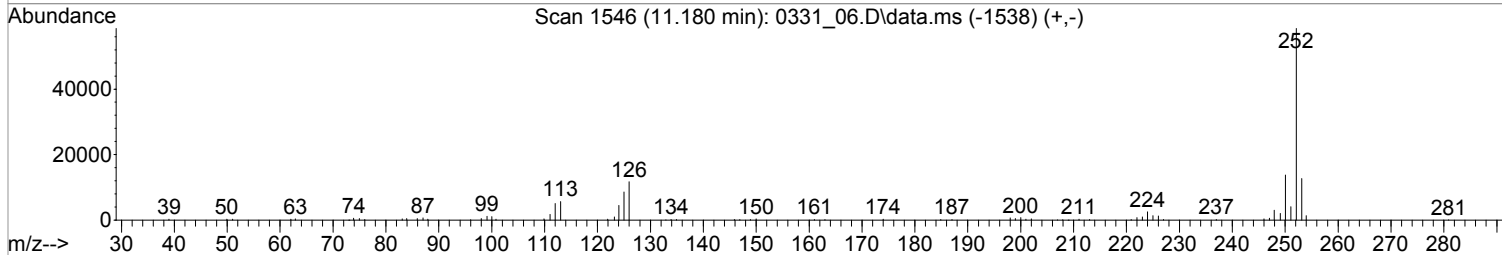
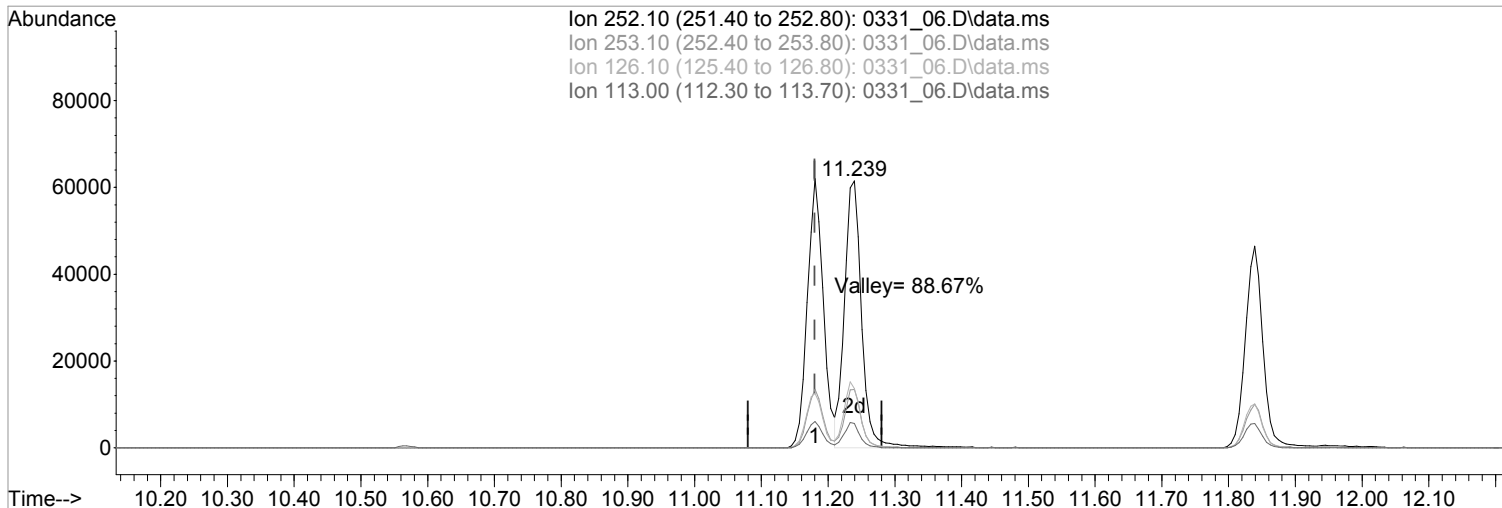
response 48718

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	46.75
54.10	60.00	60.04
98.10	11.40	11.42

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

(95) Benzo(b)fluoranthene (MT)  
 11.180min (0.000) 10000.0000000 ppb  
 Qvalue = 100  
 response 103049

Ion	Exp%	Act%
252.10	100	100
253.10	21.80	21.75
126.10	20.00	20.04
113.00	9.70	9.74

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:06:30 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.410	152	32792	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.140	136	134078	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	70723	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.434	188	112936	8000.0000000	ppb	0.00
84) Chrysene-d12	9.251	240	84930	8000.0000000	ppb	0.00
94) Perylene-d12	11.957	264	75119	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.740	112	106152	20861.0973521	ppb	0.00
Spiked Amount	20000.000		Recovery	=	104.31%	
7) Phenol-d5	3.175	99	126213	21001.8195808	ppb	0.00
Spiked Amount	20000.000		Recovery	=	105.01%	
24) Nitrobenzene-d5	3.710	82	103619m	20771.1930820	ppb	0.00
Spiked Amount	10000.000		Recovery	=	207.71%	
50) 2-Fluorobiphenyl	4.828	172	223030	19027.3520423	ppb	0.00
Spiked Amount	10000.000		Recovery	=	190.27%	
73) 2,4,6-Tribromophenol	5.892	330	25243	24542.1885073	ppb	0.00
Spiked Amount	20000.000		Recovery	=	122.71%	
87) p-Terphenyl-d14	7.845	244	237308	19778.2683501	ppb	0.00
Spiked Amount	10000.000		Recovery	=	197.78%	
<b>Target Compounds</b>						
2) Pyridine	2.210	79	111293	20520.0582576	ppb	98
3) N-Nitrosodimethylamine	2.199	42	54707	17512.4649974	ppb	97
5) Aniline	3.228	66	57894	20863.9637808	ppb	# 16
6) bis(2-Chloroethyl)ether	3.251	93	110886m	19845.2727506	ppb	
8) Phenol	3.181	94	133099	20780.4249322	ppb	98
10) 2-Chlorophenol	3.293	128	112522	21384.5068803	ppb	98
11) n-Decane	3.293	41	68989	18920.4635757	ppb	# 100
12) 1,3-Dichlorobenzene	3.381	146	123575	19382.0792001	ppb	99
13) 1,4-Dichlorobenzene	3.416	146	124782	19676.3481368	ppb	97
14) Benzyl Alcohol	3.469	79	82542	21814.2426793	ppb	99
15) 1,2-Dichlorobenzene	3.504	146	118829	19192.9016445	ppb	98
16) bis(2-Chloroisopropyl)...	3.540	121	41324	19661.8731881	ppb	99
17) 2,2-oxybis(1-chloropro...	3.540	121	41324	19661.8731881	ppb	99
18) 2-Methylphenol	3.516	108	101827	21477.9744707	ppb	99
19) Hexachloroethane	3.698	117	52039	19890.3601889	ppb	98
20) N-Nitrosodi-n-propylamine	3.610	70	72194	21832.9659564	ppb	98
21) 3&4-Methyl phenol	3.598	107	111931	21421.6043465	ppb	96
25) Nitrobenzene	3.722	77	105247	20884.2027666	ppb	98
26) Isophorone	3.857	82	210585	21841.1908819	ppb	91
27) 2-Nitrophenol	3.904	139	52249	24618.0078291	ppb	95
28) 2,4-Dimethylphenol	3.910	107	103310	21041.1313099	ppb	96
29) bis(2-Chlorethoxy)methane	3.969	93	136801	20048.2800815	ppb	100
30) 2,4-Dichlorophenol	4.045	162	83454	22074.7247902	ppb	99
32) 1,2,4-Trichlorobenzene	4.104	180	94214	19197.4563184	ppb	97
34) Naphthalene	4.157	128	329834	18763.7653181	ppb	100
35) 4-Chloroaniline	4.175	65	36268	21893.3392059	ppb	96
36) Hexachloro-1,3-butadiene	4.222	225	50893	19291.4613634	ppb	97
40) 4-Chloro-3-methylphenol	4.463	107	87785	23024.4502760	ppb	100
41) 2-Methylnaphthalene	4.593	142	211946	19970.4058612	ppb	100
42) 1-Methylnaphthalene	4.657	142	205339	19719.8276242	ppb	99
47) Hexachlorocyclopentadiene	4.692	237	48263	22542.2258944	ppb	99
48) 2,4,6-Trichlorophenol	4.769	196	56577	23494.5231526	ppb	99



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

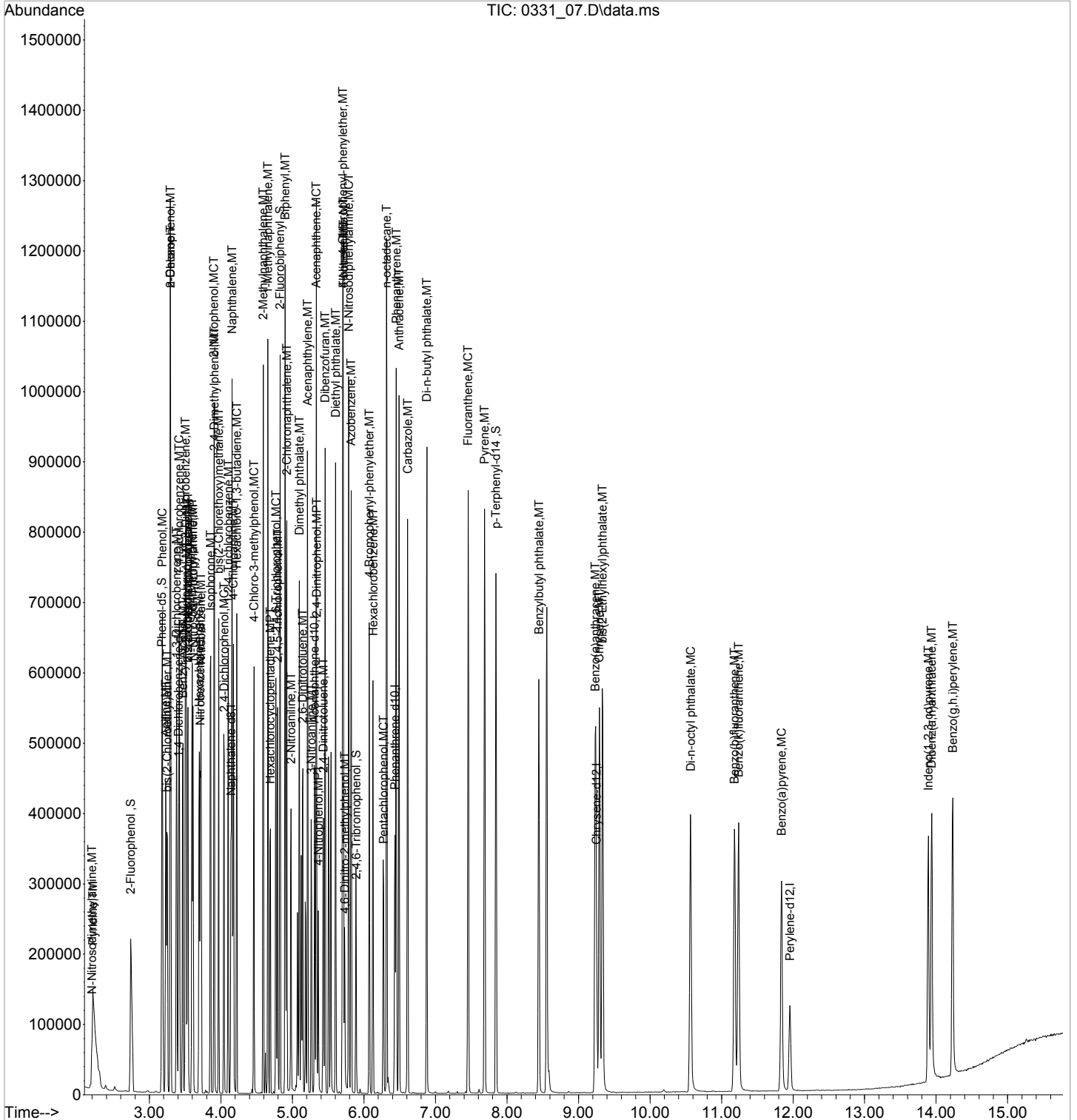
Quant Time: Apr 04 16:06:30 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	59315	24551.4730430	ppb		98
51) Biphenyl	4.898	154	251259	19173.6958276	ppb		100
52) 2-Chloronaphthalene	4.922	162	193285	19212.2177403	ppb		99
53) 2-Nitroaniline	4.981	138	59759	25988.3511479	ppb		98
54) Acenaphthylene	5.210	152	303372	20149.8725762	ppb		100
55) Dimethyl phthalate	5.098	163	227095	21158.3884957	ppb		97
56) 2,6-Dinitrotoluene	5.145	165	51741	24536.2501075	ppb	#	80
57) 3-Nitroaniline	5.263	138	47887	25616.1751347	ppb		99
58) Acenaphthene	5.334	153	202163	19347.9009194	ppb		98
59) 2,4-Dinitrophenol	5.340	184	14976	29432.6206918	ppb	#	70
60) Dibenzofuran	5.457	168	267370	19040.7081128	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	61558	25802.4933154	ppb		99
63) 4-Nitrophenol	5.363	139	33738	26954.3131233	ppb		97
64) Fluorene	5.710	166	226042	19747.7794311	ppb		98
65) 4-Chlorophenyl-phenyle...	5.704	204	101491	19118.9264213	ppb		99
66) Diethyl phthalate	5.604	149	234955	20771.6196118	ppb		100
67) 4-Nitroaniline	5.710	138	24185	16136.9020443	ppb		95
68) Azobenzene	5.822	77	238153	21105.6381926	ppb		99
71) 4,6-Dinitro-2-methylph...	5.734	198	24209	33263.5986863	ppb		96
72) N-Nitrosodiphenylamine	5.787	169	183408	21087.6244155	ppb		100
74) 4-Bromophenyl-phenylether	6.075	248	54290	19982.1021032	ppb		95
75) Hexachlorobenzene	6.128	284	62307	18977.7188118	ppb		100
76) n-octadecane	6.316	55	43712	20878.0975737	ppb		99
77) Pentachlorophenol	6.275	266	30833	25917.7797076	ppb		99
78) Phenanthrene	6.451	178	296157	19005.7829735	ppb		100
79) Anthracene	6.492	178	293833	20894.2352570	ppb		98
80) Carbazole	6.610	167	250897	21148.1675444	ppb		99
81) Di-n-butyl phthalate	6.881	149	397421	23698.6563151	ppb		100
83) Fluoranthene	7.457	202	304212	21412.2235528	ppb		100
86) Pyrene	7.686	202	314336	18911.5981484	ppb		99
88) Benzylbutyl phthalate	8.445	149	150478	26024.5200637	ppb		97
90) Benzo(a)anthracene	9.233	228	242646	21018.4091374	ppb		99
91) Chrysene	9.292	228	250717	19529.3570288	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.333	149	225383	26777.0888674	ppb		98
93) Di-n-octyl phthalate	10.569	149	335350	29247.6424441	ppb		99
95) Benzo(b)fluoranthene	11.180	252	230240	22096.3443995	ppb		98
96) Benzo(k)fluoranthene	11.239	252	239541	22391.4257258	ppb		99
97) Benzo(a)pyrene	11.839	252	191805	23713.6445070	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.892	276	170517	22398.0952594	ppb		98
99) Dibenz(a,h)anthracene	13.939	278	192016	22172.7985225	ppb		98
100) Benzo(g,h,i)perylene	14.233	276	201342	21390.6206879	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_07.D  
Acq On : 31 Mar 2022 6:49 pm  
Operator : 3545  
Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 7 Sample Multiplier: 1

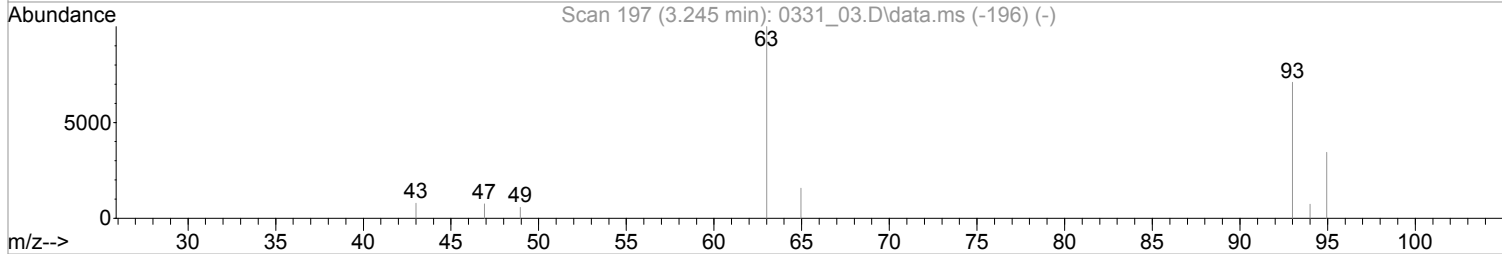
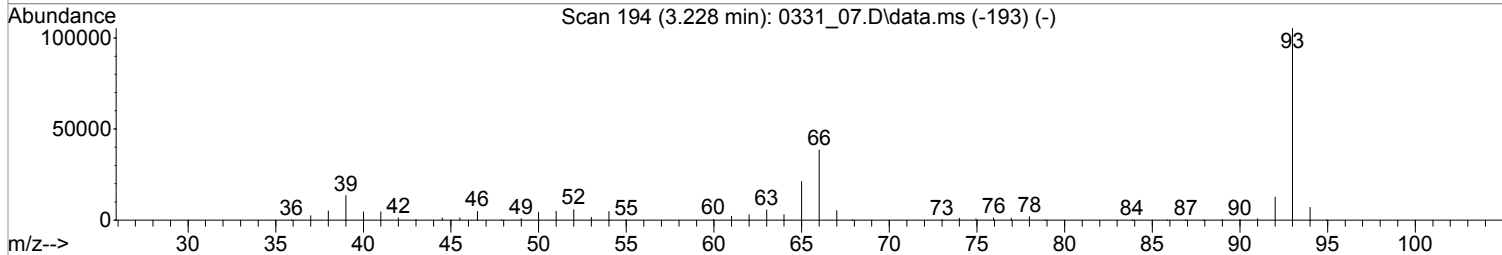
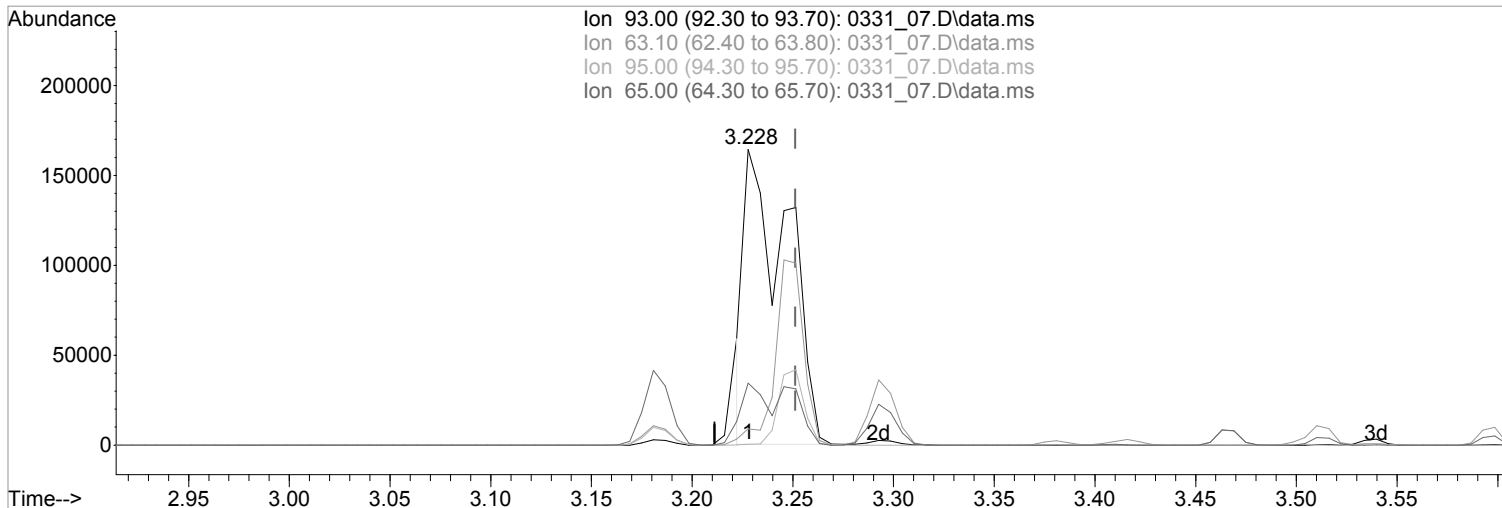
Quant Time: Apr 04 16:06:30 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:05:43 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

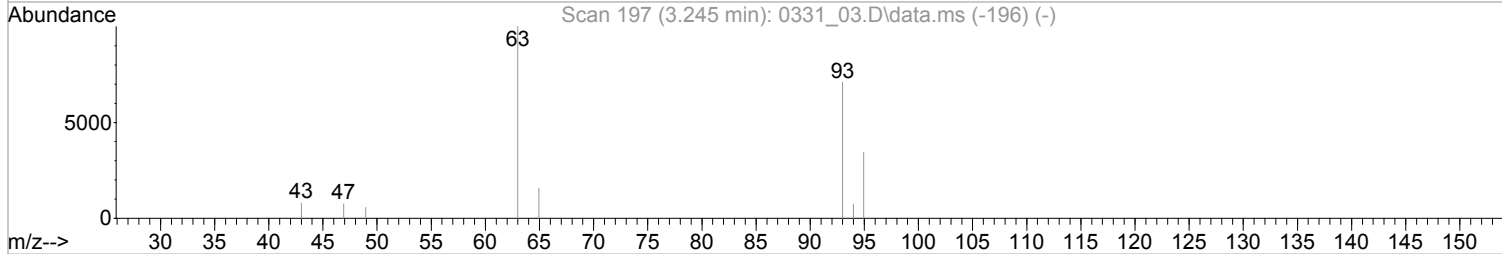
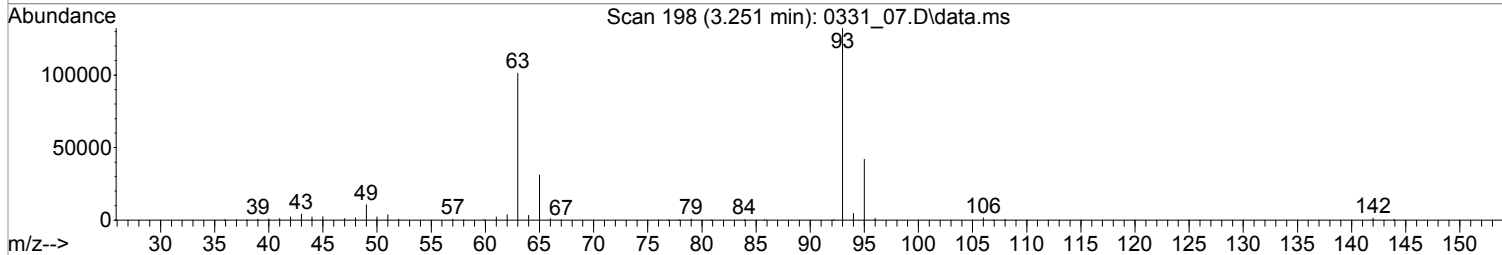
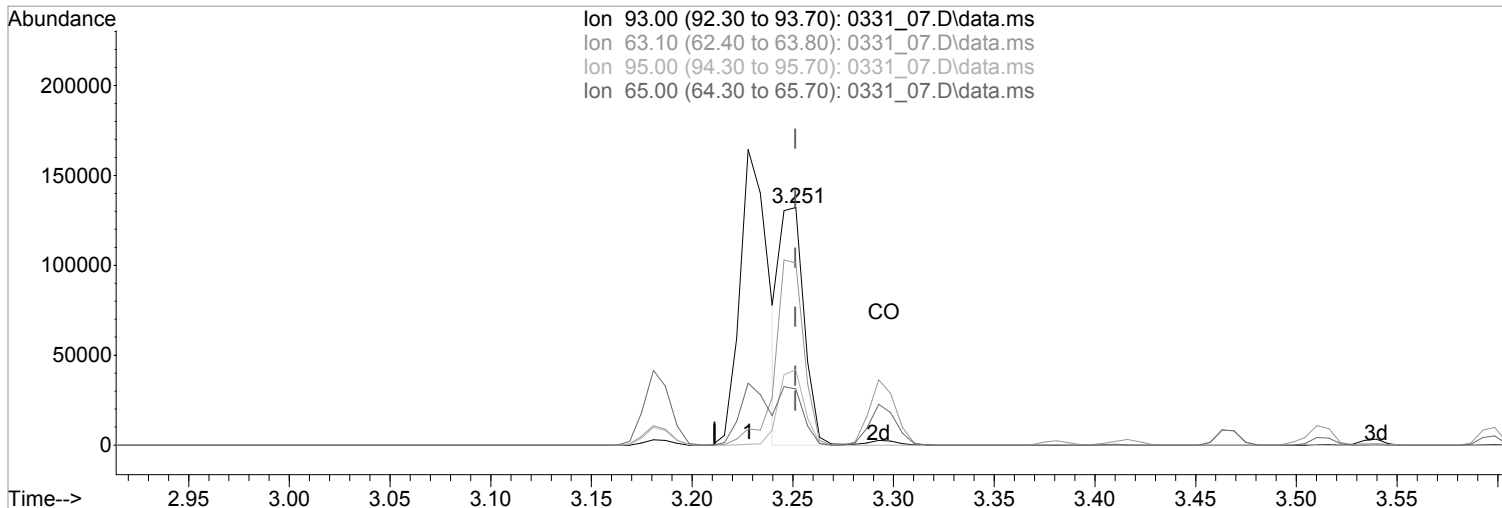
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 43763.3668852 ppb  
 Qvalue = 38  
 response 244529

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.53#
95.00	31.90	0.24#
65.00	23.10	20.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (+0.000) 19845.2727506 ppb m

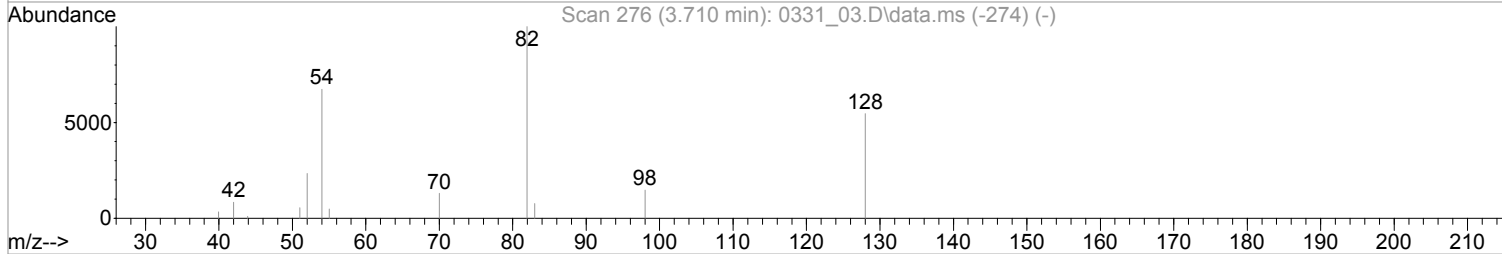
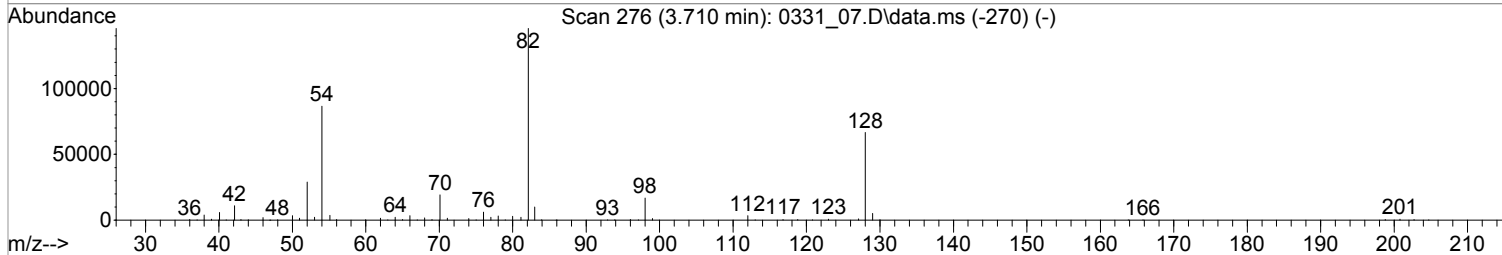
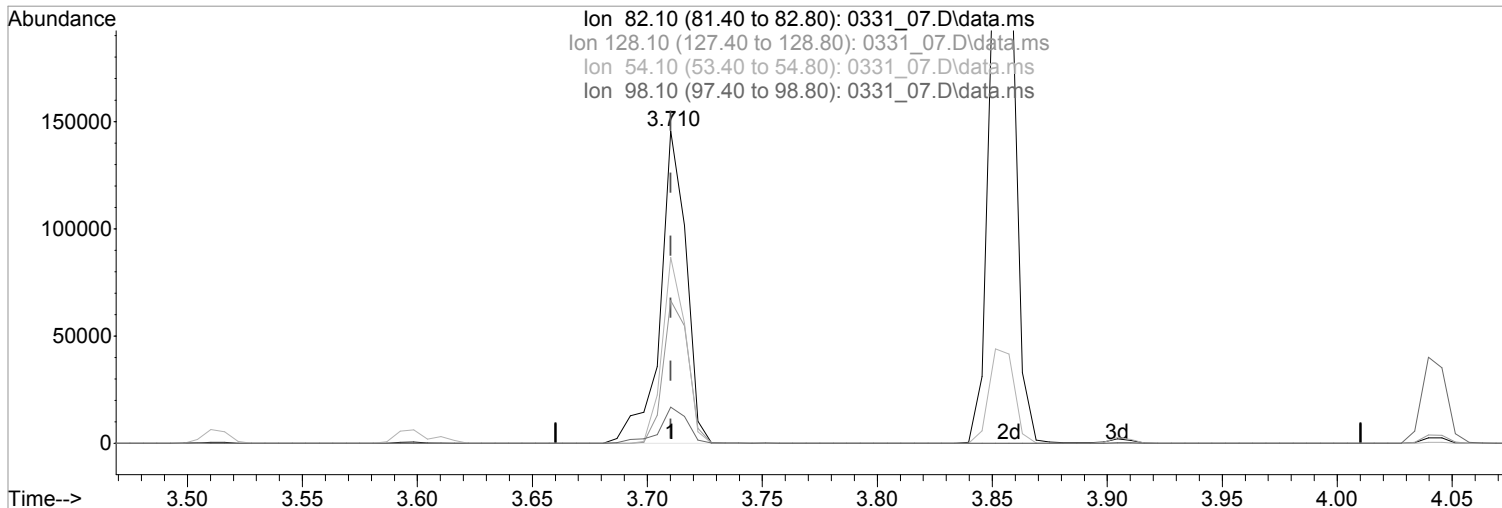
response 110886

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.56
95.00	31.90	31.70
65.00	23.10	23.63

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

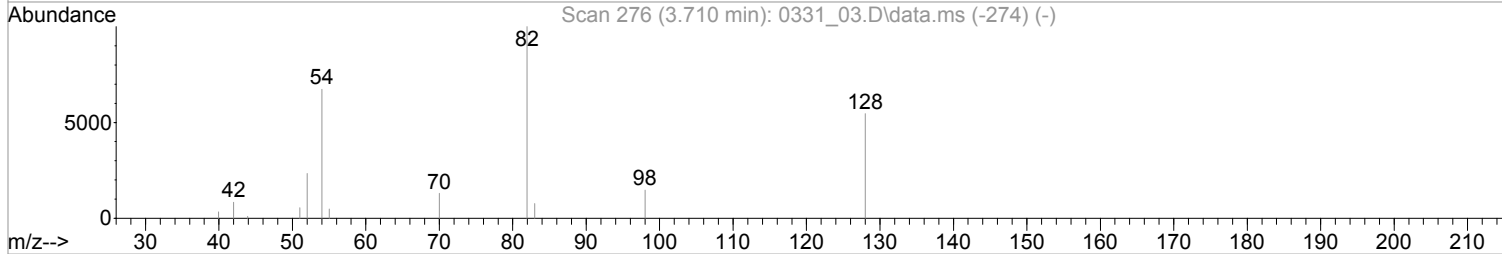
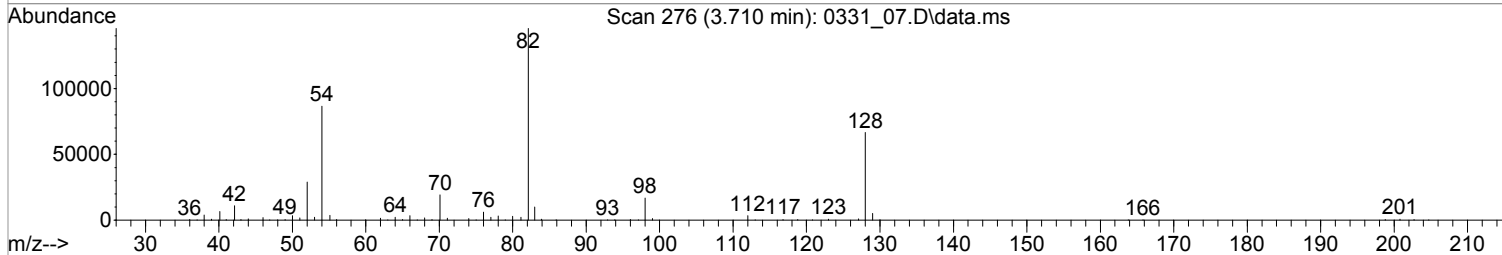
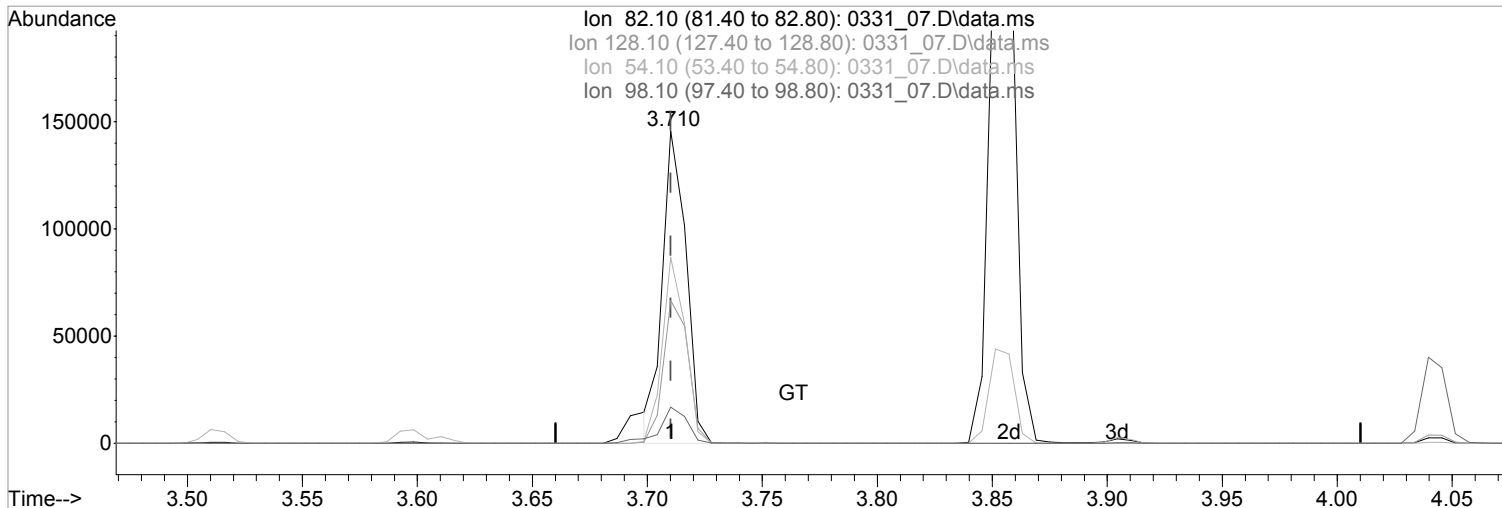
(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 22875.1937247 ppb  
 Qvalue = 99  
 response 114115

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.73
54.10	60.00	59.51
98.10	11.40	11.59

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 20771.1930820 ppb m

response 103619

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.73
54.10	60.00	59.51
98.10	11.40	11.59

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:49 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.410	152	33533	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	132888	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	71209	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	113292	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	87467	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	76329	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.740	112	157758	30058.8366266	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	150.29%		
7) Phenol-d5	3.175	99	188380	30349.6666052	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	151.75%		
24) Nitrobenzene-d5	3.710	82	156535m	31417.3001484	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	314.17%		
50) 2-Fluorobiphenyl	4.828	172	327473	28019.5521228	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	280.20%		
73) 2,4,6-Tribromophenol	5.893	330	40030	36711.9598208	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	183.56%		
87) p-Terphenyl-d14	7.845	244	360600	29247.0817353	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	292.47%		
<b>Target Compounds</b>							
					Qvalue		
2) Pyridine	2.210	79	166662	29894.4173979	ppb	100	
3) N-Nitrosodimethylamine	2.199	42	78907	25331.1714229	ppb	95	
5) Aniline	3.228	66	87768	30666.1270466	ppb	#	21
6) bis(2-Chloroethyl)ether	3.252	93	167703m	29396.0633812	ppb		
8) Phenol	3.181	94	199062	30156.9423564	ppb	98	
10) 2-Chlorophenol	3.293	128	167459	30696.8769867	ppb	98	
11) n-Decane	3.293	41	100554	27262.1829473	ppb	#	100
12) 1,3-Dichlorobenzene	3.381	146	181714	28044.3611384	ppb	99	
13) 1,4-Dichlorobenzene	3.416	146	183675	28414.8902144	ppb	96	
14) Benzyl Alcohol	3.469	79	124720	31658.3456118	ppb	99	
15) 1,2-Dichlorobenzene	3.505	146	175099	27881.5403292	ppb	98	
16) bis(2-Chloroisopropyl)...	3.540	121	61647	28780.6723560	ppb	98	
17) 2,2-oxybis(1-chloropro...	3.540	121	61647	28780.6723560	ppb	98	
18) 2-Methylphenol	3.516	108	150526	30596.0667961	ppb	98	
19) Hexachloroethane	3.699	117	77143	28865.7035157	ppb	98	
20) N-Nitrosodi-n-propylamine	3.610	70	108538	31521.0408970	ppb	98	
21) 3&4-Methyl phenol	3.599	107	166101	30650.5927115	ppb	97	
25) Nitrobenzene	3.722	77	159382	31629.7704116	ppb	99	
26) Isophorone	3.857	82	319221	32801.1162840	ppb	91	
27) 2-Nitrophenol	3.904	139	80408	36138.7503562	ppb	94	
28) 2,4-Dimethylphenol	3.910	107	156274	31782.4235741	ppb	96	
29) bis(2-Chlorethoxy)methane	3.969	93	204569	30233.5957475	ppb	100	
30) 2,4-Dichlorophenol	4.046	162	125694	32863.6826156	ppb	98	
32) 1,2,4-Trichlorobenzene	4.104	180	138967	28801.2375631	ppb	97	
34) Naphthalene	4.157	128	484005	28128.6272547	ppb	99	
35) 4-Chloroaniline	4.175	65	54919	32675.6461647	ppb	96	
36) Hexachloro-1,3-butadiene	4.222	225	75737	29172.5927324	ppb	97	
40) 4-Chloro-3-methylphenol	4.463	107	134853	34638.6550486	ppb	98	
41) 2-Methylnaphthalene	4.593	142	316159	30065.4368411	ppb	100	
42) 1-Methylnaphthalene	4.657	142	304694	29606.4143326	ppb	100	
47) Hexachlorocyclopentadiene	4.693	237	75322	34074.3338440	ppb	99	
48) 2,4,6-Trichlorophenol	4.769	196	87140	34725.8348305	ppb	100	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:49 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

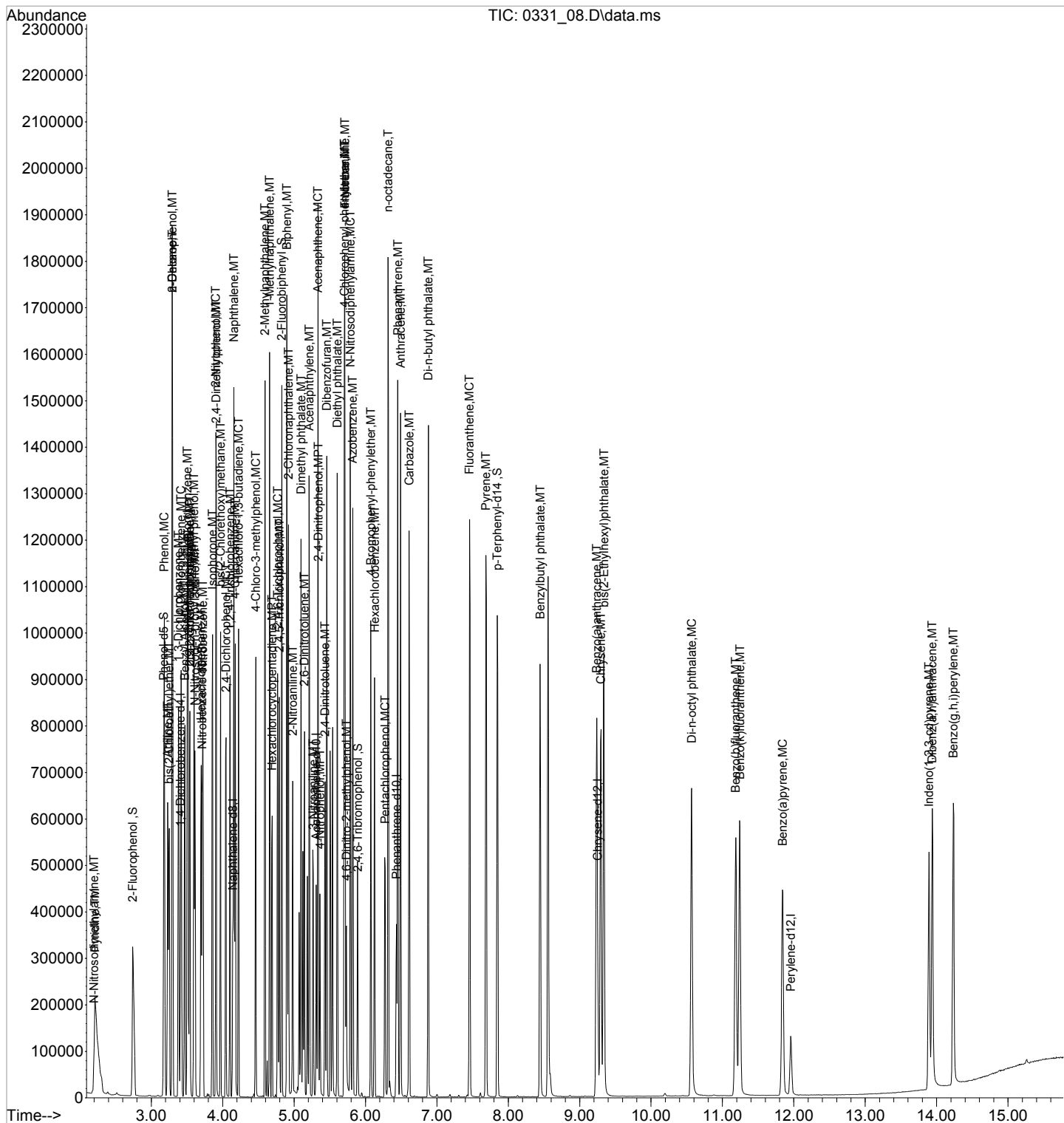
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.793	196	89614	35235.8306483	ppb		99
51) Biphenyl	4.899	154	370899	28344.5233795	ppb		99
52) 2-Chloronaphthalene	4.922	162	290244	28880.4016682	ppb		99
53) 2-Nitroaniline	4.981	138	95458	38358.7007923	ppb		99
54) Acenaphthylene	5.210	152	458154	30177.5291948	ppb		99
55) Dimethyl phthalate	5.099	163	343325	31405.3999860	ppb		94
56) 2,6-Dinitrotoluene	5.146	165	79641	35496.2824813	ppb		83
57) 3-Nitroaniline	5.269	138	74618	37042.4932595	ppb	#	82
58) Acenaphthene	5.334	153	302900	28980.0110439	ppb		98
59) 2,4-Dinitrophenol	5.340	184	25983	43826.4078457	ppb	#	52
60) Dibenzofuran	5.457	168	402364	28734.3638947	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	97371	37793.9835615	ppb		95
63) 4-Nitrophenol	5.363	139	54940	40107.1900866	ppb		98
64) Fluorene	5.710	166	338730	29464.9250158	ppb		98
65) 4-Chlorophenyl-phenyle...	5.704	204	151460	28589.2736068	ppb		98
66) Diethyl phthalate	5.604	149	355063	30937.0312942	ppb		99
67) 4-Nitroaniline	5.710	138	39081	27211.9905793	ppb		94
68) Azobenzene	5.822	77	356467	31032.1721850	ppb		100
71) 4,6-Dinitro-2-methylph...	5.734	198	40447	47521.4488194	ppb		96
72) N-Nitrosodiphenylamine	5.787	169	271452	30777.8016182	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	82403	30239.5448272	ppb		95
75) Hexachlorobenzene	6.128	284	93062	28547.9722569	ppb		99
76) n-octadecane	6.316	55	65192	30769.5273176	ppb		98
77) Pentachlorophenol	6.275	266	49246	37560.7979317	ppb		99
78) Phenanthrene	6.451	178	440824	28484.0401965	ppb		99
79) Anthracene	6.493	178	437751	30755.2925924	ppb		98
80) Carbazole	6.610	167	385203	31999.4175581	ppb		99
81) Di-n-butyl phthalate	6.881	149	608371	34873.9743472	ppb		100
83) Fluoranthene	7.457	202	461554	31933.8146061	ppb		100
86) Pyrene	7.687	202	472544	27909.1131163	ppb		99
88) Benzylbutyl phthalate	8.445	149	240272	38056.0281756	ppb		98
90) Benzo(a)anthracene	9.239	228	379776	31620.6351628	ppb		99
91) Chrysene	9.298	228	380085	28883.5511661	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.339	149	354516	38301.5951884	ppb		98
93) Di-n-octyl phthalate	10.569	149	549350	42584.0048156	ppb		100
95) Benzo(b)fluoranthene	11.186	252	363170	33596.9345021	ppb		98
96) Benzo(k)fluoranthene	11.245	252	363957	32700.0638399	ppb		99
97) Benzo(a)pyrene	11.845	252	303156	35565.4967114	ppb		100
98) Indeno(1,2,3-cd)pyrene	13.892	276	271655	34294.8931437	ppb		99
99) Dibenz(a,h)anthracene	13.939	278	299709	33335.5644575	ppb		97
100) Benzo(g,h,i)perylene	14.233	276	310410	32010.1091947	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_08.D  
Acq On : 31 Mar 2022 7:11 pm  
Operator : 3545  
Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 8 Sample Multiplier: 1

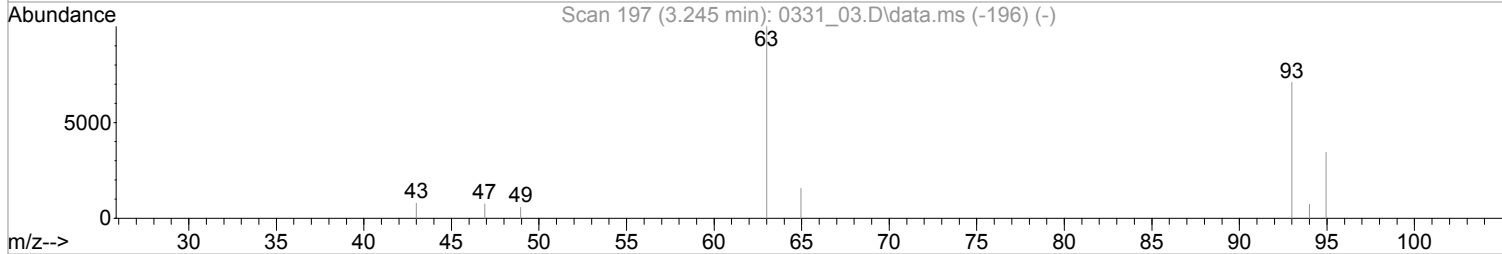
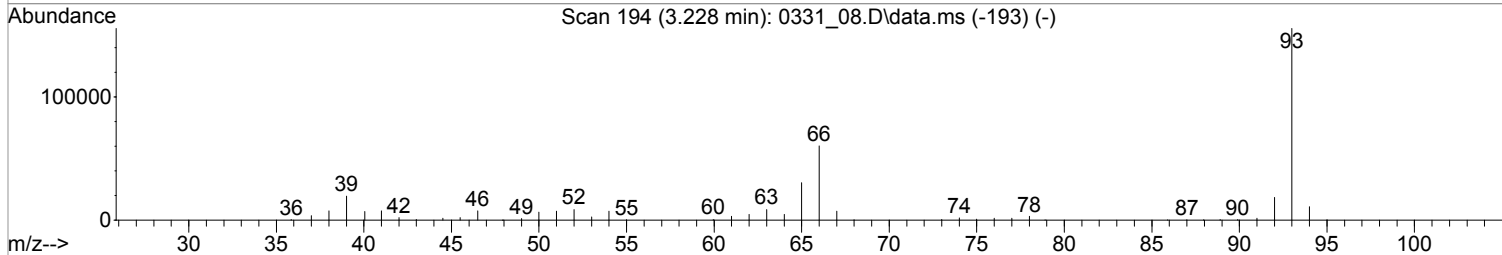
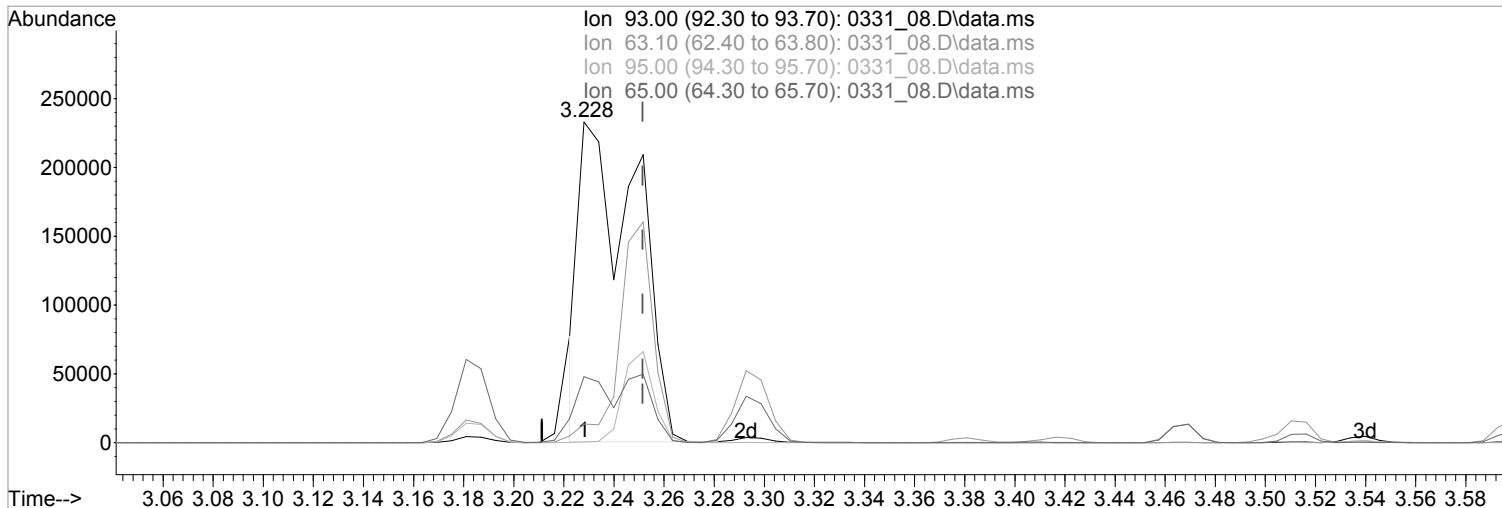
Quant Time: Apr 04 16:07:49 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:07:10 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

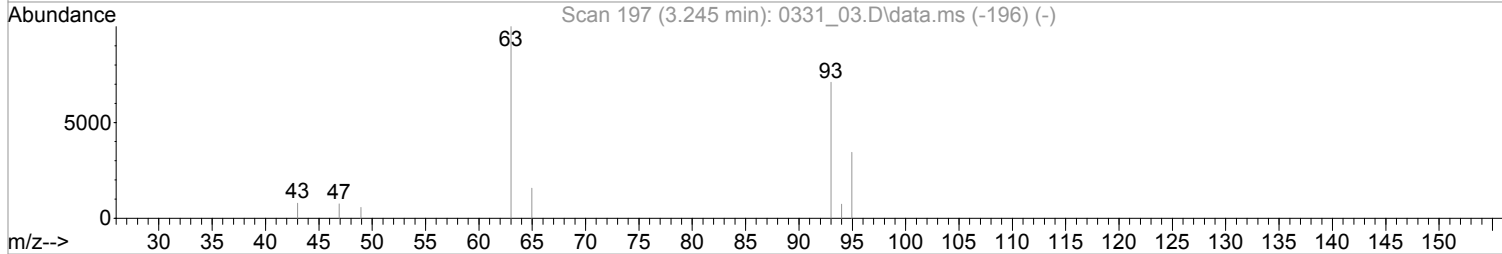
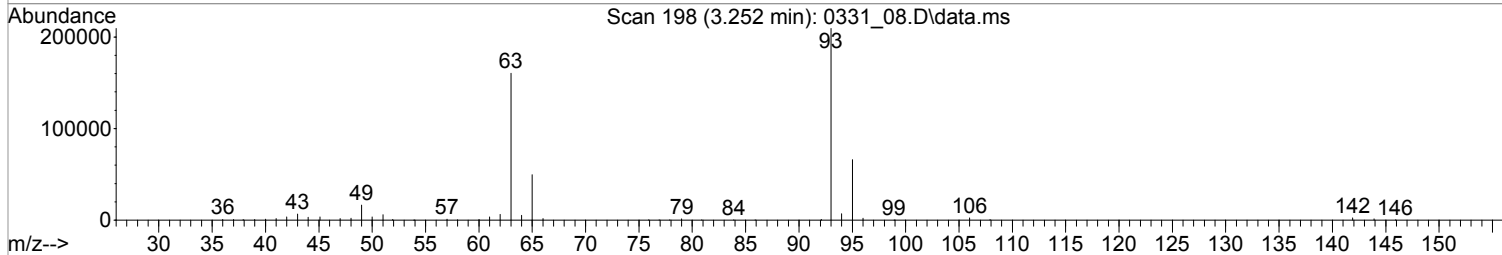
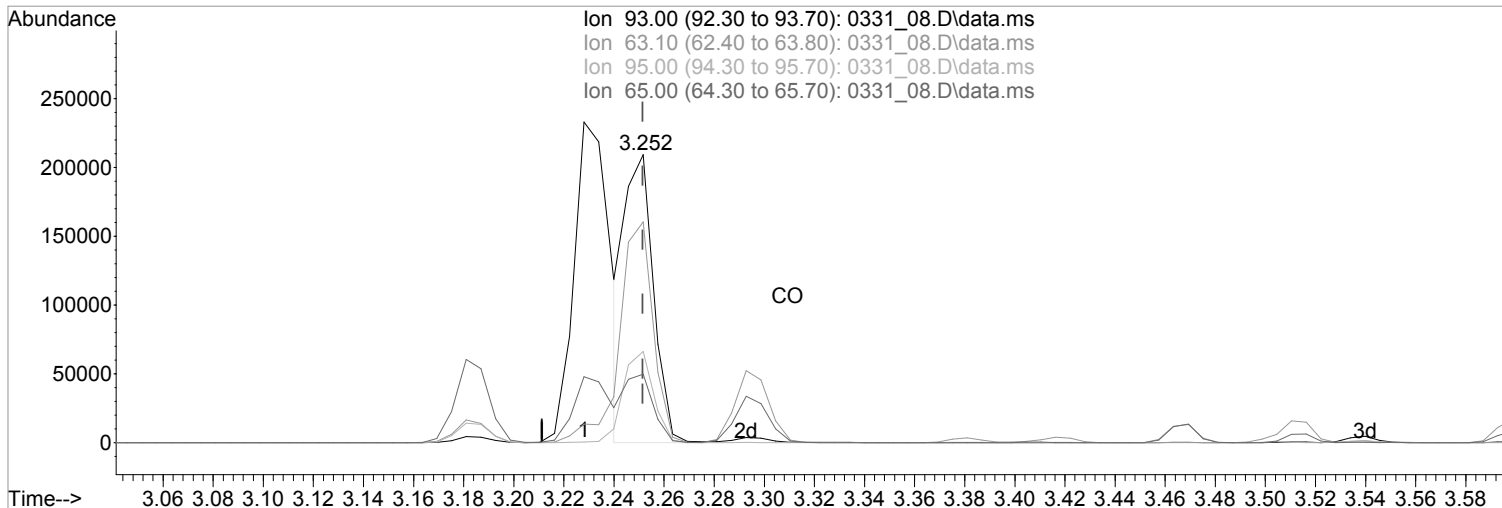
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.023) 64297.1729842 ppb  
 Qvalue = 37  
 response 366812

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	4.74#
95.00	31.90	0.23#
65.00	23.10	20.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.252min (+0.000) 29396.0633812 ppb m

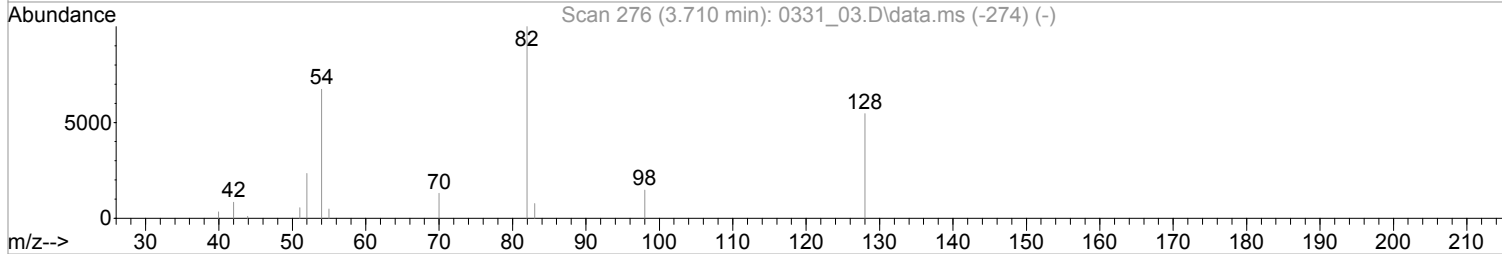
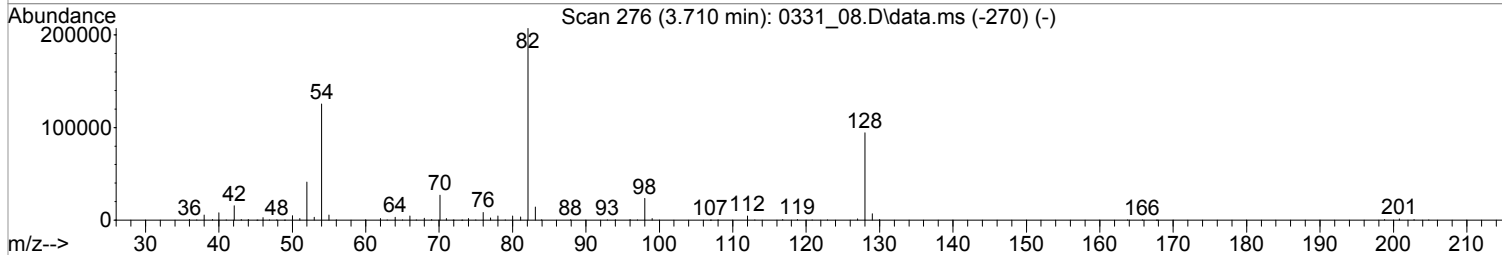
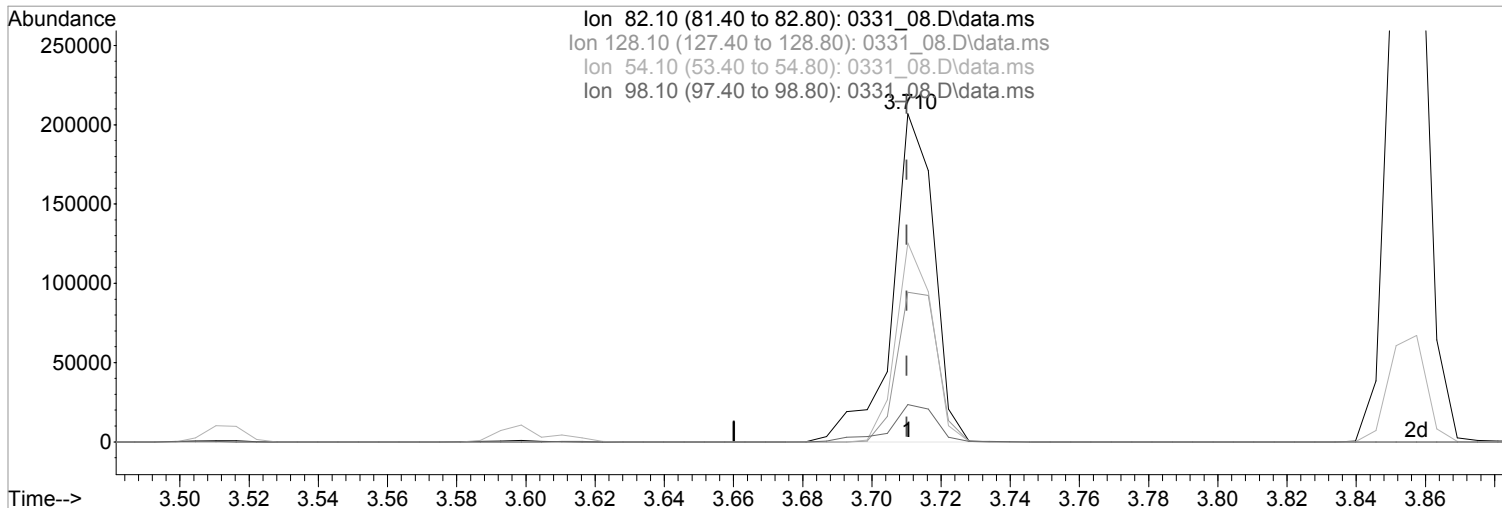
response 167703

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.64
95.00	31.90	31.63
65.00	23.10	23.78

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

(24) Nitrobenzene-d5 (S)

3.710min (+0.000) 34452.1549448 ppb

Qvalue = 99

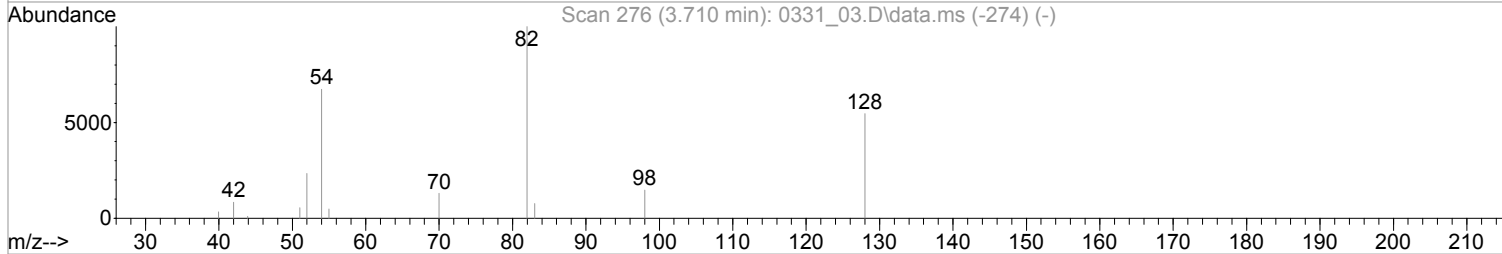
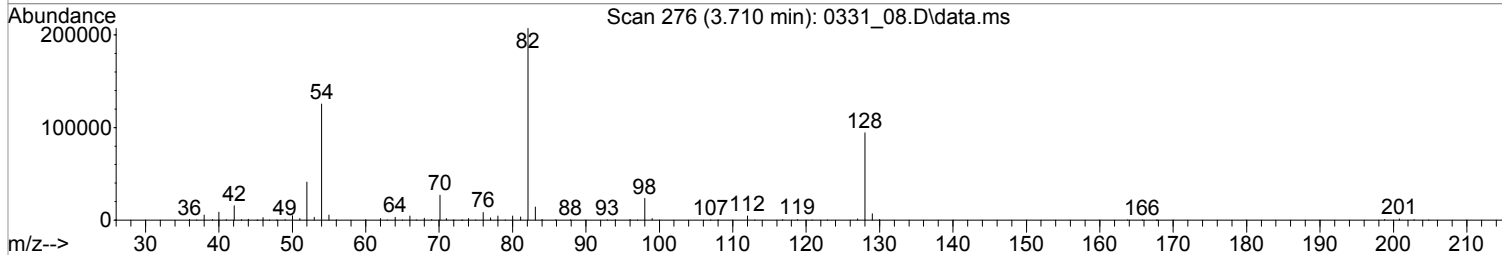
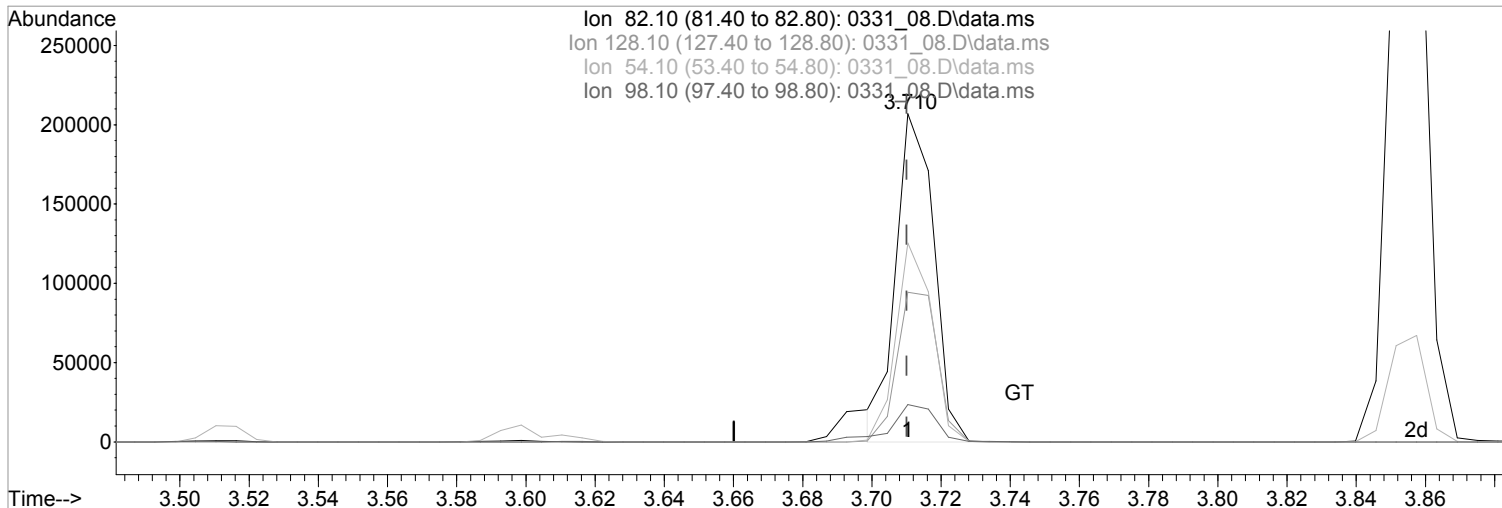
response 171656

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.54
54.10	60.00	60.63
98.10	11.40	11.35

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 31417.3001484 ppb m

response 156535

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.54
54.10	60.00	60.63
98.10	11.40	11.35

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:09:21 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	33061	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	133057	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	71412	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	114930	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	88961	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	77968	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.740	112	203931	39398.3935171	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	196.99%		
7) Phenol-d5	3.175	99	243776	39757.9207209	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	198.79%		
24) Nitrobenzene-d5	3.710	82	206939m	41156.7993172	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	411.57%		
50) 2-Fluorobiphenyl	4.828	172	421450	36358.0213610	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	363.58%		
73) 2,4,6-Tribromophenol	5.892	330	52112	45093.5757565	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	225.47%		
87) p-Terphenyl-d14	7.845	244	468126	37487.3348476	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	374.87%		
Target Compounds							
					Qvalue		
2) Pyridine	2.210	79	215337	39199.7597546	ppb	99	
3) N-Nitrosodimethylamine	2.199	42	101884	34057.7162643	ppb	95	
5) Aniline	3.228	66	113937	40229.0431035	ppb	#	20
6) bis(2-Chloroethyl)ether	3.251	93	219184m	39099.6807544	ppb		
8) Phenol	3.187	94	256473	39374.8144871	ppb	94	
10) 2-Chlorophenol	3.293	128	217896	40356.4763866	ppb	98	
11) n-Decane	3.293	41	127032	35472.1283692	ppb	#	98
12) 1,3-Dichlorobenzene	3.381	146	234296	37078.5499497	ppb	99	
13) 1,4-Dichlorobenzene	3.422	146	235807	37329.3526295	ppb	99	
14) Benzyl Alcohol	3.469	79	162508	41457.2445089	ppb	100	
15) 1,2-Dichlorobenzene	3.504	146	223975	36604.1805905	ppb	98	
16) bis(2-Chloroisopropyl)...	3.540	121	78759	37548.9281211	ppb	99	
17) 2,2-oxybis(1-chloropro...	3.540	121	78759	37548.9281211	ppb	99	
18) 2-Methylphenol	3.516	108	195561	40184.3520115	ppb	99	
19) Hexachloroethane	3.698	117	99275	37916.4240494	ppb	97	
20) N-Nitrosodi-n-propylamine	3.616	70	141625	41367.6274712	ppb	94	
21) 3&4-Methyl phenol	3.598	107	215277	40147.0649295	ppb	97	
25) Nitrobenzene	3.722	77	207934	40842.8260253	ppb	99	
26) Isophorone	3.857	82	414425	41877.8923137	ppb	93	
27) 2-Nitrophenol	3.904	139	106429	45894.6910183	ppb	93	
28) 2,4-Dimethylphenol	3.910	107	201269	40480.4960184	ppb	97	
29) bis(2-Chlorethoxy)methane	3.969	93	263088	38782.5012305	ppb	99	
30) 2,4-Dichlorophenol	4.045	162	161714	41566.3970266	ppb	95	
32) 1,2,4-Trichlorobenzene	4.104	180	177380	36961.8874658	ppb	97	
34) Naphthalene	4.157	128	612175m	35905.5101669	ppb		
35) 4-Chloroaniline	4.175	65	72463	42304.5815986	ppb	93	
36) Hexachloro-1,3-butadiene	4.222	225	96557	37316.3930938	ppb	98	
40) 4-Chloro-3-methylphenol	4.463	107	178473	44634.5178058	ppb	95	
41) 2-Methylnaphthalene	4.592	142	405791	38526.0570869	ppb	99	
42) 1-Methylnaphthalene	4.657	142	392103	38134.7387840	ppb	100	
47) Hexachlorocyclopentadiene	4.692	237	99377	43836.3485368	ppb	100	
48) 2,4,6-Trichlorophenol	4.769	196	115768	44826.2313232	ppb	99	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

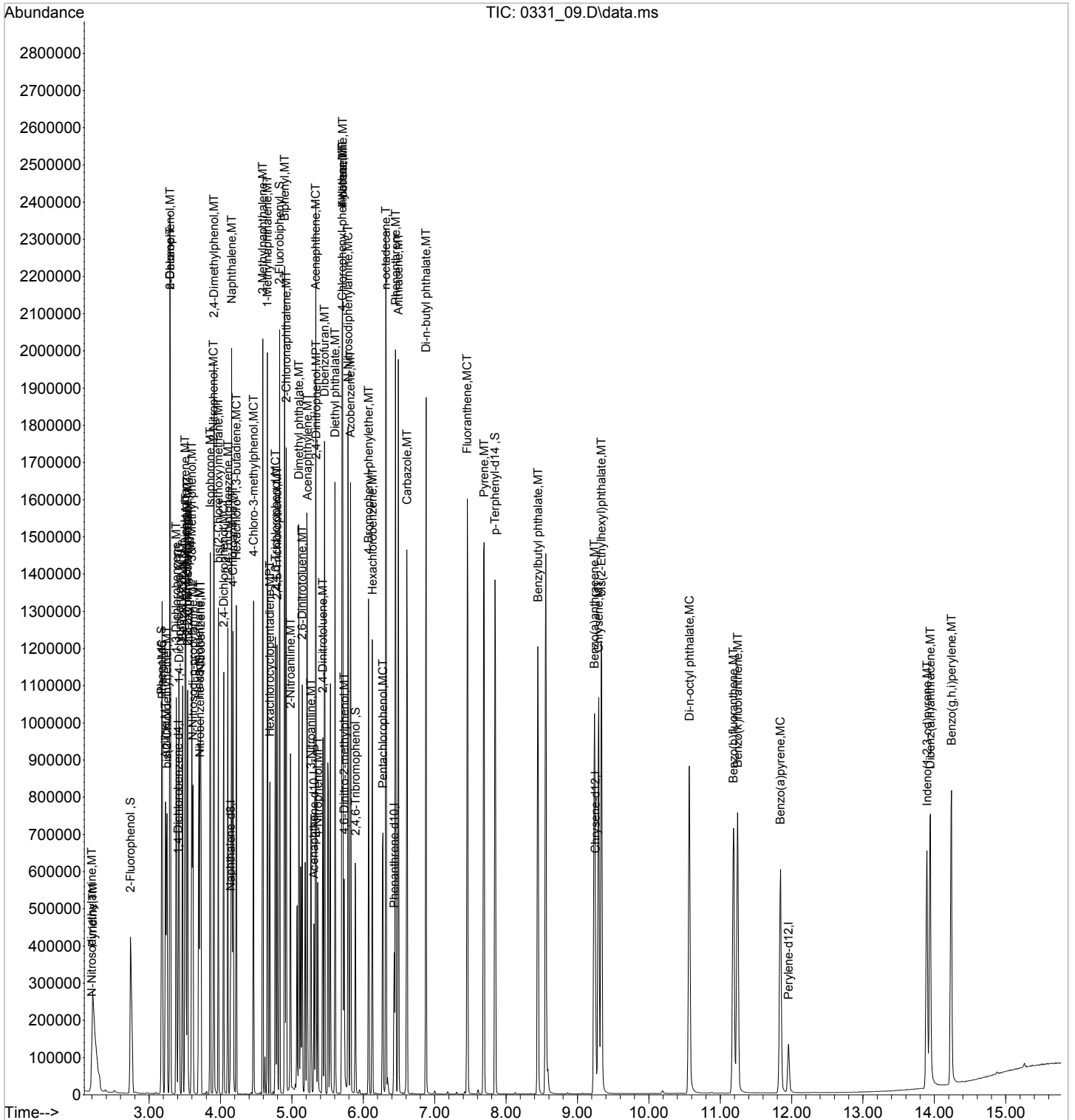
Quant Time: Apr 04 16:09:21 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	119302	45453.5255064	ppb		96
51) Biphenyl	4.898	154	480393	36947.6299186	ppb		99
52) 2-Chloronaphthalene	4.922	162	373851	37326.0436365	ppb		98
53) 2-Nitroaniline	4.981	138	127833	48518.5215917	ppb		99
54) Acenaphthylene	5.216	152	592569	38881.8295975	ppb		99
55) Dimethyl phthalate	5.098	163	444091	40193.5954557	ppb		92
56) 2,6-Dinitrotoluene	5.145	165	103807	44504.8915003	ppb		87
57) 3-Nitroaniline	5.269	138	96588	45668.5841609	ppb		87
58) Acenaphthene	5.334	153	388931	37316.7229950	ppb		99
59) 2,4-Dinitrophenol	5.339	184	36205	54603.2195077	ppb	#	61
60) Dibenzofuran	5.457	168	518647	37194.8213715	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	127967	47082.0688130	ppb		92
63) 4-Nitrophenol	5.363	139	72385	49365.8107588	ppb		89
64) Fluorene	5.710	166	434013	37758.1780561	ppb		99
65) 4-Chlorophenyl-phenyle...	5.704	204	192964	36606.8438369	ppb		98
66) Diethyl phthalate	5.604	149	453615	39207.5189475	ppb		99
67) 4-Nitroaniline	5.710	138	53281	37694.5684669	ppb		94
68) Azobenzene	5.822	77	456869	39433.4676522	ppb		99
71) 4,6-Dinitro-2-methylph...	5.734	198	55654	57714.6966225	ppb		89
72) N-Nitrosodiphenylamine	5.787	169	350165	38968.2162355	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	105898	38256.7651444	ppb		98
75) Hexachlorobenzene	6.128	284	118963	36265.8792912	ppb		99
76) n-octadecane	6.316	55	83858	38849.3842584	ppb		99
77) Pentachlorophenol	6.275	266	66534	47058.4196872	ppb		99
78) Phenanthrene	6.451	178	568662	36528.3050546	ppb		99
79) Anthracene	6.492	178	571694	39427.9021495	ppb		98
80) Carbazole	6.610	167	491734	39824.5607550	ppb		99
81) Di-n-butyl phthalate	6.881	149	777001	42748.1261335	ppb		100
83) Fluoranthene	7.457	202	603883	40747.9721884	ppb		100
86) Pyrene	7.692	202	623307	36620.5339470	ppb		100
88) Benzylbutyl phthalate	8.445	149	321842	47972.5534686	ppb		99
90) Benzo(a)anthracene	9.239	228	501256	40668.1622367	ppb		99
91) Chrysene	9.298	228	495769	37273.1327916	ppb		100
92) bis(2-Ethylhexyl)phtha...	9.333	149	468790	47601.6976177	ppb		99
93) Di-n-octyl phthalate	10.569	149	733280	52235.2983621	ppb		100
95) Benzo(b)fluoranthene	11.186	252	474283	42112.1585885	ppb		98
96) Benzo(k)fluoranthene	11.245	252	481495	41725.0907736	ppb		99
97) Benzo(a)pyrene	11.845	252	399588	44516.7656301	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.898	276	354988	42850.6886914	ppb		96
99) Dibenz(a,h)anthracene	13.945	278	390368	41733.1534265	ppb		100
100) Benzo(g,h,i)perylene	14.239	276	403531	40288.2616536	ppb		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_09.D  
Acq On : 31 Mar 2022 7:32 pm  
Operator : 3545  
Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:09:21 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:08:32 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M

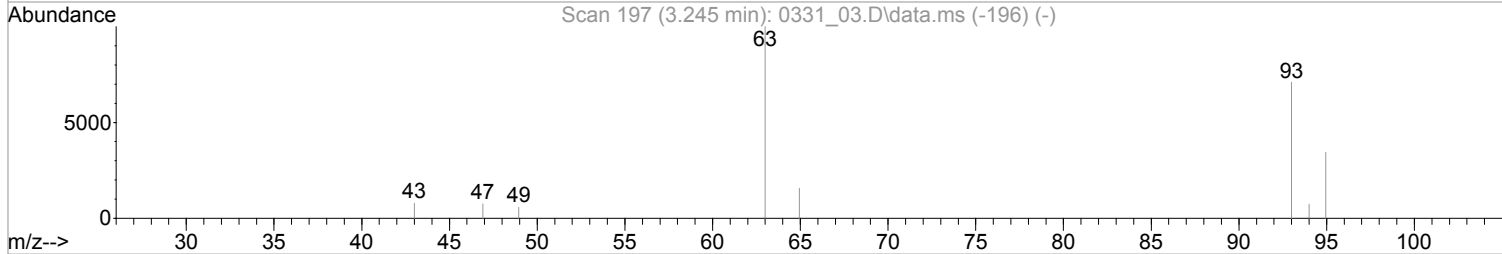
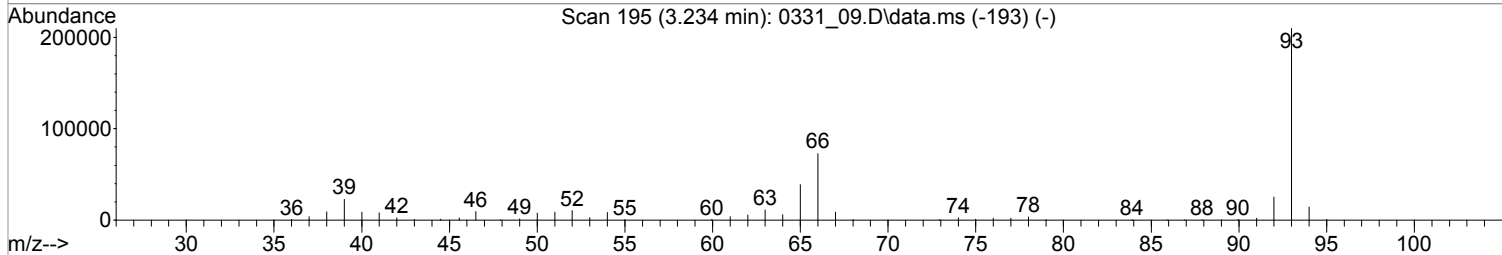
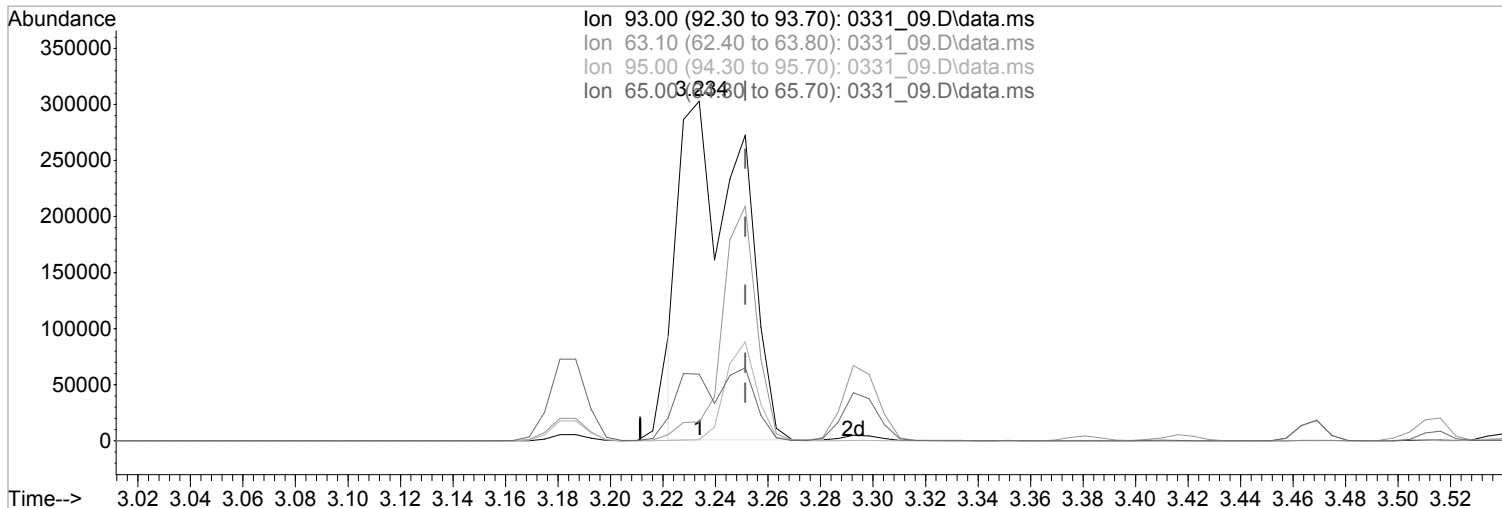




Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

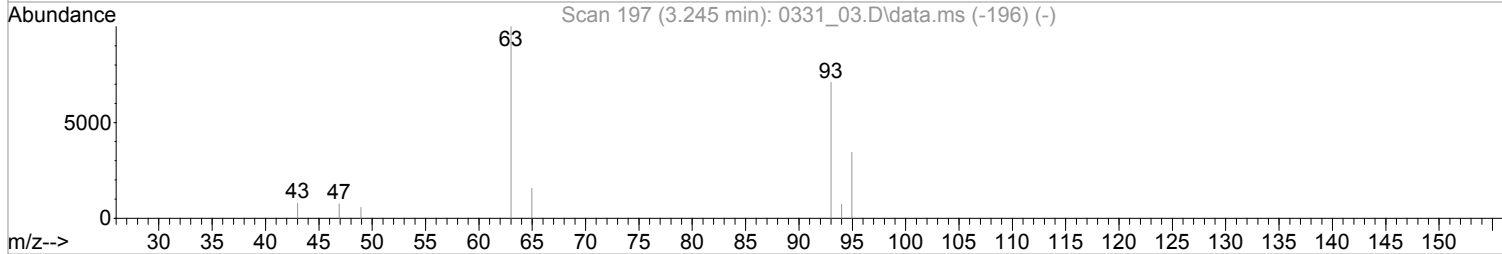
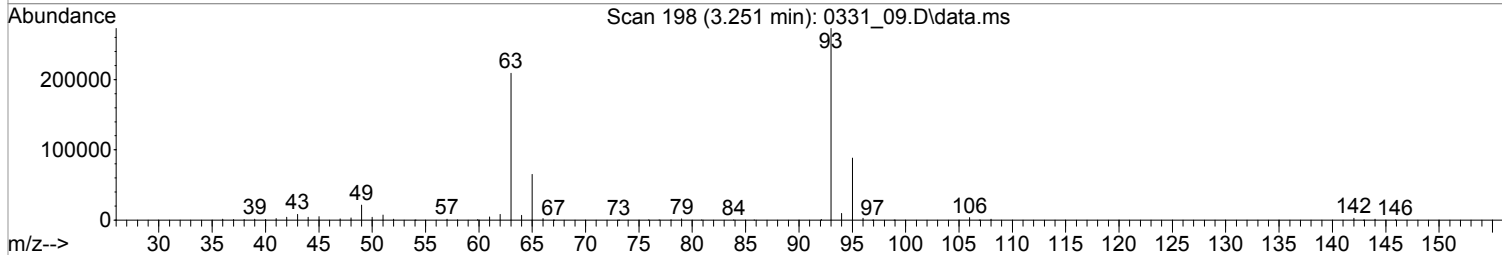
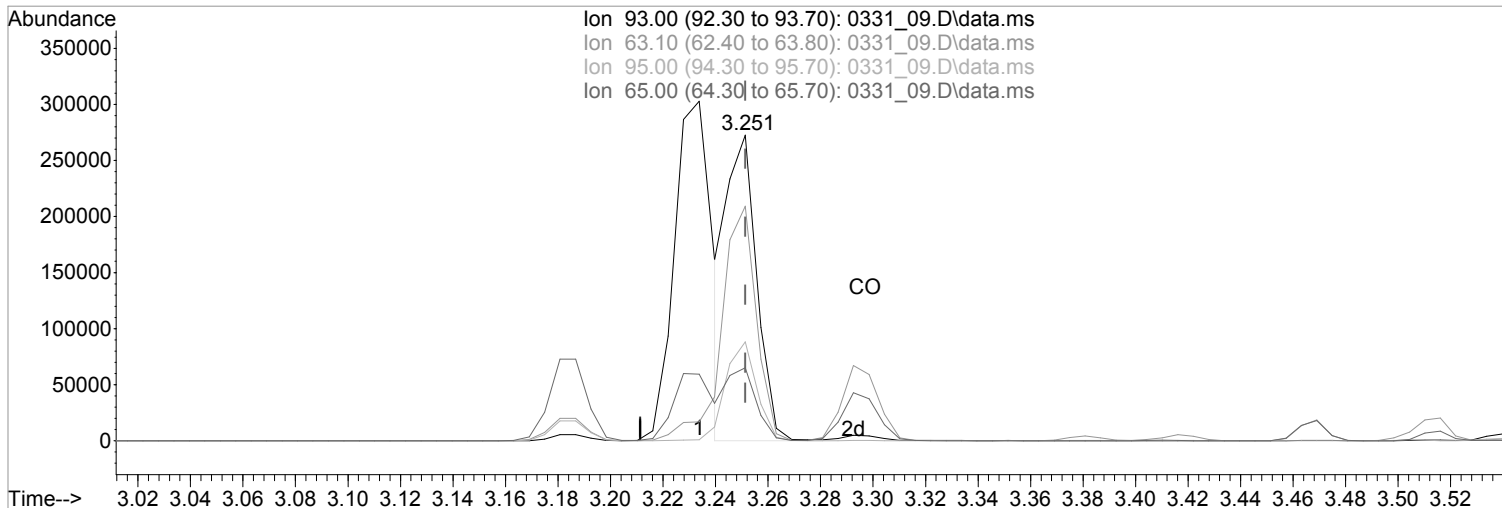
(6) bis(2-Chloroethyl)ether (MT)  
 3.234min (-0.018) 85884.8291794 ppb  
 Qvalue = 36  
 response 481451

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	4.59#
95.00	31.90	0.31#
65.00	23.10	19.03

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (-0.000) 39099.6807544 ppb m

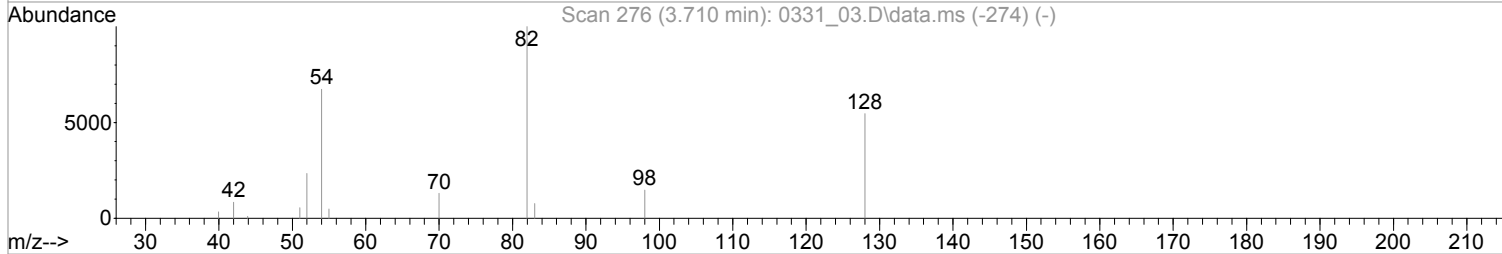
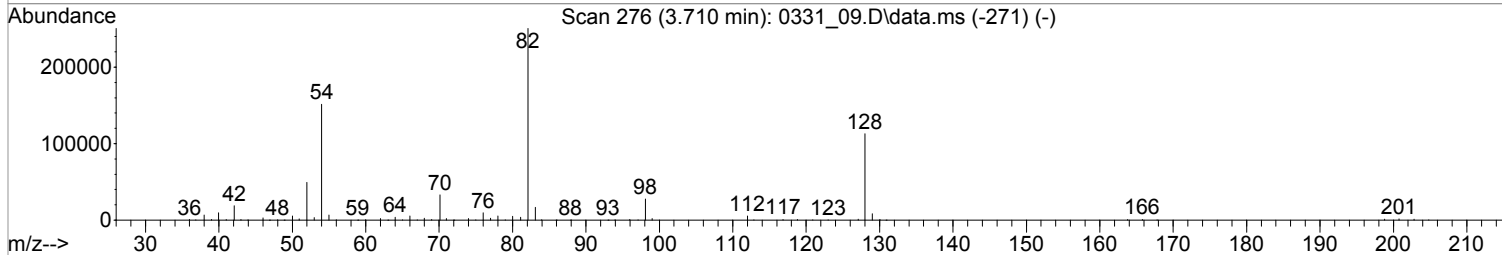
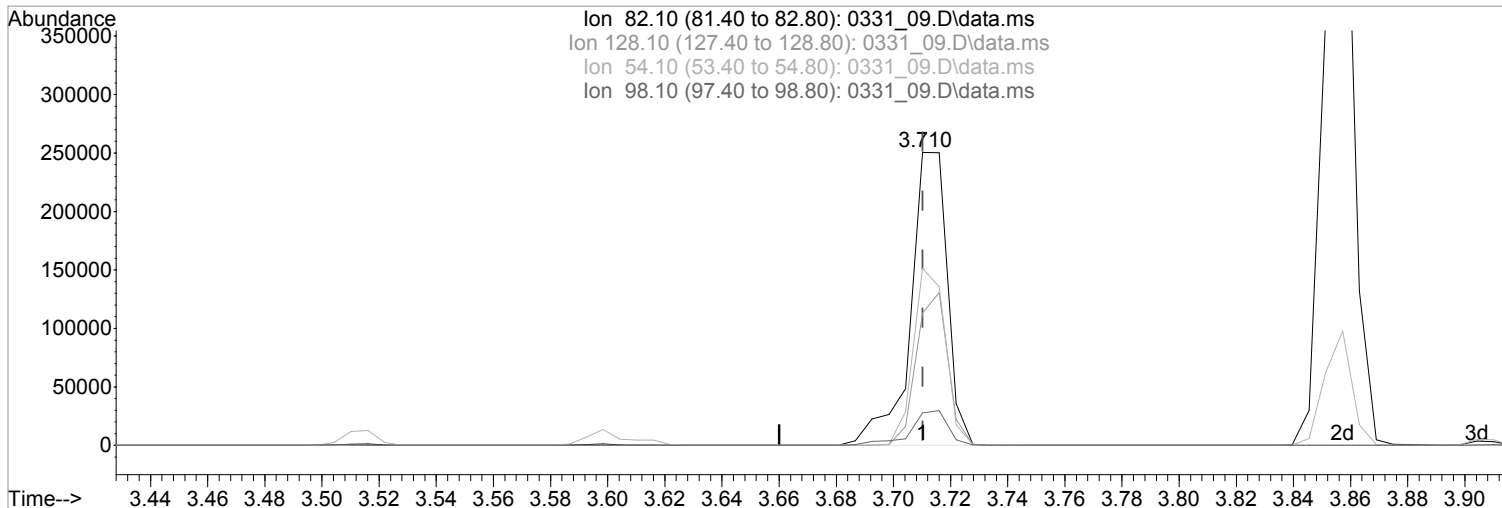
response 219184

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.70
95.00	31.90	32.33
65.00	23.10	23.85

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

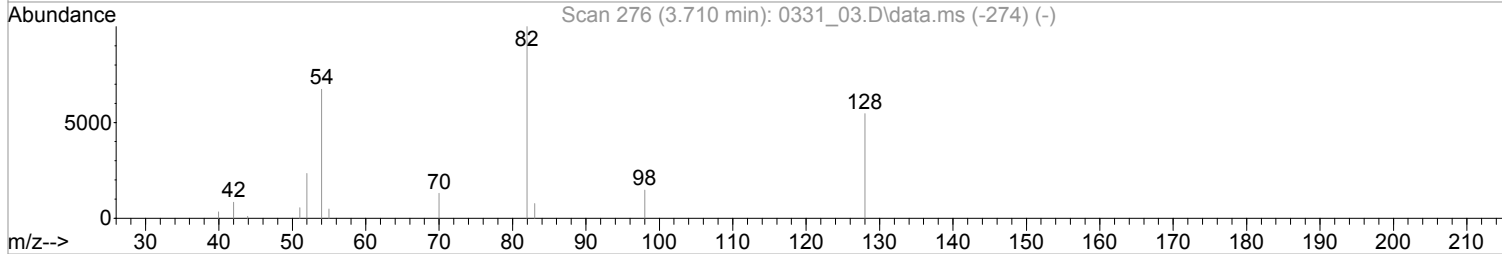
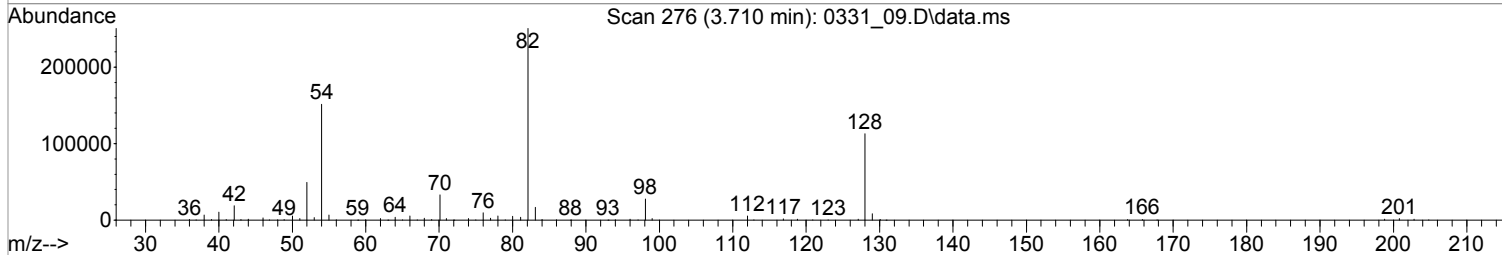
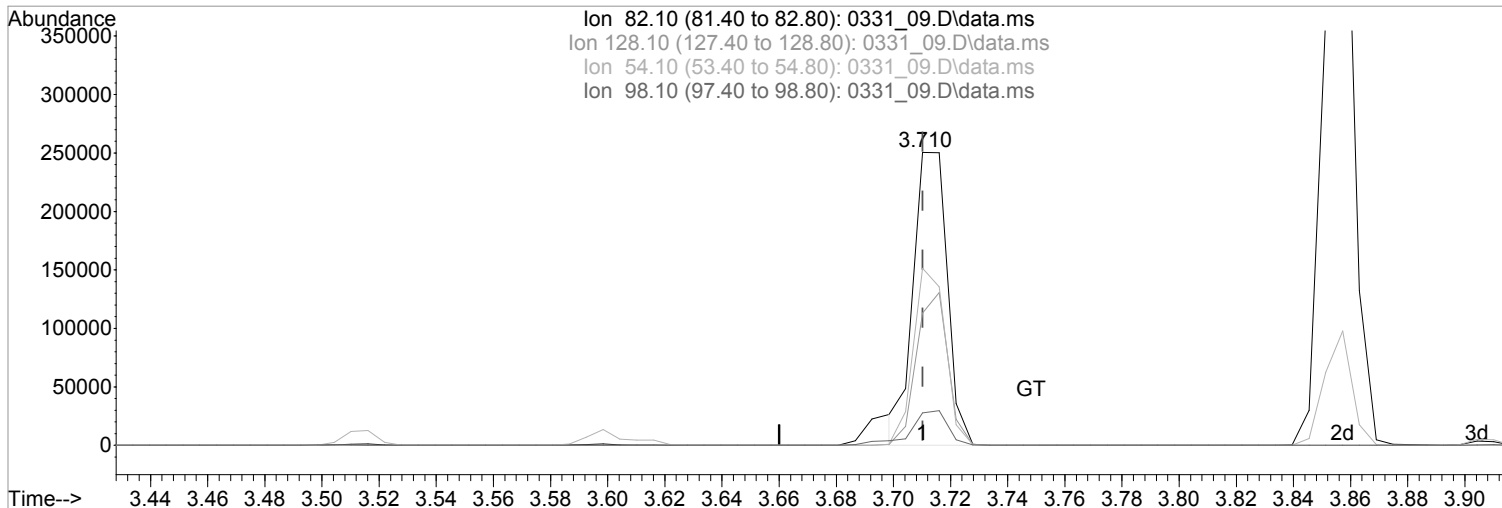
(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 44885.2725233 ppb  
 Qvalue = 99  
 response 225686

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.16
54.10	60.00	60.49
98.10	11.40	11.07

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

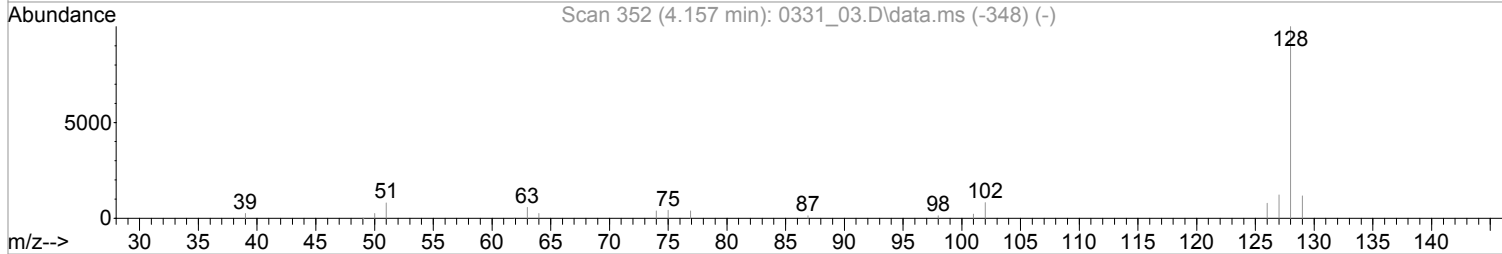
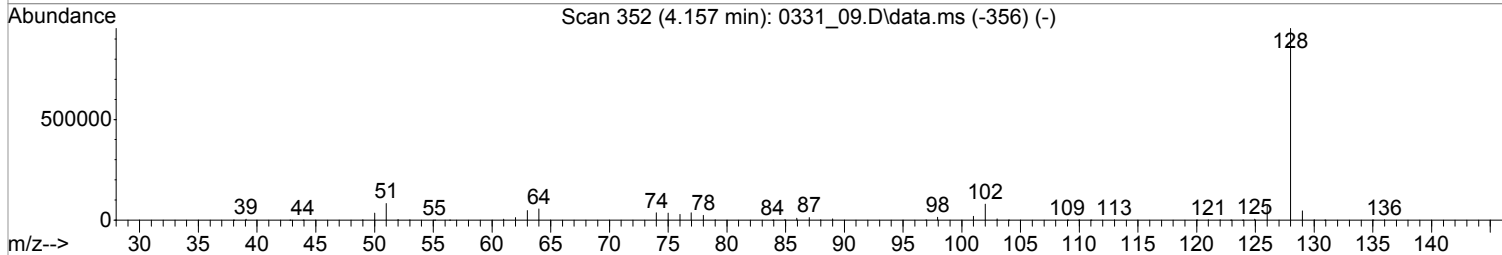
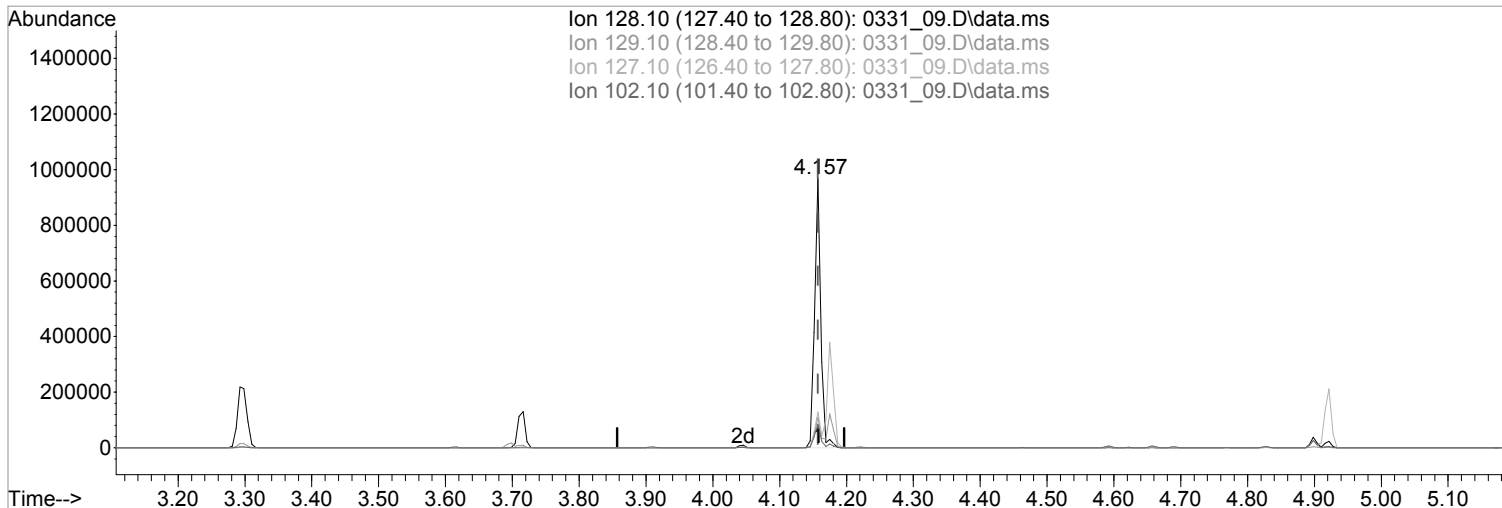
(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 41156.7993172 ppb m  
 response 206939

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.16
54.10	60.00	60.49
98.10	11.40	11.07

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_09.D  
Acq On : 31 Mar 2022 7:32 pm  
Operator : 3545  
Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:08:32 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



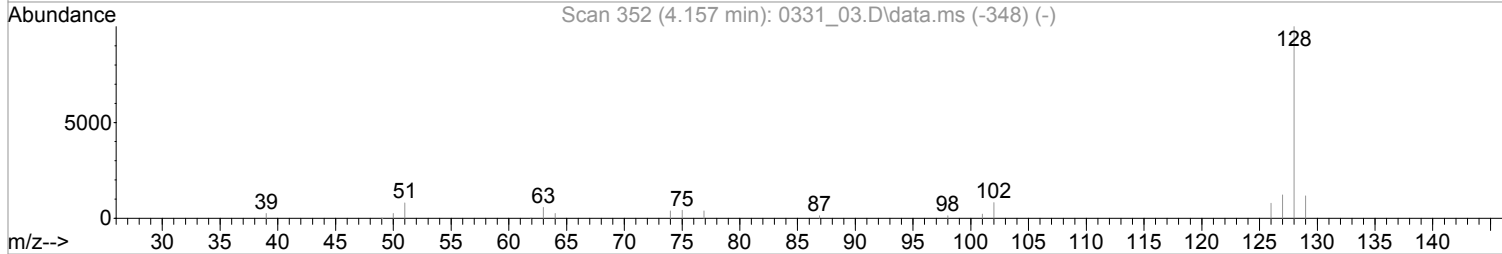
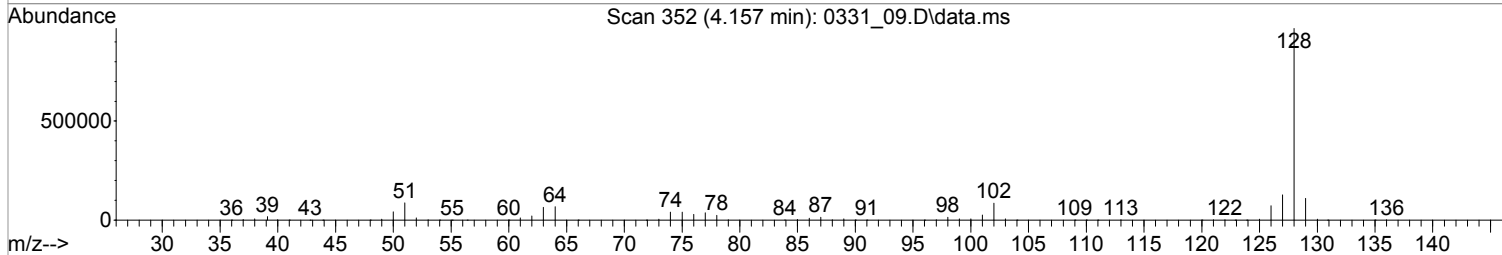
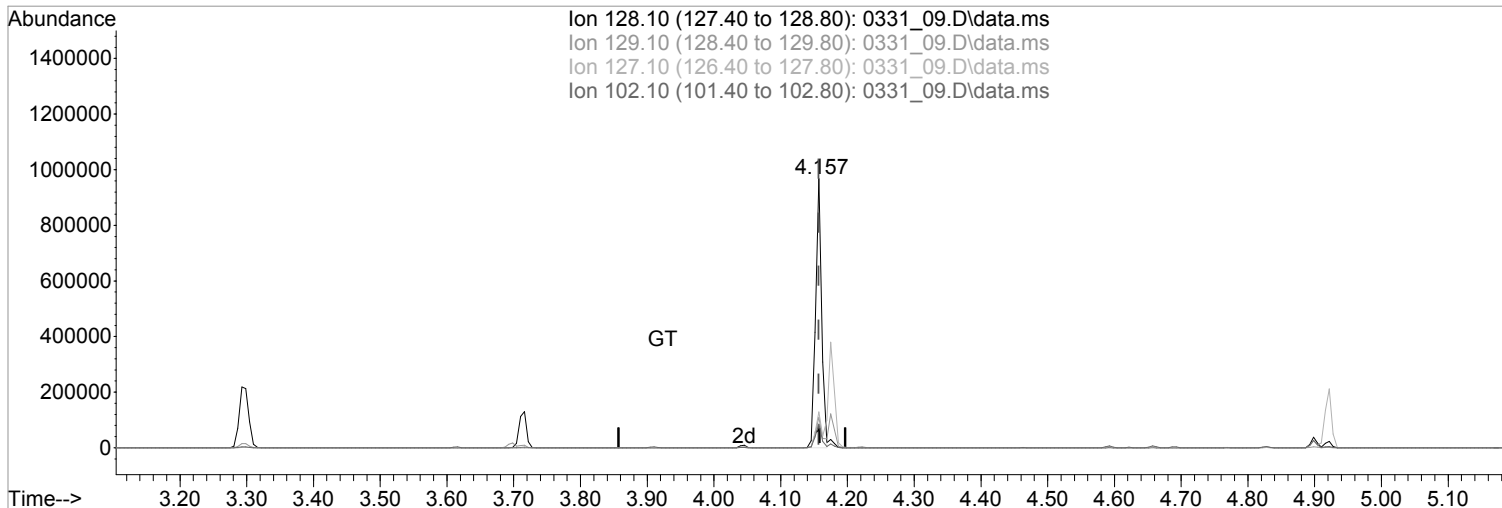
TIC: 0331\_09.D\data.ms

(34) Naphthalene (MT)  
4.157min (-0.000) 36849.7545549 ppb  
Qvalue = 99  
response 628274  
Ion Exp% Act%  
128.10 100 100  
129.10 10.90 11.30  
127.10 12.80 13.27  
102.10 8.30 8.84

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

(34) Naphthalene (MT)  
 4.157min (-0.000) 35905.5101669 ppb m  
 response 612175  

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.30
127.10	12.80	13.27
102.10	8.30	8.84

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:49 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.410	152	33286	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	137379	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	72853	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	116755	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.257	240	89872	8000.0000000	ppb	0.01	
94) Perylene-d12	11.957	264	80041	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.740	112	264507	50865.2212692	ppb	0.00	
Spiked Amount	20000.000		Recovery	= 254.33%			
7) Phenol-d5	3.175	99	314531	50994.8347848	ppb	0.00	
Spiked Amount	20000.000		Recovery	= 254.97%			
24) Nitrobenzene-d5	3.716	82	265314m	50896.3023359	ppb	0.00	
Spiked Amount	10000.000		Recovery	= 508.96%			
50) 2-Fluorobiphenyl	4.828	172	542476	46477.6781496	ppb	0.00	
Spiked Amount	10000.000		Recovery	= 464.78%			
73) 2,4,6-Tribromophenol	5.892	330	68453	57096.1272770	ppb	0.00	
Spiked Amount	20000.000		Recovery	= 285.48%			
87) p-Terphenyl-d14	7.851	244	598918	47904.8278187	ppb	0.00	
Spiked Amount	10000.000		Recovery	= 479.05%			
<b>Target Compounds</b>							
2) Pyridine	2.210	79	278007	50410.1333313	ppb	99	
3) N-Nitrosodimethylamine	2.199	42	130731	44346.4125409	ppb	94	
5) Aniline	3.234	66	145606	51021.5276676	ppb	#	20
6) bis(2-Chloroethyl)ether	3.251	93	282472m	50210.3023281	ppb		
8) Phenol	3.187	94	331731	50697.6796332	ppb	94	
10) 2-Chlorophenol	3.293	128	278445	51157.0179990	ppb	99	
11) n-Decane	3.293	41	162108	45699.6951523	ppb	#	99
12) 1,3-Dichlorobenzene	3.381	146	298942	47484.7663177	ppb	98	
13) 1,4-Dichlorobenzene	3.416	146	300039	47630.8185250	ppb	96	
14) Benzyl Alcohol	3.469	79	210910	53164.6348947	ppb	100	
15) 1,2-Dichlorobenzene	3.504	146	285067	46841.6039443	ppb	98	
16) bis(2-Chloroisopropyl)...	3.540	121	101326	48405.0979156	ppb	97	
17) 2,2-oxybis(1-chloropro...	3.540	121	101326	48405.0979156	ppb	97	
18) 2-Methylphenol	3.516	108	247855	50552.3018914	ppb	97	
19) Hexachloroethane	3.698	117	128718	49195.4518813	ppb	97	
20) N-Nitrosodi-n-propylamine	3.616	70	184502	53267.2220924	ppb	96	
21) 3&4-Methyl phenol	3.598	107	275858	51070.2615719	ppb	97	
25) Nitrobenzene	3.728	77	266900	50623.3549262	ppb	92	
26) Isophorone	3.857	82	534310	51945.3365587	ppb	94	
27) 2-Nitrophenol	3.910	139	138474	56448.2096839	ppb	83	
28) 2,4-Dimethylphenol	3.910	107	256556	49891.1889295	ppb	97	
29) bis(2-Chlorethoxy)methane	3.969	93	337131	48344.0868992	ppb	98	
30) 2,4-Dichlorophenol	4.045	162	210856	52200.5777632	ppb	95	
32) 1,2,4-Trichlorobenzene	4.104	180	227453	46408.3958517	ppb	98	
34) Naphthalene	4.157	128	788352m	45448.6219591	ppb		
35) 4-Chloroaniline	4.175	65	95090	53256.5383024	ppb	92	
36) Hexachloro-1,3-butadiene	4.222	225	121864	46056.5273806	ppb	98	
40) 4-Chloro-3-methylphenol	4.463	107	230866	55010.5698340	ppb	96	
41) 2-Methylnaphthalene	4.592	142	523350	48378.6737429	ppb	99	
42) 1-Methylnaphthalene	4.657	142	504378	47829.6186952	ppb	100	
47) Hexachlorocyclopentadiene	4.692	237	129995	55448.3866010	ppb	98	
48) 2,4,6-Trichlorophenol	4.769	196	150352	56098.9471818	ppb	97	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:49 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

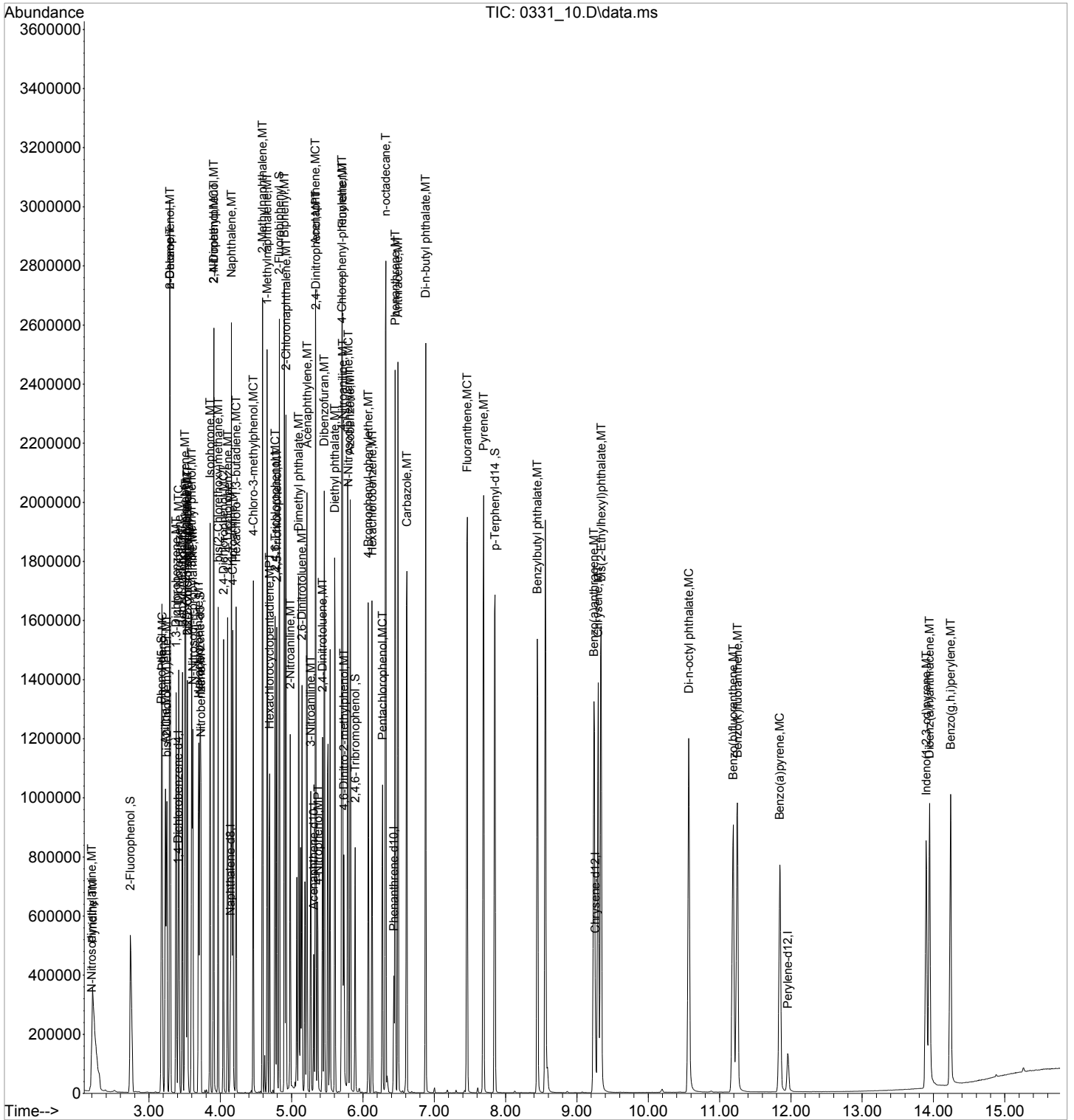
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	156604	57367.9164041	ppb		96
51) Biphenyl	4.898	154	622475	47445.6021582	ppb		99
52) 2-Chloronaphthalene	4.922	162	482181	47644.7044791	ppb		98
53) 2-Nitroaniline	4.981	138	165837	59582.9836669	ppb		98
54) Acenaphthylene	5.216	152	755128	48762.9428449	ppb		100
55) Dimethyl phthalate	5.098	163	561198	49753.6083527	ppb		90
56) 2,6-Dinitrotoluene	5.145	165	134010	55279.7104365	ppb		90
57) 3-Nitroaniline	5.269	138	123042	55709.9964627	ppb		92
58) Acenaphthene	5.334	153	499015	47386.0236386	ppb		99
59) 2,4-Dinitrophenol	5.339	184	50832	70033.2715714	ppb	#	80
60) Dibenzofuran	5.457	168	655054	46514.0746116	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	167787	58777.2992537	ppb		88
63) 4-Nitrophenol	5.369	139	95099	61185.9537290	ppb		93
64) Fluorene	5.710	166	550987	47365.7672850	ppb		98
65) 4-Chlorophenyl-phenyle...	5.704	204	245888	46285.2052677	ppb		97
66) Diethyl phthalate	5.604	149	571768	48579.8844394	ppb		98
67) 4-Nitroaniline	5.716	138	69559	48705.2165231	ppb		94
68) Azobenzene	5.822	77	585843	49665.8520799	ppb		99
71) 4,6-Dinitro-2-methylph...	5.734	198	76313	72546.8457901	ppb		83
72) N-Nitrosodiphenylamine	5.792	169	449103	49379.3048872	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	136813	48957.3690334	ppb		98
75) Hexachlorobenzene	6.128	284	151571	46098.9591670	ppb		98
76) n-octadecane	6.322	55	105949	48515.7513457	ppb		99
77) Pentachlorophenol	6.275	266	88723	59665.7277510	ppb		97
78) Phenanthrene	6.451	178	723203	46303.2942577	ppb		98
79) Anthracene	6.492	178	732119	49804.4207366	ppb		98
80) Carbazole	6.616	167	639932	51048.7019619	ppb		100
81) Di-n-butyl phthalate	6.881	149	1004284	53860.2373075	ppb		99
83) Fluoranthene	7.463	202	773416	51234.8738508	ppb		99
86) Pyrene	7.692	202	788011	46387.8040121	ppb		99
88) Benzylbutyl phthalate	8.445	149	420027	60257.2779756	ppb		100
90) Benzo(a) anthracene	9.239	228	649552	52041.4055443	ppb		98
91) Chrysene	9.298	228	642927	48317.4143460	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.339	149	610913	59781.2931036	ppb		99
93) Di-n-octyl phthalate	10.569	149	964940	65192.1281284	ppb		100
95) Benzo(b) fluoranthene	11.192	252	615009	52794.8465110	ppb		99
96) Benzo(k) fluoranthene	11.251	252	625919	52512.1784771	ppb		98
97) Benzo(a) pyrene	11.845	252	526182	56195.4572647	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.898	276	454752	52932.6248519	ppb		99
99) Dibenz(a,h) anthracene	13.945	278	498154	51557.8237309	ppb		98
100) Benzo(g,h,i) perylene	14.239	276	507520	49307.3651933	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_10.D  
Acq On : 31 Mar 2022 7:53 pm  
Operator : 3545  
Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 10 Sample Multiplier: 1

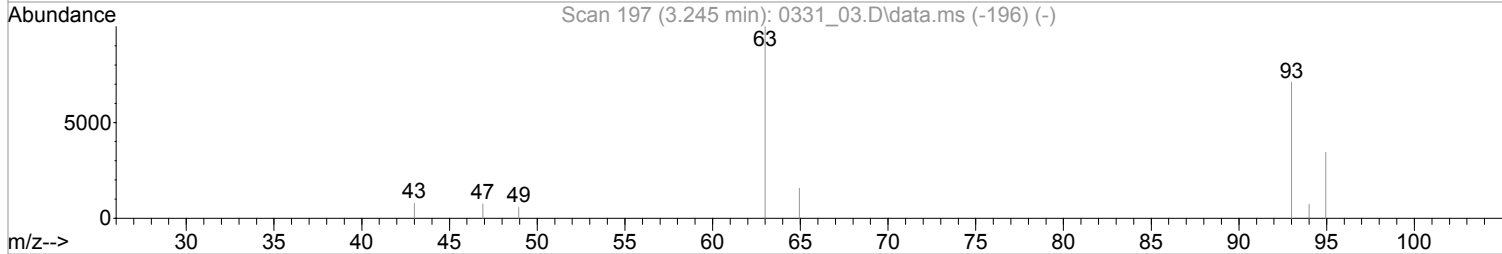
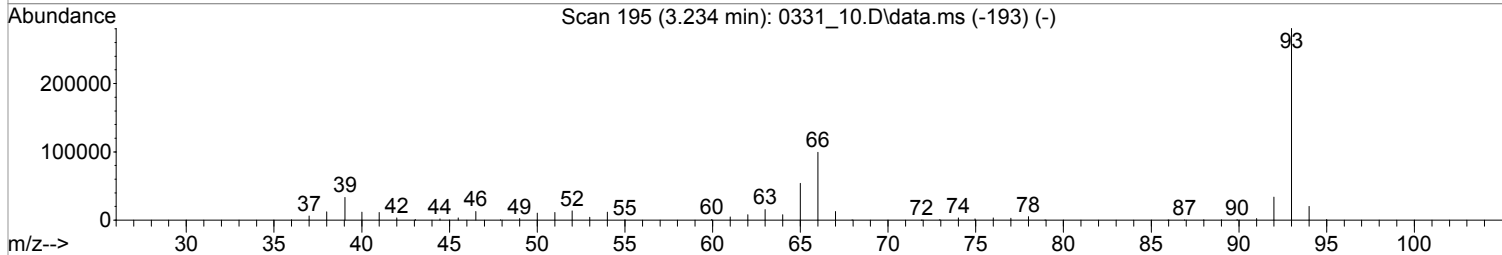
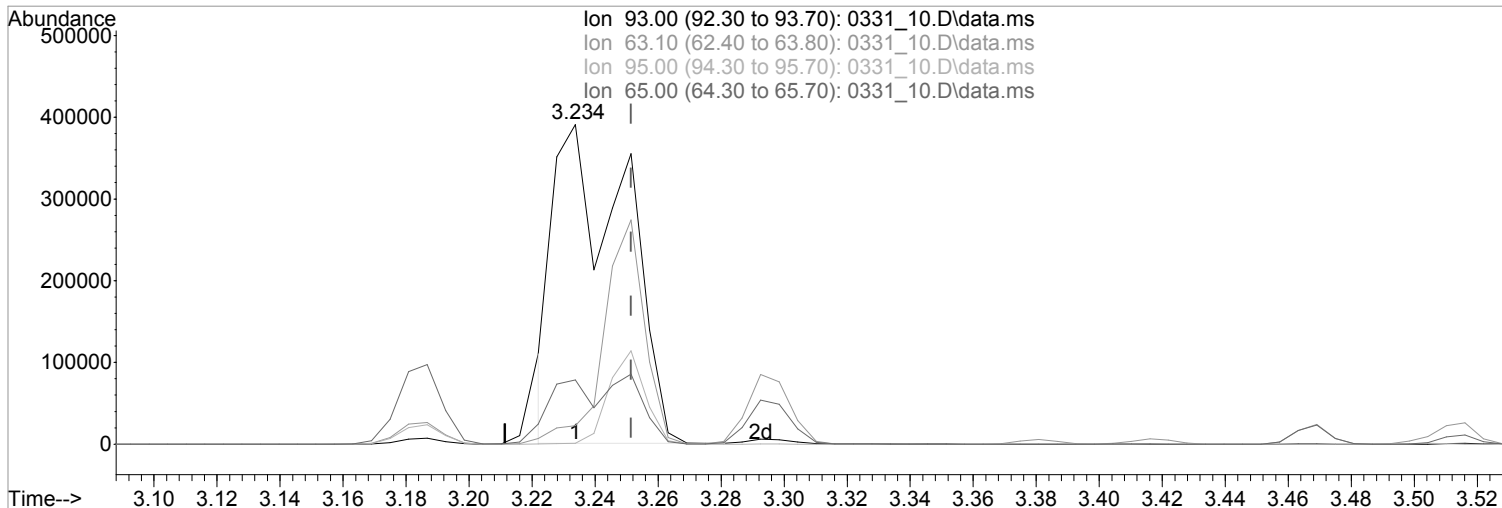
Quant Time: Apr 04 16:10:49 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:10:00 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

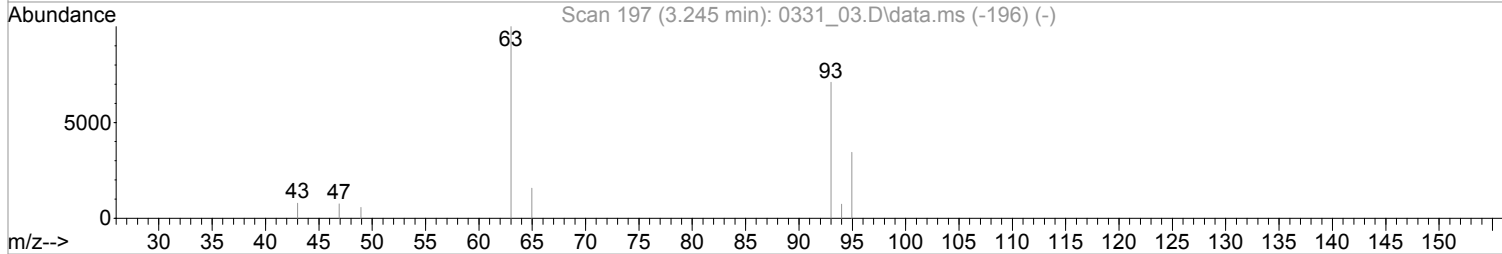
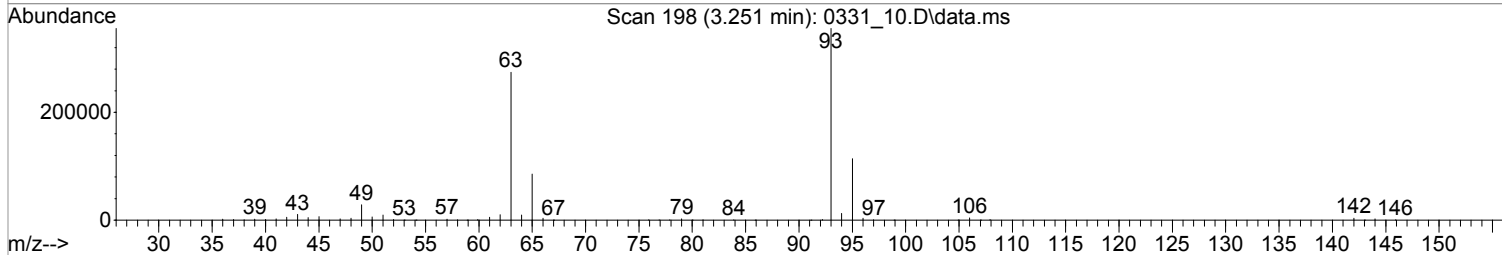
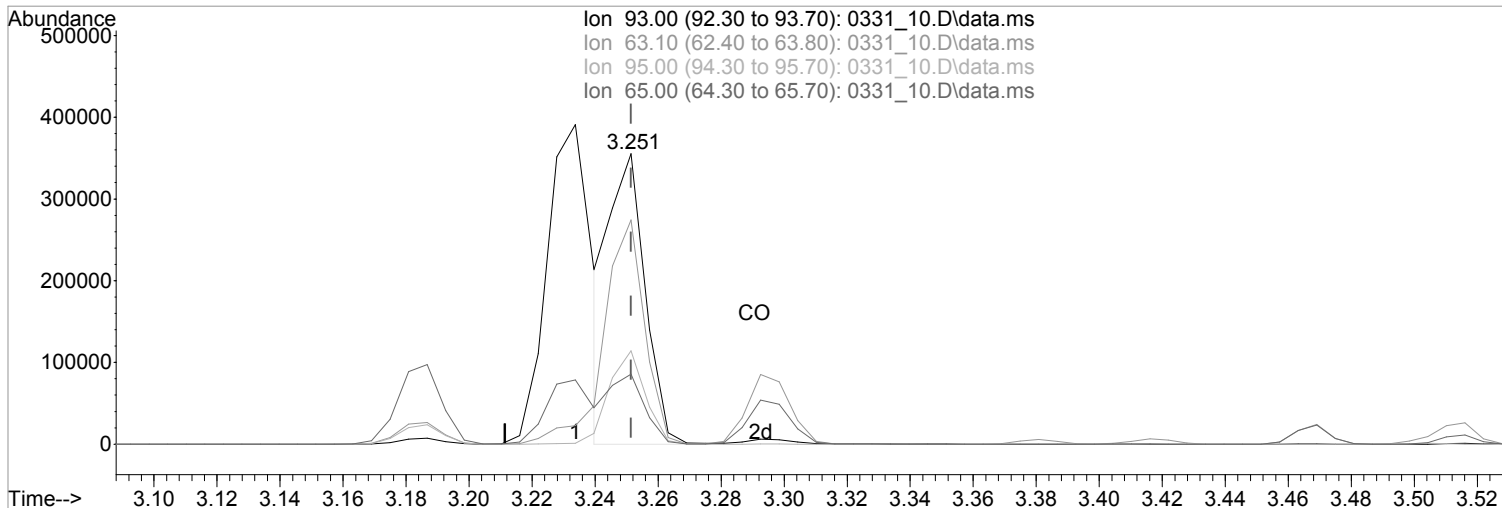
(6) bis(2-Chloroethyl)ether (MT)  
 3.234min (-0.018) 109615.2445090 ppb  
 Qvalue = 37  
 response 616671

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	4.88#
95.00	31.90	0.29#
65.00	23.10	19.61

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (-0.000) 50210.3023281 ppb m

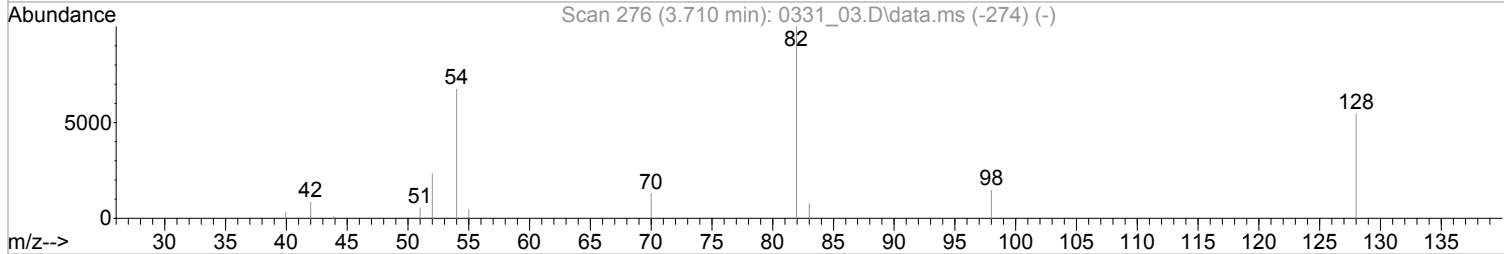
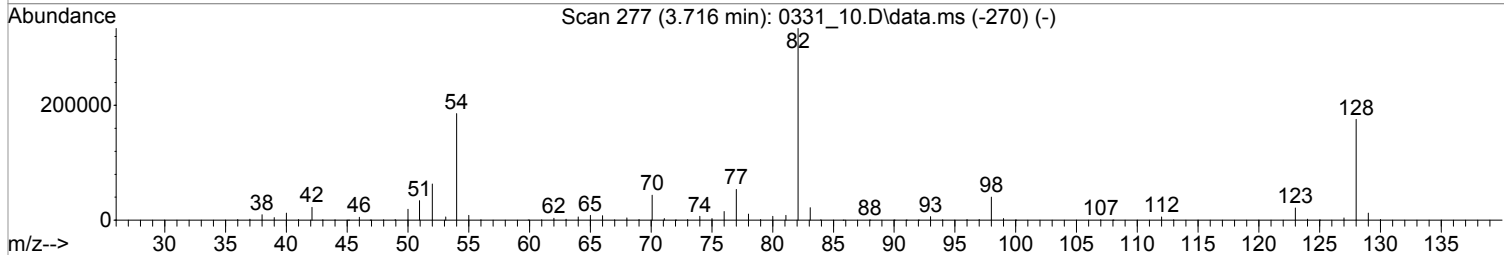
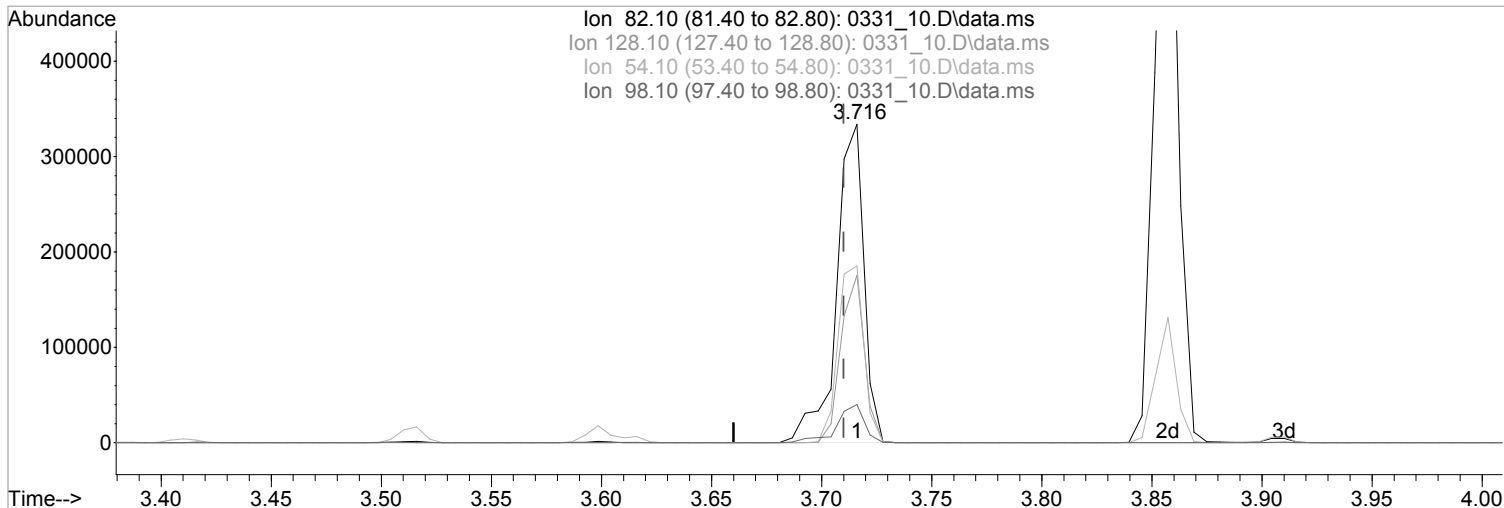
response 282472

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	77.21
95.00	31.90	32.08
65.00	23.10	24.05

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

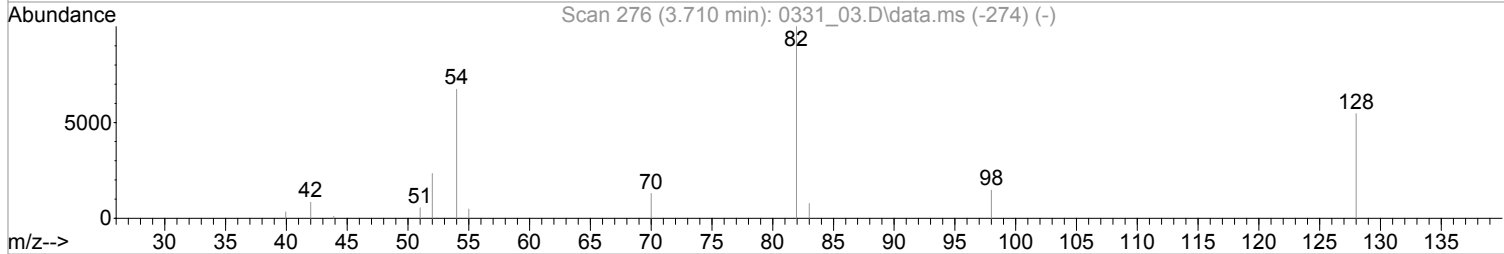
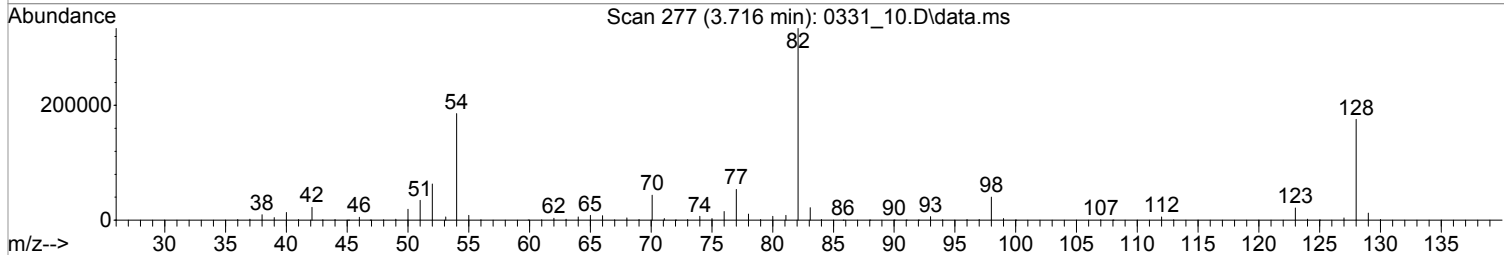
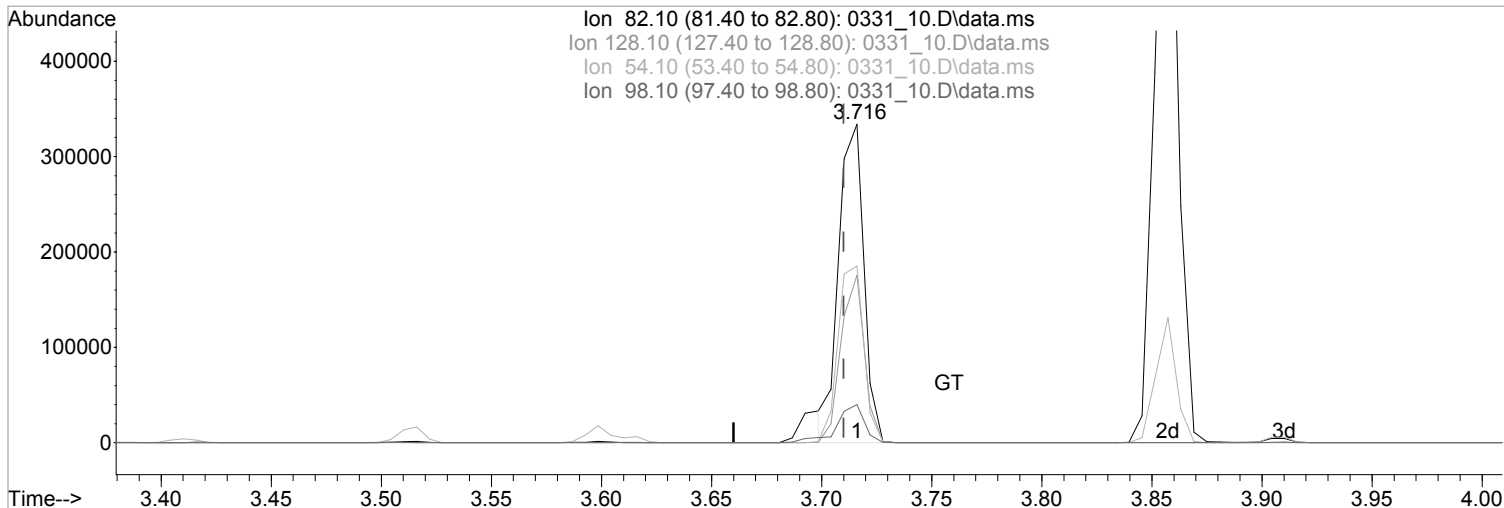
(24) Nitrobenzene-d5 (S)  
 3.716min (+0.006) 55620.7953288 ppb  
 Qvalue = 93  
 response 289942

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	52.57
54.10	60.00	55.54
98.10	11.40	12.01

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



(24) Nitrobenzene-d5 (S)  
 3.716min (+0.006) 50896.3023359 ppb m

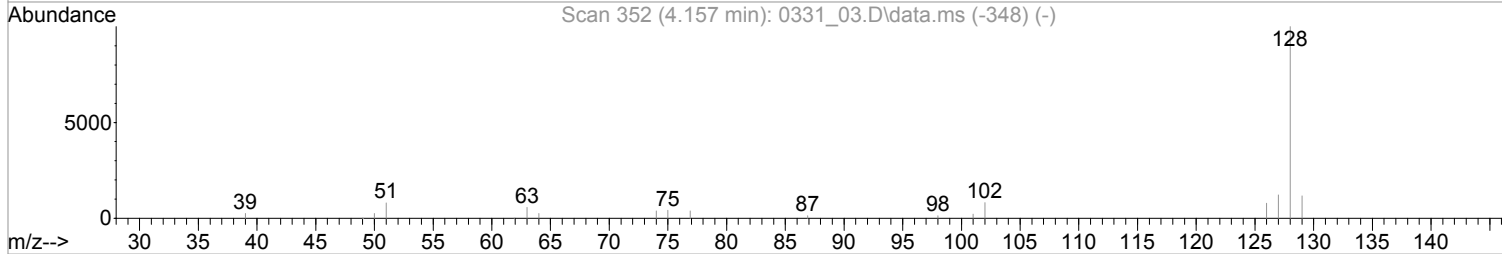
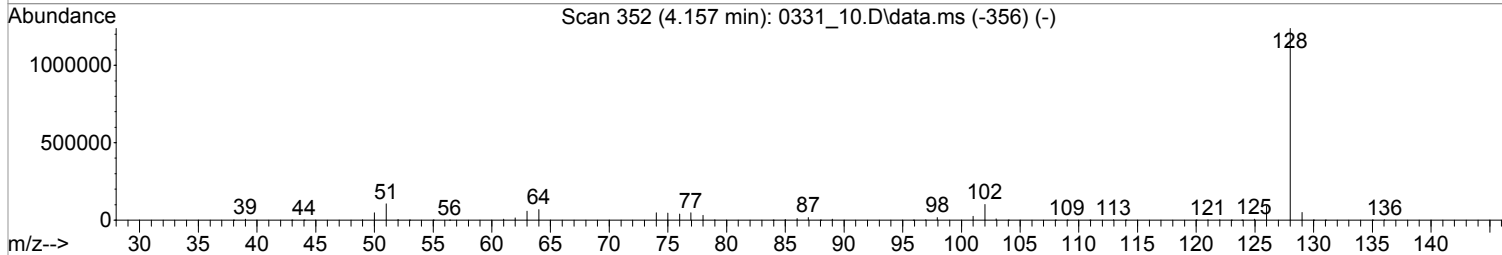
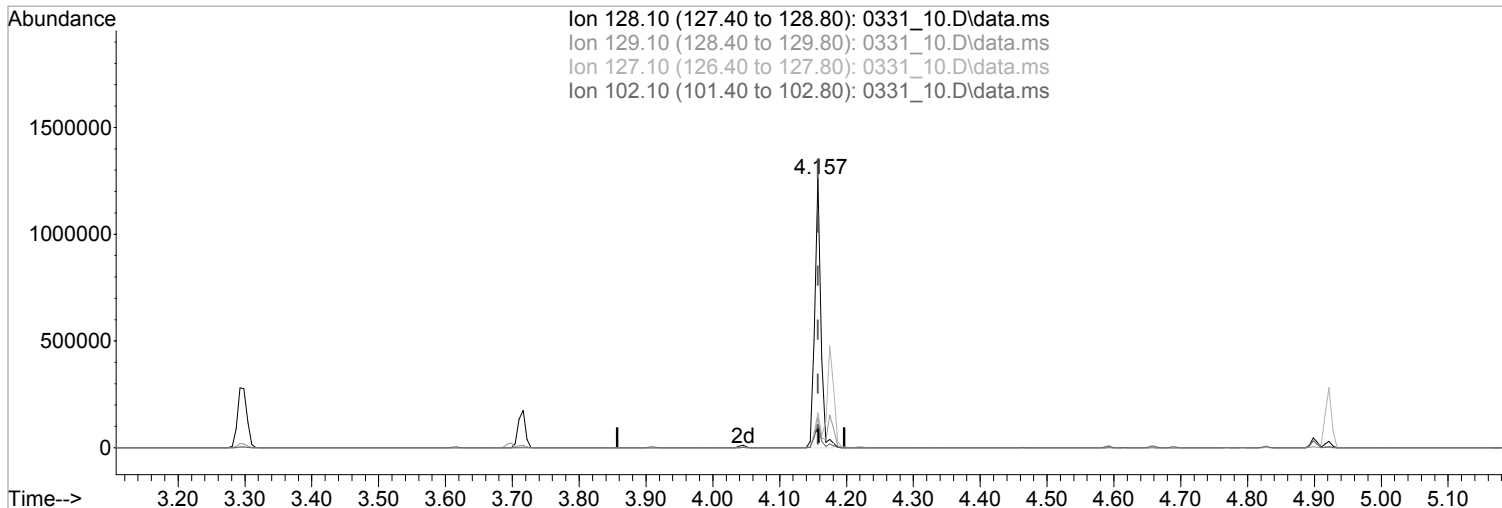
response 265314

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	52.57
54.10	60.00	55.54
98.10	11.40	12.01

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

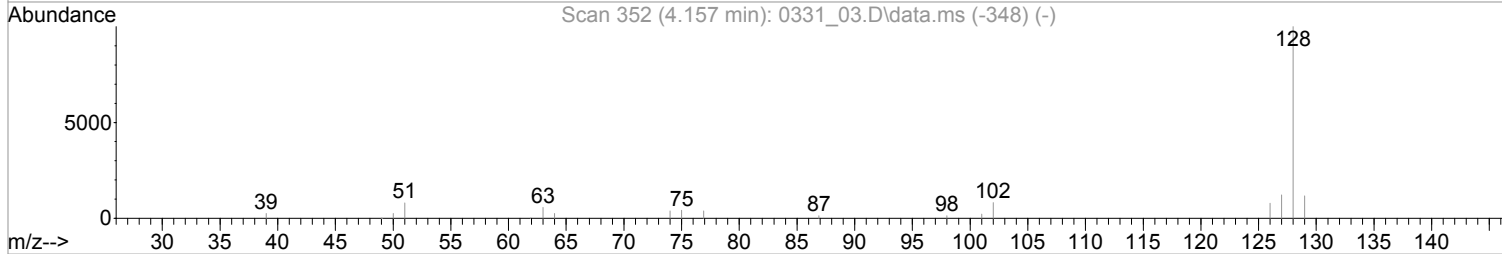
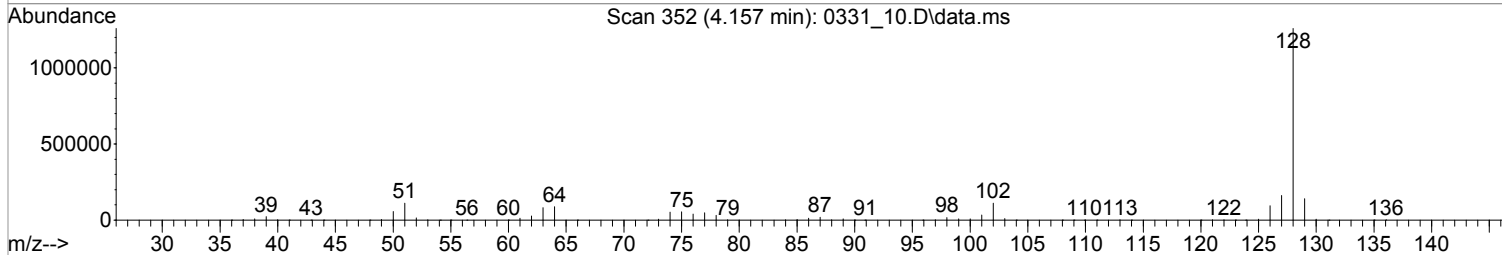
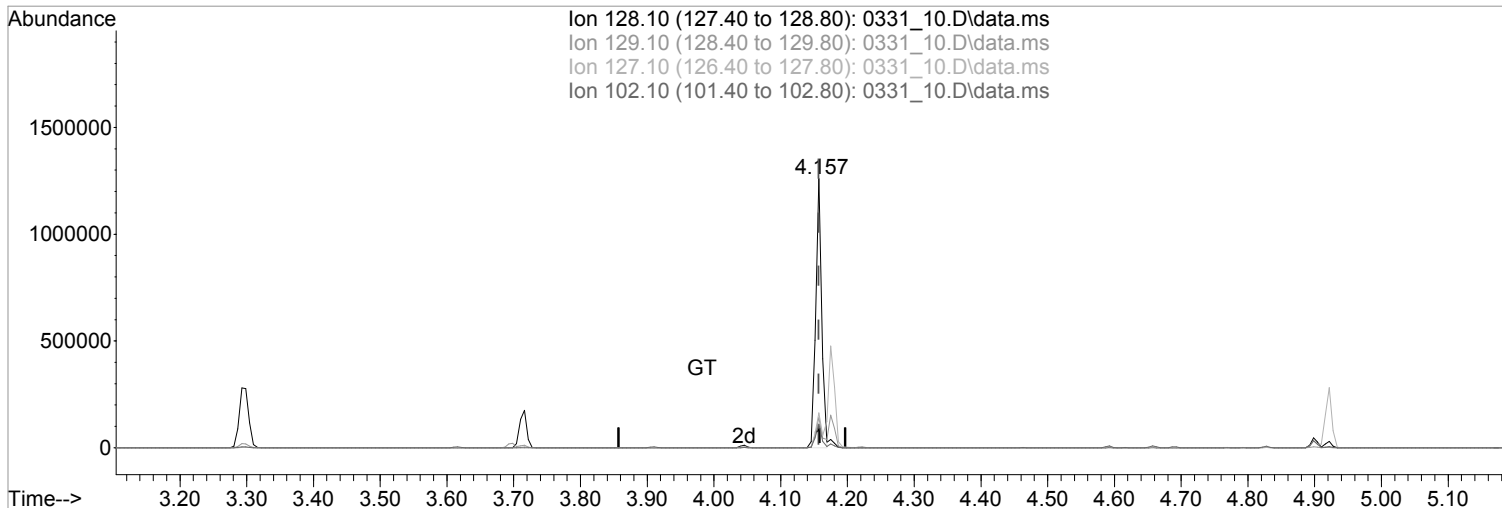
(34) Naphthalene (MT)  
 4.157min (-0.000) 46677.1469504 ppb  
 Qvalue = 99  
 response 809662

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.15
127.10	12.80	12.91
102.10	8.30	8.85

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

(34) Naphthalene (MT)  
 4.157min (-0.000) 45448.6219591 ppb m  
 response 788352  

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.15
127.10	12.80	12.91
102.10	8.30	8.85

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_12.D  
 Acq On : 31 Mar 2022 8:36 pm  
 Operator : 3545  
 Sample : STD TCL 4K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 04 16:53:59 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:34:56 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

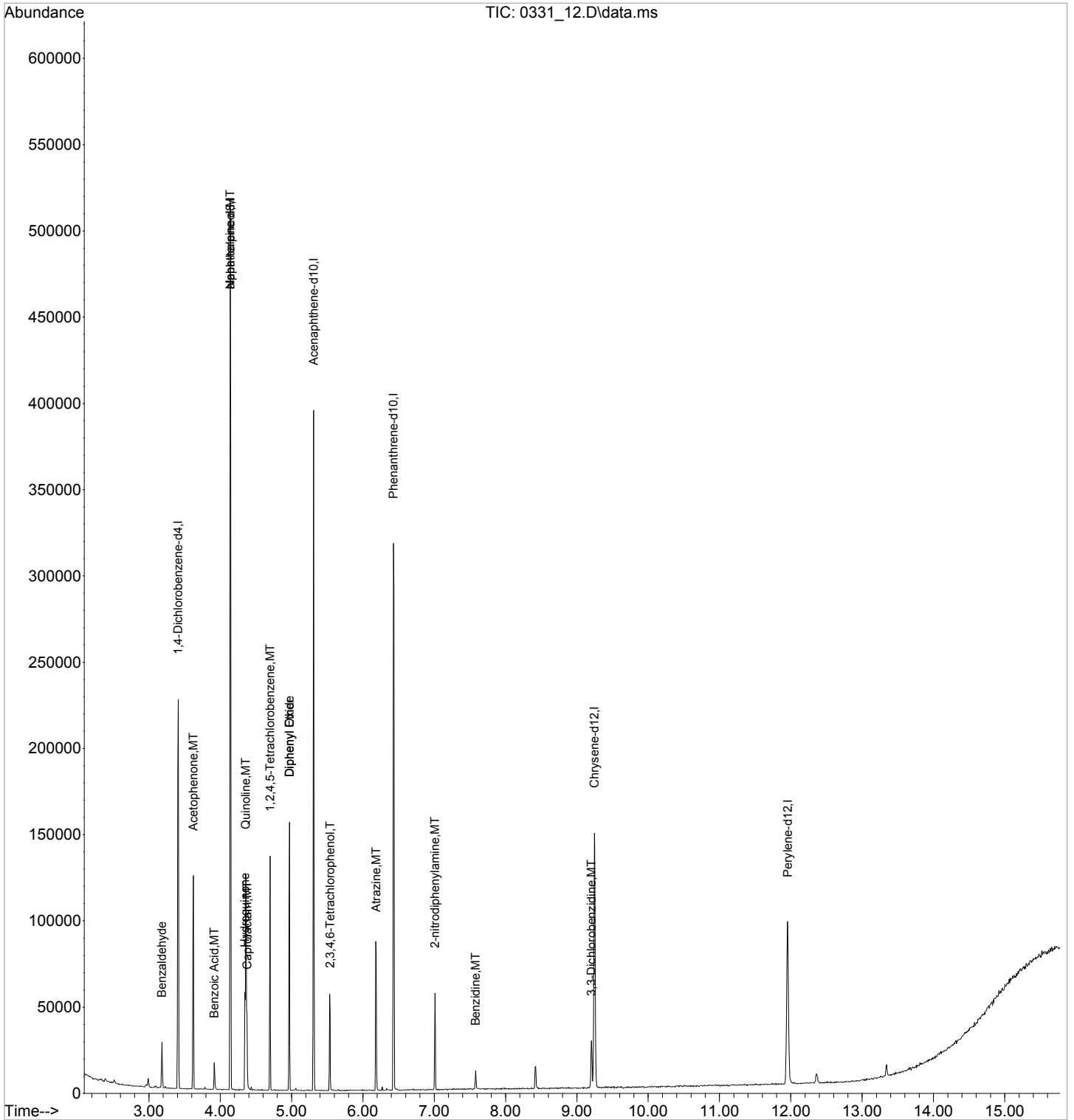
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32210	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	136220	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	65230	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.428	188	103120	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	67182	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	58564	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
9) Benzaldehyde	3.181	105	5045	3745.7880779	ppb	98	
22) Acetophenone	3.622	105	26979	3891.1883832	ppb	98	
31) Benzoic Acid	3.916	105	3581	4259.0418639	ppb	99	
33) alpha-terpineol	4.140	59	18311	4364.0779192	ppb	98	
37) Hydroquinone	4.346	110	12976	4367.0078087	ppb	93	
38) Quinoline	4.357	129	34471	4382.7379345	ppb	99	
39) Caprolactam	4.375	113	3806	3675.2281435	ppb	92	
43) 1,2,4,5-Tetrachloroben...	4.699	216	15681	4281.5578499	ppb	96	
44) Diphenyl Ether	4.969	170	23710	4319.7401334	ug/ml	99	
45) Diphenyl Oxide	4.969	170	23710	4319.7401334	ug/ml	99	
62) 2,3,4,6-Tetrachlorophenol	5.540	232	5528	3126.3602471	ppb	95	
69) Atrazine	6.187	200	8336	3551.1011360	ppb	97	
82) 2-nitrodiphenylamine	7.010	167	6112	4515.3978890	ppb	95	
85) Benzidine	7.581	184	5065	3995.7989172	ppb	# 70	
89) 3,3-Dichlorobenzidine	9.204	252	9134	3139.1498939	ppb	99	

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_12.D  
Acq On : 31 Mar 2022 8:36 pm  
Operator : 3545  
Sample : STD TCL 4K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 04 16:53:59 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:34:56 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_13.D  
 Acq On : 31 Mar 2022 8:58 pm  
 Operator : 3545  
 Sample : MSTD TCL 10K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 13 Sample Multiplier: 1

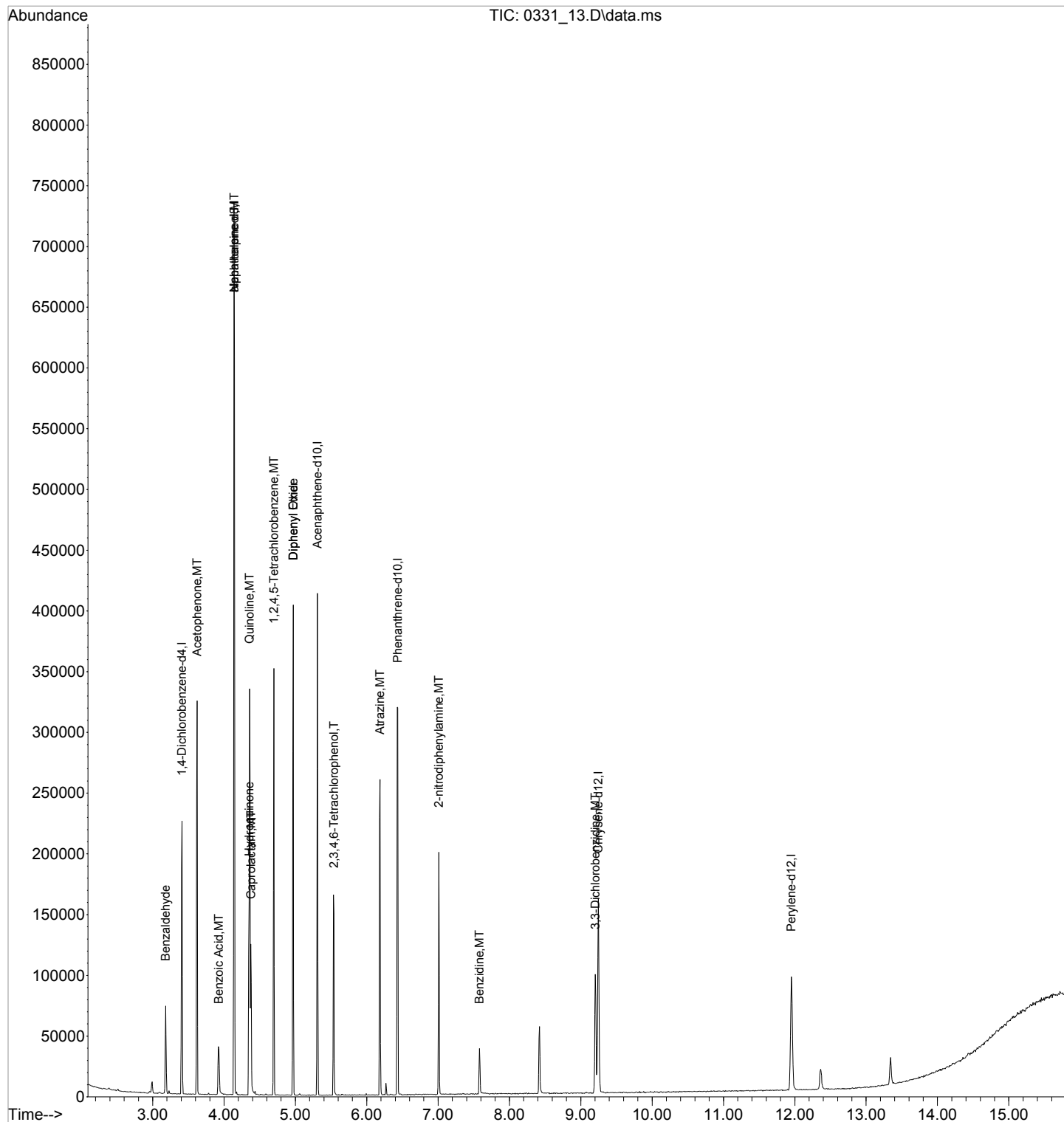
Quant Time: Apr 04 15:59:35 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:06 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32646	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	151075	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	66741	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	106483	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	70148	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	60010	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
							Qvalue
9) Benzaldehyde	3.181	105	13218	10000.0000000	ppb	100	
22) Acetophenone	3.622	105	70363	10000.0000000	ppb	100	
31) Benzoic Acid	3.928	105	13285	10000.0000000	ppb	100	
33) alpha-terpineol	4.140	59	47885	10000.0000000	ppb	100	
37) Hydroquinone	4.351	110	32456	10000.0000000	ppb	100	
38) Quinoline	4.357	129	92947	10000.0000000	ppb	100	
39) Caprolactam	4.375	113	11523	10000.0000000	ppb	100	
43) 1,2,4,5-Tetrachloroben...	4.698	216	42102	10000.0000000	ppb	100	
44) Diphenyl Ether	4.969	170	62422	10000.0000000	ug/ml	100	
45) Diphenyl Oxide	4.969	170	62422	10000.0000000	ug/ml	100	
62) 2,3,4,6-Tetrachlorophenol	5.540	232	16672	10000.0000000	ppb	100	
69) Atrazine	6.187	200	23085	10000.0000000	ppb	100	
82) 2-nitrodiphenylamine	7.010	167	19997	10000.0000000	ppb	100	
85) Benzidine	7.581	184	16992	10045.5217263	ppb	100	
89) 3,3-Dichlorobenzidine	9.204	252	28248	10000.0000000	ppb	100	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_13.D  
 Acq On : 31 Mar 2022 8:58 pm  
 Operator : 3545  
 Sample : MSTD TCL 10K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 04 15:59:35 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:06 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



Data Path : C:\msdchem\1\data\042922B\  
 Data File : 0429B\_03.D  
 Acq On : 29 Apr 2022 5:52 pm  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D05698 exp 9/10/22  
 Misc : TCL CAL ISTD 22D02367 exp. 10/02/22  
 ALS Vial : 4 Sample Multiplier: 1

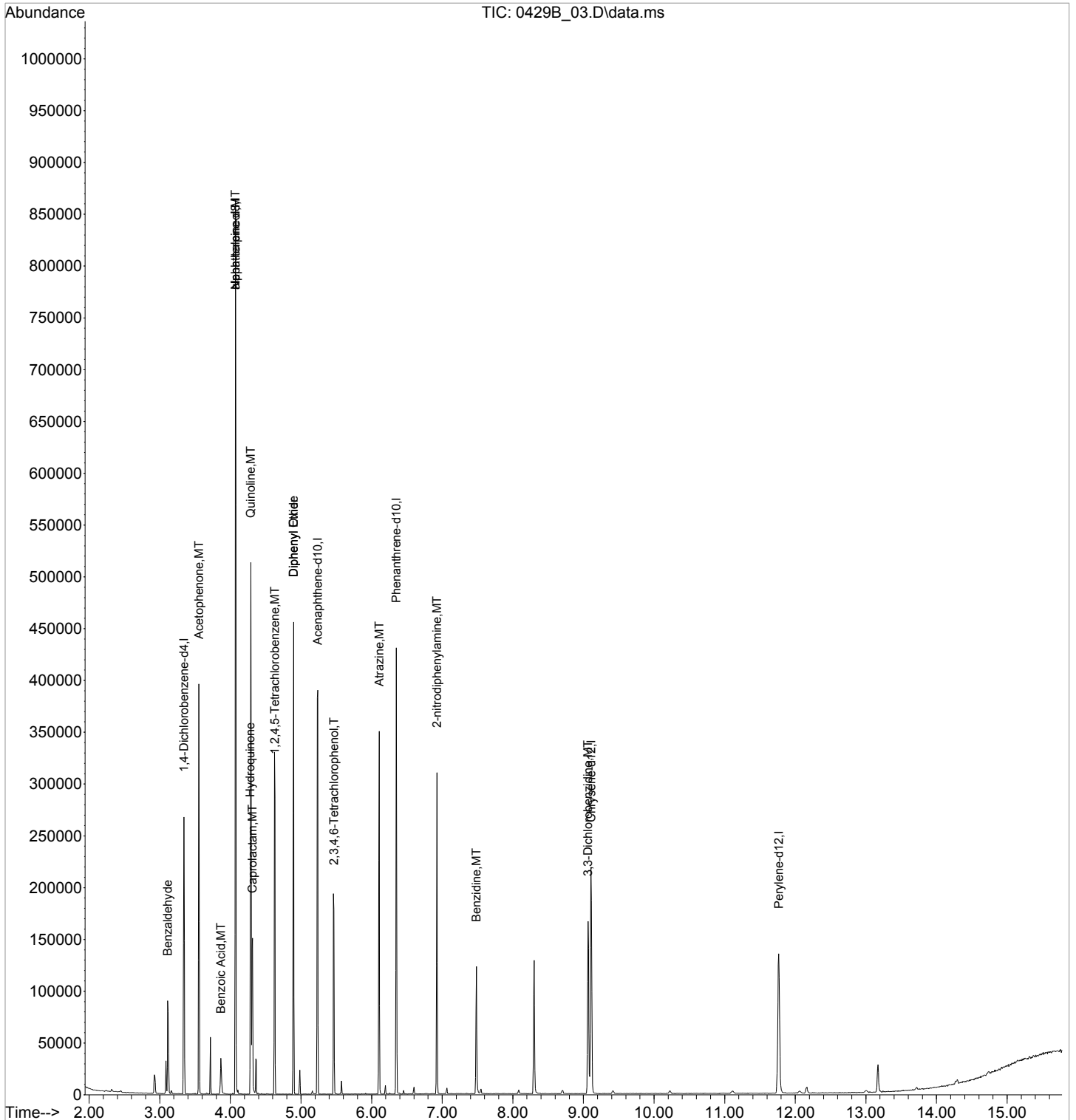
Quant Time: Apr 29 19:31:04 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.343	152	35936	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.072	136	162496	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.237	164	73371	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.348	188	124542	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.107	240	92211	8000.0000000	ppb	0.00	
94) Perylene-d12	11.766	264	82708	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
9) Benzaldehyde	3.113	105	17877	11897.0055136	ppb	99	Qvalue
22) Acetophenone	3.554	105	77833	10061.9271599	ppb	99	
31) Benzoic Acid	3.866	105	10441	7475.1145537	ppb	97	
33) alpha-terpineol	4.072	59	52436	10476.3063443	ppb	97	
37) Hydroquinone	4.284	110	36399	10269.0622148	ppb	95	
38) Quinoline	4.290	129	104932	11184.0158031	ppb	99	
39) Caprolactam	4.313	113	14776	11961.0857284	ppb	97	
43) 1,2,4,5-Tetrachloroben...	4.631	216	44745	10241.6699254	ppb	97	
44) Diphenyl Ether	4.895	170	67529	10313.7021917	ug/ml	98	
45) Diphenyl Oxide	4.895	170	67529	10313.7021917	ug/ml	98	
62) 2,3,4,6-Tetrachlorophenol	5.466	232	19384	9746.2450545	ppb	98	
69) Atrazine	6.107	200	28050	10623.3414640	ppb	97	
82) 2-nitrodiphenylamine	6.925	167	30889	11185.4538926	ppb	96	
85) Benzidine	7.483	184	45803	16815.2055310	ppb	97	
89) 3,3-Dichlorobenzidine	9.066	252	45034	11276.1739458	ppb	99	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\042922B\  
Data File : 0429B\_03.D  
Acq On : 29 Apr 2022 5:52 pm  
Operator : 3545  
Sample : ICV TCL 10K1 PPB 22D05698 exp 9/10/22  
Misc : TCL CAL ISTD 22D02367 exp. 10/02/22  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 29 19:31:04 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_14.D  
 Acq On : 31 Mar 2022 9:19 pm  
 Operator : 3545  
 Sample : STD TCL 20K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 14 Sample Multiplier: 1

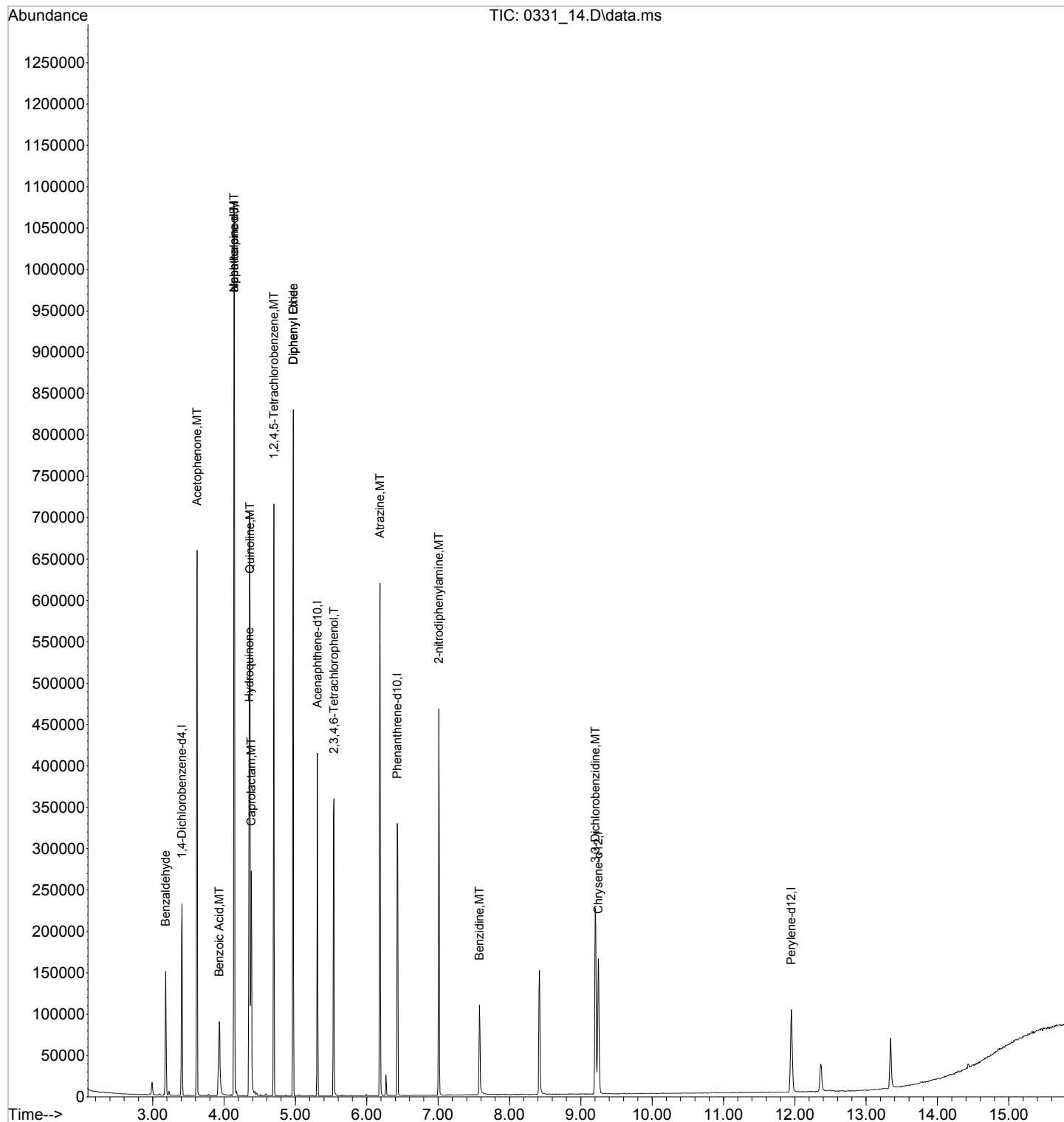
Quant Time: Apr 04 16:18:05 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:17:36 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32976	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	166588	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	65899	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.428	188	106386	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	74217	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	60508	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
							Qvalue
9) Benzaldehyde	3.181	105	27985	21379.1641942	ppb		99
22) Acetophenone	3.622	105	140981	19984.9142749	ppb		99
31) Benzoic Acid	3.934	105	33954	31589.3324189	ppb		99
33) alpha-terpineol	4.140	59	99072	17348.5751577	ppb		99
37) Hydroquinone	4.351	110	75121	19593.8858186	ppb		97
38) Quinoline	4.363	129	186747	17405.5577263	ppb		97
39) Caprolactam	4.381	113	27181	22332.1892729	ppb		99
43) 1,2,4,5-Tetrachloroben...	4.698	216	82323	16891.5493678	ppb		98
44) Diphenyl Ether	4.969	170	122968	16869.4038963	ug/ml		99
45) Diphenyl Oxide	4.969	170	122968	16869.4038963	ug/ml		99
62) 2,3,4,6-Tetrachlorophenol	5.540	232	36060	24550.3580536	ppb		100
69) Atrazine	6.187	200	50889	24345.8931400	ppb		99
82) 2-nitrodiphenylamine	7.010	167	49155	28494.9593074	ppb		96
85) Benzidine	7.581	184	46245	31477.4601229	ppb		97
89) 3,3-Dichlorobenzidine	9.204	252	66399	26100.6280685	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_14.D  
Acq On : 31 Mar 2022 9:19 pm  
Operator : 3545  
Sample : STD TCL 20K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 04 16:18:05 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:17:36 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_15.D  
 Acq On : 31 Mar 2022 9:40 pm  
 Operator : 3545  
 Sample : STD TCL 30K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 04 16:18:53 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:18:23 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

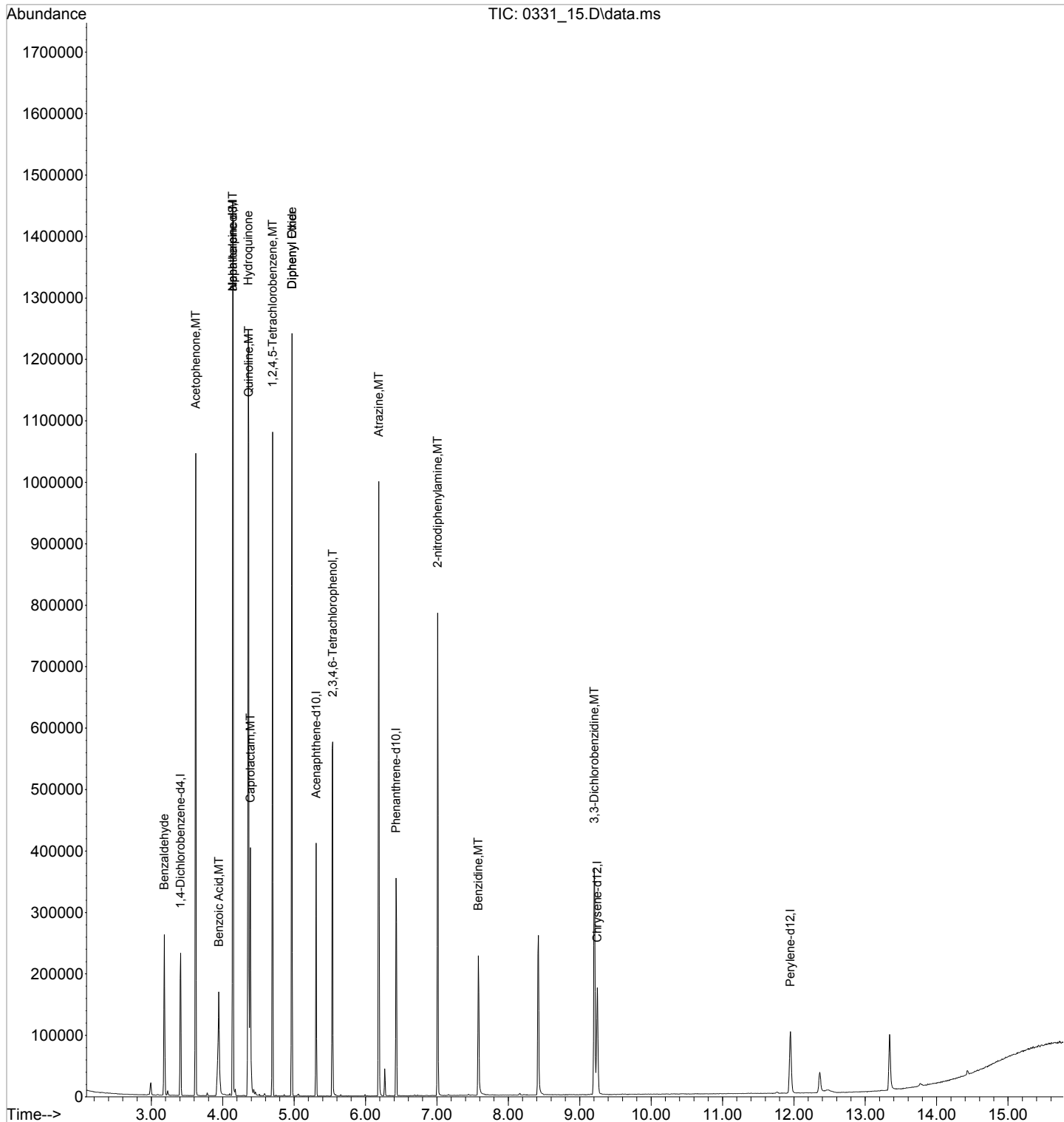
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	33491	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	188855	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	68194	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.428	188	108406	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	76700	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	62471	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
Target Compounds							
							Qvalue
9) Benzaldehyde	3.181	105	47780	35331.1828973	ppb		99
22) Acetophenone	3.622	105	218733	30535.6925993	ppb		99
31) Benzoic Acid	3.946	105	62710	44951.7521731	ppb		98
33) alpha-terpineol	4.140	59	155586	24856.2891851	ppb		99
37) Hydroquinone	4.357	110	122674	28368.5569619	ppb		99
38) Quinoline	4.363	129	289912	24633.9225551	ppb		99
39) Caprolactam	4.387	113	44595	31110.4386175	ppb		95
43) 1,2,4,5-Tetrachloroben...	4.698	216	124397	23425.2808780	ppb		98
44) Diphenyl Ether	4.969	170	188595	23751.4157709	ug/ml		99
45) Diphenyl Oxide	4.969	170	188595	23751.4157709	ug/ml		99
62) 2,3,4,6-Tetrachlorophenol	5.540	232	59018	36738.7005414	ppb		100
69) Atrazine	6.187	200	78865	34581.5780215	ppb		100
82) 2-nitrodiphenylamine	7.010	167	82992	42681.4519179	ppb		95
85) Benzidine	7.581	184	92797	53450.6210134	ppb		98
89) 3,3-Dichlorobenzidine	9.204	252	105817	37396.9826583	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_15.D  
 Acq On : 31 Mar 2022 9:40 pm  
 Operator : 3545  
 Sample : STD TCL 30K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 04 16:18:53 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:18:23 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_16.D  
 Acq On : 31 Mar 2022 10:02 pm  
 Operator : 3545  
 Sample : STD TCL 40K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 16 Sample Multiplier: 1

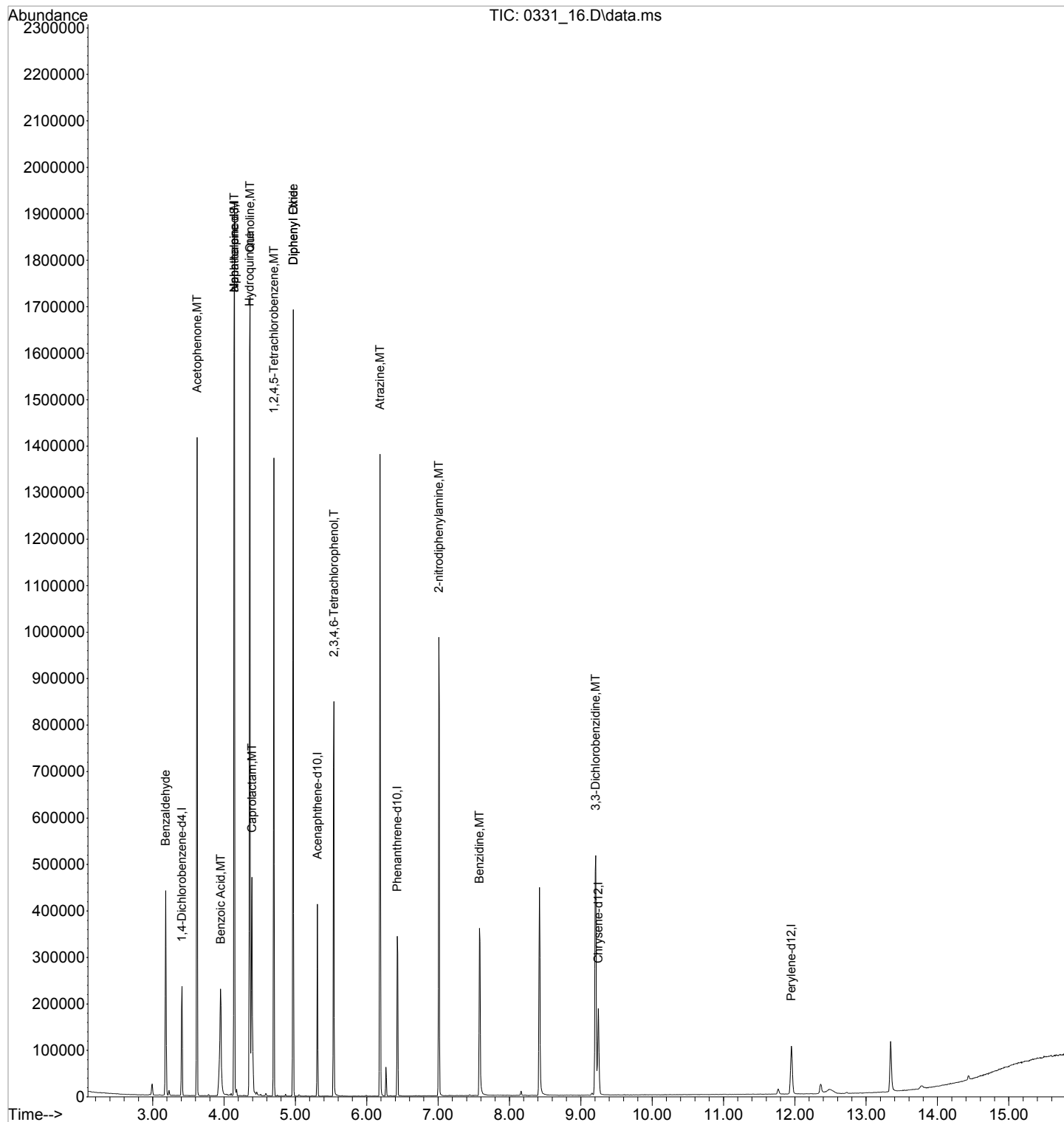
Quant Time: Apr 04 16:19:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:19:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.410	152	32750	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.145	136	205762	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	66340	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.428	188	109489	8000.0000000	ppb	0.00
84) Chrysene-d12	9.245	240	77049	8000.0000000	ppb	0.00
94) Perylene-d12	11.951	264	63298	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.181	105	80706	58934.1841835	ppb	99
22) Acetophenone	3.622	105	286364	40736.1958980	ppb	99
31) Benzoic Acid	3.951	105	92634	55421.4497707	ppb	99
33) alpha-terpineol	4.145	59	203905	30960.7071165	ppb	87
37) Hydroquinone	4.357	110	166918	35817.9389554	ppb	95
38) Quinoline	4.363	129	378568	30619.3304379	ppb	98
39) Caprolactam	4.392	113	62917	39916.3623369	ppb	96
43) 1,2,4,5-Tetrachloroben...	4.698	216	161130	29125.9548510	ppb	98
44) Diphenyl Ether	4.969	170	243421	29360.2543064	ug/ml	99
45) Diphenyl Oxide	4.969	170	243421	29360.2543064	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.539	232	79933	48949.8236216	ppb	97
69) Atrazine	6.186	200	105331	46070.2880297	ppb	99
82) 2-nitrodiphenylamine	7.010	167	117319	55081.7026593	ppb	94
85) Benzidine	7.580	184	154562	76641.7310555	ppb	97
89) 3,3-Dichlorobenzidine	9.210	252	146578	49144.2966400	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_16.D  
Acq On : 31 Mar 2022 10:02 pm  
Operator : 3545  
Sample : STD TCL 40K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 04 16:19:37 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:19:11 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_17.D  
 Acq On : 31 Mar 2022 10:23 pm  
 Operator : 3545  
 Sample : STD TCL 50K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 17 Sample Multiplier: 1

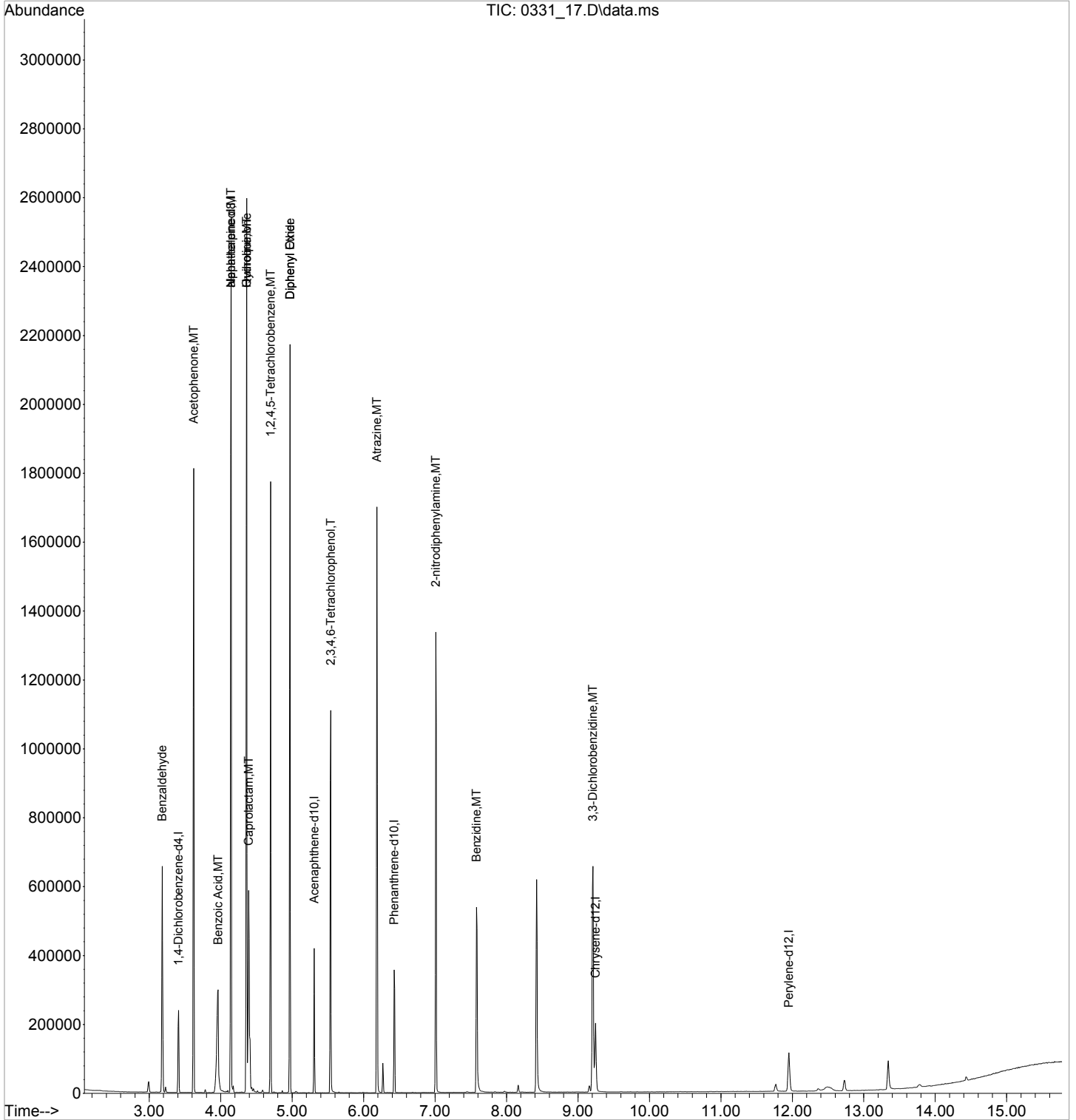
Quant Time: Apr 04 16:20:23 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:19:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	34438	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	228625	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	68678	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.428	188	112052	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	79417	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	67284	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
Target Compounds							
							Qvalue
9) Benzaldehyde	3.181	105	118679	76388.9545388	ppb		99
22) Acetophenone	3.622	105	370115	49916.2518975	ppb		99
31) Benzoic Acid	3.963	105	131168	66363.7153033	ppb		98
33) alpha-terpineol	4.145	59	264407	37546.5934006	ppb		88
37) Hydroquinone	4.363	110	219123	43068.6482517	ppb		98
38) Quinoline	4.363	129	481916	36507.3343524	ppb		99
39) Caprolactam	4.393	113	83764	47847.9644639	ppb		94
43) 1,2,4,5-Tetrachloroben...	4.698	216	204315	34816.2846862	ppb		97
44) Diphenyl Ether	4.969	170	310150	35229.6306939	ug/ml		99
45) Diphenyl Oxide	4.969	170	310150	35229.6306939	ug/ml		99
62) 2,3,4,6-Tetrachlorophenol	5.540	232	103514	59031.1652154	ppb		96
69) Atrazine	6.187	200	137008	56457.3564133	ppb		100
82) 2-nitrodiphenylamine	7.010	167	156949	67745.4868336	ppb		93
85) Benzidine	7.581	184	223719	93371.1103111	ppb		97
89) 3,3-Dichlorobenzidine	9.210	252	187922	58883.7932200	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_17.D  
Acq On : 31 Mar 2022 10:23 pm  
Operator : 3545  
Sample : STD TCL 50K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 04 16:20:23 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:19:57 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0209_21	<b>Analysis date/time:</b>	02/09/22 15:56
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.623837	0.62111570		0.4360		10	9.956	99.60	70 - 130
2-METHYLNAPHTHALENE	0.663826	0.63308330		4.63		10	9.537	95.40	70 - 130
3&4-METHYL PHENOL	1.350649	1.338996		0.8630		10	9.914	99.10	70 - 130
ACENAPHTHENE	1.170435	1.121669		4.17		10	9.583	95.80	70 - 130
ACENAPHTHYLENE	1.779211	1.817918		2.18		10	10.22	102	70 - 130
ANTHRACENE	1.065424	1.034061		2.94		10	9.706	97.10	70 - 130
BENZO(A)ANTHRACENE	1.151953	1.120667		2.72		10	9.728	97.30	70 - 130
BENZO(A)PYRENE	0.987052	1.048235		6.20		10	10.62	106	70 - 130
BENZO(B)FLUORANTHENE	1.139642	1.101573		3.34		10	9.666	96.70	70 - 130
BENZO(G,H,I)PERYLENE	1.009366	1.078476		6.85		10	10.68	107	70 - 130
BENZO(K)FLUORANTHENE	1.122546	1.14238		0.74		10	9.926	99.30	70 - 130
BIS(2-ETHYLHEXYL)PHTHALATE	0.724997	0.79033960		9.01		10	10.90	109	70 - 130
CARBAZOLE	0.972084	1.021167		5.05		10	10.50	105	70 - 130
CHRYSENE	1.116357	1.141252		2.23		10	10.22	102	70 - 130
DI-N-BUTYL PHTHALATE	1.138017	1.178124		3.52		10	10.35	104	70 - 130
DI-N-OCTYL PHTHALATE	1.204403	1.241811		3.11		10	10.31	103	70 - 130
DIBENZ(A,H)ANTHRACENE	1.033545	1.082655		4.75		10	10.48	105	70 - 130
DIBENZOFURAN	1.623192	1.575663		2.93		10	9.707	97.10	70 - 130
FLUORANTHENE	1.1182	1.053931		5.75		10	9.425	94.30	70 - 130
FLUORENE	1.316666	1.307861		0.6690		10	9.933	99.30	70 - 130
INDENO(1,2,3-CD)PYRENE	0.969769	1.039433		7.18		10	10.72	107	70 - 130
NAPHTHALENE	1.018747	1.008173		1.04		10	9.896	99	70 - 130
PENTACHLOROPHENOL	0.121187	0.14212140		17.30		10	11.73	117	70 - 130
PHENANTHRENE	1.052577	1.027167		2.41		10	9.759	97.60	70 - 130
PHENOL	1.643512	1.610572		2		10	9.800	98	70 - 130
PYRENE	1.287230	1.281216		0.4670		10	9.953	99.50	70 - 130
2,4,6-TRIBROMOPHENOL	0.090561	0.08983042		0.8070		10	9.919	99.20	70 - 130
2-FLUOROBIPHENYL	1.349543	1.323445		1.93		10	9.807	98.10	70 - 130
2-FLUOROPHENOL	1.299982	1.279613		1.57		10	9.843	98.40	70 - 130
NITROBENZENE-D5	0.339442	0.35322840		4.06		10	10.41	104	70 - 130
P-TERPHENYL-D14	1.093292	1.098755		0.50		10	10.05	101	70 - 130
PHENOL-D5	1.560263	1.524287		2.31		10	9.769	97.70	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	88915	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	355224	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	184704	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	340250	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	293653	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	310728	8000.00	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.84	112	142221	9843.3121001	ppb	0.00
Spiked Amount	666.000		Recovery	= 1477.97%		
7) Phenol-d5	3.28	99	169415	9769.4265067	ppb	0.00
Spiked Amount	666.000		Recovery	= 1466.88%		
24) Nitrobenzene-d5	3.82	82	156844	10406.1534584	ppb	0.00
Spiked Amount	333.000		Recovery	= 3124.97%		
50) 2-Fluorobiphenyl	4.95	172	305557	9806.6161349	ppb	0.00
Spiked Amount	333.000		Recovery	= 2944.93%		
73) 2,4,6-Tribromophenol	6.02	330	38206	9919.3409749	ppb	0.00
Spiked Amount	666.000		Recovery	= 1489.39%		
87) p-Terphenyl-d14	8.04	244	403316	10049.9749250	ppb	0.00
Spiked Amount	333.000		Recovery	= 3018.01%		
Target Compounds						
2) Pyridine	2.29	79	157472	11446.0495914	ppb	90
3) N-Nitrosodimethylamine	2.28	42	68975	9340.9358063	ppb	87
5) Aniline	3.34	66	79389	9650.2197215	ppb	92
6) bis(2-Chloroethyl)ether	3.36	93	152062m	11899.7254383	ppb	
8) Phenol	3.29	94	179005	9799.5751289	ppb	98
10) 2-Chlorophenol	3.40	128	146262	10000.5197227	ppb	95
11) n-Decane	3.40	41	82952	9629.2271328	ppb	98
12) 1,3-Dichlorobenzene	3.49	146	164692	9959.1733450	ppb	95
13) 1,4-Dichlorobenzene	3.53	146	167144	9819.9981031	ppb	97
14) Benzyl Alcohol	3.57	79	113873	10066.8014240	ppb	99
15) 1,2-Dichlorobenzene	3.61	146	157389	10059.2311925	ppb	100
16) bis(2-Chloroisopropyl)ethe	3.65	121	53196	9935.6902402	ppb	64
17) 2,2-oxybis(1-chloropropane	3.65	121	53196	9935.6902402	ppb	64
18) 2-Methylphenol	3.62	108	133745	10120.0527818	ppb	98
19) Hexachloroethane	3.80	117	62812	10166.1307570	ppb	99
20) N-Nitrosodi-n-propylamine	3.72	70	98111	10158.5564450	ppb	96
21) 3&4-Methyl phenol	3.70	107	148821	9913.7205681	ppb	99
25) Nitrobenzene	3.83	77	149817	10165.9220817	ppb	94
26) Isophorone	3.96	82	260097	9838.5361753	ppb	95
27) 2-Nitrophenol	4.01	139	75876	10214.9836033	ppb	# 76
28) 2,4-Dimethylphenol	4.01	107	139227	10092.5405476	ppb	98
29) bis(2-Chlorethoxy)methane	4.08	93	172239	10189.7011915	ppb	95
30) 2,4-Dichlorophenol	4.15	162	116228	10001.3018153	ppb	94
32) 1,2,4-Trichlorobenzene	4.22	180	126978	9761.1362823	ppb	99
34) Naphthalene	4.27	128	447659	9896.2058674	ppb	99
35) 4-Chloroaniline	4.28	65	50393	9587.7463840	ppb	95
36) Hexachloro-1,3-butadiene	4.33	225	78373	11043.8206612	ppb	98
40) 4-Chloro-3-methylphenol	4.57	107	115951	9898.0134487	ppb	92
41) 2-Methylnaphthalene	4.71	142	281108	9536.8809357	ppb	100
42) 1-Methylnaphthalene	4.78	142	275794	9956.3737843	ppb	100
47) Hexachlorocyclopentadiene	4.81	237	69461	8026.8498870	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	77627	9689.8796793	ppb	95
49) 2,4,5-Trichlorophenol	4.91	196	82579	9904.7566201	ppb	95

(#) = qualifier out of range (m) = manual integration  
 0209 21.D S804B09V.M Sat Feb 19 13:14:48 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

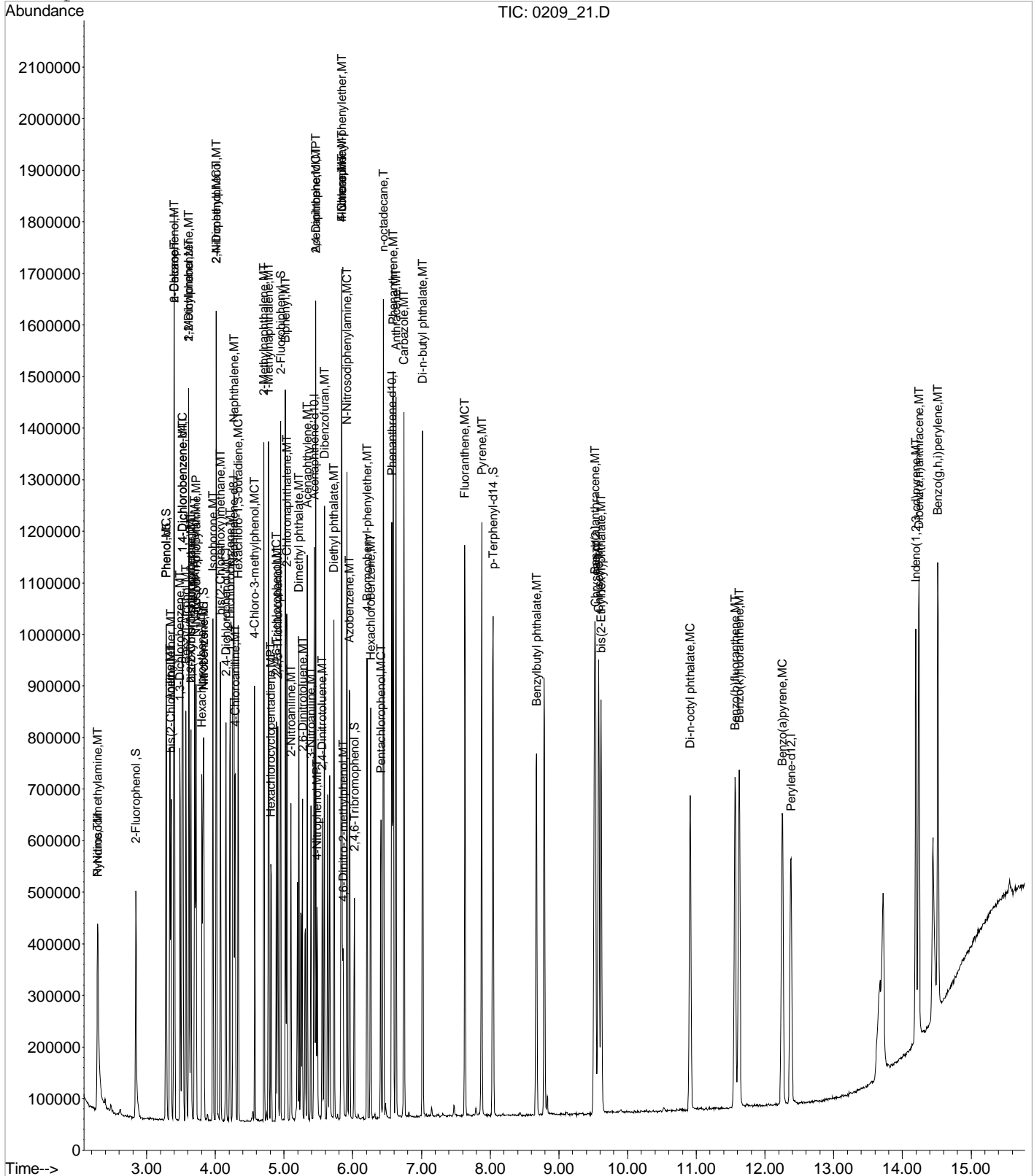
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	339927	9824.7030690	ppb	100
52) 2-Chloronaphthalene	5.05	162	263674	9985.7067521	ppb	97
53) 2-Nitroaniline	5.10	138	85461	10441.1102055	ppb	99
54) Acenaphthylene	5.34	152	419721	10217.5539048	ppb	99
55) Dimethyl phthalate	5.22	163	271177	9912.7354425	ppb	96
56) 2,6-Dinitrotoluene	5.27	165	66568	10495.3544301	ppb	96
57) 3-Nitroaniline	5.39	138	71255	10434.3274272	ppb	94
58) Acenaphthene	5.46	153	258971	9583.3554787	ppb	98
59) 2,4-Dinitrophenol	5.46	184	32249	9366.7731553	ppb #	41
60) Dibenzofuran	5.59	168	363789	9707.1874050	ppb	99
61) 2,4-Dinitrotoluene	5.56	165	83714	10539.5845559	ppb	88
63) 4-Nitrophenol	5.48	139	57927	10269.5341891	ppb	86
64) Fluorene	5.84	166	301959	9933.1298206	ppb	99
65) 4-Chlorophenyl-phenylether	5.83	204	140076	9716.6624786	ppb	96
66) Diethyl phthalate	5.73	149	278249	9927.9939388	ppb	99
67) 4-Nitroaniline	5.84	138	71180	11128.8378074	ppb	100
68) Azobenzene	5.95	77	286668	10253.9212561	ppb	99
71) 4,6-Dinitro-2-methylphenol	5.86	198	41701	9106.4716264	ppb	91
72) N-Nitrosodiphenylamine	5.92	169	255428	9879.1219938	ppb	99
74) 4-Bromophenyl-phenylether	6.21	248	81712	9737.7454867	ppb	90
75) Hexachlorobenzene	6.26	284	87977	9422.4970036	ppb	97
76) n-octadecane	6.45	55	48997	9411.5588818	ppb	98
77) Pentachlorophenol	6.41	266	60446	11727.4301888	ppb	97
78) Phenanthrene	6.59	178	436867	9758.5964787	ppb	98
79) Anthracene	6.63	178	439799	9705.6272941	ppb	99
80) Carbazole	6.75	167	434315	10504.9193533	ppb	99
81) Di-n-butyl phthalate	7.02	149	501071	10352.4273975	ppb	99
83) Fluoranthene	7.63	202	448250	9425.2443016	ppb	99
86) Pyrene	7.88	202	470291	9953.2786119	ppb	99
88) Benzylbutyl phthalate	8.68	149	199983	10350.8994468	ppb	96
90) Benzo(a)anthracene	9.52	228	411359	9728.4110603	ppb	99
91) Chrysene	9.58	228	418915	10222.9958461	ppb	99
92) bis(2-Ethylhexyl)phthalate	9.62	149	290107	10901.2883412	ppb	99
93) Di-n-octyl phthalate	10.91	149	455827	10310.5936140	ppb	100
95) Benzo(b)fluoranthene	11.56	252	427862	9665.9587742	ppb	99
96) Benzo(k)fluoranthene	11.62	252	432781	9925.9826493	ppb	98
97) Benzo(a)pyrene	12.26	252	407145	10619.8621200	ppb	98
98) Indeno(1,2,3-cd)pyrene	14.20	276	403726	10718.3514750	ppb	98
99) Dibenz(a,h)anthracene	14.24	278	420514	10475.1647908	ppb	98
100) Benzo(g,h,i)perylene	14.52	276	418891	10684.6875266	ppb	99

(#) = qualifier out of range (m) = manual integration



Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18
Acq On : 9 Feb 2022 3:56 pm Operator: 917
Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 19 13:13 2022 Quant Results File: S804B09V.RES

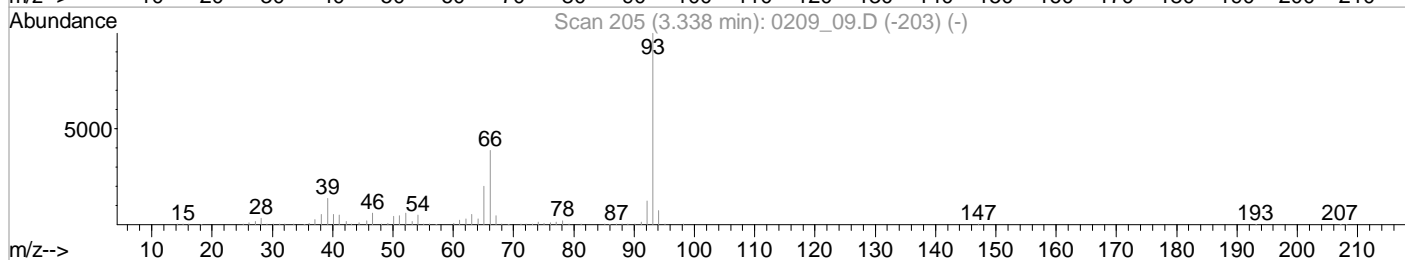
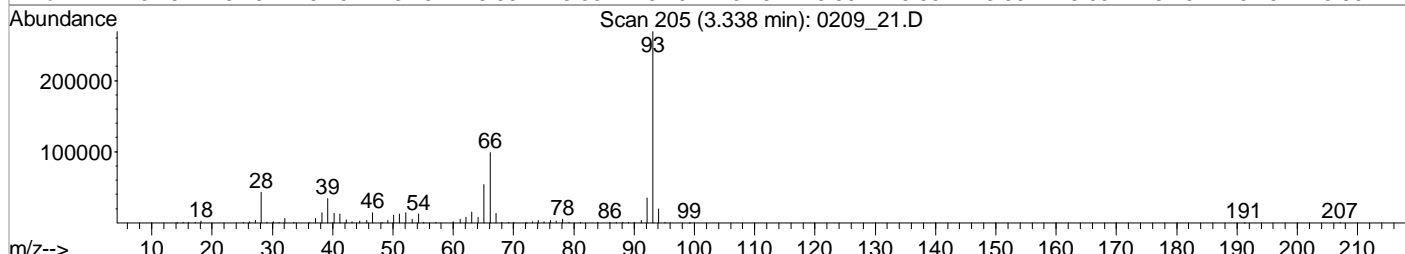
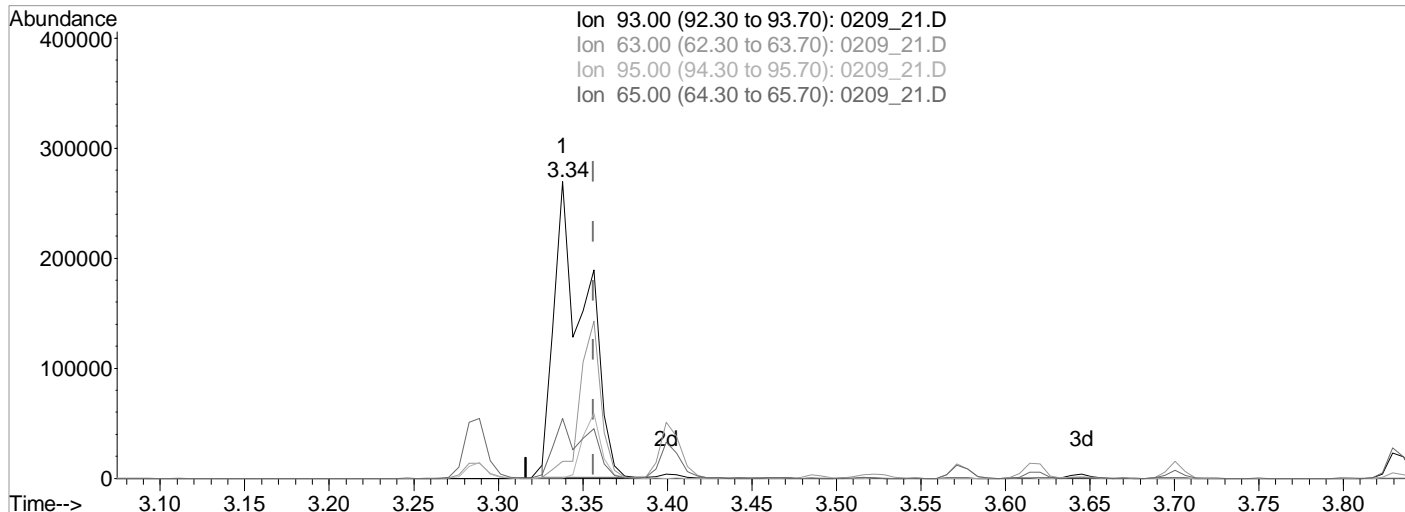
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Fri Feb 18 17:49:17 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_21.D

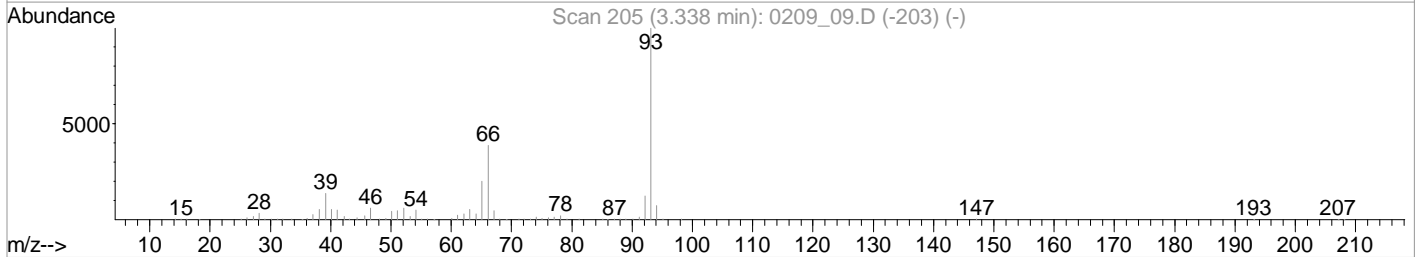
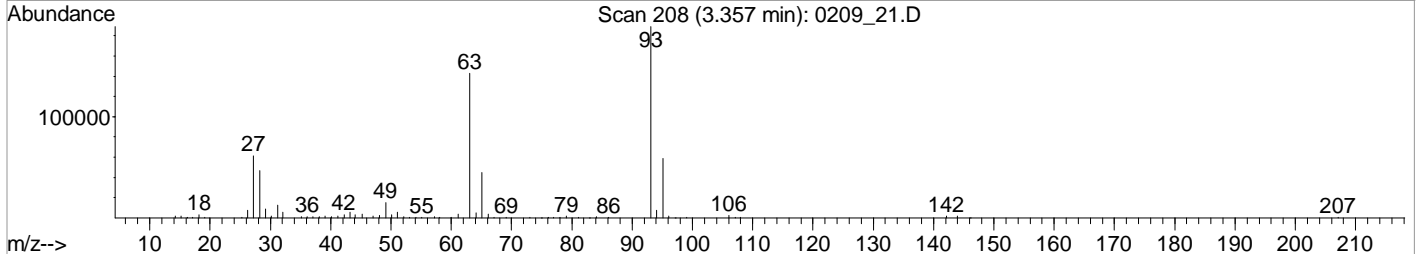
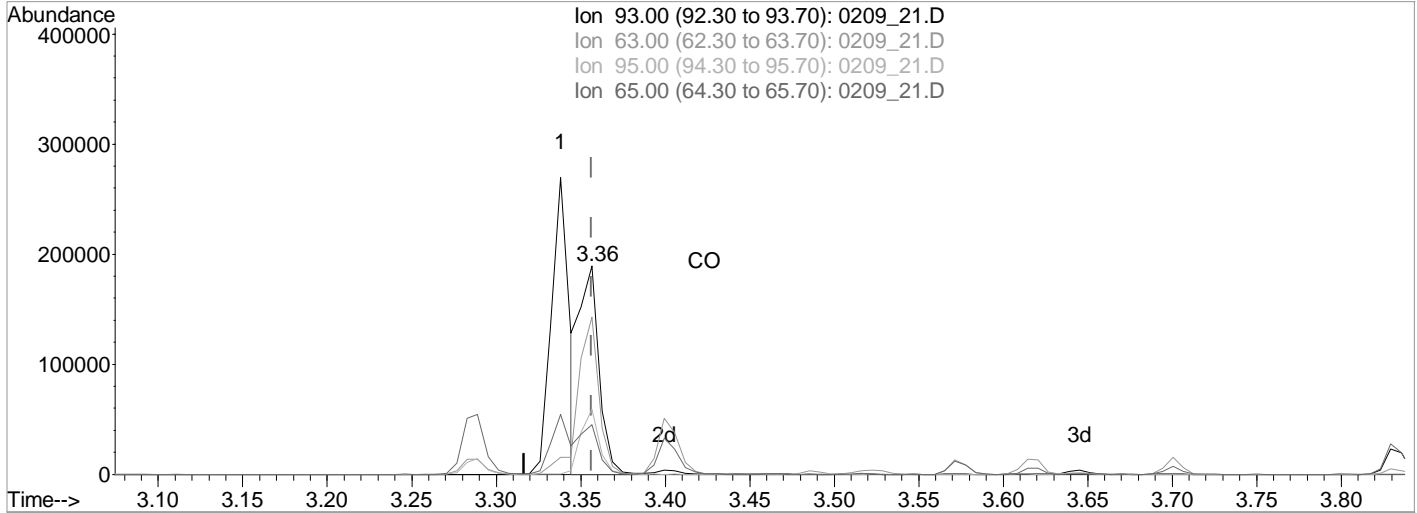
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.018) 26968.5738731 ppb  
 Qvalue = 37  
 response 344621

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.32#
95.00	30.20	0.19#
65.00	24.00	19.88

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_21.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (+0.000) 11899.7254383 ppb m

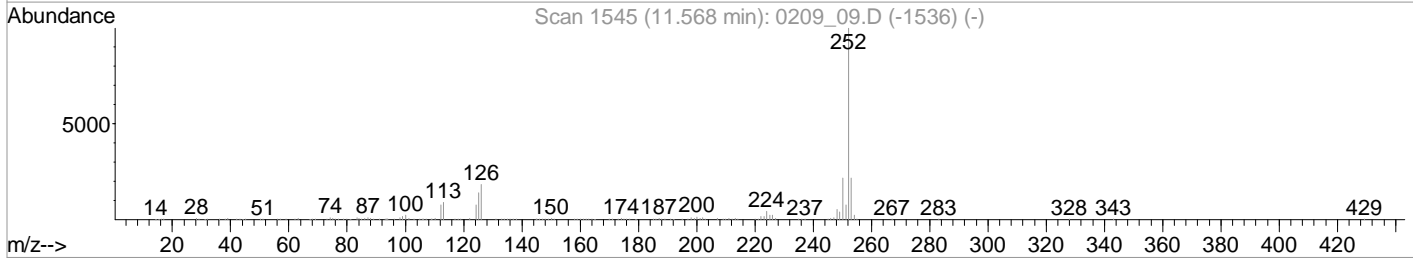
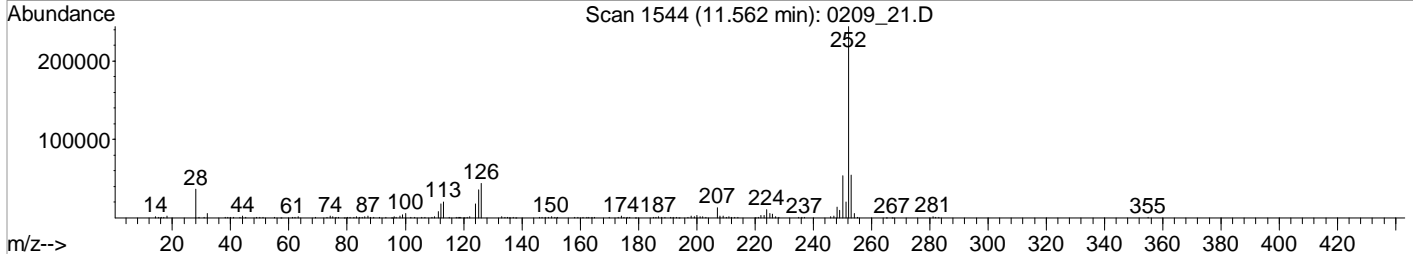
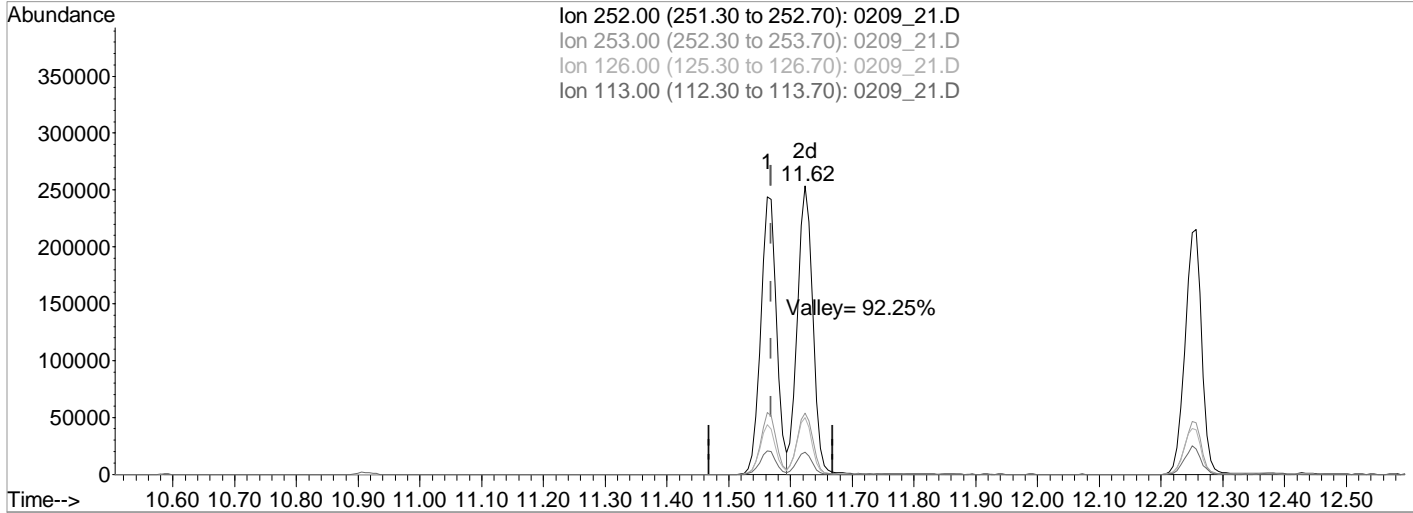
response 152062

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	75.41
95.00	30.20	31.11
65.00	24.00	23.78

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_21.D

(95) Benzo(b)fluoranthene (MT)  
 11.56min (-0.006) 9665.9587742 ppb  
 Qvalue = 99  
 response 427862

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	22.19
126.00	18.30	17.93
113.00	8.80	8.37

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0209_22	<b>Analysis date/time:</b>	02/09/22 16:16
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.130890	0.11422550		12.70		10	8.727	87.30	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data File : C:\MSDCHEM\1\DATA\020922\0209 22.D Vial: 19  
 Acq On : 9 Feb 2022 4:16 pm Operator: 917  
 Sample : SSCV TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:15 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	85079	8000.00	ppb	0.00
23) Naphthalene-d8	4.25	136	383109	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	171657	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	322325	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	279649	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	289195	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.00	82	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	37078	9798.3476806	ppb	95
22) Acetophenone	3.73	105	170064	9665.7562550	ppb #	83
31) Benzoic Acid	4.05	105	54701	8726.7995983	ppb	99
33) alpha-terpineol	4.25	59	122109	10160.5025665	ppb	99
37) Hydroquinone	4.46	110	38203	4269.0301296	ppb	96
38) Quinoline	4.48	129	266786	10450.3090905	ppb	100
39) Caprolactam	4.50	113	34287	12988.4396711	ppb #	51
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	109368	10665.4487633	ppb	98
44) Diphenyl Ether	5.09	170	160063	9785.0929631	ug/ml	99
45) Diphenyl Oxide	5.09	170	160063	9785.0929631	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.67	232	44534	9097.6464207	ppb	97
69) Atrazine	6.32	200	72810	10372.2835887	ppb	98
82) 2-nitrodiphenylamine	7.16	167	77558	9540.6082926	ppb #	100
85) Benzidine	7.76	184	172118	10413.7591707	ppb	99
89) 3,3-Dichlorobenzidine	9.48	252	141066	9798.2449383	ppb	99

(#) = qualifier out of range (m) = manual integration

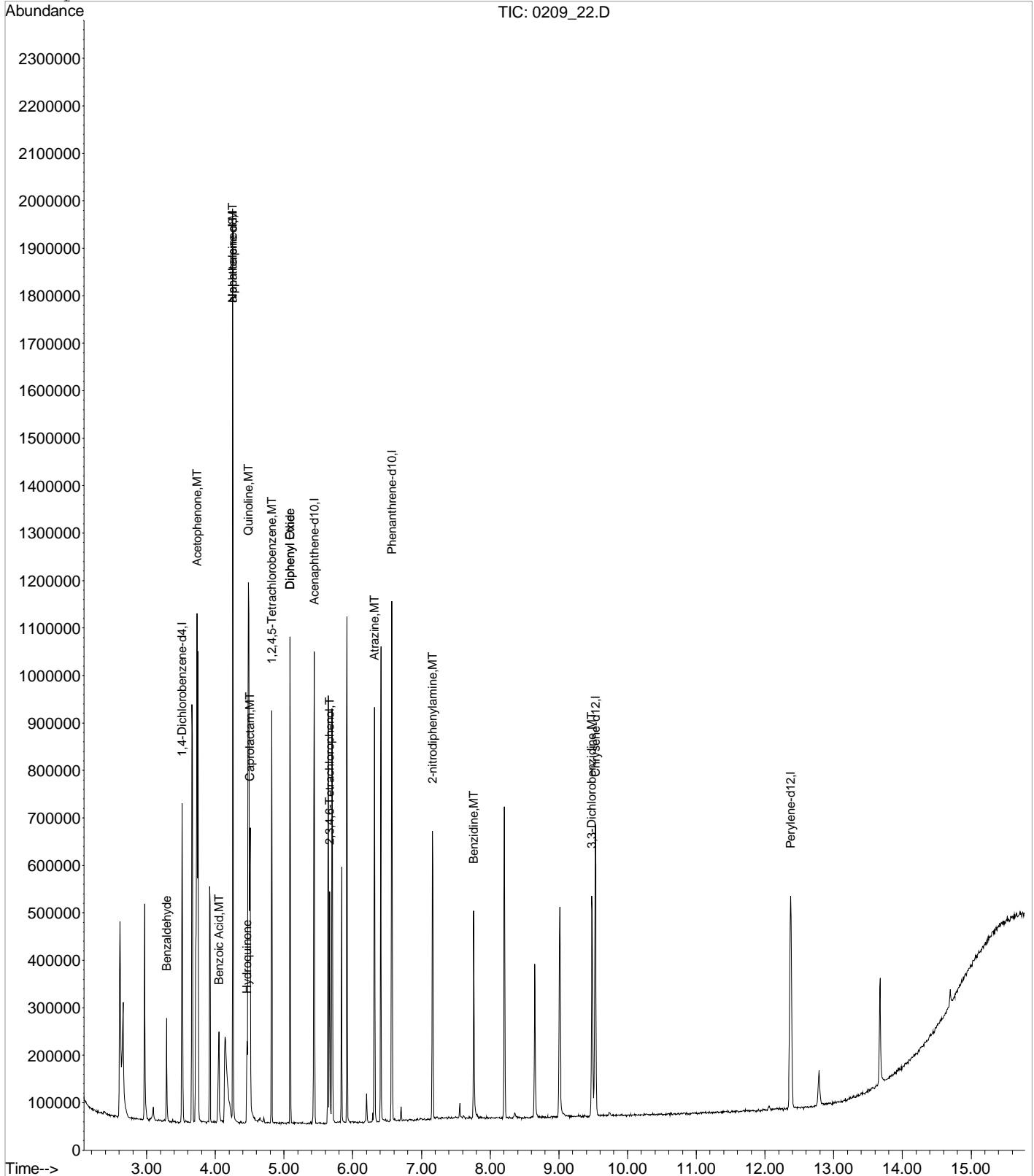
0209\_22.D S804B09V.M Sat Feb 19 13:16:13 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 22.D  
Acq On : 9 Feb 2022 4:16 pm  
Sample : SSCV TCL 10K1 PPB 22B06091 exp. 07/15/22  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
MS Integration Params: RTEINT.P  
Quant Time: Feb 19 13:15 2022

Vial: 19  
Operator: 917  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Fri Feb 18 17:49:17 2022  
Response via : Initial Calibration



GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0503A_02	<b>Analysis date/time:</b>	05/03/22 13:09
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.623837	0.62027970		0.57	20	10	9.943	99.40	
2-METHYLNAPHTHALENE	0.663826	0.65147950	0.40	1.86	20	10	9.814	98.10	
3&4-METHYL PHENOL	1.350649	1.498567	0.60	11	20	10	11.10	111	
ACENAPHTHENE	1.170435	1.213922	0.90	3.72	20	10	10.37	104	
ACENAPHTHYLENE	1.779211	1.843212	0.90	3.60	20	10	10.36	104	
ANTHRACENE	1.065424	1.104374	0.70	3.66	20	10	10.37	104	
BENZO(A)ANTHRACENE	1.151953	1.145717	0.80	0.5410	20	10	9.946	99.50	
BENZO(A)PYRENE	0.987052	0.98952040	0.70	0.25	20	10	10.03	100	
BENZO(B)FLUORANTHENE	1.139642	1.138203	0.70	0.1260	20	10	9.987	99.90	
BENZO(G,H,I)PERYLENE	1.009366	1.107553	0.50	9.73	20	10	10.97	110	
BENZO(K)FLUORANTHENE	1.122546	1.158332	0.70	3.19	20	10	10.32	103	
BIS(2-ETHYLHEXYL)PHTHALATE	0.724997	0.83526220	0.01	15.20	20	10	11.52	115	
CARBAZOLE	0.972084	0.96853820	0.01	0.3650	20	10	9.964	99.60	
CHRYSENE	1.116357	1.161295	0.70	4.03	20	10	10.40	104	
DI-N-BUTYL PHTHALATE	1.138017	1.228768	0.01	7.97	20	10	10.80	108	
DI-N-OCTYL PHTHALATE	1.204403	1.255785	0.01	4.27	20	10	10.43	104	
DIBENZ(A,H)ANTHRACENE	1.033545	1.097520	0.40	6.19	20	10	10.62	106	
DIBENZOFURAN	1.623192	1.629774	0.80	0.4050	20	10	10.04	100	
FLUORANTHENE	1.1182	1.062660	0.60	4.97	20	10	9.503	95	
FLUORENE	1.316666	1.331065	0.90	1.09	20	10	10.11	101	
INDENO(1,2,3-CD)PYRENE	0.969769	0.94489380	0.50	2.57	20	10	9.743	97.40	
NAPHTHALENE	1.018747	1.016697	0.70	0.2010	20	10	9.980	99.80	
PENTACHLOROPHENOL	0.121187	0.10562870	0.05	12.80	20	10	8.716	87.20	
PHENANTHRENE	1.052577	1.069776	0.70	1.63	20	10	10.16	102	
PHENOL	1.643512	1.727410	0.80	5.10	20	10	10.51	105	
PYRENE	1.287230	1.308697	0.60	1.67	20	10	10.17	102	
2,4,6-TRIBROMOPHENOL	0.090561	0.10379170		14.60	20	10	11.46	115	70 - 130
2-FLUOROBIPHENYL	1.349543	1.351731		0.1620	20	10	10.02	100	70 - 130
2-FLUOROPHENOL	1.299982	1.303604		0.2790	20	10	10.03	100	70 - 130
NITROBENZENE-D5	0.339442	0.40238820		18.50	20	10	11.85	119	70 - 130
P-TERPHENYL-D14	1.093292	1.162626		6.34	20	10	10.63	106	70 - 130
PHENOL-D5	1.560263	1.731366		11	20	10	11.10	111	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.



Data File : C:\MSDCHEM\1\DATA\050322A\0503A 02.D Vial: 3  
 Acq On : 3 May 2022 1:09 pm Operator: 3545  
 Sample : ICVMSV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:55 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	74619	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	298130	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	154226	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	285680	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	237512	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	241363	8000.00	ppb	-0.11

System Monitoring Compounds

4) 2-Fluorophenol	2.61	112	121592	10027.8571270	ppb	-0.04
Spiked Amount 20000.000				Recovery =	50.14%	
7) Phenol-d5	3.06	99	161491	11096.6309373	ppb	-0.03
Spiked Amount 20000.000				Recovery =	55.48%	
24) Nitrobenzene-d5	3.59	82	149955m	11854.4084745	ppb	-0.04
Spiked Amount 10000.000				Recovery =	118.54%	
50) 2-Fluorobiphenyl	4.70	172	260590	10016.2092797	ppb	-0.04
Spiked Amount 10000.000				Recovery =	100.16%	
73) 2,4,6-Tribromophenol	5.76	330	37064	11460.9820361	ppb	-0.05
Spiked Amount 20000.000				Recovery =	57.30%	
87) p-Terphenyl-d14	7.69	244	345172	10634.1791182	ppb	-0.07
Spiked Amount 10000.000				Recovery =	106.34%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.02	79	142194	12315.7016484	ppb	90
3) N-Nitrosodimethylamine	2.01	42	82206	13265.6276583	ppb	98
5) Aniline	3.11	66	81000	11732.4171835	ppb #	41
6) bis(2-Chloroethyl)ether	3.13	93	118374m	11038.1978521	ppb	
8) Phenol	3.07	94	161122	10510.4796870	ppb	96
10) 2-Chlorophenol	3.17	128	127172	10361.1550455	ppb	91
11) n-Decane	3.17	41	86444	11957.0771750	ppb	96
12) 1,3-Dichlorobenzene	3.25	146	138124	9952.8060946	ppb	93
13) 1,4-Dichlorobenzene	3.29	146	143882	10072.8574262	ppb	97
14) Benzyl Alcohol	3.35	79	102750	10823.7606086	ppb	95
15) 1,2-Dichlorobenzene	3.38	146	134081	10211.3523543	ppb	96
16) bis(2-Chloroisopropyl)ethe	3.41	121	44735	9956.1656978	ppb #	34
17) 2,2-oxybis(1-chloropropane	3.41	121	44735	9956.1656978	ppb #	34
18) 2-Methylphenol	3.40	108	124909	11262.2344054	ppb	90
19) Hexachloroethane	3.57	117	60014	11574.2071651	ppb	98
20) N-Nitrosodi-n-propylamine	3.49	70	100473	12396.2199639	ppb	95
21) 3&4-Methyl phenol	3.48	107	139777	11095.1653390	ppb	95
25) Nitrobenzene	3.60	77	150366	12157.1548213	ppb	89
26) Isophorone	3.73	82	272850	12297.4685962	ppb	100
27) 2-Nitrophenol	3.78	139	70510	11310.4681449	ppb	89
28) 2,4-Dimethylphenol	3.79	107	132934	11481.7934734	ppb	92
29) bis(2-Chlorethoxy)methane	3.84	93	161384	11375.9336167	ppb	94
30) 2,4-Dichlorophenol	3.92	162	99014	10151.7051302	ppb	97
32) 1,2,4-Trichlorobenzene	3.97	180	111695	10230.6269000	ppb	96
34) Naphthalene	4.03	128	378885	9979.8826173	ppb	98
35) 4-Chloroaniline	4.05	65	49820	11293.9709775	ppb #	51
36) Hexachloro-1,3-butadiene	4.09	225	67753	11375.6972279	ppb	98
40) 4-Chloro-3-methylphenol	4.35	107	108178	11002.9492353	ppb	90
41) 2-Methylnaphthalene	4.46	142	242782	9814.0046717	ppb	96
42) 1-Methylnaphthalene	4.53	142	231155	9942.9737086	ppb	96
47) Hexachlorocyclopentadiene	4.56	237	51742	7160.8739201	ppb	94
48) 2,4,6-Trichlorophenol	4.64	196	67989	10163.9598578	ppb #	89
49) 2,4,5-Trichlorophenol	4.67	196	72554	10422.0764752	ppb	94

(#) = qualifier out of range (m) = manual integration  
 0503A\_02.D S804C29V.M Tue May 03 14:57:02 2022

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 02.D Vial: 3  
 Acq On : 3 May 2022 1:09 pm Operator: 3545  
 Sample : ICVMSV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:55 2022 Quant Results File: S804C29V.RES

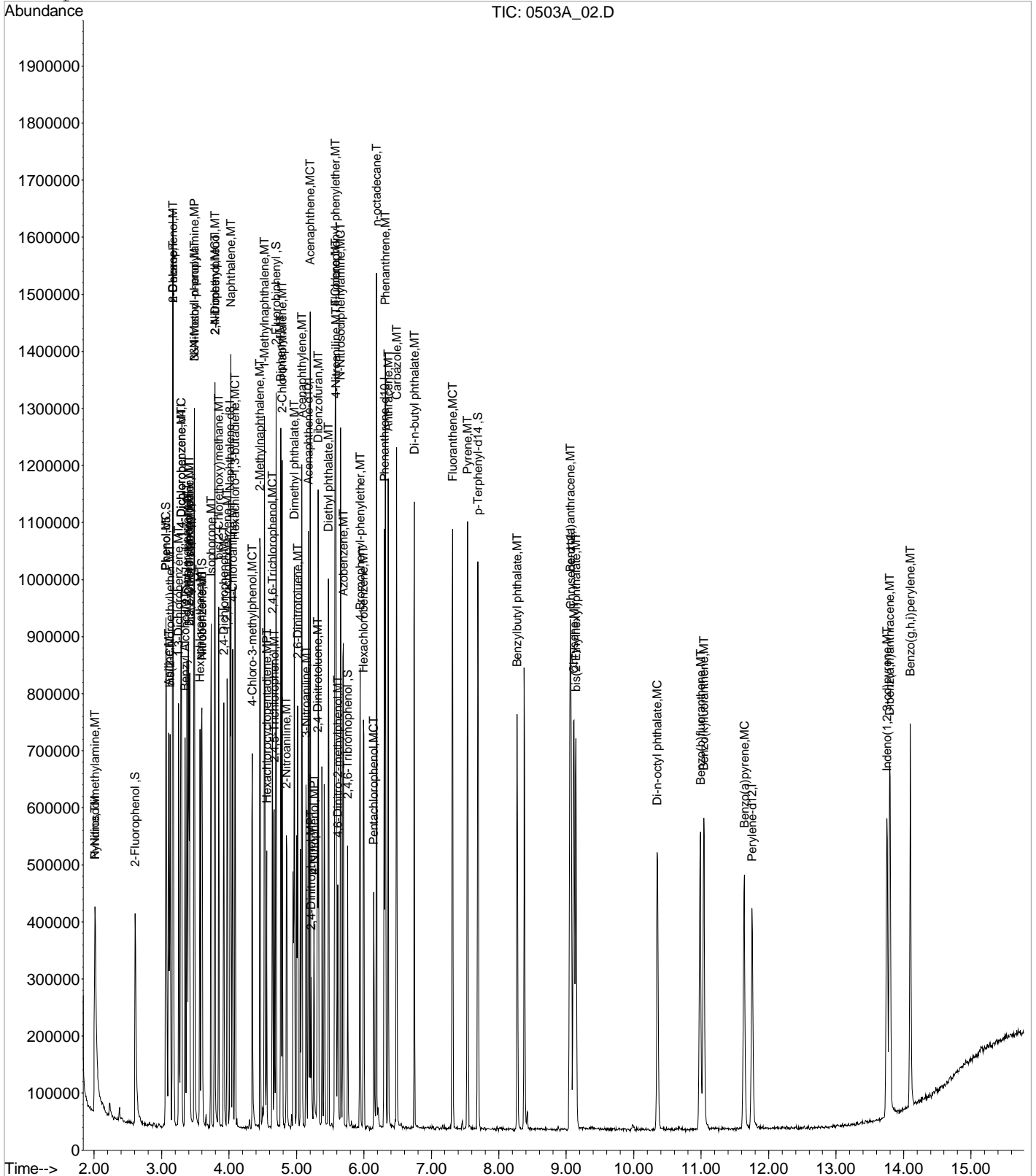
Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	4.76	154	292859	10137.0375005	ppb	99
52) 2-Chloronaphthalene	4.79	162	225823	10242.3209103	ppb	97
53) 2-Nitroaniline	4.86	138	75980	11117.2329137	ppb #	86
54) Acenaphthylene	5.08	152	355339	10359.7152958	ppb	100
55) Dimethyl phthalate	4.97	163	246226	10779.3675241	ppb	97
56) 2,6-Dinitrotoluene	5.02	165	60076	11343.6107327	ppb #	75
57) 3-Nitroaniline	5.14	138	63123	11070.1996446	ppb	83
58) Acenaphthene	5.20	153	234023	10371.5511213	ppb	95
59) 2,4-Dinitrophenol	5.22	184	26399	9193.2855139	ppb #	1
60) Dibenzofuran	5.32	168	314192	10040.5540810	ppb	94
61) 2,4-Dinitrotoluene	5.31	165	77190	11638.7179956	ppb	85
63) 4-Nitrophenol	5.26	139	45019	9558.3792369	ppb #	74
64) Fluorene	5.58	166	256606	10109.3596163	ppb	97
65) 4-Chlorophenyl-phenylether	5.57	204	121047	10056.0198496	ppb	96
66) Diethyl phthalate	5.47	149	256612	10965.3767676	ppb	97
67) 4-Nitroaniline	5.59	138	68560	12837.5262344	ppb #	82
68) Azobenzene	5.69	77	291578	12490.6264418	ppb	94
71) 4,6-Dinitro-2-methylphenol	5.61	198	38661	10012.3771836	ppb	82
72) N-Nitrosodiphenylamine	5.66	169	214138	9864.2003462	ppb	97
74) 4-Bromophenyl-phenylether	5.94	248	70731	10039.2362322	ppb	92
75) Hexachlorobenzene	6.00	284	78910	10065.7745634	ppb	98
76) n-octadecane	6.18	55	47116	10779.0077385	ppb	95
77) Pentachlorophenol	6.15	266	37720	8716.1615340	ppb	91
78) Phenanthrene	6.32	178	382017	10163.4020568	ppb	98
79) Anthracene	6.36	178	394372	10365.5832031	ppb	99
80) Carbazole	6.48	167	345865	9963.5202086	ppb	97
81) Di-n-butyl phthalate	6.75	149	438793	10797.4428148	ppb	99
83) Fluoranthene	7.31	202	379476	9503.3107043	ppb	99
86) Pyrene	7.53	202	388539	10166.7699519	ppb	98
88) Benzylbutyl phthalate	8.27	149	171220	10956.9174241	ppb	92
90) Benzo(a)anthracene	9.06	228	340152	9945.8710314	ppb	96
91) Chrysene	9.11	228	344777	10402.5412051	ppb	97
92) bis(2-Ethylhexyl)phthalate	9.14	149	247981	11520.9133758	ppb	94
93) Di-n-octyl phthalate	10.35	149	372830	10426.6155308	ppb	98
95) Benzo(b)fluoranthene	10.99	252	343400	9987.3715531	ppb	97
96) Benzo(k)fluoranthene	11.04	252	349473	10318.7870098	ppb	97
97) Benzo(a)pyrene	11.64	252	298542	10025.0120868	ppb	95
98) Indeno(1,2,3-cd)pyrene	13.75	276	285078	9743.4929023	ppb	99
99) Dibenz(a,h)anthracene	13.79	278	331126	10618.9941618	ppb	95
100) Benzo(g,h,i)perylene	14.10	276	334153	10972.7593685	ppb	99

(#) = qualifier out of range (m) = manual integration  
 0503A\_02.D S804C29V.M Tue May 03 14:57:03 2022

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 02.D Vial: 3
Acq On : 3 May 2022 1:09 pm Operator: 3545
Sample : ICMSC SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 3 14:55 2022 Quant Results File: S804C29V.RES

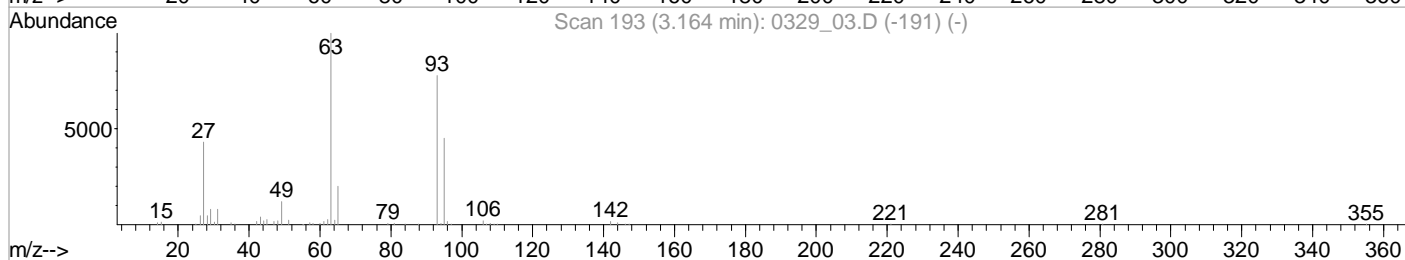
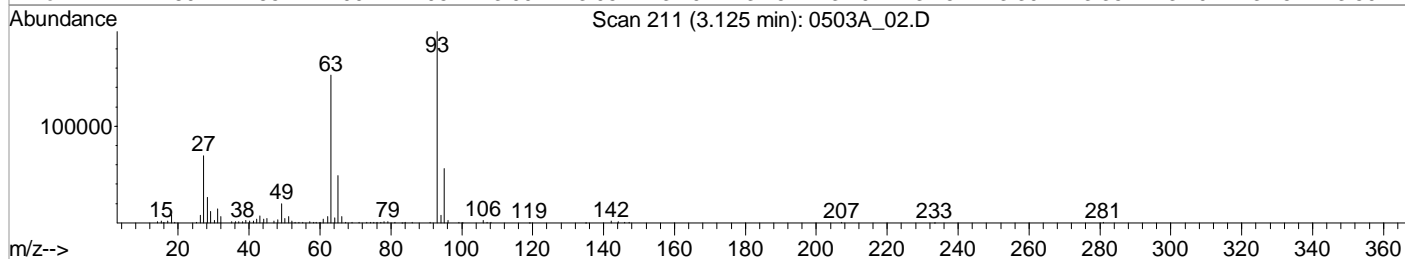
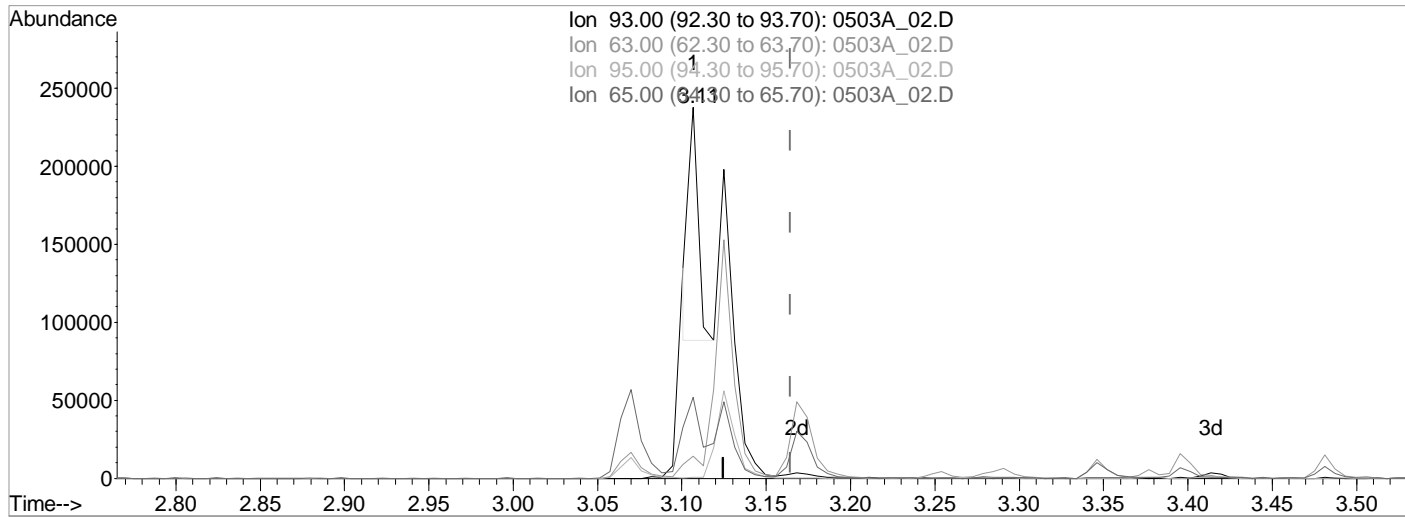
Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Tue Mar 29 09:44:27 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_02.D Vial: 3  
 Acq On : 3 May 2022 1:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_02.D

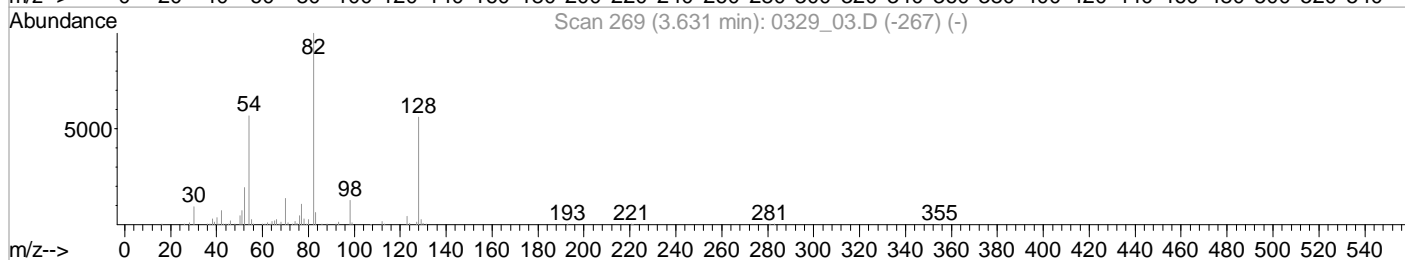
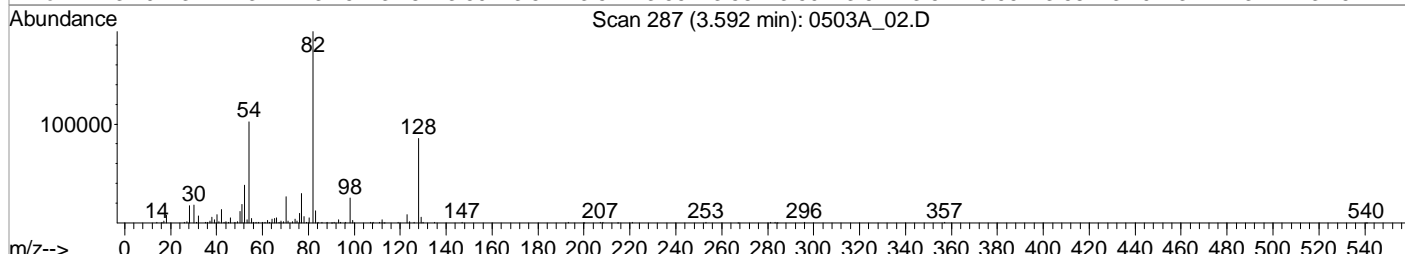
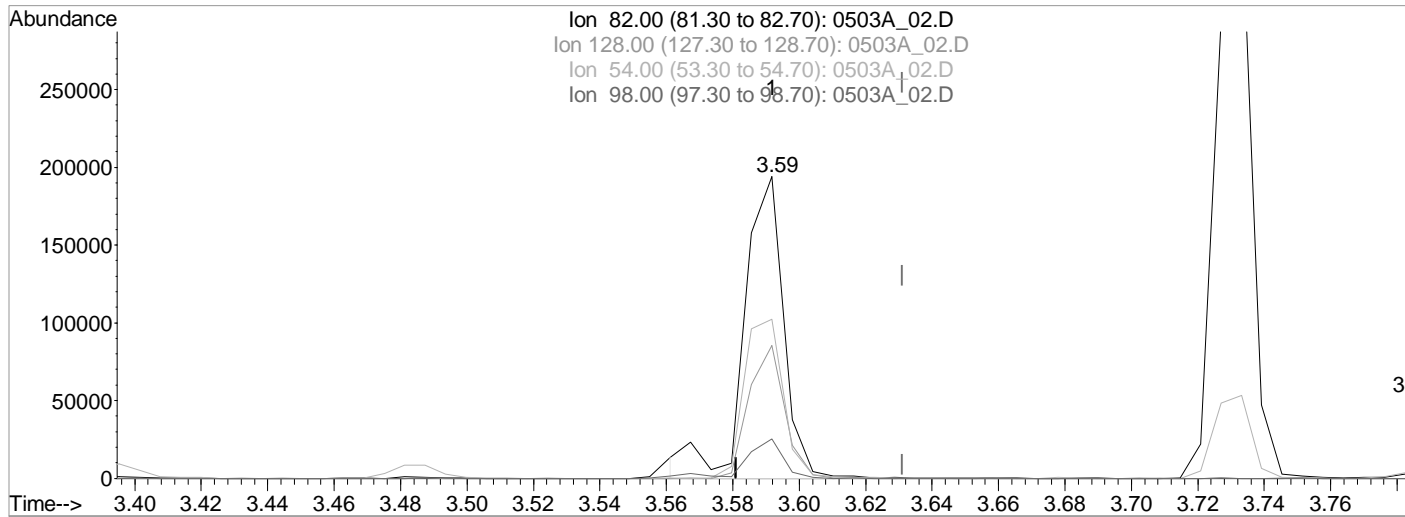
(6) bis(2-Chloroethyl)ether (MT)  
 3.11min (-0.058) 5448.4165636 ppb  
 Qvalue = 36  
 response 58429

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	3.57#
95.00	30.20	0.30#
65.00	24.00	19.66

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_02.D Vial: 3  
 Acq On : 3 May 2022 1:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_02.D

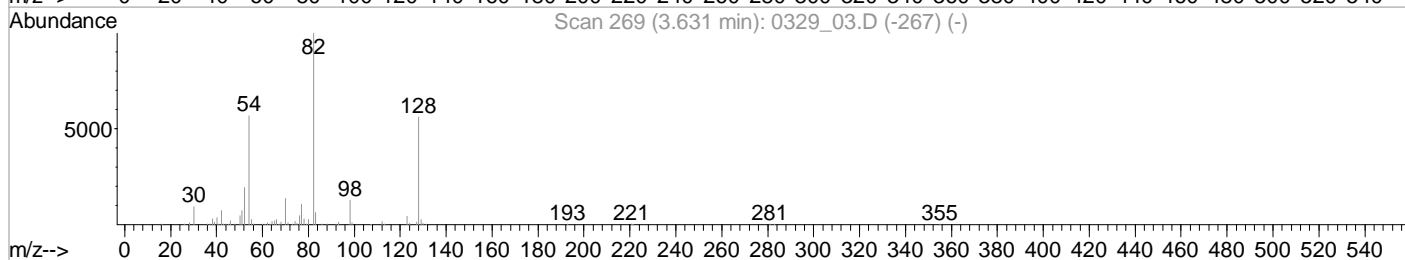
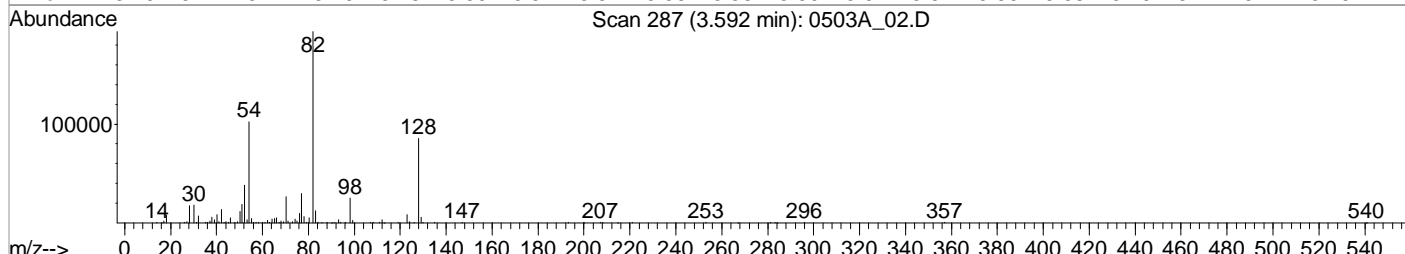
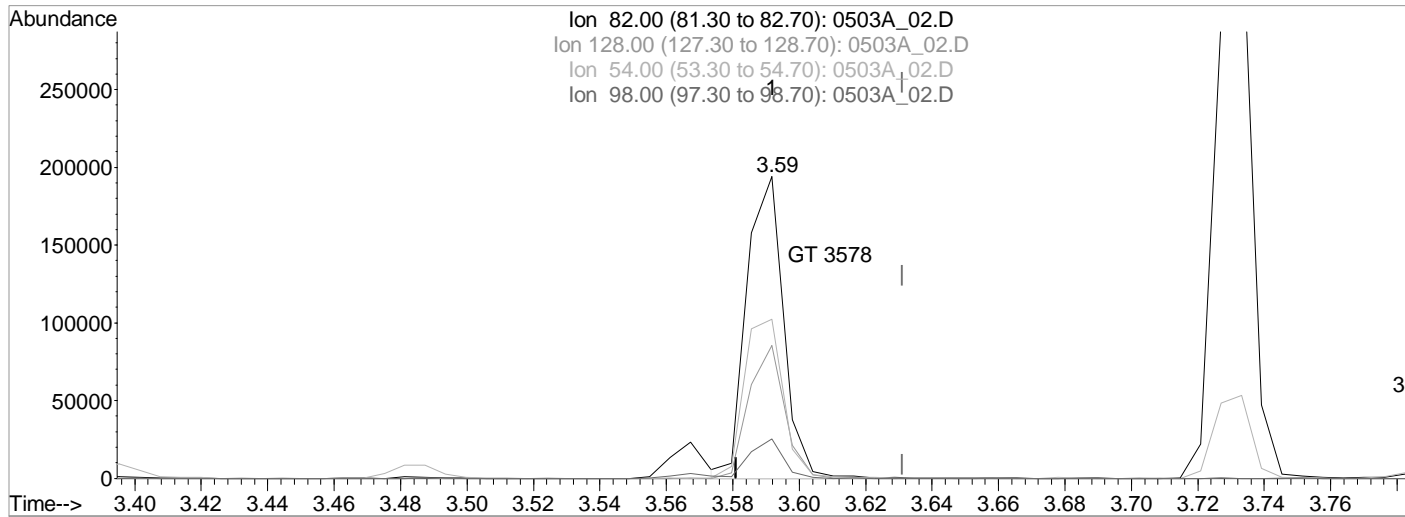
(24) Nitrobenzene-d5 (S)  
 3.59min (-0.039) 12765.9698371 ppb  
 Qvalue = 94  
 response 161486

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	44.10
54.00	56.90	52.76
98.00	11.80	13.09

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_02.D Vial: 3  
 Acq On : 3 May 2022 1:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:43 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_02.D

(24) Nitrobenzene-d5 (S)  
 3.59min (-0.039) 11854.4084745 ppb m

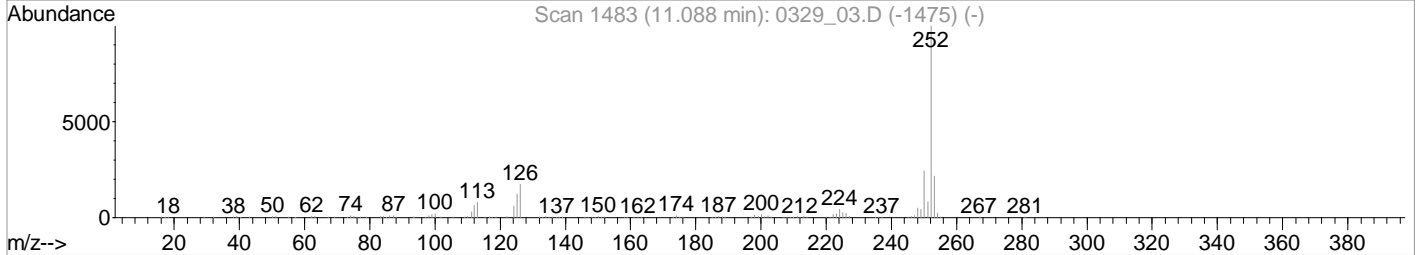
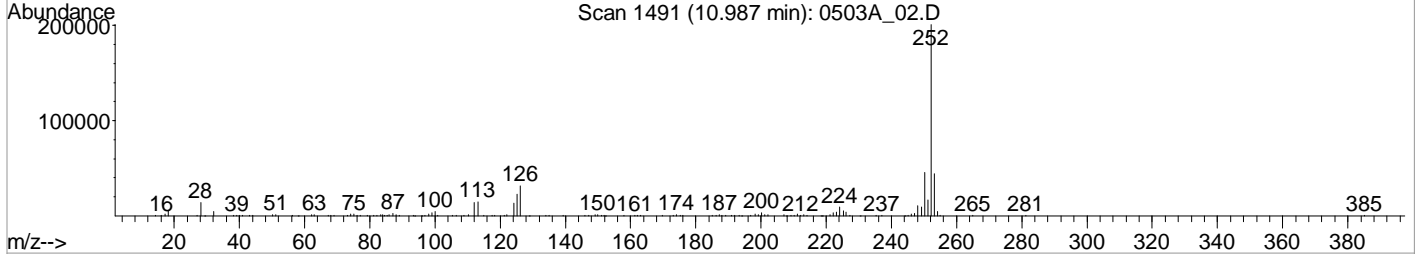
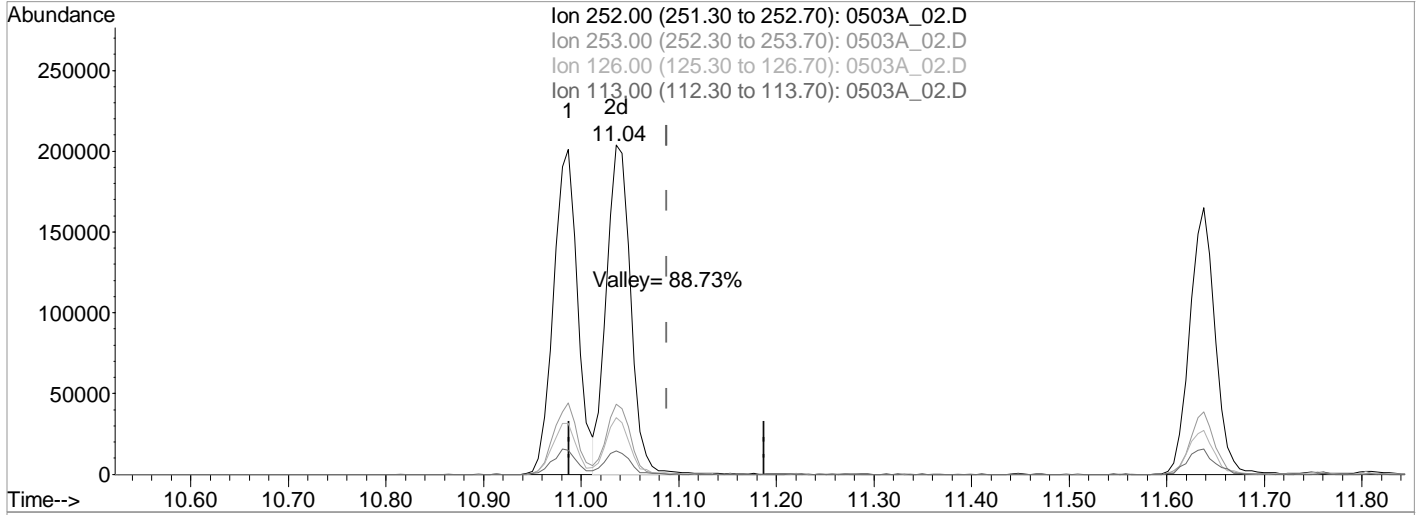
response 149955

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	44.10
54.00	56.90	52.76
98.00	11.80	13.09

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_02.D Vial: 3  
 Acq On : 3 May 2022 1:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:43 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_02.D

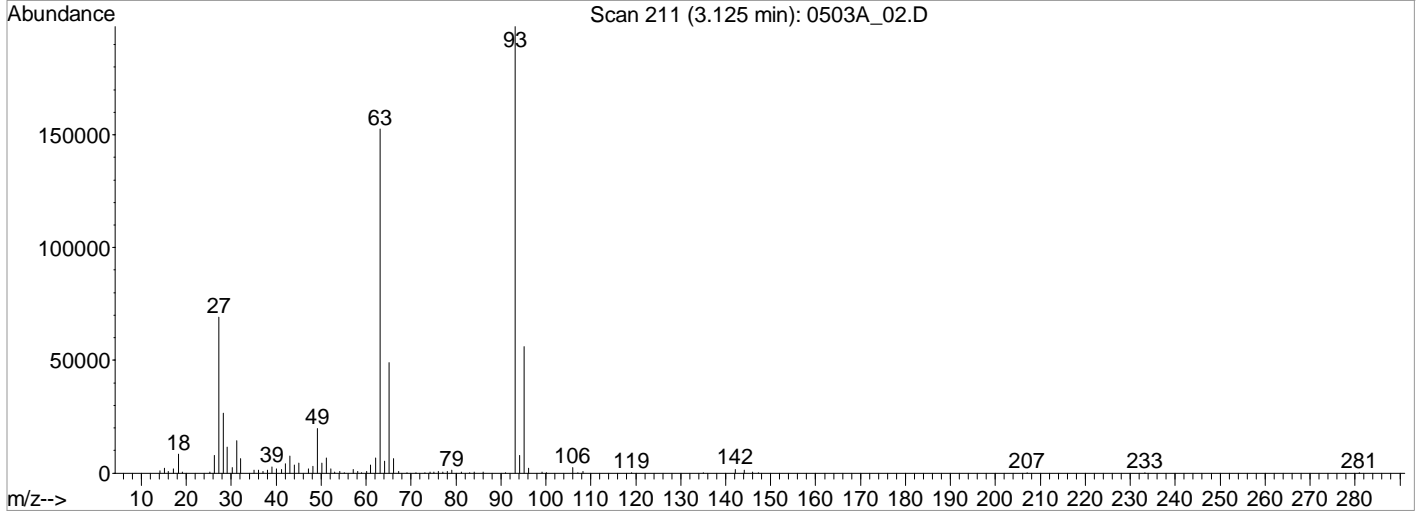
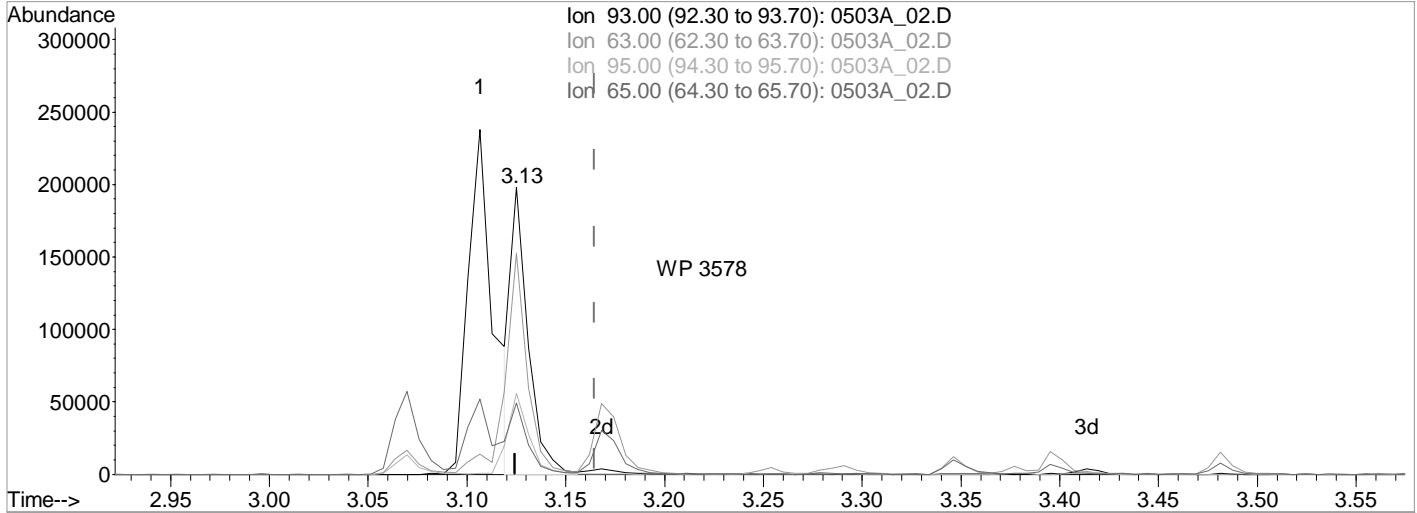
(95) Benzo(b)fluoranthene (MT)  
 10.99min (-0.101) 9987.3715531 ppb  
 Qvalue = 97  
 response 343400

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.88
126.00	18.30	15.56
113.00	8.80	7.21

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_02.D Vial: 3  
 Acq On : 3 May 2022 1:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:55 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_02.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.13min (-0.039) 11038.1978521 ppb m

response 118374

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	77.07
95.00	30.20	28.31
65.00	24.00	24.77



GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0503A_03	<b>Analysis date/time:</b>	05/03/22 13:30
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.130890	0.12888610		1.53	20	10	9.847	98.50	

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 03.D Vial: 4  
 Acq On : 3 May 2022 1:30 pm Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:48 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	74469	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	343013	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	149999	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	273701	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	231323	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	234462	8000.00	ppb	-0.12

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	
50) 2-Fluorobiphenyl	0.00	172	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	

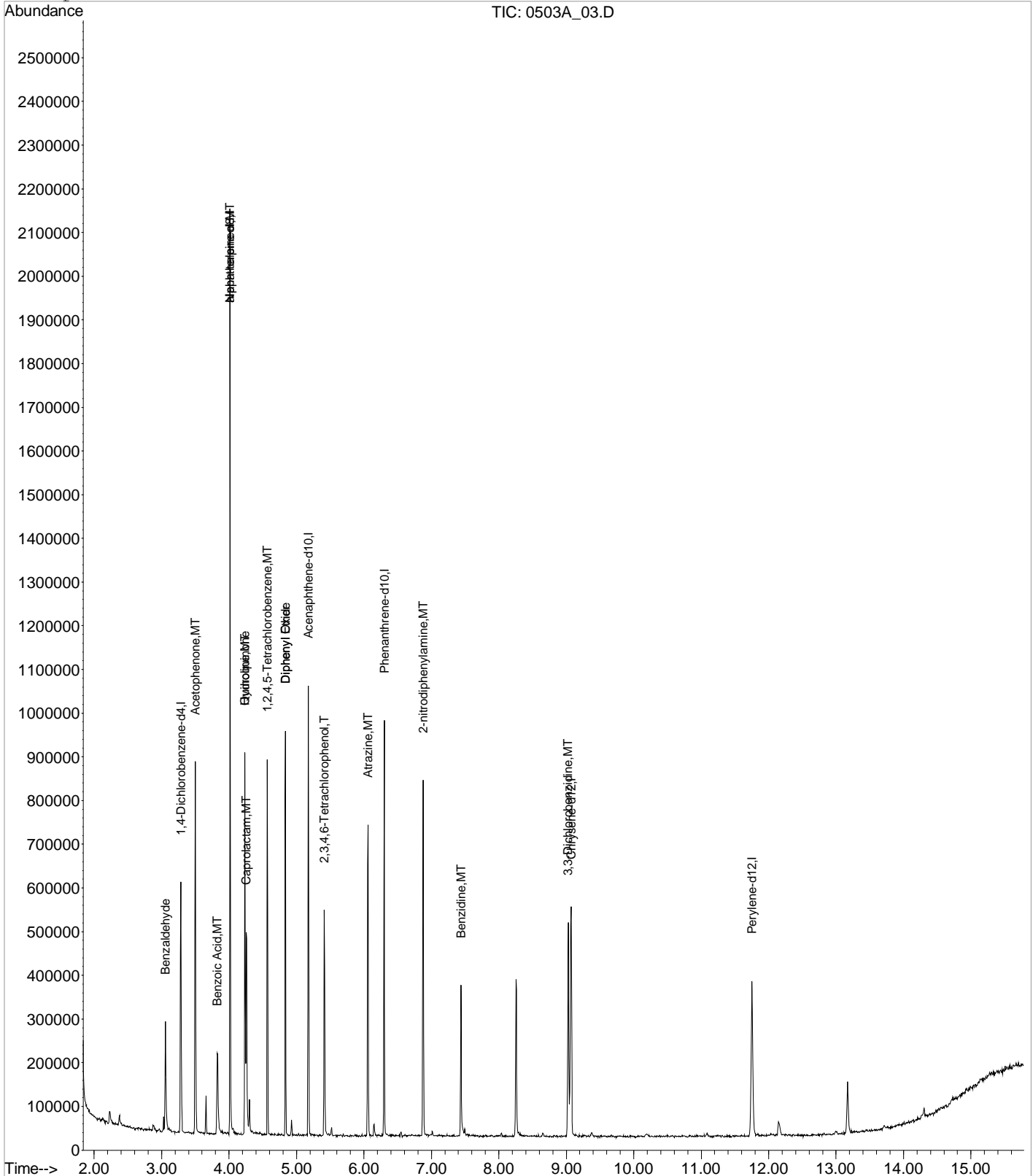
Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.06	105	41431	12508.6032021	ppb	93
22) Acetophenone	3.50	105	174987	11362.5573891	ppb	94
31) Benzoic Acid	3.83	105	55262	9846.8678689	ppb	87
33) alpha-terpineol	4.02	59	128359	11929.0432982	ppb	97
37) Hydroquinone	4.24	110	67152	8926.3680614	ppb	95
38) Quinoline	4.24	129	226963	9929.6270792	ppb	98
39) Caprolactam	4.26	113	30825	13041.9446882	ppb #	75
43) 1,2,4,5-Tetrachlorobenzene	4.57	216	102708	11186.7751887	ppb	98
44) Diphenyl Ether	4.84	170	146270	9987.1377412	ug/ml#	87
45) Diphenyl Oxide	4.84	170	146270	9987.1377412	ug/ml#	87
62) 2,3,4,6-Tetrachlorophenol	5.41	232	48216	11272.0182213	ppb	85
69) Atrazine	6.06	200	63867	10411.9727404	ppb	95
82) 2-nitrodiphenylamine	6.88	167	81441	11798.0482768	ppb #	100
85) Benzidine	7.44	184	129445	9543.7590529	ppb	100
89) 3,3-Dichlorobenzidine	9.03	252	132545	11129.7073291	ppb	98

(#) = qualifier out of range (m) = manual integration  
 0503A\_03.D S804C29V.M Tue May 03 14:52:12 2022

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 03.D Vial: 4  
 Acq On : 3 May 2022 1:30 pm Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:48 2022 Quant Results File: S804C29V.RES

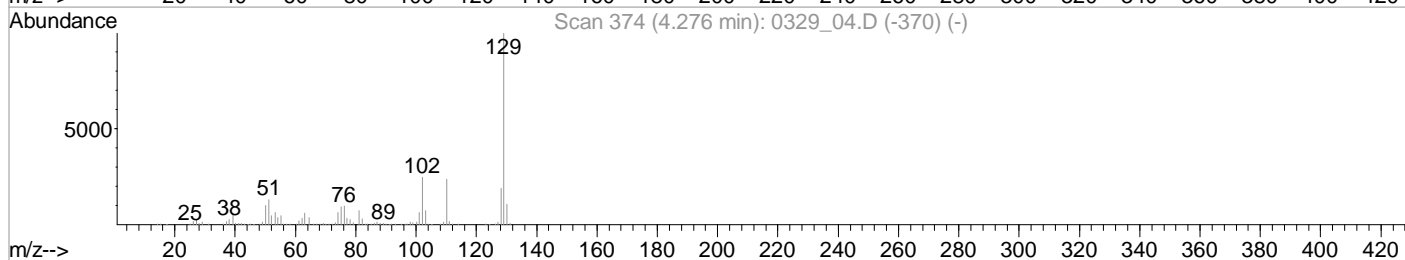
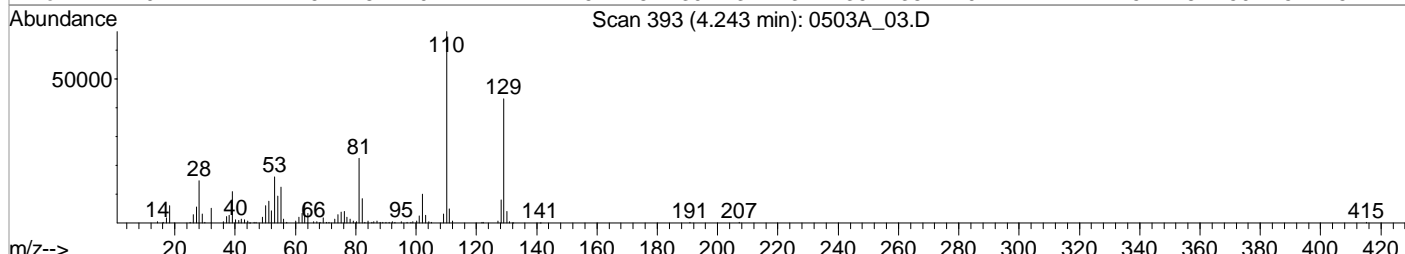
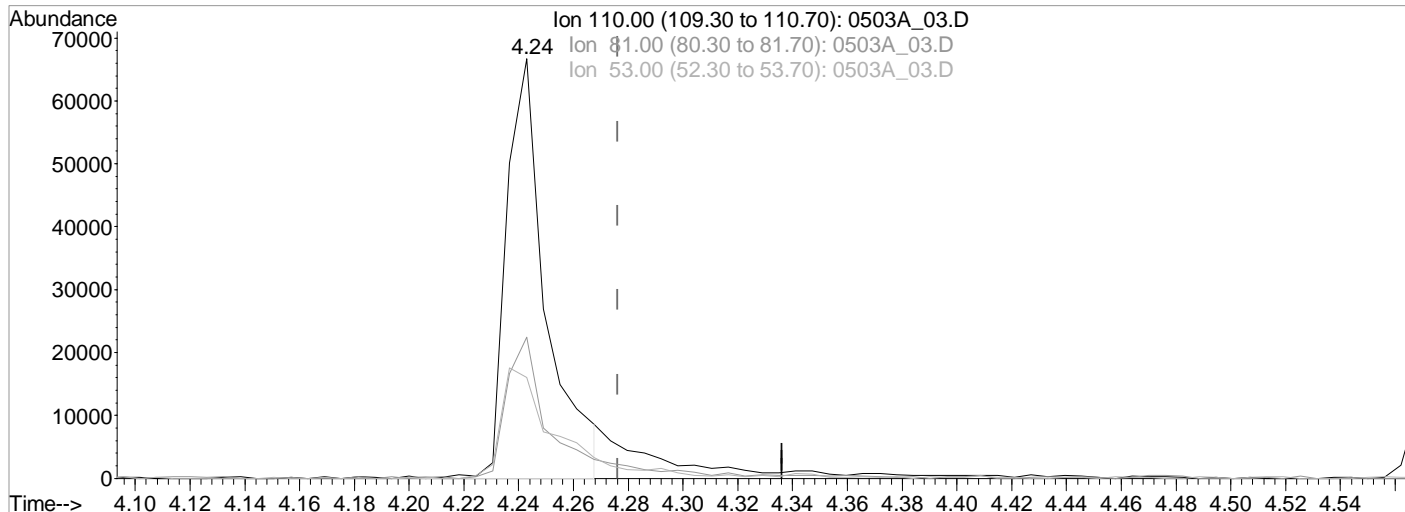
Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_03.D Vial: 4  
 Acq On : 3 May 2022 1:30 pm Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0503A\_03.D

(37) Hydroquinone

4.24min (-0.033) 8926.3680614 ppb

Qvalue = 95

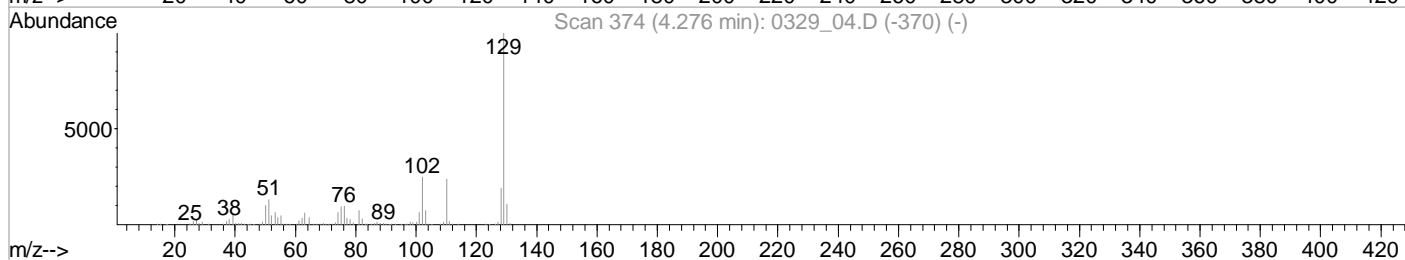
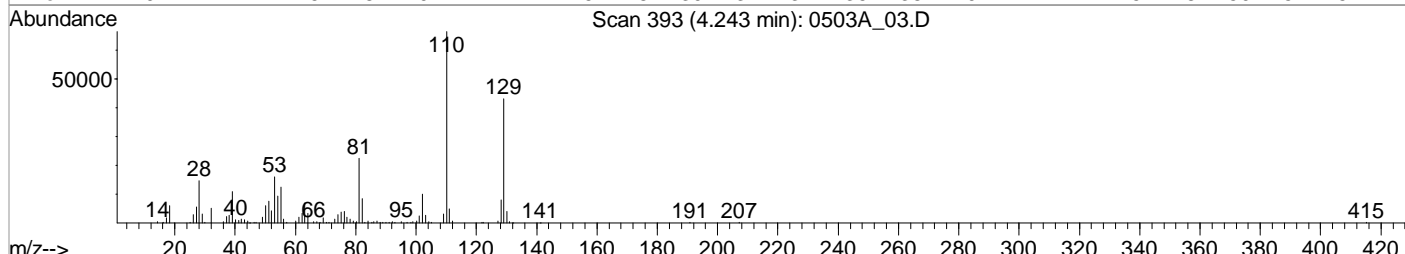
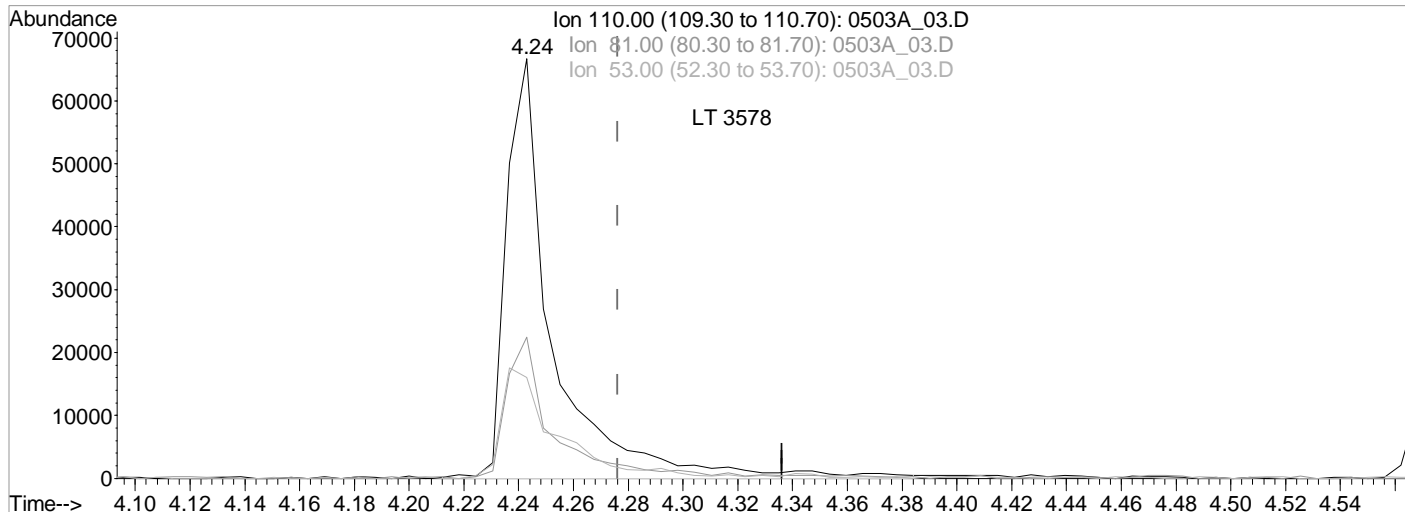
response 67152

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	33.42
53.00	25.90	24.12
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_03.D Vial: 4  
 Acq On : 3 May 2022 1:30 pm Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 14:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0503A\_03.D

(37) Hydroquinone  
 4.24min (-0.033) 8926.3680614 ppb  
 Qvalue = 95  
 response 67152

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	33.42
53.00	25.90	24.12
0.00	0.00	0.00

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0504_03	<b>Analysis date/time:</b>	05/04/22 04:59
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.623837	0.612608		1.80	20	10	9.820	98.20	
2-METHYLNAPHTHALENE	0.663826	0.64867080	0.40	2.28	20	10	9.772	97.70	
3&4-METHYL PHENOL	1.350649	1.523827	0.60	12.80	20	10	11.28	113	
ACENAPHTHENE	1.170435	1.182740	0.90	1.05	20	10	10.11	101	
ACENAPHTHYLENE	1.779211	1.831633	0.90	2.95	20	10	10.29	103	
ANTHRACENE	1.065424	1.067761	0.70	0.2190	20	10	10.02	100	
BENZO(A)ANTHRACENE	1.151953	1.109442	0.80	3.69	20	10	9.631	96.30	
BENZO(A)PYRENE	0.987052	0.97616170	0.70	1.10	20	10	9.890	98.90	
BENZO(B)FLUORANTHENE	1.139642	1.104227	0.70	3.11	20	10	9.689	96.90	
BENZO(G,H,I)PERYLENE	1.009366	1.115940	0.50	10.60	20	10	11.06	111	
BENZO(K)FLUORANTHENE	1.122546	1.135865	0.70	1.19	20	10	10.12	101	
BIS(2-ETHYLHEXYL)PHTHALATE	0.724997	0.81069670	0.01	11.80	20	10	11.18	112	
CARBAZOLE	0.972084	0.95367020	0.01	1.89	20	10	9.811	98.10	
CHRYSENE	1.116357	1.095140	0.70	1.90	20	10	9.810	98.10	
DI-N-BUTYL PHTHALATE	1.138017	1.228181	0.01	7.92	20	10	10.79	108	
DI-N-OCTYL PHTHALATE	1.204403	1.279182	0.01	6.21	20	10	10.62	106	
DIBENZ(A,H)ANTHRACENE	1.033545	1.085583	0.40	5.03	20	10	10.50	105	
DIBENZOFURAN	1.623192	1.606689	0.80	1.02	20	10	9.898	99	
FLUORANTHENE	1.1182	1.076892	0.60	3.69	20	10	9.631	96.30	
FLUORENE	1.316666	1.300795	0.90	1.21	20	10	9.879	98.80	
INDENO(1,2,3-CD)PYRENE	0.969769	0.96230120	0.50	0.77	20	10	9.923	99.20	
NAPHTHALENE	1.018747	1.049973	0.70	3.07	20	10	10.31	103	
PENTACHLOROPHENOL	0.121187	0.10346140	0.05	14.60	20	10	8.537	85.40	
PHENANTHRENE	1.052577	1.036827	0.70	1.50	20	10	9.850	98.50	
PHENOL	1.643512	1.718104	0.80	4.54	20	10	10.45	105	
PYRENE	1.287230	1.221085	0.60	5.14	20	10	9.486	94.90	
2,4,6-TRIBROMOPHENOL	0.090561	0.10655420		17.70	20	10	11.77	118	70 - 130
2-FLUOROBIPHENYL	1.349543	1.391340		3.10	20	10	10.31	103	70 - 130
2-FLUOROPHENOL	1.299982	1.290925		0.6970	20	10	9.930	99.30	70 - 130
NITROBENZENE-D5	0.339442	0.43843290		29.20	20	10	12.92	129	70 - 130
P-TERPHENYL-D14	1.093292	1.076133		1.57	20	10	9.843	98.40	70 - 130
PHENOL-D5	1.560263	1.692753		8.49	20	10	10.85	109	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data File : C:\MSDCHEM\1\DATA\050422\0504 03.D Vial: 3  
 Acq On : 4 May 2022 4:59 am Operator: 3545  
 Sample : ICVMSV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:44 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	72614	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	285391	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	146746	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	276509	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	245009	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	246687	8000.00	ppb	-0.11

System Monitoring Compounds

4) 2-Fluorophenol	2.62	112	117174	9930.3248368	ppb	-0.03
Spiked Amount 20000.000			Recovery =	49.65%		
7) Phenol-d5	3.06	99	153647	10849.1563237	ppb	-0.03
Spiked Amount 20000.000			Recovery =	54.25%		
24) Nitrobenzene-d5	3.59	82	156406	12916.2889763	ppb	-0.04
Spiked Amount 10000.000			Recovery =	129.16%		
50) 2-Fluorobiphenyl	4.70	172	255217	10309.7127815	ppb	-0.04
Spiked Amount 10000.000			Recovery =	103.10%		
73) 2,4,6-Tribromophenol	5.76	330	36829	11766.0323213	ppb	-0.05
Spiked Amount 20000.000			Recovery =	58.83%		
87) p-Terphenyl-d14	7.69	244	329578	9843.0602873	ppb	-0.07
Spiked Amount 10000.000			Recovery =	98.43%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.02	79	154475	13748.8114362	ppb	92
3) N-Nitrosodimethylamine	2.01	42	79378	13162.9582120	ppb	92
5) Aniline	3.11	66	79706	11863.7655871	ppb #	42
6) bis(2-Chloroethyl)ether	3.12	93	114647m	10985.8486026	ppb	
8) Phenol	3.07	94	155948	10453.8572691	ppb	93
10) 2-Chlorophenol	3.17	128	123201	10314.7799607	ppb	87
11) n-Decane	3.17	41	82664	11749.9402390	ppb	96
12) 1,3-Dichlorobenzene	3.25	146	134638	9969.4938926	ppb	94
13) 1,4-Dichlorobenzene	3.29	146	135760	9766.6834940	ppb	93
14) Benzyl Alcohol	3.35	79	97388	10542.1904707	ppb	95
15) 1,2-Dichlorobenzene	3.38	146	128127	10027.3400525	ppb	94
16) bis(2-Chloroisopropyl)ethe	3.41	121	43683	9990.4763134	ppb #	50
17) 2,2-oxybis(1-chloropropane	3.41	121	43683	9990.4763134	ppb #	50
18) 2-Methylphenol	3.40	108	124393m	11525.3954730	ppb	
19) Hexachloroethane	3.57	117	57126	11321.4370674	ppb	97
20) N-Nitrosodi-n-propylamine	3.49	70	95125	12060.4534703	ppb	97
21) 3&4-Methyl phenol	3.48	107	138314	11282.1863359	ppb	95
25) Nitrobenzene	3.60	77	145362	12277.1792625	ppb	91
26) Isophorone	3.73	82	262394	12354.0988224	ppb	96
27) 2-Nitrophenol	3.78	139	67383	11291.3434004	ppb	90
28) 2,4-Dimethylphenol	3.79	107	126209	11387.5262326	ppb	92
29) bis(2-Chlorethoxy)methane	3.84	93	156181	11500.5915542	ppb	96
30) 2,4-Dichlorophenol	3.92	162	96421	10327.1248426	ppb	98
32) 1,2,4-Trichlorobenzene	3.97	180	105813	10124.4851739	ppb	96
34) Naphthalene	4.03	128	374566	10306.5136137	ppb	99
35) 4-Chloroaniline	4.05	65	49799	11793.1269314	ppb #	47
36) Hexachloro-1,3-butadiene	4.09	225	66280	11625.1188396	ppb	97
40) 4-Chloro-3-methylphenol	4.35	107	103489	10995.8740997	ppb	89
41) 2-Methylnaphthalene	4.46	142	231406	9771.6926327	ppb	96
42) 1-Methylnaphthalene	4.53	142	218541	9819.9964779	ppb	95
47) Hexachlorocyclopentadiene	4.56	237	45391	6602.1272262	ppb	97
48) 2,4,6-Trichlorophenol	4.64	196	67693	10635.5357538	ppb #	89
49) 2,4,5-Trichlorophenol	4.67	196	71158	10742.5640275	ppb	95

(#) = qualifier out of range (m) = manual integration

0504\_03.D S804C29V.M Thu May 05 12:38:07 2022

Data File : C:\MSDCHEM\1\DATA\050422\0504 03.D Vial: 3  
 Acq On : 4 May 2022 4:59 am Operator: 3545  
 Sample : ICVMSV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:44 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
51) Biphenyl	4.76	154	283681	10319.8658060	ppb		99
52) 2-Chloronaphthalene	4.79	162	214396	10219.7014198	ppb		95
53) 2-Nitroaniline	4.86	138	75599	11625.3165940	ppb	#	91
54) Acenaphthylene	5.08	152	335981	10294.6357717	ppb		99
55) Dimethyl phthalate	4.97	163	233659	10750.6124465	ppb		97
56) 2,6-Dinitrotoluene	5.02	165	55362	10986.3492280	ppb	#	76
57) 3-Nitroaniline	5.14	138	62381	11497.7133586	ppb		88
58) Acenaphthene	5.20	153	216953	10105.1357621	ppb		96
59) 2,4-Dinitrophenol	5.22	184	24015	8812.6003069	ppb	#	1
60) Dibenzofuran	5.32	168	294719	9898.3319605	ppb		94
61) 2,4-Dinitrotoluene	5.31	165	74856	11862.1126422	ppb		86
63) 4-Nitrophenol	5.26	139	46161	10300.4202737	ppb	#	77
64) Fluorene	5.58	166	238608	9879.4589769	ppb		98
65) 4-Chlorophenyl-phenylether	5.57	204	116190	10144.5354933	ppb		98
66) Diethyl phthalate	5.47	149	246167	11055.2292480	ppb		96
67) 4-Nitroaniline	5.59	138	67142	13212.8386534	ppb	#	83
68) Azobenzene	5.69	77	279035	12562.5982523	ppb		94
71) 4,6-Dinitro-2-methylphenol	5.61	198	38245	10224.0665095	ppb		87
72) N-Nitrosodiphenylamine	5.66	169	205391	9775.0754275	ppb		96
74) 4-Bromophenyl-phenylether	5.94	248	68664	10069.0973704	ppb		95
75) Hexachlorobenzene	6.00	284	76205	10043.1324256	ppb		97
76) n-octadecane	6.18	55	44886	10609.4248607	ppb		99
77) Pentachlorophenol	6.15	266	35760	8537.3220011	ppb		93
78) Phenanthrene	6.32	178	358365	9850.3705837	ppb		98
79) Anthracene	6.36	178	369057	10021.9373110	ppb		98
80) Carbazole	6.48	167	329623	9810.5705166	ppb		98
81) Di-n-butyl phthalate	6.74	149	424504	10792.2891948	ppb		98
83) Fluoranthene	7.31	202	372213	9630.5860777	ppb		99
86) Pyrene	7.53	202	373971	9486.1464082	ppb		98
88) Benzylbutyl phthalate	8.27	149	175218	10869.6643558	ppb		96
90) Benzo(a)anthracene	9.05	228	339779	9630.9659490	ppb		98
91) Chrysene	9.11	228	335399	9809.9420226	ppb		98
92) bis(2-Ethylhexyl)phthalate	9.14	149	248285	11182.0777055	ppb		96
93) Di-n-octyl phthalate	10.35	149	391764	10620.8812501	ppb		100
95) Benzo(b)fluoranthene	10.98	252	340498	9689.2444567	ppb		98
96) Benzo(k)fluoranthene	11.04	252	350254	10118.6495695	ppb		95
97) Benzo(a)pyrene	11.63	252	301008	9889.6731114	ppb		97
98) Indeno(1,2,3-cd)pyrene	13.75	276	296734	9922.9936292	ppb		97
99) Dibenz(a,h)anthracene	13.79	278	334749	10503.4946655	ppb		95
100) Benzo(g,h,i)perylene	14.10	276	344110	11055.8519930	ppb		96

(#) = qualifier out of range (m) = manual integration

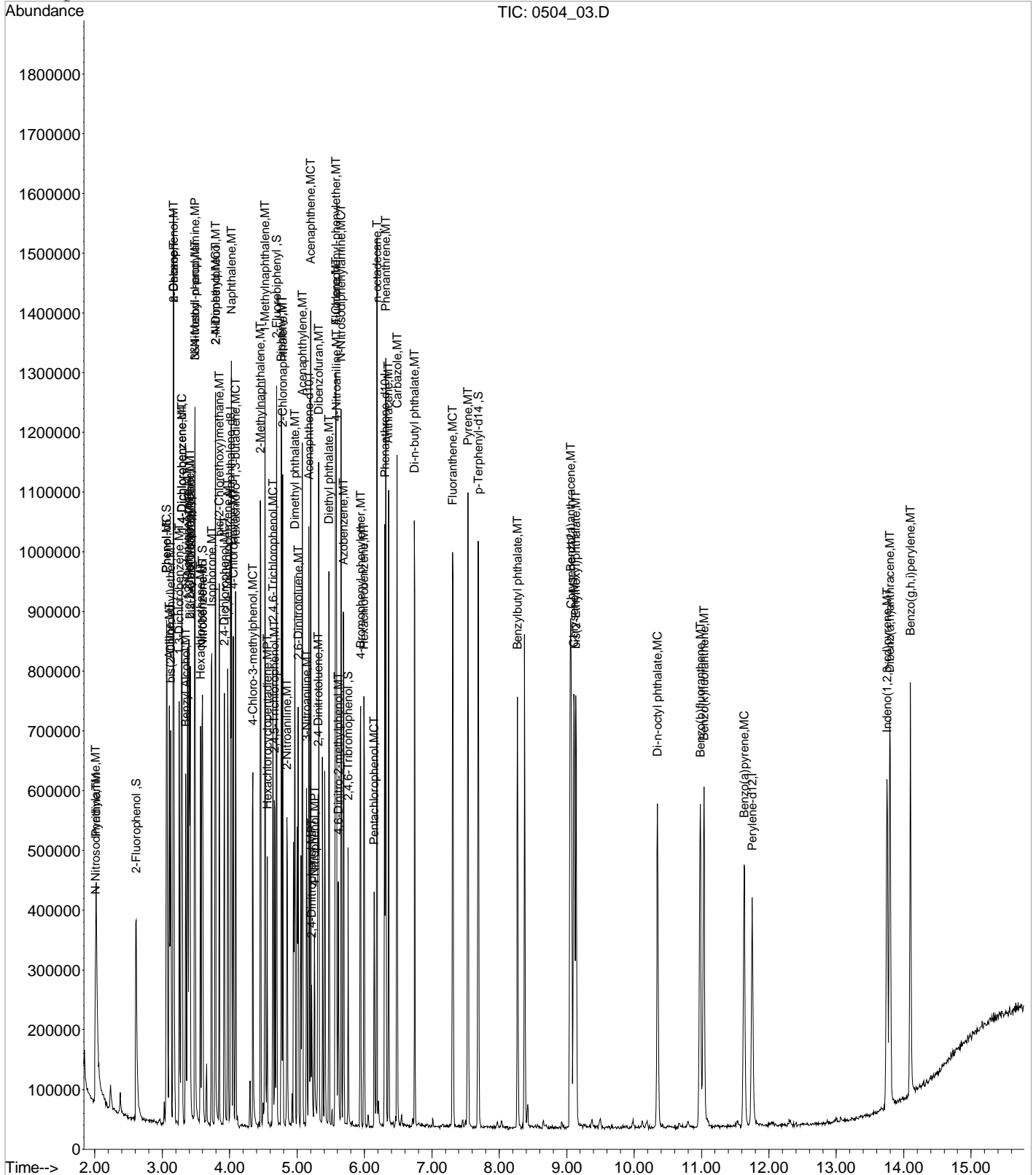
0504\_03.D S804C29V.M Thu May 05 12:38:07 2022

Page 2



Data File : C:\MSDCHEM\1\DATA\050422\0504 03.D Vial: 3
Acq On : 4 May 2022 4:59 am Operator: 3545
Sample : ICMSC SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 4 9:44 2022 Quant Results File: S804C29V.RES

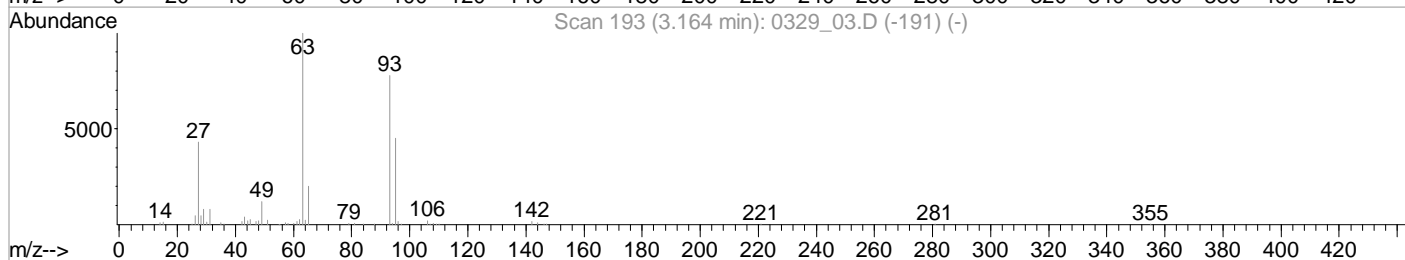
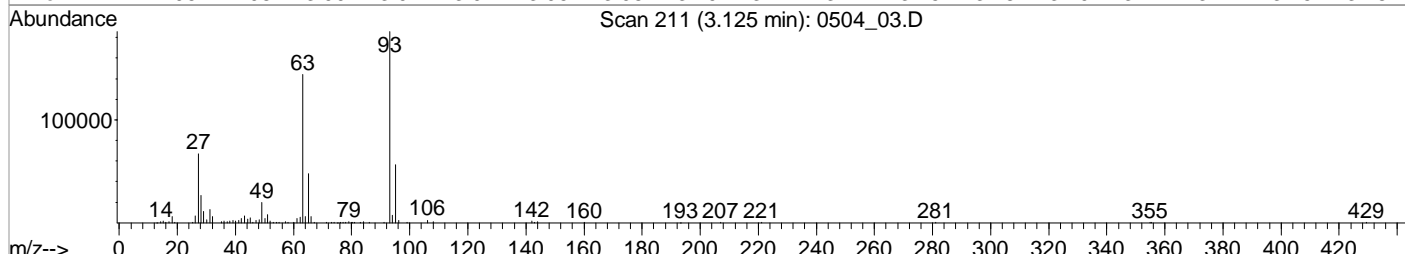
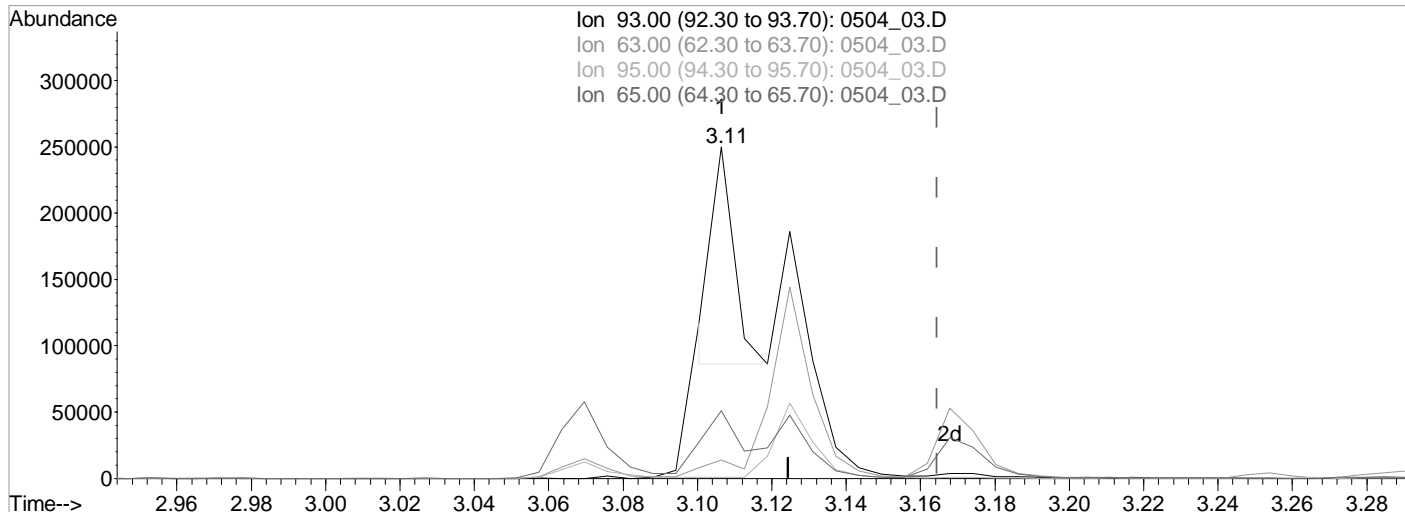
Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Tue Mar 29 09:44:27 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504\_03.D Vial: 3  
 Acq On : 4 May 2022 4:59 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_03.D

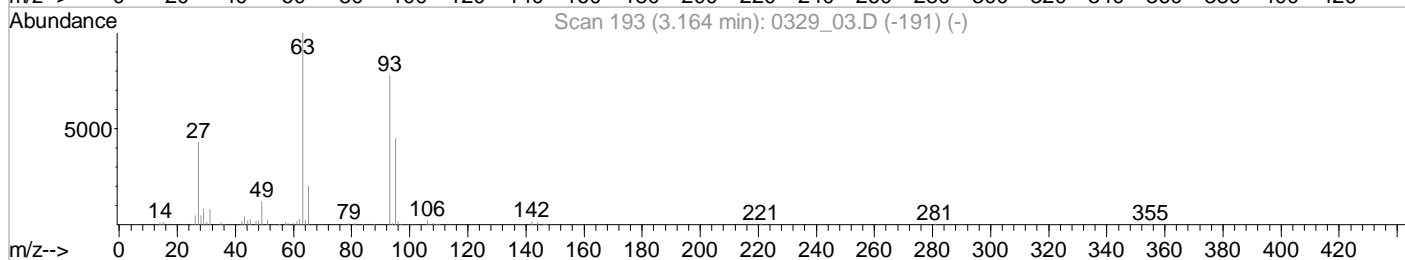
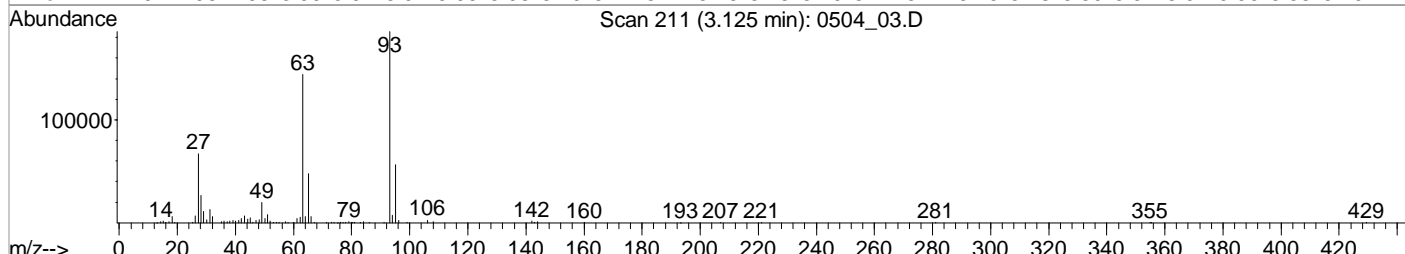
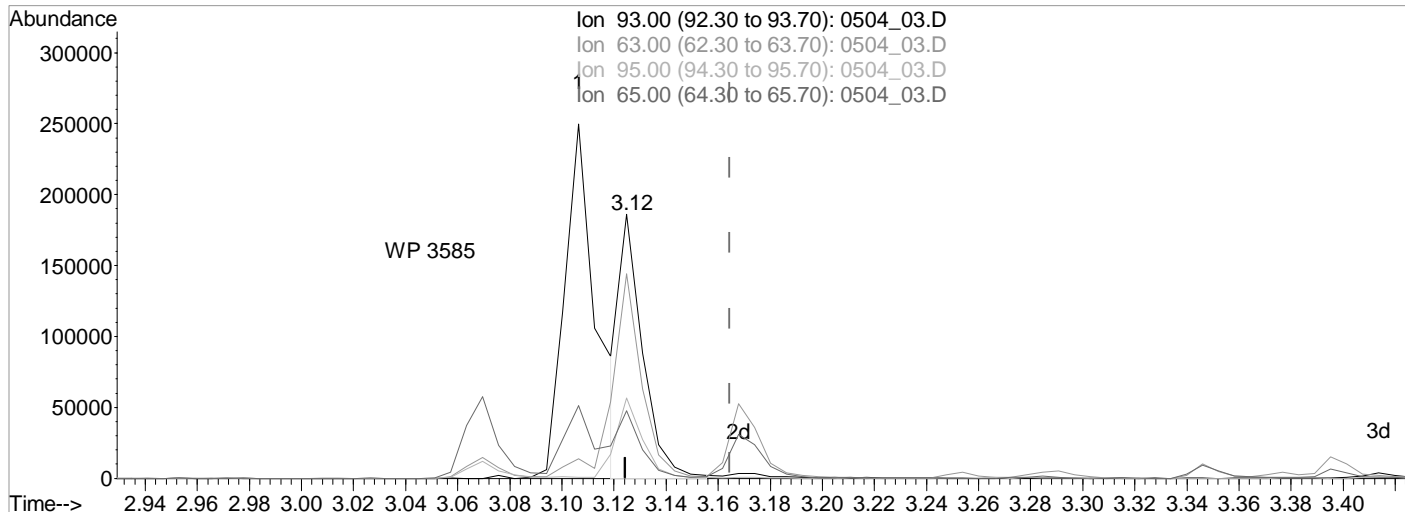
(6) bis(2-Chloroethyl)ether (MT)  
 3.11min (-0.058) 6466.3448272 ppb  
 Qvalue = 35  
 response 67482

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	3.43#
95.00	30.20	0.00#
65.00	24.00	17.28

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504\_03.D Vial: 3  
 Acq On : 4 May 2022 4:59 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:42 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_03.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.12min (-0.040) 10985.8486026 ppb m

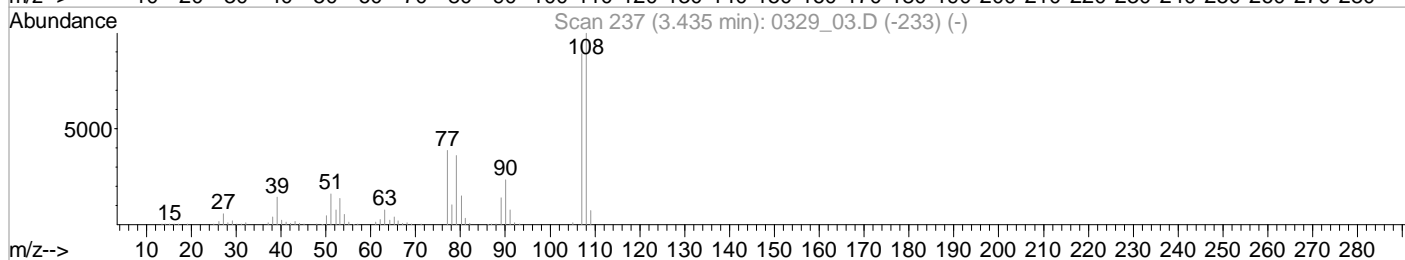
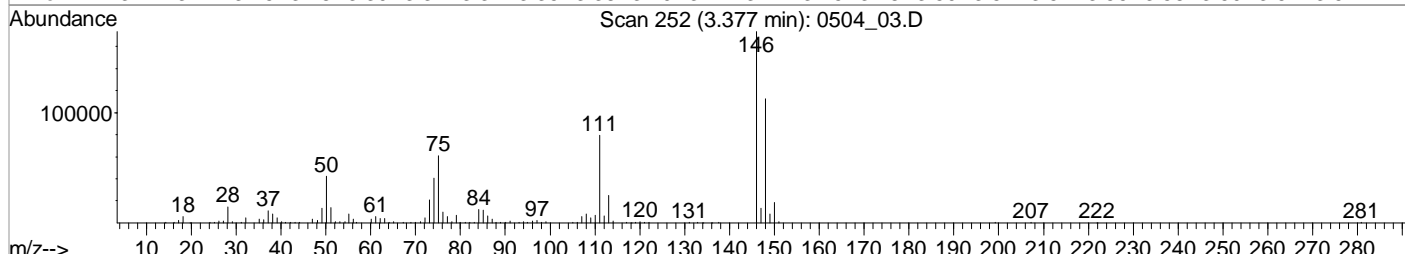
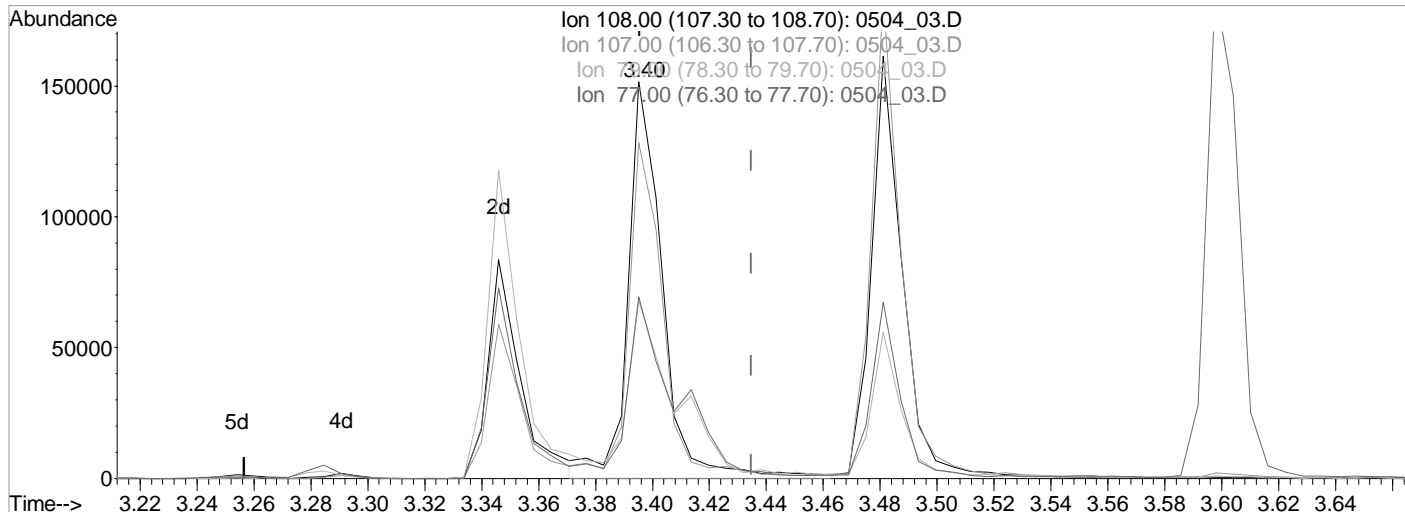
response 114647

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	77.43
95.00	30.20	30.49
65.00	24.00	25.57

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504\_03.D Vial: 3  
 Acq On : 4 May 2022 4:59 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:42 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_03.D

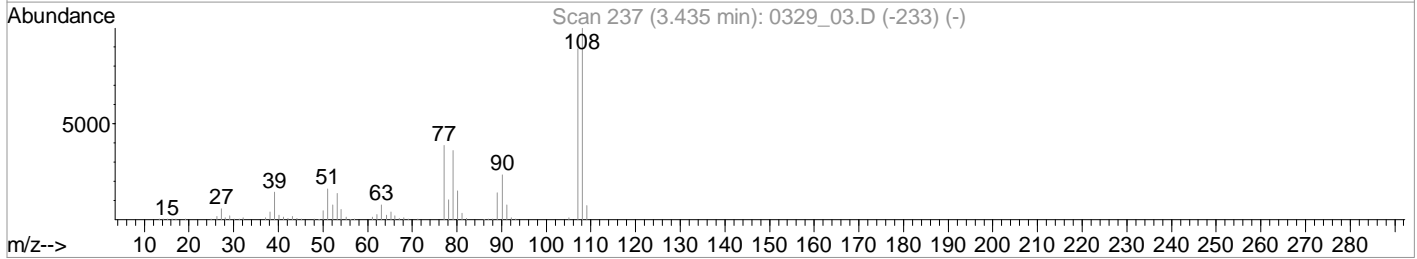
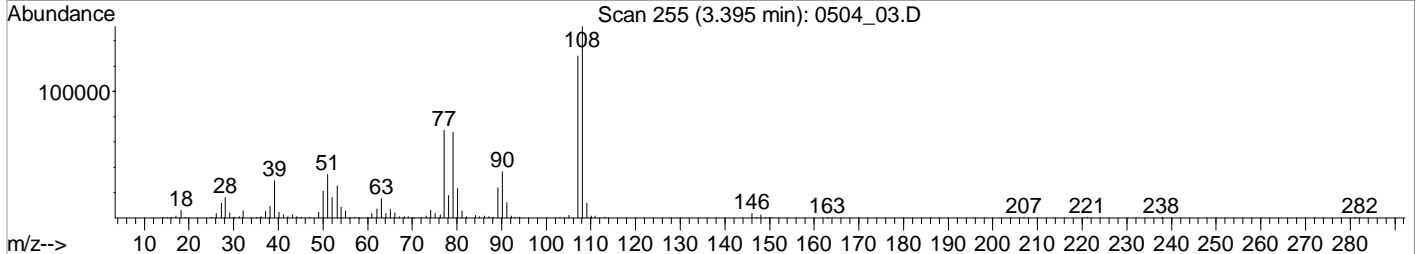
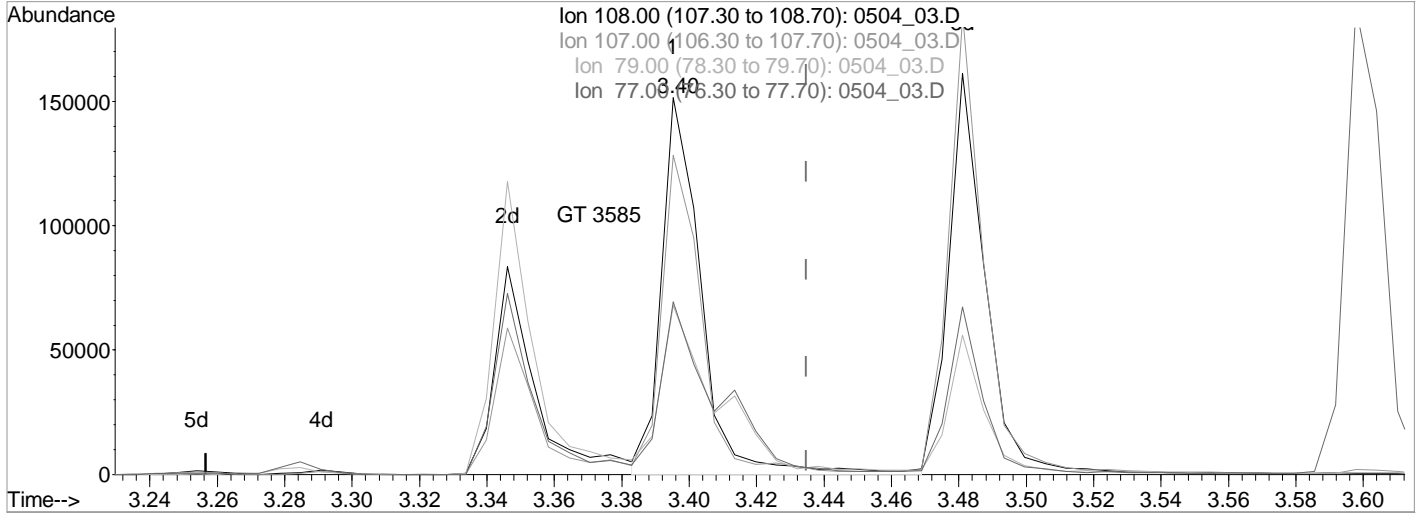
(18) 2-Methylphenol (MT)  
 3.40min (-0.040) 11804.4665716 ppb  
 Qvalue = 92  
 response 127405

Ion	Exp%	Act%
108.00	100	100
107.00	86.00	84.33
79.00	34.90	43.98
77.00	35.50	45.29

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 03.D Vial: 3  
 Acq On : 4 May 2022 4:59 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:44 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_03.D

(18) 2-Methylphenol (MT)  
 3.40min (-0.040) 11525.3954730 ppb m

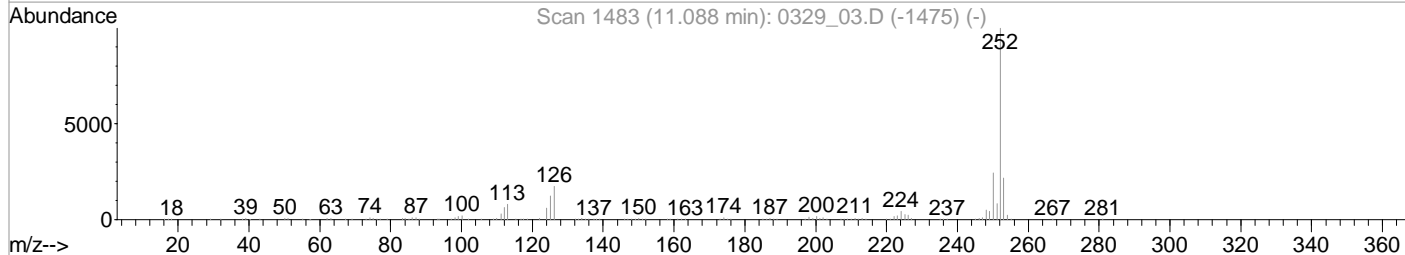
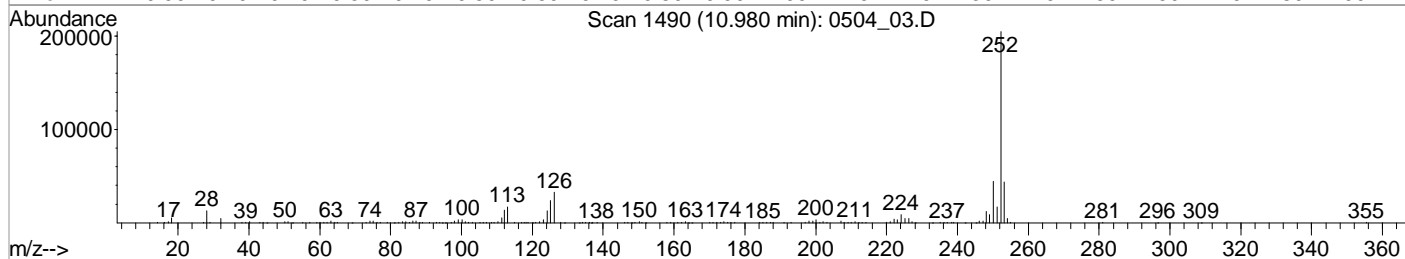
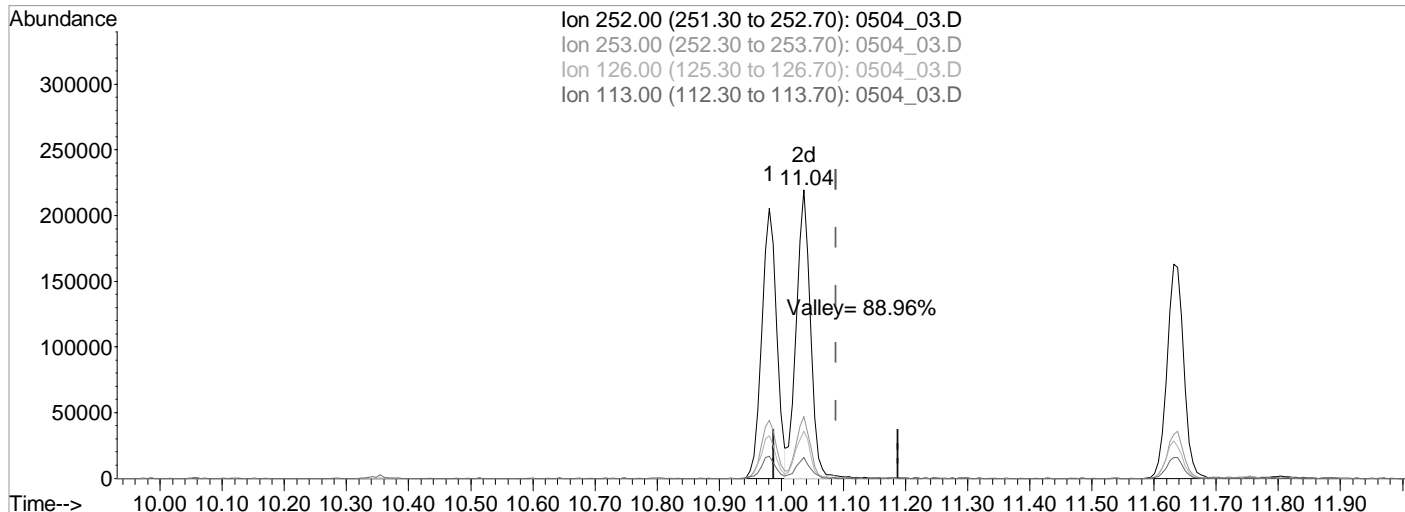
response 124393

Ion	Exp%	Act%
108.00	100	100
107.00	86.00	84.61
79.00	34.90	44.75
77.00	35.50	45.72

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504\_03.D Vial: 3  
 Acq On : 4 May 2022 4:59 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:44 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_03.D

(95) Benzo(b)fluoranthene (MT)  
 10.98min (-0.107) 9689.2444567 ppb  
 Qvalue = 98  
 response 340498

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.28
126.00	18.30	16.02
113.00	8.80	8.36

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0504_04	<b>Analysis date/time:</b>	05/04/22 05:20
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.130890	0.13308810		1.68	20	10	10.17	102	

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data File : C:\MSDCHEM\1\DATA\050422\0504 04.D Vial: 4  
 Acq On : 4 May 2022 5:20 am Operator: 3545  
 Sample : ICVMSC TCL 10K1 PPB 22D19628 exp 09/10/2 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:51 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	73299	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	334864	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	145086	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	278104	8000.00	ppb	-0.05
84) Chrysene-d12	9.06	240	241152	8000.00	ppb	-0.09
94) Perylene-d12	11.75	264	246439	8000.00	ppb	-0.11

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	
50) 2-Fluorobiphenyl	0.00	172	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.06	105	41442	12711.6398247	ppb	96
22) Acetophenone	3.50	105	178552	11779.1104911	ppb	94
31) Benzoic Acid	3.83	105	55708	10167.8983994	ppb	96
33) alpha-terpineol	4.02	59	128306	12214.2941597	ppb	98
37) Hydroquinone	4.24	110	80635m	11109.6680712	ppb	
38) Quinoline	4.23	129	234985	10530.7701716	ppb	96
39) Caprolactam	4.26	113	31618	13703.0039553	ppb #	75
43) 1,2,4,5-Tetrachlorobenzene	4.57	216	102185	11400.6577060	ppb	98
44) Diphenyl Ether	4.84	170	145863	10201.7115313	ug/ml#	88
45) Diphenyl Oxide	4.84	170	145863	10201.7115313	ug/ml#	88
62) 2,3,4,6-Tetrachlorophenol	5.41	232	52484	12685.2866902	ppb	96
69) Atrazine	6.06	200	65345	11013.6614958	ppb	96
82) 2-nitrodiphenylamine	6.88	167	88049	12553.3792055	ppb #	100
85) Benzidine	7.44	184	136803	9663.6748963	ppb	98
89) 3,3-Dichlorobenzidine	9.03	252	132635	10683.3260793	ppb	97

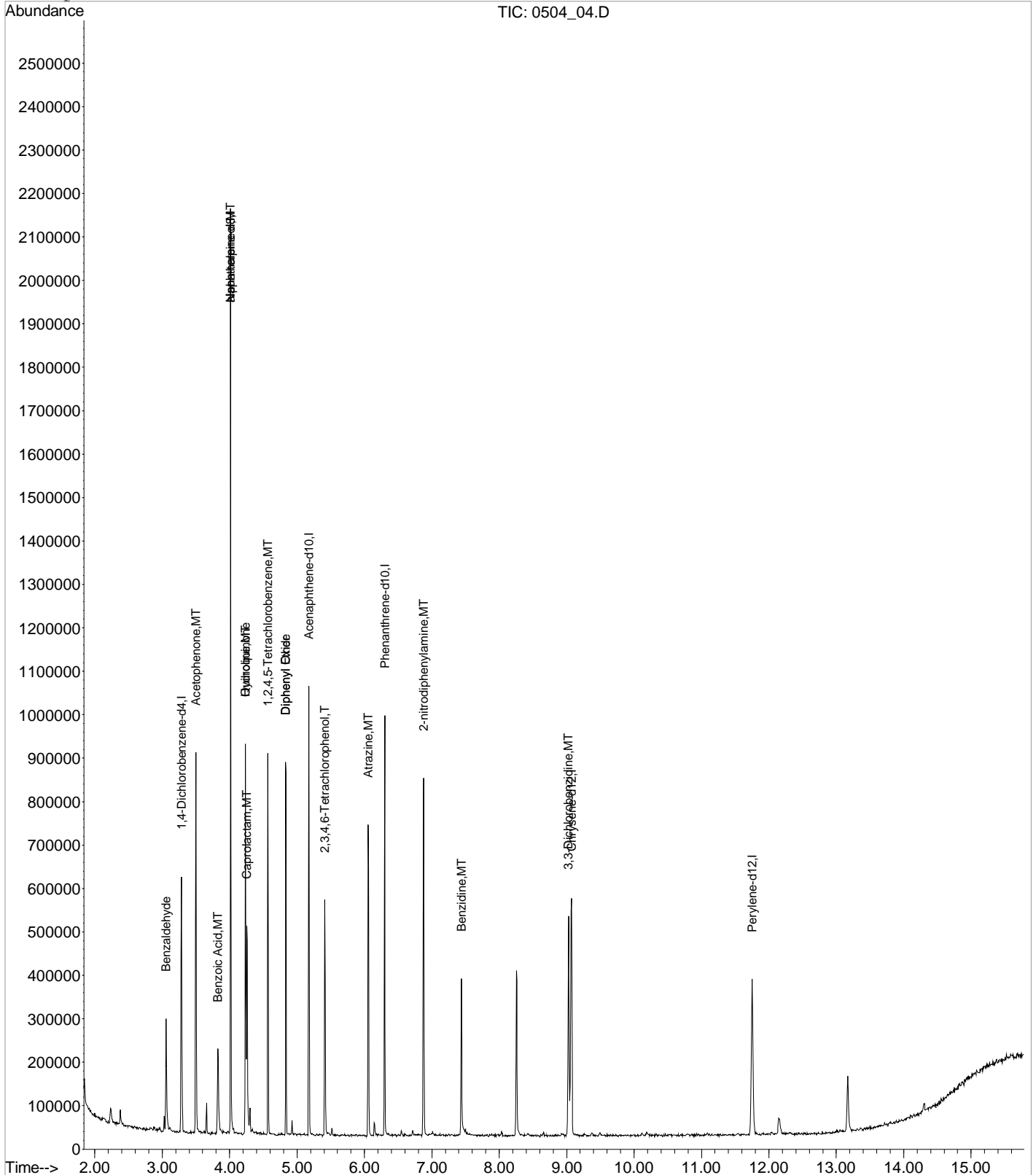
(#) = qualifier out of range (m) = manual integration

0504\_04.D S804C29V.M Thu May 05 12:39:39 2022



Data File : C:\MSDCHEM\1\DATA\050422\0504 04.D Vial: 4
Acq On : 4 May 2022 5:20 am Operator: 3545
Sample : ICMSC TCL 10K1 PPB 22D19628 exp 09/10/2 Inst : BNAMS4
Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 4 9:51 2022 Quant Results File: S804C29V.RES

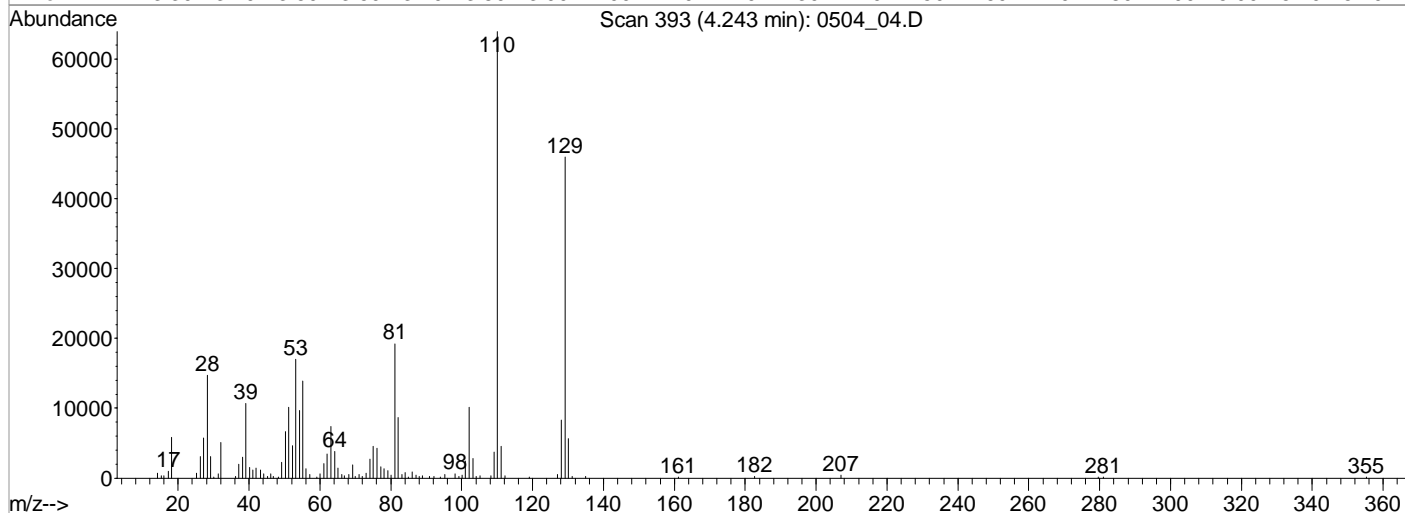
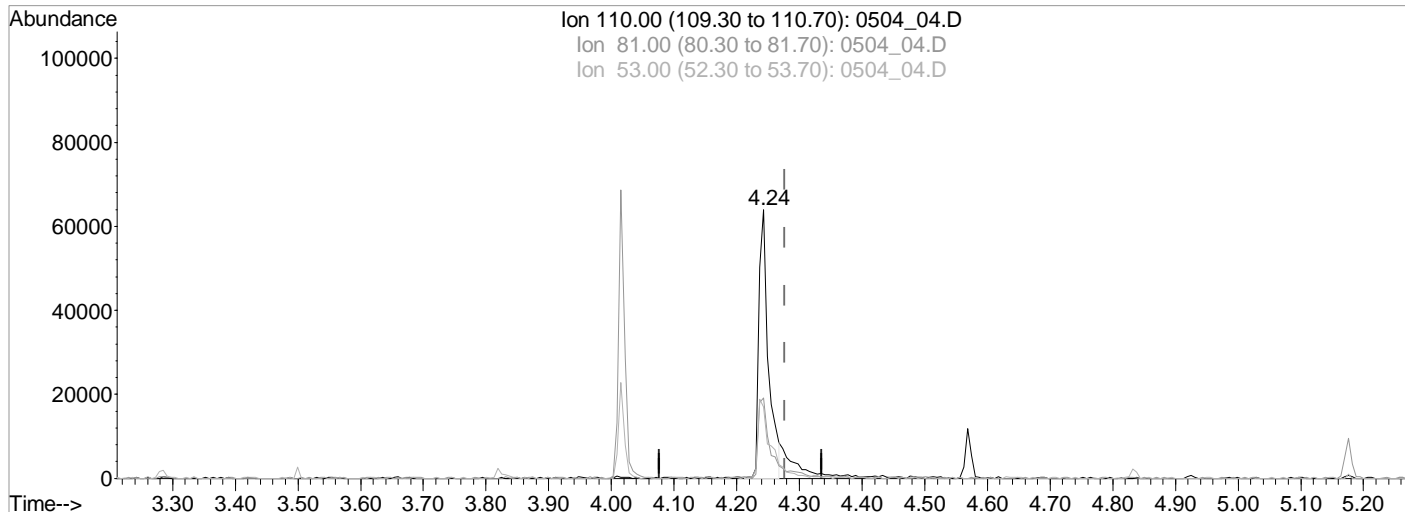
Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Tue Mar 29 09:44:27 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504\_04.D Vial: 4  
Acq On : 4 May 2022 5:20 am Operator: 3545  
Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: May 4 9:49 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Tue Mar 29 09:44:27 2022  
Response via : Single Level Calibration



TIC: 0504\_04.D

(37) Hydroquinone

4.24min (-0.033) 9325.0434824 ppb

Qvalue = 99

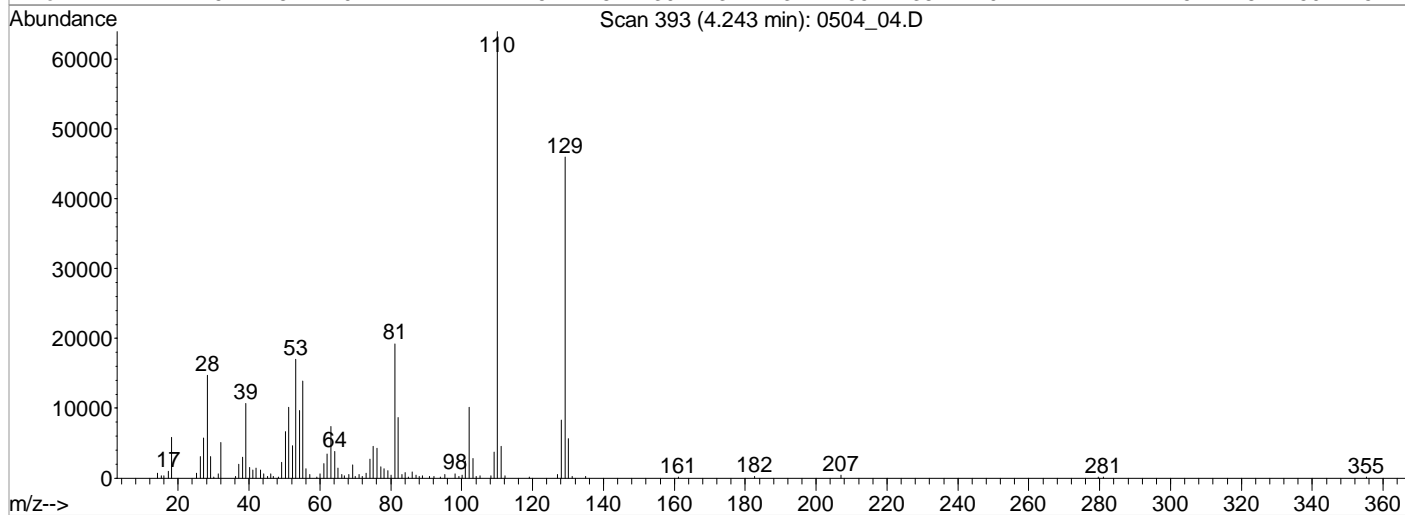
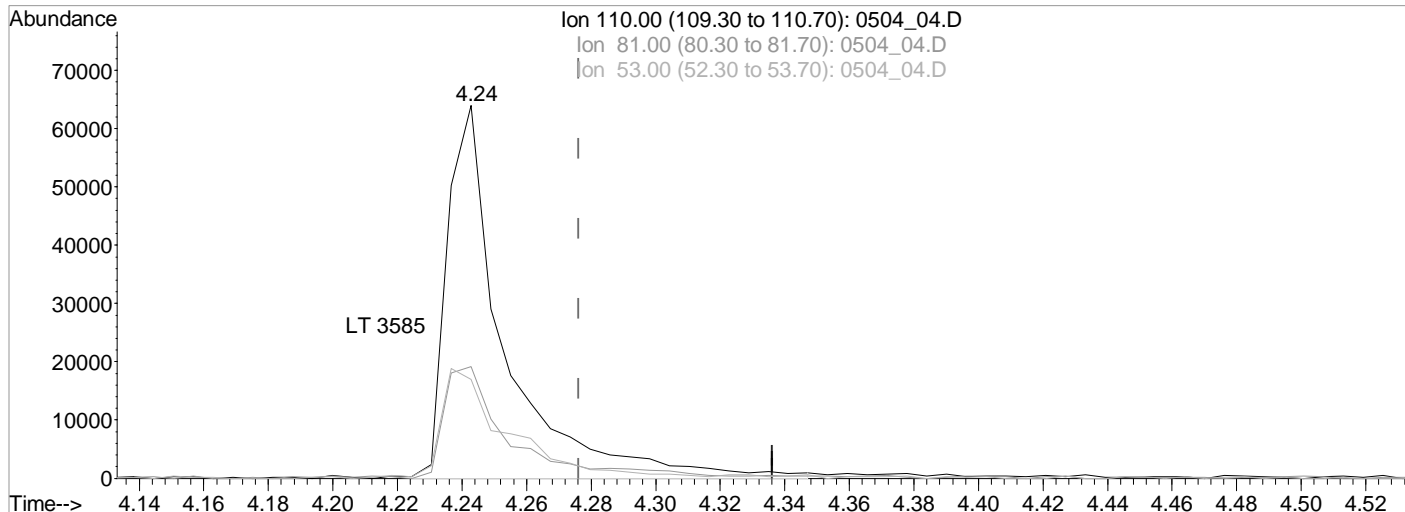
response 68310

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.41
53.00	25.90	26.26
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504\_04.D Vial: 4  
 Acq On : 4 May 2022 5:20 am Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 9:51 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0504\_04.D

(37) Hydroquinone  
 4.24min (-0.033) 11109.6680712 ppb m

response 80635

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.97
53.00	25.90	26.57
0.00	0.00	0.00

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	01/14/22 13:34
<b>Instrument ID:</b>	BNAMS11	<b>Calibration (end) date/time:</b>	01/14/22 18:18
<b>Lab File ID:</b>	0114_21	<b>Analysis date/time:</b>	01/14/22 18:38
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.618011	0.66967470		8.36		10	10.84	108	70 - 130
2-METHYLNAPHTHALENE	0.654609	0.68897150		5.25		10	10.52	105	70 - 130
3&4-METHYL PHENOL	1.304145	1.446074		10.90		10	11.09	111	70 - 130
ACENAPHTHENE	1.175522	1.222916		4.03		10	10.40	104	70 - 130
ACENAPHTHYLENE	1.804489	1.874492		3.88		10	10.39	104	70 - 130
ANTHRACENE	1.045229	1.084579		3.76		10	10.38	104	70 - 130
BENZO(A)ANTHRACENE	1.176199	1.196697		1.74		10	10.17	102	70 - 130
BENZO(A)PYRENE	1.098192	1.140437		3.85		10	10.38	104	70 - 130
BENZO(B)FLUORANTHENE	1.161097	1.214553		4.60		10	10.46	105	70 - 130
BENZO(G,H,I)PERYLENE	1.128771	1.208316		7.05		10	10.70	107	70 - 130
BENZO(K)FLUORANTHENE	1.166214	1.215792		4.25		10	10.43	104	70 - 130
BIS(2-ETHYLHEXYL)PHTHALATE	0.698890	0.755546		8.11		10	10.81	108	70 - 130
CARBAZOLE	0.906727	1.013916		11.80		10	11.18	112	70 - 130
CHRYSENE	1.139964	1.233876		8.24		10	10.82	108	70 - 130
DI-N-BUTYL PHTHALATE	1.114709	1.222438		9.66		10	10.97	110	70 - 130
DI-N-OCTYL PHTHALATE	1.142750	1.214072		6.24		10	10.62	106	70 - 130
DIBENZ(A,H)ANTHRACENE	1.112188	1.2072		8.54		10	10.85	109	70 - 130
DIBENZOFURAN	1.634378	1.674259		2.44		10	10.24	102	70 - 130
FLUORANTHENE	1.160950	1.194963		2.93		10	10.29	103	70 - 130
FLUORENE	1.314982	1.393364		5.96		10	10.60	106	70 - 130
INDENO(1,2,3-CD)PYRENE	1.016082	1.142163		12.40		10	11.24	112	70 - 130
NAPHTHALENE	0.980336	1.033334		5.41		10	10.54	105	70 - 130
PENTACHLOROPHENOL	0.129003	0.16994440		31.70		10	13.17	132	70 - 130
PHENANTHRENE	1.033526	1.076939		4.20		10	10.42	104	70 - 130
PHENOL	1.501544	1.650436		9.92		10	10.99	110	70 - 130
PYRENE	1.229759	1.317967		7.17		10	10.72	107	70 - 130
2,4,6-TRIBROMOPHENOL	0.108787	0.11175940		2.73		10	10.27	103	70 - 130
2-FLUOROBIPHENYL	1.335290	1.364634		2.20		10	10.22	102	70 - 130
2-FLUOROPHENOL	1.169591	1.240892		6.10		10	10.61	106	70 - 130
NITROBENZENE-D5	0.365916	0.38092930		4.10		10	10.41	104	70 - 130
P-TERPHENYL-D14	0.976668	1.015399		3.97		10	10.40	104	70 - 130
PHENOL-D5	1.421741	1.504952		5.85		10	10.59	106	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_21.D  
 Acq On : 14 Jan 2022 6:38 pm  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A13141 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 18 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 15:21:14 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.462	152	65382	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.191	136	267153	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.354	164	144823	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.470	188	284912	8000.0000000	ppb	0.00
84) Chrysene-d12	9.285	240	275017	8000.0000000	ppb	0.00
94) Perylene-d12	11.988	264	286016	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.792	112	101415	10609.6234969	ppb	0.00
Spiked Amount	666.000		Recovery	= 1593.04%		
7) Phenol-d5	3.227	99	122996	10585.2790474	ppb	0.00
Spiked Amount	666.000		Recovery	= 1589.38%		
24) Nitrobenzene-d5	3.762	82	127208	10410.2991831	ppb	0.00
Spiked Amount	333.000		Recovery	= 3126.22%		
50) 2-Fluorobiphenyl	4.872	172	247038	10219.7551408	ppb	0.00
Spiked Amount	333.000		Recovery	= 3069.00%		
73) 2,4,6-Tribromophenol	5.930	330	39802	10273.2382532	ppb	0.00
Spiked Amount	666.000		Recovery	= 1542.53%		
87) p-Terphenyl-d14	7.881	244	349065	10396.5668286	ppb	0.00
Spiked Amount	333.000		Recovery	= 3122.09%		
<b>Target Compounds</b>						
2) Pyridine	2.240	79	128236	12053.2452295	ppb	94
3) N-Nitrosodimethylamine	2.222	42	56649	10008.1664627	ppb	95
5) Aniline	3.280	66	65678	10948.8252531	ppb	96
6) bis(2-Chloroethyl)ether	3.303	93	107614m	10224.6164991	ppb	
8) Phenol	3.233	94	134886	10991.5948291	ppb	97
10) 2-Chlorophenol	3.350	128	114836	11105.0026059	ppb	98
11) n-Decane	3.350	41	59496	10241.5223489	ppb	97
12) 1,3-Dichlorobenzene	3.433	146	134146	11162.1118076	ppb	99
13) 1,4-Dichlorobenzene	3.474	146	130273	10674.5912864	ppb	97
14) Benzyl Alcohol	3.515	79	101482	11048.0244471	ppb	98
15) 1,2-Dichlorobenzene	3.556	146	127899	11072.5049870	ppb	98
16) bis(2-Chloroisopropyl)...	3.591	121	42174	11909.2691835	ppb	99
17) 2,2-oxybis(1-chloropro...	3.591	121	42174	11909.2691835	ppb	99
18) 2-Methylphenol	3.562	108	102617	11050.2245600	ppb	97
19) Hexachloroethane	3.750	117	49772	11097.3472119	ppb	96
20) N-Nitrosodi-n-propylamine	3.662	70	83205	11276.9804963	ppb	98
21) 3&4-Methyl phenol	3.644	107	118184	11088.2919760	ppb	99
25) Nitrobenzene	3.773	77	125715	10805.4663901	ppb	97
26) Isophorone	3.903	82	218160	10574.8778231	ppb	92
27) 2-Nitrophenol	3.956	139	58520	10545.3405024	ppb	99
28) 2,4-Dimethylphenol	3.956	107	117562	10623.0995916	ppb	99
29) bis(2-Chlorethoxy)methane	4.014	93	132933	11183.0848770	ppb	99
30) 2,4-Dichlorophenol	4.091	162	96297	10686.6939288	ppb	98
32) 1,2,4-Trichlorobenzene	4.150	180	111127	10544.4207868	ppb	96
34) Naphthalene	4.208	128	345073m	10540.6102457	ppb	
35) 4-Chloroaniline	4.220	65	41741	10506.4774376	ppb	96
36) Hexachloro-1,3-butadiene	4.273	225	76403	11561.1116095	ppb	97
40) 4-Chloro-3-methylphenol	4.508	107	100890	10954.6138300	ppb	100
41) 2-Methylnaphthalene	4.637	142	230076	10524.9335829	ppb	99
42) 1-Methylnaphthalene	4.708	142	223632	10835.9611561	ppb	99
47) Hexachlorocyclopentadiene	4.743	237	66823	8577.1340013	ppb	96
48) 2,4,6-Trichlorophenol	4.813	196	70413	10394.1337963	ppb	97

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_21.D  
 Acq On : 14 Jan 2022 6:38 pm  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A13141 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 18 Sample Multiplier: 1  
 InstName : BNAMS11

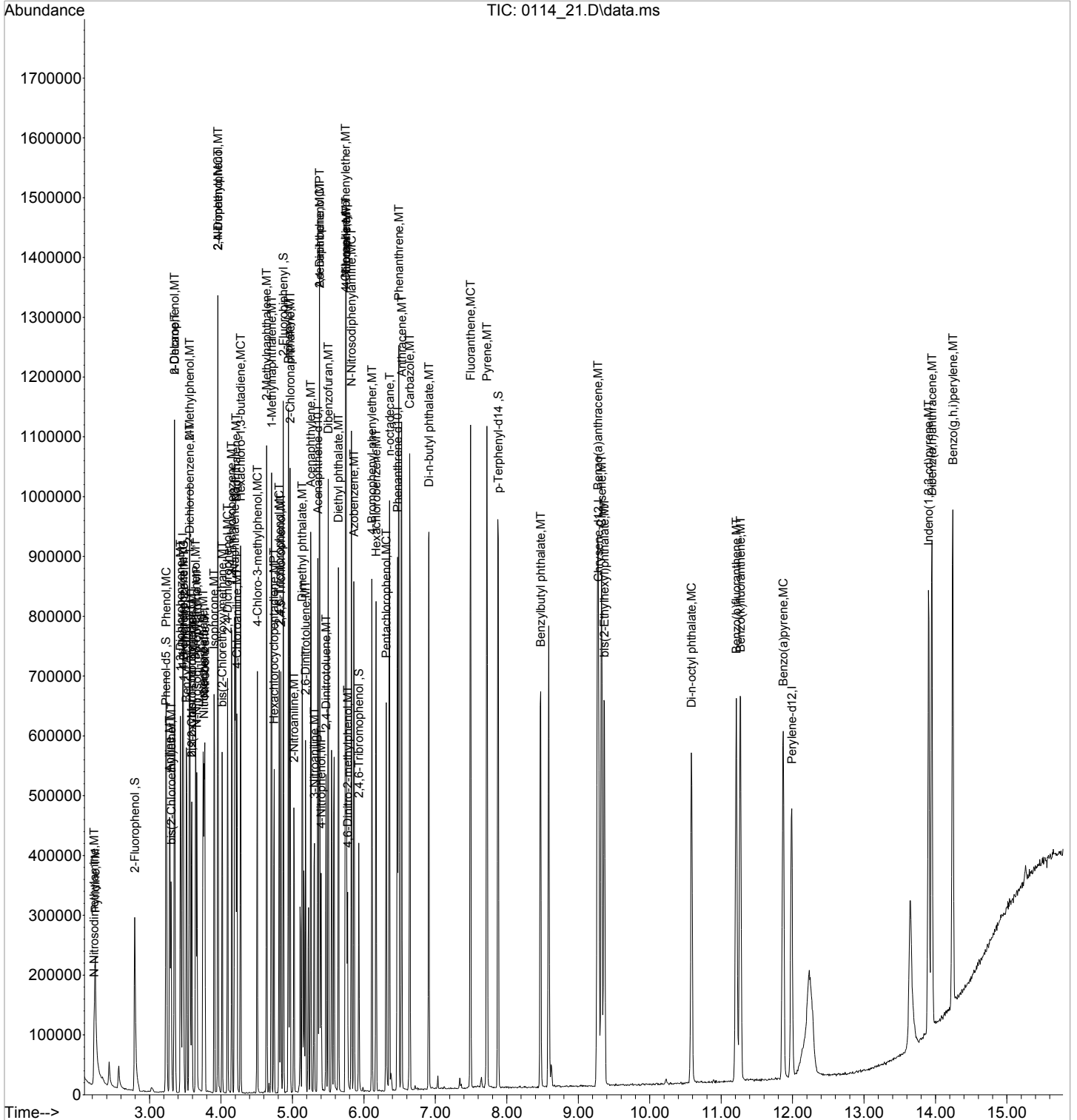
Quant Time: Jan 19 15:21:14 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
49) 2,4,5-Trichlorophenol	4.837	196	76432	10850.3706339	ppb		98
51) Biphenyl	4.943	154	277644	10274.5254566	ppb		99
52) 2-Chloronaphthalene	4.966	162	219692	10532.3191481	ppb		98
53) 2-Nitroaniline	5.019	138	69748	11443.1457274	ppb		100
54) Acenaphthylene	5.254	152	339337	10387.9420452	ppb		99
55) Dimethyl phthalate	5.137	163	237937	10282.1193585	ppb		93
56) 2,6-Dinitrotoluene	5.184	165	57756	11372.7943796	ppb		95
57) 3-Nitroaniline	5.307	138	56239	10714.8558419	ppb		98
58) Acenaphthene	5.378	153	221383	10403.1728858	ppb		99
59) 2,4-Dinitrophenol	5.378	184	28590	10097.0536349	ppb	#	76
60) Dibenzofuran	5.501	168	303089	10244.0108855	ppb		98
61) 2,4-Dinitrotoluene	5.472	165	73294	10967.0274951	ppb		95
63) 4-Nitrophenol	5.401	139	44128m	10609.1813930	ppb		
64) Fluorene	5.754	166	252239	10596.0715226	ppb		99
65) 4-Chlorophenyl-phenyle...	5.742	204	129976	10313.3624940	ppb		99
66) Diethyl phthalate	5.642	149	245840	10486.8001610	ppb		99
67) 4-Nitroaniline	5.748	138	54488	11577.6315946	ppb		97
68) Azobenzene	5.859	77	252835	10846.6591107	ppb		98
71) 4,6-Dinitro-2-methylph...	5.771	198	38755	10020.3928544	ppb		97
72) N-Nitrosodiphenylamine	5.824	169	217133	10500.2348465	ppb		98
74) 4-Bromophenyl-phenylether	6.112	248	79602	10125.8627428	ppb		98
75) Hexachlorobenzene	6.171	284	91704	10330.3824966	ppb		96
76) n-octadecane	6.359	55	33467	9419.8219740	ppb		97
77) Pentachlorophenol	6.312	266	60524	13173.6625862	ppb		96
78) Phenanthrene	6.488	178	383541	10420.0506742	ppb		99
79) Anthracene	6.529	178	386262	10376.4781267	ppb		99
80) Carbazole	6.641	167	361096	11182.1541585	ppb		98
81) Di-n-butyl phthalate	6.911	149	435359	10966.4346070	ppb		99
83) Fluoranthene	7.493	202	425574	10292.9718695	ppb		99
86) Pyrene	7.722	202	453079	10717.2724845	ppb		97
88) Benzylbutyl phthalate	8.474	149	177870	10883.9850900	ppb		94
90) Benzo(a)anthracene	9.273	228	411390	10174.2693086	ppb		99
91) Chrysene	9.326	228	424171	10823.8164701	ppb		98
92) bis(2-Ethylhexyl)phtha...	9.367	149	259735	10810.6508127	ppb		97
93) Di-n-octyl phthalate	10.583	149	417363	10624.1271232	ppb		97
95) Benzo(b)fluoranthene	11.212	252	434227	10460.3881101	ppb		99
96) Benzo(k)fluoranthene	11.271	252	434670	10425.1217908	ppb		100
97) Benzo(a)pyrene	11.870	252	407729	10384.6744081	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.903	276	408346	11240.8518328	ppb		94
99) Dibenz(a,h)anthracene	13.950	278	431598	10854.2753897	ppb		98
100) Benzo(g,h,i)perylene	14.244	276	431997	10704.7015512	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_21.D  
Acq On : 14 Jan 2022 6:38 pm  
Operator : 917  
Sample : SSCV SVMS 10K PPB 22A13141 EXP 06/20/22  
Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 18 Sample Multiplier: 1  
InstName : BNAMS11

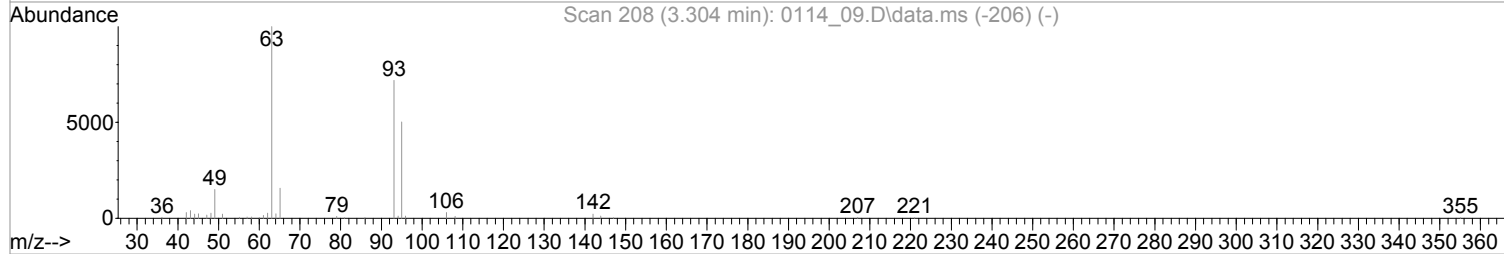
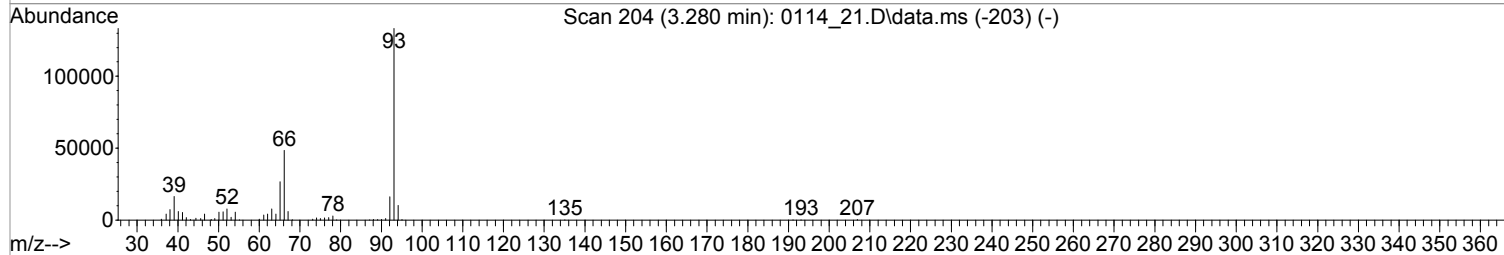
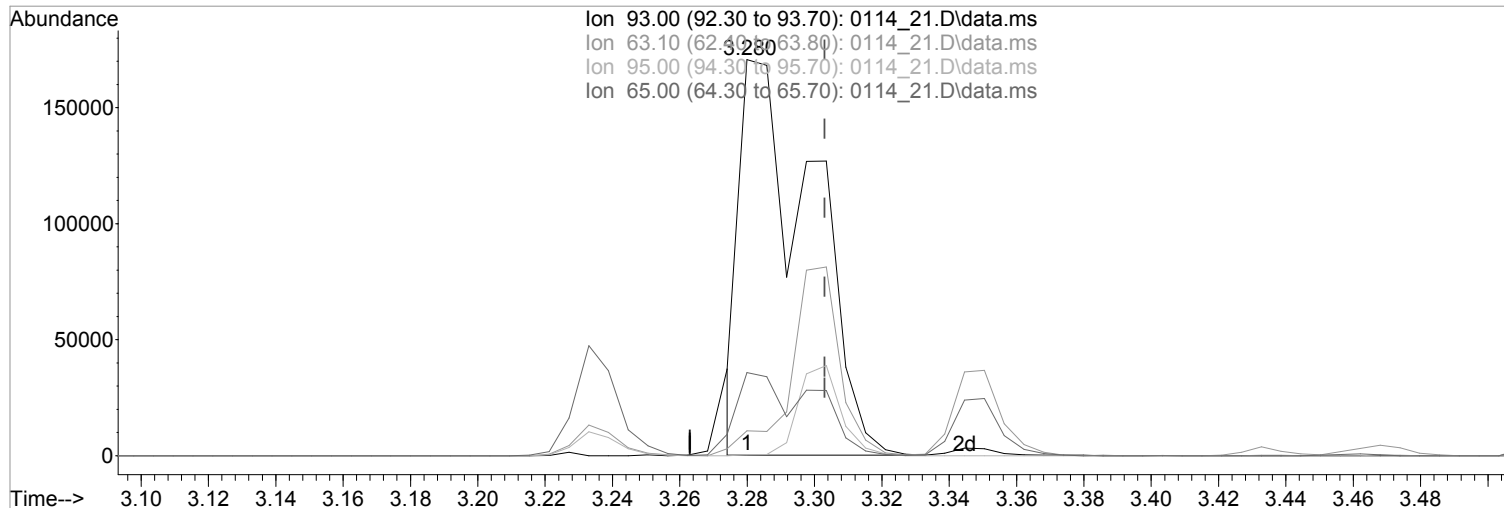
Quant Time: Jan 19 15:21:14 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Tue Jan 18 17:20:43 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_21.D  
 Acq On : 14 Jan 2022 6:38 pm  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A13141 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 18 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 14:32:36 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration



TIC: 0114\_21.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.280min (-0.023) 24089.9960924 ppb  
 Qvalue = 45  
 response 253547

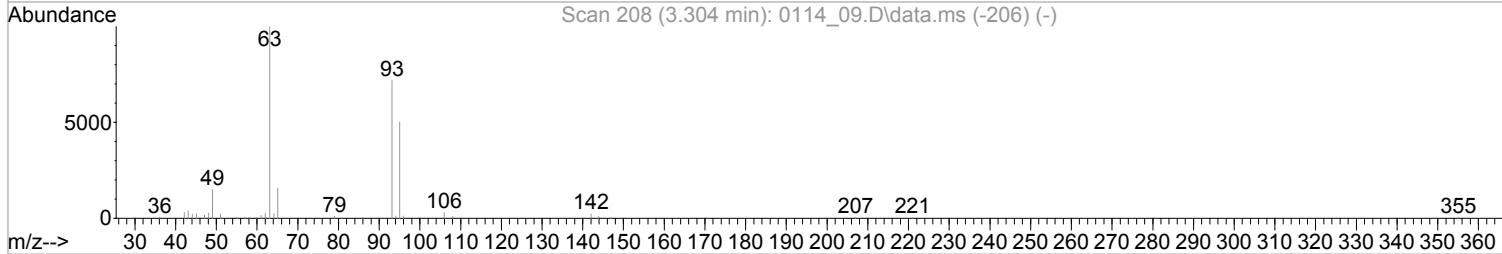
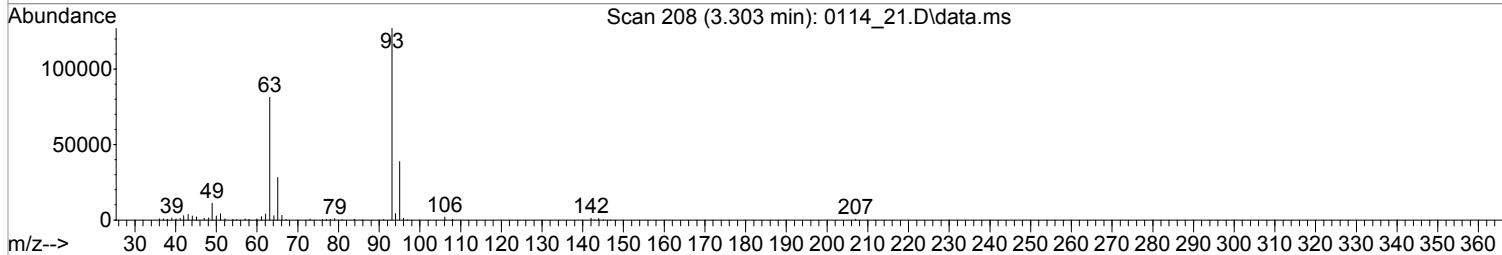
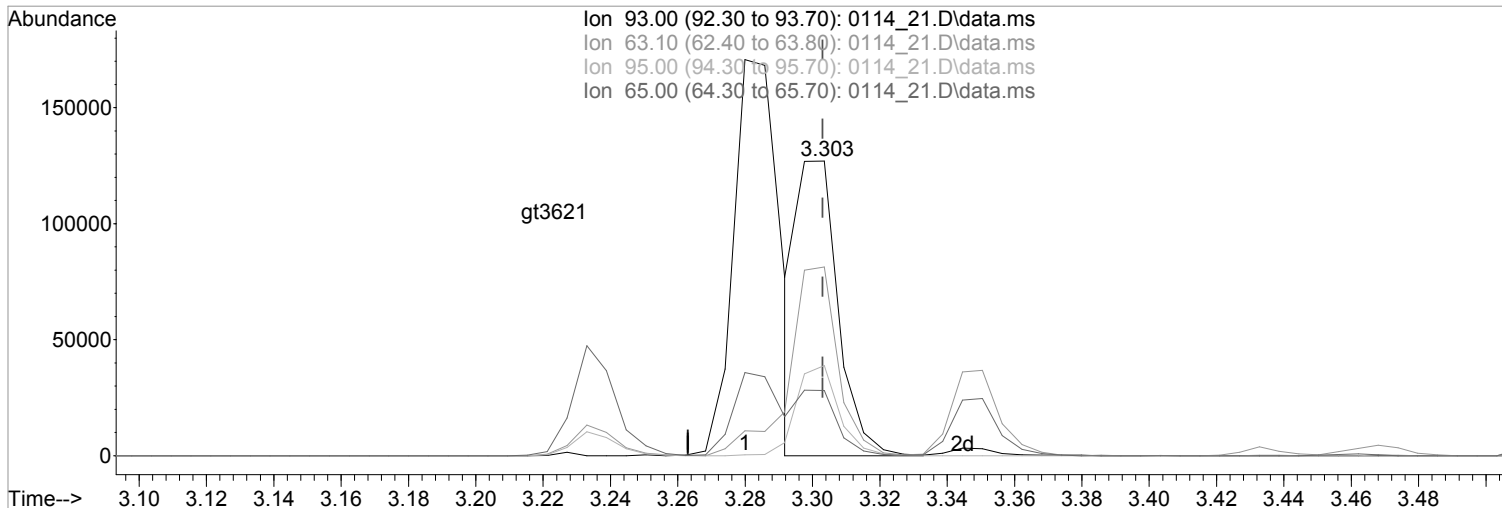
Ion	Exp%	Act%
93.00	100	100
63.10	63.50	5.91#
95.00	30.20	0.22#
65.00	21.40	20.79



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_21.D  
 Acq On : 14 Jan 2022 6:38 pm  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A13141 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 18 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 14:32:36 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration



TIC: 0114\_21.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.303min (+0.000) 10224.6164991 ppb m

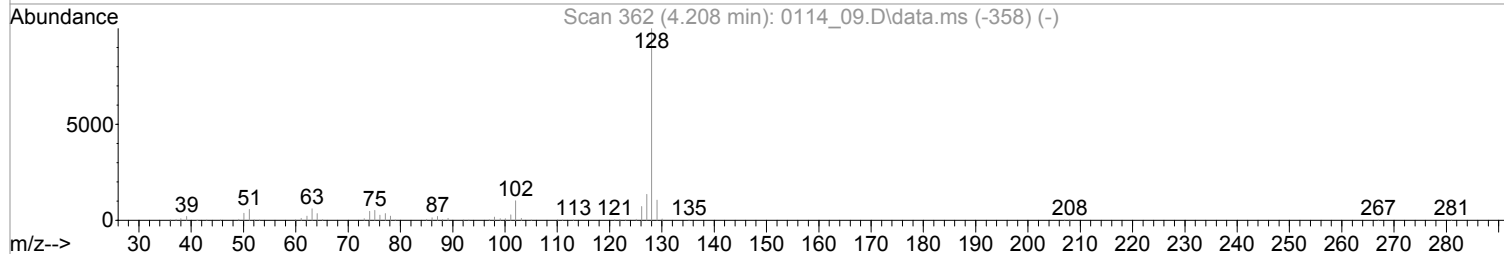
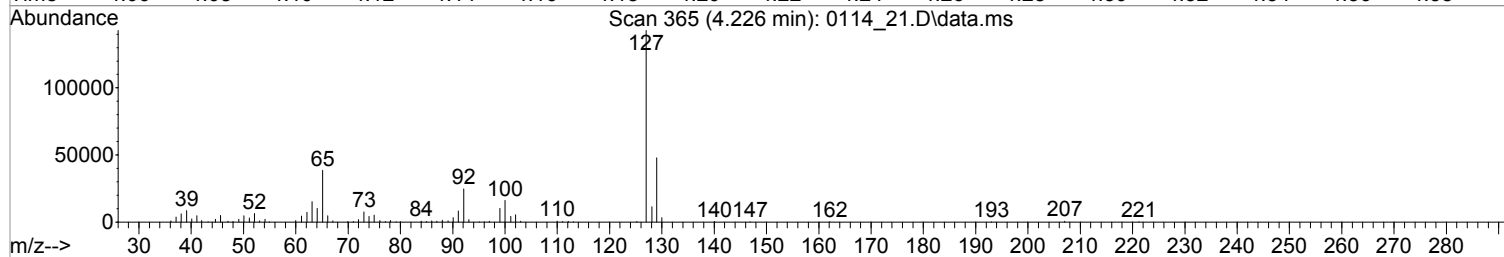
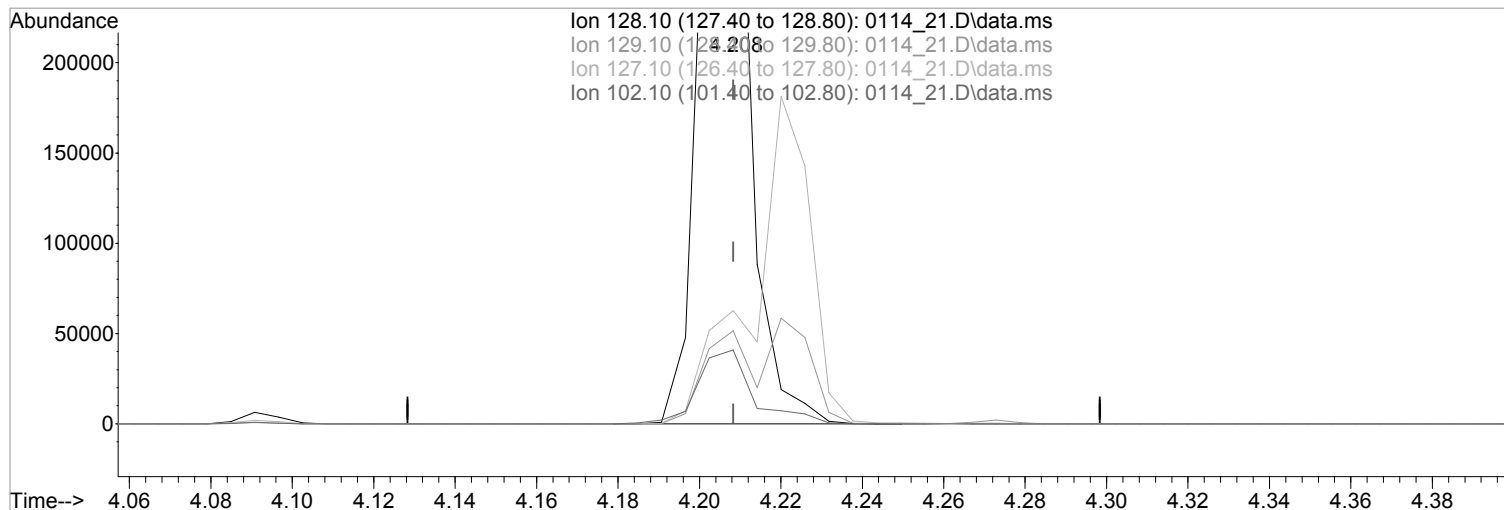
response 107614

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	64.09
95.00	30.20	30.55
65.00	21.40	22.17

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_21.D  
 Acq On : 14 Jan 2022 6:38 pm  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A13141 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 18 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 14:32:36 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration



TIC: 0114\_21.D\data.ms

(34) Naphthalene (MT)

4.208min (-0.000) 10680.2361493 ppb

Qvalue = 98

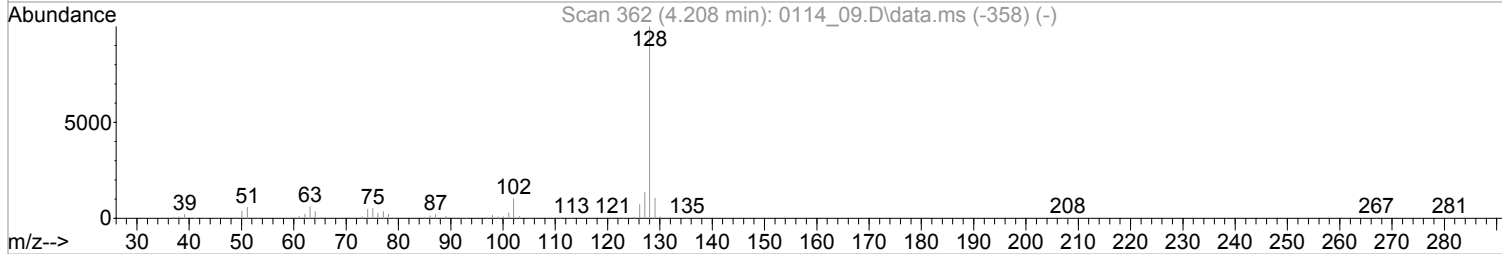
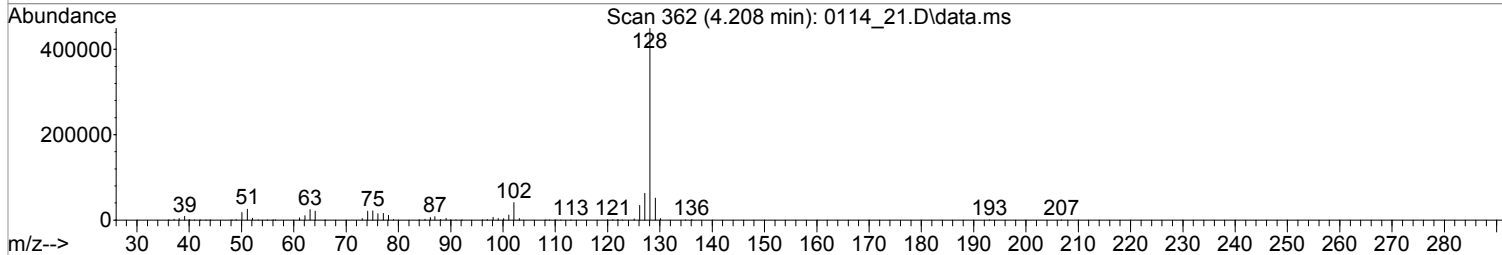
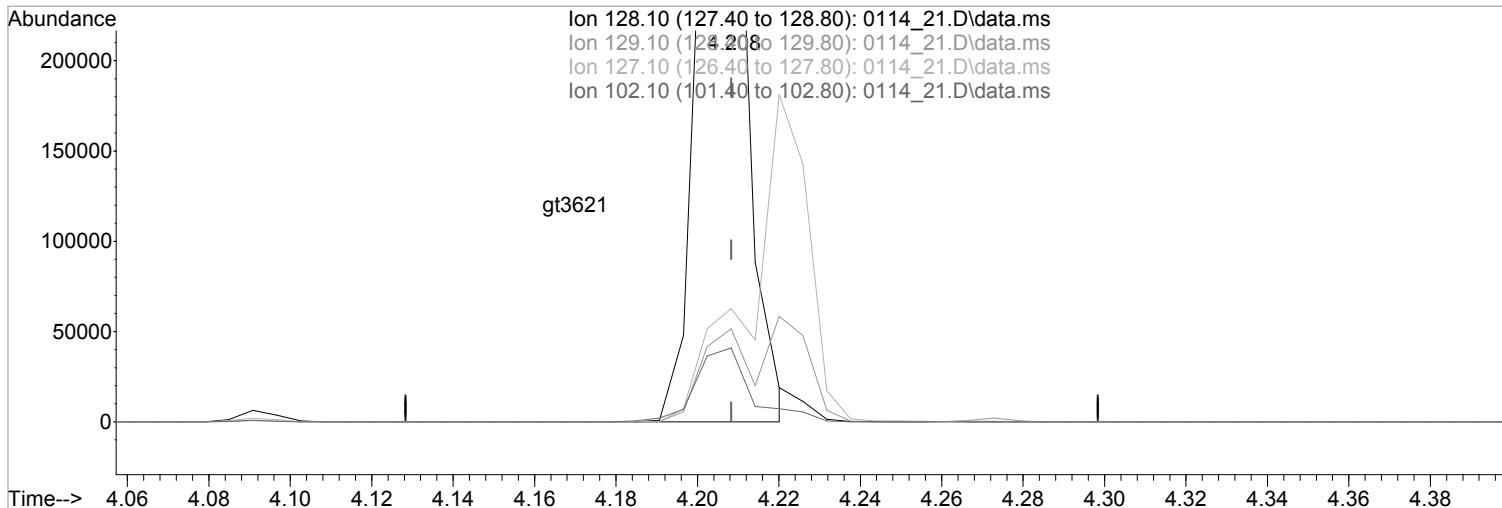
response 349644

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	11.49
127.10	13.50	13.96
102.10	10.10	9.10

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_21.D  
Acq On : 14 Jan 2022 6:38 pm  
Operator : 917  
Sample : SSCV SVMS 10K PPB 22A13141 EXP 06/20/22  
Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 18 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 19 14:32:36 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Tue Jan 18 17:20:43 2022  
Response via : Initial Calibration



TIC: 0114\_21.D\data.ms

(34) Naphthalene (MT)  
4.208min (-0.000) 10540.6102457 ppb m

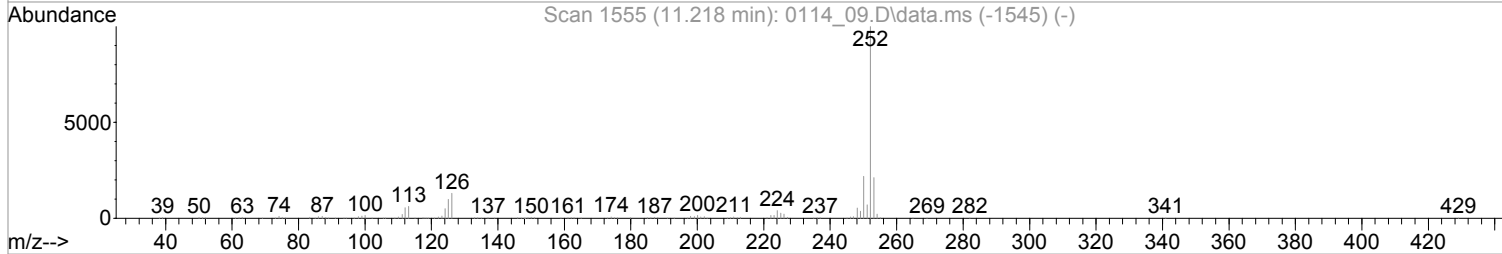
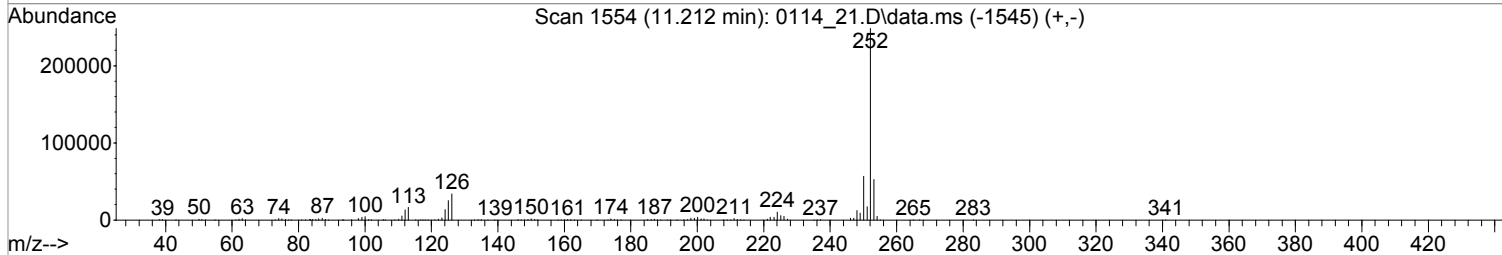
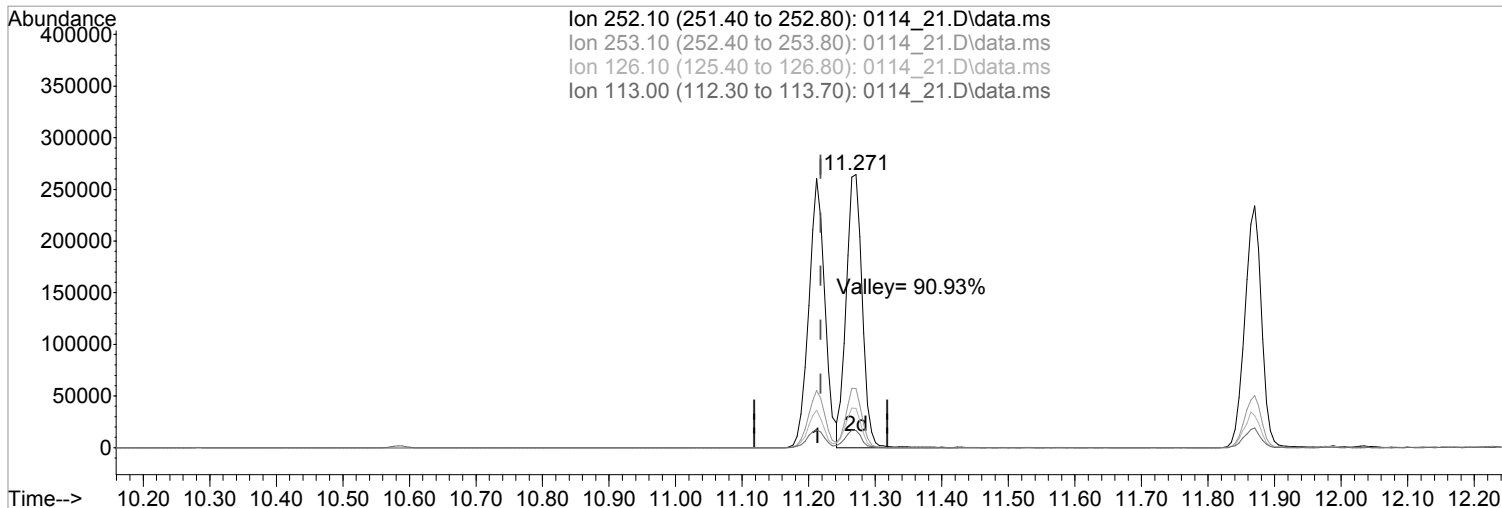
response 345073

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	11.49
127.10	13.50	13.96
102.10	10.10	9.10

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_21.D  
Acq On : 14 Jan 2022 6:38 pm  
Operator : 917  
Sample : SSCV SVMS 10K PPB 22A13141 EXP 06/20/22  
Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 18 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 19 14:37:58 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Tue Jan 18 17:20:43 2022  
Response via : Initial Calibration



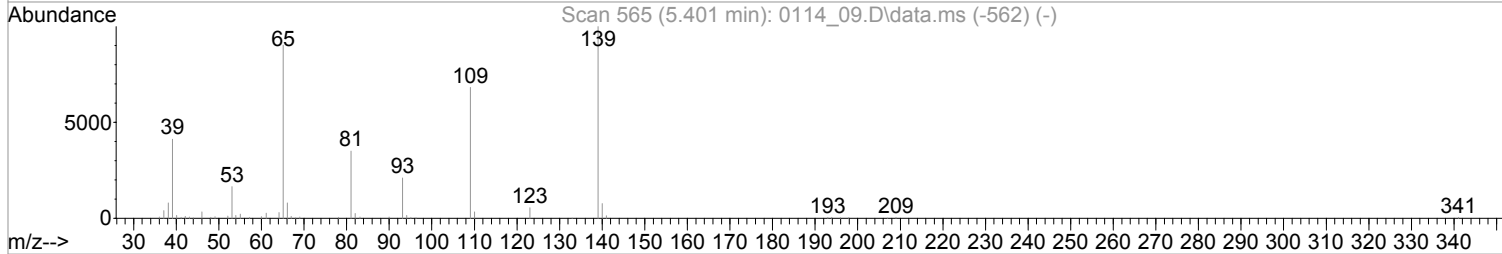
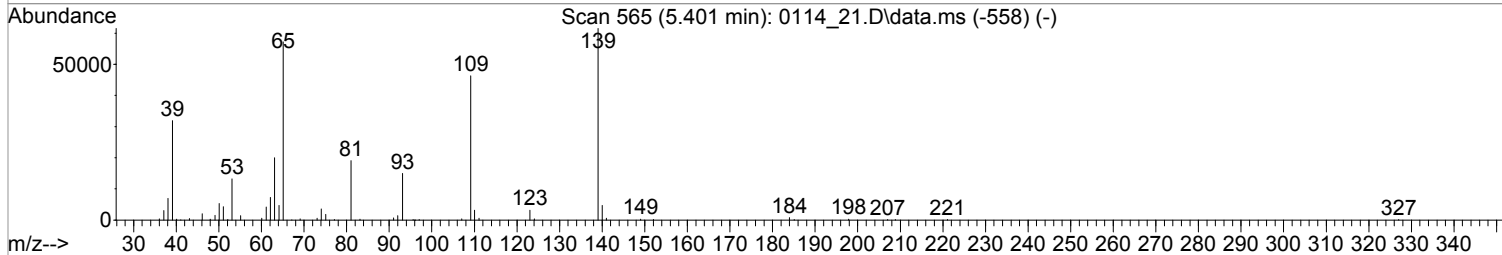
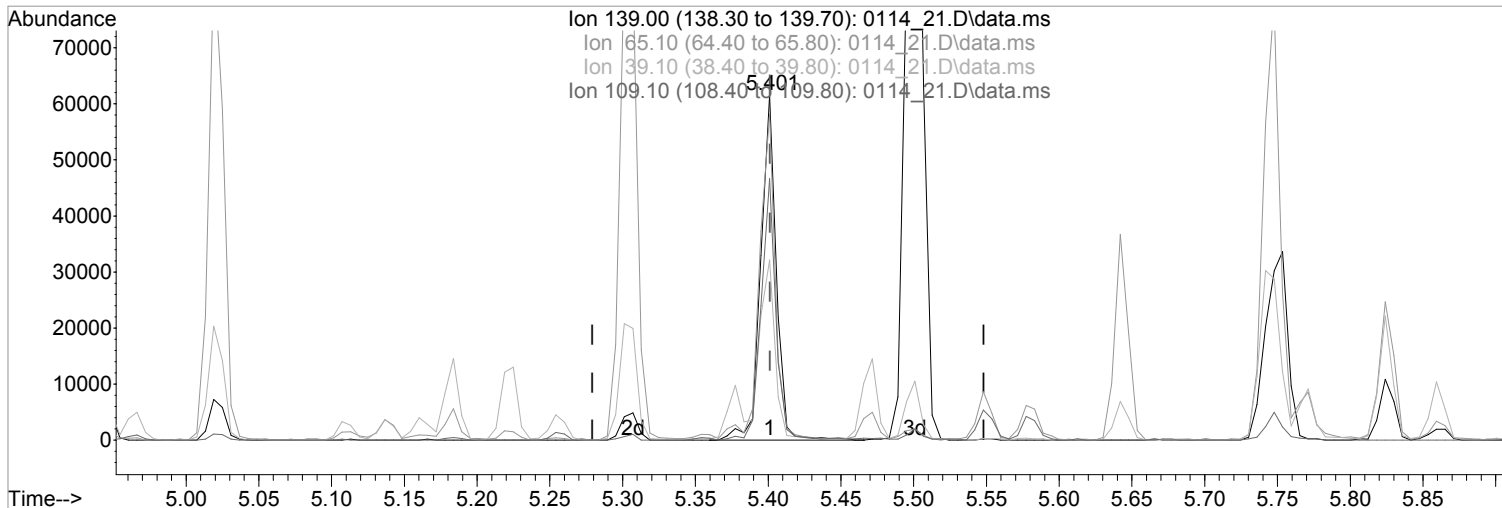
TIC: 0114\_21.D\data.ms

(95) Benzo(b)fluoranthene (MT)  
11.212min (-0.006) 10460.3881101 ppb  
Qvalue = 99  
response 434227  
Ion Exp% Act%  
252.10 100 100  
253.10 21.30 21.18  
126.10 12.90 13.66  
113.00 6.00 6.54

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_21.D  
 Acq On : 14 Jan 2022 6:38 pm  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A13141 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 18 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 14:37:58 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration



TIC: 0114\_21.D\data.ms

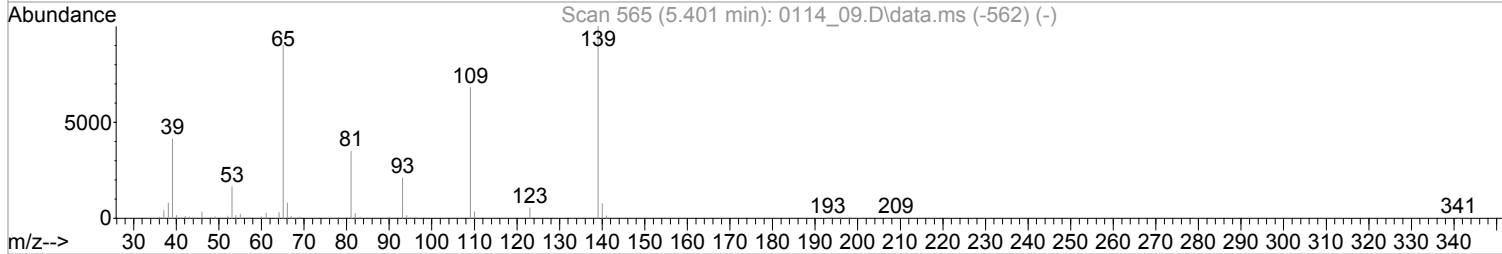
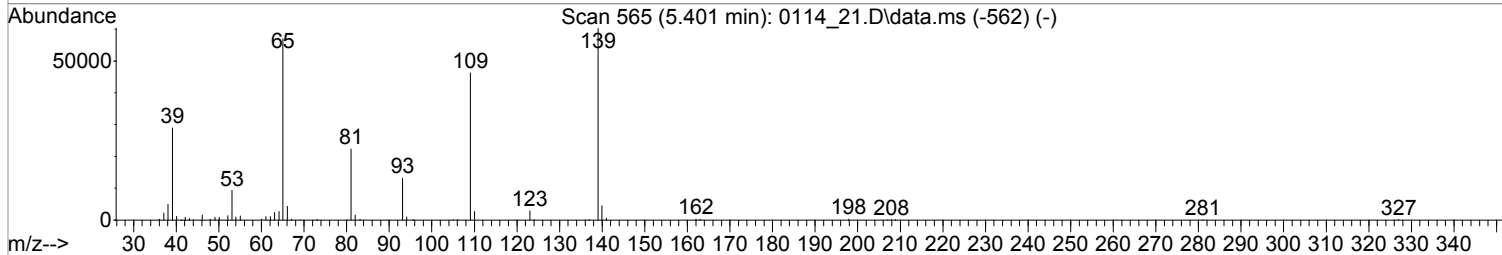
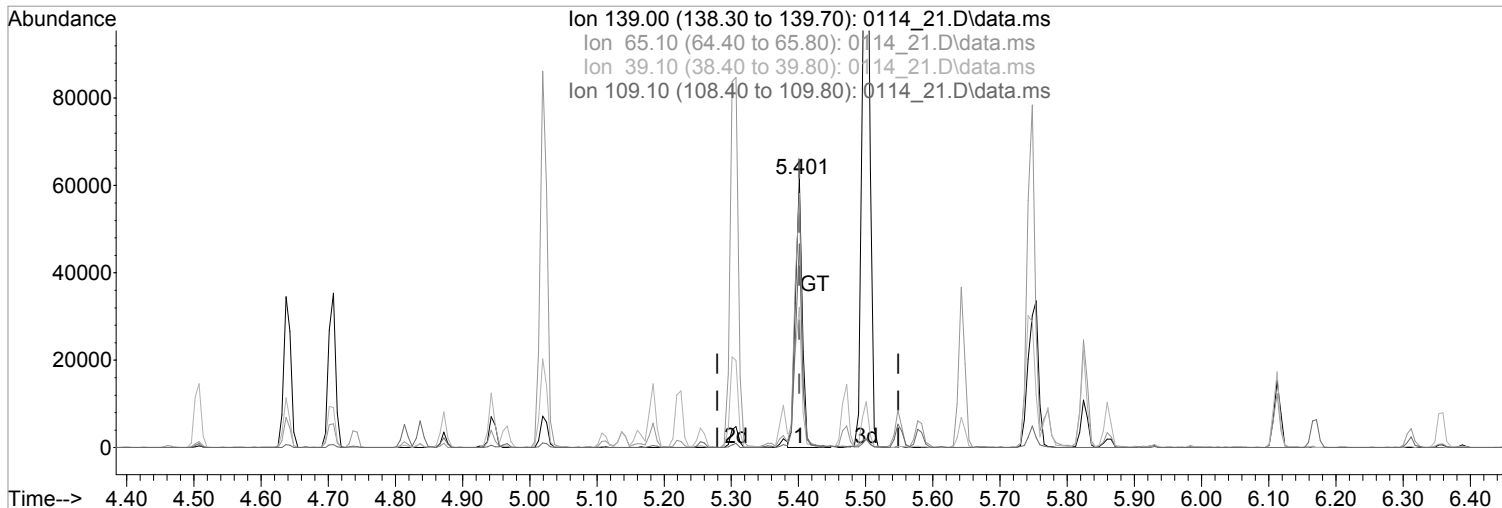
(63) 4-Nitrophenol (MPT)  
 5.401min (-0.000) 10978.2235757 ppb  
 Qvalue = 94  
 response 45663

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	92.90
39.10	47.40	51.87
109.10	67.50	75.24

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_21.D  
 Acq On : 14 Jan 2022 6:38 pm  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A13141 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 18 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 14:37:58 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration



TIC: 0114\_21.D\data.ms

(63) 4-Nitrophenol (MPT)  
 5.401min (-0.000) 10609.1813930 ppb m  
 response 44128  

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	94.48
39.10	47.40	52.22
109.10	67.50	75.73

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	01/14/22 13:34
<b>Instrument ID:</b>	BNAMS11	<b>Calibration (end) date/time:</b>	01/14/22 18:18
<b>Lab File ID:</b>	0114_26	<b>Analysis date/time:</b>	01/19/22 10:49
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.149770	0.13081760		12.70		10	8.735	87.30	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_26.D  
 Acq On : 19 Jan 2022 10:49 am  
 Operator : 917  
 Sample : SSCV TCL 10K1 PPB 22A19841 EXP 05/01/22  
 Misc : SSCV TCL CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 21 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 14:41:36 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration

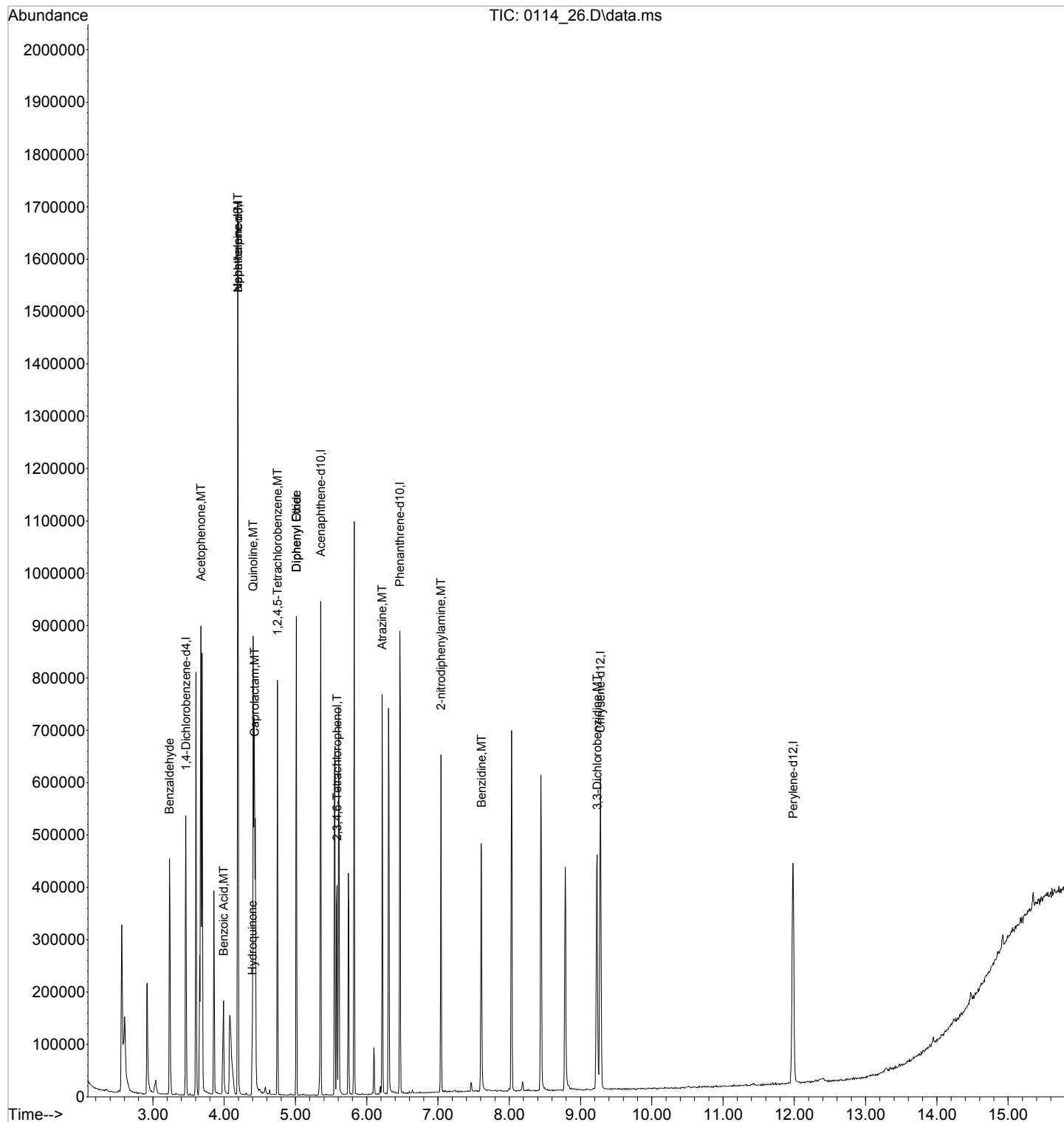
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.462	152	70828	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.191	136	306705	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.354	164	143087	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.465	188	284533	8000.0000000	ppb	0.00
84) Chrysene-d12	9.279	240	269639	8000.0000000	ppb	0.00
94) Perylene-d12	11.982	264	267020	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0d	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0d	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	666.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	333.000		Recovery	=	0.00%	
<b>Target Compounds</b>						
					Qvalue	
9) Benzaldehyde	3.233	105	81072	24119.9039871	ppb	97
22) Acetophenone	3.674	105	147734	9519.5254681	ppb #	82
31) Benzoic Acid	3.991	105	50153	8734.5524001	ppb	98
33) alpha-terpineol	4.191	59	81546	11456.9067850	ppb	98
37) Hydroquinone	4.396	110	29033	3680.4544054	ppb	96
38) Quinoline	4.408	129	212475	10293.6913421	ppb	99
39) Caprolactam	4.426	113	27014	11864.7702292	ppb #	36
43) 1,2,4,5-Tetrachloroben...	4.749	216	107811	9711.2660636	ppb	97
44) Diphenyl Ether	5.013	170	137921	10440.0160688	ppb	99
45) Diphenyl Oxide	5.013	170	137921	10440.0160688	ppb	99
62) 2,3,4,6-Tetrachlorophenol	5.583	232	44534	8637.0546245	ppb	95
69) Atrazine	6.218	200	69598	10236.3505414	ppb	96
82) 2-nitrodiphenylamine	7.040	167	70867	8941.6571695	ppb	99
85) Benzidine	7.610	184	199185	14045.4778372	ppb	99
89) 3,3-Dichlorobenzidine	9.232	252	135912	9707.3517308	ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_26.D  
Acq On : 19 Jan 2022 10:49 am  
Operator : 917  
Sample : SSCV TCL 10K1 PPB 22A19841 EXP 05/01/22  
Misc : SSCV TCL CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 21 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: Jan 19 14:41:36 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Tue Jan 18 17:20:43 2022  
Response via : Initial Calibration



GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	01/14/22 13:34
<b>Instrument ID:</b>	BNAMS11	<b>Calibration (end) date/time:</b>	01/14/22 18:18
<b>Lab File ID:</b>	0114_27	<b>Analysis date/time:</b>	01/19/22 11:10
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.618011	0.53302930		13.80		10	8.625	86.30	70 - 130
2-METHYLNAPHTHALENE	0.654609	0.55942170		14.50		10	8.546	85.50	70 - 130
3&4-METHYL PHENOL	1.304145	1.3805		5.85		10	10.59	106	70 - 130
ACENAPHTHENE	1.175522	1.096358		6.73		10	9.327	93.30	70 - 130
ACENAPHTHYLENE	1.804489	1.702032		5.68		10	9.432	94.30	70 - 130
ANTHRACENE	1.045229	1.016007		2.80		10	9.720	97.20	70 - 130
BENZO(A)ANTHRACENE	1.176199	1.133630		3.62		10	9.638	96.40	70 - 130
BENZO(A)PYRENE	1.098192	1.042845		5.04		10	9.496	95	70 - 130
BENZO(B)FLUORANTHENE	1.161097	1.077682		7.18		10	9.282	92.80	70 - 130
BENZO(G,H,I)PERYLENE	1.128771	1.067190		5.46		10	9.454	94.50	70 - 130
BENZO(K)FLUORANTHENE	1.166214	1.087054		6.79		10	9.321	93.20	70 - 130
BIS(2-ETHYLHEXYL)PHTHALATE	0.698890	0.68702770		1.70		10	9.830	98.30	70 - 130
CARBAZOLE	0.906727	0.84400620		6.92		10	9.308	93.10	70 - 130
CHRYSENE	1.139964	1.103354		3.21		10	9.679	96.80	70 - 130
DI-N-BUTYL PHTHALATE	1.114709	1.082332		2.90		10	9.710	97.10	70 - 130
DI-N-OCTYL PHTHALATE	1.142750	1.096872		4.01		10	9.599	96	70 - 130
DIBENZ(A,H)ANTHRACENE	1.112188	1.047809		5.79		10	9.421	94.20	70 - 130
DIBENZOFURAN	1.634378	1.528567		6.47		10	9.353	93.50	70 - 130
FLUORANTHENE	1.160950	1.099643		5.28		10	9.472	94.70	70 - 130
FLUORENE	1.314982	1.248139		5.08		10	9.492	94.90	70 - 130
INDENO(1,2,3-CD)PYRENE	1.016082	1.011949		0.4070		10	9.959	99.60	70 - 130
NAPHTHALENE	0.980336	0.83586380		14.70		10	8.526	85.30	70 - 130
PENTACHLOROPHENOL	0.129003	0.12862940		0.29		10	9.971	99.70	70 - 130
PHENANTHRENE	1.033526	1.000427		3.20		10	9.680	96.80	70 - 130
PHENOL	1.501544	1.425083		5.09		10	9.491	94.90	70 - 130
PYRENE	1.229759	1.194606		2.86		10	9.714	97.10	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_27.D  
 Acq On : 19 Jan 2022 11:10 am  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A12999 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 22 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 15:20:03 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.462	152	69999	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.191	136	302634	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.354	164	148793	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.465	188	284669	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.285	240	273405	8000.0000000	ppb	0.00	
94) Perylene-d12	11.982	264	284936	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	666.000		Recovery	=	0.00%		
7) Phenol-d5	0.000	99	0d	0.0000000	ppb		
Spiked Amount	666.000		Recovery	=	0.00%		
24) Nitrobenzene-d5	0.000	82	0d	0.0000000	ppb		
Spiked Amount	333.000		Recovery	=	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb		
Spiked Amount	333.000		Recovery	=	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	666.000		Recovery	=	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	333.000		Recovery	=	0.00%		
Target Compounds							
2) Pyridine	2.281	79	118775	10427.6257148	ppb		97
3) N-Nitrosodimethylamine	2.246	42	54426m	8981.2142181	ppb		
5) Aniline	3.286	66	56478	8794.1380642	ppb		96
6) bis(2-Chloroethyl)ether	3.304	93	110171m	9777.1417176	ppb		
8) Phenol	3.239	94	124693	9490.7880422	ppb		94
9) Benzaldehyde	3.239	105	14195	4273.2000762	ppb	#	81
10) 2-Chlorophenol	3.351	128	103263	9327.2090725	ppb		92
11) n-Decane	3.351	41	59212	9520.3484601	ppb	#	98
12) 1,3-Dichlorobenzene	3.433	146	123235	9577.8730425	ppb		97
13) 1,4-Dichlorobenzene	3.474	146	122554	9379.7377764	ppb		97
14) Benzyl Alcohol	3.521	79	93440	9501.5575722	ppb		100
15) 1,2-Dichlorobenzene	3.556	146	118565	9587.4167709	ppb		98
16) bis(2-Chloroisopropyl)...	3.591	121	35507	9365.2777860	ppb		93
17) 2,2-oxybis(1-chloropro...	3.591	121	35507	9365.2777860	ppb		93
18) 2-Methylphenol	3.568	108	92658	9319.6816405	ppb		98
19) Hexachloroethane	3.750	117	46968	9781.4336832	ppb		96
20) N-Nitrosodi-n-propylamine	3.662	70	75739	9588.0289491	ppb		99
21) 3&4-Methyl phenol	3.644	107	120792	10585.4787835	ppb		95
22) Acetophenone	3.674	105	143339	9345.7112013	ppb		98
25) Nitrobenzene	3.774	77	117148	8888.6055318	ppb		97
26) Isophorone	3.903	82	202354	8658.7333306	ppb		93
27) 2-Nitrophenol	3.956	139	59704	9497.3415338	ppb		97
28) 2,4-Dimethylphenol	3.956	107	111836	8920.8913499	ppb		97
29) bis(2-Chlorethoxy)methane	4.015	93	119662	8886.4317517	ppb		99
30) 2,4-Dichlorophenol	4.091	162	89058	8724.6073145	ppb		98
31) Benzoic Acid	3.997	105	141243	24929.5138626	ppb		93
32) 1,2,4-Trichlorobenzene	4.150	180	103660	8682.7376760	ppb		97
33) alpha-terpineol	4.191	59	77413	11022.5417585	ppb		94
34) Naphthalene	4.208	128	316201m	8526.2949453	ppb		
35) 4-Chloroaniline	4.220	65	33510	7445.7945400	ppb		96
36) Hexachloro-1,3-butadiene	4.273	225	64044	8554.8021199	ppb		97
37) Hydroquinone	4.396	110	78074	10030.4194844	ppb		95

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_27.D  
 Acq On : 19 Jan 2022 11:10 am  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A12999 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 22 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 15:20:03 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Quinoline	4.408	129	198968	9768.9902527	ppb	98
39) Caprolactam	4.432	113	28123	12518.0079050	ppb	95
40) 4-Chloro-3-methylphenol	4.508	107	88090	8443.4103758	ppb	95
41) 2-Methylnaphthalene	4.637	142	211625	8545.8910959	ppb	98
42) 1-Methylnaphthalene	4.702	142	201641	8624.9119804	ppb	98
43) 1,2,4,5-Tetrachloroben...	4.749	216	104554	9544.5744309	ppb	96
44) Diphenyl Ether	5.013	170	137857	10584.0163114	ppb	96
45) Diphenyl Oxide	5.013	170	137857	10584.0163114	ppb	96
47) Hexachlorocyclopentadiene	4.743	237	64812	8097.0475303	ppb	97
48) 2,4,6-Trichlorophenol	4.814	196	59956	8614.3625349	ppb	99
49) 2,4,5-Trichlorophenol	4.837	196	64169	8866.4477719	ppb	98
51) Biphenyl	4.943	154	258081	9295.7525010	ppb	100
52) 2-Chloronaphthalene	4.966	162	199764	9321.4190629	ppb	99
53) 2-Nitroaniline	5.019	138	61464	9814.9824954	ppb	# 82
54) Acenaphthylene	5.254	152	316563	9432.2107169	ppb	100
55) Dimethyl phthalate	5.137	163	217113	9131.9079938	ppb	94
56) 2,6-Dinitrotoluene	5.184	165	50550	9688.2710089	ppb	93
57) 3-Nitroaniline	5.307	138	31586	5857.3127414	ppb	98
58) Acenaphthene	5.378	153	203913	9326.5602699	ppb	97
59) 2,4-Dinitrophenol	5.378	184	25086	8623.1703413	ppb	# 69
60) Dibenzofuran	5.501	168	284300	9352.5869736	ppb	99
61) 2,4-Dinitrotoluene	5.472	165	65586	9551.8323775	ppb	92
62) 2,3,4,6-Tetrachlorophenol	5.583	232	51429	9591.7912701	ppb	99
63) 4-Nitrophenol	5.401	139	41668m	9750.4649466	ppb	
64) Fluorene	5.754	166	232143	9491.6841300	ppb	99
65) 4-Chlorophenyl-phenyle...	5.742	204	117478	9072.9537875	ppb	96
66) Diethyl phthalate	5.642	149	221862	9211.4586710	ppb	97
67) 4-Nitroaniline	5.754	138	44390	9180.3458615	ppb	97
68) Azobenzene	5.859	77	238554	9960.9449648	ppb	98
69) Atrazine	6.218	200	68197	9645.6464315	ppb	95
71) 4,6-Dinitro-2-methylph...	5.771	198	34841	9016.0888847	ppb	96
72) N-Nitrosodiphenylamine	5.824	169	191174	9252.7871642	ppb	99
74) 4-Bromophenyl-phenylether	6.112	248	72606	9243.8126246	ppb	95
75) Hexachlorobenzene	6.171	284	79947	9013.6535182	ppb	94
76) n-octadecane	6.353	55	34034	9587.5903923	ppb	97
77) Pentachlorophenol	6.312	266	45771	9971.0267124	ppb	94
78) Phenanthrene	6.488	178	355988	9679.7459452	ppb	100
79) Anthracene	6.523	178	361532	9720.4260218	ppb	100
80) Carbazole	6.641	167	300328	9308.2746087	ppb	100
81) Di-n-butyl phthalate	6.905	149	385133	9709.5527295	ppb	100
82) 2-nitrodiphenylamine	7.040	167	76182	9607.6860576	ppb	98
83) Fluoranthene	7.493	202	391293	9471.9270119	ppb	99
85) Benzidine	7.610	184	166544	12068.9822036	ppb	98
86) Pyrene	7.722	202	408264	9714.1434699	ppb	98
88) Benzylbutyl phthalate	8.468	149	160958	9907.1990299	ppb	98
89) 3,3-Dichlorobenzidine	9.232	252	231746	16324.1833704	ppb	96
90) Benzo(a)anthracene	9.267	228	387425	9638.0733618	ppb	98
91) Chrysene	9.326	228	377078	9678.8493292	ppb	98
92) bis(2-Ethylhexyl)phtha...	9.361	149	234796	9830.2631872	ppb	99
93) Di-n-octyl phthalate	10.578	149	374863	9598.5355415	ppb	99
95) Benzo(b)fluoranthene	11.206	252	383838	9281.5807484	ppb	97
96) Benzo(k)fluoranthene	11.265	252	387176	9321.2231313	ppb	98
97) Benzo(a)pyrene	11.864	252	371430	9496.0122511	ppb	97
98) Indeno(1,2,3-cd)pyrene	13.903	276	360426	9959.3279861	ppb	93
99) Dibenz(a,h)anthracene	13.944	278	373198	9421.1458152	ppb	100

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_27.D  
 Acq On : 19 Jan 2022 11:10 am  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A12999 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 22 Sample Multiplier: 1  
 InstName : BNAMS11

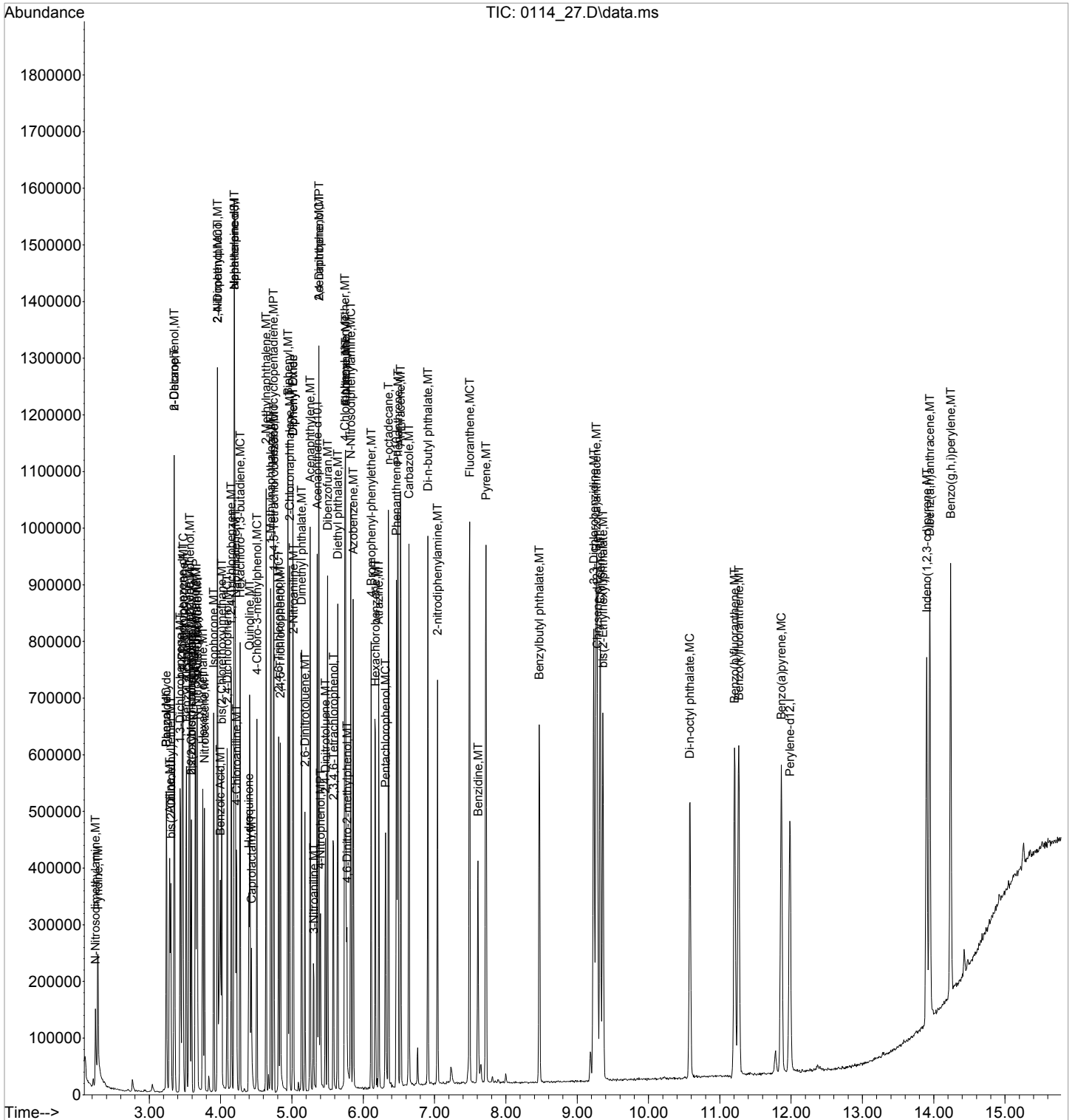
Quant Time: Jan 19 15:20:03 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
100) Benzo(g,h,i)perylene	14.238	276	380101	9454.4408755	ppb		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\011422\  
Data File : 0114\_27.D  
Acq On : 19 Jan 2022 11:10 am  
Operator : 917  
Sample : SSCV SVMS 10K PPB 22A12999 EXP 06/20/22  
Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
ALS Vial : 22 Sample Multiplier: 1  
InstName : BNAMS11

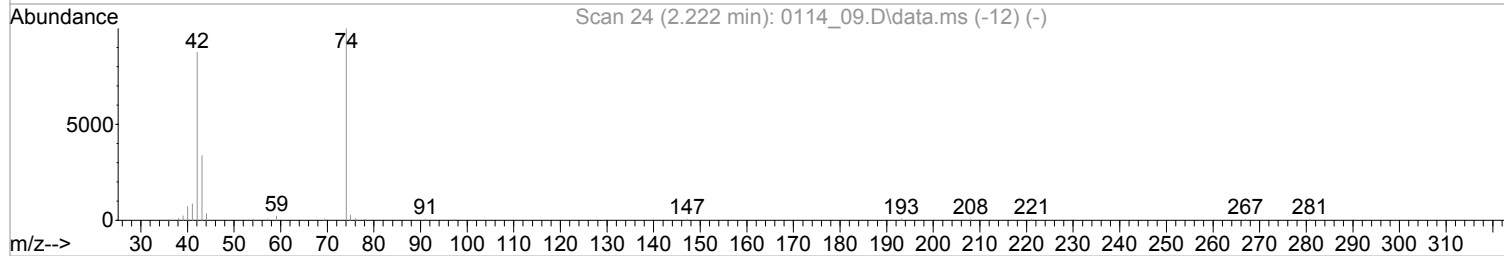
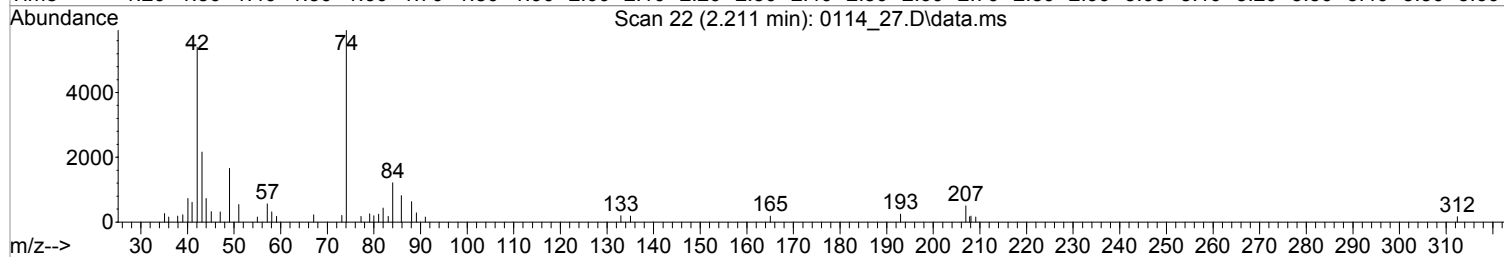
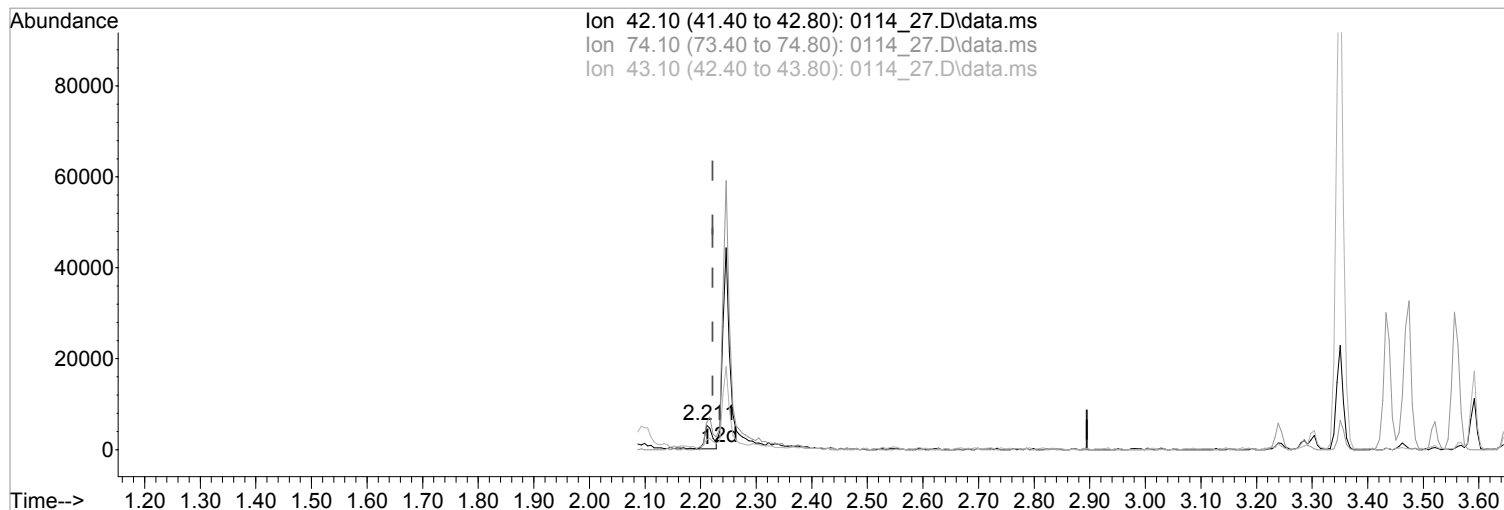
Quant Time: Jan 19 15:20:03 2022  
Quant Method : C:\msdchem\1\methods\S811A14V.M  
Quant Title : 8270 BNA  
QLast Update : Tue Jan 18 17:20:43 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_27.D  
 Acq On : 19 Jan 2022 11:10 am  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A12999 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 22 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 14:45:16 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration



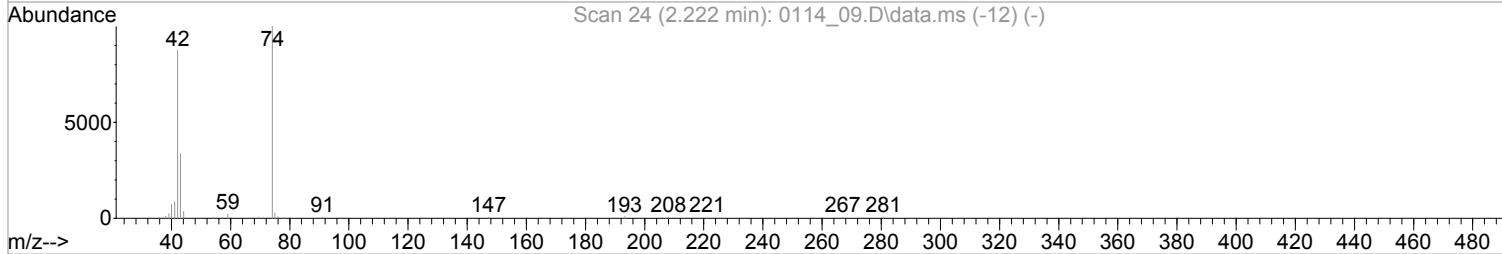
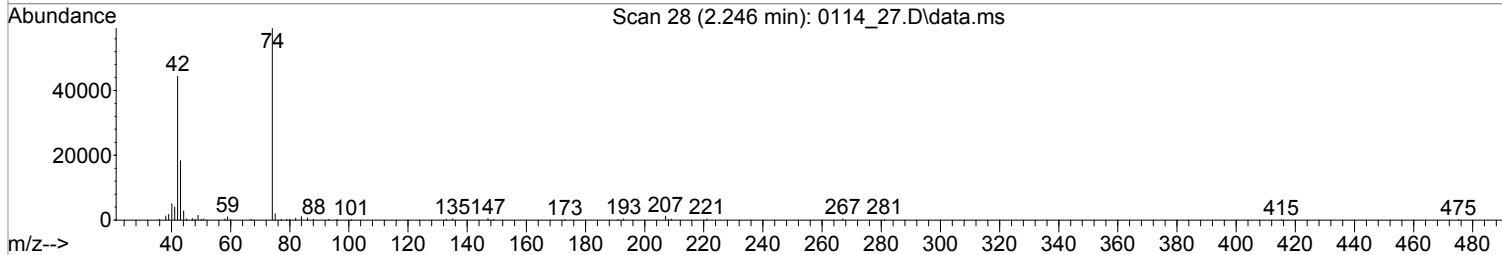
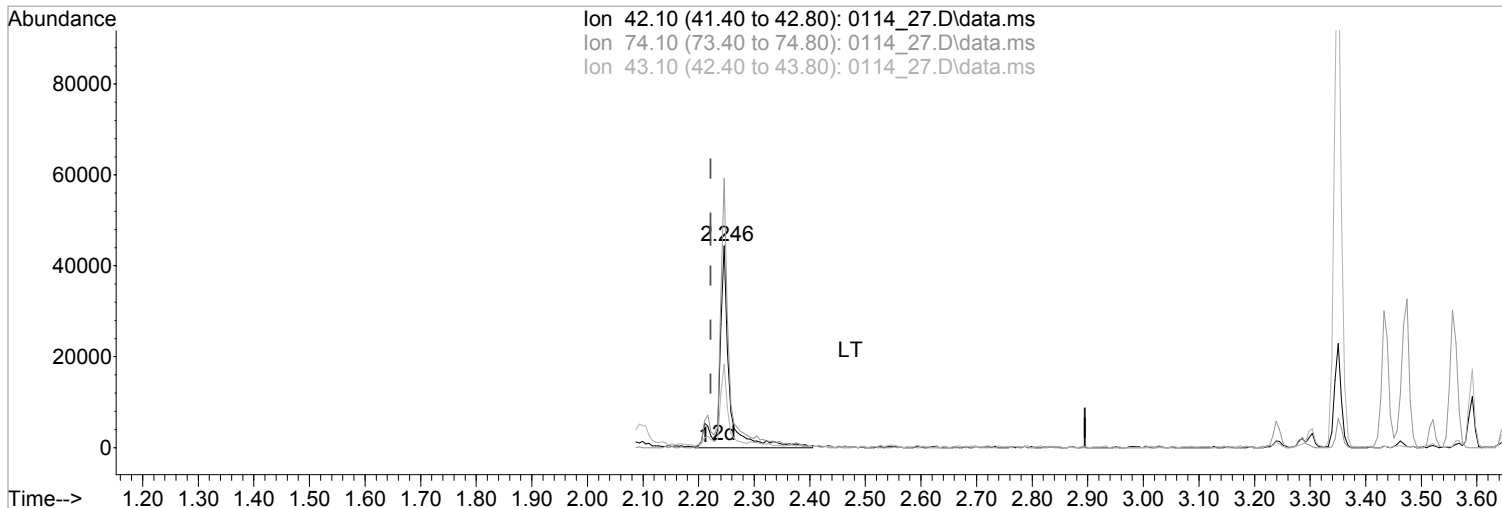
TIC: 0114\_27.D\data.ms

(3) N-Nitrosodimethylamine (MT)		
2.211min (-0.011) 873.4348814 ppb		
Qvalue = 82		
response 5293		
Ion	Exp%	Act%
42.10	100	100
74.10	121.40	138.48
43.10	34.00	49.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_27.D  
 Acq On : 19 Jan 2022 11:10 am  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A12999 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 22 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 14:45:16 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration



TIC: 0114\_27.D\data.ms

(3) N-Nitrosodimethylamine (MT)  
 2.246min (+0.024) 8981.2142181 ppb m

response 54426

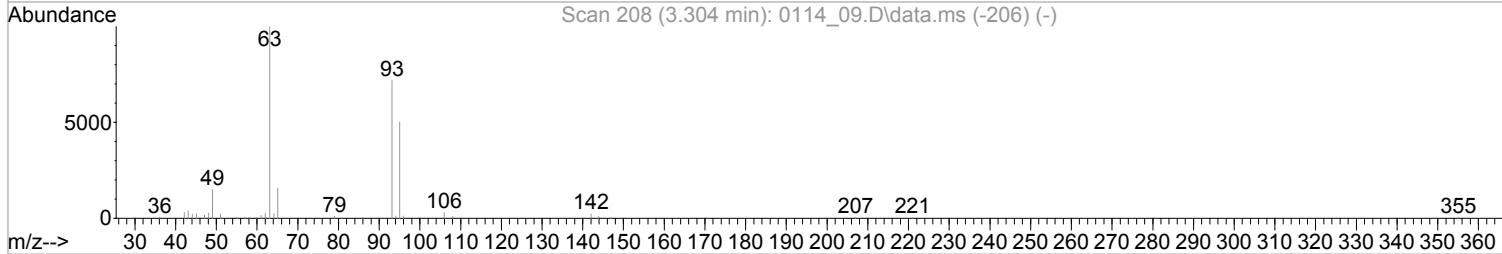
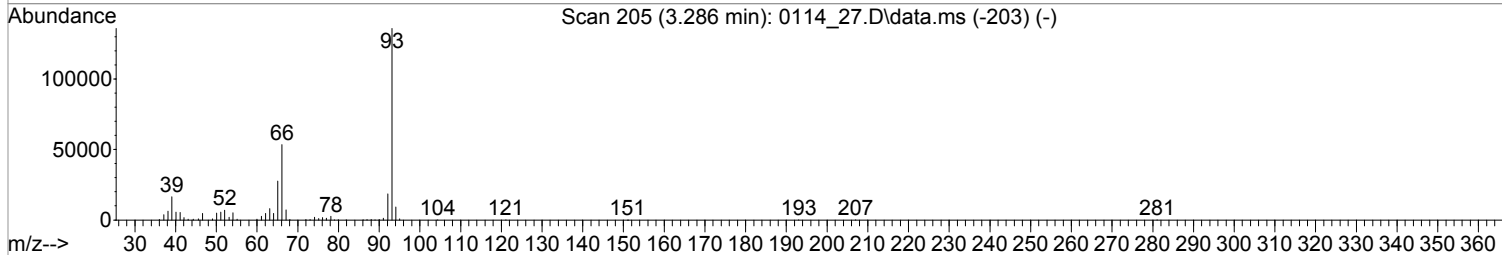
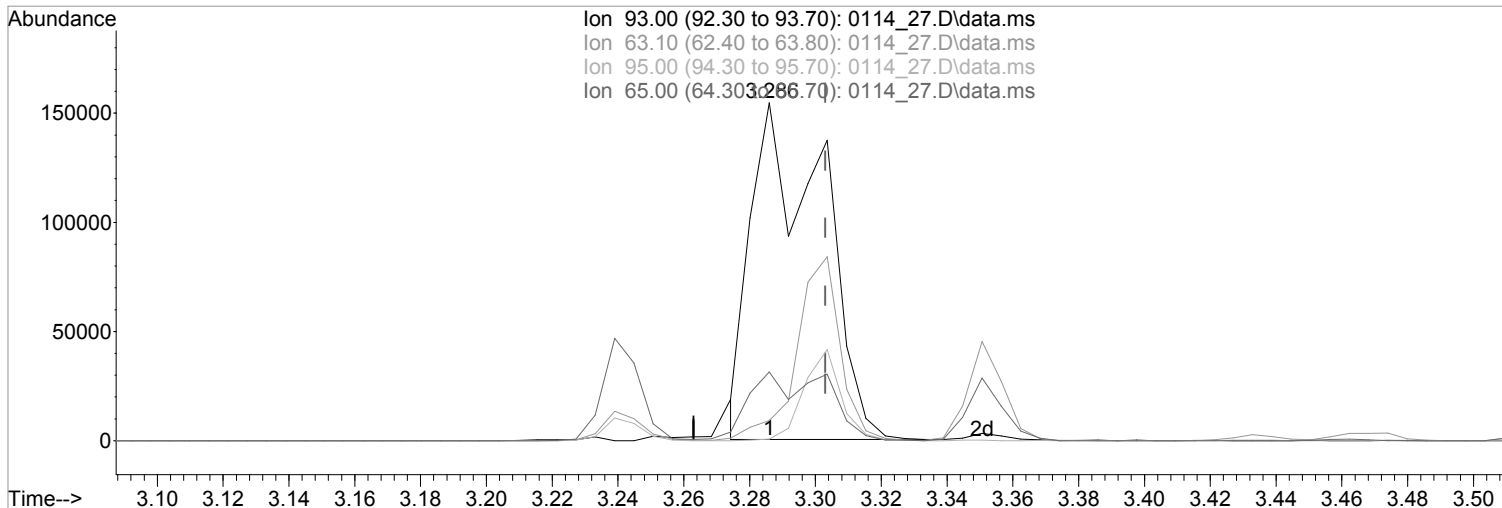
Ion	Exp%	Act%
42.10	100	100
74.10	121.40	13.47#
43.10	34.00	4.81#
0.00	0.00	0.00



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_27.D  
 Acq On : 19 Jan 2022 11:10 am  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A12999 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 22 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 14:45:16 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration



TIC: 0114\_27.D\data.ms

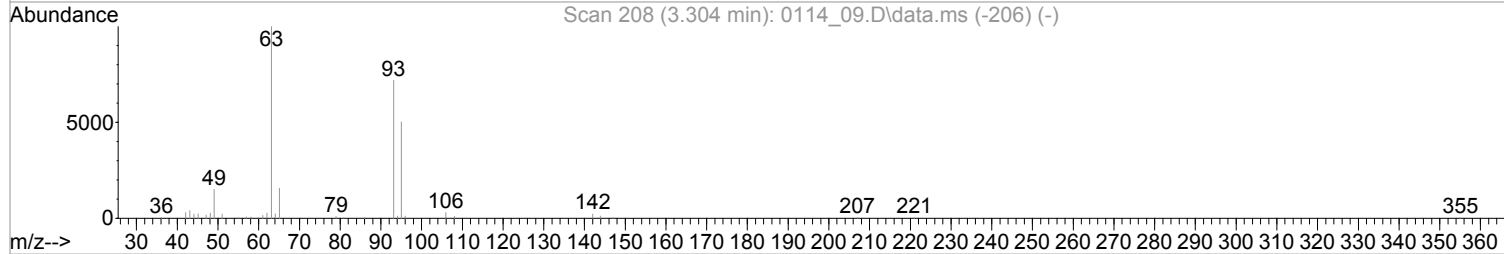
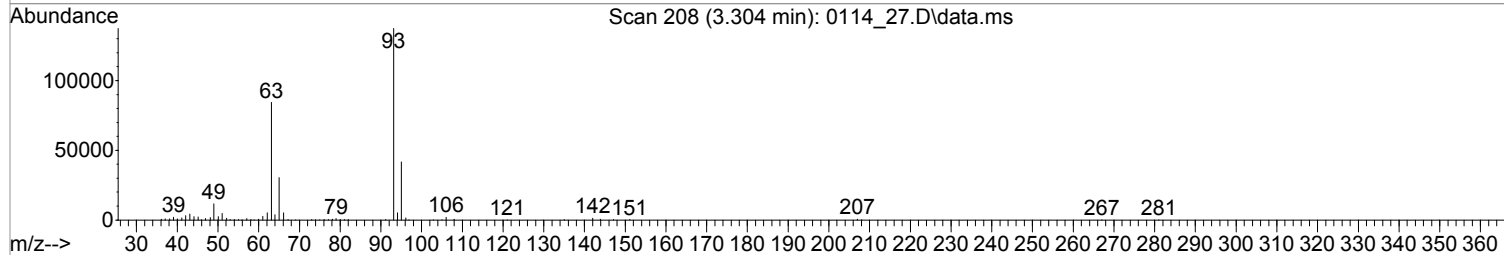
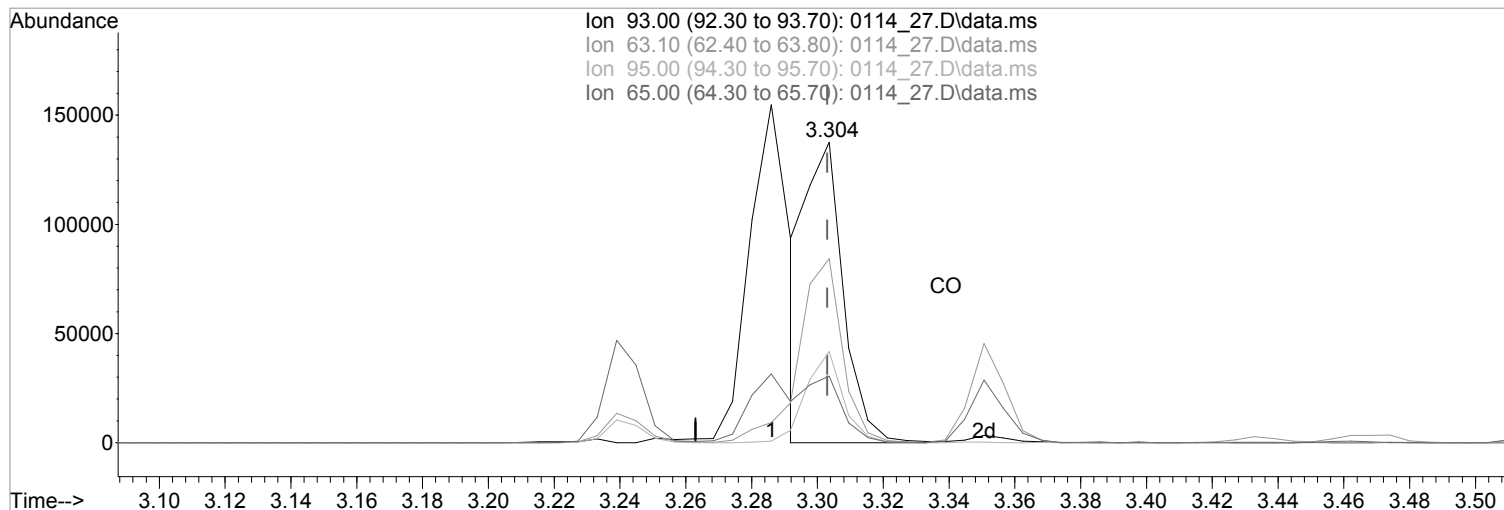
(6) bis(2-Chloroethyl)ether (MT)  
 3.286min (-0.017) 20569.5279301 ppb  
 Qvalue = 44  
 response 231782

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	5.83#
95.00	30.20	0.48#
65.00	21.40	20.45

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_27.D  
 Acq On : 19 Jan 2022 11:10 am  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A12999 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 22 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 14:45:16 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration



TIC: 0114\_27.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.304min (+0.001) 9777.1417176 ppb m

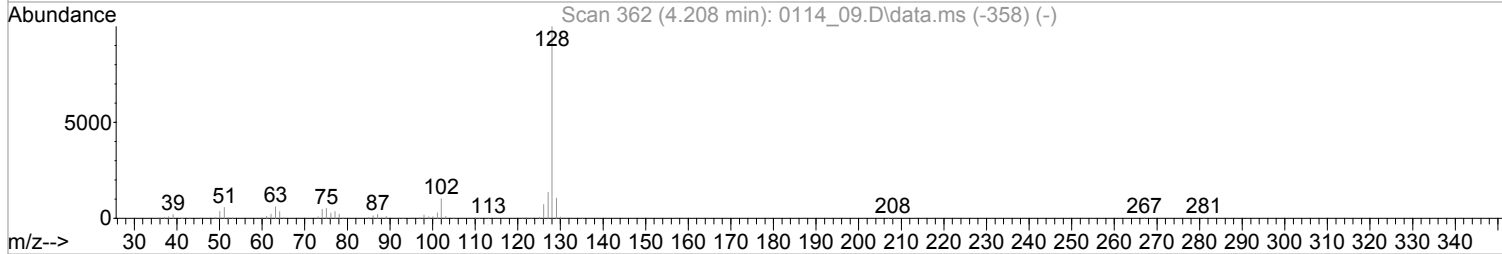
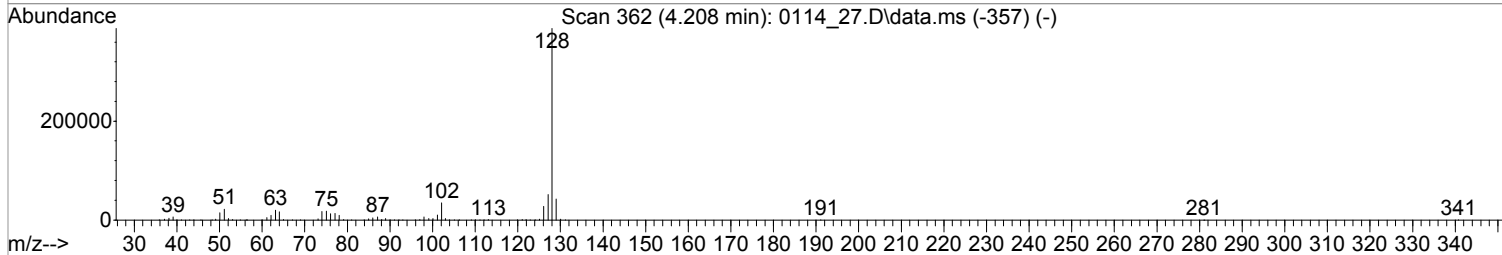
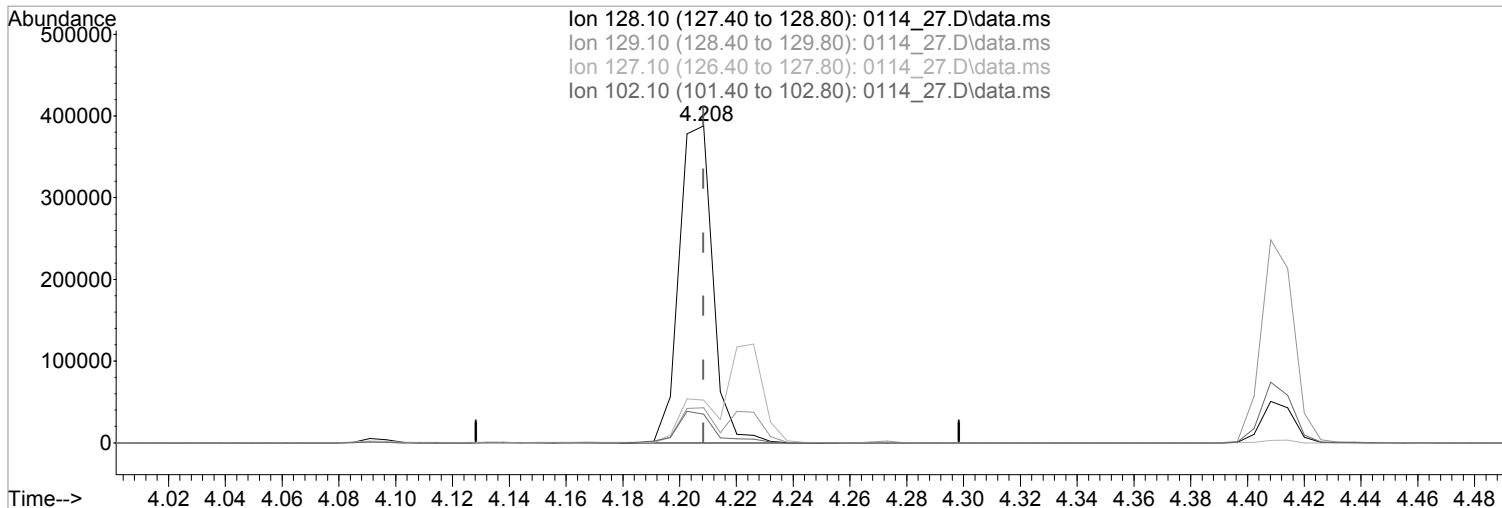
response 110171

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	61.30
95.00	30.20	30.32
65.00	21.40	22.11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_27.D  
 Acq On : 19 Jan 2022 11:10 am  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A12999 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 22 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 14:45:16 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration



TIC: 0114\_27.D\data.ms

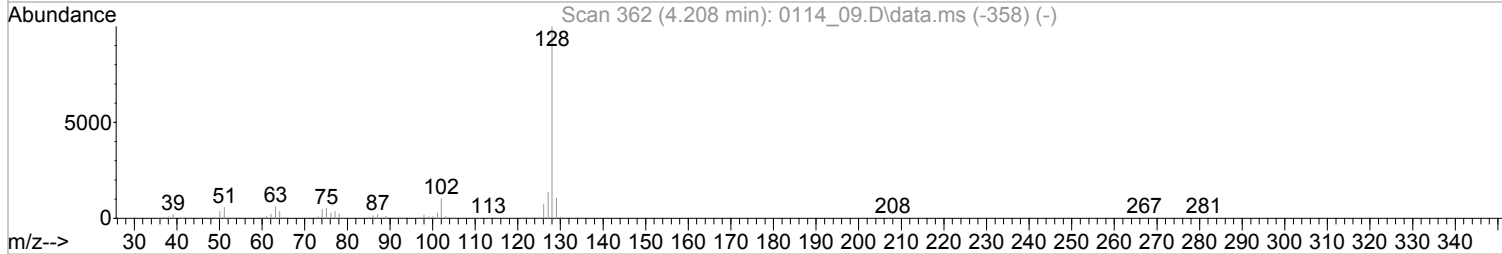
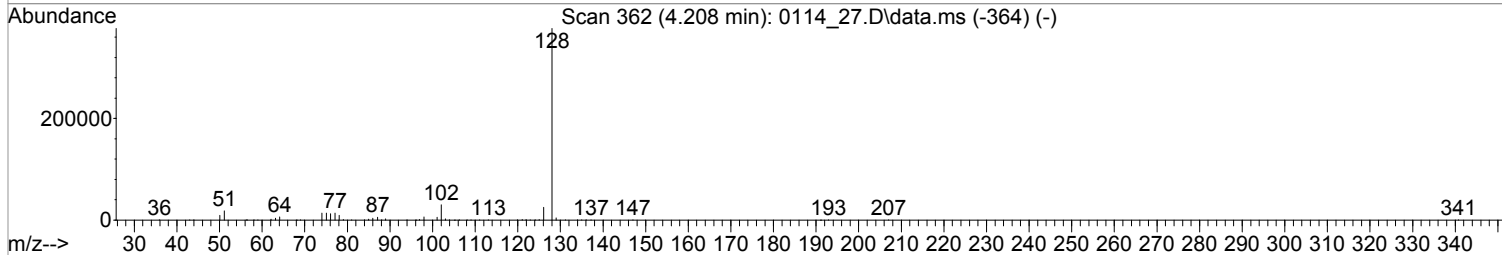
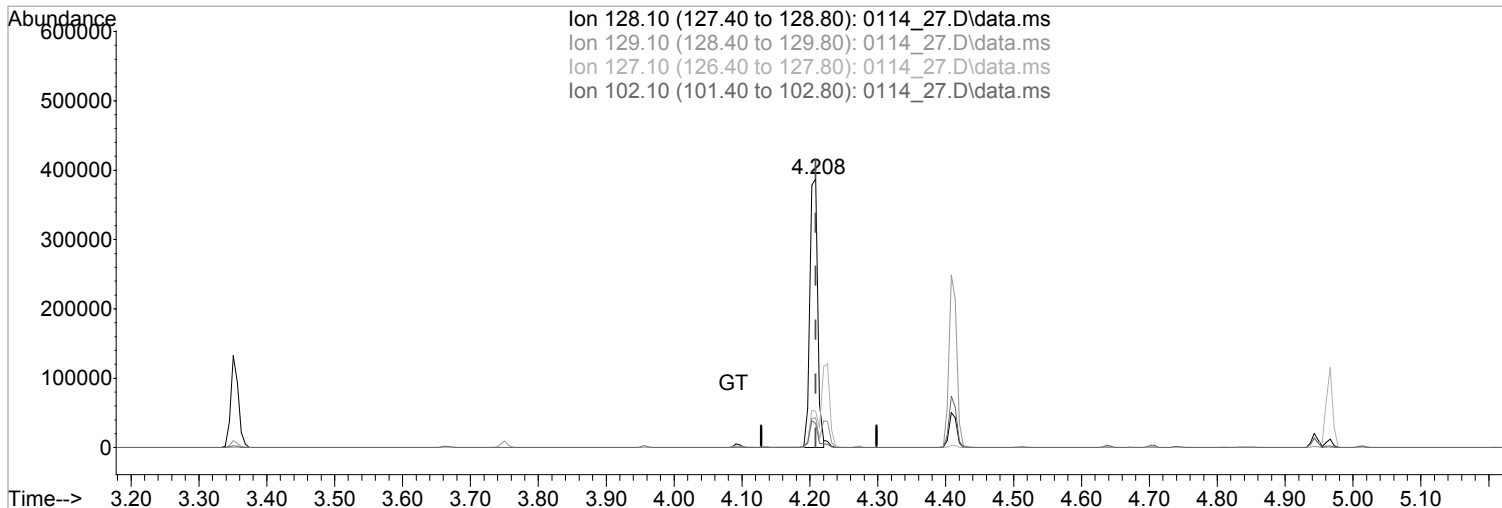
(34) Naphthalene (MT)  
 4.208min (+0.000) 8633.1294606 ppb  
 Qvalue = 99  
 response 320163

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	11.05
127.10	13.50	13.46
102.10	10.10	9.01

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_27.D  
 Acq On : 19 Jan 2022 11:10 am  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A12999 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 22 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 14:45:16 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration



TIC: 0114\_27.D\data.ms

(34) Naphthalene (MT)  
 4.208min (+0.000) 8526.2949453 ppb m

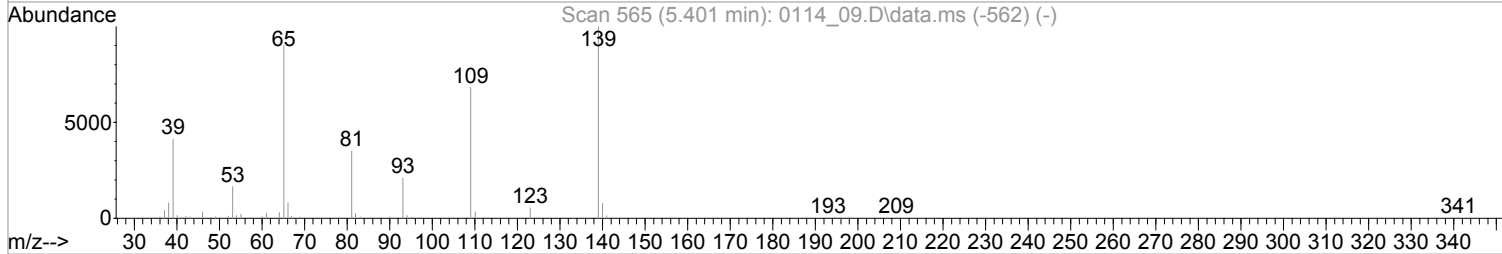
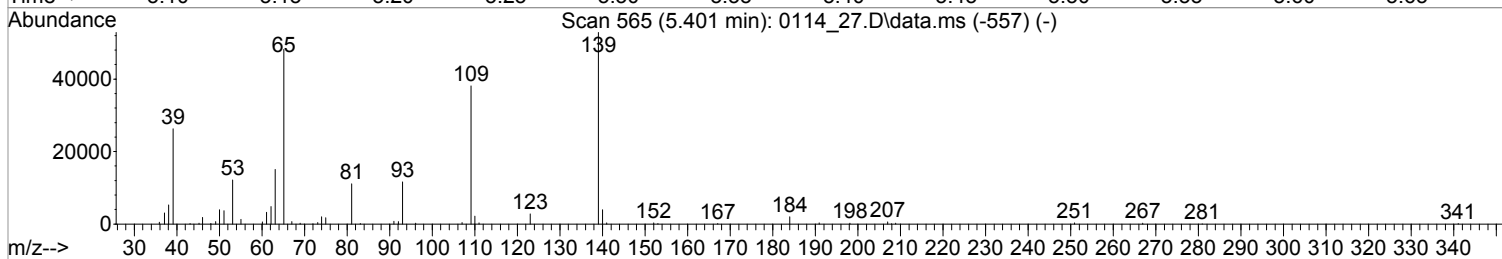
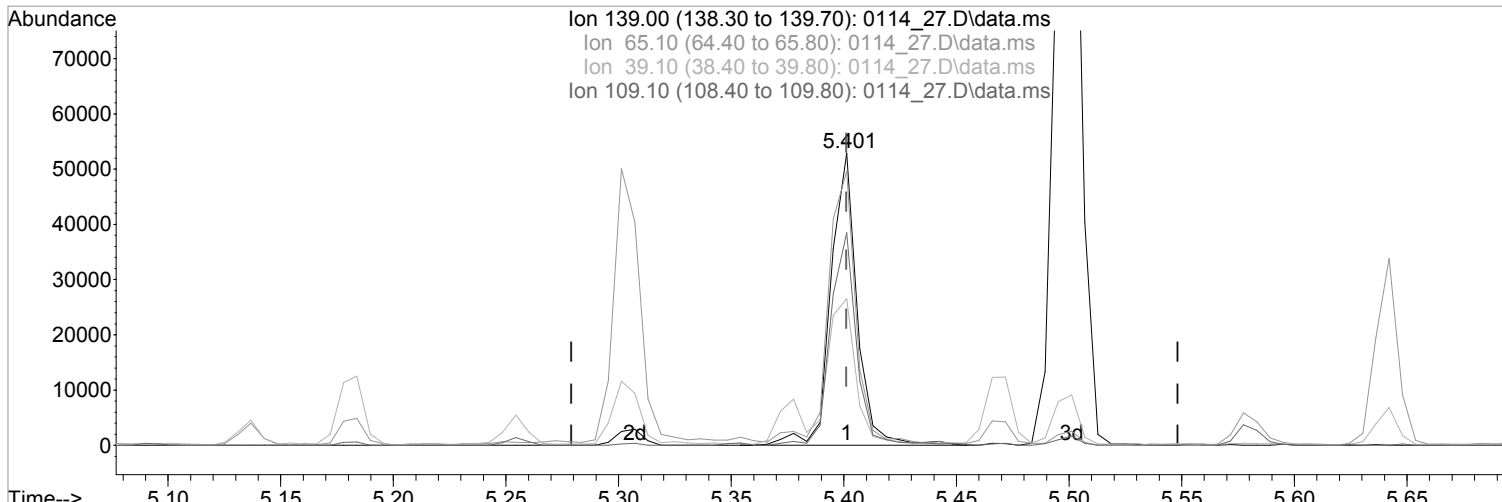
response 316201

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	11.05
127.10	13.50	13.52
102.10	10.10	9.01

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_27.D  
 Acq On : 19 Jan 2022 11:10 am  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A12999 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 22 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 14:45:16 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration



TIC: 0114\_27.D\data.ms

(63) 4-Nitrophenol (MPT)

5.401min (+0.000) 10089.3022617 ppb

Qvalue = 96

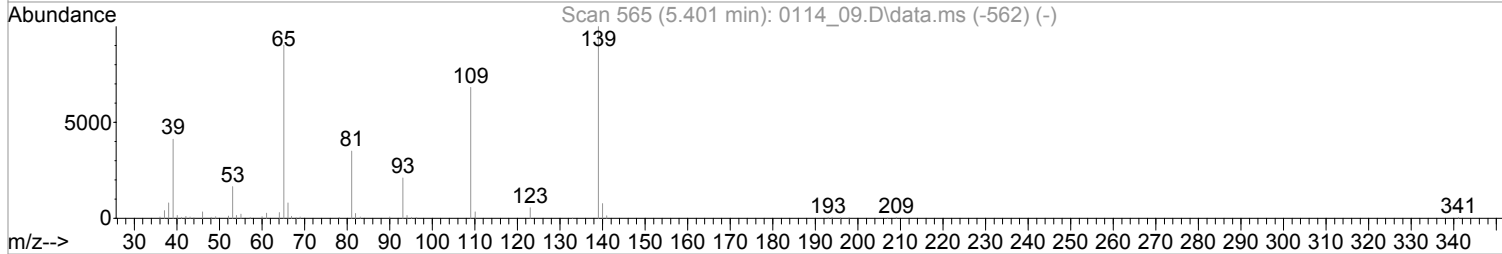
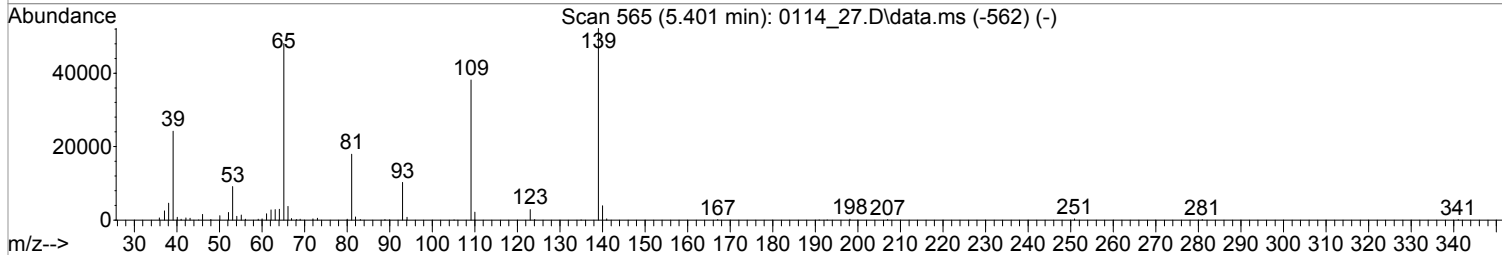
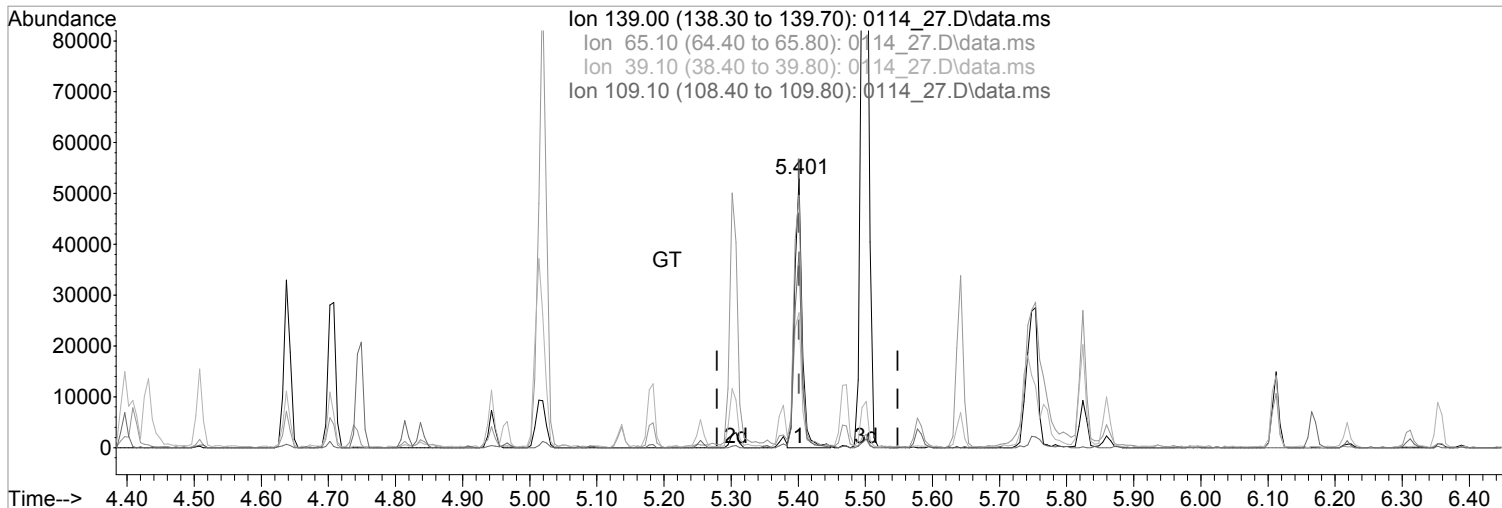
response 43116

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	93.23
39.10	47.40	49.64
109.10	67.50	72.39

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\011422\  
 Data File : 0114\_27.D  
 Acq On : 19 Jan 2022 11:10 am  
 Operator : 917  
 Sample : SSCV SVMS 10K PPB 22A12999 EXP 06/20/22  
 Misc : SSCV SVMS CAL ISTD 22A07429 EXP 07/07/22  
 ALS Vial : 22 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: Jan 19 14:45:16 2022  
 Quant Method : C:\msdchem\1\methods\S811A14V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue Jan 18 17:20:43 2022  
 Response via : Initial Calibration



TIC: 0114\_27.D\data.ms

(63) 4-Nitrophenol (MPT)  
 5.401min (+0.000) 9750.4649466 ppb m  
 response 41668  

Ion	Exp%	Act%
139.00	100	100
65.10	90.70	93.80
39.10	47.40	50.18
109.10	67.50	72.77

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	01/14/22 13:34
<b>Instrument ID:</b>	BNAMS11	<b>Calibration (end) date/time:</b>	01/14/22 18:18
<b>Lab File ID:</b>	0504_03	<b>Analysis date/time:</b>	05/04/22 04:53
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.618011	0.65934910		6.69	20	10	10.67	107	
2-METHYLNAPHTHALENE	0.654609	0.68343350	0.40	4.40	20	10	10.44	104	
3&4-METHYL PHENOL	1.304145	1.311446	0.60	0.56	20	10	10.06	101	
ACENAPHTHENE	1.175522	1.159340	0.90	1.38	20	10	9.862	98.60	
ACENAPHTHYLENE	1.804489	1.748158	0.90	3.12	20	10	9.688	96.90	
ANTHRACENE	1.045229	1.077279	0.70	3.07	20	10	10.31	103	
BENZO(A)ANTHRACENE	1.176199	1.165643	0.80	0.8970	20	10	9.910	99.10	
BENZO(A)PYRENE	1.098192	1.048305	0.70	4.54	20	10	9.546	95.50	
BENZO(B)FLUORANTHENE	1.161097	1.201880	0.70	3.51	20	10	10.35	104	
BENZO(G,H,I)PERYLENE	1.128771	1.214938	0.50	7.63	20	10	10.76	108	
BENZO(K)FLUORANTHENE	1.166214	1.165814	0.70	0.0343	20	10	9.997	100	
BIS(2-ETHYLHEXYL)PHTHALATE	0.698890	0.71363920	0.01	2.11	20	10	10.21	102	
CARBAZOLE	0.906727	0.92445190	0.01	1.95	20	10	10.20	102	
CHRYSENE	1.139964	1.076712	0.70	5.55	20	10	9.445	94.40	
DI-N-BUTYL PHTHALATE	1.114709	1.1891	0.01	6.67	20	10	10.67	107	
DI-N-OCTYL PHTHALATE	1.142750	1.157771	0.01	1.31	20	10	10.13	101	
DIBENZ(A,H)ANTHRACENE	1.112188	1.194982	0.40	7.44	20	10	10.74	107	
DIBENZOFURAN	1.634378	1.646420	0.80	0.7370	20	10	10.07	101	
FLUORANTHENE	1.160950	1.211415	0.60	4.35	20	10	10.43	104	
FLUORENE	1.314982	1.322019	0.90	0.5350	20	10	10.05	101	
INDENO(1,2,3-CD)PYRENE	1.016082	1.083834	0.50	6.67	20	10	10.67	107	
NAPHTHALENE	0.980336	0.99278830	0.70	1.27	20	10	10.13	101	
PENTACHLOROPHENOL	0.129003	0.12896260	0.05	0.0313	20	10	9.997	100	
PHENANTHRENE	1.033526	1.007445	0.70	2.52	20	10	9.748	97.50	
PHENOL	1.501544	1.402402	0.80	6.60	20	10	9.340	93.40	
PYRENE	1.229759	1.112775	0.60	9.51	20	10	9.049	90.50	
2,4,6-TRIBROMOPHENOL	0.108787	0.14309520		31.50	20	10	13.15	132	70 - 130
2-FLUOROBIPHENYL	1.335290	1.448548		8.48	20	10	10.85	109	70 - 130
2-FLUOROPHENOL	1.169591	1.105599		5.47	20	10	9.453	94.50	70 - 130
NITROBENZENE-D5	0.365916	0.39366710		7.58	20	10	10.76	108	70 - 130
P-TERPHENYL-D14	0.976668	1.028173		5.27	20	10	10.53	105	70 - 130
PHENOL-D5	1.421741	1.476030		3.82	20	10	10.38	104	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_03.D  
 Acq On : 4 May 2022 4:53 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 10:03:11 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.200	152	39474	8000.0000000	ppb	#	0.00
23) Naphthalene-d8	3.923	136	141104	8000.0000000	ppb		0.00
46) Acenaphthene-d10	5.063	164	84515	8000.0000000	ppb		0.00
70) Phenanthrene-d10	6.168	188	167782	8000.0000000	ppb		0.00
84) Chrysene-d12	8.776	240	187409	8000.0000000	ppb		0.00
94) Perylene-d12	11.297	264	197834	8000.0000000	ppb		0.00
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.537	112	54553	9452.8655390	ppb		0.00
Spiked Amount	20000.000		Recovery	=	47.26%		
7) Phenol-d5	2.983	99	72831	10381.8478786	ppb		0.00
Spiked Amount	20000.000		Recovery	=	51.91%		
24) Nitrobenzene-d5	3.506	82	69435m	10758.4066634	ppb		0.00
Spiked Amount	10000.000		Recovery	=	107.58%		
50) 2-Fluorobiphenyl	4.593	172	153030	10848.1841771	ppb		0.00
Spiked Amount	10000.000		Recovery	=	108.48%		
73) 2,4,6-Tribromophenol	5.639	330	30011	13153.7113129	ppb		0.00
Spiked Amount	20000.000		Recovery	=	65.77%		
87) p-Terphenyl-d14	7.495	244	240861	10527.3539843	ppb		0.00
Spiked Amount	10000.000		Recovery	=	105.27%		
<b>Target Compounds</b>							
2) Pyridine	1.949	79	65221	10153.7986620	ppb	#	86
3) N-Nitrosodimethylamine	1.937	42	29515	8636.7853145	ppb		91
5) Aniline	3.024	66	35600	9829.7996791	ppb	#	33
6) bis(2-Chloroethyl)ether	3.042	93	53281	8384.8960910	ppb	#	79
8) Phenol	2.989	94	69198m	9339.7325916	ppb		
10) 2-Chlorophenol	3.089	128	66469	10646.4990017	ppb		92
11) n-Decane	3.089	41	34934	9960.2933397	ppb	#	93
12) 1,3-Dichlorobenzene	3.171	146	71014	9787.2274547	ppb		94
13) 1,4-Dichlorobenzene	3.206	146	75243	10211.9812448	ppb		93
14) Benzyl Alcohol	3.265	79	52361	9441.7088815	ppb		99
15) 1,2-Dichlorobenzene	3.294	146	67744	9713.9672851	ppb		97
16) bis(2-Chloroisopropyl)...	3.330	121	21162	9897.9234919	ppb	#	66
17) 2,2-oxybis(1-chloropro...	3.330	121	21162	9897.9234919	ppb	#	66
18) 2-Methylphenol	3.318	108	59095m	10540.2179500	ppb		
19) Hexachloroethane	3.482	117	29525	10903.6286652	ppb		87
20) N-Nitrosodi-n-propylamine	3.406	70	43599	9787.3923229	ppb	#	81
21) 3&4-Methyl phenol	3.400	107	64710	10055.9807364	ppb		97
25) Nitrobenzene	3.512	77	69050	11236.7528883	ppb		90
26) Isophorone	3.647	82	119528	10969.5955771	ppb		100
27) 2-Nitrophenol	3.700	139	34268	11691.3800524	ppb	#	76
28) 2,4-Dimethylphenol	3.706	107	66160	11318.8033313	ppb		97
29) bis(2-Chloroethoxy)methane	3.759	93	68558	10919.6240179	ppb		94
30) 2,4-Dichlorophenol	3.835	162	55343	11628.2414608	ppb		97
32) 1,2,4-Trichlorobenzene	3.888	180	61481	11044.9763770	ppb		96
34) Naphthalene	3.935	128	175108m	10127.0159356	ppb		
35) 4-Chloroaniline	3.958	65	22619	10779.2467522	ppb	#	67
36) Hexachloro-1,3-butadiene	4.005	225	46491	13319.2202353	ppb		94
40) 4-Chloro-3-methylphenol	4.252	107	56509	11616.8211373	ppb		85
41) 2-Methylnaphthalene	4.364	142	120544	10440.3335624	ppb	#	95
42) 1-Methylnaphthalene	4.428	142	116296	10668.8841515	ppb	#	94
47) Hexachlorocyclopentadiene	4.464	237	36977	8133.0163053	ppb		98
48) 2,4,6-Trichlorophenol	4.546	196	44701	11307.2354961	ppb		88



Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_03.D  
 Acq On : 4 May 2022 4:53 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

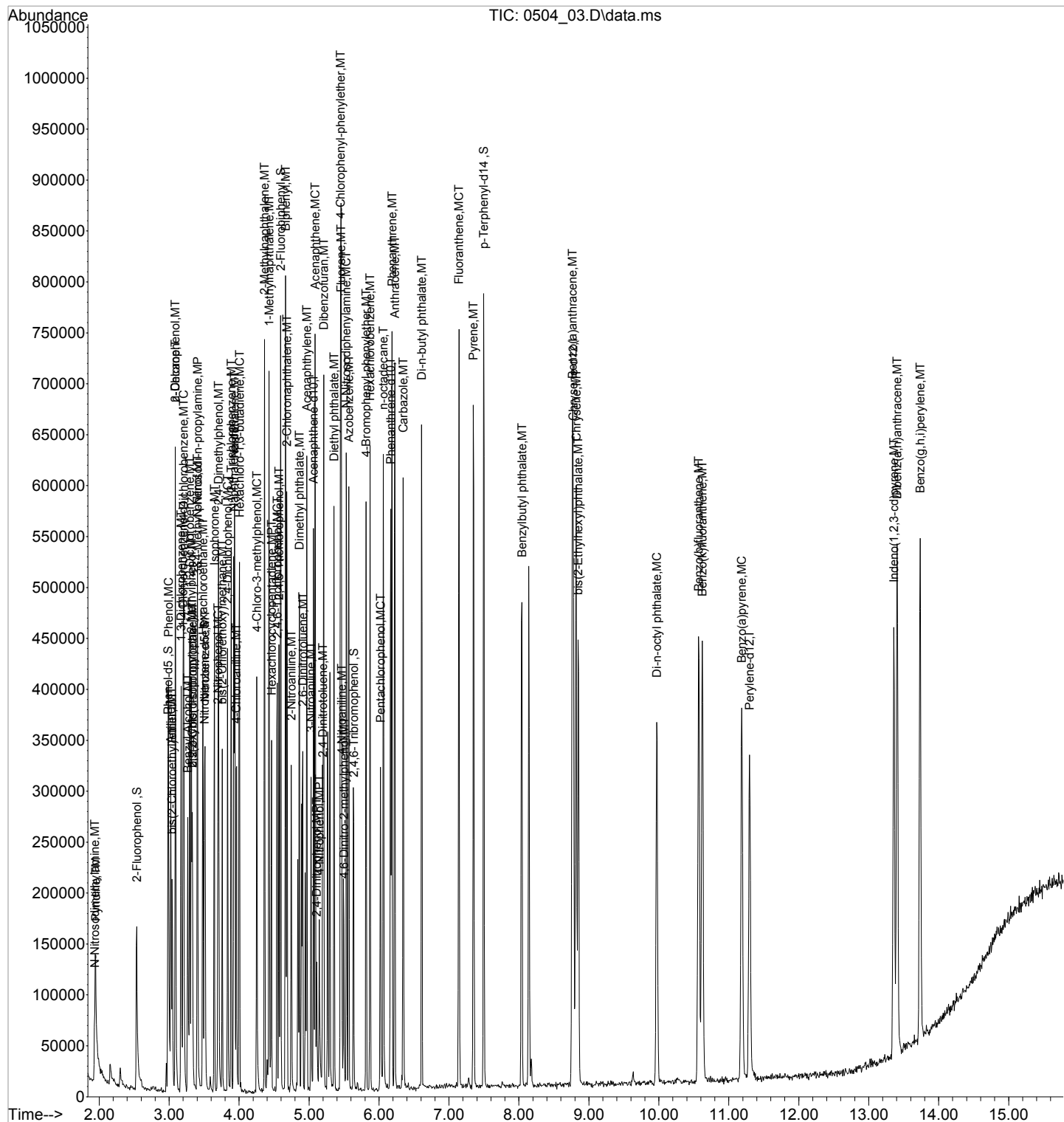
Quant Time: May 04 10:03:11 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
49) 2,4,5-Trichlorophenol	4.569	196	46993	11431.5801114	ppb		97
51) Biphenyl	4.663	154	154824	9817.8299882	ppb		97
52) 2-Chloronaphthalene	4.681	162	120067	9863.6390493	ppb		95
53) 2-Nitroaniline	4.746	138	39323	11055.1351669	ppb	#	94
54) Acenaphthylene	4.969	152	184682	9687.8323552	ppb		98
55) Dimethyl phthalate	4.863	163	141727	10494.8684114	ppb		99
56) 2,6-Dinitrotoluene	4.910	165	34199	11539.5063494	ppb		92
57) 3-Nitroaniline	5.028	138	32232	10523.0041294	ppb		91
58) Acenaphthene	5.086	153	122477	9862.3368398	ppb		96
59) 2,4-Dinitrophenol	5.110	184	19079	11546.2208362	ppb	#	1
60) Dibenzofuran	5.210	168	173934	10073.6784684	ppb		98
61) 2,4-Dinitrotoluene	5.198	165	45748	11729.9555043	ppb		91
63) 4-Nitrophenol	5.145	139	22526	9280.1597871	ppb		85
64) Fluorene	5.457	166	139663	10053.5109548	ppb		99
65) 4-Chlorophenyl-phenyle...	5.451	204	78360	10654.5542804	ppb		95
66) Diethyl phthalate	5.357	149	134225	9811.3236291	ppb		98
67) 4-Nitroaniline	5.468	138	32401	11797.2563534	ppb	#	77
68) Azobenzene	5.568	77	153089	11253.9900827	ppb		94
71) 4,6-Dinitro-2-methylph...	5.498	198	26110	11463.8172344	ppb		89
72) N-Nitrosodiphenylamine	5.533	169	123913	10175.4922000	ppb		99
74) 4-Bromophenyl-phenylether	5.815	248	53278	11508.5694944	ppb		87
75) Hexachlorobenzene	5.874	284	58035	11101.5465910	ppb		98
76) n-octadecane	6.062	55	20692	9889.9422468	ppb		93
77) Pentachlorophenol	6.021	266	27047	9996.8549003	ppb		94
78) Phenanthrene	6.185	178	211289	9747.6583006	ppb		98
79) Anthracene	6.226	178	225935	10306.6345666	ppb		99
80) Carbazole	6.344	167	193883	10195.4853049	ppb		97
81) Di-n-butyl phthalate	6.608	149	249387	10667.3639261	ppb		98
83) Fluoranthene	7.143	202	254067	10434.6847405	ppb		97
86) Pyrene	7.349	202	260680	9048.7199777	ppb		97
88) Benzylbutyl phthalate	8.042	149	114535	10284.7218391	ppb		97
90) Benzo(a)anthracene	8.765	228	273065	9910.2505286	ppb		97
91) Chrysene	8.817	228	252232	9445.1471231	ppb		97
92) bis(2-Ethylhexyl)phtha...	8.847	149	167178	10211.0307984	ppb		94
93) Di-n-octyl phthalate	9.969	149	271221	10131.4527432	ppb		97
95) Benzo(b)fluoranthene	10.568	252	297216	10351.2442370	ppb		97
96) Benzo(k)fluoranthene	10.621	252	288297	9996.5695040	ppb		94
97) Benzo(a)pyrene	11.185	252	259238	9545.7342894	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.359	276	268024	10666.7962236	ppb		97
99) Dibenz(a,h)anthracene	13.406	278	295510	10744.4203581	ppb		93
100) Benzo(g,h,i)perylene	13.735	276	300445	10763.3685233	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050422\  
Data File : 0504\_03.D  
Acq On : 4 May 2022 4:53 am  
Operator : 3545  
Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
ALS Vial : 3 Sample Multiplier: 1  
InstName : BNAMS11

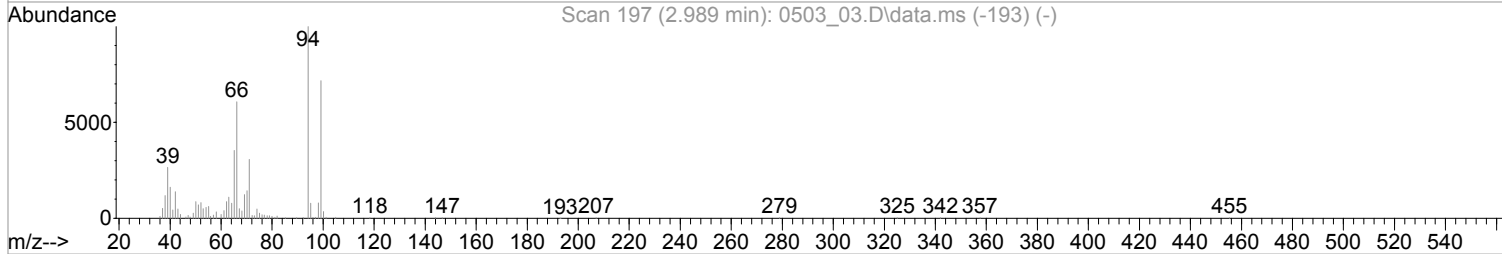
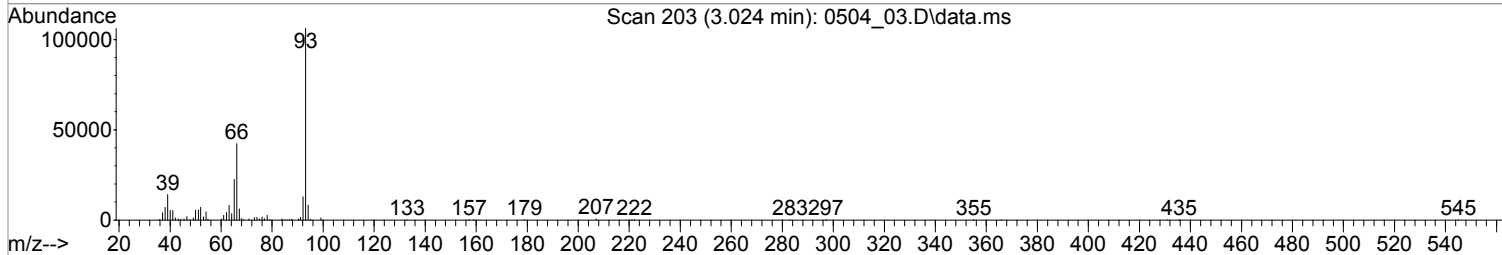
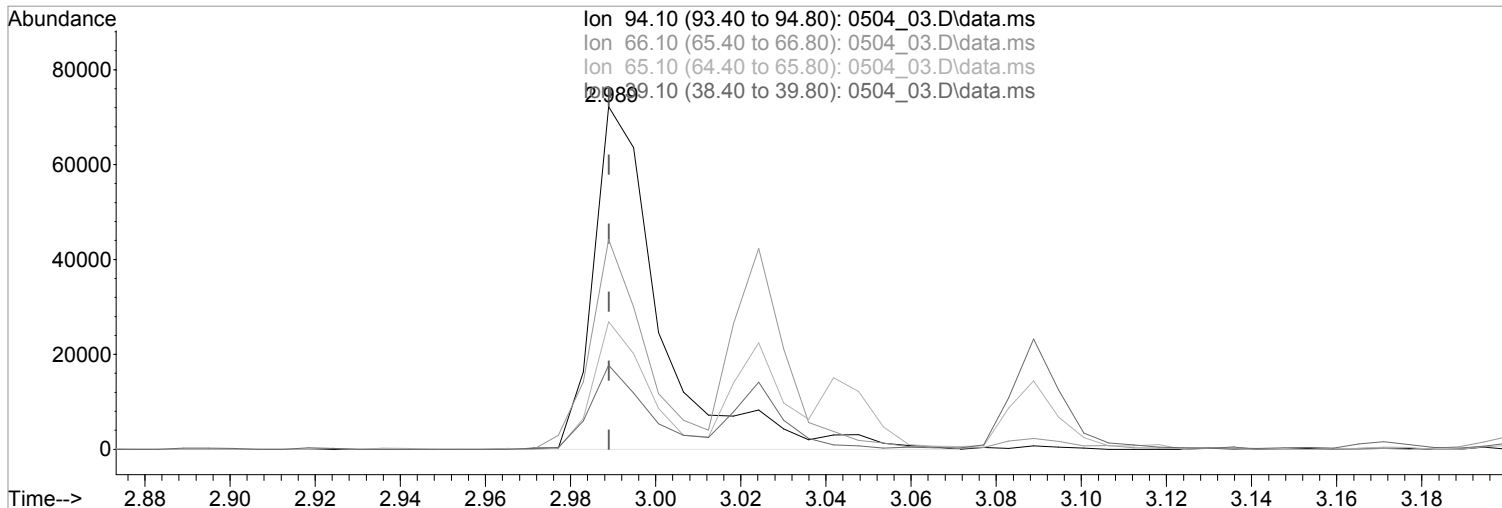
Quant Time: May 04 10:03:11 2022  
Quant Method : C:\msdchem\1\methods\S811E03V.M  
Quant Title : 8270 BNA  
QLast Update : Tue May 03 05:28:33 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_03.D  
 Acq On : 4 May 2022 4:53 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 05:44:49 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_03.D\data.ms

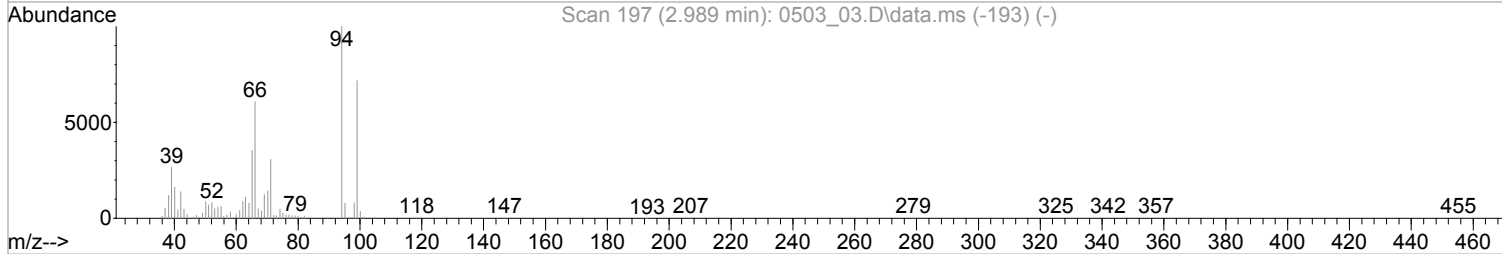
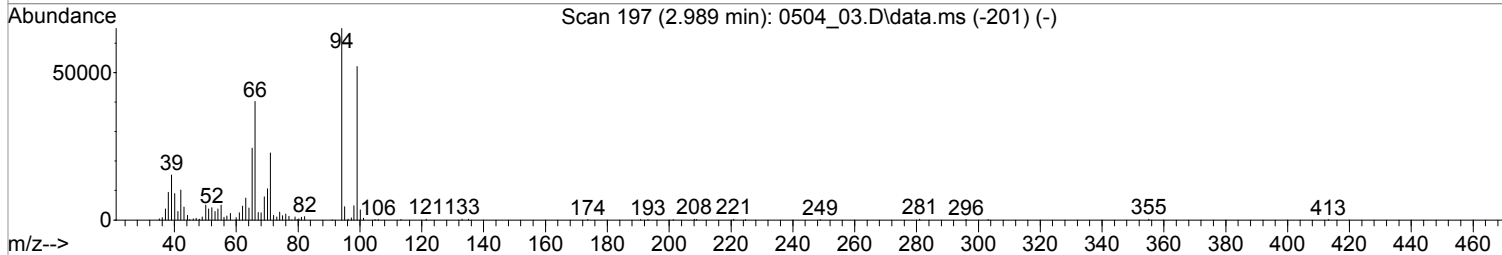
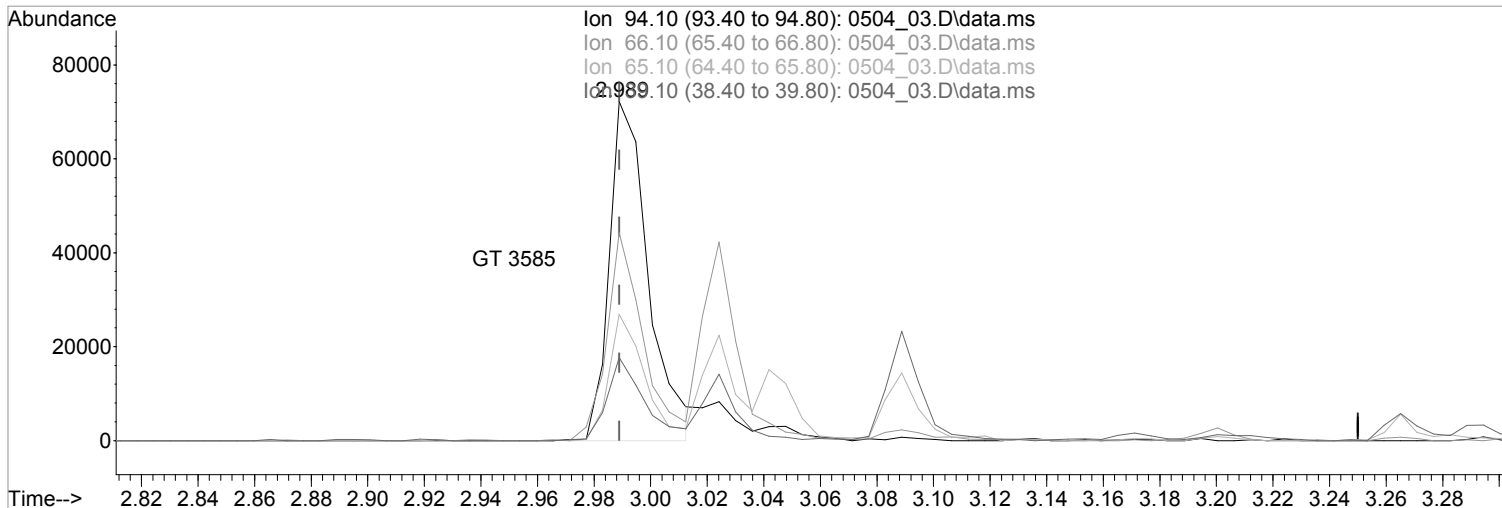
(8) Phenol (MC)  
 2.989min (-0.000) 10786.4881865 ppb  
 Qvalue = 88  
 response 79917

Ion	Exp%	Act%
94.10	100	100
66.10	47.70	61.25
65.10	32.40	37.26
39.10	25.40	24.51

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_03.D  
 Acq On : 4 May 2022 4:53 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 05:44:49 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_03.D\data.ms

(8) Phenol (MC)  
 2.989min (-0.000) 9339.7325916 ppb m

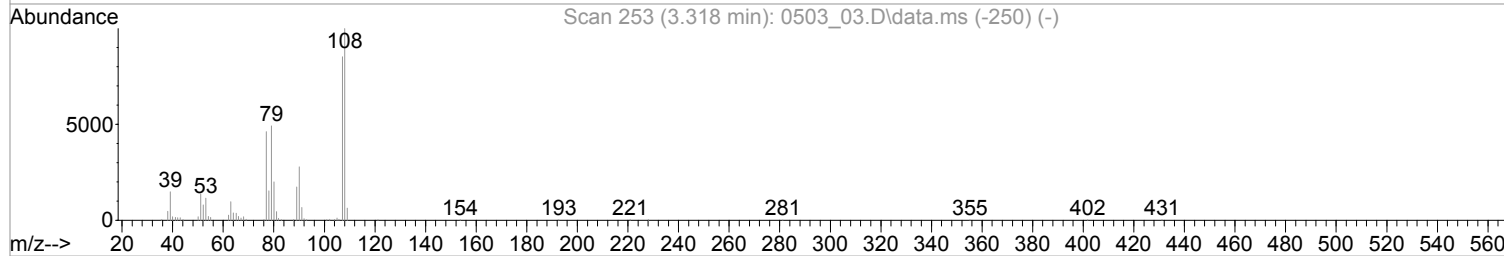
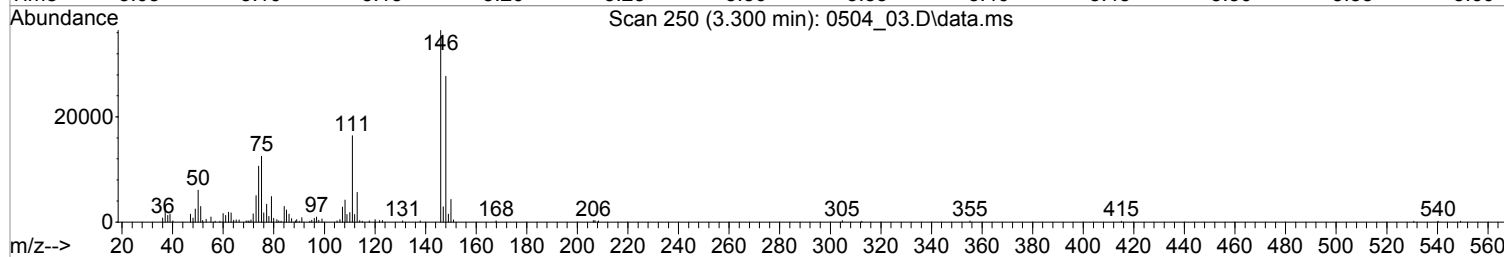
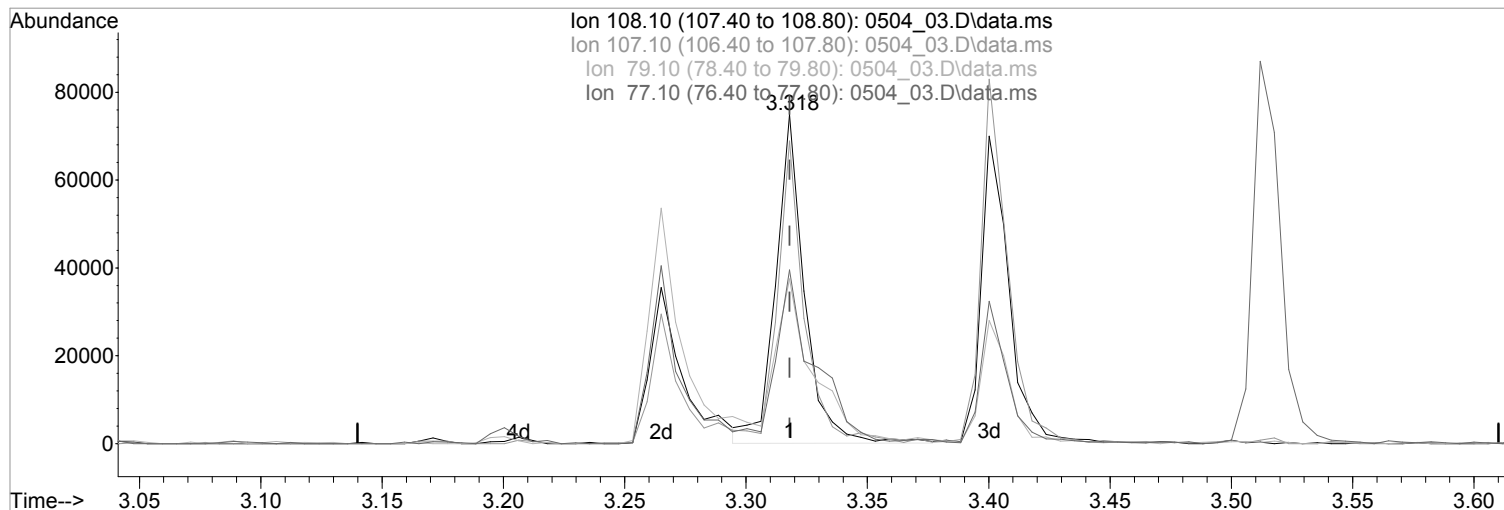
response 69198

Ion	Exp%	Act%
94.10	100	100
66.10	47.70	61.25
65.10	32.40	37.26
39.10	25.40	24.51

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_03.D  
 Acq On : 4 May 2022 4:53 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 05:44:49 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



(18) 2-Methylphenol (MT)

3.318min (-0.000) 11026.9639485 ppb

Qvalue = 94

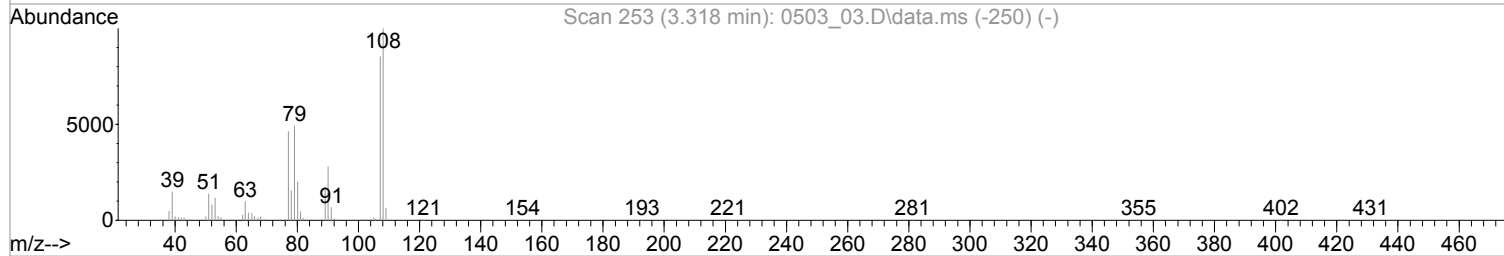
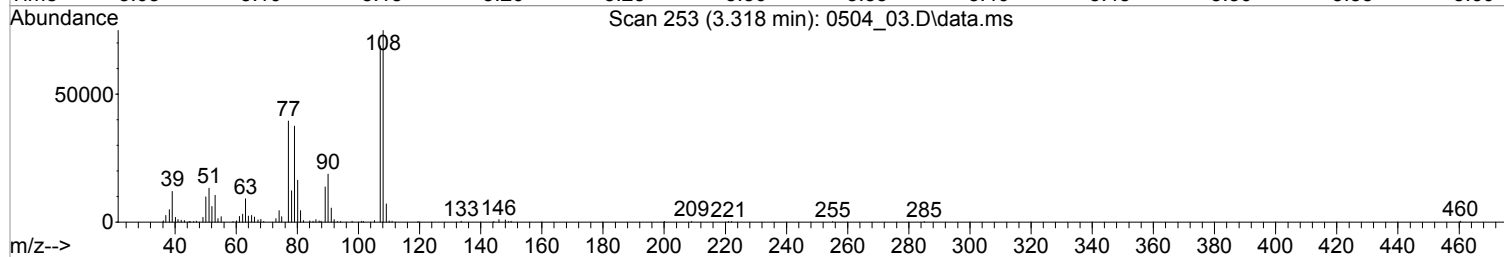
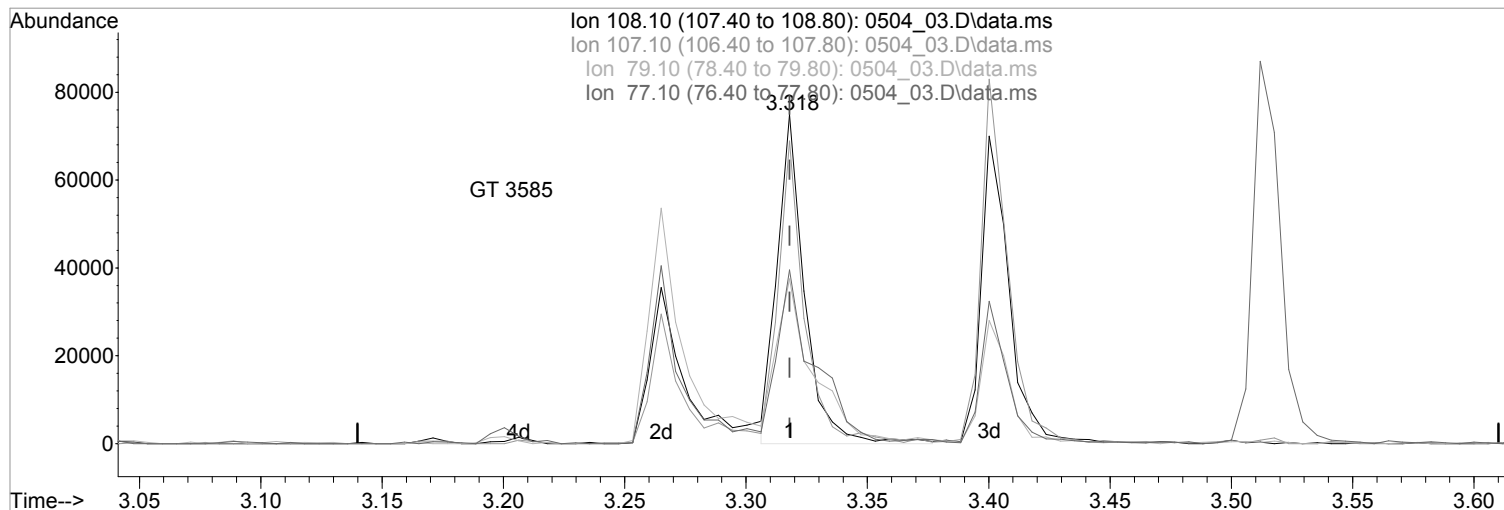
response 61824

Ion	Exp%	Act%
108.10	100	100
107.10	87.90	92.02
79.10	45.70	49.27
77.10	45.50	51.80

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_03.D  
 Acq On : 4 May 2022 4:53 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 05:44:49 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_03.D\data.ms

(18) 2-Methylphenol (MT)

3.318min (-0.000) 10540.2179500 ppb m

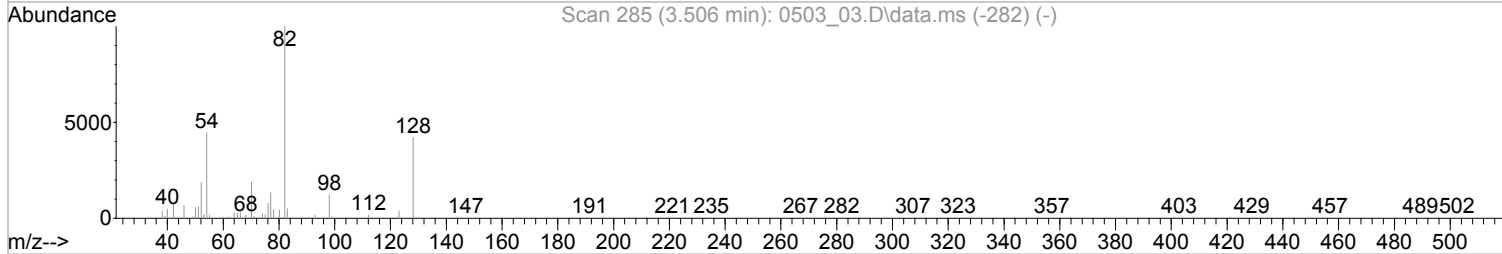
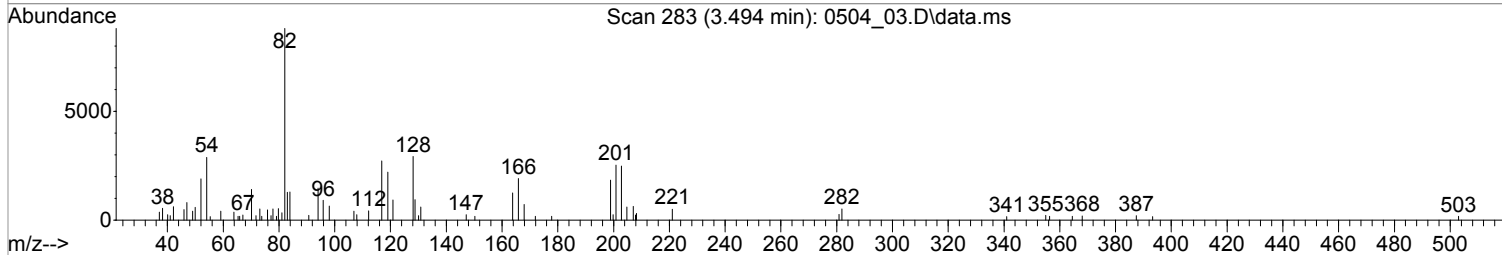
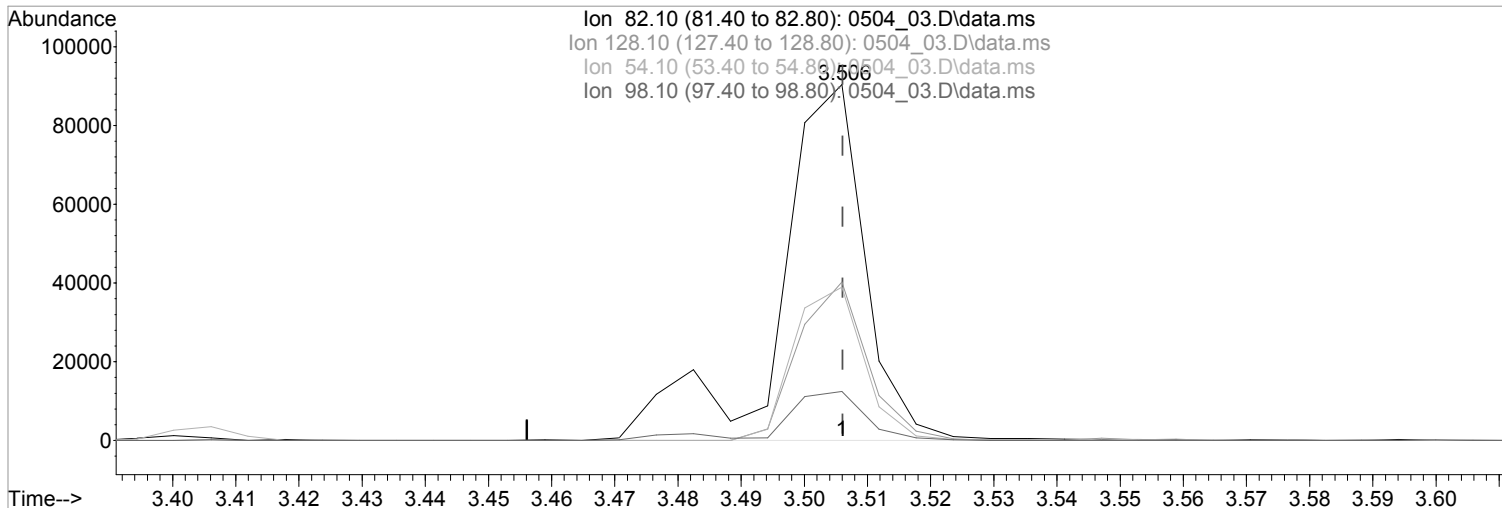
response 59095

Ion	Exp%	Act%
108.10	100	100
107.10	87.90	91.87
79.10	45.70	50.04
77.10	45.50	52.72

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_03.D  
 Acq On : 4 May 2022 4:53 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 05:44:49 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_03.D\data.ms

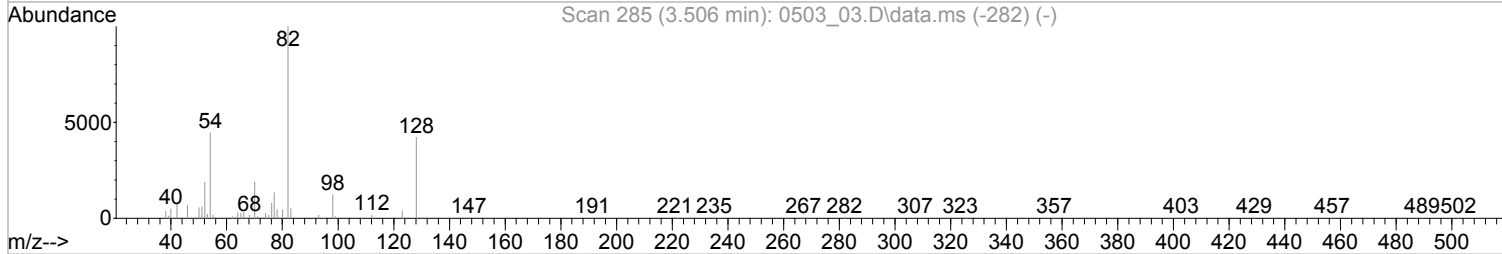
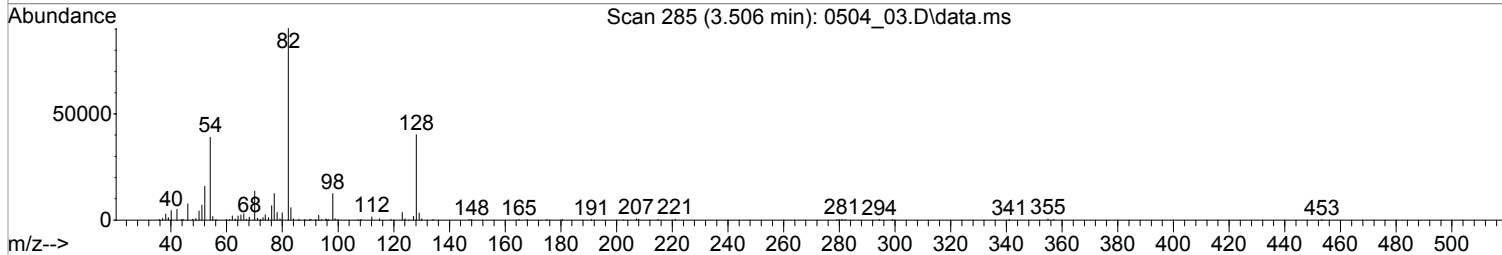
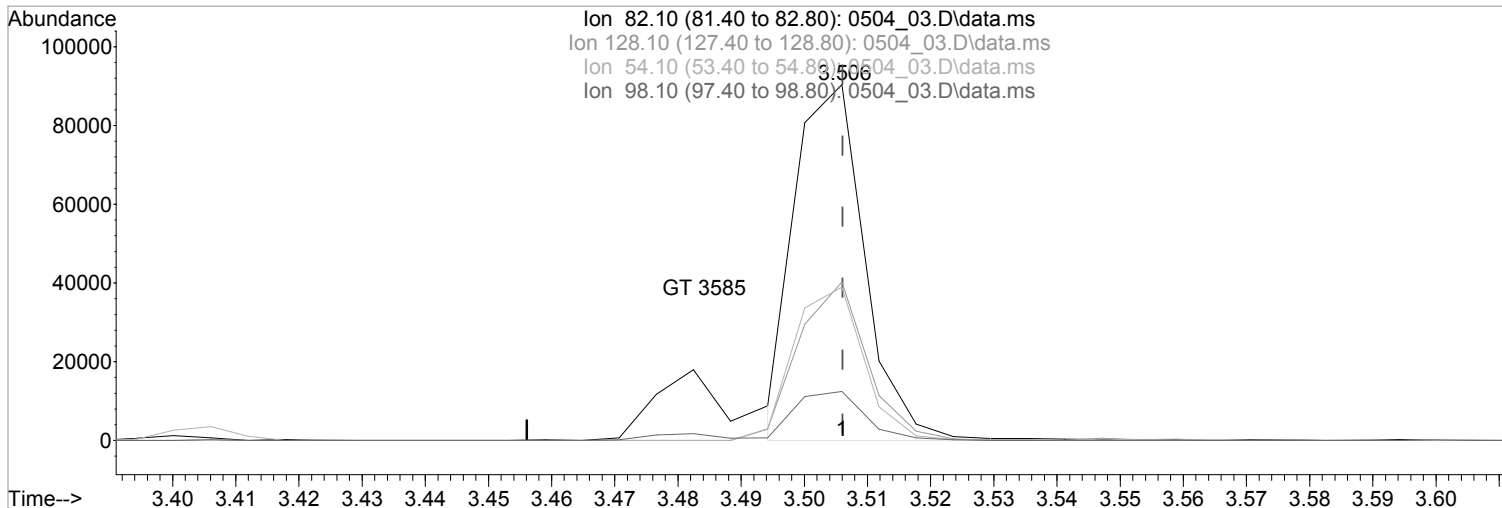
(24) Nitrobenzene-d5 (S)  
 3.506min (-0.000) 13221.6766157 ppb  
 Qvalue = 97  
 response 85333

Ion	Exp%	Act%
82.10	100	100
128.10	43.00	44.56
54.10	44.70	43.10
98.10	12.60	13.81

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
Data File : 0504\_03.D  
Acq On : 4 May 2022 4:53 am  
Operator : 3545  
Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
ALS Vial : 3 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: May 04 05:44:49 2022  
Quant Method : C:\msdchem\1\methods\S811E03V.M  
Quant Title : 8270 BNA  
QLast Update : Tue May 03 05:28:33 2022  
Response via : Initial Calibration



TIC: 0504\_03.D\data.ms

(24) Nitrobenzene-d5 (S)  
3.506min (-0.000) 10758.4066634 ppb m

response 69435

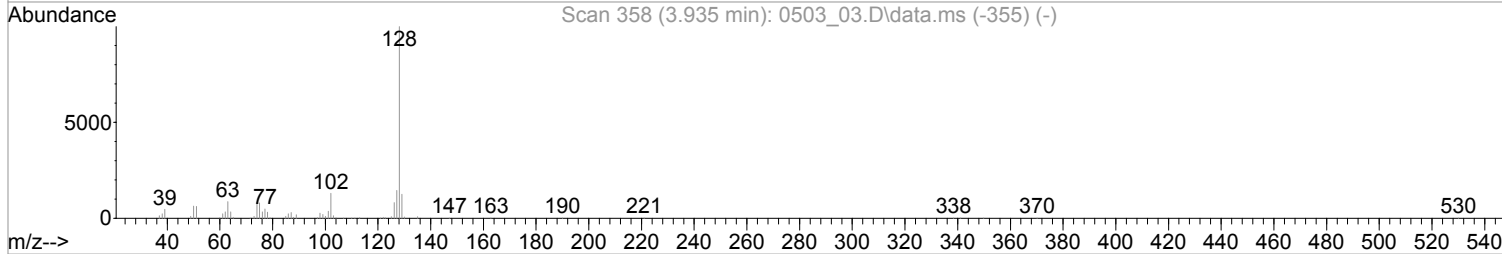
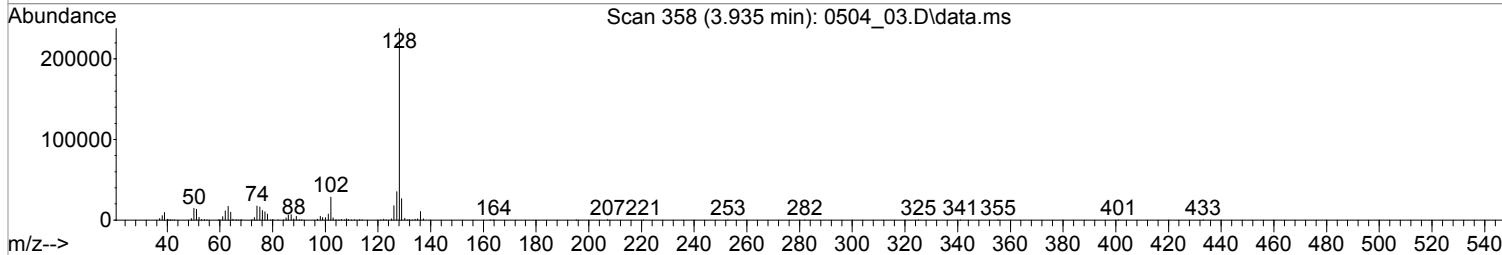
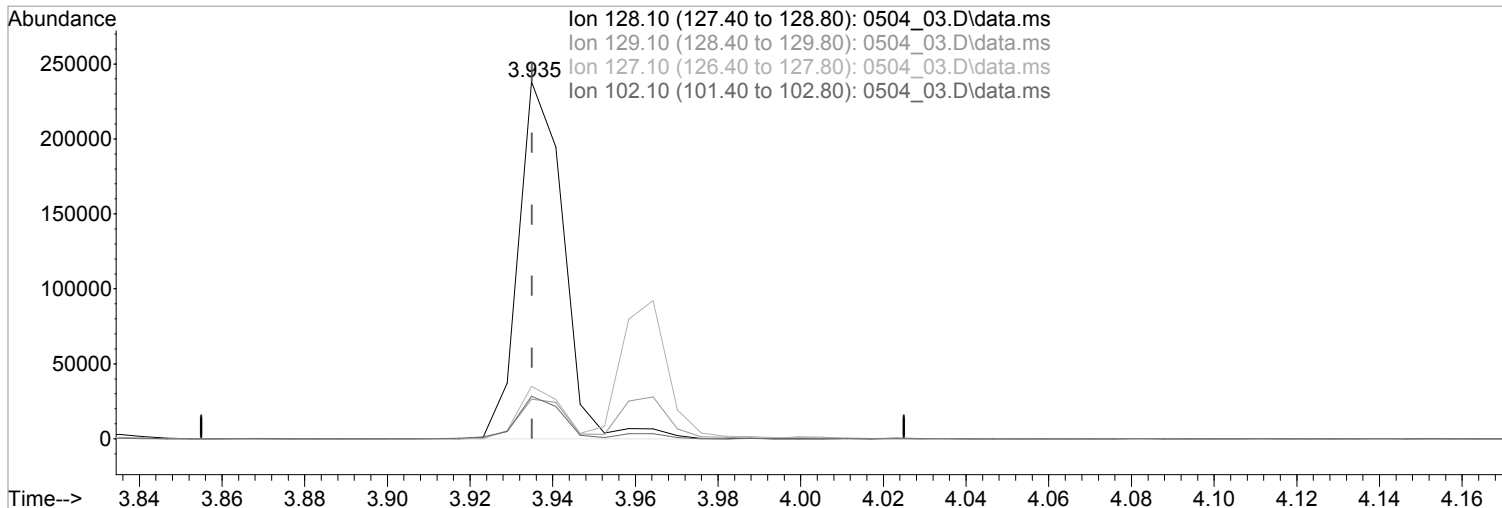
Ion	Exp%	Act%
82.10	100	100
128.10	43.00	44.56
54.10	44.70	43.10
98.10	12.60	13.81



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_03.D  
 Acq On : 4 May 2022 4:53 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 05:44:49 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_03.D\data.ms

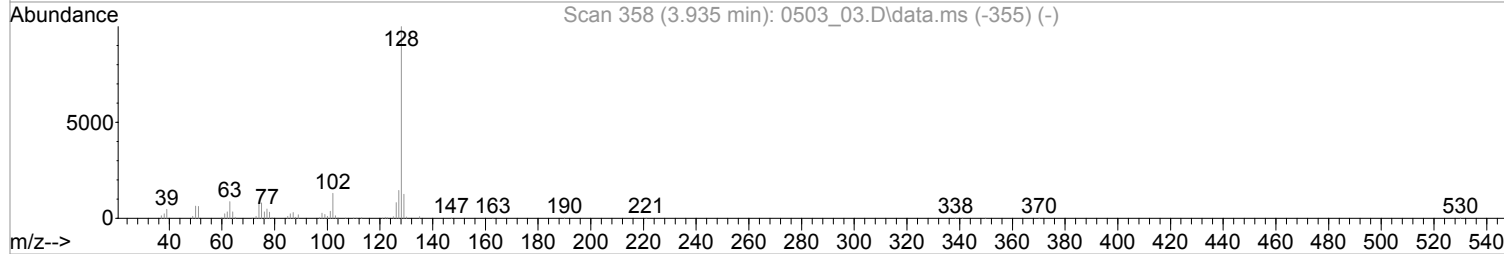
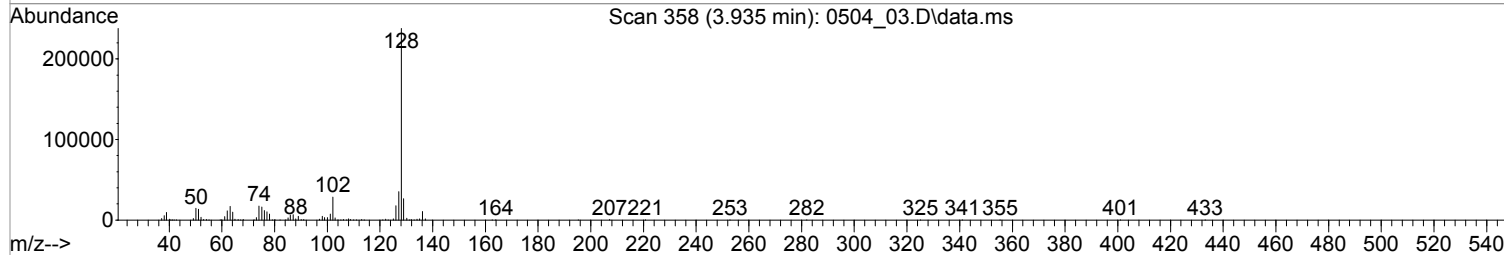
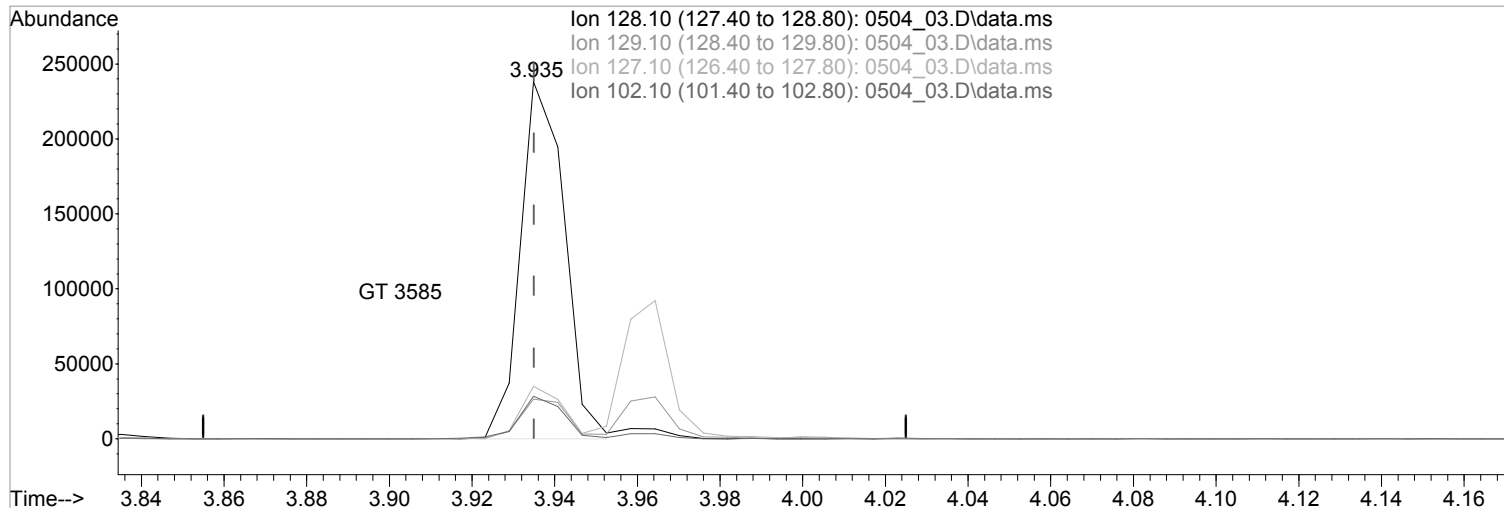
(34) Naphthalene (MT)  
 3.935min (-0.000) 10471.4691125 ppb  
 Qvalue = 97  
 response 181064

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	11.14
127.10	13.50	14.72
102.10	10.10	11.91

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_03.D  
 Acq On : 4 May 2022 4:53 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 05:44:49 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_03.D\data.ms

(34) Naphthalene (MT)

3.935min (-0.000) 10127.0159356 ppb m

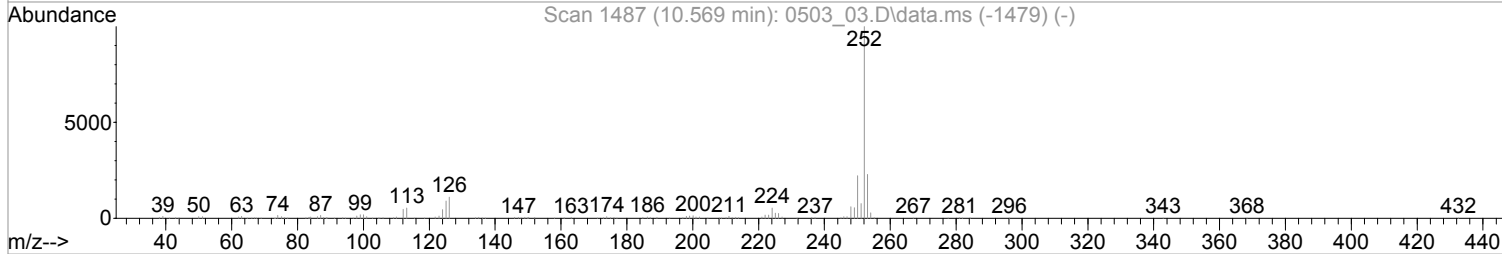
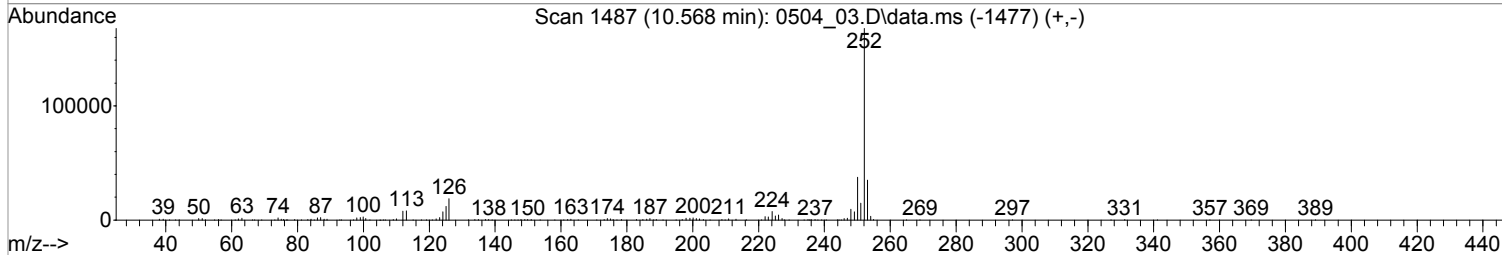
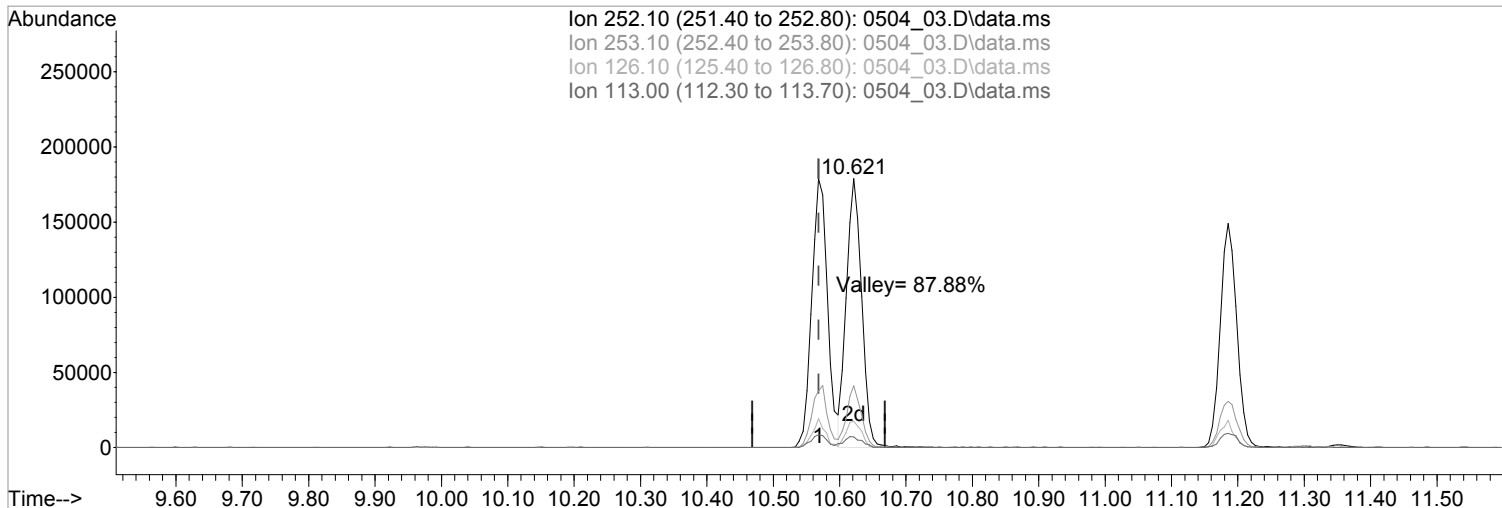
response 175108

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	11.14
127.10	13.50	14.72
102.10	10.10	11.91

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_03.D  
 Acq On : 4 May 2022 4:53 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 05:44:49 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_03.D\data.ms

(95) Benzo(b)fluoranthene (MT)  
 10.568min (-0.000) 10351.2442370 ppb  
 Qvalue = 97  
 response 297216

Ion	Exp%	Act%
252.10	100	100
253.10	21.30	20.80
126.10	12.90	11.16
113.00	6.00	4.34

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	01/14/22 13:34
<b>Instrument ID:</b>	BNAMS11	<b>Calibration (end) date/time:</b>	01/14/22 18:18
<b>Lab File ID:</b>	0504_04	<b>Analysis date/time:</b>	05/04/22 05:13
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.149770	0.17350180		15.80	20	10	11.58	116	

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_04.D  
 Acq On : 4 May 2022 5:13 am  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D05698 exp 09/10/22  
 Misc : TCL CAL ISTD 22D02367 exp 10/02/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

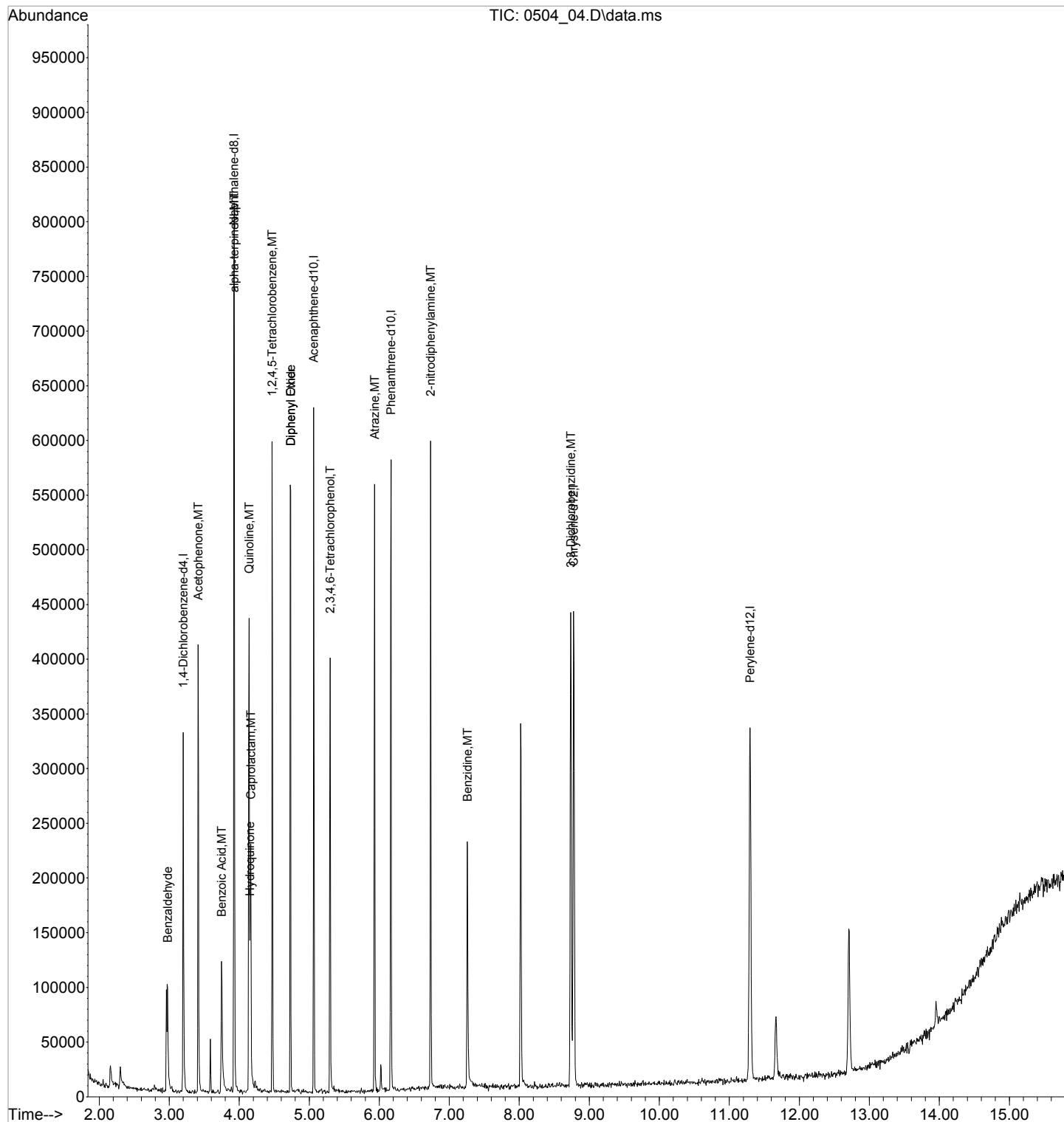
Quant Time: May 05 11:30:55 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.200	152	38756	8000.0000000	ppb	0.00
23) Naphthalene-d8	3.923	136	167989	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.063	164	86288	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.168	188	170142	8000.0000000	ppb	0.00
84) Chrysene-d12	8.776	240	188440	8000.0000000	ppb	0.00
94) Perylene-d12	11.297	264	197663	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0d	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
<b>Target Compounds</b>						
					Qvalue	
9) Benzaldehyde	2.977	105	19949	10846.5556662	ppb	97
22) Acetophenone	3.412	105	90460	10652.6450909	ppb	96
31) Benzoic Acid	3.747	105	36433	11584.5370605	ppb	97
33) alpha-terpineol	3.929	59	42495m	10900.4031746	ppb	
37) Hydroquinone	4.152	110	38678	8951.8654939	ppb	84
38) Quinoline	4.141	129	112715	9969.7674981	ppb	98
39) Caprolactam	4.164	113	16800	13471.6170711	ppb	94
43) 1,2,4,5-Tetrachloroben...	4.470	216	72911	11990.7360891	ppb	99
44) Diphenyl Ether	4.734	170	91052	12717.4541064	ppb	95
45) Diphenyl Oxide	4.734	170	91052	12717.4541064	ppb	95
62) 2,3,4,6-Tetrachlorophenol	5.298	232	38985	12537.7981970	ppb	96
69) Atrazine	5.933	200	51263	12502.6531655	ppb	# 89
82) 2-nitrodiphenylamine	6.732	167	59042	12458.2240262	ppb	90
85) Benzidine	7.260	184	91103	10151.5794370	ppb	97
89) 3,3-Dichlorobenzidine	8.735	252	115653	11819.7822960	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050422\  
Data File : 0504\_04.D  
Acq On : 4 May 2022 5:13 am  
Operator : 3545  
Sample : ICV TCL 10K1 PPB 22D05698 exp 09/10/22  
Misc : TCL CAL ISTD 22D02367 exp 10/02/22  
ALS Vial : 4 Sample Multiplier: 1  
InstName : BNAMS11

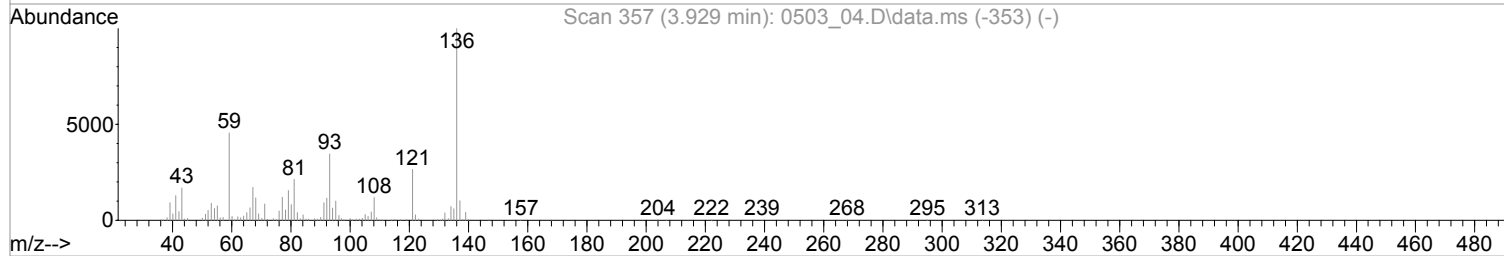
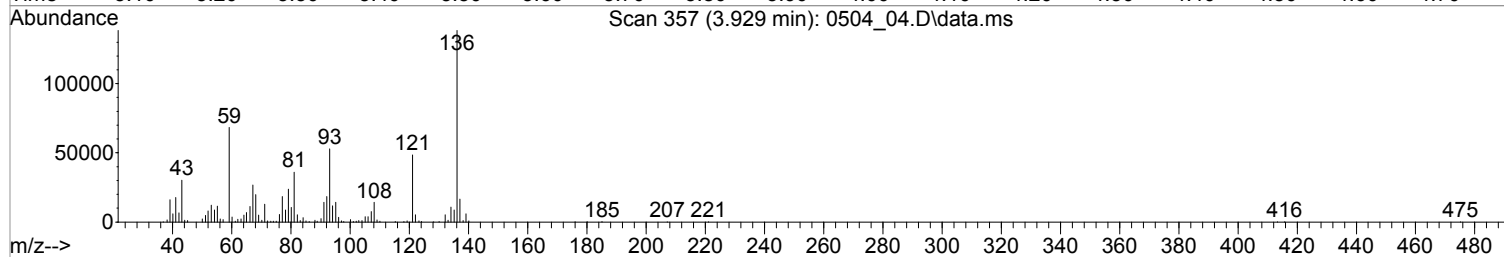
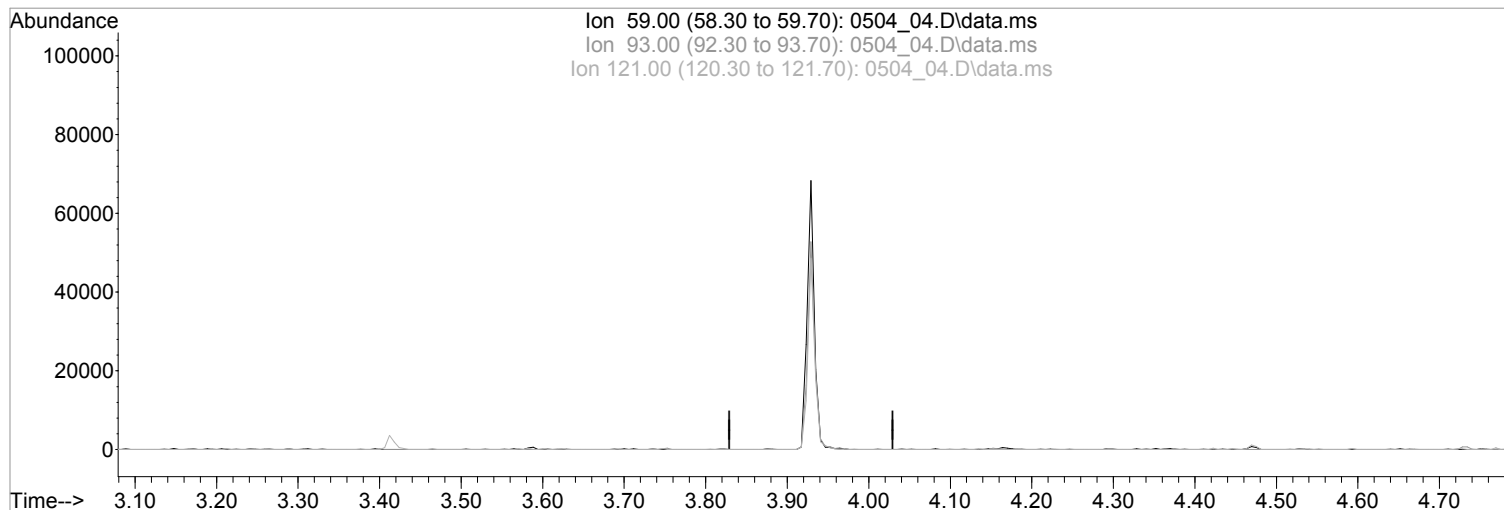
Quant Time: May 05 11:30:55 2022  
Quant Method : C:\msdchem\1\methods\S811E03V.M  
Quant Title : 8270 BNA  
QLast Update : Tue May 03 05:28:33 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_04.D  
 Acq On : 4 May 2022 5:13 am  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D05698 exp 09/10/22  
 Misc : TCL CAL ISTD 22D02367 exp 10/02/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 10:06:57 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_04.D\data.ms

(33) alpha-terpineol (MT)  
 3.929min 0.000000 ppb d

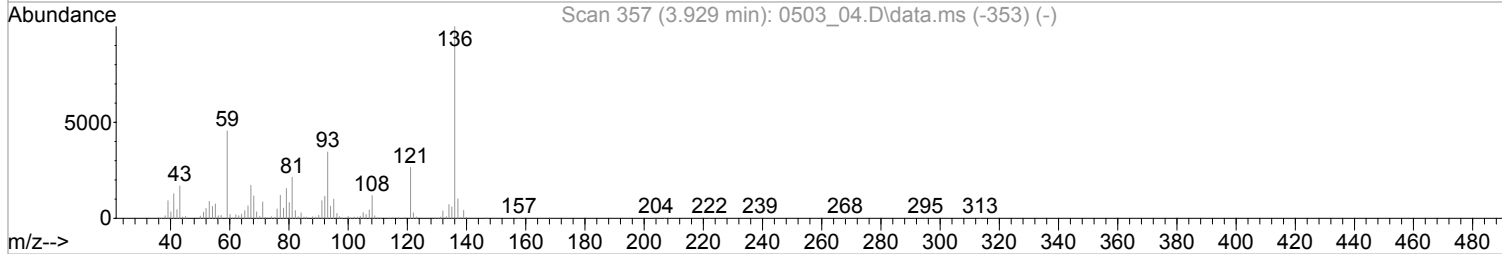
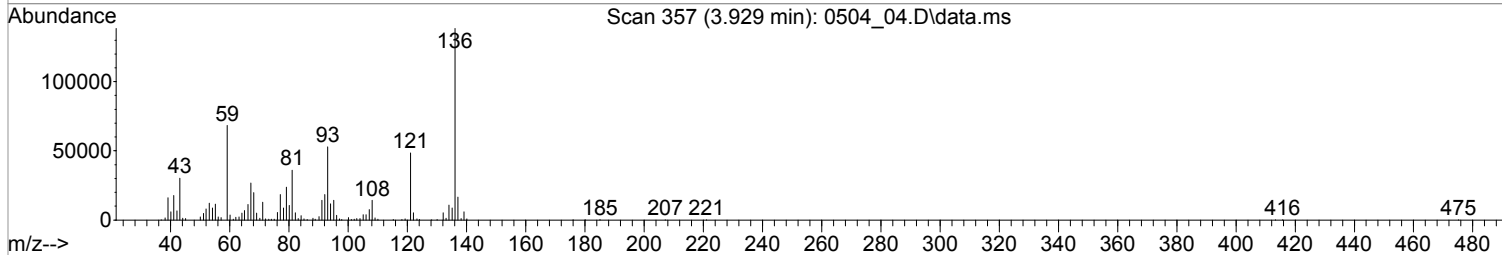
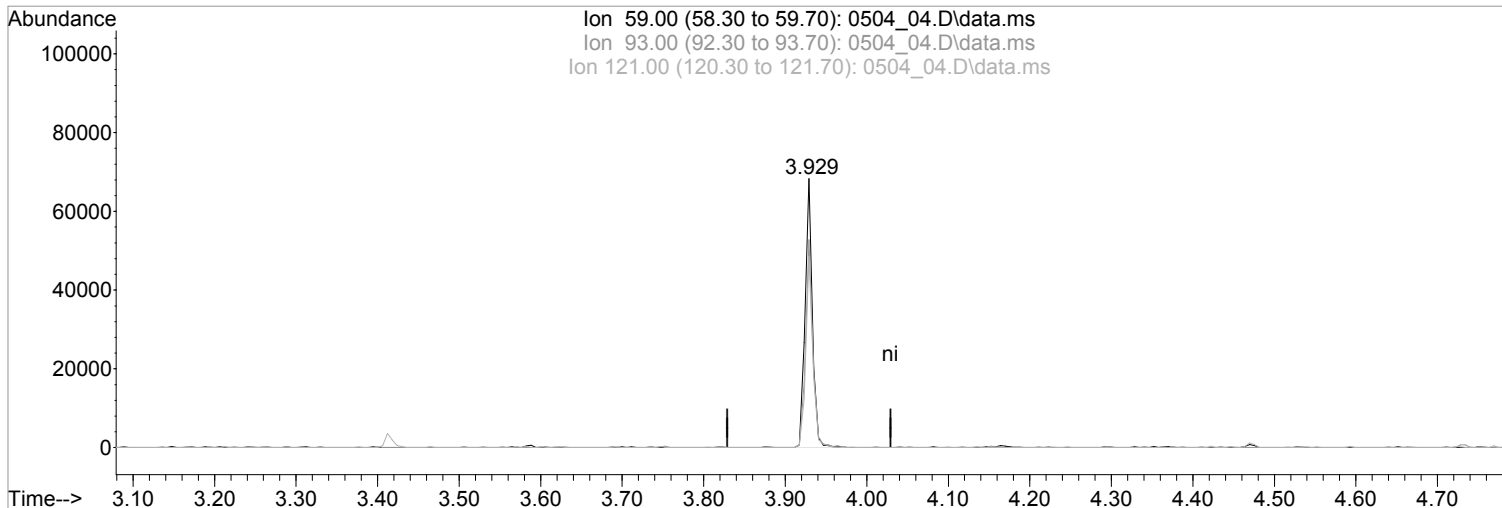
response 0

Ion	Exp%	Act%
59.00	100	0.00
93.00	66.20	0.00
121.00	55.60	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_04.D  
 Acq On : 4 May 2022 5:13 am  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D05698 exp 09/10/22  
 Misc : TCL CAL ISTD 22D02367 exp 10/02/22  
 ALS Vial : 4 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 10:06:57 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_04.D\data.ms

(33) alpha-terpineol (MT)  
 3.929min (-0.000) 10900.4031746 ppb m

response 42495

Ion	Exp%	Act%
59.00	100	100
93.00	66.20	77.32
121.00	55.60	71.07
0.00	0.00	0.00



GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0331_18	<b>Analysis date/time:</b>	03/31/22 22:44
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.610754	0.64112010		4.97		10	10.50	105	70 - 130
2-METHYLNAPHTHALENE	0.627399	0.64607670		2.98		10	10.30	103	70 - 130
3&4-METHYL PHENOL	1.301686	1.329116		2.11		10	10.21	102	70 - 130
ACENAPHTHENE	1.148837	1.199481		4.41		10	10.44	104	70 - 130
ACENAPHTHYLENE	1.695228	1.857736		9.59		10	10.96	110	70 - 130
ANTHRACENE	1.006737	1.045115		3.81		10	10.38	104	70 - 130
BENZO(A)ANTHRACENE	1.116712	1.133629		1.51		10	10.15	102	70 - 130
BENZO(A)PYRENE	0.950358	1.085630		14.20		10	11.42	114	70 - 130
BENZO(B)FLUORANTHENE	1.172442	1.217118		3.81		10	10.38	104	70 - 130
BENZO(G,H,I)PERYLENE	1.026990	1.111795		8.26		10	10.83	108	70 - 130
BENZO(K)FLUORANTHENE	1.198822	1.286310		7.30		10	10.73	107	70 - 130
BIS(2-ETHYLHEXYL)PHTHALATE	1.014597	1.069942		5.45		10	10.55	106	70 - 130
CARBAZOLE	0.861194	0.95543070		10.90		10	11.09	111	70 - 130
CHRYSENE	1.179486	1.253499		6.28		10	10.63	106	70 - 130
DI-N-BUTYL PHTHALATE	1.289953	1.485565		15.20		10	11.52	115	70 - 130
DI-N-OCTYL PHTHALATE	1.425428	1.425258		0.0119		10	9.188	91.90	70 - 130
DIBENZ(A,H)ANTHRACENE	0.969471	1.067733		10.10		10	11.01	110	70 - 130
DIBENZOFURAN	1.532971	1.604143		4.64		10	10.46	105	70 - 130
FLUORANTHENE	1.037530	1.086566		4.73		10	10.47	105	70 - 130
FLUORENE	1.268965	1.347410		6.18		10	10.62	106	70 - 130
INDENO(1,2,3-CD)PYRENE	0.864970	0.96418880		11.50		10	11.15	112	70 - 130
NAPHTHALENE	0.998617	1.032092		3.35		10	10.34	103	70 - 130
PENTACHLOROPHENOL	0.105171	0.11822170		12.40		10	11.43	114	70 - 130
PHENANTHRENE	1.060304	1.114125		5.08		10	10.51	105	70 - 130
PHENOL	1.575372	1.630722		3.51		10	10.35	104	70 - 130
PYRENE	1.498492	1.578251		5.32		10	10.53	105	70 - 130
2,4,6-TRIBROMOPHENOL	0.083814	0.08113972		3.19		10	9.681	96.80	70 - 130
2-FLUOROBIPHENYL	1.270391	1.246534		1.88		10	9.812	98.10	70 - 130
2-FLUOROPHENOL	1.252515	1.217577		2.79		10	9.721	97.20	70 - 130
NITROBENZENE-D5	0.304240	0.29725250		2.30		10	9.770	97.70	70 - 130
P-TERPHENYL-D14	1.107064	1.061220		4.14		10	9.586	95.90	70 - 130
PHENOL-D5	1.486088	1.435091		3.43		10	9.657	96.60	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 17:01:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.410	152	32498	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.140	136	129280	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	67005	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.434	188	107114	8000.0000000	ppb	0.00
84) Chrysene-d12	9.245	240	77504	8000.0000000	ppb	0.00
94) Perylene-d12	11.951	264	68794	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.740	112	49461	9721.0515879	ppb	0.00
Spiked Amount	20000.000		Recovery	=	48.61%	
7) Phenol-d5	3.175	99	58297	9656.8420263	ppb	0.00
Spiked Amount	20000.000		Recovery	=	48.28%	
24) Nitrobenzene-d5	3.710	82	48036m	9770.3438575	ppb	0.00
Spiked Amount	10000.000		Recovery	=	97.70%	
50) 2-Fluorobiphenyl	4.828	172	104405	9812.2063195	ppb	0.00
Spiked Amount	10000.000		Recovery	=	98.12%	
73) 2,4,6-Tribromophenol	5.886	330	10864	9680.9076507	ppb	0.00
Spiked Amount	20000.000		Recovery	=	48.40%	
87) p-Terphenyl-d14	7.845	244	102811	9585.8929227	ppb	0.00
Spiked Amount	10000.000		Recovery	=	95.86%	
<b>Target Compounds</b>						
2) Pyridine	2.216	79	56827	10543.3045205	ppb	99
3) N-Nitrosodimethylamine	2.199	42	26162	9220.1486386	ppb	99
5) Aniline	3.228	66	29495	10558.9289085	ppb	97
6) bis(2-Chloroethyl)ether	3.245	93	55703m	10136.1427628	ppb	99
8) Phenol	3.181	94	66244	10351.3432882	ppb	96
10) 2-Chlorophenol	3.293	128	56605	10621.1407363	ppb	98
11) n-Decane	3.293	41	32743	9557.1097558	ppb	# 100
12) 1,3-Dichlorobenzene	3.381	146	62683	10262.6996716	ppb	100
13) 1,4-Dichlorobenzene	3.416	146	63047	10312.3985770	ppb	96
14) Benzyl Alcohol	3.463	79	40660	10415.3909180	ppb	100
15) 1,2-Dichlorobenzene	3.504	146	60642	10287.4111665	ppb	98
16) bis(2-Chloroisopropyl)...	3.540	121	21521	10572.3791808	ppb	98
17) 2,2-oxybis(1-chloropro...	3.540	121	21521	10572.3791808	ppb	98
18) 2-Methylphenol	3.510	108	50596	10555.1684687	ppb	96
19) Hexachloroethane	3.698	117	26205	10278.9609507	ppb	97
20) N-Nitrosodi-n-propylamine	3.610	70	35112	10298.7989609	ppb	99
21) 3&4-Methyl phenol	3.593	107	53992	10210.7212151	ppb	99
25) Nitrobenzene	3.722	77	53649	10796.3440550	ppb	98
26) Isophorone	3.851	82	101269	10411.4636677	ppb	100
27) 2-Nitrophenol	3.904	139	25159	10701.2848374	ppb	93
28) 2,4-Dimethylphenol	3.904	107	52280	10806.4841322	ppb	99
29) bis(2-Chlorethoxy)methane	3.969	93	71047	10871.2890055	ppb	97
30) 2,4-Dichlorophenol	4.040	162	40871	10693.2795032	ppb	# 86
32) 1,2,4-Trichlorobenzene	4.098	180	47514	10395.1948767	ppb	94
34) Naphthalene	4.157	128	166786	10335.2044265	ppb	100
35) 4-Chloroaniline	4.175	65	17354	10233.0364786	ppb	98
36) Hexachloro-1,3-butadiene	4.222	225	27825	11286.0704472	ppb	98
40) 4-Chloro-3-methylphenol	4.463	107	41378	10347.5683022	ppb	99
41) 2-Methylnaphthalene	4.592	142	104406	10297.6968942	ppb	99
42) 1-Methylnaphthalene	4.657	142	103605	10497.1978691	ppb	100
47) Hexachlorocyclopentadiene	4.692	237	19130	8752.6966899	ppb	98
48) 2,4,6-Trichlorophenol	4.769	196	27186	10863.2348945	ppb	97

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

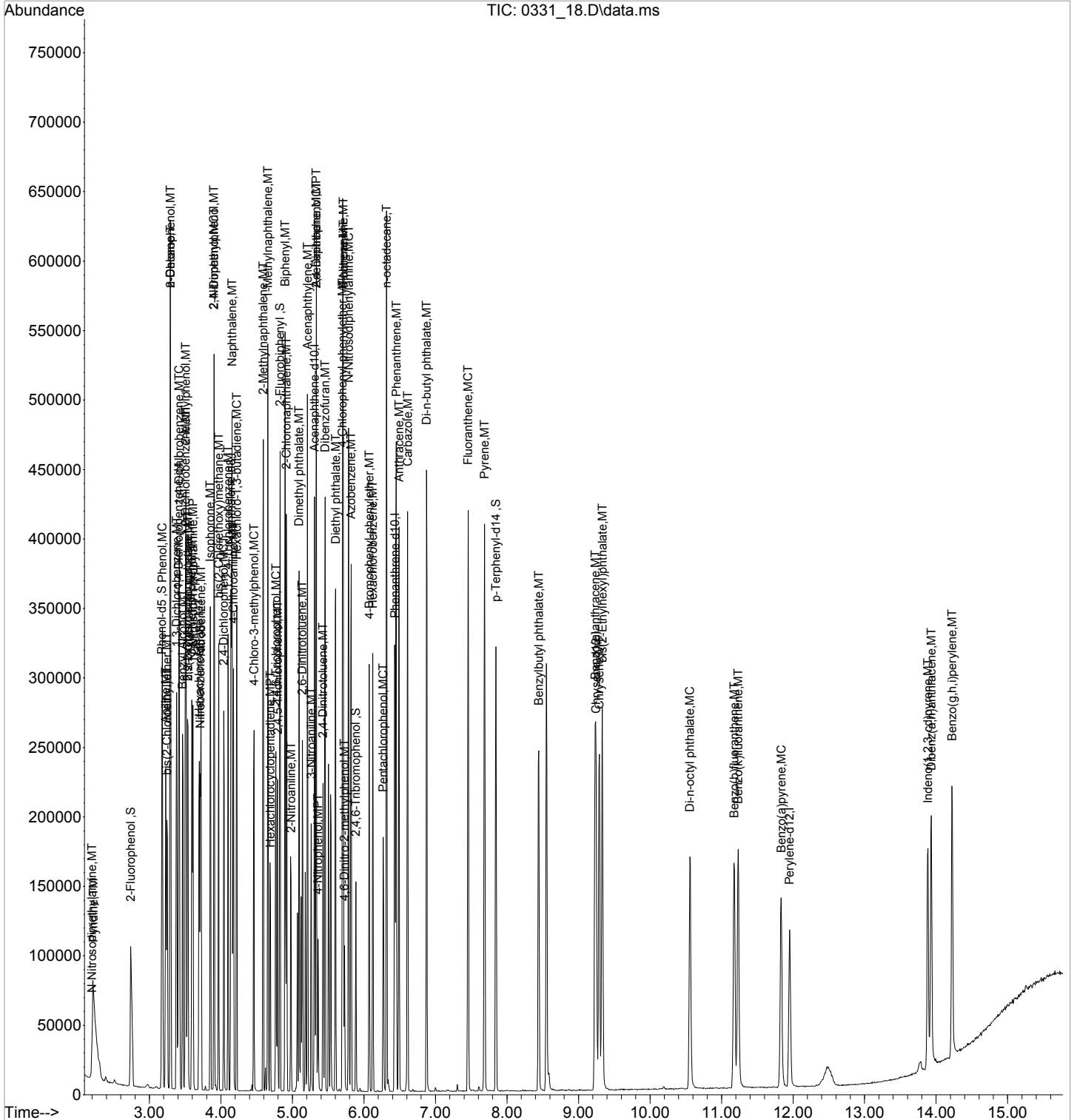
Quant Time: Apr 04 17:01:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	27202	10638.5015338	ppb		96
51) Biphenyl	4.898	154	118579	9890.1836667	ppb		99
52) 2-Chloronaphthalene	4.916	162	97364	10522.2343151	ppb		97
53) 2-Nitroaniline	4.981	138	26879	9792.8659732	ppb		99
54) Acenaphthylene	5.210	152	155597	10958.6228399	ppb		99
55) Dimethyl phthalate	5.092	163	110449	10653.1510320	ppb		94
56) 2,6-Dinitrotoluene	5.139	165	24488	10819.8125221	ppb		94
57) 3-Nitroaniline	5.263	138	21957	10159.1833892	ppb		95
58) Acenaphthene	5.334	153	100464	10440.8237247	ppb		99
59) 2,4-Dinitrophenol	5.334	184	6639	10067.3246842	ppb	#	1
60) Dibenzofuran	5.457	168	134357	10464.2761664	ppb		99
61) 2,4-Dinitrotoluene	5.428	165	28361	10009.1795744	ppb		83
63) 4-Nitrophenol	5.357	139	15677	10019.4582644	ppb		84
64) Fluorene	5.710	166	112854	10618.1767720	ppb		99
65) 4-Chlorophenyl-phenyle...	5.698	204	50559	10444.6934063	ppb		87
66) Diethyl phthalate	5.604	149	118174	10955.7827258	ppb		100
67) 4-Nitroaniline	5.710	138	14373	10982.9600230	ppb		99
68) Azobenzene	5.822	77	118542	10935.8381151	ppb		100
71) 4,6-Dinitro-2-methylph...	5.728	198	10278	9898.9697426	ppb	#	76
72) N-Nitrosodiphenylamine	5.787	169	89933	10794.9785060	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	26731	10453.6669917	ppb		91
75) Hexachlorobenzene	6.122	284	31578	10571.7081466	ppb		99
76) n-octadecane	6.316	55	19875	9957.1898370	ppb		98
77) Pentachlorophenol	6.269	266	15829	11430.0132536	ppb		91
78) Phenanthrene	6.451	178	149173	10507.5981260	ppb		99
79) Anthracene	6.492	178	139933	10381.2108124	ppb		99
80) Carbazole	6.610	167	127925	11094.2622659	ppb		100
81) Di-n-butyl phthalate	6.875	149	198906	11516.4267189	ppb		99
83) Fluoranthene	7.457	202	145483	10472.6197639	ppb		99
86) Pyrene	7.686	202	152901	10532.2669087	ppb		99
88) Benzylbutyl phthalate	8.445	149	68827	10330.4950097	ppb		95
90) Benzo(a)anthracene	9.233	228	109826	10151.4892180	ppb		99
91) Chrysene	9.292	228	121439	10627.5018659	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.333	149	103656	10545.4870384	ppb		98
93) Di-n-octyl phthalate	10.557	149	138079	9187.8214826	ppb		100
95) Benzo(b)fluoranthene	11.174	252	104663	10381.0496709	ppb		98
96) Benzo(k)fluoranthene	11.233	252	110613	10729.7840645	ppb		99
97) Benzo(a)pyrene	11.833	252	93356	11423.3722820	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.886	276	82913	11147.0755413	ppb		95
99) Dibenz(a,h)anthracene	13.933	278	91817	11013.5644462	ppb		99
100) Benzo(g,h,i)perylene	14.221	276	95606	10825.7600661	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_18.D  
Acq On : 31 Mar 2022 10:44 pm  
Operator : 3545  
Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 18 Sample Multiplier: 1

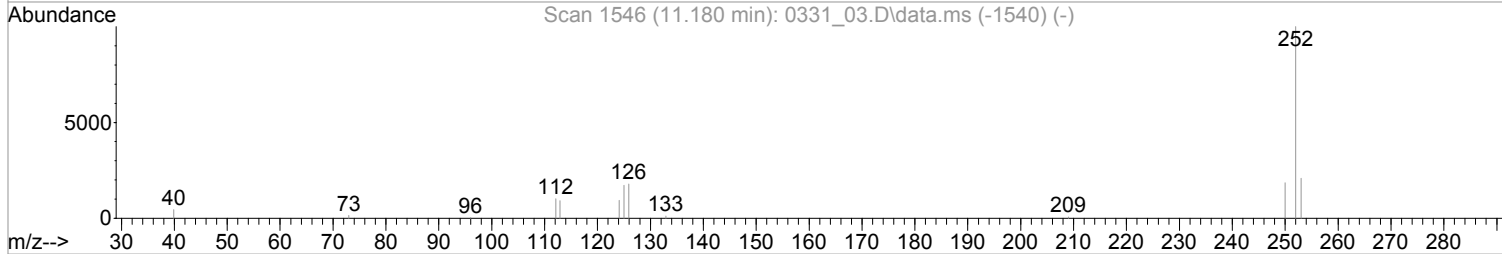
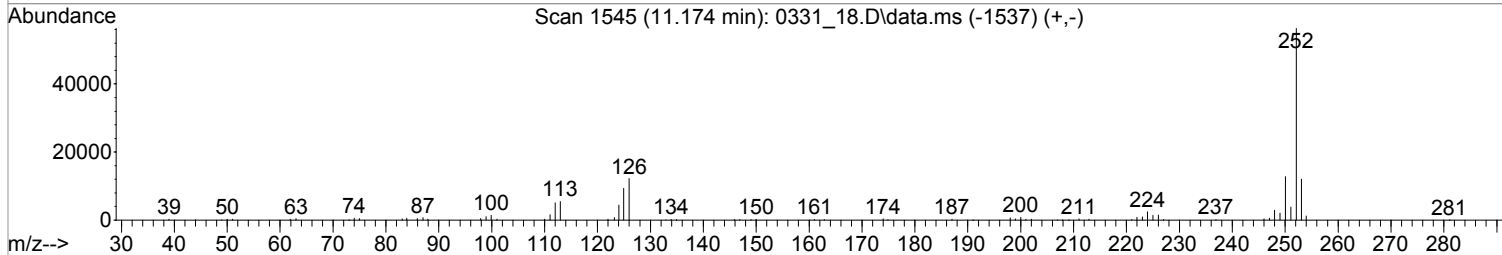
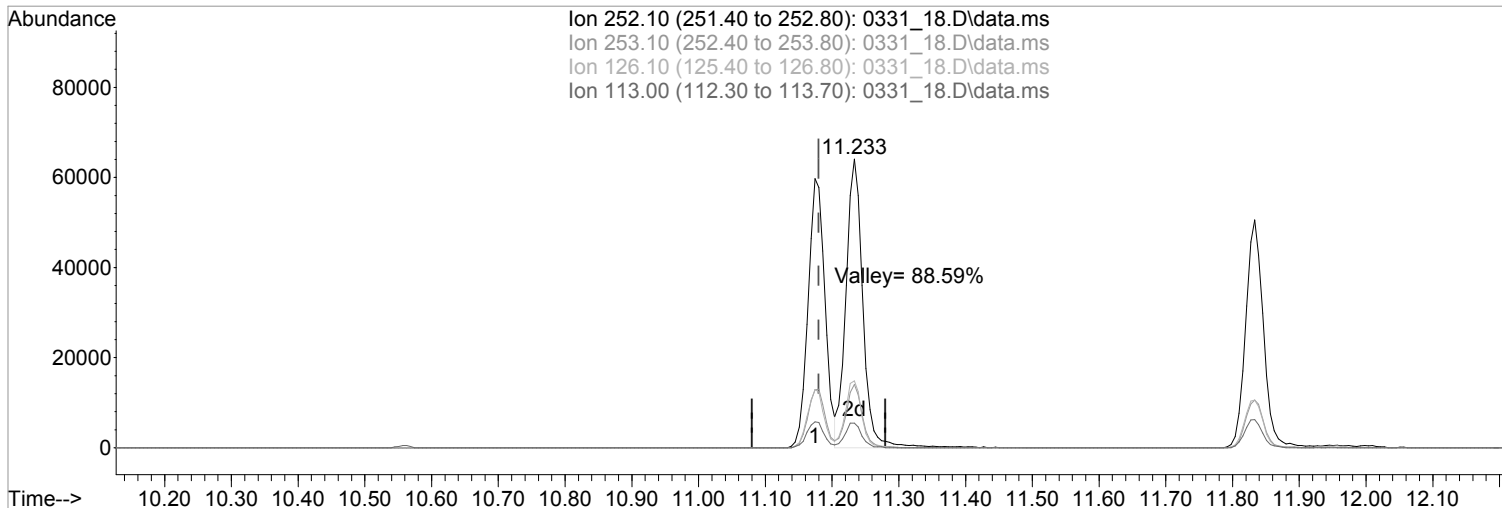
Quant Time: Apr 04 17:01:16 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:54:30 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:39:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:39:09 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

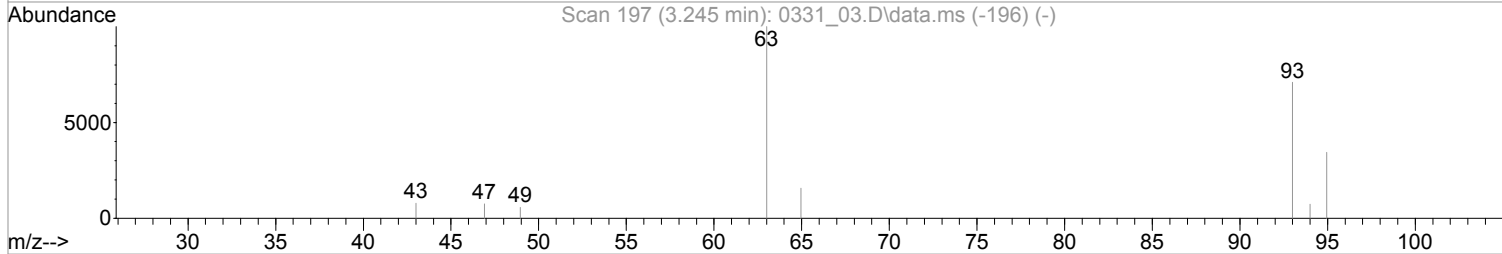
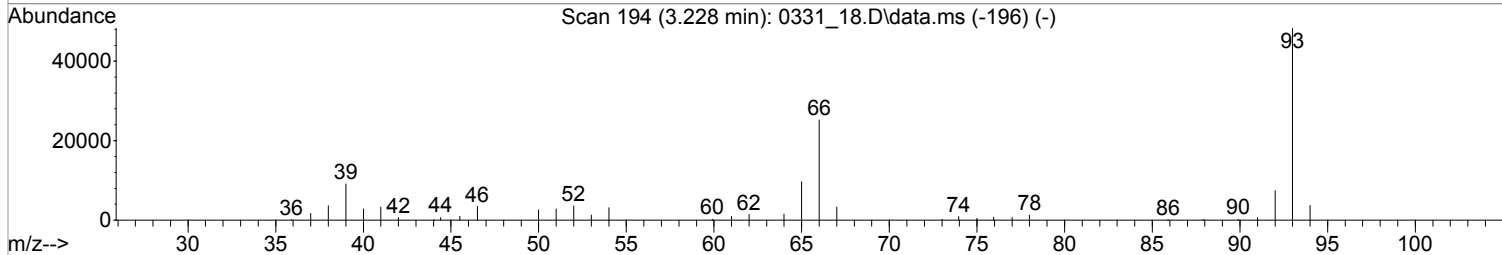
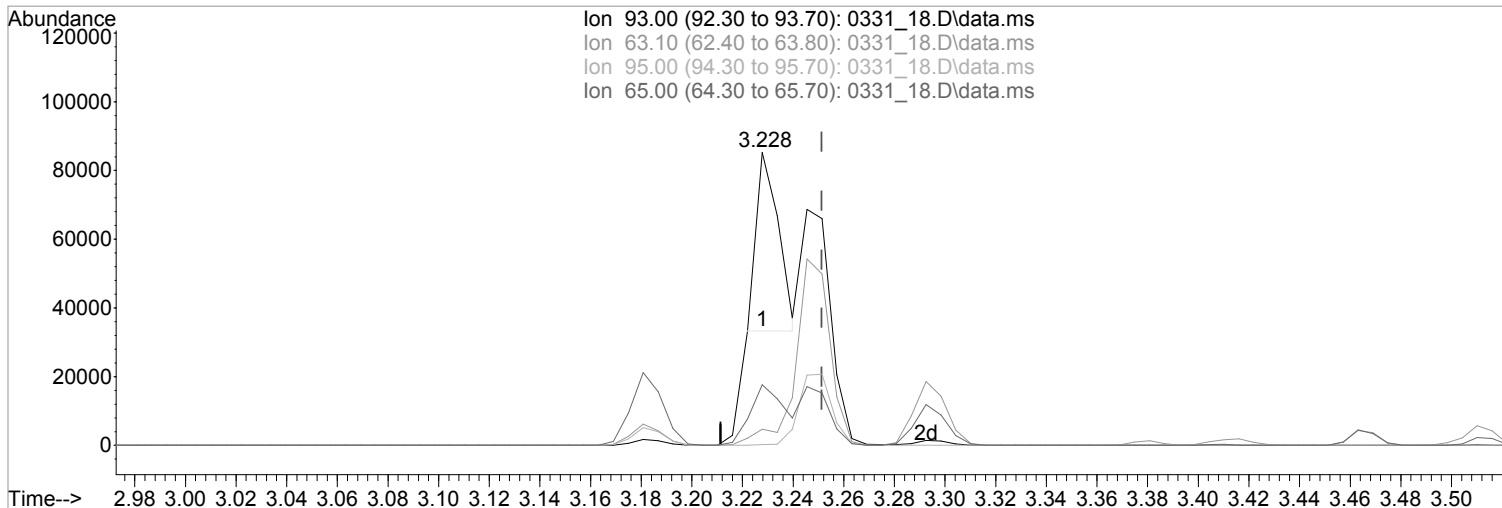
(95) Benzo(b)fluoranthene (MT)  
 11.174min (-0.006) 10381.0496709 ppb  
 Qvalue = 98  
 response 104663

Ion	Exp%	Act%
252.10	100	100
253.10	21.80	21.38
126.10	20.00	21.67
113.00	9.70	9.69

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

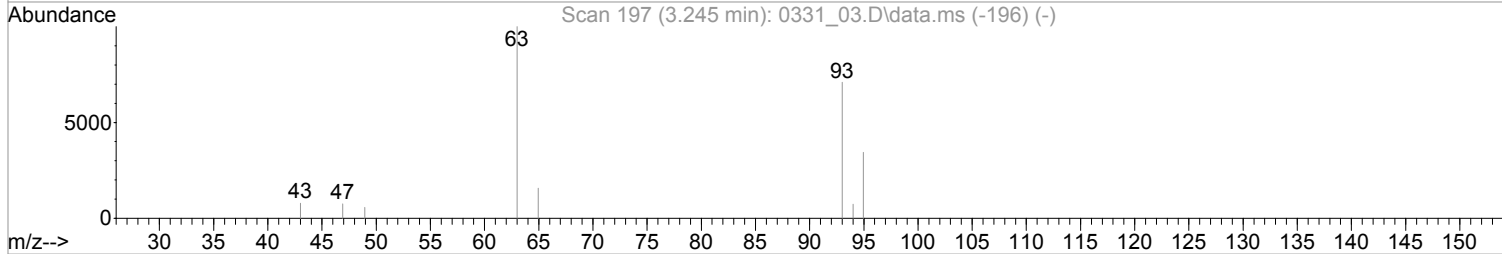
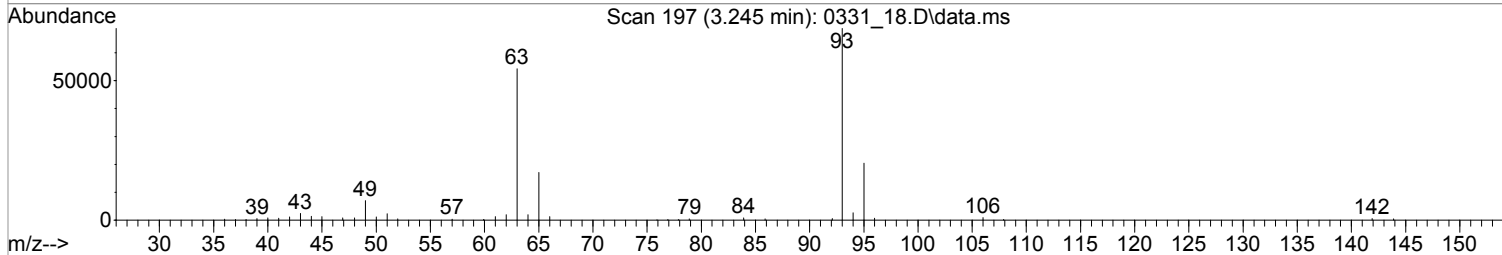
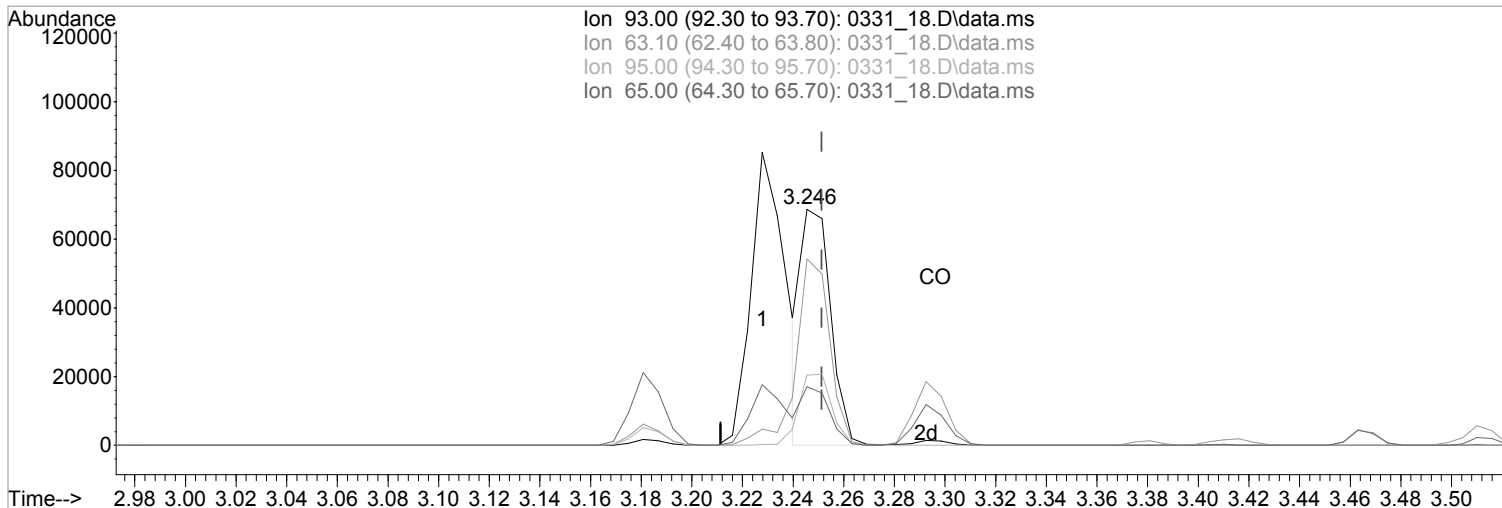
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 5741.0786522 ppb  
 Qvalue = 37  
 response 31550

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.01#
95.00	31.90	0.36#
65.00	23.10	19.07

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.245min (-0.006) 10136.1427628 ppb m

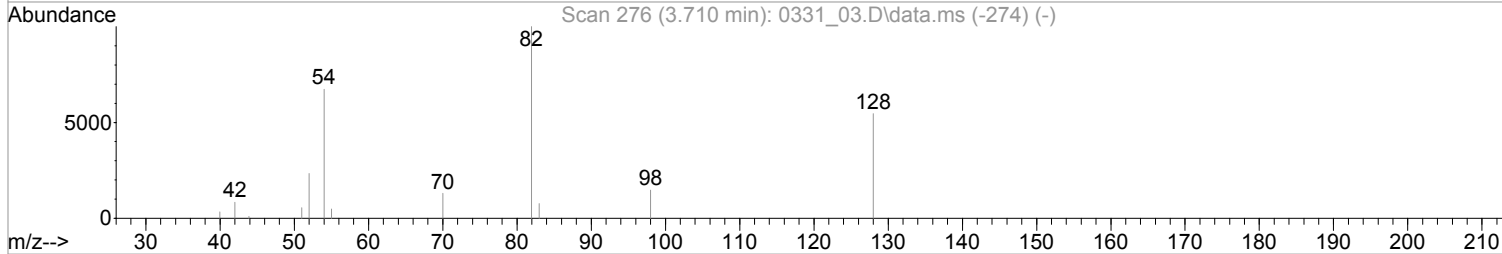
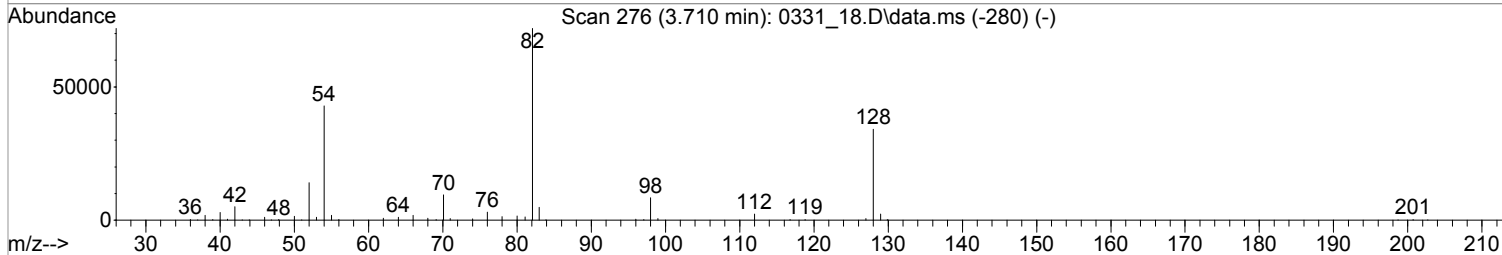
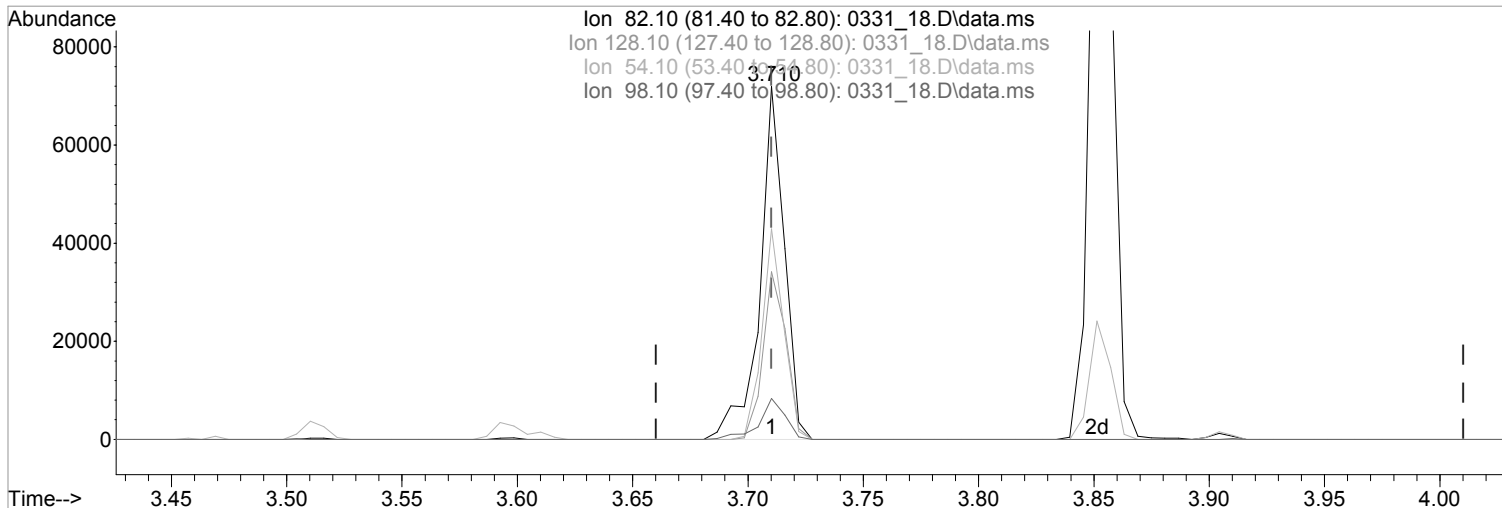
response 55703

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	78.90
95.00	31.90	29.72
65.00	23.10	24.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 10838.3777403 ppb  
 Qvalue = 99  
 response 53287

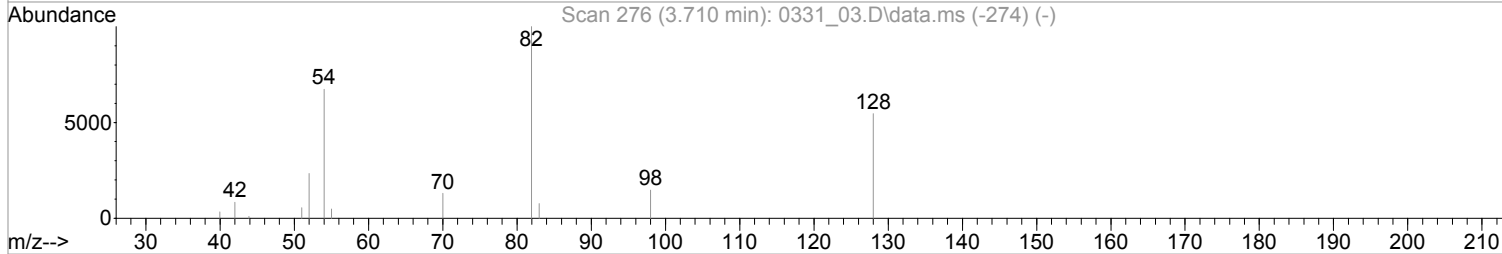
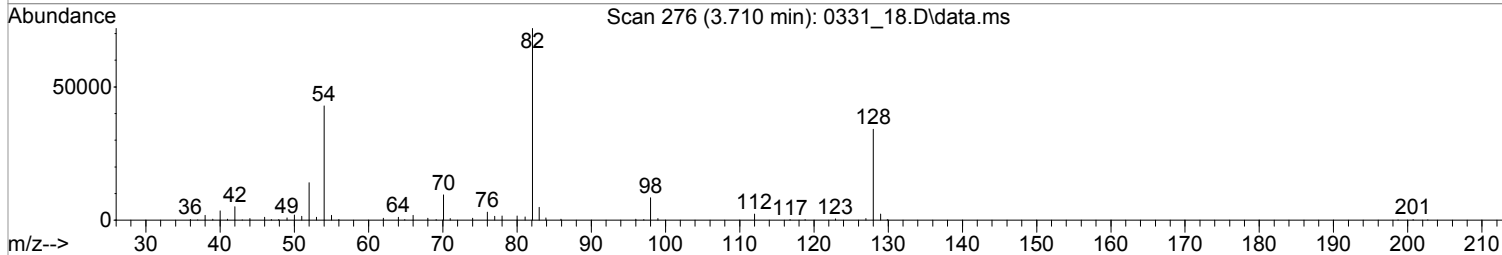
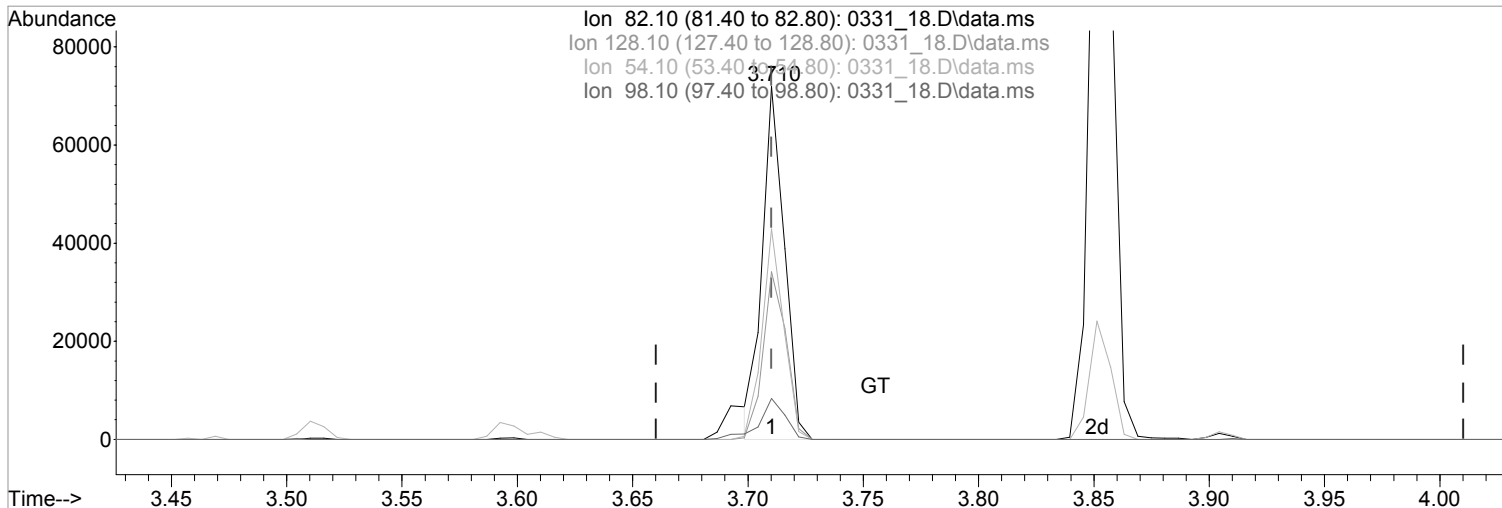
Ion	Exp%	Act%
82.10	100	100
128.10	46.80	47.47
54.10	60.00	59.60
98.10	11.40	11.62



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 9770.3438575 ppb m

response 48036

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	47.47
54.10	60.00	59.60
98.10	11.40	11.62

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0331_19	<b>Analysis date/time:</b>	03/31/22 23:06
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.079140	0.06852319		13.40		10	9.288	92.90	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_19.D  
 Acq On : 31 Mar 2022 11:06 pm  
 Operator : 3545  
 Sample : SSCV TCL 10K1 PPB 22C25375 exp 5/31/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 19 Sample Multiplier: 1

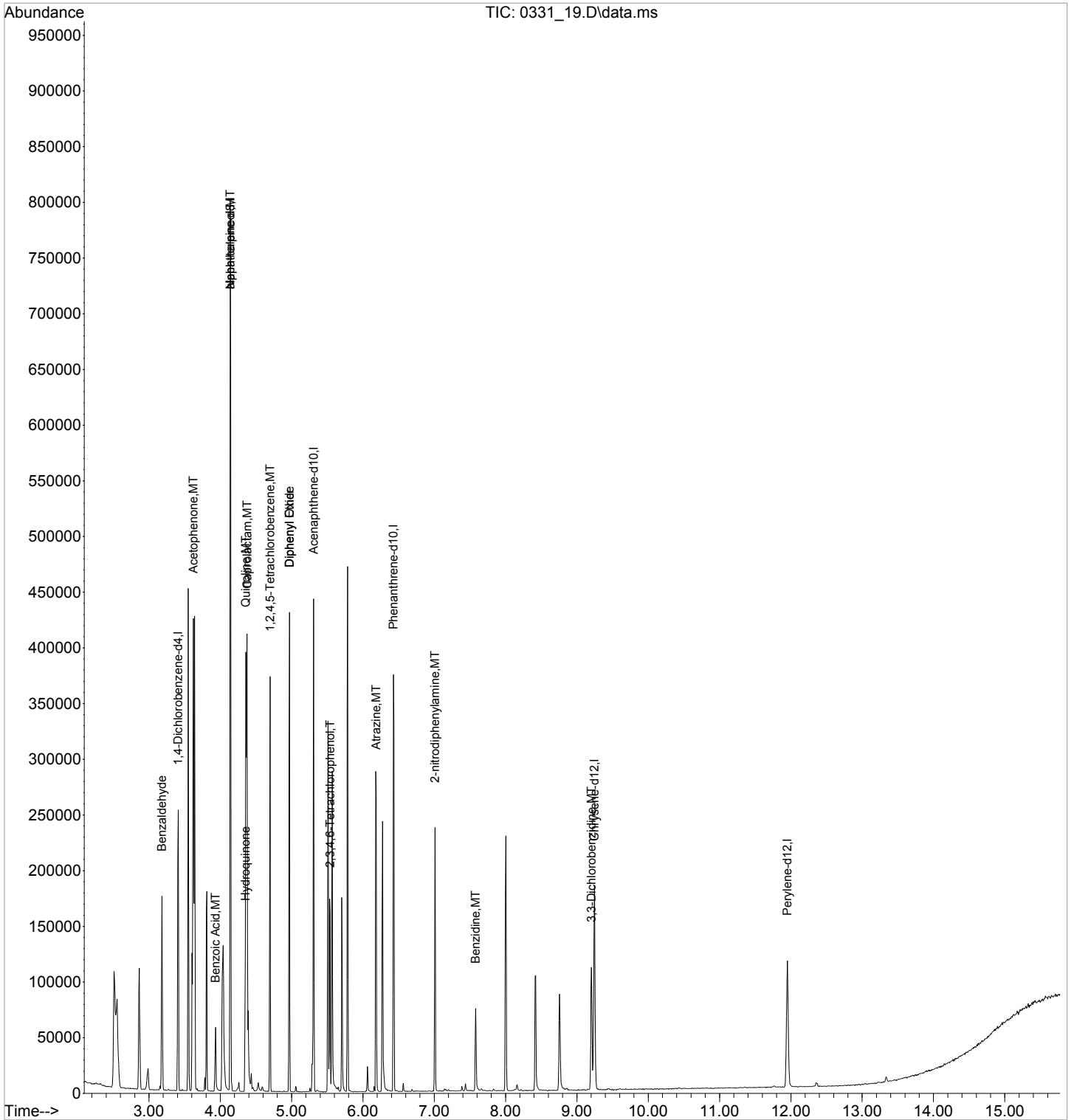
Quant Time: Apr 04 17:01:57 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.410	152	35583	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.140	136	162059	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	73711	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.428	188	118731	8000.0000000	ppb	0.00
84) Chrysene-d12	9.245	240	80072	8000.0000000	ppb	0.00
94) Perylene-d12	11.951	264	68064	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0d	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.181	105	31909	21445.8562524	ppb	98
22) Acetophenone	3.622	105	75382	9841.7477258	ppb	97
31) Benzoic Acid	3.934	105	13881	9287.9241188	ppb	100
33) alpha-terpineol	4.140	59	52858	10589.0958967	ppb	98
37) Hydroquinone	4.351	110	17084	4832.8177254	ppb	98
38) Quinoline	4.357	129	105645	11290.3729771	ppb	99
39) Caprolactam	4.375	113	15088	12246.5826042	ppb #	54
43) 1,2,4,5-Tetrachloroben...	4.698	216	44163	10135.7140612	ppb	98
44) Diphenyl Ether	4.969	170	66081	10119.7642454	ug/ml	99
45) Diphenyl Oxide	4.969	170	66081	10119.7642454	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.539	232	18260	9138.7507826	ppb	99
69) Atrazine	6.186	200	26464	9976.4469748	ppb	99
82) 2-nitrodiphenylamine	7.010	167	24172	9615.2258453	ppb	97
85) Benzidine	7.580	184	31867	14436.7066228	ppb	98
89) 3,3-Dichlorobenzidine	9.204	252	33453	9646.2468026	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_19.D  
Acq On : 31 Mar 2022 11:06 pm  
Operator : 3545  
Sample : SSCV TCL 10K1 PPB 22C25375 exp 5/31/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 04 17:01:57 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:54:30 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0504A_03	<b>Analysis date/time:</b>	05/04/22 16:30
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.610754	0.57712780		5.51	20	10	9.449	94.50	
2-METHYLNAPHTHALENE	0.627399	0.59011550	0.40	5.94	20	10	9.406	94.10	
3&4-METHYL PHENOL	1.301686	1.274660	0.60	2.08	20	10	9.792	97.90	
ACENAPHTHENE	1.148837	1.085256	0.90	5.53	20	10	9.447	94.50	
ACENAPHTHYLENE	1.695228	1.662818	0.90	1.91	20	10	9.809	98.10	
ANTHRACENE	1.006737	1.003164	0.70	0.3550	20	10	9.965	99.70	
BENZO(A)ANTHRACENE	1.116712	1.102853	0.80	1.24	20	10	9.876	98.80	
BENZO(A)PYRENE	0.950358	0.97710520	0.70	2.81	20	10	10.28	103	
BENZO(B)FLUORANTHENE	1.172442	1.102772	0.70	5.94	20	10	9.406	94.10	
BENZO(G,H,I)PERYLENE	1.026990	1.051378	0.50	2.37	20	10	10.24	102	
BENZO(K)FLUORANTHENE	1.198822	1.184975	0.70	1.16	20	10	9.884	98.80	
BIS(2-ETHYLHEXYL)PHTHALATE	1.014597	0.91476860	0.01	9.84	20	10	9.016	90.20	
CARBAZOLE	0.861194	0.93770330	0.01	8.88	20	10	10.89	109	
CHRYSENE	1.179486	1.110343	0.70	5.86	20	10	9.414	94.10	
DI-N-BUTYL PHTHALATE	1.289953	1.267799	0.01	1.72	20	10	9.828	98.30	
DI-N-OCTYL PHTHALATE	1.425428	1.442302	0.01	1.18	20	10	9.289	92.90	80 - 120
DIBENZ(A,H)ANTHRACENE	0.969471	1.005691	0.40	3.74	20	10	10.37	104	
DIBENZOFURAN	1.532971	1.499784	0.80	2.16	20	10	9.784	97.80	
FLUORANTHENE	1.037530	1.013832	0.60	2.28	20	10	9.772	97.70	
FLUORENE	1.268965	1.230038	0.90	3.07	20	10	9.693	96.90	
INDENO(1,2,3-CD)PYRENE	0.864970	0.90621660	0.50	4.77	20	10	10.48	105	
NAPHTHALENE	0.998617	0.92716110	0.70	7.16	20	10	9.284	92.80	
PENTACHLOROPHENOL	0.105171	0.09287065	0.05	11.70	20	10	9.370	93.70	80 - 120
PHENANTHRENE	1.060304	0.98730960	0.70	6.88	20	10	9.312	93.10	
PHENOL	1.575372	1.505261	0.80	4.45	20	10	9.555	95.60	
PYRENE	1.498492	1.238516	0.60	17.30	20	10	8.265	82.70	
2,4,6-TRIBROMOPHENOL	0.083814	0.08793892		4.92	20	10	10.49	105	70 - 130
2-FLUOROBIPHENYL	1.270391	1.240064		2.39	20	10	9.761	97.60	70 - 130
2-FLUOROPHENOL	1.252515	1.170585		6.54	20	10	9.346	93.50	70 - 130
NITROBENZENE-D5	0.304240	0.302704		0.5050	20	10	9.950	99.50	70 - 130
P-TERPHENYL-D14	1.107064	0.982555		11.20	20	10	8.875	88.80	70 - 130
PHENOL-D5	1.486088	1.430180		3.76	20	10	9.624	96.20	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_03.D  
 Acq On : 4 May 2022 4:30 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 04 18:23:26 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.343	152	32392	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.072	136	132248	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.237	164	67981	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.354	188	116308	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.113	240	97518	8000.0000000	ppb	0.00	
94) Perylene-d12	11.772	264	92912	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.672	112	47397	9345.8773996	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	46.73%		
7) Phenol-d5	3.113	99	57908	9623.7948589	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	48.12%		
24) Nitrobenzene-d5	3.643	82	50040m	9949.5294987	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	99.50%		
50) 2-Fluorobiphenyl	4.754	172	105376	9761.2794372	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	97.61%		
73) 2,4,6-Tribromophenol	5.813	330	12785	10492.1309564	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	52.46%		
87) p-Terphenyl-d14	7.742	244	119771	8875.3195217	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	88.75%		
Target Compounds							
2) Pyridine	2.143	79	48649	9055.5495040	ppb	97	
3) N-Nitrosodimethylamine	2.125	42	22614	7995.8242468	ppb	89	
5) Aniline	3.160	66	28216	10134.1139340	ppb	92	
6) bis(2-Chloroethyl)ether	3.184	93	52250m	9538.9220202	ppb		
8) Phenol	3.119	94	60948	9554.9516235	ppb	96	
10) 2-Chlorophenol	3.225	128	51781	9747.7789625	ppb	98	
11) n-Decane	3.225	41	28311	8290.5279123	ppb	# 97	
12) 1,3-Dichlorobenzene	3.313	146	56275	9243.7080528	ppb	98	
13) 1,4-Dichlorobenzene	3.349	146	57353	9411.7476548	ppb	97	
14) Benzyl Alcohol	3.402	79	37804	9715.4926066	ppb	99	
15) 1,2-Dichlorobenzene	3.437	146	54959	9353.8472710	ppb	97	
16) bis(2-Chloroisopropyl)...	3.472	121	18310	9024.3825732	ppb	97	
17) 2,2-oxybis(1-chloropro...	3.472	121	18310	9024.3825732	ppb	97	
18) 2-Methylphenol	3.449	108	47208	9880.6031792	ppb	96	
19) Hexachloroethane	3.625	117	23919	9412.9757870	ppb	94	
20) N-Nitrosodi-n-propylamine	3.543	70	33163	9758.9635115	ppb	98	
21) 3&4-Methyl phenol	3.531	107	51611	9792.3775173	ppb	99	
25) Nitrobenzene	3.654	77	51161	10064.5958459	ppb	98	
26) Isophorone	3.784	82	97045	9753.2793066	ppb	100	
27) 2-Nitrophenol	3.837	139	27080	11259.8716307	ppb	# 82	
28) 2,4-Dimethylphenol	3.843	107	46736	9443.7093302	ppb	97	
29) bis(2-Chloroethoxy)methane	3.902	93	61290	9167.8426102	ppb	99	
30) 2,4-Dichlorophenol	3.978	162	39798	10178.8598111	ppb	96	
32) 1,2,4-Trichlorobenzene	4.031	180	42727	9138.0950962	ppb	95	
34) Naphthalene	4.084	128	153269	9284.4468085	ppb	99	
35) 4-Chloroaniline	4.107	65	17335	9992.4274955	ppb	97	
36) Hexachloro-1,3-butadiene	4.149	225	24131	9568.0874055	ppb	99	
40) 4-Chloro-3-methylphenol	4.396	107	41313	10099.4510842	ppb	97	
41) 2-Methylnaphthalene	4.519	142	97552	9405.7418590	ppb	99	
42) 1-Methylnaphthalene	4.584	142	95405	9449.4391991	ppb	99	
47) Hexachlorocyclopentadiene	4.619	237	24971	11261.1438546	ppb	98	
48) 2,4,6-Trichlorophenol	4.696	196	26002	10240.9506775	ppb	93	

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_03.D  
 Acq On : 4 May 2022 4:30 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

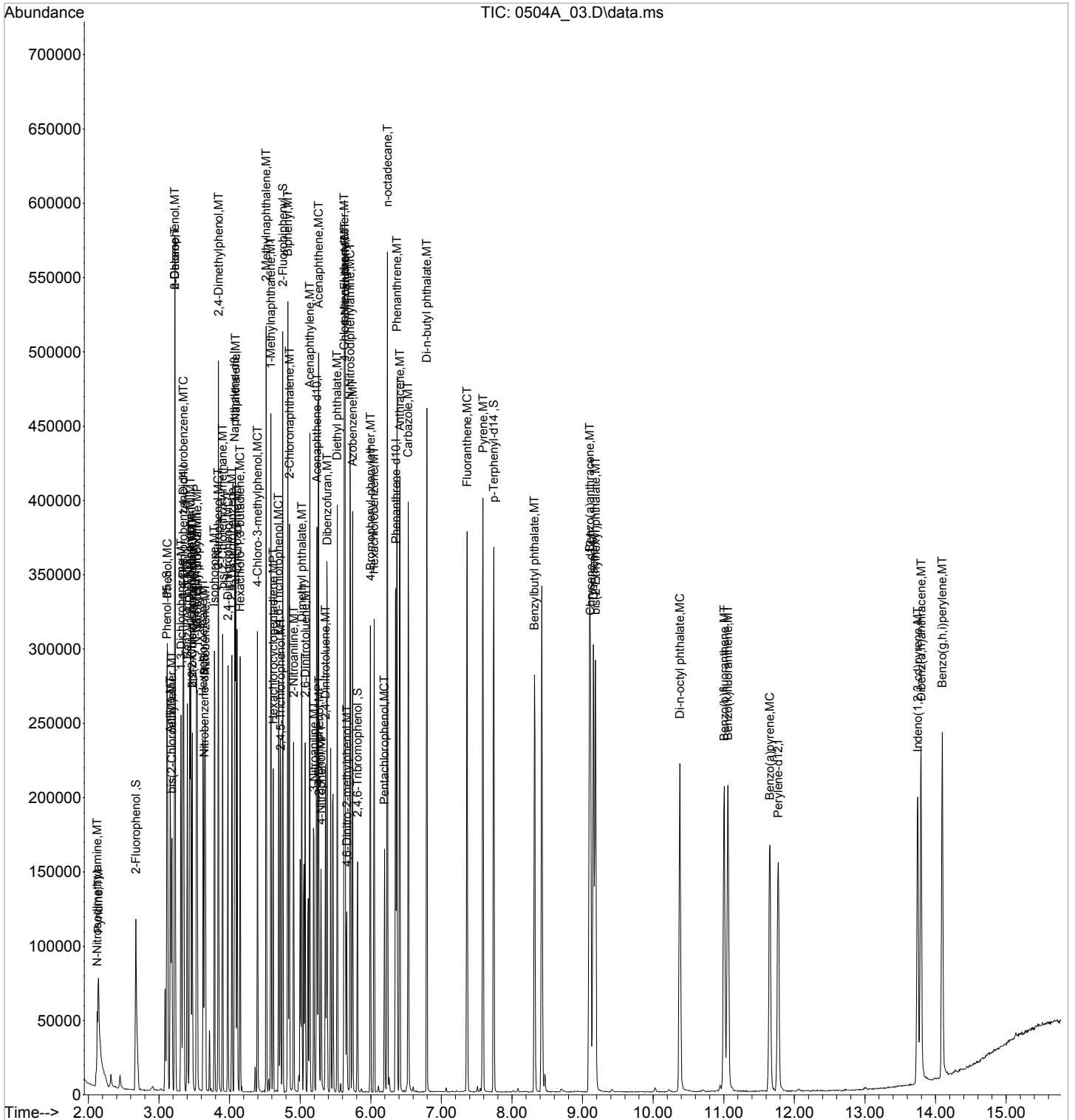
Quant Time: May 04 18:23:26 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.725	196	29123	11226.2677802	ppb		96
51) Biphenyl	4.825	154	116251	9556.8095948	ppb		99
52) 2-Chloronaphthalene	4.848	162	91424	9738.4411126	ppb		99
53) 2-Nitroaniline	4.907	138	31483	11305.5703184	ppb		100
54) Acenaphthylene	5.137	152	141300	9808.8159475	ppb		99
55) Dimethyl phthalate	5.025	163	104368	9922.0936072	ppb		98
56) 2,6-Dinitrotoluene	5.072	165	24506	10672.3119482	ppb		83
57) 3-Nitroaniline	5.196	138	26344	12013.9875811	ppb	#	80
58) Acenaphthene	5.260	153	92221	9446.5621839	ppb		97
59) 2,4-Dinitrophenol	5.266	184	9697	13218.2565472	ppb	#	1
60) Dibenzofuran	5.384	168	127446	9783.5116554	ppb		100
61) 2,4-Dinitrotoluene	5.360	165	31461	10943.8246692	ppb		98
63) 4-Nitrophenol	5.296	139	20914	13174.6185173	ppb		95
64) Fluorene	5.631	166	104524	9693.2335861	ppb		98
65) 4-Chlorophenyl-phenyle...	5.625	204	47307	9632.5726094	ppb		99
66) Diethyl phthalate	5.525	149	107114	9787.8515803	ppb		99
67) 4-Nitroaniline	5.637	138	24432	18401.3912637	ppb		97
68) Azobenzene	5.743	77	107599	9783.8034702	ppb		98
71) 4,6-Dinitro-2-methylph...	5.660	198	14422	12031.8391537	ppb		99
72) N-Nitrosodiphenylamine	5.707	169	86593	9572.4286259	ppb		99
74) 4-Bromophenyl-phenylether	5.995	248	26508	9547.0031778	ppb		89
75) Hexachlorobenzene	6.048	284	29676	9149.6094555	ppb		98
76) n-octadecane	6.237	55	18294	8440.6321635	ppb		99
77) Pentachlorophenol	6.195	266	13502	9369.5622619	ppb		96
78) Phenanthrene	6.372	178	143540	9311.5680670	ppb		99
79) Anthracene	6.413	178	145845	9964.5125864	ppb		99
80) Carbazole	6.531	167	136328	10888.4162730	ppb		99
81) Di-n-butyl phthalate	6.795	149	184319	9828.2596175	ppb		100
83) Fluoranthene	7.366	202	147396	9771.5944758	ppb		99
86) Pyrene	7.590	202	150972	8265.0839752	ppb		99
88) Benzylbutyl phthalate	8.319	149	75992	9065.0352697	ppb		99
90) Benzo(a)anthracene	9.101	228	134435	9875.8906876	ppb		99
91) Chrysene	9.154	228	135348	9413.7829701	ppb		98
92) bis(2-Ethylhexyl)phtha...	9.184	149	111508	9016.0758001	ppb		99
93) Di-n-octyl phthalate	10.378	149	175813	9288.9695759	ppb		100
95) Benzo(b)fluoranthene	11.007	252	128076m	9405.7752897	ppb		
96) Benzo(k)fluoranthene	11.060	252	137623	9884.4972457	ppb		98
97) Benzo(a)pyrene	11.654	252	113481	10281.4413553	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.748	276	105248	10476.8546825	ppb		95
99) Dibenz(a,h)anthracene	13.795	278	116801	10373.6146982	ppb		99
100) Benzo(g,h,i)perylene	14.095	276	122107	10237.4681547	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050422A\  
Data File : 0504A\_03.D  
Acq On : 4 May 2022 4:30 pm  
Operator : 3545  
Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 04 18:23:26 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M

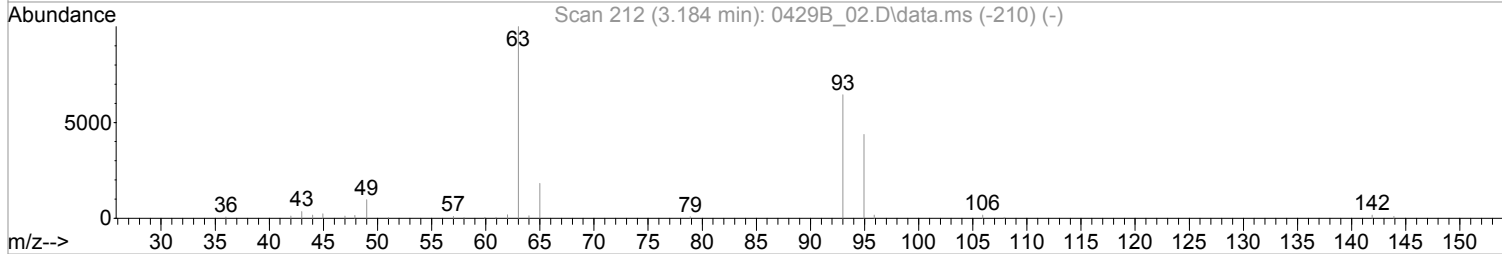
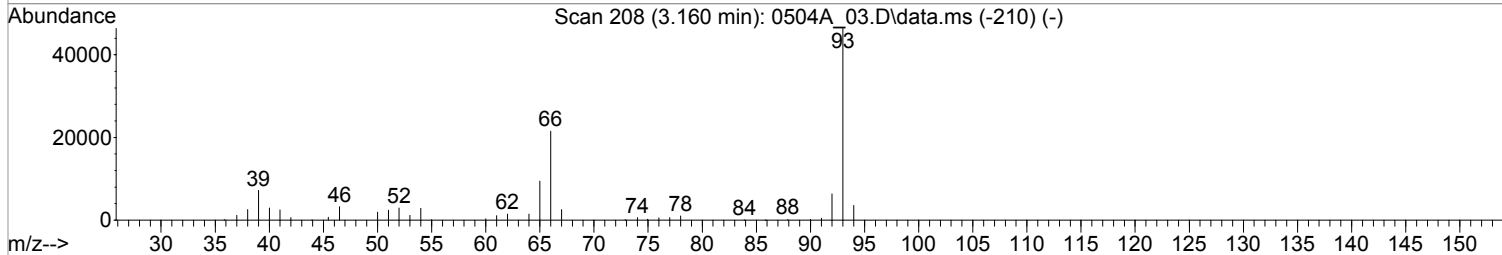
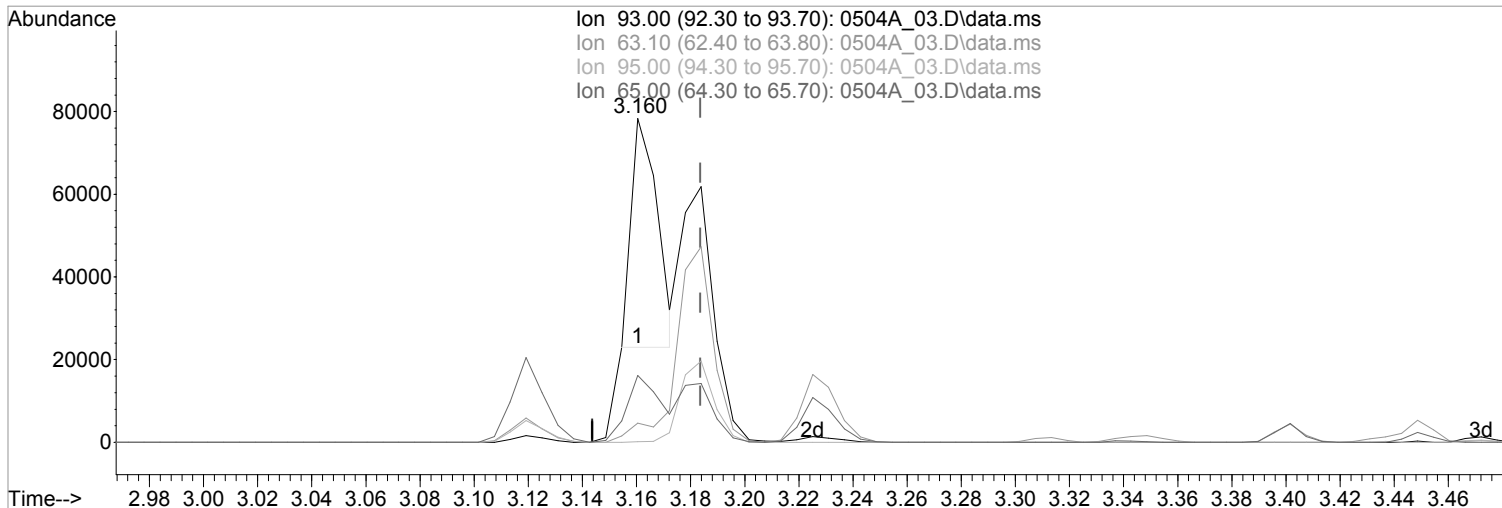




Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_03.D  
 Acq On : 4 May 2022 4:30 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 04 17:14:49 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0504A\_03.D\data.ms

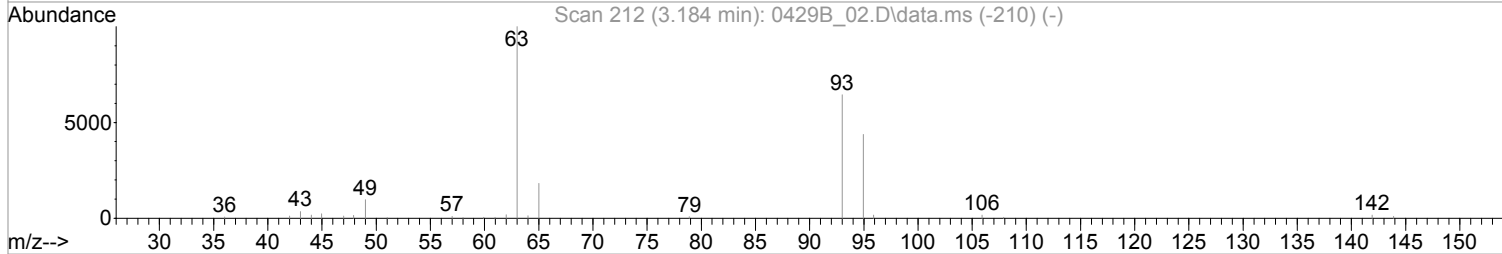
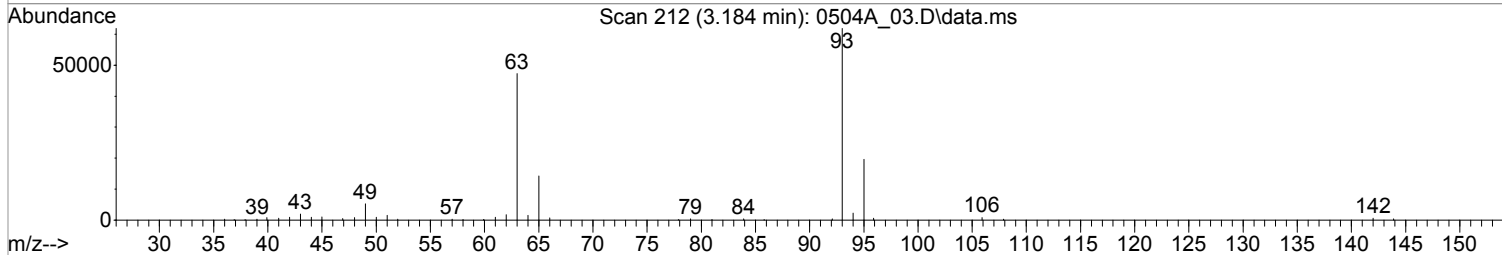
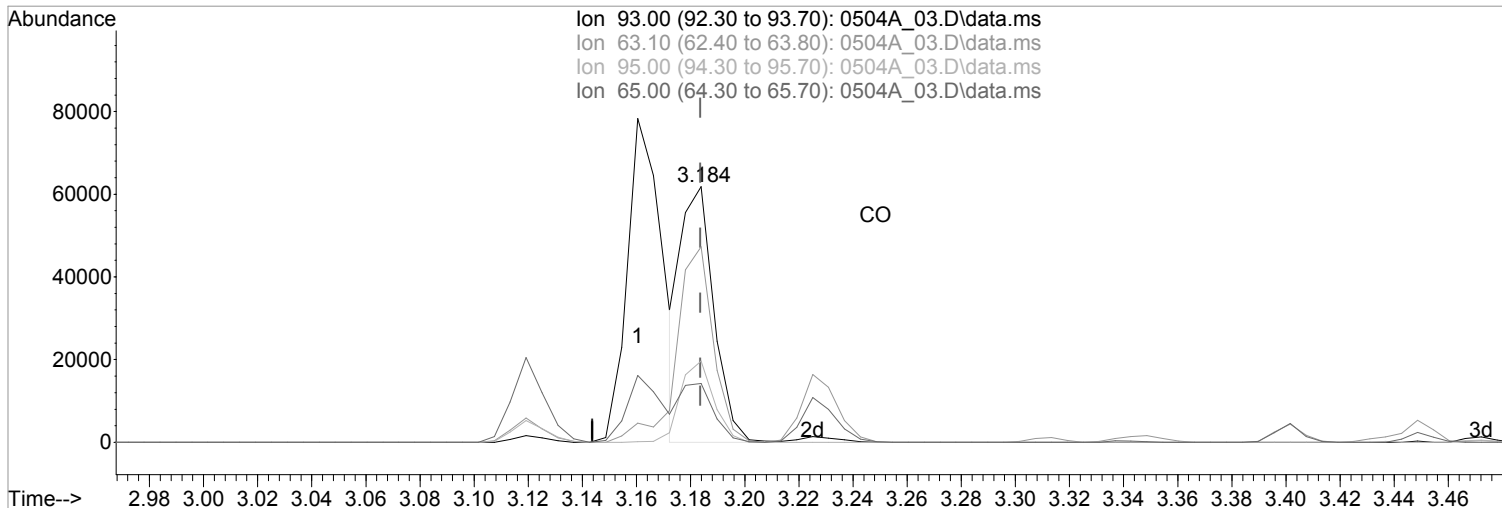
(6) bis(2-Chloroethyl)ether (MT)  
 3.160min (-0.023) 6832.2414868 ppb  
 Qvalue = 37  
 response 37424

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.51#
95.00	31.90	0.32#
65.00	23.10	19.85

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422A\  
Data File : 0504A\_03.D  
Acq On : 4 May 2022 4:30 pm  
Operator : 3545  
Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 04 17:14:49 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



TIC: 0504A\_03.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
3.184min (+0.000) 9538.9220202 ppb m

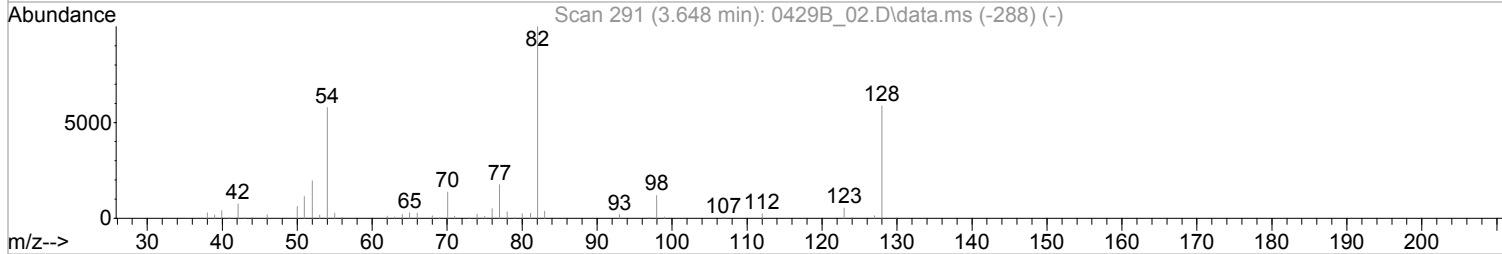
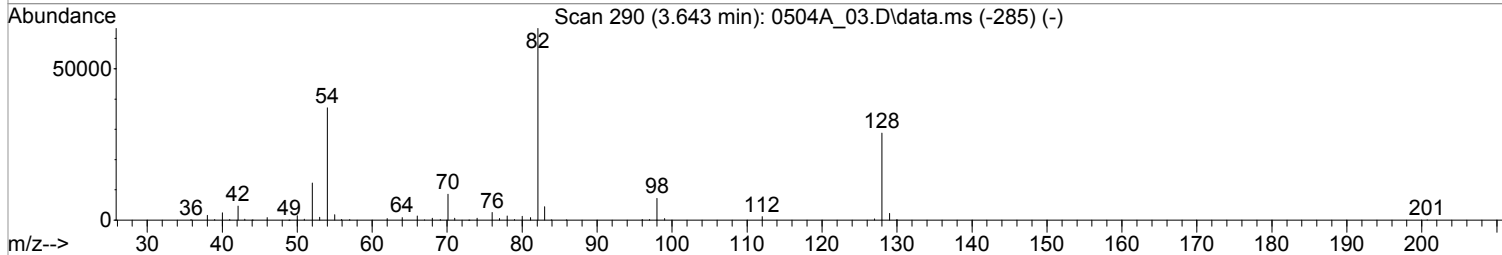
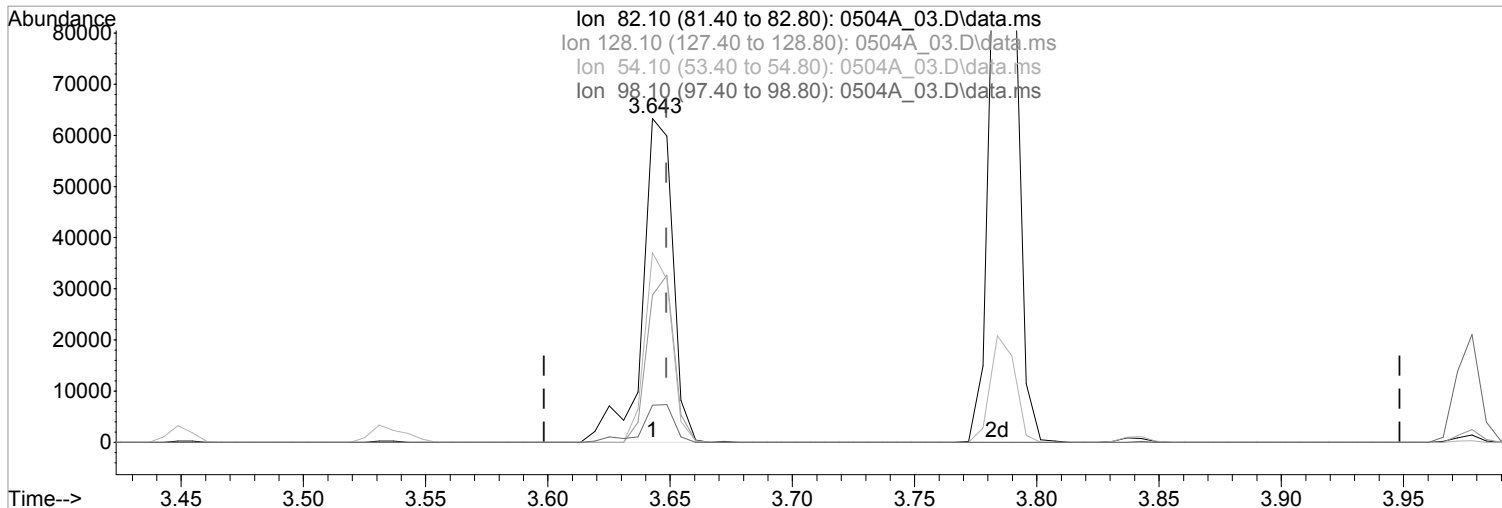
response 52250

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.45
95.00	31.90	31.76
65.00	23.10	23.02

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_03.D  
 Acq On : 4 May 2022 4:30 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 04 17:14:49 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0504A\_03.D\data.ms

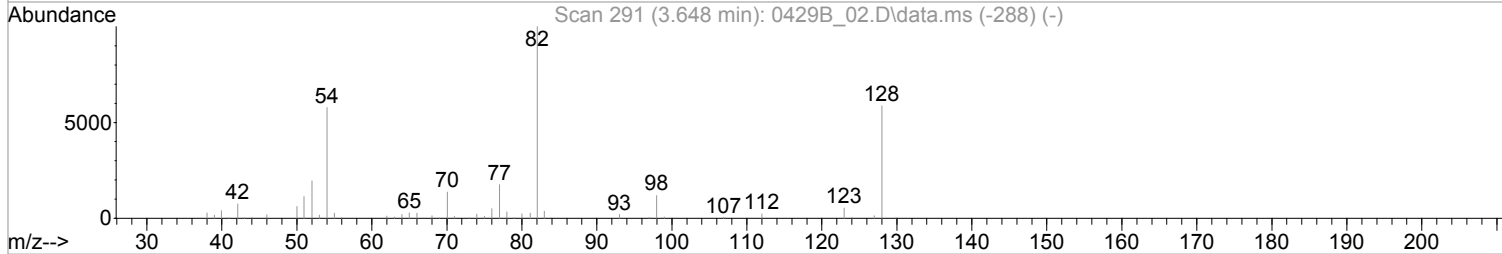
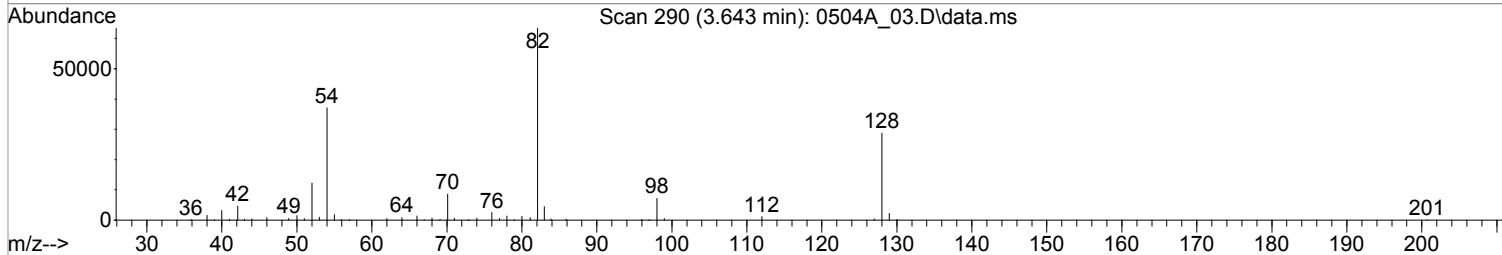
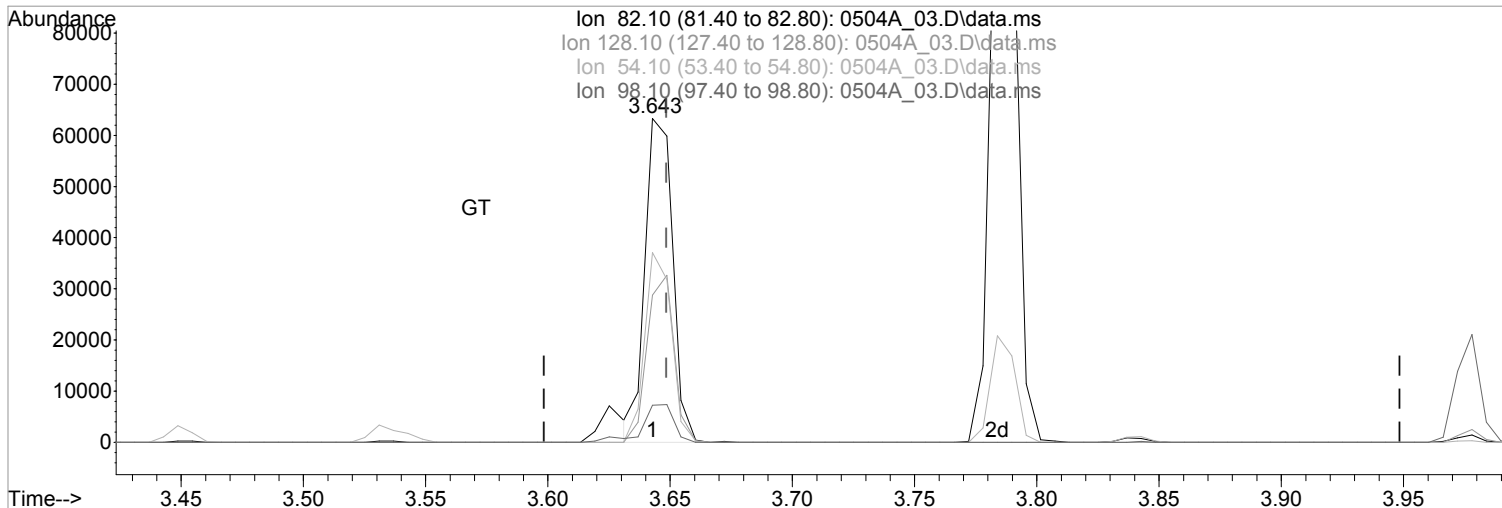
(24) Nitrobenzene-d5 (S)  
 3.643min (-0.006) 10900.9383447 ppb  
 Qvalue = 98  
 response 54825

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.42
54.10	60.00	58.62
98.10	11.40	11.44

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_03.D  
 Acq On : 4 May 2022 4:30 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 04 17:14:49 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0504A\_03.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.643min (-0.006) 9949.5294987 ppb m

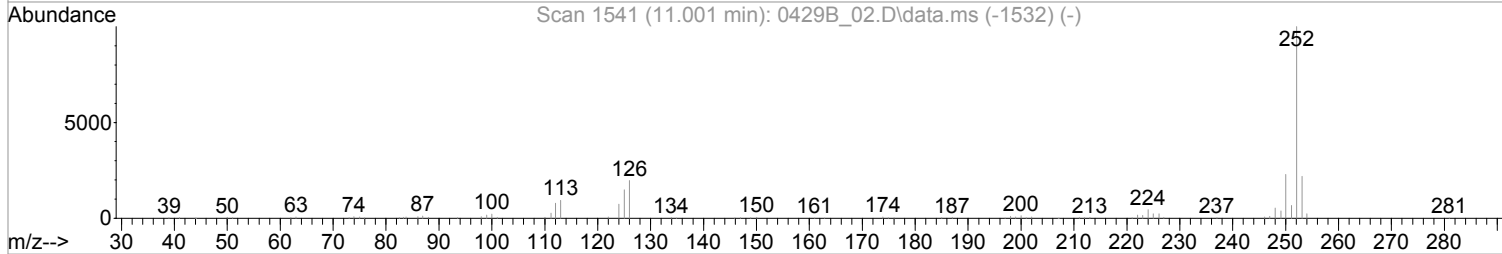
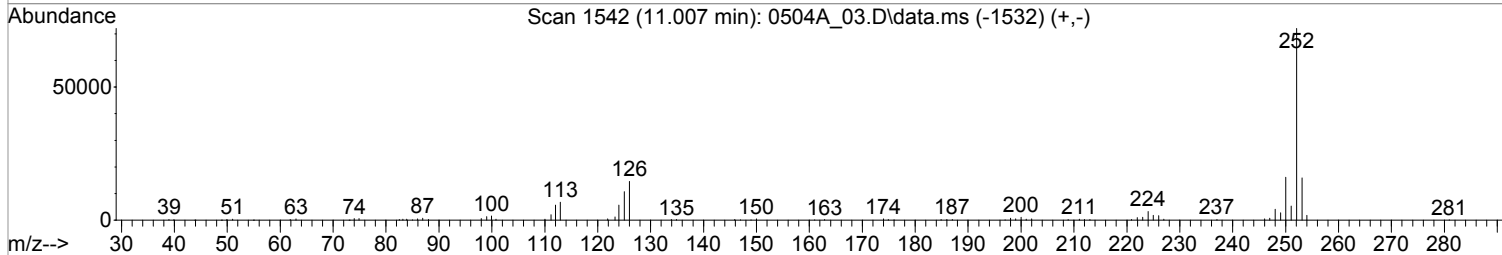
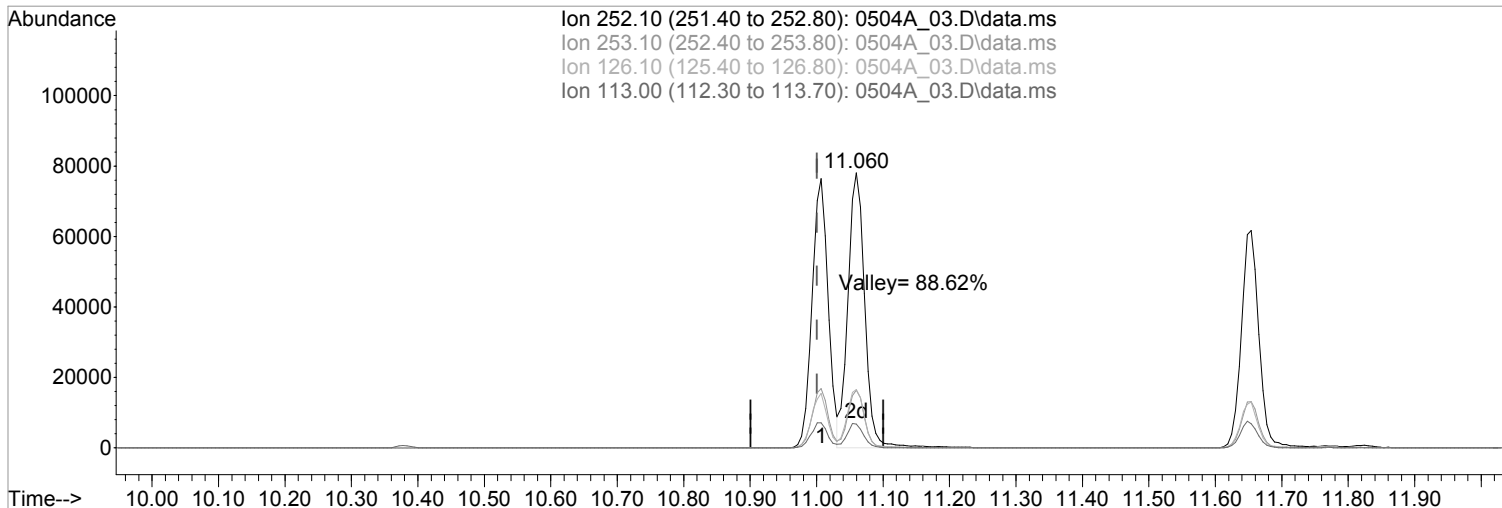
response 50040

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.42
54.10	60.00	58.62
98.10	11.40	11.44

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_03.D  
 Acq On : 4 May 2022 4:30 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 04 17:14:49 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0504A\_03.D\data.ms

(95) Benzo(b)fluoranthene (MT)  
 11.007min (+0.006) 9405.7752897 ppb m

response 128076

Ion	Exp%	Act%
252.10	100	100
253.10	21.80	22.02
126.10	20.00	20.25
113.00	9.70	9.32

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0504A_04	<b>Analysis date/time:</b>	05/04/22 16:52
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.079140	0.07610996		3.83	20	10	10.09	101	80 - 120

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_04.D  
 Acq On : 4 May 2022 4:52 pm  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 9/10/22  
 Misc : TCL CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 4 Sample Multiplier: 1

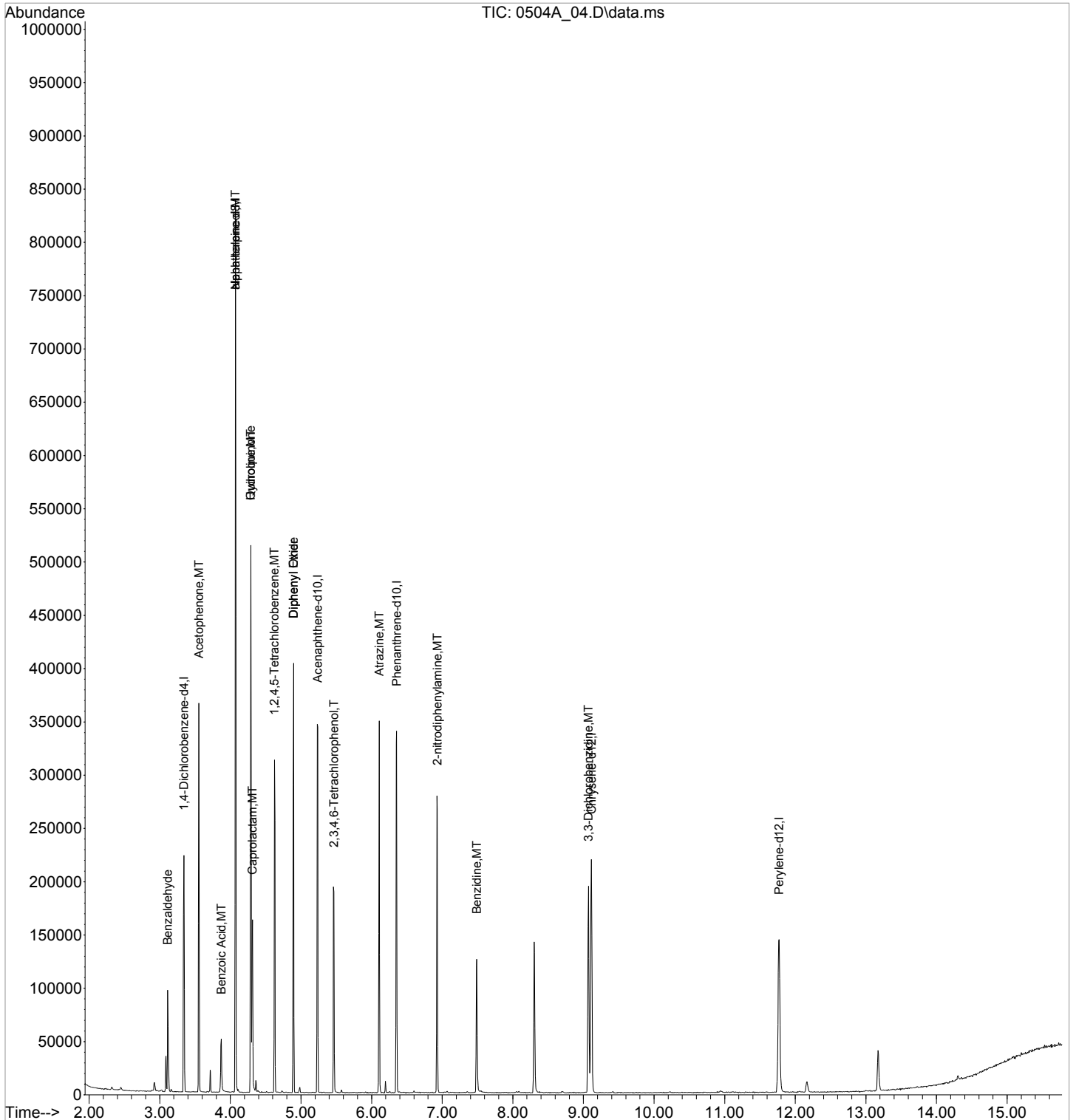
Quant Time: May 04 18:24:22 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.343	152	31313	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.072	136	145726	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.237	164	64926	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.354	188	112213	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.113	240	94058	8000.0000000	ppb	0.00	
94) Perylene-d12	11.771	264	89381	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
Target Compounds							
							Qvalue
9) Benzaldehyde	3.113	105	16983	12970.6723521	ppb		97
22) Acetophenone	3.554	105	72748	10793.0332137	ppb		97
31) Benzoic Acid	3.872	105	13864	10091.2710852	ppb		99
33) alpha-terpineol	4.072	59	50340	11214.9534807	ppb		97
37) Hydroquinone	4.290	110	41654	13103.9937128	ppb		98
38) Quinoline	4.290	129	98367	11690.8174354	ppb		100
39) Caprolactam	4.313	113	14511	13098.3530891	ppb		98
43) 1,2,4,5-Tetrachloroben...	4.625	216	42845	10935.3337003	ppb		99
44) Diphenyl Ether	4.895	170	63999	10899.4124483	ug/ml		97
45) Diphenyl Oxide	4.895	170	63999	10899.4124483	ug/ml		97
62) 2,3,4,6-Tetrachlorophenol	5.466	232	20794	11815.1096435	ppb		98
69) Atrazine	6.107	200	27097	11597.2569018	ppb		96
82) 2-nitrodiphenylamine	6.931	167	34912	13415.3499350	ppb		93
85) Benzidine	7.489	184	54961	18758.1247306	ppb		98
89) 3,3-Dichlorobenzidine	9.072	252	52049	12776.7567065	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050422A\  
Data File : 0504A\_04.D  
Acq On : 4 May 2022 4:52 pm  
Operator : 3545  
Sample : ICV TCL 10K1 PPB 22D19628 exp 9/10/22  
Misc : TCL CAL ISTD 22D16229 exp. 10/16/22  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 04 18:24:22 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M





<b>SDG:</b>	L1486885	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS4	<b>Calibration Start Date:</b>	02/09/22 10:43
		<b>Calibration End Date:</b>	02/09/22 15:35

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
TUNE	BNAMS40209220209_05572116	0209_05	02/09/22 10:23		
CAL	500	0209_06	02/09/22 10:43		
CAL	1000	0209_07	02/09/22 11:04		
CAL	4000	0209_08	02/09/22 11:25		
CAL	10000	0209_09	02/09/22 11:46		
CAL	20000	0209_10	02/09/22 12:07		
CAL	30000	0209_11	02/09/22 12:27		
CAL	40000	0209_12	02/09/22 12:48		
CAL	50000	0209_13	02/09/22 13:09		
CAL	1K1	0209_14	02/09/22 13:30		
CAL	4K1	0209_15	02/09/22 13:51		
CAL	10K1	0209_16	02/09/22 14:11		
CAL	20K1	0209_17	02/09/22 14:32		
CAL	30K1	0209_18	02/09/22 14:53		
CAL	40K1	0209_19	02/09/22 15:14		
CAL	50K1	0209_20	02/09/22 15:35		
SSCV	BNAMS40209220209_21572116	0209_21	02/09/22 15:56		
SSCV	BNAMS40209220209_22572116	0209_22	02/09/22 16:16		
TUNE	BNAMS4050322A0503A_01T-1572116	0503A_01T-1	05/03/22 12:48		
ICV	BNAMS4050322A0503A_02572116	0503A_02	05/03/22 13:09		
ICV	BNAMS4050322A0503A_03572116	0503A_03	05/03/22 13:30		
LCS	R3787713-1	0503A_04	05/03/22 15:31	1	WG1857248
BLANK	R3787713-2	0503A_05	05/03/22 15:52	1	WG1857248
L1486453-08	L1486453-08	0503A_09	05/03/22 17:17	20	WG1857248
TUNE	BNAMS40504220504_02T-1572116	0504_02T-1	05/04/22 04:39		
ICV	BNAMS40504220504_03572116	0504_03	05/04/22 04:59		
ICV	BNAMS40504220504_04572116	0504_04	05/04/22 05:20		
L1487377-02	L1487377-02	0504_23	05/04/22 12:19	1	WG1857248
L1487377-01	L1487377-01	0504_24	05/04/22 12:40	2	WG1857248
L1487377-03	L1487377-03	0504_25	05/04/22 13:01	2	WG1857248
BNSF-BG13-042122-0-10	L1486885-01	0504_26	05/04/22 13:22	2	WG1857248
MS	R3788258-1	0504_27	05/04/22 13:43	2	WG1857248
MSD	R3788258-2	0504_28	05/04/22 14:03	2	WG1857248

**SDG:** L1486885  
**Instrument ID:** BNAMS11

**Analytical Method:** 8270E  
**Calibration Start Date:** 01/14/22 13:34  
**Calibration End Date:** 01/14/22 18:18

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
TUNE	BNAMS110114220114_05577302	0114_05	01/14/22 13:14		
CAL	500	0114_06	01/14/22 13:34		
CAL	1000	0114_07	01/14/22 13:54		
CAL	4000	0114_08	01/14/22 14:15		
CAL	10000	0114_09	01/14/22 14:35		
CAL	20000	0114_10	01/14/22 14:55		
CAL	30000	0114_11	01/14/22 15:15		
CAL	40000	0114_12	01/14/22 15:36		
CAL	50000	0114_13	01/14/22 15:56		
CAL	1K1	0114_14	01/14/22 16:16		
CAL	4K1	0114_15	01/14/22 16:37		
CAL	10K1	0114_16	01/14/22 16:57		
CAL	20K1	0114_17	01/14/22 17:17		
CAL	30K1	0114_18	01/14/22 17:37		
CAL	40K1	0114_19	01/14/22 17:58		
CAL	50K1	0114_20	01/14/22 18:18		
SSCV	BNAMS110114220114_21577302	0114_21	01/14/22 18:38		
SSCV	BNAMS110114220114_26577302	0114_26	01/19/22 10:49		
SSCV	BNAMS110114220114_27577302	0114_27	01/19/22 11:10		
TUNE	BNAMS110504220504_02T-1577302	0504_02T-1	05/04/22 04:32		
ICV	BNAMS110504220504_03577302	0504_03	05/04/22 04:53		
ICV	BNAMS110504220504_04577302	0504_04	05/04/22 05:13		
LCS	R3787994-1	0504_05	05/04/22 06:03	1	WG1857484
BLANK	R3787994-2	0504_06	05/04/22 06:23	1	WG1857484
BNSF-SG23-042122-0-6	L1486885-02	0504_29	05/04/22 14:13	1	WG1857484
OS	L1485528-168	0504_30	05/04/22 14:33		
MS	R3787994-3	0504_31	05/04/22 14:54	10	WG1857484
MSD	R3787994-4	0504_32	05/04/22 15:14	10	WG1857484

<b>SDG:</b>	L1486885	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS24	<b>Calibration Start Date:</b>	03/31/22 17:24
		<b>Calibration End Date:</b>	03/31/22 22:23

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
TUNE	BNAMS240331220331_02576947	0331_02	03/31/22 17:02		
CAL	500	0331_03	03/31/22 17:24		
CAL	1000	0331_04	03/31/22 17:45		
CAL	4000	0331_05	03/31/22 18:07		
CAL	10000	0331_06	03/31/22 18:28		
CAL	20000	0331_07	03/31/22 18:49		
CAL	30000	0331_08	03/31/22 19:11		
CAL	40000	0331_09	03/31/22 19:32		
CAL	50000	0331_10	03/31/22 19:53		
CAL	1K1	0331_11	03/31/22 20:15		
CAL	4K1	0331_12	03/31/22 20:36		
CAL	10K1	0331_13	03/31/22 20:58		
CAL	20K1	0331_14	03/31/22 21:19		
CAL	30K1	0331_15	03/31/22 21:40		
CAL	40K1	0331_16	03/31/22 22:02		
CAL	50K1	0331_17	03/31/22 22:23		
SSCV	BNAMS240331220331_18576947	0331_18	03/31/22 22:44		
SSCV	BNAMS240331220331_19576947	0331_19	03/31/22 23:06		
TUNE	BNAMS24050422A0504A_02T-1576947	0504A_02T-1	05/04/22 16:09		
ICV	BNAMS24050422A0504A_03576947	0504A_03	05/04/22 16:30		
ICV	BNAMS24050422A0504A_04576947	0504A_04	05/04/22 16:52		
BLANK	R3788334-1	0504A_07	05/04/22 18:14	1	WG1857248

## DETECTION LIMIT SUMMARY

Lab Sample IDs: L1486885-01,02  
 Matrix: Solid

Analytical Method: 8270E  
 Prep Method: 3546

Analyte	CAS	MDL	RDL
		mg/kg	mg/kg
Benzo(b)fluoranthene	205-99-2	0.006210	0.0333
Benzo(k)fluoranthene	207-08-9	0.005920	0.0333
Benzo(g,h,i)perylene	191-24-2	0.006090	0.0333
Benzo(a)pyrene	50-32-8	0.006190	0.0333
Acenaphthene	83-32-9	0.005390	0.0333
Carbazole	86-74-8	0.0103	0.3330
Chrysene	218-01-9	0.006620	0.0333
Dibenz(a,h)anthracene	53-70-3	0.009230	0.0333
Dibenzofuran	132-64-9	0.0109	0.3330
Acenaphthylene	208-96-8	0.004690	0.0333
Fluoranthene	206-44-0	0.006010	0.0333
Fluorene	86-73-7	0.005420	0.0333
Anthracene	120-12-7	0.005930	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	0.009410	0.0333
1-Methylnaphthalene	90-12-0	0.004260	0.0333
2-Methylnaphthalene	91-57-6	0.004320	0.0333
Naphthalene	91-20-3	0.008360	0.0333
Phenanthrene	85-01-8	0.006610	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	0.0422	0.3330
Di-n-butyl phthalate	84-74-2	0.0114	0.3330
Di-n-octyl phthalate	117-84-0	0.0225	0.3330
Pyrene	129-00-0	0.006480	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	0.0104	0.3330
Pentachlorophenol	87-86-5	0.008960	0.3330
Phenol	108-95-2	0.0134	0.3330
Benzoic Acid	65-85-0	0.1180	1.67
Benzo(a)anthracene	56-55-3	0.005870	0.0333

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3787713-2  
**Client Sample ID:** BLANK  
**Lab File ID:** 0503A\_05  
**Instrument ID:** BNAMS4  
**Analytical Batch:** WG1857248  
**Dilution Factor:** 1  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** \_\_\_\_\_

**SDG:** L1486885  
**Collected Date/Time:** \_\_\_\_\_  
**Received Date/Time:** \_\_\_\_\_  
**Preparation Date/Time:** 05/02/22 17:00  
**Analysis Date/Time:** 05/03/22 15:52  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15 g  
**Final Wt/Vol:** 0.5 mL

Analyte	CAS	RT	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Acenaphthene	83-32-9	0	U		0.00539	0.0333
Acenaphthylene	208-96-8	0	U		0.00469	0.0333
Anthracene	120-12-7	0	U		0.00593	0.0333
Benzoic Acid	65-85-0	0	U		0.118	1.67
Benzo(a)anthracene	56-55-3	0	U		0.00587	0.0333
Benzo(b)fluoranthene	205-99-2	0	U		0.00621	0.0333
Benzo(k)fluoranthene	207-08-9	0	U		0.00592	0.0333
Benzo(g,h,i)perylene	191-24-2	0	U		0.00609	0.0333
Benzo(a)pyrene	50-32-8	11.75	U		0.00619	0.0333
Carbazole	86-74-8	0	U		0.0103	0.333
Chrysene	218-01-9	0	U		0.00662	0.0333
Dibenz(a,h)anthracene	53-70-3	0	U		0.00923	0.0333
Dibenzofuran	132-64-9	0	U		0.0109	0.333
Fluoranthene	206-44-0	0	U		0.00601	0.0333
Fluorene	86-73-7	0	U		0.00542	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	0	U		0.00941	0.0333
1-Methylnaphthalene	90-12-0	0	U		0.00426	0.0333
2-Methylnaphthalene	91-57-6	0	U		0.00432	0.0333
Naphthalene	91-20-3	4.03	U		0.00836	0.0333
Phenanthrene	85-01-8	0	U		0.00661	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	0	U		0.0422	0.333
Di-n-butyl phthalate	84-74-2	0	U		0.0114	0.333
Di-n-octyl phthalate	117-84-0	0	U		0.0225	0.333
Pyrene	129-00-0	0	U		0.00648	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	0	U		0.0104	0.333
Pentachlorophenol	87-86-5	0	U		0.00896	0.333
Phenol	108-95-2	0	U		0.0134	0.333

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 05.D Vial: 43  
 Acq On : 3 May 2022 3:52 pm Operator: 3545  
 Sample : BLANK 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:17 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	84368	8000.00	ppb	-0.05
23) Naphthalene-d8	4.02	136	319717	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	158867	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	295421	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	255513	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	266216	8000.00	ppb	-0.12
System Monitoring Compounds						
4) 2-Fluorophenol	2.63	112	199030	14517.5506291	ppb	-0.02
Spiked Amount	20000.000	Range 20 - 120	Recovery =	72.59%		
7) Phenol-d5	3.06	99	245624	14927.4384263	ppb	-0.03
Spiked Amount	20000.000	Range 20 - 120	Recovery =	74.64%		
24) Nitrobenzene-d5	3.59	82	98707	7276.2370648	ppb	-0.05
Spiked Amount	10000.000	Range 18 - 125	Recovery =	72.76%		
50) 2-Fluorobiphenyl	4.70	172	183524	6847.9788597	ppb	-0.04
Spiked Amount	10000.000	Range 28 - 120	Recovery =	68.48%		
73) 2,4,6-Tribromophenol	5.76	330	50588	15127.0947727	ppb	-0.05
Spiked Amount	20000.000	Range 17 - 137	Recovery =	75.64%		
87) p-Terphenyl-d14	7.69	244	253824	7268.9829747	ppb	-0.07
Spiked Amount	10000.000	Range 13 - 131	Recovery =	72.69%		

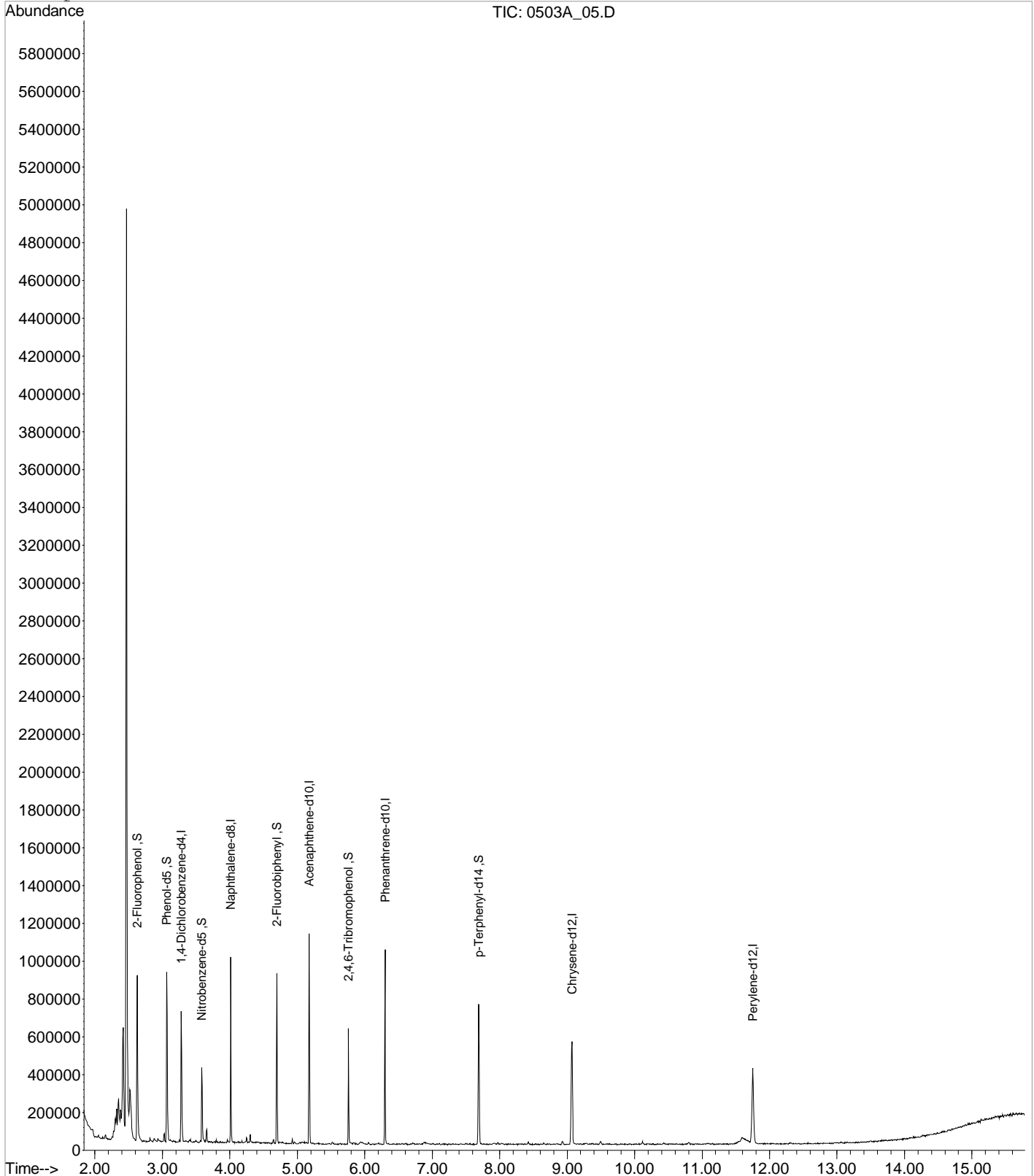
Target Compounds Qvalue

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 05.D  
Acq On : 3 May 2022 3:52 pm  
Sample : BLANK 1X WG1857248  
Misc : SOIL ISTD 22D28021 exp 10/28/22  
MS Integration Params: RTEINT.P  
Quant Time: May 3 16:17 2022

Vial: 43  
Operator: 3545  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804C29V.RES

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Tue Mar 29 09:44:27 2022  
Response via : Initial Calibration



SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3787994-2  
**Client Sample ID:** BLANK  
**Lab File ID:** 0504\_06  
**Instrument ID:** BNAMS11  
**Analytical Batch:** WG1857484  
**Dilution Factor:** 1  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** \_\_\_\_\_

**SDG:** L1486885  
**Collected Date/Time:** \_\_\_\_\_  
**Received Date/Time:** \_\_\_\_\_  
**Preparation Date/Time:** 05/03/22 09:10  
**Analysis Date/Time:** 05/04/22 06:23  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15 g  
**Final Wt/Vol:** 0.5 mL

Analyte	CAS	RT	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Acenaphthene	83-32-9	0	U		0.00539	0.0333
Acenaphthylene	208-96-8	0	U		0.00469	0.0333
Anthracene	120-12-7	0	U		0.00593	0.0333
Benzoic Acid	65-85-0	0	U		0.118	1.67
Benzo(a)anthracene	56-55-3	0	U		0.00587	0.0333
Benzo(b)fluoranthene	205-99-2	0	U		0.00621	0.0333
Benzo(k)fluoranthene	207-08-9	0	U		0.00592	0.0333
Benzo(g,h,i)perylene	191-24-2	0	U		0.00609	0.0333
Benzo(a)pyrene	50-32-8	0	U		0.00619	0.0333
Carbazole	86-74-8	0	U		0.0103	0.333
Chrysene	218-01-9	0	U		0.00662	0.0333
Dibenz(a,h)anthracene	53-70-3	0	U		0.00923	0.0333
Dibenzofuran	132-64-9	0	U		0.0109	0.333
Fluoranthene	206-44-0	0	U		0.00601	0.0333
Fluorene	86-73-7	0	U		0.00542	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	0	U		0.00941	0.0333
1-Methylnaphthalene	90-12-0	0	U		0.00426	0.0333
2-Methylnaphthalene	91-57-6	0	U		0.00432	0.0333
Naphthalene	91-20-3	0	U		0.00836	0.0333
Phenanthrene	85-01-8	0	U		0.00661	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	8.84	U		0.0422	0.333
Di-n-butyl phthalate	84-74-2	0	U		0.0114	0.333
Di-n-octyl phthalate	117-84-0	9.96	U		0.0225	0.333
Pyrene	129-00-0	0	U		0.00648	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	0	U		0.0104	0.333
Pentachlorophenol	87-86-5	0	U		0.00896	0.333
Phenol	108-95-2	0	U		0.0134	0.333



Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_06.D  
 Acq On : 4 May 2022 6:23 am  
 Operator : 3545  
 Sample : BLANK 1x WG1857484  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 ALS Vial : 6 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 18:11:42 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

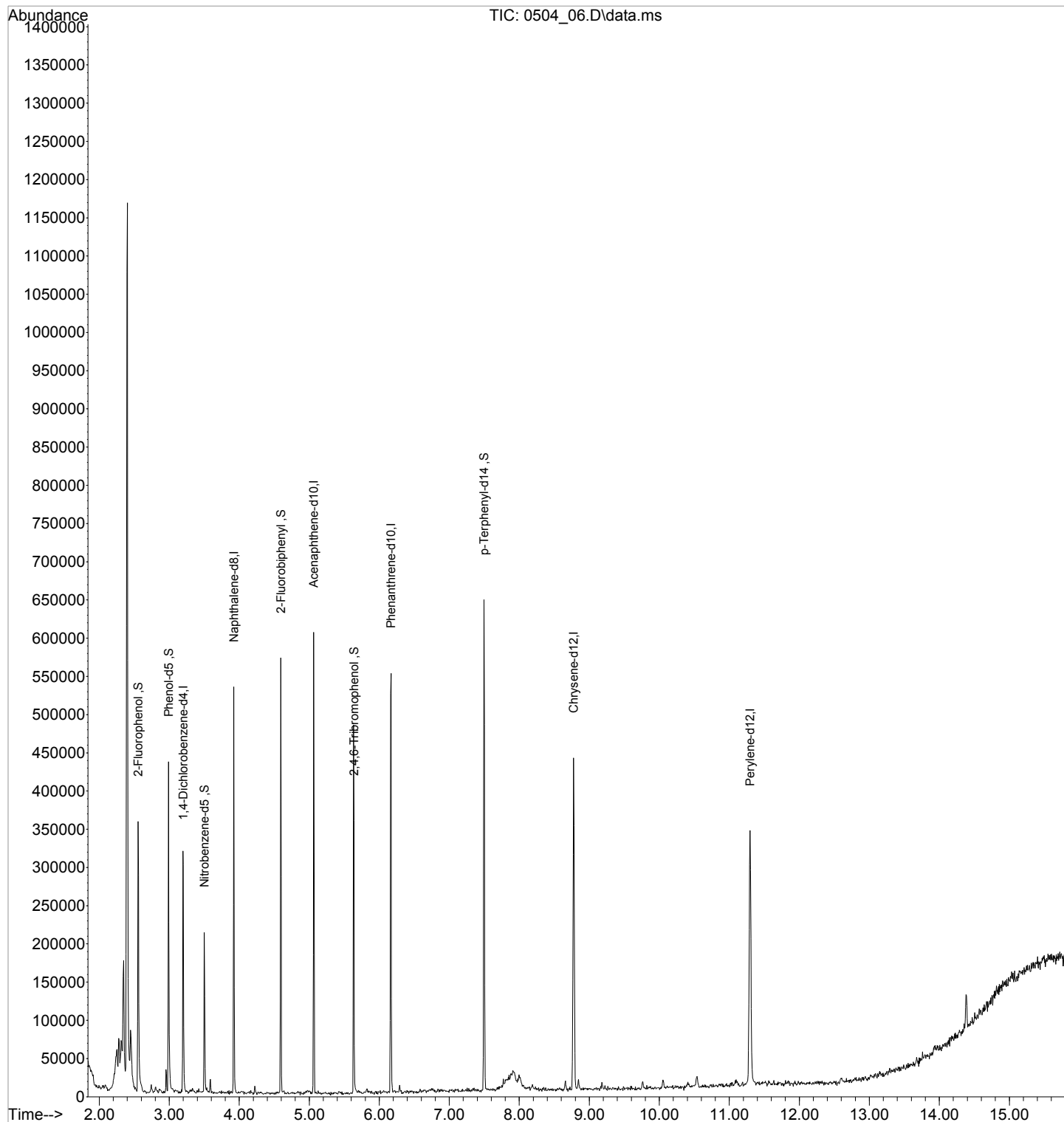
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.200	152	38696	8000.0000000	ppb	0.00
23) Naphthalene-d8	3.923	136	144932	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.063	164	87744	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.168	188	174073	8000.0000000	ppb	0.00
84) Chrysene-d12	8.776	240	182463	8000.0000000	ppb	0.00
94) Perylene-d12	11.297	264	205288	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.554	112	89286	15782.4081812	ppb	0.02
Spiked Amount	20000.000	Range 20 - 120	Recovery =	78.91%		
7) Phenol-d5	2.989	99	100730	14647.4587742	ppb	0.00
Spiked Amount	20000.000	Range 20 - 120	Recovery =	73.24%		
24) Nitrobenzene-d5	3.500	82	48052	7248.6315484	ppb	0.00
Spiked Amount	10000.000	Range 18 - 125	Recovery =	72.49%		
50) 2-Fluorobiphenyl	4.593	172	111641	7622.9058632	ppb	0.00
Spiked Amount	10000.000	Range 28 - 120	Recovery =	76.23%		
73) 2,4,6-Tribromophenol	5.639	330	45976	19422.8508982	ppb	0.00
Spiked Amount	20000.000	Range 17 - 137	Recovery =	97.11%		
87) p-Terphenyl-d14	7.496	244	176126	7906.6378189	ppb	0.00
Spiked Amount	10000.000	Range 13 - 131	Recovery =	79.07%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050422\  
Data File : 0504\_06.D  
Acq On : 4 May 2022 6:23 am  
Operator : 3545  
Sample : BLANK 1x WG1857484  
Misc : SOIL ISTD 22D28020 exp 10/28/22  
ALS Vial : 6 Sample Multiplier: 1  
InstName : BNAMS11

Quant Time: May 04 18:11:42 2022  
Quant Method : C:\msdchem\1\methods\S811E03V.M  
Quant Title : 8270 BNA  
QLast Update : Tue May 03 05:28:33 2022  
Response via : Initial Calibration



SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3788334-1  
**Client Sample ID:** BLANK  
**Lab File ID:** 0504A\_07  
**Instrument ID:** BNAMS24  
**Analytical Batch:** WG1857248  
**Dilution Factor:** 1  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** \_\_\_\_\_

**SDG:** L1486885  
**Collected Date/Time:** \_\_\_\_\_  
**Received Date/Time:** \_\_\_\_\_  
**Preparation Date/Time:** 05/02/22 17:00  
**Analysis Date/Time:** 05/04/22 18:14  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15 g  
**Final Wt/Vol:** 0.5 mL

Analyte	CAS	RT	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Acenaphthene	83-32-9	0	U		0.00539	0.0333
Acenaphthylene	208-96-8	0	U		0.00469	0.0333
Anthracene	120-12-7	0	U		0.00593	0.0333
Benzoic Acid	65-85-0	0	U		0.118	1.67
Benzo(a)anthracene	56-55-3	0	U		0.00587	0.0333
Benzo(b)fluoranthene	205-99-2	0	U		0.00621	0.0333
Benzo(k)fluoranthene	207-08-9	0	U		0.00592	0.0333
Benzo(g,h,i)perylene	191-24-2	0	U		0.00609	0.0333
Benzo(a)pyrene	50-32-8	0	U		0.00619	0.0333
Carbazole	86-74-8	0	U		0.0103	0.333
Chrysene	218-01-9	0	U		0.00662	0.0333
Dibenz(a,h)anthracene	53-70-3	0	U		0.00923	0.0333
Dibenzofuran	132-64-9	0	U		0.0109	0.333
Fluoranthene	206-44-0	0	U		0.00601	0.0333
Fluorene	86-73-7	0	U		0.00542	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	0	U		0.00941	0.0333
1-Methylnaphthalene	90-12-0	0	U		0.00426	0.0333
2-Methylnaphthalene	91-57-6	0	U		0.00432	0.0333
Naphthalene	91-20-3	0	U		0.00836	0.0333
Phenanthrene	85-01-8	0	U		0.00661	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	9.42	U		0.0422	0.333
Di-n-butyl phthalate	84-74-2	6.60	U		0.0114	0.333
Di-n-octyl phthalate	117-84-0	0	U		0.0225	0.333
Pyrene	129-00-0	0	U		0.00648	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	0	U		0.0104	0.333
Pentachlorophenol	87-86-5	0	U		0.00896	0.333
Phenol	108-95-2	0	U		0.0134	0.333

Data Path : C:\msdchem\1\data\050422A\  
 Data File : 0504A\_07.D  
 Acq On : 4 May 2022 6:14 pm  
 Operator : 3545  
 Sample : BLANK 1X WG1857248  
 Misc : SOIL ISTD 22D28021 exp. 10/28/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 05 12:13:51 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

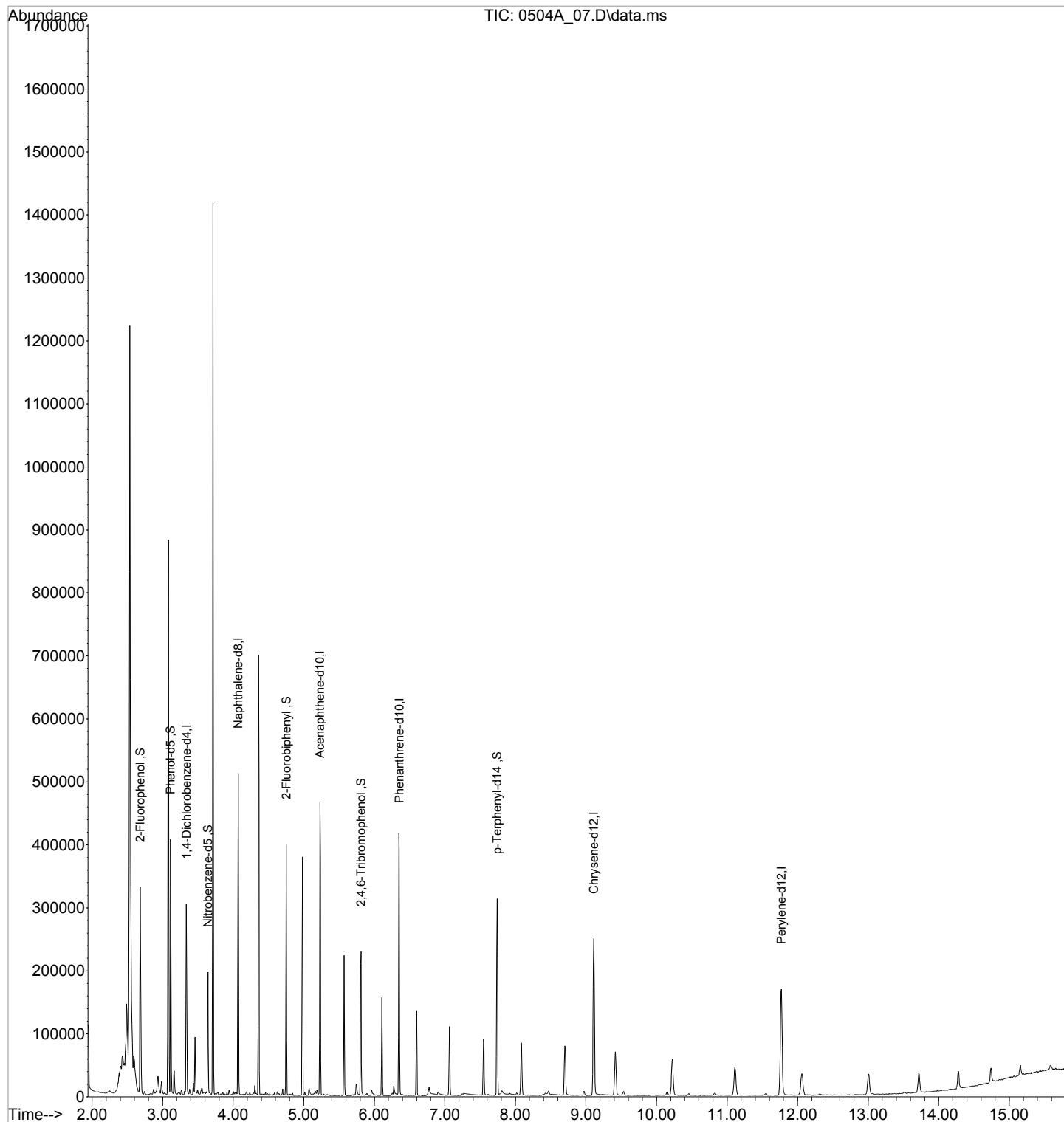
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.337	152	39125	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.072	136	156307	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.231	164	80478	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.354	188	137390	8000.0000000	ppb	0.00
84) Chrysene-d12	9.113	240	109314	8000.0000000	ppb	0.00
94) Perylene-d12	11.772	264	104233	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.684	112	82959	13543.0395690	ppb	0.00
Spiked Amount	20000.000	Range	20 - 120	Recovery	= 67.72%	
7) Phenol-d5	3.113	99	95256	13106.4038281	ppb	0.00
Spiked Amount	20000.000	Range	20 - 120	Recovery	= 65.53%	
24) Nitrobenzene-d5	3.643	82	39345	6618.8947879	ppb	0.00
Spiked Amount	10000.000	Range	18 - 125	Recovery	= 66.19%	
50) 2-Fluorobiphenyl	4.754	172	87590	6853.7764773	ppb	0.00
Spiked Amount	10000.000	Range	28 - 120	Recovery	= 68.54%	
73) 2,4,6-Tribromophenol	5.813	330	20203	14035.6748329	ppb	0.00
Spiked Amount	20000.000	Range	17 - 137	Recovery	= 70.18%	
87) p-Terphenyl-d14	7.742	244	93152	6157.9123753	ppb	0.00
Spiked Amount	10000.000	Range	13 - 131	Recovery	= 61.58%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050422A\  
Data File : 0504A\_07.D  
Acq On : 4 May 2022 6:14 pm  
Operator : 3545  
Sample : BLANK 1X WG1857248  
Misc : SOIL ISTD 22D28021 exp. 10/28/22  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 05 12:13:51 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth: BNA24PS.M



SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3787713-1  
**Client Sample ID:** LCS  
**Lab File ID:** 0503A\_04  
**Instrument ID:** BNAMS4  
**Analytical Batch:** WG1857248  
**Dilution Factor:** 1  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** \_\_\_\_\_

**SDG:** L1486885  
**Collected Date/Time:** \_\_\_\_\_  
**Received Date/Time:** \_\_\_\_\_  
**Preparation Date/Time:** 05/02/22 17:00  
**Analysis Date/Time:** 05/03/22 15:31  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15 g  
**Final Wt/Vol:** 0.5 mL

Analyte	CAS	RT	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Acenaphthene	83-32-9	5.21	0.390		0.00539	0.0333
Acenaphthylene	208-96-8	5.08	0.423		0.00469	0.0333
Anthracene	120-12-7	6.37	0.418		0.00593	0.0333
Benzoic Acid	65-85-0	3.83	0.179		0.000	1.67
Benzo(a)anthracene	56-55-3	9.06	0.412		0.00587	0.0333
Benzo(b)fluoranthene	205-99-2	11	0.389		0.00621	0.0333
Benzo(k)fluoranthene	207-08-9	11.05	0.413		0.00592	0.0333
Benzo(g,h,i)perylene	191-24-2	14.11	0.427		0.00609	0.0333
Benzo(a)pyrene	50-32-8	11.66	0.447		0.00619	0.0333
Carbazole	86-74-8	6.49	0.398		0.0103	0.333
Chrysene	218-01-9	9.13	0.414		0.00662	0.0333
Dibenz(a,h)anthracene	53-70-3	13.81	0.422		0.00923	0.0333
Dibenzofuran	132-64-9	5.33	0.401		0.0109	0.333
Fluoranthene	206-44-0	7.32	0.402		0.00601	0.0333
Fluorene	86-73-7	5.58	0.391		0.00542	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	13.76	0.411		0.00941	0.0333
1-Methylnaphthalene	90-12-0	4.53	0.321		0.00426	0.0333
2-Methylnaphthalene	91-57-6	4.46	0.312		0.00432	0.0333
Naphthalene	91-20-3	4.03	0.309		0.00836	0.0333
Phenanthrene	85-01-8	6.32	0.400		0.00661	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	9.15	0.471		0.0422	0.333
Di-n-butyl phthalate	84-74-2	6.75	0.445		0.0114	0.333
Di-n-octyl phthalate	117-84-0	10.37	0.442		0.0225	0.333
Pyrene	129-00-0	7.54	0.408		0.00648	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	3.48	0.464		0.0104	0.333
Pentachlorophenol	87-86-5	6.15	0.393		0.00896	0.333
Phenol	108-95-2	3.08	0.400		0.0134	0.333

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:15 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	82890	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	385068	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	170754	8000.00	ppb	-0.04
70) Phenanthrene-d10	6.31	188	320873	8000.00	ppb	-0.05
84) Chrysene-d12	9.08	240	287519	8000.00	ppb	-0.07
94) Perylene-d12	11.77	264	292231	8000.00	ppb	-0.10

System Monitoring Compounds

4) 2-Fluorophenol	2.63	112	163898	12168.1365491	ppb	-0.02
Spiked Amount 20000.000	Range 20	- 120	Recovery	=	60.84%	
7) Phenol-d5	3.07	99	199339	12330.5480090	ppb	-0.03
Spiked Amount 20000.000	Range 20	- 120	Recovery	=	61.65%	
24) Nitrobenzene-d5	3.59	82	85923m	5258.9206693	ppb	-0.04
Spiked Amount 10000.000	Range 18	- 125	Recovery	=	52.59%	
50) 2-Fluorobiphenyl	4.70	172	163489	5675.7190624	ppb	-0.04
Spiked Amount 10000.000	Range 28	- 120	Recovery	=	56.76%	
73) 2,4,6-Tribromophenol	5.77	330	49884	13733.3812827	ppb	-0.04
Spiked Amount 20000.000	Range 17	- 137	Recovery	=	68.67%	
87) p-Terphenyl-d14	7.70	244	245186	6239.9784261	ppb	-0.06
Spiked Amount 10000.000	Range 13	- 131	Recovery	=	62.40%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue	
2) Pyridine	2.01	79	103725	8087.3942803	ppb		87
3) N-Nitrosodimethylamine	1.99	42	83766	12168.5645156	ppb	#	80
5) Aniline	3.11	66	75107	9793.3252591	ppb	#	27
6) bis(2-Chloroethyl)ether	3.12	93	175401m	14723.8437833	ppb		
8) Phenol	3.08	94	204276m	11995.8858161	ppb		
9) Benzaldehyde	3.05	105	51305	13916.0658321	ppb	#	84
10) 2-Chlorophenol	3.17	128	155723	11421.3310004	ppb		94
11) n-Decane	3.16	41	79400	9886.8504510	ppb	#	99
12) 1,3-Dichlorobenzene	3.25	146	154634	10030.6406345	ppb		96
13) 1,4-Dichlorobenzene	3.29	146	163800	10323.0350818	ppb		97
14) Benzyl Alcohol	3.35	79	125898	11938.8491199	ppb		94
15) 1,2-Dichlorobenzene	3.38	146	152603	10462.2809522	ppb		95
16) bis(2-Chloroisopropyl)ethe	3.41	121	50973	10212.5019795	ppb	#	30
17) 2,2-oxybis(1-chloropropane	3.41	121	50973	10212.5019795	ppb	#	30
18) 2-Methylphenol	3.40	108	148515	12054.4787379	ppb		93
19) Hexachloroethane	3.57	117	68682	11924.1902257	ppb		99
20) N-Nitrosodi-n-propylamine	3.49	70	122525	13608.5514672	ppb		93
21) 3&4-Methyl phenol	3.48	107	194962	13931.4178916	ppb		93
22) Acetophenone	3.50	105	212755	12411.4768569	ppb	#	71
25) Nitrobenzene	3.60	77	175861	11008.2957727	ppb		90
26) Isophorone	3.73	82	323119	11275.1547430	ppb		99
27) 2-Nitrophenol	3.78	139	84449	10487.9987832	ppb		90
28) 2,4-Dimethylphenol	3.79	107	171462	11465.9434073	ppb		95
29) bis(2-Chlorethoxy)methane	3.84	93	193824	10577.9711052	ppb		90
30) 2,4-Dichlorophenol	3.92	162	123420	9797.0693402	ppb		87
31) Benzoic Acid	3.83	105	33915	5383.1500287	ppb		98
32) 1,2,4-Trichlorobenzene	3.98	180	136726	9695.8943246	ppb		98
33) alpha-terpineol	4.02	59	156993	12996.6890680	ppb		93
34) Naphthalene	4.03	128	455257	9284.1661542	ppb		98
35) 4-Chloroaniline	4.05	65	54118	9498.4542070	ppb	#	48
36) Hexachloro-1,3-butadiene	4.10	225	78534	10208.8180493	ppb		99
37) Hydroquinone	4.25	110	67029m	7874.1707570	ppb		
38) Quinoline	4.24	129	299249	11662.2872267	ppb		97

(#) = qualifier out of range (m) = manual integration  
 0503A\_04.D S804C29V.M Tue May 03 16:15:44 2022

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 04.D  
 Acq On : 3 May 2022 3:31 pm  
 Sample : LCS 1X WG1857248  
 Misc : SOIL ISTD 22D28021 exp 10/28/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:15 2022

Vial: 42  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
39) Caprolactam	4.27	113	54059	20374.1935265	ppb		85
40) 4-Chloro-3-methylphenol	4.35	107	138602	10914.6021357	ppb		90
41) 2-Methylnaphthalene	4.46	142	299237	9365.1193944	ppb	#	96
42) 1-Methylnaphthalene	4.53	142	289272	9633.5786689	ppb		97
43) 1,2,4,5-Tetrachlorobenzene	4.57	216	132316	12837.6683557	ppb		99
44) Diphenyl Ether	4.84	170	193885	11792.4254620	ug/ml#		85
45) Diphenyl Oxide	4.84	170	193885	11792.4254620	ug/ml#		85
47) Hexachlorocyclopentadiene	4.56	237	53547	6693.3674708	ppb		98
48) 2,4,6-Trichlorophenol	4.65	196	91774	12391.6933449	ppb		91
49) 2,4,5-Trichlorophenol	4.68	196	93814	12171.5883933	ppb		93
51) Biphenyl	4.77	154	366288	11451.4868256	ppb		99
52) 2-Chloronaphthalene	4.80	162	286963	11755.5463758	ppb		98
53) 2-Nitroaniline	4.86	138	101427	13404.1013922	ppb	#	76
54) Acenaphthylene	5.08	152	482305	12700.2835608	ppb		99
55) Dimethyl phthalate	4.97	163	333094	13170.8222379	ppb		97
56) 2,6-Dinitrotoluene	5.02	165	79038	13479.4743698	ppb		87
57) 3-Nitroaniline	5.15	138	83525	13230.3403113	ppb		99
58) Acenaphthene	5.21	153	292767	11719.0930151	ppb		96
59) 2,4-Dinitrophenol	5.23	184	22798	7287.1586869	ppb	#	1
60) Dibenzofuran	5.33	168	417620	12053.9824498	ppb		95
61) 2,4-Dinitrotoluene	5.32	165	105482	14365.1170483	ppb		93
62) 2,3,4,6-Tetrachlorophenol	5.42	232	66806	13719.6632147	ppb		92
63) 4-Nitrophenol	5.26	139	64298	12330.2700074	ppb	#	79
64) Fluorene	5.58	166	329935	11740.1037896	ppb		97
65) 4-Chlorophenyl-phenylether	5.58	204	159986	12004.4089107	ppb		98
66) Diethyl phthalate	5.48	149	349091	13473.2372755	ppb		98
67) 4-Nitroaniline	5.59	138	87589	14813.1292453	ppb	#	78
68) Azobenzene	5.69	77	403875	15626.5514874	ppb		94
69) Atrazine	6.07	200	95160	13627.8836416	ppb		99
71) 4,6-Dinitro-2-methylphenol	5.62	198	51165	11723.8889117	ppb		91
72) N-Nitrosodiphenylamine	5.66	169	286973	11769.4411734	ppb		99
74) 4-Bromophenyl-phenylether	5.95	248	98203	12409.7288731	ppb		97
75) Hexachlorobenzene	6.01	284	104834	11905.9478377	ppb		98
76) n-octadecane	6.19	55	63345	12902.3664819	ppb		97
77) Pentachlorophenol	6.15	266	57319	11792.3090806	ppb		96
78) Phenanthrene	6.32	178	507321	12016.7193638	ppb		98
79) Anthracene	6.37	178	536182	12547.1925247	ppb		99
80) Carbazole	6.49	167	465946	11950.5650634	ppb		98
81) Di-n-butyl phthalate	6.75	149	610295	13370.5014752	ppb		99
82) 2-nitrodiphenylamine	6.88	167	133264	16467.3276016	ppb	#	100
83) Fluoranthene	7.32	202	541807	12080.4159624	ppb		99
85) Benzidine	7.45	184	137410	8272.5434332	ppb		98
86) Pyrene	7.54	202	566925	12254.4265970	ppb		98
88) Benzylbutyl phthalate	8.28	149	258267	13652.8029209	ppb		94
89) 3,3-Dichlorobenzidine	9.05	252	334368	22589.0189030	ppb		99
90) Benzo(a)anthracene	9.06	228	512233	12372.4684762	ppb		98
91) Chrysene	9.13	228	498701	12429.6930755	ppb		98
92) bis(2-Ethylhexyl)phthalate	9.15	149	368721	14150.9430978	ppb		95
93) Di-n-octyl phthalate	10.37	149	574745	13277.8182037	ppb		100
95) Benzo(b)fluoranthene	11.00	252	486558	11687.7239291	ppb		96
96) Benzo(k)fluoranthene	11.05	252	508038	12389.5527425	ppb		95
97) Benzo(a)pyrene	11.66	252	483544	13410.9602963	ppb		96
98) Indeno(1,2,3-cd)pyrene	13.76	276	437607	12353.2047926	ppb		98
99) Dibenz(a,h)anthracene	13.81	278	478702	12679.4306343	ppb		94

(#) = qualifier out of range (m) = manual integration  
 0503A\_04.D S804C29V.M Tue May 03 16:15:44 2022



Data File : C:\MSDCHEM\1\DATA\050322A\0503A 04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:15 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
100) Benzo(g,h,i)perylene	14.11	276	472634	12818.5783470 ppb	96

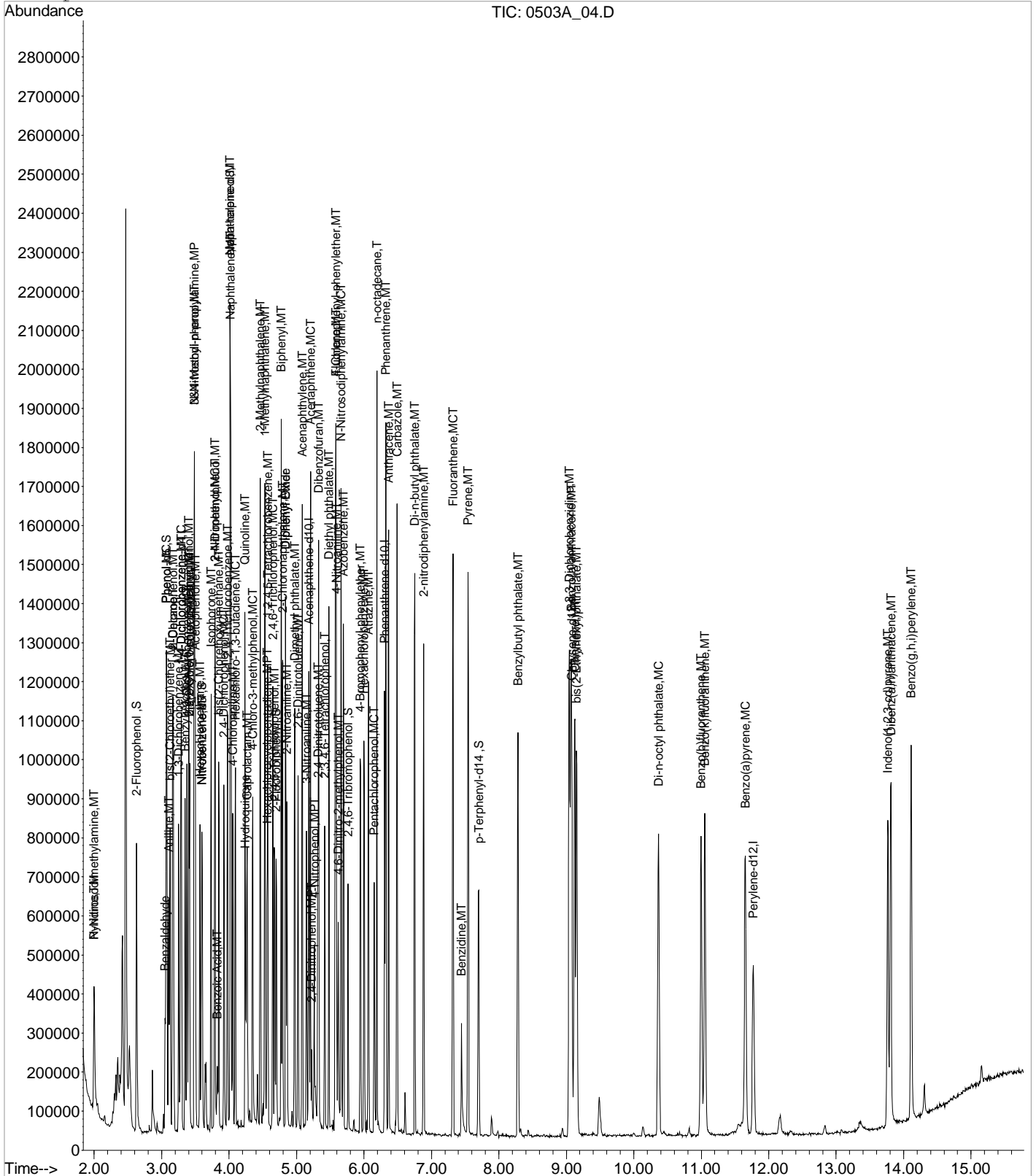
(#) = qualifier out of range (m) = manual integration  
 0503A\_04.D S804C29V.M Tue May 03 16:15:44 2022

Data File : C:\MSDCHEM\1\DATA\050322A\0503A 04.D
Acq On : 3 May 2022 3:31 pm
Sample : LCS 1X WG1857248
Misc : SOIL ISTD 22D28021 exp 10/28/22
MS Integration Params: RTEINT.P
Quant Time: May 3 16:15 2022

Vial: 42
Operator: 3545
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804C29V.RES

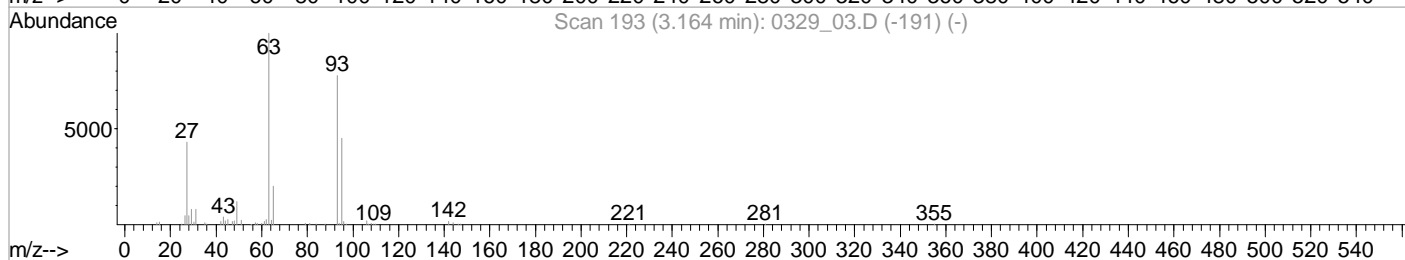
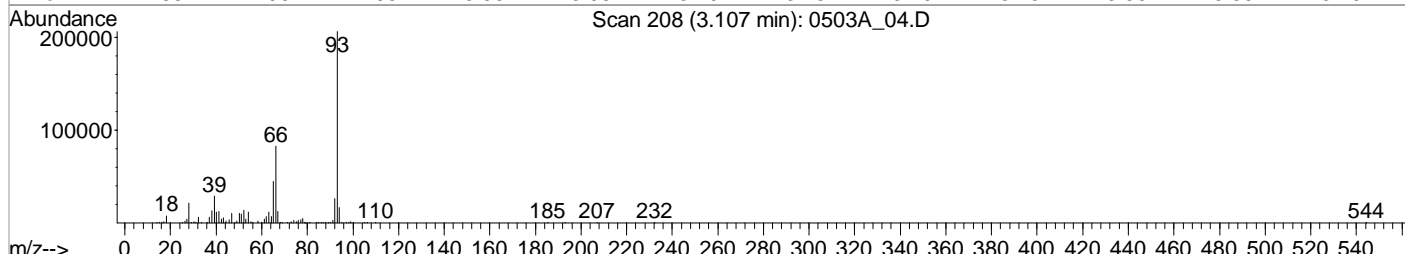
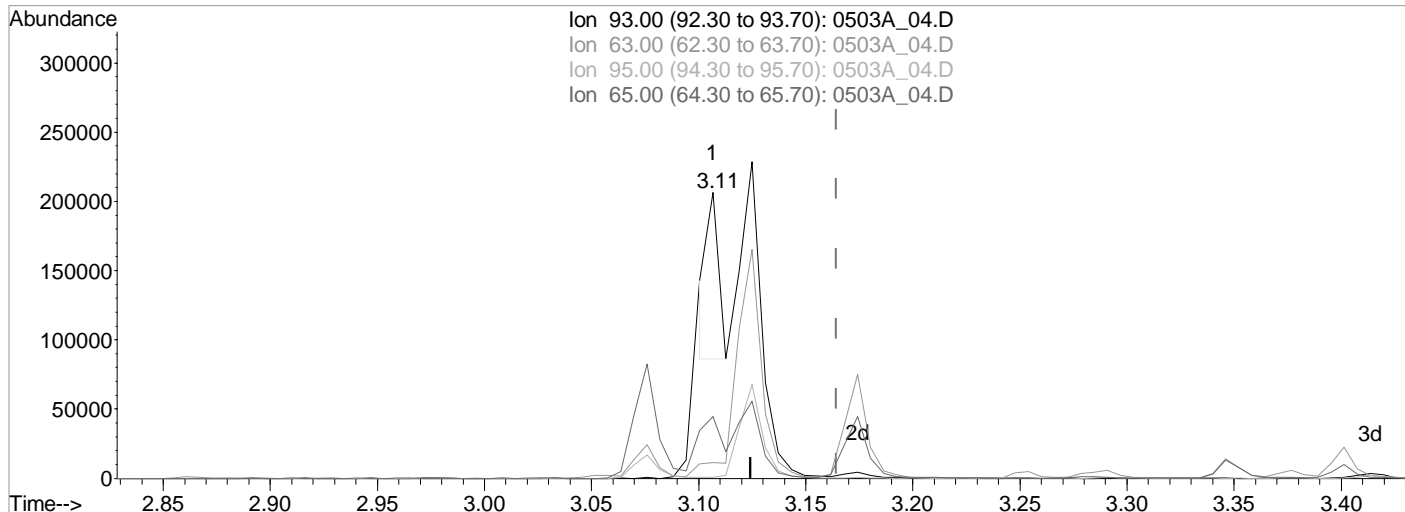
Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Tue Mar 29 09:44:27 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:13 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_04.D

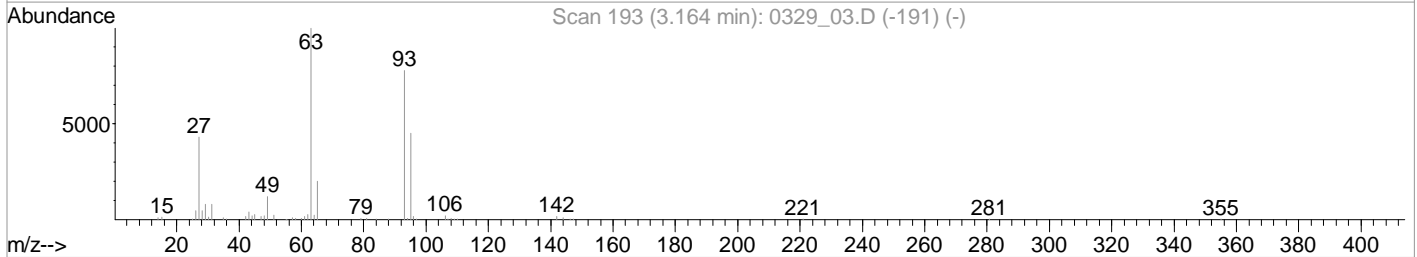
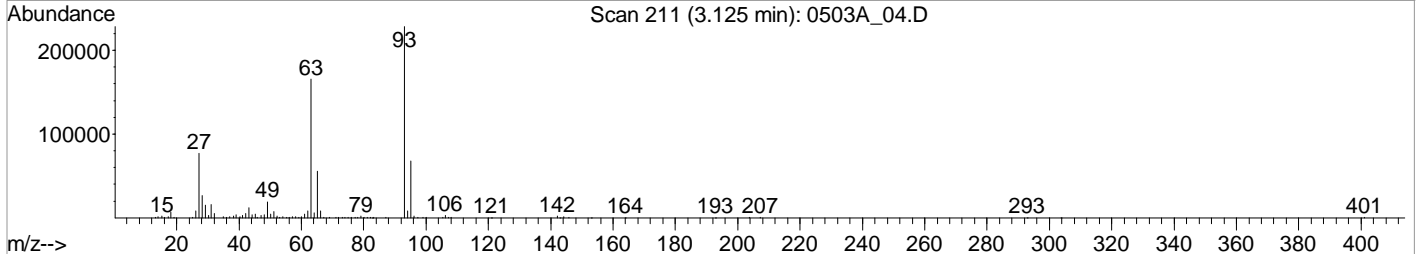
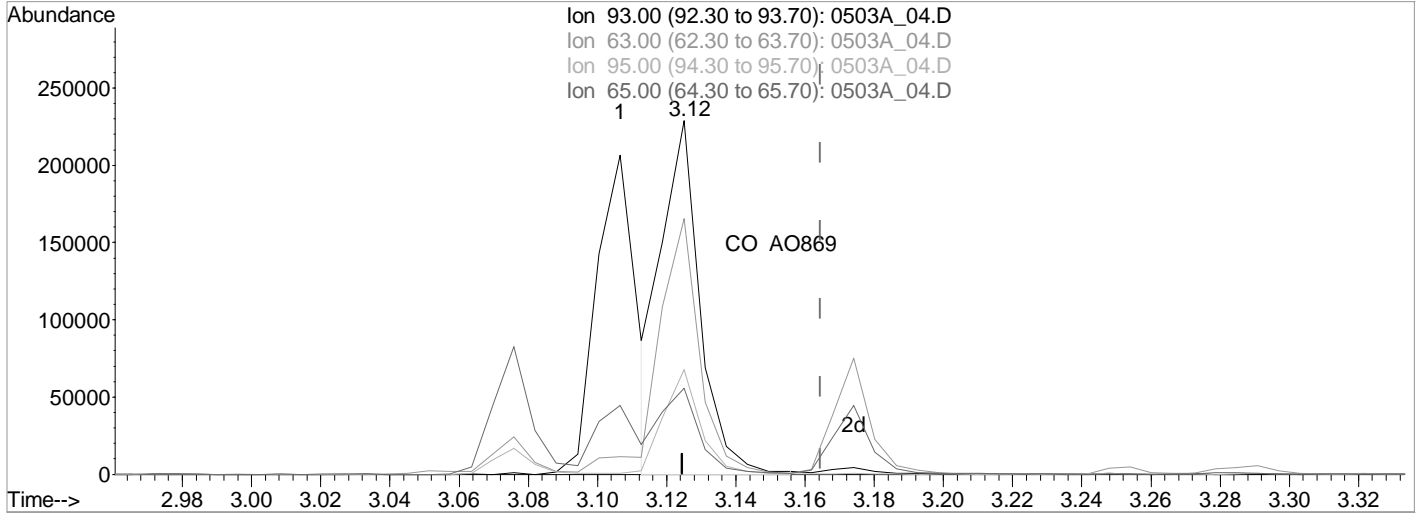
(6) bis(2-Chloroethyl)ether (MT)  
 3.11min (-0.058) 3714.4335754 ppb  
 Qvalue = 35  
 response 44249

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	0.67#
95.00	30.20	0.00#
65.00	24.00	21.16

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:14 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_04.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.12min (-0.039) 14723.8437833 ppb m

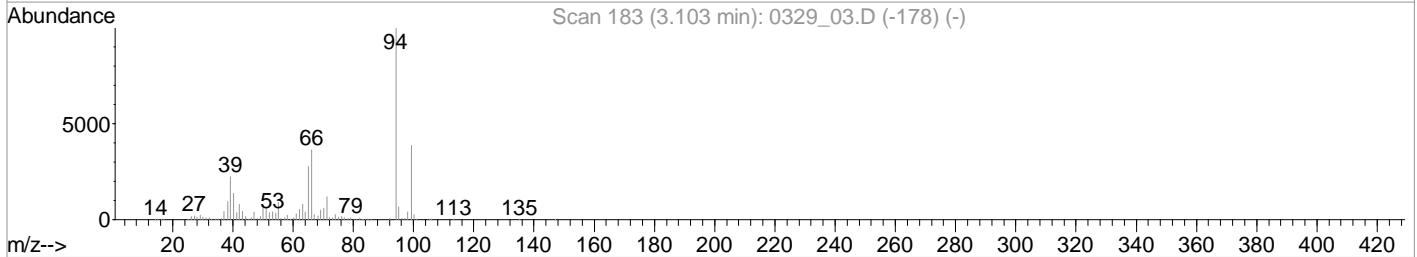
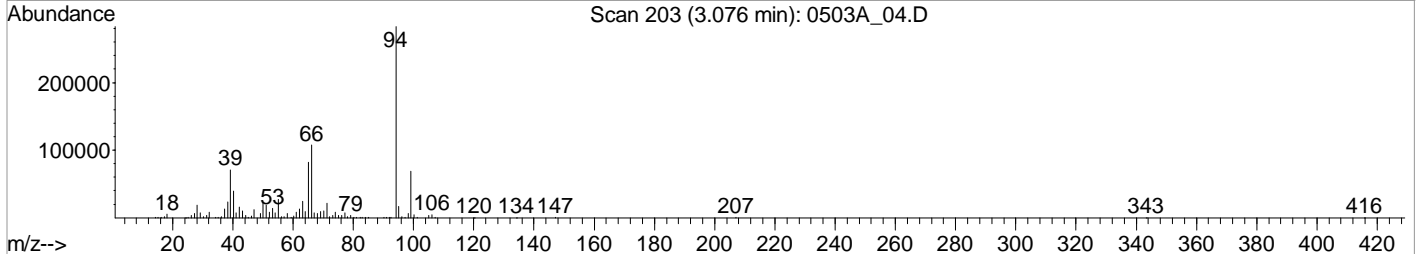
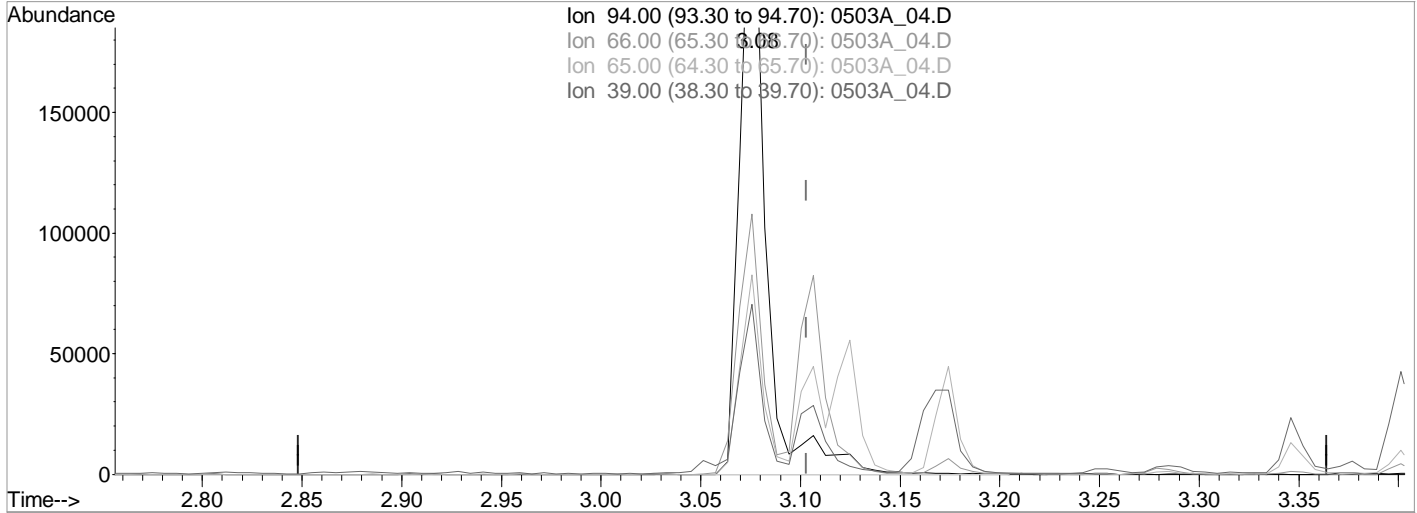
response 175401

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	72.32
95.00	30.20	29.68
65.00	24.00	24.35

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:14 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_04.D

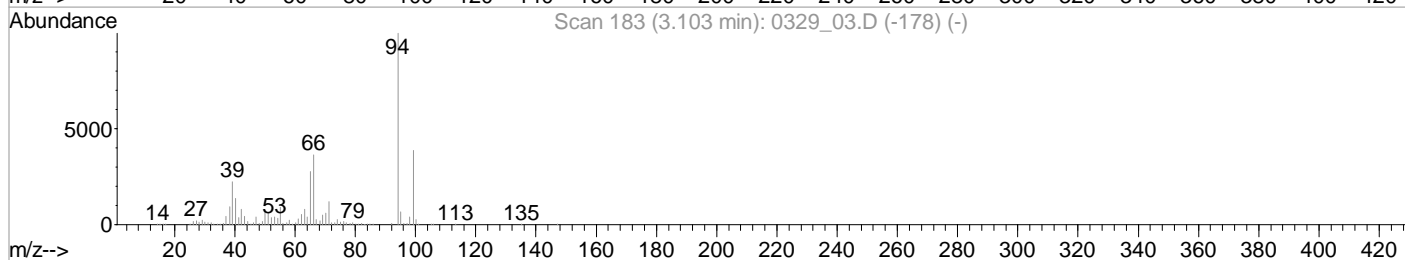
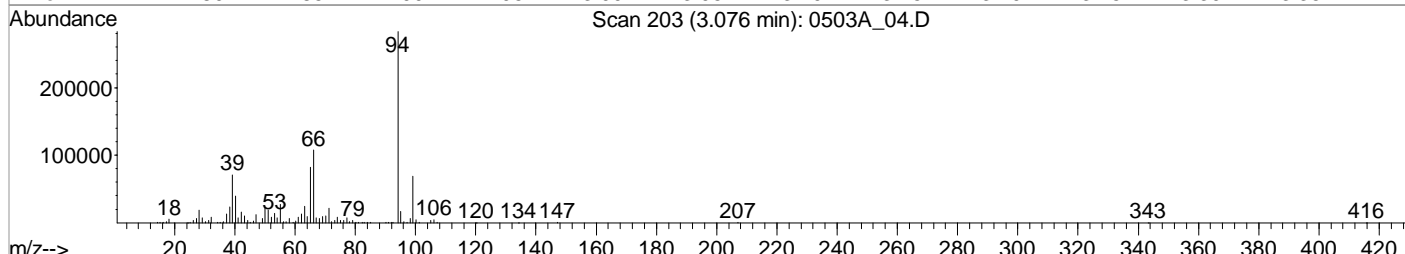
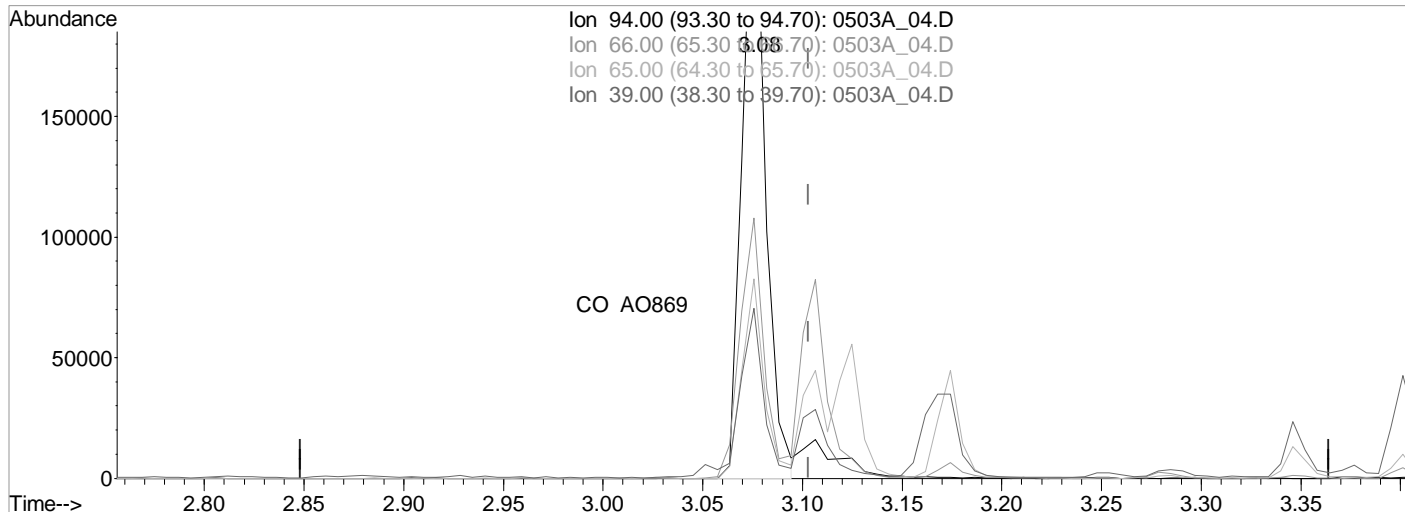
(8) Phenol (MC)  
 3.08min (-0.027) 13339.5476430 ppb  
 Qvalue = 96  
 response 227157

Ion	Exp%	Act%
94.00	100	100
66.00	34.70	38.00
65.00	27.70	29.12
39.00	22.50	24.71

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:14 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_04.D

(8) Phenol (MC)  
 3.08min (-0.027) 11995.8858161 ppb m

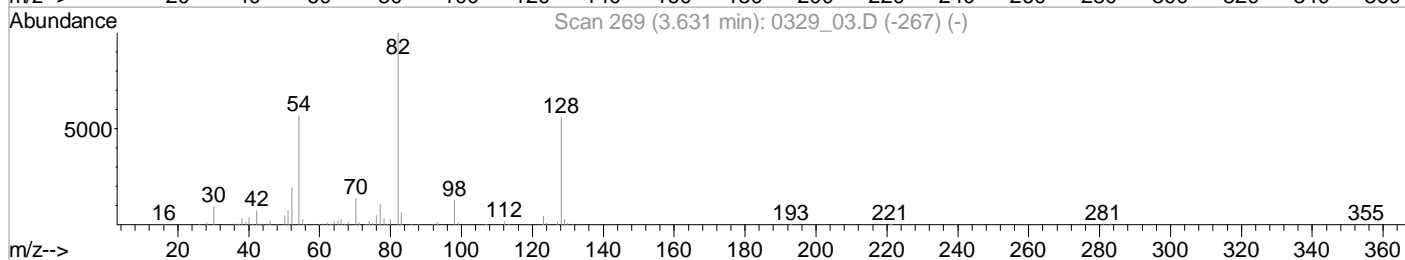
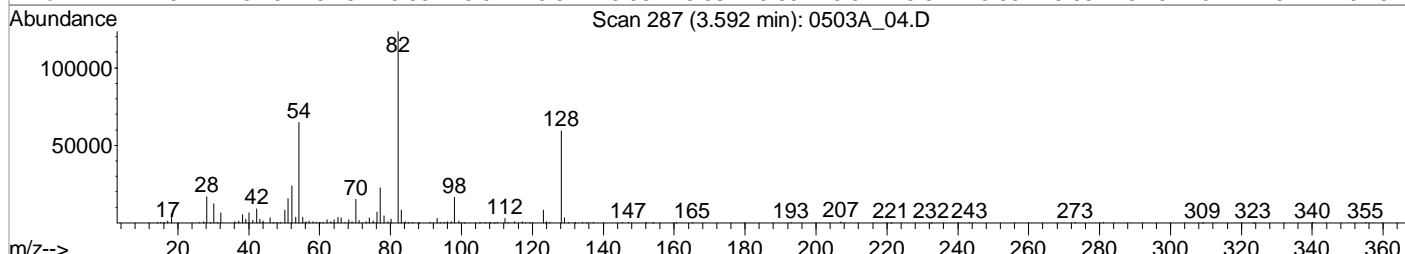
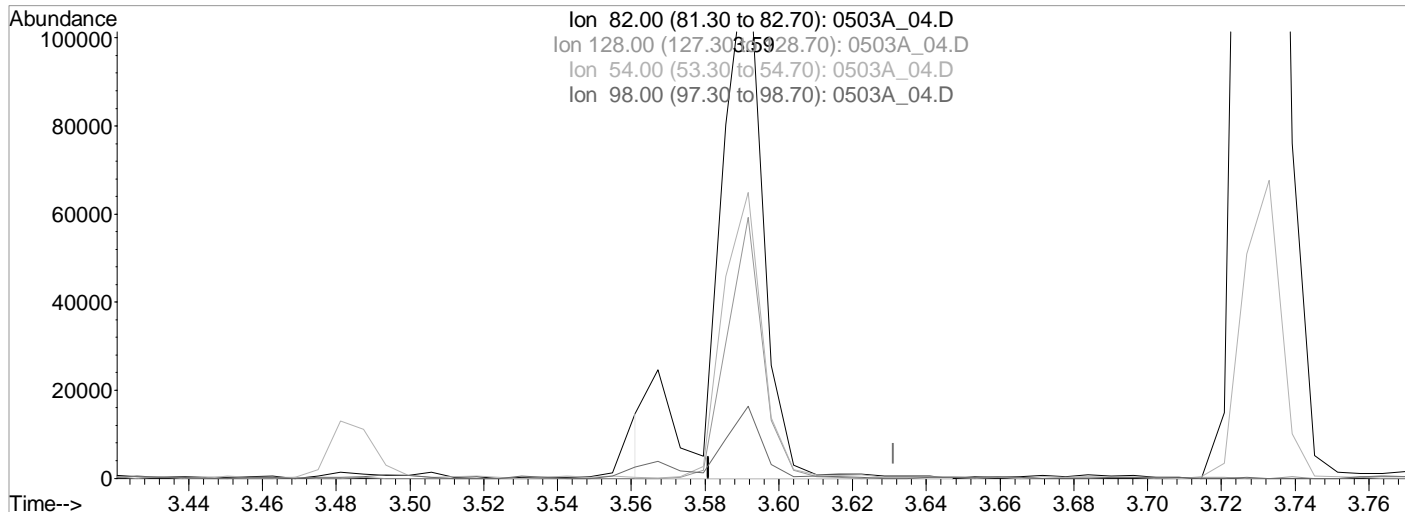
response 204276

Ion	Exp%	Act%
94.00	100	100
66.00	34.70	38.07
65.00	27.70	29.12
39.00	22.50	24.87

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:14 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_04.D

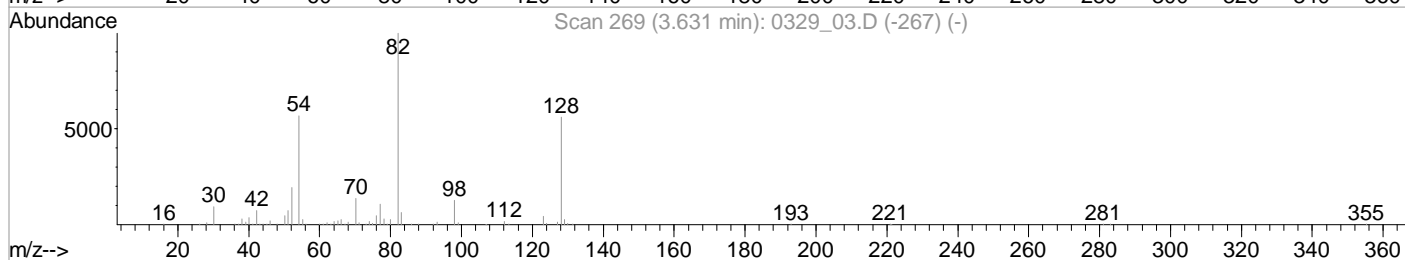
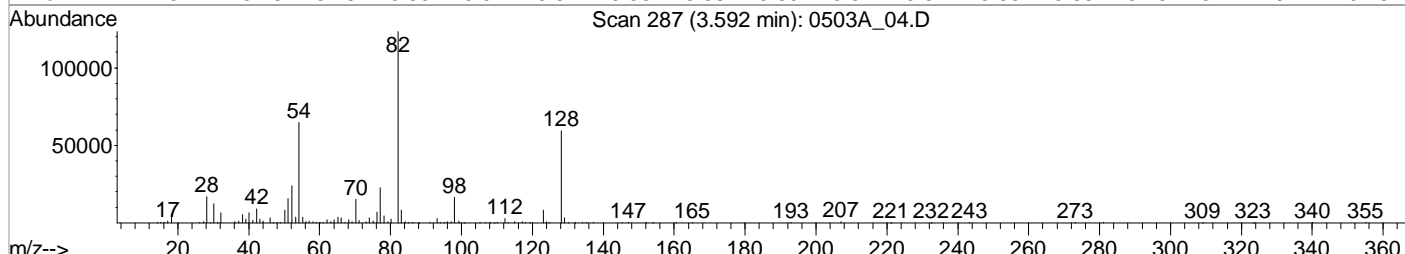
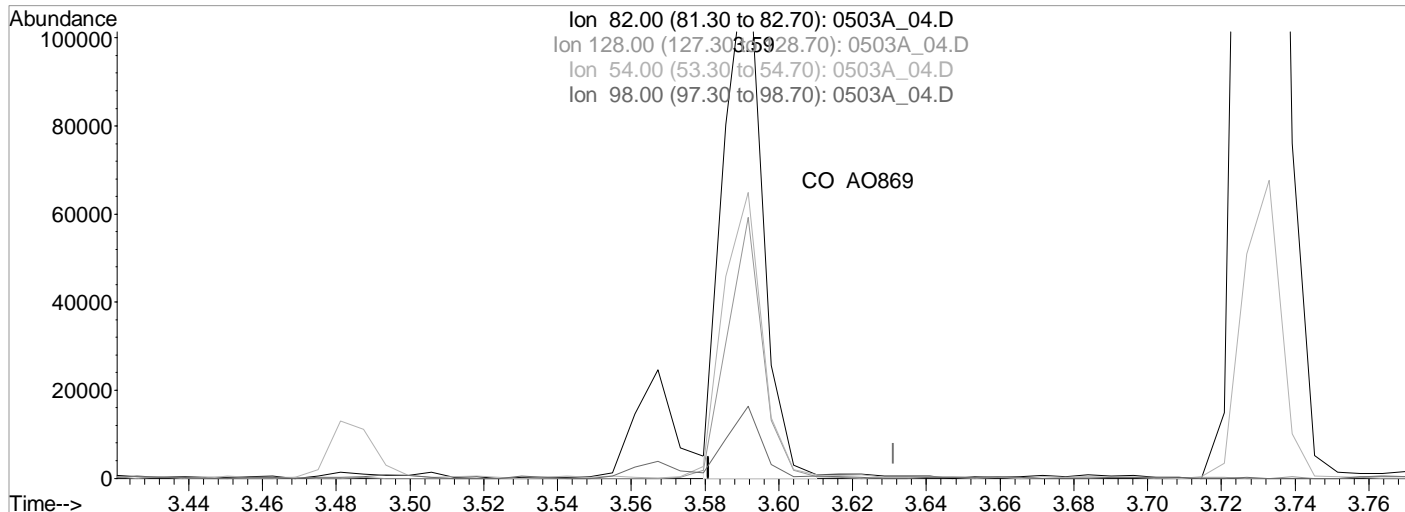
(24) Nitrobenzene-d5 (S)  
 3.59min (-0.039) 6162.1846527 ppb  
 Qvalue = 96  
 response 100681

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	47.96
54.00	56.90	52.30
98.00	11.80	13.14

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:14 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0503A\_04.D

(24) Nitrobenzene-d5 (S)  
 3.59min (-0.039) 5258.9206693 ppb m

response 85923

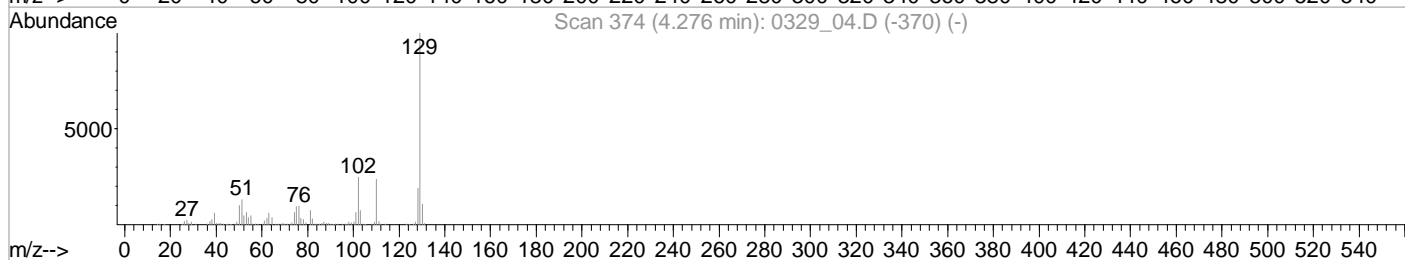
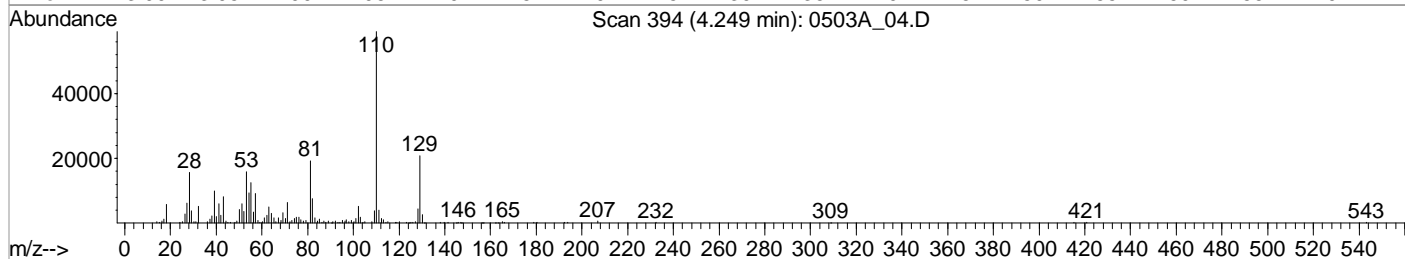
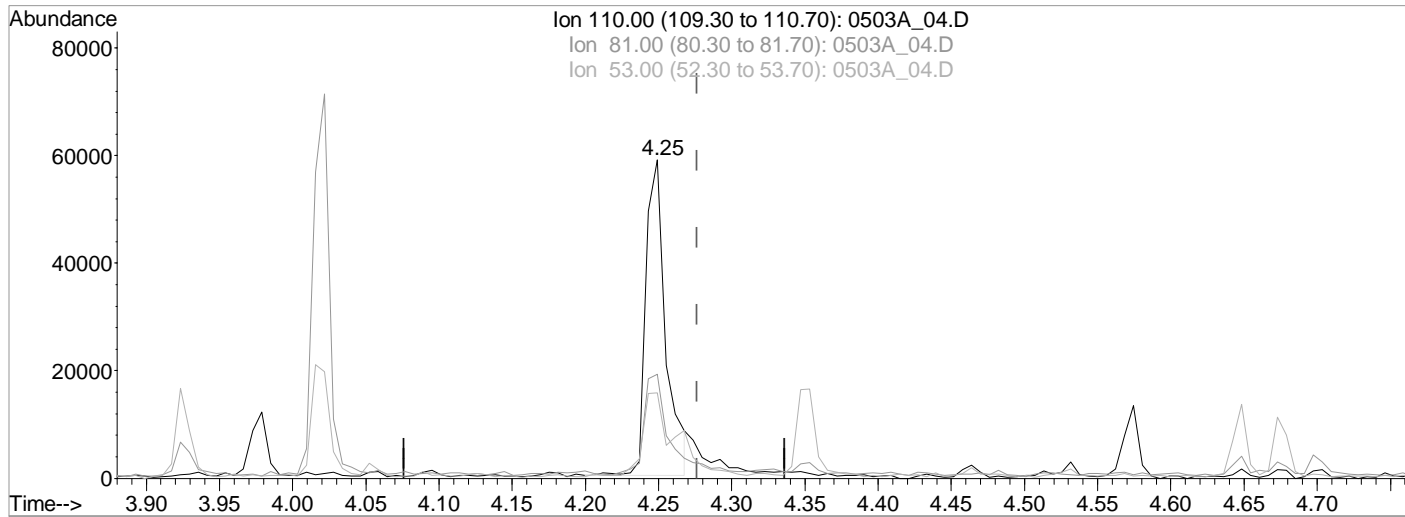
Ion	Exp%	Act%
82.00	100	100
128.00	49.30	47.96
54.00	56.90	52.46
98.00	11.80	13.28



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:14 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0503A\_04.D

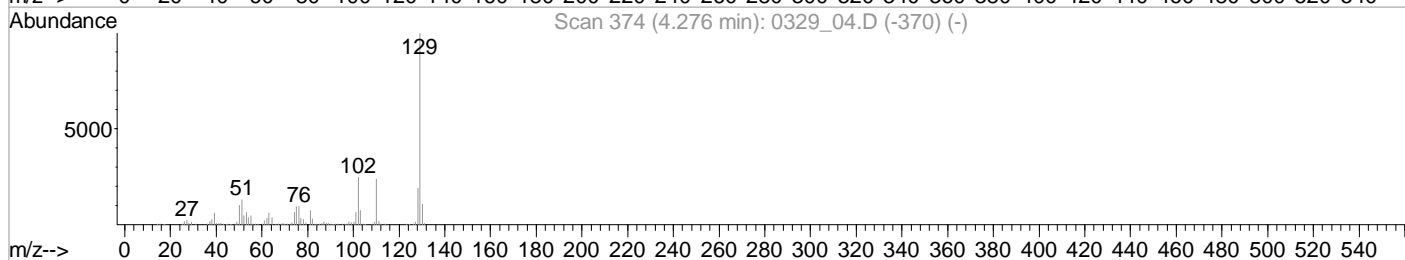
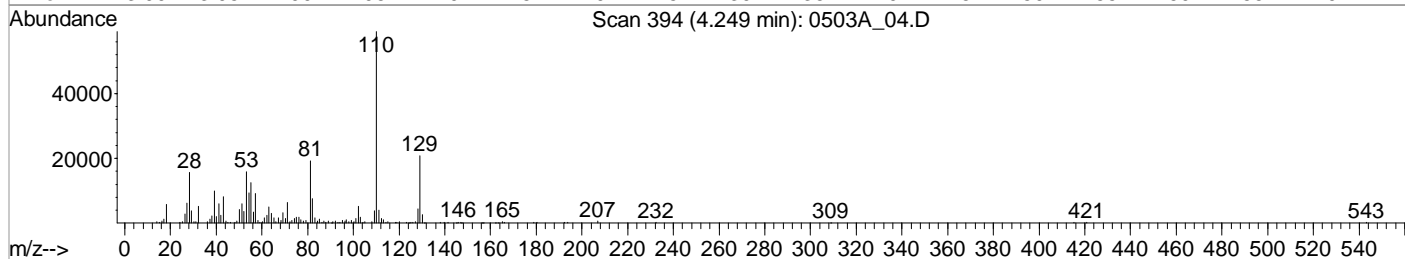
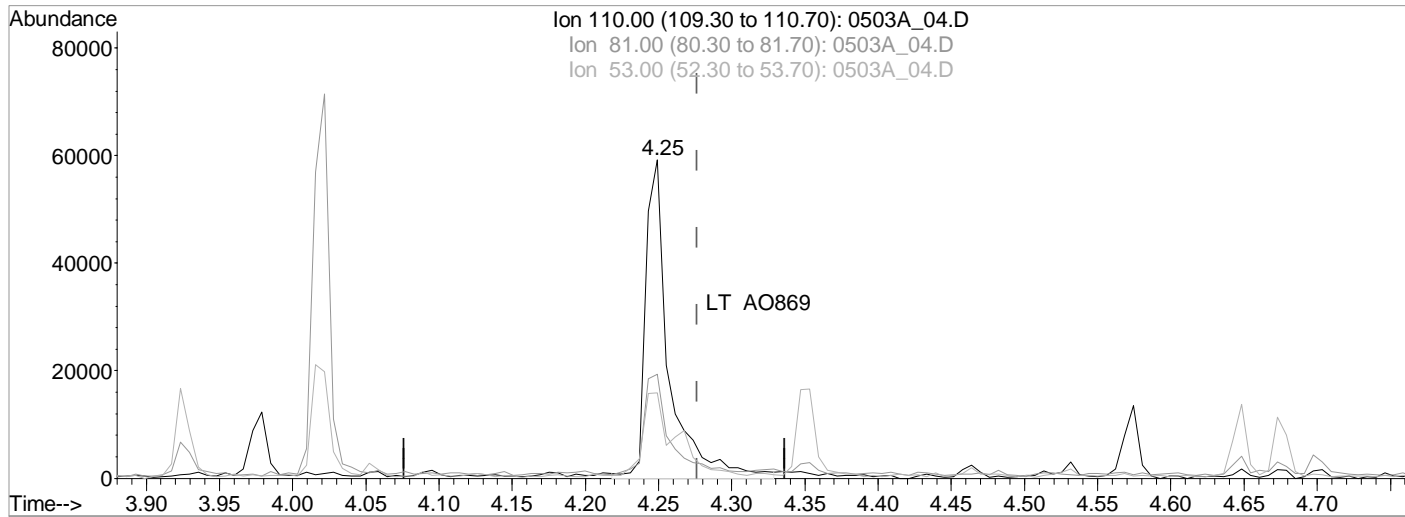
(37) Hydroquinone  
 4.25min (-0.027) 6499.6398714 ppb  
 Qvalue = 99  
 response 56113

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	30.61
53.00	25.90	26.54
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050322A\0503A\_04.D Vial: 42  
 Acq On : 3 May 2022 3:31 pm Operator: 3545  
 Sample : LCS 1X WG1857248 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28021 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 3 16:15 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0503A\_04.D

(37) Hydroquinone  
 4.25min (-0.027) 7874.1707570 ppb m

response 67029

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	32.60
53.00	25.90	26.81
0.00	0.00	0.00

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3787994-1  
**Client Sample ID:** LCS  
**Lab File ID:** 0504\_05  
**Instrument ID:** BNAMS11  
**Analytical Batch:** WG1857484  
**Dilution Factor:** 1  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** \_\_\_\_\_

**SDG:** L1486885  
**Collected Date/Time:** \_\_\_\_\_  
**Received Date/Time:** \_\_\_\_\_  
**Preparation Date/Time:** 05/03/22 09:10  
**Analysis Date/Time:** 05/04/22 06:03  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15 g  
**Final Wt/Vol:** 0.5 mL

Analyte	CAS	RT	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Acenaphthene	83-32-9	5.09	0.487		0.00539	0.0333
Acenaphthylene	208-96-8	4.97	0.506		0.00469	0.0333
Anthracene	120-12-7	6.23	0.531		0.00593	0.0333
Benzoic Acid	65-85-0	3.75	0.192		0.000	1.67
Benzo(a)anthracene	56-55-3	8.77	0.560		0.00587	0.0333
Benzo(b)fluoranthene	205-99-2	10.58	0.529		0.00621	0.0333
Benzo(k)fluoranthene	207-08-9	10.63	0.538		0.00592	0.0333
Benzo(g,h,i)perylene	191-24-2	13.75	0.556		0.00609	0.0333
Benzo(a)pyrene	50-32-8	11.20	0.562		0.00619	0.0333
Carbazole	86-74-8	6.35	0.523		0.0103	0.333
Chrysene	218-01-9	8.82	0.553		0.00662	0.0333
Dibenz(a,h)anthracene	53-70-3	13.42	0.581		0.00923	0.0333
Dibenzofuran	132-64-9	5.21	0.494		0.0109	0.333
Fluoranthene	206-44-0	7.14	0.562		0.00601	0.0333
Fluorene	86-73-7	5.46	0.517		0.00542	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	13.37	0.597		0.00941	0.0333
1-Methylnaphthalene	90-12-0	4.43	0.387		0.00426	0.0333
2-Methylnaphthalene	91-57-6	4.36	0.389		0.00432	0.0333
Naphthalene	91-20-3	3.93	0.363		0.00836	0.0333
Phenanthrene	85-01-8	6.19	0.507		0.00661	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	8.85	0.584		0.0422	0.333
Di-n-butyl phthalate	84-74-2	6.61	0.589		0.0114	0.333
Di-n-octyl phthalate	117-84-0	9.98	0.601		0.0225	0.333
Pyrene	129-00-0	7.35	0.508		0.00648	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	3.40	0.547		0.0104	0.333
Pentachlorophenol	87-86-5	6.02	0.605		0.00896	0.333
Phenol	108-95-2	3	0.453		0.0134	0.333

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_05.D  
 Acq On : 4 May 2022 6:03 am  
 Operator : 3545  
 Sample : LCS 1x WG1857484  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 ALS Vial : 5 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 18:10:49 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.200	152	39111	8000.0000000	ppb	0.00
23) Naphthalene-d8	3.923	136	175829	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.063	164	84966	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.168	188	175139	8000.0000000	ppb	0.00
84) Chrysene-d12	8.788	240	189866	8000.0000000	ppb	0.01
94) Perylene-d12	11.309	264	210449	8000.0000000	ppb	0.01
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.554	112	86385	15107.5971619	ppb	0.02
Spiked Amount	20000.000	Range 20	- 120	Recovery =	75.54%	
7) Phenol-d5	2.995	99	101594	14616.3409270	ppb	0.01
Spiked Amount	20000.000	Range 20	- 120	Recovery =	73.08%	
24) Nitrobenzene-d5	3.506	82	46770	5815.4818631	ppb	0.00
Spiked Amount	10000.000	Range 18	- 125	Recovery =	58.15%	
50) 2-Fluorobiphenyl	4.593	172	106811	7531.5623436	ppb	0.00
Spiked Amount	10000.000	Range 28	- 120	Recovery =	75.32%	
73) 2,4,6-Tribromophenol	5.639	330	47446	19921.8628111	ppb	0.00
Spiked Amount	20000.000	Range 17	- 137	Recovery =	99.61%	
87) p-Terphenyl-d14	7.501	244	181887	7846.8914255	ppb	0.00
Spiked Amount	10000.000	Range 13	- 131	Recovery =	78.47%	
<b>Target Compounds</b>						
2) Pyridine	1.949	79	53970	8480.1928521	ppb #	87
3) N-Nitrosodimethylamine	1.937	42	41512	12260.1338352	ppb	97
5) Aniline	3.024	66	40178	11196.8329914	ppb #	35
6) bis(2-Chloroethyl)ether	3.042	93	68885m	10941.1304734	ppb	
8) Phenol	3.001	94	99807m	13596.0927278	ppb	
9) Benzaldehyde	2.971	105	31861	17166.0411279	ppb	93
10) 2-Chlorophenol	3.095	128	82741	13375.8273567	ppb	95
11) n-Decane	2.395	41	34309	9872.8852539	ppb	92
12) 1,3-Dichlorobenzene	3.171	146	84770	11791.5285077	ppb	99
13) 1,4-Dichlorobenzene	3.206	146	87543	11991.6114313	ppb	94
14) Benzyl Alcohol	3.265	79	74122	13489.6915417	ppb	98
15) 1,2-Dichlorobenzene	3.294	146	86191	12473.8333098	ppb	95
16) bis(2-Chloroisopropyl)...	3.336	121	23542	11113.2978561	ppb	93
17) 2,2-oxybis(1-chloropro...	3.336	121	23542	11113.2978561	ppb	93
18) 2-Methylphenol	3.324	108	82154	14789.0332208	ppb	96
19) Hexachloroethane	3.482	117	34799	12970.6018116	ppb	92
20) N-Nitrosodi-n-propylamine	3.406	70	59025	13373.3028954	ppb	91
21) 3&4-Methyl phenol	3.400	107	104796	16436.5231459	ppb	93
22) Acetophenone	3.412	105	114074	13311.5176393	ppb #	71
25) Nitrobenzene	3.512	77	89821	11730.1577409	ppb	92
26) Isophorone	3.647	82	164580	12121.2341533	ppb	97
27) 2-Nitrophenol	3.694	139	46462	12721.0728515	ppb #	76
28) 2,4-Dimethylphenol	3.706	107	99013	13593.9621371	ppb	89
29) bis(2-Chlorethoxy)methane	3.759	93	92341	11803.0144259	ppb	98
30) 2,4-Dichlorophenol	3.835	162	76379	12878.7624027	ppb	95
31) Benzoic Acid	3.747	105	18936	5752.5755770	ppb	99
32) 1,2,4-Trichlorobenzene	3.888	180	84110	12126.0769728	ppb	97
33) alpha-terpineol	3.929	59	57121	13998.8019257	ppb	87
34) Naphthalene	3.935	128	234558m	10886.1565294	ppb	
35) 4-Chloroaniline	3.964	65	28989	11086.5665028	ppb #	60
36) Hexachloro-1,3-butadiene	4.005	225	58857	13531.8399788	ppb	94
37) Hydroquinone	4.158	110	25444	5626.3308224	ppb	85

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_05.D  
 Acq On : 4 May 2022 6:03 am  
 Operator : 3545  
 Sample : LCS 1x WG1857484  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 ALS Vial : 5 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 18:10:49 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
38) Quinoline	4.140	129	165294	13968.5312315	ppb		97
39) Caprolactam	4.170	113	28763	22036.1118377	ppb		86
40) 4-Chloro-3-methylphenol	4.258	107	83631	13797.0357498	ppb		91
41) 2-Methylnaphthalene	4.364	142	168032	11679.1057693	ppb	#	95
42) 1-Methylnaphthalene	4.428	142	157793	11616.9139982	ppb	#	92
43) 1,2,4,5-Tetrachloroben...	4.475	216	97605	15336.1092682	ppb		97
44) Diphenyl Ether	4.734	170	126403	17080.7787782	ppb		93
45) Diphenyl Oxide	4.734	170	126403	17080.7787782	ppb		93
47) Hexachlorocyclopentadiene	4.464	237	42951	9396.8408618	ppb		97
48) 2,4,6-Trichlorophenol	4.546	196	66231	16664.3789723	ppb		96
49) 2,4,5-Trichlorophenol	4.575	196	68299	16526.3163125	ppb		93
51) Biphenyl	4.663	154	221574	13976.0563908	ppb		99
52) 2-Chloronaphthalene	4.687	162	173836	14205.0201684	ppb		96
53) 2-Nitroaniline	4.746	138	58380	16325.6366675	ppb	#	72
54) Acenaphthylene	4.969	152	291231	15195.9644856	ppb		99
55) Dimethyl phthalate	4.863	163	227693	16771.1446673	ppb		96
56) 2,6-Dinitrotoluene	4.910	165	51261	17204.7957049	ppb		85
57) 3-Nitroaniline	5.028	138	48916	15885.1765282	ppb	#	77
58) Acenaphthene	5.086	153	182693	14633.0825096	ppb		91
59) 2,4-Dinitrophenol	5.110	184	13339	8029.6413359	ppb	#	1
60) Dibenzofuran	5.210	168	257409	14829.1394889	ppb		96
61) 2,4-Dinitrotoluene	5.198	165	71035	18116.9572562	ppb		98
62) 2,3,4,6-Tetrachlorophenol	5.298	232	56529	18462.9149627	ppb		93
63) 4-Nitrophenol	5.145	139	37463	15351.9147187	ppb	#	78
64) Fluorene	5.457	166	216761	15520.5160575	ppb		97
65) 4-Chlorophenyl-phenyle...	5.451	204	119744	16195.0854222	ppb		96
66) Diethyl phthalate	5.363	149	235047	17089.8213871	ppb		98
67) 4-Nitroaniline	5.468	138	54576	19765.7331243	ppb	#	71
68) Azobenzene	5.568	77	245622	17960.5002115	ppb		92
69) Atrazine	5.938	200	82089	20332.3866717	ppb	#	91
71) 4,6-Dinitro-2-methylph...	5.498	198	36338	15284.3123252	ppb		93
72) N-Nitrosodiphenylamine	5.539	169	194707	15317.3141905	ppb		98
74) 4-Bromophenyl-phenylether	5.815	248	82620	17097.0476855	ppb		96
75) Hexachlorobenzene	5.874	284	94378	17295.2469818	ppb		93
76) n-octadecane	6.062	55	32842	15037.7681218	ppb		96
77) Pentachlorophenol	6.021	266	51343	18179.7551617	ppb		97
78) Phenanthrene	6.185	178	344334	15218.2886798	ppb		98
79) Anthracene	6.226	178	365168	15958.3717842	ppb		100
80) Carbazole	6.350	167	312143	15724.7689655	ppb		97
81) Di-n-butyl phthalate	6.614	149	431805	17694.3033668	ppb		99
82) 2-nitrodiphenylamine	6.737	167	104198	21359.1087397	ppb		93
83) Fluoranthene	7.143	202	428939	16876.7613499	ppb		97
85) Benzidine	7.260	184	117782	12239.7664301	ppb		98
86) Pyrene	7.354	202	445432	15261.7414685	ppb		98
88) Benzylbutyl phthalate	8.042	149	202908	17984.4326825	ppb		96
89) 3,3-Dichlorobenzidine	8.747	252	324845	32949.9421082	ppb		95
90) Benzo(a)anthracene	8.770	228	469574	16821.5449302	ppb		96
91) Chrysene	8.823	228	448993	16595.5387667	ppb		97
92) bis(2-Ethylhexyl)phtha...	8.853	149	290721	17527.1017110	ppb		99
93) Di-n-octyl phthalate	9.981	149	489189	18037.1673756	ppb		100
95) Benzo(b)fluoranthene	10.580	252	485674	15900.8115704	ppb		96
96) Benzo(k)fluoranthene	10.633	252	495373	16147.2014798	ppb		92
97) Benzo(a)pyrene	11.197	252	487286	16867.4207682	ppb		96
98) Indeno(1,2,3-cd)pyrene	13.371	276	479615	17943.4990918	ppb		95
99) Dibenz(a,h)anthracene	13.418	278	510576	17451.1990204	ppb		92

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_05.D  
 Acq On : 4 May 2022 6:03 am  
 Operator : 3545  
 Sample : LCS 1x WG1857484  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 ALS Vial : 5 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 18:10:49 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
100) Benzo(g,h,i)perylene	13.747	276	495549	16688.7534628	ppb		98

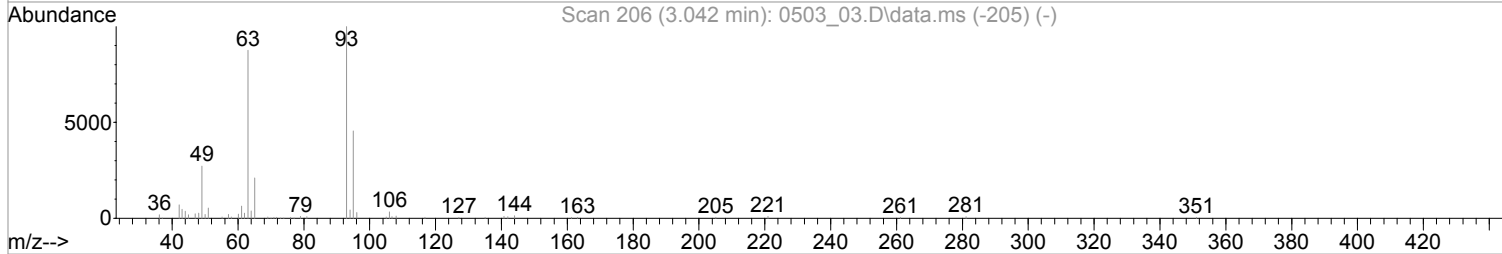
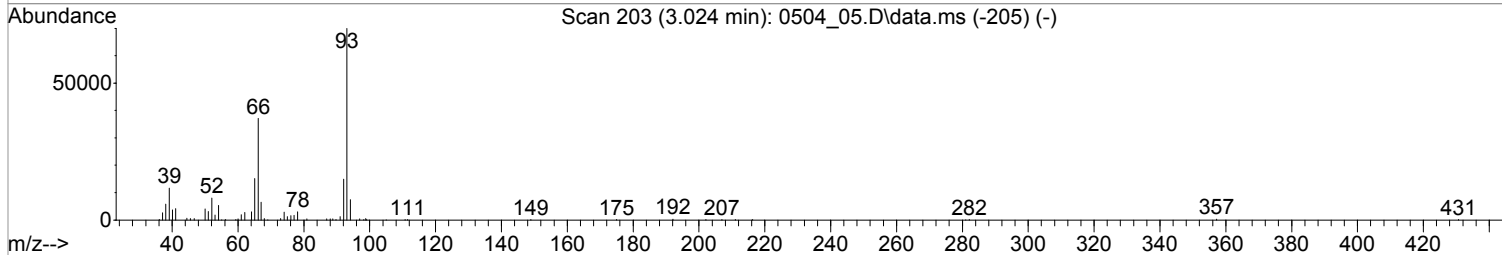
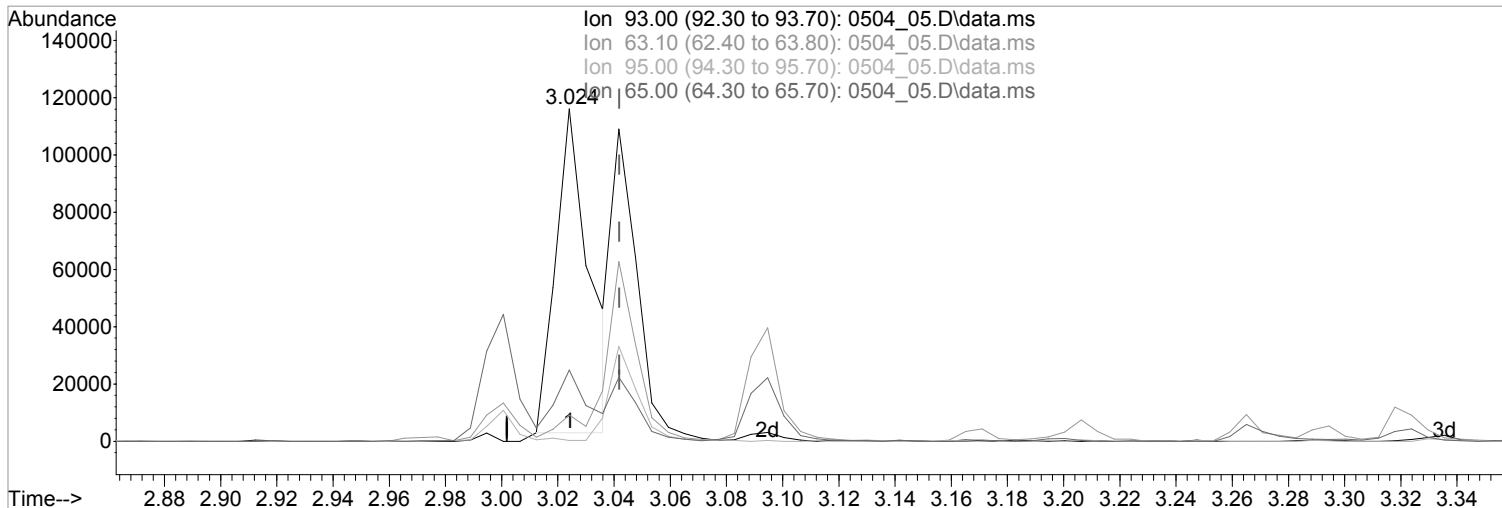
(#) = qualifier out of range (m) = manual integration (+) = signals summed



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_05.D  
 Acq On : 4 May 2022 6:03 am  
 Operator : 3545  
 Sample : LCS 1x WG1857484  
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Quant Time: May 04 13:05:31 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_05.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.024min (-0.018) 14833.4632509 ppb  
 Qvalue = 44  
 response 93391

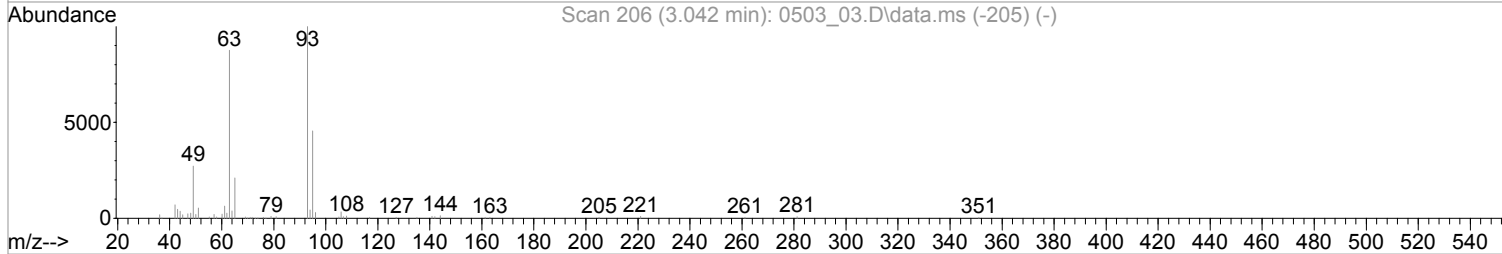
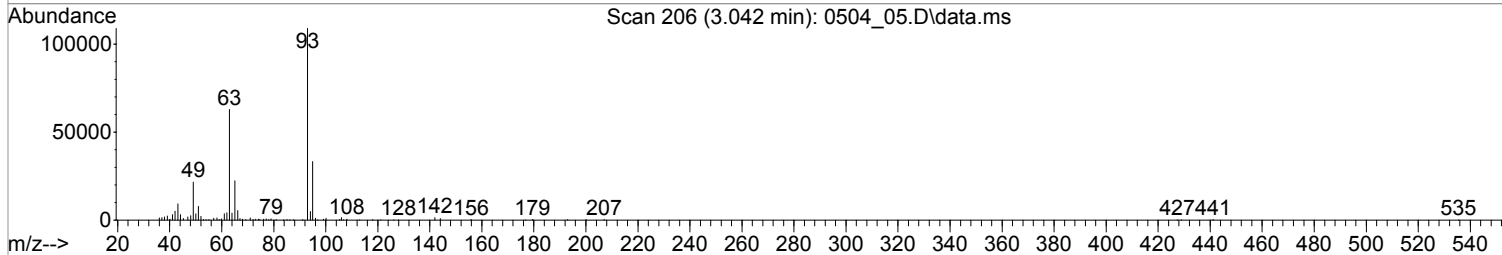
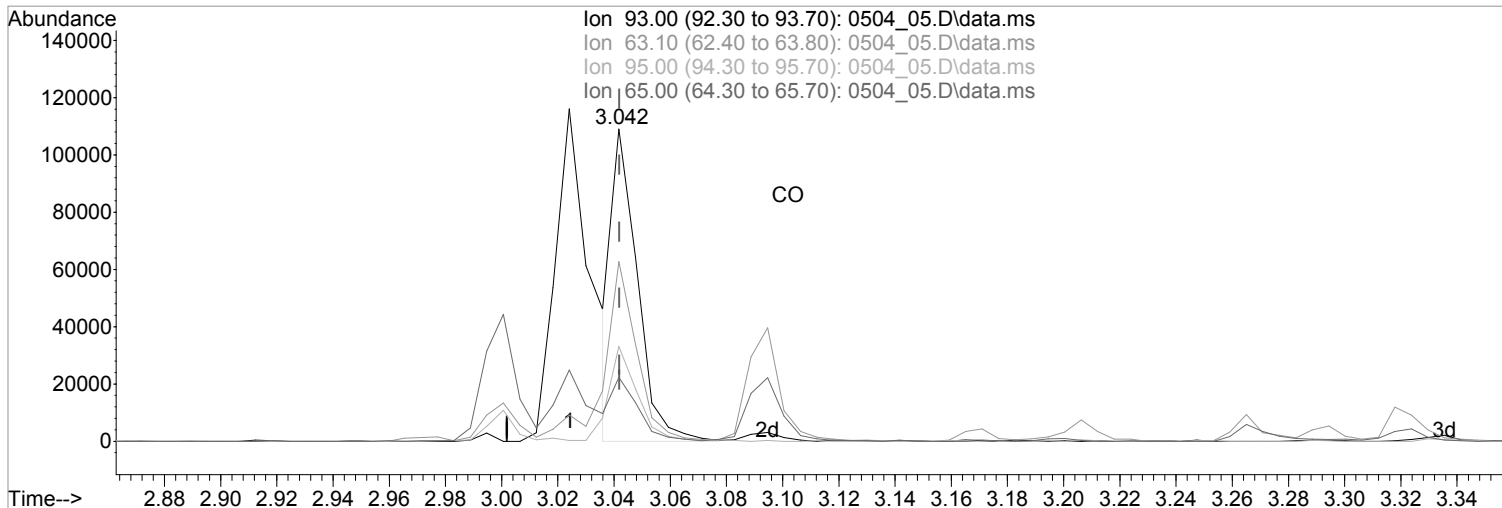
Ion	Exp%	Act%
93.00	100	100
63.10	63.50	6.82#
95.00	30.20	0.00#
65.00	21.40	17.90



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_05.D  
 Acq On : 4 May 2022 6:03 am  
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 Sample : LCS 1x WG1857484  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
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Quant Time: May 04 13:05:31 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
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TIC: 0504\_05.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.042min (-0.000) 10941.1304734 ppb m

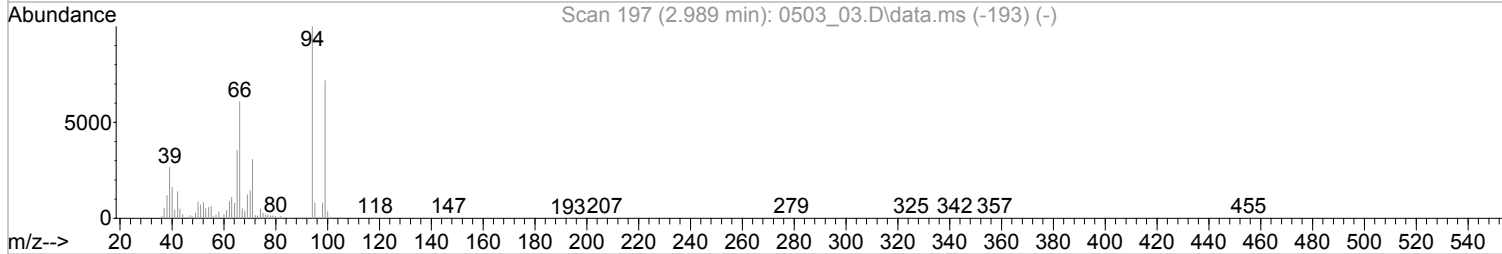
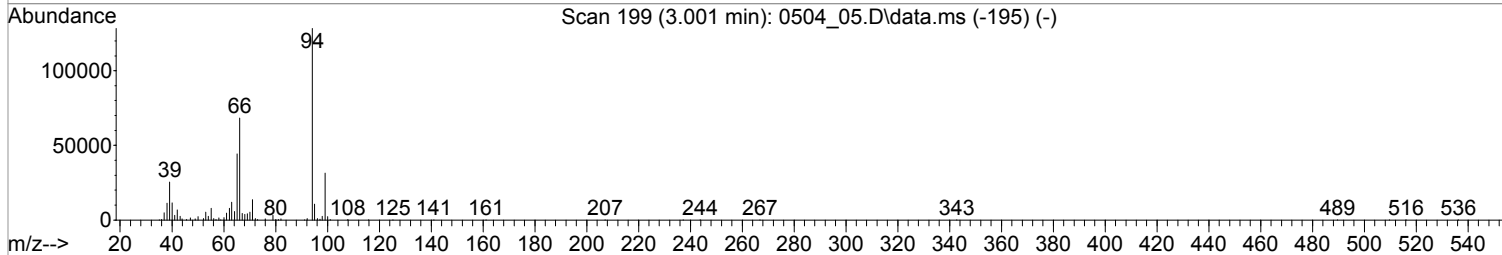
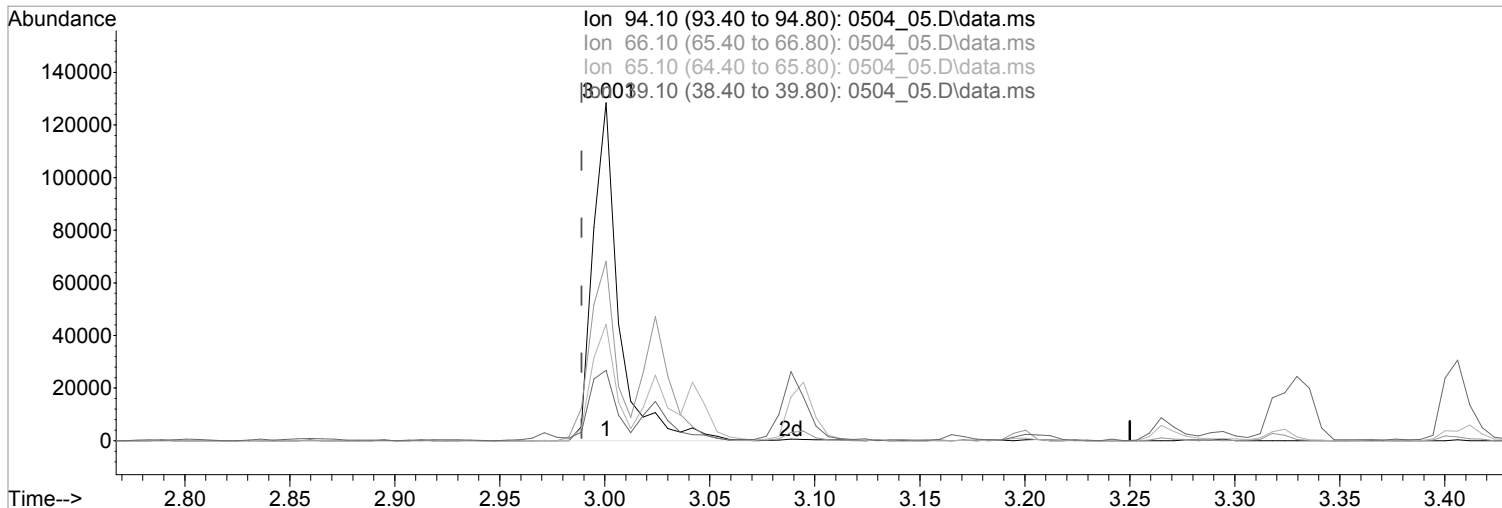
response 68885

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	57.62
95.00	30.20	30.43
65.00	21.40	20.44

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_05.D  
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 Response via : Initial Calibration



TIC: 0504\_05.D\data.ms

(8) Phenol (MC)

3.001min (+0.012) 14962.1453881 ppb

Qvalue = 93

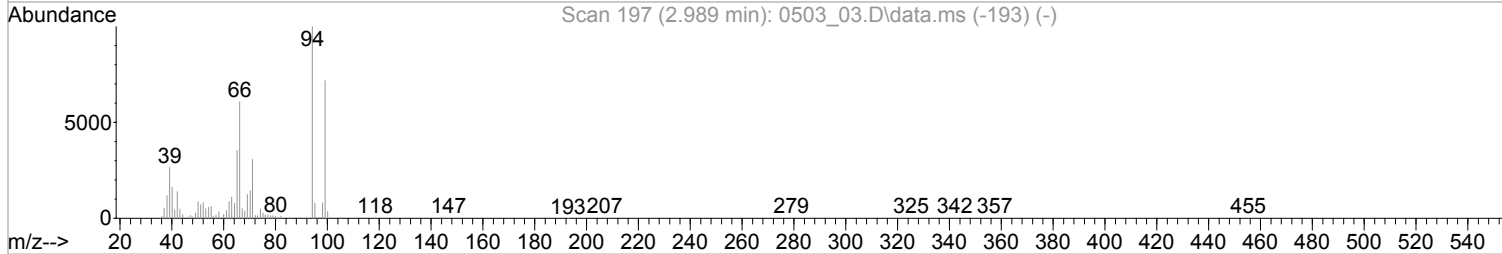
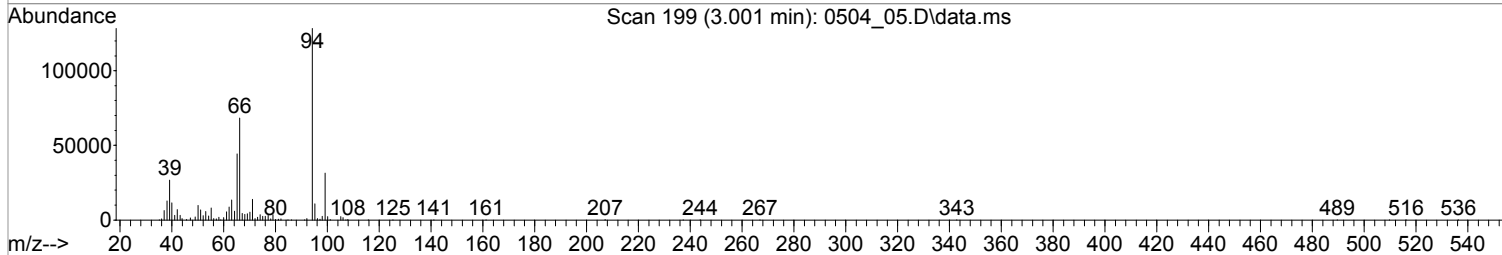
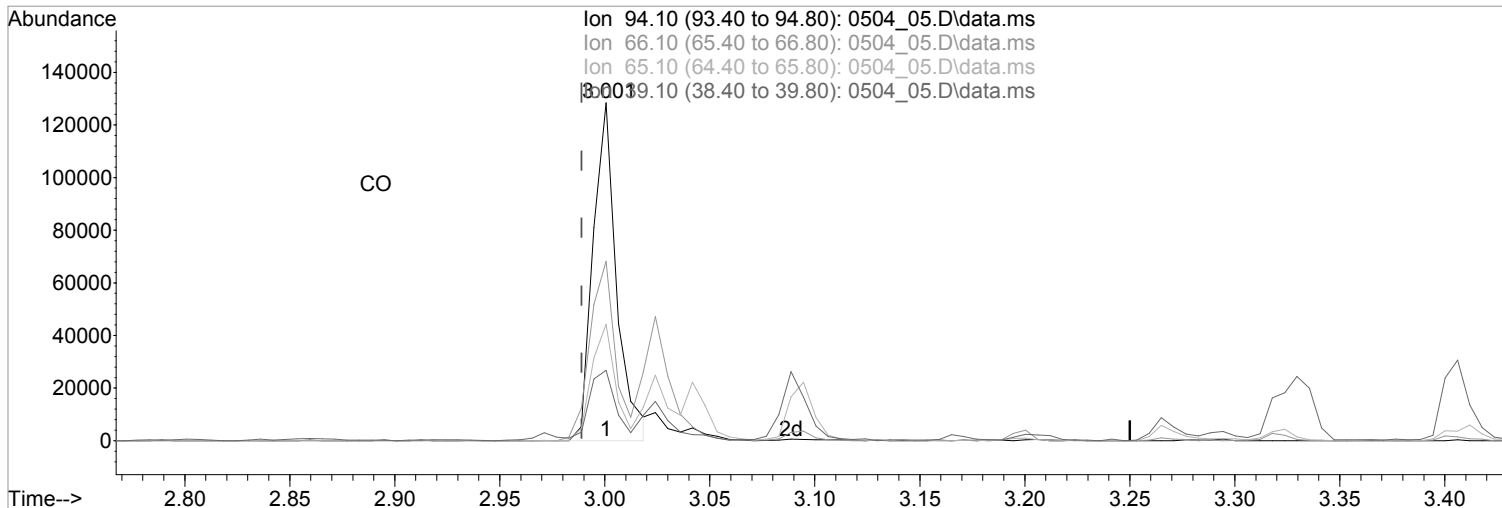
response 109835

Ion	Exp%	Act%
94.10	100	100
66.10	47.70	53.12
65.10	32.40	34.46
39.10	25.40	20.47

Quantitation Report (Qedit)

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 Quant Title : 8270 BNA  
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TIC: 0504\_05.D\data.ms

(8) Phenol (MC)  
 3.001min (+0.012) 13596.0927278 ppb m

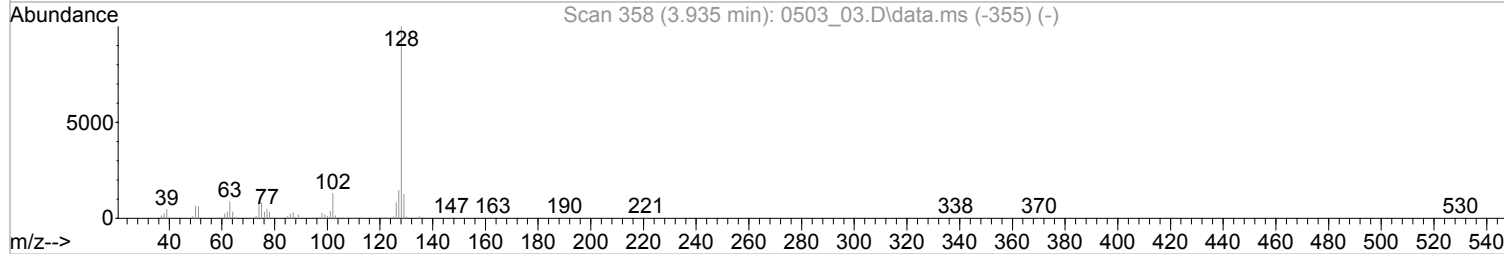
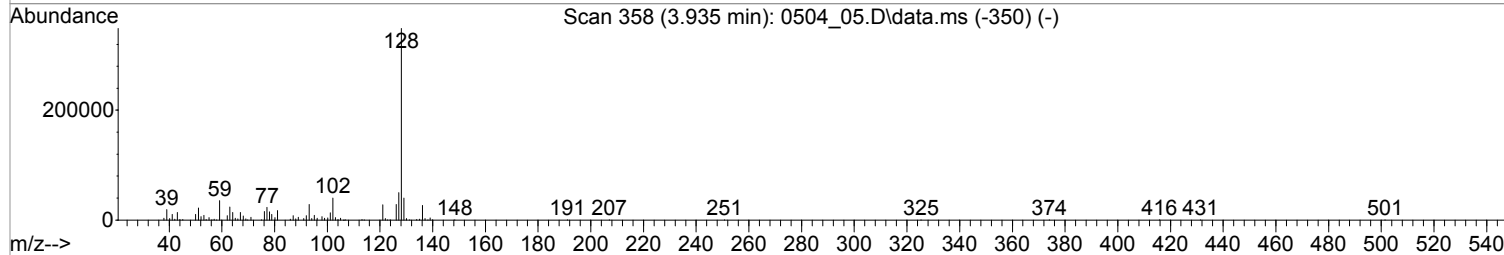
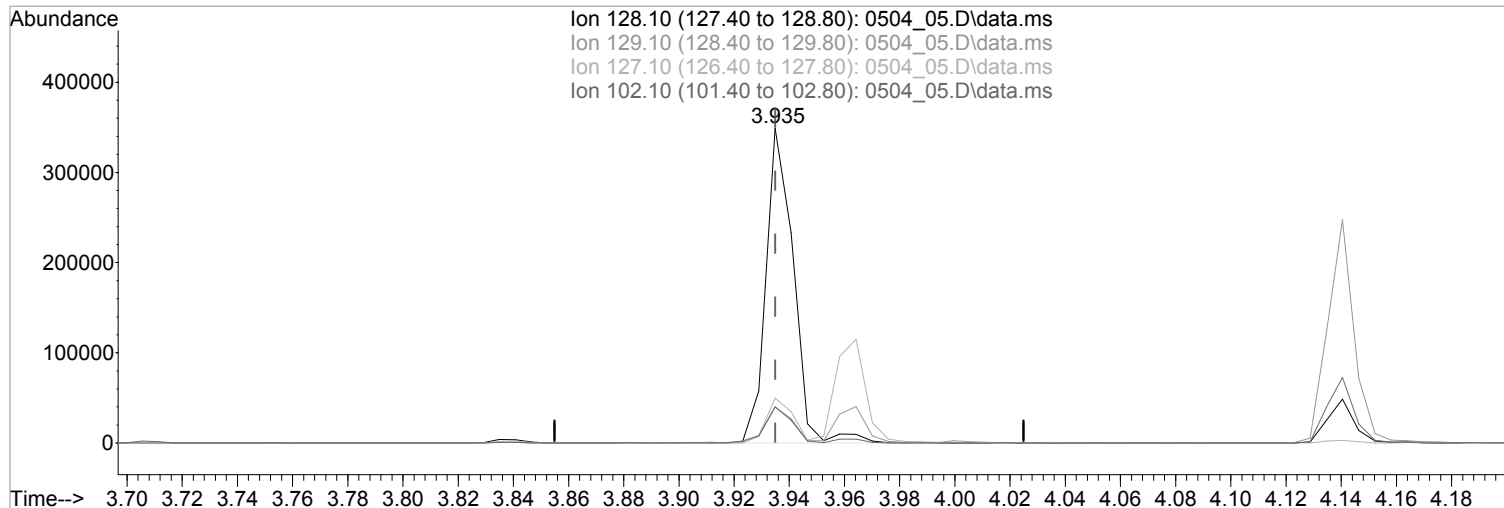
response 99807

Ion	Exp%	Act%
94.10	100	100
66.10	47.70	53.12
65.10	32.40	34.46
39.10	25.40	20.81

Quantitation Report (Qedit)

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TIC: 0504\_05.D\data.ms

(34) Naphthalene (MT)

3.935min (-0.000) 11289.6569211 ppb

Qvalue = 98

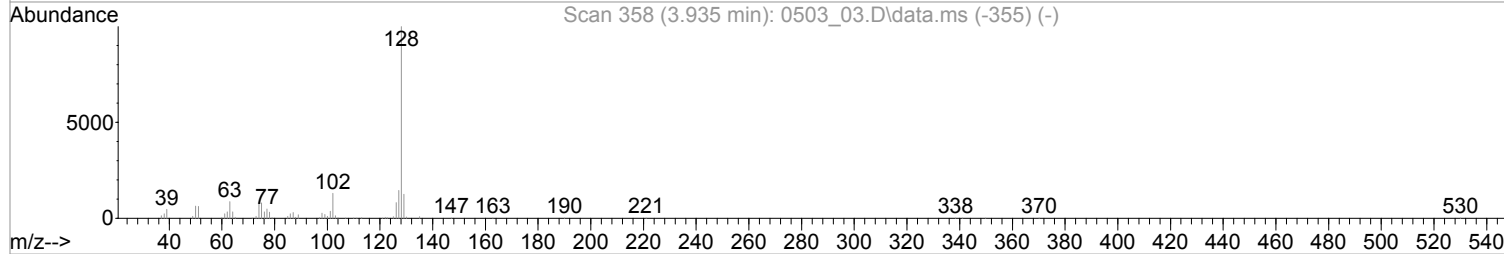
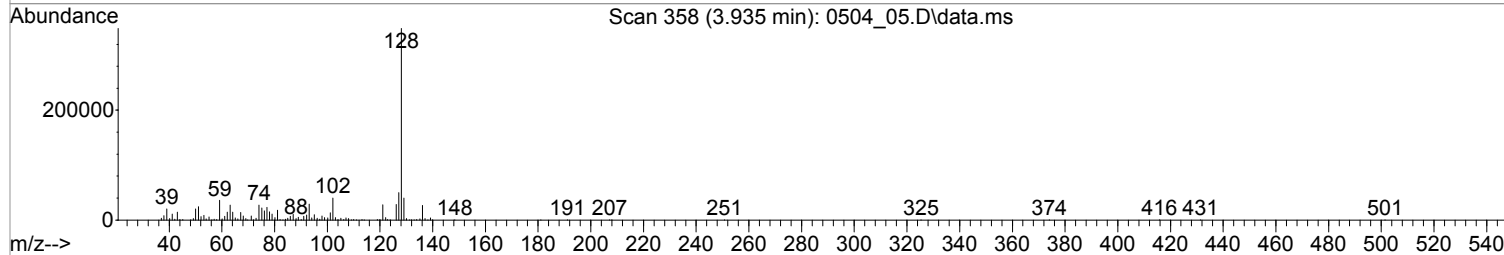
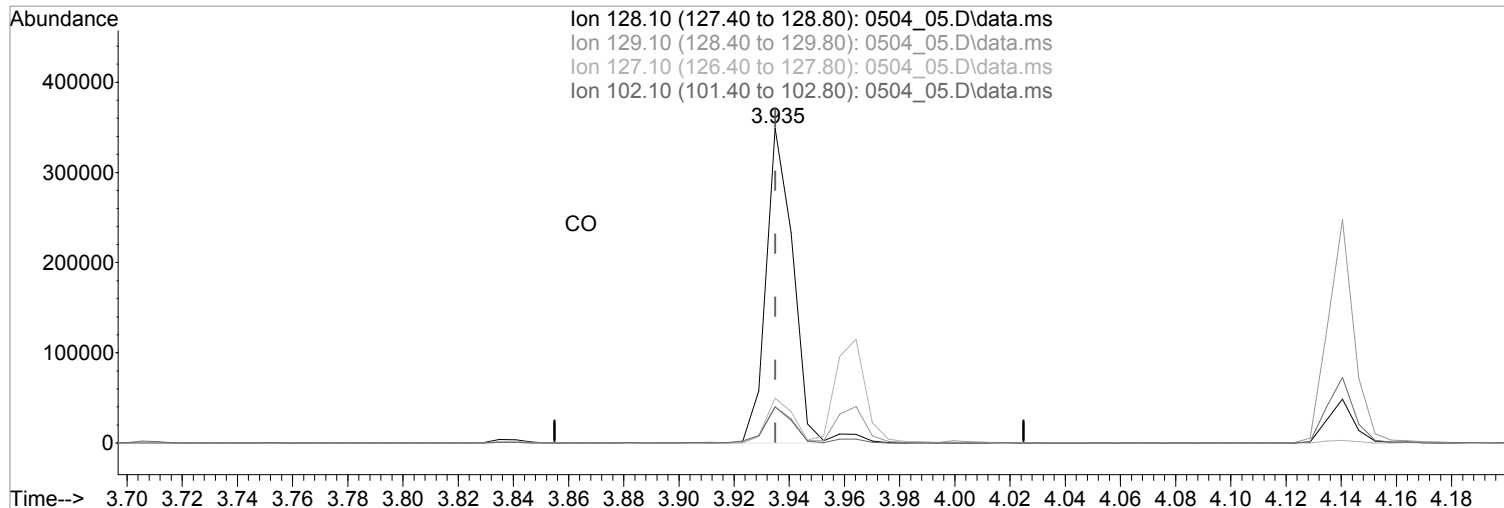
response 243252

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	11.29
127.10	13.50	14.27
102.10	10.10	11.45

Quantitation Report (Qedit)

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 Acq On : 4 May 2022 6:03 am  
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(34) Naphthalene (MT)  
 3.935min (-0.000) 10886.1565294 ppb m

response 234558

Ion	Exp%	Act%
128.10	100	100
129.10	10.50	11.38
127.10	13.50	14.27
102.10	10.10	11.45

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3787994-3  
 Client Sample ID: MS  
 Lab File ID: 0504\_31  
 Instrument ID: BNAMS11  
 Analytical Batch: WG1857484  
 Dilution Factor: 10  
 Analytical Method: 8270E  
 Matrix: Solid  
 Total Solids (%): 91.7

SDG: L1486885  
 Collected Date/Time: 04/20/22 11:45  
 Received Date/Time: 04/22/22 11:00  
 Preparation Date/Time: 05/03/22 09:10  
 Analysis Date/Time: 05/04/22 14:54  
 Prep Method: 3546  
 Sample Vol Used: \_\_\_\_\_  
 Initial Wt/Vol: 15.83 g  
 Final Wt/Vol: 1.0 mL

Analyte	CAS	RT	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	5.09	0.458		0.0588	0.363
Acenaphthylene	208-96-8	4.97	0.437		0.0511	0.363
Anthracene	120-12-7	6.23	0.565		0.0647	0.363
Benzoic Acid	65-85-0	3.74	U		1.29	18.2
Benzo(a)anthracene	56-55-3	8.76	1.38	J5	0.0640	0.363
Benzo(b)fluoranthene	205-99-2	10.57	1.74	J5	0.0677	0.363
Benzo(k)fluoranthene	207-08-9	10.62	0.896		0.0646	0.363
Benzo(g,h,i)perylene	191-24-2	13.74	1.04		0.0664	0.363
Benzo(a)pyrene	50-32-8	11.19	1.38	J5	0.0675	0.363
Carbazole	86-74-8	6.35	0.490		0.112	3.63
Chrysene	218-01-9	8.82	1.53	J5	0.0722	0.363
Dibenz(a,h)anthracene	53-70-3	13.41	0.562		0.101	0.363
Dibenzofuran	132-64-9	5.21	0.453		0.119	3.63
Fluoranthene	206-44-0	7.14	1.71	J5	0.0655	0.363
Fluorene	86-73-7	5.46	0.490		0.0591	0.363
Indeno(1,2,3-cd)pyrene	193-39-5	13.37	1.12	J5	0.103	0.363
1-Methylnaphthalene	90-12-0	4.43	0.466		0.0465	0.363
2-Methylnaphthalene	91-57-6	4.36	0.501		0.0471	0.363
Naphthalene	91-20-3	3.93	0.471		0.0912	0.363
Phenanthrene	85-01-8	6.19	0.883		0.0721	0.363
Bis(2-ethylhexyl)phthalate	117-81-7	8.85	4.11	V	0.460	3.63
Di-n-butyl phthalate	84-74-2	6.61	0.778		0.124	3.63
Di-n-octyl phthalate	117-84-0	9.98	0.820		0.245	3.63
Pyrene	129-00-0	7.35	1.48	J5	0.0707	0.363
3&4-Methyl Phenol	3&4-Methyl Phenol	3.41	0.447		0.113	3.63
Pentachlorophenol	87-86-5	6.03	0.328		0.0977	3.63
Phenol	108-95-2	2.99	0.367		0.146	3.63

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_31.D  
 Acq On : 4 May 2022 2:54 pm  
 Operator : 3545  
 Sample : MS 5x WG1857484 L1485528-168  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 ALS Vial : 31 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 05 12:18:43 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.201	152	41109	8000.0000000	ppb	0.00
23) Naphthalene-d8	3.923	136	165269	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.063	164	99310	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.162	188	200321	8000.0000000	ppb	0.00
84) Chrysene-d12	8.782	240	224893	8000.0000000	ppb	0.00
94) Perylene-d12	11.303	264	251781	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.548	112	8587	1428.7640993	ppb	0.01
Spiked Amount	20000.000	Range 20 - 120	Recovery =	7.14%#		
7) Phenol-d5	2.989	99	8961	1226.5608249	ppb	0.00
Spiked Amount	20000.000	Range 20 - 120	Recovery =	6.13%#		
24) Nitrobenzene-d5	3.506	82	5065	670.0340791	ppb	0.00
Spiked Amount	10000.000	Range 18 - 125	Recovery =	6.70%#		
50) 2-Fluorobiphenyl	4.593	172	10965	661.5001113	ppb	0.00
Spiked Amount	10000.000	Range 28 - 120	Recovery =	6.62%#		
73) 2,4,6-Tribromophenol	5.633	330	3584	1315.6934956	ppb	0.00
Spiked Amount	20000.000	Range 17 - 137	Recovery =	6.58%#		
87) p-Terphenyl-d14	7.496	244	18871	687.3250327	ppb	0.00
Spiked Amount	10000.000	Range 13 - 131	Recovery =	6.87%#		
<b>Target Compounds</b>						
3) N-Nitrosodimethylamine	1.937	42	3324	933.9950538	ppb #	83
5) Aniline	3.024	66	3962	1050.4693009	ppb #	1
6) bis(2-Chloroethyl)ether	3.042	93	7281	1100.2479629	ppb	93
8) Phenol	2.995	94	8216m	1064.8184182	ppb	
9) Benzaldehyde	2.971	105	6212	3184.2283230	ppb #	89
10) 2-Chlorophenol	3.089	128	8147	1253.0246460	ppb	92
12) 1,3-Dichlorobenzene	3.171	146	8780	1161.9419885	ppb	98
13) 1,4-Dichlorobenzene	3.206	146	9221	1201.7002512	ppb	86
14) Benzyl Alcohol	3.318	79	5539	959.0654874	ppb #	48
15) 1,2-Dichlorobenzene	3.295	146	9279	1277.6185219	ppb	96
16) bis(2-Chloroisopropyl)...	3.336	121	3510	1576.4083379	ppb	83
17) 2,2-oxybis(1-chloropro...	3.336	121	3510	1576.4083379	ppb	83
18) 2-Methylphenol	3.318	108	6631	1135.6698771	ppb	93
19) Hexachloroethane	3.477	117	3165	1122.3520008	ppb	85
20) N-Nitrosodi-n-propylamine	3.406	70	5880	1267.4826386	ppb	86
21) 3&4-Methyl phenol	3.412	107	8700	1298.2146624	ppb #	1
22) Acetophenone	3.412	105	11649	1293.2770021	ppb #	77
25) Nitrobenzene	3.512	77	8856	1230.4463467	ppb	85
26) Isophorone	3.641	82	14271	1118.2098044	ppb	88
27) 2-Nitrophenol	3.694	139	3600	1048.6424802	ppb #	73
28) 2,4-Dimethylphenol	3.712	107	5491m	802.0554368	ppb	
29) bis(2-Chlorethoxy)methane	3.759	93	9415	1280.3178362	ppb	90
30) 2,4-Dichlorophenol	3.841	162	7239	1298.6073198	ppb	95
32) 1,2,4-Trichlorobenzene	3.888	180	9426	1445.7700704	ppb	90
33) alpha-terpineol	3.929	59	5800	1512.2450342	ppb	82
34) Naphthalene	3.935	128	27655	1365.5169470	ppb	94
35) 4-Chloroaniline	3.964	65	2142	871.5301293	ppb #	49
36) Hexachloro-1,3-butadiene	4.000	225	6248	1528.2656759	ppb	96
38) Quinoline	4.141	129	13663	1228.3972313	ppb	93
39) Caprolactam	4.158	113	2331	1899.9499777	ppb	88
40) 4-Chloro-3-methylphenol	4.264	107	7540	1323.3933637	ppb #	78
41) 2-Methylnaphthalene	4.364	142	19648	1452.8977501	ppb #	91

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_31.D  
 Acq On : 4 May 2022 2:54 pm  
 Operator : 3545  
 Sample : MS 5x WG1857484 L1485528-168  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 ALS Vial : 31 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 05 12:18:43 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

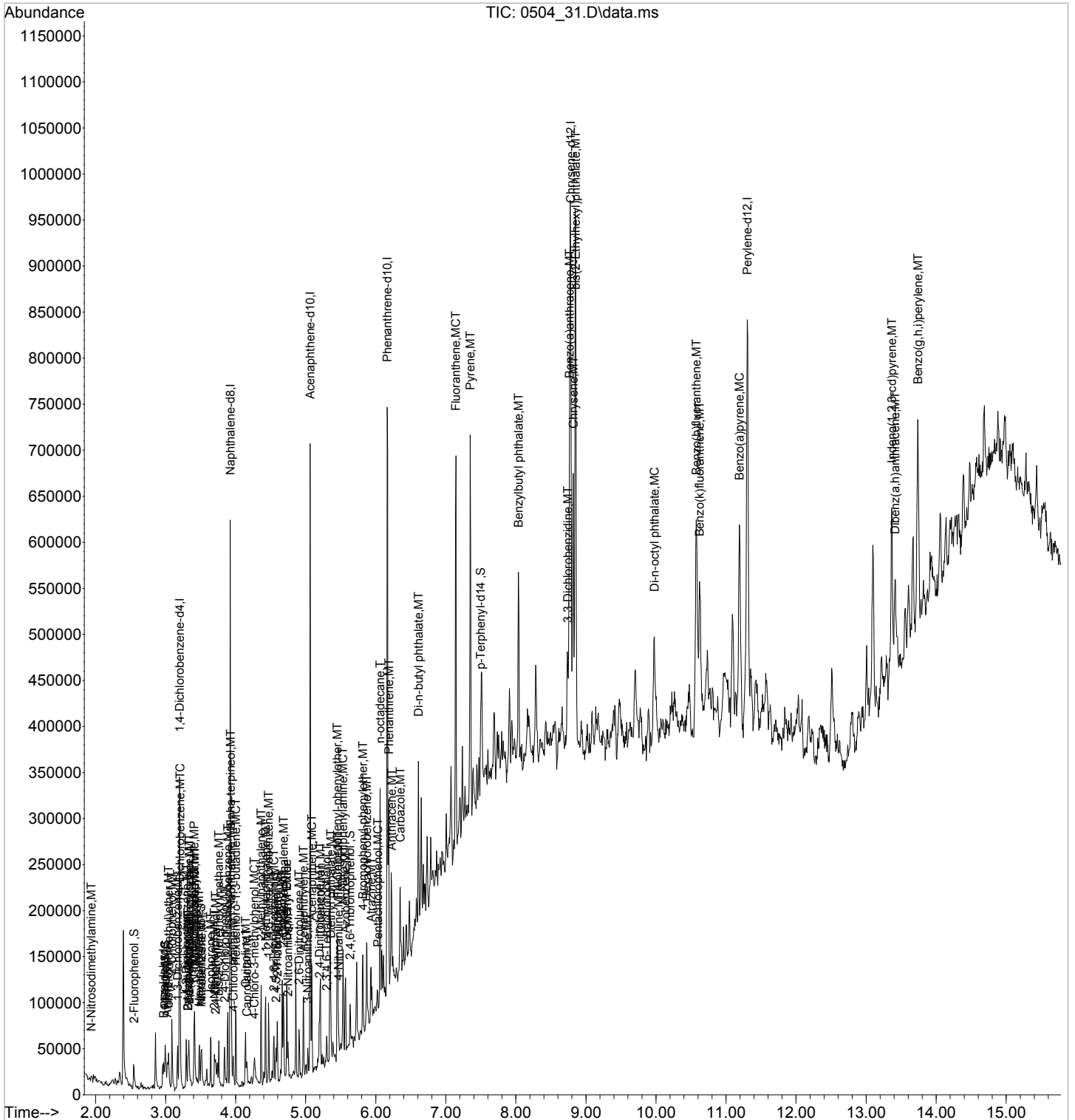
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
42) 1-Methylnaphthalene	4.429	142	17237	1350.0934476	ppb	#	90
43) 1,2,4,5-Tetrachloroben...	4.470	216	9461	1581.5367124	ppb		93
44) Diphenyl Ether	4.728	170	13000	1287.7237133	ppb	#	87
45) Diphenyl Oxide	4.728	170	13000	1287.7237133	ppb	#	87
48) 2,4,6-Trichlorophenol	4.546	196	5368	1155.5600516	ppb	#	85
49) 2,4,5-Trichlorophenol	4.575	196	6949	1438.5872895	ppb		83
51) Biphenyl	4.664	154	21788	1175.8052750	ppb		93
52) 2-Chloronaphthalene	4.681	162	17090	1194.8032312	ppb		86
53) 2-Nitroaniline	4.746	138	5457	1305.6061325	ppb	#	69
54) Acenaphthylene	4.969	152	28444	1269.7947575	ppb		96
56) 2,6-Dinitrotoluene	4.904	165	4767	1368.8623832	ppb	#	79
57) 3-Nitroaniline	5.028	138	3655	1015.5017628	ppb	#	77
58) Acenaphthene	5.087	153	19382	1328.2037269	ppb		88
60) Dibenzofuran	5.210	168	26654	1313.7320876	ppb		92
61) 2,4-Dinitrotoluene	5.198	165	6706	1463.2839708	ppb		87
62) 2,3,4,6-Tetrachlorophenol	5.298	232	3990	1114.9465641	ppb		90
64) Fluorene	5.457	166	23216	1422.2128489	ppb		94
65) 4-Chlorophenyl-phenyle...	5.451	204	11185	1294.2484731	ppb		90
66) Diethyl phthalate	5.357	149	22446	1396.2846419	ppb		94
67) 4-Nitroaniline	5.468	138	4070	1261.1241017	ppb	#	64
68) Azobenzene	5.568	77	24124	1509.2204304	ppb		96
69) Atrazine	5.933	200	8425	1785.3587484	ppb	#	87
72) N-Nitrosodiphenylamine	5.533	169	19354	1331.1536223	ppb		97
74) 4-Bromophenyl-phenylether	5.815	248	8571	1550.6858129	ppb	#	84
75) Hexachlorobenzene	5.874	284	10302	1650.5699347	ppb		93
76) n-octadecane	6.062	55	6124	2451.5759668	ppb	#	68
77) Pentachlorophenol	6.027	266	3078	952.8659116	ppb	#	79
78) Phenanthrene	6.185	178	66302	2561.9398303	ppb		94
79) Anthracene	6.226	178	42875	1638.1602552	ppb		97
80) Carbazole	6.350	167	32233	1419.6712505	ppb		92
81) Di-n-butyl phthalate	6.608	149	62964	2255.7683476	ppb		98
83) Fluoranthene	7.143	202	144464	4969.4645403	ppb		98
86) Pyrene	7.349	202	148873	4306.3555292	ppb		95
88) Benzylbutyl phthalate	8.036	149	46753	3498.4713286	ppb		96
89) 3,3-Dichlorobenzidine	8.741	252	25896	2217.5959457	ppb		96
90) Benzo(a)anthracene	8.765	228	132839	4017.5260216	ppb		94
91) Chrysene	8.818	228	142392	4443.3307188	ppb		95
92) bis(2-Ethylhexyl)phtha...	8.853	149	234660	11943.8415305	ppb		97
93) Di-n-octyl phthalate	9.975	149	76477	2380.6401784	ppb		98
95) Benzo(b)fluoranthene	10.574	252	185058	5064.1459425	ppb		95
96) Benzo(k)fluoranthene	10.621	252	95469	2601.0650777	ppb		96
97) Benzo(a)pyrene	11.191	252	138466	4006.1924080	ppb		95
98) Indeno(1,2,3-cd)pyrene	13.365	276	104538	3268.9816230	ppb		98
99) Dibenz(a,h)anthracene	13.412	278	57098	1631.2092796	ppb		94
100) Benzo(g,h,i)perylene	13.741	276	106832	3007.2017550	ppb		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\050422\  
Data File : 0504\_31.D  
Acq On : 4 May 2022 2:54 pm  
Operator : 3545  
Sample : MS 5x WG1857484 L1485528-168  
Misc : SOIL ISTD 22D28020 exp 10/28/22  
ALS Vial : 31 Sample Multiplier: 1  
InstName : BNAMS11

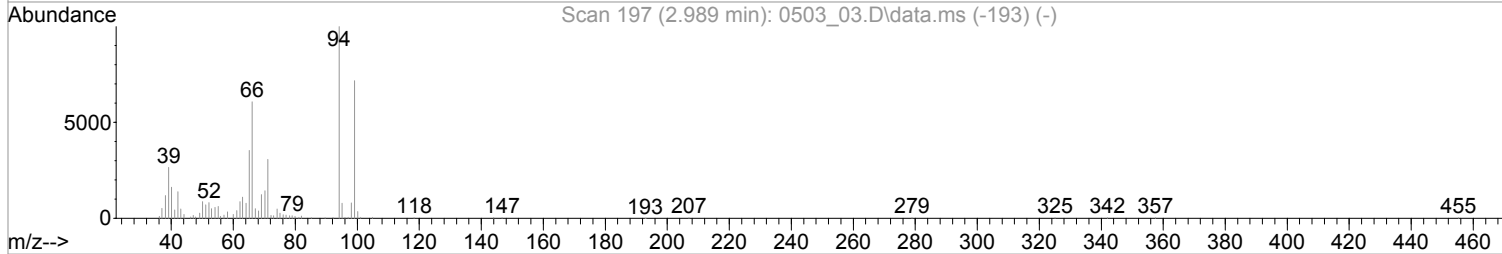
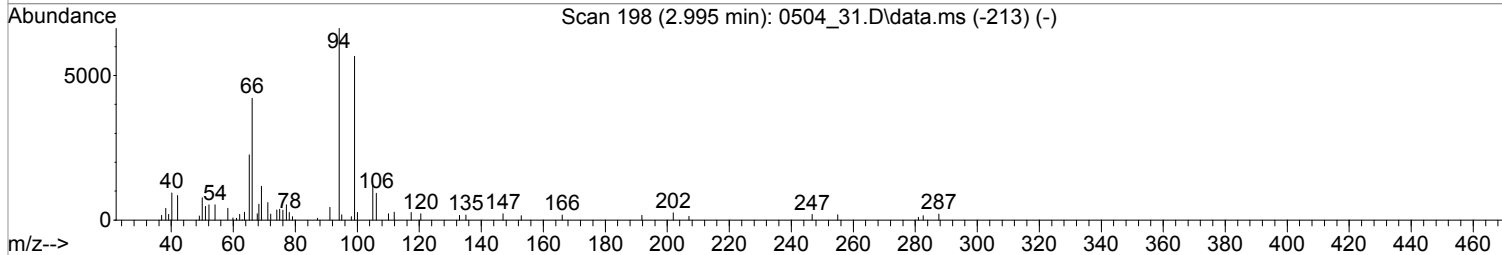
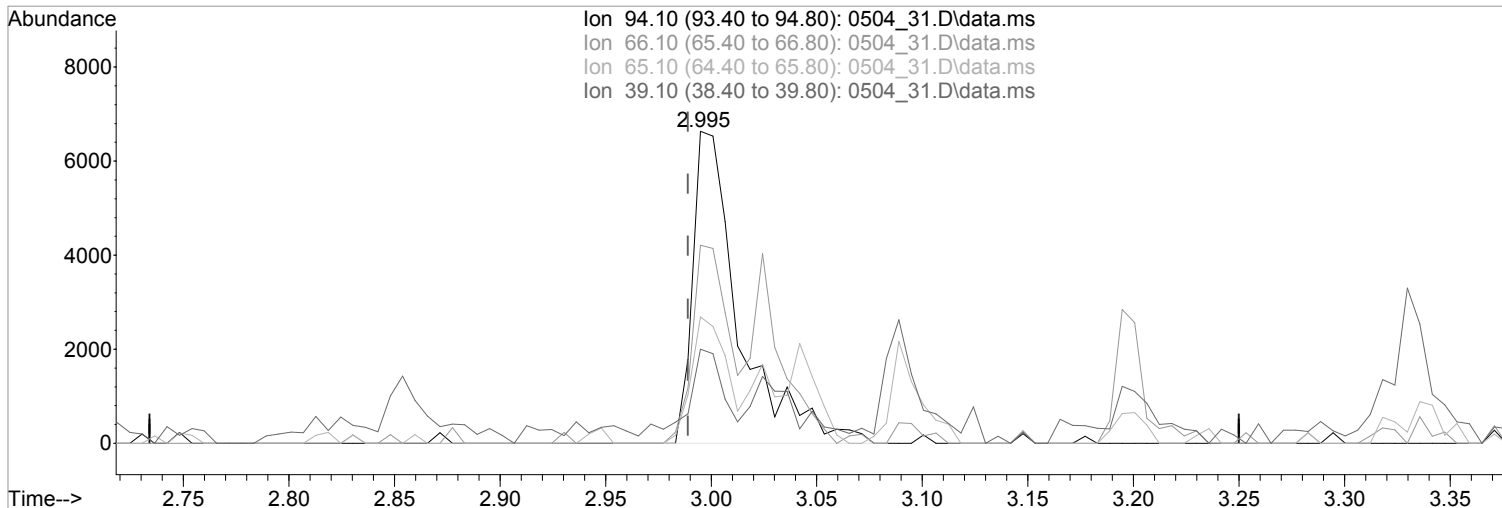
Quant Time: May 05 12:18:43 2022  
Quant Method : C:\msdchem\1\methods\S811E03V.M  
Quant Title : 8270 BNA  
QLast Update : Tue May 03 05:28:33 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_31.D  
 Acq On : 4 May 2022 2:54 pm  
 Operator : 3545  
 Sample : MS 5x WG1857484 L1485528-168  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 ALS Vial : 31 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 04 16:01:33 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_31.D\data.ms

(8) Phenol (MC)

2.995min (+0.006) 1326.4869170 ppb

Qvalue = 85

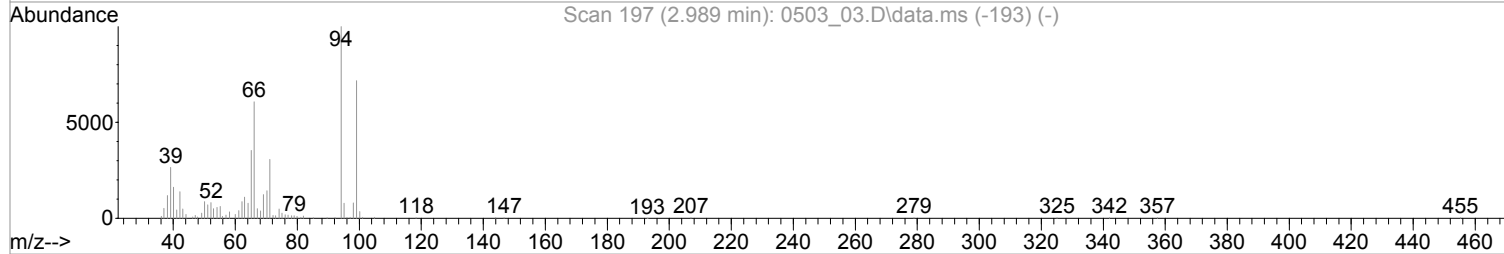
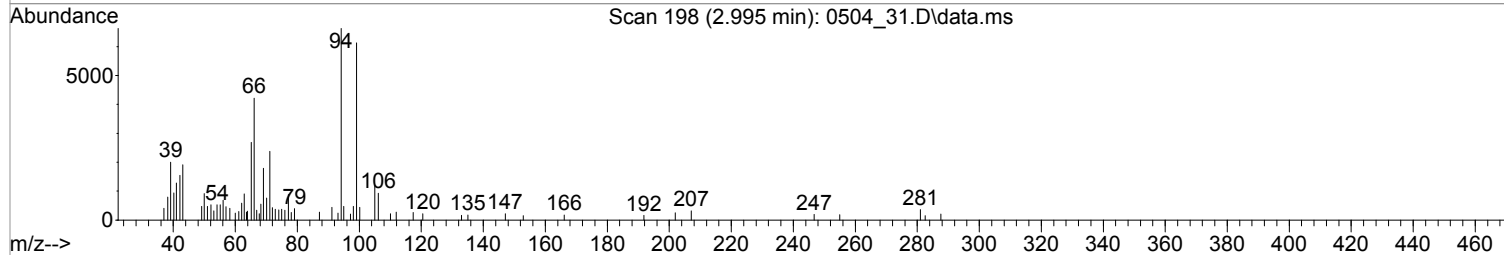
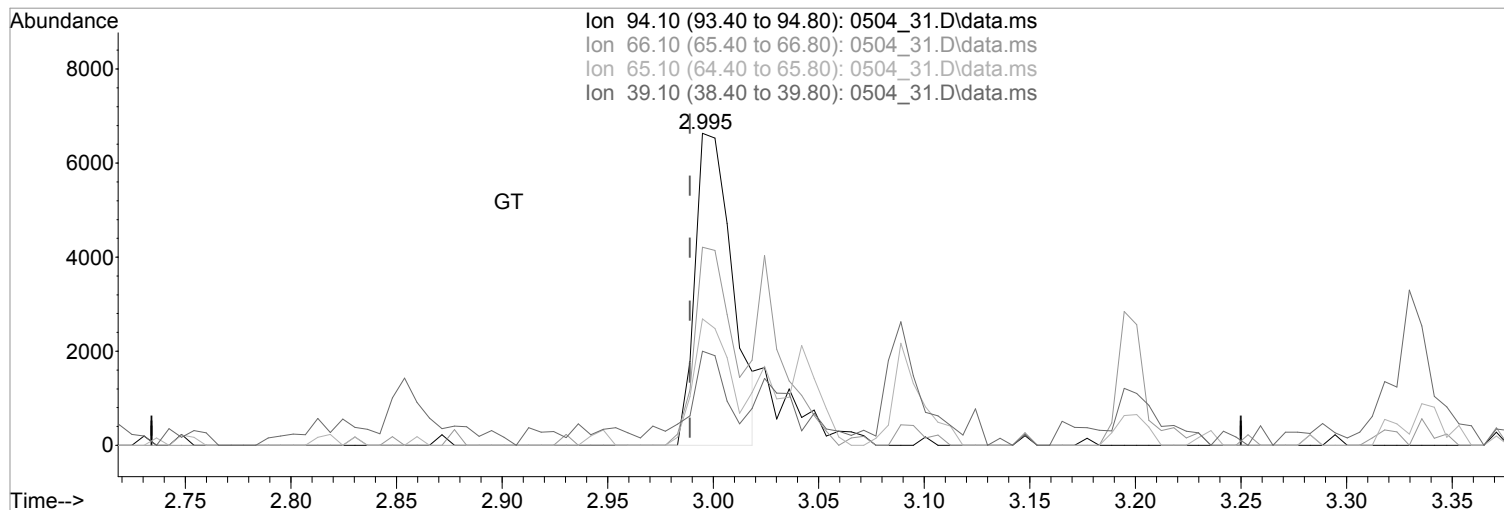
response 10235

Ion	Exp%	Act%
94.10	100	100
66.10	47.70	63.45
65.10	32.40	40.47
39.10	25.40	25.62

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_31.D  
 Acq On : 4 May 2022 2:54 pm  
 Operator : 3545  
 Sample : MS 5x WG1857484 L1485528-168  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
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Quant Time: May 04 16:01:33 2022  
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 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_31.D\data.ms

(8) Phenol (MC)  
 2.995min (+0.006) 1064.8184182 ppb m

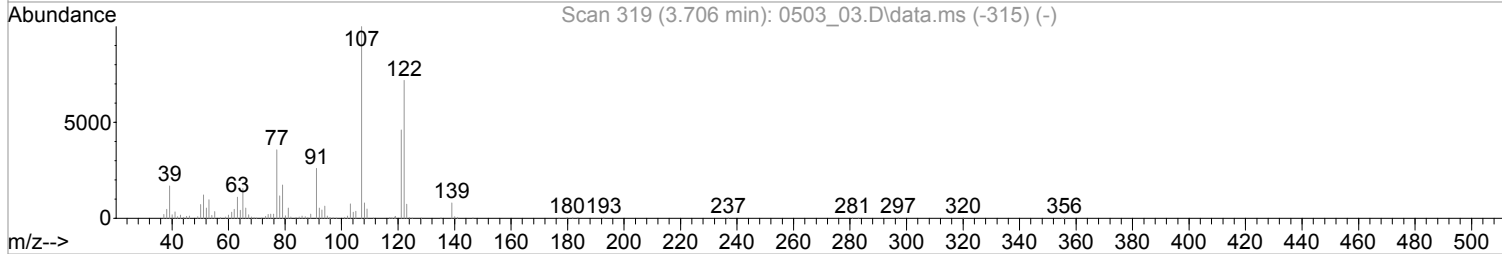
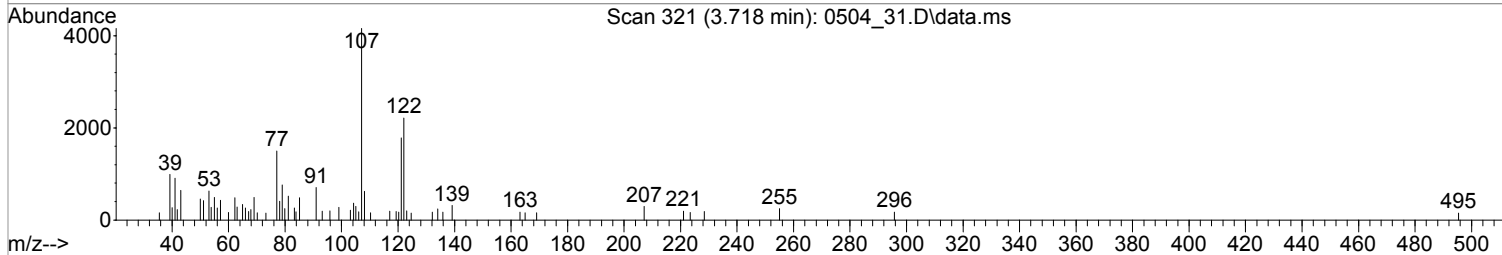
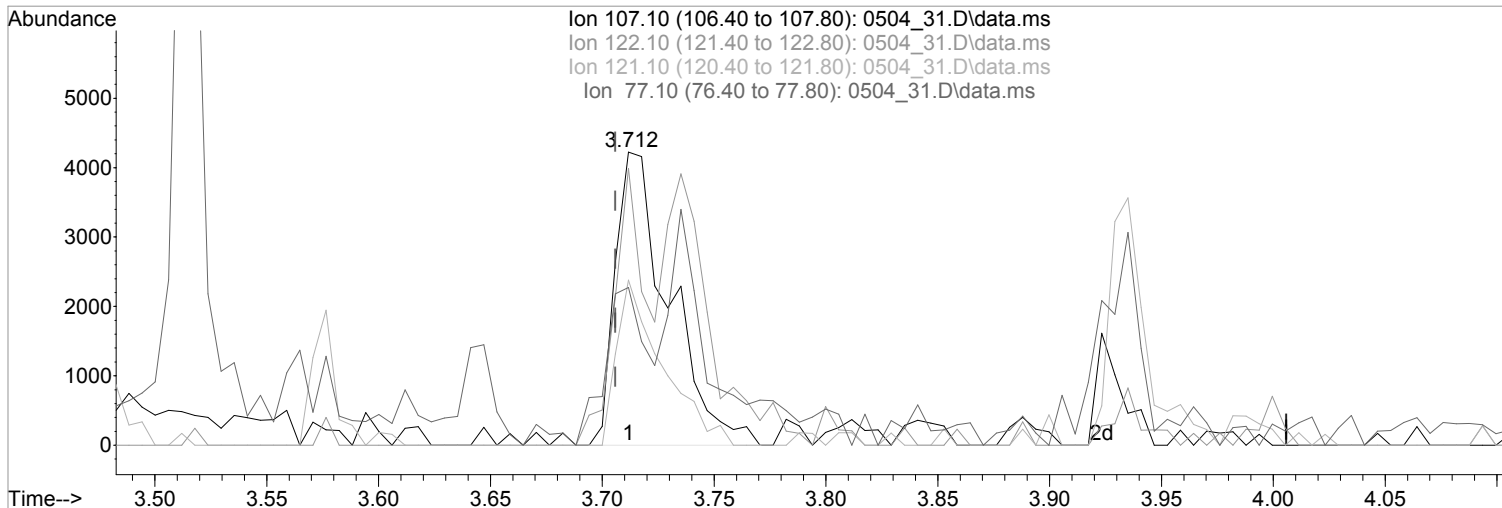
response 8216

Ion	Exp%	Act%
94.10	100	100
66.10	47.70	63.45
65.10	32.40	40.47
39.10	25.40	30.14

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_31.D  
 Acq On : 4 May 2022 2:54 pm  
 Operator : 3545  
 Sample : MS 5x WG1857484 L1485528-168  
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TIC: 0504\_31.D\data.ms

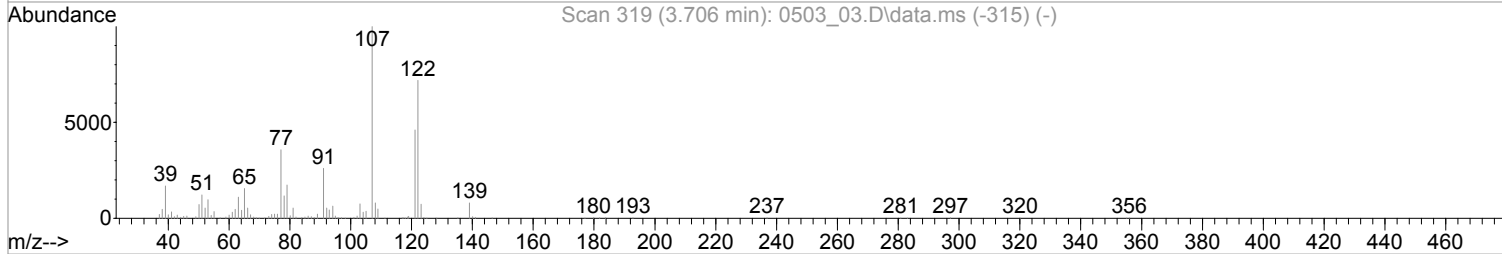
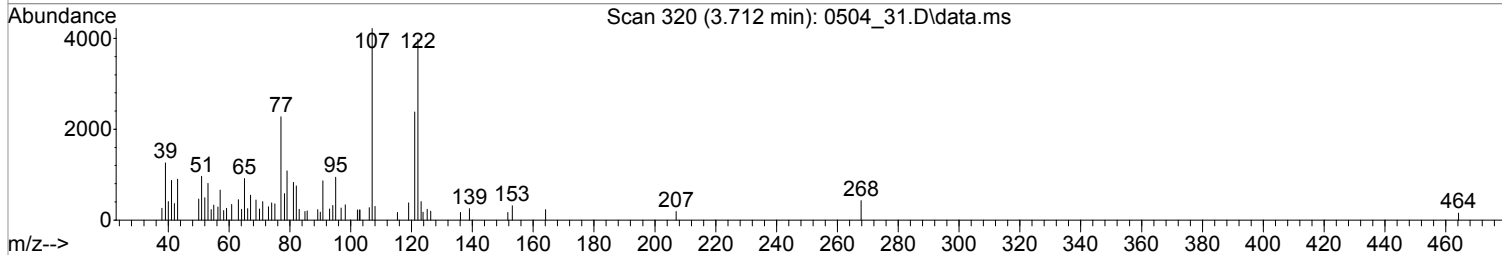
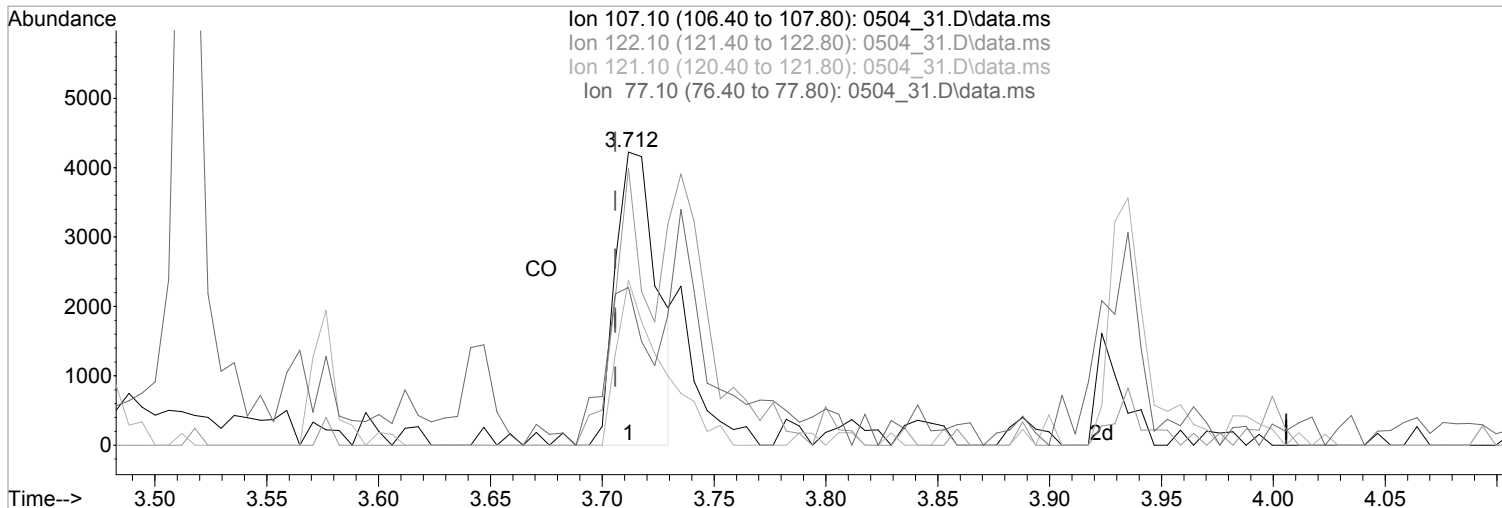
(28) 2,4-Dimethylphenol (MT)  
 3.712min (+0.006) 1036.0552201 ppb  
 Qvalue = 94  
 response 7093

Ion	Exp%	Act%
107.10	100	100
122.10	89.40	86.08
121.10	49.80	56.37
77.10	33.70	38.38

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_31.D  
 Acq On : 4 May 2022 2:54 pm  
 Operator : 3545  
 Sample : MS 5x WG1857484 L1485528-168  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
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 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_31.D\data.ms

(28) 2,4-Dimethylphenol (MT)  
 3.712min (+0.006) 802.0554368 ppb m

response 5491

Ion	Exp%	Act%
107.10	100	100
122.10	89.40	94.44
121.10	49.80	56.37
77.10	33.70	53.79#

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3788258-1  
**Client Sample ID:** MS  
**Lab File ID:** 0504\_27  
**Instrument ID:** BNAMS4  
**Analytical Batch:** WG1857248  
**Dilution Factor:** 2  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** 75.6

**SDG:** L1486885  
**Collected Date/Time:** 04/21/22 09:50  
**Received Date/Time:** 04/27/22 09:00  
**Preparation Date/Time:** 05/02/22 17:00  
**Analysis Date/Time:** 05/04/22 13:43  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15.34 g  
**Final Wt/Vol:** 1 mL

Analyte	CAS	RT	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Acenaphthene	83-32-9	5.20	0.590		0.0143	0.0881
Acenaphthylene	208-96-8	5.08	0.620		0.0124	0.0881
Anthracene	120-12-7	6.36	0.677		0.0157	0.0881
Benzoic Acid	65-85-0	3.84	1.90		0.312	4.42
Benzo(a)anthracene	56-55-3	9.05	0.705		0.0155	0.0881
Benzo(b)fluoranthene	205-99-2	10.98	0.678		0.0164	0.0881
Benzo(k)fluoranthene	207-08-9	11.04	0.688		0.0156	0.0881
Benzo(g,h,i)perylene	191-24-2	14.10	0.592		0.0161	0.0881
Benzo(a)pyrene	50-32-8	11.63	0.753		0.0164	0.0881
Carbazole	86-74-8	6.48	0.698		0.0272	0.881
Chrysene	218-01-9	9.11	0.709		0.0175	0.0881
Dibenz(a,h)anthracene	53-70-3	13.79	0.648		0.0245	0.0881
Dibenzofuran	132-64-9	5.32	0.606		0.0288	0.881
Fluoranthene	206-44-0	7.31	0.717		0.0159	0.0881
Fluorene	86-73-7	5.58	0.635		0.0143	0.0881
Indeno(1,2,3-cd)pyrene	193-39-5	13.75	0.627		0.0249	0.0881
1-Methylnaphthalene	90-12-0	4.53	0.480		0.0113	0.0881
2-Methylnaphthalene	91-57-6	4.46	0.452		0.0114	0.0881
Naphthalene	91-20-3	4.03	0.451		0.0221	0.0881
Phenanthrene	85-01-8	6.32	0.671		0.0175	0.0881
Bis(2-ethylhexyl)phthalate	117-81-7	9.14	0.837		0.112	0.881
Di-n-butyl phthalate	84-74-2	6.75	0.796		0.0302	0.881
Di-n-octyl phthalate	117-84-0	10.35	0.825		0.0595	0.881
Pyrene	129-00-0	7.53	0.692		0.0172	0.0881
3&4-Methyl Phenol	3&4-Methyl Phenol	3.48	0.734		0.0275	0.881
Pentachlorophenol	87-86-5	6.15	0.697		0.0237	0.881
Phenol	108-95-2	3.08	0.622		0.0354	0.881

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D Vial: 33  
 Acq On : 4 May 2022 1:43 pm Operator: 3545  
 Sample : MS 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	75706	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	350717	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	162768	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	314291	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	295235	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	306410	8000.00	ppb	-0.12

System Monitoring Compounds

4) 2-Fluorophenol	2.63	112	87906	7145.6341768	ppb	-0.02
Spiked Amount	20000.000	Range 20 - 120	Recovery	=	35.73%	
7) Phenol-d5	3.07	99	110042	7452.8163131	ppb	-0.03
Spiked Amount	20000.000	Range 20 - 120	Recovery	=	37.26%	
24) Nitrobenzene-d5	3.59	82	44107	2963.9803416	ppb	-0.04
Spiked Amount	10000.000	Range 18 - 125	Recovery	=	29.64%	
50) 2-Fluorobiphenyl	4.70	172	86530	3151.3810250	ppb	-0.04
Spiked Amount	10000.000	Range 28 - 120	Recovery	=	31.51%	
73) 2,4,6-Tribromophenol	5.76	330	32349	9092.3950518	ppb	-0.05
Spiked Amount	20000.000	Range 17 - 137	Recovery	=	45.46%	
87) p-Terphenyl-d14	7.69	244	141240	3500.6108629	ppb	-0.07
Spiked Amount	10000.000	Range 13 - 131	Recovery	=	35.01%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.03	79	75865	6476.4717339	ppb	90
3) N-Nitrosodimethylamine	2.01	42	43499	6918.6710715	ppb	86
5) Aniline	3.11	66	34916	4984.7810519	ppb #	32
6) bis(2-Chloroethyl)ether	3.12	93	93236m	8569.2854227	ppb	
8) Phenol	3.08	94	112013	7202.0353082	ppb	94
9) Benzaldehyde	3.06	105	62844	18663.4720976	ppb #	90
10) 2-Chlorophenol	3.17	128	83862	6734.4326029	ppb	92
11) n-Decane	3.16	41	37450	5105.7685499	ppb #	98
12) 1,3-Dichlorobenzene	3.25	146	78380	5566.7379733	ppb	96
13) 1,4-Dichlorobenzene	3.29	146	77768	5366.1928363	ppb	93
14) Benzyl Alcohol	3.35	79	65999	6852.5596901	ppb	95
15) 1,2-Dichlorobenzene	3.38	146	79093	5937.0840168	ppb	96
16) bis(2-Chloroisopropyl)ethe	3.41	121	27122	5949.5690596	ppb #	23
17) 2,2-oxybis(1-chloropropane	3.41	121	27122	5949.5690596	ppb #	23
18) 2-Methylphenol	3.40	108	84794	7535.5521149	ppb	94
19) Hexachloroethane	3.57	117	14617	2778.5361317	ppb	96
20) N-Nitrosodi-n-propylamine	3.49	70	63912	7772.1546987	ppb	95
21) 3&4-Methyl phenol	3.48	107	108863	8517.2125580	ppb	93
22) Acetophenone	3.50	105	112548	7188.7487917	ppb #	69
25) Nitrobenzene	3.60	77	97028	6668.5013378	ppb	91
26) Isophorone	3.73	82	174510	6685.9164490	ppb	91
27) 2-Nitrophenol	3.78	139	43225	5894.0488465	ppb	92
28) 2,4-Dimethylphenol	3.79	107	88106	6468.8637686	ppb	93
29) bis(2-Chlorethoxy)methane	3.84	93	103933	6227.7174337	ppb	94
30) 2,4-Dichlorophenol	3.92	162	69748	6078.8721627	ppb	92
31) Benzoic Acid	3.84	105	126352	22019.4970406	ppb	90
32) 1,2,4-Trichlorobenzene	3.97	180	69479	5409.6720267	ppb	96
33) alpha-terpineol	4.02	59	83835	7620.0605251	ppb	97
34) Naphthalene	4.03	128	233301	5223.7632297	ppb	99
35) 4-Chloroaniline	4.05	65	23900	4605.6370236	ppb #	45
36) Hexachloro-1,3-butadiene	4.09	225	39343	5615.2077653	ppb	97
37) Hydroquinone	4.24	110	51618m	6570.2461911	ppb	
38) Quinoline	4.24	129	172231	7369.5837797	ppb	98

(#) = qualifier out of range (m) = manual integration

0504\_27.D S804C29V.M Thu May 05 12:48:13 2022

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D Vial: 33  
 Acq On : 4 May 2022 1:43 pm Operator: 3545  
 Sample : MS 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022 Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) Caprolactam	4.26	113	32825	13583.0645884	ppb #	79
40) 4-Chloro-3-methylphenol	4.35	107	83639	7231.4910915	ppb	84
41) 2-Methylnaphthalene	4.46	142	152683	5246.4957183	ppb #	95
42) 1-Methylnaphthalene	4.53	142	152114	5562.0008180	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	4.57	216	66747	7110.2709581	ppb	98
44) Diphenyl Ether	4.84	170	99489	6643.7702593	ug/ml#	80
45) Diphenyl Oxide	4.84	170	99489	6643.7702593	ug/ml#	80
48) 2,4,6-Trichlorophenol	4.64	196	52029	7369.8446635	ppb #	88
49) 2,4,5-Trichlorophenol	4.67	196	57577	7836.6508029	ppb	97
51) Biphenyl	4.76	154	195482	6411.3253977	ppb	100
52) 2-Chloronaphthalene	4.79	162	150813	6481.2317849	ppb	97
53) 2-Nitroaniline	4.85	138	61284	8496.3635466	ppb #	77
54) Acenaphthylene	5.08	152	260360	7192.2996864	ppb	99
55) Dimethyl phthalate	4.97	163	189240	7849.8412996	ppb	98
56) 2,6-Dinitrotoluene	5.02	165	43589	7798.5844546	ppb #	73
57) 3-Nitroaniline	5.14	138	36982	6145.3522858	ppb #	87
58) Acenaphthene	5.20	153	162866	6839.1821075	ppb	95
59) 2,4-Dinitrophenol	5.22	184	15701	5411.7017090	ppb #	1
60) Dibenzofuran	5.32	168	231986	7024.4593132	ppb	95
61) 2,4-Dinitrotoluene	5.31	165	63325	9047.0683354	ppb	85
62) 2,3,4,6-Tetrachlorophenol	5.41	232	41745	8993.6152771	ppb	93
63) 4-Nitrophenol	5.26	139	47007	9456.6979268	ppb #	68
64) Fluorene	5.58	166	197230	7362.3825786	ppb	100
65) 4-Chlorophenyl-phenylether	5.57	204	88205	6943.1070847	ppb	94
66) Diethyl phthalate	5.47	149	206950	8379.1621633	ppb	98
67) 4-Nitroaniline	5.59	138	41832	7421.7741063	ppb #	76
68) Azobenzene	5.69	77	234777	9529.5761313	ppb	94
69) Atrazine	6.06	200	66687	10018.8303540	ppb	99
71) 4,6-Dinitro-2-methylphenol	5.61	198	27128	6535.2196672	ppb	96
72) N-Nitrosodiphenylamine	5.66	169	173289	7255.8288519	ppb	98
74) 4-Bromophenyl-phenylether	5.94	248	57518	7420.6601848	ppb	92
75) Hexachlorobenzene	5.99	284	63091	7315.2716756	ppb	98
76) n-octadecane	6.18	55	40570	8436.5186459	ppb	97
77) Pentachlorophenol	6.15	266	38480	8082.3293182	ppb	92
78) Phenanthrene	6.32	178	321765	7781.1378785	ppb	99
79) Anthracene	6.36	178	328921	7858.2739249	ppb	100
80) Carbazole	6.48	167	309303	8099.1271140	ppb	98
81) Di-n-butyl phthalate	6.75	149	412792	9232.9479289	ppb	99
82) 2-nitrodiphenylamine	6.88	167	94589	11933.0688059	ppb #	100
83) Fluoranthene	7.31	202	365173	8312.6054217	ppb	99
86) Pyrene	7.53	202	381375	8028.2024242	ppb	99
88) Benzylbutyl phthalate	8.27	149	182538	9397.3391060	ppb	91
89) 3,3-Dichlorobenzidine	9.03	252	159242	10476.8081790	ppb	94
90) Benzo(a)anthracene	9.05	228	347546	8175.2266917	ppb	98
91) Chrysene	9.11	228	338683	8220.7657157	ppb	98
92) bis(2-Ethylhexyl)phthalate	9.14	149	259547	9700.6812088	ppb	96
93) Di-n-octyl phthalate	10.35	149	425445	9571.8007133	ppb	99
95) Benzo(b)fluoranthene	10.98	252	343581	7871.3244830	ppb	98
96) Benzo(k)fluoranthene	11.04	252	342670	7970.0099778	ppb	95
97) Benzo(a)pyrene	11.63	252	329781	8723.1403078	ppb	97
98) Indeno(1,2,3-cd)pyrene	13.75	276	270080m	7271.2847976	ppb	
99) Dibenz(a,h)anthracene	13.79	278	297211	7507.9736283	ppb	97
100) Benzo(g,h,i)perylene	14.10	276	265741	6873.7988021	ppb	98

(#) = qualifier out of range (m) = manual integration

0504\_27.D S804C29V.M Thu May 05 12:48:13 2022

Page 2

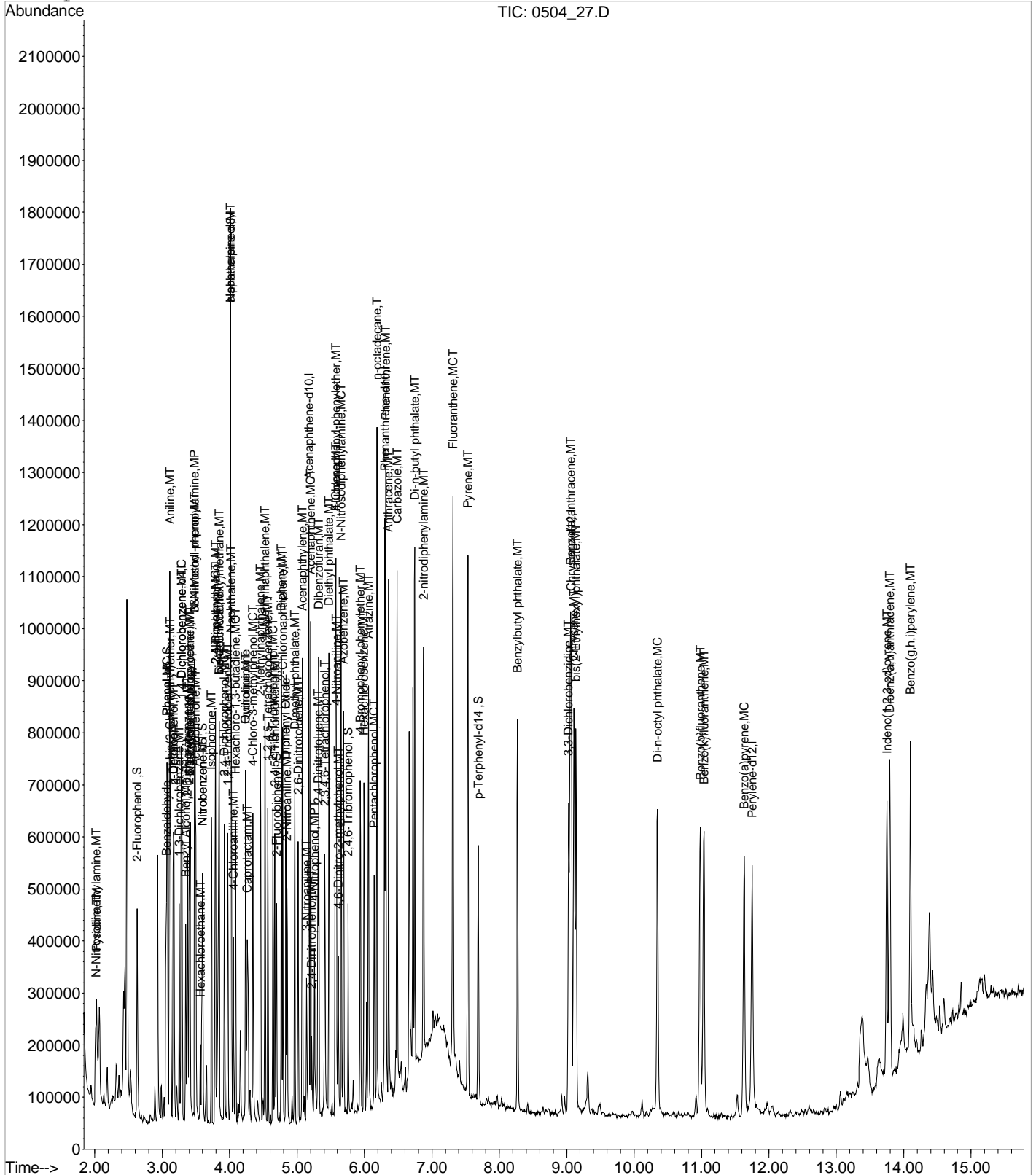


Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D
Acq On : 4 May 2022 1:43 pm
Sample : MS 1x WG1857248 L1486885-01
Misc : SOIL ISTD 22D28020 exp 10/28/22
MS Integration Params: RTEINT.P
Quant Time: May 5 12:48 2022

Vial: 33
Operator: 3545
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804C29V.RES

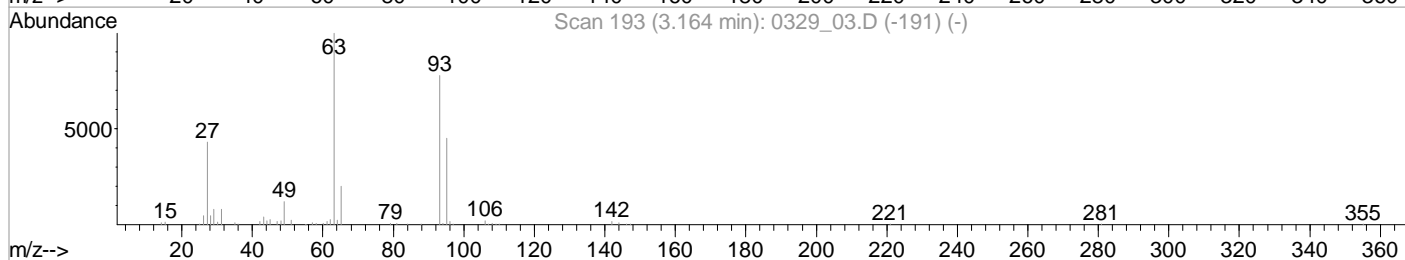
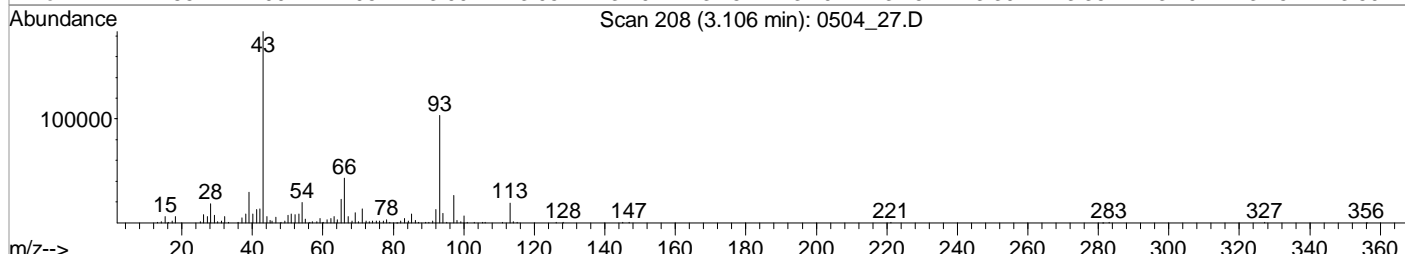
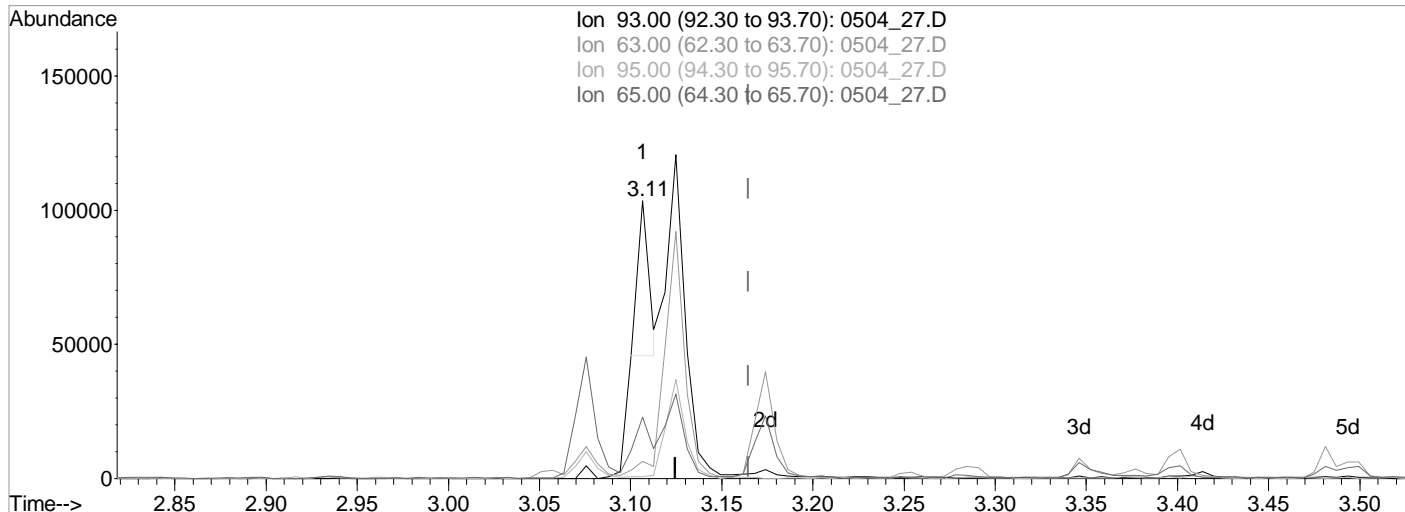
Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Tue Mar 29 09:44:27 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D Vial: 33  
 Acq On : 4 May 2022 1:43 pm Operator: 3545  
 Sample : MS 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 4 14:29 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_27.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.11min (-0.058) 2274.3954810 ppb  
 Qvalue = 38  
 response 24746

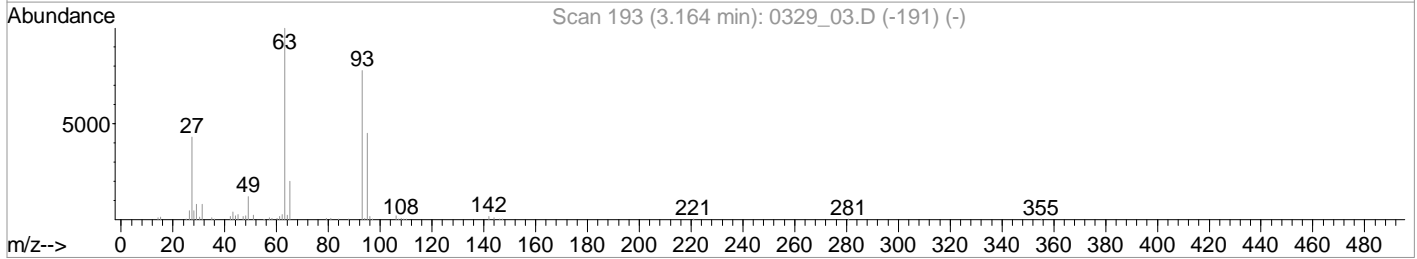
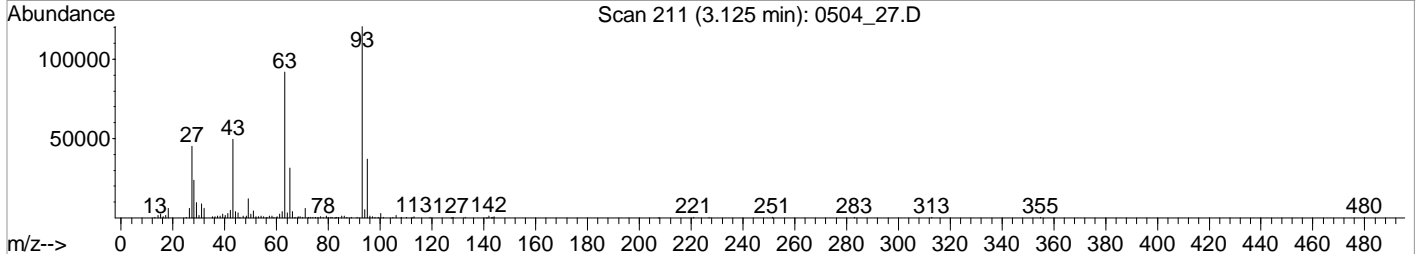
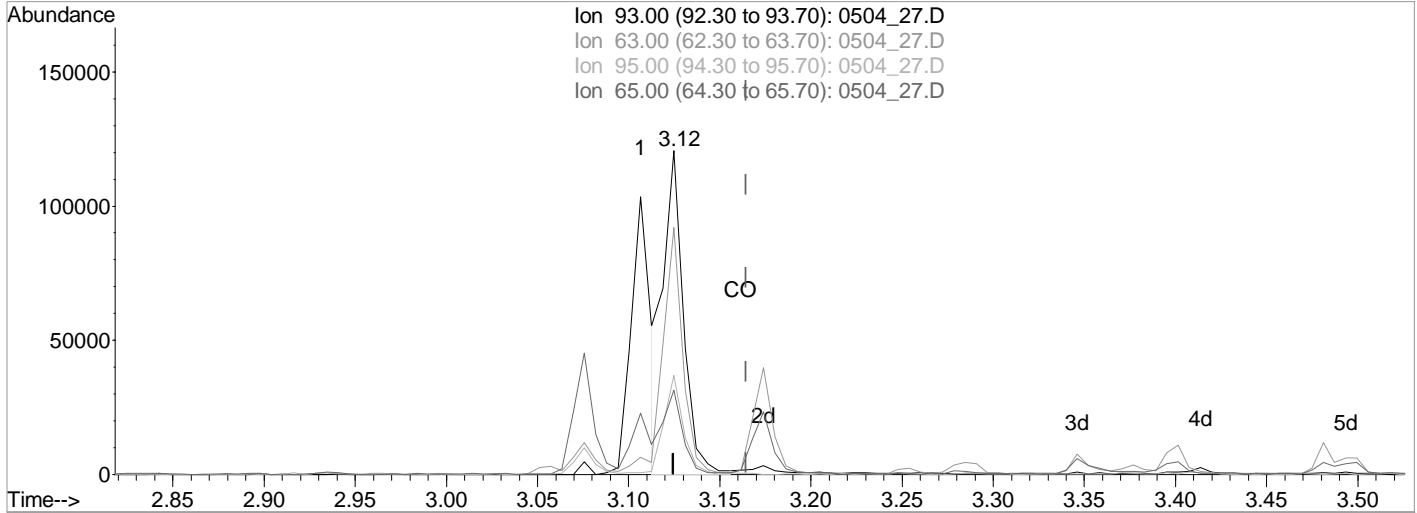
Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.81#
95.00	30.20	0.00#
65.00	24.00	21.29

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D  
 Acq On : 4 May 2022 1:43 pm  
 Sample : MS 1x WG1857248 L1486885-01  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:47 2022

Vial: 33  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_27.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.12min (-0.040) 8569.2854227 ppb m

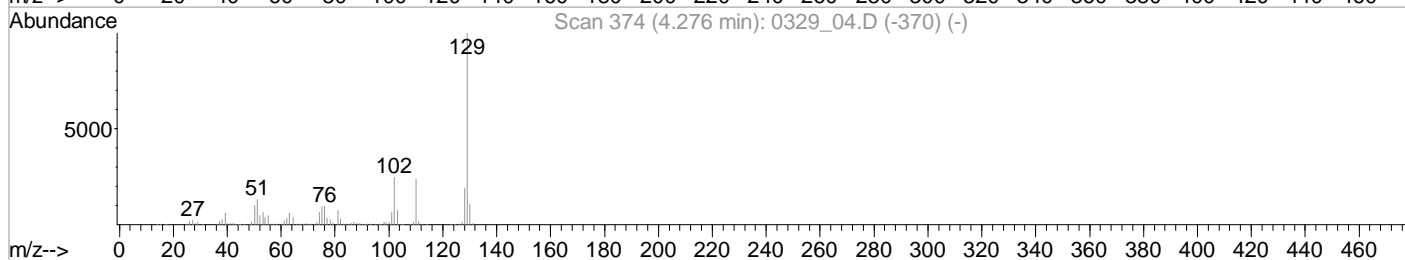
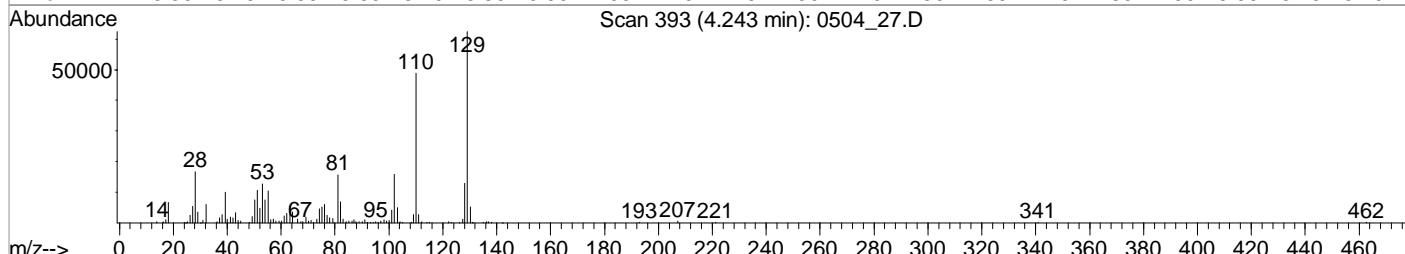
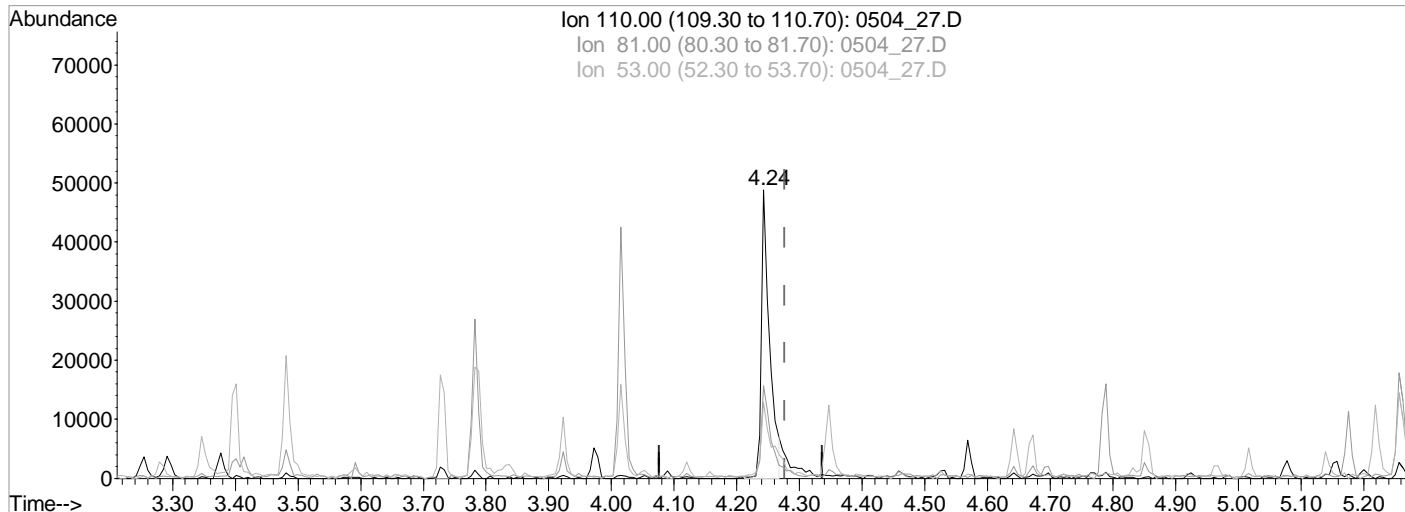
response 93236

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	76.14
95.00	30.20	30.57
65.00	24.00	25.96

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D Vial: 33  
 Acq On : 4 May 2022 1:43 pm Operator: 3545  
 Sample : MS 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:47 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0504\_27.D

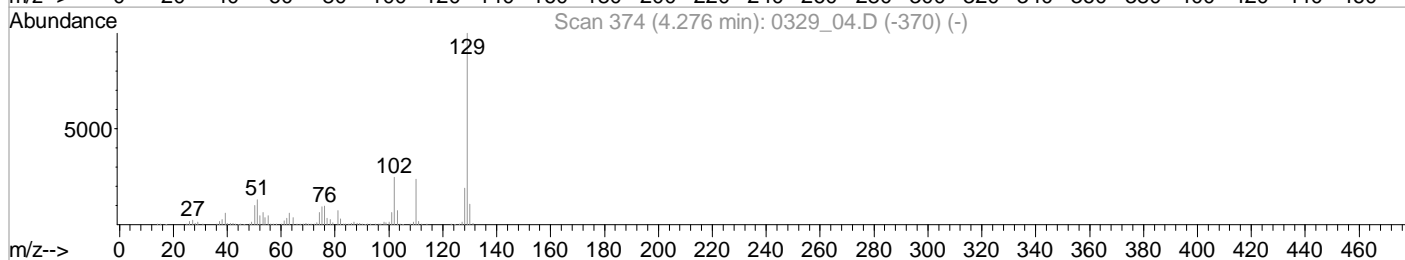
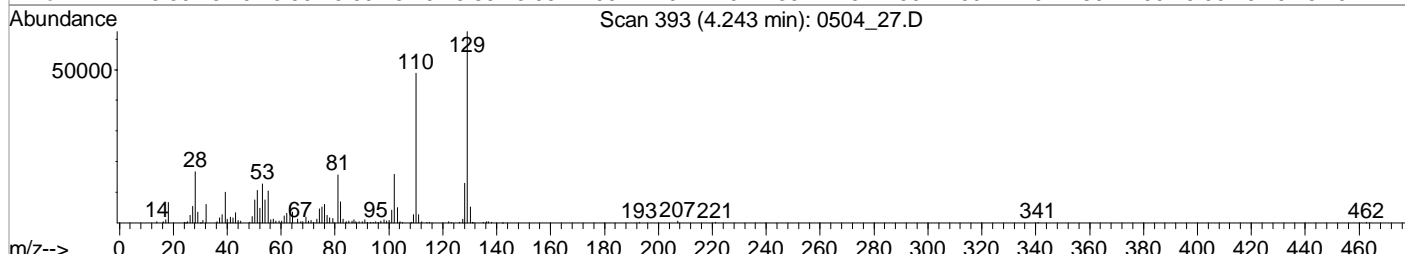
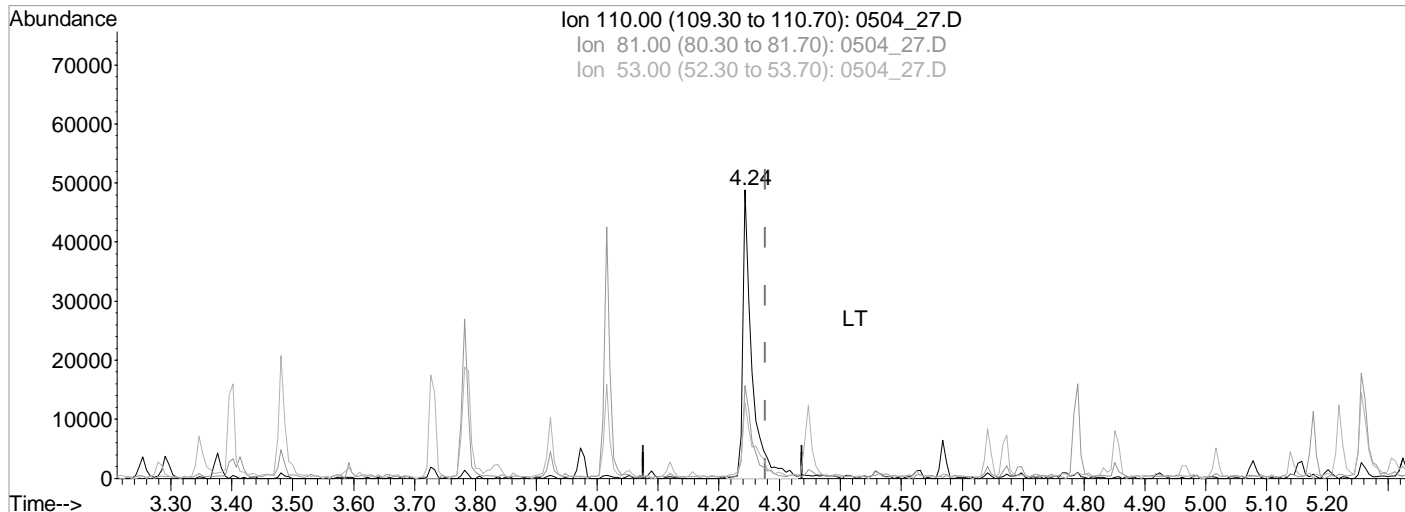
(37) Hydroquinone  
 4.24min (-0.033) 5625.5699164 ppb  
 Qvalue = 98  
 response 44785

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	31.33
53.00	25.90	25.46
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D Vial: 33  
 Acq On : 4 May 2022 1:43 pm Operator: 3545  
 Sample : MS 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:47 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0504\_27.D

(37) Hydroquinone  
 4.24min (-0.033) 6570.2461911 ppb m

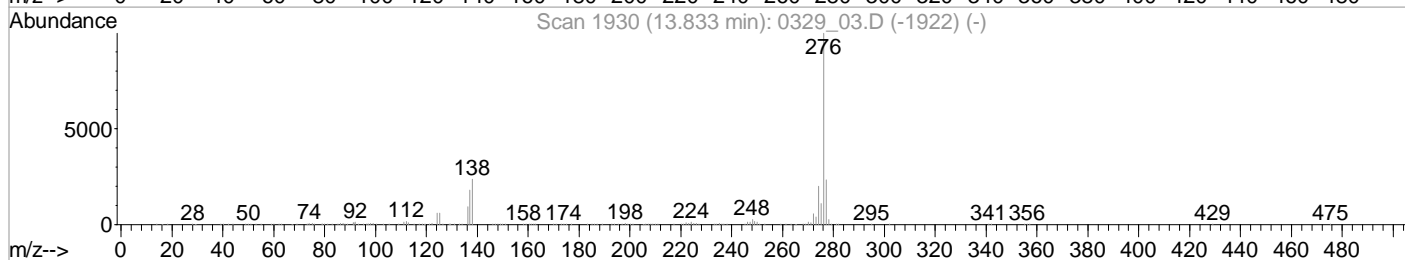
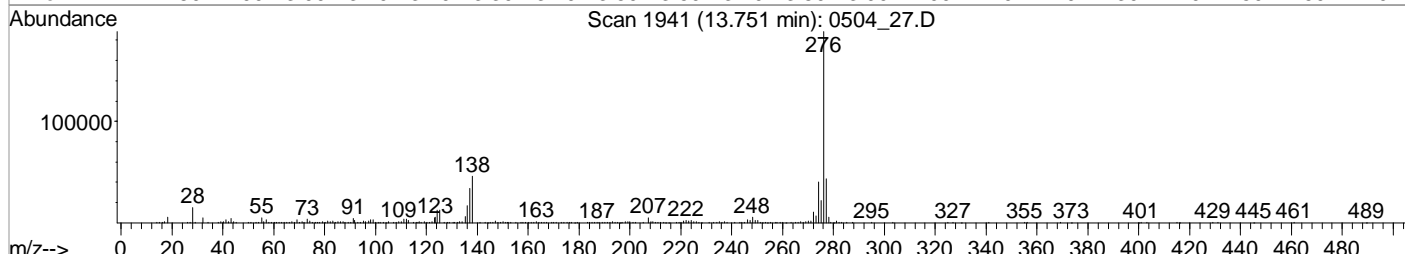
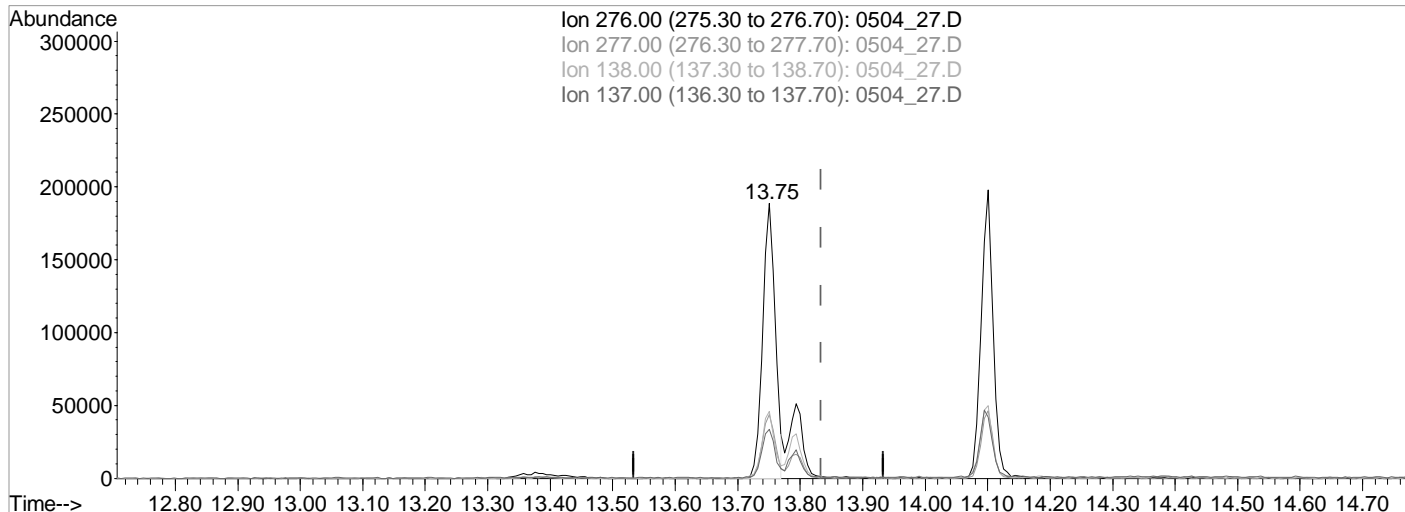
response 51618

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	31.99
53.00	25.90	26.26
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D Vial: 33  
 Acq On : 4 May 2022 1:43 pm Operator: 3545  
 Sample : MS 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:47 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_27.D

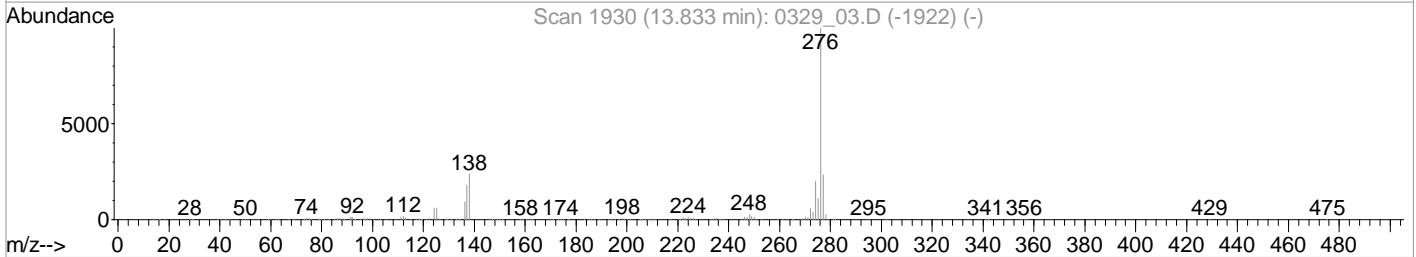
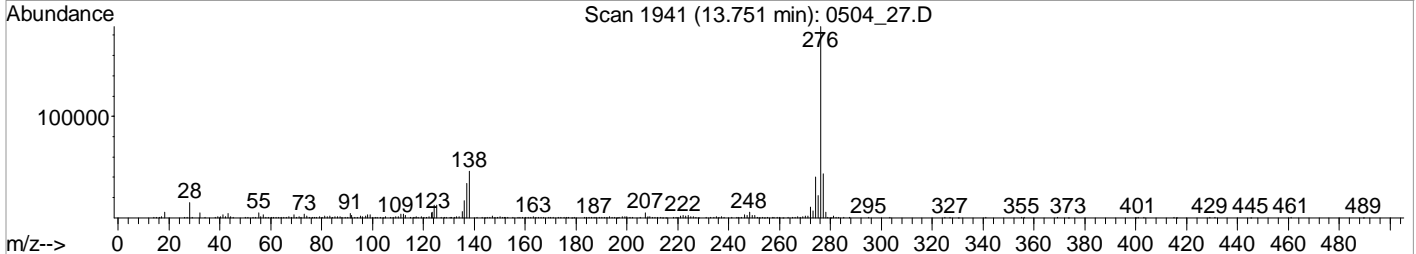
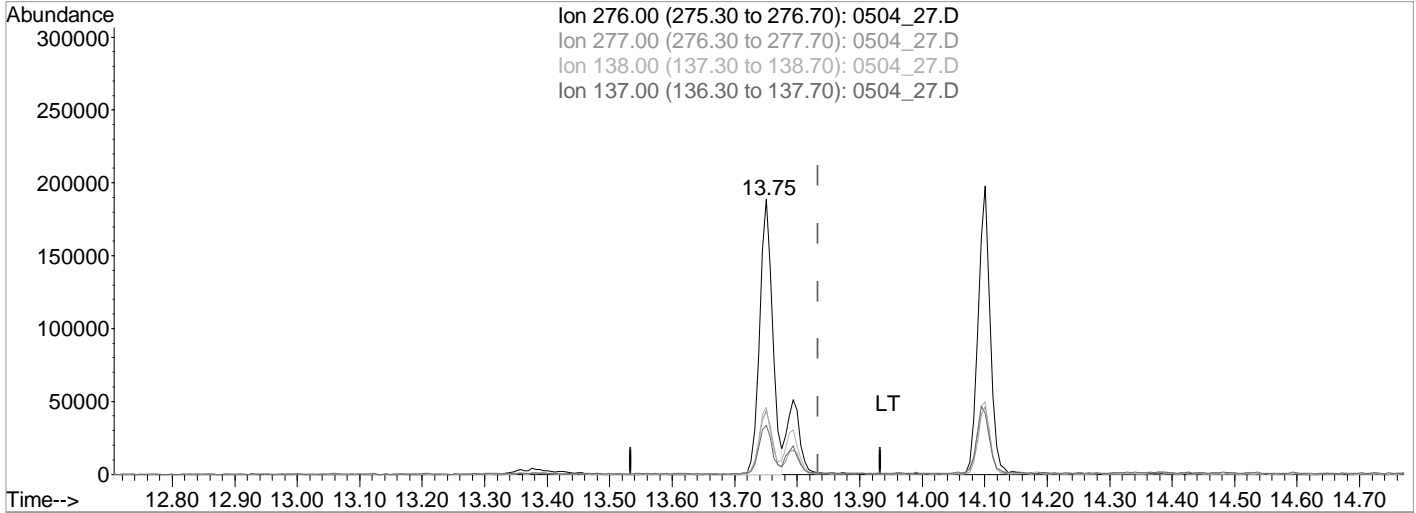
(98) Indeno(1,2,3-cd)pyrene (MT)  
 13.75min (-0.083) 7100.2448379 ppb  
 Qvalue = 98  
 response 263727

Ion	Exp%	Act%
276.00	100	100
277.00	24.10	23.06
138.00	25.30	24.14
137.00	18.00	17.68

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 27.D Vial: 33  
 Acq On : 4 May 2022 1:43 pm Operator: 3545  
 Sample : MS 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_27.D

(98) Indeno(1,2,3-cd)pyrene (MT)  
 13.75min (-0.083) 7271.2847976 ppb m

response 270080

Ion	Exp%	Act%
276.00	100	100
277.00	24.10	23.06
138.00	25.30	24.36
137.00	18.00	17.89

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3787994-4  
**Client Sample ID:** MSD  
**Lab File ID:** 0504\_32  
**Instrument ID:** BNAMS11  
**Analytical Batch:** WG1857484  
**Dilution Factor:** 10  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** 91.7

**SDG:** L1486885  
**Collected Date/Time:** 04/20/22 11:45  
**Received Date/Time:** 04/22/22 11:00  
**Preparation Date/Time:** 05/03/22 09:10  
**Analysis Date/Time:** 05/04/22 15:14  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15.71 g  
**Final Wt/Vol:** 1.0 mL

Analyte	CAS	RT	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	5.09	0.330	J3	0.0588	0.363
Acenaphthylene	208-96-8	4.97	0.311	J3	0.0511	0.363
Anthracene	120-12-7	6.23	0.351	J3	0.0647	0.363
Benzoic Acid	65-85-0	3.74	U	J3	1.29	18.2
Benzo(a)anthracene	56-55-3	8.76	0.604	J3	0.0640	0.363
Benzo(b)fluoranthene	205-99-2	10.57	0.660	J3	0.0677	0.363
Benzo(k)fluoranthene	207-08-9	10.62	0.462	J3	0.0646	0.363
Benzo(g,h,i)perylene	191-24-2	13.74	0.561	J3	0.0664	0.363
Benzo(a)pyrene	50-32-8	11.19	0.579	J3	0.0675	0.363
Carbazole	86-74-8	6.35	0.318	J3	0.112	3.63
Chrysene	218-01-9	8.82	0.583	J3	0.0722	0.363
Dibenz(a,h)anthracene	53-70-3	13.41	0.347	J3	0.101	0.363
Dibenzofuran	132-64-9	5.21	0.317	J3	0.119	3.63
Fluoranthene	206-44-0	7.14	0.728	J3	0.0655	0.363
Fluorene	86-73-7	5.46	0.352	J3	0.0591	0.363
Indeno(1,2,3-cd)pyrene	193-39-5	13.37	0.590	J3	0.103	0.363
1-Methylnaphthalene	90-12-0	4.43	0.332		0.0465	0.363
2-Methylnaphthalene	91-57-6	4.36	0.306	J3	0.0471	0.363
Naphthalene	91-20-3	3.93	0.348		0.0912	0.363
Phenanthrene	85-01-8	6.19	0.465	J3	0.0721	0.363
Bis(2-ethylhexyl)phthalate	117-81-7	8.85	3.29		0.460	3.63
Di-n-butyl phthalate	84-74-2	6.61	0.395	J3	0.124	3.63
Di-n-octyl phthalate	117-84-0	9.97	1.25	J3 J5	0.245	3.63
Pyrene	129-00-0	7.35	0.668	J3	0.0707	0.363
3&4-Methyl Phenol	3&4-Methyl Phenol	3.41	0.250	J3	0.113	3.63
Pentachlorophenol	87-86-5	0	U	J3 J6	0.0977	3.63
Phenol	108-95-2	3	0.228	J3	0.146	3.63



Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_32.D  
 Acq On : 4 May 2022 3:14 pm  
 Operator : 3545  
 Sample : MSD 5x WG1857484 L1485528-168  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 ALS Vial : 32 Sample Multiplier: 1  
 InstName : BNAMS11

Quant Time: May 05 12:20:12 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.200	152	41159	8000.0000000	ppb	0.00
23) Naphthalene-d8	3.923	136	159293	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.063	164	92862	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.162	188	196616	8000.0000000	ppb	0.00
84) Chrysene-d12	8.776	240	213416	8000.0000000	ppb	0.00
94) Perylene-d12	11.303	264	240657	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.548	112	5186	861.8341056	ppb	0.01
Spiked Amount	20000.000	Range 20	- 120	Recovery =	4.31%#	
7) Phenol-d5	2.989	99	5944	812.6125231	ppb	0.00
Spiked Amount	20000.000	Range 20	- 120	Recovery =	4.06%#	
24) Nitrobenzene-d5	3.506	82	3702	508.0992627	ppb	0.00
Spiked Amount	10000.000	Range 18	- 125	Recovery =	5.08%#	
50) 2-Fluorobiphenyl	4.593	172	7693	496.3316464	ppb	0.00
Spiked Amount	10000.000	Range 28	- 120	Recovery =	4.96%#	
73) 2,4,6-Tribromophenol	5.639	330	2721	1017.7073042	ppb	0.00
Spiked Amount	20000.000	Range 17	- 137	Recovery =	5.09%#	
87) p-Terphenyl-d14	7.495	244	12466	478.4574611	ppb	0.00
Spiked Amount	10000.000	Range 13	- 131	Recovery =	4.78%#	
<b>Target Compounds</b>						
3) N-Nitrosodimethylamine	1.943	42	2538	712.2743037	ppb	82
6) bis(2-Chloroethyl)ether	3.048	93	5499m	829.9565556	ppb	
8) Phenol	3.001	94	5072m	656.5479757	ppb	
9) Benzaldehyde	2.971	105	6150	3148.6179540	ppb	# 75
10) 2-Chlorophenol	3.095	128	4920	755.7864433	ppb	84
12) 1,3-Dichlorobenzene	3.171	146	8084	1068.5339680	ppb	96
13) 1,4-Dichlorobenzene	3.206	146	8928	1162.1024302	ppb	86
14) Benzyl Alcohol	3.330	79	3748	648.1694800	ppb	# 45
15) 1,2-Dichlorobenzene	3.294	146	7961	1094.8124974	ppb	93
16) bis(2-Chloroisopropyl)...	3.335	121	2260	1013.7763227	ppb	78
17) 2,2-oxybis(1-chloropro...	3.335	121	2260	1013.7763227	ppb	78
18) 2-Methylphenol	3.318	108	3505	599.5607563	ppb	87
19) Hexachloroethane	3.476	117	2871	1016.8588227	ppb	# 76
20) N-Nitrosodi-n-propylamine	3.406	70	3952	850.8514180	ppb	86
21) 3&4-Methyl phenol	3.406	107	4831	720.0064593	ppb	89
22) Acetophenone	3.418	105	8378	928.9992499	ppb	# 81
25) Nitrobenzene	3.512	77	5981	862.1713428	ppb	85
26) Isophorone	3.641	82	9926	806.9337279	ppb	81
27) 2-Nitrophenol	3.700	139	2590	782.7434065	ppb	# 66
28) 2,4-Dimethylphenol	3.711	107	4363	661.2000293	ppb	# 68
29) bis(2-Chlorethoxy)methane	3.759	93	5569	785.7228749	ppb	83
30) 2,4-Dichlorophenol	3.841	162	4033	750.6235740	ppb	# 76
32) 1,2,4-Trichlorobenzene	3.888	180	6744	1073.2084017	ppb	92
34) Naphthalene	3.935	128	19533	1000.6612664	ppb	95
35) 4-Chloroaniline	3.964	65	1606	677.9586212	ppb	# 29
36) Hexachloro-1,3-butadiene	4.005	225	4597	1166.6136399	ppb	92
38) Quinoline	4.140	129	9155	853.9762978	ppb	96
39) Caprolactam	4.158	113	1565	1323.4542809	ppb	# 65
40) 4-Chloro-3-methylphenol	4.264	107	5455	993.3609177	ppb	# 73
41) 2-Methylnaphthalene	4.364	142	11490	881.5185146	ppb	# 84
42) 1-Methylnaphthalene	4.428	142	11730	953.2237793	ppb	# 93
43) 1,2,4,5-Tetrachloroben...	4.469	216	7329	1271.1056956	ppb	95

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_32.D  
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 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 ALS Vial : 32 Sample Multiplier: 1  
 InstName : BNAMS11

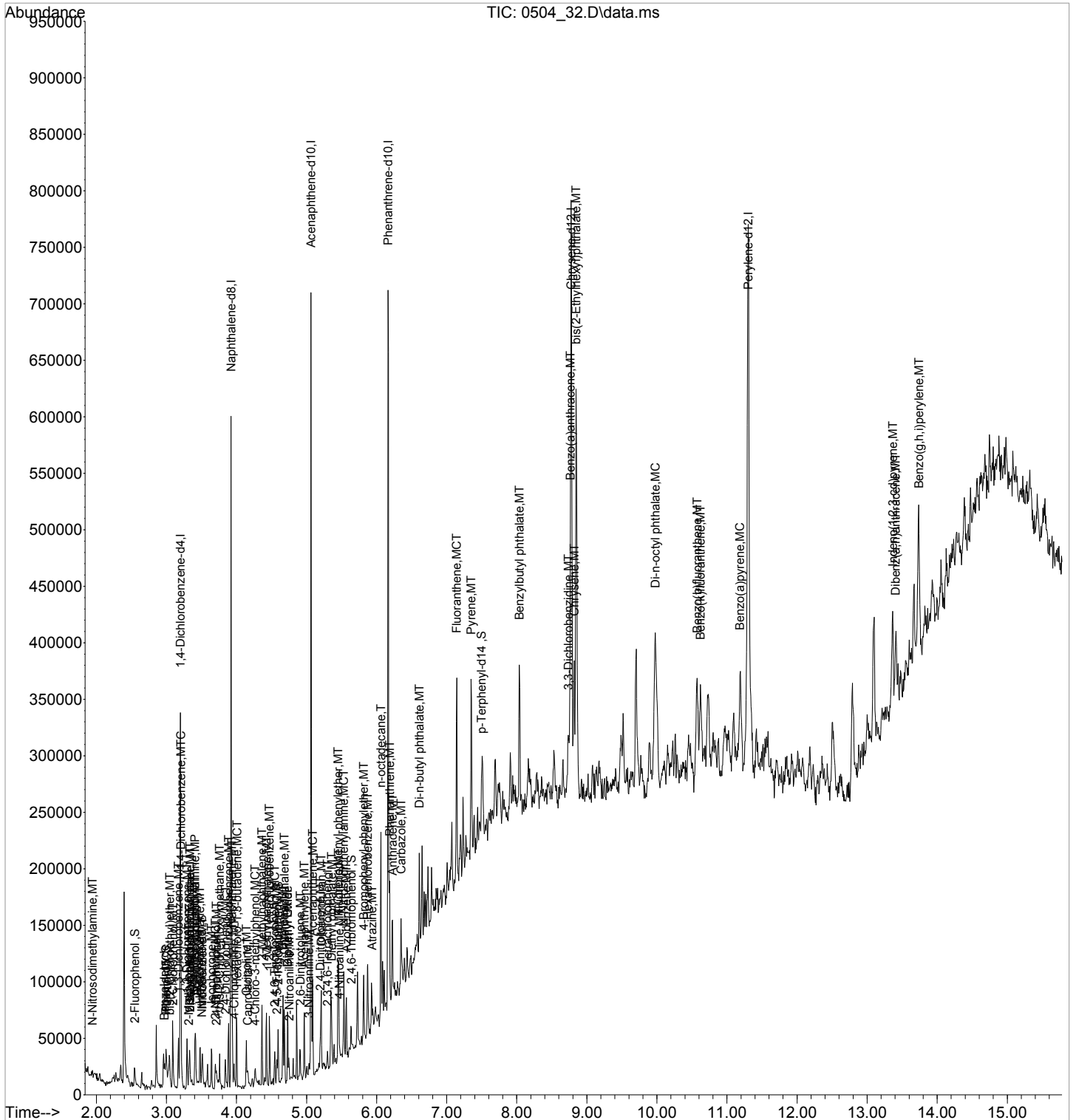
Quant Time: May 05 12:20:12 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
44) Diphenyl Ether	4.728	170	8086	599.5542072	ppb	#	79
45) Diphenyl Oxide	4.728	170	8086	599.5542072	ppb	#	79
48) 2,4,6-Trichlorophenol	4.546	196	2779	639.7694650	ppb	#	84
49) 2,4,5-Trichlorophenol	4.575	196	2813	622.7856372	ppb		91
51) Biphenyl	4.663	154	15688	905.4001606	ppb		95
52) 2-Chloronaphthalene	4.681	162	12499	934.5112688	ppb		96
53) 2-Nitroaniline	4.751	138	3269	836.4271031	ppb	#	83
54) Acenaphthylene	4.969	152	18714	893.4380282	ppb		96
56) 2,6-Dinitrotoluene	4.910	165	3299	1013.0990349	ppb		95
57) 3-Nitroaniline	5.034	138	2202	654.2828909	ppb		89
58) Acenaphthene	5.086	153	12961	949.8599246	ppb		96
60) Dibenzofuran	5.210	168	17312	912.5288559	ppb	#	93
61) 2,4-Dinitrotoluene	5.198	165	3720	868.0864052	ppb	#	63
62) 2,3,4,6-Tetrachlorophenol	5.298	232	1607	480.2329818	ppb		90
64) Fluorene	5.457	166	15486	1014.5452145	ppb		99
65) 4-Chlorophenyl-phenyle...	5.451	204	8358	1034.2820525	ppb		93
66) Diethyl phthalate	5.357	149	12616	839.2891945	ppb		84
67) 4-Nitroaniline	5.468	138	2659	881.1233346	ppb	#	42
68) Azobenzene	5.568	77	14220	951.3885079	ppb		94
69) Atrazine	5.932	200	4246	962.2557727	ppb	#	80
72) N-Nitrosodiphenylamine	5.533	169	11431	801.0309368	ppb		96
74) 4-Bromophenyl-phenylether	5.815	248	5556	1024.1467204	ppb	#	85
75) Hexachlorobenzene	5.874	284	7117	1161.7614822	ppb		94
76) n-octadecane	6.062	55	4653	1897.8017764	ppb	#	80
78) Phenanthrene	6.185	178	34020	1339.3196137	ppb		98
79) Anthracene	6.226	178	25987	1011.6167727	ppb		95
80) Carbazole	6.350	167	20398	915.3396389	ppb		97
81) Di-n-butyl phthalate	6.608	149	31166	1137.6033901	ppb		95
83) Fluoranthene	7.143	202	59834	2097.0347176	ppb		99
86) Pyrene	7.348	202	63194	1926.2770471	ppb		94
88) Benzylbutyl phthalate	8.036	149	29279	2308.7347367	ppb		93
89) 3,3-Dichlorobenzidine	8.735	252	16200	1461.8866803	ppb		96
90) Benzo(a)anthracene	8.764	228	54551	1738.5403674	ppb		96
91) Chrysene	8.817	228	51094	1680.1262407	ppb		93
92) bis(2-Ethylhexyl)phtha...	8.847	149	176982	9492.5529182	ppb		94
93) Di-n-octyl phthalate	9.975	149	110100m	3611.5962771	ppb		
95) Benzo(b)fluoranthene	10.574	252	66327	1898.9483777	ppb		92
96) Benzo(k)fluoranthene	10.621	252	46696	1331.0457423	ppb		93
97) Benzo(a)pyrene	11.185	252	55068	1666.9110149	ppb		93
98) Indeno(1,2,3-cd)pyrene	13.365	276	51963	1700.0314827	ppb		98
99) Dibenz(a,h)anthracene	13.406	278	33407	998.5060940	ppb		91
100) Benzo(g,h,i)perylene	13.741	276	54807	1614.0675017	ppb		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_32.D  
 Acq On : 4 May 2022 3:14 pm  
 Operator : 3545  
 Sample : MSD 5x WG1857484 L1485528-168  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 ALS Vial : 32 Sample Multiplier: 1  
 InstName : BNAMS11

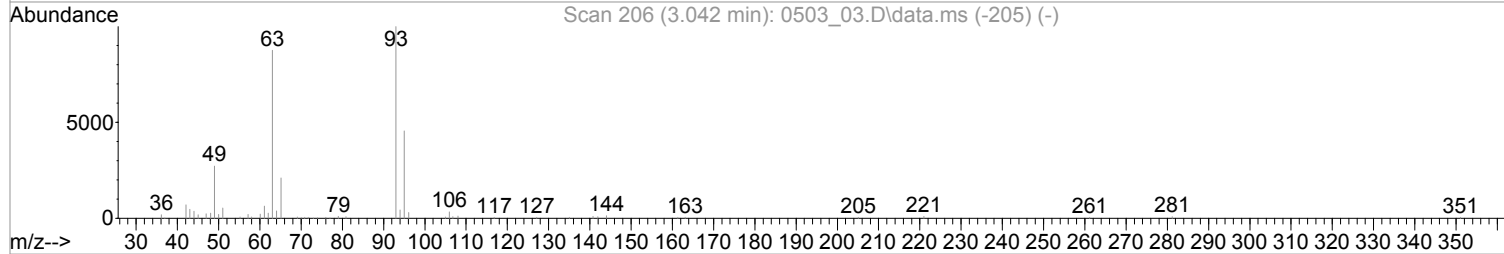
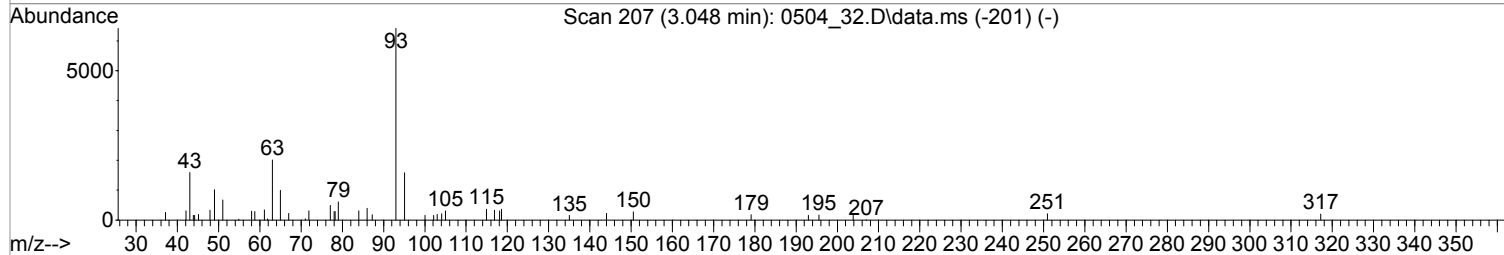
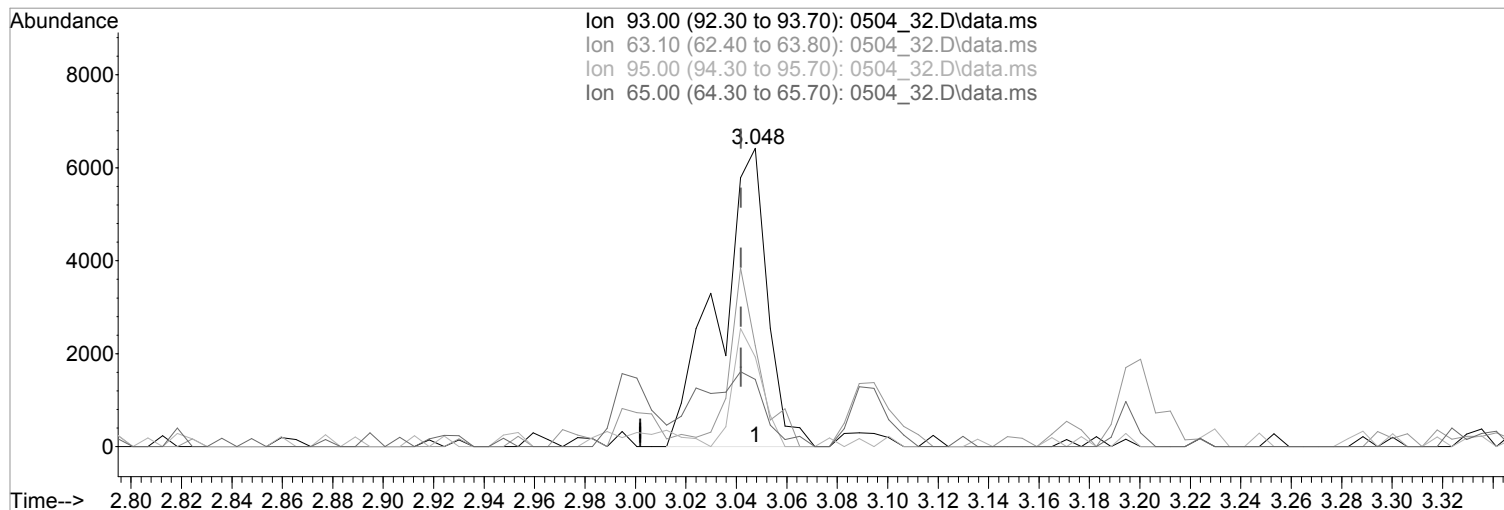
Quant Time: May 05 12:20:12 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_32.D  
 Acq On : 4 May 2022 3:14 pm  
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 Sample : MSD 5x WG1857484 L1485528-168  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
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Quant Time: May 04 16:01:37 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_32.D\data.ms

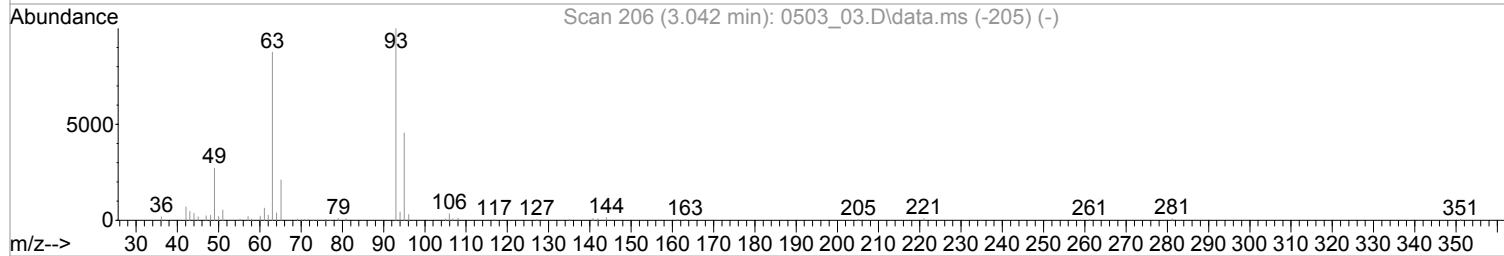
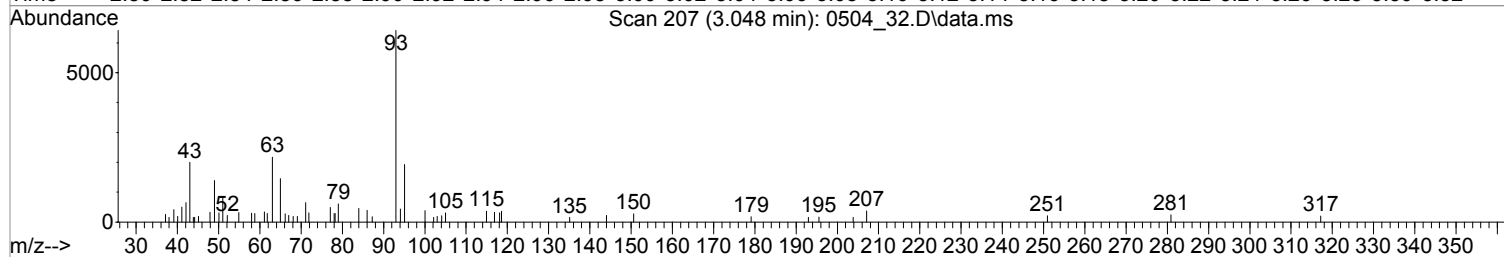
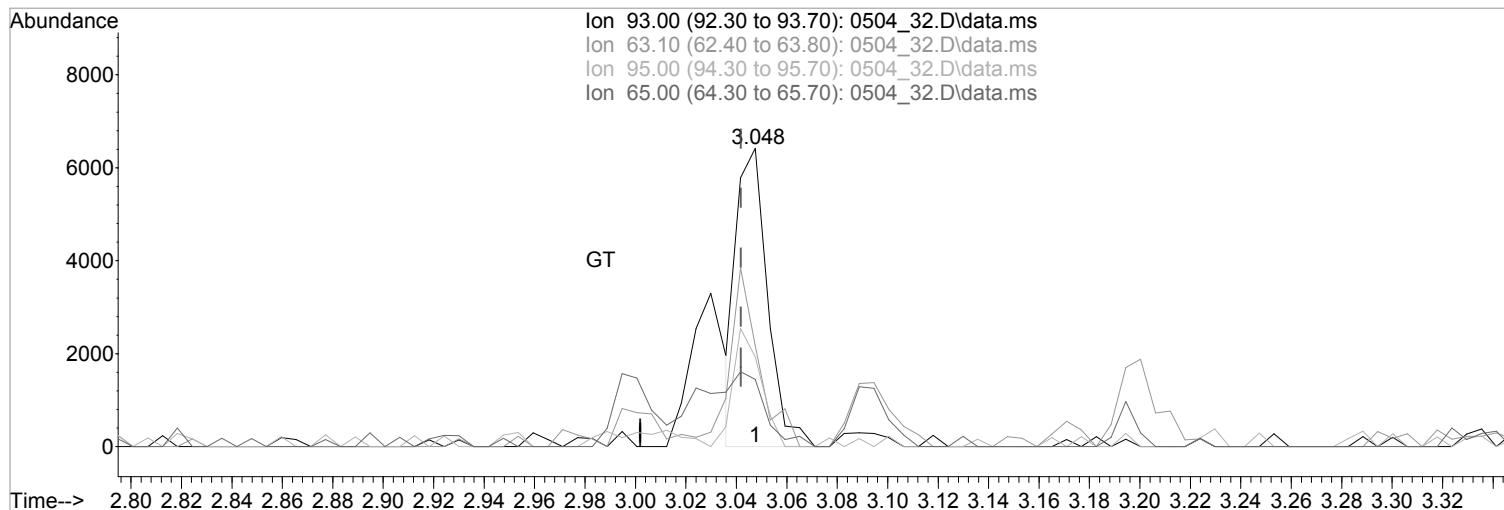
(6) bis(2-Chloroethyl)ether (MT)  
 3.048min (+0.006) 1294.8167467 ppb  
 Qvalue = 78  
 response 8579

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	33.80#
95.00	30.20	30.02
65.00	21.40	22.58

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050422\  
 Data File : 0504\_32.D  
 Acq On : 4 May 2022 3:14 pm  
 Operator : 3545  
 Sample : MSD 5x WG1857484 L1485528-168  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
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Quant Time: May 04 16:01:37 2022  
 Quant Method : C:\msdchem\1\methods\S811E03V.M  
 Quant Title : 8270 BNA  
 QLast Update : Tue May 03 05:28:33 2022  
 Response via : Initial Calibration



TIC: 0504\_32.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.048min (+0.006) 829.9565556 ppb m

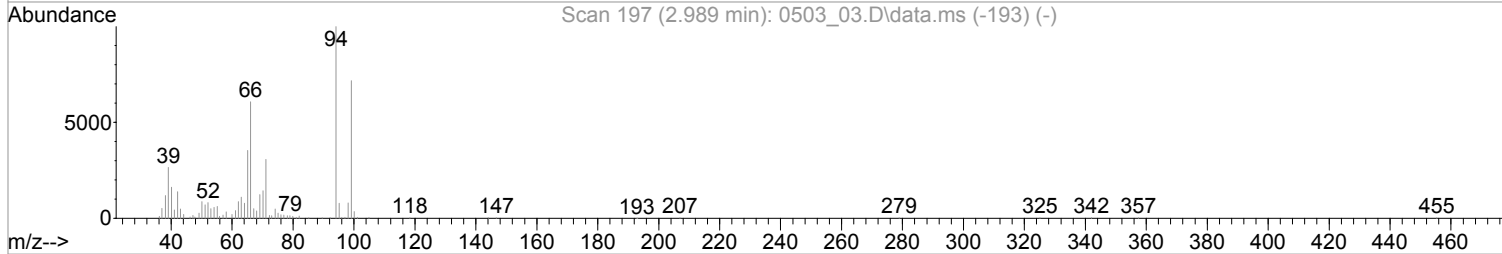
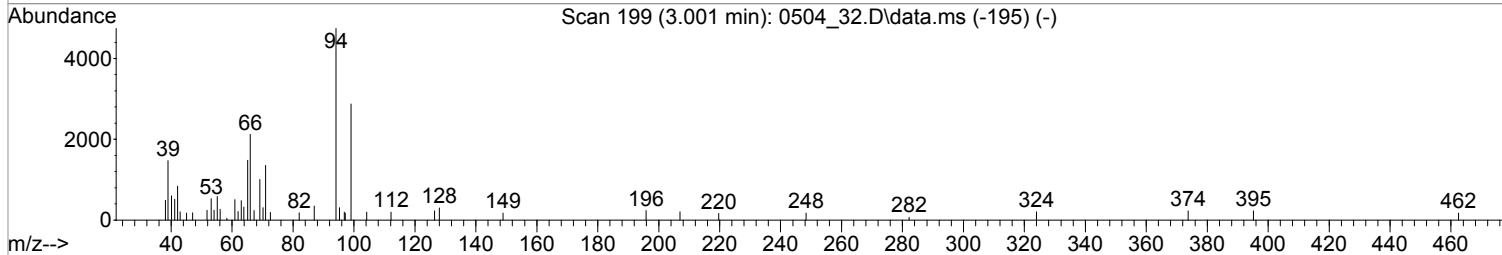
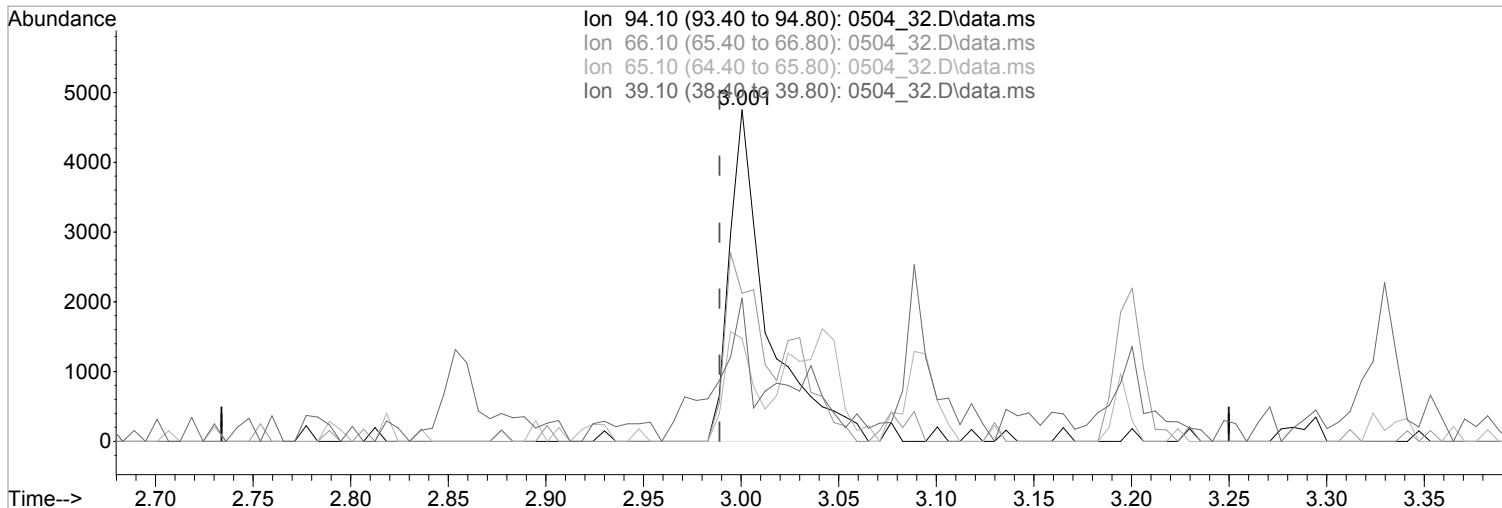
response 5499

Ion	Exp%	Act%
93.00	100	100
63.10	63.50	33.80#
95.00	30.20	30.02
65.00	21.40	22.58

Quantitation Report (Qedit)

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TIC: 0504\_32.D\data.ms

(8) Phenol (MC)

3.001min (+0.012) 834.9239833 ppb

Qvalue = 89

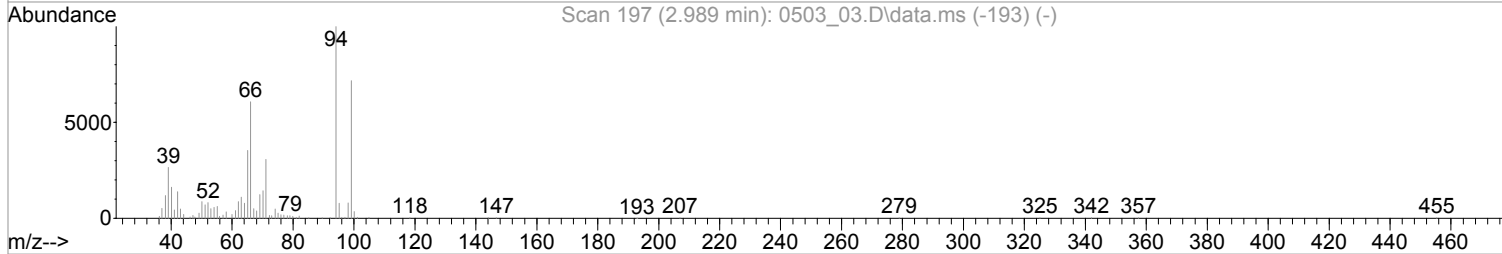
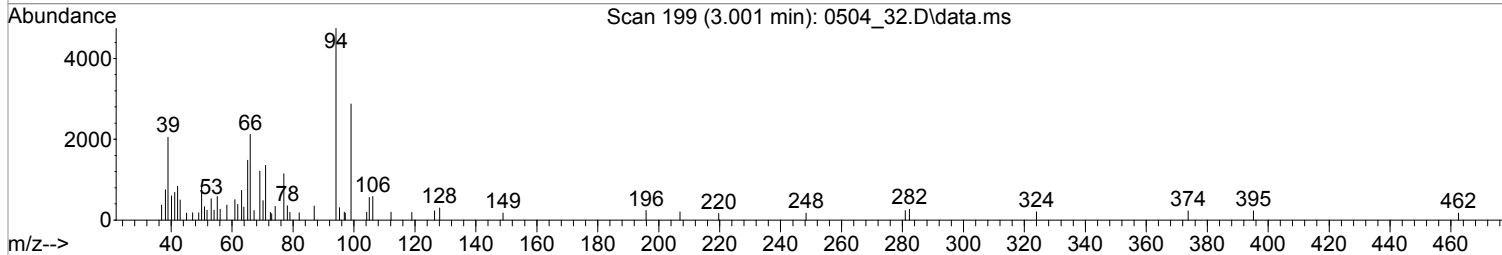
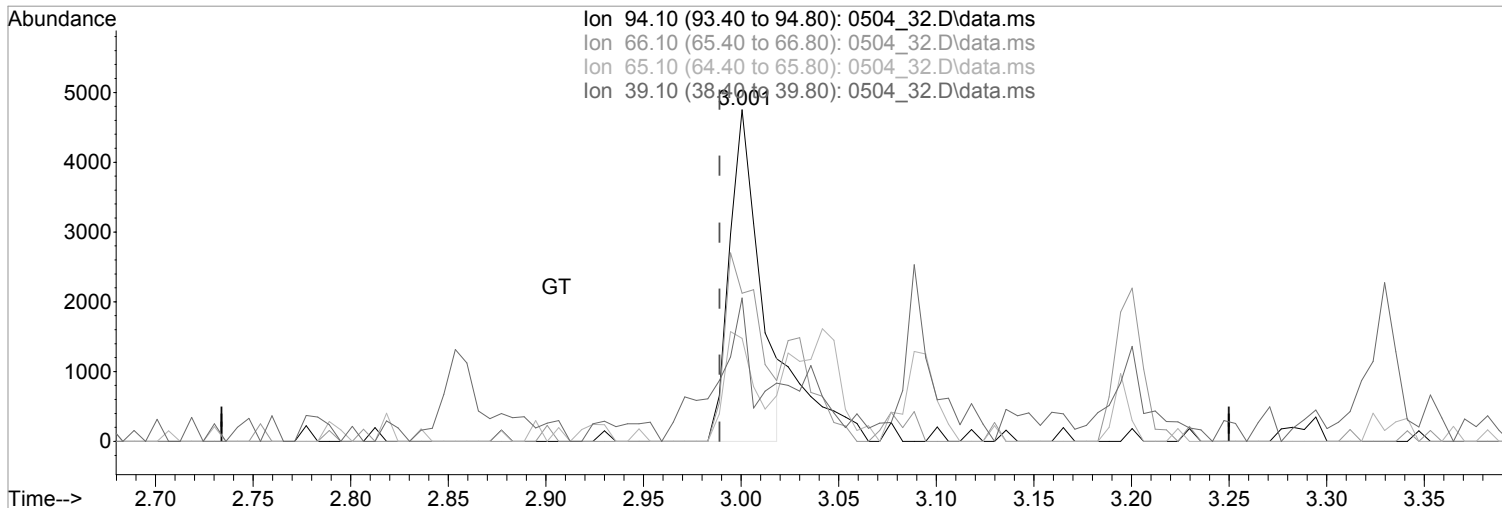
response 6450

Ion	Exp%	Act%
94.10	100	100
66.10	47.70	41.38
65.10	32.40	31.06
39.10	25.40	37.78

Quantitation Report (Qedit)

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 Operator : 3545  
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 Misc : SOIL ISTD 22D28020 exp 10/28/22  
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TIC: 0504\_32.D\data.ms

(8) Phenol (MC)  
 3.001min (+0.012) 656.5479757 ppb m

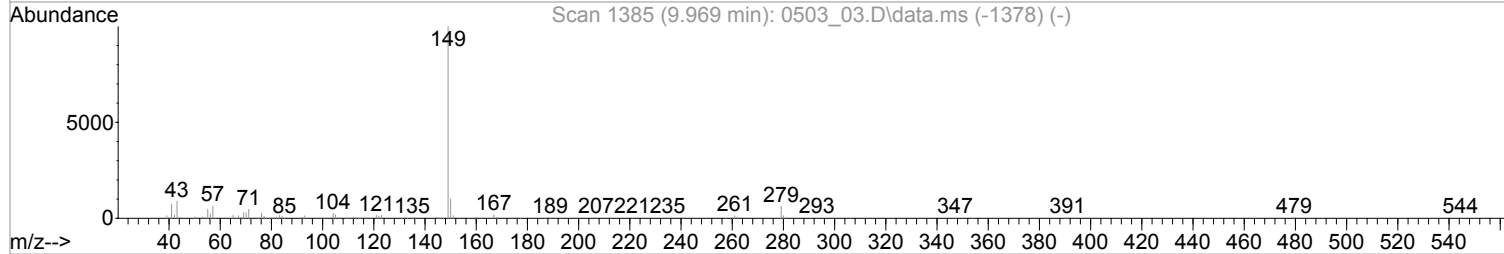
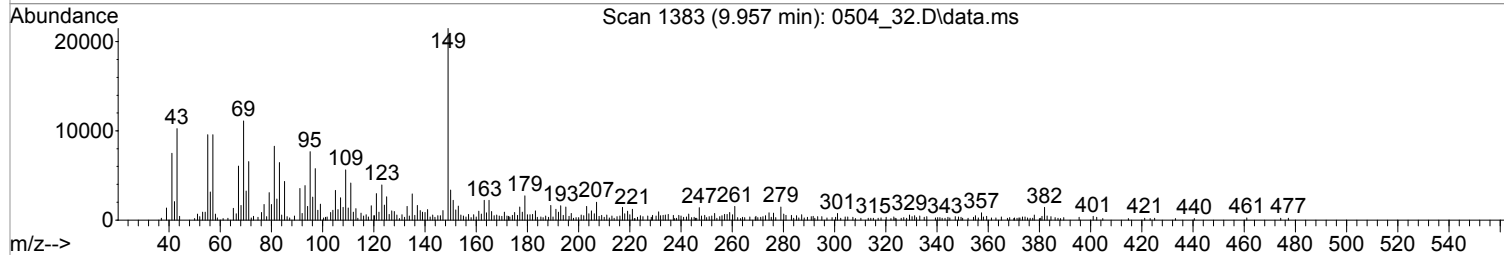
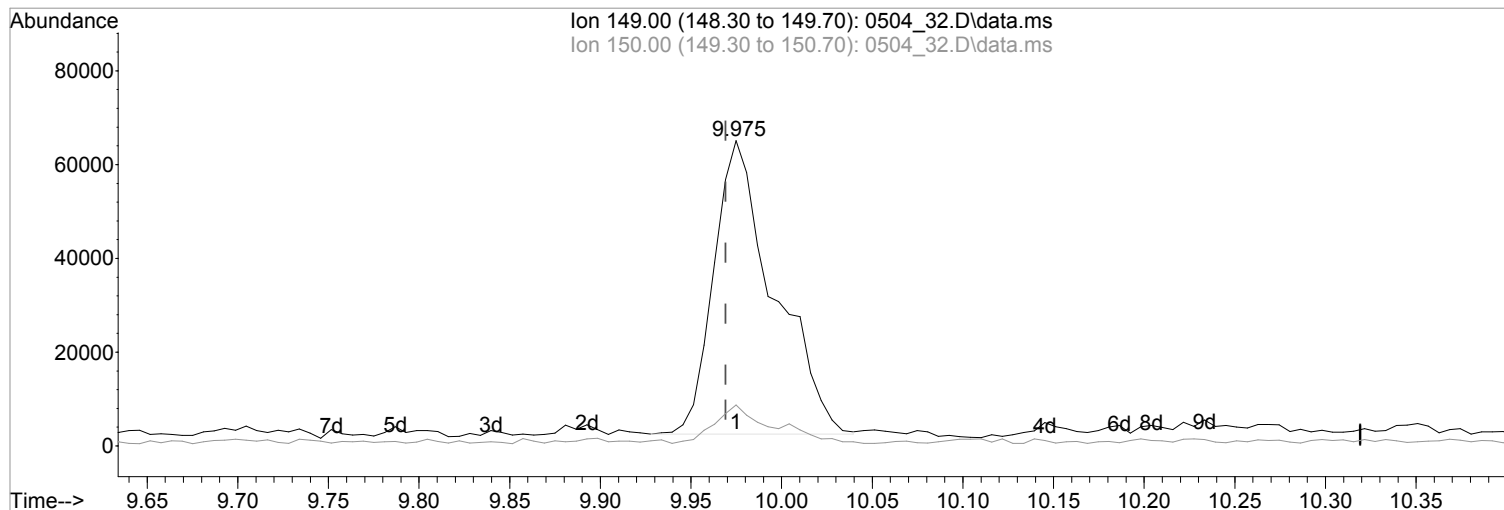
response 5072

Ion	Exp%	Act%
94.10	100	100
66.10	47.70	44.68
65.10	32.40	31.06
39.10	25.40	43.23

Quantitation Report (Qedit)

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TIC: 0504\_32.D\data.ms

(93) Di-n-octyl phthalate (MC)  
 9.975min (+0.006) 4735.8819338 ppb  
 Qvalue = 91  
 response 144374

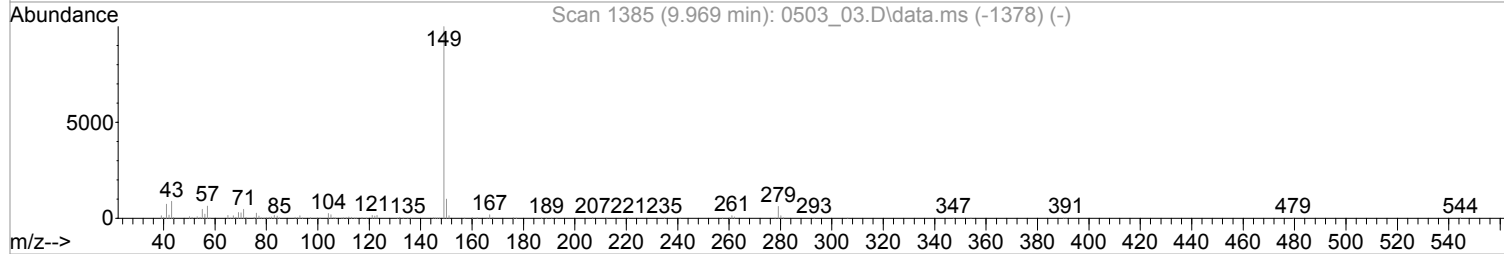
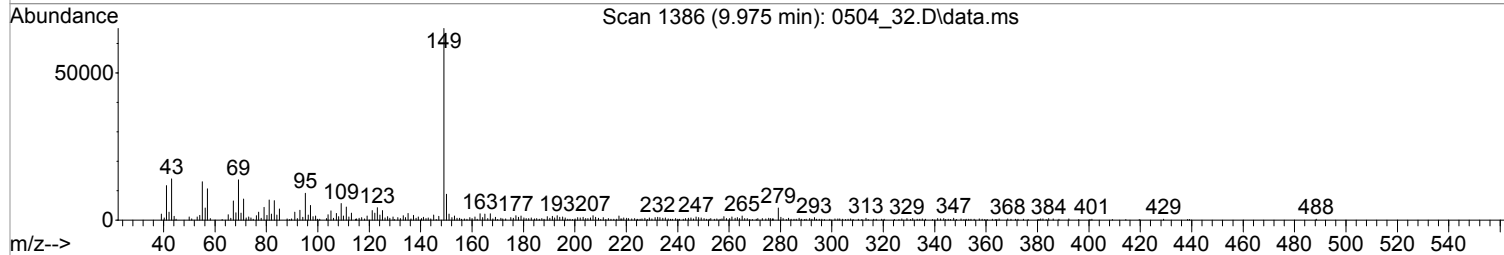
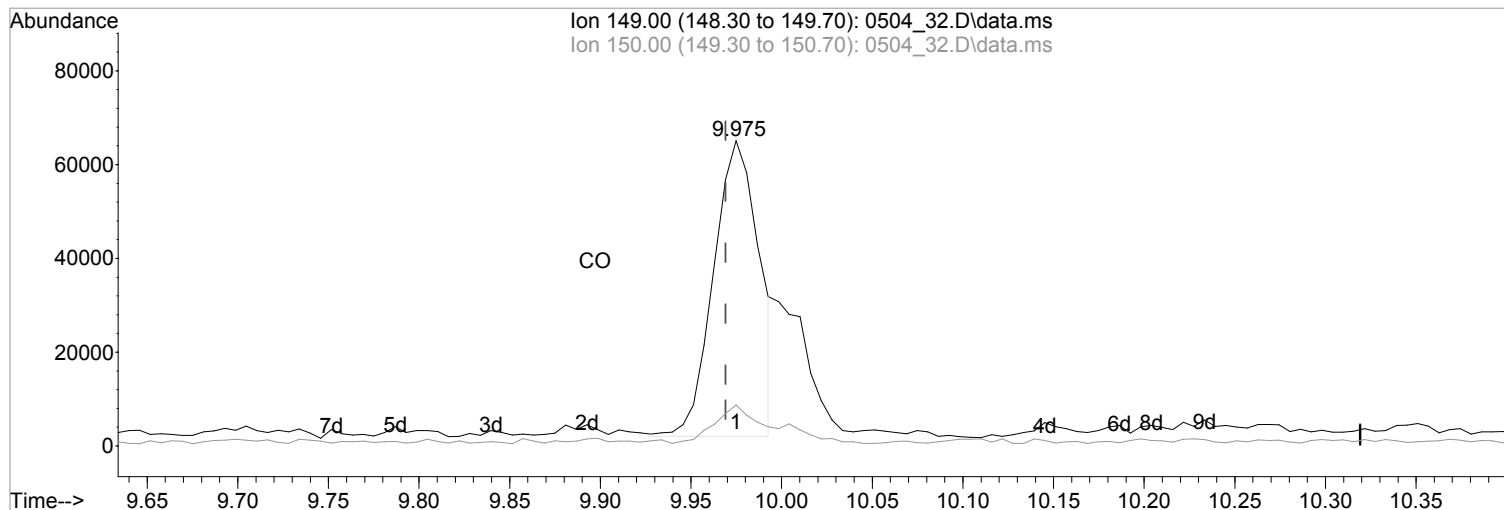
Ion	Exp%	Act%
149.00	100	100
150.00	9.10	12.51
0.00	0.00	0.00
0.00	0.00	0.00



Quantitation Report (Qedit)

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TIC: 0504\_32.D\data.ms

(93) Di-n-octyl phthalate (MC)  
 9.975min (+0.006) 3611.5962771 ppb m

response 110100

Ion	Exp%	Act%
149.00	100	100
150.00	9.10	13.38
0.00	0.00	0.00
0.00	0.00	0.00

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3788258-2  
**Client Sample ID:** MSD  
**Lab File ID:** 0504\_28  
**Instrument ID:** BNAMS4  
**Analytical Batch:** WG1857248  
**Dilution Factor:** 2  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** 75.6

**SDG:** L1486885  
**Collected Date/Time:** 04/21/22 09:50  
**Received Date/Time:** 04/27/22 09:00  
**Preparation Date/Time:** 05/02/22 17:00  
**Analysis Date/Time:** 05/04/22 14:03  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15.59 g  
**Final Wt/Vol:** 1 mL

Analyte	CAS	RT	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Acenaphthene	83-32-9	5.20	0.417	J3	0.0143	0.0881
Acenaphthylene	208-96-8	5.08	0.435	J3	0.0124	0.0881
Anthracene	120-12-7	6.36	0.555		0.0157	0.0881
Benzoic Acid	65-85-0	3.83	1.20	J3	0.312	4.42
Benzo(a)anthracene	56-55-3	9.05	0.599		0.0155	0.0881
Benzo(b)fluoranthene	205-99-2	10.98	0.589		0.0164	0.0881
Benzo(k)fluoranthene	207-08-9	11.04	0.599		0.0156	0.0881
Benzo(g,h,i)perylene	191-24-2	14.09	0.517		0.0161	0.0881
Benzo(a)pyrene	50-32-8	11.63	0.653		0.0164	0.0881
Carbazole	86-74-8	6.48	0.583		0.0272	0.881
Chrysene	218-01-9	9.11	0.607		0.0175	0.0881
Dibenz(a,h)anthracene	53-70-3	13.79	0.548		0.0245	0.0881
Dibenzofuran	132-64-9	5.32	0.435	J3	0.0288	0.881
Fluoranthene	206-44-0	7.31	0.592		0.0159	0.0881
Fluorene	86-73-7	5.58	0.469		0.0143	0.0881
Indeno(1,2,3-cd)pyrene	193-39-5	13.75	0.544		0.0249	0.0881
1-Methylnaphthalene	90-12-0	4.53	0.333	J3	0.0113	0.0881
2-Methylnaphthalene	91-57-6	4.46	0.313		0.0114	0.0881
Naphthalene	91-20-3	4.03	0.312	J3	0.0221	0.0881
Phenanthrene	85-01-8	6.32	0.546		0.0175	0.0881
Bis(2-ethylhexyl)phthalate	117-81-7	9.14	0.701		0.112	0.881
Di-n-butyl phthalate	84-74-2	6.74	0.639		0.0302	0.881
Di-n-octyl phthalate	117-84-0	10.35	0.706		0.0595	0.881
Pyrene	129-00-0	7.53	0.587		0.0172	0.0881
3&4-Methyl Phenol	3&4-Methyl Phenol	3.48	0.480	J3	0.0275	0.881
Pentachlorophenol	87-86-5	6.15	0.595		0.0237	0.881
Phenol	108-95-2	3.08	0.406	J3	0.0354	0.881

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D  
 Acq On : 4 May 2022 2:03 pm  
 Sample : MSD 1x WG1857248 L1486885-01  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022

Vial: 34  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.28	152	82044	8000.00	ppb	-0.04
23) Naphthalene-d8	4.02	136	356439	8000.00	ppb	-0.04
46) Acenaphthene-d10	5.18	164	167362	8000.00	ppb	-0.05
70) Phenanthrene-d10	6.30	188	316041	8000.00	ppb	-0.05
84) Chrysene-d12	9.07	240	282631	8000.00	ppb	-0.08
94) Perylene-d12	11.75	264	287421	8000.00	ppb	-0.11

System Monitoring Compounds

4) 2-Fluorophenol	2.63	112	72950	5471.8102743	ppb	-0.02
Spiked Amount 20000.000	Range 20	- 120	Recovery	=	27.36%	
7) Phenol-d5	3.07	99	92965	5809.8496080	ppb	-0.03
Spiked Amount 20000.000	Range 20	- 120	Recovery	=	29.05%	
24) Nitrobenzene-d5	3.59	82	37835	2501.6879609	ppb	-0.04
Spiked Amount 10000.000	Range 18	- 125	Recovery	=	25.02%	
50) 2-Fluorobiphenyl	4.70	172	71821	2543.8870811	ppb	-0.04
Spiked Amount 10000.000	Range 28	- 120	Recovery	=	25.44%#	
73) 2,4,6-Tribromophenol	5.76	330	29348	8203.2220018	ppb	-0.05
Spiked Amount 20000.000	Range 17	- 137	Recovery	=	41.02%	
87) p-Terphenyl-d14	7.69	244	148368	3841.2663005	ppb	-0.07
Spiked Amount 10000.000	Range 13	- 131	Recovery	=	38.41%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue	
2) Pyridine	2.03	79	54854	4321.0449978	ppb		93
3) N-Nitrosodimethylamine	2.01	42	33179	4869.5651166	ppb		88
5) Aniline	3.11	66	28935	3811.7864663	ppb	#	44
6) bis(2-Chloroethyl)ether	3.13	93	66711m	5657.7258623	ppb		
8) Phenol	3.08	94	80716m	4788.8355488	ppb		
9) Benzaldehyde	3.06	105	47143	12919.0123151	ppb	#	88
10) 2-Chlorophenol	3.17	128	61171	4532.7821828	ppb		90
11) n-Decane	3.16	41	28133	3539.2302929	ppb	#	98
12) 1,3-Dichlorobenzene	3.25	146	56108	3677.0859650	ppb		92
13) 1,4-Dichlorobenzene	3.29	146	57458	3658.4685375	ppb		95
14) Benzyl Alcohol	3.35	79	49818	4772.9318648	ppb		93
15) 1,2-Dichlorobenzene	3.38	146	56350	3903.1257270	ppb		94
16) bis(2-Chloroisopropyl)ethe	3.41	121	18172	3678.3241706	ppb	#	19
17) 2,2-oxybis(1-chloropropane	3.41	121	18172	3678.3241706	ppb	#	19
18) 2-Methylphenol	3.40	108	62840	5153.1122854	ppb		92
19) Hexachloroethane	3.57	117	11400	1999.6138101	ppb		94
20) N-Nitrosodi-n-propylamine	3.49	70	48368	5427.5100021	ppb		93
21) 3&4-Methyl phenol	3.48	107	78359	5657.0438738	ppb		90
22) Acetophenone	3.50	105	82045	4835.6083576	ppb	#	68
25) Nitrobenzene	3.60	77	68268	4616.5755155	ppb		92
26) Isophorone	3.73	82	130447	4917.5221331	ppb		93
27) 2-Nitrophenol	3.78	139	33200	4454.3917934	ppb		93
28) 2,4-Dimethylphenol	3.79	107	59748	4316.3583549	ppb		92
29) bis(2-Chlorethoxy)methane	3.84	93	77664	4578.9593889	ppb		95
30) 2,4-Dichlorophenol	3.92	162	51164	4387.6031818	ppb		94
31) Benzoic Acid	3.83	105	82269	14106.9489102	ppb		95
32) 1,2,4-Trichlorobenzene	3.97	180	51180	3920.9315380	ppb		95
33) alpha-terpineol	4.02	59	62771	5613.8874397	ppb		99
34) Naphthalene	4.03	128	166765	3674.0358740	ppb		98
35) 4-Chloroaniline	4.05	65	23289	4415.8493489	ppb	#	45
36) Hexachloro-1,3-butadiene	4.09	225	27712	3891.6863265	ppb		95
37) Hydroquinone	4.24	110	28541m	3316.4598783	ppb		
38) Quinoline	4.24	129	130243	5483.4972421	ppb		99

(#) = qualifier out of range (m) = manual integration

0504\_28.D S804C29V.M Thu May 05 12:49:30 2022

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D

Vial: 34

Acq On : 4 May 2022 2:03 pm

Operator: 3545

Sample : MSD 1x WG1857248 L1486885-01

Inst : BNAMS4

Misc : SOIL ISTD 22D28020 exp 10/28/22

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: May 5 12:48 2022

Quant Results File: S804C29V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)

Title : 8270 BNA

Last Update : Tue Mar 29 09:44:27 2022

Response via : Initial Calibration

DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) Caprolactam	4.26	113	27527	11207.8810962	ppb	89
40) 4-Chloro-3-methylphenol	4.35	107	63948	5440.2341350	ppb	85
41) 2-Methylnaphthalene	4.46	142	109545	3703.7596740	ppb #	94
42) 1-Methylnaphthalene	4.53	142	109325	3933.2626554	ppb	96
43) 1,2,4,5-Tetrachlorobenzene	4.57	216	46611	4885.5607940	ppb	97
44) Diphenyl Ether	4.84	170	72757	4780.6387236	ug/ml#	82
45) Diphenyl Oxide	4.84	170	72757	4780.6387236	ug/ml#	82
48) 2,4,6-Trichlorophenol	4.64	196	41019	5650.8020488	ppb #	88
49) 2,4,5-Trichlorophenol	4.67	196	45442	6015.2138264	ppb	96
51) Biphenyl	4.76	154	140221	4472.6640197	ppb	99
52) 2-Chloronaphthalene	4.79	162	111696	4668.4054220	ppb	97
53) 2-Nitroaniline	4.86	138	49373	6657.1396844	ppb #	79
54) Acenaphthylene	5.08	152	190947	5130.0136633	ppb	99
55) Dimethyl phthalate	4.97	163	145255	5859.9134023	ppb	98
56) 2,6-Dinitrotoluene	5.02	165	34321	5971.8786926	ppb	81
57) 3-Nitroaniline	5.14	138	40263	6506.9083688	ppb	94
58) Acenaphthene	5.20	153	120286	4912.4822118	ppb	97
59) 2,4-Dinitrophenol	5.22	184	11936	4138.9657283	ppb #	1
60) Dibenzofuran	5.32	168	174515	5139.2063552	ppb	93
61) 2,4-Dinitrotoluene	5.31	165	52672	7318.5433811	ppb	90
62) 2,3,4,6-Tetrachlorophenol	5.41	232	35740	7488.5297333	ppb	94
63) 4-Nitrophenol	5.26	139	40015	7829.1023870	ppb #	73
64) Fluorene	5.58	166	152446	5534.4390653	ppb	98
65) 4-Chlorophenyl-phenylether	5.57	204	68602	5251.8172633	ppb	97
66) Diethyl phthalate	5.47	149	170743	6723.4200141	ppb	97
67) 4-Nitroaniline	5.59	138	46014	7939.6482285	ppb #	81
68) Azobenzene	5.69	77	185376	7317.8535186	ppb	93
69) Atrazine	6.06	200	56949	8320.9730387	ppb	97
71) 4,6-Dinitro-2-methylphenol	5.61	198	23095	5596.0362027	ppb	85
72) N-Nitrosodiphenylamine	5.66	169	137389	5720.7967013	ppb	98
74) 4-Bromophenyl-phenylether	5.94	248	44954	5767.6065532	ppb	94
75) Hexachlorobenzene	5.99	284	51207	5904.4697123	ppb	96
76) n-octadecane	6.18	55	33346	6895.8931934	ppb	94
77) Pentachlorophenol	6.15	266	33631	7024.7322747	ppb	94
78) Phenanthrene	6.32	178	267698	6437.8070034	ppb	98
79) Anthracene	6.36	178	275702	6550.3423021	ppb	99
80) Carbazole	6.48	167	264106	6877.3459005	ppb	98
81) Di-n-butyl phthalate	6.74	149	338935	7539.0053274	ppb	98
82) 2-nitrodiphenylamine	6.88	167	75769	9505.8637165	ppb #	100
83) Fluoranthene	7.31	202	308877	6992.1799182	ppb	100
86) Pyrene	7.53	202	315149	6929.9495600	ppb	99
88) Benzylbutyl phthalate	8.27	149	152217	8185.8317841	ppb	94
89) 3,3-Dichlorobenzidine	9.03	252	156667	10767.0552785	ppb	99
90) Benzo(a)anthracene	9.05	228	287755	7070.6352619	ppb	98
91) Chrysene	9.11	228	282374	7159.6472550	ppb	99
92) bis(2-Ethylhexyl)phthalate	9.14	149	211841	8270.7383846	ppb	98
93) Di-n-octyl phthalate	10.35	149	354627	8334.3180269	ppb	99
95) Benzo(b)fluoranthene	10.98	252	284387	6945.6493647	ppb	96
96) Benzo(k)fluoranthene	11.04	252	284898	7064.0964419	ppb	96
97) Benzo(a)pyrene	11.63	252	273570	7714.3641688	ppb	96
98) Indeno(1,2,3-cd)pyrene	13.75	276	223663	6419.4425244	ppb	97
99) Dibenz(a,h)anthracene	13.79	278	240090	6465.7122064	ppb	98
100) Benzo(g,h,i)perylene	14.09	276	220955	6092.9346987	ppb	98

(#)= qualifier out of range (m) = manual integration

0504\_28.D S804C29V.M Thu May 05 12:49:30 2022

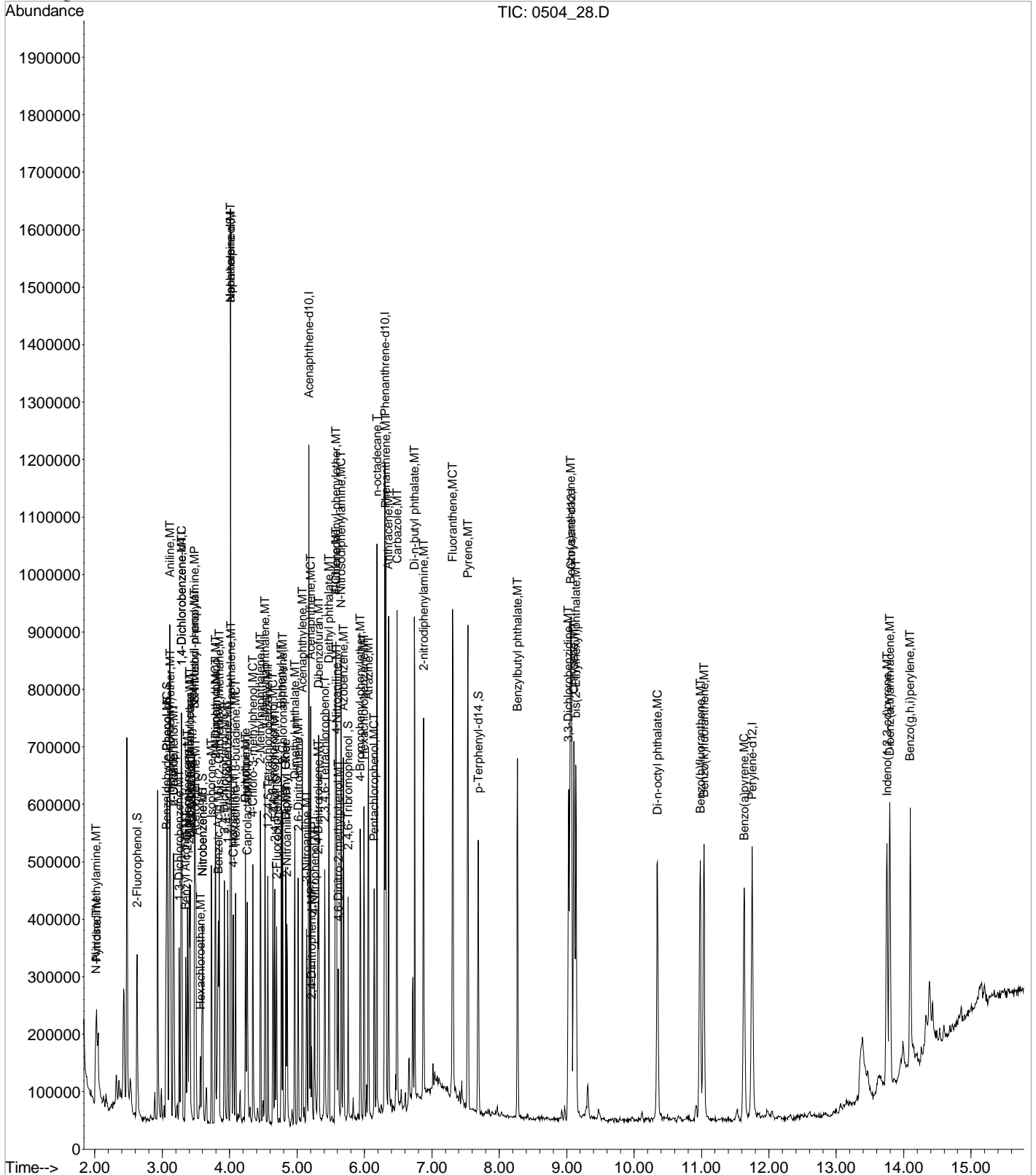
Page 2

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D
Acq On : 4 May 2022 2:03 pm
Sample : MSD 1x WG1857248 L1486885-01
Misc : SOIL ISTD 22D28020 exp 10/28/22
MS Integration Params: RTEINT.P
Quant Time: May 5 12:48 2022

Vial: 34
Operator: 3545
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804C29V.RES

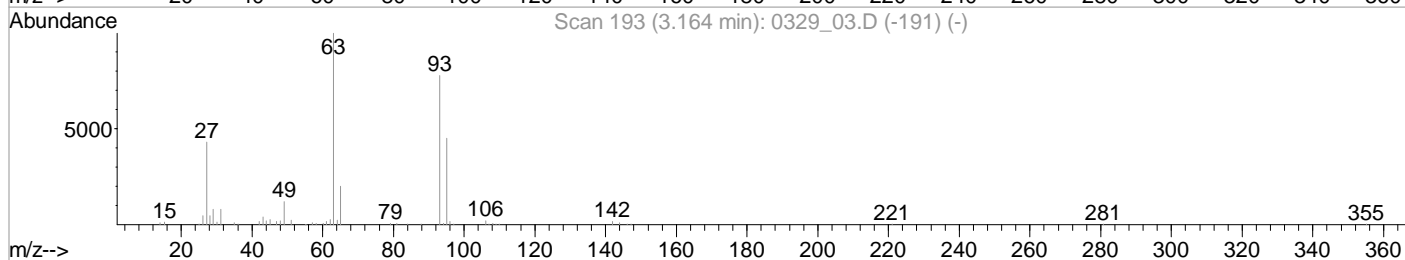
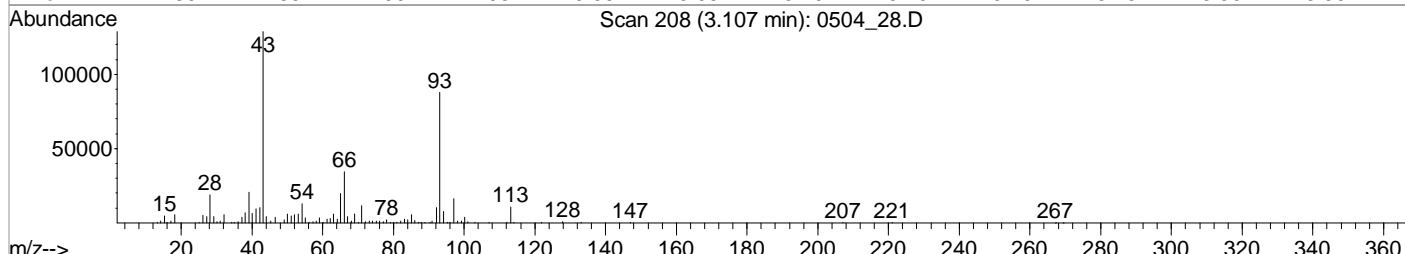
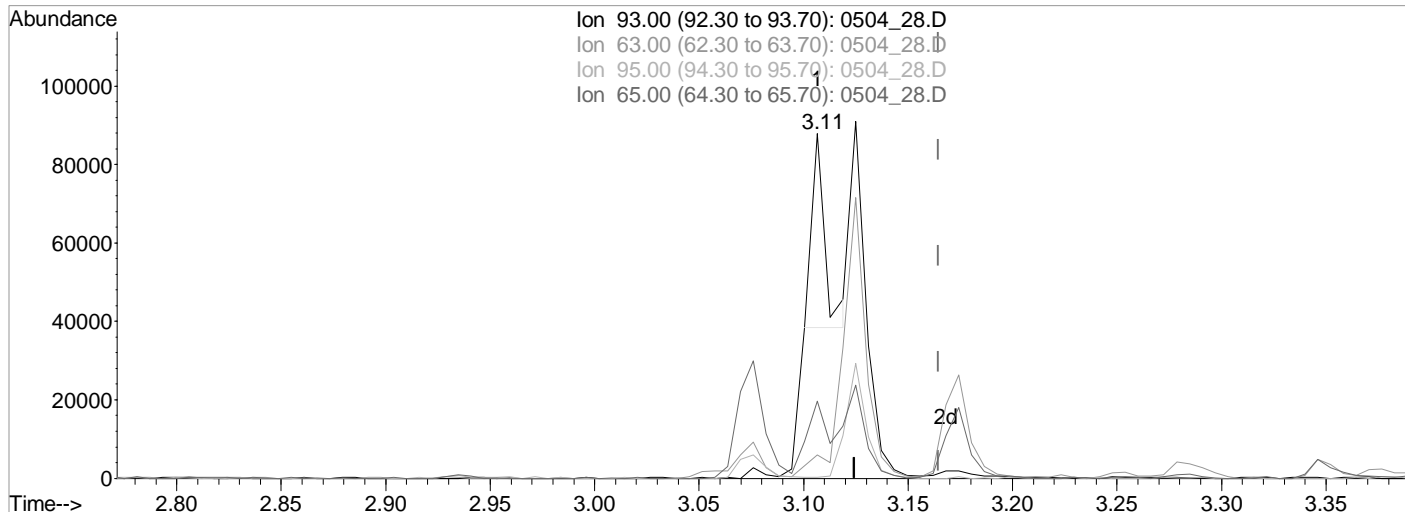
Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Tue Mar 29 09:44:27 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D Vial: 34
Acq On : 4 May 2022 2:03 pm Operator: 3545
Sample : MSD 1x WG1857248 L1486885-01 Inst : BNAMS4
Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 4 14:30 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Tue Mar 29 09:44:27 2022
Response via : Multiple Level Calibration



TIC: 0504\_28.D
(6) bis(2-Chloroethyl)ether (MT)
3.11min (-0.058) 1859.5328695 ppb
Qvalue = 38
response 21926
Table with 3 columns: Ion, Exp%, Act%
Rows: 93.00, 63.00, 95.00, 65.00

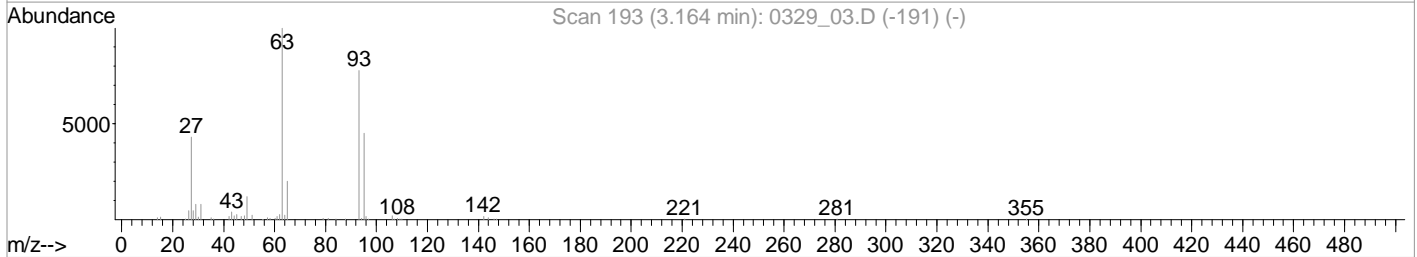
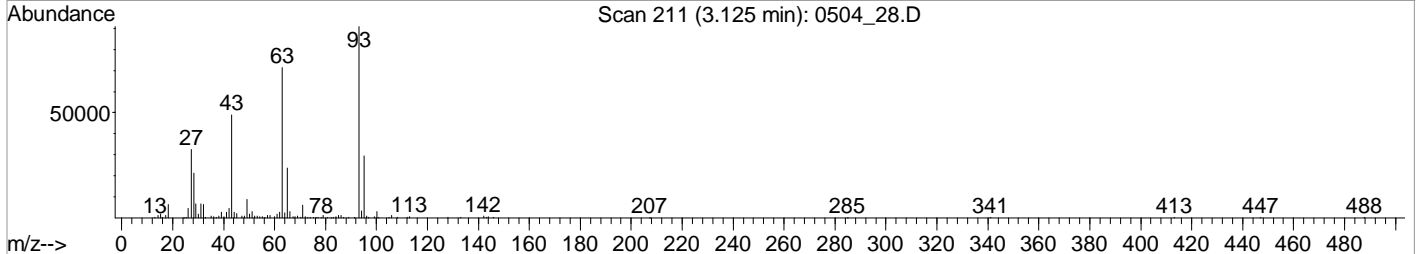
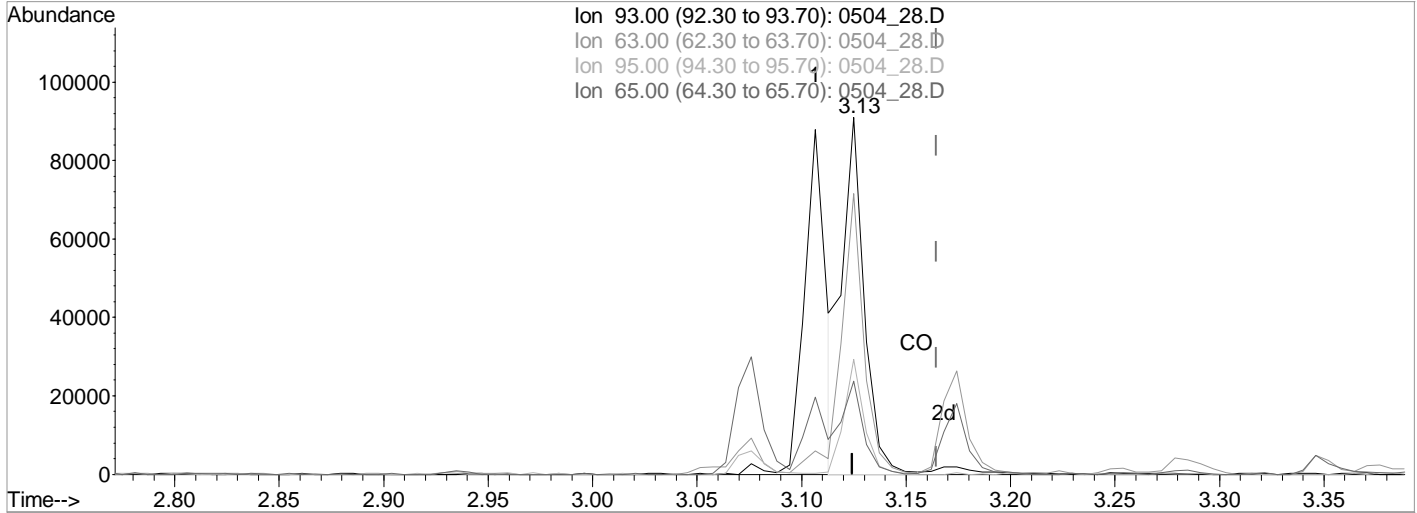
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D  
 Acq On : 4 May 2022 2:03 pm  
 Sample : MSD 1x WG1857248 L1486885-01  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022

Vial: 34  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_28.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.13min (-0.039) 5657.7258623 ppb m

response 66711

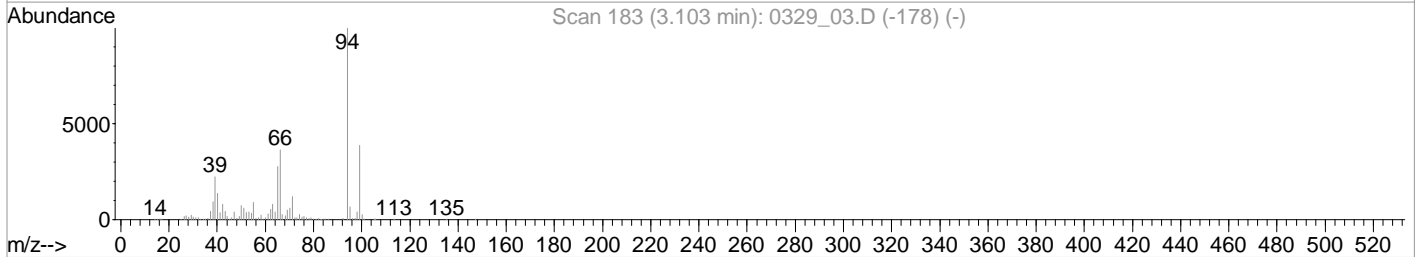
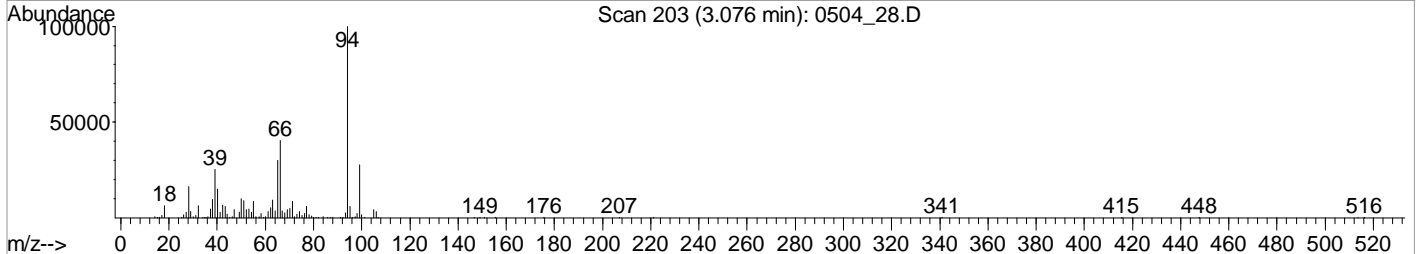
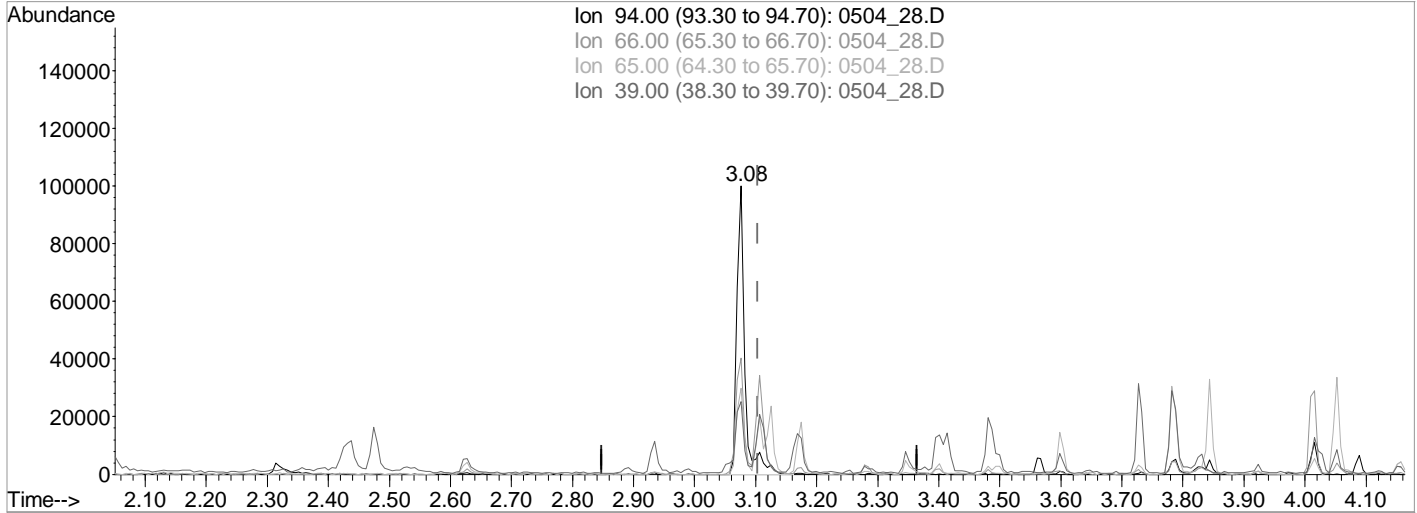
Ion	Exp%	Act%
93.00	100	100
63.00	76.20	78.58
95.00	30.20	32.26
65.00	24.00	26.07

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D  
 Acq On : 4 May 2022 2:03 pm  
 Sample : MSD 1x WG1857248 L1486885-01  
 Misc : SOIL ISTD 22D28020 exp 10/28/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022

Vial: 34  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_28.D

(8) Phenol (MC)  
 3.08min (-0.027) 5348.1342345 ppb  
 Qvalue = 94  
 response 90143

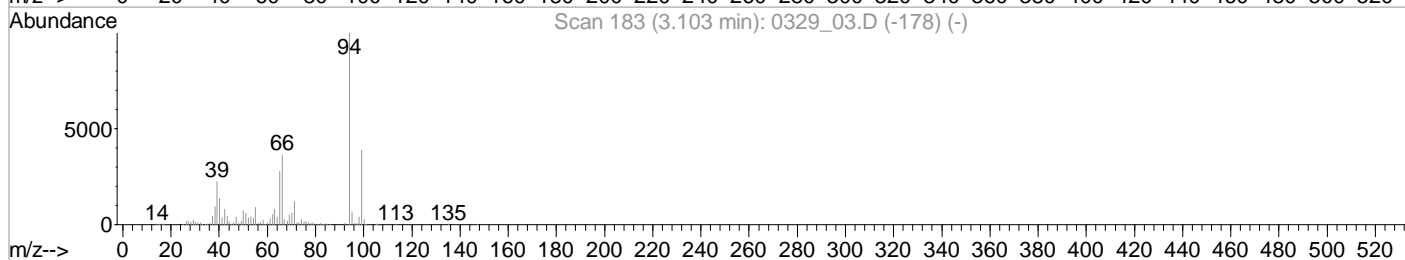
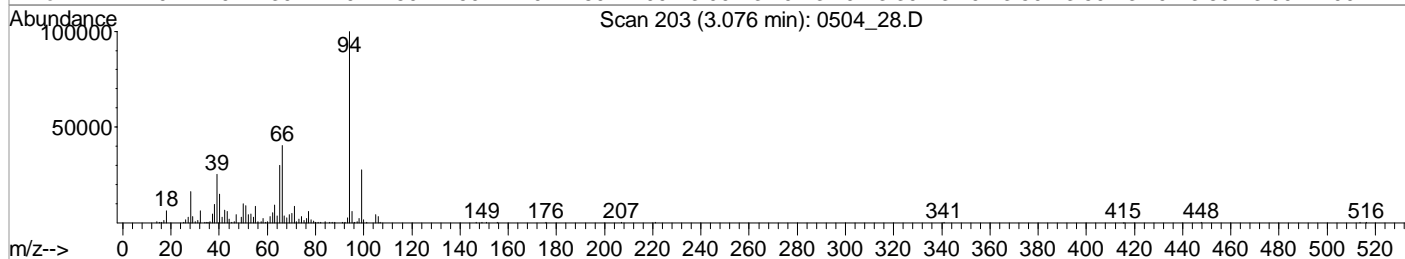
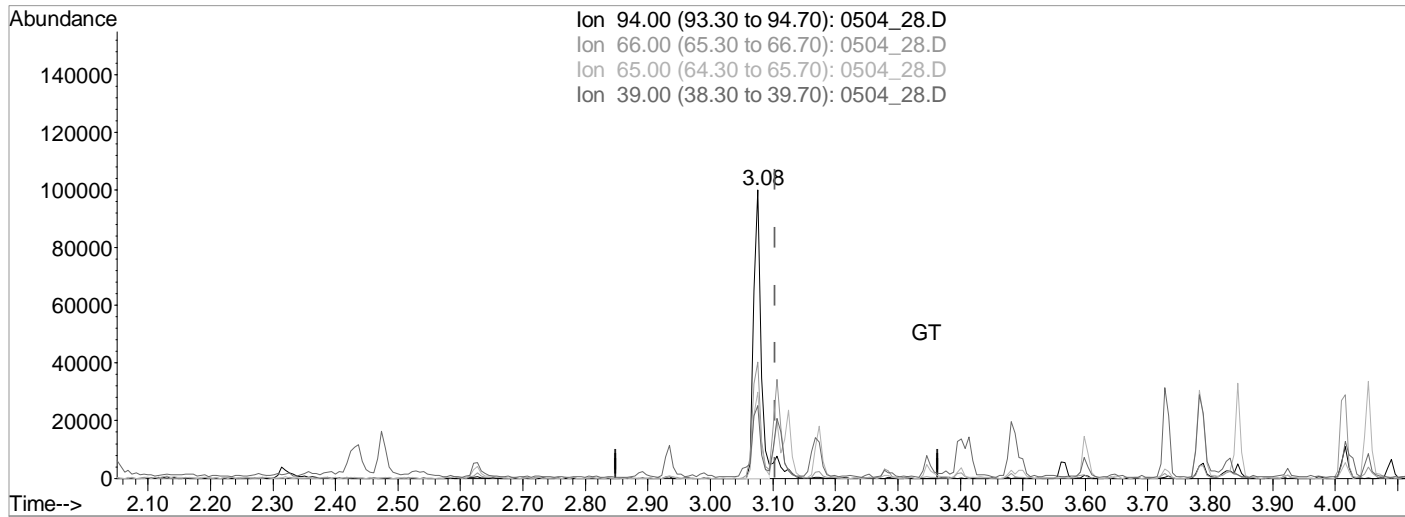
Ion	Exp%	Act%
94.00	100	100
66.00	34.70	40.14
65.00	27.70	29.93
39.00	22.50	21.84



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D Vial: 34  
 Acq On : 4 May 2022 2:03 pm Operator: 3545  
 Sample : MSD 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Multiple Level Calibration



TIC: 0504\_28.D

(8) Phenol (MC)

3.08min (-0.027) 4788.8355488 ppb m

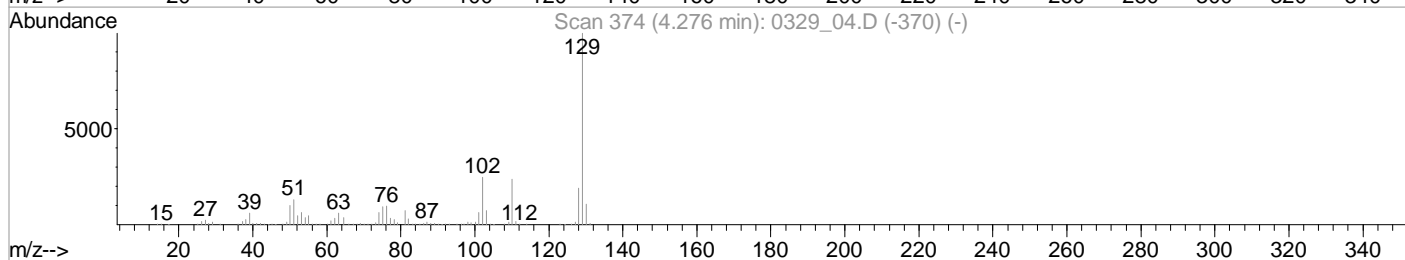
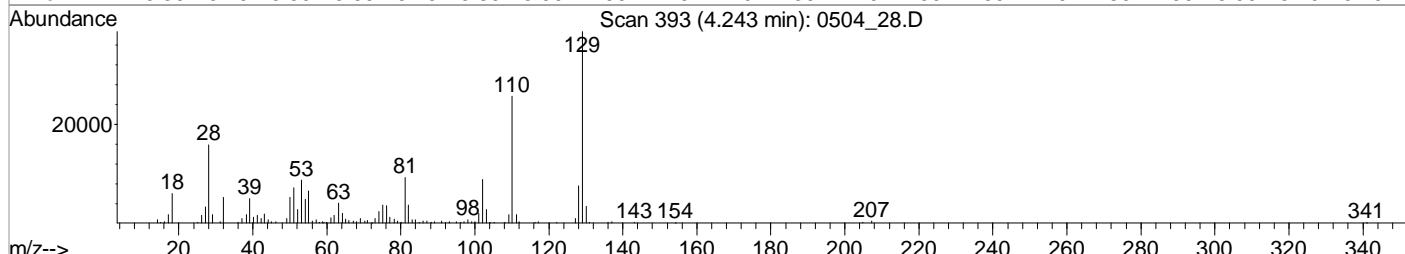
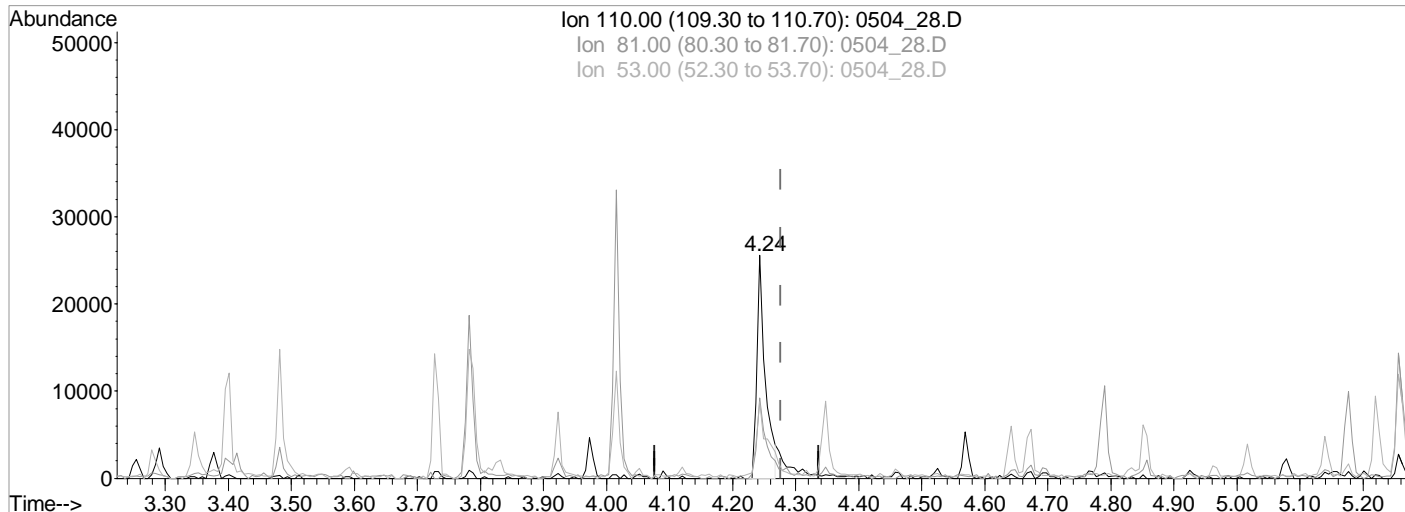
response 80716

Ion	Exp%	Act%
94.00	100	100
66.00	34.70	40.35
65.00	27.70	29.93
39.00	22.50	25.27

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D Vial: 34  
 Acq On : 4 May 2022 2:03 pm Operator: 3545  
 Sample : MSD 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0504\_28.D

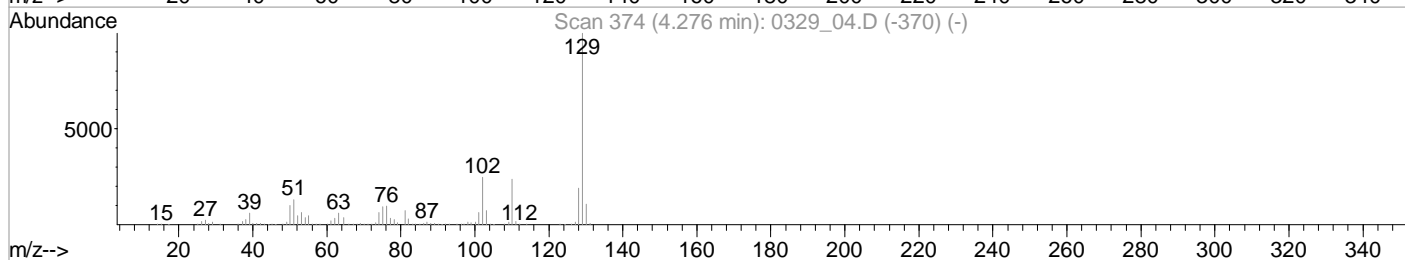
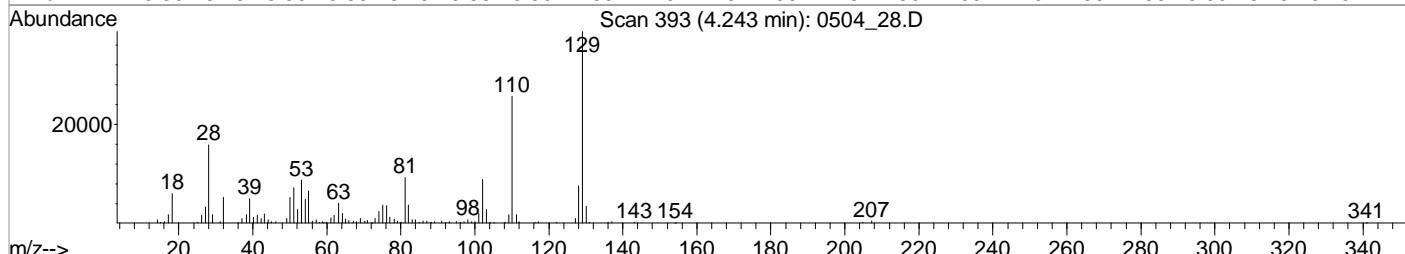
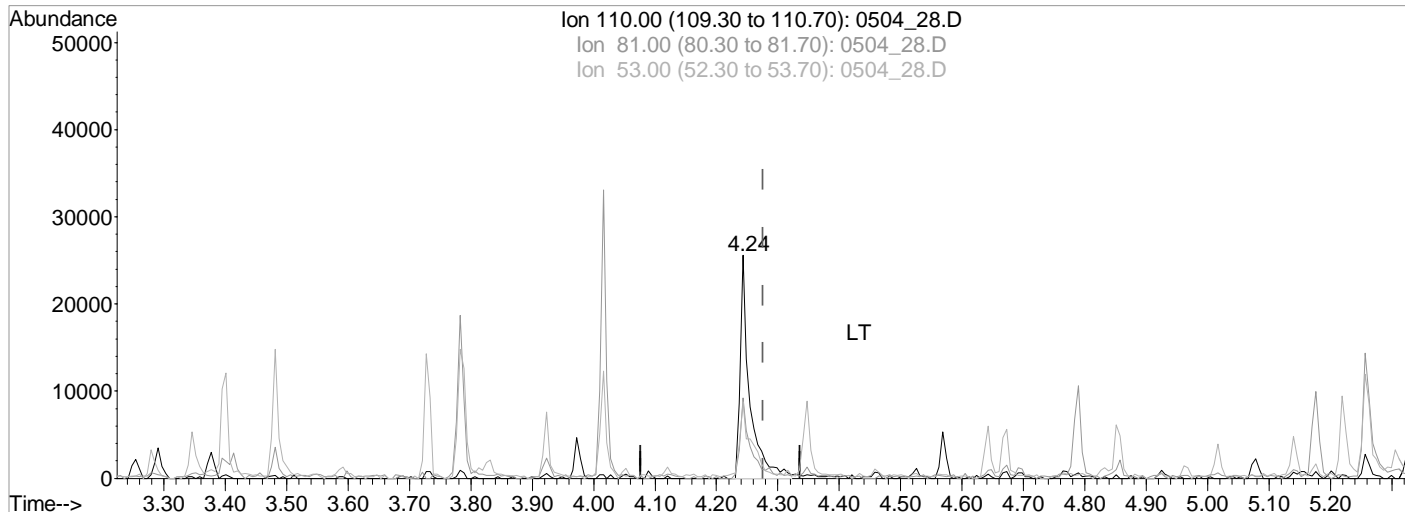
(37) Hydroquinone  
 4.24min (-0.033) 2728.3906916 ppb  
 Qvalue = 88  
 response 24218

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	36.06
53.00	25.90	32.38
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\050422\0504 28.D Vial: 34  
 Acq On : 4 May 2022 2:03 pm Operator: 3545  
 Sample : MSD 1x WG1857248 L1486885-01 Inst : BNAMS4  
 Misc : SOIL ISTD 22D28020 exp 10/28/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 12:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804C29V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Tue Mar 29 09:44:27 2022  
 Response via : Single Level Calibration



TIC: 0504\_28.D

(37) Hydroquinone  
 4.24min (-0.033) 3316.4598783 ppb m

response 28541

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	36.06
53.00	25.90	34.31
0.00	0.00	0.00

# BNA SS Extractions Benchsheet

Batch: WG1857248

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1485528	WG1853332	BJM688	PREPREPBAL1	26-APR-22
L1485528	WG1853349	BJM688	PREPREPBAL2	26-APR-22
L1485528	WG1853351	BJM688	PREPREPBAL2	26-APR-22
L1485528	WG1853353	BJM688	PREPREPBAL4	26-APR-22
L1485721	WG1854658	BJM688	PREPREPBAL1	27-APR-22
L1486453	WG1855452	KMT967	PREPREPBAL2	28-APR-22
L1486885	WG1855466	KMT967	PREPREPBAL3	27-APR-22
L1487377	WG1856083	KMT967	PREPREPBAL3	28-APR-22

Process Analyst: JM686 Transfer Analyst: JM686 Material Handler: JM686 Prep Start Date/Time: 05/02/22 17:00-05/03/22 09:05  
 Prep End Date/Time: 05/03/22 13:51 SOP: MTJL-0118 Method: 3546 Balance ID: EXTBAL5 Filter Lot#: 17502125

Na2SO4: 22E01218 Amt. Used: 1 Exp. Date:11/01/22 MeCL2:Acetone: 22D19459 Amt. Used: 1 Exp. Date:08/01/22  
 Surrogate: 22D01225 Amt. Used: 0.50 mL Exp. Date:09/24/22 LCS/MS Spike: 22D25449 Amt. Used: 0.50 mL Exp. Date:05/09/22  
 MeCL2: 22D14991 Amt. Used: 1 Exp. Date:10/14/22 Spike Syringe ID: 21K30871 Amt. Used: 1 Exp. Date:05/30/22  
 Surrogate Syringe ID: 22B04917 Amt. Used: 1 Exp. Date:08/04/22

Sample Number	Initial Sample Wt (g)	Solvent Volume (mL)	Final Volume (mL)	Extract Color	Box ID	Prep Factor	Prep Ratio	DL Adjustment Factor	Spike Factor	Surrogate Factor	Review Analyst	Review Date
BLANK	15	25	0.5	Colorless		0.0333	1	1	1	1	AO869	05/03/22 16:18:47
LCS	15	25	0.5	Yellow		0.0333	1	1	1	1	AO869	05/03/22 16:18:47
MS(L1486885-01)	15.34	25	1	Green	4/27 PP3 WED 5	0.0652	1.96	2	1	1	AO869	05/03/22 16:18:47
MSD(L1486885-01)	15.59	25	1	Green	4/27 PP3 WED 5	0.0641	1.92	2	1	1	AO869	05/03/22 16:18:47
1. L1485528-08	15.88	25	0.5	Brown	TUE 1/0426-PP1	0.0315	0.946	1	1	1	AO869	05/03/22 16:18:47
2. L1485528-108	15.31	25	0.5	Brown	Tues02 / 0426PP02	0.0327	0.982	1	1	1	AO869	05/03/22 16:18:47
3. L1485528-11	15.39	25	0.5	Tan	TUE 1/0426-PP1	0.0325	0.976	1	1	1	AO869	05/03/22 16:18:47
4. L1485528-111	15.45	25	0.5	Brown	Tues04 / 0426PP02	0.0324	0.973	1	1	1	AO869	05/03/22 16:18:47
5. L1485528-115	15.11	25	1	Dark-brown	Tues04 / 0426PP02	0.0662	1.99	2	1	1	AO869	05/03/22 16:18:47
6. L1485528-118	15.42	25	0.5	Brown	Tues04 / 0426PP02	0.0324	0.973	1	1	1	AO869	05/03/22 16:18:47
7. L1485528-15	15.43	25	0.5	Tan	TUE 1/0426-PP1	0.0324	0.973	1	1	1	AO869	05/03/22 16:18:47
8. L1485528-154	15.17	25	0.5	Brown	Tues-5	0.033	0.991	1	1	1	AO869	05/03/22 16:18:47
9. L1485528-157	15.41	25	0.5	Yellow	Tues-5	0.0324	0.973	1	1	1	AO869	05/03/22 16:18:47
10. L1485528-160	15.13	25	1	Dark-brown	Tues-5	0.0661	1.98	2	1	1	AO869	05/03/22 16:18:47
11. L1485721-08	15.10	25	0.5	Brown	WED 3/0427-PP1	0.0331	0.994	1	1	1	AO869	05/03/22 16:18:47
12. L1485721-11	15.65	25	1	Dark-brown	WED 3/0427-PP1	0.0639	1.92	2	1	1	AO869	05/03/22 16:18:47
13. L1485721-14	15.73	25	1	Dark-brown	WED 3/0427-PP1	0.0636	1.91	2	1	1	AO869	05/03/22 16:18:47
14. L1486453-08	15.38	25	1	Dark-brown	Thu02 / 0428PP02	0.065	1.95	2	1	1	AO869	05/03/22 16:18:47
15. L1486885-01	15.07	25	1	Green	4/27 PP3 WED 5	0.0664	1.99	2	1	1	AO869	05/03/22 16:18:47
16. L1487377-01	15.74	25	1	Dark-brown	4/28 PP3 RUSH	0.0635	1.91	2	1	1	AO869	05/03/22 16:18:47
17. L1487377-02	15.38	25	0.5	Dark-brown	4/28 PP3 RUSH	0.0325	0.976	1	1	1	AO869	05/03/22 16:18:47
18. L1487377-03	15.99	25	1	Dark-brown	4/28 PP3 RUSH	0.0625	1.88	2	1	1	AO869	05/03/22 16:18:47
19. L1488463-01	15.06	25	0.5	Yellow		0.0332	0.997	1	1	1	AO869	05/03/22 16:18:47
20. L1488463-02	15.16	25	0.5	Brown		0.033	0.991	1	1	1	AO869	05/03/22 16:18:47

Comments:

Reviewed By:AO869 on 05/03/22 16:18:47

# BNA SS Extractions Benchsheet

Batch: WG1857484

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1485528	WG1853332	BJM688	PREPREPBAL1	26-APR-22
L1485528	WG1853336	BJM688	PREPREPBAL1	26-APR-22
L1485528	WG1853341	BJM688	PREPREPBAL1	26-APR-22
L1485528	WG1853353	BJM688	PREPREPBAL4	26-APR-22
L1486885	WG1855466	KMT967	PREPREPBAL3	27-APR-22

Process Analyst: JM686 Transfer Analyst: JM686 Material Handler: JM686 Prep Start Date/Time: 05/03/22 09:10-09:11 Prep End Date/Time: 05/03/22 17:15  
 SOP: MTJL -0118 Method: 3546 Balance ID: EXTBAL5 Filter Lot#: 17502125

Na2SO4: 22D21051 Amt. Used: 1 Exp. Date:10/21/22 MeCL2:Acetone: 22D19459 Amt. Used: 1 Exp. Date:08/01/22  
 Surrogate: 22D01225 Amt. Used: 0.50 mL Exp. Date:09/24/22 LCS/MS Spike: 22D25449 Amt. Used: 0.50 mL Exp. Date:05/09/22  
 MeCl2: 22D14991 Amt. Used: 1 Exp. Date:10/14/22 Spike Syringe ID: 21K30871 Amt. Used: 1 Exp. Date:05/30/22  
 Surrogate Syringe ID: 22B04917 Amt. Used: 1 Exp. Date:08/04/22

Sample Number	Initial Sample Wt (g)	Solvent Volume (mL)	Final Volume (mL)	Extract Color	Box ID	Prep Factor	Prep Ratio	DL Adjustment Factor	Spike Factor	Surrogate Factor	Review Analyst	Review Date
BLANK	15	25	0.5	Colorless		0.0333	1	1	1	1	AMG974	05/04/22 04:28:55
LCS	15	25	0.5	Yellow		0.0333	1	1	1	1	AMG974	05/04/22 04:28:55
MS(L1485528-168)	15.83	25	1.0	Black	Tues-5	0.0632	1.9	2	1	1	AMG974	05/04/22 04:28:55
MSD(L1485528-168)	15.71	25	1.0	Black	Tues-5	0.0637	1.91	2	1	1	AMG974	05/04/22 04:28:55
1. L1485528-168	15.74	25	1.0	Black	Tues-5	0.0635	1.91	2	1	1	AMG974	05/04/22 04:28:55
2. L1485528-171	15.99	25	0.5	Yellow	Tues-5	0.0313	0.94	1	1	1	AMG974	05/04/22 04:28:55
3. L1485528-18	15.21	25	0.5	Yellow	TUE 1/0426-PP1	0.0329	0.988	1	1	1	AMG974	05/04/22 04:28:55
4. L1485528-22	15.12	25	0.5	Yellow	TUE 1/0426-PP1	0.0331	0.994	1	1	1	AMG974	05/04/22 04:28:55
5. L1485528-25	15.31	25	0.5	Colorless	TUE 3/0426-PP1	0.0327	0.982	1	1	1	AMG974	05/04/22 04:28:55
6. L1485528-29	15.37	25	0.5	Yellow	TUE 3/0426-PP1	0.0325	0.976	1	1	1	AMG974	05/04/22 04:28:55
7. L1485528-32	15.14	25	0.5	Brown	TUE 3/0426-PP1	0.033	0.991	1	1	1	AMG974	05/04/22 04:28:55
8. L1485528-36	15.58	25	1.0	Black	TUE 3/0426-PP1	0.0642	1.93	2	1	1	AMG974	05/04/22 04:28:55
9. L1485528-39	15.89	25	0.5	Yellow	TUE 3/0426-PP1	0.0315	0.946	1	1	1	AMG974	05/04/22 04:28:55
10. L1485528-43	15.33	25	0.5	Colorless	TUE 3/0426-PP1	0.0326	0.979	1	1	1	AMG974	05/04/22 04:28:55
11. L1485528-46	15.24	25	0.5	Colorless	TUE 3/0426-PP1	0.0328	0.985	1	1	1	AMG974	05/04/22 04:28:55
12. L1485528-50	15.32	25	0.5	Colorless	TUE 3/0426-PP1	0.0326	0.979	1	1	1	AMG974	05/04/22 04:28:55
13. L1485528-53	15.59	25	0.5	Yellow	TUE 3/0426-PP1	0.0321	0.964	1	1	1	AMG974	05/04/22 04:28:55
14. L1485528-57	15.10	25	0.5	Colorless	TUE 3/0426-PP1	0.0331	0.994	1	1	1	AMG974	05/04/22 04:28:55
15. L1485528-60	15.18	25	0.5	Colorless	TUE 3/0426-PP1	0.0329	0.988	1	1	1	AMG974	05/04/22 04:28:55
16. L1485528-64	15.01	25	1.0	Black	TUE 3/0426-PP1	0.0666	2	2	1	1	AMG974	05/04/22 04:28:55
17. L1485528-67	15.93	25	0.5	Yellow	TUE 3/0426-PP1	0.0314	0.943	1	1	1	AMG974	05/04/22 04:28:55
18. L1485528-72	15.24	25	0.5	Yellow	TUE 3/0426-PP1	0.0328	0.985	1	1	1	AMG974	05/04/22 04:28:55
19. L1485528-76	15.19	25	0.5	Yellow	TUE 3/0426-PP1	0.0329	0.988	1	1	1	AMG974	05/04/22 04:28:55
20. L1486885-02	15.25	25	0.5	Green	4/27 PP3 WED 5	0.0328	0.985	1	1	1	AMG974	05/04/22 04:28:55

Comments:

Reviewed By:AMG974 on 05/04/22 04:28:55

9034/9030B Wet Chemistry

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1486885-01  
Client Sample ID: BNSF-BG13-042122-0-10  
Lab File ID: 32  
Instrument ID: MAN TITR  
Analytical Batch: WG1857111  
Dilution Factor: 1  
Analytical Method: 9034/9030B  
Matrix: Solid  
Total Solids (%): 75.6

SDG: L1486885  
Collected Date/Time: 04/21/22 09:50  
Received Date/Time: 04/27/22 09:00  
Preparation Date/Time: 04/27/22 14:39  
Analysis Date/Time: 05/01/22 17:00  
Prep Method: 9030B  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 10.10 g  
Final Wt/Vol: \_\_\_\_\_

Analyte	CAS	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Sulfide	18496-25-8	U		39.7	99.2

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:  
BNSF-SG23-042122-0-6

**Lab Sample ID:** L1486885-02  
**Client Sample ID:** BNSF-SG23-042122-0-6  
**Lab File ID:** 33  
**Instrument ID:** MAN TITR  
**Analytical Batch:** WG1857111  
**Dilution Factor:** 1  
**Analytical Method:** 9034/9030B  
**Matrix:** Solid  
**Total Solids (%):** 79.1

**SDG:** L1486885  
**Collected Date/Time:** 04/21/22 14:40  
**Received Date/Time:** 04/27/22 09:00  
**Preparation Date/Time:** 04/27/22 14:39  
**Analysis Date/Time:** 05/01/22 17:00  
**Prep Method:** 9030B  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 11.16 g  
**Final Wt/Vol:** \_\_\_\_\_

Analyte	CAS	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Sulfide	18496-25-8	U		37.9	94.8



SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3786887-1  
**Client Sample ID:** BLANK  
**Lab File ID:** 25  
**Instrument ID:** MAN TITR  
**Analytical Batch:** WG1857111  
**Dilution Factor:** 1  
**Analytical Method:** 9034/9030B  
**Matrix:** Solid  
**Total Solids (%):** \_\_\_\_\_

**SDG:** L1486885  
**Collected Date/Time:** \_\_\_\_\_  
**Received Date/Time:** \_\_\_\_\_  
**Preparation Date/Time:** 04/27/22 14:39  
**Analysis Date/Time:** 05/01/22 17:00  
**Prep Method:** 9030B  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 10.15 g  
**Final Wt/Vol:** \_\_\_\_\_

Analyte	CAS	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Sulfide	18496-25-8	U		30.0	75.0

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3786887-2  
Client Sample ID: LCS  
Lab File ID: 26  
Instrument ID: MAN TITR  
Analytical Batch: WG1857111  
Dilution Factor: 1  
Analytical Method: 9034/9030B  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1486885  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 04/27/22 14:39  
Analysis Date/Time: 05/01/22 17:00  
Prep Method: 9030B  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 10.16 g  
Final Wt/Vol: \_\_\_\_\_

Analyte	CAS	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Sulfide	18496-25-8	74.9		30.0	75.0

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:  
R3786887-3

<b>Lab Sample ID:</b>	R3786887-3	<b>SDG:</b>	L1486885
<b>Client Sample ID:</b>	MS	<b>Collected Date/Time:</b>	04/15/22 11:45
<b>Lab File ID:</b>	27	<b>Received Date/Time:</b>	04/22/22 09:00
<b>Instrument ID:</b>	MAN TITR	<b>Preparation Date/Time:</b>	04/27/22 14:39
<b>Analytical Batch:</b>	WG1857111	<b>Analysis Date/Time:</b>	05/01/22 17:00
<b>Dilution Factor:</b>	1	<b>Prep Method:</b>	9030B
<b>Analytical Method:</b>	9034/9030B	<b>Sample Vol Used:</b>	_____
<b>Matrix:</b>	Solid	<b>Initial Wt/Vol:</b>	9.61 g
<b>Total Solids (%):</b>	91.6	<b>Final Wt/Vol:</b>	_____

Analyte	CAS	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Sulfide	18496-25-8	54.7		32.8	81.9

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3786887-4  
**Client Sample ID:** MSD  
**Lab File ID:** 28  
**Instrument ID:** MAN TITR  
**Analytical Batch:** WG1857111  
**Dilution Factor:** 1  
**Analytical Method:** 9034/9030B  
**Matrix:** Solid  
**Total Solids (%):** 91.6

**SDG:** L1486885  
**Collected Date/Time:** 04/15/22 11:45  
**Received Date/Time:** 04/22/22 09:00  
**Preparation Date/Time:** 04/27/22 14:39  
**Analysis Date/Time:** 05/01/22 17:00  
**Prep Method:** 9030B  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 9.98 g  
**Final Wt/Vol:** \_\_\_\_\_

Analyte	CAS	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Sulfide	18496-25-8	52.6		32.8	81.9

<b>SDG:</b>	L1486885	<b>Calibration (begin) date/time:</b>	_____
<b>Instrument ID:</b>	MAN TITR	<b>Calibration (end) date/time:</b>	_____
<b>Analytical Method:</b>	9034/9030B	<b>Analytical Run:</b>	WG1857111

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	Sample ID: BLANK	Result	BLANK Qual
	File ID:	25	
<b>Analyte</b>		mg/kg	
SULFIDE		U	

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MATRIX SPIKE /  
 MATRIX SPIKE DUPLICATE RECOVERY  
 L1486885-01,02

<b>MS Sample / File ID:</b>	R3786887-3 / 27	<b>SDG:</b>	L1486885
<b>MSD Sample / File ID:</b>	R3786887-4 / 28	<b>Analytical Batch:</b>	WG1857111
<b>OS Sample / File ID:</b>	L1485355-02 / 30	<b>Matrix:</b>	Solid
<b>Instrument ID:</b>	MAN TITR		
<b>Analytical Method:</b>	9034/9030B		

Analyte	Spike Amount (dry) <i>mg/kg</i>	OS Result (dry) <i>mg/kg</i>	MS Result (dry) <i>mg/kg</i>	MSD Result (dry) <i>mg/kg</i>	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	RPD %	RPD Limits %
Sulfide	109	U	54.7	52.6	50.0	48.2	1	10.0 - 136	3.78	20

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE  
 LABORATORY CONTROL SAMPLE DUPLICATE  
 RECOVERY  
 L1486885-01,02

SAMPLE NO.:  
 R3786887-2

**LCS Sample / File ID:** R3786887-2 / 26  
**LCSD Sample / File ID:** \_\_\_\_\_  
**Instrument ID:** MAN TITR  
**Analytical Method:** 9034/9030B

**SDG:** L1486885  
**Analytical Batch:** WG1857111  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	Spike Amount <i>mg/kg</i>	LCS Result <i>mg/kg</i>	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limits %
Sulfide	100	74.9		74.9		53.8 - 124		

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1486885-01,02  
Matrix: Solid

Analytical Method: 9034/9030B  
Prep Method: 9030B

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Analyte	CAS	Wavelength	Mass	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Sulfide	18496-25-8			30	75

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ANALYSIS LOG

<b>SDG:</b>	L1486885	<b>Analytical Method:</b>	9034/9030B
<b>Instrument ID:</b>	MAN TITR	<b>Calibration Start Date:</b>	_____
<b>Analytical Run:</b>	WG1857111	<b>Calibration End Date:</b>	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3786887-1	25	05/01/22 17:00	1	WG1857111
LCS	R3786887-2	26	05/01/22 17:00	1	WG1857111
MS	R3786887-3	27	05/01/22 17:00	1	WG1857111
MSD	R3786887-4	28	05/01/22 17:00	1	WG1857111
OS	L1485355-02	30	05/01/22 17:00		
BNSF-SG23-042122-0-6	L1486885-02	33	05/01/22 17:00	1	WG1857111
BNSF-BG13-042122-0-10	L1486885-01	32	05/01/22 17:00	1	WG1857111

## SULFIDE SS WetChem Prep Benchsheet

Batch: WG1857111/WG1855175

Analyst: BMD3730 Analyst 2: NA Analyst 3: NA Prep Start Date/Time: 04/27/22 14:39 Prep End Date/Time: 05/01/22 16:38  
 Date/Time Analyzed: 05/01/22 17:00:22 SOP: 0172 Method: 9030B LCS True Value: 100 ppm Balance ID: WETBAL12 5mL Pipette Lot#: NA  
 10mL Pipette Lot#: NA 50mL Pipette Lot#: NA 250mL Container Lot#: NA

H2SO4: 22D28936 Amt. Used: 50 mL Exp. Date:10/28/22 0.5M Zn Acetate: 22D28915 Amt. Used: 10 mL Exp. Date:09/29/22  
 37% Formaldehyde: 22D25378 Amt. Used: 5 mL Exp. Date:10/25/22 LCS/D Standard: 22D28937 Amt. Used: 10 mL Exp. Date:05/03/22  
 Iodine Solution: 22D27826 Amt. Used: 15 mL Exp. Date:10/27/22 Sodium Thiosulfate Titrant: 22D26624 Amt. Used: 1 Exp. Date:11/04/26  
 6N HCL: 22C22767 Amt. Used: 1 Exp. Date:09/22/22 MS/D Standard: 22D28937 Amt. Used: 10 mL Exp. Date:05/03/22

Sample Number	Prep Flags	Normality of I2	Vol I2 for Std. (mL)	Vol Titr for Std. (mL)	Normality of Titrant	Initial Sample Wt (g)	Volume of I2 (mL)	Volume of Titrant (mL)	Sulfide Result (mg/L)	Review Analyst	Review Date
BLANK		0.025	15.0	15.0	0.025	10.15	15.0	15.0	0	BMD3730	05/01/22 16:40:15
LCS		0.025	15.0	15.0	0.025	10.16	15.0	13.1	74.943	BMD3730	05/01/22 16:40:15
1. L1485355-01	T8	0.025	15.0	15.0	0.025	9.87	15.0	15.0	0	BMD3730	05/01/22 16:40:15
2. L1485355-02	T8	0.025	15.0	15.0	0.025	9.92	15.0	15.0	0	BMD3730	05/01/22 16:40:15
3. L1485355-03	T8	0.025	15.0	15.0	0.025	9.06	15.0	15.0	0	BMD3730	05/01/22 16:40:15
4. L1486885-01		0.025	15.0	15.0	0.025	10.10	15.0	14.4	23.807	BMD3730	05/01/22 16:40:15
5. L1486885-02		0.025	15.0	15.0	0.025	11.16	15.0	15.0	0	BMD3730	05/01/22 16:40:15
MS(L1485355-02)		0.025	15.0	15.0	0.025	9.61	15.0	13.8	50.042	BMD3730	05/01/22 16:40:15
MSD(L1485355-02)		0.025	15.0	15.0	0.025	9.98	15.0	13.8	48.186	BMD3730	05/01/22 16:40:15

Comments:

Reviewed By: BMD3730 on 05/01/22 16:40:15

## 9030B WetChem Prep Benchsheet

Batch: WG1855175

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1485355	WG1853008	BJM688	PREPREPBAL2	22-APR-22
L1485931	WG1854997	BJM688	PREPREPBAL2	27-APR-22
L1486752	WG1855466	KMT967	PREPREPBAL3	27-APR-22
L1486885	WG1855466	KMT967	PREPREPBAL3	27-APR-22
L1487151	WG1855971	ARS3701	PREPREPBAL1	28-APR-22
L1487154	WG1855971	ARS3701	PREPREPBAL1	28-APR-22
L1488057	WG1856887	BJM688	PREPREPBAL3	30-APR-22
L1488067	WG1856887	BJM688	PREPREPBAL3	30-APR-22
L1488142	WG1856963	BJM688	PREPREPBAL3	30-APR-22

Analyst: BMD3730 Analyst 2: NA Analyst 3: NA Prep Start Date/Time: 04/27/22 14:39-05/01/22 08:00 Prep End Date/Time: 05/01/22 16:38  
 Date/Time Analyzed: 05/01/22 17:00:22 SOP: 0172 Method: 9030B LCS True Value: 100 ppm Balance ID: WETBAL12 5mL Pipette Lot#: NA  
 10mL Pipette Lot#: NA 50mL Pipette Lot#: NA 250mL Container Lot#: NA

H2SO4: 22D28936 Amt. Used: 50 mL Exp. Date:10/28/22 0.5M Zn Acetate: 22D28915 Amt. Used: 10 mL Exp. Date:09/29/22  
 37% Formaldehyde: 22D25378 Amt. Used: 5 mL Exp. Date:10/25/22 LCS/D Standard: 22D28937 Amt. Used: 10 mL Exp. Date:05/03/22  
 Iodine Solution: 22D27826 Amt. Used: 15 mL Exp. Date:10/27/22 Sodium Thiosulfate Titrant: 22D26624 Amt. Used: 1 Exp. Date:11/04/26  
 6N HCL: 22C22767 Amt. Used: 1 Exp. Date:09/22/22 MS/D Standard: 22D28937 Amt. Used: 10 mL Exp. Date:05/03/22

Sample Number	Prep Flags	Normality of I2	Vol I2 for Std. (mL)	Vol Titr for Std. (mL)	Normality of Titrant	Initial Sample Wt (g)	Volume of I2 (mL)	Volume of Titrant (mL)	Sulfide Result (mg/L)	Review Analyst	Review Date
BLANK		0.025	15.0	15.0	0.025	10.15	15.0	15.0	0	BMD3730	05/01/22 16:40:15
LCS		0.025	15.0	15.0	0.025	10.16	15.0	13.1	74.943	BMD3730	05/01/22 16:40:15
1. L1485355-01	T8	0.025	15.0	15.0	0.025	9.87	15.0	15.0	0	BMD3730	05/01/22 16:40:15
2. L1485355-02	T8	0.025	15.0	15.0	0.025	9.92	15.0	15.0	0	BMD3730	05/01/22 16:40:15
3. L1485355-03	T8	0.025	15.0	15.0	0.025	9.06	15.0	15.0	0	BMD3730	05/01/22 16:40:15
4. L1485931-01		0.025	15.0	15.0	0.025	9.27	15.0	15.0	0	BMD3730	05/01/22 16:40:15
5. L1486576-01	T8	0.025	15.0	15.0	0.025	10.36	15.0	13.5	58.024	BMD3730	05/01/22 16:40:15
6. L1486737-01		0.025	15.0	15.0	0.025	9.54	15.0	15.0	0	BMD3730	05/01/22 16:40:15
7. L1486752-02		0.025	15.0	15.0	0.025	8.63	30.0	15.5	673.334	BMD3730	05/01/22 16:40:15
8. L1486885-01		0.025	15.0	15.0	0.025	10.10	15.0	14.4	23.807	BMD3730	05/01/22 16:40:15
9. L1486885-02		0.025	15.0	15.0	0.025	11.16	15.0	15.0	0	BMD3730	05/01/22 16:40:15
10. L1486898-02		0.025	15.0	15.0	0.025	6.18	15.0	13.3	110.239	BMD3730	05/01/22 16:40:15
11. L1487151-01		0.025	15.0	15.0	0.025	10.16	15.0	15.0	0	BMD3730	05/01/22 16:40:15
12. L1487154-01		0.025	15.0	15.0	0.025	9.72	15.0	14.8	8.246	BMD3730	05/01/22 16:40:15
13. L1488057-08		0.025	15.0	15.0	0.025	11.22	15.0	15.0	0	BMD3730	05/01/22 16:40:15
14. L1488067-04		0.025	15.0	15.0	0.025	10.78	15.0	15.0	0	BMD3730	05/01/22 16:40:15
15. L1488067-07		0.025	15.0	15.0	0.025	10.80	15.0	15.0	0	BMD3730	05/01/22 16:40:15
16. L1488142-01		0.025	15.0	15.0	0.025	11.16	15.0	15.0	0	BMD3730	05/01/22 16:40:15

Sample Number	Prep Flags	Normality of I2	Vol I2 for Std. (mL)	Vol Titr for Std. (mL)	Normality of Titrant	Initial Sample Wt (g)	Volume of I2 (mL)	Volume of Titrant (mL)	Sulfide Result (mg/L)	Review Analyst	Review Date
17. L1488142-02		0.025	15.0	15.0	0.025	10.13	15.0	15.0	0	BMD3730	05/01/22 16:40:15
18. L1488142-03		0.025	15.0	15.0	0.025	10.06	15.0	15.0	0	BMD3730	05/01/22 16:40:15
19. L1488142-04		0.025	15.0	15.0	0.025	9.96	15.0	15.0	0	BMD3730	05/01/22 16:40:15
20. L1488142-05		0.025	15.0	15.0	0.025	9.97	15.0	15.0	0	BMD3730	05/01/22 16:40:15
MS(L1485355-02)		0.025	15.0	15.0	0.025	9.61	15.0	13.8	50.042	BMD3730	05/01/22 16:40:15
MSD(L1485355-02)		0.025	15.0	15.0	0.025	9.98	15.0	13.8	48.186	BMD3730	05/01/22 16:40:15

**Comments:**

486737-01 Time Added: 05/01/22 08:07:42  
 487131-01 Time Added: 05/01/22 08:07:42  
 487134-01 Time Added: 05/01/22 08:07:42  
 488057-08 Time Added: 05/01/22 08:07:42  
 488067-04 Time Added: 05/01/22 08:07:42  
 488067-07 Time Added: 05/01/22 08:07:42  
 488142-01 Time Added: 05/01/22 08:07:42  
 488142-02 Time Added: 05/01/22 08:07:42  
 488142-03 Time Added: 05/01/22 08:07:42  
 488142-04 Time Added: 05/01/22 08:07:42  
 488142-05 Time Added: 05/01/22 08:08:08

Reviewed By: BMD3730 on 05/01/22 16:40:15

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

COD	Coefficient of Determination.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Mass	Mass of parameter.
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
RRF	Relative Response Factor.
RT	Retention Time.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Wavelength	Wavelength of parameter.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
NI	Manual Integration Code to indicate that the peak was not integrated at all by the computer software.
LT	Manual Integration Code to indicate that the peak in question was inappropriately integrated to an area less than what it should be (i.e., peak area was cut).
GT	Manual Integration Code to indicate that the peak in question was inappropriately integrated to an area greater than it should be (i.e., peak tailing).
BA	Manual Integration Code to indicate that the baseline had to be adjusted correctly by the analyst.
WP	Manual Integration Code to indicate that the wrong peak was chosen.
CO	Manual Integration Code to indicate that the analyst had to split two co-eluting peaks apart that were not (or could not be) separated by the computer system.
RT	Manual Integration Code to indicate that the retention time for the peak in question has shifted from the expected retention time.
INT	Manual Integration Code to indicate that there was electronic interference (i.e., noise).



# GLOSSARY OF TERMS

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Su

<sup>6</sup> Gl

<sup>7</sup> Al

<sup>8</sup> Sc

# ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Su

<sup>6</sup> Gl

<sup>7</sup> Al

<sup>8</sup> Sc

# Internal Transfer Chain of Custody



Samples Pre-Logged into eCOC.

State Of Origin: WA

Cert. Needed:  Yes  No

Owner Received Date: 4/23/2022 Results Requested By: 5/16/2022

Workorder: 10605661

Workorder Name: D3593500

Report To	Subcontract To	Requested Analysis																																													
Kongmeng Vang Pace Analytical Minnesota 1700 Elm Street Minneapolis, MN 55414 Phone (612)607-1700	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858																																														
		<table border="1"> <tr><td>SM4500 Ammonia</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>SVOC</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>SW9030 Total Sulfides</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>										SM4500 Ammonia												SVOC												SW9030 Total Sulfides											
SM4500 Ammonia																																															
SVOC																																															
SW9030 Total Sulfides																																															

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers										LAB USE ONLY									
						Unpreserved																			
1	BNSF-BG13-042122-0-10	RQS	4/21/2022 09:50	10605661001	Solid	2																		U486885	
2	BNSF-SG23-042122-0-6	PS	4/21/2022 14:40	10605661002	Solid	2																			
3																									
4																									
5																									

Transfers					Comments				
Released By	Date/Time	Received By	Date/Time						
CSM/Pace	4/26/22 14:45				MS/MSD on sample 001				
			4/27/22		0900 DRA7 3.4+0=3.4 802				

Cooler Temperature on Receipt  °C Custody Seal  or N Received on Ice  or N Samples Intact Y or N

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

Sample Receipt Checklist

COC Seal Present/Intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	If Applicable	
COC Signed/Accurate:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	VOA Zero Headpace:	<input type="checkbox"/> Y <input type="checkbox"/> N
Bottles arrive intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Pres. Correct/Check:	<input type="checkbox"/> Y <input type="checkbox"/> N
Correct bottles used:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
Sufficient volume sent:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
nan Screen < 0.5 mB/hr:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N		



Ship To:  
Pace National  
12065 Lebanon Rd  
Mt. Juliet, TN 37122  
Phone (615) 758-5858

INTER\_LABORATORY WORK ORDER # 10605661

(To be completed by sending lab)

Sending Project No:	10605661
Receiving Project No:	
Check Box for Consolidated Invoice:	<input type="checkbox"/>
Date Prepared:	04/25/22
<b>REQUESTED COMPLETION DATE:</b>	<b>5/16/2022</b>

Sending Region	IR10-Minnesota	Sending Project Mgr.	Kongmeng Vang
Receiving Region	IR850-Pace National	External Client	BNSF_Jacobs_WA
State of Sample Origin	WA	QC Deliverable	PACKAGELV4

All questions should be addressed to sending project manager.

Requested Reportable Units \_\_\_\_\_ Report Wet or Dry Weight?  IRWO Lab Need to run? \_\_\_\_\_ Cert. Needed yes

WORK REQUESTED					
Method Description	Container Type	Quantity of containers	Preservative	Quantity of Samples	
SM4500 Ammonia	JGFU		Unpreserved	1	
SM4500 Ammonia (MS/MSD)	JGFU		Unpreserved	1	
SW9030 Total Sulfides	JGFU		Unpreserved	1	
SW9030 Total Sulfides (MS/MSD)	JGFU		Unpreserved	1	
SVOC	JGFU		Unpreserved	1	
SVOC	JGFU		Unpreserved	1	
				<b>TOTAL</b>	<b>\$704.00</b>

Special Requirements: Report D, QC Limits, MDLs (D), Jacobs UPRR EQEDD (1579)

Receiving Region Department	Acctg. Code	Totals from above	Revenue Allocation	
			Receiving Region (80%)	Client Services Dept. Sending Region (20%)
Wet Chemistry	21	\$184.00	\$147.20	\$36.80
GC/MS Semivolatiles	30	\$520.00	\$416.00	\$104.00
<b>TOTAL</b>		<b>\$704.00</b>	<b>\$563.20</b>	<b>\$140.80</b>

\* Custom Revenue Allocation

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region:  Yes  No

DISPOSITION of FORM

Original sent to the receiving lab - Copy kept at the sending lab.  
When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

11486885



U486885

### 8270 SVOC List

#### Semi-volatile Organic Compounds and Polycyclic

3&4-Methylphenol
Benzoic acid
Bis(2-ethylhexyl) phthalate
Carbazole
Dibenzofuran
Di-n-butyl phthalate
Di-n-octyl phthalate
Pentachlorophenol
Phenol
1-Methylnaphthalene
2-Methylnaphthalene
Acenaphthene
Acenaphthylene
Anthracene
Benz(a)anthracene
Benzo(a)pyrene
Benzo(ghi)perylene
Chrysene
Dibenz(ah)anthracene
Fluoranthene
Fluorene
Indeno(123-cd)pyrene
Naphthalene
Phenanthrene
Pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene

## ANALYTICAL REPORT

Job Number: 580-113170-1

Job Description: D3593500 10605661

For:

Pace Analytical Services, LLC

1700 Elm Street

Minneapolis, MN 55414

Attention: Kongmeng Vang



Approved for release.  
Pauline M Matlock  
Project Manager  
5/26/2022 12:27 PM

---

Pauline M Matlock, Project Manager  
5755 8th Street East, Tacoma, WA, 98424

(253)922-2310

Pauline.Matlock@et.eurofinsus.com

05/26/2022

Revision: 1

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The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager. This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

### Eurofins Seattle

5755 8th Street East, Tacoma, WA 98424

Tel (253) 922-2310 [www.EurofinsUS.com](http://www.EurofinsUS.com)



# Table of Contents

Cover Title Page . . . . .	1
Data Summaries . . . . .	4
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Client Sample Results . . . . .	7
Default Detection Limits . . . . .	8
QC Sample Results . . . . .	9
QC Association . . . . .	12
Chronicle . . . . .	14
Certification Summary . . . . .	15
Method Summary . . . . .	16
Sample Summary . . . . .	17
Reagent Traceability . . . . .	18
COAs . . . . .	19
Inorganic Sample Data . . . . .	28
General Chemistry Data . . . . .	28
Gen Chem Cover Page . . . . .	29
Gen Chem Sample Data . . . . .	30
Gen Chem QC Data . . . . .	34
Gen Chem ICV/CCV . . . . .	34
Gen Chem Blanks . . . . .	36
Gen Chem MS/MSD/PDS . . . . .	37
Gen Chem Duplicates . . . . .	39
Gen Chem LCS/LCSD . . . . .	40
Gen Chem MDL . . . . .	42

# Table of Contents

Gen Chem Preparation Log .....	47
Gen Chem Analysis Run Log .....	48
Gen Chem Prep Data .....	56
Gen Chem Raw Data .....	63
Shipping and Receiving Documents .....	95
Client Chain of Custody .....	96
Sample Receipt Checklist .....	97

# Definitions/Glossary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605661

Job ID: 580-113170-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

**Job Narrative**  
**580-113170-1**

**Comments**

No additional comments.

**Revision**

The report being provided is a revision of the original report sent on 5/13/2022. The report (revision 1) is being revised due to: Client needs TOC reported by dry weight.

**Receipt**

The samples were received on 4/27/2022 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.2° C.

**General Chemistry**

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batches 580-389754 and 580-389808 and analytical batch 580-389867 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Detection Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605661

Job ID: 580-113170-1

## Client Sample ID: BNSF-BG13-042122-0-10

## Lab Sample ID: 580-113170-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	1600	J	2900	140	mg/Kg	1	☼	9060A	Total/NA

## Client Sample ID: BNSF-SG23-042122-0-6

## Lab Sample ID: 580-113170-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	11000		2500	120	mg/Kg	1	☼	9060A	Total/NA
Ammonia as N	24	J	30	11	mg/Kg	1	☼	350.1	Soluble

This Detection Summary does not include radiochemical test results.

Eurofins Seattle

# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605661

Job ID: 580-113170-1

**Client Sample ID: BNSF-BG13-042122-0-10**

**Lab Sample ID: 580-113170-1**

Date Collected: 04/21/22 09:50

Matrix: Solid

Date Received: 04/27/22 11:00

Percent Solids: 70.0

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	1600	J	2900	140	mg/Kg	☼		05/10/22 14:50	1

**General Chemistry - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND	F1	35	12	mg/Kg	☼	05/06/22 21:15	05/07/22 23:20	1

**Client Sample ID: BNSF-SG23-042122-0-6**

**Lab Sample ID: 580-113170-2**

Date Collected: 04/21/22 14:40

Matrix: Solid

Date Received: 04/27/22 11:00

Percent Solids: 80.3

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	11000		2500	120	mg/Kg	☼		05/10/22 19:07	1

**General Chemistry - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	24	J	30	11	mg/Kg	☼	05/06/22 21:15	05/07/22 23:20	1



# Default Detection Limits

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605661

Job ID: 580-113170-1

## General Chemistry

Analyte	RL	MDL	Units
Total Organic Carbon - Duplicates	2000	97	mg/Kg

## General Chemistry - Soluble

Prep: Distill/Ammonia

Leach: DI Leach

Analyte	RL	MDL	Units
Ammonia as N	25	8.8	mg/Kg

# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605661

Job ID: 580-113170-1

## Method: 350.1 - Nitrogen, Ammonia

**Lab Sample ID: MB 580-389754/1-B**  
**Matrix: Solid**  
**Analysis Batch: 389867**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**  
**Prep Batch: 389808**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		25	8.8	mg/Kg		05/06/22 21:15	05/07/22 23:20	1

**Lab Sample ID: LCS 580-389754/2-B**  
**Matrix: Solid**  
**Analysis Batch: 389867**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Soluble**  
**Prep Batch: 389808**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	50.0	50.3		mg/Kg		101	90 - 110

**Lab Sample ID: 580-113170-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 389867**

**Client Sample ID: BNSF-BG13-042122-0-10**  
**Prep Type: Soluble**  
**Prep Batch: 389808**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	ND	F1	69.4	58.6	F1	mg/Kg	☼	84	90 - 110

**Lab Sample ID: 580-113170-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 389867**

**Client Sample ID: BNSF-BG13-042122-0-10**  
**Prep Type: Soluble**  
**Prep Batch: 389808**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia as N	ND	F1	70.1	56.1	F1	mg/Kg	☼	80	90 - 110	4	20

**Lab Sample ID: 580-113170-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 389867**

**Client Sample ID: BNSF-BG13-042122-0-10**  
**Prep Type: Soluble**  
**Prep Batch: 389808**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia as N	ND	F1	17.4	J	mg/Kg	☼	NC	20

**Lab Sample ID: MB 580-389754/1-A**  
**Matrix: Solid**  
**Analysis Batch: 390299**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		25	8.8	mg/Kg			05/11/22 17:11	1

**Lab Sample ID: LCS 580-389754/2-A**  
**Matrix: Solid**  
**Analysis Batch: 390299**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Soluble**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	50.0	54.3		mg/Kg		109	90 - 110

# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605661

Job ID: 580-113170-1

## Method: 9060A - Organic Carbon, Total (TOC)

**Lab Sample ID: MB 580-390132/5**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/10/22 13:48	1

**Lab Sample ID: LCS 580-390132/6**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	118000		mg/Kg		98	80 - 120

**Lab Sample ID: LCSD 580-390132/7**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120	3	20

**Lab Sample ID: 580-113170-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: BNSF-BG13-042122-0-10**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	1600	J	171000	173000		mg/Kg	☼	100	75 - 125

**Lab Sample ID: 580-113170-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: BNSF-BG13-042122-0-10**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	1600	J	171000	177000		mg/Kg	☼	102	75 - 125	2	20

**Lab Sample ID: 580-113170-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: BNSF-BG13-042122-0-10**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	1600	J	171000	1760	J	mg/Kg	☼			7	20

**Lab Sample ID: MB 580-390261/5**  
**Matrix: Solid**  
**Analysis Batch: 390261**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/10/22 17:35	1

# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605661

Job ID: 580-113170-1

## Method: 9060A - Organic Carbon, Total (TOC) (Continued)

**Lab Sample ID: LCS 580-390261/6**  
**Matrix: Solid**  
**Analysis Batch: 390261**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	114000		mg/Kg		95	80 - 120

**Lab Sample ID: LCSD 580-390261/7**  
**Matrix: Solid**  
**Analysis Batch: 390261**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	114000		mg/Kg		95	80 - 120	0	20

# QC Association Summary

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605661

Job ID: 580-113170-1

## General Chemistry

### Leach Batch: 389754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113170-1	BNSF-BG13-042122-0-10	Soluble	Solid	DI Leach	
580-113170-2	BNSF-SG23-042122-0-6	Soluble	Solid	DI Leach	
MB 580-389754/1-A	Method Blank	Soluble	Solid	DI Leach	
MB 580-389754/1-B	Method Blank	Soluble	Solid	DI Leach	
LCS 580-389754/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCS 580-389754/2-B	Lab Control Sample	Soluble	Solid	DI Leach	
580-113170-1 MS	BNSF-BG13-042122-0-10	Soluble	Solid	DI Leach	
580-113170-1 MSD	BNSF-BG13-042122-0-10	Soluble	Solid	DI Leach	
580-113170-1 DU	BNSF-BG13-042122-0-10	Soluble	Solid	DI Leach	

### Prep Batch: 389808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113170-1	BNSF-BG13-042122-0-10	Soluble	Solid	Distill/Ammonia	389754
580-113170-2	BNSF-SG23-042122-0-6	Soluble	Solid	Distill/Ammonia	389754
MB 580-389754/1-B	Method Blank	Soluble	Solid	Distill/Ammonia	389754
LCS 580-389754/2-B	Lab Control Sample	Soluble	Solid	Distill/Ammonia	389754
580-113170-1 MS	BNSF-BG13-042122-0-10	Soluble	Solid	Distill/Ammonia	389754
580-113170-1 MSD	BNSF-BG13-042122-0-10	Soluble	Solid	Distill/Ammonia	389754
580-113170-1 DU	BNSF-BG13-042122-0-10	Soluble	Solid	Distill/Ammonia	389754

### Analysis Batch: 389867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113170-1	BNSF-BG13-042122-0-10	Soluble	Solid	350.1	389808
580-113170-2	BNSF-SG23-042122-0-6	Soluble	Solid	350.1	389808
MB 580-389754/1-B	Method Blank	Soluble	Solid	350.1	389808
LCS 580-389754/2-B	Lab Control Sample	Soluble	Solid	350.1	389808
580-113170-1 MS	BNSF-BG13-042122-0-10	Soluble	Solid	350.1	389808
580-113170-1 MSD	BNSF-BG13-042122-0-10	Soluble	Solid	350.1	389808
580-113170-1 DU	BNSF-BG13-042122-0-10	Soluble	Solid	350.1	389808

### Analysis Batch: 390064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113170-1	BNSF-BG13-042122-0-10	Total/NA	Solid	2540G	
580-113170-2	BNSF-SG23-042122-0-6	Total/NA	Solid	2540G	
580-113170-1 MS	BNSF-BG13-042122-0-10	Total/NA	Solid	2540G	
580-113170-1 MSD	BNSF-BG13-042122-0-10	Total/NA	Solid	2540G	

### Analysis Batch: 390132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113170-1	BNSF-BG13-042122-0-10	Total/NA	Solid	9060A	
MB 580-390132/5	Method Blank	Total/NA	Solid	9060A	
LCS 580-390132/6	Lab Control Sample	Total/NA	Solid	9060A	
LCSD 580-390132/7	Lab Control Sample Dup	Total/NA	Solid	9060A	
580-113170-1 MS	BNSF-BG13-042122-0-10	Total/NA	Solid	9060A	
580-113170-1 MSD	BNSF-BG13-042122-0-10	Total/NA	Solid	9060A	
580-113170-1 DU	BNSF-BG13-042122-0-10	Total/NA	Solid	9060A	

### Analysis Batch: 390261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113170-2	BNSF-SG23-042122-0-6	Total/NA	Solid	9060A	
MB 580-390261/5	Method Blank	Total/NA	Solid	9060A	

# QC Association Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605661

Job ID: 580-113170-1

## General Chemistry (Continued)

### Analysis Batch: 390261 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 580-390261/6	Lab Control Sample	Total/NA	Solid	9060A	
LCS 580-390261/7	Lab Control Sample Dup	Total/NA	Solid	9060A	

### Analysis Batch: 390299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 580-389754/1-A	Method Blank	Soluble	Solid	350.1	389754
LCS 580-389754/2-A	Lab Control Sample	Soluble	Solid	350.1	389754

# Lab Chronicle

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605661

Job ID: 580-113170-1

**Client Sample ID: BNSF-BG13-042122-0-10**

**Lab Sample ID: 580-113170-1**

Date Collected: 04/21/22 09:50

Matrix: Solid

Date Received: 04/27/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	390064	05/10/22 11:22	JSM	FGS SEA

**Client Sample ID: BNSF-BG13-042122-0-10**

**Lab Sample ID: 580-113170-1**

Date Collected: 04/21/22 09:50

Matrix: Solid

Date Received: 04/27/22 11:00

Percent Solids: 70.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			389754	05/06/22 16:28	MLT	FGS SEA
Soluble	Prep	Distill/Ammonia			389808	05/06/22 21:15	MLT	FGS SEA
Soluble	Analysis	350.1		1	389867	05/07/22 23:20	MLT	FGS SEA
Total/NA	Analysis	9060A		1	390132	05/10/22 14:50	N1R	FGS SEA

**Client Sample ID: BNSF-SG23-042122-0-6**

**Lab Sample ID: 580-113170-2**

Date Collected: 04/21/22 14:40

Matrix: Solid

Date Received: 04/27/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1	390064	05/10/22 11:22	JSM	FGS SEA

**Client Sample ID: BNSF-SG23-042122-0-6**

**Lab Sample ID: 580-113170-2**

Date Collected: 04/21/22 14:40

Matrix: Solid

Date Received: 04/27/22 11:00

Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			389754	05/06/22 16:28	MLT	FGS SEA
Soluble	Prep	Distill/Ammonia			389808	05/06/22 21:15	MLT	FGS SEA
Soluble	Analysis	350.1		1	389867	05/07/22 23:20	MLT	FGS SEA
Total/NA	Analysis	9060A		1	390261	05/10/22 19:07	N1R	FGS SEA

**Laboratory References:**

FGS SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

# Accreditation/Certification Summary

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10605661

Job ID: 580-113170-1

## Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2954	07-07-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids
350.1	Distill/Ammonia	Solid	Ammonia as N
9060A		Solid	Total Organic Carbon - Duplicates
Oregon	NELAP	4167	07-07-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Solids
Washington	State	C788	07-13-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids
9060A		Solid	Total Organic Carbon - Duplicates



# Method Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605661

Job ID: 580-113170-1

Method	Method Description	Protocol	Laboratory
2540G	SM 2540G	SM22	FGS SEA
350.1	Nitrogen, Ammonia	MCAWW	FGS SEA
9060A	Organic Carbon, Total (TOC)	SW846	FGS SEA
DI Leach	Deionized Water Leaching Procedure	ASTM	FGS SEA
Distill/Ammonia	Distillation, Ammonia	None	FGS SEA

#### Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

FGS SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

# Sample Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10605661

Job ID: 580-113170-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-113170-1	BNSF-BG13-042122-0-10	Solid	04/21/22 09:50	04/27/22 11:00
580-113170-2	BNSF-SG23-042122-0-6	Solid	04/21/22 14:40	04/27/22 11:00

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
<b>Ammonia Std_00019</b>	06/14/23		LabChem, Lot L158-09		(Purchased Reagent)		Ammonia as N	1000 mg/L
<b>CaCO3_00004_00009</b>	07/16/25		LECO, Lot 1001		(Purchased Reagent)		TOC Result 1	120000 mg/Kg
							Total Organic Carbon - Duplicates	120000 mg/Kg
<b>CaCO3_00012</b>	03/31/23		Alfa Aesar, Lot X15E030		(Purchased Reagent)		Total Organic Carbon - Duplicates	120000 mg/Kg
<b>TOCS_LCS_00012</b>	07/26/23		ERA, Lot D108-542		(Purchased Reagent)		TOC Result 1	4300 mg/Kg
							Total Organic Carbon - Duplicates	4300 mg/Kg

Reagent

---

**Ammonia Std\_00019**



### CERTIFICATE OF ANALYSIS

Description: AMMONIA (as NITROGEN) STANDARD, 1000ppm (1mL = 1mg N)

Mfg. Date: 06/14/2021

Catalog Number: LC17940

Exp. Date: 06/14/2023

Lot Number: L158-09

### ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm N	1000ppm +/- 10ppm	995 ppm
Concentration mg N/mL	1.000 +/- 0.010 mg N/mL	0.995 mg N/mL
Traceable to NIST	Potassium Chloride	999b

**Intended Use** - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

**Storage Information** - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

**Instructions for Handling and Use** - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

**Preparation** - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor



2899582  
ID: Ammonia Std\_00019  
Exp: 06/14/23 Prpd: R1K  
1000ppm Ammonia (as Nitro

*rad 6/30/21  
JSE*

*Greg Albright*

An ISO9001:2015 certified company. Registration # 0306-01

06/30/2021 7:01 PM

Form #17.13 07/28/2016

Reagent

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**CaCO3\_00004\_00009**



Version 00  
 Molecular weight 100.09  
 Quality Test / Release Date 07/31/2020  
 Molecular Formula C Ca O3  
 CAS No 471-34-1  
 Linear Formula CaCO3  
 Flash Point (°C)

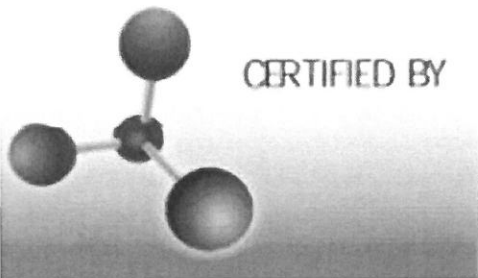
## Certificate of Analysis

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsibility of the purchaser, formulator or those performing further manufacturing to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

<b>Catalog Number</b>	42351	<b>Quality Test / Release Date</b>	07/31/2020
<b>Lot Number</b>	A0421160	<b>Suggested retest date</b>	07/31/2025
<b>Description</b>	Calcium carbonate, 99+%, ACS reagent		
<b>Country of Origin</b>	INDIA		
<b>Declaration of Origin</b>	synthetic		

<b>BSE/TSE</b>	
<b>Chemical</b>	

Result name	Specifications	Test Value
Appearance (Color)	White	White
Appearance (Form)	Crystalline powder	Crystalline powder
Titration Complexometric	>=99.0 % (on dried substance)	99.4 % (on dried substance)
Heavy metals (ICP-OES)	=<0.001 %	=<0.001 %
Insoluble matter	=<0.01 % (in dilute HCl)	0.008 % (in dilute HCl)
Chloride (Cl)	=<0.001 %	=<0.001 %
Fluoride (F)	=<0.0015 %	=<0.0015 %
Sulfate (SO4)	=<0.01 %	=<0.01 %
Ammonium (NH4)	=<0.003 %	=<0.003 %
Barium (Ba)	=<0.01 %	0.00164 %
Iron (Fe)	=<0.003 %	=<0.003 %
Magnesium (Mg)	=<0.02 %	0.010341 %
Potassium (K)	=<0.01 %	0.001048 %
Sodium (Na)	=<0.1 %	0.07061 %
Strontium (Sr)	=<0.1 %	0.007741 %



C. Wygaerts, QA Manager

Issued: 08-03-2020

Acros Organics  
 ENA23, zone1, nr 1350, Janssen Pharmaceuticlaan 3a, B-2440 Geel, Belgium  
 Tel +32 14/57.52.11 - Fax+32 14/59.34.34 Internet: <http://www.acros.com>  
 1 Reagent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329

3092515  
 ID: CaCO3\_00004\_00009  
 Exp 07/16/25 Prpd R1K Opn 03/04/22  
 CaCO3-12%TC Second Source

FCG  
 3/14/22

Reagent

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**CaCO3\_00012**



# Certificate of analysis



2450156  
 ID: CaCO3\_00012  
 Exp 03/31/23 Prpd. JKM Opm 08/14/19  
 CaCO3-12%TC Second Source

Product No.: 36337  
 Product: Calcium carbonate, ACS, low in alkalies, 99.0% min  
 Lot No.: X15E030

Test	Limits	Results
Assay	99.5 % min	99.1 %
Insoluble in dilute HCl	0.01 % max	< 0.01 %
Chloride	0.001 % max	< 0.001 %
Fluoride	0.0015 % max	< 0.0008 %
Sulfate	0.005 % max	< 0.01 %
Ammonium	0.003 % max	< 0.003 %
Barium	0.01 %	< 0.01 %
Heavy metals (as Pb)	0.001 % max	< 0.001 %
Iron	0.002 % max	< 0.003 %
Magnesium	0.01 % max	0.003 %
Potassium	0.01 % max	< 0.01 %
Sodium	0.01 % max	< 0.1 %
Strontium	0.1 % max	< 0.1 %

This document has been electronically generated and does not require a signature.

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**ThermoFisher**  
SCIENTIFIC

Reagent

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**TOCS\_LCS\_00012**



A Waters Company

Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Nutrients in Soil  
**Catalog Number:** 542  
**Lot No.** D108-542  
**Certificate Issue Date:** December 26, 2019  
**Expiration Date:** July 26, 2023  
**Revision Number:** Original

*Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #542 revision 090119.*

## CERTIFICATION

Parameter	Certified Value <sup>1</sup>	Reference Value <sup>7</sup>	Uncertainty <sup>2</sup>	QC Performance Acceptance Limits <sup>3</sup>	PT Performance Acceptance Limits <sup>4</sup>
	mg/kg	mg/kg	%	mg/kg	mg/kg
Ammonia as N	853	795	5.50	523 - 1070	456 - 1130
Total Kjeldahl Nitrogen	1510	1500	12.3	976 - 2030	827 - 2180
Total Organic Carbon (TOC)	4300	4370	6.86	1580 - 7150	1530 - 7200
Total Phosphorus	911	815	10.8	422 - 1210	185 - 1440

## ANALYTICAL VERIFICATION

Parameter	Certified Value <sup>1</sup>	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery <sup>5</sup>	n	SRM Number <sup>6</sup>	Recovery
	mg/kg	mg/kg	%			%
Ammonia as N	853	795	93.3	39	-	-
Total Kjeldahl Nitrogen	1510	1500	99.7	33	-	-
Total Organic Carbon (TOC)	4300	4370	102	24	-	-
Total Phosphorus	911	815	89.4	55	-	-

*rev. 10/20/20  
WSE*



2735864  
 ID: TOCS\_LCS\_00012  
 Exp: 01/31/22 PpPd: R1K  
 1540-7000 mg/kg TOC

▪ **Certificate of Analysis** ▪

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:

$$U_{\text{expanded}} = k * \text{SQRT}((U_{\text{char}}^2) + (U_{\text{homogen}}^2) + (U_{\text{LTS}}^2) + (U_{\text{STS}}^2) + (U_{\text{RSS}}^2))$$

Where:

U<sub>expanded</sub> = Expanded uncertainty.

k = Coverage factor.

U<sub>char</sub> = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.

U<sub>homogen</sub> = Standard uncertainty of the homogeneity assessment.

U<sub>LTS</sub> = Standard uncertainty associated with long-term stability.

U<sub>STS</sub> = Standard uncertainty associated with short-term (transport) stability.

U<sub>RSS</sub> = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]\*100

The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

8. **Metrological Traceability.** This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

**Quality Officer**

**Matthew Seebeck**




ISO/IEC 17025:2017

ISO/IEC 17034:2016



# GENERAL CHEMISTRY

COVER PAGE  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job Number: 580-113170-1

SDG No.: \_\_\_\_\_

Project: D3593500 10605661

Client Sample ID	Lab Sample ID
<u>BNSF-BG13-042122-0-10</u>	<u>580-113170-1</u>
<u>BNSF-SG23-042122-0-6</u>	<u>580-113170-2</u>

Comments:

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY

Client Sample ID: BNSF-BG13-042122-0-10

Lab Sample ID: 580-113170-1

Lab Name: Eurofins Seattle

Job No.: 580-113170-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/21/2022 09:50

Reporting Basis: DRY

Date Received: 04/27/2022 11:00

% Solids: 70.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Duplicates	1600	2900	140	mg/Kg	J		1	9060A



1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY - SOLUBLE

Client Sample ID: BNSF-BG13-042122-0-10

Lab Sample ID: 580-113170-1

Lab Name: Eurofins Seattle

Job No.: 580-113170-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/21/2022 09:50

Reporting Basis: DRY

Date Received: 04/27/2022 11:00

% Solids: 70.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7664-41-7	Ammonia as N	ND	35	12	mg/Kg		F1	1	350.1



1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY

Client Sample ID: BNSF-SG23-042122-0-6

Lab Sample ID: 580-113170-2

Lab Name: Eurofins Seattle

Job No.: 580-113170-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/21/2022 14:40

Reporting Basis: DRY

Date Received: 04/27/2022 11:00

% Solids: 80.3

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Duplicates	11000	2500	120	mg/Kg			1	9060A

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY - SOLUBLE

Client Sample ID: BNSF-SG23-042122-0-6

Lab Sample ID: 580-113170-2

Lab Name: Eurofins Seattle

Job No.: 580-113170-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/21/2022 14:40

Reporting Basis: DRY

Date Received: 04/27/2022 11:00

% Solids: 80.3

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7664-41-7	Ammonia as N	24	30	11	mg/Kg	J		1	350.1

2-IN  
 CALIBRATION QUALITY CONTROL  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113170-1  
 SDG No.: \_\_\_\_\_  
 Analyst: NlR Batch Start Date: 03/18/2022  
 Reporting Units: mg/Kg Analytical Batch No.: 390132

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	18:26	Total Organic Carbon - Duplicates	4350	4300	101	80-120		TOCS_LCS_00012
2	ICB	18:28	Total Organic Carbon - Duplicates	ND					
3	CCV	13:44	Total Organic Carbon - Duplicates	118000	120000	98	80-120		CaCO3_00004_00009
4	CCB	13:46	Total Organic Carbon - Duplicates	217				J	
13	CCV	14:19	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
14	CCB	14:21	Total Organic Carbon - Duplicates	ND					
26	CCV	15:09	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
27	CCB	15:12	Total Organic Carbon - Duplicates	193				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

2-IN  
 CALIBRATION QUALITY CONTROL  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113170-1  
 SDG No.: \_\_\_\_\_  
 Analyst: NlR Batch Start Date: 03/18/2022  
 Reporting Units: mg/Kg Analytical Batch No.: 390261

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	18:26	Total Organic Carbon - Duplicates	4350	4300	101	80-120		TOCS_LCS_00012
2	ICB	18:28	Total Organic Carbon - Duplicates	ND					
3	CCV	17:30	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
4	CCB	17:33	Total Organic Carbon - Duplicates	ND					
13	CCV	18:05	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
14	CCB	18:07	Total Organic Carbon - Duplicates	ND					
26	CCV	18:55	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
27	CCB	18:57	Total Organic Carbon - Duplicates	ND					
32	CCV	19:17	Total Organic Carbon - Duplicates	119000	120000	100	80-120		CaCO3_00004_00009
33	CCB	19:19	Total Organic Carbon - Duplicates	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

3-IN  
METHOD BLANK  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle

Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 389867 Date: 05/07/2022 23:20 Prep Batch: 389808 Date: 05/06/2022 21:15							
350.1	MB 580-389754/1-B	Ammonia as N	ND		mg/Kg	25	1
Batch ID: 390299 Date: 05/11/2022 17:11							
350.1	MB 580-389754/1-A	Ammonia as N	ND		mg/Kg	25	1
Batch ID: 390132 Date: 05/10/2022 13:48							
9060A	MB 580-390132/5	Total Organic Carbon - Duplicates	ND		mg/Kg	2000	1
Batch ID: 390261 Date: 05/10/2022 17:35							
9060A	MB 580-390261/5	Total Organic Carbon - Duplicates	ND		mg/Kg	2000	1

5-IN  
 MATRIX SPIKE SAMPLE RECOVERY  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 389867 Date: 05/07/2022 23:20 Prep Batch: 389808 Date: 05/06/2022 21:15											
350.1	580-113170-1	Ammonia as N	ND		mg/Kg						F1
350.1	580-113170-1	Ammonia as N	58.6		mg/Kg	69.4	84	90-110			F1
MS											
Batch ID: 390132 Date: 05/10/2022 15:00											
9060A	580-113170-1	Total Organic Carbon - Duplicates	1600	J	mg/Kg						
9060A	580-113170-1	Total Organic Carbon - Duplicates	173000		mg/Kg	171000	100	75-125			
MS											

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Note - Results and Reporting Limits have been adjusted for dry weight.

5-IN  
 MATRIX SPIKE DUPLICATE SAMPLE RECOVERY  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 389867 Date: 05/07/2022 23:20 Prep Batch: 389808 Date: 05/06/2022 21:15											
350.1	580-113170-1	Ammonia as N	56.1		mg/Kg	70.1	80	90-110	4	20	F1
Batch ID: 390132 Date: 05/10/2022 15:02											
9060A	580-113170-1	Total Organic Carbon - Duplicates	177000		mg/Kg	171000	102	75-125	2	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Note - Results and Reporting Limits have been adjusted for dry weight.

6-IN  
DUPLICATE  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Matrix: Solid

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 389867 Date: 05/07/2022 23:20 Prep Batch: 389808 Date: 05/06/2022 21:15								
350.1	BNSF-BG13-042122-0-10	580-113170-1	Ammonia as N	ND	mg/Kg			
350.1	BNSF-BG13-042122-0-10	580-113170-1 DU	Ammonia as N	17.4	mg/Kg	NC	20	J
Batch ID: 390132 Date: 05/10/2022 14:55								
9060A	BNSF-BG13-042122-0-10	580-113170-1	Total Organic Carbon - Duplicates	1600	mg/Kg			J
9060A	BNSF-BG13-042122-0-10	580-113170-1 DU	Total Organic Carbon - Duplicates	1760	mg/Kg	7	20	J

Calculations are performed before rounding to avoid round-off errors in calculated results.



7A-IN  
LAB CONTROL SAMPLE  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 389867 Date: 05/07/2022 23:20 Prep Batch: 389808 Date: 05/06/2022 21:15 LCS Source: Ammonia Std_00019											
350.1	LCS 580-389754/2-B	Ammonia as N	50.3		mg/Kg	50.0	101	90-110			
Batch ID: 390299 Date: 05/11/2022 17:11 LCS Source: Ammonia Std_00019											
350.1	LCS 580-389754/2-A	Ammonia as N	54.3		mg/Kg	50.0	109	90-110			
Batch ID: 390132 Date: 05/10/2022 13:51 LCS Source: CaCO3_00012											
9060A	LCS 580-390132/6	Total Organic Carbon - Duplicates	118000		mg/Kg	120000	98	80-120	3	20	
Batch ID: 390261 Date: 05/10/2022 17:37 LCS Source: CaCO3_00012											
9060A	LCS 580-390261/6	Total Organic Carbon - Duplicates	114000		mg/Kg	120000	95	80-120	0	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN  
 LAB CONTROL SAMPLE DUPLICATE  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113170-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 390132 Date: 05/10/2022 13:54											
LCSD Source: CaCO3_00012											
9060A	LCSD 580-390132/7	Total Organic Carbon - Duplicates	115000		mg/Kg	120000	96	80-120	3	20	
Batch ID: 390261 Date: 05/10/2022 17:40											
LCSD Source: CaCO3_00012											
9060A	LCSD 580-390261/7	Total Organic Carbon - Duplicates	114000		mg/Kg	120000	95	80-120	0	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY - SOLUBLE

Lab Name: Eurofins Seattle Job Number: 580-113170-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC126  
Method: 350.1 MDL Date: 04/21/2021 07:54  
Prep Method: Distill/Ammonia  
Leach Method: DI Leach

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Ammonia as N		25	8.78

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY - SOLUBLE

Lab Name: Eurofins Seattle Job Number: 580-113170-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC126  
Method: 350.1 XMDL Date: 10/08/2019 08:54

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia as N		1	0.3512

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle

Job Number: 580-113170-1

SDG Number: \_\_\_\_\_

Matrix: Solid

Instrument ID: NOEQUIP

Method: 2540G

RL Date: 01/01/2005 13:13

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job Number: 580-113170-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC105  
Method: 9060A MDL Date: 07/09/2019 14:51

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Total Organic Carbon - Duplicates		2000	96.7

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job Number: 580-113170-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC105  
Method: 9060A XMDL Date: 07/09/2019 14:51

Analyte	Wavelength/ Mass	XRL (mg/Kg)	XMDL (mg/Kg)
Total Organic Carbon - Duplicates		2000	96.7

12-IN  
PREPARATION LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle

Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Prep Method: Distill/Ammonia

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 580-389754/1-B	05/06/2022 21:15	389808		50	50
LCS 580-389754/2-B	05/06/2022 21:15	389808		50	50
580-113170-1	05/06/2022 21:15	389808		50	50
580-113170-1 DU	05/06/2022 21:15	389808		50	50
580-113170-1 MS	05/06/2022 21:15	389808		50	50
580-113170-1 MSD	05/06/2022 21:15	389808		50	50
580-113170-2	05/06/2022 21:15	389808		50	50



13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113170-1  
 SDG No.: \_\_\_\_\_  
 Instrument ID: TAC126 Analysis Method: 350.1  
 Start Date: 05/07/2022 23:20 End Date: 05/07/2022 23:20

Lab Sample Id	D/F	Type	Time	Analytes																											
				NH3																											
MB 580-389754/1-B	1	S	23:20	X																											
LCS 580-389754/2-B	1	S	23:20	X																											
ZZZZZZ			23:20																												
580-113170-1	1	S	23:20	X																											
580-113170-1 DU	1	S	23:20	X																											
580-113170-1 MS	1	S	23:20	X																											
580-113170-1 MSD	1	S	23:20	X																											
580-113170-2	1	S	23:20	X																											
ZZZZZZ			23:20																												
ZZZZZZ			23:20																												

Prep Types: \_\_\_\_\_  
 S = Soluble

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113170-1  
 SDG No.: \_\_\_\_\_  
 Instrument ID: TAC126 Analysis Method: 350.1  
 Start Date: 05/11/2022 17:11 End Date: 05/11/2022 17:11

Lab Sample Id	D/F	Type	Time	NH3	Analytes																			
MB 580-389754/1-A	1	S	17:11	X																				
LCS 580-389754/2-A	1	S	17:11	X																				
ZZZZZZ			17:11																					
ZZZZZZ			17:11																					
ZZZZZZ			17:11																					
ZZZZZZ			17:11																					
ZZZZZZ			17:11																					
ZZZZZZ			17:11																					

Prep Types: \_\_\_\_\_  
 S = Soluble

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Instrument ID: NOEQUIP Analysis Method: 2540G

Start Date: 05/10/2022 11:22 End Date: 05/11/2022 08:18

Lab Sample Id	D/F	Type	Time	Analytes																											
				% S	M o i s t																										
ZZZZZZ			11:22																												
ZZZZZZ			11:22																												
ZZZZZZ			11:22																												
ZZZZZZ			11:22																												
ZZZZZZ			11:22																												
ZZZZZZ			11:22																												
ZZZZZZ			11:22																												
ZZZZZZ			11:22																												
580-113170-1	1	T	11:22	X	X																										
580-113170-2	1	T	11:22	X	X																										
ZZZZZZ			11:22																												
ZZZZZZ			11:22																												
ZZZZZZ			11:22																												
ZZZZZZ			11:22																												
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ZZZZZZ			11:22																												
ZZZZZZ			11:22																												
ZZZZZZ			11:22																												
ZZZZZZ			11:22																												
580-113170-1 MS	1	T	08:16	X	X																										
580-113170-1 MSD	1	T	08:16	X	X																										
ZZZZZZ			08:18																												
ZZZZZZ			08:18																												

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113170-1  
 SDG No.: \_\_\_\_\_  
 Instrument ID: NOEQUIP Analysis Method: 2540G  
 Start Date: 05/10/2022 11:22 End Date: 05/11/2022 08:18

Lab Sample Id	D/F	Type	Time	Analytes																											
				% S	M																										
				o	i	s	t																								

Prep Types: \_\_\_\_\_  
 T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Instrument ID: TAC105 Analysis Method: 9060A

Start Date: 03/18/2022 18:26 End Date: 05/10/2022 17:28

Lab Sample Id	D/F	Type	Time	T O C D	Analytes																			
ICV 580-390132/1	1		18:26	X																				
ICB 580-390132/2	1		18:28	X																				
CCV 580-390132/3	1		13:44	X																				
CCB 580-390132/4	1		13:46	X																				
MB 580-390132/5	1	T	13:48	X																				
LCS 580-390132/6	1	T	13:51	X																				
LCSD 580-390132/7	1	T	13:54	X																				
ZZZZZZ			13:56																					
ZZZZZZ			14:01																					
ZZZZZZ			14:05																					
ZZZZZZ			14:09																					
ZZZZZZ			14:14																					
CCV 580-390132/13	1		14:19	X																				
CCB 580-390132/14	1		14:21	X																				
ZZZZZZ			14:24																					
ZZZZZZ			14:28																					
ZZZZZZ			14:32																					
ZZZZZZ			14:37																					
ZZZZZZ			14:41																					
ZZZZZZ			14:46																					
580-113170-1	1	T	14:50	X																				
580-113170-1 DU	1	T	14:55	X																				
580-113170-1 MS	1	T	15:00	X																				
580-113170-1 MSD	1	T	15:02	X																				
ZZZZZZ			15:04																					
CCV 580-390132/26	1		15:09	X																				
CCB 580-390132/27	1		15:12	X																				
ZZZZZZ			15:14																					
ZZZZZZ			15:18																					
ZZZZZZ			15:22																					
ZZZZZZ			15:27																					
CCV 580-390132/32			15:32																					
CCB 580-390132/33			15:34																					
CCV 580-390132/34			15:38																					
CCB 580-390132/35			15:40																					
ZZZZZZ			15:42																					
ZZZZZZ			15:45																					
ZZZZZZ			15:48																					
ZZZZZZ			15:50																					
ZZZZZZ			15:54																					

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Instrument ID: TAC105 Analysis Method: 9060A

Start Date: 03/18/2022 18:26 End Date: 05/10/2022 17:28

Lab Sample Id	D/F	Type	Time	Analytes																											
				T	O	C	D																								
ZZZZZZ			15:58																												
ZZZZZZ			16:03																												
ZZZZZZ			16:07																												
CCV 580-390132/44			16:12																												
CCB 580-390132/45			16:14																												
ZZZZZZ			16:16																												
ZZZZZZ			16:21																												
ZZZZZZ			16:25																												
ZZZZZZ			16:29																												
ZZZZZZ			16:33																												
ZZZZZZ			16:38																												
ZZZZZZ			16:42																												
ZZZZZZ			16:47																												
ZZZZZZ			16:51																												
ZZZZZZ			16:56																												
CCV 580-390132/56			17:01																												
CCB 580-390132/57			17:03																												
ZZZZZZ			17:06																												
ZZZZZZ			17:11																												
ZZZZZZ			17:13																												
ZZZZZZ			17:16																												
ZZZZZZ			17:20																												
CCV 580-390132/63			17:26																												
CCB 580-390132/64			17:28																												

Prep Types: \_\_\_\_\_  
T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle

Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Instrument ID: TAC105

Analysis Method: 9060A

Start Date: 03/18/2022 18:26

End Date: 05/11/2022 14:19

Lab Sample Id	D/F	Type	Time	Analytes																											
				T O C D																											
ICV 580-390261/1	1		18:26	X																											
ICB 580-390261/2	1		18:28	X																											
CCV 580-390261/3	1		17:30	X																											
CCB 580-390261/4	1		17:33	X																											
MB 580-390261/5	1	T	17:35	X																											
LCS 580-390261/6	1	T	17:37	X																											
LCSD 580-390261/7	1	T	17:40	X																											
ZZZZZZ			17:43																												
ZZZZZZ			17:47																												
ZZZZZZ			17:52																												
ZZZZZZ			17:56																												
ZZZZZZ			18:00																												
CCV 580-390261/13	1		18:05	X																											
CCB 580-390261/14	1		18:07	X																											
ZZZZZZ			18:09																												
ZZZZZZ			18:14																												
ZZZZZZ			18:18																												
ZZZZZZ			18:22																												
ZZZZZZ			18:27																												
ZZZZZZ			18:31																												
ZZZZZZ			18:35																												
ZZZZZZ			18:39																												
ZZZZZZ			18:44																												
ZZZZZZ			18:49																												
ZZZZZZ			18:51																												
CCV 580-390261/26	1		18:55	X																											
CCB 580-390261/27	1		18:57	X																											
ZZZZZZ			18:59																												
ZZZZZZ			19:03																												
580-113170-2	1	T	19:07	X																											
ZZZZZZ			19:12																												
CCV 580-390261/32	1		19:17	X																											
CCB 580-390261/33	1		19:19	X																											
CCV 580-390261/34			13:37																												
CCB 580-390261/35			13:39																												
ZZZZZZ			13:42																												
ZZZZZZ			13:44																												
ZZZZZZ			13:47																												
ZZZZZZ			13:49																												
ZZZZZZ			13:54																												

13-IN  
 ANALYSIS RUN LOG  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113170-1  
 SDG No.: \_\_\_\_\_  
 Instrument ID: TAC105 Analysis Method: 9060A  
 Start Date: 03/18/2022 18:26 End Date: 05/11/2022 14:19

Lab Sample Id	D/F	T y p e	Time	Analytes																																	
				T	O	C	D																														
ZZZZZZ			13:58																																		
ZZZZZZ			14:01																																		
ZZZZZZ			14:03																																		
ZZZZZZ			14:07																																		
ZZZZZZ			14:12																																		
CCV 580-390261/46			14:17																																		
CCB 580-390261/47			14:19																																		

Prep Types: \_\_\_\_\_  
 T = Total/NA



GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Batch Number: 389754 Batch Start Date: 05/06/22 16:28 Batch Analyst: Tanase, Michelle L

Batch Method: DI Leach Batch End Date: 05/06/22 21:09

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Ammonia Std 00019			
MB 580-389754/1		DI Leach, 350.1		10 g	250 mL				
LCS 580-389754/2		DI Leach, 350.1		10 g	250 mL	0.5 mL			

Batch Notes	
Balance ID	SEA224
Blank Matrix ID	DI water
Tumble Start Time	05/06/2022 17:47
Tumble End Time	05/06/2022 19:55
Pipette/Syringe/Dispenser ID	WC 2E

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Batch Number: 389754 Batch Start Date: 05/06/22 16:28 Batch Analyst: Tanase, Michelle L

Batch Method: DI Leach Batch End Date: 05/06/22 21:09

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Ammonia Std 00019			
MB 580-389754/1		DI Leach, Distill/Ammonia, 350.1		10 g	250 mL				
LCS 580-389754/2		DI Leach, Distill/Ammonia, 350.1		10 g	250 mL	0.5 mL			
580-113170-A-1	BNSF-BG13-042122 -0-10	DI Leach, Distill/Ammonia, 350.1	S	10.2434 g	250 mL				
580-113170-A-1 DU	BNSF-BG13-042122 -0-10	DI Leach, Distill/Ammonia, 350.1	S	10.2796 g	250 mL				
580-113170-A-1 MS	BNSF-BG13-042122 -0-10	DI Leach, Distill/Ammonia, 350.1	S	10.2933 g	250 mL	0.5 mL			
580-113170-A-1 MSD	BNSF-BG13-042122 -0-10	DI Leach, Distill/Ammonia, 350.1	S	10.1892 g	250 mL	0.5 mL			
580-113170-A-2	BNSF-SG23-042122 -0-6	DI Leach, Distill/Ammonia, 350.1	S	10.2445 g	250 mL				

Batch Notes	
Balance ID	SEA224
Blank Matrix ID	DI water
Tumble Start Time	05/06/2022 17:47
Tumble End Time	05/06/2022 19:55
Pipette/Syringe/Dispenser ID	WC 2E

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Batch Number: 389808 Batch Start Date: 05/06/22 21:15 Batch Analyst: Tanase, Michelle L

Batch Method: Distill/Ammonia Batch End Date: 05/07/22 23:19

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount			
MB 580-389754/1-A		Distill/Ammonia, 350.1		50 mL	50 mL			
LCS 580-389754/2-A		Distill/Ammonia, 350.1		50 mL	50 mL			
580-113170-A-1-A	BNSF-BG13-042122-0-10	Distill/Ammonia, 350.1	S	50 mL	50 mL			
580-113170-A-1-B DU	BNSF-BG13-042122-0-10	Distill/Ammonia, 350.1	S	50 mL	50 mL			
580-113170-A-1-C MS	BNSF-BG13-042122-0-10	Distill/Ammonia, 350.1	S	50 mL	50 mL			
580-113170-A-1-D MSD	BNSF-BG13-042122-0-10	Distill/Ammonia, 350.1	S	50 mL	50 mL			
580-113170-A-2-A	BNSF-SG23-042122-0-6	Distill/Ammonia, 350.1	S	50 mL	50 mL			

Batch Notes	
Blank Matrix ID	DI water
pH Indicator ID	2839642
Acid used for pH adjustment	3154574
Base used for pH adjustment	3118259
Buffer Reagent ID	3139694
Boiling Chips ID	3093959
Anti Foam ID	3090171
Sulfuric Acid Reagent ID Number	3154574
Pipette/Syringe/Dispenser ID	WC 5A, WC 10E
Distillation Unit ID	AMM Dist Block 1
Distillation Start Time	2035
Distillation End Time	2128
Uncorrected Temperature	In: 209 Out:209 Celsius

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

350.1

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Batch Number: 389867 Batch Start Date: 05/07/22 23:20 Batch Analyst: Tanase, Michelle L

Batch Method: 350.1 Batch End Date: 05/08/22 01:08

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 580-389754/1-B		350.1		50 mL	50 mL				
LCS 580-389754/2-B		350.1		50 mL	50 mL				
580-113170-A-1-E	BNSF-BG13-042122-0-10	350.1	S	50 mL	50 mL				
580-113170-A-1-F DU	BNSF-BG13-042122-0-10	350.1	S	50 mL	50 mL				
580-113170-A-1-G MS	BNSF-BG13-042122-0-10	350.1	S	50 mL	50 mL				
580-113170-A-1-H MSD	BNSF-BG13-042122-0-10	350.1	S	50 mL	50 mL				
580-113170-A-2-B	BNSF-SG23-042122-0-6	350.1	S	50 mL	50 mL				

Batch Notes	
Sodium Nitroprusside ID	3146568
Hypochlorite ID	3146725
Sodium Phenolate ID	Phenol/nitroferricyanide: 3146569
EDTA Buffer ID	3093957
Carrier Identification	DI water
Pipette/Syringe/Dispenser ID	WC 0.2D, WC 2E, WC 10E
Batch Comment	NH3: 3062042 (ICV), 3087035 (CCV)

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Batch Number: 390064 Batch Start Date: 05/10/22 11:22 Batch Analyst: McKell, Justin S

Batch Method: 2540G Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry	%_Moisture	%_Solid	
580-113170-A-1	BNSF-BG13-042122 -0-10	2540G	T	00000.73 g	00008.07 g	00005.87 g	29.972752043596 7 %	70.027247956403 3 %	
580-113170-A-2	BNSF-SG23-042122 -0-6	2540G	T	00000.71 g	00004.27 g	00003.57 g	19.662921348314 6 %	80.337078651685 4 %	
580-113170-A-1 MS	BNSF-BG13-042122 -0-10	2540G	T	.73 g	8.07 g	5.87 g	29.972752043596 7 %	70.027247956403 3 %	
580-113170-A-1 MSD	BNSF-BG13-042122 -0-10	2540G	T	.73 g	8.07 g	5.87 g	29.972752043596 7 %	70.027247956403 3 %	

Batch Notes	
Balance ID	sea225
Oven ID	microwave
Date samples were placed in the oven	05/10/2022
Time samples were place in the oven	11:45
Date samples were removed from oven	05/10/2022

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Batch Number: 390132 Batch Start Date: 05/10/22 15:00 Batch Analyst: Ronk, Nicholas 1

Batch Method: 9060A Batch End Date: 05/10/22 18:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	Baked Sand 00149	CaCO3 00012	CaCO3 00004 00009	TOCS_LCS 00012		
ICV 580-390132/1		9060A					# g		
CCV 580-390132/3		9060A				# g			
CCB 580-390132/4		9060A		# g					
MB 580-390132/5		9060A		# g					
LCS 580-390132/6		9060A			# g				
LCS 580-390132/7		9060A			# g				
CCV 580-390132/13		9060A				# g			
CCB 580-390132/14		9060A		# g					
580-113170-A-1 MS	BNSF-BG13-042122 -0-10	9060A	T			0.1047 g			
580-113170-A-1 MSD	BNSF-BG13-042122 -0-10	9060A	T			0.1064 g			
CCV 580-390132/26		9060A				# g			
CCB 580-390132/27		9060A		# g					

Batch Notes	
Pipette/Syringe/Dispenser ID	SEA224

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113170-1

SDG No.: \_\_\_\_\_

Batch Number: 390261 Batch Start Date: 05/10/22 17:30 Batch Analyst: Ronk, Nicholas 1

Batch Method: 9060A Batch End Date: 05/11/22 14:14

Lab Sample ID	Client Sample ID	Method Chain	Basis	Baked Sand 00149	CaCO3 00012	CaCO3 00004 00009	TOCS_LCS 00012		
ICV 580-390261/1		9060A					# g		
CCV 580-390261/3		9060A				# g			
CCB 580-390261/4		9060A		# g					
MB 580-390261/5		9060A		# g					
LCS 580-390261/6		9060A			# g				
LCS 580-390261/7		9060A			# g				
CCV 580-390261/13		9060A				# g			
CCB 580-390261/14		9060A		# g					
CCV 580-390261/26		9060A				# g			
CCB 580-390261/27		9060A		# g					
CCV 580-390261/32		9060A				# g			
CCB 580-390261/33		9060A		# g					

Batch Notes	
Phosphoric Acid ID	3035886
Pipette/Syringe/Dispenser ID	SEA224

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# General Chemistry Raw Data Report

Job ID: 580-113170-1

**Batch: 389867**  
**Method: 350.1**

**Analyst Initials: MLT**  
**Instrument: Astoria Pacific rAPID T**

**Lab Sample ID: MB 580-389754/1-B**

**Analysis Date: May 07, 2022 23:20**

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	0.20	mg/L	50 mL	50 mL

**Lab Sample ID: LCS 580-389754/2-B**

**Analysis Date: May 07, 2022 23:20**

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	2.01	mg/L	50 mL	50 mL

**Lab Sample ID: 580-113170-A-1-E**

**Analysis Date: May 07, 2022 23:20**

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	0.30	mg/L	50 mL	50 mL

**Lab Sample ID: 580-113170-A-1-F DU**

**Analysis Date: May 07, 2022 23:20**

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	0.50	mg/L	50 mL	50 mL

**Lab Sample ID: 580-113170-A-1-G MS**

**Analysis Date: May 07, 2022 23:20**

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	1.69	mg/L	50 mL	50 mL

**Lab Sample ID: 580-113170-A-1-H MSD**

**Analysis Date: May 07, 2022 23:20**

Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	1.60	mg/L	50 mL	50 mL

**Lab Sample ID: 580-113170-A-2-B**

**Analysis Date: May 07, 2022 23:20**

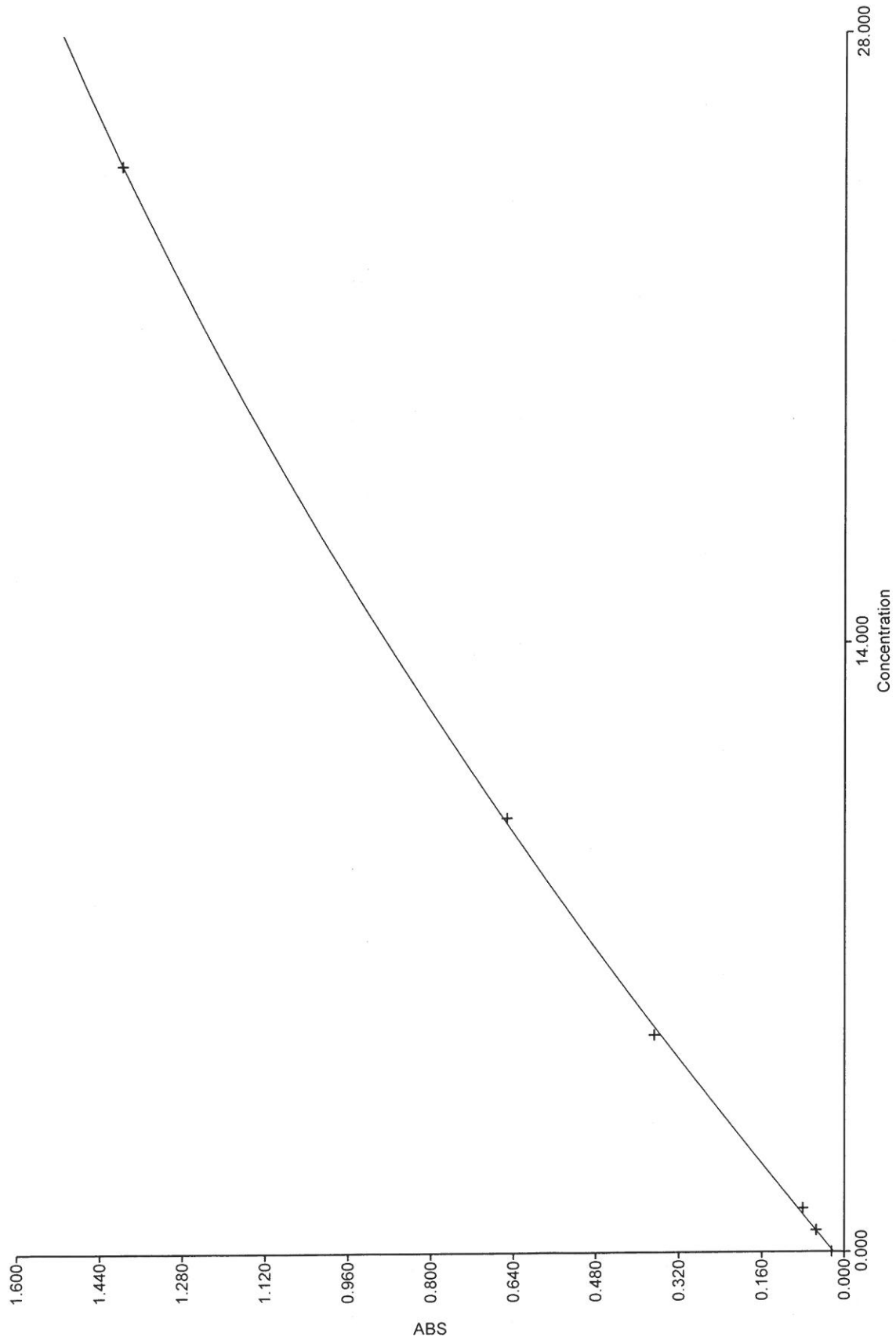
Analyte	Detector	Dilution	Raw Result	Unit	Initial	Final
					Amount	Amount
Ammonia as N	None	1	0.79	mg/L	50 mL	50 mL



Batch: 389867, 389868

Row	Sample Info			Ammonia, High Level (T023)				
	Cup	ID	Comment	Abs	ppm Status	Well	Date	Time
1	C1	NH3 0.0		0.025	0.06 Crv	A02	5/7/2022	10:29:13 PM
2	C2	NH3 0.5		0.055	0.49	A03	5/7/2022	10:32:07 PM
3	C3	NH3 1.0		0.080	0.86	A04	5/7/2022	10:35:01 PM
4	C4	NH3 5.0		0.367	5.19	A05	5/7/2022	10:37:54 PM
5	C5	NH3 10.0		0.652	9.89	B02	5/7/2022	10:40:44 PM
6	C6	NH3 25.0		1.396	25.01	B03	5/7/2022	10:43:54 PM
7	CC1	CCV		0.335	4.70	B04	5/7/2022	10:47:06 PM
8	CC5	CCB		0.029	0.11	B05	5/7/2022	10:50:17 PM
9	11	ICV		0.151	1.90	C02	5/7/2022	10:53:13 PM
10	12	ICB		0.026	0.08	C03	5/7/2022	10:56:15 PM
11	31	MB		0.035	0.20	C04	5/7/2022	10:59:27 PM
12	32	LCS		0.159	2.01	C05	5/7/2022	11:02:38 PM
13	33	000-5		0.073	0.75	D02	5/7/2022	11:05:44 PM
14	34	170-1		0.042	0.30	D03	5/7/2022	11:08:44 PM
15	35	170-1 DU		0.055	0.50	D04	5/7/2022	11:11:47 PM
16	36	170-1 MS		0.137	1.69	D05	5/7/2022	11:14:59 PM
17	CC1	CCV		0.356	5.03	E02	5/7/2022	11:18:04 PM
18	CC5	CCB		0.030	0.13	E03	5/7/2022	11:21:07 PM
19	37	170-1 MSD		0.131	1.60	E04	5/7/2022	11:24:08 PM
20	38	170-2		0.076	0.79	E05	5/7/2022	11:27:20 PM
21	39	095-2	10X	0.228	3.05 AE	F02	5/7/2022	11:30:24 PM
22	40	238-1		0.045	0.34	F03	5/7/2022	11:33:27 PM
23	13	MB		0.033	0.18	F04	5/7/2022	11:36:40 PM
24	14	LCS		0.149	1.88	F05	5/7/2022	11:39:41 PM
25	15	080-1		1.199	20.43	G02	5/7/2022	11:42:45 PM
26	16	080-2		1.260	21.79	G03	5/7/2022	11:45:48 PM
27	CC1	CCV		0.341	4.79	G04	5/7/2022	11:49:03 PM
28	CC5	CCB		0.026	0.07	G05	5/7/2022	11:52:04 PM
29	17	082-1		0.980	15.89	H02	5/7/2022	11:55:06 PM
30	18	085-1		1.159	19.55	H03	5/7/2022	11:58:07 PM
31	19	099-3		0.247	3.34	H04	5/8/2022	12:01:25 AM
32	20	099-3 DU		0.263	3.59	H05	5/8/2022	12:04:35 AM
33	CC1	CCV		0.347	4.88	A02	5/8/2022	12:22:45 AM
34	CC5	CCB		0.025	0.07	A03	5/8/2022	12:25:32 AM
35	21	099-3 MS		0.382	5.43	A04	5/8/2022	12:28:26 AM
36	22	099-3 MSD		0.387	5.51	A05	5/8/2022	12:31:18 AM
37	23	074-1		1.053	17.35	B02	5/8/2022	12:34:09 AM
38	24	074-2		0.781	12.15	B03	5/8/2022	12:37:19 AM
39	41	078-1	10X	0.274	3.75	B04	5/8/2022	12:40:31 AM
40	42	078-2	10X	0.192	2.51	B05	5/8/2022	12:43:41 AM
41	27	095-1		0.034	0.19	C02	5/8/2022	12:46:38 AM
42	28	227-1		1.027	16.83	C03	5/8/2022	12:49:40 AM
43	29	227-2		0.881	14.00	C04	5/8/2022	12:52:52 AM
44	CC1	CCV		0.362	5.12	C05	5/8/2022	12:56:02 AM
45	CC5	CCB		0.027	0.09	D02	5/8/2022	12:59:01 AM
46	30	395-1		0.034	0.19	D03	5/8/2022	1:01:59 AM

Row	Sample Info			Ammonia, High Level (T023)					
	Cup	ID	Comment	Abs	ppm	Status	Well	Date	Time
47	CC1	CCV		0.339	4.76		D04	5/8/2022	1:05:12 AM
48	CC5	CCB		0.033	0.17		D05	5/8/2022	1:08:22 AM



# General Chemistry Raw Data Report

Job ID: 580-113170-1

**Batch: 390299**  
**Method: 350.1**

**Analyst Initials: MLT**  
**Instrument: Astoria Pacific rAPID T**

**Lab Sample ID: MB 580-389754/1-A**

**Analysis Date: May 11, 2022 17:11**

Analyte	Detector	Dilution	Raw Result	Unit
Ammonia as N	None	1	0.06	mg/L

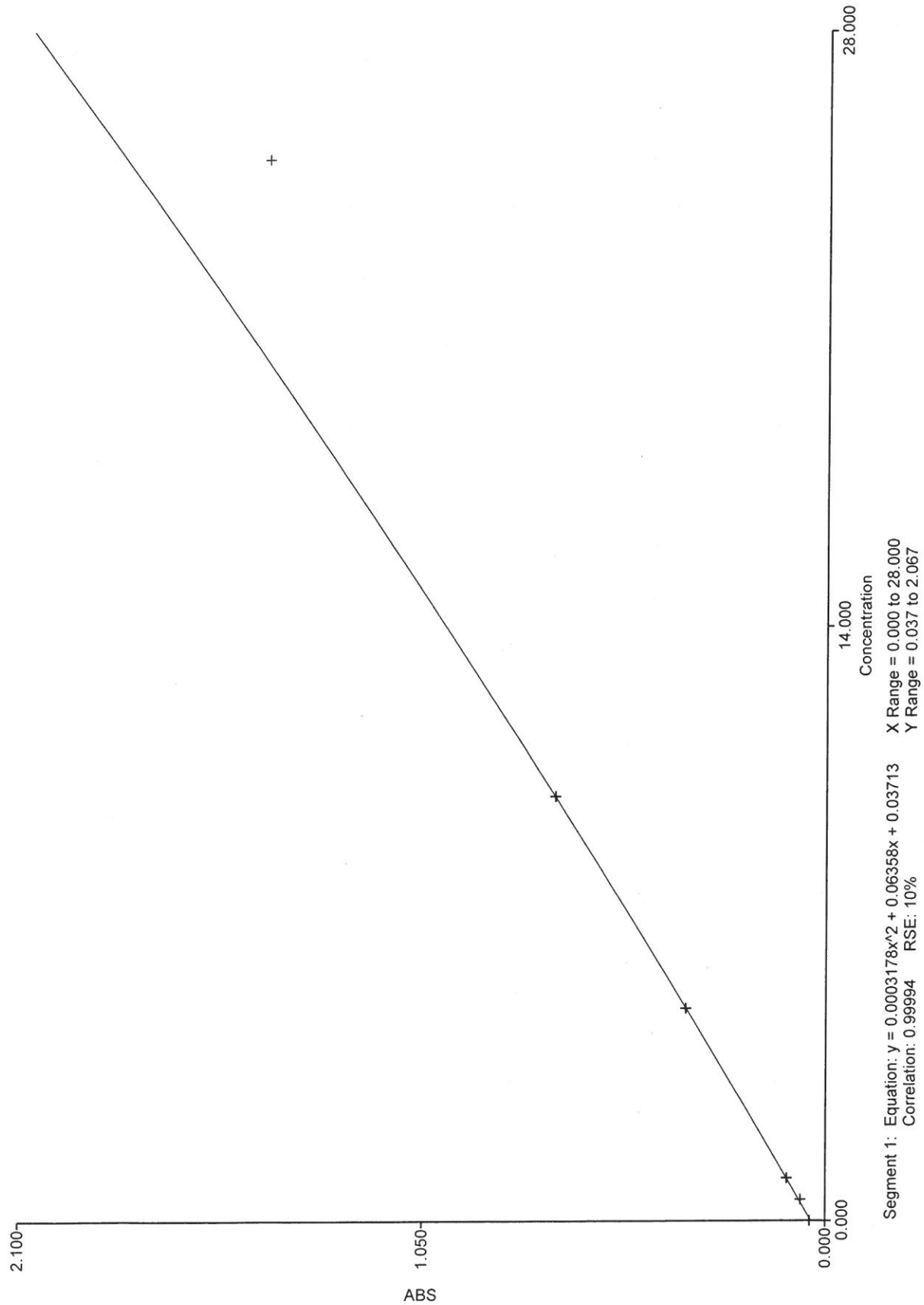
**Lab Sample ID: LCS 580-389754/2-A**

**Analysis Date: May 11, 2022 17:11**

Analyte	Detector	Dilution	Raw Result	Unit
Ammonia as N	None	1	2.17	mg/L

Batch 390299, 390284

Row	Sample Info			Ammonia, High Level (T023)				
	Cup	ID	Comment	Abs	ppm>Status	Well	Date	Time
1	C1	NH3 0.0		0.041	0.06 Crv	D02	5/11/2022	6:14:24 PM
2	C2	NH3 0.5		0.065	0.43	D03	5/11/2022	6:17:17 PM
3	C3	NH3 1.0		0.101	0.99	D04	5/11/2022	6:20:07 PM
4	C4	NH3 5.0		0.364	5.02	D05	5/11/2022	6:22:58 PM
5	C5	NH3 10.0		0.705	10.00	E02	5/11/2022	6:25:46 PM
6	C6	NH3 25.0		1.454	20.23 DS	E03	5/11/2022	6:28:59 PM
7	CC1	CCV		0.343	4.70	E04	5/11/2022	6:32:12 PM
8	CC5	CCB		0.043	0.10	E05	5/11/2022	6:35:21 PM
9	11	ICV		0.166	2.01	F02	5/11/2022	6:38:28 PM
10	12	ICB		0.040	0.05	F03	5/11/2022	6:41:28 PM
11	13	MB		0.041	0.06	F04	5/11/2022	6:44:33 PM
12	14	LCS		0.176	2.17	F05	5/11/2022	6:47:42 PM
13	15	169-1		0.037	0.00 BR	G02	5/11/2022	6:50:51 PM
14	16	169-2		0.037	-0.01 BR	G03	5/11/2022	6:53:48 PM
15	17	169-3		0.106	1.08	G04	5/11/2022	6:56:54 PM
16	18	169-4		0.145	1.68	G05	5/11/2022	7:00:03 PM
17	CC1	CCV		0.332	4.54	H02	5/11/2022	7:03:11 PM
18	CC5	CCB		0.031	-0.09 BR	H03	5/11/2022	7:06:10 PM
19	19	169-5		0.063	0.40	H04	5/11/2022	7:09:13 PM
20	20	169-6		0.123	1.34	H05	5/11/2022	7:12:23 PM
21	CC1	CCV		0.352	4.84	A02	5/11/2022	7:48:13 PM
22	CC5	CCB		0.037	0.00 BR	A03	5/11/2022	7:50:57 PM
23	21	MB		0.038	0.01	A04	5/11/2022	7:53:51 PM
24	22	LCS		0.168	2.03	A05	5/11/2022	7:56:45 PM
25	23	177-1 PT		0.265	3.52	B02	5/11/2022	7:59:31 PM
26	CC1	CCV		0.370	5.10	B03	5/11/2022	8:03:01 PM
27	CC5	CCB		0.042	0.07	B04	5/11/2022	8:06:13 PM



# General Chemistry Raw Data Report

Job ID: 580-113170-1

**Batch: 390064**  
**Method: 2540G**

**Analyst Initials: JSM**  
**Instrument: NONE**

**Lab Sample ID: 580-113170-A-1**

**Analysis Date: May 10, 2022 11:22**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Solids	None	1	70.0272479564033	%
Percent Moisture	None	1	29.9727520435967	%

**Lab Sample ID: 580-113170-A-2**

**Analysis Date: May 10, 2022 11:22**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Solids	None	1	80.3370786516854	%
Percent Moisture	None	1	19.6629213483146	%

**Lab Sample ID: 580-113170-A-1 MS**

**Analysis Date: May 11, 2022 08:16**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Solids	None	1	70.0272479564033	%
Percent Moisture	None	1	29.9727520435967	%

**Lab Sample ID: 580-113170-A-1 MSD**

**Analysis Date: May 11, 2022 08:16**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Solids	None	1	70.0272479564033	%
Percent Moisture	None	1	29.9727520435967	%



**SC632**3/15/22 TOLSON  
CAI

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
Blank	1126.0		1.0000	TA SOIL LINNEAR	3/12/2022 12:11:17 PM	-0.00000004585	A07

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
2450155	1451030		0.2506	TA SOIL LINNEAR	3/12/2022 12:14:29 PM	11.72	A08
2450155	1177768		0.2010	TA SOIL LINNEAR	3/12/2022 12:16:59 PM	11.85	A09
2450155	888162		0.1495	TA SOIL LINNEAR	3/12/2022 12:19:25 PM	12.01	A10
2450155	615185		0.1009	TA SOIL LINNEAR	3/12/2022 12:21:59 PM	12.32	A01
2450155	457663		0.0742	TA SOIL LINNEAR	3/12/2022 12:24:31 PM	12.46	A02
2450155	163681		0.0253	TA SOIL LINNEAR	3/12/2022 12:26:45 PM	13.01	A03
Average			0.1336			12.23	
Std. Deviation			0.08			0.474	
RSD			62.46			3.874	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICV 2735864	54587		0.2001	TA SOIL LINNEAR	3/15/2022 4:03:45 PM	0.5153	A01

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICB	2280.0		0.2007	TA SOIL LINNEAR	3/15/2022 4:05:56 PM	0.007354	A02



# SC632

TA SOIL LINNEAR Calibration - Read Only

CO2 Low (range: 0.000000 to 30.072000 mg)

Previous Calibration:

$$y = +1.07104x + 0.000345869$$

Date: 3/12/2022 12:27:51 PM

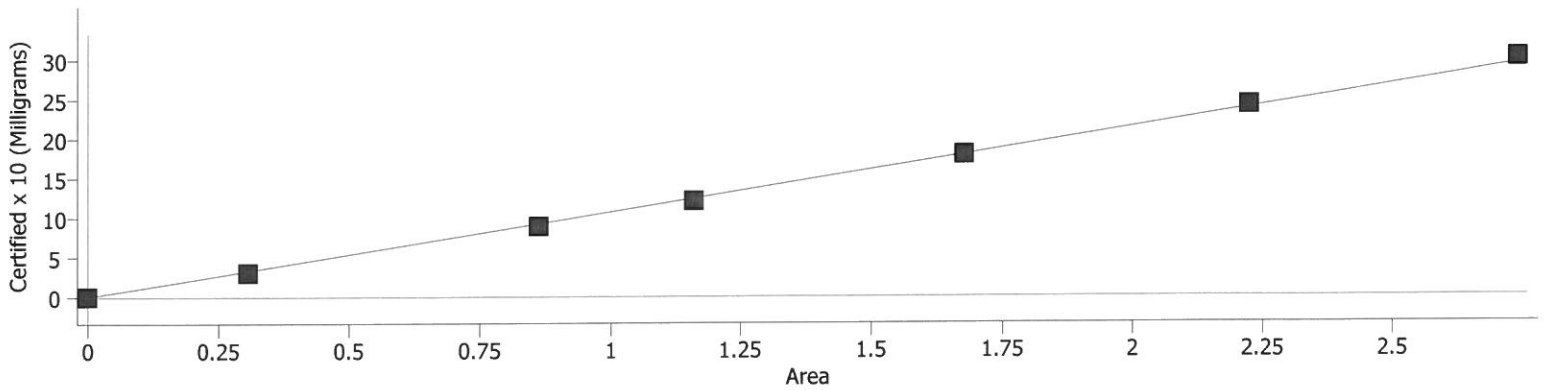
New Calibration:

$$y = +1.07104x + 0.000345869$$

Curve Type: Linear

Weighting: 1 / Certified

RMS Error: 0.0012198



Row	Standard	Drift	Mass	Certified	Calculated	Error %	Prev Err %	Peak	Peak Area	Weighting	Date	Range	Saturated
1	Blank	0	1.0000	0.0000	0.0000000045	100.00	100.00	6.1098	0.00032297	2.5000E+6	03/12/22 12:11 PM	Low	No
2	2450155	0	0.25060	12.000	11.715	-2.3711	-2.3711	2707.6	2.7408	0.33254	03/12/22 12:14 PM	Low	No
3	2450155	1	0.20100	12.000	11.854	-1.2201	-1.2201	2408.8	2.2242	0.41459	03/12/22 12:16 PM	Low	No
4	2450155	0	0.14950	12.000	12.014	0.11992	0.11992	2103.5	1.6767	0.55741	03/12/22 12:19 PM	Low	No
5	2450155	0	0.10090	12.000	12.323	2.6926	2.6926	1478.2	1.1606	0.82590	03/12/22 12:21 PM	Low	No
6	2450155	0	0.074200	12.000	12.459	3.8227	3.8227	1115.8	0.86280	1.1231	03/12/22 12:24 PM	Low	No
7	2450155	0	0.025300	12.000	13.010	8.4179	8.4179	493.53	0.30700	3.2938	03/12/22 12:26 PM	Low	No

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICV 2735864	46786		0.2021	TA SOIL LINNEAR	3/18/2022 6:26:29 PM	0.4352	A01

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICB	1514.5		0.2002	TA SOIL LINNEAR	3/18/2022 6:28:40 PM	-0.00005695	A02

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
CCV 3092515	1163109		0.2020	TA SOIL LINNEAR	5/10/2022 1:44:20 PM	11.81	A01
CCV 3092515	1182782		0.2039	TA SOIL LINNEAR	5/10/2022 2:19:43 PM	11.90	B06
CCV 3092515	1183775		0.2043	TA SOIL LINNEAR	5/10/2022 3:09:53 PM	11.89	D08
CCV 3092515	1187525		0.2046	TA SOIL LINNEAR	5/10/2022 3:32:00 PM	11.91	E08
CCV 3092515	1212574		0.2085	TA SOIL LINNEAR	5/10/2022 3:38:11 PM	11.93	A01
CCV 3092515	1175237		0.2026	TA SOIL LINNEAR	5/10/2022 4:12:15 PM	11.90	B06
CCV 3092515	1191854		0.2060	TA SOIL LINNEAR	5/10/2022 5:01:30 PM	11.87	D08
CCV 3092515	1164669		0.2017	TA SOIL LINNEAR	5/10/2022 5:26:07 PM	11.85	E08
Average			0.2042			11.88	
Std. Deviation			0.002			0.038	
RSD			1.105			0.321	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
CCB 3117971	4848.5		0.2039	TA SOIL LINNEAR	5/10/2022 1:46:35 PM	0.02172	A02
CCB 3117971	1959.2		0.2008	TA SOIL LINNEAR	5/10/2022 2:21:54 PM	-0.007536	B07
CCB 3117971	4633.5		0.2062	TA SOIL LINNEAR	5/10/2022 3:12:06 PM	0.01933	D09
CCB 3117971	3446.7		0.2035	TA SOIL LINNEAR	5/10/2022 3:34:12 PM	0.007593	E09
CCB 3117971	4130.4		0.2061	TA SOIL LINNEAR	5/10/2022 3:40:24 PM	0.01432	A02
CCB 3117971	4195.1		0.2037	TA SOIL LINNEAR	5/10/2022 4:14:26 PM	0.01514	B07
CCB 3117971	2326.4		0.2027	TA SOIL LINNEAR	5/10/2022 5:03:43 PM	-0.003741	D09

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
CCB 3117971	3398.5		0.2069	TA SOIL LINNEAR	5/10/2022 5:28:18 PM	0.006990	E09
Average			0.2042			0.009226	
Std. Deviation			0.002			0.010527	
RSD			1.006			114.1	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MB 3117971	2907.6		0.2053	TA SOIL LINNEAR	5/10/2022 1:48:46 PM	0.002128	A03
MB 3117971	4279.1		0.2074	TA SOIL LINNEAR	5/10/2022 3:42:35 PM	0.01570	A03
Average			0.2064			0.008916	
Std. Deviation			0.001			0.0095997	
RSD			0.720			107.7	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
LCS 2450156	1192167		0.2079	TA SOIL LINNEAR	5/10/2022 1:51:35 PM	11.76	A04
LCS 2450156	1154875		0.2064	TA SOIL LINNEAR	5/10/2022 3:45:12 PM	11.48	A04
Average			0.2072			11.62	
Std. Deviation			0.001			0.202	
RSD			0.512			1.740	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
LCSD 2450156	1118540		0.2003	TA SOIL LINNEAR	5/10/2022 1:54:27 PM	11.46	A05
LCSD 2450156	1117903		0.2036	TA SOIL LINNEAR	5/10/2022 3:48:04 PM	11.26	A05
Average			0.2020			11.36	
Std. Deviation			0.002			0.136	
RSD			1.155			1.196	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113025-C-12	984990		0.2086	TA SOIL LINNEAR	5/10/2022 1:56:41 PM	9.683	A06
580-113025-C-12	1047214		0.2028	TA SOIL LINNEAR	5/10/2022 1:58:52 PM	10.59	A07
Average			0.2057			10.14	
Std. Deviation			0.004			0.642	
RSD			1.994			6.333	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113025-C-13	283938		0.2026	TA SOIL LINNEAR	5/10/2022 2:01:04 PM	2.854	A08
580-113025-C-13	397094		0.2077	TA SOIL LINNEAR	5/10/2022 2:03:15 PM	3.905	A09
Average			0.2052			3.379	
Std. Deviation			0.004			0.7426	
RSD			1.758			21.97	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113025-C-14	376733		0.2083	TA SOIL LINNEAR	5/10/2022 2:05:28 PM	3.692	A10
580-113025-C-14	365186		0.2041	TA SOIL LINNEAR	5/10/2022 2:07:43 PM	3.652	B01
Average			0.2062			3.672	
Std. Deviation			0.003			0.0285	
RSD			1.440			0.777	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113025-C-15	917648		0.2063	TA SOIL LINNEAR	5/10/2022 2:09:54 PM	9.120	B02
580-113025-C-15	736708		0.2029	TA SOIL LINNEAR	5/10/2022 2:12:05 PM	7.439	B03
Average			0.2046			8.279	
Std. Deviation			0.002			1.1886	
RSD			1.175			14.36	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
570-93645-T-1	12637		0.2037	TA SOIL LINNEAR	5/10/2022 2:14:27 PM	0.1004	B04
570-93645-T-1	16265		0.2027	TA SOIL LINNEAR	5/10/2022 2:16:52 PM	0.1377	B05
Average			0.2032			0.1190	
Std. Deviation			0.0007			0.02637	



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
RSD			0.348			22.16	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113235-A-1	8779.1		0.2070	TA SOIL LINNEAR	5/10/2022 2:24:06 PM	0.06043	B08
580-113235-A-1	6406.0		0.2018	TA SOIL LINNEAR	5/10/2022 2:26:23 PM	0.03781	B09
Average			0.2044			0.04912	
Std. Deviation			0.004			0.015997	
RSD			1.799			32.57	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113021-B-3	155556		0.2082	TA SOIL LINNEAR	5/10/2022 2:28:35 PM	1.510	B10
580-113021-B-3	153936		0.2017	TA SOIL LINNEAR	5/10/2022 2:30:47 PM	1.542	C01
Average			0.2050			1.526	
Std. Deviation			0.005			0.0227	
RSD			2.243			1.489	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113021-B-6	338869		0.2037	TA SOIL LINNEAR	5/10/2022 2:32:58 PM	3.394	C02
580-113021-B-6	258380		0.2024	TA SOIL LINNEAR	5/10/2022 2:35:09 PM	2.598	C03
Average			0.2031			2.996	
Std. Deviation			0.0009			0.5628	
RSD			0.453			18.79	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113021-B-11	1287970		0.2039	TA SOIL LINNEAR	5/10/2022 2:37:20 PM	12.96	C04
580-113021-B-11	1383807		0.2075	TA SOIL LINNEAR	5/10/2022 2:39:32 PM	13.69	C05
Average			0.2057			13.32	
Std. Deviation			0.003			0.513	
RSD			1.238			3.847	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113021-C-12	741715		0.2087	TA SOIL LINNEAR	5/10/2022 2:41:45 PM	7.281	C06
580-113021-C-12	791221		0.2070	TA SOIL LINNEAR	5/10/2022 2:43:56 PM	7.833	C07
Average			0.2078			7.557	
Std. Deviation			0.001			0.3900	
RSD			0.578			5.161	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-1	7365.2		0.2081	TA SOIL LINNEAR	5/10/2022 2:46:10 PM	0.04614	C08
580-113169-D-1	4216.8		0.2081	TA SOIL LINNEAR	5/10/2022 2:48:21 PM	0.01504	C09
Average			0.2081			0.03059	
Std. Deviation			0			0.021998	
RSD			0.000			71.91	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113170-A-1	13599		0.2054	TA SOIL LINNEAR	5/10/2022 2:50:37 PM	0.1092	C10
580-113170-A-1	14918		0.2076	TA SOIL LINNEAR	5/10/2022 2:52:56 PM	0.1211	D01
Average			0.2065			0.1151	
Std. Deviation			0.002			0.00842	
RSD			0.753			7.311	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
DU 580-113170-A-1	14601		0.2087	TA SOIL LINNEAR	5/10/2022 2:55:15 PM	0.1173	D02
DU 580-113170-A-1	15487		0.2033	TA SOIL LINNEAR	5/10/2022 2:57:35 PM	0.1294	D03
Average			0.2060			0.1233	
Std. Deviation			0.004			0.00853	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
RSD			1.854			6.918	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MS 580-113170-A-1	607336	0.1047	0.1026	TA SOIL LINNEAR	5/10/2022 3:00:08 PM	12.12	D04

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MSD 580-113170-A-1	615521	0.1064	0.1018	TA SOIL LINNEAR	5/10/2022 3:02:42 PM	12.38	D05

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-2	7540.3		0.2036	TA SOIL LINNEAR	5/10/2022 3:04:54 PM	0.04893	D06
580-113169-D-2	5511.3		0.2045	TA SOIL LINNEAR	5/10/2022 3:07:05 PM	0.02832	D07
Average			0.2041			0.03862	
Std. Deviation			0.0006			0.014578	
RSD			0.312			37.74	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-3	7628.3		0.2025	TA SOIL LINNEAR	5/10/2022 3:14:17 PM	0.05009	D10
580-113169-D-3	5932.8		0.2054	TA SOIL LINNEAR	5/10/2022 3:16:28 PM	0.03241	E01
Average			0.2040			0.04125	
Std. Deviation			0.002			0.012502	
RSD			1.005			30.31	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-4	8658.2		0.2039	TA SOIL LINNEAR	5/10/2022 3:18:26 PM	0.06013	E02

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-4	6753.0		0.2043	TA SOIL LINNEAR	5/10/2022 3:20:37 PM	0.04084	E03
Average			0.2041			0.05049	
Std. Deviation			0.0003			0.013643	
RSD			0.139			27.02	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-5	8318.6		0.2016	TA SOIL LINNEAR	5/10/2022 3:22:48 PM	0.05736	E04
580-113169-D-5	6950.7		0.2030	TA SOIL LINNEAR	5/10/2022 3:24:59 PM	0.04311	E05
Average			0.2023			0.05023	
Std. Deviation			0.0010			0.010078	
RSD			0.489			20.06	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-6	6324.8		0.2052	TA SOIL LINNEAR	5/10/2022 3:27:10 PM	0.03637	E06
580-113169-D-6	9161.4		0.2039	TA SOIL LINNEAR	5/10/2022 3:29:21 PM	0.06521	E07
Average			0.2046			0.05079	
Std. Deviation			0.0009			0.020392	
RSD			0.449			40.15	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113239-A-2	51845		0.2060	TA SOIL LINNEAR	5/10/2022 3:50:16 PM	0.4906	A06
580-113239-A-2	43413		0.2068	TA SOIL LINNEAR	5/10/2022 3:52:28 PM	0.4049	A07
Average			0.2064			0.4477	
Std. Deviation			0.0006			0.06062	
RSD			0.274			13.54	



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113239-A-1	92140		0.2026	TA SOIL LINNEAR	5/10/2022 3:54:39 PM	0.9078	A08
580-113239-A-1	120712		0.2044	TA SOIL LINNEAR	5/10/2022 3:56:34 PM	1.187	A09
Average			0.2035			1.048	
Std. Deviation			0.001			0.1976	
RSD			0.625			18.86	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113239-A-3	7116.6		0.2077	TA SOIL LINNEAR	5/10/2022 3:58:45 PM	0.04377	A10
580-113239-A-3	6377.5		0.2067	TA SOIL LINNEAR	5/10/2022 4:00:57 PM	0.03663	B01
Average			0.2072			0.04020	
Std. Deviation			0.0007			0.005049	
RSD			0.341			12.56	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113239-A-4	191825		0.2077	TA SOIL LINNEAR	5/10/2022 4:03:08 PM	1.872	B02
580-113239-A-4	148950		0.2051	TA SOIL LINNEAR	5/10/2022 4:05:19 PM	1.466	B03
Average			0.2064			1.669	
Std. Deviation			0.002			0.2872	
RSD			0.891			17.20	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113238-A-1	9090.5		0.2072	TA SOIL LINNEAR	5/10/2022 4:07:30 PM	0.06347	B04
580-113238-A-1	8554.4		0.2030	TA SOIL LINNEAR	5/10/2022 4:09:41 PM	0.05935	B05
Average			0.2051			0.06141	
Std. Deviation			0.003			0.002911	
RSD			1.448			4.740	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
590-17421-A-1	67793		0.2097	TA SOIL LINNEAR	5/10/2022 4:16:41 PM	0.6383	B08

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
590-17421-A-1	60306		0.2018	TA SOIL LINNEAR	5/10/2022 4:18:52 PM	0.5870	B09
Average			0.2058			0.6127	
Std. Deviation			0.006			0.03628	
RSD			2.715			5.921	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
590-17421-A-3	74858		0.2048	TA SOIL LINNEAR	5/10/2022 4:21:03 PM	0.7245	B10
590-17421-A-3	83879		0.2021	TA SOIL LINNEAR	5/10/2022 4:23:14 PM	0.8260	C01
Average			0.2035			0.7753	
Std. Deviation			0.002			0.07175	
RSD			0.938			9.255	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113240-A-1	154941		0.2035	TA SOIL LINNEAR	5/10/2022 4:25:25 PM	1.538	C02
580-113240-A-1	154998		0.2037	TA SOIL LINNEAR	5/10/2022 4:27:24 PM	1.537	C03
Average			0.2036			1.538	
Std. Deviation			0.0001			0.0007	
RSD			0.069			0.043	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113240-A-2	103211		0.2033	TA SOIL LINNEAR	5/10/2022 4:29:35 PM	1.017	C04
580-113240-A-2	101462		0.2082	TA SOIL LINNEAR	5/10/2022 4:31:46 PM	0.9755	C05
Average			0.2058			0.9961	
Std. Deviation			0.003			0.02914	
RSD			1.684			2.925	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113240-A-3	14168		0.2015	TA SOIL LINNEAR	5/10/2022 4:33:57 PM	0.1171	C06
580-113240-A-3	15631		0.2012	TA SOIL LINNEAR	5/10/2022 4:36:08 PM	0.1322	C07
Average			0.2014			0.1246	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
Std. Deviation			0.0002			0.01070	
RSD			0.105			8.582	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113240-A-4	110908		0.2039	TA SOIL LINNEAR	5/10/2022 4:38:19 PM	1.091	C08
580-113240-A-4	71979		0.2085	TA SOIL LINNEAR	5/10/2022 4:40:32 PM	0.6833	C09
Average			0.2062			0.8873	
Std. Deviation			0.003			0.28850	
RSD			1.577			32.52	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113343-A-1	574650		0.2027	TA SOIL LINNEAR	5/10/2022 4:42:44 PM	5.802	C10
580-113343-A-1	634028		0.2057	TA SOIL LINNEAR	5/10/2022 4:44:55 PM	6.311	D01
Average			0.2042			6.057	
Std. Deviation			0.002			0.3599	
RSD			1.039			5.942	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113343-A-2	476966		0.2046	TA SOIL LINNEAR	5/10/2022 4:47:06 PM	4.766	D02
580-113343-A-2	384876		0.2018	TA SOIL LINNEAR	5/10/2022 4:49:18 PM	3.894	D03
Average			0.2032			4.330	
Std. Deviation			0.002			0.6167	
RSD			0.974			14.24	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113343-A-3	956057		0.2036	TA SOIL LINNEAR	5/10/2022 4:51:30 PM	9.628	D04
580-113343-A-3	665819		0.2016	TA SOIL LINNEAR	5/10/2022 4:53:45 PM	6.764	D05
Average			0.2026			8.196	
Std. Deviation			0.001			2.0257	
RSD			0.698			24.72	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113288-A-8	59834		0.2004	TA SOIL LINNEAR	5/10/2022 4:56:11 PM	0.5863	D06
580-113288-A-8	60021		0.2067	TA SOIL LINNEAR	5/10/2022 4:58:36 PM	0.5703	D07
Average			0.2036			0.5783	
Std. Deviation			0.004			0.01132	
RSD			2.189			1.957	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
DU 580-113288-A-8	62217		0.2086	TA SOIL LINNEAR	5/10/2022 5:06:07 PM	0.5867	D10
DU 580-113288-A-8	60168		0.2084	TA SOIL LINNEAR	5/10/2022 5:08:32 PM	0.5671	E01
Average			0.2085			0.5769	
Std. Deviation			0.0001			0.01390	
RSD			0.068			2.409	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MS 580-113288-A-8	651833	0.1011	0.1034	TA SOIL LINNEAR	5/10/2022 5:11:25 PM	12.91	E02

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MSD 580-113288-A-8	629718	0.1044	0.1021	TA SOIL LINNEAR	5/10/2022 5:13:56 PM	12.63	E03

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113275-A-1	6091.6		0.2039	TA SOIL LINNEAR	5/10/2022 5:16:12 PM	0.03425	E04
580-113275-A-1	7710.1		0.2072	TA SOIL LINNEAR	5/10/2022 5:18:33 PM	0.04977	E05
Average			0.2056			0.04201	
Std. Deviation			0.002			0.010972	
RSD			1.135			26.12	



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113275-D-2	73602		0.2041	TA SOIL LINNEAR	5/10/2022 5:20:45 PM	0.7144	E06
580-113275-D-2	73146		0.2068	TA SOIL LINNEAR	5/10/2022 5:22:56 PM	0.7005	E07
Average			0.2055			0.7074	
Std. Deviation			0.002			0.00980	
RSD			0.929			1.385	

**SC632**3/15/22 TOLSON  
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Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
Blank	1126.0		1.0000	TA SOIL LINNEAR	3/12/2022 12:11:17 PM	-0.00000004585	A07

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
2450155	1451030		0.2506	TA SOIL LINNEAR	3/12/2022 12:14:29 PM	11.72	A08
2450155	1177768		0.2010	TA SOIL LINNEAR	3/12/2022 12:16:59 PM	11.85	A09
2450155	888162		0.1495	TA SOIL LINNEAR	3/12/2022 12:19:25 PM	12.01	A10
2450155	615185		0.1009	TA SOIL LINNEAR	3/12/2022 12:21:59 PM	12.32	A01
2450155	457663		0.0742	TA SOIL LINNEAR	3/12/2022 12:24:31 PM	12.46	A02
2450155	163681		0.0253	TA SOIL LINNEAR	3/12/2022 12:26:45 PM	13.01	A03
Average			0.1336			12.23	
Std. Deviation			0.08			0.474	
RSD			62.46			3.874	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICV 2735864	54587		0.2001	TA SOIL LINNEAR	3/15/2022 4:03:45 PM	0.5153	A01

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICB	2280.0		0.2007	TA SOIL LINNEAR	3/15/2022 4:05:56 PM	0.007354	A02

# SC632

TA SOIL LINNEAR Calibration - Read Only

CO2 Low (range: 0.000000 to 30.072000 mg)

Previous Calibration:

$$y = +1.07104x + 0.000345869$$

Date: 3/12/2022 12:27:51 PM

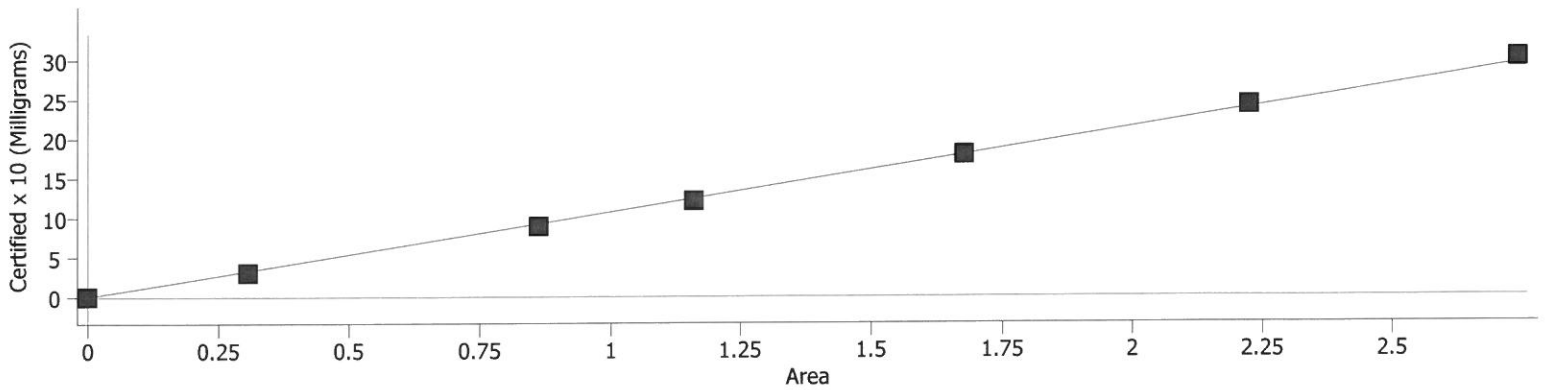
New Calibration:

$$y = +1.07104x + 0.000345869$$

Curve Type: Linear

Weighting: 1 / Certified

RMS Error: 0.0012198



Row	Standard	Drift	Mass	Certified	Calculated	Error %	Prev Err %	Peak	Peak Area	Weighting	Date	Range	Saturated
1	Blank	0	1.0000	0.0000000000000045	0.0000000000000045	100.00	100.00	6.1098	0.00032297	2.5000E+6	03/12/22 12:11 PM	Low	No
2	2450155	0	0.25060	12.000	11.715	-2.3711	-2.3711	2707.6	2.7408	0.33254	03/12/22 12:14 PM	Low	No
3	2450155	1	0.20100	12.000	11.854	-1.2201	-1.2201	2408.8	2.2242	0.41459	03/12/22 12:16 PM	Low	No
4	2450155	0	0.14950	12.000	12.014	0.11992	0.11992	2103.5	1.6767	0.55741	03/12/22 12:19 PM	Low	No
5	2450155	0	0.10090	12.000	12.323	2.6926	2.6926	1478.2	1.1606	0.82590	03/12/22 12:21 PM	Low	No
6	2450155	0	0.074200	12.000	12.459	3.8227	3.8227	1115.8	0.86280	1.1231	03/12/22 12:24 PM	Low	No
7	2450155	0	0.025300	12.000	13.010	8.4179	8.4179	493.53	0.30700	3.2938	03/12/22 12:26 PM	Low	No

# SC632

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Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICV 2735864	46786		0.2021	TA SOIL LINNEAR	3/18/2022 6:26:29 PM	0.4352	A01

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICB	1514.5		0.2002	TA SOIL LINNEAR	3/18/2022 6:28:40 PM	-0.00005695	A02

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
CCV 3092515	1193665		0.2060	TA SOIL LINNEAR	5/10/2022 5:30:53 PM	11.89	A01
CCV 3092515	1198497		0.2067	TA SOIL LINNEAR	5/10/2022 6:05:34 PM	11.90	B06
CCV 3092515	1169732		0.2015	TA SOIL LINNEAR	5/10/2022 6:55:06 PM	11.91	D08
CCV 3092515	1170014		0.2010	TA SOIL LINNEAR	5/10/2022 7:17:02 PM	11.94	E08
CCV 3092515	1178203		0.2046	TA SOIL LINNEAR	5/11/2022 1:37:46 PM	11.81	A01
CCV 3092515	1159843		0.2011	TA SOIL LINNEAR	5/11/2022 2:17:06 PM	11.83	B08
Average			0.2035			11.88	
Std. Deviation			0.003			0.048	
RSD			1.276			0.407	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
CCB 3117971	1287.5		0.2056	TA SOIL LINNEAR	5/10/2022 5:33:07 PM	-0.01408	A02
CCB 3117971	2761.1		0.2056	TA SOIL LINNEAR	5/10/2022 6:07:47 PM	0.0006595	B07
CCB 3117971	3075.9		0.2059	TA SOIL LINNEAR	5/10/2022 6:57:17 PM	0.003802	D09
CCB 3117971	2941.5		0.2009	TA SOIL LINNEAR	5/10/2022 7:19:15 PM	0.002522	E09
CCB 3117971	1063.3		0.2040	TA SOIL LINNEAR	5/11/2022 1:39:58 PM	-0.01645	A02
CCB 3117971	830.14		0.2073	TA SOIL LINNEAR	5/11/2022 2:19:22 PM	-0.01850	B09
Average			0.2049			-0.007007	
Std. Deviation			0.002			0.010370	
RSD			1.081			148.0	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MB 3117971	1761.6		0.2058	TA SOIL LINNEAR	5/10/2022 5:35:18 PM	-0.009328	A03



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MB 3117971	1565.0		0.2021	TA SOIL LINNEAR	5/11/2022 1:42:10 PM	-0.01150	A03
Average			0.2040			-0.01041	
Std. Deviation			0.003			0.001535	
RSD			1.283			14.74	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
LCS 2450156	1125924		0.2028	TA SOIL LINNEAR	5/10/2022 5:37:57 PM	11.39	A04
LCS 2450156	1155683		0.2070	TA SOIL LINNEAR	5/11/2022 1:44:53 PM	11.45	A04
Average			0.2049			11.42	
Std. Deviation			0.003			0.046	
RSD			1.449			0.400	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
LCSD 2450156	1122368		0.2019	TA SOIL LINNEAR	5/10/2022 5:40:54 PM	11.40	A05
LCSD 2450156	1157414		0.2080	TA SOIL LINNEAR	5/11/2022 1:47:39 PM	11.42	A05
Average			0.2050			11.41	
Std. Deviation			0.004			0.009	
RSD			2.105			0.075	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113275-E-3	40270		0.2062	TA SOIL LINNEAR	5/10/2022 5:43:07 PM	0.3747	A06
580-113275-E-3	37588		0.2021	TA SOIL LINNEAR	5/10/2022 5:45:18 PM	0.3550	A07
Average			0.2041			0.3649	
Std. Deviation			0.003			0.01392	
RSD			1.420			3.815	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113275-D-12	4735.2		0.2076	TA SOIL LINNEAR	5/10/2022 5:47:33 PM	0.02021	A08
580-113275-D-12	4916.4		0.2066	TA SOIL LINNEAR	5/10/2022 5:49:56 PM	0.02211	A09
Average			0.2071			0.02116	
Std. Deviation			0.0007			0.001344	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
RSD			0.341			6.354	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113275-D-18	8886.3		0.2043	TA SOIL LINNEAR	5/10/2022 5:52:13 PM	0.06231	A10
580-113275-D-18	7714.3		0.2071	TA SOIL LINNEAR	5/10/2022 5:54:27 PM	0.04983	B01
Average			0.2057			0.05607	
Std. Deviation			0.002			0.008824	
RSD			0.963			15.74	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113275-D-19	43136		0.2075	TA SOIL LINNEAR	5/10/2022 5:56:38 PM	0.4008	B02
580-113275-D-19	39523		0.2012	TA SOIL LINNEAR	5/10/2022 5:58:36 PM	0.3764	B03
Average			0.2043			0.3886	
Std. Deviation			0.004			0.01724	
RSD			2.180			4.436	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113396-A-2	10399		0.2028	TA SOIL LINNEAR	5/10/2022 6:00:47 PM	0.07811	B04
580-113396-A-2	9860.0		0.2027	TA SOIL LINNEAR	5/10/2022 6:02:58 PM	0.07268	B05
Average			0.2027			0.07540	
Std. Deviation			0.00007			0.003840	
RSD			0.035			5.093	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113396-F-5	9636.0		0.2035	TA SOIL LINNEAR	5/10/2022 6:09:58 PM	0.07013	B08

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113396-F-5	9775.9		0.2085	TA SOIL LINNEAR	5/10/2022 6:11:58 PM	0.06983	B09
Average			0.2060			0.06998	
Std. Deviation			0.004			0.000214	
RSD			1.716			0.305	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113396-D-6	9397.4		0.2013	TA SOIL LINNEAR	5/10/2022 6:14:10 PM	0.06846	B10
580-113396-D-6	10467		0.2047	TA SOIL LINNEAR	5/10/2022 6:16:21 PM	0.07807	C01
Average			0.2030			0.07326	
Std. Deviation			0.002			0.006791	
RSD			1.184			9.269	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113469-A-1	29859		0.2048	TA SOIL LINNEAR	5/10/2022 6:18:32 PM	0.2727	C02
580-113469-A-1	26797		0.2073	TA SOIL LINNEAR	5/10/2022 6:20:43 PM	0.2391	C03
Average			0.2061			0.2559	
Std. Deviation			0.002			0.02380	
RSD			0.858			9.302	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113469-A-2	22868		0.2018	TA SOIL LINNEAR	5/10/2022 6:22:54 PM	0.2055	C04
580-113469-A-2	24102		0.2062	TA SOIL LINNEAR	5/10/2022 6:24:49 PM	0.2135	C05
Average			0.2040			0.2095	
Std. Deviation			0.003			0.00561	
RSD			1.525			2.676	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113469-A-4	52659		0.2075	TA SOIL LINNEAR	5/10/2022 6:27:00 PM	0.4951	C06

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113469-A-4	63733		0.2006	TA SOIL LINNEAR	5/10/2022 6:29:11 PM	0.6257	C07
Average			0.2041			0.5604	
Std. Deviation			0.005			0.09231	
RSD			2.391			16.47	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113469-A-5	45513		0.2074	TA SOIL LINNEAR	5/10/2022 6:31:05 PM	0.4245	C08
580-113469-A-5	43942		0.2073	TA SOIL LINNEAR	5/10/2022 6:33:16 PM	0.4091	C09
Average			0.2074			0.4168	
Std. Deviation			0.00007			0.01087	
RSD			0.034			2.609	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113469-A-6	208163		0.2036	TA SOIL LINNEAR	5/10/2022 6:35:27 PM	2.075	C10
580-113469-A-6	37893		0.2029	TA SOIL LINNEAR	5/10/2022 6:37:38 PM	0.3567	D01
Average			0.2032			1.216	
Std. Deviation			0.0005			1.2151	
RSD			0.244			99.93	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113471-A-1	253219		0.2046	TA SOIL LINNEAR	5/10/2022 6:39:49 PM	2.518	D02
580-113471-A-1	207678		0.2069	TA SOIL LINNEAR	5/10/2022 6:42:03 PM	2.037	D03
Average			0.2058			2.277	
Std. Deviation			0.002			0.3398	
RSD			0.790			14.92	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
DU 580-113471-A-1	157559		0.2032	TA SOIL LINNEAR	5/10/2022 6:44:14 PM	1.567	D04



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
DU 580-113471-A-1	234275		0.2051	TA SOIL LINNEAR	5/10/2022 6:46:34 PM	2.322	D05
Average			0.2041			1.944	
Std. Deviation			0.001			0.5336	
RSD			0.658			27.44	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MS 580-113471-A-1	682181	0.1072	0.1036	TA SOIL LINNEAR	5/10/2022 6:49:17 PM	13.49	D06

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MSD 580-113471-A-1	656325	0.1016	0.1026	TA SOIL LINNEAR	5/10/2022 6:51:55 PM	13.10	D07

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113471-A-2	35173		0.2010	TA SOIL LINNEAR	5/10/2022 6:59:28 PM	0.3322	D10
580-113471-A-2	33464		0.2055	TA SOIL LINNEAR	5/10/2022 7:01:39 PM	0.3079	E01
Average			0.2032			0.3201	
Std. Deviation			0.003			0.01723	
RSD			1.566			5.384	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113471-A-3	50660		0.2060	TA SOIL LINNEAR	5/10/2022 7:03:36 PM	0.4788	E02
580-113471-A-3	45135		0.2055	TA SOIL LINNEAR	5/10/2022 7:05:47 PM	0.4247	E03
Average			0.2058			0.4517	
Std. Deviation			0.0004			0.03827	
RSD			0.172			8.471	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113170-A-2	123721		0.2056	TA SOIL LINNEAR	5/10/2022 7:07:58 PM	1.210	E04

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113170-A-2	54915		0.2051	TA SOIL LINNEAR	5/10/2022 7:10:09 PM	0.5235	E05
Average			0.2054			0.8670	
Std. Deviation			0.0004			0.48569	
RSD			0.172			56.02	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113209-D-1	293100		0.2025	TA SOIL LINNEAR	5/10/2022 7:12:20 PM	2.949	E06
580-113209-D-1	283123		0.2017	TA SOIL LINNEAR	5/10/2022 7:14:31 PM	2.859	E07
Average			0.2021			2.904	
Std. Deviation			0.0006			0.0637	
RSD			0.280			2.192	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113209-D-3	98209		0.2049	TA SOIL LINNEAR	5/11/2022 1:49:50 PM	0.9585	A06
580-113209-D-3	105199		0.2033	TA SOIL LINNEAR	5/11/2022 1:52:02 PM	1.037	A07
Average			0.2041			0.9976	
Std. Deviation			0.001			0.05532	
RSD			0.554			5.545	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
DU 580-113209-D-3	167147		0.2052	TA SOIL LINNEAR	5/11/2022 1:54:13 PM	1.648	A08
DU 580-113209-D-3	127286		0.2053	TA SOIL LINNEAR	5/11/2022 1:56:25 PM	1.248	A09
Average			0.2053			1.448	
Std. Deviation			0.00007			0.2829	
RSD			0.034			19.54	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MS 580-113209-D-3	649848	0.1015	0.1035	TA SOIL LINNEAR	5/11/2022 1:58:50 PM	12.86	A10

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MSD 580-113209-D-3	688280	0.1053	0.1026	TA SOIL LINNEAR	5/11/2022 2:01:22 PM	13.74	B01

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113209-E-4	11703		0.2081	TA SOIL LINNEAR	5/11/2022 2:03:33 PM	0.08901	B02
580-113209-E-4	5874.9		0.2060	TA SOIL LINNEAR	5/11/2022 2:05:44 PM	0.03174	B03
Average			0.2071			0.06037	
Std. Deviation			0.001			0.040494	
RSD			0.717			67.07	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113209-D-5	3619.4		0.2036	TA SOIL LINNEAR	5/11/2022 2:07:55 PM	0.009334	B04
580-113209-D-5	11717		0.2063	TA SOIL LINNEAR	5/11/2022 2:10:06 PM	0.08992	B05
Average			0.2050			0.04963	
Std. Deviation			0.002			0.056984	
RSD			0.932			114.8	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113209-E-6	17260		0.2041	TA SOIL LINNEAR	5/11/2022 2:12:17 PM	0.1467	B06
580-113209-E-6	10837		0.2049	TA SOIL LINNEAR	5/11/2022 2:14:28 PM	0.08171	B07
Average			0.2045			0.1142	
Std. Deviation			0.0006			0.04598	
RSD			0.277			40.26	

# Shipping and Receiving Documents



# Chain of Custody

PASI Minnesota Laboratory



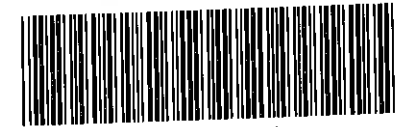
Workorder: 10605661

Workorder Name: D3593500

Results Requested By: 5/16/2022

Report / Invoice To		Subcontract To				Requested Analysis											
Kongmeng Vang Pace Analytical Minnesota 1700 Elm Street Minneapolis, MN 55414 Phone (612)607-1700 Email: kongmeng.vang@pacelabs.com		Eurofins Frontier Global Sciences 5755 8th Street East Tacoma, WA 98424				SO Total Organic Carbon											
State of Sample Origin: WA		LAB USE ONLY															
Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers					SO Total Organic Carbon							
					Unpreserved												
1	BNSF-BG13-042122-0-10	4/21/2022 09:50	10605661001	Solid	3					X							
2	BNSF-SG23-042122-0-6	4/21/2022 14:40	10605661002	Solid	1					X							
3																	
4																	
5																	
Transfers										Comments							
Released By	Date/Time	Received By	Date/Time	MS/MSD on sample 001													
CSM/pace	4-26-22 13:20	Tom Blunt	4/27/22 11:00														
Cooler Temperature on Receipt	°C	Custody Seal	Y or N	Received on Ice	Y or N	Samples Intact						Y or N					

FedPo SmRed/wet/bub  
AR 0.2/0.3



580-113170 Chain of Custody

# Login Sample Receipt Checklist

Client: Pace Analytical Services, LLC

Job Number: 580-113170-1

**Login Number: 113170**  
**List Number: 1**  
**Creator: Blankinship, Tom X**

**List Source: Eurofins Seattle**

Question	Answer	Comment
Radioactivity wasn't checked or is <= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

June 08, 2022

Bernice Kidd  
Jacobs Engineering  
2525 Air Park Drive  
Redding, CA 96001

RE: Project: D3593500-Revised Report  
Pace Project No.: 10606046

Dear Bernice Kidd:

Enclosed are the analytical results for sample(s) received by the laboratory on April 27, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Minneapolis

This report was revised on June 8th, 2022, to include a revised subcontract report from Eurofins.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kongmeng Vang  
kongmeng.vang@pacelabs.com  
(612)607-1700  
Project Manager

Enclosures

cc: Kris Ivarson, Jacobs  
Jennifer Ulrich, Jacobs



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
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## CERTIFICATIONS

Project: D3593500-Revised Report

Pace Project No.: 10606046

### Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414  
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab

A2LA Certification #: 2926.01\*  
Alabama Certification #: 40770  
Alaska Contaminated Sites Certification #: 17-009\*  
Alaska DW Certification #: MN00064  
Arizona Certification #: AZ0014\*  
Arkansas DW Certification #: MN00064  
Arkansas WW Certification #: 88-0680  
California Certification #: 2929  
Colorado Certification #: MN00064  
Connecticut Certification #: PH-0256  
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137  
Florida Certification #: E87605\*  
Georgia Certification #: 959  
Hawaii Certification #: MN00064  
Idaho Certification #: MN00064  
Illinois Certification #: 200011  
Indiana Certification #: C-MN-01  
Iowa Certification #: 368  
Kansas Certification #: E-10167  
Kentucky DW Certification #: 90062  
Kentucky WW Certification #: 90062  
Louisiana DEQ Certification #: AI-03086\*  
Louisiana DW Certification #: MN00064  
Maine Certification #: MN00064\*  
Maryland Certification #: 322  
Michigan Certification #: 9909  
Minnesota Certification #: 027-053-137\*  
Minnesota Dept of Ag Approval: via MN 027-053-137  
Minnesota Petrofund Registration #: 1240\*  
Mississippi Certification #: MN00064

Missouri Certification #: 10100  
Montana Certification #: CERT0092  
Nebraska Certification #: NE-OS-18-06  
Nevada Certification #: MN00064  
New Hampshire Certification #: 2081\*  
New Jersey Certification #: MN002  
New York Certification #: 11647\*  
North Carolina DW Certification #: 27700  
North Carolina WW Certification #: 530  
North Dakota Certification (A2LA) #: R-036  
North Dakota Certification (MN) #: R-036  
Ohio DW Certification #: 41244  
Ohio VAP Certification (1700) #: CL101  
Ohio VAP Certification (1800) #: CL110\*  
Oklahoma Certification #: 9507\*  
Oregon Primary Certification #: MN300001  
Oregon Secondary Certification #: MN200001\*  
Pennsylvania Certification #: 68-00563\*  
Puerto Rico Certification #: MN00064  
South Carolina Certification #: 74003001  
Tennessee Certification #: TN02818  
Texas Certification #: T104704192\*  
Utah Certification #: MN00064\*  
Vermont Certification #: VT-027053137  
Virginia Certification #: 460163\*  
Washington Certification #: C486\*  
West Virginia DEP Certification #: 382  
West Virginia DW Certification #: 9952 C  
Wisconsin Certification #: 999407970  
Wyoming UST Certification #: via A2LA 2926.01  
USDA Permit #: P330-19-00208  
\*Please Note: Applicable air certifications are denoted with an asterisk (\*).

### Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122

Alabama Certification #: 40660  
Alaska Certification 17-026  
Arizona Certification #: AZ0612  
Arkansas Certification #: 88-0469  
California Certification #: 2932  
Canada Certification #: 1461.01  
Colorado Certification #: TN00003  
Connecticut Certification #: PH-0197  
DOD Certification: #1461.01  
EPA# TN00003  
Florida Certification #: E87487  
Georgia DW Certification #: 923  
Georgia Certification: NELAP  
Idaho Certification #: TN00003  
Illinois Certification #: 200008

Indiana Certification #: C-TN-01  
Iowa Certification #: 364  
Kansas Certification #: E-10277  
Kentucky UST Certification #: 16  
Kentucky Certification #: 90010  
Louisiana Certification #: AI30792  
Louisiana DW Certification #: LA180010  
Maine Certification #: TN0002  
Maryland Certification #: 324  
Massachusetts Certification #: M-TN003  
Michigan Certification #: 9958  
Minnesota Certification #: 047-999-395  
Mississippi Certification #: TN00003  
Missouri Certification #: 340  
Montana Certification #: CERT0086  
Nebraska Certification #: NE-OS-15-05

## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: D3593500-Revised Report

Pace Project No.: 10606046

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### **Pace Analytical Services National**

Nevada Certification #: TN-03-2002-34

New Hampshire Certification #: 2975

New Jersey Certification #: TN002

New Mexico DW Certification

New York Certification #: 11742

North Carolina Aquatic Toxicity Certification #: 41

North Carolina Drinking Water Certification #: 21704

North Carolina Environmental Certificate #: 375

North Dakota Certification #: R-140

Ohio VAP Certification #: CL0069

Oklahoma Certification #: 9915

Oregon Certification #: TN200002

Pennsylvania Certification #: 68-02979

Rhode Island Certification #: LAO00356

South Carolina Certification #: 84004

South Dakota Certification

Tennessee DW/Chem/Micro Certification #: 2006

Texas Certification #: T 104704245-17-14

Texas Mold Certification #: LAB0152

USDA Soil Permit #: P330-15-00234

Utah Certification #: TN00003

Vermont Dept. of Health: ID# VT-2006

Virginia Certification #: VT2006

Virginia Certification #: 460132

Washington Certification #: C847

West Virginia Certification #: 233

Wisconsin Certification #: 998093910

Wyoming UST Certification #: via A2LA 2926.01

A2LA-ISO 17025 Certification #: 1461.01

A2LA-ISO 17025 Certification #: 1461.02

AIHA-LAP/LLC EMLAP Certification #:100789

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: D3593500-Revised Report  
Pace Project No.: 10606046

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Lab ID	Sample ID	Matrix	Date Collected	Date Received
10606046001	BNSF-SG13-042522-0-1.5	Solid	04/25/22 09:55	04/27/22 08:50

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: D3593500-Revised Report

Pace Project No.: 10606046

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10606046001	BNSF-SG13-042522-0-1.5	NWTPH-Dx	TT2	4	PASI-M
		EPA 6020B	RJS	9	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	ADF	33	PAN
		SM 2540G	CMK	1	PAN
		EPA 9030B	BMD	1	PAN

PAN = Pace National - Mt. Juliet

PASI-M = Pace Analytical Services - Minneapolis

### REPORT OF LABORATORY ANALYSIS

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### SUMMARY OF DETECTION

Project: D3593500-Revised Report

Pace Project No.: 10606046

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>10606046001</b>	<b>BNSF-SG13-042522-0-1.5</b>					
NWTPH-Dx	Motor Oil Range	28.5	mg/kg	13.7	05/02/22 20:42	
EPA 6020B	Arsenic	2.1	mg/kg	0.67	05/05/22 18:46	
EPA 6020B	Cadmium	0.089J	mg/kg	0.11	05/05/22 18:46	
EPA 6020B	Chromium	8.2	mg/kg	2.7	05/05/22 18:46	
EPA 6020B	Copper	7.7	mg/kg	1.3	05/05/22 18:46	
EPA 6020B	Lead	3.6	mg/kg	0.67	05/05/22 18:46	M1, R1
EPA 6020B	Nickel	9.3	mg/kg	0.67	05/05/22 18:46	
EPA 6020B	Silver	0.26J	mg/kg	0.67	05/05/22 18:46	
EPA 6020B	Zinc	32.3	mg/kg	6.7	05/05/22 18:46	
ASTM D2974	Percent Moisture	27.7	%	0.10	04/28/22 14:11	N2
SM 2540G	Total Solids	79.4	%		05/03/22 12:18	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: D3593500-Revised Report  
Pace Project No.: 10606046

Sample: **BNSF-SG13-042522-0-1.5** Lab ID: **10606046001** Collected: 04/25/22 09:55 Received: 04/27/22 08:50 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Pace Analytical Services - Minneapolis									
Diesel Fuel Range	ND	mg/kg	20.5	9.5	1	04/29/22 17:05	05/02/22 20:42	68334-30-5	
Motor Oil Range	<b>28.5</b>	mg/kg	13.7	6.8	1	04/29/22 17:05	05/02/22 20:42		
<b>Surrogates</b>									
n-Triacontane (S)	78	%	50-150		1	04/29/22 17:05	05/02/22 20:42		
o-Terphenyl (S)	78	%	50-150		1	04/29/22 17:05	05/02/22 20:42	84-15-1	
<b>6020B MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3050B									
Pace Analytical Services - Minneapolis									
Arsenic	<b>2.1</b>	mg/kg	0.67	0.15	1	05/03/22 17:29	05/05/22 18:46	7440-38-2	
Cadmium	<b>0.089J</b>	mg/kg	0.11	0.042	1	05/03/22 17:29	05/05/22 18:46	7440-43-9	
Chromium	<b>8.2</b>	mg/kg	2.7	0.19	1	05/03/22 17:29	05/05/22 18:46	7440-47-3	
Copper	<b>7.7</b>	mg/kg	1.3	0.32	1	05/03/22 17:29	05/05/22 18:46	7440-50-8	
Lead	<b>3.6</b>	mg/kg	0.67	0.039	1	05/03/22 17:29	05/05/22 18:46	7439-92-1	M1, R1
Nickel	<b>9.3</b>	mg/kg	0.67	0.26	1	05/03/22 17:29	05/05/22 18:46	7440-02-0	
Selenium	ND	mg/kg	0.67	0.11	1	05/03/22 17:29	05/05/22 18:46	7782-49-2	
Silver	<b>0.26J</b>	mg/kg	0.67	0.19	1	05/03/22 17:29	05/05/22 18:46	7440-22-4	
Zinc	<b>32.3</b>	mg/kg	6.7	1.2	1	05/03/22 17:29	05/05/22 18:46	7440-66-6	
<b>7471B Mercury</b>									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Minneapolis									
Mercury	ND	mg/kg	0.025	0.011	1	05/03/22 12:07	05/10/22 12:30	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>27.7</b>	%	0.10	0.10	1		04/28/22 14:11		N2
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
Acenaphthene	ND	mg/kg	0.0419	0.00679	1	05/06/22 04:50	05/06/22 22:25	83-32-9	
Acenaphthylene	ND	mg/kg	0.0419	0.00590	1	05/06/22 04:50	05/06/22 22:25	208-96-8	
Anthracene	ND	mg/kg	0.0419	0.00746	1	05/06/22 04:50	05/06/22 22:25	120-12-7	
Benzoic acid	ND	mg/kg	2.10	0.149	1	05/06/22 04:50	05/06/22 22:25	65-85-0	
Benzo(a)anthracene	ND	mg/kg	0.0419	0.00739	1	05/06/22 04:50	05/06/22 22:25	56-55-3	
Benzo(b)fluoranthene	ND	mg/kg	0.0419	0.00782	1	05/06/22 04:50	05/06/22 22:25	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0419	0.00745	1	05/06/22 04:50	05/06/22 22:25	207-08-9	
Benzo(g,h,i)perylene	ND	mg/kg	0.0419	0.00767	1	05/06/22 04:50	05/06/22 22:25	191-24-2	
Benzo(a)pyrene	ND	mg/kg	0.0419	0.00779	1	05/06/22 04:50	05/06/22 22:25	50-32-8	
Carbazole	ND	mg/kg	0.419	0.0130	1	05/06/22 04:50	05/06/22 22:25	86-74-8	
Chrysene	ND	mg/kg	0.0419	0.00833	1	05/06/22 04:50	05/06/22 22:25	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0419	0.0116	1	05/06/22 04:50	05/06/22 22:25	53-70-3	
Dibenzofuran	ND	mg/kg	0.419	0.0137	1	05/06/22 04:50	05/06/22 22:25	132-64-9	
Fluoranthene	ND	mg/kg	0.0419	0.00757	1	05/06/22 04:50	05/06/22 22:25	206-44-0	
Fluorene	ND	mg/kg	0.0419	0.00682	1	05/06/22 04:50	05/06/22 22:25	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0419	0.0118	1	05/06/22 04:50	05/06/22 22:25	193-39-5	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606046

**Sample: BNSF-SG13-042522-0-1.5 Lab ID: 10606046001** Collected: 04/25/22 09:55 Received: 04/27/22 08:50 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
1-Methylnaphthalene	ND	mg/kg	0.0419	0.00536	1	05/06/22 04:50	05/06/22 22:25	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0419	0.00544	1	05/06/22 04:50	05/06/22 22:25	91-57-6	
Naphthalene	ND	mg/kg	0.0419	0.0105	1	05/06/22 04:50	05/06/22 22:25	91-20-3	
Phenanthrene	ND	mg/kg	0.0419	0.00832	1	05/06/22 04:50	05/06/22 22:25	85-01-8	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.419	0.0531	1	05/06/22 04:50	05/06/22 22:25	117-81-7	
Di-n-butylphthalate	ND	mg/kg	0.419	0.0144	1	05/06/22 04:50	05/06/22 22:25	84-74-2	
Di-n-octylphthalate	ND	mg/kg	0.419	0.0283	1	05/06/22 04:50	05/06/22 22:25	117-84-0	
Pyrene	ND	mg/kg	0.0419	0.00816	1	05/06/22 04:50	05/06/22 22:25	129-00-0	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.419	0.0131	1	05/06/22 04:50	05/06/22 22:25		
Pentachlorophenol	ND	mg/kg	0.419	0.0113	1	05/06/22 04:50	05/06/22 22:25	87-86-5	
Phenol	ND	mg/kg	0.419	0.0169	1	05/06/22 04:50	05/06/22 22:25	108-95-2	
<b>Surrogates</b>									
2-Fluorophenol (S)	57.3	%	12.0-120		1	05/06/22 04:50	05/06/22 22:25	367-12-4	
Phenol-d5 (S)	55.6	%	10.0-120		1	05/06/22 04:50	05/06/22 22:25	4165-62-2	
Nitrobenzene-d5 (S)	53.8	%	10.0-122		1	05/06/22 04:50	05/06/22 22:25	4165-60-0	
2-Fluorobiphenyl (S)	56.1	%	15.0-120		1	05/06/22 04:50	05/06/22 22:25	321-60-8	
2,4,6-Tribromophenol (S)	69.7	%	10.0-127		1	05/06/22 04:50	05/06/22 22:25	118-79-6	
p-Terphenyl-d14 (S)	60.5	%	10.0-120		1	05/06/22 04:50	05/06/22 22:25	1718-51-0	
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>79.4</b>	%			1	05/03/22 11:58	05/03/22 12:18		
<b>Wet Chemistry 9034/9030B</b>									
Analytical Method: EPA 9030B Preparation Method: 9030B									
Pace National - Mt. Juliet									
Sulfide	ND	mg/kg	94.4	37.8	1	05/01/22 08:00	05/02/22 18:00	18496-25-8	

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606046

QC Batch: 812439

Analysis Method: EPA 7471B

QC Batch Method: EPA 7471B

Analysis Description: 7471B Mercury Solids

Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10606046001

METHOD BLANK: 4308604

Matrix: Solid

Associated Lab Samples: 10606046001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.018	0.0080	05/10/22 12:27	

LABORATORY CONTROL SAMPLE: 4308605

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.48	0.49	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308606 4308607

Parameter	Units	4308606		4308607		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		10606394001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Mercury	mg/kg	0.025J	0.81	0.79	0.86	0.81	102	100	80-120	6	20	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606046

QC Batch: 812437

Analysis Method: EPA 6020B

QC Batch Method: EPA 3050B

Analysis Description: 6020B Solids UPD5

Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10606046001

METHOD BLANK: 4308596

Matrix: Solid

Associated Lab Samples: 10606046001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	ND	0.47	0.10	05/05/22 18:39	
Cadmium	mg/kg	ND	0.075	0.029	05/05/22 18:39	
Chromium	mg/kg	ND	1.9	0.13	05/05/22 18:39	
Copper	mg/kg	ND	0.94	0.23	05/05/22 18:39	
Lead	mg/kg	ND	0.47	0.028	05/05/22 18:39	
Nickel	mg/kg	ND	0.47	0.19	05/05/22 18:39	
Selenium	mg/kg	ND	0.47	0.080	05/05/22 18:39	
Silver	mg/kg	ND	0.47	0.14	05/05/22 18:39	
Zinc	mg/kg	1.0J	4.7	0.84	05/05/22 18:39	

LABORATORY CONTROL SAMPLE: 4308597

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	49.2	44.3	90	80-120	
Cadmium	mg/kg	49.2	44.3	90	80-120	
Chromium	mg/kg	49.2	45.7	93	80-120	
Copper	mg/kg	49.2	46.2	94	80-120	
Lead	mg/kg	49.2	45.6	93	80-120	
Nickel	mg/kg	49.2	46.6	95	80-120	
Selenium	mg/kg	49.2	48.4	98	80-120	
Silver	mg/kg	24.6	23.6	96	80-120	
Zinc	mg/kg	49.2	45.5	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308598 4308599

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10606046001 Result	Spike Conc.	Spike Conc.	MS Result						
Arsenic	mg/kg	2.1	66.3	68.1	64.4	59.1	94	84	75-125	9	20
Cadmium	mg/kg	0.089J	66.3	68.1	62.7	57.4	94	84	75-125	9	20
Chromium	mg/kg	8.2	66.3	68.1	73.8	67.7	99	87	75-125	9	20
Copper	mg/kg	7.7	66.3	68.1	73.2	66.8	99	87	75-125	9	20
Lead	mg/kg	3.6	66.3	68.1	93.2	62.6	135	87	75-125	39	20 M1,R1
Nickel	mg/kg	9.3	66.3	68.1	75.5	69.4	100	88	75-125	8	20
Selenium	mg/kg	ND	66.3	68.1	65.1	60.9	98	89	75-125	7	20
Silver	mg/kg	0.26J	33.2	34	33.3	30.6	100	89	75-125	8	20
Zinc	mg/kg	32.3	66.3	68.1	97.9	89.2	99	84	75-125	9	20

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606046

QC Batch: 811854	Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974	Analysis Description: Dry Weight / %M by ASTM D2974
	Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10606046001

SAMPLE DUPLICATE: 4305698

Parameter	Units	10605738001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	17.6	17.4	1	30	N2

SAMPLE DUPLICATE: 4306465

Parameter	Units	10606065003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.0	9.0	0	30	N2

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report  
Pace Project No.: 10606046

QC Batch: 1859393      Analysis Method: EPA 8270E  
QC Batch Method: 3546      Analysis Description: SVOA (GC/MS) 8270E  
Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10606046001

METHOD BLANK: R3789566-2      Matrix: Solid  
Associated Lab Samples: 10606046001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	mg/kg	ND	0.0333	0.00539	05/06/22 16:10	
Acenaphthylene	mg/kg	ND	0.0333	0.00469	05/06/22 16:10	
Anthracene	mg/kg	ND	0.0333	0.00593	05/06/22 16:10	
Benzoic acid	mg/kg	ND	1.67	0.118	05/06/22 16:10	
Benzo(a)anthracene	mg/kg	ND	0.0333	0.00587	05/06/22 16:10	
Benzo(b)fluoranthene	mg/kg	ND	0.0333	0.00621	05/06/22 16:10	
Benzo(k)fluoranthene	mg/kg	ND	0.0333	0.00592	05/06/22 16:10	
Benzo(g,h,i)perylene	mg/kg	ND	0.0333	0.00609	05/06/22 16:10	
Benzo(a)pyrene	mg/kg	ND	0.0333	0.00619	05/06/22 16:10	
Carbazole	mg/kg	ND	0.333	0.0103	05/06/22 16:10	
Chrysene	mg/kg	ND	0.0333	0.00662	05/06/22 16:10	
Dibenz(a,h)anthracene	mg/kg	ND	0.0333	0.00923	05/06/22 16:10	
Dibenzofuran	mg/kg	ND	0.333	0.0109	05/06/22 16:10	
Fluoranthene	mg/kg	ND	0.0333	0.00601	05/06/22 16:10	
Fluorene	mg/kg	ND	0.0333	0.00542	05/06/22 16:10	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.0333	0.00941	05/06/22 16:10	
1-Methylnaphthalene	mg/kg	ND	0.0333	0.00426	05/06/22 16:10	
2-Methylnaphthalene	mg/kg	ND	0.0333	0.00432	05/06/22 16:10	
Naphthalene	mg/kg	ND	0.0333	0.00836	05/06/22 16:10	
Phenanthrene	mg/kg	ND	0.0333	0.00661	05/06/22 16:10	
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.333	0.0422	05/06/22 16:10	
Di-n-butylphthalate	mg/kg	ND	0.333	0.0114	05/06/22 16:10	
Di-n-octylphthalate	mg/kg	ND	0.333	0.0225	05/06/22 16:10	
Pyrene	mg/kg	ND	0.0333	0.00648	05/06/22 16:10	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.333	0.0104	05/06/22 16:10	
Pentachlorophenol	mg/kg	ND	0.333	0.00896	05/06/22 16:10	
Phenol	mg/kg	ND	0.333	0.0134	05/06/22 16:10	
2-Fluorophenol (S)	%	68.8	12.0-120		05/06/22 16:10	
Phenol-d5 (S)	%	65.8	10.0-120		05/06/22 16:10	
Nitrobenzene-d5 (S)	%	64.9	10.0-122		05/06/22 16:10	
2-Fluorobiphenyl (S)	%	65.2	15.0-120		05/06/22 16:10	
2,4,6-Tribromophenol (S)	%	65.3	10.0-127		05/06/22 16:10	
p-Terphenyl-d14 (S)	%	60.4	10.0-120		05/06/22 16:10	

LABORATORY CONTROL SAMPLE: R3789566-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	mg/kg	0.666	0.451	67.7	38.0-120	
Acenaphthylene	mg/kg	0.666	0.496	74.5	40.0-120	

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report  
Pace Project No.: 10606046

LABORATORY CONTROL SAMPLE: R3789566-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Anthracene	mg/kg	0.666	0.496	74.5	42.0-120	
Benzoic acid	mg/kg	1.33	0.351	26.4	10.0-120	
Benzo(a)anthracene	mg/kg	0.666	0.501	75.2	44.0-120	
Benzo(b)fluoranthene	mg/kg	0.666	0.448	67.3	43.0-120	
Benzo(k)fluoranthene	mg/kg	0.666	0.459	68.9	44.0-120	
Benzo(g,h,i)perylene	mg/kg	0.666	0.480	72.1	43.0-120	
Benzo(a)pyrene	mg/kg	0.666	0.540	81.1	45.0-120	
Carbazole	mg/kg	0.666	0.535	80.3	48.0-120	
Chrysene	mg/kg	0.666	0.460	69.1	43.0-120	
Dibenz(a,h)anthracene	mg/kg	0.666	0.491	73.7	44.0-120	
Dibenzofuran	mg/kg	0.666	0.475	71.3	44.0-120	
Fluoranthene	mg/kg	0.666	0.497	74.6	44.0-120	
Fluorene	mg/kg	0.666	0.477	71.6	41.0-120	
Indeno(1,2,3-cd)pyrene	mg/kg	0.666	0.511	76.7	45.0-120	
1-Methylnaphthalene	mg/kg	0.666	0.384	57.7	34.0-120	
2-Methylnaphthalene	mg/kg	0.666	0.383	57.5	34.0-120	
Naphthalene	mg/kg	0.666	0.370	55.6	18.0-120	
Phenanthrene	mg/kg	0.666	0.452	67.9	42.0-120	
bis(2-Ethylhexyl)phthalate	mg/kg	0.666	0.455	68.3	41.0-120	
Di-n-butylphthalate	mg/kg	0.666	0.491	73.7	43.0-120	
Di-n-octylphthalate	mg/kg	0.666	0.463	69.5	40.0-120	
Pyrene	mg/kg	0.666	0.403	60.5	41.0-120	
3&4-Methylphenol(m&p Cresol)	mg/kg	0.666	0.533	80.0	42.0-120	
Pentachlorophenol	mg/kg	0.666	0.467	70.1	29.0-120	
Phenol	mg/kg	0.666	0.462	69.4	28.0-120	
2-Fluorophenol (S)	%			70.1	12.0-120	
Phenol-d5 (S)	%			67.4	10.0-120	
Nitrobenzene-d5 (S)	%			58.9	10.0-122	
2-Fluorobiphenyl (S)	%			67.3	15.0-120	
2,4,6-Tribromophenol (S)	%			74.0	10.0-127	
p-Terphenyl-d14 (S)	%			59.8	10.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3789566-3 R3789566-4

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1487440-03 Result	Spike Conc.	Spike Conc.	Conc.								
Acenaphthene	mg/kg	0.0117	0.648	0.644	0.456	0.496	50.2	55.0	18.0-120	8.32	32		
Acenaphthylene	mg/kg	0.00774	0.648	0.644	0.505	0.546	56.2	61.2	25.0-120	7.79	32		
Anthracene	mg/kg	0.0348	0.648	0.644	0.533	0.556	56.2	59.2	22.0-120	4.27	29		
Benzoic acid	mg/kg	ND	1.30	1.29	1.01	0.933	50.2	46.2	10.0-152	8.01	40		
Benzo(a)anthracene	mg/kg	0.168	0.648	0.644	0.557	0.605	44.0	49.7	25.0-120	8.23	29		
Benzo(b)fluoranthene	mg/kg	0.206	0.648	0.644	0.508	0.546	34.1	38.7	19.0-122	7.25	31		
Benzo(k)fluoranthene	mg/kg	0.0728	0.648	0.644	0.468	0.504	44.7	49.0	23.0-120	7.30	30		
Benzo(g,h,i)perylene	mg/kg	0.0975	0.648	0.644	0.481	0.490	43.3	44.7	10.0-120	1.97	33		
Benzo(a)pyrene	mg/kg	0.162	0.648	0.644	0.591	0.616	48.5	51.6	24.0-120	4.07	30		

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report  
Pace Project No.: 10606046

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3789566-3			R3789566-4			% Rec	% Rec	Limits	RPD	Max RPD	Qual
		L1487440-03	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec						
Carbazole	mg/kg	0.0227	0.648	0.644	0.587	0.625	63.8	68.5	31.0-120	6.31	24		
Chrysene	mg/kg	0.169	0.648	0.644	0.511	0.556	38.6	43.9	21.0-120	8.45	29		
Dibenz(a,h)anthracene	mg/kg	0.0259	0.648	0.644	0.496	0.520	53.1	56.2	10.0-120	4.84	32		
Dibenzofuran	mg/kg	0.0240	0.648	0.644	0.486	0.527	52.2	57.2	24.0-120	8.09	30		
Fluoranthene	mg/kg	0.330	0.648	0.644	0.599	0.620	30.4	32.9	18.0-126	3.36	32		
Fluorene	mg/kg	0.00918	0.648	0.644	0.485	0.526	53.7	58.7	25.0-120	8.11	30		
Indeno(1,2,3-cd)pyrene	mg/kg	0.120	0.648	0.644	0.557	0.571	49.4	51.3	10.0-120	2.42	32		
1-Methylnaphthalene	mg/kg	0.0679	0.648	0.644	0.416	0.438	39.4	42.1	10.0-120	5.11	36		
2-Methylnaphthalene	mg/kg	0.0837	0.648	0.644	0.422	0.434	38.2	39.9	10.0-120	2.87	37		
Naphthalene	mg/kg	0.0571	0.648	0.644	0.396	0.414	38.3	40.6	10.0-120	4.38	35		
Phenanthrene	mg/kg	0.180	0.648	0.644	0.522	0.549	38.6	41.9	17.0-120	5.10	31		
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.648	0.644	0.497	0.578	56.2	65.7	17.0-126	15.0	30		
Di-n-butylphthalate	mg/kg	ND	0.648	0.644	0.560	0.605	63.3	68.8	30.0-120	7.74	29		
Di-n-octylphthalate	mg/kg	ND	0.648	0.644	0.549	0.612	62.0	69.6	21.0-123	10.8	29		
Pyrene	mg/kg	0.202	0.648	0.644	0.466	0.507	29.8	34.6	16.0-121	8.43	32		
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.648	0.644	0.489	0.474	55.2	53.9	12.0-123	3.12	38		
Pentachlorophenol	mg/kg	ND	0.648	0.644	0.520	0.571	58.8	64.9	10.0-160	9.26	31		
Phenol	mg/kg	ND	0.648	0.644	0.442	0.462	50.0	52.5	12.0-120	4.23	38		
2-Fluorophenol (S)	%						51.9	57.3	12.0-120				
Phenol-d5 (S)	%						50.9	55.4	10.0-120				
Nitrobenzene-d5 (S)	%						44.4	49.7	10.0-122				
2-Fluorobiphenyl (S)	%						52.2	57.5	15.0-120				
2,4,6-Tribromophenol (S)	%						61.7	68.2	10.0-127				
p-Terphenyl-d14 (S)	%						49.1	58.4	10.0-120				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
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### QUALITY CONTROL DATA

Project: D3593500-Revised Report  
Pace Project No.: 10606046

QC Batch: 812360	Analysis Method: NWTPH-Dx
QC Batch Method: EPA 3550	Analysis Description: NWTPH-Dx GCS
	Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10606046001

METHOD BLANK: 4307793 Matrix: Solid

Associated Lab Samples: 10606046001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Diesel Fuel Range	mg/kg	ND	15.0	6.9	05/02/22 19:37	
Motor Oil Range	mg/kg	ND	10.0	5.0	05/02/22 19:37	
n-Triacontane (S)	%	91	50-150		05/02/22 19:37	
o-Terphenyl (S)	%	80	50-150		05/02/22 19:37	

LABORATORY CONTROL SAMPLE: 4307794

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel Range	mg/kg	50	41.4	83	50-150	
Motor Oil Range	mg/kg	50	46.6	93	50-150	
n-Triacontane (S)	%			82	50-150	
o-Terphenyl (S)	%			84	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4307905 4307906

Parameter	Units	10606463001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
			Spike Conc.	Spike Conc.	MS Result	MSD Result					
Diesel Fuel Range	mg/kg	ND	49	49.2	41.2	39.4	83	79	50-150	5	30
Motor Oil Range	mg/kg	ND	49	49.2	46.9	46.9	88	88	50-150	0	30
n-Triacontane (S)	%						80	78	50-150		
o-Terphenyl (S)	%						79	73	50-150		

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606046

QC Batch: 1857290	Analysis Method: SM 2540G
QC Batch Method: SM 2540 G	Analysis Description: Total Solids 2540 G-2011
	Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10606046001

METHOD BLANK: R3787793-1 Matrix: Solid

Associated Lab Samples: 10606046001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	ND			05/03/22 12:18	

LABORATORY CONTROL SAMPLE: R3787793-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	85.0-115	

SAMPLE DUPLICATE: R3787793-3

Parameter	Units	L1487807-02 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	82.9	82.9	0.0116	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606046

QC Batch: 1857660

Analysis Method: EPA 9030B

QC Batch Method: 9030B

Analysis Description: Wet Chemistry 9034/9030B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10606046001

METHOD BLANK: R3787279-1

Matrix: Solid

Associated Lab Samples: 10606046001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/kg	ND	75.0	30.0	05/02/22 18:00	

LABORATORY CONTROL SAMPLE: R3787279-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/kg	100	80.1	80.1	53.8-124	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: D3593500-Revised Report

Pace Project No.: 10606046

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

R1 RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: D3593500-Revised Report  
Pace Project No.: 10606046

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10606046001	BNSF-SG13-042522-0-1.5	EPA 3550	812360	NWTPH-Dx	812833
10606046001	BNSF-SG13-042522-0-1.5	EPA 3050B	812437	EPA 6020B	813004
10606046001	BNSF-SG13-042522-0-1.5	EPA 7471B	812439	EPA 7471B	813107
10606046001	BNSF-SG13-042522-0-1.5	ASTM D2974	811854		
10606046001	BNSF-SG13-042522-0-1.5	3546	1859393	EPA 8270E	1859393
10606046001	BNSF-SG13-042522-0-1.5	SM 2540 G	1857290	SM 2540G	1857290
10606046001	BNSF-SG13-042522-0-1.5	9030B	1857660	EPA 9030B	1857660

### REPORT OF LABORATORY ANALYSIS

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# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: **JACOBS**  
 Address: **2020 SW HWY AVE SUITE 300**  
**HOVDE**

Billing Information:  
**BNSF WIS BRAM RI**

Report To: **Berny Field**

Email To: **Berny Field**  
**KELIS.IVARSON@JACOBS.COM**  
**KELIS.IVARSON@JACOBS.COM**

Copy To: **Kris Ivarson**

Site Collection Info/Address:  
**BNSF WISHRAM, WA**

Customer Project Name/Number:  
**D3593500**

State: **WA** County/City: **Spokane**  
 Time Zone Collected: **PST**

Phone:  
 Email:  
 Collected By (print): **J. WURICK**  
 Collected By (signature): *[Signature]*  
 Purchase Order #: **SEE CONTRACT**  
 Quote #: **SEE CONTRACT**  
 Turnaround Date Required:

Compliance Monitoring?  
 Yes  No  
 DW PWS ID #:  
 DW Location Code:  
 Immediately Packed on Ice:  
 Yes  No  
 Field Filtered (if applicable):  
 Yes  No  
 Analysis:

Sample Disposal:  
 Dispose as appropriate  Return  
 Archive  Hold

Rush:  
 Same Day  Next Day  
 2 Day  3 Day  4 Day  5 Day  
 (Expedite Charges Apply)

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
BNSF-SG13-042522-0-1-S	SL	CARB	4/26/22	6:55				7

**LAB USE ONLY- Affix Workord**

WO#: 10606046

10606046

**ALL SHADED**

Container Preservative Type:

U	W	U	W	U	W	U	W	U	W	U	W	U	W
---	---	---	---	---	---	---	---	---	---	---	---	---	---

\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA

CL Strips: \_\_\_\_\_

Sample pH Acceptable:  Y  N  NA

pH Strips: \_\_\_\_\_

Sulfide Present:  Y  N  NA

Lead Acetate Strips: \_\_\_\_\_

LAB USE ONLY:

Lab Sample # / Comments: \_\_\_\_\_

Lab Sample Temperature Info:

Temp Blank Received:  Y  N  NA

Therm ID#: **#4**

Cooler 1 Temp Upon Receipt: **59** °C

Cooler 1 Therm Corr. Factor: \_\_\_\_\_ °C

Cooler 1 Corrected Temp: \_\_\_\_\_ °C

Comments:

Trip Blank Received:  Y  N  NA

HCL MeOH TSP Other

Non Conformance(s): \_\_\_\_\_

YES / NO

Page: \_\_\_\_\_ of: \_\_\_\_\_

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm):  Y  N  NA

Received by/Company: (Signature) **[Signature]**

Received by/Company: (Signature) **[Signature]**

Received by/Company: (Signature)



DC#\_Title: ENV-FRM-MIN4-0149 v03\_Sample Condition Upon Receipt (SCUR) - ESI

Effective Date: 04/12/2022

Sample Condition Upon Receipt - ESI Tech Specs

Client Name: BNSF Jacobs

Project #:

WO#: 10606046

PM: KV

Due Date: 05/11/22

CLIENT: BNSF\_Jacobs

Courier: Fed Ex UPS USPS Client Pace SpeeDee Commercial

Tracking Number: 5102 1600 5590

See Exceptions ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? Yes No

Seals Intact? Yes No

Biological Tissue Frozen? Yes No N/A

Packing Material: Bubble Wrap Bubble Bags None Other: Zipper

Temp Blank? Yes No

Thermometer: T1(0461) T2(1336) T3(0459) T4(0254) T5(0489) T6(0235) T7(0042) Type of ice: Wet Blue None Dry Melted

Temp should be above freezing to 6°C Cooler Temp Read w/temp blank: °C

Average Corrected Temp (no temp blank only): 5.4 °C

See Exceptions ENV-FRM-MIN4-0142 1 Container

Correction Factor: Cooler Temp Corrected w/temp blank: °C

USDA Regulated Soil: ( N/A, water sample/Other: )

Date/initials of Person Examining Contents: KN 4/12/22

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MIN4-0154) and include with SCUR/COC paperwork.

Table with 2 columns: Question/Requirement and Answer/Comments. Includes sections for Chain of Custody, Short Hold Time Analysis, Rush Turn Around Time, Matrix, and Field Data Required.

Temp Log table with columns: Opened Time, Temp, Corrected Temp, Time, put in cooler, Corrected Temp.

CLIENT NOTIFICATION/RESOLUTION table with columns: Field Data Required, Person Contacted, Date/Time, Comments/Resolution.

Project Manager Review:

Date: 5/10/22

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers)

Labeled by: KN (1)



Document Name:  
**Sample Condition Upon Receipt (SCUR) Exception Form**

Document No.:  
**ENV-FRM-MIN4-0142 Rev.01**

Document Revised: 04Jun2020  
**Page 1 of 1**

Pace Analytical Services -  
**Minneapolis**

**SCUR Exceptions:**

**Workorder #:**

Out of Temp Sample IDs	Container Type	# of Containers	PM Notified? <input type="checkbox"/> Yes <input type="checkbox"/> No																		
			If yes, indicate who was contacted/date/time. If no, indicate reason why.																		
			<b>Multiple Cooler Project?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No If you answered yes, fill out information to the left.																		
			<table border="1"> <thead> <tr> <th colspan="3">No Temp Blank</th> </tr> <tr> <th>Read Temp</th> <th>Corrected Temp</th> <th>Average Temp</th> </tr> </thead> <tbody> <tr> <td>5.6</td> <td>5.6</td> <td>5.9</td> </tr> <tr> <td>7.0</td> <td>7.0</td> <td></td> </tr> <tr> <td>4.7</td> <td>4.7</td> <td></td> </tr> <tr> <td>6.3</td> <td>6.3</td> <td></td> </tr> </tbody> </table>	No Temp Blank			Read Temp	Corrected Temp	Average Temp	5.6	5.6	5.9	7.0	7.0		4.7	4.7		6.3	6.3	
No Temp Blank																					
Read Temp	Corrected Temp	Average Temp																			
5.6	5.6	5.9																			
7.0	7.0																				
4.7	4.7																				
6.3	6.3																				

Tracking Number/Temperature

Issue Type:	Container Type	# of Containers
Sample ID		

**pH Adjustment Log for Preserved Samples**

Sample ID	Type of Preserv.	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance after addition? <input type="checkbox"/> Yes <input type="checkbox"/> No	Initials
								<input type="checkbox"/> Yes <input type="checkbox"/> No	
								<input type="checkbox"/> Yes <input type="checkbox"/> No	
								<input type="checkbox"/> Yes <input type="checkbox"/> No	
								<input type="checkbox"/> Yes <input type="checkbox"/> No	

**Comments:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# Internal Transfer Chain of Custody

B205



Samples Pre-Logged into eCOC.

State Of Origin: WA

Cert. Needed:  Yes  No

Owner Received Date: 4/27/2022 Results Requested By: 5/11/2022

Workorder: 10606046

Workorder Name: D3593500

Report To	Subcontract To		Requested Analysis																				
Kongmeng Vang Pace Analytical Minnesota 1700 Elm Street Minneapolis, MN 55414 Phone (612)607-1700	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858																						
		SVOC SW9030 Total Sulfides																					
		Preserved Containers																					
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved																	
1	BNSF-SG13-042522-0-1.5	PS	4/25/2022 09:55	10606046001	Solid	2																	
2																							
3																							
4																							
5																							
Comments																							
Transfers	Released By		Date/Time	Received By		Date/Time																	
1	CSM/Pace		4/28/22 15:05	Veronica Sistrunk		4/29/22 09:00																	
2																							
3																							
Cooler Temperature on Receipt			°C	Custody Seal <input checked="" type="checkbox"/> or N			Received on Ice <input checked="" type="checkbox"/> or N			Samples Intact <input checked="" type="checkbox"/> or N													

U487790  
LAB USE ONLY  
-u

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
This chain of custody is considered complete as is since this information is available in the owner laboratory.

DRAFT, 5 to = .5

Sample Receipt Checklist

COC Seal Present/Intact:  Y  N If Applicable

COC Signed/Accurate:  Y  N VOA Zero Headspace:  Y  N

Bottles arrive intact:  Y  N Pres. Correct/Check:  Y  N

Correct bottles used:  Y  N

Sufficient volume sent:  Y  N

REP Screen <0.5 mR/hr:  Y  N

Fed ex 5466 8884 4836

U487790

8270 SVOC List

<i>Semi-volatile Organic Compounds and Polycyclic</i>
384-Methylphenol
Benzoic acid
Bis(2-ethylhexyl) phthalate
Carbazole
Dibenzofuran
Di-n-butyl phthalate
Di-n-octyl phthalate
Pentachlorophenol
Phenol
1-Methylnaphthalene
2-Methylnaphthalene
Acenaphthene
Acenaphthylene
Anthracene
Benz(a)anthracene
Benzo(a)pyrene
Benzo(ghi)perylene
Chrysene
Dibenz(ah)anthracene
Fluoranthene
Fluorene
Indeno(123-cd)pyrene
Naphthalene
Phenanthrene
Pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene

## ANALYTICAL REPORT

Eurofins Seattle  
5755 8th Street East  
Tacoma, WA 98424  
Tel: (253)922-2310

Laboratory Job ID: 580-113238-1  
Client Project/Site: D3593500 10606046  
Revision: 1

For:  
Pace Analytical Services, LLC  
1700 Elm Street  
Minneapolis, Minnesota 55414

Attn: Kongmeng Vang



Authorized for release by:  
5/26/2022 12:31:11 PM

Pauline Matlock, Project Manager  
(253)922-2310  
[Pauline.Matlock@et.eurofinsus.com](mailto:Pauline.Matlock@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

10606046

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions . . . . .	4
Client Sample Results . . . . .	5
QC Sample Results . . . . .	6
Chronicle . . . . .	8
Certification Summary . . . . .	9
Sample Summary . . . . .	10
Chain of Custody . . . . .	11
Receipt Checklists . . . . .	12

# Case Narrative

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606046

Job ID: 580-113238-1

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**Job ID: 580-113238-1**

---

**Laboratory: Eurofins Seattle**

---

**Narrative**

**Job Narrative  
580-113238-1**

**Comments**

No additional comments.

**Revision**

The report being provided is a revision of the original report sent on 5/13/2022. The report (revision 1) is being revised due to: Client needs TOC reported by dry weight.

**Receipt**

The sample was received on 4/29/2022 9:45 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.9° C.

**General Chemistry**

Method 9060A: The method blank for analytical batch 580-390132 contained Organic Carbon above the method detection limit. This target analyte concentration was less than half of the reporting limit (1/2RL); therefore re-extraction and re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Definitions/Glossary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606046

Job ID: 580-113238-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606046

Job ID: 580-113238-1

**Client Sample ID: BNSF-SG13-042522-0-1.5**

**Lab Sample ID: 580-113238-1**

Date Collected: 04/25/22 09:55

Matrix: Solid

Date Received: 04/29/22 09:45

Percent Solids: 72.8

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	670	J	2700	130	mg/Kg	☼		05/10/22 14:24	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	72.8		0.1	0.1	%			05/11/22 11:50	1
Percent Moisture	27.2		0.1	0.1	%			05/11/22 11:50	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	12	J	34	12	mg/Kg	☼	05/06/22 21:15	05/07/22 23:20	1



# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606046

Job ID: 580-113238-1

## Method: 9060A - Organic Carbon, Total (TOC)

**Lab Sample ID: MB 580-390132/36**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	157	J	2000	97	mg/Kg			05/10/22 15:42	1

**Lab Sample ID: MB 580-390132/5**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/10/22 13:48	1

**Lab Sample ID: LCS 580-390132/37**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120

**Lab Sample ID: LCS 580-390132/6**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	118000		mg/Kg		98	80 - 120

**Lab Sample ID: LCSD 580-390132/38**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	113000		mg/Kg		94	80 - 120	2	20

**Lab Sample ID: LCSD 580-390132/7**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120	3	20

## Method: EPA 350.1 - Ammonia

**Lab Sample ID: MB 580-389754/1-B**  
**Matrix: Solid**  
**Analysis Batch: 389867**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**  
**Prep Batch: 389808**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		25	8.8	mg/Kg		05/06/22 21:15	05/07/22 23:20	1



# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606046

Job ID: 580-113238-1

## Method: EPA 350.1 - Ammonia (Continued)

**Lab Sample ID: LCS 580-389754/2-B**  
**Matrix: Solid**  
**Analysis Batch: 389867**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Soluble**  
**Prep Batch: 389808**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	50.0	50.3		mg/Kg		101	90 - 110

**Lab Sample ID: MB 580-389754/1-A**  
**Matrix: Solid**  
**Analysis Batch: 390299**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		25	8.8	mg/Kg			05/11/22 17:11	1

**Lab Sample ID: LCS 580-389754/2-A**  
**Matrix: Solid**  
**Analysis Batch: 390299**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Soluble**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	50.0	54.3		mg/Kg		109	90 - 110

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Lab Chronicle

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606046

Job ID: 580-113238-1

**Client Sample ID: BNSF-SG13-042522-0-1.5**

**Lab Sample ID: 580-113238-1**

**Date Collected: 04/25/22 09:55**

**Matrix: Solid**

**Date Received: 04/29/22 09:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	390214	05/11/22 11:50	JSM	FGS SEA

**Client Sample ID: BNSF-SG13-042522-0-1.5**

**Lab Sample ID: 580-113238-1**

**Date Collected: 04/25/22 09:55**

**Matrix: Solid**

**Date Received: 04/29/22 09:45**

**Percent Solids: 72.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	390132	05/10/22 14:24	N1R	FGS SEA
Soluble	Leach	DI Leach			389754	05/06/22 16:31	MLT	FGS SEA
Soluble	Prep	Distill/Ammonia			389808	05/06/22 21:15	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	389867	05/07/22 23:20	MLT	FGS SEA

**Laboratory References:**

FGS SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

- 1
- 2
- 3
- 4
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- 10
- 11

# Accreditation/Certification Summary

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606046

Job ID: 580-113238-1

## Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2954	07-07-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9060A		Solid	Total Organic Carbon - Duplicates
EPA 350.1	Distill/Ammonia	Solid	Ammonia as N
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Oregon	NELAP	4167	07-07-22
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Solids

Washington	State	C788	07-13-22
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9060A		Solid	Total Organic Carbon - Duplicates
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

# Sample Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606046

Job ID: 580-113238-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-113238-1	BNSF-SG13-042522-0-1.5	Solid	04/25/22 09:55	04/29/22 09:45

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Chain of Custody

PASI Minnesota Laboratory



Workorder: 10606046

Workorder Name: D3593500

Report / Invoice To

Results Requested By: 5/11/2022

Subcontract ID

Requested Analysts

Kongmeng Vang  
 Pace Analytical Minnesota  
 1700 Elm Street  
 Minneapolis, MN 55414  
 Phone (612)607-1700  
 Email: kongmeng.vang@pacelabs.com

P.O.  
 Eurofins Frontier Global Sciences  
 5755 8th Street East  
 Tacoma, WA 98424

State of Sample Origin: WA

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers
					Unpreserved
1	BNSF-SG13-042522-0-1.5	4/25/2022 09:55	10606046001	Solid	1
2					
3					
4					
5					

TOC SW9060A

350.1 Ammonia

LAB USE ONLY

Transfers

Released By: *[Signature]*  
 Received By: *[Signature]*  
 Date/Time: 4/29/22

LVI4 Package

0945

Comments

Cooler Temperature on Receipt °C

Custody Seal Y or N

Received on Ice Y or N

Samples Intact Y or N

*Sm B IR 9 2.9/3.3*  
*Fed Per vics*



580-113238 Chain of Custody



# Login Sample Receipt Checklist

Client: Pace Analytical Services, LLC

Job Number: 580-113238-1

**Login Number: 113238**

**List Number: 1**

**Creator: Presley, Kim A**

**List Source: Eurofins Seattle**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Date: 5/12/2022

CLIENT: Pace Analytical - Minneapolis  
Project: 10606046 D3593500  
Lab Order: S2204397

**CASE NARRATIVE**  
Report ID: S2204397001

Entire Report Reviewed by: *John M. Jacobs*  
John Jacobs, Project Manager

Sample BNSF-SG13-042522-0-1.5 was received on April 29, 2022.  
This report contains:

- Case Narrative - 2 pages
- Sample Analysis Report - 6 pages
- Data Sheets- 3 pages
- Original COC - 1 page

-----  
All samples were received and analyzed within recommended holding times, except those noted below in this case narrative. Samples were analyzed using methods outlined in the following references:

- Standard Methods for the Examination of Water and Wastewater, approved method versions
- EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, online versions
- EPA methods 40 CFR Parts 136 and 141 EPA 600/2-78-054 methods
- NDEP Mining Methods
- 40 CFR Part 50, Appendices B, J, L, O and FEM EQL-0310-189
- IO Compendium Methods
- Clean Water Act Methods Update Rule for the Analysis of Effluent, current version.
- ASTM approved and recognized standards
- ISO approved and recognized standards
- USDA Handbook 60
- Soil Survey Laboratory Manual Ver 4.0
- ASA/SSSA 9 Methods of Analysis Part 2, 1982
- ASA/SSSA Methods of Analysis Book 5 Part 3, 1996
- Other industry approved methods

All Quality Control parameters met the acceptance criteria defined by EPA and Pace Analytical except as indicated in this case narrative:



Date: 5/12/2022

## Definitions

RL Reporting Limit

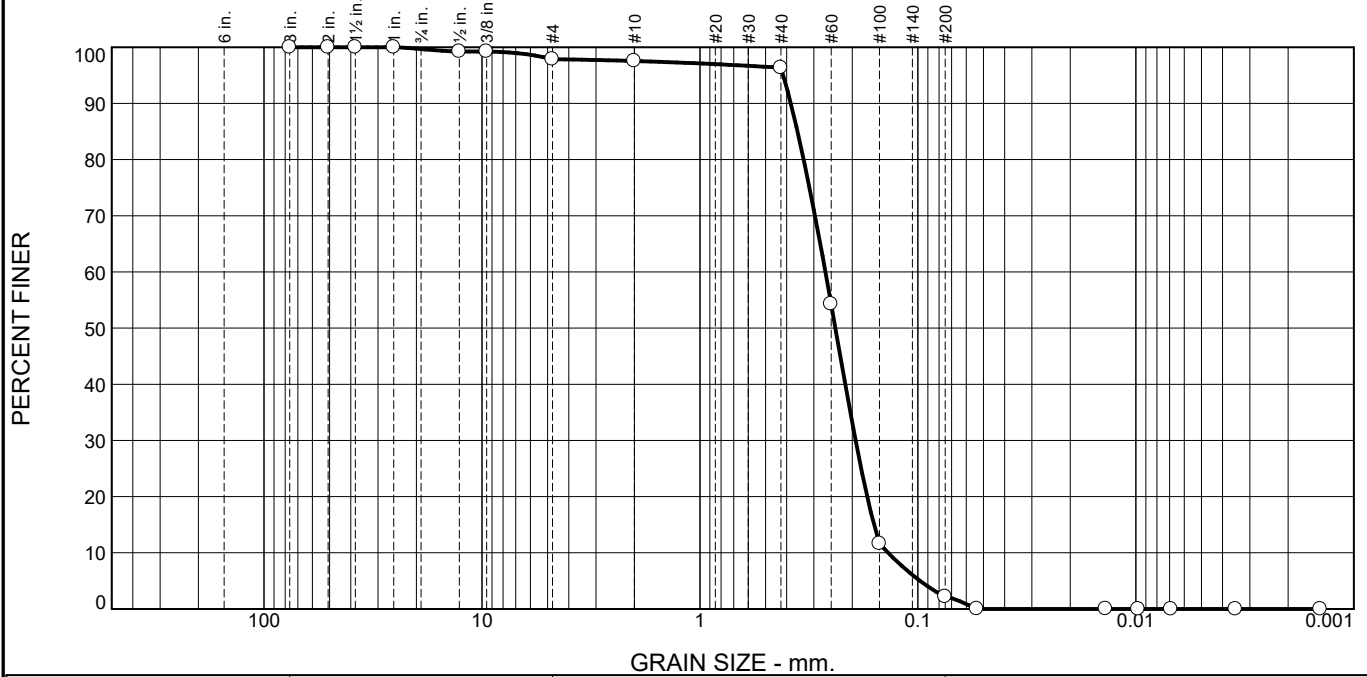
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## Qualifiers

- \* Value exceeds Maximum Contaminant Level
- A Check MSA specifications
- B Analyte detected in the associated Method Blank
- C Calculated Value
- D Report limit raised due to dilution
- E Value above quantitation range
- G Analyzed at Pace Gillette, WY laboratory
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by another laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- U Analyte below method detection limit
- X Matrix Effect



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.3	1.8	0.3	1.2	94.2	2.2	

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	99.2		
0.375	99.2		
#4	97.9		
#10	97.6		
#40	96.4		
#60	54.3		
#100	11.6		
#200	2.2		
0.0536 mm.	0.0		
0.0137 mm.	0.0		
0.0097 mm.			
0.0069 mm.			
0.0035 mm.			
0.0014 mm.			

\* (no specification provided)

**Material Description**

poorly graded sand

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= SP                      AASHTO (M 145)= A-3

**Coefficients**

D<sub>90</sub>= 0.3829                      D<sub>85</sub>= 0.3567                      D<sub>60</sub>= 0.2657  
D<sub>50</sub>= 0.2391                      D<sub>30</sub>= 0.1931                      D<sub>15</sub>= 0.1590  
D<sub>10</sub>= 0.1370                      C<sub>u</sub>= 1.94                      C<sub>c</sub>= 1.03

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

---

Date Received: 4/29/2022                      Date Tested: 5/11/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: BNSF-SG13-042522-0-1.5  
Sample Number: S2204397-001A

Date Sampled: 4/25/2022

**Pace Analytical Services, Inc.**  
**Sheridan, Wyoming**

Client: Pace Analytical - Minneapolis  
Project: 10606046 D3593500  
Project No: S2204397

Figure

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/11/2022

**Client:** Pace Analytical - Minneapolis

**Project:** 10606046 D3593500

**Project Number:** S2204397

**Location:** BNSF-SG13-042522-0-1.5

**Sample Number:** S2204397-001A

**Material Description:** poorly graded sand

**Sample Date:** 4/25/2022 9:55

**Date Received:** 4/29/2022    **PL:** NP

**LL:** NV

**USCS Classification:** SP

**AASHTO Classification:** A-3

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5/11/2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer		
154.56	0.00	3"	0.00	0.00	100.0		
		2"	0.00	0.00	100.0		
		1.5"	0.00	0.00	100.0		
		1"	0.00	0.00	100.0		
		0.5"	1.18	0.00	99.2		
		0.375"	0.00	0.00	99.2		
		#4	2.11	0.00	97.9		
		#10	0.49	0.00	97.6		
		70.01	0.00	#40	0.86	0.00	96.4
				#60	30.21	0.00	54.3
#100	30.60			0.00	11.6		
#200	6.78			0.00	2.2		

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 2.2

Weight of hydrometer sample =70.01

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	6.5	0.0	0.0137	6.5	15.2	0.0536	0.0
15.00	20.0	6.5	0.1	0.0136	6.5	15.2	0.0137	0.0
30.00	20.0	6.0	-0.4	0.0136	6.0	15.3	0.0097	0.0
60.00	20.0	6.0	-0.4	0.0136	6.0	15.3	0.0069	0.0
240.00	19.0	6.0	-0.6	0.0138	6.0	15.3	0.0035	0.0
1440.00	19.0	6.0	-0.6	0.0138	6.0	15.3	0.0014	0.0

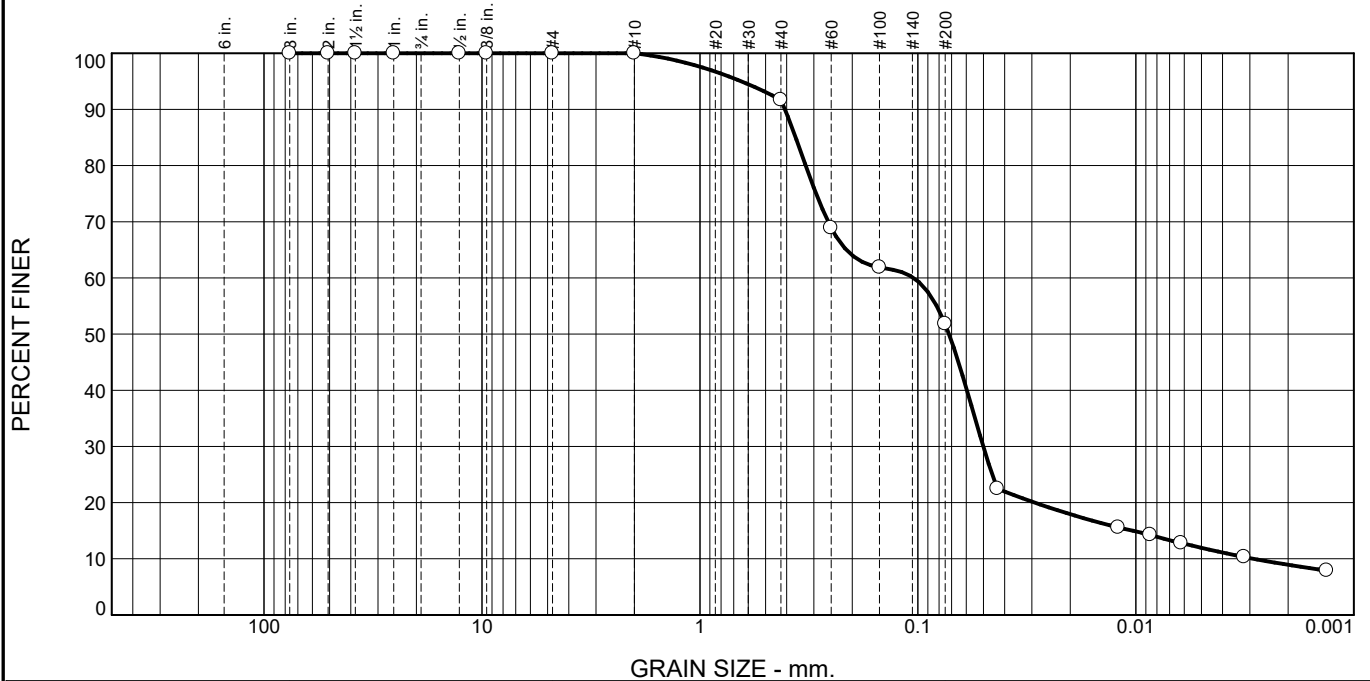
**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.3	1.8	2.1	0.3	1.2	94.2	95.7			2.2

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0978	0.1370	0.1590	0.1709	0.1931	0.2154	0.2391	0.2657	0.3342	0.3567	0.3829	0.4149

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
1.29	1.94	1.03

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	8.3	39.9	39.8	12.0

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375	100.0		
#4	100.0		
#10	100.0		
#40	91.7		
#60	68.9		
#100	61.9		
#200	51.8		
0.0432 mm.	22.5		
0.0120 mm.	15.6		
0.0086 mm.	14.3		
0.0062 mm.	12.8		
0.0032 mm.	10.3		
0.0013 mm.	7.9		

\* (no specification provided)

**Material Description**

sandy silt

**Atterberg Limits (ASTM D 4318)**

PL= NP                          LL= NV                          PI=

**Classification**

USCS (D 2487)= ML                          AASHTO (M 145)= A-4(0)

**Coefficients**

D<sub>90</sub>= 0.4073                          D<sub>85</sub>= 0.3638                          D<sub>60</sub>= 0.1047  
 D<sub>50</sub>= 0.0719                          D<sub>30</sub>= 0.0501                          D<sub>15</sub>= 0.0103  
 D<sub>10</sub>= 0.0029                          C<sub>u</sub>= 36.16                          C<sub>c</sub>= 8.29

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
 SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

---

Date Received: \_\_\_\_\_ Date Tested: 5-11-2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: LCS  
 Sample Number: LCS

Date Sampled:

**Pace Analytical Services, Inc.**

Client:  
 Project:

**Sheridan, Wyoming**

Project No:

Figure

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/11/2022

**Location:** LCS

**Sample Number:** LCS

**Material Description:** sandy silt

**PL:** NP                      **LL:** NV

**USCS Classification:** ML

**AASHTO Classification:** A-4(0)

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5-11-2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer		
75.00	0.00	3"	0.00	0.00	100.0		
		2"	0.00	0.00	100.0		
		1.5"	0.00	0.00	100.0		
		1"	0.00	0.00	100.0		
		0.5"	0.00	0.00	100.0		
		0.375	0.00	0.00	100.0		
		#4	0.00	0.00	100.0		
		#10	0.00	0.00	100.0		
		75.00	0.00	#40	6.22	0.00	91.7
				#60	17.09	0.00	68.9
#100	5.27			0.00	61.9		
#200	7.55			0.00	51.8		

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 51.8

Weight of hydrometer sample = 75.0

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	39.0	32.5	0.0137	39.0	9.9	0.0432	22.5
15.00	19.5	29.0	22.5	0.0137	29.0	11.5	0.0120	15.6
30.00	20.0	27.0	20.6	0.0136	27.0	11.9	0.0086	14.3
60.00	19.5	25.0	18.5	0.0137	25.0	12.2	0.0062	12.8
240.00	19.0	21.5	14.9	0.0138	21.5	12.8	0.0032	10.3
1440.00	19.0	18.0	11.4	0.0138	18.0	13.3	0.0013	7.9

Pace Analytical Services, Inc.

**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	8.3	39.9	48.2	39.8	12.0	51.8

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
	0.0029	0.0103	0.0291	0.0501	0.0596	0.0719	0.1047	0.3270	0.3638	0.4073	0.6461

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.69	36.16	8.29

Pace Analytical Services, Inc.

# Internal Transfer Chain of Custody



Samples Pre-Logged into eCOC.

Workorder: 10606046      Workorder Name: D3593500

State Of Origin: WA  
 Cert. Needed:  Yes       No  
 Owner Received Date: 4/27/2022

Results Requested By: 5/11/2022

**Pace Analytical**  
 www.pacelabs.com

Kongmeng Yang  
 Pace Analytical Minnesota  
 1700 Elm Street  
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 1673 Terra Avenue  
 Sheridan, WY 82801  
 Phone (307) 672-8945

Transfers	Released By	Date/Time	Received By	Date/Time	ASTM D422 Hydrometer	LAB USE ONLY
1	CSM/pate	4/28/2022 14:10	C. J. PROTERMAN	4/29/22	X	S2204397
2						
3						
4						
5						

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

LCS: 25g ASTM grade Sand + 50g OC lab soil

Sieve/Hydrometer

1/2" 1.18  
3/8" 0

Sample #	Initial Wt (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)
	52204397-001	154.56					
Sieve #		Retained (g)	Retained (g)	Retained (g)	Retained (g)	Retained (g)	Retained (g)
4		2.11					
10		.49					
40		.86					
60		30.21					
100		30.60					
200		6.78					
Sample Wt		70.01					
Start Time	11:11	Light soil					
Minutes		19.5					
1		6.5					
15		6.5					
30		6					
60		6					
240		6					
1440		6					

S-5-22  
S-9-22  
S-10-22  
③



- 1 Sod. Hex / Sod. carb. see solution prep. log copy
- 2 No. 10 Sieve (2.00 mm) W.S. Tyler Incorporated
- 3 Amex Instruments Inc Gyromax 818 orbital shaker  
SN: A114 1010 501-40
- 4 No 200 sieve Fisher Brand SN: 211912174
- 5 VWR Scientific Inc convection oven
- 6 Geosystem Soils Test Software version 5
- 7 Ro-Tap RX-29 SN: 16763
8. No 4 sieve soil test Inc. 4.75 mm
- 9 3/8" sieve soil test, Inc. 9.5 mm
- 10 1/2" sieve Gilson Company 16.0 mm
11. Hydrometer: Fisher Brand / ERTCO no. 32982  
ASTM 152 H
12. Thermometer: Fisher Brand / ERTCO SN: 05169100



Solution Preparation Log

Initials	Date	Solution	Chemical	Preparation			pH	Solution Lot #
				Lot #	Amount	DI Volume		
SH	Prep: 4-6-22 Expire: 10-6-22	CEC	Ammonium Acetate	203214	711g	10L	- 7.30	MHyAcetate22
CH	Prep: 4/11/22 Expire: 10/11/22	0.1 HCl	HCl	820911	14.22mL 110.20mL	14L	-	0.1HCl-041122
SH	Prep: 4-11-22 Expire: 10-11-22	CEC	Sodium Acetate	201280	272g	2L	- 5.45	MACE 041122
CH	Prep: 4-12-22 Expire: 10-12-22	1M KCl	KCl	10221405	26075g	3.5L	-	1M KCl-041222
SH	Prep: 4-13-22 Expire: 10-13-22	MHA	Sodium Hex	A0423850	198.50g	25L	-	MHA 041322
CH	Prep: 4/13/22 Expire: 10/13/22	1M KCl	KCl	10232819	26075g	3.6L	-	1M KCl-041322
CH	Prep: 4/14/22 Expire: 10/14/22	0.1M CEC	Ammonium Acetate	203214	711.00g	10L	7.07	MHyAcetate-041422
CH	Prep: 4/15/22 Expire: 10/15/22	Mixed Acid AS	HCl Sulfuric	195245 101072	17mLs 144mLs	2L	-	Mixed Acid 041522



# Analytical Data Package

**Prepared by:**

**Pace Analytical Services**

**Pace Project No.: 10606046**





Organic

GC-FID DRO

Surrogate Recovery Summary (Form 2) ..... 1

Laboratory Control Spike/Laboratory Control Spike Duplicate Summary (Form 3) ..... 2

Matrix Spike/Matrix Spike Duplicate Summary (Form 3) ..... 3

Method Blank Association Summary (Form 4) ..... 5

Analytical Results with Raw Data (Form 1) ..... 6

Initial Calibration Summary (Form 6) ..... 16

Raw Data for Initial Calibration Standards ..... 19

Continuing Calibration Summary (Form 7) ..... 167

Raw Data for Continuing Calibration Standards ..... 170

Raw Data QC ..... 212

Preparation Logs Raw Data ..... 228

Instrument Run Log ..... 230

InOrganic

ICPMS

Analytical Results (Form 1-IN) ..... 234

Initial & Continuing Calibration Verification (Form 2A-IN) ..... 235

CRDL Check Standard (Form 2B-IN) ..... 237

Blanks (Form 3-IN) ..... 239

Interference Check Sample (Form 4B-IN) ..... 241

Matrix Spike Recovery (Form 5A-IN) ..... 242

Post Digestion Spike Recovery (Form 5B-IN) ..... 244

Duplicates (Form 6-IN) ..... 245

Laboratory Control Spike (Form 7-IN) ..... 246

Serial Dilution (Form 8-IN) ..... 247

Method Detection Limits (Form 9-IN) ..... 248

Linear Ranges (Form 11-IN) ..... 250

Preparation Log (Form 12-IN) ..... 251

Analysis Run Log (Form 13-IN) ..... 252

Tune (Form 14-IN) ..... 253

Internal Standard Relative Intensity Summary (Form 15-IN) ..... 255

ICPMS Raw Data (Multiple Schedules/Sample) ..... 256

Preparation Logs Raw Data ..... 458

Mercury

Analytical Results (Form 1-IN) ..... 459

Initial & Continuing Calibration Verification (Form 2A-IN) ..... 460

CRDL Check Standard (Form 2B-IN) ..... 461

Blanks (Form 3-IN) ..... 463

Matrix Spike Recovery (Form 5A-IN) ..... 464

Duplicates (Form 6-IN) ..... 466

Laboratory Control Spike (Form 7-IN) .....	467
Method Detection Limits (Form 9-IN) .....	468
Preparation Log (Form 12-IN) .....	470
Analysis Run Log (Form 13-IN) .....	471
Mercury Raw Data .....	472
Preparation Logs Raw Data .....	481
<b>Gravimetric</b>	
Analytical Results (Form 1-IN) .....	482
Duplicates (Form 6-IN) .....	483
Method Detection Limits (Form 9-IN) .....	485
Preparation Log (Form 12-IN) .....	486
Analysis Run Log (Form 13-IN) .....	487
Percent Moisture Determination Raw Data .....	488

GC-FID DRO - FORM II SVOA-1  
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Minnesota SDG No.: 10606046 Contract: D3593500

Instrument ID: 10GCSF

LAB SAMPLE ID	SAMPLE NAME	NTCS	OTER
4307793	4307793BLANK	91	80
4307794	4307794LCS	82	84
10606046001	BNSF-SG13-042522-0-1.5	78	78

QC LIMITS

(50-150)

(50-150)

(NTCS) = n-Triacontane (S)

(OTER) = o-Terphenyl (S)

\* Values outside of QC Limits

GC-FID DRO - FORM III SVOA-1  
SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Minnesota

Lab Sample ID: 4307794LCS

Date Extracted: 04/29/2022

Date Analyzed (1): 05/02/2022

Instrument: 10GCSF

LCS Lot No: 358262

Lab File ID: 050222R.B\0502R0000032B.D

SDG No.: 10606046

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
Diesel Fuel Range	50.0	41.4	83	50-150
Motor Oil Range	50.0	46.6	93	50-150

Spike Recovery: 0 out of 2 outside limits.

GC-FID DRO - FORM III SVOA-1  
SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Minnesota

Matrix Spike - Sample No: 4307905MS

Date Extracted: 04/29/2022

Date Analyzed (1): 05/02/2022

Instrument: 10GCSF

Lab File ID: 050222R.B\0502R0000034B.D

Parent Sample ID: 10606463001

SDG No.: 10606046

COMPOUND	SPIKE ADDED (mg/kg)	SAMPLE CONCENTRATION (mg/kg)	MS CONCENTRATION (mg/kg)	MS %REC	QC LIMITS REC.
Diesel Fuel Range	49.0	ND	41.2	83	50-150
Motor Oil Range	49.0	ND	46.9	88	50-150

Spike Recovery: 0 out of 2 outside limits.



GC-FID DRO - FORM III SVOA-2  
SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 10GCSF Matrix Spike Duplicate - Sample No: 4307906MSD  
 Lab File ID (2): 050222R.B\0502R0000035B.D Date Analyzed (2): 05/02/2022

COMPOUND	SPIKE ADDED (mg/kg)	MSD CONCENTRATION (mg/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Diesel Fuel Range	49.2	39.4	79	5	0-30	50-150
Motor Oil Range	49.2	46.9	88	0	0-30	50-150

RPD: 0 out of 2 outside limits.

Spike Recovery: 0 out of 2 outside limits.

GC-FID DRO - FORM IV SVOA-1  
SEMI-VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

4307793BLANK

Lab Name: Pace Analytical - Minnesota SDG No.: 10606046 Contract: D3593500  
Instrument ID: 10GCSF Matrix: Solid Lab Sample ID: 4307793  
Lab File ID: 050222R.B\0502R0000031B.D Date Analyzed: 05/02/2022 Time: 19:37

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
4307794LCS	4307794	050222R.B\0502R0000032B.	05/02/2022 19:46
BNSF-SG13-042522-0-1.5	10606046001	050222R.B\0502R0000038.D	05/02/2022 20:42

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BNSF-SG13-042522-0-1.5

Lab Name: Pace Analytical - Minnesota Contract: D3593500  
Date Received: 04/27/2022 08:50 Matrix: Solid SDG No.: 10606046  
Date Extracted: 04/29/2022 17:05 Lab Sample ID: 10606046001  
Date Analyzed: 05/02/2022 20:42 Lab File ID: 050222R.B\0502R0000038.D  
Initial wt/vol: 10.11 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: 27.7%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	ND	U
	Motor Oil Range	28.5	

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AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000038.D  
 Lab Smp Id: 10606046001 Client Smp ID: BNSF-SG13-042522-0-  
 Inj Date : 02-MAY-2022 20:42  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 10606046001  
 Misc Info : 39248  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050222R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 06-May-2022 08:44 rgustafson Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 32  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.110	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	27.717	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
\$ 2	o-Terphenyl (S)					CAS #:
2.712	2.713	-0.001	261798	39.0468	5.34	(M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.260	4.262	-0.002	204071	38.8605	5.32	(M) BA
S 10	Motor Oil Range					CAS #:
3.651	- 6.100		1033570	207.955	28.4	(M) RNG
S 11	Motor Oil Range SG					CAS #:
3.651	- 6.100		1033570	207.955	28.4	(M) RNG
S 8	Diesel Fuel Range					CAS #:
1.350	- 3.650		493631	37.0752	5.07	(M) RNG
S 9	Diesel Fuel Range SG					CAS #:
1.350	- 3.650		493631	37.0752	5.07	(M) RNG

QC Flag Legend

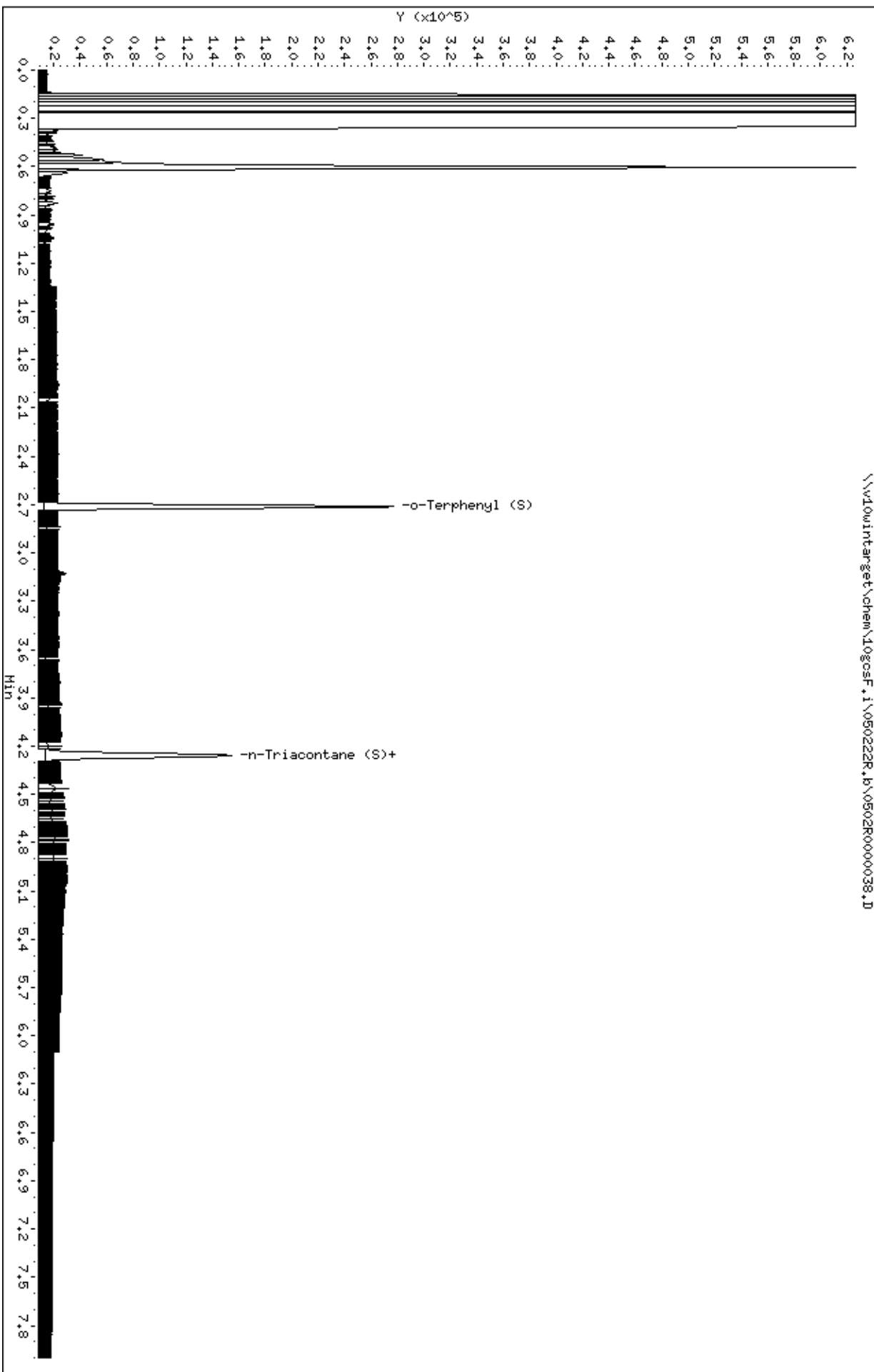
M - Compound response manually integrated.

Review Codes Legend

- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.

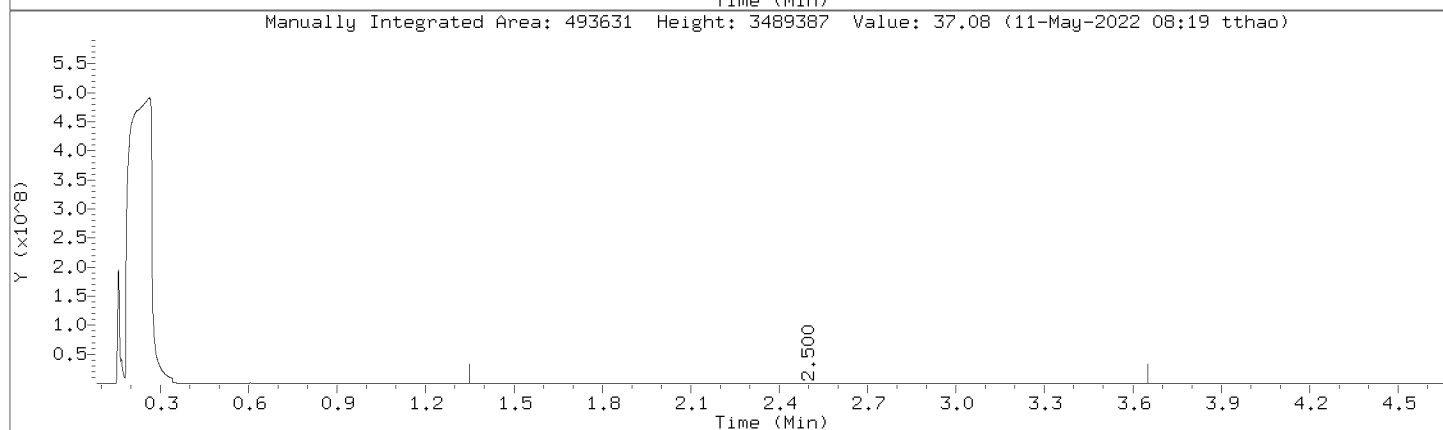
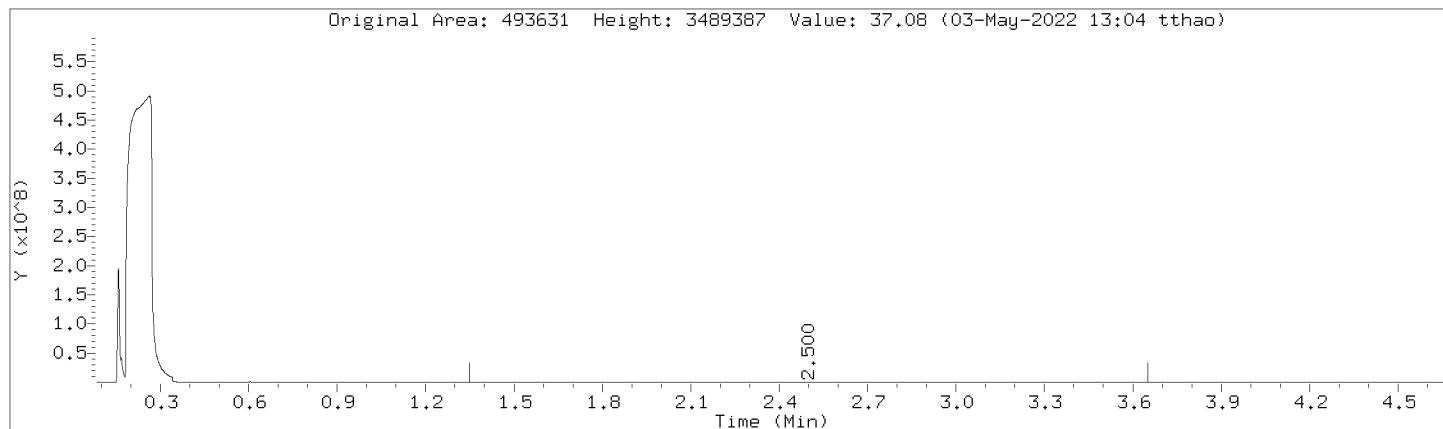
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Date : 02-MAY-2022 20:42  
Client ID: BNSF-SGL3-042522-0-  
Sample Info: 10606046001  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21430033

Instrument: 10goscF.1  
Operator: TT2  
Column diameter: 0.32



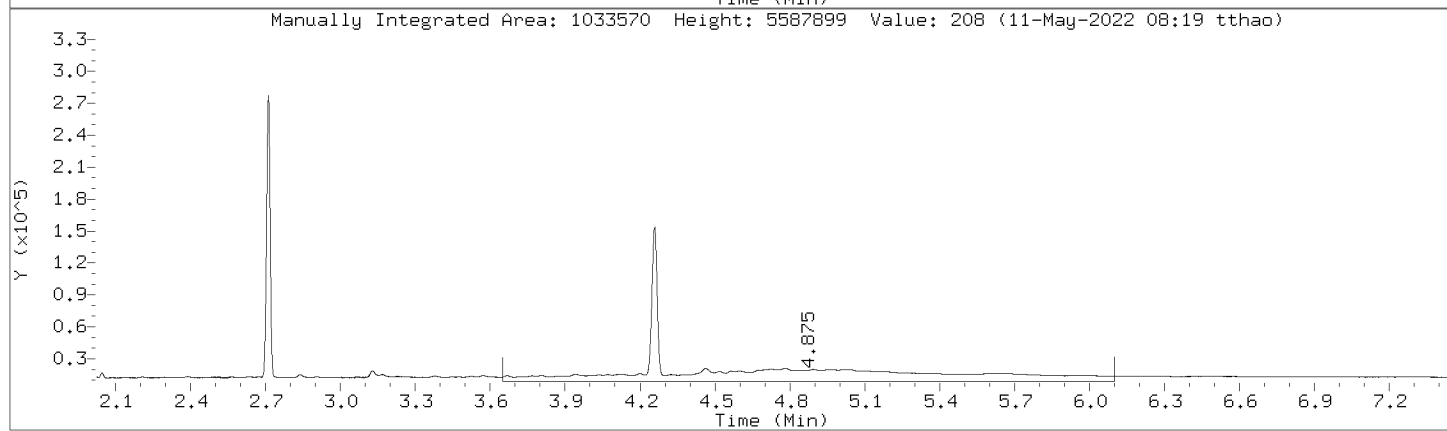
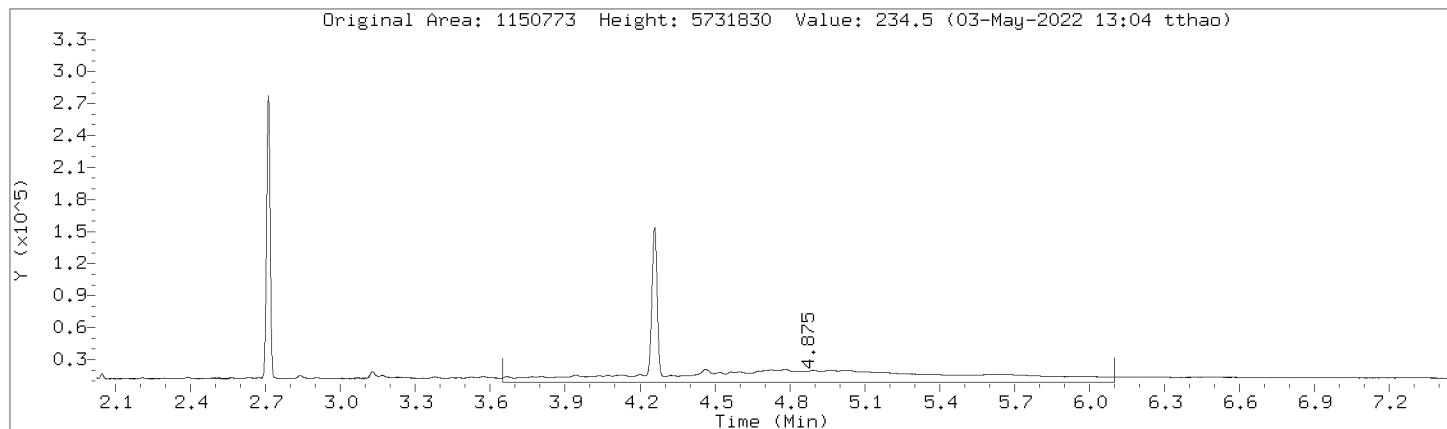
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000038.D  
Injection Date: 02-MAY-2022 20:42  
Instrument: 10gcsF.i  
Lab Sample ID: 10606046001

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000038.D  
Injection Date: 02-MAY-2022 20:42  
Instrument: 10gcsF.i  
Lab Sample ID: 10606046001

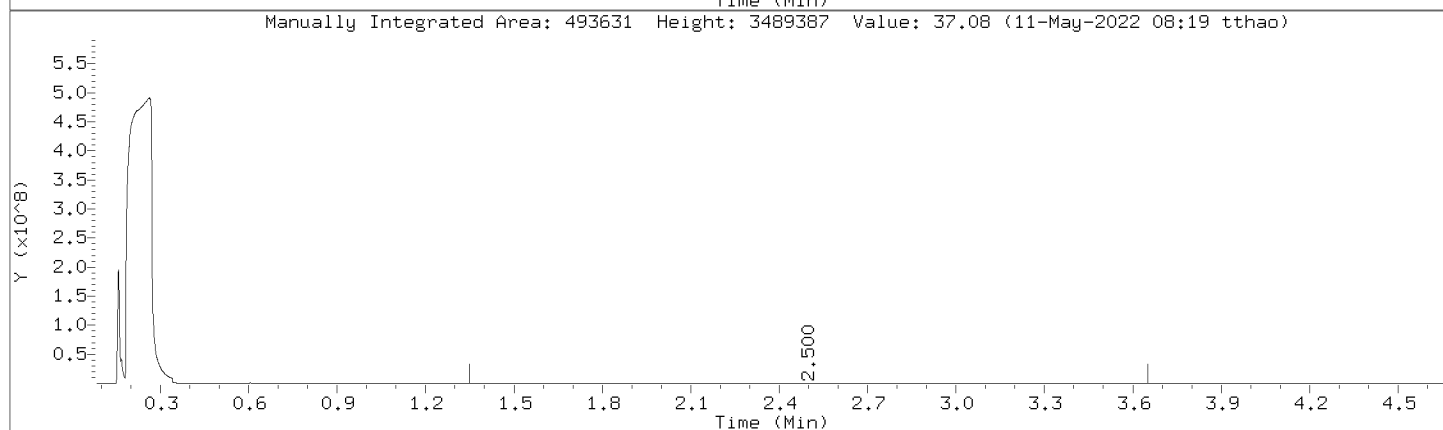
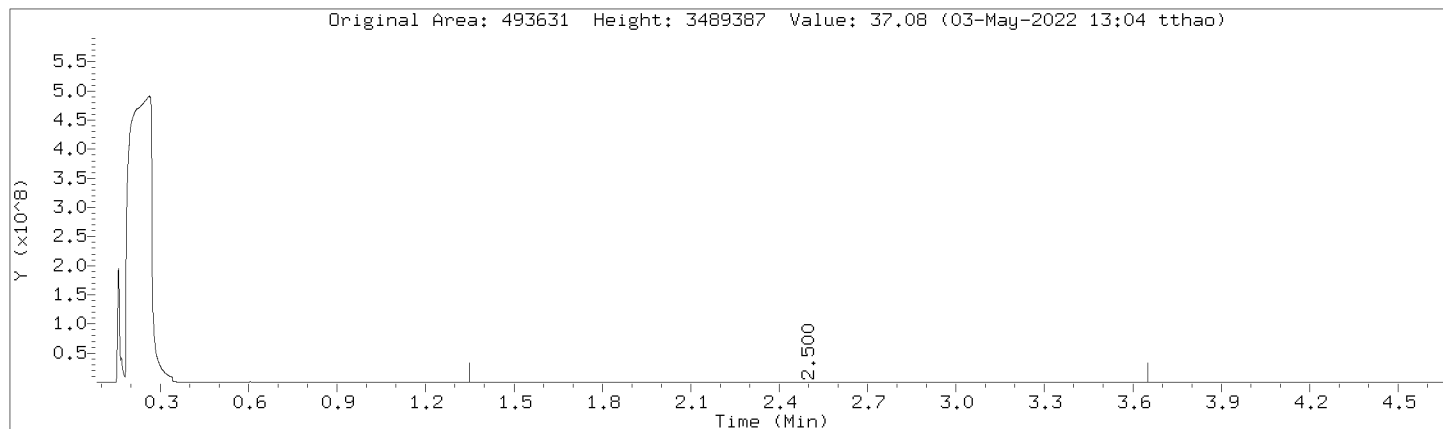
Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





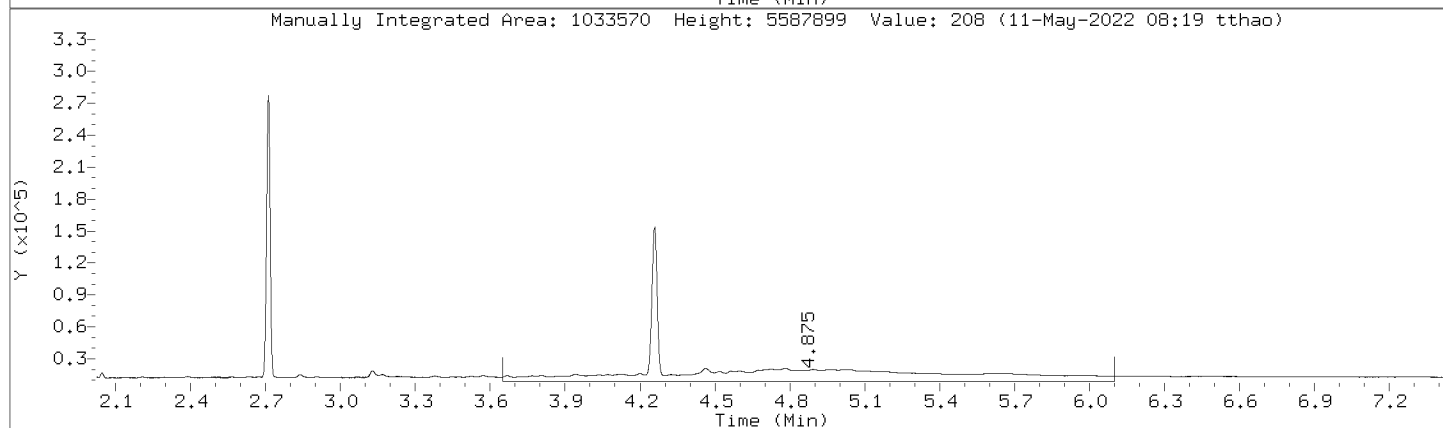
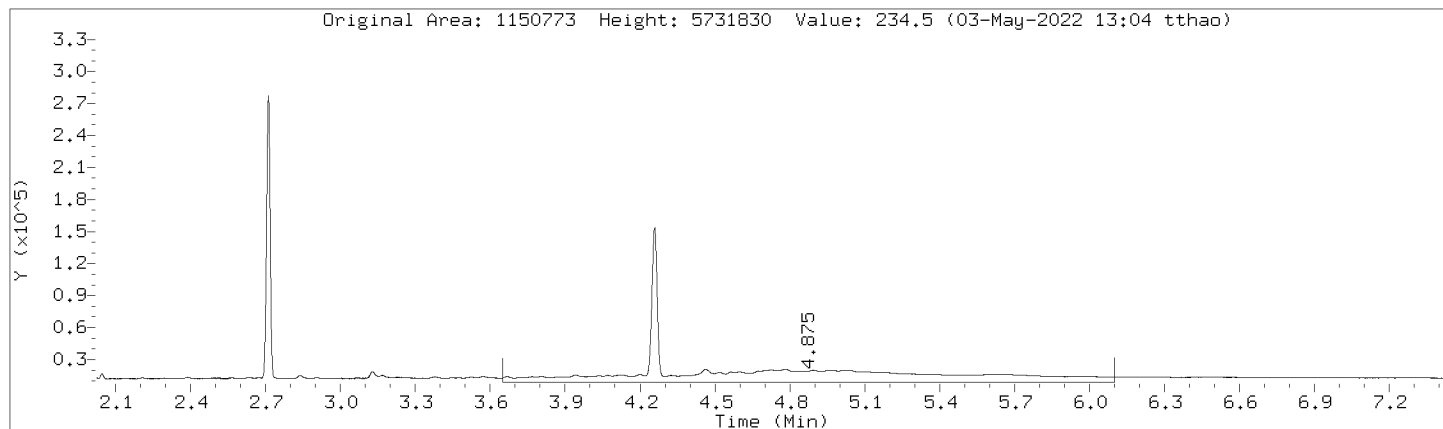
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Injection Date: 02-MAY-2022 20:42  
Instrument: 10gcsF.i  
Lab Sample ID: 10606046001

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



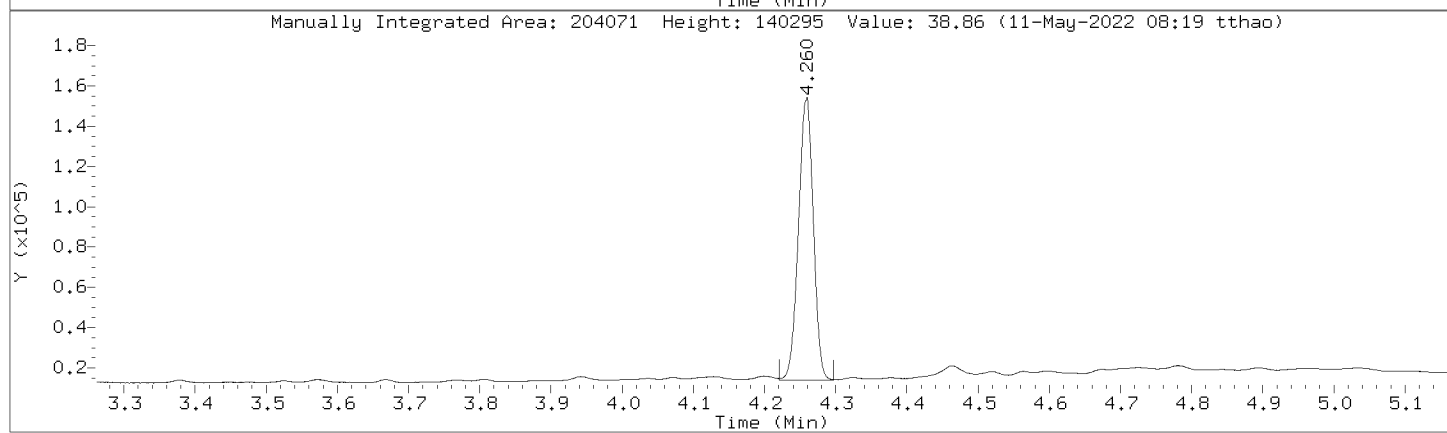
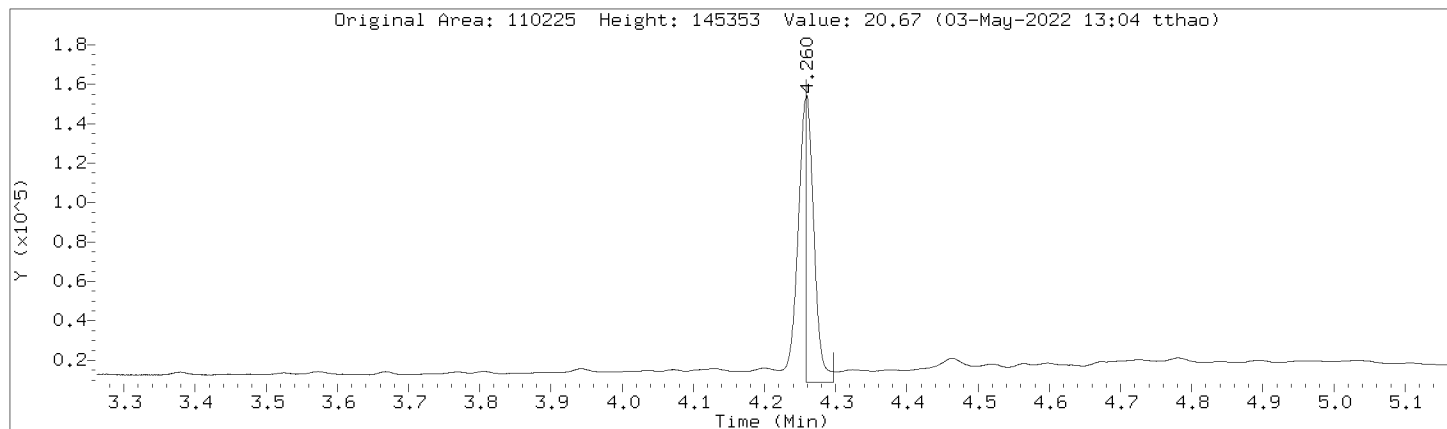
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Injection Date: 02-MAY-2022 20:42  
Instrument: 10gcsF.i  
Lab Sample ID: 10606046001

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



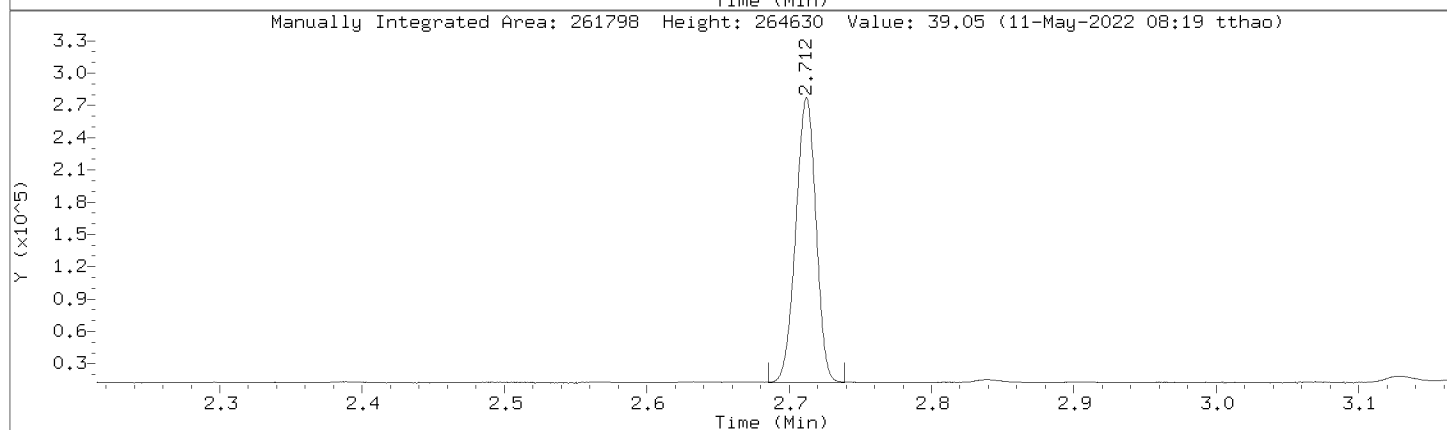
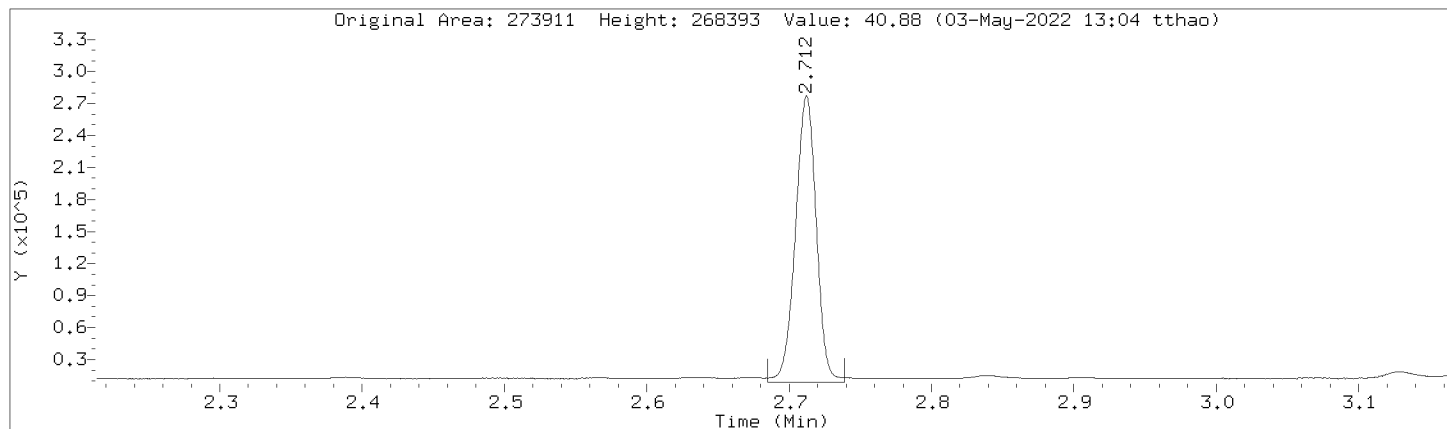
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000038.D  
Injection Date: 02-MAY-2022 20:42  
Instrument: 10gcsF.i  
Lab Sample ID: 10606046001

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000038.D  
 Injection Date: 02-MAY-2022 20:42  
 Instrument: 10gcsF.i  
 Lab Sample ID: 10606046001

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	493631	493631
Motor Oil Range	1150773	1033570
Diesel Fuel Range SG	493631	493631
Motor Oil Range SG	1150773	1033570
n-Triacontane (S)	110225	204071
o-Terphenyl (S)	273911	261798

GC-FID DRO - FORM VI SVOA-1  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10606046  
 Calibration Date(s): 04/27/2022 04/27/2022 Calibration Time(s): 13:00 14:42

**LAB FILE ID**

CAL1 = 042722R.B\0427R0000008.D CAL2 = 042722R.B\0427R0000009.D CAL3 = 042722R.B\0427R0000010.D  
 CAL4 = 042722R.B\0427R0000011.D CAL5 = 042722R.B\0427R0000012.D CAL6 = 042722R.B\0427R0000013.D  
 CAL7 = 042722R.B\0427R0000014.D CAL8 = 042722R.B\0427R0000015.D CAL9 = 042722R.B\0427R0000016.D  
 CAL10 = 042722R.B\0427R0000017.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
Diesel Fuel Range	Linear		32799.2000	15994.5600	10516.6800	7598.3000	6137.9160
Motor Oil Range	Linear		15156.0000	8573.0400	6184.1400	5184.0300	4861.4360
n-Triacontane (S)	Linear		4770.0000	5078.8000	5142.4000	5157.2000	5290.4800
o-Terphenyl (S)	Linear		6499.0000	6898.4000	6828.0000	6766.1000	6784.8000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VI SVOA-2  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10606046  
 Calibration Date(s): 04/27/2022 04/27/2022 Calibration Time(s): 13:00 14:42

**LAB FILE ID**

CAL1 = 042722R.B\0427R0000008.D CAL2 = 042722R.B\0427R0000009.D CAL3 = 042722R.B\0427R0000010.D  
 CAL4 = 042722R.B\0427R0000011.D CAL5 = 042722R.B\0427R0000012.D CAL6 = 042722R.B\0427R0000013.D  
 CAL7 = 042722R.B\0427R0000014.D CAL8 = 042722R.B\0427R0000015.D CAL9 = 042722R.B\0427R0000016.D  
 CAL10 = 042722R.B\0427R0000017.D

COMPOUND	CURVE TYPE	CAL7	CAL8	CAL9	CAL10
Diesel Fuel Range	Linear	5514.4620	5194.6480	5002.1655	4874.0325
Motor Oil Range	Linear	4701.7520	4563.5490	4504.7180	4426.8685
n-Triacontane (S)	Linear	5326.0000	5282.2800	5221.2450	5151.8275
o-Terphenyl (S)	Linear	6798.7200	6709.3900	6640.3250	6603.0700

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VI SVOA-3  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10606046  
 Calibration Date(s): 04/27/2022 04/27/2022 Calibration Time(s): 13:00 14:42

**LAB FILE ID**

CAL1 = 042722R.B\0427R0000008.D CAL2 = 042722R.B\0427R0000009.D CAL3 = 042722R.B\0427R0000010.D  
 CAL4 = 042722R.B\0427R0000011.D CAL5 = 042722R.B\0427R0000012.D CAL6 = 042722R.B\0427R0000013.D  
 CAL7 = 042722R.B\0427R0000014.D CAL8 = 042722R.B\0427R0000015.D CAL9 = 042722R.B\0427R0000016.D  
 CAL10 = 042722R.B\0427R0000017.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Diesel Fuel Range	Linear		0.99994	315322.471	4809.38081	
Motor Oil Range	Linear		0.99996	116539.639	4409.74584	
n-Triacontane (S)	Linear		0.99993	3541.89337	5160.23183	
o-Terphenyl (S)	Linear		0.99998	3963.03758	6603.23461	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000007.D  
 Lab Smp Id: DMO-RTM,362403:2 Client Smp ID: DMO-RTM,362403:2  
 Inj Date : 27-APR-2022 12:49  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-rtm,362403:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 77  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/mL)	(ug/mL)	REVIEW CODE
====	=====	=====	=====	=====	=====	=====
S	1	DRO by AK 102				CAS #:
0.885	-	3.540	2305153	338.845	339	
-----						
\$	2	o-Terphenyl (S)				CAS #:
Compound Not Detected.						
-----						
\$	3	n-Triacontane (S)				CAS #:
Compound Not Detected.						
-----						
S	4	Residual Range Organics AK103				CAS #:
3.541	-	5.020	2128603	578.081	578	
-----						
S	5	TPH-DRO (C10-C28)				CAS #:
0.885	-	4.099	3703303	503.789	504	
-----						
S	6	Motor Oil Range (C24-C36)				CAS #:
3.400	-	5.020	2815723	742.120	742	
-----						
S	7	C10-C36				CAS #:
0.885	-	5.020	4433757	858.994	859	
-----						
S	8	Diesel Fuel Range				CAS #:
1.340	-	3.580	1622920	271.885	272	
-----						
S	9	Diesel Fuel Range SG				CAS #:
1.340	-	3.580	1622920	271.885	272	
-----						
S	10	Motor Oil Range				CAS #:
3.581	-	5.740	2620070	567.727	568	
-----						



CONCENTRATIONS					
		ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ug/mL)	(ug/mL)	REVIEW CODE
====	=====	=====	=====	=====	=====
S	11	Motor Oil Range SG		CAS #:	
3.581	-	5.740	2620070	567.727	568

---

Date : 27-APR-2022 12:49

Client ID: DM0-RTM,362403;2

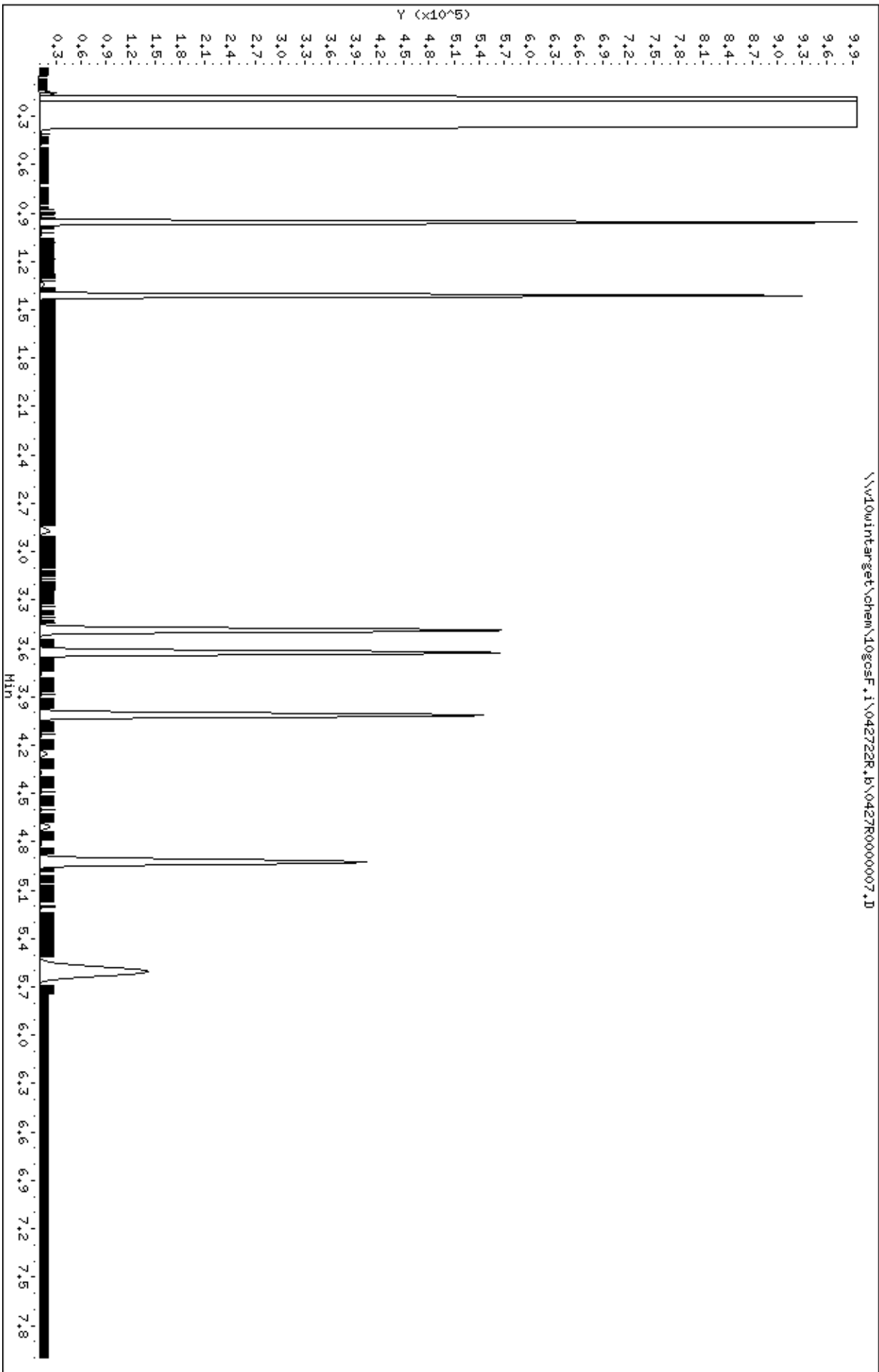
Sample Info: DM0-RTM,362403;2

Instrument: logosf.i

Operator: EB3

Column diameter: 0.32

Column phase: DB-5-US21430033



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000007.D  
Injection Date: 27-APR-2022 12:49  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-RTM,362403:2  
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
 Lab Smp Id: DMO-CAL1,362369:2 Client Smp ID: DMO-CAL1,362369:2  
 Inj Date : 27-APR-2022 13:00  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-call,362369:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 78 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		347320 6.00000		(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.684	2.685 -0.001		3754 0.60000		(MH) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.193	4.193 0.000		2820 0.60000		(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		104920 6.00000		(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		387621 6.00000		(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		119128 6.00000		(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		452378 12.0000		(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		308284 6.00000		(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		308284 6.00000		(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		132846 6.00000	3.70	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		132846 6.00000	3.70	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.  
H - Operator selected an alternate compound hit.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:00

Client ID: DMO-CAL1,362369;2

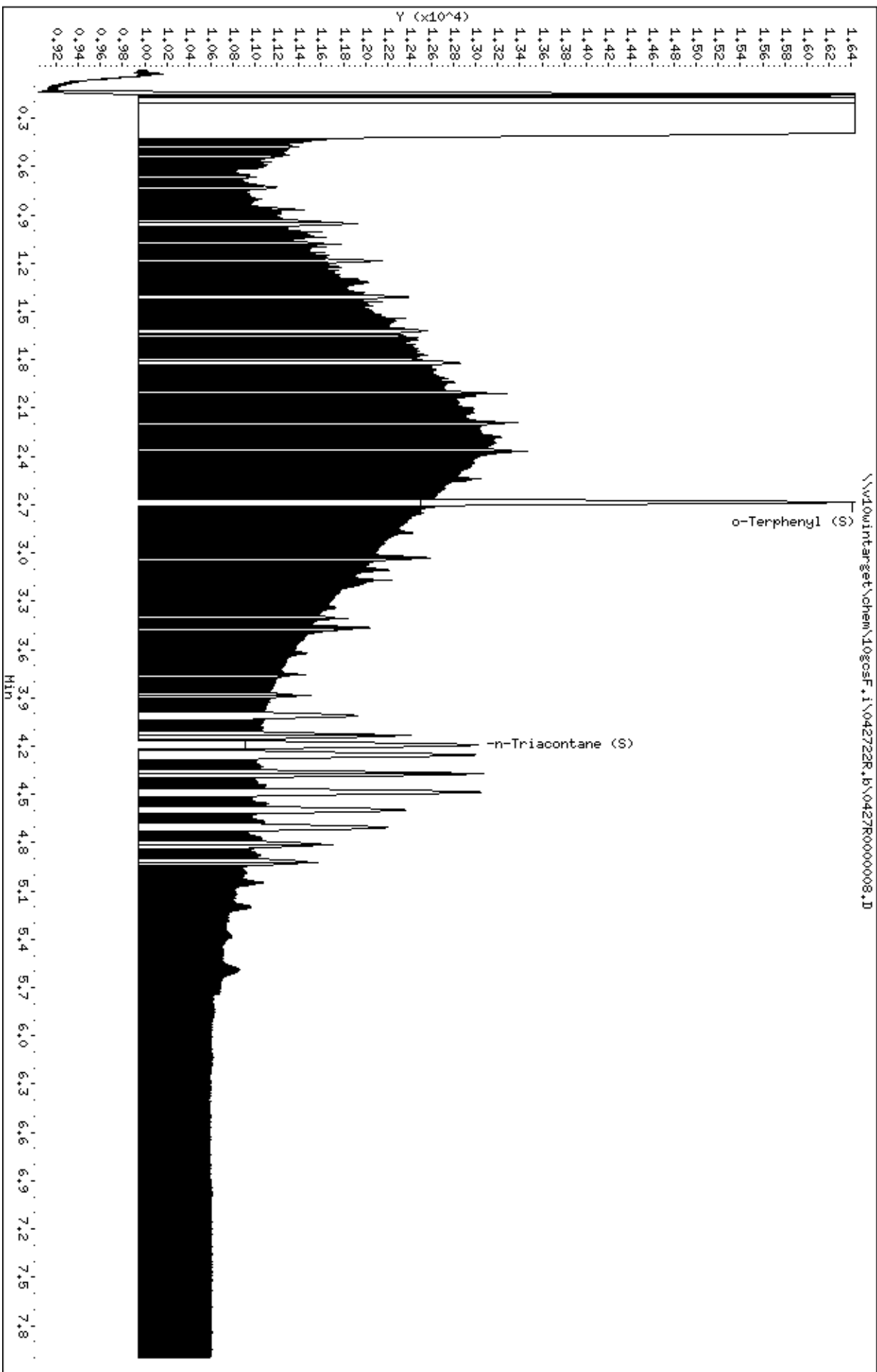
Sample Info: DMO-CAL1,362369;2

Column phase: DB-5-MS21430033

Instrument: 10gosc.f.1

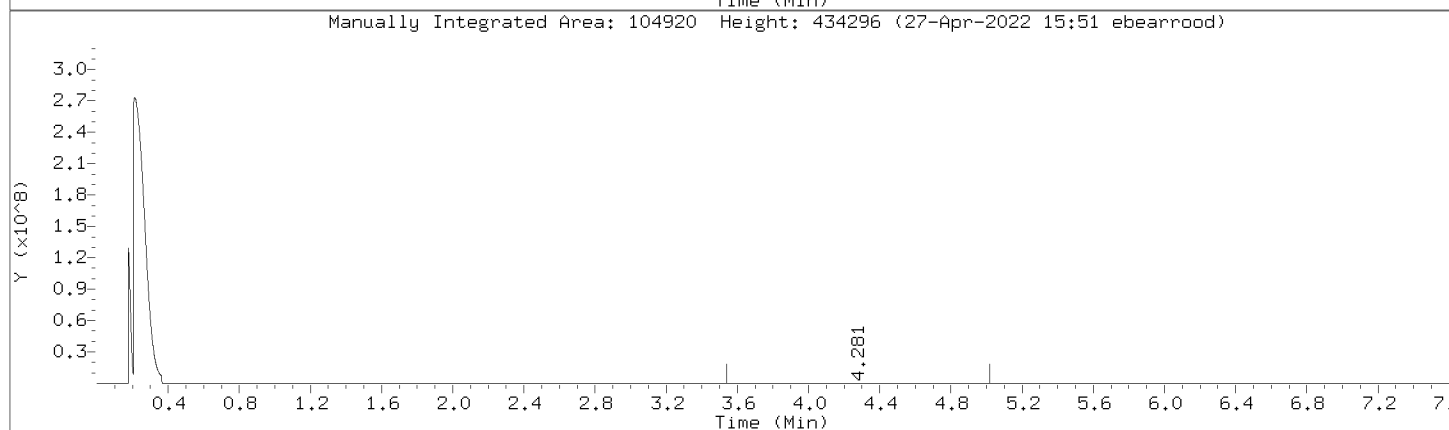
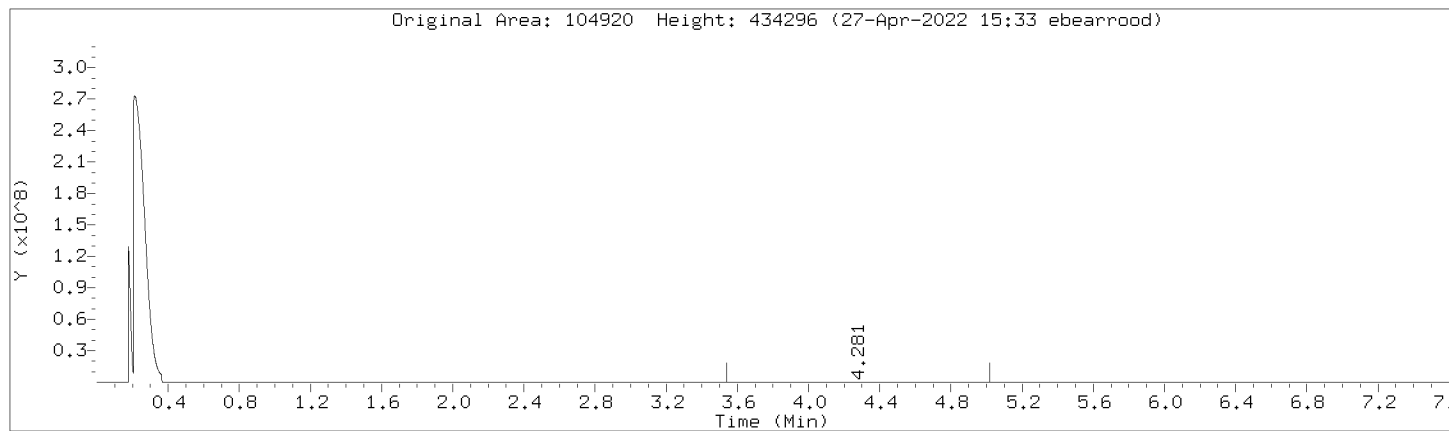
Operator: EB3

Column diameter: 0.32



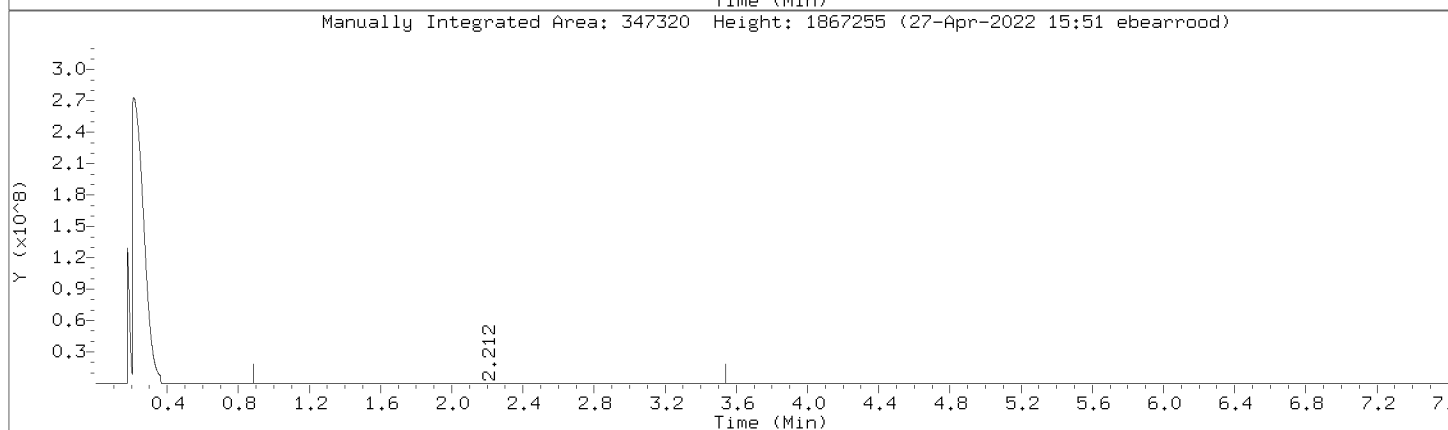
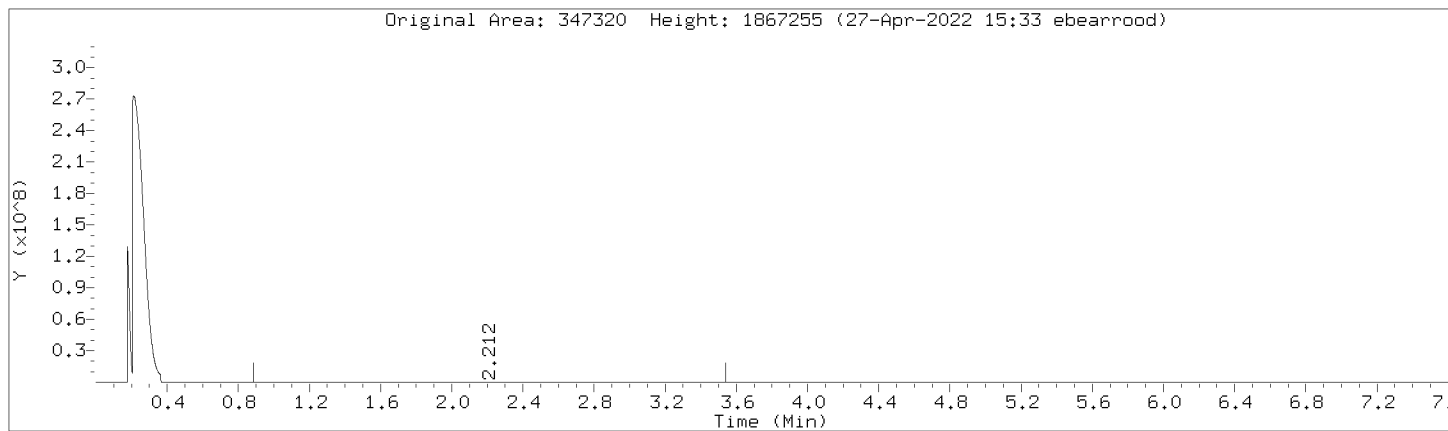
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

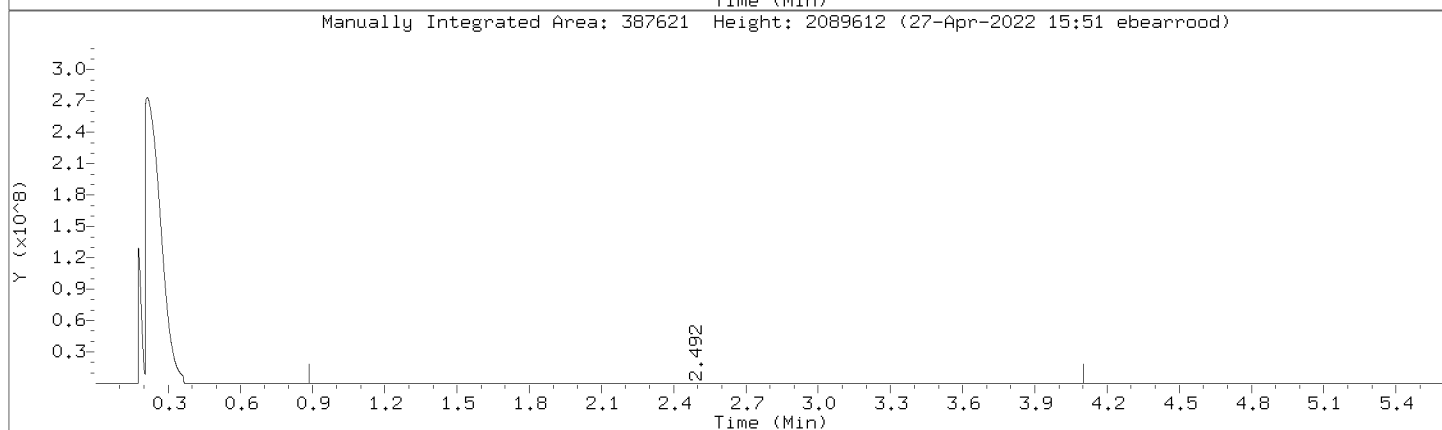
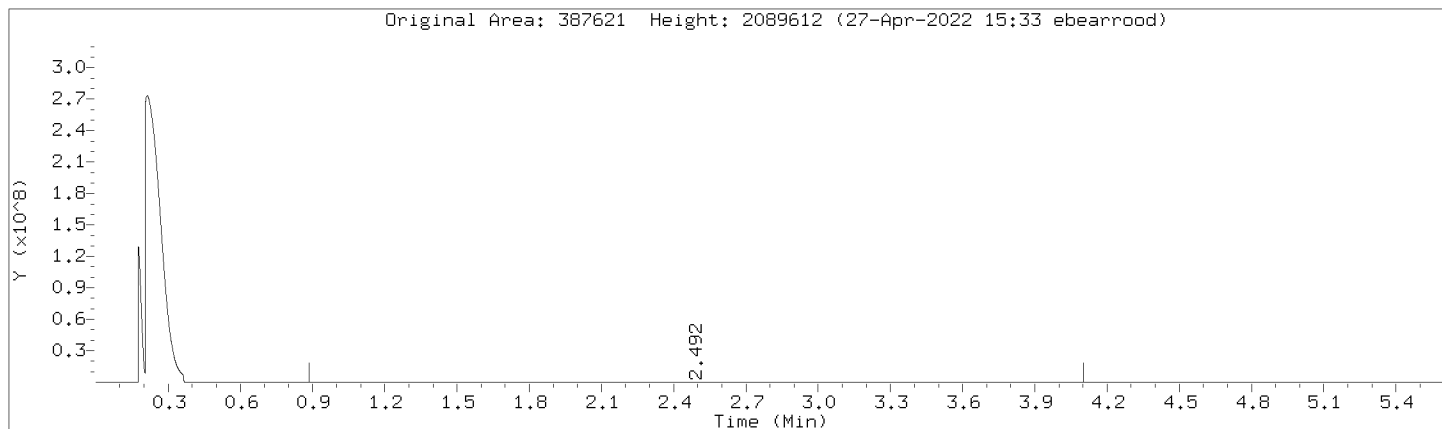
Compound: DRO by AK 102      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

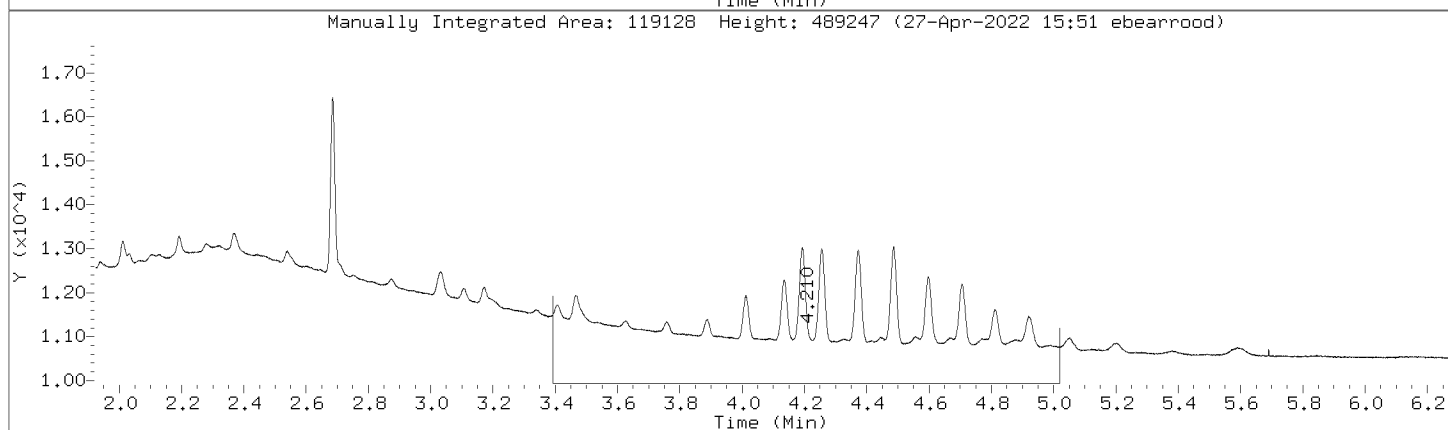
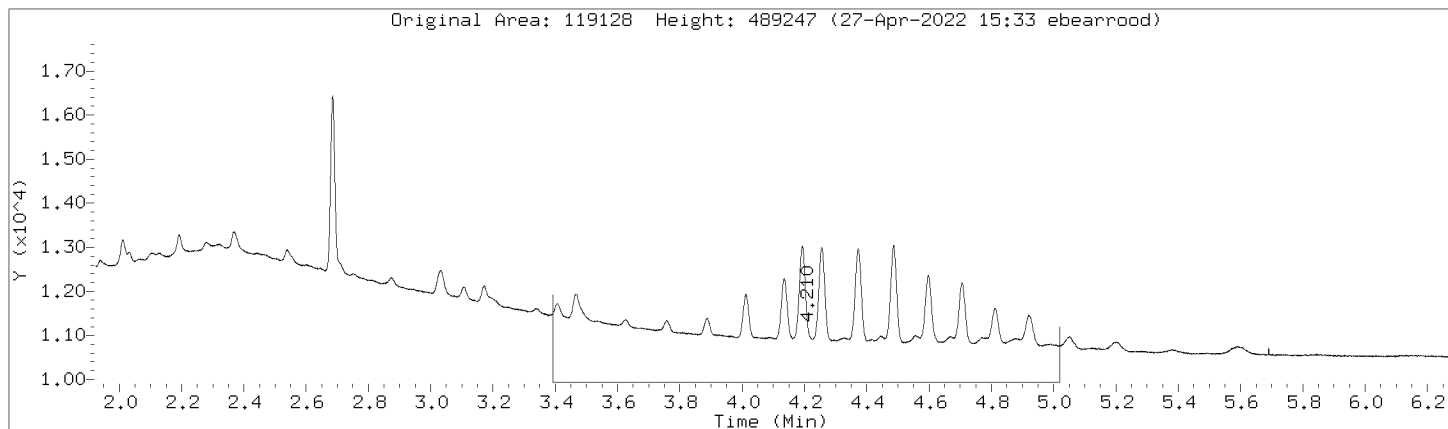
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

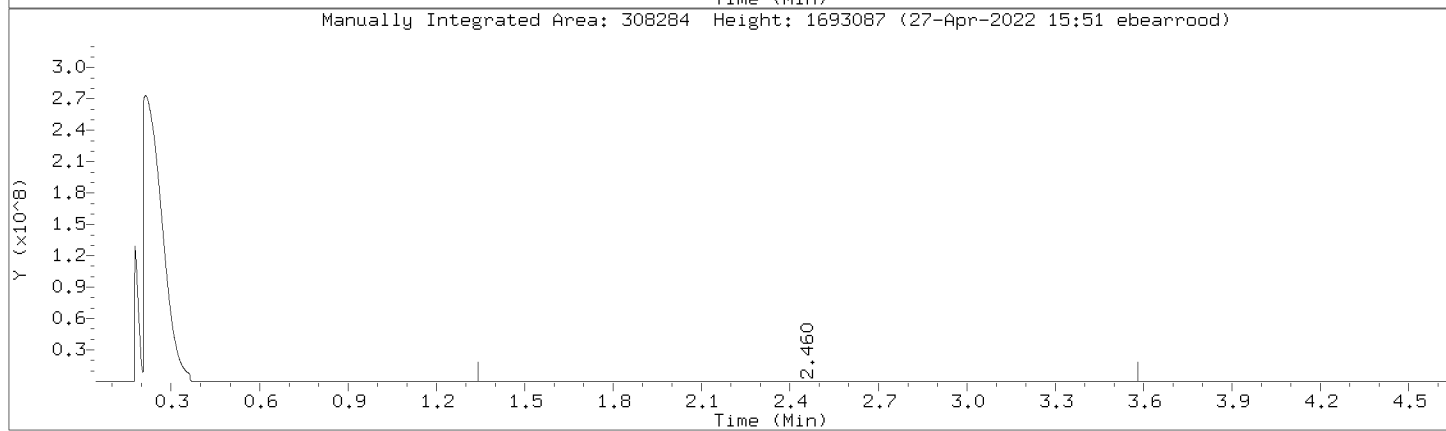
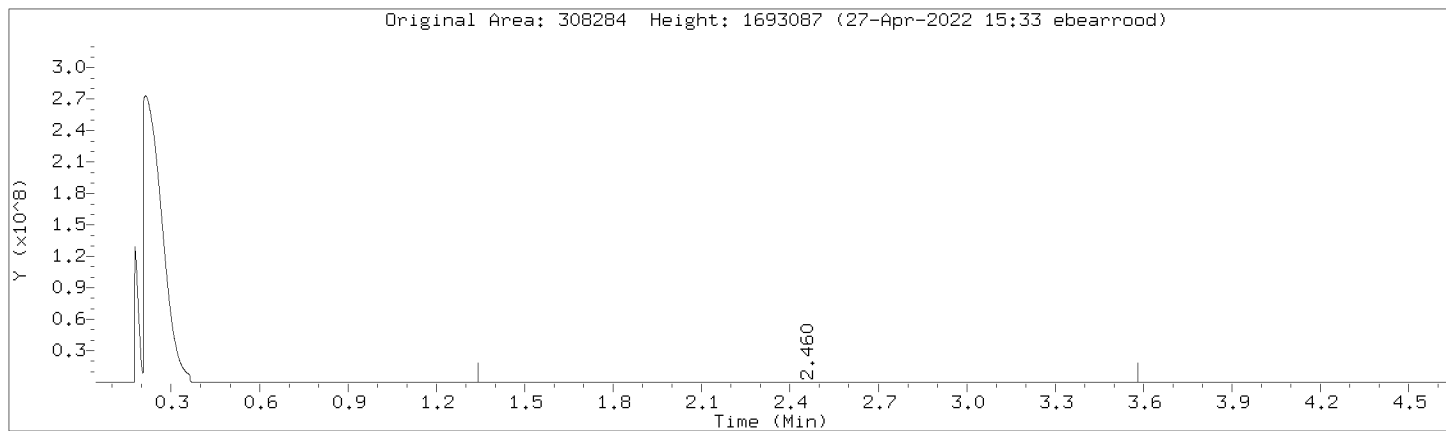
Compound: Motor Oil Range (C24-C36)  
CAS Number:

Review Code: RNG



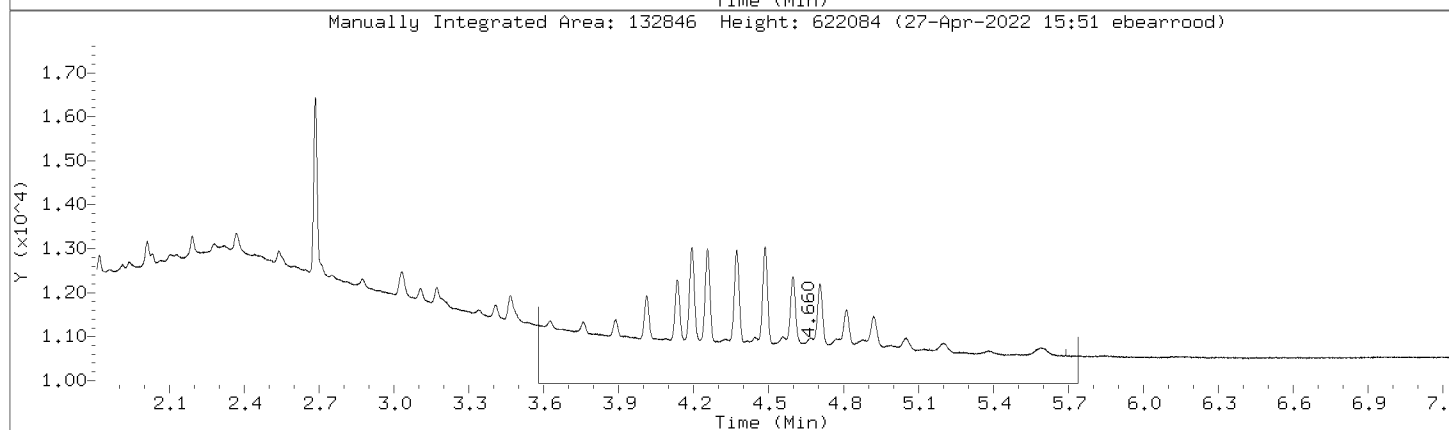
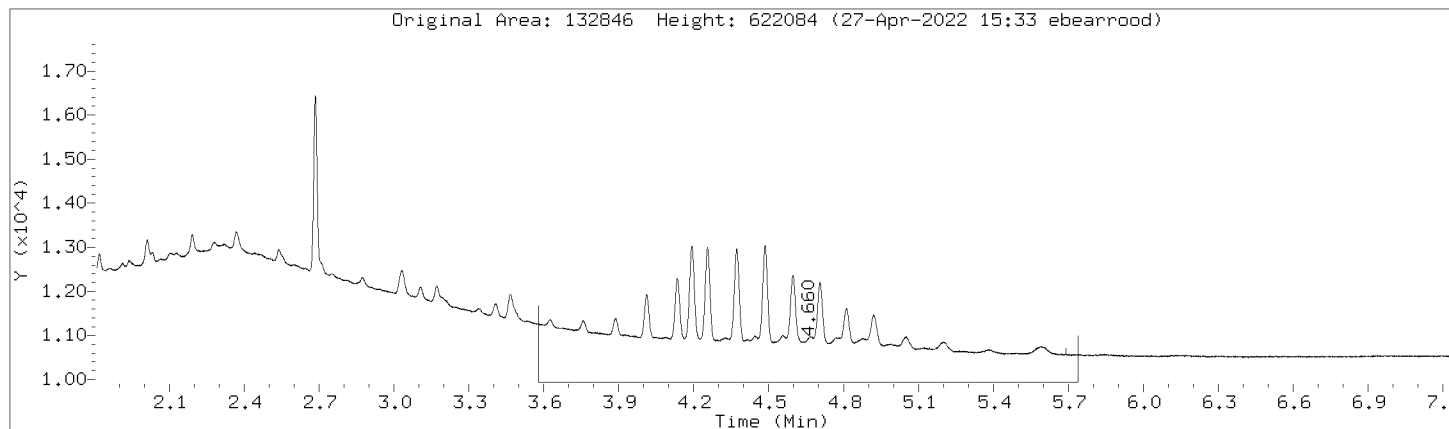
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



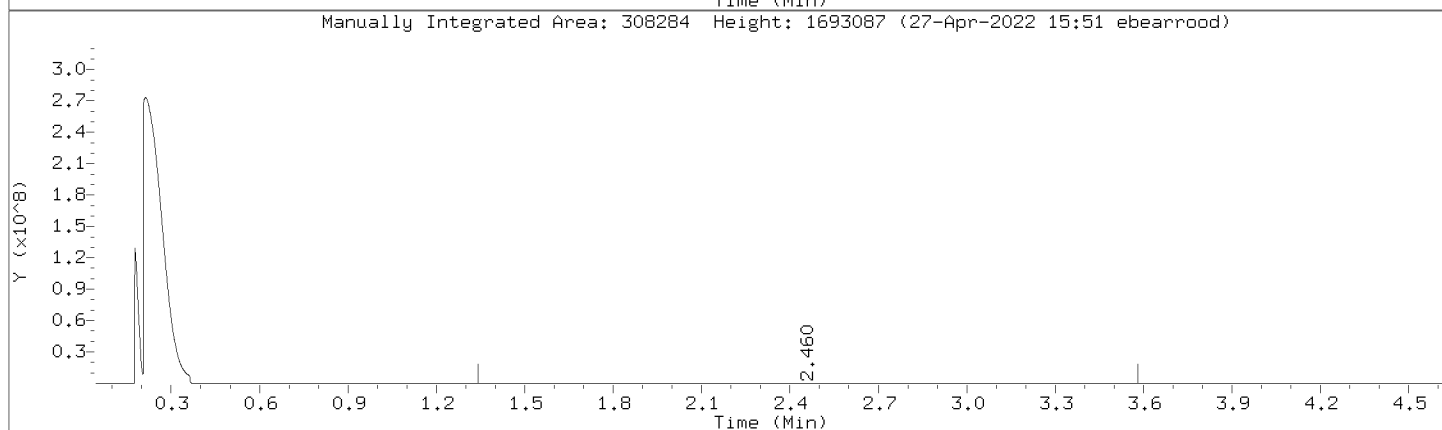
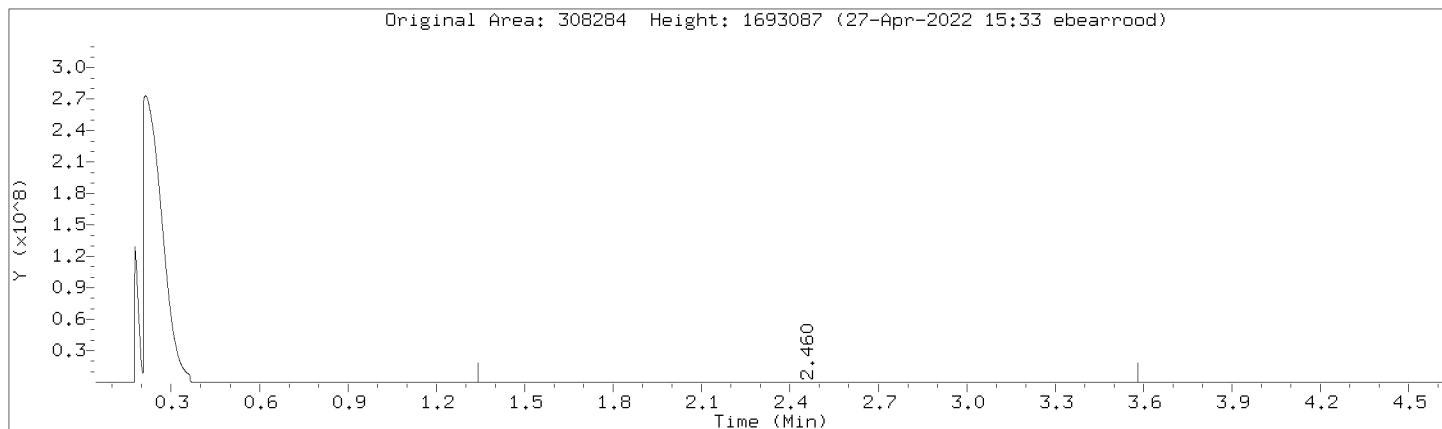
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Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



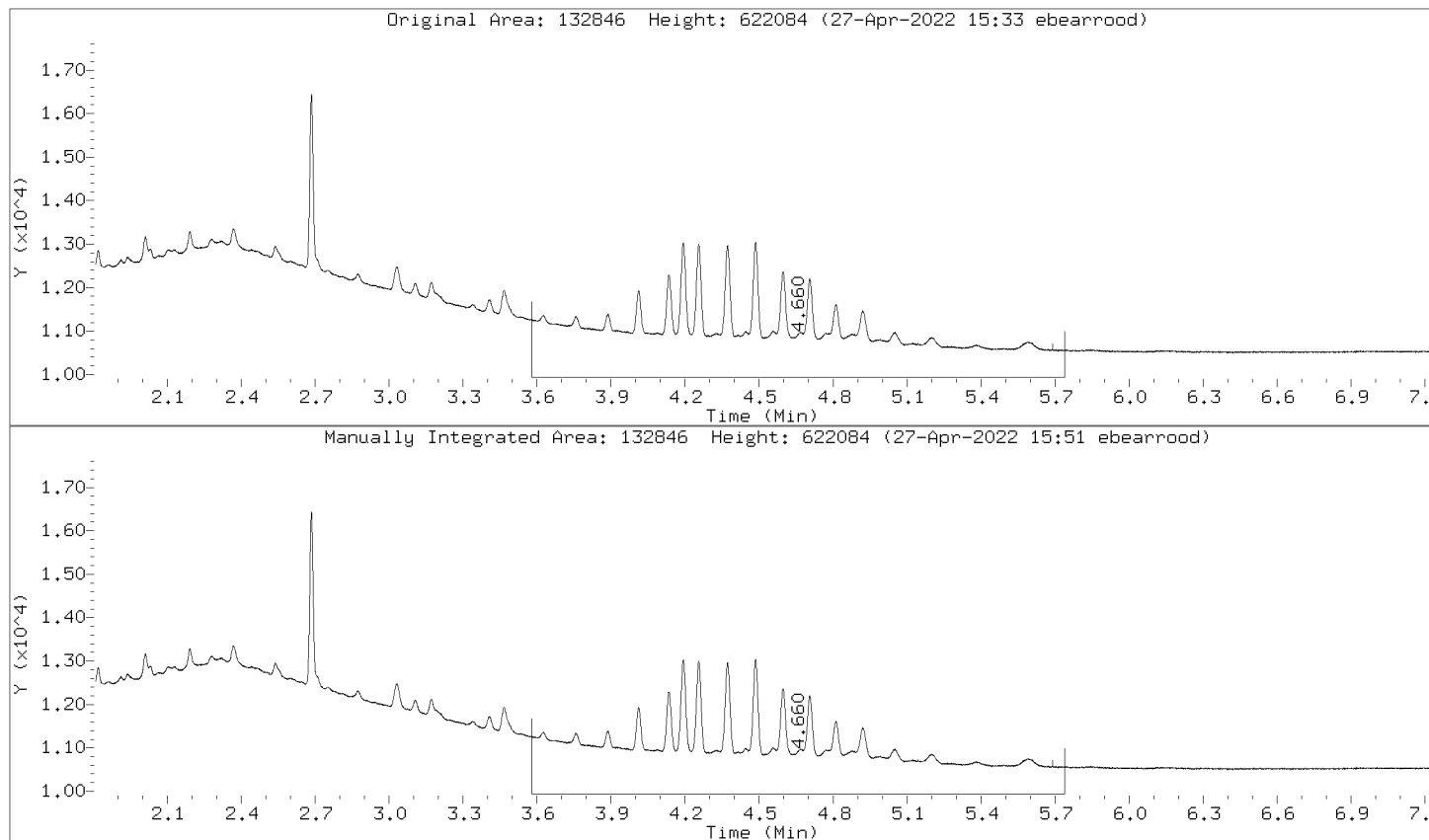
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Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



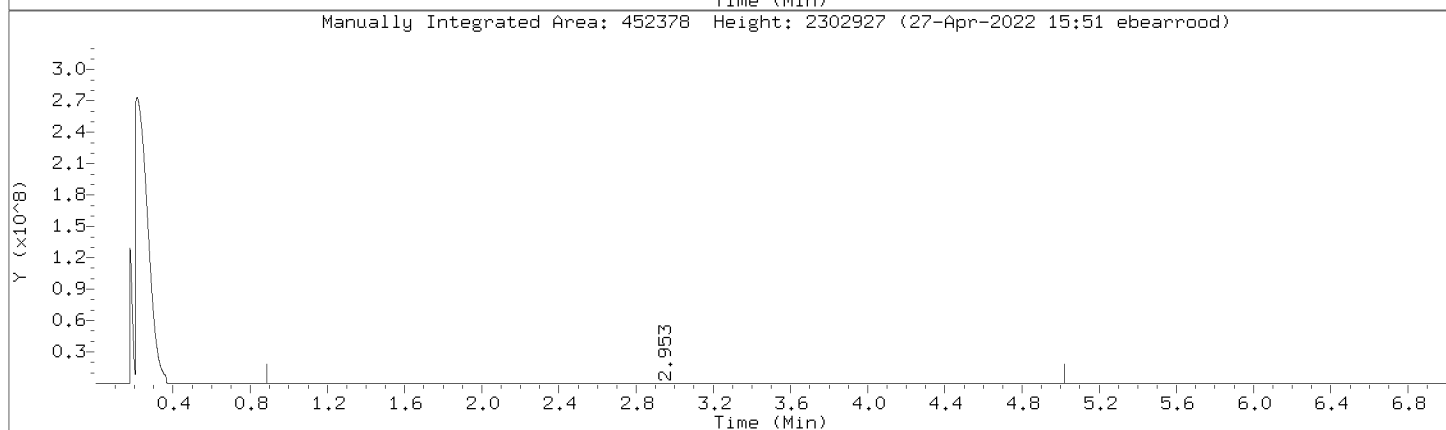
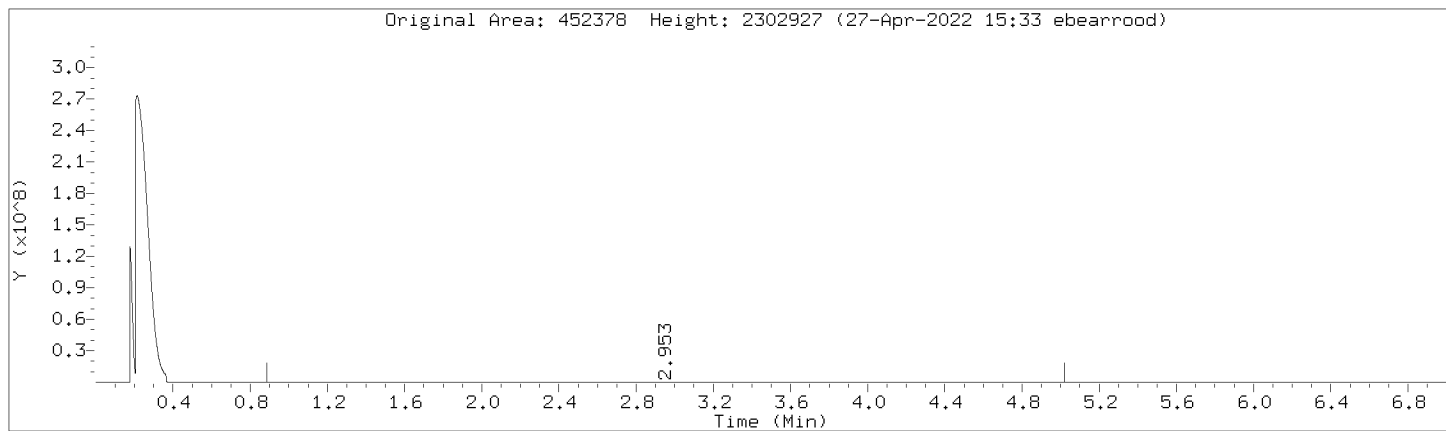
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



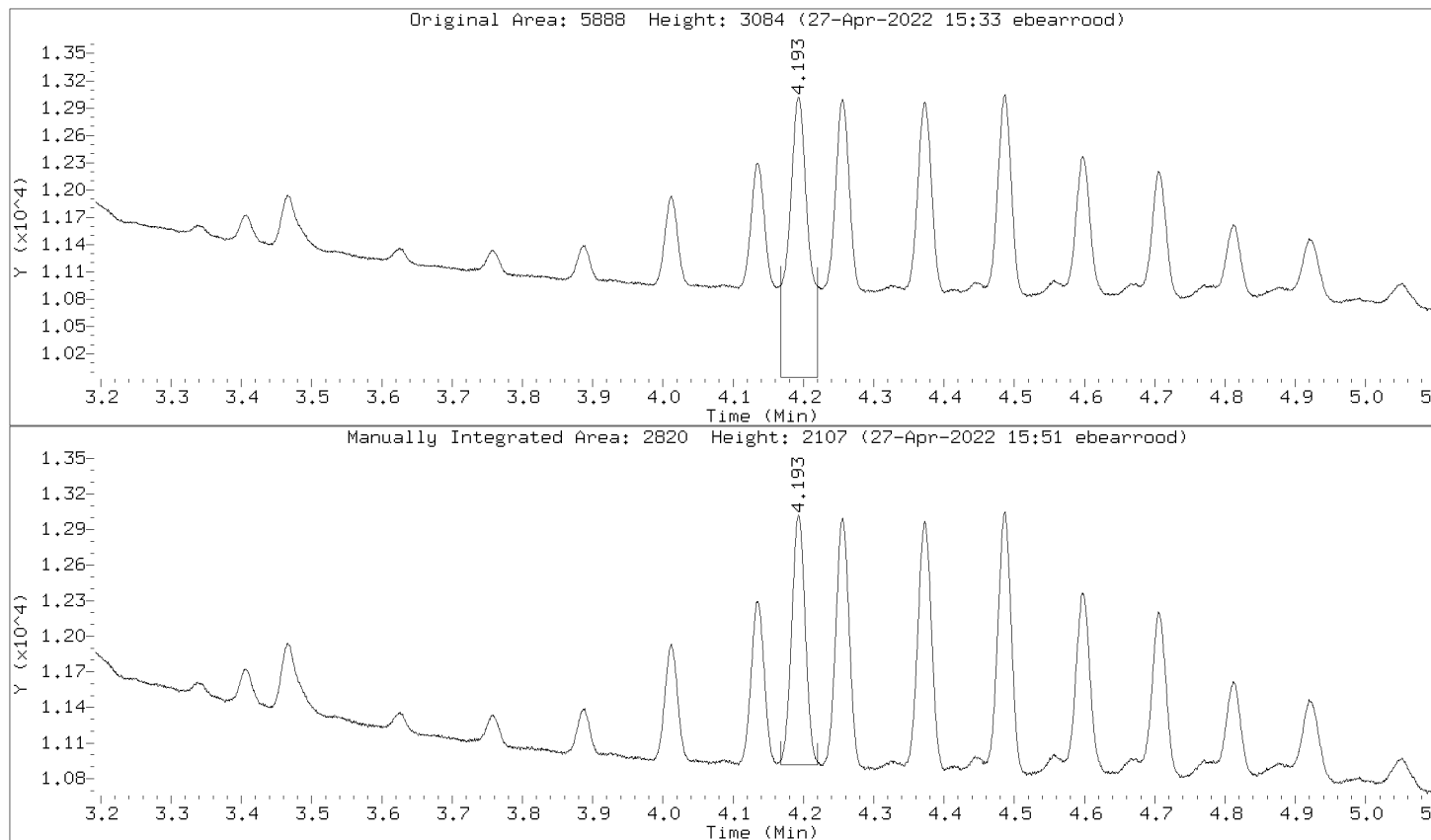
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

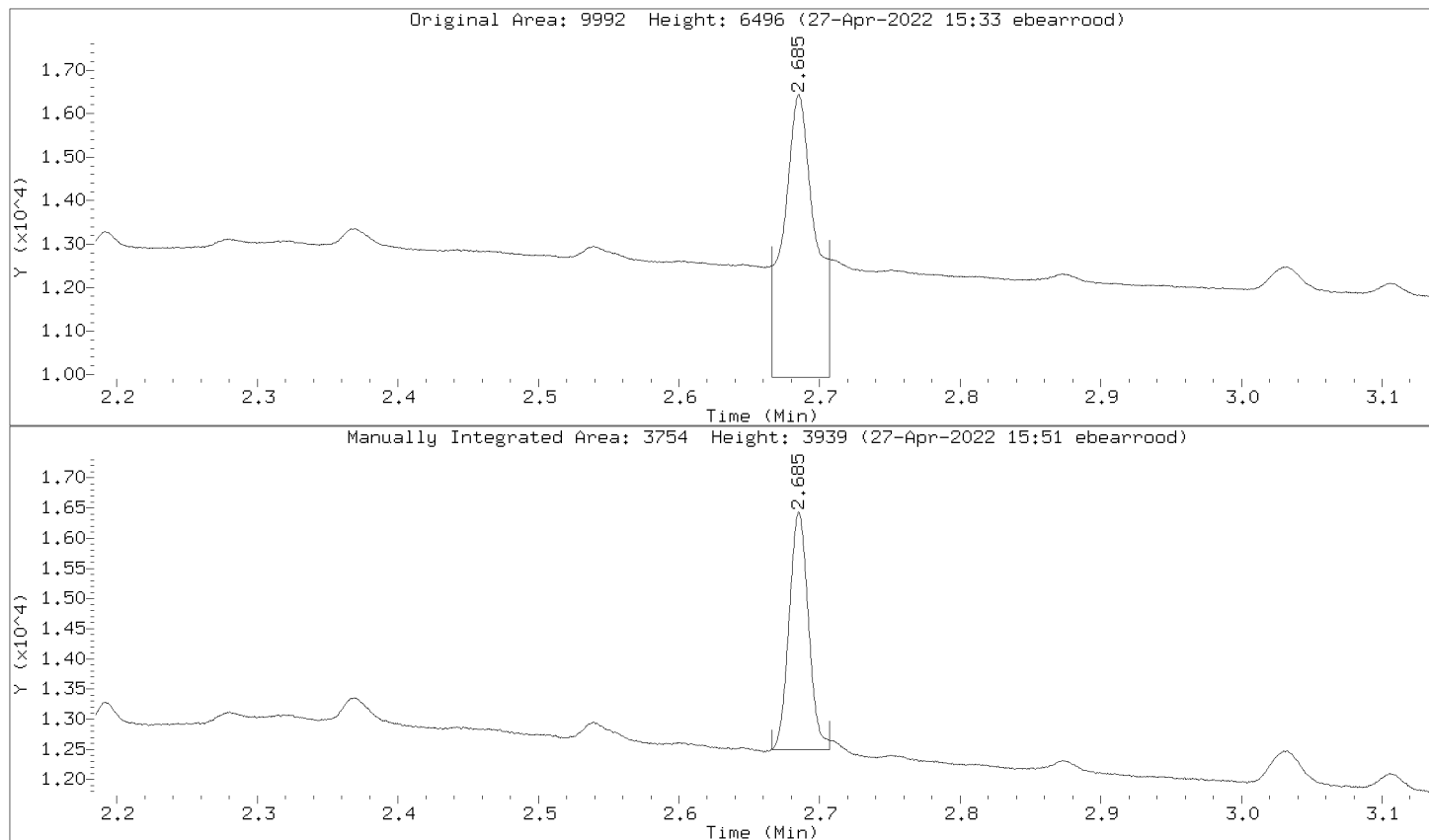
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
 Lab Smp Id: DMO-CAL2,362370:2 Client Smp ID: DMO-CAL2,362370:2  
 Inj Date : 27-APR-2022 13:11  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal2,362370:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 79 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		371077 10.0000	0.708	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.684	2.685 -0.001		6499 1.00000	0.384	(MH) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.193	4.193 0.000		4770 1.00000	0.238	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		121697 10.0000	3.10	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		414945 10.0000	0.851	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		136931 10.0000	2.46	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		493035 20.0000	3.26	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		327992 10.0000	2.63	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		327992 10.0000	2.63	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		151560 10.0000	7.94	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		151560 10.0000	7.94	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.  
H - Operator selected an alternate compound hit.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:11

Client ID: DM0-CAL2.362370:2

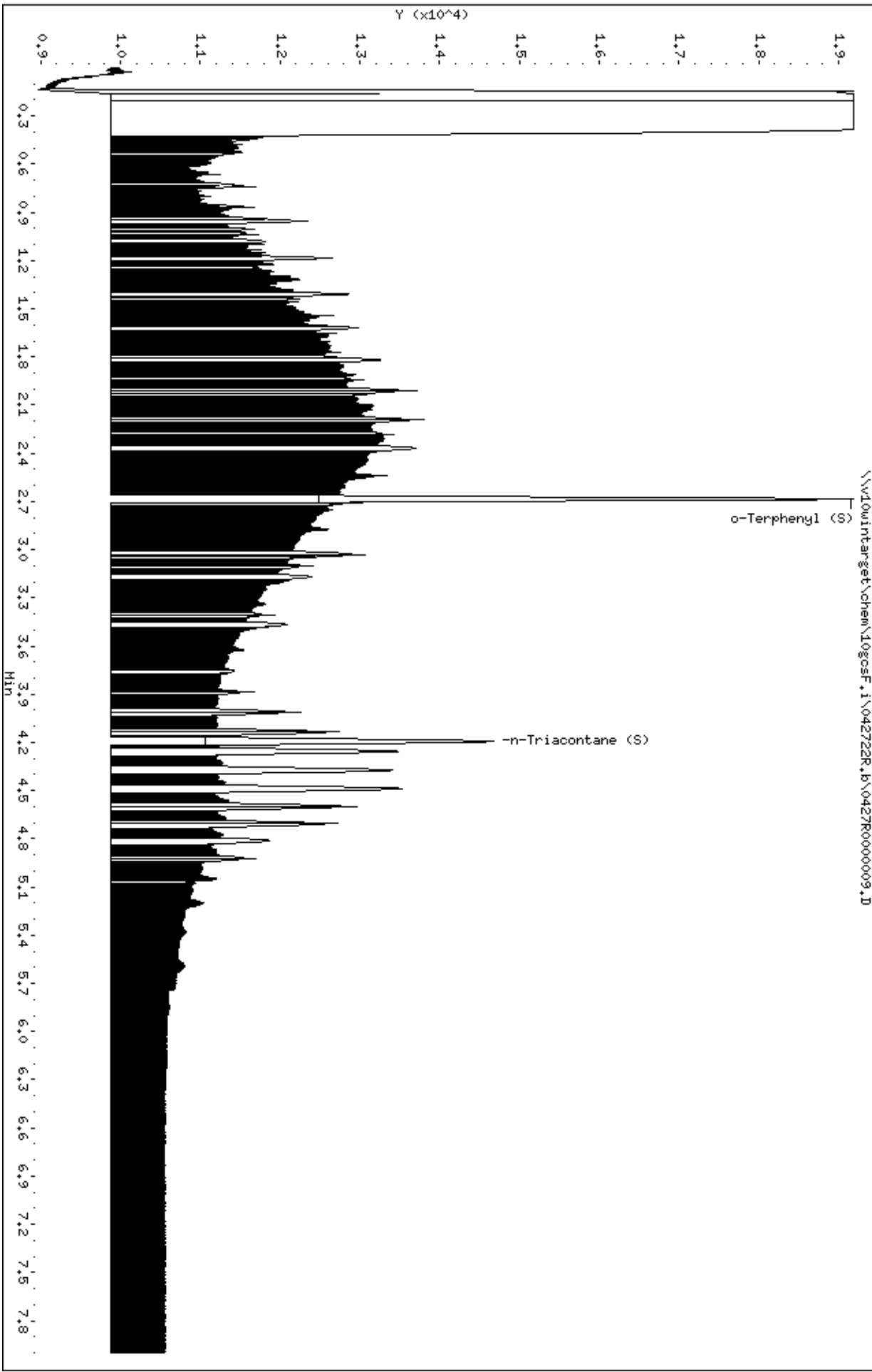
Sample Info: DM0-CAL2.362370:2

Column phase: DB-5-MS21430033

Instrument: 10gocsf.1

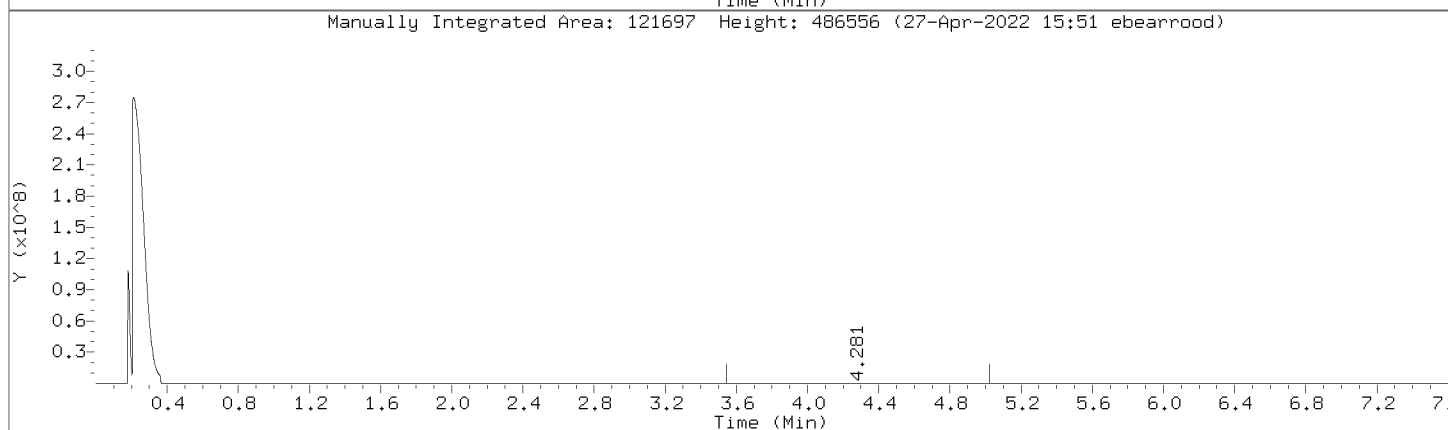
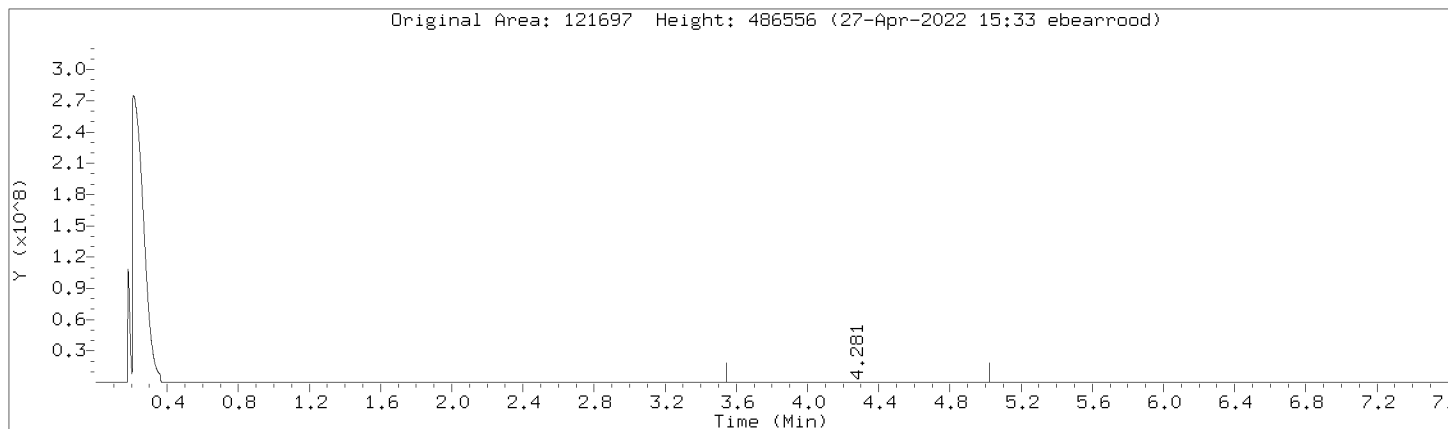
Operator: EB3

Column diameter: 0.32



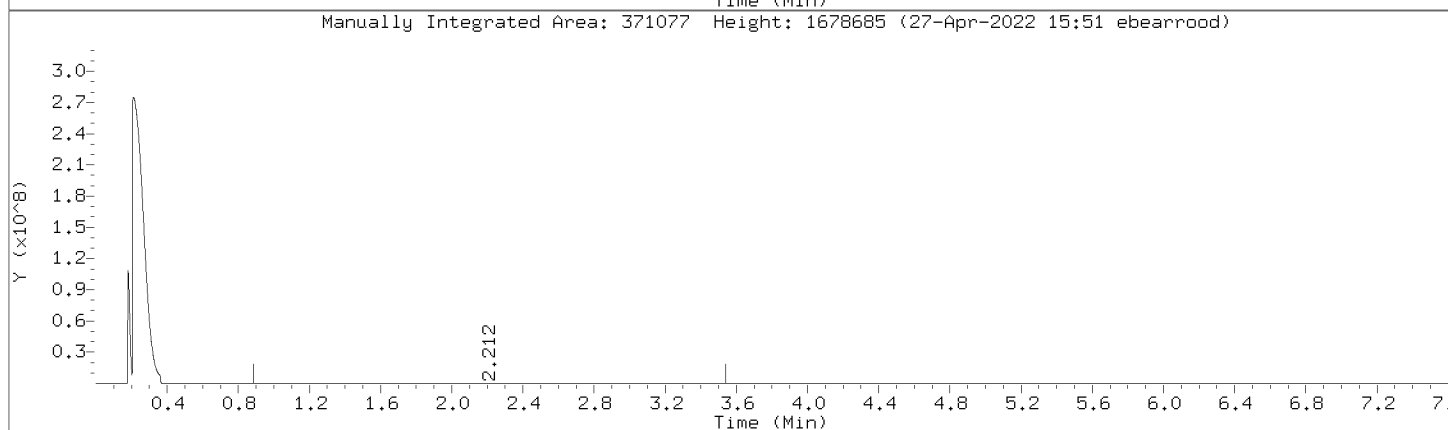
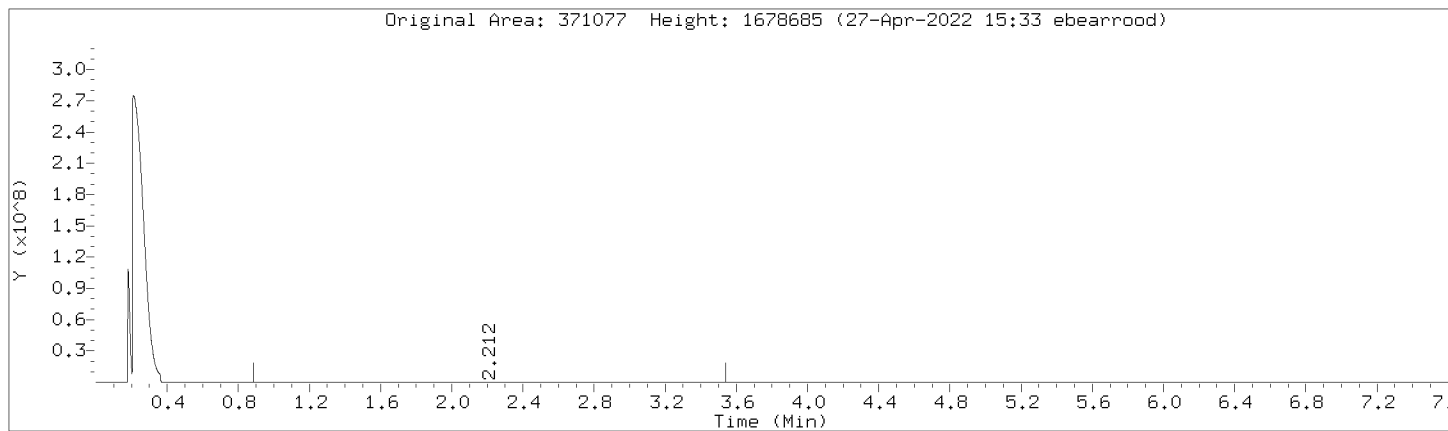
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



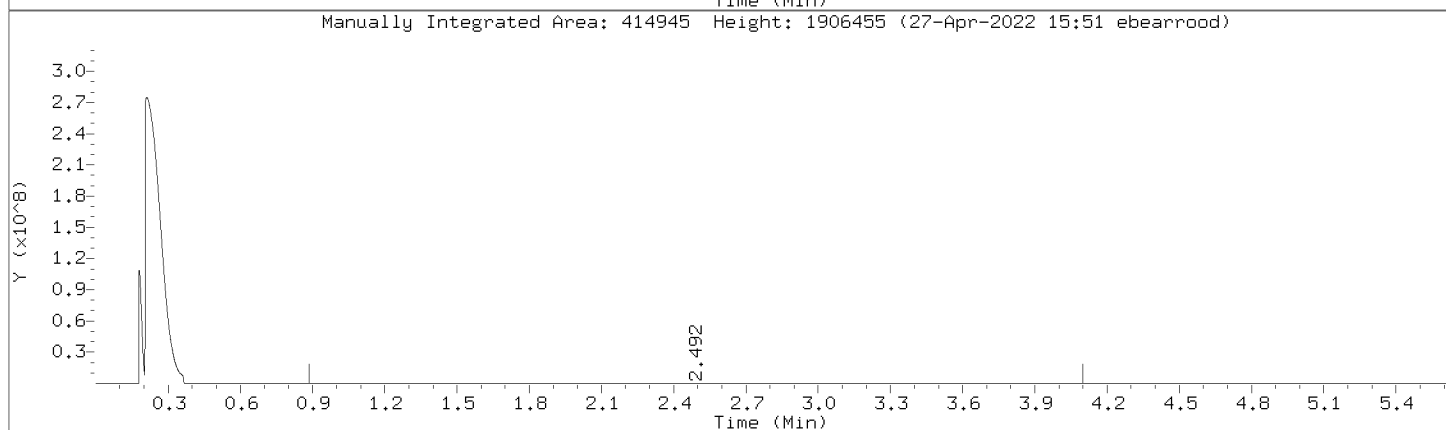
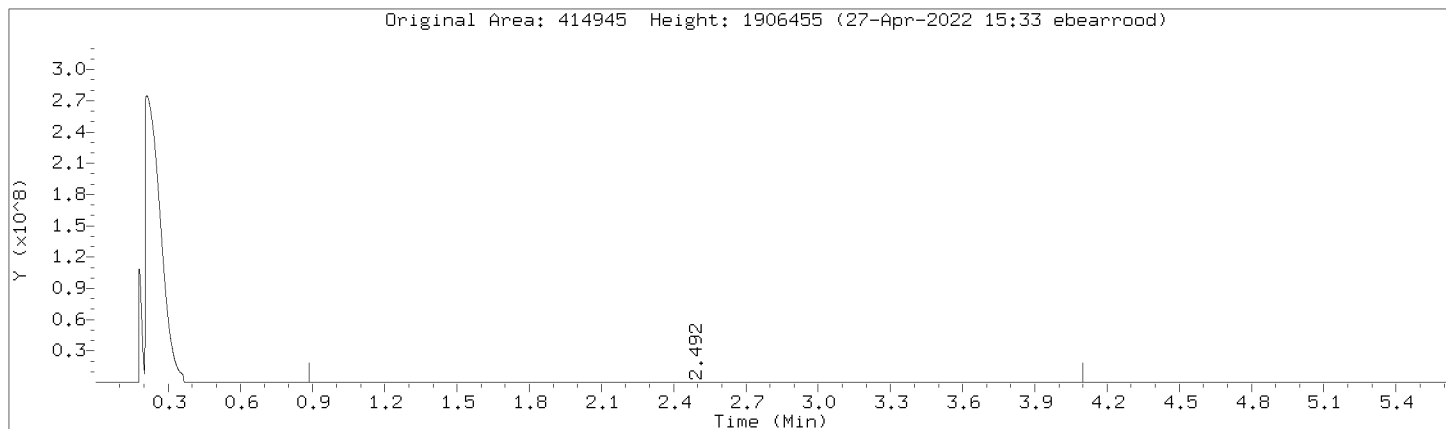
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

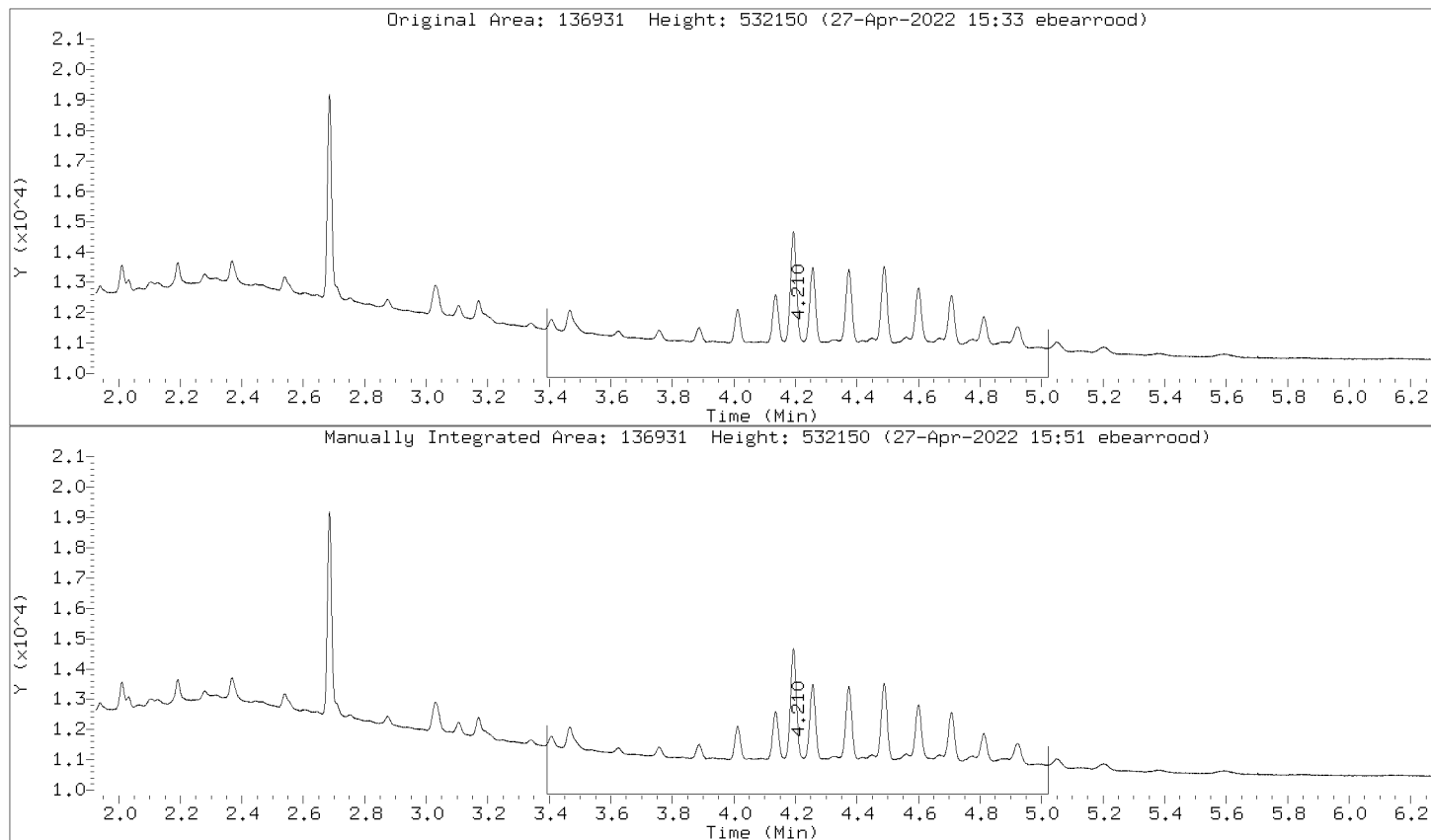
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Motor Oil Range (C24-C36)  
CAS Number:

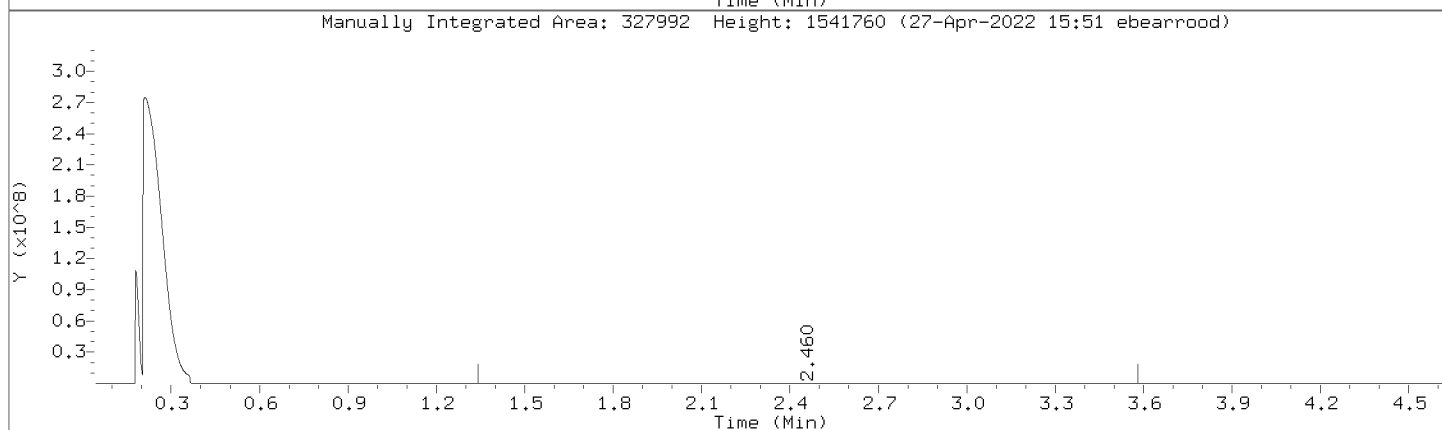
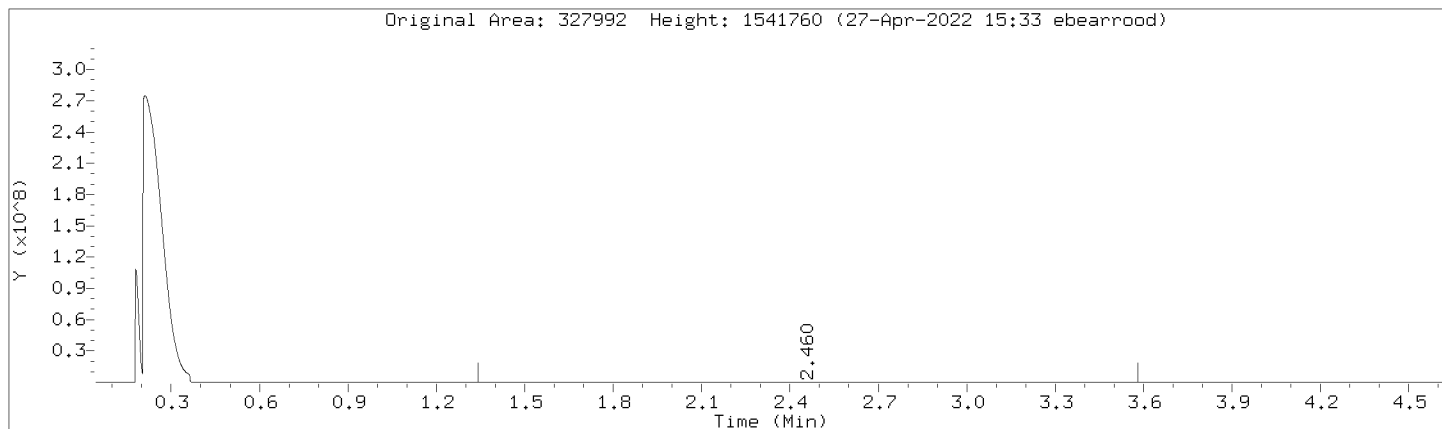
Review Code: RNG





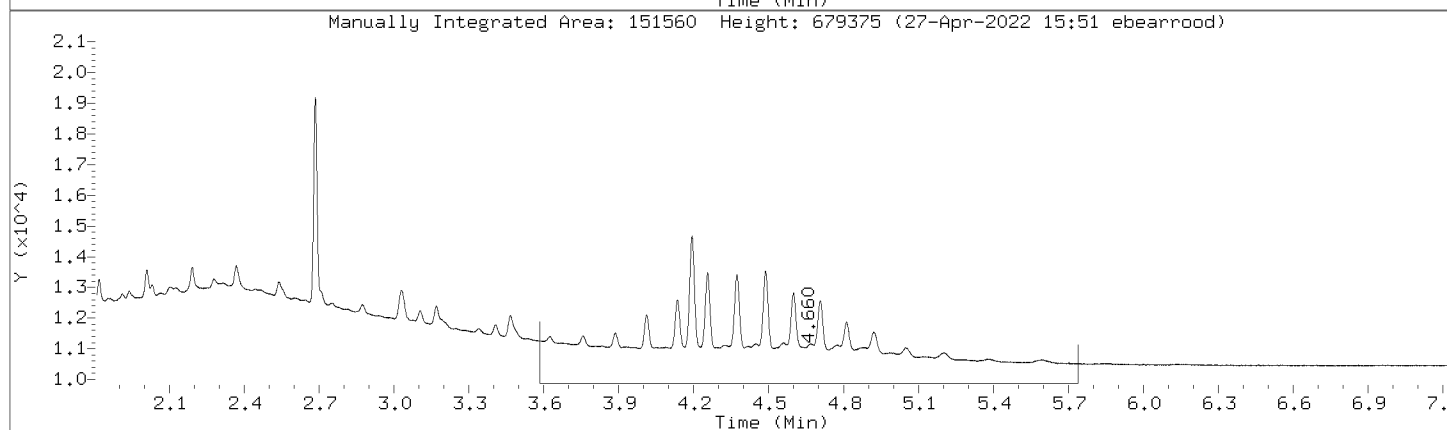
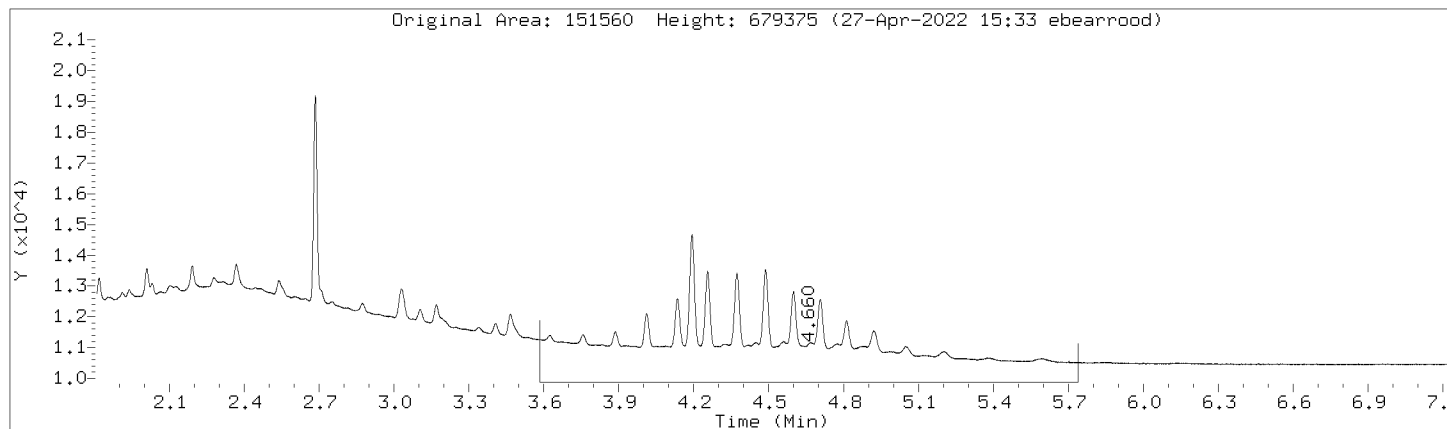
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



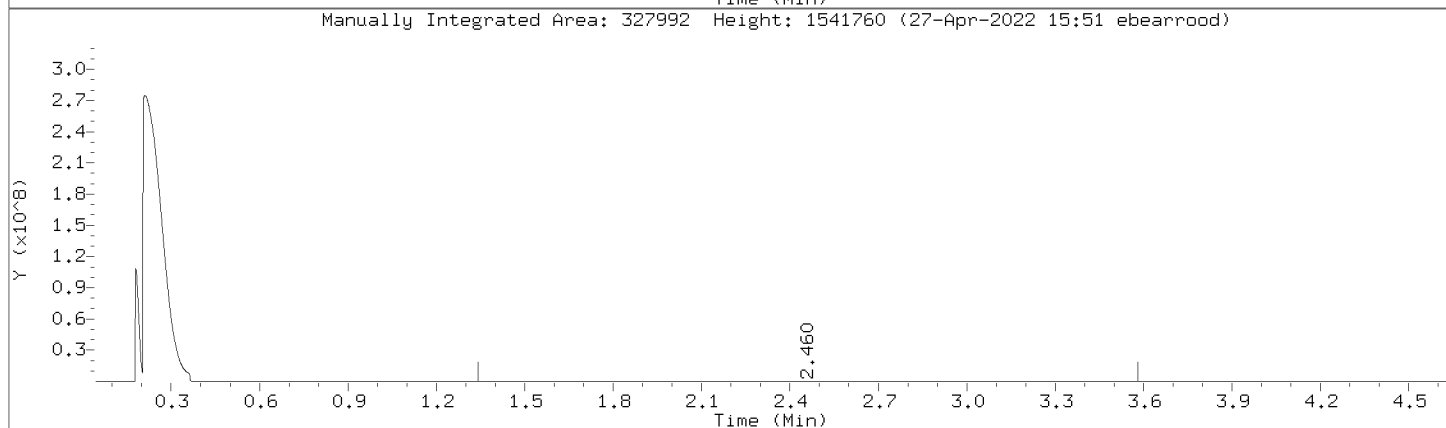
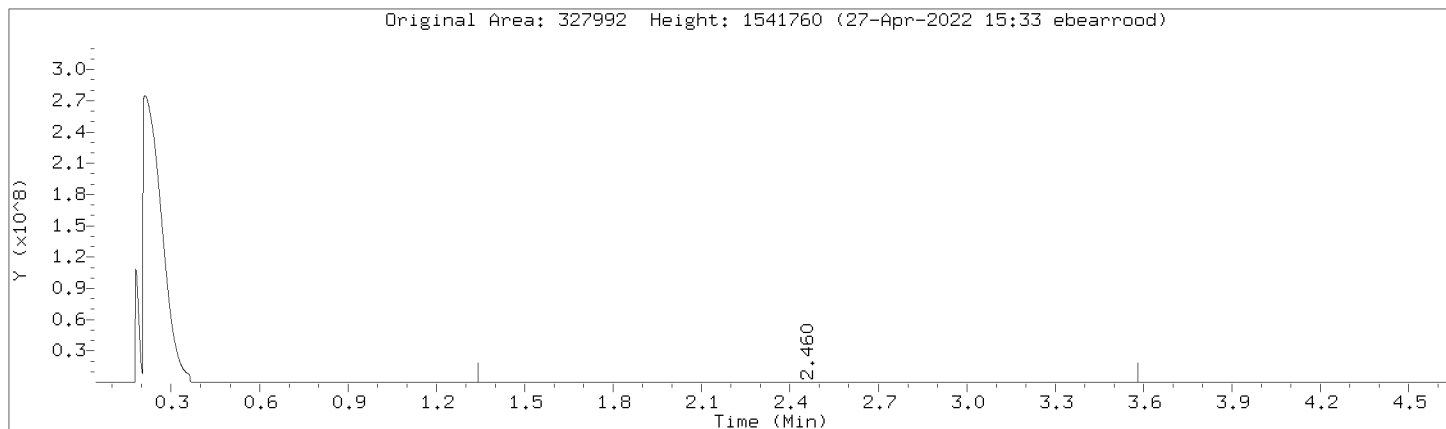
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



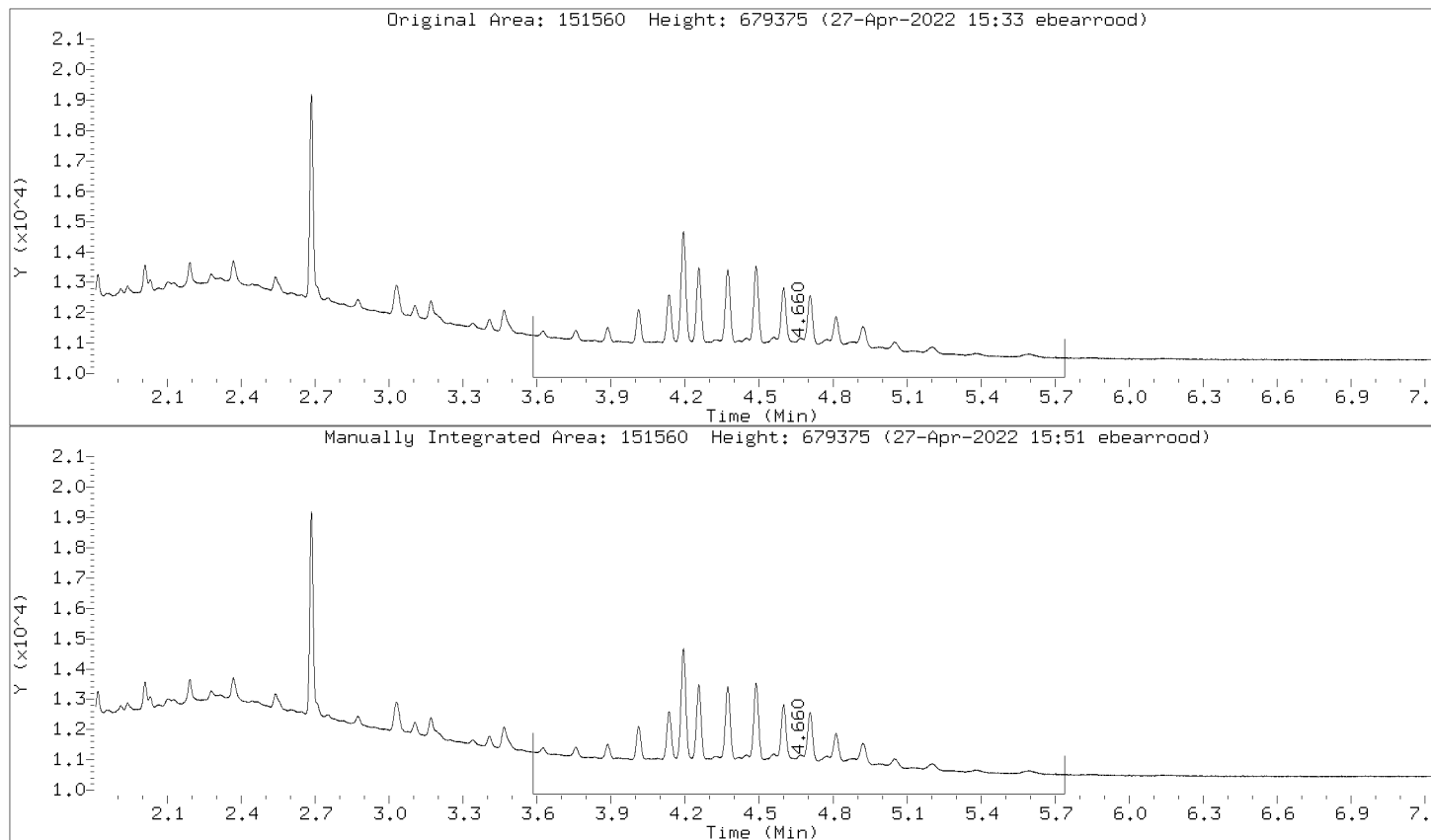
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



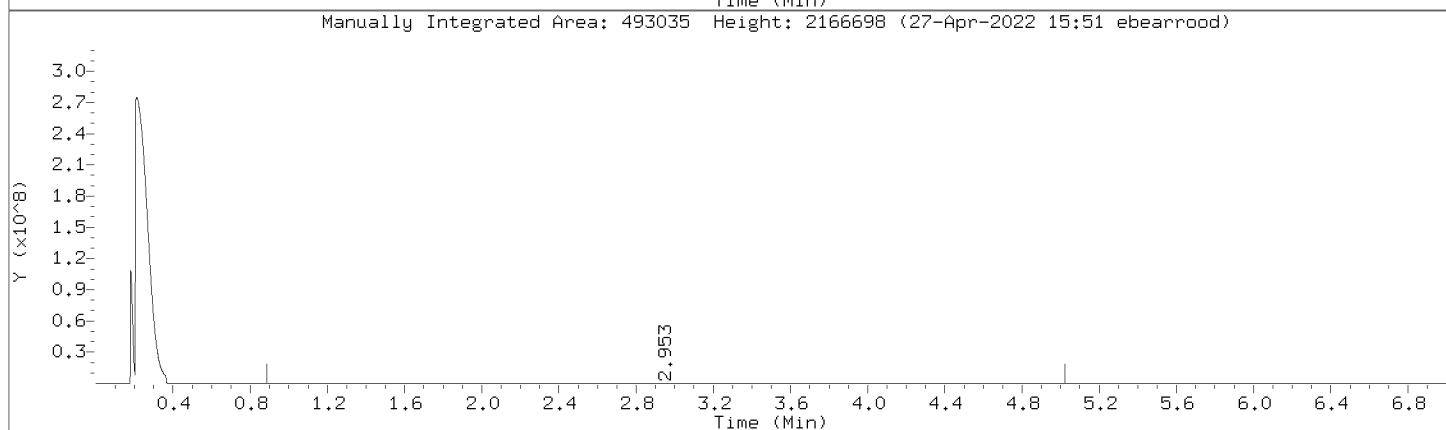
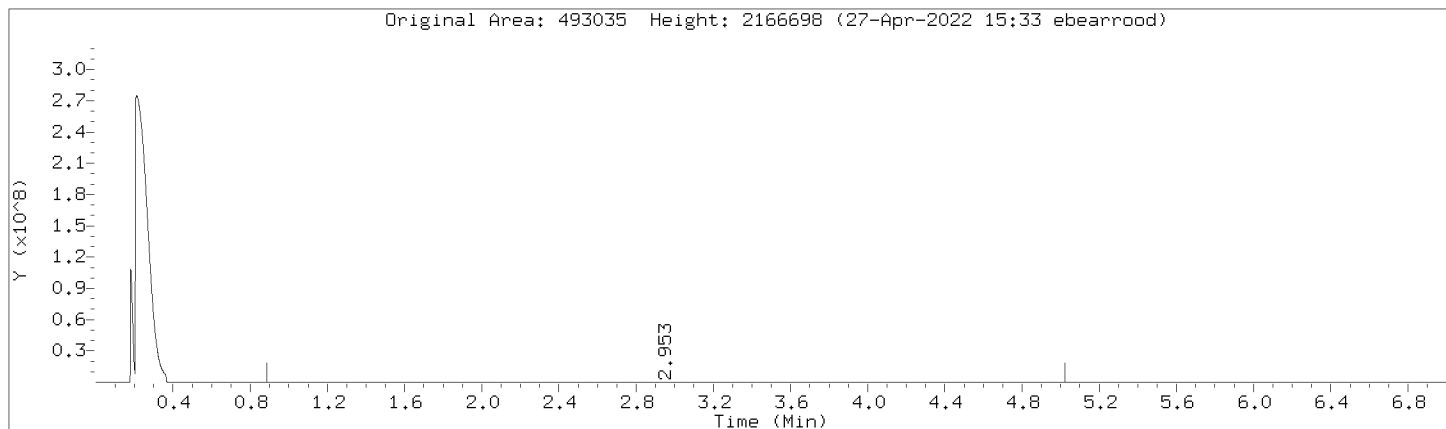
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



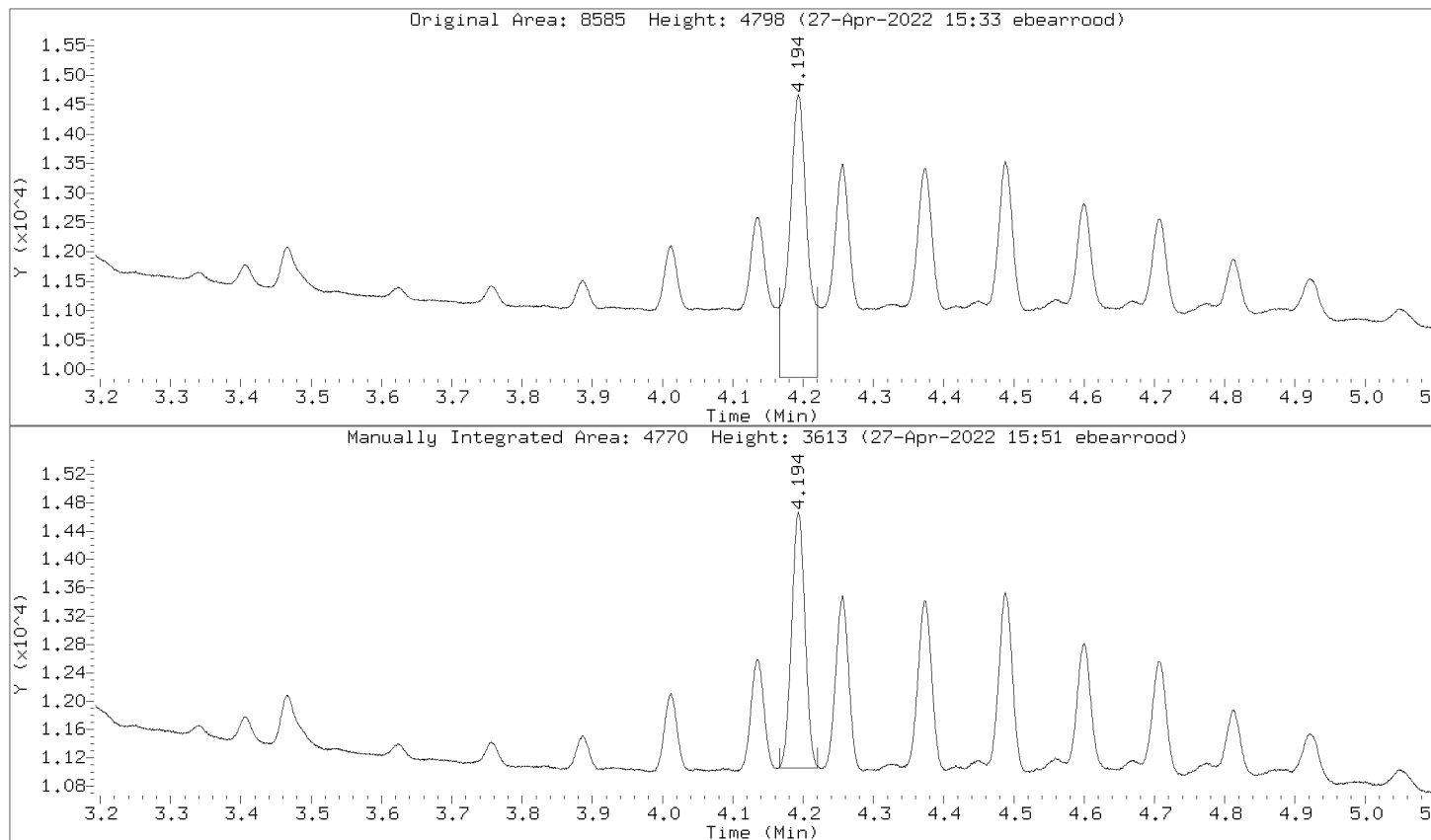
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



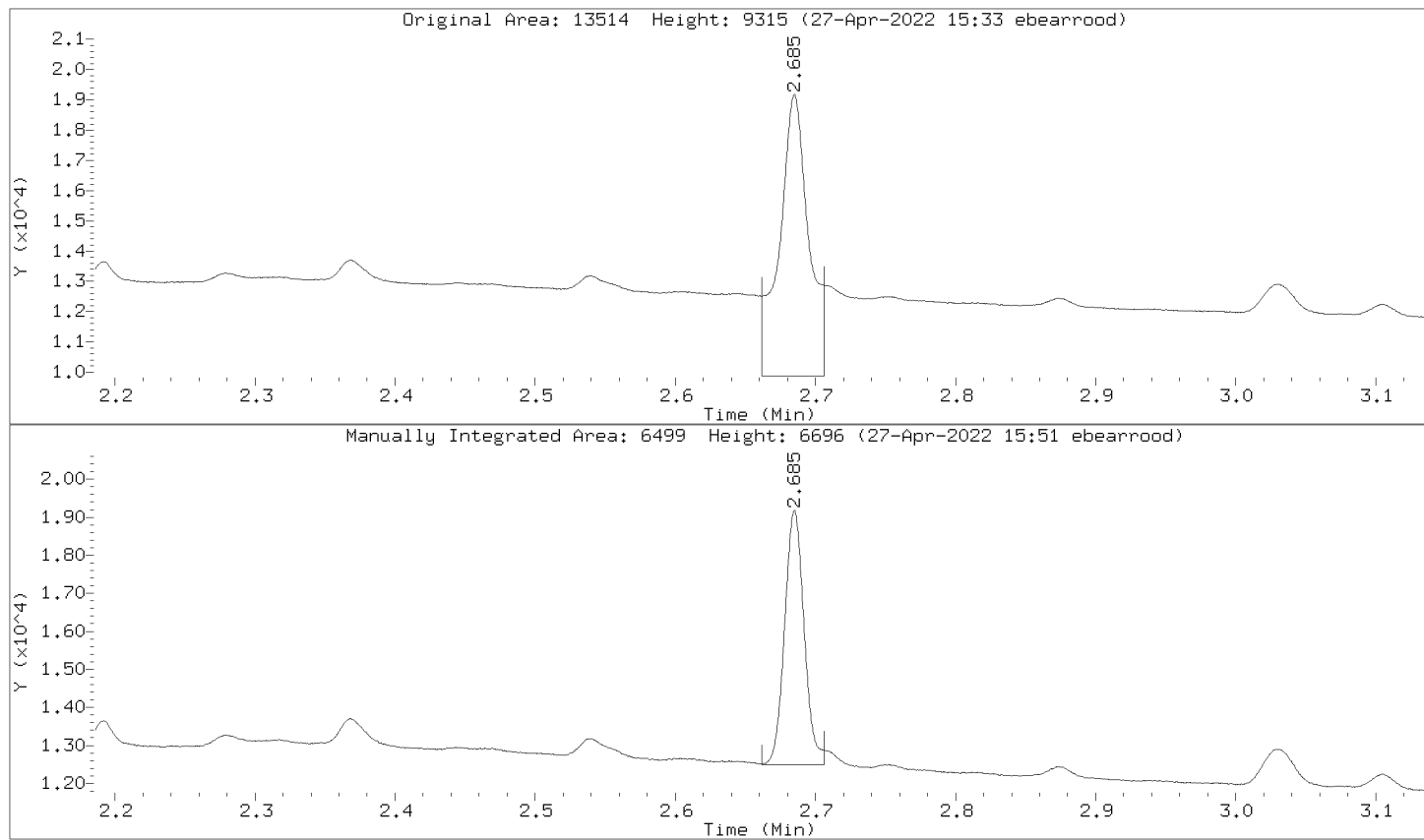
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
 Lab Smp Id: DMO-CAL3,362371:2 Client Smp ID: DMO-CAL3,362371:2  
 Inj Date : 27-APR-2022 13:23  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal3,362371:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 80 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		458652 25.0000	16.0	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.684	2.685 -0.001		17246 2.50000	2.01	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.191	4.193 -0.002		12697 2.50000	1.77	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		175114 25.0000	18.4	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		514803 25.0000	16.1	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		191130 25.0000	17.4	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		633766 50.0000	33.8	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		399864 25.0000	17.6	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		399864 25.0000	17.6	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		214326 25.0000	22.2	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		214326 25.0000	22.2	(M) RNG
-----					



QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:23

Client ID: DM0-CAL3.362371:2

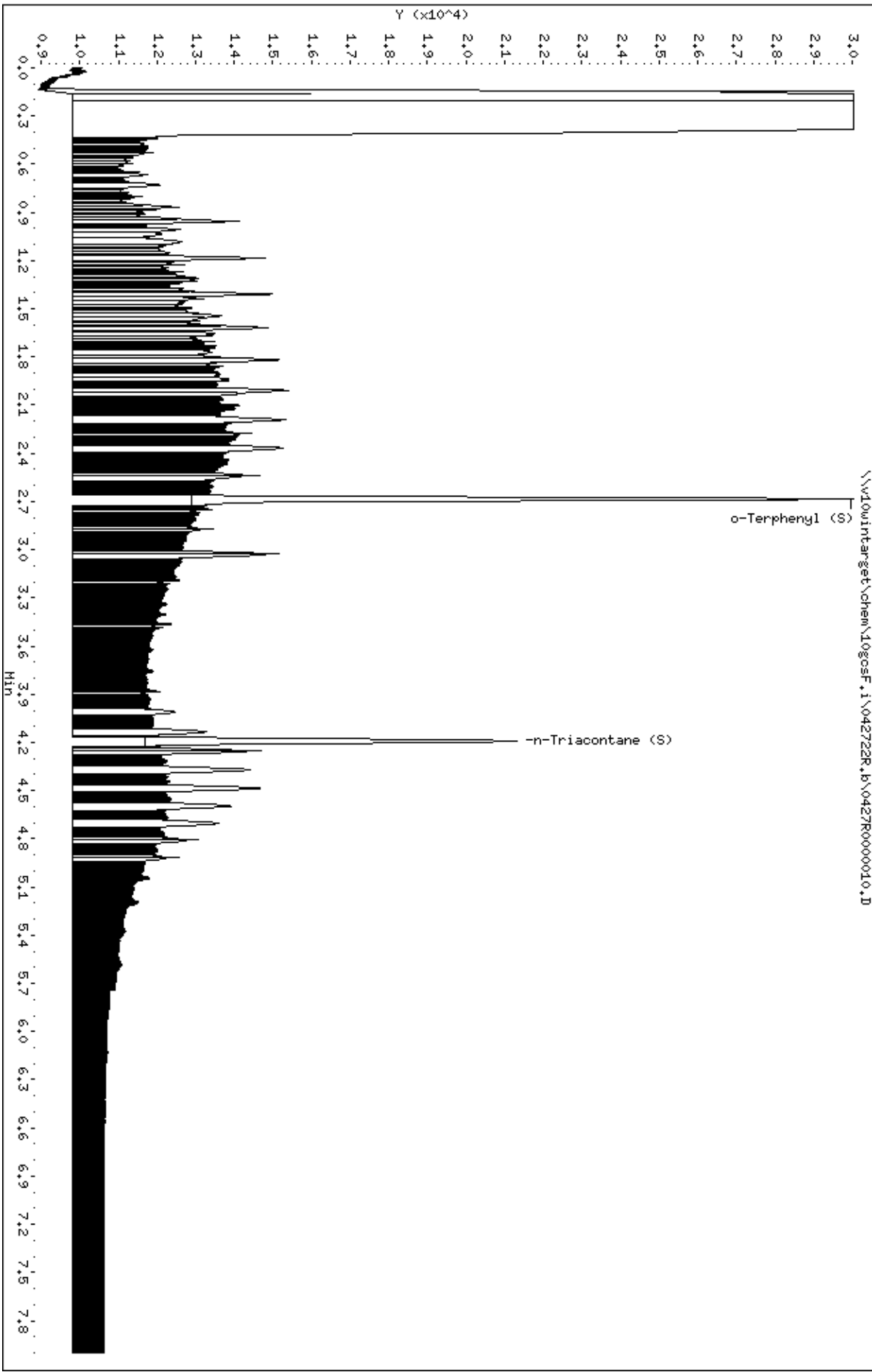
Sample Info: DM0-CAL3.362371:2

Column phase: DB-5-MS21430033

Instrument: 10goscF.1

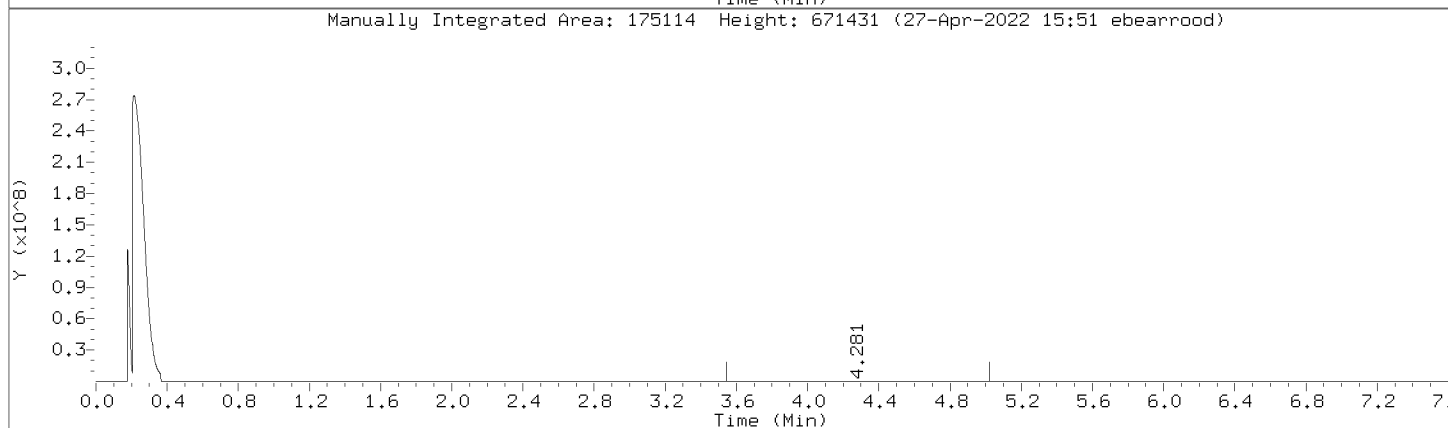
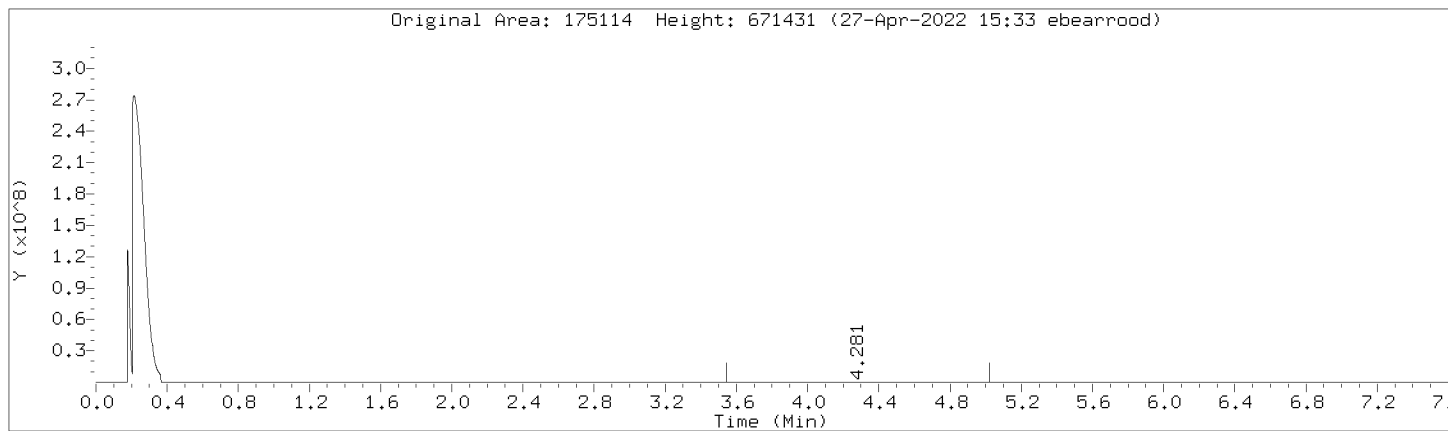
Operator: EBS

Column diameter: 0.32



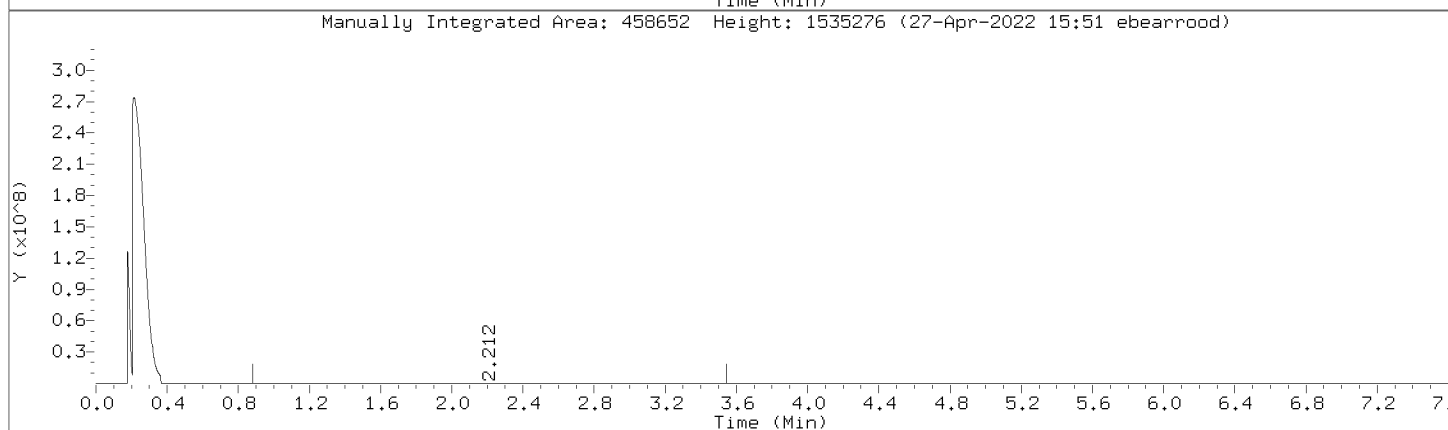
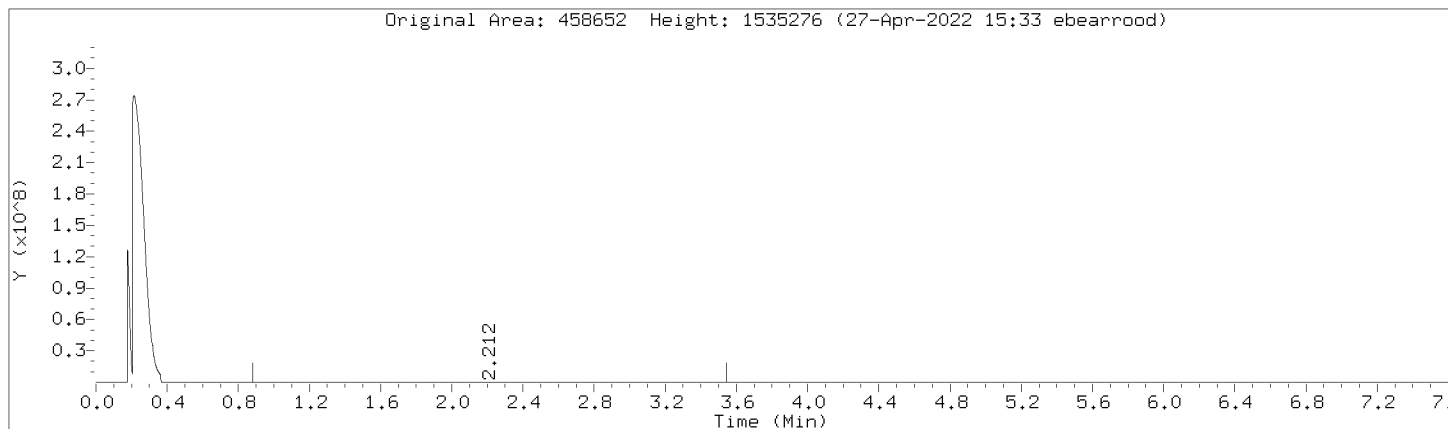
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



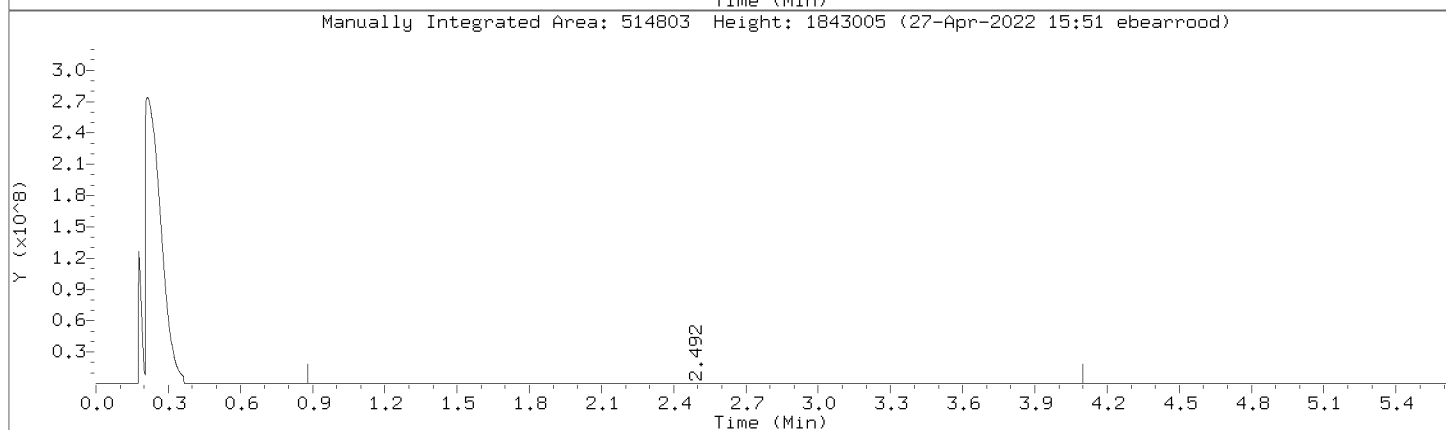
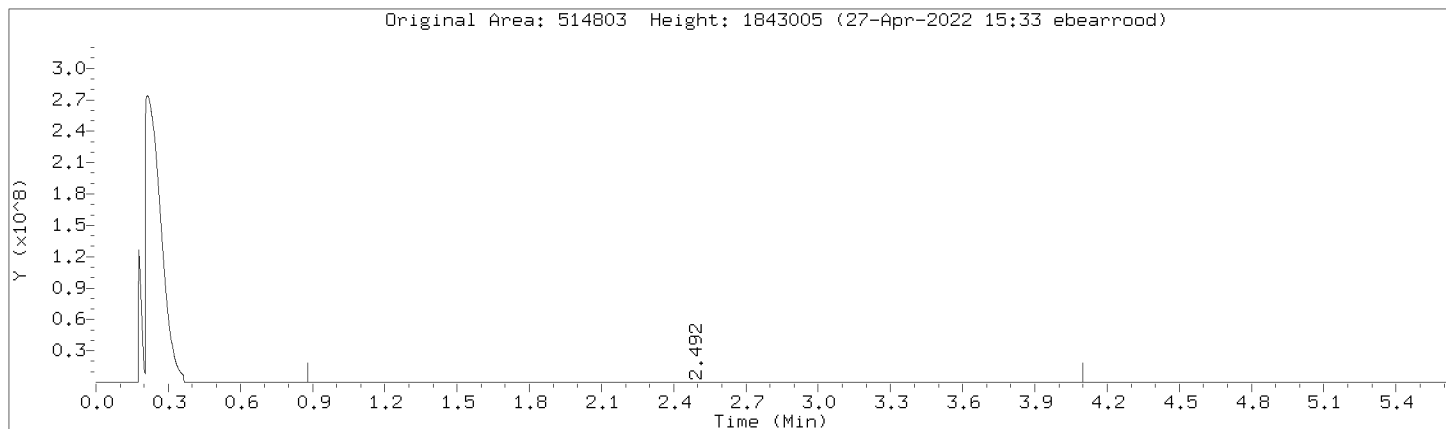
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

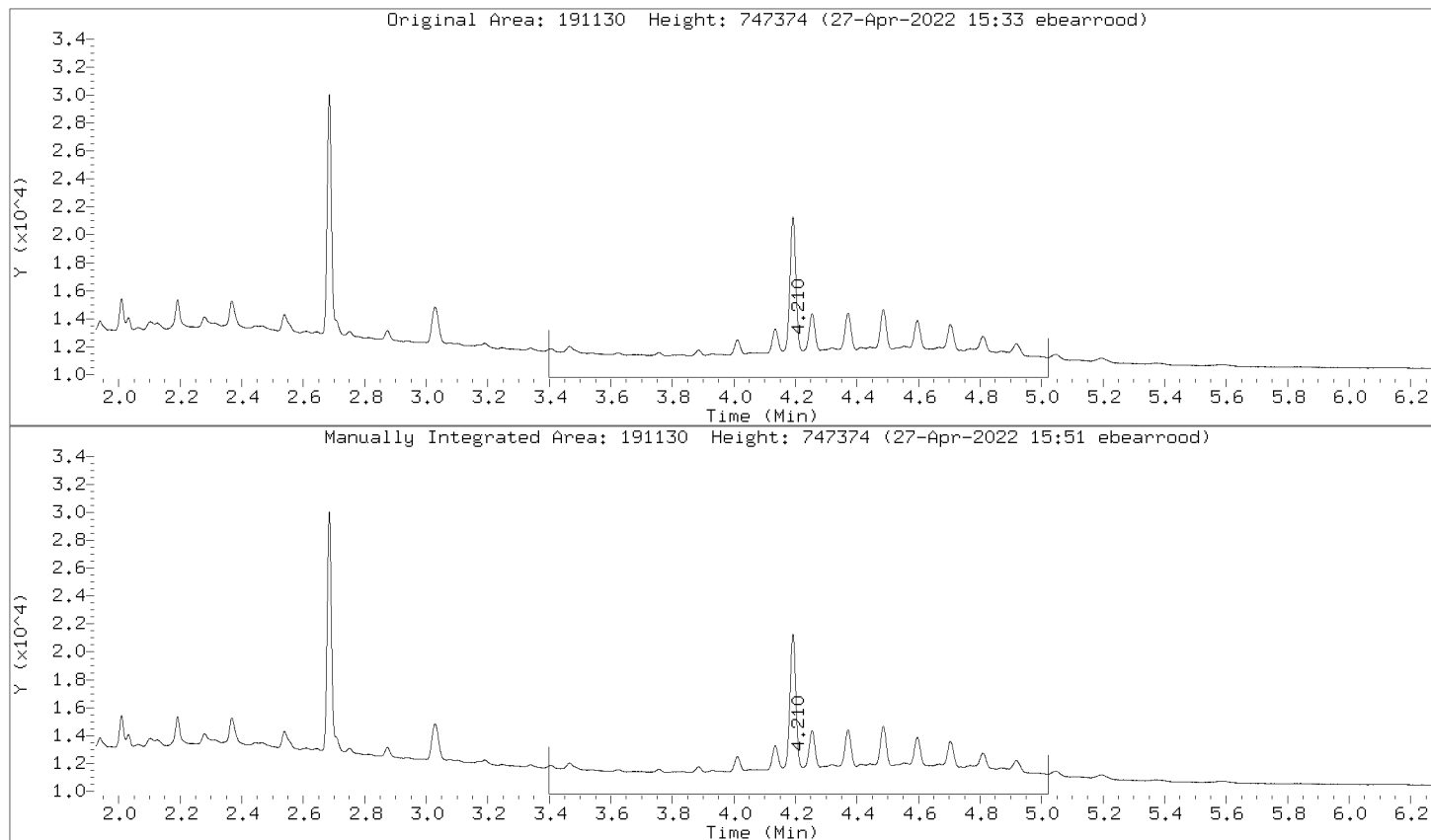
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

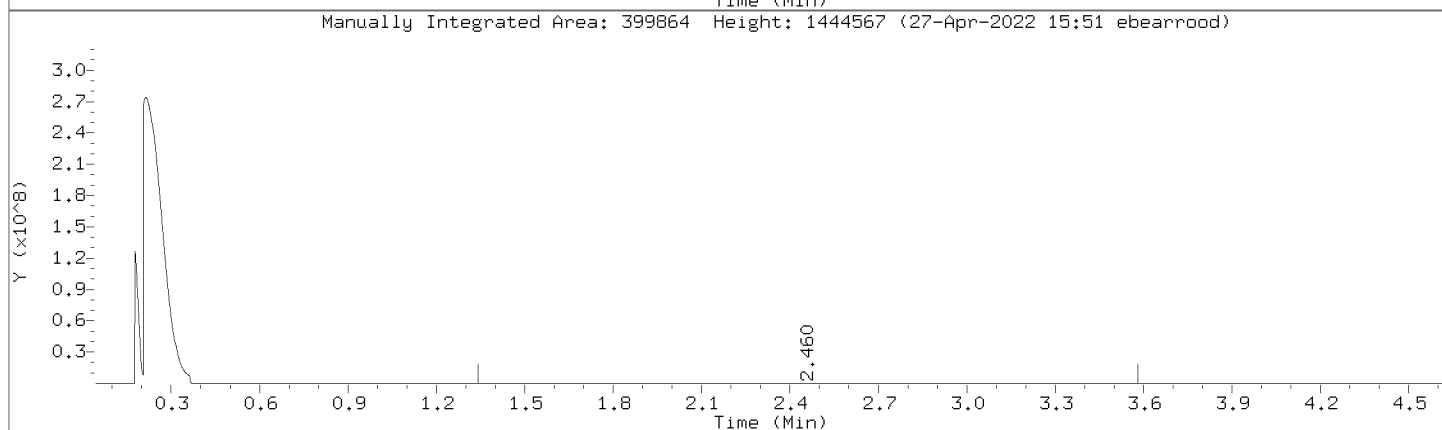
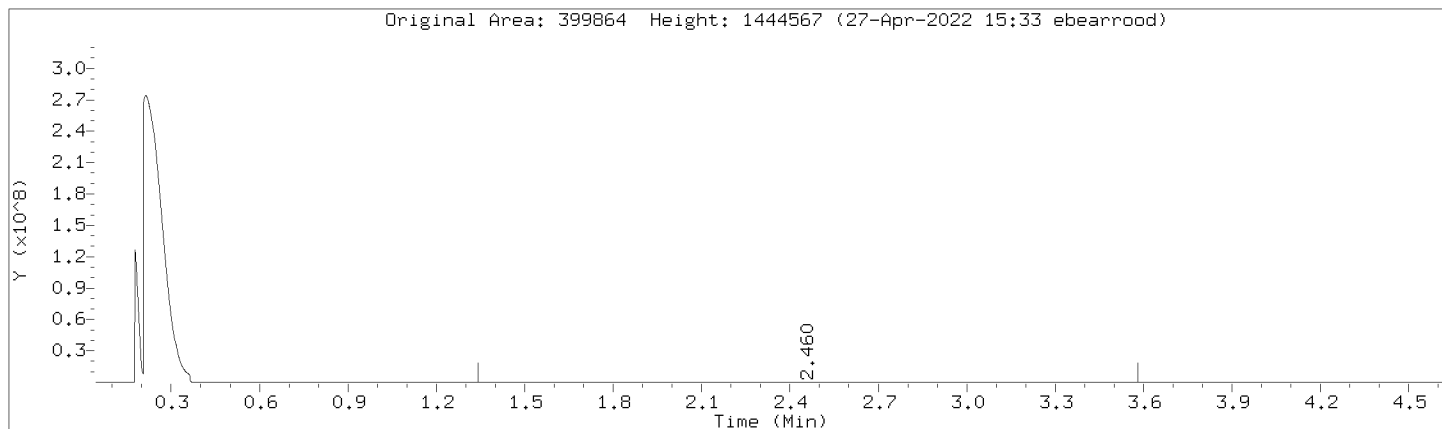
Compound: Motor Oil Range (C24-C36)  
CAS Number:

Review Code: RNG



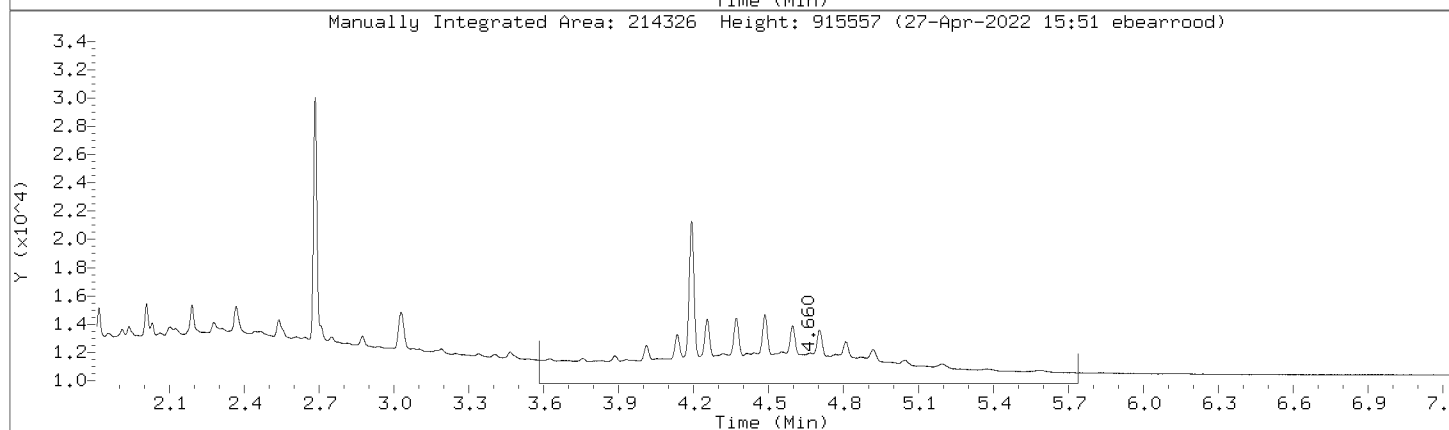
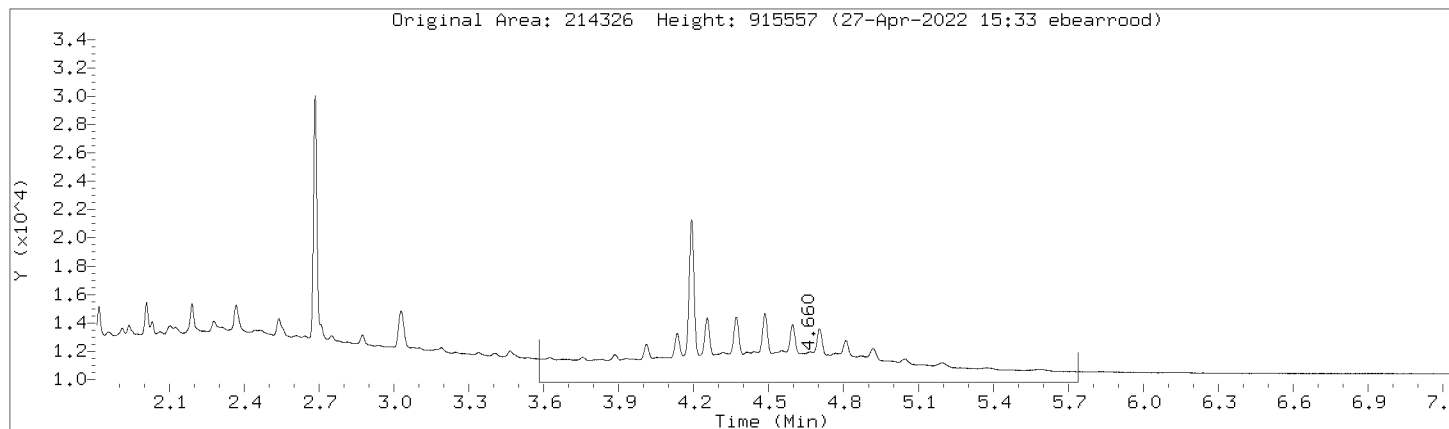
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

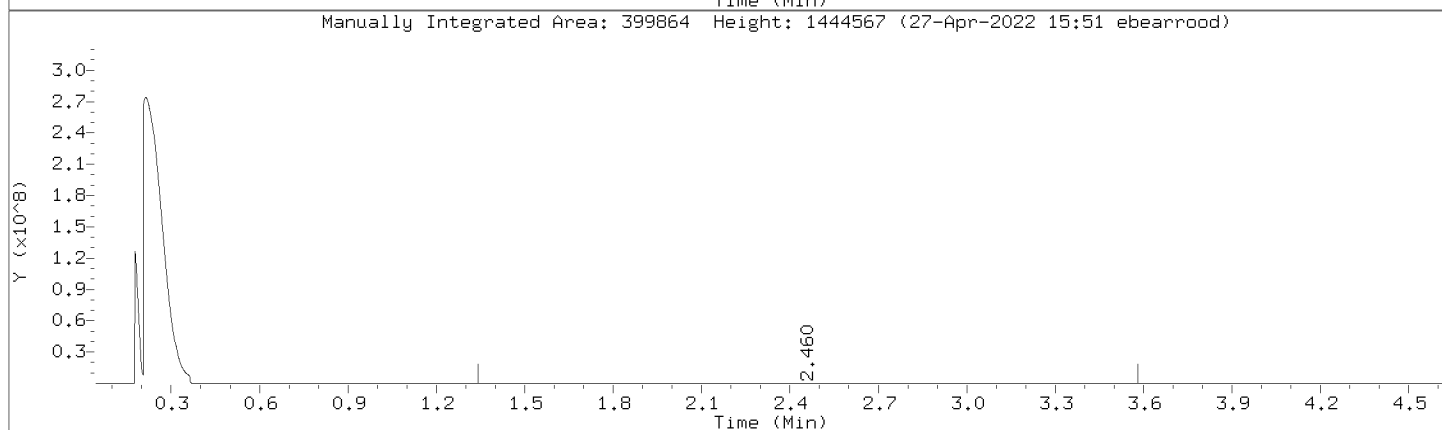
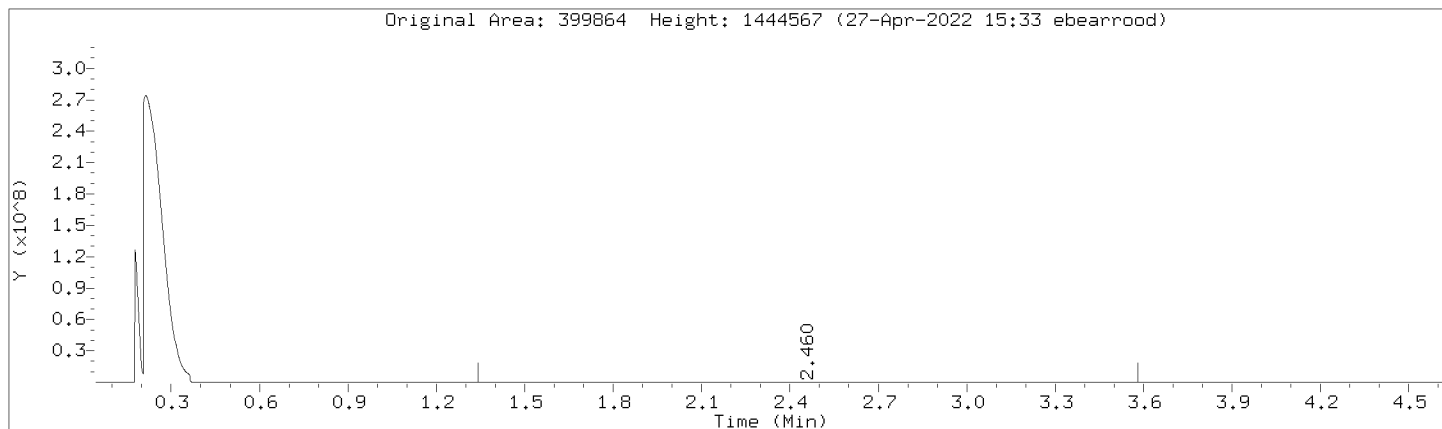
Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





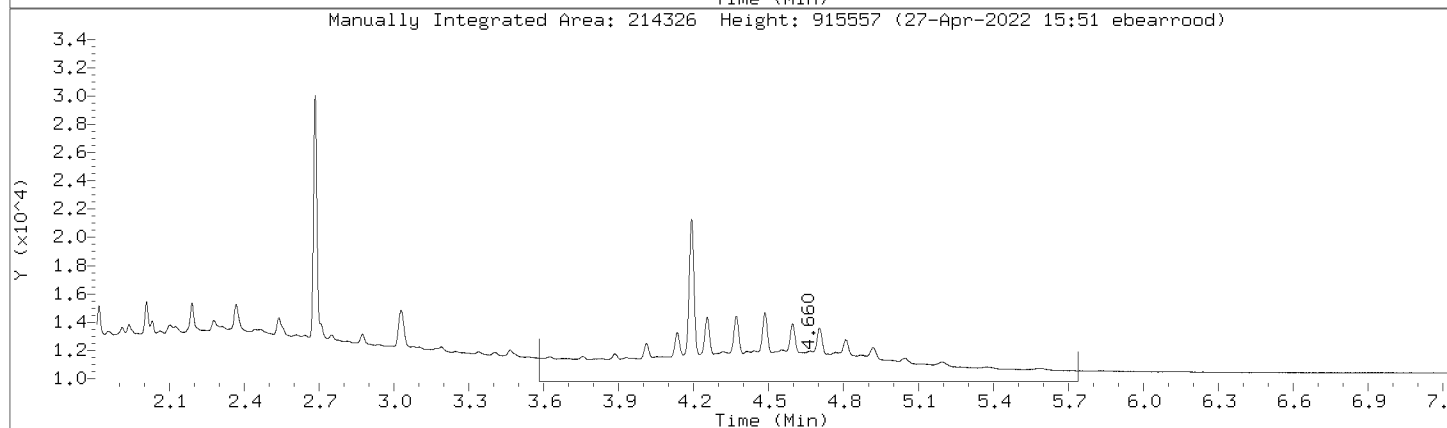
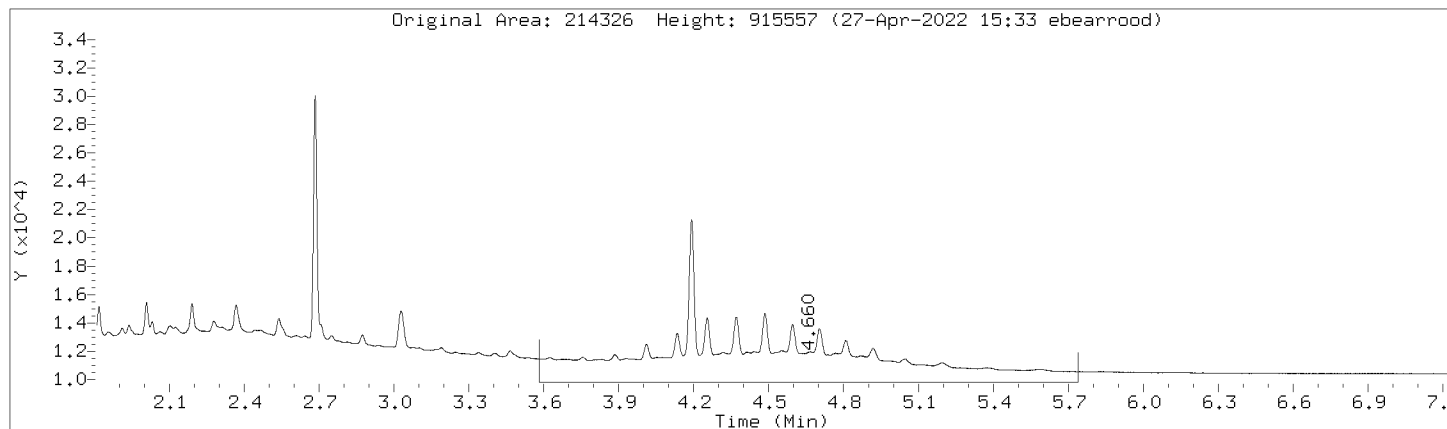
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



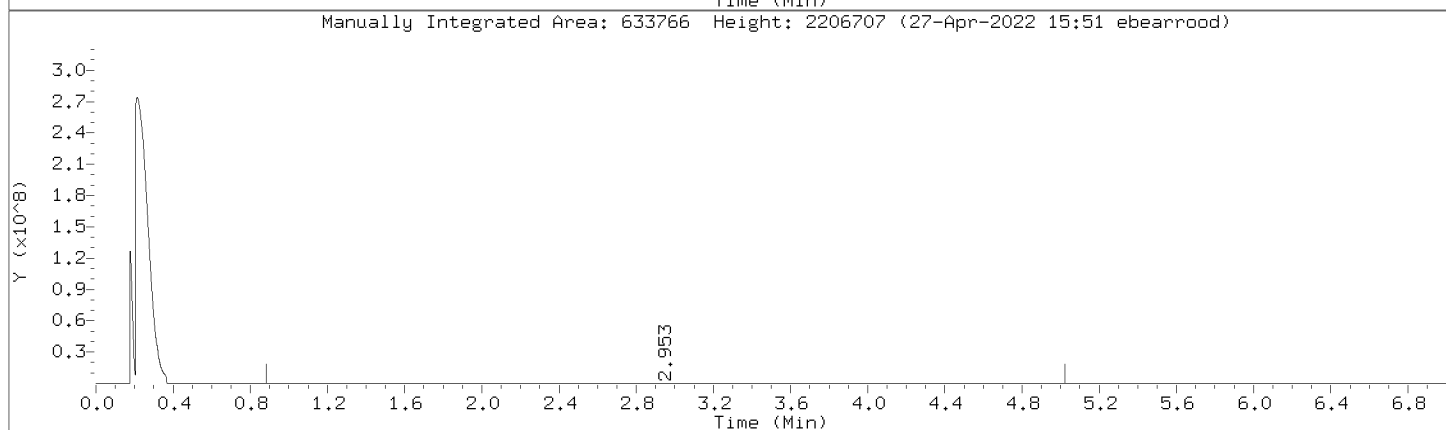
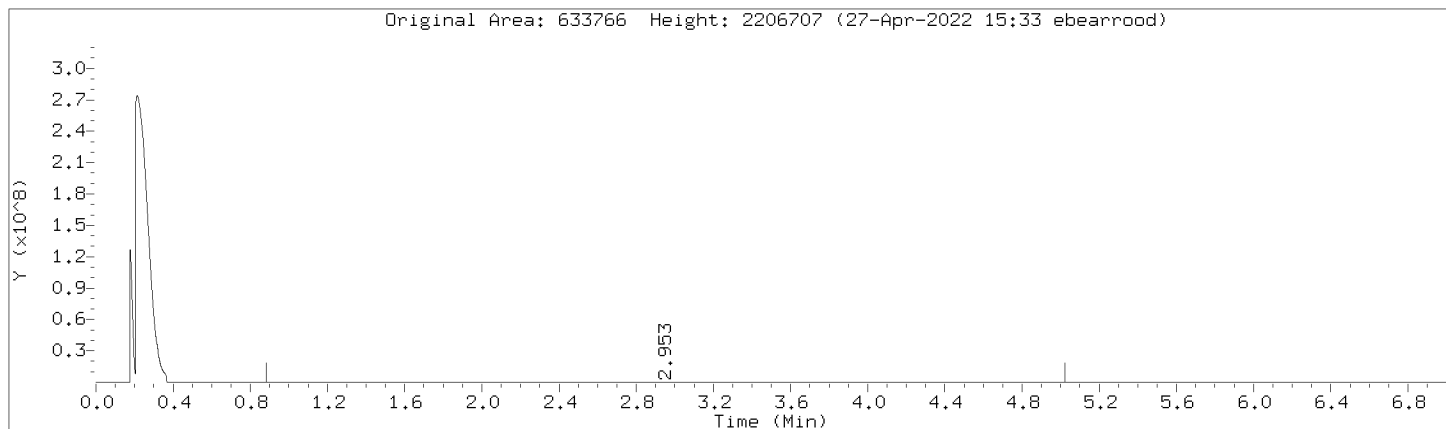
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



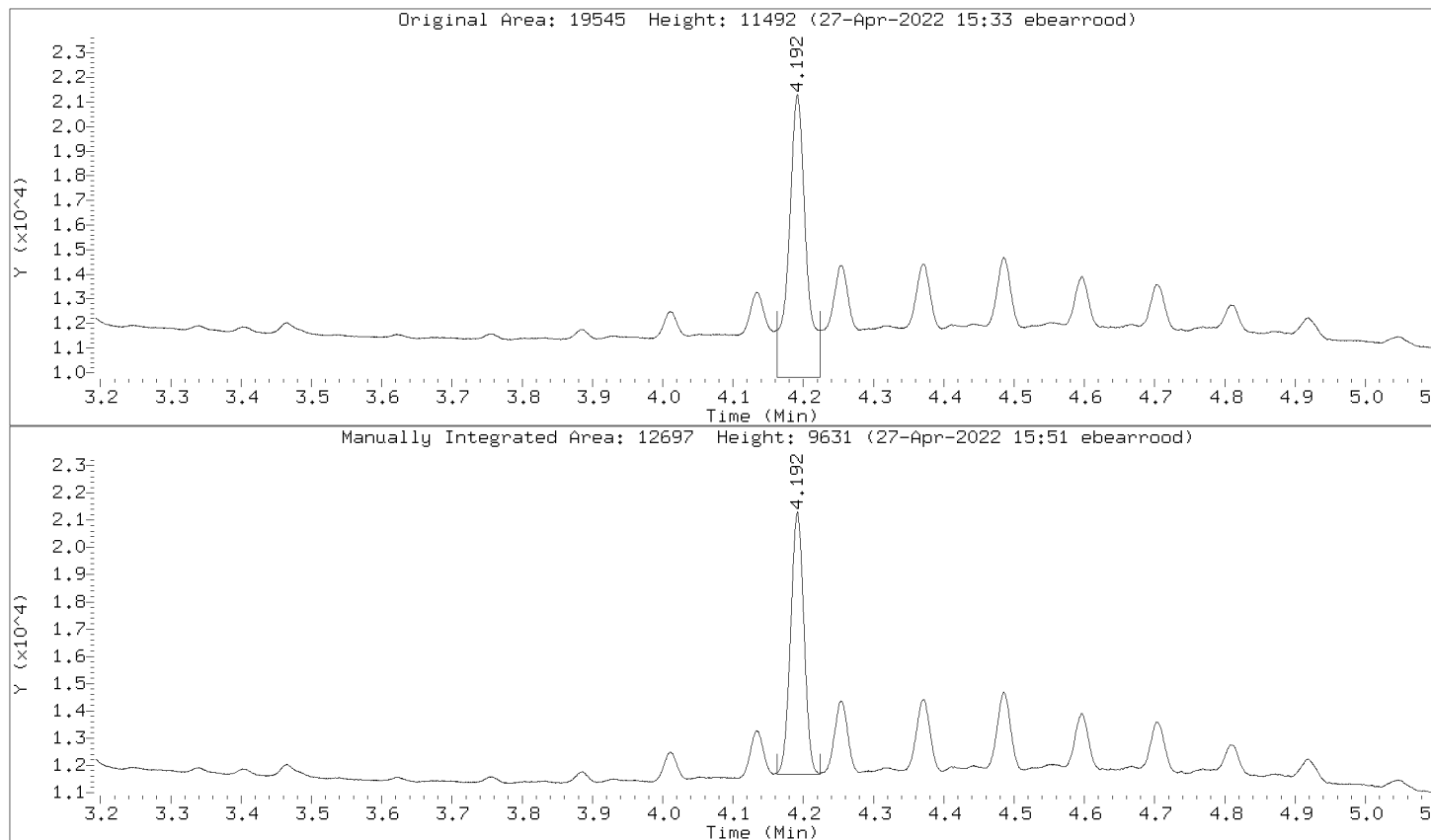
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



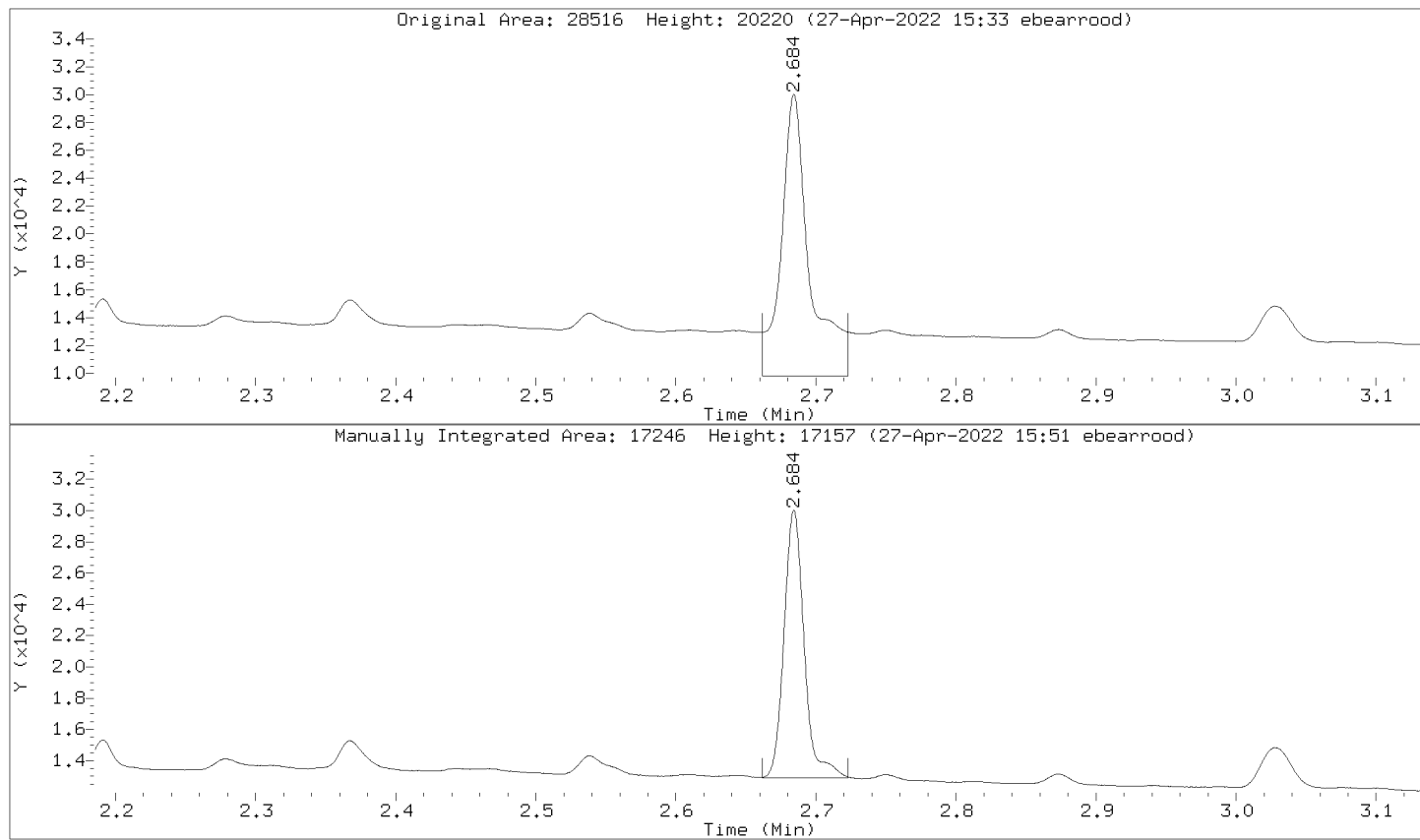
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
 Lab Smp Id: DMO-CAL4,362372:2 Client Smp ID: DMO-CAL4,362372:2  
 Inj Date : 27-APR-2022 13:34  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal4,362372:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 81 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE	
			RESPONSE	ON-COL		
=====	=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:		
0.885	- 3.540		608687 50.0000	42.2	(M)	RNG
-----						
\$ 2	o-Terphenyl (S)			CAS #:		
2.684	2.685 -0.001		34140 5.00000	4.57	(M)	BA
-----						
\$ 3	n-Triacontane (S)			CAS #:		
4.193	4.193 0.000		25712 5.00000	4.30	(M)	BA
-----						
S 4	Residual Range Organics AK103			CAS #:		
3.541	- 5.020		256015 50.0000	41.6	(M)	RNG
-----						
S 5	TPH-DRO (C10-C28)			CAS #:		
0.885	- 4.099		685656 50.0000	42.2	(M)	RNG
-----						
S 6	Motor Oil Range (C24-C36)			CAS #:		
3.400	- 5.020		279506 50.0000	41.8	(M)	RNG
-----						
S 7	C10-C36			CAS #:		
0.885	- 5.020		864702 100.000	84.0	(M)	RNG
-----						
S 8	Diesel Fuel Range			CAS #:		
1.340	- 3.580		525834 50.0000	43.8	(M)	RNG
-----						
S 9	Diesel Fuel Range SG			CAS #:		
1.340	- 3.580		525834 50.0000	43.8	(M)	RNG
-----						
S 10	Motor Oil Range			CAS #:		
3.581	- 5.740		309207 50.0000	43.7	(M)	RNG
-----						
S 11	Motor Oil Range SG			CAS #:		
3.581	- 5.740		309207 50.0000	43.7	(M)	RNG
-----						

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:34

Client ID: DMO-CAL4,362372:2

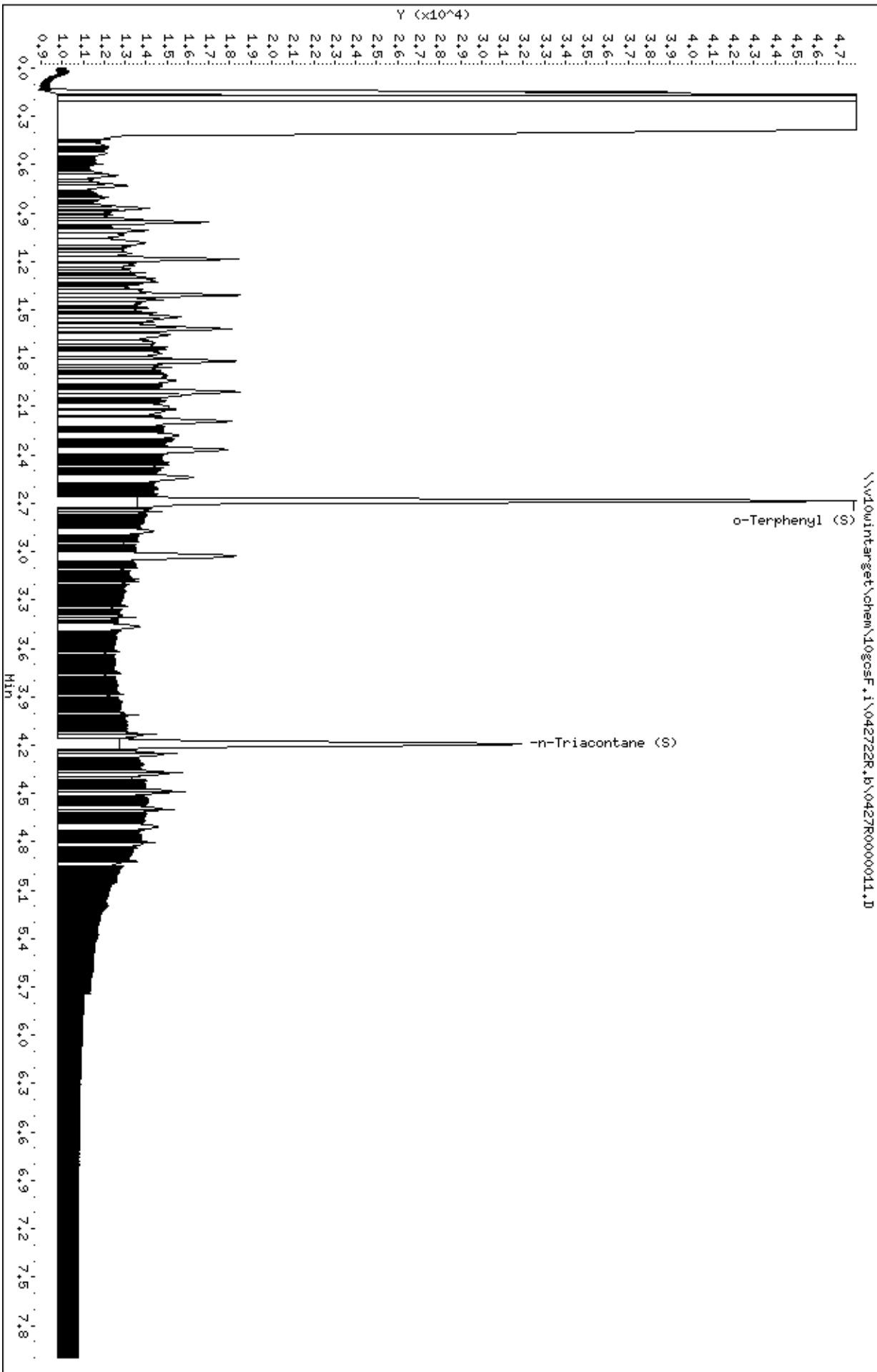
Sample Info: DMO-CAL4,362372:2

Instrument: 10gosc.f.1

Operator: EB3

Column diameter: 0.32

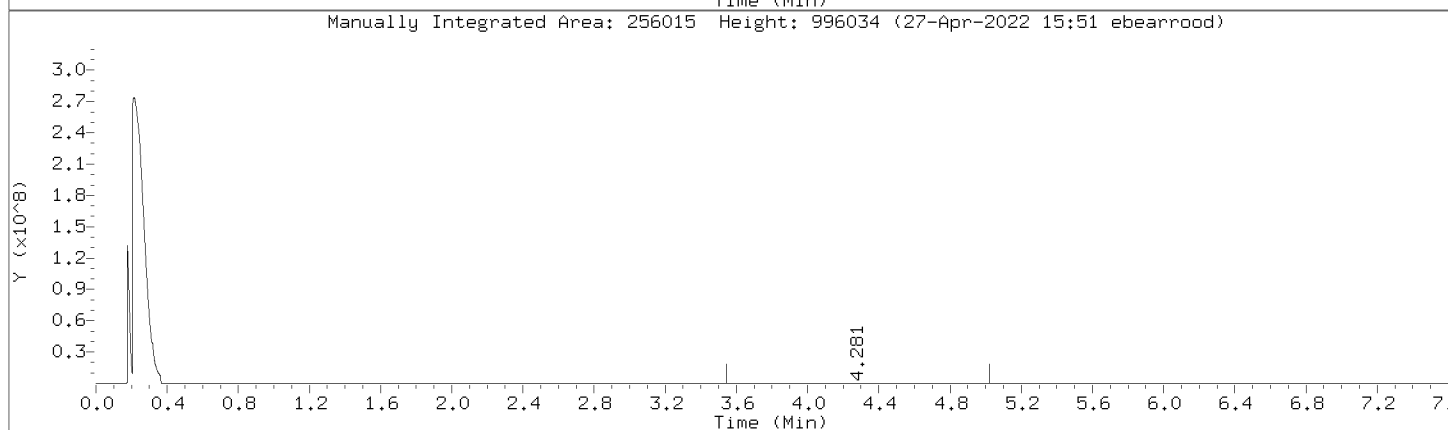
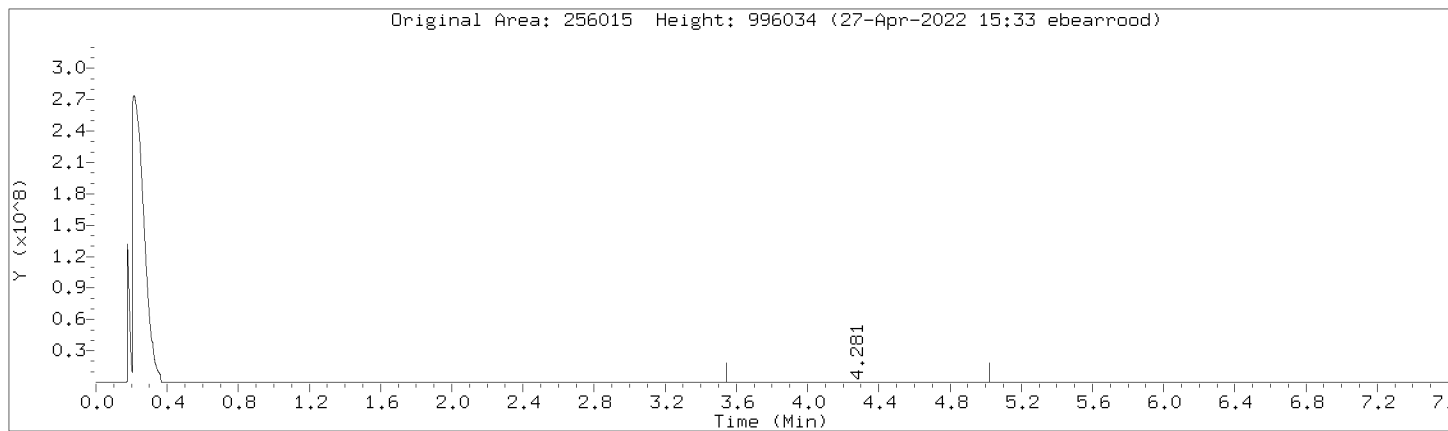
Column phase: DB-5-US21430033





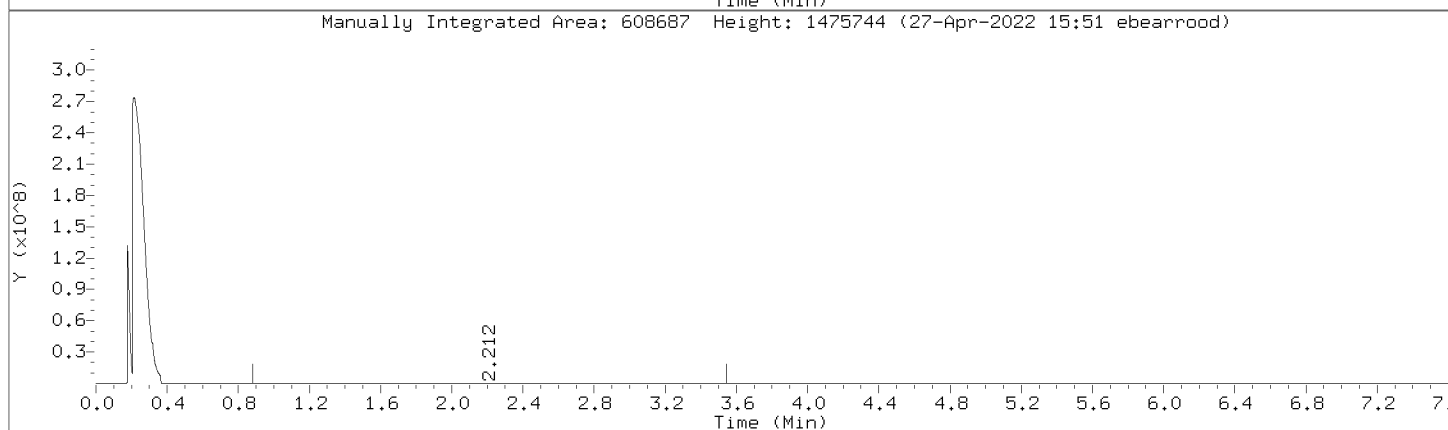
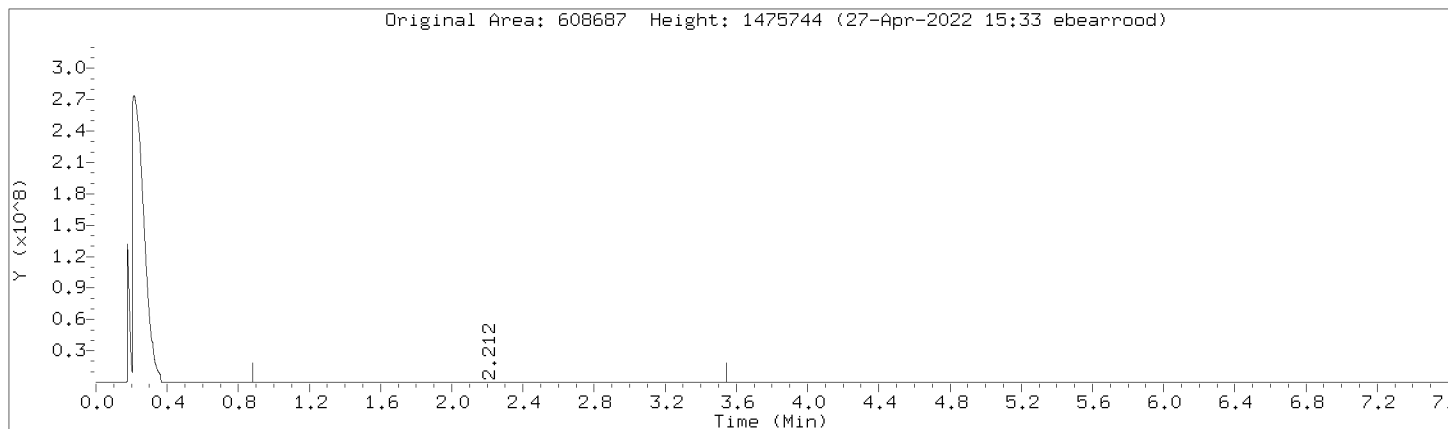
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



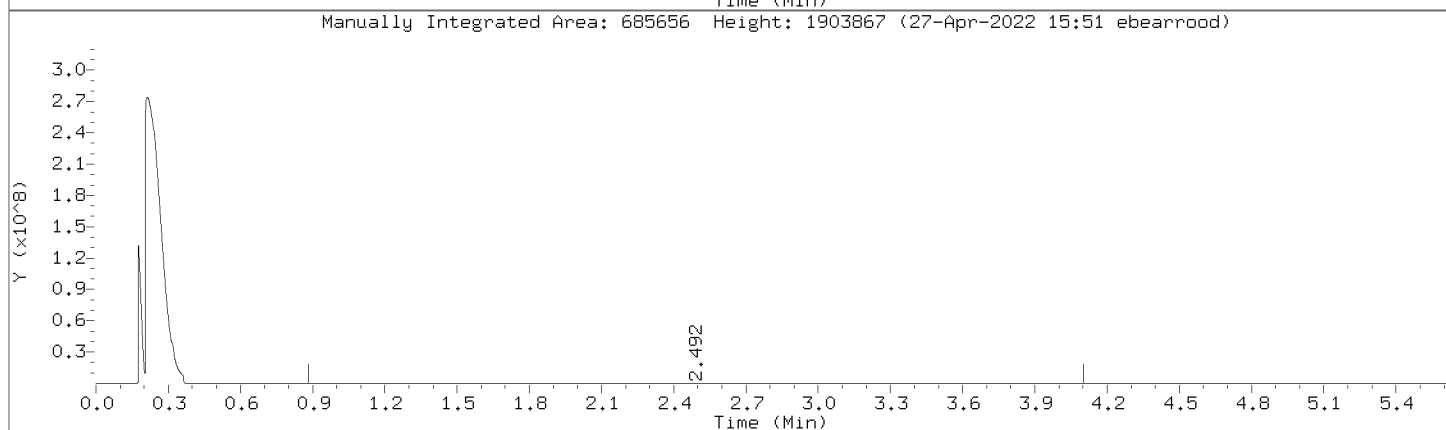
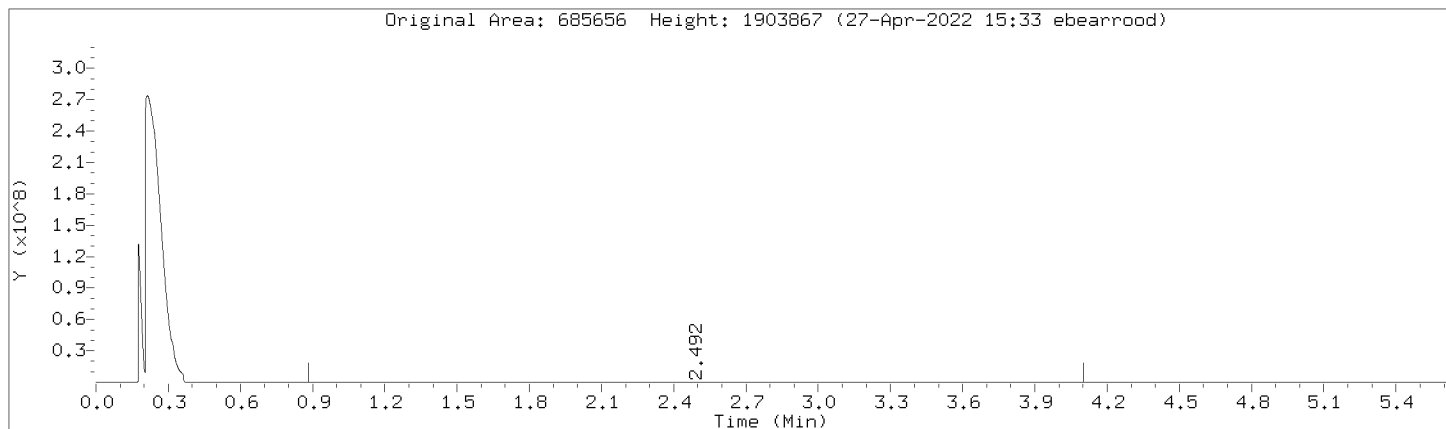
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



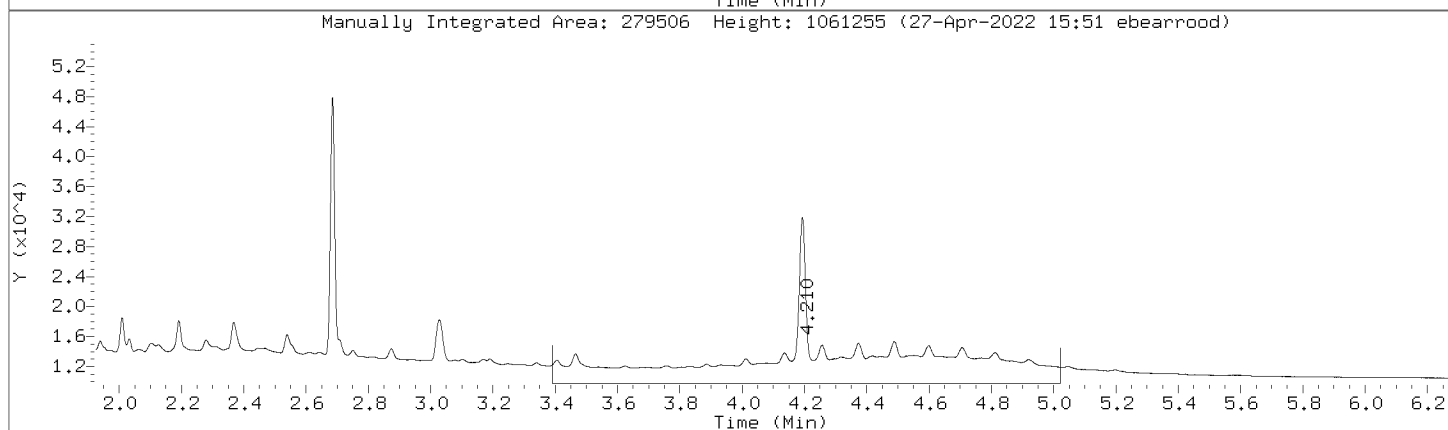
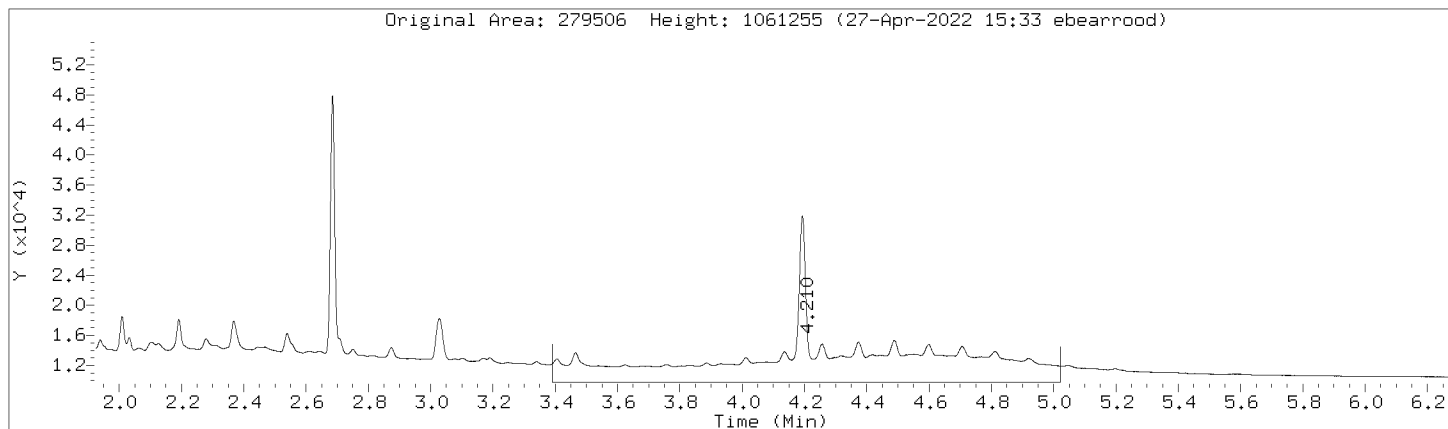
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



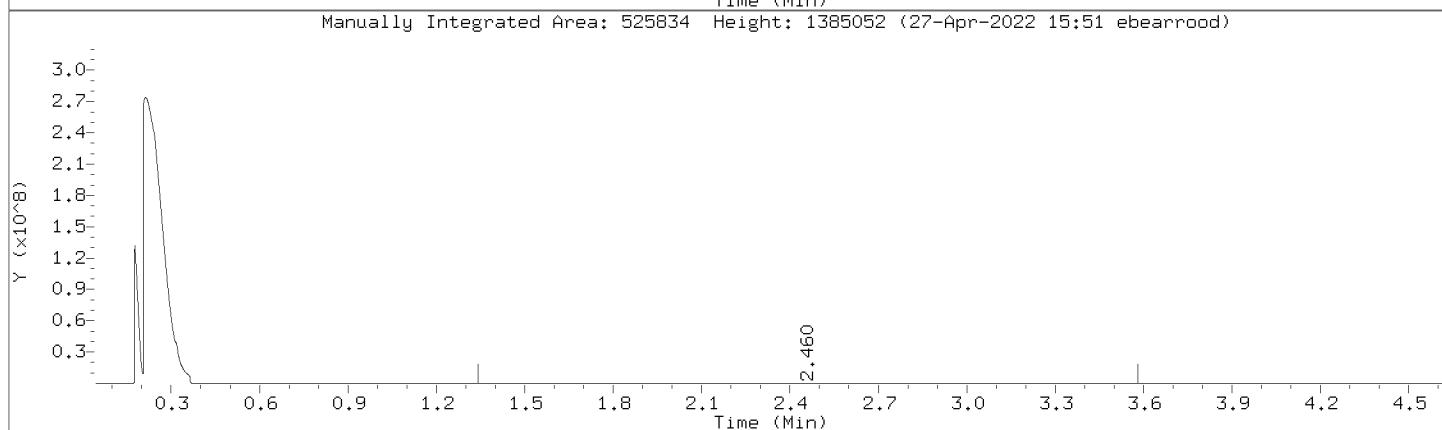
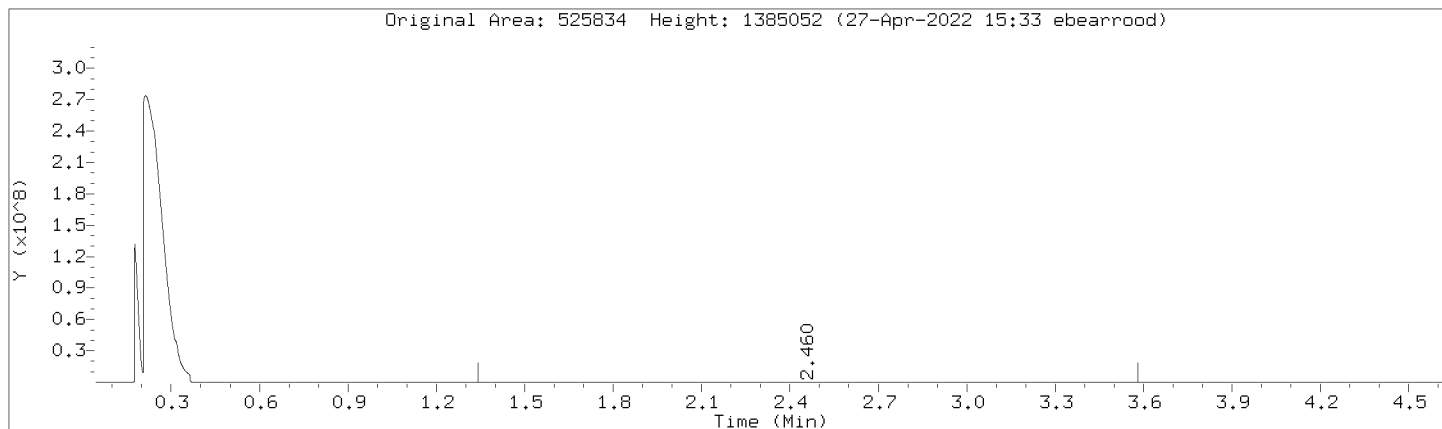
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



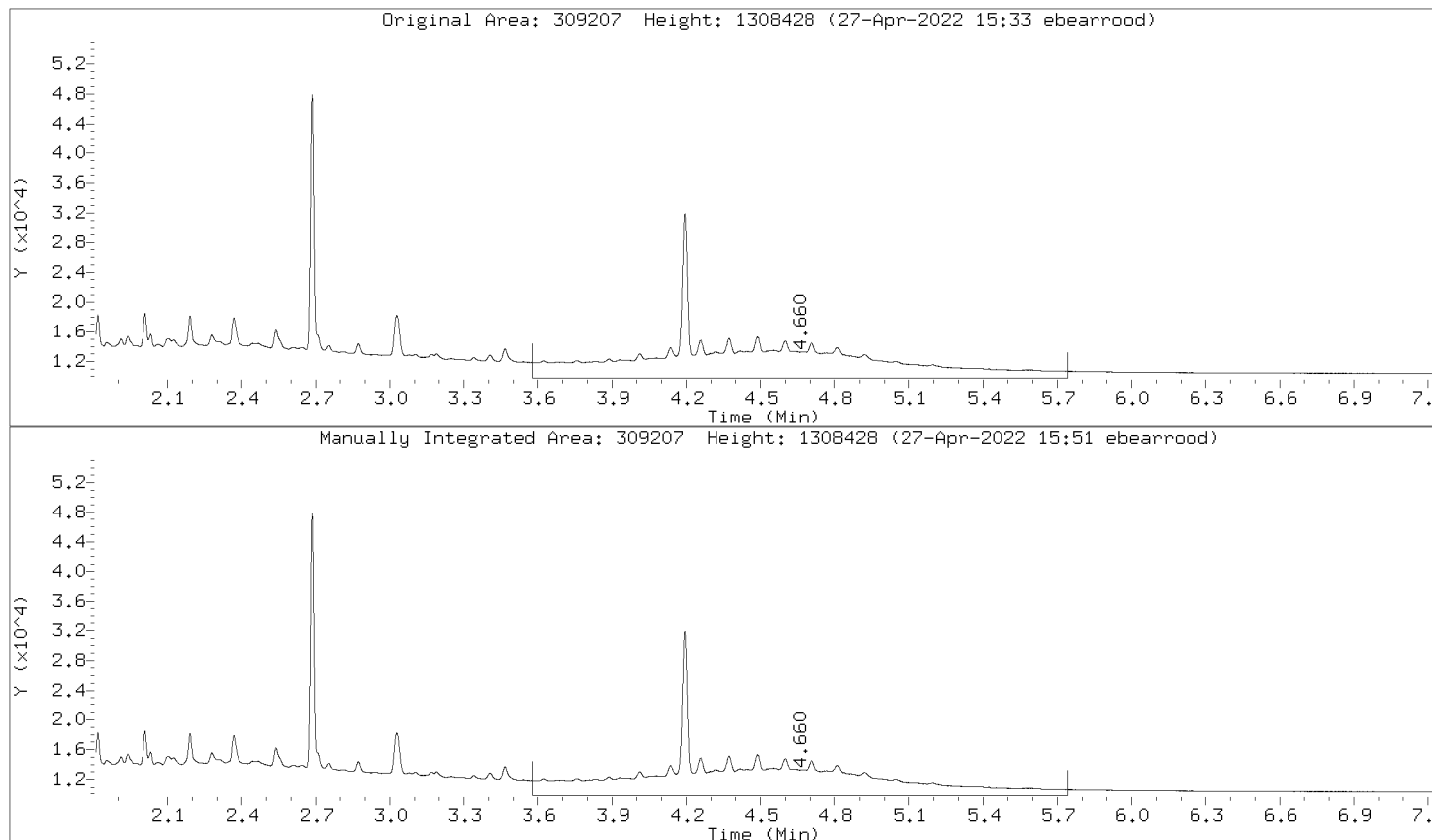
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



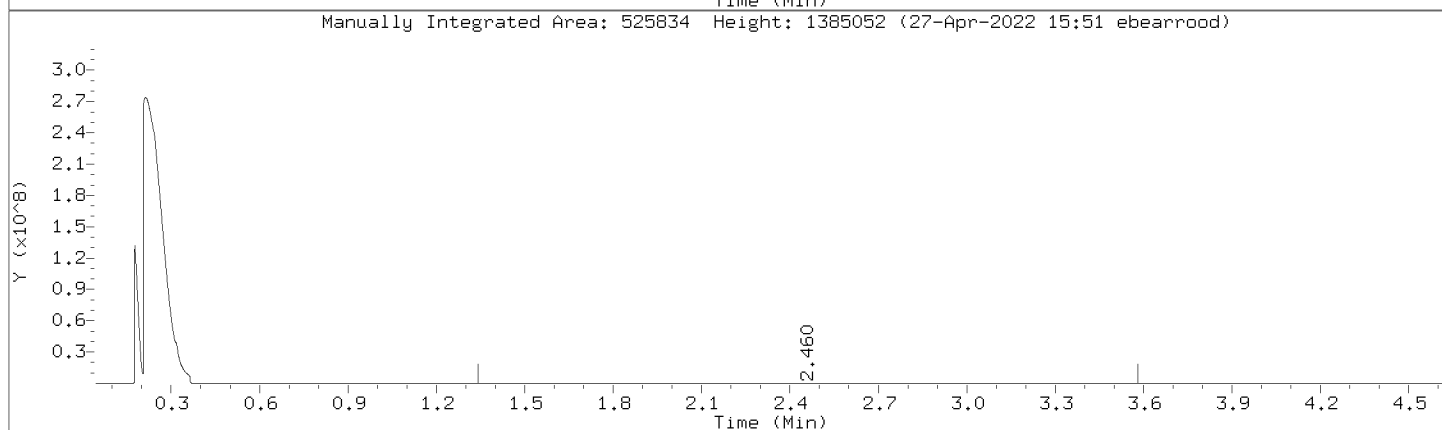
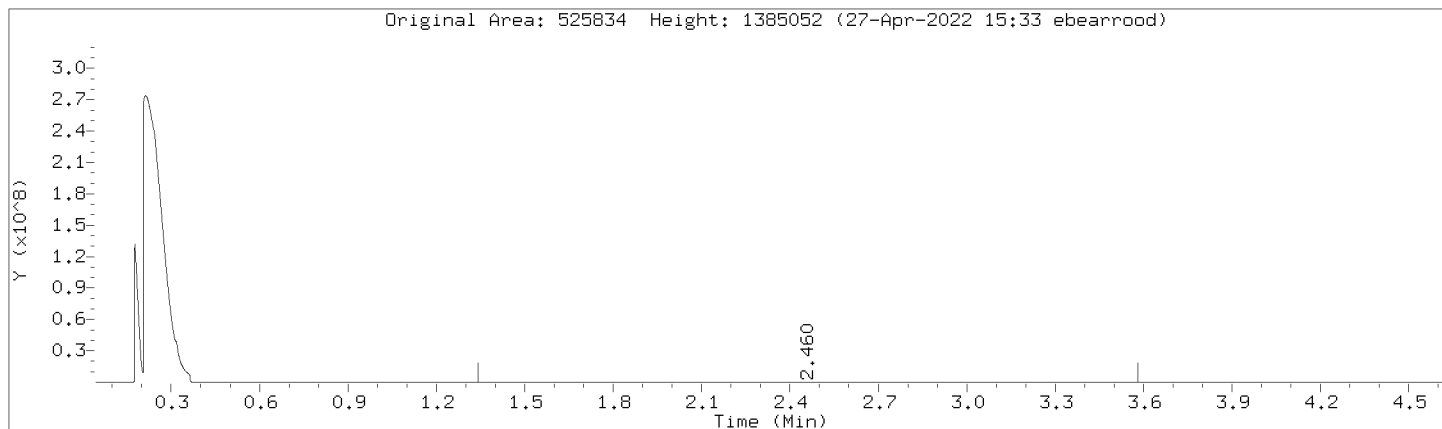
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



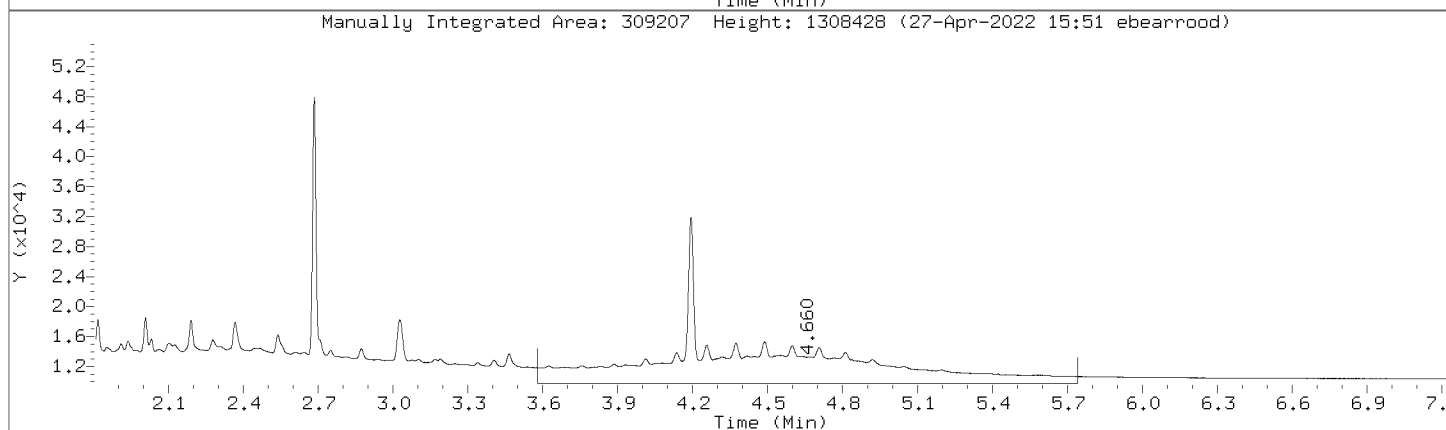
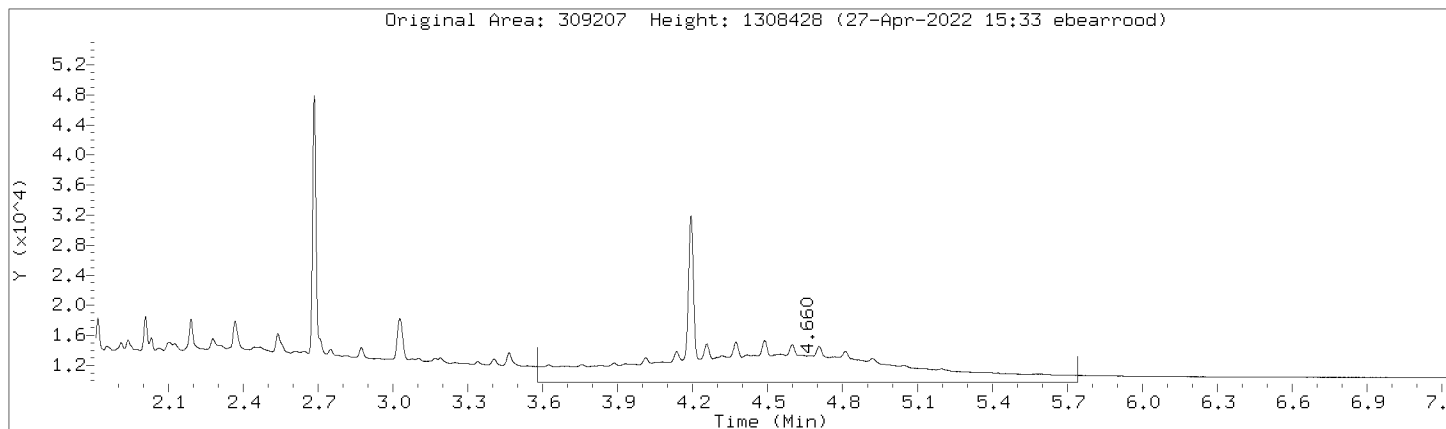
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

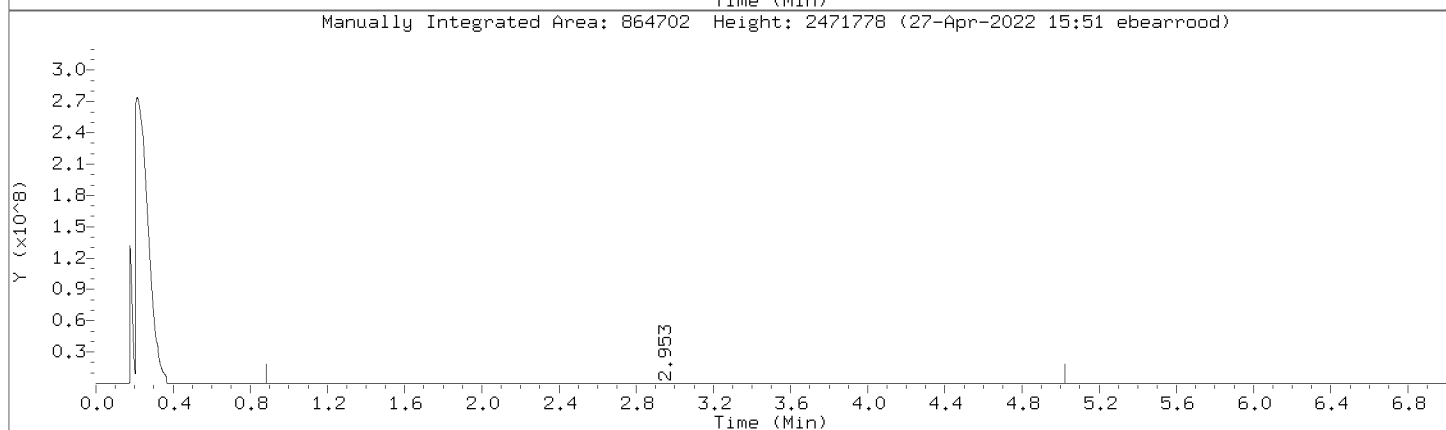
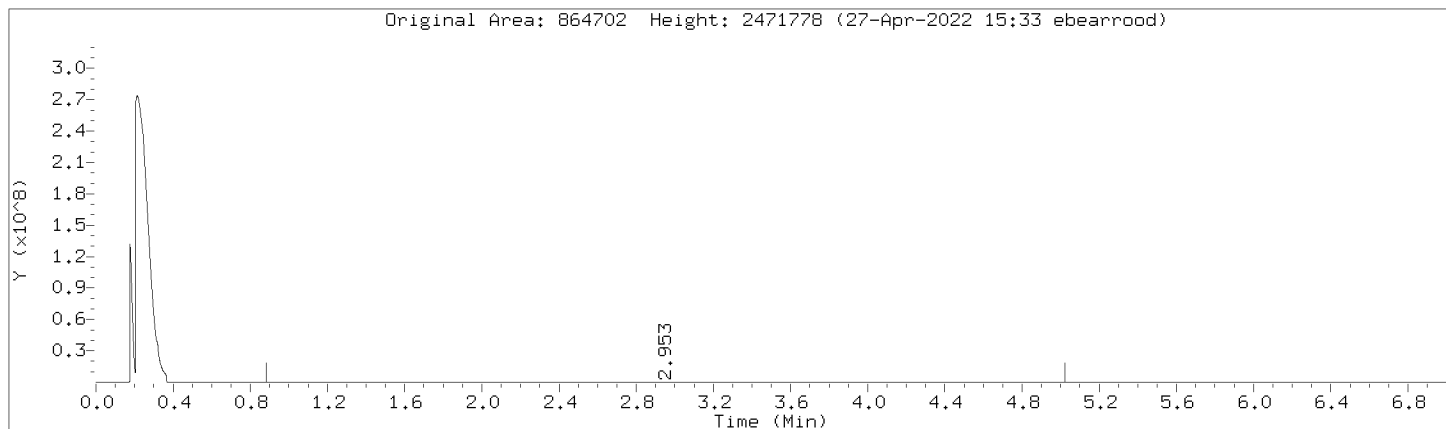
Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





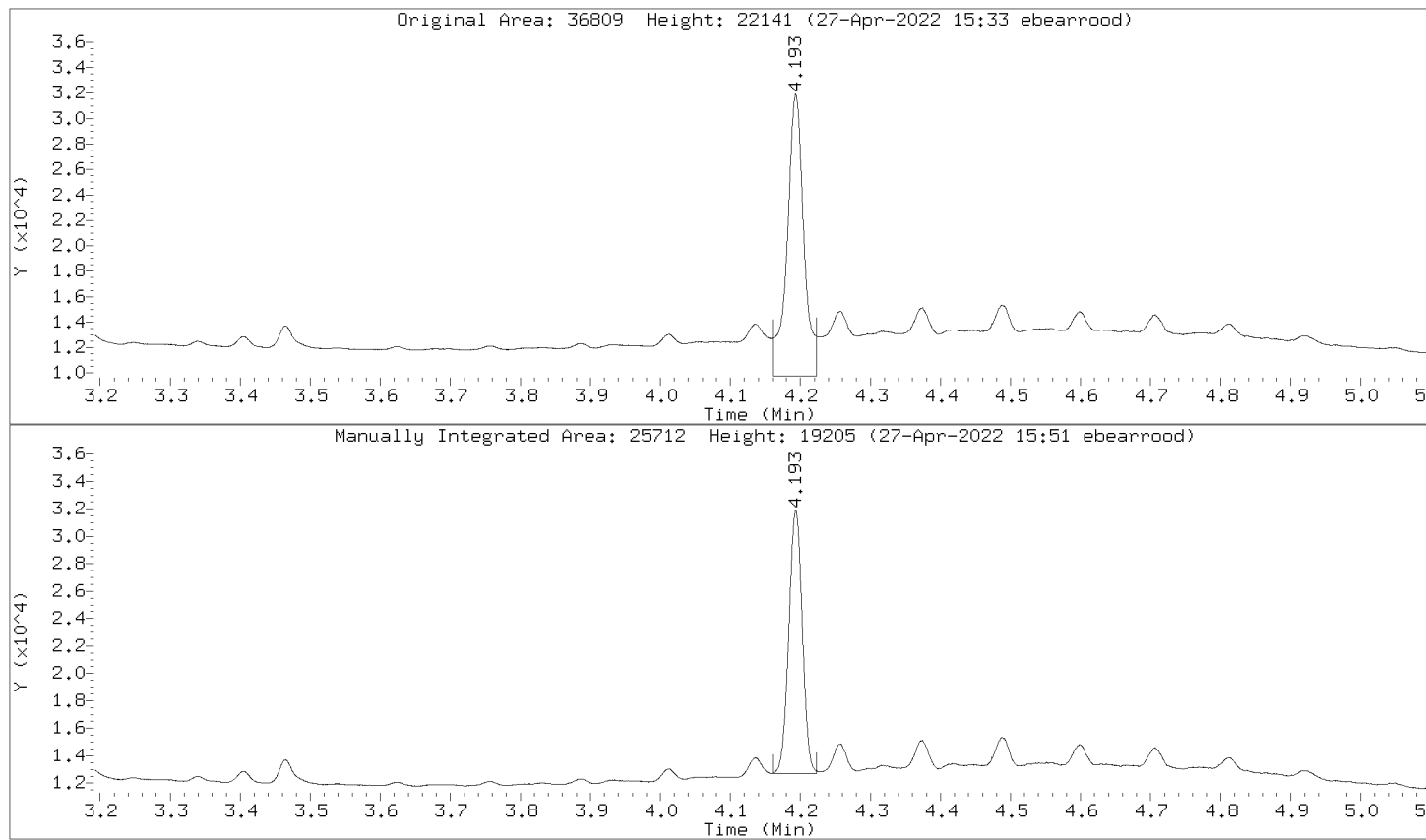
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Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



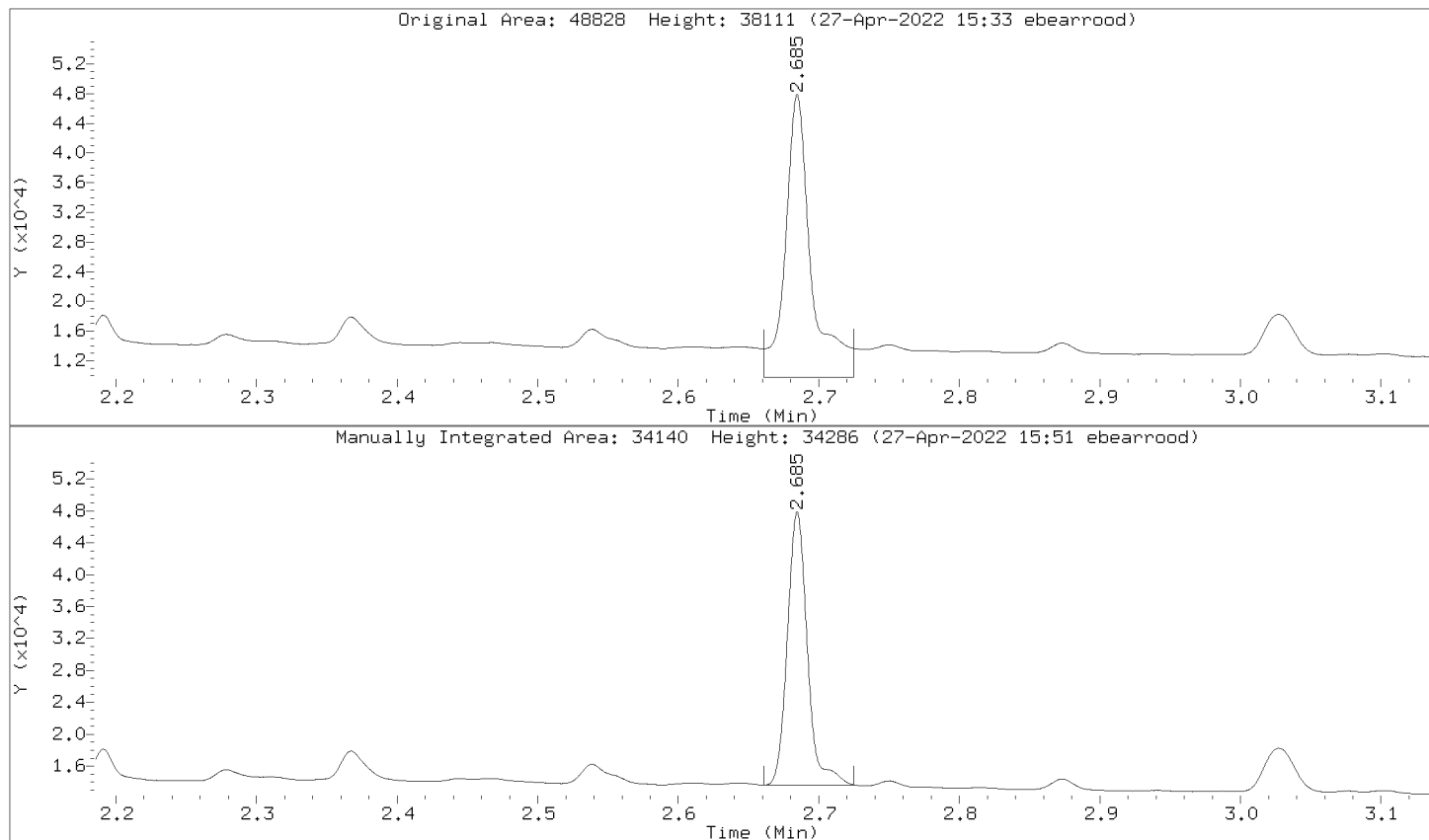
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
 Lab Smp Id: DMO-CAL5,362373:2 Client Smp ID: DMO-CAL5,362373:2  
 Inj Date : 27-APR-2022 13:45  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal5,362373:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 82 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		889707 100.000	91.4	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.684	2.685 -0.001		67661 10.0000	9.65	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.193	4.193 0.000		51572 10.0000	9.31	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		429960 100.000	91.4	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		1007171 100.000	91.4	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		456691 100.000	90.8	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		1320158 200.000	183	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		759830 100.000	92.4	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		759830 100.000	92.4	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		518403 100.000	91.1	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		518403 100.000	91.1	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:45

Client ID: DMO-CAL5.362373:2

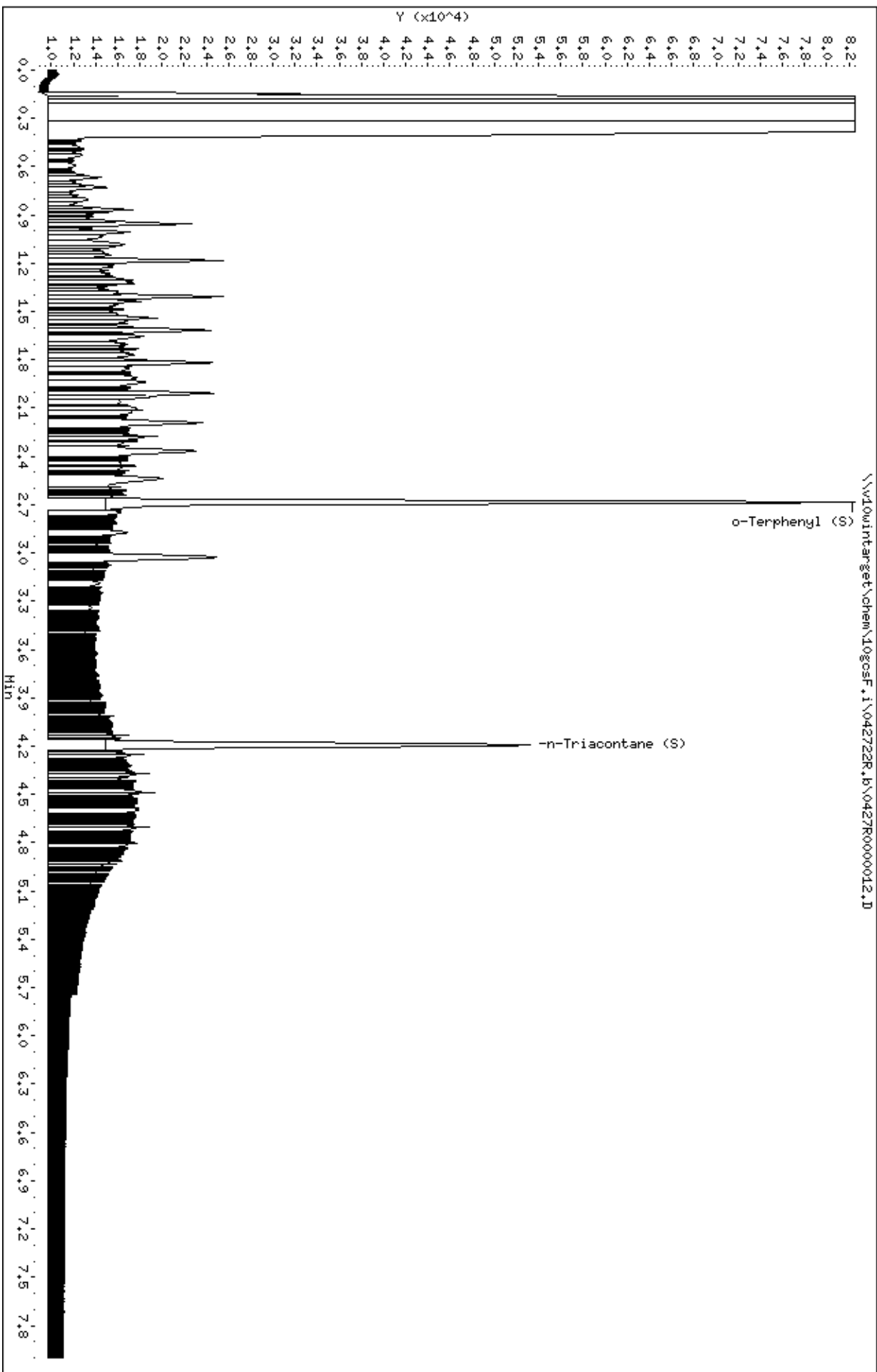
Sample Info: DMO-CAL5.362373:2

Instrument: 10goscF.1

Operator: EBS

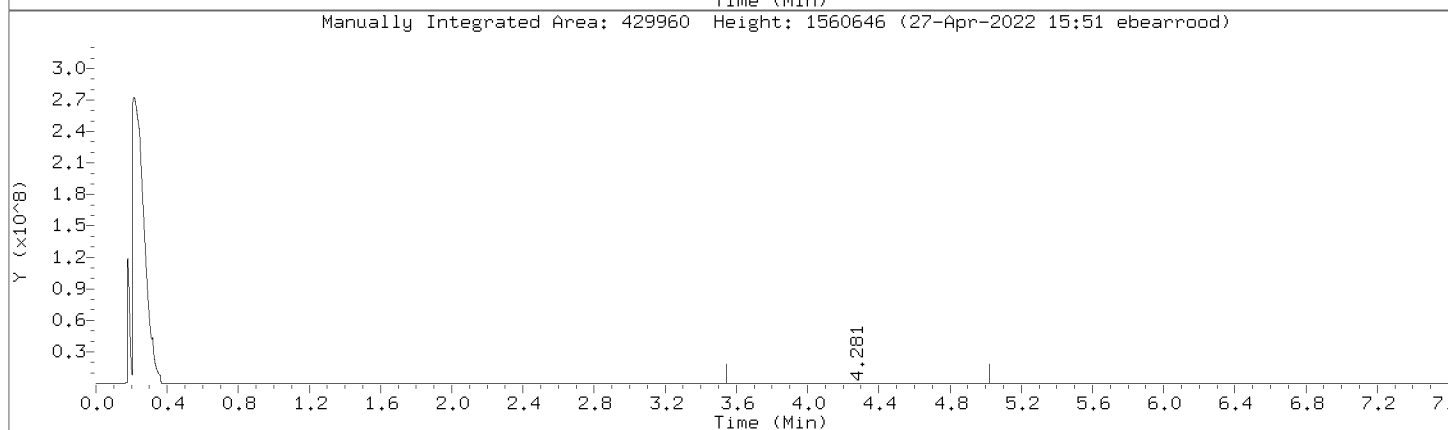
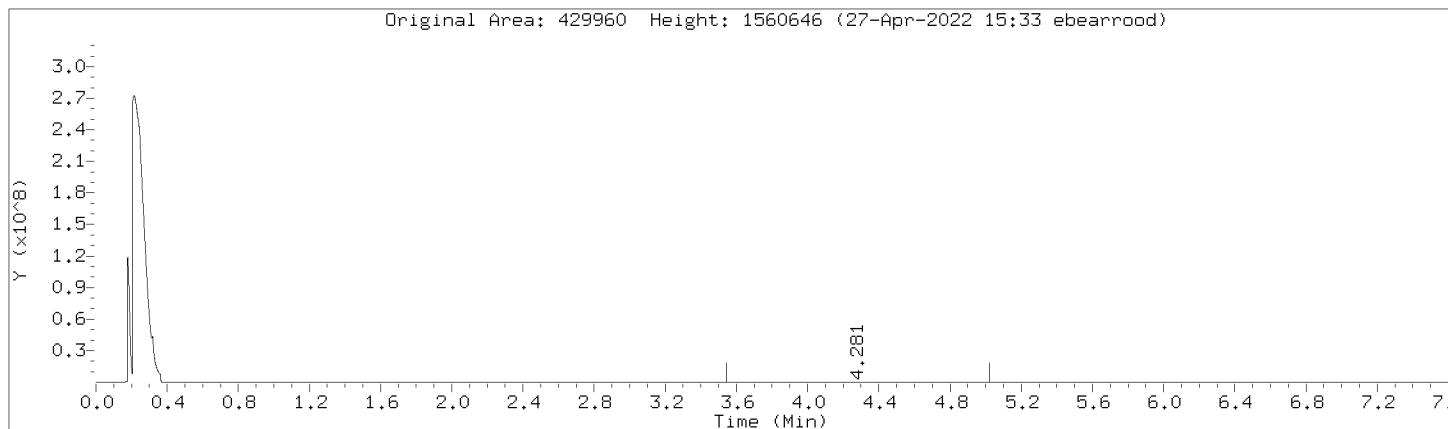
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Column phase: DB-5-US21430033



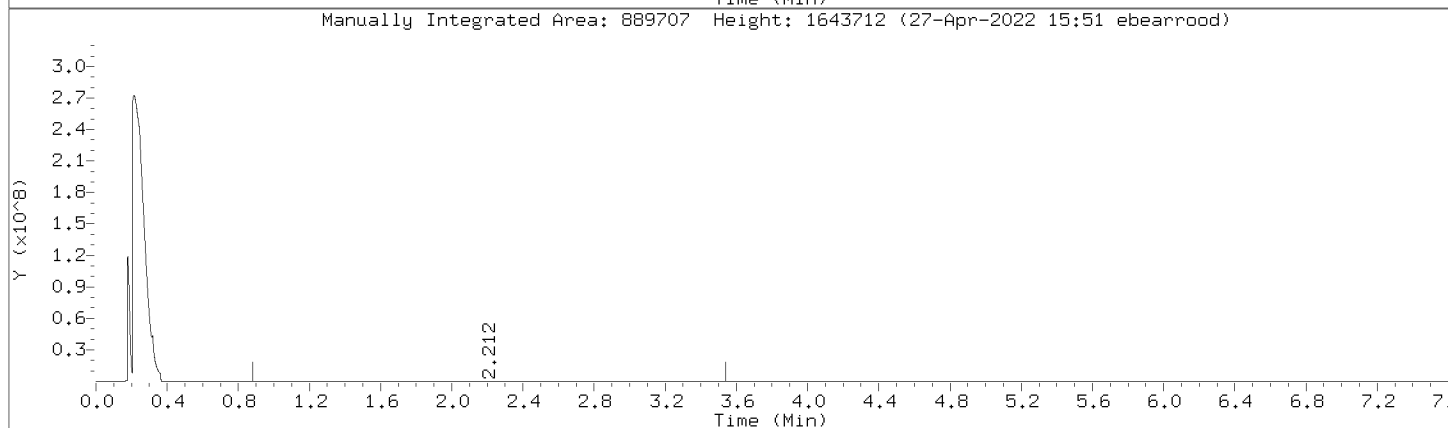
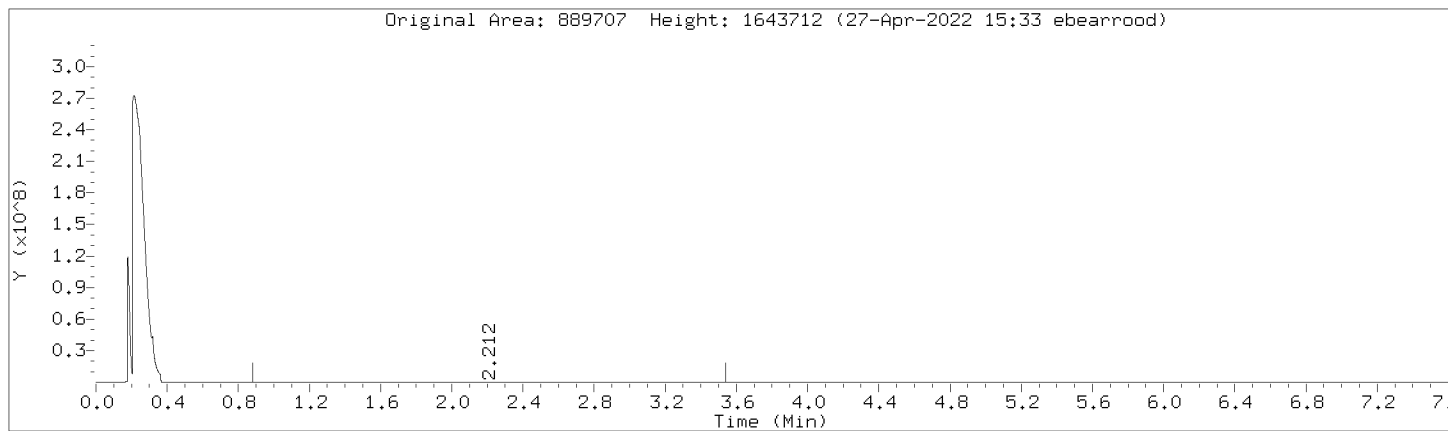
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Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

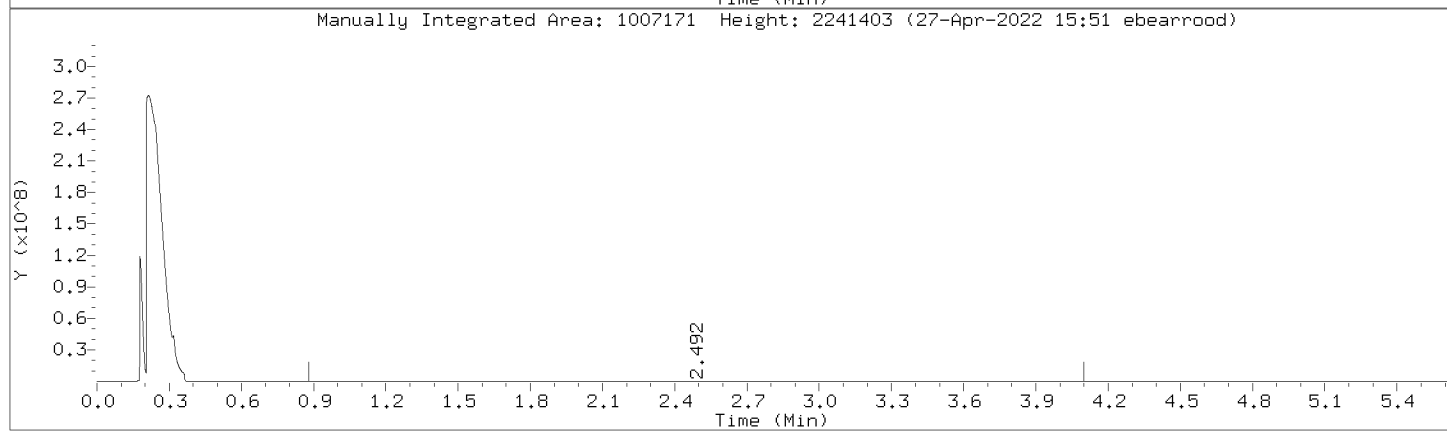
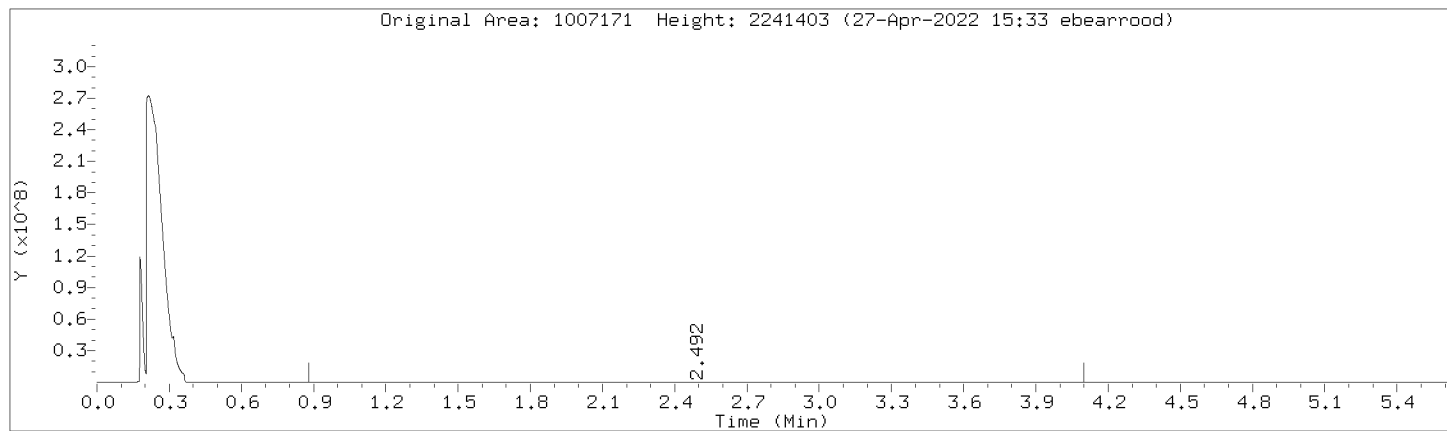
Compound: DRO by AK 102      Review Code: RNG  
CAS Number:





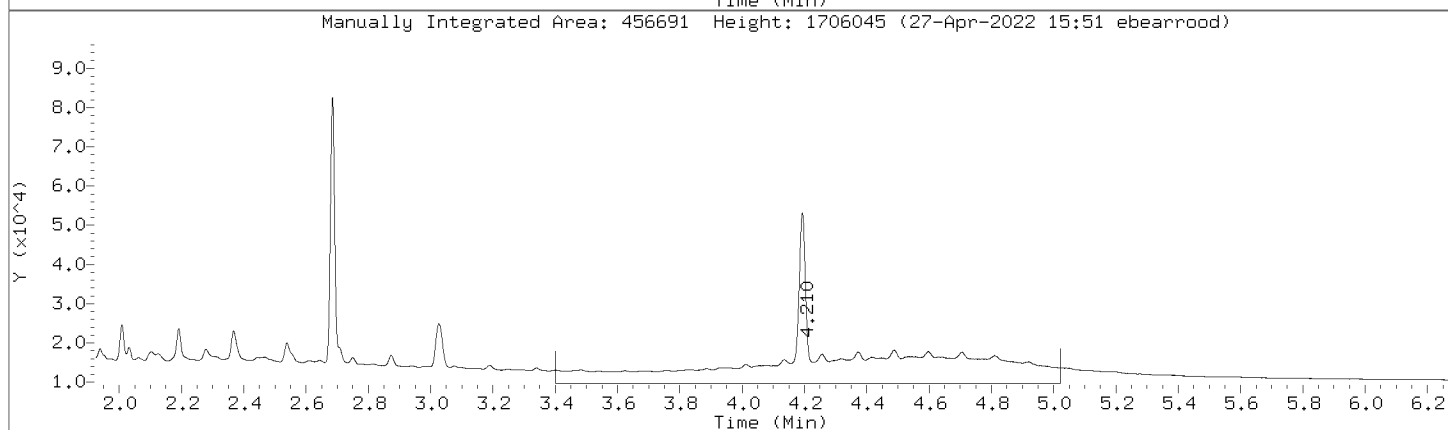
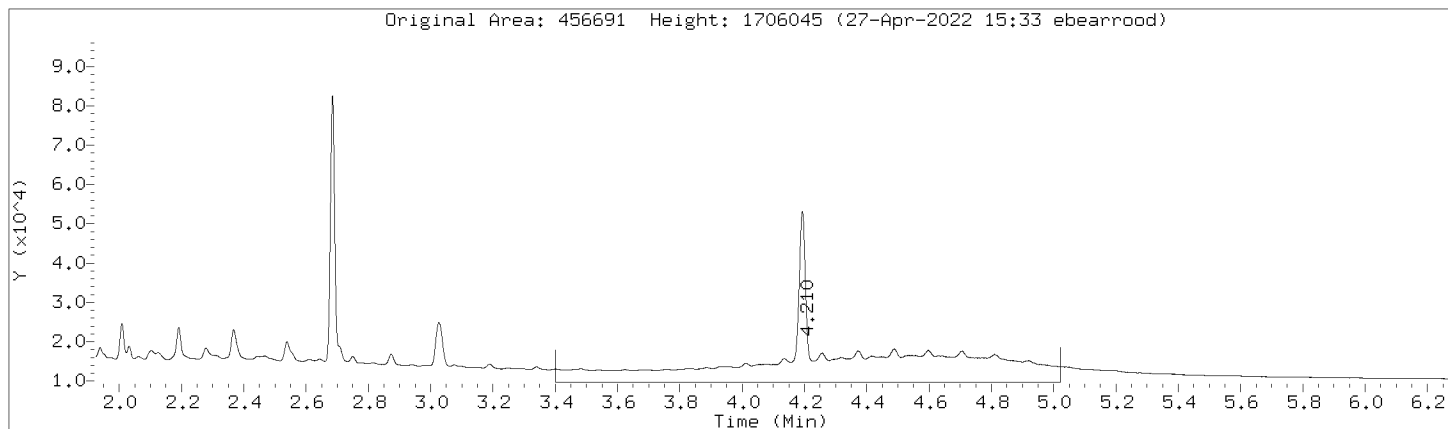
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Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



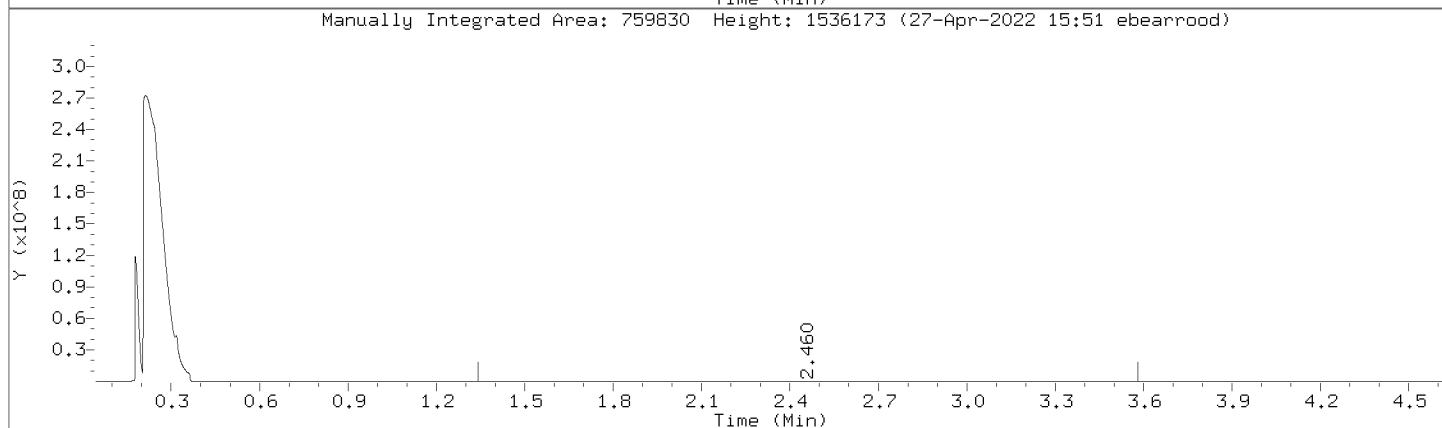
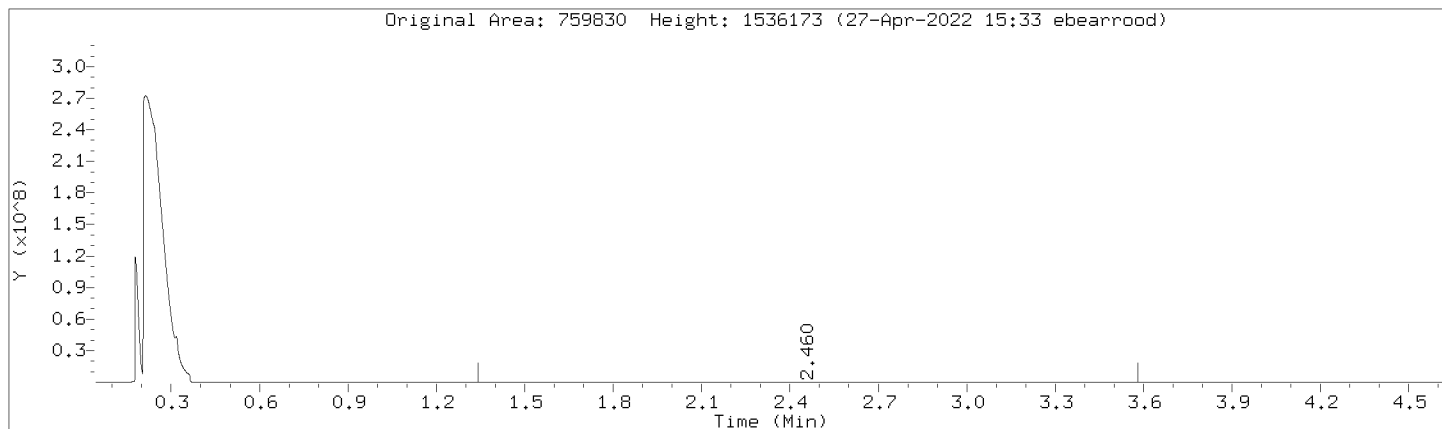
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Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



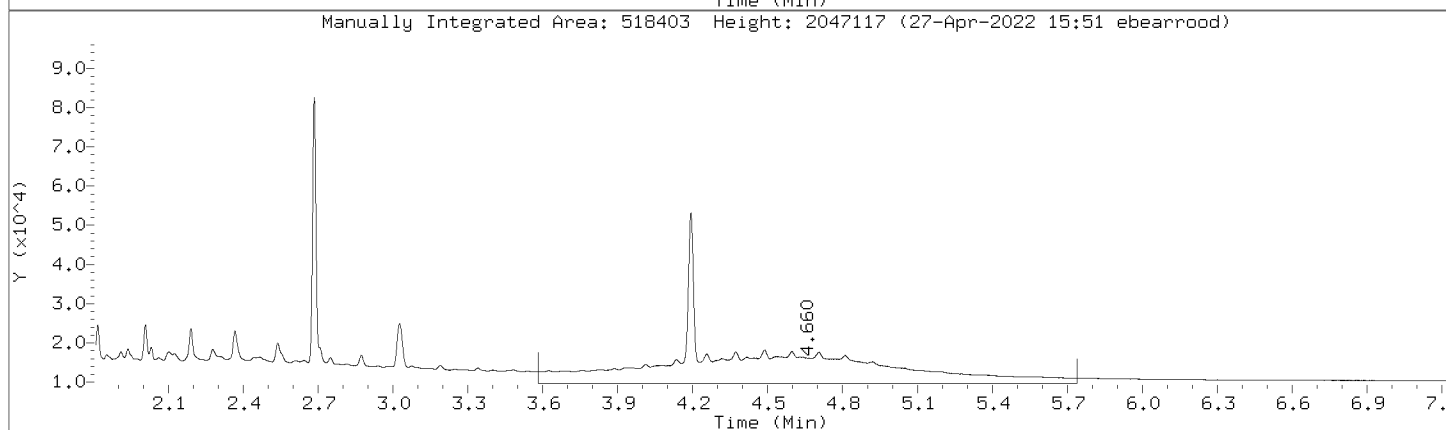
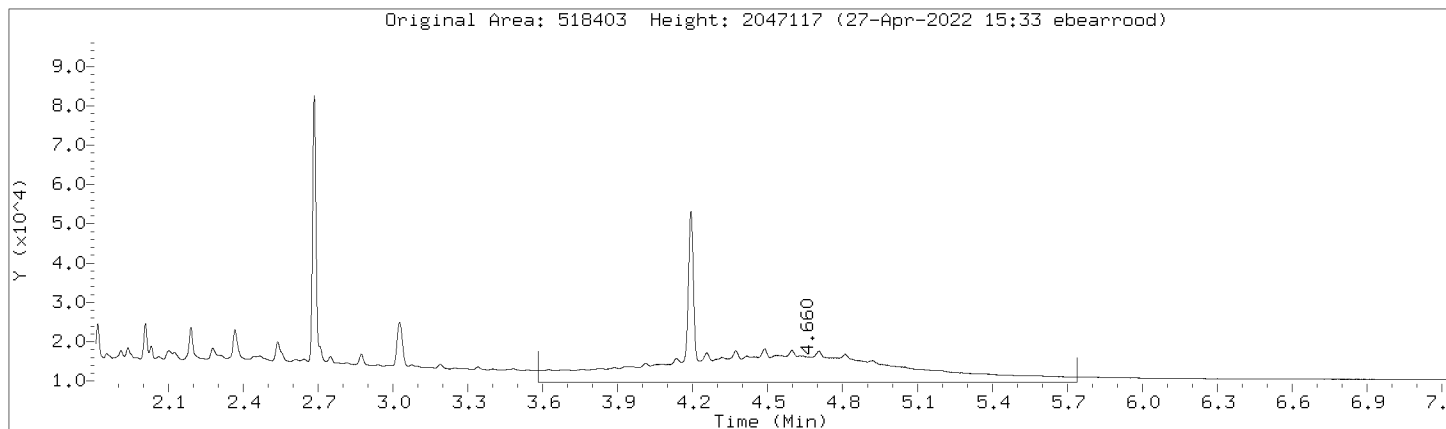
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Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



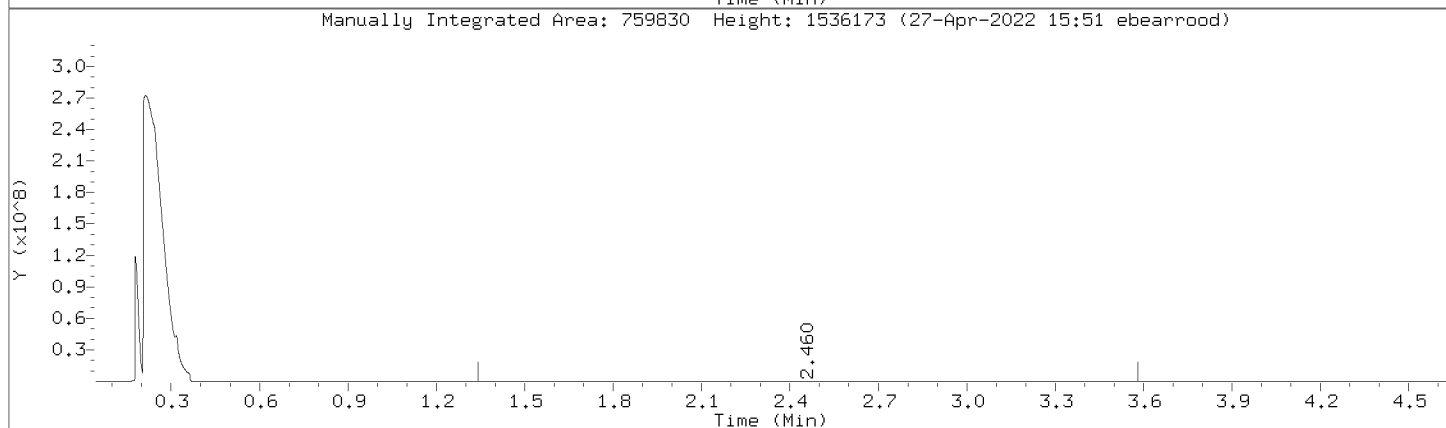
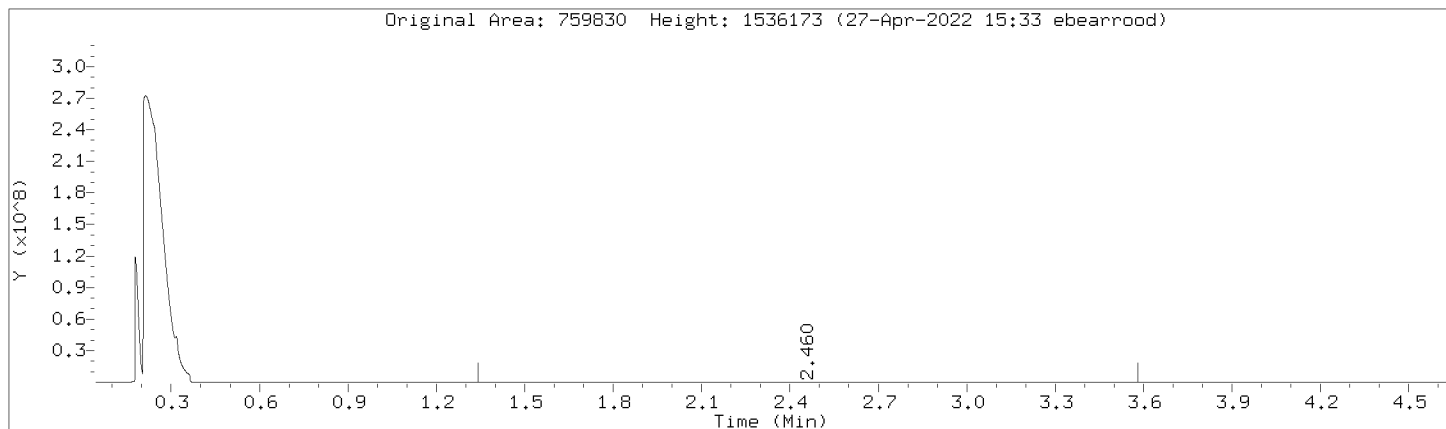
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Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



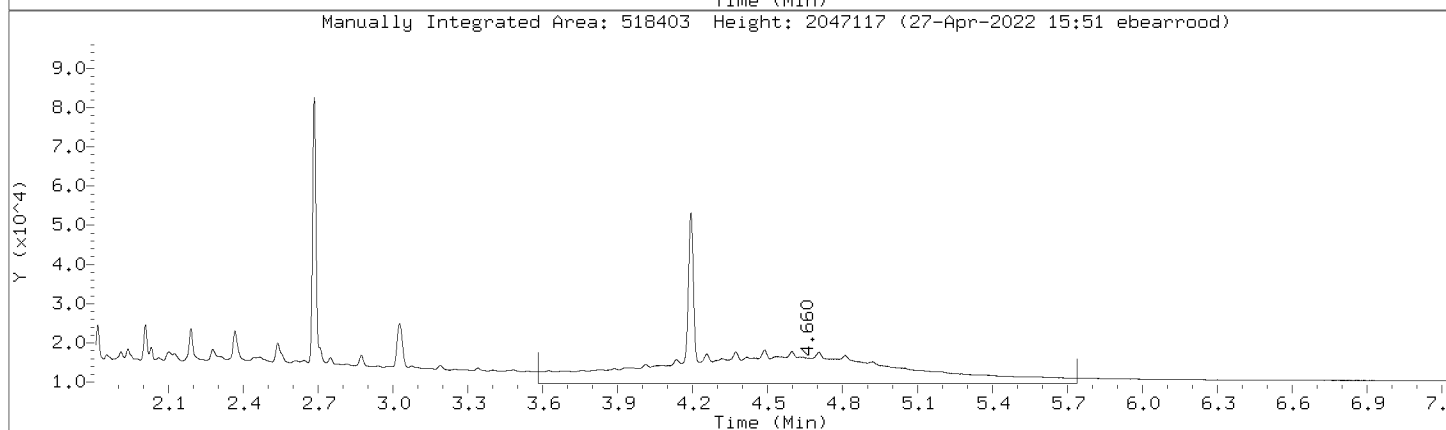
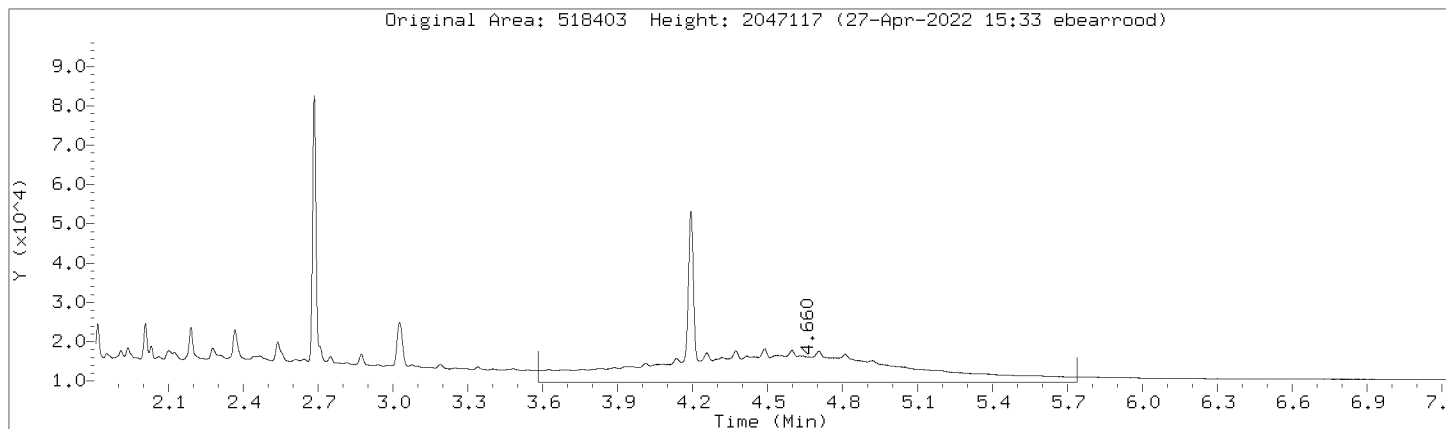
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Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



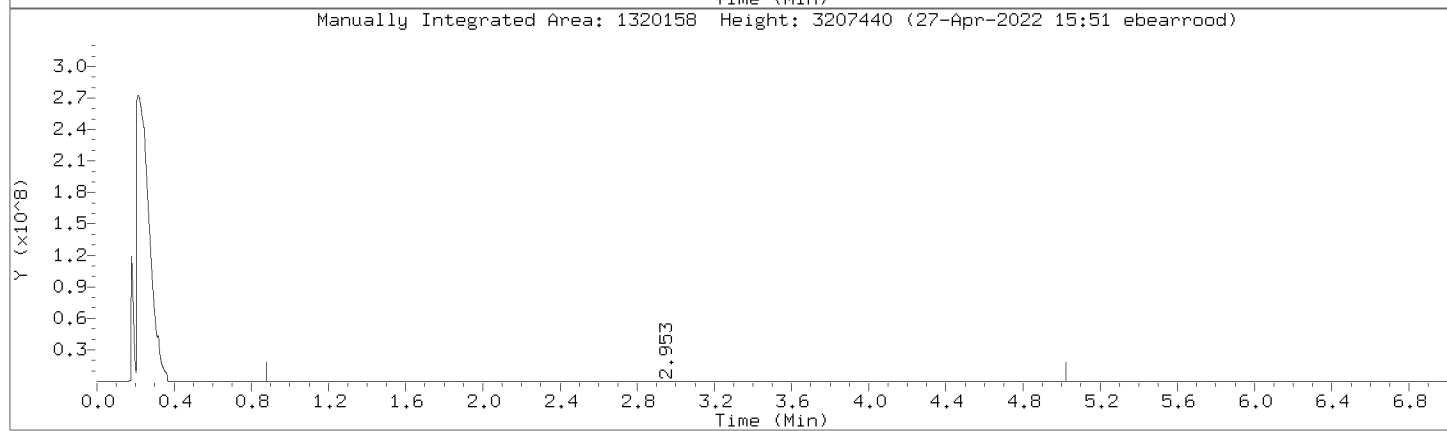
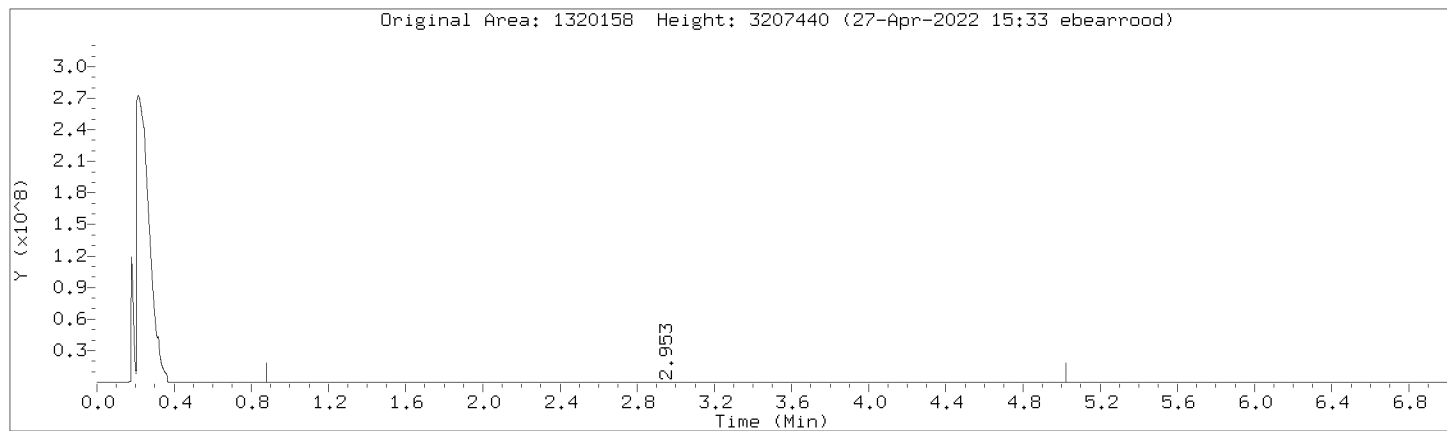
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Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



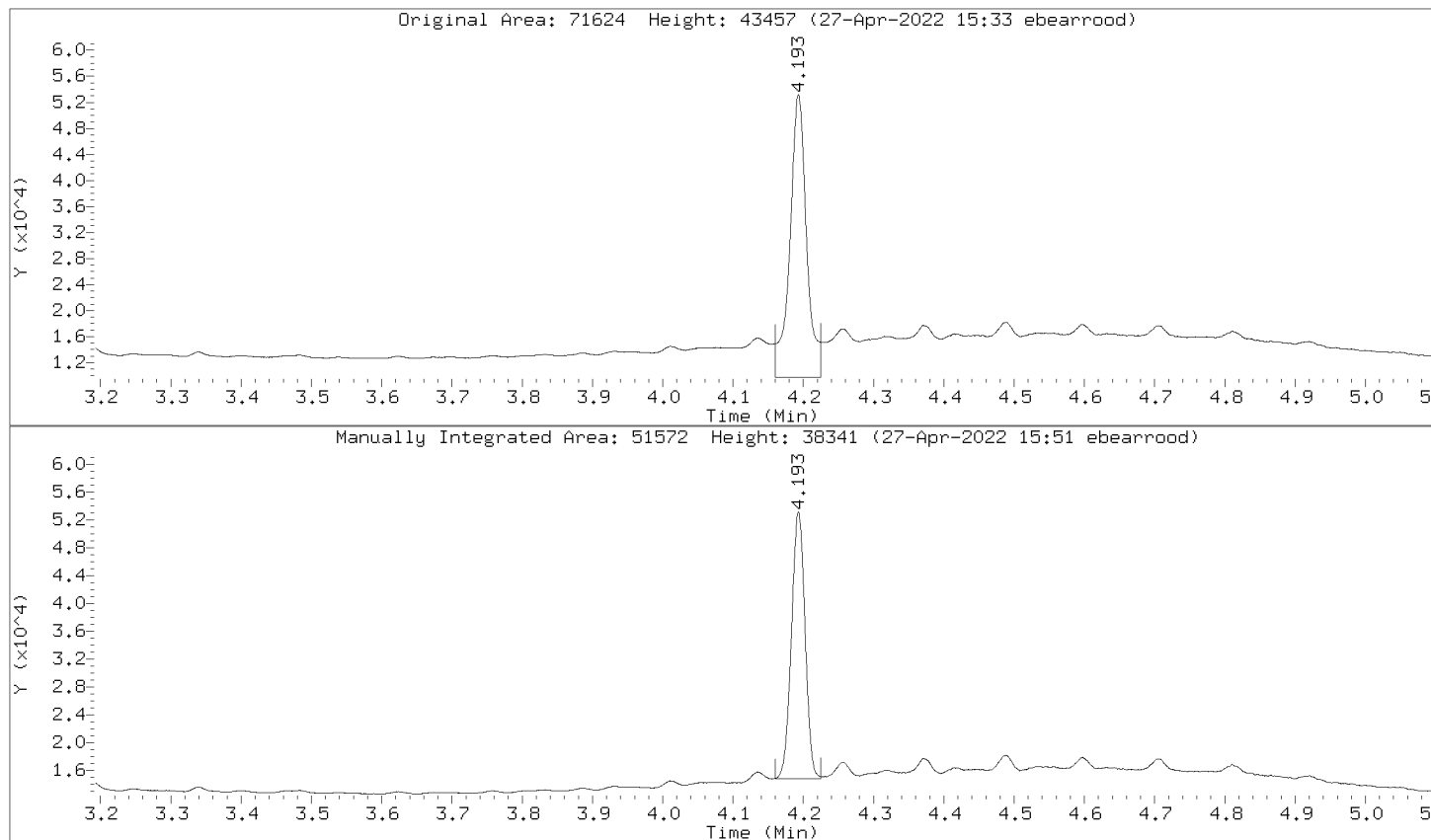
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Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

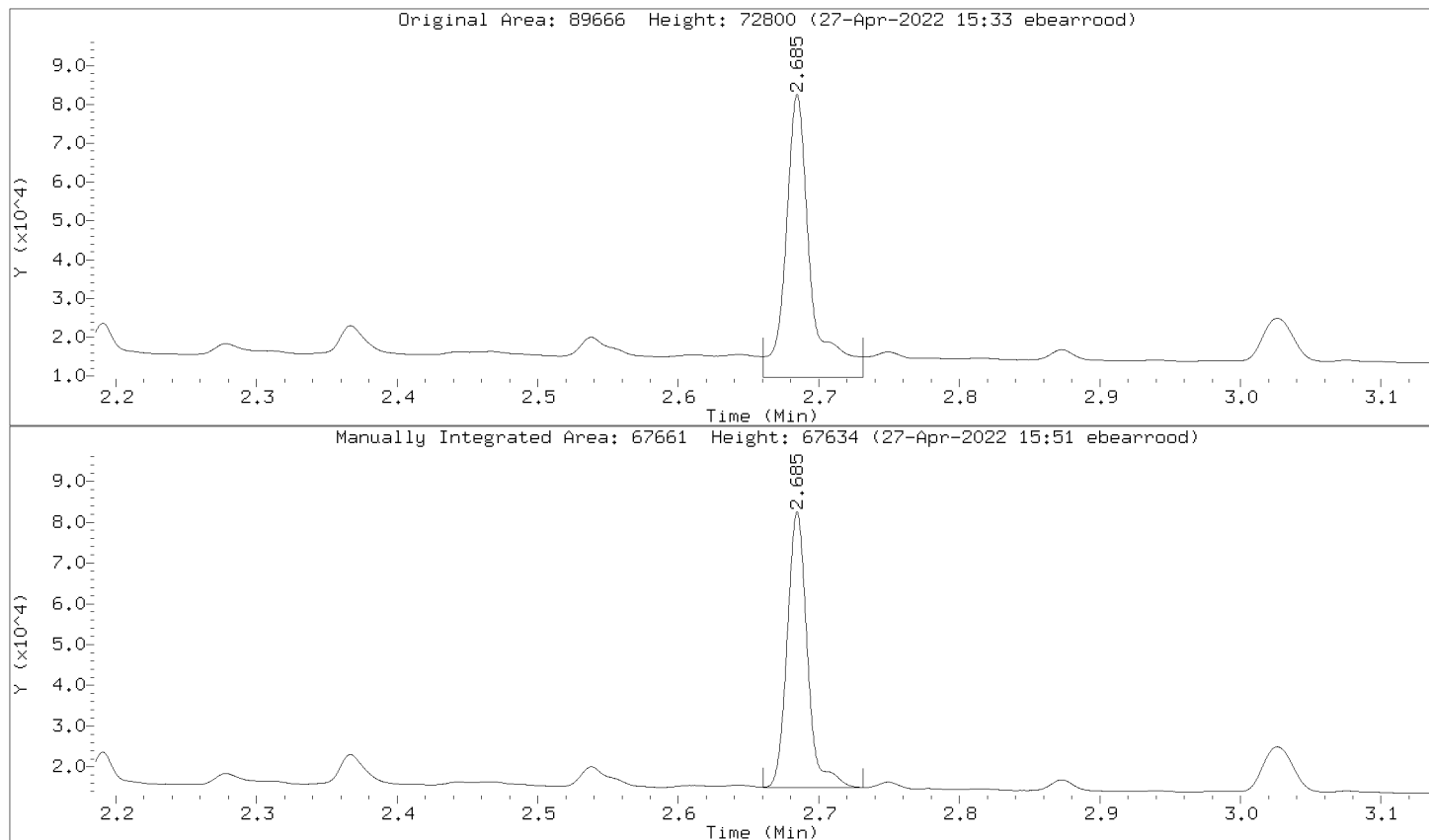
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
 Lab Smp Id: DMO-CAL6,362374:2 Client Smp ID: DMO-CAL6,362374:2  
 Inj Date : 27-APR-2022 13:57  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal6,362374:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 83 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		1816320 250.000	253	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.685	2.685 0.000		169620 25.0000	25.1	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.193	4.193 0.000		132262 25.0000	24.9	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		995322 250.000	253	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		2067409 250.000	254	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		1048038 250.000	254	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		2811643 500.000	507	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		1534479 250.000	253	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		1534479 250.000	253	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		1215359 250.000	249	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		1215359 250.000	249	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:57

Client ID: DM0-CAL6,362374;2

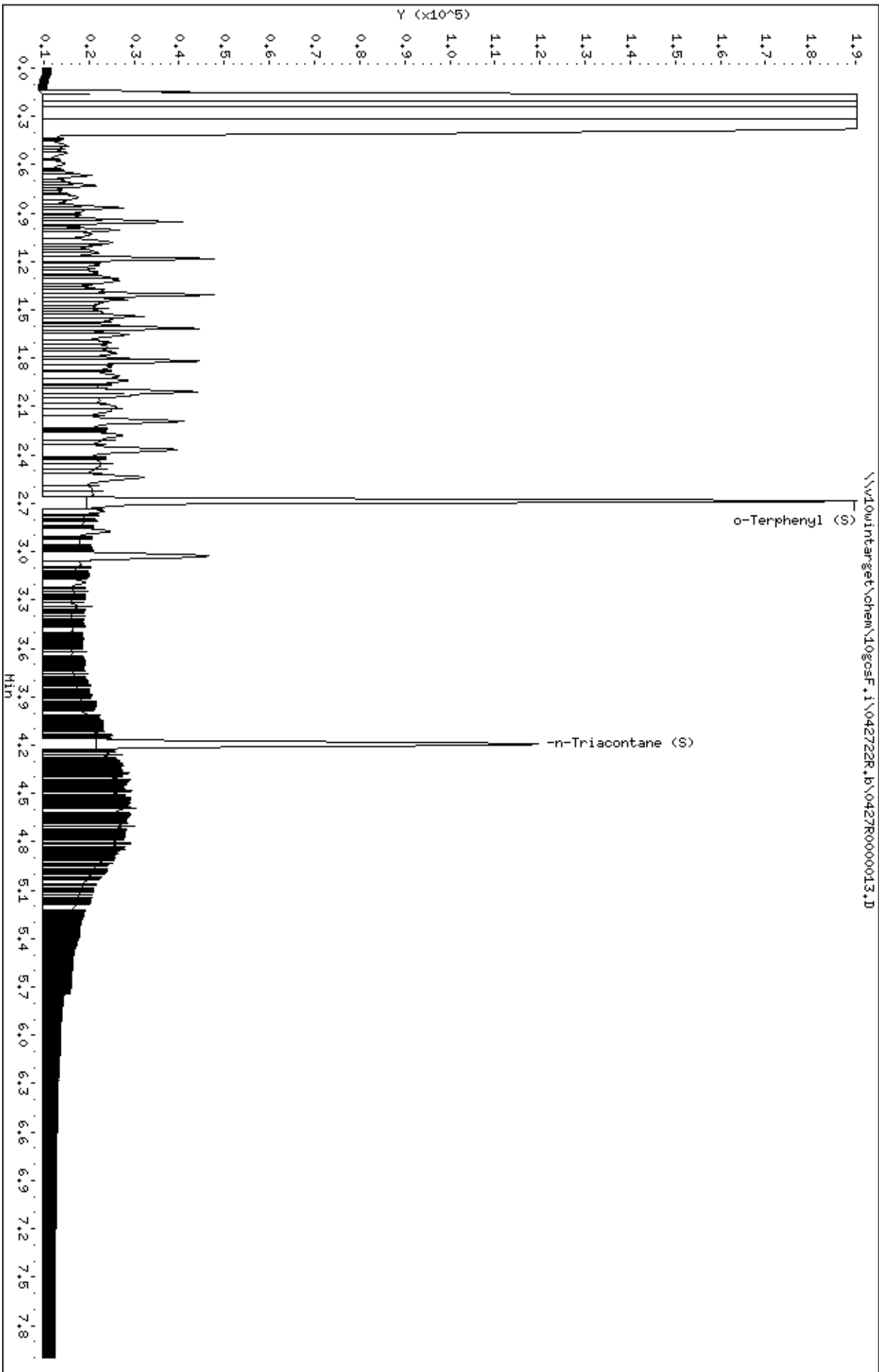
Sample Info: DM0-CAL6,362374;2

Instrument: logosf.1

Operator: EB3

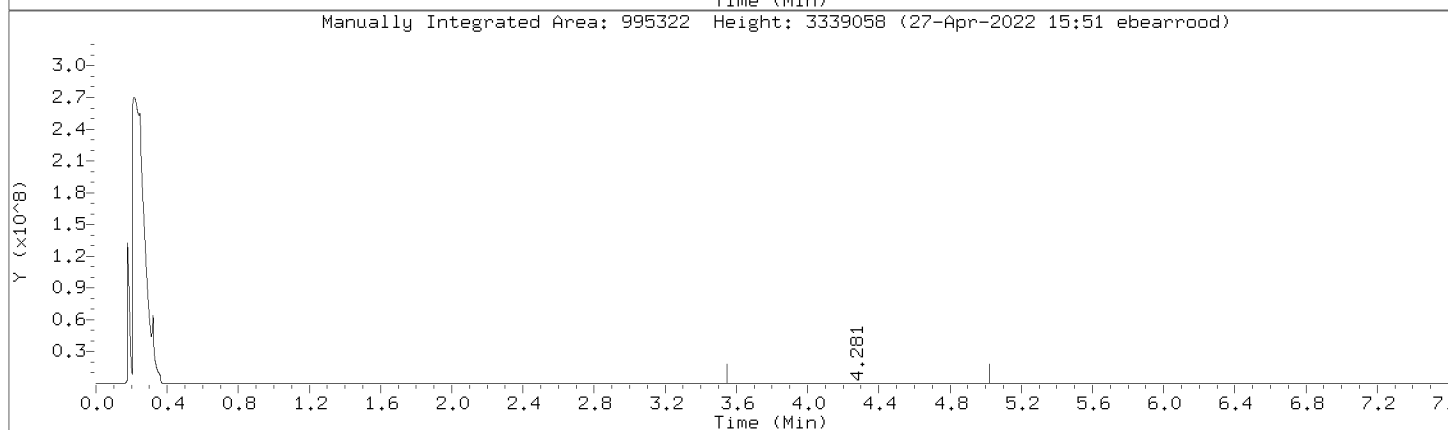
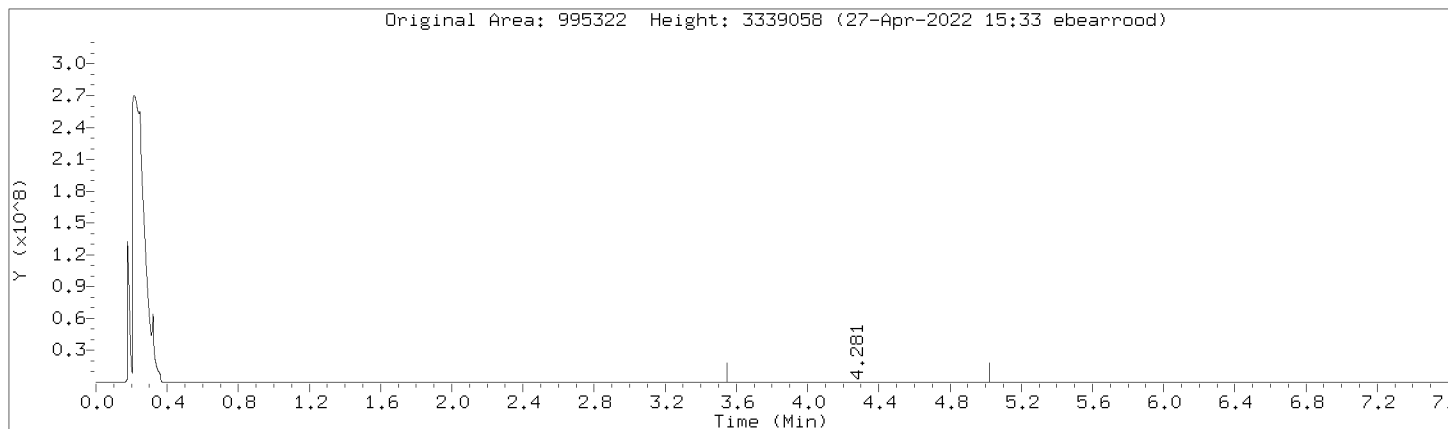
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Column phase: DB-5-US21430033



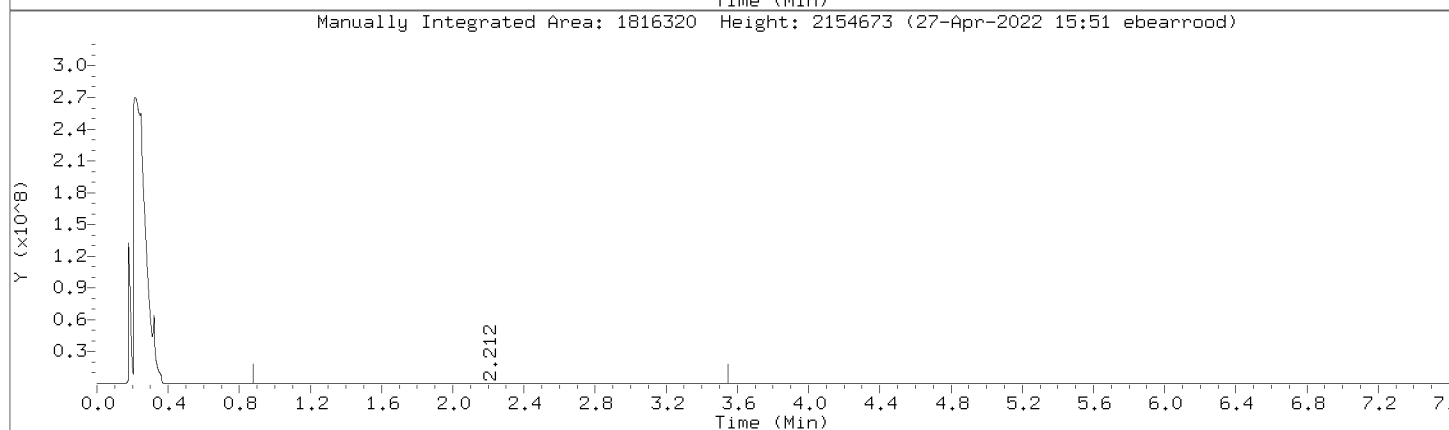
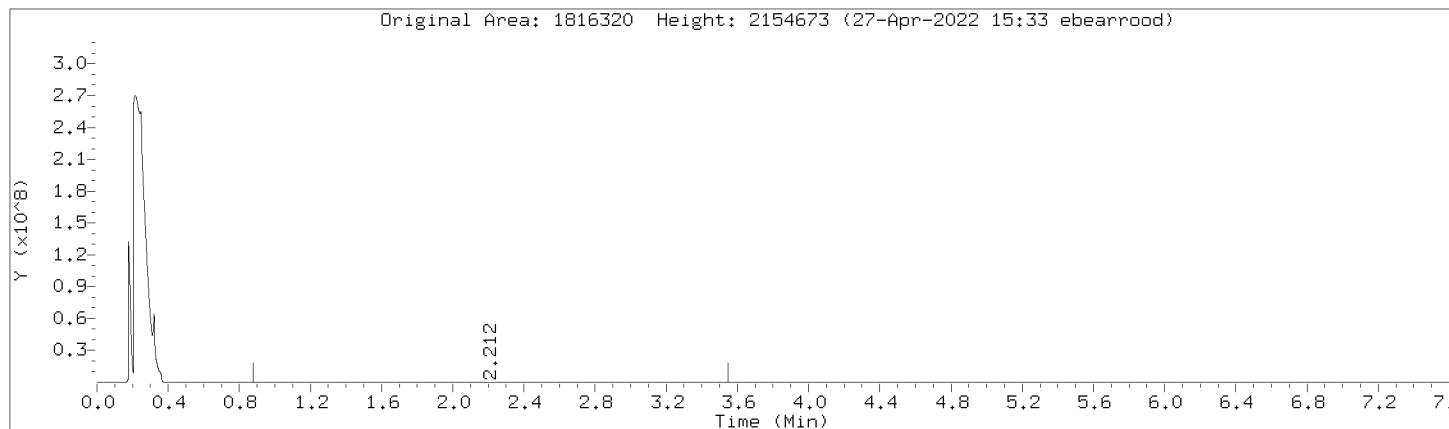
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



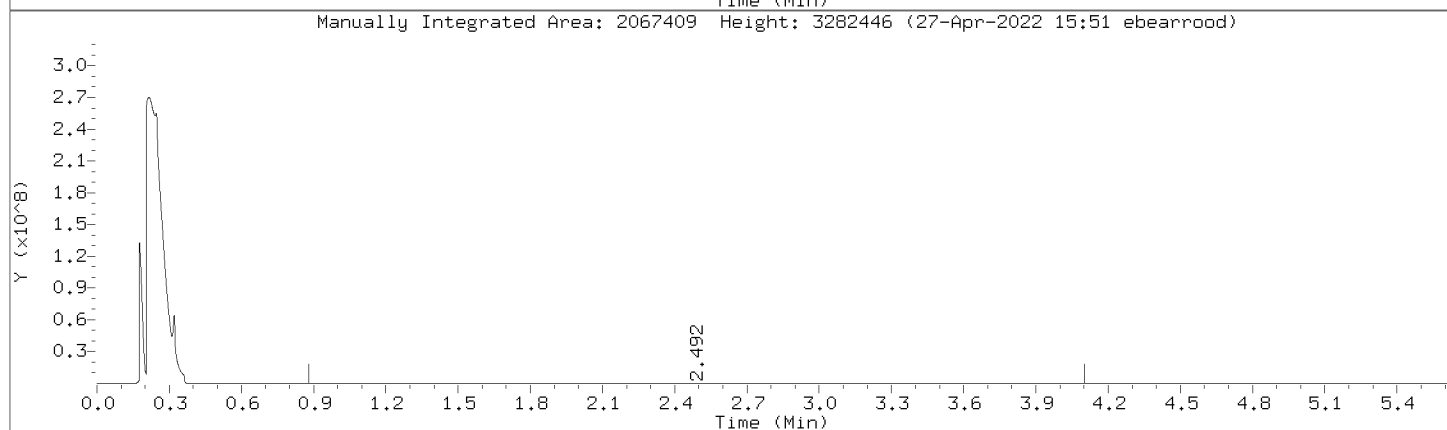
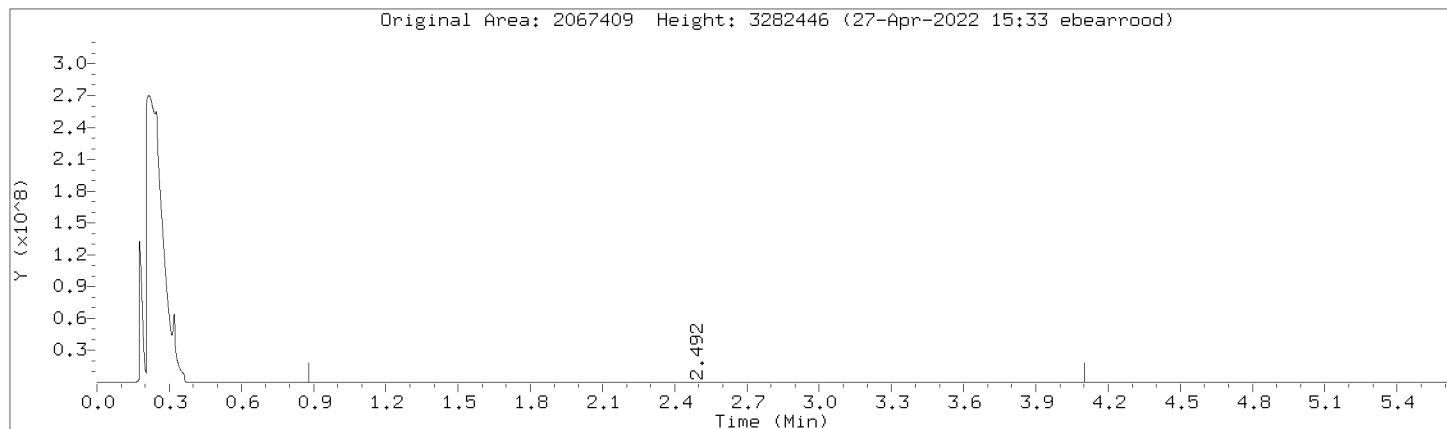
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



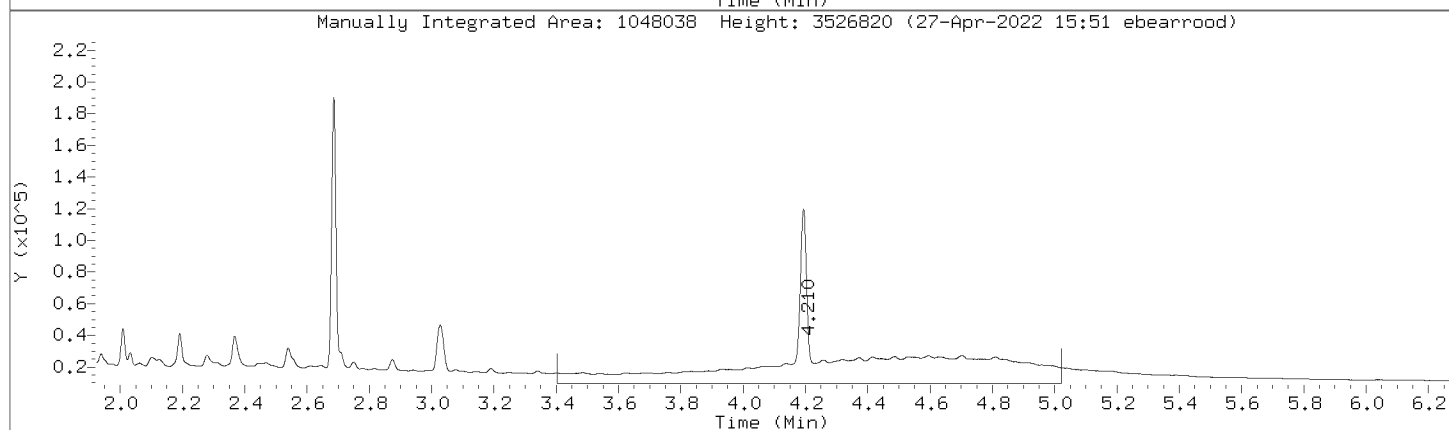
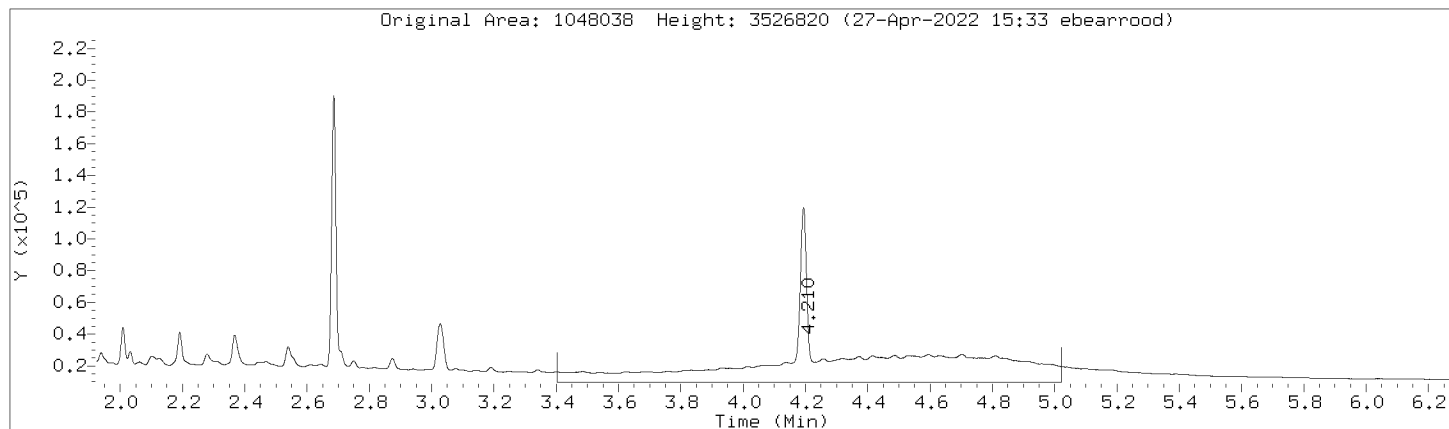
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

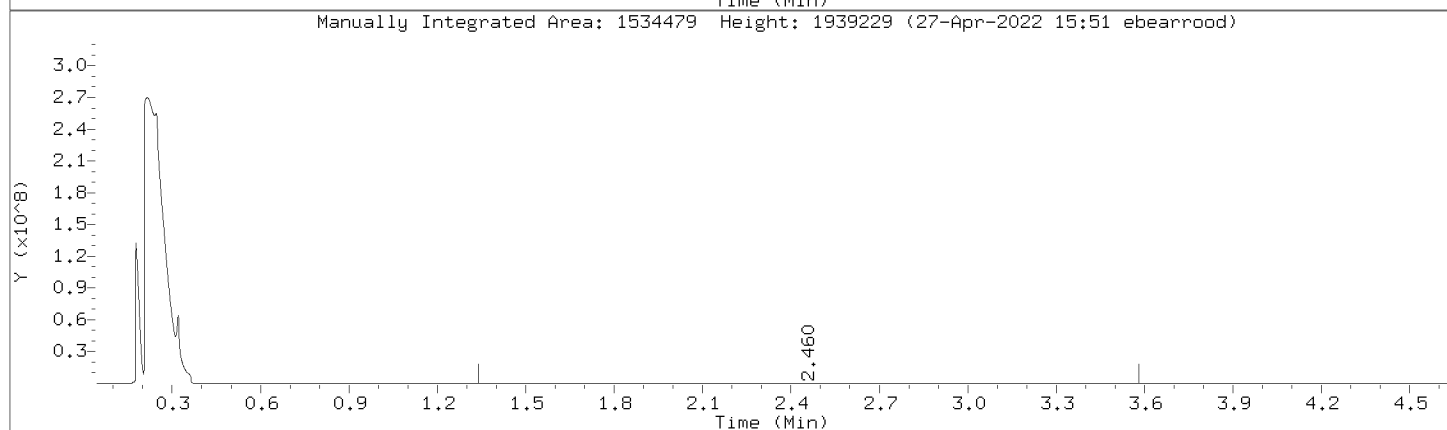
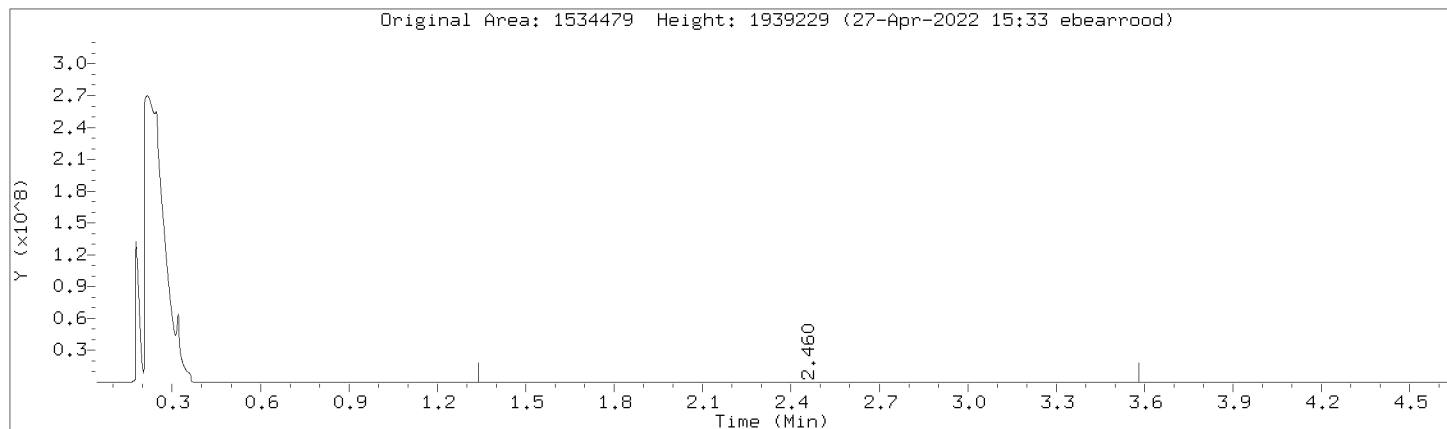
Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:





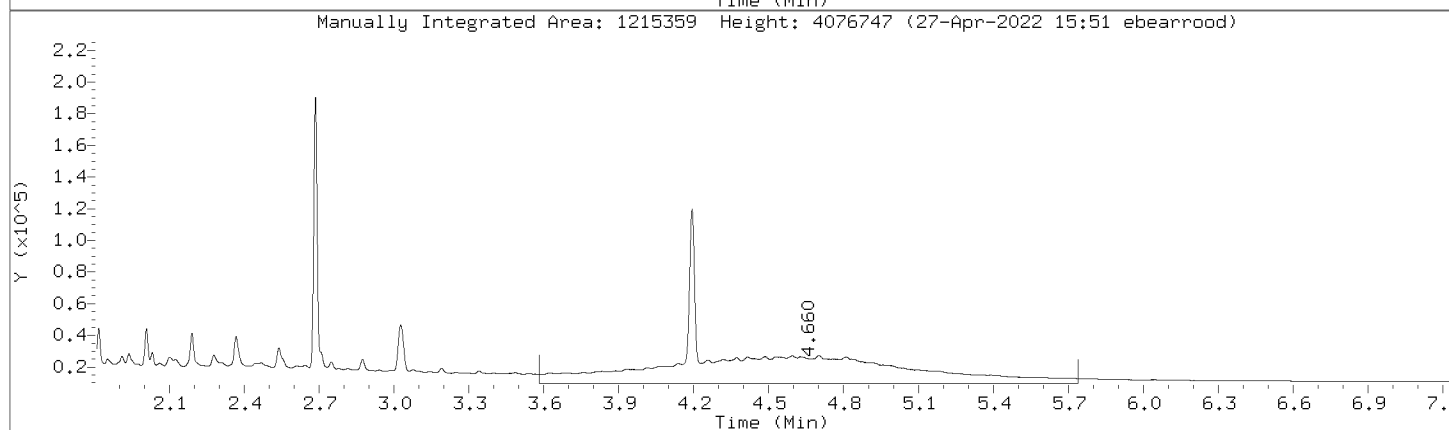
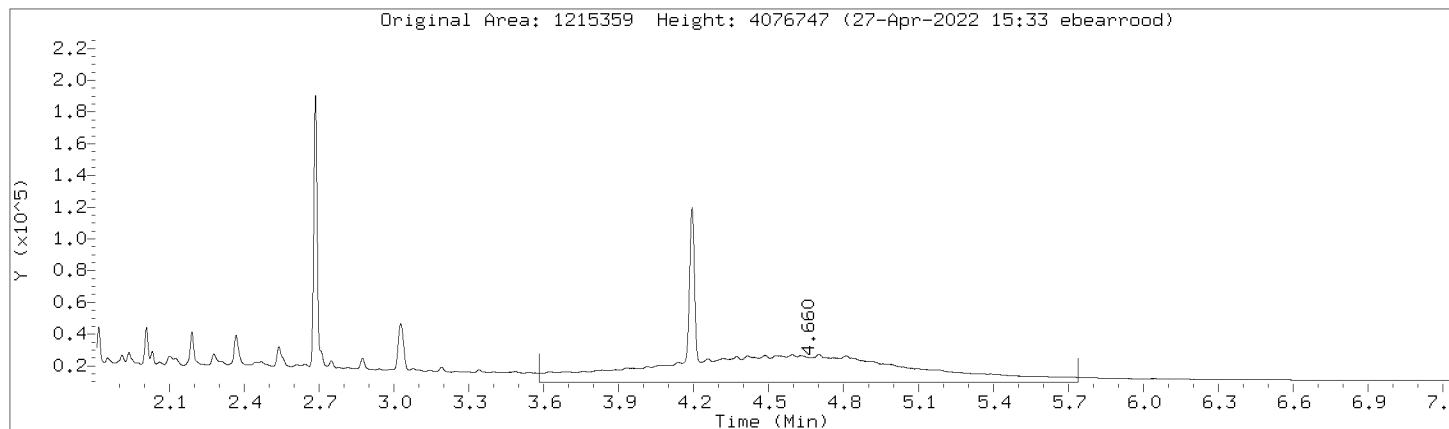
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



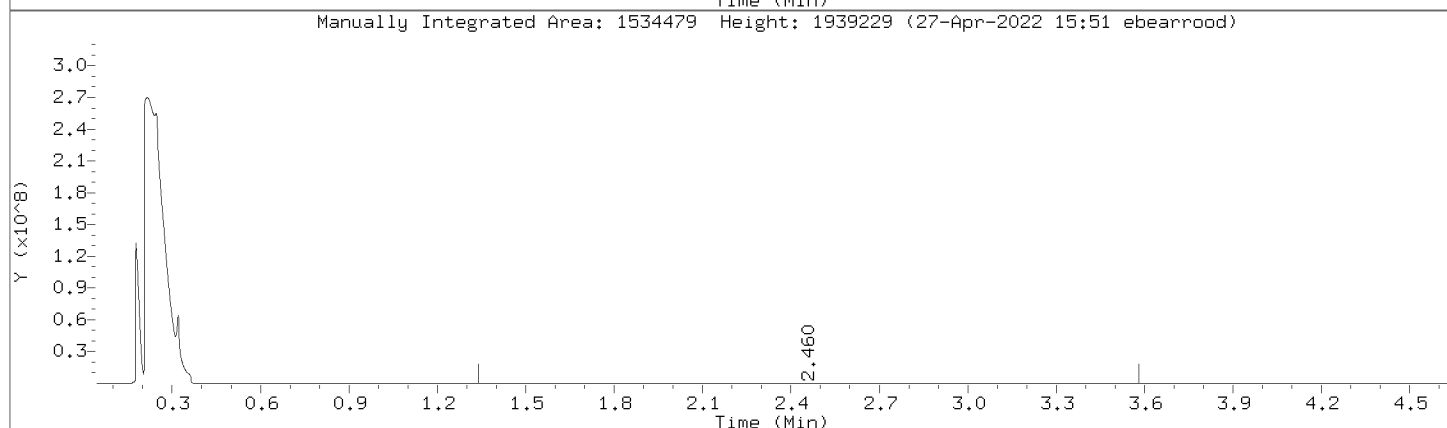
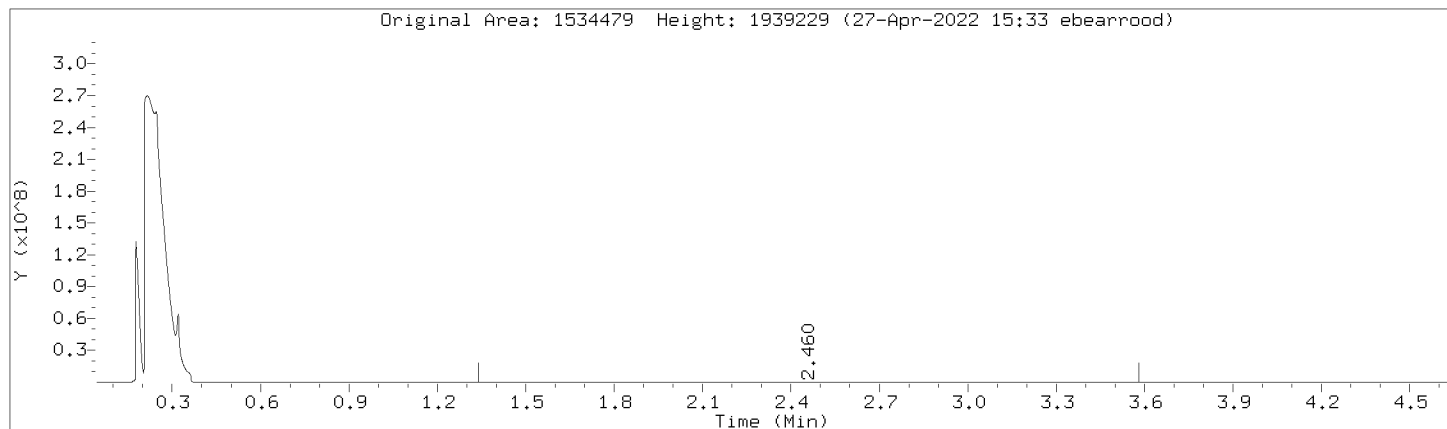
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



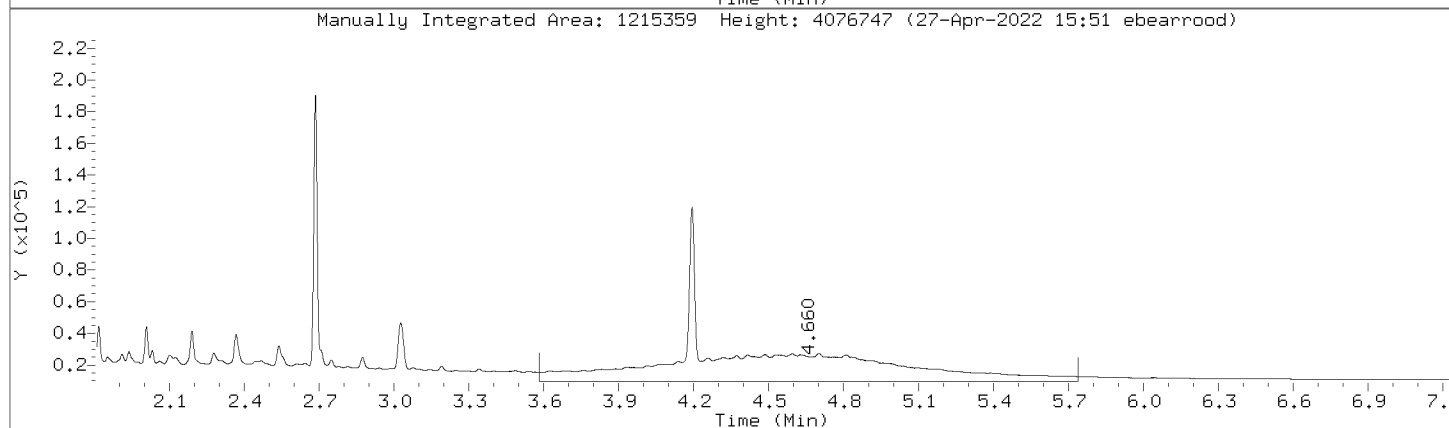
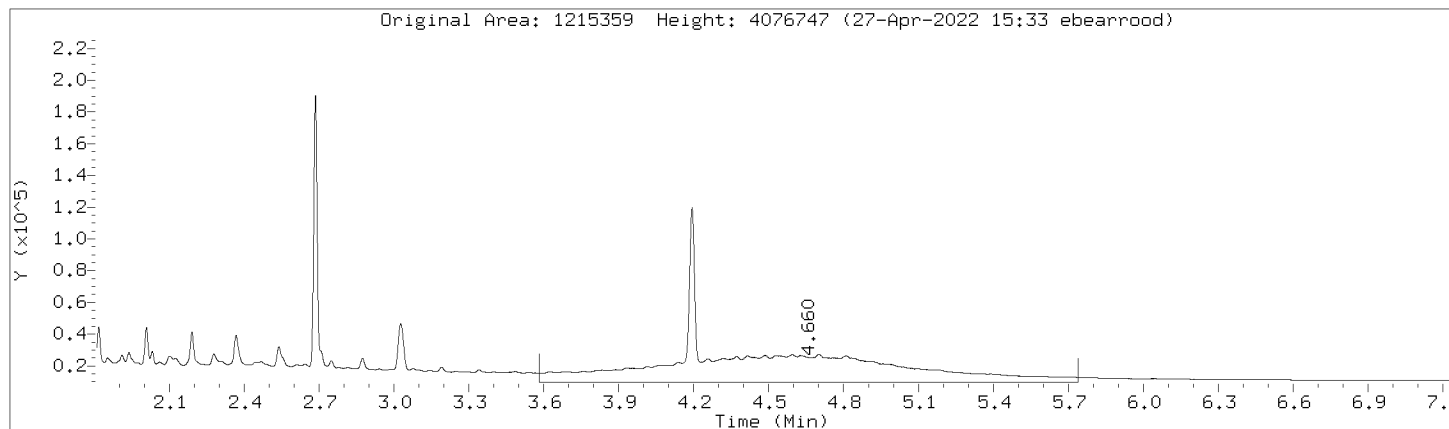
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



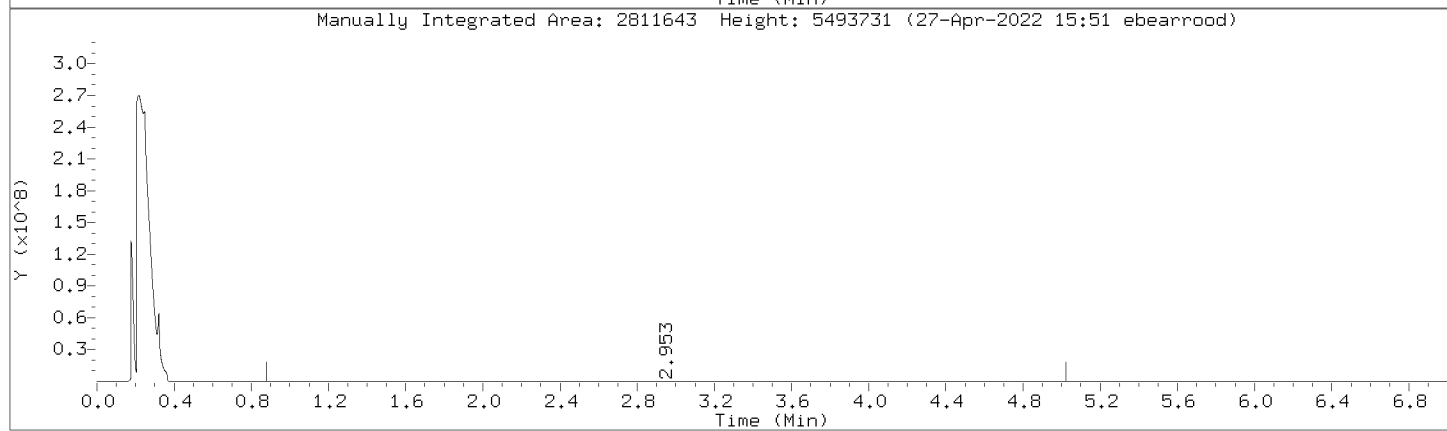
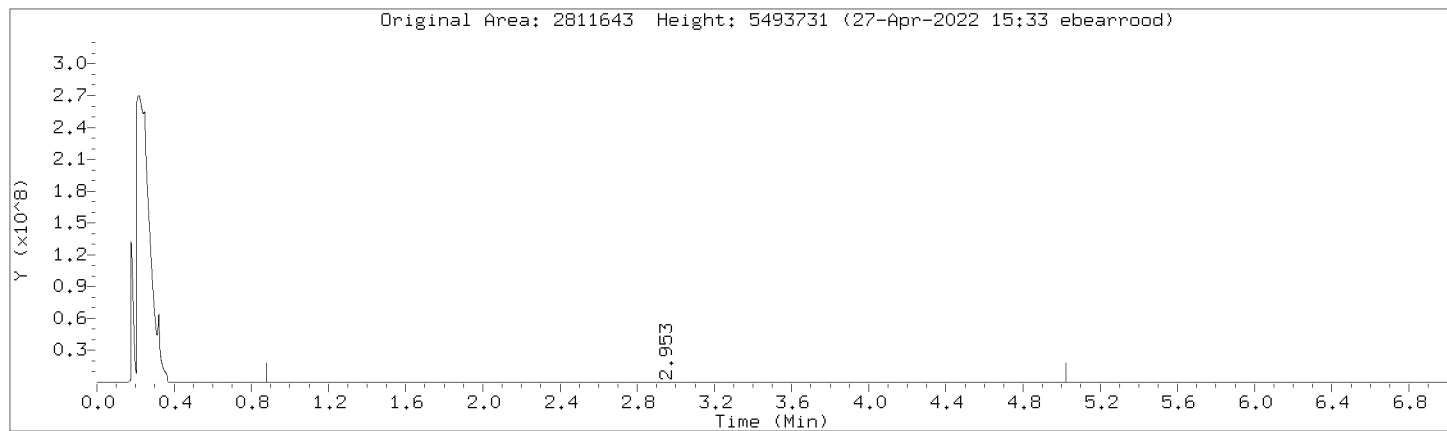
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



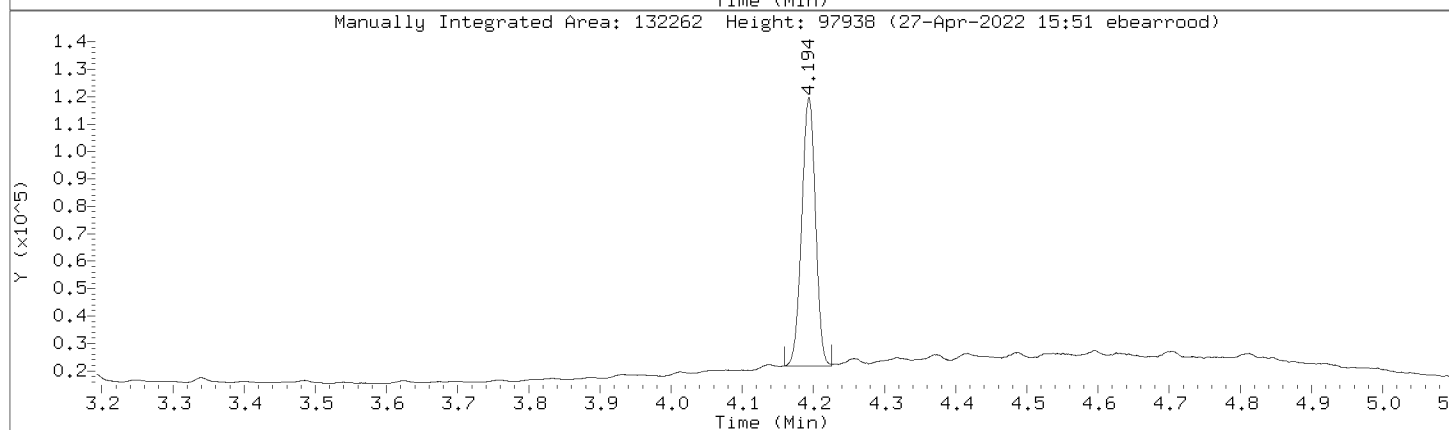
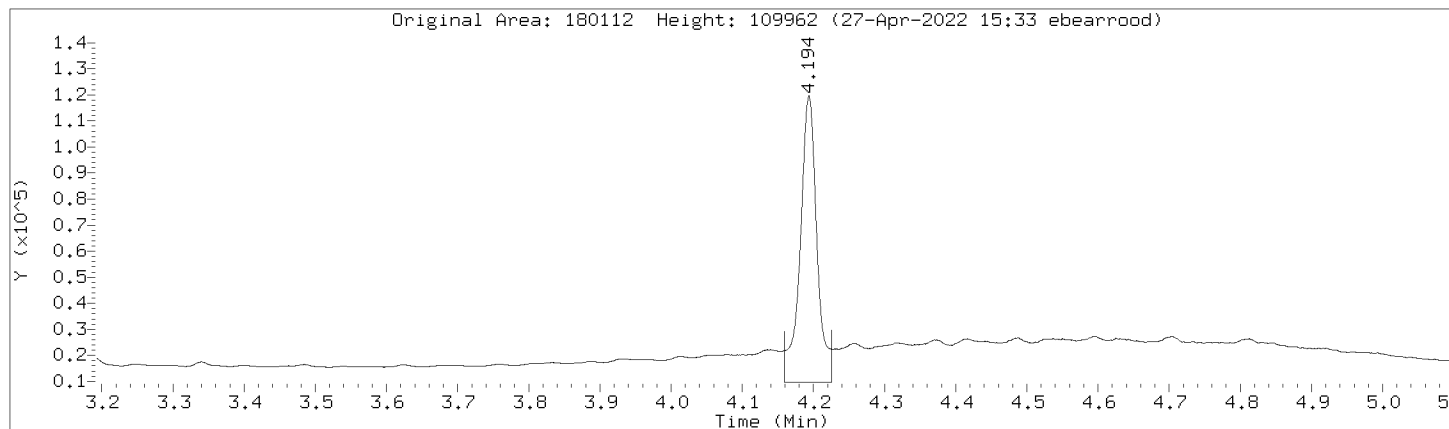
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



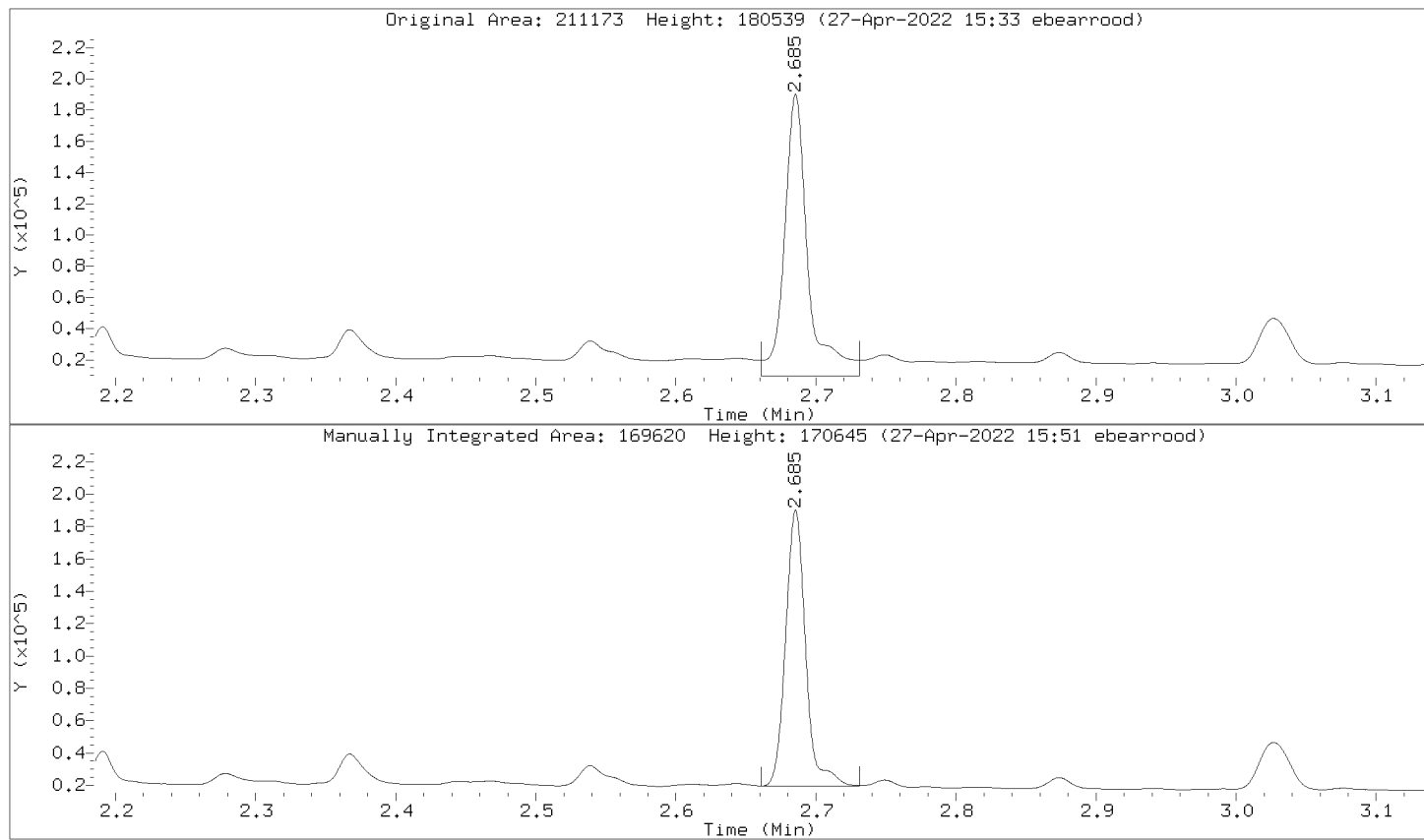
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
 Lab Smp Id: DMO-CAL7,362375:2 Client Smp ID: DMO-CAL7,362375:2  
 Inj Date : 27-APR-2022 14:08  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal7,362375:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 84 Calibration Sample, Level: 7  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		3278745 500.000	509	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.686	2.685 0.001		339936 50.0000	50.9	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.196	4.193 0.003		266300 50.0000	50.9	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		1893104 500.000	511	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		3731684 500.000	508	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		1980340 500.000	511	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		5171850 1000.00	1020	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		2757231 500.000	508	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		2757231 500.000	508	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		2350876 500.000	507	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		2350876 500.000	507	(M) RNG
-----					



QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 14:08

Client ID: DMO-CAL7.362375;2

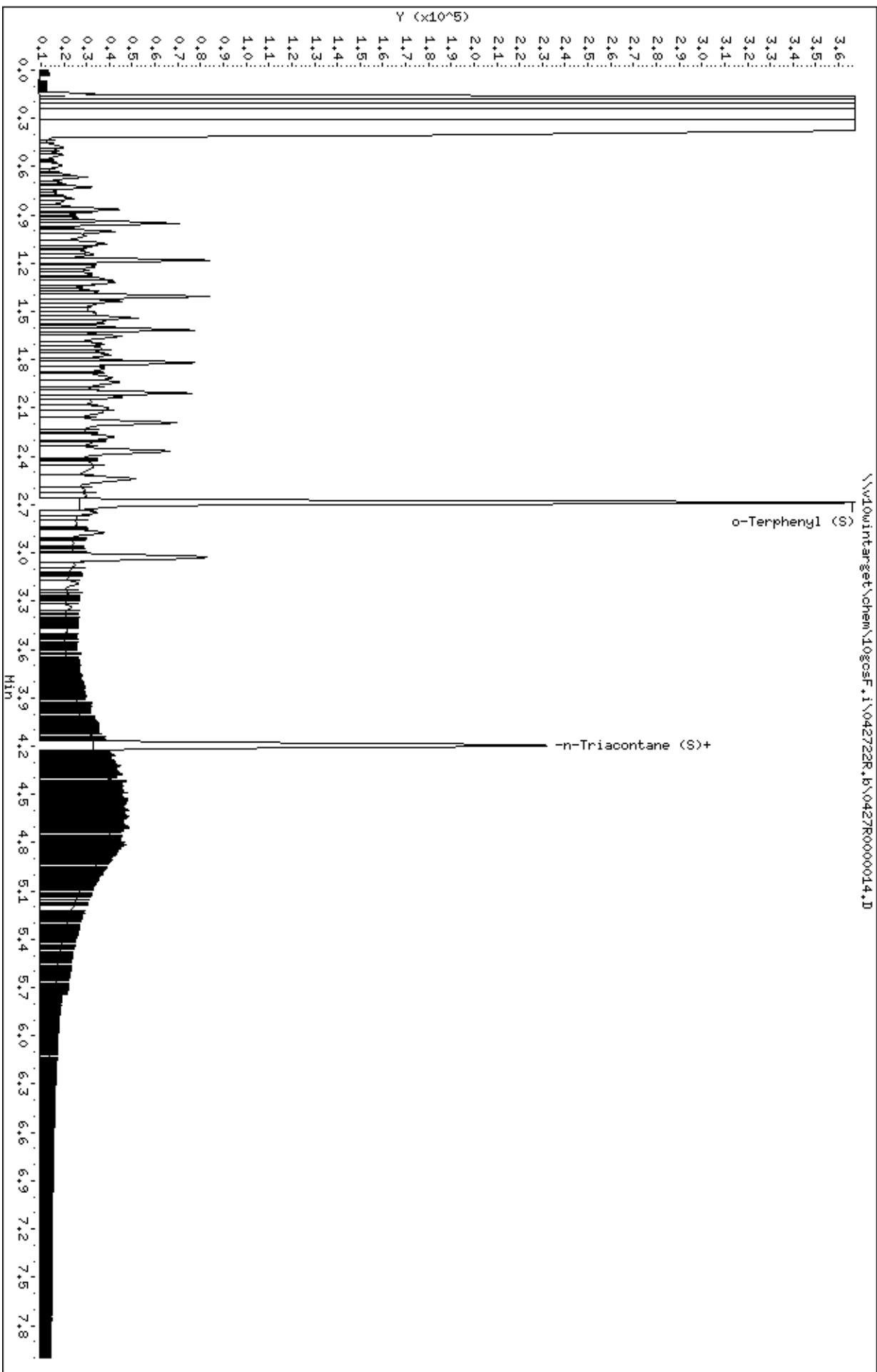
Sample Info: DMO-CAL7.362375;2

Instrument: 10gocsf.1

Operator: EBS

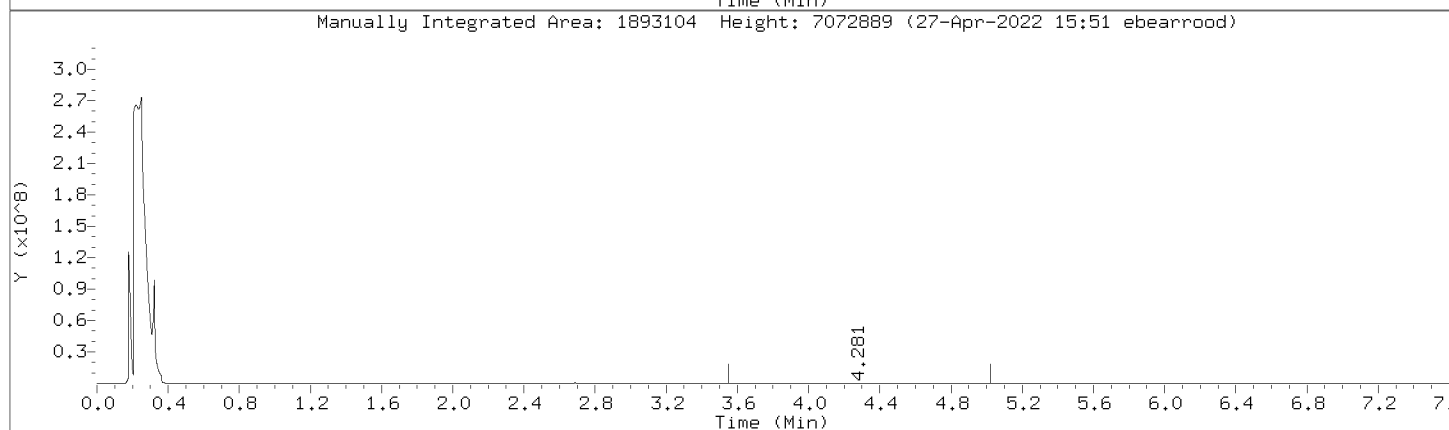
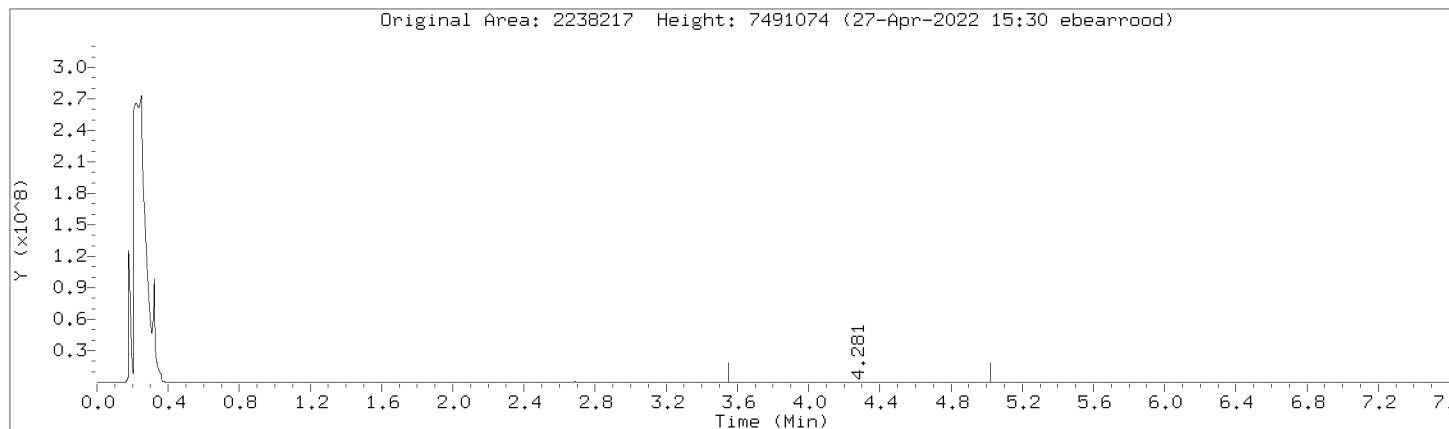
Column diameter: 0.32

Column phase: DB-5-US21430033



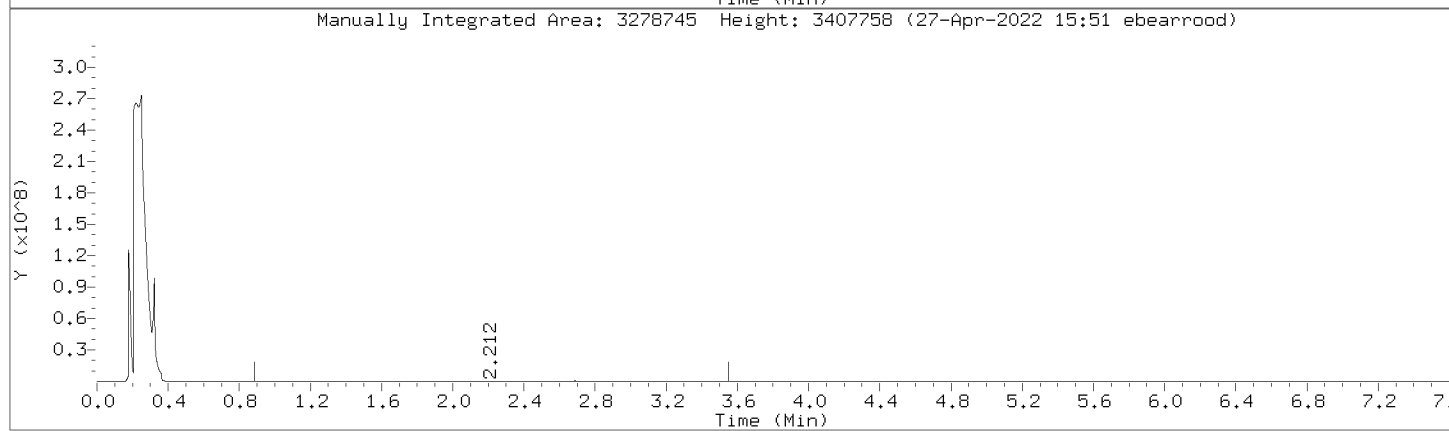
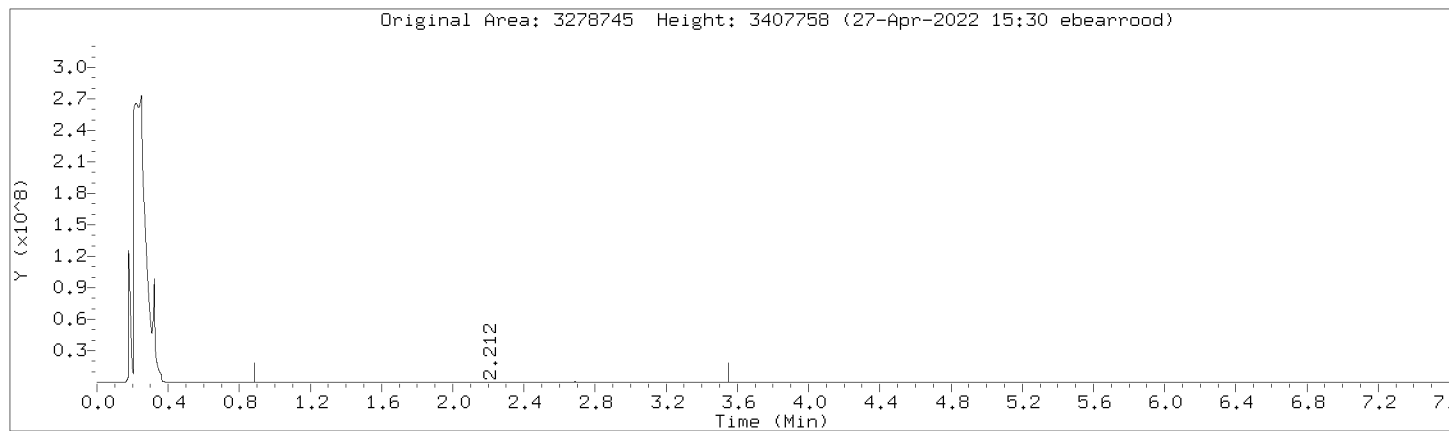
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



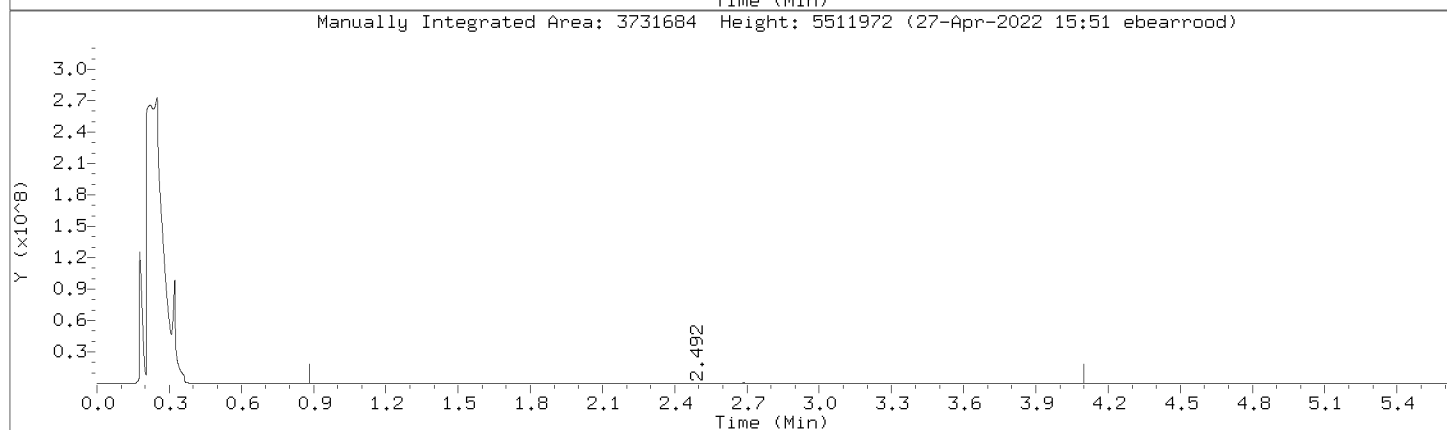
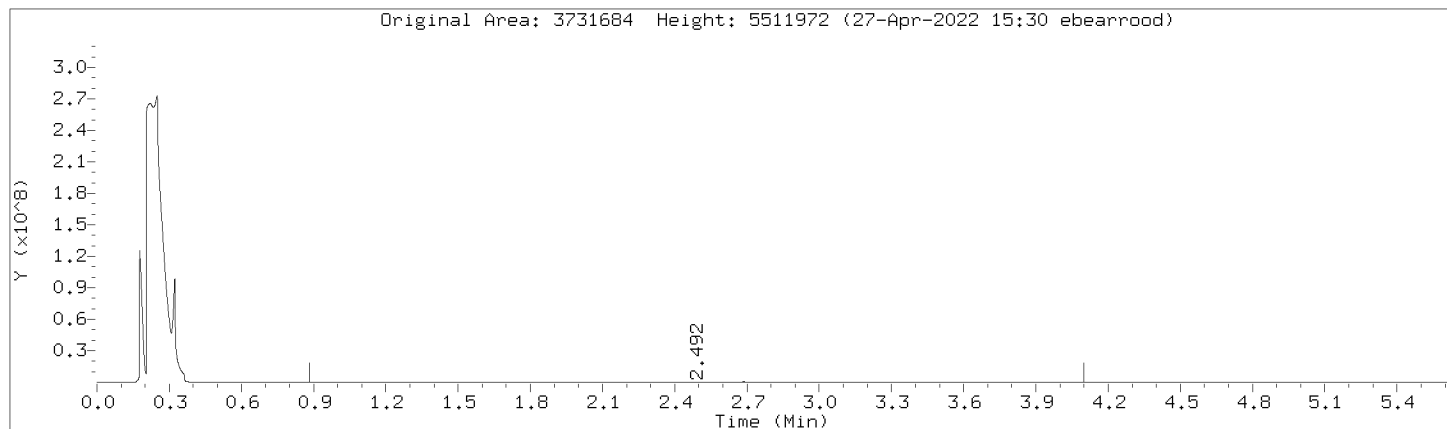
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Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



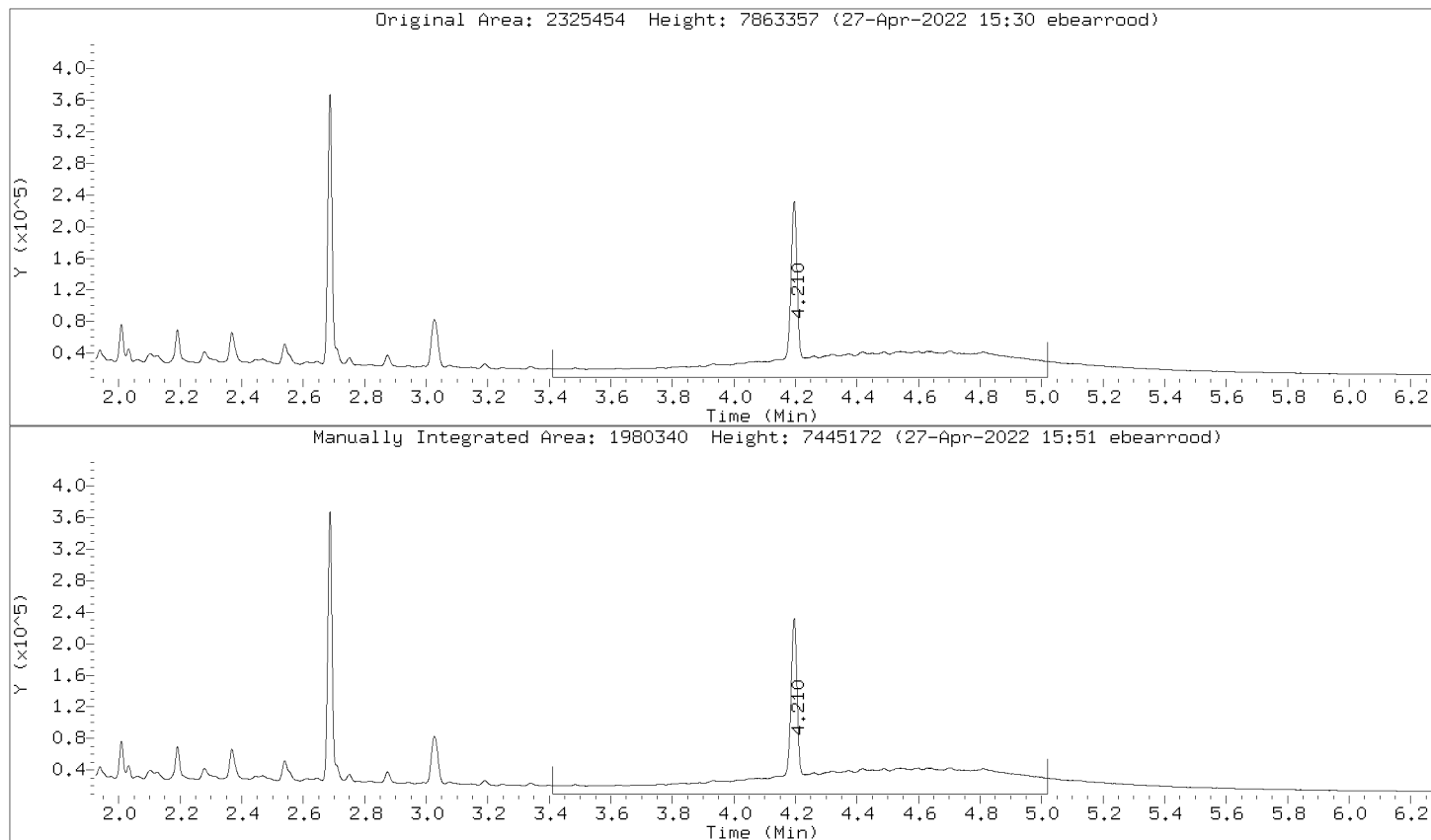
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Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



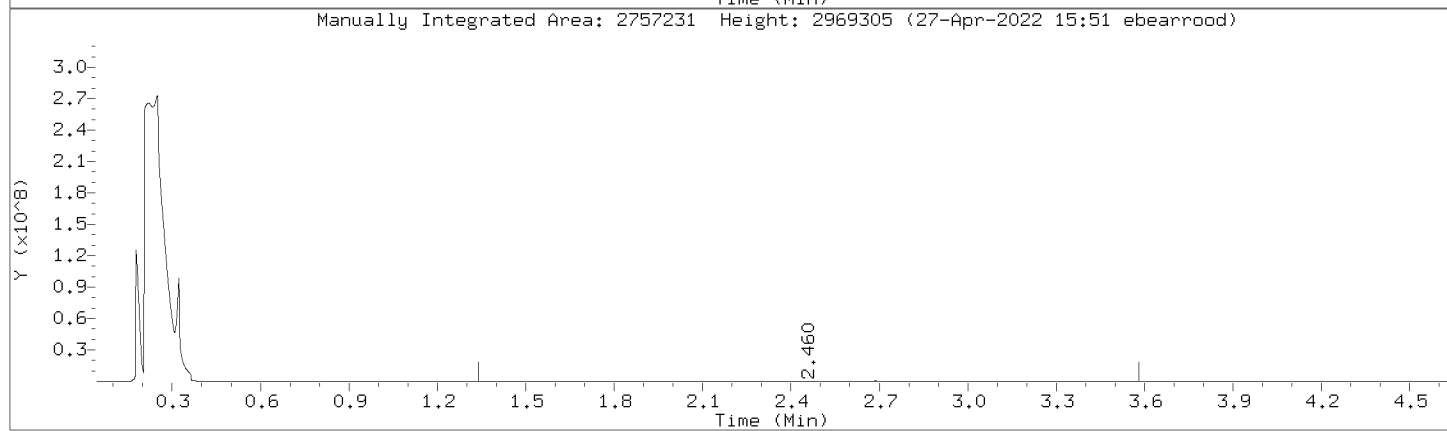
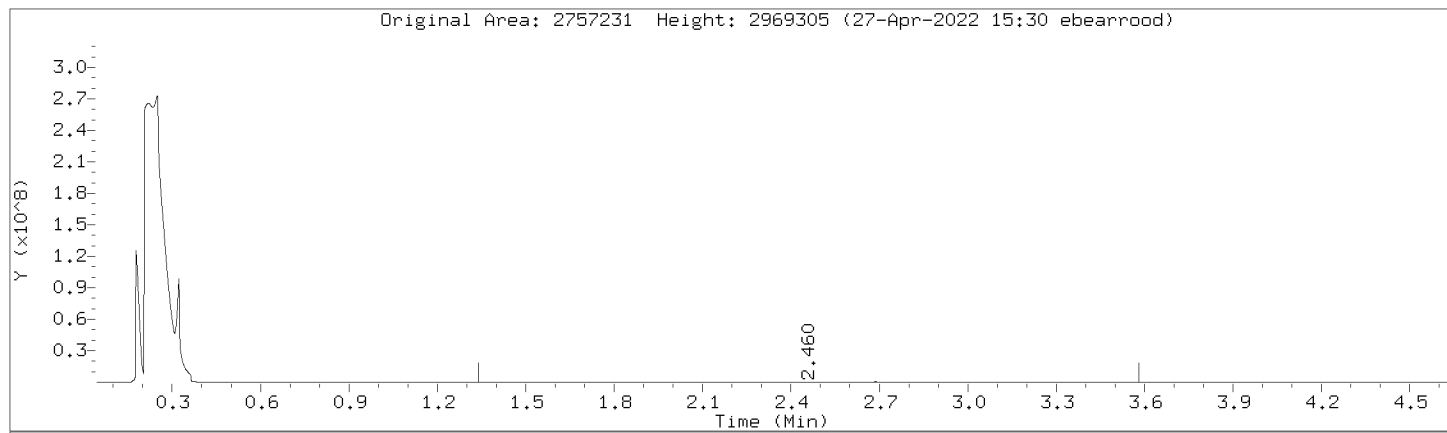
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



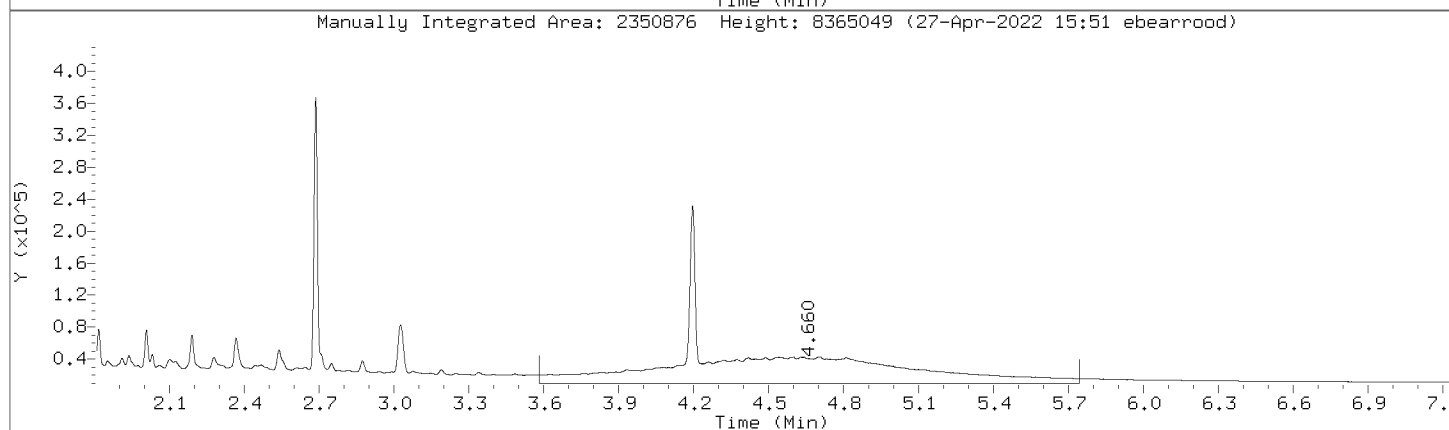
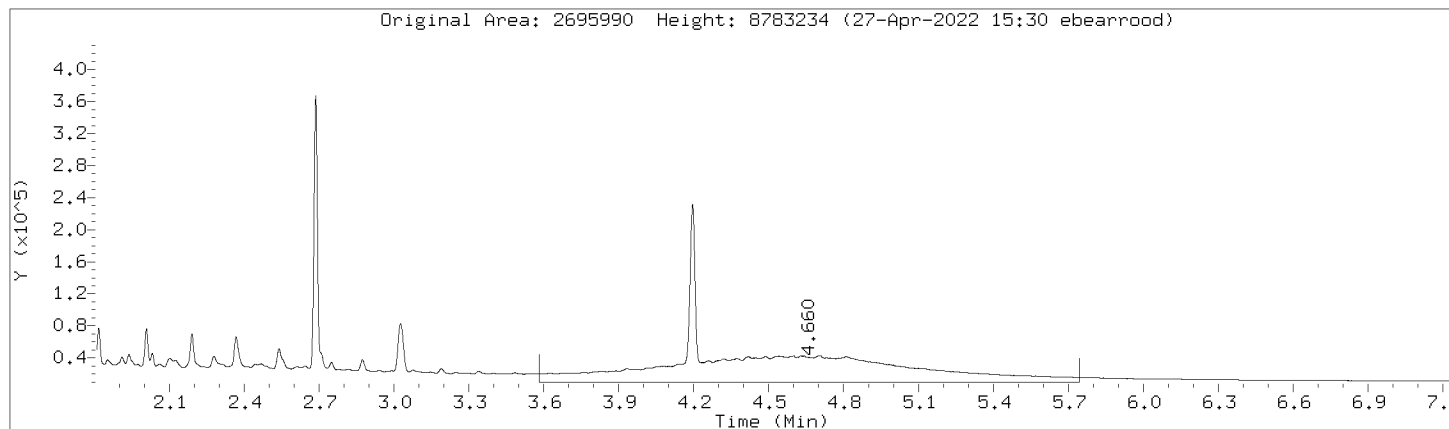
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

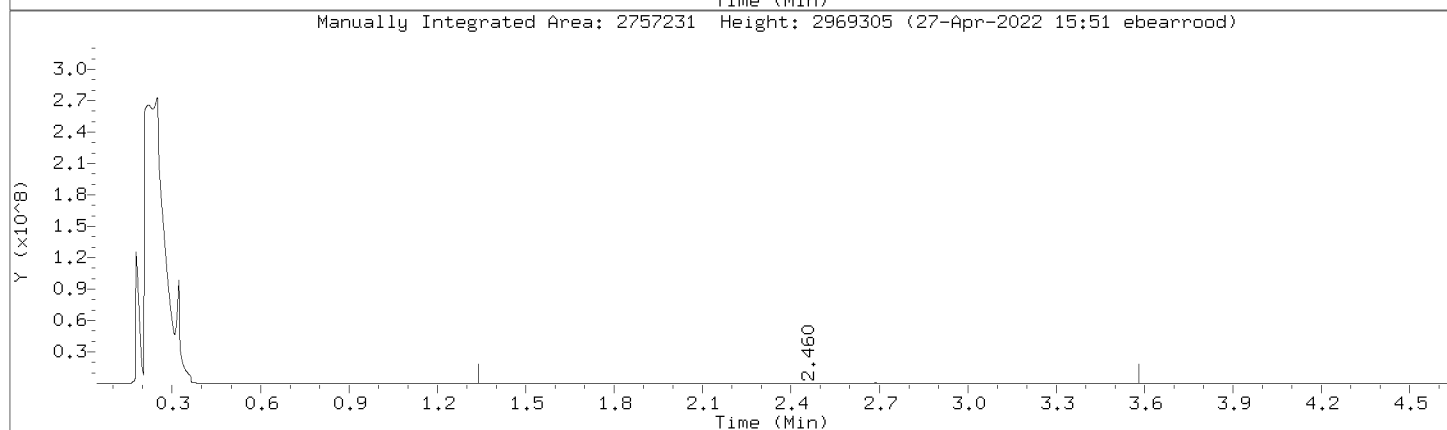
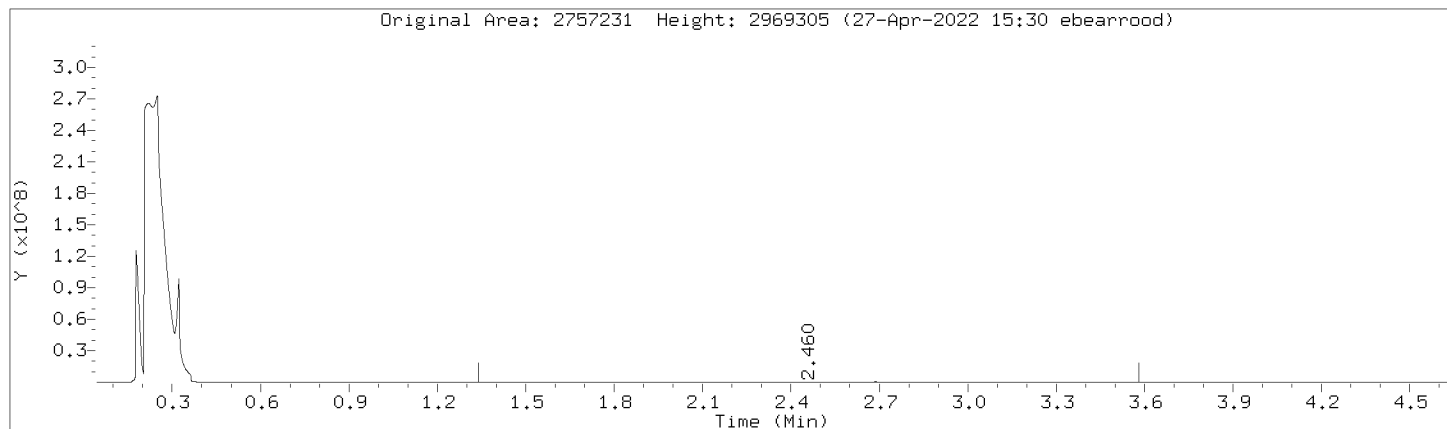
Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





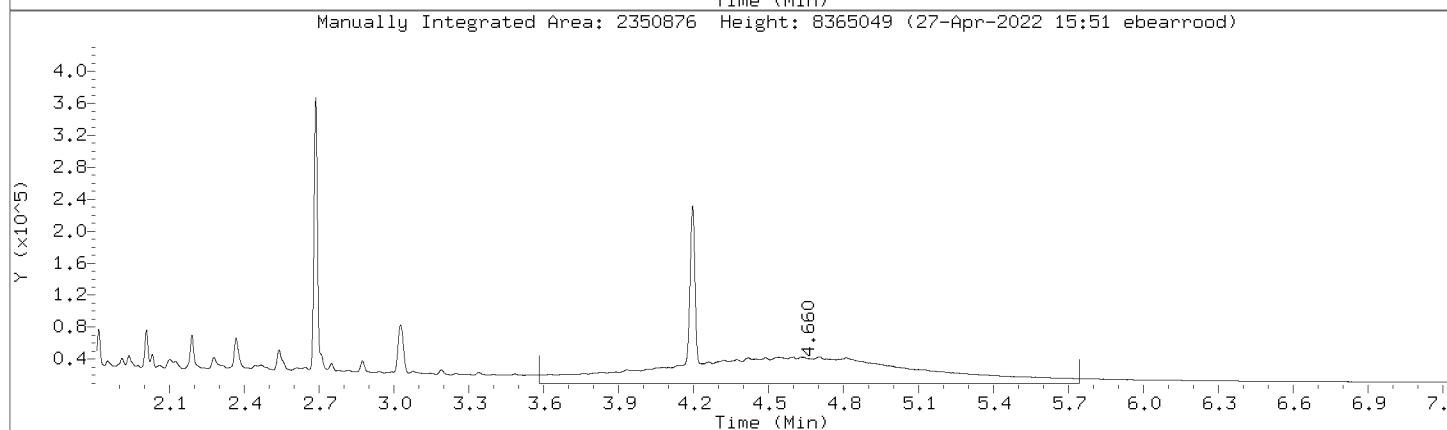
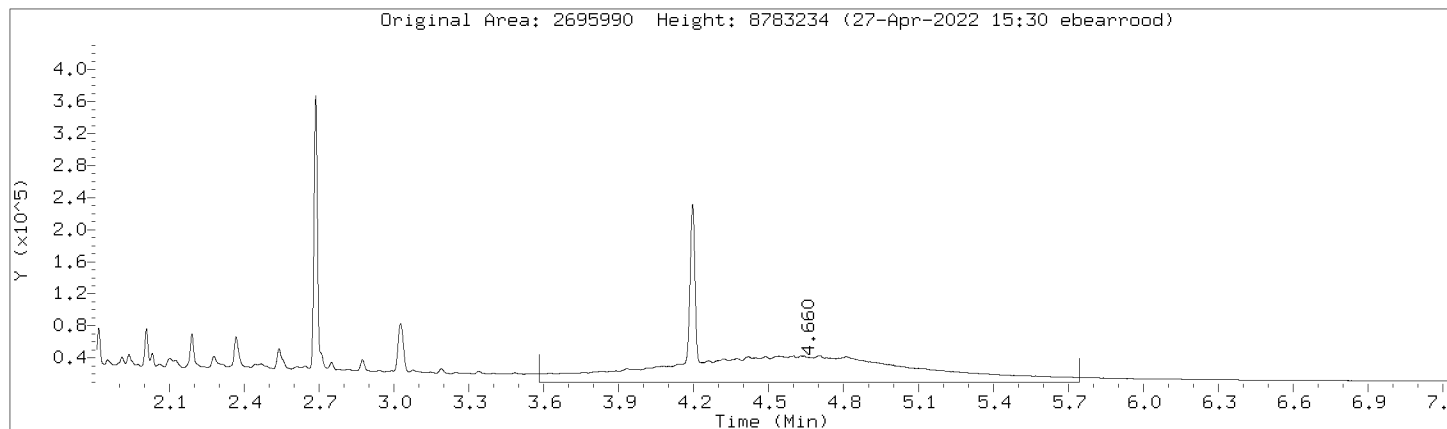
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



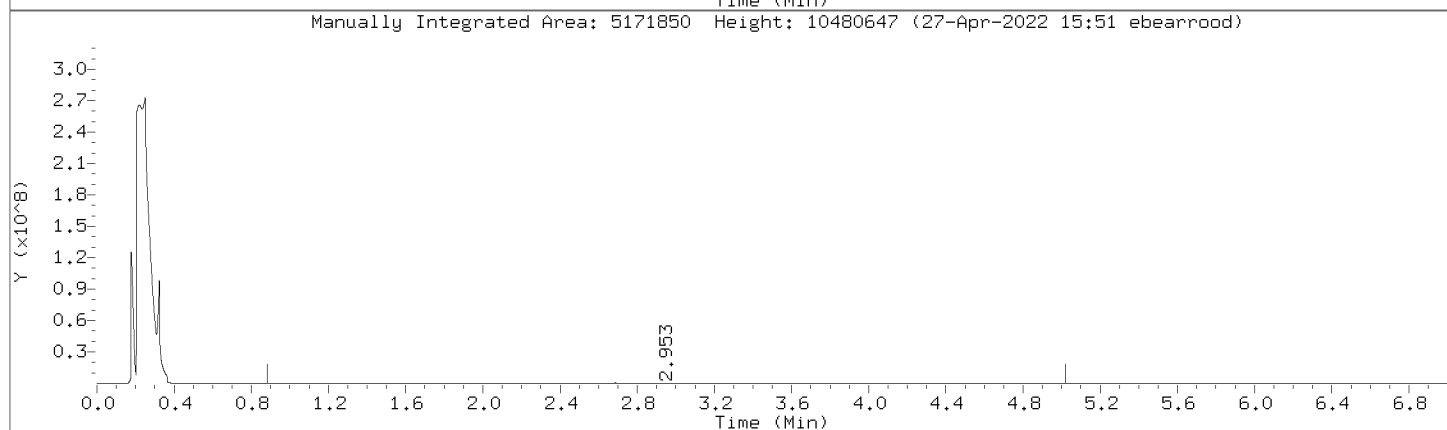
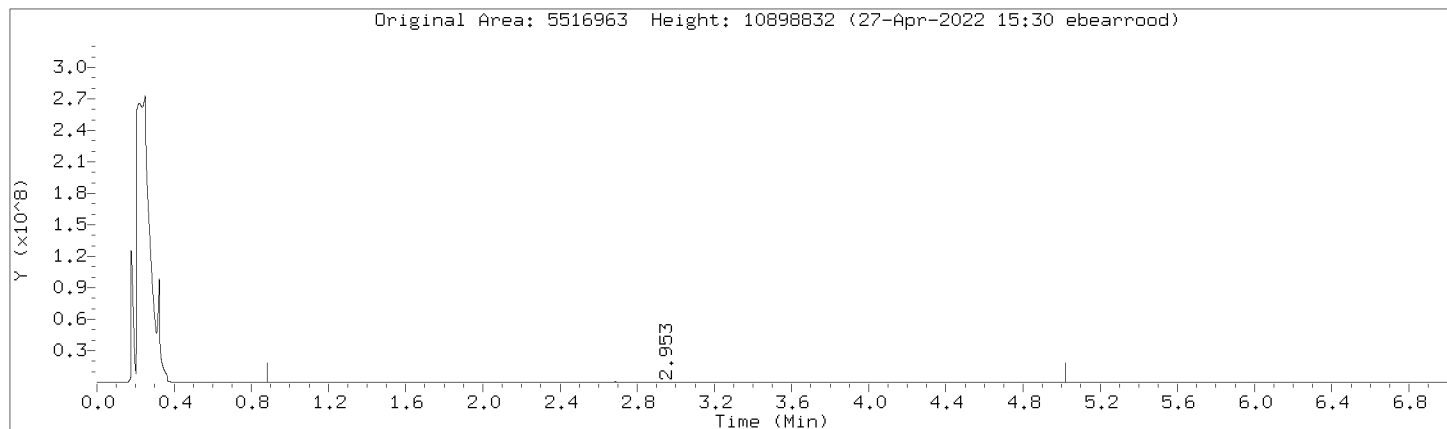
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



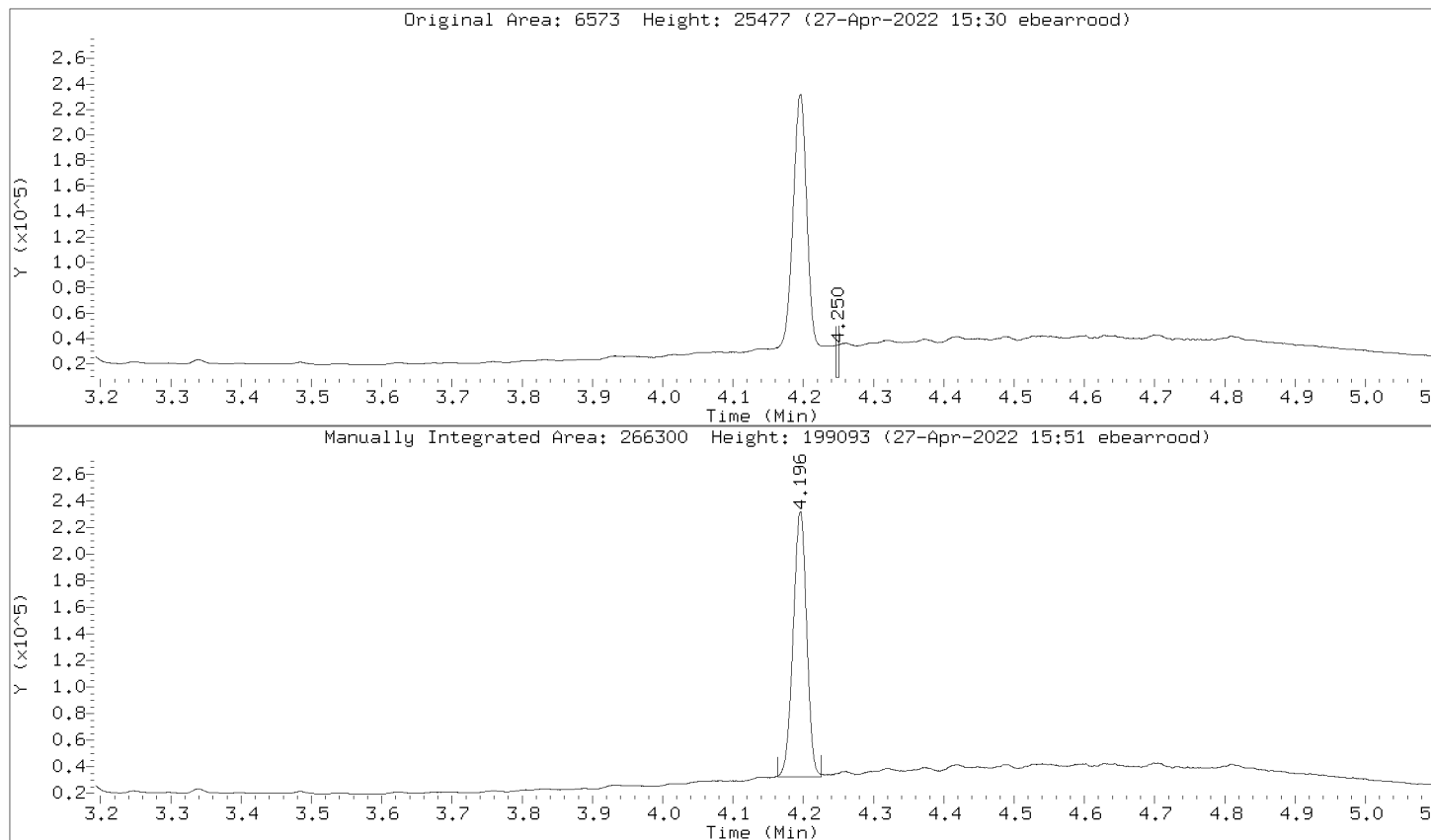
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



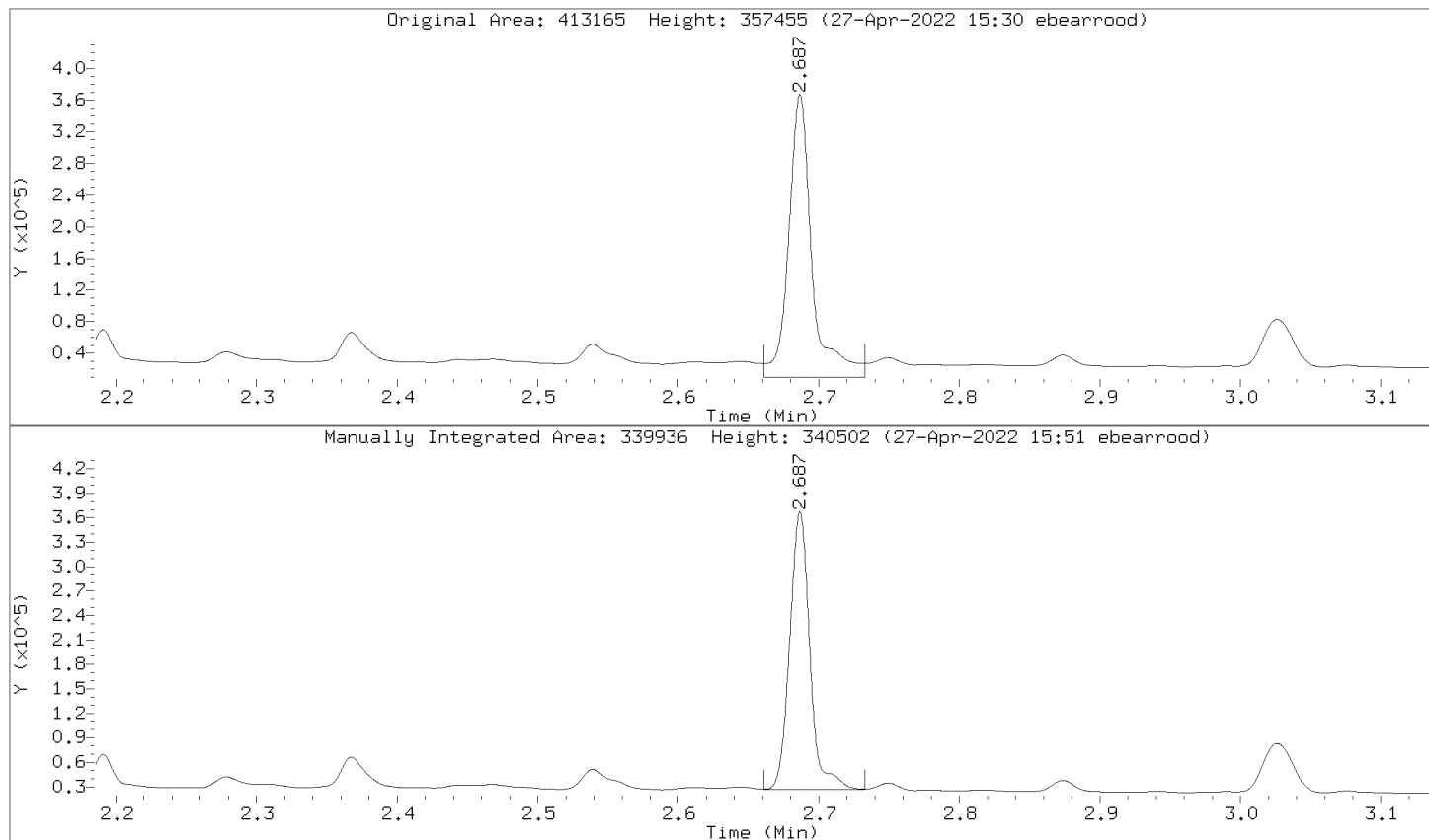
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Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
 Lab Smp Id: DMO-CAL8,362376:2 Client Smp ID: DMO-CAL8,362376:2  
 Inj Date : 27-APR-2022 14:19  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal8,362376:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 85 Calibration Sample, Level: 8  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		6183718 1000.00	1020	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.687	2.685 0.002		670939 100.000	101	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.197	4.193 0.004		528228 100.000	102	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		3660871 1000.00	1020	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		7059201 1000.00	1020	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		3812366 1000.00	1020	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		9844589 2000.00	2030	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		5194648 1000.00	1010	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		5194648 1000.00	1010	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		4563549 1000.00	1010	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		4563549 1000.00	1010	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 14:19

Client ID: DM0-CAL8,362376;2

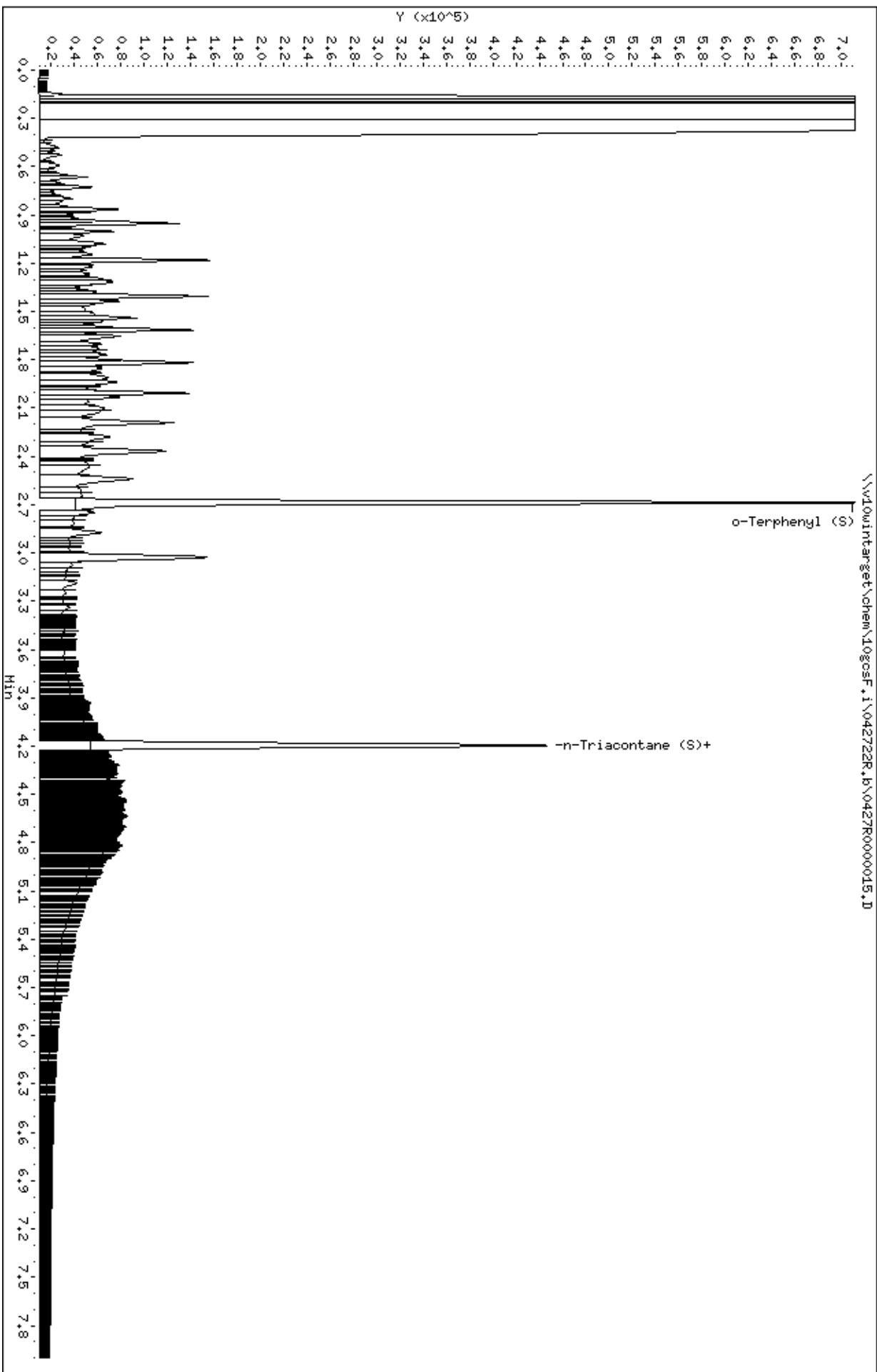
Sample Info: DM0-CAL8,362376;2

Instrument: logosf.i

Operator: EB3

Column diameter: 0.32

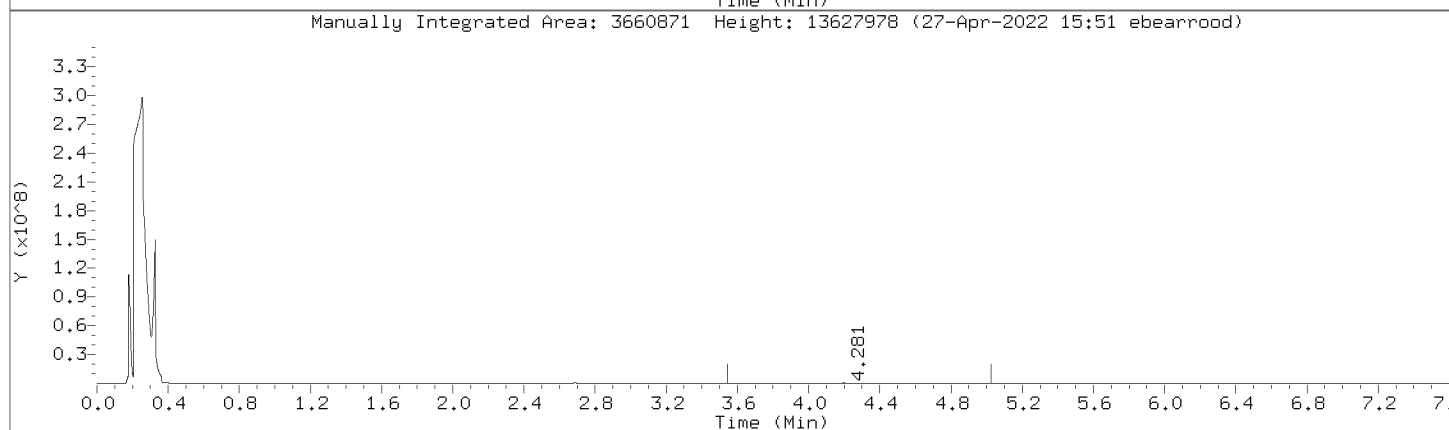
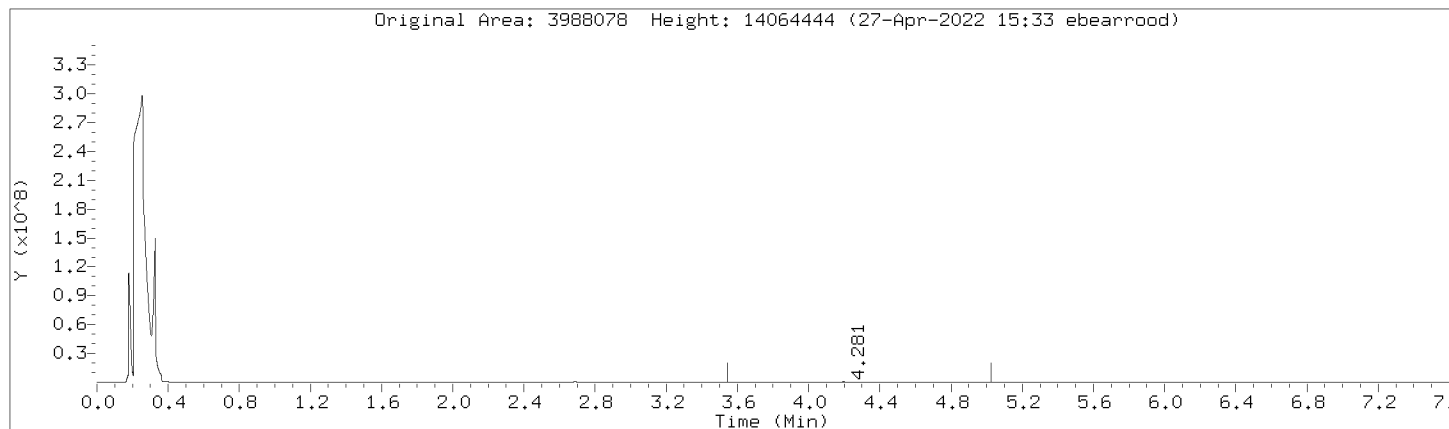
Column phase: DB-5-US21430033





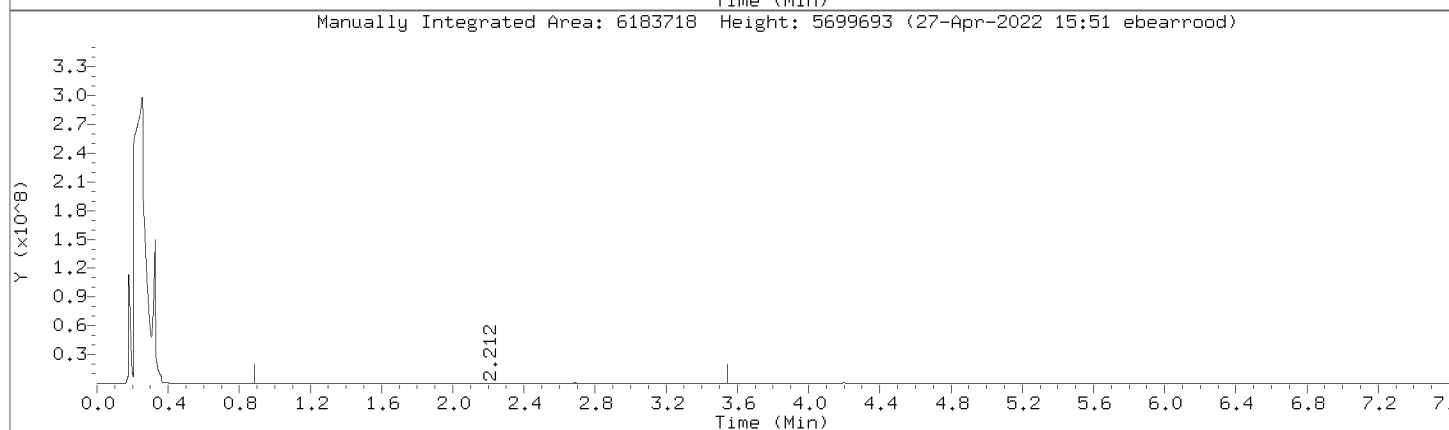
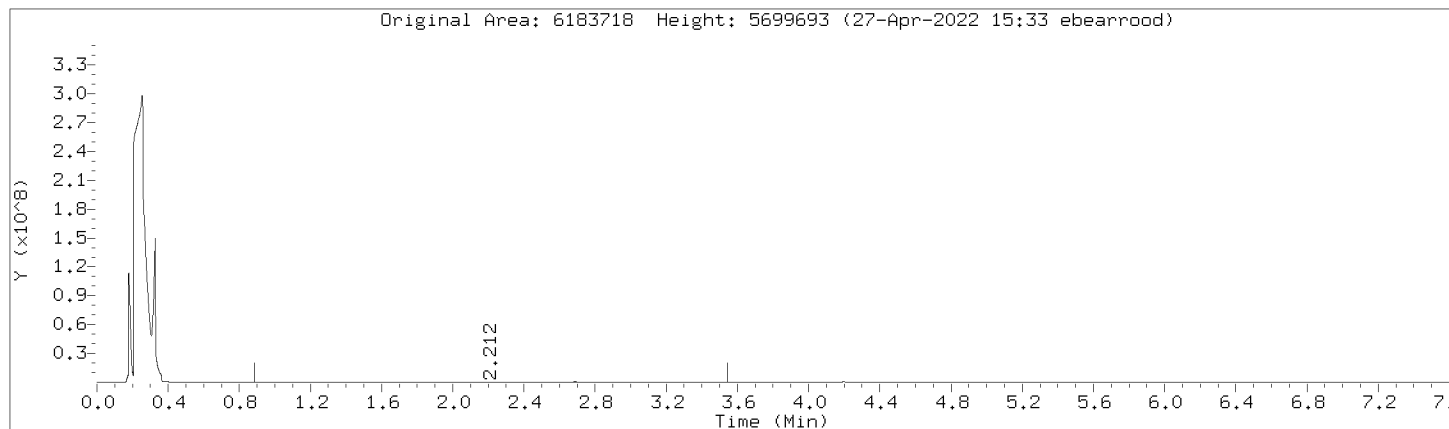
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



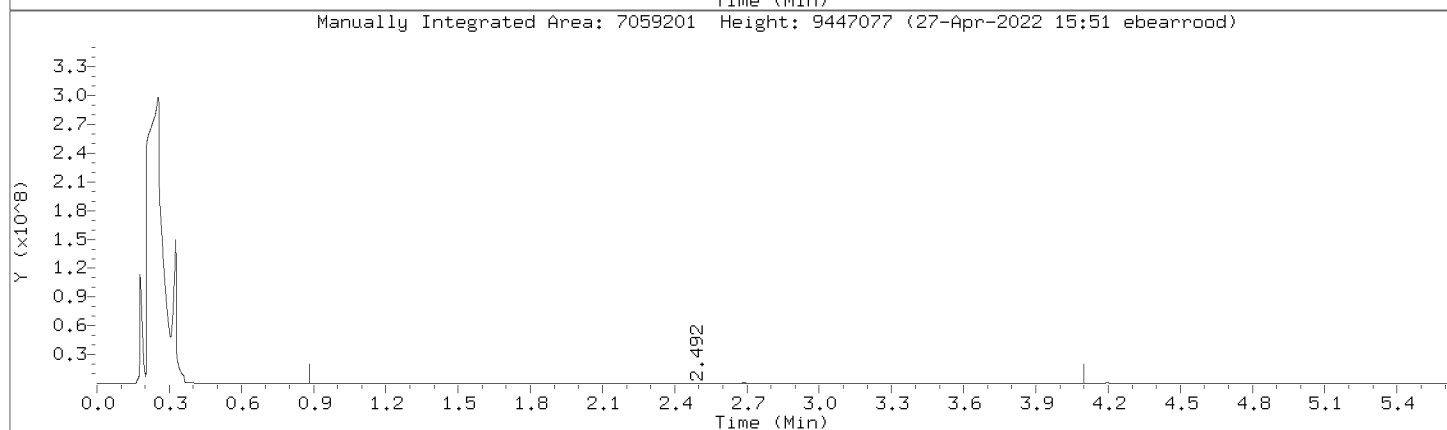
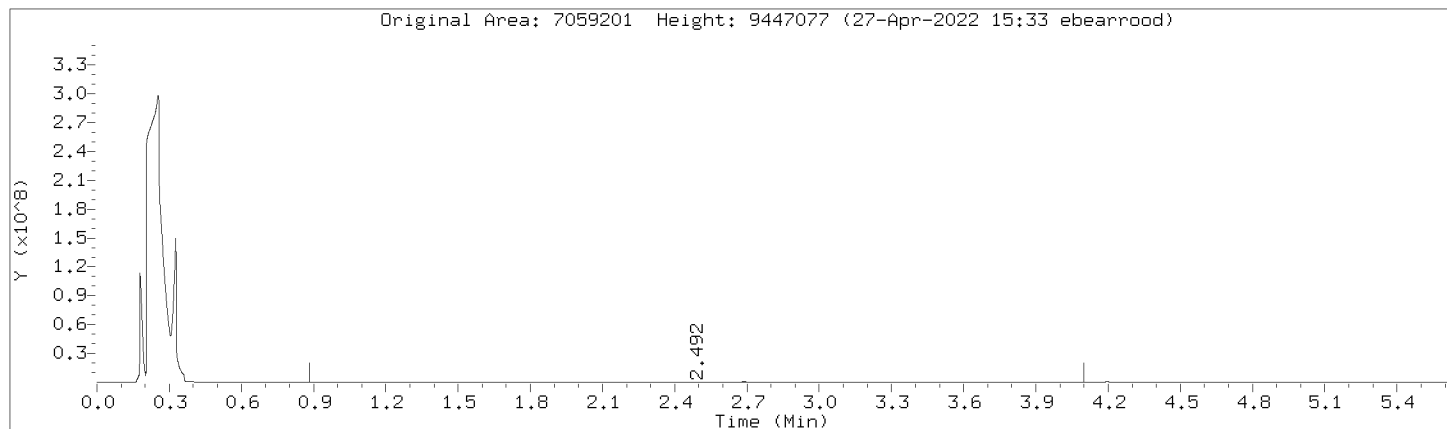
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



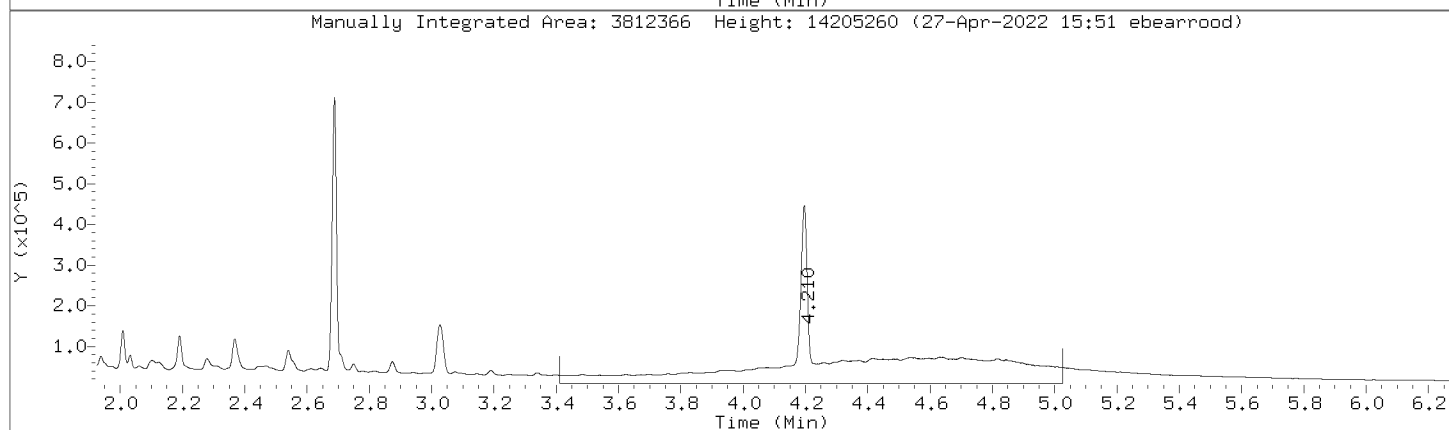
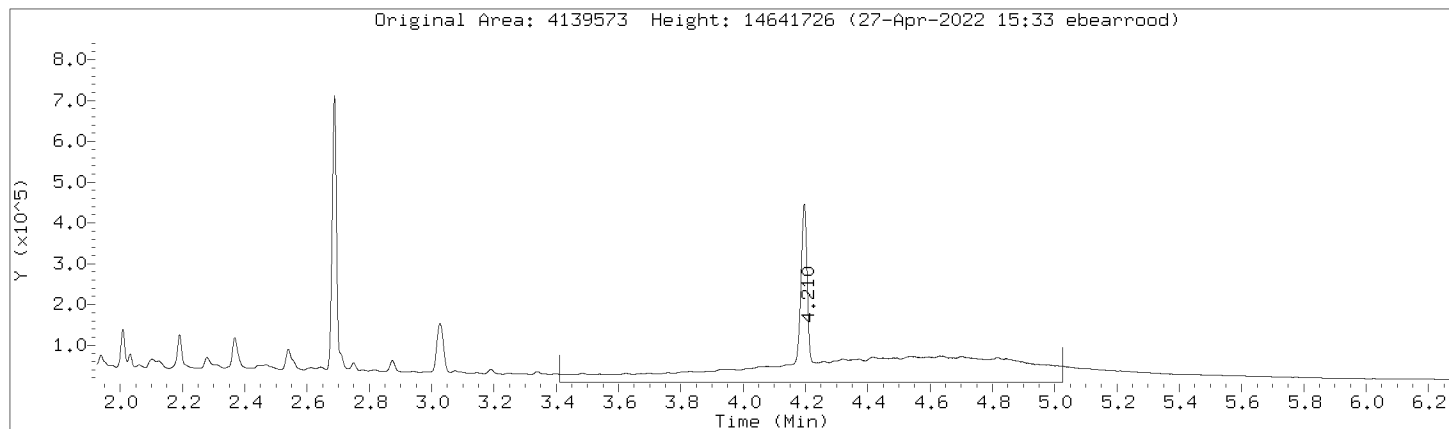
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Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



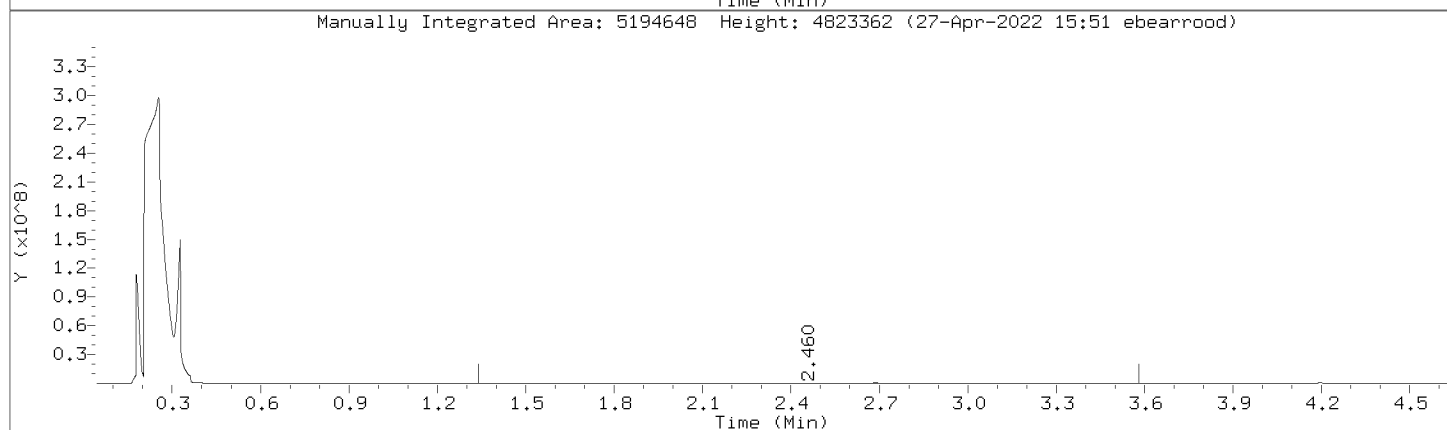
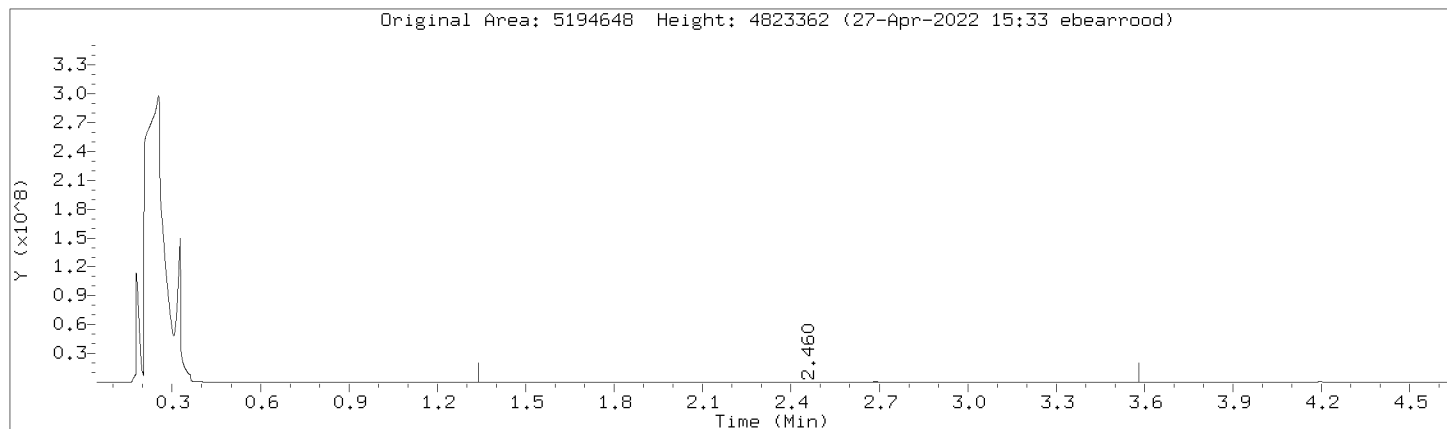
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Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



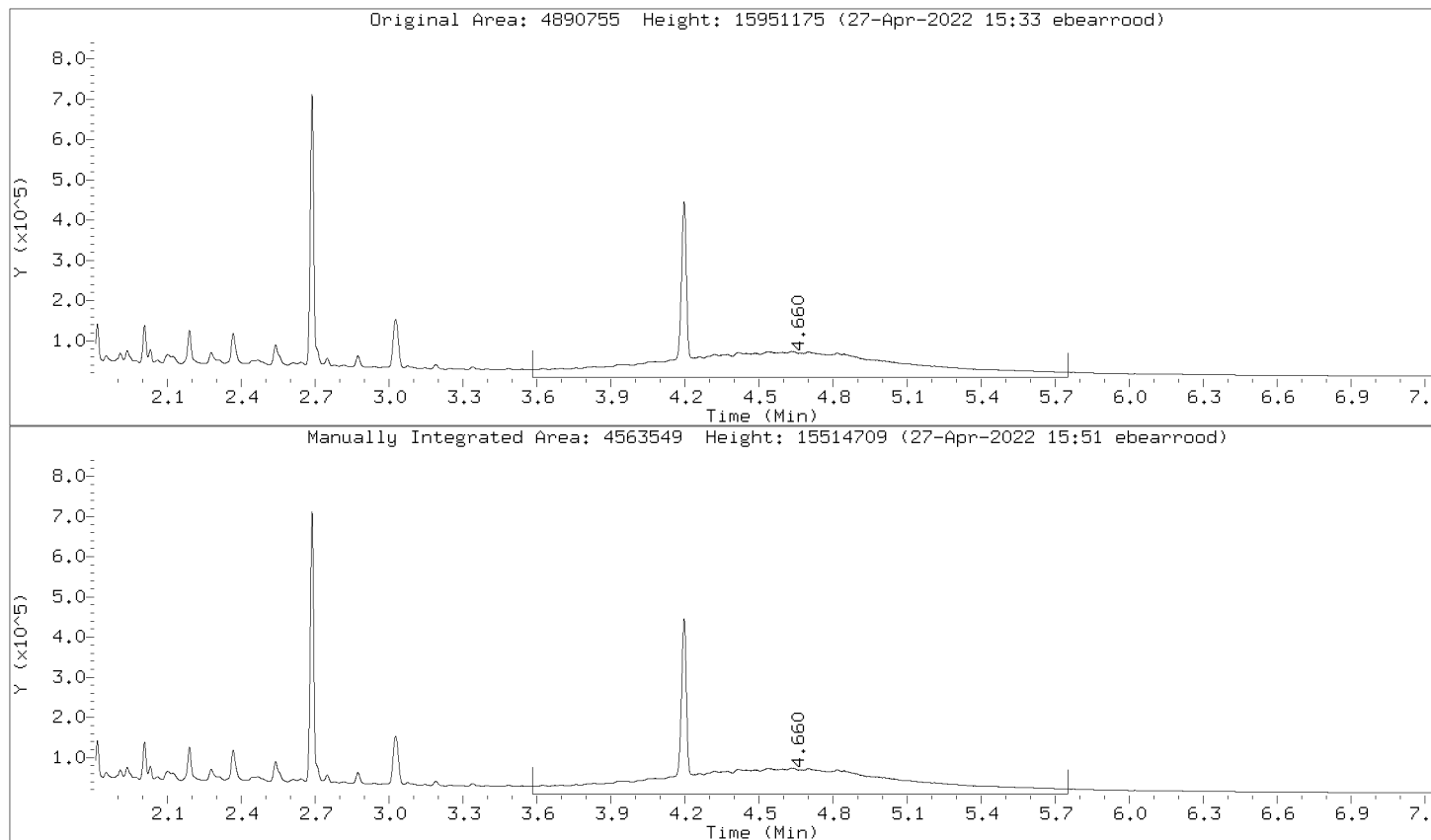
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Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



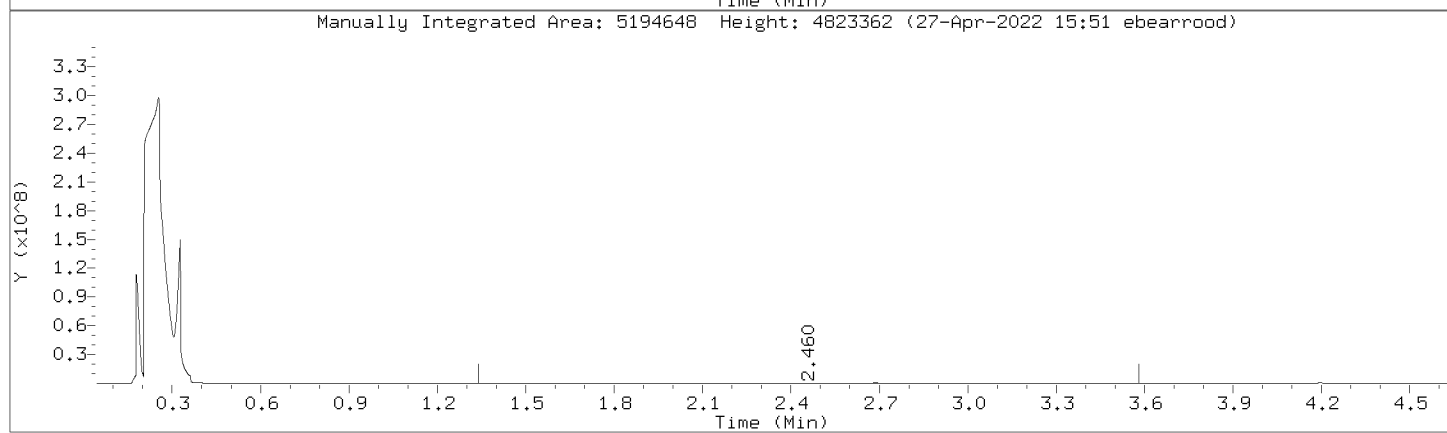
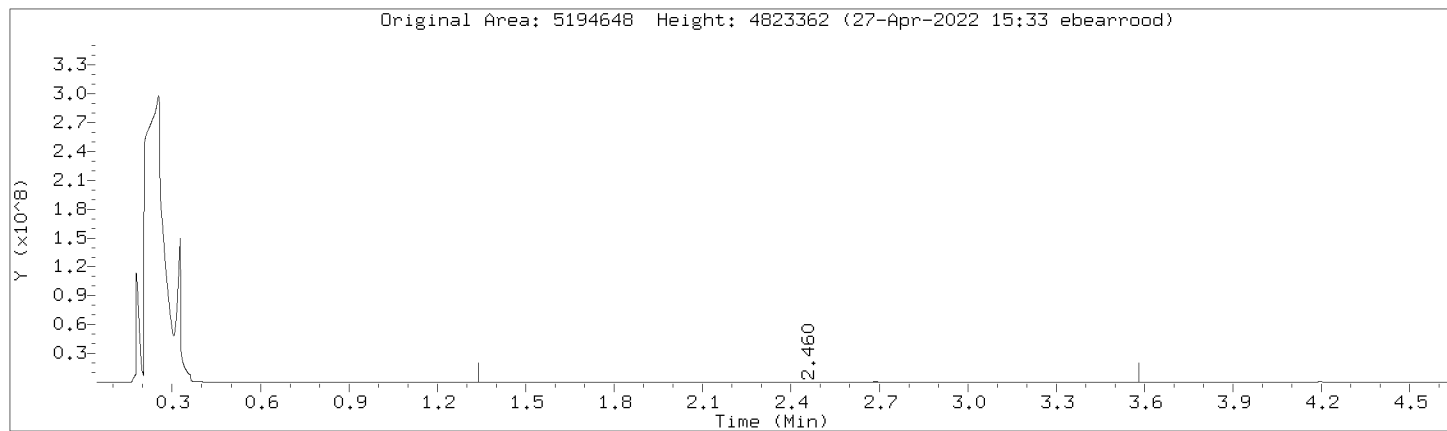
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Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



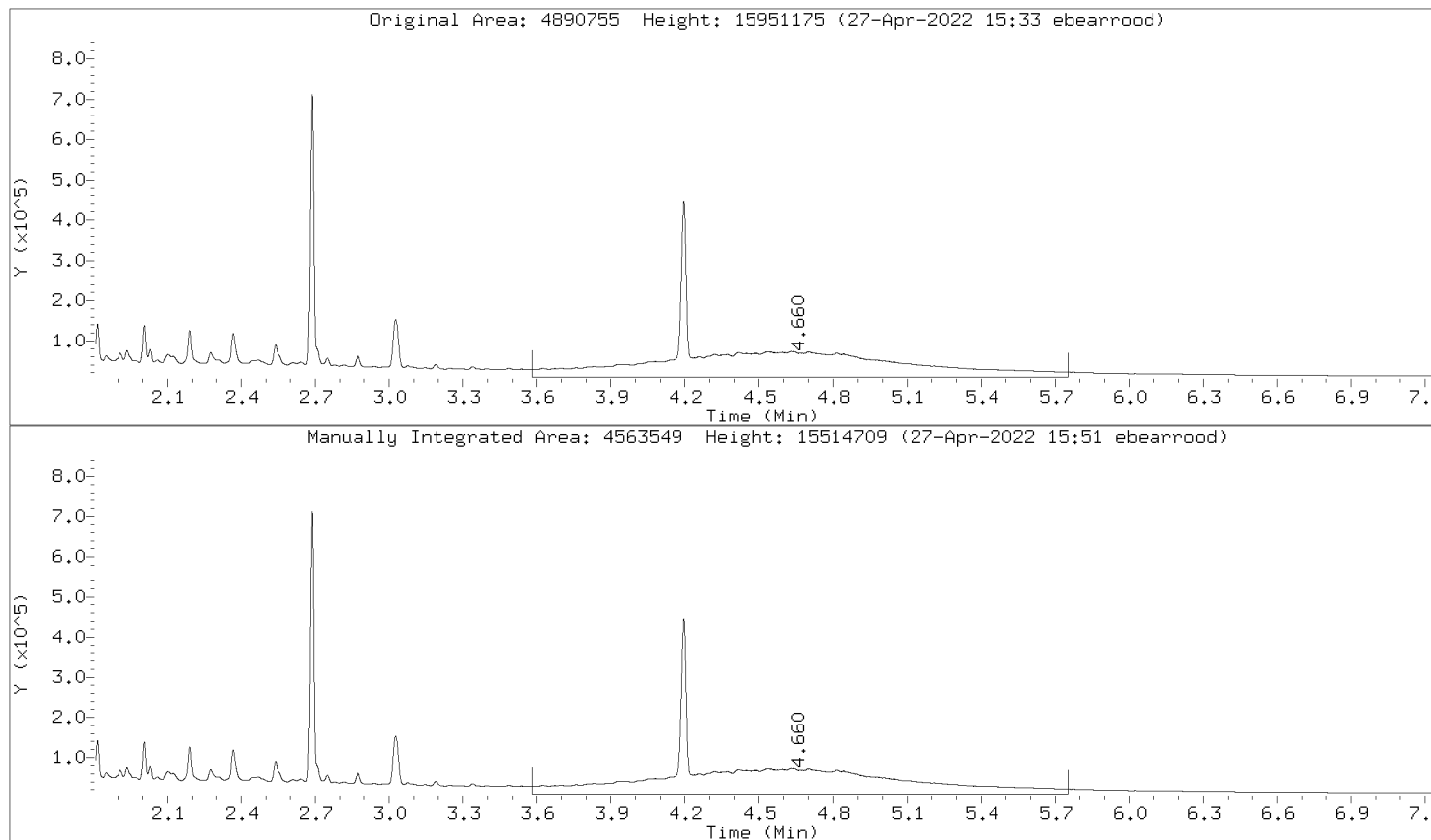
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

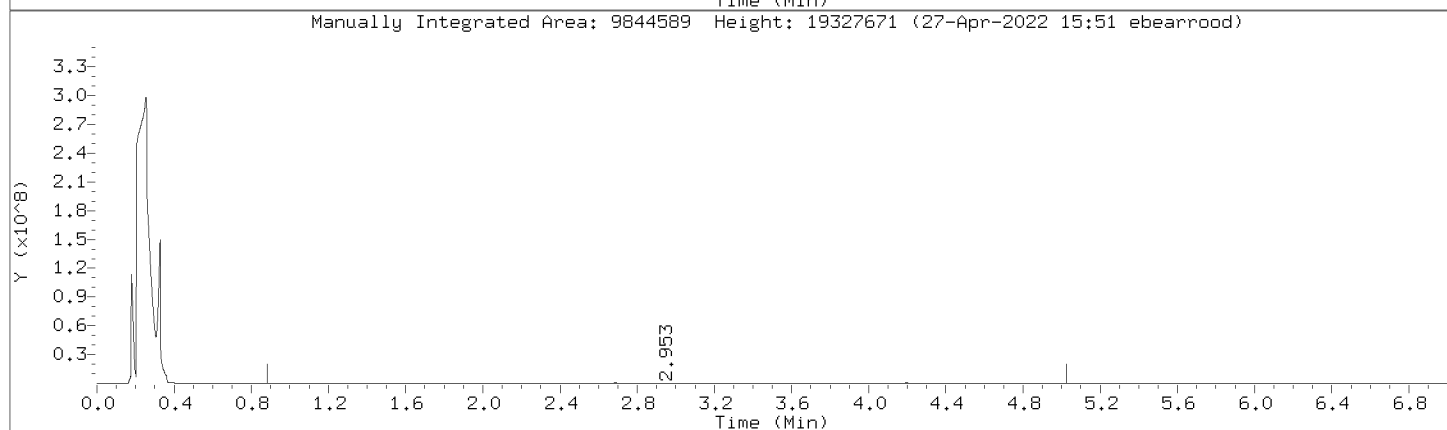
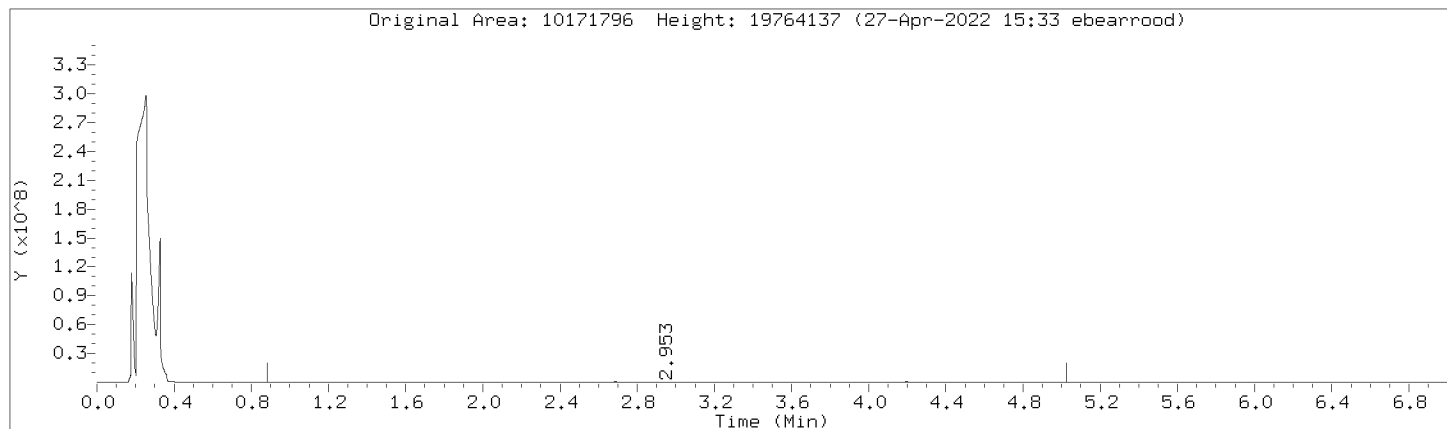
Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





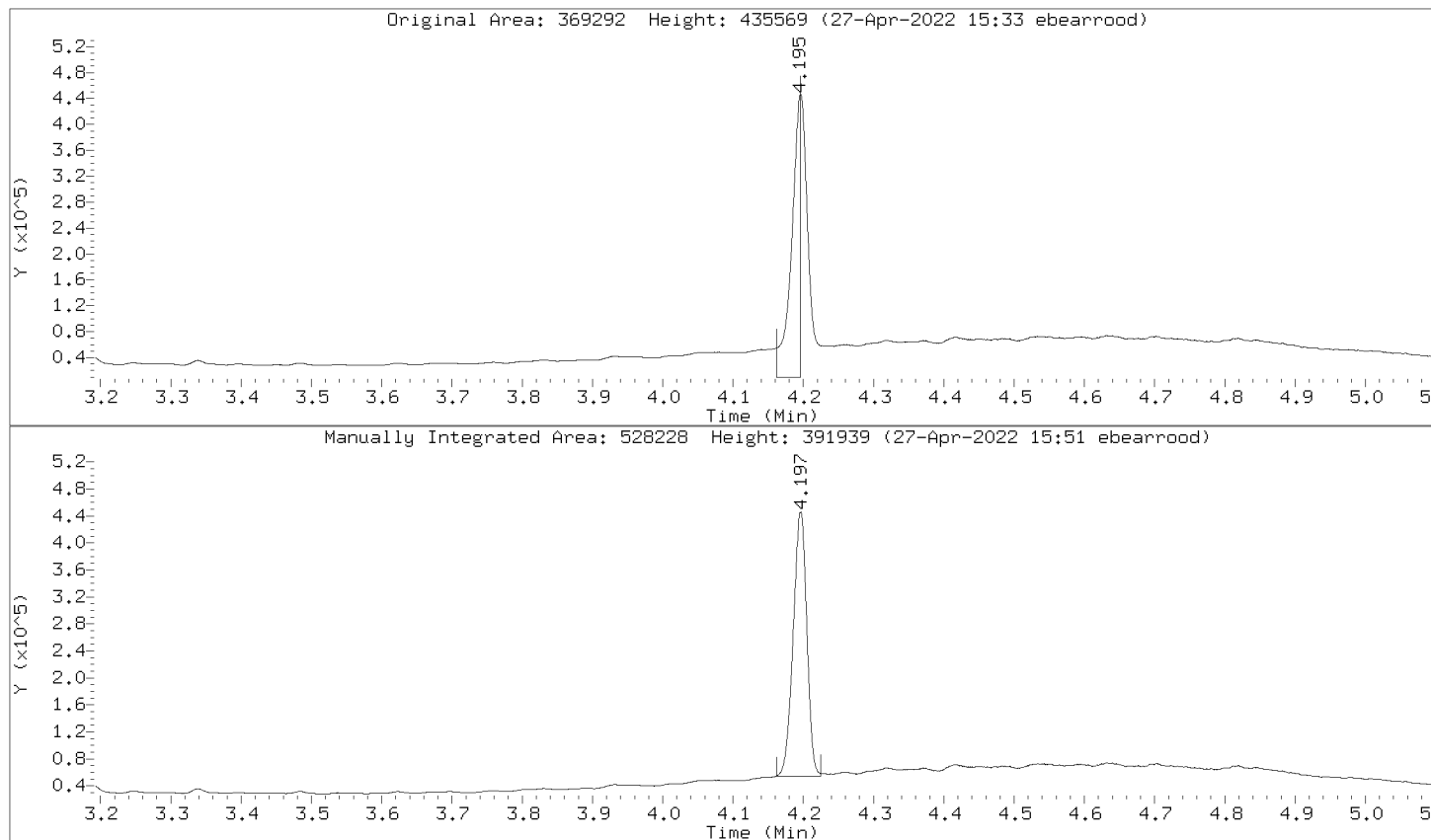
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Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



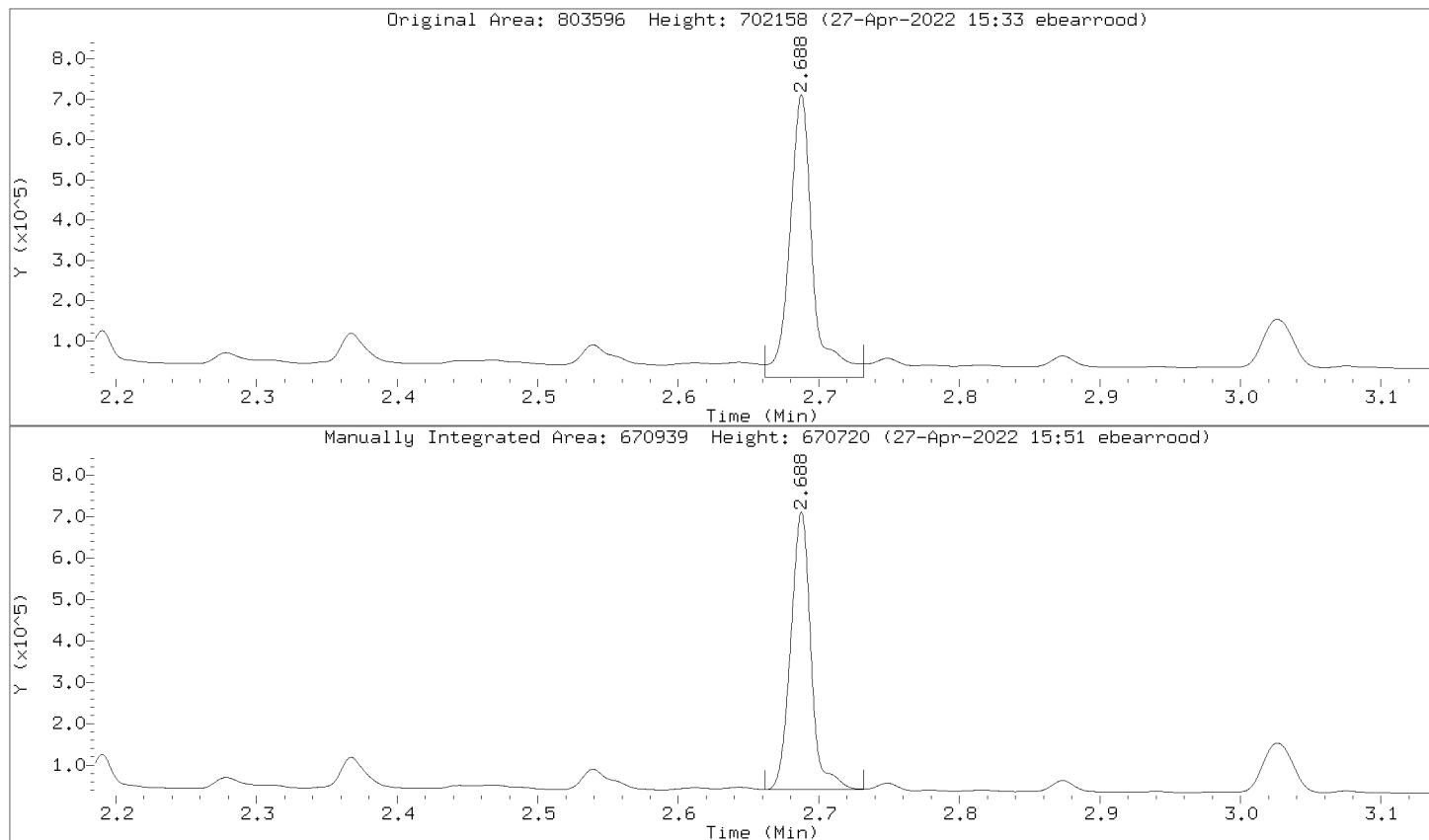
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Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
 Lab Smp Id: DMO-CAL9,362377:2 Client Smp ID: DMO-CAL9,362377:2  
 Inj Date : 27-APR-2022 14:30  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal9,362377:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 86 Calibration Sample, Level: 9  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		11926188 2000.00	2020	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.692	2.685 0.007		1328065 200.000	200	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.202	4.193 0.009		1044249 200.000	202	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		7125460 2000.00	2010	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		13625690 2000.00	2020	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		7409993 2000.00	2010	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		19051649 4000.00	4030	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		10004331 2000.00	2010	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		10004331 2000.00	2010	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		9009436 2000.00	2020	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		9009436 2000.00	2020	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 14:30

Client ID: DM0-CAL9,362377:2

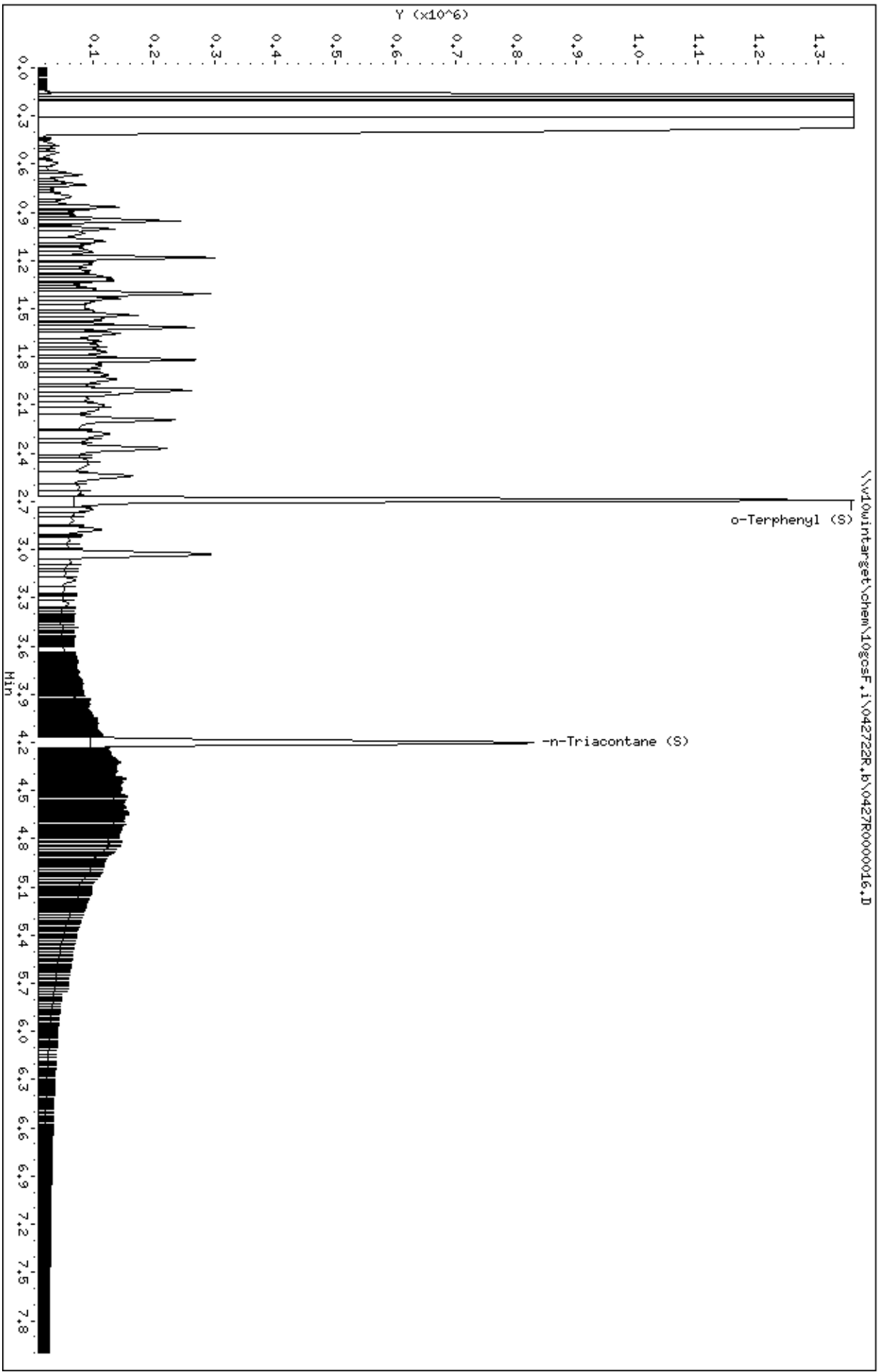
Sample Info: DM0-CAL9,362377:2

Column phase: DB-5-MS21430033

Instrument: 10goscF.1

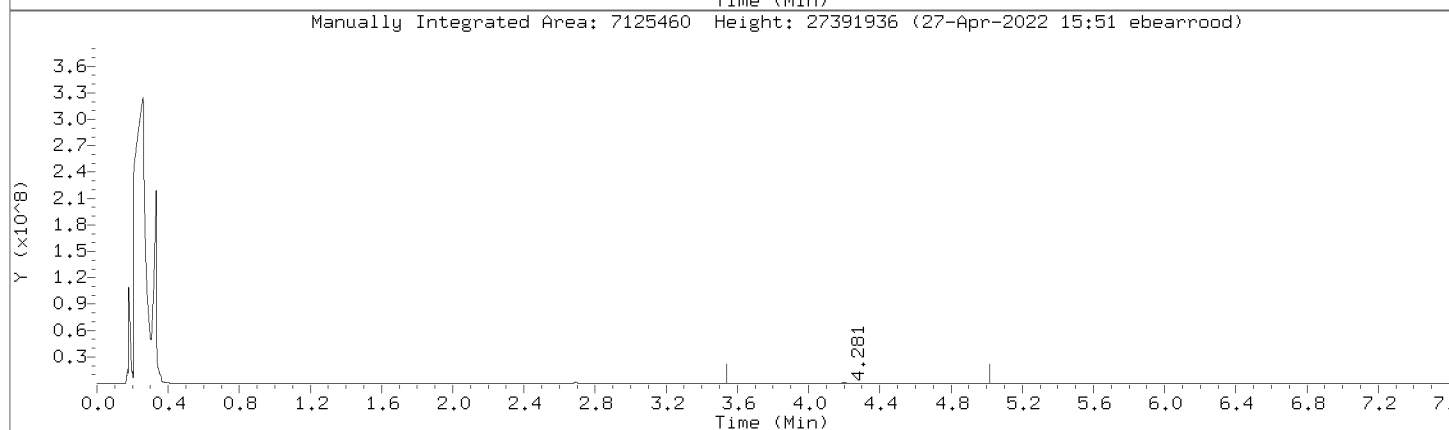
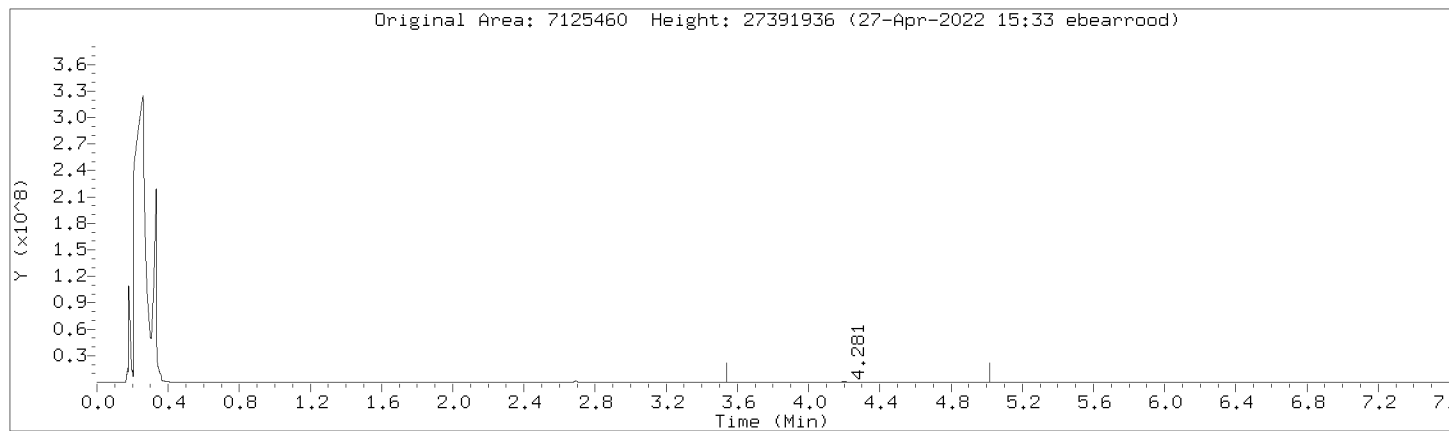
Operator: EBS

Column diameter: 0.32



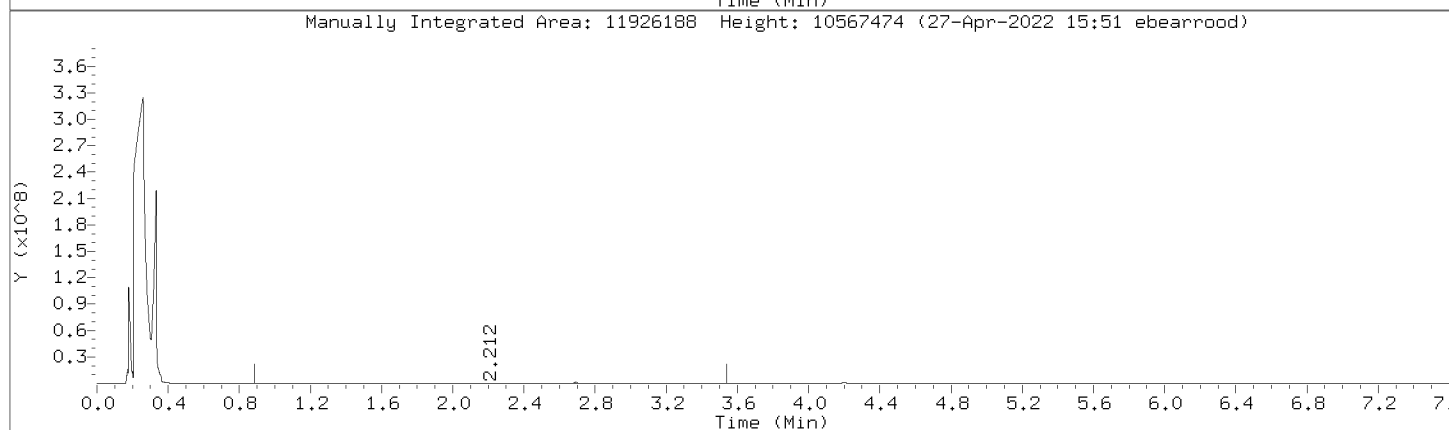
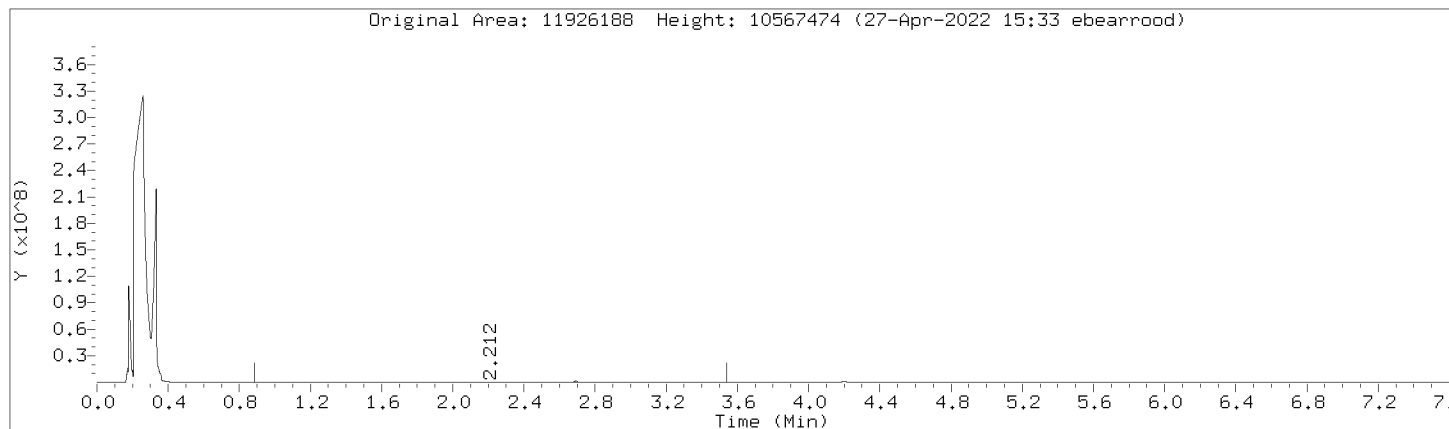
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

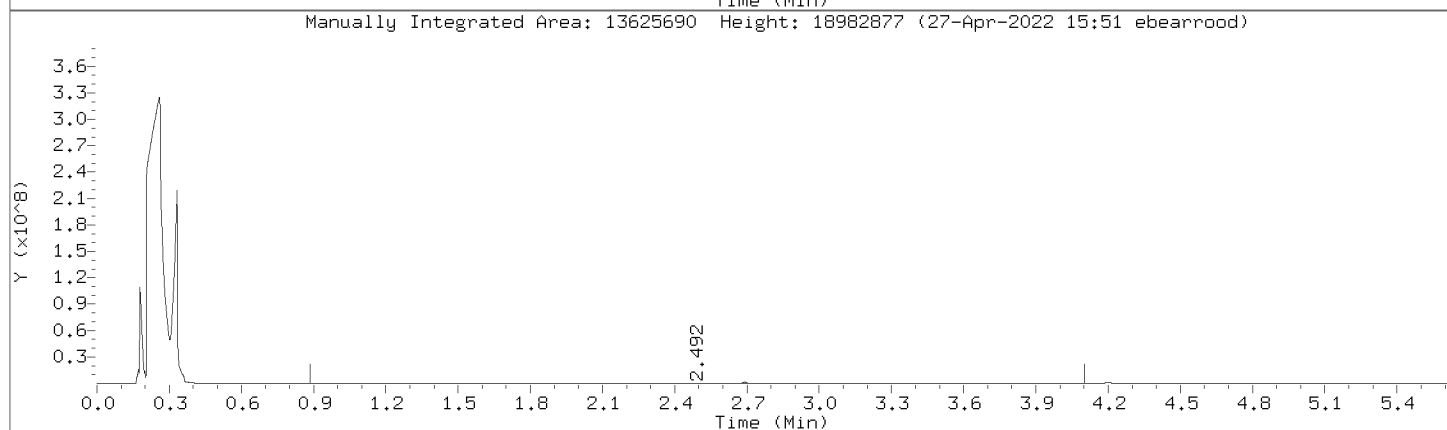
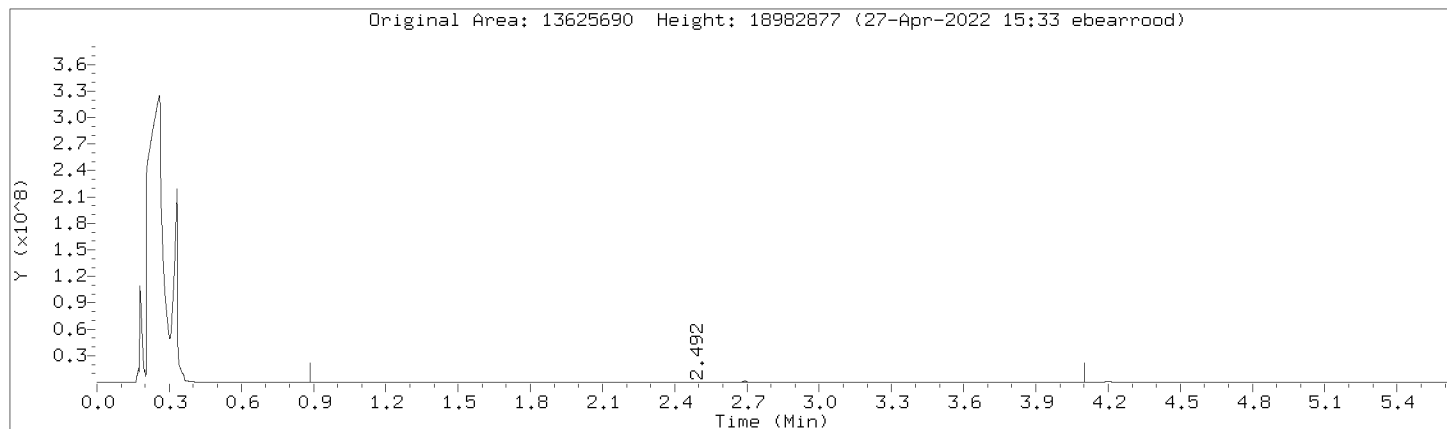
Compound: DRO by AK 102      Review Code: RNG  
CAS Number:





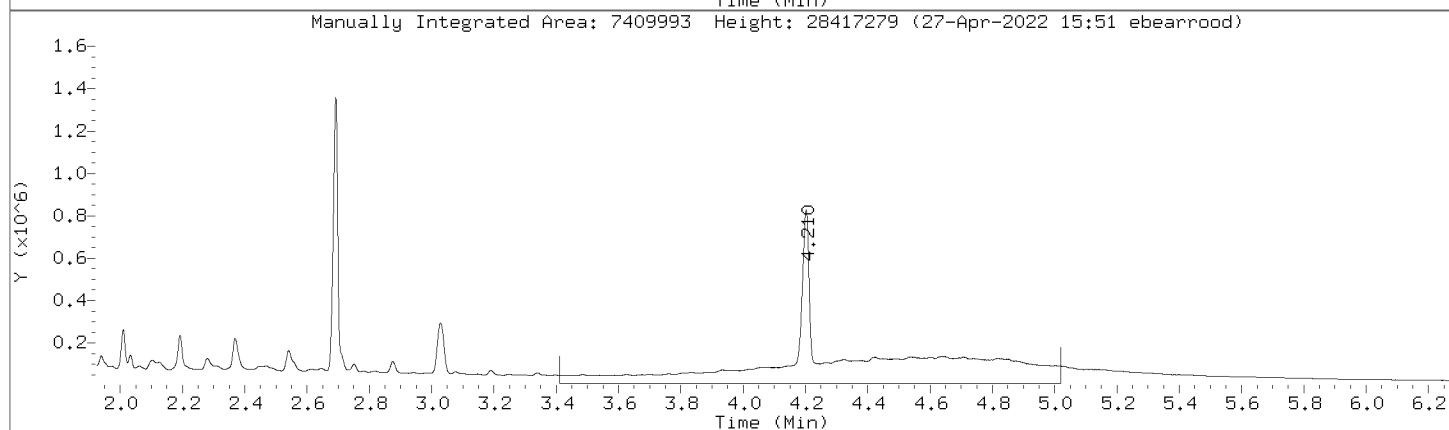
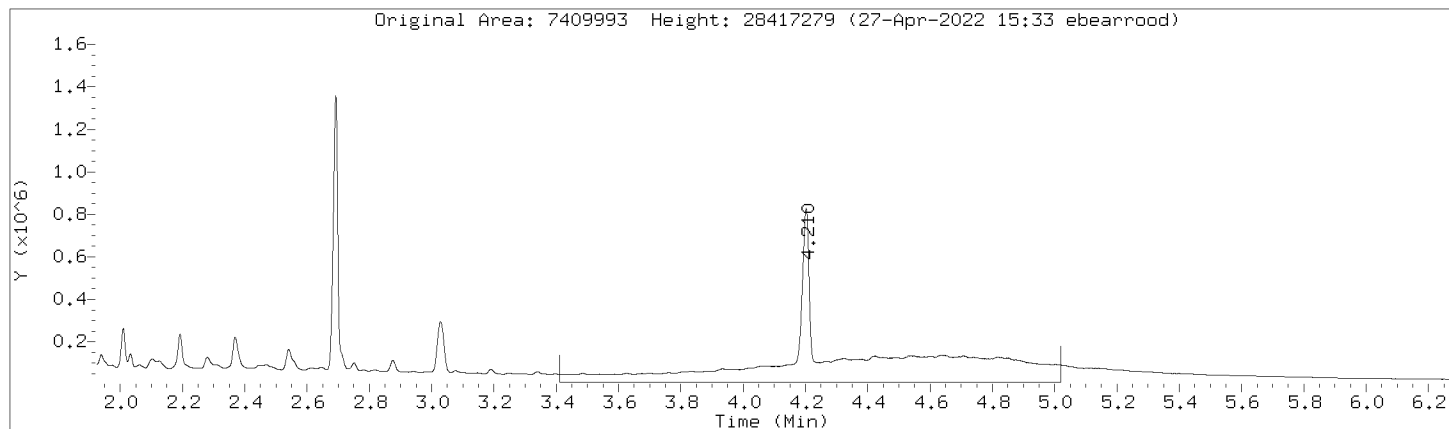
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Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



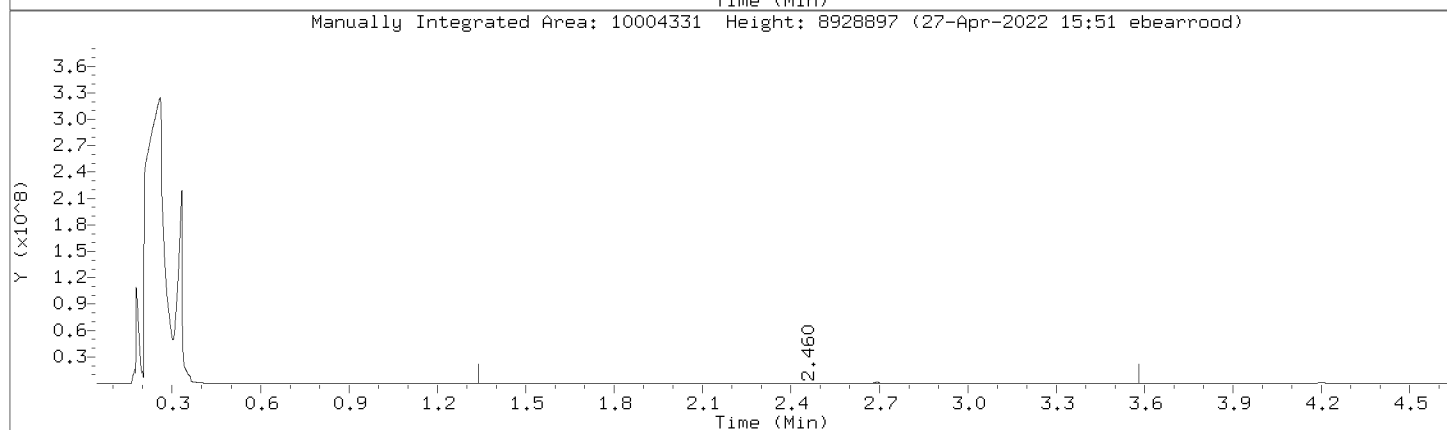
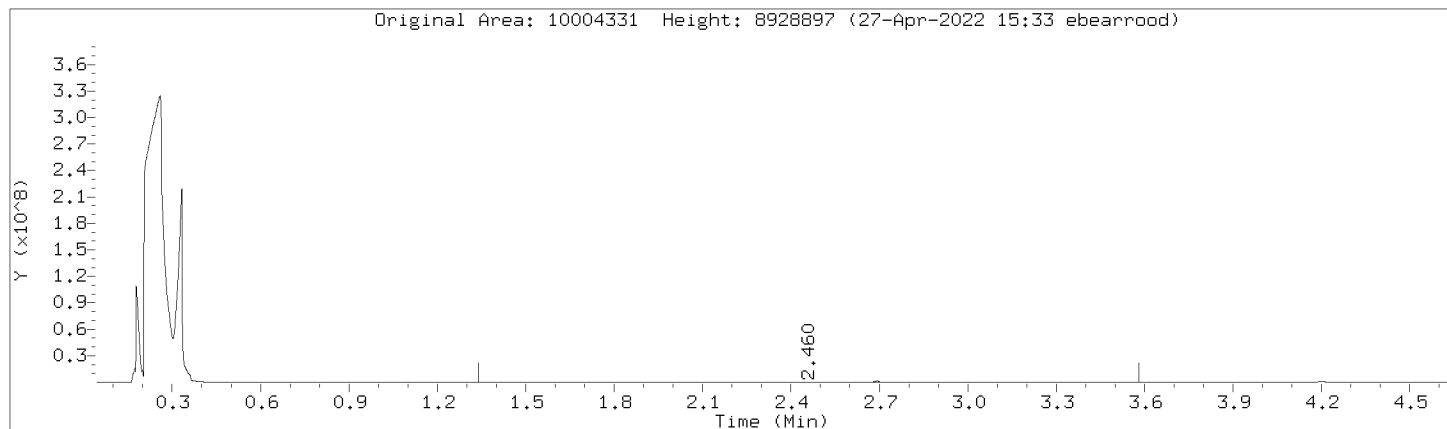
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Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



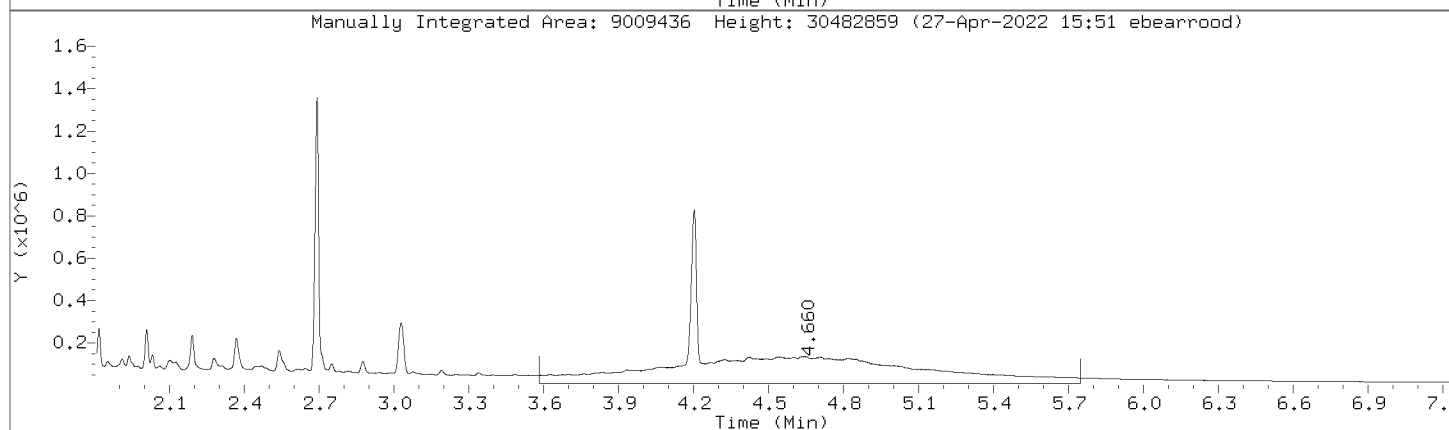
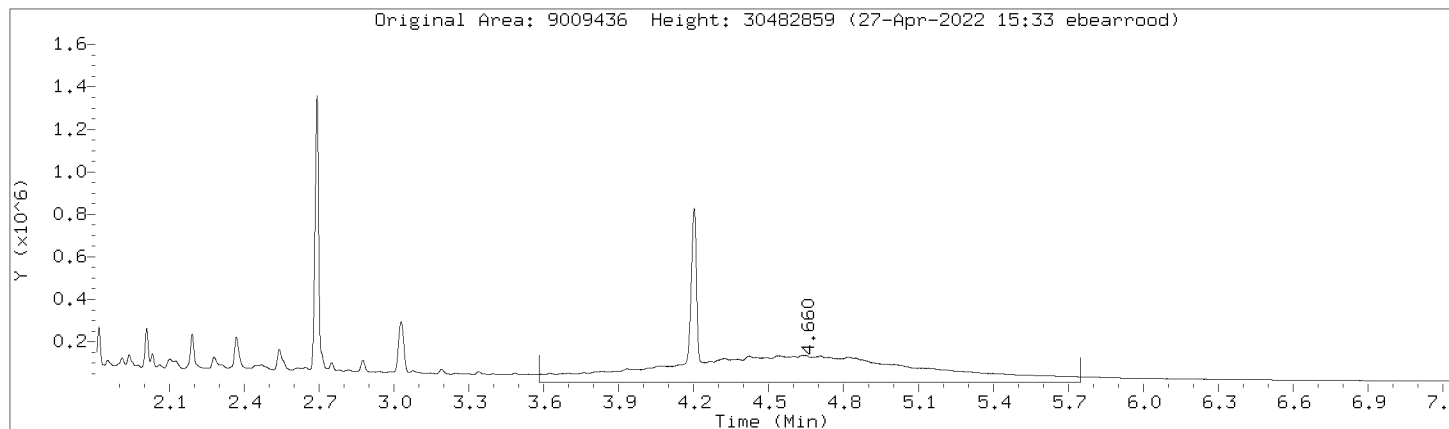
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



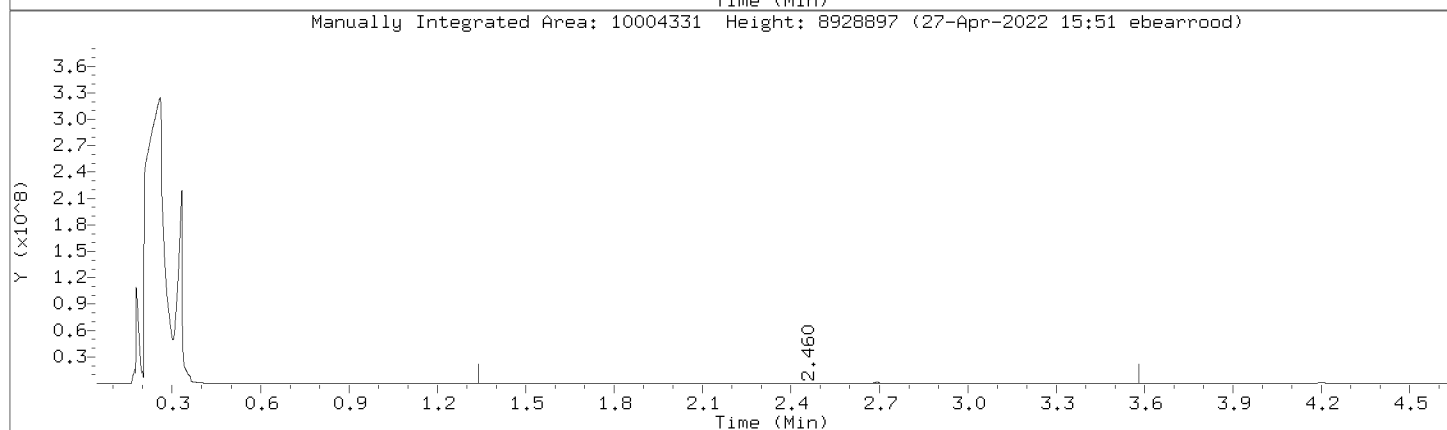
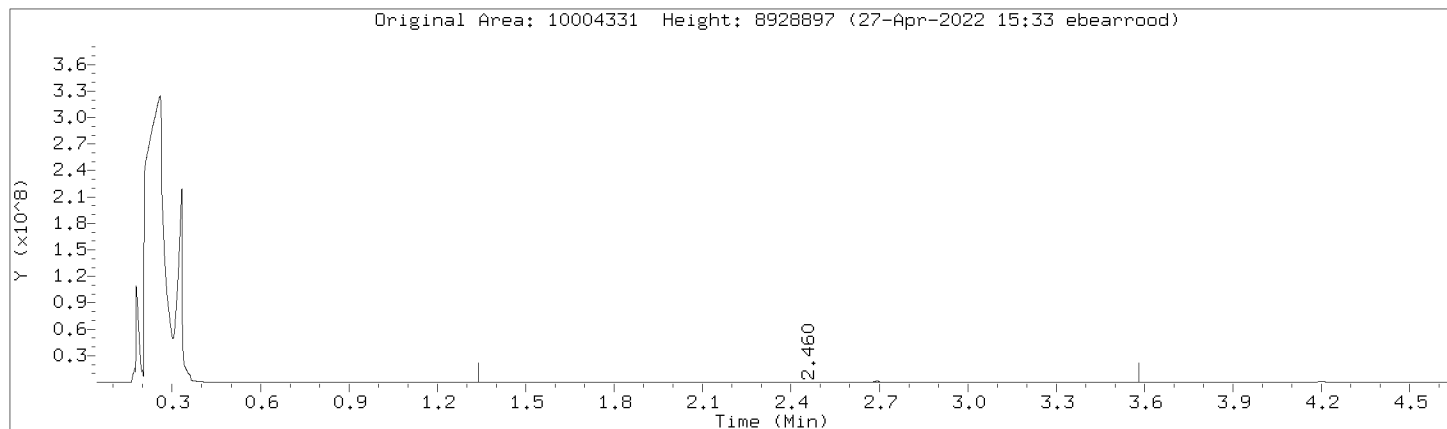
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Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



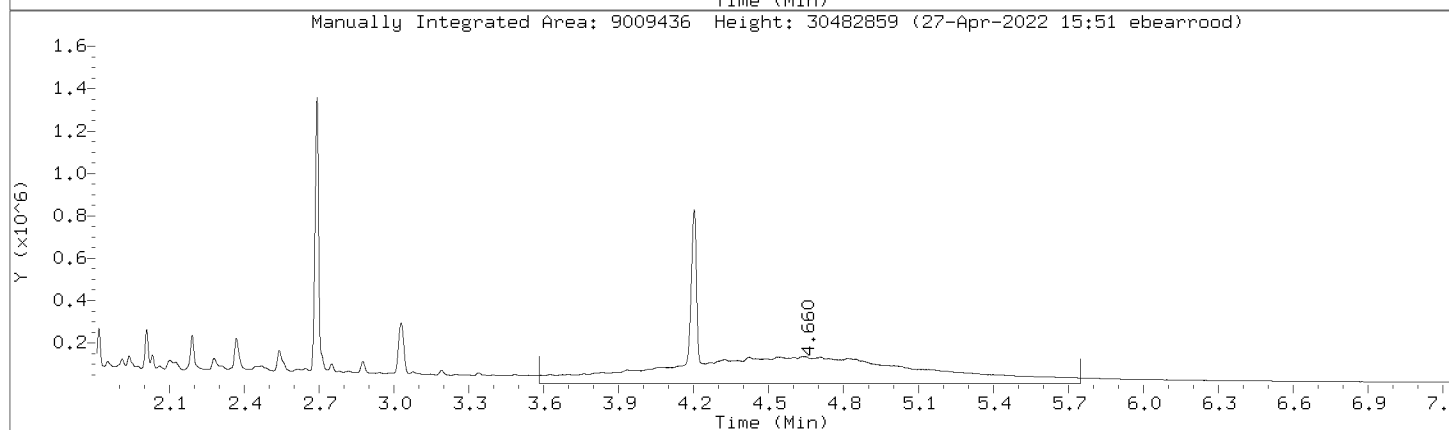
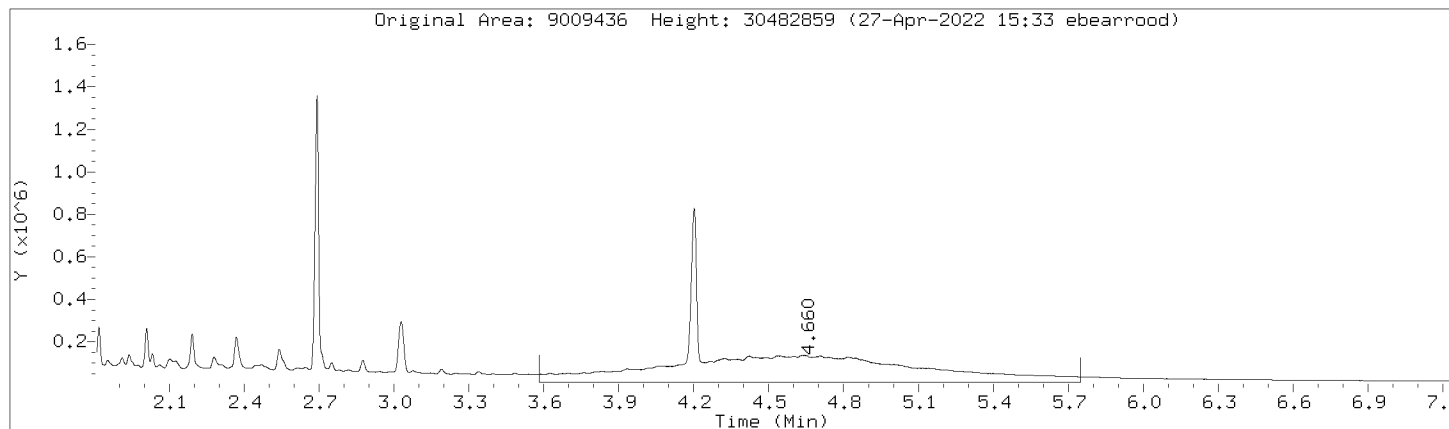
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Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



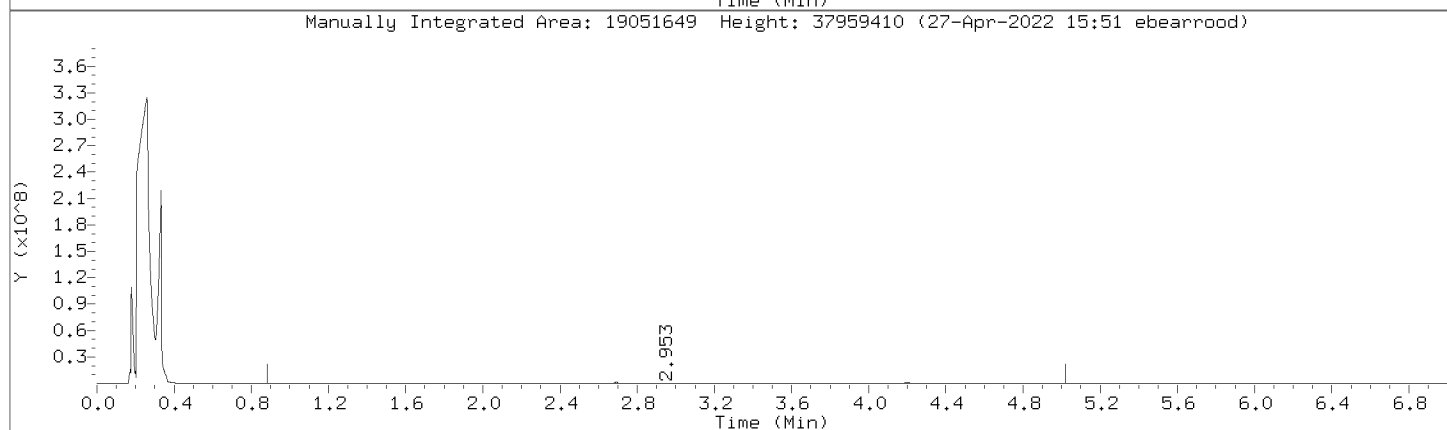
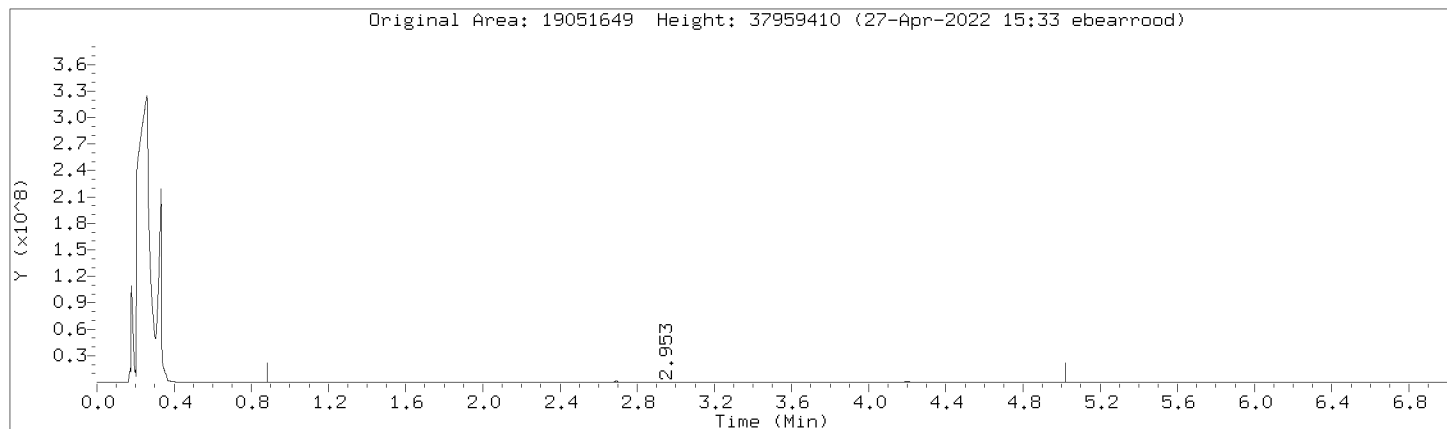
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



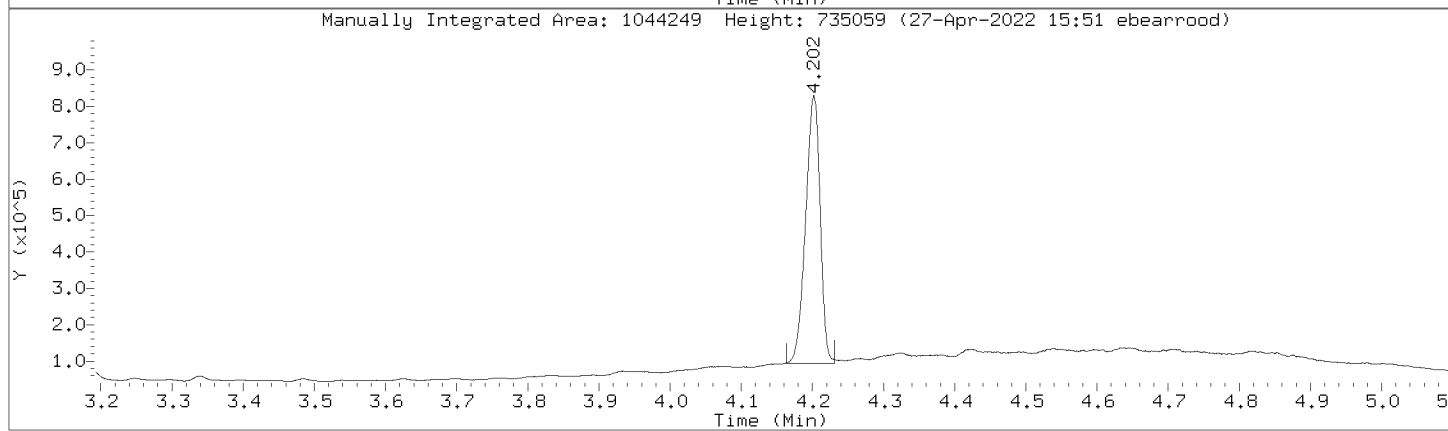
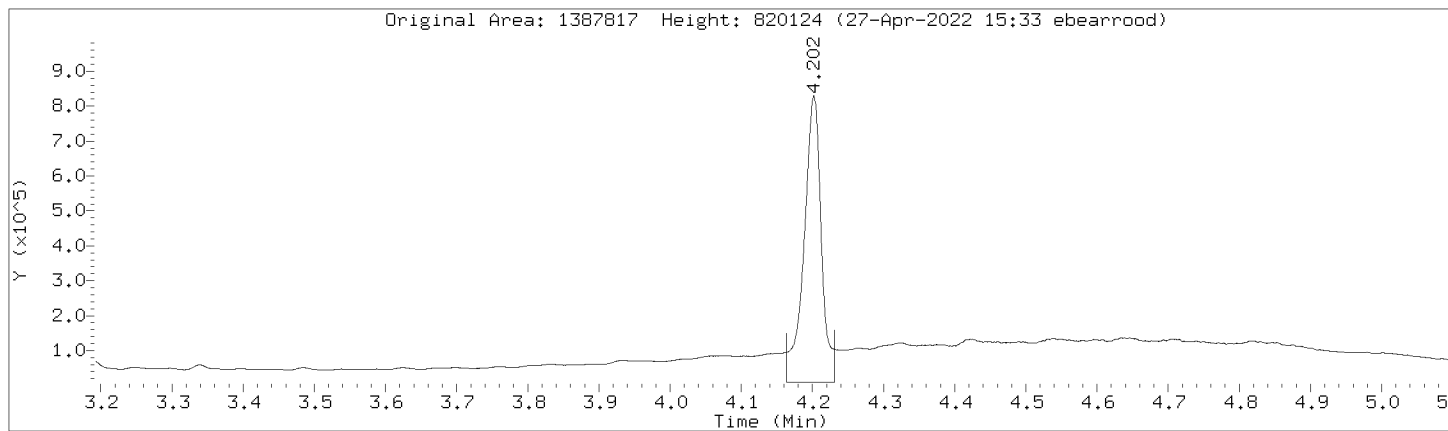
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

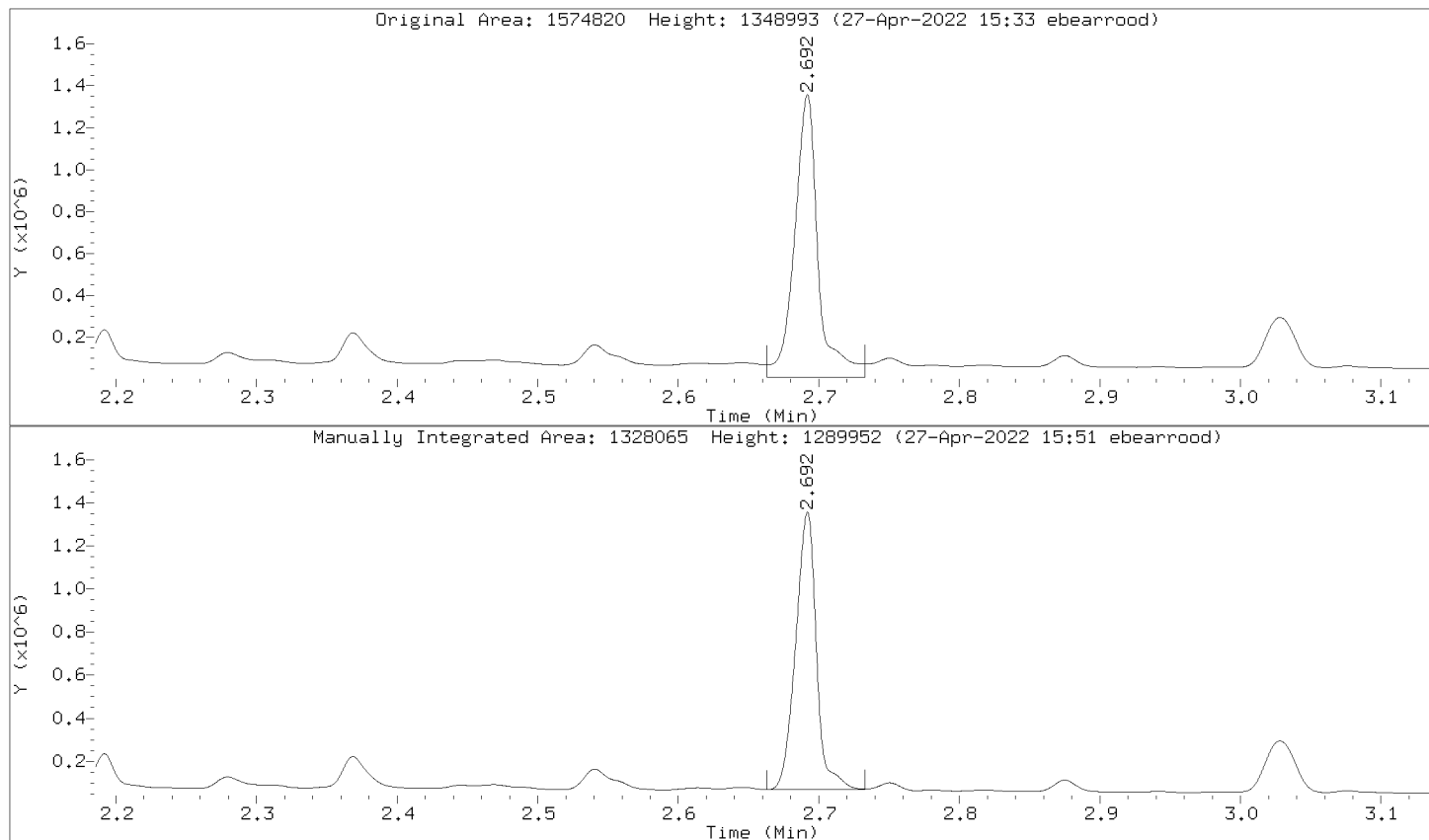
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
 Lab Smp Id: DMO-CAL10,362378:2 Client Smp ID: DMO-CAL10,362378:2  
 Inj Date : 27-APR-2022 14:42  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal10,362378:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 87 Calibration Sample, Level: 10  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		23156787 4000.00	3980	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.698	2.685 0.013		2641228 400.000	399	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.210	4.193 0.017		2060731 400.000	399	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		14036526 4000.00	3990	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		26459303 4000.00	3980	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		14575028 4000.00	3990	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		37193313 8000.00	7970	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		19496130 4000.00	3990	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		19496130 4000.00	3990	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		17707474 4000.00	3990	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		17707474 4000.00	3990	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 14:42

Client ID: DMO-CALL0,362378;2

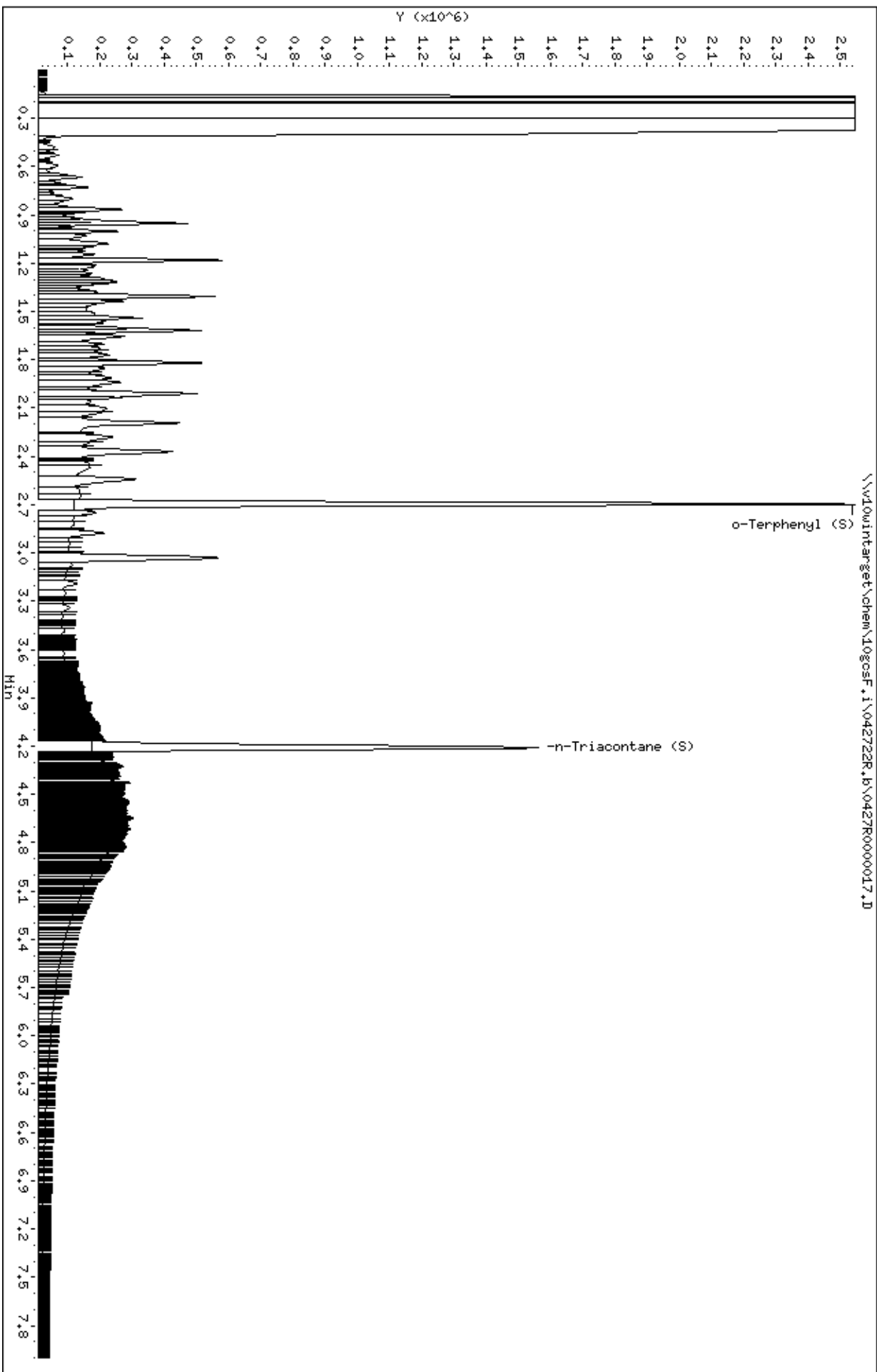
Sample Info: DMO-CALL0,362378;2

Instrument: 10gocsf.1

Operator: EB3

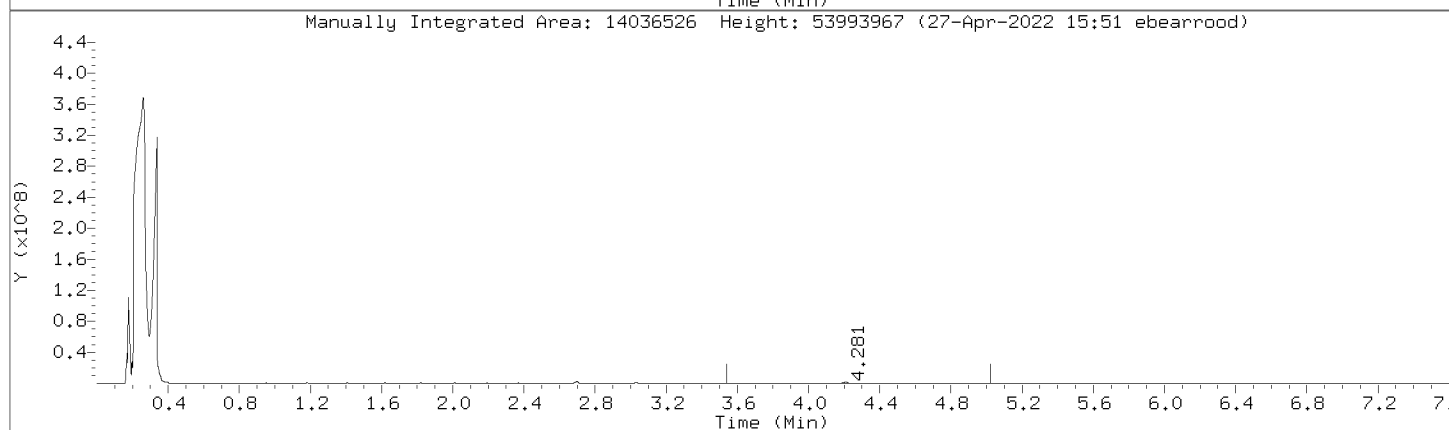
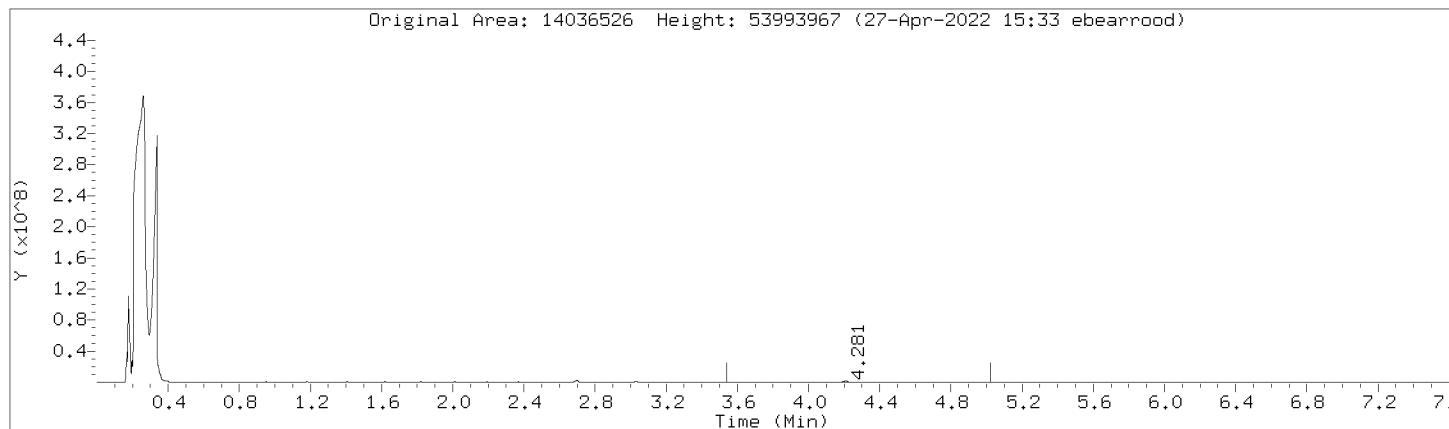
Column diameter: 0.32

Column phase: DB-5-US21430033



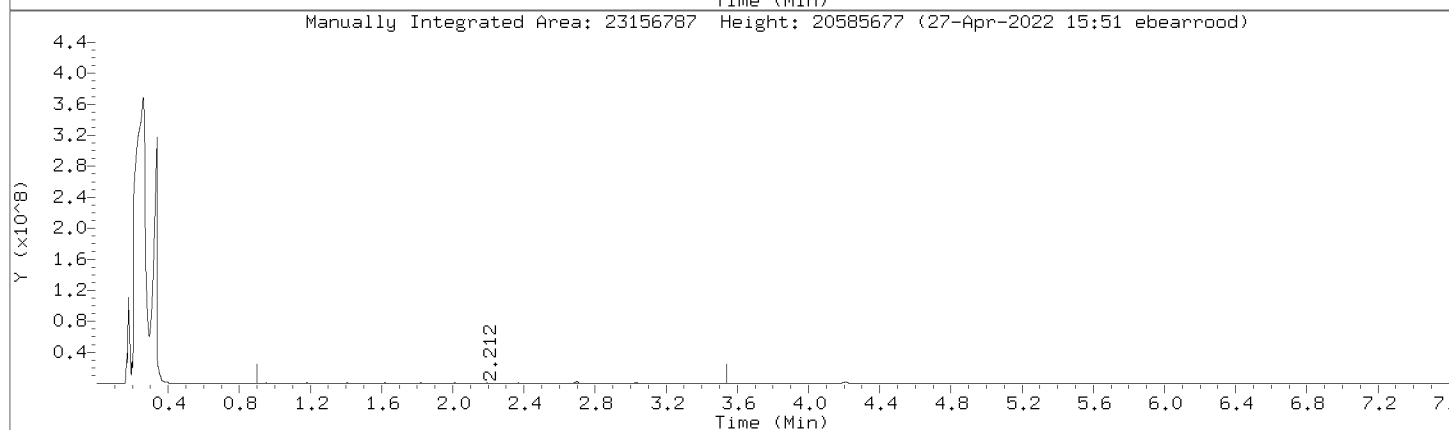
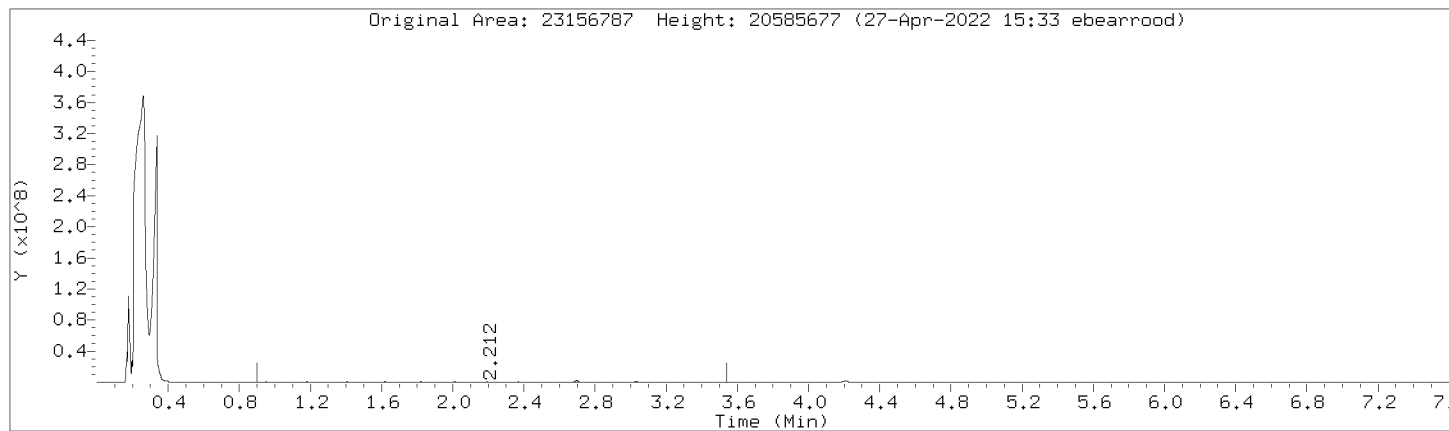
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



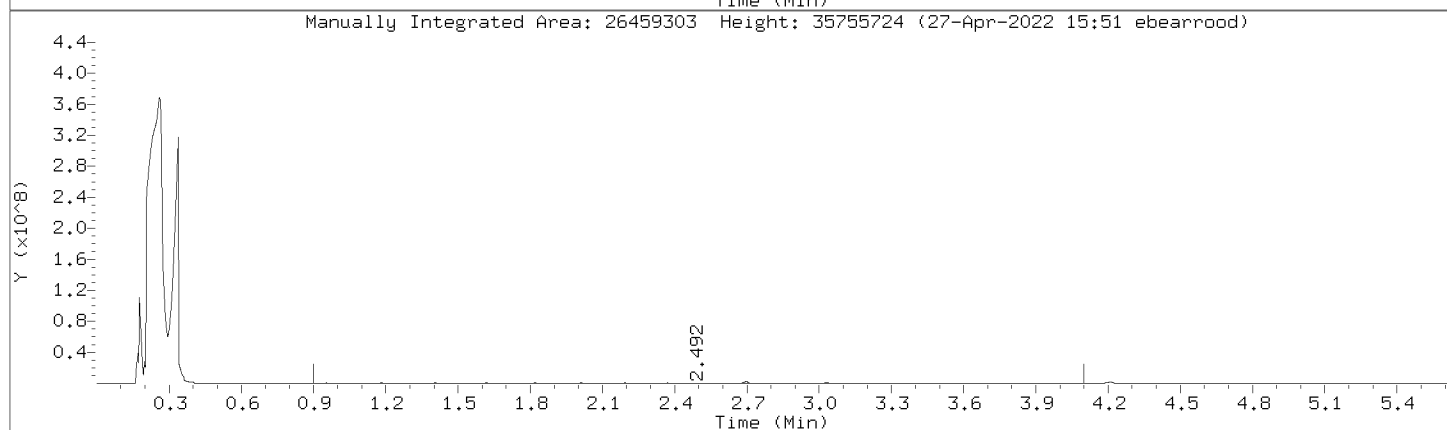
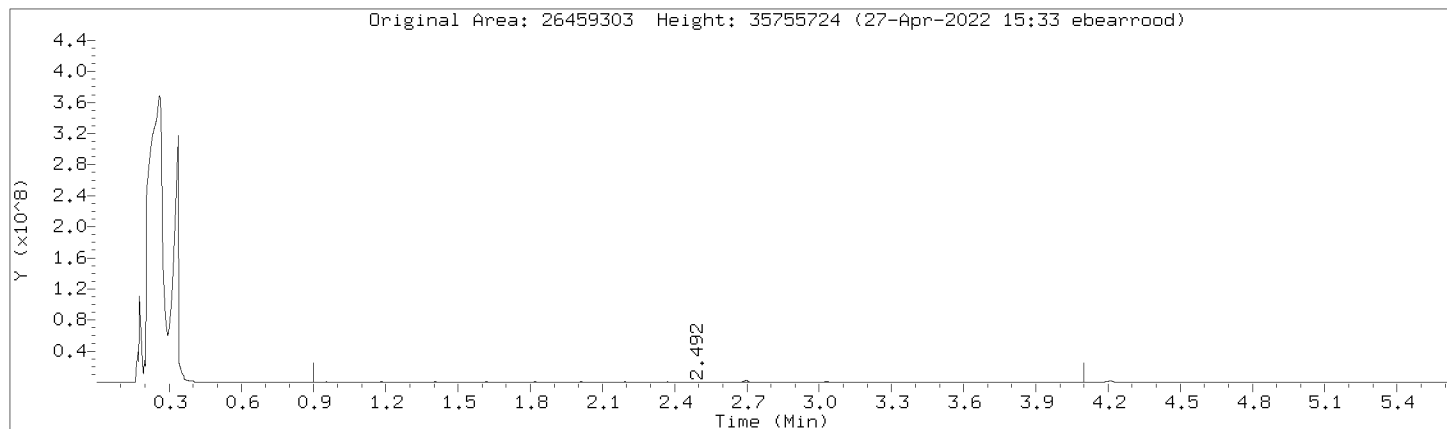
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

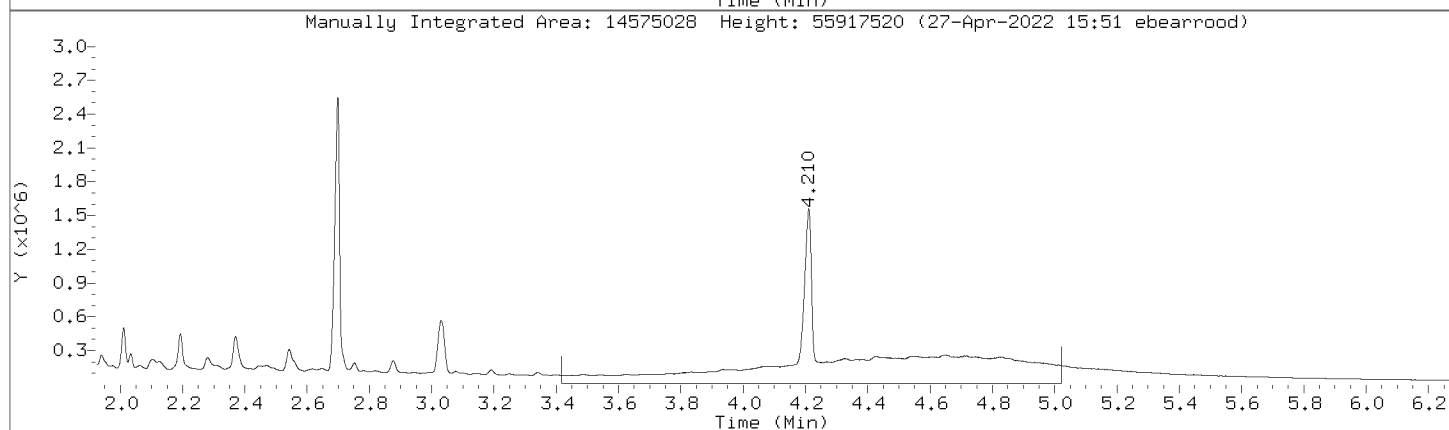
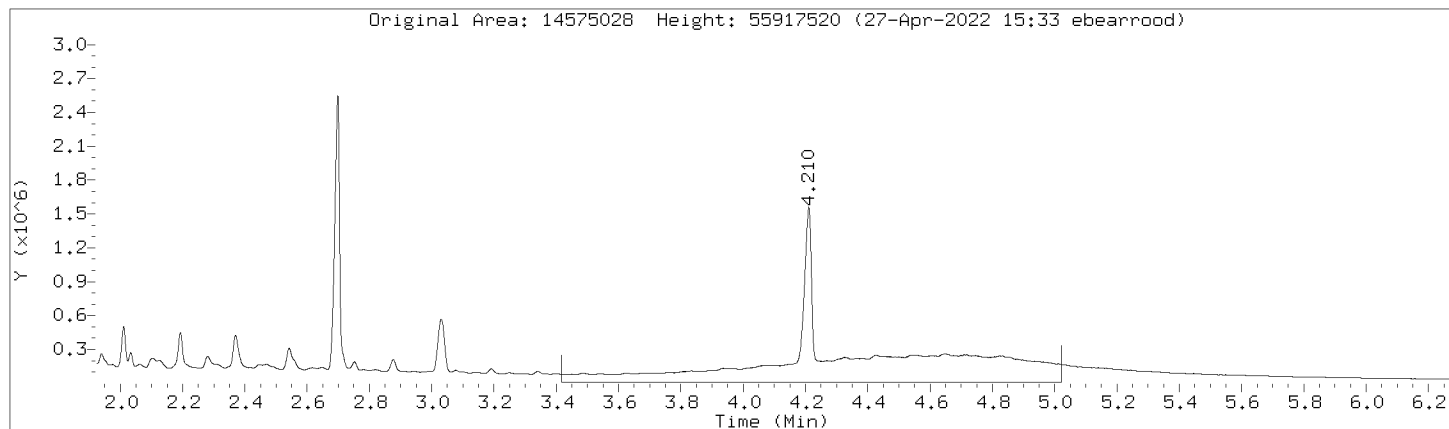
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Motor Oil Range (C24-C36)  
CAS Number:

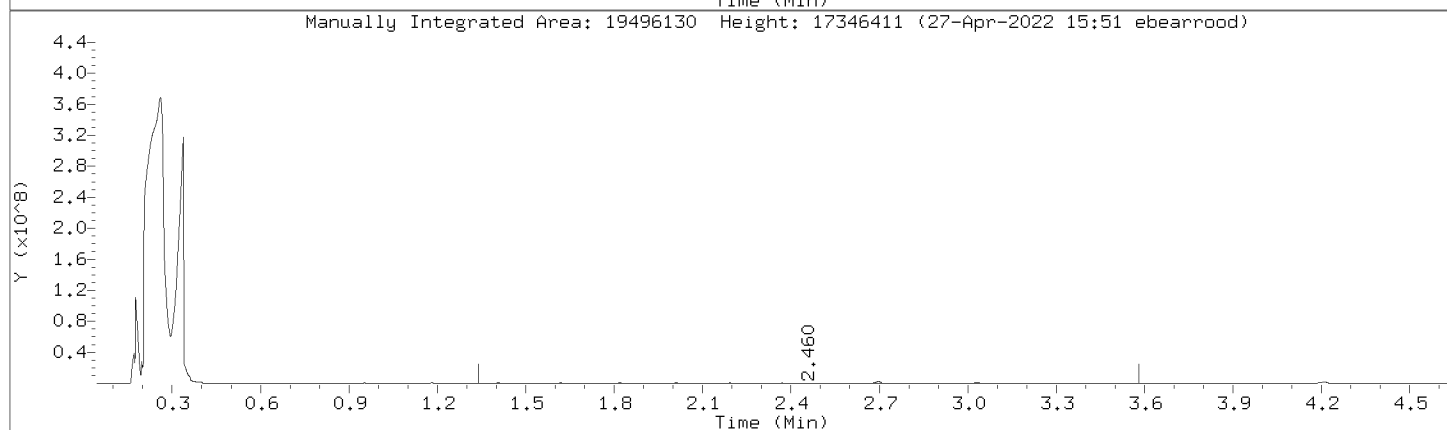
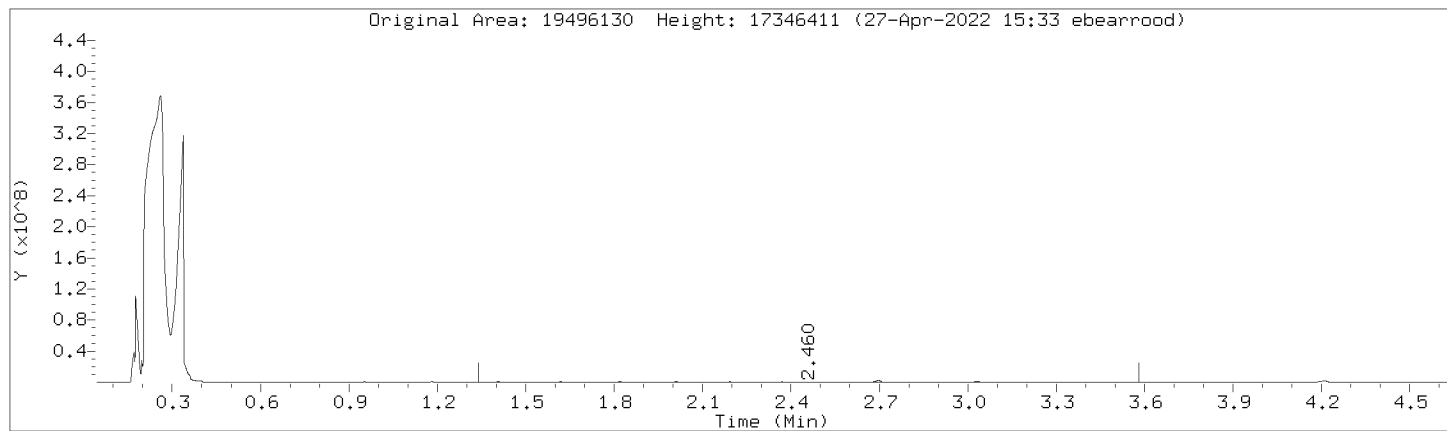
Review Code: RNG





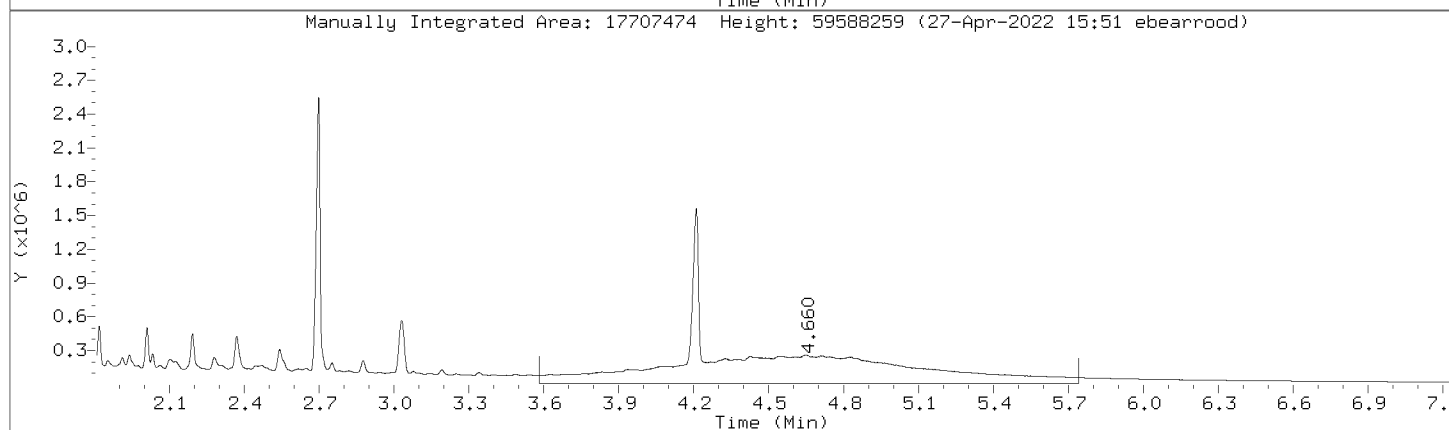
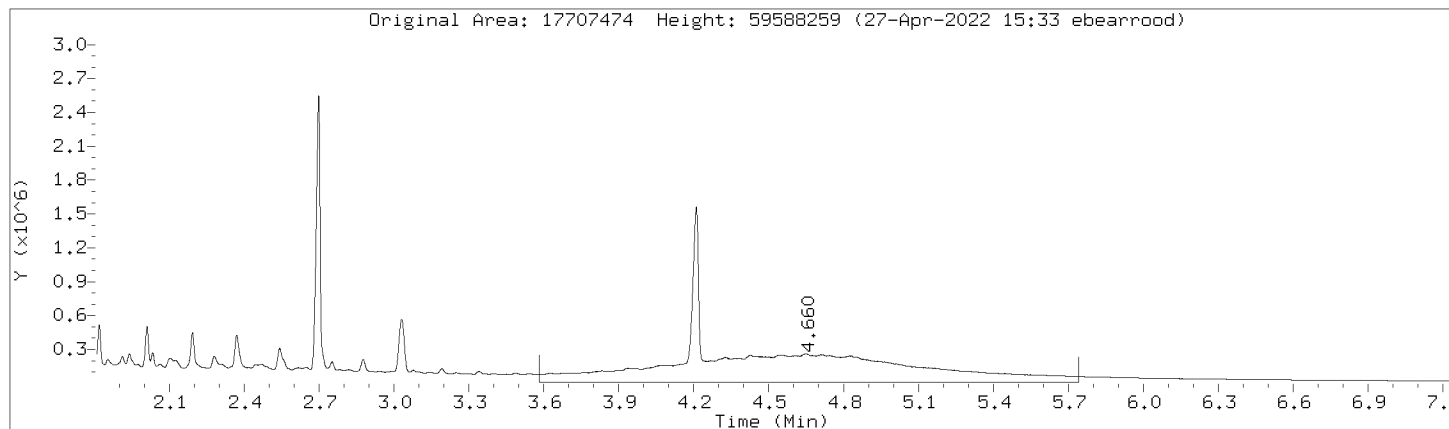
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Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



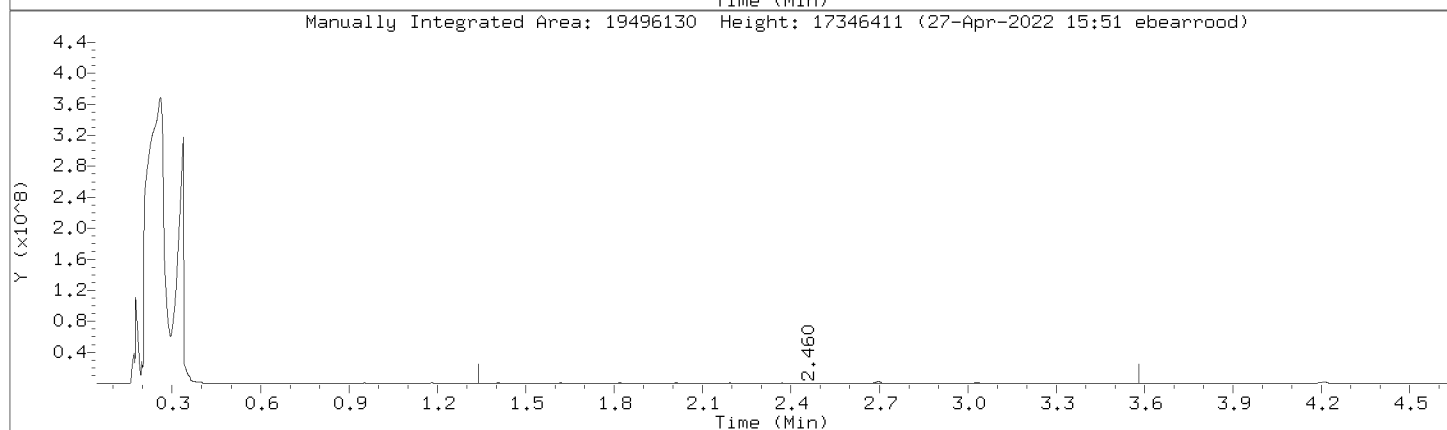
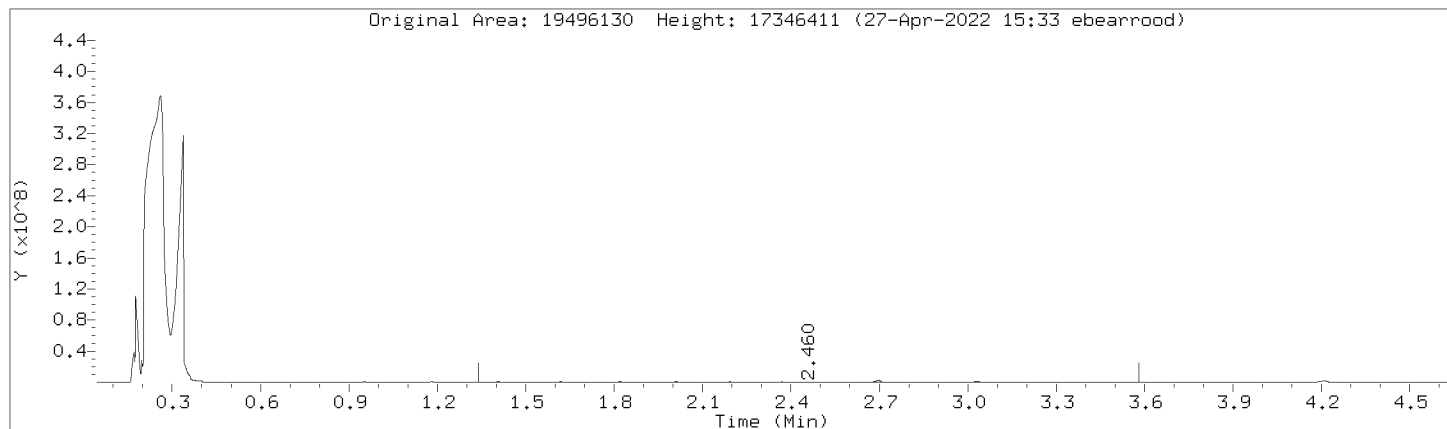
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Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



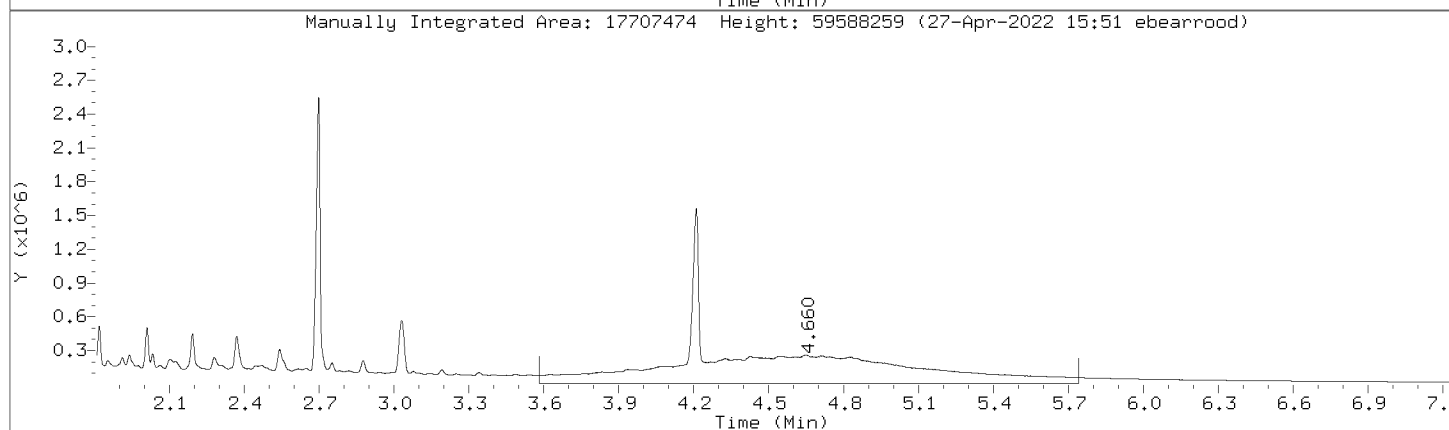
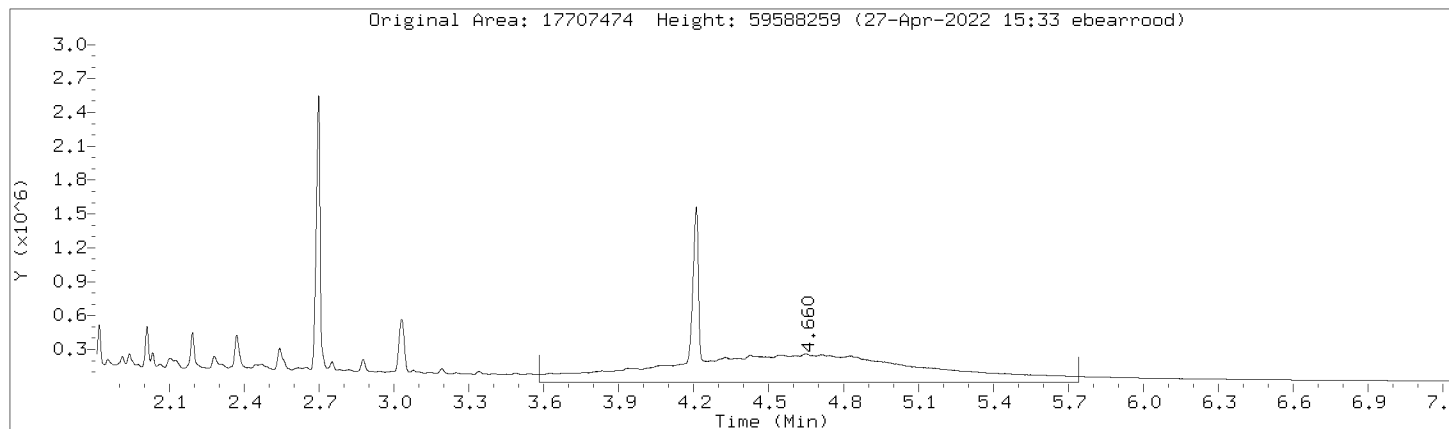
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



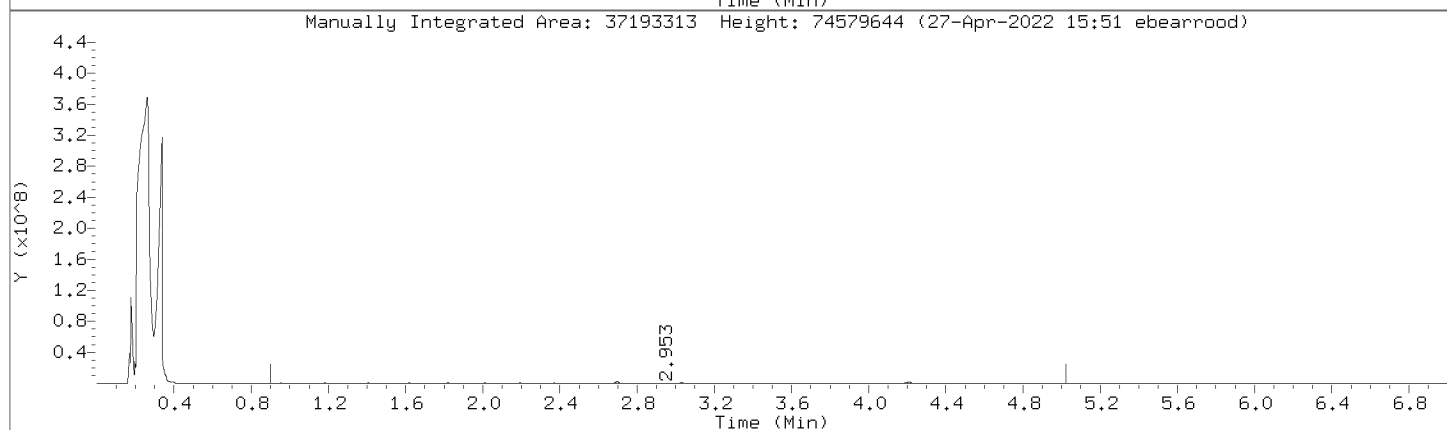
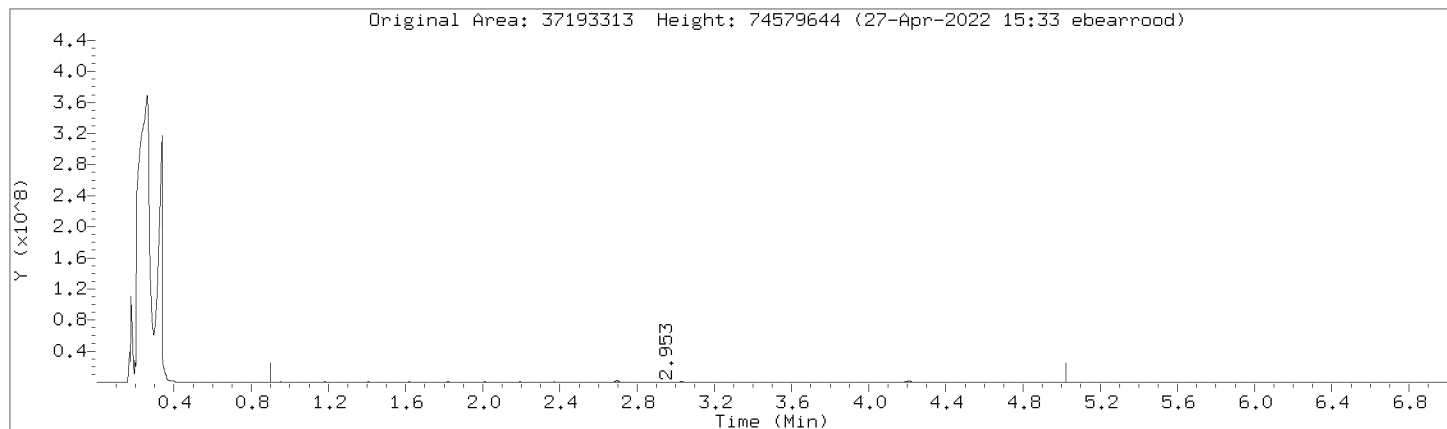
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Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



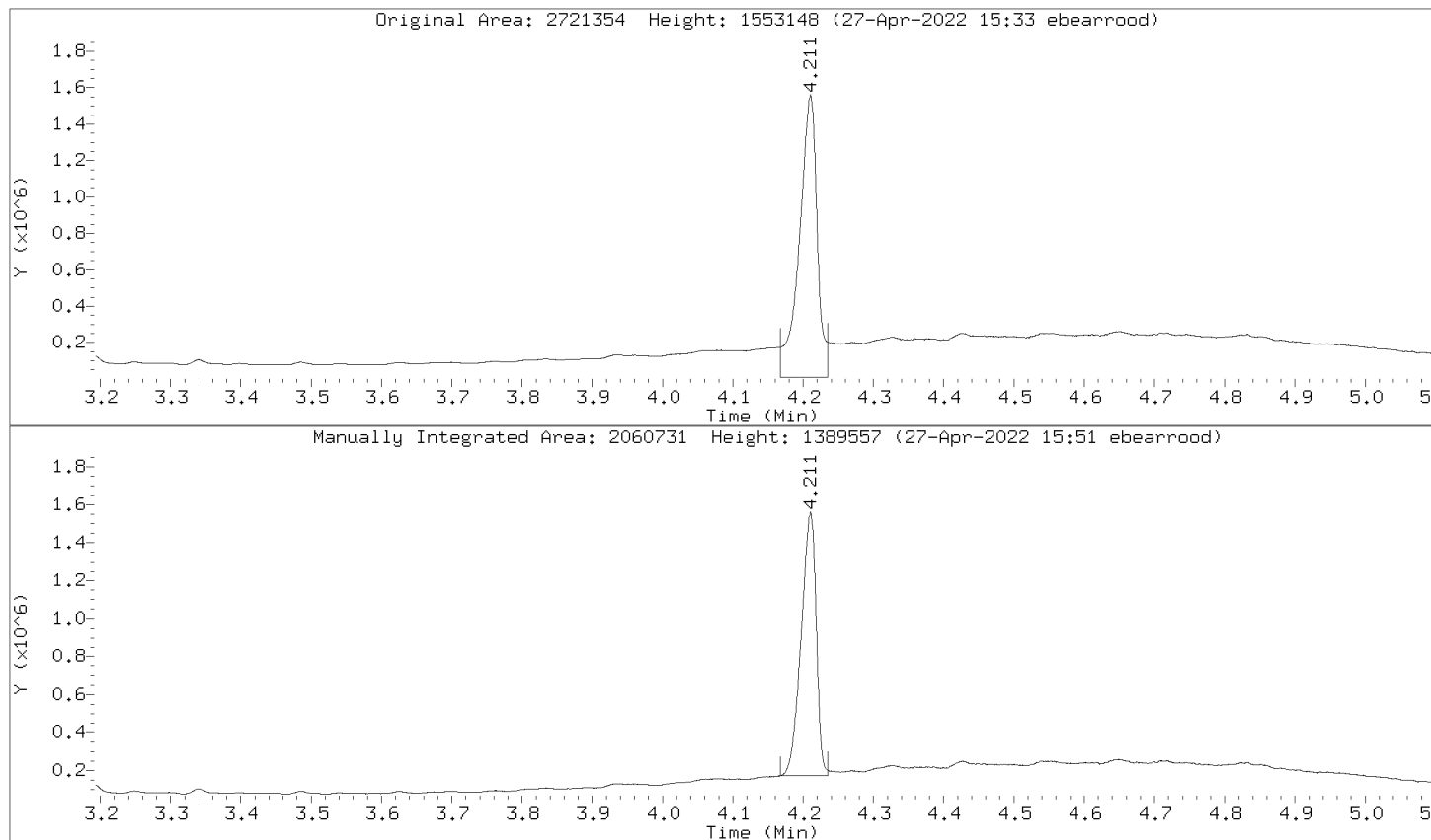
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



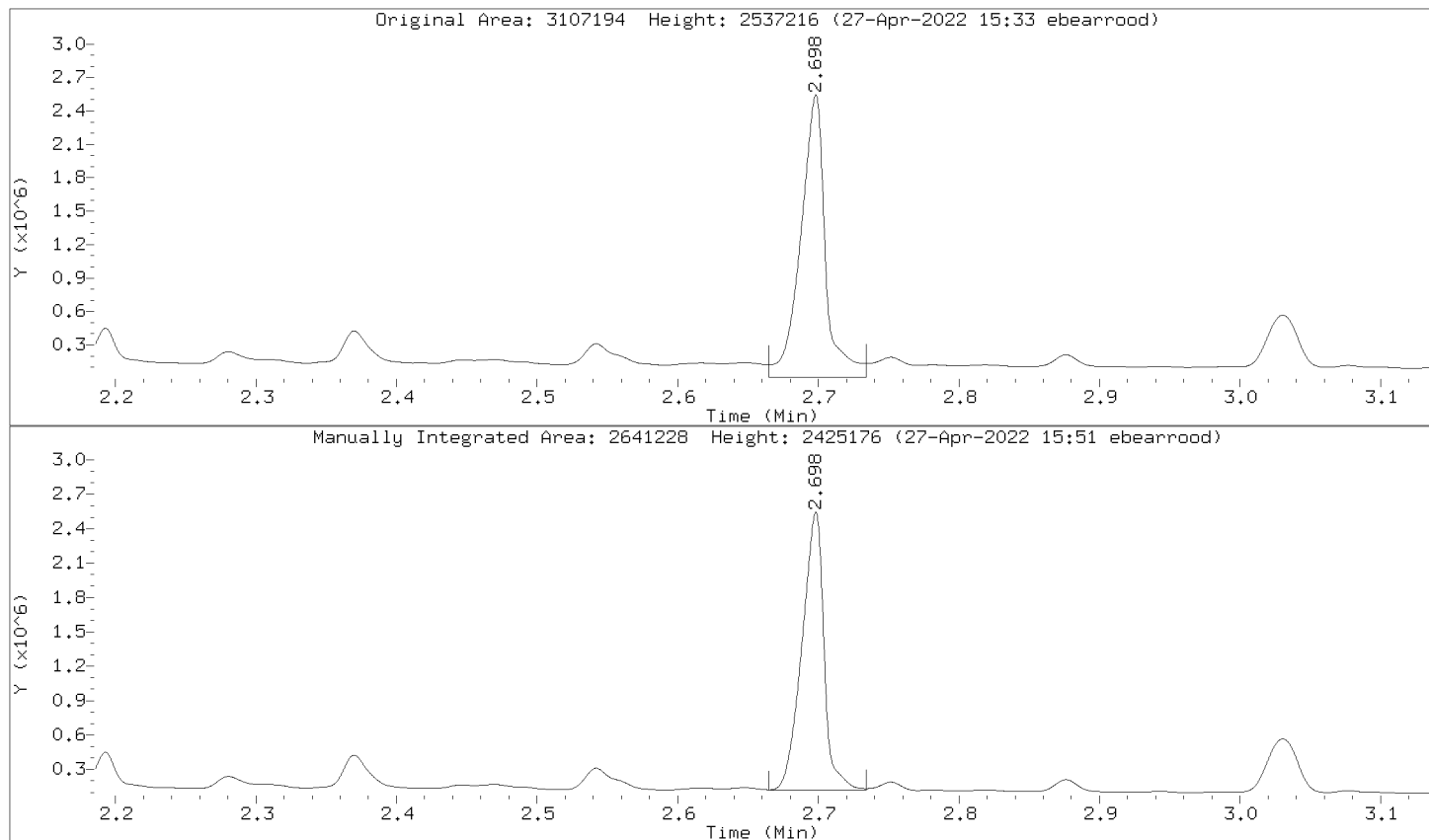
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000003.D  
 Lab Smp Id: DMO-RTM,362402:2 Client Smp ID: DMO-RTM,362402:2  
 Inj Date : 02-MAY-2022 15:16  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-rtm,362402:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050222R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 03-May-2022 13:08 tthao Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/mL)	(ug/mL)	REVIEW CODE
====	=====	=====	=====	=====	=====	=====
S	1	DRO by AK 102				CAS #:
0.880	-	3.600	2384010	352.631	353	
-----						
\$	2	o-Terphenyl (S)				CAS #:
Compound Not Detected.						
-----						
\$	3	n-Triacontane (S)				CAS #:
Compound Not Detected.						
-----						
S	4	Residual Range Organics AK103				CAS #:
3.601	-	5.180	2209992	601.400	601	
-----						
S	5	TPH-DRO (C10-C28)				CAS #:
0.880	-	4.200	3826453	522.624	523	
-----						
S	6	Motor Oil Range (C24-C36)				CAS #:
3.450	-	5.180	2917053	770.099	770	
-----						
S	7	C10-C36				CAS #:
0.880	-	5.180	4594003	893.792	894	
-----						
S	8	Diesel Fuel Range				CAS #:
1.350	-	3.650	1680432	283.843	284	
-----						
S	9	Diesel Fuel Range SG				CAS #:
1.350	-	3.650	1680432	283.843	284	
-----						
S	10	Motor Oil Range				CAS #:
3.651	-	6.100	2702163	586.343	586	
-----						



CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/mL)	(ug/mL)	REVIEW CODE
====	=====	=====	=====	=====	=====	=====
S	11	Motor Oil Range SG			CAS #:	
3.651	-	6.100	2702163	586.343	586	

---

Date : 02-MAY-2022 15:16

Client ID: DMO-RTM,362402:2

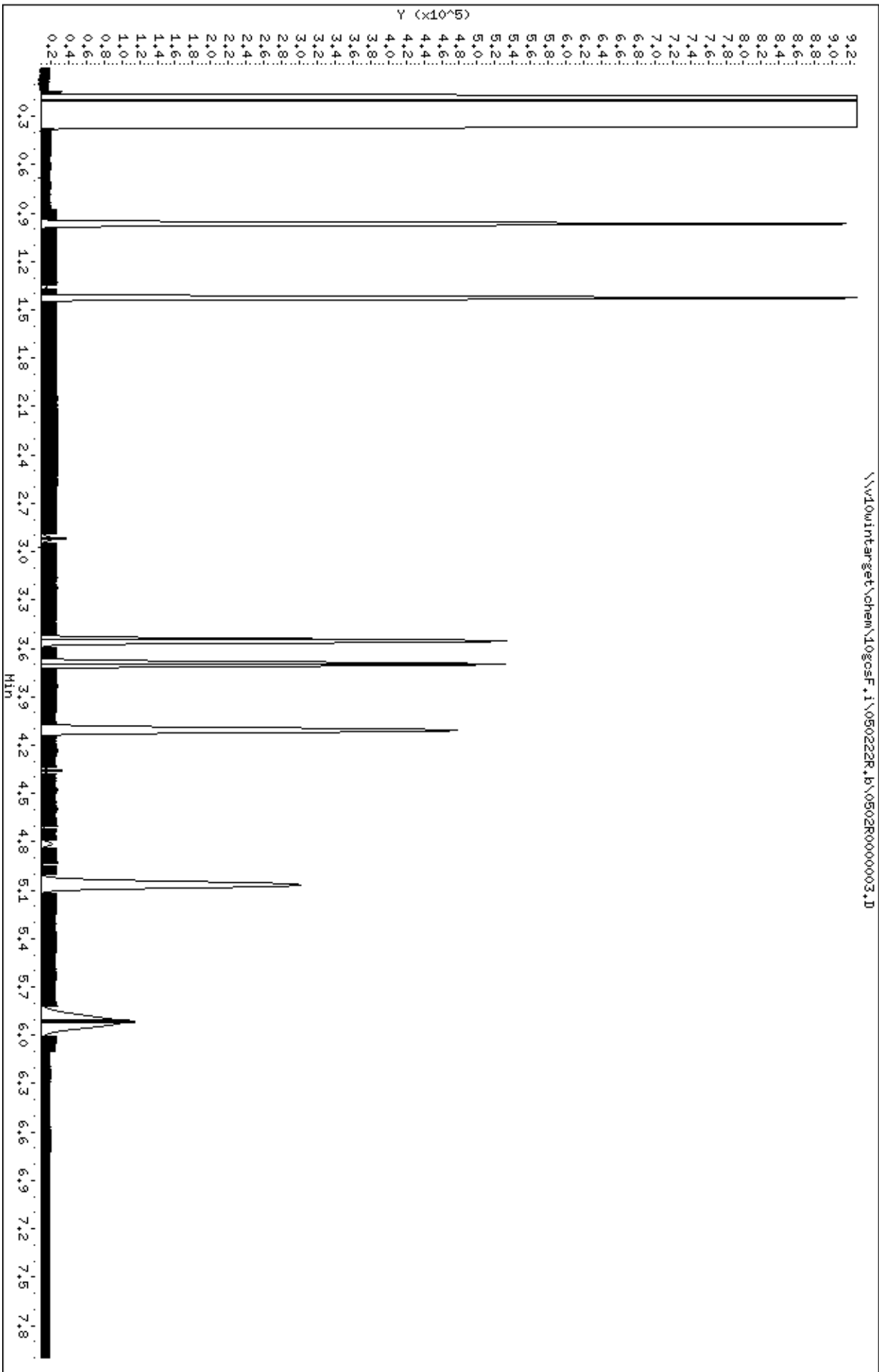
Sample Info: DMO-RTM,362402:2

Instrument: logsf.1

Operator: TT2

Column phase: DB-5-MS21430033

Column diameter: 0.32



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000003.D  
Injection Date: 02-MAY-2022 15:16  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-RTM,362402:2  
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	2235824	2209992
DRO by AK 102	1686390	2384010
TPH-DRO (C10-C28)	3822911	3826453
Motor Oil Range (C24-C36)	2250841	2917053
Diesel Fuel Range	1675765	1680432
Motor Oil Range	2253486	2702163
Diesel Fuel Range SG	1675765	1680432
Motor Oil Range SG	2253486	2702163
C10-C36	3922214	4594003
n-Triacontane (S)	0	0
o-Terphenyl (S)	0	0

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO INITIAL CALIBRATION DATA

SAMPLE NO.

29844123ICV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 04/27/2022 Time: 15:04

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 04/27/2022 04/27/2022

Lab File ID: 042722R.B\0427R0000019.D

Init. Calib. Time(s): 13:00 14:42

SDG No.: 10606046

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	551.8944	0.0100	10.3789	15.0000
Motor Oil Range	Linear	500	549.0625	0.0100	9.8125	15.0000
n-Triacontane (S)	Linear	50	49.29993	0.0100	-1.4001	15.0000
o-Terphenyl (S)	Linear	50	52.07765	0.0100	4.1553	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29940885CCV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 05/02/2022 Time: 19:28

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 04/27/2022 04/27/2022

Lab File ID: 050222R.B\0502R0000030.D

Init. Calib. Time(s): 13:00 14:42

SDG No.: 10606046

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	512.1824	0.0100	2.4365	15.0000
Motor Oil Range	Linear	500	519.5084	0.0100	3.9017	15.0000
n-Triacontane (S)	Linear	50	49.51426	0.0100	-0.9715	15.0000
o-Terphenyl (S)	Linear	50	48.93177	0.0100	-2.1365	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29940884CCV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 05/02/2022 Time: 21:10

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 04/27/2022 04/27/2022

Lab File ID: 050222R.B\0502R0000041.D

Init. Calib. Time(s): 13:00 14:42

SDG No.: 10606046

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	506.2076	0.0100	1.2415	15.0000
Motor Oil Range	Linear	500	509.6090	0.0100	1.9218	15.0000
n-Triacontane (S)	Linear	50	50.10416	0.0100	0.2083	15.0000
o-Terphenyl (S)	Linear	50	48.53151	0.0100	-2.9370	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000019.D  
 Lab Smp Id: DMO-ICV,355155:2 Client Smp ID: DMO-ICV,355155:2  
 Inj Date : 27-APR-2022 15:04  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-icv,355155:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 88 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		3511427 500.000	550	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.685	2.685 0.000		347844 50.0000	52.1	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.192	4.193 -0.001		257941 50.0000	49.3	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		2016357 500.000	546	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		3998930 500.000	549	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		2116930 500.000	549	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		5533336 1000.00	1100	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		2969593 500.000	552	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		2969593 500.000	552	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		2537766 500.000	549	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		2537766 500.000	549	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.



Date : 27-APR-2022 15:04

Client ID: DMO-ICV,355155:2

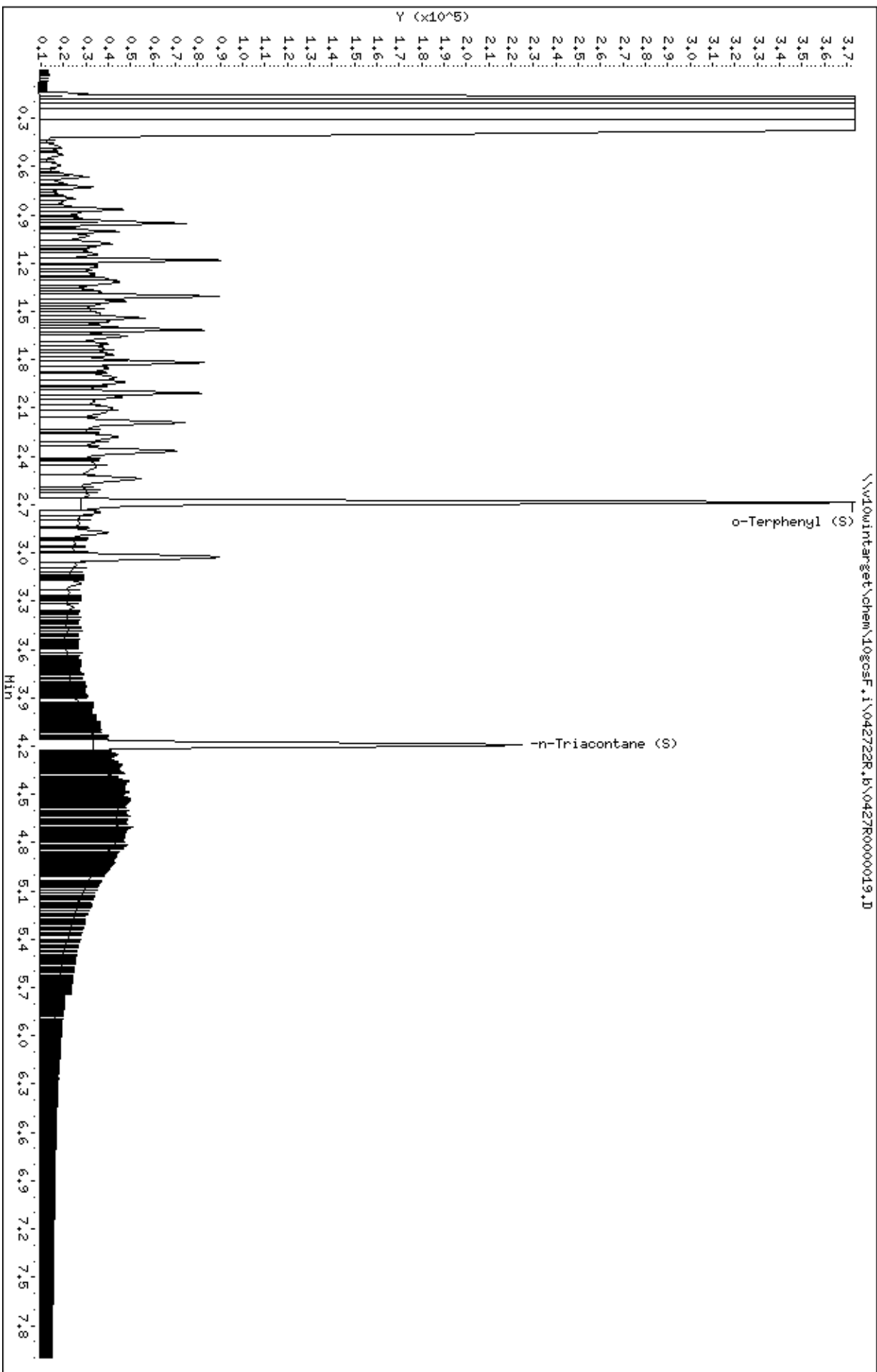
Sample Info: DMO-ICV,355155:2

Instrument: 10goscF.1

Operator: EB3

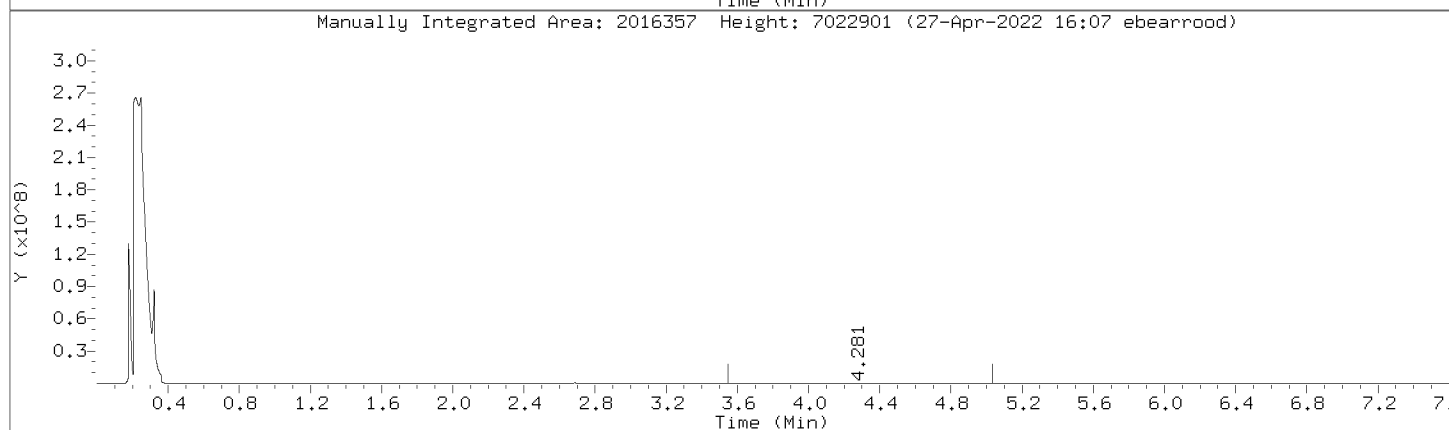
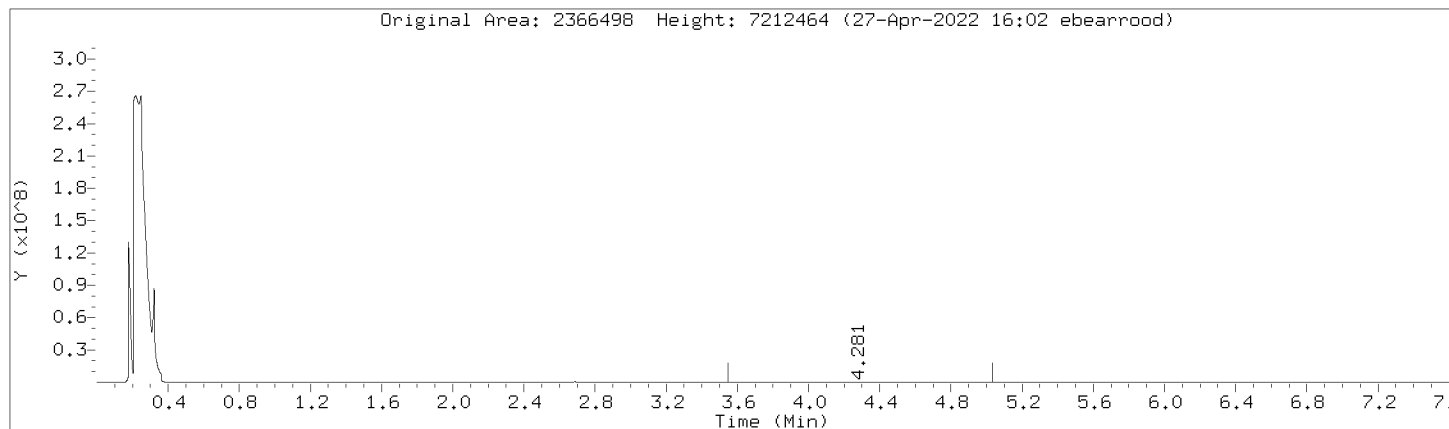
Column diameter: 0.32

Column phase: DB-5-MS21430033



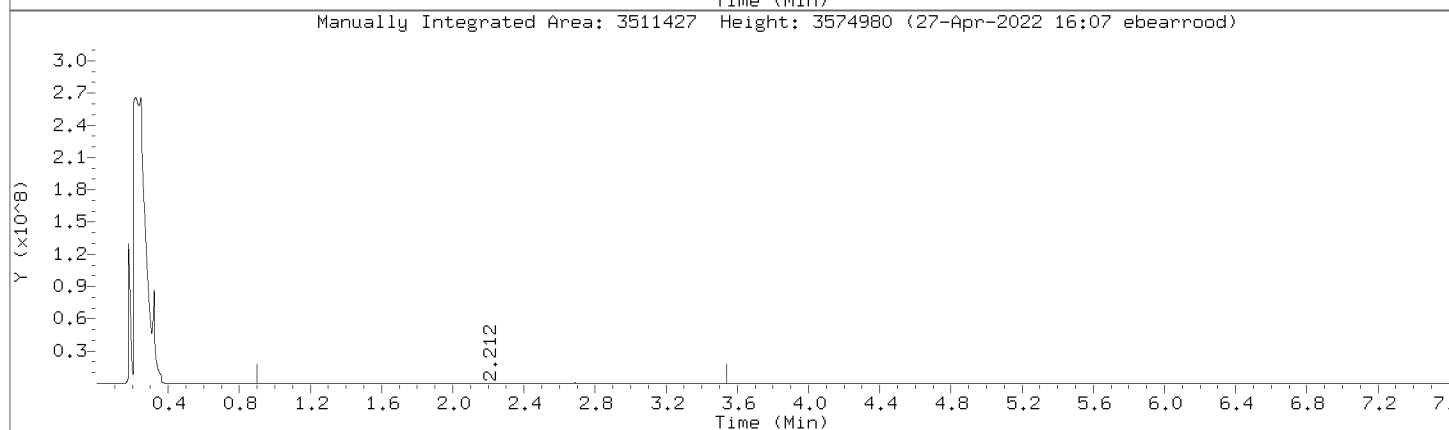
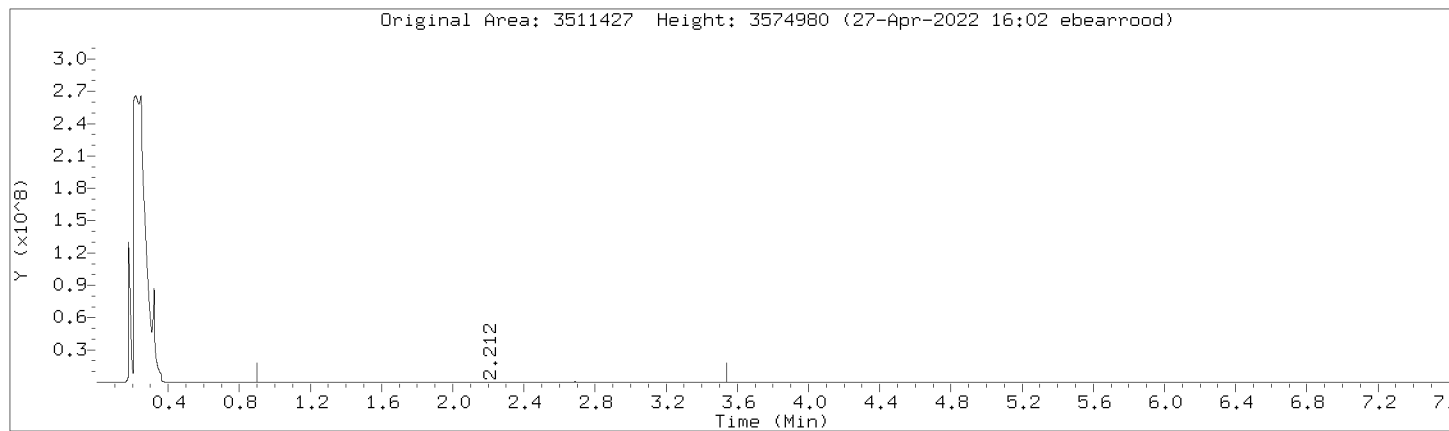
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Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



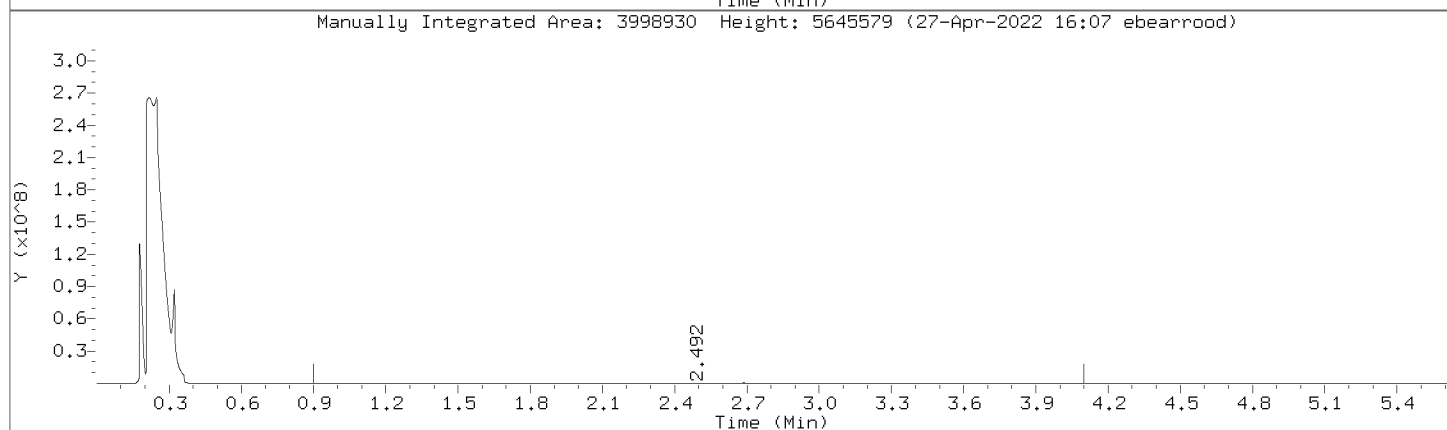
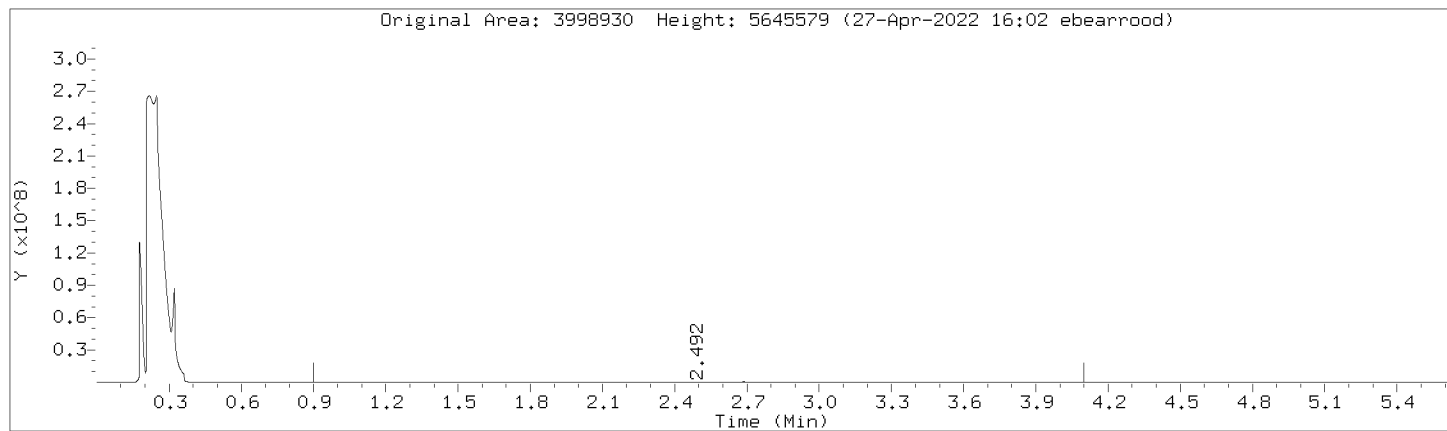
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Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



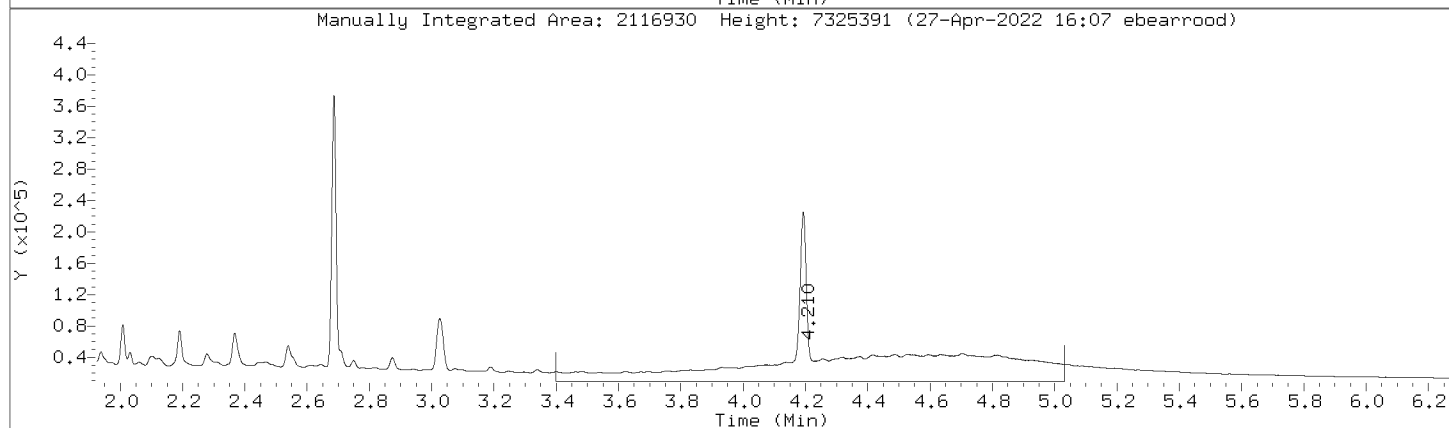
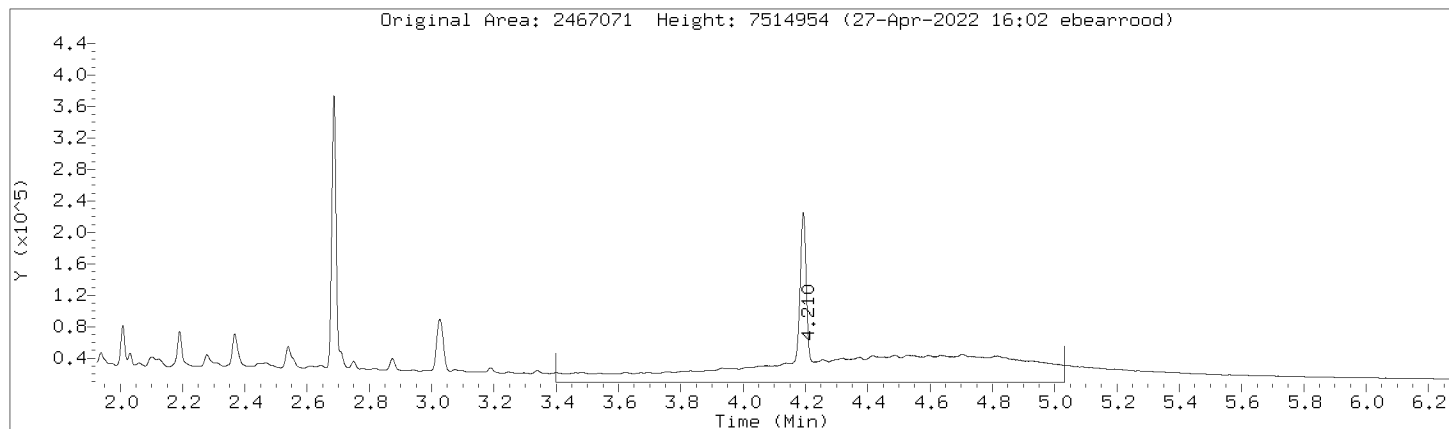
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Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



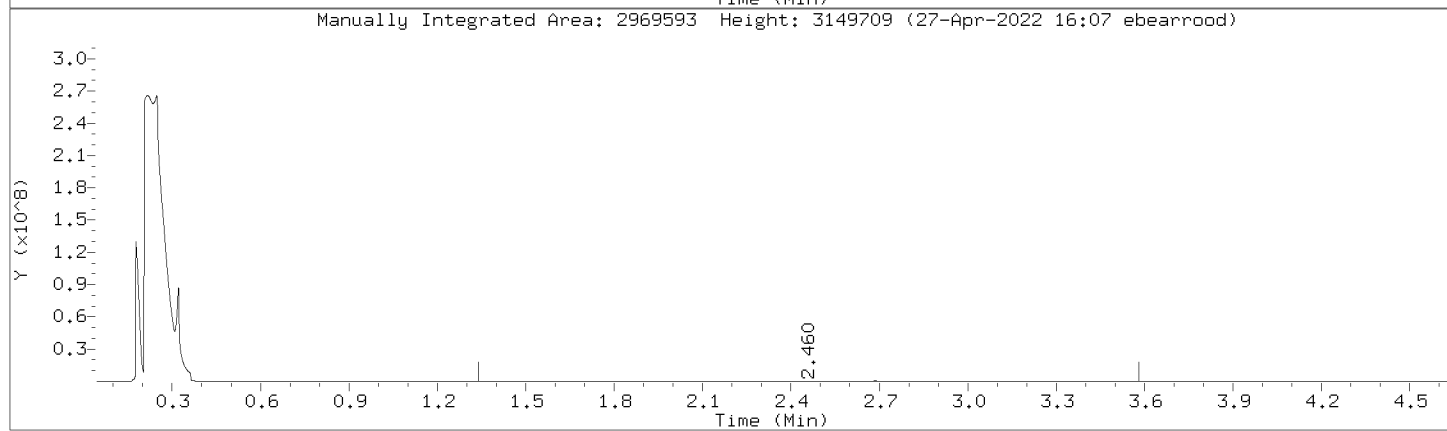
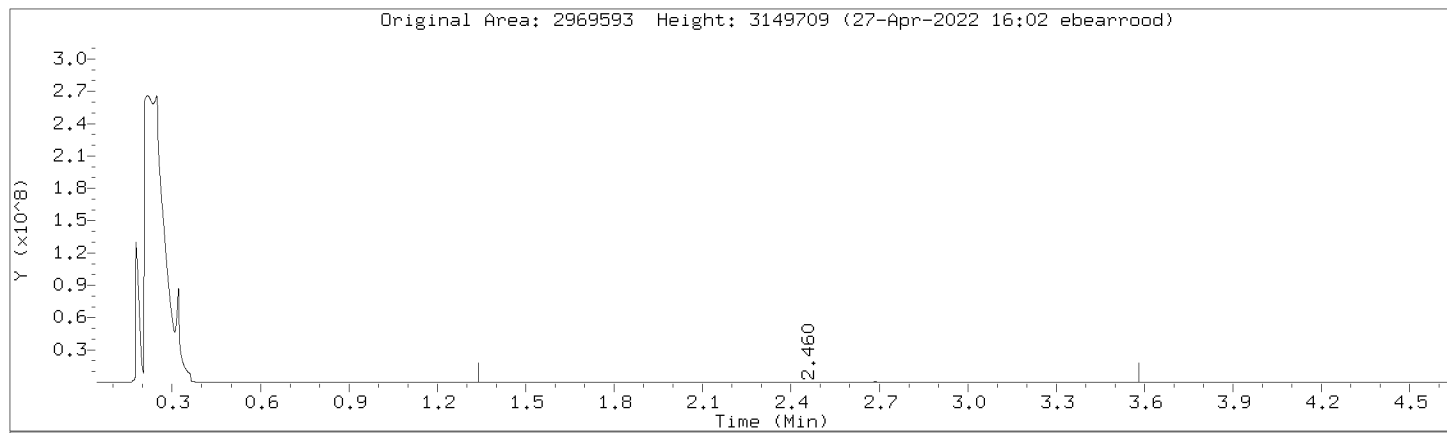
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



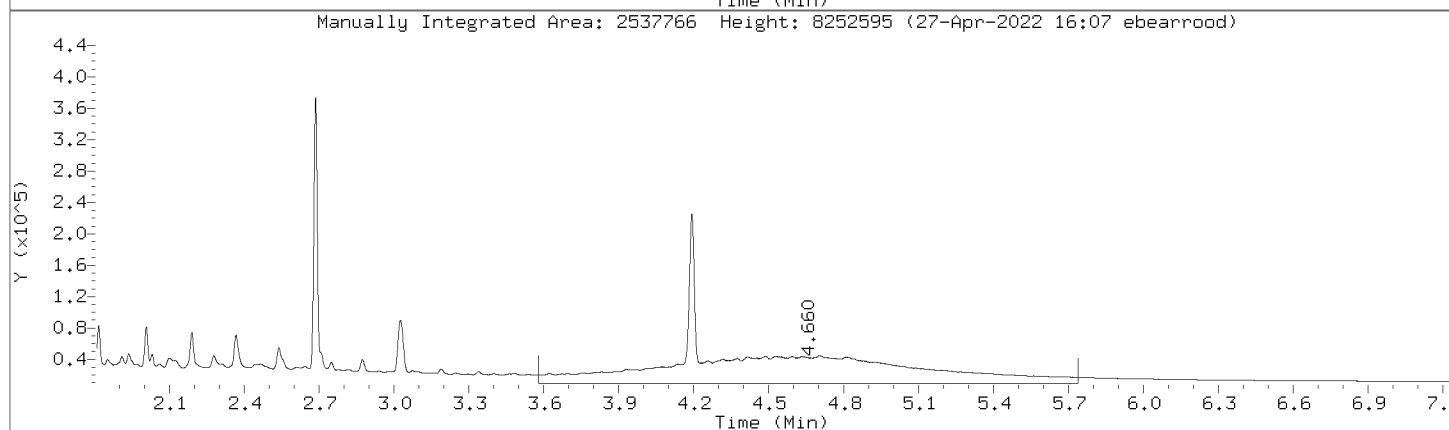
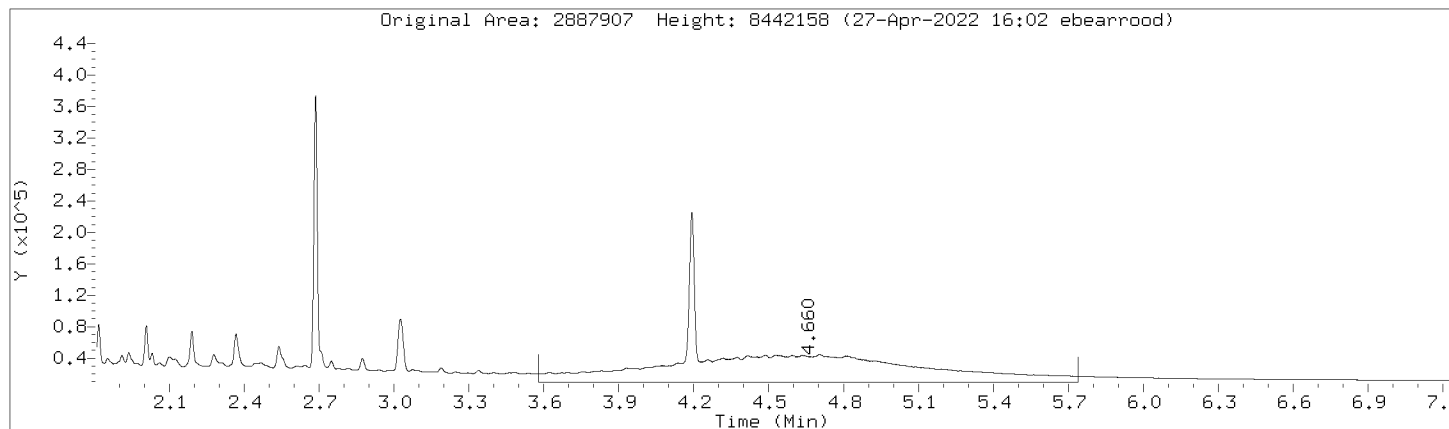
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Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



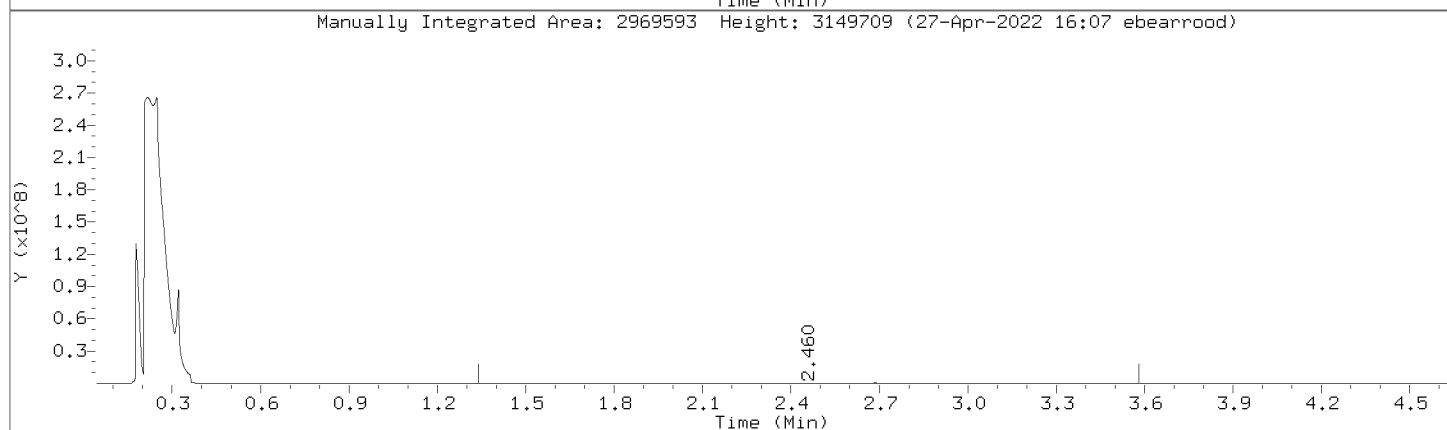
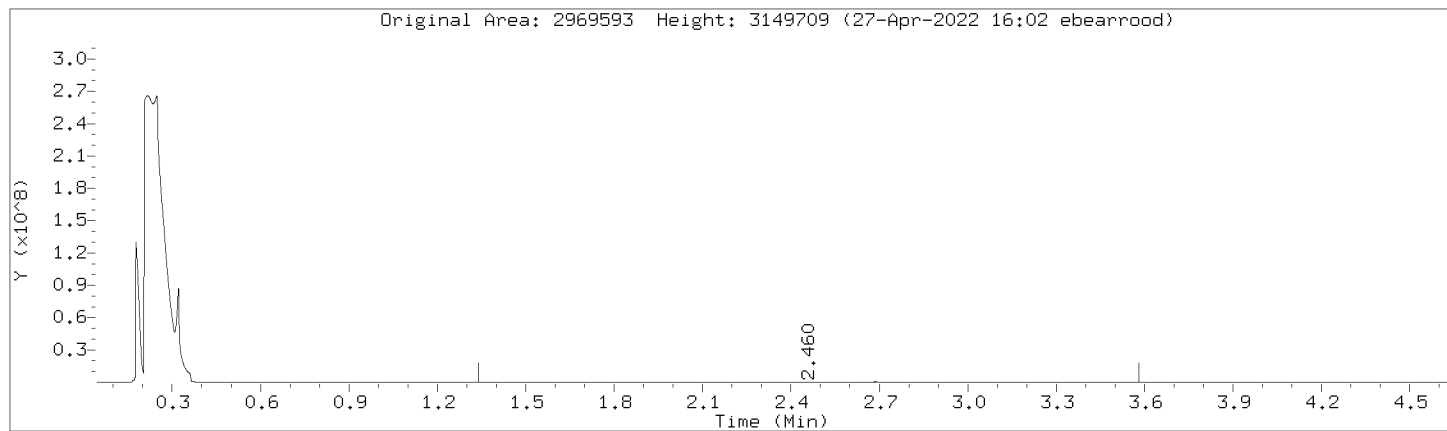
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000019.D  
Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

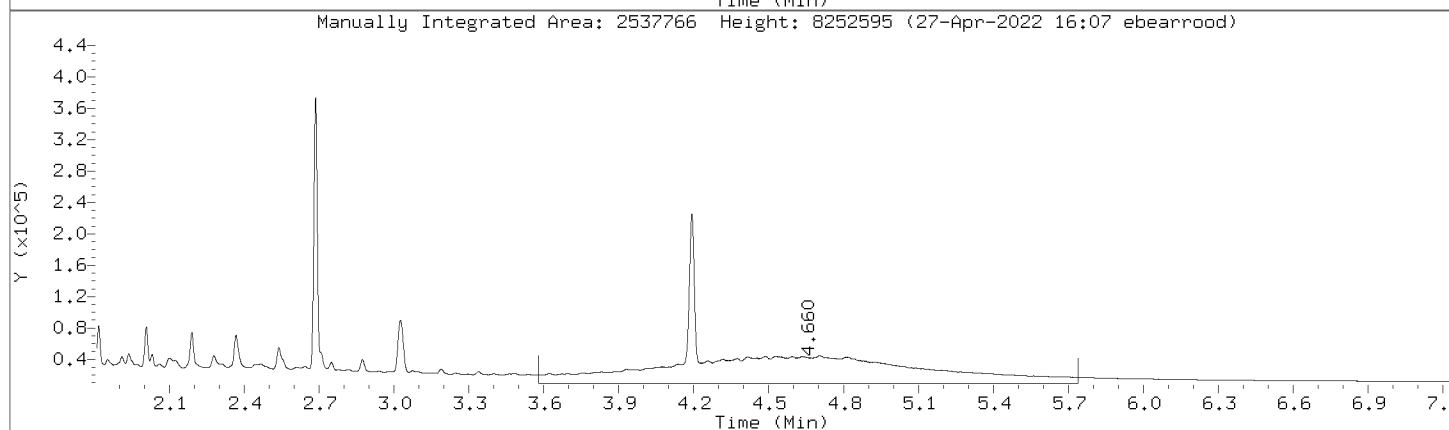
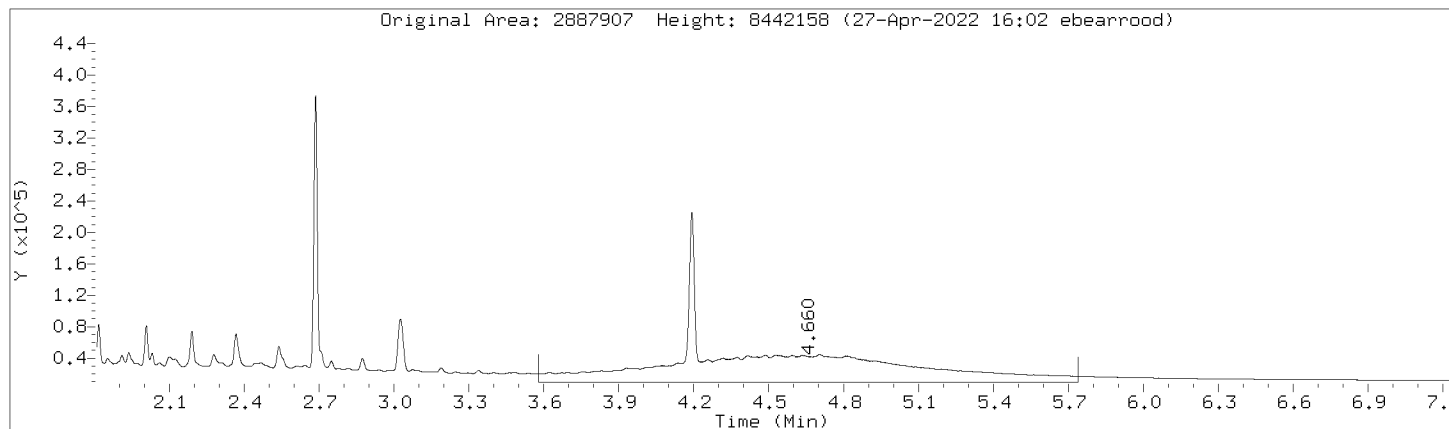
Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000019.D  
Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



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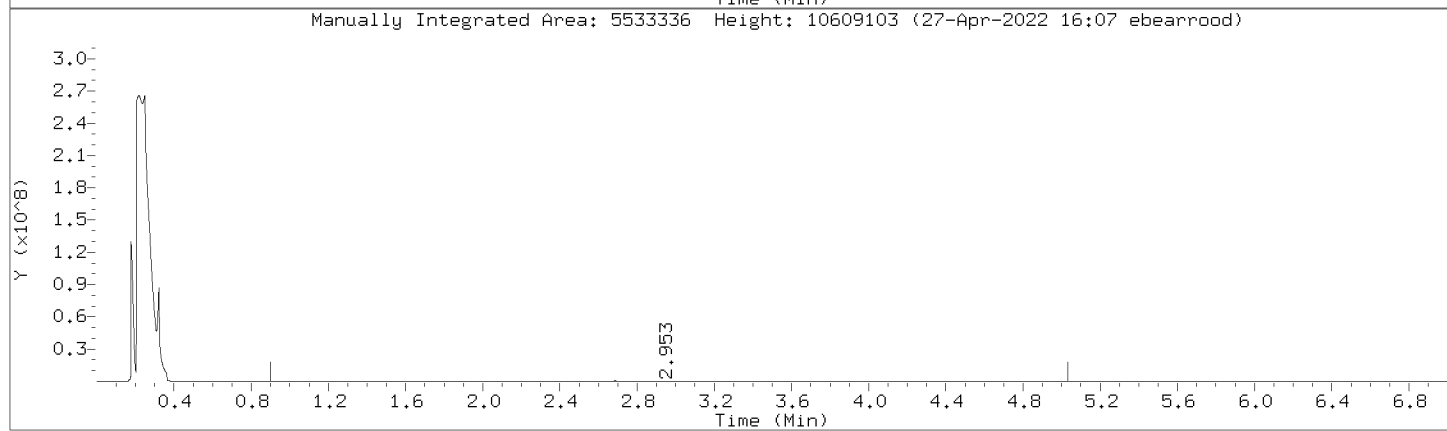
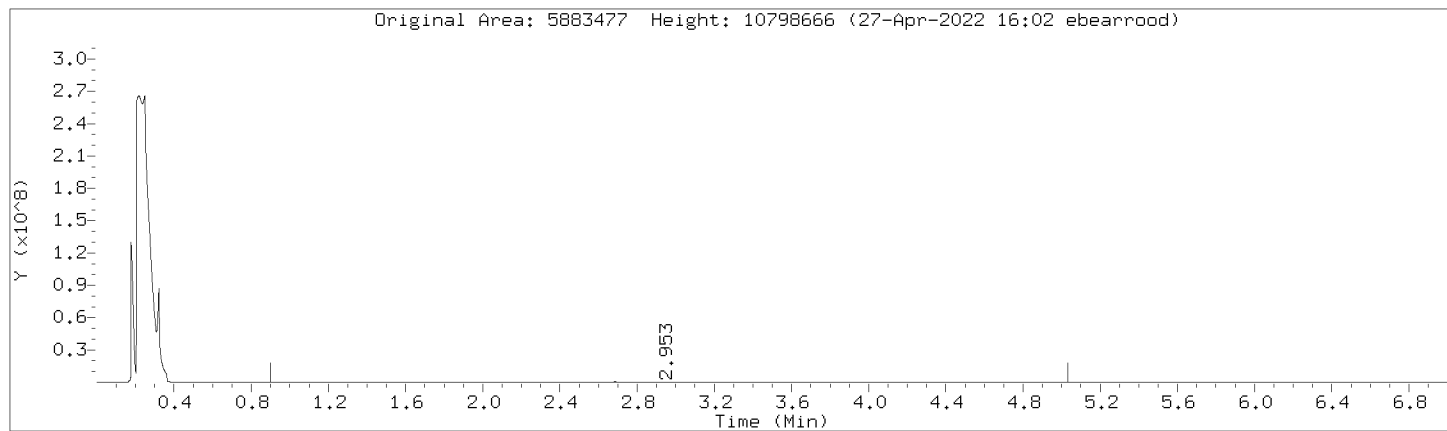
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Instrument: 10gcsF.i

Lab Sample ID: DMO-ICV,355155:2

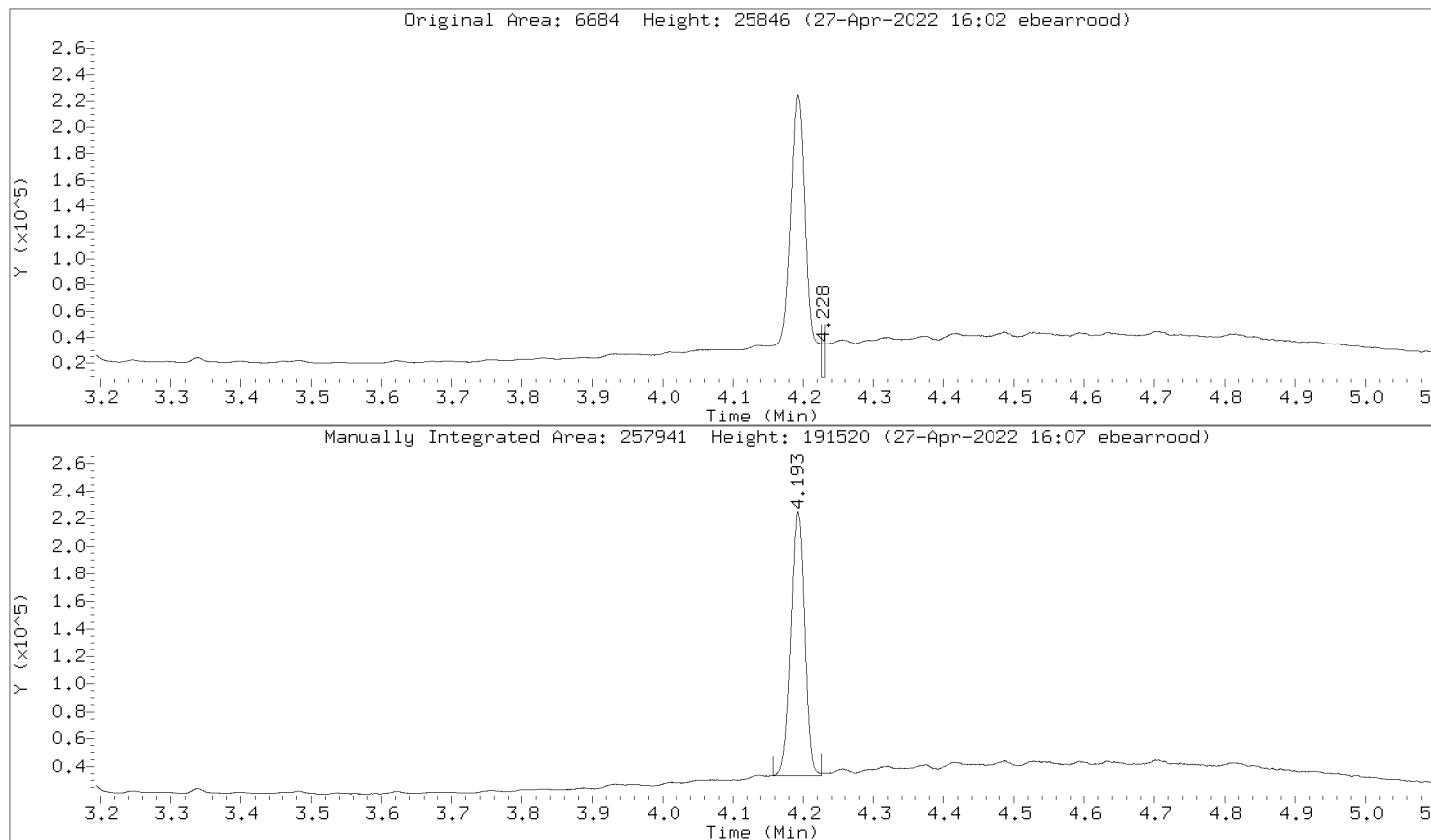
Compound: C10-C36      Review Code: RNG

CAS Number:



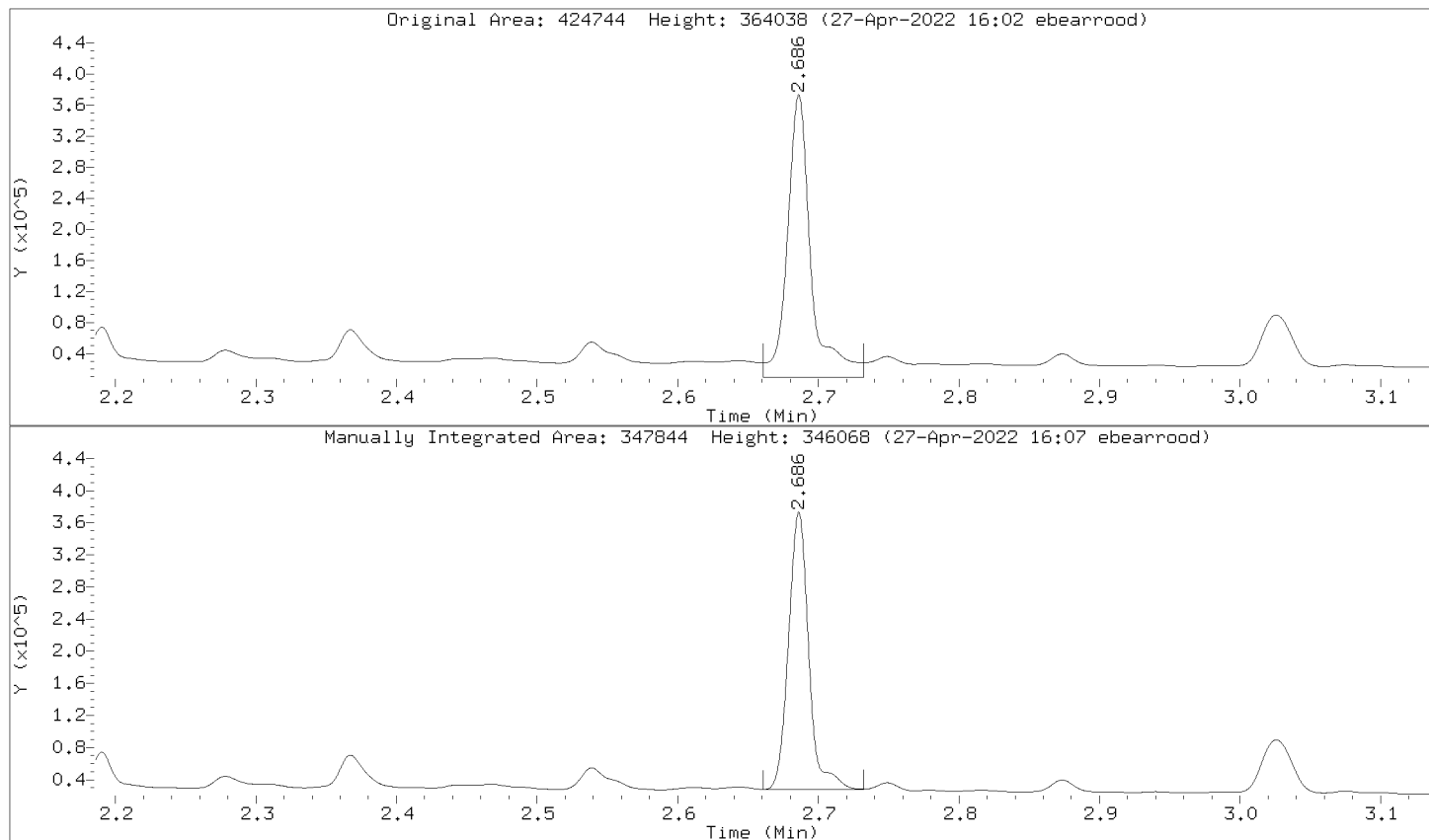
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000019.D  
Injection Date: 27-APR-2022 15:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,355155:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000030.D  
 Lab Smp Id: DMO-CCV,363721:2 Client Smp ID: DMO-CCV,363721:2  
 Inj Date : 02-MAY-2022 19:28  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,363721:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050222R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 06-May-2022 08:44 rgustafson Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 3 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	(ug/mL)	(ug/mL)	=====
S 1	DRO by AK 102			CAS #:	
0.880	- 3.600		3287397 500.000	510	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.711	2.713 -0.002		327071 50.0000	48.9	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.260	4.262 -0.002		259047 50.0000	49.5	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.601	- 5.180		1897229 500.000	512	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.880	- 4.200		3781526 500.000	516	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.450	- 5.180		1991603 500.000	514	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.880	- 5.180		5184627 1000.00	1020	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.350	- 3.650		2778603 500.000	512	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.350	- 3.650		2778603 500.000	512	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.651	- 6.100		2407440 500.000	520	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.651	- 6.100		2407440 500.000	520	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 02-MAY-2022 19:28

Client ID: DMO-CCV,363721:2

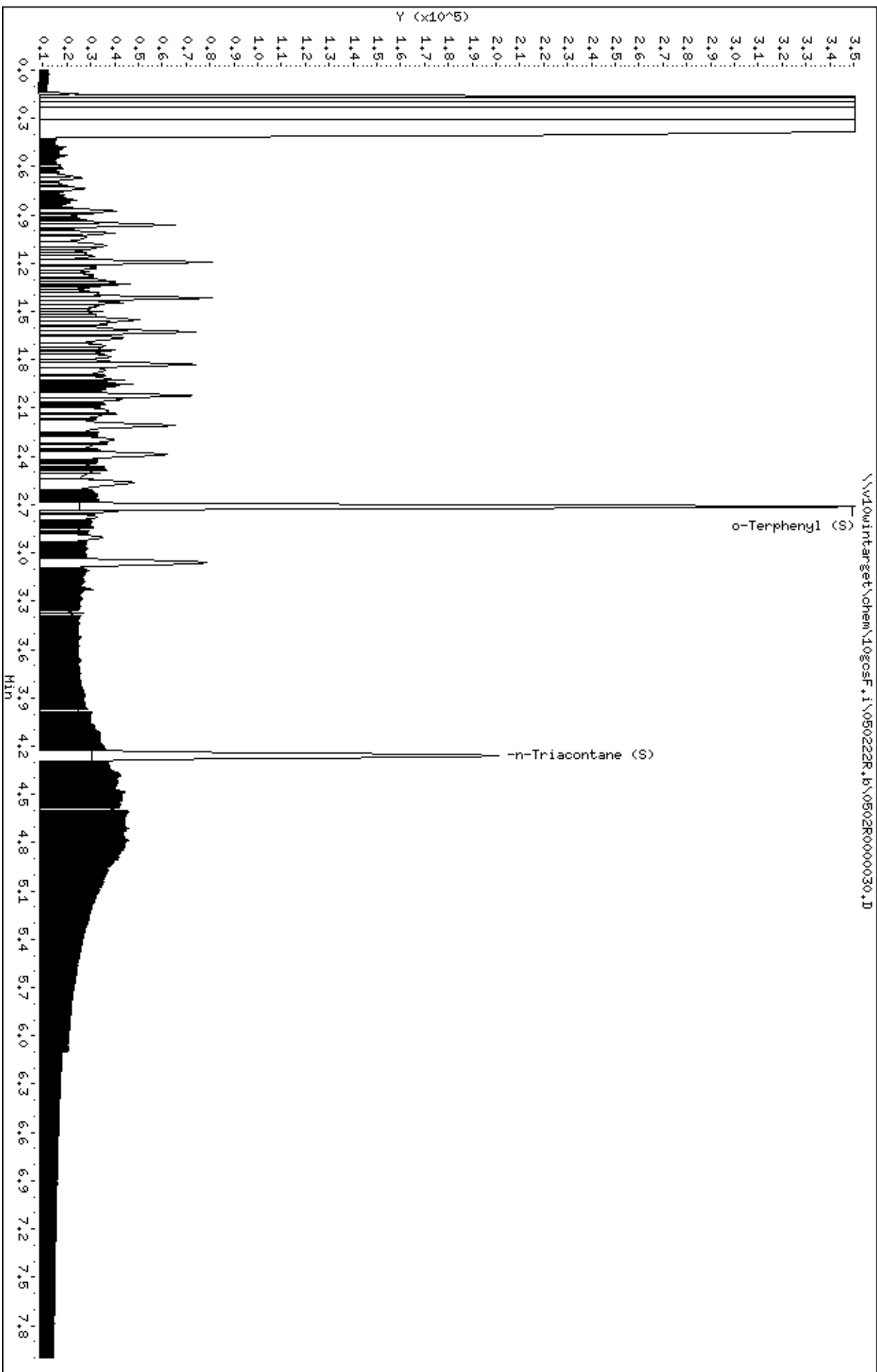
Sample Info: DMO-CCV,363721:2

Instrument: 10gocsf.1

Operator: TT2

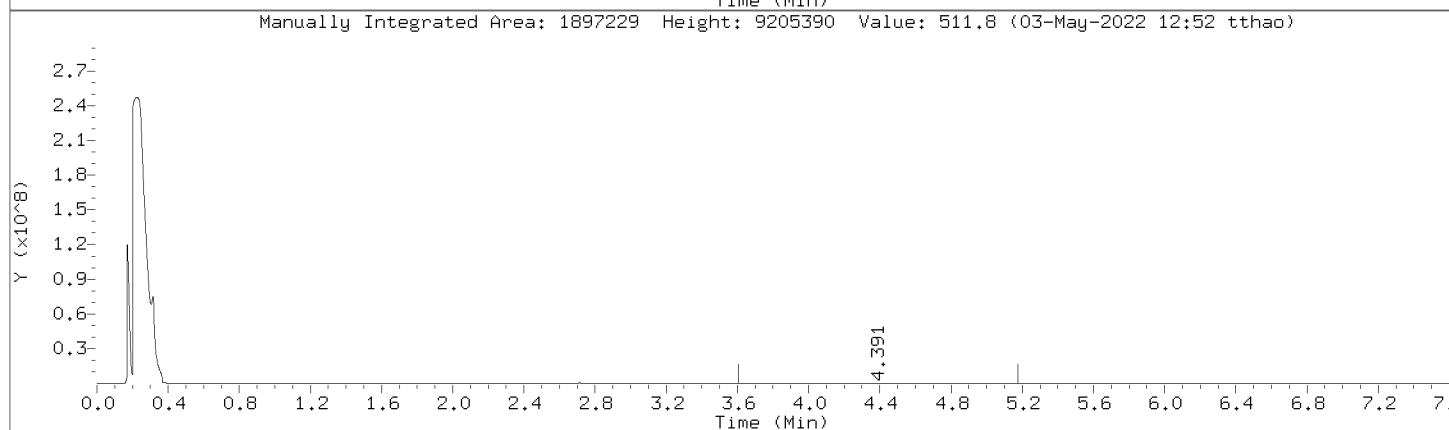
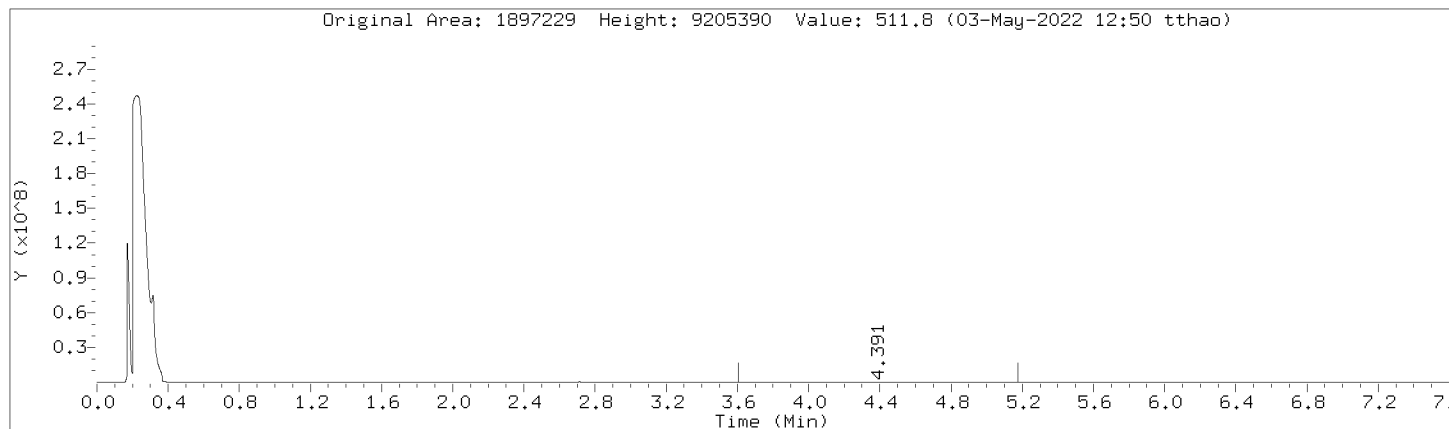
Column diameter: 0.32

Column phase: DB-5-MS21430033



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000030.D  
Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

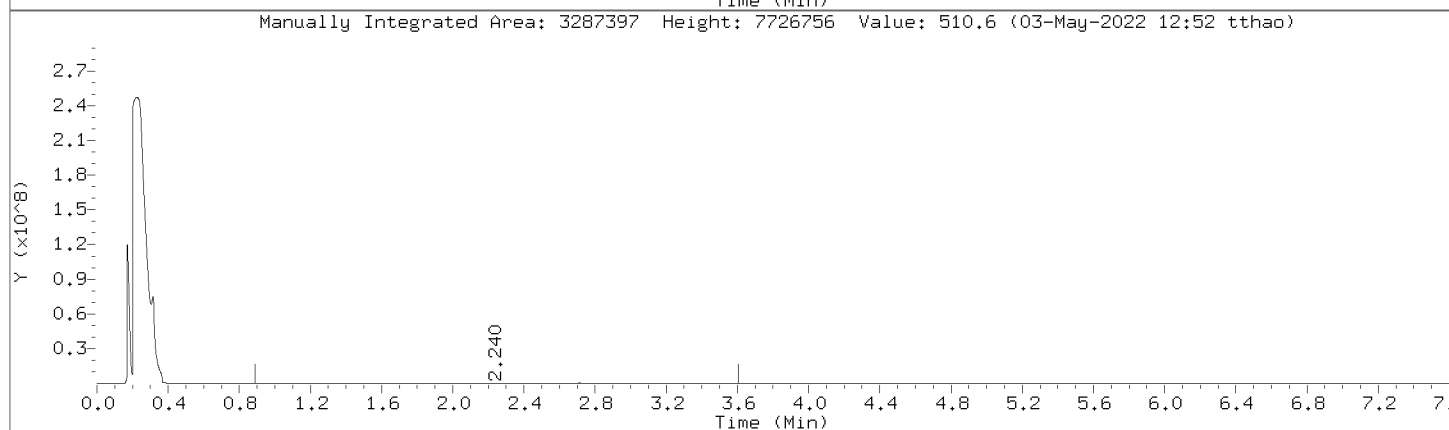
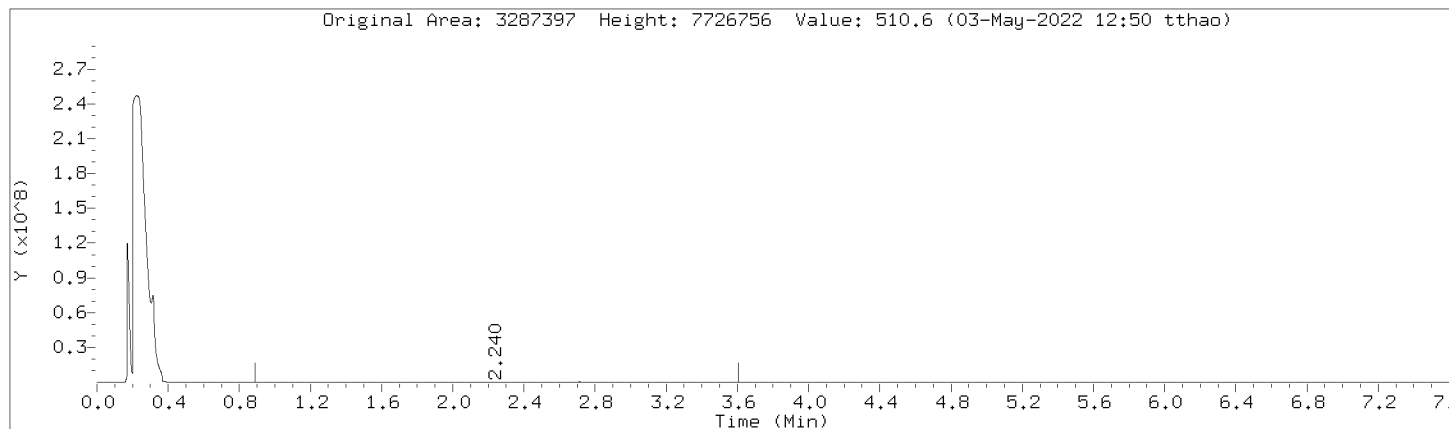
Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:





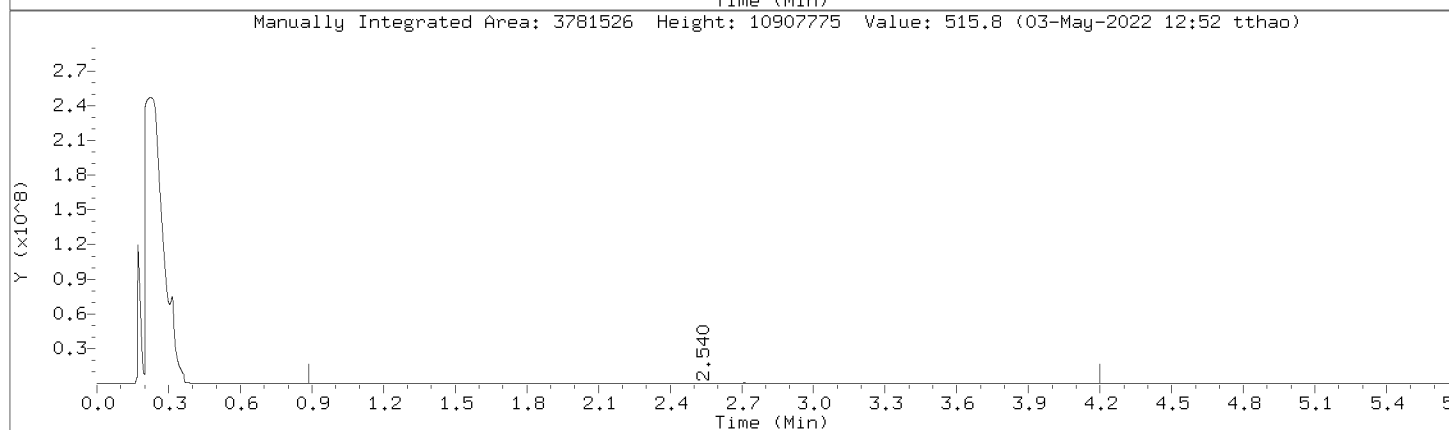
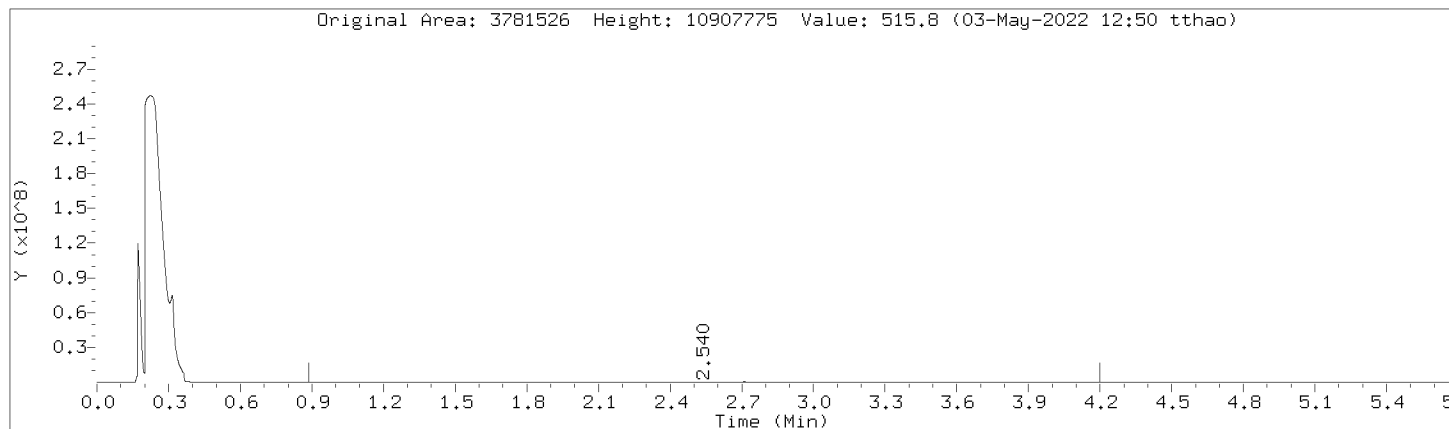
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Lab Sample ID: DMO-CCV,363721:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



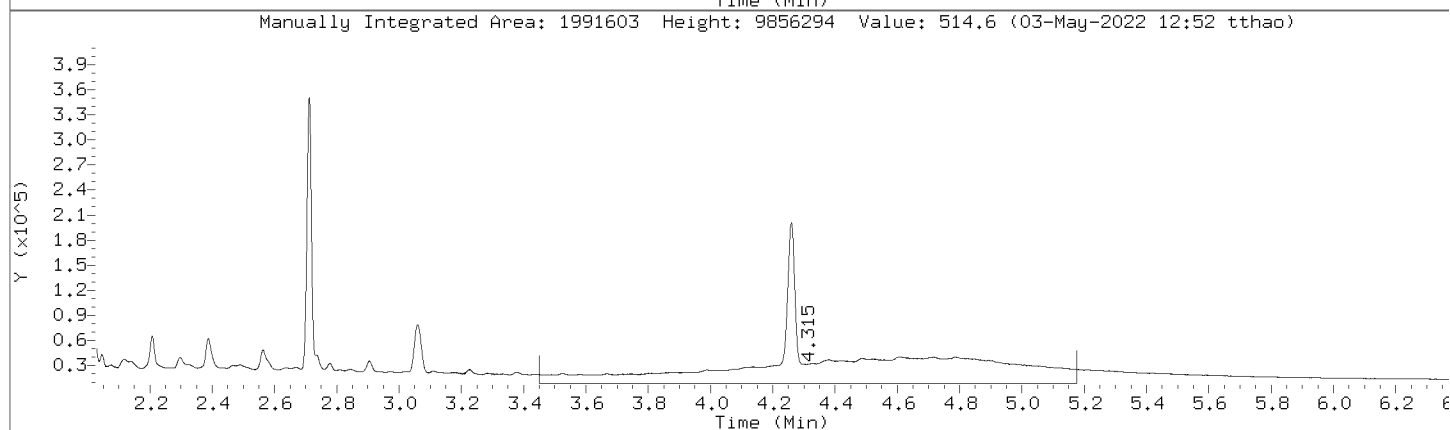
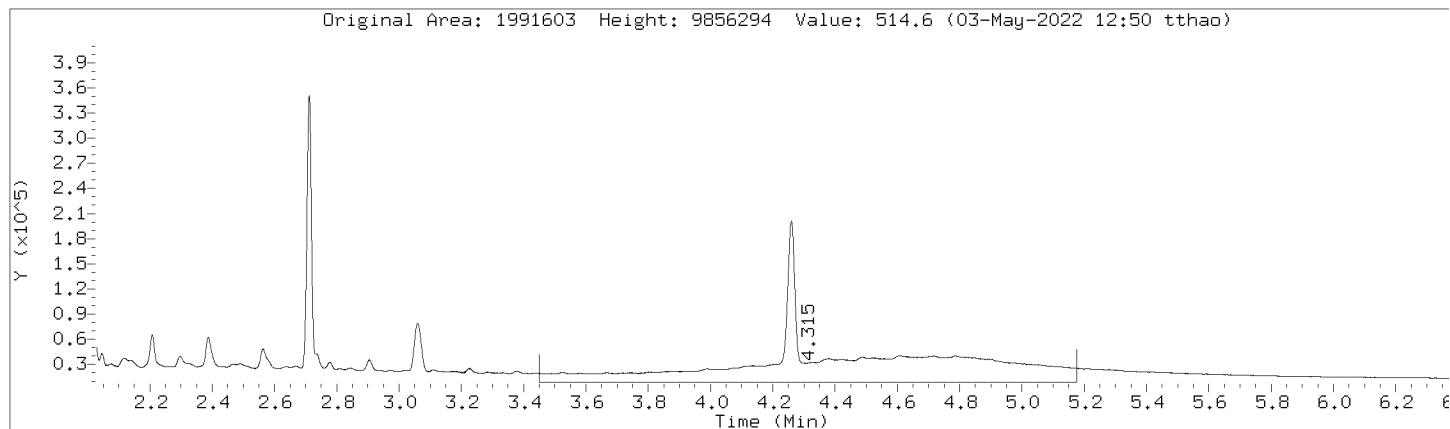
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Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



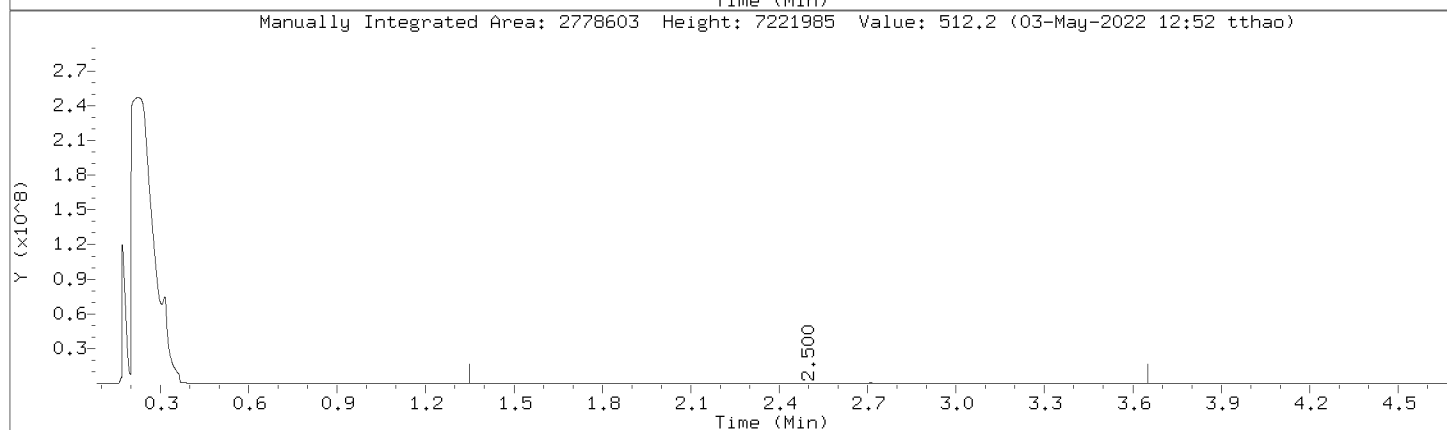
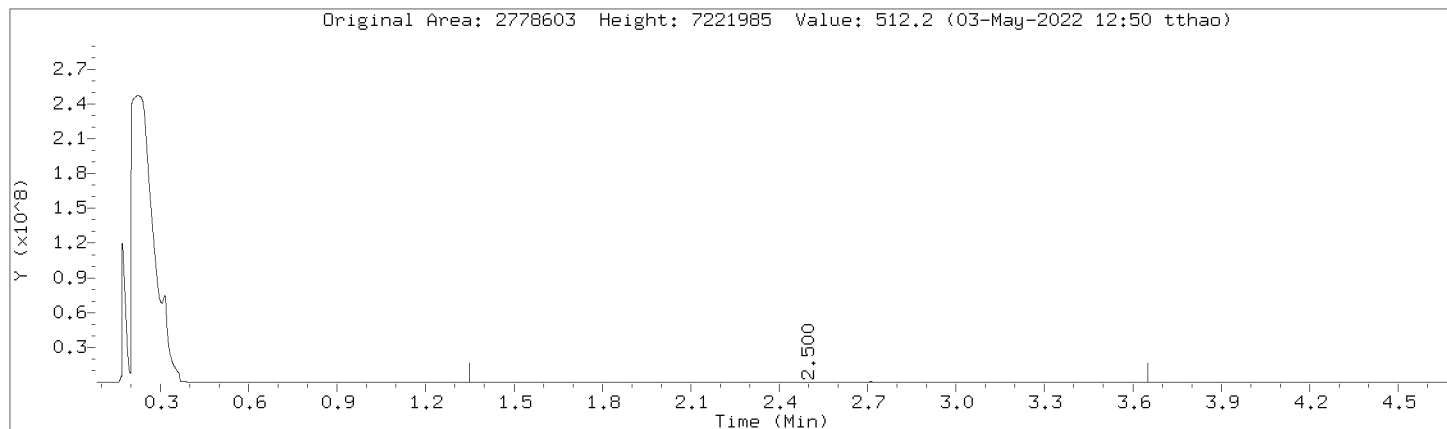
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Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



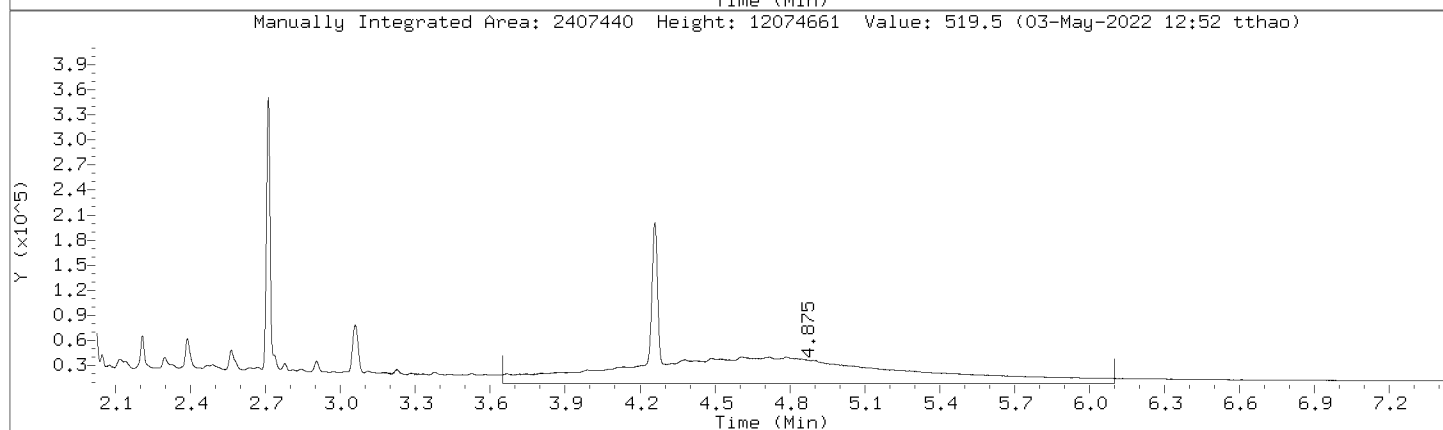
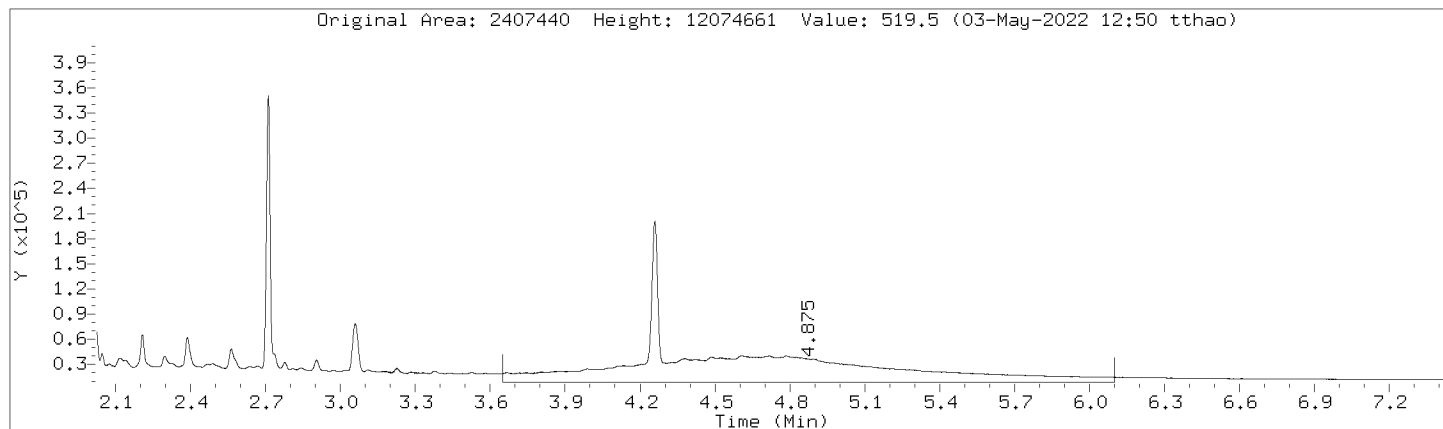
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000030.D  
Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



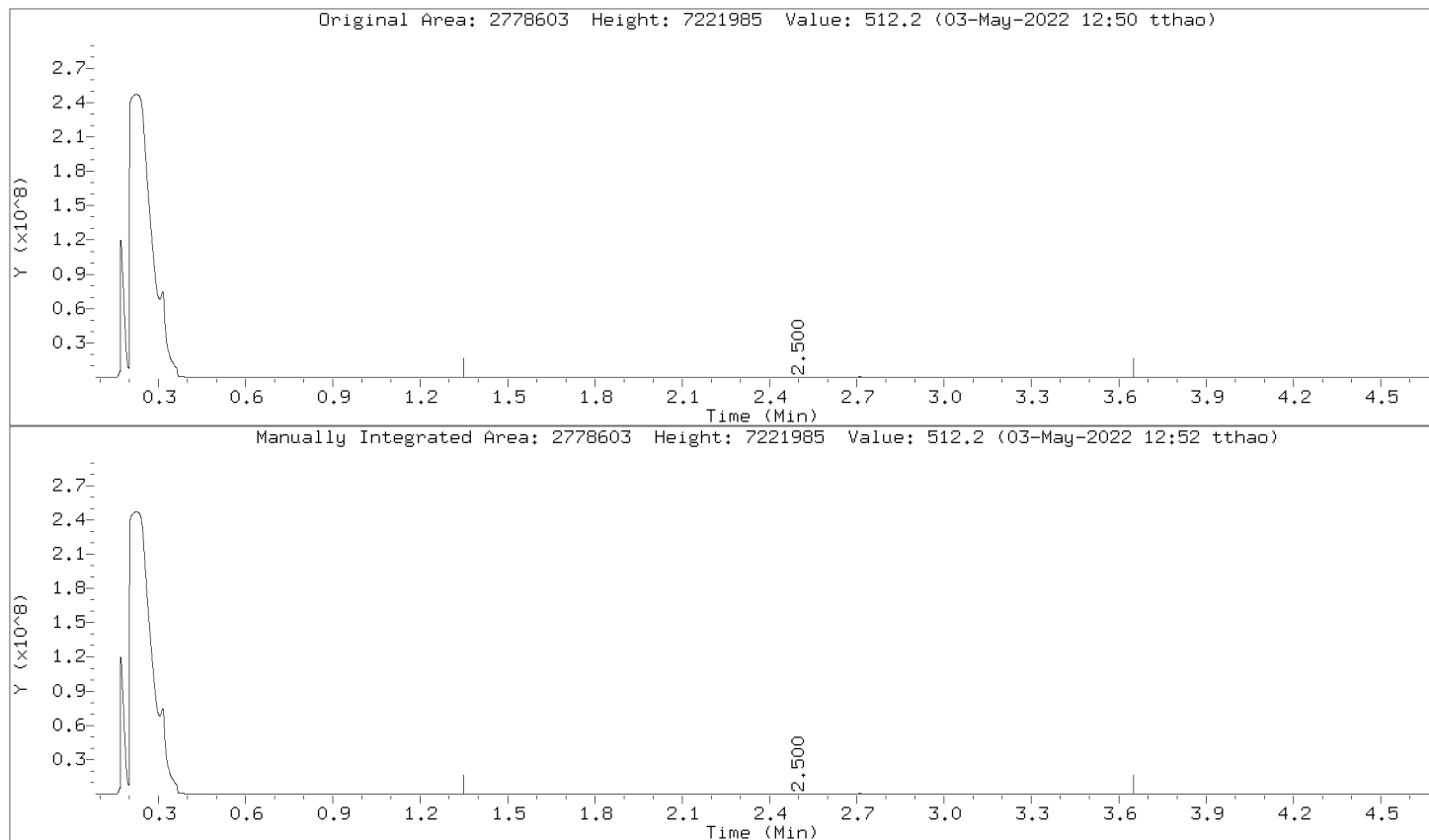
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Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



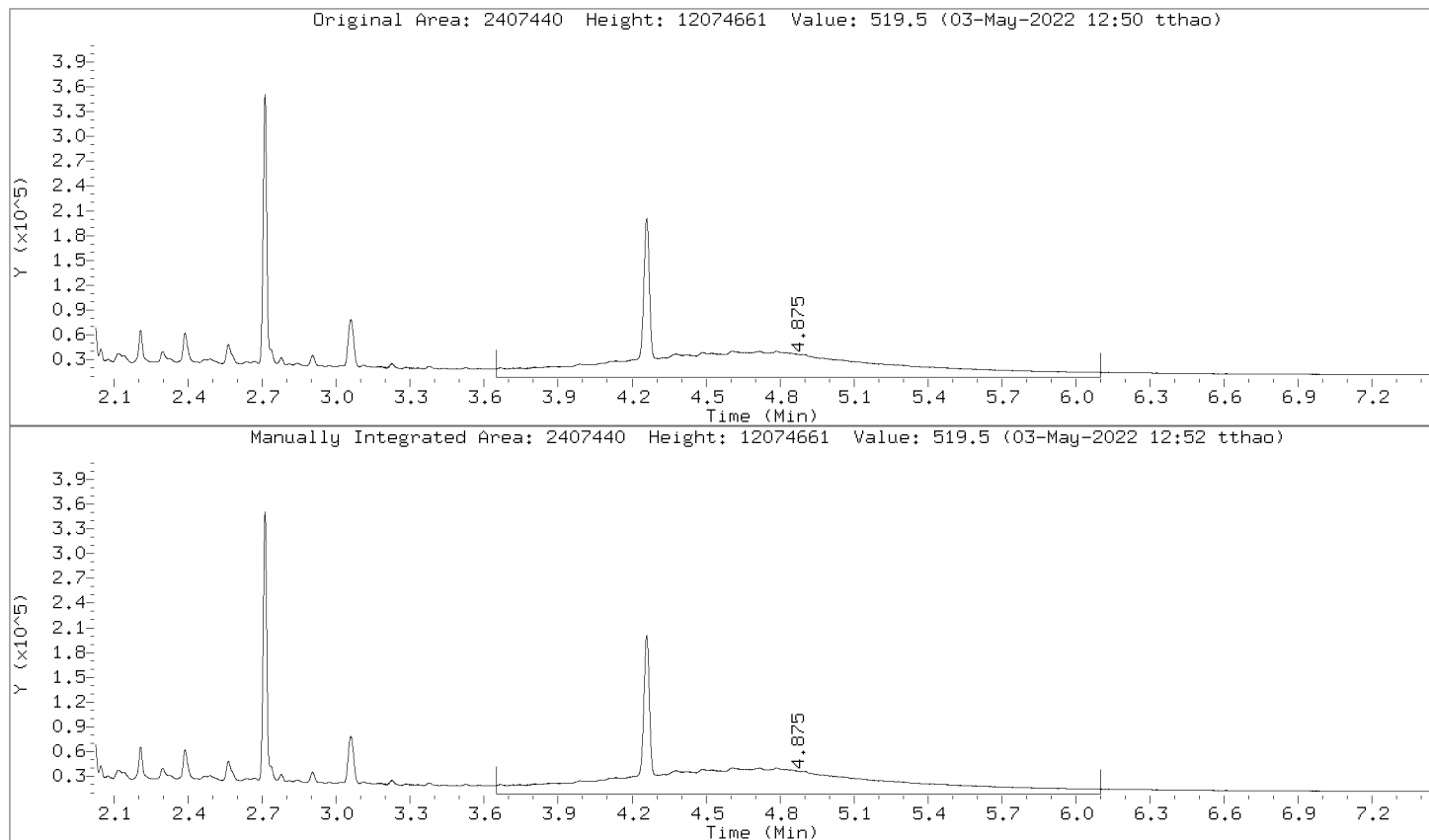
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000030.D  
Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



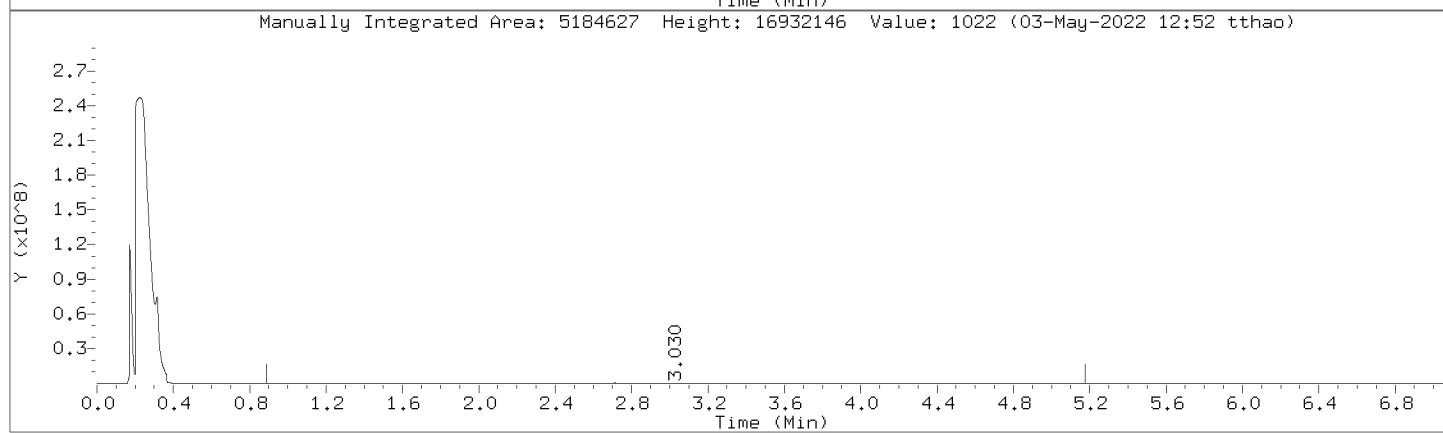
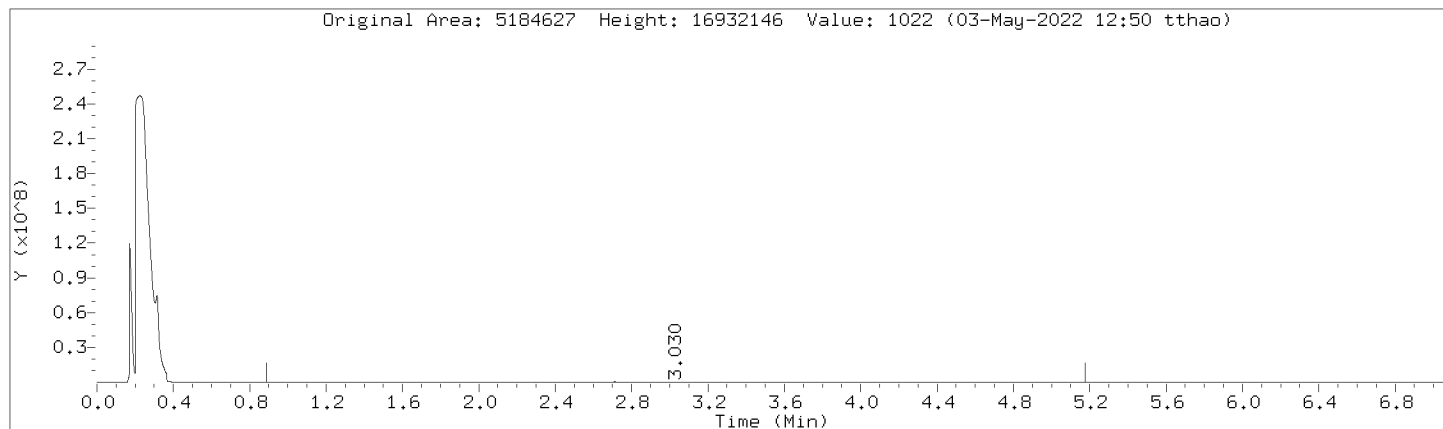
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Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000030.D  
Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

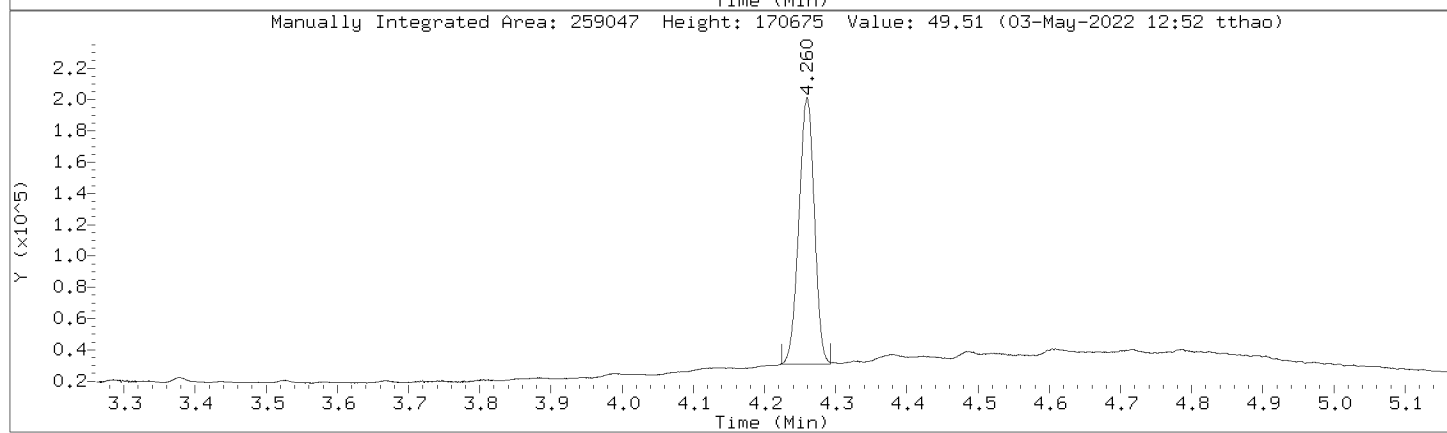
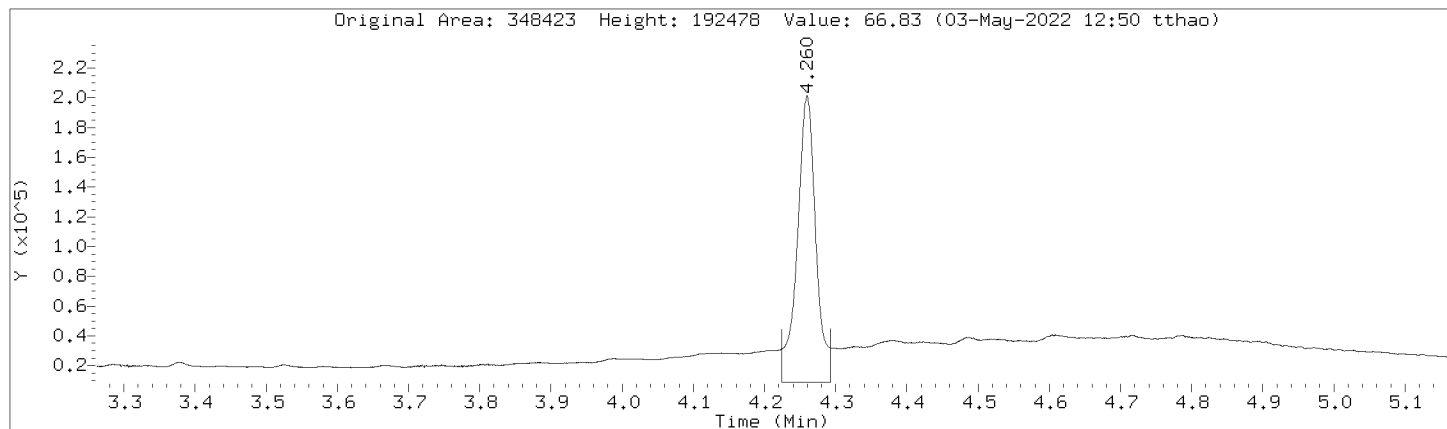
Compound: C10-C36      Review Code: RNG  
CAS Number:





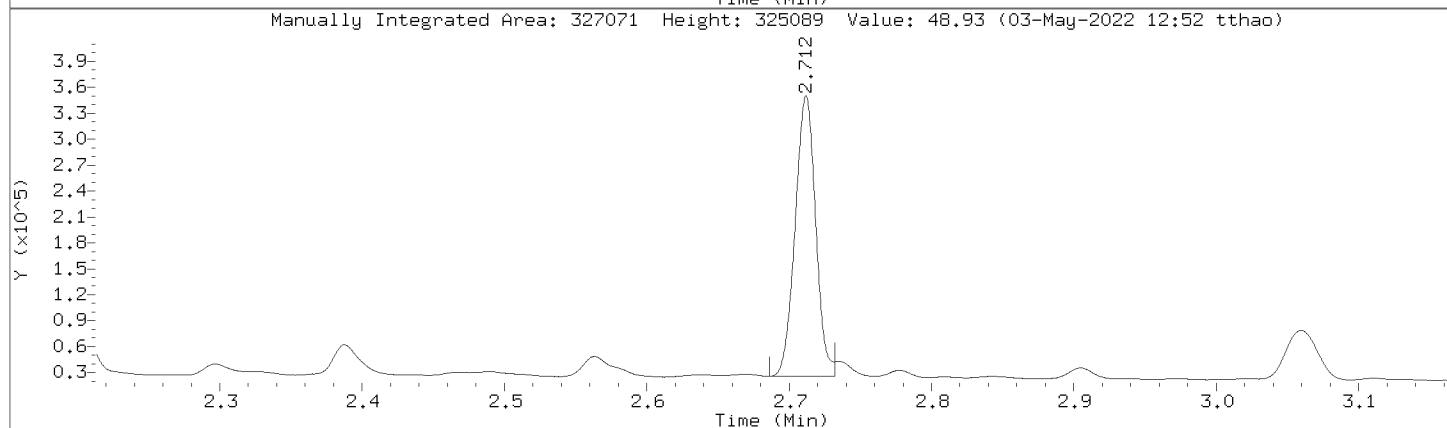
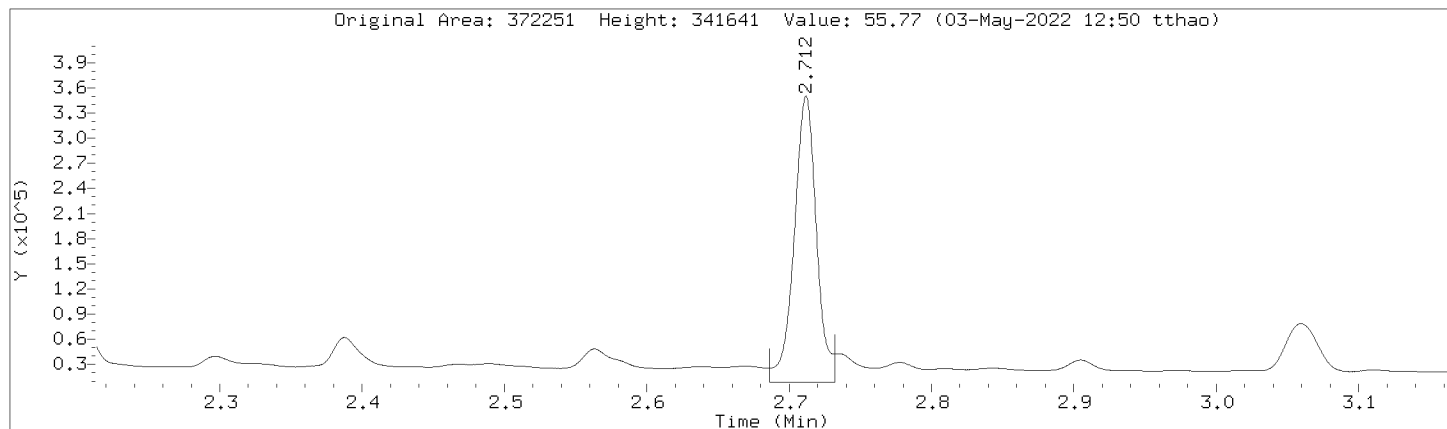
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Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000030.D  
 Injection Date: 02-MAY-2022 19:28  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,363721:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1897229	1897229
DRO by AK 102	3287397	3287397
TPH-DRO (C10-C28)	3781526	3781526
Motor Oil Range (C24-C36)	1991603	1991603
Diesel Fuel Range	2778603	2778603
Motor Oil Range	2407440	2407440
Diesel Fuel Range SG	2778603	2778603
Motor Oil Range SG	2407440	2407440
C10-C36	5184627	5184627
n-Triacontane (S)	348423	259047
o-Terphenyl (S)	372251	327071

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000041.D  
 Lab Smp Id: DMO-CCV,363721:2 Client Smp ID: DMO-CCV,363721:2  
 Inj Date : 02-MAY-2022 21:10  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,363721:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050222R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 06-May-2022 08:44 rgustafson Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 3 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.880	- 3.600		3261382 500.000	506	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.711	2.713 -0.002		324428 50.0000	48.5	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.259	4.262 -0.003		262091 50.0000	50.1	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.601	- 5.180		1877802 500.000	506	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.880	- 4.200		3752324 500.000	511	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.450	- 5.180		1969662 500.000	508	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.880	- 5.180		5139184 1000.00	1010	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.350	- 3.650		2749868 500.000	506	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.350	- 3.650		2749868 500.000	506	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.651	- 6.100		2363786 500.000	510	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.651	- 6.100		2363786 500.000	510	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 02-MAY-2022 21:10

Client ID: DMO-CCV,363721:2

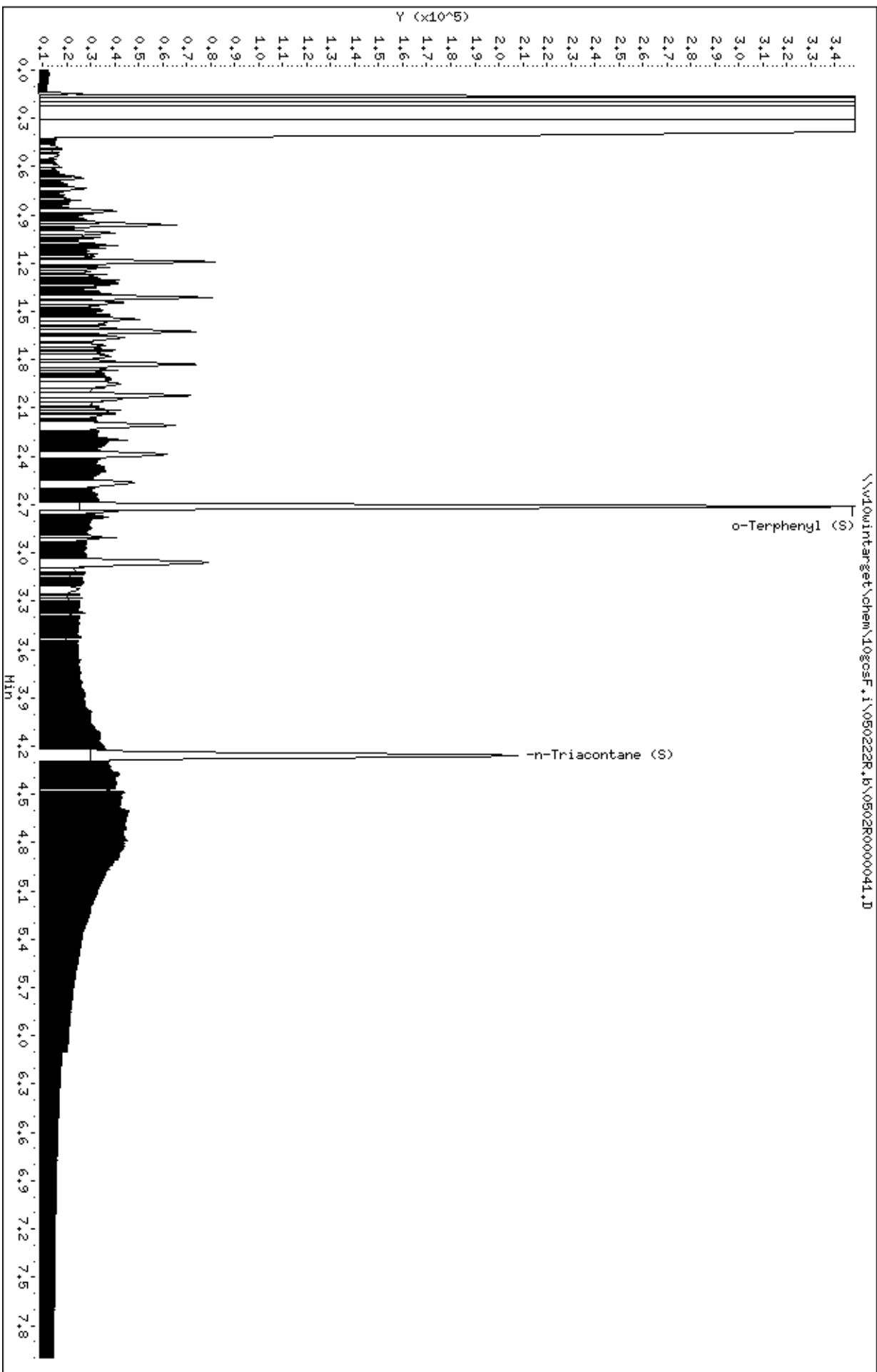
Sample Info: DMO-CCV,363721:2

Instrument: 10gocsf.1

Operator: TT2

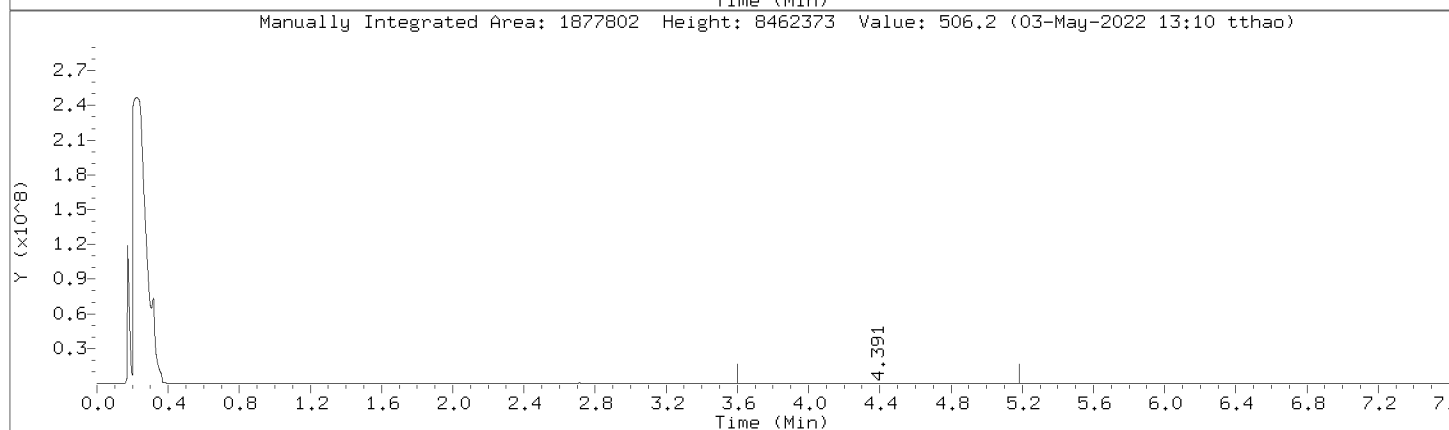
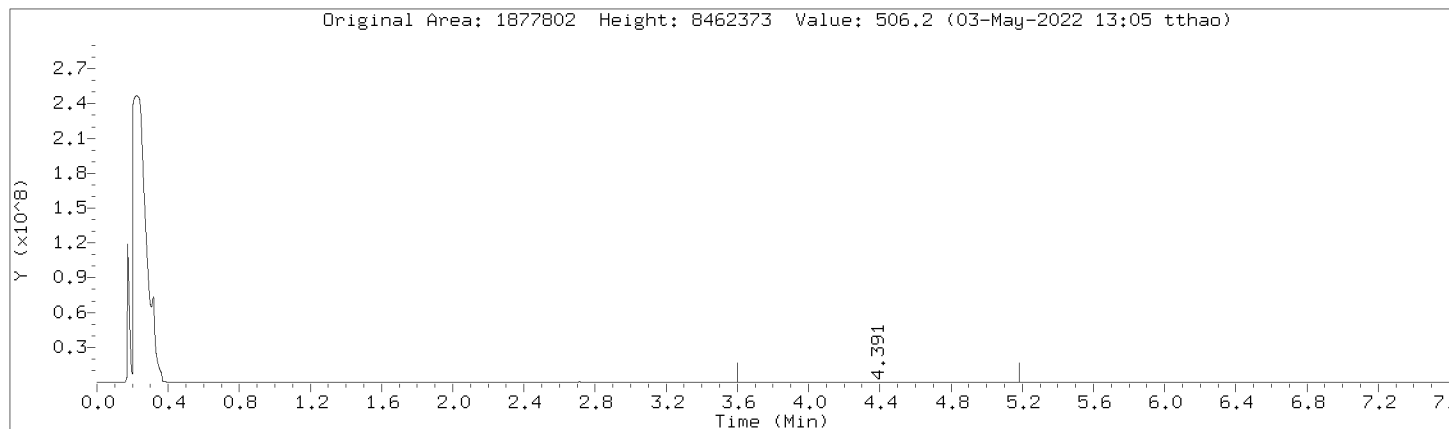
Column diameter: 0.32

Column phase: DB-5-MS21430033



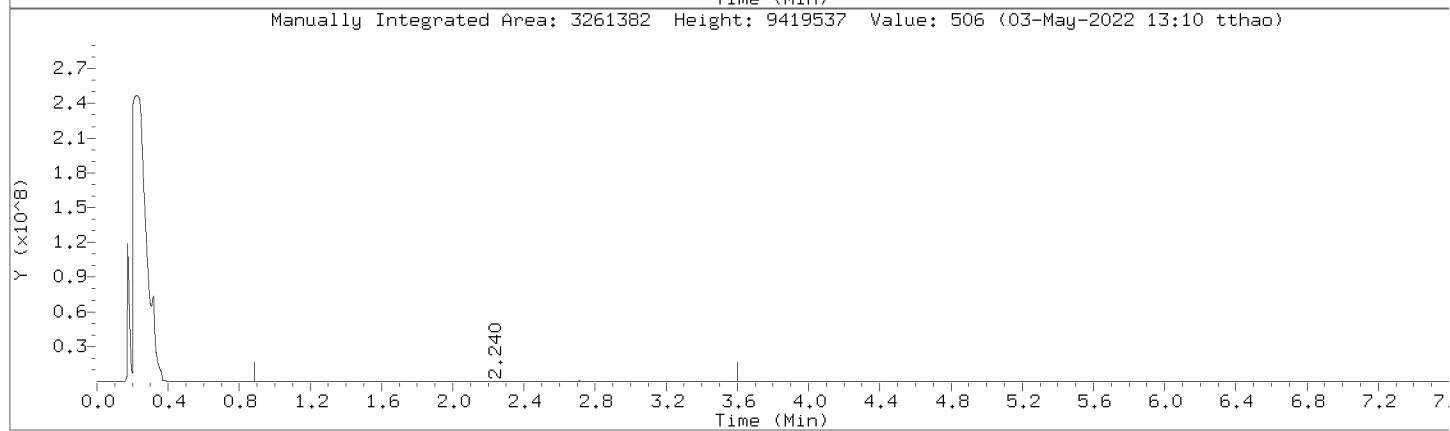
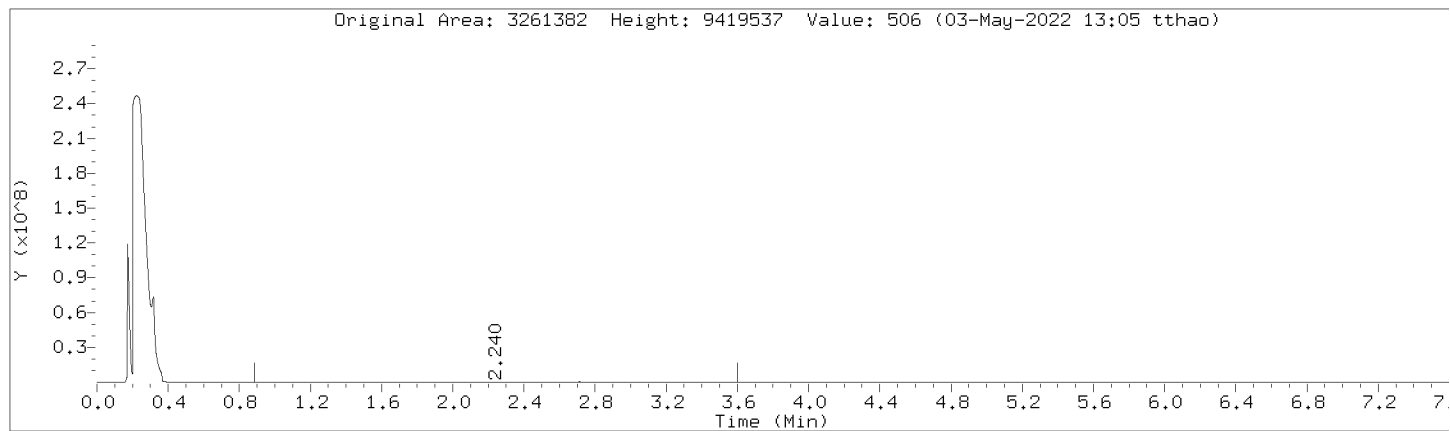
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000041.D  
Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



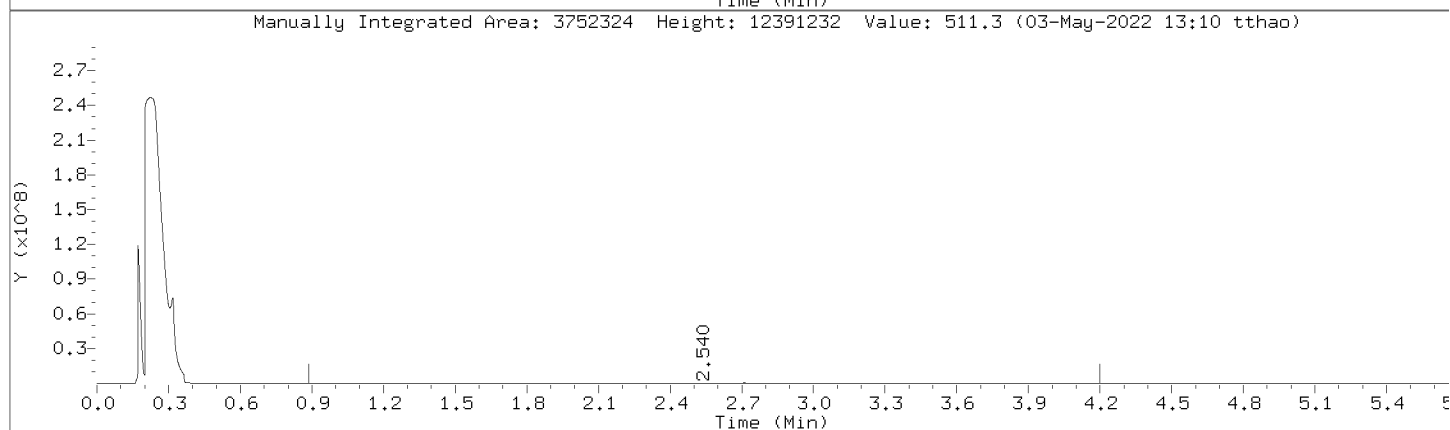
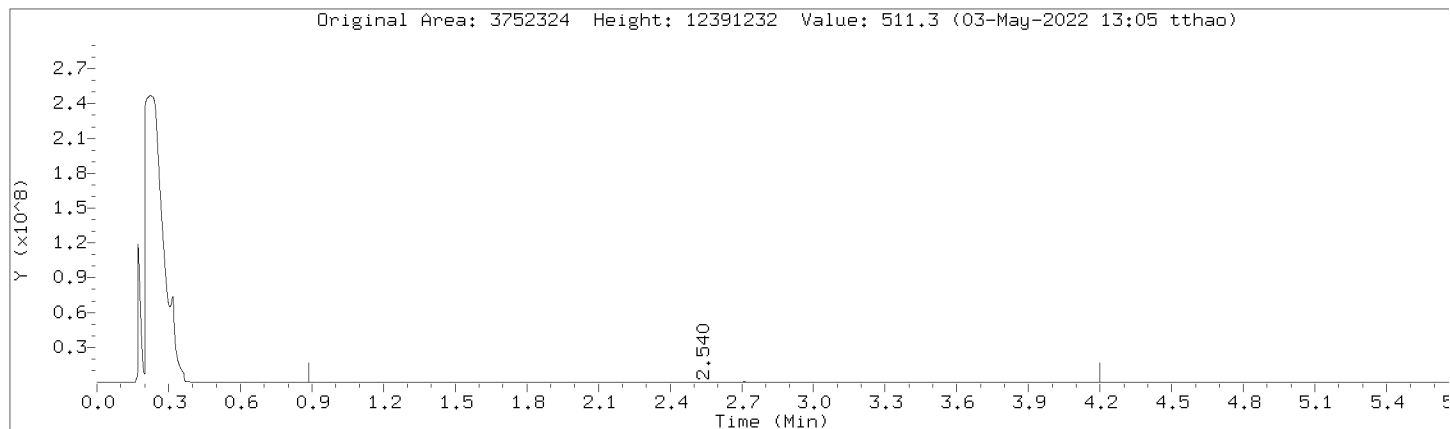
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Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000041.D  
Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

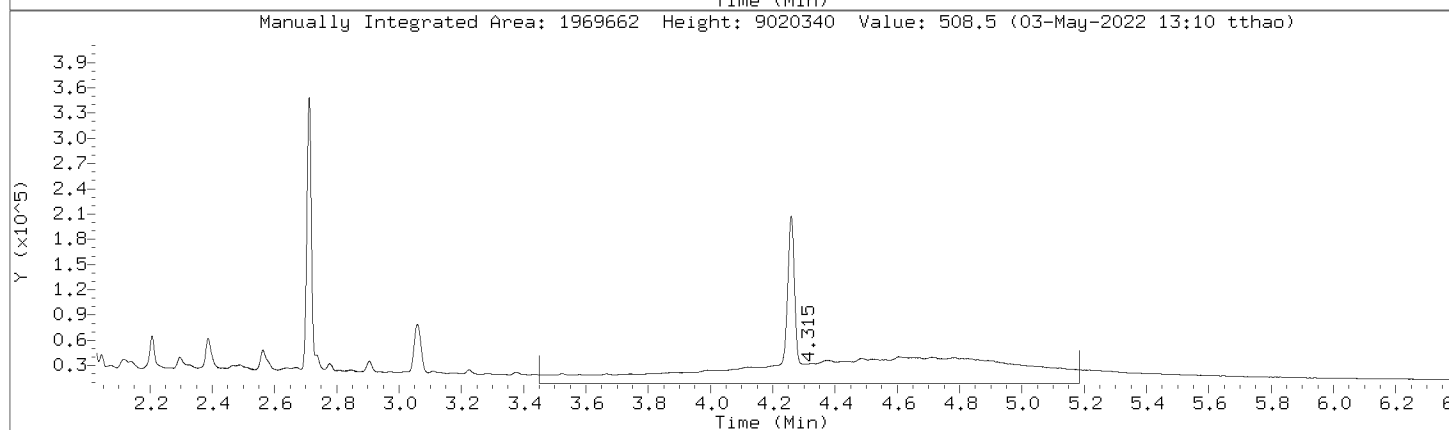
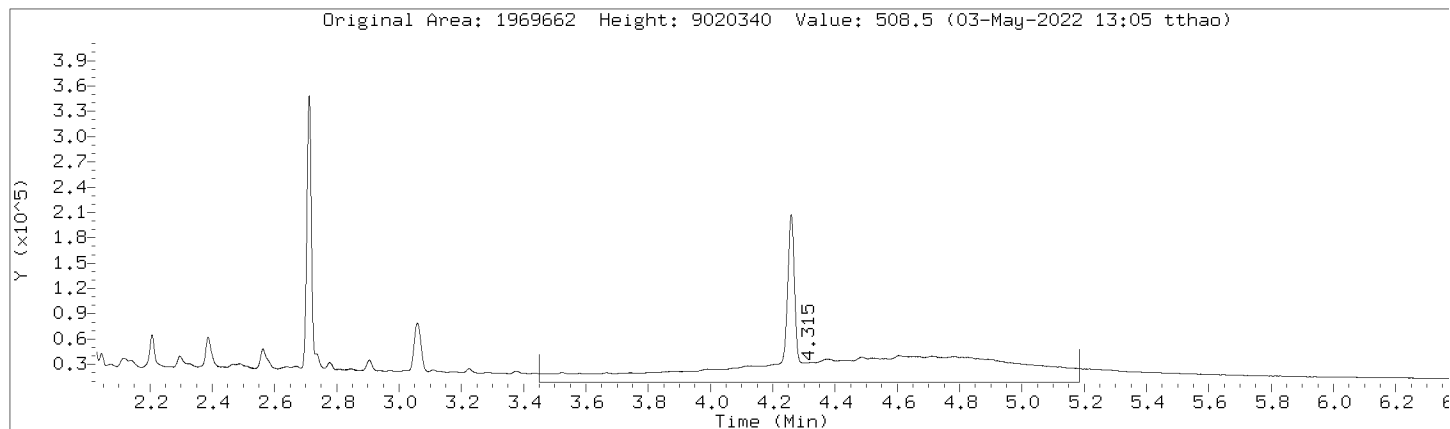
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:





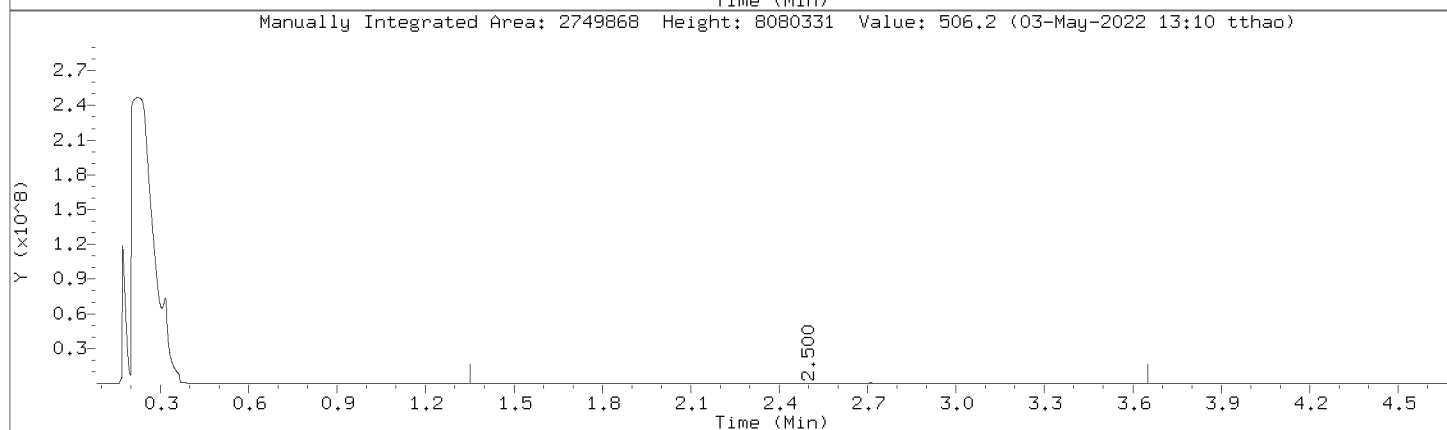
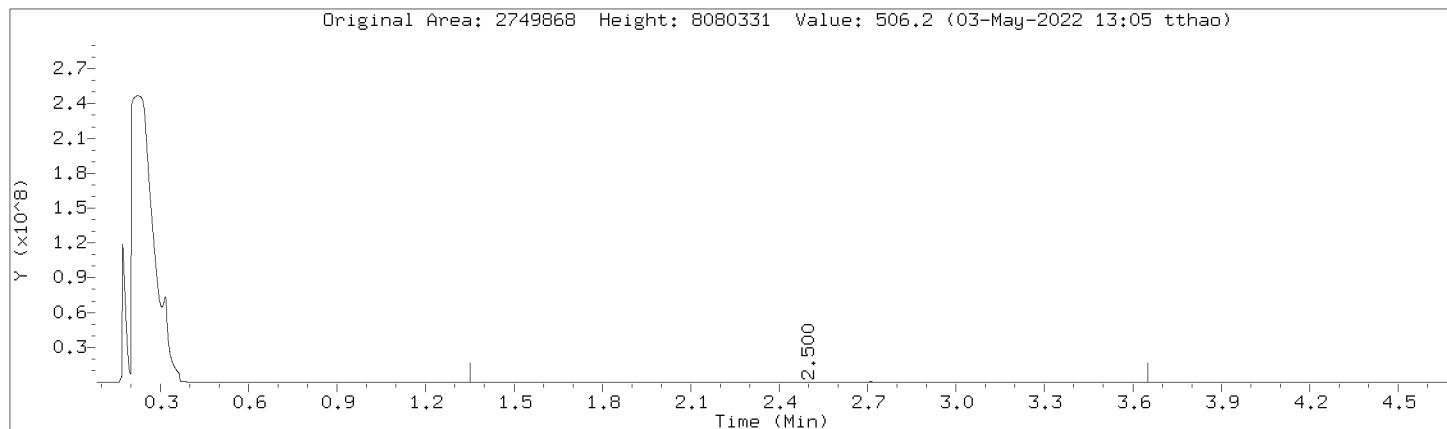
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Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



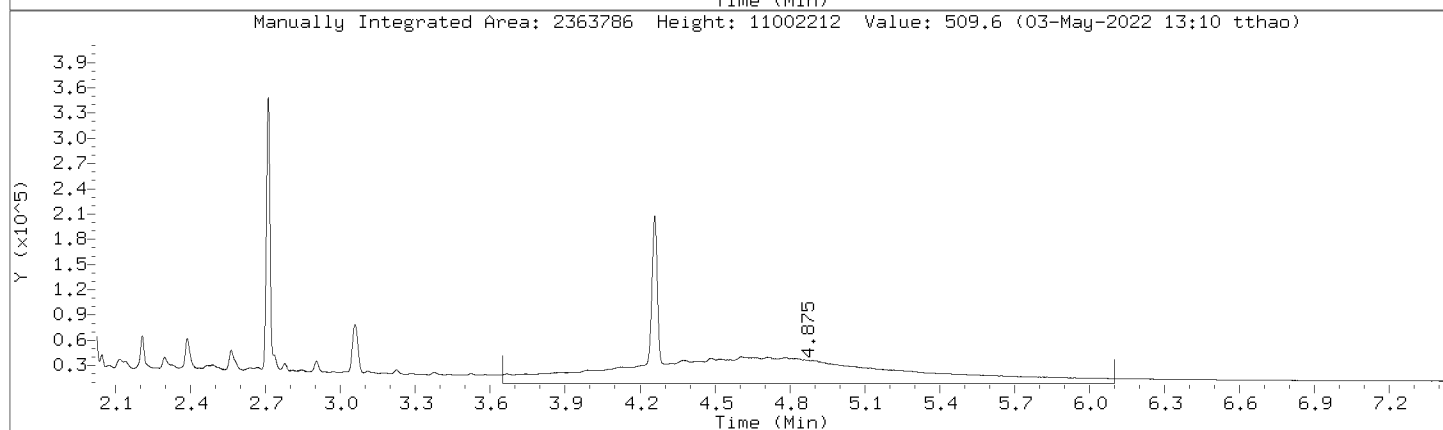
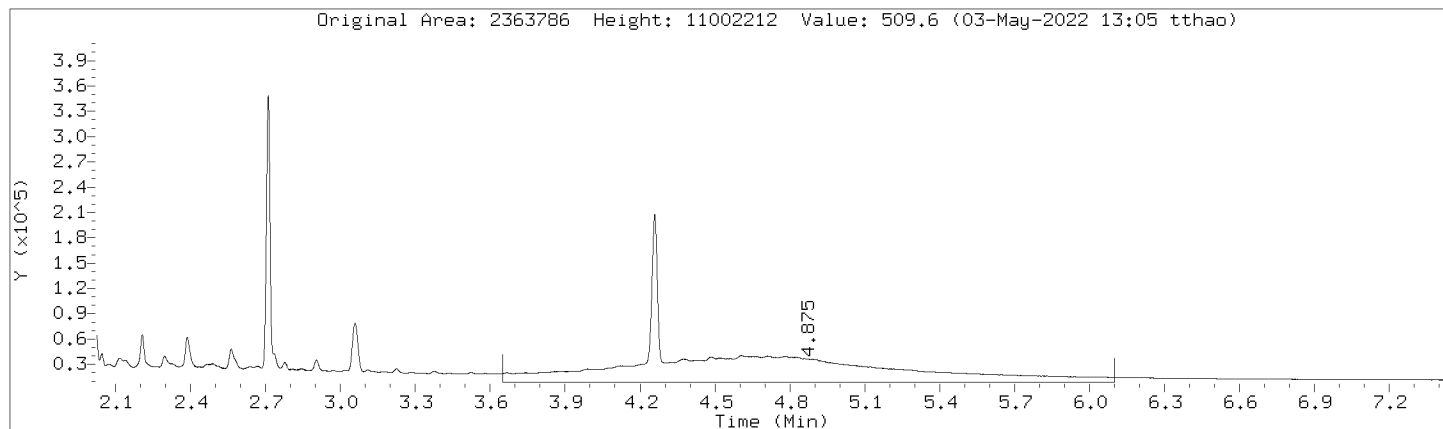
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000041.D  
Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



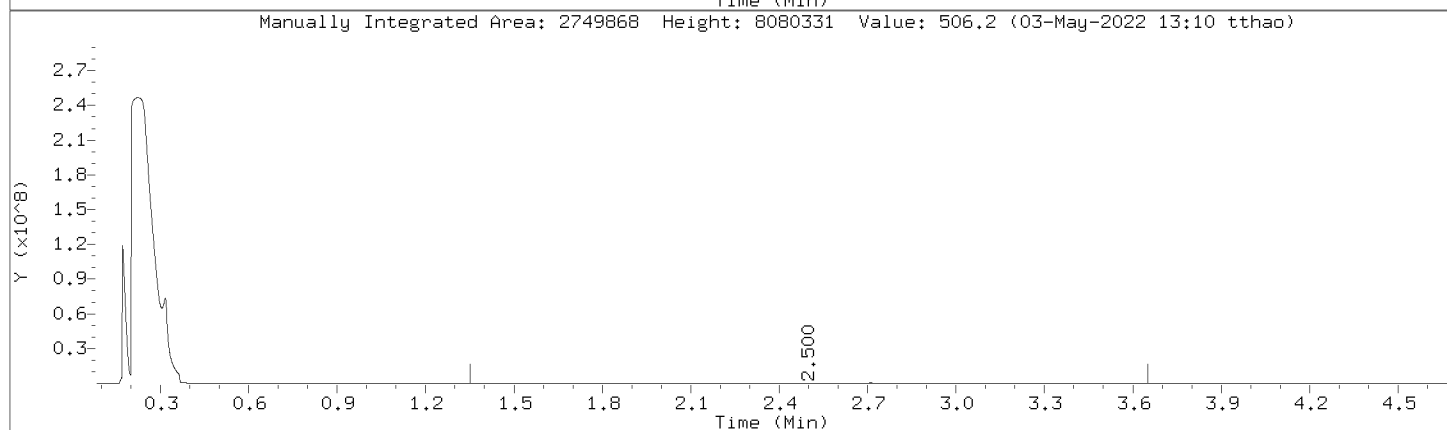
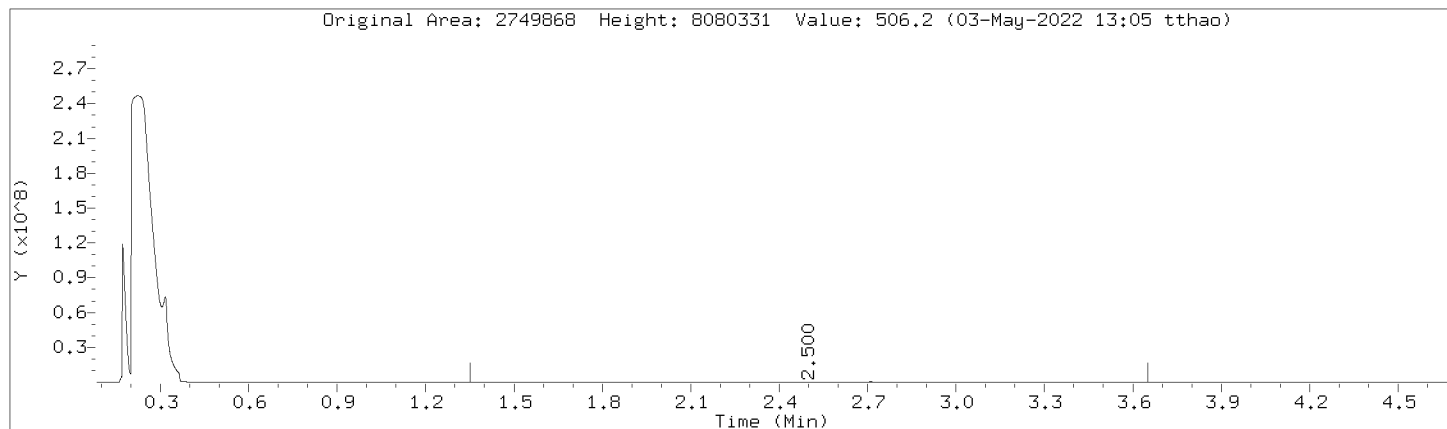
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Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



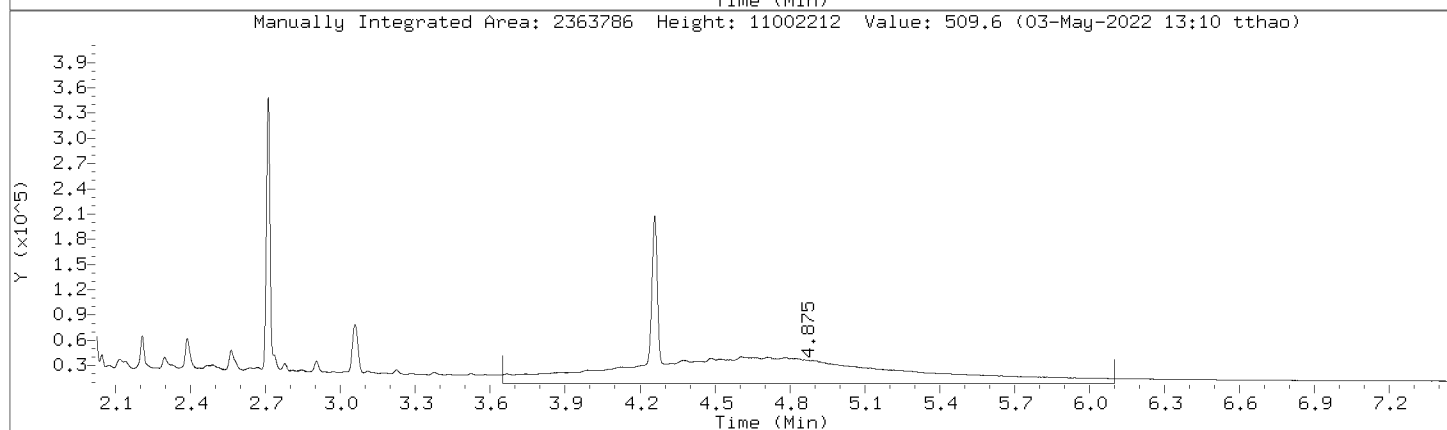
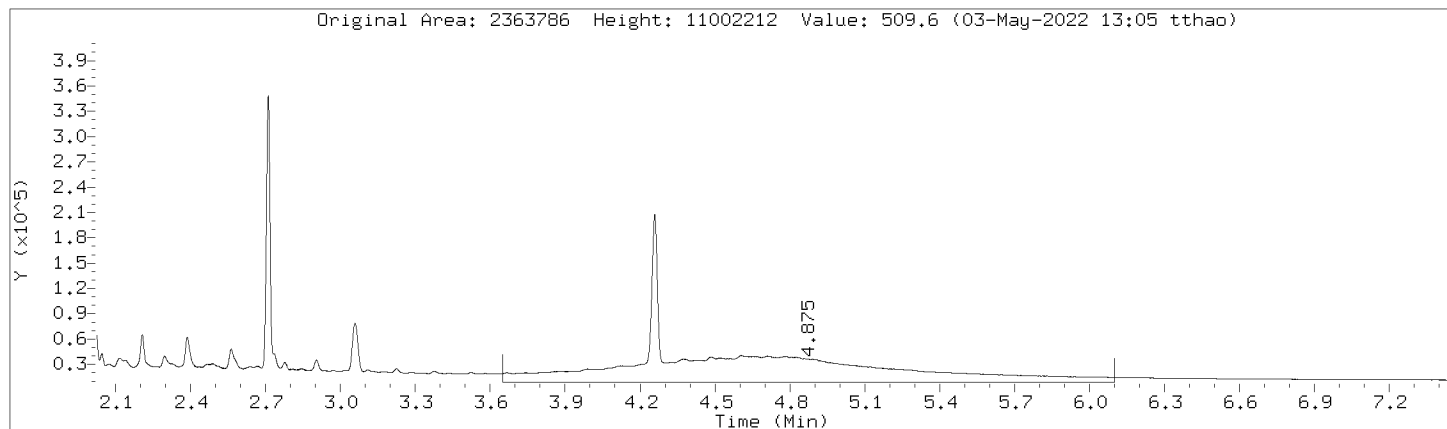
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000041.D  
Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



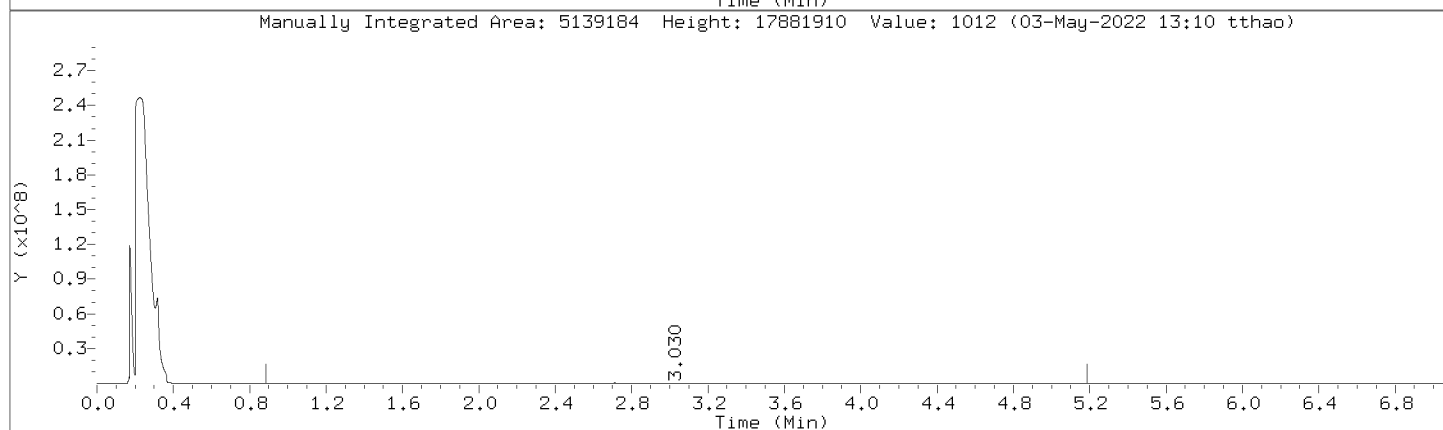
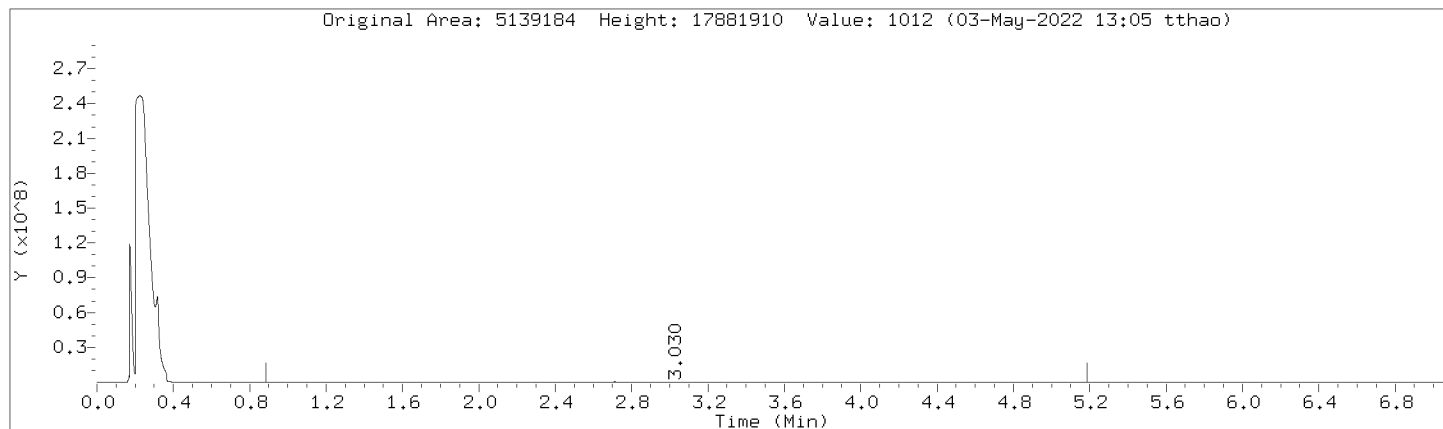
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Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



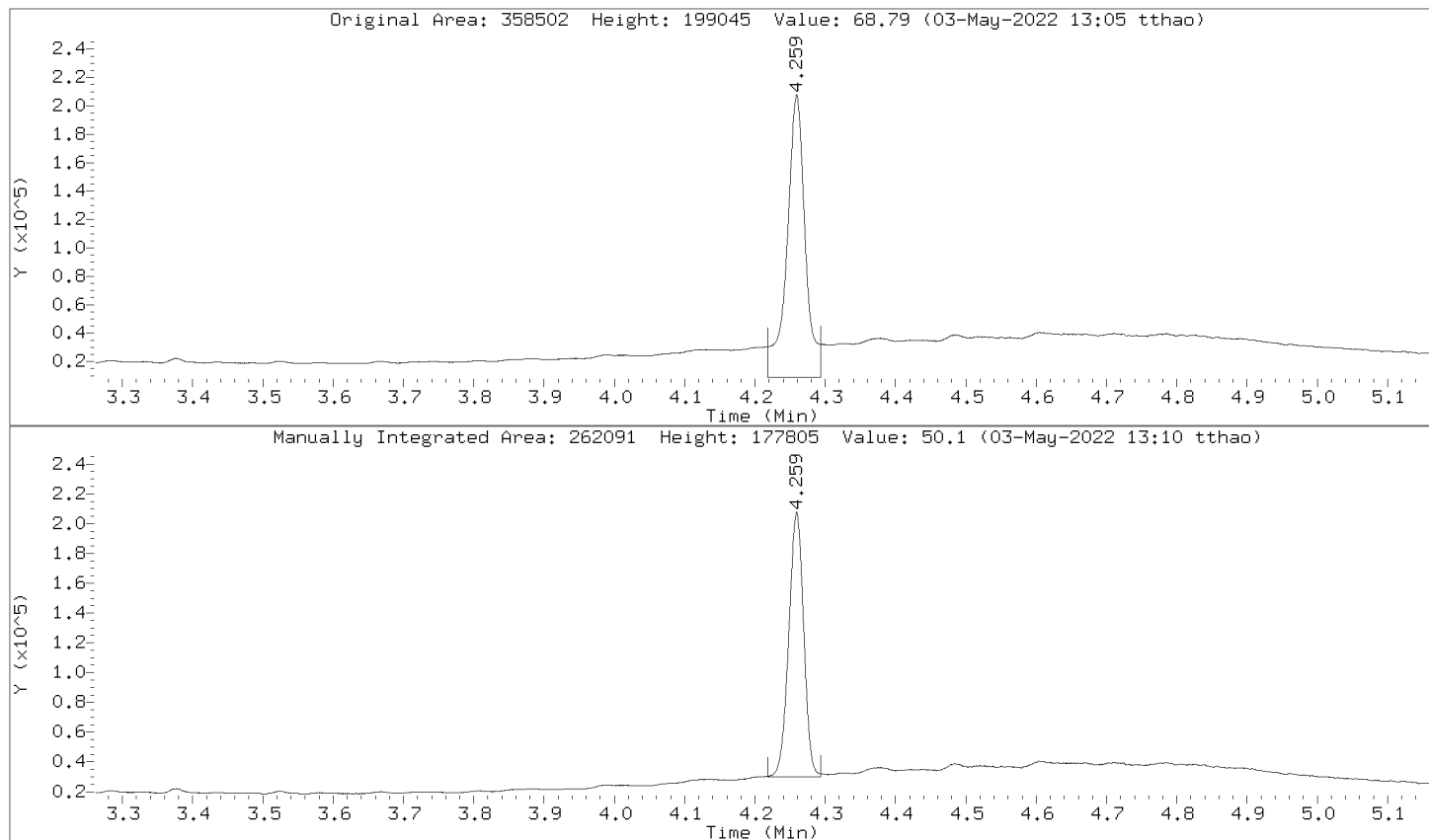
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Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



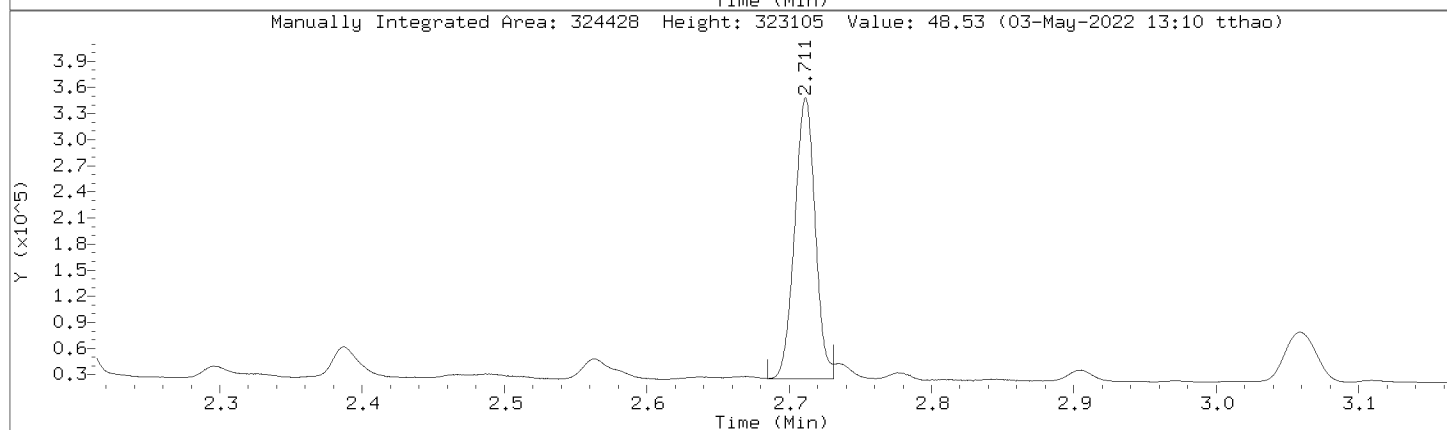
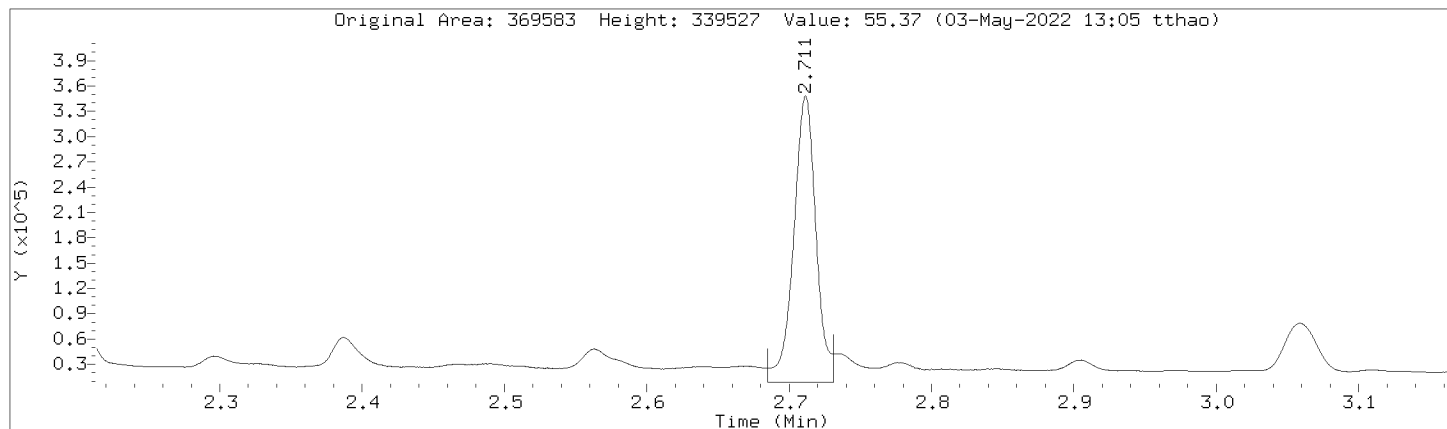
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Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000041.D  
 Injection Date: 02-MAY-2022 21:10  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,363721:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1877802	1877802
DRO by AK 102	3261382	3261382
TPH-DRO (C10-C28)	3752324	3752324
Motor Oil Range (C24-C36)	1969662	1969662
Diesel Fuel Range	2749868	2749868
Motor Oil Range	2363786	2363786
Diesel Fuel Range SG	2749868	2749868
Motor Oil Range SG	2363786	2363786
C10-C36	5139184	5139184
n-Triacontane (S)	358502	262091
o-Terphenyl (S)	369583	324428



GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BLANK

Lab Name: Pace Analytical - Minnesota Contract: D3593500  
Date Received: \_\_\_\_\_ Matrix: Solid SDG No.: 10606046  
Date Extracted: 04/29/2022 17:05 Lab Sample ID: 4307793  
Date Analyzed: 05/02/2022 19:37 Lab File ID: 050222R.B\0502R0000031B.D  
Initial wt/vol: 10 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	ND	U
	Motor Oil Range	ND	U

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000031b.D  
 Lab Smp Id: 4307793 Client Smp ID: MB  
 Inj Date : 02-MAY-2022 19:37  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 4307793  
 Misc Info : 39248  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050222R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 06-May-2022 08:44 rgustafson Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 25 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL		FINAL	REVIEW CODE
			RESPONSE	(ug/mL)	(mg/Kg)	
=====	=====	=====	=====	=====	=====	=====
\$ 2	o-Terphenyl (S)				CAS #:	
2.712	2.713	-0.001	268590	40.0754	4.01	(M) BA
\$ 3	n-Triacontane (S)				CAS #:	
4.258	4.262	-0.004	238032	45.4418	4.54	(M) BA
S 10	Motor Oil Range				CAS #:	
3.651	- 6.100		286907	38.6343	3.86	(M) RNG
S 11	Motor Oil Range SG				CAS #:	
3.651	- 6.100		286907	38.6343	3.86	(M) RNG
S 8	Diesel Fuel Range				CAS #:	
1.350	- 3.650		351920	7.60961	0.761	(M) RNG
S 9	Diesel Fuel Range SG				CAS #:	
1.350	- 3.650		351920	7.60961	0.761	(M) RNG

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.

Date : 02-MAY-2022 19:37

Client ID: HB

Sample Info: 4307793

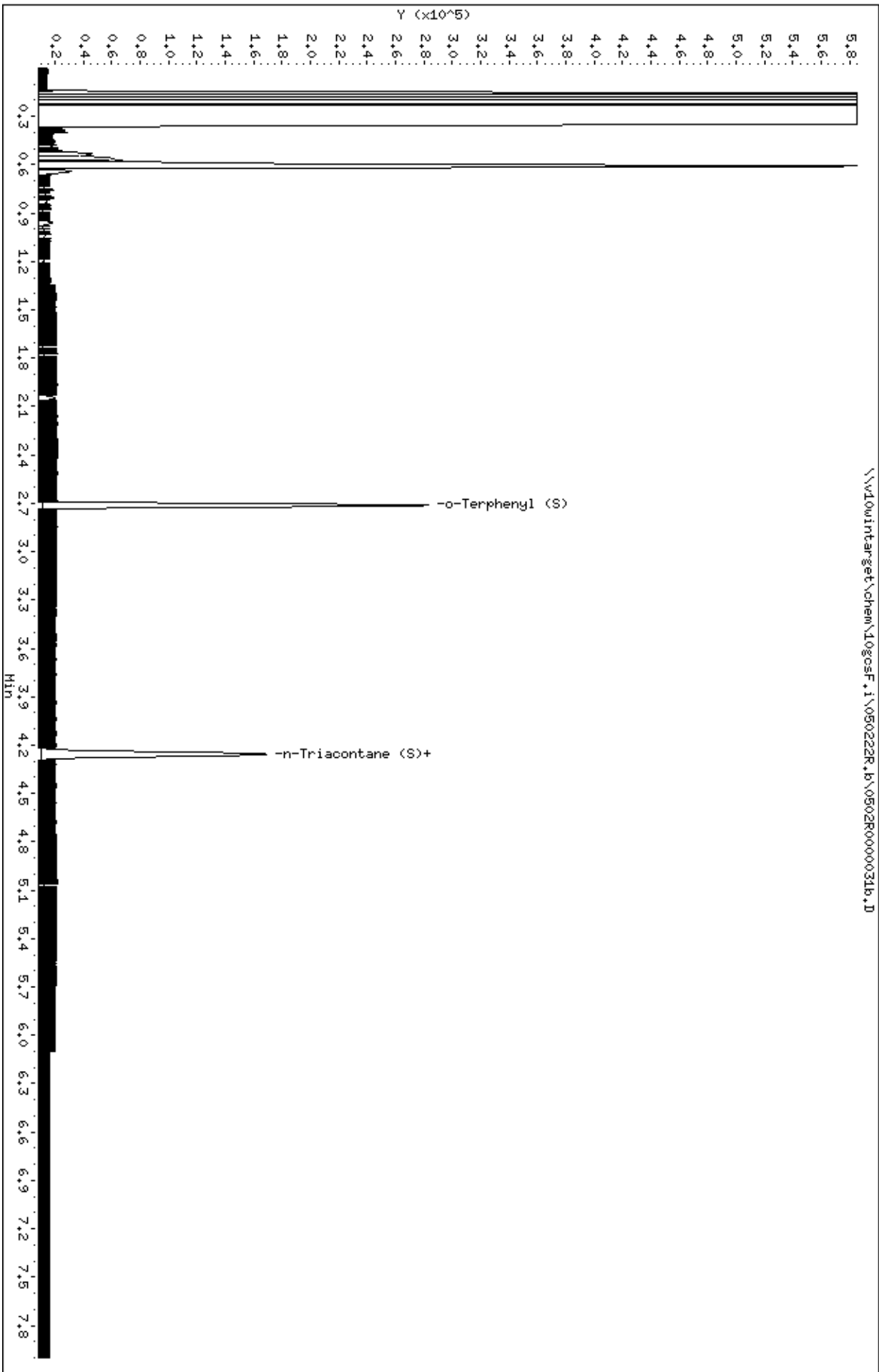
Volume Injected (uL): 1.0

Column phase: DB-5-MS21430033

Instrument: 10gcsf.i

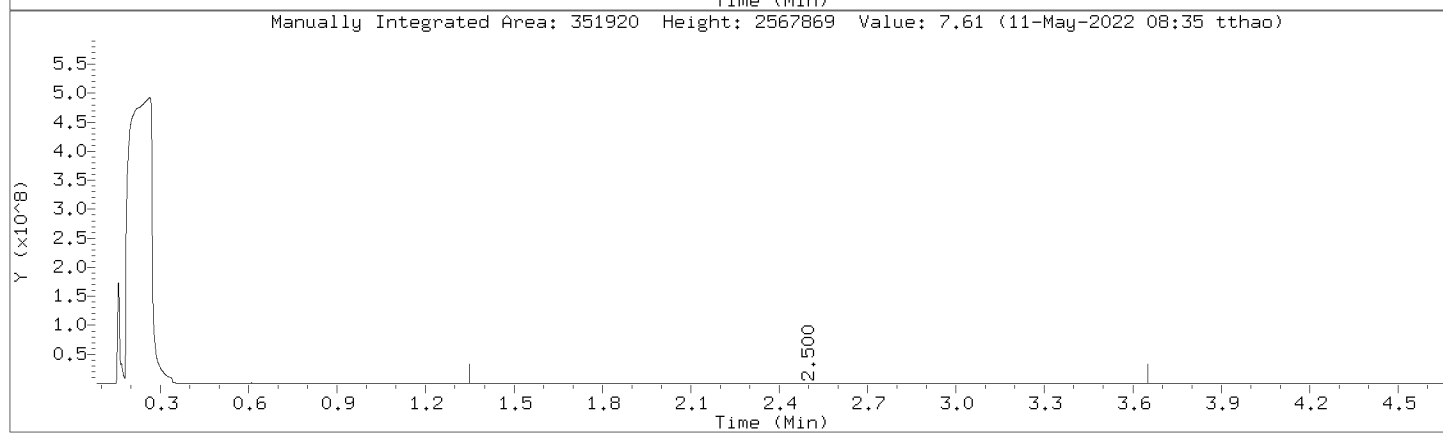
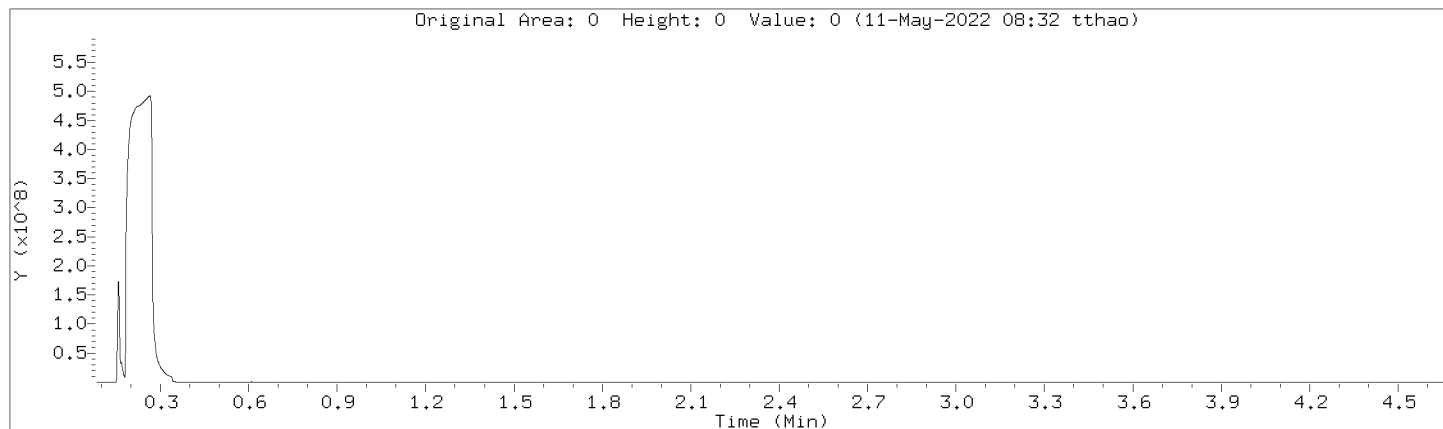
Operator: TT2

Column diameter: 0.32



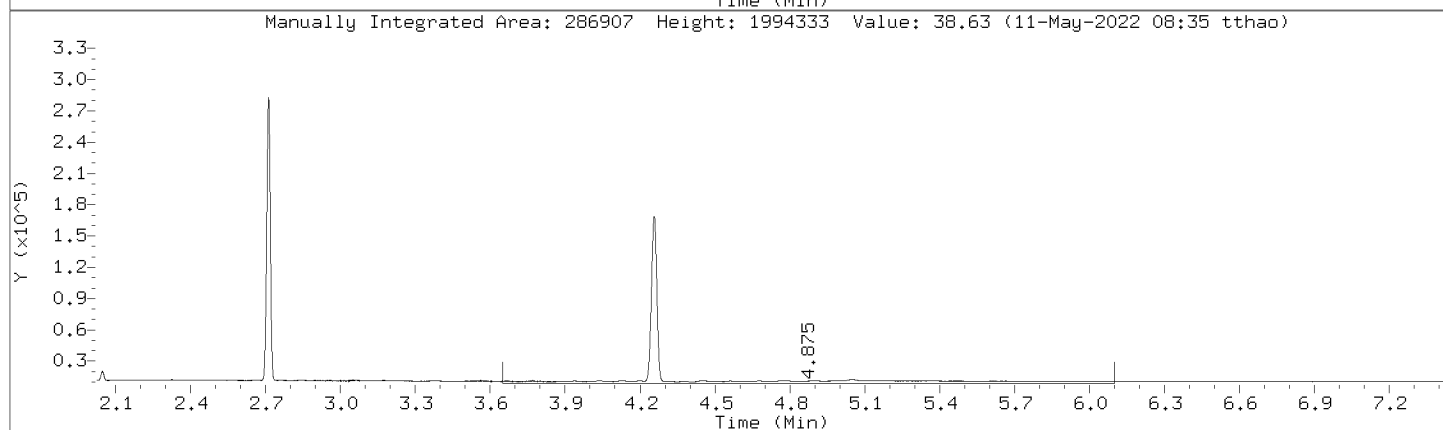
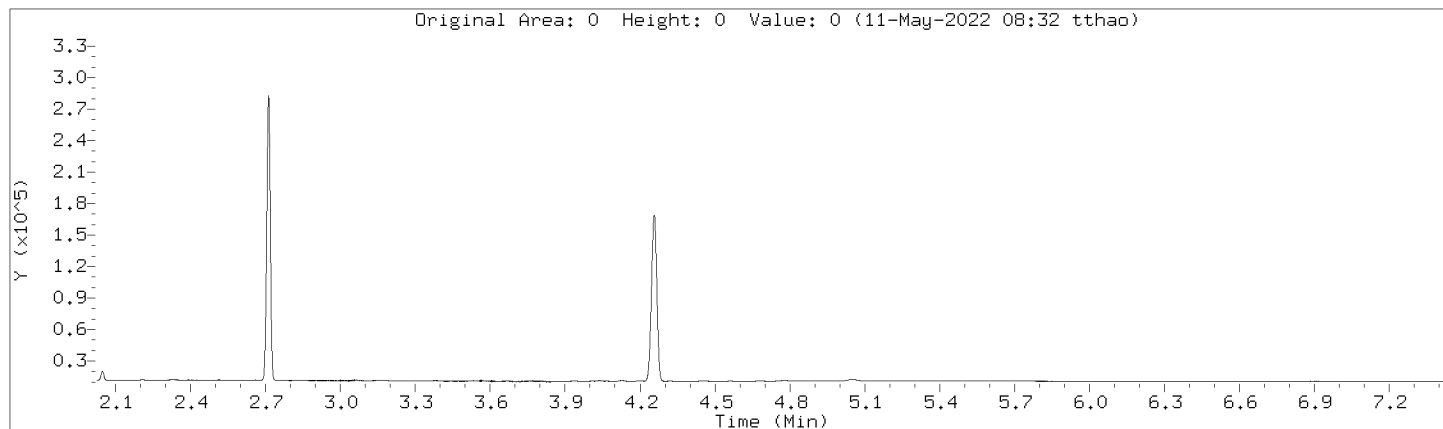
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Instrument: 10gcsF.i  
Lab Sample ID: 4307793

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



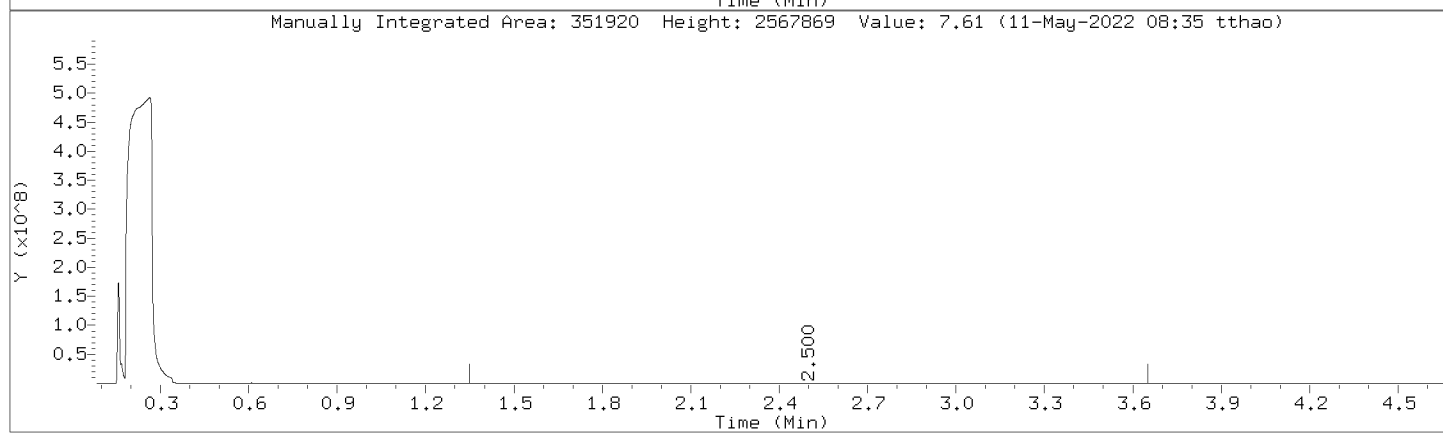
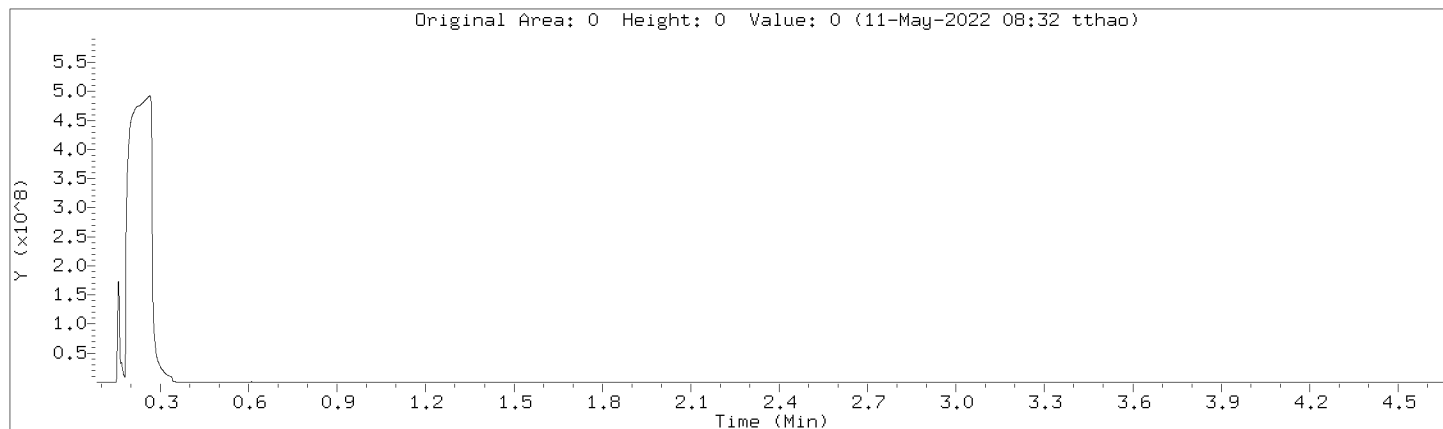
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000031b.D  
Injection Date: 02-MAY-2022 19:37  
Instrument: 10gcsF.i  
Lab Sample ID: 4307793

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



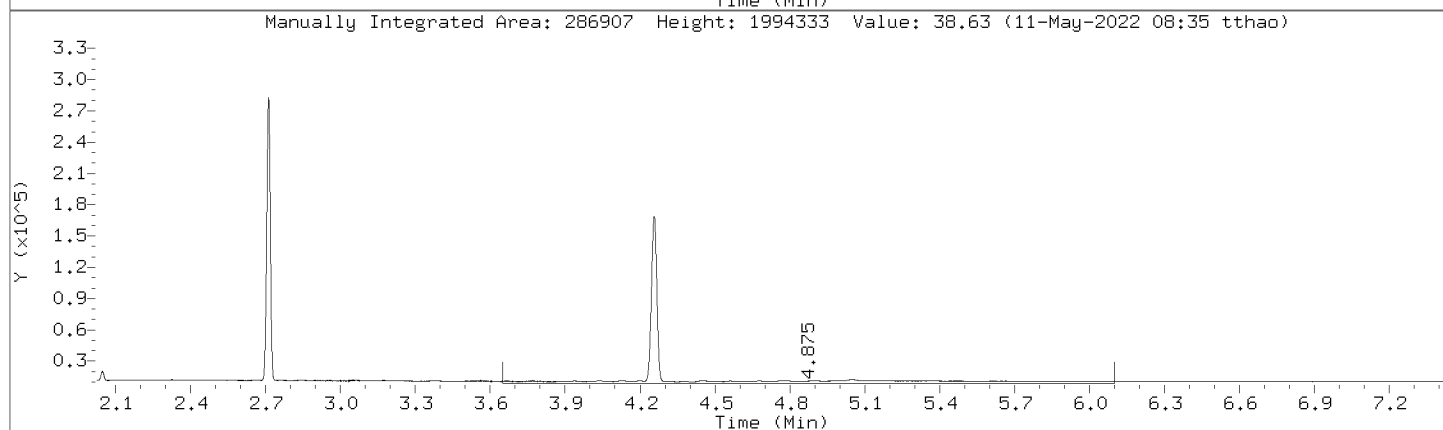
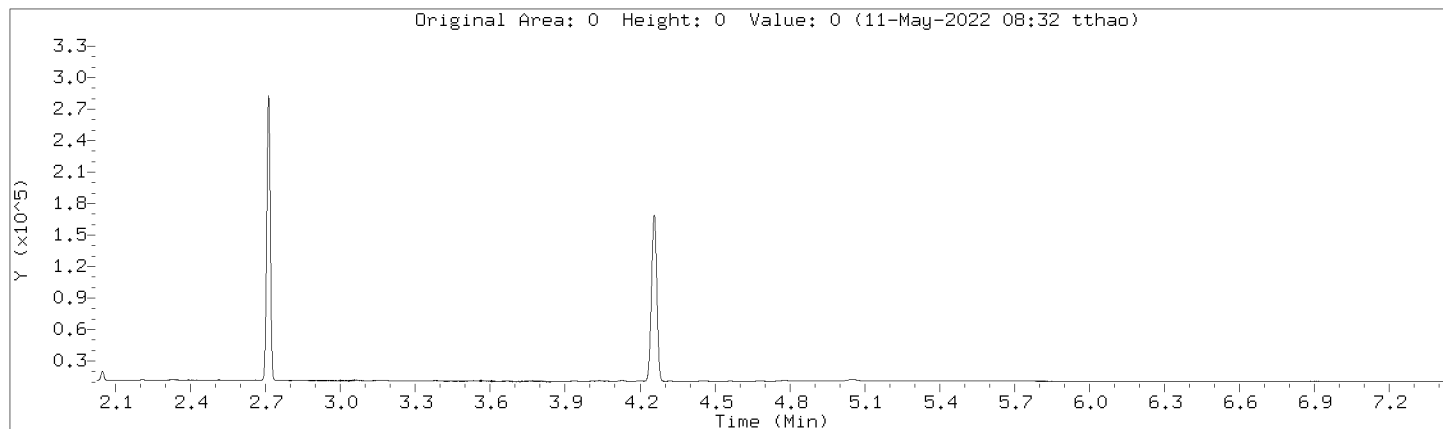
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000031b.D  
Injection Date: 02-MAY-2022 19:37  
Instrument: 10gcsF.i  
Lab Sample ID: 4307793

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000031b.D  
Injection Date: 02-MAY-2022 19:37  
Instrument: 10gcsF.i  
Lab Sample ID: 4307793

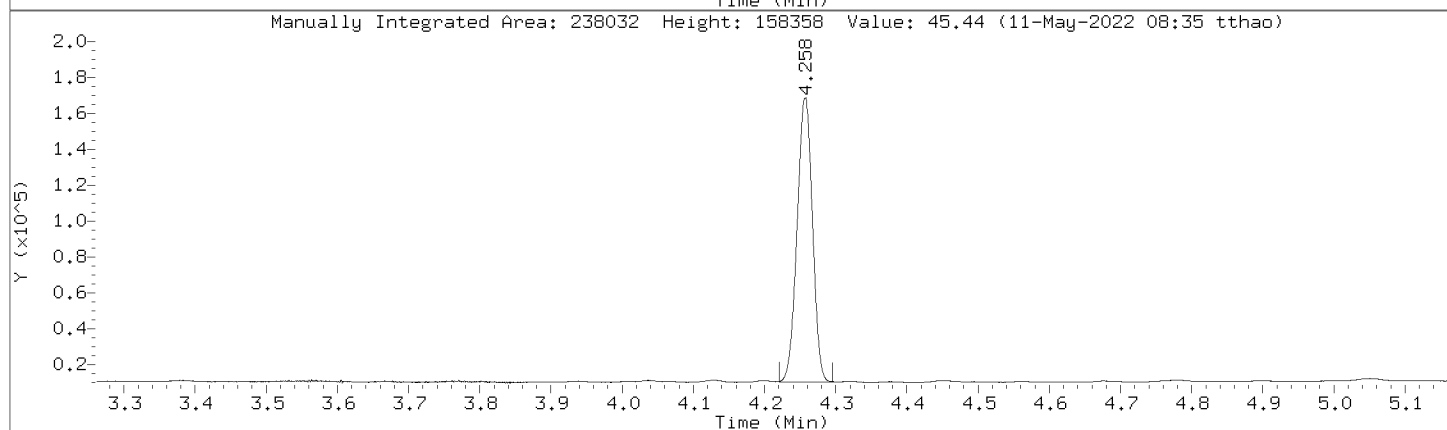
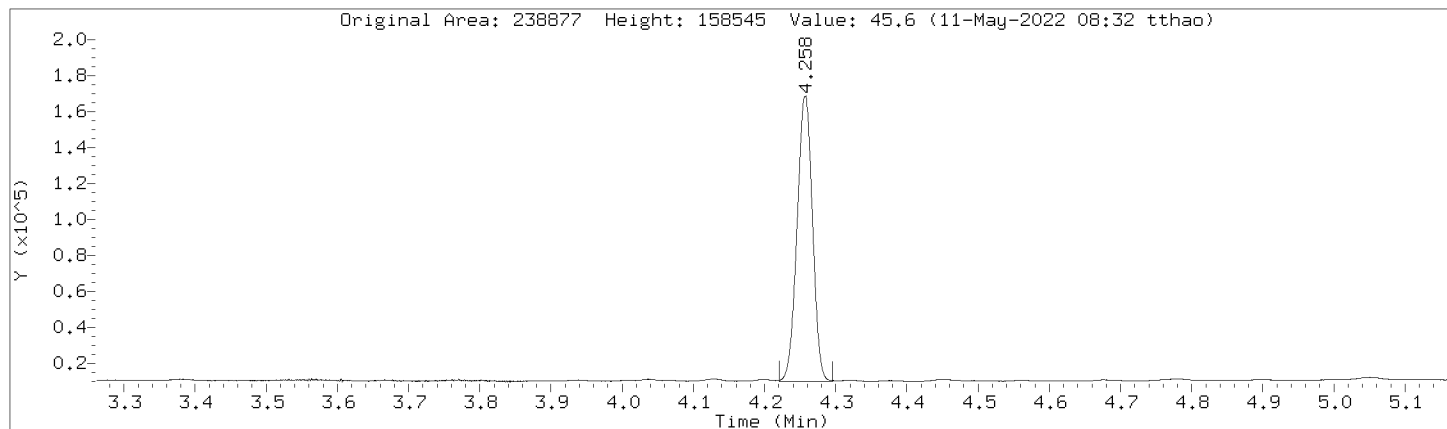
Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





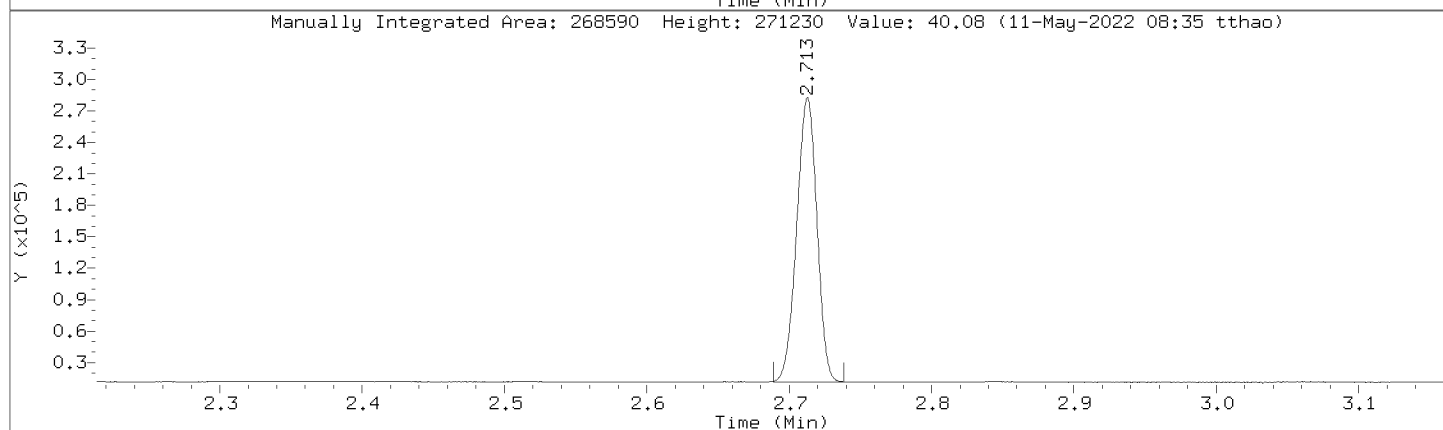
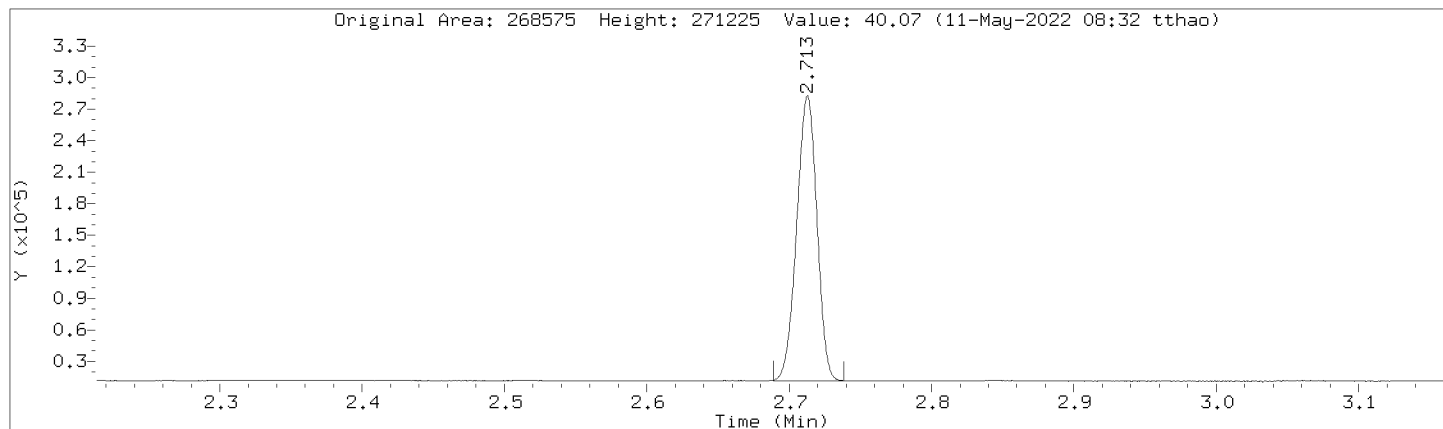
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000031b.D  
Injection Date: 02-MAY-2022 19:37  
Instrument: 10gcsF.i  
Lab Sample ID: 4307793

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000031b.D  
 Injection Date: 02-MAY-2022 19:37  
 Instrument: 10gcsF.i  
 Lab Sample ID: 4307793

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	0	351920
Motor Oil Range	0	286907
Diesel Fuel Range SG	0	351920
Motor Oil Range SG	0	286907
n-Triacontane (S)	238877	238032
o-Terphenyl (S)	268575	268590

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

LCS

Lab Name: Pace Analytical - Minnesota  
Date Received: \_\_\_\_\_  
Date Extracted: 04/29/2022 17:05  
Date Analyzed: 05/02/2022 19:46  
Initial wt/vol: 10 g Final wt/vol: 1 mL Dilution: 1

Contract: D3593500  
Matrix: Solid SDG No.: 10606046  
Lab Sample ID: 4307794  
Lab File ID: 050222R.B\0502R0000032B.D  
Instrument: 10GCSF Percent Moisture: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	41.4	
	Motor Oil Range	46.6	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000032b.D  
 Lab Smp Id: 4307794 Client Smp ID: MBLCS  
 Inj Date : 02-MAY-2022 19:46  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 4307794  
 Misc Info : 39248  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050222R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 06-May-2022 08:44 rgustafson Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 26 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
\$ 2	o-Terphenyl (S)					CAS #:
2.711	2.713	-0.002	280153	41.8265	4.18	(M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.255	4.262	-0.007	214503	40.8821	4.09	(M) BA
S 10	Motor Oil Range					CAS #:
3.651	- 6.100		2169720	465.601	46.6	(M) RNG
S 11	Motor Oil Range SG					CAS #:
3.651	- 6.100		2169720	465.601	46.6	(M) RNG
S 8	Diesel Fuel Range					CAS #:
1.350	- 3.650		2305427	413.796	41.4	(M) RNG
S 9	Diesel Fuel Range SG					CAS #:
1.350	- 3.650		2305427	413.796	41.4	(M) RNG

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.

Date : 02-MAY-2022 19:46

Client ID: HBLCS

Sample Info: 4307794

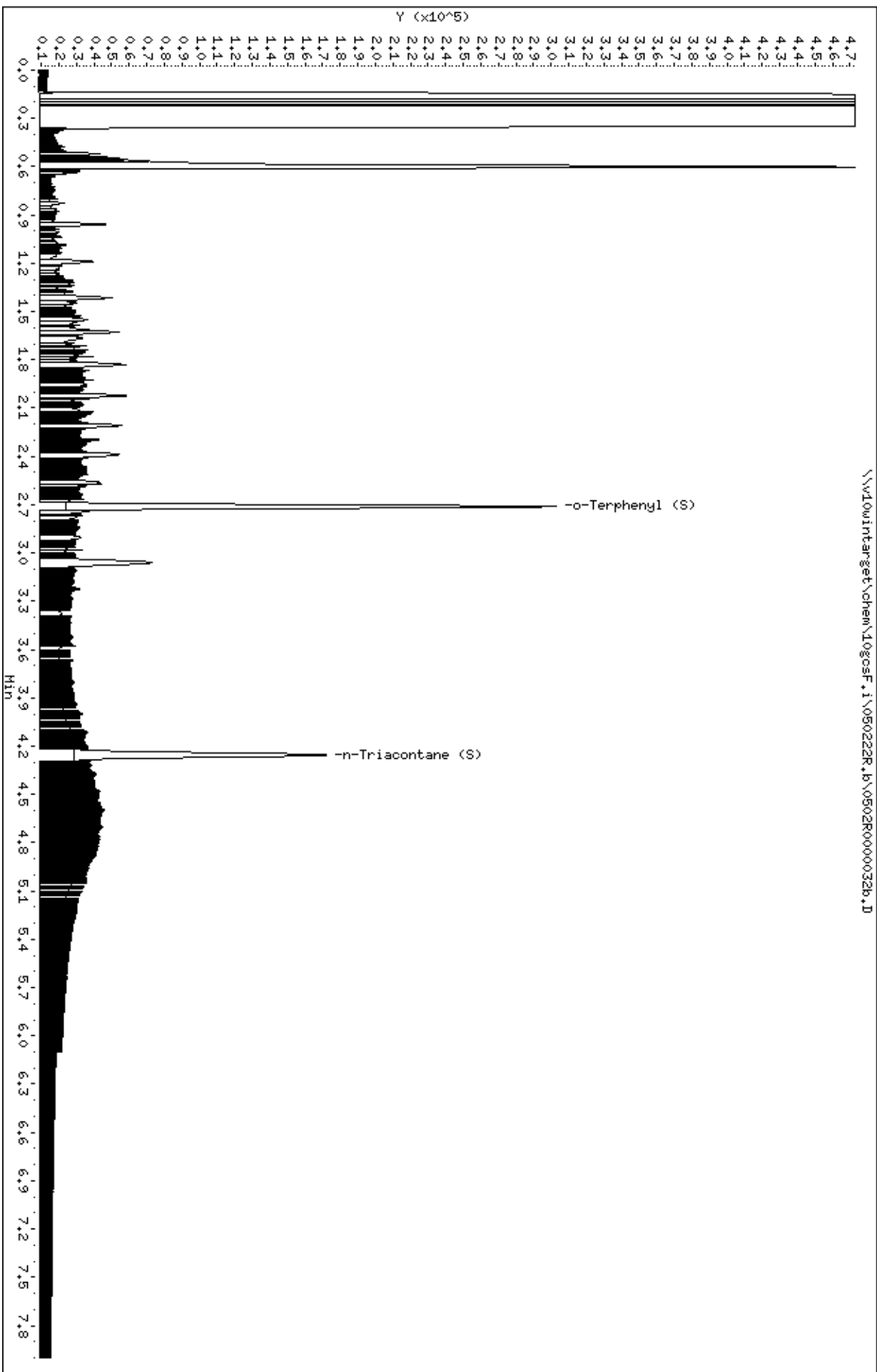
Volume Injected (uL): 1.0

Column phase: DB-5-MS21430033

Instrument: 10gocsf.1

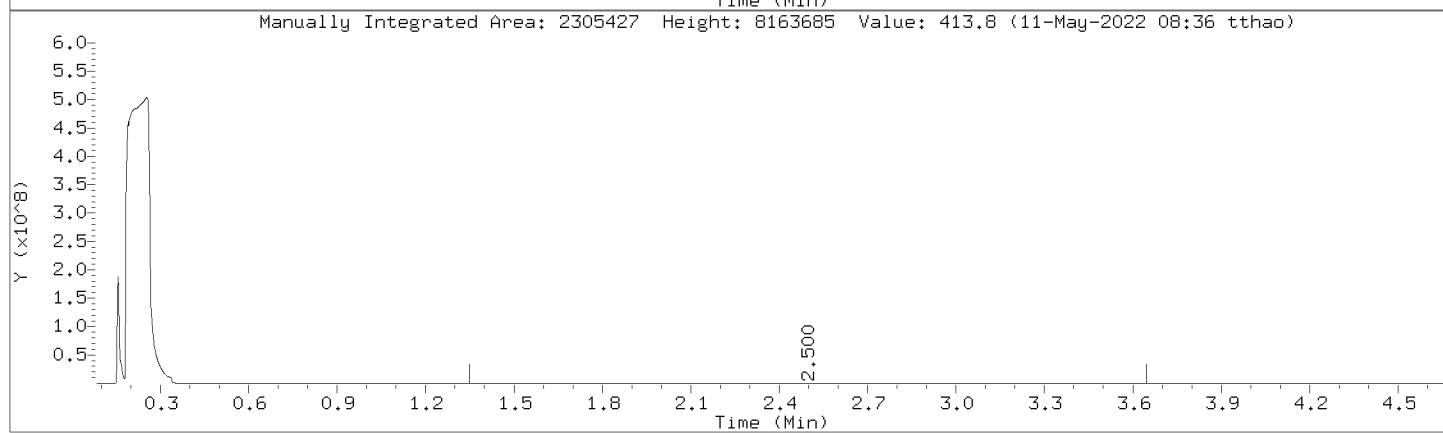
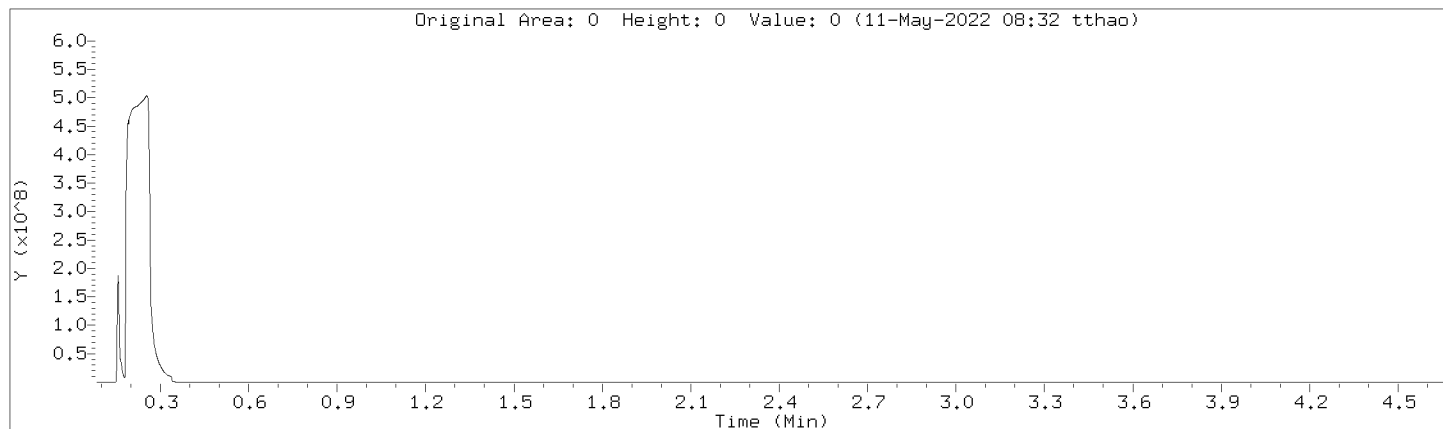
Operator: TT2

Column diameter: 0.32



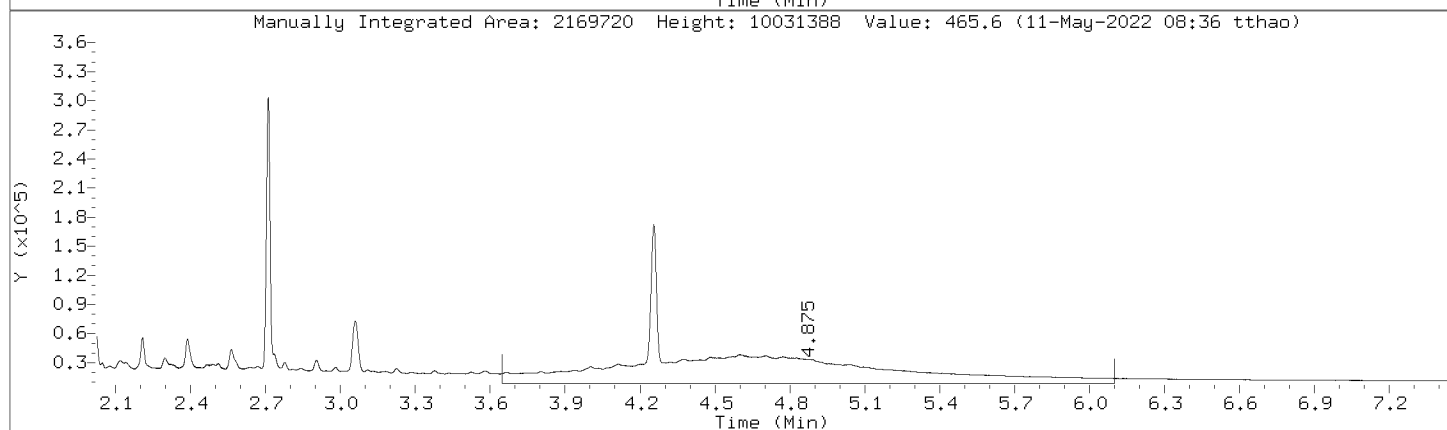
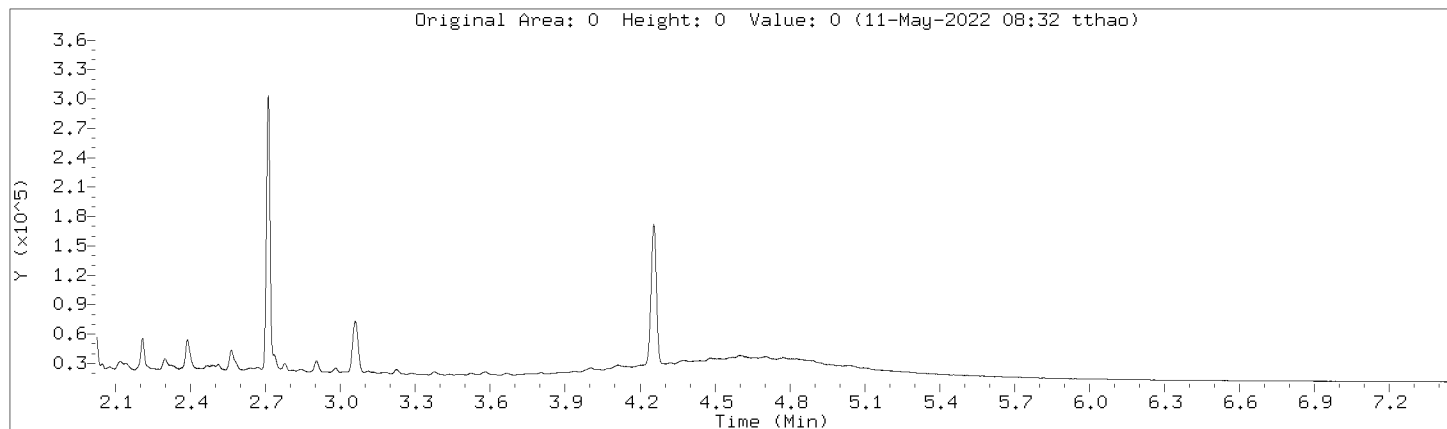
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000032b.D  
Injection Date: 02-MAY-2022 19:46  
Instrument: 10gcsF.i  
Lab Sample ID: 4307794

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000032b.D  
Injection Date: 02-MAY-2022 19:46  
Instrument: 10gcsF.i  
Lab Sample ID: 4307794

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:







# Prep Log Report

Batch Information: OEXT 64498 812360 NWDROS

Template Version: ENV-EPL-MIN4-0072-Rev.00 (03Jan2021)

Prep Method	EPA 3550	Analysis Method	NWTPH-Dx	Prepared By	GY1	Extracted Date/Time	04/29/2022 17:05:56:115
Instrument	10BALW	Calibrated	Yes	Sonicator Tune Date	04/29/2022 16:55:55:290	Spiked By	GY1
Dispenser ID 1	Q617	Dispenser ID 2		Syringe ID 1		Syringe ID 2	
Syringe ID 3		Pipette ID 1	PP1-42	Conc. Method	WaterBath	Concentrated By	VH
Concentration Date/Time	05/01/2022	Methylene Chloride	362509	MeCl/Acetone 80:20	363495	Ottawa Sand	357927
Sodium Sulfate	355640-06	Glass Wool	363836	Gravity Filters	None Added	Vial Lot #	22025312
Reviewed By	RS	Reviewed By Date	05/02/2022 06:24	Batch Notes	Syringe Q835, Q825 & Q827. Shares QC w/OEXT 64499 812361 8015DSD10.		

QC Rule	NWDROS_P	Sample Type	BLANK	Lab Sample ID	4307793	Select	Y	Matrix	Solid	Sample ID Verified By	Scanner	Spike Verified	No one to verify	Container Wt (g)		Container + Sample Wt (g)		Initial Amount (g)	10	Final Volume (mL)	1	Sonicator ID	100P37	Water Bath ID	100P29	Water Bath Thermo ID	210745396	Correction Factor	1
	NWDROS_P		LCS		4307794		Y		Solid		Scanner		No one to verify						10		1		100P04		210745396		1		
	NWDROS_P		PS	10606046001			Y		Solid		Scanner		No one to verify						10.11		1		100P01		210745396		1		
	NWDROS_P		PS	10606394001			Y		Solid		Scanner		No one to verify						10.03		1		100P37		210745396		1		
	NWDROS_P		PS	10606394002			Y		Solid		Scanner		No one to verify						10.09		1		100P04		210745396		1		
	NWDROS_P		PS	10606394003			Y		Solid		Scanner		No one to verify						10.19		1		100P04		210745396		1		
	NWDROS_P		PS	10606394004			Y		Solid		Scanner		No one to verify						10.1		1		100P01		210745396		1		
	NWDROS_P		PS	10606395001			Y		Solid		Scanner		No one to verify						10.05		1		100P37		210745396		1		
	NWDROS_P		PS	10606395002			Y		Solid		Scanner		No one to verify						10.05		1		100P04		210745396		1		
	NWDROS_P		PS	10606395003			Y		Solid		Scanner		No one to verify						10.02		1		100P04		210745396		1		
	NWDROS_P		PS	10606395004			Y		Solid		Scanner		No one to verify						10.13		1		100P01		210745396		1		
	NWDROS_P		PS	10606463001			Y		Solid		Scanner		No one to verify						10.14		1		100P04		210745396		1		
	NWDROS_P		MS	4307905			Y		Solid		Scanner		No one to verify						10.2		1		100P01		210745396		1		
	NWDROS_P		MSD	4307906			Y		Solid		Scanner		No one to verify						10.16		1		100P37		210745396		1		

## Sample Information:

10606046

228 of 488

279 of 82



# Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Water Bath Temp   Corr (C)	Sample Notes	DMSO-SPK (uL)	Indices-SS (uL)	Other-SS (uL)
10606046	NWDROS_P	4307793	92.00   93.00			358167 (10)	352759 (25)
	BLANK						
	NWDROS_P	4307794	92.00   93.00		358262 (250)	358167 (10)	352759 (25)
	LCS						
	NWDROS_P	10606046001	92.00   93.00	wet sample		358167 (10)	352759 (25)
	PS						
	NWDROS_P	10606394001	92.00   93.00	1*		358167 (10)	352759 (25)
	PS						
	NWDROS_P	10606394002	92.00   93.00	1*		363304 (10)	352759 (25)
	PS						
	NWDROS_P	10606394003	92.00   93.00	1*		360507 (10)	352759 (25)
	PS						
	NWDROS_P	10606394004	92.00   93.00	1*		360507 (10)	352759 (25)
	PS						
	NWDROS_P	10606395001	92.00   93.00	1*		360507 (10)	352759 (25)
	PS						
	NWDROS_P	10606395002	92.00   93.00	1*		360507 (10)	352759 (25)
	PS						
	NWDROS_P	10606395003	92.00   93.00	wet sample		360507 (10)	352760 (25)
	PS						
	NWDROS_P	10606395004	92.00   93.00	1*		360507 (10)	352760 (25)
	PS						
	NWDROS_P	10606463001	92.00   93.00			358167 (10)	352759 (25)
	PS						
	NWDROS_P	4307905	92.00   93.00		358262 (250)	358167 (10)	352759 (25)
	MS						
	NWDROS_P	4307906	92.00   93.00		358262 (250)	358167 (10)	352759 (25)
	MSD						

### Sample Notes:

1\*: decanted standing water

### Standard Notes:

352759: received 2/21/22, opened 04/21/22 GY1

360507: Received 4/11/22, opened 04/29/22 GY1

352760: received 2/21/22, opened 04/29/22 GY1

363304: Received 4/26/22, opened 04/28/22 GY1

358167: Received 3/25/22, opened 4/28/22 FT1

### Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0427R0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 11:41	EB3	ran to stabilize baseline
0427R0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 11:53	EB3	
0427R0000003.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:04	EB3	
0427R0000004.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:15	EB3	
0427R0000005.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:26	EB3	
0427R0000006.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:38	EB3	V
0427R0000007.D	DMO-RTM,362403	/39205	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:49	EB3	
0427R0000008.D	DMO-CAL1,362369	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:00	EB3	level 1 dropped
0427R0000009.D	DMO-CAL2,362370	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:11	EB3	
0427R0000010.D	DMO-CAL3,362371	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:23	EB3	Pass 40% for all target analytes
0427R0000011.D	DMO-CAL4,362372	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:34	EB3	
0427R0000012.D	DMO-CAL5,362373	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:45	EB3	
0427R0000013.D	DMO-CAL6,362374	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:57	EB3	
0427R0000014.D	DMO-CAL7,362375	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:08	EB3	
0427R0000015.D	DMO-CAL8,362376	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:19	EB3	
0427R0000016.D	DMO-CAL9,362377	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:30	EB3	
0427R0000017.D	DMO-CAL10,362378	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:42	EB3	ICAL passing
0427R0000018.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 14:53	EB3	ran to eliminate the possibility of carryover
0427R0000019.D	DMO-ICV,355155	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 15:04	EB3	Pass 15% for all ranges
0427R0000020.D	PBLK,349203	/39205	Sample	1		GCSFAKNW8015-042722_	4/27/22 15:15	EB3	Clean for all ranges
0427R0000021.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 15:27	EB3	Pass 15% for all ranges
0427R0000022.D	4295161	L/39115	Blank	1		GCSFAKNW8015-042722_	4/27/22 15:38	EB3	ok
0427R0000023.D	10604482008	L/39115	Sample	1		GCSFAKNW8015-042722_	4/27/22 15:49	EB3	8015W MDL - passing
0427R0000024.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 16:00	EB3	Pass 15% for all ranges
0427R0000025.D	4295166	L/39113	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:12	EB3	ok
0427R0000025B.	4295167	L/39114	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:12	EB3	ok
0427R0000026.D	10604482012	L/39113	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:23	EB3	AK W MDL - passing
0427R0000026B.	10604482016	L/39114	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:23	EB3	NW W MDL - passing
0427R0000027.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 16:34	EB3	Pass 15% for all ranges
0427R0000028.D	4295299	S/39116	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000028B.	4295310	S/39118	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000028C.	4295311	S/39117	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000028D.	4325687	S/39417	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000029.D	10604453012	S/39116	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	8015S MDL - passing
0427R0000029B.	10604453008	S/39118	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	AK S MDL - passing
0427R0000029C.	10604453016	S/39117	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	NW S MDL - passing
0427R0000029D.	10604453076	S/39417	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	1036S MDL - passing
0427R0000030.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 17:19	EB3	Pass 15% for all ranges
0427R0000031.D	PBLK,4301183	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 17:30	EB3	NR

**Instrument Run Log**Instrument: 10GCSF  
Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

Surrogate Lot: See extract sheet  
ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
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## Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\W10WINTARGET\CHEM\10GCSF.I\042722R.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 05/19/2022 15:13

ReviewedBy/Date:

## Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot: MECL2-362509

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0502R0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	5/02/22 14:57	TT2	
0502R0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	5/02/22 15:07	TT2	
0502R0000003.D	DMO-RTM,362402	/39205	Sample	1		GCSFAKNW8015-042722_	5/02/22 15:16	TT2	
0502R0000004.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 15:25	TT2	Pass 15% for all ranges
0502R0000005.D	4305172	L/39219	Blank	1		GCSFAKNW8015-042722_	5/02/22 15:35	TT2	ok
0502R0000006.D	4305173	L/39219	LCS	1		GCSFAKNW8015-042722_	5/02/22 15:44	TT2	pass
0502R0000007.D	4305174	L/39219	LCSD	1		GCSFAKNW8015-042722_	5/02/22 15:53	TT2	pass
0502R0000008.D	10606016001	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:03	TT2	
0502R0000009.D	10606016002	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:12	TT2	
0502R0000010.D	10606016003	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:21	TT2	
0502R0000011.D	10606016004	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:31	TT2	
0502R0000012.D	10606016005	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:40	TT2	
0502R0000013.D	10606016007	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:49	TT2	
0502R0000014.D	10606016008	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:59	TT2	
0502R0000015.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 17:08	TT2	Pass 15% for all ranges
0502R0000016.D	4305172	L/39219	Blank	1		GCSFAKNW8015-042722_	5/02/22 17:17	TT2	ok
0502R0000017.D	10606016010	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 17:27	TT2	
0502R0000018.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 17:36	TT2	Pass 15% for all ranges
0502R0000019.D	4307671	L/39247	Blank	1		GCSFAKNW8015-042722_	5/02/22 17:45	TT2	ok
0502R0000020.D	4307672	L/39247	LCS	1		GCSFAKNW8015-042722_	5/02/22 17:55	TT2	passes
0502R0000021.D	4307673	L/39247	LCSD	1		GCSFAKNW8015-042722_	5/02/22 18:04	TT2	passes
0502R0000022.D	10606410001	L/39247	Sample	1		GCSFAKNW8015-042722_	5/02/22 18:13	TT2	RAG
0502R0000023.D	10606410002	L/39247	Sample	1		GCSFAKNW8015-042722_	5/02/22 18:23	TT2	
0502R0000024.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 18:32	TT2	Pass 15% for all ranges
0502R0000025.D	4303622	S/39215	Blank	1		GCSFAKNW8015-042722_	5/02/22 18:41	TT2	rr, MB failing
0502R0000026.D	10605661001	S/39215	Sample	1		GCSFAKNW8015-042722_	5/02/22 18:50	TT2	
0502R0000027.D	4303624	S/39215	MS	1		GCSFAKNW8015-042722_	5/02/22 19:00	TT2	
0502R0000028.D	4303625	S/39215	MSD	1		GCSFAKNW8015-042722_	5/02/22 19:09	TT2	
0502R0000029.D	10605661002	S/39215	Sample	1		GCSFAKNW8015-042722_	5/02/22 19:18	TT2	V
0502R0000030.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 19:28	TT2	Pass 15% for all ranges
0502R0000031.D	4307795	S/39249	Blank	1		GCSFAKNW8015-042722_	5/02/22 19:37	TT2	OK
0502R0000031B.	4307793	S/39248	Blank	1		GCSFAKNW8015-042722_	5/02/22 19:37	TT2	OK
0502R0000032.D	4307796	S/39249	LCS	1		GCSFAKNW8015-042722_	5/02/22 19:46	TT2	Passes
0502R0000032B.	4307794	S/39248	LCS	1		GCSFAKNW8015-042722_	5/02/22 19:46	TT2	Passes
0502R0000033.D	10606390001	S/39249	Sample	1		GCSFAKNW8015-042722_	5/02/22 19:56	TT2	
0502R0000033B.	10606463001	S/39248	Sample	1		GCSFAKNW8015-042722_	5/02/22 19:56	TT2	
0502R0000034.D	4307797	S/39249	MS	1		GCSFAKNW8015-042722_	5/02/22 20:05	TT2	
0502R0000034B.	4307905	S/39248	MS	1		GCSFAKNW8015-042722_	5/02/22 20:05	TT2	
0502R0000035.D	4307798	S/39249	MSD	1		GCSFAKNW8015-042722_	5/02/22 20:14	TT2	
0502R0000035B.	4307906	S/39248	MSD	1		GCSFAKNW8015-042722_	5/02/22 20:14	TT2	
0502R0000036.D	10606390002	S/39249	Sample	1		GCSFAKNW8015-042722_	5/02/22 20:23	TT2	
0502R0000037.D	10606398001	S/39249	Sample	1		GCSFAKNW8015-042722_	5/02/22 20:33	TT2	rr 2X
0502R0000038.D	10606046001	S/39248	Sample	1		GCSFAKNW8015-042722_	5/02/22 20:42	TT2	
0502R0000039.D	10606394001	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 20:51	TT2	rr 1X
0502R0000040.D	10606394002	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:01	TT2	rr 1X
0502R0000041.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 21:10	TT2	Pass 15% for all ranges

### Instrument Run Log

Instrument: 10GCSF  
 Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot: MECL2-362509

Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0502R0000042.D	4307795	S/39249	Blank	1		GCSFAKNW8015-042722_	5/02/22 21:19	TT2	OK
0502R0000043.D	10606394003	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:29	TT2	rr 1X
0502R0000044.D	10606394004	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:38	TT2	rr 1X
0502R0000045.D	10606395001	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:47	TT2	rr 1X
0502R0000046.D	10606395002	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:57	TT2	rr 1X
0502R0000047.D	10606395003	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 22:06	TT2	rr 1X
0502R0000048.D	10606395004	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 22:15	TT2	rr 1X
0502R0000049.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 22:25	TT2	Pass 15% for all ranges
0502R0000050.D	PBLK,4305172	/39205	Sample	1		GCSFAKNW8015-042722_	5/02/22 22:34	TT2	Clean

**Check Maintenance Items Performed:**

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\W10WINTARGET\CHEM10GCSF.I\050222R.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: RAG

Report Date: 05/16/2022 10:12

ReviewedBy/Date:

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-SG13-042522-0-1.5

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500  
 Lab Sample ID: 10606046001 Percent Moisture: 27.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-38-2	Arsenic	2.1		mg/kg	1	05/05/2022 18:46
7440-43-9	Cadmium	0.089	J	mg/kg	1	05/05/2022 18:46
7440-47-3	Chromium	8.2		mg/kg	1	05/05/2022 18:46
7440-50-8	Copper	7.7		mg/kg	1	05/05/2022 18:46
7439-92-1	Lead	3.6		mg/kg	1	05/05/2022 18:46
7440-02-0	Nickel	9.3		mg/kg	1	05/05/2022 18:46
7782-49-2	Selenium	ND	U	mg/kg	1	05/05/2022 18:46
7440-22-4	Silver	0.26	J	mg/kg	1	05/05/2022 18:46
7440-66-6	Zinc	32.3		mg/kg	1	05/05/2022 18:46

FORM II INORGANIC-1  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Initial Calibration Verification Source: 364486

Continuing Calibration Verification Source: 364486

Concentration Units: ug/L Instrument ID: 10ICMC

Analyte	Initial Calibration Verification				Continuing Calibration Verification						
	05/05/2022 14:38				05/05/2022 15:00			05/05/2022 15:54			Control Limit
	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Arsenic	80	80.8	101.0	90-110	80	80.1	100.1	80	79.7	99.7	90-110
Cadmium	80	81.0	101.3	90-110	80	80.2	100.3	80	80.1	100.1	90-110
Chromium	80	82.3	102.9	90-110	80	82.1	102.7	80	84.7	105.9	90-110
Copper	80	84.2	105.3	90-110	80	83.9	104.8	80	83.8	104.8	90-110
Lead	80	83.2	103.9	90-110	80	82.3	102.8	80	82.2	102.8	90-110
Nickel	80	84.3	105.4	90-110	80	84.0	105.0	80	83.7	104.6	90-110
Selenium	80	81.3	101.6	90-110	80	81.5	101.9	80	79.8	99.7	90-110
Silver	40	42.4	106.0	90-110	40	42.4	106.0	40	42.0	105.0	90-110
Zinc	80	82.1	102.6	90-110	80	82.3	102.9	80	81.8	102.3	90-110



FORM II INORGANIC-2  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Initial Calibration Verification Source: \_\_\_\_\_

Continuing Calibration Verification Source: 364486

Concentration Units: ug/L Instrument ID: 10ICMC

Analyte	Continuing Calibration Verification									Control Limit
	05/05/2022 16:31			05/05/2022 18:32			05/05/2022 19:16			
	True	Found	%R	True	Found	%R	True	Found	%R	
Arsenic	80	80.4	100.4	80	78.5	98.1	80	79.4	99.3	90-110
Cadmium	80	80.5	100.6	80	79.2	99.1	80	79.8	99.8	90-110
Chromium	80	81.7	102.1	80	81.0	101.2	80	82.5	103.1	90-110
Copper	80	83.6	104.5	80	82.2	102.8	80	83.4	104.2	90-110
Lead	80	82.6	103.3	80	81.8	102.2	80	82.4	103.0	90-110
Nickel	80	83.8	104.8	80	81.9	102.4	80	82.9	103.7	90-110
Selenium	80	81.2	101.5	80	81.4	101.7	80	79.6	99.5	90-110
Silver	40	42.3	105.7	40	41.6	103.9	40	41.8	104.5	90-110
Zinc	80	82.0	102.5	80	80.4	100.5	80	81.5	101.9	90-110

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

CRDL Check Standard Source: 364485 Analysis Date/Time: 05/05/2022 14:49

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Arsenic	0.5	0.49	98.6	80-120
Cadmium	0.08	0.087	108.8	80-120
Chromium	2.0	2.1	103.6	80-120
Copper	1.0	1.1	108.1	80-120
Lead	0.5	0.53	105.6	80-120
Nickel	0.5	0.55	109.2	80-120
Selenium	0.5	0.53	105.8	80-120
Silver	0.5	0.42	84.6	80-120
Zinc	5.0	5.3	106.1	80-120

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

CRDL Check Standard Source: 364485 Analysis Date/Time: 05/05/2022 16:01

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Arsenic	0.5	0.49	98.8	80-120
Cadmium	0.08	0.083	103.8	80-120
Chromium	2.0	2.1	103.4	80-120
Copper	1.0	1.1	108.0	80-120
Lead	0.5	0.53	105.4	80-120
Nickel	0.5	0.54	108.2	80-120
Selenium	0.5	0.50	99.4	80-120
Silver	0.5	0.46	91.8	80-120
Zinc	5.0	5.3	106.6	80-120

FORM III INORGANIC-1  
BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract : D3593500

Method Blank Matrix: Solid Instrument ID: 10ICMC

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	05/05/2022 14:45	C	05/05/2022 15:04	C	05/05/2022 15:58	C	05/05/2022 16:35	C	4308596	C
Arsenic	0.11	U	0.11	U	0.11	U	0.11	U	ND	U
Cadmium	0.031	U	0.031	U	0.031	U	0.044	J	ND	U
Chromium	0.14	U	0.14	U	0.14	U	0.14	U	ND	U
Copper	0.24	U	0.24	U	0.24	U	0.24	U	ND	U
Lead	0.029	U	0.029	U	0.029	U	0.050	J	ND	U
Nickel	0.20	U	0.20	U	0.20	U	0.20	U	ND	U
Selenium	0.086	U	0.086	U	0.086	U	0.086	U	ND	U
Silver	0.14	U	0.14	U	0.14	U	0.14	U	ND	U
Zinc	0.90	U	0.90	U	0.90	U	0.90	U	1.0	J

FORM III INORGANIC-2

BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract : D3593500

Method Blank Matrix: \_\_\_\_\_ Instrument ID: 10ICMC

Method Blank Concentration Units: \_\_\_\_\_

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	05/05/2022 18:35	C	05/05/2022 19:19	C		C
Arsenic			0.11	U	0.11	U		
Cadmium			0.048	J	0.037	J		
Chromium			0.14	U	0.14	U		
Copper			0.24	U	0.24	U		
Lead			0.045	J	0.034	J		
Nickel			0.20	U	0.20	U		
Selenium			0.086	U	0.086	U		
Silver			0.19	J	0.18	J		
Zinc			0.90	U	0.90	U		

FORM IV INORGANIC-1  
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Instrument ID: 10ICMC Solution A Run Date: 05/05/2022 14:52

ICS Source: 364484,364483 Solution AB Run Date: 05/05/2022 14:56

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	25000	27500	24861.832	99.4	27234.917	99	80-120
Arsenic		100	0.016		100.196	100.2	80-120
Cadmium		100	-0.001		100.802	100.8	80-120
Calcium	25000	27500	24766.638	99.1	27540.707	100.1	80-120
Chromium		100	0.236		101.06	101.1	80-120
Copper		100	0.077		101.324	101.3	80-120
Iron	25000	26250	25154.634	100.6	26308.773	100.2	80-120
Lead		100	0.014		99.69	99.7	80-120
Magnesium	25000	27500	24800.339	99.2	27126.21	98.6	80-120
Molybdenum	500	600	513.805	102.8	622.689	103.8	80-120
Nickel		100	0.061		102.917	102.9	80-120
Potassium	25000	27500	24962.212	99.8	27554.434	100.2	80-120
Selenium		100	0.018		100.518	100.5	80-120
Silver		50	0.034		51.867	103.7	80-120
Sodium	25000	27500	25108.44	100.4	27575.468	100.3	80-120
Titanium	500	600	499.894	100	598.164	99.7	80-120
Zinc		100	0.188		101.163	101.2	80-120

FORM V INORGANIC-1  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4308598MS
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Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Matrix: Solid Basis: Dry Parent Sample ID: BNSF-SG13-042522-0-1.5

Percent Moisture: 27.7

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Arsenic	mg/kg	75-125	64.4	2.1	66.3	94
Cadmium	mg/kg	75-125	62.7	0.089J	66.3	94
Chromium	mg/kg	75-125	73.8	8.2	66.3	99
Copper	mg/kg	75-125	73.2	7.7	66.3	99
Lead	mg/kg	75-125	93.2	3.6	66.3	135*
Nickel	mg/kg	75-125	75.5	9.3	66.3	100
Selenium	mg/kg	75-125	65.1	ND	66.3	98
Silver	mg/kg	75-125	33.3	0.26J	33.2	100
Zinc	mg/kg	75-125	97.9	32.3	66.3	99

\* Spike Recovery outside QC Limits

FORM V INORGANIC-2  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4308599MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Matrix: Solid Basis: Dry Parent Sample ID: BNSF-SG13-042522-0-1.5

Percent Moisture: 27.7

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Arsenic	mg/kg	75-125	59.1	2.1	68.1	84
Cadmium	mg/kg	75-125	57.4	0.089J	68.1	84
Chromium	mg/kg	75-125	67.7	8.2	68.1	87
Copper	mg/kg	75-125	66.8	7.7	68.1	87
Lead	mg/kg	75-125	62.6	3.6	68.1	87
Nickel	mg/kg	75-125	69.4	9.3	68.1	88
Selenium	mg/kg	75-125	60.9	ND	68.1	89
Silver	mg/kg	75-125	30.6	0.26J	34.0	89
Zinc	mg/kg	75-125	89.2	32.3	68.1	84



FORM V INORGANIC-1  
POST-DIGESTION SPIKE SAMPLE RECOVERY

SAMPLE NO.

4310748PDS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Matrix: Solid Parent Sample ID: BNSF-SG13-042522-0-1.5

Analyte	Units	Control Limit %R	DF	Spiked Sample Result (SSR)	DF	Sample Result (SR)	Spike Added (SA)	%R
Arsenic	ug/L	80-120	1	73.7	1	2.2U	80	92.2
Cadmium	ug/L	80-120	1	73.0	1	0.63U	80	91.2
Chromium	ug/L	80-120	1	79.9	1	6.1J	80	92.2
Copper	ug/L	80-120	1	80.7	1	5.8J	80	93.6
Lead	ug/L	80-120	1	76.6	1	2.7J	80	92.4
Nickel	ug/L	80-120	1	82.4	1	7.0J	80	94.3
Selenium	ug/L	80-120	1	76.9	1	1.7U	80	96.2
Silver	ug/L	80-120	1	15.1	1	2.9U	40	37.8*
Zinc	ug/L	80-120	1	99.2J	1	24.3J	80	93.6

FORM VI INORGANIC-1  
DUPLICATES

SAMPLE NO.

4308599MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 27.7 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Arsenic	20	64.4	59.1	9
Cadmium	20	62.7	57.4	9
Chromium	20	73.8	67.7	9
Copper	20	73.2	66.8	9
Lead	20	93.2	62.6	39*
Nickel	20	75.5	69.4	8
Selenium	20	65.1	60.9	7
Silver	20	33.3	30.6	8
Zinc	20	97.9	89.2	9

\* RPD outside QC Limits

FORM VII INORGANIC-1  
LABORATORY CONTROL SAMPLE

SAMPLE NO.

4308597LCS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Arsenic	mg/kg	49.2	44.3	90	80	120
Cadmium	mg/kg	49.2	44.3	90	80	120
Chromium	mg/kg	49.2	45.7	93	80	120
Copper	mg/kg	49.2	46.2	94	80	120
Lead	mg/kg	49.2	45.6	93	80	120
Nickel	mg/kg	49.2	46.6	95	80	120
Selenium	mg/kg	49.2	48.4	98	80	120
Silver	mg/kg	24.6	23.6	96	80	120
Zinc	mg/kg	49.2	45.5	92	80	120

FORM VIII INORGANIC-1  
SERIAL DILUTIONS

4310749SD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500Matrix: SolidParent Sample ID: BNSF-SG13-042522-0-1.5

Analyte	Units	Initial Sample Result	Serial Dilution Result	% Difference	Control Limit %D
Arsenic	ug/L	2.2U	10.9U		10
Cadmium	ug/L	0.63U	3.1U		10
Chromium	ug/L	6.1J	14.0U		10
Copper	ug/L	5.8J	24.2U		10
Lead	ug/L	2.7J	2.9U		10
Nickel	ug/L	7.0J	19.9U		10
Selenium	ug/L	1.7U	8.6U		10
Silver	ug/L	2.9U	14.5U		10
Zinc	ug/L	24.3J	89.9U		10

\* Indicates that the % Difference exceeds the control limit.  
No difference is calculated if either result is a non-detect.

FORM IX INORGANIC-1  
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Preparation Method: None Instrument ID: 10ICMC

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Arsenic	0.50	0.11	04/01/2022
Cadmium	0.080	0.031	04/01/2022
Chromium	2.0	0.14	04/01/2022
Copper	1.0	0.24	04/01/2022
Lead	0.50	0.029	04/01/2022
Nickel	0.50	0.20	04/01/2022
Selenium	0.50	0.086	04/01/2022
Silver	0.50	0.14	04/01/2022
Zinc	5.0	0.90	04/01/2022

FORM IX INORGANIC-2  
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Preparation Method: EPA 3050B Instrument ID: 10ICMC

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Arsenic	0.50	0.11	07/19/2021
Cadmium	0.080	0.031	07/19/2021
Chromium	2.0	0.14	07/19/2021
Copper	1.0	0.24	07/19/2021
Lead	0.50	0.029	07/19/2021
Nickel	0.50	0.20	07/19/2021
Selenium	0.50	0.086	07/19/2021
Silver	0.50	0.14	07/19/2021
Zinc	5.0	0.90	07/19/2021

FORM XI - INORGANIC-1  
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract : D3593500

Instrument ID: 10ICMC Effective Date:04/26/2022

<b>Analyte</b>	<b>Concentration (ug/L)</b>
Arsenic	450
Cadmium	450
Chromium	450
Copper	450
Lead	450
Nickel	450
Selenium	450
Silver	225
Zinc	450

FORM XII INORGANIC-1  
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Preparation Method: EPA 3050B Batch: MPRP 123945

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
4308596	4308596	05/03/2022	1.067	50
4308597	4308597	05/03/2022	1.016	50
4308598	4308598	05/03/2022	1.043	50
4308599	4308599	05/03/2022	1.017	50
10606046001	BNSF-SG13-042522-0-1.5	05/03/2022	1.039	50



FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Instrument ID: 10ICMC Analysis Method: EPA 6020B

Start Date: 05/05/2022 14:00 End Date: 05/05/2022 19:19

Sample Name	Lab Sample ID	D/F	Date	Time	Ag	As	Cd	Cr	Cu	Ni	Pb	Se	Zn
29907792CAL0	29907792CAL0	1	05/05/2022	14:00	X	X	X	X	X	X	X	X	X
29907793CAL1	29907793CAL1	1	05/05/2022	14:04	X	X	X	X	X	X	X	X	X
29907794CAL2	29907794CAL2	1	05/05/2022	14:08	X	X	X	X	X	X	X	X	X
29907795CAL3	29907795CAL3	1	05/05/2022	14:12	X	X	X	X	X	X	X	X	X
29907796CAL4	29907796CAL4	1	05/05/2022	14:16	X	X	X	X	X	X	X	X	X
29907797CAL5	29907797CAL5	1	05/05/2022	14:20	X	X	X	X	X	X	X	X	X
29907798CAL6	29907798CAL6	1	05/05/2022	14:24	X	X	X	X	X	X	X	X	X
29907799CAL7	29907799CAL7	1	05/05/2022	14:30	X	X	X	X	X	X	X	X	X
29907800ICV	29907800ICV	1	05/05/2022	14:38	X	X	X	X	X	X	X	X	X
29907801ICB	29907801ICB	1	05/05/2022	14:45	X	X	X	X	X	X	X	X	X
29907802CRDL	29907802CRDL	1	05/05/2022	14:49	X	X	X	X	X	X	X	X	X
29907803ICSA	29907803ICSA	1	05/05/2022	14:52	X	X	X	X	X	X	X	X	X
29907804ICSAB	29907804ICSAB	1	05/05/2022	14:56	X	X	X	X	X	X	X	X	X
29907805CCV	29907805CCV	1	05/05/2022	15:00	X	X	X	X	X	X	X	X	X
29907806CCB	29907806CCB	1	05/05/2022	15:04	X	X	X	X	X	X	X	X	X
29907807CCV	29907807CCV	1	05/05/2022	15:54	X	X	X	X	X	X	X	X	X
29907808CCB	29907808CCB	1	05/05/2022	15:58	X	X	X	X	X	X	X	X	X
29907809CRDL	29907809CRDL	1	05/05/2022	16:01	X	X	X	X	X	X	X	X	X
29907810CCV	29907810CCV	1	05/05/2022	16:31	X	X	X	X	X	X	X	X	X
29907811CCB	29907811CCB	1	05/05/2022	16:35	X	X	X	X	X	X	X	X	X
29907816CCV	29907816CCV	1	05/05/2022	18:32	X	X	X	X	X	X	X	X	X
29907817CCB	29907817CCB	1	05/05/2022	18:35	X	X	X	X	X	X	X	X	X
4308596BLANK	4308596	1	05/05/2022	18:39	X	X	X	X	X	X	X	X	X
4308597LCS	4308597	1	05/05/2022	18:43	X	X	X	X	X	X	X	X	X
BNSF-SG13-042522-0-1.5	10606046001	1	05/05/2022	18:46	X	X	X	X	X	X	X	X	X
4310748PDS	4310748	1	05/05/2022	18:50	X	X	X	X	X	X	X	X	X
4310749SD	4310749	5	05/05/2022	18:54	X	X	X	X	X	X	X	X	X
4308598MS	4308598	1	05/05/2022	18:57	X	X	X	X	X	X	X	X	X
4308599MSD	4308599	1	05/05/2022	19:01	X	X	X	X	X	X	X	X	X
29907818CCV	29907818CCV	1	05/05/2022	19:16	X	X	X	X	X	X	X	X	X
29907819CCB	29907819CCB	1	05/05/2022	19:19	X	X	X	X	X	X	X	X	X

# US EPA 200.8/6020 Tune Check Report

Acq/Data Batch  
Report Comment  
Instrument Name

D:\DATA\050522.b  
ICMC RJS  
G8403A SG19304531

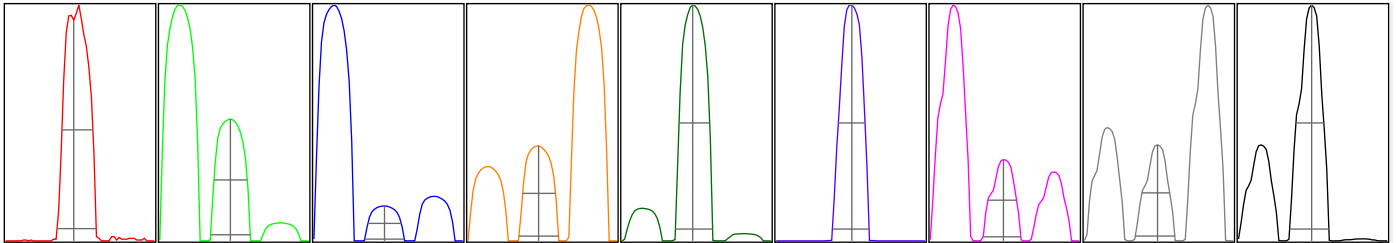
[He]

## Sensitivity

Mass	Count	RSD%	RSD%(Rqd)	RSD%(Flag)	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	32	3.980	5.000		32	34	32	30	32
24	17381	1.228	5.000		17688	17434	17423	17207	17151
25	2564	0.751	5.000		2598	2557	2557	2553	2554
26	3238	1.262	5.000		3277	3241	3253	3248	3169
59	10772	0.340	5.000		10728	10745	10819	10792	10774
115	314290	1.692	5.000		307624	312789	321564	312172	317299
206	9303	2.739	5.000		8910	9196	9397	9543	9470
207	7771	3.012	5.000		7420	7679	7810	7923	8022
208	19163	2.843	5.000		18361	18929	19249	19516	19760

Integration Time [sec] 0.1

## Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Required)	W-5% (Flag)
9	52.45	8.90	8.90 - 9.10		0.776	0.900	
24	27558.19	23.95	23.90 - 24.10		0.788	0.900	
25	4082.47	24.95	24.90 - 25.10		0.787	0.900	
26	5205.52	25.95	25.90 - 26.10		0.786	0.900	
59	18531.29	58.95	58.90 - 59.10		0.737	0.900	
115	603970.78	115.05	114.90 - 115.10		0.729	0.900	
206	17772.12	206.00	205.90 - 206.10		0.748	0.900	
207	15061.63	207.00	206.90 - 207.10		0.783	0.900	
208	37005.46	208.00	207.90 - 208.10		0.779	0.900	

Integration Time [sec] 0.1 Acquisition Time [sec] 212.5 Y Axis Linear

## Tune Parameters

### Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.78 L/min	Dilution Gas	0.15 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	7.0 mm	S/C Temp	2 °C		

### Lens Parameters

Extract 1	0.0 V	Omega Lens	14.2 V	Deflect	2.0 V
Extract 2	-210.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-115 V	Cell Exit	-70 V		

### Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

# US EPA 200.8/6020 Tune Check Report

Acq/Data Batch  
Report Comment  
Instrument Name

D:\DATA\050522.b  
ICMC RJS  
G8403A SG19304531

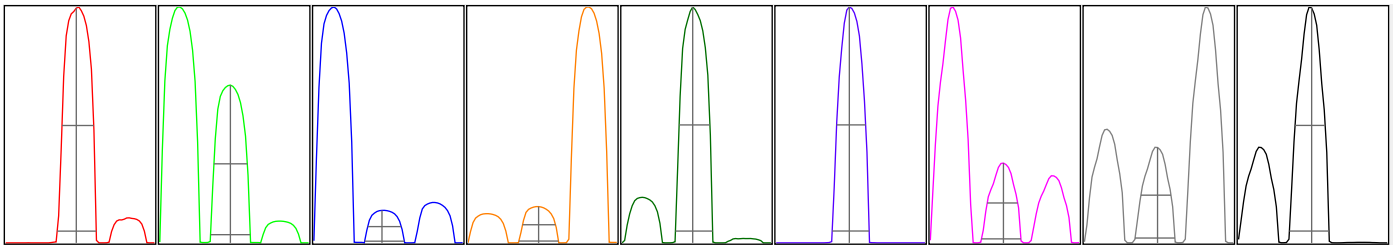
[H2]

## Sensitivity

Mass	Count	RSD%	RSD%(Rqd)	RSD%(Flag)	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	388	1.037	5.000		386	392	391	388	382
24	170556	0.215	5.000		170565	170093	170996	170819	170306
25	23566	0.264	5.000		23650	23612	23501	23534	23531
26	28720	0.304	5.000		28659	28869	28729	28672	28672
59	13407	0.868	5.000		13286	13310	13577	13431	13433
115	780988	1.088	5.000		768715	778567	780073	790978	786608
206	11188	1.818	5.000		10894	11121	11174	11423	11328
207	9412	1.737	5.000		9209	9326	9413	9648	9464
208	23147	1.881	5.000		22622	22817	23184	23693	23420

Integration Time [sec] 0.1

## Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Required)	W-5% (Flag)
9	638.80	8.95	8.90 - 9.10		0.775	0.900	
24	269211.28	23.95	23.90 - 24.10		0.788	0.900	
25	37076.22	24.90	24.90 - 25.10		0.788	0.900	
26	46087.69	25.95	25.90 - 26.10		0.786	0.900	
59	23134.16	58.95	58.90 - 59.10		0.737	0.900	
115	1433422.03	115.00	114.90 - 115.10		0.734	0.900	
206	20140.06	206.00	205.90 - 206.10		0.783	0.900	
207	16903.58	207.00	206.90 - 207.10		0.790	0.900	
208	41614.48	208.00	207.90 - 208.10		0.786	0.900	

Integration Time [sec] 0.1 Acquisition Time [sec] 212.5 Y Axis Linear

## Tune Parameters

### Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.78 L/min	Dilution Gas	0.15 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	7.0 mm	S/C Temp	2 °C		

### Lens Parameters

Extract 1	0.0 V	Omega Lens	14.2 V	Deflect	3.4 V
Extract 2	-210.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-115 V	Cell Exit	-70 V		

### Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	3.5 mL/min	OctP RF	200 V		

FORM XV INORGANIC-1  
INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Minnesota      SDG No. : 10606046      Contract: D3593500

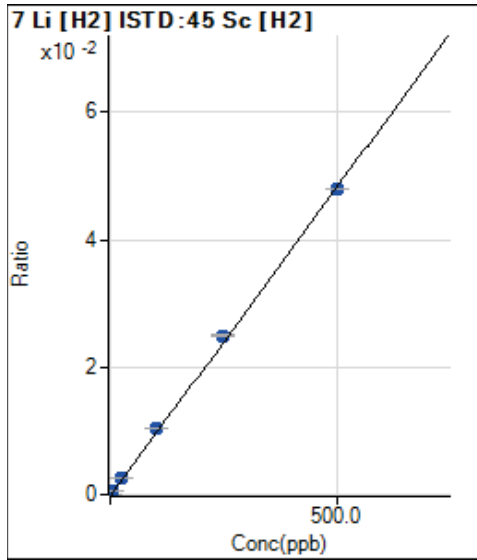
Instrument ID: 10ICMC      Start Date: 05/05/2022 14:00      End Date: 05/05/2022 19:19

Sample Name	Time	Ge-72	Ge-72-IS1	In-115	Ir-193-IS	Sc-45-IS	Sc-45-IS1	Tb-159
29907792CAL0	14:00	100.0	100.0	100.0	100.0	100.0	100.0	100.0
29907793CAL1	14:04	100.2	99.7	100.3	100.1	100.5	100.4	101.0
29907794CAL2	14:08	99.7	97.9	101.4	100.4	99.6	99.0	101.7
29907795CAL3	14:12	99.7	98.4	101.1	98.8	98.6	97.7	100.9
29907796CAL4	14:16	97.3	97.0	97.9	96.6	95.8	96.0	99.1
29907797CAL5	14:20	97.2	97.2	96.9	97.7	96.0	97.6	100.0
29907798CAL6	14:24	97.7	98.4	96.7	96.6	97.0	100.2	100.1
29907799CAL7	14:30	97.8	102.4	96.2	98.5	97.0	104.4	101.3
29907800ICV	14:38	105.3	104.6	106.5	105.6	104.1	104.3	106.4
29907801ICB	14:45	103.0	99.1	104.1	100.5	103.6	99.9	102.1
29907802CRDL	14:49	103.3	102.9	103.8	100.2	104.0	103.7	102.3
29907803ICSA	14:52	96.9	99.3	97.2	96.0	97.3	99.6	98.6
29907804ICSAB	14:56	99.7	102.3	97.6	97.2	99.4	102.7	100.3
29907805CCV	15:00	104.7	104.8	104.7	100.4	103.9	105.2	103.5
29907806CCB	15:04	103.6	104.9	103.3	101.0	103.2	105.2	102.6
29907807CCV	15:54	101.7	100.5	102.2	100.2	100.7	100.6	101.7
29907808CCB	15:58	100.5	100.5	101.9	100.4	99.9	101.1	101.2
29907809CRDL	16:01	100.3	101.2	101.2	100.8	99.9	102.0	101.7
29907810CCV	16:31	98.1	96.2	99.5	99.2	97.4	96.4	100.3
29907811CCB	16:35	97.9	96.7	100.1	99.8	96.7	97.3	100.0
29907816CCV	18:32	99.7	96.9	100.8	99.4	97.9	96.8	100.6
29907817CCB	18:35	96.5	97.1	98.7	98.9	94.8	96.5	99.2
4308596	18:39	94.6	96.4	97.6	98.6	93.1	96.2	98.6
4308597	18:43	95.3	95.6	97.0	97.3	93.7	94.5	98.8
BNSF-SG13-042522-0-	18:46	93.6	93.3	96.7	98.2	92.9	92.8	99.8
4310748	18:50	92.9	93.7	94.3	96.8	91.3	93.0	98.5
4310749	18:54	93.5	94.9	96.1	98.2	91.6	94.7	98.3
4308598	18:57	93.3	94.6	94.9	97.0	91.5	93.6	98.0
4308599	19:01	93.3	93.9	94.9	97.0	91.3	93.2	98.4
29907818CCV	19:16	96.7	94.9	99.0	99.1	93.8	94.5	100.0
29907819CCB	19:19	95.0	95.6	98.0	99.2	93.1	95.1	99.0

Calibration for 182SMPL.d

Batch Folder: D:\DATA\050522B\  
 Analysis File: 050522B.batch.bin  
 DA Date-Time: 05/06/22 01:09:42  
 Calibration Title:  
 Calibration Method: External Calibration  
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	005CALB.d	CAL0	05/05/22 14:00:47
2	006CAL.S.d	CAL1	05/05/22 14:04:58
3	007CAL.S.d	CAL2	05/05/22 14:08:51
4	008CAL.S.d	CAL3	05/05/22 14:12:44
5	009CAL.S.d	CAL4	05/05/22 14:16:36
6	010CAL.S.d	CAL5	05/05/22 14:20:26
7	011CAL.S.d	CAL6	05/05/22 14:24:12
8	012CAL.S.d	CAL7	05/05/22 14:30:29



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	69.17	0.0000	P	2.4	
2	<input type="checkbox"/>	0.500	0.570	342.83	0.0001	P	3.1	14.1
3	<input type="checkbox"/>	5.000	5.551	2692.41	0.0006	P	1.9	11.0
4	<input type="checkbox"/>	25.000	27.750	13005.57	0.0027	P	1.2	11.0
5	<input type="checkbox"/>	100.000	107.666	49396.59	0.0105	P	0.5	7.7
6	<input type="checkbox"/>	250.000	257.478	120037.24	0.0250	P	0.6	3.0
7	<input type="checkbox"/>	500.000	494.585	236761.79	0.0480	P	0.3	-1.1
8	<input type="checkbox"/>			206.00	0.0000	P	3.9	

$y = 9.6949E-005 * x + 1.4045E-005$

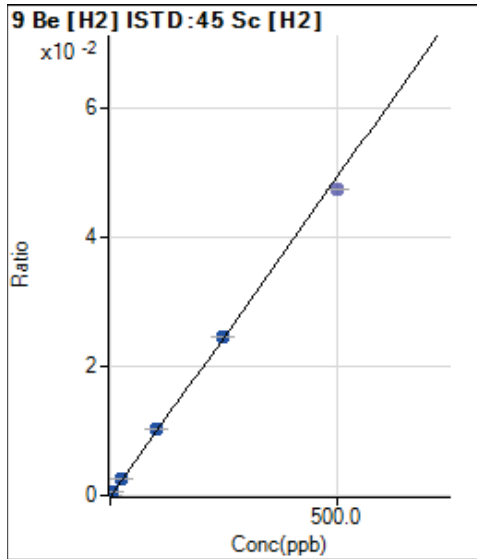
R = 0.9997

DL = 0.01064 ppb

BEC = 0.1449 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	11.33	0.0000	P	10.9	
2	<input type="checkbox"/>	0.200	0.218	118.00	0.0000	P	4.3	8.9
3	<input type="checkbox"/>	5.000	5.389	2614.23	0.0005	P	1.3	7.8
4	<input type="checkbox"/>	25.000	27.060	12903.98	0.0027	P	0.2	8.2
5	<input type="checkbox"/>	100.000	103.524	48481.78	0.0103	P	0.6	3.5
6	<input type="checkbox"/>	250.000	248.377	118275.01	0.0246	P	0.6	-0.6
7	<input checked="" type="checkbox"/>	500.000		234246.43	0.0475	P	0.4	
8	<input type="checkbox"/>			110.50	0.0000	P	9.3	

$y = 9.9073E-005 * x + 2.3009E-006$

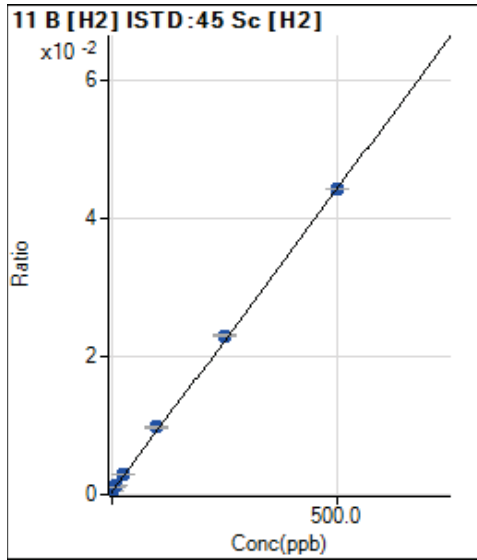
R = 0.9998

DL = 0.007579 ppb

BEC = 0.02322 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2723.41	0.0006	P	1.0	
2	<input type="checkbox"/>	10.000	10.174	7157.03	0.0014	P	1.3	1.7
3	<input type="checkbox"/>	5.000	4.828	4766.42	0.0010	P	1.0	-3.4
4	<input type="checkbox"/>	25.000	26.375	13814.63	0.0029	P	0.5	5.5
5	<input type="checkbox"/>	100.000	104.443	46020.89	0.0097	P	0.8	4.4
6	<input type="checkbox"/>	250.000	255.114	110483.09	0.0230	P	0.5	2.0
7	<input type="checkbox"/>	500.000	496.484	218257.26	0.0442	P	0.3	-0.7
8	<input type="checkbox"/>			3142.16	0.0006	P	1.3	

$y = 8.7942E-005 * x + 5.5300E-004$

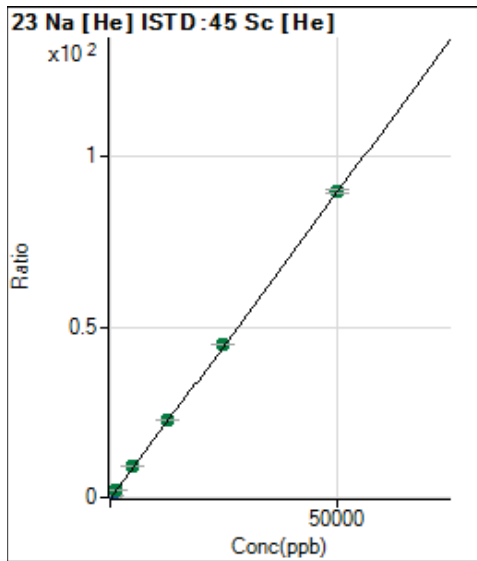
R = 0.9999

DL = 0.1882 ppb

BEC = 6.288 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	11617.92	0.0189	P	3.0	
2	<input type="checkbox"/>	50.000	54.912	72749.51	0.1175	P	0.5	9.8
3	<input type="checkbox"/>	250.000	273.745	313328.63	0.5108	P	0.6	9.5
4	<input type="checkbox"/>	1250.000	1327.663	1461048.57	2.4046	A	0.6	6.2
5	<input type="checkbox"/>	5000.000	5176.978	5504088.04	9.3216	A	0.6	3.5
6	<input type="checkbox"/>	12500.00	12630.31	13428051.88	22.7148	A	0.5	1.0
7	<input type="checkbox"/>	25000.00	24943.71	26802559.60	44.8413	A	0.3	-0.2
8	<input type="checkbox"/>	50000.00	49975.80	53685932.54	89.8225	A	0.7	0.0

$y = 0.0018 * x + 0.0189$

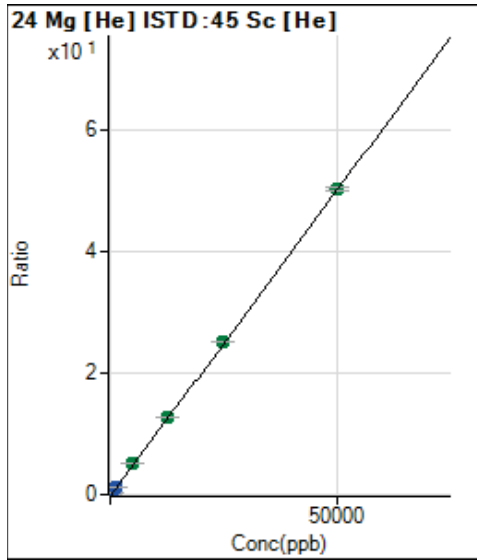
R = 1.0000

DL = 0.9502 ppb

BEC = 10.5 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	1505.09	0.0024	P	5.5	
2	<input type="checkbox"/>	30.000	30.796	20747.84	0.0335	P	0.4	2.7
3	<input type="checkbox"/>	250.000	267.572	167147.16	0.2725	P	1.4	7.0
4	<input type="checkbox"/>	1250.000	1335.586	820443.22	1.3503	P	1.2	6.8
5	<input type="checkbox"/>	5000.000	5205.856	3103459.33	5.2560	A	1.0	4.1
6	<input type="checkbox"/>	12500.00	12657.76	7552746.76	12.7762	A	0.8	1.3
7	<input type="checkbox"/>	25000.00	24937.59	15043746.45	25.1685	A	0.3	-0.2
8	<input type="checkbox"/>	50000.00	49968.94	30140342.88	50.4291	A	0.9	-0.1

$y = 0.0010 * x + 0.0024$

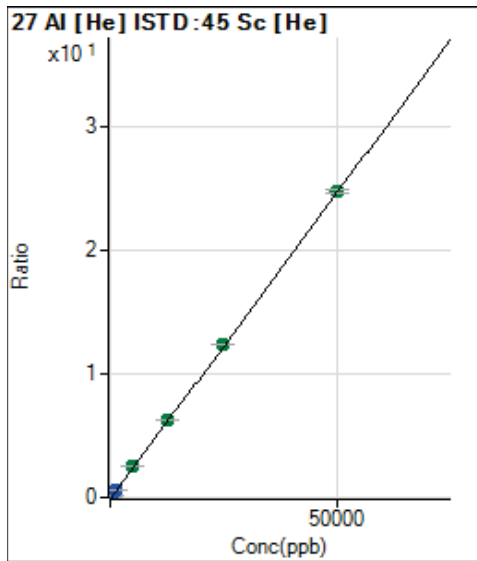
R = 1.0000

DL = 0.3965 ppb

BEC = 2.421 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	74.67	0.0001	P	16.0	
2	<input type="checkbox"/>	30.000	31.547	9736.18	0.0157	P	0.5	5.2
3	<input type="checkbox"/>	250.000	266.007	80812.17	0.1317	P	0.6	6.4
4	<input type="checkbox"/>	1250.000	1328.054	399322.79	0.6572	P	0.8	6.2
5	<input type="checkbox"/>	5000.000	5190.920	1516561.69	2.5684	A	1.0	3.8
6	<input type="checkbox"/>	12500.00	12622.33	3691954.00	6.2453	A	0.6	1.0
7	<input type="checkbox"/>	25000.00	24899.74	7363820.67	12.3198	A	0.2	-0.4
8	<input type="checkbox"/>	50000.00	49998.42	14785661.67	24.7379	A	0.7	0.0

$y = 4.9477E-004 * x + 1.2136E-004$

R = 1.0000

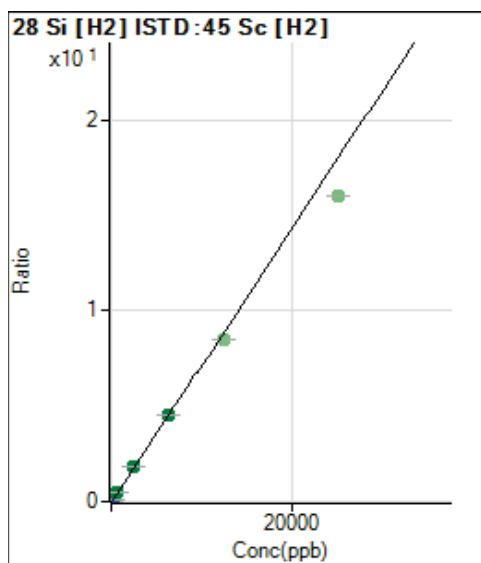
DL = 0.1178 ppb

BEC = 0.2453 ppb

Weight: <None>

Min Conc: <None>





	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	14225.96	0.0029	P	7.3	
2	<input type="checkbox"/>	100.000	101.004	375014.95	0.0759	P	0.8	1.0
3	<input type="checkbox"/>	125.000	131.108	475924.05	0.0976	P	0.5	4.9
4	<input type="checkbox"/>	625.000	662.551	2315872.83	0.4815	A	0.4	6.0
5	<input type="checkbox"/>	2500.000	2573.561	8800586.00	1.8622	A	0.4	2.9
6	<input type="checkbox"/>	6250.000	6216.682	21599221.33	4.4941	A	0.1	-0.5
7	<input checked="" type="checkbox"/>	12500.00		41976410.67	8.5037	A	0.3	
8	<input checked="" type="checkbox"/>	25000.00		82245138.67	16.0017	A	0.4	

$y = 7.2245E-004 * x + 0.0029$

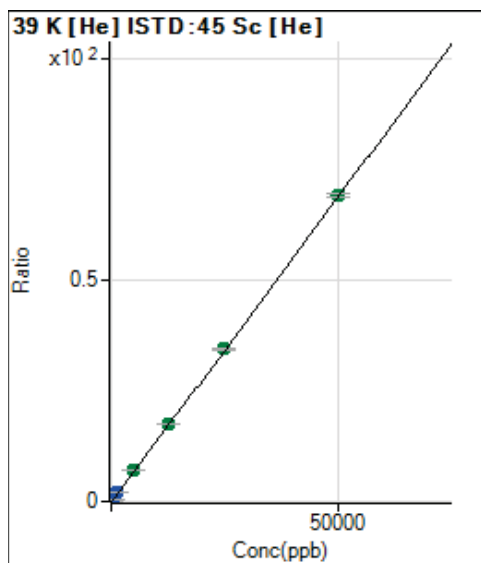
R = 0.9999

DL = 0.8751 ppb

BEC = 3.998 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	75312.55	0.1223	P	1.1	
2	<input type="checkbox"/>	100.000	104.237	164780.86	0.2662	P	0.4	4.2
3	<input type="checkbox"/>	250.000	262.809	297669.74	0.4852	P	0.5	5.1
4	<input type="checkbox"/>	1250.000	1311.465	1174865.04	1.9336	P	0.7	4.9
5	<input type="checkbox"/>	5000.000	5109.309	4239085.41	7.1792	A	0.3	2.2
6	<input type="checkbox"/>	12500.00	12497.62	10276584.22	17.3838	A	0.4	0.0
7	<input type="checkbox"/>	25000.00	24843.86	20583217.61	34.4362	A	0.6	-0.6
8	<input type="checkbox"/>	50000.00	50066.12	41403626.88	69.2728	A	0.7	0.1

$y = 0.0014 * x + 0.1223$

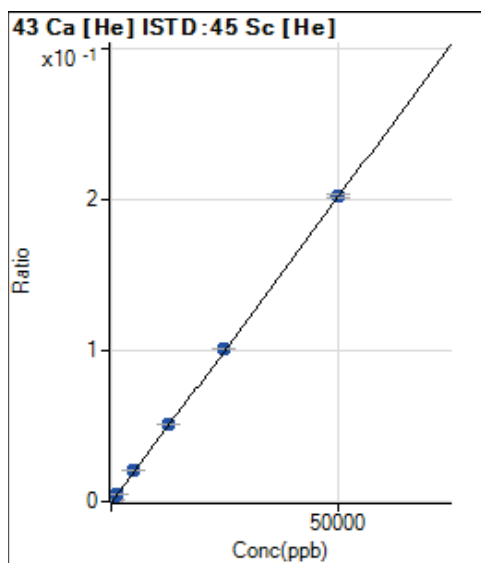
R = 1.0000

DL = 2.845 ppb

BEC = 88.52 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	18.58	0.0000	P	15.5	
2	<input type="checkbox"/>	100.000	91.410	248.27	0.0004	P	2.4	-8.6
3	<input type="checkbox"/>	250.000	255.191	653.74	0.0011	P	2.7	2.1
4	<input type="checkbox"/>	1250.000	1307.466	3242.15	0.0053	P	1.4	4.6
5	<input type="checkbox"/>	5000.000	5154.959	12369.54	0.0209	P	0.3	3.1
6	<input type="checkbox"/>	12500.00	12614.91	30279.45	0.0512	P	0.5	0.9
7	<input type="checkbox"/>	25000.00	25012.04	60684.82	0.1015	P	0.3	0.0
8	<input type="checkbox"/>	50000.00	49948.30	121160.93	0.2027	P	0.8	-0.1

$y = 4.0579E-006 * x + 3.0198E-005$

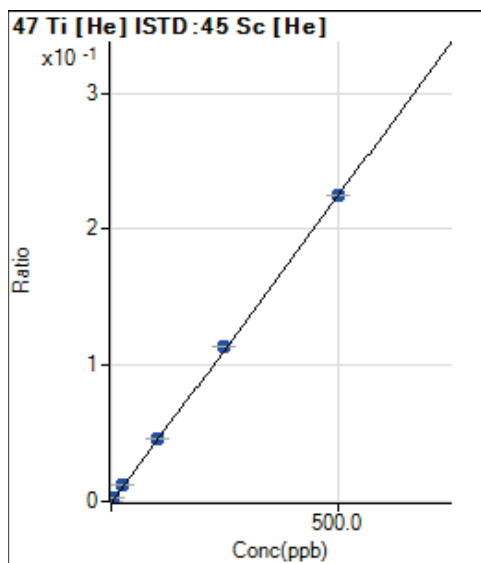
R = 1.0000

DL = 3.451 ppb

BEC = 7.442 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	1.00	0.0000	P	99.6	
2	<input type="checkbox"/>	1.000	1.046	293.33	0.0005	P	7.2	4.6
3	<input type="checkbox"/>	5.000	5.055	1400.74	0.0023	P	1.1	1.1
4	<input type="checkbox"/>	25.000	25.812	7080.04	0.0117	P	0.7	3.2
5	<input type="checkbox"/>	100.000	102.608	27348.28	0.0463	P	1.3	2.6
6	<input type="checkbox"/>	250.000	252.265	67315.52	0.1139	P	0.7	0.9
7	<input type="checkbox"/>	500.000	498.305	134443.93	0.2249	P	0.6	-0.3
8	<input type="checkbox"/>			617.35	0.0010	P	6.0	

$y = 4.5138E-004 * x + 1.6100E-006$

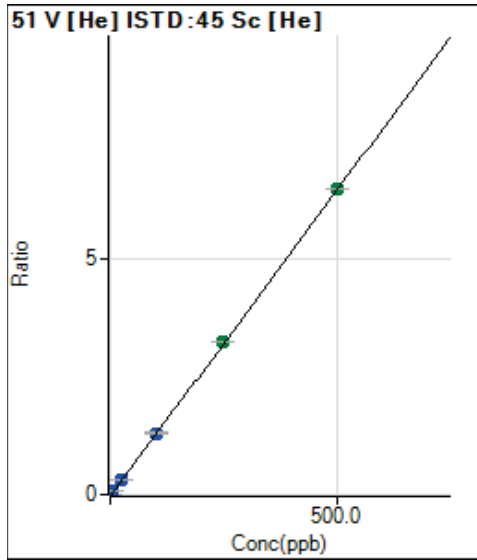
R = 1.0000

DL = 0.01066 ppb

BEC = 0.003567 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	-545.49	-0.0009	P	-55.	
2	<input type="checkbox"/>	1.000	0.964	7174.13	0.0116	P	3.2	-3.6
3	<input type="checkbox"/>	5.000	4.951	38779.29	0.0632	P	1.8	-1.0
4	<input type="checkbox"/>	25.000	25.272	198281.70	0.3263	P	1.5	1.1
5	<input type="checkbox"/>	100.000	100.638	768869.44	1.3022	P	1.0	0.6
6	<input type="checkbox"/>	250.000	250.650	1917993.61	3.2445	A	0.4	0.3
7	<input type="checkbox"/>	500.000	499.535	3865500.57	6.4670	A	0.2	-0.1
8	<input type="checkbox"/>			569.86	0.0010	P	66.7	

$y = 0.0129 * x - 8.8522E-004$

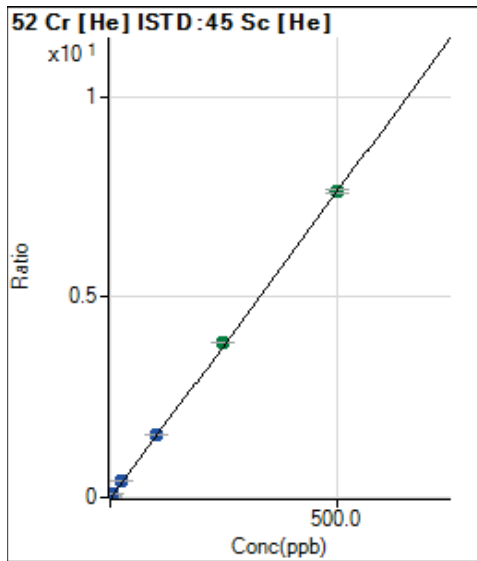
R = 1.0000

DL = 0.1133 ppb

BEC = -0.06837 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2675.59	0.0043	P	1.3	
2	<input type="checkbox"/>	2.000	2.070	22315.70	0.0361	P	1.1	3.5
3	<input type="checkbox"/>	5.000	5.127	50847.03	0.0829	P	0.4	2.5
4	<input type="checkbox"/>	25.000	26.063	245244.40	0.4036	P	0.7	4.3
5	<input type="checkbox"/>	100.000	102.596	930663.94	1.5761	P	0.5	2.6
6	<input type="checkbox"/>	250.000	252.669	2290941.67	3.8753	A	0.1	1.1
7	<input type="checkbox"/>	500.000	498.092	4563740.50	7.6353	A	0.7	-0.4
8	<input type="checkbox"/>			5359.66	0.0090	P	1.5	

$y = 0.0153 * x + 0.0043$

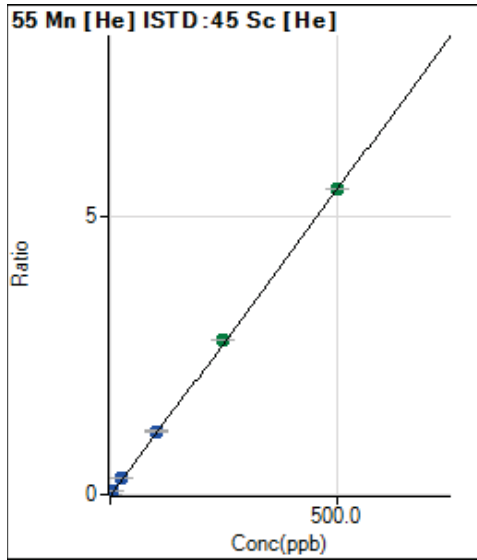
R = 1.0000

DL = 0.01089 ppb

BEC = 0.2835 ppb

Weight: <None>

Min Conc: <None>



	R <sub>j</sub> c <sub>t</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	328.67	0.0005	P	17.5	
2	<input type="checkbox"/>	0.500	0.532	3968.55	0.0064	P	0.9	6.4
3	<input type="checkbox"/>	5.000	5.144	35192.16	0.0574	P	0.8	2.9
4	<input type="checkbox"/>	25.000	26.387	177464.35	0.2921	P	0.7	5.5
5	<input type="checkbox"/>	100.000	103.521	675671.75	1.1443	P	0.9	3.5
6	<input type="checkbox"/>	250.000	251.138	1640630.33	2.7753	A	0.1	0.5
7	<input type="checkbox"/>	500.000	498.656	3293457.58	5.5100	A	0.4	-0.3
8	<input type="checkbox"/>			4648.75	0.0078	P	2.1	

$y = 0.0110 * x + 5.3327E-004$

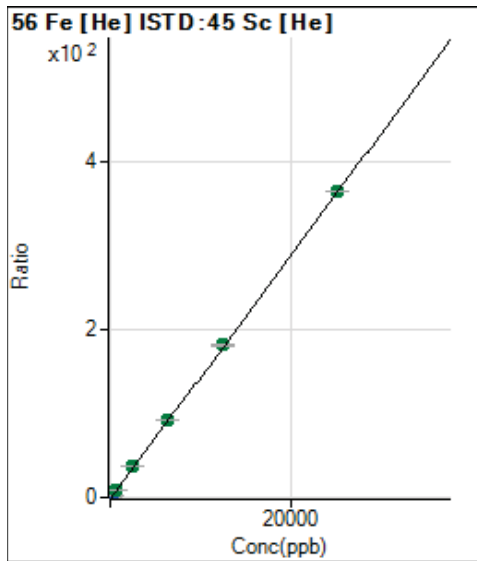
R = 1.0000

DL = 0.02538 ppb

BEC = 0.04827 ppb

Weight: <None>

Min Conc: <None>



	R <sub>j</sub> c <sub>t</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	11110.90	0.0180	P	1.7	
2	<input type="checkbox"/>	50.000	51.316	475039.19	0.7675	P	0.1	2.6
3	<input type="checkbox"/>	125.000	129.349	1169914.83	1.9071	P	0.0	3.5
4	<input type="checkbox"/>	625.000	652.570	5801662.33	9.5486	A	0.5	4.4
5	<input type="checkbox"/>	2500.000	2563.759	22119012.00	37.4607	A	1.2	2.6
6	<input type="checkbox"/>	6250.000	6296.522	54372749.33	91.9763	A	0.2	0.7
7	<input type="checkbox"/>	12500.00	12450.88	108700666.6	181.858	A	0.4	-0.4
8	<input type="checkbox"/>	25000.00	25005.83	218289456.0	365.218	A	0.6	0.0

$y = 0.0146 * x + 0.0180$

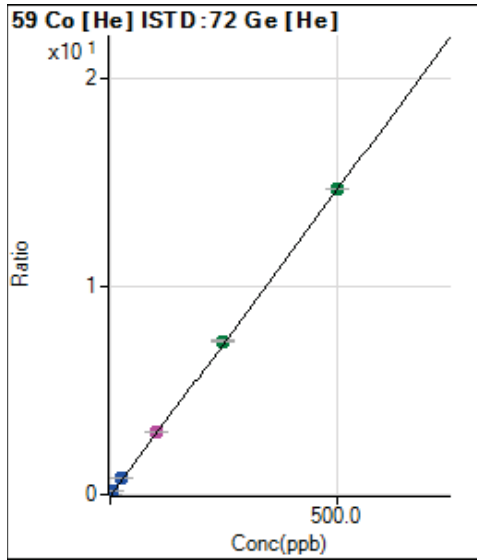
R = 1.0000

DL = 0.06386 ppb

BEC = 1.235 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	50.67	0.0001	P	29.2	
2	<input type="checkbox"/>	0.500	0.543	8150.29	0.0161	P	1.1	8.6
3	<input type="checkbox"/>	5.000	5.290	78571.37	0.1556	P	1.4	5.8
4	<input type="checkbox"/>	25.000	26.266	389765.90	0.7721	P	0.2	5.1
5	<input type="checkbox"/>	100.000	102.078	1478749.50	3.0004	M	0.3	2.1
6	<input type="checkbox"/>	250.000	250.819	3629996.00	7.3722	A	0.4	0.3
7	<input type="checkbox"/>	500.000	499.109	7260329.33	14.6700	A	0.4	-0.2
8	<input type="checkbox"/>			10325.67	0.0208	P	0.1	

$y = 0.0294 * x + 9.9901E-005$

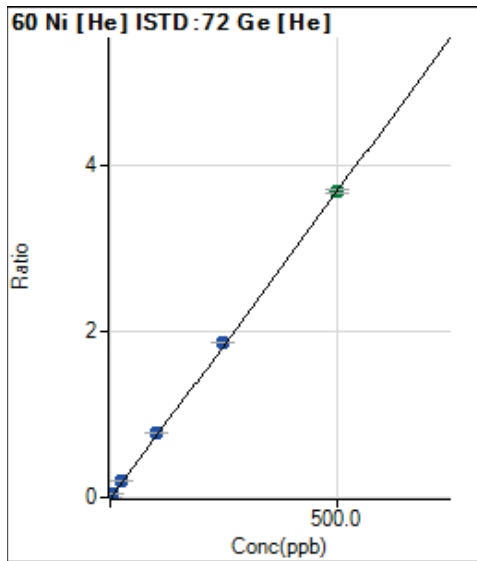
R = 1.0000

DL = 0.002978 ppb

BEC = 0.003399 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	209.33	0.0004	P	10.0	
2	<input type="checkbox"/>	0.500	0.564	2332.86	0.0046	P	4.2	12.8
3	<input type="checkbox"/>	5.000	5.373	20326.16	0.0403	P	1.7	7.5
4	<input type="checkbox"/>	25.000	26.783	100450.04	0.1990	P	1.0	7.1
5	<input type="checkbox"/>	100.000	103.946	380044.03	0.7711	P	0.1	3.9
6	<input type="checkbox"/>	250.000	252.577	922296.17	1.8731	P	0.5	1.0
7	<input type="checkbox"/>	500.000	497.829	1826945.79	3.6915	A	0.8	-0.4
8	<input type="checkbox"/>			4897.50	0.0099	P	0.6	

$y = 0.0074 * x + 4.1332E-004$

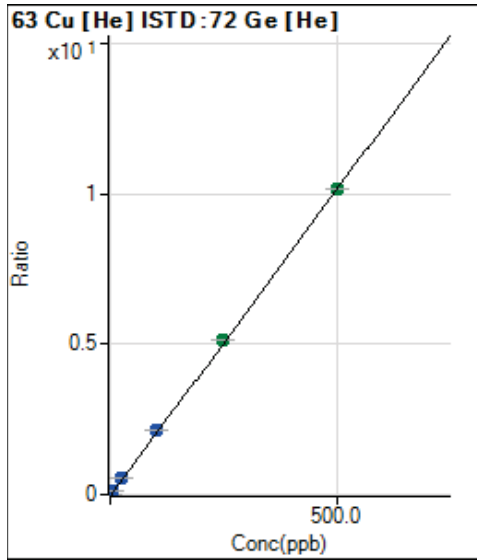
R = 1.0000

DL = 0.01678 ppb

BEC = 0.05575 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	206.00	0.0004	P	13.2	
2	<input type="checkbox"/>	1.000	1.066	11252.36	0.0222	P	1.1	6.6
3	<input type="checkbox"/>	5.000	5.392	55776.27	0.1104	P	0.7	7.8
4	<input type="checkbox"/>	25.000	26.915	277461.10	0.5496	P	0.7	7.7
5	<input type="checkbox"/>	100.000	104.049	1046647.69	2.1236	P	0.2	4.0
6	<input type="checkbox"/>	250.000	252.387	2536119.92	5.1506	A	0.5	1.0
7	<input type="checkbox"/>	500.000	497.897	5028514.00	10.1605	A	0.3	-0.4
8	<input type="checkbox"/>			3675.14	0.0074	P	3.3	

$y = 0.0204 * x + 4.0712E-004$

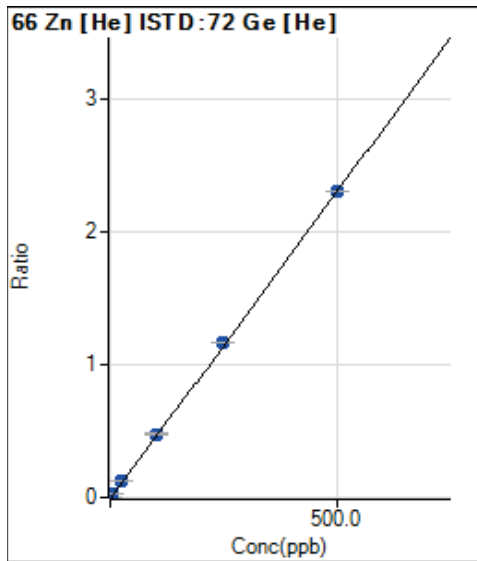
R = 1.0000

DL = 0.007879 ppb

BEC = 0.01995 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	172.00	0.0003	P	16.7	
2	<input type="checkbox"/>	5.000	5.213	12397.97	0.0244	P	1.6	4.3
3	<input type="checkbox"/>	5.000	5.401	12774.30	0.0253	P	1.2	8.0
4	<input type="checkbox"/>	25.000	26.532	62051.74	0.1229	P	1.2	6.1
5	<input type="checkbox"/>	100.000	103.237	235249.33	0.4773	P	0.4	3.2
6	<input type="checkbox"/>	250.000	252.692	575035.40	1.1678	P	0.2	1.1
7	<input type="checkbox"/>	500.000	497.924	1138726.33	2.3009	P	0.4	-0.4
8	<input type="checkbox"/>			4655.42	0.0094	P	2.2	

$y = 0.0046 * x + 3.3981E-004$

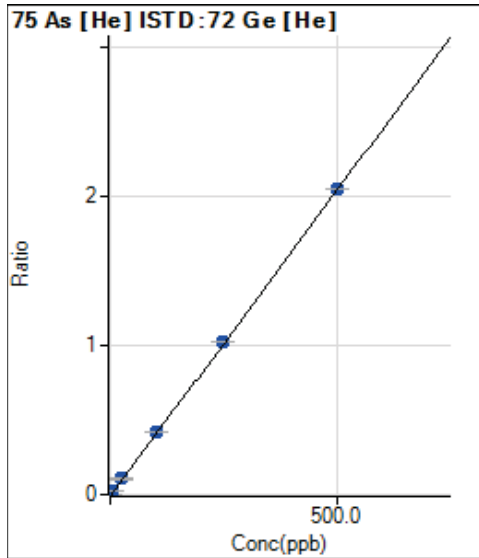
R = 1.0000

DL = 0.03677 ppb

BEC = 0.07355 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	189.50	0.0004	P	2.4	
2	<input type="checkbox"/>	0.500	0.500	1228.55	0.0024	P	2.3	0.0
3	<input type="checkbox"/>	5.000	5.028	10584.53	0.0210	P	1.2	0.6
4	<input type="checkbox"/>	25.000	25.564	53018.65	0.1050	P	0.6	2.3
5	<input type="checkbox"/>	100.000	101.186	204340.91	0.4146	P	0.1	1.2
6	<input type="checkbox"/>	250.000	249.852	503822.59	1.0232	P	0.3	-0.1
7	<input type="checkbox"/>	500.000	499.809	1012823.79	2.0465	P	0.6	0.0
8	<input type="checkbox"/>			442.84	0.0009	P	4.8	

$y = 0.0041 * x + 3.7408E-004$

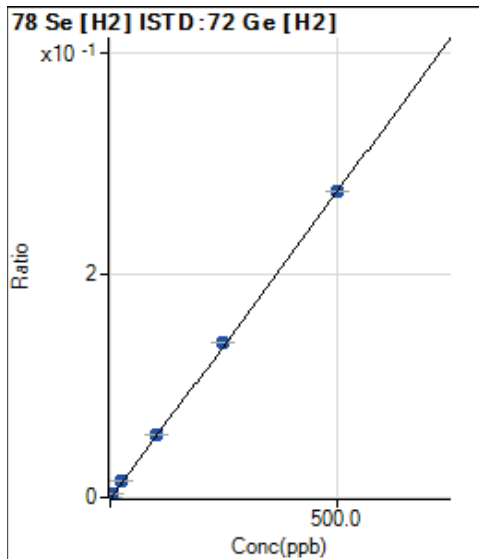
R = 1.0000

DL = 0.006542 ppb

BEC = 0.09138 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	32.00	0.0000	P	25.3	
2	<input type="checkbox"/>	0.500	0.509	509.34	0.0003	P	4.2	1.7
3	<input type="checkbox"/>	5.000	5.097	4732.45	0.0028	P	3.6	1.9
4	<input type="checkbox"/>	25.000	26.107	24239.31	0.0144	P	1.2	4.4
5	<input type="checkbox"/>	100.000	102.777	93916.93	0.0568	P	0.7	2.8
6	<input type="checkbox"/>	250.000	252.014	230721.32	0.1392	P	1.0	0.8
7	<input type="checkbox"/>	500.000	498.381	462185.38	0.2752	P	0.6	-0.3
8	<input type="checkbox"/>			145.67	0.0001	P	9.6	

$y = 5.5216E-004 * x + 1.8752E-005$

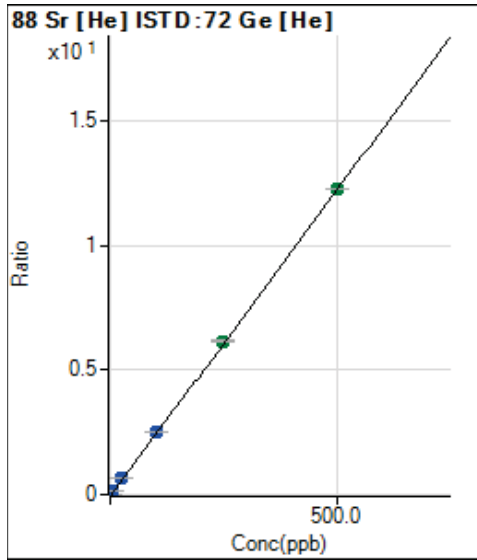
R = 1.0000

DL = 0.02581 ppb

BEC = 0.03396 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	138.33	0.0003	P	8.9	
2	<input type="checkbox"/>	0.500	0.518	6604.92	0.0130	P	2.1	3.6
3	<input type="checkbox"/>	5.000	5.085	63301.29	0.1253	P	0.6	1.7
4	<input type="checkbox"/>	25.000	25.759	319934.23	0.6338	P	0.5	3.0
5	<input type="checkbox"/>	100.000	101.918	1235504.55	2.5069	P	0.3	1.9
6	<input type="checkbox"/>	250.000	250.738	3036539.75	6.1670	A	0.4	0.3
7	<input type="checkbox"/>	500.000	499.208	6076409.70	12.2779	A	0.6	-0.2
8	<input type="checkbox"/>			6846.69	0.0138	P	1.6	

$y = 0.0246 * x + 2.7322E-004$

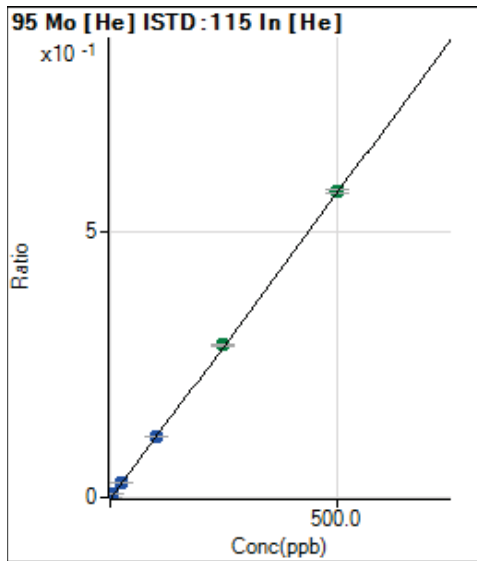
R = 1.0000

DL = 0.002981 ppb

BEC = 0.01111 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	16.00	0.0000	P	38.2	
2	<input type="checkbox"/>	0.500	0.491	3365.08	0.0006	P	2.6	-1.8
3	<input type="checkbox"/>	5.000	4.859	33521.30	0.0056	P	1.5	-2.8
4	<input type="checkbox"/>	25.000	24.835	170709.22	0.0286	P	0.3	-0.7
5	<input type="checkbox"/>	100.000	99.222	660535.22	0.1141	P	0.1	-0.8
6	<input type="checkbox"/>	250.000	249.121	1641511.92	0.2864	A	0.5	-0.4
7	<input type="checkbox"/>	500.000	500.605	3289417.75	0.5755	A	0.8	0.1
8	<input type="checkbox"/>			880.03	0.0002	P	12.9	

$y = 0.0011 * x + 2.7104E-006$

R = 1.0000

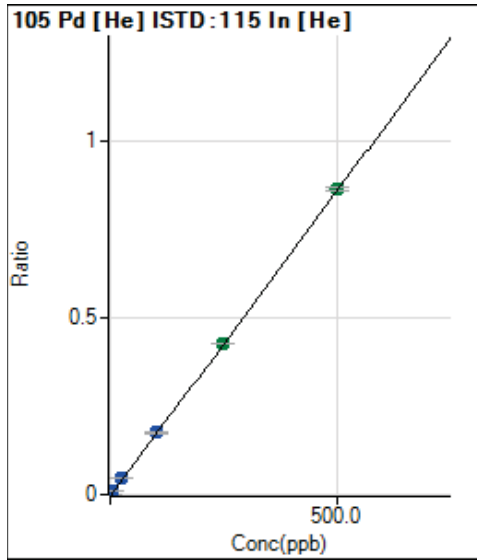
DL = 0.002699 ppb

BEC = 0.002358 ppb

Weight: <None>

Min Conc: <None>





	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	220.00	0.0000	P	22.0	
2	<input type="checkbox"/>	0.500	0.526	5604.49	0.0009	P	2.4	5.3
3	<input type="checkbox"/>	5.000	4.852	50394.73	0.0084	P	2.1	-3.0
4	<input type="checkbox"/>	25.000	25.895	267167.81	0.0447	P	1.0	3.6
5	<input type="checkbox"/>	100.000	101.785	1016464.21	0.1755	P	1.9	1.8
6	<input type="checkbox"/>	250.000	247.386	2445103.24	0.4266	A	0.7	-1.0
7	<input type="checkbox"/>	500.000	500.907	4937042.01	0.8638	A	0.9	0.2
8	<input type="checkbox"/>			996.71	0.0002	P	7.5	

$y = 0.0017 * x + 3.7211E-005$

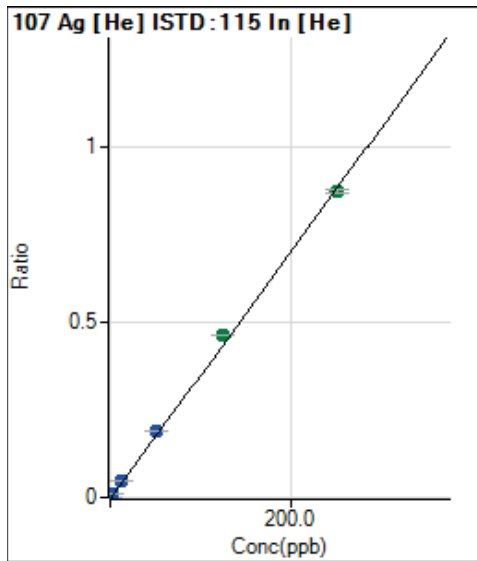
R = 1.0000

DL = 0.01424 ppb

BEC = 0.02158 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	98.33	0.0000	P	42.2	
2	<input type="checkbox"/>	0.500	0.410	8716.06	0.0015	P	3.6	-18.
3	<input type="checkbox"/>	2.500	2.348	50021.89	0.0083	P	5.7	-6.1
4	<input type="checkbox"/>	12.500	13.214	280265.36	0.0469	P	1.9	5.7
5	<input type="checkbox"/>	50.000	52.877	1085834.09	0.1875	P	0.7	5.8
6	<input type="checkbox"/>	125.000	131.053	2663674.86	0.4647	A	0.3	4.8
7	<input type="checkbox"/>	250.000	246.364	4993671.49	0.8736	A	1.0	-1.5
8	<input type="checkbox"/>			1898.48	0.0003	P	5.3	

$y = 0.0035 * x + 1.6627E-005$

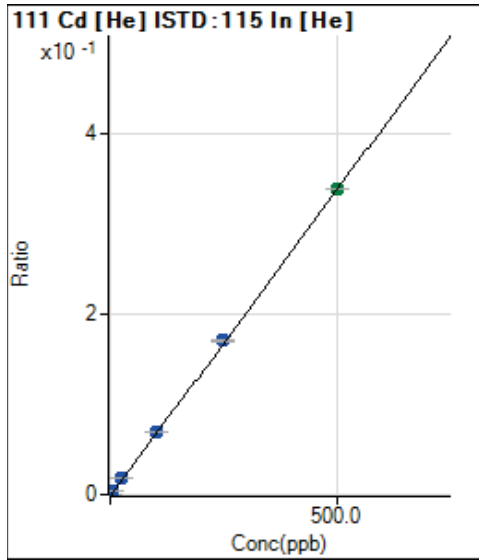
R = 0.9995

DL = 0.005932 ppb

BEC = 0.004689 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	12.67	0.0000	P	12.7	
2	<input type="checkbox"/>	0.080	0.082	342.06	0.0001	P	8.0	2.2
3	<input type="checkbox"/>	5.000	5.044	20542.22	0.0034	P	2.0	0.9
4	<input type="checkbox"/>	25.000	25.660	104116.97	0.0174	P	0.4	2.6
5	<input type="checkbox"/>	100.000	102.445	402567.45	0.0695	P	0.7	2.4
6	<input type="checkbox"/>	250.000	251.358	977670.18	0.1706	P	0.4	0.5
7	<input type="checkbox"/>	500.000	498.799	1934720.32	0.3385	A	0.4	-0.2
8	<input type="checkbox"/>			248.84	0.0000	P	10.3	

$y = 6.7861E-004 * x + 2.1432E-006$

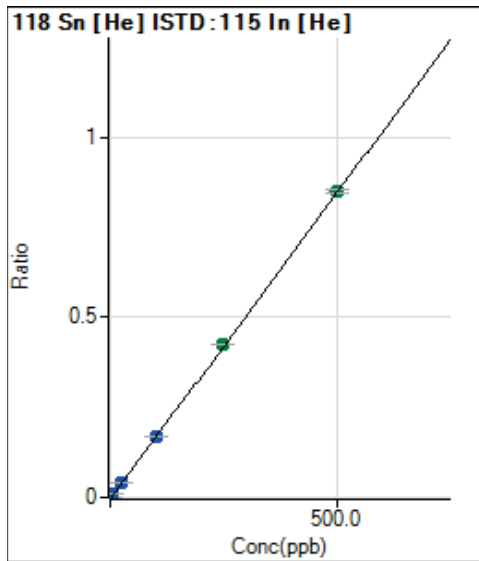
R = 1.0000

DL = 0.001201 ppb

BEC = 0.003158 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	68.33	0.0000	P	22.3	
2	<input type="checkbox"/>	0.500	0.494	5057.62	0.0009	P	2.0	-1.1
3	<input type="checkbox"/>	5.000	4.861	49672.67	0.0083	P	0.4	-2.8
4	<input type="checkbox"/>	25.000	24.937	253709.19	0.0424	P	1.2	-0.3
5	<input type="checkbox"/>	100.000	100.249	987674.79	0.1706	P	0.2	0.2
6	<input type="checkbox"/>	250.000	249.712	2435109.29	0.4248	A	0.4	-0.1
7	<input type="checkbox"/>	500.000	500.099	4862804.20	0.8508	A	1.4	0.0
8	<input type="checkbox"/>			20745.47	0.0036	P	1.1	

$y = 0.0017 * x + 1.1556E-005$

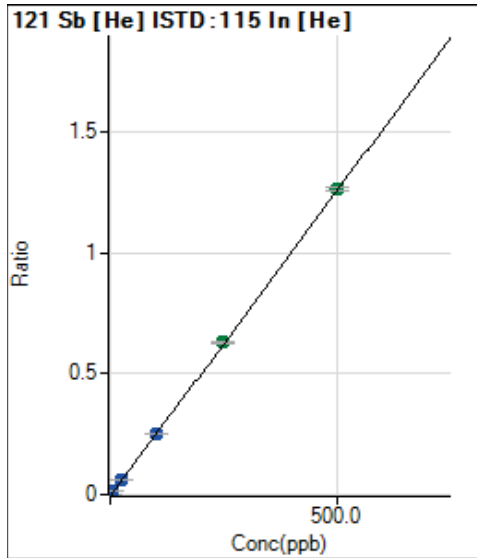
R = 1.0000

DL = 0.004544 ppb

BEC = 0.006793 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	56.67	0.0000	P	56.9	
2	<input type="checkbox"/>	0.500	0.517	7812.24	0.0013	P	0.8	3.3
3	<input type="checkbox"/>	5.000	4.866	73912.66	0.0123	P	1.7	-2.7
4	<input type="checkbox"/>	25.000	24.737	374306.86	0.0626	P	1.1	-1.1
5	<input type="checkbox"/>	100.000	99.418	1456899.36	0.2516	P	0.2	-0.6
6	<input type="checkbox"/>	250.000	249.192	3614447.13	0.6306	A	0.5	-0.3
7	<input type="checkbox"/>	500.000	500.535	7239419.48	1.2667	A	1.4	0.1
8	<input type="checkbox"/>			2730.29	0.0005	P	9.9	

$y = 0.0025 * x + 9.5587E-006$

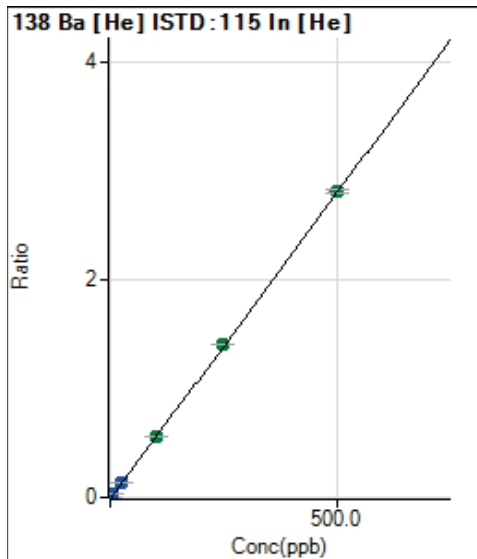
R = 1.0000

DL = 0.006452 ppb

BEC = 0.003777 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	118.33	0.0000	P	19.6	
2	<input type="checkbox"/>	0.300	0.311	10474.04	0.0018	P	1.3	3.5
3	<input type="checkbox"/>	5.000	4.932	166368.26	0.0277	P	1.8	-1.4
4	<input type="checkbox"/>	25.000	25.006	840336.87	0.1406	P	0.7	0.0
5	<input type="checkbox"/>	100.000	99.447	3236489.01	0.5589	A	0.5	-0.6
6	<input type="checkbox"/>	250.000	250.098	8056243.21	1.4056	A	0.8	0.0
7	<input type="checkbox"/>	500.000	500.062	16062892.26	2.8104	A	1.0	0.0
8	<input type="checkbox"/>			3400.45	0.0006	P	7.0	

$y = 0.0056 * x + 2.0002E-005$

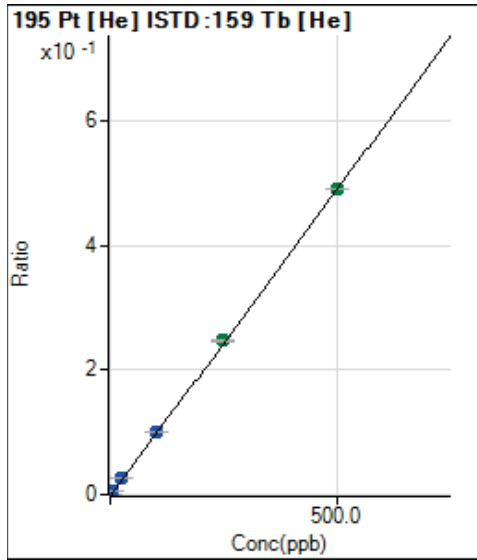
R = 1.0000

DL = 0.002088 ppb

BEC = 0.003559 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	166.00	0.0000	P	15.4	
2	<input type="checkbox"/>	0.500	0.506	7114.57	0.0005	P	1.5	1.2
3	<input type="checkbox"/>	5.000	5.079	70372.77	0.0050	P	0.4	1.6
4	<input type="checkbox"/>	25.000	25.928	355422.60	0.0255	P	0.9	3.7
5	<input type="checkbox"/>	100.000	102.924	1385455.50	0.1013	P	0.6	2.9
6	<input type="checkbox"/>	250.000	251.460	3415591.33	0.2475	A	0.6	0.6
7	<input type="checkbox"/>	500.000	498.638	6781919.83	0.4908	A	0.3	-0.3
8	<input type="checkbox"/>			808.03	0.0001	P	19.1	

$y = 9.8427E-004 * x + 1.2034E-005$

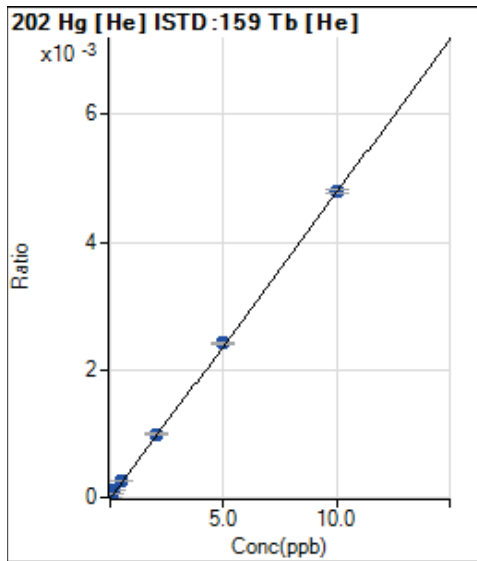
R = 1.0000

DL = 0.005663 ppb

BEC = 0.01223 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	99.33	0.0000	P	10.5	
2	<input type="checkbox"/>	0.200	0.223	1592.10	0.0001	P	0.2	11.4
3	<input type="checkbox"/>	0.100	0.100	773.02	0.0001	P	3.6	-0.3
4	<input type="checkbox"/>	0.500	0.513	3529.47	0.0003	P	2.0	2.6
5	<input type="checkbox"/>	2.000	2.052	13568.92	0.0010	P	1.4	2.6
6	<input type="checkbox"/>	5.000	5.030	33426.45	0.0024	P	0.9	0.6
7	<input type="checkbox"/>	10.000	9.974	66270.51	0.0048	P	0.8	-0.3
8	<input type="checkbox"/>			431.68	0.0000	P	5.5	

$y = 4.8015E-004 * x + 7.1985E-006$

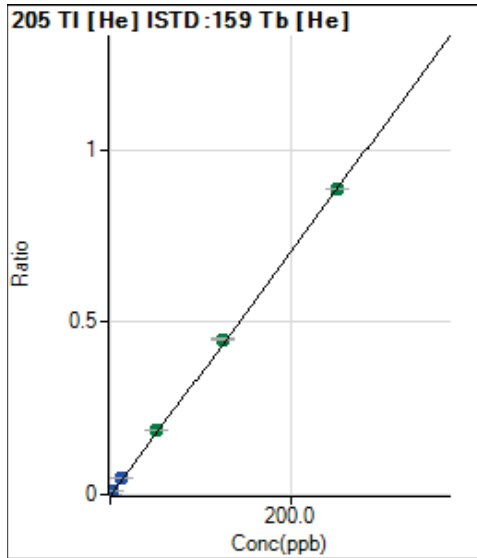
R = 1.0000

DL = 0.004717 ppb

BEC = 0.01499 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	335.01	0.0000	P	12.0	
2	<input type="checkbox"/>	0.100	0.091	4839.25	0.0003	P	2.4	-9.3
3	<input type="checkbox"/>	2.500	2.529	126718.54	0.0090	P	1.5	1.2
4	<input type="checkbox"/>	12.500	13.238	656079.51	0.0471	P	0.2	5.9
5	<input type="checkbox"/>	50.000	51.996	2530419.81	0.1850	A	0.8	4.0
6	<input type="checkbox"/>	125.000	126.443	6209235.12	0.4500	A	0.4	1.2
7	<input type="checkbox"/>	250.000	248.842	12235848.57	0.8855	A	0.4	-0.5
8	<input type="checkbox"/>			3473.82	0.0002	P	10.0	

$y = 0.0036 * x + 2.4259E-005$

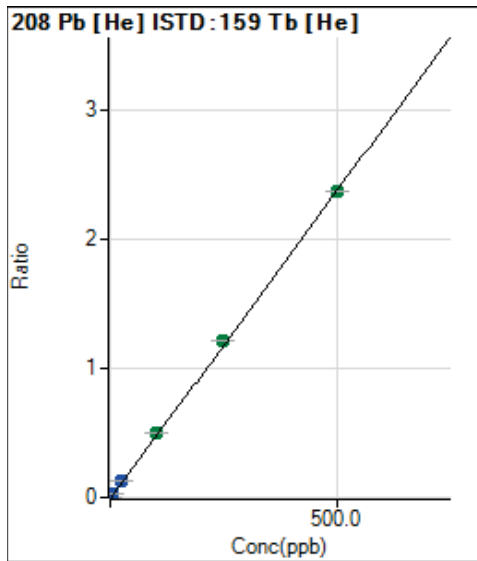
R = 0.9999

DL = 0.002457 ppb

BEC = 0.006817 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2171.76	0.0002	P	5.6	
2	<input type="checkbox"/>	0.500	0.528	37423.96	0.0027	P	1.4	5.7
3	<input type="checkbox"/>	5.000	5.191	350725.22	0.0250	P	0.8	3.8
4	<input type="checkbox"/>	25.000	26.449	1762442.85	0.1266	P	0.1	5.8
5	<input type="checkbox"/>	100.000	104.326	6822457.41	0.4989	A	0.6	4.3
6	<input type="checkbox"/>	250.000	254.651	16801983.60	1.2176	A	0.6	1.9
7	<input type="checkbox"/>	500.000	496.735	32816529.51	2.3749	A	0.6	-0.7
8	<input type="checkbox"/>			19704.05	0.0014	P	2.7	

$y = 0.0048 * x + 1.5736E-004$

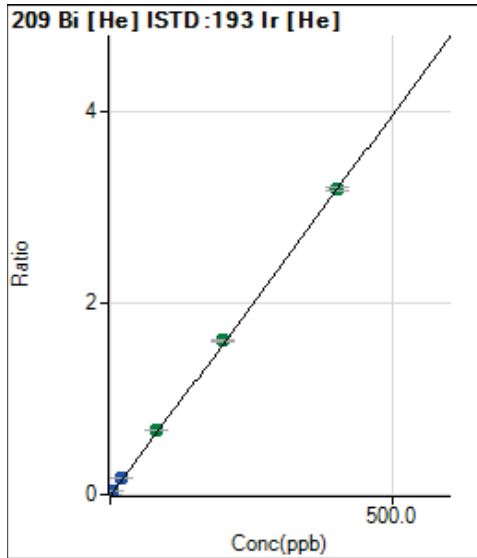
R = 0.9999

DL = 0.005487 ppb

BEC = 0.03291 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	1800.16	0.0002	P	1.7	
2	<input type="checkbox"/>	0.500	0.518	31755.24	0.0044	P	1.5	3.5
3	<input type="checkbox"/>	4.000	4.083	238652.20	0.0329	P	1.2	2.1
4	<input type="checkbox"/>	20.000	21.322	1218957.25	0.1706	P	0.7	6.6
5	<input type="checkbox"/>	80.000	83.434	4660021.81	0.6668	A	1.0	4.3
6	<input type="checkbox"/>	200.000	200.835	11334544.41	1.6046	A	0.9	0.4
7	<input type="checkbox"/>	400.000	398.829	22268338.84	3.1863	A	1.2	-0.3
8	<input type="checkbox"/>			4417.51	0.0006	P	9.6	

$y = 0.0080 * x + 2.4890E-004$

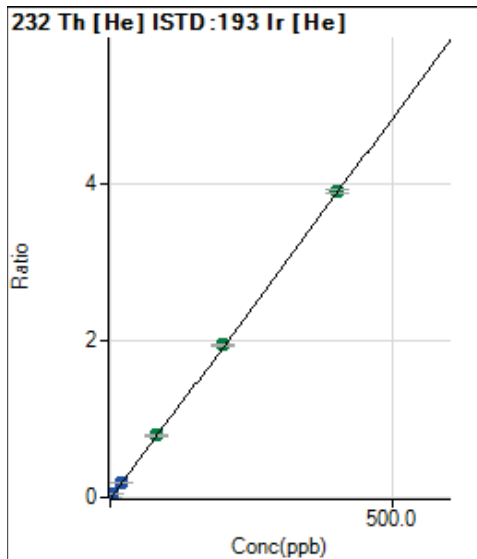
R = 1.0000

DL = 0.001586 ppb

BEC = 0.03116 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	500.02	0.0001	P	6.8	
2	<input type="checkbox"/>	0.500	0.476	34203.15	0.0047	P	1.7	-4.7
3	<input type="checkbox"/>	4.000	3.838	272846.36	0.0376	P	0.5	-4.0
4	<input type="checkbox"/>	20.000	20.378	1423496.96	0.1992	P	0.7	1.9
5	<input type="checkbox"/>	80.000	80.839	5521651.48	0.7900	A	0.3	1.0
6	<input type="checkbox"/>	200.000	199.197	13750568.54	1.9466	A	0.6	-0.4
7	<input type="checkbox"/>	400.000	400.216	27332266.26	3.9110	A	1.5	0.1
8	<input type="checkbox"/>			16191.54	0.0023	P	5.8	

$y = 0.0098 * x + 6.9141E-005$

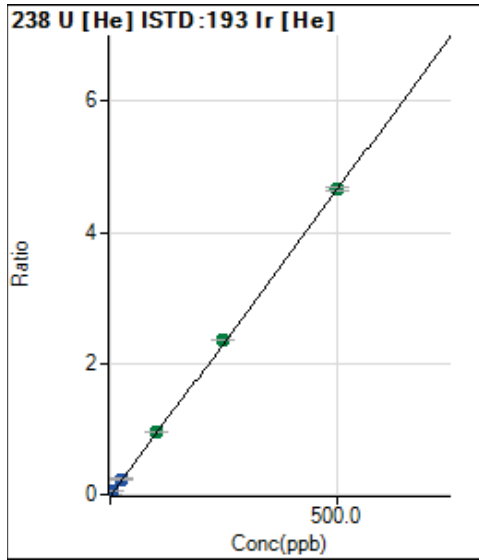
R = 1.0000

DL = 0.001438 ppb

BEC = 0.007075 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	465.01	0.0001	P	5.1	
2	<input type="checkbox"/>	0.500	0.502	34447.30	0.0048	P	1.0	0.4
3	<input type="checkbox"/>	5.000	4.878	331539.05	0.0457	P	1.1	-2.4
4	<input type="checkbox"/>	25.000	25.441	1699623.04	0.2379	P	1.2	1.8
5	<input type="checkbox"/>	100.000	101.913	6657971.15	0.9526	A	0.6	1.9
6	<input type="checkbox"/>	250.000	251.618	16613304.75	2.3519	A	0.4	0.6
7	<input type="checkbox"/>	500.000	498.787	32582057.85	4.6621	A	1.3	-0.2
8	<input type="checkbox"/>			4392.46	0.0006	P	14.6	

$y = 0.0093 * x + 6.4287E-005$

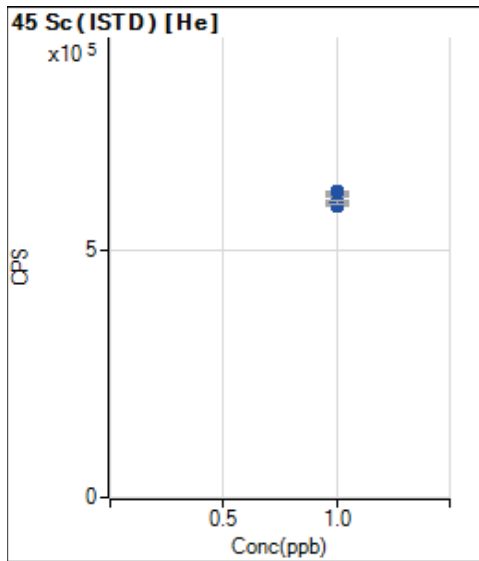
R = 1.0000

DL = 0.001047 ppb

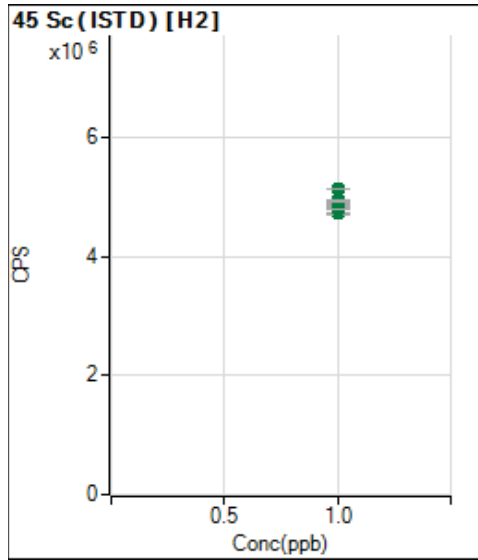
BEC = 0.006878 ppb

Weight: <None>

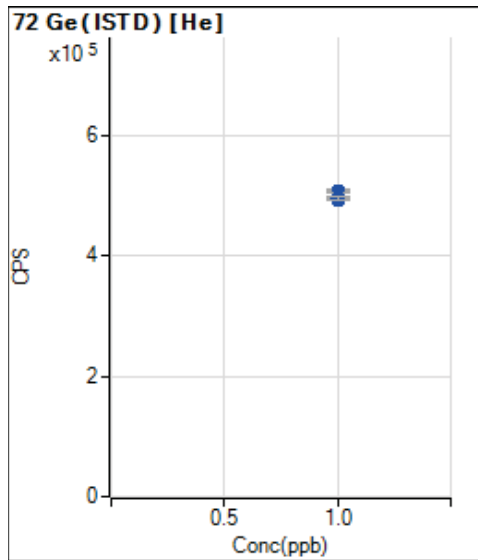
Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		616059.81		P	1.2	
2	<input type="checkbox"/>	1.000		618948.94		P	0.3	
3	<input type="checkbox"/>	1.000		613443.44		P	0.3	
4	<input type="checkbox"/>	1.000		607603.00		P	0.5	
5	<input type="checkbox"/>	1.000		590475.29		P	0.5	
6	<input type="checkbox"/>	1.000		591159.85		P	0.3	
7	<input type="checkbox"/>	1.000		597725.73		P	0.4	
8	<input type="checkbox"/>	1.000		597716.75		P	1.2	



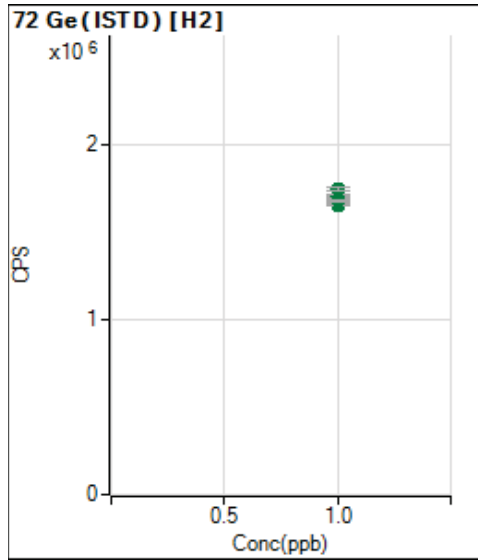
	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		4924870.33		A	0.2	
2	<input type="checkbox"/>	1.000		4943754.67		A	0.7	
3	<input type="checkbox"/>	1.000		4875879.00		A	0.3	
4	<input type="checkbox"/>	1.000		4809239.00		A	0.4	
5	<input type="checkbox"/>	1.000		4725976.83		A	0.2	
6	<input type="checkbox"/>	1.000		4806087.17		A	0.3	
7	<input type="checkbox"/>	1.000		4936293.83		A	0.2	
8	<input type="checkbox"/>	1.000		5139806.00		A	0.5	



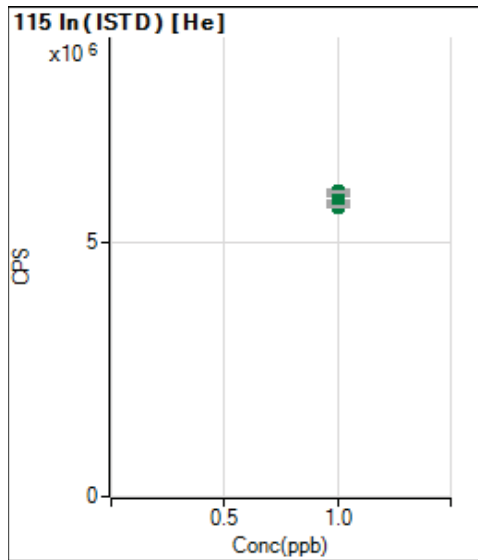
	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		506513.70		P	1.2	
2	<input type="checkbox"/>	1.000		507620.59		P	0.4	
3	<input type="checkbox"/>	1.000		505015.57		P	0.5	
4	<input type="checkbox"/>	1.000		504795.28		P	0.2	
5	<input type="checkbox"/>	1.000		492852.47		P	0.2	
6	<input type="checkbox"/>	1.000		492389.77		P	0.2	
7	<input type="checkbox"/>	1.000		494908.69		P	0.3	
8	<input type="checkbox"/>	1.000		495322.81		P	1.1	



Calibration for 182SMPL.d

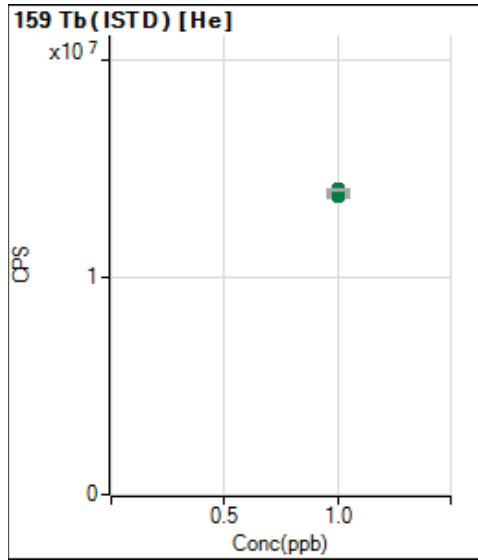


	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		1705947.33		A	0.5	
2	<input type="checkbox"/>	1.000		1700161.33		A	1.2	
3	<input type="checkbox"/>	1.000		1670306.92		A	0.2	
4	<input type="checkbox"/>	1.000		1679247.00		A	0.5	
5	<input type="checkbox"/>	1.000		1654325.71		A	0.9	
6	<input type="checkbox"/>	1.000		1657760.21		A	0.6	
7	<input type="checkbox"/>	1.000		1679385.17		A	0.9	
8	<input type="checkbox"/>	1.000		1746043.38		A	0.6	

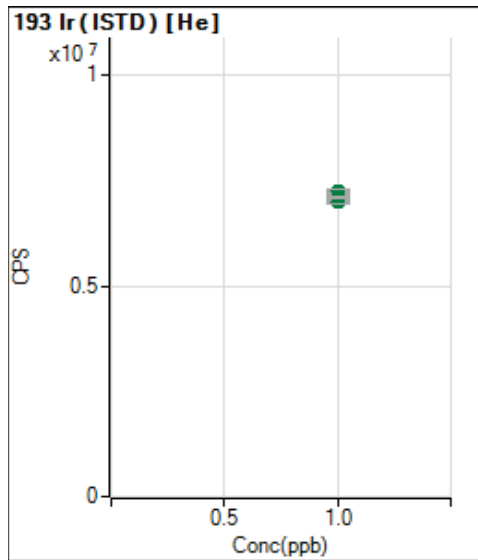


	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		5913357.43		A	0.7	
2	<input type="checkbox"/>	1.000		5931871.22		A	0.7	
3	<input type="checkbox"/>	1.000		5998232.71		A	1.2	
4	<input type="checkbox"/>	1.000		5978616.73		A	0.5	
5	<input type="checkbox"/>	1.000		5790582.31		A	0.5	
6	<input type="checkbox"/>	1.000		5731644.28		A	0.5	
7	<input type="checkbox"/>	1.000		5715841.84		A	1.1	
8	<input type="checkbox"/>	1.000		5688461.85		A	0.7	

Calibration for 182SMPL.d



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		13802456.04		A	0.9	
2	<input type="checkbox"/>	1.000		13945661.46		A	0.8	
3	<input type="checkbox"/>	1.000		14043758.12		A	0.5	
4	<input type="checkbox"/>	1.000		13920715.62		A	0.3	
5	<input type="checkbox"/>	1.000		13674763.55		A	0.8	
6	<input type="checkbox"/>	1.000		13799571.88		A	0.5	
7	<input type="checkbox"/>	1.000		13817811.87		A	0.4	
8	<input type="checkbox"/>	1.000		13977339.79		A	0.8	



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		7232565.10		A	0.3	
2	<input type="checkbox"/>	1.000		7241036.14		A	1.2	
3	<input type="checkbox"/>	1.000		7261368.43		A	0.7	
4	<input type="checkbox"/>	1.000		7146085.73		A	0.8	
5	<input type="checkbox"/>	1.000		6989253.34		A	0.6	
6	<input type="checkbox"/>	1.000		7063948.23		A	0.6	
7	<input type="checkbox"/>	1.000		6989483.44		A	1.3	
8	<input type="checkbox"/>	1.000		7121527.39		A	0.6	

Sample Name SysBlk-EPA Tune-352695  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 003SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 13:53:28  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2			66.667
Be	9	2	H2			16.333
B	11	2	H2			3035.643
Na	23	1	He			11763.023
Mg	24	1	He			1440.080
Al	27	1	He			71.333
Si	28	2	H2			13852.597
K	39	1	He			76145.210
Ca	43	1	He			17.900
Ti	47	1	He			3.333
V	51	1	He			4.527
Cr	52	1	He			2633.573
Mn	55	1	He			318.003
Fe	56	1	He			11662.407
Co	59	1	He			82.000
Ni	60	1	He			198.000
Cu	63	1	He			186.667
Zn	66	1	He			166.000
As	75	1	He			186.833
Se	78	2	H2			26.333
Sr	88	1	He			166.667
Mo	95	1	He			21.333
Pd	105	1	He			176.667
Ag	107	1	He			138.333
Cd	111	1	He			15.667
Sn	118	1	He			80.000
Sb	121	1	He			56.667
Ba	138	1	He			138.333
Pt	195	1	He			174.000
Hg	202	1	He			126.000
Tl	205	1	He			321.677
Pb	208	1	He			2031.753
Bi	209	1	He			1693.473
Th	232	1	He			533.350
U	238	1	He			436.680

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He		615387.667
Sc	45	2	H2		4879219.833
Ge	72	1	He		502609.917
Ge	72	2	H2		1719809.000
In	115	1	He		5823128.517
Tb	159	1	He		13764227.293
Ir	193	1	He		7342758.433

Sample Name SysBlk-EPA Tune-352695  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 004SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 13:57:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2			72.000
Be	9	2	H2			16.833
B	11	2	H2			2906.613
Na	23	1	He			11884.803
Mg	24	1	He			1515.093
Al	27	1	He			73.667
Si	28	2	H2			13622.583
K	39	1	He			76421.703
Ca	43	1	He			14.583
Ti	47	1	He			1.333
V	51	1	He			-598.823
Cr	52	1	He			2758.933
Mn	55	1	He			331.340
Fe	56	1	He			11242.337
Co	59	1	He			54.667
Ni	60	1	He			210.000
Cu	63	1	He			198.667
Zn	66	1	He			172.000
As	75	1	He			196.667
Se	78	2	H2			27.000
Sr	88	1	He			163.333
Mo	95	1	He			19.333
Pd	105	1	He			161.667
Ag	107	1	He			110.000
Cd	111	1	He			16.000
Sn	118	1	He			93.333
Sb	121	1	He			60.000
Ba	138	1	He			128.333
Pt	195	1	He			158.000
Hg	202	1	He			122.333
Tl	205	1	He			348.343
Pb	208	1	He			2211.763
Bi	209	1	He			1766.820
Th	232	1	He			550.017
U	238	1	He			458.343

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He		616919.540
Sc	45	2	H2		4877146.500
Ge	72	1	He		505057.783
Ge	72	2	H2		1713173.167
In	115	1	He		5821464.357
Tb	159	1	He		13829863.957
Ir	193	1	He		7367731.970

Sample Name CAL0  
 Sample Type CalBlk  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 005CALB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:00:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.000000	N/A	69.167
Be	9	2	H2	0.000000	N/A	11.333
B	11	2	H2	0.000000	N/A	2723.410
Na	23	1	He	0.000000	N/A	11617.923
Mg	24	1	He	0.000000	N/A	1505.090
Al	27	1	He	0.000000	N/A	74.667
Si	28	2	H2	0.000000	N/A	14225.957
K	39	1	He	0.000000	N/A	75312.553
Ca	43	1	He	0.000000	N/A	18.583
Ti	47	1	He	0.000000	N/A	1.000
V	51	1	He	0.000000	N/A	-545.487
Cr	52	1	He	0.000000	N/A	2675.587
Mn	55	1	He	0.000000	N/A	328.673
Fe	56	1	He	0.000000	N/A	11110.903
Co	59	1	He	0.000000	N/A	50.667
Ni	60	1	He	0.000000	N/A	209.333
Cu	63	1	He	0.000000	N/A	206.000
Zn	66	1	He	0.000000	N/A	172.000
As	75	1	He	0.000000	N/A	189.500
Se	78	2	H2	0.000000	N/A	32.000
Sr	88	1	He	0.000000	N/A	138.333
Mo	95	1	He	0.000000	N/A	16.000
Pd	105	1	He	0.000000	N/A	220.000
Ag	107	1	He	0.000000	N/A	98.333
Cd	111	1	He	0.000000	N/A	12.667
Sn	118	1	He	0.000000	N/A	68.333
Sb	121	1	He	0.000000	N/A	56.667
Ba	138	1	He	0.000000	N/A	118.333
Pt	195	1	He	0.000000	N/A	166.000
Hg	202	1	He	0.000000	N/A	99.333
Tl	205	1	He	0.000000	N/A	335.010
Pb	208	1	He	0.000000	N/A	2171.763
Bi	209	1	He	0.000000	N/A	1800.160
Th	232	1	He	0.000000	N/A	500.017
U	238	1	He	0.000000	N/A	465.010

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100	616059.813
Sc	45	2	H2	100	4924870.333
Ge	72	1	He	100	506513.700
Ge	72	2	H2	100	1705947.330
In	115	1	He	100	5913357.433
Tb	159	1	He	100	13802456.043
Ir	193	1	He	100	7232565.100

Sample Name CAL1  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 006CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:04:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.570360	3.9	342.833
Be	9	2	H2	0.217731	4.7	118.000
B	11	2	H2	10.174380	2.2	7157.027
Na	23	1	He	54.911881	0.6	72749.513
Mg	24	1	He	30.795899	0.4	20747.843
Al	27	1	He	31.547330	0.5	9736.177
Si	28	2	H2	101.004129	0.8	375014.950
K	39	1	He	104.236825	0.7	164780.857
Ca	43	1	He	91.409738	2.6	248.267
Ti	47	1	He	1.046442	7.3	293.333
V	51	1	He	0.963502	2.9	7174.133
Cr	52	1	He	2.069893	1.3	22315.703
Mn	55	1	He	0.532062	1.0	3968.550
Fe	56	1	He	51.316483	0.1	475039.190
Co	59	1	He	0.542882	1.1	8150.293
Ni	60	1	He	0.564153	4.6	2332.860
Cu	63	1	He	1.066368	1.1	11252.360
Zn	66	1	He	5.212787	1.6	12397.973
As	75	1	He	0.499796	2.7	1228.553
Se	78	2	H2	0.508708	4.5	509.343
Sr	88	1	He	0.517954	2.1	6604.917
Mo	95	1	He	0.491144	2.6	3365.077
Pd	105	1	He	0.526380	2.5	5604.490
Ag	107	1	He	0.409748	3.6	8716.063
Cd	111	1	He	0.081788	8.3	342.063
Sn	118	1	He	0.494374	2.1	5057.623
Sb	121	1	He	0.516653	0.8	7812.240
Ba	138	1	He	0.310606	1.3	10474.043
Pt	195	1	He	0.506121	1.5	7114.573
Hg	202	1	He	0.222775	0.2	1592.100
Tl	205	1	He	0.090707	2.6	4839.253
Pb	208	1	He	0.528430	1.4	37423.957
Bi	209	1	He	0.517748	1.6	31755.237
Th	232	1	He	0.476364	1.7	34203.150
U	238	1	He	0.502131	1.0	34447.297

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.4689679	618948.937
Sc	45	2	H2	100.3834483	4943754.667
Ge	72	1	He	100.2185317	507620.593
Ge	72	2	H2	99.66083380	1700161.333
In	115	1	He	100.3130842	5931871.223
Tb	159	1	He	101.0375357	13945661.457
Ir	193	1	He	100.1171236	7241036.143

Sample Name CAL2  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 007CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:08:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.550903	2.0	2692.407
Be	9	2	H2	5.388507	1.3	2614.227
B	11	2	H2	4.827805	2.3	4766.420
Na	23	1	He	273.744511	0.6	313328.633
Mg	24	1	He	267.571750	1.4	167147.157
Al	27	1	He	266.006758	0.6	80812.173
Si	28	2	H2	131.108289	0.5	475924.050
K	39	1	He	262.808581	0.6	297669.743
Ca	43	1	He	255.190777	2.7	653.743
Ti	47	1	He	5.055124	1.1	1400.737
V	51	1	He	4.950541	1.7	38779.293
Cr	52	1	He	5.126852	0.4	50847.033
Mn	55	1	He	5.143951	0.8	35192.163
Fe	56	1	He	129.349012	0.0	1169914.833
Co	59	1	He	5.290169	1.4	78571.367
Ni	60	1	He	5.373028	1.7	20326.157
Cu	63	1	He	5.392451	0.7	55776.270
Zn	66	1	He	5.401424	1.2	12774.300
As	75	1	He	5.028470	1.2	10584.530
Se	78	2	H2	5.097384	3.6	4732.453
Sr	88	1	He	5.085459	0.6	63301.287
Mo	95	1	He	4.859391	1.5	33521.303
Pd	105	1	He	4.851593	2.1	50394.730
Ag	107	1	He	2.347653	5.7	50021.887
Cd	111	1	He	5.044254	2.0	20542.223
Sn	118	1	He	4.860917	0.4	49672.673
Sb	121	1	He	4.866201	1.7	73912.660
Ba	138	1	He	4.932143	1.8	166368.263
Pt	195	1	He	5.078802	0.4	70372.767
Hg	202	1	He	0.099659	4.1	773.023
Tl	205	1	He	2.528930	1.5	126718.540
Pb	208	1	He	5.190973	0.9	350725.217
Bi	209	1	He	4.083223	1.2	238652.203
Th	232	1	He	3.838178	0.5	272846.357
U	238	1	He	4.878194	1.1	331539.047

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.57530530	613443.440
Sc	45	2	H2	99.00522592	4875879.000
Ge	72	1	He	99.70422715	505015.570
Ge	72	2	H2	97.91081396	1670306.917
In	115	1	He	101.4353144	5998232.707
Tb	159	1	He	101.7482546	14043758.123
Ir	193	1	He	100.3982450	7261368.433

Sample Name CAL3  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 008CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:12:44  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	27.749826	1.2	13005.567
Be	9	2	H2	27.059554	0.2	12903.983
B	11	2	H2	26.375478	0.6	13814.633
Na	23	1	He	1327.662842	0.6	1461048.570
Mg	24	1	He	1335.585819	1.2	820443.217
Al	27	1	He	1328.053989	0.8	399322.790
Si	28	2	H2	662.550681	0.4	2315872.833
K	39	1	He	1311.464601	0.8	1174865.037
Ca	43	1	He	1307.465891	1.4	3242.153
Ti	47	1	He	25.811608	0.7	7080.043
V	51	1	He	25.272244	1.5	198281.697
Cr	52	1	He	26.062861	0.7	245244.397
Mn	55	1	He	26.387374	0.7	177464.350
Fe	56	1	He	652.570031	0.5	5801662.333
Co	59	1	He	26.266364	0.2	389765.897
Ni	60	1	He	26.782646	1.0	100450.043
Cu	63	1	He	26.915452	0.7	277461.103
Zn	66	1	He	26.531982	1.2	62051.737
As	75	1	He	25.564414	0.6	53018.650
Se	78	2	H2	26.107145	1.2	24239.313
Sr	88	1	He	25.759033	0.5	319934.233
Mo	95	1	He	24.834847	0.3	170709.217
Pd	105	1	He	25.894544	1.0	267167.807
Ag	107	1	He	13.214382	1.9	280265.357
Cd	111	1	He	25.659702	0.4	104116.970
Sn	118	1	He	24.937426	1.2	253709.190
Sb	121	1	He	24.737186	1.1	374306.857
Ba	138	1	He	25.006496	0.7	840336.867
Pt	195	1	He	25.927802	0.9	355422.597
Hg	202	1	He	0.513039	2.1	3529.473
Tl	205	1	He	13.237605	0.2	656079.510
Pb	208	1	He	26.449246	0.1	1762442.850
Bi	209	1	He	21.322367	0.7	1218957.247
Th	232	1	He	20.378235	0.7	1423496.957
U	238	1	He	25.440943	1.2	1699623.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.62727398	607603.000
Sc	45	2	H2	97.65209385	4809239.000
Ge	72	1	He	99.66073638	504795.283
Ge	72	2	H2	98.43486785	1679247.000
In	115	1	He	101.1035912	5978616.730
Tb	159	1	He	100.8568009	13920715.623
Ir	193	1	He	98.80430563	7146085.727



Sample Name CAL4  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 009CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:16:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	107.665670	0.5	49396.587
Be	9	2	H2	103.523585	0.6	48481.777
B	11	2	H2	104.443217	0.9	46020.893
Na	23	1	He	5176.978239	0.6	5504088.040
Mg	24	1	He	5205.856333	1.0	3103459.330
Al	27	1	He	5190.919749	1.0	1516561.690
Si	28	2	H2	2573.560919	0.4	8800586.000
K	39	1	He	5109.308761	0.3	4239085.405
Ca	43	1	He	5154.959441	0.3	12369.540
Ti	47	1	He	102.607915	1.3	27348.280
V	51	1	He	100.637518	1.0	768869.435
Cr	52	1	He	102.595778	0.5	930663.940
Mn	55	1	He	103.521435	0.9	675671.750
Fe	56	1	He	2563.759043	1.2	22119012.000
Co	59	1	He	102.078033	0.3	1478749.500
Ni	60	1	He	103.946477	0.1	380044.030
Cu	63	1	He	104.049357	0.2	1046647.685
Zn	66	1	He	103.237000	0.4	235249.330
As	75	1	He	101.185672	0.1	204340.905
Se	78	2	H2	102.776820	0.7	93916.927
Sr	88	1	He	101.917669	0.3	1235504.550
Mo	95	1	He	99.221680	0.1	660535.220
Pd	105	1	He	101.785135	1.9	1016464.205
Ag	107	1	He	52.876969	0.7	1085834.090
Cd	111	1	He	102.444744	0.7	402567.450
Sn	118	1	He	100.248825	0.2	987674.790
Sb	121	1	He	99.418011	0.2	1456899.355
Ba	138	1	He	99.447453	0.5	3236489.010
Pt	195	1	He	102.923794	0.6	1385455.500
Hg	202	1	He	2.051685	1.4	13568.920
Tl	205	1	He	51.995727	0.8	2530419.805
Pb	208	1	He	104.326340	0.6	6822457.405
Bi	209	1	He	83.433652	1.0	4660021.805
Th	232	1	He	80.838916	0.3	5521651.480
U	238	1	He	101.912765	0.6	6657971.150

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.84707072	590475.285
Sc	45	2	H2	95.96144697	4725976.833
Ge	72	1	He	97.30288933	492852.465
Ge	72	2	H2	96.97402029	1654325.710
In	115	1	He	97.92376615	5790582.305
Tb	159	1	He	99.07485672	13674763.550
Ir	193	1	He	96.63588558	6989253.335

Sample Name CAL5  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 010CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:20:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	257.477806	0.6	120037.243
Be	9	2	H2	248.376826	0.6	118275.013
B	11	2	H2	255.114443	0.5	110483.087
Na	23	1	He	12630.31068	0.5	13428051.883
Mg	24	1	He	12657.76703	0.8	7552746.760
Al	27	1	He	12622.33112	0.6	3691954.000
Si	28	2	H2	6216.682332	0.1	21599221.333
K	39	1	He	12497.62676	0.4	10276584.223
Ca	43	1	He	12614.91443	0.5	30279.447
Ti	47	1	He	252.265287	0.7	67315.520
V	51	1	He	250.649798	0.4	1917993.613
Cr	52	1	He	252.669139	0.1	2290941.667
Mn	55	1	He	251.138103	0.1	1640630.333
Fe	56	1	He	6296.522007	0.2	54372749.333
Co	59	1	He	250.819222	0.4	3629996.000
Ni	60	1	He	252.577033	0.5	922296.167
Cu	63	1	He	252.386748	0.5	2536119.917
Zn	66	1	He	252.691957	0.2	575035.397
As	75	1	He	249.851574	0.3	503822.593
Se	78	2	H2	252.014226	1.0	230721.320
Sr	88	1	He	250.738284	0.4	3036539.747
Mo	95	1	He	249.121006	0.5	1641511.920
Pd	105	1	He	247.385817	0.7	2445103.243
Ag	107	1	He	131.053035	0.3	2663674.857
Cd	111	1	He	251.357866	0.4	977670.177
Sn	118	1	He	249.712255	0.4	2435109.287
Sb	121	1	He	249.192079	0.5	3614447.133
Ba	138	1	He	250.097866	0.8	8056243.213
Pt	195	1	He	251.459804	0.6	3415591.333
Hg	202	1	He	5.029907	0.9	33426.450
Tl	205	1	He	126.442710	0.4	6209235.117
Pb	208	1	He	254.650862	0.6	16801983.603
Bi	209	1	He	200.834589	0.9	11334544.413
Th	232	1	He	199.197286	0.6	13750568.543
U	238	1	He	251.618271	0.4	16613304.750

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.95819115	591159.853
Sc	45	2	H2	97.58809555	4806087.167
Ge	72	1	He	97.21154037	492389.770
Ge	72	2	H2	97.17534538	1657760.210
In	115	1	He	96.92707312	5731644.283
Tb	159	1	He	99.97910396	13799571.877
Ir	193	1	He	97.66864354	7063948.227

Sample Name CAL6  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 011CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:24:12  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	494.584892	0.3	236761.793
Be	9	2	H2	478.959922	0.4	234246.427
B	11	2	H2	496.483596	0.3	218257.257
Na	23	1	He	24943.71725	0.3	26802559.600
Mg	24	1	He	24937.59176	0.3	15043746.447
Al	27	1	He	24899.74030	0.2	7363820.667
Si	28	2	H2	11766.54569	0.3	41976410.667
K	39	1	He	24843.86207	0.6	20583217.607
Ca	43	1	He	25012.04717	0.3	60684.820
Ti	47	1	He	498.304549	0.6	134443.930
V	51	1	He	499.534553	0.2	3865500.567
Cr	52	1	He	498.091584	0.7	4563740.500
Mn	55	1	He	498.655821	0.4	3293457.583
Fe	56	1	He	12450.88663	0.4	108700666.667
Co	59	1	He	499.108519	0.4	7260329.333
Ni	60	1	He	497.829261	0.8	1826945.793
Cu	63	1	He	497.896925	0.3	5028514.000
Zn	66	1	He	497.923880	0.4	1138726.333
As	75	1	He	499.808573	0.6	1012823.793
Se	78	2	H2	498.381183	0.6	462185.377
Sr	88	1	He	499.208500	0.6	6076409.700
Mo	95	1	He	500.604834	0.8	3289417.750
Pd	105	1	He	500.906795	0.9	4937042.010
Ag	107	1	He	246.364074	1.0	4993671.490
Cd	111	1	He	498.798690	0.4	1934720.317
Sn	118	1	He	500.098633	1.4	4862804.197
Sb	121	1	He	500.534820	1.4	7239419.477
Ba	138	1	He	500.061924	1.0	16062892.260
Pt	195	1	He	498.638155	0.3	6781919.833
Hg	202	1	He	9.973605	0.8	66270.507
Tl	205	1	He	248.842334	0.4	12235848.570
Pb	208	1	He	496.734901	0.6	32816529.507
Bi	209	1	He	398.829002	1.2	22268338.837
Th	232	1	He	400.216310	1.5	27332266.257
U	238	1	He	498.787480	1.3	32582057.847

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.02397674	597725.730
Sc	45	2	H2	100.2319553	4936293.833
Ge	72	1	He	97.70884512	494908.687
Ge	72	2	H2	98.44296697	1679385.167
In	115	1	He	96.65984010	5715841.840
Tb	159	1	He	100.1112543	13817811.873
Ir	193	1	He	96.63906709	6989483.440

Sample Name CAL7  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 012CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:30:29  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.268541	6.0	206.000
Be	9	2	H2	0.193787	10.4	110.500
B	11	2	H2	0.663447	14.0	3142.160
Na	23	1	He	49975.80067	0.7	53685932.537
Mg	24	1	He	49968.94874	0.9	30140342.883
Al	27	1	He	49998.42278	0.7	14785661.667
Si	28	2	H2	22145.13452	0.4	82245138.667
K	39	1	He	50066.12226	0.7	41403626.883
Ca	43	1	He	49948.30643	0.8	121160.933
Ti	47	1	He	2.284420	6.0	617.347
V	51	1	He	0.142158	34.6	569.863
Cr	52	1	He	0.301799	3.0	5359.657
Mn	55	1	He	0.655745	2.3	4648.753
Fe	56	1	He	25005.83664	0.6	218289456.000
Co	59	1	He	0.705848	0.1	10325.673
Ni	60	1	He	1.277789	0.6	4897.503
Cu	63	1	He	0.343571	3.5	3675.140
Zn	66	1	He	1.960501	2.3	4655.423
As	75	1	He	0.126963	8.2	442.843
Se	78	2	H2	0.117143	12.4	145.667
Sr	88	1	He	0.550900	1.6	6846.687
Mo	95	1	He	0.132135	13.1	880.033
Pd	105	1	He	0.080020	9.6	996.713
Ag	107	1	He	0.089426	5.6	1898.477
Cd	111	1	He	0.061279	10.8	248.843
Sn	118	1	He	2.136907	1.1	20745.470
Sb	121	1	He	0.185804	10.1	2730.290
Ba	138	1	He	0.102772	7.2	3400.453
Pt	195	1	He	0.046457	24.1	808.030
Hg	202	1	He	0.049326	7.2	431.677
Tl	205	1	He	0.063062	11.1	3473.817
Pb	208	1	He	0.261914	3.1	19704.047
Bi	209	1	He	0.046473	16.0	4417.510
Th	232	1	He	0.225538	6.0	16191.543
U	238	1	He	0.059079	16.3	4392.463

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.02251909	597716.750
Sc	45	2	H2	104.3642908	5139806.000
Ge	72	1	He	97.79060533	495322.813
Ge	72	2	H2	102.3503683	1746043.377
In	115	1	He	96.19682074	5688461.850
Tb	159	1	He	101.2670480	13977339.790
Ir	193	1	He	98.46475344	7121527.393

Sample Name ICV  
 Sample Type ICV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 013\_ICV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:38:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.654540	1.6	41726.840
Be	9	2	H2	81.715543	1.1	41593.053
B	11	2	H2	81.911715	1.5	39837.760
Na	23	1	He	1012.939638	0.8	1179610.503
Mg	24	1	He	1012.610915	0.4	657025.030
Al	27	1	He	1011.284355	0.8	321016.040
Si	28	2	H2	508.414466	1.7	1901305.460
K	39	1	He	1009.407091	0.5	972675.167
Ca	43	1	He	1028.663580	0.6	2696.780
Ti	47	1	He	80.578276	0.5	23330.423
V	51	1	He	80.012405	1.1	663939.700
Cr	52	1	He	82.341317	0.6	811939.563
Mn	55	1	He	81.024826	0.5	574554.500
Fe	56	1	He	507.640702	0.2	4766990.500
Co	59	1	He	83.448579	0.5	1308709.413
Ni	60	1	He	84.301679	0.7	333711.677
Cu	63	1	He	84.234274	0.4	917332.460
Zn	66	1	He	82.072147	0.3	202501.673
As	75	1	He	80.812145	0.5	176713.180
Se	78	2	H2	81.272487	1.3	80148.960
Sr	88	1	He	81.593090	0.1	1070829.647
Mo	95	1	He	78.149854	0.3	565785.000
Pd	105	1	He	82.905124	0.5	900453.243
Ag	107	1	He	42.385230	1.0	946566.733
Cd	111	1	He	81.012013	0.6	346200.980
Sn	118	1	He	77.595487	0.1	831391.990
Sb	121	1	He	78.495968	0.0	1250963.993
Ba	138	1	He	78.749387	0.2	2787202.460
Pt	195	1	He	83.715620	0.3	1209759.540
Hg	202	1	He	3.934928	0.5	27841.007
Tl	205	1	He	42.563110	0.7	2223681.687
Pb	208	1	He	83.149796	0.7	5837776.250
Bi	209	1	He	80.685351	0.7	4923754.820
Th	232	1	He	77.819220	1.0	5807213.453
U	238	1	He	78.717521	1.2	5618573.877

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	104.1163411	641418.937
Sc	45	2	H2	104.2975784	5136520.500
Ge	72	1	He	105.3379451	533551.123
Ge	72	2	H2	104.6445824	1785181.460
In	115	1	He	106.4914607	6297220.710
Tb	159	1	He	106.3549498	14679595.197
Ir	193	1	He	105.5806300	7636187.803

Sample Name ICB  
 Sample Type ICB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 014\_ICB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:41:44  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.150074	12.5	145.667
Be	9	2	H2	0.107840	13.0	66.167
B	11	2	H2	0.257726	39.7	2932.453
Na	23	1	He	1.449171	20.5	13769.753
Mg	24	1	He	-0.250533		1405.080
Al	27	1	He	0.293614	13.1	171.000
Si	28	2	H2	2.004811	19.5	22096.143
K	39	1	He	-1.607371		77007.963
Ca	43	1	He	-0.259156		18.700
Ti	47	1	He	0.011424	87.6	4.333
V	51	1	He	0.015430	444.1	-439.677
Cr	52	1	He	0.013038	25.3	2914.300
Mn	55	1	He	0.001960	108.8	356.010
Fe	56	1	He	0.391366	12.1	15239.960
Co	59	1	He	0.012428	2.9	246.000
Ni	60	1	He	0.002776	350.3	229.333
Cu	63	1	He	0.009119	42.0	314.003
Zn	66	1	He	0.003690	295.3	188.667
As	75	1	He	-0.000500		196.667
Se	78	2	H2	0.006518	105.1	39.333
Sr	88	1	He	0.006191	3.0	225.000
Mo	95	1	He	0.015741	4.5	130.000
Pd	105	1	He	0.036936	16.8	630.017
Ag	107	1	He	0.089943	18.5	2096.847
Cd	111	1	He	0.010755	18.7	58.980
Sn	118	1	He	0.012953	22.8	210.000
Sb	121	1	He	0.007292	6.9	175.000
Ba	138	1	He	0.004702	33.3	290.007
Pt	195	1	He	0.005773	16.5	254.667
Hg	202	1	He	0.036680	4.3	356.677
Tl	205	1	He	0.045427	21.3	2673.637
Pb	208	1	He	0.019349	11.4	3591.883
Bi	209	1	He	0.007304	46.4	2280.240
Th	232	1	He	0.013955	5.8	1525.107
U	238	1	He	0.006386	15.7	920.040

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	104.1340612	641528.103
Sc	45	2	H2	103.4396946	5094270.833
Ge	72	1	He	104.4119714	528860.940
Ge	72	2	H2	103.0276530	1757597.497
In	115	1	He	105.6374729	6246721.360
Tb	159	1	He	104.1510365	14375401.040
Ir	193	1	He	102.6114524	7421440.097

Sample Name ICB  
 Sample Type ICB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 015\_ICB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:45:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.135649	14.9	133.333
Be	9	2	H2	0.090220	6.8	55.333
B	11	2	H2	-0.041503		2691.907
Na	23	1	He	1.070626	15.0	13270.997
Mg	24	1	He	-0.157368		1458.417
Al	27	1	He	0.261269	21.6	160.000
Si	28	2	H2	1.690985	20.7	20170.810
K	39	1	He	0.576037	202.5	78562.963
Ca	43	1	He	-0.868242		17.033
Ti	47	1	He	0.009153	57.9	3.667
V	51	1	He	0.044766	151.6	-195.597
Cr	52	1	He	0.014302	106.1	2912.300
Mn	55	1	He	-0.005354		302.667
Fe	56	1	He	0.310561	3.8	14411.777
Co	59	1	He	0.006508	13.5	152.000
Ni	60	1	He	0.003537	176.1	229.333
Cu	63	1	He	0.005094	37.4	266.667
Zn	66	1	He	0.000310	3803.8	178.000
As	75	1	He	-0.000915		193.333
Se	78	2	H2	0.001336	100.0	33.000
Sr	88	1	He	0.002006	74.0	168.333
Mo	95	1	He	0.006125	48.7	60.000
Pd	105	1	He	0.023762	26.4	481.680
Ag	107	1	He	0.031576	14.8	791.697
Cd	111	1	He	0.004665	43.7	32.653
Sn	118	1	He	0.007223	38.8	146.667
Sb	121	1	He	0.004249	16.3	125.000
Ba	138	1	He	0.001692	50.9	181.667
Pt	195	1	He	0.002249	90.3	200.667
Hg	202	1	He	0.019553	1.1	233.667
Tl	205	1	He	0.013165	14.2	1001.713
Pb	208	1	He	0.016508	3.2	3328.517
Bi	209	1	He	0.001967	10.9	1923.510
Th	232	1	He	0.006486	9.1	963.380
U	238	1	He	0.002739	12.3	653.357

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.6364937	638462.790
Sc	45	2	H2	99.89452852	4919676.000
Ge	72	1	He	103.0388575	521905.930
Ge	72	2	H2	99.10634736	1690702.087
In	115	1	He	104.1176776	6156850.433
Tb	159	1	He	102.0647140	14087437.290
Ir	193	1	He	100.5031179	7268953.433

Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 016CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:49:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.590297	3.6	364.000
Be	9	2	H2	0.289416	6.9	158.167
B	11	2	H2	9.418506	1.5	7054.813
Na	23	1	He	54.247631	0.7	74561.707
Mg	24	1	He	29.962859	0.6	20944.723
Al	27	1	He	30.984322	1.5	9902.287
Si	28	2	H2	101.451718	1.0	389094.033
K	39	1	He	102.580921	1.0	169154.660
Ca	43	1	He	102.104682	3.6	284.883
Ti	47	1	He	1.095744	5.0	318.000
V	51	1	He	0.968075	10.1	7464.097
Cr	52	1	He	2.070587	0.6	23113.507
Mn	55	1	He	0.530648	4.7	4099.253
Fe	56	1	He	51.460540	0.3	493223.813
Co	59	1	He	0.548069	0.8	8478.477
Ni	60	1	He	0.545571	2.7	2332.193
Cu	63	1	He	1.081043	1.7	11751.423
Zn	66	1	He	5.302704	1.8	12992.493
As	75	1	He	0.492857	1.2	1251.057
Se	78	2	H2	0.529401	1.9	546.010
Sr	88	1	He	0.514236	0.5	6758.330
Mo	95	1	He	0.489267	2.5	3469.100
Pd	105	1	He	0.538514	4.4	5927.960
Ag	107	1	He	0.423184	5.0	9313.133
Cd	111	1	He	0.086963	1.9	375.383
Sn	118	1	He	0.474645	0.8	5027.610
Sb	121	1	He	0.506121	2.3	7920.633
Ba	138	1	He	0.303739	0.9	10600.810
Pt	195	1	He	0.507537	0.6	7221.303
Hg	202	1	He	0.236340	3.1	1703.447
Tl	205	1	He	0.098463	5.1	5287.777
Pb	208	1	He	0.528239	1.5	37867.760
Bi	209	1	He	0.510501	2.2	31354.077
Th	232	1	He	0.491732	1.3	35316.147
U	238	1	He	0.496410	1.2	34084.690

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	104.0301622	640888.023
Sc	45	2	H2	103.7095731	5107562.000
Ge	72	1	He	103.2689678	523071.470
Ge	72	2	H2	102.8921101	1755285.207
In	115	1	He	103.8010600	6138127.700
Tb	159	1	He	102.2680021	14115496.040
Ir	193	1	He	100.1804368	7245615.310



Sample Name ICSA  
 Sample Type ICSA  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 017ICSA.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:52:50  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.200999	11.0	164.500
Be	9	2	H2	0.044342	36.4	32.833
B	11	2	H2	-0.709593		2407.027
Na	23	1	He	25108.44043	0.3	27060095.433
Mg	24	1	He	24800.33855	0.4	15005601.863
Al	27	1	He	24861.83170	0.4	7374513.667
Si	28	2	H2	6.850831	4.2	38456.480
K	39	1	He	24962.21156	0.3	20742856.773
Ca	43	1	He	24766.63751	0.6	60269.123
Ti	47	1	He	499.893567	0.1	135277.193
V	51	1	He	0.067503	122.8	-8.977
Cr	52	1	He	0.236042	2.2	4771.453
Mn	55	1	He	0.050260	4.9	652.687
Fe	56	1	He	25154.63443	0.3	220255168.000
Co	59	1	He	0.060729	1.8	924.697
Ni	60	1	He	0.060822	7.1	424.010
Cu	63	1	He	0.077410	3.5	974.703
Zn	66	1	He	0.188229	7.6	593.347
As	75	1	He	0.016338	49.3	216.333
Se	78	2	H2	0.018431	61.7	49.000
Sr	88	1	He	0.234656	0.9	2965.333
Mo	95	1	He	513.805101	0.6	3393935.417
Pd	105	1	He	0.006022	129.3	273.340
Ag	107	1	He	0.033748	12.0	783.360
Cd	111	1	He	-0.000676		9.777
Sn	118	1	He	0.023713	23.2	298.337
Sb	121	1	He	0.012485	36.6	236.670
Ba	138	1	He	0.015855	25.1	626.683
Pt	195	1	He	0.001961	91.8	190.000
Hg	202	1	He	0.017407	12.4	211.667
Tl	205	1	He	0.016389	25.4	1123.390
Pb	208	1	He	0.013903	27.4	3045.150
Bi	209	1	He	-0.000867		1680.140
Th	232	1	He	0.012945	10.1	1358.423
U	238	1	He	0.004014	27.2	706.690

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.31415743	599513.417
Sc	45	2	H2	99.62771608	4906535.833
Ge	72	1	He	96.85725183	490595.250
Ge	72	2	H2	99.30738639	1694131.707
In	115	1	He	97.16725917	5745847.343
Tb	159	1	He	98.57423930	13605666.050
Ir	193	1	He	96.03713104	6945948.023

Sample Name ICSAB  
 Sample Type ICSB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 018ICSB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:56:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	99.388321	0.7	48807.190
Be	9	2	H2	99.051081	0.2	49646.197
B	11	2	H2	95.942885	1.0	45473.420
Na	23	1	He	27575.46786	1.5	30344212.883
Mg	24	1	He	27126.20966	1.4	16759053.500
Al	27	1	He	27234.91746	1.4	8248909.500
Si	28	2	H2	1264.127270	0.4	4633870.667
K	39	1	He	27554.43442	1.3	23372273.817
Ca	43	1	He	27540.70715	1.9	68428.703
Ti	47	1	He	598.163568	1.5	165281.800
V	51	1	He	99.616577	0.8	789072.943
Cr	52	1	He	101.060134	1.5	950428.190
Mn	55	1	He	100.360630	1.6	679096.917
Fe	56	1	He	26308.77306	1.6	235212149.333
Co	59	1	He	102.316768	1.5	1519223.790
Ni	60	1	He	102.916581	1.7	385665.617
Cu	63	1	He	101.324134	1.9	1044628.710
Zn	66	1	He	101.163159	2.1	236266.627
As	75	1	He	100.195784	2.1	207382.860
Se	78	2	H2	100.517615	0.6	96901.520
Sr	88	1	He	99.904833	1.0	1241429.643
Mo	95	1	He	622.688882	1.5	4129886.167
Pd	105	1	He	99.525658	1.7	990240.660
Ag	107	1	He	51.867363	1.7	1061164.150
Cd	111	1	He	100.801975	1.8	394636.733
Sn	118	1	He	99.482732	1.2	976524.880
Sb	121	1	He	99.218294	1.4	1448611.173
Ba	138	1	He	99.829887	2.0	3236739.223
Pt	195	1	He	98.920607	1.2	1347571.877
Hg	202	1	He	4.061767	0.7	27090.797
Tl	205	1	He	49.499543	0.8	2438084.860
Pb	208	1	He	99.689945	1.0	6597800.373
Bi	209	1	He	105.969666	1.0	5952800.537
Th	232	1	He	95.684354	0.8	6573706.360
U	238	1	He	100.206490	1.4	6584396.777

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.37923668	612235.540
Sc	45	2	H2	102.7012893	5057905.333
Ge	72	1	He	99.74924534	505243.593
Ge	72	2	H2	102.3084169	1745327.707
In	115	1	He	97.57946606	5770222.610
Tb	159	1	He	100.2754491	13840474.793
Ir	193	1	He	97.20705074	7030563.227

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 019\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:00:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.495457	1.1	41513.927
Be	9	2	H2	80.230180	0.6	41198.473
B	11	2	H2	79.995691	1.0	39317.923
Na	23	1	He	1015.766520	0.7	1179989.017
Mg	24	1	He	1005.328154	0.4	650725.667
Al	27	1	He	1007.625486	0.5	319075.637
Si	28	2	H2	502.114768	1.3	1894560.047
K	39	1	He	1019.867307	0.3	979555.637
Ca	43	1	He	1045.300630	1.8	2733.437
Ti	47	1	He	80.250626	0.8	23179.177
V	51	1	He	79.230630	1.0	655848.787
Cr	52	1	He	82.135635	0.7	807947.353
Mn	55	1	He	80.820008	0.8	571707.393
Fe	56	1	He	503.488874	0.8	4716613.667
Co	59	1	He	83.078496	1.5	1295411.250
Ni	60	1	He	83.987954	0.8	330568.803
Cu	63	1	He	83.872675	1.0	908161.733
Zn	66	1	He	82.304528	1.3	201909.427
As	75	1	He	80.088456	0.8	174130.713
Se	78	2	H2	81.534971	1.0	80493.517
Sr	88	1	He	80.490944	1.3	1050297.953
Mo	95	1	He	77.622043	0.6	552634.940
Pd	105	1	He	82.718174	0.8	883490.923
Ag	107	1	He	42.419951	0.2	931631.367
Cd	111	1	He	80.218339	0.7	337121.400
Sn	118	1	He	77.274622	0.4	814202.227
Sb	121	1	He	77.875358	0.6	1220459.357
Ba	138	1	He	78.280477	0.8	2724557.460
Pt	195	1	He	81.609547	0.3	1147481.373
Hg	202	1	He	3.860921	0.6	26580.757
Tl	205	1	He	41.984646	1.5	2134178.353
Pb	208	1	He	82.257775	0.6	5619116.453
Bi	209	1	He	81.127002	0.7	4705619.303
Th	232	1	He	78.058993	1.5	5536569.500
U	238	1	He	79.586216	1.5	5399195.960

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.8636941	639862.480
Sc	45	2	H2	105.2140120	5181653.667
Ge	72	1	He	104.7387267	530516.000
Ge	72	2	H2	104.7610424	1787168.207
In	115	1	He	104.7244985	6192733.920
Tb	159	1	He	103.4822033	14283085.623
Ir	193	1	He	100.3587881	7258514.683

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 020\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:04:00  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.124826	29.6	135.500
Be	9	2	H2	0.091357	19.9	58.833
B	11	2	H2	-0.596269		2592.393
Na	23	1	He	2.444205	7.5	14782.370
Mg	24	1	He	-0.329465		1341.737
Al	27	1	He	0.437251	4.7	214.667
Si	28	2	H2	0.374274	40.7	16357.150
K	39	1	He	1.701281	41.5	79209.397
Ca	43	1	He	-0.520142		17.850
Ti	47	1	He	0.011554	114.3	4.333
V	51	1	He	-0.005441		-607.400
Cr	52	1	He	-0.003857		2722.930
Mn	55	1	He	-0.009910		269.333
Fe	56	1	He	0.687975	4.4	17852.233
Co	59	1	He	0.009088	12.2	192.667
Ni	60	1	He	-0.005206		196.667
Cu	63	1	He	0.008492	5.2	304.667
Zn	66	1	He	0.006713	79.8	194.667
As	75	1	He	-0.006226		183.000
Se	78	2	H2	0.007196	55.8	40.667
Sr	88	1	He	0.001286	110.6	160.000
Mo	95	1	He	0.029655	11.2	224.667
Pd	105	1	He	0.039023	17.7	638.357
Ag	107	1	He	0.113602	14.8	2560.257
Cd	111	1	He	0.008334	4.9	47.623
Sn	118	1	He	0.008764	10.4	161.667
Sb	121	1	He	0.004642	38.1	130.000
Ba	138	1	He	0.003579	7.8	245.003
Pt	195	1	He	0.003939	37.3	225.333
Hg	202	1	He	0.038836	12.7	366.007
Tl	205	1	He	0.044913	22.1	2606.947
Pb	208	1	He	0.010319	19.9	2926.810
Bi	209	1	He	0.001858	21.6	1926.847
Th	232	1	He	0.012378	9.5	1388.420
U	238	1	He	0.002353	50.5	630.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.1822391	635664.310
Sc	45	2	H2	105.1626367	5179123.500
Ge	72	1	He	103.6331343	524916.023
Ge	72	2	H2	104.8643991	1788931.417
In	115	1	He	103.2744839	6106989.373
Tb	159	1	He	102.5948431	14160608.123
Ir	193	1	He	101.0078518	7305458.643

Sample Name LDR-800ppb-364507  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 021SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:16:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.106812	8.1	123.167
Be	9	2	H2	0.078431	9.0	50.833
B	11	2	H2	-1.657801		2055.640
Na	23	1	He	2.445147	17.2	14150.107
Mg	24	1	He	-0.388655		1248.400
Al	27	1	He	0.905096	2.0	346.337
Si	28	2	H2	1.000778	31.2	18233.430
K	39	1	He	0.546344	110.6	74855.147
Ca	43	1	He	1.455623	62.6	21.967
Ti	47	1	He	0.020702	9.8	6.667
V	51	1	He	0.091307	68.8	181.373
Cr	52	1	He	0.048885	8.6	3098.333
Mn	55	1	He	1022.385142	0.5	6873832.000
Fe	56	1	He	0.545225	6.9	15820.570
Co	59	1	He	0.068845	8.9	1082.043
Ni	60	1	He	1046.173098	0.4	3952720.417
Cu	63	1	He	1069.094531	0.2	11116774.000
Zn	66	1	He	1193.407193	0.2	2809820.083
As	75	1	He	945.223603	0.4	1971963.123
Se	78	2	H2	1031.078602	0.6	998981.417
Sr	88	1	He	0.028395	14.9	495.017
Mo	95	1	He	0.013451	26.6	112.000
Pd	105	1	He	0.020303	15.5	445.010
Ag	107	1	He	0.011333	9.4	350.010
Cd	111	1	He	0.014930	16.6	75.647
Sn	118	1	He	0.014995	9.6	228.333
Sb	121	1	He	0.008302	5.7	188.333
Ba	138	1	He	964.056524	0.5	33380781.170
Pt	195	1	He	0.002269	58.9	208.667
Hg	202	1	He	0.008838	11.9	167.333
Tl	205	1	He	0.006188	32.8	676.693
Pb	208	1	He	1058.214328	0.4	73975820.980
Bi	209	1	He	0.039022	13.9	4350.793
Th	232	1	He	0.080672	2.8	6656.743
U	238	1	He	0.007875	15.5	1070.057

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.77279556	608499.500
Sc	45	2	H2	102.5050168	5048239.167
Ge	72	1	He	100.6010255	509557.977
Ge	72	2	H2	102.8576794	1754697.837
In	115	1	He	104.1849833	6160830.460
Tb	159	1	He	105.9379588	14622040.197
Ir	193	1	He	107.3316513	7762831.553

Sample Name blank-364482  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 022\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:19:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.056367	39.7	96.333
Be	9	2	H2	0.041948	19.4	31.833
B	11	2	H2	-1.699592		1990.463
Na	23	1	He	0.299984	69.1	11921.497
Mg	24	1	He	-0.515110		1181.727
Al	27	1	He	0.186730	9.0	131.333
Si	28	2	H2	0.115317	105.6	14656.710
K	39	1	He	-0.507491		74689.397
Ca	43	1	He	-0.596031		17.067
Ti	47	1	He	-0.001160		0.667
V	51	1	He	0.019926	295.9	-385.273
Cr	52	1	He	0.008055	20.0	2744.263
Mn	55	1	He	0.046704	11.0	644.683
Fe	56	1	He	0.250337	4.7	13329.420
Co	59	1	He	0.004079	27.9	111.333
Ni	60	1	He	0.055761	17.7	418.677
Cu	63	1	He	0.056821	4.8	793.357
Zn	66	1	He	0.060644	13.6	314.000
As	75	1	He	0.162539	10.7	526.343
Se	78	2	H2	0.067772	17.6	95.667
Sr	88	1	He	0.002675	74.2	171.667
Mo	95	1	He	0.005305	21.8	53.333
Pd	105	1	He	0.005878	56.0	286.677
Ag	107	1	He	0.000745	124.7	116.667
Cd	111	1	He	0.001384	97.1	18.657
Sn	118	1	He	0.001141	261.1	81.667
Sb	121	1	He	0.001336	101.9	78.333
Ba	138	1	He	0.029222	10.5	1115.060
Pt	195	1	He	0.001716	97.7	194.000
Hg	202	1	He	0.007939	22.4	155.667
Tl	205	1	He	0.002228	58.5	455.013
Pb	208	1	He	0.084808	8.6	7957.620
Bi	209	1	He	-0.002336		1700.140
Th	232	1	He	0.001952	18.4	651.687
U	238	1	He	0.001450	54.2	575.020

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.73902047	614452.023
Sc	45	2	H2	100.1748844	4933483.167
Ge	72	1	He	99.97457324	506384.910
Ge	72	2	H2	99.93188320	1704785.293
In	115	1	He	102.3718796	6053615.153
Tb	159	1	He	102.4356323	14138633.123
Ir	193	1	He	102.1310010	7386691.140

Sample Name 4309486\_B69970Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 023SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:23:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.047536	5.2	93.500
Be	9	2	H2	0.043917	23.4	33.333
B	11	2	H2	-2.195230		1804.110
Na	23	1	He	4.954580	5.2	17094.850
Mg	24	1	He	3.375993	16.9	3602.133
Al	27	1	He	10.365843	0.7	3232.353
Si	28	2	H2	0.544690	17.7	16449.153
K	39	1	He	2.023779	6.6	76991.147
Ca	43	1	He	10.911457	3.2	45.850
Ti	47	1	He	0.079158	32.6	23.000
V	51	1	He	0.062047	120.0	-48.657
Cr	52	1	He	0.147737	0.8	4067.237
Mn	55	1	He	0.054995	23.5	702.690
Fe	56	1	He	1.932774	0.3	28483.660
Co	59	1	He	0.008122	9.8	172.000
Ni	60	1	He	0.028523	33.0	317.337
Cu	63	1	He	0.218057	4.4	2466.883
Zn	66	1	He	1.404981	1.4	3469.763
As	75	1	He	0.076385	7.7	348.833
Se	78	2	H2	0.032773	20.8	63.667
Sr	88	1	He	0.038123	7.9	615.020
Mo	95	1	He	0.009384	5.9	82.000
Pd	105	1	He	0.003734	138.1	265.007
Ag	107	1	He	0.003747	35.7	181.667
Cd	111	1	He	0.006701	23.7	40.653
Sn	118	1	He	0.025637	24.0	335.010
Sb	121	1	He	0.010426	18.2	218.333
Ba	138	1	He	0.040282	10.6	1496.760
Pt	195	1	He	0.005136	17.7	242.000
Hg	202	1	He	0.010888	18.5	176.000
Tl	205	1	He	0.004590	27.6	575.017
Pb	208	1	He	0.037162	8.6	4743.677
Bi	209	1	He	0.004995	19.5	2126.887
Th	232	1	He	0.003345	20.9	750.030
U	238	1	He	0.003561	21.9	718.360

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.93657975	615669.107
Sc	45	2	H2	101.7774308	5012406.500
Ge	72	1	He	100.2799325	507931.597
Ge	72	2	H2	101.2927278	1728000.587
In	115	1	He	102.7229135	6074373.043
Tb	159	1	He	102.6032021	14161761.873
Ir	193	1	He	101.8203834	7364225.517

Sample Name 4309487\_B69970Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 024SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:28:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	108.345476	0.6	51588.833
Be	9	2	H2	105.391312	0.6	51222.907
B	11	2	H2	104.214422	1.3	47661.790
Na	23	1	He	2071.154958	0.4	2276891.320
Mg	24	1	He	2056.360843	0.7	1264634.827
Al	27	1	He	2039.033745	0.6	614151.063
Si	28	2	H2	519.240140	0.3	1854057.293
K	39	1	He	2045.235720	0.4	1793888.253
Ca	43	1	He	2062.232767	1.5	5111.927
Ti	47	1	He	102.107502	0.7	28055.287
V	51	1	He	102.787415	1.1	809528.113
Cr	52	1	He	106.101419	0.2	992089.957
Mn	55	1	He	103.093151	0.5	693661.560
Fe	56	1	He	2060.664448	0.4	18329777.333
Co	59	1	He	107.458619	0.2	1600719.497
Ni	60	1	He	108.467553	0.5	407780.623
Cu	63	1	He	106.719965	0.7	1103870.583
Zn	66	1	He	106.051464	0.5	248494.433
As	75	1	He	102.662123	0.1	213181.760
Se	78	2	H2	103.869414	0.5	97645.483
Sr	88	1	He	103.767798	1.2	1293526.727
Mo	95	1	He	100.108895	0.7	690596.147
Pd	105	1	He	20.975813	0.7	217253.287
Ag	107	1	He	53.072734	0.7	1129398.993
Cd	111	1	He	102.630196	0.4	417926.743
Sn	118	1	He	98.372910	0.2	1004324.413
Sb	121	1	He	100.226537	0.5	1522006.120
Ba	138	1	He	100.712518	0.6	3396502.760
Pt	195	1	He	20.906839	0.7	293546.040
Hg	202	1	He	0.015344	5.9	207.667
Tl	205	1	He	107.638440	0.7	5460979.293
Pb	208	1	He	105.524839	0.5	7194614.270
Bi	209	1	He	102.116310	0.9	6033134.287
Th	232	1	He	102.860682	0.8	7432129.263
U	238	1	He	101.529746	0.7	7016812.187

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.80633884	608706.147
Sc	45	2	H2	99.59163391	4904758.833
Ge	72	1	He	100.0542966	506788.720
Ge	72	2	H2	99.76714814	1701975.000
In	115	1	He	101.4739321	6000516.310
Tb	159	1	He	103.2914854	14256761.873
Ir	193	1	He	102.2280879	7393713.013



Sample Name 10605796019\_B69970Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 025SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:32:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.899072	6.5	496.677
Be	9	2	H2	0.086787	12.4	53.500
B	11	2	H2	112.570436	0.4	51304.640
Na	23	1	He	2086.215493	1.0	2258284.187
Mg	24	1	He	9733.226232	0.7	5888916.577
Al	27	1	He	4.032061	11.3	1268.057
Si	28	2	H2	577.744599	0.9	2062815.460
K	39	1	He	349.051831	0.7	362251.403
Ca	43	1	He	28198.10285	1.1	68602.637
Ti	47	1	He	0.061694	17.8	17.667
V	51	1	He	0.109160	63.3	318.220
Cr	52	1	He	0.215188	7.1	4578.727
Mn	55	1	He	82.639516	0.6	547598.520
Fe	56	1	He	4.205282	4.6	47619.260
Co	59	1	He	0.140817	9.5	2118.163
Ni	60	1	He	1.342155	1.3	5180.933
Cu	63	1	He	0.207158	5.2	2316.193
Zn	66	1	He	0.721208	5.2	1835.453
As	75	1	He	0.098844	11.1	389.173
Se	78	2	H2	2.995794	1.4	2863.290
Sr	88	1	He	45.739148	1.2	562422.283
Mo	95	1	He	0.064192	25.8	451.343
Pd	105	1	He	0.039814	16.2	625.020
Ag	107	1	He	0.184448	31.0	3955.623
Cd	111	1	He	0.046604	19.4	199.250
Sn	118	1	He	0.051788	11.5	588.353
Sb	121	1	He	0.044118	27.5	715.027
Ba	138	1	He	1.353385	1.8	45024.780
Pt	195	1	He	0.007883	5.4	274.667
Hg	202	1	He	0.004718	32.4	131.333
Tl	205	1	He	0.056577	11.2	3130.400
Pb	208	1	He	0.089603	2.5	8127.653
Bi	209	1	He	0.036567	18.0	3860.640
Th	232	1	He	0.064089	9.5	4962.657
U	238	1	He	1.374773	1.0	92196.477

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.29642701	599404.187
Sc	45	2	H2	99.66414682	4908330.000
Ge	72	1	He	98.68885612	499872.577
Ge	72	2	H2	100.3278166	1711539.710
In	115	1	He	99.84700535	5904310.313
Tb	159	1	He	100.5351704	13876322.707
Ir	193	1	He	98.71525815	7139645.310

Sample Name 4310780\_B69970Dx100  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 026SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:36:01  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.233508	6.6	182.833
Be	9	2	H2	0.066207	11.3	44.167
B	11	2	H2	21.093563	1.2	12001.257
Na	23	1	He	414.661292	1.0	464643.273
Mg	24	1	He	1878.632579	1.0	1154523.967
Al	27	1	He	4.652729	2.8	1473.740
Si	28	2	H2	110.174856	0.8	411102.023
K	39	1	He	68.526058	1.1	131921.640
Ca	43	1	He	5404.762953	2.1	13356.317
Ti	47	1	He	0.041402	21.2	12.333
V	51	1	He	0.032514	81.2	-281.223
Cr	52	1	He	0.069142	2.9	3285.713
Mn	55	1	He	15.821765	1.1	106640.120
Fe	56	1	He	1.359154	3.2	23041.467
Co	59	1	He	0.030658	10.5	506.010
Ni	60	1	He	0.298306	2.5	1326.730
Cu	63	1	He	0.117862	3.0	1421.407
Zn	66	1	He	1.498625	2.4	3671.143
As	75	1	He	0.051284	13.9	295.167
Se	78	2	H2	0.568404	3.7	573.677
Sr	88	1	He	8.790043	0.7	109401.870
Mo	95	1	He	0.019599	15.9	152.000
Pd	105	1	He	0.011648	32.4	345.010
Ag	107	1	He	0.038473	15.6	921.707
Cd	111	1	He	0.011436	11.0	59.640
Sn	118	1	He	0.032253	7.0	400.010
Sb	121	1	He	0.015143	14.3	288.343
Ba	138	1	He	0.279508	1.9	9580.047
Pt	195	1	He	0.001275	113.1	184.667
Hg	202	1	He	0.005237	56.5	135.000
Tl	205	1	He	0.012938	4.9	976.713
Pb	208	1	He	0.061306	2.9	6257.247
Bi	209	1	He	0.004312	101.8	2013.530
Th	232	1	He	0.014610	8.3	1505.103
U	238	1	He	0.259854	0.8	17705.520

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.72656142	608214.670
Sc	45	2	H2	101.1998928	4983963.500
Ge	72	1	He	99.78358729	505417.540
Ge	72	2	H2	101.1205017	1725062.500
In	115	1	He	101.8336991	6021790.617
Tb	159	1	He	100.6486526	13891986.040
Ir	193	1	He	98.18801607	7101512.183

Sample Name 4309488\_B69970Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 027SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:39:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	6.099083	0.1	2993.300
Be	9	2	H2	5.221266	0.6	2569.220
B	11	2	H2	113.417995	0.4	52054.353
Na	23	1	He	2116.467081	0.3	2301166.217
Mg	24	1	He	9509.778497	0.6	5779539.077
Al	27	1	He	107.582133	0.4	32120.737
Si	28	2	H2	587.847187	0.2	2114287.417
K	39	1	He	445.618039	0.7	444179.927
Ca	43	1	He	27537.54330	1.1	67296.783
Ti	47	1	He	5.263498	2.8	1431.407
V	51	1	He	5.266670	3.6	40526.697
Cr	52	1	He	5.524660	0.4	53574.643
Mn	55	1	He	85.330203	1.1	567947.687
Fe	56	1	He	109.007229	0.6	969370.227
Co	59	1	He	5.440952	0.7	79964.897
Ni	60	1	He	6.723990	0.8	25119.597
Cu	63	1	He	5.533345	0.2	56629.580
Zn	66	1	He	6.907566	1.8	16117.613
As	75	1	He	5.271782	0.6	10971.820
Se	78	2	H2	8.007557	2.1	7583.337
Sr	88	1	He	49.870630	0.3	613054.327
Mo	95	1	He	5.198042	1.0	35319.657
Pd	105	1	He	1.072776	1.1	11147.810
Ag	107	1	He	2.401582	5.7	50421.700
Cd	111	1	He	5.132347	0.4	20588.973
Sn	118	1	He	5.110400	2.1	51429.087
Sb	121	1	He	5.064177	1.1	75765.617
Ba	138	1	He	6.401290	1.5	212648.590
Pt	195	1	He	1.044579	0.8	14409.797
Hg	202	1	He	0.000892	181.5	105.667
Tl	205	1	He	5.389376	0.9	265992.667
Pb	208	1	He	5.285933	0.6	352246.143
Bi	209	1	He	5.184875	0.6	295656.230
Th	232	1	He	5.094856	1.0	353735.930
U	238	1	He	6.363975	1.4	422474.277

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.73094921	602081.103
Sc	45	2	H2	100.4040715	4944770.333
Ge	72	1	He	98.65946699	499723.717
Ge	72	2	H2	100.1133585	1707881.167
In	115	1	He	99.90900442	5907976.540
Tb	159	1	He	100.3650225	13852838.127
Ir	193	1	He	98.10875074	7095779.267

Sample Name 4309489\_B69970Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 028SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:43:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	6.094143	1.6	2990.963
Be	9	2	H2	5.182149	0.8	2550.050
B	11	2	H2	118.249700	0.1	54155.693
Na	23	1	He	2174.562338	0.4	2380254.597
Mg	24	1	He	9796.464971	0.7	5994626.370
Al	27	1	He	105.473228	0.9	31708.533
Si	28	2	H2	607.506488	0.1	2184507.917
K	39	1	He	452.795202	1.2	453232.547
Ca	43	1	He	28281.33629	0.6	69589.207
Ti	47	1	He	5.206827	0.8	1425.737
V	51	1	He	5.174803	2.9	40080.097
Cr	52	1	He	5.458725	1.2	53329.807
Mn	55	1	He	86.918604	0.4	582491.667
Fe	56	1	He	107.369000	0.5	961525.690
Co	59	1	He	5.382855	1.1	80018.590
Ni	60	1	He	6.631964	0.3	25062.190
Cu	63	1	He	5.459993	0.9	56519.823
Zn	66	1	He	5.741661	2.0	13581.037
As	75	1	He	5.234972	0.5	11021.193
Se	78	2	H2	8.162700	0.9	7769.767
Sr	88	1	He	50.781016	0.6	631373.790
Mo	95	1	He	5.133189	0.5	34767.597
Pd	105	1	He	1.061809	0.7	11001.020
Ag	107	1	He	2.506575	5.4	52442.207
Cd	111	1	He	5.110801	1.6	20436.853
Sn	118	1	He	5.080947	0.4	50972.473
Sb	121	1	He	5.090112	0.3	75911.487
Ba	138	1	He	6.345941	0.5	210145.810
Pt	195	1	He	1.030768	1.8	14146.160
Hg	202	1	He	0.004359	17.6	128.000
Tl	205	1	He	5.378964	0.7	264084.670
Pb	208	1	He	5.264483	0.5	348985.013
Bi	209	1	He	5.222352	0.4	294220.970
Th	232	1	He	5.177064	0.6	355152.290
U	238	1	He	6.485169	1.3	425373.603

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.40252903	606218.437
Sc	45	2	H2	100.4038008	4944757.000
Ge	72	1	He	99.78757928	505437.760
Ge	72	2	H2	100.6267461	1716639.290
In	115	1	He	99.58566036	5888856.050
Tb	159	1	He	99.83921339	13780263.543
Ir	193	1	He	96.93398892	7010813.853

Sample Name 10605796021\_B69970Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 029SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:47:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.831722	5.5	479.010
Be	9	2	H2	0.040634	26.4	32.000
B	11	2	H2	112.114631	0.1	52685.187
Na	23	1	He	2059.274564	1.7	2273682.570
Mg	24	1	He	9594.613500	1.6	5920745.120
Al	27	1	He	4.142184	2.0	1327.060
Si	28	2	H2	575.251518	0.5	2117408.917
K	39	1	He	346.444749	1.2	367289.943
Ca	43	1	He	27923.51571	1.3	69291.893
Ti	47	1	He	0.026673	39.8	8.333
V	51	1	He	-0.024931		-734.707
Cr	52	1	He	0.159525	7.2	4148.597
Mn	55	1	He	81.528822	1.6	551010.837
Fe	56	1	He	2.707306	2.7	35199.590
Co	59	1	He	0.099069	1.9	1512.750
Ni	60	1	He	1.309670	0.7	5084.903
Cu	63	1	He	0.190047	2.6	2152.837
Zn	66	1	He	1.284734	2.8	3151.680
As	75	1	He	0.056261	14.9	303.500
Se	78	2	H2	2.908933	1.7	2837.620
Sr	88	1	He	45.933572	1.1	567546.610
Mo	95	1	He	0.021269	5.0	162.667
Pd	105	1	He	0.026958	13.6	501.680
Ag	107	1	He	0.082885	18.5	1855.143
Cd	111	1	He	0.013402	21.6	67.303
Sn	118	1	He	0.028888	16.4	363.343
Sb	121	1	He	0.009103	10.1	195.000
Ba	138	1	He	1.293674	2.0	43648.680
Pt	195	1	He	0.002468	68.6	200.667
Hg	202	1	He	0.003046	133.0	120.000
Tl	205	1	He	0.013246	4.3	991.717
Pb	208	1	He	0.045449	5.7	5203.747
Bi	209	1	He	0.002788	64.0	1933.510
Th	232	1	He	0.021165	17.0	1965.170
U	238	1	He	1.317000	1.6	88212.253

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.24906155	611433.583
Sc	45	2	H2	102.7388233	5059753.833
Ge	72	1	He	99.16928670	502306.023
Ge	72	2	H2	102.3600087	1746207.837
In	115	1	He	101.2697838	5988444.290
Tb	159	1	He	100.6747259	13895584.793
Ir	193	1	He	98.57768308	7129695.103

Sample Name 10605796022\_B69970Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 030SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:50:45  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.028765	17.4	84.667
Be	9	2	H2	0.035673	18.0	29.333
B	11	2	H2	1.137163	1.3	3283.860
Na	23	1	He	27.452931	3.3	42326.537
Mg	24	1	He	10.692076	51.6	8219.317
Al	27	1	He	9.450543	2.5	2977.303
Si	28	2	H2	1.884515	50.1	21373.073
K	39	1	He	7.501184	12.4	82307.900
Ca	43	1	He	119.680035	22.8	320.287
Ti	47	1	He	0.092825	11.7	27.000
V	51	1	He	0.004086	296.2	-516.773
Cr	52	1	He	0.778887	0.2	10101.490
Mn	55	1	He	0.123221	51.4	1176.723
Fe	56	1	He	2.879004	1.3	37291.357
Co	59	1	He	0.004435	18.9	118.000
Ni	60	1	He	0.112359	7.2	638.687
Cu	63	1	He	0.043687	3.6	665.353
Zn	66	1	He	2.826847	1.3	6865.643
As	75	1	He	0.024807	13.1	243.667
Se	78	2	H2	-0.000319		32.000
Sr	88	1	He	0.110365	21.8	1531.763
Mo	95	1	He	0.018558	7.8	144.667
Pd	105	1	He	0.007349	142.4	300.007
Ag	107	1	He	0.017102	1.6	465.010
Cd	111	1	He	0.001647	60.2	19.640
Sn	118	1	He	0.022502	15.9	300.007
Sb	121	1	He	0.005631	17.8	143.333
Ba	138	1	He	0.028722	6.4	1091.720
Pt	195	1	He	0.010294	11.4	309.340
Hg	202	1	He	0.006284	25.9	142.667
Tl	205	1	He	0.004200	40.9	546.683
Pb	208	1	He	0.009934	39.1	2858.477
Bi	209	1	He	0.001872	110.1	1916.843
Th	232	1	He	0.006538	9.3	966.713
U	238	1	He	0.003968	37.3	736.693

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.7448107	620648.293
Sc	45	2	H2	102.1113855	5028853.333
Ge	72	1	He	101.1500235	512338.727
Ge	72	2	H2	100.9157865	1721570.167
In	115	1	He	101.7627655	6017596.060
Tb	159	1	He	101.1289355	13958276.873
Ir	193	1	He	100.4616821	7265956.560

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 031\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:54:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	81.833357	0.1	39386.453
Be	9	2	H2	79.946870	0.2	39263.023
B	11	2	H2	79.173170	0.2	37245.523
Na	23	1	He	1004.660625	0.5	1132069.097
Mg	24	1	He	1000.435005	0.7	628067.427
Al	27	1	He	1000.241904	0.9	307202.583
Si	28	2	H2	492.986870	0.2	1779317.623
K	39	1	He	1007.205049	0.6	939194.857
Ca	43	1	He	1003.447626	0.9	2545.687
Ti	47	1	He	80.340672	1.5	22507.143
V	51	1	He	80.693437	3.4	647904.853
Cr	52	1	He	84.721818	5.9	808338.667
Mn	55	1	He	80.576889	0.7	552828.147
Fe	56	1	He	500.103185	0.9	4543907.333
Co	59	1	He	82.585677	1.1	1250896.333
Ni	60	1	He	83.690605	1.1	319961.573
Cu	63	1	He	83.844829	1.1	881868.520
Zn	66	1	He	81.809734	1.5	194953.203
As	75	1	He	79.732492	0.6	168392.620
Se	78	2	H2	79.778992	0.9	75552.270
Sr	88	1	He	80.266165	1.1	1017378.893
Mo	95	1	He	77.677846	1.0	539840.250
Pd	105	1	He	82.328109	1.0	858355.403
Ag	107	1	He	41.983302	0.2	900057.280
Cd	111	1	He	80.092750	0.9	328567.913
Sn	118	1	He	76.956399	0.7	791511.263
Sb	121	1	He	77.808678	0.8	1190336.570
Ba	138	1	He	77.614861	1.1	2636948.970
Pt	195	1	He	81.872371	0.3	1131382.293
Hg	202	1	He	3.868550	0.5	26175.963
Tl	205	1	He	42.099422	0.2	2103300.487
Pb	208	1	He	82.211207	0.8	5519402.547
Bi	209	1	He	79.779859	0.8	4620937.327
Th	232	1	He	76.701557	0.6	5432913.667
U	238	1	He	78.074751	0.7	5289569.920

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.7352300	620589.270
Sc	45	2	H2	100.6255156	4955676.167
Ge	72	1	He	101.7372343	515313.030
Ge	72	2	H2	100.4921556	1714343.247
In	115	1	He	102.2278763	6045099.727
Tb	159	1	He	101.7039932	14037648.957
Ir	193	1	He	100.2127069	7247949.267

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 032\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:58:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.068889	31.3	103.167
Be	9	2	H2	0.053431	25.4	37.833
B	11	2	H2	-0.468320		2547.717
Na	23	1	He	-0.248675		11339.373
Mg	24	1	He	-0.492399		1198.393
Al	27	1	He	0.260297	10.5	154.000
Si	28	2	H2	-0.210971		13618.250
K	39	1	He	-0.996772		74433.037
Ca	43	1	He	-1.231123		15.517
Ti	47	1	He	0.020421	10.2	6.667
V	51	1	He	-0.002121		-564.623
Cr	52	1	He	0.001859	218.9	2691.593
Mn	55	1	He	-0.003101		307.337
Fe	56	1	He	0.161474	11.9	12558.063
Co	59	1	He	0.010011	33.4	200.667
Ni	60	1	He	0.011903	39.3	255.333
Cu	63	1	He	0.011560	38.9	327.337
Zn	66	1	He	0.004689	206.3	184.000
As	75	1	He	0.016751	27.1	225.333
Se	78	2	H2	0.008274	54.1	40.000
Sr	88	1	He	0.005795	75.2	211.667
Mo	95	1	He	0.016026	33.6	127.333
Pd	105	1	He	0.014084	52.8	370.010
Ag	107	1	He	0.131929	19.6	2917.000
Cd	111	1	He	0.005799	37.7	36.643
Sn	118	1	He	0.011248	10.0	185.000
Sb	121	1	He	0.006526	68.1	156.667
Ba	138	1	He	0.004861	76.5	285.003
Pt	195	1	He	0.006772	36.1	261.333
Hg	202	1	He	0.029103	14.0	295.667
Tl	205	1	He	0.047226	16.7	2685.303
Pb	208	1	He	0.015141	17.3	3208.503
Bi	209	1	He	0.008142	64.2	2280.253
Th	232	1	He	0.022513	1.0	2100.190
U	238	1	He	0.006758	42.0	925.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.94886481	615744.790
Sc	45	2	H2	101.0807526	4978096.000
Ge	72	1	He	100.4974337	509033.270
Ge	72	2	H2	100.5233872	1714876.040
In	115	1	He	101.8891293	6025068.403
Tb	159	1	He	101.2003932	13968139.790
Ir	193	1	He	100.4256299	7263349.060



Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 033CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:01:50  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.546855	7.3	336.833
Be	9	2	H2	0.234679	2.7	128.333
B	11	2	H2	8.784515	0.6	6657.467
Na	23	1	He	53.126790	0.8	70326.303
Mg	24	1	He	30.529530	2.2	20457.407
Al	27	1	He	31.339713	1.5	9613.427
Si	28	2	H2	98.451819	0.9	371741.117
K	39	1	He	103.792621	1.0	163388.673
Ca	43	1	He	103.182507	3.1	276.117
Ti	47	1	He	0.999243	7.4	278.333
V	51	1	He	0.925393	13.7	6824.960
Cr	52	1	He	2.067514	1.5	22154.713
Mn	55	1	He	0.526343	1.1	3905.197
Fe	56	1	He	51.782620	1.4	476276.927
Co	59	1	He	0.557170	2.4	8370.417
Ni	60	1	He	0.541063	2.1	2248.180
Cu	63	1	He	1.079857	2.2	11401.813
Zn	66	1	He	5.331170	3.1	12686.893
As	75	1	He	0.494391	3.5	1218.217
Se	78	2	H2	0.497427	3.1	506.677
Sr	88	1	He	0.522030	2.3	6661.607
Mo	95	1	He	0.491247	2.9	3395.083
Pd	105	1	He	0.533907	3.2	5731.207
Ag	107	1	He	0.459059	5.9	9841.823
Cd	111	1	He	0.083289	6.5	351.057
Sn	118	1	He	0.488279	3.6	5039.287
Sb	121	1	He	0.515283	2.9	7858.930
Ba	138	1	He	0.303200	2.1	10315.573
Pt	195	1	He	0.511840	1.7	7240.647
Hg	202	1	He	0.237866	3.0	1704.113
Tl	205	1	He	0.104050	4.4	5539.540
Pb	208	1	He	0.527281	1.0	37599.103
Bi	209	1	He	0.495482	1.9	30672.687
Th	232	1	He	0.502597	2.0	36315.560
U	238	1	He	0.486214	1.3	33600.047

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.85197216	615147.873
Sc	45	2	H2	101.9822992	5022496.000
Ge	72	1	He	100.3144074	508106.217
Ge	72	2	H2	101.2398880	1727099.167
In	115	1	He	101.1915977	5983820.867
Tb	159	1	He	101.7082527	14038236.873
Ir	193	1	He	100.8074245	7290962.603

Sample Name CG-CRDL-AIMgCaCrPb  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 034CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:05:32  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.557476	6.2	340.333
Be	9	2	H2	0.239473	2.3	130.000
B	11	2	H2	8.677565	2.4	6578.933
Na	23	1	He	52.698848	1.1	70316.243
Mg	24	1	He	9.614271	1.8	7520.283
Al	27	1	He	21.557593	0.9	6679.503
Si	28	2	H2	97.377919	0.3	366103.123
K	39	1	He	99.780184	0.2	161038.013
Ca	43	1	He	38.581916	6.5	115.633
Ti	47	1	He	1.011270	12.3	283.667
V	51	1	He	1.041292	3.8	7799.823
Cr	52	1	He	0.495831	2.8	7392.547
Mn	55	1	He	0.508300	3.9	3807.843
Fe	56	1	He	51.843216	0.9	479996.363
Co	59	1	He	0.540380	1.2	8178.977
Ni	60	1	He	0.568007	4.3	2366.863
Cu	63	1	He	1.090485	1.6	11595.963
Zn	66	1	He	5.351910	1.7	12827.017
As	75	1	He	0.489294	1.4	1216.383
Se	78	2	H2	0.514865	2.7	520.677
Sr	88	1	He	0.527260	2.7	6774.990
Mo	95	1	He	0.481908	2.2	3347.070
Pd	105	1	He	0.525887	0.2	5676.183
Ag	107	1	He	0.483175	3.5	10403.903
Cd	111	1	He	0.086529	4.7	366.070
Sn	118	1	He	0.486395	2.8	5045.950
Sb	121	1	He	0.502279	6.0	7697.190
Ba	138	1	He	0.313211	1.4	10704.207
Pt	195	1	He	0.490858	1.5	6961.830
Hg	202	1	He	0.237589	2.3	1705.113
Tl	205	1	He	0.100732	7.5	5381.137
Pb	208	1	He	0.116553	1.6	10046.480
Bi	209	1	He	0.519526	3.3	31902.183
Th	232	1	He	0.506523	1.7	36399.137
U	238	1	He	0.498706	0.8	34273.553

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.5100830	619202.230
Sc	45	2	H2	101.5004016	4998763.167
Ge	72	1	He	101.0274536	511717.893
Ge	72	2	H2	100.7119557	1718092.920
In	115	1	He	101.6847944	6012985.350
Tb	159	1	He	101.8577762	14058874.790
Ir	193	1	He	100.2836332	7253079.057

Sample Name 4311407\_B70011Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 035\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:09:13  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.075264	17.0	104.667
Be	9	2	H2	0.035480	25.7	28.500
B	11	2	H2	-1.583127		2027.807
Na	23	1	He	-0.086585		11254.317
Mg	24	1	He	2.897732	8.8	3228.707
Al	27	1	He	2.048413	5.2	682.687
Si	28	2	H2	0.256027	33.7	15062.963
K	39	1	He	0.991293	50.9	74374.470
Ca	43	1	He	0.791494	10.9	20.100
Ti	47	1	He	0.013636	82.8	4.667
V	51	1	He	0.003484	2388.2	-506.553
Cr	52	1	He	0.079312	3.8	3343.723
Mn	55	1	He	0.001889	286.1	333.337
Fe	56	1	He	0.239598	13.9	12957.100
Co	59	1	He	0.005213	14.2	125.333
Ni	60	1	He	0.004760	180.6	222.000
Cu	63	1	He	0.007243	25.3	274.667
Zn	66	1	He	0.070976	25.9	330.673
As	75	1	He	0.026015	11.1	237.833
Se	78	2	H2	0.005721	124.8	37.000
Sr	88	1	He	0.005880	54.1	206.667
Mo	95	1	He	0.001392	54.1	25.333
Pd	105	1	He	0.009483	38.0	315.010
Ag	107	1	He	0.072515	30.8	1608.443
Cd	111	1	He	0.001771	36.2	19.663
Sn	118	1	He	0.008871	11.8	156.667
Sb	121	1	He	0.001153	187.7	73.333
Ba	138	1	He	0.004309	9.1	260.007
Pt	195	1	He	0.000527	184.0	174.667
Hg	202	1	He	0.012688	22.1	185.000
Tl	205	1	He	0.009485	26.0	806.700
Pb	208	1	He	0.024252	18.2	3803.563
Bi	209	1	He	0.003443	40.5	2006.857
Th	232	1	He	0.007288	22.8	1018.380
U	238	1	He	0.002262	40.8	620.020

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.65386687	601606.230
Sc	45	2	H2	99.52905697	4901677.000
Ge	72	1	He	97.71580051	494943.917
Ge	72	2	H2	98.89124673	1687032.583
In	115	1	He	99.42453971	5879328.410
Tb	159	1	He	100.7777751	13909808.123
Ir	193	1	He	100.4407438	7264442.183

Sample Name 4311408\_B70011Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 036SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:12:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	53.604392	0.9	24893.363
Be	9	2	H2	51.951989	0.5	24599.253
B	11	2	H2	50.188990	0.4	23726.887
Na	23	1	He	1013.849083	0.5	1098905.997
Mg	24	1	He	1005.680438	0.8	607343.027
Al	27	1	He	998.186841	0.8	294911.710
Si	28	2	H2	254.079600	0.2	890703.980
K	39	1	He	1005.802245	1.2	902314.077
Ca	43	1	He	988.134080	2.3	2411.833
Ti	47	1	He	49.703084	0.6	13394.750
V	51	1	He	50.109175	0.8	386804.540
Cr	52	1	He	51.616647	0.6	474695.143
Mn	55	1	He	50.309739	0.9	332158.500
Fe	56	1	He	997.478892	0.4	8707810.667
Co	59	1	He	51.940387	0.3	754792.583
Ni	60	1	He	52.690261	0.6	193342.193
Cu	63	1	He	51.991053	0.7	524702.240
Zn	66	1	He	51.117252	0.9	116927.487
As	75	1	He	49.827770	0.3	101031.513
Se	78	2	H2	51.373683	0.4	46914.247
Sr	88	1	He	50.484000	1.0	613957.673
Mo	95	1	He	48.537120	1.6	326705.583
Pd	105	1	He	10.244547	1.4	103640.467
Ag	107	1	He	26.596816	2.2	552269.510
Cd	111	1	He	49.970111	0.6	198551.240
Sn	118	1	He	48.316707	0.7	481340.983
Sb	121	1	He	48.241456	1.2	714812.020
Ba	138	1	He	49.038160	1.2	1613683.880
Pt	195	1	He	10.164283	1.4	138536.893
Hg	202	1	He	0.009905	5.0	165.333
Tl	205	1	He	52.846305	0.3	2601099.337
Pb	208	1	He	51.351125	0.8	3397486.433
Bi	209	1	He	49.875504	1.0	2857361.523
Th	232	1	He	49.872901	0.9	3493436.717
U	238	1	He	49.303858	0.8	3303420.577

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.90938072	597019.750
Sc	45	2	H2	97.00191091	4777218.333
Ge	72	1	He	97.60544219	494384.937
Ge	72	2	H2	96.88218451	1652759.040
In	115	1	He	99.01116310	5854883.973
Tb	159	1	He	100.2011357	13830217.710
Ir	193	1	He	99.09914109	7167409.893

Sample Name 4311409\_B70011Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 037SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:16:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	51.900122	0.6	24052.510
Be	9	2	H2	50.210881	0.9	23724.027
B	11	2	H2	48.944257	1.0	23154.177
Na	23	1	He	981.819216	1.5	1049055.090
Mg	24	1	He	981.003786	1.4	583876.540
Al	27	1	He	968.107551	1.7	281866.073
Si	28	2	H2	238.998762	0.5	836853.227
K	39	1	He	973.446793	1.9	862908.033
Ca	43	1	He	991.184123	3.3	2383.657
Ti	47	1	He	47.056544	0.9	12497.967
V	51	1	He	48.512236	1.8	369011.670
Cr	52	1	He	49.957811	1.6	452836.667
Mn	55	1	He	49.102756	1.8	319482.597
Fe	56	1	He	973.610172	1.8	8375860.667
Co	59	1	He	50.484198	1.8	728732.397
Ni	60	1	He	51.168622	1.7	186510.810
Cu	63	1	He	50.280465	1.8	504053.260
Zn	66	1	He	49.371037	2.2	112181.690
As	75	1	He	47.150823	1.8	94973.850
Se	78	2	H2	48.852992	0.8	44383.303
Sr	88	1	He	48.785346	1.2	589379.523
Mo	95	1	He	46.213255	1.1	307941.073
Pd	105	1	He	9.803464	0.8	98191.797
Ag	107	1	He	25.994824	1.8	534336.360
Cd	111	1	He	48.139001	1.9	189340.243
Sn	118	1	He	45.939985	2.4	453016.503
Sb	121	1	He	46.119261	2.2	676448.973
Ba	138	1	He	47.706062	1.5	1554035.237
Pt	195	1	He	9.569226	2.1	130146.897
Hg	202	1	He	0.005092	45.8	133.000
Tl	205	1	He	50.697458	1.5	2490130.327
Pb	208	1	He	49.474445	2.1	3266427.320
Bi	209	1	He	47.795969	1.0	2718440.790
Th	232	1	He	47.692897	1.0	3316562.867
U	238	1	He	47.278493	0.9	3144699.120

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.51246171	588413.893
Sc	45	2	H2	96.79391558	4766974.833
Ge	72	1	He	96.96701129	491151.197
Ge	72	2	H2	96.38334379	1644249.080
In	115	1	He	98.01838169	5796177.260
Tb	159	1	He	99.99683631	13802019.377
Ir	193	1	He	98.37780010	7115238.437

Sample Name CG-Control\_B70011Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 038\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:20:17  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.118924	23.4	122.833
Be	9	2	H2	0.049988	22.5	34.833
B	11	2	H2	-1.458380		2039.810
Na	23	1	He	-0.100958		10980.767
Mg	24	1	He	2.230540	8.0	2758.617
Al	27	1	He	2.057493	0.8	669.687
Si	28	2	H2	0.841314	17.2	16789.820
K	39	1	He	-1.041489		71016.417
Ca	43	1	He	0.496103	326.8	18.933
Ti	47	1	He	0.034100	18.5	10.000
V	51	1	He	0.013751	380.5	-415.593
Cr	52	1	He	0.079779	3.5	3271.043
Mn	55	1	He	0.006235	42.2	354.010
Fe	56	1	He	0.613747	4.5	15869.940
Co	59	1	He	0.013676	16.1	244.667
Ni	60	1	He	0.001050	305.6	205.333
Cu	63	1	He	0.010938	4.6	307.333
Zn	66	1	He	0.072964	21.1	330.003
As	75	1	He	0.020934	14.2	224.167
Se	78	2	H2	0.008682	111.9	39.000
Sr	88	1	He	0.007926	43.1	228.333
Mo	95	1	He	0.007414	18.6	65.333
Pd	105	1	He	0.008163	47.7	298.340
Ag	107	1	He	0.165033	33.5	3498.837
Cd	111	1	He	0.003003	63.2	24.323
Sn	118	1	He	0.027722	18.7	341.677
Sb	121	1	He	0.020229	16.6	353.343
Ba	138	1	He	0.005164	54.5	285.007
Pt	195	1	He	-0.000920		153.333
Hg	202	1	He	0.004005	48.4	125.667
Tl	205	1	He	0.011688	23.3	906.707
Pb	208	1	He	0.016802	10.4	3275.180
Bi	209	1	He	0.007081	91.0	2193.567
Th	232	1	He	0.030810	11.2	2660.297
U	238	1	He	0.008937	133.1	1064.903

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.41158947	587792.460
Sc	45	2	H2	97.51622902	4802547.833
Ge	72	1	He	96.25999257	487570.050
Ge	72	2	H2	97.06068025	1655804.083
In	115	1	He	98.37802757	5817444.407
Tb	159	1	He	99.86125660	13783306.047
Ir	193	1	He	99.43127024	7191431.350

Sample Name 10606778001\_B70011Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 039\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:23:59  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.105375	16.3	115.333
Be	9	2	H2	0.034486	15.9	27.167
B	11	2	H2	-1.866936		1847.950
Na	23	1	He	2.513534	54.9	12657.090
Mg	24	1	He	3.208423	22.5	3080.350
Al	27	1	He	2.228521	15.8	661.017
Si	28	2	H2	0.242396	36.0	14559.223
K	39	1	He	7.727780	124.7	71994.273
Ca	43	1	He	2.422324	55.6	21.683
Ti	47	1	He	0.014337	61.8	4.333
V	51	1	He	0.064706	9.8	-24.323
Cr	52	1	He	0.107402	44.7	3238.367
Mn	55	1	He	0.004636	144.3	316.000
Fe	56	1	He	0.504370	27.8	13777.900
Co	59	1	He	0.006814	33.1	134.000
Ni	60	1	He	0.011503	82.2	224.000
Cu	63	1	He	0.029691	23.3	454.677
Zn	66	1	He	0.226583	16.0	623.353
As	75	1	He	0.036205	14.8	236.333
Se	78	2	H2	0.002518	198.8	33.000
Sr	88	1	He	0.012216	46.8	258.337
Mo	95	1	He	0.001985	67.3	27.333
Pd	105	1	He	0.006168	13.7	258.340
Ag	107	1	He	0.044533	16.4	935.040
Cd	111	1	He	0.001674	109.5	17.330
Sn	118	1	He	0.013996	27.4	193.333
Sb	121	1	He	0.006413	12.3	140.000
Ba	138	1	He	0.007108	42.6	318.343
Pt	195	1	He	-0.000133		151.333
Hg	202	1	He	0.004224	55.9	117.667
Tl	205	1	He	0.005424	21.5	556.687
Pb	208	1	He	0.014639	42.5	2898.483
Bi	209	1	He	0.003595	75.9	1856.837
Th	232	1	He	0.012685	14.6	1283.410
U	238	1	He	-0.000858		373.343

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.51250612	545289.980
Sc	45	2	H2	96.50486229	4752739.333
Ge	72	1	He	89.51707722	453416.260
Ge	72	2	H2	96.01749642	1638007.917
In	115	1	He	91.42130965	5406068.810
Tb	159	1	He	93.20536699	12864629.810
Ir	193	1	He	92.49020480	6689414.273

Sample Name 10606778001\_B70011Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 040\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:27:40  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.090170	12.0	108.667
Be	9	2	H2	0.033611	22.3	26.833
B	11	2	H2	-2.039242		1781.940
Na	23	1	He	-0.647254		10281.950
Mg	24	1	He	1.809629	7.6	2480.227
Al	27	1	He	1.913345	10.2	620.347
Si	28	2	H2	0.632845	19.6	15955.207
K	39	1	He	1.073697	11.2	71887.283
Ca	43	1	He	-0.228030		17.017
Ti	47	1	He	0.015508	85.3	5.000
V	51	1	He	0.048899	25.0	-146.363
Cr	52	1	He	0.125252	4.9	3637.793
Mn	55	1	He	0.005754	72.7	346.673
Fe	56	1	He	0.436909	3.8	14185.557
Co	59	1	He	0.006081	16.4	134.000
Ni	60	1	He	0.051573	11.5	382.677
Cu	63	1	He	0.013064	20.1	324.003
Zn	66	1	He	0.047058	6.9	268.000
As	75	1	He	0.029167	17.1	237.333
Se	78	2	H2	-0.001081		29.667
Sr	88	1	He	0.006502	58.1	208.333
Mo	95	1	He	0.002277	39.6	30.667
Pd	105	1	He	0.012028	23.7	333.343
Ag	107	1	He	0.016891	13.1	440.010
Cd	111	1	He	0.000512	31.0	14.327
Sn	118	1	He	0.012299	47.8	186.667
Sb	121	1	He	0.001943	33.7	83.333
Ba	138	1	He	0.003400	31.3	225.000
Pt	195	1	He	0.000080	2276.3	166.000
Hg	202	1	He	0.001416	91.8	108.000
Tl	205	1	He	0.002957	36.7	476.680
Pb	208	1	He	0.009723	8.7	2795.140
Bi	209	1	He	0.000600	126.4	1810.157
Th	232	1	He	0.009420	12.2	1150.060
U	238	1	He	-0.000407		431.677

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.30049606	580947.460
Sc	45	2	H2	96.83504357	4769000.333
Ge	72	1	He	94.95283016	480949.093
Ge	72	2	H2	95.80061282	1634307.997
In	115	1	He	97.27315637	5752109.423
Tb	159	1	He	99.35089755	13712863.963
Ir	193	1	He	98.66422158	7135954.057



Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 041\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:31:21  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	86.063882	0.6	39675.523
Be	9	2	H2	83.285187	0.4	39180.970
B	11	2	H2	80.582564	0.5	36266.153
Na	23	1	He	1002.722780	0.5	1092444.177
Mg	24	1	He	1006.804063	0.3	611089.847
Al	27	1	He	1007.621483	0.4	299202.447
Si	28	2	H2	505.560106	0.6	1747553.420
K	39	1	He	1001.295378	0.1	903145.430
Ca	43	1	He	1012.907886	1.6	2484.427
Ti	47	1	He	79.293430	0.2	21476.277
V	51	1	He	78.978402	0.2	613030.517
Cr	52	1	He	81.706808	0.7	753659.043
Mn	55	1	He	80.314255	0.4	532735.290
Fe	56	1	He	499.562429	0.7	4388331.167
Co	59	1	He	83.105582	0.3	1213403.047
Ni	60	1	He	83.821035	0.2	308917.167
Cu	63	1	He	83.614839	0.6	847763.127
Zn	66	1	He	81.973938	0.5	188305.510
As	75	1	He	80.356583	0.5	163596.123
Se	78	2	H2	81.219251	0.7	73623.020
Sr	88	1	He	80.760897	0.4	986787.327
Mo	95	1	He	77.708272	0.4	525855.127
Pd	105	1	He	82.801447	0.6	840621.187
Ag	107	1	He	42.289598	0.8	882791.137
Cd	111	1	He	80.505944	0.6	321581.240
Sn	118	1	He	77.655358	0.9	777693.633
Sb	121	1	He	78.392341	0.6	1167741.467
Ba	138	1	He	78.244966	0.3	2588525.900
Pt	195	1	He	82.319855	0.4	1121948.250
Hg	202	1	He	3.890560	0.3	25962.553
Tl	205	1	He	42.009374	0.4	2069994.970
Pb	208	1	He	82.610658	0.8	5470065.337
Bi	209	1	He	79.887786	0.9	4580906.700
Th	232	1	He	77.636405	0.9	5444065.543
U	238	1	He	79.265987	0.8	5316450.757

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.39362429	600002.980
Sc	45	2	H2	96.39248370	4747204.833
Ge	72	1	He	98.07004627	496738.220
Ge	72	2	H2	96.19543021	1641043.373
In	115	1	He	99.54037408	5886178.110
Tb	159	1	He	100.3079916	13844966.457
Ir	193	1	He	99.21114607	7175510.727

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 042\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:35:01  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.066674	27.6	98.167
Be	9	2	H2	0.064648	15.6	41.667
B	11	2	H2	-1.521319		2007.803
Na	23	1	He	-0.076209		11144.227
Mg	24	1	He	-0.618844		1080.050
Al	27	1	He	0.781740	57.8	300.670
Si	28	2	H2	-0.186743		13188.553
K	39	1	He	-0.083487		72731.297
Ca	43	1	He	-0.086918		17.767
Ti	47	1	He	0.048822	43.3	14.000
V	51	1	He	0.094042	67.3	193.747
Cr	52	1	He	0.044519	87.9	2987.647
Mn	55	1	He	0.029452	122.2	508.010
Fe	56	1	He	0.410189	51.8	14284.387
Co	59	1	He	0.051595	59.2	797.363
Ni	60	1	He	0.051280	82.9	392.007
Cu	63	1	He	0.049348	54.2	698.690
Zn	66	1	He	0.050067	49.2	282.670
As	75	1	He	0.038980	82.5	264.000
Se	78	2	H2	0.013616	43.4	43.333
Sr	88	1	He	0.044658	64.9	676.693
Mo	95	1	He	0.047568	53.9	338.003
Pd	105	1	He	0.025264	66.6	476.680
Ag	107	1	He	0.136509	32.6	2955.357
Cd	111	1	He	0.044192	68.2	188.940
Sn	118	1	He	0.048078	51.9	550.017
Sb	121	1	He	0.037672	71.1	616.690
Ba	138	1	He	0.042242	59.2	1515.113
Pt	195	1	He	0.042294	54.9	737.360
Hg	202	1	He	0.030609	13.4	302.000
Tl	205	1	He	0.065274	29.5	3532.183
Pb	208	1	He	0.049743	52.7	5435.477
Bi	209	1	He	0.046583	66.7	4460.913
Th	232	1	He	0.055834	48.4	4414.200
U	238	1	He	0.044207	66.8	3422.250

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.68013188	595607.440
Sc	45	2	H2	97.26883841	4790364.167
Ge	72	1	He	97.90383228	495896.323
Ge	72	2	H2	96.66883541	1649119.417
In	115	1	He	100.1420814	5921759.220
Tb	159	1	He	100.0469783	13808940.210
Ir	193	1	He	99.80349876	7218353.020

Sample Name 4305774\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 043SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:38:40  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.046773	53.2	88.500
Be	9	2	H2	0.038143	11.7	29.000
B	11	2	H2	-1.993652		1801.940
Na	23	1	He	6.102351	4.7	18102.687
Mg	24	1	He	2.741932	11.1	3162.027
Al	27	1	He	6.311513	1.4	1968.800
Si	28	2	H2	1.248601	50.1	18115.507
K	39	1	He	-0.597279		73696.130
Ca	43	1	He	15.547583	5.9	56.617
Ti	47	1	He	0.060940	21.2	17.667
V	51	1	He	0.060371	126.4	-62.467
Cr	52	1	He	0.167604	4.2	4193.943
Mn	55	1	He	0.072633	2.0	810.687
Fe	56	1	He	3.310301	3.0	40286.577
Co	59	1	He	0.020231	12.6	345.340
Ni	60	1	He	0.024202	10.8	294.667
Cu	63	1	He	0.114552	6.6	1364.067
Zn	66	1	He	0.823211	2.6	2059.490
As	75	1	He	-0.000628		184.667
Se	78	2	H2	0.004556	59.6	35.000
Sr	88	1	He	0.031837	1.9	525.010
Mo	95	1	He	0.012866	21.7	104.667
Pd	105	1	He	0.006705	36.2	291.670
Ag	107	1	He	0.032174	14.7	781.697
Cd	111	1	He	0.016468	26.8	79.647
Sn	118	1	He	0.162117	9.8	1718.467
Sb	121	1	He	0.010538	55.1	216.670
Ba	138	1	He	0.048861	4.8	1761.797
Pt	195	1	He	0.010640	17.4	316.003
Hg	202	1	He	0.013452	12.3	191.667
Tl	205	1	He	0.018678	10.3	1273.407
Pb	208	1	He	0.018841	3.7	3473.530
Bi	209	1	He	0.012069	40.5	2513.617
Th	232	1	He	0.011259	11.8	1305.077
U	238	1	He	0.005563	39.1	846.703

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.51247885	606895.793
Sc	45	2	H2	96.98859753	4776562.667
Ge	72	1	He	98.13339369	497059.083
Ge	72	2	H2	96.46333610	1645613.707
In	115	1	He	101.1273347	5980020.767
Tb	159	1	He	101.7187641	14039687.707
Ir	193	1	He	100.6946071	7282803.017

Sample Name 4305775\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 044SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:42:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	106.753751	0.2	49766.123
Be	9	2	H2	104.334156	1.0	49647.213
B	11	2	H2	101.927479	0.8	45698.600
Na	23	1	He	2056.041984	1.5	2230511.530
Mg	24	1	He	2045.873188	1.7	1241587.610
Al	27	1	He	2035.907173	1.2	605125.957
Si	28	2	H2	516.729011	0.2	1806499.670
K	39	1	He	2039.925767	1.0	1765831.533
Ca	43	1	He	2094.787692	1.2	5124.120
Ti	47	1	He	100.779389	1.1	27325.587
V	51	1	He	101.579454	1.7	789461.697
Cr	52	1	He	105.005684	1.4	968901.667
Mn	55	1	He	102.853249	0.6	682924.190
Fe	56	1	He	2044.598880	1.0	17947066.000
Co	59	1	He	105.826757	1.1	1562200.667
Ni	60	1	He	106.432199	1.2	396524.760
Cu	63	1	He	105.081500	0.9	1077127.083
Zn	66	1	He	105.070071	1.1	243978.047
As	75	1	He	101.581984	0.8	209042.043
Se	78	2	H2	102.910457	0.8	94635.577
Sr	88	1	He	103.439275	0.1	1277822.040
Mo	95	1	He	99.358862	1.0	674686.853
Pd	105	1	He	20.771609	0.9	211770.417
Ag	107	1	He	51.462790	1.2	1077978.553
Cd	111	1	He	102.293810	1.0	410029.383
Sn	118	1	He	97.507365	0.4	979927.377
Sb	121	1	He	99.848558	0.4	1492546.073
Ba	138	1	He	99.961769	1.1	3318374.953
Pt	195	1	He	20.585842	0.8	283449.843
Hg	202	1	He	0.011224	14.2	176.000
Tl	205	1	He	106.335026	0.4	5290445.757
Pb	208	1	He	104.847717	0.0	7010109.120
Bi	209	1	He	101.552317	1.5	5861997.620
Th	232	1	He	101.835039	1.3	7189224.890
U	238	1	He	100.312777	0.9	6773762.813

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.50487214	600688.333
Sc	45	2	H2	97.50411364	4801951.167
Ge	72	1	He	99.15543120	502235.843
Ge	72	2	H2	97.58901817	1664817.250
In	115	1	He	99.88856268	5906767.747
Tb	159	1	He	101.2916994	13980742.290
Ir	193	1	He	99.89133928	7224706.143

Sample Name 10606019001\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 045SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:45:59  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.593414	0.9	817.353
Be	9	2	H2	0.242425	7.6	127.667
B	11	2	H2	5.143910	1.0	4876.120
Na	23	1	He	3307.184670	7.2	3378900.367
Mg	24	1	He	1818.987366	7.0	1041848.763
Al	27	1	He	1816.405637	7.1	509439.507
Si	28	2	H2	11577.08090	0.2	40579426.667
K	39	1	He	983.607279	8.1	839183.400
Ca	43	1	He	7210.621135	7.3	16599.910
Ti	47	1	He	55.879407	7.3	14298.057
V	51	1	He	3.048653	4.5	21899.333
Cr	52	1	He	1.387963	6.7	14523.867
Mn	55	1	He	30.396445	6.3	190720.513
Fe	56	1	He	1314.262484	7.0	10889805.000
Co	59	1	He	0.794546	5.9	11000.823
Ni	60	1	He	1.435363	7.5	5182.937
Cu	63	1	He	2.482590	6.2	23950.327
Zn	66	1	He	11.913571	7.1	25965.153
As	75	1	He	1.773270	6.1	3580.610
Se	78	2	H2	0.231893	8.0	241.000
Sr	88	1	He	50.917430	6.1	587439.287
Mo	95	1	He	0.170086	9.5	1113.380
Pd	105	1	He	0.040260	9.3	600.020
Ag	107	1	He	0.243367	18.1	4922.577
Cd	111	1	He	0.123691	13.3	482.477
Sn	118	1	He	0.156886	4.8	1566.767
Sb	121	1	He	0.141949	11.5	2068.507
Ba	138	1	He	21.831730	6.4	689734.497
Pt	195	1	He	0.011743	10.6	315.337
Hg	202	1	He	0.168915	9.3	1178.387
Tl	205	1	He	0.094111	19.4	4770.903
Pb	208	1	He	0.646817	6.3	43417.647
Bi	209	1	He	0.076564	9.8	5921.433
Th	232	1	He	0.216345	8.8	15007.457
U	238	1	He	0.103884	10.4	7108.667

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.27833364	568489.730
Sc	45	2	H2	98.48063004	4850043.333
Ge	72	1	He	92.81187195	470104.847
Ge	72	2	H2	96.24597163	1641905.583
In	115	1	He	95.30338672	5635629.903
Tb	159	1	He	97.07542392	13398792.717
Ir	193	1	He	95.35341783	6896498.020

Sample Name 4308645\_B69910Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 046SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:49:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.369564	6.6	241.333
Be	9	2	H2	0.087318	1.8	53.000
B	11	2	H2	-0.681921		2385.857
Na	23	1	He	640.225464	1.2	702410.950
Mg	24	1	He	355.642814	0.9	217066.083
Al	27	1	He	357.714427	1.7	106385.910
Si	28	2	H2	2332.470410	0.5	8168685.333
K	39	1	He	188.742677	1.2	230049.227
Ca	43	1	He	1379.179336	1.2	3380.187
Ti	47	1	He	11.503739	10.1	3119.410
V	51	1	He	0.606970	7.6	4187.457
Cr	52	1	He	0.292537	2.3	5300.970
Mn	55	1	He	5.963455	1.8	39898.833
Fe	56	1	He	255.905651	1.8	2255758.167
Co	59	1	He	0.161509	2.3	2398.203
Ni	60	1	He	0.285822	2.4	1253.390
Cu	63	1	He	0.497483	1.1	5224.950
Zn	66	1	He	2.626906	2.0	6173.330
As	75	1	He	0.342904	6.7	879.363
Se	78	2	H2	0.047141	16.1	74.333
Sr	88	1	He	9.868889	2.1	120226.177
Mo	95	1	He	0.037774	12.2	275.333
Pd	105	1	He	0.006445	41.9	288.340
Ag	107	1	He	0.059124	1.1	1351.743
Cd	111	1	He	0.029286	12.6	131.620
Sn	118	1	He	0.046225	8.8	538.350
Sb	121	1	He	0.034724	8.0	581.687
Ba	138	1	He	4.149766	1.7	139411.347
Pt	195	1	He	0.001971	86.2	194.667
Hg	202	1	He	0.036239	8.5	342.337
Tl	205	1	He	0.023931	12.3	1523.433
Pb	208	1	He	0.129761	2.6	10828.403
Bi	209	1	He	0.015885	42.4	2703.663
Th	232	1	He	0.045433	4.7	3690.557
U	238	1	He	0.021817	8.1	1930.163

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.51793851	600768.830
Sc	45	2	H2	98.26261415	4839306.333
Ge	72	1	He	97.70137773	494870.863
Ge	72	2	H2	97.32863030	1660375.170
In	115	1	He	101.0204805	5973702.097
Tb	159	1	He	100.8789136	13923767.710
Ir	193	1	He	99.47066096	7194280.310

Sample Name 4305776\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 047SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:53:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	106.949910	0.2	49863.447
Be	9	2	H2	103.918712	0.7	49455.397
B	11	2	H2	107.938715	0.4	48242.783
Na	23	1	He	5174.211952	0.8	5442219.083
Mg	24	1	He	3785.362938	0.8	2232861.320
Al	27	1	He	4356.129518	0.3	1259085.120
Si	28	2	H2	12857.13266	0.4	44622805.333
K	39	1	He	3053.141479	0.3	2534828.087
Ca	43	1	He	8846.903034	0.6	20988.773
Ti	47	1	He	196.671142	1.2	51856.470
V	51	1	He	107.104335	0.9	809549.167
Cr	52	1	He	107.699572	0.6	966390.857
Mn	55	1	He	133.681470	0.4	863105.707
Fe	56	1	He	3462.029548	0.8	29545516.667
Co	59	1	He	109.032707	1.0	1556149.460
Ni	60	1	He	110.504074	0.9	398037.540
Cu	63	1	He	110.360117	0.9	1093708.960
Zn	66	1	He	117.856502	0.6	264576.260
As	75	1	He	105.614186	0.7	210127.130
Se	78	2	H2	104.292556	1.0	93784.453
Sr	88	1	He	155.141805	1.0	1852840.440
Mo	95	1	He	102.085649	0.2	675961.853
Pd	105	1	He	20.840881	0.3	207193.043
Ag	107	1	He	51.968816	1.0	1061510.453
Cd	111	1	He	103.940573	0.1	406267.367
Sn	118	1	He	101.545375	0.4	995087.067
Sb	121	1	He	101.926996	0.6	1485662.323
Ba	138	1	He	124.140713	1.3	4018412.233
Pt	195	1	He	20.972399	1.5	280785.803
Hg	202	1	He	0.226397	3.9	1575.427
Tl	205	1	He	109.429838	0.6	5294100.547
Pb	208	1	He	107.579608	0.8	6994097.813
Bi	209	1	He	105.246954	0.1	5855422.620
Th	232	1	He	106.335620	0.6	7235176.973
U	238	1	He	104.703540	0.6	6814105.520

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.82219810	584161.457
Sc	45	2	H2	97.51618502	4802545.667
Ge	72	1	He	95.87043548	485596.890
Ge	72	2	H2	95.42782152	1627948.373
In	115	1	He	97.39957119	5759584.783
Tb	159	1	He	98.49803607	13595148.133
Ir	193	1	He	96.26351163	6962321.147

Sample Name 4305777\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 048SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:56:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	103.486617	0.9	49133.240
Be	9	2	H2	100.821968	1.2	48858.147
B	11	2	H2	105.986202	0.9	48285.430
Na	23	1	He	5039.062581	0.4	5389227.210
Mg	24	1	He	3667.679899	0.2	2199780.280
Al	27	1	He	4072.177601	0.2	1196739.127
Si	28	2	H2	12217.45851	0.8	43178789.333
K	39	1	He	2926.679776	0.2	2473492.463
Ca	43	1	He	8642.045919	0.3	20846.567
Ti	47	1	He	170.756848	1.3	45779.643
V	51	1	He	103.417549	0.4	794779.253
Cr	52	1	He	104.286049	0.5	951510.647
Mn	55	1	He	129.838570	0.6	852352.877
Fe	56	1	He	3309.684875	0.4	28719886.000
Co	59	1	He	104.742877	0.5	1523580.207
Ni	60	1	He	106.003298	0.2	389151.427
Cu	63	1	He	106.608217	0.4	1076788.917
Zn	66	1	He	113.317684	0.5	259265.843
As	75	1	He	103.320835	0.5	209503.843
Se	78	2	H2	103.119006	0.5	94214.200
Sr	88	1	He	149.555178	0.6	1820363.047
Mo	95	1	He	99.748624	0.8	665314.290
Pd	105	1	He	20.702600	1.1	207321.467
Ag	107	1	He	51.150123	0.3	1052438.550
Cd	111	1	He	102.055725	0.5	401815.120
Sn	118	1	He	99.149822	0.7	978707.303
Sb	121	1	He	99.964759	0.5	1467729.510
Ba	138	1	He	120.848276	0.7	3940497.547
Pt	195	1	He	20.633746	0.5	280141.250
Hg	202	1	He	0.163571	2.9	1182.053
Tl	205	1	He	105.965405	0.2	5198584.507
Pb	208	1	He	104.124828	0.8	6864647.710
Bi	209	1	He	101.421788	1.3	5715969.707
Th	232	1	He	101.622098	1.4	7004193.230
U	238	1	He	100.963630	1.1	6656104.693

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.40939572	593939.543
Sc	45	2	H2	99.30405951	4890596.167
Ge	72	1	He	97.70310260	494879.600
Ge	72	2	H2	96.96450925	1654163.457
In	115	1	He	98.11323970	5801786.553
Tb	159	1	He	99.88009682	13785906.460
Ir	193	1	He	97.52408906	7053493.230



Sample Name 10606019002\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 049SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:00:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.258982	8.3	190.167
Be	9	2	H2	0.246962	6.4	130.000
B	11	2	H2	-1.151082		2194.163
Na	23	1	He	58.602768	1.9	75335.627
Mg	24	1	He	5.678073	6.6	4959.193
Al	27	1	He	12.981866	1.8	3971.200
Si	28	2	H2	29.844156	0.3	118750.840
K	39	1	He	8.084927	8.7	80955.340
Ca	43	1	He	21.100861	13.6	70.250
Ti	47	1	He	0.163210	7.3	45.667
V	51	1	He	0.182053	19.8	893.867
Cr	52	1	He	0.841201	2.9	10455.733
Mn	55	1	He	0.451733	2.5	3351.727
Fe	56	1	He	5.266101	1.7	57607.453
Co	59	1	He	0.140561	4.8	2114.830
Ni	60	1	He	0.387548	5.1	1642.763
Cu	63	1	He	1.399948	1.4	14481.870
Zn	66	1	He	3.580801	2.0	8439.140
As	75	1	He	0.082030	9.2	354.837
Se	78	2	H2	0.081821	25.6	106.667
Sr	88	1	He	0.200137	3.7	2596.923
Mo	95	1	He	0.093728	3.1	656.020
Pd	105	1	He	0.007544	28.9	298.340
Ag	107	1	He	0.156290	14.8	3390.440
Cd	111	1	He	0.160891	5.1	661.233
Sn	118	1	He	0.115433	5.6	1235.063
Sb	121	1	He	0.075165	6.0	1186.727
Ba	138	1	He	0.244325	0.9	8274.197
Pt	195	1	He	0.010939	20.5	317.340
Hg	202	1	He	0.002165	134.1	114.667
Tl	205	1	He	0.151659	6.6	7844.047
Pb	208	1	He	0.242781	1.8	18336.617
Bi	209	1	He	0.151994	2.2	10504.323
Th	232	1	He	0.095328	3.4	7185.387
U	238	1	He	0.067841	3.5	5014.340

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.49119791	606764.690
Sc	45	2	H2	98.62258979	4857034.667
Ge	72	1	He	98.67935391	499824.447
Ge	72	2	H2	97.88250105	1669823.913
In	115	1	He	100.4394379	5939342.970
Tb	159	1	He	100.7995768	13912817.290
Ir	193	1	He	99.27444197	7180088.643

Sample Name 10606019003\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 050SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:04:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.769330	2.2	1376.897
Be	9	2	H2	0.285332	2.2	149.000
B	11	2	H2	6.303281	3.0	5396.463
Na	23	1	He	3710.672068	1.6	3826245.047
Mg	24	1	He	2227.678027	1.7	1287782.480
Al	27	1	He	4982.220141	1.8	1410586.960
Si	28	2	H2	19353.19227	0.4	68156701.333
K	39	1	He	1506.587545	1.3	1260717.377
Ca	43	1	He	8322.778809	1.6	19343.213
Ti	47	1	He	133.895779	3.2	34579.923
V	51	1	He	6.963022	2.2	51079.577
Cr	52	1	He	2.327246	2.1	22887.180
Mn	55	1	He	36.336282	1.6	230032.680
Fe	56	1	He	3494.409547	0.8	29215268.667
Co	59	1	He	0.827337	1.0	11523.903
Ni	60	1	He	2.335625	3.2	8365.080
Cu	63	1	He	3.573704	1.9	34603.660
Zn	66	1	He	13.505382	2.0	29603.413
As	75	1	He	1.251628	3.3	2593.900
Se	78	2	H2	0.146000	4.9	161.333
Sr	88	1	He	73.163234	2.1	849168.450
Mo	95	1	He	0.194337	0.9	1281.393
Pd	105	1	He	0.041558	7.9	616.687
Ag	107	1	He	0.087920	6.8	1860.140
Cd	111	1	He	0.061320	5.5	248.103
Sn	118	1	He	0.178463	3.6	1786.793
Sb	121	1	He	0.153732	6.0	2258.537
Ba	138	1	He	47.605429	1.4	1516152.790
Pt	195	1	He	0.009341	6.1	285.333
Hg	202	1	He	0.020870	16.0	231.667
Tl	205	1	He	0.079393	6.1	4122.350
Pb	208	1	He	0.845983	2.4	56460.160
Bi	209	1	He	0.040449	5.7	3973.997
Th	232	1	He	0.355486	0.6	24628.477
U	238	1	He	0.131369	0.7	8981.513

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.89687802	572300.333
Sc	45	2	H2	98.96286271	4873792.667
Ge	72	1	He	93.17901569	471964.480
Ge	72	2	H2	95.15983259	1623376.623
In	115	1	He	95.83725670	5667199.543
Tb	159	1	He	97.37714257	13440437.300
Ir	193	1	He	96.10582207	6950916.147

Sample Name 10606021001\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 051SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:07:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.389011	0.6	722.687
Be	9	2	H2	0.118391	9.7	68.167
B	11	2	H2	2.888105	4.4	3921.510
Na	23	1	He	6558.519695	1.2	6840732.607
Mg	24	1	He	5902.232798	1.3	3453205.573
Al	27	1	He	7.044972	5.0	2090.153
Si	28	2	H2	15774.76865	0.6	55396382.667
K	39	1	He	766.931133	0.9	684722.753
Ca	43	1	He	14193.97979	0.4	33397.670
Ti	47	1	He	0.596542	2.9	157.000
V	51	1	He	0.251117	21.6	1372.620
Cr	52	1	He	0.388275	3.9	5963.897
Mn	55	1	He	5.591323	1.1	36109.723
Fe	56	1	He	60.808382	0.7	525118.707
Co	59	1	He	0.198629	2.7	2867.623
Ni	60	1	He	3.092167	1.6	11271.040
Cu	63	1	He	0.291284	4.1	3067.000
Zn	66	1	He	4.488816	1.3	10179.573
As	75	1	He	0.247036	4.0	669.020
Se	78	2	H2	0.299716	9.9	301.667
Sr	88	1	He	91.526208	0.3	1087193.577
Mo	95	1	He	0.912107	3.4	6073.977
Pd	105	1	He	0.050525	14.4	718.360
Ag	107	1	He	0.030619	12.9	723.357
Cd	111	1	He	0.099523	5.6	402.583
Sn	118	1	He	0.161074	1.3	1650.113
Sb	121	1	He	0.070893	5.9	1091.720
Ba	138	1	He	19.228403	0.3	624503.663
Pt	195	1	He	0.011979	16.5	324.003
Hg	202	1	He	0.002060	48.8	111.333
Tl	205	1	He	0.065701	4.6	3508.827
Pb	208	1	He	1.968917	1.3	130124.650
Bi	209	1	He	0.061572	3.7	5141.070
Th	232	1	He	0.016299	6.7	1585.110
U	238	1	He	0.034731	10.6	2698.640

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.07149989	579536.707
Sc	45	2	H2	98.67621557	4859675.667
Ge	72	1	He	95.34284265	482924.560
Ge	72	2	H2	95.95291862	1636906.253
In	115	1	He	97.70793239	5777819.283
Tb	159	1	He	98.51168703	13597032.300
Ir	193	1	He	95.96771409	6940927.397

Sample Name 10606021002\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 052SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:11:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.003614	5.3	1019.537
Be	9	2	H2	0.152984	2.7	85.500
B	11	2	H2	0.488587	28.3	2917.783
Na	23	1	He	5145.388910	0.1	5421988.040
Mg	24	1	He	6901.324332	0.3	4077221.187
Al	27	1	He	47.001962	2.8	13680.877
Si	28	2	H2	19443.14493	1.4	68789328.000
K	39	1	He	818.574339	0.8	733199.390
Ca	43	1	He	10149.38184	0.2	24120.243
Ti	47	1	He	1.084296	9.6	287.333
V	51	1	He	1.141735	9.7	8135.047
Cr	52	1	He	0.877474	1.7	10409.047
Mn	55	1	He	16.387079	0.8	106268.830
Fe	56	1	He	34.765899	2.2	307709.833
Co	59	1	He	1.720629	1.8	24569.987
Ni	60	1	He	0.305508	2.5	1298.730
Cu	63	1	He	0.328221	0.5	3445.087
Zn	66	1	He	2.761617	1.9	6352.073
As	75	1	He	0.117743	7.6	415.177
Se	78	2	H2	0.045758	8.9	72.333
Sr	88	1	He	33.958989	0.9	405106.610
Mo	95	1	He	0.206108	6.4	1386.740
Pd	105	1	He	0.015853	30.4	373.343
Ag	107	1	He	0.025846	15.0	626.683
Cd	111	1	He	0.114248	4.5	461.093
Sn	118	1	He	0.086990	10.3	923.370
Sb	121	1	He	0.034573	9.5	561.687
Ba	138	1	He	1.207133	0.3	39384.310
Pt	195	1	He	0.010612	21.8	308.007
Hg	202	1	He	0.003355	126.3	120.667
Tl	205	1	He	0.082389	1.4	4350.747
Pb	208	1	He	0.164903	2.7	12962.493
Bi	209	1	He	0.084635	7.4	6451.707
Th	232	1	He	0.045984	1.5	3617.203
U	238	1	He	0.040377	2.6	3082.057

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.99459803	585223.543
Sc	45	2	H2	99.42835381	4896717.500
Ge	72	1	He	95.73299794	484900.750
Ge	72	2	H2	96.34862955	1643656.873
In	115	1	He	97.88236793	5788134.280
Tb	159	1	He	99.30511765	13706545.213
Ir	193	1	He	96.46348098	6976784.060

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 053\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:15:17  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.130873	0.9	39386.950
Be	9	2	H2	81.890898	0.4	39122.823
B	11	2	H2	78.922614	1.1	36124.323
Na	23	1	He	995.570110	1.6	1103250.607
Mg	24	1	He	998.565787	1.8	616431.620
Al	27	1	He	1002.279530	1.7	302692.230
Si	28	2	H2	507.277801	0.5	1780653.087
K	39	1	He	1002.966755	1.6	920000.873
Ca	43	1	He	1001.378700	1.5	2498.207
Ti	47	1	He	79.014582	1.9	21765.373
V	51	1	He	78.695932	2.5	621241.797
Cr	52	1	He	81.181319	2.2	761585.687
Mn	55	1	He	80.033017	2.2	539905.770
Fe	56	1	He	498.382609	2.0	4452597.667
Co	59	1	He	82.341223	1.5	1222862.210
Ni	60	1	He	82.978273	2.4	311034.260
Cu	63	1	He	83.420443	1.6	860281.583
Zn	66	1	He	81.842330	1.1	191231.783
As	75	1	He	79.913452	1.5	165482.980
Se	78	2	H2	81.237782	0.6	74580.257
Sr	88	1	He	81.209208	1.3	1009288.450
Mo	95	1	He	76.998770	1.2	528678.480
Pd	105	1	He	82.070042	1.3	845376.473
Ag	107	1	He	41.904694	1.4	887539.777
Cd	111	1	He	79.832741	1.2	323563.720
Sn	118	1	He	76.900932	0.8	781451.160
Sb	121	1	He	77.383735	0.5	1169641.390
Ba	138	1	He	77.637801	0.8	2606137.200
Pt	195	1	He	81.422917	2.2	1118678.413
Hg	202	1	He	3.854727	2.0	25932.827
Tl	205	1	He	41.596581	2.6	2066070.593
Pb	208	1	He	81.632226	2.3	5448861.243
Bi	209	1	He	79.149885	0.6	4550920.350
Th	232	1	He	77.018110	1.4	5415099.083
U	238	1	He	78.390787	2.2	5271487.633

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.07429443	610356.913
Sc	45	2	H2	97.88810683	4820862.333
Ge	72	1	He	99.76266387	505311.560
Ge	72	2	H2	97.41695561	1661881.953
In	115	1	He	101.0020869	5972614.417
Tb	159	1	He	101.1438483	13960335.210
Ir	193	1	He	99.47906623	7194888.227

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 054\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:18:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.080409	12.7	105.500
Be	9	2	H2	0.048864	5.5	34.500
B	11	2	H2	-1.881153		1872.117
Na	23	1	He	-0.085473		11290.987
Mg	24	1	He	-0.582123		1120.053
Al	27	1	He	0.195571	10.3	131.667
Si	28	2	H2	0.197291	66.7	14640.867
K	39	1	He	-1.381674		72639.393
Ca	43	1	He	-1.658162		14.167
Ti	47	1	He	0.005006	43.4	2.333
V	51	1	He	0.009272	59.7	-461.777
Cr	52	1	He	0.001983	264.1	2639.583
Mn	55	1	He	-0.002781		303.337
Fe	56	1	He	0.139166	2.6	12113.027
Co	59	1	He	0.007339	15.0	156.667
Ni	60	1	He	-0.002664		195.333
Cu	63	1	He	0.006906	20.7	272.000
Zn	66	1	He	0.000582	45.1	170.000
As	75	1	He	-0.006724		172.000
Se	78	2	H2	0.011182	40.6	41.333
Sr	88	1	He	0.002258	237.1	163.337
Mo	95	1	He	0.014051	29.5	112.667
Pd	105	1	He	0.014658	16.2	373.343
Ag	107	1	He	0.139171	21.0	3047.030
Cd	111	1	He	0.004647	44.9	31.650
Sn	118	1	He	0.008954	39.9	160.000
Sb	121	1	He	0.004159	44.1	120.000
Ba	138	1	He	0.003290	15.4	230.000
Pt	195	1	He	0.000610	264.0	174.000
Hg	202	1	He	0.025601	19.7	268.333
Tl	205	1	He	0.047147	25.8	2641.960
Pb	208	1	He	0.003992	30.7	2431.773
Bi	209	1	He	0.003564	119.9	1973.520
Th	232	1	He	0.016361	6.5	1630.117
U	238	1	He	0.002668	25.2	635.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.96903486	603547.853
Sc	45	2	H2	98.08463654	4830541.167
Ge	72	1	He	97.99467813	496356.470
Ge	72	2	H2	97.22051070	1658530.707
In	115	1	He	101.0316772	5974364.197
Tb	159	1	He	99.83243622	13779328.127
Ir	193	1	He	98.43721019	7119535.310

Sample Name 10606022001\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 055SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:22:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.422026	3.2	1709.430
Be	9	2	H2	0.308584	1.2	162.500
B	11	2	H2	5.907369	2.8	5301.600
Na	23	1	He	3760.647795	0.4	3963097.440
Mg	24	1	He	2112.578424	0.5	1248235.817
Al	27	1	He	6389.226280	0.9	1848816.873
Si	28	2	H2	22061.82550	0.5	78802597.333
K	39	1	He	1739.558962	0.3	1476646.647
Ca	43	1	He	7590.972550	0.0	18032.630
Ti	47	1	He	226.750688	2.3	59855.803
V	51	1	He	7.661972	1.2	57501.423
Cr	52	1	He	2.964311	1.2	29098.800
Mn	55	1	He	31.219642	0.4	202041.873
Fe	56	1	He	3801.566347	0.7	32480324.000
Co	59	1	He	0.783989	1.9	11142.260
Ni	60	1	He	2.273809	2.2	8315.723
Cu	63	1	He	3.359733	0.9	33204.437
Zn	66	1	He	14.196338	0.4	31743.273
As	75	1	He	1.452434	1.4	3042.820
Se	78	2	H2	0.139059	7.2	156.000
Sr	88	1	He	64.886129	0.6	768455.167
Mo	95	1	He	0.217397	3.3	1463.417
Pd	105	1	He	0.050005	12.2	715.023
Ag	107	1	He	0.092934	8.9	2005.160
Cd	111	1	He	0.053502	11.3	222.737
Sn	118	1	He	0.243380	3.8	2465.237
Sb	121	1	He	0.219324	5.0	3270.420
Ba	138	1	He	46.299121	0.1	1507329.563
Pt	195	1	He	0.011954	20.5	326.673
Hg	202	1	He	0.042468	9.4	378.677
Tl	205	1	He	0.080850	3.3	4282.387
Pb	208	1	He	1.016861	0.7	68900.367
Bi	209	1	He	0.040994	10.5	4074.023
Th	232	1	He	0.607092	4.1	42422.333
U	238	1	He	0.203325	1.5	13887.610

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.93127896	584833.460
Sc	45	2	H2	100.3732484	4943252.333
Ge	72	1	He	95.05455100	481464.323
Ge	72	2	H2	95.72814361	1633071.710
In	115	1	He	97.95319881	5792322.763
Tb	159	1	He	99.46759175	13728970.630
Ir	193	1	He	97.73225914	7068549.267

Sample Name 10606022002\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 056SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:26:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.667775	59.1	890.193
Be	9	2	H2	0.539674	54.1	184.500
B	11	2	H2	8.923725	96.0	4360.963
Na	23	1	He	3144.577555	0.7	3290493.073
Mg	24	1	He	1722.481098	0.4	1010291.520
Al	27	1	He	2048.016326	1.0	588170.313
Si	28	2	H2	17831.94061	57.4	41854434.667
K	39	1	He	952.809864	1.0	834745.120
Ca	43	1	He	6714.788492	1.3	15831.677
Ti	47	1	He	67.878281	1.5	17784.160
V	51	1	He	3.191603	4.5	23467.657
Cr	52	1	He	1.282381	2.5	13923.293
Mn	55	1	He	26.134763	0.5	167899.797
Fe	56	1	He	1378.105922	0.3	11691984.333
Co	59	1	He	0.648537	2.0	9240.940
Ni	60	1	He	1.398926	2.7	5200.940
Cu	63	1	He	2.521619	0.4	25012.120
Zn	66	1	He	11.975185	1.2	26847.430
As	75	1	He	1.639973	1.6	3418.403
Se	78	2	H2	0.469340	61.1	299.000
Sr	88	1	He	47.662881	1.3	565431.113
Mo	95	1	He	0.184719	4.0	1246.057
Pd	105	1	He	0.032627	10.1	541.680
Ag	107	1	He	0.161148	5.3	3407.100
Cd	111	1	He	0.215736	3.7	860.807
Sn	118	1	He	0.174496	6.3	1786.797
Sb	121	1	He	0.196502	3.4	2936.993
Ba	138	1	He	21.831688	0.7	711046.813
Pt	195	1	He	0.012415	25.6	333.340
Hg	202	1	He	0.204213	2.2	1445.413
Tl	205	1	He	0.144612	2.8	7400.483
Pb	208	1	He	0.719096	3.1	49367.653
Bi	209	1	He	0.180631	2.2	11965.637
Th	232	1	He	0.282292	4.0	19994.080
U	238	1	He	0.252082	1.8	17116.410

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.21146520	580398.977
Sc	45	2	H2	78.71926793	3876821.873
Ge	72	1	He	95.21333644	482268.593
Ge	72	2	H2	76.04070734	1297214.417
In	115	1	He	97.98592320	5794257.873
Tb	159	1	He	99.50294476	13733850.213
Ir	193	1	He	97.78223279	7072163.643



Sample Name 10606022003\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 057SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:29:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.733316	0.6	1853.280
Be	9	2	H2	0.304072	2.1	159.833
B	11	2	H2	5.917288	3.6	5290.760
Na	23	1	He	3789.256092	0.8	3983148.170
Mg	24	1	He	2172.716666	1.2	1280495.737
Al	27	1	He	7161.060497	0.9	2066950.000
Si	28	2	H2	23487.64685	0.1	83654869.333
K	39	1	He	1798.806237	0.3	1520693.413
Ca	43	1	He	7603.276137	1.0	18016.187
Ti	47	1	He	276.058053	1.7	72690.360
V	51	1	He	8.436581	0.9	63210.370
Cr	52	1	He	2.988268	0.1	29241.093
Mn	55	1	He	31.995672	0.7	206535.013
Fe	56	1	He	4011.107292	0.8	34184270.667
Co	59	1	He	0.807189	0.6	11501.880
Ni	60	1	He	2.376281	0.6	8705.280
Cu	63	1	He	3.533200	1.0	35003.283
Zn	66	1	He	14.609486	0.5	32750.817
As	75	1	He	1.470834	0.8	3087.500
Se	78	2	H2	0.121653	5.1	139.667
Sr	88	1	He	64.787746	0.3	769372.460
Mo	95	1	He	0.235667	8.9	1582.097
Pd	105	1	He	0.034740	10.6	561.683
Ag	107	1	He	0.072860	5.8	1590.103
Cd	111	1	He	0.053188	6.4	221.050
Sn	118	1	He	0.249753	3.9	2523.583
Sb	121	1	He	0.260343	2.9	3863.977
Ba	138	1	He	47.798044	0.5	1553285.913
Pt	195	1	He	0.012572	11.0	336.007
Hg	202	1	He	0.036392	8.5	339.673
Tl	205	1	He	0.075734	4.7	4043.983
Pb	208	1	He	1.027782	0.9	69825.047
Bi	209	1	He	0.039059	6.3	3984.017
Th	232	1	He	0.679090	4.0	47627.583
U	238	1	He	0.223869	2.8	15324.487

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.69457305	583375.210
Sc	45	2	H2	100.0861207	4929111.667
Ge	72	1	He	95.31195635	482768.117
Ge	72	2	H2	95.27809298	1625394.083
In	115	1	He	97.77720539	5781915.643
Tb	159	1	He	99.76238530	13769659.380
Ir	193	1	He	98.21729057	7103629.480

Sample Name 10606024001\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 058SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:33:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	28.015188	1.1	12884.963
Be	9	2	H2	0.070150	18.6	43.667
B	11	2	H2	7.825939	0.8	5857.970
Na	23	1	He	15314.48147	0.2	15926567.677
Mg	24	1	He	7363.940084	0.4	4299338.270
Al	27	1	He	10.360974	2.5	3034.980
Si	28	2	H2	7001.015023	0.2	23884340.667
K	39	1	He	5812.115671	0.6	4713422.117
Ca	43	1	He	30614.69446	0.1	71866.803
Ti	47	1	He	0.239015	14.3	63.333
V	51	1	He	0.143402	48.5	562.547
Cr	52	1	He	0.533677	2.7	7240.463
Mn	55	1	He	79.517280	0.6	508418.750
Fe	56	1	He	209.847010	0.4	1782903.290
Co	59	1	He	1.159636	1.0	16402.553
Ni	60	1	He	2.443876	0.3	8892.730
Cu	63	1	He	0.460547	0.7	4704.770
Zn	66	1	He	2.043516	4.6	4693.433
As	75	1	He	2.598841	0.6	5284.467
Se	78	2	H2	0.038657	39.9	64.667
Sr	88	1	He	730.291885	0.1	8618301.747
Mo	95	1	He	3.393925	1.7	22331.480
Pd	105	1	He	0.384226	1.5	4002.267
Ag	107	1	He	0.022597	5.9	553.350
Cd	111	1	He	0.052399	0.3	215.647
Sn	118	1	He	0.580287	0.9	5712.877
Sb	121	1	He	0.578626	3.2	8430.937
Ba	138	1	He	90.200117	1.1	2899610.270
Pt	195	1	He	0.010194	5.1	299.333
Hg	202	1	He	0.009475	15.0	159.333
Tl	205	1	He	0.032968	3.3	1920.160
Pb	208	1	He	0.086639	1.3	7752.577
Bi	209	1	He	0.032761	7.3	3530.537
Th	232	1	He	0.020434	6.9	1858.483
U	238	1	He	0.626259	0.5	40917.797

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.87858031	578348.207
Sc	45	2	H2	95.83000865	4719503.667
Ge	72	1	He	94.73177724	479829.430
Ge	72	2	H2	94.55642416	1613082.793
In	115	1	He	96.72708261	5719818.130
Tb	159	1	He	98.27020525	13563701.883
Ir	193	1	He	95.59964214	6914306.353

Sample Name 10606024002\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 059SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:37:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.247711	3.1	1604.083
Be	9	2	H2	0.049565	11.8	35.167
B	11	2	H2	4.064086	2.9	4440.150
Na	23	1	He	7746.750761	0.1	8027386.967
Mg	24	1	He	23536.35567	0.5	13679649.800
Al	27	1	He	64.898448	2.1	18560.823
Si	28	2	H2	24929.62410	0.7	87852800.000
K	39	1	He	3477.458274	0.4	2836361.103
Ca	43	1	He	23114.91064	0.3	54034.000
Ti	47	1	He	1.763701	13.1	459.343
V	51	1	He	3.965176	7.8	29056.780
Cr	52	1	He	1.213003	4.7	13202.817
Mn	55	1	He	6.019259	0.1	38606.040
Fe	56	1	He	196.072330	0.8	1659440.670
Co	59	1	He	0.132966	2.2	1910.133
Ni	60	1	He	0.508798	2.0	1994.810
Cu	63	1	He	0.309827	2.6	3207.030
Zn	66	1	He	1.435990	3.5	3323.727
As	75	1	He	0.658198	2.4	1462.407
Se	78	2	H2	0.238337	2.1	244.000
Sr	88	1	He	98.901546	0.5	1159326.103
Mo	95	1	He	0.645870	1.3	4221.307
Pd	105	1	He	0.051290	8.6	711.693
Ag	107	1	He	0.013486	7.1	365.010
Cd	111	1	He	0.030192	14.0	128.240
Sn	118	1	He	0.190721	3.1	1903.483
Sb	121	1	He	0.057255	8.2	875.037
Ba	138	1	He	4.426360	1.2	141024.137
Pt	195	1	He	0.005650	23.6	240.000
Hg	202	1	He	0.010505	17.3	167.000
Tl	205	1	He	0.023164	13.5	1455.093
Pb	208	1	He	0.039126	4.1	4697.040
Bi	209	1	He	0.019809	17.0	2813.690
Th	232	1	He	0.032515	5.5	2673.630
U	238	1	He	0.396626	1.4	26062.850

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.47813218	575881.207
Sc	45	2	H2	99.02868508	4877034.333
Ge	72	1	He	94.08760184	476566.593
Ge	72	2	H2	95.11996969	1622696.583
In	115	1	He	95.79174764	5664508.430
Tb	159	1	He	98.81516862	13638920.213
Ir	193	1	He	95.54945538	6910676.563

Sample Name 4309483\_B69981Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 060SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:40:55  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	110.517975	0.7	51605.410
Be	9	2	H2	107.686670	0.5	51328.930
B	11	2	H2	106.052773	1.1	47520.027
Na	23	1	He	2205.780719	3.5	2335519.963
Mg	24	1	He	2196.024214	3.9	1300961.077
Al	27	1	He	2180.507109	3.9	632701.023
Si	28	2	H2	538.904970	1.1	1886564.127
K	39	1	He	2207.416400	3.7	1859633.203
Ca	43	1	He	2216.624246	4.1	5292.143
Ti	47	1	He	108.618531	4.6	28746.960
V	51	1	He	108.661861	4.4	824404.670
Cr	52	1	He	112.644024	4.1	1014475.333
Mn	55	1	He	110.693874	3.6	717524.873
Fe	56	1	He	2203.379252	3.8	18880474.000
Co	59	1	He	114.690840	4.9	1637362.043
Ni	60	1	He	115.760559	4.7	417098.803
Cu	63	1	He	113.679130	4.3	1127066.000
Zn	66	1	He	112.910123	4.7	253560.553
As	75	1	He	109.551744	4.6	218023.937
Se	78	2	H2	106.635276	0.5	97859.297
Sr	88	1	He	111.397712	4.9	1330794.357
Mo	95	1	He	107.157860	4.3	703056.500
Pd	105	1	He	22.262814	3.9	219309.763
Ag	107	1	He	57.034447	2.7	1154765.320
Cd	111	1	He	110.201320	3.5	426876.473
Sn	118	1	He	105.489157	3.6	1024450.660
Sb	121	1	He	107.230642	3.4	1549019.040
Ba	138	1	He	108.301371	4.5	3473531.613
Pt	195	1	He	21.945176	2.9	292295.790
Hg	202	1	He	0.007889	26.8	148.667
Tl	205	1	He	114.247873	3.2	5498389.710
Pb	208	1	He	112.120914	2.8	7251835.937
Bi	209	1	He	109.129826	3.7	6062483.240
Th	232	1	He	109.929975	4.6	7467083.637
U	238	1	He	108.129900	3.1	7027773.230

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.25910103	586853.040
Sc	45	2	H2	97.67122802	4810181.333
Ge	72	1	He	96.01853809	486347.050
Ge	72	2	H2	97.39013806	1661424.460
In	115	1	He	96.61353623	5713103.727
Tb	159	1	He	98.04213593	13532222.717
Ir	193	1	He	96.21322403	6958684.063

Sample Name 10606366001\_B69981Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 061SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:44:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.138274	7.4	134.000
Be	9	2	H2	0.069077	14.7	44.667
B	11	2	H2	-1.340831		2124.313
Na	23	1	He	4.684739	30.2	16429.167
Mg	24	1	He	5.231139	38.9	4652.463
Al	27	1	He	6.604306	27.8	2041.817
Si	28	2	H2	2.917446	1.0	24391.917
K	39	1	He	1.863640	48.4	75159.987
Ca	43	1	He	16.136154	11.1	57.617
Ti	47	1	He	0.176535	44.1	49.000
V	51	1	He	0.014759	655.1	-416.887
Cr	52	1	He	0.603763	12.3	8185.647
Mn	55	1	He	0.178605	51.9	1510.760
Fe	56	1	He	4.616453	36.4	51490.570
Co	59	1	He	0.113894	71.6	1716.143
Ni	60	1	He	0.245788	30.7	1113.380
Cu	63	1	He	0.209358	39.2	2330.210
Zn	66	1	He	0.928268	11.0	2305.523
As	75	1	He	0.099619	73.2	389.337
Se	78	2	H2	0.021796	19.5	51.667
Sr	88	1	He	0.129771	55.5	1725.143
Mo	95	1	He	0.118560	67.1	826.703
Pd	105	1	He	0.008787	91.7	311.670
Ag	107	1	He	0.216457	36.9	4665.893
Cd	111	1	He	0.102984	74.9	428.190
Sn	118	1	He	0.123204	64.3	1315.087
Sb	121	1	He	0.117703	57.5	1828.497
Ba	138	1	He	0.145235	48.6	4974.417
Pt	195	1	He	0.027002	62.3	536.017
Hg	202	1	He	0.005348	29.3	136.000
Tl	205	1	He	0.126152	65.9	6560.497
Pb	208	1	He	0.099113	79.2	8753.100
Bi	209	1	He	0.100924	80.1	7579.537
Th	232	1	He	0.113244	68.1	8443.657
U	238	1	He	0.097015	81.3	6969.373

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.73083775	602080.417
Sc	45	2	H2	99.13669808	4882353.833
Ge	72	1	He	98.35239731	498168.367
Ge	72	2	H2	98.39013220	1678483.833
In	115	1	He	100.7437781	5957339.693
Tb	159	1	He	100.8543829	13920381.873
Ir	193	1	He	99.64688645	7207025.933

Sample Name 10606366002\_B69981Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 062SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:48:14  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.284313	3.0	203.500
Be	9	2	H2	0.040428	21.0	30.833
B	11	2	H2	66.143274	0.9	31150.643
Na	23	1	He	154.203860	0.8	179299.083
Mg	24	1	He	222.073257	0.7	137251.387
Al	27	1	He	10.321540	1.0	3167.343
Si	28	2	H2	85.391738	1.6	315815.117
K	39	1	He	57.958796	0.8	122565.653
Ca	43	1	He	1803.209601	0.8	4451.320
Ti	47	1	He	0.242654	4.8	67.333
V	51	1	He	-0.027132		-748.873
Cr	52	1	He	0.123204	3.4	3774.500
Mn	55	1	He	16.786437	0.4	112684.953
Fe	56	1	He	19.826007	1.2	186344.783
Co	59	1	He	0.026679	4.6	447.343
Ni	60	1	He	0.056736	7.4	422.010
Cu	63	1	He	0.122995	3.5	1476.077
Zn	66	1	He	1.078598	3.6	2693.590
As	75	1	He	0.027126	18.8	245.500
Se	78	2	H2	0.041929	20.6	71.000
Sr	88	1	He	10.427738	0.4	129918.360
Mo	95	1	He	1.356230	0.8	9322.390
Pd	105	1	He	0.004171	32.7	265.000
Ag	107	1	He	0.037756	1.6	898.373
Cd	111	1	He	0.013712	7.7	68.323
Sn	118	1	He	0.024394	2.7	316.677
Sb	121	1	He	0.026663	21.9	460.010
Ba	138	1	He	0.870896	2.0	29332.887
Pt	195	1	He	0.003193	26.7	211.333
Hg	202	1	He	0.004904	36.4	133.000
Tl	205	1	He	0.017706	4.0	1215.070
Pb	208	1	He	0.063764	5.9	6437.293
Bi	209	1	He	0.008181	23.0	2233.563
Th	232	1	He	0.015206	17.6	1548.440
U	238	1	He	0.059084	2.7	4382.443

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.33943018	605829.710
Sc	45	2	H2	99.30201208	4890495.333
Ge	72	1	He	99.90613876	506038.280
Ge	72	2	H2	99.32616637	1694452.083
In	115	1	He	100.9365070	5968736.443
Tb	159	1	He	100.8907079	13925395.623
Ir	193	1	He	98.26734768	7107249.893

Sample Name 10606366007\_B69981Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 063SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:51:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.236853	0.8	1112.373
Be	9	2	H2	0.034041	18.6	27.333
B	11	2	H2	84.275929	0.6	38367.150
Na	23	1	He	2213.185796	0.4	2394455.590
Mg	24	1	He	1347.818191	0.1	816527.047
Al	27	1	He	26.888822	0.0	8044.860
Si	28	2	H2	1248.915518	0.9	4360472.333
K	39	1	He	178.790863	1.2	221236.533
Ca	43	1	He	5217.050960	0.9	12704.007
Ti	47	1	He	0.638502	9.9	173.667
V	51	1	He	0.300811	14.1	1803.590
Cr	52	1	He	0.303185	2.7	5385.673
Mn	55	1	He	3.932053	1.0	26352.353
Fe	56	1	He	33.470227	0.5	303729.477
Co	59	1	He	0.028890	0.6	475.343
Ni	60	1	He	0.137937	7.6	719.353
Cu	63	1	He	0.819936	0.4	8584.553
Zn	66	1	He	0.919734	6.2	2298.857
As	75	1	He	0.178547	4.2	553.510
Se	78	2	H2	0.049105	5.9	76.333
Sr	88	1	He	21.987602	0.7	270991.910
Mo	95	1	He	0.651224	2.7	4455.377
Pd	105	1	He	0.009391	44.7	316.677
Ag	107	1	He	0.018298	9.7	483.343
Cd	111	1	He	0.007494	33.6	42.863
Sn	118	1	He	0.019146	2.9	261.670
Sb	121	1	He	0.029544	6.7	500.013
Ba	138	1	He	1.383647	1.4	46228.900
Pt	195	1	He	0.002764	65.8	204.667
Hg	202	1	He	0.003931	17.5	126.000
Tl	205	1	He	0.012372	9.2	946.710
Pb	208	1	He	0.023788	7.8	3758.563
Bi	209	1	He	0.006312	13.0	2123.557
Th	232	1	He	0.010320	22.7	1205.070
U	238	1	He	0.035466	7.5	2806.993

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.26949889	599238.293
Sc	45	2	H2	97.81701189	4817361.000
Ge	72	1	He	98.88756875	500879.083
Ge	72	2	H2	97.56739031	1664448.290
In	115	1	He	100.2734881	5929529.763
Tb	159	1	He	100.4740037	13867880.207
Ir	193	1	He	98.08128529	7093792.810

Sample Name 10606366008\_B69981Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 064SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:55:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.297095	7.6	207.500
Be	9	2	H2	0.031312	4.9	26.167
B	11	2	H2	67.401712	0.6	31384.120
Na	23	1	He	157.344987	0.9	181921.910
Mg	24	1	He	219.744817	1.2	135233.507
Al	27	1	He	11.839993	2.8	3606.787
Si	28	2	H2	89.149640	0.9	325904.750
K	39	1	He	58.940572	0.9	122846.250
Ca	43	1	He	1782.868472	1.1	4382.023
Ti	47	1	He	0.219243	14.6	60.667
V	51	1	He	-0.034807		-805.317
Cr	52	1	He	0.230504	6.4	4749.457
Mn	55	1	He	16.821991	0.6	112428.980
Fe	56	1	He	23.181065	0.9	215087.563
Co	59	1	He	0.026012	12.2	432.010
Ni	60	1	He	0.074878	16.4	484.010
Cu	63	1	He	0.125568	4.3	1484.083
Zn	66	1	He	0.961561	3.0	2390.203
As	75	1	He	0.024376	3.7	236.833
Se	78	2	H2	0.038030	23.7	66.667
Sr	88	1	He	10.551805	0.6	129838.007
Mo	95	1	He	1.397665	1.9	9526.533
Pd	105	1	He	-0.000185		218.333
Ag	107	1	He	0.012310	19.8	356.677
Cd	111	1	He	0.009452	38.2	50.620
Sn	118	1	He	0.027790	8.6	348.343
Sb	121	1	He	0.021369	20.8	376.677
Ba	138	1	He	0.880729	1.7	29416.300
Pt	195	1	He	0.002137	65.2	197.333
Hg	202	1	He	0.001719	110.9	112.000
Tl	205	1	He	0.007648	7.1	718.363
Pb	208	1	He	0.065807	2.3	6585.643
Bi	209	1	He	0.004530	10.5	2026.860
Th	232	1	He	0.008633	18.1	1091.723
U	238	1	He	0.054503	7.2	4079.010

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.90894221	603177.647
Sc	45	2	H2	98.33572944	4842907.167
Ge	72	1	He	98.67226098	499788.520
Ge	72	2	H2	98.33359958	1677519.417
In	115	1	He	100.1005174	5919301.387
Tb	159	1	He	101.1003355	13954329.373
Ir	193	1	He	98.29559381	7109292.813



Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 065\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:59:14  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.773147	0.5	38255.223
Be	9	2	H2	80.653743	1.0	38035.747
B	11	2	H2	79.055704	1.2	35715.350
Na	23	1	He	992.808108	0.2	1085026.155
Mg	24	1	He	989.332260	0.6	602356.965
Al	27	1	He	1002.468213	0.4	298584.360
Si	28	2	H2	498.966505	0.4	1729204.957
K	39	1	He	1002.754700	0.3	907098.850
Ca	43	1	He	1009.514517	1.4	2483.785
Ti	47	1	He	80.204145	0.9	21788.070
V	51	1	He	80.322569	0.3	625366.820
Cr	52	1	He	81.637261	0.0	755333.810
Mn	55	1	He	80.227475	0.1	533794.035
Fe	56	1	He	498.138173	0.1	4389233.500
Co	59	1	He	82.459881	0.8	1216027.440
Ni	60	1	He	83.152096	0.0	309513.580
Cu	63	1	He	83.120332	0.1	851161.065
Zn	66	1	He	81.445967	0.3	188962.090
As	75	1	He	79.794428	0.4	164074.985
Se	78	2	H2	80.676271	0.5	73191.530
Sr	88	1	He	80.953649	0.1	999006.000
Mo	95	1	He	76.834450	0.6	524184.395
Pd	105	1	He	82.025355	0.7	839521.745
Ag	107	1	He	41.660887	2.5	876646.355
Cd	111	1	He	79.851026	0.2	321579.130
Sn	118	1	He	76.910824	0.4	776585.845
Sb	121	1	He	77.987417	0.7	1171187.560
Ba	138	1	He	77.860292	0.9	2596768.945
Pt	195	1	He	81.840435	1.8	1111818.375
Hg	202	1	He	3.890408	1.6	25878.055
Tl	205	1	He	42.369959	1.5	2081050.045
Pb	208	1	He	82.658517	1.3	5455784.060
Bi	209	1	He	79.571804	0.5	4545173.060
Th	232	1	He	76.311737	1.6	5330280.550
U	238	1	He	78.635265	1.5	5253563.670

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.69083893	601834.000
Sc	45	2	H2	96.63040874	4758922.333
Ge	72	1	He	99.04906323	501697.075
Ge	72	2	H2	96.26974610	1642311.163
In	115	1	He	100.3548656	5934341.910
Tb	159	1	He	99.99392772	13801617.920
Ir	193	1	He	98.82611378	7147663.015

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 066\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:02:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.079231	14.5	103.500
Be	9	2	H2	0.050573	9.0	34.833
B	11	2	H2	-1.145405		2154.820
Na	23	1	He	0.400911	73.5	11579.573
Mg	24	1	He	-0.451345		1175.060
Al	27	1	He	0.706465	32.4	278.333
Si	28	2	H2	-0.009112		13728.380
K	39	1	He	-0.214351		72116.867
Ca	43	1	He	-0.758657		16.033
Ti	47	1	He	0.042629	30.6	12.333
V	51	1	He	0.070126	127.1	12.357
Cr	52	1	He	0.034724	25.6	2882.290
Mn	55	1	He	0.026244	51.7	486.677
Fe	56	1	He	0.365562	27.7	13821.223
Co	59	1	He	0.042867	36.9	669.353
Ni	60	1	He	0.033193	46.8	324.673
Cu	63	1	He	0.040765	28.9	610.017
Zn	66	1	He	0.048396	64.2	277.337
As	75	1	He	0.032979	33.2	250.667
Se	78	2	H2	0.018810	36.9	48.000
Sr	88	1	He	0.043956	34.2	666.690
Mo	95	1	He	0.041291	23.3	294.003
Pd	105	1	He	0.024573	22.2	466.677
Ag	107	1	He	0.154940	23.0	3315.430
Cd	111	1	He	0.040242	23.7	172.613
Sn	118	1	He	0.041212	42.3	478.347
Sb	121	1	He	0.031853	29.5	528.350
Ba	138	1	He	0.034122	34.0	1240.067
Pt	195	1	He	0.037704	33.8	672.020
Hg	202	1	He	0.031073	4.3	303.000
Tl	205	1	He	0.065292	20.6	3510.500
Pb	208	1	He	0.042049	25.1	4905.377
Bi	209	1	He	0.036258	31.0	3850.650
Th	232	1	He	0.048614	19.4	3890.623
U	238	1	He	0.034904	29.1	2790.333

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.98160014	591304.067
Sc	45	2	H2	96.74805989	4764716.500
Ge	72	1	He	97.22275758	492446.587
Ge	72	2	H2	96.58086630	1647618.710
In	115	1	He	99.16740649	5864123.203
Tb	159	1	He	99.26055131	13700393.963
Ir	193	1	He	98.97187813	7158205.517

Sample Name 4305856\_B69911Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 067SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:06:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.065506	21.8	97.500
Be	9	2	H2	0.048569	25.3	34.000
B	11	2	H2	-1.700355		1928.960
Na	23	1	He	8.232889	6.0	20006.800
Mg	24	1	He	2.210986	2.6	2778.613
Al	27	1	He	4.793208	5.8	1482.077
Si	28	2	H2	0.487947	9.7	15494.070
K	39	1	He	3.087454	29.2	75211.960
Ca	43	1	He	5.288630	27.3	30.717
Ti	47	1	He	0.087099	20.1	24.333
V	51	1	He	0.018404	352.6	-385.263
Cr	52	1	He	0.991916	1.2	11615.283
Mn	55	1	He	0.126313	5.5	1146.717
Fe	56	1	He	7.519512	0.7	76006.247
Co	59	1	He	0.022968	5.2	380.677
Ni	60	1	He	0.035782	40.5	333.340
Cu	63	1	He	0.068242	10.1	884.027
Zn	66	1	He	0.679632	8.3	1709.440
As	75	1	He	0.024919	20.4	233.833
Se	78	2	H2	0.014403	60.2	44.000
Sr	88	1	He	0.037584	22.6	588.353
Mo	95	1	He	0.039772	3.8	284.667
Pd	105	1	He	0.000784	375.0	226.670
Ag	107	1	He	0.040896	3.4	950.040
Cd	111	1	He	0.025499	3.4	114.283
Sn	118	1	He	0.033190	44.1	400.027
Sb	121	1	He	0.025360	2.7	433.343
Ba	138	1	He	0.027776	2.9	1035.050
Pt	195	1	He	0.007155	41.2	262.667
Hg	202	1	He	0.014725	9.3	196.333
Tl	205	1	He	0.030403	3.6	1821.810
Pb	208	1	He	0.020479	10.9	3511.863
Bi	209	1	He	0.015905	12.3	2707.000
Th	232	1	He	0.014302	10.5	1503.440
U	238	1	He	0.003726	16.2	713.363

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.49493990	594466.547
Sc	45	2	H2	97.07820733	4780975.833
Ge	72	1	He	96.97260969	491179.553
Ge	72	2	H2	96.66812241	1649107.253
In	115	1	He	99.38556935	5877023.953
Tb	159	1	He	99.66669279	13756451.463
Ir	193	1	He	99.53343547	7198820.517

Sample Name 4305857\_B69911Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 068SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:10:14  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	110.686786	0.4	50281.153
Be	9	2	H2	108.053050	0.2	50105.187
B	11	2	H2	105.694031	0.1	46083.580
Na	23	1	He	2166.239880	1.6	2288059.030
Mg	24	1	He	2146.582742	1.5	1268603.210
Al	27	1	He	2141.418344	0.6	619862.540
Si	28	2	H2	541.267828	0.2	1843383.417
K	39	1	He	2169.367923	0.9	1824271.900
Ca	43	1	He	2218.957393	0.9	5285.043
Ti	47	1	He	107.390498	0.2	28357.863
V	51	1	He	107.974284	0.7	817304.337
Cr	52	1	He	110.939858	0.9	996784.210
Mn	55	1	He	109.365725	1.0	707161.293
Fe	56	1	He	2179.083611	1.3	18626981.333
Co	59	1	He	111.895381	1.3	1609007.083
Ni	60	1	He	112.761408	0.7	409225.793
Cu	63	1	He	111.696981	0.2	1115324.293
Zn	66	1	He	110.969168	0.6	250999.547
As	75	1	He	107.678182	0.6	215843.177
Se	78	2	H2	107.990818	0.8	97316.597
Sr	88	1	He	109.269509	0.8	1314879.720
Mo	95	1	He	105.775650	0.5	702558.460
Pd	105	1	He	22.071380	1.2	220089.580
Ag	107	1	He	54.730162	1.8	1121318.787
Cd	111	1	He	108.152611	0.4	424038.760
Sn	118	1	He	103.842617	0.2	1020745.430
Sb	121	1	He	106.290212	0.4	1554052.633
Ba	138	1	He	106.667171	0.7	3463579.740
Pt	195	1	He	21.823307	0.8	294436.333
Hg	202	1	He	0.012386	27.9	180.000
Tl	205	1	He	112.931749	1.1	5505633.043
Pb	208	1	He	110.796277	0.1	7259058.797
Bi	209	1	He	108.834951	1.1	6105082.407
Th	232	1	He	109.030438	1.1	7479981.763
U	238	1	He	107.043550	1.8	7023450.937

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.95661092	584989.520
Sc	45	2	H2	95.01768269	4679497.667
Ge	72	1	He	96.59061673	489244.707
Ge	72	2	H2	95.63588773	1631497.873
In	115	1	He	97.70067943	5777390.390
Tb	159	1	He	99.25944643	13700241.463
Ir	193	1	He	97.07012665	7020660.103

Sample Name 10606019001\_B69911Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 069SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:13:53  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.606506	3.2	808.853
Be	9	2	H2	0.211592	3.7	110.833
B	11	2	H2	5.041101	0.8	4746.580
Na	23	1	He	3186.629456	0.3	3297984.847
Mg	24	1	He	1743.469781	0.1	1011416.287
Al	27	1	He	1733.972620	0.2	492560.987
Si	28	2	H2	11450.72733	0.1	39425432.000
K	39	1	He	943.098079	0.6	817942.880
Ca	43	1	He	6932.917149	0.9	16167.080
Ti	47	1	He	51.267825	2.4	13284.933
V	51	1	He	2.922219	3.0	21210.597
Cr	52	1	He	1.228131	1.0	13294.043
Mn	55	1	He	29.378130	1.2	186638.163
Fe	56	1	He	1278.595566	0.0	10729897.333
Co	59	1	He	0.566545	0.9	8048.230
Ni	60	1	He	1.239802	1.5	4614.747
Cu	63	1	He	2.364688	1.0	23378.077
Zn	66	1	He	10.900134	0.7	24358.373
As	75	1	He	1.671195	1.4	3466.587
Se	78	2	H2	0.209972	5.5	219.667
Sr	88	1	He	48.725936	0.4	575869.067
Mo	95	1	He	0.142862	1.3	964.707
Pd	105	1	He	0.033451	13.6	548.347
Ag	107	1	He	0.254542	12.4	5311.057
Cd	111	1	He	0.080960	5.7	329.827
Sn	118	1	He	0.125425	8.7	1300.073
Sb	121	1	He	0.130840	1.4	1968.487
Ba	138	1	He	20.924083	0.5	679599.027
Pt	195	1	He	0.014811	3.2	364.677
Hg	202	1	He	0.160062	6.3	1151.720
Tl	205	1	He	0.066363	11.9	3568.850
Pb	208	1	He	0.572950	1.7	39691.223
Bi	209	1	He	0.036089	6.0	3790.600
Th	232	1	He	0.194780	3.1	13919.323
U	238	1	He	0.096404	2.5	6813.500

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.18162797	574054.563
Sc	45	2	H2	96.73567040	4764106.333
Ge	72	1	He	94.85054139	480430.987
Ge	72	2	H2	95.59142563	1630739.373
In	115	1	He	97.71400632	5778178.457
Tb	159	1	He	99.28166472	13703308.133
Ir	193	1	He	97.57561527	7057219.897

Sample Name 4308646\_B69911Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 070SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:17:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.372069	2.1	236.833
Be	9	2	H2	0.066162	21.0	41.833
B	11	2	H2	-0.613990		2358.187
Na	23	1	He	644.350492	0.2	684642.800
Mg	24	1	He	353.598807	0.3	209036.713
Al	27	1	He	353.578343	0.8	101857.063
Si	28	2	H2	2346.326828	0.7	8024256.667
K	39	1	He	187.986892	1.1	222192.450
Ca	43	1	He	1425.138094	1.1	3382.257
Ti	47	1	He	10.474926	0.7	2751.940
V	51	1	He	0.566838	5.2	3755.810
Cr	52	1	He	0.262190	4.9	4864.157
Mn	55	1	He	5.965721	0.7	38660.187
Fe	56	1	He	267.030256	5.1	2279417.167
Co	59	1	He	0.123894	2.1	1819.453
Ni	60	1	He	0.271567	2.5	1180.050
Cu	63	1	He	0.484268	1.9	5002.877
Zn	66	1	He	2.614159	2.6	6038.610
As	75	1	He	0.335151	1.8	849.030
Se	78	2	H2	0.048974	14.9	75.000
Sr	88	1	He	9.675875	1.7	115840.653
Mo	95	1	He	0.035920	7.6	258.000
Pd	105	1	He	0.008918	64.9	308.340
Ag	107	1	He	0.060410	12.9	1353.413
Cd	111	1	He	0.021458	15.7	97.953
Sn	118	1	He	0.039492	11.5	461.677
Sb	121	1	He	0.033069	11.5	546.680
Ba	138	1	He	4.103979	0.7	135350.373
Pt	195	1	He	0.003482	36.6	214.000
Hg	202	1	He	0.036372	8.2	341.340
Tl	205	1	He	0.017517	14.6	1198.397
Pb	208	1	He	0.125885	3.8	10508.303
Bi	209	1	He	0.012276	39.4	2473.620
Th	232	1	He	0.044894	9.1	3620.567
U	238	1	He	0.022090	5.3	1930.160

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.44187086	581818.413
Sc	45	2	H2	95.95895621	4725854.167
Ge	72	1	He	96.00464640	486276.687
Ge	72	2	H2	95.97466099	1637277.167
In	115	1	He	99.15092967	5863148.870
Tb	159	1	He	100.2803788	13841155.207
Ir	193	1	He	98.55313840	7127919.893

Sample Name 4305858\_B69911Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 071SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:21:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	106.514407	0.7	49707.757
Be	9	2	H2	102.768780	0.3	48955.110
B	11	2	H2	105.833407	0.6	47398.957
Na	23	1	He	5119.088392	0.5	5358638.047
Mg	24	1	He	3746.335346	0.6	2199314.393
Al	27	1	He	4169.602960	0.7	1199397.960
Si	28	2	H2	12346.36411	1.2	42890900.000
K	39	1	He	2985.261054	0.6	2468121.473
Ca	43	1	He	8769.728572	0.8	20706.100
Ti	47	1	He	169.033721	0.9	44357.220
V	51	1	He	107.415385	0.7	808029.390
Cr	52	1	He	108.180516	0.2	966040.667
Mn	55	1	He	134.403801	0.1	863615.957
Fe	56	1	He	3439.278213	0.6	29211364.000
Co	59	1	He	108.379113	0.7	1552055.663
Ni	60	1	He	109.381322	0.2	395327.323
Cu	63	1	He	109.952381	0.1	1093355.540
Zn	66	1	He	116.115146	0.5	261545.260
As	75	1	He	105.226658	0.3	210061.870
Se	78	2	H2	104.823451	0.5	95272.763
Sr	88	1	He	153.903576	0.2	1844291.277
Mo	95	1	He	101.917638	0.9	677481.500
Pd	105	1	He	20.910235	1.2	208689.033
Ag	107	1	He	52.756610	0.2	1081848.630
Cd	111	1	He	104.151921	1.0	408678.410
Sn	118	1	He	101.176054	0.7	995348.397
Sb	121	1	He	101.704431	0.4	1488250.240
Ba	138	1	He	124.395369	1.1	4042443.480
Pt	195	1	He	20.787693	0.1	284915.623
Hg	202	1	He	0.171999	3.6	1249.397
Tl	205	1	He	108.405383	0.7	5368628.253
Pb	208	1	He	106.569456	0.5	7092466.043
Bi	209	1	He	103.686853	0.4	5909841.787
Th	232	1	He	103.410915	0.5	7208341.767
U	238	1	He	103.526882	0.7	6902282.817

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.36690627	581356.587
Sc	45	2	H2	97.60932115	4807132.500
Ge	72	1	He	96.18930741	487212.020
Ge	72	2	H2	96.45986315	1645554.460
In	115	1	He	97.78399144	5782316.927
Tb	159	1	He	100.8287202	13916839.790
Ir	193	1	He	98.62159037	7132870.727

Sample Name 4305859\_B69911Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 072SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:24:52  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	103.414541	0.7	48309.113
Be	9	2	H2	100.375214	0.9	47859.967
B	11	2	H2	104.190335	0.5	46749.630
Na	23	1	He	4869.697919	0.2	5131398.780
Mg	24	1	He	3580.615904	0.3	2115790.337
Al	27	1	He	4032.489760	0.4	1167526.917
Si	28	2	H2	11819.13310	1.4	41097913.333
K	39	1	He	2881.927900	0.1	2400689.180
Ca	43	1	He	8311.281106	0.7	19752.667
Ti	47	1	He	173.668342	1.1	45872.560
V	51	1	He	104.139971	0.4	788478.967
Cr	52	1	He	104.739554	0.7	941476.210
Mn	55	1	He	129.119455	0.3	835076.520
Fe	56	1	He	3325.268820	0.5	28427726.000
Co	59	1	He	105.449371	0.6	1511349.040
Ni	60	1	He	106.922784	0.5	386762.747
Cu	63	1	He	107.650905	0.7	1071345.960
Zn	66	1	He	114.550691	0.3	258239.373
As	75	1	He	102.655319	0.5	205102.797
Se	78	2	H2	101.547223	0.2	91804.480
Sr	88	1	He	148.069599	0.6	1775873.673
Mo	95	1	He	99.279969	1.4	657420.397
Pd	105	1	He	20.383702	1.2	202665.077
Ag	107	1	He	51.907324	1.2	1060303.813
Cd	111	1	He	102.140371	0.9	399269.560
Sn	118	1	He	99.228345	1.1	972484.830
Sb	121	1	He	99.033739	1.2	1443599.043
Ba	138	1	He	121.605854	1.3	3936712.443
Pt	195	1	He	20.309703	0.5	276081.197
Hg	202	1	He	0.273052	2.7	1908.803
Tl	205	1	He	105.810948	0.4	5197310.547
Pb	208	1	He	104.210074	0.4	6878648.757
Bi	209	1	He	102.866689	1.1	5758240.747
Th	232	1	He	103.787093	1.3	7105050.933
U	238	1	He	102.073736	1.3	6683658.237

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.98192285	585145.457
Sc	45	2	H2	97.70497510	4811843.333
Ge	72	1	He	96.26931973	487617.293
Ge	72	2	H2	95.94202516	1636720.417
In	115	1	He	97.41623020	5760569.890
Tb	159	1	He	100.0015969	13802676.460
Ir	193	1	He	96.86447693	7005786.353



Sample Name 10606019002\_B69911Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 073SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:28:31  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.220378	2.0	169.833
Be	9	2	H2	0.168988	1.5	91.333
B	11	2	H2	-1.686921		1940.790
Na	23	1	He	62.016055	0.6	77159.783
Mg	24	1	He	5.066151	5.8	4474.043
Al	27	1	He	5.122037	3.9	1572.420
Si	28	2	H2	29.720442	0.5	116836.637
K	39	1	He	7.389970	18.2	78438.793
Ca	43	1	He	19.441969	13.2	64.617
Ti	47	1	He	0.149818	4.9	41.000
V	51	1	He	0.022997	15.7	-347.847
Cr	52	1	He	0.523669	0.2	7322.517
Mn	55	1	He	0.390220	2.8	2868.957
Fe	56	1	He	4.196834	1.9	46976.390
Co	59	1	He	0.094779	2.5	1424.740
Ni	60	1	He	0.368330	7.7	1552.087
Cu	63	1	He	1.506020	1.1	15375.457
Zn	66	1	He	8.129343	1.5	18714.723
As	75	1	He	0.072309	6.8	330.833
Se	78	2	H2	0.061849	15.4	88.000
Sr	88	1	He	0.142402	9.7	1865.137
Mo	95	1	He	0.086981	7.5	605.350
Pd	105	1	He	0.003998	74.7	260.007
Ag	107	1	He	0.186946	20.1	4007.293
Cd	111	1	He	0.095490	3.0	394.567
Sn	118	1	He	0.125196	4.0	1323.410
Sb	121	1	He	0.070419	8.2	1106.720
Ba	138	1	He	0.178720	2.8	6038.040
Pt	195	1	He	0.015657	7.7	379.343
Hg	202	1	He	0.006917	39.7	145.333
Tl	205	1	He	0.100681	6.7	5287.767
Pb	208	1	He	1.038523	2.0	70790.257
Bi	209	1	He	0.079947	7.4	6374.993
Th	232	1	He	0.066926	11.4	5196.090
U	238	1	He	0.039787	4.1	3133.747

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.12195015	592168.707
Sc	45	2	H2	97.38826626	4796245.833
Ge	72	1	He	97.48618974	493780.907
Ge	72	2	H2	97.50997841	1663468.873
In	115	1	He	99.66463028	5893525.823
Tb	159	1	He	100.1325699	13820753.957
Ir	193	1	He	99.32434068	7183697.600

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 074\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:32:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.833053	0.6	38359.990
Be	9	2	H2	80.682054	0.5	38126.643
B	11	2	H2	77.912228	1.4	35308.407
Na	23	1	He	978.850611	0.6	1072402.823
Mg	24	1	He	978.259283	0.5	596983.703
Al	27	1	He	985.331721	1.1	294146.530
Si	28	2	H2	499.805490	0.5	1735571.040
K	39	1	He	982.713711	0.7	892502.073
Ca	43	1	He	1002.305317	2.4	2471.583
Ti	47	1	He	78.430336	1.1	21356.113
V	51	1	He	78.363096	1.2	611517.157
Cr	52	1	He	80.991618	1.1	751098.230
Mn	55	1	He	79.488093	0.7	530088.500
Fe	56	1	He	493.745338	0.5	4360660.000
Co	59	1	He	80.961407	0.8	1202098.917
Ni	60	1	He	81.880177	1.4	306866.510
Cu	63	1	He	82.249899	1.2	848016.147
Zn	66	1	He	80.424870	1.5	187868.017
As	75	1	He	78.514060	0.7	162553.740
Se	78	2	H2	81.377868	0.2	74296.477
Sr	88	1	He	79.520632	1.1	988047.697
Mo	95	1	He	76.184150	0.9	521820.073
Pd	105	1	He	81.223632	1.1	834630.870
Ag	107	1	He	41.571329	1.5	878356.133
Cd	111	1	He	79.242633	0.9	320392.960
Sn	118	1	He	75.862775	0.9	769012.880
Sb	121	1	He	76.934643	1.1	1159995.793
Ba	138	1	He	77.131188	1.2	2582728.607
Pt	195	1	He	81.252906	0.4	1110109.333
Hg	202	1	He	3.832538	0.9	25638.593
Tl	205	1	He	41.749765	0.6	2062201.847
Pb	208	1	He	81.757245	0.8	5426781.867
Bi	209	1	He	79.120983	1.6	4546170.350
Th	232	1	He	76.016880	0.6	5341593.253
U	238	1	He	78.167801	0.5	5253932.217

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.91630405	603223.000
Sc	45	2	H2	96.82348658	4768431.167
Ge	72	1	He	99.73232181	505157.873
Ge	72	2	H2	96.88307844	1652774.290
In	115	1	He	100.7546230	5957980.993
Tb	159	1	He	100.5537087	13878881.457
Ir	193	1	He	99.41591151	7190320.520

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 075\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:35:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.112289	14.0	118.500
Be	9	2	H2	0.066728	17.4	42.333
B	11	2	H2	-1.643776		1941.293
Na	23	1	He	0.131809	228.1	11155.903
Mg	24	1	He	-0.820190		943.373
Al	27	1	He	0.725011	70.8	280.337
Si	28	2	H2	0.319503	248.0	14835.577
K	39	1	He	-1.408365		70271.140
Ca	43	1	He	-0.670380		16.050
Ti	47	1	He	0.049533	86.3	14.000
V	51	1	He	0.074310	98.0	46.300
Cr	52	1	He	0.045595	94.4	2944.310
Mn	55	1	He	0.035946	110.7	543.350
Fe	56	1	He	0.409531	64.8	14027.573
Co	59	1	He	0.054407	76.2	829.370
Ni	60	1	He	0.044016	79.7	361.337
Cu	63	1	He	0.045840	93.3	655.357
Zn	66	1	He	0.050487	73.9	280.003
As	75	1	He	0.038883	107.5	260.500
Se	78	2	H2	0.001750	151.2	32.667
Sr	88	1	He	0.046085	79.0	686.697
Mo	95	1	He	0.053614	79.5	374.673
Pd	105	1	He	0.033109	42.4	550.017
Ag	107	1	He	0.187223	26.5	3968.957
Cd	111	1	He	0.047526	79.1	200.270
Sn	118	1	He	0.054608	78.4	608.357
Sb	121	1	He	0.047227	75.5	751.700
Ba	138	1	He	0.042129	80.2	1495.127
Pt	195	1	He	0.043001	85.6	744.697
Hg	202	1	He	0.028554	23.4	286.333
Tl	205	1	He	0.073433	34.1	3910.657
Pb	208	1	He	0.045232	83.6	5117.150
Bi	209	1	He	0.041557	84.3	4154.197
Th	232	1	He	0.059064	68.5	4622.777
U	238	1	He	0.040219	90.4	3148.927

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.80689926	584067.207
Sc	45	2	H2	96.51115349	4753049.167
Ge	72	1	He	96.51189099	488845.950
Ge	72	2	H2	97.09887506	1656455.667
In	115	1	He	98.71541673	5837395.433
Tb	159	1	He	99.21355788	13693907.717
Ir	193	1	He	98.89169394	7152406.143

Sample Name 4308596\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 076SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:39:30  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.133689	6.1	128.000
Be	9	2	H2	0.069445	19.3	43.500
B	11	2	H2	-2.234278		1689.930
Na	23	1	He	5.200762	6.4	16183.850
Mg	24	1	He	4.008278	7.7	3722.163
Al	27	1	He	3.013581	4.7	925.030
Si	28	2	H2	1.317994	49.9	18209.910
K	39	1	He	1.878680	74.0	71632.587
Ca	43	1	He	10.236136	15.2	41.167
Ti	47	1	He	0.035064	58.4	10.000
V	51	1	He	0.024921	76.6	-323.080
Cr	52	1	He	0.115072	7.6	3503.097
Mn	55	1	He	0.067111	4.7	731.353
Fe	56	1	He	0.844994	11.8	17427.977
Co	59	1	He	0.019312	43.7	319.337
Ni	60	1	He	0.029102	33.9	301.337
Cu	63	1	He	0.042049	15.0	606.013
Zn	66	1	He	1.111108	2.9	2622.910
As	75	1	He	0.027068	15.3	232.333
Se	78	2	H2	0.015290	49.3	44.667
Sr	88	1	He	0.038255	12.4	581.683
Mo	95	1	He	0.026697	23.9	192.667
Pd	105	1	He	0.019473	55.6	408.347
Ag	107	1	He	0.078904	17.6	1710.120
Cd	111	1	He	0.011751	47.7	58.300
Sn	118	1	He	0.851755	1.6	8432.590
Sb	121	1	He	0.015542	50.5	281.673
Ba	138	1	He	0.042536	13.5	1495.097
Pt	195	1	He	0.009491	69.5	290.670
Hg	202	1	He	0.015508	10.6	199.333
Tl	205	1	He	0.026033	26.3	1590.117
Pb	208	1	He	0.024645	17.3	3745.230
Bi	209	1	He	0.015975	54.5	2680.323
Th	232	1	He	0.026345	21.4	2325.233
U	238	1	He	0.012426	52.5	1283.417

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.13302933	573755.167
Sc	45	2	H2	96.24539014	4739960.667
Ge	72	1	He	94.61294136	479227.510
Ge	72	2	H2	96.38206161	1644227.207
In	115	1	He	97.63064595	5773249.060
Tb	159	1	He	98.64494833	13615425.633
Ir	193	1	He	98.58923671	7130530.727

Sample Name 4308597\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 077SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:43:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	50.390175	0.8	22795.087
Be	9	2	H2	49.152459	0.9	22667.750
B	11	2	H2	46.791588	2.1	21718.730
Na	23	1	He	906.408956	2.0	950860.477
Mg	24	1	He	896.013078	2.0	523244.433
Al	27	1	He	890.925241	1.7	254459.110
Si	28	2	H2	242.950166	1.3	830079.437
K	39	1	He	909.487267	1.8	795493.373
Ca	43	1	He	936.734574	1.7	2211.050
Ti	47	1	He	44.135676	3.3	11498.827
V	51	1	He	44.773808	2.4	334050.747
Cr	52	1	He	46.412897	2.4	412874.333
Mn	55	1	He	45.653838	2.8	291420.447
Fe	56	1	He	903.998184	2.6	7629915.833
Co	59	1	He	46.919971	2.1	665601.000
Ni	60	1	He	47.330411	2.6	169561.740
Cu	63	1	He	46.930754	2.3	462375.237
Zn	66	1	He	46.213008	2.4	103211.997
As	75	1	He	44.994115	2.3	89077.190
Se	78	2	H2	49.153834	0.6	44299.690
Sr	88	1	He	46.044279	2.0	546612.870
Mo	95	1	He	44.175465	2.8	291238.000
Pd	105	1	He	9.436716	3.1	93515.680
Ag	107	1	He	23.996992	3.6	488083.497
Cd	111	1	He	44.963915	3.0	174988.677
Sn	118	1	He	44.227268	2.7	431546.153
Sb	121	1	He	44.156830	2.2	640825.093
Ba	138	1	He	44.641817	3.2	1438877.533
Pt	195	1	He	9.148533	2.5	122953.023
Hg	202	1	He	3.904114	3.3	25661.667
Tl	205	1	He	47.926205	2.6	2325867.467
Pb	208	1	He	46.296421	2.6	3020337.353
Bi	209	1	He	45.023283	2.6	2532417.200
Th	232	1	He	44.409973	3.1	3054129.953
U	238	1	He	44.441516	2.6	2923163.187

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.66969637	577061.357
Sc	45	2	H2	94.47224363	4652635.500
Ge	72	1	He	95.27062742	482558.780
Ge	72	2	H2	95.61553247	1631150.623
In	115	1	He	96.96238453	5733732.373
Tb	159	1	He	98.77732511	13633696.880
Ir	193	1	He	97.26876526	7035026.770

Sample Name 10606046001\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 078SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:46:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.235495	2.9	1939.793
Be	9	2	H2	0.182962	5.1	93.333
B	11	2	H2	-1.639208		1867.780
Na	23	1	He	176.671483	2.2	192502.407
Mg	24	1	He	1949.457904	1.7	1127444.723
Al	27	1	He	3473.608422	1.6	983786.480
Si	28	2	H2	471.931059	2.4	1570577.833
K	39	1	He	501.935145	1.7	466800.307
Ca	43	1	He	1790.422649	1.5	4176.080
Ti	47	1	He	542.636402	2.5	140187.963
V	51	1	He	23.114698	2.1	170791.637
Cr	52	1	He	6.148597	1.4	56404.513
Mn	55	1	He	117.966611	2.4	746285.397
Fe	56	1	He	8200.868856	2.5	68559624.000
Co	59	1	He	3.341103	1.5	46626.153
Ni	60	1	He	6.968899	0.4	24704.207
Cu	63	1	He	5.786540	1.3	56201.907
Zn	66	1	He	24.275610	1.0	53361.497
As	75	1	He	1.602146	1.7	3288.377
Se	78	2	H2	0.084755	4.2	104.333
Sr	88	1	He	13.496176	2.2	157573.737
Mo	95	1	He	0.145394	2.8	970.707
Pd	105	1	He	0.021887	17.0	428.343
Ag	107	1	He	0.191754	28.7	3982.293
Cd	111	1	He	0.066975	9.2	272.160
Sn	118	1	He	1.101947	2.3	10782.570
Sb	121	1	He	0.045682	8.4	715.027
Ba	138	1	He	40.369587	2.5	1296840.733
Pt	195	1	He	0.002582	32.2	200.667
Hg	202	1	He	0.046468	13.7	406.343
Tl	205	1	He	0.057381	3.6	3145.407
Pb	208	1	He	2.740380	2.5	182537.667
Bi	209	1	He	0.033155	27.4	3647.250
Th	232	1	He	1.319199	2.0	92049.637
U	238	1	He	0.221334	3.7	15150.563

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.92251460	572458.270
Sc	45	2	H2	92.75874674	4568248.000
Ge	72	1	He	93.64519064	474325.720
Ge	72	2	H2	93.31661194	1591932.250
In	115	1	He	96.66096259	5715908.217
Tb	159	1	He	99.75084748	13768066.877
Ir	193	1	He	98.19878915	7102291.353

Sample Name 4310748\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 079SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:50:29  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.000289	0.4	36474.193
Be	9	2	H2	75.563977	1.2	34296.527
B	11	2	H2	75.258685	1.0	32844.037
Na	23	1	He	1954.565330	2.3	1985081.893
Mg	24	1	He	3789.105676	2.6	2151019.757
Al	27	1	He	5347.997846	2.7	1487592.540
Si	28	2	H2	1446.864420	1.1	4800533.000
K	39	1	He	2275.490625	2.7	1835564.970
Ca	43	1	He	3638.239791	2.4	8316.653
Ti	47	1	He	643.350641	3.2	163253.367
V	51	1	He	95.682671	2.6	695963.030
Cr	52	1	He	79.918616	2.8	690754.603
Mn	55	1	He	196.450636	3.1	1220502.790
Fe	56	1	He	9428.318062	3.5	77418632.000
Co	59	1	He	77.166068	3.0	1067368.290
Ni	60	1	He	82.405451	3.2	287712.757
Cu	63	1	He	80.690149	3.1	775040.023
Zn	66	1	He	99.179336	2.9	215799.290
As	75	1	He	73.735773	2.7	142227.117
Se	78	2	H2	76.934216	0.4	67902.847
Sr	88	1	He	87.026661	3.1	1007338.007
Mo	95	1	He	73.391845	2.9	470653.157
Pd	105	1	He	75.285521	2.3	724318.423
Ag	107	1	He	15.137653	4.7	299535.287
Cd	111	1	He	72.984627	2.9	276286.163
Sn	118	1	He	74.515647	3.1	707221.423
Sb	121	1	He	72.489585	2.7	1023316.363
Ba	138	1	He	115.155887	2.6	3610193.070
Pt	195	1	He	73.788784	2.6	987484.083
Hg	202	1	He	0.022598	9.0	245.333
Tl	205	1	He	37.155344	2.3	1797657.110
Pb	208	1	He	76.639959	2.7	4983077.973
Bi	209	1	He	71.443369	2.5	3997349.313
Th	232	1	He	11.307304	4.6	774137.383
U	238	1	He	71.826997	3.6	4700772.533

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.25731536	562199.647
Sc	45	2	H2	92.99660410	4579962.167
Ge	72	1	He	92.91131381	470608.533
Ge	72	2	H2	93.65557102	1597714.713
In	115	1	He	94.32107184	5577542.113
Tb	159	1	He	98.47732116	13592288.967
Ir	193	1	He	96.79470279	7000739.893

Sample Name 4310749\_B69966Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 080SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:54:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.827729	4.3	439.510
Be	9	2	H2	0.097728	16.5	55.833
B	11	2	H2	-2.104172		1715.097
Na	23	1	He	34.658598	2.1	45775.000
Mg	24	1	He	373.293352	1.0	213869.423
Al	27	1	He	667.537229	0.7	186360.250
Si	28	2	H2	87.720831	1.9	308899.010
K	39	1	He	96.005666	1.7	143747.410
Ca	43	1	He	347.765356	3.8	812.790
Ti	47	1	He	102.483836	1.2	26094.383
V	51	1	He	4.521248	1.2	32522.717
Cr	52	1	He	1.208161	0.5	12889.670
Mn	55	1	He	22.483789	0.8	140429.397
Fe	56	1	He	1570.592208	0.4	12948240.667
Co	59	1	He	0.636829	1.1	8907.403
Ni	60	1	He	1.335546	3.9	4883.500
Cu	63	1	He	1.110681	1.1	10922.117
Zn	66	1	He	5.010800	0.7	11120.277
As	75	1	He	0.307202	4.2	772.520
Se	78	2	H2	0.023868	8.4	51.667
Sr	88	1	He	2.526676	1.2	29545.553
Mo	95	1	He	0.039892	2.0	276.000
Pd	105	1	He	0.021086	18.7	418.343
Ag	107	1	He	0.143737	33.9	2983.700
Cd	111	1	He	0.023738	15.4	103.617
Sn	118	1	He	0.213657	2.9	2131.847
Sb	121	1	He	0.014651	21.0	265.003
Ba	138	1	He	7.567668	1.6	241837.273
Pt	195	1	He	0.004346	75.4	220.667
Hg	202	1	He	0.014824	12.4	194.333
Tl	205	1	He	0.071120	24.3	3748.913
Pb	208	1	He	0.540186	0.8	37160.220
Bi	209	1	He	0.012928	46.9	2496.957
Th	232	1	He	0.246867	3.0	17623.663
U	238	1	He	0.046944	2.7	3573.863

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.55903768	564058.437
Sc	45	2	H2	94.65184565	4661480.667
Ge	72	1	He	93.45569001	473365.873
Ge	72	2	H2	94.87555027	1618526.917
In	115	1	He	96.10335731	5682935.023
Tb	159	1	He	98.25936174	13562205.213
Ir	193	1	He	98.23821150	7105142.600



Sample Name 4308598\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 081SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:57:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	54.796588	1.7	24546.480
Be	9	2	H2	48.881462	0.8	22328.747
B	11	2	H2	46.722911	0.8	21484.553
Na	23	1	He	1156.055058	2.0	1181052.770
Mg	24	1	He	3157.723788	2.3	1796762.367
Al	27	1	He	5174.027016	1.6	1442429.500
Si	28	2	H2	672.796843	0.6	2253383.167
K	39	1	He	1440.872577	1.5	1190178.937
Ca	43	1	He	3045.715285	2.0	6980.380
Ti	47	1	He	621.657105	1.9	158100.417
V	51	1	He	72.488086	2.6	528282.780
Cr	52	1	He	55.616701	2.8	482495.637
Mn	55	1	He	175.779961	2.3	1094516.087
Fe	56	1	He	9768.589507	1.9	80390930.667
Co	59	1	He	52.065077	1.4	723493.187
Ni	60	1	He	56.953286	1.9	199823.133
Cu	63	1	He	55.223066	1.5	532933.643
Zn	66	1	He	73.823624	1.6	161407.530
As	75	1	He	48.557016	1.3	94151.660
Se	78	2	H2	49.092549	0.2	43756.377
Sr	88	1	He	63.206665	1.8	735028.217
Mo	95	1	He	46.058423	2.1	297218.363
Pd	105	1	He	9.841974	2.1	95463.527
Ag	107	1	He	25.114804	3.0	499969.197
Cd	111	1	He	47.261133	1.5	180029.480
Sn	118	1	He	49.513917	2.3	472891.257
Sb	121	1	He	36.873705	1.8	523801.683
Ba	138	1	He	93.663186	1.7	2954737.247
Pt	195	1	He	9.605134	2.2	128015.110
Hg	202	1	He	4.148071	2.2	27031.687
Tl	205	1	He	49.563405	1.6	2385405.223
Pb	208	1	He	70.229502	1.7	4542548.603
Bi	209	1	He	47.445853	1.6	2659961.627
Th	232	1	He	48.758656	1.6	3342158.390
U	238	1	He	46.971497	1.8	3079574.330

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.46431311	563474.877
Sc	45	2	H2	93.57927257	4608657.833
Ge	72	1	He	93.33713645	472765.383
Ge	72	2	H2	94.55843418	1613117.083
In	115	1	He	94.92264870	5613115.503
Tb	159	1	He	97.97302685	13522683.967
Ir	193	1	He	96.96279959	7012897.603

Sample Name 4308599\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 082SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:01:28  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	49.668200	1.2	22168.327
Be	9	2	H2	44.573027	1.7	20281.213
B	11	2	H2	42.476662	2.3	19684.780
Na	23	1	He	1062.011638	1.5	1083824.203
Mg	24	1	He	2825.423394	1.4	1604868.307
Al	27	1	He	4645.394775	1.2	1292631.293
Si	28	2	H2	601.603669	1.6	2008284.793
K	39	1	He	1299.621809	1.4	1078228.863
Ca	43	1	He	2827.760058	1.3	6470.113
Ti	47	1	He	581.796300	1.9	147686.170
V	51	1	He	64.826879	2.5	471529.013
Cr	52	1	He	49.748104	2.0	431054.647
Mn	55	1	He	155.891832	1.6	968927.440
Fe	56	1	He	8681.211798	1.6	71310805.333
Co	59	1	He	46.169681	1.8	641314.377
Ni	60	1	He	51.027598	2.1	178976.757
Cu	63	1	He	49.101345	2.1	473667.480
Zn	66	1	He	65.545531	2.4	143264.030
As	75	1	He	43.458501	2.7	84245.303
Se	78	2	H2	44.768827	0.9	39624.197
Sr	88	1	He	57.649985	2.7	670109.573
Mo	95	1	He	41.056788	1.5	264822.083
Pd	105	1	He	8.735842	1.9	84719.230
Ag	107	1	He	22.502999	2.2	447782.283
Cd	111	1	He	42.167442	1.4	160555.160
Sn	118	1	He	42.061290	1.5	401532.660
Sb	121	1	He	31.410660	2.0	446005.630
Ba	138	1	He	80.831055	2.1	2548802.200
Pt	195	1	He	8.484626	2.5	113537.663
Hg	202	1	He	3.735922	2.6	24450.057
Tl	205	1	He	44.613514	3.0	2155552.623
Pb	208	1	He	46.026969	2.8	2989426.593
Bi	209	1	He	42.367593	2.5	2375729.237
Th	232	1	He	43.749644	1.7	2999118.913
U	238	1	He	41.989699	1.4	2753280.583

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.28749370	562385.563
Sc	45	2	H2	93.21122904	4590532.167
Ge	72	1	He	93.30399552	472597.520
Ge	72	2	H2	93.89627033	1601820.917
In	115	1	He	94.87575481	5610342.500
Tb	159	1	He	98.36153863	13576308.133
Ir	193	1	He	96.97413144	7013717.187

Sample Name 10606394001\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 083SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:05:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.576546	2.0	2112.317
Be	9	2	H2	0.276169	6.6	136.833
B	11	2	H2	-1.457548		1960.460
Na	23	1	He	210.478708	2.0	223279.663
Mg	24	1	He	2140.102601	1.9	1215773.497
Al	27	1	He	5287.802542	1.6	1471219.333
Si	28	2	H2	653.660342	2.7	2192650.083
K	39	1	He	639.268541	2.1	565228.273
Ca	43	1	He	2493.740605	0.9	5707.553
Ti	47	1	He	699.609522	2.1	177567.720
V	51	1	He	30.278654	1.6	219955.303
Cr	52	1	He	8.067502	2.7	71937.283
Mn	55	1	He	198.937409	2.5	1236169.787
Fe	56	1	He	11101.61469	1.9	91178168.000
Co	59	1	He	5.085642	0.6	69866.910
Ni	60	1	He	8.661581	1.9	30189.820
Cu	63	1	He	9.210172	0.9	87976.807
Zn	66	1	He	60.205740	0.9	130087.947
As	75	1	He	1.855541	2.6	3722.813
Se	78	2	H2	0.256339	11.5	256.667
Sr	88	1	He	21.146495	1.1	243051.273
Mo	95	1	He	0.195554	10.2	1279.393
Pd	105	1	He	0.044652	27.8	641.690
Ag	107	1	He	0.233358	26.3	4750.883
Cd	111	1	He	0.293139	4.2	1130.483
Sn	118	1	He	1.039011	6.5	10001.990
Sb	121	1	He	0.099529	11.1	1470.093
Ba	138	1	He	70.646110	2.3	2232600.280
Pt	195	1	He	0.011393	26.2	312.003
Hg	202	1	He	0.071404	5.8	556.677
Tl	205	1	He	0.150063	6.7	7493.840
Pb	208	1	He	4.899851	2.0	316475.463
Bi	209	1	He	0.091584	8.5	6921.960
Th	232	1	He	1.480774	1.9	102630.847
U	238	1	He	0.736222	4.2	49037.560

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.28776370	562387.227
Sc	45	2	H2	93.71135727	4615162.833
Ge	72	1	He	92.21754975	467094.523
Ge	72	2	H2	93.78774040	1599969.453
In	115	1	He	95.09573796	5623350.890
Tb	159	1	He	97.22538516	13419491.050
Ir	193	1	He	97.58723803	7058060.520

Sample Name 10606394002\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 084SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:08:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.504632	8.1	290.500
Be	9	2	H2	0.079281	11.8	46.833
B	11	2	H2	-2.252692		1637.090
Na	23	1	He	220.405883	2.8	232618.603
Mg	24	1	He	149.895107	3.2	86177.427
Al	27	1	He	1277.339389	3.2	354389.033
Si	28	2	H2	313.010446	1.4	1056413.210
K	39	1	He	54.961180	4.9	111097.620
Ca	43	1	He	1060.756144	3.3	2430.070
Ti	47	1	He	195.778832	3.6	49546.000
V	51	1	He	9.456574	2.7	68150.670
Cr	52	1	He	1.399000	5.5	14452.463
Mn	55	1	He	20.407083	2.7	126706.970
Fe	56	1	He	2253.268401	3.4	18459805.333
Co	59	1	He	0.715683	2.3	9928.727
Ni	60	1	He	1.281421	1.1	4656.760
Cu	63	1	He	3.789036	3.0	36516.360
Zn	66	1	He	4.602316	1.6	10148.233
As	75	1	He	0.121400	7.0	409.177
Se	78	2	H2	0.044689	29.5	69.667
Sr	88	1	He	9.160308	2.8	105970.220
Mo	95	1	He	0.053234	6.6	362.677
Pd	105	1	He	0.015919	45.3	366.677
Ag	107	1	He	0.047277	13.9	1045.050
Cd	111	1	He	0.010674	7.9	53.270
Sn	118	1	He	0.738744	1.2	7201.920
Sb	121	1	He	0.009904	23.2	196.667
Ba	138	1	He	3.909144	3.5	124894.900
Pt	195	1	He	0.000940	99.3	176.667
Hg	202	1	He	0.025367	9.9	264.000
Tl	205	1	He	0.011655	22.4	895.040
Pb	208	1	He	0.213776	4.4	16077.147
Bi	209	1	He	0.006021	58.4	2110.220
Th	232	1	He	0.114380	3.7	8442.793
U	238	1	He	0.059626	1.4	4420.790

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.99725836	560597.540
Sc	45	2	H2	93.66489242	4612874.500
Ge	72	1	He	92.73029403	469691.643
Ge	72	2	H2	94.06461276	1604692.750
In	115	1	He	96.01957591	5677980.730
Tb	159	1	He	98.74147403	13628748.550
Ir	193	1	He	98.32008660	7111064.270

Sample Name 10606394003\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 085SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:12:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.524759	2.0	299.500
Be	9	2	H2	0.068659	20.9	42.000
B	11	2	H2	-2.697178		1456.903
Na	23	1	He	296.453590	2.6	311456.043
Mg	24	1	He	184.244319	2.6	106369.413
Al	27	1	He	1567.943441	2.0	438125.873
Si	28	2	H2	261.548571	3.0	885051.750
K	39	1	He	52.553220	5.5	110023.120
Ca	43	1	He	1336.925313	2.2	3080.500
Ti	47	1	He	258.178513	2.8	65805.893
V	51	1	He	11.872387	2.7	86301.480
Cr	52	1	He	1.724982	2.8	17374.973
Mn	55	1	He	26.015019	3.4	162602.583
Fe	56	1	He	2722.825703	2.6	22464644.000
Co	59	1	He	0.913577	2.6	12787.627
Ni	60	1	He	1.712204	4.9	6219.340
Cu	63	1	He	4.491894	3.4	43683.343
Zn	66	1	He	5.269764	3.5	11713.407
As	75	1	He	0.116972	0.8	404.677
Se	78	2	H2	0.047128	16.4	72.000
Sr	88	1	He	11.592838	2.8	135405.823
Mo	95	1	He	0.062031	2.0	428.010
Pd	105	1	He	0.016364	5.6	378.343
Ag	107	1	He	0.024825	17.1	605.017
Cd	111	1	He	0.008033	5.8	43.920
Sn	118	1	He	0.875058	4.2	8676.073
Sb	121	1	He	0.010228	20.5	205.000
Ba	138	1	He	3.691962	2.2	120102.420
Pt	195	1	He	0.001042	172.6	179.333
Hg	202	1	He	0.017616	21.2	215.000
Tl	205	1	He	0.010473	8.3	845.033
Pb	208	1	He	0.191905	2.3	14763.207
Bi	209	1	He	0.011374	38.3	2440.277
Th	232	1	He	0.123759	3.0	9189.993
U	238	1	He	0.038532	4.5	3050.383

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.66159158	564690.230
Sc	45	2	H2	93.67466256	4613355.667
Ge	72	1	He	93.66985664	474450.657
Ge	72	2	H2	94.24963469	1607849.127
In	115	1	He	97.78450874	5782347.517
Tb	159	1	He	99.52074956	13736307.713
Ir	193	1	He	99.36981790	7186986.770

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 086\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:16:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.286625	0.8	37190.590
Be	9	2	H2	79.842055	1.1	36821.940
B	11	2	H2	76.606485	0.1	33924.913
Na	23	1	He	995.578065	0.3	1044214.050
Mg	24	1	He	996.966510	0.5	582531.110
Al	27	1	He	995.398514	0.4	284533.093
Si	28	2	H2	493.748823	0.4	1673447.920
K	39	1	He	1000.876291	0.7	869076.370
Ca	43	1	He	1030.832126	1.0	2433.567
Ti	47	1	He	80.049347	1.0	20870.423
V	51	1	He	80.274812	1.1	599851.687
Cr	52	1	He	82.517276	1.0	732697.060
Mn	55	1	He	81.125674	0.5	518017.607
Fe	56	1	He	508.810352	0.7	4302444.000
Co	59	1	He	82.235086	0.5	1183528.583
Ni	60	1	He	82.922262	0.2	301242.947
Cu	63	1	He	83.366129	0.7	833168.543
Zn	66	1	He	81.488207	0.3	184515.640
As	75	1	He	79.414616	0.6	159369.713
Se	78	2	H2	79.616456	0.8	71168.853
Sr	88	1	He	80.758337	0.1	972651.810
Mo	95	1	He	76.846156	0.6	516953.717
Pd	105	1	He	82.192146	1.3	829497.540
Ag	107	1	He	41.804831	1.0	867510.977
Cd	111	1	He	79.843652	0.7	317058.390
Sn	118	1	He	76.857288	0.3	765180.877
Sb	121	1	He	77.679813	0.8	1150304.543
Ba	138	1	He	78.204080	0.8	2571928.817
Pt	195	1	He	81.967295	0.8	1114066.250
Hg	202	1	He	3.869855	0.9	25753.143
Tl	205	1	He	42.143077	0.9	2070803.043
Pb	208	1	He	82.420432	1.6	5442115.303
Bi	209	1	He	79.735326	2.0	4565623.887
Th	232	1	He	77.019460	1.1	5393261.587
U	238	1	He	78.370534	1.1	5249042.837

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.75629511	577594.857
Sc	45	2	H2	94.49301913	4653658.667
Ge	72	1	He	96.66879099	489640.670
Ge	72	2	H2	94.85292823	1618140.997
In	115	1	He	98.95309462	5851450.177
Tb	159	1	He	100.0337047	13807108.127
Ir	193	1	He	99.07274138	7165500.517

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 087\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:19:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.042939	40.0	85.333
Be	9	2	H2	0.068012	11.2	42.333
B	11	2	H2	-2.306510		1640.590
Na	23	1	He	-0.937727		9856.623
Mg	24	1	He	-0.993377		826.693
Al	27	1	He	0.709023	30.8	271.000
Si	28	2	H2	-0.150111		13021.427
K	39	1	He	-1.433138		69013.673
Ca	43	1	He	-1.286681		14.333
Ti	47	1	He	0.041427	70.4	11.667
V	51	1	He	0.055592	134.0	-94.093
Cr	52	1	He	0.026639	82.1	2726.263
Mn	55	1	He	0.019023	76.2	426.677
Fe	56	1	He	0.666599	22.2	15936.727
Co	59	1	He	0.039324	32.5	604.680
Ni	60	1	He	0.023436	74.7	282.670
Cu	63	1	He	0.036014	52.3	550.013
Zn	66	1	He	0.043604	81.2	260.670
As	75	1	He	0.020002	75.0	219.500
Se	78	2	H2	0.003423	182.7	33.667
Sr	88	1	He	0.032664	29.8	518.347
Mo	95	1	He	0.043125	29.9	303.337
Pd	105	1	He	0.022276	7.2	438.343
Ag	107	1	He	0.180015	23.9	3798.893
Cd	111	1	He	0.036687	49.4	156.947
Sn	118	1	He	0.037807	25.6	440.013
Sb	121	1	He	0.029934	49.2	495.013
Ba	138	1	He	0.032838	39.4	1186.733
Pt	195	1	He	0.029649	39.7	562.013
Hg	202	1	He	0.036978	9.0	340.673
Tl	205	1	He	0.067595	23.9	3612.207
Pb	208	1	He	0.033921	28.3	4360.303
Bi	209	1	He	0.032571	32.4	3650.570
Th	232	1	He	0.041150	32.0	3377.160
U	238	1	He	0.030894	43.4	2528.620

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.13840651	573788.293
Sc	45	2	H2	95.13734405	4685390.833
Ge	72	1	He	95.02219518	481300.437
Ge	72	2	H2	95.55576372	1630131.000
In	115	1	He	98.03242927	5797007.943
Tb	159	1	He	98.95288867	13657928.963
Ir	193	1	He	99.24986562	7178311.143

Sample Name 10606394004\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 088SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:23:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.660680	4.6	358.667
Be	9	2	H2	0.080059	14.9	47.000
B	11	2	H2	-1.889568		1776.440
Na	23	1	He	200.580426	0.8	213433.290
Mg	24	1	He	222.968283	1.1	127992.110
Al	27	1	He	1454.102555	1.3	404913.457
Si	28	2	H2	415.180208	3.4	1390587.790
K	39	1	He	81.650858	0.4	132251.647
Ca	43	1	He	1075.450596	0.9	2472.713
Ti	47	1	He	213.600887	2.2	54257.480
V	51	1	He	12.101221	1.5	87671.173
Cr	52	1	He	2.104810	0.8	20589.107
Mn	55	1	He	25.346681	1.4	157888.557
Fe	56	1	He	2728.536358	1.6	22434232.667
Co	59	1	He	0.871618	1.9	12047.653
Ni	60	1	He	1.500539	6.6	5405.017
Cu	63	1	He	4.450583	2.9	42733.857
Zn	66	1	He	4.993829	4.3	10967.507
As	75	1	He	0.216458	3.1	590.343
Se	78	2	H2	0.073746	6.5	95.000
Sr	88	1	He	9.033065	1.9	104196.877
Mo	95	1	He	0.065254	2.0	442.010
Pd	105	1	He	0.018536	13.7	393.343
Ag	107	1	He	0.078591	21.5	1678.453
Cd	111	1	He	0.011679	11.2	57.253
Sn	118	1	He	0.770196	2.3	7517.093
Sb	121	1	He	0.009544	6.1	191.667
Ba	138	1	He	6.096058	1.8	194935.833
Pt	195	1	He	0.002650	74.7	199.333
Hg	202	1	He	0.024578	8.1	258.667
Tl	205	1	He	0.022462	9.9	1418.427
Pb	208	1	He	0.315354	3.4	22674.157
Bi	209	1	He	0.009539	26.4	2293.567
Th	232	1	He	0.129716	5.3	9433.470
U	238	1	He	0.134284	1.7	9310.063

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.33781349	562695.563
Sc	45	2	H2	93.24612336	4592250.667
Ge	72	1	He	92.48490021	468448.690
Ge	72	2	H2	93.65757108	1597748.833
In	115	1	He	96.15963831	5686263.120
Tb	159	1	He	98.65389903	13616661.050
Ir	193	1	He	97.55680562	7055859.477



Sample Name 10606395001\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 089SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:27:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.729211	3.8	390.173
Be	9	2	H2	0.072863	16.5	43.833
B	11	2	H2	-1.867111		1790.110
Na	23	1	He	229.177307	2.1	240923.007
Mg	24	1	He	262.991705	2.4	149831.537
Al	27	1	He	1708.632724	2.5	472962.820
Si	28	2	H2	425.778935	2.4	1429570.750
K	39	1	He	96.040147	1.7	142604.587
Ca	43	1	He	1232.549564	1.5	2814.870
Ti	47	1	He	244.173718	2.1	61656.307
V	51	1	He	14.254357	2.3	102747.477
Cr	52	1	He	2.441096	2.2	23350.537
Mn	55	1	He	28.708105	2.7	177727.187
Fe	56	1	He	3218.931673	2.9	26306999.333
Co	59	1	He	1.001176	1.1	13855.920
Ni	60	1	He	1.781609	2.6	6392.753
Cu	63	1	He	5.263291	1.7	50591.470
Zn	66	1	He	6.116818	0.9	13421.553
As	75	1	He	0.267714	2.6	689.853
Se	78	2	H2	0.101967	14.6	120.333
Sr	88	1	He	10.559926	1.9	122000.987
Mo	95	1	He	0.070203	11.6	474.677
Pd	105	1	He	0.019715	27.2	405.010
Ag	107	1	He	0.028457	19.3	668.357
Cd	111	1	He	0.012887	9.0	61.917
Sn	118	1	He	0.746796	2.3	7295.287
Sb	121	1	He	0.012301	21.6	231.670
Ba	138	1	He	7.569597	1.9	242138.680
Pt	195	1	He	0.002532	84.9	198.000
Hg	202	1	He	0.018149	8.4	216.667
Tl	205	1	He	0.013481	9.5	983.380
Pb	208	1	He	0.374107	3.4	26506.977
Bi	209	1	He	0.010438	14.1	2366.917
Th	232	1	He	0.137622	4.2	10075.660
U	238	1	He	0.157689	2.4	10958.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.81402452	559468.710
Sc	45	2	H2	93.48891486	4604207.833
Ge	72	1	He	92.64762565	469272.917
Ge	72	2	H2	93.96198884	1602942.040
In	115	1	He	96.20561428	5688981.843
Tb	159	1	He	98.67583052	13619688.133
Ir	193	1	He	98.49827654	7123951.973

Sample Name 10606395002\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 090SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:30:45  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.852209	3.8	441.010
Be	9	2	H2	0.083033	23.2	48.000
B	11	2	H2	-2.483838		1526.410
Na	23	1	He	240.031813	1.8	250354.657
Mg	24	1	He	369.317372	2.8	208625.590
Al	27	1	He	1933.899608	2.3	532180.420
Si	28	2	H2	477.557306	0.9	1587176.790
K	39	1	He	130.864181	1.5	168503.727
Ca	43	1	He	1328.760982	3.7	3015.440
Ti	47	1	He	291.142337	2.7	73084.663
V	51	1	He	15.277046	2.9	109511.177
Cr	52	1	He	3.021332	1.5	28156.317
Mn	55	1	He	30.251728	2.1	186173.543
Fe	56	1	He	3458.487319	2.4	28099460.000
Co	59	1	He	1.587873	3.2	21824.297
Ni	60	1	He	2.113857	5.3	7505.277
Cu	63	1	He	4.798308	2.9	45878.703
Zn	66	1	He	7.890195	3.2	17168.823
As	75	1	He	0.316266	3.8	778.687
Se	78	2	H2	0.101642	16.5	118.333
Sr	88	1	He	11.171228	3.2	128326.410
Mo	95	1	He	0.067973	6.8	459.343
Pd	105	1	He	0.017042	17.1	378.343
Ag	107	1	He	0.018975	6.1	476.677
Cd	111	1	He	0.017311	6.5	78.913
Sn	118	1	He	0.817336	6.0	7965.660
Sb	121	1	He	0.012918	11.8	240.000
Ba	138	1	He	9.362169	2.8	299031.577
Pt	195	1	He	0.001440	75.9	183.333
Hg	202	1	He	0.016663	20.5	207.333
Tl	205	1	He	0.019466	7.0	1275.073
Pb	208	1	He	0.572303	4.0	39458.037
Bi	209	1	He	0.010621	17.7	2390.253
Th	232	1	He	0.200638	3.2	14534.887
U	238	1	He	0.178932	4.0	12437.693

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.26729406	556100.523
Sc	45	2	H2	92.63726808	4562265.333
Ge	72	1	He	92.13520252	466677.423
Ge	72	2	H2	92.69427464	1581315.503
In	115	1	He	96.06836512	5680865.810
Tb	159	1	He	98.78541848	13634813.963
Ir	193	1	He	98.98407412	7159087.600

Sample Name 10606395003\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 091SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:34:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.733884	1.8	1720.433
Be	9	2	H2	0.151437	14.1	79.167
B	11	2	H2	-2.769872		1415.570
Na	23	1	He	170.435065	2.0	180996.293
Mg	24	1	He	1972.461942	1.7	1109491.157
Al	27	1	He	3469.991738	1.8	955865.607
Si	28	2	H2	452.241932	2.3	1508011.457
K	39	1	He	403.966024	2.7	378649.007
Ca	43	1	He	1950.394879	3.0	4423.180
Ti	47	1	He	627.936719	2.2	157797.197
V	51	1	He	28.454664	1.8	204626.623
Cr	52	1	He	6.613046	2.8	58819.377
Mn	55	1	He	177.287125	2.0	1090843.543
Fe	56	1	He	8958.452114	2.1	72849925.333
Co	59	1	He	3.772262	1.9	52057.757
Ni	60	1	He	7.438097	2.1	26062.590
Cu	63	1	He	5.486428	2.9	52698.947
Zn	66	1	He	40.917945	2.8	88823.093
As	75	1	He	1.938958	3.6	3898.527
Se	78	2	H2	0.092104	1.0	110.000
Sr	88	1	He	15.259465	2.2	176147.057
Mo	95	1	He	0.153821	5.0	1010.040
Pd	105	1	He	0.022027	8.2	423.343
Ag	107	1	He	0.022061	15.7	535.017
Cd	111	1	He	0.089247	3.8	352.823
Sn	118	1	He	0.886363	4.5	8551.027
Sb	121	1	He	0.042326	2.7	656.687
Ba	138	1	He	37.799011	3.1	1195745.947
Pt	195	1	He	0.001112	65.8	178.667
Hg	202	1	He	0.015351	6.8	198.000
Tl	205	1	He	0.062489	1.5	3352.110
Pb	208	1	He	2.782698	2.3	182940.970
Bi	209	1	He	0.026445	12.2	3287.150
Th	232	1	He	1.279552	2.7	89832.853
U	238	1	He	0.361696	2.9	24604.977

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.38654222	556835.163
Sc	45	2	H2	92.89798898	4575105.500
Ge	72	1	He	92.61418003	469103.510
Ge	72	2	H2	92.63262268	1580263.753
In	115	1	He	95.20604529	5629873.757
Tb	159	1	He	98.48349154	13593140.630
Ir	193	1	He	98.80782273	7146340.103

Sample Name 10606395004\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 092SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:38:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.464286	2.5	2497.873
Be	9	2	H2	0.261329	5.5	129.500
B	11	2	H2	-2.084991		1697.930
Na	23	1	He	280.820485	4.4	292249.867
Mg	24	1	He	2871.138068	4.1	1618960.967
Al	27	1	He	5869.656195	3.7	1621451.833
Si	28	2	H2	583.219529	2.8	1948670.583
K	39	1	He	837.644025	2.8	714242.123
Ca	43	1	He	3538.057563	4.0	8032.447
Ti	47	1	He	701.276637	3.5	176732.620
V	51	1	He	33.591965	5.2	242300.593
Cr	52	1	He	9.343881	4.4	82343.737
Mn	55	1	He	307.475304	4.1	1896874.623
Fe	56	1	He	11511.93982	4.0	93874829.333
Co	59	1	He	5.679526	3.6	77751.827
Ni	60	1	He	11.061190	3.0	38367.620
Cu	63	1	He	13.720863	3.1	130521.487
Zn	66	1	He	43.628424	3.5	93985.997
As	75	1	He	2.450409	3.6	4843.647
Se	78	2	H2	0.151676	7.7	163.333
Sr	88	1	He	27.560272	3.6	315635.343
Mo	95	1	He	0.160299	7.6	1052.047
Pd	105	1	He	0.029282	9.0	493.347
Ag	107	1	He	0.039007	4.1	871.703
Cd	111	1	He	0.203633	8.0	789.503
Sn	118	1	He	1.248591	3.6	12015.250
Sb	121	1	He	0.075009	11.3	1121.727
Ba	138	1	He	94.972056	3.7	3002949.643
Pt	195	1	He	0.002204	86.4	191.333
Hg	202	1	He	0.028259	6.1	280.000
Tl	205	1	He	0.076015	5.6	3972.293
Pb	208	1	He	6.406972	4.9	414882.357
Bi	209	1	He	0.051458	14.4	4667.583
Th	232	1	He	1.622110	4.7	112610.927
U	238	1	He	0.510074	4.3	34176.703

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.64843887	558448.603
Sc	45	2	H2	93.26433027	4593147.333
Ge	72	1	He	91.91199435	465546.843
Ge	72	2	H2	93.38928652	1593172.040
In	115	1	He	95.13424192	5625627.767
Tb	159	1	He	97.65984588	13479457.300
Ir	193	1	He	97.81240595	7074345.937

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 093\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:41:44  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	81.073279	0.4	36792.797
Be	9	2	H2	79.140920	1.0	36647.520
B	11	2	H2	75.325068	1.1	33536.060
Na	23	1	He	989.252702	0.5	1041140.063
Mg	24	1	He	986.755128	0.7	578521.630
Al	27	1	He	984.789765	0.6	282449.540
Si	28	2	H2	489.849407	0.3	1667112.287
K	39	1	He	985.272591	0.3	859508.893
Ca	43	1	He	1010.216276	1.3	2393.250
Ti	47	1	He	80.136442	0.6	20964.210
V	51	1	He	79.442947	0.6	595603.160
Cr	52	1	He	81.544702	0.4	726530.330
Mn	55	1	He	80.255134	0.4	514186.917
Fe	56	1	He	508.165137	1.2	4311647.333
Co	59	1	He	82.095424	0.9	1174959.917
Ni	60	1	He	82.999172	0.7	299841.720
Cu	63	1	He	83.252043	1.0	827398.413
Zn	66	1	He	80.924549	0.5	182222.420
As	75	1	He	79.336959	0.8	158329.047
Se	78	2	H2	79.812915	0.8	71639.133
Sr	88	1	He	80.478048	1.1	963878.373
Mo	95	1	He	76.978733	0.5	513862.853
Pd	105	1	He	81.960634	0.4	820805.277
Ag	107	1	He	42.127184	1.9	867454.153
Cd	111	1	He	79.846716	0.0	314630.107
Sn	118	1	He	77.406031	0.4	764710.483
Sb	121	1	He	77.986904	0.2	1145972.587
Ba	138	1	He	78.083405	0.7	2548220.640
Pt	195	1	He	82.267833	0.2	1112849.250
Hg	202	1	He	3.885456	0.4	25734.770
Tl	205	1	He	42.303237	0.6	2068835.333
Pb	208	1	He	82.904300	0.2	5448461.720
Bi	209	1	He	79.637944	0.9	4531532.223
Th	232	1	He	77.573223	0.8	5397868.667
U	238	1	He	78.769063	1.2	5242475.860

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.07033063	579529.503
Sc	45	2	H2	94.87980089	4672707.167
Ge	72	1	He	96.13356163	486929.660
Ge	72	2	H2	95.24767977	1624875.250
In	115	1	He	98.19056475	5806359.060
Tb	159	1	He	99.55672142	13741272.713
Ir	193	1	He	98.44813877	7120325.727

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 094\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:45:24  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.052475	27.1	89.667
Be	9	2	H2	0.052121	15.4	35.000
B	11	2	H2	-2.594017		1523.243
Na	23	1	He	-1.637075		9214.567
Mg	24	1	He	-1.296170		656.690
Al	27	1	He	0.499491	2.1	213.333
Si	28	2	H2	-0.129037		13101.273
K	39	1	He	-5.446943		66410.263
Ca	43	1	He	-1.017754		15.083
Ti	47	1	He	0.060098	34.0	16.667
V	51	1	He	0.032262	42.5	-270.293
Cr	52	1	He	-0.000242		2511.553
Mn	55	1	He	0.006983	52.8	353.343
Fe	56	1	He	0.811410	6.7	17299.587
Co	59	1	He	0.011014	17.8	205.333
Ni	60	1	He	-0.002504		191.333
Cu	63	1	He	0.009654	8.5	292.667
Zn	66	1	He	0.011369	46.4	190.000
As	75	1	He	-0.009348		162.667
Se	78	2	H2	-0.007031		24.333
Sr	88	1	He	0.006934	20.9	215.000
Mo	95	1	He	0.014403	24.3	112.667
Pd	105	1	He	0.014130	29.2	360.010
Ag	107	1	He	0.163138	26.0	3482.143
Cd	111	1	He	0.007929	13.0	43.977
Sn	118	1	He	0.011160	24.0	178.333
Sb	121	1	He	0.005812	25.7	141.667
Ba	138	1	He	0.010138	19.0	450.013
Pt	195	1	He	0.004545	71.0	228.000
Hg	202	1	He	0.030674	9.6	303.000
Tl	205	1	He	0.054403	22.3	3010.387
Pb	208	1	He	0.005436	22.4	2533.447
Bi	209	1	He	0.007386	35.3	2226.890
Th	232	1	He	0.017451	2.8	1733.460
U	238	1	He	0.007468	22.5	970.047

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.96588948	578886.083
Sc	45	2	H2	95.19651312	4688304.833
Ge	72	1	He	95.63461100	484402.407
Ge	72	2	H2	96.22977359	1641629.253
In	115	1	He	98.81093759	5843043.923
Tb	159	1	He	100.1028108	13816646.460
Ir	193	1	He	100.0004983	7232601.143

Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 095CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:49:05  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.509884	5.6	301.333
Be	9	2	H2	0.223084	8.7	115.833
B	11	2	H2	6.654237	2.7	5402.970
Na	23	1	He	50.098131	0.5	63906.107
Mg	24	1	He	28.264265	2.1	18174.480
Al	27	1	He	30.390980	0.5	8896.317
Si	28	2	H2	95.796592	0.8	342243.260
K	39	1	He	97.295768	0.9	150624.903
Ca	43	1	He	94.996609	3.2	243.967
Ti	47	1	He	1.080997	5.7	287.333
V	51	1	He	1.004685	2.7	7115.277
Cr	52	1	He	2.022076	1.2	20730.643
Mn	55	1	He	0.531749	1.0	3761.160
Fe	56	1	He	51.288689	0.4	450210.407
Co	59	1	He	0.527652	2.9	7634.020
Ni	60	1	He	0.530071	3.4	2124.163
Cu	63	1	He	1.069178	1.4	10868.747
Zn	66	1	He	5.263221	1.0	12059.017
As	75	1	He	0.476522	2.1	1137.047
Se	78	2	H2	0.503433	0.5	489.010
Sr	88	1	He	0.502403	3.0	6176.390
Mo	95	1	He	0.479091	3.0	3247.043
Pd	105	1	He	0.501002	3.1	5287.697
Ag	107	1	He	0.452522	5.2	9514.947
Cd	111	1	He	0.077654	2.2	321.750
Sn	118	1	He	0.488998	1.1	4949.237
Sb	121	1	He	0.535134	3.8	8002.337
Ba	138	1	He	0.310335	0.8	10350.617
Pt	195	1	He	0.500992	0.6	6966.503
Hg	202	1	He	0.240802	3.3	1693.780
Tl	205	1	He	0.104438	3.3	5459.493
Pb	208	1	He	0.519183	1.8	36399.470
Bi	209	1	He	0.496390	1.2	30271.550
Th	232	1	He	0.485185	0.4	34552.523
U	238	1	He	0.488312	1.3	33245.903

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.26817482	586908.940
Sc	45	2	H2	96.38783721	4746976.000
Ge	72	1	He	96.55194782	489048.843
Ge	72	2	H2	96.60196152	1647978.583
In	115	1	He	99.22157842	5867326.583
Tb	159	1	He	99.91654564	13790937.293
Ir	193	1	He	99.31485810	7183011.767

Sample Name 4305766\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 096SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:52:44  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.045470	67.5	73.667
Be	9	2	H2	0.047739	48.0	27.333
B	11	2	H2	-2.352802		1350.893
Na	23	1	He	9.338049	4.4	20961.470
Mg	24	1	He	1.250322	22.1	2178.510
Al	27	1	He	137.893708	1.0	40192.850
Si	28	2	H2	1.606805	108.2	15769.040
K	39	1	He	-3.551518		69013.683
Ca	43	1	He	7.044640	15.2	34.567
Ti	47	1	He	0.095583	25.0	26.333
V	51	1	He	0.026324	162.2	-320.303
Cr	52	1	He	0.179056	5.2	4167.267
Mn	55	1	He	0.038336	4.6	562.677
Fe	56	1	He	3.077839	2.2	37040.697
Co	59	1	He	0.009233	11.7	182.000
Ni	60	1	He	0.010458	30.0	240.667
Cu	63	1	He	0.050984	12.7	709.353
Zn	66	1	He	3.128038	1.7	7253.160
As	75	1	He	-0.008110		167.167
Se	78	2	H2	0.010401	143.3	33.000
Sr	88	1	He	0.021614	23.5	395.010
Mo	95	1	He	0.010417	8.8	86.667
Pd	105	1	He	-0.001767		201.667
Ag	107	1	He	0.051221	8.2	1170.057
Cd	111	1	He	0.005247	22.5	33.650
Sn	118	1	He	0.039034	15.7	460.010
Sb	121	1	He	0.009386	14.6	196.667
Ba	138	1	He	0.024832	5.3	941.710
Pt	195	1	He	0.006921	46.5	262.000
Hg	202	1	He	0.016584	19.5	210.667
Tl	205	1	He	0.012485	3.1	955.043
Pb	208	1	He	0.007760	11.8	2703.460
Bi	209	1	He	0.006658	78.2	2186.897
Th	232	1	He	0.004636	25.5	830.040
U	238	1	He	0.002941	33.1	665.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.45736100	588074.440
Sc	45	2	H2	83.18663178	4096833.750
Ge	72	1	He	96.79907243	490300.563
Ge	72	2	H2	83.34506415	1421822.897
In	115	1	He	99.82304542	5902893.477
Tb	159	1	He	100.7418214	13904845.627
Ir	193	1	He	100.2606181	7251414.477



Sample Name 4305767\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 097SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:56:24  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	98.928127	1.0	45279.650
Be	9	2	H2	97.200086	1.0	45407.460
B	11	2	H2	93.237654	0.9	41261.063
Na	23	1	He	1936.389916	0.2	2049462.367
Mg	24	1	He	1927.261209	0.2	1140804.957
Al	27	1	He	2008.568465	0.2	582249.313
Si	28	2	H2	513.008602	0.4	1760835.707
K	39	1	He	1940.002025	0.1	1641341.330
Ca	43	1	He	1971.463078	1.1	4704.363
Ti	47	1	He	101.093299	1.0	26732.520
V	51	1	He	97.783306	0.9	741183.157
Cr	52	1	He	100.258897	0.1	902370.997
Mn	55	1	He	98.220707	0.3	636054.460
Fe	56	1	He	1956.985044	0.3	16753904.000
Co	59	1	He	99.723170	0.3	1454689.997
Ni	60	1	He	100.904426	0.7	371498.603
Cu	63	1	He	99.554944	0.1	1008418.583
Zn	66	1	He	102.313463	0.2	234768.913
As	75	1	He	101.057623	0.7	205500.040
Se	78	2	H2	102.987895	0.3	93048.020
Sr	88	1	He	98.199507	0.8	1198701.860
Mo	95	1	He	99.245000	0.6	666200.107
Pd	105	1	He	19.969571	0.5	201270.797
Ag	107	1	He	50.376473	1.4	1043156.860
Cd	111	1	He	97.365180	0.8	385801.387
Sn	118	1	He	97.557581	0.4	969172.823
Sb	121	1	He	99.420268	1.2	1469071.277
Ba	138	1	He	95.812717	0.7	3144225.370
Pt	195	1	He	20.500466	0.4	278061.103
Hg	202	1	He	0.015925	30.7	204.333
Tl	205	1	He	102.524377	0.8	5024524.927
Pb	208	1	He	100.249775	0.3	6602632.140
Bi	209	1	He	97.240285	1.6	5505936.167
Th	232	1	He	97.631821	1.1	6760680.523
U	238	1	He	96.601906	0.6	6398295.943

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.09220706	585824.873
Sc	45	2	H2	95.72549152	4714356.333
Ge	72	1	He	97.98018099	496283.040
Ge	72	2	H2	95.88581006	1635761.417
In	115	1	He	98.74150614	5838938.193
Tb	159	1	He	99.77875014	13771918.130
Ir	193	1	He	97.97046993	7085778.017

Sample Name 60398600001\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 098SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:00:03  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.654708	0.7	2209.827
Be	9	2	H2	0.085138	13.9	51.000
B	11	2	H2	73.424333	0.8	33291.503
Na	23	1	He	31629.05014	0.2	32569899.517
Mg	24	1	He	28338.86171	0.2	16384365.177
Al	27	1	He	90.376639	2.1	25684.737
Si	28	2	H2	4666.946647	0.1	16026306.000
K	39	1	He	2093.197769	0.6	1726224.817
Ca	43	1	He	57288.08958	0.5	133190.327
Ti	47	1	He	0.817660	94.5	212.380
V	51	1	He	1.947839	1.2	13940.503
Cr	52	1	He	0.570548	9.6	7494.600
Mn	55	1	He	0.367846	5.4	2633.580
Fe	56	1	He	10.814502	14.7	100794.527
Co	59	1	He	0.070450	40.5	1040.047
Ni	60	1	He	1.467793	3.6	5419.693
Cu	63	1	He	0.651670	5.1	6574.833
Zn	66	1	He	6.193500	2.5	13892.663
As	75	1	He	0.661118	5.3	1477.910
Se	78	2	H2	1.060873	1.8	990.037
Sr	88	1	He	149.692754	0.6	1766564.450
Mo	95	1	He	9.829421	2.7	63405.703
Pd	105	1	He	0.085058	0.6	1031.717
Ag	107	1	He	0.195506	32.3	3972.297
Cd	111	1	He	0.065872	34.3	262.257
Sn	118	1	He	0.156521	21.8	1556.767
Sb	121	1	He	1.483469	2.2	21114.307
Ba	138	1	He	47.543334	1.2	1499174.250
Pt	195	1	He	0.012629	29.6	330.670
Hg	202	1	He	0.015619	7.5	198.667
Tl	205	1	He	0.068910	36.7	3642.243
Pb	208	1	He	0.079810	29.1	7284.160
Bi	209	1	He	0.036640	57.4	3733.977
Th	232	1	He	0.063341	37.4	4744.333
U	238	1	He	10.156874	1.7	656381.867

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.98830583	572863.583
Sc	45	2	H2	96.43244752	4749173.000
Ge	72	1	He	94.72891717	479814.943
Ge	72	2	H2	95.99217794	1637575.997
In	115	1	He	94.88367564	5610810.887
Tb	159	1	He	97.93002726	13516748.967
Ir	193	1	He	95.53608990	6909709.897

Sample Name 4308653\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 099SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:03:43  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.058402	0.3	38244.367
Be	9	2	H2	78.232532	0.4	36757.943
B	11	2	H2	152.436233	0.5	66179.733
Na	23	1	He	32972.32137	0.3	34526061.150
Mg	24	1	He	29804.45907	0.3	17522643.907
Al	27	1	He	2004.100057	0.2	577697.187
Si	28	2	H2	5649.840604	0.2	19365794.667
K	39	1	He	3974.028235	0.9	3268659.327
Ca	43	1	He	58976.71354	0.5	139432.537
Ti	47	1	He	79.670276	0.7	20949.860
V	51	1	He	81.445425	1.1	613808.543
Cr	52	1	He	81.422173	0.0	729202.833
Mn	55	1	He	80.156564	0.2	516223.927
Fe	56	1	He	973.732134	0.2	8294777.667
Co	59	1	He	78.845300	0.9	1132662.663
Ni	60	1	He	81.113844	0.1	294135.803
Cu	63	1	He	79.847550	0.2	796546.333
Zn	66	1	He	83.968537	0.6	189775.390
As	75	1	He	81.053407	0.5	162353.850
Se	78	2	H2	81.366457	0.1	73543.303
Sr	88	1	He	226.154213	0.4	2718561.627
Mo	95	1	He	90.751210	2.2	584354.750
Pd	105	1	He	79.688566	2.1	769817.100
Ag	107	1	He	16.260862	3.0	323058.923
Cd	111	1	He	80.687480	1.3	306718.137
Sn	118	1	He	79.629001	0.8	758934.857
Sb	121	1	He	81.058389	1.4	1149035.167
Ba	138	1	He	127.886263	0.8	4026250.567
Pt	195	1	He	78.555230	0.8	1047044.187
Hg	202	1	He	0.011506	31.4	172.333
Tl	205	1	He	40.045589	1.5	1929708.563
Pb	208	1	He	80.210950	1.5	5194083.073
Bi	209	1	He	76.492845	1.6	4236492.853
Th	232	1	He	11.179160	0.5	757577.463
U	238	1	He	90.580262	0.8	5868033.037

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.55929777	582541.833
Sc	45	2	H2	96.26963782	4741154.833
Ge	72	1	He	96.49191785	488744.783
Ge	72	2	H2	95.91432774	1636247.913
In	115	1	He	94.73678475	5602124.703
Tb	159	1	He	98.09856007	13540010.633
Ir	193	1	He	95.82515286	6930616.563

Sample Name 4308654\_B69917Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 100SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:07:22  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.093089	3.4	578.677
Be	9	2	H2	0.061201	8.2	40.333
B	11	2	H2	14.555768	1.2	8837.580
Na	23	1	He	6566.974510	0.8	6994806.773
Mg	24	1	He	5926.823510	0.9	3541123.280
Al	27	1	He	20.097351	3.0	5956.560
Si	28	2	H2	975.903431	0.9	3413079.000
K	39	1	He	431.391894	0.8	424974.880
Ca	43	1	He	11896.09964	1.1	28586.367
Ti	47	1	He	0.093739	52.7	26.000
V	51	1	He	0.345928	10.7	2127.447
Cr	52	1	He	0.144472	9.5	3879.860
Mn	55	1	He	0.079700	6.3	836.697
Fe	56	1	He	2.373999	7.7	31194.410
Co	59	1	He	0.014637	21.2	261.333
Ni	60	1	He	0.324236	3.3	1388.740
Cu	63	1	He	0.143830	5.3	1647.433
Zn	66	1	He	1.654077	0.5	3934.543
As	75	1	He	0.146660	1.9	480.343
Se	78	2	H2	0.236762	7.8	249.000
Sr	88	1	He	30.472066	0.5	369545.453
Mo	95	1	He	1.974481	1.6	13246.850
Pd	105	1	He	0.046904	8.6	688.360
Ag	107	1	He	0.157140	27.9	3347.120
Cd	111	1	He	0.013931	14.0	67.617
Sn	118	1	He	0.047825	7.9	541.683
Sb	121	1	He	0.296806	4.0	4434.073
Ba	138	1	He	9.608980	1.2	314891.140
Pt	195	1	He	0.004236	34.4	222.000
Hg	202	1	He	0.008712	39.8	156.000
Tl	205	1	He	0.063142	28.8	3408.820
Pb	208	1	He	0.016604	15.8	3243.510
Bi	209	1	He	0.015874	32.9	2623.640
Th	232	1	He	0.010868	10.1	1225.070
U	238	1	He	2.068701	0.4	135605.780

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.06520890	591819.147
Sc	45	2	H2	97.89725766	4821313.000
Ge	72	1	He	97.31633122	492920.550
Ge	72	2	H2	97.58959478	1664827.087
In	115	1	He	98.57112741	5828863.090
Tb	159	1	He	99.27669882	13702622.717
Ir	193	1	He	96.64791877	6990123.643

Sample Name 4305768\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 101SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:11:01  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	109.666405	0.2	50062.930
Be	9	2	H2	104.921959	0.3	48892.253
B	11	2	H2	183.384399	0.1	78438.157
Na	23	1	He	34624.51838	0.6	35757221.133
Mg	24	1	He	31312.26516	0.7	18156109.313
Al	27	1	He	2204.149400	0.8	626630.543
Si	28	2	H2	5343.582959	0.1	18167325.333
K	39	1	He	4237.716598	1.0	3433069.740
Ca	43	1	He	61435.08756	0.3	143247.160
Ti	47	1	He	106.724421	1.1	27677.243
V	51	1	He	109.493228	0.4	813991.733
Cr	52	1	He	109.194556	0.3	963628.690
Mn	55	1	He	105.913199	0.5	672625.643
Fe	56	1	He	2106.491744	0.8	17685750.000
Co	59	1	He	106.069785	0.7	1500849.747
Ni	60	1	He	108.082308	0.3	385965.300
Cu	63	1	He	105.706002	0.6	1038573.440
Zn	66	1	He	111.135422	0.6	247343.460
As	75	1	He	108.409726	0.5	213823.277
Se	78	2	H2	107.416543	0.8	96121.690
Sr	88	1	He	261.614403	0.6	3097500.477
Mo	95	1	He	117.237501	1.1	750173.293
Pd	105	1	He	21.382776	1.2	205421.780
Ag	107	1	He	54.727805	0.8	1080282.460
Cd	111	1	He	106.904461	0.4	403803.057
Sn	118	1	He	105.430864	0.9	998406.000
Sb	121	1	He	108.755580	0.6	1531902.057
Ba	138	1	He	155.684492	0.4	4870173.053
Pt	195	1	He	21.285621	0.6	282073.790
Hg	202	1	He	0.010448	18.2	164.333
Tl	205	1	He	109.888130	0.4	5261885.133
Pb	208	1	He	106.804049	0.5	6872670.160
Bi	209	1	He	103.711914	1.3	5719861.997
Th	232	1	He	107.613808	0.9	7258579.270
U	238	1	He	118.150005	0.6	7622525.303

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.25827474	574526.753
Sc	45	2	H2	95.48385740	4702456.167
Ge	72	1	He	95.03965177	481388.857
Ge	72	2	H2	94.96480429	1620049.543
In	115	1	He	94.12652450	5566037.833
Tb	159	1	He	97.48774788	13455703.550
Ir	193	1	He	95.43437984	6902353.650

Sample Name 4305769\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 102SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:14:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	107.102304	0.6	49221.870
Be	9	2	H2	102.354945	0.4	48016.453
B	11	2	H2	178.846786	0.3	77075.163
Na	23	1	He	32916.93779	0.4	34163166.157
Mg	24	1	He	29762.84889	0.2	17343412.657
Al	27	1	He	2093.765082	0.7	598204.353
Si	28	2	H2	5123.351576	0.3	17536046.667
K	39	1	He	4072.139660	0.7	3317982.660
Ca	43	1	He	58306.71758	0.6	136627.740
Ti	47	1	He	103.155801	0.8	26885.447
V	51	1	He	105.358164	0.4	787134.110
Cr	52	1	He	105.621995	0.1	936812.067
Mn	55	1	He	102.369137	0.8	653349.167
Fe	56	1	He	2048.619189	0.2	17285335.333
Co	59	1	He	102.602660	0.5	1459042.293
Ni	60	1	He	104.847109	0.5	376291.323
Cu	63	1	He	102.637715	0.3	1013482.103
Zn	66	1	He	107.803969	0.5	241134.653
As	75	1	He	104.623133	0.8	207392.943
Se	78	2	H2	105.704695	1.0	95263.000
Sr	88	1	He	248.544307	0.3	2957465.267
Mo	95	1	He	114.658364	0.7	733609.353
Pd	105	1	He	20.870540	0.9	200493.743
Ag	107	1	He	53.406608	1.0	1054067.770
Cd	111	1	He	103.941520	0.4	392574.537
Sn	118	1	He	102.601743	0.5	971542.250
Sb	121	1	He	105.964566	0.8	1492475.290
Ba	138	1	He	150.315615	0.7	4701746.390
Pt	195	1	He	20.417276	0.5	274126.137
Hg	202	1	He	0.010162	14.3	164.667
Tl	205	1	He	104.864805	0.6	5087362.113
Pb	208	1	He	102.429779	0.5	6677956.310
Bi	209	1	He	100.989457	0.5	5562423.250
Th	232	1	He	105.806609	0.6	7127023.223
U	238	1	He	114.349998	0.8	7367443.430

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.72214637	577384.480
Sc	45	2	H2	96.12487936	4734025.667
Ge	72	1	He	95.51611470	483802.207
Ge	72	2	H2	95.63920964	1631554.543
In	115	1	He	94.11664331	5565453.523
Tb	159	1	He	98.76857066	13632488.550
Ir	193	1	He	95.30127520	6892726.770

Sample Name 60398600001\_B69917Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 103SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:18:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.710353	3.8	399.010
Be	9	2	H2	0.094210	9.3	56.000
B	11	2	H2	8.029692	0.3	6059.717
Na	23	1	He	3382.171138	0.5	3617071.717
Mg	24	1	He	3027.777494	0.5	1814313.777
Al	27	1	He	10.912420	0.6	3275.363
Si	28	2	H2	498.183564	0.4	1745984.163
K	39	1	He	220.038670	0.6	252851.087
Ca	43	1	He	6012.274747	0.5	14493.147
Ti	47	1	He	0.044966	24.8	13.000
V	51	1	He	0.228681	17.2	1231.940
Cr	52	1	He	0.131062	10.4	3767.827
Mn	55	1	He	0.039099	16.7	572.680
Fe	56	1	He	2.385415	60.3	31372.687
Co	59	1	He	0.013343	16.1	242.667
Ni	60	1	He	0.173629	3.1	838.697
Cu	63	1	He	0.078829	4.6	994.037
Zn	66	1	He	0.890682	5.7	2196.837
As	75	1	He	0.089666	8.3	365.507
Se	78	2	H2	0.133072	13.1	154.000
Sr	88	1	He	15.521528	0.7	188400.870
Mo	95	1	He	0.999039	3.0	6774.963
Pd	105	1	He	0.024231	9.8	465.010
Ag	107	1	He	0.211368	29.2	4507.463
Cd	111	1	He	0.012653	18.7	63.113
Sn	118	1	He	0.060942	6.1	678.357
Sb	121	1	He	0.154665	5.9	2360.220
Ba	138	1	He	4.783150	1.1	158332.190
Pt	195	1	He	-0.000807		154.000
Hg	202	1	He	0.003380	15.8	121.000
Tl	205	1	He	0.040094	21.2	2286.890
Pb	208	1	He	0.014777	14.6	3126.833
Bi	209	1	He	0.020045	16.2	2883.703
Th	232	1	He	0.033936	5.1	2825.323
U	238	1	He	1.054233	1.6	69935.650

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.30726765	593310.373
Sc	45	2	H2	97.71920898	4812544.333
Ge	72	1	He	97.36944594	493189.583
Ge	72	2	H2	97.92912481	1670619.290
In	115	1	He	99.53214807	5885691.677
Tb	159	1	He	99.36200968	13714397.710
Ir	193	1	He	97.50457948	7052082.187

Sample Name 4308653\_B69917Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 104SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:22:00  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	81.226471	0.7	37184.073
Be	9	2	H2	78.727060	0.4	36774.817
B	11	2	H2	85.893752	0.5	38210.927
Na	23	1	He	5173.382909	0.6	5464039.290
Mg	24	1	He	4863.305902	0.7	2880279.437
Al	27	1	He	1960.380178	0.8	569028.560
Si	28	2	H2	1445.201008	0.8	4934898.667
K	39	1	He	2157.796829	0.6	1819945.077
Ca	43	1	He	7843.383714	0.3	18687.510
Ti	47	1	He	79.625797	0.6	21083.720
V	51	1	He	79.521040	0.9	603405.867
Cr	52	1	He	80.702789	0.6	727771.603
Mn	55	1	He	80.750683	0.6	523642.030
Fe	56	1	He	982.685644	0.7	8429006.500
Co	59	1	He	80.146340	1.3	1156302.707
Ni	60	1	He	81.431360	0.9	296553.980
Cu	63	1	He	81.475958	0.7	816276.873
Zn	66	1	He	81.163285	1.0	184230.583
As	75	1	He	79.143319	0.8	159214.733
Se	78	2	H2	78.386594	0.2	71092.470
Sr	88	1	He	94.504938	0.6	1140988.237
Mo	95	1	He	80.276206	0.4	532120.893
Pd	105	1	He	79.978897	0.8	795344.287
Ag	107	1	He	16.466914	3.2	336736.243
Cd	111	1	He	80.136651	0.5	313559.667
Sn	118	1	He	78.400717	0.6	769116.397
Sb	121	1	He	78.265792	0.4	1142023.577
Ba	138	1	He	83.204104	0.4	2696283.603
Pt	195	1	He	80.032080	0.5	1088556.163
Hg	202	1	He	0.004301	38.6	128.000
Tl	205	1	He	40.077358	0.4	1970785.593
Pb	208	1	He	81.025552	0.3	5354284.423
Bi	209	1	He	78.838616	0.9	4467055.040
Th	232	1	He	10.874158	0.8	753882.280
U	238	1	He	79.716314	0.3	5283212.423

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.21445276	586577.980
Sc	45	2	H2	95.70894286	4713541.333
Ge	72	1	He	96.90712084	490847.843
Ge	72	2	H2	96.23986808	1641801.460
In	115	1	He	97.50437071	5765781.953
Tb	159	1	He	100.1031519	13816693.540
Ir	193	1	He	98.02967843	7090060.310



Sample Name 4308654\_B69917Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 105SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:25:40  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.266220	5.9	190.500
Be	9	2	H2	0.082367	7.2	50.000
B	11	2	H2	0.294051	76.7	2766.927
Na	23	1	He	713.938555	11.7	707214.260
Mg	24	1	He	646.824501	11.8	355880.450
Al	27	1	He	4.469550	14.8	1265.053
Si	28	2	H2	95.141420	0.2	342371.780
K	39	1	He	52.454839	29.1	105829.513
Ca	43	1	He	1297.723037	11.4	2877.703
Ti	47	1	He	0.028058	58.5	8.000
V	51	1	He	0.096415	28.1	190.320
Cr	52	1	He	0.078503	37.0	3020.323
Mn	55	1	He	0.018862	23.2	404.677
Fe	56	1	He	0.984402	17.5	17662.713
Co	59	1	He	0.017025	25.2	272.003
Ni	60	1	He	0.053677	31.4	367.340
Cu	63	1	He	0.052209	9.4	668.687
Zn	66	1	He	0.387107	19.8	959.367
As	75	1	He	0.043736	36.6	250.333
Se	78	2	H2	0.025909	7.5	55.000
Sr	88	1	He	3.343281	13.6	37270.213
Mo	95	1	He	0.222501	13.4	1401.410
Pd	105	1	He	0.031395	30.2	493.347
Ag	107	1	He	0.179113	31.1	3530.507
Cd	111	1	He	0.011537	38.9	53.417
Sn	118	1	He	0.050108	24.9	525.013
Sb	121	1	He	0.043345	21.1	643.353
Ba	138	1	He	1.017923	11.4	31161.857
Pt	195	1	He	0.007347	30.6	244.667
Hg	202	1	He	0.003949	66.5	115.000
Tl	205	1	He	0.070908	33.8	3502.200
Pb	208	1	He	0.021432	24.8	3295.183
Bi	209	1	He	0.019243	36.6	2643.650
Th	232	1	He	0.012420	28.9	1240.070
U	238	1	He	0.224529	12.5	14127.787

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.91292232	547756.783
Sc	45	2	H2	97.06160791	4780158.333
Ge	72	1	He	90.09753668	456356.367
Ge	72	2	H2	97.51934056	1663628.587
In	115	1	He	92.58200204	5474704.700
Tb	159	1	He	92.52713019	12771016.473
Ir	193	1	He	91.19866504	6596002.820

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 106\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:29:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.687718	0.4	38538.607
Be	9	2	H2	81.272180	0.4	38190.470
B	11	2	H2	78.823870	0.8	35491.000
Na	23	1	He	998.810050	0.3	1075229.150
Mg	24	1	He	997.342981	0.7	598117.180
Al	27	1	He	996.013980	0.5	292224.353
Si	28	2	H2	497.530433	0.4	1718070.120
K	39	1	He	994.129906	0.4	886502.487
Ca	43	1	He	1013.498116	0.3	2456.203
Ti	47	1	He	79.667089	1.5	21318.060
V	51	1	He	78.981563	0.6	605729.157
Cr	52	1	He	81.755401	0.8	745101.310
Mn	55	1	He	80.307617	0.4	526354.603
Fe	56	1	He	501.513366	0.4	4353010.667
Co	59	1	He	82.294949	0.4	1194913.083
Ni	60	1	He	83.168651	0.5	304815.263
Cu	63	1	He	83.739346	0.4	844334.873
Zn	66	1	He	82.080769	0.4	187507.297
As	75	1	He	79.393857	0.1	160742.210
Se	78	2	H2	80.579794	0.4	73569.163
Sr	88	1	He	81.303120	0.5	987891.627
Mo	95	1	He	77.217883	1.4	522174.250
Pd	105	1	He	82.025119	0.8	832173.480
Ag	107	1	He	42.025554	0.7	876746.107
Cd	111	1	He	79.763969	0.4	318413.537
Sn	118	1	He	77.047212	0.4	771130.143
Sb	121	1	He	77.759242	0.3	1157575.893
Ba	138	1	He	77.975189	0.8	2577883.710
Pt	195	1	He	82.537623	0.5	1117896.833
Hg	202	1	He	3.905600	0.9	25899.453
Tl	205	1	He	42.243746	0.6	2068523.720
Pb	208	1	He	82.949286	0.8	5458291.920
Bi	209	1	He	80.571913	0.7	4585985.450
Th	232	1	He	77.719396	1.4	5409370.753
U	238	1	He	78.547139	0.8	5229271.797

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.23420548	592860.267
Sc	45	2	H2	96.28251803	4741789.167
Ge	72	1	He	97.52740218	493989.653
Ge	72	2	H2	96.88156433	1652748.460
In	115	1	He	99.47635737	5882392.573
Tb	159	1	He	99.68134598	13758473.963
Ir	193	1	He	98.47674780	7122394.893

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 107\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:33:00  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.139682	7.7	130.167
Be	9	2	H2	0.088727	5.0	52.333
B	11	2	H2	-1.578985		1953.960
Na	23	1	He	1.072623	7.4	12143.323
Mg	24	1	He	-0.656085		1040.043
Al	27	1	He	0.263459	29.8	147.000
Si	28	2	H2	-0.300149		12603.360
K	39	1	He	-1.036764		70570.913
Ca	43	1	He	-1.525808		14.033
Ti	47	1	He	0.010322	55.5	3.667
V	51	1	He	0.045011	30.3	-176.483
Cr	52	1	He	-0.006759		2476.217
Mn	55	1	He	-0.007690		262.000
Fe	56	1	He	0.179237	10.2	12063.673
Co	59	1	He	0.008821	18.8	174.667
Ni	60	1	He	0.002509	65.1	210.000
Cu	63	1	He	0.007334	41.4	270.667
Zn	66	1	He	0.011634	168.3	191.333
As	75	1	He	0.003747	16.3	189.333
Se	78	2	H2	0.013447	71.4	43.000
Sr	88	1	He	0.005198	81.6	195.000
Mo	95	1	He	0.015391	1.9	119.333
Pd	105	1	He	0.022700	44.3	446.677
Ag	107	1	He	0.168157	23.6	3583.833
Cd	111	1	He	0.008682	15.4	46.980
Sn	118	1	He	0.019501	28.1	261.670
Sb	121	1	He	0.006019	44.4	145.000
Ba	138	1	He	0.006025	15.4	315.010
Pt	195	1	He	0.003815	32.8	218.000
Hg	202	1	He	0.027818	12.8	283.667
Tl	205	1	He	0.058959	21.0	3228.773
Pb	208	1	He	0.006162	32.3	2578.457
Bi	209	1	He	0.006140	38.6	2156.890
Th	232	1	He	0.020681	10.3	1963.497
U	238	1	He	0.005050	41.8	806.703

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.80911117	584080.833
Sc	45	2	H2	95.79836991	4717945.500
Ge	72	1	He	95.98854877	486195.150
Ge	72	2	H2	96.22470524	1641542.790
In	115	1	He	98.89925476	5848266.433
Tb	159	1	He	100.0159935	13804663.543
Ir	193	1	He	100.1107318	7240573.850

Sample Name 60398600002\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 108SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:36:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	7.211455	0.0	3325.530
Be	9	2	H2	0.078135	7.2	46.833
B	11	2	H2	45.159842	0.9	21096.843
Na	23	1	He	10079.10707	0.9	10280285.473
Mg	24	1	He	18127.07653	0.8	10374010.263
Al	27	1	He	110.251060	1.3	30999.123
Si	28	2	H2	4472.675010	0.7	15080419.333
K	39	1	He	8745.963866	0.9	6918828.857
Ca	43	1	He	84750.36275	0.7	195022.853
Ti	47	1	He	1.192002	2.8	306.003
V	51	1	He	0.448621	12.5	2790.427
Cr	52	1	He	0.582632	5.5	7523.280
Mn	55	1	He	2.964592	2.4	18874.160
Fe	56	1	He	53.666386	0.7	454645.800
Co	59	1	He	0.514879	1.5	7186.447
Ni	60	1	He	1.461233	1.3	5306.313
Cu	63	1	He	0.213219	4.8	2244.850
Zn	66	1	He	3.511353	1.5	7814.120
As	75	1	He	0.160184	2.6	485.843
Se	78	2	H2	0.768436	2.0	714.353
Sr	88	1	He	249.785721	0.3	2898360.473
Mo	95	1	He	4.023164	0.4	26014.367
Pd	105	1	He	0.141959	8.5	1585.103
Ag	107	1	He	0.058199	11.1	1253.403
Cd	111	1	He	0.020351	18.5	89.650
Sn	118	1	He	0.054380	9.3	585.013
Sb	121	1	He	0.074013	9.2	1106.720
Ba	138	1	He	44.289728	0.3	1399334.667
Pt	195	1	He	0.004632	24.6	224.667
Hg	202	1	He	0.017472	16.6	211.000
Tl	205	1	He	0.042364	3.5	2370.237
Pb	208	1	He	0.098775	1.8	8527.737
Bi	209	1	He	0.007415	111.0	2143.557
Th	232	1	He	0.026542	3.2	2286.887
U	238	1	He	1.103641	1.3	72264.923

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.04195508	567033.497
Sc	45	2	H2	94.68061798	4662897.667
Ge	72	1	He	93.14207164	471777.353
Ge	72	2	H2	94.49795967	1612085.420
In	115	1	He	95.06069538	5621278.697
Tb	159	1	He	98.14568634	13546515.217
Ir	193	1	He	96.26437578	6962383.647

Sample Name 60398600002\_B69917Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 109SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:40:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.877970	4.6	469.843
Be	9	2	H2	0.065924	23.2	41.833
B	11	2	H2	2.921904	1.7	3837.657
Na	23	1	He	1024.671879	0.7	1077342.980
Mg	24	1	He	1848.440827	0.4	1081803.917
Al	27	1	He	12.906731	1.8	3768.817
Si	28	2	H2	460.145434	1.3	1588742.417
K	39	1	He	882.180700	0.6	776531.293
Ca	43	1	He	8582.699496	0.2	20189.430
Ti	47	1	He	0.145568	18.1	39.000
V	51	1	He	-0.007322		-567.583
Cr	52	1	He	0.101455	12.4	3415.740
Mn	55	1	He	0.305022	7.1	2260.853
Fe	56	1	He	6.052754	2.2	61647.640
Co	59	1	He	0.057608	3.4	866.697
Ni	60	1	He	0.174207	3.8	824.030
Cu	63	1	He	0.031224	6.0	504.677
Zn	66	1	He	0.462675	5.1	1197.387
As	75	1	He	0.017783	16.9	216.000
Se	78	2	H2	0.078692	10.0	102.667
Sr	88	1	He	24.988795	0.8	297198.167
Mo	95	1	He	0.399976	1.0	2695.597
Pd	105	1	He	0.025869	21.2	476.677
Ag	107	1	He	0.031945	18.5	756.693
Cd	111	1	He	0.002706	31.0	23.183
Sn	118	1	He	0.023644	13.6	301.677
Sb	121	1	He	0.010689	4.5	213.333
Ba	138	1	He	4.408820	0.7	144525.800
Pt	195	1	He	-0.000249		162.000
Hg	202	1	He	0.006681	27.9	143.000
Tl	205	1	He	0.012273	7.9	933.373
Pb	208	1	He	0.014510	16.3	3115.163
Bi	209	1	He	0.001648	59.0	1863.507
Th	232	1	He	0.007924	32.2	1043.390
U	238	1	He	0.110097	2.4	7775.727

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.01458226	579186.060
Sc	45	2	H2	96.20898986	4738168.000
Ge	72	1	He	95.43061651	483369.147
Ge	72	2	H2	96.75058354	1650513.997
In	115	1	He	98.55868800	5828127.503
Tb	159	1	He	99.55029443	13740385.630
Ir	193	1	He	98.33964799	7112479.060

Sample Name 60398600003\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 110SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:43:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.480513	2.7	1208.217
Be	9	2	H2	0.064267	18.6	41.167
B	11	2	H2	577.400901	0.3	243668.197
Na	23	1	He	34999.35778	1.1	35138396.977
Mg	24	1	He	40991.74944	1.2	23106542.993
Al	27	1	He	73.917837	1.5	20494.377
Si	28	2	H2	3599.355437	0.6	12357768.000
K	39	1	He	4038.405933	1.6	3183631.100
Ca	43	1	He	244436.5539	1.0	554044.083
Ti	47	1	He	0.252918	0.9	64.667
V	51	1	He	0.024451	296.0	-315.650
Cr	52	1	He	0.599940	2.3	7559.297
Mn	55	1	He	0.408993	1.5	2822.283
Fe	56	1	He	8.115613	1.8	76291.467
Co	59	1	He	0.078697	7.8	1120.047
Ni	60	1	He	0.247231	3.4	1043.373
Cu	63	1	He	0.138025	2.0	1497.417
Zn	66	1	He	6.582635	1.4	14282.370
As	75	1	He	0.101037	2.5	365.833
Se	78	2	H2	2.183157	2.2	1996.140
Sr	88	1	He	421.870555	0.5	4818837.743
Mo	95	1	He	0.311298	3.5	1974.810
Pd	105	1	He	0.230918	1.2	2385.230
Ag	107	1	He	0.019613	10.2	471.677
Cd	111	1	He	0.045658	10.0	181.310
Sn	118	1	He	0.042589	11.7	460.010
Sb	121	1	He	0.067407	8.7	986.710
Ba	138	1	He	56.305571	1.8	1733338.413
Pt	195	1	He	0.008437	9.6	270.000
Hg	202	1	He	0.011257	17.0	167.333
Tl	205	1	He	0.018981	1.1	1218.400
Pb	208	1	He	0.016393	4.4	3128.503
Bi	209	1	He	0.005801	28.0	2003.520
Th	232	1	He	0.012023	13.4	1266.740
U	238	1	He	1.911625	0.7	121679.530

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.67150211	558590.687
Sc	45	2	H2	96.38736343	4746952.667
Ge	72	1	He	91.69414766	464443.420
Ge	72	2	H2	95.57603829	1630476.873
In	115	1	He	92.63905908	5478078.687
Tb	159	1	He	96.16165237	13272669.800
Ir	193	1	He	93.82256404	6785778.023

Sample Name 60398600003\_B69917Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 111SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:47:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.382548	7.8	247.333
Be	9	2	H2	0.065491	15.6	42.500
B	11	2	H2	63.835608	0.6	29826.153
Na	23	1	He	3581.548976	0.5	3828537.653
Mg	24	1	He	4214.500168	0.4	2524132.983
Al	27	1	He	9.119457	1.0	2748.257
Si	28	2	H2	373.821867	0.6	1320165.747
K	39	1	He	411.136023	0.2	409332.807
Ca	43	1	He	24790.15137	0.2	59685.597
Ti	47	1	He	0.046253	33.9	13.333
V	51	1	He	0.029709	237.1	-296.097
Cr	52	1	He	0.097841	7.6	3465.087
Mn	55	1	He	0.033834	6.0	538.010
Fe	56	1	He	1.788919	1.0	26195.423
Co	59	1	He	0.010780	20.3	204.667
Ni	60	1	He	0.048601	16.3	380.010
Cu	63	1	He	0.022880	3.5	429.343
Zn	66	1	He	0.823056	3.9	2034.820
As	75	1	He	0.020503	10.6	225.000
Se	78	2	H2	0.208254	17.6	225.000
Sr	88	1	He	42.053622	0.1	508205.003
Mo	95	1	He	0.032058	6.4	232.667
Pd	105	1	He	0.024095	18.2	463.343
Ag	107	1	He	0.010342	26.1	313.340
Cd	111	1	He	0.004268	25.2	29.627
Sn	118	1	He	0.018354	28.2	251.670
Sb	121	1	He	0.006633	26.3	155.000
Ba	138	1	He	5.536820	0.6	183136.053
Pt	195	1	He	0.001247	74.8	184.667
Hg	202	1	He	0.005099	13.8	134.333
Tl	205	1	He	0.003812	9.1	526.687
Pb	208	1	He	0.012439	95.5	3019.450
Bi	209	1	He	0.002251	143.7	1906.847
Th	232	1	He	0.004505	10.5	808.367
U	238	1	He	0.190579	3.3	13181.767

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.27921355	593137.543
Sc	45	2	H2	98.20689356	4836562.167
Ge	72	1	He	96.98344914	491234.457
Ge	72	2	H2	98.70366533	1683832.543
In	115	1	He	99.46246662	5881571.163
Tb	159	1	He	100.8926853	13925668.540
Ir	193	1	He	98.75462584	7142492.603

Sample Name 60398600004\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 112SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:51:17  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.590190	1.6	1252.050
Be	9	2	H2	0.067976	13.2	42.667
B	11	2	H2	616.904929	1.4	258772.043
Na	23	1	He	36983.70285	0.5	38039446.100
Mg	24	1	He	43081.80597	0.2	24879605.463
Al	27	1	He	94.923127	0.9	26944.567
Si	28	2	H2	3886.923215	1.6	13272605.000
K	39	1	He	4281.594650	0.3	3453881.510
Ca	43	1	He	259215.4895	0.6	601915.460
Ti	47	1	He	0.185031	25.5	48.667
V	51	1	He	0.072268	177.7	28.650
Cr	52	1	He	0.533228	0.4	7159.760
Mn	55	1	He	0.608821	1.8	4154.600
Fe	56	1	He	8.582424	1.4	82041.780
Co	59	1	He	0.080071	4.0	1155.383
Ni	60	1	He	1.068573	1.6	3925.873
Cu	63	1	He	0.129597	3.9	1437.410
Zn	66	1	He	3.230019	0.9	7188.467
As	75	1	He	0.116996	7.5	401.677
Se	78	2	H2	2.298948	1.8	2082.483
Sr	88	1	He	448.282685	0.5	5192335.547
Mo	95	1	He	0.337290	8.6	2158.173
Pd	105	1	He	0.240749	2.5	2500.243
Ag	107	1	He	0.013340	19.4	353.343
Cd	111	1	He	0.007135	26.2	38.610
Sn	118	1	He	0.035033	11.3	393.343
Sb	121	1	He	0.082014	1.9	1200.063
Ba	138	1	He	59.949680	0.6	1862477.627
Pt	195	1	He	0.006446	18.3	246.667
Hg	202	1	He	0.008335	8.1	150.333
Tl	205	1	He	0.019150	11.2	1240.070
Pb	208	1	He	0.024391	8.1	3676.877
Bi	209	1	He	0.006807	36.9	2063.530
Th	232	1	He	0.010562	27.1	1171.733
U	238	1	He	2.026186	1.3	129241.923

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.88527903	572228.877
Sc	45	2	H2	95.88486627	4722205.333
Ge	72	1	He	92.97960680	470954.447
Ge	72	2	H2	94.75116170	1616404.913
In	115	1	He	93.47453262	5527483.223
Tb	159	1	He	97.24212433	13421801.467
Ir	193	1	He	94.04241454	6801678.853



Sample Name 60398600004\_B69917Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 113SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:54:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.355680	14.4	237.833
Be	9	2	H2	0.046791	21.1	34.000
B	11	2	H2	68.508602	0.8	32229.547
Na	23	1	He	3779.710194	0.8	4058984.733
Mg	24	1	He	4447.493196	0.7	2676303.293
Al	27	1	He	11.638076	0.8	3504.083
Si	28	2	H2	389.886592	0.3	1394300.373
K	39	1	He	434.005663	1.2	430108.327
Ca	43	1	He	26205.76564	0.8	63393.690
Ti	47	1	He	0.031080	60.7	9.333
V	51	1	He	-0.021324		-691.880
Cr	52	1	He	0.097051	10.2	3474.423
Mn	55	1	He	0.057352	21.6	695.350
Fe	56	1	He	1.659888	2.1	25196.980
Co	59	1	He	0.023652	2.6	390.010
Ni	60	1	He	0.135271	1.4	694.687
Cu	63	1	He	0.142891	7.2	1630.097
Zn	66	1	He	0.529941	4.8	1368.070
As	75	1	He	0.014919	79.3	213.333
Se	78	2	H2	0.229761	6.2	245.000
Sr	88	1	He	44.969921	0.9	542637.153
Mo	95	1	He	0.035749	1.9	257.333
Pd	105	1	He	0.023947	19.5	461.683
Ag	107	1	He	0.005064	20.3	203.333
Cd	111	1	He	0.002603	20.2	22.950
Sn	118	1	He	0.013352	30.2	201.667
Sb	121	1	He	0.008679	19.4	185.000
Ba	138	1	He	5.976314	4.9	197352.873
Pt	195	1	He	-0.000716		155.333
Hg	202	1	He	0.003904	40.3	124.333
Tl	205	1	He	0.003687	32.8	513.350
Pb	208	1	He	0.012282	13.5	2963.480
Bi	209	1	He	0.003162	97.2	1930.173
Th	232	1	He	0.004081	6.3	768.363
U	238	1	He	0.202020	3.6	13754.020

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.74154637	595985.790
Sc	45	2	H2	99.49173281	4899838.833
Ge	72	1	He	96.84528901	490534.657
Ge	72	2	H2	98.60135638	1682087.207
In	115	1	He	99.35199491	5875038.577
Tb	159	1	He	99.38420379	13717461.043
Ir	193	1	He	97.42800743	7046544.063

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 114\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:58:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.148730	0.6	38685.983
Be	9	2	H2	79.659823	0.3	38279.020
B	11	2	H2	81.377704	0.5	37382.860
Na	23	1	He	987.066493	1.0	1095597.743
Mg	24	1	He	989.059218	1.4	611519.940
Al	27	1	He	982.092807	1.2	297049.290
Si	28	2	H2	494.967987	0.5	1747928.877
K	39	1	He	985.297416	1.2	906450.247
Ca	43	1	He	1004.333918	2.4	2509.057
Ti	47	1	He	78.096101	0.9	21546.703
V	51	1	He	78.412974	1.2	619957.857
Cr	52	1	He	80.752352	0.9	758780.730
Mn	55	1	He	79.235831	0.8	535390.710
Fe	56	1	He	493.545398	1.1	4416393.167
Co	59	1	He	81.659108	1.0	1217844.543
Ni	60	1	He	82.083279	1.0	309001.550
Cu	63	1	He	82.717181	1.2	856624.437
Zn	66	1	He	80.384835	1.5	188607.933
As	75	1	He	78.395106	1.0	163027.757
Se	78	2	H2	79.371048	0.8	73436.473
Sr	88	1	He	79.947001	0.9	997789.360
Mo	95	1	He	75.951965	0.7	528000.960
Pd	105	1	He	81.191672	0.7	846773.633
Ag	107	1	He	41.293753	2.1	885551.733
Cd	111	1	He	78.849042	0.3	323568.877
Sn	118	1	He	75.676665	0.1	778608.763
Sb	121	1	He	76.174125	0.6	1165686.440
Ba	138	1	He	76.704166	0.9	2606808.917
Pt	195	1	He	80.831702	1.5	1126042.917
Hg	202	1	He	3.785318	1.0	25822.617
Tl	205	1	He	41.500503	2.1	2090054.240
Pb	208	1	He	80.894681	1.3	5475088.307
Bi	209	1	He	78.962472	1.7	4599915.767
Th	232	1	He	76.227993	1.2	5430383.040
U	238	1	He	77.629257	0.9	5289495.757

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.21403032	611217.770
Sc	45	2	H2	98.45749915	4848904.167
Ge	72	1	He	100.1804998	507427.957
Ge	72	2	H2	98.18048837	1674907.420
In	115	1	He	102.2589668	6046938.220
Tb	159	1	He	102.5354243	14152406.873
Ir	193	1	He	100.7862788	7289433.227

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 115\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:02:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.086819	6.3	108.833
Be	9	2	H2	0.049359	17.9	34.833
B	11	2	H2	1.368403	11.4	3261.853
Na	23	1	He	2.276362	6.8	13708.033
Mg	24	1	He	0.004502	2845.3	1461.750
Al	27	1	He	0.157350	22.9	119.000
Si	28	2	H2	-0.334725		12820.287
K	39	1	He	-2.788705		70711.870
Ca	43	1	He	2.615565	54.0	24.383
Ti	47	1	He	0.011259	32.3	4.000
V	51	1	He	0.008635	568.7	-461.853
Cr	52	1	He	0.001535	1216.9	2607.577
Mn	55	1	He	-0.008859		260.000
Fe	56	1	He	0.164256	9.4	12204.440
Co	59	1	He	0.008538	20.9	173.333
Ni	60	1	He	0.000135	2269.2	204.667
Cu	63	1	He	0.007761	45.9	279.333
Zn	66	1	He	-0.002850		161.333
As	75	1	He	-0.002381		180.000
Se	78	2	H2	0.005914	207.3	37.000
Sr	88	1	He	0.008921	62.3	243.337
Mo	95	1	He	0.011941	28.9	98.000
Pd	105	1	He	0.018149	22.1	408.343
Ag	107	1	He	0.168172	26.0	3647.190
Cd	111	1	He	0.006834	41.4	40.317
Sn	118	1	He	0.015240	6.0	223.333
Sb	121	1	He	0.005955	35.8	146.667
Ba	138	1	He	0.006458	24.8	335.010
Pt	195	1	He	0.005674	45.1	245.333
Hg	202	1	He	0.029577	18.8	298.000
Tl	205	1	He	0.050421	26.9	2835.347
Pb	208	1	He	0.005835	27.4	2580.113
Bi	209	1	He	0.005395	72.1	2130.213
Th	232	1	He	0.019833	10.0	1918.497
U	238	1	He	0.005180	35.4	821.700

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.94129699	597216.373
Sc	45	2	H2	98.37199436	4844693.167
Ge	72	1	He	97.54285356	494067.917
Ge	72	2	H2	98.13661460	1674158.957
In	115	1	He	100.7470479	5957533.047
Tb	159	1	He	100.9207630	13929543.957
Ir	193	1	He	100.9145614	7298711.350

Sample Name 4308551\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 116SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:05:56  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.078627	39.8	104.500
Be	9	2	H2	0.047928	19.9	34.000
B	11	2	H2	0.228773	29.3	2762.423
Na	23	1	He	7.900037	16.1	18833.610
Mg	24	1	He	2.918059	6.5	3073.677
Al	27	1	He	18.396664	6.9	5254.930
Si	28	2	H2	0.542173	20.0	15811.580
K	39	1	He	1.398100	372.0	70783.707
Ca	43	1	He	11.621143	17.8	44.050
Ti	47	1	He	0.074035	2.3	20.000
V	51	1	He	0.035599	123.8	-231.687
Cr	52	1	He	0.124378	8.8	3567.113
Mn	55	1	He	0.288449	6.2	2120.827
Fe	56	1	He	3.111274	9.0	36169.910
Co	59	1	He	0.006289	11.4	134.667
Ni	60	1	He	0.006160	180.0	218.000
Cu	63	1	He	0.058526	1.6	756.020
Zn	66	1	He	1.756386	8.7	3977.887
As	75	1	He	0.003896	174.0	183.667
Se	78	2	H2	0.004350	184.1	35.000
Sr	88	1	He	0.034394	26.6	525.017
Mo	95	1	He	0.010341	12.9	83.333
Pd	105	1	He	0.014013	48.1	348.343
Ag	107	1	He	0.046618	16.1	1035.047
Cd	111	1	He	0.003266	34.9	24.987
Sn	118	1	He	0.051349	3.9	565.017
Sb	121	1	He	0.009848	18.5	198.333
Ba	138	1	He	0.090191	5.9	3007.020
Pt	195	1	He	0.009995	6.7	294.670
Hg	202	1	He	0.015573	11.8	198.000
Tl	205	1	He	0.014915	17.0	1038.387
Pb	208	1	He	0.006460	34.7	2533.447
Bi	209	1	He	0.004033	81.1	1970.190
Th	232	1	He	0.008449	32.0	1070.053
U	238	1	He	0.002221	10.7	598.353

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.73674692	571313.830
Sc	45	2	H2	97.87127728	4820033.500
Ge	72	1	He	93.20789348	472110.750
Ge	72	2	H2	97.10888182	1656626.377
In	115	1	He	96.73423861	5720241.290
Tb	159	1	He	97.72610218	13488602.297
Ir	193	1	He	97.29318320	7036792.813

Sample Name 4308552\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 117SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:09:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	106.158427	0.4	48204.767
Be	9	2	H2	103.672168	0.5	48051.907
B	11	2	H2	102.554723	0.3	44771.180
Na	23	1	He	2079.492995	1.5	2184668.093
Mg	24	1	He	2061.713245	1.2	1211750.633
Al	27	1	He	2059.294303	1.4	592773.893
Si	28	2	H2	517.031016	0.5	1760632.917
K	39	1	He	2056.949205	1.3	1723747.890
Ca	43	1	He	2065.076415	2.3	4891.833
Ti	47	1	He	101.840162	2.0	26740.527
V	51	1	He	103.050006	1.4	775623.853
Cr	52	1	He	107.246821	1.7	958272.980
Mn	55	1	He	104.435226	1.5	671505.500
Fe	56	1	He	2077.156939	1.5	17657056.667
Co	59	1	He	107.098021	1.3	1537329.873
Ni	60	1	He	107.450234	1.0	389271.220
Cu	63	1	He	106.615164	1.2	1062666.503
Zn	66	1	He	108.762139	0.9	245574.213
As	75	1	He	102.201666	1.2	204507.383
Se	78	2	H2	103.128393	0.7	92796.100
Sr	88	1	He	104.638702	1.4	1256897.847
Mo	95	1	He	100.724460	2.1	670541.793
Pd	105	1	He	20.814290	1.9	208045.667
Ag	107	1	He	53.644949	1.9	1101653.630
Cd	111	1	He	103.566668	2.1	406982.690
Sn	118	1	He	99.251958	2.0	977861.030
Sb	121	1	He	101.171052	1.9	1482621.803
Ba	138	1	He	102.147473	2.4	3324288.493
Pt	195	1	He	20.783007	1.9	283786.833
Hg	202	1	He	0.014585	8.3	197.000
Tl	205	1	He	108.012537	0.9	5329792.423
Pb	208	1	He	105.670501	0.7	7007162.817
Bi	209	1	He	102.387729	1.1	5862709.080
Th	232	1	He	103.226175	0.9	7228716.560
U	238	1	He	102.036529	1.0	6834420.107

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.42933852	581741.207
Sc	45	2	H2	94.97443959	4677368.000
Ge	72	1	He	96.42063317	488383.717
Ge	72	2	H2	95.48991331	1629007.627
In	115	1	He	97.94827245	5792031.450
Tb	159	1	He	100.4665836	13866856.043
Ir	193	1	He	99.08339924	7166271.353

Sample Name 10606337001\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 118SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:13:15  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	105.835572	0.2	49456.787
Be	9	2	H2	0.091420	7.9	54.667
B	11	2	H2	173.647228	0.6	76166.803
Na	23	1	He	48300.33744	0.8	48965340.937
Mg	24	1	He	31324.03548	0.8	17831220.150
Al	27	1	He	9.148026	3.3	2621.567
Si	28	2	H2	9538.111925	0.2	33182541.333
K	39	1	He	6796.487957	1.0	5363658.670
Ca	43	1	He	96106.60186	0.8	219987.663
Ti	47	1	He	0.226689	15.4	58.667
V	51	1	He	1.145420	7.1	7867.827
Cr	52	1	He	0.726206	1.9	8724.610
Mn	55	1	He	295.291786	0.5	1840550.917
Fe	56	1	He	16.146069	1.1	143176.180
Co	59	1	He	0.684931	2.5	9484.440
Ni	60	1	He	2.189114	2.4	7802.770
Cu	63	1	He	9.640525	0.4	92423.293
Zn	66	1	He	81.812240	0.6	177375.893
As	75	1	He	3.578589	0.8	7043.880
Se	78	2	H2	0.218928	16.6	231.333
Sr	88	1	He	759.756918	0.6	8760552.787
Mo	95	1	He	5.805973	0.4	37636.153
Pd	105	1	He	0.406192	4.9	4157.317
Ag	107	1	He	0.194178	30.0	3970.637
Cd	111	1	He	0.256911	4.7	994.597
Sn	118	1	He	0.067074	3.5	708.360
Sb	121	1	He	0.518381	3.0	7447.047
Ba	138	1	He	11.965812	0.4	379157.170
Pt	195	1	He	0.008432	17.5	277.333
Hg	202	1	He	0.012141	13.2	177.667
Tl	205	1	He	0.052431	12.1	2872.007
Pb	208	1	He	0.112489	3.5	9474.680
Bi	209	1	He	0.015789	20.1	2593.643
Th	232	1	He	0.054750	20.3	4175.727
U	238	1	He	6.426537	0.6	416063.873

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.55906149	564058.583
Sc	45	2	H2	97.73808934	4813474.167
Ge	72	1	He	92.56398198	468849.250
Ge	72	2	H2	97.08454539	1656211.210
In	115	1	He	95.31533854	5636336.657
Tb	159	1	He	98.76889367	13632533.133
Ir	193	1	He	95.66395487	6918957.813

Sample Name 4309986\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 119SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:16:54  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	178.633295	0.8	86388.137
Be	9	2	H2	74.419803	1.4	36759.620
B	11	2	H2	249.762799	0.5	112232.617
Na	23	1	He	49612.21516	0.6	52609149.217
Mg	24	1	He	32655.09900	0.3	19444383.877
Al	27	1	He	1890.990420	0.4	552074.207
Si	28	2	H2	10365.42283	0.9	37338028.000
K	39	1	He	8582.673550	1.0	7066033.437
Ca	43	1	He	96728.28135	0.6	231599.140
Ti	47	1	He	79.552893	1.2	21186.860
V	51	1	He	78.058123	0.9	595769.237
Cr	52	1	He	78.502365	0.3	712142.813
Mn	55	1	He	365.604656	0.7	2383557.583
Fe	56	1	He	973.535142	0.6	8399237.167
Co	59	1	He	77.522731	0.7	1126820.167
Ni	60	1	He	79.518351	0.7	291755.167
Cu	63	1	He	86.096679	0.6	869007.873
Zn	66	1	He	156.430848	0.3	357580.333
As	75	1	He	81.125992	0.4	164420.610
Se	78	2	H2	78.302768	0.9	73951.743
Sr	88	1	He	816.149871	1.0	9926444.437
Mo	95	1	He	84.182080	0.6	566873.143
Pd	105	1	He	77.282740	0.7	780762.697
Ag	107	1	He	14.652149	3.2	304441.010
Cd	111	1	He	76.095508	0.2	302475.910
Sn	118	1	He	78.268434	0.7	779992.227
Sb	121	1	He	77.961702	0.8	1155626.077
Ba	138	1	He	88.369975	0.2	2909147.767
Pt	195	1	He	77.529881	1.2	1082978.873
Hg	202	1	He	0.011775	18.6	182.333
Tl	205	1	He	38.045905	1.3	1921311.220
Pb	208	1	He	76.102546	0.8	5164692.010
Bi	209	1	He	75.220867	0.1	4311176.397
Th	232	1	He	11.109805	0.4	779044.730
U	238	1	He	83.801782	0.5	5617579.917

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.76991831	589999.980
Sc	45	2	H2	101.2064920	4984288.500
Ge	72	1	He	97.63141582	494516.497
Ge	72	2	H2	100.2154425	1709622.667
In	115	1	He	99.05153593	5857271.363
Tb	159	1	He	102.8031665	14189361.873
Ir	193	1	He	99.15517239	7171462.393

Sample Name 4309987\_B69957Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 120SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:20:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	22.452077	0.3	11129.747
Be	9	2	H2	0.083774	16.3	53.833
B	11	2	H2	38.061962	1.2	19813.947
Na	23	1	He	10741.47299	6.4	11189798.163
Mg	24	1	He	6941.158622	6.1	4058704.317
Al	27	1	He	4.866090	31.7	1452.410
Si	28	2	H2	1959.193188	0.6	7205339.167
K	39	1	He	1496.853388	7.1	1268050.683
Ca	43	1	He	20836.29622	6.5	48985.447
Ti	47	1	He	0.122104	23.3	32.667
V	51	1	He	0.329366	18.3	1945.713
Cr	52	1	He	0.248191	26.0	4708.107
Mn	55	1	He	63.865415	6.5	408968.443
Fe	56	1	He	4.522536	21.4	48519.170
Co	59	1	He	0.202616	28.9	2922.983
Ni	60	1	He	0.527775	10.4	2103.490
Cu	63	1	He	2.198870	7.6	22026.000
Zn	66	1	He	18.018468	6.1	40685.427
As	75	1	He	0.802946	13.6	1777.947
Se	78	2	H2	0.063688	24.7	94.667
Sr	88	1	He	161.608906	6.5	1934433.100
Mo	95	1	He	1.277353	9.6	8575.937
Pd	105	1	He	0.114897	12.1	1373.410
Ag	107	1	He	0.181739	32.0	3827.253
Cd	111	1	He	0.108883	52.1	437.467
Sn	118	1	He	0.076623	63.4	815.040
Sb	121	1	He	0.155532	34.9	2331.897
Ba	138	1	He	2.585946	8.9	84853.883
Pt	195	1	He	0.054527	86.7	891.380
Hg	202	1	He	0.008565	33.0	156.667
Tl	205	1	He	0.088209	41.3	4640.930
Pb	208	1	He	0.077398	63.1	7222.570
Bi	209	1	He	0.058901	91.0	5014.607
Th	232	1	He	0.021993	58.5	1991.853
U	238	1	He	1.417334	10.2	94615.870

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.22659143	580492.163
Sc	45	2	H2	103.1563910	5080318.500
Ge	72	1	He	96.30977010	487822.180
Ge	72	2	H2	102.8677274	1754869.250
In	115	1	He	98.87582414	5846880.897
Tb	159	1	He	100.7705814	13908815.207
Ir	193	1	He	98.66726347	7136174.063



Sample Name 4308553\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 121SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:24:13  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	203.718513	0.5	100434.790
Be	9	2	H2	97.860460	0.4	49278.990
B	11	2	H2	273.905557	0.2	125213.140
Na	23	1	He	50845.28210	0.7	54696312.520
Mg	24	1	He	33502.02675	0.8	20237012.617
Al	27	1	He	1974.361607	0.4	584757.417
Si	28	2	H2	10020.38303	0.5	36801298.667
K	39	1	He	8862.086984	0.4	7399299.473
Ca	43	1	He	99030.13953	0.4	240541.800
Ti	47	1	He	101.627616	0.6	27458.190
V	51	1	He	103.295708	1.0	799985.090
Cr	52	1	He	105.011631	0.5	965518.500
Mn	55	1	He	397.697211	0.3	2630287.250
Fe	56	1	He	2042.940021	0.5	17868665.333
Co	59	1	He	103.488603	0.5	1524843.833
Ni	60	1	He	104.990713	0.3	390429.487
Cu	63	1	He	111.474089	0.7	1140491.917
Zn	66	1	He	181.505843	0.4	420553.873
As	75	1	He	106.358018	0.6	218450.980
Se	78	2	H2	103.544216	0.5	99358.807
Sr	88	1	He	857.109197	1.6	10566767.550
Mo	95	1	He	107.980260	0.9	734279.687
Pd	105	1	He	20.418010	0.9	208466.703
Ag	107	1	He	51.818649	1.7	1086981.130
Cd	111	1	He	101.245810	1.0	406407.567
Sn	118	1	He	100.000957	1.2	1006354.880
Sb	121	1	He	100.972439	1.1	1511433.677
Ba	138	1	He	112.929959	0.8	3754245.260
Pt	195	1	He	20.275093	0.6	287614.053
Hg	202	1	He	0.014310	9.6	202.667
Tl	205	1	He	104.020097	1.6	5332029.190
Pb	208	1	He	101.157956	0.6	6968252.290
Bi	209	1	He	99.398854	0.6	5795692.413
Th	232	1	He	104.138590	0.8	7425353.220
U	238	1	He	109.423345	0.6	7462736.557

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.15574533	598537.503
Sc	45	2	H2	103.1809500	5081528.000
Ge	72	1	He	98.96931646	501293.147
Ge	72	2	H2	101.8339591	1737233.707
In	115	1	He	100.0338090	5915356.683
Tb	159	1	He	104.3559034	14403677.703
Ir	193	1	He	100.8828904	7296420.727

Sample Name 4308554\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 122SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:27:53  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	207.223333	0.2	102847.810
Be	9	2	H2	99.766436	0.4	50576.257
B	11	2	H2	279.763356	0.3	128691.223
Na	23	1	He	50612.91702	0.5	55629544.170
Mg	24	1	He	33348.66665	0.5	20582112.190
Al	27	1	He	1986.123461	0.8	601010.893
Si	28	2	H2	10179.18551	0.1	37635762.667
K	39	1	He	8802.721927	0.8	7509910.093
Ca	43	1	He	98099.37942	0.6	243457.473
Ti	47	1	He	102.842561	0.5	28389.267
V	51	1	He	103.621987	0.4	819955.893
Cr	52	1	He	105.142224	0.2	987737.500
Mn	55	1	He	397.250995	0.9	2684379.667
Fe	56	1	He	2055.229805	0.4	18366768.000
Co	59	1	He	104.744470	0.1	1567983.127
Ni	60	1	He	105.638028	0.6	399100.210
Cu	63	1	He	112.072121	0.6	1164907.873
Zn	66	1	He	182.846611	0.8	430412.803
As	75	1	He	107.024484	0.6	223325.450
Se	78	2	H2	106.626493	0.9	103012.147
Sr	88	1	He	860.909102	0.5	10783401.923
Mo	95	1	He	108.929412	0.8	756184.877
Pd	105	1	He	20.654611	1.3	215275.140
Ag	107	1	He	52.004798	1.5	1113602.353
Cd	111	1	He	101.704889	1.0	416762.877
Sn	118	1	He	100.497659	0.7	1032483.110
Sb	121	1	He	101.592359	1.1	1552439.507
Ba	138	1	He	113.244996	1.0	3843194.733
Pt	195	1	He	20.487949	0.4	296346.000
Hg	202	1	He	0.012801	3.0	196.000
Tl	205	1	He	104.541019	0.8	5463734.500
Pb	208	1	He	102.026816	0.9	7165789.943
Bi	209	1	He	99.624762	0.6	5987029.287
Th	232	1	He	104.393080	1.0	7672462.800
U	238	1	He	109.137997	0.9	7672012.180

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.26690668	611543.520
Sc	45	2	H2	103.8756891	5115743.000
Ge	72	1	He	100.5476173	509287.457
Ge	72	2	H2	102.5294206	1749097.913
In	115	1	He	102.1164361	6038509.867
Tb	159	1	He	106.4071295	14686797.280
Ir	193	1	He	103.9825053	7520602.390

Sample Name 10606337001\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 123SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:31:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	11.853866	0.4	5850.963
Be	9	2	H2	0.116231	3.8	69.500
B	11	2	H2	21.509356	0.4	12295.493
Na	23	1	He	5211.148101	0.1	5812377.830
Mg	24	1	He	3312.951190	0.2	2072567.577
Al	27	1	He	16.685662	2.0	5188.910
Si	28	2	H2	1001.731855	0.4	3654454.250
K	39	1	He	705.348424	0.3	679215.903
Ca	43	1	He	9913.996675	0.7	24939.763
Ti	47	1	He	0.048915	15.8	14.667
V	51	1	He	0.178227	29.1	879.607
Cr	52	1	He	0.135971	5.3	3980.550
Mn	55	1	He	30.432249	0.3	208613.563
Fe	56	1	He	3.161328	0.9	39774.537
Co	59	1	He	0.097651	3.3	1540.087
Ni	60	1	He	0.551382	2.6	2334.863
Cu	63	1	He	1.115553	1.8	12016.973
Zn	66	1	He	10.122722	1.3	24433.863
As	75	1	He	0.376841	5.7	993.870
Se	78	2	H2	0.039448	12.0	71.000
Sr	88	1	He	75.672855	0.6	965337.330
Mo	95	1	He	0.603731	2.4	4322.000
Pd	105	1	He	0.051065	18.4	776.693
Ag	107	1	He	0.209729	33.0	4722.557
Cd	111	1	He	0.047102	11.9	211.553
Sn	118	1	He	0.050221	3.6	601.687
Sb	121	1	He	0.063852	4.4	1061.717
Ba	138	1	He	1.241246	1.5	43386.273
Pt	195	1	He	0.003555	44.4	229.333
Hg	202	1	He	0.002924	70.9	127.000
Tl	205	1	He	0.045782	20.7	2761.987
Pb	208	1	He	0.034728	4.6	4773.690
Bi	209	1	He	0.019745	15.0	3083.770
Th	232	1	He	0.039127	9.3	3422.150
U	238	1	He	0.643258	0.2	46081.353

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.5518165	619459.333
Sc	45	2	H2	102.1282117	5029682.000
Ge	72	1	He	102.3914805	518626.877
Ge	72	2	H2	102.6182596	1750613.460
In	115	1	He	104.8832658	6202122.397
Tb	159	1	He	106.9556309	14762503.947
Ir	193	1	He	104.8509875	7583415.930

Sample Name 4309986\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 124SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:35:13  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	92.067112	0.4	44026.640
Be	9	2	H2	78.303729	0.6	38216.697
B	11	2	H2	98.934050	0.5	45570.693
Na	23	1	He	6973.839120	0.7	7558706.763
Mg	24	1	He	5174.303473	0.2	3146350.577
Al	27	1	He	1934.375444	0.6	576490.207
Si	28	2	H2	1951.605352	0.4	6957778.500
K	39	1	He	2631.843371	0.8	2262917.780
Ca	43	1	He	11719.94191	0.8	28660.250
Ti	47	1	He	79.996758	0.9	21747.343
V	51	1	He	79.170924	0.9	616854.803
Cr	52	1	He	80.691271	0.4	747141.620
Mn	55	1	He	110.094779	0.3	732922.417
Fe	56	1	He	994.479347	0.5	8758046.000
Co	59	1	He	81.517068	0.2	1201281.250
Ni	60	1	He	83.096961	0.5	309100.553
Cu	63	1	He	83.361691	0.1	853051.123
Zn	66	1	He	90.101810	0.2	208880.860
As	75	1	He	79.472442	0.6	163300.383
Se	78	2	H2	78.867113	0.9	74464.660
Sr	88	1	He	155.130925	0.6	1912961.273
Mo	95	1	He	80.147845	0.3	550469.583
Pd	105	1	He	81.186311	0.6	836527.123
Ag	107	1	He	15.649647	2.4	331608.543
Cd	111	1	He	79.601092	0.4	322721.060
Sn	118	1	He	79.164254	0.3	804668.007
Sb	121	1	He	78.208654	0.4	1182420.060
Ba	138	1	He	79.336950	0.3	2663886.003
Pt	195	1	He	81.598159	0.3	1153691.667
Hg	202	1	He	0.002848	133.6	123.000
Tl	205	1	He	40.363316	0.3	2063240.127
Pb	208	1	He	80.935712	0.3	5559581.403
Bi	209	1	He	78.588269	0.8	4681512.323
Th	232	1	He	11.660715	0.3	849907.540
U	238	1	He	78.554456	0.2	5473545.123

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.76297100	602278.377
Sc	45	2	H2	99.99773259	4924758.667
Ge	72	1	He	98.98126282	501353.657
Ge	72	2	H2	100.1870323	1709138.003
In	115	1	He	101.0268808	5974080.567
Tb	159	1	He	104.0570134	14362423.540
Ir	193	1	He	103.0644325	7454202.177

Sample Name 4309987\_B69957Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 125SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:38:52  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.408828	0.7	1248.550
Be	9	2	H2	0.079518	10.2	51.333
B	11	2	H2	4.084201	1.9	4600.033
Na	23	1	He	988.179989	4.8	1095254.880
Mg	24	1	He	634.756821	4.4	392485.370
Al	27	1	He	2.693682	0.5	888.697
Si	28	2	H2	186.571984	0.3	694312.293
K	39	1	He	132.043885	6.9	185959.920
Ca	43	1	He	1876.922438	5.4	4666.183
Ti	47	1	He	0.025612	41.0	8.000
V	51	1	He	0.095553	34.2	221.943
Cr	52	1	He	0.053230	39.8	3147.017
Mn	55	1	He	5.829347	3.6	39650.153
Fe	56	1	He	0.682854	11.3	17103.353
Co	59	1	He	0.029385	9.8	494.677
Ni	60	1	He	0.117540	2.3	659.353
Cu	63	1	He	0.230656	0.8	2623.580
Zn	66	1	He	1.810315	3.1	4463.367
As	75	1	He	0.075886	9.3	351.333
Se	78	2	H2	0.009107	32.4	41.667
Sr	88	1	He	14.392243	3.4	181637.713
Mo	95	1	He	0.121831	8.4	876.030
Pd	105	1	He	0.030404	15.9	551.683
Ag	107	1	He	0.175123	35.9	3905.617
Cd	111	1	He	0.019379	16.3	93.843
Sn	118	1	He	0.025861	5.8	341.677
Sb	121	1	He	0.018196	5.3	341.677
Ba	138	1	He	0.263653	3.8	9223.157
Pt	195	1	He	0.005019	67.1	246.667
Hg	202	1	He	-0.000189		103.333
Tl	205	1	He	0.066898	28.9	3802.263
Pb	208	1	He	0.014371	13.8	3291.843
Bi	209	1	He	0.013593	22.1	2686.993
Th	232	1	He	0.011823	7.7	1388.420
U	238	1	He	0.127052	7.9	9396.823

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.19580644	611105.500
Sc	45	2	H2	102.3994574	5043040.500
Ge	72	1	He	101.3012987	513104.957
Ge	72	2	H2	102.6672841	1751449.793
In	115	1	He	103.9443133	6146598.780
Tb	159	1	He	105.5877705	14573705.613
Ir	193	1	He	103.9883987	7521028.637

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 126\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:42:32  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.719645	0.5	40233.647
Be	9	2	H2	81.101073	0.6	39771.347
B	11	2	H2	80.087944	0.3	37588.870
Na	23	1	He	1010.414340	1.4	1123912.847
Mg	24	1	He	995.172633	1.1	616783.077
Al	27	1	He	980.664072	1.3	297334.000
Si	28	2	H2	498.047360	0.3	1794815.837
K	39	1	He	987.147797	1.2	910230.067
Ca	43	1	He	1020.997445	0.8	2556.880
Ti	47	1	He	78.868967	1.4	21811.437
V	51	1	He	78.787752	0.9	624470.503
Cr	52	1	He	81.807050	1.3	770505.440
Mn	55	1	He	79.942452	1.2	541463.060
Fe	56	1	He	500.626796	1.0	4490600.667
Co	59	1	He	82.300251	1.1	1239767.337
Ni	60	1	He	83.066912	0.9	315853.033
Cu	63	1	He	83.692103	0.3	875481.727
Zn	66	1	He	81.224099	0.5	192505.987
As	75	1	He	78.644755	0.8	165192.713
Se	78	2	H2	80.707717	0.9	76394.693
Sr	88	1	He	80.229699	0.4	1011404.307
Mo	95	1	He	77.049203	0.7	541046.330
Pd	105	1	He	82.657890	0.3	870792.907
Ag	107	1	He	42.017666	1.7	910141.730
Cd	111	1	He	79.636419	0.8	330098.647
Sn	118	1	He	76.756897	0.4	797698.113
Sb	121	1	He	77.159880	1.0	1192709.773
Ba	138	1	He	77.285508	0.7	2653149.333
Pt	195	1	He	82.416194	1.1	1173749.753
Hg	202	1	He	3.892879	1.3	27145.560
Tl	205	1	He	42.074706	2.4	2166212.210
Pb	208	1	He	82.132546	1.6	5682772.233
Bi	209	1	He	78.609844	1.2	4761722.220
Th	232	1	He	76.139104	0.6	5640172.627
U	238	1	He	77.302988	0.8	5477159.290

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.45492305	612701.813
Sc	45	2	H2	100.4786454	4948443.000
Ge	72	1	He	101.1843865	512512.780
Ge	72	2	H2	100.4473492	1713578.873
In	115	1	He	103.2935939	6108119.417
Tb	159	1	He	104.8234228	14468206.867
Ir	193	1	He	104.8040816	7580023.430

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 127\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:46:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.200355	10.7	166.333
Be	9	2	H2	0.089208	15.8	55.333
B	11	2	H2	0.312711	18.2	2884.777
Na	23	1	He	3.624131	7.7	15302.917
Mg	24	1	He	-0.191556		1356.740
Al	27	1	He	0.335672	16.4	173.333
Si	28	2	H2	0.051923	365.3	14540.520
K	39	1	He	-0.509362		73305.927
Ca	43	1	He	0.437894	216.9	19.283
Ti	47	1	He	0.011133	99.2	4.000
V	51	1	He	0.010990	558.3	-448.313
Cr	52	1	He	0.009742	144.1	2708.923
Mn	55	1	He	0.008667	31.8	379.343
Fe	56	1	He	0.221000	6.5	12824.297
Co	59	1	He	0.020090	24.7	348.007
Ni	60	1	He	0.004573	147.6	225.333
Cu	63	1	He	0.021678	20.7	428.010
Zn	66	1	He	0.016477	98.2	209.333
As	75	1	He	-0.000939		186.500
Se	78	2	H2	0.022950	50.8	54.000
Sr	88	1	He	0.020750	33.1	395.013
Mo	95	1	He	0.021330	10.9	164.667
Pd	105	1	He	0.022380	12.5	458.343
Ag	107	1	He	0.171504	24.3	3778.893
Cd	111	1	He	0.019827	23.6	94.303
Sn	118	1	He	0.023827	20.7	315.010
Sb	121	1	He	0.013652	23.4	266.670
Ba	138	1	He	0.013953	26.0	595.020
Pt	195	1	He	0.011029	23.4	328.673
Hg	202	1	He	0.022370	13.2	257.333
Tl	205	1	He	0.060693	22.4	3443.817
Pb	208	1	He	0.012277	26.3	3101.837
Bi	209	1	He	0.013532	17.9	2680.333
Th	232	1	He	0.026362	11.0	2453.583
U	238	1	He	0.012121	17.4	1333.413

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.89178317	603071.937
Sc	45	2	H2	100.9069917	4969538.500
Ge	72	1	He	99.43740975	503664.103
Ge	72	2	H2	100.6460365	1716968.373
In	115	1	He	102.2605790	6047033.550
Tb	159	1	He	103.9754186	14351161.453
Ir	193	1	He	103.7916151	7506796.137

Sample Name 10606337002\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 128SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:49:52  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	161.722899	42.0	59406.300
Be	9	2	H2	0.096097	60.9	44.000
B	11	2	H2	252.601466	43.1	86171.620
Na	23	1	He	50613.50840	0.8	53102535.877
Mg	24	1	He	33716.66766	0.5	19863881.367
Al	27	1	He	22.198323	1.4	6482.083
Si	28	2	H2	12556.56728	42.3	34321993.333
K	39	1	He	7047.287489	0.6	5753379.910
Ca	43	1	He	98766.48425	1.1	233973.450
Ti	47	1	He	0.369650	9.1	98.333
V	51	1	He	1.275350	5.6	9122.177
Cr	52	1	He	0.994706	0.9	11431.140
Mn	55	1	He	249.384652	0.7	1608753.413
Fe	56	1	He	17.327637	1.1	158253.087
Co	59	1	He	0.571008	2.9	8176.973
Ni	60	1	He	2.063373	1.3	7610.663
Cu	63	1	He	8.305520	0.2	82298.393
Zn	66	1	He	46.828548	0.9	104969.550
As	75	1	He	3.971619	1.5	8056.573
Se	78	2	H2	0.330081	35.5	264.333
Sr	88	1	He	782.979245	1.0	9327862.153
Mo	95	1	He	6.027903	0.2	40229.947
Pd	105	1	He	0.420711	1.7	4425.740
Ag	107	1	He	0.057650	11.6	1281.737
Cd	111	1	He	0.164049	6.2	658.440
Sn	118	1	He	0.061412	2.4	673.353
Sb	121	1	He	0.533583	1.7	7890.607
Ba	138	1	He	12.010763	1.3	391791.857
Pt	195	1	He	0.007681	79.5	277.337
Hg	202	1	He	0.018641	13.4	228.667
Tl	205	1	He	0.036995	16.3	2206.880
Pb	208	1	He	0.131122	2.7	11108.507
Bi	209	1	He	0.008704	36.2	2296.903
Th	232	1	He	0.026484	18.0	2363.570
U	238	1	He	7.162447	1.5	483760.773

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.75667470	583757.793
Sc	45	2	H2	84.75551572	4174099.250
Ge	72	1	He	95.63841938	484421.697
Ge	72	2	H2	83.23621456	1419965.980
In	115	1	He	98.13312040	5802962.170
Tb	159	1	He	102.6305613	14165538.123
Ir	193	1	He	99.83494795	7220627.603



Sample Name 10606337002\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 129SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:53:31  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	13.279994	1.1	6351.497
Be	9	2	H2	0.075086	18.8	47.500
B	11	2	H2	20.413365	1.8	11458.830
Na	23	1	He	5229.706257	0.9	5773858.247
Mg	24	1	He	3478.986970	1.1	2154260.020
Al	27	1	He	7.154807	2.5	2244.840
Si	28	2	H2	974.419824	0.7	3449431.833
K	39	1	He	715.242803	1.1	680704.363
Ca	43	1	He	9985.860222	1.3	24864.970
Ti	47	1	He	0.054243	17.7	16.000
V	51	1	He	0.129327	54.4	482.027
Cr	52	1	He	0.141036	2.3	3987.887
Mn	55	1	He	25.131085	0.5	170583.827
Fe	56	1	He	2.302651	1.0	31680.243
Co	59	1	He	0.075264	5.0	1185.387
Ni	60	1	He	0.443278	1.4	1896.793
Cu	63	1	He	0.909470	0.7	9722.583
Zn	66	1	He	5.306415	0.7	12742.273
As	75	1	He	0.380415	1.9	990.203
Se	78	2	H2	0.030853	28.0	60.333
Sr	88	1	He	76.436012	0.5	963826.367
Mo	95	1	He	0.583601	2.7	4151.287
Pd	105	1	He	0.053585	17.4	798.363
Ag	107	1	He	0.032745	18.6	818.363
Cd	111	1	He	0.026724	10.2	124.920
Sn	118	1	He	0.019120	10.3	271.670
Sb	121	1	He	0.054033	6.6	901.703
Ba	138	1	He	1.187339	0.8	41246.453
Pt	195	1	He	0.000129	1066.3	178.667
Hg	202	1	He	0.005306	59.7	143.333
Tl	205	1	He	0.012014	16.7	985.043
Pb	208	1	He	0.022114	5.5	3866.903
Bi	209	1	He	0.005004	44.3	2186.883
Th	232	1	He	0.009956	6.4	1260.073
U	238	1	He	0.704587	0.9	50342.290

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.53197185	613176.480
Sc	45	2	H2	99.09297781	4880200.667
Ge	72	1	He	101.2102969	512644.020
Ge	72	2	H2	98.95193169	1688067.837
In	115	1	He	104.2114345	6162394.610
Tb	159	1	He	106.5037850	14700138.113
Ir	193	1	He	104.6663653	7570063.013

Sample Name 10606337003\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 130SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:57:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	102.605224	0.4	49028.897
Be	9	2	H2	0.062570	9.1	41.833
B	11	2	H2	169.801067	0.5	76217.003
Na	23	1	He	48433.85587	0.8	49721960.923
Mg	24	1	He	30761.59230	0.9	17732402.653
Al	27	1	He	12.748346	0.7	3672.120
Si	28	2	H2	9300.258243	0.4	33083314.000
K	39	1	He	6777.156974	0.6	5416436.797
Ca	43	1	He	95699.92669	0.4	221837.980
Ti	47	1	He	0.253029	39.8	66.000
V	51	1	He	1.134284	2.9	7885.393
Cr	52	1	He	0.570276	1.8	7470.580
Mn	55	1	He	347.493758	0.2	2193381.417
Fe	56	1	He	26.526713	0.5	231593.867
Co	59	1	He	0.782784	1.2	10911.427
Ni	60	1	He	2.079316	0.9	7475.263
Cu	63	1	He	14.935548	0.5	144131.613
Zn	66	1	He	142.914098	0.6	311977.363
As	75	1	He	3.619623	0.8	7174.113
Se	78	2	H2	0.207757	7.2	224.333
Sr	88	1	He	748.695936	1.1	8695042.163
Mo	95	1	He	5.792523	1.8	37705.063
Pd	105	1	He	0.378440	2.0	3903.903
Ag	107	1	He	0.017495	12.9	445.010
Cd	111	1	He	0.439245	3.1	1699.653
Sn	118	1	He	0.042519	9.9	475.013
Sb	121	1	He	0.483571	1.8	6981.783
Ba	138	1	He	12.037429	0.5	383089.733
Pt	195	1	He	0.005545	16.6	240.000
Hg	202	1	He	0.011433	25.3	174.000
Tl	205	1	He	0.023600	7.5	1486.767
Pb	208	1	He	0.161740	1.5	12775.750
Bi	209	1	He	0.008497	50.6	2213.557
Th	232	1	He	0.012254	8.6	1320.077
U	238	1	He	5.810154	1.2	380061.910

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.72115428	571217.770
Sc	45	2	H2	99.93722338	4921778.667
Ge	72	1	He	93.23692922	472257.820
Ge	72	2	H2	98.58498503	1681807.920
In	115	1	He	95.72830072	5660756.587
Tb	159	1	He	99.45826974	13727683.963
Ir	193	1	He	96.64924675	6990219.690

Sample Name 10606337003\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 131SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:00:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	11.098202	0.9	5613.877
Be	9	2	H2	0.060771	23.2	42.833
B	11	2	H2	18.017498	1.0	11009.340
Na	23	1	He	5024.558751	0.8	5588727.210
Mg	24	1	He	3181.200478	1.1	1984510.593
Al	27	1	He	3.694654	4.7	1204.053
Si	28	2	H2	955.253276	0.3	3569299.333
K	39	1	He	693.329185	0.4	667036.553
Ca	43	1	He	9815.956830	0.3	24623.310
Ti	47	1	He	0.038274	10.7	11.667
V	51	1	He	0.145624	26.3	617.620
Cr	52	1	He	0.110245	3.5	3725.817
Mn	55	1	He	35.445242	0.2	242235.313
Fe	56	1	He	3.185409	0.3	39878.133
Co	59	1	He	0.090004	2.6	1418.740
Ni	60	1	He	0.406077	1.1	1769.447
Cu	63	1	He	1.598127	0.6	17062.667
Zn	66	1	He	15.246138	0.4	36576.553
As	75	1	He	0.354192	2.3	942.530
Se	78	2	H2	0.034497	52.2	67.667
Sr	88	1	He	73.921500	0.6	939587.070
Mo	95	1	He	0.568031	1.0	4053.920
Pd	105	1	He	0.045815	12.7	718.357
Ag	107	1	He	0.011507	5.9	355.010
Cd	111	1	He	0.049421	4.5	220.603
Sn	118	1	He	0.015390	25.6	233.337
Sb	121	1	He	0.053428	5.0	895.037
Ba	138	1	He	1.209909	0.7	42160.903
Pt	195	1	He	0.000388	360.6	180.667
Hg	202	1	He	0.002711	39.0	123.667
Tl	205	1	He	0.005830	19.5	655.023
Pb	208	1	He	0.024060	13.3	3963.587
Bi	209	1	He	0.002500	74.4	2003.527
Th	232	1	He	0.004678	25.3	856.703
U	238	1	He	0.580838	1.4	40931.013

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.2665661	617702.020
Sc	45	2	H2	104.5808075	5150469.167
Ge	72	1	He	102.0203356	516746.977
Ge	72	2	H2	105.0576301	1792227.837
In	115	1	He	104.5442535	6182075.390
Tb	159	1	He	105.4293778	14551843.530
Ir	193	1	He	103.0306300	7451757.390

Sample Name 10606337004\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 132SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:04:29  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	105.814580	0.6	53184.330
Be	9	2	H2	0.042409	25.1	33.667
B	11	2	H2	172.808424	0.1	81543.083
Na	23	1	He	48824.37298	0.9	53010304.210
Mg	24	1	He	31698.51432	1.0	19325350.960
Al	27	1	He	9.784590	1.6	2997.640
Si	28	2	H2	9279.632629	0.4	34723810.667
K	39	1	He	6860.769347	0.4	5798403.453
Ca	43	1	He	95418.71948	0.1	233930.027
Ti	47	1	He	0.336189	10.6	92.667
V	51	1	He	1.069882	29.2	7830.090
Cr	52	1	He	0.521545	0.9	7450.580
Mn	55	1	He	261.735991	0.3	1747290.330
Fe	56	1	He	14.384634	0.2	137810.790
Co	59	1	He	0.598108	3.4	8890.060
Ni	60	1	He	1.972454	2.4	7561.977
Cu	63	1	He	9.320179	1.2	95847.103
Zn	66	1	He	68.751465	0.1	159906.200
As	75	1	He	3.640552	0.4	7682.707
Se	78	2	H2	0.225333	8.7	253.667
Sr	88	1	He	747.855302	0.2	9249134.237
Mo	95	1	He	5.847542	1.0	39854.867
Pd	105	1	He	0.398163	1.8	4289.020
Ag	107	1	He	0.008636	12.2	280.003
Cd	111	1	He	0.216036	3.2	881.523
Sn	118	1	He	0.038506	3.6	456.677
Sb	121	1	He	0.516810	2.9	7807.237
Ba	138	1	He	11.569433	0.4	385450.983
Pt	195	1	He	0.004014	11.0	228.667
Hg	202	1	He	0.009179	5.0	166.000
Tl	205	1	He	0.016918	6.6	1208.400
Pb	208	1	He	0.090220	3.0	8421.063
Bi	209	1	He	0.000864	331.4	1863.500
Th	232	1	He	0.007307	2.9	1025.050
U	238	1	He	6.244573	1.0	426117.897

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.06045943	604111.083
Sc	45	2	H2	105.1252483	5177282.167
Ge	72	1	He	99.27916132	502862.553
Ge	72	2	H2	103.8927540	1772355.663
In	115	1	He	100.2159913	5926129.777
Tb	159	1	He	103.6285298	14303282.287
Ir	193	1	He	100.8455362	7293719.057

Sample Name 10606337004\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 133SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:08:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	11.365189	0.5	5910.320
Be	9	2	H2	0.044751	8.9	35.667
B	11	2	H2	18.776804	1.0	11674.840
Na	23	1	He	5030.188419	0.5	5784989.080
Mg	24	1	He	3274.212044	0.4	2111875.180
Al	27	1	He	4.772961	0.4	1585.757
Si	28	2	H2	950.875692	0.1	3653795.167
K	39	1	He	695.842983	0.2	691914.027
Ca	43	1	He	9647.696681	0.2	25023.553
Ti	47	1	He	0.056509	18.0	17.333
V	51	1	He	0.199786	8.9	1087.153
Cr	52	1	He	0.139086	5.1	4134.593
Mn	55	1	He	26.354843	0.3	186314.463
Fe	56	1	He	2.187198	3.7	31924.083
Co	59	1	He	0.072025	3.7	1178.720
Ni	60	1	He	0.421906	5.5	1882.793
Cu	63	1	He	1.028286	1.0	11372.467
Zn	66	1	He	7.591014	3.4	18828.220
As	75	1	He	0.363138	5.5	989.203
Se	78	2	H2	0.021656	48.6	56.333
Sr	88	1	He	74.184358	0.8	970177.460
Mo	95	1	He	0.569521	3.7	4151.947
Pd	105	1	He	0.036434	11.6	631.687
Ag	107	1	He	0.005210	22.1	221.670
Cd	111	1	He	0.028790	7.0	136.917
Sn	118	1	He	0.013991	21.9	223.333
Sb	121	1	He	0.051292	8.6	880.033
Ba	138	1	He	1.161870	0.3	41363.407
Pt	195	1	He	0.000702	72.7	189.333
Hg	202	1	He	0.004790	34.3	141.333
Tl	205	1	He	0.004426	25.4	595.023
Pb	208	1	He	0.016857	10.1	3540.207
Bi	209	1	He	0.002520	32.0	2050.193
Th	232	1	He	0.003872	19.3	815.030
U	238	1	He	0.609869	0.5	43934.180

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.6727418	638686.100
Sc	45	2	H2	107.5460328	5296502.667
Ge	72	1	He	104.9667192	531670.813
Ge	72	2	H2	107.5229805	1834285.417
In	115	1	He	106.7943314	6315130.540
Tb	159	1	He	107.7760978	14875748.530
Ir	193	1	He	105.3737014	7621221.553

Sample Name 10606337005\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 134SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:11:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	106.770532	0.4	51372.610
Be	9	2	H2	0.048399	13.8	35.167
B	11	2	H2	174.829964	0.5	78941.083
Na	23	1	He	51456.04857	0.9	54736144.187
Mg	24	1	He	32466.67287	0.9	19393080.130
Al	27	1	He	9.635191	0.5	2893.283
Si	28	2	H2	9805.724541	0.4	35124530.667
K	39	1	He	7121.281123	0.8	5893671.373
Ca	43	1	He	104078.5111	0.4	249979.237
Ti	47	1	He	0.213647	12.8	58.000
V	51	1	He	1.154822	8.5	8326.213
Cr	52	1	He	0.732504	2.2	9211.580
Mn	55	1	He	523.275101	0.5	3422080.167
Fe	56	1	He	47.685360	0.2	422848.290
Co	59	1	He	1.191029	0.4	17292.913
Ni	60	1	He	2.532843	2.2	9453.087
Cu	63	1	He	23.741431	0.3	238844.150
Zn	66	1	He	240.020264	0.5	546443.227
As	75	1	He	4.226918	0.2	8708.117
Se	78	2	H2	0.243824	3.5	260.000
Sr	88	1	He	800.987053	0.4	9703993.187
Mo	95	1	He	6.312719	0.8	42217.647
Pd	105	1	He	0.425117	1.3	4479.087
Ag	107	1	He	0.006545	18.4	231.670
Cd	111	1	He	0.690603	2.4	2737.677
Sn	118	1	He	0.043708	28.0	500.023
Sb	121	1	He	0.508096	1.5	7532.097
Ba	138	1	He	13.451290	0.5	439727.883
Pt	195	1	He	0.005524	70.2	244.667
Hg	202	1	He	0.011170	14.5	176.000
Tl	205	1	He	0.018401	10.1	1256.733
Pb	208	1	He	0.305231	2.5	22645.963
Bi	209	1	He	0.001691	119.2	1870.163
Th	232	1	He	0.008049	24.2	1053.387
U	238	1	He	7.335043	1.2	489212.090

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.06796783	591836.143
Sc	45	2	H2	100.6356512	4956175.333
Ge	72	1	He	97.25098452	492589.560
Ge	72	2	H2	99.36132768	1695051.917
In	115	1	He	98.33719020	5815029.547
Tb	159	1	He	101.4987549	14009321.040
Ir	193	1	He	98.57553709	7129539.893

Sample Name 10606337005\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 135SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:15:28  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	11.266252	1.0	5770.597
Be	9	2	H2	0.029039	18.2	27.000
B	11	2	H2	18.600973	1.3	11416.803
Na	23	1	He	5450.808576	4.6	5934015.537
Mg	24	1	He	3444.633592	4.6	2103381.217
Al	27	1	He	11.369496	5.9	3474.407
Si	28	2	H2	1003.164065	0.6	3795325.000
K	39	1	He	748.568861	5.2	699095.877
Ca	43	1	He	10833.78163	5.0	26598.080
Ti	47	1	He	0.076540	17.7	22.000
V	51	1	He	0.127877	72.9	444.933
Cr	52	1	He	0.136162	4.2	3891.193
Mn	55	1	He	54.703793	4.8	365761.560
Fe	56	1	He	6.931428	8.5	72060.060
Co	59	1	He	0.130170	3.6	1974.810
Ni	60	1	He	0.293656	7.0	1302.730
Cu	63	1	He	2.616396	5.6	27047.057
Zn	66	1	He	75.916437	4.1	176580.353
As	75	1	He	0.426519	4.7	1066.373
Se	78	2	H2	0.018800	38.8	52.667
Sr	88	1	He	80.944284	5.3	1001067.747
Mo	95	1	He	0.637516	7.2	4397.360
Pd	105	1	He	0.043431	14.5	670.023
Ag	107	1	He	0.006759	50.8	241.670
Cd	111	1	He	0.076159	10.5	321.543
Sn	118	1	He	0.026078	4.3	335.010
Sb	121	1	He	0.060720	3.4	976.713
Ba	138	1	He	1.410857	3.7	47561.480
Pt	195	1	He	0.000604	109.8	178.000
Hg	202	1	He	0.002070	22.8	115.667
Tl	205	1	He	0.002888	49.8	485.013
Pb	208	1	He	0.048548	9.1	5485.467
Bi	209	1	He	0.002501	123.6	1956.853
Th	232	1	He	0.000750	72.9	556.683
U	238	1	He	0.740698	4.1	50790.727

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.28454102	605491.560
Sc	45	2	H2	105.9140474	5216129.500
Ge	72	1	He	99.39684421	503458.633
Ge	72	2	H2	105.9161168	1806873.167
In	115	1	He	101.2821816	5989177.420
Tb	159	1	He	102.2050030	14106800.620
Ir	193	1	He	100.5667479	7273555.517

Sample Name 10606337006\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 136SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:19:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	109.636148	1.7	55261.207
Be	9	2	H2	0.036726	8.9	30.833
B	11	2	H2	176.518407	0.9	83478.110
Na	23	1	He	51191.20188	0.2	55066909.180
Mg	24	1	He	32916.90227	0.3	19883090.537
Al	27	1	He	14.846195	3.0	4469.343
Si	28	2	H2	9513.814449	1.0	35704238.667
K	39	1	He	7072.846626	0.2	5920017.827
Ca	43	1	He	99580.53113	0.5	241873.497
Ti	47	1	He	0.294866	20.9	80.667
V	51	1	He	1.186561	8.3	8663.493
Cr	52	1	He	1.008098	2.2	11843.473
Mn	55	1	He	319.324568	0.4	2111958.000
Fe	56	1	He	19.173637	0.5	178395.730
Co	59	1	He	0.744527	0.5	10920.770
Ni	60	1	He	2.369920	0.3	8934.757
Cu	63	1	He	10.680149	0.9	108466.893
Zn	66	1	He	79.037086	0.5	181583.777
As	75	1	He	4.005848	1.6	8332.233
Se	78	2	H2	0.239975	3.8	268.667
Sr	88	1	He	782.740607	0.7	9563432.360
Mo	95	1	He	6.316380	1.8	42422.910
Pd	105	1	He	0.390913	5.2	4153.983
Ag	107	1	He	0.004488	25.1	190.000
Cd	111	1	He	0.246229	3.7	988.400
Sn	118	1	He	0.024406	10.6	310.010
Sb	121	1	He	0.519225	3.2	7728.853
Ba	138	1	He	12.518318	0.6	410984.240
Pt	195	1	He	0.007201	23.3	269.333
Hg	202	1	He	0.009217	4.5	163.667
Tl	205	1	He	0.014512	9.7	1068.387
Pb	208	1	He	0.132165	3.4	11108.517
Bi	209	1	He	0.004180	11.1	2026.857
Th	232	1	He	0.006265	23.7	936.710
U	238	1	He	7.615501	1.2	511432.607

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.15160882	598512.020
Sc	45	2	H2	105.4421974	5192891.500
Ge	72	1	He	98.08048100	496791.073
Ge	72	2	H2	104.1273452	1776357.667
In	115	1	He	98.75759638	5839889.667
Tb	159	1	He	101.9983973	14078283.957
Ir	193	1	He	99.25719645	7178841.350



Sample Name 10606337006\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 137SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:22:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	11.651332	0.5	5983.017
Be	9	2	H2	0.028239	14.7	26.667
B	11	2	H2	19.119657	0.9	11689.177
Na	23	1	He	5309.247962	1.1	5945685.747
Mg	24	1	He	3412.492445	0.8	2143431.167
Al	27	1	He	3.465279	3.4	1142.043
Si	28	2	H2	969.539557	0.3	3679521.500
K	39	1	He	718.937060	1.3	693637.047
Ca	43	1	He	10100.77405	0.9	25512.417
Ti	47	1	He	0.046325	8.8	14.000
V	51	1	He	0.156226	54.1	708.560
Cr	52	1	He	0.146824	5.1	4100.583
Mn	55	1	He	32.398534	1.9	222954.857
Fe	56	1	He	2.376908	0.9	32811.390
Co	59	1	He	0.077830	3.3	1238.057
Ni	60	1	He	0.247965	10.5	1168.050
Cu	63	1	He	1.121418	1.8	12079.027
Zn	66	1	He	8.139639	1.4	19679.973
As	75	1	He	0.390390	1.7	1022.873
Se	78	2	H2	0.024010	47.2	58.000
Sr	88	1	He	77.168523	1.4	984412.483
Mo	95	1	He	0.615916	1.6	4365.347
Pd	105	1	He	0.045980	9.2	715.023
Ag	107	1	He	0.003515	61.3	178.333
Cd	111	1	He	0.025059	5.3	117.550
Sn	118	1	He	0.016469	15.1	243.333
Sb	121	1	He	0.056665	7.8	940.043
Ba	138	1	He	1.273189	0.4	44066.733
Pt	195	1	He	0.000542	196.5	182.667
Hg	202	1	He	0.001830	140.6	117.333
Tl	205	1	He	0.002298	51.3	471.680
Pb	208	1	He	0.015607	10.1	3371.857
Bi	209	1	He	-0.000735		1803.497
Th	232	1	He	0.001258	50.2	605.020
U	238	1	He	0.750863	3.0	52664.833

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.9643847	622001.000
Sc	45	2	H2	106.2268373	5231534.000
Ge	72	1	He	102.3998317	518669.177
Ge	72	2	H2	106.2184635	1812031.043
In	115	1	He	103.8585435	6141526.907
Tb	159	1	He	105.3089614	14535223.113
Ir	193	1	He	102.8168803	7436297.803

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 138\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:26:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	81.480106	2.2	40858.137
Be	9	2	H2	79.110120	2.1	40478.873
B	11	2	H2	79.021638	3.1	38731.070
Na	23	1	He	1011.745382	0.8	1176748.757
Mg	24	1	He	995.870090	0.2	645417.607
Al	27	1	He	978.248825	0.8	310155.720
Si	28	2	H2	493.011705	2.6	1853790.043
K	39	1	He	989.992964	1.1	954276.653
Ca	43	1	He	983.400712	2.0	2575.897
Ti	47	1	He	78.177577	0.6	22607.627
V	51	1	He	78.478761	0.5	650419.243
Cr	52	1	He	81.264307	0.7	800374.523
Mn	55	1	He	79.565296	0.9	563500.477
Fe	56	1	He	498.185276	0.8	4672585.833
Co	59	1	He	82.881304	0.6	1287509.627
Ni	60	1	He	83.525714	1.1	327516.160
Cu	63	1	He	84.116194	0.8	907371.250
Zn	66	1	He	81.682746	0.3	199633.717
As	75	1	He	79.017825	0.3	171158.187
Se	78	2	H2	80.508251	1.5	79725.567
Sr	88	1	He	80.133946	1.3	1041738.500
Mo	95	1	He	77.233836	1.8	559474.020
Pd	105	1	He	81.733740	1.6	888260.663
Ag	107	1	He	41.707961	2.7	931965.220
Cd	111	1	He	79.630529	1.3	340513.797
Sn	118	1	He	76.740817	1.5	822725.533
Sb	121	1	He	76.676319	1.2	1222733.837
Ba	138	1	He	77.115821	1.2	2731066.730
Pt	195	1	He	81.939180	1.0	1193989.333
Hg	202	1	He	3.795356	2.9	27079.093
Tl	205	1	He	41.573375	2.1	2190053.300
Pb	208	1	He	81.303547	1.3	5755776.763
Bi	209	1	He	78.743697	1.2	4833965.657
Th	232	1	He	75.991311	1.1	5704788.663
U	238	1	He	77.087272	1.0	5535200.543

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.9915934	640650.417
Sc	45	2	H2	104.8701079	5164716.833
Ge	72	1	He	104.3404031	528498.437
Ge	72	2	H2	105.1011983	1792971.087
In	115	1	He	106.5661885	6301639.630
Tb	159	1	He	107.2461861	14802607.697
Ir	193	1	He	106.2146777	7682045.717

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 139\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:30:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.156752	11.9	152.000
Be	9	2	H2	0.049585	51.8	37.500
B	11	2	H2	-0.001262		2874.273
Na	23	1	He	5.926018	5.6	18558.263
Mg	24	1	He	0.163559	46.2	1640.107
Al	27	1	He	0.230033	31.2	148.000
Si	28	2	H2	-0.233514		14138.817
K	39	1	He	-1.133510		75905.540
Ca	43	1	He	-0.588178		17.517
Ti	47	1	He	0.011697	17.3	4.333
V	51	1	He	0.031196	178.5	-302.790
Cr	52	1	He	-0.004944		2683.587
Mn	55	1	He	0.012657	1.9	423.343
Fe	56	1	He	0.094929	5.1	12215.777
Co	59	1	He	0.008476	16.0	181.333
Ni	60	1	He	-0.000855		211.333
Cu	63	1	He	0.011502	7.8	333.340
Zn	66	1	He	0.007568	131.3	194.667
As	75	1	He	-0.005232		183.167
Se	78	2	H2	0.005548	109.2	39.000
Sr	88	1	He	0.019161	9.2	386.677
Mo	95	1	He	0.013580	15.6	114.000
Pd	105	1	He	0.013693	34.8	378.343
Ag	107	1	He	0.179006	24.9	4052.310
Cd	111	1	He	0.006235	22.5	39.647
Sn	118	1	He	0.009275	32.4	170.000
Sb	121	1	He	0.005010	25.9	138.333
Ba	138	1	He	0.004307	23.7	275.007
Pt	195	1	He	0.003789	47.1	229.333
Hg	202	1	He	0.027956	7.1	300.000
Tl	205	1	He	0.050362	20.5	2958.693
Pb	208	1	He	0.001666	72.8	2405.107
Bi	209	1	He	0.007714	37.0	2370.253
Th	232	1	He	0.017822	1.8	1856.813
U	238	1	He	0.003374	30.5	731.693

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.0872940	628918.793
Sc	45	2	H2	105.5613342	5198758.833
Ge	72	1	He	102.5384407	519371.250
Ge	72	2	H2	104.7178383	1786431.167
In	115	1	He	105.2201511	6222043.627
Tb	159	1	He	105.4133903	14549636.863
Ir	193	1	He	105.5141368	7631378.637

Sample Name 10606337007\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 140SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:33:46  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	111.792695	0.8	53996.367
Be	9	2	H2	0.155945	9.6	88.333
B	11	2	H2	187.902326	1.2	84969.550
Na	23	1	He	47854.01952	1.0	49966684.257
Mg	24	1	He	36567.33285	0.5	21439743.013
Al	27	1	He	129.661694	0.6	37340.163
Si	28	2	H2	12980.10214	1.1	46672420.000
K	39	1	He	7176.680623	0.7	5829552.623
Ca	43	1	He	129558.9125	0.8	305444.220
Ti	47	1	He	1.005656	2.8	264.667
V	51	1	He	0.753934	3.4	5156.557
Cr	52	1	He	0.668652	2.0	8474.463
Mn	55	1	He	5227.958609	0.2	33557387.333
Fe	56	1	He	2802.498234	0.3	23788456.667
Co	59	1	He	15.095521	0.6	215076.040
Ni	60	1	He	9.527526	0.5	34435.197
Cu	63	1	He	720.518823	0.6	7125782.167
Zn	66	1	He	3651.871398	0.3	8177300.500
As	75	1	He	19.690195	0.3	39246.997
Se	78	2	H2	0.268637	8.5	283.333
Sr	88	1	He	1052.440843	0.6	12544507.727
Mo	95	1	He	6.264594	1.9	40959.267
Pd	105	1	He	0.567051	5.6	5769.563
Ag	107	1	He	0.118442	4.9	2481.907
Cd	111	1	He	16.625674	0.6	64154.977
Sn	118	1	He	0.053861	3.4	586.687
Sb	121	1	He	0.465262	3.2	6748.347
Ba	138	1	He	31.829527	1.0	1017112.200
Pt	195	1	He	0.014775	27.9	367.343
Hg	202	1	He	0.077103	8.5	611.350
Tl	205	1	He	0.032511	5.3	1935.160
Pb	208	1	He	19.637253	0.4	1300687.407
Bi	209	1	He	0.023812	13.9	3117.093
Th	232	1	He	0.054312	24.6	4251.573
U	238	1	He	14.869658	0.7	987352.613

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.30159173	580954.210
Sc	45	2	H2	101.0262639	4975412.500
Ge	72	1	He	95.68124942	484638.637
Ge	72	2	H2	99.40952436	1695874.127
In	115	1	He	96.14352947	5685310.547
Tb	159	1	He	100.2115112	13831649.793
Ir	193	1	He	98.18086960	7100995.310

Sample Name 10606337007\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 141SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:37:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	11.942418	1.1	6066.047
Be	9	2	H2	0.046008	23.8	35.500
B	11	2	H2	20.009396	0.7	11971.230
Na	23	1	He	5034.054705	2.8	5545080.750
Mg	24	1	He	3837.749966	2.7	2370663.767
Al	27	1	He	19.425395	2.3	5954.523
Si	28	2	H2	1333.772768	0.3	5002846.833
K	39	1	He	743.700459	2.3	703221.503
Ca	43	1	He	13281.47297	2.8	32987.227
Ti	47	1	He	0.107673	16.0	30.667
V	51	1	He	0.104854	53.5	284.173
Cr	52	1	He	0.115807	7.0	3742.487
Mn	55	1	He	545.474953	2.8	3687014.083
Fe	56	1	He	292.787605	2.8	2626778.500
Co	59	1	He	1.596270	3.0	23982.343
Ni	60	1	He	1.125743	3.4	4468.027
Cu	63	1	He	76.434014	2.8	795795.020
Zn	66	1	He	380.553914	3.6	896895.397
As	75	1	He	1.999890	4.3	4365.830
Se	78	2	H2	0.031740	7.6	65.333
Sr	88	1	He	106.324259	3.2	1333893.363
Mo	95	1	He	0.631813	3.5	4470.713
Pd	105	1	He	0.058084	15.5	843.370
Ag	107	1	He	0.037085	15.0	906.703
Cd	111	1	He	1.692635	3.1	7057.633
Sn	118	1	He	0.012824	9.5	205.000
Sb	121	1	He	0.051025	6.4	850.037
Ba	138	1	He	3.218810	2.8	111065.463
Pt	195	1	He	0.000905	161.0	188.667
Hg	202	1	He	0.010370	18.2	177.333
Tl	205	1	He	0.006957	16.5	713.357
Pb	208	1	He	2.032018	2.5	143799.503
Bi	209	1	He	0.004273	106.5	2126.870
Th	232	1	He	0.008355	13.9	1135.063
U	238	1	He	1.481000	3.7	104671.397

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.33797337	611981.333
Sc	45	2	H2	105.1069974	5176383.333
Ge	72	1	He	100.7596530	510361.447
Ge	72	2	H2	105.6024396	1801522.000
In	115	1	He	103.7622669	6135833.727
Tb	159	1	He	105.5793481	14572543.117
Ir	193	1	He	104.1349437	7531627.597

Sample Name 10606337008\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 142SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:41:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	107.393329	0.1	54776.493
Be	9	2	H2	0.172619	6.2	102.000
B	11	2	H2	188.149373	0.5	89842.350
Na	23	1	He	50090.12365	0.3	54799115.847
Mg	24	1	He	35719.25282	0.6	21942644.673
Al	27	1	He	163.528016	0.6	49322.033
Si	28	2	H2	12790.04179	0.2	48564330.667
K	39	1	He	7388.869033	0.2	6286356.990
Ca	43	1	He	128549.8056	0.2	317539.403
Ti	47	1	He	2.334230	2.9	642.347
V	51	1	He	0.983771	3.6	7214.260
Cr	52	1	He	0.621736	3.1	8441.120
Mn	55	1	He	4805.172229	0.8	32315974.000
Fe	56	1	He	2830.229476	0.8	25170628.667
Co	59	1	He	13.255808	0.8	196789.640
Ni	60	1	He	8.509415	0.5	32066.467
Cu	63	1	He	780.567903	0.6	8043079.167
Zn	66	1	He	3618.818410	0.2	8442796.333
As	75	1	He	34.118357	0.8	70717.013
Se	78	2	H2	0.241426	11.5	272.000
Sr	88	1	He	1028.548189	0.6	12773336.060
Mo	95	1	He	6.326956	0.2	43148.377
Pd	105	1	He	0.550176	1.8	5846.257
Ag	107	1	He	0.079951	7.0	1780.130
Cd	111	1	He	16.611875	0.8	66862.047
Sn	118	1	He	0.042272	2.9	495.010
Sb	121	1	He	0.527817	2.0	7977.343
Ba	138	1	He	29.774093	0.8	992399.387
Pt	195	1	He	0.012790	68.6	356.700
Hg	202	1	He	0.085471	5.5	699.020
Tl	205	1	He	0.019624	6.3	1363.417
Pb	208	1	He	19.857731	1.0	1378009.397
Bi	209	1	He	0.027764	6.7	3477.200
Th	232	1	He	0.057735	8.3	4677.543
U	238	1	He	14.692439	0.6	1014931.027

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.80414046	608692.603
Sc	45	2	H2	106.6840169	5254049.500
Ge	72	1	He	99.69019594	504944.500
Ge	72	2	H2	104.8404630	1788523.080
In	115	1	He	100.2797145	5929897.953
Tb	159	1	He	104.9897066	14491158.113
Ir	193	1	He	102.1397952	7387327.183

Sample Name 10606337008\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 143SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:44:45  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	12.008829	0.4	6147.413
Be	9	2	H2	0.047709	8.9	36.667
B	11	2	H2	20.594934	0.5	12334.353
Na	23	1	He	5247.664103	0.1	5900227.207
Mg	24	1	He	3762.944334	0.4	2372863.713
Al	27	1	He	21.714944	1.3	6785.243
Si	28	2	H2	1340.923410	0.5	5069300.500
K	39	1	He	761.500085	0.1	733131.030
Ca	43	1	He	13162.55046	0.6	33373.477
Ti	47	1	He	0.239998	14.8	68.667
V	51	1	He	0.158153	32.5	724.030
Cr	52	1	He	0.130352	7.4	3958.547
Mn	55	1	He	499.070245	0.2	3443609.917
Fe	56	1	He	294.066464	0.1	2693127.750
Co	59	1	He	1.390639	0.8	21362.290
Ni	60	1	He	0.983476	3.4	4017.230
Cu	63	1	He	81.646331	0.3	868864.750
Zn	66	1	He	374.782315	0.2	903005.750
As	75	1	He	3.423500	0.5	7502.113
Se	78	2	H2	0.029756	13.7	63.667
Sr	88	1	He	102.290605	1.2	1311740.217
Mo	95	1	He	0.635961	4.6	4580.080
Pd	105	1	He	0.056789	10.6	843.367
Ag	107	1	He	0.022047	12.4	591.687
Cd	111	1	He	1.668461	0.3	7079.953
Sn	118	1	He	0.015966	10.3	241.667
Sb	121	1	He	0.053523	5.6	905.037
Ba	138	1	He	2.977984	0.8	104582.563
Pt	195	1	He	0.000591	75.5	186.667
Hg	202	1	He	0.010523	30.8	181.333
Tl	205	1	He	0.004802	2.8	611.687
Pb	208	1	He	2.078951	1.1	149384.897
Bi	209	1	He	0.004183	6.0	2163.557
Th	232	1	He	0.010584	48.9	1321.980
U	238	1	He	1.477379	0.6	106316.693

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.3630402	624456.957
Sc	45	2	H2	105.9365387	5217237.167
Ge	72	1	He	102.9350670	521380.217
Ge	72	2	H2	106.0808930	1809684.163
In	115	1	He	105.5447301	6241237.143
Tb	159	1	He	107.1926630	14795220.197
Ir	193	1	He	105.9587520	7663535.720

Sample Name 10606337009\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 144SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:48:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	36.637223	0.4	19607.140
Be	9	2	H2	0.108953	3.8	72.000
B	11	2	H2	209.899617	0.4	104535.113
Na	23	1	He	42073.93714	0.3	47452357.627
Mg	24	1	He	49655.75921	0.4	31444767.030
Al	27	1	He	84.574983	0.8	26332.810
Si	28	2	H2	9665.653955	0.6	38410717.333
K	39	1	He	6362.540298	0.8	5590767.627
Ca	43	1	He	177922.6148	0.6	453047.263
Ti	47	1	He	5.529818	4.3	1567.083
V	51	1	He	0.864588	6.5	6469.853
Cr	52	1	He	0.804756	4.4	10463.837
Mn	55	1	He	4152.786127	1.1	28789477.333
Fe	56	1	He	145.113572	1.0	1341091.623
Co	59	1	He	0.211464	1.5	3265.040
Ni	60	1	He	1.152301	0.6	4630.750
Cu	63	1	He	15.166211	1.7	160203.323
Zn	66	1	He	923.556575	0.9	2206182.750
As	75	1	He	57.901471	1.0	122738.190
Se	78	2	H2	0.066412	11.3	103.667
Sr	88	1	He	1520.312939	0.4	19331140.960
Mo	95	1	He	1.314230	0.8	9062.903
Pd	105	1	He	0.827019	1.8	8761.133
Ag	107	1	He	0.013128	9.6	378.343
Cd	111	1	He	3.156020	0.6	12836.870
Sn	118	1	He	0.035429	9.0	430.010
Sb	121	1	He	0.093667	3.7	1476.757
Ba	138	1	He	34.620714	0.7	1165170.737
Pt	195	1	He	0.004580	29.9	242.000
Hg	202	1	He	0.011339	17.5	185.000
Tl	205	1	He	0.009731	19.4	861.703
Pb	208	1	He	0.834676	1.4	60702.650
Bi	209	1	He	0.004361	35.9	2130.207
Th	232	1	He	0.035096	0.3	3093.730
U	238	1	He	21.185197	1.0	1486934.977

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.8558198	627492.773
Sc	45	2	H2	111.6453252	5498387.500
Ge	72	1	He	102.0716728	517007.007
Ge	72	2	H2	109.6445777	1870478.747
In	115	1	He	101.2600468	5987868.507
Tb	159	1	He	106.0381704	14635871.867
Ir	193	1	He	103.7967136	7507164.887



Sample Name 10606337009\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 145SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:52:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.121349	30.8	2252.337
Be	9	2	H2	0.056167	47.2	34.500
B	11	2	H2	29.925619	35.2	14070.693
Na	23	1	He	4685.847715	8.7	5142611.280
Mg	24	1	He	5565.666846	9.0	3423601.927
Al	27	1	He	17.595359	9.3	5377.970
Si	28	2	H2	1229.510962	28.6	3940937.667
K	39	1	He	700.714964	9.9	664236.787
Ca	43	1	He	19353.22935	8.9	47871.637
Ti	47	1	He	0.592064	21.5	163.000
V	51	1	He	0.145793	40.9	632.817
Cr	52	1	He	0.147091	21.0	4023.233
Mn	55	1	He	460.563415	9.0	3100732.500
Fe	56	1	He	16.581324	9.7	158539.563
Co	59	1	He	0.027649	16.2	466.010
Ni	60	1	He	0.210521	9.3	1012.040
Cu	63	1	He	1.722454	9.7	18202.043
Zn	66	1	He	101.506125	9.0	240342.887
As	75	1	He	6.117045	8.7	13018.340
Se	78	2	H2	0.011052	45.5	39.667
Sr	88	1	He	162.991987	9.0	2052890.903
Mo	95	1	He	0.143993	6.6	1022.040
Pd	105	1	He	0.085707	14.8	1120.053
Ag	107	1	He	0.010247	36.6	318.340
Cd	111	1	He	0.343868	12.5	1425.557
Sn	118	1	He	0.013460	21.3	208.333
Sb	121	1	He	0.007264	22.1	171.667
Ba	138	1	He	3.653175	8.6	124660.490
Pt	195	1	He	-0.001583		152.667
Hg	202	1	He	0.003564	68.1	128.667
Tl	205	1	He	0.001991	46.3	453.347
Pb	208	1	He	0.094430	6.0	8779.480
Bi	209	1	He	0.004607	88.3	2113.540
Th	232	1	He	0.005994	2.4	950.047
U	238	1	He	2.247609	7.7	156113.117

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.37823245	612229.353
Sc	45	2	H2	94.09374297	4633994.833
Ge	72	1	He	101.6061651	514649.147
Ge	72	2	H2	94.51572321	1612388.457
In	115	1	He	103.0814135	6095572.430
Tb	159	1	He	104.7497162	14458033.537
Ir	193	1	He	102.8849405	7441220.307

Sample Name 10606337010\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 146SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:55:43  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	55.017152	0.4	29640.697
Be	9	2	H2	0.071462	12.0	52.000
B	11	2	H2	175.426472	0.2	88571.173
Na	23	1	He	45999.51927	1.7	52740265.880
Mg	24	1	He	38841.13498	1.7	25006107.127
Al	27	1	He	64.315517	2.9	20372.700
Si	28	2	H2	10487.27354	0.1	42009121.333
K	39	1	He	6060.762814	1.4	5418178.250
Ca	43	1	He	136477.2937	1.3	353334.343
Ti	47	1	He	1.423271	4.0	410.677
V	51	1	He	1.218446	7.9	9488.400
Cr	52	1	He	0.513673	3.8	7791.423
Mn	55	1	He	3631.774411	1.6	25597396.000
Fe	56	1	He	243.893445	2.0	2283586.667
Co	59	1	He	0.697214	2.4	10826.707
Ni	60	1	He	1.515603	2.5	6125.970
Cu	63	1	He	164.046669	0.7	1760608.750
Zn	66	1	He	1517.083845	1.2	3685984.750
As	75	1	He	37.555074	0.7	81047.853
Se	78	2	H2	0.138593	9.4	179.000
Sr	88	1	He	1111.769759	1.6	14378268.537
Mo	95	1	He	4.059378	1.1	28787.690
Pd	105	1	He	0.589430	2.4	6498.210
Ag	107	1	He	0.068340	10.0	1598.437
Cd	111	1	He	6.297080	0.9	26359.027
Sn	118	1	He	0.042141	24.2	513.350
Sb	121	1	He	0.775601	0.9	12160.363
Ba	138	1	He	33.591684	1.2	1164001.727
Pt	195	1	He	0.006483	31.8	274.000
Hg	202	1	He	0.147254	3.4	1160.053
Tl	205	1	He	0.011467	17.3	968.377
Pb	208	1	He	45.360965	1.6	3231311.643
Bi	209	1	He	0.057992	4.6	5411.220
Th	232	1	He	0.028305	7.3	2626.953
U	238	1	He	17.399839	1.2	1236153.237

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.5720016	638065.480
Sc	45	2	H2	112.5409596	5542496.333
Ge	72	1	He	103.8307052	525916.747
Ge	72	2	H2	110.1701682	1879445.043
In	115	1	He	104.2707342	6165901.217
Tb	159	1	He	107.8813327	14890273.530
Ir	193	1	He	105.0523913	7597982.597

Sample Name 10606337010\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 147SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:59:22  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	6.035783	0.3	3233.513
Be	9	2	H2	0.032574	26.0	29.833
B	11	2	H2	19.274124	0.7	12130.690
Na	23	1	He	4791.464597	0.5	5553441.793
Mg	24	1	He	4048.167327	0.6	2630782.773
Al	27	1	He	8.935246	1.3	2923.293
Si	28	2	H2	1075.890285	0.6	4209946.500
K	39	1	He	622.085197	0.2	631671.203
Ca	43	1	He	14014.44460	0.4	36620.007
Ti	47	1	He	0.169705	3.4	50.333
V	51	1	He	0.147150	51.6	655.497
Cr	52	1	He	0.074947	15.3	3533.770
Mn	55	1	He	376.464108	1.0	2677273.333
Fe	56	1	He	25.381853	0.5	250182.520
Co	59	1	He	0.073387	6.2	1215.390
Ni	60	1	He	0.252518	1.9	1230.720
Cu	63	1	He	16.936105	0.5	186317.827
Zn	66	1	He	155.498296	1.0	387048.417
As	75	1	He	3.763720	0.4	8498.323
Se	78	2	H2	0.014113	60.2	49.667
Sr	88	1	He	110.020404	0.2	1457208.623
Mo	95	1	He	0.398411	2.1	2957.650
Pd	105	1	He	0.049183	3.9	783.363
Ag	107	1	He	0.016247	8.2	476.677
Cd	111	1	He	0.648041	1.0	2836.760
Sn	118	1	He	0.009679	28.7	180.000
Sb	121	1	He	0.076264	7.4	1300.073
Ba	138	1	He	3.369288	0.2	121687.830
Pt	195	1	He	0.001520	128.2	206.667
Hg	202	1	He	0.018543	19.7	246.000
Tl	205	1	He	0.002135	26.7	486.680
Pb	208	1	He	4.703049	0.4	345943.817
Bi	209	1	He	0.006845	26.2	2403.597
Th	232	1	He	0.004626	22.4	905.043
U	238	1	He	1.723520	1.0	128042.990

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	104.4692797	643593.250
Sc	45	2	H2	109.5719000	5396274.000
Ge	72	1	He	106.3117095	538483.373
Ge	72	2	H2	109.7575843	1872406.580
In	115	1	He	108.5594141	6419506.183
Tb	159	1	He	110.6975917	15278986.437
Ir	193	1	He	109.4613647	7916864.467

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 148\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:03:02  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.181358	1.0	42648.397
Be	9	2	H2	81.183617	1.5	42472.143
B	11	2	H2	80.082578	1.3	40099.120
Na	23	1	He	1025.310831	1.2	1209070.840
Mg	24	1	He	1007.804020	1.1	662258.023
Al	27	1	He	992.644354	1.3	319116.783
Si	28	2	H2	502.549397	1.2	1931957.417
K	39	1	He	1005.005627	0.8	981123.840
Ca	43	1	He	1017.487949	3.5	2701.543
Ti	47	1	He	80.101692	1.0	23489.343
V	51	1	He	79.874094	1.1	671249.440
Cr	52	1	He	82.684599	1.3	825724.583
Mn	55	1	He	80.751835	0.9	579928.560
Fe	56	1	He	505.841692	1.6	4810651.667
Co	59	1	He	83.456544	0.7	1326560.997
Ni	60	1	He	84.346407	1.0	338410.947
Cu	63	1	He	85.070508	0.6	939006.397
Zn	66	1	He	82.297494	0.9	205806.020
As	75	1	He	79.710332	1.1	176657.263
Se	78	2	H2	81.535347	0.2	82033.360
Sr	88	1	He	80.481368	0.7	1070532.170
Mo	95	1	He	78.047592	0.3	575324.417
Pd	105	1	He	83.091266	0.3	918883.817
Ag	107	1	He	42.675827	2.0	970316.367
Cd	111	1	He	80.379220	0.7	349747.860
Sn	118	1	He	77.486119	0.3	845318.477
Sb	121	1	He	77.594552	0.3	1259112.610
Ba	138	1	He	78.375735	0.5	2824408.813
Pt	195	1	He	83.273160	0.6	1241733.707
Hg	202	1	He	3.926461	1.3	28666.063
Tl	205	1	He	42.114916	1.3	2270371.633
Pb	208	1	He	82.762912	1.6	5995590.373
Bi	209	1	He	79.053458	2.2	5007081.280
Th	232	1	He	75.906273	1.8	5879483.873
U	238	1	He	77.750902	0.4	5760804.493

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	105.4476138	649620.373
Sc	45	2	H2	107.2055771	5279735.667
Ge	72	1	He	106.7690561	540799.897
Ge	72	2	H2	106.7662186	1821375.457
In	115	1	He	108.4298474	6411844.447
Tb	159	1	He	109.7492550	15148092.690
Ir	193	1	He	109.5970272	7926676.340

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 149\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:06:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.150358	3.7	150.333
Be	9	2	H2	0.034433	19.7	30.000
B	11	2	H2	-0.425051		2708.247
Na	23	1	He	5.720529	0.9	18466.487
Mg	24	1	He	0.464484	48.6	1845.130
Al	27	1	He	0.192681	26.1	137.333
Si	28	2	H2	0.037836	1095.1	15318.413
K	39	1	He	-0.762269		76805.247
Ca	43	1	He	0.577216	284.5	20.617
Ti	47	1	He	0.006912	182.3	3.000
V	51	1	He	0.079918	114.6	95.400
Cr	52	1	He	-0.006767		2686.257
Mn	55	1	He	0.261540	7.5	2168.833
Fe	56	1	He	0.104128	22.8	12393.263
Co	59	1	He	0.008601	51.6	185.333
Ni	60	1	He	-0.001413		212.000
Cu	63	1	He	0.021901	5.4	449.343
Zn	66	1	He	0.071497	5.9	352.677
As	75	1	He	-0.014910		164.667
Se	78	2	H2	-0.002026		32.000
Sr	88	1	He	0.028977	25.7	518.347
Mo	95	1	He	0.012229	43.5	106.000
Pd	105	1	He	0.018934	14.4	441.677
Ag	107	1	He	0.194434	26.9	4462.440
Cd	111	1	He	0.008035	48.9	47.980
Sn	118	1	He	0.013050	21.1	213.333
Sb	121	1	He	0.004444	15.9	131.667
Ba	138	1	He	0.006148	35.9	345.010
Pt	195	1	He	0.004865	67.0	251.333
Hg	202	1	He	0.023929	12.9	279.333
Tl	205	1	He	0.056494	36.3	3363.823
Pb	208	1	He	0.002794	83.7	2551.790
Bi	209	1	He	0.007412	107.5	2430.270
Th	232	1	He	0.020036	18.0	2091.857
U	238	1	He	0.005604	48.3	920.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.8588474	633672.023
Sc	45	2	H2	106.6439718	5252077.333
Ge	72	1	He	103.8918999	526226.707
Ge	72	2	H2	106.4062011	1815233.747
In	115	1	He	106.9675082	6325371.100
Tb	159	1	He	108.3340359	14952757.697
Ir	193	1	He	109.2297790	7900114.880

Sample Name 10606337011\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 150SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:10:21  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	42.394302	0.8	21773.760
Be	9	2	H2	0.089913	9.4	59.167
B	11	2	H2	118.041334	0.2	57729.007
Na	23	1	He	63237.92702	0.4	68688367.310
Mg	24	1	He	23229.97955	0.5	14169398.123
Al	27	1	He	206.285591	0.5	61756.973
Si	28	2	H2	14046.12889	0.1	53593236.000
K	39	1	He	6231.871954	0.1	5276003.153
Ca	43	1	He	102268.8394	0.2	250839.517
Ti	47	1	He	7.337589	3.2	2002.807
V	51	1	He	1.710974	0.1	12854.120
Cr	52	1	He	0.614215	1.1	8312.370
Mn	55	1	He	3270.242089	0.3	21837683.333
Fe	56	1	He	1095.142836	0.8	9677439.333
Co	59	1	He	0.988726	1.1	14583.970
Ni	60	1	He	2.040999	1.0	7775.417
Cu	63	1	He	977.945237	0.7	9980750.667
Zn	66	1	He	2459.930448	0.4	5684295.833
As	75	1	He	18.752286	1.0	38579.890
Se	78	2	H2	0.289453	7.0	320.333
Sr	88	1	He	683.471974	0.6	8406748.207
Mo	95	1	He	6.316215	0.9	42823.403
Pd	105	1	He	0.368586	4.0	3967.260
Ag	107	1	He	0.203771	4.3	4359.040
Cd	111	1	He	14.539158	0.5	58180.250
Sn	118	1	He	0.039877	9.6	468.343
Sb	121	1	He	0.310583	5.2	4690.827
Ba	138	1	He	23.177000	0.4	768039.490
Pt	195	1	He	0.013218	4.1	356.010
Hg	202	1	He	0.212797	3.4	1554.093
Tl	205	1	He	0.042408	3.6	2488.590
Pb	208	1	He	13.106363	1.0	892663.170
Bi	209	1	He	0.239035	2.7	15783.000
Th	232	1	He	0.192391	2.2	14254.547
U	238	1	He	15.185871	0.8	1038575.377

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.10440538	604381.817
Sc	45	2	H2	107.2071406	5279812.667
Ge	72	1	He	98.74056647	500134.497
Ge	72	2	H2	105.1651825	1794062.623
In	115	1	He	99.69695518	5895437.310
Tb	159	1	He	102.9695650	14212328.953
Ir	193	1	He	101.1172615	7313371.767

Sample Name 4308555\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 151SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:14:01  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	141.385297	0.6	73501.160
Be	9	2	H2	98.240198	0.3	52149.373
B	11	2	H2	222.762917	0.4	107902.877
Na	23	1	He	68001.92725	1.0	76379360.530
Mg	24	1	He	26228.48028	0.6	16543684.337
Al	27	1	He	2201.642928	0.6	680847.023
Si	28	2	H2	15208.43638	0.8	58872041.333
K	39	1	He	8555.430505	0.6	7461375.513
Ca	43	1	He	109843.5941	0.7	278586.430
Ti	47	1	He	110.811374	0.5	31261.387
V	51	1	He	104.435276	1.0	844529.333
Cr	52	1	He	104.409629	1.4	1002400.143
Mn	55	1	He	3529.159344	0.8	24369208.000
Fe	56	1	He	3178.603970	0.8	29023756.000
Co	59	1	He	105.543156	0.6	1602159.460
Ni	60	1	He	105.490899	0.8	404149.397
Cu	63	1	He	1119.235409	0.7	11795586.000
Zn	66	1	He	2663.390696	0.8	6355405.500
As	75	1	He	123.650866	0.5	261626.380
Se	78	2	H2	103.923269	1.0	104233.547
Sr	88	1	He	813.756518	0.7	10336184.847
Mo	95	1	He	110.535328	0.2	766079.063
Pd	105	1	He	20.094461	0.5	209100.633
Ag	107	1	He	52.259418	0.7	1117335.063
Cd	111	1	He	117.064695	0.6	478905.430
Sn	118	1	He	101.072883	0.6	1036676.287
Sb	121	1	He	101.629307	0.7	1550429.717
Ba	138	1	He	125.979765	0.5	4268317.957
Pt	195	1	He	20.335220	1.0	294117.330
Hg	202	1	He	0.229795	3.6	1726.117
Tl	205	1	He	102.931793	0.7	5379396.170
Pb	208	1	He	114.297412	0.6	8027035.717
Bi	209	1	He	97.668732	0.7	5862912.620
Th	232	1	He	102.955052	0.1	7558316.553
U	238	1	He	117.529291	0.9	8253034.043

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.4460852	624968.563
Sc	45	2	H2	108.7702647	5356794.500
Ge	72	1	He	101.9674828	516479.270
Ge	72	2	H2	106.4391937	1815796.583
In	115	1	He	101.9477858	6028536.973
Tb	159	1	He	106.3985078	14685607.280
Ir	193	1	He	103.8658281	7512163.637

Sample Name 10606337011\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 152SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:17:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.786127	1.3	2467.200
Be	9	2	H2	0.069016	23.3	47.167
B	11	2	H2	13.126086	0.5	8811.733
Na	23	1	He	6579.937400	0.2	7422264.263
Mg	24	1	He	2430.685746	0.8	1538942.320
Al	27	1	He	23.837265	0.6	7467.877
Si	28	2	H2	1435.043609	0.5	5365623.000
K	39	1	He	642.075867	0.3	632431.930
Ca	43	1	He	10467.46989	1.1	26639.583
Ti	47	1	He	0.731736	1.4	208.000
V	51	1	He	0.229207	8.5	1305.863
Cr	52	1	He	0.090435	8.9	3590.457
Mn	55	1	He	340.569348	0.0	2358637.250
Fe	56	1	He	113.635028	0.3	1051410.980
Co	59	1	He	0.118480	4.0	1880.127
Ni	60	1	He	0.378414	3.7	1690.103
Cu	63	1	He	101.145984	0.4	1083706.333
Zn	66	1	He	250.553570	0.4	607867.917
As	75	1	He	1.874312	1.2	4224.123
Se	78	2	H2	0.027631	7.2	60.667
Sr	88	1	He	68.160630	0.8	880101.603
Mo	95	1	He	0.644185	1.2	4668.110
Pd	105	1	He	0.044749	6.3	718.353
Ag	107	1	He	0.263382	31.2	5966.403
Cd	111	1	He	1.484200	1.6	6338.590
Sn	118	1	He	0.025196	15.9	341.677
Sb	121	1	He	0.037651	5.6	658.353
Ba	138	1	He	2.326233	0.9	82231.160
Pt	195	1	He	0.002214	153.5	211.333
Hg	202	1	He	0.028653	4.2	311.667
Tl	205	1	He	0.038137	26.2	2378.577
Pb	208	1	He	1.360490	1.0	99070.973
Bi	209	1	He	0.033246	11.7	3953.983
Th	232	1	He	0.056506	9.4	4774.253
U	238	1	He	1.518296	0.6	109573.287

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.7325428	626733.313
Sc	45	2	H2	104.7968538	5161109.167
Ge	72	1	He	103.6400910	524951.260
Ge	72	2	H2	104.5836532	1784142.040
In	115	1	He	106.2035134	6280193.357
Tb	159	1	He	107.7488593	14871988.947
Ir	193	1	He	106.2772910	7686574.260



Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 153\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:21:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.090966	1.2	41490.187
Be	9	2	H2	79.577117	1.1	41040.553
B	11	2	H2	78.246345	1.2	38687.793
Na	23	1	He	1022.667223	0.6	1175850.293
Mg	24	1	He	1002.659225	1.4	642387.270
Al	27	1	He	988.412397	0.9	309805.157
Si	28	2	H2	492.318502	0.8	1866051.583
K	39	1	He	996.544677	0.5	949176.783
Ca	43	1	He	1019.349971	1.4	2639.077
Ti	47	1	He	79.122396	1.1	22620.320
V	51	1	He	79.114212	0.7	648207.077
Cr	52	1	He	81.731521	0.7	795790.290
Mn	55	1	He	80.800924	0.5	565748.457
Fe	56	1	He	502.091615	1.0	4655529.167
Co	59	1	He	82.895655	0.6	1283521.373
Ni	60	1	He	83.915464	0.5	327966.687
Cu	63	1	He	83.950579	0.6	902634.917
Zn	66	1	He	81.243492	0.5	197913.733
As	75	1	He	78.710458	1.1	169933.740
Se	78	2	H2	80.352471	1.1	79712.237
Sr	88	1	He	80.099946	0.7	1037872.693
Mo	95	1	He	77.339026	1.0	557032.250
Pd	105	1	He	82.593786	0.8	892459.310
Ag	107	1	He	42.129555	2.3	936001.860
Cd	111	1	He	79.942346	0.4	339886.703
Sn	118	1	He	76.968569	1.3	820410.873
Sb	121	1	He	77.478169	1.2	1228376.597
Ba	138	1	He	77.742715	0.5	2737462.563
Pt	195	1	He	81.600891	0.5	1193218.080
Hg	202	1	He	3.858457	1.9	27625.560
Tl	205	1	He	41.831781	0.2	2211478.613
Pb	208	1	He	81.403014	1.0	5783038.900
Bi	209	1	He	78.681487	1.3	4860348.887
Th	232	1	He	75.819397	1.3	5727572.623
U	238	1	He	77.244082	1.1	5581135.753

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.8072728	633354.293
Sc	45	2	H2	105.6778449	5204496.833
Ge	72	1	He	104.0013573	526781.123
Ge	72	2	H2	105.2623160	1795719.670
In	115	1	He	105.9475733	6265058.707
Tb	159	1	He	107.6186500	14854016.863
Ir	193	1	He	106.8812405	7730255.303

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 154\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:25:00  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.268170	42.0	159.833
Be	9	2	H2	0.078793	33.3	40.500
B	11	2	H2	1.510734	160.5	2716.747
Na	23	1	He	7.054870	6.5	19726.453
Mg	24	1	He	0.006079	2309.8	1531.757
Al	27	1	He	0.159802	19.0	125.333
Si	28	2	H2	1.046596	153.5	14415.097
K	39	1	He	-2.498178		74304.050
Ca	43	1	He	1.209617	193.3	21.950
Ti	47	1	He	0.014166	87.1	5.000
V	51	1	He	0.046427	95.3	-177.063
Cr	52	1	He	-0.015026		2572.233
Mn	55	1	He	0.295141	4.6	2372.867
Fe	56	1	He	0.130321	2.7	12471.333
Co	59	1	He	0.009560	17.0	198.000
Ni	60	1	He	-0.003860		200.000
Cu	63	1	He	0.029819	8.8	528.010
Zn	66	1	He	0.088866	17.7	390.010
As	75	1	He	-0.017343		157.500
Se	78	2	H2	0.020438	90.6	41.000
Sr	88	1	He	0.025787	17.4	471.677
Mo	95	1	He	0.013738	34.7	116.000
Pd	105	1	He	0.014794	20.7	393.343
Ag	107	1	He	0.187580	25.1	4274.043
Cd	111	1	He	0.006550	30.5	41.313
Sn	118	1	He	0.010238	45.2	181.667
Sb	121	1	He	0.004841	96.4	136.667
Ba	138	1	He	0.005429	30.1	316.677
Pt	195	1	He	0.002264	72.7	211.333
Hg	202	1	He	0.027922	17.4	305.333
Tl	205	1	He	0.054968	27.6	3255.447
Pb	208	1	He	0.002055	126.8	2478.443
Bi	209	1	He	0.005283	101.3	2260.233
Th	232	1	He	0.019636	7.5	2028.513
U	238	1	He	0.006697	34.1	985.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.5196511	625421.773
Sc	45	2	H2	85.13518054	4192797.250
Ge	72	1	He	102.6449735	519910.853
Ge	72	2	H2	84.98759747	1449843.650
In	115	1	He	106.0389969	6270464.910
Tb	159	1	He	107.4317901	14828225.613
Ir	193	1	He	107.4905535	7774324.260

Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 155CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:28:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.656944	8.7	399.343
Be	9	2	H2	0.244716	16.2	136.333
B	11	2	H2	9.481915	2.1	7126.013
Na	23	1	He	58.919126	0.4	78171.353
Mg	24	1	He	30.547597	1.2	20849.673
Al	27	1	He	31.052059	1.6	9704.160
Si	28	2	H2	99.128668	0.6	382828.803
K	39	1	He	101.843247	1.2	164768.733
Ca	43	1	He	102.084025	5.4	278.583
Ti	47	1	He	0.962796	5.1	273.333
V	51	1	He	0.942614	11.1	7096.117
Cr	52	1	He	2.047745	1.0	22381.713
Mn	55	1	He	0.756308	4.1	5570.407
Fe	56	1	He	51.393534	0.9	481676.540
Co	59	1	He	0.542435	0.9	8327.727
Ni	60	1	He	0.551614	1.9	2337.530
Cu	63	1	He	1.114524	1.2	12016.983
Zn	66	1	He	5.314074	2.2	12921.763
As	75	1	He	0.475714	2.2	1205.050
Se	78	2	H2	0.516994	1.7	537.010
Sr	88	1	He	0.538125	0.5	7011.770
Mo	95	1	He	0.483464	3.5	3459.763
Pd	105	1	He	0.520735	3.0	5791.247
Ag	107	1	He	0.450371	9.1	9995.300
Cd	111	1	He	0.087979	3.6	383.053
Sn	118	1	He	0.480599	1.1	5135.983
Sb	121	1	He	0.525406	3.2	8294.183
Ba	138	1	He	0.303496	2.4	10687.560
Pt	195	1	He	0.504728	0.7	7453.430
Hg	202	1	He	0.234079	0.4	1751.787
Tl	205	1	He	0.106054	5.5	5883.017
Pb	208	1	He	0.517594	1.9	38550.213
Bi	209	1	He	0.492194	0.5	32062.447
Th	232	1	He	0.505766	0.5	38431.520
U	238	1	He	0.485886	1.4	35319.650

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.7266921	626697.270
Sc	45	2	H2	104.3373493	5138479.167
Ge	72	1	He	102.4820480	519085.613
Ge	72	2	H2	103.4825350	1765357.543
In	115	1	He	104.7417244	6193752.550
Tb	159	1	He	106.1273001	14648173.947
Ir	193	1	He	106.0325876	7668875.927

Sample Name 4308560\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 156SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:32:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.146843	11.3	146.500
Be	9	2	H2	0.034904	1.6	29.833
B	11	2	H2	-1.331878		2258.007
Na	23	1	He	7.531274	7.8	20268.833
Mg	24	1	He	2.460504	7.0	3082.013
Al	27	1	He	3.151928	3.6	1051.707
Si	28	2	H2	-0.009966		14925.483
K	39	1	He	-1.669088		75051.147
Ca	43	1	He	11.224414	31.1	47.383
Ti	47	1	He	0.068408	34.3	20.333
V	51	1	He	0.006548	1328.1	-500.603
Cr	52	1	He	0.296467	2.2	5559.077
Mn	55	1	He	0.273568	3.5	2224.843
Fe	56	1	He	9.164419	1.3	95027.087
Co	59	1	He	0.007772	23.1	169.333
Ni	60	1	He	0.004584	159.2	230.667
Cu	63	1	He	0.063177	4.1	874.697
Zn	66	1	He	0.535987	3.0	1452.077
As	75	1	He	-0.015499		160.167
Se	78	2	H2	-0.002472		31.000
Sr	88	1	He	0.040142	8.0	650.020
Mo	95	1	He	0.015462	2.6	128.000
Pd	105	1	He	0.004707	39.2	283.340
Ag	107	1	He	0.069529	19.2	1643.443
Cd	111	1	He	0.005890	50.9	38.313
Sn	118	1	He	0.018317	24.3	266.670
Sb	121	1	He	0.007710	24.6	181.667
Ba	138	1	He	0.020681	12.4	851.703
Pt	195	1	He	0.004485	45.7	242.667
Hg	202	1	He	0.013384	32.9	201.000
Tl	205	1	He	0.013005	25.7	1040.050
Pb	208	1	He	0.003364	50.7	2560.117
Bi	209	1	He	0.003623	54.4	2156.887
Th	232	1	He	0.004659	23.7	890.033
U	238	1	He	0.001439	61.6	603.353

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.5615128	625679.667
Sc	45	2	H2	105.1886306	5180403.667
Ge	72	1	He	101.7944332	515602.750
Ge	72	2	H2	104.5225630	1783099.873
In	115	1	He	105.6611339	6248120.517
Tb	159	1	He	106.9414305	14760543.947
Ir	193	1	He	107.3608162	7764940.927

Sample Name 4308561\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 157SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:36:00  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	105.029963	0.4	51605.900
Be	9	2	H2	102.339809	1.0	51326.750
B	11	2	H2	100.485737	0.9	47523.180
Na	23	1	He	2075.366932	0.6	2308482.257
Mg	24	1	He	2044.376598	0.4	1272147.013
Al	27	1	He	2009.984651	0.3	612565.583
Si	28	2	H2	515.674484	0.6	1900132.627
K	39	1	He	2034.851558	0.4	1806273.620
Ca	43	1	He	2047.721035	1.6	5136.070
Ti	47	1	He	100.536668	1.6	27949.420
V	51	1	He	101.724361	0.3	810648.120
Cr	52	1	He	105.427828	0.6	997441.873
Mn	55	1	He	102.741812	0.7	699451.000
Fe	56	1	He	2058.213606	0.7	18524073.333
Co	59	1	He	107.108446	0.4	1618956.040
Ni	60	1	He	107.509284	0.8	410114.553
Cu	63	1	He	106.422263	0.8	1116952.957
Zn	66	1	He	105.135748	0.7	249967.893
As	75	1	He	101.187360	0.6	213210.187
Se	78	2	H2	103.859690	1.3	100304.517
Sr	88	1	He	102.731307	0.4	1299414.043
Mo	95	1	He	99.837039	0.7	703718.647
Pd	105	1	He	20.802769	0.7	220154.370
Ag	107	1	He	52.880017	1.5	1149787.407
Cd	111	1	He	101.622878	0.5	422830.790
Sn	118	1	He	97.386713	0.1	1015895.530
Sb	121	1	He	99.270311	0.4	1540293.467
Ba	138	1	He	100.801770	0.2	3473525.260
Pt	195	1	He	20.458215	0.6	297114.427
Hg	202	1	He	0.013909	20.6	204.667
Tl	205	1	He	106.002510	0.8	5562637.003
Pb	208	1	He	103.777504	0.0	7318474.320
Bi	209	1	He	100.274990	1.0	6114959.490
Th	232	1	He	100.799538	0.3	7517803.430
U	238	1	He	99.410218	0.3	7091519.893

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.97366651	615897.583
Sc	45	2	H2	102.7658562	5061085.167
Ge	72	1	He	101.5262686	514244.460
Ge	72	2	H2	102.4934534	1748484.333
In	115	1	He	103.6821756	6131097.643
Tb	159	1	He	106.8375088	14746200.197
Ir	193	1	He	105.5193678	7631756.970

Sample Name 10606389001\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 158SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:39:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	34.767821	0.2	17929.237
Be	9	2	H2	1.794948	3.1	954.030
B	11	2	H2	8.422668	2.4	6851.720
Na	23	1	He	19133.71524	2.7	20920808.020
Mg	24	1	He	66493.45160	3.0	40807737.727
Al	27	1	He	406.003217	3.1	122226.503
Si	28	2	H2	3686.472149	0.9	14124141.000
K	39	1	He	5840.949542	2.7	4980397.530
Ca	43	1	He	448549.0352	2.9	1106937.483
Ti	47	1	He	3.482699	2.4	957.367
V	51	1	He	0.925361	9.0	6749.420
Cr	52	1	He	0.781856	6.9	9922.707
Mn	55	1	He	792.533019	2.8	5325228.833
Fe	56	1	He	944.891688	3.2	8402837.500
Co	59	1	He	10.869277	3.6	157887.177
Ni	60	1	He	34.152269	2.8	125326.643
Cu	63	1	He	0.723450	4.4	7493.947
Zn	66	1	He	237.901256	2.1	543296.500
As	75	1	He	1.581561	3.6	3383.400
Se	78	2	H2	0.291869	13.4	321.670
Sr	88	1	He	3139.730296	2.4	38152842.767
Mo	95	1	He	0.167637	14.8	1149.387
Pd	105	1	He	1.653422	4.9	17007.000
Ag	107	1	He	0.269132	28.0	5701.260
Cd	111	1	He	0.311439	11.4	1256.517
Sn	118	1	He	0.131619	17.5	1385.080
Sb	121	1	He	0.151882	19.5	2316.883
Ba	138	1	He	18.965157	1.8	627989.120
Pt	195	1	He	0.023327	21.6	492.677
Hg	202	1	He	0.009738	13.9	167.667
Tl	205	1	He	0.698523	5.4	35392.333
Pb	208	1	He	1.007543	4.2	70144.937
Bi	209	1	He	0.081696	32.0	6325.017
Th	232	1	He	0.242002	18.4	17078.200
U	238	1	He	2.119430	3.3	139784.783

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.73152847	608245.270
Sc	45	2	H2	107.5563850	5297012.500
Ge	72	1	He	97.57048887	494207.893
Ge	72	2	H2	104.8829739	1789248.293
In	115	1	He	99.62715354	5891309.690
Tb	159	1	He	102.2171355	14108475.207
Ir	193	1	He	97.27317817	7035345.937

Sample Name 4309988\_B69958Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 159SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:43:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	7.463023	0.2	3902.673
Be	9	2	H2	0.415563	4.2	230.000
B	11	2	H2	0.411370	38.4	3117.157
Na	23	1	He	3835.326229	0.2	4401522.433
Mg	24	1	He	13272.31297	0.2	8532489.663
Al	27	1	He	84.699073	1.9	26766.010
Si	28	2	H2	773.211091	1.8	2970821.750
K	39	1	He	1149.538152	0.9	1089108.293
Ca	43	1	He	87733.96159	0.2	226772.277
Ti	47	1	He	1.008238	15.5	291.007
V	51	1	He	0.165484	45.7	804.593
Cr	52	1	He	0.199577	6.8	4714.100
Mn	55	1	He	156.991083	0.7	1105068.503
Fe	56	1	He	191.587213	0.4	1793618.043
Co	59	1	He	2.146867	0.9	33790.983
Ni	60	1	He	6.775901	1.3	27081.770
Cu	63	1	He	0.204304	6.8	2446.883
Zn	66	1	He	47.676203	0.9	117957.333
As	75	1	He	0.306181	1.6	870.197
Se	78	2	H2	0.052302	14.7	87.333
Sr	88	1	He	597.174799	0.7	7852819.467
Mo	95	1	He	0.035157	16.4	274.000
Pd	105	1	He	0.318179	2.7	3722.180
Ag	107	1	He	0.063894	13.8	1545.097
Cd	111	1	He	0.062628	8.9	283.617
Sn	118	1	He	0.036537	16.3	468.343
Sb	121	1	He	0.024833	12.3	460.010
Ba	138	1	He	3.642604	1.2	130193.923
Pt	195	1	He	0.004331	56.7	246.000
Hg	202	1	He	0.004592	42.4	142.000
Tl	205	1	He	0.144367	2.8	8125.880
Pb	208	1	He	0.204316	2.0	17131.047
Bi	209	1	He	0.018288	26.9	3073.750
Th	232	1	He	0.040716	21.8	3633.890
U	238	1	He	0.397419	3.0	29406.813

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.3861225	636920.353
Sc	45	2	H2	107.4387068	5291217.000
Ge	72	1	He	105.5588223	534669.897
Ge	72	2	H2	107.5808688	1835272.960
In	115	1	He	107.4412864	6353387.300
Tb	159	1	He	109.4400830	15105419.360
Ir	193	1	He	107.6112316	7783052.383

Sample Name 4308562\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 160SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:46:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	127.320486	0.3	65360.477
Be	9	2	H2	91.714956	0.4	48071.147
B	11	2	H2	97.103289	0.4	48090.977
Na	23	1	He	20890.97807	0.5	22629089.663
Mg	24	1	He	67425.24413	0.2	40998005.223
Al	27	1	He	2254.648502	0.2	672193.060
Si	28	2	H2	4109.491501	0.6	15717822.000
K	39	1	He	7746.326039	0.8	6519744.070
Ca	43	1	He	444415.0431	0.7	1086546.260
Ti	47	1	He	102.542891	1.0	27887.300
V	51	1	He	101.435900	1.5	790720.733
Cr	52	1	He	102.474569	0.3	948543.020
Mn	55	1	He	861.540657	0.3	5735655.500
Fe	56	1	He	2879.010453	0.7	25343620.000
Co	59	1	He	113.905429	1.2	1646758.540
Ni	60	1	He	136.310659	0.7	497325.300
Cu	63	1	He	101.675883	0.9	1020738.250
Zn	66	1	He	333.002414	0.5	756969.980
As	75	1	He	104.144740	0.9	209892.733
Se	78	2	H2	107.434136	0.5	106870.283
Sr	88	1	He	3185.113047	0.6	38532121.090
Mo	95	1	He	101.804051	1.1	677340.270
Pd	105	1	He	21.342719	0.6	213205.127
Ag	107	1	He	50.069241	1.7	1027584.777
Cd	111	1	He	98.895424	0.5	388426.977
Sn	118	1	He	97.451910	0.5	959652.280
Sb	121	1	He	98.438904	0.8	1441835.497
Ba	138	1	He	123.023235	0.9	4001546.193
Pt	195	1	He	19.960069	1.1	274908.333
Hg	202	1	He	0.012281	41.1	183.000
Tl	205	1	He	102.867468	0.8	5119455.340
Pb	208	1	He	98.891120	1.0	6613726.413
Bi	209	1	He	97.998685	1.0	5513399.293
Th	232	1	He	103.228007	0.3	7102415.310
U	238	1	He	103.114987	0.3	6785936.773

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.80190715	602518.247
Sc	45	2	H2	107.3934873	5288990.000
Ge	72	1	He	97.11677097	491909.750
Ge	72	2	H2	105.5705000	1800977.127
In	115	1	He	97.87702229	5787818.173
Tb	159	1	He	101.3236110	13985146.873
Ir	193	1	He	97.34270169	7040374.270



Sample Name 4308563\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 161SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:50:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	129.001419	0.5	66121.913
Be	9	2	H2	94.578495	0.3	49495.533
B	11	2	H2	99.479754	1.1	49122.440
Na	23	1	He	20135.60817	1.0	20683210.527
Mg	24	1	He	64704.38969	0.8	37307771.110
Al	27	1	He	2252.423948	0.8	636793.227
Si	28	2	H2	3962.787035	1.0	15134937.667
K	39	1	He	7481.720127	0.8	5973996.787
Ca	43	1	He	422792.6163	0.7	980250.013
Ti	47	1	He	104.987563	0.3	27075.143
V	51	1	He	104.282751	1.3	771000.730
Cr	52	1	He	104.811794	1.0	919955.793
Mn	55	1	He	831.672408	1.1	5250600.333
Fe	56	1	He	2868.770573	0.8	23948386.000
Co	59	1	He	116.160140	0.9	1596155.833
Ni	60	1	He	137.219238	0.9	475832.187
Cu	63	1	He	104.104077	0.8	993330.063
Zn	66	1	He	322.959281	1.0	697736.040
As	75	1	He	106.314495	0.9	203647.490
Se	78	2	H2	109.999746	0.3	109522.240
Sr	88	1	He	3049.185040	0.9	35059770.310
Mo	95	1	He	104.909770	0.4	663276.667
Pd	105	1	He	22.208647	0.8	210818.920
Ag	107	1	He	51.389807	0.7	1002305.453
Cd	111	1	He	100.948287	0.9	376784.127
Sn	118	1	He	100.117340	0.5	936798.163
Sb	121	1	He	100.990858	0.9	1405661.800
Ba	138	1	He	119.563247	0.6	3695642.030
Pt	195	1	He	20.576496	0.7	269888.597
Hg	202	1	He	0.012373	5.2	175.000
Tl	205	1	He	105.018025	1.5	4977752.740
Pb	208	1	He	101.310497	1.5	6453747.040
Bi	209	1	He	99.066253	0.8	5347769.713
Th	232	1	He	104.007406	1.0	6866567.397
U	238	1	He	104.552281	1.9	6603200.527

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.73255090	571287.980
Sc	45	2	H2	107.2286370	5280871.333
Ge	72	1	He	92.28842773	467453.530
Ge	72	2	H2	105.6672621	1802627.837
In	115	1	He	92.99391637	5499062.667
Tb	159	1	He	96.48360899	13317107.720
Ir	193	1	He	93.38775694	6754330.317

Sample Name 10606389001\_B69958Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 162SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:54:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.753816	1.7	2104.147
Be	9	2	H2	0.266575	3.7	159.833
B	11	2	H2	0.120233	111.5	3137.327
Na	23	1	He	1918.513423	5.0	2254383.197
Mg	24	1	He	6673.683138	4.9	4381805.560
Al	27	1	He	44.327599	5.8	14339.633
Si	28	2	H2	386.260434	2.8	1569554.540
K	39	1	He	574.739769	5.1	595883.623
Ca	43	1	He	44802.26199	2.2	118351.380
Ti	47	1	He	0.446486	5.1	132.333
V	51	1	He	0.125899	69.7	465.620
Cr	52	1	He	0.133828	12.2	4160.603
Mn	55	1	He	79.234322	4.4	569799.977
Fe	56	1	He	96.796766	4.7	931222.293
Co	59	1	He	1.087585	1.9	17468.460
Ni	60	1	He	3.465529	3.4	14218.287
Cu	63	1	He	0.136703	7.1	1740.110
Zn	66	1	He	24.296224	2.7	61326.140
As	75	1	He	0.165292	8.2	572.510
Se	78	2	H2	0.047876	12.7	88.000
Sr	88	1	He	302.300493	3.5	4048958.167
Mo	95	1	He	0.033233	23.2	268.667
Pd	105	1	He	0.163994	5.6	2110.180
Ag	107	1	He	0.241358	38.9	5743.003
Cd	111	1	He	0.045205	9.2	216.283
Sn	118	1	He	0.042769	15.4	555.017
Sb	121	1	He	0.020673	13.7	408.343
Ba	138	1	He	1.841878	4.8	68386.680
Pt	195	1	He	0.003825	12.5	246.000
Hg	202	1	He	0.006806	29.8	162.667
Tl	205	1	He	0.105046	15.2	6188.187
Pb	208	1	He	0.110726	8.6	10690.013
Bi	209	1	He	0.016016	44.2	3030.417
Th	232	1	He	0.049868	17.9	4464.153
U	238	1	He	0.204757	8.9	15881.450

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	105.7141432	651262.353
Sc	45	2	H2	113.0361841	5566885.500
Ge	72	1	He	107.5880119	544948.020
Ge	72	2	H2	114.1263399	1946935.250
In	115	1	He	111.6495901	6602239.337
Tb	159	1	He	112.8994975	15582903.517
Ir	193	1	He	111.2825172	8048580.503

Sample Name 4309988\_B69958Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 163SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:57:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.893214	1.8	567.010
Be	9	2	H2	0.117561	16.2	78.500
B	11	2	H2	-1.606572		2319.180
Na	23	1	He	397.325766	1.7	482560.213
Mg	24	1	He	1377.999872	1.5	917319.257
Al	27	1	He	14.292929	6.6	4737.440
Si	28	2	H2	77.852047	1.9	333081.520
K	39	1	He	117.564700	3.2	187423.627
Ca	43	1	He	9111.161096	2.2	24364.390
Ti	47	1	He	0.165504	28.0	50.333
V	51	1	He	0.084065	68.8	132.800
Cr	52	1	He	0.122582	33.8	4095.920
Mn	55	1	He	16.457186	2.1	120081.223
Fe	56	1	He	21.616115	5.2	219751.473
Co	59	1	He	0.284938	17.7	4685.447
Ni	60	1	He	0.817348	6.2	3578.450
Cu	63	1	He	0.151021	28.7	1928.803
Zn	66	1	He	5.320733	3.1	13777.220
As	75	1	He	0.082692	38.1	394.007
Se	78	2	H2	0.012780	78.7	51.000
Sr	88	1	He	61.084321	1.7	830662.177
Mo	95	1	He	0.065742	60.6	525.347
Pd	105	1	He	0.044417	11.7	765.030
Ag	107	1	He	0.075923	30.5	1920.160
Cd	111	1	He	0.061491	55.0	294.577
Sn	118	1	He	0.074685	63.8	930.047
Sb	121	1	He	0.062552	54.6	1126.733
Ba	138	1	He	0.435548	10.0	16586.777
Pt	195	1	He	0.011058	54.3	366.007
Hg	202	1	He	0.004378	56.6	148.667
Tl	205	1	He	0.078439	48.2	4842.717
Pb	208	1	He	0.080061	43.9	8624.510
Bi	209	1	He	0.055754	60.3	5694.837
Th	232	1	He	0.063858	61.0	5681.543
U	238	1	He	0.092371	41.0	7609.177

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	106.8909196	658512.000
Sc	45	2	H2	114.3906902	5633593.167
Ge	72	1	He	109.1458710	552838.790
Ge	72	2	H2	115.7598998	1974802.920
In	115	1	He	113.7055821	6723817.497
Tb	159	1	He	115.7891281	15981743.510
Ir	193	1	He	113.5867193	8215233.420

Sample Name 10606389002\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 164SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:01:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	9.092479	0.2	4944.640
Be	9	2	H2	0.059363	6.8	45.167
B	11	2	H2	29.845895	0.9	17545.817
Na	23	1	He	11511.87489	0.3	12999919.810
Mg	24	1	He	25810.74244	0.6	16355593.507
Al	27	1	He	15.678906	7.2	4947.557
Si	28	2	H2	5362.919214	0.7	21408558.667
K	39	1	He	1951.293172	0.2	1768912.733
Ca	43	1	He	80145.04143	0.3	204213.300
Ti	47	1	He	0.246983	4.6	71.000
V	51	1	He	0.432828	10.6	2962.270
Cr	52	1	He	0.398755	5.4	6562.817
Mn	55	1	He	0.649466	0.4	4840.143
Fe	56	1	He	10.464757	0.9	107285.260
Co	59	1	He	0.120032	4.6	1930.803
Ni	60	1	He	0.278751	9.6	1319.400
Cu	63	1	He	0.493925	1.7	5581.087
Zn	66	1	He	4.032547	1.4	10097.527
As	75	1	He	1.164521	2.1	2736.093
Se	78	2	H2	2.690754	0.8	2882.290
Sr	88	1	He	868.949592	1.3	11373593.163
Mo	95	1	He	0.675153	0.7	4957.543
Pd	105	1	He	0.438819	4.4	5054.290
Ag	107	1	He	0.021015	17.9	580.017
Cd	111	1	He	0.017399	11.2	88.773
Sn	118	1	He	0.036744	11.8	471.677
Sb	121	1	He	0.242779	4.0	3972.263
Ba	138	1	He	75.929411	0.4	2716300.897
Pt	195	1	He	0.273651	138.7	4361.297
Hg	202	1	He	0.007742	44.6	170.000
Tl	205	1	He	0.058153	5.4	3597.187
Pb	208	1	He	0.069636	2.6	7629.203
Bi	209	1	He	0.006139	39.3	2393.583
Th	232	1	He	0.014221	20.2	1670.123
U	238	1	He	16.464085	0.6	1236463.523

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.9155266	627860.603
Sc	45	2	H2	112.1118586	5521363.667
Ge	72	1	He	105.0771420	532230.120
Ge	72	2	H2	112.3006071	1915789.210
In	115	1	He	107.6401116	6365144.543
Tb	159	1	He	112.7550878	15562971.437
Ir	193	1	He	111.0518936	8031900.503

Sample Name 10606389002\_B69958Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 165SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:05:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.053192	0.3	642.510
Be	9	2	H2	0.054023	5.0	42.333
B	11	2	H2	1.219664	11.4	3652.447
Na	23	1	He	1165.022877	4.4	1396376.123
Mg	24	1	He	2624.685809	4.7	1752351.377
Al	27	1	He	4.054145	4.9	1406.070
Si	28	2	H2	553.997767	0.2	2229957.000
K	39	1	He	195.958885	5.4	259785.740
Ca	43	1	He	8092.385106	4.2	21728.400
Ti	47	1	He	0.053544	15.9	17.000
V	51	1	He	0.067783	110.8	-24.267
Cr	52	1	He	0.279043	11.3	5701.793
Mn	55	1	He	0.112225	8.7	1172.053
Fe	56	1	He	2.400664	6.0	35113.380
Co	59	1	He	0.016961	1.6	333.340
Ni	60	1	He	0.053744	11.2	452.010
Cu	63	1	He	0.105678	7.0	1427.407
Zn	66	1	He	0.594848	4.3	1719.443
As	75	1	He	0.114301	13.4	468.677
Se	78	2	H2	0.263011	4.7	316.667
Sr	88	1	He	86.615791	3.1	1186385.060
Mo	95	1	He	0.072815	7.7	581.347
Pd	105	1	He	0.052805	24.5	863.370
Ag	107	1	He	0.017314	24.0	523.347
Cd	111	1	He	0.003566	46.3	30.560
Sn	118	1	He	0.017230	16.4	275.003
Sb	121	1	He	0.026843	5.9	521.680
Ba	138	1	He	7.357055	4.3	278367.300
Pt	195	1	He	0.000881	255.2	207.333
Hg	202	1	He	0.001372	15.8	125.667
Tl	205	1	He	0.011436	18.6	1038.387
Pb	208	1	He	0.009630	7.8	3251.850
Bi	209	1	He	0.003249	93.0	2276.907
Th	232	1	He	0.005753	3.4	1040.050
U	238	1	He	1.646987	4.0	128164.320

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	107.4408056	661899.627
Sc	45	2	H2	112.3216340	5531694.833
Ge	72	1	He	110.0020381	557175.393
Ge	72	2	H2	113.2110227	1931320.420
In	115	1	He	113.9193315	6736457.260
Tb	159	1	He	115.8579775	15991246.427
Ir	193	1	He	114.7482539	8299242.170

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 166\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:08:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	74.957500	5.6	41989.730
Be	9	2	H2	73.038494	5.5	41745.467
B	11	2	H2	70.923244	5.5	39165.523
Na	23	1	He	1002.885199	1.2	1201598.653
Mg	24	1	He	992.146194	1.3	662292.843
Al	27	1	He	972.702491	1.0	317641.397
Si	28	2	H2	463.225528	5.6	1946681.210
K	39	1	He	997.548293	0.4	989791.183
Ca	43	1	He	1021.982781	1.7	2756.453
Ti	47	1	He	79.638184	0.4	23721.043
V	51	1	He	79.648345	0.9	679890.243
Cr	52	1	He	83.050070	0.8	842424.187
Mn	55	1	He	81.000862	0.9	590882.543
Fe	56	1	He	510.828550	0.9	4934735.833
Co	59	1	He	82.985468	0.9	1363496.540
Ni	60	1	He	84.298868	0.8	349612.720
Cu	63	1	He	84.531671	0.8	964462.957
Zn	66	1	He	81.372339	0.7	210352.293
As	75	1	He	79.082059	0.4	181181.877
Se	78	2	H2	77.501582	5.6	85507.107
Sr	88	1	He	80.597369	0.8	1108208.657
Mo	95	1	He	77.804654	1.3	601471.063
Pd	105	1	He	82.818694	1.2	960488.267
Ag	107	1	He	42.636903	0.9	1016810.063
Cd	111	1	He	80.241494	1.0	366165.193
Sn	118	1	He	77.162417	1.2	882798.763
Sb	121	1	He	76.922681	1.1	1309007.743
Ba	138	1	He	77.835799	0.4	2941700.477
Pt	195	1	He	82.711708	1.0	1303896.583
Hg	202	1	He	3.881067	0.6	29957.540
Tl	205	1	He	42.010668	1.1	2394346.943
Pb	208	1	He	81.799901	1.7	6264688.400
Bi	209	1	He	77.628427	1.9	5206137.007
Th	232	1	He	74.933987	1.2	6145653.240
U	238	1	He	76.258332	2.0	5981843.453

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	107.1072206	659844.543
Sc	45	2	H2	117.3110378	5777416.500
Ge	72	1	He	110.3609866	558993.517
Ge	72	2	H2	117.2131123	1999593.960
In	115	1	He	113.7163267	6724452.863
Tb	159	1	He	116.0291004	16014865.593
Ir	193	1	He	116.0376506	8392498.623

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 167\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:12:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.105630	14.5	132.500
Be	9	2	H2	0.070503	6.0	50.667
B	11	2	H2	-1.645542		2227.997
Na	23	1	He	2.493351	44.6	14762.420
Mg	24	1	He	0.118212	38.6	1625.107
Al	27	1	He	0.136535	37.0	119.333
Si	28	2	H2	-0.343435		14408.343
K	39	1	He	0.440829	1284.8	77761.757
Ca	43	1	He	0.608524	183.3	20.617
Ti	47	1	He	0.010410	64.8	4.000
V	51	1	He	0.011152	494.1	-458.463
Cr	52	1	He	-0.000440		2747.600
Mn	55	1	He	0.023673	34.4	503.343
Fe	56	1	He	0.200225	15.4	13287.390
Co	59	1	He	0.015715	65.6	300.723
Ni	60	1	He	0.003092	269.5	232.667
Cu	63	1	He	0.015089	53.4	378.673
Zn	66	1	He	0.028787	4.9	252.667
As	75	1	He	-0.008362		180.833
Se	78	2	H2	0.001205	327.1	37.000
Sr	88	1	He	0.032232	9.5	568.350
Mo	95	1	He	0.012529	35.4	110.667
Pd	105	1	He	0.018679	10.7	453.343
Ag	107	1	He	0.205472	33.2	4815.907
Cd	111	1	He	0.005603	25.5	38.643
Sn	118	1	He	0.013629	38.3	226.667
Sb	121	1	He	0.003096	36.5	113.333
Ba	138	1	He	0.004321	23.9	288.337
Pt	195	1	He	0.002506	50.3	225.333
Hg	202	1	He	0.025373	24.6	299.667
Tl	205	1	He	0.056738	33.9	3475.507
Pb	208	1	He	0.001561	99.9	2560.120
Bi	209	1	He	0.007482	4.8	2536.957
Th	232	1	He	0.021325	6.8	2276.887
U	238	1	He	0.004696	6.4	888.373

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.9767672	634398.480
Sc	45	2	H2	110.8091949	5457209.167
Ge	72	1	He	105.4476203	534106.643
Ge	72	2	H2	111.6511682	1904710.123
In	115	1	He	110.5848555	6539277.777
Tb	159	1	He	112.7462669	15561753.933
Ir	193	1	He	113.6562082	8220259.253

Sample Name 10606297001\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 168SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:16:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.979477	2.9	1647.423
Be	9	2	H2	0.058405	9.2	44.000
B	11	2	H2	18.394037	1.8	11806.433
Na	23	1	He	136332.7557	0.5	154355664.367
Mg	24	1	He	15159.24709	0.5	9639689.650
Al	27	1	He	53.287799	2.6	16687.117
Si	28	2	H2	4224.355599	1.0	16615692.333
K	39	1	He	2107.657003	0.2	1911082.940
Ca	43	1	He	66349.72400	0.2	169650.097
Ti	47	1	He	1.475327	8.3	420.677
V	51	1	He	0.626004	11.0	4549.270
Cr	52	1	He	0.559147	4.7	8132.277
Mn	55	1	He	217.632281	0.8	1515234.247
Fe	56	1	He	617.128933	0.4	5689714.833
Co	59	1	He	0.245541	3.8	3801.840
Ni	60	1	He	1.119487	1.9	4527.383
Cu	63	1	He	1.966124	2.7	21057.240
Zn	66	1	He	78.017989	0.8	187478.393
As	75	1	He	0.545668	1.2	1355.060
Se	78	2	H2	0.170034	5.0	210.333
Sr	88	1	He	149.617849	0.6	1912129.607
Mo	95	1	He	0.955432	28.3	6880.757
Pd	105	1	He	0.076812	9.4	1060.050
Ag	107	1	He	0.065418	17.6	1553.430
Cd	111	1	He	0.009681	8.4	54.430
Sn	118	1	He	0.066757	5.9	781.697
Sb	121	1	He	0.184953	4.1	2983.680
Ba	138	1	He	67.089261	0.7	2355752.050
Pt	195	1	He	0.010857	3.0	353.343
Hg	202	1	He	0.017954	15.7	246.000
Tl	205	1	He	0.024021	9.6	1706.793
Pb	208	1	He	0.464944	2.9	37014.950
Bi	209	1	He	0.010493	7.1	2690.323
Th	232	1	He	0.018007	2.4	1981.837
U	238	1	He	0.560343	0.8	42868.880

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.2680222	630032.187
Sc	45	2	H2	110.4493207	5439485.833
Ge	72	1	He	102.5859998	519612.143
Ge	72	2	H2	109.4331949	1866872.667
In	115	1	He	105.6509351	6247517.430
Tb	159	1	He	112.6759714	15552051.437
Ir	193	1	He	111.7983121	8085885.710



Sample Name 10606389009\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 169SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:19:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.131264	17.4	147.000
Be	9	2	H2	0.038944	15.3	33.833
B	11	2	H2	-3.411627		1388.897
Na	23	1	He	87.216624	9.7	113977.263
Mg	24	1	He	10.959845	10.9	8765.993
Al	27	1	He	10.078611	4.6	3307.703
Si	28	2	H2	0.770664	23.8	18917.353
K	39	1	He	0.559165	534.1	79686.933
Ca	43	1	He	48.290235	10.3	146.817
Ti	47	1	He	0.089774	14.5	27.333
V	51	1	He	-0.007509		-637.373
Cr	52	1	He	0.457057	5.5	7348.520
Mn	55	1	He	0.223173	11.0	1946.807
Fe	56	1	He	3.230783	1.3	42264.127
Co	59	1	He	0.005560	18.1	140.667
Ni	60	1	He	0.044524	19.8	397.343
Cu	63	1	He	0.091343	5.6	1214.720
Zn	66	1	He	0.953520	2.8	2539.560
As	75	1	He	-0.008103		182.500
Se	78	2	H2	0.002384	381.7	38.000
Sr	88	1	He	0.124875	11.8	1793.460
Mo	95	1	He	0.009906	37.5	92.000
Pd	105	1	He	0.005073	110.4	301.673
Ag	107	1	He	0.019205	21.6	553.350
Cd	111	1	He	0.000905	125.2	17.983
Sn	118	1	He	0.027129	8.5	378.343
Sb	121	1	He	0.010581	13.4	238.333
Ba	138	1	He	0.053822	10.3	2115.180
Pt	195	1	He	0.017695	19.4	462.010
Hg	202	1	He	0.008983	6.1	181.000
Tl	205	1	He	0.005076	33.7	663.357
Pb	208	1	He	0.001853	38.3	2613.463
Bi	209	1	He	0.004903	58.9	2350.253
Th	232	1	He	0.005144	28.3	973.380
U	238	1	He	0.002098	58.8	683.360

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	105.2018693	648106.440
Sc	45	2	H2	111.4850367	5490493.500
Ge	72	1	He	105.6883272	535325.857
Ge	72	2	H2	110.7596305	1889500.960
In	115	1	He	110.7333052	6548056.137
Tb	159	1	He	113.8983354	15720767.680
Ir	193	1	He	112.8912969	8164936.543

Sample Name 10606426001\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 170SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:23:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.394661	4.3	282.000
Be	9	2	H2	0.060694	22.9	44.833
B	11	2	H2	-0.548878		2721.247
Na	23	1	He	91608.86725	0.9	102195745.143
Mg	24	1	He	272.927907	1.5	172475.153
Al	27	1	He	237.010855	1.6	72861.617
Si	28	2	H2	729.687168	0.2	2857769.083
K	39	1	He	4586.302581	0.6	4008182.130
Ca	43	1	He	572.658492	2.3	1461.323
Ti	47	1	He	2.195218	4.7	616.347
V	51	1	He	0.452961	30.9	3096.977
Cr	52	1	He	6.236932	1.8	62002.923
Mn	55	1	He	490.574075	1.2	3364786.083
Fe	56	1	He	54978.92779	1.2	498414784.000
Co	59	1	He	0.488258	0.8	7644.687
Ni	60	1	He	4.274625	1.0	16985.897
Cu	63	1	He	0.746553	1.7	8274.370
Zn	66	1	He	31.716967	1.2	77711.183
As	75	1	He	8.071204	0.8	17677.430
Se	78	2	H2	0.019735	53.3	56.667
Sr	88	1	He	2.083226	1.6	27249.343
Mo	95	1	He	0.153356	3.8	1130.047
Pd	105	1	He	-0.001031		223.333
Ag	107	1	He	0.022394	20.9	605.023
Cd	111	1	He	0.002864	11.4	25.800
Sn	118	1	He	2.806840	0.4	30205.967
Sb	121	1	He	3.893134	2.5	62239.707
Ba	138	1	He	20.925098	0.7	742178.947
Pt	195	1	He	0.010646	5.4	348.010
Hg	202	1	He	0.013675	9.4	212.667
Tl	205	1	He	0.012535	14.8	1063.387
Pb	208	1	He	0.089018	3.4	9009.533
Bi	209	1	He	0.002311	70.4	2130.213
Th	232	1	He	0.016169	10.0	1808.477
U	238	1	He	0.007875	16.7	1098.393

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.7695275	620800.563
Sc	45	2	H2	109.4747976	5391491.833
Ge	72	1	He	104.4474545	529040.667
Ge	72	2	H2	112.1502897	1913224.873
In	115	1	He	106.7112131	6310215.457
Tb	159	1	He	111.9675408	15454270.603
Ir	193	1	He	110.1371450	7965740.713

Sample Name 10606426001\_B69958Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 171SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:27:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.172948	6.8	178.500
Be	9	2	H2	0.042173	29.2	37.500
B	11	2	H2	-2.699548		1828.443
Na	23	1	He	9332.225795	3.0	11202681.497
Mg	24	1	He	29.952152	2.9	21804.350
Al	27	1	He	26.804136	2.2	8932.020
Si	28	2	H2	74.173310	1.0	327178.927
K	39	1	He	459.836548	4.2	505343.403
Ca	43	1	He	65.572823	3.8	197.833
Ti	47	1	He	0.216758	6.6	66.333
V	51	1	He	0.123169	53.5	484.527
Cr	52	1	He	0.683049	2.4	9883.353
Mn	55	1	He	49.322889	2.7	364018.377
Fe	56	1	He	5604.532409	2.9	54631897.333
Co	59	1	He	0.051785	4.7	913.367
Ni	60	1	He	0.456713	0.6	2138.163
Cu	63	1	He	0.099775	4.7	1374.737
Zn	66	1	He	3.526543	1.9	9359.040
As	75	1	He	0.785494	1.9	2019.810
Se	78	2	H2	0.000970	1066.5	38.667
Sr	88	1	He	0.254424	5.5	3672.170
Mo	95	1	He	0.042740	6.0	354.677
Pd	105	1	He	-0.001725		233.337
Ag	107	1	He	0.011256	12.7	386.677
Cd	111	1	He	0.002638	20.5	26.933
Sn	118	1	He	0.319338	6.4	3795.540
Sb	121	1	He	0.436651	5.6	7623.803
Ba	138	1	He	2.042484	1.8	78712.960
Pt	195	1	He	-0.000442		188.000
Hg	202	1	He	0.004755	71.2	154.000
Tl	205	1	He	0.001467	89.5	476.680
Pb	208	1	He	0.008258	23.6	3190.170
Bi	209	1	He	0.002284	114.4	2236.893
Th	232	1	He	0.004700	37.1	963.380
U	238	1	He	0.002077	82.6	700.027

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	108.3801657	667686.647
Sc	45	2	H2	117.6410059	5793667.000
Ge	72	1	He	111.1109261	562792.063
Ge	72	2	H2	117.7637399	2008987.377
In	115	1	He	115.7968401	6847481.057
Tb	159	1	He	117.5220382	16220927.677
Ir	193	1	He	115.6071354	8361361.333

Sample Name 10606389003\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 172SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:30:59  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	24.930725	0.6	14038.650
Be	9	2	H2	0.114573	2.2	78.833
B	11	2	H2	18.526400	0.6	12601.913
Na	23	1	He	21674.40550	21.3	22722326.327
Mg	24	1	He	79962.62900	20.9	47082259.297
Al	27	1	He	14.060712	21.2	4129.910
Si	28	2	H2	7109.631849	0.0	29677901.333
K	39	1	He	5238.676798	22.2	4287915.350
Ca	43	1	He	396830.4503	21.7	938540.603
Ti	47	1	He	0.189569	8.8	51.667
V	51	1	He	0.169208	12.1	762.370
Cr	52	1	He	0.698696	25.5	8810.000
Mn	55	1	He	0.603224	20.0	4213.283
Fe	56	1	He	13.744224	18.5	128333.580
Co	59	1	He	0.124913	19.6	1809.450
Ni	60	1	He	1.371245	19.3	5080.233
Cu	63	1	He	0.288588	23.7	3008.987
Zn	66	1	He	30.444430	21.3	67467.787
As	75	1	He	0.449721	23.1	1062.873
Se	78	2	H2	0.470571	3.5	543.010
Sr	88	1	He	2843.274347	20.7	33479829.503
Mo	95	1	He	0.106749	20.5	715.357
Pd	105	1	He	1.518919	22.3	15079.833
Ag	107	1	He	0.009114	30.1	280.007
Cd	111	1	He	0.080498	23.1	322.203
Sn	118	1	He	0.170728	13.1	1735.127
Sb	121	1	He	0.077887	19.4	1178.393
Ba	138	1	He	24.383256	22.1	778012.617
Pt	195	1	He	0.010416	16.3	307.340
Hg	202	1	He	0.011189	34.0	172.000
Tl	205	1	He	0.022794	17.1	1441.753
Pb	208	1	He	0.010645	56.7	2856.810
Bi	209	1	He	0.015531	22.5	2586.983
Th	232	1	He	0.016499	22.4	1580.120
U	238	1	He	6.268110	21.0	398673.443

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.22215392	598946.620
Sc	45	2	H2	117.2568908	5774749.833
Ge	72	1	He	96.91992536	490912.700
Ge	72	2	H2	114.2635339	1949275.707
In	115	1	He	98.69282629	5836059.580
Tb	159	1	He	100.6546057	13892807.710
Ir	193	1	He	96.47102786	6977329.893

Sample Name 10606389003\_B69958Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 173SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:34:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.841309	2.3	1687.930
Be	9	2	H2	0.048571	30.5	41.500
B	11	2	H2	-0.402567		3017.800
Na	23	1	He	1952.762046	0.3	2435931.837
Mg	24	1	He	7260.482619	0.1	5060847.007
Al	27	1	He	3.550352	1.4	1296.727
Si	28	2	H2	746.247479	0.7	3160035.750
K	39	1	He	456.193917	0.5	519479.067
Ca	43	1	He	35352.97890	0.5	99076.680
Ti	47	1	He	0.034936	27.6	12.000
V	51	1	He	-0.015128		-745.530
Cr	52	1	He	0.099402	11.2	4049.907
Mn	55	1	He	0.062103	4.4	842.030
Fe	56	1	He	1.870934	1.9	31321.430
Co	59	1	He	0.011701	4.0	256.000
Ni	60	1	He	0.137222	4.4	825.360
Cu	63	1	He	0.043712	10.1	749.353
Zn	66	1	He	2.944266	0.4	8043.577
As	75	1	He	0.038693	6.9	307.167
Se	78	2	H2	0.045632	17.9	89.333
Sr	88	1	He	252.582702	1.3	3583503.593
Mo	95	1	He	0.012498	7.9	120.000
Pd	105	1	He	0.130599	4.1	1843.467
Ag	107	1	He	0.005691	33.3	258.337
Cd	111	1	He	0.006984	37.0	48.313
Sn	118	1	He	0.027975	40.1	415.010
Sb	121	1	He	0.012345	7.1	286.677
Ba	138	1	He	2.153639	1.1	85161.907
Pt	195	1	He	0.000517	313.6	206.667
Hg	202	1	He	0.003940	30.0	149.667
Tl	205	1	He	0.002402	31.7	540.020
Pb	208	1	He	0.001065	146.7	2675.143
Bi	209	1	He	0.003351	40.0	2323.590
Th	232	1	He	0.002119	51.3	756.697
U	238	1	He	0.545120	2.2	43499.333

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	112.0806895	690484.087
Sc	45	2	H2	118.3847175	5830293.833
Ge	72	1	He	113.8919875	576878.520
Ge	72	2	H2	119.1079146	2031918.290
In	115	1	He	118.7906334	7024514.753
Tb	159	1	He	119.3310762	16470619.340
Ir	193	1	He	116.5915429	8432559.247

Sample Name 10606389004\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 174SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:38:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.831535	1.1	3303.027
Be	9	2	H2	0.028408	14.7	29.167
B	11	2	H2	9.889033	1.7	8110.010
Na	23	1	He	2227.167812	0.5	2675293.710
Mg	24	1	He	23745.74685	0.6	15945238.510
Al	27	1	He	27.694755	0.7	9197.837
Si	28	2	H2	4360.728042	0.3	17975913.333
K	39	1	He	1400.059262	0.6	1367932.897
Ca	43	1	He	56971.08332	0.4	153836.250
Ti	47	1	He	0.617976	1.0	186.667
V	51	1	He	1.310765	5.1	10701.350
Cr	52	1	He	0.575088	1.9	8751.293
Mn	55	1	He	1.008084	0.3	7765.407
Fe	56	1	He	31.445232	0.4	317555.897
Co	59	1	He	0.043417	4.8	764.020
Ni	60	1	He	0.248736	2.8	1253.393
Cu	63	1	He	0.240935	1.5	2955.643
Zn	66	1	He	1.507653	2.7	4055.913
As	75	1	He	1.700546	1.8	4072.743
Se	78	2	H2	0.786859	2.9	893.363
Sr	88	1	He	236.411413	0.8	3228273.597
Mo	95	1	He	0.450903	2.7	3480.433
Pd	105	1	He	0.122377	3.2	1658.447
Ag	107	1	He	0.003900	20.9	203.333
Cd	111	1	He	0.001478	93.5	21.043
Sn	118	1	He	0.031919	2.6	440.010
Sb	121	1	He	0.051920	3.0	941.707
Ba	138	1	He	57.798871	0.4	2170092.470
Pt	195	1	He	0.007909	26.1	317.340
Hg	202	1	He	0.006368	18.2	164.333
Tl	205	1	He	0.188558	3.8	11139.733
Pb	208	1	He	0.058571	3.5	7004.067
Bi	209	1	He	0.003558	68.3	2306.910
Th	232	1	He	0.009027	56.8	1308.787
U	238	1	He	2.701184	0.3	210636.917

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	108.0005521	665348.000
Sc	45	2	H2	115.7531694	5700693.500
Ge	72	1	He	109.6126527	555203.103
Ge	72	2	H2	115.5350487	1970967.080
In	115	1	He	112.9688111	6680249.593
Tb	159	1	He	116.0457853	16017168.510
Ir	193	1	He	115.0612912	8321882.793

Sample Name 10606389004\_B69958Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 175SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:41:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.660391	5.7	441.343
Be	9	2	H2	0.025514	19.7	27.333
B	11	2	H2	-1.676890		2292.843
Na	23	1	He	234.887992	1.4	294655.133
Mg	24	1	He	2454.089367	1.4	1656544.923
Al	27	1	He	5.587635	0.9	1928.800
Si	28	2	H2	442.188647	1.3	1822792.833
K	39	1	He	140.159338	0.7	211089.327
Ca	43	1	He	5795.168104	0.4	15736.697
Ti	47	1	He	0.089163	13.6	28.000
V	51	1	He	0.164510	50.3	836.093
Cr	52	1	He	0.079659	24.9	3717.150
Mn	55	1	He	0.119978	2.9	1242.060
Fe	56	1	He	4.194228	1.4	52986.993
Co	59	1	He	0.005651	32.7	149.333
Ni	60	1	He	0.035483	12.9	380.010
Cu	63	1	He	0.055117	1.6	860.697
Zn	66	1	He	0.311162	1.2	998.707
As	75	1	He	0.178379	6.1	620.343
Se	78	2	H2	0.073681	7.5	117.333
Sr	88	1	He	23.674501	0.9	327282.253
Mo	95	1	He	0.045072	9.3	370.677
Pd	105	1	He	0.009255	21.3	361.677
Ag	107	1	He	0.002563	43.1	175.000
Cd	111	1	He	0.001374	137.0	20.933
Sn	118	1	He	0.009896	49.4	193.337
Sb	121	1	He	0.009295	47.3	225.007
Ba	138	1	He	5.705250	0.3	218195.467
Pt	195	1	He	0.000010	2059.5	194.667
Hg	202	1	He	0.002796	29.0	138.000
Tl	205	1	He	0.023461	7.8	1741.797
Pb	208	1	He	0.006870	17.1	3073.497
Bi	209	1	He	0.000945	294.6	2150.213
Th	232	1	He	0.001957	35.3	740.030
U	238	1	He	0.269865	2.7	21684.857

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	108.4830880	668320.710
Sc	45	2	H2	114.8340250	5655426.833
Ge	72	1	He	110.9249818	561850.230
Ge	72	2	H2	115.7898708	1975314.210
In	115	1	He	115.0059104	6800710.557
Tb	159	1	He	117.0912574	16161469.343
Ir	193	1	He	115.9074294	8383080.293

Sample Name 10606389008\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 176SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:45:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	16.345311	0.4	9196.617
Be	9	2	H2	0.022396	3.6	26.000
B	11	2	H2	118.537480	0.9	63148.180
Na	23	1	He	80028.16829	0.4	94985688.587
Mg	24	1	He	14721.24746	0.4	9812992.353
Al	27	1	He	10.373124	1.0	3469.740
Si	28	2	H2	5632.890806	0.5	23426456.000
K	39	1	He	15392.17407	0.2	14121055.623
Ca	43	1	He	20934.13382	0.7	56122.677
Ti	47	1	He	0.133971	13.0	41.000
V	51	1	He	3.164168	1.5	26471.237
Cr	52	1	He	0.702276	2.1	9974.067
Mn	55	1	He	0.049954	5.9	716.687
Fe	56	1	He	3.314623	0.5	43882.183
Co	59	1	He	0.025064	4.7	463.343
Ni	60	1	He	0.322471	8.6	1553.423
Cu	63	1	He	1.029029	1.2	11856.170
Zn	66	1	He	1.826036	3.4	4860.820
As	75	1	He	4.380393	0.5	10139.547
Se	78	2	H2	1.824879	3.6	2031.480
Sr	88	1	He	757.429693	0.1	10317972.970
Mo	95	1	He	7.070660	1.0	54039.913
Pd	105	1	He	0.373050	4.0	4522.430
Ag	107	1	He	0.001532	78.4	146.667
Cd	111	1	He	0.002448	56.1	25.273
Sn	118	1	He	0.032720	5.9	446.677
Sb	121	1	He	0.187682	4.5	3220.397
Ba	138	1	He	22.403000	0.2	836938.947
Pt	195	1	He	0.006232	26.1	294.003
Hg	202	1	He	0.005744	46.7	161.000
Tl	205	1	He	0.032188	5.3	2245.210
Pb	208	1	He	0.003533	51.3	2818.487
Bi	209	1	He	0.001564	249.8	2170.217
Th	232	1	He	0.000772	87.0	636.687
U	238	1	He	4.294874	0.7	333967.270

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	107.2013635	660424.520
Sc	45	2	H2	116.8050312	5752496.333
Ge	72	1	He	109.3508678	553877.127
Ge	72	2	H2	116.0039843	1978966.873
In	115	1	He	112.3926140	6646176.997
Tb	159	1	He	117.2047004	16177127.260
Ir	193	1	He	114.8414522	8305982.793



Sample Name 10606389008\_B69958Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 177SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:49:17  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.853630	2.7	1121.207
Be	9	2	H2	0.018363	31.6	23.833
B	11	2	H2	10.320036	1.0	8452.197
Na	23	1	He	8222.992112	0.9	10207052.140
Mg	24	1	He	1497.450342	0.7	1044229.980
Al	27	1	He	5.352775	0.8	1910.793
Si	28	2	H2	565.276426	0.5	2380021.667
K	39	1	He	1577.293387	0.6	1587293.883
Ca	43	1	He	2129.147725	0.8	5981.387
Ti	47	1	He	0.032862	41.2	11.333
V	51	1	He	0.336284	11.5	2392.957
Cr	52	1	He	0.118875	6.7	4252.627
Mn	55	1	He	0.024504	2.2	554.677
Fe	56	1	He	1.169978	2.5	24232.697
Co	59	1	He	0.003773	26.7	121.333
Ni	60	1	He	0.038801	18.5	403.343
Cu	63	1	He	0.133006	6.0	1796.117
Zn	66	1	He	0.291829	0.3	971.367
As	75	1	He	0.430758	2.4	1229.883
Se	78	2	H2	0.168949	3.9	224.667
Sr	88	1	He	74.742183	0.8	1057905.817
Mo	95	1	He	0.690383	3.6	5566.440
Pd	105	1	He	0.030560	17.9	628.353
Ag	107	1	He	0.003175	68.2	195.000
Cd	111	1	He	0.000985	138.6	19.663
Sn	118	1	He	0.008481	46.6	181.667
Sb	121	1	He	0.021196	9.7	441.677
Ba	138	1	He	2.229560	1.1	87724.457
Pt	195	1	He	-0.000021		199.333
Hg	202	1	He	0.003675	59.8	148.667
Tl	205	1	He	0.002921	13.9	575.020
Pb	208	1	He	0.000469	339.4	2648.463
Bi	209	1	He	-0.000276		2100.210
Th	232	1	He	0.001576	57.4	720.027
U	238	1	He	0.426677	2.4	34509.153

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	111.9841745	689889.497
Sc	45	2	H2	117.5060108	5787018.667
Ge	72	1	He	113.6017597	575408.477
Ge	72	2	H2	117.5495455	2005333.333
In	115	1	He	118.2003057	6989606.567
Tb	159	1	He	120.2141043	16592498.917
Ir	193	1	He	117.7323035	8515065.497

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 178\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:52:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	78.911504	1.3	44326.007
Be	9	2	H2	77.447612	1.3	44388.780
B	11	2	H2	74.974155	0.3	41332.600
Na	23	1	He	1015.332085	0.2	1275306.050
Mg	24	1	He	995.377076	0.1	696640.277
Al	27	1	He	983.307693	0.3	336671.583
Si	28	2	H2	491.089490	1.5	2068545.750
K	39	1	He	1001.254388	0.5	1041336.547
Ca	43	1	He	1018.046169	0.8	2878.970
Ti	47	1	He	79.877953	0.5	24946.060
V	51	1	He	79.620974	0.9	712626.537
Cr	52	1	He	82.758652	0.3	880188.270
Mn	55	1	He	80.610411	0.4	616548.127
Fe	56	1	He	507.327651	0.3	5138570.333
Co	59	1	He	83.353332	0.6	1421809.997
Ni	60	1	He	84.485286	0.7	363755.043
Cu	63	1	He	84.863421	0.3	1005198.380
Zn	66	1	He	81.522941	0.5	218779.730
As	75	1	He	79.374547	0.3	188788.583
Se	78	2	H2	80.746657	1.9	89008.090
Sr	88	1	He	80.388681	0.2	1147504.930
Mo	95	1	He	77.072421	0.8	619852.023
Pd	105	1	He	82.826300	0.6	999350.323
Ag	107	1	He	42.417726	1.6	1052360.817
Cd	111	1	He	80.294009	0.5	381190.697
Sn	118	1	He	76.579708	0.6	911492.693
Sb	121	1	He	76.292178	0.8	1350663.367
Ba	138	1	He	77.167102	0.3	3034066.207
Pt	195	1	He	82.713933	1.1	1338692.333
Hg	202	1	He	3.865684	1.3	30634.763
Tl	205	1	He	42.174683	0.6	2467892.203
Pb	208	1	He	82.018450	0.5	6449567.770
Bi	209	1	He	79.016034	1.0	5407689.293
Th	232	1	He	75.592521	0.9	6326512.200
U	238	1	He	77.089959	0.6	6171201.783

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	112.3007639	691839.877
Sc	45	2	H2	117.4402527	5783780.167
Ge	72	1	He	114.5716664	580321.187
Ge	72	2	H2	116.9835890	1995678.413
In	115	1	He	118.3021198	6995627.197
Tb	159	1	He	119.1237821	16442007.673
Ir	193	1	He	118.4126321	8564270.703

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 179\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:56:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.112953	12.7	140.500
Be	9	2	H2	0.042021	11.9	36.333
B	11	2	H2	-2.093705		2073.310
Na	23	1	He	5.762505	1.0	19738.103
Mg	24	1	He	-0.183412		1525.090
Al	27	1	He	0.202496	20.2	149.667
Si	28	2	H2	-0.381817		14684.587
K	39	1	He	-1.987219		80739.280
Ca	43	1	He	-0.838839		18.117
Ti	47	1	He	0.001903	199.6	1.667
V	51	1	He	0.009424	420.6	-514.603
Cr	52	1	He	-0.010975		2820.277
Mn	55	1	He	0.015592	6.2	476.677
Fe	56	1	He	0.244957	8.2	14601.307
Co	59	1	He	0.008304	21.7	194.667
Ni	60	1	He	-0.008716		197.333
Cu	63	1	He	0.008570	13.7	329.337
Zn	66	1	He	0.014424	42.2	230.000
As	75	1	He	-0.012529		182.667
Se	78	2	H2	0.002237	424.7	39.000
Sr	88	1	He	0.023995	40.0	488.347
Mo	95	1	He	0.010640	23.9	102.667
Pd	105	1	He	0.012457	21.2	403.343
Ag	107	1	He	0.192731	24.5	4812.567
Cd	111	1	He	0.006914	16.2	46.980
Sn	118	1	He	0.009037	20.7	185.000
Sb	121	1	He	0.003704	66.5	130.000
Ba	138	1	He	0.005900	19.1	365.010
Pt	195	1	He	0.004980	64.1	276.670
Hg	202	1	He	0.025293	14.2	316.003
Tl	205	1	He	0.046554	23.5	3103.733
Pb	208	1	He	0.001300	222.0	2671.803
Bi	209	1	He	0.008069	38.2	2690.323
Th	232	1	He	0.021376	11.3	2386.907
U	238	1	He	0.005020	17.5	955.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	109.6596881	675569.270
Sc	45	2	H2	114.1375735	5621127.500
Ge	72	1	He	111.7252642	565903.770
Ge	72	2	H2	114.2569172	1949162.830
In	115	1	He	116.1740941	6869789.433
Tb	159	1	He	118.3496476	16335158.090
Ir	193	1	He	118.7236329	8586764.040

Sample Name rinse-1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 180SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 01:00:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.071968	8.4	118.167
Be	9	2	H2	0.025552	13.8	27.167
B	11	2	H2	-2.672170		1787.437
Na	23	1	He	4.429304	3.8	18015.903
Mg	24	1	He	-0.185397		1515.090
Al	27	1	He	0.125846	12.5	123.333
Si	28	2	H2	-0.238092		15270.343
K	39	1	He	-2.414562		79879.657
Ca	43	1	He	0.087270	1719.3	20.517
Ti	47	1	He	0.003038	188.3	2.000
V	51	1	He	-0.006984		-654.483
Cr	52	1	He	-0.016732		2744.937
Mn	55	1	He	0.008412	67.2	420.677
Fe	56	1	He	0.224056	5.7	14313.683
Co	59	1	He	0.002408	20.9	95.333
Ni	60	1	He	-0.009225		192.667
Cu	63	1	He	0.001984	86.5	250.000
Zn	66	1	He	0.048635	4.8	315.333
As	75	1	He	-0.015149		174.333
Se	78	2	H2	-0.006137		30.000
Sr	88	1	He	0.017521	30.6	393.343
Mo	95	1	He	0.003490	53.1	46.000
Pd	105	1	He	0.001300	349.6	270.007
Ag	107	1	He	0.036307	15.8	995.043
Cd	111	1	He	0.001285	56.9	20.657
Sn	118	1	He	0.011375	10.8	211.667
Sb	121	1	He	0.002479	49.7	108.333
Ba	138	1	He	0.001595	11.0	198.333
Pt	195	1	He	0.000656	282.0	206.667
Hg	202	1	He	0.012065	32.7	211.667
Tl	205	1	He	0.009969	8.2	973.380
Pb	208	1	He	-0.003412		2298.450
Bi	209	1	He	0.002446	74.5	2293.577
Th	232	1	He	0.005930	19.1	1086.720
U	238	1	He	0.001446	39.1	665.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	109.0304202	671692.603
Sc	45	2	H2	114.1285276	5620682.000
Ge	72	1	He	110.2797337	558581.960
Ge	72	2	H2	114.5760631	1954607.290
In	115	1	He	115.7859619	6846837.787
Tb	159	1	He	118.0673971	16296200.593
Ir	193	1	He	118.1686776	8546626.540

Sample Name rinse-2  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 181SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 01:03:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.049140	12.2	105.167
Be	9	2	H2	0.018594	15.0	23.167
B	11	2	H2	-2.953229		1639.757
Na	23	1	He	3.538605	2.8	16832.857
Mg	24	1	He	-0.313490		1420.083
Al	27	1	He	0.168665	10.7	136.667
Si	28	2	H2	-0.402471		14522.510
K	39	1	He	-1.134210		80548.443
Ca	43	1	He	-0.445516		18.967
Ti	47	1	He	0.009694	58.9	4.000
V	51	1	He	-0.032468		-872.843
Cr	52	1	He	-0.025970		2632.913
Mn	55	1	He	0.009664	54.1	427.343
Fe	56	1	He	0.211938	12.2	14103.473
Co	59	1	He	0.001303	96.1	76.667
Ni	60	1	He	-0.014443		170.000
Cu	63	1	He	-0.001759		206.000
Zn	66	1	He	0.032464	29.5	272.000
As	75	1	He	-0.017088		168.833
Se	78	2	H2	-0.010542		25.000
Sr	88	1	He	0.019173	20.1	413.343
Mo	95	1	He	0.002850	22.5	40.667
Pd	105	1	He	0.000338	1409.3	256.670
Ag	107	1	He	0.017731	10.2	540.013
Cd	111	1	He	0.000600	21.3	17.323
Sn	118	1	He	0.003016	65.2	113.333
Sb	121	1	He	0.001651	35.5	93.333
Ba	138	1	He	0.001634	73.7	198.333
Pt	195	1	He	0.000347	572.8	200.000
Hg	202	1	He	0.008234	19.0	180.333
Tl	205	1	He	0.003240	15.6	578.350
Pb	208	1	He	-0.003414		2280.113
Bi	209	1	He	0.005694	59.5	2473.607
Th	232	1	He	0.004238	26.0	928.377
U	238	1	He	0.001079	60.1	625.020

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	108.3358951	667413.913
Sc	45	2	H2	113.5278451	5591099.167
Ge	72	1	He	109.6230309	555255.670
Ge	72	2	H2	113.2808883	1932512.290
In	115	1	He	114.8722785	6792808.420
Tb	159	1	He	117.1157820	16164854.343
Ir	193	1	He	116.1897462	8403499.040

Sample Name rinse-3  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 182SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 01:07:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.060120	27.2	110.167
Be	9	2	H2	0.015306	55.1	21.167
B	11	2	H2	-2.997276		1604.590
Na	23	1	He	2.769740	12.6	15858.483
Mg	24	1	He	-0.181185		1503.423
Al	27	1	He	0.026183	56.9	89.333
Si	28	2	H2	-0.364129		14555.340
K	39	1	He	-1.917210		79562.897
Ca	43	1	He	-0.330447		19.200
Ti	47	1	He	0.003084	106.7	2.000
V	51	1	He	0.004864	1804.8	-543.833
Cr	52	1	He	-0.023055		2653.580
Mn	55	1	He	0.004070	61.4	384.677
Fe	56	1	He	0.165732	28.9	13607.013
Co	59	1	He	0.001749	14.2	84.000
Ni	60	1	He	-0.013479		174.000
Cu	63	1	He	-0.000533		220.000
Zn	66	1	He	0.013780	6.0	224.000
As	75	1	He	-0.015187		173.167
Se	78	2	H2	-0.011867		23.333
Sr	88	1	He	0.016234	18.9	373.343
Mo	95	1	He	0.000536	168.3	22.667
Pd	105	1	He	-0.001443		236.667
Ag	107	1	He	0.008687	12.5	323.343
Cd	111	1	He	-0.000421		12.663
Sn	118	1	He	0.001402	55.5	95.000
Sb	121	1	He	-0.000589		55.000
Ba	138	1	He	0.001053	82.7	176.667
Pt	195	1	He	0.000591	119.7	203.333
Hg	202	1	He	0.005976	31.1	162.333
Tl	205	1	He	0.002704	80.6	546.680
Pb	208	1	He	-0.003244		2286.780
Bi	209	1	He	0.003984	143.5	2376.927
Th	232	1	He	0.002734	42.3	811.700
U	238	1	He	0.001714	14.2	680.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	107.9799708	665221.207
Sc	45	2	H2	112.5785951	5544349.833
Ge	72	1	He	109.6073926	555176.460
Ge	72	2	H2	112.1108590	1912552.207
In	115	1	He	115.2559378	6815495.567
Tb	159	1	He	116.8010796	16121417.677
Ir	193	1	He	117.0897842	8468594.873



# Prep Log Report

Batch Information: MPRP 812437 6020BS\_P

Template Version: ENV-EPL-MIN4-0015-Rev.00 (13Dec2020)

Prep Method	EPA 3050B	Analysis Method	EPA 6020B	Prepared By	NJ1	Instrument	10BL04
Block ID	10MET50	Thermometer ID	210354356	Correction Factor (C)	.5	Block Temp (C)	93.4
Corrected Temp. (C)	93.90	Digestion Start Date/Time	05/03/2022 17:29:42:290	Digestion End Date/Time	05/03/2022 19:58:35:255	Block End Temp (C)	95.4
Corrected End Temp. (C)	95.90	Digestion Vessel	360406	Resin Pellets Solid Matrix	344615	Metals Pipette 1	Q765
Metals Pipette 2		Bottle Disp. 1	Q814	Bottle Disp. 2	Q791	Bottle Disp. 3	Q452
Reviewed By	RJS	Reviewed By Date	05/04/2022 08:02	Batch Notes			

QC Rule	Sample Type	Lab Sample ID	Matrix	Initial Weight (g)	Conc. HNO3 (mL)	H2O2 (mL)	Conc. HCL (mL)	Final Volume (mL)	Sample Notes	Hg-SPK (mL)	METALS-STK1 (mL)	METALS-STK2 (mL)
6020BS_P	BLANK	4308596	Solid	1.067	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	LCS	4308597	Solid	1.016	357589 (7.5)	332176 (2.5)	357590 (5)	50		363145 (.25)	343315 (.5)	343316 (.5)
6020BS_P	PS	10606046001	Solid	1.039	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	MS	4308598	Solid	1.043	357589 (7.5)	332176 (2.5)	357590 (5)	50		363145 (.25)	343315 (.5)	343316 (.5)
6020BS_P	MSD	4308599	Solid	1.017	357589 (7.5)	332176 (2.5)	357590 (5)	50		363145 (.25)	343315 (.5)	343316 (.5)
6020BS_P	PS	10606394001	Solid	1.022	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10606394002	Solid	1.03	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10606394003	Solid	1.012	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10606394004	Solid	1.07	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10606395001	Solid	1.05	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10606395002	Solid	1.085	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10606395003	Solid	1.02	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10606395004	Solid	1.031	357589 (7.5)	332176 (2.5)	357590 (5)	50				

## Sample Information:

## Standard Notes:

343315: ZPACEMN-116 (MIX 1)

343316: ZPACEMN-106

363145: Intermediate Spike for IC/PMS Soil

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-SG13-042522-0-1.5

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500  
Lab Sample ID: 10606046001 Percent Moisture: 27.7

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	ND	U	mg/kg	1	05/10/2022 12:30



FORM II INORGANIC-1  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Initial Calibration Verification Source: 365356

Continuing Calibration Verification Source: 365356

Concentration Units: ug/L Instrument ID: 10HG09

Analyte	Initial Calibration Verification				Continuing Calibration Verification						
	05/10/2022 12:08				05/10/2022 12:23			05/10/2022 12:40			Control Limit
	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Mercury	5.0	5.0	101.0	90-110	5.0	4.9	98.6	5.0	4.9	97.2	90-110

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

CRDL Check Standard Source: 365084,365351 Analysis Date/Time: 05/10/2022 12:11

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.2	0.19	95.0	70-130

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

CRDL Check Standard Source: 365084,365351 Analysis Date/Time: 05/10/2022 12:22

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.2	0.18	90.0	70-130

FORM III INORGANIC-1  
BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract : D3593500

Method Blank Matrix: Solid Instrument ID: 10HG09

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	05/10/2022 12:09	C	05/10/2022 12:25	C	05/10/2022 12:41	C		C	4308604	C
Mercury	0.087	U	0.087	U	0.087	U			ND	U

FORM V INORGANIC-1  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4308606MS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Matrix: Solid Basis: Dry Parent Sample ID: 10606394001

Percent Moisture: 44.5

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Mercury	mg/kg	80-120	0.86	0.025J	0.81	102

FORM V INORGANIC-2  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4308607MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Matrix: Solid Basis: Dry Parent Sample ID: 10606394001

Percent Moisture: 44.5

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Mercury	mg/kg	80-120	0.81	0.025J	0.79	100

FORM VI INORGANIC-1  
DUPLICATES

SAMPLE NO.

4308607MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 44.5 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Mercury	20	0.86	0.81	6

FORM VII INORGANIC-1  
LABORATORY CONTROL SAMPLE

SAMPLE NO.

4308605LCS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Mercury	mg/kg	0.48	0.49	101	80	120



FORM IX INORGANIC-1  
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Preparation Method: None Instrument ID: 10HG09

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Mercury	0.20	0.087	03/30/2021

FORM IX INORGANIC-2  
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Preparation Method: EPA 7471B Instrument ID: 10HG09

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Mercury	0.020	0.0087	03/30/2021

FORM XII INORGANIC-1  
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Preparation Method: EPA 7471B Batch: MERP 37092

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
4308604	4308604	05/03/2022	0.325	30
4308605	4308605	05/03/2022	0.31	30
4308606	4308606	05/03/2022	0.331	30
4308607	4308607	05/03/2022	0.342	30
10606046001	BNSF-SG13-042522-0-1.5	05/03/2022	0.338	30

FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Instrument ID: 10HG09 Analysis Method: EPA 7471B

Start Date: 05/10/2022 11:40 End Date: 05/10/2022 12:41

Sample Name	Lab Sample ID	D/F	Date	Time	Hg
29937326CAL0	29937326CAL0	1	05/10/2022	11:40	X
29937327CAL1	29937327CAL1	1	05/10/2022	11:41	X
29937328CAL2	29937328CAL2	1	05/10/2022	11:43	X
29937329CAL3	29937329CAL3	1	05/10/2022	11:45	X
29937330CAL4	29937330CAL4	1	05/10/2022	11:46	X
29937331CAL5	29937331CAL5	1	05/10/2022	11:48	X
29937332ICV	29937332ICV	1	05/10/2022	12:08	X
29937333ICB	29937333ICB	1	05/10/2022	12:09	X
29937334CRDL	29937334CRDL	1	05/10/2022	12:11	X
29937336CRDL	29937336CRDL	1	05/10/2022	12:22	X
29937337CCV	29937337CCV	1	05/10/2022	12:23	X
29937341CCB	29937341CCB	1	05/10/2022	12:25	X
4308604BLANK	4308604	1	05/10/2022	12:27	X
4308605LCS	4308605	1	05/10/2022	12:28	X
BNSF-SG13-042522-0-1.5	10606046001	1	05/10/2022	12:30	X
10606394001	10606394001	1	05/10/2022	12:32	X
4308606MS	4308606	1	05/10/2022	12:33	X
4308607MSD	4308607	1	05/10/2022	12:35	X
29937342CCV	29937342CCV	1	05/10/2022	12:40	X
29937343CCB	29937343CCB	1	05/10/2022	12:41	X

**Report Generated By Teledyne Leeman QuickTrace**

**Analyst:** 10metalsuser,LENA WIGER

**Worksheet file:** S:\DATA\Metals\10HG09\10MAY22SOLIDSB10HG09.wszf

**Creation Date:** 5/10/2022 11:37:52 AM

**Comment:** EPA 7471/7471B

## Results

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
Calibration Blank	STD	05/10/22 11:40:16 am	0.00	396	3.07			1.0000	N/A
Replicates			387.3 394.0 413.5 388.5						
Standard #1 (0.2 ug/L)	STD	05/10/22 11:41:53 am	0.20	2001	0.59	-8.65%		1.0000	N/A
Replicates			2007.6 1983.7 2009.2 2002.2						
Standard #2 (1 ug/L)	STD	05/10/22 11:43:30 am	1.00	8271	0.43	-1.69%		1.0000	N/A
Replicates			8222.4 8275.4 8307.4 8278.9						
Standard #3 (3 ug/L)	STD	05/10/22 11:45:08 am	3.00	24464	0.48	1.67%		1.0000	N/A
Replicates			24298.3 24465.4 24534.6 24557.6						
Standard #4 (5 ug/L)	STD	05/10/22 11:46:46 am	5.00	40040	0.28	0.77%		1.0000	N/A
Replicates			40170.4 39908.9 39995.1 40084.9						
Standard #5 (10 ug/L)	STD	05/10/22 11:48:24 am	10.00	78656	1.20	-0.32%		1.0000	N/A
Replicates			79916.4 77791.3 78108.6 78809.6						
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Calibration</p> <p>Equation: Abs = 7833.940x + 569.366</p> <p>R2: 0.99992 RSE: 5.20%</p> <p>SEE: 305.9292</p> <p>Flags:</p> </div> <div style="width: 50%;"> </div> </div>									
ICV	ICV	05/10/22 12:08:01 pm	5.05	40149	0.17			1.0000	101.05
Replicates			40126.1 40249.5 40091.5 40128.0						
ICB	ICB	05/10/22 12:09:40 pm	-0.02	419	7.42			1.0000	N/A
Replicates			418.1 404.3 426.0 429.3						
CRDL	CRDL	05/10/22 12:11:17 pm	0.19	2089	1.96			1.0000	96.98
Replicates			2116.6 2078.5 2108.5 2051.5						
4312191_43583	UNK	05/10/22 12:14:10 pm	-0.01	506	32.13			1.0000	N/A
Replicates			530.4 497.9 512.9 482.9						
4312192_43583	UNK	05/10/22 12:15:46 pm	4.92	39076	0.32			1.0000	N/A
Replicates			39232.3 38930.6 39057.1 39085.3						
10605980004_43583	UNK	05/10/22 12:17:23 pm	0.11	1428	1.12			1.0000	N/A
Replicates			1426.4 1432.7 1415.2 1437.4						
4312193_43583	UNK	05/10/22 12:19:00 pm	5.22	41466	0.23			1.0000	N/A
Replicates			41491.5 41533.0 41515.0 41325.5						

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
4312194_43583	UNK	05/10/22 12:20:36 pm	5.11	40610	0.13			1.0000	N/A
Replicates		40566.2 40570.3 40678.5 40626.5							
CRDL	CRDL	05/10/22 12:22:14 pm	0.18	1984	1.24			1.0000	90.26
Replicates		1983.0 2007.2 1979.0 1965.0							
CCV	CCV	05/10/22 12:23:52 pm	4.93	39184	0.61			1.0000	98.58
Replicates		39116.9 38928.1 39198.3 39493.6							
CCB	CCB	05/10/22 12:25:31 pm	-0.02	449	12.78			1.0000	N/A
Replicates		426.2 458.7 457.2 454.4							
4308604_43535	UNK	05/10/22 12:27:08 pm	0.00	557	89.73			1.0000	N/A
Replicates		557.7 554.7 571.5 545.2							
4308605_43535	UNK	05/10/22 12:28:45 pm	5.07	40296	0.09			1.0000	N/A
Replicates		40267.4 40326.1 40325.8 40265.8							
10606046001_43535	UNK	05/10/22 12:30:22 pm	0.05	993	2.85			1.0000	N/A
Replicates		980.1 991.1 1009.1 990.6							
10606394001_43535	UNK	05/10/22 12:32:00 pm	0.15	1711	1.07			1.0000	N/A
Replicates		1714.8 1699.9 1726.2 1702.2							
4308606_43535	UNK	05/10/22 12:33:38 pm	5.26	41794	0.31			1.0000	N/A
Replicates		41722.1 41957.4 41826.7 41668.9							
4308607_43535	UNK	05/10/22 12:35:15 pm	5.14	40829	0.19			1.0000	N/A
Replicates		40717.3 40859.9 40877.1 40863.4							
10606394002_43535	UNK	05/10/22 12:36:53 pm	0.03	798	3.64			1.0000	N/A
Replicates		794.2 793.8 810.3 793.0							
10606394003_43535	UNK	05/10/22 12:38:30 pm	0.01	623	44.08			1.0000	N/A
Replicates		610.2 610.1 612.8 658.1							
CCV	CCV	05/10/22 12:40:08 pm	4.86	38633	0.19			1.0000	97.18
Replicates		38527.9 38659.3 38690.6 38653.3							
CCB	CCB	05/10/22 12:41:47 pm	-0.02	389	14.59			1.0000	N/A
Replicates		390.5 418.4 392.6 354.4							
10606394004_43535	UNK	05/10/22 12:43:24 pm	0.33	3174	0.71			1.0000	N/A
Replicates		3179.3 3197.9 3156.9 3162.6							
10606395001_43535	UNK	05/10/22 12:45:00 pm	0.02	761	9.48			1.0000	N/A
Replicates		780.4 766.3 761.8 736.8							
10606395002_43535	UNK	05/10/22 12:46:37 pm	0.05	979	3.03			1.0000	N/A
Replicates		983.0 976.6 964.1 993.9							
10606395003_43535	UNK	05/10/22 12:48:14 pm	0.03	803	2.59			1.0000	N/A
Replicates		794.5 808.8 804.8 802.3							
10606395004_43535	UNK	05/10/22 12:49:51 pm	0.20	2160	0.92			1.0000	N/A
Replicates		2159.0 2148.4 2181.2 2152.4							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
CRDL		CRDL 05/10/22 12:51:28 pm	0.19	2081	1.12			1.0000	96.47
Replicates		2096.8 2094.3 2065.8 2066.5							
CCV		CCV 05/10/22 12:53:07 pm	4.86	38665	1.38			1.0000	97.26
Replicates		38681.9 38050.6 38595.4 39330.6							
CCB		CCB 05/10/22 12:54:45 pm	-0.02	445	5.62			1.0000	N/A
Replicates		448.0 448.1 434.3 448.8							
4315272_43568		UNK 05/10/22 12:56:23 pm	0.00	551	67.67			1.0000	N/A
Replicates		558.9 564.1 538.1 543.9							
4315273_43568		UNK 05/10/22 12:58:00 pm	5.22	41441	0.38			1.0000	N/A
Replicates		41215.3 41509.3 41465.5 41574.8							
10607417001_43568		UNK 05/10/22 12:59:38 pm	0.09	1253	1.58			1.0000	N/A
Replicates		1267.6 1243.7 1246.0 1254.0							
4315274_43568		UNK 05/10/22 01:01:15 pm	5.23	41505	0.72			1.0000	N/A
Replicates		41262.0 41341.9 41489.9 41925.4							
4315275_43568		UNK 05/10/22 01:02:53 pm	5.45	43284	0.71			1.0000	N/A
Replicates		42838.2 43370.9 43516.4 43410.7							
CRDL		CRDL 05/10/22 01:04:30 pm	0.18	1958	1.45			1.0000	88.61
Replicates		1928.9 1975.9 1964.4 1961.9							
CCV		CCV 05/10/22 01:06:09 pm	4.90	38934	0.60			1.0000	97.95
Replicates		39132.4 38685.6 38790.8 39128.6							
CCB		CCB 05/10/22 01:07:48 pm	-0.02	439	11.05			1.0000	N/A
Replicates		427.5 459.5 438.0 430.8							
4315290_43569		UNK 05/10/22 01:09:26 pm	0.00	550	40.95			1.0000	N/A
Replicates		560.8 542.1 550.1 547.4							
4315291_43569		UNK 05/10/22 01:11:03 pm	5.29	42015	0.70			1.0000	N/A
Replicates		41667.1 41885.5 42280.5 42228.0							
10606264001_43569		UNK 05/10/22 01:12:39 pm	0.01	680	2.85			1.0000	N/A
Replicates		683.3 677.0 681.0 677.0							
4315292_43569		UNK 05/10/22 01:14:16 pm	5.27	41893	0.56			1.0000	N/A
Replicates		41672.8 41787.0 41903.5 42207.3							
4315293_43569		UNK 05/10/22 01:15:53 pm	5.09	40440	1.22			1.0000	N/A
Replicates		39786.0 40366.8 40714.8 40891.1							
CRDL		CRDL 05/10/22 01:17:30 pm	0.18	1977	1.56			1.0000	89.85
Replicates		1983.1 1947.2 1999.7 1978.5							
CCV		CCV 05/10/22 01:19:09 pm	5.00	39757	0.38			1.0000	100.05
Replicates		39598.0 39884.5 39663.8 39881.5							
CCB		CCB 05/10/22 01:20:47 pm	-0.02	438	16.45			1.0000	N/A
Replicates		421.6 459.3 416.3 452.8							

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
4315282_43570	UNK	05/10/22 01:22:24 pm	-0.01	473	20.24			1.0000	N/A
Replicates		465.5 486.5 490.0 448.0							
4315283_43570	UNK	05/10/22 01:24:01 pm	5.24	41611	0.18			1.0000	N/A
Replicates		41513.3 41591.0 41668.2 41671.0							
10607169001_43570	UNK	05/10/22 01:25:38 pm	0.34	3212	0.84			1.0000	N/A
Replicates		3194.7 3194.1 3219.8 3240.3							
4315284_43570	UNK	05/10/22 01:27:16 pm	5.67	44955	0.77			1.0000	N/A
Replicates		44529.7 44896.5 45043.3 45351.3							
4315285_43570	UNK	05/10/22 01:28:53 pm	5.49	43547	0.17			1.0000	N/A
Replicates		43456.8 43576.0 43630.7 43522.7							
10607169002_43570	UNK	05/10/22 01:30:31 pm	0.34	3224	0.65			1.0000	N/A
Replicates		3218.0 3248.1 3224.6 3207.3							
10607169003_43570	UNK	05/10/22 01:32:09 pm	0.56	4957	1.23			1.0000	N/A
Replicates		5008.8 4951.3 4884.5 4984.5							
10607169004_43570	UNK	05/10/22 01:33:47 pm	0.46	4190	0.45			1.0000	N/A
Replicates		4180.0 4197.3 4209.8 4174.3							
10607169005_43570	UNK	05/10/22 01:35:24 pm	0.34	3231	0.30			1.0000	N/A
Replicates		3225.6 3227.3 3242.5 3227.8							
CRDL	CRDL	05/10/22 01:37:01 pm	0.19	2028	1.11			1.0000	93.10
Replicates		2024.5 2024.8 2012.3 2050.8							
CCV	CCV	05/10/22 01:38:39 pm	5.03	39955	0.31			1.0000	100.55
Replicates		39786.6 39938.6 40042.1 40054.4							
CCB	CCB	05/10/22 01:40:18 pm	-0.02	393	5.74			1.0000	N/A
Replicates		381.7 406.3 391.8 393.8							
4312183_43584	UNK	05/10/22 01:41:55 pm	0.00	540	93.12			1.0000	N/A
Replicates		507.0 528.7 552.0 570.7							
4312184_43584	UNK	05/10/22 01:43:32 pm	5.25	41671	0.53			1.0000	N/A
Replicates		41971.0 41677.7 41480.9 41553.7							
10606797001_43584	UNK	05/10/22 01:45:08 pm	-0.01	529	34.03			1.0000	N/A
Replicates		533.1 514.2 545.9 522.2							
4312185_43584	UNK	05/10/22 01:46:45 pm	4.74	37674	0.18			1.0000	N/A
Replicates		37578.2 37676.7 37712.9 37727.9							
4312186_43584	UNK	05/10/22 01:48:22 pm	4.91	38999	0.13			1.0000	N/A
Replicates		38947.0 39037.6 39042.6 38969.4							
10606981001_43584	UNK	05/10/22 01:50:00 pm	0.19	2038	1.60			1.0000	N/A
Replicates		2016.3 2034.3 2071.6 2031.1							
10606796001_43584	UNK	05/10/22 01:51:37 pm	-0.01	515	38.28			1.0000	N/A
Replicates		508.8 545.3 497.8 507.5							



Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
CRDL	CRDL	05/10/22 01:53:14 pm	0.19	2038	0.43			1.0000	93.72
Replicates		2031.9 2032.8 2044.1 2042.1							
CCV	CCV	05/10/22 01:54:52 pm	4.89	38845	0.32			1.0000	97.72
Replicates		38665.9 38864.6 38926.8 38922.8							
CCB	CCB	05/10/22 01:56:31 pm	-0.02	439	11.70			1.0000	N/A
Replicates		423.6 429.1 453.4 451.4							
4307147_43503	UNK	05/10/22 01:58:09 pm	0.00	573	365.90			1.0000	N/A
Replicates		582.6 584.9 557.2 567.2							
4307148_43503	UNK	05/10/22 01:59:47 pm	5.14	40847	1.97			1.0000	N/A
Replicates		40175.4 40237.0 41142.0 41833.8							
10606192001_43503	UNK	05/10/22 02:01:24 pm	0.21	2253	0.61			1.0000	N/A
Replicates		2260.7 2239.8 2261.3 2248.8							
4307149_43503	UNK	05/10/22 02:03:02 pm	5.26	41809	0.12			1.0000	N/A
Replicates		41809.1 41868.8 41750.8 41806.0							
4307150_43503	UNK	05/10/22 02:04:39 pm	5.03	39978	2.15			1.0000	N/A
Replicates		39078.3 39487.0 40409.0 40937.5							
10606192002_43503	UNK	05/10/22 02:06:16 pm	0.15	1781	1.32			1.0000	N/A
Replicates		1790.0 1798.0 1767.8 1766.3							
10606192003_43503	UNK	05/10/22 02:07:53 pm	0.21	2204	1.19			1.0000	N/A
Replicates		2194.5 2181.1 2216.8 2222.8							
CRDL	CRDL	05/10/22 02:09:30 pm	0.18	2009	1.50			1.0000	91.89
Replicates		2004.6 2004.6 1987.9 2039.1							
CCV	CCV	05/10/22 02:11:09 pm	4.90	38994	1.05			1.0000	98.10
Replicates		38441.2 38961.5 39198.0 39373.5							
CCB	CCB	05/10/22 02:12:48 pm	-0.02	417	8.43			1.0000	N/A
Replicates		400.7 421.3 414.0 431.3							
4303400_43454	UNK	05/10/22 02:14:25 pm	0.00	566	420.64			1.0000	N/A
Replicates		550.7 574.2 581.2 557.9							
4303401_43454	UNK	05/10/22 02:16:02 pm	5.09	40449	0.12			1.0000	N/A
Replicates		40380.8 40466.3 40486.3 40462.3							
10605435001_43454	UNK	05/10/22 02:17:39 pm	0.14	1678	1.50			1.0000	N/A
Replicates		1681.3 1692.9 1653.9 1682.1							
10605435002_43454	UNK	05/10/22 02:19:16 pm	0.17	1903	0.94			1.0000	N/A
Replicates		1918.3 1903.0 1887.7 1901.7							
10605435003_43454	UNK	05/10/22 02:20:54 pm	0.18	1954	0.62			1.0000	N/A
Replicates		1942.7 1951.6 1958.9 1961.9							
10605661001_43454	UNK	05/10/22 02:22:31 pm	0.04	853	3.54			1.0000	N/A
Replicates		843.4 862.1 844.8 860.8							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
4303402_43454	UNK	05/10/22 02:24:09 pm	4.38	34852	1.03			1.0000	N/A
Replicates		34790.8 34555.1 34699.1 35361.3							
4303403_43454	UNK	05/10/22 02:25:47 pm	4.38	34861	0.16			1.0000	N/A
Replicates		34787.8 34853.5 34919.2 34884.7							
10605661002_43454	UNK	05/10/22 02:27:25 pm	0.07	1093	2.82			1.0000	N/A
Replicates		1075.3 1106.8 1086.8 1103.5							
CRDL	CRDL	05/10/22 02:29:02 pm	0.18	1968	2.42			1.0000	89.30
Replicates		1955.4 1944.2 1955.5 2018.7							
CCV	CCV	05/10/22 02:30:41 pm	4.90	38983	0.66			1.0000	98.07
Replicates		39184.7 38683.6 38861.3 39201.8							
CCB	CCB	05/10/22 02:32:20 pm	-0.02	398	9.58			1.0000	N/A
Replicates		403.1 377.9 417.1 395.1							
4310680_43571	UNK	05/10/22 02:33:57 pm	0.01	652	20.04			1.0000	N/A
Replicates		642.0 634.8 670.3 661.8							
4310681_43571	UNK	05/10/22 02:35:34 pm	5.25	41670	1.82			1.0000	N/A
Replicates		41550.1 42443.9 41991.9 40693.2							
10606360001_43571	UNK	05/10/22 02:37:12 pm	0.22	2260	0.97			1.0000	N/A
Replicates		2270.8 2256.7 2239.0 2275.2							
4310682_43571	UNK	05/10/22 02:38:49 pm	4.35	34679	0.10			1.0000	N/A
Replicates		34631.9 34679.9 34706.6 34696.6							
4310683_43571	UNK	05/10/22 02:40:26 pm	4.65	36984	0.06			1.0000	N/A
Replicates		36999.3 36977.2 36957.2 37003.2							
10606360002_43571	UNK	05/10/22 02:42:03 pm	0.10	1385	3.17			1.0000	N/A
Replicates		1371.0 1420.5 1361.5 1385.3							
10606361001_43571	UNK	05/10/22 02:43:41 pm	0.12	1480	2.33			1.0000	N/A
Replicates		1477.1 1452.6 1484.6 1503.9							
10606361002_43571	UNK	05/10/22 02:45:18 pm	0.11	1466	1.88			1.0000	N/A
Replicates		1444.2 1478.1 1462.4 1480.9							
CRDL	CRDL	05/10/22 02:46:55 pm	0.18	1995	2.55			1.0000	91.01
Replicates		1947.2 1995.3 2035.0 2003.5							
CCV	CCV	05/10/22 02:48:34 pm	4.88	38837	0.78			1.0000	97.70
Replicates		38527.6 38661.9 38965.4 39193.6							
CCB	CCB	05/10/22 02:50:13 pm	-0.02	442	3.01			1.0000	N/A
Replicates		436.9 445.6 442.4 444.1							
4310663_43573	UNK	05/10/22 02:51:50 pm	0.00	604	20.13			1.0000	N/A
Replicates		596.6 613.0 606.3 601.3							
4310664_43573	UNK	05/10/22 02:53:28 pm	5.15	40896	0.14			1.0000	N/A
Replicates		40813.5 40910.2 40922.9 40936.2							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
10606414001_43573	UNK	05/10/22 02:55:06 pm	1.43	11802	1.54			1.0000	N/A
Replicates		11979.1 11903.1 11731.8 11593.6							
10606414002_43573	UNK	05/10/22 02:56:44 pm	0.60	5245	1.75			1.0000	N/A
Replicates		5251.8 5152.8 5226.5 5350.8							
10606414003_43573	UNK	05/10/22 02:58:22 pm	0.06	1011	1.14			1.0000	N/A
Replicates		1012.3 1015.2 1003.5 1011.7							
10606414004_43573	UNK	05/10/22 02:59:59 pm	0.57	5041	0.24			1.0000	N/A
Replicates		5054.7 5033.7 5031.7 5042.9							
10606414005_43573	UNK	05/10/22 03:01:36 pm	85.61	671274	0.51	O		1.0000	N/A
Replicates		667007.4 670233.3 672841.3 675012.6							
4310665_43573	UNK	05/10/22 03:05:41 pm	97.17	761807	0.20	O		1.0000	N/A
Replicates		759682.8 761888.7 762611.7 763044.2							
4310666_43573	UNK	05/10/22 03:10:05 pm	95.98	752484	1.05	O		1.0000	N/A
Replicates		744199.6 749091.8 753994.3 762651.3							
10606414006_43573	UNK	05/10/22 03:14:46 pm	5.06	40192	0.06			1.0000	N/A
Replicates		40177.7 40178.0 40182.3 40229.8							
CRDL	CRDL	05/10/22 03:16:24 pm	0.17	1887	1.03			1.0000	84.12
Replicates		1868.5 1892.6 1887.9 1900.1							
CCV	CCV	05/10/22 03:18:02 pm	4.95	39375	0.91			1.0000	99.07
Replicates		39893.8 39253.6 39116.6 39234.3							
CCB	CCB	05/10/22 03:19:41 pm	-0.02	390	9.04			1.0000	N/A
Replicates		376.3 399.6 407.6 375.8							
4315286_43581	UNK	05/10/22 03:21:19 pm	-0.01	473	19.16			1.0000	N/A
Replicates		448.8 473.9 476.1 493.6							
4315287_43581	UNK	05/10/22 03:22:56 pm	5.14	40845	0.20			1.0000	N/A
Replicates		40731.4 40852.0 40906.7 40891.0							
10606158001_43581	UNK	05/10/22 03:24:34 pm	0.26	2623	1.40			1.0000	N/A
Replicates		2585.9 2632.9 2654.2 2617.7							
4315288_43581	UNK	05/10/22 03:26:11 pm	5.82	46131	0.13			1.0000	N/A
Replicates		46141.2 46201.1 46128.1 46053.1							
4315289_43581	UNK	05/10/22 03:27:49 pm	5.54	43955	0.23			1.0000	N/A
Replicates		43824.2 43953.9 43977.4 44063.4							
10607008001_43581	UNK	05/10/22 03:29:27 pm	1.67	13674	0.31			1.0000	N/A
Replicates		13619.3 13666.1 13709.3 13699.6							
10607011001_43581	UNK	05/10/22 03:31:05 pm	0.50	4470	0.47			1.0000	N/A
Replicates		4487.7 4479.2 4445.7 4469.2							
10607172001_43581	UNK	05/10/22 03:32:43 pm	0.02	721	6.01			1.0000	N/A
Replicates		725.8 715.9 710.9 730.9							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
CCV	CCV	05/10/22 03:34:21 pm	4.91	39003	0.45			1.0000	98.12
Replicates		38759.0 39013.3 39074.6 39163.8							
CCB	CCB	05/10/22 03:36:00 pm	-0.03	372	3.57			1.0000	N/A
Replicates		371.0 366.9 369.2 382.7							
10607172003_43581	UNK	05/10/22 03:37:38 pm	0.02	717	14.15			1.0000	N/A
Replicates		701.9 748.0 707.3 711.8							
10607172005_43581	UNK	05/10/22 03:39:15 pm	0.03	827	4.59			1.0000	N/A
Replicates		839.0 826.1 811.4 832.6							
10607172007_43581	UNK	05/10/22 03:40:53 pm	0.01	631	28.38			1.0000	N/A
Replicates		613.9 619.9 639.9 651.9							
10607223002_43581	UNK	05/10/22 03:42:31 pm	0.40	3694	0.57			1.0000	N/A
Replicates		3684.0 3675.5 3714.5 3703.0							
10607223003_43581	UNK	05/10/22 03:44:08 pm	0.60	5249	0.47			1.0000	N/A
Replicates		5222.0 5241.2 5262.2 5270.7							
10607223004_43581	UNK	05/10/22 03:45:46 pm	0.61	5339	1.87			1.0000	N/A
Replicates		5217.0 5329.8 5415.5 5394.8							
10606445002_43581	UNK	05/10/22 03:47:23 pm	-0.01	478	26.95			1.0000	N/A
Replicates		485.2 449.2 507.5 469.0							
10607170001_43581	UNK	05/10/22 03:49:21 pm	0.03	804	10.82			1.0000	N/A
Replicates		817.3 821.8 809.8 766.5							
CCV	CCV	05/10/22 03:50:59 pm	4.85	38555	0.35			1.0000	96.98
Replicates		38359.7 38570.0 38646.3 38642.0							
CCB	CCB	05/10/22 03:52:38 pm	-0.02	378	4.56			1.0000	N/A
Replicates		369.3 373.6 389.1 381.1							
10607170003_43581	UNK	05/10/22 03:54:16 pm	0.01	609	48.62			1.0000	N/A
Replicates		609.6 633.4 585.7 609.2							
10607170004_43581	UNK	05/10/22 03:55:54 pm	0.03	768	2.75			1.0000	N/A
Replicates		769.3 761.5 766.2 774.5							
10607170005_43581	UNK	05/10/22 03:57:32 pm	0.04	852	3.65			1.0000	N/A
Replicates		858.7 862.0 844.7 841.0							
10607170007_43581	UNK	05/10/22 03:59:10 pm	0.07	1120	3.10			1.0000	N/A
Replicates		1114.6 1099.3 1139.6 1125.8							
10607170008_43581	UNK	05/10/22 04:00:47 pm	0.01	672	16.07			1.0000	N/A
Replicates		682.5 650.4 667.4 686.7							
10606414005Dx50_43573	UNK	05/10/22 04:03:24 pm	2.60	20956	1.13			1.0000	N/A
Replicates		21201.9 21080.3 20859.3 20681.5							
4310665Dx50_43573	UNK	05/10/22 04:05:02 pm	3.26	26111	1.86			1.0000	N/A
Replicates		26567.1 26381.8 26006.5 25488.8							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
4310666Dx50_43573	UNK	05/10/22 04:06:39 pm	3.34	26701	1.11			1.0000	N/A
Replicates		26338.5 26621.8 26831.3 27012.6							
CRDL	CRDL	05/10/22 04:08:35 pm	0.18	1977	0.35			1.0000	89.82
Replicates		1976.6 1981.0 1979.2 1969.7							
CCV	CCV	05/10/22 04:10:13 pm	4.93	39199	0.45			1.0000	98.62
Replicates		38964.2 39195.1 39263.3 39372.3							
CCB	CCB	05/10/22 04:11:52 pm	-0.02	403	16.85			1.0000	N/A
Replicates		390.4 406.3 441.1 376.1							



# Prep Log Report

Batch Information: MERP 812439 7471B S\_P

Template Version: ENV-EPL-MIN4-0028-Rev.00 (13Dec2020)

Prep Method	EPA 7471B	Analysis Method	EPA 7471B	Prepared By	NJ1	Instrument	10BL04
Block ID	10MET54	Thermometer ID	210354363	Correction Factor (C)	.8	Block Temp (C)	94
Corrected Temp. (C)	94.80	Digestion Start Date/Time	05/03/2022 12:07:41:655	Digestion End Date/Time	05/03/2022 12:51:10:405	Block End Temp (C)	96
Corrected End Temp. (C)	96.80	Digestion Vessel	360406	Resin Pellets Solid Matrix	344615	Metals Pipette 1	Q473
Metals Pipette 2	Q778	Bottle Disp. 1	Q814	Bottle Disp. 2	Q791	Bottle Disp. 3	Q452
Bottle Disp. 4	Q671	Bottle Disp. 5		Reviewed By	MT2	Reviewed By Date	05/04/2022 08:49
Batch Notes							

## Sample Information:

QC Rule	Sample Type	Lab Sample ID	Matrix	Initial Weight (g)	Aqua Regia (mL)	5% KMnO4 (mL)	12% NH2OH-HCL (mL)	Final Volume (mL)	Sample Notes	MERCURY-SPK (mL)
7471B_S_P	BLANK	4308604	Solid	0.325	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	LCS	4308605	Solid	0.31	364106 (3)	362590 (9)	363339 (3.6)	30		350870 (.15)
7471B_S_P	PS	10606046001	Solid	0.338	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	PS	10606394001	Solid	0.32	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	MS	4308606	Solid	0.331	364106 (3)	362590 (9)	363339 (3.6)	30		350870 (.15)
7471B_S_P	MSD	4308607	Solid	0.342	364106 (3)	362590 (9)	363339 (3.6)	30		350870 (.15)
7471B_S_P	PS	10606394002	Solid	0.351	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	PS	10606394003	Solid	0.301	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	PS	10606394004	Solid	0.34	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	PS	10606395001	Solid	0.339	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	PS	10606395002	Solid	0.321	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	PS	10606395003	Solid	0.309	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	PS	10606395004	Solid	0.306	364106 (3)	362590 (9)	363339 (3.6)	30		

## Standard Notes:

350870: LCS, MS, MSD Spike Solution

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-SG13-042522-0-1.5

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500  
Lab Sample ID: 10606046001 Percent Moisture: \_\_\_\_\_

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	27.7		%	1	04/28/2022 14:11

FORM VI INORGANIC-1  
DUPLICATES

SAMPLE NO.

4305698DUP

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Matrix: Solid Concentration Units: %

Percent Moisture: \_\_\_\_\_ Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	30	17.6	17.4	1



FORM VI INORGANIC-2  
DUPLICATES

SAMPLE NO.

4306465DUP

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Matrix: Solid Concentration Units: %

Percent Moisture: \_\_\_\_\_ Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	30	9.0	9.0	0

FORM IX INORGANIC-1  
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Preparation Method: ASTM D2974 Instrument ID: 10BALP

Concentration Units: %

Analyte	PQL	MDL	MDL Date
Percent Moisture	0.10	0.10	01/01/2003

FORM XII INORGANIC-1  
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Preparation Method: ASTM D2974 Batch: MPRP 123848

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
4305698	4305698	04/28/2022	1	1
4306465	4306465	04/28/2022	1	1
10606046001	BNSF-SG13-042522-0-1.5	04/28/2022	1	1

FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10606046 Contract: D3593500

Instrument ID: 10BALP

Analysis Method: ASTM D2974

Start Date: 04/28/2022 14:10

End Date: 04/28/2022 14:12

Sample Name	Lab Sample ID	D/F	Date	Time	MO IST
10605738001	10605738001	1	04/28/2022	14:10	X
4305698DUP	4305698	1	04/28/2022	14:10	X
BNSF-SG13-042522-0-1.5	10606046001	1	04/28/2022	14:11	X
10606065003	10606065003	1	04/28/2022	14:12	X
4306465DUP	4306465	1	04/28/2022	14:12	X



# Prep Log Report

Batch Information: 811854 123848 DW

Template Version: ENV-EPL-MIN4-0033-Rev.00 (13Dec2020)

Analysis Method	ASTM D2974	Analyzed By	JDL	Instrument	10BALP	Oven ID	10WET49
Acceptance Range	100-110 C	Thermometer ID	559926	Oven Correction Factor (C)	0	Oven Temp In1 (C)   Corr   Date/Time   Init	105.0   105.0   04/28/2022 14:27   JDL
Oven Temp Out1 (C)   Corr   Date/Time   Init	103.0   103.0   04/29/2022 08:01   JDL	Desic. In 1 ID   Date/Time   Init	10MET41   04/29/2022 08:01   JDL	Desic. Out 1 Date/Time   Init	04/29/2022 08:34   JDL	Reviewed By	CR2
Reviewed By Date	04/29/2022 08:23	Batch Notes					

## Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	ID	TS Posted (%)	Percent Moisture	Run Date/Time	Posted Dry Weight /w Dish (g)	Dish Weight (g)	Wet Weight /w Dish (g)	Dry Weight 1 (g)	Dry Wt Use 1	Sample Notes
DRY WEIGHT	PS	10605738001	Y		82.39	17.61	04/28/2022 14:10:15	8.4691	1.3096	9.9992	8.4691	M	
DRY WEIGHT	DUP	4305698	Y		82.64	17.36	04/28/2022 14:10:25	8.3938	1.3069	9.8821	8.3938	M	
DRY WEIGHT	PS	10605738002	Y		81.63	18.37	04/28/2022 14:10:36	8.3716	1.3085	9.9615	8.3716	M	
DRY WEIGHT	PS	10605738003	Y		80.36	19.64	04/28/2022 14:10:46	8.1741	1.3067	9.8524	8.1741	M	
DRY WEIGHT	PS	10606158001	Y		86.32	13.68	04/28/2022 14:10:57	8.7309	1.3054	9.9073	8.7309	M	
DRY WEIGHT	PS	10605899001	Y		90.89	9.113	04/28/2022 14:11:08	8.8582	1.3125	9.6148	8.8582	M	
DRY WEIGHT	PS	10606046001	Y		72.28	27.72	04/28/2022 14:11:20	6.9025	1.3061	9.0484	6.9025	M	
DRY WEIGHT	PS	10606060001	Y		80.10	19.90	04/28/2022 14:11:42	7.6449	1.3121	9.2179	7.6449	M	
DRY WEIGHT	PS	10606063001	Y		73.93	26.07	04/28/2022 14:11:57	7.3948	1.3076	9.5416	7.3948	M	
DRY WEIGHT	PS	10606065001	Y		88.24	11.76	04/28/2022 14:12:08	8.9378	1.3071	9.9551	8.9378	M	
DRY WEIGHT	PS	10606065002	Y		92.22	7.776	04/28/2022 14:12:23	9.2174	1.3053	9.8845	9.2174	M	
DRY WEIGHT	PS	10606065003	Y		91.00	8.997	04/28/2022 14:12:34	9.1831	1.3073	9.9617	9.1831	M	
DRY WEIGHT	DUP	4306465	Y		90.97	9.033	04/28/2022 14:12:46	9.2078	1.3099	9.9921	9.2078	M	
DRY WEIGHT	PS	10606076001	Y		92.57	7.433	04/28/2022 14:12:56	9.2079	1.3084	9.8422	9.2079	M	
DRY WEIGHT	PS	10606076002	Y		78.37	21.63	04/28/2022 14:13:07	7.5734	1.3081	9.3031	7.5734	M	
DRY WEIGHT	PS	10606144001	Y		90.04	9.963	04/28/2022 14:13:23	9.0549	1.3075	9.9122	9.0549	M	

**Pace Analytical - Minnesota**

Sample Delivery Group: L1487790  
Samples Received: 04/29/2022  
Project Number: 10606046  
Description: D3593500  
Site: 001  
Report To: Kongmeng Vang  
1700 Elm Street Suite 200  
Minneapolis, MN 55414

Entire Report Reviewed By:



Nancy McLain  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

# TABLE OF CONTENTS

<b>Cp: Cover Page</b>	<b>1</b>
<b>Tc: Table of Contents</b>	<b>2</b>
<b>Ss: Sample Summary</b>	<b>6</b>
<b>Cn: Case Narrative</b>	<b>7</b>
<b>Su: Summary Results</b>	<b>8</b>
<b>2540 G-2011 Total Solids</b>	<b>9</b>
<b>Sample Result Inorganic Analysis Data Sheet</b>	<b>9</b>
L1487790-01 05/03/22 12:18 LOGBAL1	9
BLANK(R3787793-1) WG1857290 05/03/22 12:18 LOGBAL1	10
DUP(R3787793-3) WG1857290 05/03/22 12:18 LOGBAL1	11
LCS(R3787793-2) WG1857290 05/03/22 12:18 LOGBAL1	12
<b>Blank</b>	<b>13</b>
LOGBAL1 WG1857290	13
<b>Laboratory Duplicate</b>	<b>14</b>
WG1857290 DUP(R3787793-3)	14
<b>Laboratory Control Sample / Duplicate</b>	<b>15</b>
WG1857290 LCS(R3787793-2)	15
<b>Detection Limit Summary</b>	<b>16</b>
2540 G-2011 - Solid	16
<b>Analysis Log</b>	<b>17</b>
LOGBAL1 WG1857290	17
<b>Preparation Logs</b>	<b>18</b>
WG1857290	18
<b>8270E Semi Volatile Organic Compounds (GC/MS)</b>	<b>20</b>
<b>Surrogate Recovery</b>	<b>20</b>
Solid Surrogate Summary	20
<b>Matrix Spike / Duplicate</b>	<b>21</b>
WG1859393 MS(R3789566-3) MSD(R3789566-4)	21
<b>Laboratory Control Sample / Duplicate</b>	<b>22</b>
WG1859393 LCS(R3789566-1)	22
<b>Method Blank</b>	<b>23</b>
WG1859393 R3789566-2 BNAMS24 05/06/22 16:10	23
<b>GC/MS Performance Check</b>	<b>24</b>
BNAMS24 033122 03/31/22 17:02	24
<b>0331_02</b>	<b>25</b>
BNAMS24 050622A 05/06/22 14:35	26
<b>0506A_01T-1</b>	<b>27</b>
<b>Internal Standard &amp; Retention Time</b>	<b>28</b>
BNAMS24 05/06/22 14:57	28
<b>Sample Result Summary Organic Analysis Data Sheet</b>	<b>30</b>



L1487790-01 05/06/22 22:25 BNAMS24	30
Raw Data - 0506A_22	31
GC/MS Initial Calibration	33
BNAMS24 03/31/22 17:24	33
Calibration Plots	35
2,4-Dinitrophenol	35
2-nitrodiphenylamine	36
4,6-Dinitro-2-methylphenol	37
Benzidine	38
Benzoic Acid	39
Di-n-octyl phthalate	40
Pentachlorophenol	41
Calibration Summary	42
Raw Data	47
0331_03	47
0331_04	62
0331_05	77
0331_06	84
0331_07	95
0331_08	102
0331_09	109
0331_10	118
0331_12	127
0331_13	129
0331_14	133
0331_15	135
0331_16	137
0331_17	139
GC/MS Calibration Verification	141
BNAMS24 03/31/22 22:44	141
BNAMS24 - 033122	142
5_Benzo(b)fluoranthene	145
6_bis(2-Chloroethyl)ether	146
7_bis(2-Chloroethyl)ether	147
8_Nitrobenzene-d5	148
9_Nitrobenzene-d5	149
BNAMS24 03/31/22 23:06	150
BNAMS24 - 033122	151
BNAMS24 05/06/22 14:57	153
BNAMS24 - 050622A	154





1_bis(2-Chloroethyl)ether	157
2_bis(2-Chloroethyl)ether	158
3_Nitrobenzene-d5	159
4_Nitrobenzene-d5	160
5_Benzo(b)fluoranthene	161
BNAMS24 05/06/22 15:19	162
<b>BNAMS24 - 050622A</b>	<b>163</b>
<b>Analytical Sequence</b>	<b>165</b>
BNAMS24 03/31/22 17:24	165
<b>Detection Limit Summary</b>	<b>166</b>
8270E - Solid	166
<b>QC Result Summary Organic Analysis Data Sheet</b>	<b>167</b>
BLANK(R3789566-2) WG1859393 05/06/22 16:10 BNAMS24	167
<b>Raw Data - 0506A_05</b>	<b>168</b>
LCS(R3789566-1) WG1859393 05/06/22 15:48 BNAMS24	170
<b>Raw Data - 0506A_04</b>	<b>171</b>
1_bis(2-Chloroethyl)ether	175
2_bis(2-Chloroethyl)ether	176
3_Nitrobenzene-d5	177
4_Nitrobenzene-d5	178
MS(R3789566-3) WG1859393 05/06/22 23:09 BNAMS24	179
<b>Raw Data - 0506A_24</b>	<b>180</b>
1_Nitrobenzene-d5	184
2_Nitrobenzene-d5	185
MSD(R3789566-4) WG1859393 05/06/22 23:30 BNAMS24	186
<b>Raw Data - 0506A_25</b>	<b>187</b>
1_Nitrobenzene-d5	191
2_Nitrobenzene-d5	192
<b>Preparation Logs</b>	<b>193</b>
WG1859393	193
<b>9034/9030B Wet Chemistry</b>	<b>195</b>
<b>Sample Result Inorganic Analysis Data Sheet</b>	<b>195</b>
L1487790-01 05/02/22 18:00 MAN TITR	195
BLANK(R3787279-1) WG1857660 05/02/22 18:00 MAN TITR	196
LCS(R3787279-2) WG1857660 05/02/22 18:00 MAN TITR	197
<b>Blank</b>	<b>198</b>
MAN TITR WG1857660	198
<b>Laboratory Control Sample / Duplicate</b>	<b>199</b>
WG1857660 LCS(R3787279-2)	199
<b>Detection Limit Summary</b>	<b>200</b>



9034/9030B - Solid	200
<b>Analysis Log</b>	<b>201</b>
MAN TITR WG1857660	201
<b>Preparation Logs</b>	<b>202</b>
WG1857660	202
<b>GI: Glossary of Terms</b>	<b>204</b>
<b>AI: Accreditations &amp; Locations</b>	<b>206</b>
<b>Sc: Sample Chain of Custody</b>	<b>207</b>



# SAMPLE SUMMARY

BNSF-SG13-042522-0-1.5 L1487790-01 Solid

Collected by: [Blank]      Collected date/time: 04/25/22 09:55      Received date/time: 04/29/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1857290	1	05/03/22 11:58	05/03/22 12:18	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9034/9030B	WG1857660	1	05/01/22 08:00	05/02/22 18:00	BMD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1859393	1	05/06/22 04:50	05/06/22 22:25	ADF	Mt. Juliet, TN

- <sup>1</sup>Cp
- <sup>2</sup>Tc
- <sup>3</sup>Ss
- <sup>4</sup>Cn
- <sup>5</sup>Su
- <sup>6</sup>Gl
- <sup>7</sup>Al
- <sup>8</sup>Sc

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Nancy McLain  
Project Manager



## Report Revision History

---

Level II Report - Version 1: 05/09/22 11:34

2540 G-2011 Total Solids

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:  
BNSF-SG13-042522-0-1.5

<b>Lab Sample ID:</b> L1487790-01	<b>SDG:</b> L1487790
<b>Client Sample ID:</b> BNSF-SG13-042522-0-1.5	<b>Collected Date/Time:</b> 04/25/22 09:55
<b>Lab File ID:</b> 06	<b>Received Date/Time:</b> 04/29/22 09:00
<b>Instrument ID:</b> LOGBAL1	<b>Preparation Date/Time:</b> 05/03/22 11:58
<b>Analytical Batch:</b> WG1857290	<b>Analysis Date/Time:</b> 05/03/22 12:18
<b>Dilution Factor:</b> 1	<b>Prep Method:</b> SM 2540 G
<b>Analytical Method:</b> 2540 G-2011	<b>Sample Vol Used:</b> _____
<b>Matrix:</b> Solid	<b>Initial Wt/Vol:</b> 9.332 g
<b>Total Solids (%):</b> 79.4	<b>Final Wt/Vol:</b> 7.671 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	79.4	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3787793-1  
Client Sample ID: BLANK  
Lab File ID: 01  
Instrument ID: LOGBAL1  
Analytical Batch: WG1857290  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1487790  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 05/03/22 11:53  
Analysis Date/Time: 05/03/22 12:18  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 1.268 g  
Final Wt/Vol: 1.268 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	0.000	

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

<b>Lab Sample ID:</b>	R3787793-3	<b>SDG:</b>	L1487790
<b>Client Sample ID:</b>	DUP	<b>Collected Date/Time:</b>	04/28/22 08:32
<b>Lab File ID:</b>	02	<b>Received Date/Time:</b>	04/29/22 12:00
<b>Instrument ID:</b>	LOGBAL1	<b>Preparation Date/Time:</b>	05/03/22 11:53
<b>Analytical Batch:</b>	WG1857290	<b>Analysis Date/Time:</b>	05/03/22 12:18
<b>Dilution Factor:</b>	1	<b>Prep Method:</b>	SM 2540 G
<b>Analytical Method:</b>	2540 G-2011	<b>Sample Vol Used:</b>	_____
<b>Matrix:</b>	Solid	<b>Initial Wt/Vol:</b>	8.053 g
<b>Total Solids (%):</b>	82.9	<b>Final Wt/Vol:</b>	6.889 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	82.9 %	



SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3787793-2  
Client Sample ID: LCS  
Lab File ID: 03  
Instrument ID: LOGBAL1  
Analytical Batch: WG1857290  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1487790  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 05/03/22 11:53  
Analysis Date/Time: 05/03/22 12:18  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 11.254 g  
Final Wt/Vol: 6.252 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	50.0	%

<b>SDG:</b>	L1487790	<b>Calibration (begin) date/time:</b>	_____
<b>Instrument ID:</b>	LOGBAL1	<b>Calibration (end) date/time:</b>	_____
<b>Analytical Method:</b>	2540 G-2011	<b>Analytical Run:</b>	WG1857290

---

	Sample ID: BLANK	Result	BLANK Qual
	File ID:	01	
<b>Analyte</b>		%	
TOTAL SOLIDS		0.000	

---

**DUP Sample / File ID:** R3787793-3 / 02  
**OS Sample / File ID:** L1487807-02 / 08  
**Instrument ID:** LOGBAL1  
**Analytical Method:** 2540 G-2011

**SDG:** L1487790  
**Analytical Batch:** WG1857290  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	OS Result %	DUP Result %	RPD %	RPD Limits %
Total Solids	82.9	82.9	0.0116	10

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE  
 LABORATORY CONTROL SAMPLE DUPLICATE  
 RECOVERY  
 L1487790-01

SAMPLE NO.:  
 R3787793-2

**LCS Sample / File ID:** R3787793-2 / 03  
**LCSD Sample / File ID:** \_\_\_\_\_  
**Instrument ID:** LOGBAL1  
**Analytical Method:** 2540 G-2011

**SDG:** L1487790  
**Analytical Batch:** WG1857290  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	%	%		%	%	%	%	%
Total Solids	50.0	50.0		100		85.0 - 115		

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1487790-01  
Matrix: Solid

Analytical Method: 2540 G-2011  
Prep Method: SM 2540 G

---

Analyte	CAS	Wavelength	Mass	MDL	RDL
Total Solids	TSOLIDS			%	%

---

ANALYSIS LOG

**SDG:** L1487790      **Analytical Method:** 2540 G-2011  
**Instrument ID:** LOGBAL1      **Calibration Start Date:** \_\_\_\_\_  
**Analytical Run:** WG1857290      **Calibration End Date:** \_\_\_\_\_

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3787793-1	01	05/03/22 12:18	1	WG1857290
DUP	R3787793-3	02	05/03/22 12:18	1	WG1857290
LCS	R3787793-2	03	05/03/22 12:18	1	WG1857290
OS	L1487807-02	08	05/03/22 12:18		
BNSF-SG13-042522-0-1 .5	L1487790-01	06	05/03/22 12:18	1	WG1857290

# Total Solids WetChem Prep Benchsheet

Batch: WG1857290

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1487609	WG1856523	BJM688	PREPREPBAL1	29-APR-22
L1487722	WG1856682	BJM688	PREPREPBAL1	29-APR-22
L1487790	WG1856683	BJM688	PREPREPBAL1	29-APR-22
L1487807	WG1856701	BJM688	PREPREPBAL1	29-APR-22
L1488001	WG1856886	BJM688	PREPREPBAL3	05/02/22 11:06:29

Analyst: MT3521    Prep Start Date/Time: 05/03/22 11:53-11:58    Prep End Date/Time: 05/04/22 08:31    SOP: 0178    Method: SM 2540G    Oven ID: 2305  
 Balance ID: LOGBAL1    LCS True Value: 50

LCS: 22B23211 Amt. Used: 50 Exp. Date:08/23/22

Sample Number	Matrix	State	Collect Date	Vessel ID	Vessel Wt (g)	Sample + Vessel Wt (g)	Oven Wt1 (g)	Oven Wt2 (g)	Wt Diff (g)	% TS Result	% Moisture Result	TS % Recovery	Moisture % Rec.	TS RPD	% Moisture RPD	Box ID	Review Analyst	Review Date
BLANK				GG1	1.268	1.268	1.268	1.268	0	0	100						CMK3616	05/04/22 08:31:41
LCS				GG2	1.252	11.254	6.253	6.252	0.001	49.99	50.01	99.98	100.02				CMK3616	05/04/22 08:31:41
DUP(L1487807-02)				GG3	1.242	8.053	6.892	6.889	0.003	82.91	17.09			0.01	0.06	PP1 0429	CMK3616	05/04/22 08:31:41
1. L1487609-02	SS	NM	04/27/22 13:45	GG4	1.244	9.932	9.226	9.222	0.004	91.8278	8.1722					FRI 5/04/22-PP1	CMK3616	05/04/22 08:31:41
2. L1487722-02	SS	NJ	04/26/22 11:30	GG5	1.252	14.203	12.917	12.916	0.001	90.0625	9.9375					PP1 0429	CMK3616	05/04/22 08:31:41
3. L1487790-01	SS	WA	04/25/22 09:55	GG6	1.254	9.332	7.672	7.671	0.001	79.438	20.562					PP1 0429	CMK3616	05/04/22 08:31:41
4. L1487807-01	SS	KS	04/28/22 09:01	GG7	1.243	9.090	7.317	7.318	0.001	77.4181	22.5819					PP1 0429	CMK3616	05/04/22 08:31:41
5. L1487807-02	SS	KS	04/28/22 08:32	GG8	1.255	7.723	6.617	6.617	0	82.9004	17.0996						CMK3616	05/04/22 08:31:41
6. L1488001-01	SS	IL	04/26/22 12:10	GG9	1.259	11.114	9.595	9.597	0.002	84.6068	15.3932					4/30 PP3 SAT 2	CMK3616	05/04/22 08:31:41
7. L1488001-02	SS	IL	04/26/22 13:30	GG10	1.260	11.352	9.248	9.250	0.002	79.1716	20.8284					4/30 PP3 SAT 2	CMK3616	05/04/22 08:31:41
8. L1488001-03	SS	IL	04/26/22 13:50	GG11	1.267	8.943	7.906	7.904	0.002	86.4643	13.5357					4/30 PP3 SAT 2	CMK3616	05/04/22 08:31:41
9. L1488001-04	SS	IL	04/26/22 14:30	GG12	1.261	9.452	8.300	8.299	0.001	85.9236	14.0764					4/30 PP3 SAT 2	CMK3616	05/04/22 08:31:41
10. L1488001-06	SS	IL	04/26/22 16:30	GG13	1.265	11.218	9.667	9.667	0	84.4168	15.5832					4/30 PP3 SAT 2	CMK3616	05/04/22 08:31:41

Comments:

Reviewed By:CMK3616 on 05/04/22 08:31:41

#	Type	Time In	Obs. Temp In (°C)	Corrected Temp In (°C)	Time Out	Obs. Temp Out (°C)	Corrected Temp Out (°C)	Samples
1	Oven-05/03/22 4hr	12:18:34	104	104	05/04/22 05:27:24	104	104	BLANK, LCS, DUP(L1487807-02), L1487609-02, L1488001-06, L1488001-04, L1488001-03, L1488001-02, L1488001-01, L1487807-02, L1487807-01, L1487790-01, L1487722-02
2	Oven-05/04/22 1hr	05:29:53	104	104	05/04/22 08:28:41	104	104	BLANK, LCS, DUP(L1487807-02), L1487609-02, L1487722-02, L1487790-01, L1487807-01, L1487807-02, L1488001-01, L1488001-02, L1488001-03, L1488001-04, L1488001-06

8270E Semi Volatile Organic Compounds (GC/MS)



Analytical Method: 8270E  
 Matrix: Solid

SDG: L1487790

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1	DMC-2	DMC-3	DMC-4	DMC-5	DMC-6	TOT Out
				% Rec.	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.	
BNSF-SG13-04252 2-0-1.5	L1487790-01	BNAMS24	0506A_22	57.3	55.6	53.8	56.1	69.7	60.5	0
MS	R3789566-3	BNAMS24	0506A_24	51.9	50.9	44.4	52.2	61.7	49.1	0
MSD	R3789566-4	BNAMS24	0506A_25	57.3	55.4	49.7	57.5	68.2	58.4	0
BLANK	R3789566-2	BNAMS24	0506A_05	68.8	65.8	64.9	65.2	65.3	60.4	0
LCS	R3789566-1	BNAMS24	0506A_04	70.1	67.4	58.9	67.3	74.0	59.8	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	2-Fluorophenol	12.0 - 120
DMC-2	Phenol-d5	10.0 - 120
DMC-3	Nitrobenzene-d5	10.0 - 122
DMC-4	2-Fluorobiphenyl	15.0 - 120
DMC-5	2,4,6-Tribromophenol	10.0 - 127
DMC-6	p-Terphenyl-d14	10.0 - 120

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

MATRIX SPIKE /  
MATRIX SPIKE DUPLICATE RECOVERY  
L1487790-01

SAMPLE NO.:  
R3789566-3  
R3789566-4

**MS Sample / File ID:** R3789566-3 / 0506A\_24  
**MSD Sample / File ID:** R3789566-4 / 0506A\_25  
**OS Sample / File ID:** L1487440-03 / 0506A\_23  
**Instrument ID:** BNAMS24  
**Analytical Method:** 8270E

**SDG:** L1487790  
**Analytical Batch:** WG1859393  
**Matrix:** Solid

Analyte	Spike Amount (dry) mg/kg	OS Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	RPD %	RPD Limit %
Acenaphthene	0.648	0.0117	0.456	0.496	50.2	55.0	1	18.0 - 120	8.32	32
Acenaphthylene	0.648	0.00774	0.505	0.546	56.2	61.2	1	25.0 - 120	7.79	32
Anthracene	0.648	0.0348	0.533	0.556	56.2	59.2	1	22.0 - 120	4.27	29
Benzoic Acid	1.30	U	1.01	0.933	50.2	46.2	1	10.0 - 152	8.01	40
Benzo(a)anthracene	0.648	0.168	0.557	0.605	44.0	49.7	1	25.0 - 120	8.23	29
Benzo(b)fluoranthene	0.648	0.206	0.508	0.546	34.1	38.7	1	19.0 - 122	7.25	31
Benzo(k)fluoranthene	0.648	0.0728	0.468	0.504	44.7	49.0	1	23.0 - 120	7.30	30
Benzo(g,h,i)perylene	0.648	0.0975	0.481	0.490	43.3	44.7	1	10.0 - 120	1.97	33
Benzo(a)pyrene	0.648	0.162	0.591	0.616	48.5	51.6	1	24.0 - 120	4.07	30
Carbazole	0.648	0.0227	0.587	0.625	63.8	68.5	1	31.0 - 120	6.31	24
Chrysene	0.648	0.169	0.511	0.556	38.6	43.9	1	21.0 - 120	8.45	29
Dibenz(a,h)anthracene	0.648	0.0259	0.496	0.520	53.1	56.2	1	10.0 - 120	4.84	32
Dibenzofuran	0.648	0.0240	0.486	0.527	52.2	57.2	1	24.0 - 120	8.09	30
Fluoranthene	0.648	0.330	0.599	0.620	30.4	32.9	1	18.0 - 126	3.36	32
Fluorene	0.648	0.00918	0.485	0.526	53.7	58.7	1	25.0 - 120	8.11	30
Indeno(1,2,3-cd)pyrene	0.648	0.120	0.557	0.571	49.4	51.3	1	10.0 - 120	2.42	32
1-Methylnaphthalene	0.648	0.0679	0.416	0.438	39.4	42.1	1	10.0 - 120	5.11	36
2-Methylnaphthalene	0.648	0.0837	0.422	0.434	38.2	39.9	1	10.0 - 120	2.87	37
Naphthalene	0.648	0.0571	0.396	0.414	38.3	40.6	1	10.0 - 120	4.38	35
Phenanthrene	0.648	0.180	0.522	0.549	38.6	41.9	1	17.0 - 120	5.10	31
Bis(2-ethylhexyl)phthalate	0.648	U	0.497	0.578	56.2	65.7	1	17.0 - 126	15.0	30
Di-n-butyl phthalate	0.648	U	0.560	0.605	63.3	68.8	1	30.0 - 120	7.74	29
Di-n-octyl phthalate	0.648	U	0.549	0.612	62.0	69.6	1	21.0 - 123	10.8	29
Pyrene	0.648	0.202	0.466	0.507	29.8	34.6	1	16.0 - 121	8.43	32
3&4-Methyl Phenol	0.648	U	0.489	0.474	55.2	53.9	1	12.0 - 123	3.12	38
Pentachlorophenol	0.648	U	0.520	0.571	58.8	64.9	1	10.0 - 160	9.26	31
Phenol	0.648	U	0.442	0.462	50.0	52.5	1	12.0 - 120	4.23	38

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE  
LABORATORY CONTROL SAMPLE DUPLICATE  
RECOVERY  
L1487790-01

LCS Sample / File ID: R3789566-1 / 0506A\_04  
LCSD Sample / File ID: \_\_\_\_\_  
Instrument ID: BNAMS24  
Analytical Method: 8270E

SDG: L1487790  
Analytical Batch: WG1859393  
Dilution Factor: 1  
Matrix: Solid

Analyte	Spike Amount <i>mg/kg</i>	LCS Result <i>mg/kg</i>	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limit %
Acenaphthene	0.666	0.451		67.7		38.0 - 120		
Acenaphthylene	0.666	0.496		74.5		40.0 - 120		
Anthracene	0.666	0.496		74.5		42.0 - 120		
Benzoic Acid	1.33	0.351		26.4		10.0 - 120		
Benzo(a)anthracene	0.666	0.501		75.2		44.0 - 120		
Benzo(b)fluoranthene	0.666	0.448		67.3		43.0 - 120		
Benzo(k)fluoranthene	0.666	0.459		68.9		44.0 - 120		
Benzo(g,h,i)perylene	0.666	0.480		72.1		43.0 - 120		
Benzo(a)pyrene	0.666	0.540		81.1		45.0 - 120		
Carbazole	0.666	0.535		80.3		48.0 - 120		
Chrysene	0.666	0.460		69.1		43.0 - 120		
Dibenz(a,h)anthracene	0.666	0.491		73.7		44.0 - 120		
Dibenzofuran	0.666	0.475		71.3		44.0 - 120		
Fluoranthene	0.666	0.497		74.6		44.0 - 120		
Fluorene	0.666	0.477		71.6		41.0 - 120		
Indeno(1,2,3-cd)pyrene	0.666	0.511		76.7		45.0 - 120		
1-Methylnaphthalene	0.666	0.384		57.7		34.0 - 120		
2-Methylnaphthalene	0.666	0.383		57.5		34.0 - 120		
Naphthalene	0.666	0.370		55.6		18.0 - 120		
Phenanthrene	0.666	0.452		67.9		42.0 - 120		
Bis(2-ethylhexyl)phthalate	0.666	0.455		68.3		41.0 - 120		
Di-n-butyl phthalate	0.666	0.491		73.7		43.0 - 120		
Di-n-octyl phthalate	0.666	0.463		69.5		40.0 - 120		
Pyrene	0.666	0.403		60.5		41.0 - 120		
3&4-Methyl Phenol	0.666	0.533		80.0		42.0 - 120		
Pentachlorophenol	0.666	0.467		70.1		29.0 - 120		
Phenol	0.666	0.462		69.4		28.0 - 120		

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

**Lab Sample ID:** R3789566-2  
**Lab File ID:** 0506A\_05  
**Instrument ID:** BNAMS24  
**Analytical Batch:** WG1859393  
**Analytical Method:** 8270E

**SDG:** L1487790  
**Preparation Date/Time:** 05/06/22 04:49  
**Analysis Date/Time:** 05/06/22 16:10  
**Dilution Factor:** 1  
**Matrix:** Solid

Sample ID	Lab Sample ID	Instrument	File ID	Analysis date/time
LCS	R3789566-1	BNAMS24	0506A_04	05/06/22 15:48
BNSF-SG13-042522-0-1.5	L1487790-01	BNAMS24	0506A_22	05/06/22 22:25
OS	L1487440-03	BNAMS24	0506A_23	05/06/22 22:47
MS	R3789566-3	BNAMS24	0506A_24	05/06/22 23:09
MSD	R3789566-4	BNAMS24	0506A_25	05/06/22 23:30

GC/MS INSTRUMENT  
PERFORMANCE CHECK

Lab File ID: 0331\_02  
Instrument ID: BNAMS24  
Analysis Date/Time: 03/31/22 17:02

SDG: L1487790  
Analytical Method: 8270E

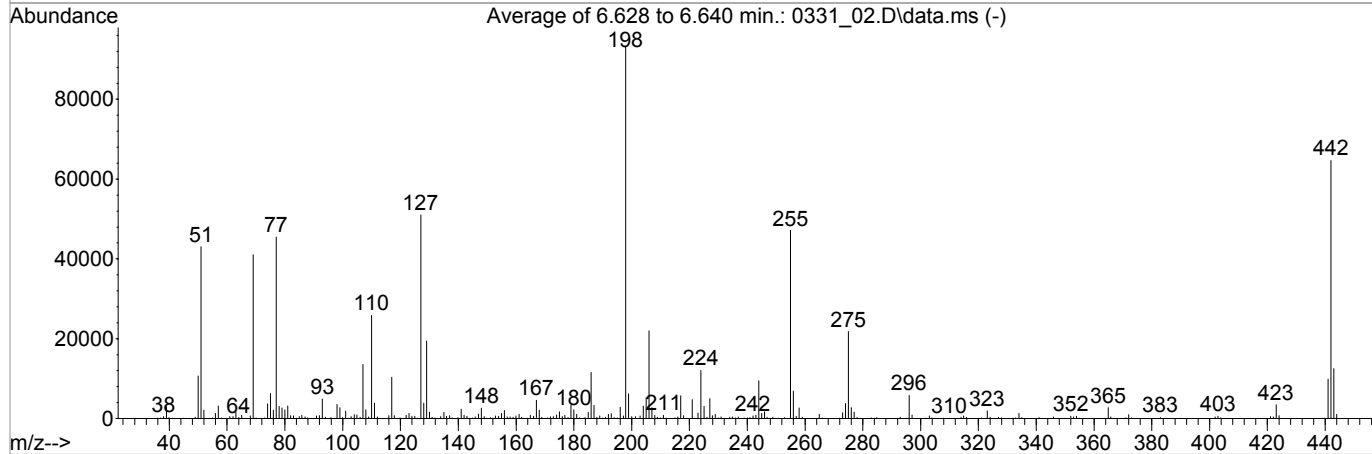
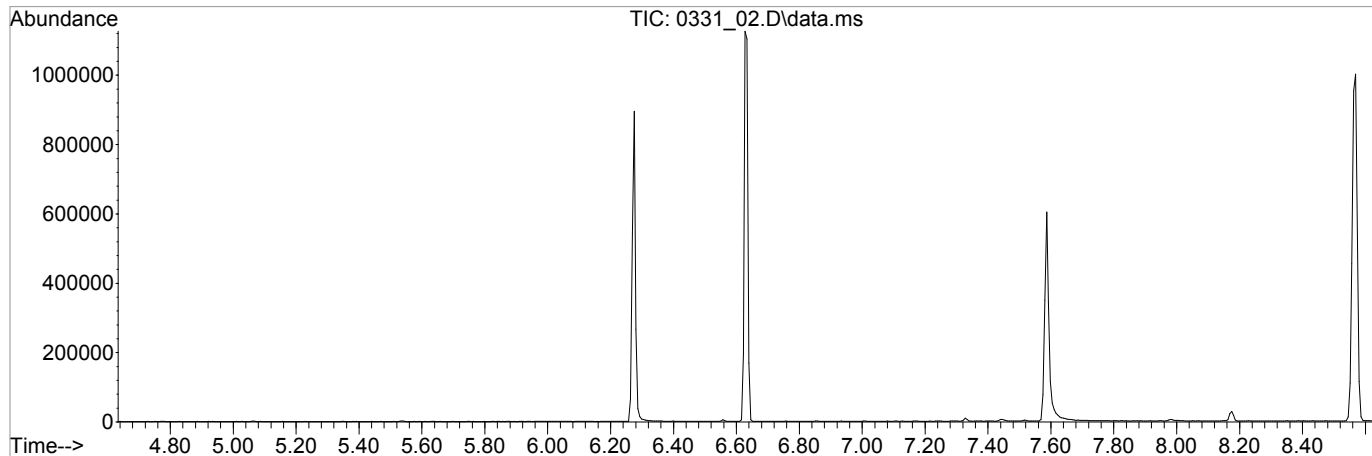
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	198	10	80	46
68	69	0	2	2
69	69	100	100	100
70	69	0	2	0
127	198	10	80	55
197	198	0	2	1
198	198	50	100	100
199	198	5	9	7
275	198	10	60	23
365	198	1	100	3
441	442	0.0001	24	15
442	198	50	100	69
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-500	500	0331_03	03/31/22 17:24
STD-1000	1000	0331_04	03/31/22 17:45
STD-4000	4000	0331_05	03/31/22 18:07
STD-10000	10000	0331_06	03/31/22 18:28
STD-20000	20000	0331_07	03/31/22 18:49
STD-30000	30000	0331_08	03/31/22 19:11
STD-40000	40000	0331_09	03/31/22 19:32
STD-50000	50000	0331_10	03/31/22 19:53
STD-1K1	1K1	0331_11	03/31/22 20:15
STD-4K1	4K1	0331_12	03/31/22 20:36
STD-10K1	10K1	0331_13	03/31/22 20:58
STD-20K1	20K1	0331_14	03/31/22 21:19
STD-30K1	30K1	0331_15	03/31/22 21:40
STD-40K1	40K1	0331_16	03/31/22 22:02
STD-50K1	50K1	0331_17	03/31/22 22:23
SSCV	BNAMS240331220331_18576947	0331_18	03/31/22 22:44
SSCV	BNAMS240331220331_19576947	0331_19	03/31/22 23:06

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_02.D  
Acq On : 31 Mar 2022 5:02 pm  
Operator : 3545  
Sample : TUNE 50 PPM 22C25374 exp 8/11/22  
Misc : DFTPP Tune  
ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e

Method : C:\msdchem\1\methods\TUNED.M  
Title :  
Last Update : Mon Mar 28 16:39:56 2022



Spectrum Information: Average of 6.628 to 6.640 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	46.2	43070	PASS
68	69	0.00	2	1.5	616	PASS
69	69	100	100	100.0	41045	PASS
70	69	0.00	2	0.5	194	PASS
127	198	10	80	54.7	51035	PASS
197	198	0.00	2	0.7	627	PASS
198	198	50	100	100.0	93259	PASS
199	198	5	9	6.6	6186	PASS
275	198	10	60	23.4	21794	PASS
365	198	1	100	3.0	2770	PASS
441	442	0.01	24	15.3	9884	PASS
442	198	50	100	69.4	64677	PASS
443	442	15	24	19.3	12480	PASS

GC/MS INSTRUMENT  
PERFORMANCE CHECK

Lab File ID: 0506A\_01T-1  
Instrument ID: BNAMS24  
Analysis Date/Time: 05/06/22 14:35

SDG: L1487790  
Analytical Method: 8270E

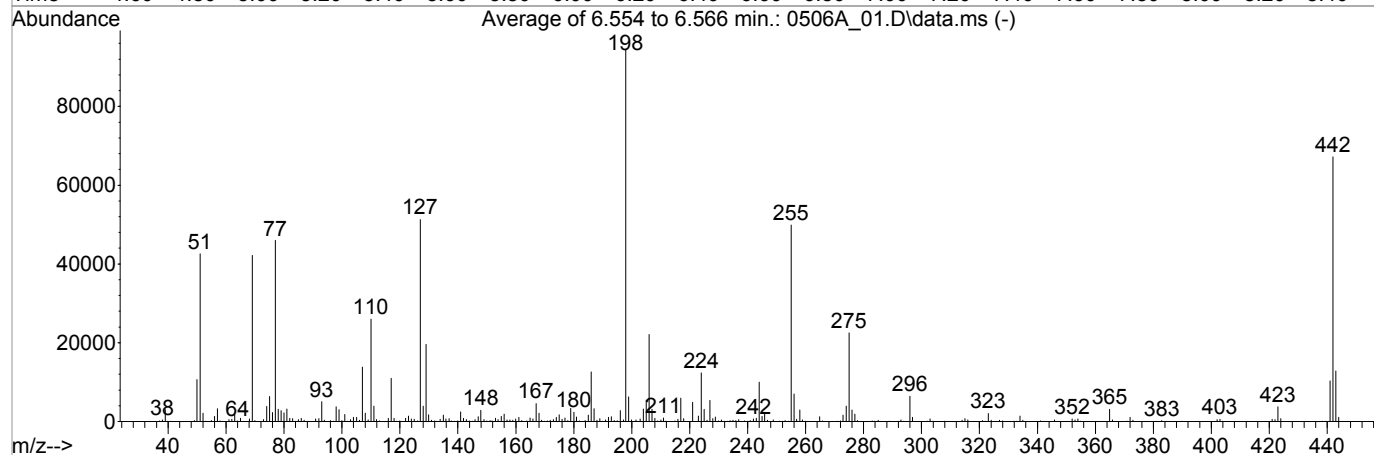
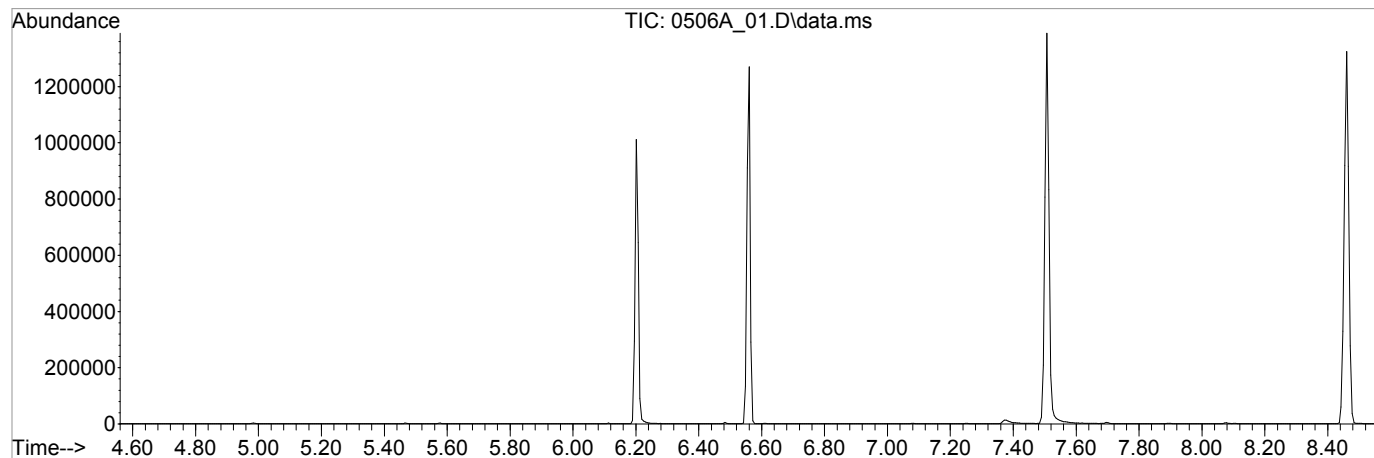
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	198	10	80	45
68	69	0	2	2
69	69	100	100	100
70	69	0	2	0
127	198	10	80	54
197	198	0	2	0
198	198	50	100	100
199	198	5	9	7
275	198	10	60	24
365	198	1	100	3
441	442	0.0001	24	15
442	198	50	100	71
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	BNAMS24050622A0506A_02576947	0506A_02	05/06/22 14:57
ICV	BNAMS24050622A0506A_03576947	0506A_03	05/06/22 15:19
LCS	R3789566-1	0506A_04	05/06/22 15:48
BLANK	R3789566-2	0506A_05	05/06/22 16:10
BNSF-SG13-042522-0-1.5	L1487790-01	0506A_22	05/06/22 22:25
OS	L1487440-03	0506A_23	05/06/22 22:47
MS	R3789566-3	0506A_24	05/06/22 23:09
MSD	R3789566-4	0506A_25	05/06/22 23:30

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_01.D  
 Acq On : 6 May 2022 2:35 pm  
 Operator : 3545  
 Sample : TUNE 50 PPM 22D25444 exp 10/15/22  
 Misc : DFTPP Tune  
 ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e

Method : C:\msdchem\1\methods\TUNED.M  
 Title :  
 Last Update : Mon Mar 28 16:39:56 2022



Spectrum Information: Average of 6.554 to 6.566 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	45.0	42536	PASS
68	69	0.00	2	1.6	666	PASS
69	69	100	100	100.0	42183	PASS
70	69	0.00	2	0.5	218	PASS
127	198	10	80	54.3	51274	PASS
197	198	0.00	2	0.4	383	PASS
198	198	50	100	100.0	94480	PASS
199	198	5	9	6.6	6280	PASS
275	198	10	60	23.8	22503	PASS
365	198	1	100	3.3	3113	PASS
441	442	0.01	24	15.4	10353	PASS
442	198	50	100	71.2	67232	PASS
443	442	15	24	19.2	12879	PASS



INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1487790	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS24	<b>Calibration Start Date:</b>	03/31/22 17:24
<b>Std File:</b>	0506A_02	<b>Calibration End Date:</b>	03/31/22 22:23
		<b>Std Analysis Date:</b>	05/06/22 14:57

Sample ID	File ID	1,4-DCB		ACE		CHR		NAP	
		Response	RT	Response	RT	Response	RT	Response	RT
STANDARD		33051	3.34	69059	5.24	99956	9.12	133596	4.07
UPPER LIMIT		66102		138118		199912		267192	
LOWER LIMIT		16526		34530		49978		66798	
LCS R3789566-1 WG1859393 1x	0506A_04	28542	3.34	62136	5.24	96009	9.12	137544	4.07
BLANK R3789566-2 WG1859393 1x	0506A_05	29363	3.34	63075	5.23	92967	9.11	120706	4.07
L1487790-01 WG1859393 1x	0506A_22	33931	3.34	71732	5.23	107283	9.11	139097	4.07
OS L1487440-03 WG1859393 1x	0506A_23	31038	3.34	68256	5.23	104199	9.11	128135	4.07
MS R3789566-3 WG1859393 1x	0506A_24	28570	3.34	62634	5.23	98553	9.11	133886	4.07
MSD R3789566-4 WG1859393 1x	0506A_25	27675	3.34	61380	5.23	91484	9.11	132636	4.07

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1487790	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS24	<b>Calibration Start Date:</b>	03/31/22 17:24
<b>Std File:</b>	0506A_02	<b>Calibration End Date:</b>	03/31/22 22:23
		<b>Std Analysis Date:</b>	05/06/22 14:57

Sample ID	File ID	PER		PHEN	
		Response	RT	Response	RT
STANDARD		94610	11.78	118508	6.35
UPPER LIMIT		189220		237016	
LOWER LIMIT		47305		59254	
LCS R3789566-1 WG1859393 1x	0506A_04	95147	11.78	109472	6.35
BLANK R3789566-2 WG1859393 1x	0506A_05	93983	11.77	109068	6.35
L1487790-01 WG1859393 1x	0506A_22	107666	11.77	125497	6.35
OS L1487440-03 WG1859393 1x	0506A_23	104964	11.77	117582	6.35
MS R3789566-3 WG1859393 1x	0506A_24	100994	11.77	108516	6.35
MSD R3789566-4 WG1859393 1x	0506A_25	94109	11.77	106572	6.35

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.  
 D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

<b>Lab Sample ID:</b> L1487790-01	<b>SDG:</b> L1487790
<b>Client Sample ID:</b> BNSF-SG13-042522-0-1.5	<b>Collected Date/Time:</b> 04/25/22 09:55
<b>Lab File ID:</b> 0506A_22	<b>Received Date/Time:</b> 04/29/22 09:00
<b>Instrument ID:</b> BNAMS24	<b>Preparation Date/Time:</b> 05/06/22 04:50
<b>Analytical Batch:</b> WG1859393	<b>Analysis Date/Time:</b> 05/06/22 22:25
<b>Dilution Factor:</b> 1	<b>Prep Method:</b> 3546
<b>Analytical Method:</b> 8270E	<b>Sample Vol Used:</b> _____
<b>Matrix:</b> Solid	<b>Initial Wt/Vol:</b> 15.91 g
<b>Total Solids (%):</b> 79.4	<b>Final Wt/Vol:</b> 0.5 mL

Analyte	CAS	RT	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Acenaphthene	83-32-9	0	U		0.00679	0.0419
Acenaphthylene	208-96-8	0	U		0.00590	0.0419
Anthracene	120-12-7	0	U		0.00746	0.0419
Benzoic Acid	65-85-0	3.85	U		0.149	2.10
Benzo(a)anthracene	56-55-3	0	U		0.00739	0.0419
Benzo(b)fluoranthene	205-99-2	11.01	U		0.00782	0.0419
Benzo(k)fluoranthene	207-08-9	11.01	U		0.00745	0.0419
Benzo(g,h,i)perylene	191-24-2	0	U		0.00767	0.0419
Benzo(a)pyrene	50-32-8	0	U		0.00779	0.0419
Carbazole	86-74-8	0	U		0.0130	0.419
Chrysene	218-01-9	0	U		0.00833	0.0419
Dibenz(a,h)anthracene	53-70-3	0	U		0.0116	0.0419
Dibenzofuran	132-64-9	0	U		0.0137	0.419
Fluoranthene	206-44-0	0	U		0.00757	0.0419
Fluorene	86-73-7	0	U		0.00682	0.0419
Indeno(1,2,3-cd)pyrene	193-39-5	0	U		0.0118	0.0419
1-Methylnaphthalene	90-12-0	0	U		0.00536	0.0419
2-Methylnaphthalene	91-57-6	0	U		0.00544	0.0419
Naphthalene	91-20-3	0	U		0.0105	0.0419
Phenanthrene	85-01-8	0	U		0.00832	0.0419
Bis(2-ethylhexyl)phthalate	117-81-7	9.18	U		0.0531	0.419
Di-n-butyl phthalate	84-74-2	6.80	U		0.0144	0.419
Di-n-octyl phthalate	117-84-0	0	U		0.0283	0.419
Pyrene	129-00-0	0	U		0.00816	0.0419
3&4-Methyl Phenol	3&4-Methyl Phenol	0	U		0.0131	0.419
Pentachlorophenol	87-86-5	0	U		0.0113	0.419
Phenol	108-95-2	0	U		0.0169	0.419

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_22.D  
 Acq On : 6 May 2022 10:25 pm  
 Operator : 3545  
 Sample : L1487790-01 1x WG1859393  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 63 Sample Multiplier: 1

Quant Time: May 09 09:42:14 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

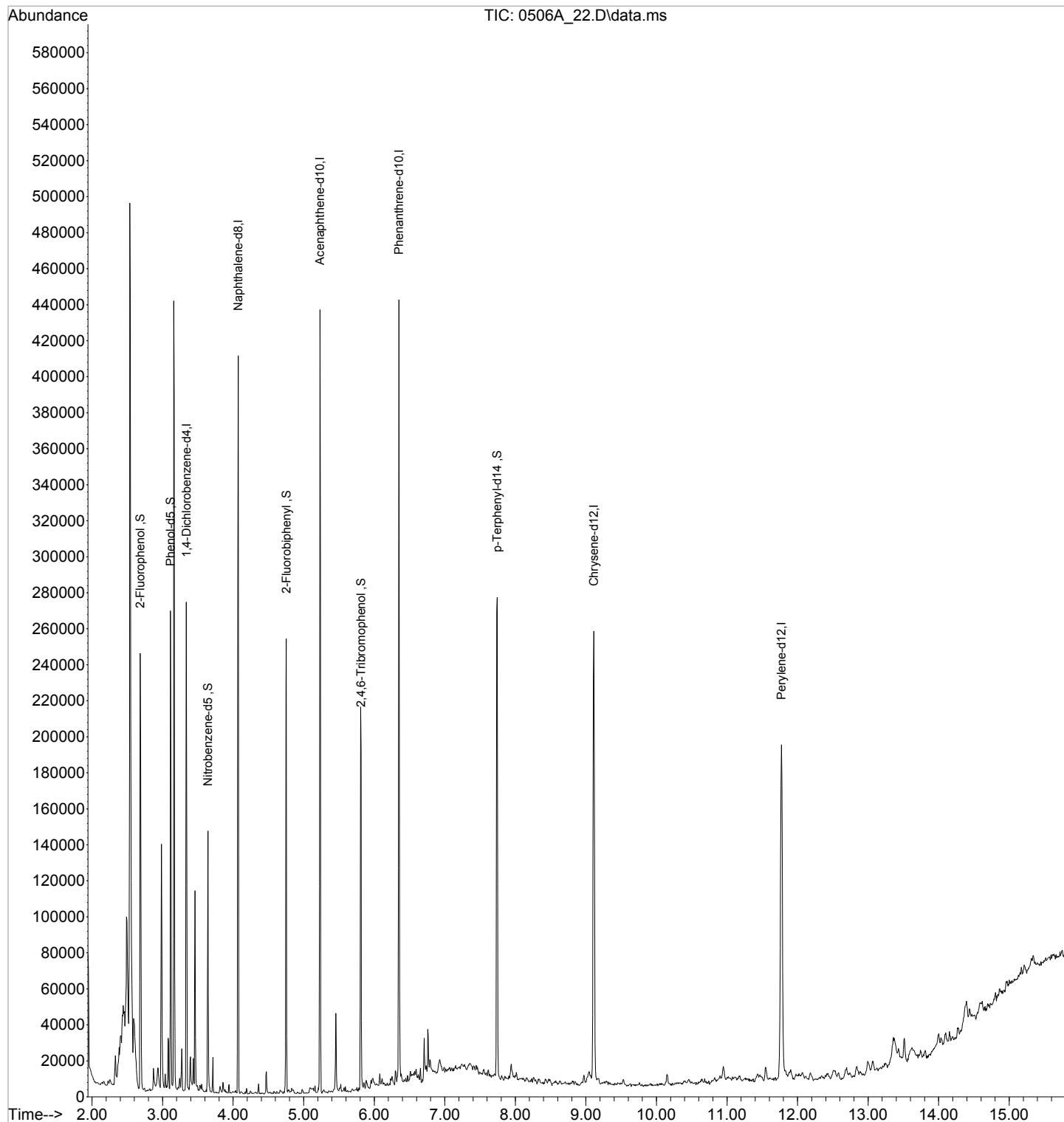
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.337	152	33931	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.072	136	139097	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.231	164	71732	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.348	188	125497	8000.0000000	ppb	0.00
84) Chrysene-d12	9.113	240	107283	8000.0000000	ppb	0.00
94) Perylene-d12	11.772	264	107666	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.684	112	60996	11481.8451676	ppb	0.00
Spiked Amount	20000.000	Range	20 - 120	Recovery	= 57.41%	
7) Phenol-d5	3.113	99	70061	11115.4033733	ppb	0.00
Spiked Amount	20000.000	Range	20 - 120	Recovery	= 55.58%	
24) Nitrobenzene-d5	3.643	82	28470	5382.0045378	ppb	0.00
Spiked Amount	10000.000	Range	18 - 125	Recovery	= 53.82%	
50) 2-Fluorobiphenyl	4.754	172	63710	5593.0313102	ppb	0.00
Spiked Amount	10000.000	Range	28 - 120	Recovery	= 55.93%	
73) 2,4,6-Tribromophenol	5.813	330	18351	13957.2208016	ppb	0.00
Spiked Amount	20000.000	Range	17 - 137	Recovery	= 69.79%	
87) p-Terphenyl-d14	7.742	244	89878	6053.9607038	ppb	0.00
Spiked Amount	10000.000	Range	13 - 131	Recovery	= 60.54%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050622A\  
Data File : 0506A\_22.D  
Acq On : 6 May 2022 10:25 pm  
Operator : 3545  
Sample : L1487790-01 1x WG1859393  
Misc : SOIL ISTD 22E03576 exp. 11/03/22  
ALS Vial : 63 Sample Multiplier: 1

Quant Time: May 09 09:42:14 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



**SDG:** L1487790  
**Instrument ID:** BNAMS24

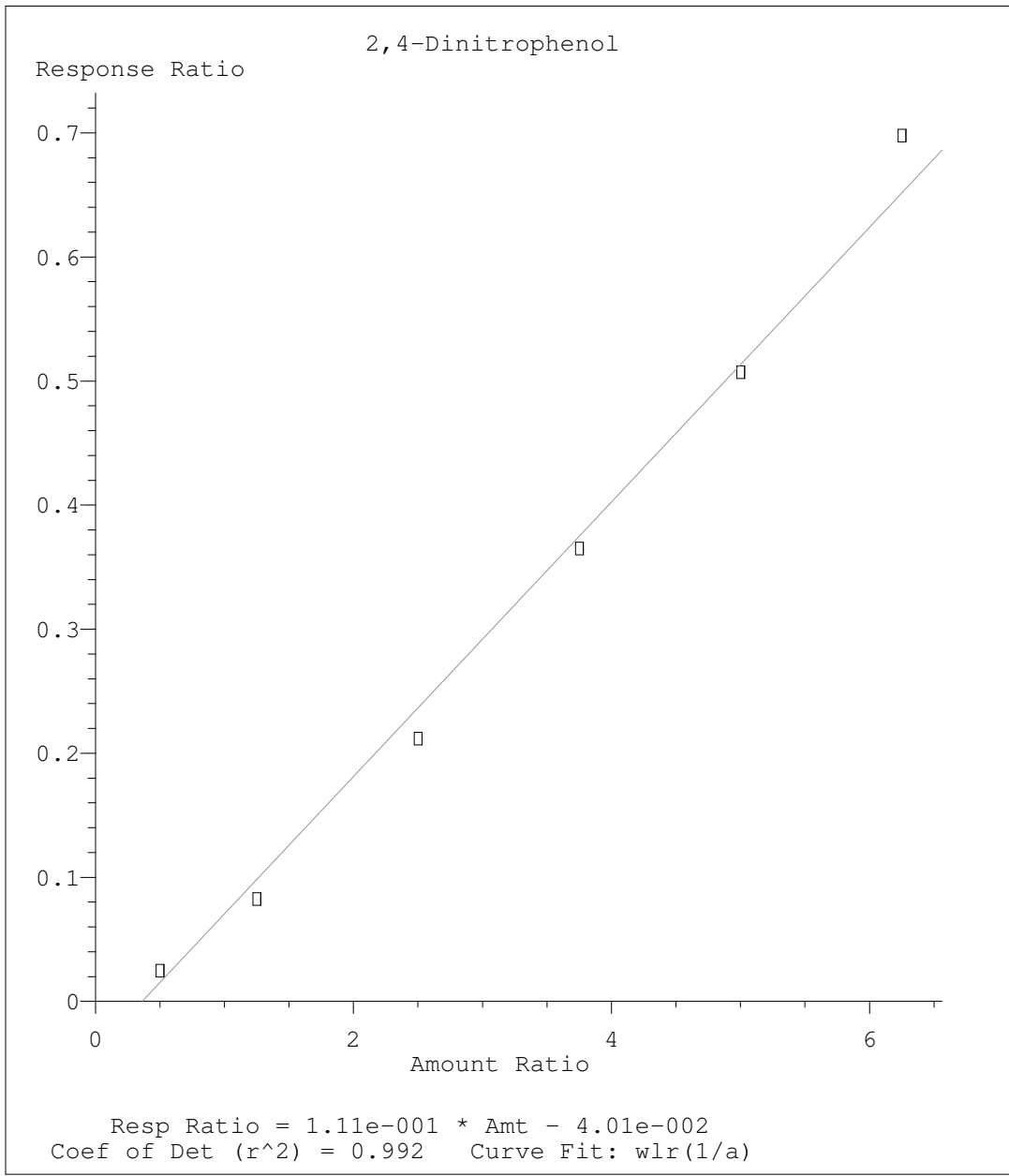
**Analytical Method:** 8270E

Analyte	RRF: 500	RRF: 1000	RRF: 4000	RRF: 10000	RRF: 20000	RRF: 30000	RRF: 40000	RRF: 50000	RRF: 4K1	RRF: 10K1
Analysis date/time	03/31/22 17:24	03/31/22 17:45	03/31/22 18:07	03/31/22 18:28	03/31/22 18:49	03/31/22 19:11	03/31/22 19:32	03/31/22 19:53	03/31/22 20:36	03/31/22 20:58
PHENOL	1.6010	1.4820	1.57	1.5980	1.6240	1.5830	1.5520	1.5950		
3&4-METHYL PHENOL	1.2840	1.2150	1.25	1.3490	1.3650	1.3210	1.3020	1.3260		
NAPHTHALENE	1.1320	1.0560	0.9950	1.0120	0.9840	0.9710	0.92	0.9180		
2-METHYLNAPHTHALENE	0.6570	0.6280	0.6150	0.6330	0.6320	0.6340	0.61	0.61		
1-METHYLNAPHTHALENE	0.6470	0.6310	0.5970	0.61	0.6130	0.6110	0.5890	0.5870		
ACENAPHTHYLENE	1.7480	1.6720	1.6690	1.7240	1.7160	1.7160	1.66	1.6580		
ACENAPHTHENE	1.2270	1.2160	1.14	1.1450	1.1430	1.1340	1.0890	1.0960		
DIBENZOFURAN	1.67	1.5920	1.5340	1.5580	1.5120	1.5070	1.4530	1.4390		
FLUORENE	1.33	1.2780	1.2650	1.3060	1.2780	1.2680	1.2160	1.21		
PHENANTHRENE	1.2170	1.0870	1.0560	1.0550	1.0490	1.0380	0.99	0.9910		
ANTHRACENE	1.0170	0.9560	0.9850	1.0270	1.0410	1.03	0.9950	1.0030		
CARBAZOLE	0.8390	0.7930	0.8460	0.8840	0.8890	0.9070	0.8560	0.8770		
DI-N-BUTYL PHTHALATE	1.1240	1.0760	1.2080	1.3430	1.4080	1.4320	1.3520	1.3760		
FLUORANTHENE	1.0230	0.9560	0.9940	1.0520	1.0770	1.0860	1.0510	1.06		
PYRENE	1.7080	1.5380	1.5110	1.5060	1.48	1.4410	1.4010	1.4030		
BENZO(A)ANTHRACENE	1.0880	1.0760	1.0630	1.1220	1.1430	1.1580	1.1270	1.1560		
CHRYSENE	1.2550	1.2220	1.1770	1.1820	1.1810	1.1590	1.1150	1.1450		
BENZO(B)FLUORANTHENE	1.0580	1.0570	1.1180	1.2060	1.2260	1.2690	1.2170	1.2290		
BENZO(K)FLUORANTHENE	1.0520	1.0420	1.1760	1.2870	1.2760	1.2720	1.2350	1.2510		
BENZO(A)PYRENE	0.8090	0.7610	0.88	0.9960	1.0210	1.0590	1.0250	1.0520		
INDENO(1,2,3-CD)PYRENE	0.7840	0.7330	0.8210	0.9050	0.9080	0.9490	0.9110	0.9090		
DIBENZ(A,H)ANTHRACENE	0.8410	0.8770	0.9470	1.0240	1.0220	1.0470	1.0010	0.9960		
BENZO(G,H,I)PERYLENE	0.9080	0.9740	1.0220	1.1050	1.0720	1.0840	1.0350	1.0150		
2-FLUOROPHENOL	1.2870	1.1960	1.2160	1.2670	1.2950	1.2550	1.2340	1.2710		
PHENOL-D5	1.48	1.4190	1.4560	1.5090	1.54	1.4980	1.4750	1.5120		
NITROBENZENE-D5	0.3150	0.2930	0.2820	0.30	0.3090	0.3140	0.3110	0.3090		
2-FLUOROBIPHENYL	1.3980	1.3490	1.2660	1.2910	1.2610	1.2260	1.18	1.1910		
P-TERPHENYL-D14	1.1680	1.1310	1.1060	1.1160	1.1180	1.0990	1.0520	1.0660		
DI-N-OCTYL PHTHALATE		0.9020	1.0920	1.3640	1.5790	1.6750	1.6490	1.7180		
2,4,6-TRIBROMOPHENOL		0.0630	0.0730	0.0820	0.0890	0.0940	0.0910	0.0940		
PENTACHLOROPHENOL			0.0760	0.0930	0.1090	0.1160	0.1160	0.1220		
BIS(2-ETHYLHEXYL)PHTHALATE			0.8310	0.9730	1.0620	1.0810	1.0540	1.0880		
BENZOIC ACID									0.0530	0.07
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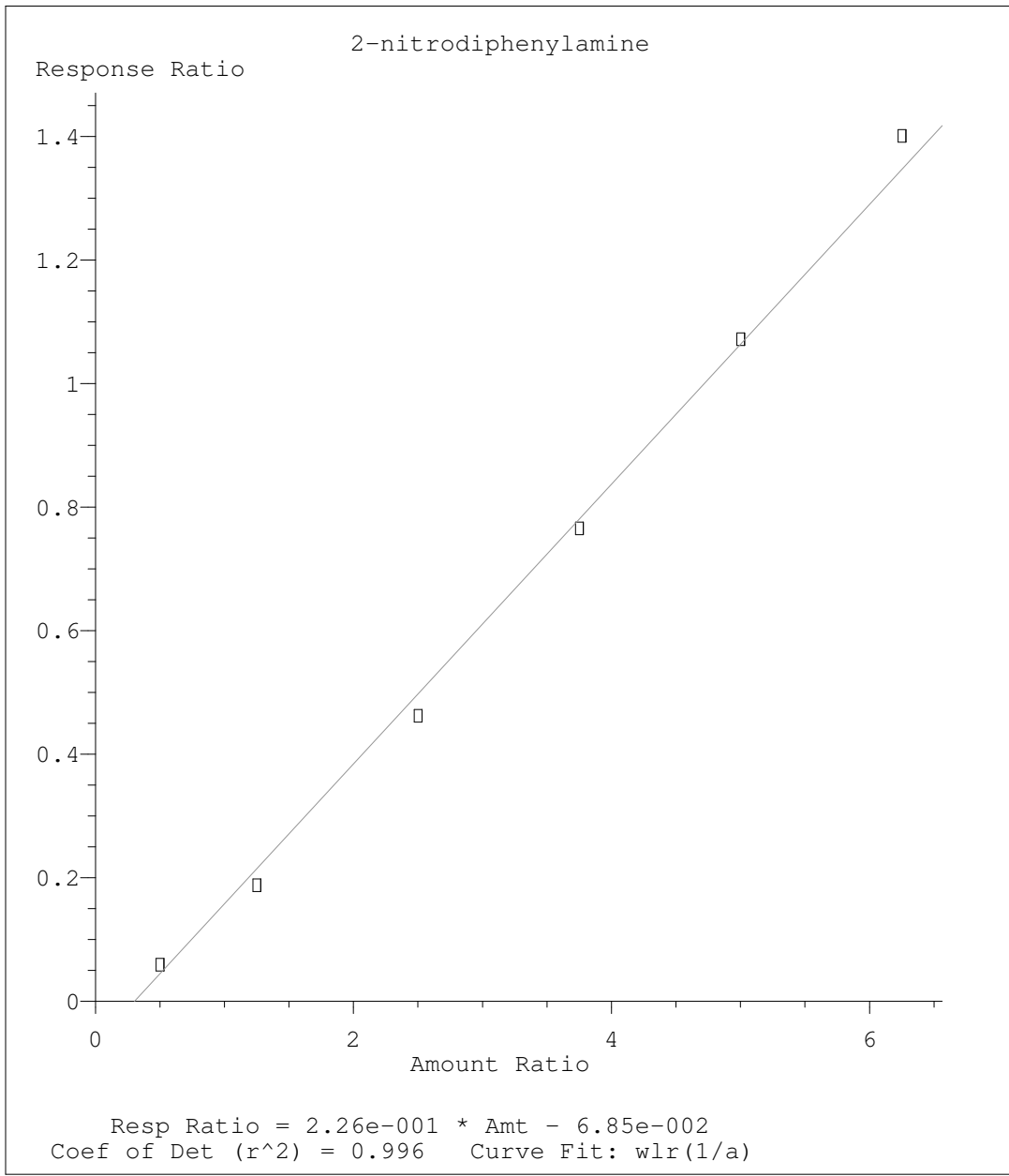
SDG: L1487790  
Instrument ID: BNAMS24

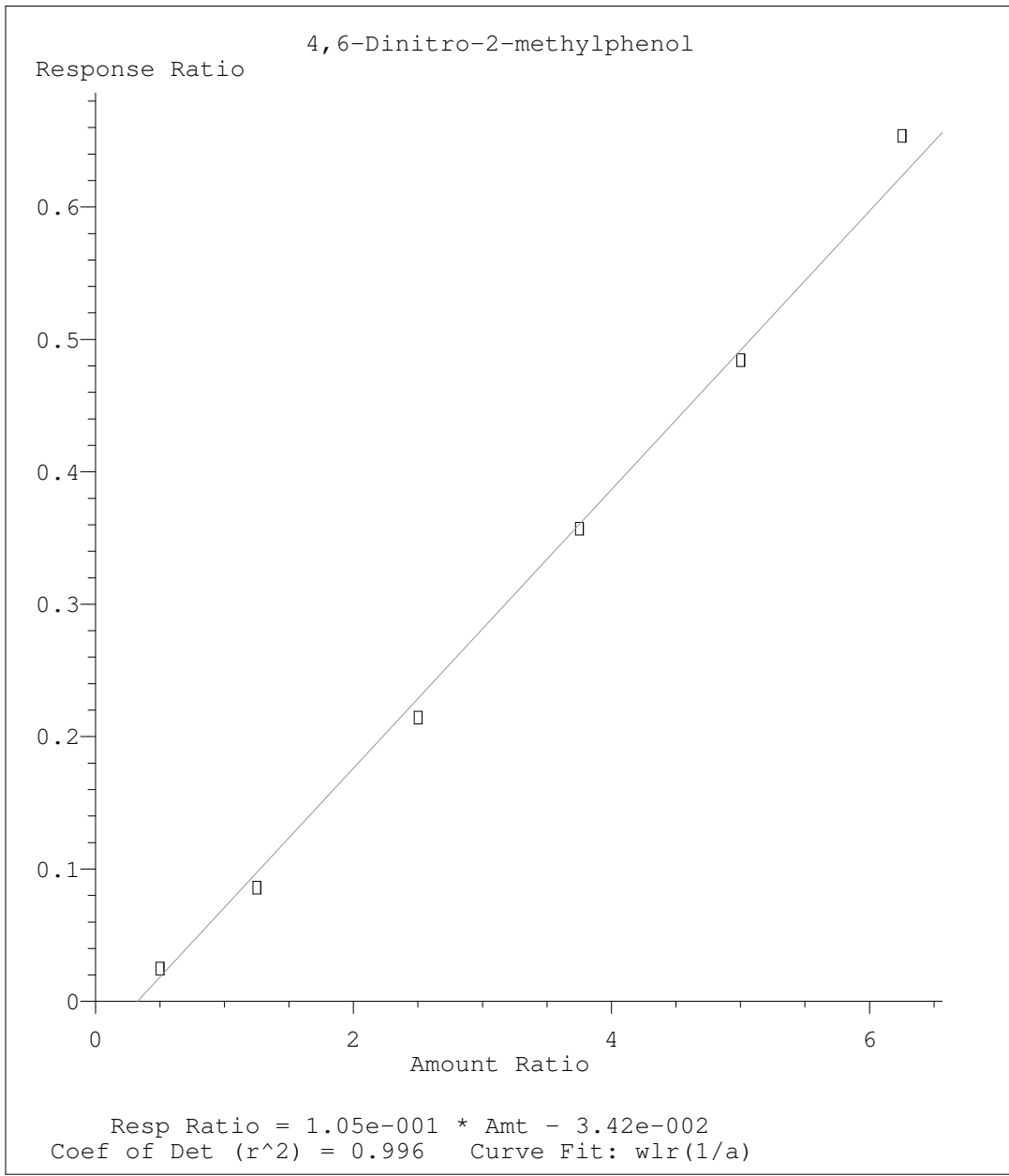
Analytical Method: 8270E

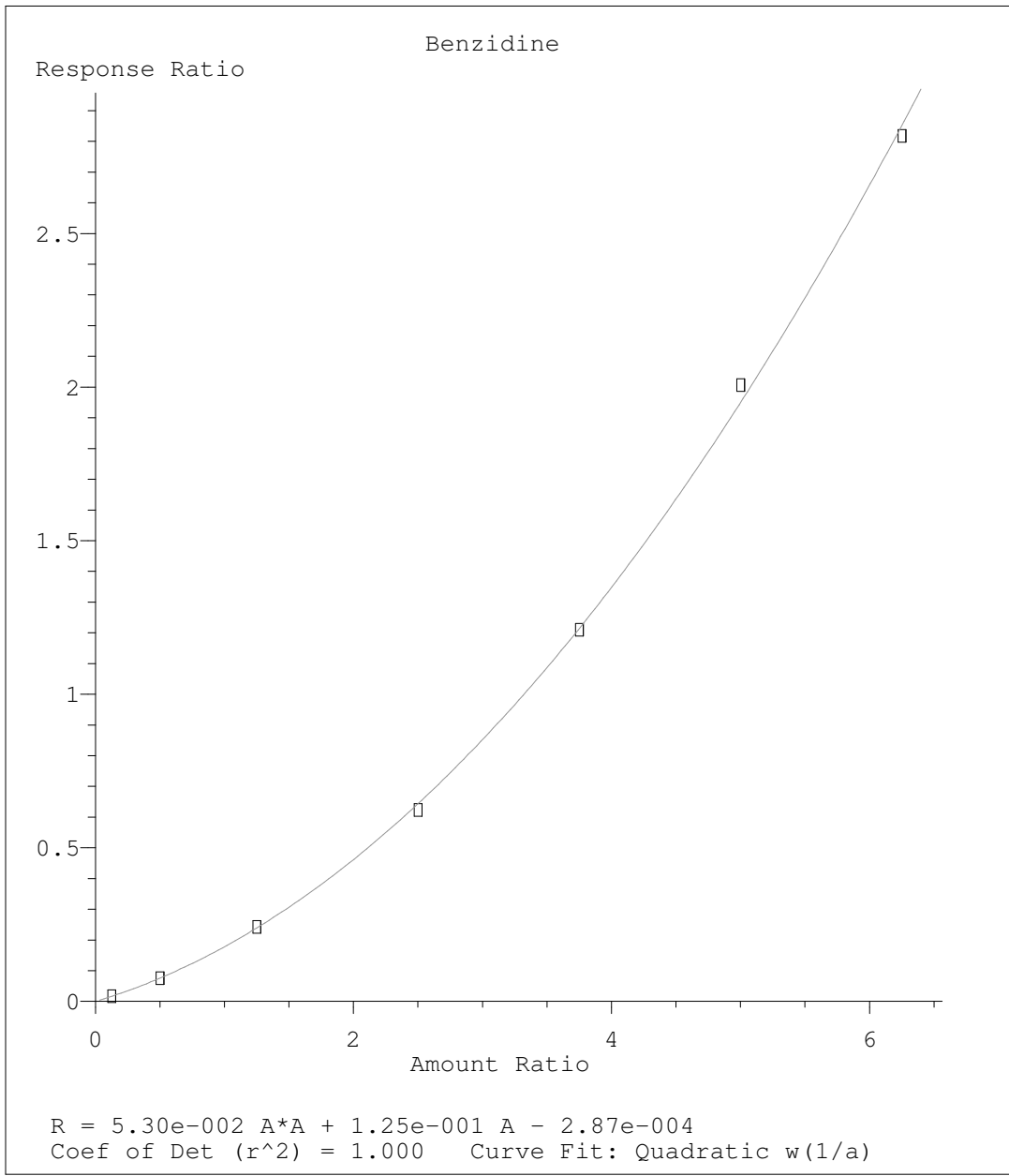
Analyte	RRF: 20K1	RRF: 30K1	RRF: 40K1	RRF: 50K1	RRF. Avg	%RSD	COD
Analysis date/time	03/31/22 21:19	03/31/22 21:40	03/31/22 22:02	03/31/22 22:23			
PHENOL					1.575372	2.77	
3&4-METHYL PHENOL					1.301686	3.86	
NAPHTHALENE					0.998617	7.08	
2-METHYLNAPHTHALENE					0.627399	2.53	
1-METHYLNAPHTHALENE					0.610754	3.34	
ACENAPHTHYLENE					1.695228	2.03	
ACENAPHTHENE					1.148837	4.33	
DIBENZOFURAN					1.532971	4.89	
FLUORENE					1.268965	3.21	
PHENANTHRENE					1.060304	6.75	
ANTHRACENE					1.006737	2.77	
CARBAZOLE					0.861194	4.17	
DI-N-BUTYL PHTHALATE					1.289953	10.48	
FLUORANTHENE					1.03753	4.25	
PYRENE					1.498492	6.58	
BENZO(A)ANTHRACENE					1.116712	3.28	
CHRYSENE					1.179486	3.71	
BENZO(B)FLUORANTHENE					1.172442	7.06	
BENZO(K)FLUORANTHENE					1.198822	8.32	
BENZO(A)PYRENE					0.950358	12.31	
INDENO(1,2,3-CD)PYRENE					0.86497	8.78	
DIBENZ(A,H)ANTHRACENE					0.969471	7.71	
BENZO(G,H,I)PERYLENE					1.02699	6.23	
2-FLUOROPHENOL					1.252515	2.77	
PHENOL-D5					1.486088	2.5	
NITROBENZENE-D5					0.30424	3.85	
2-FLUOROBIPHENYL					1.270391	5.89	
P-TERPHENYL-D14					1.107064	3.26	
DI-N-OCTYL PHTHALATE					1.425428	22.38	0.997
2,4,6-TRIBROMOPHENOL					0.083814	14.11	
PENTACHLOROPHENOL					0.105171	16.65	0.999
BIS(2-ETHYLHEXYL)PHTHALATE					1.014597	9.75	
BENZOIC ACID	0.0820	0.0890	0.09	0.0920	0.07914	19.21	0.999
File ID:	0331_14	0331_15	0331_16	0331_17			

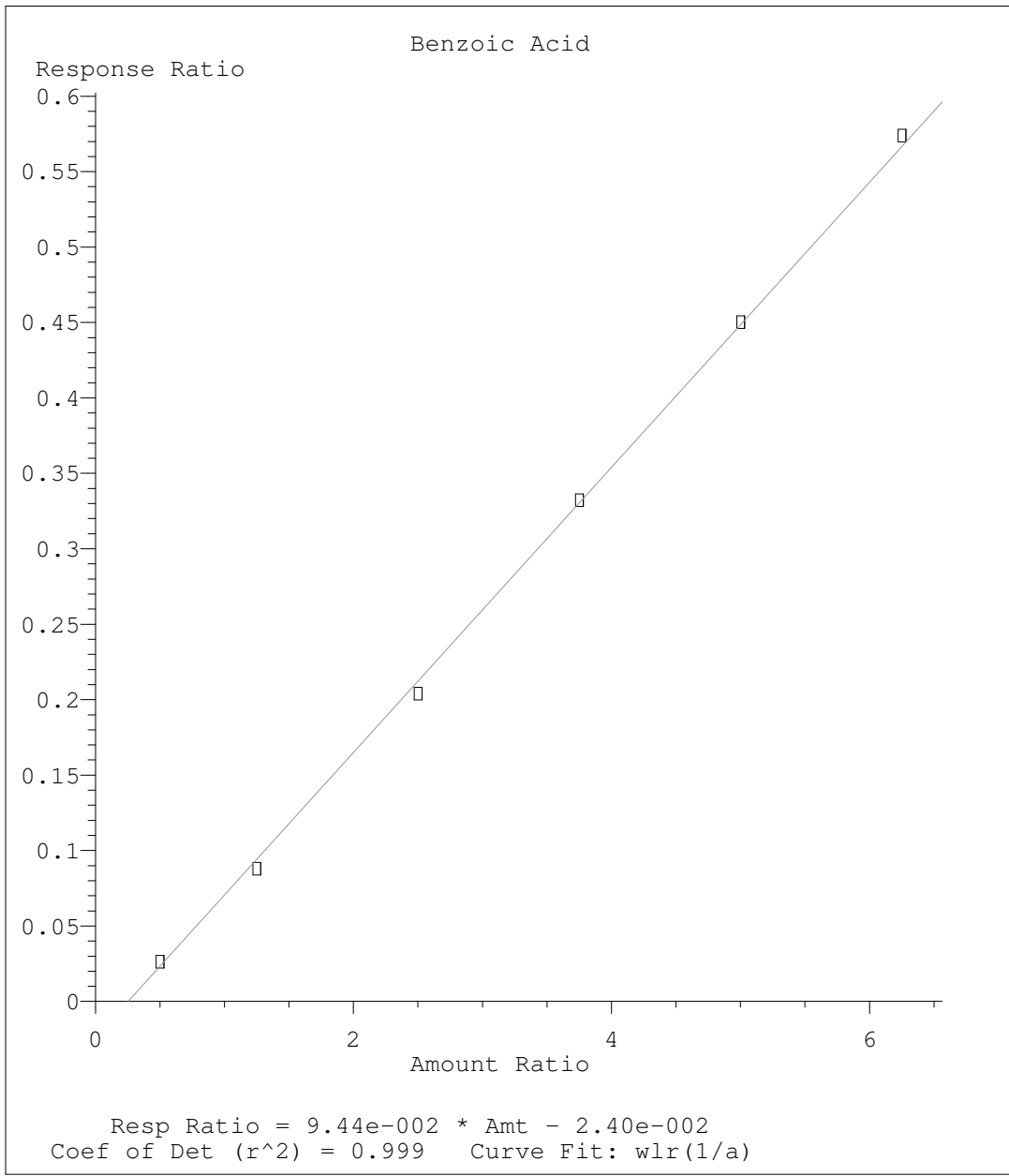


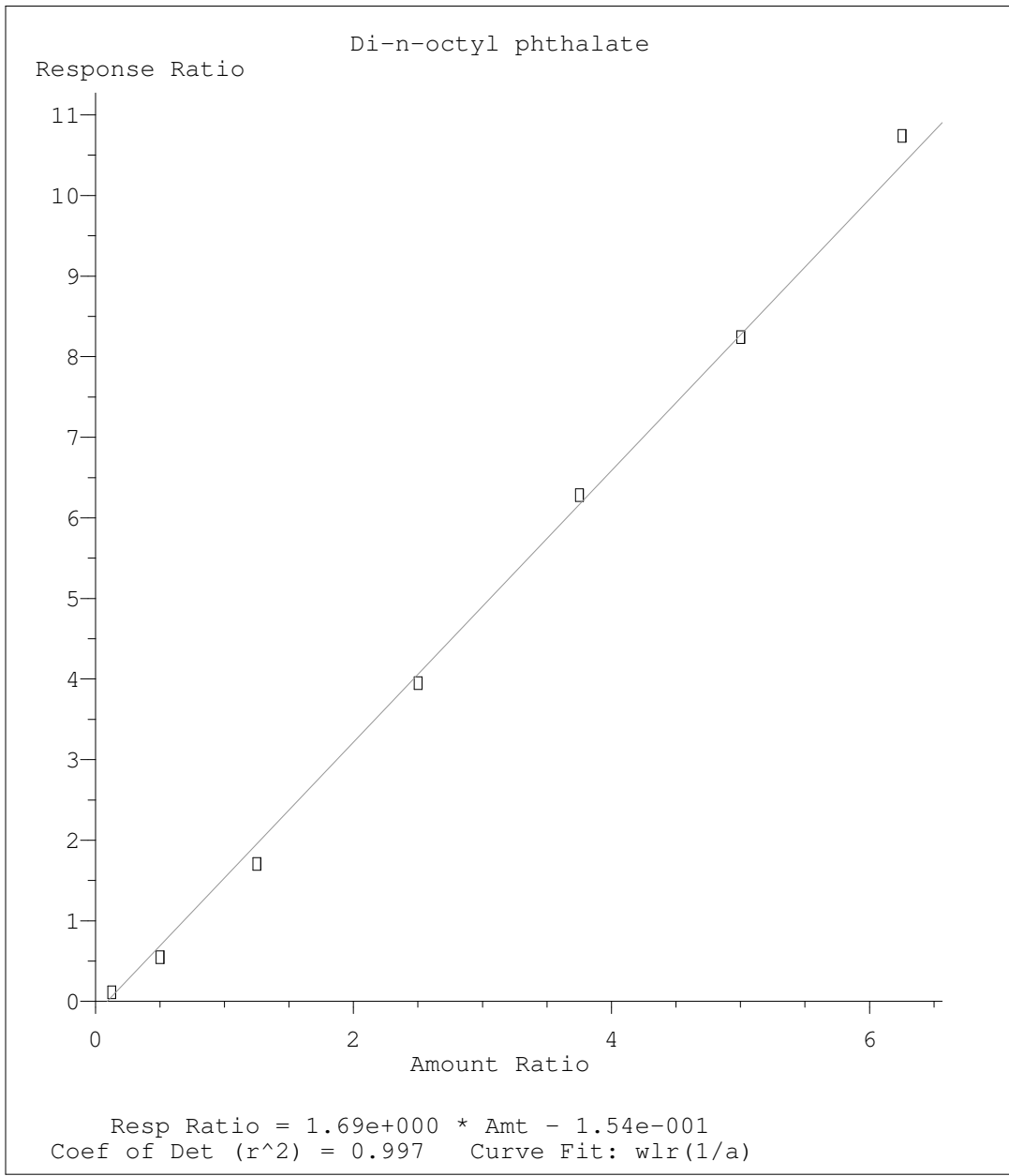


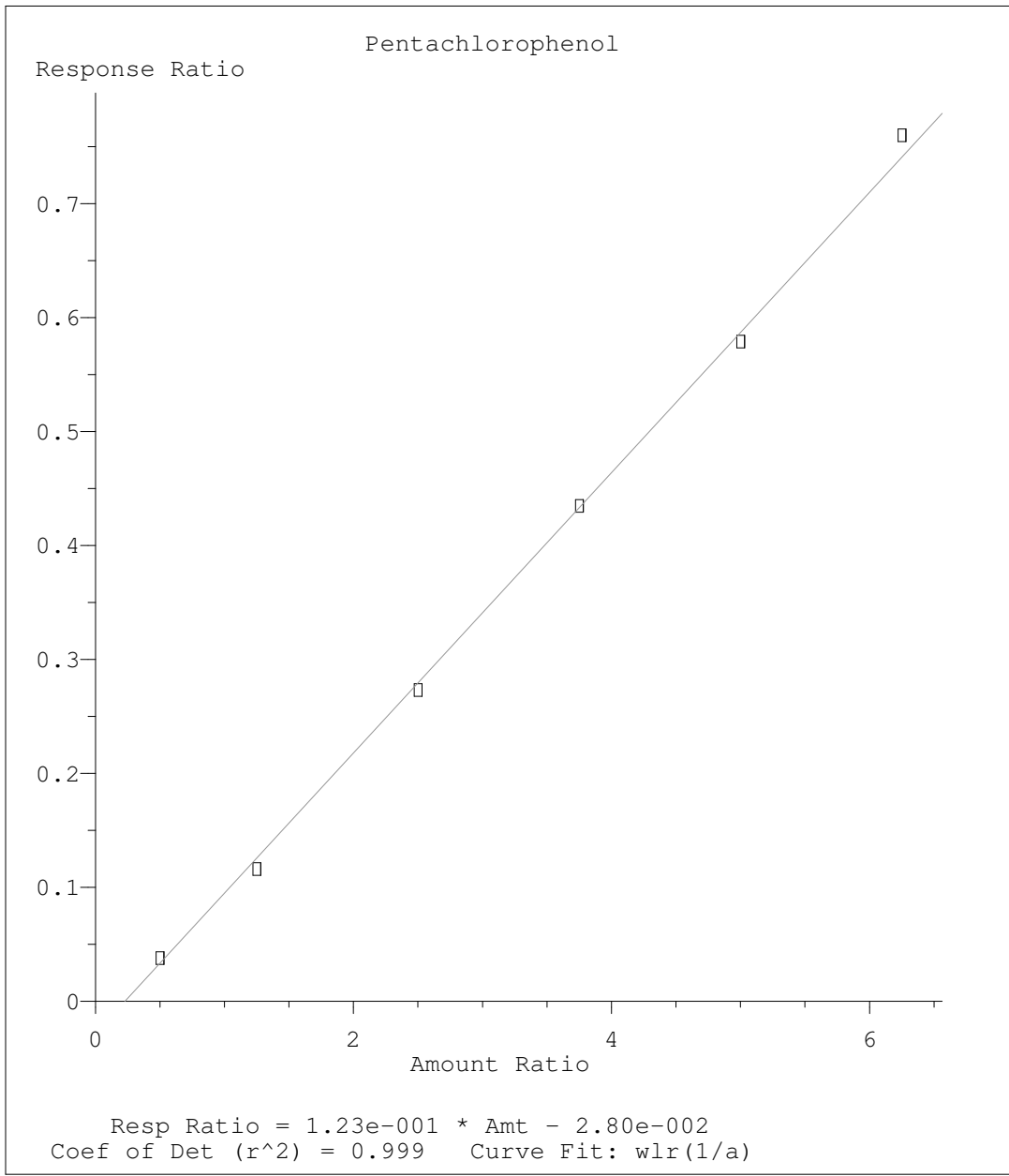












Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA  
 Last Update : Mon Apr 04 16:54:30 2022  
 Response Via : Initial Calibration

10606046

Calibration Files  
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 50K =0331\_10.D 1K1 =0331\_11.D 4K1 =0331\_12.D 10K1 =0331\_13.D 20K1 =0331\_14.D 30K1 =0331\_15.D 40K1 =0331\_16.D  
 50K1 =0331\_17.D

Compound	500	1K	4K	10K	20K	30K	40K	50K	1K1	4K1	10K1	20K1	30K1	40K1	50K1	Avg
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%RSD

1) I	1,4-Dichlorobenzen...	1.368	1.258	1.308	1.360	1.358	1.325	1.303	1.336							1.327	2	
2) TM	Pyridine																	
3) MT	N-Nitrosodimet...	0.884	0.802	0.684	0.678	0.667	0.627	0.616	0.628							0.698	13	
4) S	2-Fluorophenol	1.287	1.196	1.216	1.267	1.295	1.255	1.234	1.271							1.253	2	
5) MT	Aniline	0.699	0.608	0.690	0.711	0.706	0.698	0.689	0.700							0.688	4	
6) MT	bis(2-Chloroet...	1.410	1.346	1.328	1.368	1.353	1.334	1.326	1.358							1.353	2	
7) S	Phenol-d5	1.480	1.419	1.456	1.509	1.540	1.498	1.475	1.512							1.486	2	
8) MC	Phenol	1.601	1.482	1.570	1.598	1.624	1.583	1.552	1.595							1.575	2	
9) Benzaldehyde										0.316	0.313	0.324	0.339	0.380		0.335	8	
10) MT	2-Chlorophenol	1.250	1.255	1.285	1.345	1.373	1.332	1.318	1.338							1.312	3	
11) T	n-Decane	0.981	0.866	0.859	0.852	0.842	0.800	0.768	0.779							0.843	7	
12) MT	1,3-Dichlorobe...	1.581	1.584	1.528	1.528	1.507	1.445	1.417	1.437							1.504	4	
13) MTC	1,4-Dichlorobe...	1.578	1.562	1.514	1.534	1.522	1.461	1.426	1.442							1.505	3	
14) MT	Benzyl Alcohol	0.936	0.879	0.900	0.977	1.007	0.992	0.983	1.014							0.961	5	
15) MT	1,2-Dichlorobe...	1.624	1.492	1.457	1.469	1.449	1.392	1.355	1.370							1.451	5	
16) MT	bis(2-Chlorois...	0.540	0.503	0.500	0.507	0.504	0.490	0.476	0.487							0.501	3	
17) MT	2,2-oxybis(1-c...	0.540	0.503	0.500	0.507	0.504	0.490	0.476	0.487							0.501	3	
18) MT	2-Methylphenol	1.141	1.074	1.178	1.234	1.242	1.197	1.183	1.191							1.180	4	
19) MT	Hexachloroethane	0.665	0.625	0.628	0.635	0.635	0.613	0.601	0.619							0.628	3	

Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA

Last Update : Mon Apr 04 16:54:30 2022

00) MP N-Nitrosodi-n-... 0.798 0.775 0.805 0.849 0.881 0.863 0.857 0.887  
 03  
 11) MT 3&4-Methyl phenol 1.284 1.215 1.250 1.349 1.365 1.321 1.302 1.326  
 06  
 22) MT Acetophenone  
 .42

1.735 1.675 1.724 1.710 1.742 1.749 1.720 1.722 1

Peak #	Retention Time	Response Factor	Area	Height	Width	Height	Area	Height
23) I	Naphthalene-d8	0.315	0.293	0.282	0.300	0.309	0.314	0.311
24) S	Nitrobenzene-d5	0.297	0.295	0.296	0.315	0.314	0.320	0.313
25) MT	Nitrobenzene	0.585	0.546	0.560	0.609	0.628	0.641	0.623
26) MT	Isophorone	0.114	0.122	0.144	0.156	0.161	0.161	0.161
27) MCT	2-Nitrophenol	0.291	0.282	0.288	0.310	0.308	0.314	0.303
28) MT	2,4-Dimethylph...	0.421	0.400	0.398	0.410	0.408	0.411	0.395
29) MT	bis(2-Chloreth...	0.225	0.212	0.222	0.243	0.249	0.252	0.243
30) MCT	2,4-Dichloroph...	0.309	0.301	0.278	0.283	0.281	0.279	0.267
31) MT	Benzoic Acid	0.300	0.269	0.254	0.238	0.220	0.198	0.246
32) MT	1,2,4-Trichlor...	1.132	1.056	0.995	1.012	0.984	0.971	0.920
33) MT	alpha-terpineol	0.094	0.099	0.103	0.108	0.110	0.109	0.111
34) MT	Naphthalene	0.169	0.156	0.151	0.153	0.152	0.152	0.145
35) MT	4-Chloroaniline	0.190	0.191	0.172	0.180	0.173	0.162	0.153
36) MCT	Hexachloro-1,3...	0.547	0.506	0.492	0.448	0.409	0.368	0.462
37) Hydroquinone		0.056	0.061	0.065	0.063	0.061	0.059	0.061
38) MT	Quinoline	0.227	0.216	0.220	0.247	0.262	0.271	0.268
39) MT	Caprolactam	0.657	0.628	0.615	0.633	0.632	0.634	0.610
40) MCT	4-Chloro-3-met...	0.647	0.631	0.597	0.610	0.613	0.611	0.589
41) MT	2-Methylnaphth...	0.249	0.230	0.223	0.198	0.176		
42) MT	1-Methylnaphth...	0.372	0.348	0.331	0.295	0.266		
43) MT	1,2,4,5-Tetrac...							
44) Diphenyl Ether								



Response Factor Report BNAMS24

Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA  
 Last Update : Mon Apr 04 16:54:30 2022  
 (45) Diphenyl Oxide

0.372 0.348 0.331 0.295 0.266

Peak No.	Retention Time	Response Factor	Area	Height	Width	Height	Area	Height
46)	I Acenaphthene-d10	0.237	0.225	0.246	0.261	0.273	0.282	0.278
47)	MPT Hexachlorocycl...	0.254	0.252	0.277	0.307	0.320	0.326	0.324
71)	MCT 2,4,6-Trichlor...	0.255	0.244	0.276	0.318	0.335	0.336	0.334
48)	MT 2,4,5-Trichlor...	1.398	1.349	1.266	1.291	1.261	1.226	1.180
07)	S 2-Fluorobiphenyl	1.595	1.471	1.421	1.442	1.421	1.389	1.345
27)	MT Biphenyl	1.156	1.154	1.117	1.125	1.093	1.087	1.047
50)	MT 2-Chloronaphth...	0.247	0.301	0.338	0.357	0.358	0.364	0.364
89)	MT 2-Nitroaniline	1.748	1.672	1.669	1.724	1.716	1.716	1.660
51)	MT Acenaphthylene	1.195	1.180	1.209	1.272	1.284	1.286	1.244
41)	MT Dimethyl phtha...	0.206	0.241	0.269	0.293	0.298	0.291	0.294
52)	MT 2,6-Dinitrotol...	0.211	0.247	0.271	0.279	0.271	0.271	0.270
67)	MT 3-Nitroaniline	1.227	1.216	1.140	1.145	1.143	1.134	1.089
53)	MCT Acenaphthene	0.049	0.066	0.085	0.097	0.101	0.112	0.112
91)	MPT 2,4-Dinitrophenol	1.670	1.592	1.534	1.558	1.512	1.507	1.453
54)	MT Dibenzofuran	0.268	0.322	0.348	0.365	0.358	0.368	0.368
03)	MT 2,4-Dinitrotol...	0.139	0.174	0.191	0.206	0.203	0.209	0.209
30)	T 2,3,4,6-Tetrac...	1.330	1.278	1.265	1.306	1.278	1.268	1.216
56)	MPT 4-Nitrophenol	0.650	0.571	0.598	0.583	0.574	0.567	0.540
94)	MT Fluorene	1.276	1.231	1.264	1.346	1.329	1.330	1.270
57)	MT 4-Chlorophenyl...	0.168	0.192	0.148	0.137	0.146	0.149	0.153
97)	MT Diethyl phthalate	1.230	1.233	1.287	1.356	1.347	1.335	1.280
58)	MT 4-Nitroaniline	1.230	1.233	1.287	1.356	1.347	1.335	1.280
33)	MT Azobenzene	0.169	0.200	0.219	0.231	0.241	0.241	0.217
59)	MPT 4-Nitrophenol	0.139	0.174	0.191	0.206	0.203	0.209	0.209
73)	MT Fluorene	1.330	1.278	1.265	1.306	1.278	1.268	1.216
80)	MT 4-Chlorophenyl...	0.650	0.571	0.598	0.583	0.574	0.567	0.540
61)	MT Diethyl phthalate	0.168	0.192	0.148	0.137	0.146	0.149	0.153
31)	T 4-Nitroaniline	1.230	1.233	1.287	1.356	1.347	1.335	1.280
62)	MT Azobenzene	0.169	0.200	0.219	0.231	0.241	0.241	0.217
88)	MPT 4-Nitrophenol	0.139	0.174	0.191	0.206	0.203	0.209	0.209
32)	MT Fluorene	1.330	1.278	1.265	1.306	1.278	1.268	1.216
64)	MT 4-Chlorophenyl...	0.650	0.571	0.598	0.583	0.574	0.567	0.540
21)	MT Diethyl phthalate	0.168	0.192	0.148	0.137	0.146	0.149	0.153
65)	MT 4-Nitroaniline	1.230	1.233	1.287	1.356	1.347	1.335	1.280
07)	MT Azobenzene	0.169	0.200	0.219	0.231	0.241	0.241	0.217
66)	MPT 4-Nitrophenol	0.139	0.174	0.191	0.206	0.203	0.209	0.209
33)	MT Fluorene	1.330	1.278	1.265	1.306	1.278	1.268	1.216
67)	MT 4-Chlorophenyl...	0.650	0.571	0.598	0.583	0.574	0.567	0.540
11)	MT Diethyl phthalate	0.168	0.192	0.148	0.137	0.146	0.149	0.153
88)	MT 4-Nitroaniline	1.230	1.233	1.287	1.356	1.347	1.335	1.280
6)	MT Azobenzene	0.169	0.200	0.219	0.231	0.241	0.241	0.217

Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA  
 Last Update : Mon Apr 04 16:54:30 2022

Retention Time	Peak Label	Area	Height	Width	Height	Area	Height	Width	Height	Area	Height	Width	Height
0.229	9) MT Atrazine	0.256	0.277	0.309	0.308	0.318	0.319	0.288	12				
0.083	0) I Phenanthrene-d10								24				
0.622	1) MT 4,6-Dinitro-2-...	0.049	0.069	0.086	0.095	0.097	0.105						
0.084	2) MCT N-Nitrosodiphe...	0.625	0.589	0.613	0.637	0.650	0.639	0.609	3				
0.191	3) S 2,4,6-Tribromo...	0.063	0.073	0.082	0.089	0.094	0.091	0.094	14				
0.223	4) MT 4-Bromophenyl-...	0.195	0.193	0.190	0.191	0.192	0.194	0.184	1				
0.149	5) MT Hexachlorobenzene	0.253	0.236	0.221	0.221	0.221	0.219	0.207	6				
0.105	6) T n-octadecane	0.162	0.138	0.146	0.148	0.155	0.153	0.146	4				
1.060	7) MCT Pentachlorophenol	0.076	0.093	0.109	0.116	0.116	0.116	0.122	16				
1.007	8) MT Phenanthrene	1.217	1.087	1.056	1.055	1.049	1.038	0.990	6				
0.861	9) MT Anthracene	1.017	0.956	0.985	1.027	1.041	1.030	0.995	2				
1.290	0) MT Carbazole	0.839	0.793	0.846	0.884	0.889	0.907	0.856	4				
0.183	1) MT Di-n-butyl pht...	1.124	1.076	1.208	1.343	1.408	1.432	1.352	10				
0.224	2) MT 2-nitrodipheny...								22				
0.131	3) MCT Fluoranthene	1.023	0.956	0.994	1.052	1.077	1.086	1.051	4				
0.271	4) I Chrysene-d12								45				
1.498	5) MT Benzidine								6				
1.107	6) MT Pyrene	1.708	1.538	1.511	1.506	1.480	1.441	1.401	3				
0.688	7) S p-Terphenyl-d14	1.168	1.131	1.106	1.116	1.118	1.099	1.052	10				
0.346	8) MT Benzylbutyl ph...	0.562	0.651	0.709	0.733	0.724	0.748		12				
1.117	9) MT 3,3-Dichlororobe...								3				
1.179	0) MT Benzo(a)anthra...	1.088	1.076	1.063	1.122	1.143	1.158	1.127	3				
1.015	1) MT Chrysene	1.255	1.222	1.177	1.182	1.181	1.159	1.115	9				
1.425	2) MT bis(2-Ethylhex...	0.831	0.973	1.062	1.081	1.054	1.088		22				
	3) MC Di-n-octyl pht...	0.902	1.092	1.364	1.579	1.675	1.649	1.718					

Response Factor Report BNAMS24

Method Path : C:\msdchem\1\methods\  
Method File : S824C31V.M  
Title : 8270 BNA  
Last Update : Mon Apr 04 16:54:30 2022

94)	I	Perylene-d12							
95)	MT	Benzo(b)fluora...	1.058	1.057	1.118	1.206	1.226	1.269	1.217
96)	MT	Benzo(k)fluora...	1.052	1.042	1.176	1.287	1.276	1.272	1.235
97)	MC	Benzo(a)pyrene	0.809	0.761	0.880	0.996	1.021	1.059	1.025
98)	MT	Indeno(1,2,3-c...	0.784	0.733	0.821	0.905	0.908	0.949	0.911
99)	MT	Dibenz(a,h)ant...	0.841	0.877	0.947	1.024	1.022	1.047	1.001
100)	MT	Benzo(g,h,i)pe...	0.908	0.974	1.022	1.105	1.072	1.084	1.035

10606046

(#) = Out of Range

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:01:33 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.410	152	31379	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.145	136	126523	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	63425	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.433	188	100259	8000.0000000	ppb	0.00
84) Chrysene-d12	9.251	240	65923	8000.0000000	ppb	0.00
94) Perylene-d12	11.957	264	60338	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.740	112	2524	507.9989337	ppb	0.00
Spiked Amount	20000.000		Recovery	=	2.54%	
7) Phenol-d5	3.175	99	2902	490.2811940	ppb	0.00
Spiked Amount	20000.000		Recovery	=	2.45%	
24) Nitrobenzene-d5	3.710	82	2493m	524.6305136	ppb	0.00
Spiked Amount	10000.000		Recovery	=	5.25%	
50) 2-Fluorobiphenyl	4.828	172	5540	541.1485688	ppb	0.00
Spiked Amount	10000.000		Recovery	=	5.41%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	7.845	244	4811	523.3093824	ppb	0.00
Spiked Amount	10000.000		Recovery	=	5.23%	
<b>Target Compounds</b>						
2) Pyridine	2.263	79	2682m	502.9288558	ppb	
3) N-Nitrosodimethylamine	2.204	42	1734m	651.9362692	ppb	
5) Aniline	3.228	66	1370	491.5376500	ppb	# 79
6) bis(2-Chloroethyl)ether	3.245	93	2765m	515.1374508	ppb	
8) Phenol	3.181	94	3140	501.1068373	ppb	93
10) 2-Chlorophenol	3.292	128	2452	464.8748538	ppb	95
11) n-Decane	3.292	41	1924	575.6723728	ppb	# 36
12) 1,3-Dichlorobenzene	3.381	146	3101	517.2524205	ppb	96
13) 1,4-Dichlorobenzene	3.416	146	3094	514.0708349	ppb	# 68
14) Benzyl Alcohol	3.469	79	1836	479.0055036	ppb	99
15) 1,2-Dichlorobenzene	3.504	146	3184	552.5060104	ppb	97
16) bis(2-Chloroisopropyl)...	3.539	121	1060	532.7713266	ppb	87
17) 2,2-oxybis(1-chloropro...	3.539	121	1060	532.7713266	ppb	87
18) 2-Methylphenol	3.510	108	2237	462.2064517	ppb	86
19) Hexachloroethane	3.698	117	1305	524.0277072	ppb	97
20) N-Nitrosodi-n-propylamine	3.610	70	1565	469.7971863	ppb	98
21) 3&4-Methyl phenol	3.592	107	2518	475.7854675	ppb	95
25) Nitrobenzene	3.722	77	2349	471.8104374	ppb	92
26) Isophorone	3.851	82	4629	480.4591456	ppb	99
28) 2,4-Dimethylphenol	3.904	107	2304	469.9159942	ppb	92
29) bis(2-Chlorethoxy)methane	3.969	93	3329	513.4626234	ppb	98
30) 2,4-Dichlorophenol	4.039	162	1782	464.4492046	ppb	84
32) 1,2,4-Trichlorobenzene	4.104	180	2444	545.7286958	ppb	94
34) Naphthalene	4.157	128	8954m	559.6849764	ppb	
36) Hexachloro-1,3-butadiene	4.222	225	1339	554.5918131	ppb	91
40) 4-Chloro-3-methylphenol	4.463	107	1795	460.1058487	ppb	92
41) 2-Methylnaphthalene	4.592	142	5197	519.2282987	ppb	# 95
42) 1-Methylnaphthalene	4.657	142	5117	530.1816916	ppb	# 96
47) Hexachlorocyclopentadiene	4.692	237	939m	453.4144396	ppb	
48) 2,4,6-Trichlorophenol	4.769	196	1005	412.4968894	ppb	93
49) 2,4,5-Trichlorophenol	4.792	196	1011	400.6238575	ppb	94
51) Biphenyl	4.898	154	6324	553.1433075	ppb	99

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

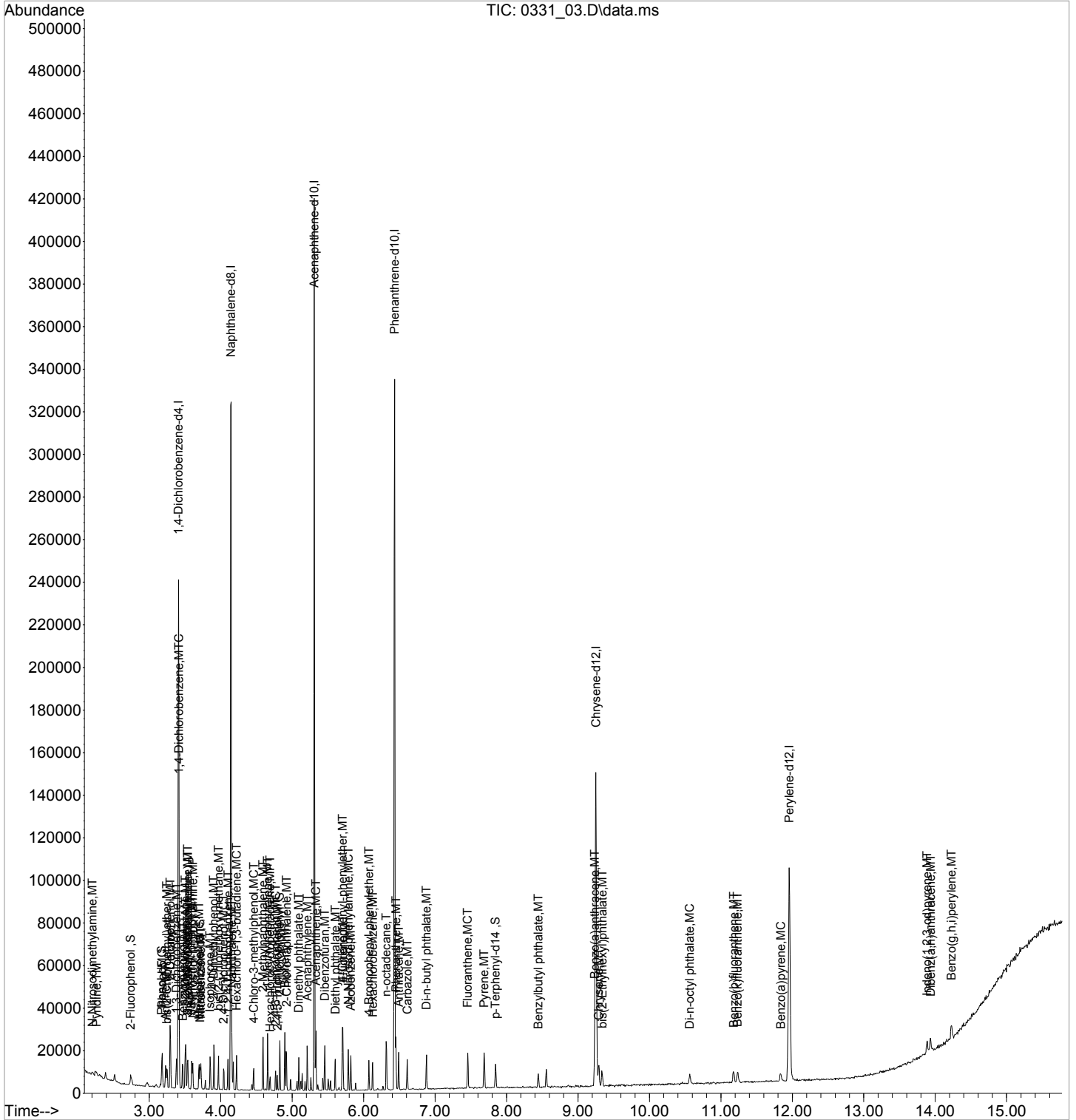
Quant Time: Apr 04 16:01:33 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
52) 2-Chloronaphthalene	4.922	162	4581	513.4164333	ppb		95
54) Acenaphthylene	5.210	152	6929	506.9901865	ppb		99
55) Dimethyl phthalate	5.092	163	4737	469.5927938	ppb		91
58) Acenaphthene	5.333	153	4864	535.9579409	ppb		98
60) Dibenzofuran	5.457	168	6619	535.9944213	ppb	#	89
64) Fluorene	5.710	166	5272	509.1051045	ppb		96
65) 4-Chlorophenyl-phenyle...	5.704	204	2576	557.7817146	ppb		99
66) Diethyl phthalate	5.604	149	5060	474.0047284	ppb		98
68) Azobenzene	5.822	77	4874	453.2199158	ppb	#	86
72) N-Nitrosodiphenylamine	5.786	169	3919	491.1822538	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	1225	512.3795821	ppb		96
75) Hexachlorobenzene	6.128	284	1585	573.4533593	ppb		94
76) n-octadecane	6.316	55	1016	548.9786212	ppb	#	29
78) Phenanthrene	6.451	178	7629	577.0254334	ppb		98
79) Anthracene	6.492	178	6370	494.8391331	ppb		97
80) Carbazole	6.610	167	5256	474.4175216	ppb	#	62
81) Di-n-butyl phthalate	6.880	149	7044	418.5148193	ppb		99
83) Fluoranthene	7.457	202	6410	485.9650062	ppb		99
86) Pyrene	7.686	202	7038	567.1001911	ppb		97
88) Benzylbutyl phthalate	8.445	149	2045	380.9486504	ppb		99
90) Benzo(a)anthracene	9.233	228	4484	484.9718122	ppb		93
91) Chrysene	9.292	228	5171	530.7402982	ppb		97
92) bis(2-Ethylhexyl)phtha...	9.339	149	2721	339.4590534	ppb		94
93) Di-n-octyl phthalate	10.563	149	3967	353.0003114	ppb		96
95) Benzo(b)fluoranthene	11.180	252	3990	438.5119188	ppb		99
96) Benzo(k)fluoranthene	11.233	252	3967	408.5899278	ppb		99
97) Benzo(a)pyrene	11.839	252	3050	406.0798426	ppb		95
98) Indeno(1,2,3-cd)pyrene	13.886	276	2955	433.0546037	ppb		93
99) Dibenz(a,h)anthracene	13.939	278	3172	410.5654286	ppb		98
100) Benzo(g,h,i)perylene	14.227	276	3424	410.7757987	ppb		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_03.D  
Acq On : 31 Mar 2022 5:24 pm  
Operator : 3545  
Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 3 Sample Multiplier: 1

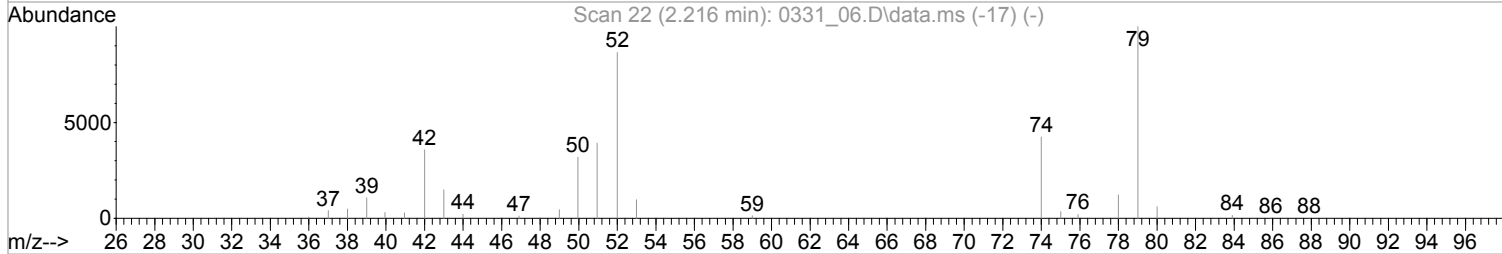
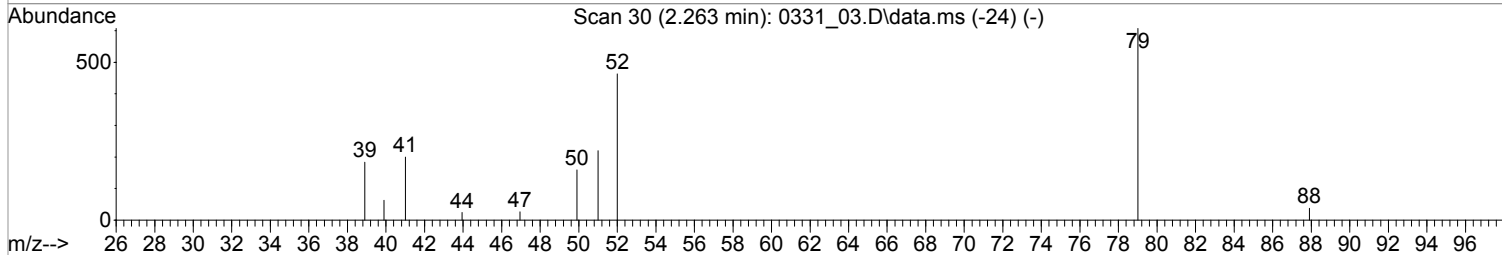
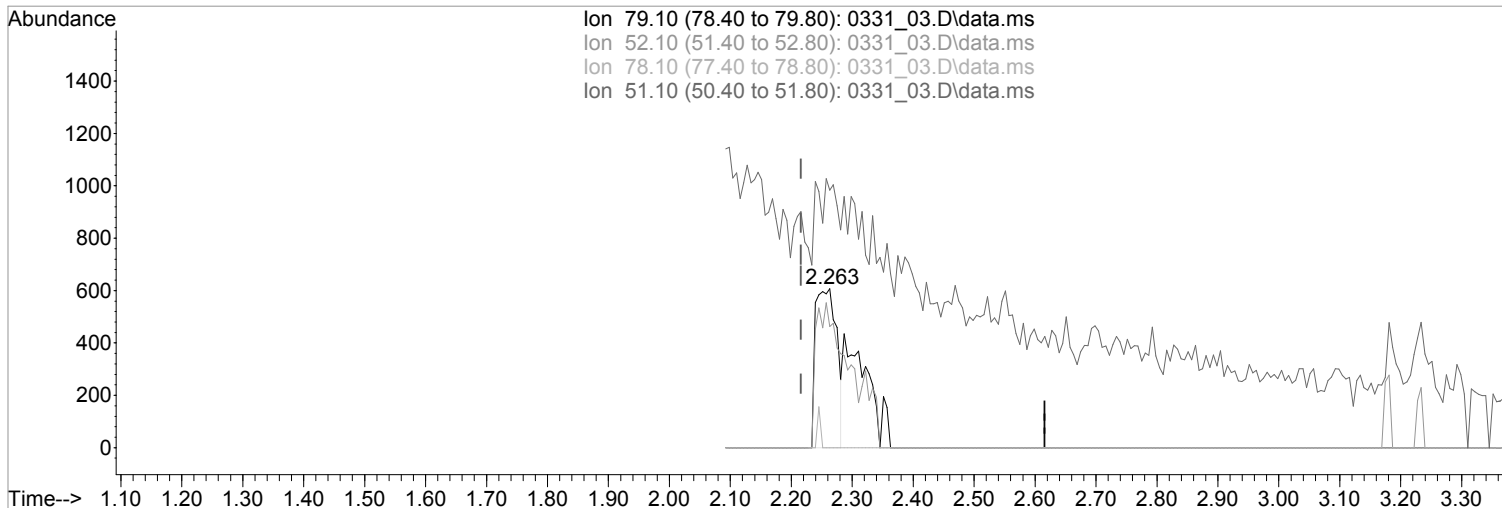
Quant Time: Apr 04 16:01:33 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 15:59:57 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

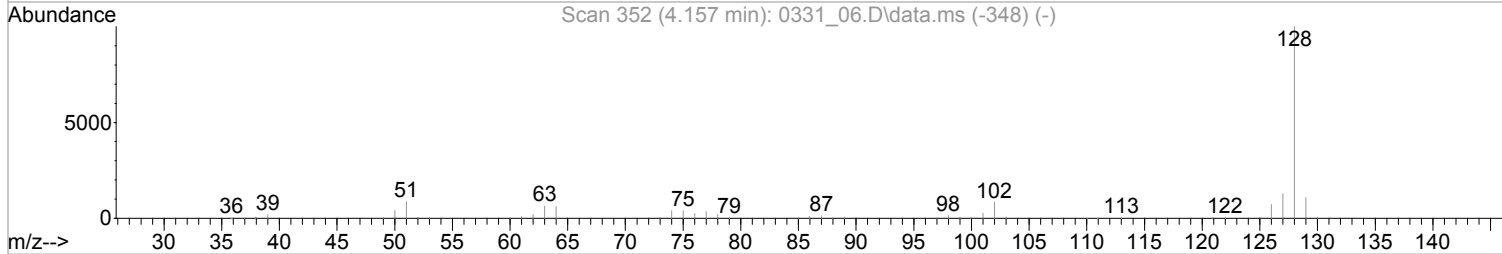
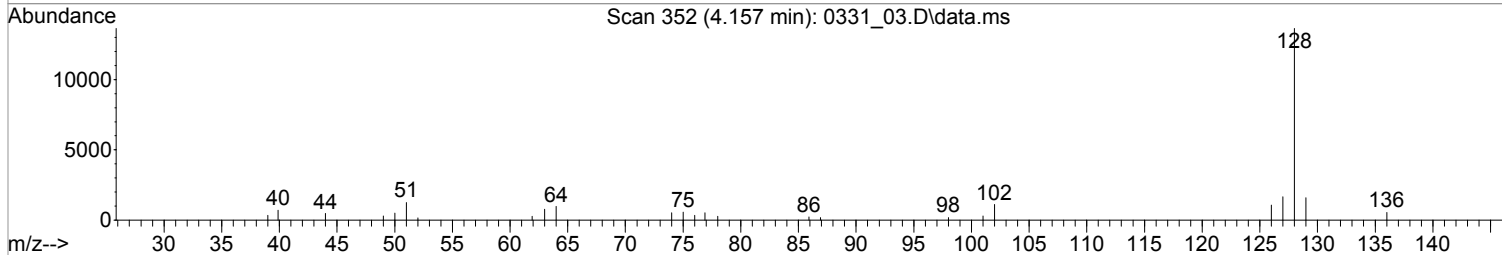
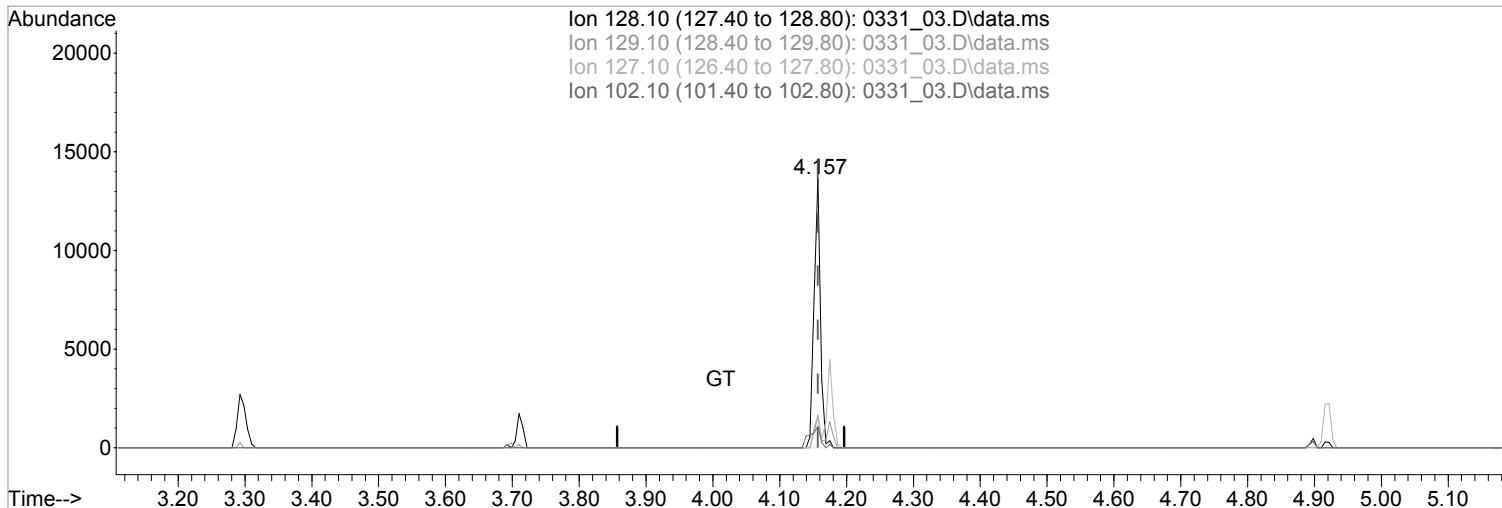
(2) Pyridine (TM)  
 2.263min (+0.047) 273.5917974 ppb  
 Qvalue = 88  
 response 1459

Ion	Exp%	Act%
79.10	100	100
52.10	86.50	76.28
78.10	12.30	0.00#
51.10	40.80	36.24

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_03.D  
Acq On : 31 Mar 2022 5:24 pm  
Operator : 3545  
Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 15:59:57 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



TIC: 0331\_03.D\data.ms

(34) Naphthalene (MT)

4.157min (-0.000) 559.6849764 ppb m

response 8954

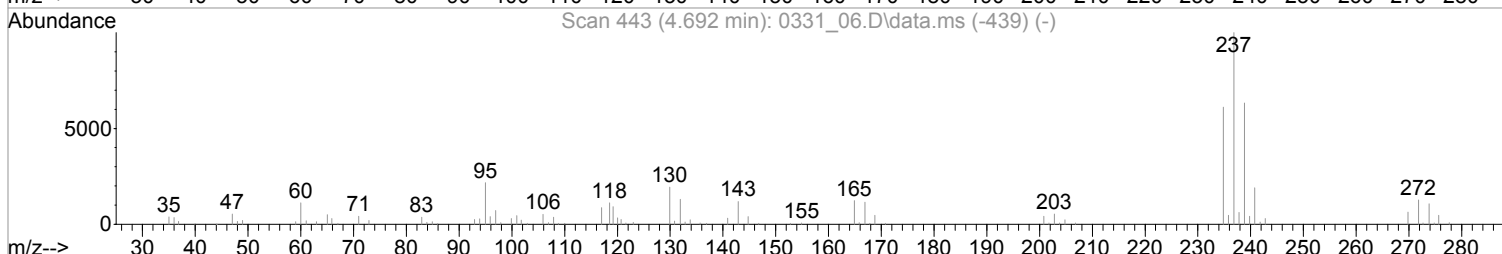
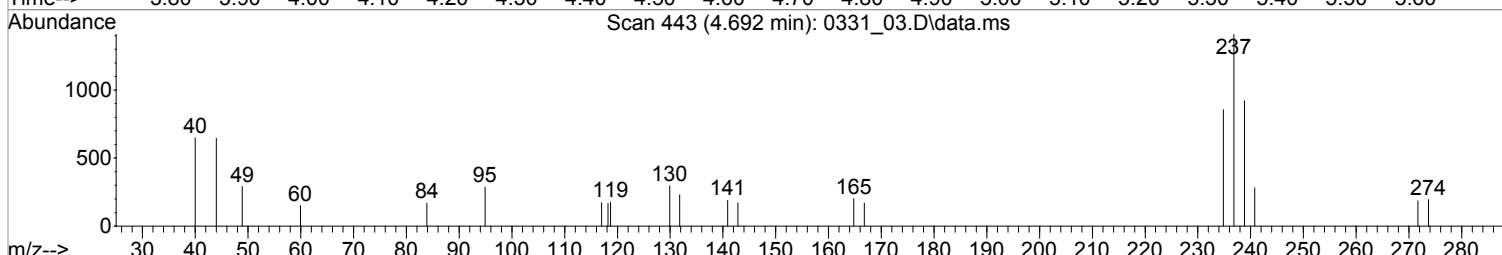
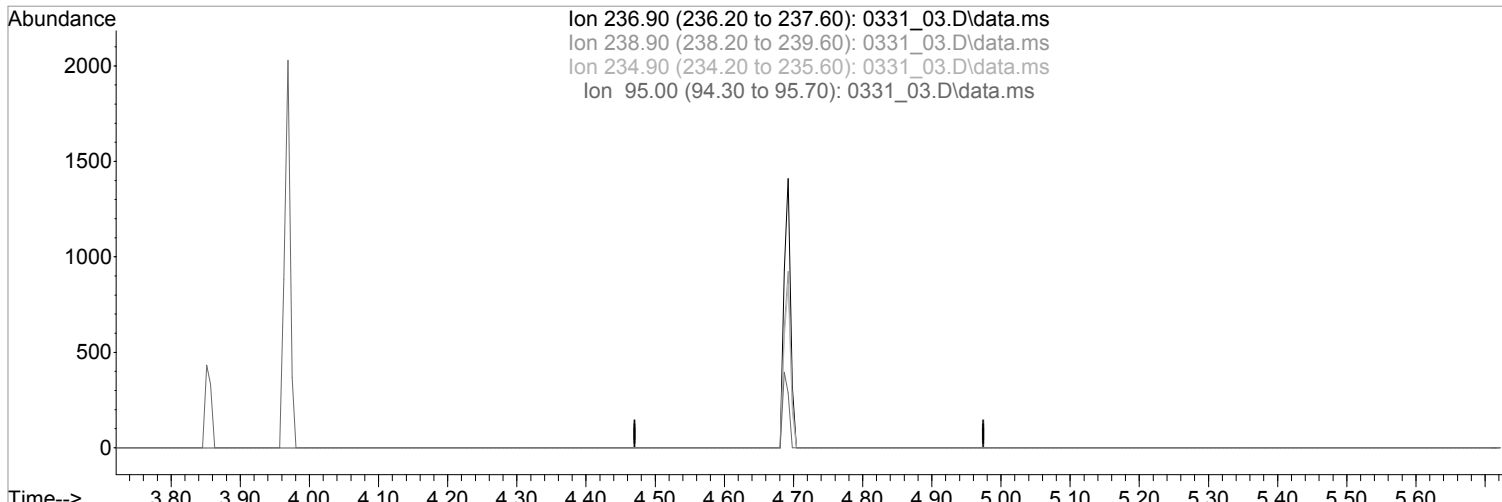
Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.62
127.10	12.80	12.25
102.10	8.30	8.14



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(47) Hexachlorocyclopentadiene (MPT)

4.692min (-4.692) 0.0000000 ppb

Qvalue = 0

response 0

Ion	Exp%	Act%
-----	------	------

236.90	100	0.00
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238.90	63.30	0.00#
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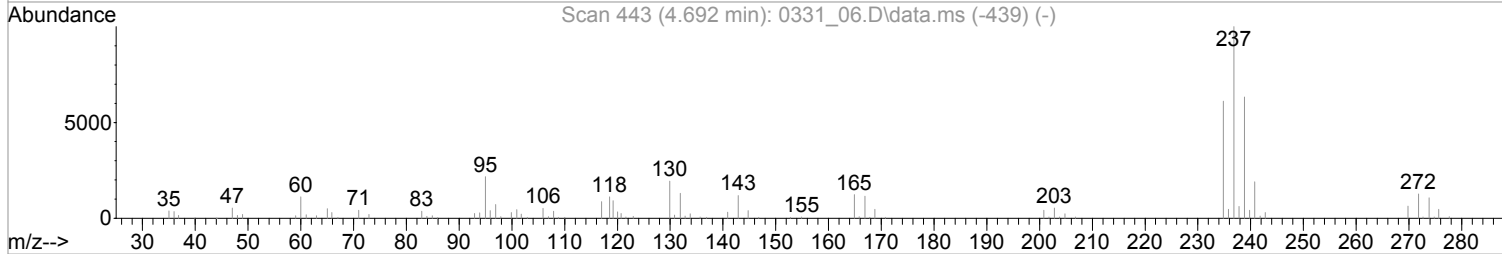
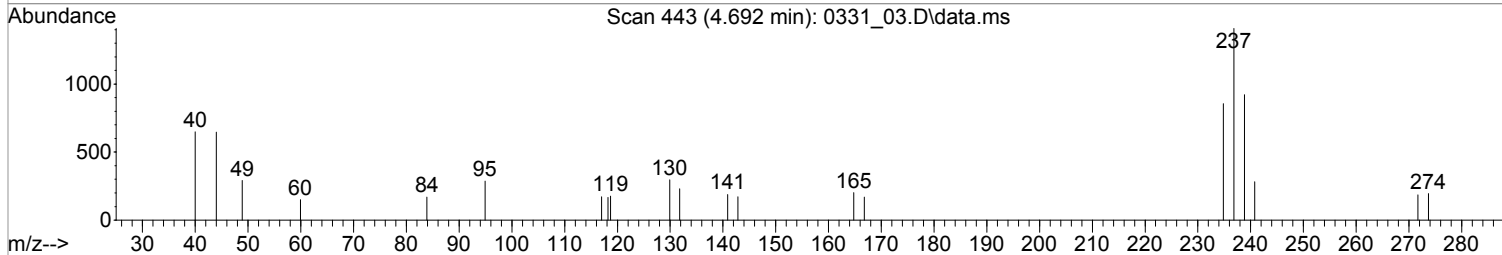
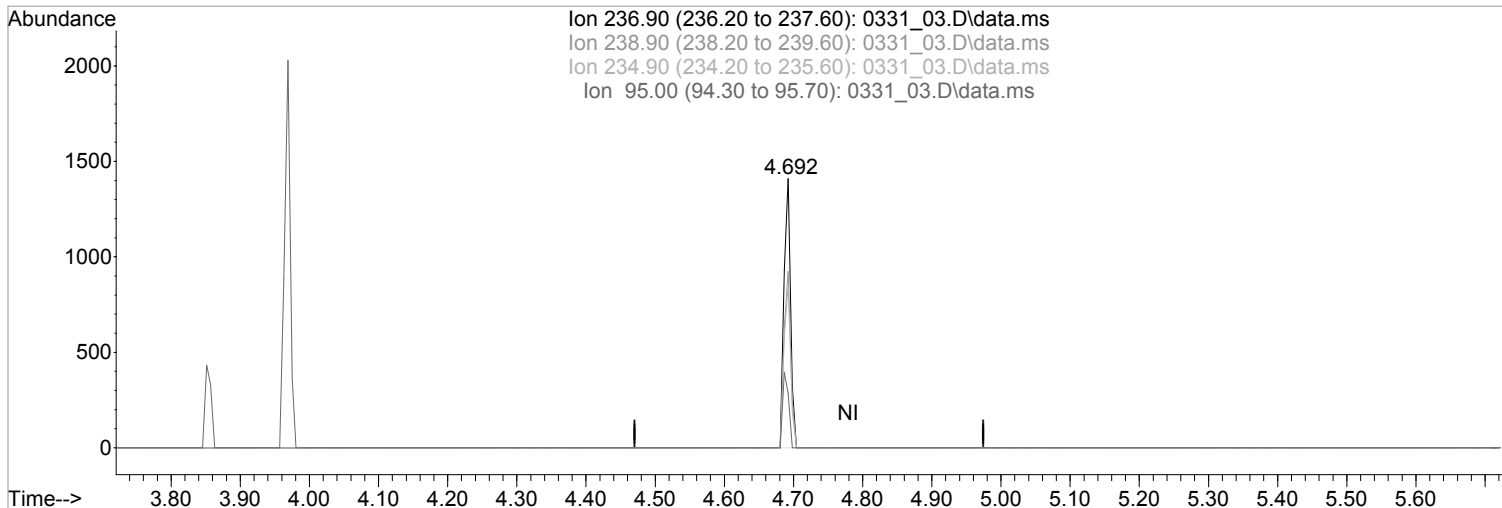
234.90	61.10	0.00#
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95.00	21.70	0.00#
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Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(47) Hexachlorocyclopentadiene (MPT)

4.692min (-0.000) 453.4144396 ppb m

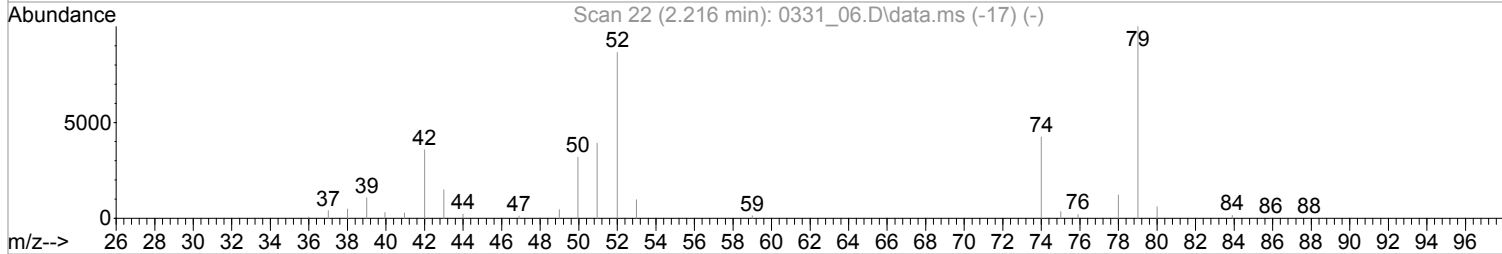
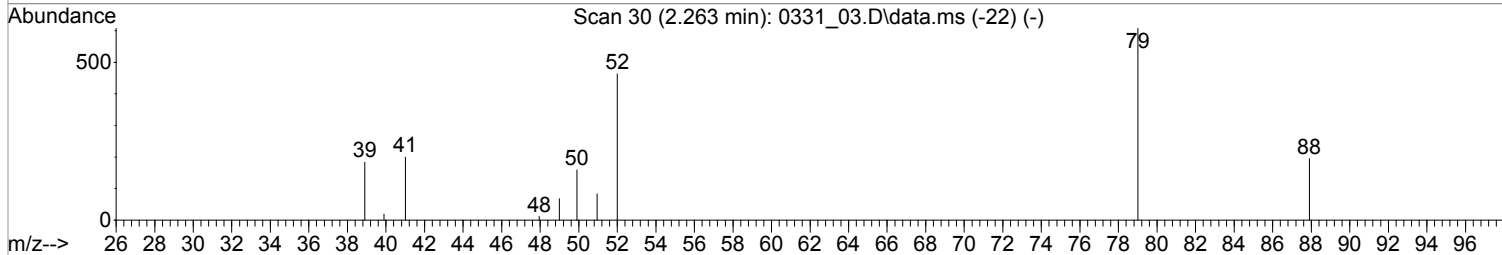
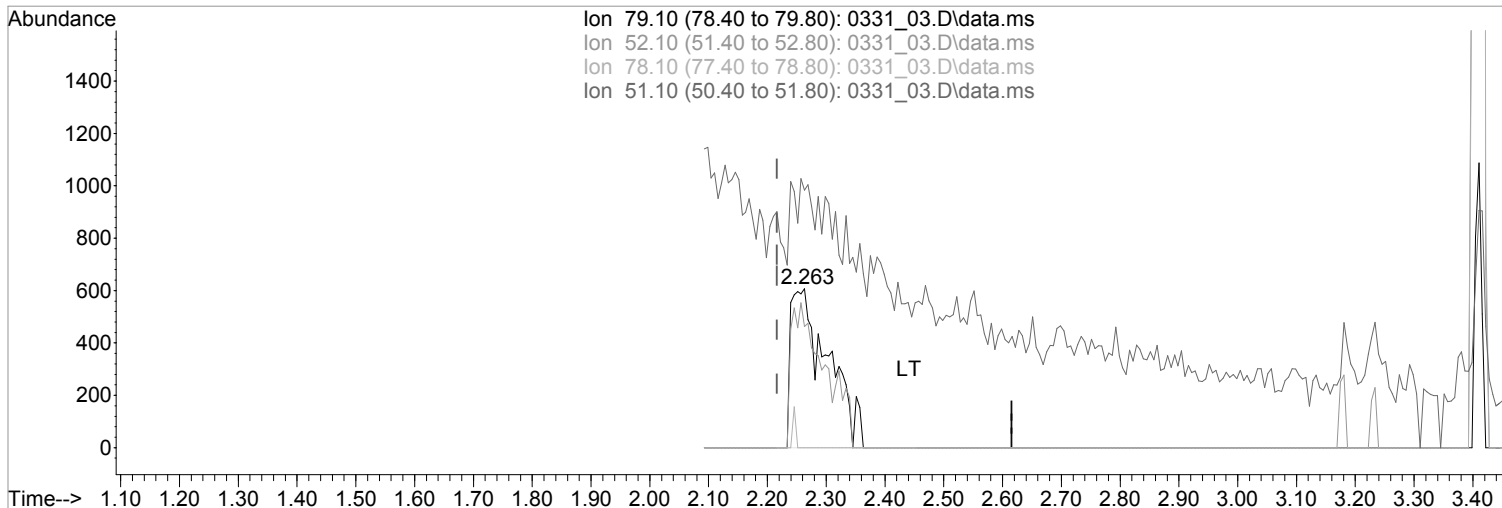
response 939

Ion	Exp%	Act%
236.90	100	100
238.90	63.30	65.51
234.90	61.10	60.75
95.00	21.70	20.37

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(2) Pyridine (TM)  
 2.263min (+0.047) 502.9288558 ppb m

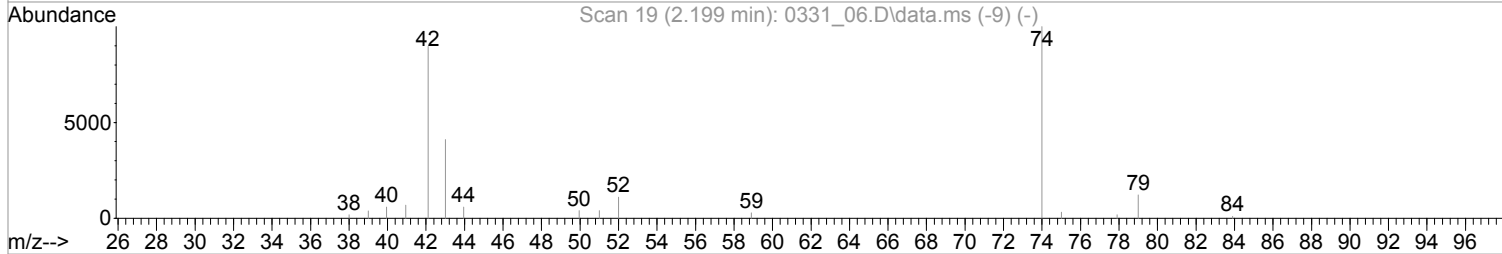
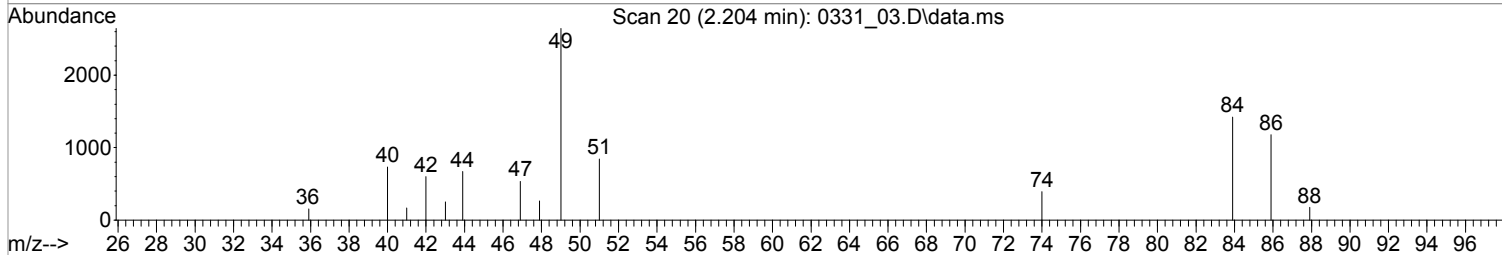
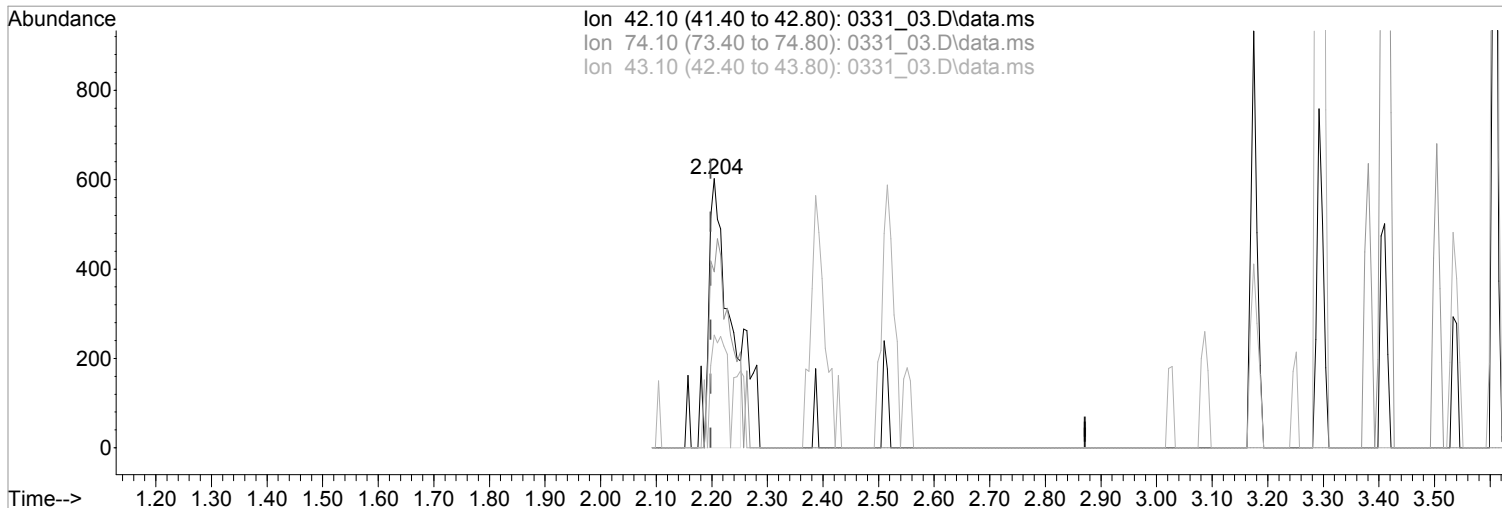
response 2682

Ion	Exp%	Act%
79.10	100	100
52.10	86.50	76.28
78.10	12.30	0.00#
51.10	40.80	162.11#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(3) N-Nitrosodimethylamine (MT)

2.204min (+0.006) 539.1445272 ppb

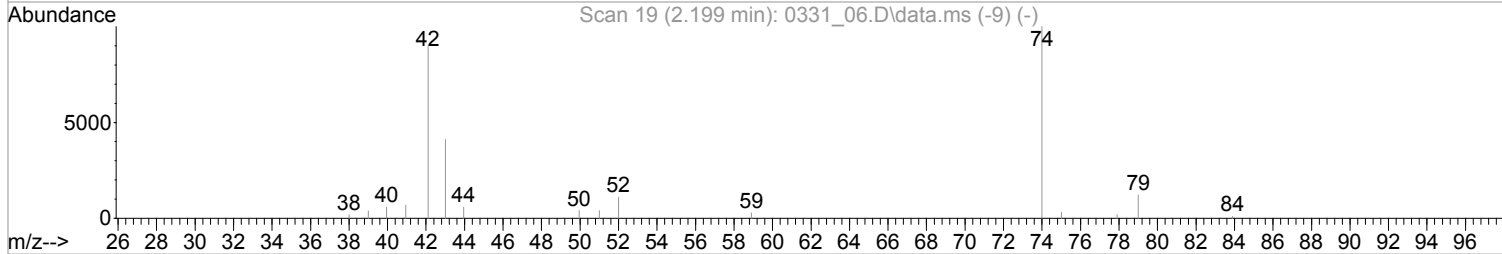
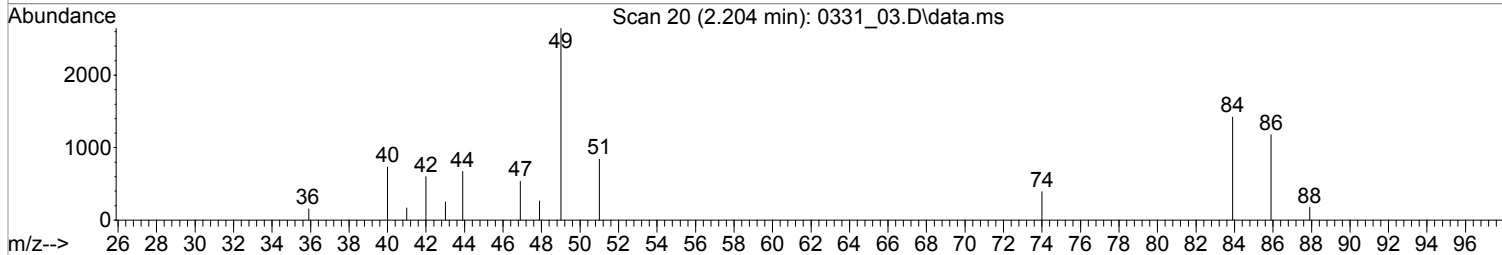
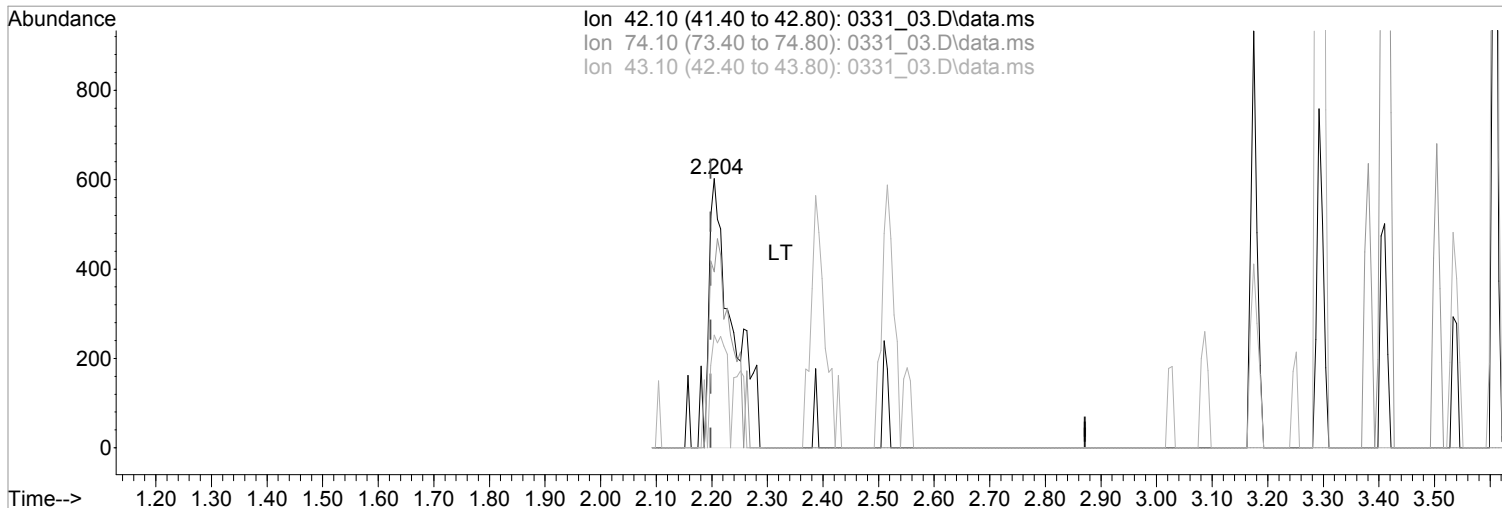
Qvalue = 64  
 response 1434

Ion	Exp%	Act%
42.10	100	100
74.10	109.30	86.75#
43.10	46.50	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(3) N-Nitrosodimethylamine (MT)  
 2.204min (+0.006) 651.9362692 ppb m

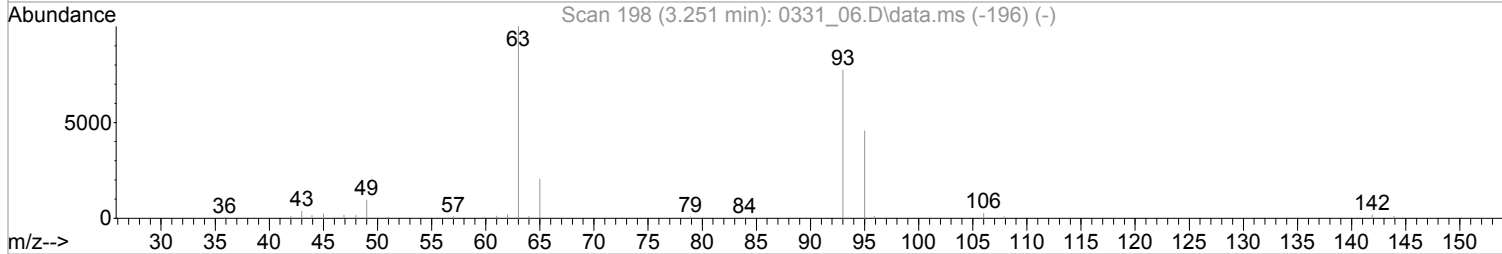
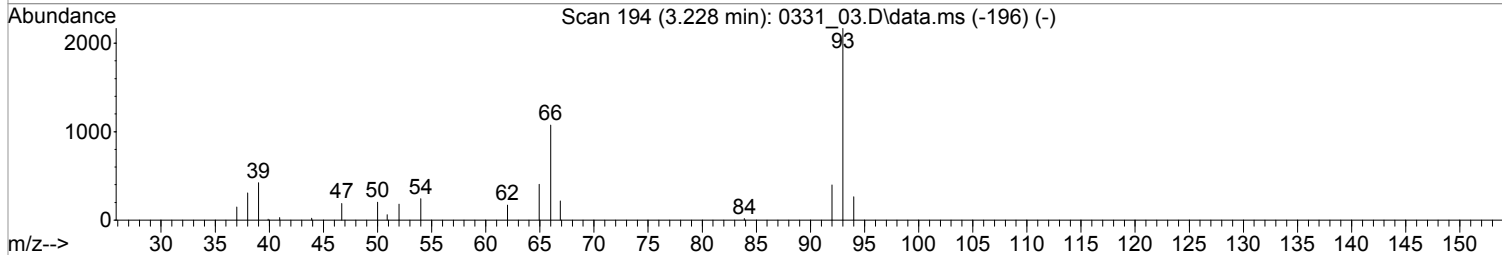
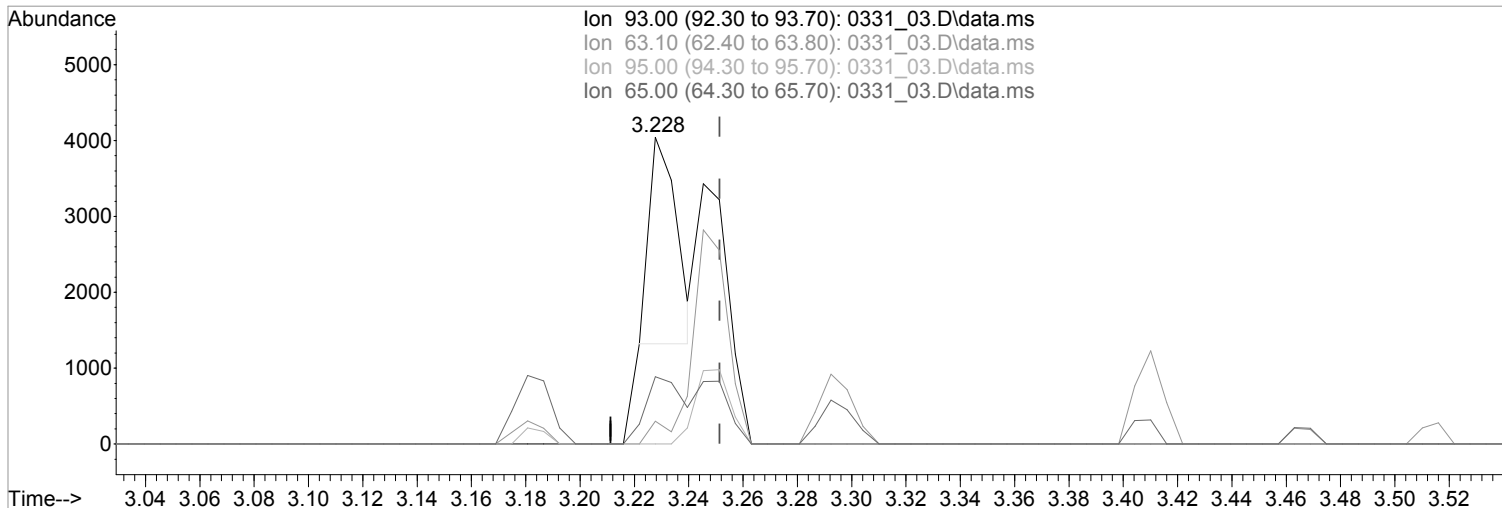
response 1734

Ion	Exp%	Act%
42.10	100	100
74.10	109.30	71.74#
43.10	46.50	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

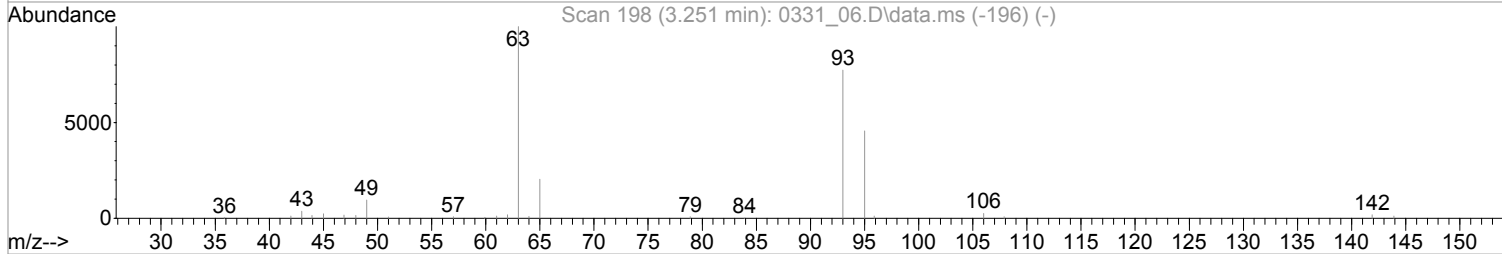
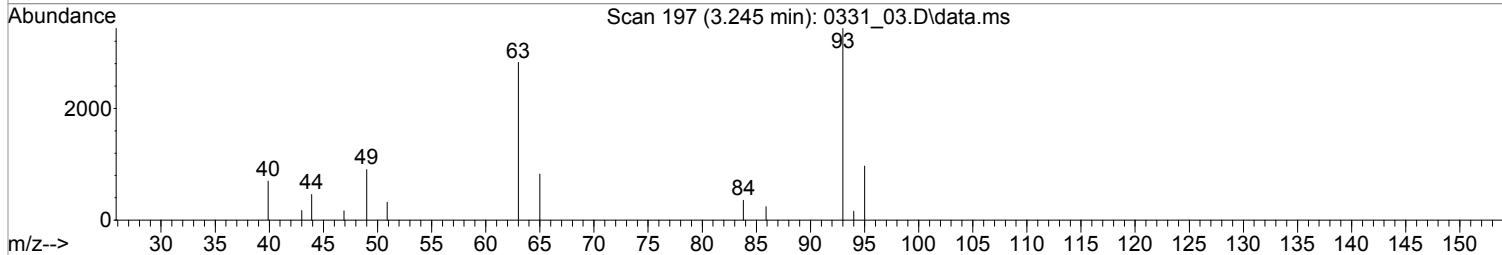
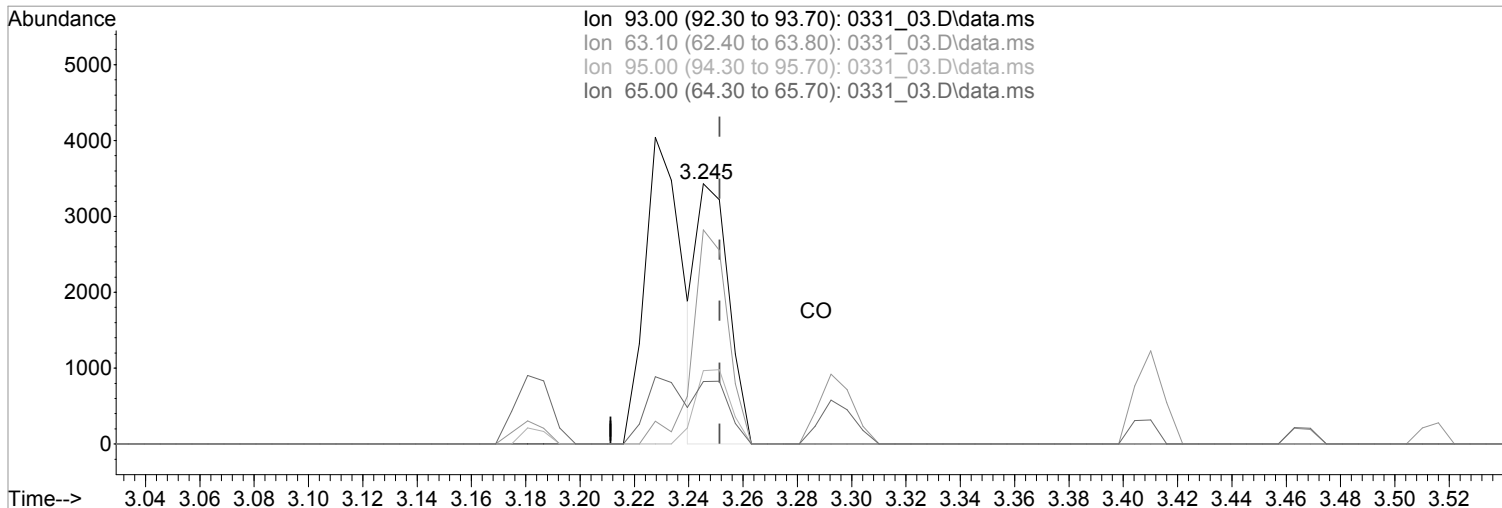
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 356.9632390 ppb  
 Qvalue = 42  
 response 1916

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	11.06#
95.00	31.90	0.00#
65.00	23.10	22.97

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.245min (-0.006) 515.1374508 ppb m

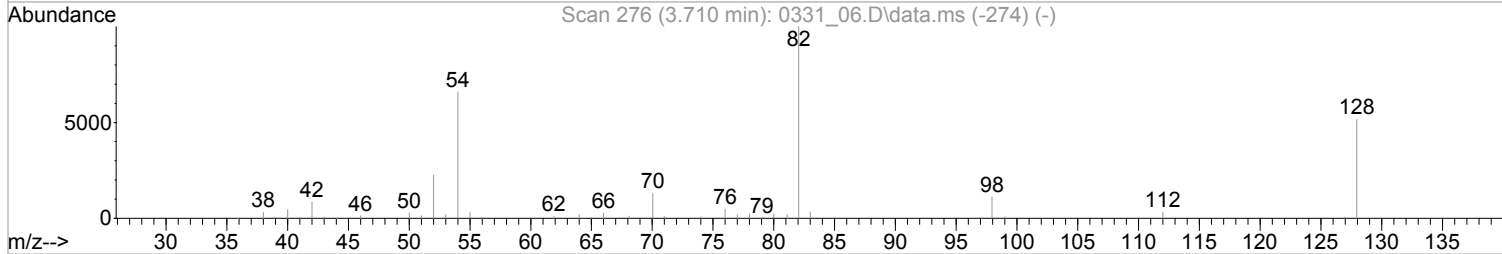
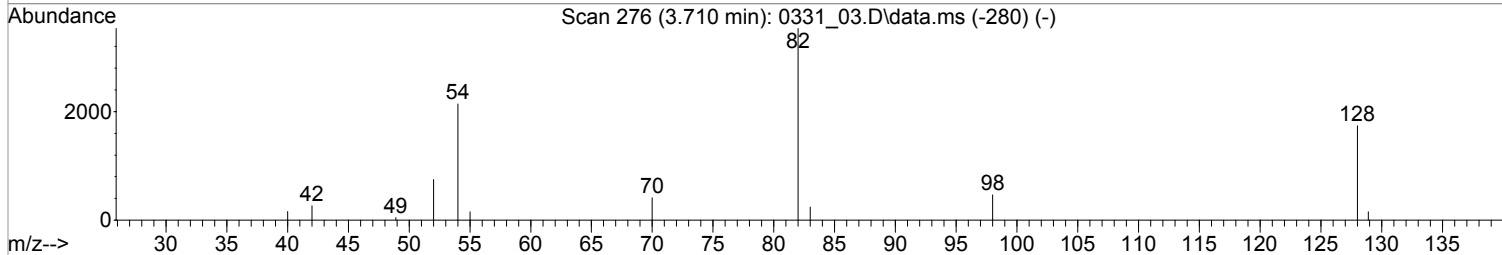
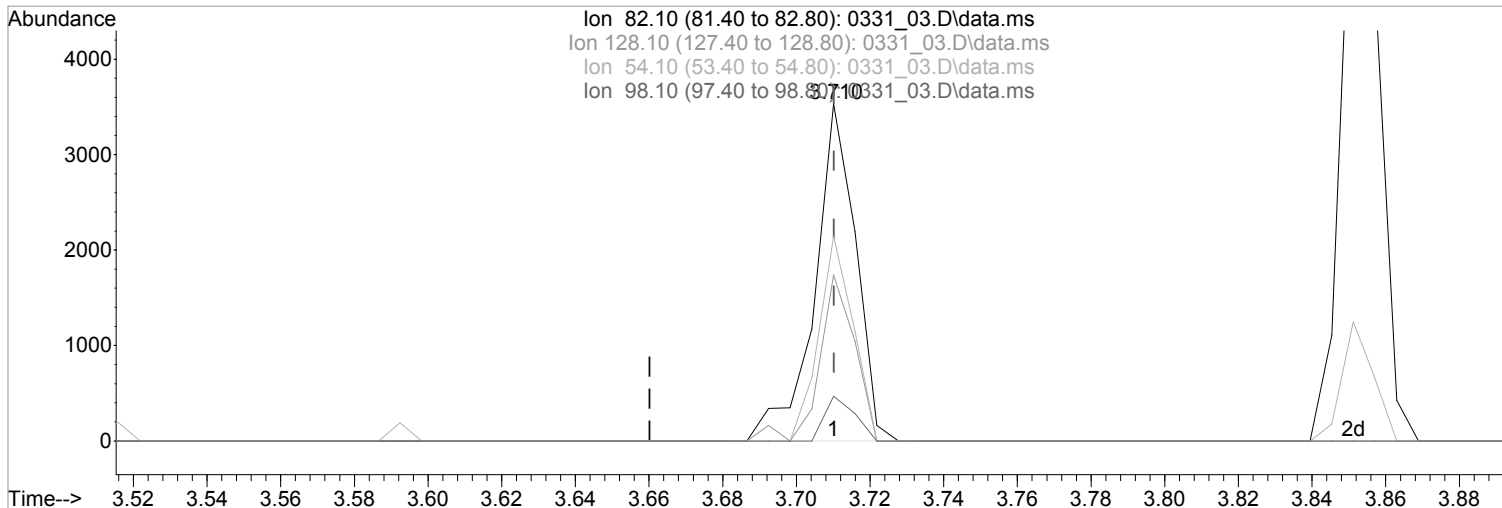
response 2765

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	82.25
95.00	31.90	28.18
65.00	23.10	24.05

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 575.7677839 ppb  
 Qvalue = 98  
 response 2736

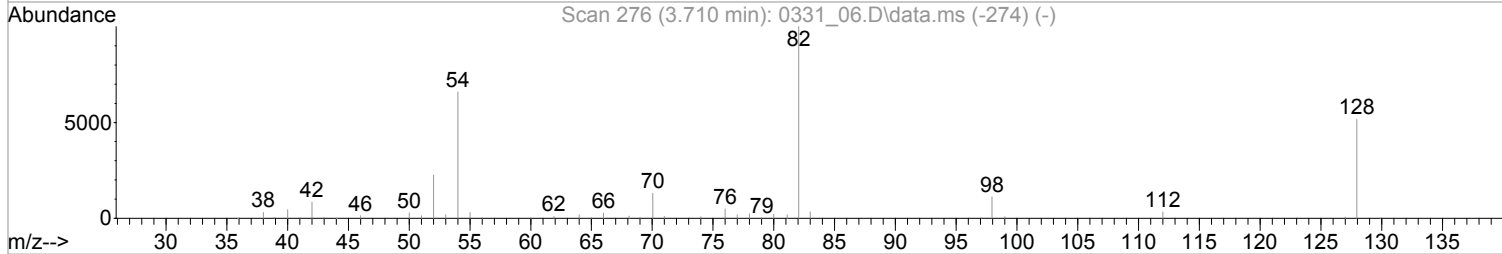
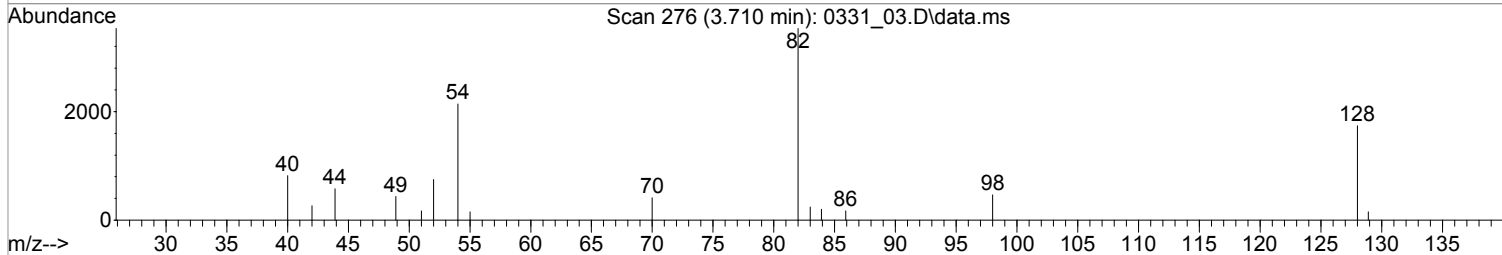
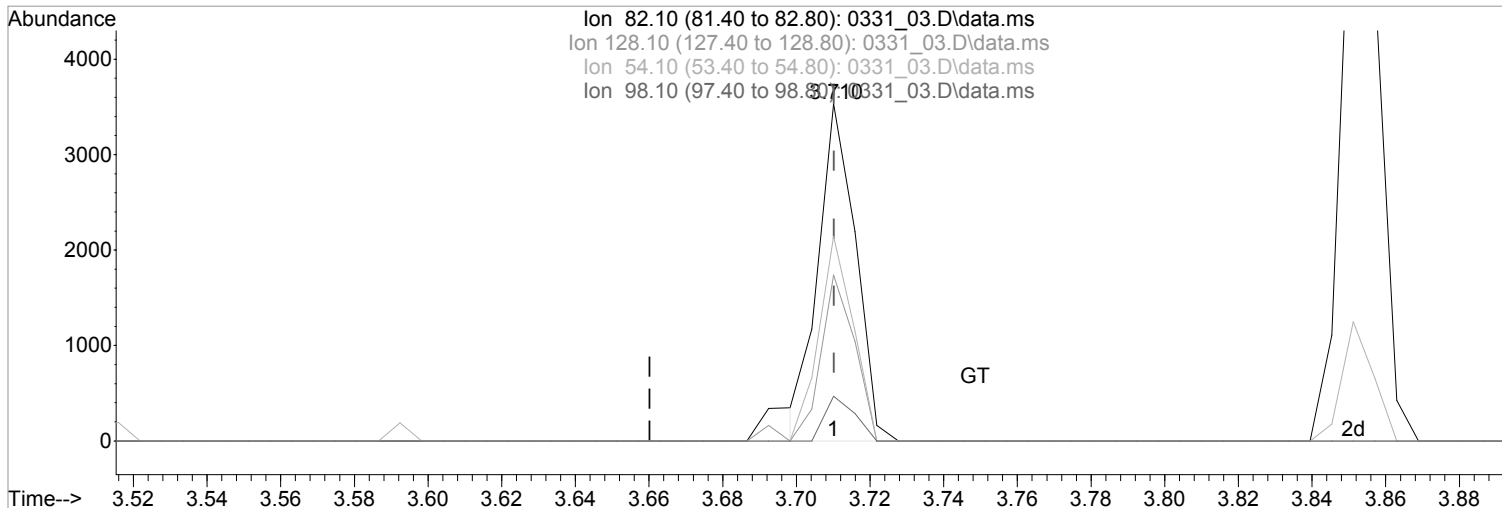
Ion	Exp%	Act%
82.10	100	100
128.10	46.80	49.19
54.10	60.00	60.68
98.10	11.40	13.25



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 524.6305136 ppb m

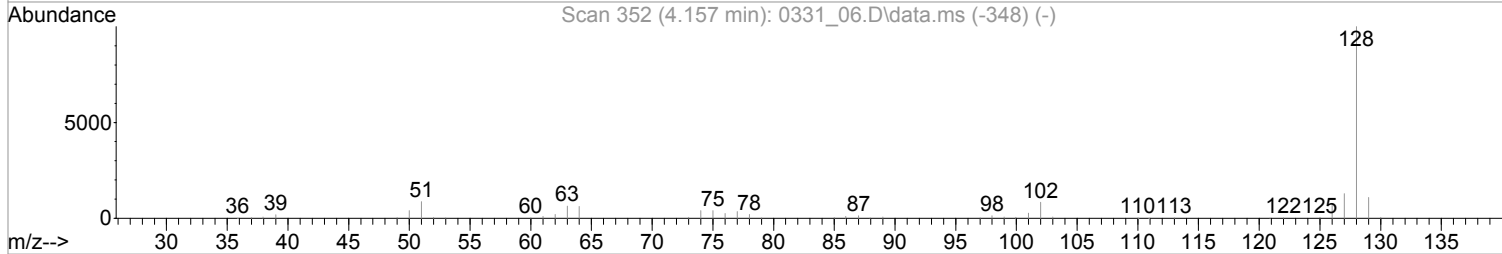
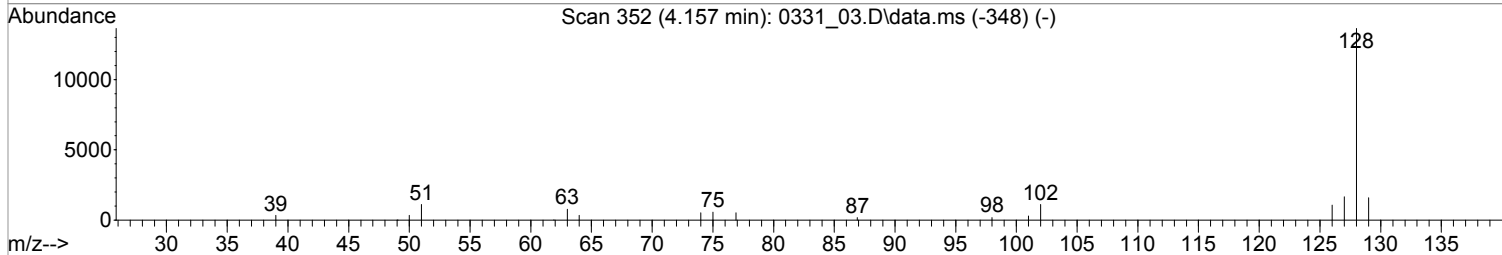
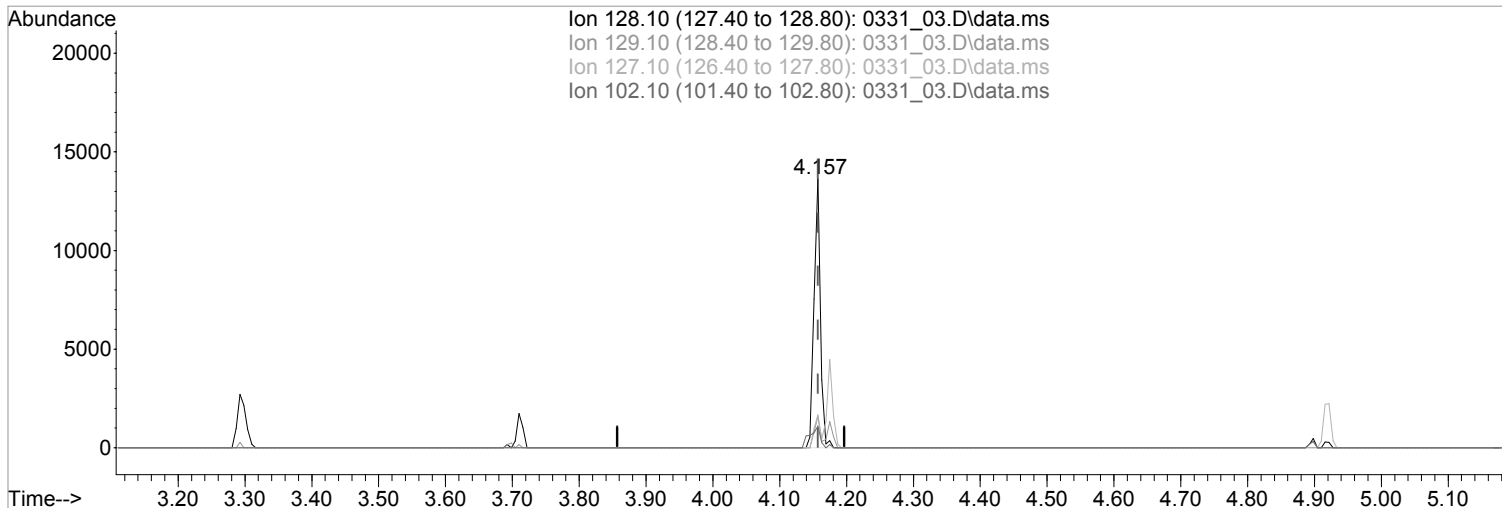
response 2493

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	49.19
54.10	60.00	60.68
98.10	11.40	13.25

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(34) Naphthalene (MT)  
 4.157min (-0.000) 567.6233271 ppb  
 Qvalue = 99  
 response 9081

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.62
127.10	12.80	12.25
102.10	8.30	8.14

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:03:57 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32256	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	127295	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	64408	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	102417	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	66477	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	60703	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.740	112	4822	936.6323900	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	4.68%		
7) Phenol-d5	3.175	99	5723	949.8206996	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	4.75%		
24) Nitrobenzene-d5	3.710	82	4668m	952.9123725	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	9.53%		
50) 2-Fluorobiphenyl	4.828	172	10861	1003.4240800	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	10.03%		
73) 2,4,6-Tribromophenol	5.887	330	805m	762.4927132	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	3.81%		
87) p-Terphenyl-d14	7.845	244	9398	990.6430560	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	9.91%		
Target Compounds							
2) Pyridine	2.240	79	5071	922.3587099	ppb	#	95
3) N-Nitrosodimethylamine	2.199	42	3234	1026.8244509	ppb		87
5) Aniline	3.228	66	2453	863.4817222	ppb	#	87
6) bis(2-Chloroethyl)ether	3.246	93	5429m	969.2851721	ppb		
8) Phenol	3.181	94	5974	926.4330927	ppb		95
10) 2-Chlorophenol	3.293	128	5060	967.2165217	ppb		98
11) n-Decane	3.293	41	3492	944.9158398	ppb	#	99
12) 1,3-Dichlorobenzene	3.381	146	6386	1018.6606650	ppb		98
13) 1,4-Dichlorobenzene	3.416	146	6299	1004.0019603	ppb	#	88
14) Benzyl Alcohol	3.463	79	3546	919.2846602	ppb		99
15) 1,2-Dichlorobenzene	3.504	146	6014	964.5647258	ppb		96
16) bis(2-Chloroisopropyl)...	3.540	121	2029	960.5974778	ppb		92
17) 2,2-oxybis(1-chloropro...	3.540	121	2029	960.5974778	ppb		92
18) 2-Methylphenol	3.510	108	4331	904.7290329	ppb		93
19) Hexachloroethane	3.698	117	2518	960.5419697	ppb		92
20) N-Nitrosodi-n-propylamine	3.610	70	3124	940.7078404	ppb		99
21) 3&4-Methyl phenol	3.593	107	4900	923.0511547	ppb		97
25) Nitrobenzene	3.722	77	4690	963.4605718	ppb		95
26) Isophorone	3.851	82	8692	914.5714399	ppb		99
27) 2-Nitrophenol	3.904	139	1821	795.4129864	ppb		93
28) 2,4-Dimethylphenol	3.904	107	4491	938.6524583	ppb		93
29) bis(2-Chlorethoxy)methane	3.969	93	6359	961.9096115	ppb		97
30) 2,4-Dichlorophenol	4.045	162	3374	906.2632690	ppb		98
32) 1,2,4-Trichlorobenzene	4.104	180	4786	1015.7513152	ppb		92
34) Naphthalene	4.157	128	16810m	985.5431213	ppb		
35) 4-Chloroaniline	4.175	65	1501	912.0664575	ppb	#	88
36) Hexachloro-1,3-butadiene	4.222	225	2489	971.6089660	ppb		97
40) 4-Chloro-3-methylphenol	4.463	107	3435	911.5050154	ppb		94
41) 2-Methylnaphthalene	4.593	142	9991	973.4222268	ppb		99
42) 1-Methylnaphthalene	4.657	142	10035	1003.1618197	ppb		97
47) Hexachlorocyclopentadiene	4.693	237	1808	901.7104811	ppb		98
48) 2,4,6-Trichlorophenol	4.769	196	2025	896.9514026	ppb		91

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

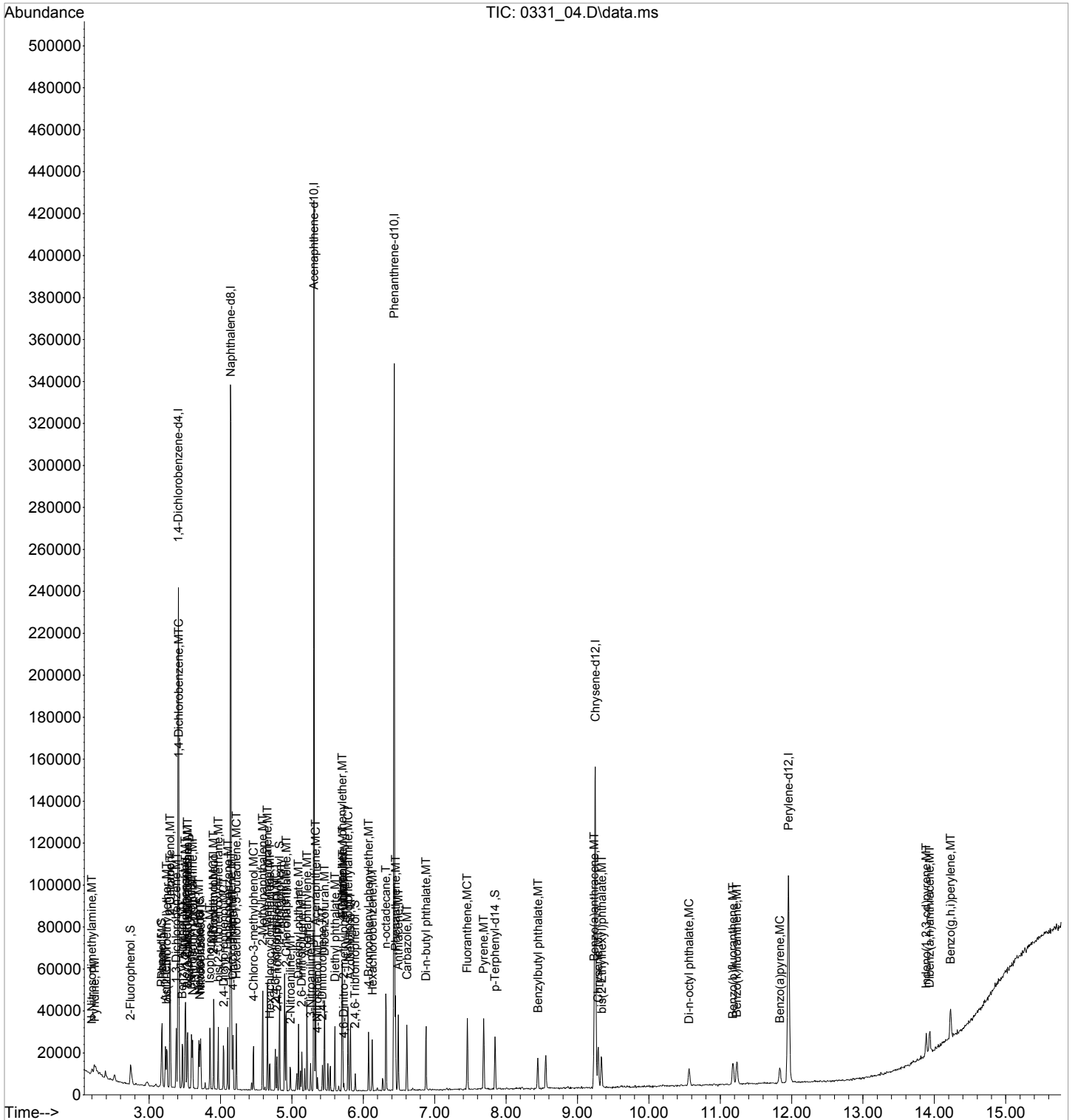
Quant Time: Apr 04 16:03:57 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.793	196	1963	850.5173304	ppb		91
51) Biphenyl	4.898	154	11839	968.2645048	ppb		98
52) 2-Chloronaphthalene	4.922	162	9292	1011.9321511	ppb		98
53) 2-Nitroaniline	4.981	138	1866	769.8225109	ppb	#	93
54) Acenaphthylene	5.210	152	13458	962.9526656	ppb		99
55) Dimethyl phthalate	5.092	163	9503	956.7755123	ppb		93
56) 2,6-Dinitrotoluene	5.140	165	1655	763.6081461	ppb		92
57) 3-Nitroaniline	5.263	138	1426	717.7969135	ppb		98
58) Acenaphthene	5.334	153	9791	1025.5166899	ppb		99
60) Dibenzofuran	5.457	168	12817	986.5464047	ppb	#	98
61) 2,4-Dinitrotoluene	5.428	165	1767	681.0093031	ppb	#	73
63) 4-Nitrophenol	5.357	139	902m	644.5700639	ppb		
64) Fluorene	5.710	166	10290	969.6872468	ppb		98
65) 4-Chlorophenyl-phenyle...	5.704	204	4599	927.0569857	ppb		97
66) Diethyl phthalate	5.604	149	9914	938.9461138	ppb		98
67) 4-Nitroaniline	5.710	138	1350	1129.6086293	ppb	#	26
68) Azobenzene	5.822	77	9927	953.6061374	ppb		97
71) 4,6-Dinitro-2-methylph...	5.728	198	471m	535.7640762	ppb		
72) N-Nitrosodiphenylamine	5.787	169	7540	933.3328472	ppb		98
74) 4-Bromophenyl-phenylether	6.075	248	2477	1001.8199448	ppb		98
75) Hexachlorobenzene	6.128	284	3015	994.7736888	ppb		95
76) n-octadecane	6.316	55	1765	890.0022714	ppb	#	72
78) Phenanthrene	6.451	178	13916	956.6809370	ppb		99
79) Anthracene	6.492	178	12234	935.1720946	ppb		99
80) Carbazole	6.610	167	10150	920.4021822	ppb		98
81) Di-n-butyl phthalate	6.881	149	13780	872.5812197	ppb		99
83) Fluoranthene	7.457	202	12239	921.2610703	ppb		99
86) Pyrene	7.686	202	12779	956.9026432	ppb		99
88) Benzylbutyl phthalate	8.445	149	3894	816.5523448	ppb		98
90) Benzo(a)anthracene	9.233	228	8944	973.9225740	ppb		98
91) Chrysene	9.292	228	10158	1003.0718203	ppb		98
92) bis(2-Ethylhexyl)phtha...	9.339	149	5877	866.1250077	ppb		97
93) Di-n-octyl phthalate	10.563	149	7493	775.1486260	ppb		98
95) Benzo(b)fluoranthene	11.174	252	8017	933.1712569	ppb		97
96) Benzo(k)fluoranthene	11.233	252	7909	891.1685866	ppb		97
97) Benzo(a)pyrene	11.833	252	5772	843.0478053	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.886	276	5564	868.6523357	ppb		93
99) Dibenz(a,h)anthracene	13.933	278	6652	939.8770333	ppb		97
100) Benzo(g,h,i)perylene	14.227	276	7392	967.8372314	ppb		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_04.D  
Acq On : 31 Mar 2022 5:45 pm  
Operator : 3545  
Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 4 Sample Multiplier: 1

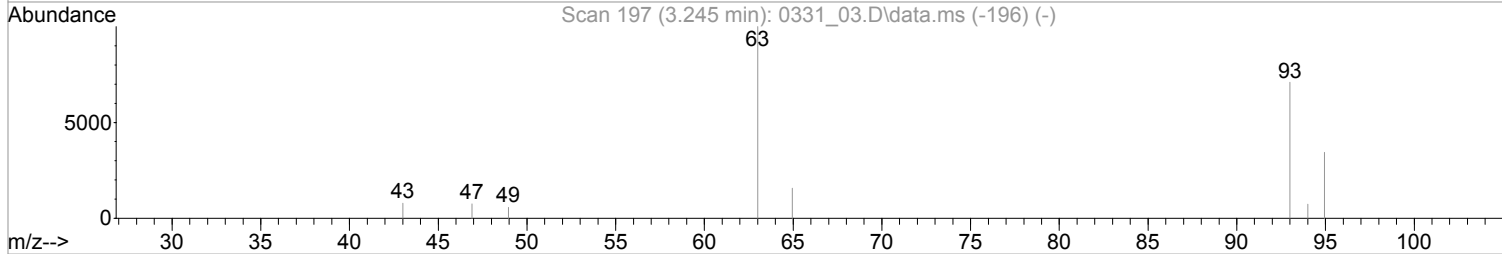
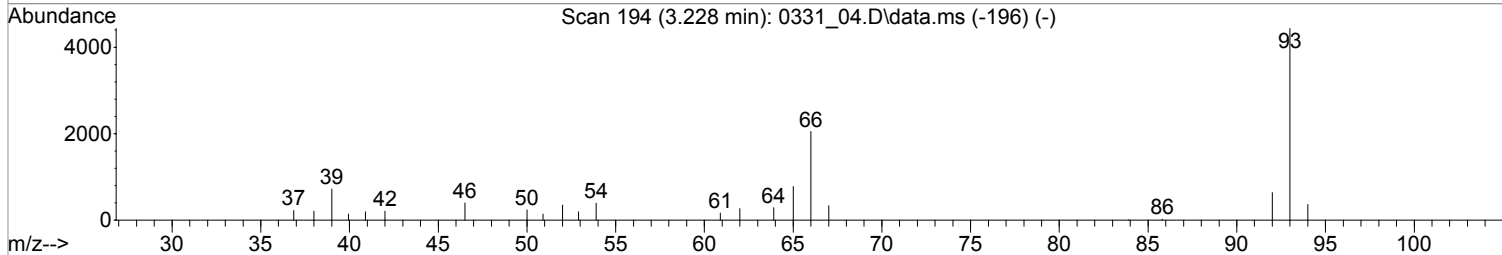
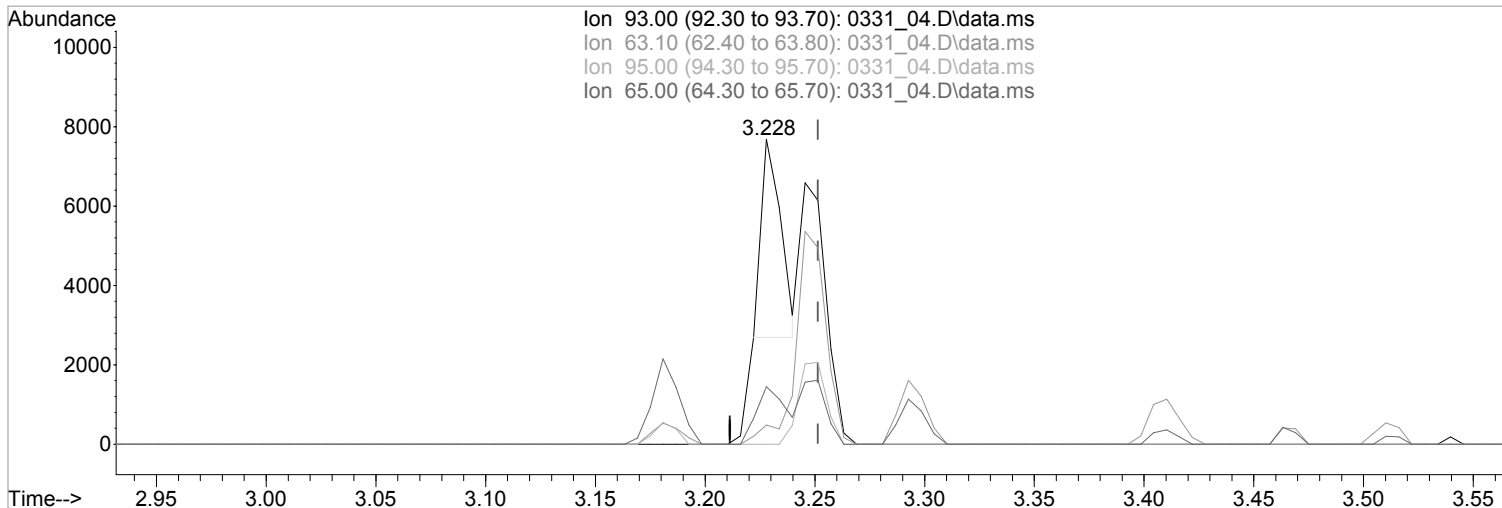
Quant Time: Apr 04 16:03:57 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:02:11 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

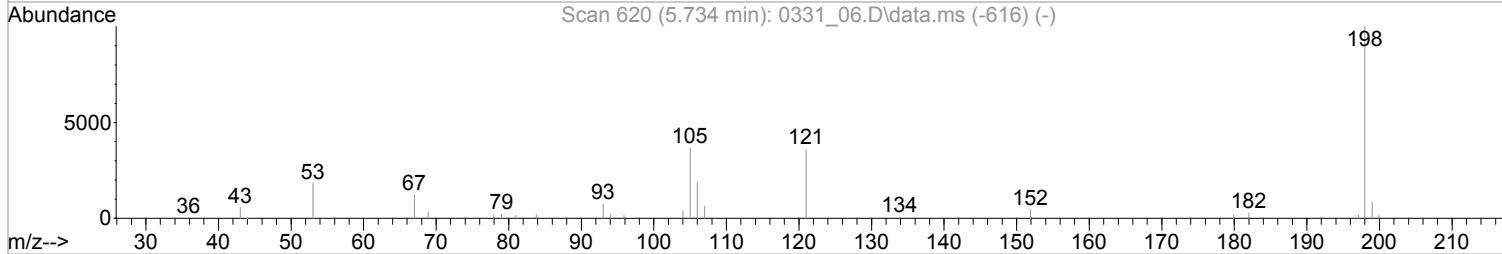
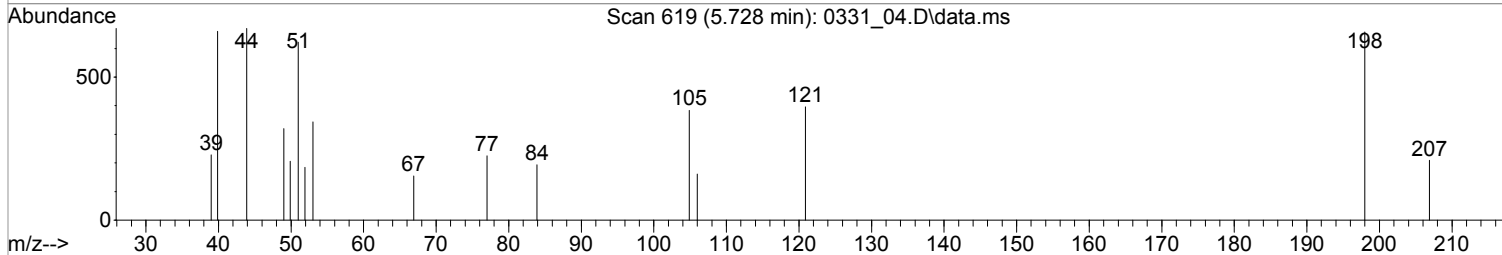
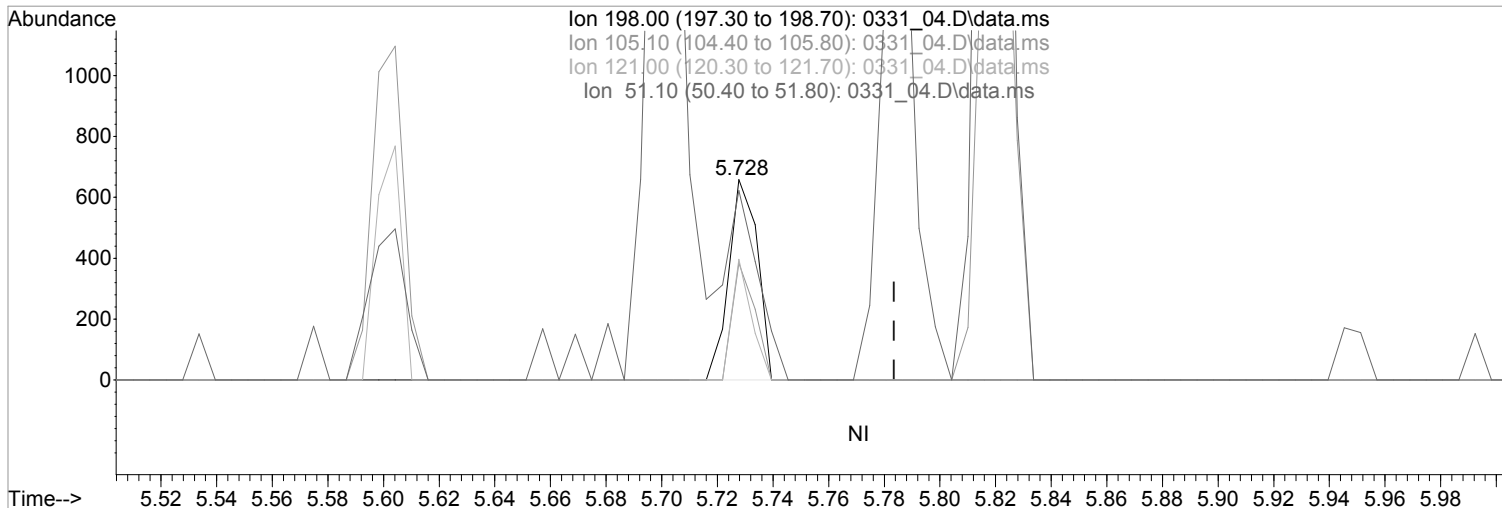
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.023) 555.9686915 ppb  
 Qvalue = 36  
 response 3114

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.69#
95.00	31.90	0.00#
65.00	23.10	15.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(71) 4,6-Dinitro-2-methylphenol (MT)  
 5.728min (-0.006) 535.7640762 ppb m

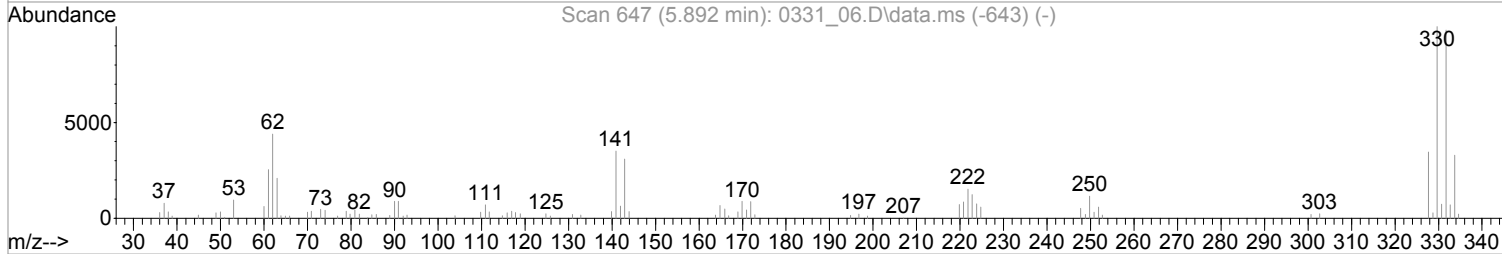
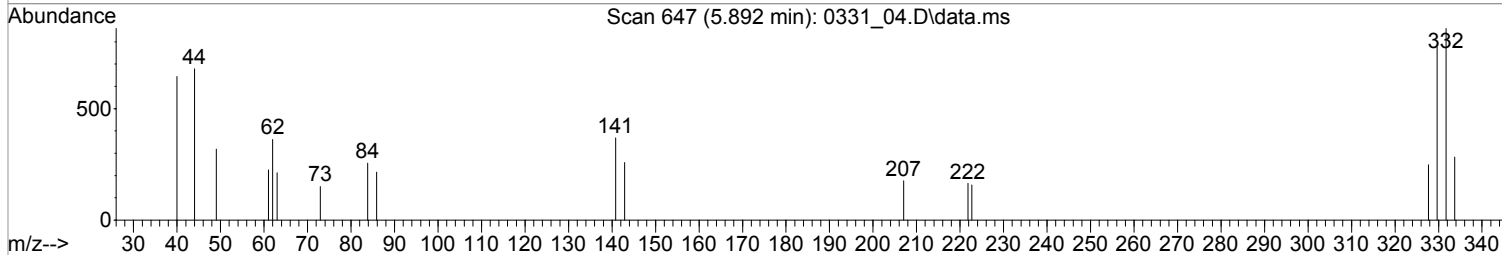
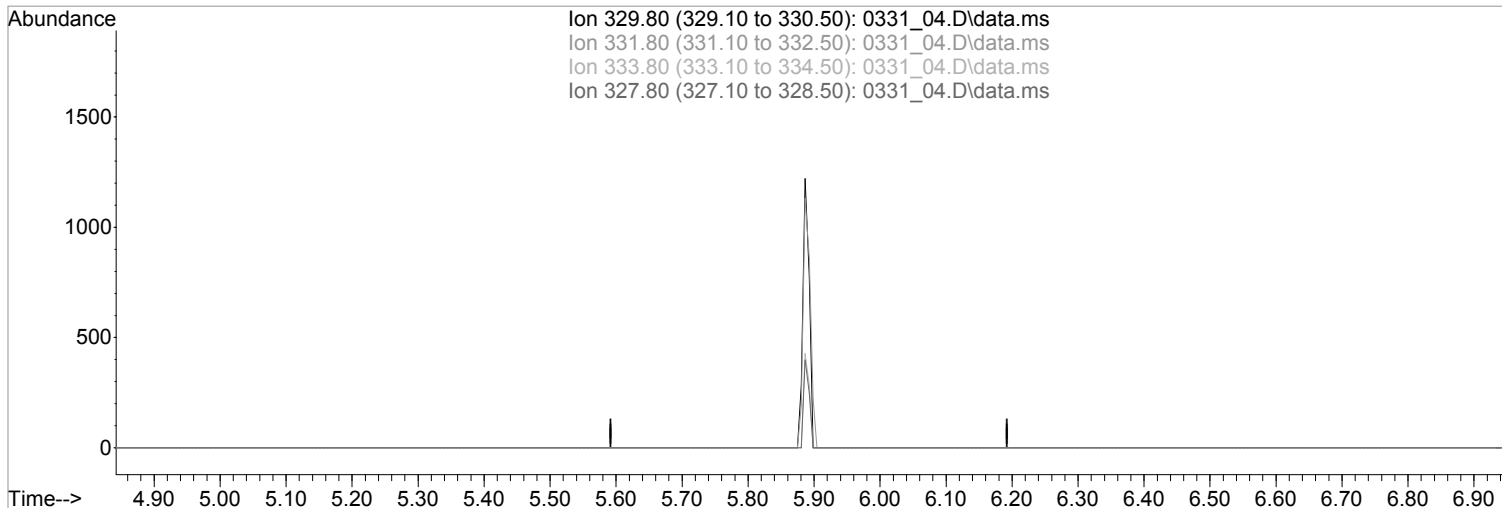
response 471

Ion	Exp%	Act%
198.00	100	100
105.10	38.30	58.36#
121.00	35.90	60.18#
51.10	39.60	94.53#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(73) 2,4,6-Tribromophenol (S)

5.892min (-5.892) 0.000000 ppb

Qvalue = 0

response 0

Ion	Exp%	Act%
-----	------	------

329.80	100	0.00
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331.80	98.20	0.00#
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333.80	33.00	0.00#
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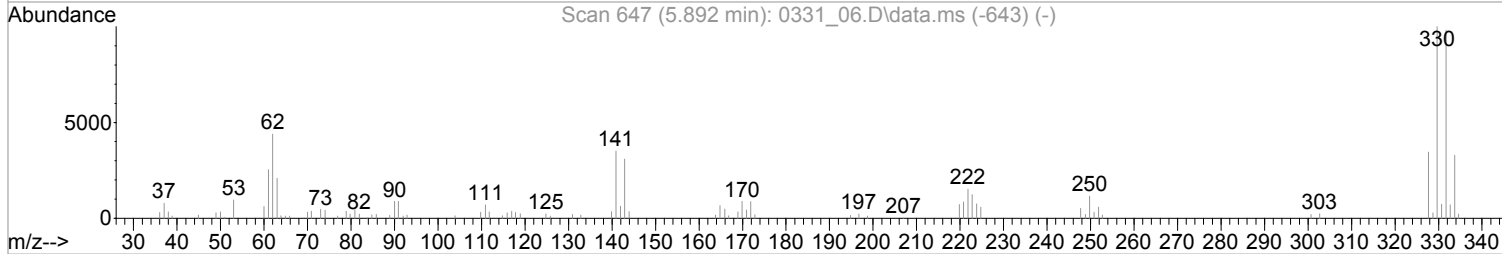
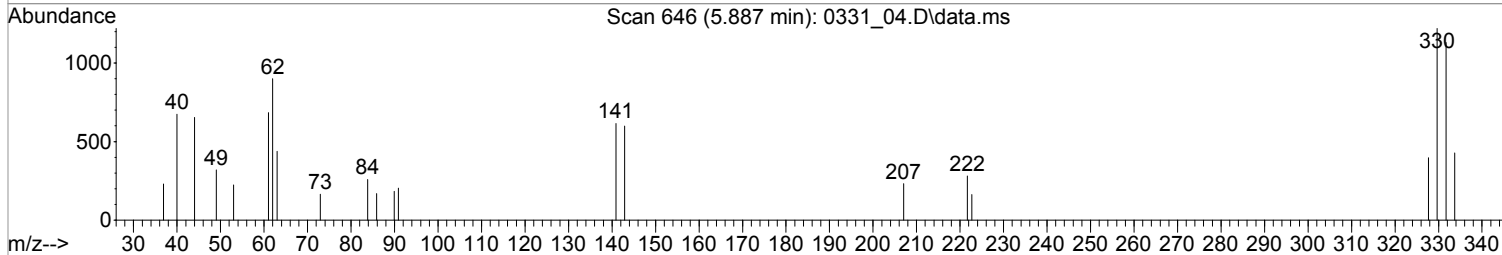
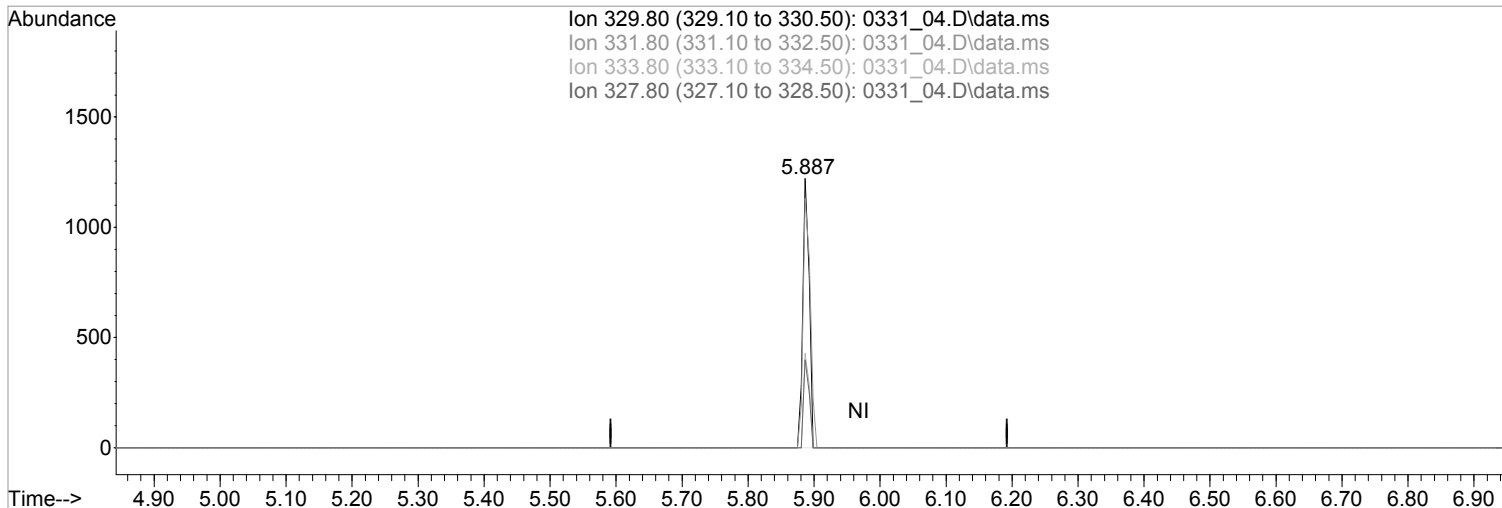
327.80	34.60	0.00#
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Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(73) 2,4,6-Tribromophenol (S)  
 5.887min (-0.006) 762.4927132 ppb m

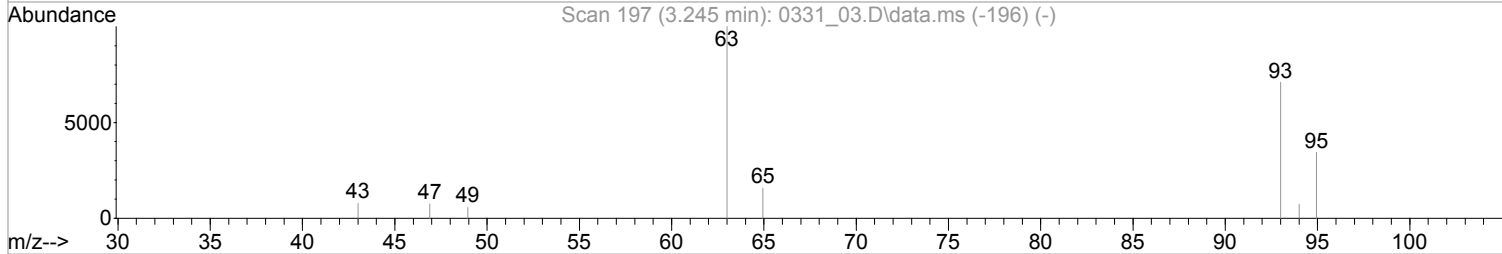
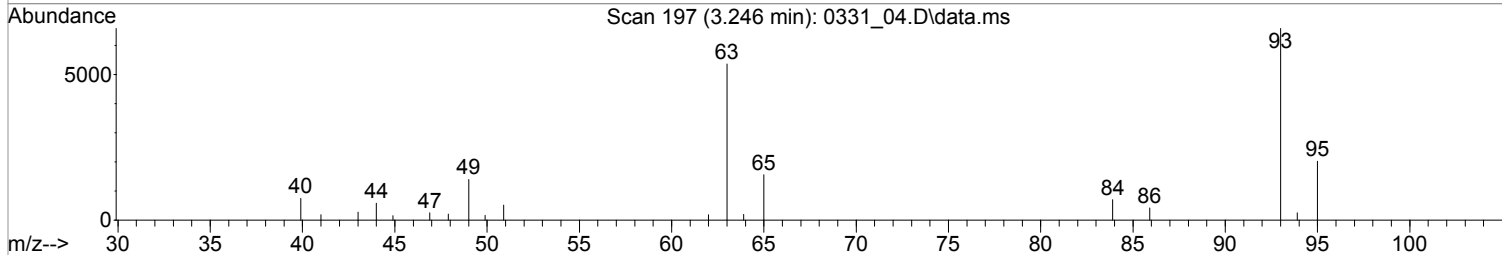
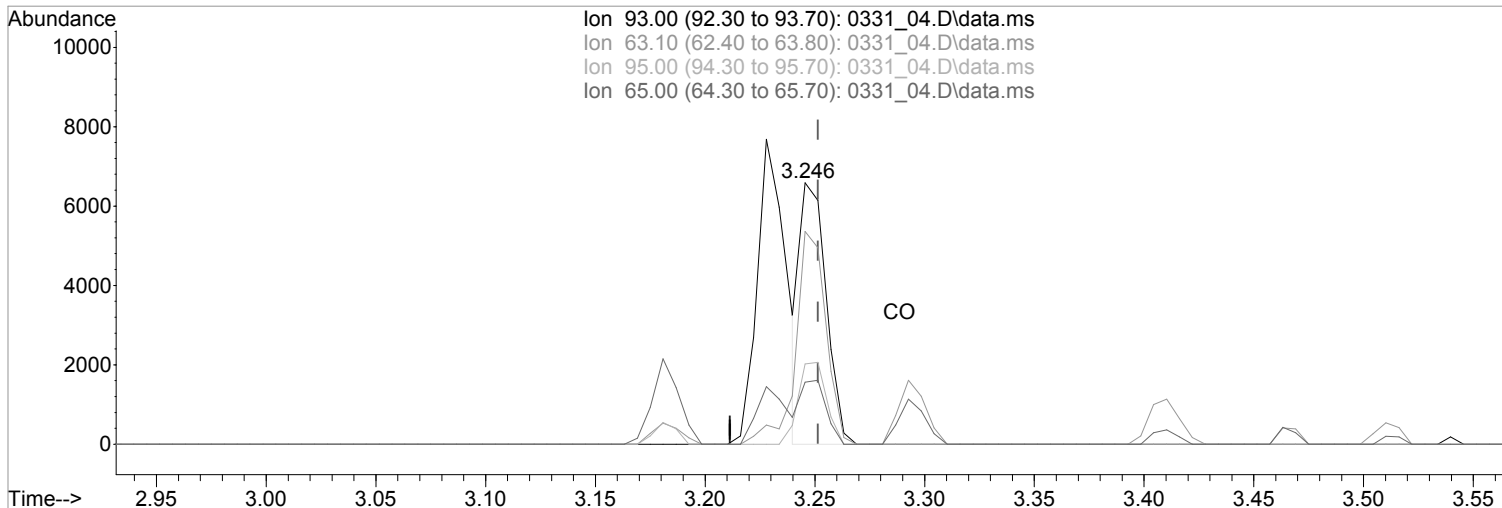
response 805

Ion	Exp%	Act%
329.80	100	100
331.80	98.20	92.62
333.80	33.00	35.08
327.80	34.60	32.62

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.246min (-0.006) 969.2851721 ppb m

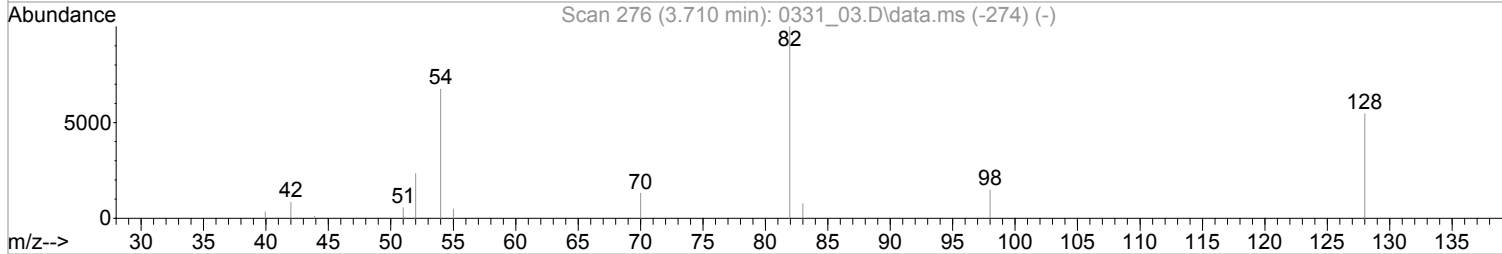
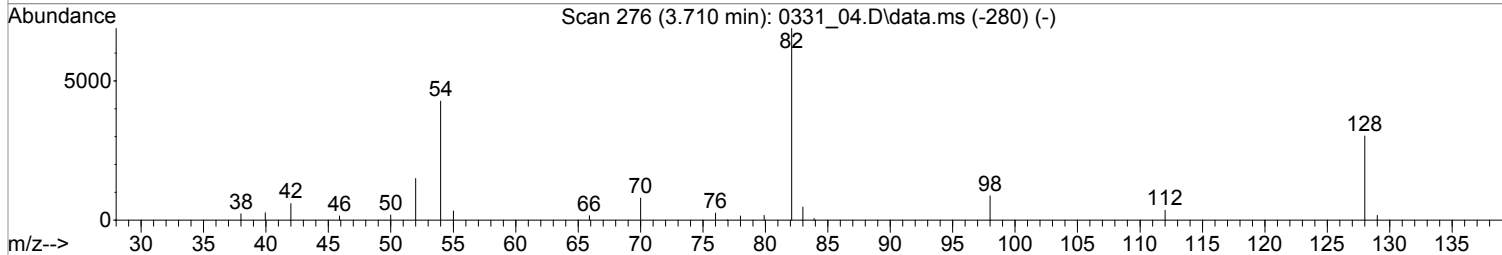
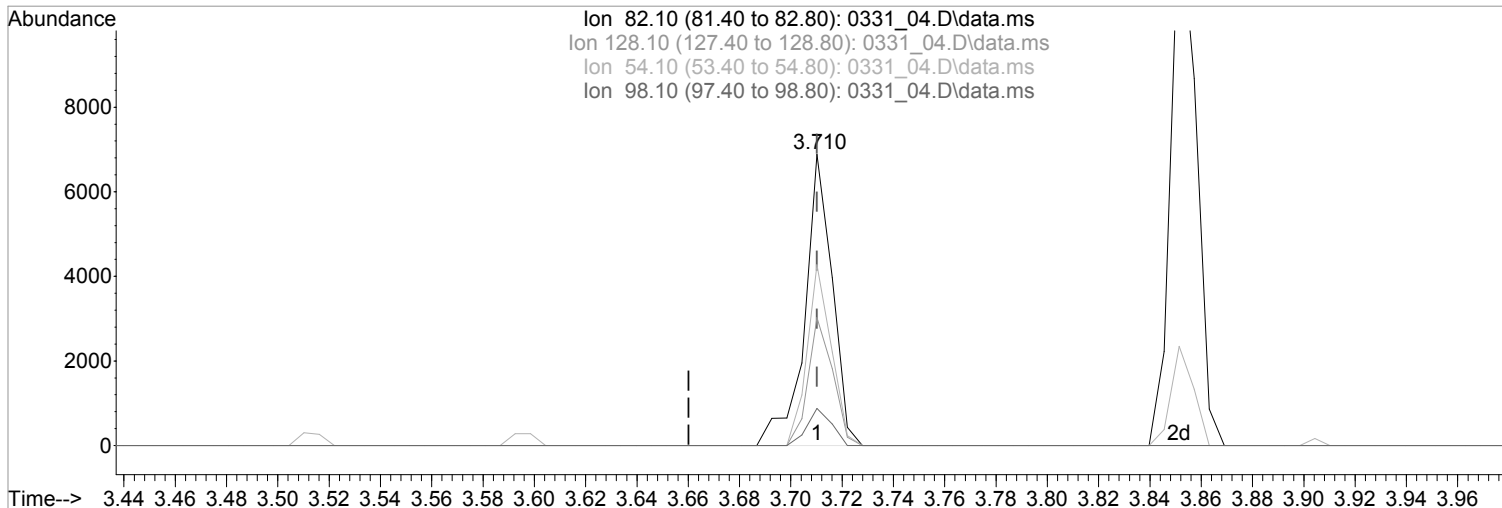
response 5429

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	81.46
95.00	31.90	30.67
65.00	23.10	23.69

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

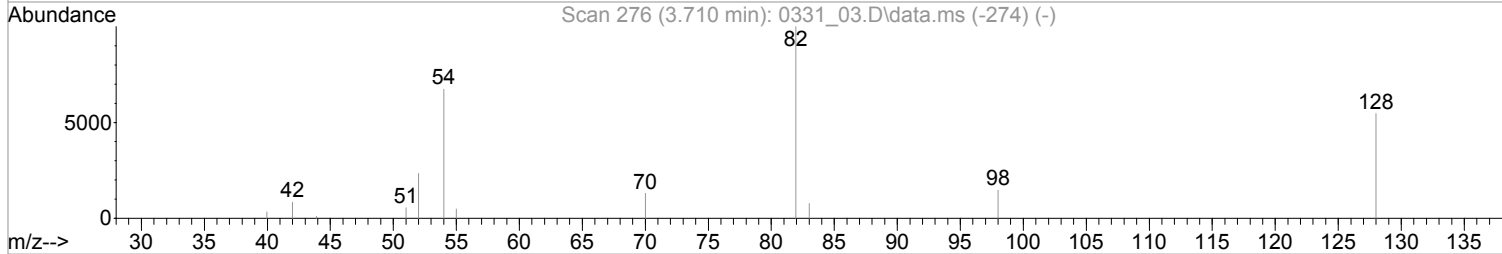
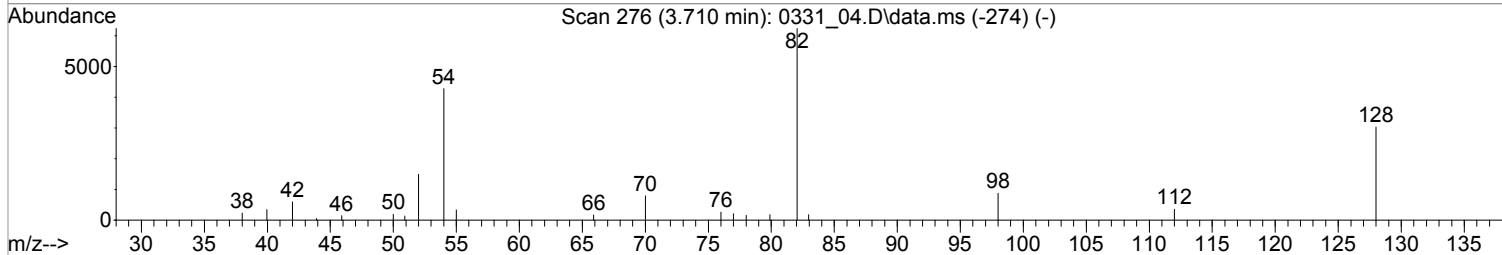
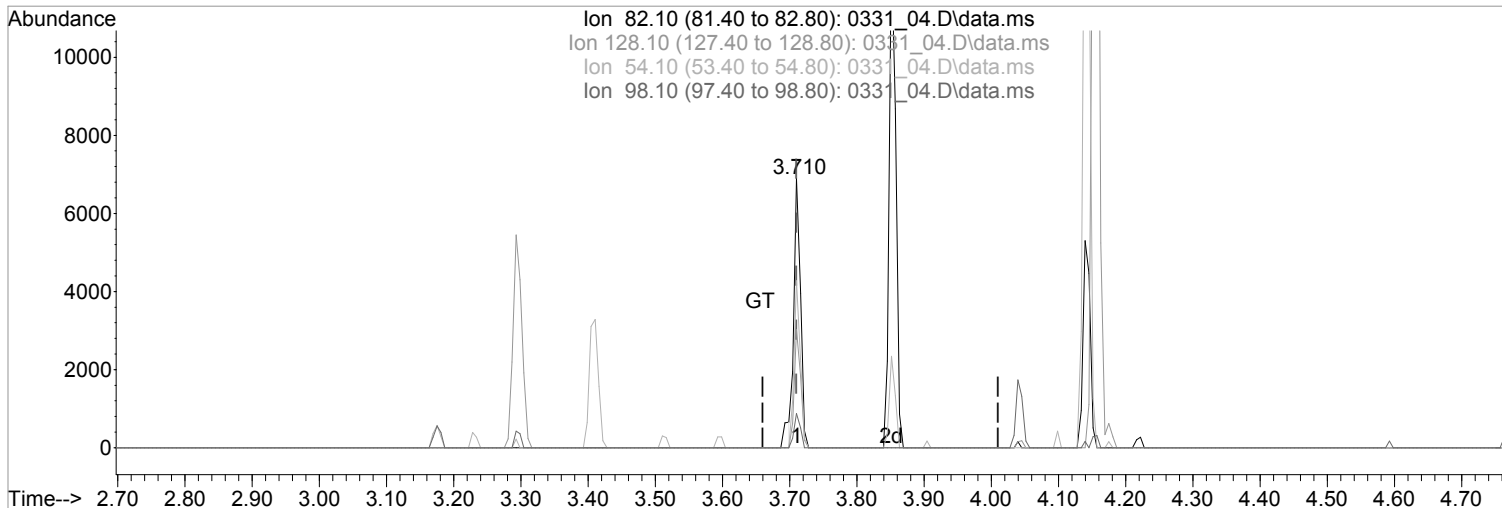
(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 1046.2030654 ppb  
 Qvalue = 97  
 response 5125

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	43.96
54.10	60.00	62.09
98.10	11.40	12.73

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 952.9123725 ppb m

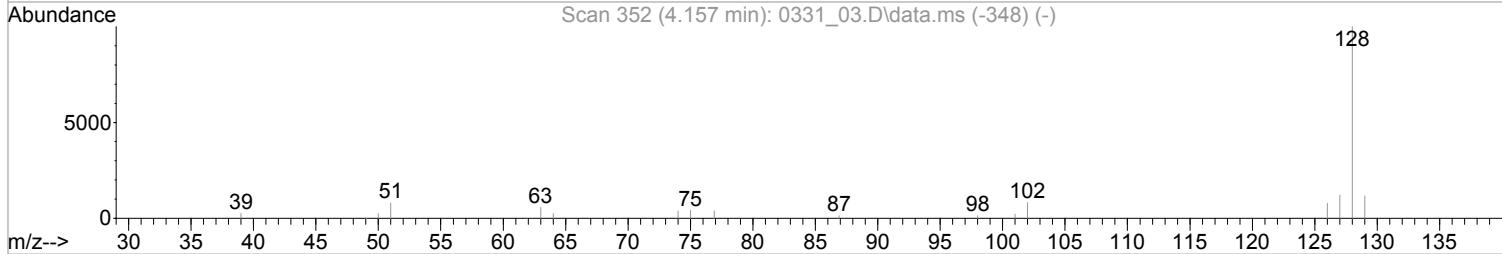
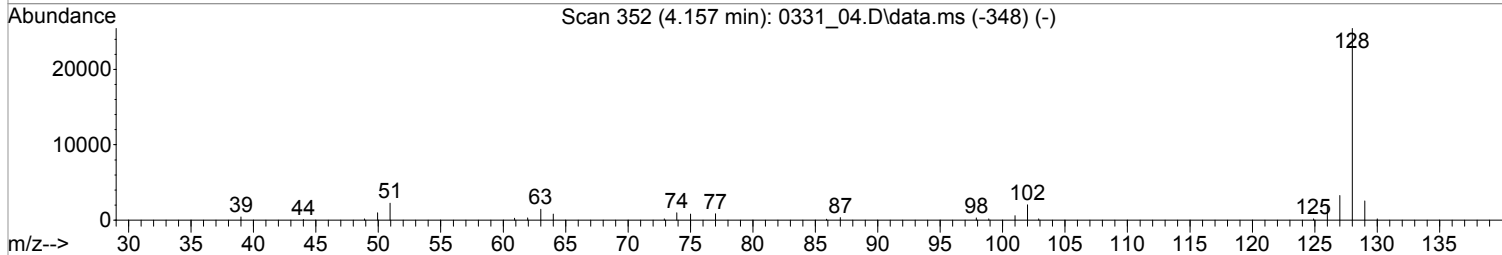
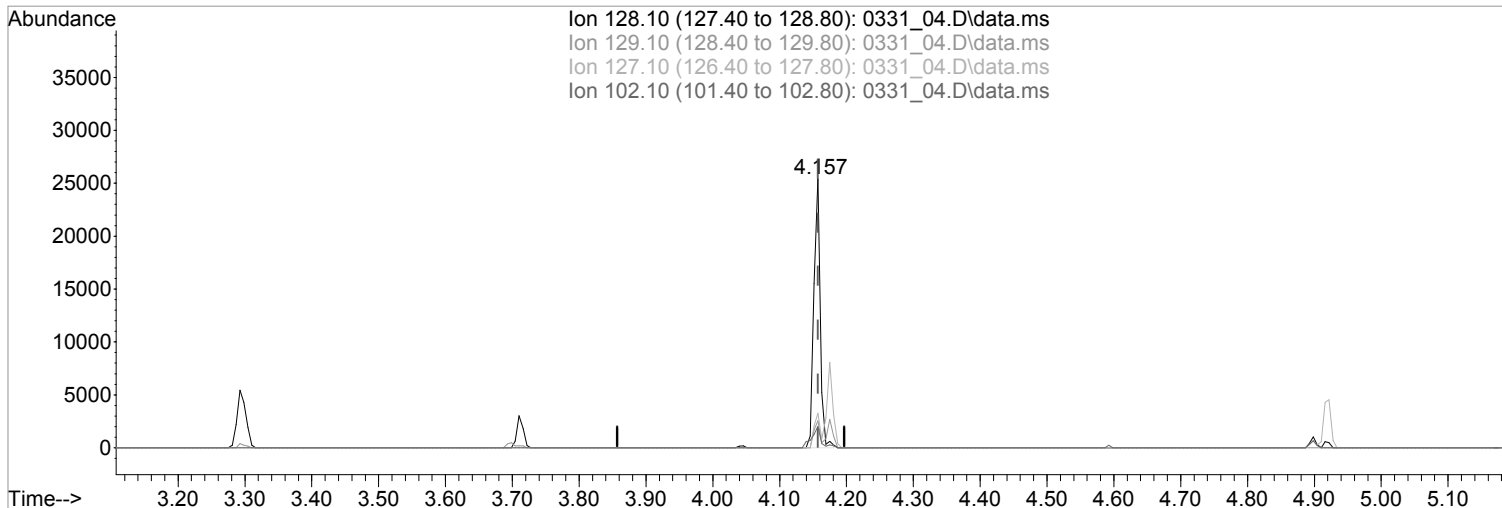
response 4668

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	43.96
54.10	60.00	62.09
98.10	11.40	12.73

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(34) Naphthalene (MT)

4.157min (+0.000) 1004.1869471 ppb

Qvalue = 99

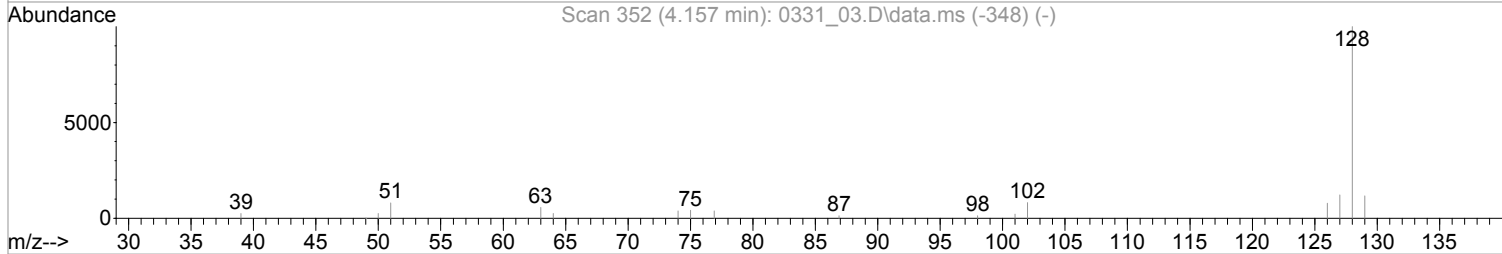
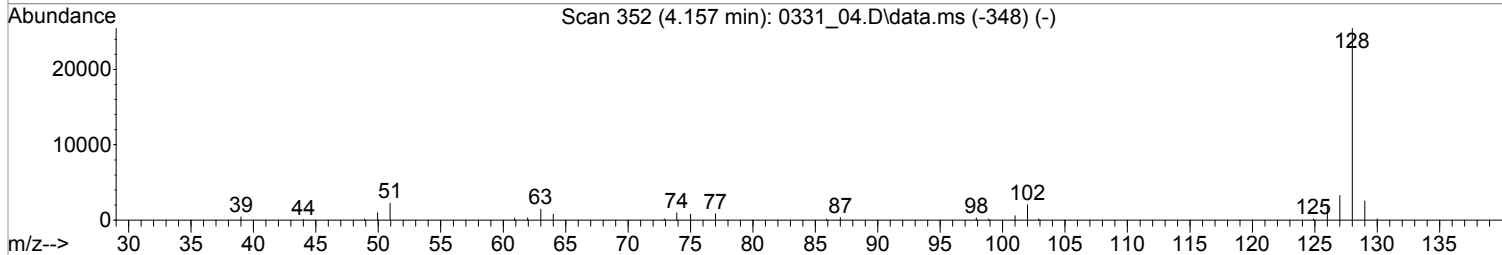
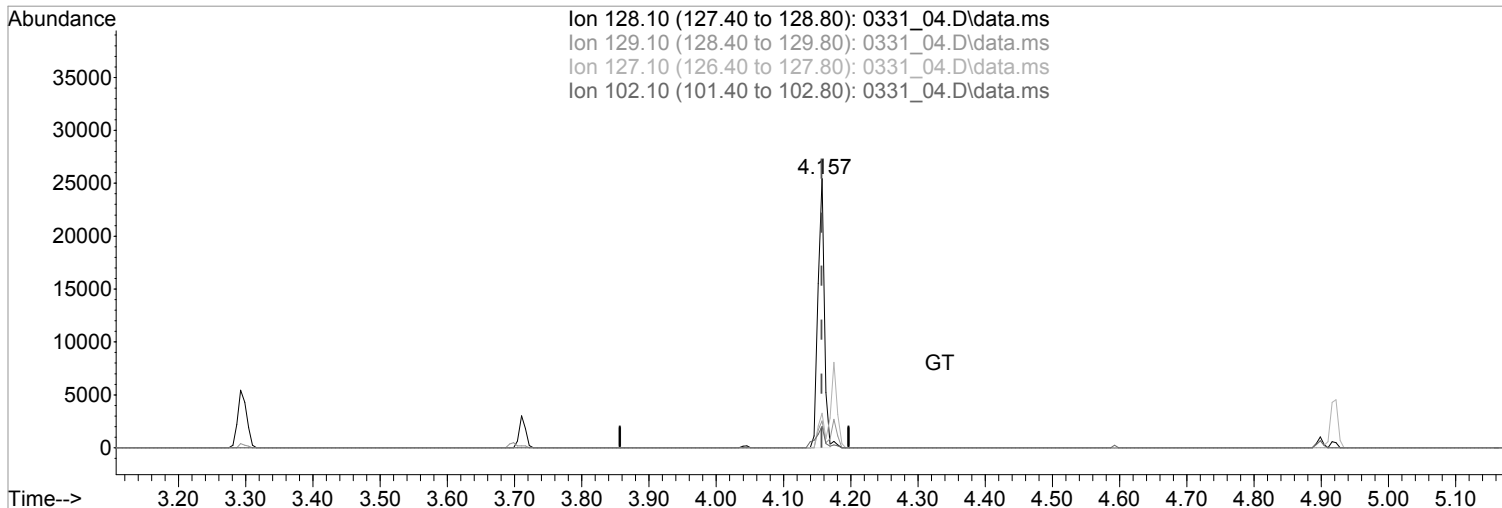
response 17128

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	9.95
127.10	12.80	12.89
102.10	8.30	7.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_04.D  
Acq On : 31 Mar 2022 5:45 pm  
Operator : 3545  
Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:02:11 2022  
Response via : Initial Calibration  
DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(34) Naphthalene (MT)  
4.157min (+0.000) 985.5431213 ppb m

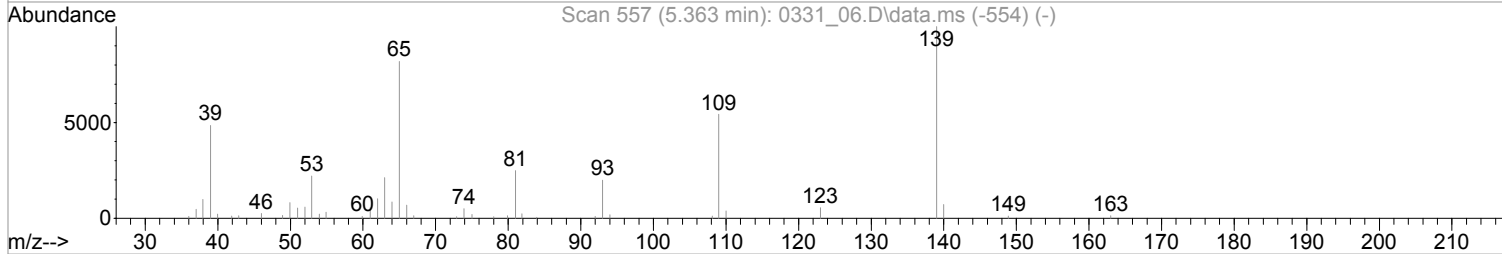
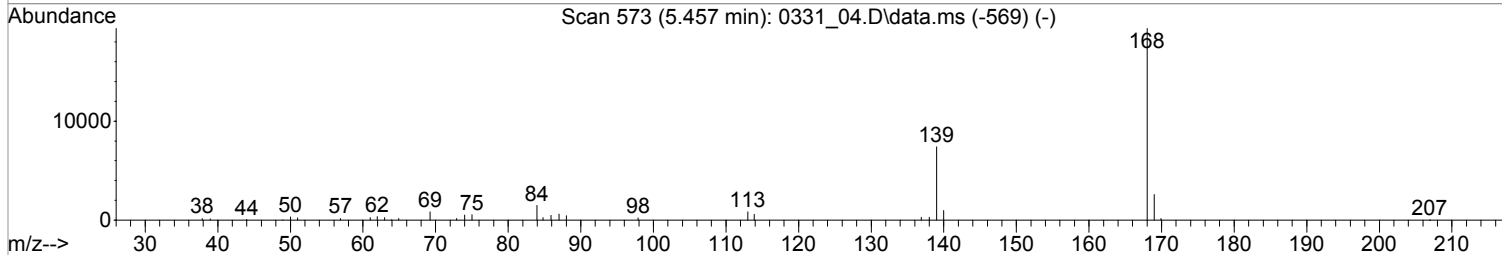
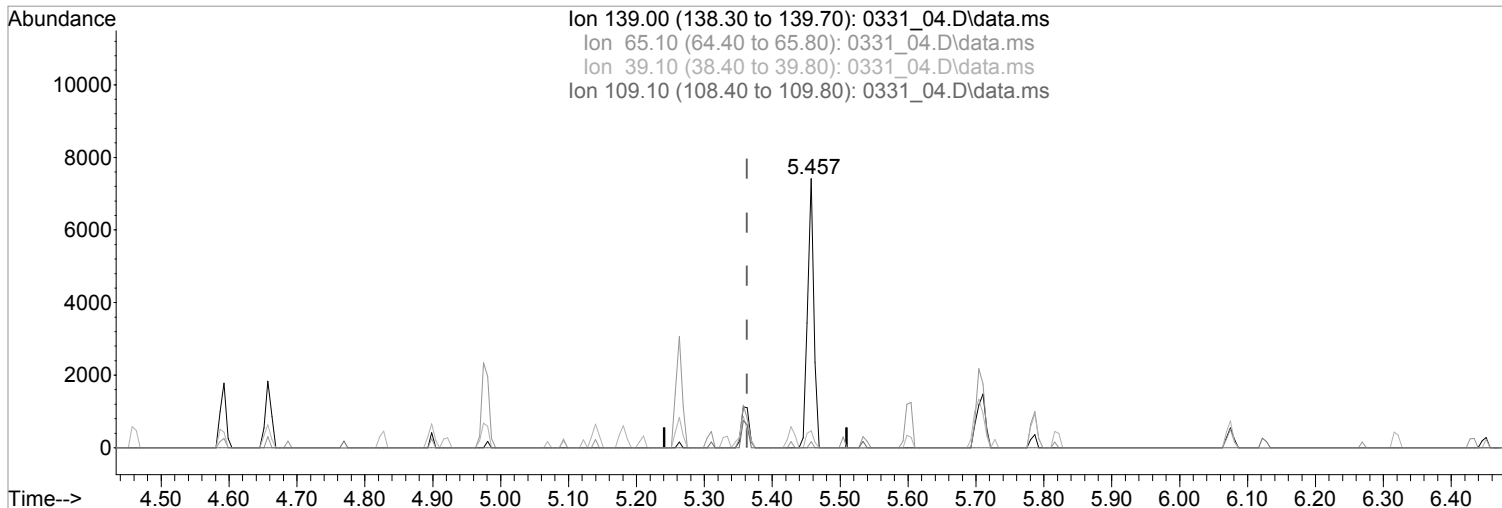
response 16810

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	9.95
127.10	12.80	12.89
102.10	8.30	7.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(63) 4-Nitrophenol (MPT)

5.457min (+0.094) 3396.4983522 ppb

Qvalue = 22

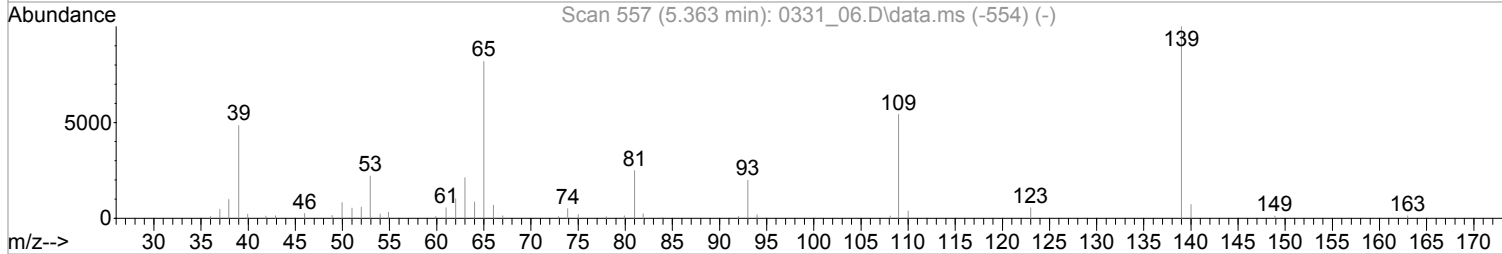
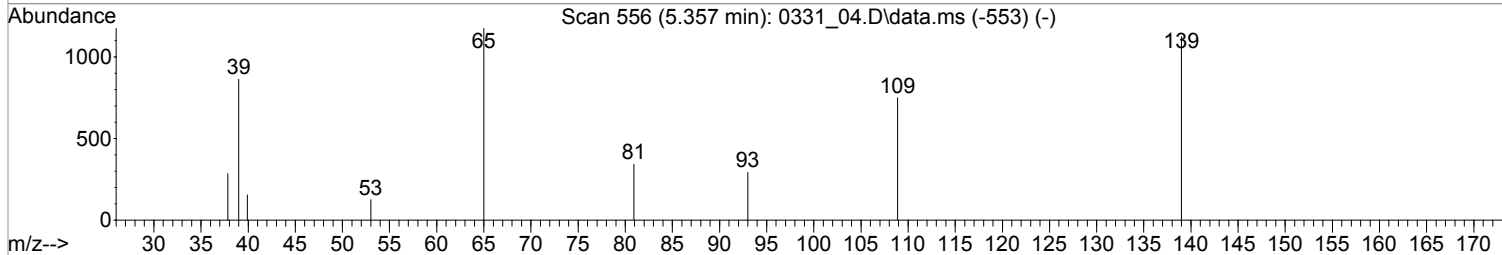
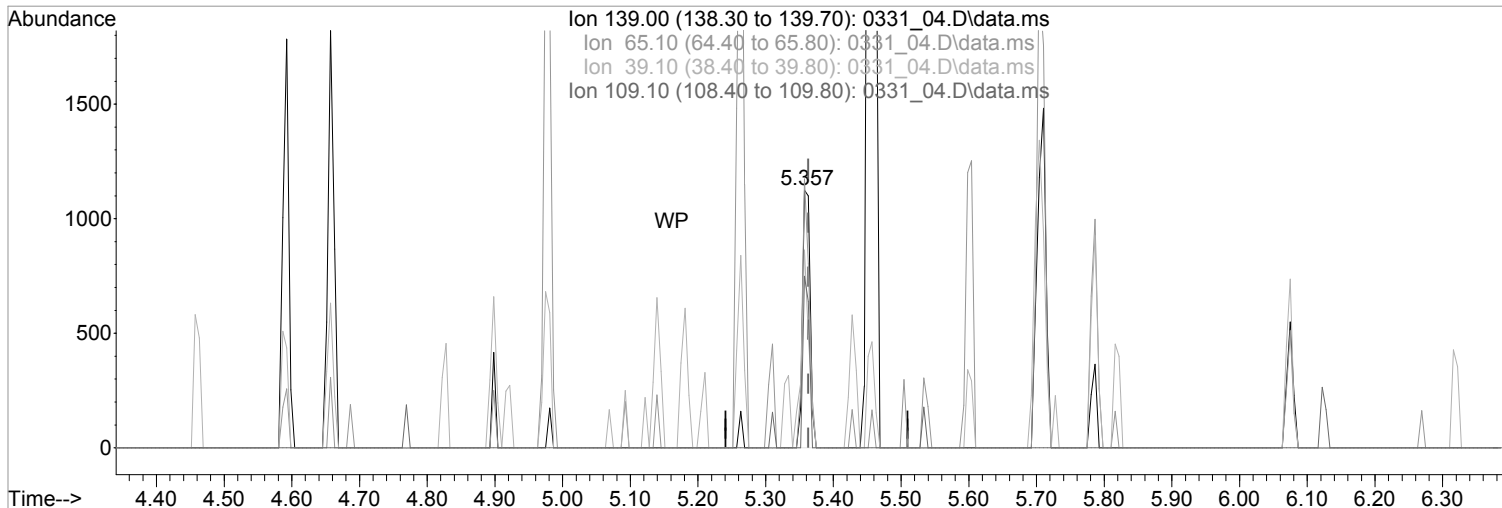
response 4753

Ion	Exp%	Act%
139.00	100	100
65.10	82.10	2.23#
39.10	50.10	6.25#
109.10	54.20	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(63) 4-Nitrophenol (MPT)  
 5.357min (-0.006) 644.5700639 ppb m

response 902

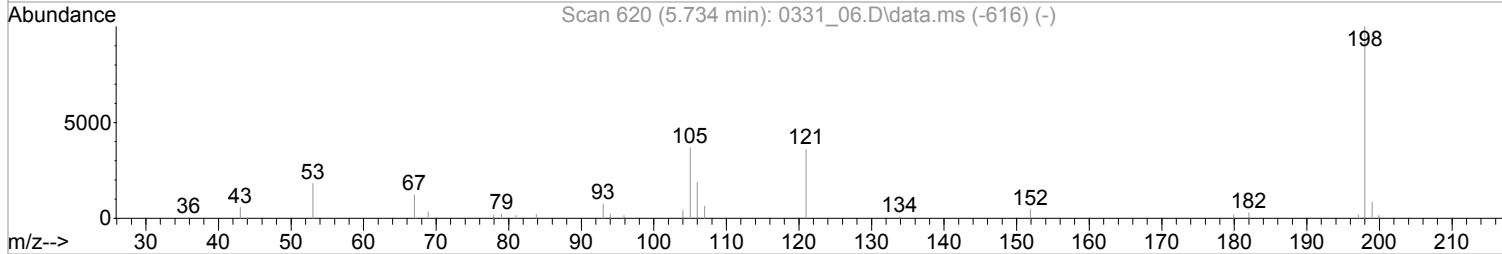
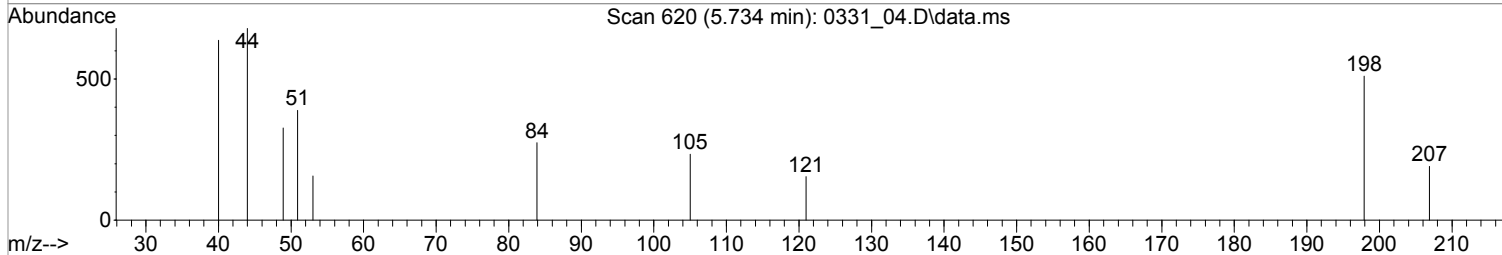
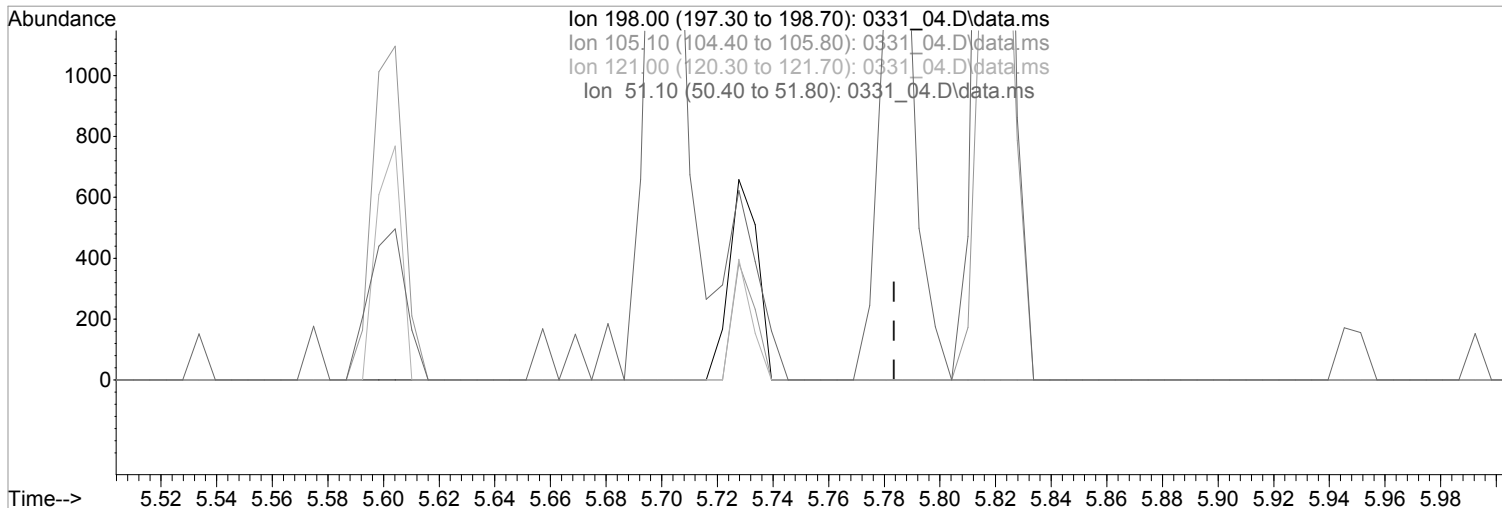
Ion	Exp%	Act%
139.00	100	100
65.10	82.10	104.45#
39.10	50.10	76.78#
109.10	54.20	66.64



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(71) 4,6-Dinitro-2-methylphenol (MT)

5.734min (-5.734) 0.0000000 ppb

Qvalue = 0

response 0

Ion	Exp%	Act%
198.00	100	0.00
105.10	38.30	0.00#
121.00	35.90	0.00#
51.10	39.60	0.00#

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:56 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.410	152	32931	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	134192	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	68434	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	110035	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	75687	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	68115	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.740	112	20022	3891.5864703	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	19.46%		
7) Phenol-d5	3.175	99	23979	3964.4247535	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	19.82%		
24) Nitrobenzene-d5	3.710	82	18889m	3716.0923649	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	37.16%		
50) 2-Fluorobiphenyl	4.828	172	43311	3761.7107736	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	37.62%		
73) 2,4,6-Tribromophenol	5.887	330	4029	4030.7044309	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	20.15%		
87) p-Terphenyl-d14	7.845	244	41873	3888.8628771	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	38.89%		
<b>Target Compounds</b>							
2) Pyridine	2.216	79	21534	3938.4403708	ppb	94	
3) N-Nitrosodimethylamine	2.199	42	11264	3472.0697452	ppb	95	
5) Aniline	3.228	66	11366	4105.7800811	ppb	98	
6) bis(2-Chloroethyl)ether	3.246	93	21863m	3862.9262686	ppb		
8) Phenol	3.181	94	25852	4025.6057139	ppb	98	
10) 2-Chlorophenol	3.293	128	21155	4004.6431903	ppb	98	
11) n-Decane	3.293	41	14144	3818.9599168	ppb	# 99	
12) 1,3-Dichlorobenzene	3.381	146	25164	3907.4447803	ppb	98	
13) 1,4-Dichlorobenzene	3.416	146	24933	3887.4438033	ppb	94	
14) Benzyl Alcohol	3.463	79	14813	3865.4913504	ppb	98	
15) 1,2-Dichlorobenzene	3.504	146	23998	3815.1262164	ppb	98	
16) bis(2-Chloroisopropyl)...	3.540	121	8233	3868.6994504	ppb	96	
17) 2,2-oxybis(1-chloropro...	3.540	121	8233	3868.6994504	ppb	96	
18) 2-Methylphenol	3.510	108	19393	4098.2322025	ppb	93	
19) Hexachloroethane	3.699	117	10345	3916.9383750	ppb	97	
20) N-Nitrosodi-n-propylamine	3.610	70	13250	3986.8930302	ppb	99	
21) 3&4-Methyl phenol	3.593	107	20590	3899.2085753	ppb	99	
25) Nitrobenzene	3.722	77	19872	3920.2115447	ppb	99	
26) Isophorone	3.851	82	37595	3862.4180344	ppb	99	
27) 2-Nitrophenol	3.904	139	8158	3765.4491378	ppb	97	
28) 2,4-Dimethylphenol	3.904	107	19338	3914.0923671	ppb	99	
29) bis(2-Chlorethoxy)methane	3.969	93	26704	3881.1098229	ppb	99	
30) 2,4-Dichlorophenol	4.046	162	14915	3922.8669546	ppb	97	
32) 1,2,4-Trichlorobenzene	4.104	180	18671	3739.3208108	ppb	99	
34) Naphthalene	4.157	128	66762	3730.9538948	ppb	99	
35) 4-Chloroaniline	4.175	65	6627	3995.5309124	ppb	99	
36) Hexachloro-1,3-butadiene	4.222	225	10146	3792.9384009	ppb	97	
40) 4-Chloro-3-methylphenol	4.463	107	14789	3835.8318603	ppb	97	
41) 2-Methylnaphthalene	4.593	142	41264	3847.8046515	ppb	99	
42) 1-Methylnaphthalene	4.657	142	40069	3795.6779953	ppb	99	
47) Hexachlorocyclopentadiene	4.693	237	8420	4086.1645114	ppb	98	
48) 2,4,6-Trichlorophenol	4.769	196	9486	4095.1983274	ppb	97	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

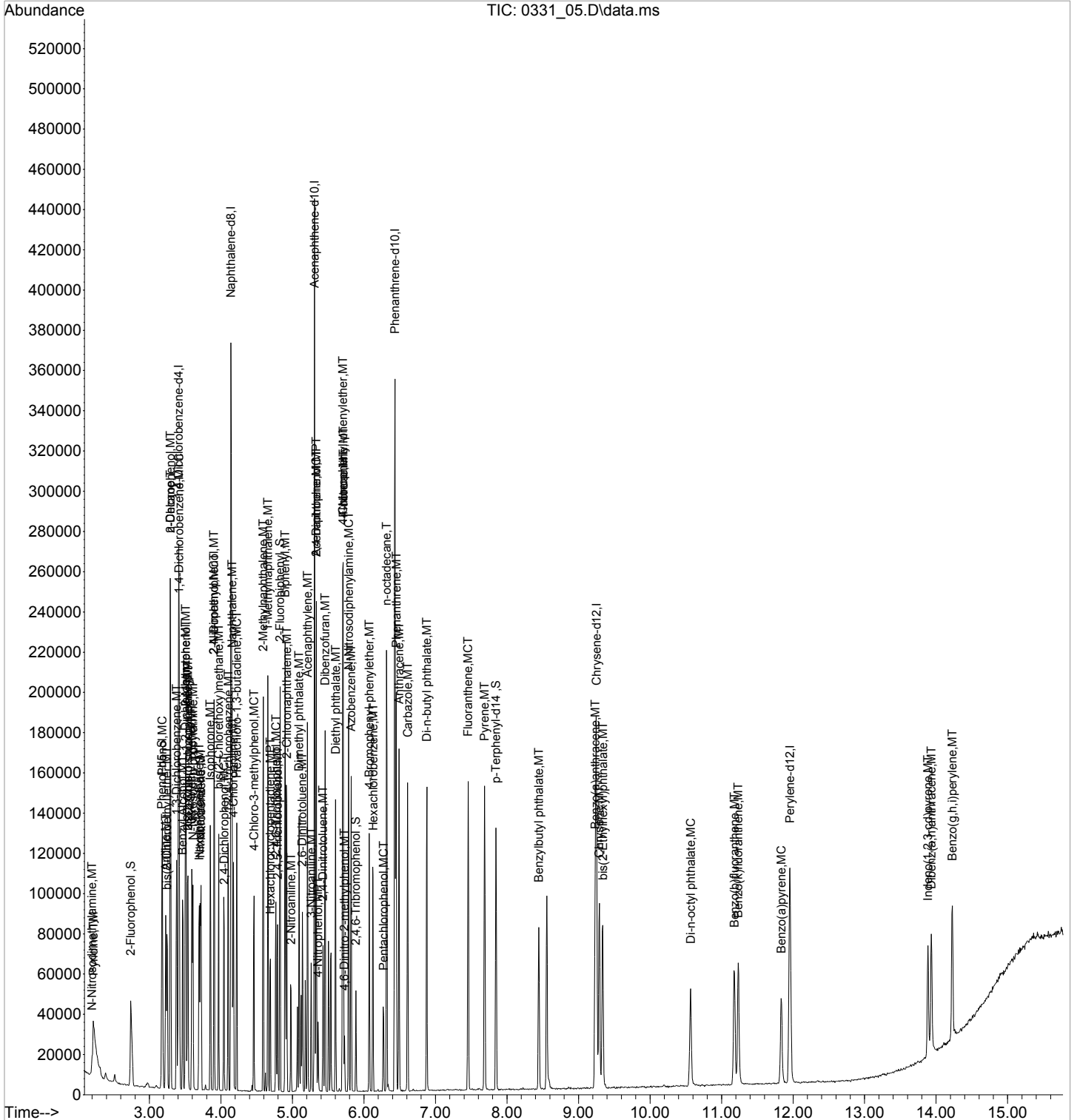
Quant Time: Apr 04 16:04:56 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.793	196	9443	4052.6426870	ppb		98
51) Biphenyl	4.898	154	48637	3783.8360827	ppb		99
52) 2-Chloronaphthalene	4.922	162	38216	3901.4979240	ppb		99
53) 2-Nitroaniline	4.981	138	8468	3715.5917121	ppb		98
54) Acenaphthylene	5.210	152	57104	3893.6362427	ppb		99
55) Dimethyl phthalate	5.093	163	41358	3976.3045598	ppb		94
56) 2,6-Dinitrotoluene	5.140	165	8241	4058.3383916	ppb		93
57) 3-Nitroaniline	5.263	138	7203	3973.0272299	ppb		97
58) Acenaphthene	5.334	153	39005	3812.6378437	ppb		99
59) 2,4-Dinitrophenol	5.334	184	1680	2974.9807456	ppb	#	1
60) Dibenzofuran	5.457	168	52497	3820.1946803	ppb		99
61) 2,4-Dinitrotoluene	5.428	165	9165	3955.2754297	ppb	#	77
63) 4-Nitrophenol	5.357	139	4753	3887.5582689	ppb	#	79
64) Fluorene	5.710	166	43283	3878.0382895	ppb		97
65) 4-Chlorophenyl-phenyle...	5.704	204	20472	3980.7165957	ppb		94
66) Diethyl phthalate	5.604	149	43240	3934.3678190	ppb		99
67) 4-Nitroaniline	5.710	138	6586	4870.9541902	ppb		96
68) Azobenzene	5.822	77	44023	4042.6599452	ppb		99
71) 4,6-Dinitro-2-methylph...	5.728	198	2707	3732.3952874	ppb	#	74
72) N-Nitrosodiphenylamine	5.787	169	33745	3976.2689220	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	10458	3934.5051940	ppb		94
75) Hexachlorobenzene	6.128	284	12174	3745.1457104	ppb		98
76) n-octadecane	6.316	55	8008	3901.5281337	ppb	#	96
77) Pentachlorophenol	6.275	266	4167	3264.5837369	ppb		98
78) Phenanthrene	6.451	178	58086	3771.2225902	ppb		99
79) Anthracene	6.492	178	54209	3942.0610534	ppb		99
80) Carbazole	6.610	167	46540	4035.1322148	ppb		99
81) Di-n-butyl phthalate	6.881	149	66469	4091.3433685	ppb		100
83) Fluoranthene	7.457	202	54696	3935.3597347	ppb		100
86) Pyrene	7.687	202	57163	3814.3474206	ppb		99
88) Benzylbutyl phthalate	8.445	149	21276	4173.7997939	ppb		99
90) Benzo(a)anthracene	9.233	228	40230	3881.3641678	ppb		98
91) Chrysene	9.292	228	44552	3860.0833542	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.339	149	31447	4260.6941032	ppb		98
93) Di-n-octyl phthalate	10.569	149	41318	4058.3889660	ppb		98
95) Benzo(b)fluoranthene	11.180	252	38068	4038.8782196	ppb		98
96) Benzo(k)fluoranthene	11.233	252	40040	4172.0316530	ppb		99
97) Benzo(a)pyrene	11.833	252	29980	4117.7691399	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.886	276	27978	4070.8609426	ppb		97
99) Dibenz(a,h)anthracene	13.933	278	32250	4143.8879049	ppb		98
100) Benzo(g,h,i)perylene	14.227	276	34820	4106.9338075	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_05.D  
Acq On : 31 Mar 2022 6:07 pm  
Operator : 3545  
Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 5 Sample Multiplier: 1

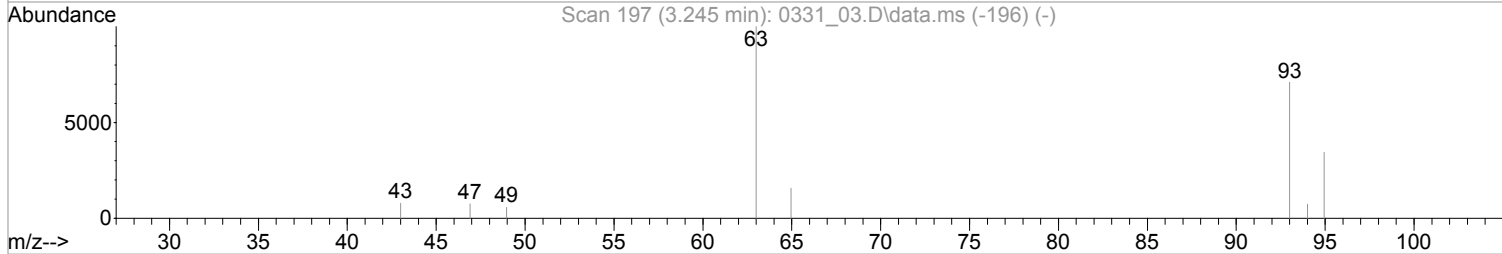
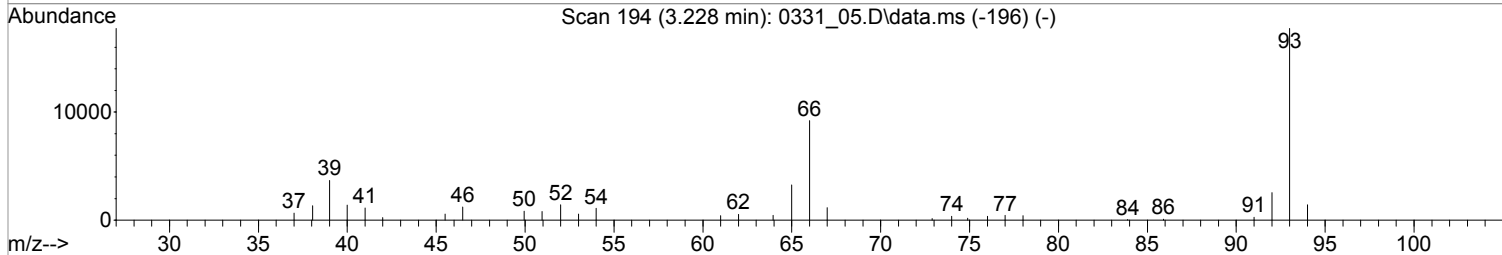
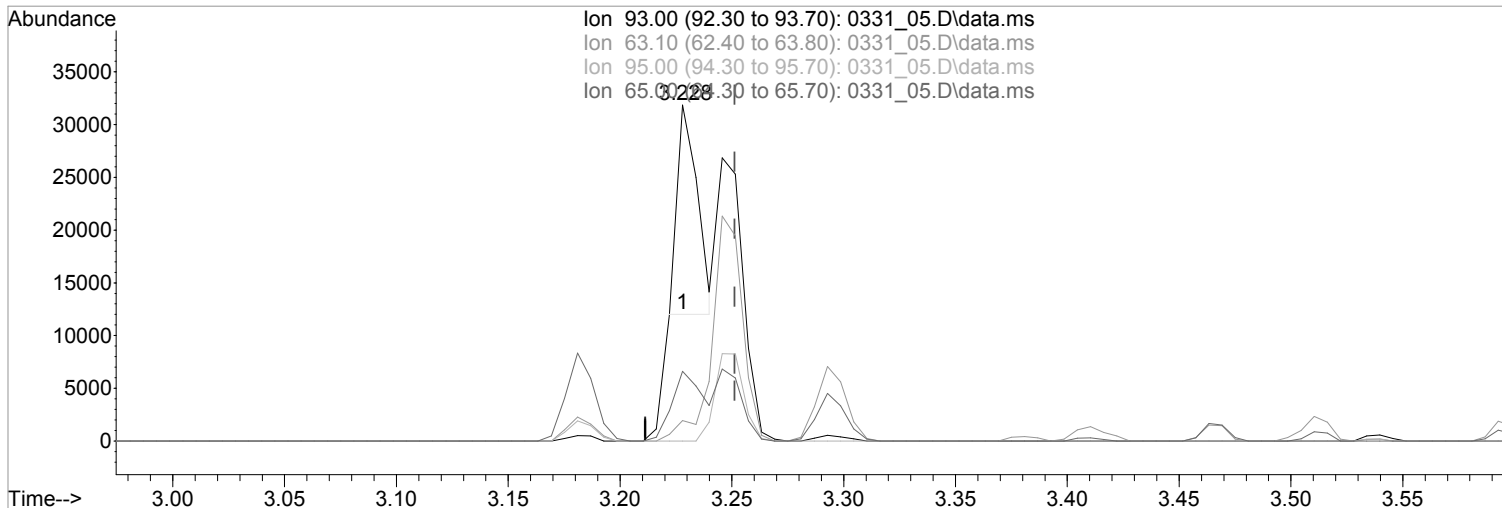
Quant Time: Apr 04 16:04:56 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:04:13 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

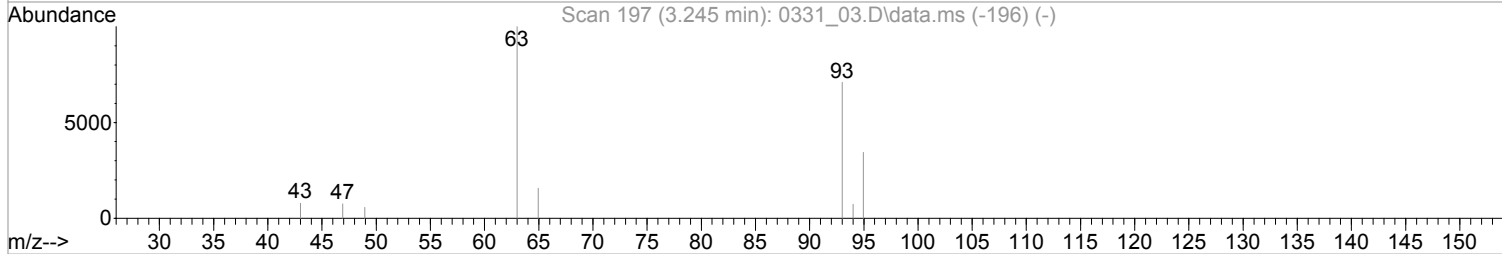
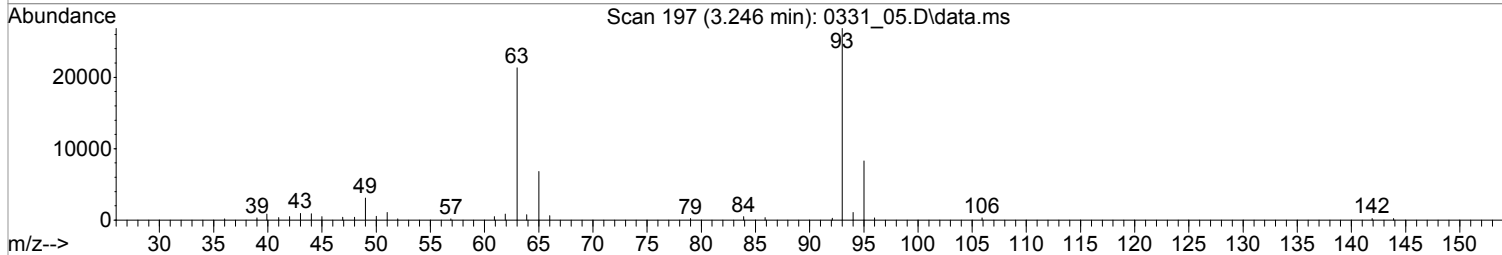
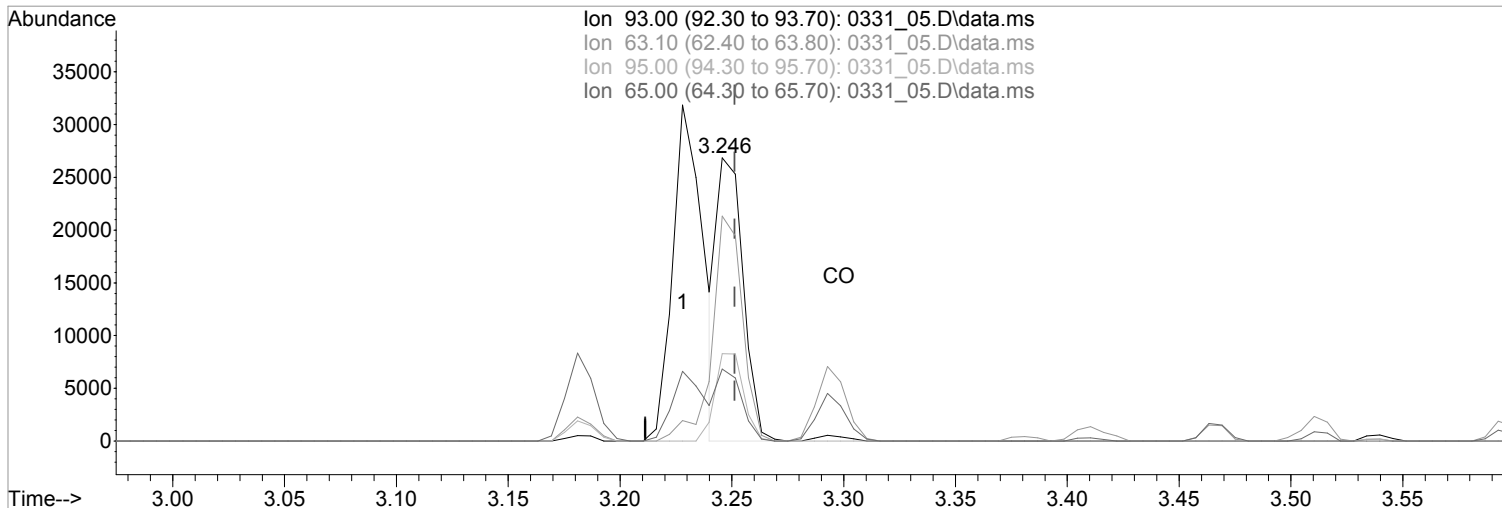
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.023) 2176.4408259 ppb  
 Qvalue = 37  
 response 12318

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	6.47#
95.00	31.90	0.00#
65.00	23.10	18.86

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.246min (-0.006) 3862.9262686 ppb m

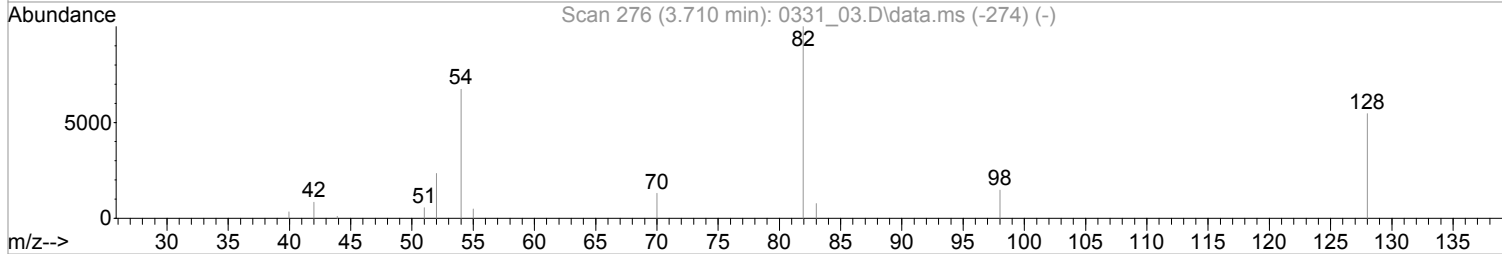
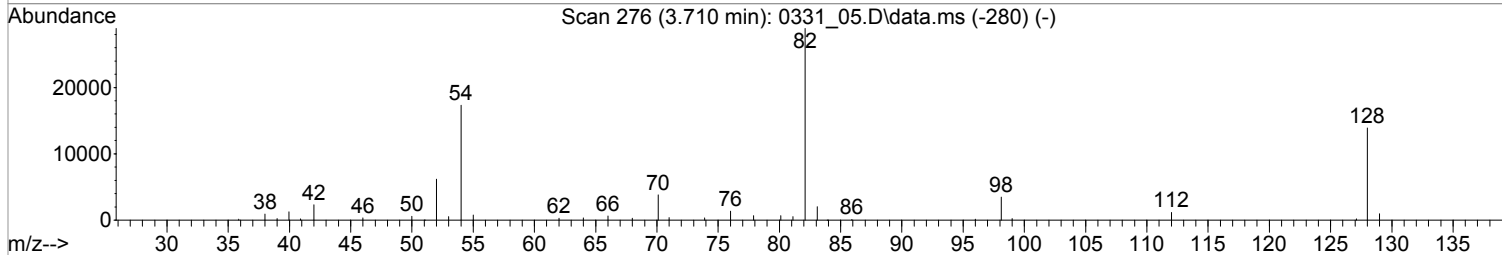
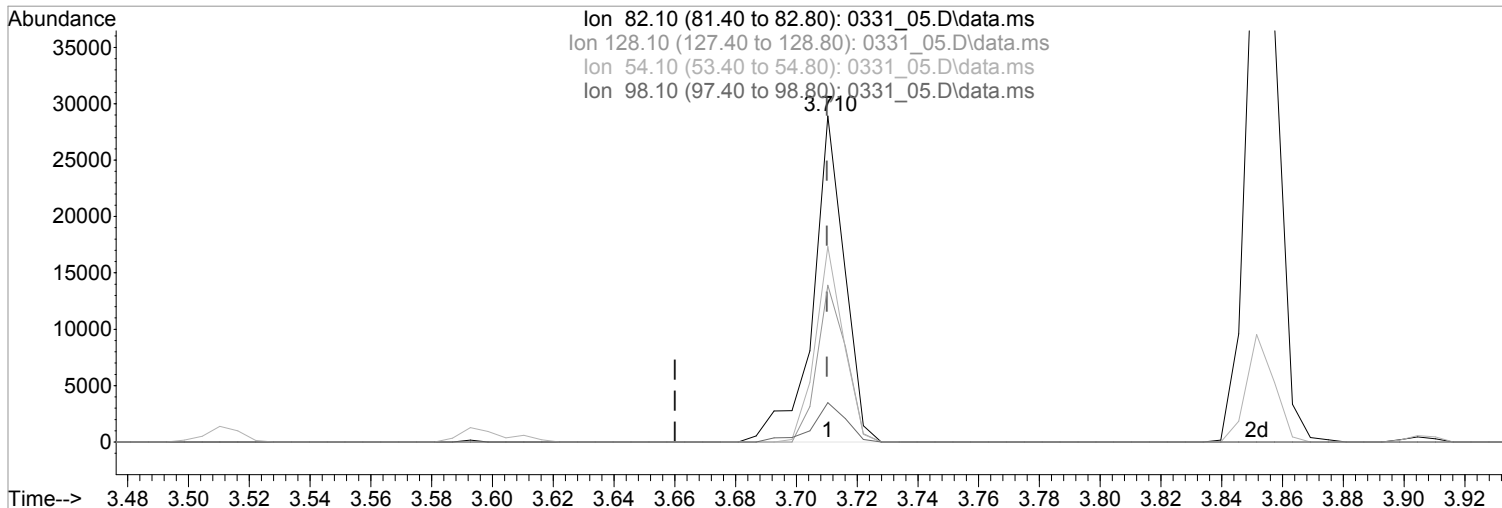
response 21863

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	79.43
95.00	31.90	30.91
65.00	23.10	25.46

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

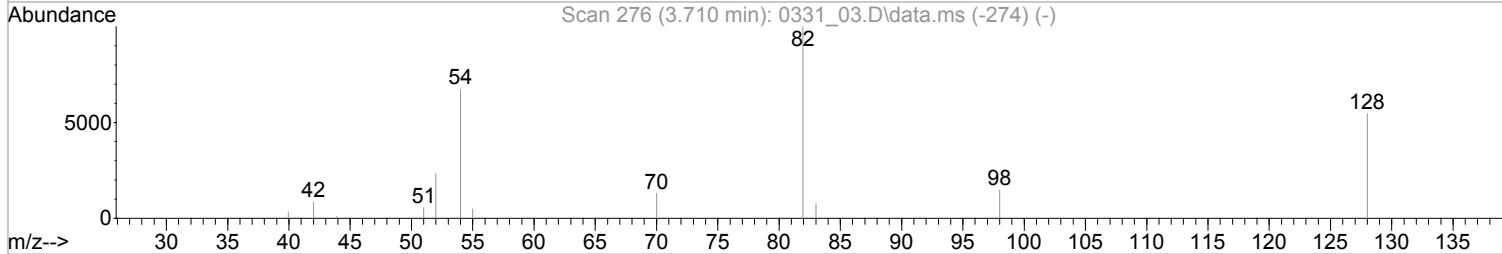
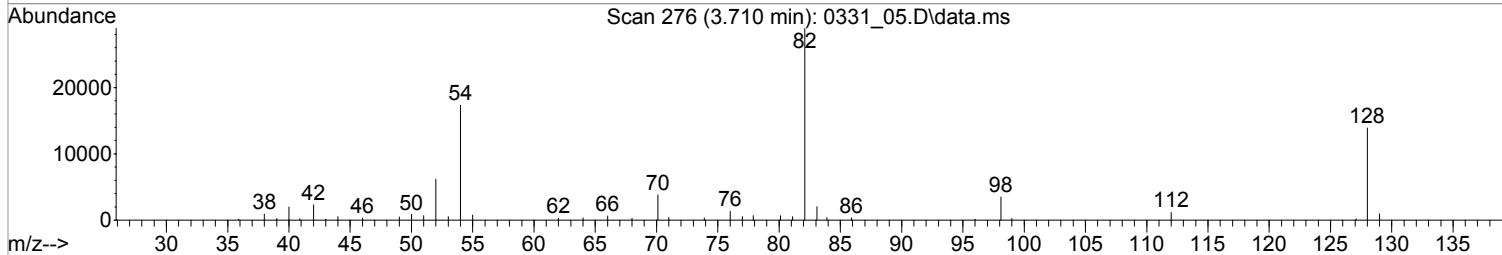
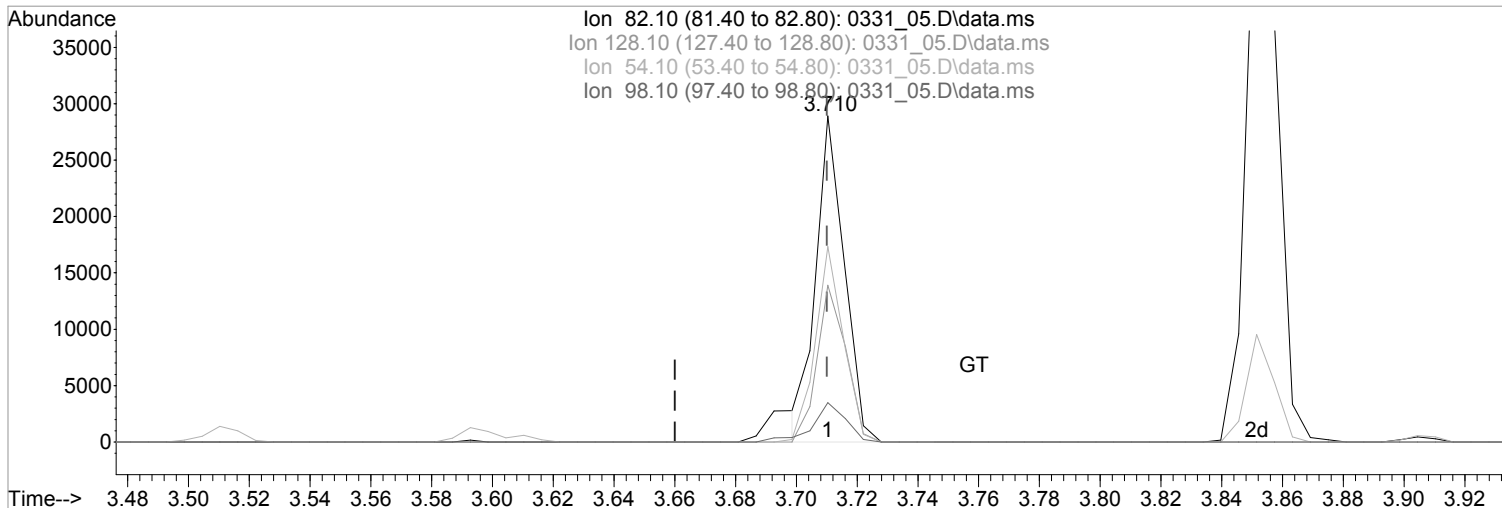
(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 4137.4947602 ppb  
 Qvalue = 99  
 response 21031

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	48.14
54.10	60.00	60.01
98.10	11.40	12.09

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 3716.0923649 ppb m

response 18889

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	48.14
54.10	60.00	60.01
98.10	11.40	12.09



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:57:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	31797	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	129715	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	67221	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	109300	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	79132	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	68335	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.740	112	50347	10000.0000000	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	50.00%		
7) Phenol-d5	3.175	99	59979	10000.0000000	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	50.00%		
24) Nitrobenzene-d5	3.710	82	48718m	10000.0000000	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	100.00%		
50) 2-Fluorobiphenyl	4.828	172	108502	10000.0000000	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	100.00%		
73) 2,4,6-Tribromophenol	5.892	330	11267	10000.0000000	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	50.00%		
87) p-Terphenyl-d14	7.845	244	110355	10000.0000000	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	100.00%		
Target Compounds							
2) Pyridine	2.216	79	54038	10000.0000000	ppb	100	
3) N-Nitrosodimethylamine	2.199	42	26952	10000.0000000	ppb	100	
5) Aniline	3.228	66	28243	10000.0000000	ppb	100	
6) bis(2-Chloroethyl)ether	3.251	93	54390m	10000.0000000	ppb	100	
8) Phenol	3.181	94	63496	10000.0000000	ppb	100	
10) 2-Chlorophenol	3.293	128	53448	10000.0000000	ppb	100	
11) n-Decane	3.293	41	33867	10000.0000000	ppb	100	#
12) 1,3-Dichlorobenzene	3.381	146	60750	10000.0000000	ppb	100	
13) 1,4-Dichlorobenzene	3.422	146	60988	10000.0000000	ppb	100	
14) Benzyl Alcohol	3.469	79	38840	10000.0000000	ppb	100	
15) 1,2-Dichlorobenzene	3.504	146	58396	10000.0000000	ppb	100	
16) bis(2-Chloroisopropyl)...	3.540	121	20161	10000.0000000	ppb	100	
17) 2,2-oxybis(1-chloropro...	3.540	121	20161	10000.0000000	ppb	100	
18) 2-Methylphenol	3.516	108	49043	10000.0000000	ppb	100	
19) Hexachloroethane	3.698	117	25235	10000.0000000	ppb	100	
20) N-Nitrosodi-n-propylamine	3.610	70	33756	10000.0000000	ppb	100	
21) 3&4-Methyl phenol	3.593	107	53628	10000.0000000	ppb	100	
25) Nitrobenzene	3.722	77	51043	10000.0000000	ppb	100	
26) Isophorone	3.851	82	98776	10000.0000000	ppb	100	
27) 2-Nitrophenol	3.904	139	23329	10000.0000000	ppb	100	
28) 2,4-Dimethylphenol	3.904	107	50267	10000.0000000	ppb	100	
29) bis(2-Chloroethoxy)methane	3.969	93	66470	10000.0000000	ppb	100	
30) 2,4-Dichlorophenol	4.045	162	39336	10000.0000000	ppb	100	
32) 1,2,4-Trichlorobenzene	4.104	180	45914	10000.0000000	ppb	100	
34) Naphthalene	4.157	128	164019	10000.0000000	ppb	100	
35) 4-Chloroaniline	4.175	65	16770	10000.0000000	ppb	100	
36) Hexachloro-1,3-butadiene	4.222	225	24753	10000.0000000	ppb	100	
40) 4-Chloro-3-methylphenol	4.463	107	39997	10000.0000000	ppb	100	
41) 2-Methylnaphthalene	4.593	142	102616	10000.0000000	ppb	100	
42) 1-Methylnaphthalene	4.657	142	98949	10000.0000000	ppb	100	
47) Hexachlorocyclopentadiene	4.692	237	21949	10000.0000000	ppb	100	
48) 2,4,6-Trichlorophenol	4.769	196	25822	10000.0000000	ppb	100	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

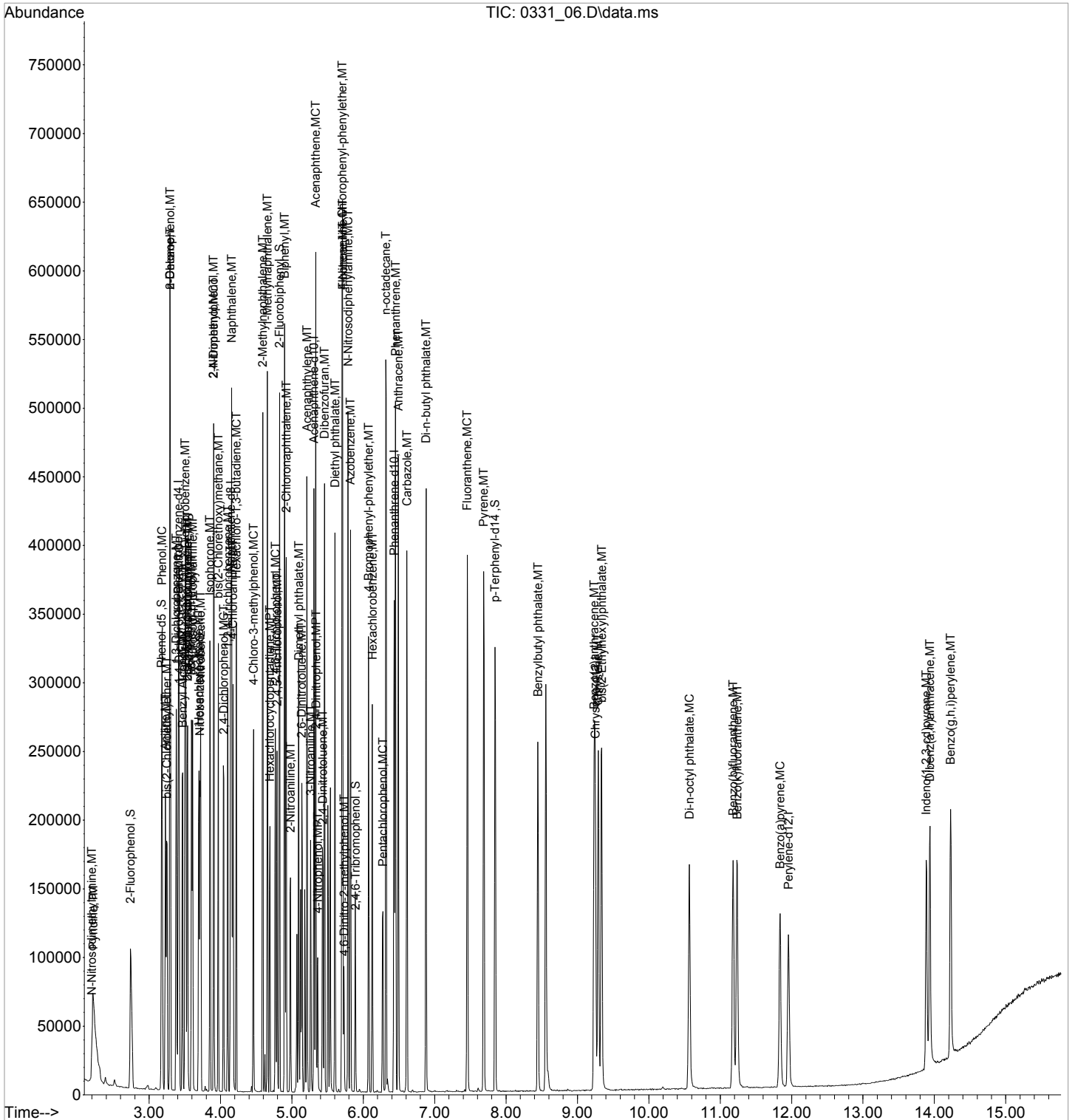
Quant Time: Apr 04 15:57:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
49) 2,4,5-Trichlorophenol	4.792	196	26746	10000.0000000	ppb	100
51) Biphenyl	4.898	154	121171	10000.0000000	ppb	100
52) 2-Chloronaphthalene	4.922	162	94566	10000.0000000	ppb	100
53) 2-Nitroaniline	4.981	138	25298	10000.0000000	ppb	100
54) Acenaphthylene	5.210	152	144849	10000.0000000	ppb	100
55) Dimethyl phthalate	5.098	163	106912	10000.0000000	ppb	100
56) 2,6-Dinitrotoluene	5.140	165	22620	10000.0000000	ppb	100
57) 3-Nitroaniline	5.263	138	20734	10000.0000000	ppb	100
58) Acenaphthene	5.334	153	96185	10000.0000000	ppb	100
59) 2,4-Dinitrophenol	5.340	184	5547	10000.0000000	ppb	100
60) Dibenzofuran	5.457	168	130881	10000.0000000	ppb	100
61) 2,4-Dinitrotoluene	5.434	165	27080	10000.0000000	ppb	100
63) 4-Nitrophenol	5.363	139	14605	10000.0000000	ppb	100
64) Fluorene	5.710	166	109752	10000.0000000	ppb	100
65) 4-Chlorophenyl-phenyle...	5.704	204	48947	10000.0000000	ppb	100
66) Diethyl phthalate	5.604	149	113139	10000.0000000	ppb	100
67) 4-Nitroaniline	5.710	138	12473	10000.0000000	ppb	100
68) Azobenzene	5.822	77	113978	10000.0000000	ppb	100
71) 4,6-Dinitro-2-methylph...	5.734	198	9382	10000.0000000	ppb	100
72) N-Nitrosodiphenylamine	5.787	169	86982	10000.0000000	ppb	100
74) 4-Bromophenyl-phenylether	6.075	248	26064	10000.0000000	ppb	100
75) Hexachlorobenzene	6.128	284	30132	10000.0000000	ppb	100
76) n-octadecane	6.316	55	20176	10000.0000000	ppb	100
77) Pentachlorophenol	6.275	266	12679	10000.0000000	ppb	100
78) Phenanthrene	6.451	178	144135	10000.0000000	ppb	100
79) Anthracene	6.492	178	140337	10000.0000000	ppb	100
80) Carbazole	6.610	167	120779	10000.0000000	ppb	100
81) Di-n-butyl phthalate	6.881	149	183487	10000.0000000	ppb	100
83) Fluoranthene	7.457	202	143797	10000.0000000	ppb	100
86) Pyrene	7.686	202	148972	10000.0000000	ppb	100
88) Benzylbutyl phthalate	8.445	149	64438	10000.0000000	ppb	100
90) Benzo(a)anthracene	9.233	228	110985	10000.0000000	ppb	100
91) Chrysene	9.292	228	116952	9997.5209649	ppb	100
92) bis(2-Ethylhexyl)phtha...	9.339	149	96218	10000.0000000	ppb	100
93) Di-n-octyl phthalate	10.569	149	134897	10000.0000000	ppb	100
95) Benzo(b)fluoranthene	11.180	252	103049	10000.0000000	ppb	100
96) Benzo(k)fluoranthene	11.239	252	109958	10000.0000000	ppb	100
97) Benzo(a)pyrene	11.839	252	85063	10000.0000000	ppb	100
98) Indeno(1,2,3-cd)pyrene	13.886	276	77280	10000.0000000	ppb	100
99) Dibenz(a,h)anthracene	13.939	278	87499	10000.0000000	ppb	100
100) Benzo(g,h,i)perylene	14.227	276	94402	10000.0000000	ppb	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_06.D  
Acq On : 31 Mar 2022 6:28 pm  
Operator : 3545  
Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:57:16 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 15:56:28 2022  
Response via : Initial Calibration  
DataAcq Meth: BNA24PS.M



Data Path : C:\msdchem\1\data\042922B\  
 Data File : 0429B\_02.D  
 Acq On : 29 Apr 2022 5:31 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 29 19:29:41 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.343	152	34721	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.072	136	141814	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.237	164	72983	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.348	188	122329	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.113	240	94191	8000.0000000	ppb	0.00	
94) Perylene-d12	11.766	264	87365	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.678	112	51787	9526.5470780	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	47.63%		
7) Phenol-d5	3.113	99	62394	9673.7789380	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	48.37%		
24) Nitrobenzene-d5	3.648	82	53608m	9939.9649697	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	99.40%		
50) 2-Fluorobiphenyl	4.754	172	110751	9556.0525709	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	95.56%		
73) 2,4,6-Tribromophenol	5.813	330	12747	9946.0609950	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	49.73%		
87) p-Terphenyl-d14	7.736	244	121362	9310.8734599	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	93.11%		
Target Compounds							
2) Pyridine	2.149	79	53826	9347.1354793	ppb	97	
3) N-Nitrosodimethylamine	2.131	42	24901	8213.8766926	ppb	93	
5) Aniline	3.166	66	30037	10064.5052197	ppb	#	24
6) bis(2-Chloroethyl)ether	3.184	93	59920m	10205.4074214	ppb		
8) Phenol	3.119	94	66790	9768.4580572	ppb	96	
10) 2-Chlorophenol	3.231	128	55720	9785.6997436	ppb	93	
11) n-Decane	3.225	41	30829	8422.3241625	ppb	#	96
12) 1,3-Dichlorobenzene	3.313	146	61737	9460.6674667	ppb	99	
13) 1,4-Dichlorobenzene	3.354	146	62717	9601.6296348	ppb	99	
14) Benzyl Alcohol	3.401	79	41147	9865.3111340	ppb	99	
15) 1,2-Dichlorobenzene	3.437	146	59098	9383.6062355	ppb	99	
16) bis(2-Chloroisopropyl)...	3.472	121	19823	9114.7355717	ppb	92	
17) 2,2-oxybis(1-chloropro...	3.472	121	19823	9114.7355717	ppb	92	
18) 2-Methylphenol	3.448	108	51422	10040.6622639	ppb	97	
19) Hexachloroethane	3.625	117	25427	9335.2205902	ppb	94	
20) N-Nitrosodi-n-propylamine	3.543	70	35264	9681.1510235	ppb	99	
21) 3&4-Methyl phenol	3.531	107	55759	9869.7553944	ppb	99	
25) Nitrobenzene	3.654	77	55107	10109.6027410	ppb	98	
26) Isophorone	3.784	82	102182	9576.8327252	ppb	100	
27) 2-Nitrophenol	3.837	139	25409	9852.4073272	ppb	87	
28) 2,4-Dimethylphenol	3.843	107	52260	9847.6018926	ppb	99	
29) bis(2-Chlorethoxy)methane	3.901	93	67640	9435.2004785	ppb	99	
30) 2,4-Dichlorophenol	3.978	162	42013	10020.5506012	ppb	96	
32) 1,2,4-Trichlorobenzene	4.031	180	46298	9233.9072755	ppb	95	
34) Naphthalene	4.090	128	166007	9377.7384495	ppb	100	
35) 4-Chloroaniline	4.107	65	18448	9916.6835713	ppb	97	
36) Hexachloro-1,3-butadiene	4.148	225	25433	9404.1037456	ppb	97	
40) 4-Chloro-3-methylphenol	4.395	107	42870	9773.1491472	ppb	97	
41) 2-Methylnaphthalene	4.519	142	105002	9441.1403741	ppb	99	
42) 1-Methylnaphthalene	4.584	142	101389	9364.7404413	ppb	100	
47) Hexachlorocyclopentadiene	4.619	237	21972	9229.5812969	ppb	96	
48) 2,4,6-Trichlorophenol	4.695	196	27403	10053.0413465	ppb	94	

Data Path : C:\msdchem\1\data\042922B\  
 Data File : 0429B\_02.D  
 Acq On : 29 Apr 2022 5:31 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1

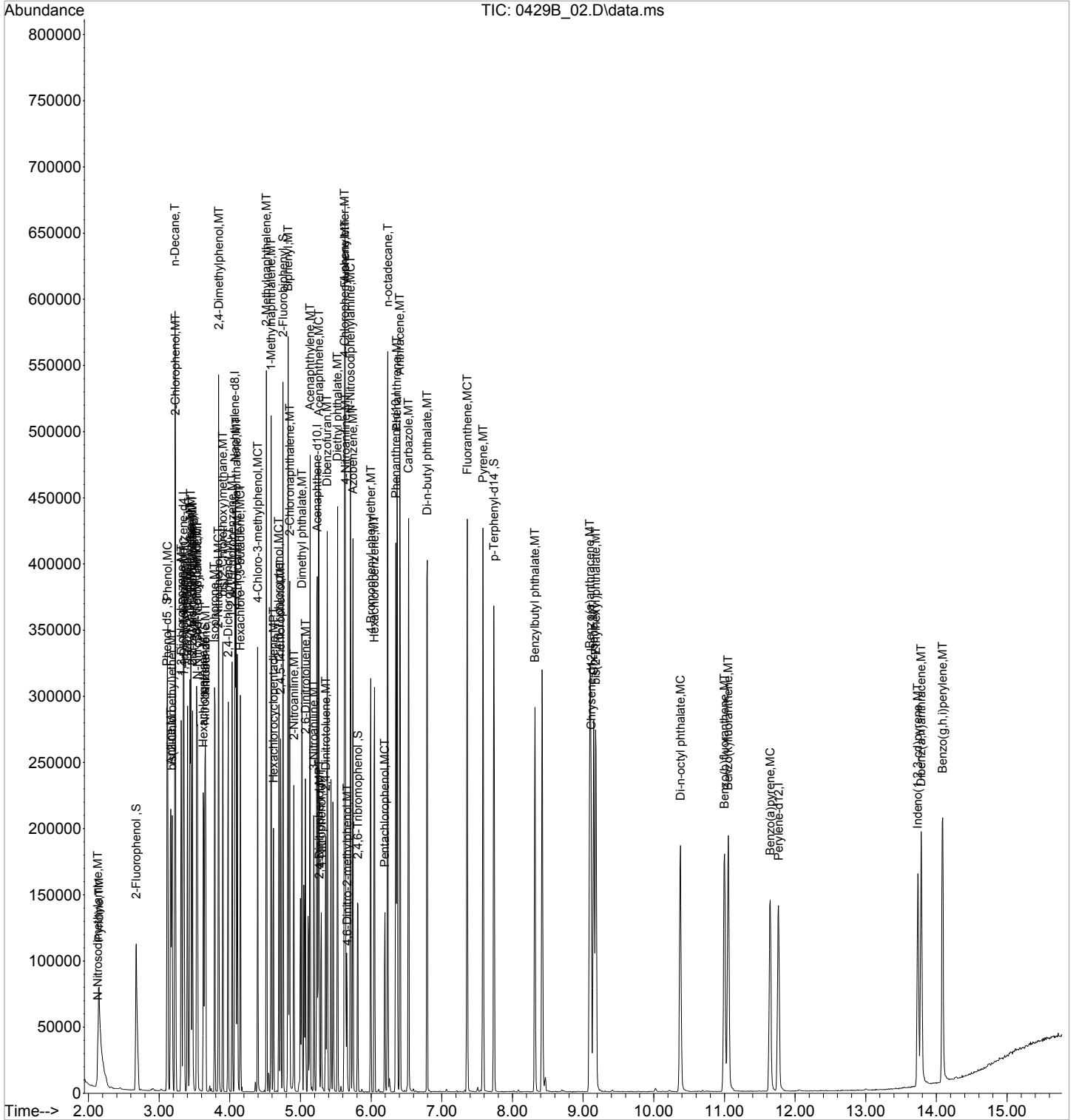
Quant Time: Apr 29 19:29:41 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.719	196	29365	10543.7507224	ppb		93
51) Biphenyl	4.825	154	124290	9517.3986670	ppb		99
52) 2-Chloronaphthalene	4.848	162	97251	9649.1517606	ppb		99
53) 2-Nitroaniline	4.907	138	31669	10592.9410083	ppb		99
54) Acenaphthylene	5.137	152	150810	9751.4770077	ppb		100
55) Dimethyl phthalate	5.019	163	109339	9682.2634147	ppb		92
56) 2,6-Dinitrotoluene	5.072	165	25467	10330.6989938	ppb		81
57) 3-Nitroaniline	5.189	138	25785	10953.1348418	ppb		97
58) Acenaphthene	5.260	153	99101	9455.5726306	ppb		98
59) 2,4-Dinitrophenol	5.266	184	5993	8840.0167598	ppb	#	1
60) Dibenzofuran	5.378	168	137045	9799.3572344	ppb		100
61) 2,4-Dinitrotoluene	5.360	165	30940	10024.9623613	ppb		97
63) 4-Nitrophenol	5.295	139	18931	11108.1142510	ppb		97
64) Fluorene	5.631	166	112911	9753.3710928	ppb		97
65) 4-Chlorophenyl-phenyle...	5.625	204	50189	9518.9986133	ppb		99
66) Diethyl phthalate	5.525	149	115221	9807.0550971	ppb		98
67) 4-Nitroaniline	5.637	138	21489	15075.5679791	ppb		99
68) Azobenzene	5.742	77	117275	9932.7788080	ppb		99
71) 4,6-Dinitro-2-methylph...	5.660	198	10709	9259.2700472	ppb		98
72) N-Nitrosodiphenylamine	5.707	169	91384	9604.8298764	ppb		100
74) 4-Bromophenyl-phenylether	5.995	248	27848	9535.9568611	ppb		90
75) Hexachlorobenzene	6.048	284	31371	9196.1430755	ppb		99
76) n-octadecane	6.236	55	19676	8631.4403952	ppb		100
77) Pentachlorophenol	6.195	266	11706	8043.4149505	ppb		98
78) Phenanthrene	6.366	178	151616	9351.3664803	ppb		99
79) Anthracene	6.407	178	152674	9917.6724685	ppb		98
80) Carbazole	6.531	167	135830	10314.6742137	ppb		99
81) Di-n-butyl phthalate	6.795	149	187224	9491.7916435	ppb		99
83) Fluoranthene	7.360	202	150751	9502.1110437	ppb		99
86) Pyrene	7.583	202	156977	8897.3825763	ppb		99
88) Benzylbutyl phthalate	8.319	149	73740	9107.1006176	ppb		97
90) Benzo(a)anthracene	9.095	228	128467	9770.8170872	ppb		99
91) Chrysene	9.148	228	131331	9457.0343856	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.177	149	104028	8708.3756522	ppb		99
93) Di-n-octyl phthalate	10.377	149	154290	8506.4476678	ppb		99
95) Benzo(b)fluoranthene	11.001	252	117962	9213.0472428	ppb		100
96) Benzo(k)fluoranthene	11.054	252	126080	9630.3948039	ppb		99
97) Benzo(a)pyrene	11.648	252	100734	9706.0216441	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.736	276	91330	9668.6280520	ppb		97
99) Dibenz(a,h)anthracene	13.783	278	104495	9869.9144856	ppb		98
100) Benzo(g,h,i)perylene	14.089	276	110936	9891.4243184	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\042922B\  
Data File : 0429B\_02.D  
Acq On : 29 Apr 2022 5:31 pm  
Operator : 3545  
Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
Misc : SVMS CAL ISTD 22D16229 exp. 10/16/22  
ALS Vial : 3 Sample Multiplier: 1

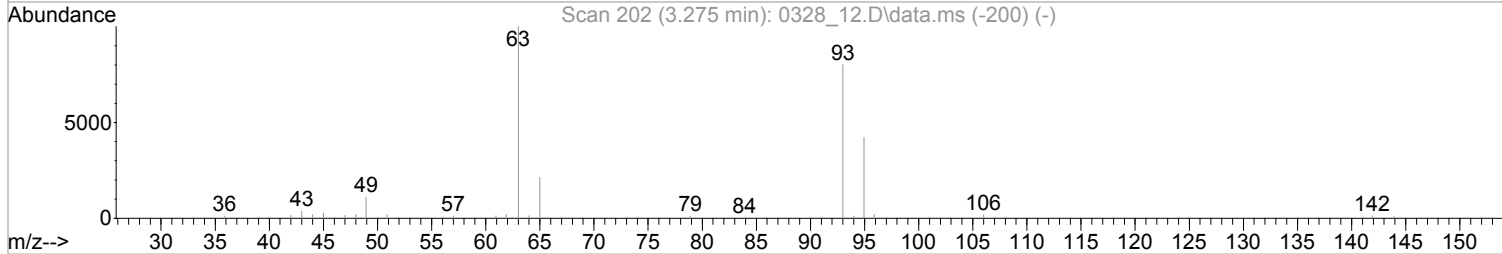
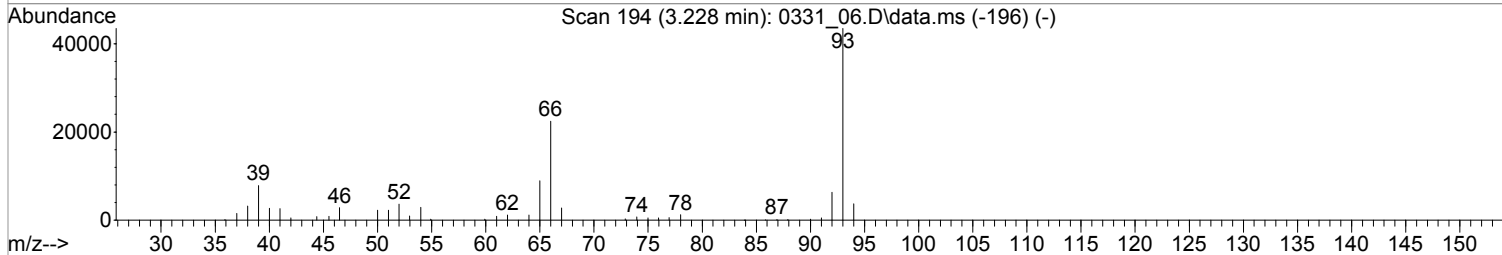
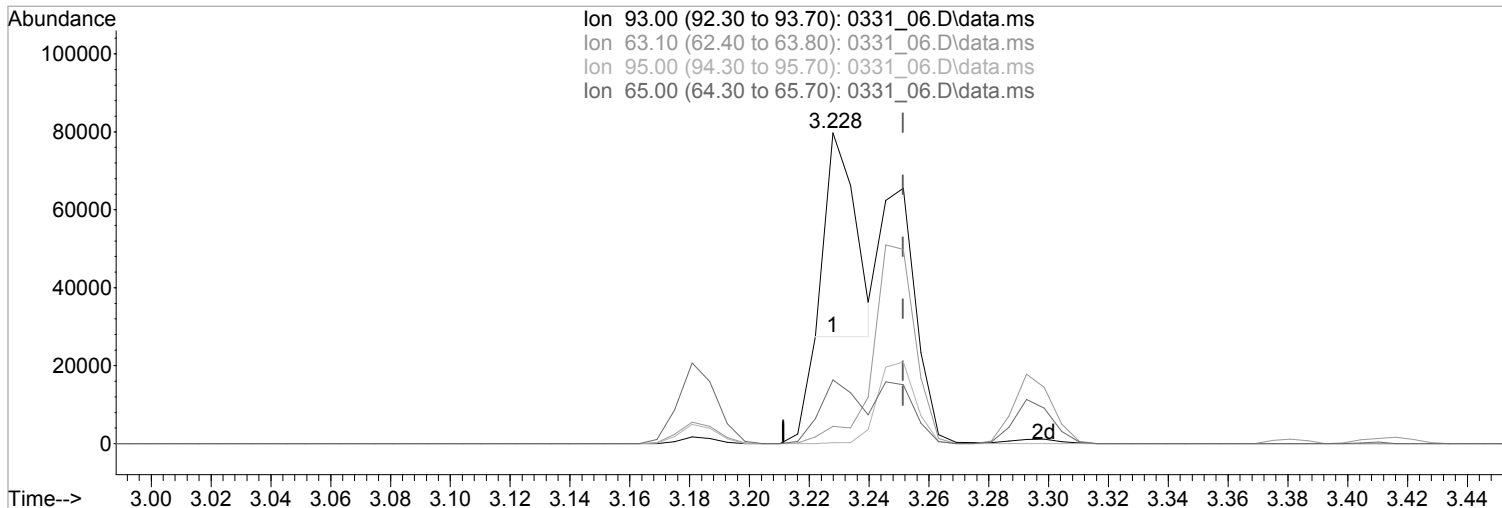
Quant Time: Apr 29 19:29:41 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

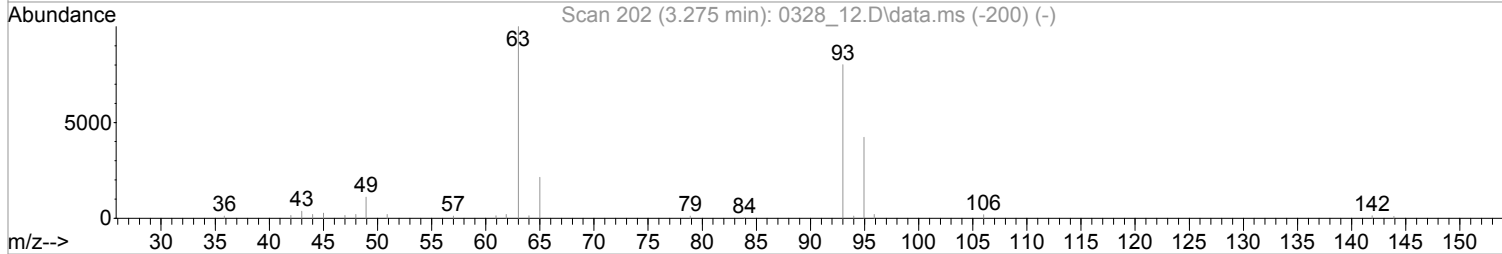
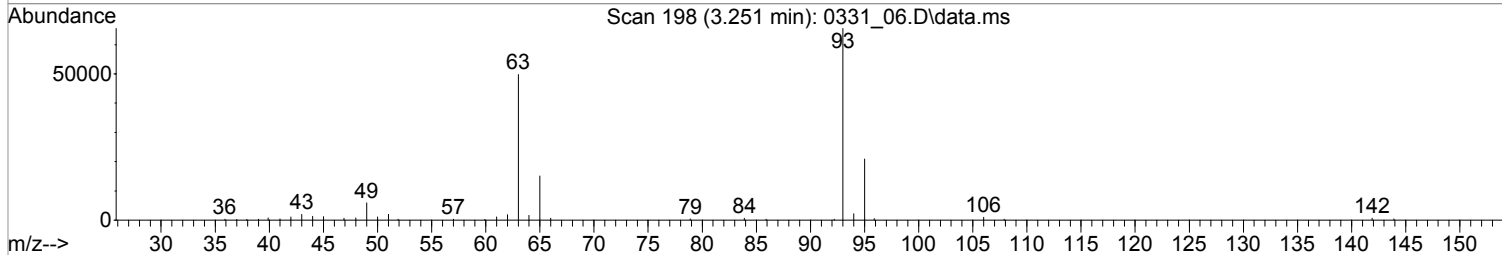
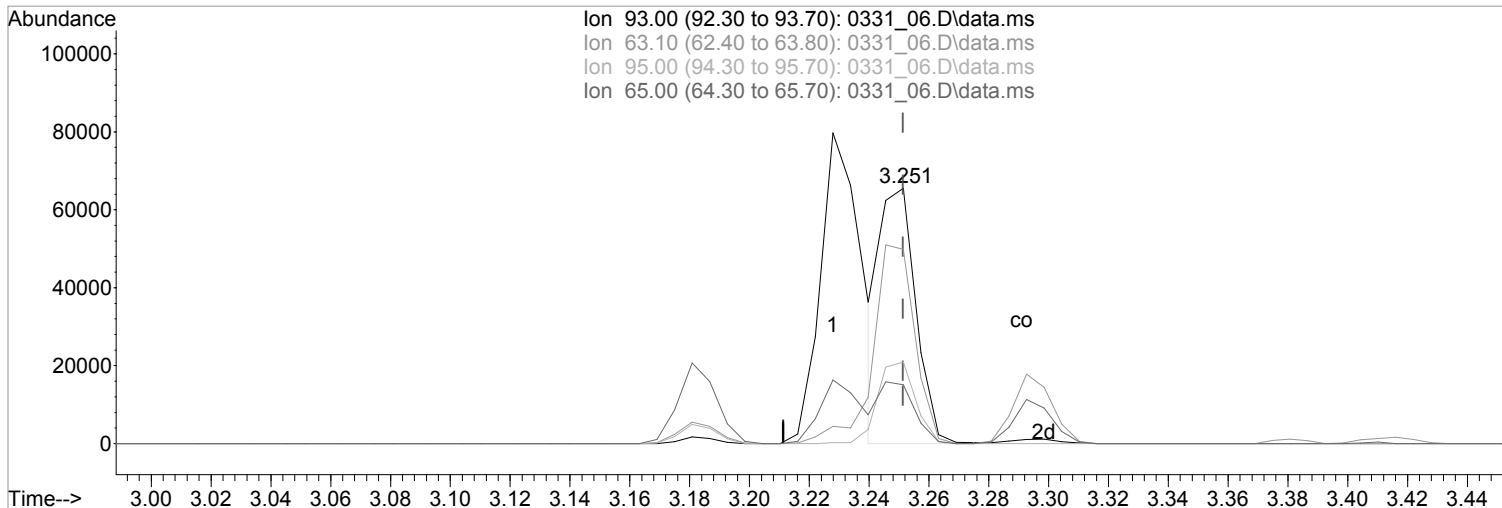
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 6479.8676227 ppb  
 Qvalue = 37  
 response 35244

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.09#
95.00	31.90	0.47#
65.00	23.10	19.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (0.000) 10000.0000000 ppb m

response 54390

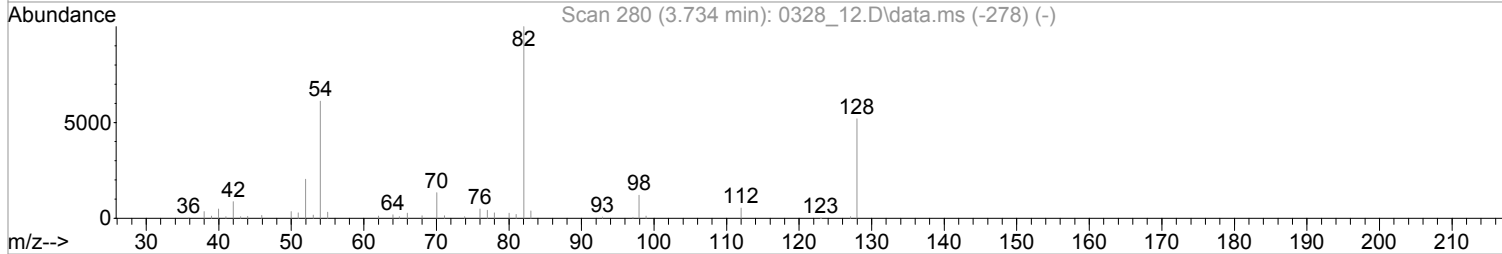
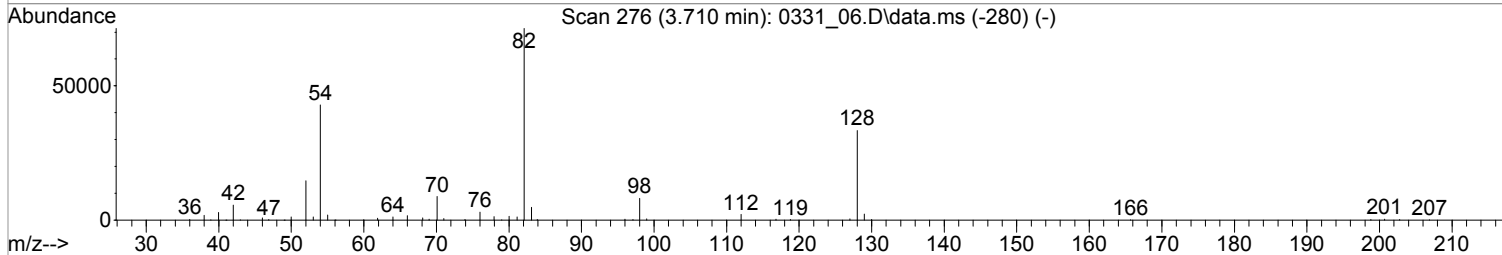
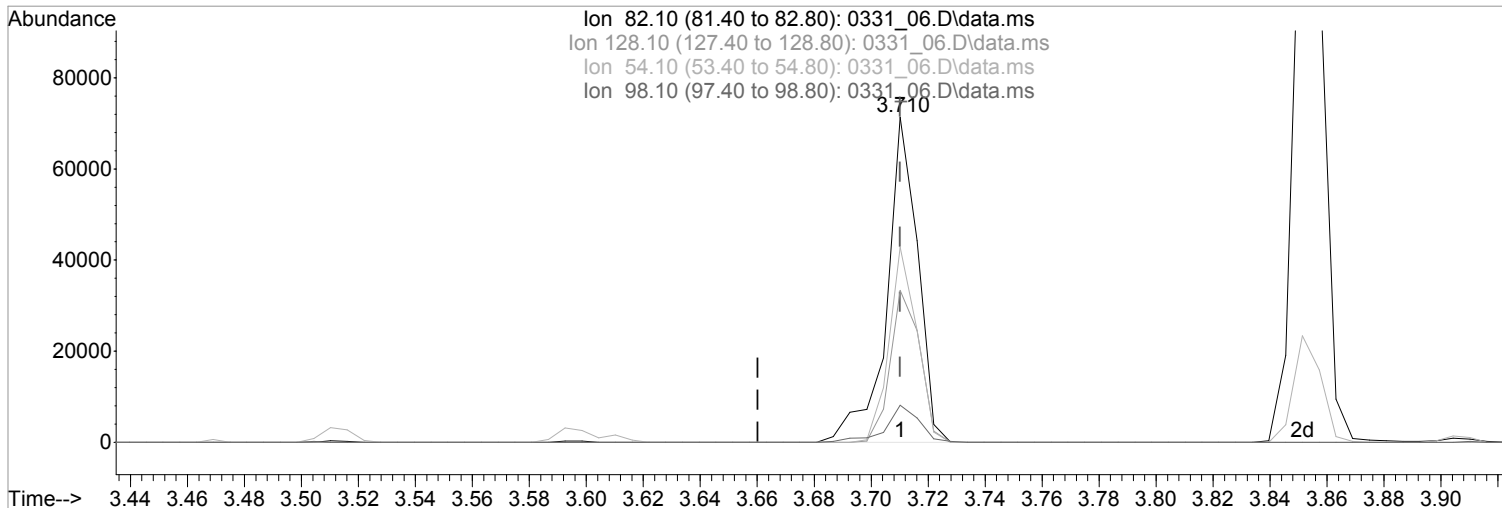
Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.04
95.00	31.90	31.89
65.00	23.10	23.09



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

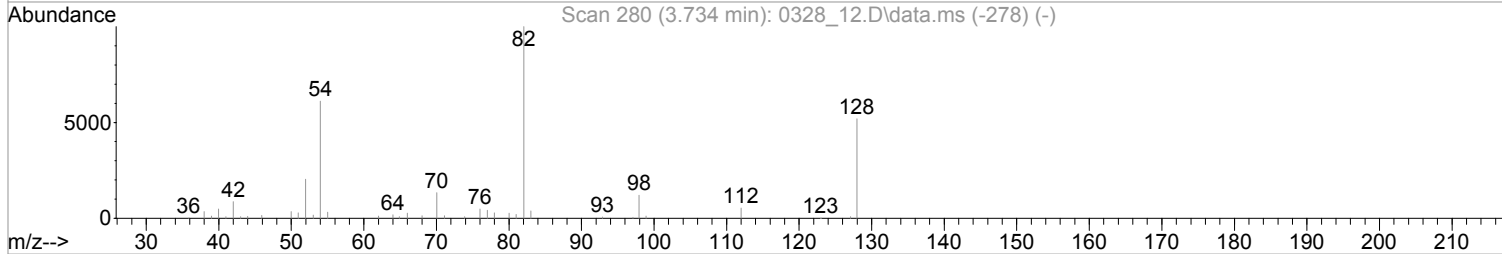
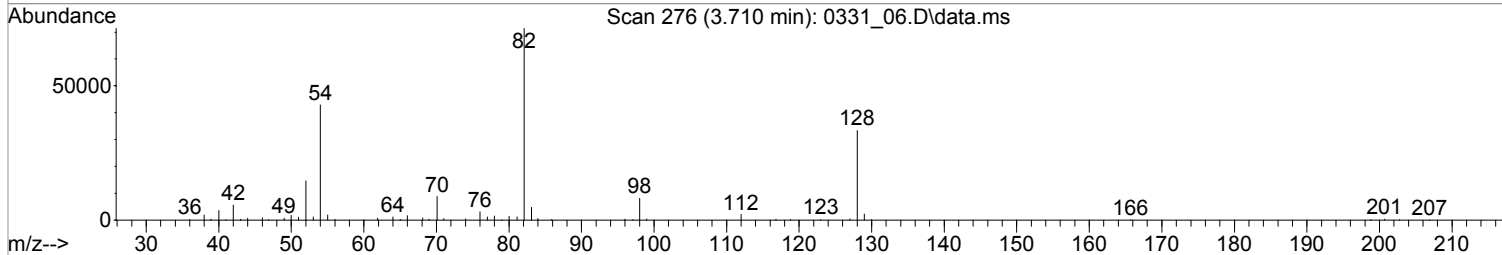
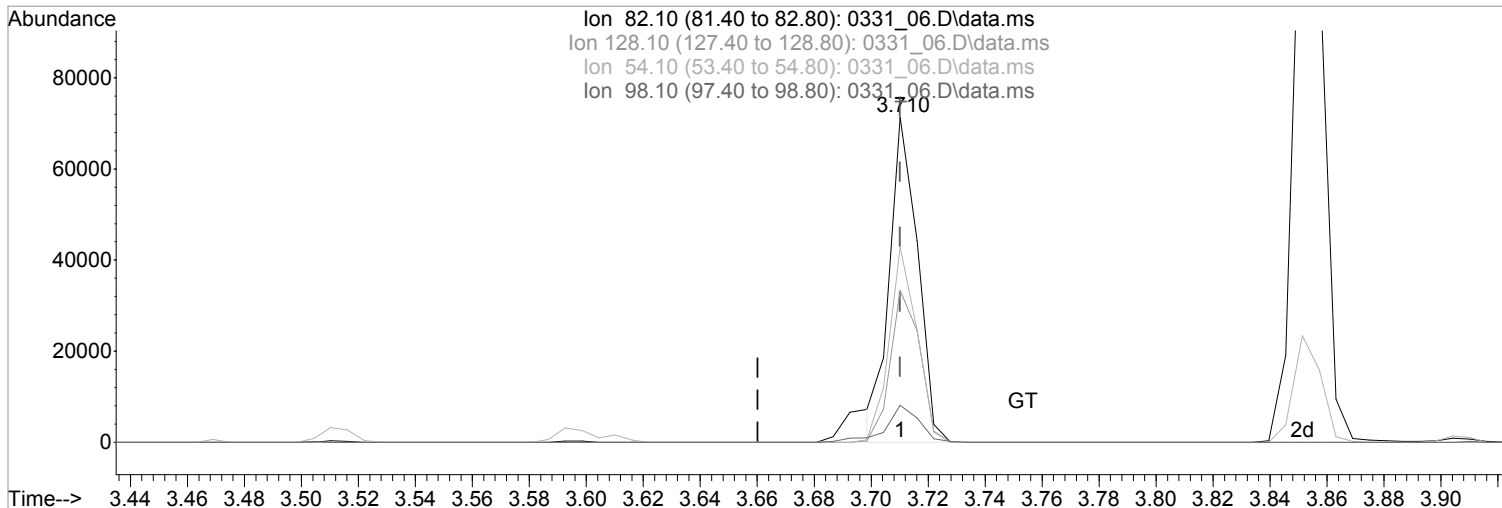
(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 11089.1251693 ppb  
 Qvalue = 100  
 response 54024

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	46.75
54.10	60.00	60.04
98.10	11.40	11.42

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 10000.0000000 ppb m

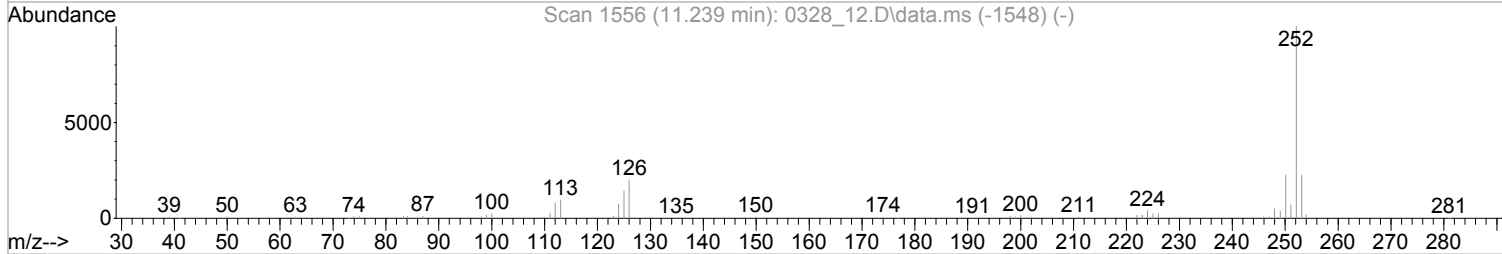
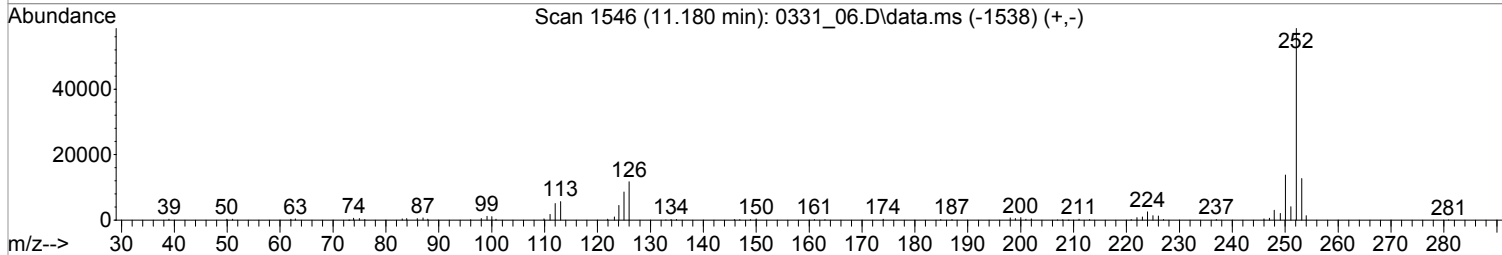
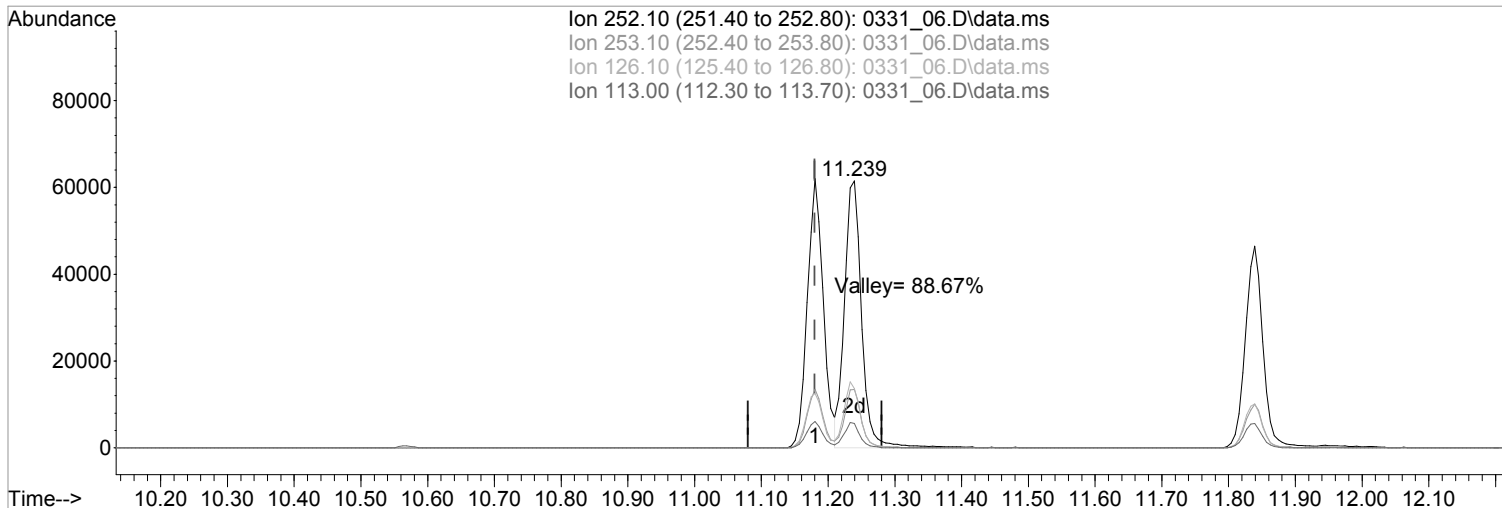
response 48718

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	46.75
54.10	60.00	60.04
98.10	11.40	11.42

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

(95) Benzo(b)fluoranthene (MT)  
 11.180min (0.000) 10000.0000000 ppb  
 Qvalue = 100  
 response 103049

Ion	Exp%	Act%
252.10	100	100
253.10	21.80	21.75
126.10	20.00	20.04
113.00	9.70	9.74

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:06:30 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.410	152	32792	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.140	136	134078	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	70723	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.434	188	112936	8000.0000000	ppb	0.00
84) Chrysene-d12	9.251	240	84930	8000.0000000	ppb	0.00
94) Perylene-d12	11.957	264	75119	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.740	112	106152	20861.0973521	ppb	0.00
Spiked Amount	20000.000		Recovery	=	104.31%	
7) Phenol-d5	3.175	99	126213	21001.8195808	ppb	0.00
Spiked Amount	20000.000		Recovery	=	105.01%	
24) Nitrobenzene-d5	3.710	82	103619m	20771.1930820	ppb	0.00
Spiked Amount	10000.000		Recovery	=	207.71%	
50) 2-Fluorobiphenyl	4.828	172	223030	19027.3520423	ppb	0.00
Spiked Amount	10000.000		Recovery	=	190.27%	
73) 2,4,6-Tribromophenol	5.892	330	25243	24542.1885073	ppb	0.00
Spiked Amount	20000.000		Recovery	=	122.71%	
87) p-Terphenyl-d14	7.845	244	237308	19778.2683501	ppb	0.00
Spiked Amount	10000.000		Recovery	=	197.78%	
<b>Target Compounds</b>						
2) Pyridine	2.210	79	111293	20520.0582576	ppb	98
3) N-Nitrosodimethylamine	2.199	42	54707	17512.4649974	ppb	97
5) Aniline	3.228	66	57894	20863.9637808	ppb	# 16
6) bis(2-Chloroethyl)ether	3.251	93	110886m	19845.2727506	ppb	
8) Phenol	3.181	94	133099	20780.4249322	ppb	98
10) 2-Chlorophenol	3.293	128	112522	21384.5068803	ppb	98
11) n-Decane	3.293	41	68989	18920.4635757	ppb	# 100
12) 1,3-Dichlorobenzene	3.381	146	123575	19382.0792001	ppb	99
13) 1,4-Dichlorobenzene	3.416	146	124782	19676.3481368	ppb	97
14) Benzyl Alcohol	3.469	79	82542	21814.2426793	ppb	99
15) 1,2-Dichlorobenzene	3.504	146	118829	19192.9016445	ppb	98
16) bis(2-Chloroisopropyl)...	3.540	121	41324	19661.8731881	ppb	99
17) 2,2-oxybis(1-chloropro...	3.540	121	41324	19661.8731881	ppb	99
18) 2-Methylphenol	3.516	108	101827	21477.9744707	ppb	99
19) Hexachloroethane	3.698	117	52039	19890.3601889	ppb	98
20) N-Nitrosodi-n-propylamine	3.610	70	72194	21832.9659564	ppb	98
21) 3&4-Methyl phenol	3.598	107	111931	21421.6043465	ppb	96
25) Nitrobenzene	3.722	77	105247	20884.2027666	ppb	98
26) Isophorone	3.857	82	210585	21841.1908819	ppb	91
27) 2-Nitrophenol	3.904	139	52249	24618.0078291	ppb	95
28) 2,4-Dimethylphenol	3.910	107	103310	21041.1313099	ppb	96
29) bis(2-Chlorethoxy)methane	3.969	93	136801	20048.2800815	ppb	100
30) 2,4-Dichlorophenol	4.045	162	83454	22074.7247902	ppb	99
32) 1,2,4-Trichlorobenzene	4.104	180	94214	19197.4563184	ppb	97
34) Naphthalene	4.157	128	329834	18763.7653181	ppb	100
35) 4-Chloroaniline	4.175	65	36268	21893.3392059	ppb	96
36) Hexachloro-1,3-butadiene	4.222	225	50893	19291.4613634	ppb	97
40) 4-Chloro-3-methylphenol	4.463	107	87785	23024.4502760	ppb	100
41) 2-Methylnaphthalene	4.593	142	211946	19970.4058612	ppb	100
42) 1-Methylnaphthalene	4.657	142	205339	19719.8276242	ppb	99
47) Hexachlorocyclopentadiene	4.692	237	48263	22542.2258944	ppb	99
48) 2,4,6-Trichlorophenol	4.769	196	56577	23494.5231526	ppb	99

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

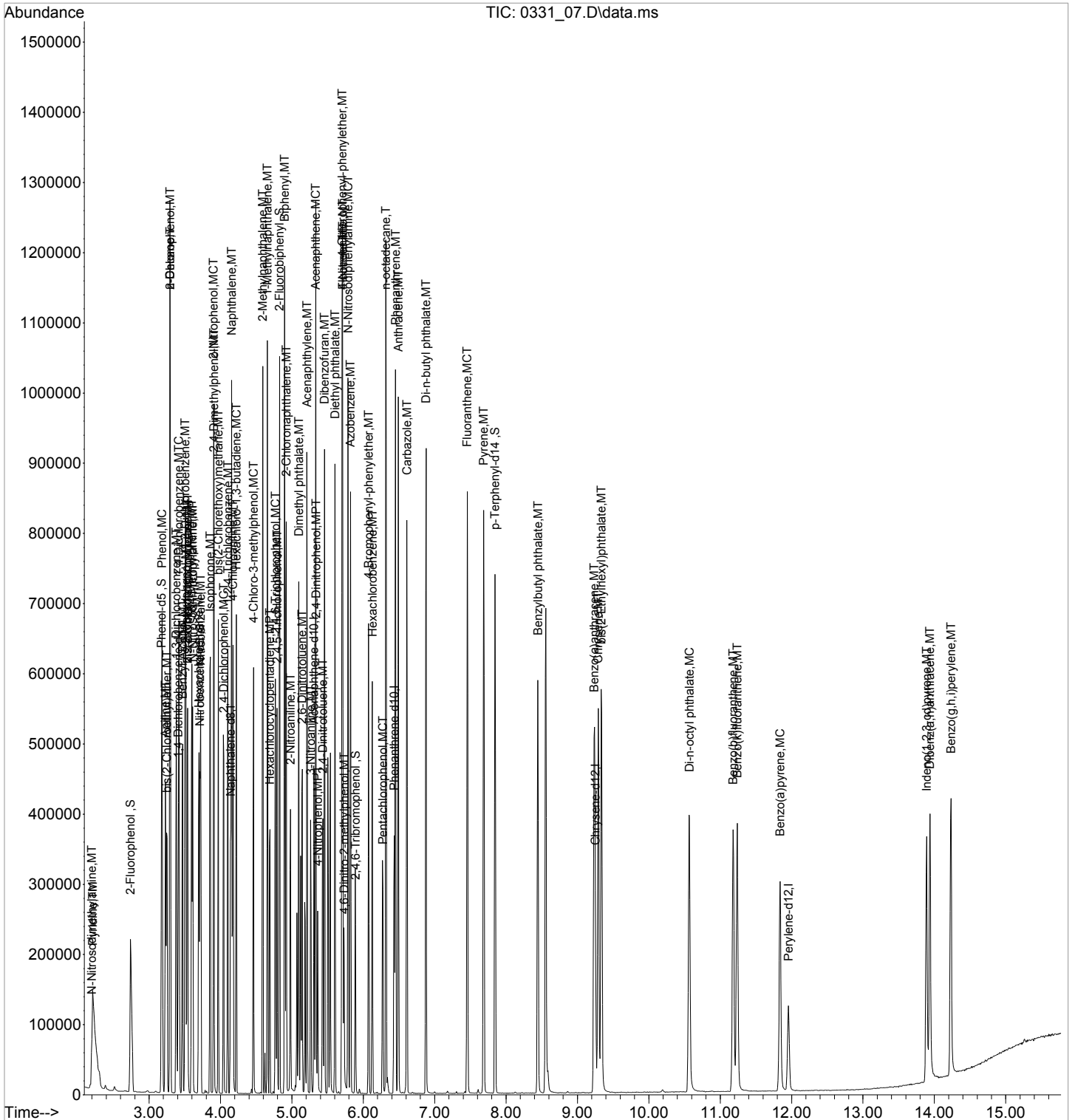
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 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	59315	24551.4730430	ppb		98
51) Biphenyl	4.898	154	251259	19173.6958276	ppb		100
52) 2-Chloronaphthalene	4.922	162	193285	19212.2177403	ppb		99
53) 2-Nitroaniline	4.981	138	59759	25988.3511479	ppb		98
54) Acenaphthylene	5.210	152	303372	20149.8725762	ppb		100
55) Dimethyl phthalate	5.098	163	227095	21158.3884957	ppb		97
56) 2,6-Dinitrotoluene	5.145	165	51741	24536.2501075	ppb	#	80
57) 3-Nitroaniline	5.263	138	47887	25616.1751347	ppb		99
58) Acenaphthene	5.334	153	202163	19347.9009194	ppb		98
59) 2,4-Dinitrophenol	5.340	184	14976	29432.6206918	ppb	#	70
60) Dibenzofuran	5.457	168	267370	19040.7081128	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	61558	25802.4933154	ppb		99
63) 4-Nitrophenol	5.363	139	33738	26954.3131233	ppb		97
64) Fluorene	5.710	166	226042	19747.7794311	ppb		98
65) 4-Chlorophenyl-phenyle...	5.704	204	101491	19118.9264213	ppb		99
66) Diethyl phthalate	5.604	149	234955	20771.6196118	ppb		100
67) 4-Nitroaniline	5.710	138	24185	16136.9020443	ppb		95
68) Azobenzene	5.822	77	238153	21105.6381926	ppb		99
71) 4,6-Dinitro-2-methylph...	5.734	198	24209	33263.5986863	ppb		96
72) N-Nitrosodiphenylamine	5.787	169	183408	21087.6244155	ppb		100
74) 4-Bromophenyl-phenylether	6.075	248	54290	19982.1021032	ppb		95
75) Hexachlorobenzene	6.128	284	62307	18977.7188118	ppb		100
76) n-octadecane	6.316	55	43712	20878.0975737	ppb		99
77) Pentachlorophenol	6.275	266	30833	25917.7797076	ppb		99
78) Phenanthrene	6.451	178	296157	19005.7829735	ppb		100
79) Anthracene	6.492	178	293833	20894.2352570	ppb		98
80) Carbazole	6.610	167	250897	21148.1675444	ppb		99
81) Di-n-butyl phthalate	6.881	149	397421	23698.6563151	ppb		100
83) Fluoranthene	7.457	202	304212	21412.2235528	ppb		100
86) Pyrene	7.686	202	314336	18911.5981484	ppb		99
88) Benzylbutyl phthalate	8.445	149	150478	26024.5200637	ppb		97
90) Benzo(a)anthracene	9.233	228	242646	21018.4091374	ppb		99
91) Chrysene	9.292	228	250717	19529.3570288	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.333	149	225383	26777.0888674	ppb		98
93) Di-n-octyl phthalate	10.569	149	335350	29247.6424441	ppb		99
95) Benzo(b)fluoranthene	11.180	252	230240	22096.3443995	ppb		98
96) Benzo(k)fluoranthene	11.239	252	239541	22391.4257258	ppb		99
97) Benzo(a)pyrene	11.839	252	191805	23713.6445070	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.892	276	170517	22398.0952594	ppb		98
99) Dibenz(a,h)anthracene	13.939	278	192016	22172.7985225	ppb		98
100) Benzo(g,h,i)perylene	14.233	276	201342	21390.6206879	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_07.D  
Acq On : 31 Mar 2022 6:49 pm  
Operator : 3545  
Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 7 Sample Multiplier: 1

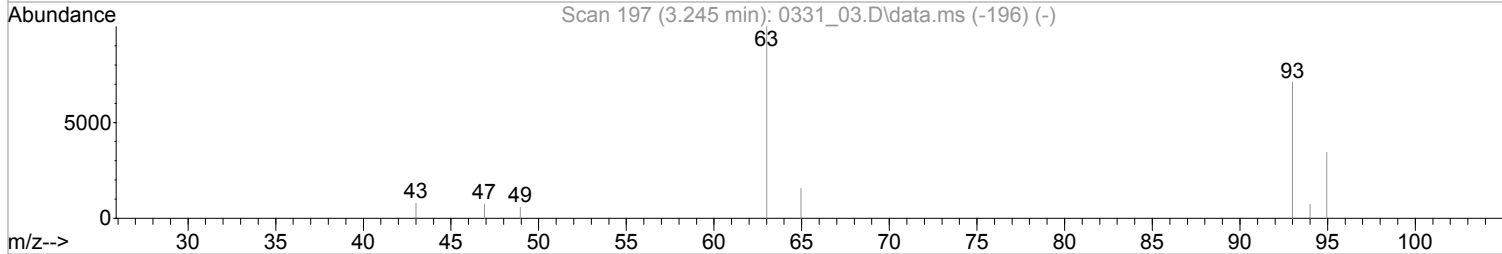
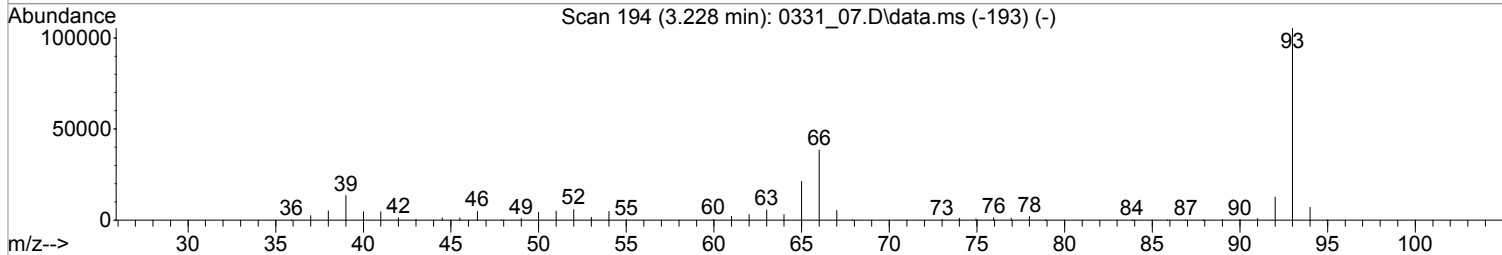
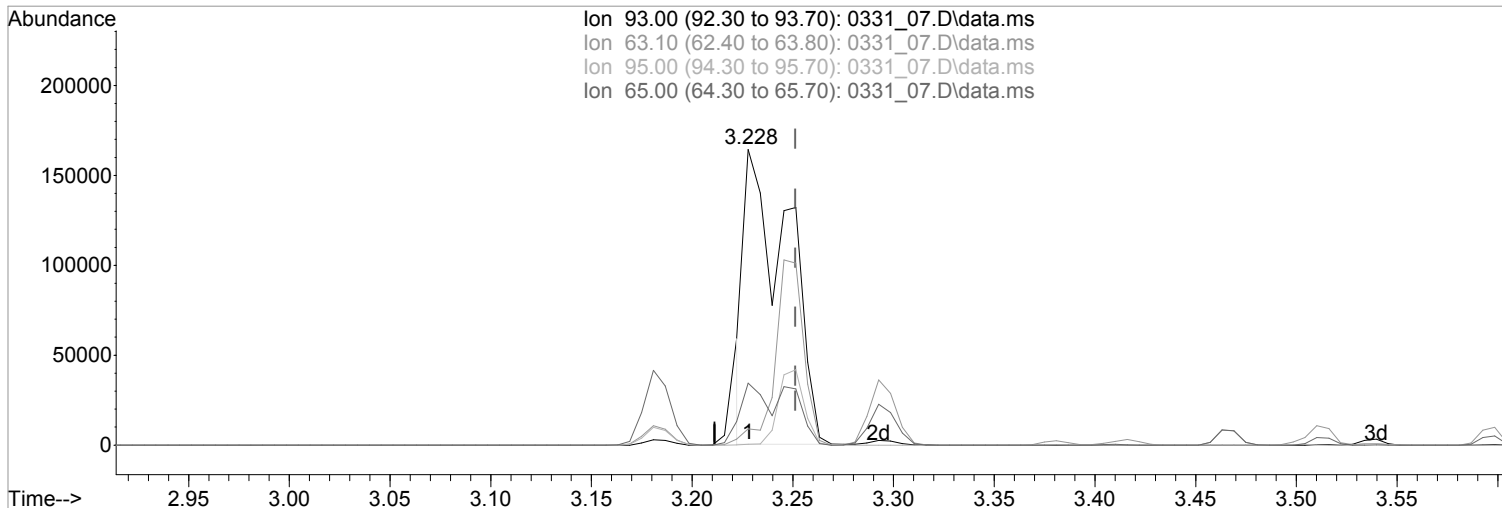
Quant Time: Apr 04 16:06:30 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:05:43 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

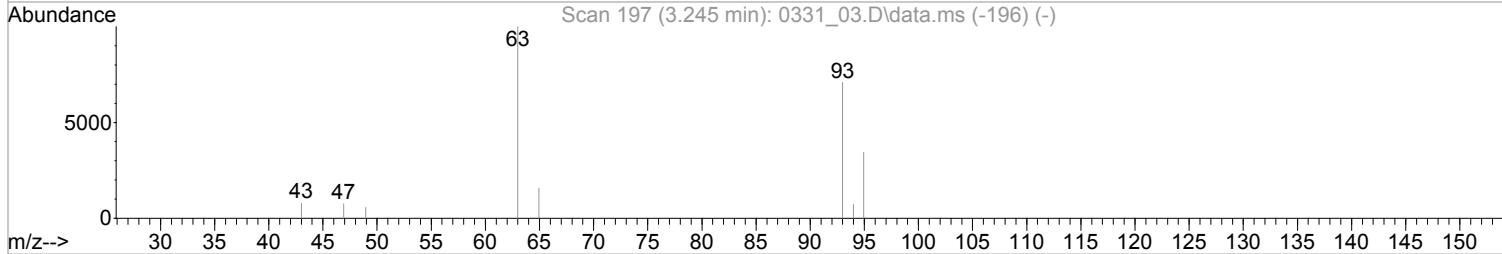
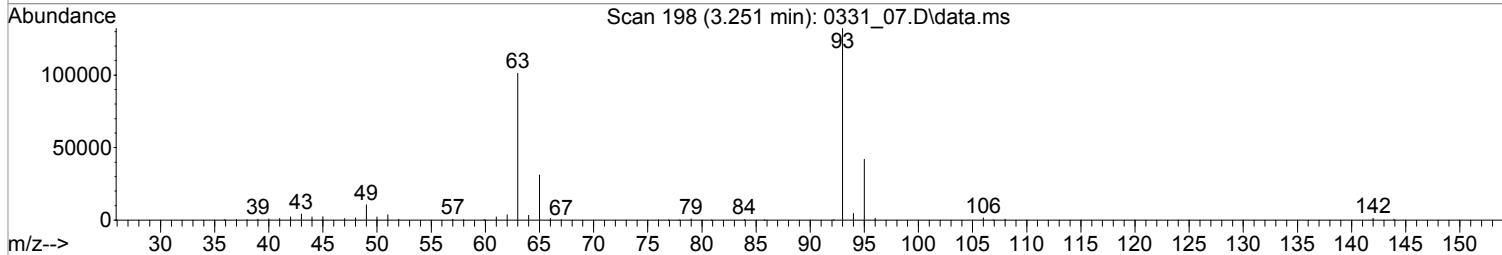
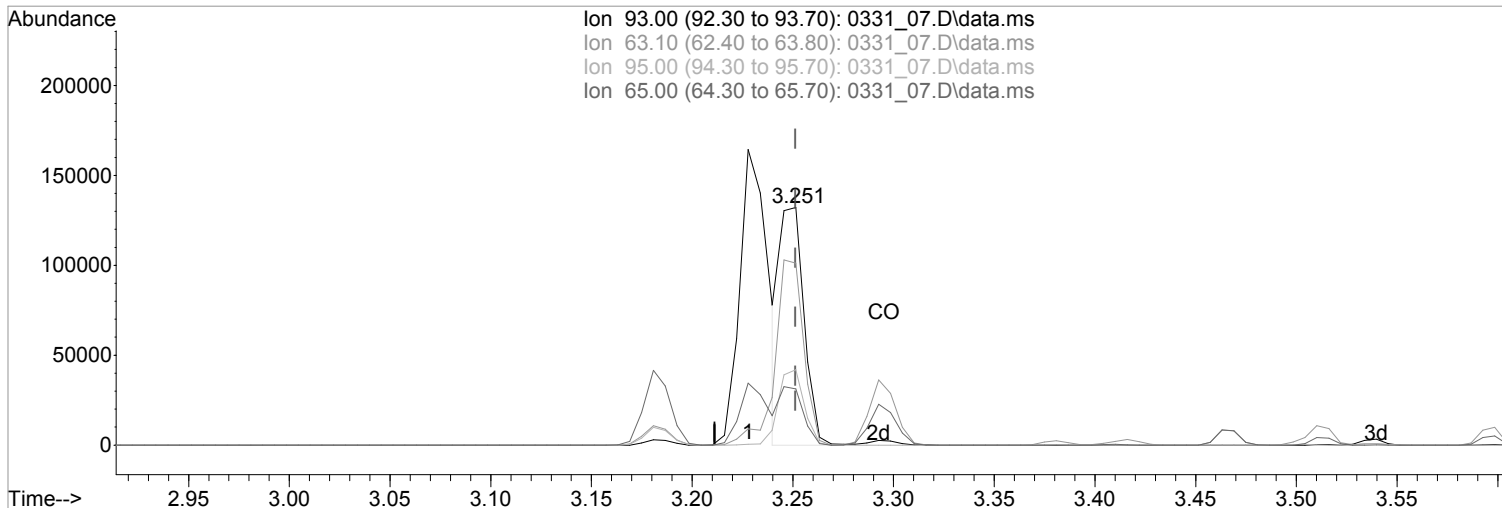
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 43763.3668852 ppb  
 Qvalue = 38  
 response 244529

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.53#
95.00	31.90	0.24#
65.00	23.10	20.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (+0.000) 19845.2727506 ppb m

response 110886

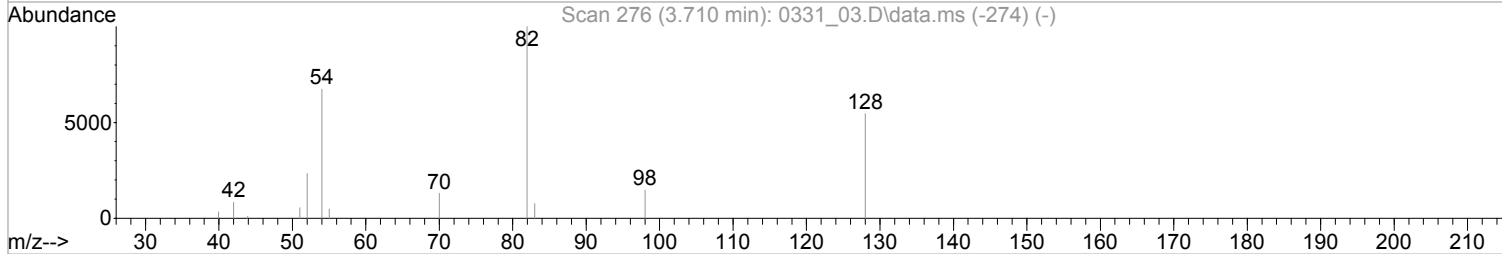
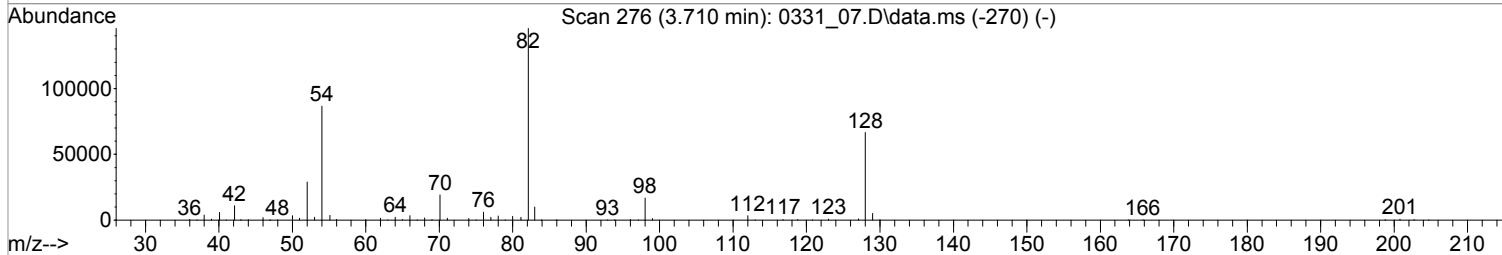
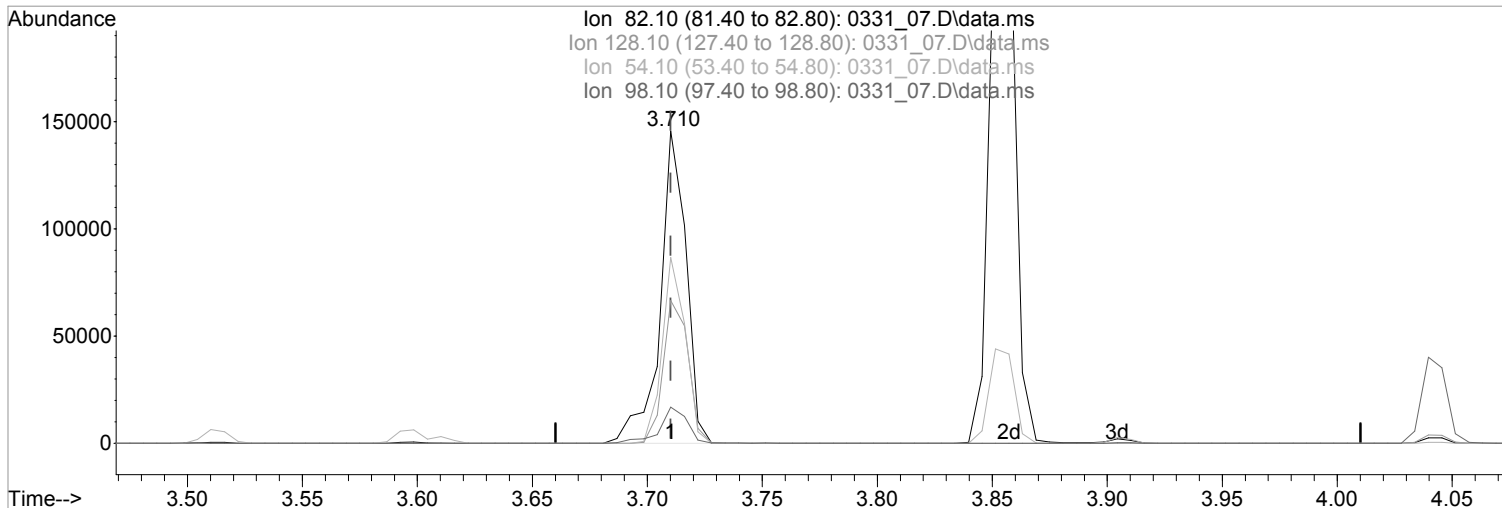
Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.56
95.00	31.90	31.70
65.00	23.10	23.63



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

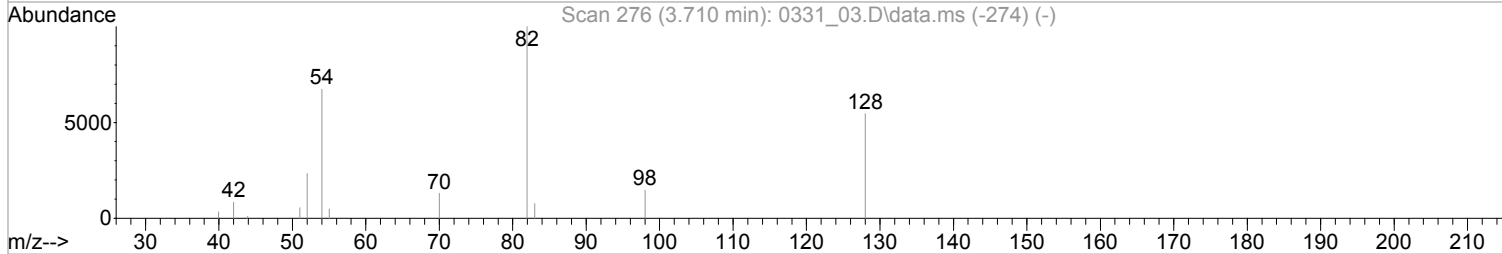
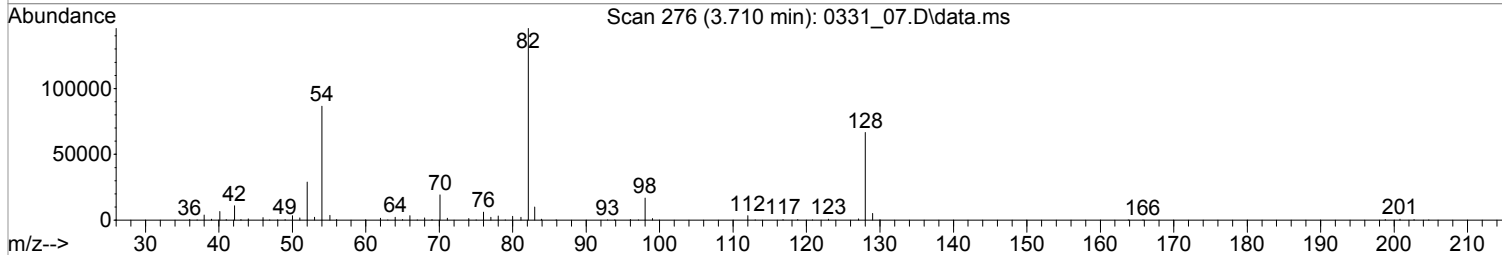
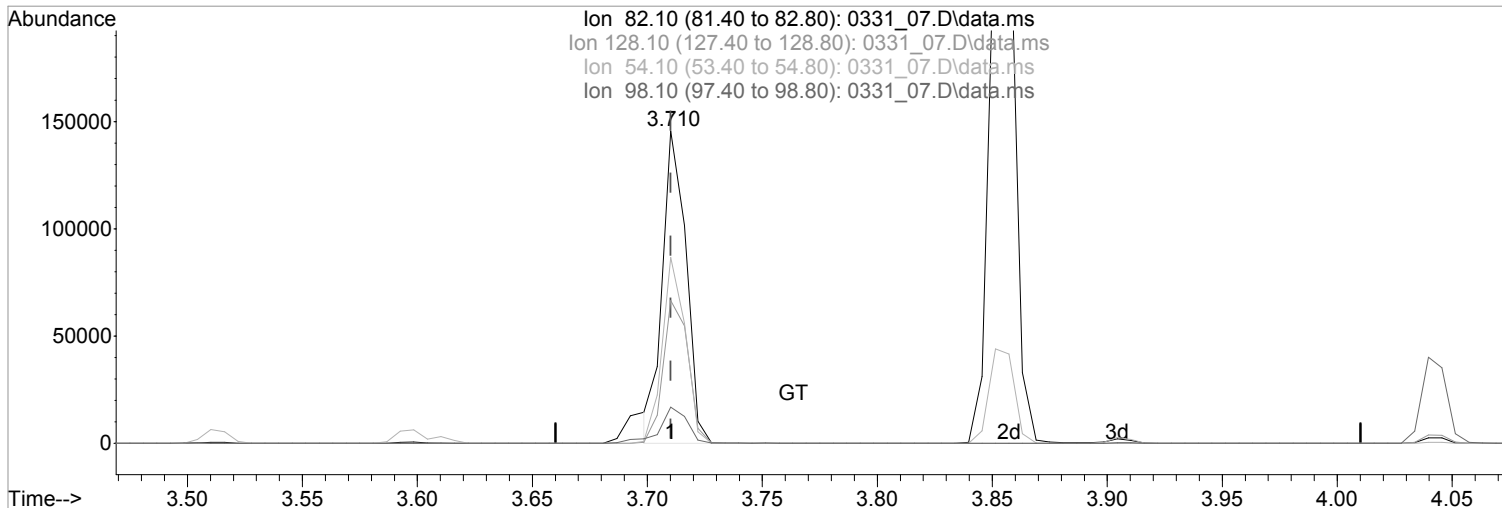
(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 22875.1937247 ppb  
 Qvalue = 99  
 response 114115

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.73
54.10	60.00	59.51
98.10	11.40	11.59

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 20771.1930820 ppb m

response 103619

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.73
54.10	60.00	59.51
98.10	11.40	11.59

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:49 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.410	152	33533	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	132888	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	71209	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	113292	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	87467	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	76329	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.740	112	157758	30058.8366266	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	150.29%		
7) Phenol-d5	3.175	99	188380	30349.6666052	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	151.75%		
24) Nitrobenzene-d5	3.710	82	156535m	31417.3001484	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	314.17%		
50) 2-Fluorobiphenyl	4.828	172	327473	28019.5521228	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	280.20%		
73) 2,4,6-Tribromophenol	5.893	330	40030	36711.9598208	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	183.56%		
87) p-Terphenyl-d14	7.845	244	360600	29247.0817353	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	292.47%		
<b>Target Compounds</b>							
					Qvalue		
2) Pyridine	2.210	79	166662	29894.4173979	ppb	100	
3) N-Nitrosodimethylamine	2.199	42	78907	25331.1714229	ppb	95	
5) Aniline	3.228	66	87768	30666.1270466	ppb	#	21
6) bis(2-Chloroethyl)ether	3.252	93	167703m	29396.0633812	ppb		
8) Phenol	3.181	94	199062	30156.9423564	ppb	98	
10) 2-Chlorophenol	3.293	128	167459	30696.8769867	ppb	98	
11) n-Decane	3.293	41	100554	27262.1829473	ppb	#	100
12) 1,3-Dichlorobenzene	3.381	146	181714	28044.3611384	ppb	99	
13) 1,4-Dichlorobenzene	3.416	146	183675	28414.8902144	ppb	96	
14) Benzyl Alcohol	3.469	79	124720	31658.3456118	ppb	99	
15) 1,2-Dichlorobenzene	3.505	146	175099	27881.5403292	ppb	98	
16) bis(2-Chloroisopropyl)...	3.540	121	61647	28780.6723560	ppb	98	
17) 2,2-oxybis(1-chloropro...	3.540	121	61647	28780.6723560	ppb	98	
18) 2-Methylphenol	3.516	108	150526	30596.0667961	ppb	98	
19) Hexachloroethane	3.699	117	77143	28865.7035157	ppb	98	
20) N-Nitrosodi-n-propylamine	3.610	70	108538	31521.0408970	ppb	98	
21) 3&4-Methyl phenol	3.599	107	166101	30650.5927115	ppb	97	
25) Nitrobenzene	3.722	77	159382	31629.7704116	ppb	99	
26) Isophorone	3.857	82	319221	32801.1162840	ppb	91	
27) 2-Nitrophenol	3.904	139	80408	36138.7503562	ppb	94	
28) 2,4-Dimethylphenol	3.910	107	156274	31782.4235741	ppb	96	
29) bis(2-Chlorethoxy)methane	3.969	93	204569	30233.5957475	ppb	100	
30) 2,4-Dichlorophenol	4.046	162	125694	32863.6826156	ppb	98	
32) 1,2,4-Trichlorobenzene	4.104	180	138967	28801.2375631	ppb	97	
34) Naphthalene	4.157	128	484005	28128.6272547	ppb	99	
35) 4-Chloroaniline	4.175	65	54919	32675.6461647	ppb	96	
36) Hexachloro-1,3-butadiene	4.222	225	75737	29172.5927324	ppb	97	
40) 4-Chloro-3-methylphenol	4.463	107	134853	34638.6550486	ppb	98	
41) 2-Methylnaphthalene	4.593	142	316159	30065.4368411	ppb	100	
42) 1-Methylnaphthalene	4.657	142	304694	29606.4143326	ppb	100	
47) Hexachlorocyclopentadiene	4.693	237	75322	34074.3338440	ppb	99	
48) 2,4,6-Trichlorophenol	4.769	196	87140	34725.8348305	ppb	100	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

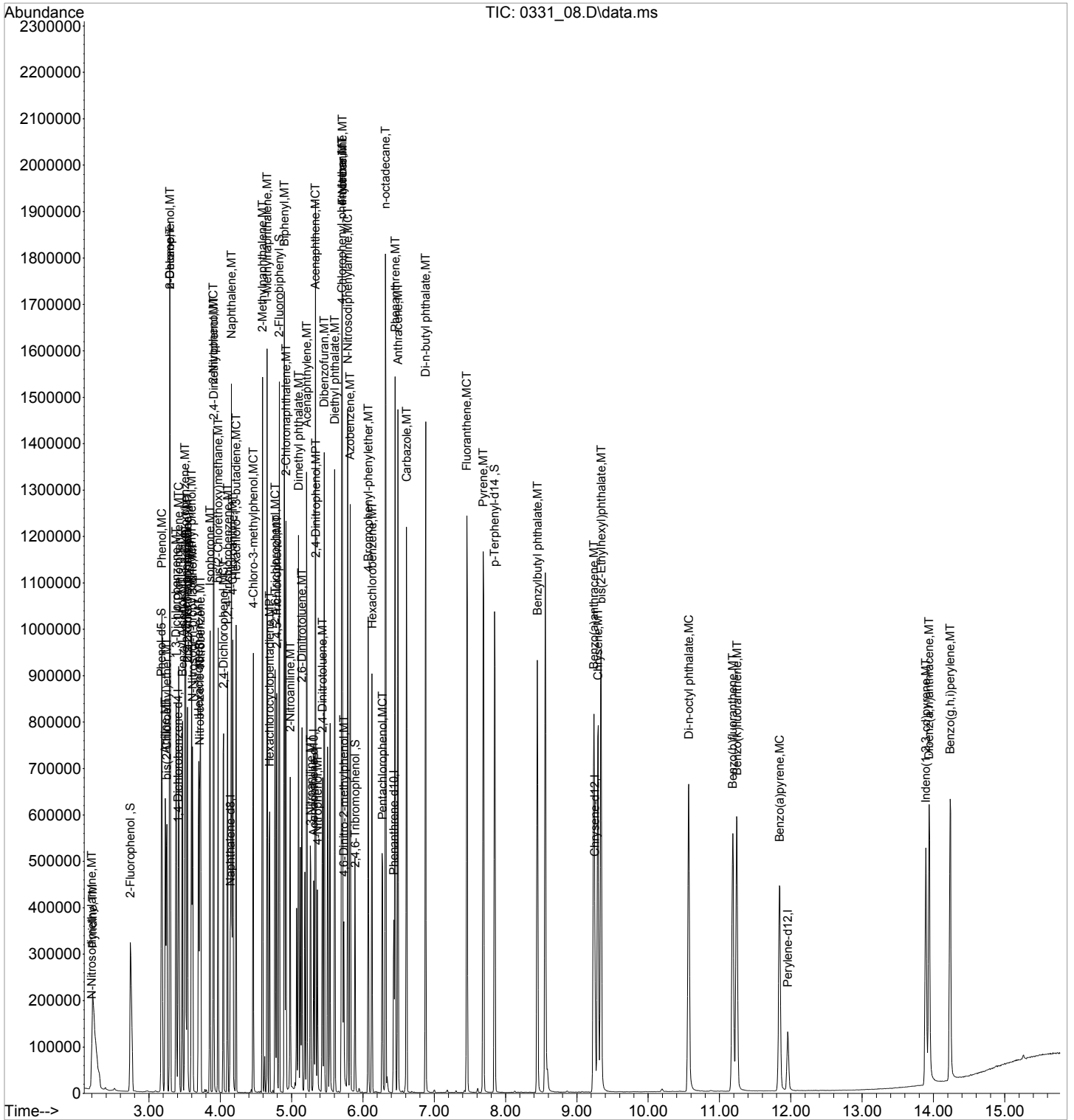
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 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.793	196	89614	35235.8306483	ppb		99
51) Biphenyl	4.899	154	370899	28344.5233795	ppb		99
52) 2-Chloronaphthalene	4.922	162	290244	28880.4016682	ppb		99
53) 2-Nitroaniline	4.981	138	95458	38358.7007923	ppb		99
54) Acenaphthylene	5.210	152	458154	30177.5291948	ppb		99
55) Dimethyl phthalate	5.099	163	343325	31405.3999860	ppb		94
56) 2,6-Dinitrotoluene	5.146	165	79641	35496.2824813	ppb		83
57) 3-Nitroaniline	5.269	138	74618	37042.4932595	ppb	#	82
58) Acenaphthene	5.334	153	302900	28980.0110439	ppb		98
59) 2,4-Dinitrophenol	5.340	184	25983	43826.4078457	ppb	#	52
60) Dibenzofuran	5.457	168	402364	28734.3638947	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	97371	37793.9835615	ppb		95
63) 4-Nitrophenol	5.363	139	54940	40107.1900866	ppb		98
64) Fluorene	5.710	166	338730	29464.9250158	ppb		98
65) 4-Chlorophenyl-phenyle...	5.704	204	151460	28589.2736068	ppb		98
66) Diethyl phthalate	5.604	149	355063	30937.0312942	ppb		99
67) 4-Nitroaniline	5.710	138	39081	27211.9905793	ppb		94
68) Azobenzene	5.822	77	356467	31032.1721850	ppb		100
71) 4,6-Dinitro-2-methylph...	5.734	198	40447	47521.4488194	ppb		96
72) N-Nitrosodiphenylamine	5.787	169	271452	30777.8016182	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	82403	30239.5448272	ppb		95
75) Hexachlorobenzene	6.128	284	93062	28547.9722569	ppb		99
76) n-octadecane	6.316	55	65192	30769.5273176	ppb		98
77) Pentachlorophenol	6.275	266	49246	37560.7979317	ppb		99
78) Phenanthrene	6.451	178	440824	28484.0401965	ppb		99
79) Anthracene	6.493	178	437751	30755.2925924	ppb		98
80) Carbazole	6.610	167	385203	31999.4175581	ppb		99
81) Di-n-butyl phthalate	6.881	149	608371	34873.9743472	ppb		100
83) Fluoranthene	7.457	202	461554	31933.8146061	ppb		100
86) Pyrene	7.687	202	472544	27909.1131163	ppb		99
88) Benzylbutyl phthalate	8.445	149	240272	38056.0281756	ppb		98
90) Benzo(a)anthracene	9.239	228	379776	31620.6351628	ppb		99
91) Chrysene	9.298	228	380085	28883.5511661	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.339	149	354516	38301.5951884	ppb		98
93) Di-n-octyl phthalate	10.569	149	549350	42584.0048156	ppb		100
95) Benzo(b)fluoranthene	11.186	252	363170	33596.9345021	ppb		98
96) Benzo(k)fluoranthene	11.245	252	363957	32700.0638399	ppb		99
97) Benzo(a)pyrene	11.845	252	303156	35565.4967114	ppb		100
98) Indeno(1,2,3-cd)pyrene	13.892	276	271655	34294.8931437	ppb		99
99) Dibenz(a,h)anthracene	13.939	278	299709	33335.5644575	ppb		97
100) Benzo(g,h,i)perylene	14.233	276	310410	32010.1091947	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_08.D  
Acq On : 31 Mar 2022 7:11 pm  
Operator : 3545  
Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 8 Sample Multiplier: 1

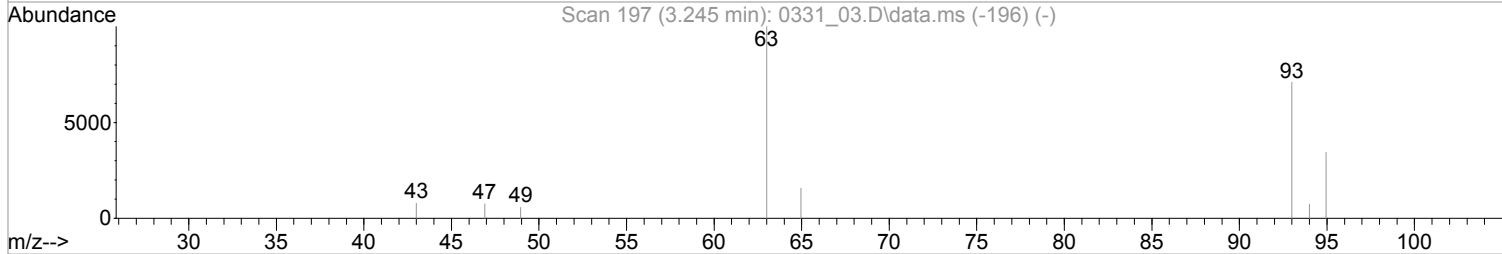
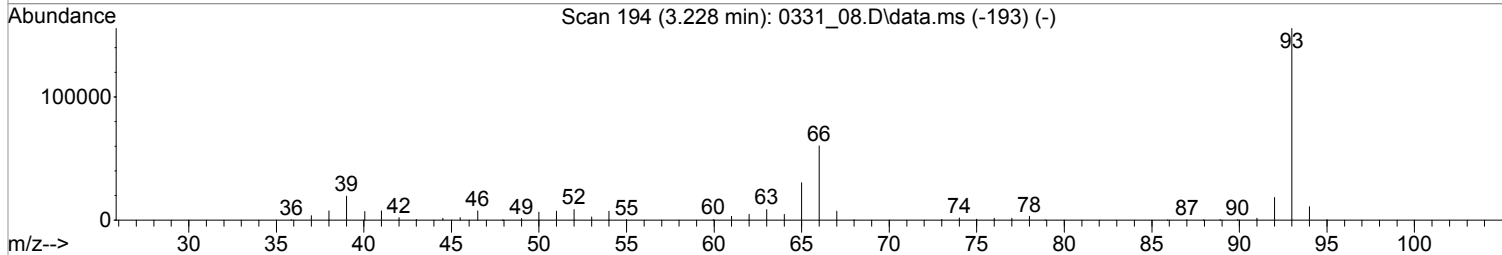
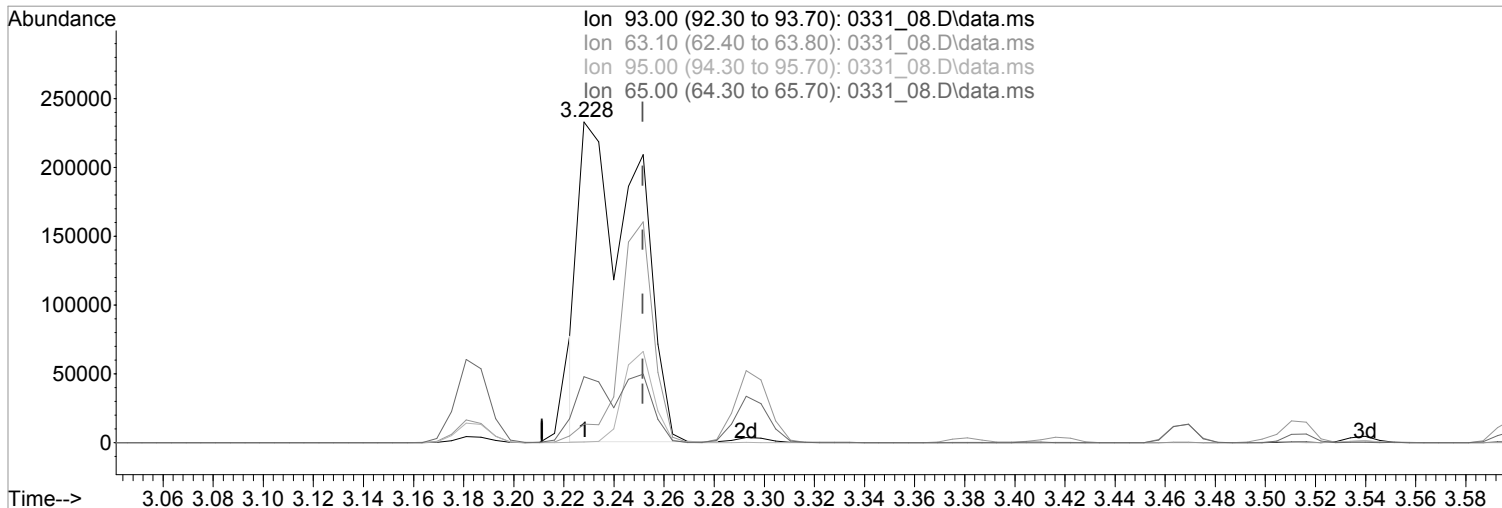
Quant Time: Apr 04 16:07:49 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:07:10 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

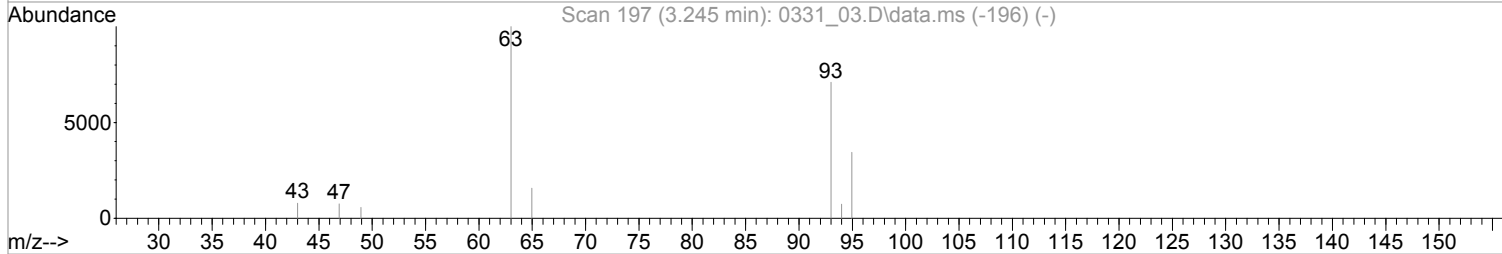
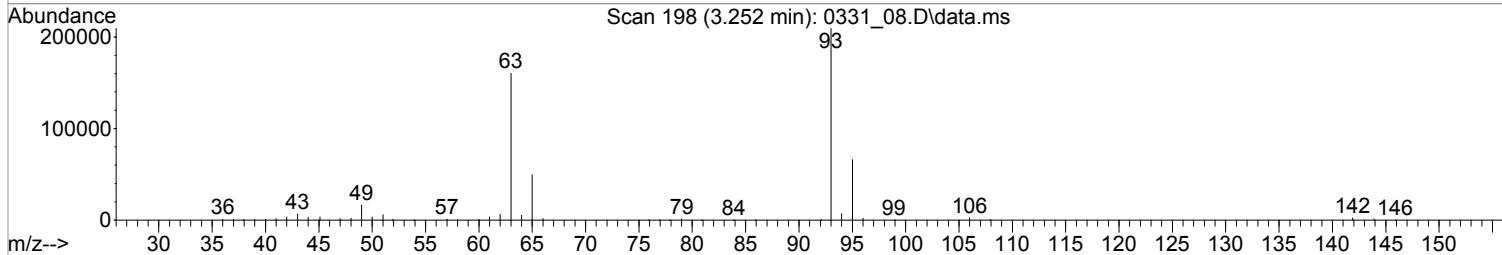
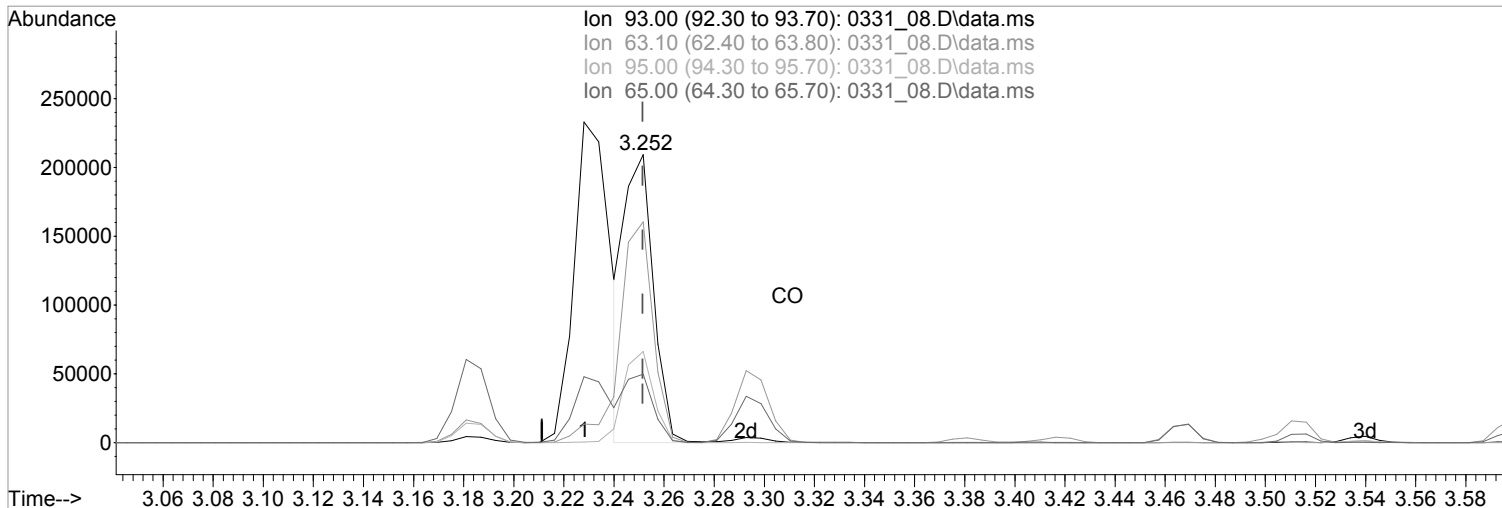
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.023) 64297.1729842 ppb  
 Qvalue = 37  
 response 366812

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	4.74#
95.00	31.90	0.23#
65.00	23.10	20.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.252min (+0.000) 29396.0633812 ppb m

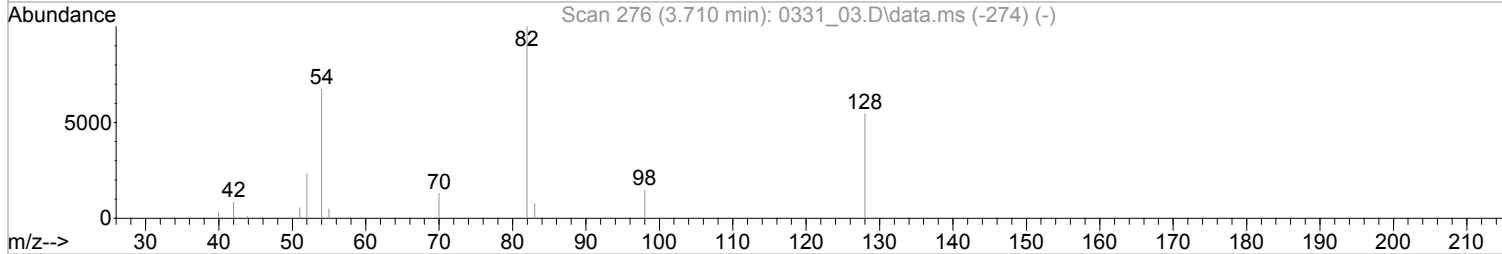
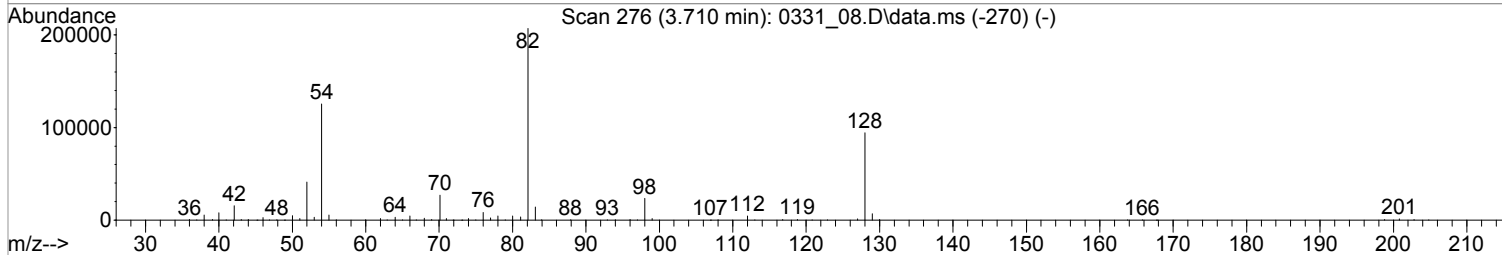
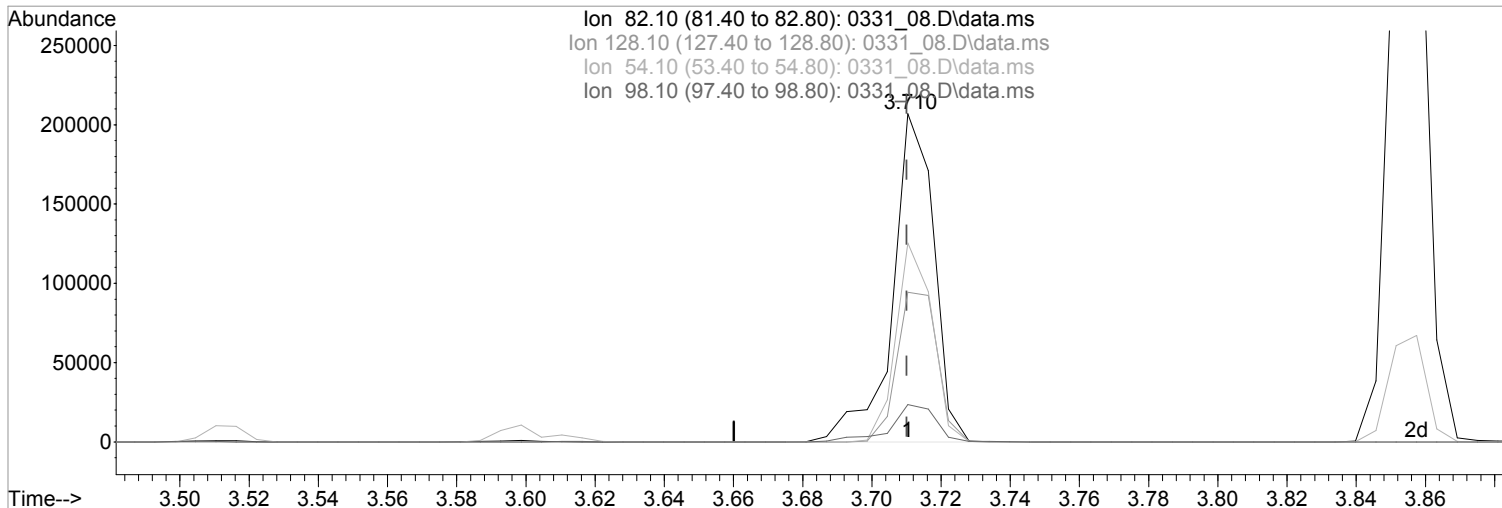
response 167703

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.64
95.00	31.90	31.63
65.00	23.10	23.78

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 34452.1549448 ppb  
 Qvalue = 99  
 response 171656

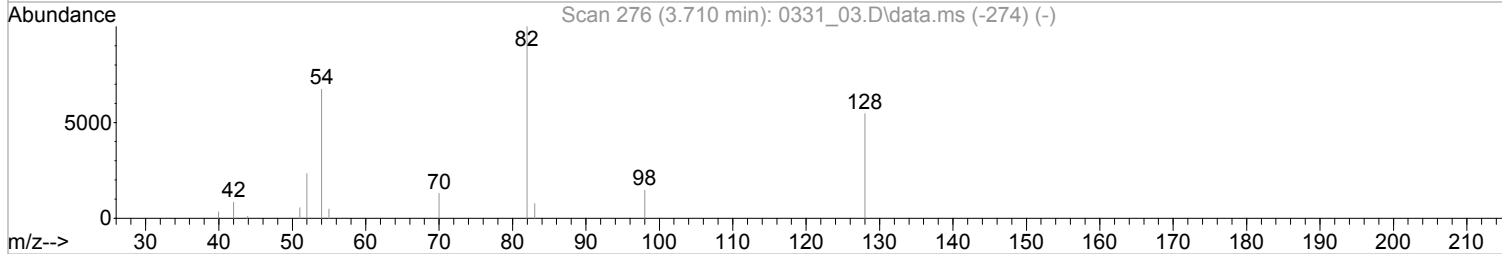
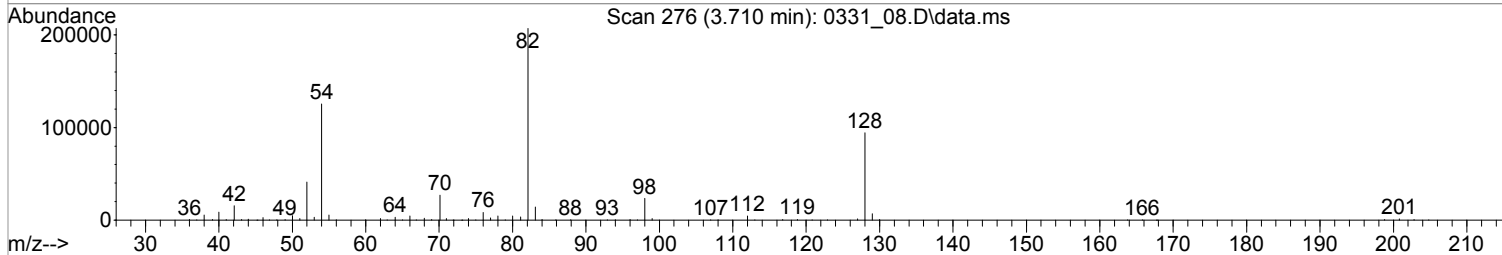
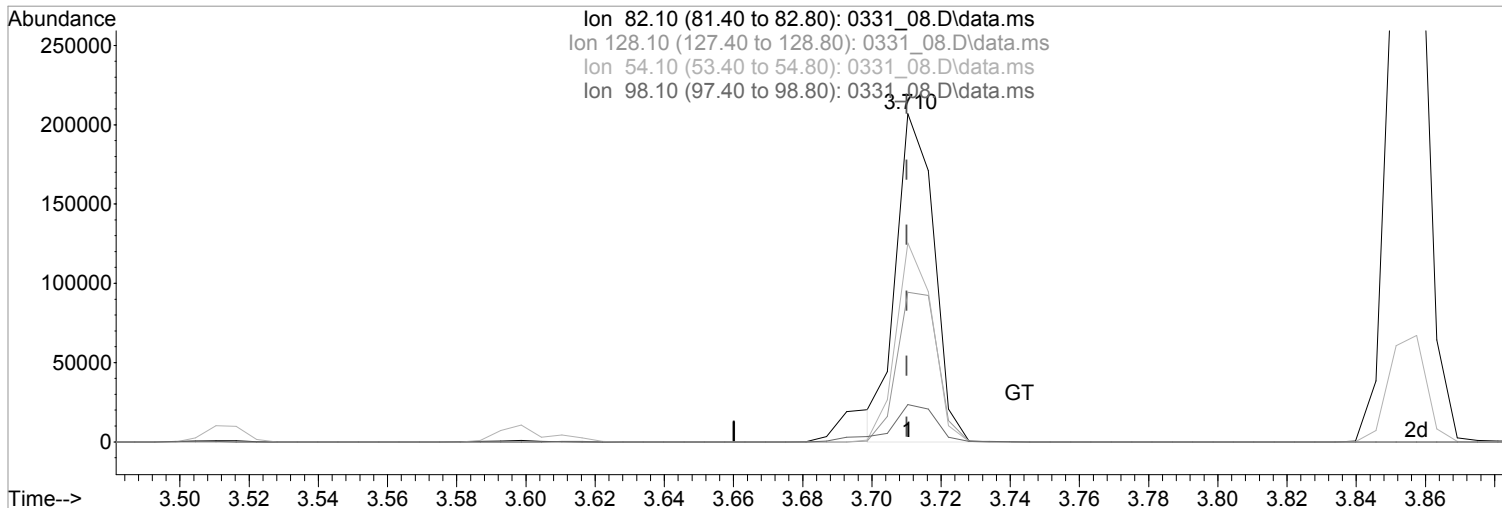
Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.54
54.10	60.00	60.63
98.10	11.40	11.35



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 31417.3001484 ppb m

response 156535

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.54
54.10	60.00	60.63
98.10	11.40	11.35

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:09:21 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.410	152	33061	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	133057	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	71412	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	114930	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	88961	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	77968	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.740	112	203931	39398.3935171	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	196.99%		
7) Phenol-d5	3.175	99	243776	39757.9207209	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	198.79%		
24) Nitrobenzene-d5	3.710	82	206939m	41156.7993172	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	411.57%		
50) 2-Fluorobiphenyl	4.828	172	421450	36358.0213610	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	363.58%		
73) 2,4,6-Tribromophenol	5.892	330	52112	45093.5757565	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	225.47%		
87) p-Terphenyl-d14	7.845	244	468126	37487.3348476	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	374.87%		
<b>Target Compounds</b>							
							Qvalue
2) Pyridine	2.210	79	215337	39199.7597546	ppb		99
3) N-Nitrosodimethylamine	2.199	42	101884	34057.7162643	ppb		95
5) Aniline	3.228	66	113937	40229.0431035	ppb	#	20
6) bis(2-Chloroethyl)ether	3.251	93	219184m	39099.6807544	ppb		
8) Phenol	3.187	94	256473	39374.8144871	ppb		94
10) 2-Chlorophenol	3.293	128	217896	40356.4763866	ppb		98
11) n-Decane	3.293	41	127032	35472.1283692	ppb	#	98
12) 1,3-Dichlorobenzene	3.381	146	234296	37078.5499497	ppb		99
13) 1,4-Dichlorobenzene	3.422	146	235807	37329.3526295	ppb		99
14) Benzyl Alcohol	3.469	79	162508	41457.2445089	ppb		100
15) 1,2-Dichlorobenzene	3.504	146	223975	36604.1805905	ppb		98
16) bis(2-Chloroisopropyl)...	3.540	121	78759	37548.9281211	ppb		99
17) 2,2-oxybis(1-chloropro...	3.540	121	78759	37548.9281211	ppb		99
18) 2-Methylphenol	3.516	108	195561	40184.3520115	ppb		99
19) Hexachloroethane	3.698	117	99275	37916.4240494	ppb		97
20) N-Nitrosodi-n-propylamine	3.616	70	141625	41367.6274712	ppb		94
21) 3&4-Methyl phenol	3.598	107	215277	40147.0649295	ppb		97
25) Nitrobenzene	3.722	77	207934	40842.8260253	ppb		99
26) Isophorone	3.857	82	414425	41877.8923137	ppb		93
27) 2-Nitrophenol	3.904	139	106429	45894.6910183	ppb		93
28) 2,4-Dimethylphenol	3.910	107	201269	40480.4960184	ppb		97
29) bis(2-Chlorethoxy)methane	3.969	93	263088	38782.5012305	ppb		99
30) 2,4-Dichlorophenol	4.045	162	161714	41566.3970266	ppb		95
32) 1,2,4-Trichlorobenzene	4.104	180	177380	36961.8874658	ppb		97
34) Naphthalene	4.157	128	612175m	35905.5101669	ppb		
35) 4-Chloroaniline	4.175	65	72463	42304.5815986	ppb		93
36) Hexachloro-1,3-butadiene	4.222	225	96557	37316.3930938	ppb		98
40) 4-Chloro-3-methylphenol	4.463	107	178473	44634.5178058	ppb		95
41) 2-Methylnaphthalene	4.592	142	405791	38526.0570869	ppb		99
42) 1-Methylnaphthalene	4.657	142	392103	38134.7387840	ppb		100
47) Hexachlorocyclopentadiene	4.692	237	99377	43836.3485368	ppb		100
48) 2,4,6-Trichlorophenol	4.769	196	115768	44826.2313232	ppb		99

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

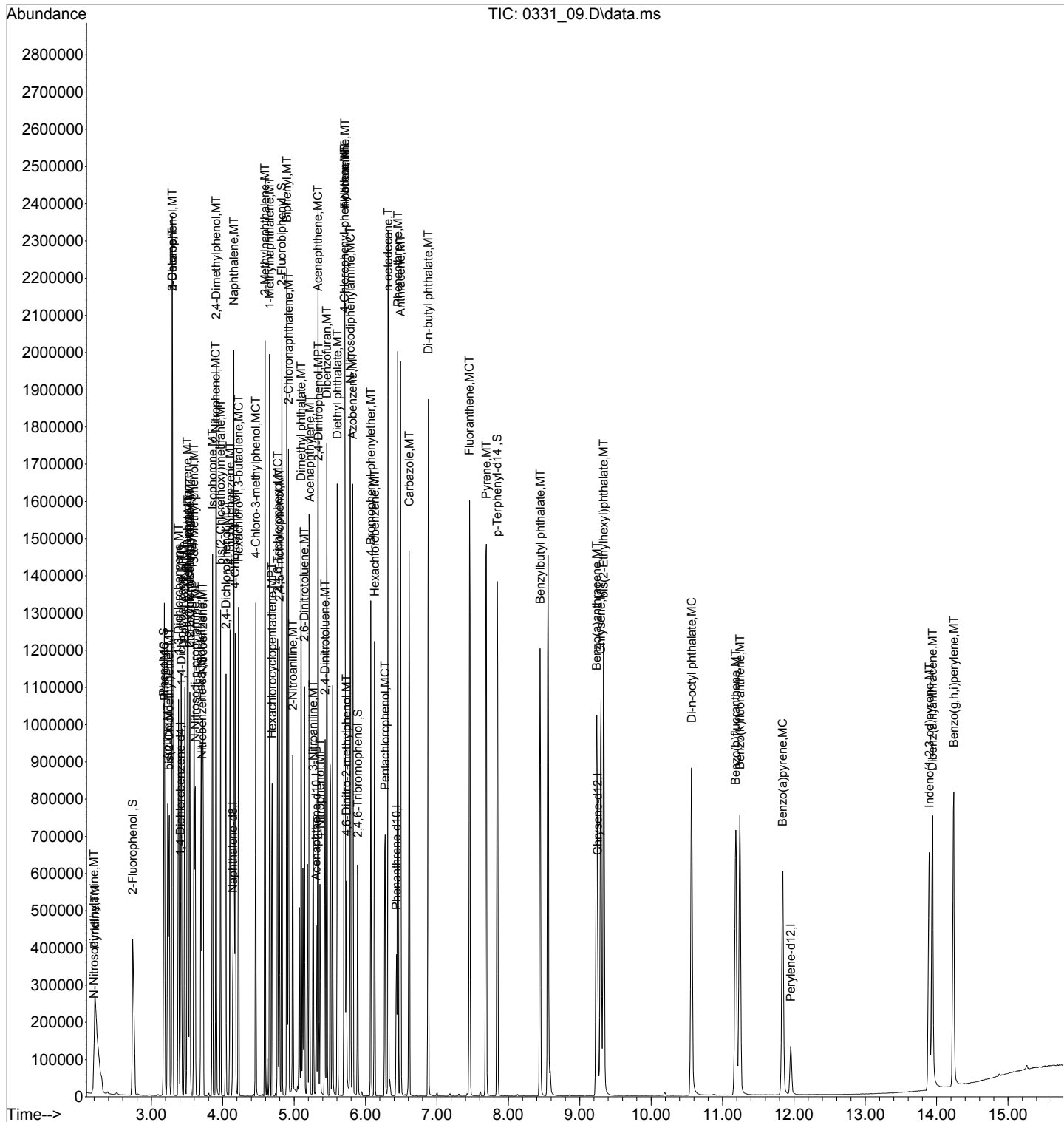
Quant Time: Apr 04 16:09:21 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	119302	45453.5255064	ppb		96
51) Biphenyl	4.898	154	480393	36947.6299186	ppb		99
52) 2-Chloronaphthalene	4.922	162	373851	37326.0436365	ppb		98
53) 2-Nitroaniline	4.981	138	127833	48518.5215917	ppb		99
54) Acenaphthylene	5.216	152	592569	38881.8295975	ppb		99
55) Dimethyl phthalate	5.098	163	444091	40193.5954557	ppb		92
56) 2,6-Dinitrotoluene	5.145	165	103807	44504.8915003	ppb		87
57) 3-Nitroaniline	5.269	138	96588	45668.5841609	ppb		87
58) Acenaphthene	5.334	153	388931	37316.7229950	ppb		99
59) 2,4-Dinitrophenol	5.339	184	36205	54603.2195077	ppb	#	61
60) Dibenzofuran	5.457	168	518647	37194.8213715	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	127967	47082.0688130	ppb		92
63) 4-Nitrophenol	5.363	139	72385	49365.8107588	ppb		89
64) Fluorene	5.710	166	434013	37758.1780561	ppb		99
65) 4-Chlorophenyl-phenyle...	5.704	204	192964	36606.8438369	ppb		98
66) Diethyl phthalate	5.604	149	453615	39207.5189475	ppb		99
67) 4-Nitroaniline	5.710	138	53281	37694.5684669	ppb		94
68) Azobenzene	5.822	77	456869	39433.4676522	ppb		99
71) 4,6-Dinitro-2-methylph...	5.734	198	55654	57714.6966225	ppb		89
72) N-Nitrosodiphenylamine	5.787	169	350165	38968.2162355	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	105898	38256.7651444	ppb		98
75) Hexachlorobenzene	6.128	284	118963	36265.8792912	ppb		99
76) n-octadecane	6.316	55	83858	38849.3842584	ppb		99
77) Pentachlorophenol	6.275	266	66534	47058.4196872	ppb		99
78) Phenanthrene	6.451	178	568662	36528.3050546	ppb		99
79) Anthracene	6.492	178	571694	39427.9021495	ppb		98
80) Carbazole	6.610	167	491734	39824.5607550	ppb		99
81) Di-n-butyl phthalate	6.881	149	777001	42748.1261335	ppb		100
83) Fluoranthene	7.457	202	603883	40747.9721884	ppb		100
86) Pyrene	7.692	202	623307	36620.5339470	ppb		100
88) Benzylbutyl phthalate	8.445	149	321842	47972.5534686	ppb		99
90) Benzo(a)anthracene	9.239	228	501256	40668.1622367	ppb		99
91) Chrysene	9.298	228	495769	37273.1327916	ppb		100
92) bis(2-Ethylhexyl)phtha...	9.333	149	468790	47601.6976177	ppb		99
93) Di-n-octyl phthalate	10.569	149	733280	52235.2983621	ppb		100
95) Benzo(b)fluoranthene	11.186	252	474283	42112.1585885	ppb		98
96) Benzo(k)fluoranthene	11.245	252	481495	41725.0907736	ppb		99
97) Benzo(a)pyrene	11.845	252	399588	44516.7656301	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.898	276	354988	42850.6886914	ppb		96
99) Dibenz(a,h)anthracene	13.945	278	390368	41733.1534265	ppb		100
100) Benzo(g,h,i)perylene	14.239	276	403531	40288.2616536	ppb		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

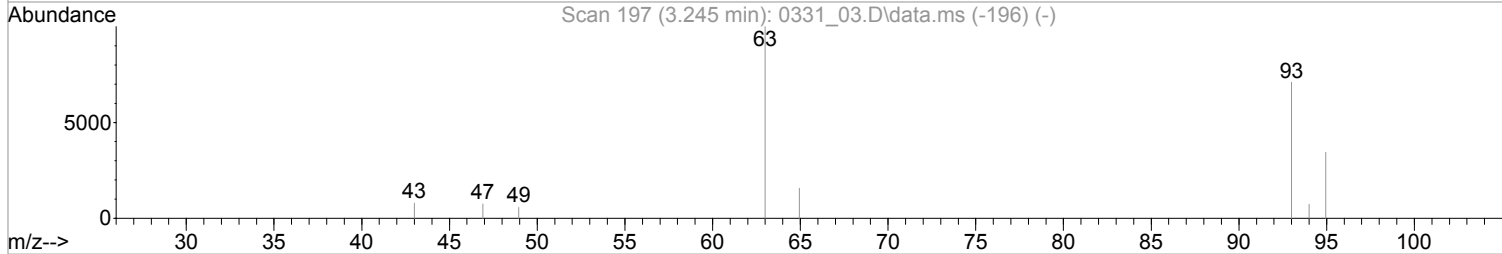
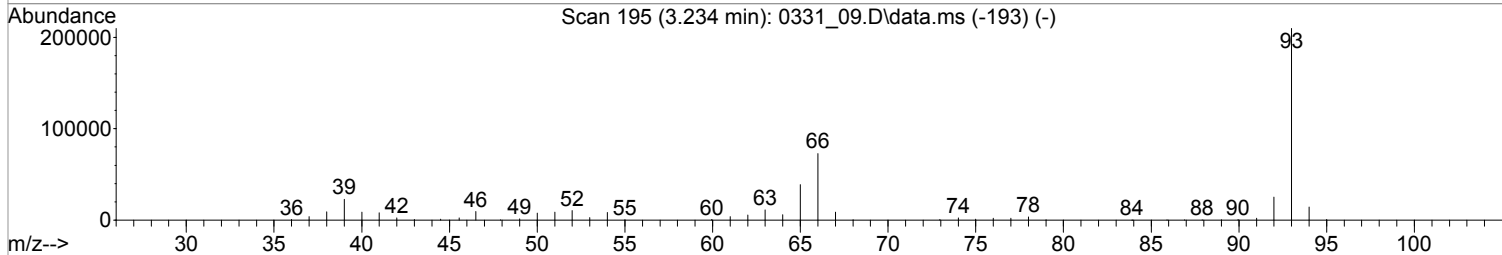
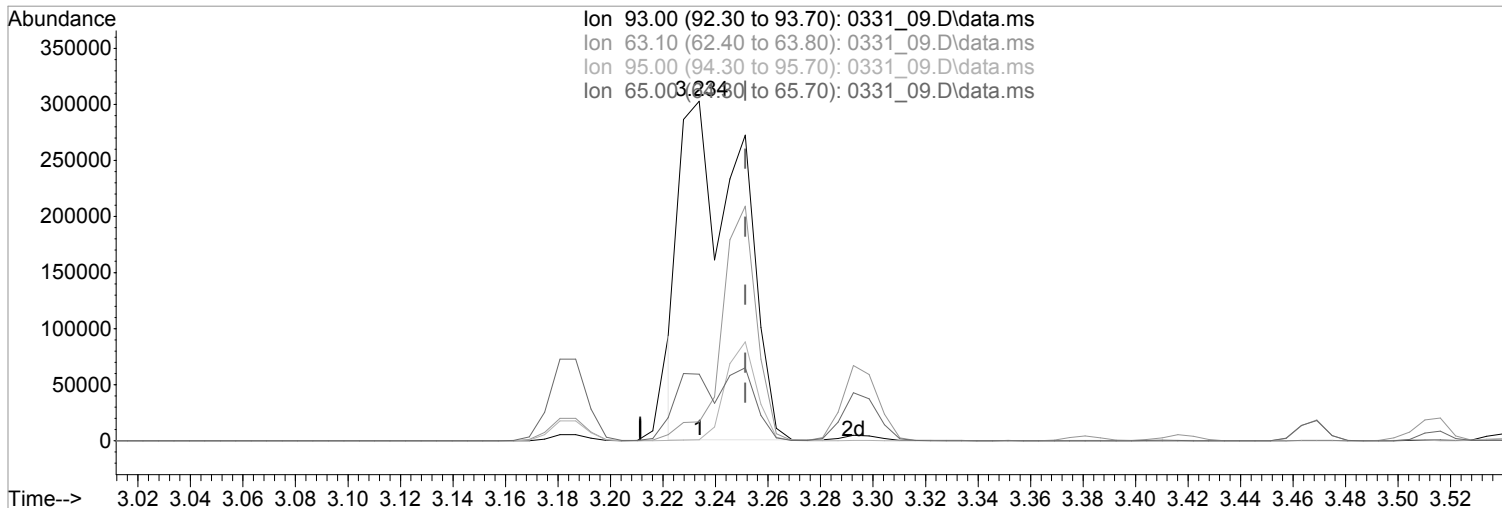
Quant Time: Apr 04 16:09:21 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

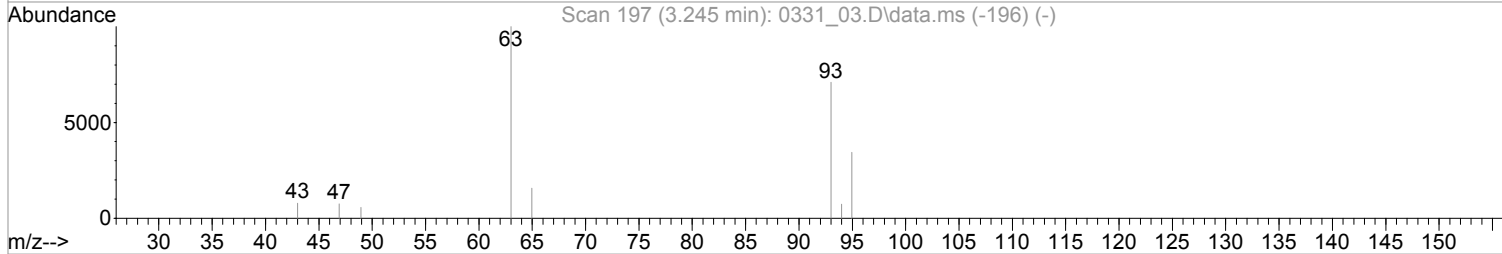
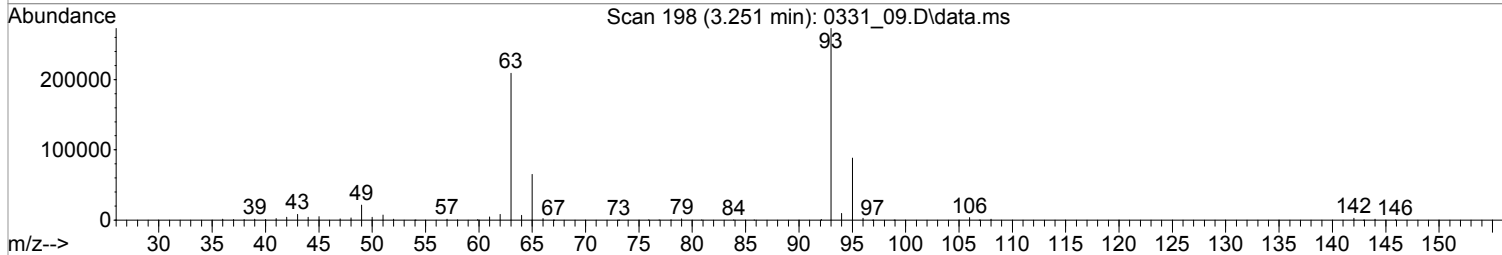
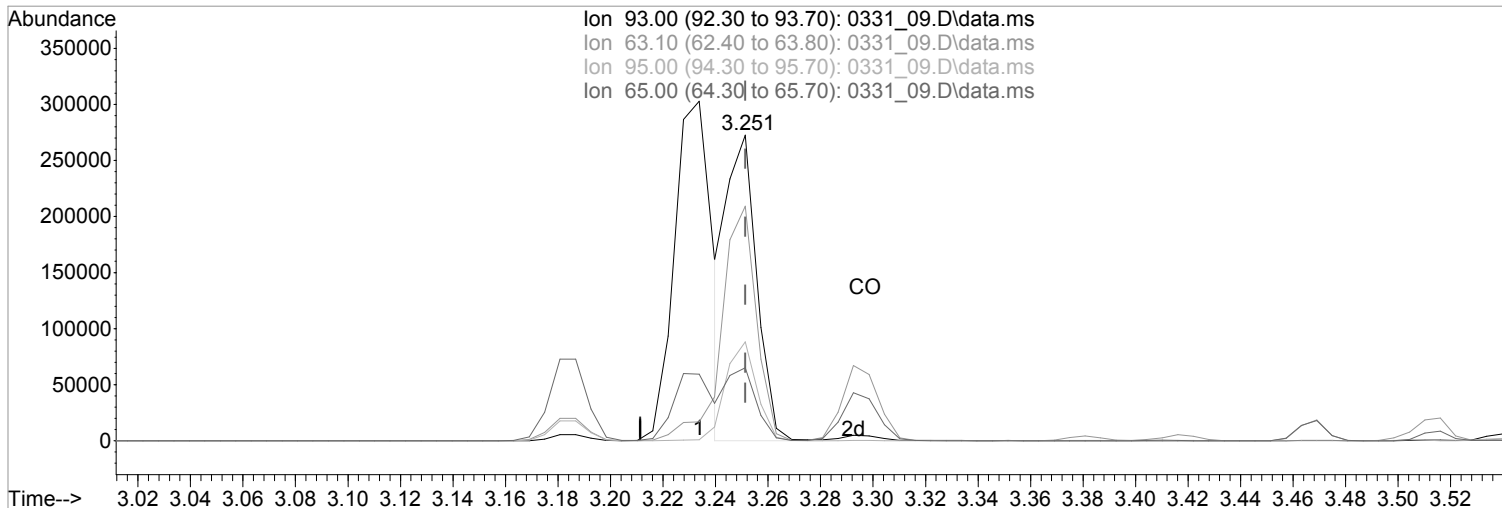
(6) bis(2-Chloroethyl)ether (MT)  
 3.234min (-0.018) 85884.8291794 ppb  
 Qvalue = 36  
 response 481451

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	4.59#
95.00	31.90	0.31#
65.00	23.10	19.03

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (-0.000) 39099.6807544 ppb m

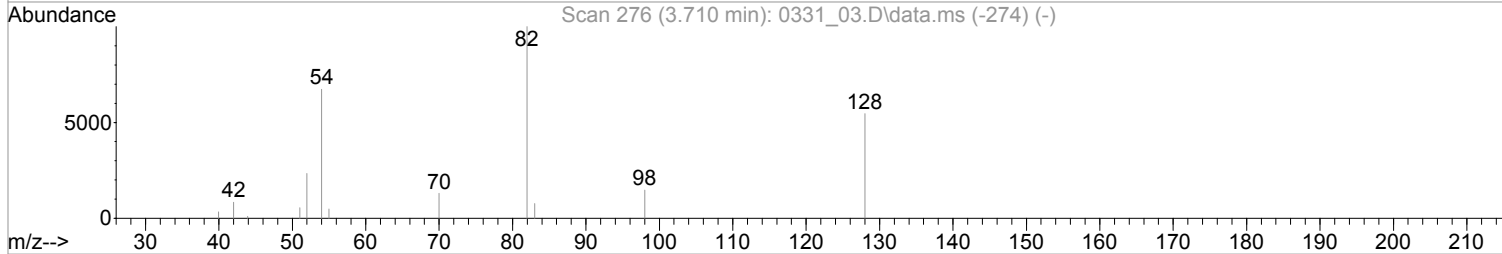
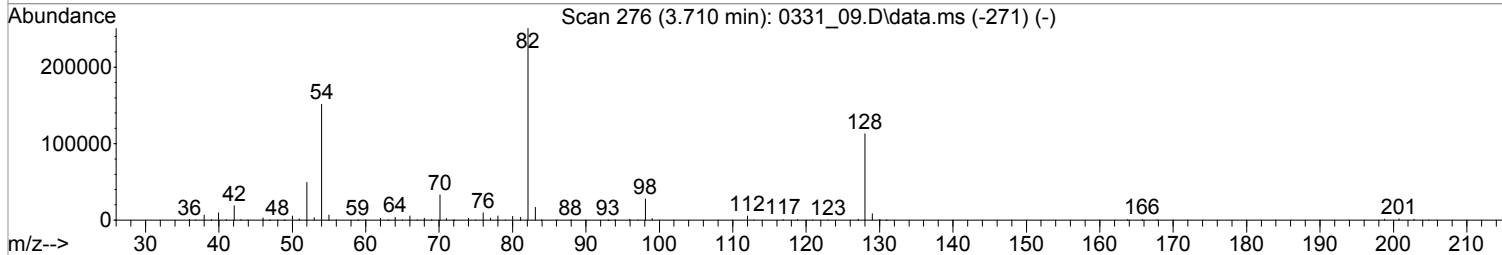
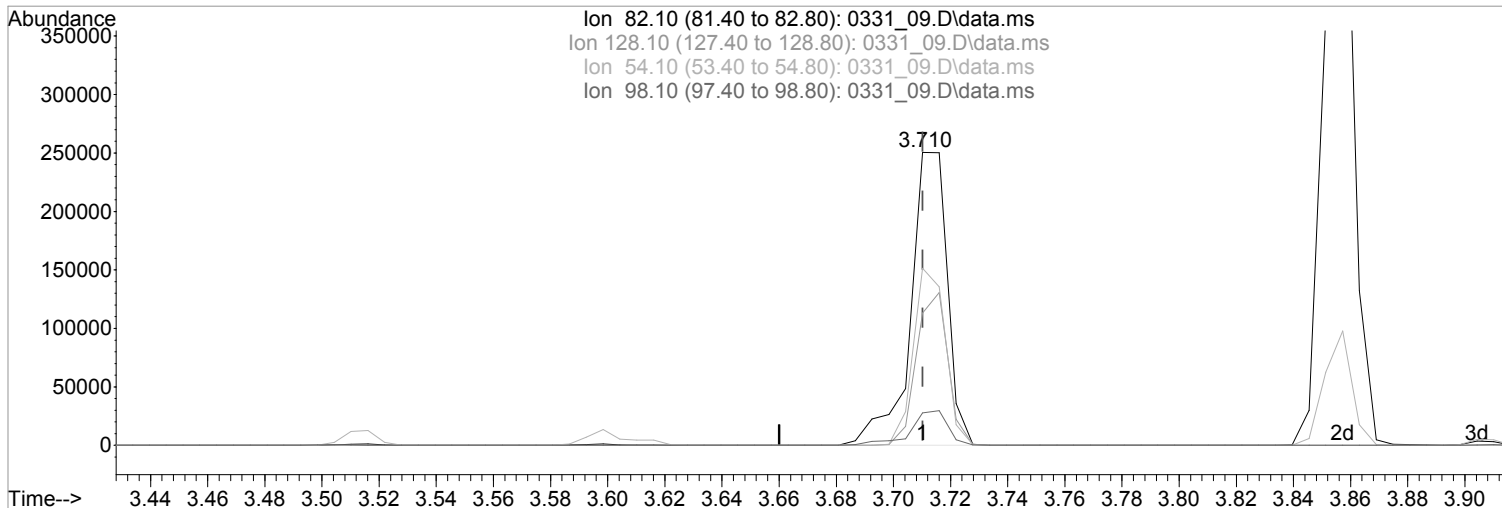
response 219184

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.70
95.00	31.90	32.33
65.00	23.10	23.85

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

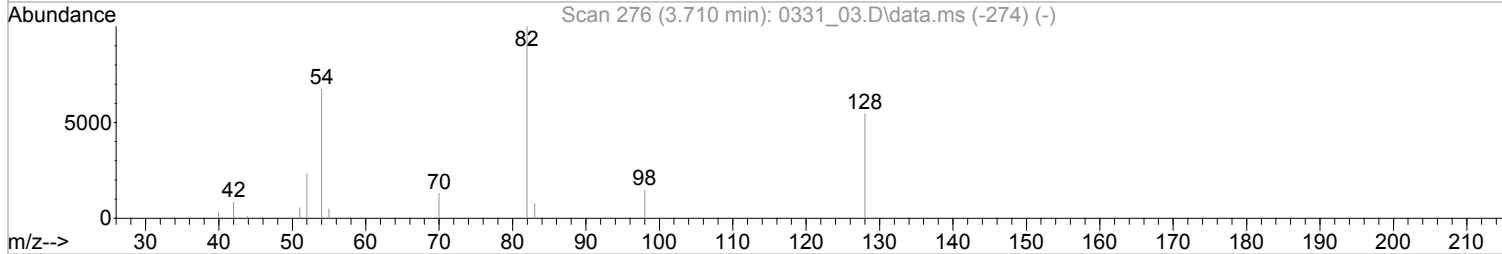
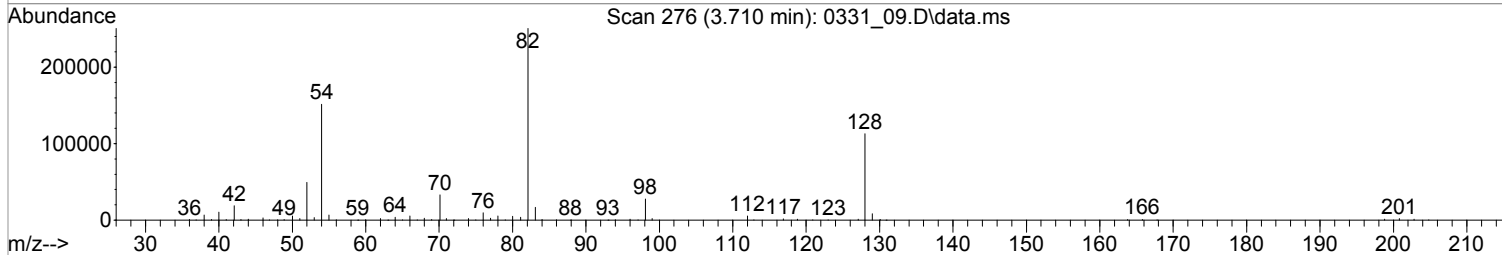
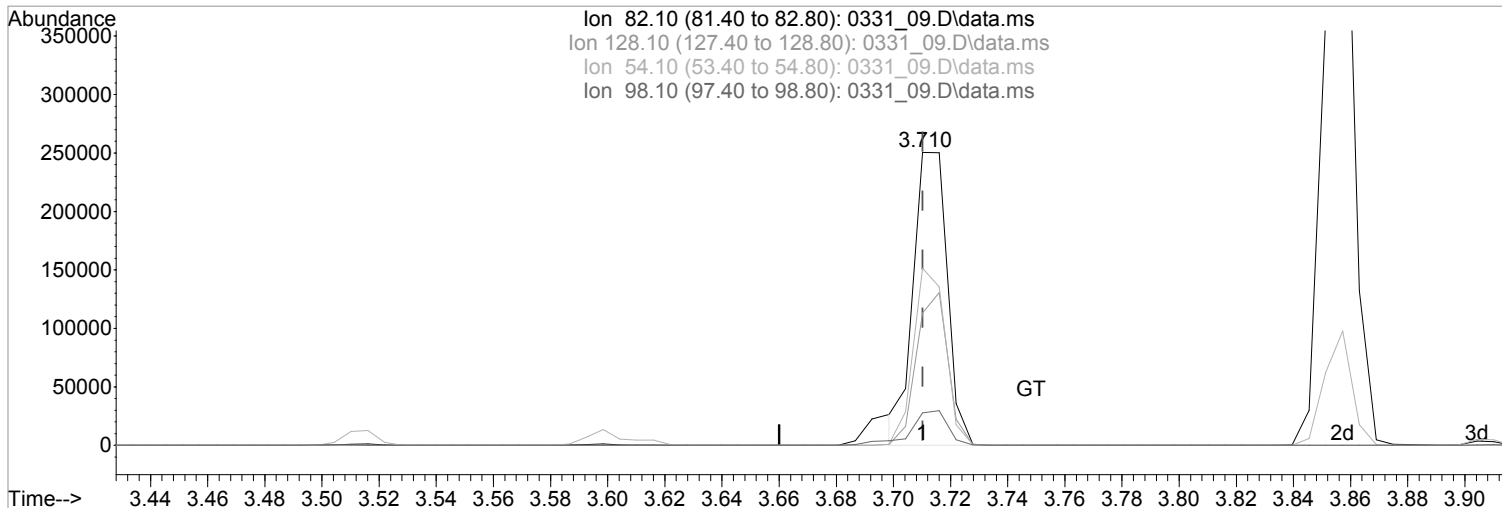
(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 44885.2725233 ppb  
 Qvalue = 99  
 response 225686

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.16
54.10	60.00	60.49
98.10	11.40	11.07

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 41156.7993172 ppb m  
 response 206939

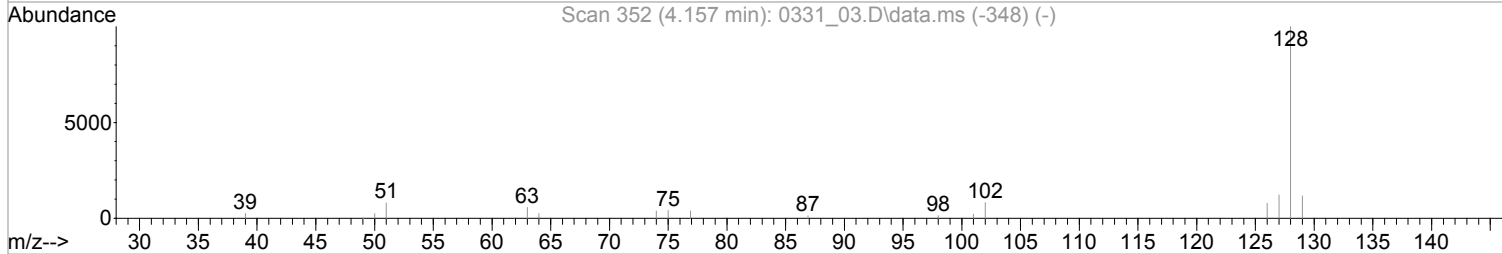
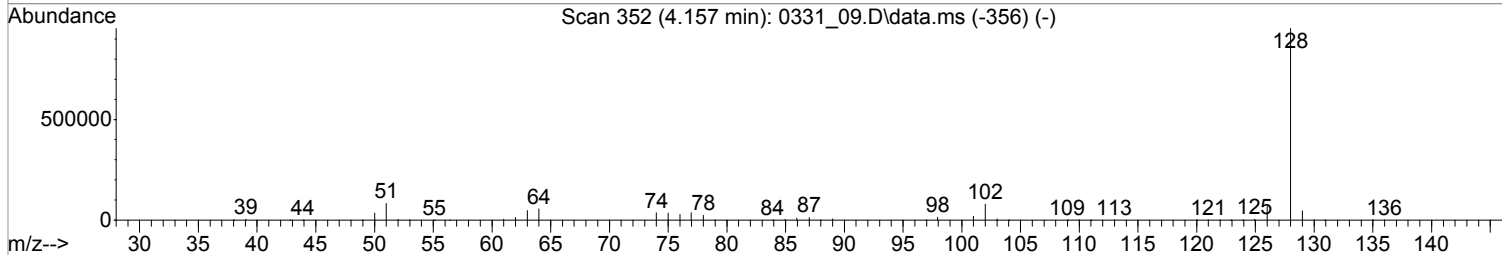
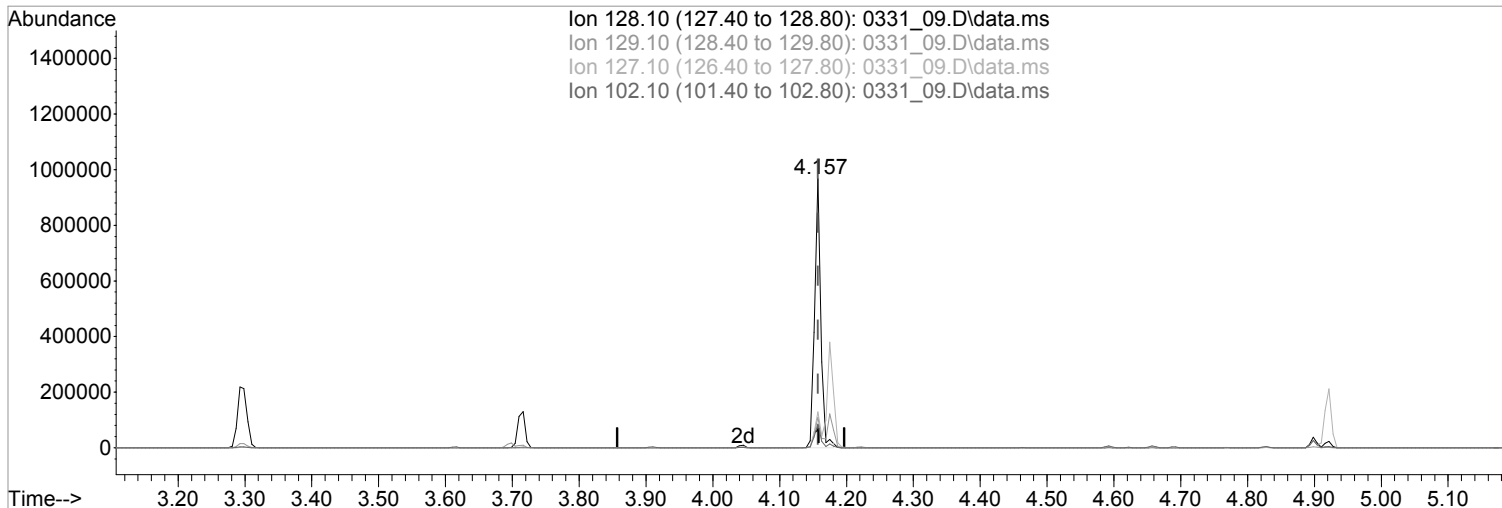
Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.16
54.10	60.00	60.49
98.10	11.40	11.07



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

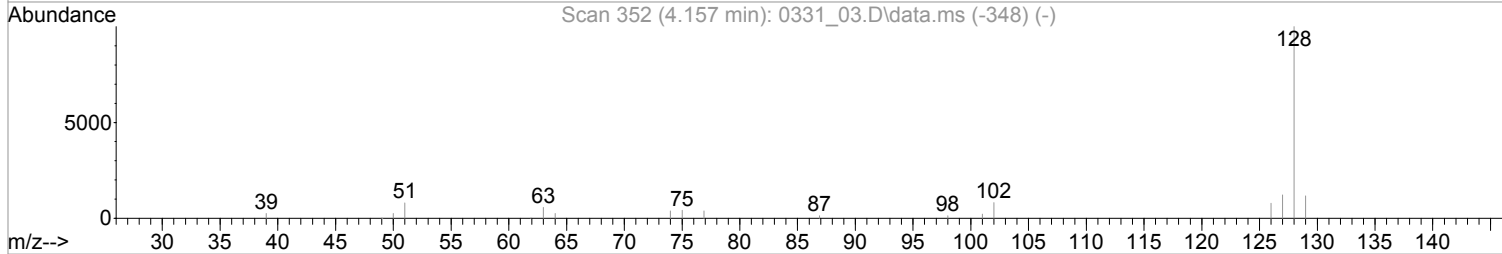
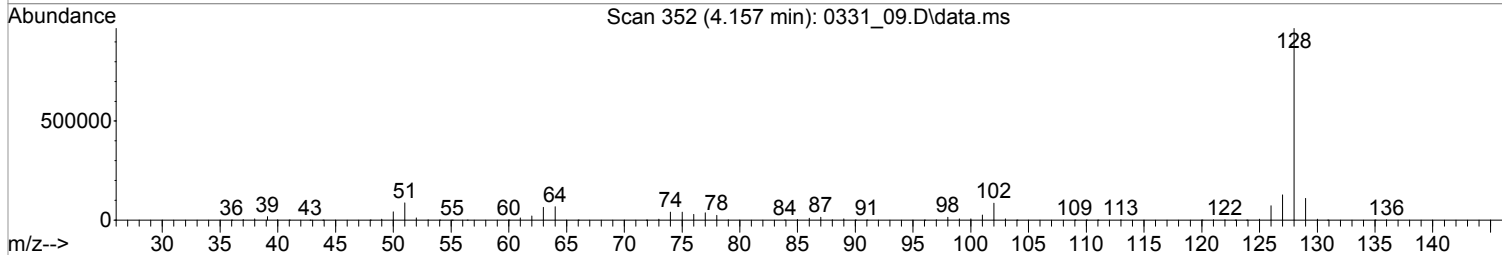
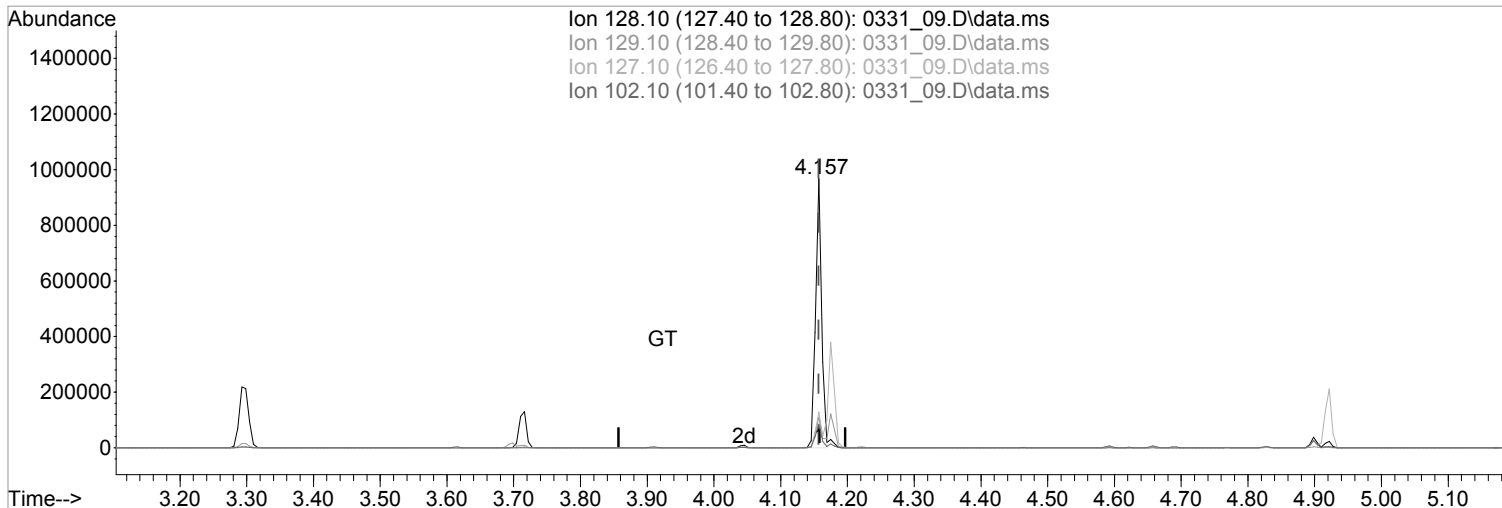
(34) Naphthalene (MT)  
 4.157min (-0.000) 36849.7545549 ppb  
 Qvalue = 99  
 response 628274

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.30
127.10	12.80	13.27
102.10	8.30	8.84

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

(34) Naphthalene (MT)  
 4.157min (-0.000) 35905.5101669 ppb m

response 612175

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.30
127.10	12.80	13.27
102.10	8.30	8.84

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:49 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.410	152	33286	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	137379	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	72853	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	116755	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.257	240	89872	8000.0000000	ppb	0.01	
94) Perylene-d12	11.957	264	80041	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.740	112	264507	50865.2212692	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	254.33%		
7) Phenol-d5	3.175	99	314531	50994.8347848	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	254.97%		
24) Nitrobenzene-d5	3.716	82	265314m	50896.3023359	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	508.96%		
50) 2-Fluorobiphenyl	4.828	172	542476	46477.6781496	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	464.78%		
73) 2,4,6-Tribromophenol	5.892	330	68453	57096.1272770	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	285.48%		
87) p-Terphenyl-d14	7.851	244	598918	47904.8278187	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	479.05%		
<b>Target Compounds</b>							
2) Pyridine	2.210	79	278007	50410.1333313	ppb	99	
3) N-Nitrosodimethylamine	2.199	42	130731	44346.4125409	ppb	94	
5) Aniline	3.234	66	145606	51021.5276676	ppb	#	20
6) bis(2-Chloroethyl)ether	3.251	93	282472m	50210.3023281	ppb		
8) Phenol	3.187	94	331731	50697.6796332	ppb	94	
10) 2-Chlorophenol	3.293	128	278445	51157.0179990	ppb	99	
11) n-Decane	3.293	41	162108	45699.6951523	ppb	#	99
12) 1,3-Dichlorobenzene	3.381	146	298942	47484.7663177	ppb	98	
13) 1,4-Dichlorobenzene	3.416	146	300039	47630.8185250	ppb	96	
14) Benzyl Alcohol	3.469	79	210910	53164.6348947	ppb	100	
15) 1,2-Dichlorobenzene	3.504	146	285067	46841.6039443	ppb	98	
16) bis(2-Chloroisopropyl)...	3.540	121	101326	48405.0979156	ppb	97	
17) 2,2-oxybis(1-chloropro...	3.540	121	101326	48405.0979156	ppb	97	
18) 2-Methylphenol	3.516	108	247855	50552.3018914	ppb	97	
19) Hexachloroethane	3.698	117	128718	49195.4518813	ppb	97	
20) N-Nitrosodi-n-propylamine	3.616	70	184502	53267.2220924	ppb	96	
21) 3&4-Methyl phenol	3.598	107	275858	51070.2615719	ppb	97	
25) Nitrobenzene	3.728	77	266900	50623.3549262	ppb	92	
26) Isophorone	3.857	82	534310	51945.3365587	ppb	94	
27) 2-Nitrophenol	3.910	139	138474	56448.2096839	ppb	83	
28) 2,4-Dimethylphenol	3.910	107	256556	49891.1889295	ppb	97	
29) bis(2-Chlorethoxy)methane	3.969	93	337131	48344.0868992	ppb	98	
30) 2,4-Dichlorophenol	4.045	162	210856	52200.5777632	ppb	95	
32) 1,2,4-Trichlorobenzene	4.104	180	227453	46408.3958517	ppb	98	
34) Naphthalene	4.157	128	788352m	45448.6219591	ppb		
35) 4-Chloroaniline	4.175	65	95090	53256.5383024	ppb	92	
36) Hexachloro-1,3-butadiene	4.222	225	121864	46056.5273806	ppb	98	
40) 4-Chloro-3-methylphenol	4.463	107	230866	55010.5698340	ppb	96	
41) 2-Methylnaphthalene	4.592	142	523350	48378.6737429	ppb	99	
42) 1-Methylnaphthalene	4.657	142	504378	47829.6186952	ppb	100	
47) Hexachlorocyclopentadiene	4.692	237	129995	55448.3866010	ppb	98	
48) 2,4,6-Trichlorophenol	4.769	196	150352	56098.9471818	ppb	97	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

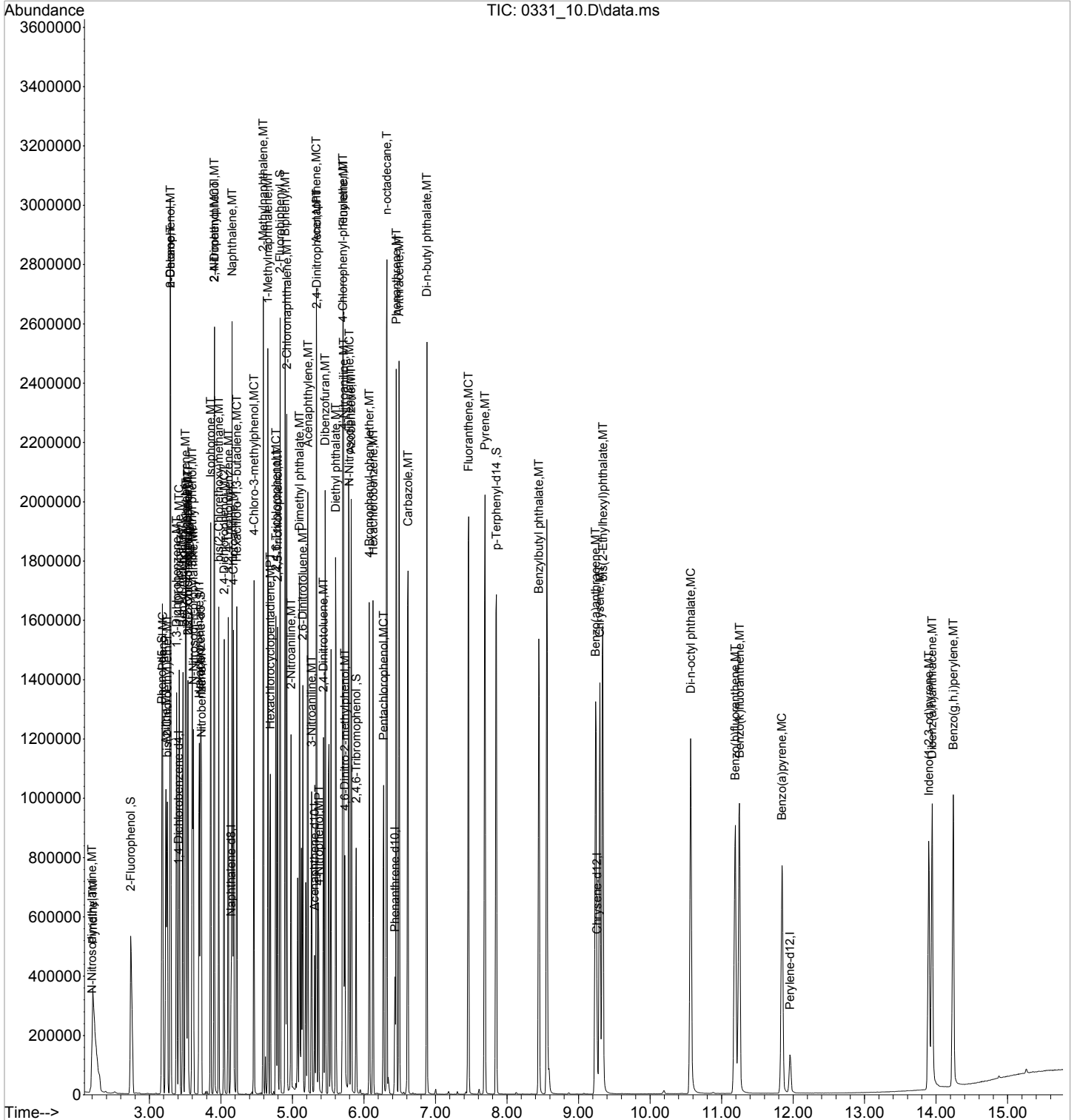
Quant Time: Apr 04 16:10:49 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	156604	57367.9164041	ppb		96
51) Biphenyl	4.898	154	622475	47445.6021582	ppb		99
52) 2-Chloronaphthalene	4.922	162	482181	47644.7044791	ppb		98
53) 2-Nitroaniline	4.981	138	165837	59582.9836669	ppb		98
54) Acenaphthylene	5.216	152	755128	48762.9428449	ppb		100
55) Dimethyl phthalate	5.098	163	561198	49753.6083527	ppb		90
56) 2,6-Dinitrotoluene	5.145	165	134010	55279.7104365	ppb		90
57) 3-Nitroaniline	5.269	138	123042	55709.9964627	ppb		92
58) Acenaphthene	5.334	153	499015	47386.0236386	ppb		99
59) 2,4-Dinitrophenol	5.339	184	50832	70033.2715714	ppb	#	80
60) Dibenzofuran	5.457	168	655054	46514.0746116	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	167787	58777.2992537	ppb		88
63) 4-Nitrophenol	5.369	139	95099	61185.9537290	ppb		93
64) Fluorene	5.710	166	550987	47365.7672850	ppb		98
65) 4-Chlorophenyl-phenyle...	5.704	204	245888	46285.2052677	ppb		97
66) Diethyl phthalate	5.604	149	571768	48579.8844394	ppb		98
67) 4-Nitroaniline	5.716	138	69559	48705.2165231	ppb		94
68) Azobenzene	5.822	77	585843	49665.8520799	ppb		99
71) 4,6-Dinitro-2-methylph...	5.734	198	76313	72546.8457901	ppb		83
72) N-Nitrosodiphenylamine	5.792	169	449103	49379.3048872	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	136813	48957.3690334	ppb		98
75) Hexachlorobenzene	6.128	284	151571	46098.9591670	ppb		98
76) n-octadecane	6.322	55	105949	48515.7513457	ppb		99
77) Pentachlorophenol	6.275	266	88723	59665.7277510	ppb		97
78) Phenanthrene	6.451	178	723203	46303.2942577	ppb		98
79) Anthracene	6.492	178	732119	49804.4207366	ppb		98
80) Carbazole	6.616	167	639932	51048.7019619	ppb		100
81) Di-n-butyl phthalate	6.881	149	1004284	53860.2373075	ppb		99
83) Fluoranthene	7.463	202	773416	51234.8738508	ppb		99
86) Pyrene	7.692	202	788011	46387.8040121	ppb		99
88) Benzylbutyl phthalate	8.445	149	420027	60257.2779756	ppb		100
90) Benzo(a)anthracene	9.239	228	649552	52041.4055443	ppb		98
91) Chrysene	9.298	228	642927	48317.4143460	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.339	149	610913	59781.2931036	ppb		99
93) Di-n-octyl phthalate	10.569	149	964940	65192.1281284	ppb		100
95) Benzo(b)fluoranthene	11.192	252	615009	52794.8465110	ppb		99
96) Benzo(k)fluoranthene	11.251	252	625919	52512.1784771	ppb		98
97) Benzo(a)pyrene	11.845	252	526182	56195.4572647	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.898	276	454752	52932.6248519	ppb		99
99) Dibenz(a,h)anthracene	13.945	278	498154	51557.8237309	ppb		98
100) Benzo(g,h,i)perylene	14.239	276	507520	49307.3651933	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_10.D  
Acq On : 31 Mar 2022 7:53 pm  
Operator : 3545  
Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 10 Sample Multiplier: 1

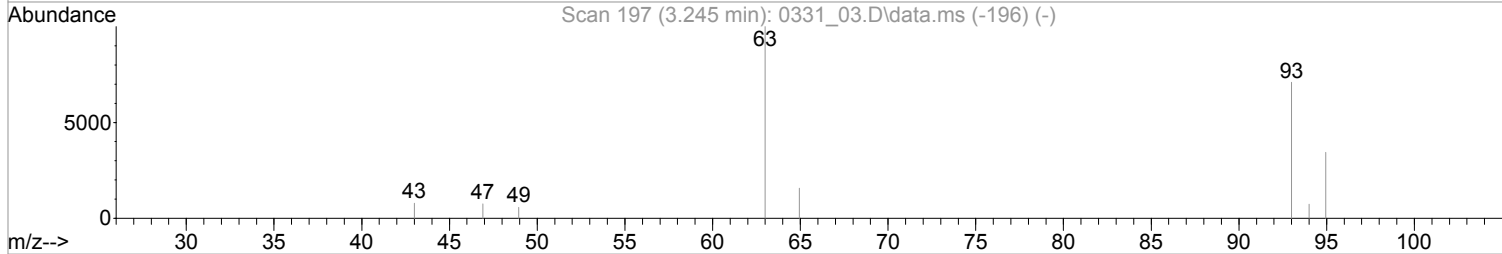
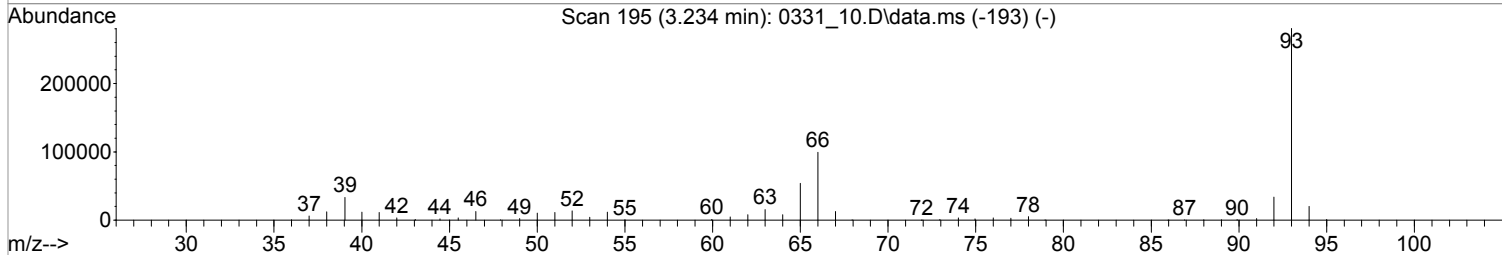
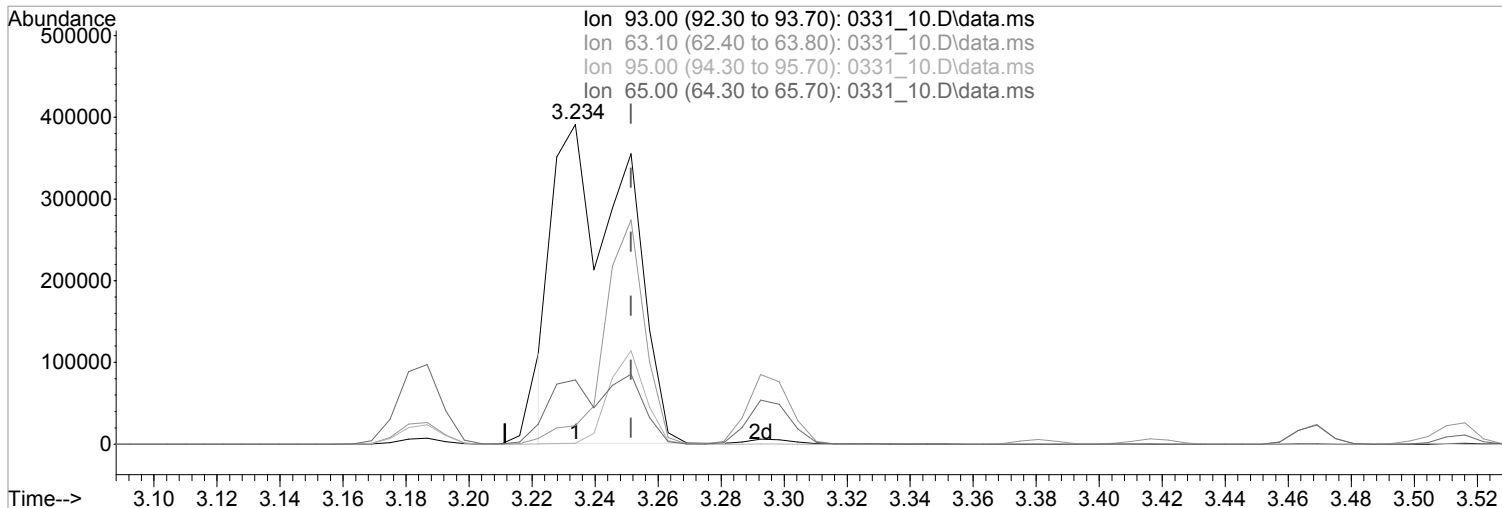
Quant Time: Apr 04 16:10:49 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:10:00 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

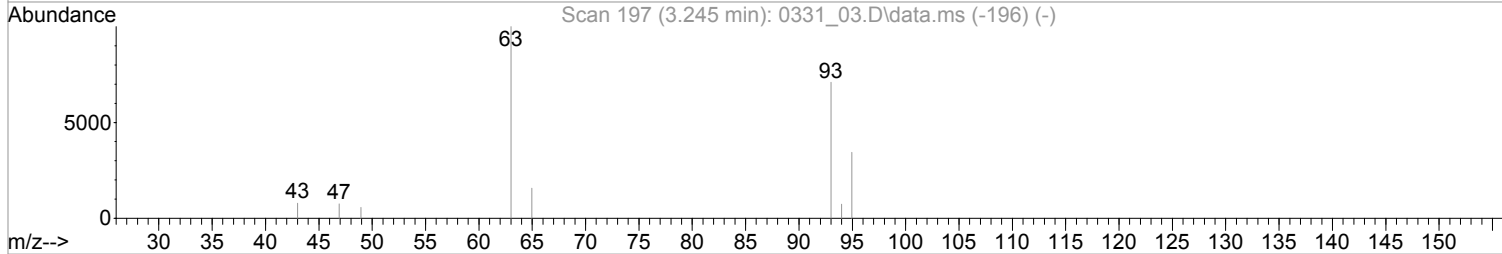
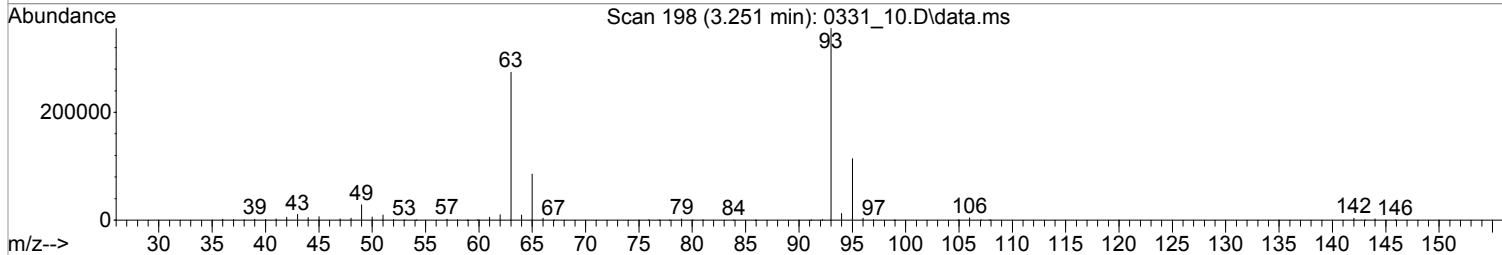
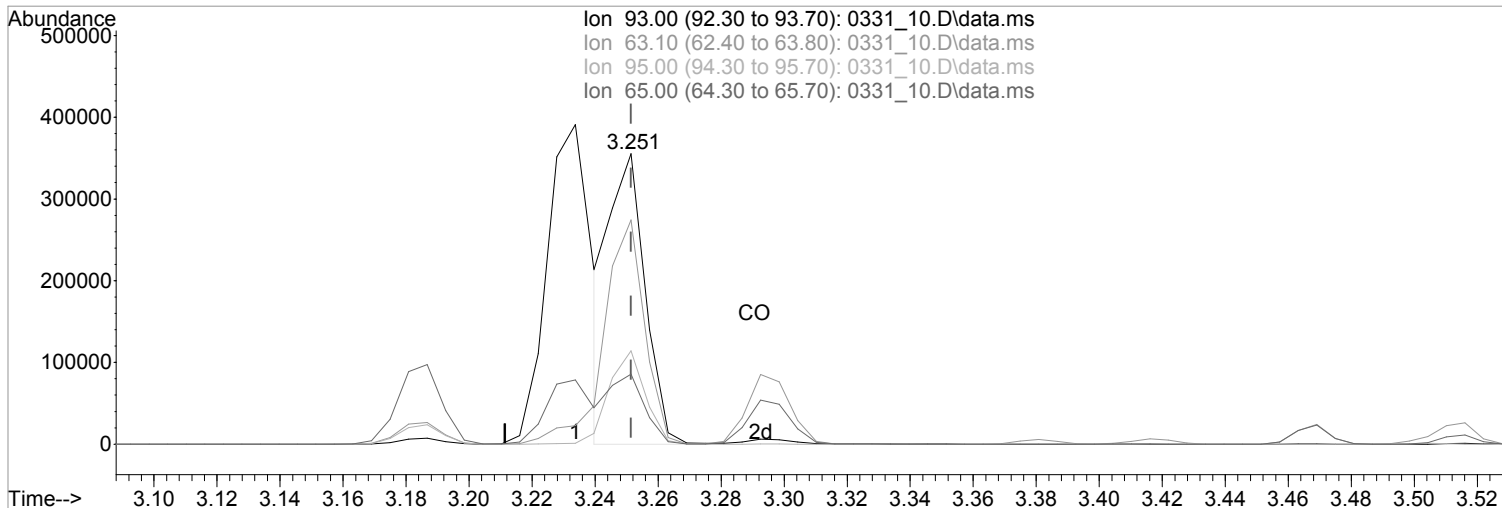
(6) bis(2-Chloroethyl)ether (MT)  
 3.234min (-0.018) 109615.2445090 ppb  
 Qvalue = 37  
 response 616671

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	4.88#
95.00	31.90	0.29#
65.00	23.10	19.61

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (-0.000) 50210.3023281 ppb m

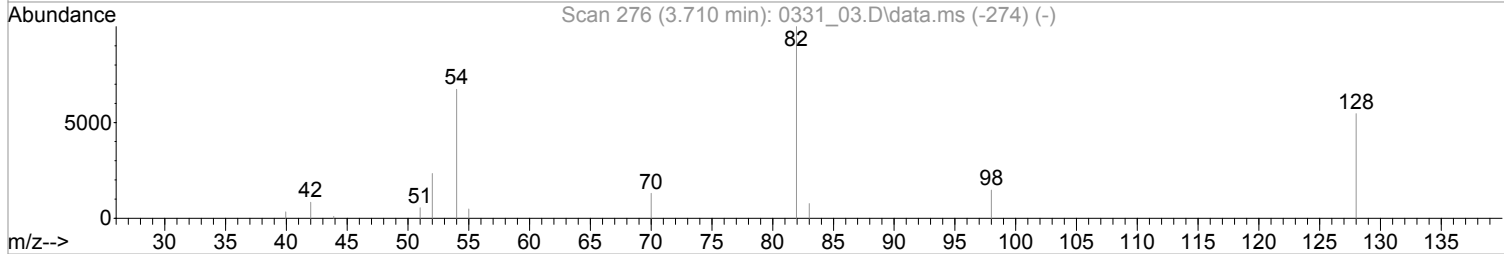
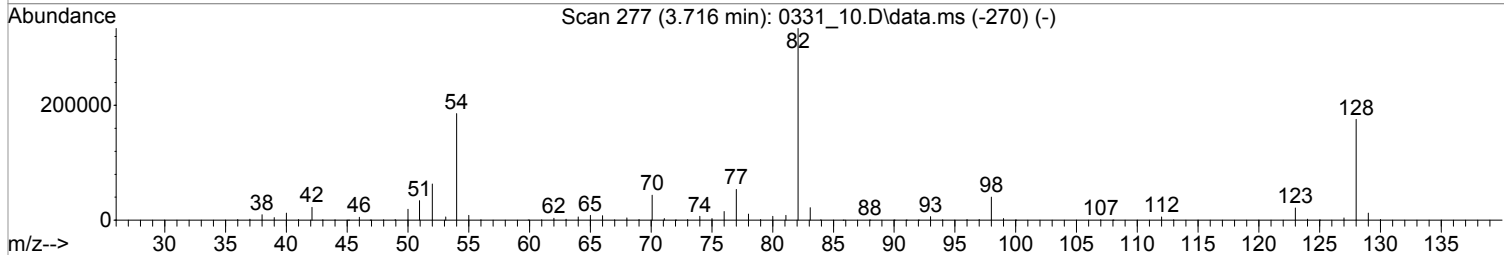
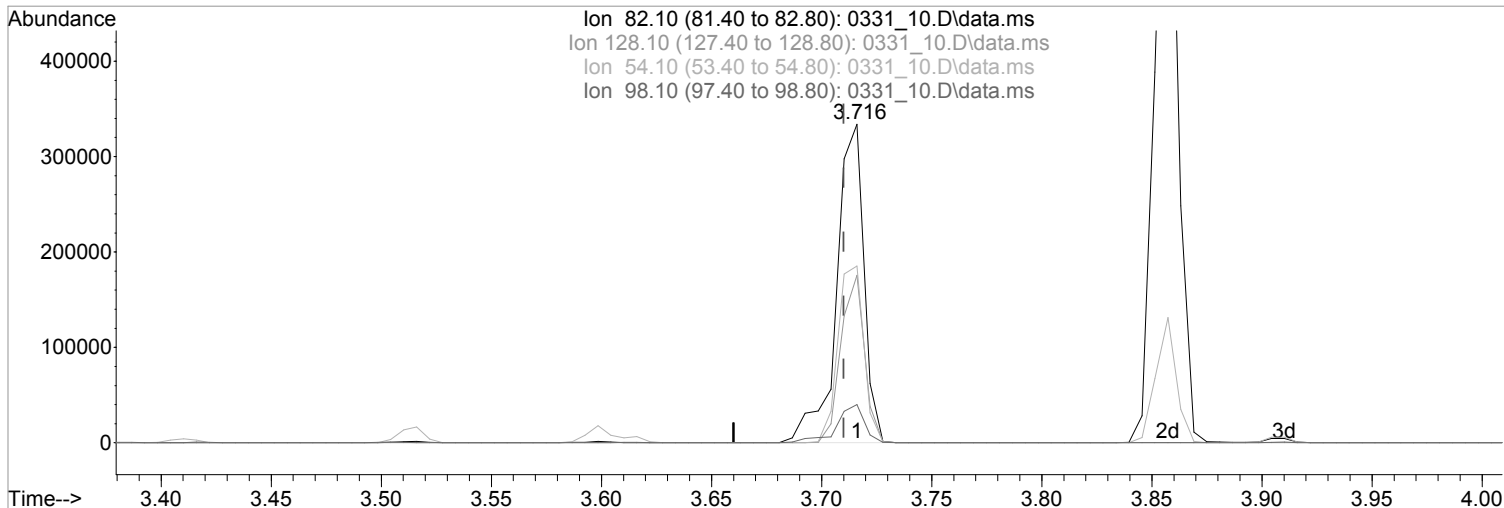
response 282472

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	77.21
95.00	31.90	32.08
65.00	23.10	24.05

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.716min (+0.006) 55620.7953288 ppb  
 Qvalue = 93  
 response 289942

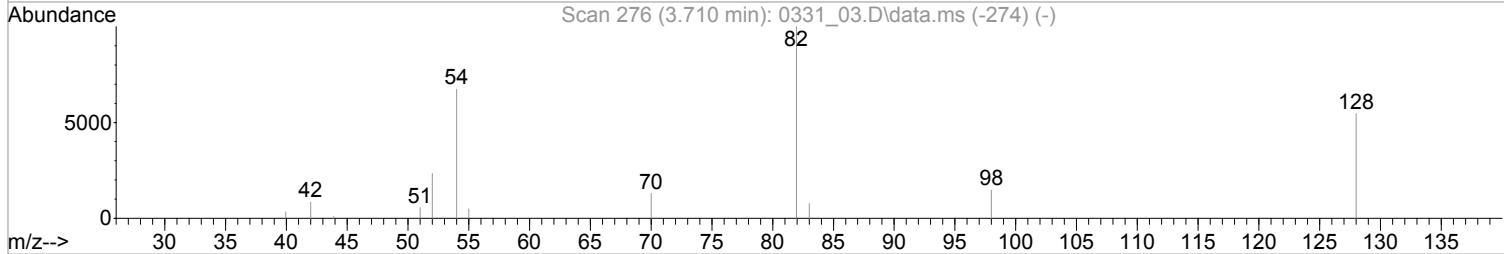
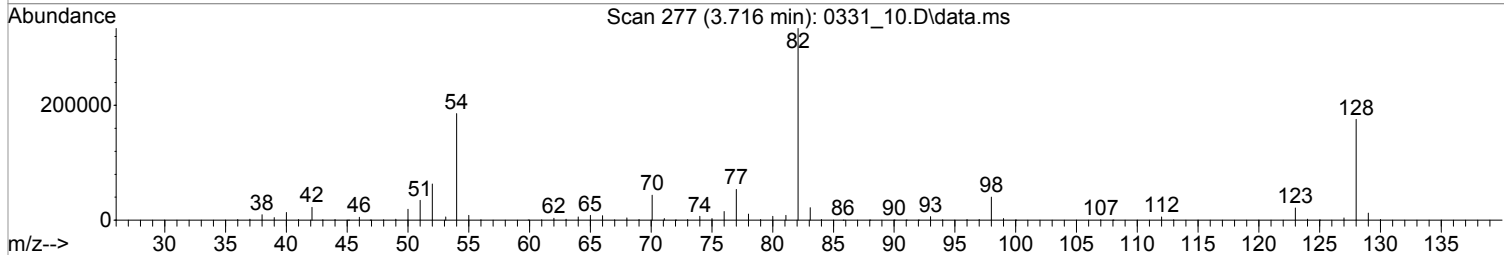
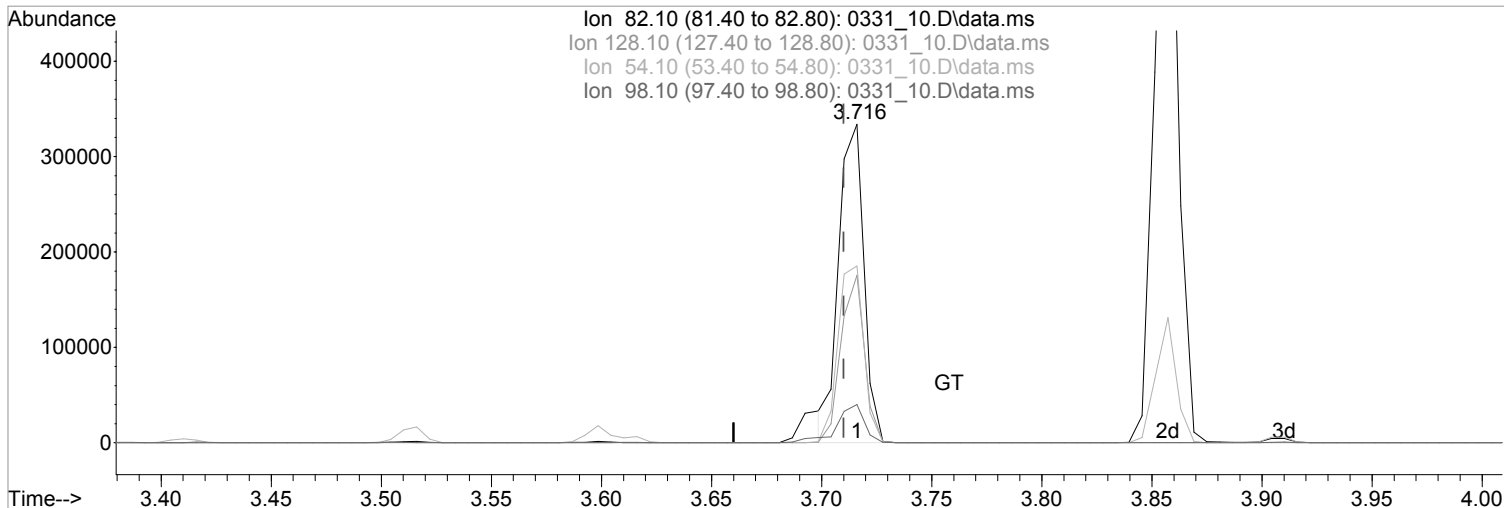
Ion	Exp%	Act%
82.10	100	100
128.10	46.80	52.57
54.10	60.00	55.54
98.10	11.40	12.01



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.716min (+0.006) 50896.3023359 ppb m

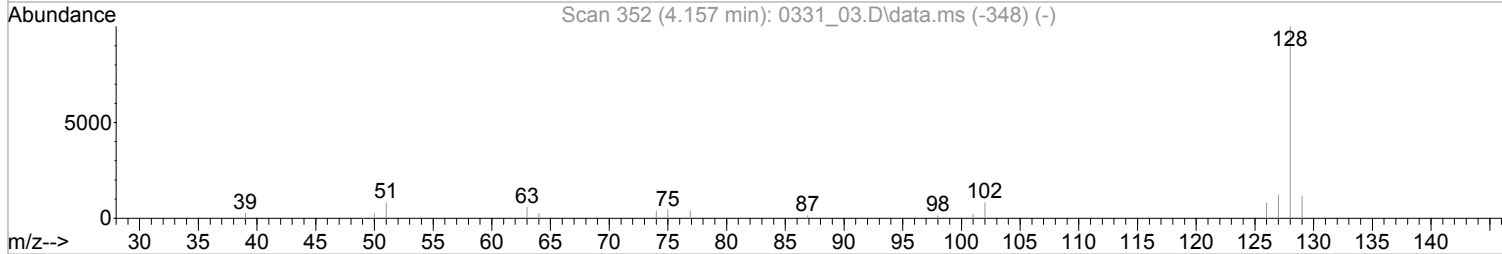
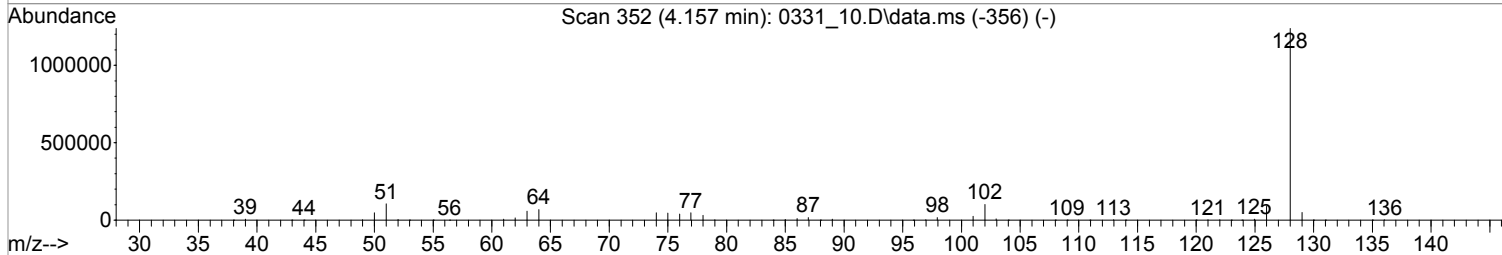
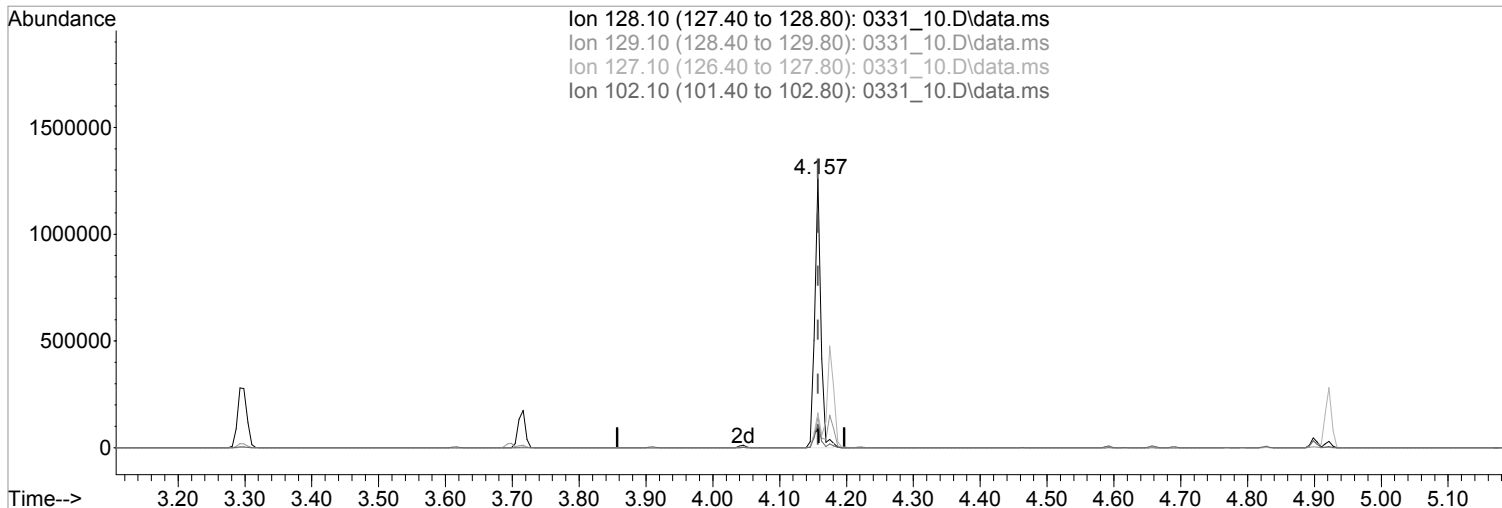
response 265314

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	52.57
54.10	60.00	55.54
98.10	11.40	12.01

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

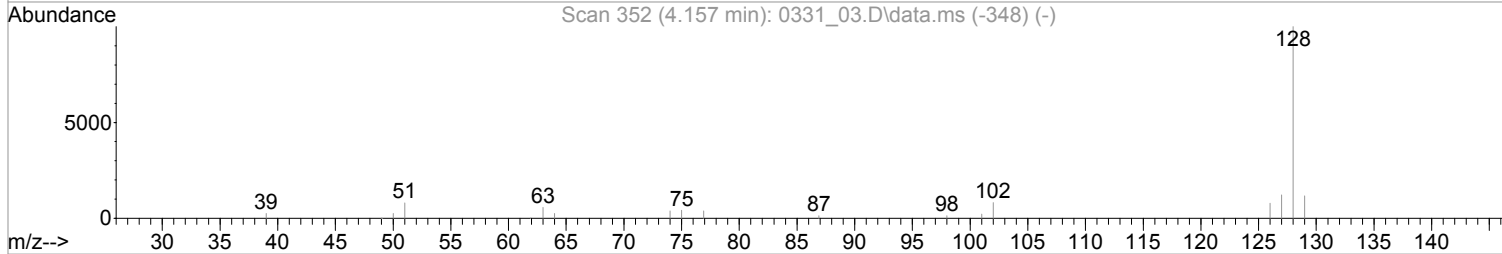
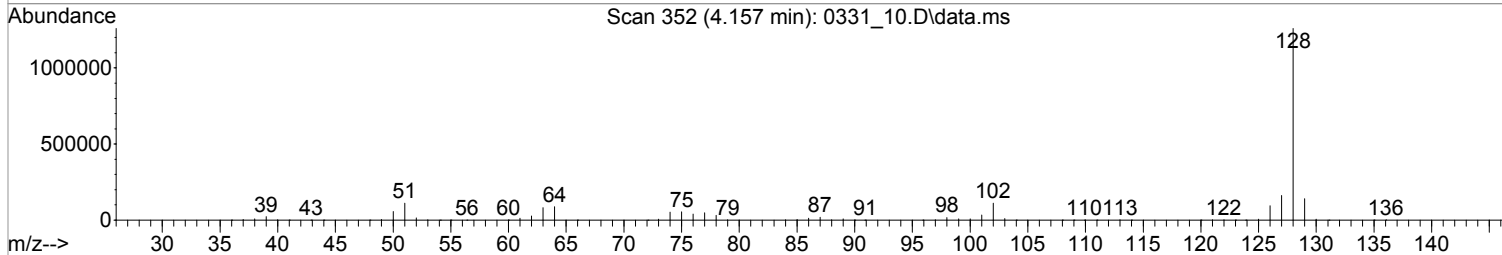
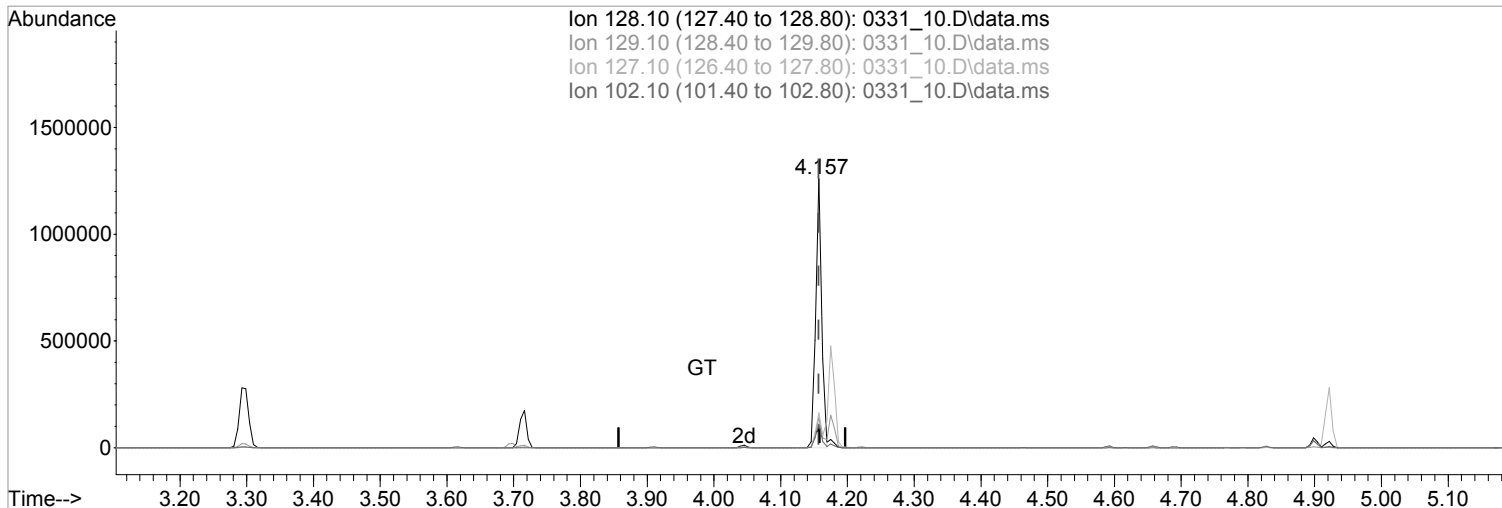
(34) Naphthalene (MT)  
 4.157min (-0.000) 46677.1469504 ppb  
 Qvalue = 99  
 response 809662

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.15
127.10	12.80	12.91
102.10	8.30	8.85

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

(34) Naphthalene (MT)  
 4.157min (-0.000) 45448.6219591 ppb m  
 response 788352  

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.15
127.10	12.80	12.91
102.10	8.30	8.85

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_12.D  
 Acq On : 31 Mar 2022 8:36 pm  
 Operator : 3545  
 Sample : STD TCL 4K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 12 Sample Multiplier: 1

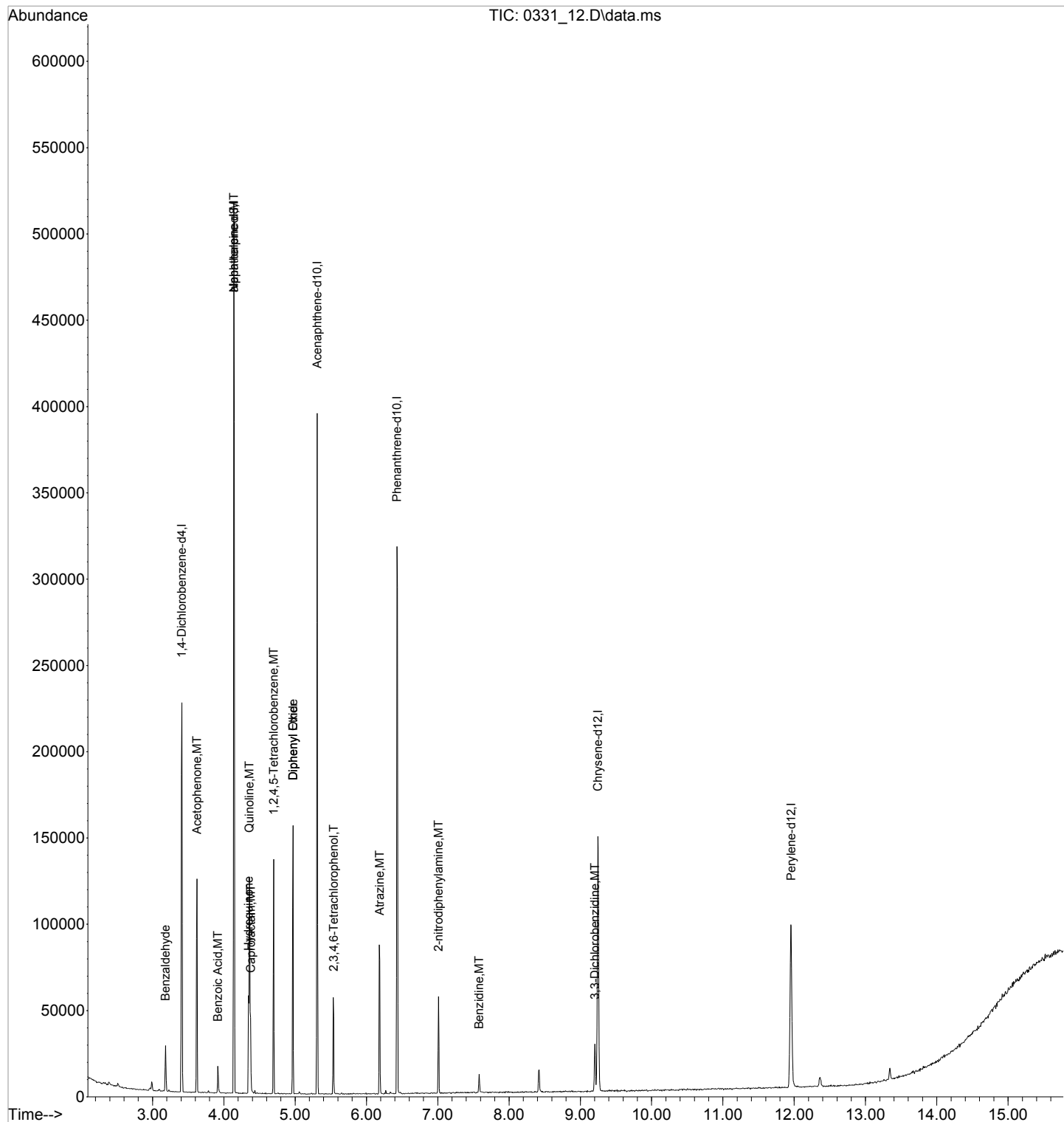
Quant Time: Apr 04 16:53:59 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:34:56 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32210	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	136220	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	65230	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.428	188	103120	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	67182	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	58564	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
9) Benzaldehyde	3.181	105	5045	3745.7880779	ppb	98	
22) Acetophenone	3.622	105	26979	3891.1883832	ppb	98	
31) Benzoic Acid	3.916	105	3581	4259.0418639	ppb	99	
33) alpha-terpineol	4.140	59	18311	4364.0779192	ppb	98	
37) Hydroquinone	4.346	110	12976	4367.0078087	ppb	93	
38) Quinoline	4.357	129	34471	4382.7379345	ppb	99	
39) Caprolactam	4.375	113	3806	3675.2281435	ppb	92	
43) 1,2,4,5-Tetrachloroben...	4.699	216	15681	4281.5578499	ppb	96	
44) Diphenyl Ether	4.969	170	23710	4319.7401334	ug/ml	99	
45) Diphenyl Oxide	4.969	170	23710	4319.7401334	ug/ml	99	
62) 2,3,4,6-Tetrachlorophenol	5.540	232	5528	3126.3602471	ppb	95	
69) Atrazine	6.187	200	8336	3551.1011360	ppb	97	
82) 2-nitrodiphenylamine	7.010	167	6112	4515.3978890	ppb	95	
85) Benzidine	7.581	184	5065	3995.7989172	ppb	# 70	
89) 3,3-Dichlorobenzidine	9.204	252	9134	3139.1498939	ppb	99	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_12.D  
Acq On : 31 Mar 2022 8:36 pm  
Operator : 3545  
Sample : STD TCL 4K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 04 16:53:59 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:34:56 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_13.D  
 Acq On : 31 Mar 2022 8:58 pm  
 Operator : 3545  
 Sample : MSTD TCL 10K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 13 Sample Multiplier: 1

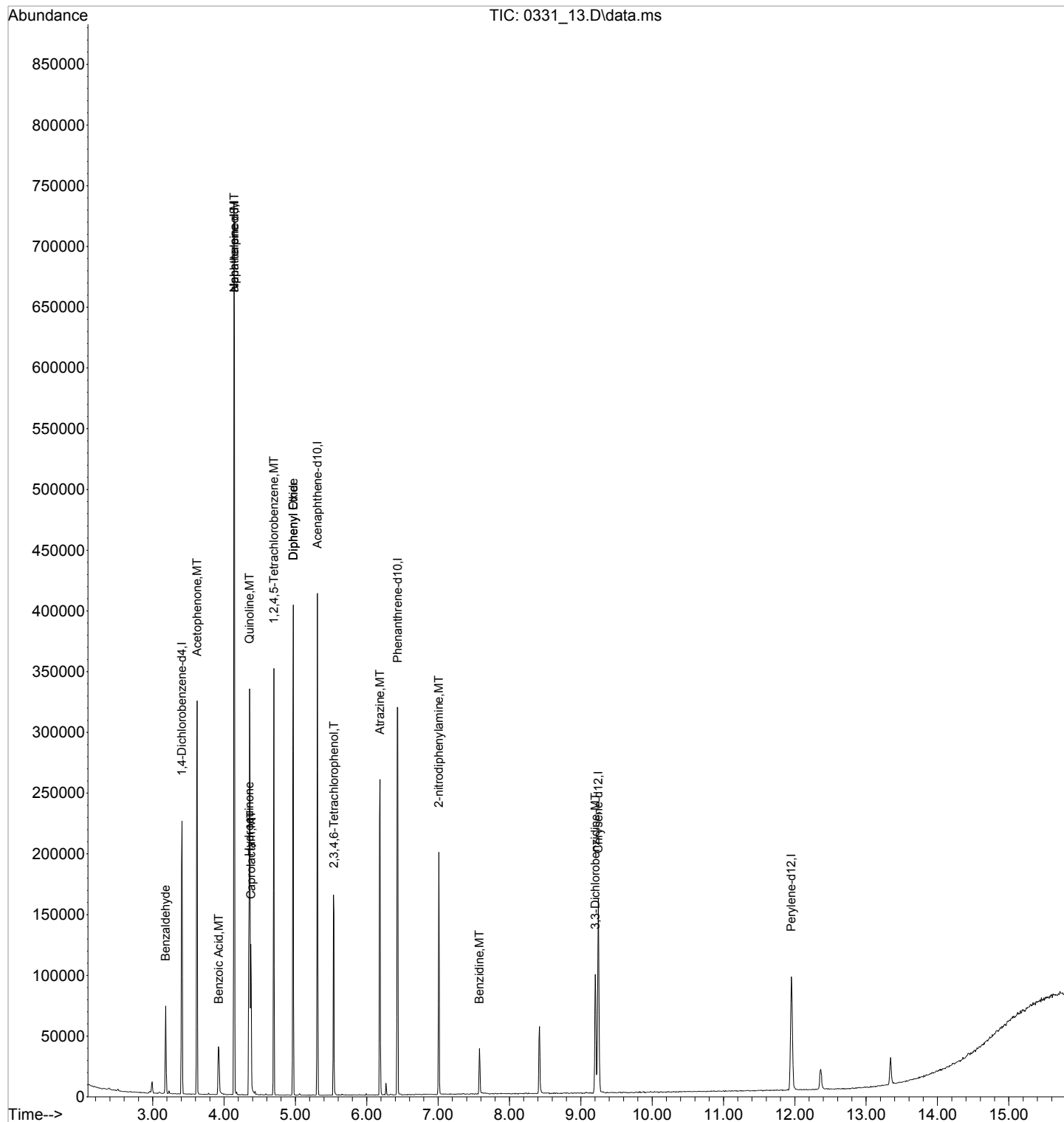
Quant Time: Apr 04 15:59:35 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:06 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32646	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	151075	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	66741	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	106483	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	70148	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	60010	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
							Qvalue
9) Benzaldehyde	3.181	105	13218	10000.0000000	ppb		100
22) Acetophenone	3.622	105	70363	10000.0000000	ppb		100
31) Benzoic Acid	3.928	105	13285	10000.0000000	ppb		100
33) alpha-terpineol	4.140	59	47885	10000.0000000	ppb		100
37) Hydroquinone	4.351	110	32456	10000.0000000	ppb		100
38) Quinoline	4.357	129	92947	10000.0000000	ppb		100
39) Caprolactam	4.375	113	11523	10000.0000000	ppb		100
43) 1,2,4,5-Tetrachloroben...	4.698	216	42102	10000.0000000	ppb		100
44) Diphenyl Ether	4.969	170	62422	10000.0000000	ug/ml		100
45) Diphenyl Oxide	4.969	170	62422	10000.0000000	ug/ml		100
62) 2,3,4,6-Tetrachlorophenol	5.540	232	16672	10000.0000000	ppb		100
69) Atrazine	6.187	200	23085	10000.0000000	ppb		100
82) 2-nitrodiphenylamine	7.010	167	19997	10000.0000000	ppb		100
85) Benzidine	7.581	184	16992	10045.5217263	ppb		100
89) 3,3-Dichlorobenzidine	9.204	252	28248	10000.0000000	ppb		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_13.D  
Acq On : 31 Mar 2022 8:58 pm  
Operator : 3545  
Sample : MSTD TCL 10K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 04 15:59:35 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 15:59:06 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\042922B\  
 Data File : 0429B\_03.D  
 Acq On : 29 Apr 2022 5:52 pm  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D05698 exp 9/10/22  
 Misc : TCL CAL ISTD 22D02367 exp. 10/02/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 29 19:31:04 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

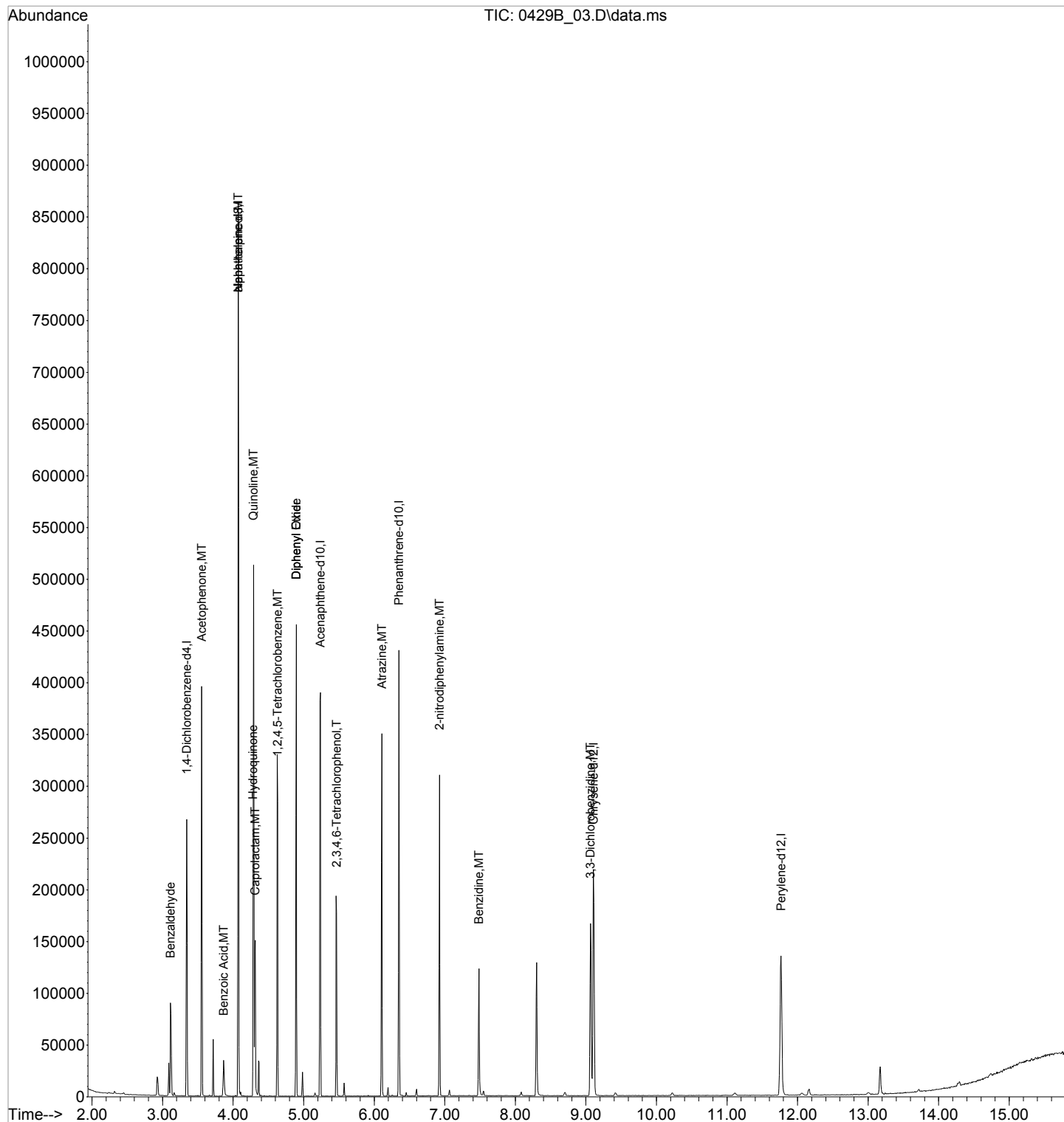
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.343	152	35936	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.072	136	162496	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.237	164	73371	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.348	188	124542	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.107	240	92211	8000.0000000	ppb	0.00	
94) Perylene-d12	11.766	264	82708	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
9) Benzaldehyde	3.113	105	17877	11897.0055136	ppb	99	Qvalue
22) Acetophenone	3.554	105	77833	10061.9271599	ppb	99	
31) Benzoic Acid	3.866	105	10441	7475.1145537	ppb	97	
33) alpha-terpineol	4.072	59	52436	10476.3063443	ppb	97	
37) Hydroquinone	4.284	110	36399	10269.0622148	ppb	95	
38) Quinoline	4.290	129	104932	11184.0158031	ppb	99	
39) Caprolactam	4.313	113	14776	11961.0857284	ppb	97	
43) 1,2,4,5-Tetrachloroben...	4.631	216	44745	10241.6699254	ppb	97	
44) Diphenyl Ether	4.895	170	67529	10313.7021917	ug/ml	98	
45) Diphenyl Oxide	4.895	170	67529	10313.7021917	ug/ml	98	
62) 2,3,4,6-Tetrachlorophenol	5.466	232	19384	9746.2450545	ppb	98	
69) Atrazine	6.107	200	28050	10623.3414640	ppb	97	
82) 2-nitrodiphenylamine	6.925	167	30889	11185.4538926	ppb	96	
85) Benzidine	7.483	184	45803	16815.2055310	ppb	97	
89) 3,3-Dichlorobenzidine	9.066	252	45034	11276.1739458	ppb	99	

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\042922B\  
Data File : 0429B\_03.D  
Acq On : 29 Apr 2022 5:52 pm  
Operator : 3545  
Sample : ICV TCL 10K1 PPB 22D05698 exp 9/10/22  
Misc : TCL CAL ISTD 22D02367 exp. 10/02/22  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 29 19:31:04 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_14.D  
 Acq On : 31 Mar 2022 9:19 pm  
 Operator : 3545  
 Sample : STD TCL 20K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 14 Sample Multiplier: 1

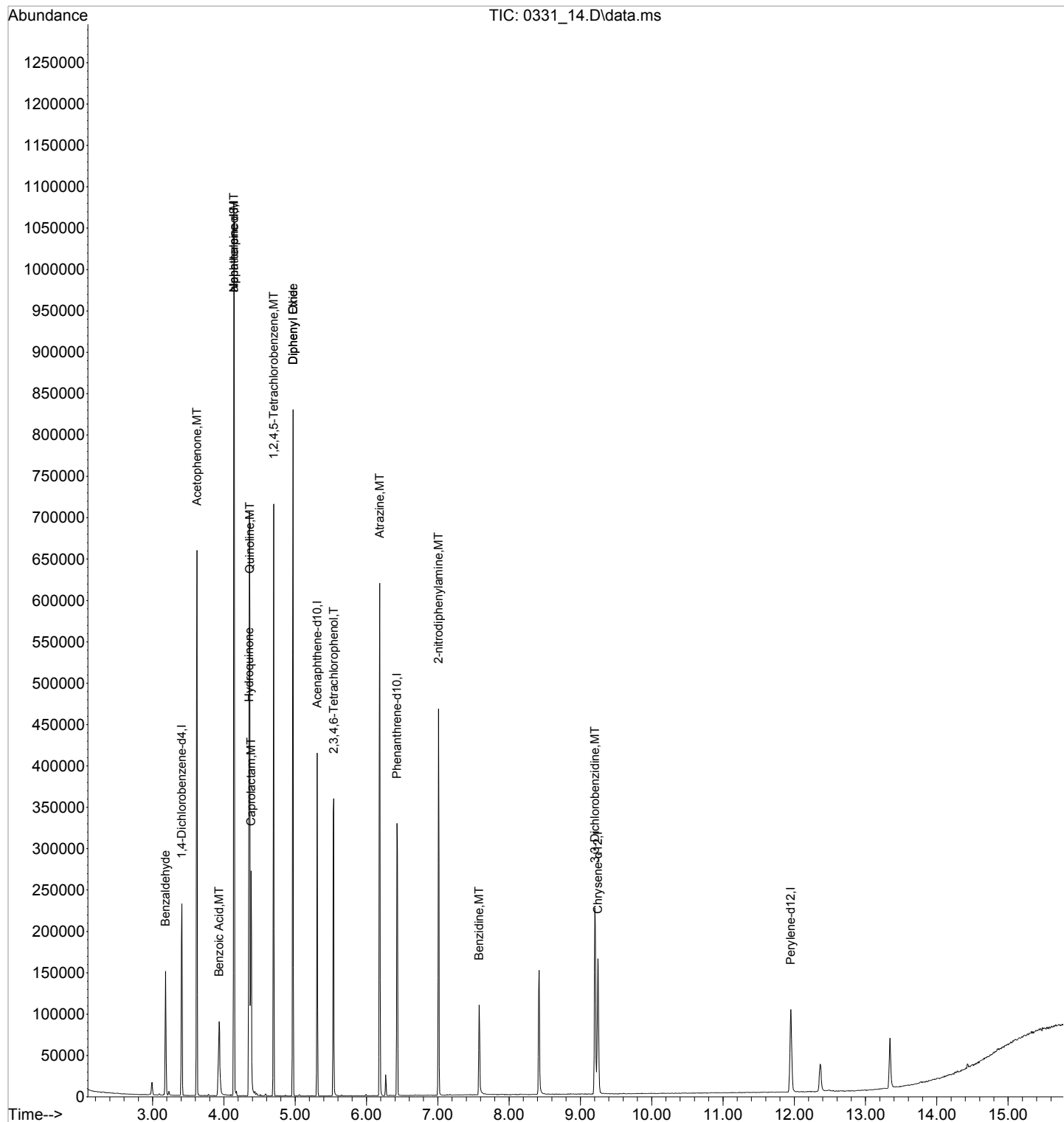
Quant Time: Apr 04 16:18:05 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:17:36 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32976	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	166588	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	65899	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.428	188	106386	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	74217	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	60508	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
							Qvalue
9) Benzaldehyde	3.181	105	27985	21379.1641942	ppb		99
22) Acetophenone	3.622	105	140981	19984.9142749	ppb		99
31) Benzoic Acid	3.934	105	33954	31589.3324189	ppb		99
33) alpha-terpineol	4.140	59	99072	17348.5751577	ppb		99
37) Hydroquinone	4.351	110	75121	19593.8858186	ppb		97
38) Quinoline	4.363	129	186747	17405.5577263	ppb		97
39) Caprolactam	4.381	113	27181	22332.1892729	ppb		99
43) 1,2,4,5-Tetrachloroben...	4.698	216	82323	16891.5493678	ppb		98
44) Diphenyl Ether	4.969	170	122968	16869.4038963	ug/ml		99
45) Diphenyl Oxide	4.969	170	122968	16869.4038963	ug/ml		99
62) 2,3,4,6-Tetrachlorophenol	5.540	232	36060	24550.3580536	ppb		100
69) Atrazine	6.187	200	50889	24345.8931400	ppb		99
82) 2-nitrodiphenylamine	7.010	167	49155	28494.9593074	ppb		96
85) Benzidine	7.581	184	46245	31477.4601229	ppb		97
89) 3,3-Dichlorobenzidine	9.204	252	66399	26100.6280685	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_14.D  
Acq On : 31 Mar 2022 9:19 pm  
Operator : 3545  
Sample : STD TCL 20K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 04 16:18:05 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:17:36 2022  
Response via : Initial Calibration  
DataAcq Meth: BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_15.D  
 Acq On : 31 Mar 2022 9:40 pm  
 Operator : 3545  
 Sample : STD TCL 30K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 15 Sample Multiplier: 1

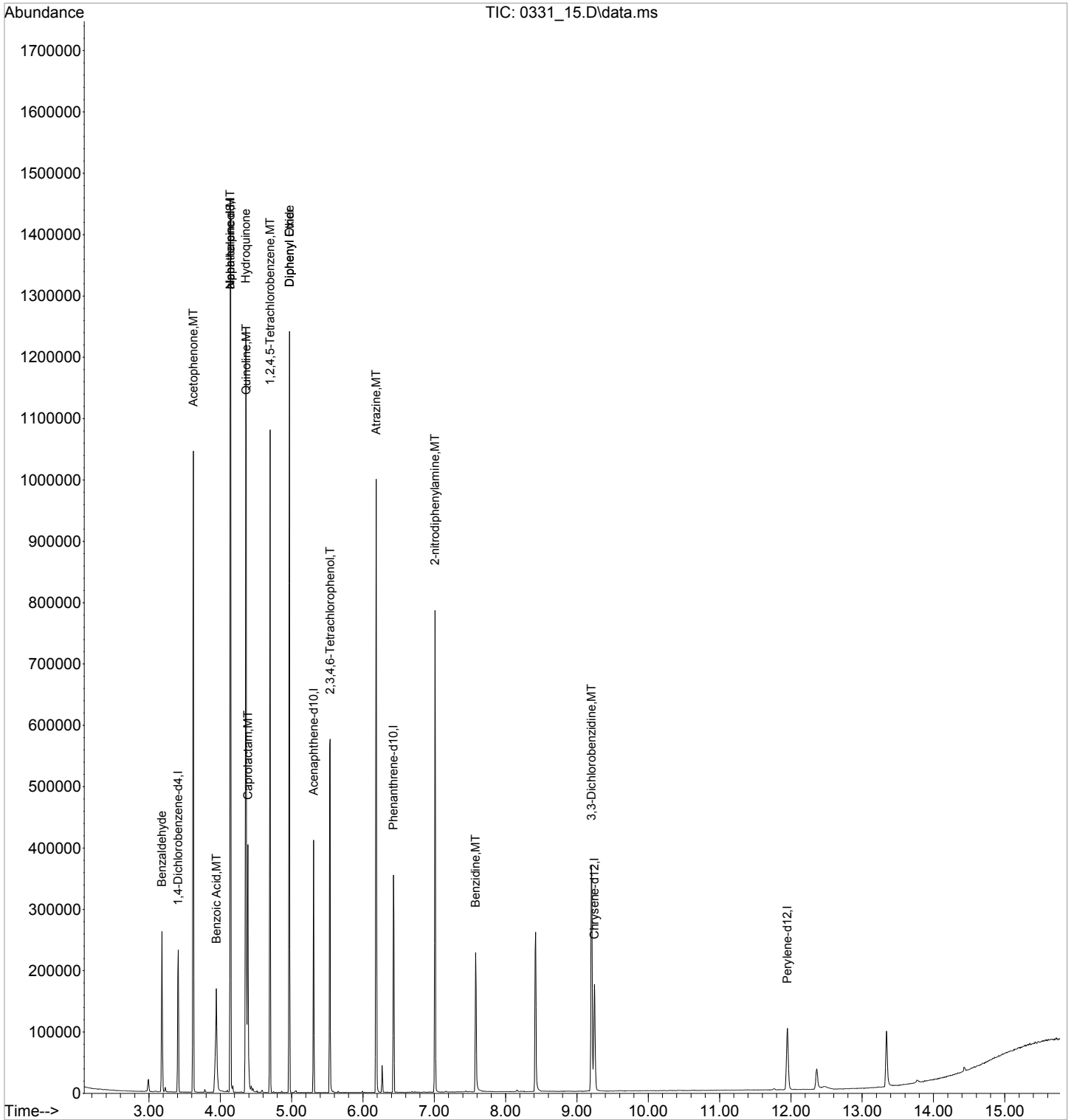
Quant Time: Apr 04 16:18:53 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:18:23 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	33491	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	188855	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	68194	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.428	188	108406	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	76700	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	62471	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
Target Compounds							
							Qvalue
9) Benzaldehyde	3.181	105	47780	35331.1828973	ppb		99
22) Acetophenone	3.622	105	218733	30535.6925993	ppb		99
31) Benzoic Acid	3.946	105	62710	44951.7521731	ppb		98
33) alpha-terpineol	4.140	59	155586	24856.2891851	ppb		99
37) Hydroquinone	4.357	110	122674	28368.5569619	ppb		99
38) Quinoline	4.363	129	289912	24633.9225551	ppb		99
39) Caprolactam	4.387	113	44595	31110.4386175	ppb		95
43) 1,2,4,5-Tetrachloroben...	4.698	216	124397	23425.2808780	ppb		98
44) Diphenyl Ether	4.969	170	188595	23751.4157709	ug/ml		99
45) Diphenyl Oxide	4.969	170	188595	23751.4157709	ug/ml		99
62) 2,3,4,6-Tetrachlorophenol	5.540	232	59018	36738.7005414	ppb		100
69) Atrazine	6.187	200	78865	34581.5780215	ppb		100
82) 2-nitrodiphenylamine	7.010	167	82992	42681.4519179	ppb		95
85) Benzidine	7.581	184	92797	53450.6210134	ppb		98
89) 3,3-Dichlorobenzidine	9.204	252	105817	37396.9826583	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_15.D  
Acq On : 31 Mar 2022 9:40 pm  
Operator : 3545  
Sample : STD TCL 30K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 04 16:18:53 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:18:23 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_16.D  
 Acq On : 31 Mar 2022 10:02 pm  
 Operator : 3545  
 Sample : STD TCL 40K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 16 Sample Multiplier: 1

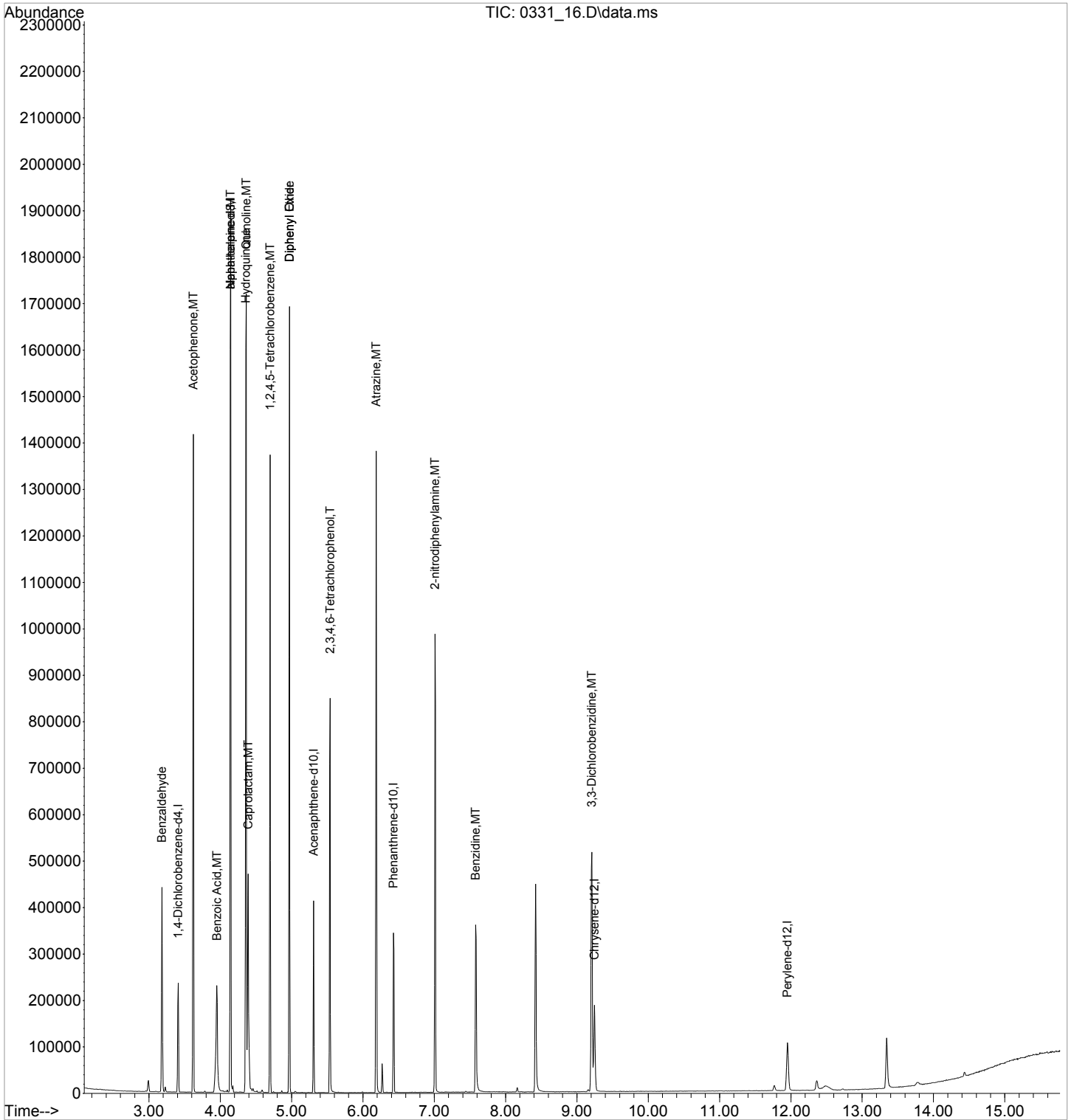
Quant Time: Apr 04 16:19:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:19:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.410	152	32750	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.145	136	205762	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	66340	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.428	188	109489	8000.0000000	ppb	0.00
84) Chrysene-d12	9.245	240	77049	8000.0000000	ppb	0.00
94) Perylene-d12	11.951	264	63298	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.181	105	80706	58934.1841835	ppb	99
22) Acetophenone	3.622	105	286364	40736.1958980	ppb	99
31) Benzoic Acid	3.951	105	92634	55421.4497707	ppb	99
33) alpha-terpineol	4.145	59	203905	30960.7071165	ppb	87
37) Hydroquinone	4.357	110	166918	35817.9389554	ppb	95
38) Quinoline	4.363	129	378568	30619.3304379	ppb	98
39) Caprolactam	4.392	113	62917	39916.3623369	ppb	96
43) 1,2,4,5-Tetrachloroben...	4.698	216	161130	29125.9548510	ppb	98
44) Diphenyl Ether	4.969	170	243421	29360.2543064	ug/ml	99
45) Diphenyl Oxide	4.969	170	243421	29360.2543064	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.539	232	79933	48949.8236216	ppb	97
69) Atrazine	6.186	200	105331	46070.2880297	ppb	99
82) 2-nitrodiphenylamine	7.010	167	117319	55081.7026593	ppb	94
85) Benzidine	7.580	184	154562	76641.7310555	ppb	97
89) 3,3-Dichlorobenzidine	9.210	252	146578	49144.2966400	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_16.D  
Acq On : 31 Mar 2022 10:02 pm  
Operator : 3545  
Sample : STD TCL 40K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 04 16:19:37 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:19:11 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_17.D  
 Acq On : 31 Mar 2022 10:23 pm  
 Operator : 3545  
 Sample : STD TCL 50K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 04 16:20:23 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:19:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

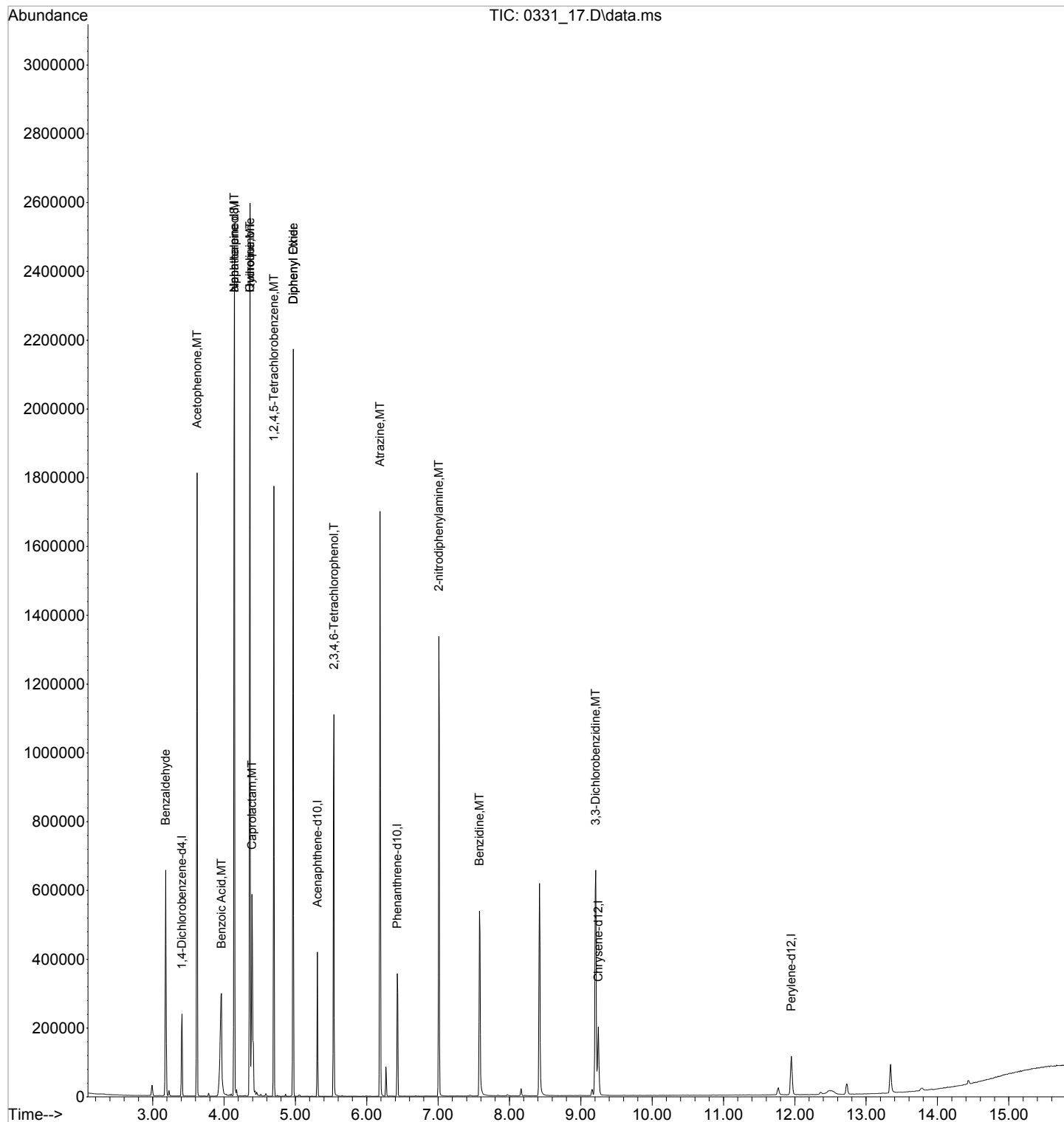
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	34438	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	228625	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	68678	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.428	188	112052	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	79417	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	67284	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
							Qvalue
9) Benzaldehyde	3.181	105	118679	76388.9545388	ppb		99
22) Acetophenone	3.622	105	370115	49916.2518975	ppb		99
31) Benzoic Acid	3.963	105	131168	66363.7153033	ppb		98
33) alpha-terpineol	4.145	59	264407	37546.5934006	ppb		88
37) Hydroquinone	4.363	110	219123	43068.6482517	ppb		98
38) Quinoline	4.363	129	481916	36507.3343524	ppb		99
39) Caprolactam	4.393	113	83764	47847.9644639	ppb		94
43) 1,2,4,5-Tetrachloroben...	4.698	216	204315	34816.2846862	ppb		97
44) Diphenyl Ether	4.969	170	310150	35229.6306939	ug/ml		99
45) Diphenyl Oxide	4.969	170	310150	35229.6306939	ug/ml		99
62) 2,3,4,6-Tetrachlorophenol	5.540	232	103514	59031.1652154	ppb		96
69) Atrazine	6.187	200	137008	56457.3564133	ppb		100
82) 2-nitrodiphenylamine	7.010	167	156949	67745.4868336	ppb		93
85) Benzidine	7.581	184	223719	93371.1103111	ppb		97
89) 3,3-Dichlorobenzidine	9.210	252	187922	58883.7932200	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_17.D  
Acq On : 31 Mar 2022 10:23 pm  
Operator : 3545  
Sample : STD TCL 50K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 04 16:20:23 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:19:57 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1487790	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0331_18	<b>Analysis date/time:</b>	03/31/22 22:44
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.610754	0.64112010		4.97		10	10.50	105	70 - 130
2-METHYLNAPHTHALENE	0.627399	0.64607670		2.98		10	10.30	103	70 - 130
3&4-METHYL PHENOL	1.301686	1.329116		2.11		10	10.21	102	70 - 130
ACENAPHTHENE	1.148837	1.199481		4.41		10	10.44	104	70 - 130
ACENAPHTHYLENE	1.695228	1.857736		9.59		10	10.96	110	70 - 130
ANTHRACENE	1.006737	1.045115		3.81		10	10.38	104	70 - 130
BENZO(A)ANTHRACENE	1.116712	1.133629		1.51		10	10.15	102	70 - 130
BENZO(A)PYRENE	0.950358	1.085630		14.20		10	11.42	114	70 - 130
BENZO(B)FLUORANTHENE	1.172442	1.217118		3.81		10	10.38	104	70 - 130
BENZO(G,H,I)PERYLENE	1.026990	1.111795		8.26		10	10.83	108	70 - 130
BENZO(K)FLUORANTHENE	1.198822	1.286310		7.30		10	10.73	107	70 - 130
BIS(2-ETHYLHEXYL)PHTHALATE	1.014597	1.069942		5.45		10	10.55	106	70 - 130
CARBAZOLE	0.861194	0.95543070		10.90		10	11.09	111	70 - 130
CHRYSENE	1.179486	1.253499		6.28		10	10.63	106	70 - 130
DI-N-BUTYL PHTHALATE	1.289953	1.485565		15.20		10	11.52	115	70 - 130
DI-N-OCTYL PHTHALATE	1.425428	1.425258		0.0119		10	9.188	91.90	70 - 130
DIBENZ(A,H)ANTHRACENE	0.969471	1.067733		10.10		10	11.01	110	70 - 130
DIBENZOFURAN	1.532971	1.604143		4.64		10	10.46	105	70 - 130
FLUORANTHENE	1.037530	1.086566		4.73		10	10.47	105	70 - 130
FLUORENE	1.268965	1.347410		6.18		10	10.62	106	70 - 130
INDENO(1,2,3-CD)PYRENE	0.864970	0.96418880		11.50		10	11.15	112	70 - 130
NAPHTHALENE	0.998617	1.032092		3.35		10	10.34	103	70 - 130
PENTACHLOROPHENOL	0.105171	0.11822170		12.40		10	11.43	114	70 - 130
PHENANTHRENE	1.060304	1.114125		5.08		10	10.51	105	70 - 130
PHENOL	1.575372	1.630722		3.51		10	10.35	104	70 - 130
PYRENE	1.498492	1.578251		5.32		10	10.53	105	70 - 130
2,4,6-TRIBROMOPHENOL	0.083814	0.08113972		3.19		10	9.681	96.80	70 - 130
2-FLUOROBIPHENYL	1.270391	1.246534		1.88		10	9.812	98.10	70 - 130
2-FLUOROPHENOL	1.252515	1.217577		2.79		10	9.721	97.20	70 - 130
NITROBENZENE-D5	0.304240	0.29725250		2.30		10	9.770	97.70	70 - 130
P-TERPHENYL-D14	1.107064	1.061220		4.14		10	9.586	95.90	70 - 130
PHENOL-D5	1.486088	1.435091		3.43		10	9.657	96.60	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 17:01:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32498	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	129280	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	67005	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	107114	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	77504	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	68794	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.740	112	49461	9721.0515879	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	48.61%		
7) Phenol-d5	3.175	99	58297	9656.8420263	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	48.28%		
24) Nitrobenzene-d5	3.710	82	48036m	9770.3438575	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	97.70%		
50) 2-Fluorobiphenyl	4.828	172	104405	9812.2063195	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	98.12%		
73) 2,4,6-Tribromophenol	5.886	330	10864	9680.9076507	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	48.40%		
87) p-Terphenyl-d14	7.845	244	102811	9585.8929227	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	95.86%		
Target Compounds							
2) Pyridine	2.216	79	56827	10543.3045205	ppb	99	
3) N-Nitrosodimethylamine	2.199	42	26162	9220.1486386	ppb	99	
5) Aniline	3.228	66	29495	10558.9289085	ppb	97	
6) bis(2-Chloroethyl)ether	3.245	93	55703m	10136.1427628	ppb		
8) Phenol	3.181	94	66244	10351.3432882	ppb	96	
10) 2-Chlorophenol	3.293	128	56605	10621.1407363	ppb	98	
11) n-Decane	3.293	41	32743	9557.1097558	ppb	# 100	
12) 1,3-Dichlorobenzene	3.381	146	62683	10262.6996716	ppb	100	
13) 1,4-Dichlorobenzene	3.416	146	63047	10312.3985770	ppb	96	
14) Benzyl Alcohol	3.463	79	40660	10415.3909180	ppb	100	
15) 1,2-Dichlorobenzene	3.504	146	60642	10287.4111665	ppb	98	
16) bis(2-Chloroisopropyl)...	3.540	121	21521	10572.3791808	ppb	98	
17) 2,2-oxybis(1-chloropro...	3.540	121	21521	10572.3791808	ppb	98	
18) 2-Methylphenol	3.510	108	50596	10555.1684687	ppb	96	
19) Hexachloroethane	3.698	117	26205	10278.9609507	ppb	97	
20) N-Nitrosodi-n-propylamine	3.610	70	35112	10298.7989609	ppb	99	
21) 3&4-Methyl phenol	3.593	107	53992	10210.7212151	ppb	99	
25) Nitrobenzene	3.722	77	53649	10796.3440550	ppb	98	
26) Isophorone	3.851	82	101269	10411.4636677	ppb	100	
27) 2-Nitrophenol	3.904	139	25159	10701.2848374	ppb	93	
28) 2,4-Dimethylphenol	3.904	107	52280	10806.4841322	ppb	99	
29) bis(2-Chlorethoxy)methane	3.969	93	71047	10871.2890055	ppb	97	
30) 2,4-Dichlorophenol	4.040	162	40871	10693.2795032	ppb	# 86	
32) 1,2,4-Trichlorobenzene	4.098	180	47514	10395.1948767	ppb	94	
34) Naphthalene	4.157	128	166786	10335.2044265	ppb	100	
35) 4-Chloroaniline	4.175	65	17354	10233.0364786	ppb	98	
36) Hexachloro-1,3-butadiene	4.222	225	27825	11286.0704472	ppb	98	
40) 4-Chloro-3-methylphenol	4.463	107	41378	10347.5683022	ppb	99	
41) 2-Methylnaphthalene	4.592	142	104406	10297.6968942	ppb	99	
42) 1-Methylnaphthalene	4.657	142	103605	10497.1978691	ppb	100	
47) Hexachlorocyclopentadiene	4.692	237	19130	8752.6966899	ppb	98	
48) 2,4,6-Trichlorophenol	4.769	196	27186	10863.2348945	ppb	97	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

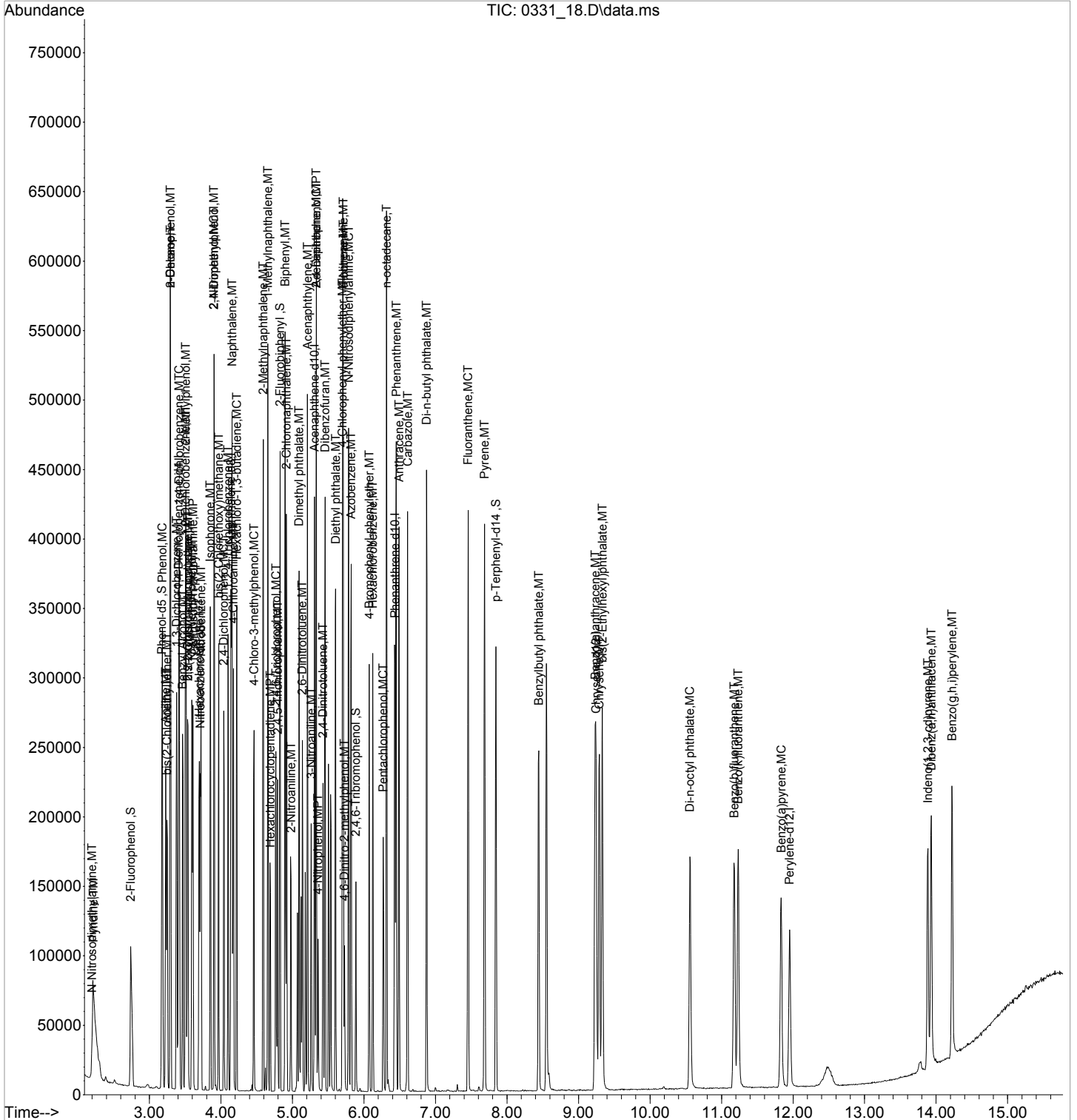
Quant Time: Apr 04 17:01:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	27202	10638.5015338	ppb		96
51) Biphenyl	4.898	154	118579	9890.1836667	ppb		99
52) 2-Chloronaphthalene	4.916	162	97364	10522.2343151	ppb		97
53) 2-Nitroaniline	4.981	138	26879	9792.8659732	ppb		99
54) Acenaphthylene	5.210	152	155597	10958.6228399	ppb		99
55) Dimethyl phthalate	5.092	163	110449	10653.1510320	ppb		94
56) 2,6-Dinitrotoluene	5.139	165	24488	10819.8125221	ppb		94
57) 3-Nitroaniline	5.263	138	21957	10159.1833892	ppb		95
58) Acenaphthene	5.334	153	100464	10440.8237247	ppb		99
59) 2,4-Dinitrophenol	5.334	184	6639	10067.3246842	ppb	#	1
60) Dibenzofuran	5.457	168	134357	10464.2761664	ppb		99
61) 2,4-Dinitrotoluene	5.428	165	28361	10009.1795744	ppb		83
63) 4-Nitrophenol	5.357	139	15677	10019.4582644	ppb		84
64) Fluorene	5.710	166	112854	10618.1767720	ppb		99
65) 4-Chlorophenyl-phenyle...	5.698	204	50559	10444.6934063	ppb		87
66) Diethyl phthalate	5.604	149	118174	10955.7827258	ppb		100
67) 4-Nitroaniline	5.710	138	14373	10982.9600230	ppb		99
68) Azobenzene	5.822	77	118542	10935.8381151	ppb		100
71) 4,6-Dinitro-2-methylph...	5.728	198	10278	9898.9697426	ppb	#	76
72) N-Nitrosodiphenylamine	5.787	169	89933	10794.9785060	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	26731	10453.6669917	ppb		91
75) Hexachlorobenzene	6.122	284	31578	10571.7081466	ppb		99
76) n-octadecane	6.316	55	19875	9957.1898370	ppb		98
77) Pentachlorophenol	6.269	266	15829	11430.0132536	ppb		91
78) Phenanthrene	6.451	178	149173	10507.5981260	ppb		99
79) Anthracene	6.492	178	139933	10381.2108124	ppb		99
80) Carbazole	6.610	167	127925	11094.2622659	ppb		100
81) Di-n-butyl phthalate	6.875	149	198906	11516.4267189	ppb		99
83) Fluoranthene	7.457	202	145483	10472.6197639	ppb		99
86) Pyrene	7.686	202	152901	10532.2669087	ppb		99
88) Benzylbutyl phthalate	8.445	149	68827	10330.4950097	ppb		95
90) Benzo(a)anthracene	9.233	228	109826	10151.4892180	ppb		99
91) Chrysene	9.292	228	121439	10627.5018659	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.333	149	103656	10545.4870384	ppb		98
93) Di-n-octyl phthalate	10.557	149	138079	9187.8214826	ppb		100
95) Benzo(b)fluoranthene	11.174	252	104663	10381.0496709	ppb		98
96) Benzo(k)fluoranthene	11.233	252	110613	10729.7840645	ppb		99
97) Benzo(a)pyrene	11.833	252	93356	11423.3722820	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.886	276	82913	11147.0755413	ppb		95
99) Dibenz(a,h)anthracene	13.933	278	91817	11013.5644462	ppb		99
100) Benzo(g,h,i)perylene	14.221	276	95606	10825.7600661	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_18.D  
Acq On : 31 Mar 2022 10:44 pm  
Operator : 3545  
Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 18 Sample Multiplier: 1

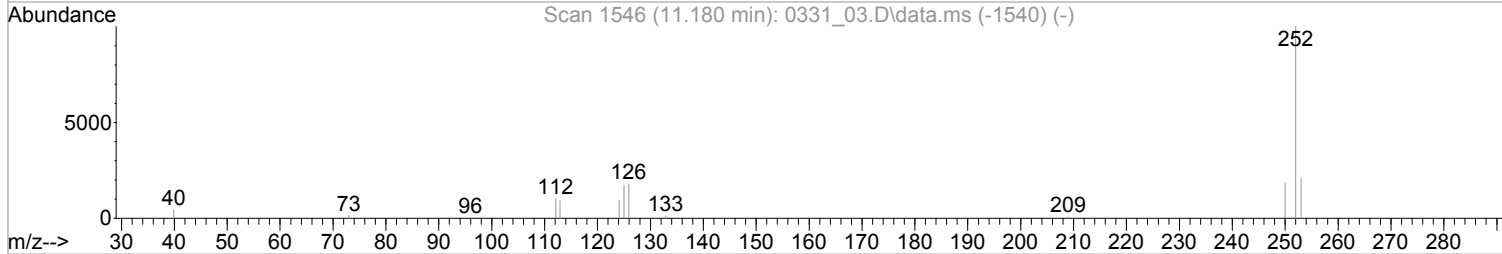
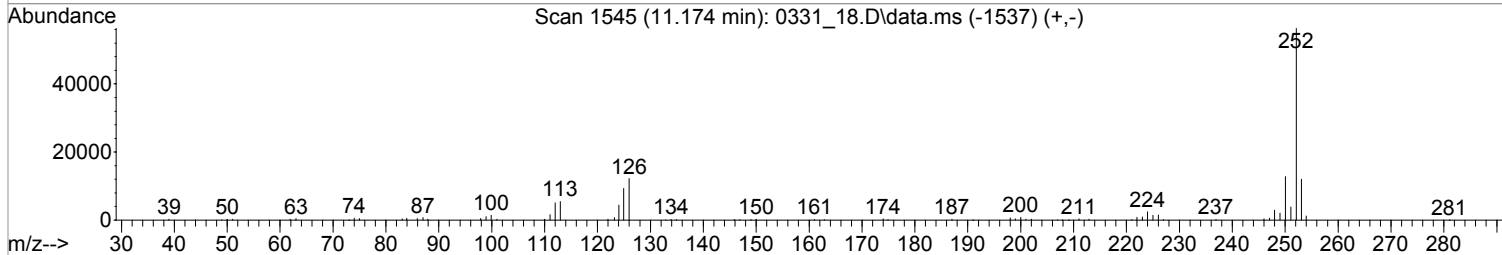
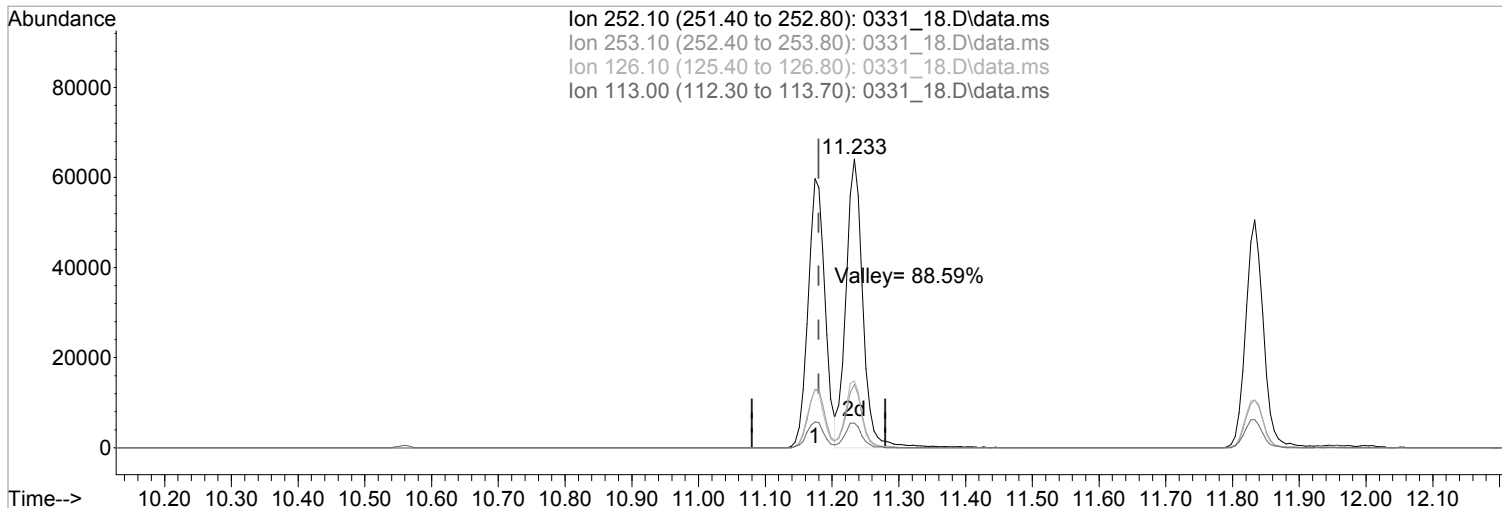
Quant Time: Apr 04 17:01:16 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:54:30 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:39:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:39:09 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

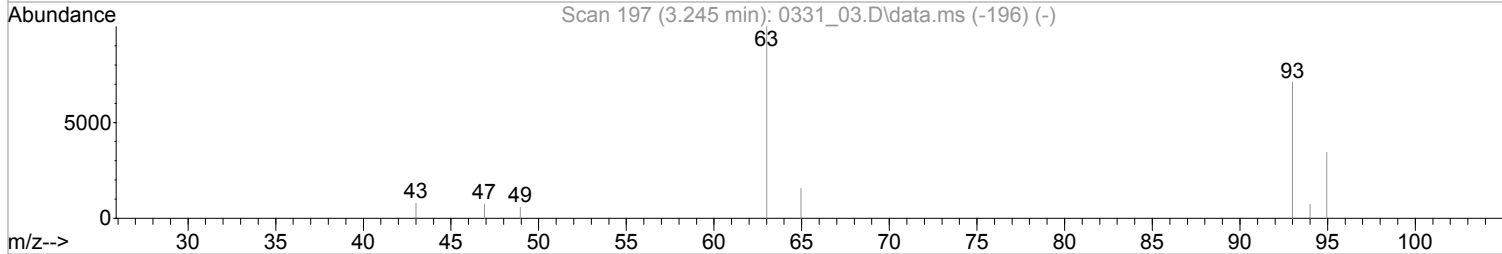
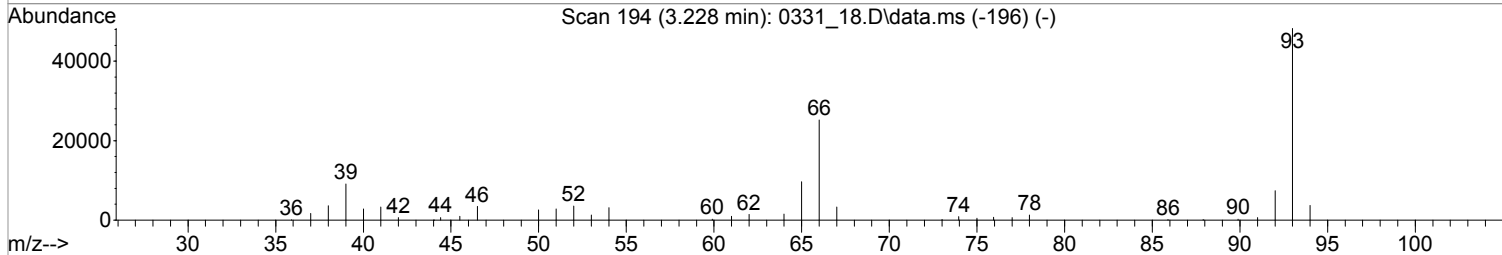
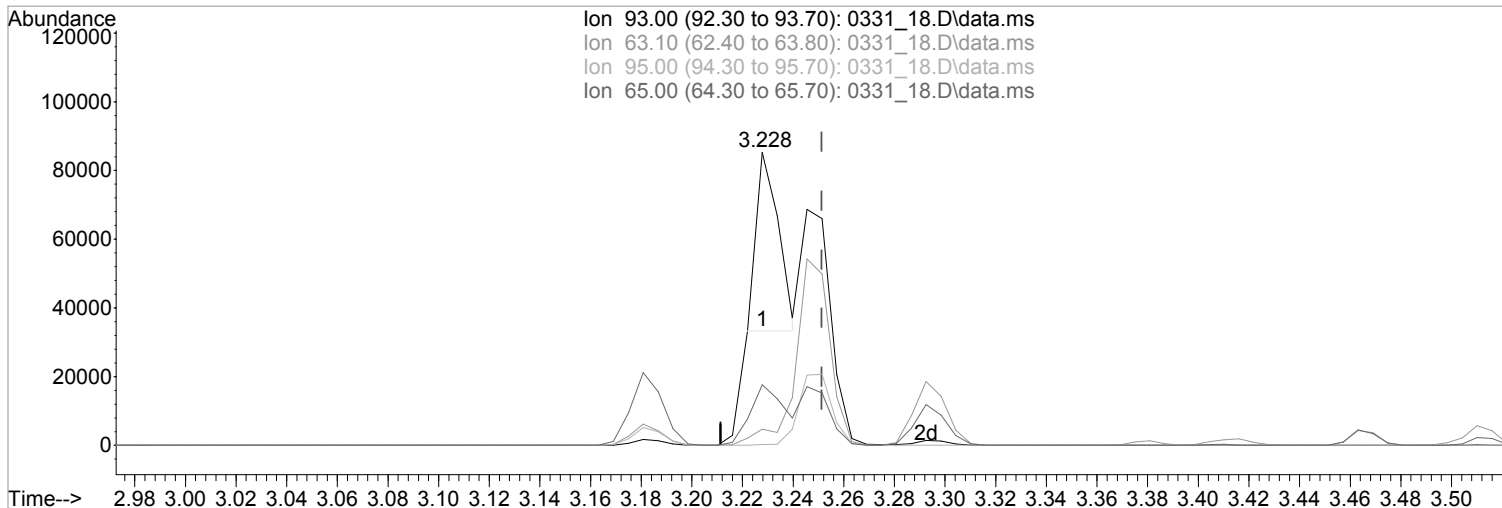
(95) Benzo(b)fluoranthene (MT)  
 11.174min (-0.006) 10381.0496709 ppb  
 Qvalue = 98  
 response 104663

Ion	Exp%	Act%
252.10	100	100
253.10	21.80	21.38
126.10	20.00	21.67
113.00	9.70	9.69

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

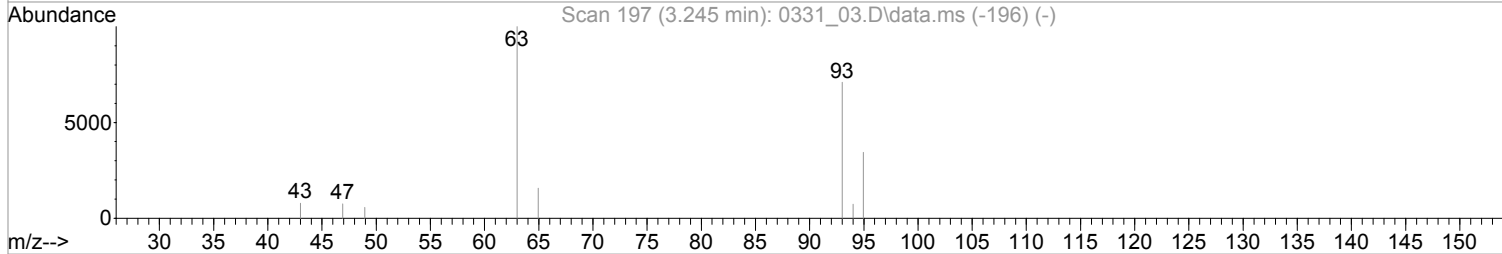
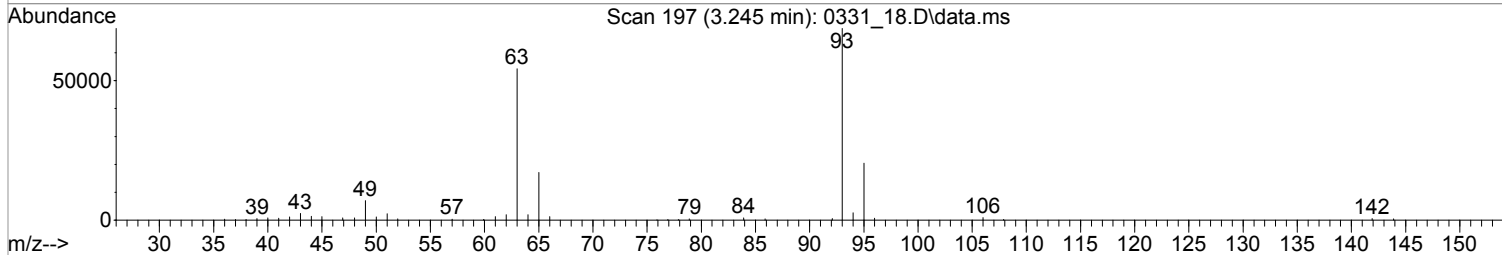
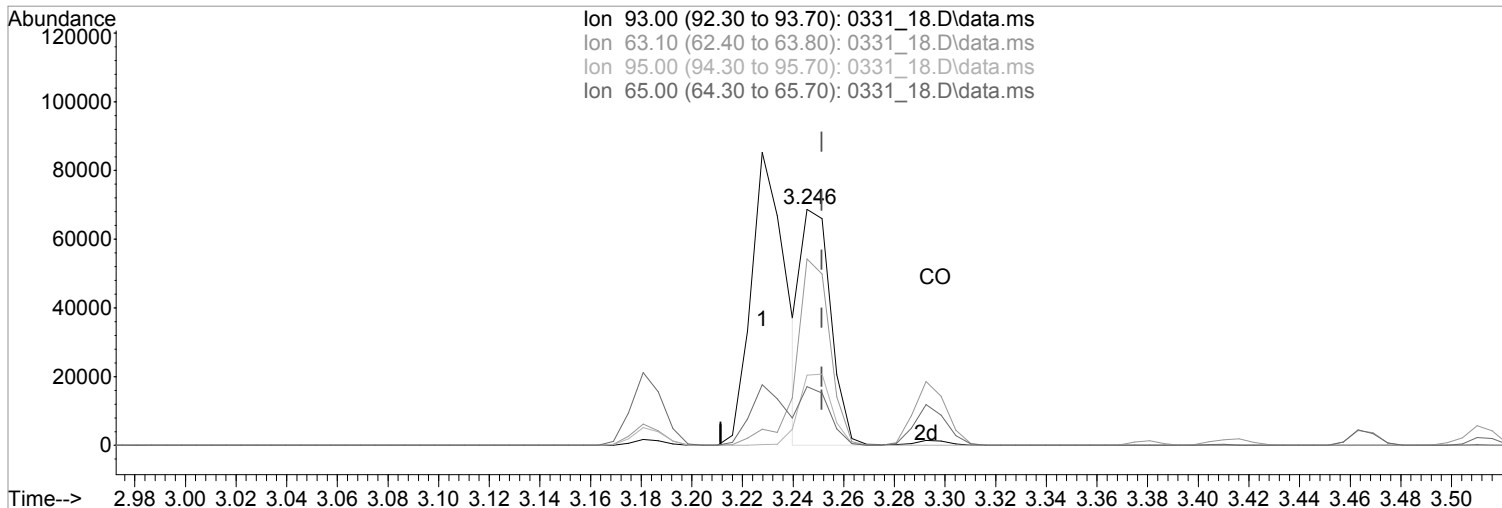
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 5741.0786522 ppb  
 Qvalue = 37  
 response 31550

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.01#
95.00	31.90	0.36#
65.00	23.10	19.07

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.245min (-0.006) 10136.1427628 ppb m

response 55703

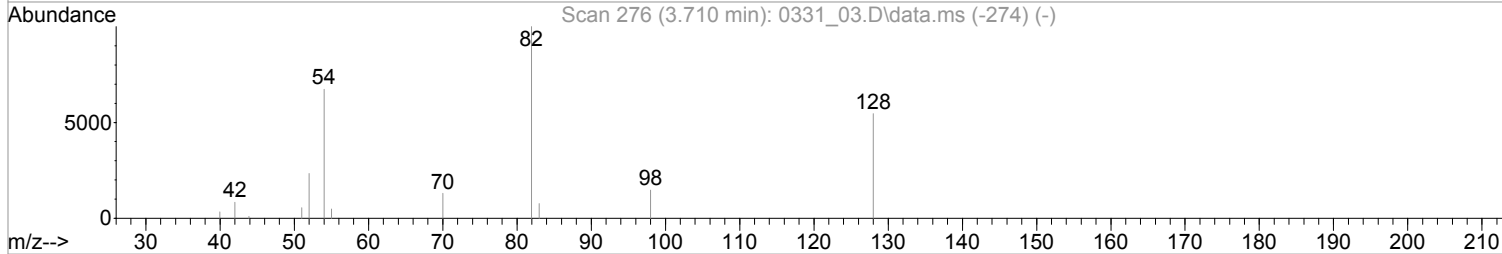
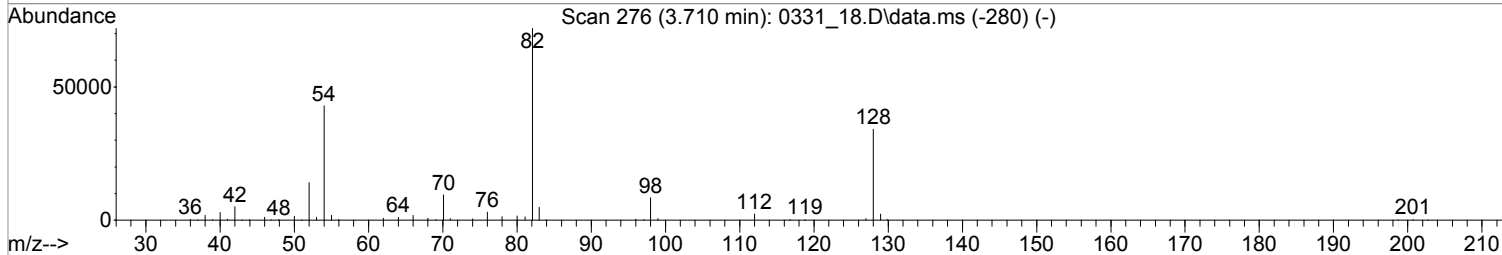
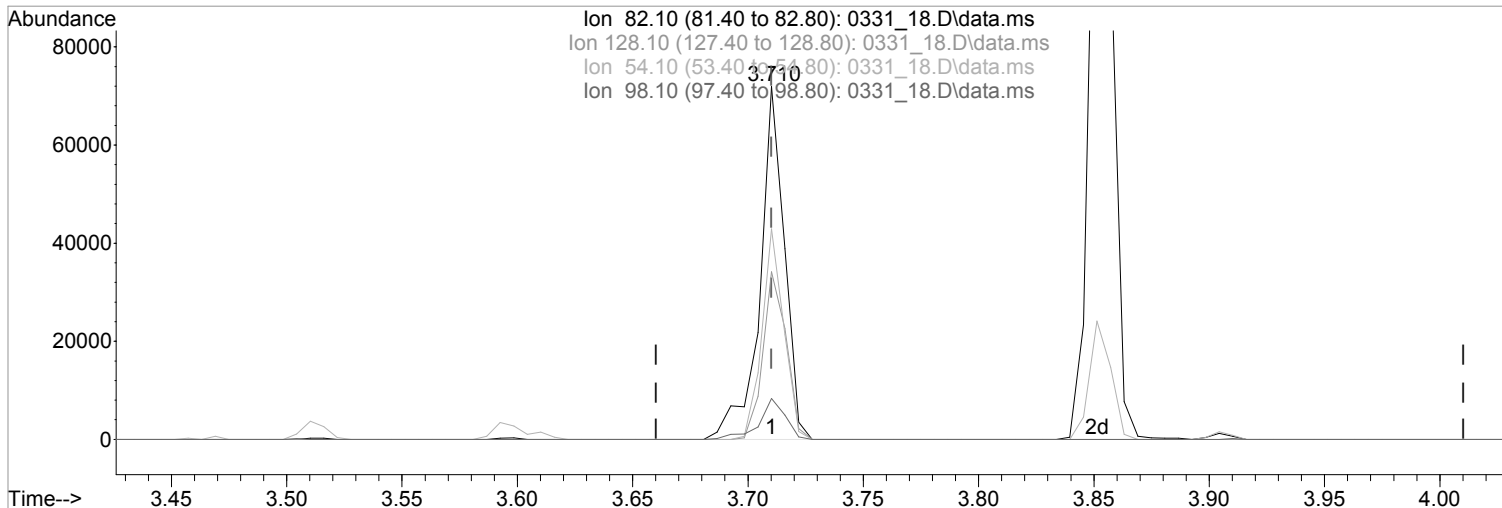
Ion	Exp%	Act%
93.00	100	100
63.10	76.00	78.90
95.00	31.90	29.72
65.00	23.10	24.89



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

(24) Nitrobenzene-d5 (S)

3.710min (-0.000) 10838.3777403 ppb

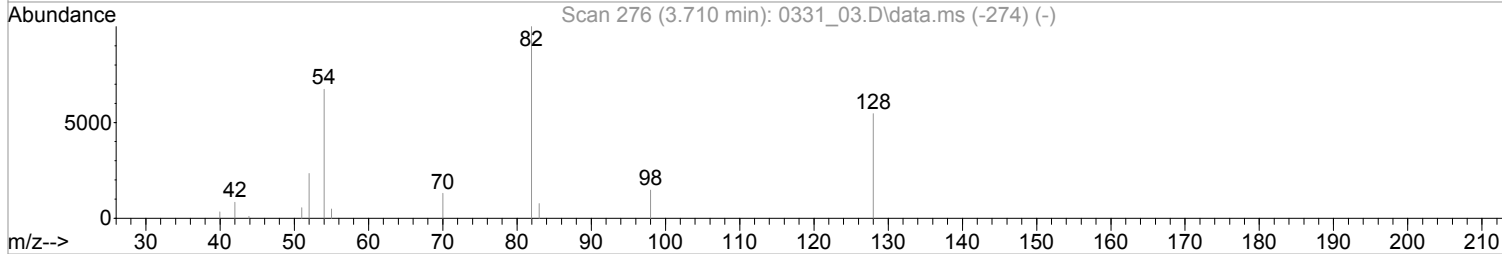
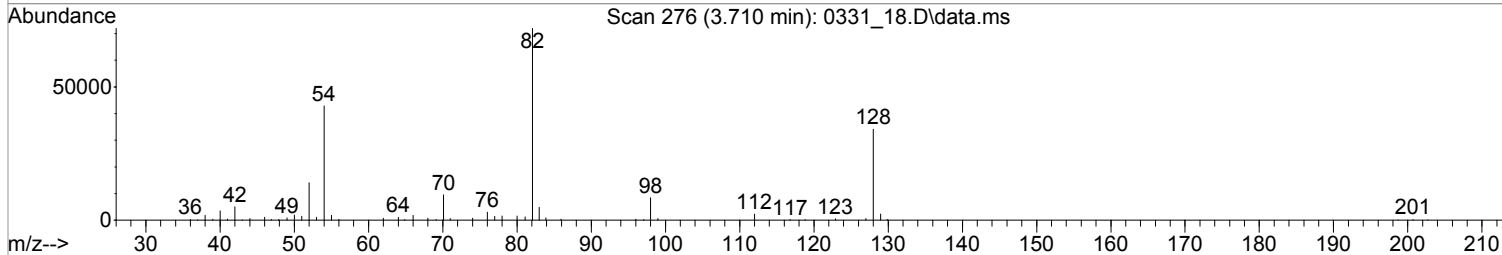
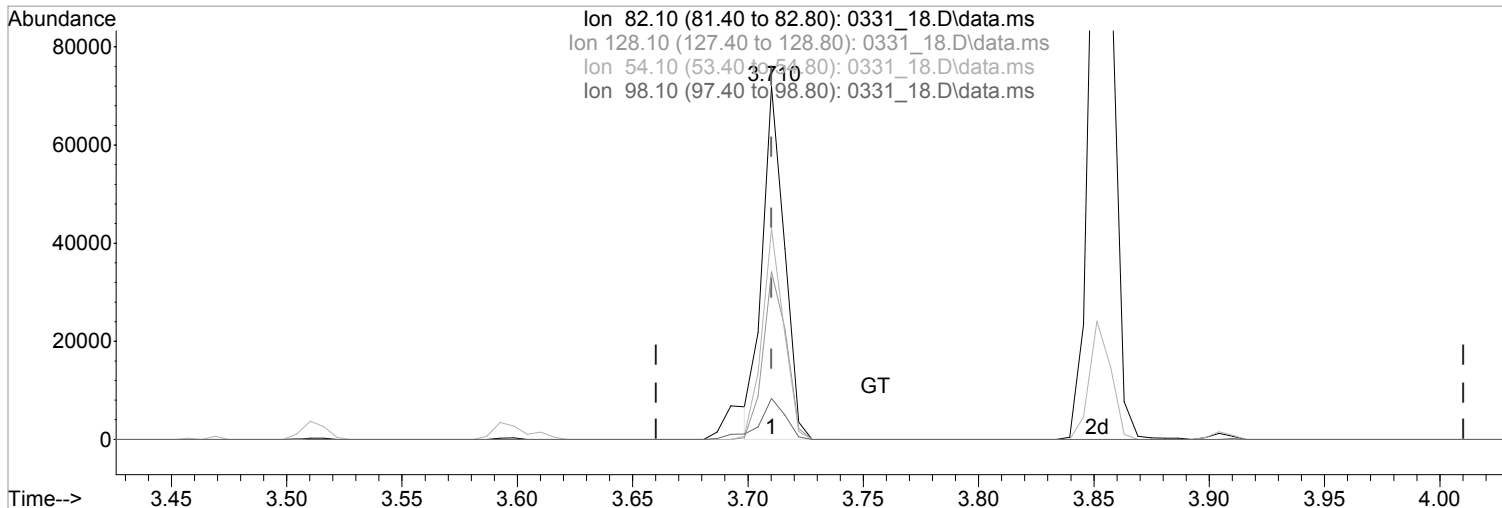
Qvalue = 99  
 response 53287

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	47.47
54.10	60.00	59.60
98.10	11.40	11.62

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 9770.3438575 ppb m

response 48036

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	47.47
54.10	60.00	59.60
98.10	11.40	11.62

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1487790	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0331_19	<b>Analysis date/time:</b>	03/31/22 23:06
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.079140	0.06852319		13.40		10	9.288	92.90	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_19.D  
 Acq On : 31 Mar 2022 11:06 pm  
 Operator : 3545  
 Sample : SSCV TCL 10K1 PPB 22C25375 exp 5/31/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 19 Sample Multiplier: 1

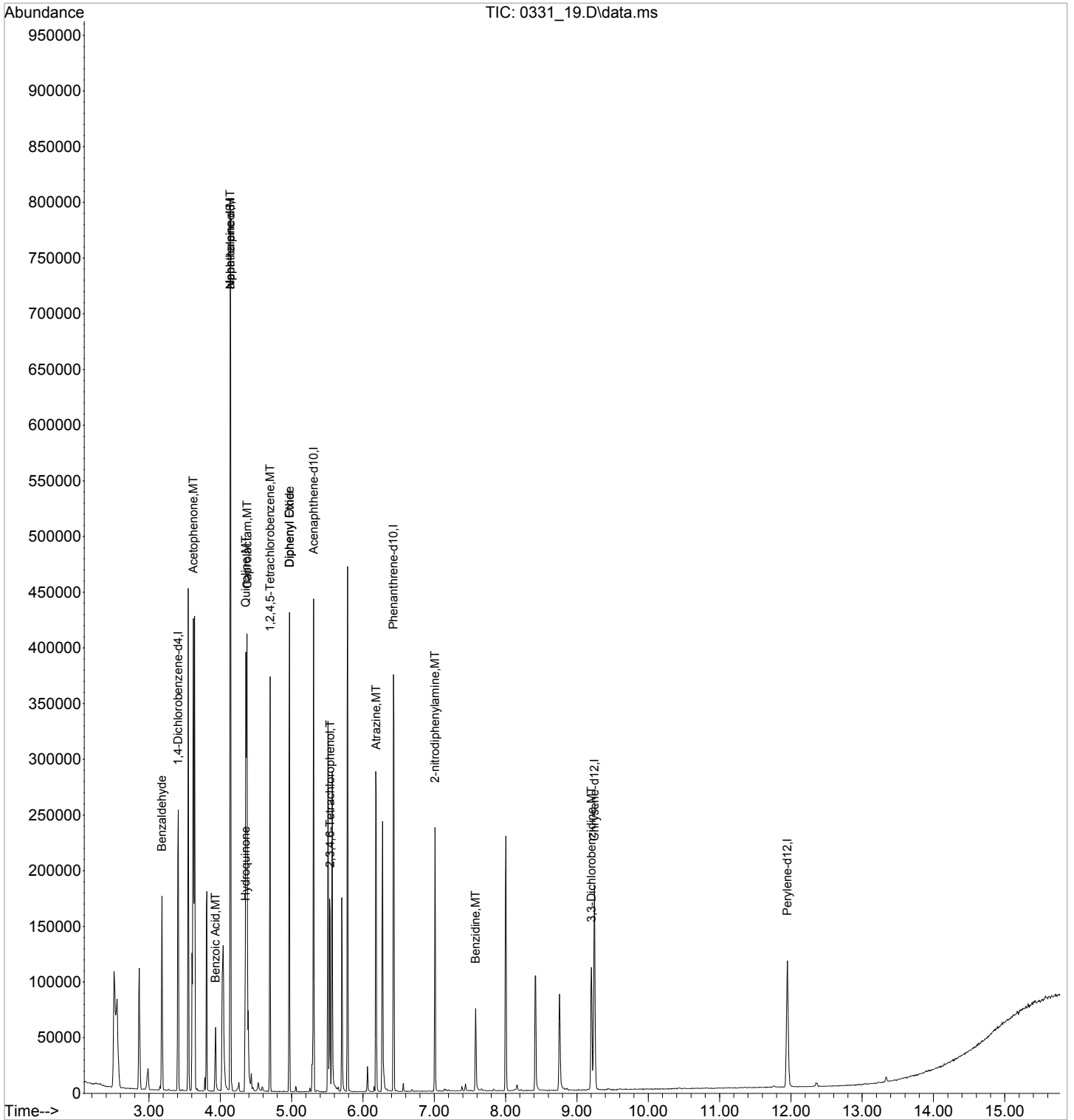
Quant Time: Apr 04 17:01:57 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.410	152	35583	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.140	136	162059	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	73711	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.428	188	118731	8000.0000000	ppb	0.00
84) Chrysene-d12	9.245	240	80072	8000.0000000	ppb	0.00
94) Perylene-d12	11.951	264	68064	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0d	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.181	105	31909	21445.8562524	ppb	98
22) Acetophenone	3.622	105	75382	9841.7477258	ppb	97
31) Benzoic Acid	3.934	105	13881	9287.9241188	ppb	100
33) alpha-terpineol	4.140	59	52858	10589.0958967	ppb	98
37) Hydroquinone	4.351	110	17084	4832.8177254	ppb	98
38) Quinoline	4.357	129	105645	11290.3729771	ppb	99
39) Caprolactam	4.375	113	15088	12246.5826042	ppb #	54
43) 1,2,4,5-Tetrachloroben...	4.698	216	44163	10135.7140612	ppb	98
44) Diphenyl Ether	4.969	170	66081	10119.7642454	ug/ml	99
45) Diphenyl Oxide	4.969	170	66081	10119.7642454	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.539	232	18260	9138.7507826	ppb	99
69) Atrazine	6.186	200	26464	9976.4469748	ppb	99
82) 2-nitrodiphenylamine	7.010	167	24172	9615.2258453	ppb	97
85) Benzidine	7.580	184	31867	14436.7066228	ppb	98
89) 3,3-Dichlorobenzidine	9.204	252	33453	9646.2468026	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_19.D  
 Acq On : 31 Mar 2022 11:06 pm  
 Operator : 3545  
 Sample : SSCV TCL 10K1 PPB 22C25375 exp 5/31/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 04 17:01:57 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1487790	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0506A_02	<b>Analysis date/time:</b>	05/06/22 14:57
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.610754	0.576628		5.59	20	10	9.441	94.40	
2-METHYLNAPHTHALENE	0.627399	0.59571240	0.40	5.05	20	10	9.495	94.90	
3&4-METHYL PHENOL	1.301686	1.282043	0.60	1.51	20	10	9.849	98.50	
ACENAPHTHENE	1.148837	1.076981	0.90	6.25	20	10	9.375	93.80	
ACENAPHTHYLENE	1.695228	1.645051	0.90	2.96	20	10	9.704	97	
ANTHRACENE	1.006737	0.99728630	0.70	0.9390	20	10	9.906	99.10	
BENZO(A)ANTHRACENE	1.116712	1.071904	0.80	4.01	20	10	9.599	96	
BENZO(A)PYRENE	0.950358	0.96049890	0.70	1.07	20	10	10.11	101	
BENZO(B)FLUORANTHENE	1.172442	1.102556	0.70	5.96	20	10	9.404	94	
BENZO(G,H,I)PERYLENE	1.026990	1.055474	0.50	2.77	20	10	10.28	103	
BENZO(K)FLUORANTHENE	1.198822	1.173584	0.70	2.11	20	10	9.789	97.90	
BIS(2-ETHYLHEXYL)PHTHALATE	1.014597	0.872824	0.01	14	20	10	8.603	86	
CARBAZOLE	0.861194	0.94552270	0.01	9.79	20	10	10.98	110	
CHRYSENE	1.179486	1.110193	0.70	5.87	20	10	9.413	94.10	
DI-N-BUTYL PHTHALATE	1.289953	1.222533	0.01	5.23	20	10	9.477	94.80	
DI-N-OCTYL PHTHALATE	1.425428	1.362512	0.01	4.41	20	10	8.815	88.10	80 - 120
DIBENZ(A,H)ANTHRACENE	0.969471	1.009627	0.40	4.14	20	10	10.41	104	
DIBENZOFURAN	1.532971	1.498939	0.80	2.22	20	10	9.778	97.80	
FLUORANTHENE	1.037530	1.003834	0.60	3.25	20	10	9.675	96.80	
FLUORENE	1.268965	1.221170	0.90	3.77	20	10	9.623	96.20	
INDENO(1,2,3-CD)PYRENE	0.864970	0.86928650	0.50	0.4990	20	10	10.05	101	
NAPHTHALENE	0.998617	0.94943560	0.70	4.92	20	10	9.507	95.10	
PENTACHLOROPHENOL	0.105171	0.09136936	0.05	13.10	20	10	9.248	92.50	80 - 120
PHENANTHRENE	1.060304	0.97941740	0.70	7.63	20	10	9.237	92.40	
PHENOL	1.575372	1.514435	0.80	3.87	20	10	9.613	96.10	
PYRENE	1.498492	1.231806	0.60	17.80	20	10	8.220	82.20	
2,4,6-TRIBROMOPHENOL	0.083814	0.08636717		3.05	20	10	10.30	103	70 - 130
2-FLUOROBIPHENYL	1.270391	1.232349		2.99	20	10	9.701	97	70 - 130
2-FLUOROPHENOL	1.252515	1.171862		6.44	20	10	9.356	93.60	70 - 130
NITROBENZENE-D5	0.304240	0.30752420		1.08	20	10	10.11	101	70 - 130
P-TERPHENYL-D14	1.107064	0.96904240		12.50	20	10	8.753	87.50	70 - 130
PHENOL-D5	1.486088	1.450486		2.40	20	10	9.760	97.60	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_02.D  
 Acq On : 6 May 2022 2:57 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:16:58 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.343	152	33051	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.072	136	133596	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.237	164	69059	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.354	188	118508	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.119	240	99956	8000.0000000	ppb	0.01	
94) Perylene-d12	11.777	264	94610	8000.0000000	ppb	0.01	
System Monitoring Compounds							
4) 2-Fluorophenol	2.672	112	48414	9356.0676044	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	46.78%		
7) Phenol-d5	3.113	99	59925	9760.4309543	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	48.80%		
24) Nitrobenzene-d5	3.643	82	51355m	10107.9627845	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	101.08%		
50) 2-Fluorobiphenyl	4.754	172	106381	9700.5502211	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	97.01%		
73) 2,4,6-Tribromophenol	5.813	330	12794	10304.6023104	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	51.52%		
87) p-Terphenyl-d14	7.742	244	121077	8753.2612475	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	87.53%		
Target Compounds							
2) Pyridine	2.143	79	49657	9058.8804734	ppb	96	
3) N-Nitrosodimethylamine	2.125	42	23787	8242.8744278	ppb	93	
5) Aniline	3.160	66	28253	9945.0750537	ppb	96	
6) bis(2-Chloroethyl)ether	3.184	93	54327m	9720.3496406	ppb		
8) Phenol	3.119	94	62567	9613.1899769	ppb	95	
10) 2-Chlorophenol	3.225	128	52677	9718.7281105	ppb	98	
11) n-Decane	3.225	41	29604	8496.3135470	ppb	# 96	
12) 1,3-Dichlorobenzene	3.313	146	58489	9415.8183755	ppb	97	
13) 1,4-Dichlorobenzene	3.349	146	59154	9513.7429107	ppb	97	
14) Benzyl Alcohol	3.401	79	38719	9752.2396032	ppb	100	
15) 1,2-Dichlorobenzene	3.437	146	56189	9372.5100575	ppb	99	
16) bis(2-Chloroisopropyl)...	3.472	121	19123	9237.1572837	ppb	98	
17) 2,2-oxybis(1-chloropro...	3.472	121	19123	9237.1572837	ppb	98	
18) 2-Methylphenol	3.449	108	48139	9874.5674349	ppb	95	
19) Hexachloroethane	3.625	117	24629	9499.1306529	ppb	94	
20) N-Nitrosodi-n-propylamine	3.543	70	34505	9951.4204258	ppb	95	
21) 3&4-Methyl phenol	3.531	107	52966	9849.0923583	ppb	98	
25) Nitrobenzene	3.654	77	52686	10260.0198421	ppb	98	
26) Isophorone	3.784	82	99130	9862.3011763	ppb	99	
27) 2-Nitrophenol	3.837	139	27686	11395.6906595	ppb	# 81	
28) 2,4-Dimethylphenol	3.843	107	48237	9648.6603656	ppb	97	
29) bis(2-Chlorethoxy)methane	3.901	93	64191	9504.8950678	ppb	99	
30) 2,4-Dichlorophenol	3.978	162	40299	10202.9982606	ppb	97	
32) 1,2,4-Trichlorobenzene	4.031	180	43710	9254.0051495	ppb	94	
34) Naphthalene	4.084	128	158551	9507.5003893	ppb	99	
35) 4-Chloroaniline	4.107	65	17869	10196.3108313	ppb	# 57	
36) Hexachloro-1,3-butadiene	4.148	225	24574	9645.4240584	ppb	97	
40) 4-Chloro-3-methylphenol	4.396	107	41177	9964.6350431	ppb	96	
41) 2-Methylnaphthalene	4.519	142	99481	9494.9499026	ppb	99	
42) 1-Methylnaphthalene	4.584	142	96294	9441.2562302	ppb	100	
47) Hexachlorocyclopentadiene	4.619	237	25150	11164.8225404	ppb	98	
48) 2,4,6-Trichlorophenol	4.695	196	26785	10384.6636502	ppb	94	

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_02.D  
 Acq On : 6 May 2022 2:57 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 16:16:58 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

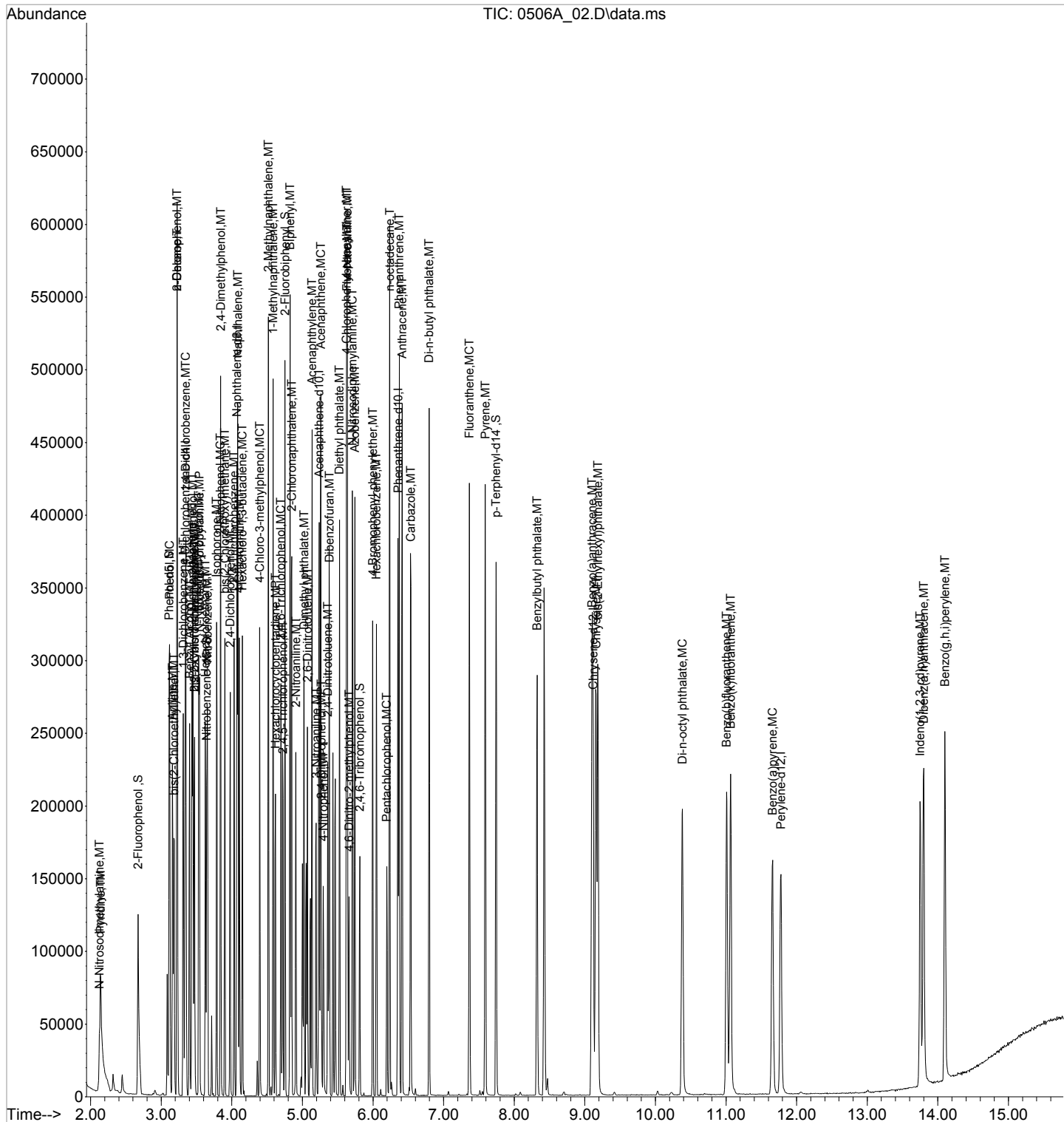
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
49) 2,4,5-Trichlorophenol	4.725	196	29214	11085.5584302	ppb	97
51) Biphenyl	4.825	154	119237	9649.2718082	ppb	99
52) 2-Chloronaphthalene	4.848	162	93344	9787.7506004	ppb	99
53) 2-Nitroaniline	4.907	138	31515	11140.4040142	ppb	99
54) Acenaphthylene	5.137	152	142007	9704.0145684	ppb	100
55) Dimethyl phthalate	5.025	163	105544	9877.2664991	ppb	99
56) 2,6-Dinitrotoluene	5.072	165	24727	10600.4615270	ppb	84
57) 3-Nitroaniline	5.195	138	26851	12054.0555628	ppb #	84
58) Acenaphthene	5.260	153	92969	9374.5274179	ppb	97
59) 2,4-Dinitrophenol	5.266	184	9939	13310.6722992	ppb #	1
60) Dibenzofuran	5.384	168	129394	9777.9983451	ppb	100
61) 2,4-Dinitrotoluene	5.360	165	31667	10843.5325983	ppb	94
63) 4-Nitrophenol	5.295	139	20850	12929.2778269	ppb	91
64) Fluorene	5.631	166	105416	9623.3538161	ppb	98
65) 4-Chlorophenyl-phenyle...	5.625	204	47647	9550.3592451	ppb	97
66) Diethyl phthalate	5.525	149	108523	9761.8064357	ppb	98
67) 4-Nitroaniline	5.637	138	25597	18977.8920474	ppb	96
68) Azobenzene	5.742	77	110016	9847.4231297	ppb	99
71) 4,6-Dinitro-2-methylph...	5.660	198	14841	12125.6659676	ppb	94
72) N-Nitrosodiphenylamine	5.707	169	88009	9548.3505777	ppb	99
74) 4-Bromophenyl-phenylether	5.995	248	27036	9556.4031317	ppb	95
75) Hexachlorobenzene	6.048	284	29785	9012.7374103	ppb	99
76) n-octadecane	6.237	55	19344	8759.4028889	ppb	97
77) Pentachlorophenol	6.195	266	13535	9247.5419204	ppb	93
78) Phenanthrene	6.372	178	145086	9237.1353390	ppb	99
79) Anthracene	6.413	178	147733	9906.1283647	ppb	99
80) Carbazole	6.537	167	140065	10979.2126581	ppb	99
81) Di-n-butyl phthalate	6.795	149	181100	9477.3492206	ppb	100
83) Fluoranthene	7.366	202	148703	9675.2319776	ppb	100
86) Pyrene	7.589	202	153908	8220.3058047	ppb	99
88) Benzylbutyl phthalate	8.325	149	76266	8875.8204850	ppb	97
90) Benzo(a)anthracene	9.101	228	133929	9598.7452619	ppb	99
91) Chrysene	9.160	228	138713	9412.5093539	ppb	98
92) bis(2-Ethylhexyl)phtha...	9.183	149	109055	8602.6653193	ppb	99
93) Di-n-octyl phthalate	10.383	149	170239	8815.4477942	ppb	99
95) Benzo(b)fluoranthene	11.007	252	130391	9403.9264926	ppb	99
96) Benzo(k)fluoranthene	11.066	252	138791	9789.4802642	ppb	98
97) Benzo(a)pyrene	11.660	252	113591	10106.7037929	ppb	98
98) Indeno(1,2,3-cd)pyrene	13.748	276	102804	10049.9024783	ppb	97
99) Dibenz(a,h)anthracene	13.801	278	119401	10414.2088386	ppb	98
100) Benzo(g,h,i)perylene	14.101	276	124823	10277.3556324	ppb	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\050622A\  
Data File : 0506A\_02.D  
Acq On : 6 May 2022 2:57 pm  
Operator : 3545  
Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
ALS Vial : 3 Sample Multiplier: 1

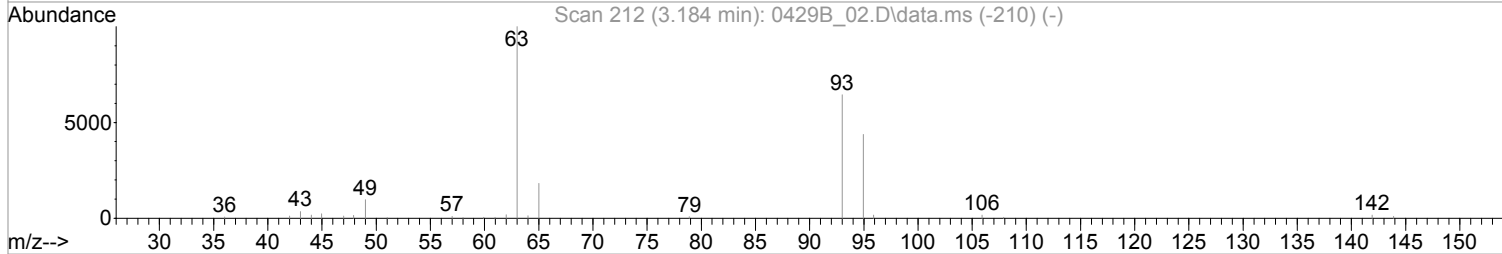
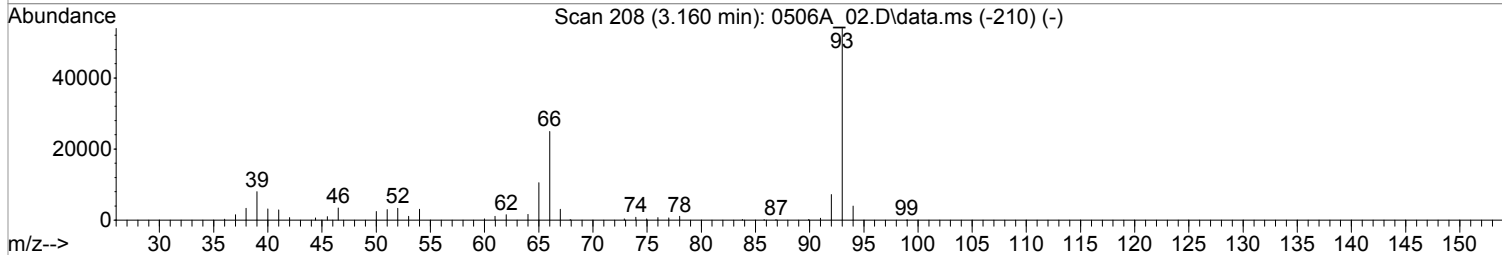
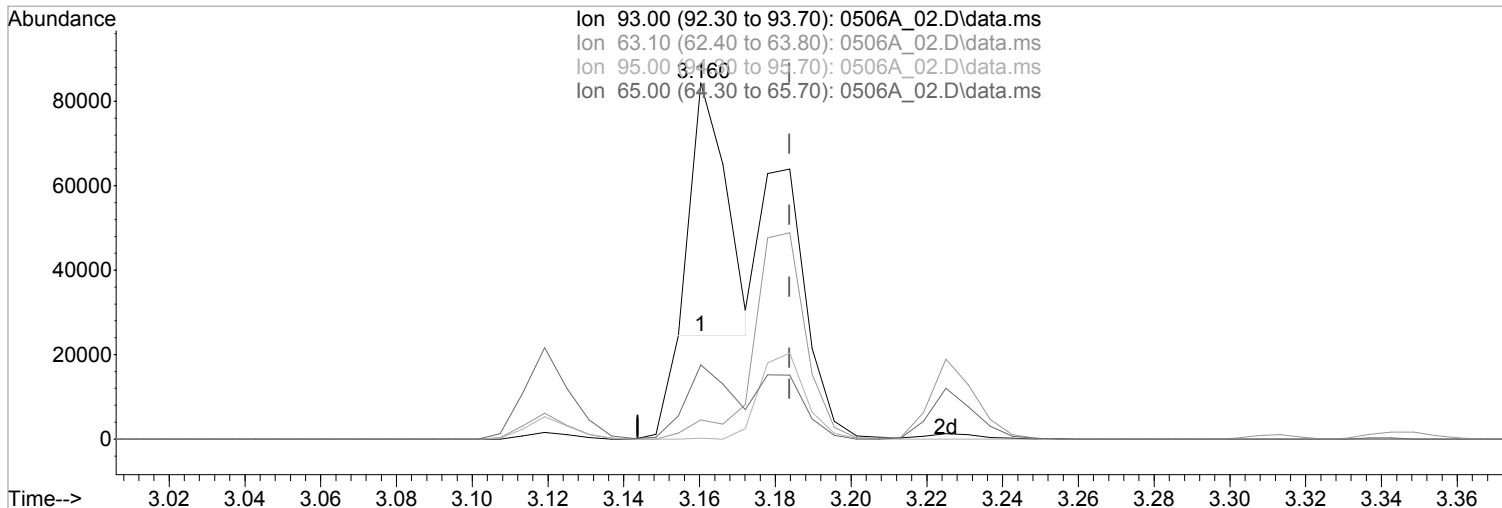
Quant Time: May 06 16:16:58 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_02.D  
 Acq On : 6 May 2022 2:57 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 15:32:49 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0506A\_02.D\data.ms

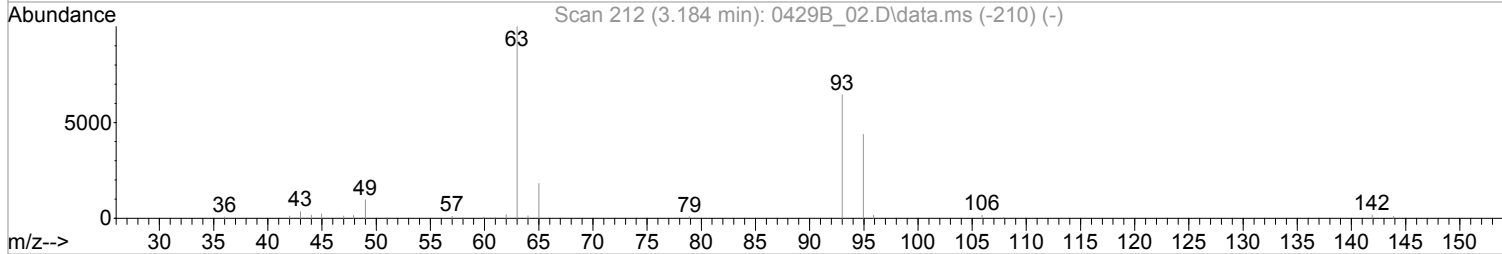
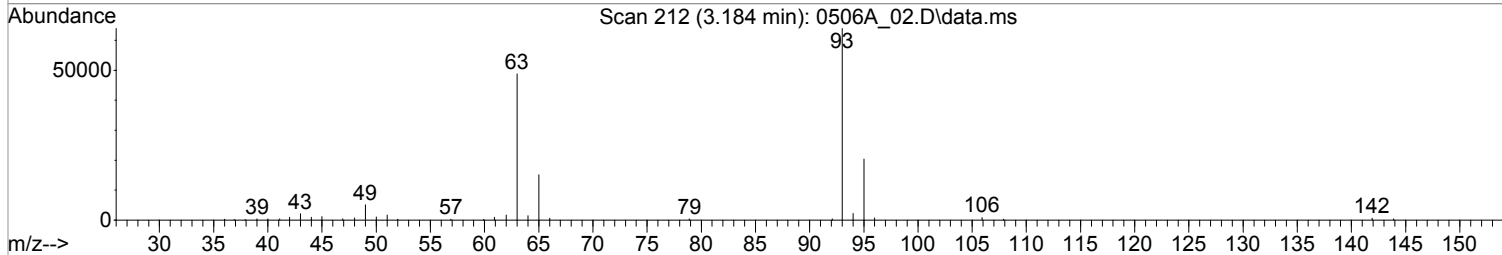
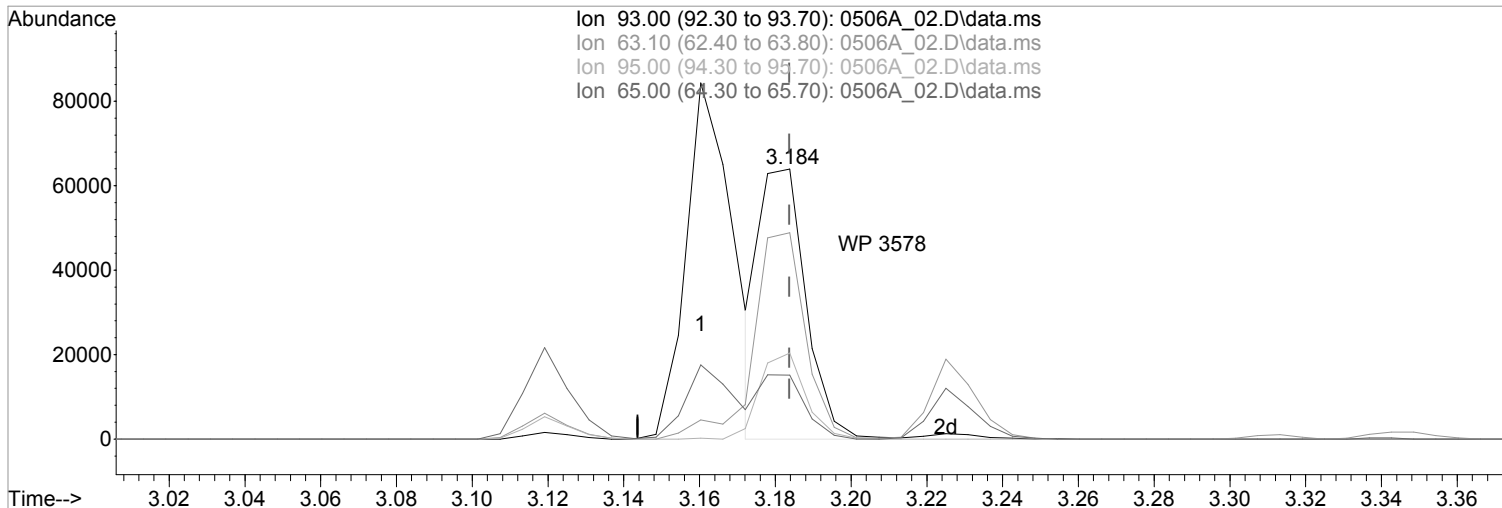
(6) bis(2-Chloroethyl)ether (MT)  
 3.160min (-0.023) 6719.6320633 ppb  
 Qvalue = 37  
 response 37556

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.19#
95.00	31.90	0.36#
65.00	23.10	20.09

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_02.D  
 Acq On : 6 May 2022 2:57 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 15:32:49 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0506A\_02.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.184min (+0.000) 9720.3496406 ppb m

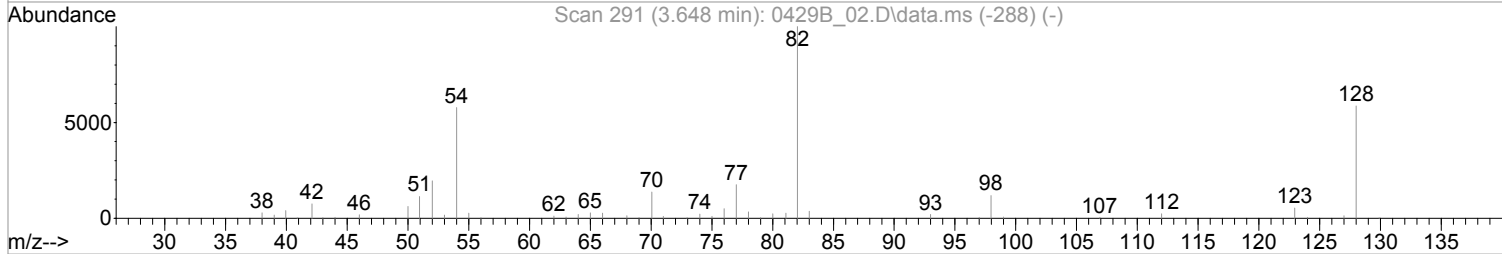
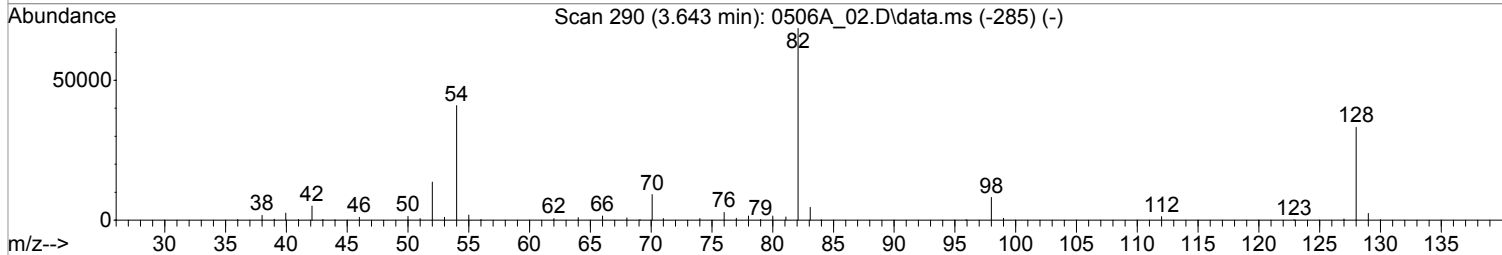
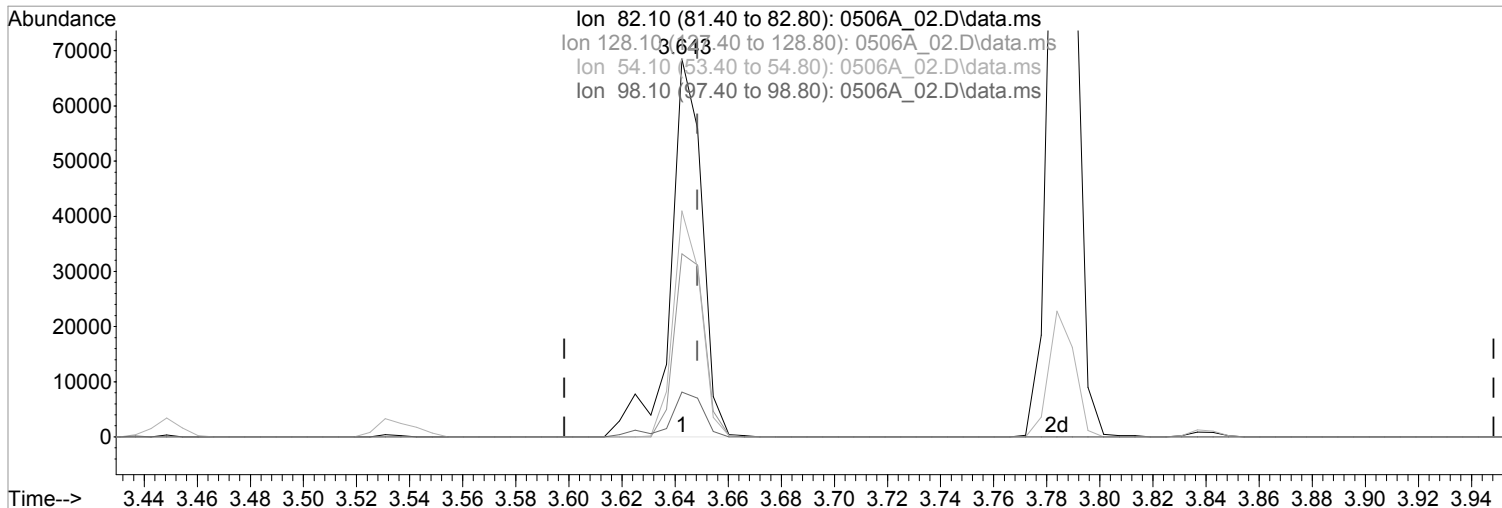
response 54327

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.36
95.00	31.90	31.88
65.00	23.10	23.72

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_02.D  
 Acq On : 6 May 2022 2:57 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 15:32:49 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0506A\_02.D\data.ms

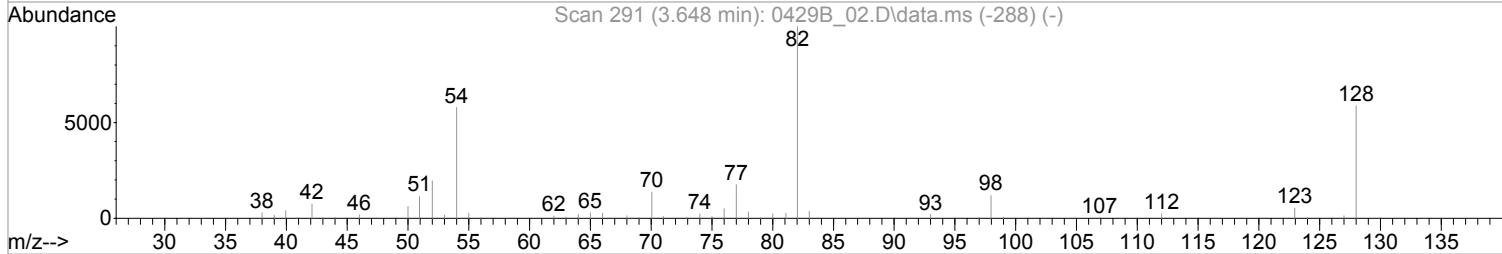
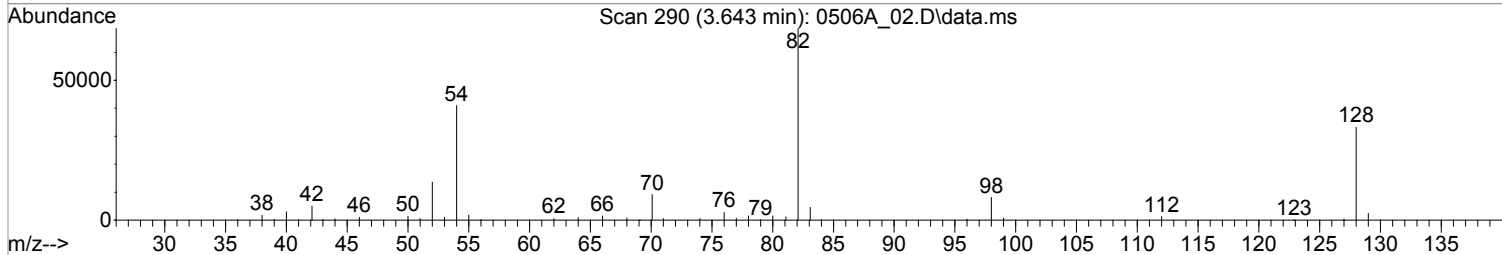
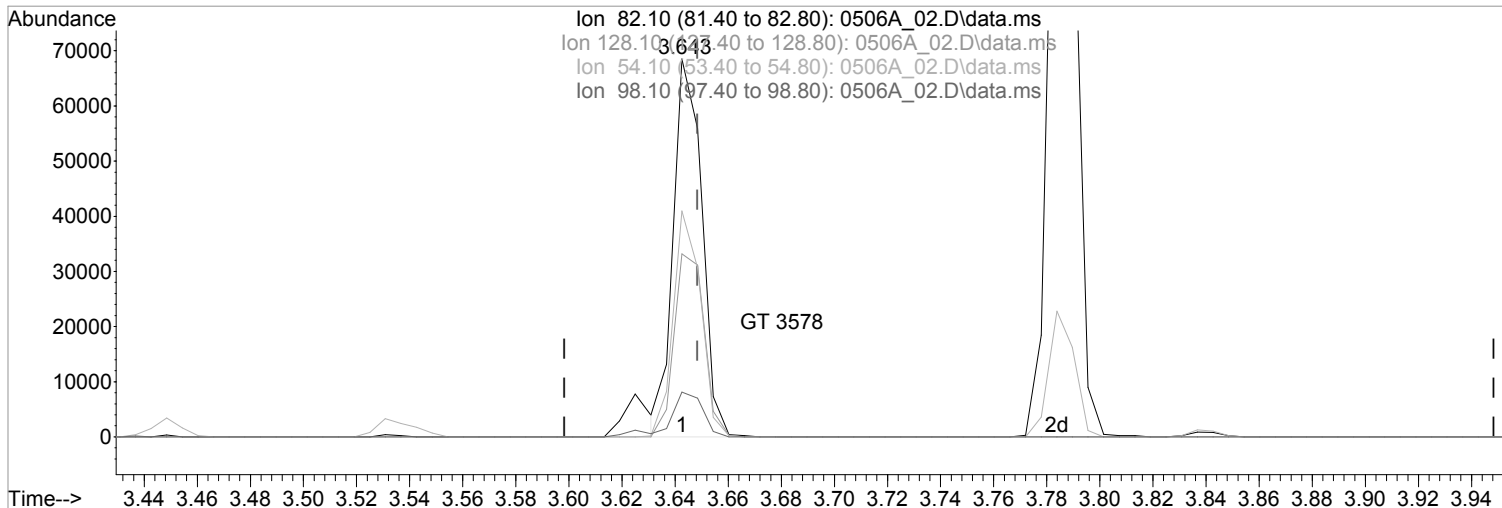
(24) Nitrobenzene-d5 (S)  
 3.643min (-0.006) 11123.9749331 ppb  
 Qvalue = 99  
 response 56517

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	48.45
54.10	60.00	59.75
98.10	11.40	11.83

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050622A\  
Data File : 0506A\_02.D  
Acq On : 6 May 2022 2:57 pm  
Operator : 3545  
Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 15:32:49 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



TIC: 0506A\_02.D\data.ms

(24) Nitrobenzene-d5 (S)  
3.643min (-0.006) 10107.9627845 ppb m

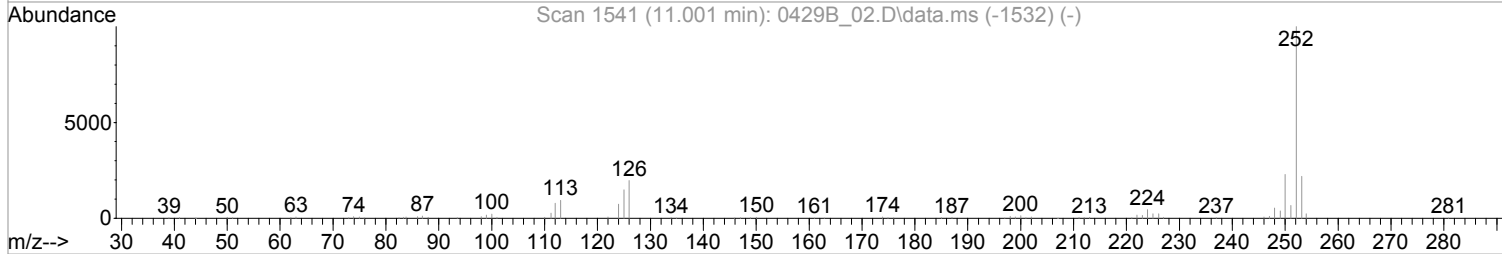
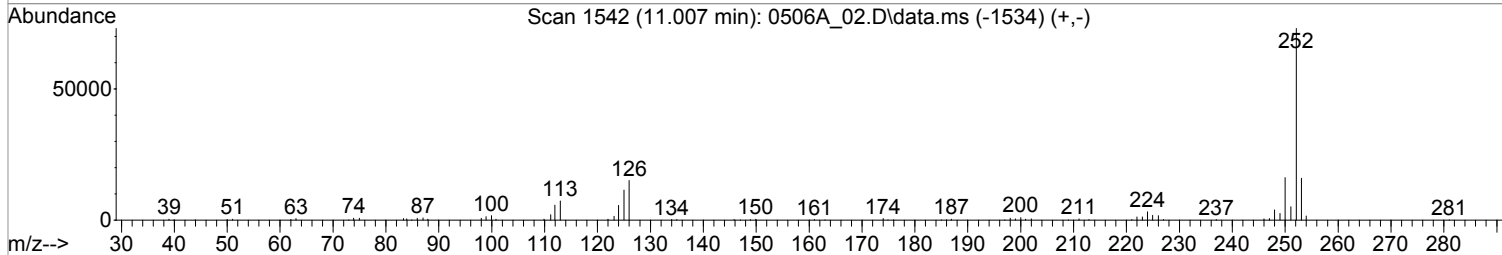
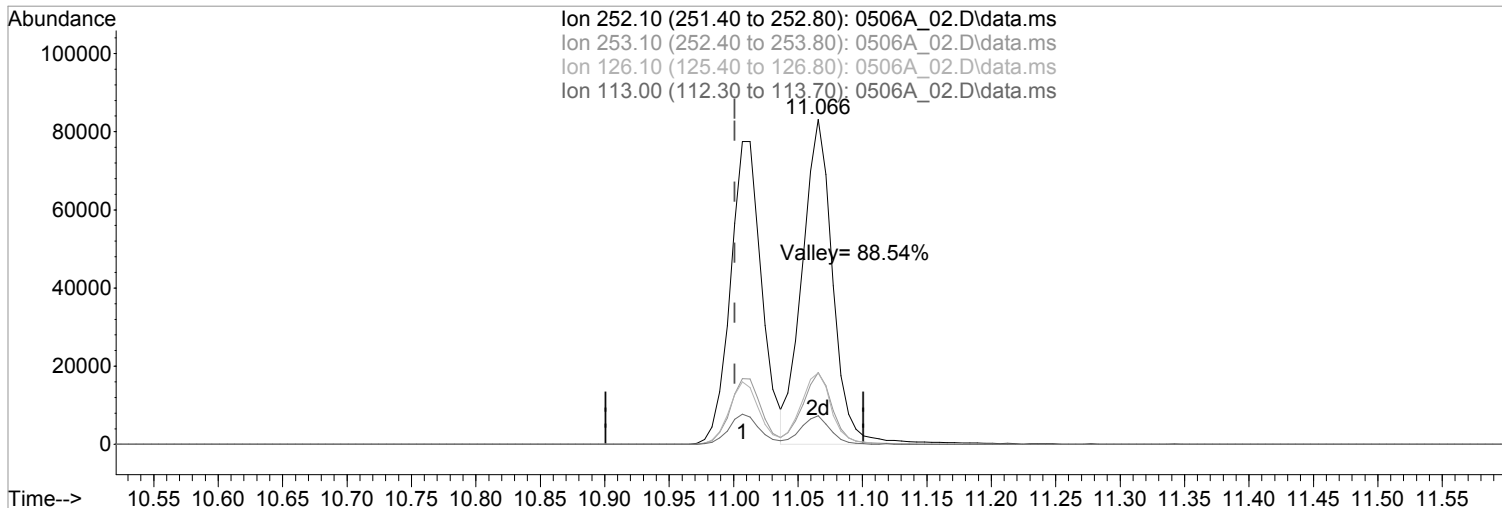
response 51355

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	48.45
54.10	60.00	59.75
98.10	11.40	11.83

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_02.D  
 Acq On : 6 May 2022 2:57 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22C22891 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C22755 exp. 09/22/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 15:32:49 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0506A\_02.D\data.ms

(95) Benzo(b)fluoranthene (MT)  
 11.007min (+0.006) 9403.9264926 ppb  
 Qvalue = 99  
 response 130391

Ion	Exp%	Act%
252.10	100	100
253.10	21.80	21.81
126.10	20.00	20.63
113.00	9.70	9.95

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1487790	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0506A_03	<b>Analysis date/time:</b>	05/06/22 15:19
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.079140	0.07534551		4.79	20	10	10.01	100	80 - 120

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_03.D  
 Acq On : 6 May 2022 3:19 pm  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 9/10/22  
 Misc : TCL CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 16:19:33 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

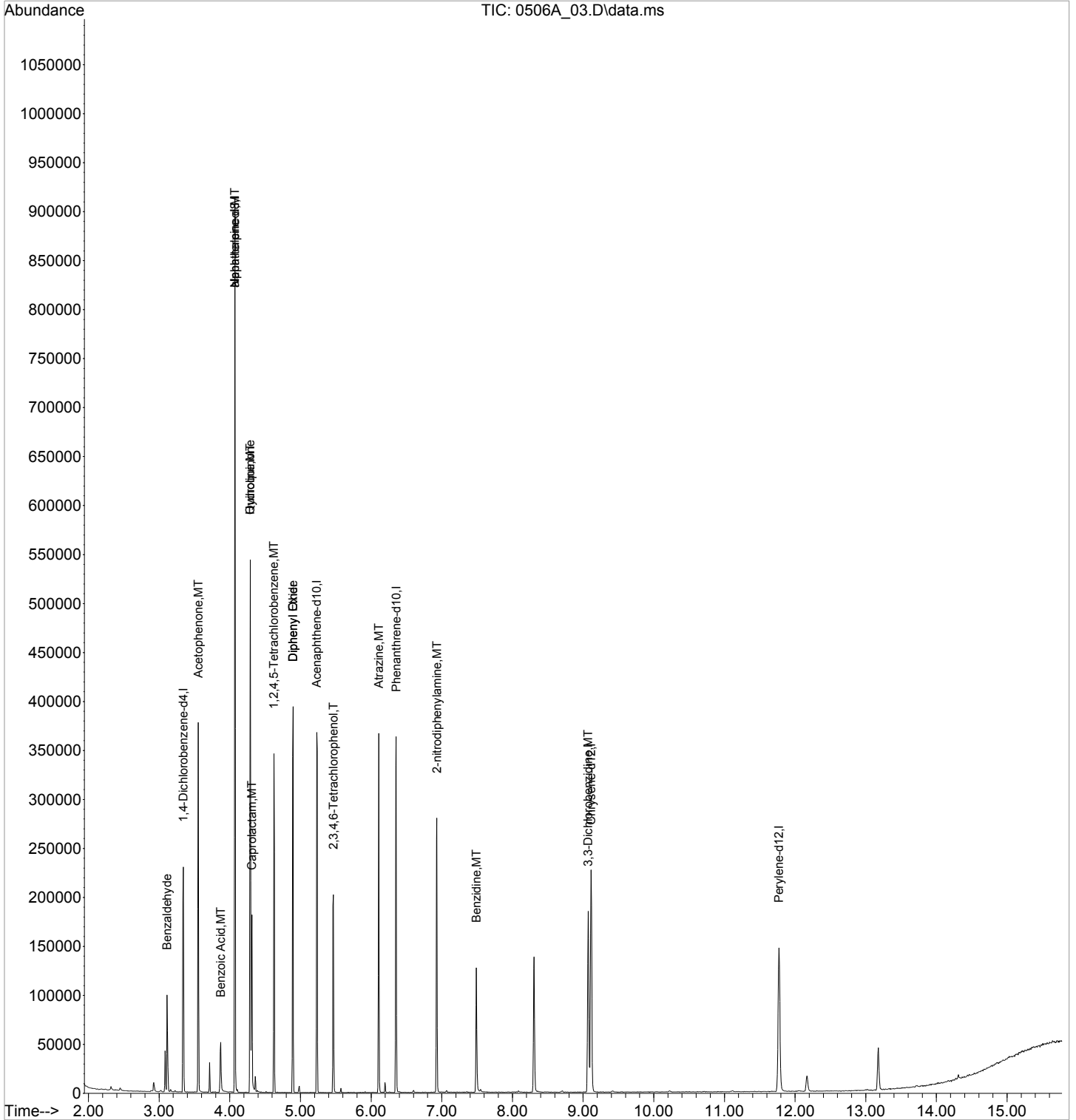
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.343	152	32563	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.072	136	153108	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.231	164	68508	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.354	188	116920	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.113	240	97991	8000.0000000	ppb	0.00	
94) Perylene-d12	11.771	264	90374	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
					Qvalue		
9) Benzaldehyde	3.113	105	17308	12711.4541293	ppb	99	
22) Acetophenone	3.554	105	75236	10733.6745207	ppb	99	
31) Benzoic Acid	3.872	105	14420	10010.3248563	ppb	97	
33) alpha-terpineol	4.072	59	52734	11181.8623273	ppb	96	
37) Hydroquinone	4.290	110	42497	12724.6075554	ppb	99	
38) Quinoline	4.290	129	103320	11687.4296666	ppb	99	
39) Caprolactam	4.313	113	15181	13042.4413462	ppb	99	
43) 1,2,4,5-Tetrachloroben...	4.625	216	43900	10664.3790788	ppb	98	
44) Diphenyl Ether	4.895	170	66457	10772.3335512	ug/ml	98	
45) Diphenyl Oxide	4.895	170	66457	10772.3335512	ug/ml	98	
62) 2,3,4,6-Tetrachlorophenol	5.466	232	21283	11460.6676883	ppb	98	
69) Atrazine	6.107	200	27540	11170.5706763	ppb	96	
82) 2-nitrodiphenylamine	6.931	167	35645	13194.2743507	ppb	96	
85) Benzidine	7.489	184	50750	17297.9675021	ppb	97	
89) 3,3-Dichlorobenzidine	9.072	252	52299	12322.8502315	ppb	99	

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\050622A\  
Data File : 0506A\_03.D  
Acq On : 6 May 2022 3:19 pm  
Operator : 3545  
Sample : ICV TCL 10K1 PPB 22D19628 exp 9/10/22  
Misc : TCL CAL ISTD 22D16229 exp. 10/16/22  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 06 16:19:33 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



**SDG:** L1487790  
**Instrument ID:** BNAMS24

**Analytical Method:** 8270E  
**Calibration Start Date:** 03/31/22 17:24  
**Calibration End Date:** 03/31/22 22:23

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
TUNE	BNAMS240331220331_02576947	0331_02	03/31/22 17:02		
CAL	500	0331_03	03/31/22 17:24		
CAL	1000	0331_04	03/31/22 17:45		
CAL	4000	0331_05	03/31/22 18:07		
CAL	10000	0331_06	03/31/22 18:28		
CAL	20000	0331_07	03/31/22 18:49		
CAL	30000	0331_08	03/31/22 19:11		
CAL	40000	0331_09	03/31/22 19:32		
CAL	50000	0331_10	03/31/22 19:53		
CAL	1K1	0331_11	03/31/22 20:15		
CAL	4K1	0331_12	03/31/22 20:36		
CAL	10K1	0331_13	03/31/22 20:58		
CAL	20K1	0331_14	03/31/22 21:19		
CAL	30K1	0331_15	03/31/22 21:40		
CAL	40K1	0331_16	03/31/22 22:02		
CAL	50K1	0331_17	03/31/22 22:23		
SSCV	BNAMS240331220331_18576947	0331_18	03/31/22 22:44		
SSCV	BNAMS240331220331_19576947	0331_19	03/31/22 23:06		
TUNE	BNAMS24050622A0506A_01T-1576947	0506A_01T-1	05/06/22 14:35		
ICV	BNAMS24050622A0506A_02576947	0506A_02	05/06/22 14:57		
ICV	BNAMS24050622A0506A_03576947	0506A_03	05/06/22 15:19		
LCS	R3789566-1	0506A_04	05/06/22 15:48	1	WG1859393
BLANK	R3789566-2	0506A_05	05/06/22 16:10	1	WG1859393
LCS	R3789576-1	0506A_06	05/06/22 16:32	1	WG1859630
LCS	R3789576-2	0506A_07	05/06/22 16:54	1	WG1859630
BLANK	R3789576-3	0506A_08	05/06/22 17:16	1	WG1859630
L1487785-01	L1487785-01	0506A_12	05/06/22 18:45	1	WG1859630
L1487785-02	L1487785-02	0506A_13	05/06/22 19:07	1	WG1859630
BNSF-SG13-042522-0-1 .5	L1487790-01	0506A_22	05/06/22 22:25	1	WG1859393
OS	L1487440-03	0506A_23	05/06/22 22:47		
MS	R3789566-3	0506A_24	05/06/22 23:09	1	WG1859393
MSD	R3789566-4	0506A_25	05/06/22 23:30	1	WG1859393
L1487337-02	L1487337-02	0506A_28	05/07/22 00:36	1	WG1859393

## DETECTION LIMIT SUMMARY

Lab Sample IDs: L1487790-01  
 Matrix: Solid

Analytical Method: 8270E  
 Prep Method: 3546

Analyte	CAS	MDL	RDL
		mg/kg	mg/kg
Benzo(b)fluoranthene	205-99-2	0.006210	0.0333
Benzo(k)fluoranthene	207-08-9	0.005920	0.0333
Benzo(g,h,i)perylene	191-24-2	0.006090	0.0333
Benzo(a)pyrene	50-32-8	0.006190	0.0333
Acenaphthene	83-32-9	0.005390	0.0333
Carbazole	86-74-8	0.0103	0.3330
Chrysene	218-01-9	0.006620	0.0333
Dibenz(a,h)anthracene	53-70-3	0.009230	0.0333
Dibenzofuran	132-64-9	0.0109	0.3330
Acenaphthylene	208-96-8	0.004690	0.0333
Fluoranthene	206-44-0	0.006010	0.0333
Fluorene	86-73-7	0.005420	0.0333
Anthracene	120-12-7	0.005930	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	0.009410	0.0333
1-Methylnaphthalene	90-12-0	0.004260	0.0333
2-Methylnaphthalene	91-57-6	0.004320	0.0333
Naphthalene	91-20-3	0.008360	0.0333
Phenanthrene	85-01-8	0.006610	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	0.0422	0.3330
Di-n-butyl phthalate	84-74-2	0.0114	0.3330
Di-n-octyl phthalate	117-84-0	0.0225	0.3330
Pyrene	129-00-0	0.006480	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	0.0104	0.3330
Pentachlorophenol	87-86-5	0.008960	0.3330
Phenol	108-95-2	0.0134	0.3330
Benzoic Acid	65-85-0	0.1180	1.67
Benzo(a)anthracene	56-55-3	0.005870	0.0333

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3789566-2  
 Client Sample ID: BLANK  
 Lab File ID: 0506A\_05  
 Instrument ID: BNAMS24  
 Analytical Batch: WG1859393  
 Dilution Factor: 1  
 Analytical Method: 8270E  
 Matrix: Solid  
 Total Solids (%): \_\_\_\_\_

SDG: L1487790  
 Collected Date/Time: \_\_\_\_\_  
 Received Date/Time: \_\_\_\_\_  
 Preparation Date/Time: 05/06/22 04:49  
 Analysis Date/Time: 05/06/22 16:10  
 Prep Method: 3546  
 Sample Vol Used: \_\_\_\_\_  
 Initial Wt/Vol: 15 g  
 Final Wt/Vol: 0.5 mL

Analyte	CAS	RT	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Acenaphthene	83-32-9	0	U		0.00539	0.0333
Acenaphthylene	208-96-8	0	U		0.00469	0.0333
Anthracene	120-12-7	0	U		0.00593	0.0333
Benzoic Acid	65-85-0	0	U		0.118	1.67
Benzo(a)anthracene	56-55-3	0	U		0.00587	0.0333
Benzo(b)fluoranthene	205-99-2	0	U		0.00621	0.0333
Benzo(k)fluoranthene	207-08-9	0	U		0.00592	0.0333
Benzo(g,h,i)perylene	191-24-2	0	U		0.00609	0.0333
Benzo(a)pyrene	50-32-8	0	U		0.00619	0.0333
Carbazole	86-74-8	0	U		0.0103	0.333
Chrysene	218-01-9	0	U		0.00662	0.0333
Dibenz(a,h)anthracene	53-70-3	0	U		0.00923	0.0333
Dibenzofuran	132-64-9	0	U		0.0109	0.333
Fluoranthene	206-44-0	0	U		0.00601	0.0333
Fluorene	86-73-7	0	U		0.00542	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	0	U		0.00941	0.0333
1-Methylnaphthalene	90-12-0	0	U		0.00426	0.0333
2-Methylnaphthalene	91-57-6	0	U		0.00432	0.0333
Naphthalene	91-20-3	0	U		0.00836	0.0333
Phenanthrene	85-01-8	0	U		0.00661	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	9.18	U		0.0422	0.333
Di-n-butyl phthalate	84-74-2	6.80	U		0.0114	0.333
Di-n-octyl phthalate	117-84-0	0	U		0.0225	0.333
Pyrene	129-00-0	0	U		0.00648	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	0	U		0.0104	0.333
Pentachlorophenol	87-86-5	0	U		0.00896	0.333
Phenol	108-95-2	0	U		0.0134	0.333

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_05.D  
 Acq On : 6 May 2022 4:10 pm  
 Operator : 3545  
 Sample : BLANK 1x WG1859393  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 46 Sample Multiplier: 1

Quant Time: May 09 09:26:37 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

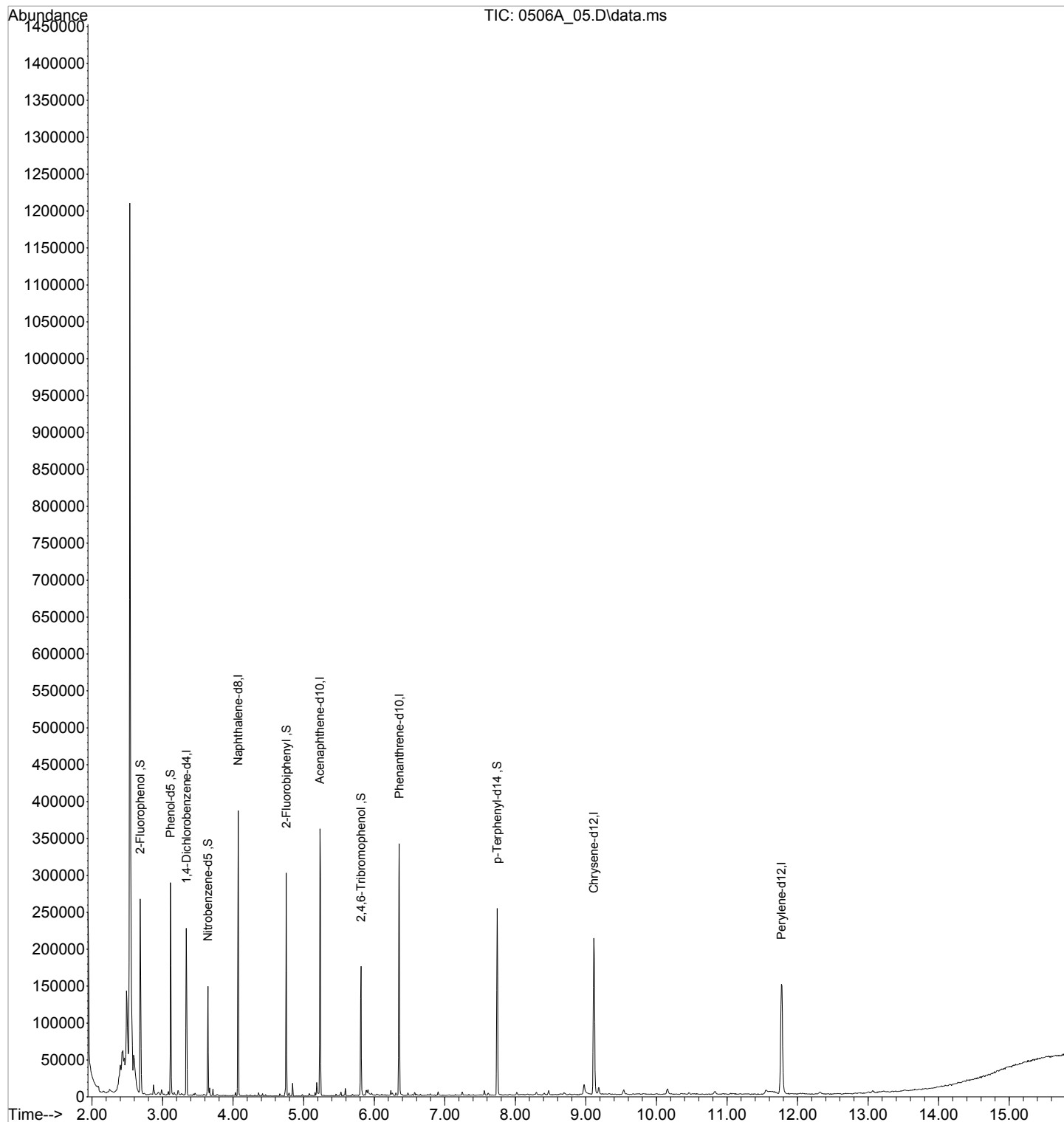
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.337	152	29363	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.072	136	120706	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.231	164	63075	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.354	188	109068	8000.0000000	ppb	0.00
84) Chrysene-d12	9.113	240	92967	8000.0000000	ppb	0.00
94) Perylene-d12	11.771	264	93983	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.684	112	63199	13747.2797653	ppb	0.00
Spiked Amount	20000.000	Range	20 - 120	Recovery	= 68.74%	
7) Phenol-d5	3.113	99	71791	13161.7953183	ppb	0.00
Spiked Amount	20000.000	Range	20 - 120	Recovery	= 65.81%	
24) Nitrobenzene-d5	3.643	82	29826	6497.4135680	ppb	0.00
Spiked Amount	10000.000	Range	18 - 125	Recovery	= 64.97%	
50) 2-Fluorobiphenyl	4.754	172	65279	6517.3166030	ppb	0.00
Spiked Amount	10000.000	Range	28 - 120	Recovery	= 65.17%	
73) 2,4,6-Tribromophenol	5.813	330	14937	13071.8961668	ppb	0.00
Spiked Amount	20000.000	Range	17 - 137	Recovery	= 65.36%	
87) p-Terphenyl-d14	7.742	244	77674	6037.5947764	ppb	0.00
Spiked Amount	10000.000	Range	13 - 131	Recovery	= 60.38%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050622A\  
Data File : 0506A\_05.D  
Acq On : 6 May 2022 4:10 pm  
Operator : 3545  
Sample : BLANK 1x WG1859393  
Misc : SOIL ISTD 22E03576 exp. 11/03/22  
ALS Vial : 46 Sample Multiplier: 1

Quant Time: May 09 09:26:37 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3789566-1  
**Client Sample ID:** LCS  
**Lab File ID:** 0506A\_04  
**Instrument ID:** BNAMS24  
**Analytical Batch:** WG1859393  
**Dilution Factor:** 1  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** \_\_\_\_\_

**SDG:** L1487790  
**Collected Date/Time:** \_\_\_\_\_  
**Received Date/Time:** \_\_\_\_\_  
**Preparation Date/Time:** 05/06/22 04:49  
**Analysis Date/Time:** 05/06/22 15:48  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15 g  
**Final Wt/Vol:** 0.5 mL

Analyte	CAS	RT	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Acenaphthene	83-32-9	5.26	0.451		0.00539	0.0333
Acenaphthylene	208-96-8	5.14	0.496		0.00469	0.0333
Anthracene	120-12-7	6.41	0.496		0.00593	0.0333
Benzoic Acid	65-85-0	3.87	0.351		0.000	1.67
Benzo(a)anthracene	56-55-3	9.11	0.501		0.00587	0.0333
Benzo(b)fluoranthene	205-99-2	11.02	0.448		0.00621	0.0333
Benzo(k)fluoranthene	207-08-9	11.07	0.459		0.00592	0.0333
Benzo(g,h,i)perylene	191-24-2	14.11	0.480		0.00609	0.0333
Benzo(a)pyrene	50-32-8	11.67	0.540		0.00619	0.0333
Carbazole	86-74-8	6.54	0.535		0.0103	0.333
Chrysene	218-01-9	9.16	0.460		0.00662	0.0333
Dibenz(a,h)anthracene	53-70-3	13.81	0.491		0.00923	0.0333
Dibenzofuran	132-64-9	5.38	0.475		0.0109	0.333
Fluoranthene	206-44-0	7.37	0.497		0.00601	0.0333
Fluorene	86-73-7	5.64	0.477		0.00542	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	13.76	0.511		0.00941	0.0333
1-Methylnaphthalene	90-12-0	4.58	0.384		0.00426	0.0333
2-Methylnaphthalene	91-57-6	4.52	0.383		0.00432	0.0333
Naphthalene	91-20-3	4.08	0.370		0.00836	0.0333
Phenanthrene	85-01-8	6.37	0.452		0.00661	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	9.19	0.455		0.0422	0.333
Di-n-butyl phthalate	84-74-2	6.80	0.491		0.0114	0.333
Di-n-octyl phthalate	117-84-0	10.39	0.463		0.0225	0.333
Pyrene	129-00-0	7.60	0.403		0.00648	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	3.53	0.533		0.0104	0.333
Pentachlorophenol	87-86-5	6.20	0.467		0.00896	0.333
Phenol	108-95-2	3.12	0.462		0.0134	0.333

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_04.D  
 Acq On : 6 May 2022 3:48 pm  
 Operator : 3545  
 Sample : LCS 1x WG1859393  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 45 Sample Multiplier: 1

Quant Time: May 09 09:09:01 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.337	152	28542	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.072	136	137544	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.237	164	62136	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.354	188	109472	8000.0000000	ppb	0.00
84) Chrysene-d12	9.119	240	96009	8000.0000000	ppb	0.01
94) Perylene-d12	11.783	264	95147	8000.0000000	ppb	0.02
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.684	112	62678	14026.1254139	ppb	0.00
Spiked Amount	20000.000	Range 20 - 120	Recovery =	70.13%		
7) Phenol-d5	3.113	99	71517	13488.7107426	ppb	0.00
Spiked Amount	20000.000	Range 20 - 120	Recovery =	67.44%		
24) Nitrobenzene-d5	3.643	82	30837m	5895.2852862	ppb	0.00
Spiked Amount	10000.000	Range 18 - 125	Recovery =	58.95%		
50) 2-Fluorobiphenyl	4.754	172	66393	6728.7065130	ppb	0.00
Spiked Amount	10000.000	Range 28 - 120	Recovery =	67.29%		
73) 2,4,6-Tribromophenol	5.813	330	16981	14805.8303043	ppb	0.00
Spiked Amount	20000.000	Range 17 - 137	Recovery =	74.03%		
87) p-Terphenyl-d14	7.748	244	79435	5978.8417825	ppb	0.01
Spiked Amount	10000.000	Range 13 - 131	Recovery =	59.79%		
<b>Target Compounds</b>						
2) Pyridine	2.125	79	35781	7558.6933618	ppb	99
3) N-Nitrosodimethylamine	2.113	42	26576	10664.2134399	ppb	83
5) Aniline	3.160	66	28190	11490.4959435	ppb	85
6) bis(2-Chloroethyl)ether	3.178	93	70473m	14601.2193484	ppb	
8) Phenol	3.125	94	77992	13876.2607795	ppb	91
9) Benzaldehyde	3.107	105	26124	21889.1063128	ppb #	95
10) 2-Chlorophenol	3.225	128	65335	13958.3632705	ppb	99
11) n-Decane	3.219	41	28892	9601.9169254	ppb #	96
12) 1,3-Dichlorobenzene	3.307	146	65864	12278.1286964	ppb	98
13) 1,4-Dichlorobenzene	3.348	146	66530	12390.3912462	ppb	99
14) Benzyl Alcohol	3.401	79	49975	14575.8280350	ppb	98
15) 1,2-Dichlorobenzene	3.431	146	66009	12749.9349194	ppb	97
16) bis(2-Chloroisopropyl)...	3.472	121	22197	12415.8597432	ppb	99
17) 2,2-oxybis(1-chloropro...	3.472	121	22197	12415.8597432	ppb	99
18) 2-Methylphenol	3.448	108	60055	14264.9544528	ppb	92
19) Hexachloroethane	3.625	117	28380	12675.0498431	ppb	98
20) N-Nitrosodi-n-propylamine	3.543	70	42844	14308.4719303	ppb	94
21) 3&4-Methyl phenol	3.531	107	74385	16017.1264240	ppb	93
22) Acetophenone	3.554	105	83619	13610.3000949	ppb #	81
25) Nitrobenzene	3.654	77	64342	12170.2453724	ppb	96
26) Isophorone	3.784	82	122667	11853.6664865	ppb	97
27) 2-Nitrophenol	3.837	139	34490	13788.7671065	ppb #	79
28) 2,4-Dimethylphenol	3.842	107	64012	12436.5503085	ppb	98
29) bis(2-Chlorethoxy)methane	3.901	93	80815	11622.9660035	ppb	98
30) 2,4-Dichlorophenol	3.978	162	50998	12541.1826422	ppb	95
31) Benzoic Acid	3.866	105	13830	10549.7396923	ppb	100
32) 1,2,4-Trichlorobenzene	4.031	180	53655	11033.4399198	ppb	96
33) alpha-terpineol	4.072	59	59306	13998.3965632	ppb	96
34) Naphthalene	4.084	128	190969	11122.7466527	ppb	99
35) 4-Chloroaniline	4.107	65	19682	10908.4702090	ppb #	60
36) Hexachloro-1,3-butadiene	4.148	225	29253	11152.3833200	ppb	99
37) Hydroquinone	4.290	110	29016	9671.1896538	ppb	96



Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_04.D  
 Acq On : 6 May 2022 3:48 pm  
 Operator : 3545  
 Sample : LCS 1x WG1859393  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 45 Sample Multiplier: 1

Quant Time: May 09 09:09:01 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
38) Quinoline	4.290	129	126199	15890.8365185	ppb		99
39) Caprolactam	4.313	113	21473	20535.6034548	ppb		97
40) 4-Chloro-3-methylphenol	4.401	107	54533	12817.9298296	ppb		99
41) 2-Methylnaphthalene	4.519	142	124201	11514.0850458	ppb		99
42) 1-Methylnaphthalene	4.584	142	121051	11527.9144083	ppb		99
43) 1,2,4,5-Tetrachloroben...	4.631	216	49910	13496.3041592	ppb		97
44) Diphenyl Ether	4.895	170	79612	14364.9403678	ug/ml		99
45) Diphenyl Oxide	4.895	170	79612	14364.9403678	ug/ml		99
47) Hexachlorocyclopentadiene	4.619	237	25420	12541.9878162	ppb		98
48) 2,4,6-Trichlorophenol	4.701	196	35498	15296.1333904	ppb		97
49) 2,4,5-Trichlorophenol	4.725	196	36989	15599.6959581	ppb		96
51) Biphenyl	4.825	154	149225	13421.5316604	ppb		100
52) 2-Chloronaphthalene	4.848	162	117949	13745.7279275	ppb		99
53) 2-Nitroaniline	4.907	138	42663	16761.4665212	ppb	#	88
54) Acenaphthylene	5.137	152	196017	14887.1792793	ppb		99
55) Dimethyl phthalate	5.025	163	140931	14658.4060870	ppb		98
56) 2,6-Dinitrotoluene	5.072	165	32441	15456.9773825	ppb		88
57) 3-Nitroaniline	5.195	138	35022	17473.9328035	ppb		88
58) Acenaphthene	5.260	153	120865	13545.3045340	ppb		98
59) 2,4-Dinitrophenol	5.272	184	8305	12568.3776650	ppb	#	1
60) Dibenzofuran	5.384	168	169961	14274.5390073	ppb		99
61) 2,4-Dinitrotoluene	5.360	165	44605	16975.5715014	ppb		88
62) 2,3,4,6-Tetrachlorophenol	5.466	232	25826	15333.1794545	ppb		89
63) 4-Nitrophenol	5.301	139	29177	20108.7852905	ppb		97
64) Fluorene	5.636	166	141243	14330.5826156	ppb		98
65) 4-Chlorophenyl-phenyle...	5.625	204	63997	14256.7572867	ppb		91
66) Diethyl phthalate	5.531	149	150703	15066.3236295	ppb		99
67) 4-Nitroaniline	5.642	138	37718	31080.2535294	ppb		95
68) Azobenzene	5.742	77	153068	15227.4839190	ppb		98
69) Atrazine	6.113	200	38279	17118.6694245	ppb		97
71) 4,6-Dinitro-2-methylph...	5.660	198	18452	15420.4703141	ppb	#	77
72) N-Nitrosodiphenylamine	5.713	169	119239	14004.3904721	ppb		99
74) 4-Bromophenyl-phenylether	6.001	248	36690	14039.2643710	ppb	#	82
75) Hexachlorobenzene	6.054	284	40010	13106.0639026	ppb		99
76) n-octadecane	6.236	55	25803	12648.6168550	ppb		98
77) Pentachlorophenol	6.201	266	20552	14028.2920370	ppb		98
78) Phenanthrene	6.372	178	196732	13559.1174528	ppb		99
79) Anthracene	6.413	178	205160	14892.3673675	ppb		99
80) Carbazole	6.536	167	189526	16082.5527514	ppb		99
81) Di-n-butyl phthalate	6.801	149	260234	14742.7019975	ppb		100
82) 2-nitrodiphenylamine	6.931	167	48977	18230.8775861	ppb		93
83) Fluoranthene	7.372	202	211963	14929.5366870	ppb		99
85) Benzidine	7.495	184	66106	20907.5536550	ppb		99
86) Pyrene	7.595	202	217624	12101.2571596	ppb		99
88) Benzylbutyl phthalate	8.325	149	112736	13659.5717748	ppb		98
89) 3,3-Dichlorobenzidine	9.083	252	127554	30675.1087513	ppb		99
90) Benzo (a) anthracene	9.107	228	201801	15057.7497868	ppb		99
91) Chrysene	9.160	228	195397	13803.9402250	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.189	149	166306	13658.1628104	ppb		100
93) Di-n-octyl phthalate	10.389	149	266621	13913.9656290	ppb		99
95) Benzo (b) fluoranthene	11.018	252	187740	13463.5741402	ppb		99
96) Benzo (k) fluoranthene	11.071	252	196590	13788.0133734	ppb		99
97) Benzo (a) pyrene	11.666	252	183187	16206.9841775	ppb		99
98) Indeno (1,2,3-cd) pyrene	13.759	276	157992	15357.7952884	ppb		95
99) Dibenz (a, h) anthracene	13.807	278	169931	14737.8073261	ppb		98

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_04.D  
 Acq On : 6 May 2022 3:48 pm  
 Operator : 3545  
 Sample : LCS 1x WG1859393  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 45 Sample Multiplier: 1

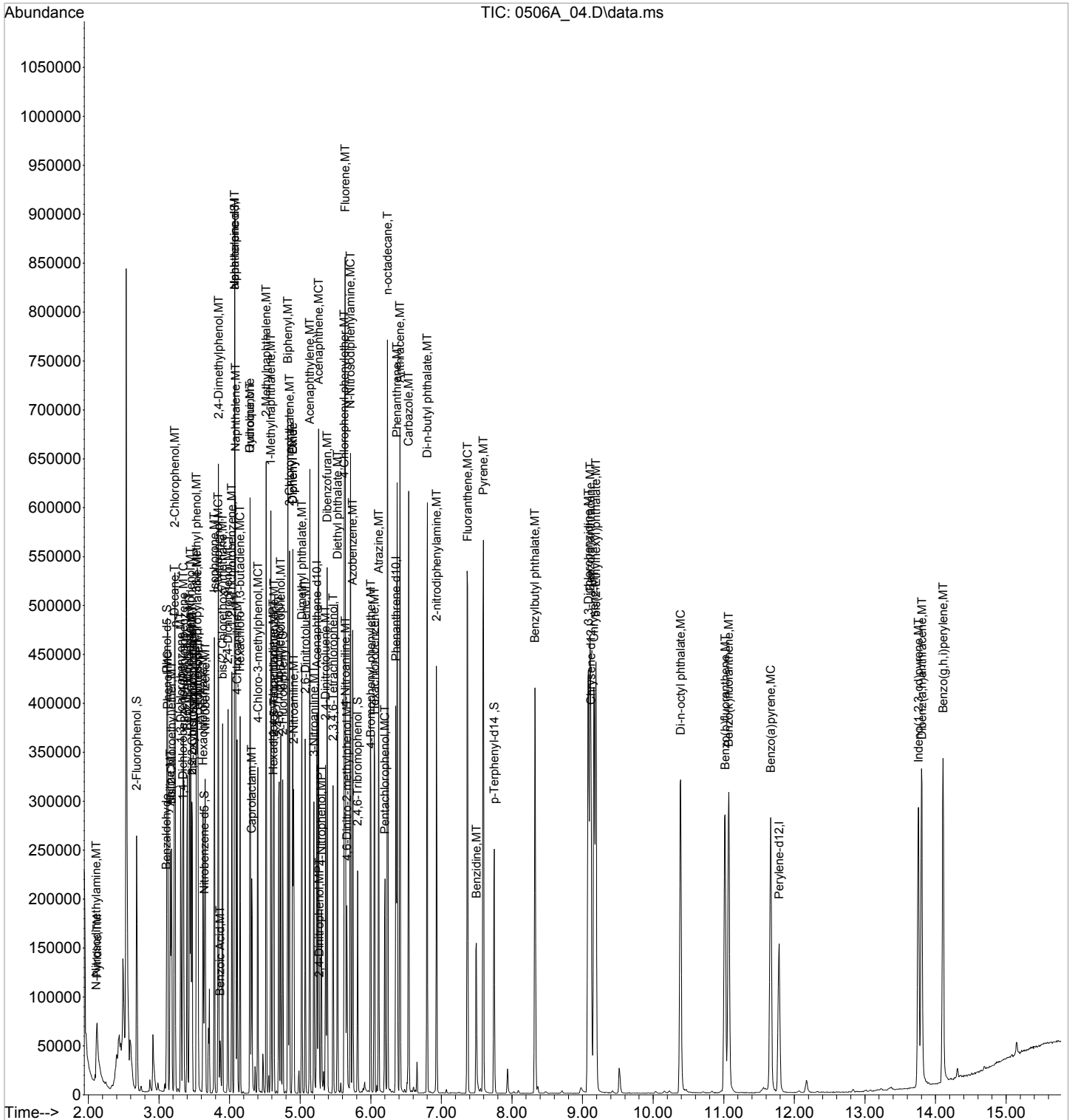
Quant Time: May 09 09:09:01 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
100) Benzo(g,h,i)perylene	14.107	276	176025	14411.2968710	ppb	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050622A\  
Data File : 0506A\_04.D  
Acq On : 6 May 2022 3:48 pm  
Operator : 3545  
Sample : LCS 1x WG1859393  
Misc : SOIL ISTD 22E03576 exp. 11/03/22  
ALS Vial : 45 Sample Multiplier: 1

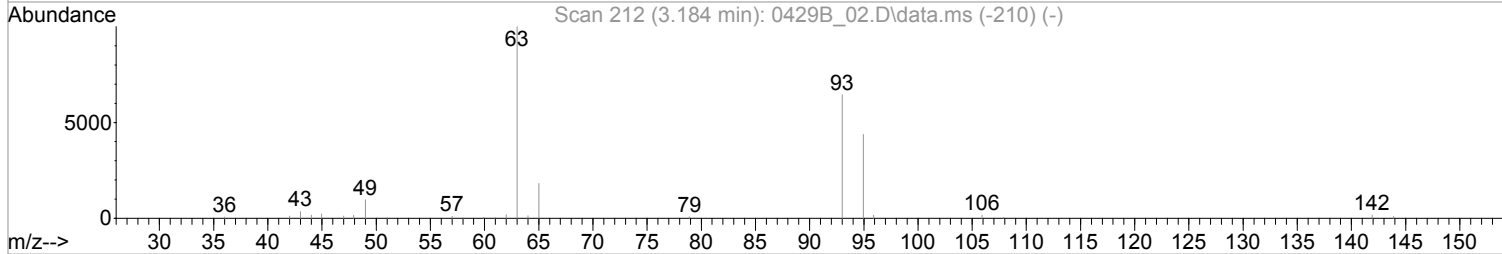
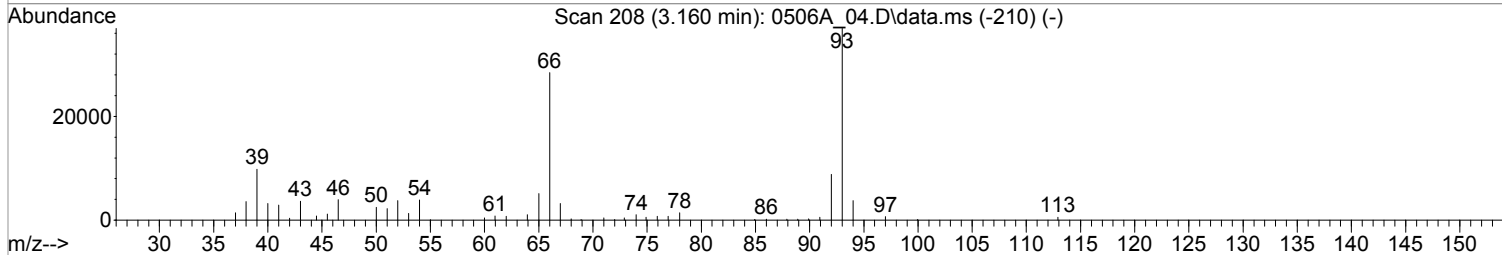
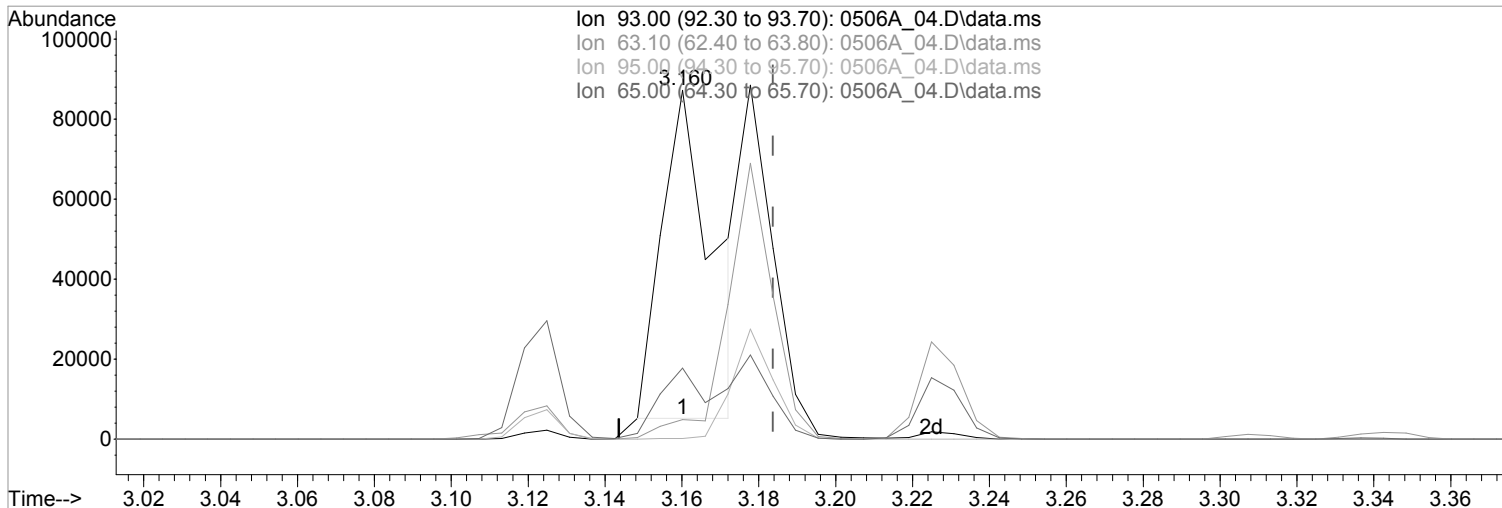
Quant Time: May 09 09:09:01 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_04.D  
 Acq On : 6 May 2022 3:48 pm  
 Operator : 3545  
 Sample : LCS 1x WG1859393  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 45 Sample Multiplier: 1

Quant Time: May 09 09:02:47 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0506A\_04.D\data.ms

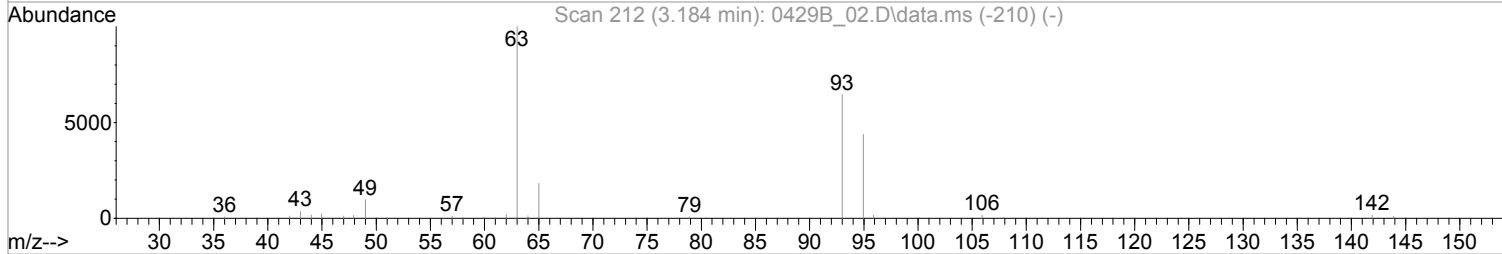
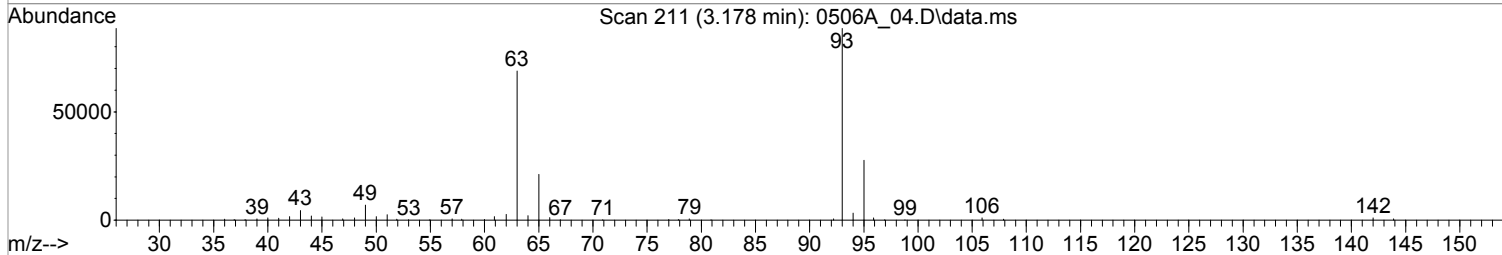
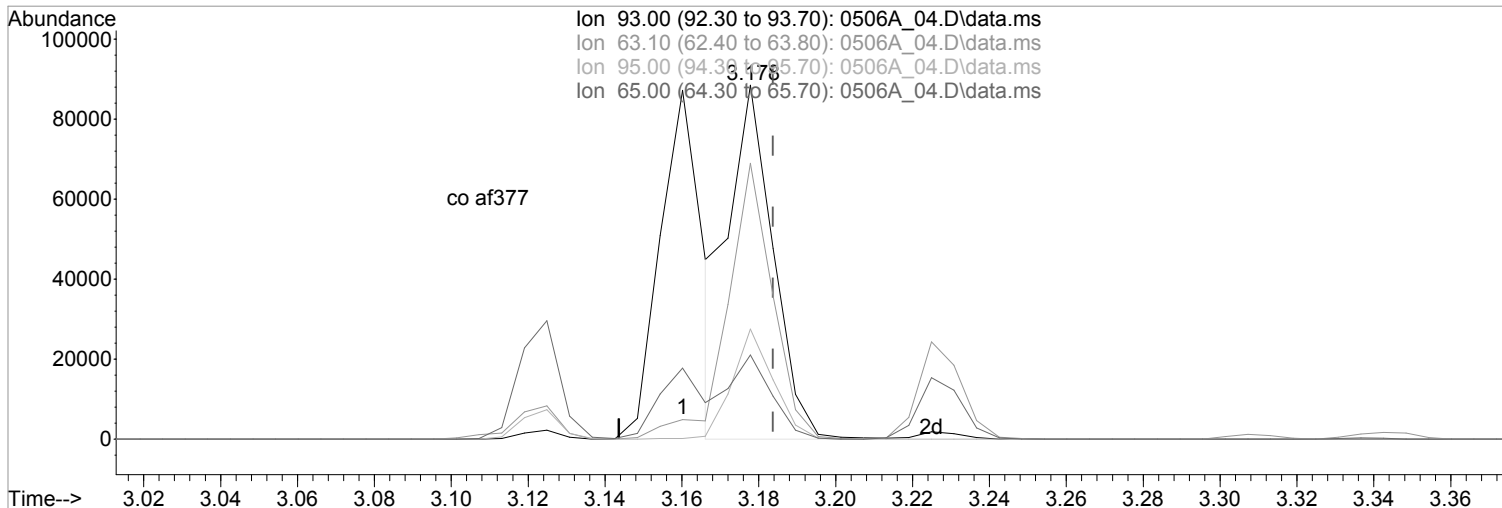
(6) bis(2-Chloroethyl)ether (MT)  
 3.160min (-0.024) 15533.5691429 ppb  
 Qvalue = 37  
 response 74973

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.53#
95.00	31.90	0.25#
65.00	23.10	19.87

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_04.D  
 Acq On : 6 May 2022 3:48 pm  
 Operator : 3545  
 Sample : LCS 1x WG1859393  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 45 Sample Multiplier: 1

Quant Time: May 09 09:02:47 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0506A\_04.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.178min (-0.006) 14601.2193484 ppb m

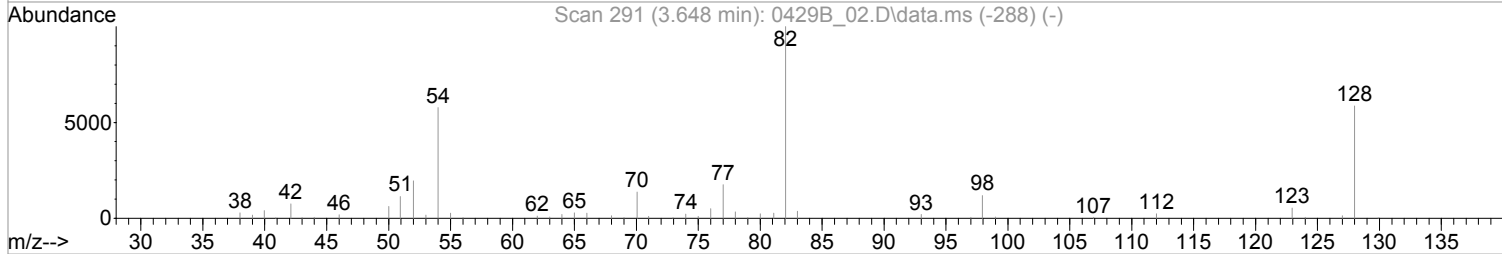
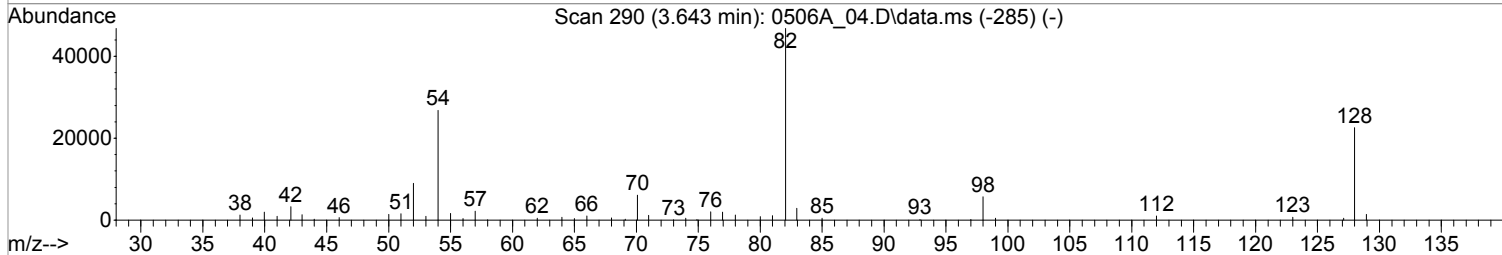
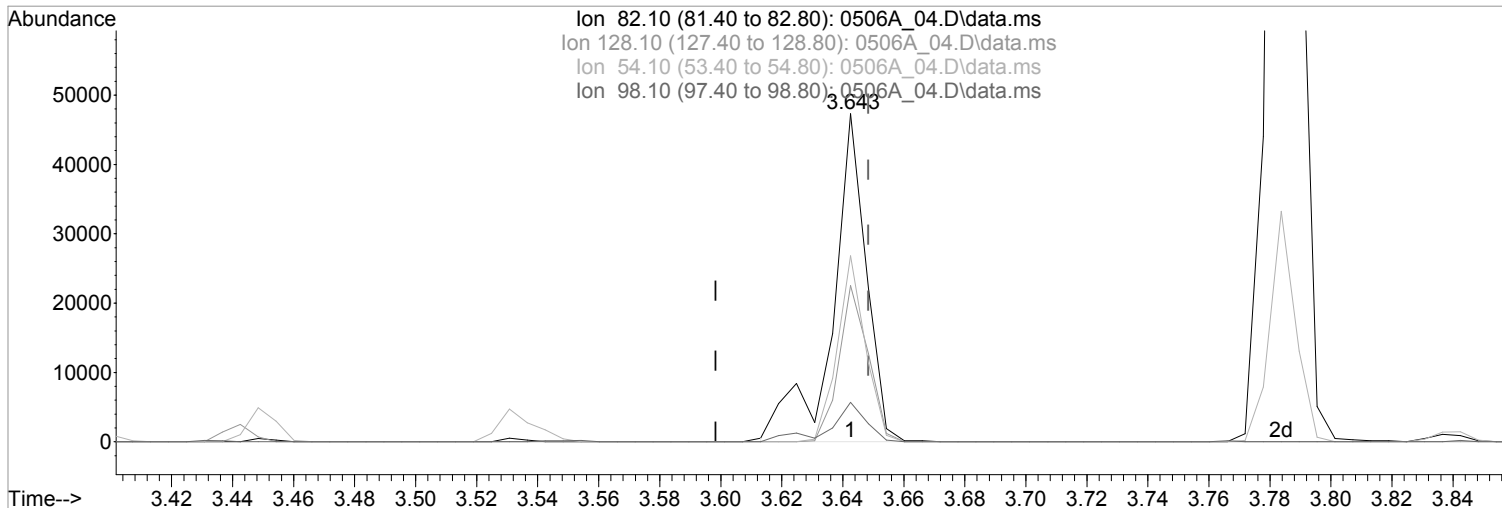
response 70473

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	77.88
95.00	31.90	31.15
65.00	23.10	23.83

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_04.D  
 Acq On : 6 May 2022 3:48 pm  
 Operator : 3545  
 Sample : LCS 1x WG1859393  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 45 Sample Multiplier: 1

Quant Time: May 09 09:02:47 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0506A\_04.D\data.ms

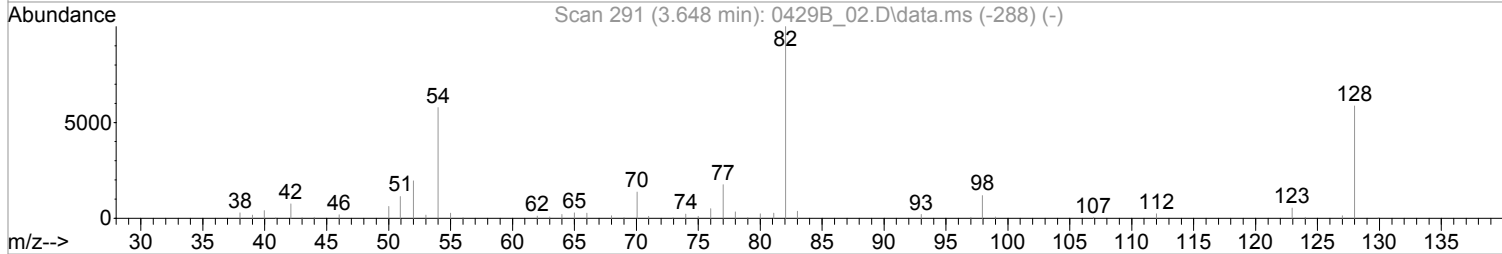
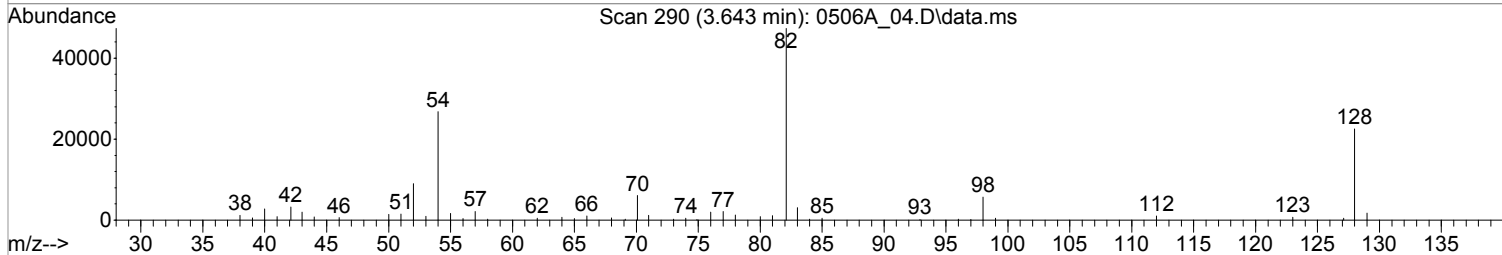
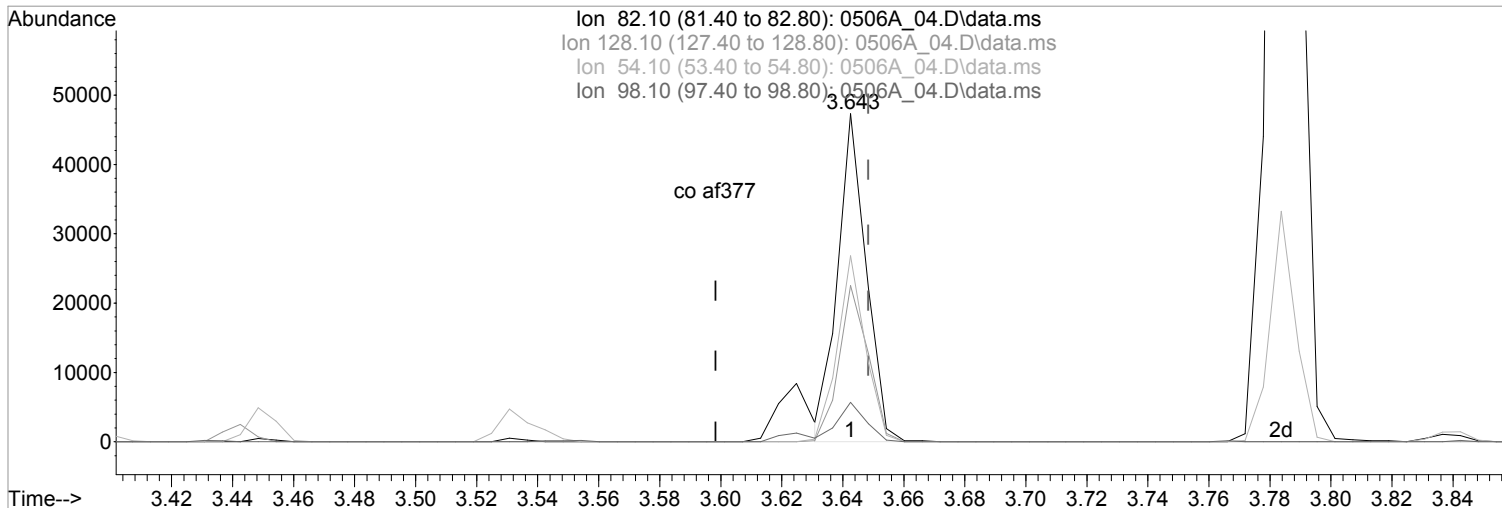
(24) Nitrobenzene-d5 (S)  
 3.643min (-0.006) 7022.6484322 ppb  
 Qvalue = 97  
 response 36734

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	47.67
54.10	60.00	56.66
98.10	11.40	12.02

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_04.D  
 Acq On : 6 May 2022 3:48 pm  
 Operator : 3545  
 Sample : LCS 1x WG1859393  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 45 Sample Multiplier: 1

Quant Time: May 09 09:02:47 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0506A\_04.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.643min (-0.006) 5895.2852862 ppb m

response 30837

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	47.67
54.10	60.00	56.66
98.10	11.40	12.02

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3789566-3  
**Client Sample ID:** MS  
**Lab File ID:** 0506A\_24  
**Instrument ID:** BNAMS24  
**Analytical Batch:** WG1859393  
**Dilution Factor:** 1  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** 73.2

**SDG:** L1487790  
**Collected Date/Time:** 04/26/22 11:16  
**Received Date/Time:** 04/28/22 09:00  
**Preparation Date/Time:** 05/06/22 04:49  
**Analysis Date/Time:** 05/06/22 23:09  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15.45 g  
**Final Wt/Vol:** 0.5 mL

Analyte	CAS	RT	Result (dry)	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	5.25	0.456		0.00736	0.0455
Acenaphthylene	208-96-8	5.14	0.505		0.00640	0.0455
Anthracene	120-12-7	6.41	0.533		0.00810	0.0455
Benzoic Acid	65-85-0	3.87	1.01		0.161	2.28
Benzo(a)anthracene	56-55-3	9.10	0.557		0.00802	0.0455
Benzo(b)fluoranthene	205-99-2	11.01	0.508		0.00848	0.0455
Benzo(k)fluoranthene	207-08-9	11.06	0.468		0.00808	0.0455
Benzo(g,h,i)perylene	191-24-2	14.10	0.481		0.00832	0.0455
Benzo(a)pyrene	50-32-8	11.65	0.591		0.00845	0.0455
Carbazole	86-74-8	6.53	0.587		0.0141	0.455
Chrysene	218-01-9	9.15	0.511		0.00904	0.0455
Dibenz(a,h)anthracene	53-70-3	13.80	0.496		0.0126	0.0455
Dibenzofuran	132-64-9	5.38	0.486		0.0149	0.455
Fluoranthene	206-44-0	7.37	0.599		0.00821	0.0455
Fluorene	86-73-7	5.63	0.485		0.00740	0.0455
Indeno(1,2,3-cd)pyrene	193-39-5	13.75	0.557		0.0128	0.0455
1-Methylnaphthalene	90-12-0	4.58	0.416		0.00582	0.0455
2-Methylnaphthalene	91-57-6	4.52	0.422		0.00590	0.0455
Naphthalene	91-20-3	4.08	0.396		0.0114	0.0455
Phenanthrene	85-01-8	6.37	0.522		0.00903	0.0455
Bis(2-ethylhexyl)phthalate	117-81-7	9.18	0.497		0.0576	0.455
Di-n-butyl phthalate	84-74-2	6.80	0.560		0.0156	0.455
Di-n-octyl phthalate	117-84-0	10.38	0.549		0.0307	0.455
Pyrene	129-00-0	7.59	0.466		0.00885	0.0455
3&4-Methyl Phenol	3&4-Methyl Phenol	3.53	0.489		0.0142	0.455
Pentachlorophenol	87-86-5	6.20	0.520		0.0122	0.455
Phenol	108-95-2	3.13	0.442		0.0183	0.455



Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_24.D  
 Acq On : 6 May 2022 11:09 pm  
 Operator : 3545  
 Sample : MS 1x WG1859393 L1487440-03  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 65 Sample Multiplier: 1

Quant Time: May 09 09:45:11 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.337	152	28570	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.072	136	133886	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.231	164	62634	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.348	188	108516	8000.0000000	ppb	0.00
84) Chrysene-d12	9.113	240	98553	8000.0000000	ppb	0.00
94) Perylene-d12	11.772	264	100994	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.684	112	46335	10358.7157646	ppb	0.00
Spiked Amount	20000.000	Range 20 - 120	Recovery =	51.79%		
7) Phenol-d5	3.113	99	54102	10194.0940186	ppb	0.00
Spiked Amount	20000.000	Range 20 - 120	Recovery =	50.97%		
24) Nitrobenzene-d5	3.643	82	22574m	4433.5101782	ppb	0.00
Spiked Amount	10000.000	Range 18 - 125	Recovery =	44.34%		
50) 2-Fluorobiphenyl	4.754	172	51931	5221.1854958	ppb	0.00
Spiked Amount	10000.000	Range 28 - 120	Recovery =	52.21%		
73) 2,4,6-Tribromophenol	5.813	330	14045	12353.7988198	ppb	0.00
Spiked Amount	20000.000	Range 17 - 137	Recovery =	61.77%		
87) p-Terphenyl-d14	7.742	244	66943	4908.5410725	ppb	0.00
Spiked Amount	10000.000	Range 13 - 131	Recovery =	49.09%		
<b>Target Compounds</b>						
2) Pyridine	2.125	79	34029	7181.5402958	ppb #	93
3) N-Nitrosodimethylamine	2.113	42	19163	7682.0454914	ppb #	76
5) Aniline	3.160	66	18418	7499.9838454	ppb #	78
6) bis(2-Chloroethyl)ether	3.178	93	50324	10416.3527954	ppb	99
8) Phenol	3.125	94	56222	9993.1601601	ppb	91
9) Benzaldehyde	3.107	105	29092	24352.0819064	ppb	97
10) 2-Chlorophenol	3.225	128	47127	10058.4846429	ppb	98
11) n-Decane	3.219	41	19044	6322.8469901	ppb #	97
12) 1,3-Dichlorobenzene	3.307	146	47820	8905.6948891	ppb	99
13) 1,4-Dichlorobenzene	3.349	146	49308	9174.0065403	ppb	99
14) Benzyl Alcohol	3.396	79	36040	10501.2108065	ppb	100
15) 1,2-Dichlorobenzene	3.431	146	48053	9272.5563709	ppb	99
16) bis(2-Chloroisopropyl)...	3.466	121	16179	9040.8310254	ppb	95
17) 2,2-oxybis(1-chloropro...	3.466	121	16179	9040.8310254	ppb	95
18) 2-Methylphenol	3.449	108	42744	10143.0961096	ppb	95
19) Hexachloroethane	3.625	117	19871	8866.0702781	ppb	95
20) N-Nitrosodi-n-propylamine	3.537	70	32033	10687.4727493	ppb	95
21) 3&4-Methyl phenol	3.531	107	51325	11040.8460845	ppb	92
22) Acetophenone	3.549	105	63396	10308.5777242	ppb #	84
25) Nitrobenzene	3.655	77	47591	9247.7502408	ppb	93
26) Isophorone	3.784	82	91189	9052.6117847	ppb	94
27) 2-Nitrophenol	3.837	139	26862	11032.5796176	ppb #	73
28) 2,4-Dimethylphenol	3.843	107	38218	7628.0402156	ppb	96
29) bis(2-Chlorethoxy)methane	3.902	93	60057	8873.5031541	ppb	96
30) 2,4-Dichlorophenol	3.978	162	38271	9668.5565524	ppb	98
31) Benzoic Acid	3.872	105	32872	22830.4219248	ppb	91
32) 1,2,4-Trichlorobenzene	4.031	180	41421	8750.3978300	ppb	98
33) alpha-terpineol	4.072	59	44356	10755.6959703	ppb	91
34) Naphthalene	4.084	128	149843	8965.8633246	ppb	100
35) 4-Chloroaniline	4.107	65	14151	8057.2759318	ppb #	58
36) Hexachloro-1,3-butadiene	4.149	225	22145	8673.2016775	ppb	98
37) Hydroquinone	4.290	110	8755	2997.8161248	ppb	89

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_24.D  
 Acq On : 6 May 2022 11:09 pm  
 Operator : 3545  
 Sample : MS 1x WG1859393 L1487440-03  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 65 Sample Multiplier: 1

Quant Time: May 09 09:45:11 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
38) Quinoline	4.290	129	95825	12395.8455842	ppb		99
39) Caprolactam	4.313	113	18882	18551.0810183	ppb		98
40) 4-Chloro-3-methylphenol	4.396	107	41559	10035.2933485	ppb		94
41) 2-Methylnaphthalene	4.519	142	100151	9538.1931756	ppb		99
42) 1-Methylnaphthalene	4.584	142	96319	9423.2521076	ppb		100
43) 1,2,4,5-Tetrachloroben...	4.625	216	38766	10769.2327236	ppb		97
44) Diphenyl Ether	4.890	170	60742	11259.5455992	ug/ml		99
45) Diphenyl Oxide	4.890	170	60742	11259.5455992	ug/ml		99
47) Hexachlorocyclopentadiene	4.613	237	12519	6127.6452127	ppb		95
48) 2,4,6-Trichlorophenol	4.696	196	25846	11048.5239469	ppb		95
49) 2,4,5-Trichlorophenol	4.725	196	29454	12323.1283061	ppb		96
51) Biphenyl	4.825	154	112880	10071.8821977	ppb		98
52) 2-Chloronaphthalene	4.843	162	90877	10506.5614851	ppb		95
53) 2-Nitroaniline	4.907	138	33944	13229.9068303	ppb		92
54) Acenaphthylene	5.137	152	151556	11418.9181225	ppb		100
55) Dimethyl phthalate	5.019	163	109552	11304.0395957	ppb		94
56) 2,6-Dinitrotoluene	5.072	165	25074	11851.8761407	ppb	#	77
57) 3-Nitroaniline	5.190	138	24593	12172.9088920	ppb		99
58) Acenaphthene	5.254	153	92761	10313.0419237	ppb		97
59) 2,4-Dinitrophenol	5.266	184	9699	14101.4014737	ppb	#	1
60) Dibenzofuran	5.378	168	131999	10998.0730327	ppb		98
61) 2,4-Dinitrotoluene	5.360	165	34578	13054.9097739	ppb		98
62) 2,3,4,6-Tetrachlorophenol	5.460	232	19756	11636.0943367	ppb		81
63) 4-Nitrophenol	5.296	139	24083	16466.0311047	ppb		93
64) Fluorene	5.631	166	108952	10966.4298486	ppb		97
65) 4-Chlorophenyl-phenyle...	5.625	204	49223	10878.3333616	ppb		97
66) Diethyl phthalate	5.525	149	118801	11782.5321836	ppb		99
67) 4-Nitroaniline	5.637	138	27913	22817.8938990	ppb		95
68) Azobenzene	5.743	77	118306	11675.7196072	ppb		97
69) Atrazine	6.107	200	32070	14227.9236428	ppb		96
71) 4,6-Dinitro-2-methylph...	5.660	198	15817	13686.6737058	ppb		97
72) N-Nitrosodiphenylamine	5.707	169	82906	9822.9316882	ppb		99
74) 4-Bromophenyl-phenylether	5.996	248	29548	11406.0167875	ppb	#	88
75) Hexachlorobenzene	6.048	284	31842	10522.3645366	ppb		99
76) n-octadecane	6.231	55	20735	10253.8308824	ppb		97
77) Pentachlorophenol	6.196	266	16604	11770.2415698	ppb		96
78) Phenanthrene	6.372	178	169755	11802.8874616	ppb		99
79) Anthracene	6.407	178	164257	12028.2989297	ppb		99
80) Carbazole	6.531	167	155021	13270.4606175	ppb		100
81) Di-n-butyl phthalate	6.795	149	221558	12662.2172767	ppb		100
82) 2-nitrodiphenylamine	6.925	167	40939	15752.5991729	ppb		94
83) Fluoranthene	7.366	202	190748	13553.6273690	ppb		100
85) Benzidine	7.490	184	15010	7095.0704446	ppb		99
86) Pyrene	7.590	202	194142	10516.8407607	ppb		99
88) Benzylbutyl phthalate	8.319	149	99489	11743.3397545	ppb		98
89) 3,3-Dichlorobenzidine	9.072	252	85525	20036.7467441	ppb		99
90) Benzo (a) anthracene	9.101	228	173282	12595.9901229	ppb		99
91) Chrysene	9.154	228	167514	11528.6481488	ppb		100
92) bis(2-Ethylhexyl)phtha...	9.184	149	140217	11218.3022182	ppb		99
93) Di-n-octyl phthalate	10.378	149	242394	12406.5265688	ppb		100
95) Benzo (b) fluoranthene	11.007	252	170007	11486.0283146	ppb		99
96) Benzo (k) fluoranthene	11.060	252	160446	10601.5335923	ppb		99
97) Benzo (a) pyrene	11.654	252	160380	13367.7185452	ppb		98
98) Indeno (1,2,3-cd) pyrene	13.748	276	137441	12586.6341821	ppb		95
99) Dibenz (a, h) anthracene	13.795	278	137135	11204.9029256	ppb		100

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_24.D  
 Acq On : 6 May 2022 11:09 pm  
 Operator : 3545  
 Sample : MS 1x WG1859393 L1487440-03  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 65 Sample Multiplier: 1

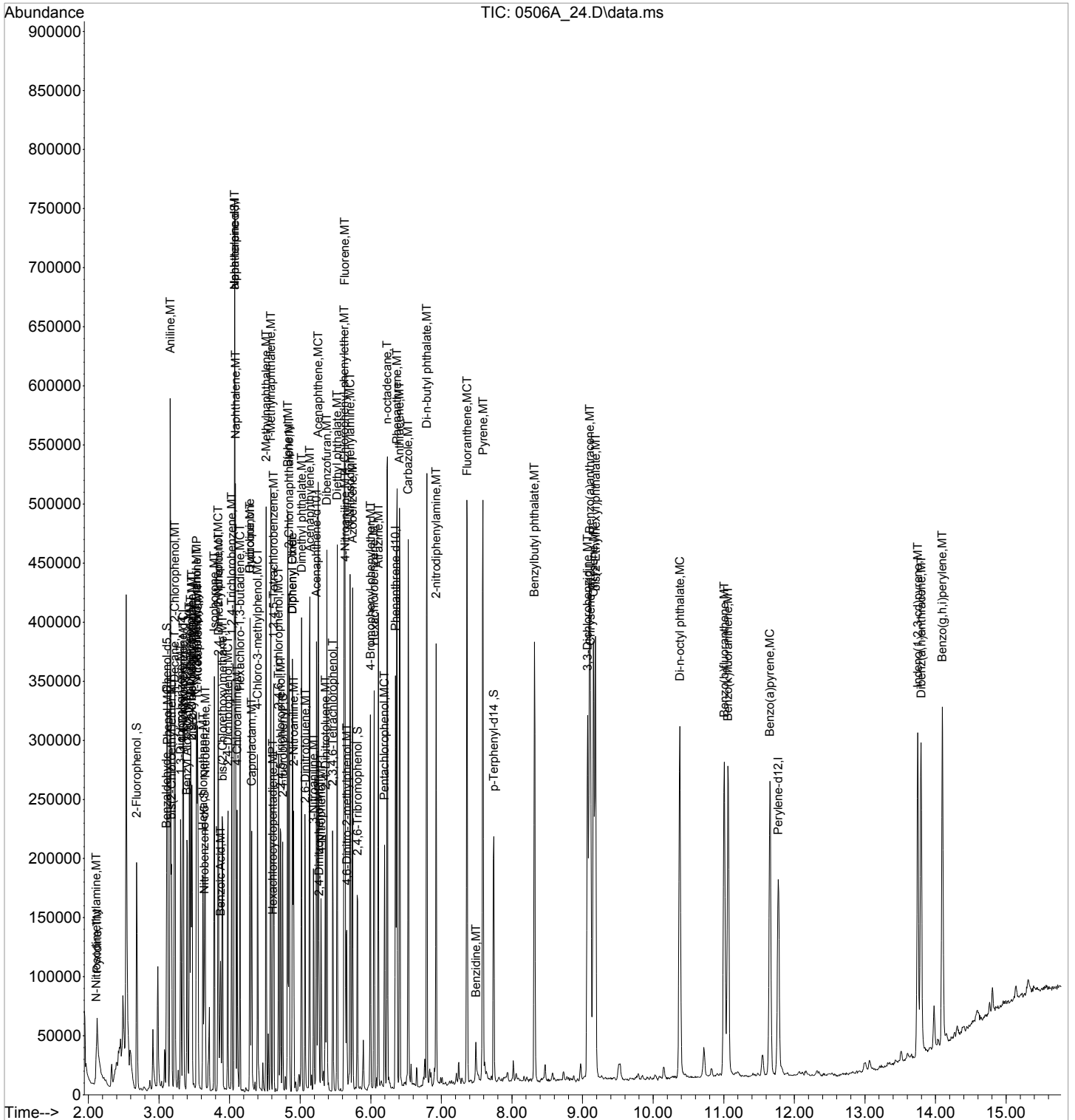
Quant Time: May 09 09:45:11 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
100) Benzo(g,h,i)perylene	14.095	276	140615	10845.7574795	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_24.D  
 Acq On : 6 May 2022 11:09 pm  
 Operator : 3545  
 Sample : MS 1x WG1859393 L1487440-03  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 65 Sample Multiplier: 1

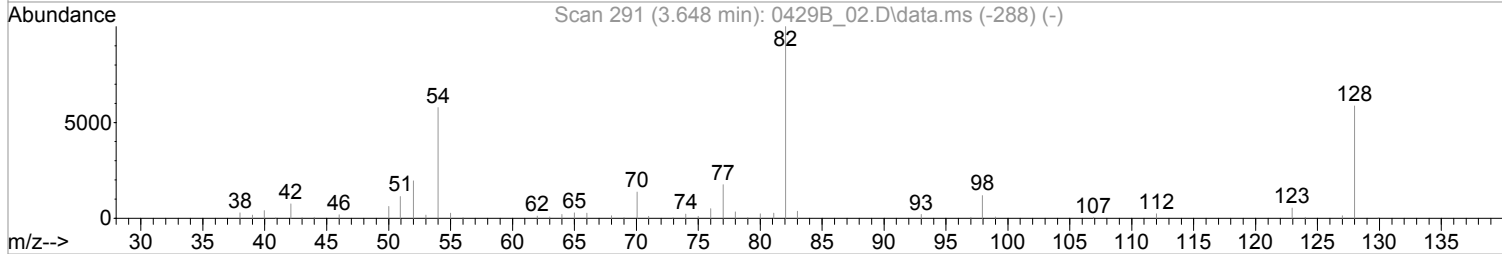
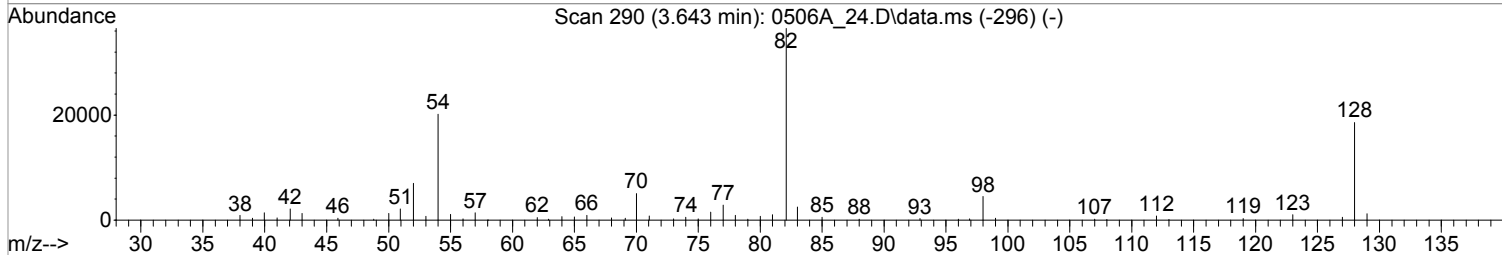
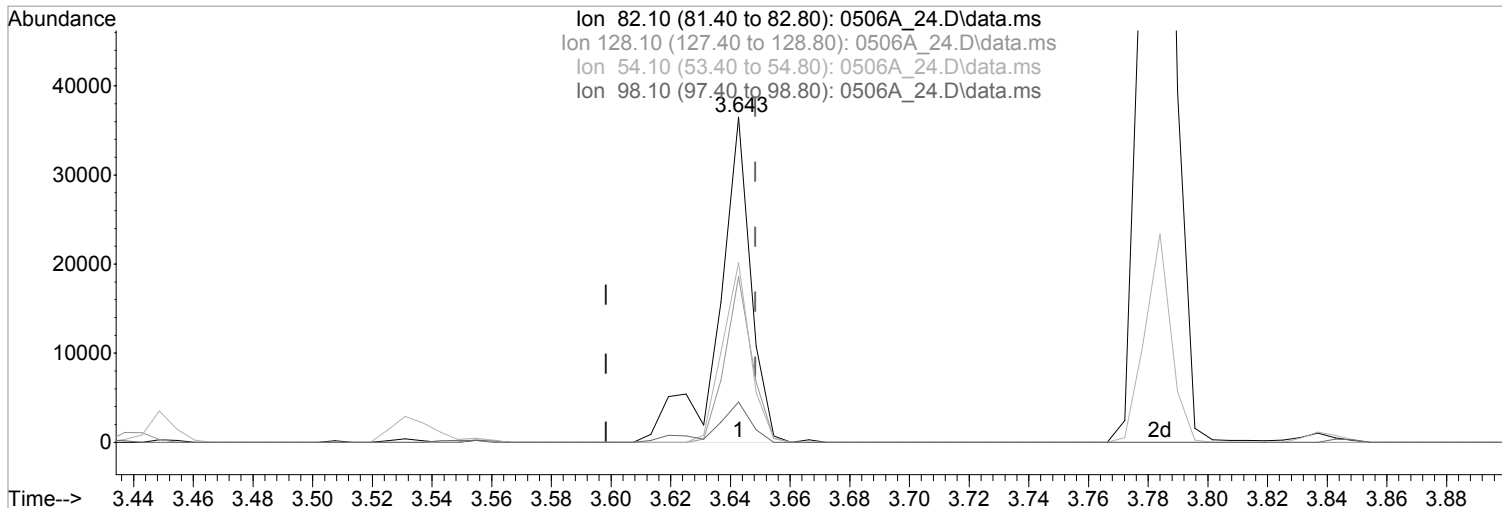
Quant Time: May 09 09:45:11 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_24.D  
 Acq On : 6 May 2022 11:09 pm  
 Operator : 3545  
 Sample : MS 1x WG1859393 L1487440-03  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 65 Sample Multiplier: 1

Quant Time: May 09 09:04:28 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0506A\_24.D\data.ms

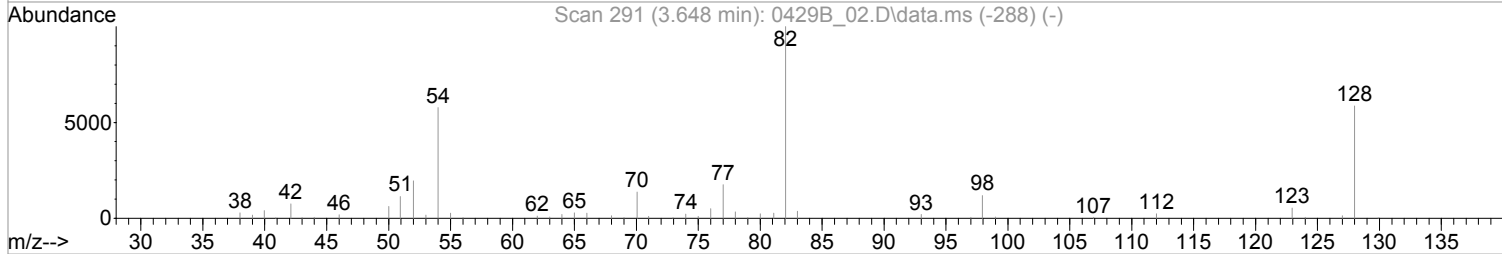
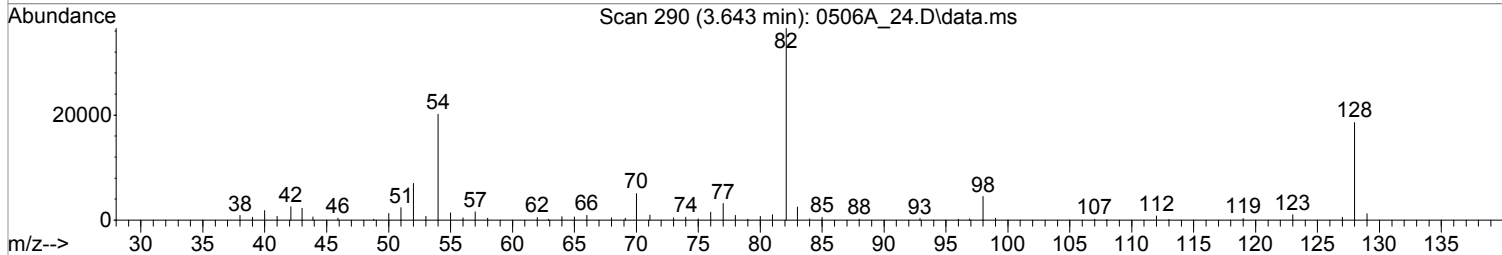
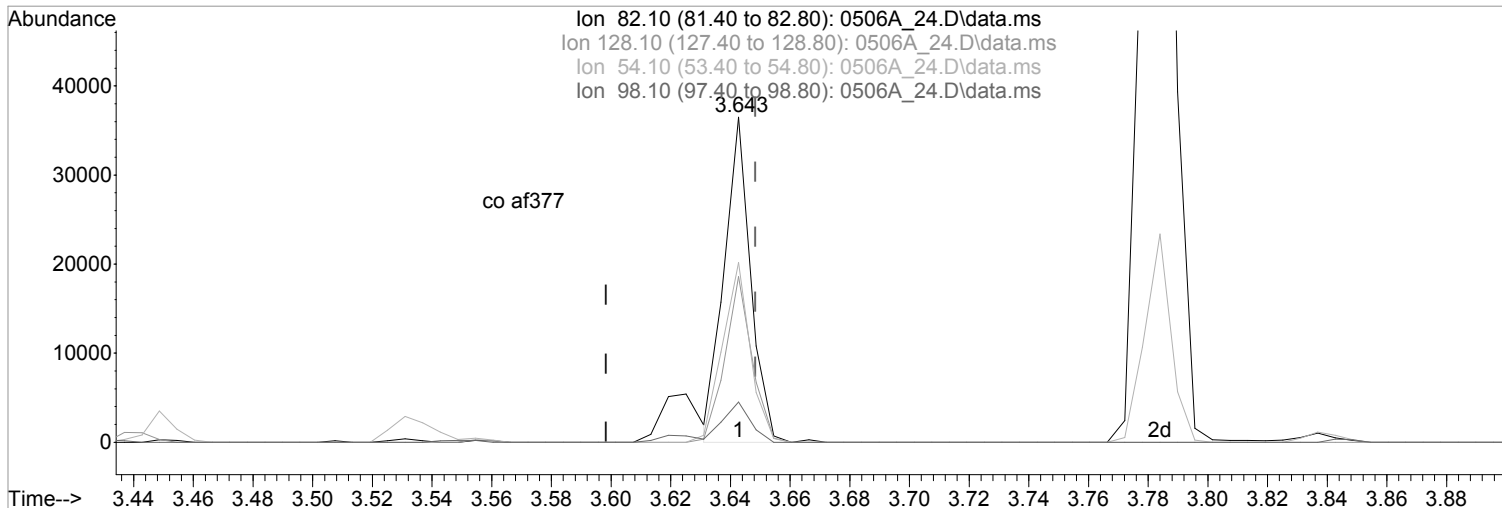
(24) Nitrobenzene-d5 (S)  
 3.643min (-0.006) 5355.7997059 ppb  
 Qvalue = 94  
 response 27270

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	50.93
54.10	60.00	55.25
98.10	11.40	12.31

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_24.D  
 Acq On : 6 May 2022 11:09 pm  
 Operator : 3545  
 Sample : MS 1x WG1859393 L1487440-03  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 65 Sample Multiplier: 1

Quant Time: May 09 09:04:28 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0506A\_24.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.643min (-0.006) 4433.5101782 ppb m

response 22574

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	50.93
54.10	60.00	55.25
98.10	11.40	12.31

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3789566-4  
**Client Sample ID:** MSD  
**Lab File ID:** 0506A\_25  
**Instrument ID:** BNAMS24  
**Analytical Batch:** WG1859393  
**Dilution Factor:** 1  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** 73.2

**SDG:** L1487790  
**Collected Date/Time:** 04/26/22 11:16  
**Received Date/Time:** 04/28/22 09:00  
**Preparation Date/Time:** 05/06/22 04:49  
**Analysis Date/Time:** 05/06/22 23:30  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15.53 g  
**Final Wt/Vol:** 0.5 mL

Analyte	CAS	RT	Result (dry)	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	5.25	0.496		0.00736	0.0455
Acenaphthylene	208-96-8	5.14	0.546		0.00640	0.0455
Anthracene	120-12-7	6.41	0.556		0.00810	0.0455
Benzoic Acid	65-85-0	3.87	0.933		0.161	2.28
Benzo(a)anthracene	56-55-3	9.10	0.605		0.00802	0.0455
Benzo(b)fluoranthene	205-99-2	11.01	0.546		0.00848	0.0455
Benzo(k)fluoranthene	207-08-9	11.07	0.504		0.00808	0.0455
Benzo(g,h,i)perylene	191-24-2	14.10	0.490		0.00832	0.0455
Benzo(a)pyrene	50-32-8	11.65	0.616		0.00845	0.0455
Carbazole	86-74-8	6.53	0.625		0.0141	0.455
Chrysene	218-01-9	9.15	0.556		0.00904	0.0455
Dibenz(a,h)anthracene	53-70-3	13.80	0.520		0.0126	0.0455
Dibenzofuran	132-64-9	5.38	0.527		0.0149	0.455
Fluoranthene	206-44-0	7.37	0.620		0.00821	0.0455
Fluorene	86-73-7	5.63	0.526		0.00740	0.0455
Indeno(1,2,3-cd)pyrene	193-39-5	13.75	0.571		0.0128	0.0455
1-Methylnaphthalene	90-12-0	4.58	0.438		0.00582	0.0455
2-Methylnaphthalene	91-57-6	4.52	0.434		0.00590	0.0455
Naphthalene	91-20-3	4.08	0.414		0.0114	0.0455
Phenanthrene	85-01-8	6.37	0.549		0.00903	0.0455
Bis(2-ethylhexyl)phthalate	117-81-7	9.18	0.578		0.0576	0.455
Di-n-butyl phthalate	84-74-2	6.80	0.605		0.0156	0.455
Di-n-octyl phthalate	117-84-0	10.38	0.612		0.0307	0.455
Pyrene	129-00-0	7.59	0.507		0.00885	0.0455
3&4-Methyl Phenol	3&4-Methyl Phenol	3.53	0.474		0.0142	0.455
Pentachlorophenol	87-86-5	6.20	0.571		0.0122	0.455
Phenol	108-95-2	3.13	0.462		0.0183	0.455

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_25.D  
 Acq On : 6 May 2022 11:30 pm  
 Operator : 3545  
 Sample : MSD 1x WG1859393 L1487440-03  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 66 Sample Multiplier: 1

Quant Time: May 09 09:46:14 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.337	152	27675	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.072	136	132636	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.231	164	61380	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.354	188	106572	8000.0000000	ppb	0.00
84) Chrysene-d12	9.113	240	91484	8000.0000000	ppb	0.00
94) Perylene-d12	11.772	264	94109	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.684	112	49698	11469.8640873	ppb	0.00
Spiked Amount	20000.000	Range 20	- 120	Recovery =	57.35%	
7) Phenol-d5	3.113	99	56972	11082.0317759	ppb	0.00
Spiked Amount	20000.000	Range 20	- 120	Recovery =	55.41%	
24) Nitrobenzene-d5	3.643	82	25035m	4963.1858217	ppb	0.00
Spiked Amount	10000.000	Range 18	- 125	Recovery =	49.63%	
50) 2-Fluorobiphenyl	4.754	172	56139	5759.5741452	ppb	0.00
Spiked Amount	10000.000	Range 28	- 120	Recovery =	57.60%	
73) 2,4,6-Tribromophenol	5.813	330	15235	13644.9484864	ppb	0.00
Spiked Amount	20000.000	Range 17	- 137	Recovery =	68.22%	
87) p-Terphenyl-d14	7.742	244	73959	5842.0193679	ppb	0.00
Spiked Amount	10000.000	Range 13	- 131	Recovery =	58.42%	
<b>Target Compounds</b>						
2) Pyridine	2.125	79	36635	7981.5496868	ppb	98
3) N-Nitrosodimethylamine	2.113	42	21728	8991.9884103	ppb	92
5) Aniline	3.160	66	17370	7301.9741069	ppb #	77
6) bis(2-Chloroethyl)ether	3.178	93	53582	11449.3823277	ppb	100
8) Phenol	3.125	94	57238	10502.7642742	ppb	92
9) Benzaldehyde	3.107	105	36862	31854.0034328	ppb	96
10) 2-Chlorophenol	3.225	128	47234	10407.3485307	ppb	99
11) n-Decane	3.219	41	20792	7126.4522041	ppb #	98
12) 1,3-Dichlorobenzene	3.307	146	50943	9794.1188045	ppb	99
13) 1,4-Dichlorobenzene	3.349	146	52092	10005.4194696	ppb	99
14) Benzyl Alcohol	3.396	79	38475	11573.2633024	ppb	99
15) 1,2-Dichlorobenzene	3.431	146	50718	10103.3106384	ppb	98
16) bis(2-Chloroisopropyl)...	3.466	121	17357	10012.7633446	ppb	85
17) 2,2-oxybis(1-chloropro...	3.466	121	17357	10012.7633446	ppb	85
18) 2-Methylphenol	3.449	108	39926	9780.7868083	ppb	96
19) Hexachloroethane	3.625	117	21256	9790.7418177	ppb	95
20) N-Nitrosodi-n-propylamine	3.537	70	34187	11775.0025393	ppb	98
21) 3&4-Methyl phenol	3.531	107	48609	10794.7526432	ppb	94
22) Acetophenone	3.549	105	66902	11230.4873971	ppb #	86
25) Nitrobenzene	3.655	77	49895	9786.8298777	ppb	93
26) Isophorone	3.784	82	96962	9716.4307277	ppb	92
27) 2-Nitrophenol	3.837	139	28242	11708.6796760	ppb #	72
28) 2,4-Dimethylphenol	3.843	107	35865	7225.8610117	ppb	98
29) bis(2-Chlorethoxy)methane	3.902	93	65268	9734.3179904	ppb	96
30) 2,4-Dichlorophenol	3.978	162	39350	10034.8369175	ppb	98
31) Benzoic Acid	3.872	105	30026	21208.7826324	ppb	88
32) 1,2,4-Trichlorobenzene	4.031	180	43260	9225.0235707	ppb	99
33) alpha-terpineol	4.072	59	48340	11832.2282675	ppb	93
34) Naphthalene	4.084	128	155836	9412.3311332	ppb	100
35) 4-Chloroaniline	4.107	65	14598	8390.1208398	ppb #	55
36) Hexachloro-1,3-butadiene	4.149	225	23112	9137.2401616	ppb	97
37) Hydroquinone	4.290	110	8458	2923.4136626	ppb	88



Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_25.D  
 Acq On : 6 May 2022 11:30 pm  
 Operator : 3545  
 Sample : MSD 1x WG1859393 L1487440-03  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 66 Sample Multiplier: 1

Quant Time: May 09 09:46:14 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
38) Quinoline	4.290	129	102348	13364.4300041	ppb		99
39) Caprolactam	4.313	113	21716	21536.4844797	ppb		98
40) 4-Chloro-3-methylphenol	4.396	107	44121	10754.3478834	ppb		92
41) 2-Methylnaphthalene	4.519	142	102572	9860.8283312	ppb		99
42) 1-Methylnaphthalene	4.584	142	101019	9976.2118024	ppb		100
43) 1,2,4,5-Tetrachloroben...	4.625	216	40304	11302.0095920	ppb		98
44) Diphenyl Ether	4.896	170	63742	11926.9998345	ug/ml		98
45) Diphenyl Oxide	4.896	170	63742	11926.9998345	ug/ml		98
47) Hexachlorocyclopentadiene	4.613	237	14226	7105.4246900	ppb		97
48) 2,4,6-Trichlorophenol	4.696	196	27643	12058.1132641	ppb		95
49) 2,4,5-Trichlorophenol	4.725	196	32375	13821.9630861	ppb		94
51) Biphenyl	4.825	154	120796	10998.3985731	ppb		100
52) 2-Chloronaphthalene	4.843	162	94501	11148.7529699	ppb		97
53) 2-Nitroaniline	4.907	138	35653	14179.8981036	ppb		92
54) Acenaphthylene	5.137	152	161717	12433.4245856	ppb		99
55) Dimethyl phthalate	5.019	163	121247	12766.3758197	ppb		94
56) 2,6-Dinitrotoluene	5.072	165	27536	13281.5144625	ppb	#	79
57) 3-Nitroaniline	5.190	138	26503	13386.3187550	ppb		97
58) Acenaphthene	5.254	153	99212	11255.6046398	ppb		97
59) 2,4-Dinitrophenol	5.266	184	9608	14223.0010177	ppb	#	1
60) Dibenzofuran	5.378	168	141112	11997.5665963	ppb		99
61) 2,4-Dinitrotoluene	5.360	165	38141	14694.3149473	ppb		98
62) 2,3,4,6-Tetrachlorophenol	5.466	232	21791	13096.9038928	ppb		99
63) 4-Nitrophenol	5.296	139	24861	17345.2356000	ppb		93
64) Fluorene	5.631	166	116575	11973.4345880	ppb		97
65) 4-Chlorophenyl-phenyle...	5.625	204	54560	12304.1582958	ppb		98
66) Diethyl phthalate	5.525	149	129130	13068.5966262	ppb		99
67) 4-Nitroaniline	5.637	138	28218	23538.4864496	ppb		97
68) Azobenzene	5.743	77	126228	12712.0575704	ppb		97
69) Atrazine	6.107	200	34927	15812.0112231	ppb		97
71) 4,6-Dinitro-2-methylph...	5.660	198	16337	14259.9702864	ppb		97
72) N-Nitrosodiphenylamine	5.707	169	83468	10069.9155850	ppb		98
74) 4-Bromophenyl-phenylether	5.996	248	31585	12414.7351257	ppb		89
75) Hexachlorobenzene	6.048	284	34501	11609.0143843	ppb		99
76) n-octadecane	6.237	55	22693	11426.8015363	ppb		95
77) Pentachlorophenol	6.196	266	18273	12970.0067013	ppb		96
78) Phenanthrene	6.372	178	176076	12465.6955428	ppb		98
79) Anthracene	6.413	178	169486	12637.6061667	ppb		99
80) Carbazole	6.531	167	163217	14226.9405014	ppb		99
81) Di-n-butyl phthalate	6.795	149	236548	13765.5087439	ppb		99
82) 2-nitrodiphenylamine	6.925	167	45079	17368.5617310	ppb		94
83) Fluoranthene	7.366	202	194840	14096.9230794	ppb		99
85) Benzidine	7.490	184	14464	7305.5530415	ppb		98
86) Pyrene	7.590	202	197345	11516.3970611	ppb		100
88) Benzylbutyl phthalate	8.319	149	105947	13471.9334173	ppb		98
89) 3,3-Dichlorobenzidine	9.072	252	75735	19114.1706721	ppb		99
90) Benzo (a) anthracene	9.101	228	175905	13774.6872610	ppb		99
91) Chrysene	9.154	228	170337	12628.7676679	ppb		100
92) bis(2-Ethylhexyl)phtha...	9.184	149	152539	13147.1634823	ppb		100
93) Di-n-octyl phthalate	10.378	149	253756	13898.4546294	ppb		99
95) Benzo (b) fluoranthene	11.007	252	171217	12414.0753401	ppb		100
96) Benzo (k) fluoranthene	11.066	252	161652	11462.6569790	ppb		97
97) Benzo (a) pyrene	11.654	252	156648	14011.8781826	ppb		99
98) Indeno (1,2,3-cd) pyrene	13.748	276	132118	12984.3349168	ppb		98
99) Dibenz (a, h) anthracene	13.795	278	135071	11843.6705244	ppb		97

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_25.D  
 Acq On : 6 May 2022 11:30 pm  
 Operator : 3545  
 Sample : MSD 1x WG1859393 L1487440-03  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 66 Sample Multiplier: 1

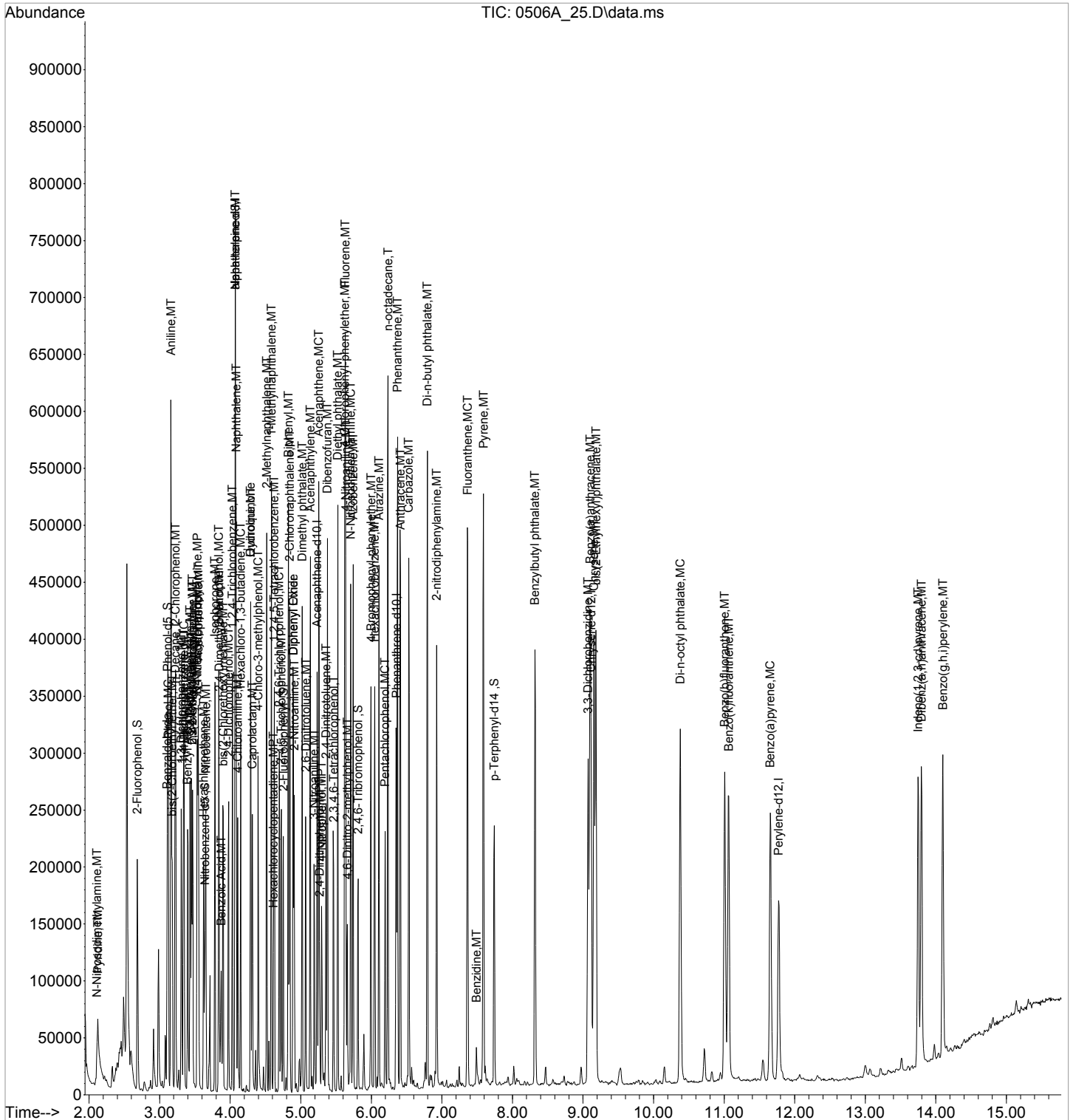
Quant Time: May 09 09:46:14 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
100) Benzo(g,h,i)perylene	14.101	276	134786	11156.7432199	ppb	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\050622A\  
Data File : 0506A\_25.D  
Acq On : 6 May 2022 11:30 pm  
Operator : 3545  
Sample : MSD 1x WG1859393 L1487440-03  
Misc : SOIL ISTD 22E03576 exp. 11/03/22  
ALS Vial : 66 Sample Multiplier: 1

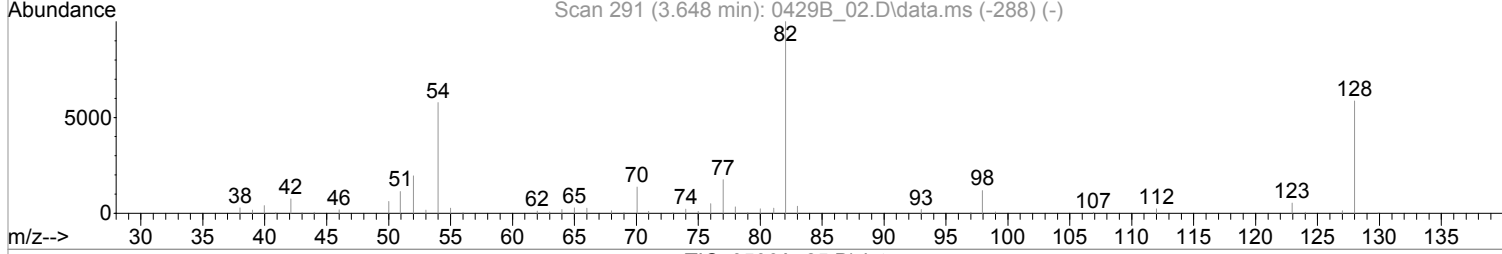
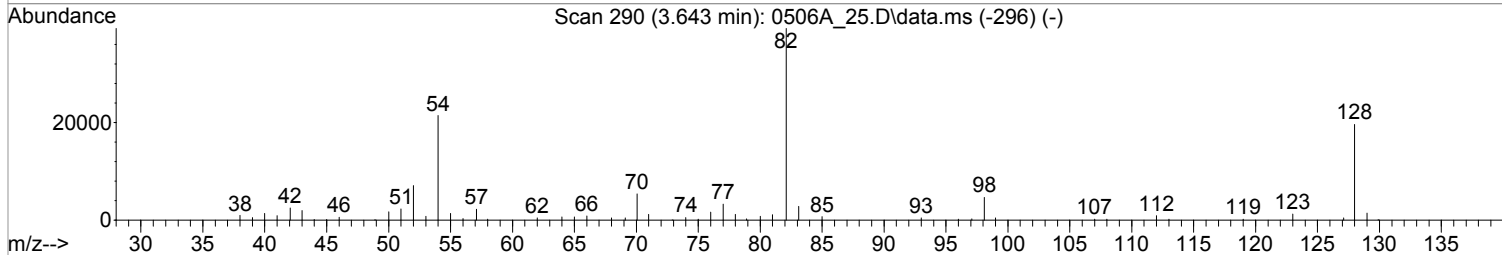
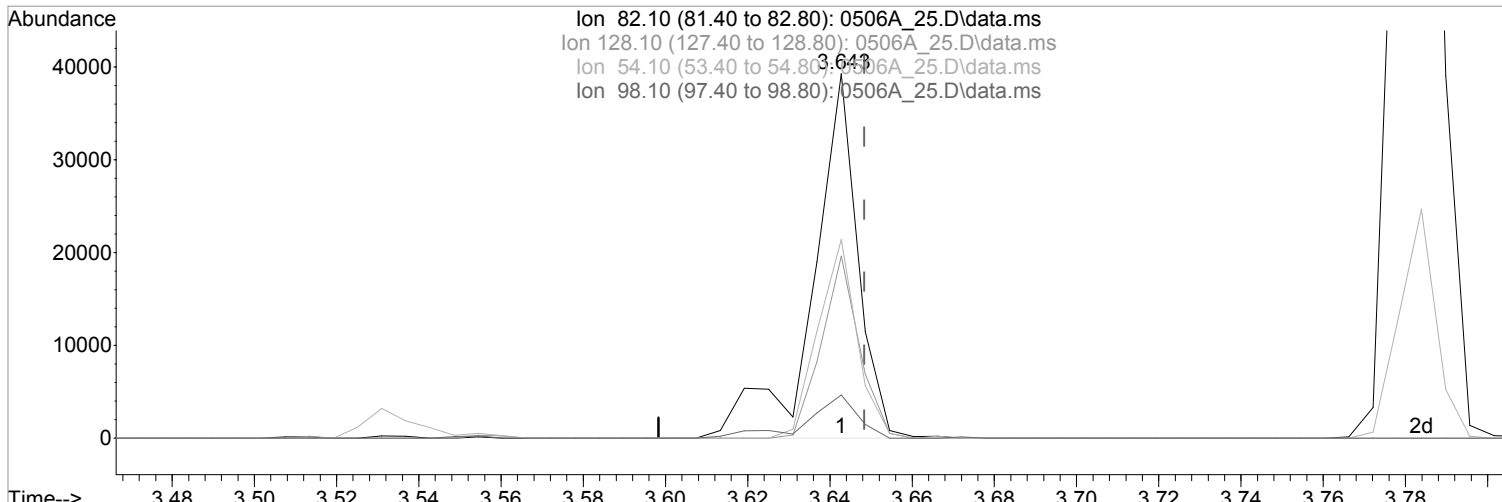
Quant Time: May 09 09:46:14 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth: BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_25.D  
 Acq On : 6 May 2022 11:30 pm  
 Operator : 3545  
 Sample : MSD 1x WG1859393 L1487440-03  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 66 Sample Multiplier: 1

Quant Time: May 09 09:04:33 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0506A\_25.D\data.ms

(24) Nitrobenzene-d5 (S)

3.643min (-0.006) 5931.4382504 ppb

Qvalue = 94

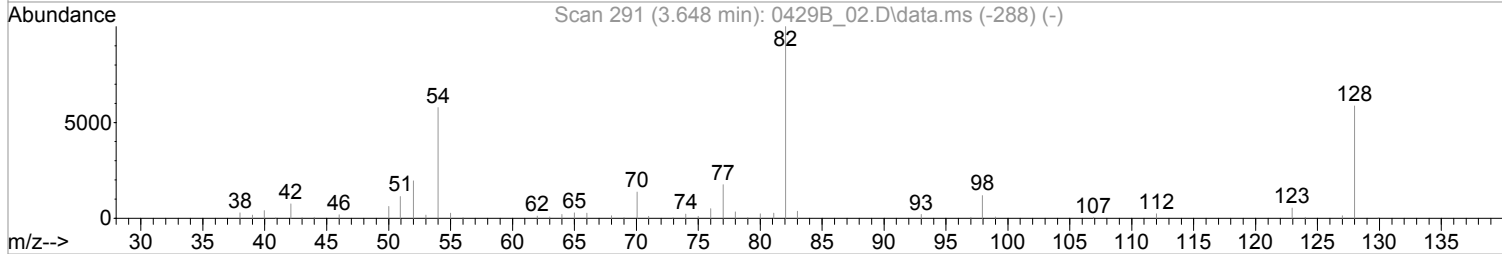
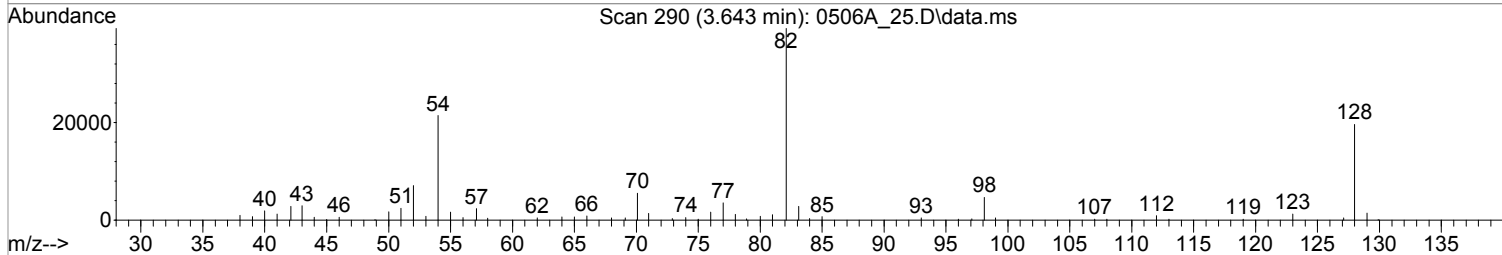
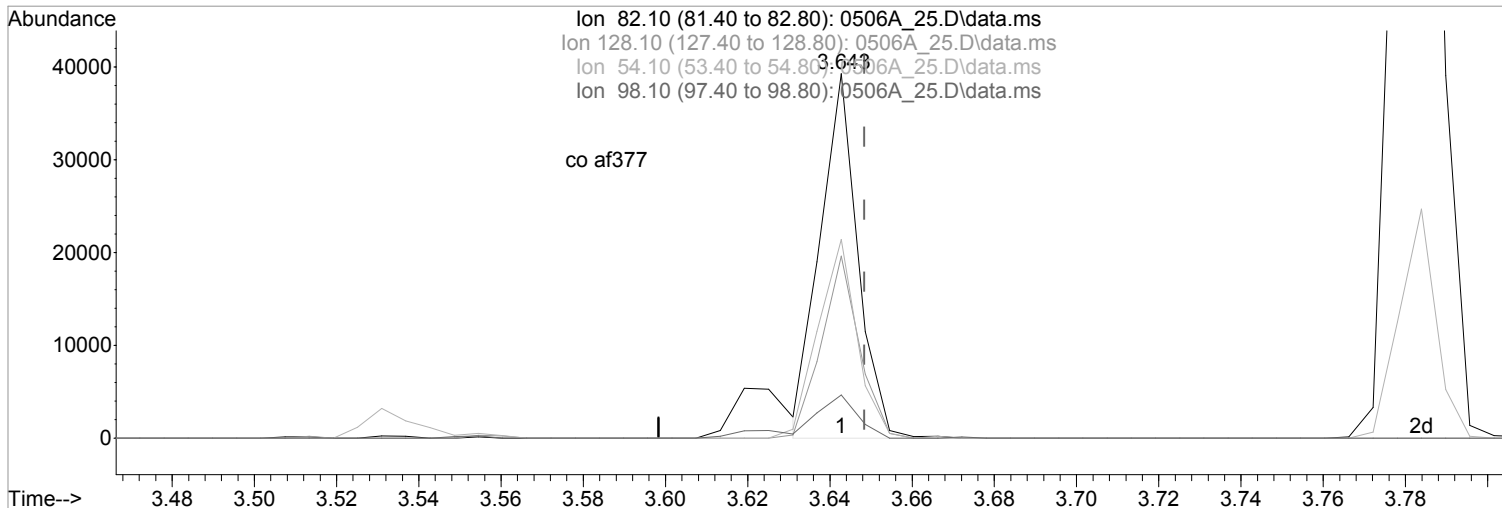
response 29919

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	49.97
54.10	60.00	54.53
98.10	11.40	11.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\050622A\  
 Data File : 0506A\_25.D  
 Acq On : 6 May 2022 11:30 pm  
 Operator : 3545  
 Sample : MSD 1x WG1859393 L1487440-03  
 Misc : SOIL ISTD 22E03576 exp. 11/03/22  
 ALS Vial : 66 Sample Multiplier: 1

Quant Time: May 09 09:04:33 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0506A\_25.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.643min (-0.006) 4963.1858217 ppb m

response 25035

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	49.97
54.10	60.00	54.53
98.10	11.40	11.89

# BNA SS Extractions Benchsheet

Batch: WG1859393

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1486429	WG1859288	ARS3701	PREPREPBAL1	05-MAY-22
L1486912	WG1855472	KMT967	PREPREPBAL1	28-APR-22
L1487337	WG1856127	KMT967	PREPREPBAL4	28-APR-22
L1487429	WG1856124	KMT967	PREPREPBAL4	29-APR-22
L1487440	WG1856133	KMT967	PREPREPBAL2	29-APR-22
L1487790	WG1856683	BJM688	PREPREPBAL1	29-APR-22
L1488057	WG1858234	BJM688	PREPREPBAL1	04-MAY-22
L1488067	WG1858145	BJM688	PREPREPBAL1	03-MAY-22

Process Analyst: MAB3514 Transfer Analyst: MAB3514 Material Handler: MAB3514 Prep Start Date/Time: 05/06/22 04:49-14:57  
 Prep End Date/Time: 05/06/22 14:57 SOP: MTJL-0118 Method: 3546 Balance ID: EXTBAL5 Filter Lot#: 17127444

Na2SO4: 22D27809 Amt. Used: 1 Exp. Date:10/27/22 MeCL2:Acetone: 22D19459 Amt. Used: 1 Exp. Date:08/01/22  
 Surrogate: 22E03640 Amt. Used: 0.50 mL Exp. Date:08/22/22 LCS/MS Spike: 22D25449 Amt. Used: 0.50 mL Exp. Date:05/09/22  
 MeCL2: 22E04829 Amt. Used: 1 Exp. Date:11/04/22 Spike Syringe ID: 21K30871 Amt. Used: 1 Exp. Date:05/30/22  
 Surrogate Syringe ID: 22B04917 Amt. Used: 1 Exp. Date:08/04/22

Sample Number	Prep Flags	Initial Sample Wt (g)	Solvent Volume (mL)	Final Volume (mL)	Extract Color	Box ID	Prep Factor	Prep Ratio	DL Adjustment Factor	Spike Factor	Surrogate Factor	Review Analyst	Review Date
BLANK		15	25	0.5	Colorless		0.0333	1	1	1	1	DSH3578	05/06/22 15:49:27
LCS		15	25	0.5	Yellow		0.0333	1	1	1	1	DSH3578	05/06/22 15:49:27
MS(L1487440-03)		15.45	25	0.5	Orange	Fri03 / 0429PP02	0.0324	0.973	1	1	1	DSH3578	05/06/22 15:49:27
MSD(L1487440-03)		15.53	25	0.5	Orange	Fri03 / 0429PP02	0.0322	0.967	1	1	1	DSH3578	05/06/22 15:49:27
1. L1486429-08		15.07	25	0.5	Colorless	RUSH	0.0332	0.997	1	1	1	DSH3578	05/06/22 15:49:27
2. L1486429-09	T8	15.30	25	0.5	Colorless		0.0327	0.982	1	1	1	DSH3578	05/06/22 15:49:27
3. L1486912-07		15.30	25	0.5	Yellow	THU 1/0428-PP1	0.0327	0.982	1	1	1	DSH3578	05/06/22 15:49:27
4. L1486912-09		15.22	25	0.5	Colorless	THU 1/0428-PP1	0.0329	0.988	1	1	1	DSH3578	05/06/22 15:49:27
5. L1486912-11		15.57	25	0.5	Dark-brown	THU 1/0428-PP1	0.0321	0.964	1	1	1	DSH3578	05/06/22 15:49:27
6. L1487337-02		15.42	25	0.5	Brown	Thur-5	0.0324	0.973	1	1	1	DSH3578	05/06/22 15:49:27
7. L1487429-01		15.01	25	0.5	Brown	FRI BOX 3	0.0333	1	1	1	1	DSH3578	05/06/22 15:49:27
8. L1487429-02		15.57	25	0.5	Yellow	FRI BOX 3	0.0321	0.964	1	1	1	DSH3578	05/06/22 15:49:27
9. L1487429-03		15.68	25	0.5	Orange	FRI BOX 3	0.0319	0.958	1	1	1	DSH3578	05/06/22 15:49:27
10. L1487429-04		15.35	25	0.5	Yellow	FRI BOX 3	0.0326	0.979	1	1	1	DSH3578	05/06/22 15:49:27
11. L1487440-01		15.97	25	0.5	Yellow	Fri03 / 0429PP02	0.0313	0.94	1	1	1	DSH3578	05/06/22 15:49:27
12. L1487440-02		15.32	25	0.5	Dark-brown	Fri03 / 0429PP02	0.0326	0.979	1	1	1	DSH3578	05/06/22 15:49:27
13. L1487440-03		15.54	25	0.5	Orange	Fri03 / 0429PP02	0.0322	0.967	1	1	1	DSH3578	05/06/22 15:49:27
14. L1487440-04		15.51	25	1.0	Dark-brown	Fri03 / 0429PP02	0.0645	1.94	2	1	1	DSH3578	05/06/22 15:49:27
15. L1487440-05		15.77	25	0.5	Yellow	Fri03 / 0429PP02	0.0317	0.952	1	1	1	DSH3578	05/06/22 15:49:27
16. L1487440-06		15.82	25	0.5	Orange	Fri03 / 0429PP02	0.0316	0.949	1	1	1	DSH3578	05/06/22 15:49:27
17. L1487790-01		15.91	25	0.5	Yellow	Fri-7	0.0314	0.943	1	1	1	DSH3578	05/06/22 15:49:27
18. L1488057-08		15.57	25	0.5	Yellow	WED 1/0504-PP1	0.0321	0.964	1	1	1	DSH3578	05/06/22 15:49:27
19. L1488067-04		15.49	25	0.5	Yellow	TUE BOX 6, 0503 PP1	0.0323	0.97	1	1	1	DSH3578	05/06/22 15:49:27
20. L1488067-07		15.24	25	0.5	Yellow	TUE BOX 6, 0503 PP1	0.0328	0.985	1	1	1	DSH3578	05/06/22 15:49:27

Comments: L1487440-04 and -06 were Na2SO4 treated

Reviewed By: DSH3578 on 05/06/22 15:49:27

9034/9030B Wet Chemistry

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** L1487790-01  
**Client Sample ID:** BNSF-SG13-042522-0-1.5  
**Lab File ID:** 28  
**Instrument ID:** MAN TITR  
**Analytical Batch:** WG1857660  
**Dilution Factor:** 1  
**Analytical Method:** 9034/9030B  
**Matrix:** Solid  
**Total Solids (%):** 79.4

**SDG:** L1487790  
**Collected Date/Time:** 04/25/22 09:55  
**Received Date/Time:** 04/29/22 09:00  
**Preparation Date/Time:** 05/01/22 08:00  
**Analysis Date/Time:** 05/02/22 18:00  
**Prep Method:** 9030B  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 8.94 g  
**Final Wt/Vol:** \_\_\_\_\_

Analyte	CAS	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Sulfide	18496-25-8	U		37.8	94.4



SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3787279-1  
**Client Sample ID:** BLANK  
**Lab File ID:** 25  
**Instrument ID:** MAN TITR  
**Analytical Batch:** WG1857660  
**Dilution Factor:** 1  
**Analytical Method:** 9034/9030B  
**Matrix:** Solid  
**Total Solids (%):** \_\_\_\_\_

**SDG:** L1487790  
**Collected Date/Time:** \_\_\_\_\_  
**Received Date/Time:** \_\_\_\_\_  
**Preparation Date/Time:** 05/01/22 08:00  
**Analysis Date/Time:** 05/02/22 18:00  
**Prep Method:** 9030B  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 10.17 g  
**Final Wt/Vol:** \_\_\_\_\_

Analyte	CAS	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Sulfide	18496-25-8	U		30.0	75.0

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3787279-2  
Client Sample ID: LCS  
Lab File ID: 26  
Instrument ID: MAN TITR  
Analytical Batch: WG1857660  
Dilution Factor: 1  
Analytical Method: 9034/9030B  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1487790  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 05/01/22 08:00  
Analysis Date/Time: 05/02/22 18:00  
Prep Method: 9030B  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 10.01 g  
Final Wt/Vol: \_\_\_\_\_

Analyte	CAS	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Sulfide	18496-25-8	80.1		30.0	75.0

<b>SDG:</b>	L1487790	<b>Calibration (begin) date/time:</b>	_____
<b>Instrument ID:</b>	MAN TITR	<b>Calibration (end) date/time:</b>	_____
<b>Analytical Method:</b>	9034/9030B	<b>Analytical Run:</b>	WG1857660

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	<b>Sample ID: BLANK</b>	<b>Result</b>	<b>BLANK Qual</b>
	<b>File ID:</b>	25	
<b>Analyte</b>		mg/kg	
SULFIDE		U	

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LABORATORY CONTROL SAMPLE  
 LABORATORY CONTROL SAMPLE DUPLICATE  
 RECOVERY  
 L1487790-01

SAMPLE NO.:  
 R3787279-2

**LCS Sample / File ID:** R3787279-2 / 26  
**LCSD Sample / File ID:** \_\_\_\_\_  
**Instrument ID:** MAN TITR  
**Analytical Method:** 9034/9030B

**SDG:** L1487790  
**Analytical Batch:** WG1857660  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	Spike Amount <i>mg/kg</i>	LCS Result <i>mg/kg</i>	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limits %
Sulfide	100	80.1		80.1		53.8 - 124		

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1487790-01  
Matrix: Solid

Analytical Method: 9034/9030B  
Prep Method: 9030B

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Analyte	CAS	Wavelength	Mass	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Sulfide	18496-25-8			30	75

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ANALYSIS LOG

**SDG:** L1487790 **Analytical Method:** 9034/9030B  
**Instrument ID:** MAN TITR **Calibration Start Date:** \_\_\_\_\_  
**Analytical Run:** WG1857660 **Calibration End Date:** \_\_\_\_\_

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3787279-1	25	05/02/22 18:00	1	WG1857660
LCS	R3787279-2	26	05/02/22 18:00	1	WG1857660
BNSF-SG13-042522-0-1 .5	L1487790-01	28	05/02/22 18:00	1	WG1857660

## SULFIDE SS WetChem Prep Benchsheet

**Batch:** WG1857660/WG1857087

**Analyst:** BMD3730 **Analyst 2:** NA **Analyst 3:** NA **Prep Start Date/Time:** 05/01/22 08:00 **Prep End Date/Time:** 05/02/22 17:00  
**Date/Time Analyzed:** 05/02/22 18:00:55 **SOP:** 0172 **Method:** 9030B **LCS True Value:** 100 ppm **Balance ID:** WETBAL12 **5mL Pipette Lot#:** NA  
**10mL Pipette Lot#:** NA **50mL Pipette Lot#:** NA **250mL Container Lot#:** NA

**H2SO4:** 22E02355 Amt. Used: 50 mL Exp. Date:11/02/22 **0.5M Zn Acetate:** 22D28915 Amt. Used: 10 mL Exp. Date:09/29/22  
**37% Formaldehyde:** 22D25378 Amt. Used: 5 mL Exp. Date:10/25/22 **LCS/D Standard:** 22E02354 Amt. Used: 10 mL Exp. Date:05/03/22  
**Iodine Solution:** 22E02416 Amt. Used: 15 mL Exp. Date:11/02/22 **Sodium Thiosulfate Titrant:** 22E02415 Amt. Used: 1 Exp. Date:11/02/22  
**6N HCL:** 22C22767 Amt. Used: 1 Exp. Date:09/22/22 **MS/D Standard:** 22E02354 Amt. Used: 10 mL Exp. Date:05/03/22

Sample Number	Normality of I2	Vol I2 for Std. (mL)	Vol Titr for Std. (mL)	Normality of Titrant	Initial Sample Wt (g)	Volume of I2 (mL)	Volume of Titrant (mL)	Sulfide Result (mg/L)	Review Analyst	Review Date
BLANK	0.025	15	15	0.025	10.17	15	15.0	0	BMD3730	05/02/22 18:37:19
LCS	0.025	15	15	0.025	10.01	15	13.0	80.07	BMD3730	05/02/22 18:37:19
1. L1487357-01	0.025	15	15	0.025	10.11	15	15.0	0	BMD3730	05/02/22 18:37:19
2. L1487790-01	0.025	15	15	0.025	8.94	15	15.0	0	BMD3730	05/02/22 18:37:19
3. L1487939-01	0.025	15	15	0.025	10.48	15	15.0	0	BMD3730	05/02/22 18:37:19
4. L1487939-02	0.025	15	15	0.025	9.97	15	15.0	0	BMD3730	05/02/22 18:37:19
5. L1487939-03	0.025	15	15	0.025	11.71	15	15.0	0	BMD3730	05/02/22 18:37:19

**Comments:**

**Reviewed By:**BMD3730 on 05/02/22 18:37:19

## 9030B WetChem Prep Benchsheet

**Batch:** WG1857087

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1487357	WG1856878	BJM688	PREPREPBAL1	30-APR-22
L1487459	WG1856127	KMT967	PREPREPBAL4	28-APR-22
L1487556	WG1856857	BJM688	PREPREPBAL1	30-APR-22
L1487790	WG1856683	BJM688	PREPREPBAL1	29-APR-22
L1487939	WG1856725	BJM688	PREPREPBAL1	29-APR-22
L1488057	WG1856887	BJM688	PREPREPBAL3	30-APR-22
L1488067	WG1856887	BJM688	PREPREPBAL3	30-APR-22
L1488142	WG1856963	BJM688	PREPREPBAL3	30-APR-22

**Analyst:** BMD3730 **Analyst 2:** NA **Analyst 3:** NA **Prep Start Date/Time:** 05/01/22 08:00 **Prep End Date/Time:** 05/02/22 17:00  
**Date/Time Analyzed:** 05/02/22 18:00:55 **SOP:** 0172 **Method:** 9030B **LCS True Value:** 100 ppm **Balance ID:** WETBAL12 **5mL Pipette Lot#:** NA  
**10mL Pipette Lot#:** NA **50mL Pipette Lot#:** NA **250mL Container Lot#:** NA

**H2SO4:** 22E02355 Amt. Used: 50 mL Exp. Date:11/02/22 **0.5M Zn Acetate:** 22D28915 Amt. Used: 10 mL Exp. Date:09/29/22  
**37% Formaldehyde:** 22D25378 Amt. Used: 5 mL Exp. Date:10/25/22 **LCS/D Standard:** 22E02354 Amt. Used: 10 mL Exp. Date:05/03/22  
**Iodine Solution:** 22E02416 Amt. Used: 15 mL Exp. Date:11/02/22 **Sodium Thiosulfate Titrant:** 22E02415 Amt. Used: 1 Exp. Date:11/02/22  
**6N HCL:** 22C22767 Amt. Used: 1 Exp. Date:09/22/22 **MS/D Standard:** 22E02354 Amt. Used: 10 mL Exp. Date:05/03/22

Sample Number	Normality of I2	Vol I2 for Std. (mL)	Vol Titr for Std. (mL)	Normality of Titrant	Initial Sample Wt (g)	Volume of I2 (mL)	Volume of Titrant (mL)	Sulfide Result (mg/L)	Review Analyst	Review Date
BLANK	0.025	15	15	0.025	10.17	15	15.0	0	BMD3730	05/02/22 18:37:19
LCS	0.025	15	15	0.025	10.01	15	13.0	80.07	BMD3730	05/02/22 18:37:19
1. L1487357-01	0.025	15	15	0.025	10.11	15	15.0	0	BMD3730	05/02/22 18:37:19
2. L1487459-01	0.025	15	15	0.025	12.04	15	15.0	0	BMD3730	05/02/22 18:37:19
3. L1487556-02	0.025	15	15	0.025	9.99	15	15.0	0	BMD3730	05/02/22 18:37:19
4. L1487790-01	0.025	15	15	0.025	8.94	15	15.0	0	BMD3730	05/02/22 18:37:19
5. L1487939-01	0.025	15	15	0.025	10.48	15	15.0	0	BMD3730	05/02/22 18:37:19
6. L1487939-02	0.025	15	15	0.025	9.97	15	15.0	0	BMD3730	05/02/22 18:37:19
7. L1487939-03	0.025	15	15	0.025	11.71	15	15.0	0	BMD3730	05/02/22 18:37:19
8. L1488057-03	0.025	15	15	0.025	9.81	15	15.0	0	BMD3730	05/02/22 18:37:19
9. L1488057-04	0.025	15	15	0.025	9.98	15	15.0	0	BMD3730	05/02/22 18:37:19
10. L1488057-05	0.025	15	15	0.025	10.05	15	15.0	0	BMD3730	05/02/22 18:37:19
11. L1488057-06	0.025	15	15	0.025	8.64	15	15.0	0	BMD3730	05/02/22 18:37:19
12. L1488057-07	0.025	15	15	0.025	10.55	15	15.0	0	BMD3730	05/02/22 18:37:19
13. L1488057-09	0.025	15	15	0.025	12.50	15	15.0	0	BMD3730	05/02/22 18:37:19
14. L1488067-01	0.025	15	15	0.025	10.27	15	15.0	0	BMD3730	05/02/22 18:37:19
15. L1488067-05	0.025	15	15	0.025	9.97	15	15.0	0	BMD3730	05/02/22 18:37:19
16. L1488067-06	0.025	15	15	0.025	10.53	15	15.0	0	BMD3730	05/02/22 18:37:19
17. L1488067-08	0.025	15	15	0.025	10.19	15	15.0	0	BMD3730	05/02/22 18:37:19
18. L1488142-06	0.025	15	15	0.025	9.59	15	15.0	0	BMD3730	05/02/22 18:37:19
19. L1488142-07	0.025	15	15	0.025	10.01	15	15.0	0	BMD3730	05/02/22 18:37:19

Sample Number	Normality of I2	Vol I2 for Std. (mL)	Vol Titr for Std. (mL)	Normality of Titrant	Initial Sample Wt (g)	Volume of I2 (mL)	Volume of Titrant (mL)	Sulfide Result (mg/L)	Review Analyst	Review Date
20. L1488142-08	0.025	15	15	0.025	10.20	15	15.0	0	BMD3730	05/02/22 18:37:19
MS(L1487556-02)	0.025	15	15	0.025	10.01	15	13.8	48.042	BMD3730	05/02/22 18:37:19
MSD(L1487556-02)	0.025	15	15	0.025	9.99	15	14.0	40.115	BMD3730	05/02/22 18:37:19
<b>Comments:</b>									<b>Reviewed By:</b> BMD3730 on 05/02/22 18:37:19	



# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

COD	Coefficient of Determination.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Mass	Mass of parameter.
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
RRF	Relative Response Factor.
RT	Retention Time.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Wavelength	Wavelength of parameter.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
NI	Manual Integration Code to indicate that the peak was not integrated at all by the computer software.
LT	Manual Integration Code to indicate that the peak in question was inappropriately integrated to an area less than what it should be (i.e., peak area was cut).
GT	Manual Integration Code to indicate that the peak in question was inappropriately integrated to an area greater than it should be (i.e., peak tailing).
BA	Manual Integration Code to indicate that the baseline had to be adjusted correctly by the analyst.
WP	Manual Integration Code to indicate that the wrong peak was chosen.
CO	Manual Integration Code to indicate that the analyst had to split two co-eluting peaks apart that were not (or could not be) separated by the computer system.
RT	Manual Integration Code to indicate that the retention time for the peak in question has shifted from the expected retention time.
INT	Manual Integration Code to indicate that there was electronic interference (i.e., noise).



# GLOSSARY OF TERMS

Qualifier	Description
-----------	-------------

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Su

<sup>6</sup>Gl

<sup>7</sup>Al

<sup>8</sup>Sc

# ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



B205

# Internal Transfer Chain of Custody



Samples Pre-Logged into eCOC.

State Of Origin: WA

Cert. Needed:  Yes  No

Owner Received Date: 4/27/2022

Results Requested By: 5/11/2022

Workorder: 10606046

Workorder Name: D3593500

Report To		Subcontract To					Requested Analysis														
Kongmeng Vang Pace Analytical Minnesota 1700 Elm Street Minneapolis, MN 55414 Phone (612)607-1700		Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858																			
							SVOC		SW9030 Total Sulfides												
							Preserved Containers														
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved															
1	BNSF-SG13-042522-0-1.5	PS	4/25/2022 09:55	10606046001	Solid	2															
2																					
3																					
4																					
5																					

U487790  
LAB USE ONLY

Transfers					Comments				
Released By	Date/Time	Received By	Date/Time						
CSM/Pace	4/28/22 15:05	Veronica Sistrunk	4/29/22 09:00						

Cooler Temperature on Receipt °C      Custody Seal  or N      Received on Ice  or N      Samples Intact  or N

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
This chain of custody is considered complete as is since this information is available in the owner laboratory.

DRAFT 1.5 to = .5

Sample Receipt Checklist  
 COC Seal Present/Intact:  Y  N If Applicable  
 COC Signed/Accurate:  Y  N VOA Zero Headpace:  Y  N  
 Bottles arrive intact:  Y  N Pres. Correct/Check:  Y  N  
 Correct bottles used:  Y  N  
 Sufficient volume sent:  Y  N  
 RAN Screen <0.5 mR/hr:  Y  N  
 Fed ex 5466 8884 4836



Ship To:  
 Pace National  
 12065 Lebanon Rd  
 Mt. Juliet, TN 37122  
 Phone (615) 758-5858

4487790

**INTER\_LABORATORY WORK ORDER # 10606046**  
 (To be completed by sending lab)

Sending Project No	10606046
Receiving Project No	
Check Box for Consolidated Invoice	<input type="checkbox"/>
Date Prepared	04/28/22
<b>REQUESTED COMPLETION DATE</b>	<b>5/11/2022</b>

Sending Region	IR10-Minnesota	Sending Project Mgr.	Kongmeng Vang
Receiving Region	IR850-Pace National	External Client	BNSF_Jacobs_WA
State of Sample Origin	WA	QC Deliverable	PACKAGELV4

All questions should be addressed to sending project manager.

Requested Reportable Units \_\_\_\_\_ Report Wet or Dry Weight?  IRWO Lab Need to run? \_\_\_\_\_ Cert. Needed yes

WORK REQUESTED						
Method Description	Container Type	Quantity of containers	Preservative	Quantity of Samples	Unit Price	Amount
SW9030 Total Sulfides	JGFU		Unpreserved	1	\$22.00	\$22.00
SVOC	JGFU		Unpreserved	1	\$130.00	\$130.00
<b>TOTAL</b>						<b>\$152.00</b>

Special Requirements: Report D, QC Limits, MDLs (D), Jacobs UPRR EQEDD (1579)

Receiving Region Department	Accig. Code	Totals from above		Revenue Allocation	
		Receiving Region (80%)	Revenue Region	Client Services Dept. Sending Region (20%)	Amount
Wet Chemistry	21	\$22.00	\$17.60	\$4.40	
GC/MS Semivolatiles	30	\$130.00	\$104.00	\$26.00	
<b>TOTAL</b>		<b>\$152.00</b>	<b>\$121.60</b>	<b>\$30.40</b>	

\* Custom Revenue Allocation

**FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO**

Return Samples to Sending Region:  Yes  No

**DISPOSITION of FORM**

Original sent to the receiving lab - Copy kept at the sending lab.  
 When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

U487790

8270 SVOC List

<i>Semi-volatile Organic Compounds and Polycyclic</i>
384-Methylphenol
Benzoic acid
Bis(2-ethylhexyl) phthalate
Carbazole
Dibenzofuran
Di-n-butyl phthalate
Di-n-octyl phthalate
Pentachlorophenol
Phenol
1-Methylnaphthalene
2-Methylnaphthalene
Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(ghi)perylene
Chrysene
Dibenz(ah)anthracene
Fluoranthene
Fluorene
Indeno(123-cd)pyrene
Naphthalene
Phenanthrene
Pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene

## ANALYTICAL REPORT

Job Number: 580-113238-1

Job Description: D3593500 10606046

For:

Pace Analytical Services, LLC

1700 Elm Street

Minneapolis, MN 55414

Attention: Kongmeng Vang



Approved for release.  
Pauline M Matlock  
Project Manager  
5/26/2022 12:32 PM

---

Pauline M Matlock, Project Manager  
5755 8th Street East, Tacoma, WA, 98424

(253)922-2310

Pauline.Matlock@et.eurofinsus.com

05/26/2022

Revision: 1

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The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager. This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

### Eurofins Seattle

5755 8th Street East, Tacoma, WA 98424

Tel (253) 922-2310 [www.EurofinsUS.com](http://www.EurofinsUS.com)



# Table of Contents

Cover Title Page . . . . .	1
Data Summaries . . . . .	4
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Client Sample Results . . . . .	7
Default Detection Limits . . . . .	8
QC Sample Results . . . . .	9
QC Association . . . . .	11
Chronicle . . . . .	12
Certification Summary . . . . .	13
Method Summary . . . . .	14
Sample Summary . . . . .	15
Reagent Traceability . . . . .	16
COAs . . . . .	17
Inorganic Sample Data . . . . .	26
General Chemistry Data . . . . .	26
Gen Chem Cover Page . . . . .	27
Gen Chem Sample Data . . . . .	28
Gen Chem QC Data . . . . .	30
Gen Chem ICV/CCV . . . . .	30
Gen Chem Blanks . . . . .	31
Gen Chem LCS/LCSD . . . . .	32
Gen Chem MDL . . . . .	34
Gen Chem Preparation Log . . . . .	39
Gen Chem Analysis Run Log . . . . .	40



# Table of Contents

Gen Chem Prep Data .....	46
Gen Chem Raw Data .....	52
Shipping and Receiving Documents .....	74
Client Chain of Custody .....	75
Sample Receipt Checklist .....	76

# Definitions/Glossary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606046

Job ID: 580-113238-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

**Job Narrative**  
**580-113238-1**

**Comments**

No additional comments.

**Revision**

The report being provided is a revision of the original report sent on 5/13/2022. The report (revision 1) is being revised due to: Client needs TOC reported by dry weight.

**Receipt**

The sample was received on 4/29/2022 9:45 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.9° C.

**General Chemistry**

Method 9060A: The method blank for analytical batch 580-390132 contained Organic Carbon above the method detection limit. This target analyte concentration was less than half of the reporting limit (1/2RL); therefore re-extraction and re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Detection Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606046

Job ID: 580-113238-1

**Client Sample ID: BNSF-SG13-042522-0-1.5**

**Lab Sample ID: 580-113238-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	670	J	2700	130	mg/Kg	1	☼	9060A	Total/NA
Ammonia as N	12	J	34	12	mg/Kg	1	☼	EPA 350.1	Soluble

This Detection Summary does not include radiochemical test results.

# Client Sample Results

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606046

Job ID: 580-113238-1

**Client Sample ID: BNSF-SG13-042522-0-1.5**

**Lab Sample ID: 580-113238-1**

Date Collected: 04/25/22 09:55

Matrix: Solid

Date Received: 04/29/22 09:45

Percent Solids: 72.8

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	670	J	2700	130	mg/Kg	☼		05/10/22 14:24	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	12	J	34	12	mg/Kg	☼	05/06/22 21:15	05/07/22 23:20	1

# Default Detection Limits

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606046

Job ID: 580-113238-1

## General Chemistry

Analyte	RL	MDL	Units
Total Organic Carbon - Duplicates	2000	97	mg/Kg

## General Chemistry - Soluble

Prep: Distill/Ammonia

Leach: DI Leach

Analyte	RL	MDL	Units
Ammonia as N	25	8.8	mg/Kg

# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606046

Job ID: 580-113238-1

## Method: 9060A - Organic Carbon, Total (TOC)

**Lab Sample ID: MB 580-390132/36**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	157	J	2000	97	mg/Kg			05/10/22 15:42	1

**Lab Sample ID: MB 580-390132/5**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/10/22 13:48	1

**Lab Sample ID: LCS 580-390132/37**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120

**Lab Sample ID: LCS 580-390132/6**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	118000		mg/Kg		98	80 - 120

**Lab Sample ID: LCSD 580-390132/38**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	113000		mg/Kg		94	80 - 120	2	20

**Lab Sample ID: LCSD 580-390132/7**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120	3	20

## Method: EPA 350.1 - Ammonia

**Lab Sample ID: MB 580-389754/1-B**  
**Matrix: Solid**  
**Analysis Batch: 389867**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**  
**Prep Batch: 389808**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		25	8.8	mg/Kg		05/06/22 21:15	05/07/22 23:20	1

# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606046

Job ID: 580-113238-1

## Method: EPA 350.1 - Ammonia (Continued)

**Lab Sample ID: LCS 580-389754/2-B**  
**Matrix: Solid**  
**Analysis Batch: 389867**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Soluble**  
**Prep Batch: 389808**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	50.0	50.3		mg/Kg		101	90 - 110

**Lab Sample ID: MB 580-389754/1-A**  
**Matrix: Solid**  
**Analysis Batch: 390299**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		25	8.8	mg/Kg			05/11/22 17:11	1

**Lab Sample ID: LCS 580-389754/2-A**  
**Matrix: Solid**  
**Analysis Batch: 390299**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Soluble**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	50.0	54.3		mg/Kg		109	90 - 110



# QC Association Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606046

Job ID: 580-113238-1

## General Chemistry

### Leach Batch: 389754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113238-1	BNSF-SG13-042522-0-1.5	Soluble	Solid	DI Leach	
MB 580-389754/1-A	Method Blank	Soluble	Solid	DI Leach	
MB 580-389754/1-B	Method Blank	Soluble	Solid	DI Leach	
LCS 580-389754/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCS 580-389754/2-B	Lab Control Sample	Soluble	Solid	DI Leach	

### Prep Batch: 389808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113238-1	BNSF-SG13-042522-0-1.5	Soluble	Solid	Distill/Ammonia	389754
MB 580-389754/1-B	Method Blank	Soluble	Solid	Distill/Ammonia	389754
LCS 580-389754/2-B	Lab Control Sample	Soluble	Solid	Distill/Ammonia	389754

### Analysis Batch: 389867

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113238-1	BNSF-SG13-042522-0-1.5	Soluble	Solid	EPA 350.1	389808
MB 580-389754/1-B	Method Blank	Soluble	Solid	EPA 350.1	389808
LCS 580-389754/2-B	Lab Control Sample	Soluble	Solid	EPA 350.1	389808

### Analysis Batch: 390132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113238-1	BNSF-SG13-042522-0-1.5	Total/NA	Solid	9060A	
MB 580-390132/36	Method Blank	Total/NA	Solid	9060A	
MB 580-390132/5	Method Blank	Total/NA	Solid	9060A	
LCS 580-390132/37	Lab Control Sample	Total/NA	Solid	9060A	
LCS 580-390132/6	Lab Control Sample	Total/NA	Solid	9060A	
LCSD 580-390132/38	Lab Control Sample Dup	Total/NA	Solid	9060A	
LCSD 580-390132/7	Lab Control Sample Dup	Total/NA	Solid	9060A	

### Analysis Batch: 390214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113238-1	BNSF-SG13-042522-0-1.5	Total/NA	Solid	Moisture	

### Analysis Batch: 390299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 580-389754/1-A	Method Blank	Soluble	Solid	EPA 350.1	389754
LCS 580-389754/2-A	Lab Control Sample	Soluble	Solid	EPA 350.1	389754

# Lab Chronicle

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606046

Job ID: 580-113238-1

**Client Sample ID: BNSF-SG13-042522-0-1.5**

**Lab Sample ID: 580-113238-1**

**Date Collected: 04/25/22 09:55**

**Matrix: Solid**

**Date Received: 04/29/22 09:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	390214	05/11/22 11:50	JSM	FGS SEA

**Client Sample ID: BNSF-SG13-042522-0-1.5**

**Lab Sample ID: 580-113238-1**

**Date Collected: 04/25/22 09:55**

**Matrix: Solid**

**Date Received: 04/29/22 09:45**

**Percent Solids: 72.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	390132	05/10/22 14:24	N1R	FGS SEA
Soluble	Leach	DI Leach			389754	05/06/22 16:31	MLT	FGS SEA
Soluble	Prep	Distill/Ammonia			389808	05/06/22 21:15	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	389867	05/07/22 23:20	MLT	FGS SEA

**Laboratory References:**

FGS SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

# Accreditation/Certification Summary

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606046

Job ID: 580-113238-1

## Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2954	07-07-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9060A		Solid	Total Organic Carbon - Duplicates
EPA 350.1	Distill/Ammonia	Solid	Ammonia as N
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Oregon	NELAP	4167	07-07-22
--------	-------	------	----------

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Solids

Washington	State	C788	07-13-22
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9060A		Solid	Total Organic Carbon - Duplicates
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

# Method Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606046

Job ID: 580-113238-1

---

---

<b>Method</b>	<b>Method Description</b>	<b>Protocol</b>	<b>Laboratory</b>
9060A	Organic Carbon, Total (TOC)	SW846	FGS SEA
EPA 350.1	Ammonia	EPA	FGS SEA
Moisture	Percent Moisture	EPA	FGS SEA
DI Leach	Deionized Water Leaching Procedure	ASTM	FGS SEA
Distill/Ammonia	Distillation, Ammonia	None	FGS SEA

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

FGS SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

# Sample Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606046

Job ID: 580-113238-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-113238-1	BNSF-SG13-042522-0-1.5	Solid	04/25/22 09:55	04/29/22 09:45

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Seattle Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
<b>Ammonia Std_00019</b>	06/14/23		LabChem, Lot L158-09			(Purchased Reagent)	Ammonia as N	1000 mg/L
<b>CaCO3_00004_00009</b>	07/16/25		LECO, Lot 1001			(Purchased Reagent)	TOC Result 1	120000 mg/Kg
							Total Organic Carbon - Duplicates	120000 mg/Kg
<b>CaCO3_00012</b>	03/31/23		Alfa Aesar, Lot X15E030			(Purchased Reagent)	Total Organic Carbon - Duplicates	120000 mg/Kg
<b>TOCS_LCS_00012</b>	07/26/23		ERA, Lot D108-542			(Purchased Reagent)	TOC Result 1	4300 mg/Kg
							Total Organic Carbon - Duplicates	4300 mg/Kg

Reagent

---

**Ammonia Std\_00019**



### CERTIFICATE OF ANALYSIS

Description: AMMONIA (as NITROGEN) STANDARD, 1000ppm (1mL = 1mg N)

Mfg. Date: 06/14/2021

Catalog Number: LC17940

Exp. Date: 06/14/2023

Lot Number: L158-09

### ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm N	1000ppm +/- 10ppm	995 ppm
Concentration mg N/mL	1.000 +/- 0.010 mg N/mL	0.995 mg N/mL
Traceable to NIST	Potassium Chloride	999b

**Intended Use** - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

**Storage Information** - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

**Instructions for Handling and Use** - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

**Preparation** - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor



2899582  
ID: Ammonia Std\_00019  
Exp: 06/14/23 Prpd: R1K  
1000ppm Ammonia (as Nitro

*rad 6/30/21  
JSE*

An ISO9001:2015 certified company. Registration # 0306-01

06/30/2021 7:01 PM

Form #17.13 07/28/2016



Reagent

---

**CaCO3\_00004\_00009**



Version 00  
 Molecular weight 100.09  
 Quality Test / Release Date 07/31/2020  
 Molecular Formula C Ca O3  
 CAS No 471-34-1  
 Linear Formula CaCO3  
 Flash Point (°C)

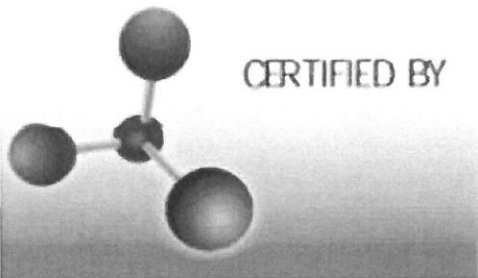
## Certificate of Analysis

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsibility of the purchaser, formulator or those performing further manufacturing to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

<b>Catalog Number</b>	42351	<b>Quality Test / Release Date</b>	07/31/2020
<b>Lot Number</b>	A0421160	<b>Suggested retest date</b>	07/31/2025
<b>Description</b>	Calcium carbonate, 99+%, ACS reagent		
<b>Country of Origin</b>	INDIA		
<b>Declaration of Origin</b>	synthetic		

<b>BSE/TSE</b>	
<b>Chemical</b>	

Result name	Specifications	Test Value
Appearance (Color)	White	White
Appearance (Form)	Crystalline powder	Crystalline powder
Titration Complexometric	>=99.0 % (on dried substance)	99.4 % (on dried substance)
Heavy metals (ICP-OES)	=<0.001 %	=<0.001 %
Insoluble matter	=<0.01 % (in dilute HCl)	0.008 % (in dilute HCl)
Chloride (Cl)	=<0.001 %	=<0.001 %
Fluoride (F)	=<0.0015 %	=<0.0015 %
Sulfate (SO4)	=<0.01 %	=<0.01 %
Ammonium (NH4)	=<0.003 %	=<0.003 %
Barium (Ba)	=<0.01 %	0.00164 %
Iron (Fe)	=<0.003 %	=<0.003 %
Magnesium (Mg)	=<0.02 %	0.010341 %
Potassium (K)	=<0.01 %	0.001048 %
Sodium (Na)	=<0.1 %	0.07061 %
Strontium (Sr)	=<0.1 %	0.007741 %



C. Wygaerts, QA Manager

Issued: 08-03-2020

Acros Organics  
 ENA23, zone1, nr 1350, Janssen Pharmaceuticlaan 3a, B-2440 Geel, Belgium  
 Tel +32 14/57.52.11 - Fax+32 14/59.34.34 Internet: <http://www.acros.com>  
 1 Reagent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329

3092515  
 ID: CaCO3\_00004\_00009  
 Exp 07/16/25 Prpd R1K Opn 03/04/22  
 CaCO3-12%TC Second Source

FCG  
 3/14/22

Reagent

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**CaCO3\_00012**

# Certificate of analysis



2450156  
 ID: CaCO3\_00012  
 Exp 03/31/23 Prpd.JKM Opm 08/14/19  
 CaCO3-12%TC Second Source

Product No.: 36337  
 Product: Calcium carbonate, ACS, low in alkalies, 99.0% min  
 Lot No.: X15E030

Test	Limits	Results
Assay	99.5 % min	99.1 %
Insoluble in dilute HCl	0.01 % max	< 0.01 %
Chloride	0.001 % max	< 0.001 %
Fluoride	0.0015 % max	< 0.0008 %
Sulfate	0.005 % max	< 0.01 %
Ammonium	0.003 % max	< 0.003 %
Barium	0.01 %	< 0.01 %
Heavy metals (as Pb)	0.001 % max	< 0.001 %
Iron	0.002 % max	< 0.003 %
Magnesium	0.01 % max	0.003 %
Potassium	0.01 % max	< 0.01 %
Sodium	0.01 % max	< 0.1 %
Strontium	0.1 % max	< 0.1 %

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**ThermoFisher**  
SCIENTIFIC

Reagent

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**TOCS\_LCS\_00012**



A Waters Company

Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Nutrients in Soil  
**Catalog Number:** 542  
**Lot No.** D108-542  
**Certificate Issue Date:** December 26, 2019  
**Expiration Date:** July 26, 2023  
**Revision Number:** Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #542 revision 090119.

## CERTIFICATION

Parameter	Certified Value <sup>1</sup>	Reference Value <sup>7</sup>	Uncertainty <sup>2</sup>	QC Performance Acceptance Limits <sup>3</sup>	PT Performance Acceptance Limits <sup>4</sup>
	mg/kg	mg/kg	%	mg/kg	mg/kg
Ammonia as N	853	795	5.50	523 - 1070	456 - 1130
Total Kjeldahl Nitrogen	1510	1500	12.3	976 - 2030	827 - 2180
Total Organic Carbon (TOC)	4300	4370	6.86	1580 - 7150	1530 - 7200
Total Phosphorus	911	815	10.8	422 - 1210	185 - 1440

## ANALYTICAL VERIFICATION

Parameter	Certified Value <sup>1</sup>	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery <sup>5</sup>	n	SRM Number <sup>6</sup>	Recovery
	mg/kg	mg/kg	%			%
Ammonia as N	853	795	93.3	39	-	-
Total Kjeldahl Nitrogen	1510	1500	99.7	33	-	-
Total Organic Carbon (TOC)	4300	4370	102	24	-	-
Total Phosphorus	911	815	89.4	55	-	-

REV. 10/20/20  
WSE



2735864  
 ID: TOCS\_LCS\_00012  
 Exp: 01/31/22 PpPd: R1K  
 1540-7000 mg/kg TOC



▪ **Certificate of Analysis** ▪

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:

$$U_{expanded} = k * \text{SQRT}((U_{char}^2) + (U_{homogen}^2) + (ULTS^2) + (USTS^2) + (URSS^2))$$

Where:

U<sub>expanded</sub> = Expanded uncertainty.

k = Coverage factor.

U<sub>char</sub> = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.

U<sub>homogen</sub> = Standard uncertainty of the homogeneity assessment.

ULTS = Standard uncertainty associated with long-term stability.

USTS = Standard uncertainty associated with short-term (transport) stability.

URSS = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]\*100

The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

8. **Metrological Traceability.** This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.**

**Certifying Officer**

**Brian Miller**

**Quality Officer**

**Matthew Seebeck**




ISO/IEC 17025:2017

ISO/IEC 17034:2016



# GENERAL CHEMISTRY



COVER PAGE  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job Number: 580-113238-1

SDG No.: \_\_\_\_\_

Project: D3593500 10606046

Client Sample ID  
BNSF-SG13-042522-0-1.5

Lab Sample ID  
580-113238-1

Comments:

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY

Client Sample ID: BNSF-SG13-042522-0-1.5

Lab Sample ID: 580-113238-1

Lab Name: Eurofins Seattle

Job No.: 580-113238-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/25/2022 09:55

Reporting Basis: DRY

Date Received: 04/29/2022 09:45

% Solids: 72.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Duplicates	670	2700	130	mg/Kg	J		1	9060A

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY - SOLUBLE

Client Sample ID: BNSF-SG13-042522-0-1.5

Lab Sample ID: 580-113238-1

Lab Name: Eurofins Seattle

Job No.: 580-113238-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/25/2022 09:55

Reporting Basis: DRY

Date Received: 04/29/2022 09:45

% Solids: 72.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7664-41-7	Ammonia as N	12	34	12	mg/Kg	J		1	EPA 350.1

2-IN  
 CALIBRATION QUALITY CONTROL  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113238-1  
 SDG No.: \_\_\_\_\_  
 Analyst: NlR Batch Start Date: 03/18/2022  
 Reporting Units: mg/Kg Analytical Batch No.: 390132

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	18:26	Total Organic Carbon - Duplicates	4350	4300	101	80-120		TOCS_LCS_00012
2	ICB	18:28	Total Organic Carbon - Duplicates	ND					
3	CCV	13:44	Total Organic Carbon - Duplicates	118000	120000	98	80-120		CaCO3_00004_00009
4	CCB	13:46	Total Organic Carbon - Duplicates	217				J	
13	CCV	14:19	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
14	CCB	14:21	Total Organic Carbon - Duplicates	ND					
26	CCV	15:09	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
27	CCB	15:12	Total Organic Carbon - Duplicates	193				J	
34	CCV	15:38	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
35	CCB	15:40	Total Organic Carbon - Duplicates	143				J	
44	CCV	16:12	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
45	CCB	16:14	Total Organic Carbon - Duplicates	151				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

3-IN  
METHOD BLANK  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle

Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 390132 Date: 05/10/2022 13:48							
9060A	MB 580-390132/5	Total Organic Carbon - Duplicates	ND		mg/Kg	2000	1
Batch ID: 390132 Date: 05/10/2022 15:42							
9060A	MB 580-390132/36	Total Organic Carbon - Duplicates	157	J	mg/Kg	2000	1
Batch ID: 389867 Date: 05/07/2022 23:20 Prep Batch: 389808 Date: 05/06/2022 21:15							
EPA 350.1	MB 580-389754/1-B	Ammonia as N	ND		mg/Kg	25	1
Batch ID: 390299 Date: 05/11/2022 17:11							
EPA 350.1	MB 580-389754/1-A	Ammonia as N	ND		mg/Kg	25	1

7A-IN  
LAB CONTROL SAMPLE  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 390132 Date: 05/10/2022 13:51											
9060A	LCS 580-390132/6	Total Organic Carbon - Duplicates	118000		mg/Kg	120000	98	80-120	3	20	
LCS Source: CaCO3_00012											
Batch ID: 390132 Date: 05/10/2022 15:45											
9060A	LCS 580-390132/37	Total Organic Carbon - Duplicates	115000		mg/Kg	120000	96	80-120	2	20	
LCS Source: CaCO3_00012											
Batch ID: 389867 Date: 05/07/2022 23:20 Prep Batch: 389808 Date: 05/06/2022 21:15											
EPA 350.1	LCS 580-389754/2- B	Ammonia as N	50.3		mg/Kg	50.0	101	90-110			
LCS Source: Ammonia Std_00019											
Batch ID: 390299 Date: 05/11/2022 17:11											
EPA 350.1	LCS 580-389754/2- A	Ammonia as N	54.3		mg/Kg	50.0	109	90-110			
LCS Source: Ammonia Std_00019											

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN  
 LAB CONTROL SAMPLE DUPLICATE  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113238-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 390132 Date: 05/10/2022 13:54											
LCSD Source: CaCO3_00012											
9060A	LCSD 580-390132/7	Total Organic Carbon - Duplicates	115000		mg/Kg	120000	96	80-120	3	20	
Batch ID: 390132 Date: 05/10/2022 15:48											
LCSD Source: CaCO3_00012											
9060A	LCSD 580-390132/38	Total Organic Carbon - Duplicates	113000		mg/Kg	120000	94	80-120	2	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY - SOLUBLE

Lab Name: Eurofins Seattle Job Number: 580-113238-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC126  
Method: EPA 350.1 MDL Date: 04/21/2021 07:54  
Prep Method: Distill/Ammonia  
Leach Method: DI Leach

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Ammonia as N		25	8.78



9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY - SOLUBLE

Lab Name: Eurofins Seattle Job Number: 580-113238-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC126  
Method: EPA 350.1 XMDL Date: 10/08/2019 08:54

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia as N		1	0.3512

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle

Job Number: 580-113238-1

SDG Number: \_\_\_\_\_

Matrix: Solid

Instrument ID: TAC105

Method: 9060A

MDL Date: 07/09/2019 14:51

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Total Organic Carbon - Duplicates		2000	96.7

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job Number: 580-113238-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC105  
Method: 9060A XMDL Date: 07/09/2019 14:51

Analyte	Wavelength/ Mass	XRL (mg/Kg)	XMDL (mg/Kg)
Total Organic Carbon - Duplicates		2000	96.7

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle

Job Number: 580-113238-1

SDG Number: \_\_\_\_\_

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

RL Date: 01/01/2005 13:13

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

12-IN  
PREPARATION LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Prep Method: Distill/Ammonia

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 580-389754/1-B	05/06/2022 21:15	389808		50	50
LCS 580-389754/2-B	05/06/2022 21:15	389808		50	50
580-113238-1	05/06/2022 21:15	389808		50	50

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Instrument ID: TAC126 Analysis Method: EPA 350.1

Start Date: 05/07/2022 23:20 End Date: 05/07/2022 23:20

Lab Sample Id	D/F	Type	Time	Analytes																											
				NH3																											
MB 580-389754/1-B	1	S	23:20	X																											
LCS 580-389754/2-B	1	S	23:20	X																											
ZZZZZZ			23:20																												
ZZZZZZ			23:20																												
ZZZZZZ			23:20																												
ZZZZZZ			23:20																												
ZZZZZZ			23:20																												
ZZZZZZ			23:20																												
ZZZZZZ			23:20																												
580-113238-1	1	S	23:20	X																											

Prep Types: \_\_\_\_\_  
S = Soluble

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Instrument ID: TAC126 Analysis Method: EPA 350.1

Start Date: 05/11/2022 17:11 End Date: 05/11/2022 17:11

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				N	H	3																									
MB 580-389754/1-A	1	S	17:11	X																											
LCS 580-389754/2-A	1	S	17:11	X																											
ZZZZZZ			17:11																												
ZZZZZZ			17:11																												
ZZZZZZ			17:11																												
ZZZZZZ			17:11																												
ZZZZZZ			17:11																												
ZZZZZZ			17:11																												

Prep Types: \_\_\_\_\_  
S = Soluble

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Instrument ID: TAC105 Analysis Method: 9060A

Start Date: 03/18/2022 18:26 End Date: 05/10/2022 17:28

Lab Sample Id	D/F	T y p e	Time	T O C D	Analytes																			
ICV 580-390132/1	1		18:26	X																				
ICB 580-390132/2	1		18:28	X																				
CCV 580-390132/3	1		13:44	X																				
CCB 580-390132/4	1		13:46	X																				
MB 580-390132/5	1	T	13:48	X																				
LCS 580-390132/6	1	T	13:51	X																				
LCSD 580-390132/7	1	T	13:54	X																				
ZZZZZZ			13:56																					
ZZZZZZ			14:01																					
ZZZZZZ			14:05																					
ZZZZZZ			14:09																					
ZZZZZZ			14:14																					
CCV 580-390132/13	1		14:19	X																				
CCB 580-390132/14	1		14:21	X																				
580-113238-1	1	T	14:24	X																				
ZZZZZZ			14:28																					
ZZZZZZ			14:32																					
ZZZZZZ			14:37																					
ZZZZZZ			14:41																					
ZZZZZZ			14:46																					
ZZZZZZ			14:50																					
ZZZZZZ			14:55																					
ZZZZZZ			15:00																					
ZZZZZZ			15:02																					
ZZZZZZ			15:04																					
CCV 580-390132/26	1		15:09	X																				
CCB 580-390132/27	1		15:12	X																				
ZZZZZZ			15:14																					
ZZZZZZ			15:18																					
ZZZZZZ			15:22																					
ZZZZZZ			15:27																					
CCV 580-390132/32			15:32																					
CCB 580-390132/33			15:34																					
CCV 580-390132/34	1		15:38	X																				
CCB 580-390132/35	1		15:40	X																				
MB 580-390132/36	1	T	15:42	X																				
LCS 580-390132/37	1	T	15:45	X																				
LCSD 580-390132/38	1	T	15:48	X																				
ZZZZZZ			15:50																					
ZZZZZZ			15:54																					



13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Instrument ID: TAC105 Analysis Method: 9060A

Start Date: 03/18/2022 18:26 End Date: 05/10/2022 17:28

Lab Sample Id	D/F	Type	Time	Analytes																											
				T	O	C	D																								
ZZZZZZ			15:58																												
ZZZZZZ			16:03																												
ZZZZZZ			16:07																												
CCV 580-390132/44	1		16:12	X																											
CCB 580-390132/45	1		16:14	X																											
ZZZZZZ			16:16																												
ZZZZZZ			16:21																												
ZZZZZZ			16:25																												
ZZZZZZ			16:29																												
ZZZZZZ			16:33																												
ZZZZZZ			16:38																												
ZZZZZZ			16:42																												
ZZZZZZ			16:47																												
ZZZZZZ			16:51																												
ZZZZZZ			16:56																												
CCV 580-390132/56			17:01																												
CCB 580-390132/57			17:03																												
ZZZZZZ			17:06																												
ZZZZZZ			17:11																												
ZZZZZZ			17:13																												
ZZZZZZ			17:16																												
ZZZZZZ			17:20																												
CCV 580-390132/63			17:26																												
CCB 580-390132/64			17:28																												

Prep Types: \_\_\_\_\_  
T = Total/NA

13-IN  
 ANALYSIS RUN LOG  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle

Job No.: 580-113238-1

SDG No.:

Instrument ID: NOEQUIP

Analysis Method: Moisture

Start Date: 05/11/2022 11:50

End Date: 05/11/2022 11:53

Lab Sample Id	D/F	Type	Time	Analytes																											
				% S	M o i s t																										
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
580-113238-1	1	T	11:50	X	X																										
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
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ZZZZZZ			11:50																												
ZZZZZZ			11:50																												

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/11/2022 11:50 End Date: 05/11/2022 11:53

Lab Sample Id	D/F	Type	Time	Analytes																											
				% S	M o i s t																										
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
ZZZZZZ			11:53																												

Prep Types: \_\_\_\_\_  
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Batch Number: 389754 Batch Start Date: 05/06/22 16:28 Batch Analyst: Tanase, Michelle L

Batch Method: DI Leach Batch End Date: 05/06/22 21:09

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Ammonia Std 00019			
MB 580-389754/1		DI Leach, Distill/Ammo nia, EPA 350.1		10 g	250 mL				
LCS 580-389754/2		DI Leach, Distill/Ammo nia, EPA 350.1		10 g	250 mL	0.5 mL			
580-113238-A-1	BNSF-SG13-042522 -0-1.5	DI Leach, Distill/Ammo nia, EPA 350.1	S	10.1514 g	250 mL				

Batch Notes	
Balance ID	SEA224
Blank Matrix ID	DI water
Tumble Start Time	05/06/2022 17:47
Tumble End Time	05/06/2022 19:55
Pipette/Syringe/Dispenser ID	WC 2E

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Batch Number: 389754 Batch Start Date: 05/06/22 16:28 Batch Analyst: Tanase, Michelle L

Batch Method: DI Leach Batch End Date: 05/06/22 21:09

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Ammonia Std 00019			
MB 580-389754/1		DI Leach, EPA 350.1		10 g	250 mL				
LCS 580-389754/2		DI Leach, EPA 350.1		10 g	250 mL	0.5 mL			

Batch Notes	
Balance ID	SEA224
Blank Matrix ID	DI water
Tumble Start Time	05/06/2022 17:47
Tumble End Time	05/06/2022 19:55
Pipette/Syringe/Dispenser ID	WC 2E

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Batch Number: 389808 Batch Start Date: 05/06/22 21:15 Batch Analyst: Tanase, Michelle L

Batch Method: Distill/Ammonia Batch End Date: 05/07/22 23:19

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 580-389754/1-A		Distill/Ammonia, EPA 350.1		50 mL	50 mL				
LCS 580-389754/2-A		Distill/Ammonia, EPA 350.1		50 mL	50 mL				
580-113238-A-1-A	BNSF-SG13-042522 -0-1.5	Distill/Ammonia, EPA 350.1	S	50 mL	50 mL				

Batch Notes	
Blank Matrix ID	DI water
pH Indicator ID	2839642
Acid used for pH adjustment	3154574
Base used for pH adjustment	3118259
Buffer Reagent ID	3139694
Boiling Chips ID	3093959
Anti Foam ID	3090171
Sulfuric Acid Reagent ID Number	3154574
Pipette/Syringe/Dispenser ID	WC 5A, WC 10E
Distillation Unit ID	AMM Dist Block 1
Distillation Start Time	2035
Distillation End Time	2128
Uncorrected Temperature	In: 209 Out:209 Celsius

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Batch Number: 389867 Batch Start Date: 05/07/22 23:20 Batch Analyst: Tanase, Michelle L

Batch Method: EPA 350.1 Batch End Date: 05/08/22 01:08

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 580-389754/1-B		EPA 350.1		50 mL	50 mL				
LCS 580-389754/2-B		EPA 350.1		50 mL	50 mL				
580-113238-A-1-B	BNSF-SG13-042522 -0-1.5	EPA 350.1	S	50 mL	50 mL				

Batch Notes	
Sodium Nitroprusside ID	3146568
Hypochlorite ID	3146725
Sodium Phenolate ID	Phenol/nitroferricyanide: 3146569
EDTA Buffer ID	3093957
Carrier Identification	DI water
Pipette/Syringe/Dispenser ID	WC 0.2D, WC 2E, WC 10E
Batch Comment	NH3: 3062042 (ICV), 3087035 (CCV)

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Batch Number: 390132 Batch Start Date: 05/10/22 15:00 Batch Analyst: Ronk, Nicholas 1

Batch Method: 9060A Batch End Date: 05/10/22 18:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	Baked Sand 00149	CaCO3 00012	CaCO3 00004 00009	TOCS_LCS 00012		
ICV 580-390132/1		9060A					# g		
CCV 580-390132/3		9060A				# g			
CCB 580-390132/4		9060A		# g					
MB 580-390132/5		9060A		# g					
LCS 580-390132/6		9060A			# g				
LCS 580-390132/7		9060A			# g				
CCV 580-390132/13		9060A				# g			
CCB 580-390132/14		9060A		# g					
CCV 580-390132/26		9060A				# g			
CCB 580-390132/27		9060A		# g					
CCV 580-390132/34		9060A				# g			
CCB 580-390132/35		9060A		# g					
MB 580-390132/36		9060A		# g					
LCS 580-390132/37		9060A			# g				
LCS 580-390132/38		9060A			# g				
CCV 580-390132/44		9060A				# g			
CCB 580-390132/45		9060A		# g					

Batch Notes	
Pipette/Syringe/Dispenser ID	SEA224

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.



GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113238-1

SDG No.: \_\_\_\_\_

Batch Number: 390214 Batch Start Date: 05/11/22 11:50 Batch Analyst: McKell, Justin S

Batch Method: Moisture Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry	%_Moisture	%_Solid
580-113238-A-1	BNSF-SG13-042522 -0-1.5	Moisture	T	00000.71 g	00006.11 g	00004.64 g	27.222222222222 2 %	72.777777777777 8 %

Batch Notes	
Balance ID	sea225
Oven ID	microwave
Date samples were placed in the oven	05/11/2022
Time samples were place in the oven	12:16
Date samples were removed from oven	05/11/2022
Time Samples were removed from oven	14:46

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# General Chemistry Raw Data Report

Job ID: 580-113238-1

**Batch: 389867**  
**Method: EPA 350.1**

**Analyst Initials: MLT**  
**Instrument: Astoria Pacific rAPID T**

**Lab Sample ID: MB 580-389754/1-B**

**Analysis Date: May 07, 2022 23:20**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Ammonia as N	None	1	0.20	mg/L	50 mL	50 mL

**Lab Sample ID: LCS 580-389754/2-B**

**Analysis Date: May 07, 2022 23:20**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Ammonia as N	None	1	2.01	mg/L	50 mL	50 mL

**Lab Sample ID: 580-113238-A-1-B**

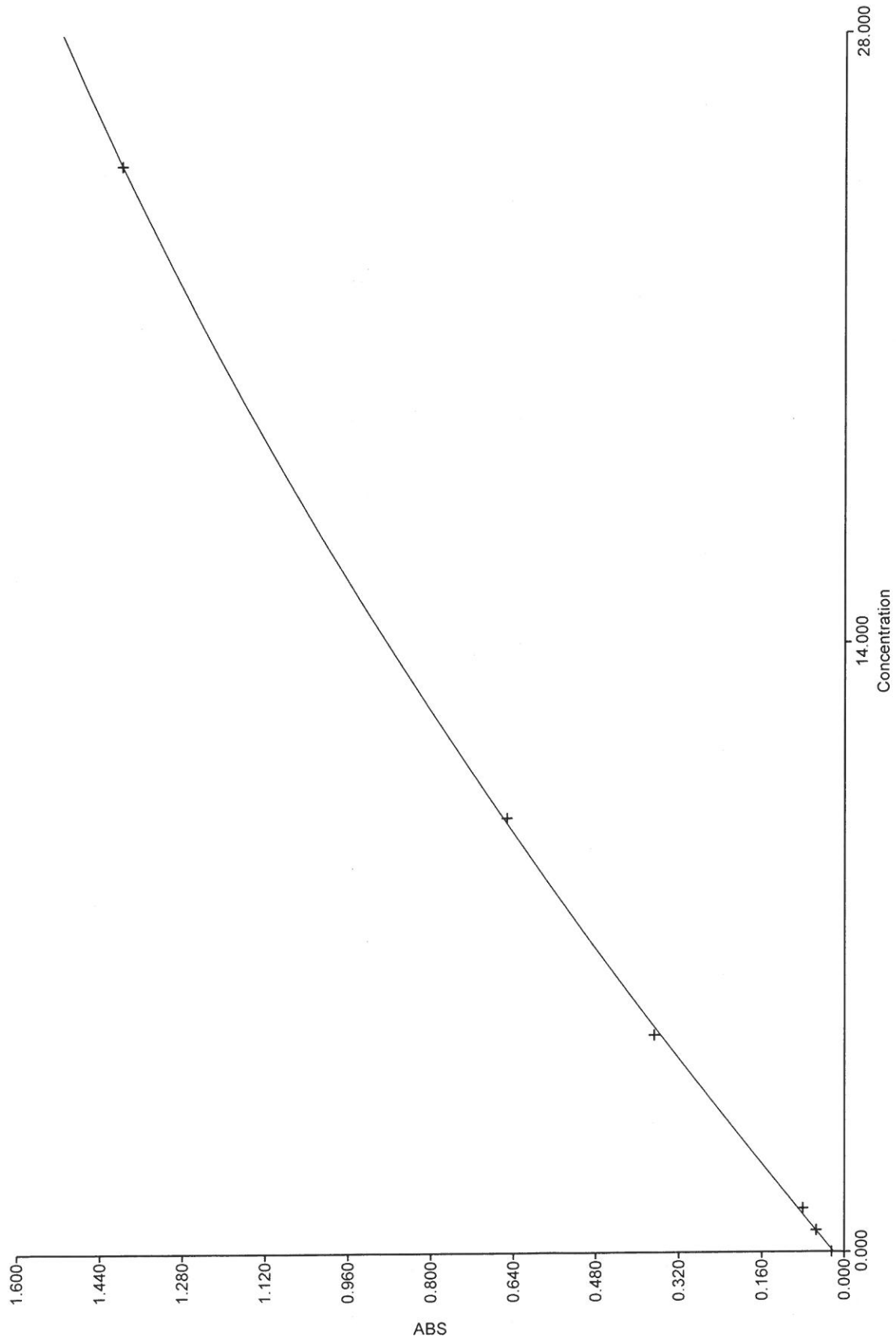
**Analysis Date: May 07, 2022 23:20**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Ammonia as N	None	1	0.34	mg/L	50 mL	50 mL

Batch: 389867, 389868

Sample Info				Ammonia, High Level (T023)				
Row	Cup	ID	Comment	Abs	ppm Status	Well	Date	Time
1	C1	NH3 0.0		0.025	0.06 Crv	A02	5/7/2022	10:29:13 PM
2	C2	NH3 0.5		0.055	0.49	A03	5/7/2022	10:32:07 PM
3	C3	NH3 1.0		0.080	0.86	A04	5/7/2022	10:35:01 PM
4	C4	NH3 5.0		0.367	5.19	A05	5/7/2022	10:37:54 PM
5	C5	NH3 10.0		0.652	9.89	B02	5/7/2022	10:40:44 PM
6	C6	NH3 25.0		1.396	25.01	B03	5/7/2022	10:43:54 PM
7	CC1	CCV		0.335	4.70	B04	5/7/2022	10:47:06 PM
8	CC5	CCB		0.029	0.11	B05	5/7/2022	10:50:17 PM
9	11	ICV		0.151	1.90	C02	5/7/2022	10:53:13 PM
10	12	ICB		0.026	0.08	C03	5/7/2022	10:56:15 PM
11	31	MB		0.035	0.20	C04	5/7/2022	10:59:27 PM
12	32	LCS		0.159	2.01	C05	5/7/2022	11:02:38 PM
13	33	000-5		0.073	0.75	D02	5/7/2022	11:05:44 PM
14	34	170-1		0.042	0.30	D03	5/7/2022	11:08:44 PM
15	35	170-1 DU		0.055	0.50	D04	5/7/2022	11:11:47 PM
16	36	170-1 MS		0.137	1.69	D05	5/7/2022	11:14:59 PM
17	CC1	CCV		0.356	5.03	E02	5/7/2022	11:18:04 PM
18	CC5	CCB		0.030	0.13	E03	5/7/2022	11:21:07 PM
19	37	170-1 MSD		0.131	1.60	E04	5/7/2022	11:24:08 PM
20	38	170-2		0.076	0.79	E05	5/7/2022	11:27:20 PM
21	39	095-2	10X	0.228	3.05 AE	F02	5/7/2022	11:30:24 PM
22	40	238-1		0.045	0.34	F03	5/7/2022	11:33:27 PM
23	13	MB		0.033	0.18	F04	5/7/2022	11:36:40 PM
24	14	LCS		0.149	1.88	F05	5/7/2022	11:39:41 PM
25	15	080-1		1.199	20.43	G02	5/7/2022	11:42:45 PM
26	16	080-2		1.260	21.79	G03	5/7/2022	11:45:48 PM
27	CC1	CCV		0.341	4.79	G04	5/7/2022	11:49:03 PM
28	CC5	CCB		0.026	0.07	G05	5/7/2022	11:52:04 PM
29	17	082-1		0.980	15.89	H02	5/7/2022	11:55:06 PM
30	18	085-1		1.159	19.55	H03	5/7/2022	11:58:07 PM
31	19	099-3		0.247	3.34	H04	5/8/2022	12:01:25 AM
32	20	099-3 DU		0.263	3.59	H05	5/8/2022	12:04:35 AM
33	CC1	CCV		0.347	4.88	A02	5/8/2022	12:22:45 AM
34	CC5	CCB		0.025	0.07	A03	5/8/2022	12:25:32 AM
35	21	099-3 MS		0.382	5.43	A04	5/8/2022	12:28:26 AM
36	22	099-3 MSD		0.387	5.51	A05	5/8/2022	12:31:18 AM
37	23	074-1		1.053	17.35	B02	5/8/2022	12:34:09 AM
38	24	074-2		0.781	12.15	B03	5/8/2022	12:37:19 AM
39	41	078-1	10X	0.274	3.75	B04	5/8/2022	12:40:31 AM
40	42	078-2	10X	0.192	2.51	B05	5/8/2022	12:43:41 AM
41	27	095-1		0.034	0.19	C02	5/8/2022	12:46:38 AM
42	28	227-1		1.027	16.83	C03	5/8/2022	12:49:40 AM
43	29	227-2		0.881	14.00	C04	5/8/2022	12:52:52 AM
44	CC1	CCV		0.362	5.12	C05	5/8/2022	12:56:02 AM
45	CC5	CCB		0.027	0.09	D02	5/8/2022	12:59:01 AM
46	30	395-1		0.034	0.19	D03	5/8/2022	1:01:59 AM

Row	Sample Info			Ammonia, High Level (T023)				
	Cup	ID	Comment	Abs	ppm Status	Well	Date	Time
47	CC1	CCV		0.339	4.76	D04	5/8/2022	1:05:12 AM
48	CC5	CCB		0.033	0.17	D05	5/8/2022	1:08:22 AM



# General Chemistry Raw Data Report

Job ID: 580-113238-1

**Batch: 390299**  
**Method: EPA 350.1**

**Analyst Initials: MLT**  
**Instrument: Astoria Pacific rAPID T**

**Lab Sample ID: MB 580-389754/1-A**

**Analysis Date: May 11, 2022 17:11**

Analyte	Detector	Dilution	Raw Result	Unit
Ammonia as N	None	1	0.06	mg/L

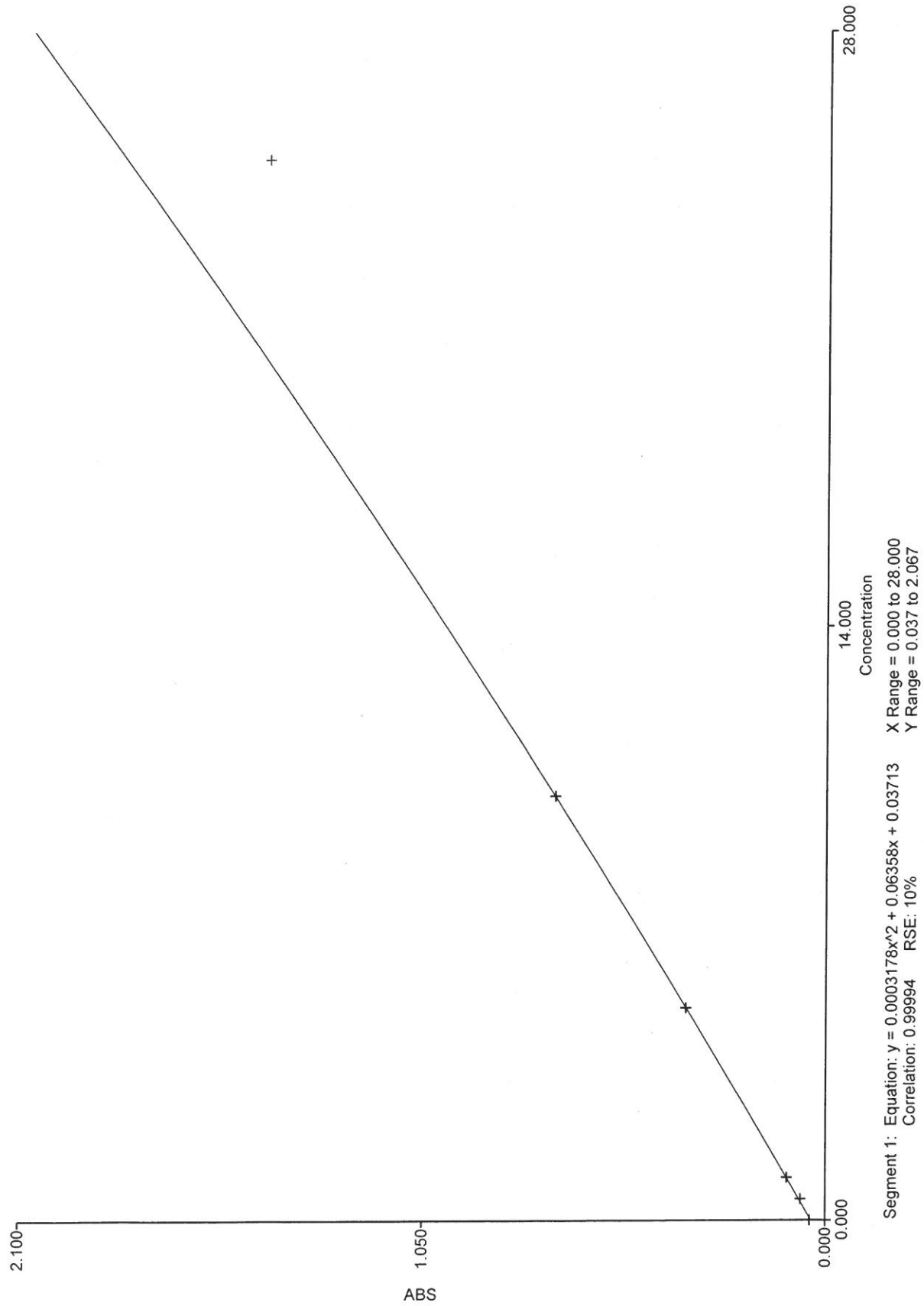
**Lab Sample ID: LCS 580-389754/2-A**

**Analysis Date: May 11, 2022 17:11**

Analyte	Detector	Dilution	Raw Result	Unit
Ammonia as N	None	1	2.17	mg/L

Batch 390299, 390284

Row	Sample Info			Ammonia, High Level (T023)				
	Cup	ID	Comment	Abs	ppm>Status	Well	Date	Time
1	C1	NH3 0.0		0.041	0.06 Crv	D02	5/11/2022	6:14:24 PM
2	C2	NH3 0.5		0.065	0.43	D03	5/11/2022	6:17:17 PM
3	C3	NH3 1.0		0.101	0.99	D04	5/11/2022	6:20:07 PM
4	C4	NH3 5.0		0.364	5.02	D05	5/11/2022	6:22:58 PM
5	C5	NH3 10.0		0.705	10.00	E02	5/11/2022	6:25:46 PM
6	C6	NH3 25.0		1.454	20.23 DS	E03	5/11/2022	6:28:59 PM
7	CC1	CCV		0.343	4.70	E04	5/11/2022	6:32:12 PM
8	CC5	CCB		0.043	0.10	E05	5/11/2022	6:35:21 PM
9	11	ICV		0.166	2.01	F02	5/11/2022	6:38:28 PM
10	12	ICB		0.040	0.05	F03	5/11/2022	6:41:28 PM
11	13	MB		0.041	0.06	F04	5/11/2022	6:44:33 PM
12	14	LCS		0.176	2.17	F05	5/11/2022	6:47:42 PM
13	15	169-1		0.037	0.00 BR	G02	5/11/2022	6:50:51 PM
14	16	169-2		0.037	-0.01 BR	G03	5/11/2022	6:53:48 PM
15	17	169-3		0.106	1.08	G04	5/11/2022	6:56:54 PM
16	18	169-4		0.145	1.68	G05	5/11/2022	7:00:03 PM
17	CC1	CCV		0.332	4.54	H02	5/11/2022	7:03:11 PM
18	CC5	CCB		0.031	-0.09 BR	H03	5/11/2022	7:06:10 PM
19	19	169-5		0.063	0.40	H04	5/11/2022	7:09:13 PM
20	20	169-6		0.123	1.34	H05	5/11/2022	7:12:23 PM
21	CC1	CCV		0.352	4.84	A02	5/11/2022	7:48:13 PM
22	CC5	CCB		0.037	0.00 BR	A03	5/11/2022	7:50:57 PM
23	21	MB		0.038	0.01	A04	5/11/2022	7:53:51 PM
24	22	LCS		0.168	2.03	A05	5/11/2022	7:56:45 PM
25	23	177-1 PT		0.265	3.52	B02	5/11/2022	7:59:31 PM
26	CC1	CCV		0.370	5.10	B03	5/11/2022	8:03:01 PM
27	CC5	CCB		0.042	0.07	B04	5/11/2022	8:06:13 PM





**SC632**3/15/22 TOLSON  
CAI

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
Blank	1126.0		1.0000	TA SOIL LINNEAR	3/12/2022 12:11:17 PM	-0.00000004585	A07

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
2450155	1451030		0.2506	TA SOIL LINNEAR	3/12/2022 12:14:29 PM	11.72	A08
2450155	1177768		0.2010	TA SOIL LINNEAR	3/12/2022 12:16:59 PM	11.85	A09
2450155	888162		0.1495	TA SOIL LINNEAR	3/12/2022 12:19:25 PM	12.01	A10
2450155	615185		0.1009	TA SOIL LINNEAR	3/12/2022 12:21:59 PM	12.32	A01
2450155	457663		0.0742	TA SOIL LINNEAR	3/12/2022 12:24:31 PM	12.46	A02
2450155	163681		0.0253	TA SOIL LINNEAR	3/12/2022 12:26:45 PM	13.01	A03
Average			0.1336			12.23	
Std. Deviation			0.08			0.474	
RSD			62.46			3.874	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICV 2735864	54587		0.2001	TA SOIL LINNEAR	3/15/2022 4:03:45 PM	0.5153	A01

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICB	2280.0		0.2007	TA SOIL LINNEAR	3/15/2022 4:05:56 PM	0.007354	A02

# SC632

TA SOIL LINNEAR Calibration - Read Only

CO2 Low (range: 0.000000 to 30.072000 mg)

Previous Calibration:

$$y = +1.07104x + 0.000345869$$

Date: 3/12/2022 12:27:51 PM

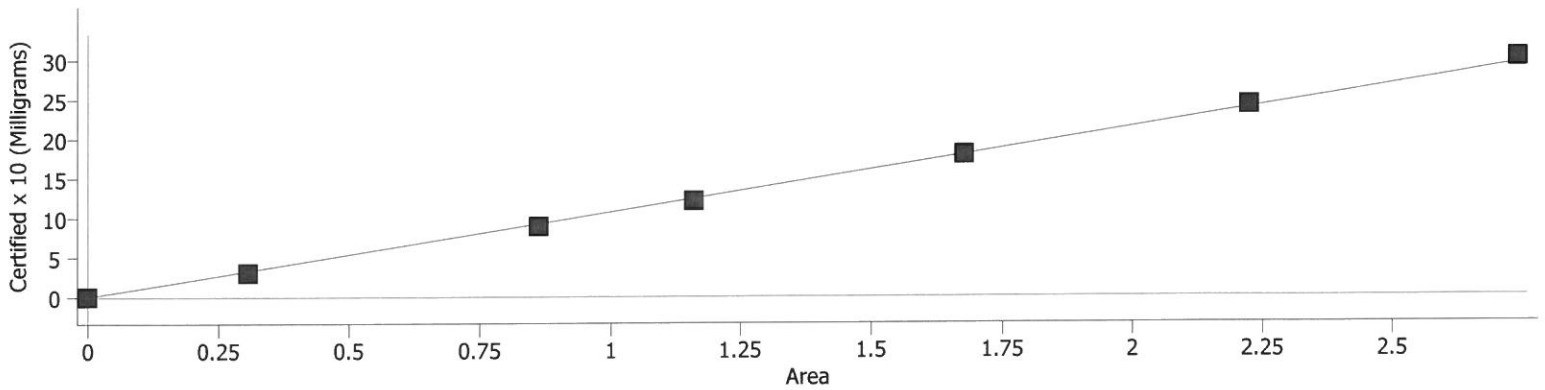
New Calibration:

$$y = +1.07104x + 0.000345869$$

Curve Type: Linear

Weighting: 1 / Certified

RMS Error: 0.0012198



Row	Standard	Drift	Mass	Certified	Calculated	Error %	Prev Err %	Peak	Peak Area	Weighting	Date	Range	Saturated
1	Blank	0	1.0000	0.0000	0.0000000045	100.00	100.00	6.1098	0.00032297	2.5000E+6	03/12/22 12:11 PM	Low	No
2	2450155	0	0.25060	12.000	11.715	-2.3711	-2.3711	2707.6	2.7408	0.33254	03/12/22 12:14 PM	Low	No
3	2450155	1	0.20100	12.000	11.854	-1.2201	-1.2201	2408.8	2.2242	0.41459	03/12/22 12:16 PM	Low	No
4	2450155	0	0.14950	12.000	12.014	0.11992	0.11992	2103.5	1.6767	0.55741	03/12/22 12:19 PM	Low	No
5	2450155	0	0.10090	12.000	12.323	2.6926	2.6926	1478.2	1.1606	0.82590	03/12/22 12:21 PM	Low	No
6	2450155	0	0.074200	12.000	12.459	3.8227	3.8227	1115.8	0.86280	1.1231	03/12/22 12:24 PM	Low	No
7	2450155	0	0.025300	12.000	13.010	8.4179	8.4179	493.53	0.30700	3.2938	03/12/22 12:26 PM	Low	No

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICV 2735864	46786		0.2021	TA SOIL LINNEAR	3/18/2022 6:26:29 PM	0.4352	A01

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICB	1514.5		0.2002	TA SOIL LINNEAR	3/18/2022 6:28:40 PM	-0.00005695	A02

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
CCV 3092515	1163109		0.2020	TA SOIL LINNEAR	5/10/2022 1:44:20 PM	11.81	A01
CCV 3092515	1182782		0.2039	TA SOIL LINNEAR	5/10/2022 2:19:43 PM	11.90	B06
CCV 3092515	1183775		0.2043	TA SOIL LINNEAR	5/10/2022 3:09:53 PM	11.89	D08
CCV 3092515	1187525		0.2046	TA SOIL LINNEAR	5/10/2022 3:32:00 PM	11.91	E08
CCV 3092515	1212574		0.2085	TA SOIL LINNEAR	5/10/2022 3:38:11 PM	11.93	A01
CCV 3092515	1175237		0.2026	TA SOIL LINNEAR	5/10/2022 4:12:15 PM	11.90	B06
CCV 3092515	1191854		0.2060	TA SOIL LINNEAR	5/10/2022 5:01:30 PM	11.87	D08
CCV 3092515	1164669		0.2017	TA SOIL LINNEAR	5/10/2022 5:26:07 PM	11.85	E08
Average			0.2042			11.88	
Std. Deviation			0.002			0.038	
RSD			1.105			0.321	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
CCB 3117971	4848.5		0.2039	TA SOIL LINNEAR	5/10/2022 1:46:35 PM	0.02172	A02
CCB 3117971	1959.2		0.2008	TA SOIL LINNEAR	5/10/2022 2:21:54 PM	-0.007536	B07
CCB 3117971	4633.5		0.2062	TA SOIL LINNEAR	5/10/2022 3:12:06 PM	0.01933	D09
CCB 3117971	3446.7		0.2035	TA SOIL LINNEAR	5/10/2022 3:34:12 PM	0.007593	E09
CCB 3117971	4130.4		0.2061	TA SOIL LINNEAR	5/10/2022 3:40:24 PM	0.01432	A02
CCB 3117971	4195.1		0.2037	TA SOIL LINNEAR	5/10/2022 4:14:26 PM	0.01514	B07
CCB 3117971	2326.4		0.2027	TA SOIL LINNEAR	5/10/2022 5:03:43 PM	-0.003741	D09

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
CCB 3117971	3398.5		0.2069	TA SOIL LINNEAR	5/10/2022 5:28:18 PM	0.006990	E09
Average			0.2042			0.009226	
Std. Deviation			0.002			0.010527	
RSD			1.006			114.1	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MB 3117971	2907.6		0.2053	TA SOIL LINNEAR	5/10/2022 1:48:46 PM	0.002128	A03
MB 3117971	4279.1		0.2074	TA SOIL LINNEAR	5/10/2022 3:42:35 PM	0.01570	A03
Average			0.2064			0.008916	
Std. Deviation			0.001			0.0095997	
RSD			0.720			107.7	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
LCS 2450156	1192167		0.2079	TA SOIL LINNEAR	5/10/2022 1:51:35 PM	11.76	A04
LCS 2450156	1154875		0.2064	TA SOIL LINNEAR	5/10/2022 3:45:12 PM	11.48	A04
Average			0.2072			11.62	
Std. Deviation			0.001			0.202	
RSD			0.512			1.740	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
LCSD 2450156	1118540		0.2003	TA SOIL LINNEAR	5/10/2022 1:54:27 PM	11.46	A05
LCSD 2450156	1117903		0.2036	TA SOIL LINNEAR	5/10/2022 3:48:04 PM	11.26	A05
Average			0.2020			11.36	
Std. Deviation			0.002			0.136	
RSD			1.155			1.196	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113025-C-12	984990		0.2086	TA SOIL LINNEAR	5/10/2022 1:56:41 PM	9.683	A06
580-113025-C-12	1047214		0.2028	TA SOIL LINNEAR	5/10/2022 1:58:52 PM	10.59	A07
Average			0.2057			10.14	
Std. Deviation			0.004			0.642	
RSD			1.994			6.333	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113025-C-13	283938		0.2026	TA SOIL LINNEAR	5/10/2022 2:01:04 PM	2.854	A08
580-113025-C-13	397094		0.2077	TA SOIL LINNEAR	5/10/2022 2:03:15 PM	3.905	A09
Average			0.2052			3.379	
Std. Deviation			0.004			0.7426	
RSD			1.758			21.97	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113025-C-14	376733		0.2083	TA SOIL LINNEAR	5/10/2022 2:05:28 PM	3.692	A10
580-113025-C-14	365186		0.2041	TA SOIL LINNEAR	5/10/2022 2:07:43 PM	3.652	B01
Average			0.2062			3.672	
Std. Deviation			0.003			0.0285	
RSD			1.440			0.777	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113025-C-15	917648		0.2063	TA SOIL LINNEAR	5/10/2022 2:09:54 PM	9.120	B02
580-113025-C-15	736708		0.2029	TA SOIL LINNEAR	5/10/2022 2:12:05 PM	7.439	B03
Average			0.2046			8.279	
Std. Deviation			0.002			1.1886	
RSD			1.175			14.36	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
570-93645-T-1	12637		0.2037	TA SOIL LINNEAR	5/10/2022 2:14:27 PM	0.1004	B04
570-93645-T-1	16265		0.2027	TA SOIL LINNEAR	5/10/2022 2:16:52 PM	0.1377	B05
Average			0.2032			0.1190	
Std. Deviation			0.0007			0.02637	



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
RSD			0.348			22.16	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113235-A-1	8779.1		0.2070	TA SOIL LINNEAR	5/10/2022 2:24:06 PM	0.06043	B08
580-113235-A-1	6406.0		0.2018	TA SOIL LINNEAR	5/10/2022 2:26:23 PM	0.03781	B09
Average			0.2044			0.04912	
Std. Deviation			0.004			0.015997	
RSD			1.799			32.57	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113021-B-3	155556		0.2082	TA SOIL LINNEAR	5/10/2022 2:28:35 PM	1.510	B10
580-113021-B-3	153936		0.2017	TA SOIL LINNEAR	5/10/2022 2:30:47 PM	1.542	C01
Average			0.2050			1.526	
Std. Deviation			0.005			0.0227	
RSD			2.243			1.489	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113021-B-6	338869		0.2037	TA SOIL LINNEAR	5/10/2022 2:32:58 PM	3.394	C02
580-113021-B-6	258380		0.2024	TA SOIL LINNEAR	5/10/2022 2:35:09 PM	2.598	C03
Average			0.2031			2.996	
Std. Deviation			0.0009			0.5628	
RSD			0.453			18.79	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113021-B-11	1287970		0.2039	TA SOIL LINNEAR	5/10/2022 2:37:20 PM	12.96	C04
580-113021-B-11	1383807		0.2075	TA SOIL LINNEAR	5/10/2022 2:39:32 PM	13.69	C05
Average			0.2057			13.32	
Std. Deviation			0.003			0.513	
RSD			1.238			3.847	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113021-C-12	741715		0.2087	TA SOIL LINNEAR	5/10/2022 2:41:45 PM	7.281	C06
580-113021-C-12	791221		0.2070	TA SOIL LINNEAR	5/10/2022 2:43:56 PM	7.833	C07
Average			0.2078			7.557	
Std. Deviation			0.001			0.3900	
RSD			0.578			5.161	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-1	7365.2		0.2081	TA SOIL LINNEAR	5/10/2022 2:46:10 PM	0.04614	C08
580-113169-D-1	4216.8		0.2081	TA SOIL LINNEAR	5/10/2022 2:48:21 PM	0.01504	C09
Average			0.2081			0.03059	
Std. Deviation			0			0.021998	
RSD			0.000			71.91	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113170-A-1	13599		0.2054	TA SOIL LINNEAR	5/10/2022 2:50:37 PM	0.1092	C10
580-113170-A-1	14918		0.2076	TA SOIL LINNEAR	5/10/2022 2:52:56 PM	0.1211	D01
Average			0.2065			0.1151	
Std. Deviation			0.002			0.00842	
RSD			0.753			7.311	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
DU 580-113170-A-1	14601		0.2087	TA SOIL LINNEAR	5/10/2022 2:55:15 PM	0.1173	D02
DU 580-113170-A-1	15487		0.2033	TA SOIL LINNEAR	5/10/2022 2:57:35 PM	0.1294	D03
Average			0.2060			0.1233	
Std. Deviation			0.004			0.00853	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
RSD			1.854			6.918	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MS 580-113170-A-1	607336	0.1047	0.1026	TA SOIL LINNEAR	5/10/2022 3:00:08 PM	12.12	D04

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MSD 580-113170-A-1	615521	0.1064	0.1018	TA SOIL LINNEAR	5/10/2022 3:02:42 PM	12.38	D05

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-2	7540.3		0.2036	TA SOIL LINNEAR	5/10/2022 3:04:54 PM	0.04893	D06
580-113169-D-2	5511.3		0.2045	TA SOIL LINNEAR	5/10/2022 3:07:05 PM	0.02832	D07
Average			0.2041			0.03862	
Std. Deviation			0.0006			0.014578	
RSD			0.312			37.74	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-3	7628.3		0.2025	TA SOIL LINNEAR	5/10/2022 3:14:17 PM	0.05009	D10
580-113169-D-3	5932.8		0.2054	TA SOIL LINNEAR	5/10/2022 3:16:28 PM	0.03241	E01
Average			0.2040			0.04125	
Std. Deviation			0.002			0.012502	
RSD			1.005			30.31	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-4	8658.2		0.2039	TA SOIL LINNEAR	5/10/2022 3:18:26 PM	0.06013	E02



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-4	6753.0		0.2043	TA SOIL LINNEAR	5/10/2022 3:20:37 PM	0.04084	E03
Average			0.2041			0.05049	
Std. Deviation			0.0003			0.013643	
RSD			0.139			27.02	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-5	8318.6		0.2016	TA SOIL LINNEAR	5/10/2022 3:22:48 PM	0.05736	E04
580-113169-D-5	6950.7		0.2030	TA SOIL LINNEAR	5/10/2022 3:24:59 PM	0.04311	E05
Average			0.2023			0.05023	
Std. Deviation			0.0010			0.010078	
RSD			0.489			20.06	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-6	6324.8		0.2052	TA SOIL LINNEAR	5/10/2022 3:27:10 PM	0.03637	E06
580-113169-D-6	9161.4		0.2039	TA SOIL LINNEAR	5/10/2022 3:29:21 PM	0.06521	E07
Average			0.2046			0.05079	
Std. Deviation			0.0009			0.020392	
RSD			0.449			40.15	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113239-A-2	51845		0.2060	TA SOIL LINNEAR	5/10/2022 3:50:16 PM	0.4906	A06
580-113239-A-2	43413		0.2068	TA SOIL LINNEAR	5/10/2022 3:52:28 PM	0.4049	A07
Average			0.2064			0.4477	
Std. Deviation			0.0006			0.06062	
RSD			0.274			13.54	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113239-A-1	92140		0.2026	TA SOIL LINNEAR	5/10/2022 3:54:39 PM	0.9078	A08
580-113239-A-1	120712		0.2044	TA SOIL LINNEAR	5/10/2022 3:56:34 PM	1.187	A09
Average			0.2035			1.048	
Std. Deviation			0.001			0.1976	
RSD			0.625			18.86	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113239-A-3	7116.6		0.2077	TA SOIL LINNEAR	5/10/2022 3:58:45 PM	0.04377	A10
580-113239-A-3	6377.5		0.2067	TA SOIL LINNEAR	5/10/2022 4:00:57 PM	0.03663	B01
Average			0.2072			0.04020	
Std. Deviation			0.0007			0.005049	
RSD			0.341			12.56	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113239-A-4	191825		0.2077	TA SOIL LINNEAR	5/10/2022 4:03:08 PM	1.872	B02
580-113239-A-4	148950		0.2051	TA SOIL LINNEAR	5/10/2022 4:05:19 PM	1.466	B03
Average			0.2064			1.669	
Std. Deviation			0.002			0.2872	
RSD			0.891			17.20	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113238-A-1	9090.5		0.2072	TA SOIL LINNEAR	5/10/2022 4:07:30 PM	0.06347	B04
580-113238-A-1	8554.4		0.2030	TA SOIL LINNEAR	5/10/2022 4:09:41 PM	0.05935	B05
Average			0.2051			0.06141	
Std. Deviation			0.003			0.002911	
RSD			1.448			4.740	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
590-17421-A-1	67793		0.2097	TA SOIL LINNEAR	5/10/2022 4:16:41 PM	0.6383	B08

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
590-17421-A-1	60306		0.2018	TA SOIL LINNEAR	5/10/2022 4:18:52 PM	0.5870	B09
Average			0.2058			0.6127	
Std. Deviation			0.006			0.03628	
RSD			2.715			5.921	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
590-17421-A-3	74858		0.2048	TA SOIL LINNEAR	5/10/2022 4:21:03 PM	0.7245	B10
590-17421-A-3	83879		0.2021	TA SOIL LINNEAR	5/10/2022 4:23:14 PM	0.8260	C01
Average			0.2035			0.7753	
Std. Deviation			0.002			0.07175	
RSD			0.938			9.255	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113240-A-1	154941		0.2035	TA SOIL LINNEAR	5/10/2022 4:25:25 PM	1.538	C02
580-113240-A-1	154998		0.2037	TA SOIL LINNEAR	5/10/2022 4:27:24 PM	1.537	C03
Average			0.2036			1.538	
Std. Deviation			0.0001			0.0007	
RSD			0.069			0.043	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113240-A-2	103211		0.2033	TA SOIL LINNEAR	5/10/2022 4:29:35 PM	1.017	C04
580-113240-A-2	101462		0.2082	TA SOIL LINNEAR	5/10/2022 4:31:46 PM	0.9755	C05
Average			0.2058			0.9961	
Std. Deviation			0.003			0.02914	
RSD			1.684			2.925	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113240-A-3	14168		0.2015	TA SOIL LINNEAR	5/10/2022 4:33:57 PM	0.1171	C06
580-113240-A-3	15631		0.2012	TA SOIL LINNEAR	5/10/2022 4:36:08 PM	0.1322	C07
Average			0.2014			0.1246	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
Std. Deviation			0.0002			0.01070	
RSD			0.105			8.582	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113240-A-4	110908		0.2039	TA SOIL LINNEAR	5/10/2022 4:38:19 PM	1.091	C08
580-113240-A-4	71979		0.2085	TA SOIL LINNEAR	5/10/2022 4:40:32 PM	0.6833	C09
Average			0.2062			0.8873	
Std. Deviation			0.003			0.28850	
RSD			1.577			32.52	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113343-A-1	574650		0.2027	TA SOIL LINNEAR	5/10/2022 4:42:44 PM	5.802	C10
580-113343-A-1	634028		0.2057	TA SOIL LINNEAR	5/10/2022 4:44:55 PM	6.311	D01
Average			0.2042			6.057	
Std. Deviation			0.002			0.3599	
RSD			1.039			5.942	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113343-A-2	476966		0.2046	TA SOIL LINNEAR	5/10/2022 4:47:06 PM	4.766	D02
580-113343-A-2	384876		0.2018	TA SOIL LINNEAR	5/10/2022 4:49:18 PM	3.894	D03
Average			0.2032			4.330	
Std. Deviation			0.002			0.6167	
RSD			0.974			14.24	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113343-A-3	956057		0.2036	TA SOIL LINNEAR	5/10/2022 4:51:30 PM	9.628	D04
580-113343-A-3	665819		0.2016	TA SOIL LINNEAR	5/10/2022 4:53:45 PM	6.764	D05
Average			0.2026			8.196	
Std. Deviation			0.001			2.0257	
RSD			0.698			24.72	



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113288-A-8	59834		0.2004	TA SOIL LINNEAR	5/10/2022 4:56:11 PM	0.5863	D06
580-113288-A-8	60021		0.2067	TA SOIL LINNEAR	5/10/2022 4:58:36 PM	0.5703	D07
Average			0.2036			0.5783	
Std. Deviation			0.004			0.01132	
RSD			2.189			1.957	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
DU 580-113288-A-8	62217		0.2086	TA SOIL LINNEAR	5/10/2022 5:06:07 PM	0.5867	D10
DU 580-113288-A-8	60168		0.2084	TA SOIL LINNEAR	5/10/2022 5:08:32 PM	0.5671	E01
Average			0.2085			0.5769	
Std. Deviation			0.0001			0.01390	
RSD			0.068			2.409	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MS 580-113288-A-8	651833	0.1011	0.1034	TA SOIL LINNEAR	5/10/2022 5:11:25 PM	12.91	E02

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MSD 580-113288-A-8	629718	0.1044	0.1021	TA SOIL LINNEAR	5/10/2022 5:13:56 PM	12.63	E03

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113275-A-1	6091.6		0.2039	TA SOIL LINNEAR	5/10/2022 5:16:12 PM	0.03425	E04
580-113275-A-1	7710.1		0.2072	TA SOIL LINNEAR	5/10/2022 5:18:33 PM	0.04977	E05
Average			0.2056			0.04201	
Std. Deviation			0.002			0.010972	
RSD			1.135			26.12	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113275-D-2	73602		0.2041	TA SOIL LINNEAR	5/10/2022 5:20:45 PM	0.7144	E06
580-113275-D-2	73146		0.2068	TA SOIL LINNEAR	5/10/2022 5:22:56 PM	0.7005	E07
Average			0.2055			0.7074	
Std. Deviation			0.002			0.00980	
RSD			0.929			1.385	

# General Chemistry Raw Data Report

Job ID: 580-113238-1

**Batch: 390214**  
**Method: Moisture**

**Analyst Initials: JSM**  
**Instrument: NONE**

**Lab Sample ID: 580-113238-A-1**

**Analysis Date: May 11, 2022 11:50**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Solids	None	1	72.7777777777778	%
Percent Moisture	None	1	27.2222222222222	%

# Shipping and Receiving Documents



# Chain of Custody

PASI Minnesota Laboratory



Workorder: 10606046

Workorder Name: D3593500

Report / Invoice To

Subcontract To

Results Requested By: 5/11/2022

Requested Analysis

Kongmeng Vang  
 Pace Analytical Minnesota  
 1700 Elm Street  
 Minneapolis, MN 55414  
 Phone (612)607-1700  
 Email: kongmeng.vang@pacelabs.com

P.O.  
 Eurofins Frontier Global Sciences  
 5755 8th Street East  
 Tacoma, WA 98424

State of Sample Origin: WA

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers		LAB USE ONLY
					Unpreserved	Preserved	
1	BNSF-SG13-042522-0-1.5	4/25/2022 09:55	10606046001	Solid	1		
2							
3							
4							
5							

Transfers	Released By	Date/Time	Received By	Date/Time	LVL4 Package	Comments
1	<i>[Signature]</i>					
2	<i>[Signature]</i>	4/29/22	<i>[Signature]</i>	4/29/22	0945	
3						

Cooler Temperature on Receipt	°C	Custody Seal	Y or N	Received on Ice	Y or N	Samples Intact	Y or N

*Sm B IR 9 2.9/3.3*  
*Fed for vics*



580-113238 Chain of Custody

# Login Sample Receipt Checklist

Client: Pace Analytical Services, LLC

Job Number: 580-113238-1

**Login Number: 113238**  
**List Number: 1**  
**Creator: Presley, Kim A**

**List Source: Eurofins Seattle**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

June 08, 2022

Bernice Kidd  
Jacobs Engineering  
2525 Air Park Drive  
Redding, CA 96001

RE: Project: D3593500-Revised Report  
Pace Project No.: 10606394

Dear Bernice Kidd:

Enclosed are the analytical results for sample(s) received by the laboratory on April 29, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Minneapolis

This report was revised on June 8th, 2022, to include a revised subcontract report from Eurofins.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kongmeng Vang  
kongmeng.vang@pacelabs.com  
(612)607-1700  
Project Manager

Enclosures

cc: Kris Ivarson, Jacobs  
Jennifer Ulrich, Jacobs



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: D3593500-Revised Report

Pace Project No.: 10606394

### Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414  
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab

A2LA Certification #: 2926.01\*  
Alabama Certification #: 40770  
Alaska Contaminated Sites Certification #: 17-009\*  
Alaska DW Certification #: MN00064  
Arizona Certification #: AZ0014\*  
Arkansas DW Certification #: MN00064  
Arkansas WW Certification #: 88-0680  
California Certification #: 2929  
Colorado Certification #: MN00064  
Connecticut Certification #: PH-0256  
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137  
Florida Certification #: E87605\*  
Georgia Certification #: 959  
Hawaii Certification #: MN00064  
Idaho Certification #: MN00064  
Illinois Certification #: 200011  
Indiana Certification #: C-MN-01  
Iowa Certification #: 368  
Kansas Certification #: E-10167  
Kentucky DW Certification #: 90062  
Kentucky WW Certification #: 90062  
Louisiana DEQ Certification #: AI-03086\*  
Louisiana DW Certification #: MN00064  
Maine Certification #: MN00064\*  
Maryland Certification #: 322  
Michigan Certification #: 9909  
Minnesota Certification #: 027-053-137\*  
Minnesota Dept of Ag Approval: via MN 027-053-137  
Minnesota Petrofund Registration #: 1240\*  
Mississippi Certification #: MN00064

Missouri Certification #: 10100  
Montana Certification #: CERT0092  
Nebraska Certification #: NE-OS-18-06  
Nevada Certification #: MN00064  
New Hampshire Certification #: 2081\*  
New Jersey Certification #: MN002  
New York Certification #: 11647\*  
North Carolina DW Certification #: 27700  
North Carolina WW Certification #: 530  
North Dakota Certification (A2LA) #: R-036  
North Dakota Certification (MN) #: R-036  
Ohio DW Certification #: 41244  
Ohio VAP Certification (1700) #: CL101  
Ohio VAP Certification (1800) #: CL110\*  
Oklahoma Certification #: 9507\*  
Oregon Primary Certification #: MN300001  
Oregon Secondary Certification #: MN200001\*  
Pennsylvania Certification #: 68-00563\*  
Puerto Rico Certification #: MN00064  
South Carolina Certification #: 74003001  
Tennessee Certification #: TN02818  
Texas Certification #: T104704192\*  
Utah Certification #: MN00064\*  
Vermont Certification #: VT-027053137  
Virginia Certification #: 460163\*  
Washington Certification #: C486\*  
West Virginia DEP Certification #: 382  
West Virginia DW Certification #: 9952 C  
Wisconsin Certification #: 999407970  
Wyoming UST Certification #: via A2LA 2926.01  
USDA Permit #: P330-19-00208  
\*Please Note: Applicable air certifications are denoted with an asterisk (\*).

### Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122

Alabama Certification #: 40660  
Alaska Certification 17-026  
Arizona Certification #: AZ0612  
Arkansas Certification #: 88-0469  
California Certification #: 2932  
Canada Certification #: 1461.01  
Colorado Certification #: TN00003  
Connecticut Certification #: PH-0197  
DOD Certification: #1461.01  
EPA# TN00003  
Florida Certification #: E87487  
Georgia DW Certification #: 923  
Georgia Certification: NELAP  
Idaho Certification #: TN00003  
Illinois Certification #: 200008

Indiana Certification #: C-TN-01  
Iowa Certification #: 364  
Kansas Certification #: E-10277  
Kentucky UST Certification #: 16  
Kentucky Certification #: 90010  
Louisiana Certification #: AI30792  
Louisiana DW Certification #: LA180010  
Maine Certification #: TN0002  
Maryland Certification #: 324  
Massachusetts Certification #: M-TN003  
Michigan Certification #: 9958  
Minnesota Certification #: 047-999-395  
Mississippi Certification #: TN00003  
Missouri Certification #: 340  
Montana Certification #: CERT0086  
Nebraska Certification #: NE-OS-15-05

## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: D3593500-Revised Report

Pace Project No.: 10606394

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### **Pace Analytical Services National**

Nevada Certification #: TN-03-2002-34

New Hampshire Certification #: 2975

New Jersey Certification #: TN002

New Mexico DW Certification

New York Certification #: 11742

North Carolina Aquatic Toxicity Certification #: 41

North Carolina Drinking Water Certification #: 21704

North Carolina Environmental Certificate #: 375

North Dakota Certification #: R-140

Ohio VAP Certification #: CL0069

Oklahoma Certification #: 9915

Oregon Certification #: TN200002

Pennsylvania Certification #: 68-02979

Rhode Island Certification #: LAO00356

South Carolina Certification #: 84004

South Dakota Certification

Tennessee DW/Chem/Micro Certification #: 2006

Texas Certification #: T 104704245-17-14

Texas Mold Certification #: LAB0152

USDA Soil Permit #: P330-15-00234

Utah Certification #: TN00003

Vermont Dept. of Health: ID# VT-2006

Virginia Certification #: VT2006

Virginia Certification #: 460132

Washington Certification #: C847

West Virginia Certification #: 233

Wisconsin Certification #: 998093910

Wyoming UST Certification #: via A2LA 2926.01

A2LA-ISO 17025 Certification #: 1461.01

A2LA-ISO 17025 Certification #: 1461.02

AIHA-LAP/LLC EMLAP Certification #:100789

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: D3593500-Revised Report

Pace Project No.: 10606394

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10606394001	BNSF-BG14-042722-0-5.5	Solid	04/27/22 09:00	04/29/22 08:50
10606394002	BNSF-BG15-042722-0-10	Solid	04/27/22 09:25	04/29/22 08:50
10606394003	BNSF-BG16-042722-0-10	Solid	04/27/22 09:45	04/29/22 08:50
10606394004	BNSF-BG17-042722-0-10	Solid	04/27/22 10:05	04/29/22 08:50

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: D3593500-Revised Report

Pace Project No.: 10606394

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10606394001	BNSF-BG14-042722-0-5.5	NWTPH-Dx	TT2	4	PASI-M
		EPA 6020B	RJS	9	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	AGW	33	PAN
		SM 2540G	CMK	1	PAN
		EPA 9030B	BMD	1	PAN
10606394002	BNSF-BG15-042722-0-10	NWTPH-Dx	TT2	4	PASI-M
		EPA 6020B	RJS	9	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	AGW	33	PAN
		SM 2540G	CMK	1	PAN
		EPA 9030B	BMD	1	PAN
10606394003	BNSF-BG16-042722-0-10	NWTPH-Dx	TT2	4	PASI-M
		EPA 6020B	RJS	9	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	AGW	33	PAN
		SM 2540G	CMK	1	PAN
		EPA 9030B	BMD	1	PAN
10606394004	BNSF-BG17-042722-0-10	NWTPH-Dx	TT2	4	PASI-M
		EPA 6020B	RJS	9	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	AGW	33	PAN
		SM 2540G	CMK	1	PAN
		EPA 9030B	BMD	1	PAN

PAN = Pace National - Mt. Juliet

PASI-M = Pace Analytical Services - Minneapolis

### REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10606394

---

**Method:** NWTPH-Dx

**Description:** NWTPH-Dx GCS

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

4 samples were analyzed for NWTPH-Dx by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10606394

---

**Method:** EPA 6020B

**Description:** 6020B MET ICPMS

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

4 samples were analyzed for EPA 6020B by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3050B with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 812437

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10606046001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 4308598)
  - Lead

R1: RPD value was outside control limits.

- MSD (Lab ID: 4308599)
  - Lead

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10606394

---

**Method:** EPA 7471B

**Description:** 7471B Mercury

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

4 samples were analyzed for EPA 7471B by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 7471B with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10606394

---

**Method:** EPA 8270E

**Description:** SVOA (GC/MS) 8270E

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

4 samples were analyzed for EPA 8270E by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 1860981

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): L1488161-03

R1: RPD value was outside control limits.

- MSD (Lab ID: R3791358-4)
  - Benzoic acid
  - Carbazole
  - Di-n-butylphthalate
  - Di-n-octylphthalate
  - Pentachlorophenol
  - bis(2-Ethylhexyl)phthalate

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10606394

---

**Method:** SM 2540G

**Description:** Total Solids 2540 G-2011

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

4 samples were analyzed for SM 2540G by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10606394

---

**Method:** EPA 9030B

**Description:** Wet Chemistry 9034/9030B

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

4 samples were analyzed for EPA 9030B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606394

**Sample: BNSF-BG14-042722-0-5.5**    **Lab ID: 10606394001**    Collected: 04/27/22 09:00    Received: 04/29/22 08:50    Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Pace Analytical Services - Minneapolis									
Diesel Fuel Range	<b>19.5J</b>	mg/kg	27.0	12.4	1	04/29/22 17:05	05/11/22 09:18	68334-30-5	
Motor Oil Range	<b>60.0</b>	mg/kg	18.0	9.0	1	04/29/22 17:05	05/11/22 09:18		
<b>Surrogates</b>									
n-Triacontane (S)	72	%	50-150		1	04/29/22 17:05	05/11/22 09:18		
o-Terphenyl (S)	80	%	50-150		1	04/29/22 17:05	05/11/22 09:18	84-15-1	
<b>6020B MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3050B									
Pace Analytical Services - Minneapolis									
Arsenic	<b>3.3</b>	mg/kg	0.88	0.19	1	05/03/22 17:29	05/05/22 19:05	7440-38-2	
Cadmium	<b>0.52</b>	mg/kg	0.14	0.055	1	05/03/22 17:29	05/05/22 19:05	7440-43-9	
Chromium	<b>14.2</b>	mg/kg	3.5	0.25	1	05/03/22 17:29	05/05/22 19:05	7440-47-3	
Copper	<b>16.2</b>	mg/kg	1.8	0.43	1	05/03/22 17:29	05/05/22 19:05	7440-50-8	
Lead	<b>8.6</b>	mg/kg	0.88	0.052	1	05/03/22 17:29	05/05/22 19:05	7439-92-1	
Nickel	<b>15.3</b>	mg/kg	0.88	0.35	1	05/03/22 17:29	05/05/22 19:05	7440-02-0	
Selenium	<b>0.45J</b>	mg/kg	0.88	0.15	1	05/03/22 17:29	05/05/22 19:05	7782-49-2	
Silver	<b>0.41J</b>	mg/kg	0.88	0.26	1	05/03/22 17:29	05/05/22 19:05	7440-22-4	
Zinc	<b>106</b>	mg/kg	8.8	1.6	1	05/03/22 17:29	05/05/22 19:05	7440-66-6	
<b>7471B Mercury</b>									
Analytical Method: EPA 7471B    Preparation Method: EPA 7471B									
Pace Analytical Services - Minneapolis									
Mercury	<b>0.025J</b>	mg/kg	0.034	0.015	1	05/03/22 12:07	05/10/22 12:32	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>44.5</b>	%	0.10	0.10	1		04/29/22 13:02		N2
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E    Preparation Method: 3546									
Pace National - Mt. Juliet									
Acenaphthene	ND	mg/kg	0.0530	0.00858	1	05/11/22 03:10	05/12/22 11:00	83-32-9	
Acenaphthylene	ND	mg/kg	0.0530	0.00747	1	05/11/22 03:10	05/12/22 11:00	208-96-8	
Anthracene	ND	mg/kg	0.0530	0.00944	1	05/11/22 03:10	05/12/22 11:00	120-12-7	
Benzoic acid	ND	mg/kg	2.66	0.188	1	05/11/22 03:10	05/12/22 11:00	65-85-0	
Benzo(a)anthracene	ND	mg/kg	0.0530	0.00935	1	05/11/22 03:10	05/12/22 11:00	56-55-3	
Benzo(b)fluoranthene	ND	mg/kg	0.0530	0.00989	1	05/11/22 03:10	05/12/22 11:00	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0530	0.00943	1	05/11/22 03:10	05/12/22 11:00	207-08-9	
Benzo(g,h,i)perylene	ND	mg/kg	0.0530	0.00970	1	05/11/22 03:10	05/12/22 11:00	191-24-2	
Benzo(a)pyrene	ND	mg/kg	0.0530	0.00986	1	05/11/22 03:10	05/12/22 11:00	50-32-8	
Carbazole	ND	mg/kg	0.530	0.0164	1	05/11/22 03:10	05/12/22 11:00	86-74-8	
Chrysene	ND	mg/kg	0.0530	0.0105	1	05/11/22 03:10	05/12/22 11:00	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0530	0.0147	1	05/11/22 03:10	05/12/22 11:00	53-70-3	
Dibenzofuran	ND	mg/kg	0.530	0.0174	1	05/11/22 03:10	05/12/22 11:00	132-64-9	
Fluoranthene	ND	mg/kg	0.0530	0.00957	1	05/11/22 03:10	05/12/22 11:00	206-44-0	
Fluorene	ND	mg/kg	0.0530	0.00863	1	05/11/22 03:10	05/12/22 11:00	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0530	0.0150	1	05/11/22 03:10	05/12/22 11:00	193-39-5	

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## ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606394

**Sample: BNSF-BG14-042722-0-5.5**    **Lab ID: 10606394001**    Collected: 04/27/22 09:00    Received: 04/29/22 08:50    Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E    Preparation Method: 3546									
Pace National - Mt. Juliet									
1-Methylnaphthalene	ND	mg/kg	0.0530	0.00678	1	05/11/22 03:10	05/12/22 11:00	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0530	0.00688	1	05/11/22 03:10	05/12/22 11:00	91-57-6	
Naphthalene	ND	mg/kg	0.0530	0.0133	1	05/11/22 03:10	05/12/22 11:00	91-20-3	
Phenanthrene	ND	mg/kg	0.0530	0.0105	1	05/11/22 03:10	05/12/22 11:00	85-01-8	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.530	0.0672	1	05/11/22 03:10	05/12/22 11:00	117-81-7	
Di-n-butylphthalate	ND	mg/kg	0.530	0.0182	1	05/11/22 03:10	05/12/22 11:00	84-74-2	
Di-n-octylphthalate	ND	mg/kg	0.530	0.0358	1	05/11/22 03:10	05/12/22 11:00	117-84-0	
Pyrene	ND	mg/kg	0.0530	0.0103	1	05/11/22 03:10	05/12/22 11:00	129-00-0	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.530	0.0166	1	05/11/22 03:10	05/12/22 11:00		
Pentachlorophenol	ND	mg/kg	0.530	0.0143	1	05/11/22 03:10	05/12/22 11:00	87-86-5	
Phenol	ND	mg/kg	0.530	0.0213	1	05/11/22 03:10	05/12/22 11:00	108-95-2	
<b>Surrogates</b>									
2-Fluorophenol (S)	63.6	%	12.0-120		1	05/11/22 03:10	05/12/22 11:00	367-12-4	
Phenol-d5 (S)	61.9	%	10.0-120		1	05/11/22 03:10	05/12/22 11:00	4165-62-2	
Nitrobenzene-d5 (S)	63.2	%	10.0-122		1	05/11/22 03:10	05/12/22 11:00	4165-60-0	
2-Fluorobiphenyl (S)	53.9	%	15.0-120		1	05/11/22 03:10	05/12/22 11:00	321-60-8	
2,4,6-Tribromophenol (S)	58.2	%	10.0-127		1	05/11/22 03:10	05/12/22 11:00	118-79-6	
p-Terphenyl-d14 (S)	61.9	%	10.0-120		1	05/11/22 03:10	05/12/22 11:00	1718-51-0	
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G    Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>62.8</b>	%			1	05/03/22 15:38	05/03/22 15:50		
<b>Wet Chemistry 9034/9030B</b>									
Analytical Method: EPA 9030B    Preparation Method: 9030B									
Pace National - Mt. Juliet									
Sulfide	<b>167</b>	mg/kg	119	47.8	1	05/02/22 16:22	05/04/22 19:00	18496-25-8	

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## ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606394

**Sample: BNSF-BG15-042722-0-10 Lab ID: 10606394002** Collected: 04/27/22 09:25 Received: 04/29/22 08:50 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Pace Analytical Services - Minneapolis									
Diesel Fuel Range	<b>34.2</b>	mg/kg	23.0	10.6	1	04/29/22 17:05	05/11/22 09:41	68334-30-5	
Motor Oil Range	<b>174</b>	mg/kg	15.4	7.7	1	04/29/22 17:05	05/11/22 09:41		
<b>Surrogates</b>									
n-Triacontane (S)	83	%	50-150		1	04/29/22 17:05	05/11/22 09:41		
o-Terphenyl (S)	87	%	50-150		1	04/29/22 17:05	05/11/22 09:41	84-15-1	
<b>6020B MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3050B									
Pace Analytical Services - Minneapolis									
Arsenic	<b>0.18J</b>	mg/kg	0.75	0.16	1	05/03/22 17:29	05/05/22 19:08	7440-38-2	
Cadmium	ND	mg/kg	0.12	0.047	1	05/03/22 17:29	05/05/22 19:08	7440-43-9	
Chromium	<b>2.1J</b>	mg/kg	3.0	0.21	1	05/03/22 17:29	05/05/22 19:08	7440-47-3	
Copper	<b>5.7</b>	mg/kg	1.5	0.36	1	05/03/22 17:29	05/05/22 19:08	7440-50-8	
Lead	<b>0.32J</b>	mg/kg	0.75	0.044	1	05/03/22 17:29	05/05/22 19:08	7439-92-1	
Nickel	<b>1.9</b>	mg/kg	0.75	0.30	1	05/03/22 17:29	05/05/22 19:08	7440-02-0	
Selenium	ND	mg/kg	0.75	0.13	1	05/03/22 17:29	05/05/22 19:08	7782-49-2	
Silver	ND	mg/kg	0.75	0.22	1	05/03/22 17:29	05/05/22 19:08	7440-22-4	
Zinc	<b>6.9J</b>	mg/kg	7.5	1.4	1	05/03/22 17:29	05/05/22 19:08	7440-66-6	
<b>7471B Mercury</b>									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Minneapolis									
Mercury	ND	mg/kg	0.027	0.012	1	05/03/22 12:07	05/10/22 12:36	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>35.5</b>	%	0.10	0.10	1		04/29/22 13:02		N2
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
Acenaphthene	ND	mg/kg	0.0471	0.00762	1	05/11/22 03:10	05/12/22 15:36	83-32-9	
Acenaphthylene	ND	mg/kg	0.0471	0.00663	1	05/11/22 03:10	05/12/22 15:36	208-96-8	
Anthracene	ND	mg/kg	0.0471	0.00839	1	05/11/22 03:10	05/12/22 15:36	120-12-7	
Benzoic acid	ND	mg/kg	2.36	0.167	1	05/11/22 03:10	05/12/22 15:36	65-85-0	
Benzo(a)anthracene	ND	mg/kg	0.0471	0.00830	1	05/11/22 03:10	05/12/22 15:36	56-55-3	
Benzo(b)fluoranthene	ND	mg/kg	0.0471	0.00878	1	05/11/22 03:10	05/12/22 15:36	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0471	0.00837	1	05/11/22 03:10	05/12/22 15:36	207-08-9	
Benzo(g,h,i)perylene	ND	mg/kg	0.0471	0.00861	1	05/11/22 03:10	05/12/22 15:36	191-24-2	
Benzo(a)pyrene	ND	mg/kg	0.0471	0.00876	1	05/11/22 03:10	05/12/22 15:36	50-32-8	
Carbazole	ND	mg/kg	0.471	0.0146	1	05/11/22 03:10	05/12/22 15:36	86-74-8	
Chrysene	ND	mg/kg	0.0471	0.00936	1	05/11/22 03:10	05/12/22 15:36	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0471	0.0131	1	05/11/22 03:10	05/12/22 15:36	53-70-3	
Dibenzofuran	ND	mg/kg	0.471	0.0154	1	05/11/22 03:10	05/12/22 15:36	132-64-9	
Fluoranthene	ND	mg/kg	0.0471	0.00850	1	05/11/22 03:10	05/12/22 15:36	206-44-0	
Fluorene	ND	mg/kg	0.0471	0.00767	1	05/11/22 03:10	05/12/22 15:36	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0471	0.0133	1	05/11/22 03:10	05/12/22 15:36	193-39-5	

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## ANALYTICAL RESULTS

Project: D3593500-Revised Report  
Pace Project No.: 10606394

**Sample: BNSF-BG15-042722-0-10    Lab ID: 10606394002    Collected: 04/27/22 09:25    Received: 04/29/22 08:50    Matrix: Solid**

**Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.**

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E    Preparation Method: 3546									
Pace National - Mt. Juliet									
1-Methylnaphthalene	ND	mg/kg	0.0471	0.00603	1	05/11/22 03:10	05/12/22 15:36	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0471	0.00611	1	05/11/22 03:10	05/12/22 15:36	91-57-6	
Naphthalene	ND	mg/kg	0.0471	0.0118	1	05/11/22 03:10	05/12/22 15:36	91-20-3	
Phenanthrene	ND	mg/kg	0.0471	0.00935	1	05/11/22 03:10	05/12/22 15:36	85-01-8	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.471	0.0597	1	05/11/22 03:10	05/12/22 15:36	117-81-7	
Di-n-butylphthalate	ND	mg/kg	0.471	0.0161	1	05/11/22 03:10	05/12/22 15:36	84-74-2	
Di-n-octylphthalate	ND	mg/kg	0.471	0.0318	1	05/11/22 03:10	05/12/22 15:36	117-84-0	
Pyrene	ND	mg/kg	0.0471	0.00917	1	05/11/22 03:10	05/12/22 15:36	129-00-0	
3&4-Methylphenol(m&p Cresol)	<b>0.0455J</b>	mg/kg	0.471	0.0147	1	05/11/22 03:10	05/12/22 15:36		J
Pentachlorophenol	ND	mg/kg	0.471	0.0127	1	05/11/22 03:10	05/12/22 15:36	87-86-5	
Phenol	ND	mg/kg	0.471	0.0190	1	05/11/22 03:10	05/12/22 15:36	108-95-2	
<b>Surrogates</b>									
2-Fluorophenol (S)	43.0	%	12.0-120		1	05/11/22 03:10	05/12/22 15:36	367-12-4	
Phenol-d5 (S)	40.1	%	10.0-120		1	05/11/22 03:10	05/12/22 15:36	4165-62-2	
Nitrobenzene-d5 (S)	41.6	%	10.0-122		1	05/11/22 03:10	05/12/22 15:36	4165-60-0	
2-Fluorobiphenyl (S)	41.0	%	15.0-120		1	05/11/22 03:10	05/12/22 15:36	321-60-8	
2,4,6-Tribromophenol (S)	48.8	%	10.0-127		1	05/11/22 03:10	05/12/22 15:36	118-79-6	
p-Terphenyl-d14 (S)	48.0	%	10.0-120		1	05/11/22 03:10	05/12/22 15:36	1718-51-0	
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G    Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>70.7</b>	%			1	05/03/22 15:38	05/03/22 15:50		
<b>Wet Chemistry 9034/9030B</b>									
Analytical Method: EPA 9030B    Preparation Method: 9030B									
Pace National - Mt. Juliet									
Sulfide	ND	mg/kg	106	42.4	1	05/02/22 16:22	05/04/22 19:00	18496-25-8	

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## ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606394

**Sample: BNSF-BG16-042722-0-10**    **Lab ID: 10606394003**    Collected: 04/27/22 09:45    Received: 04/29/22 08:50    Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Pace Analytical Services - Minneapolis									
Diesel Fuel Range	ND	mg/kg	20.0	9.2	1	04/29/22 17:05	05/11/22 10:04	68334-30-5	
Motor Oil Range	<b>18.0</b>	mg/kg	13.4	6.7	1	04/29/22 17:05	05/11/22 10:04		
<b>Surrogates</b>									
n-Triacontane (S)	83	%	50-150		1	04/29/22 17:05	05/11/22 10:04		
o-Terphenyl (S)	85	%	50-150		1	04/29/22 17:05	05/11/22 10:04	84-15-1	
<b>6020B MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3050B									
Pace Analytical Services - Minneapolis									
Arsenic	<b>0.16J</b>	mg/kg	0.67	0.15	1	05/03/22 17:29	05/05/22 19:12	7440-38-2	
Cadmium	ND	mg/kg	0.11	0.042	1	05/03/22 17:29	05/05/22 19:12	7440-43-9	
Chromium	<b>2.3J</b>	mg/kg	2.7	0.19	1	05/03/22 17:29	05/05/22 19:12	7440-47-3	
Copper	<b>6.0</b>	mg/kg	1.3	0.33	1	05/03/22 17:29	05/05/22 19:12	7440-50-8	
Lead	<b>0.26J</b>	mg/kg	0.67	0.040	1	05/03/22 17:29	05/05/22 19:12	7439-92-1	
Nickel	<b>2.3</b>	mg/kg	0.67	0.27	1	05/03/22 17:29	05/05/22 19:12	7440-02-0	
Selenium	ND	mg/kg	0.67	0.12	1	05/03/22 17:29	05/05/22 19:12	7782-49-2	
Silver	ND	mg/kg	0.67	0.19	1	05/03/22 17:29	05/05/22 19:12	7440-22-4	
Zinc	<b>7.1</b>	mg/kg	6.7	1.2	1	05/03/22 17:29	05/05/22 19:12	7440-66-6	
<b>7471B Mercury</b>									
Analytical Method: EPA 7471B    Preparation Method: EPA 7471B									
Pace Analytical Services - Minneapolis									
Mercury	ND	mg/kg	0.027	0.012	1	05/03/22 12:07	05/10/22 12:38	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>26.5</b>	%	0.10	0.10	1		04/29/22 13:03		N2
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E    Preparation Method: 3546									
Pace National - Mt. Juliet									
Acenaphthene	ND	mg/kg	0.0433	0.00700	1	05/11/22 03:10	05/12/22 10:18	83-32-9	
Acenaphthylene	ND	mg/kg	0.0433	0.00609	1	05/11/22 03:10	05/12/22 10:18	208-96-8	
Anthracene	ND	mg/kg	0.0433	0.00771	1	05/11/22 03:10	05/12/22 10:18	120-12-7	
Benzoic acid	ND	mg/kg	2.17	0.153	1	05/11/22 03:10	05/12/22 10:18	65-85-0	
Benzo(a)anthracene	ND	mg/kg	0.0433	0.00763	1	05/11/22 03:10	05/12/22 10:18	56-55-3	
Benzo(b)fluoranthene	ND	mg/kg	0.0433	0.00807	1	05/11/22 03:10	05/12/22 10:18	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0433	0.00769	1	05/11/22 03:10	05/12/22 10:18	207-08-9	
Benzo(g,h,i)perylene	ND	mg/kg	0.0433	0.00791	1	05/11/22 03:10	05/12/22 10:18	191-24-2	
Benzo(a)pyrene	ND	mg/kg	0.0433	0.00804	1	05/11/22 03:10	05/12/22 10:18	50-32-8	
Carbazole	ND	mg/kg	0.433	0.0134	1	05/11/22 03:10	05/12/22 10:18	86-74-8	
Chrysene	ND	mg/kg	0.0433	0.00860	1	05/11/22 03:10	05/12/22 10:18	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0433	0.0120	1	05/11/22 03:10	05/12/22 10:18	53-70-3	
Dibenzofuran	ND	mg/kg	0.433	0.0142	1	05/11/22 03:10	05/12/22 10:18	132-64-9	
Fluoranthene	ND	mg/kg	0.0433	0.00781	1	05/11/22 03:10	05/12/22 10:18	206-44-0	
Fluorene	ND	mg/kg	0.0433	0.00704	1	05/11/22 03:10	05/12/22 10:18	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0433	0.0122	1	05/11/22 03:10	05/12/22 10:18	193-39-5	

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### ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606394

**Sample: BNSF-BG16-042722-0-10 Lab ID: 10606394003** Collected: 04/27/22 09:45 Received: 04/29/22 08:50 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
1-Methylnaphthalene	ND	mg/kg	0.0433	0.00554	1	05/11/22 03:10	05/12/22 10:18	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0433	0.00561	1	05/11/22 03:10	05/12/22 10:18	91-57-6	
Naphthalene	ND	mg/kg	0.0433	0.0109	1	05/11/22 03:10	05/12/22 10:18	91-20-3	
Phenanthrene	ND	mg/kg	0.0433	0.00859	1	05/11/22 03:10	05/12/22 10:18	85-01-8	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.433	0.0548	1	05/11/22 03:10	05/12/22 10:18	117-81-7	
Di-n-butylphthalate	ND	mg/kg	0.433	0.0148	1	05/11/22 03:10	05/12/22 10:18	84-74-2	
Di-n-octylphthalate	ND	mg/kg	0.433	0.0292	1	05/11/22 03:10	05/12/22 10:18	117-84-0	
Pyrene	ND	mg/kg	0.0433	0.00842	1	05/11/22 03:10	05/12/22 10:18	129-00-0	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.433	0.0135	1	05/11/22 03:10	05/12/22 10:18		
Pentachlorophenol	ND	mg/kg	0.433	0.0116	1	05/11/22 03:10	05/12/22 10:18	87-86-5	
Phenol	ND	mg/kg	0.433	0.0174	1	05/11/22 03:10	05/12/22 10:18	108-95-2	
<b>Surrogates</b>									
2-Fluorophenol (S)	55.1	%	12.0-120		1	05/11/22 03:10	05/12/22 10:18	367-12-4	
Phenol-d5 (S)	53.5	%	10.0-120		1	05/11/22 03:10	05/12/22 10:18	4165-62-2	
Nitrobenzene-d5 (S)	55.3	%	10.0-122		1	05/11/22 03:10	05/12/22 10:18	4165-60-0	
2-Fluorobiphenyl (S)	49.8	%	15.0-120		1	05/11/22 03:10	05/12/22 10:18	321-60-8	
2,4,6-Tribromophenol (S)	51.7	%	10.0-127		1	05/11/22 03:10	05/12/22 10:18	118-79-6	
p-Terphenyl-d14 (S)	54.4	%	10.0-120		1	05/11/22 03:10	05/12/22 10:18	1718-51-0	
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>77.0</b>	%			1	05/04/22 10:20	05/04/22 10:53		
<b>Wet Chemistry 9034/9030B</b>									
Analytical Method: EPA 9030B Preparation Method: 9030B									
Pace National - Mt. Juliet									
Sulfide	ND	mg/kg	97.5	39.0	1	05/02/22 16:22	05/04/22 19:00	18496-25-8	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606394

**Sample: BNSF-BG17-042722-0-10 Lab ID: 10606394004** Collected: 04/27/22 10:05 Received: 04/29/22 08:50 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Pace Analytical Services - Minneapolis									
Diesel Fuel Range	<b>64.4</b>	mg/kg	29.8	13.8	1	04/29/22 17:05	05/11/22 10:26	68334-30-5	
Motor Oil Range	<b>363</b>	mg/kg	19.9	9.9	1	04/29/22 17:05	05/11/22 10:26		
<b>Surrogates</b>									
n-Triacontane (S)	93	%	50-150		1	04/29/22 17:05	05/11/22 10:26		
o-Terphenyl (S)	90	%	50-150		1	04/29/22 17:05	05/11/22 10:26	84-15-1	
<b>6020B MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3050B									
Pace Analytical Services - Minneapolis									
Arsenic	<b>0.41J</b>	mg/kg	0.94	0.20	1	05/03/22 17:29	05/05/22 19:23	7440-38-2	
Cadmium	ND	mg/kg	0.15	0.059	1	05/03/22 17:29	05/05/22 19:23	7440-43-9	
Chromium	<b>3.9</b>	mg/kg	3.8	0.26	1	05/03/22 17:29	05/05/22 19:23	7440-47-3	
Copper	<b>8.4</b>	mg/kg	1.9	0.45	1	05/03/22 17:29	05/05/22 19:23	7440-50-8	
Lead	<b>0.59J</b>	mg/kg	0.94	0.055	1	05/03/22 17:29	05/05/22 19:23	7439-92-1	
Nickel	<b>2.8</b>	mg/kg	0.94	0.37	1	05/03/22 17:29	05/05/22 19:23	7440-02-0	
Selenium	ND	mg/kg	0.94	0.16	1	05/03/22 17:29	05/05/22 19:23	7782-49-2	
Silver	ND	mg/kg	0.94	0.27	1	05/03/22 17:29	05/05/22 19:23	7440-22-4	
Zinc	<b>9.4J</b>	mg/kg	9.4	1.7	1	05/03/22 17:29	05/05/22 19:23	7440-66-6	
<b>7471B Mercury</b>									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Minneapolis									
Mercury	<b>0.058</b>	mg/kg	0.035	0.015	1	05/03/22 12:07	05/10/22 12:43	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>50.2</b>	%	0.10	0.10	1		04/29/22 13:03		N2
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
Acenaphthene	ND	mg/kg	0.0573	0.00928	1	05/11/22 03:10	05/12/22 11:21	83-32-9	
Acenaphthylene	ND	mg/kg	0.0573	0.00807	1	05/11/22 03:10	05/12/22 11:21	208-96-8	
Anthracene	ND	mg/kg	0.0573	0.0102	1	05/11/22 03:10	05/12/22 11:21	120-12-7	
Benzoic acid	ND	mg/kg	2.87	0.203	1	05/11/22 03:10	05/12/22 11:21	65-85-0	
Benzo(a)anthracene	ND	mg/kg	0.0573	0.0101	1	05/11/22 03:10	05/12/22 11:21	56-55-3	
Benzo(b)fluoranthene	ND	mg/kg	0.0573	0.0107	1	05/11/22 03:10	05/12/22 11:21	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0573	0.0102	1	05/11/22 03:10	05/12/22 11:21	207-08-9	
Benzo(g,h,i)perylene	ND	mg/kg	0.0573	0.0105	1	05/11/22 03:10	05/12/22 11:21	191-24-2	
Benzo(a)pyrene	ND	mg/kg	0.0573	0.0107	1	05/11/22 03:10	05/12/22 11:21	50-32-8	
Carbazole	ND	mg/kg	0.573	0.0177	1	05/11/22 03:10	05/12/22 11:21	86-74-8	
Chrysene	ND	mg/kg	0.0573	0.0114	1	05/11/22 03:10	05/12/22 11:21	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0573	0.0159	1	05/11/22 03:10	05/12/22 11:21	53-70-3	
Dibenzofuran	ND	mg/kg	0.573	0.0188	1	05/11/22 03:10	05/12/22 11:21	132-64-9	
Fluoranthene	ND	mg/kg	0.0573	0.0103	1	05/11/22 03:10	05/12/22 11:21	206-44-0	
Fluorene	ND	mg/kg	0.0573	0.00933	1	05/11/22 03:10	05/12/22 11:21	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0573	0.0162	1	05/11/22 03:10	05/12/22 11:21	193-39-5	

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### ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606394

**Sample: BNSF-BG17-042722-0-10 Lab ID: 10606394004** Collected: 04/27/22 10:05 Received: 04/29/22 08:50 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
1-Methylnaphthalene	ND	mg/kg	0.0573	0.00733	1	05/11/22 03:10	05/12/22 11:21	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0573	0.00744	1	05/11/22 03:10	05/12/22 11:21	91-57-6	
Naphthalene	ND	mg/kg	0.0573	0.0144	1	05/11/22 03:10	05/12/22 11:21	91-20-3	
Phenanthrene	ND	mg/kg	0.0573	0.0114	1	05/11/22 03:10	05/12/22 11:21	85-01-8	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.573	0.0726	1	05/11/22 03:10	05/12/22 11:21	117-81-7	
Di-n-butylphthalate	ND	mg/kg	0.573	0.0196	1	05/11/22 03:10	05/12/22 11:21	84-74-2	
Di-n-octylphthalate	ND	mg/kg	0.573	0.0387	1	05/11/22 03:10	05/12/22 11:21	117-84-0	
Pyrene	ND	mg/kg	0.0573	0.0112	1	05/11/22 03:10	05/12/22 11:21	129-00-0	
3&4-Methylphenol(m&p Cresol)	<b>0.127J</b>	mg/kg	0.573	0.0179	1	05/11/22 03:10	05/12/22 11:21		J
Pentachlorophenol	ND	mg/kg	0.573	0.0154	1	05/11/22 03:10	05/12/22 11:21	87-86-5	
Phenol	ND	mg/kg	0.573	0.0231	1	05/11/22 03:10	05/12/22 11:21	108-95-2	
<b>Surrogates</b>									
2-Fluorophenol (S)	54.7	%	12.0-120		1	05/11/22 03:10	05/12/22 11:21	367-12-4	
Phenol-d5 (S)	54.3	%	10.0-120		1	05/11/22 03:10	05/12/22 11:21	4165-62-2	
Nitrobenzene-d5 (S)	56.2	%	10.0-122		1	05/11/22 03:10	05/12/22 11:21	4165-60-0	
2-Fluorobiphenyl (S)	52.2	%	15.0-120		1	05/11/22 03:10	05/12/22 11:21	321-60-8	
2,4,6-Tribromophenol (S)	63.8	%	10.0-127		1	05/11/22 03:10	05/12/22 11:21	118-79-6	
p-Terphenyl-d14 (S)	50.9	%	10.0-120		1	05/11/22 03:10	05/12/22 11:21	1718-51-0	
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>58.1</b>	%			1	05/04/22 10:20	05/04/22 10:53		
<b>Wet Chemistry 9034/9030B</b>									
Analytical Method: EPA 9030B Preparation Method: 9030B									
Pace National - Mt. Juliet									
Sulfide	ND	mg/kg	129	51.6	1	05/02/22 16:22	05/04/22 19:00	18496-25-8	

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606394

QC Batch:	812439	Analysis Method:	EPA 7471B
QC Batch Method:	EPA 7471B	Analysis Description:	7471B Mercury Solids
		Laboratory:	Pace Analytical Services - Minneapolis

Associated Lab Samples: 10606394001, 10606394002, 10606394003, 10606394004

METHOD BLANK: 4308604 Matrix: Solid  
Associated Lab Samples: 10606394001, 10606394002, 10606394003, 10606394004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.018	0.0080	05/10/22 12:27	

LABORATORY CONTROL SAMPLE: 4308605

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.48	0.49	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308606 4308607

Parameter	Units	4308606		4308607		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10606394001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Mercury	mg/kg	0.025J	0.81	0.79	0.86	0.81	102	100	80-120	6	20

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### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: D3593500-Revised Report

Pace Project No.: 10606394

QC Batch: 812437 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3050B Analysis Description: 6020B Solids UPD5  
 Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10606394001, 10606394002, 10606394003, 10606394004

METHOD BLANK: 4308596 Matrix: Solid

Associated Lab Samples: 10606394001, 10606394002, 10606394003, 10606394004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	ND	0.47	0.10	05/05/22 18:39	
Cadmium	mg/kg	ND	0.075	0.029	05/05/22 18:39	
Chromium	mg/kg	ND	1.9	0.13	05/05/22 18:39	
Copper	mg/kg	ND	0.94	0.23	05/05/22 18:39	
Lead	mg/kg	ND	0.47	0.028	05/05/22 18:39	
Nickel	mg/kg	ND	0.47	0.19	05/05/22 18:39	
Selenium	mg/kg	ND	0.47	0.080	05/05/22 18:39	
Silver	mg/kg	ND	0.47	0.14	05/05/22 18:39	
Zinc	mg/kg	1.0J	4.7	0.84	05/05/22 18:39	

LABORATORY CONTROL SAMPLE: 4308597

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	49.2	44.3	90	80-120	
Cadmium	mg/kg	49.2	44.3	90	80-120	
Chromium	mg/kg	49.2	45.7	93	80-120	
Copper	mg/kg	49.2	46.2	94	80-120	
Lead	mg/kg	49.2	45.6	93	80-120	
Nickel	mg/kg	49.2	46.6	95	80-120	
Selenium	mg/kg	49.2	48.4	98	80-120	
Silver	mg/kg	24.6	23.6	96	80-120	
Zinc	mg/kg	49.2	45.5	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308598 4308599

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10606046001 Result	Spike Conc.	Spike Conc.	MS Result								
Arsenic	mg/kg	2.1	66.3	68.1	64.4	59.1	94	84	75-125	9	20		
Cadmium	mg/kg	0.089J	66.3	68.1	62.7	57.4	94	84	75-125	9	20		
Chromium	mg/kg	8.2	66.3	68.1	73.8	67.7	99	87	75-125	9	20		
Copper	mg/kg	7.7	66.3	68.1	73.2	66.8	99	87	75-125	9	20		
Lead	mg/kg	3.6	66.3	68.1	93.2	62.6	135	87	75-125	39	20	M1,R1	
Nickel	mg/kg	9.3	66.3	68.1	75.5	69.4	100	88	75-125	8	20		
Selenium	mg/kg	ND	66.3	68.1	65.1	60.9	98	89	75-125	7	20		
Silver	mg/kg	0.26J	33.2	34	33.3	30.6	100	89	75-125	8	20		
Zinc	mg/kg	32.3	66.3	68.1	97.9	89.2	99	84	75-125	9	20		

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606394

QC Batch:	812294	Analysis Method:	ASTM D2974
QC Batch Method:	ASTM D2974	Analysis Description:	Dry Weight / %M by ASTM D2974
		Laboratory:	Pace Analytical Services - Minneapolis

Associated Lab Samples: 10606394001, 10606394002, 10606394003, 10606394004

SAMPLE DUPLICATE: 4307525

Parameter	Units	10606390001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	33.2	32.1	4	30	N2

SAMPLE DUPLICATE: 4307526

Parameter	Units	10605980004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.3	9.4	0	30	N2

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report  
Pace Project No.: 10606394

QC Batch: 1860981 Analysis Method: EPA 8270E  
QC Batch Method: 3546 Analysis Description: SVOA (GC/MS) 8270E  
Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10606394001, 10606394002, 10606394003, 10606394004

METHOD BLANK: R3791358-2 Matrix: Solid  
Associated Lab Samples: 10606394001, 10606394002, 10606394003, 10606394004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	mg/kg	ND	0.0333	0.00539	05/12/22 06:29	
Acenaphthylene	mg/kg	ND	0.0333	0.00469	05/12/22 06:29	
Anthracene	mg/kg	ND	0.0333	0.00593	05/12/22 06:29	
Benzoic acid	mg/kg	ND	1.67	0.118	05/12/22 06:29	
Benzo(a)anthracene	mg/kg	ND	0.0333	0.00587	05/12/22 06:29	
Benzo(b)fluoranthene	mg/kg	ND	0.0333	0.00621	05/12/22 06:29	
Benzo(k)fluoranthene	mg/kg	ND	0.0333	0.00592	05/12/22 06:29	
Benzo(g,h,i)perylene	mg/kg	ND	0.0333	0.00609	05/12/22 06:29	
Benzo(a)pyrene	mg/kg	ND	0.0333	0.00619	05/12/22 06:29	
Carbazole	mg/kg	ND	0.333	0.0103	05/12/22 06:29	
Chrysene	mg/kg	ND	0.0333	0.00662	05/12/22 06:29	
Dibenz(a,h)anthracene	mg/kg	ND	0.0333	0.00923	05/12/22 06:29	
Dibenzofuran	mg/kg	ND	0.333	0.0109	05/12/22 06:29	
Fluoranthene	mg/kg	ND	0.0333	0.00601	05/12/22 06:29	
Fluorene	mg/kg	ND	0.0333	0.00542	05/12/22 06:29	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.0333	0.00941	05/12/22 06:29	
1-Methylnaphthalene	mg/kg	ND	0.0333	0.00426	05/12/22 06:29	
2-Methylnaphthalene	mg/kg	ND	0.0333	0.00432	05/12/22 06:29	
Naphthalene	mg/kg	ND	0.0333	0.00836	05/12/22 06:29	
Phenanthrene	mg/kg	ND	0.0333	0.00661	05/12/22 06:29	
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.333	0.0422	05/12/22 06:29	
Di-n-butylphthalate	mg/kg	ND	0.333	0.0114	05/12/22 06:29	
Di-n-octylphthalate	mg/kg	ND	0.333	0.0225	05/12/22 06:29	
Pyrene	mg/kg	ND	0.0333	0.00648	05/12/22 06:29	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.333	0.0104	05/12/22 06:29	
Pentachlorophenol	mg/kg	ND	0.333	0.00896	05/12/22 06:29	
Phenol	mg/kg	ND	0.333	0.0134	05/12/22 06:29	
2-Fluorophenol (S)	%	62.8	12.0-120		05/12/22 06:29	
Phenol-d5 (S)	%	61.9	10.0-120		05/12/22 06:29	
Nitrobenzene-d5 (S)	%	64.9	10.0-122		05/12/22 06:29	
2-Fluorobiphenyl (S)	%	56.2	15.0-120		05/12/22 06:29	
2,4,6-Tribromophenol (S)	%	54.2	10.0-127		05/12/22 06:29	
p-Terphenyl-d14 (S)	%	64	10.0-120		05/12/22 06:29	

LABORATORY CONTROL SAMPLE: R3791358-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	mg/kg	0.666	0.418	62.8	38.0-120	
Acenaphthylene	mg/kg	0.666	0.440	66.1	40.0-120	

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606394

LABORATORY CONTROL SAMPLE: R3791358-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Anthracene	mg/kg	0.666	0.419	62.9	42.0-120	
Benzoic acid	mg/kg	1.33	0.211	15.9	10.0-120	
Benzo(a)anthracene	mg/kg	0.666	0.435	65.3	44.0-120	
Benzo(b)fluoranthene	mg/kg	0.666	0.395	59.3	43.0-120	
Benzo(k)fluoranthene	mg/kg	0.666	0.400	60.1	44.0-120	
Benzo(g,h,i)perylene	mg/kg	0.666	0.434	65.2	43.0-120	
Benzo(a)pyrene	mg/kg	0.666	0.433	65.0	45.0-120	
Carbazole	mg/kg	0.666	0.405	60.8	48.0-120	
Chrysene	mg/kg	0.666	0.441	66.2	43.0-120	
Dibenz(a,h)anthracene	mg/kg	0.666	0.403	60.5	44.0-120	
Dibenzofuran	mg/kg	0.666	0.413	62.0	44.0-120	
Fluoranthene	mg/kg	0.666	0.419	62.9	44.0-120	
Fluorene	mg/kg	0.666	0.414	62.2	41.0-120	
Indeno(1,2,3-cd)pyrene	mg/kg	0.666	0.415	62.3	45.0-120	
1-Methylnaphthalene	mg/kg	0.666	0.330	49.5	34.0-120	
2-Methylnaphthalene	mg/kg	0.666	0.317	47.6	34.0-120	
Naphthalene	mg/kg	0.666	0.323	48.5	18.0-120	
Phenanthrene	mg/kg	0.666	0.414	62.2	42.0-120	
bis(2-Ethylhexyl)phthalate	mg/kg	0.666	0.523	78.5	41.0-120	
Di-n-butylphthalate	mg/kg	0.666	0.481	72.2	43.0-120	
Di-n-octylphthalate	mg/kg	0.666	0.485	72.8	40.0-120	
Pyrene	mg/kg	0.666	0.425	63.8	41.0-120	
3&4-Methylphenol(m&p Cresol)	mg/kg	0.666	0.459	68.9	42.0-120	
Pentachlorophenol	mg/kg	0.666	0.390	58.6	29.0-120	
Phenol	mg/kg	0.666	0.395	59.3	28.0-120	
2-Fluorophenol (S)	%			59.3	12.0-120	
Phenol-d5 (S)	%			59.8	10.0-120	
Nitrobenzene-d5 (S)	%			54.4	10.0-122	
2-Fluorobiphenyl (S)	%			60.7	15.0-120	
2,4,6-Tribromophenol (S)	%			68.2	10.0-127	
p-Terphenyl-d14 (S)	%			64.3	10.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3791358-3 R3791358-4

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		L1488161-03 Result	Spike Conc.	Spike Conc.	Conc.								
Acenaphthene	mg/kg	ND	0.828	0.833	0.392	0.337	47.3	40.5	18.0-120	14.9	32		
Acenaphthylene	mg/kg	ND	0.828	0.833	0.406	0.335	49.1	40.2	25.0-120	19.3	32		
Anthracene	mg/kg	ND	0.828	0.833	0.448	0.339	54.1	40.7	22.0-120	27.7	29		
Benzoic acid	mg/kg	ND	1.66	1.66	1.24	0.806	74.7	48.5	10.0-152	42.5	40	R1	
Benzo(a)anthracene	mg/kg	ND	0.828	0.833	0.448	0.353	54.1	42.4	25.0-120	23.7	29		
Benzo(b)fluoranthene	mg/kg	ND	0.828	0.833	0.446	0.353	53.9	42.4	19.0-122	23.4	31		
Benzo(k)fluoranthene	mg/kg	ND	0.828	0.833	0.472	0.352	57.1	42.2	23.0-120	29.3	30		
Benzo(g,h,i)perylene	mg/kg	ND	0.828	0.833	0.428	0.345	51.7	41.4	10.0-120	21.5	33		
Benzo(a)pyrene	mg/kg	ND	0.828	0.833	0.497	0.389	60.0	46.7	24.0-120	24.3	30		

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606394

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3791358-3												R3791358-4											
Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual										
		L1488161-03 Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec															
Carbazole	mg/kg	ND	0.828	0.833	0.449	0.322	54.2	38.6	31.0-120	33.0	24	R1											
Chrysene	mg/kg	ND	0.828	0.833	0.441	0.347	53.3	41.6	21.0-120	24.1	29												
Dibenz(a,h)anthracene	mg/kg	ND	0.828	0.833	0.465	0.349	56.1	41.9	10.0-120	28.4	32												
Dibenzofuran	mg/kg	ND	0.828	0.833	0.393	0.328	47.5	39.4	24.0-120	18.0	30												
Fluoranthene	mg/kg	ND	0.828	0.833	0.458	0.348	55.3	41.7	18.0-126	27.4	32												
Fluorene	mg/kg	ND	0.828	0.833	0.397	0.339	48.0	40.7	25.0-120	15.9	30												
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.828	0.833	0.456	0.336	55.0	40.3	10.0-120	30.2	32												
1-Methylnaphthalene	mg/kg	ND	0.828	0.833	0.374	0.299	45.1	35.8	10.0-120	22.4	36												
2-Methylnaphthalene	mg/kg	ND	0.828	0.833	0.352	0.288	42.5	34.6	10.0-120	19.9	37												
Naphthalene	mg/kg	ND	0.828	0.833	0.356	0.295	42.9	35.4	10.0-120	18.8	35												
Phenanthrene	mg/kg	ND	0.828	0.833	0.457	0.340	55.2	40.8	17.0-120	29.3	31												
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.828	0.833	0.546	0.389	66.0	46.7	17.0-126	33.6	30	R1											
Di-n-butylphthalate	mg/kg	ND	0.828	0.833	0.549	0.404	66.3	48.4	30.0-120	30.5	29	R1											
Di-n-octylphthalate	mg/kg	ND	0.828	0.833	0.515	0.382	62.2	45.8	21.0-123	29.8	29	R1											
Pyrene	mg/kg	ND	0.828	0.833	0.404	0.331	48.7	39.7	16.0-121	19.8	32												
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.828	0.833	0.478	0.345	57.7	41.4	12.0-123	32.2	38												
Pentachlorophenol	mg/kg	ND	0.828	0.833	0.494	0.322	59.7	38.6	10.0-160	42.3	31	R1											
Phenol	mg/kg	ND	0.828	0.833	0.383	0.322	46.2	38.6	12.0-120	17.3	38												
2-Fluorophenol (S)	%						45.9	36.4	12.0-120														
Phenol-d5 (S)	%						45.1	37.7	10.0-120														
Nitrobenzene-d5 (S)	%						46.7	34.9	10.0-122														
2-Fluorobiphenyl (S)	%						42.3	35.8	15.0-120														
2,4,6-Tribromophenol (S)	%						60.0	41.9	10.0-127														
p-Terphenyl-d14 (S)	%						50.5	38.3	10.0-120														

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### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: D3593500-Revised Report

Pace Project No.: 10606394

QC Batch: 812360 Analysis Method: NWTPH-Dx  
 QC Batch Method: EPA 3550 Analysis Description: NWTPH-Dx GCS  
 Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10606394001, 10606394002, 10606394003, 10606394004

METHOD BLANK: 4307793 Matrix: Solid  
 Associated Lab Samples: 10606394001, 10606394002, 10606394003, 10606394004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Diesel Fuel Range	mg/kg	ND	15.0	6.9	05/02/22 19:37	
Motor Oil Range	mg/kg	ND	10.0	5.0	05/02/22 19:37	
n-Triacontane (S)	%	91	50-150		05/02/22 19:37	
o-Terphenyl (S)	%	80	50-150		05/02/22 19:37	

LABORATORY CONTROL SAMPLE: 4307794

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel Range	mg/kg	50	41.4	83	50-150	
Motor Oil Range	mg/kg	50	46.6	93	50-150	
n-Triacontane (S)	%			82	50-150	
o-Terphenyl (S)	%			84	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4307905 4307906

Parameter	Units	10606463001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
			Spike Conc.	Spike Conc.	Result	Result					
Diesel Fuel Range	mg/kg	ND	49	49.2	41.2	39.4	83	79	50-150	5	30
Motor Oil Range	mg/kg	ND	49	49.2	46.9	46.9	88	88	50-150	0	30
n-Triacontane (S)	%						80	78	50-150		
o-Terphenyl (S)	%						79	73	50-150		

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**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606394

QC Batch: 1857874

Analysis Method: SM 2540G

QC Batch Method: SM 2540 G

Analysis Description: Total Solids 2540 G-2011

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10606394001, 10606394002

METHOD BLANK: R3787827-1

Matrix: Solid

Associated Lab Samples: 10606394001, 10606394002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	ND			05/03/22 15:50	

LABORATORY CONTROL SAMPLE: R3787827-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	85.0-115	

SAMPLE DUPLICATE: R3787827-3

Parameter	Units	L1488173-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	82.7	82.9	0.239	10	

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**QUALITY CONTROL DATA**

Project: D3593500-Revised Report

Pace Project No.: 10606394

QC Batch: 1858159	Analysis Method: SM 2540G
QC Batch Method: SM 2540 G	Analysis Description: Total Solids 2540 G-2011
	Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10606394003, 10606394004

METHOD BLANK: R3788267-1 Matrix: Solid

Associated Lab Samples: 10606394003, 10606394004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	0.00100			05/04/22 10:53	

LABORATORY CONTROL SAMPLE: R3788267-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	85.0-115	

SAMPLE DUPLICATE: R3788267-3

Parameter	Units	L1488260-04 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	84.4	83.4	1.11	10	

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606394

QC Batch: 1858884

Analysis Method: EPA 9030B

QC Batch Method: 9030B

Analysis Description: Wet Chemistry 9034/9030B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10606394001, 10606394002, 10606394003, 10606394004

METHOD BLANK: R3788164-1

Matrix: Solid

Associated Lab Samples: 10606394001, 10606394002, 10606394003, 10606394004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/kg	ND	75.0	30.0	05/04/22 19:00	

LABORATORY CONTROL SAMPLE: R3788164-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/kg	100	71.3	71.3	53.8-124	

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### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: D3593500-Revised Report

Pace Project No.: 10606394

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### SAMPLE QUALIFIERS

Sample: L1488161-03

[1] Semi Volatile Organic Compounds (GC/MS) by Method 8270E - Dilution due to matrix

### ANALYTE QUALIFIERS

J Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

R1 RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: D3593500-Revised Report  
Pace Project No.: 10606394

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10606394001	BNSF-BG14-042722-0-5.5	EPA 3550	812360	NWTPH-Dx	812833
10606394002	BNSF-BG15-042722-0-10	EPA 3550	812360	NWTPH-Dx	812833
10606394003	BNSF-BG16-042722-0-10	EPA 3550	812360	NWTPH-Dx	812833
10606394004	BNSF-BG17-042722-0-10	EPA 3550	812360	NWTPH-Dx	812833
10606394001	BNSF-BG14-042722-0-5.5	EPA 3050B	812437	EPA 6020B	813004
10606394002	BNSF-BG15-042722-0-10	EPA 3050B	812437	EPA 6020B	813004
10606394003	BNSF-BG16-042722-0-10	EPA 3050B	812437	EPA 6020B	813004
10606394004	BNSF-BG17-042722-0-10	EPA 3050B	812437	EPA 6020B	813004
10606394001	BNSF-BG14-042722-0-5.5	EPA 7471B	812439	EPA 7471B	813107
10606394002	BNSF-BG15-042722-0-10	EPA 7471B	812439	EPA 7471B	813107
10606394003	BNSF-BG16-042722-0-10	EPA 7471B	812439	EPA 7471B	813107
10606394004	BNSF-BG17-042722-0-10	EPA 7471B	812439	EPA 7471B	813107
10606394001	BNSF-BG14-042722-0-5.5	ASTM D2974	812294		
10606394002	BNSF-BG15-042722-0-10	ASTM D2974	812294		
10606394003	BNSF-BG16-042722-0-10	ASTM D2974	812294		
10606394004	BNSF-BG17-042722-0-10	ASTM D2974	812294		
10606394001	BNSF-BG14-042722-0-5.5	3546	1860981	EPA 8270E	1860981
10606394002	BNSF-BG15-042722-0-10	3546	1860981	EPA 8270E	1860981
10606394003	BNSF-BG16-042722-0-10	3546	1860981	EPA 8270E	1860981
10606394004	BNSF-BG17-042722-0-10	3546	1860981	EPA 8270E	1860981
10606394001	BNSF-BG14-042722-0-5.5	SM 2540 G	1857874	SM 2540G	1857874
10606394002	BNSF-BG15-042722-0-10	SM 2540 G	1857874	SM 2540G	1857874
10606394003	BNSF-BG16-042722-0-10	SM 2540 G	1858159	SM 2540G	1858159
10606394004	BNSF-BG17-042722-0-10	SM 2540 G	1858159	SM 2540G	1858159
10606394001	BNSF-BG14-042722-0-5.5	9030B	1858884	EPA 9030B	1858884
10606394002	BNSF-BG15-042722-0-10	9030B	1858884	EPA 9030B	1858884
10606394003	BNSF-BG16-042722-0-10	9030B	1858884	EPA 9030B	1858884
10606394004	BNSF-BG17-042722-0-10	9030B	1858884	EPA 9030B	1858884

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DC#\_Title: ENV-FRM-MIN4-0149 v03\_Sample Condition Upon Receipt (SCUR) - ESI

Effective Date: 04/12/2022

Sample Condition Upon Receipt - ESI Tech Specs

Client Name:

Project #:

WO#: 10606394

PM: KV

Due Date: 05/20/22

CLIENT: BNSF\_Jacobs

Courier:

Fed Ex  UPS  USPS  Client  Pace  Speedee  Commercial

Tracking Number:

8150 1600 5015

See Exceptions  ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present?  Yes  No

Seals Intact?  Yes  No

Biological Tissue Frozen?  Yes  No  N/A

Packing Material:  Bubble Wrap  Bubble Bags  None  Other: \_\_\_\_\_

Temp Blank?  Yes  No

Thermometer:

T1(0461)  T2(1336)  T3(0459)  T4(0254)  T5(0489)  T6(0235)  T7(0042)

Type of Ice:  Wet  Blue  None  Dry  Melted

Temp should be above freezing to 6°C

Cooler Temp Read w/temp blank: 2.5 °C

Average Corrected Temp

(no temp blank only):

See Exceptions ENV-FRM-MIN4-0142  1 Container

Correction Factor: none

Cooler Temp Corrected w/temp blank: 2.5 °C

USDA Regulated Soil: {  N/A, water sample/Other: \_\_\_\_\_ }

Date/initials of Person Examining Contents: 5/12/22 RF

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MIN4-0154) and include with SCUR/COC paperwork.

		COMMENTS:
Chain of Custody Present and Filled Out?	<input type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Sampler Name and/or Signature on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. <input type="checkbox"/> Fecal Coliform <input type="checkbox"/> HPC <input type="checkbox"/> Total Coliform/E coli <input type="checkbox"/> BOD/cBOD <input type="checkbox"/> Hex Chrome <input type="checkbox"/> Turbidity <input type="checkbox"/> Nitrate <input type="checkbox"/> Nitrite <input type="checkbox"/> Orthophos <input type="checkbox"/> Other _____
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Sufficient Sample Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7.
Triple Volume Provided for MS/MSD (if more than 10 samples)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Field Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10. Is sediment visible in the dissolved container? <input type="checkbox"/> Yes <input type="checkbox"/> No
Is sufficient information available to reconcile the samples to the COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. If no, write ID/ Date/Time on Container Below: See Exception <input type="checkbox"/> ENV-FRM-MIN4-0142
Matrix: <input type="checkbox"/> Water <input checked="" type="checkbox"/> Soil <input type="checkbox"/> Oil <input type="checkbox"/> Other _____		12. Sample #  <input type="checkbox"/> NaOH <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> Zinc Acetate  Positive for Res. <input type="checkbox"/> Yes <input type="checkbox"/> No See Exception <input type="checkbox"/> ENV-FRM-MIN4-0142 Chlorine? <input type="checkbox"/> No pH Paper Lot# Res. Chlorine 0-6 Roll 0-6 Strip 0-14 Strip
All containers needing acid/base preservation have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , <2pH, NaOH >9 Sulfide, NaOH >10 Cyanide)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS *if adding preservative to a container it must be added to associated field and equipment blanks (verify with PM first)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Extra labels present on soil VOA or WIDRO containers?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. See Exception <input type="checkbox"/> ENV-FRM-MIN4-0140
Headspace in VOA Vials (greater than 6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
3 Trip Blanks Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14. Pace Trip Blank Lot # (if purchased):
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Temp Log: Temp must be maintained at <6°C during login, record temp every 20 mins	
Opened Time: 1134	Temp: 2.3
Time: 1150	Corrected Temp: 2.5
Time:	put in cooler
Time:	Corrected Temp:

CLIENT NOTIFICATION/RESOLUTION

Field Data Required?  Yes  No

Person Contacted:

Date/Time:

Comments/Resolution:

Project Manager Review:

Date: 5/19/22

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers)

Labeled by: RF (2)

14095



# Internal Transfer Chain of Custody



Samples Pre-Logged into eCOC.

State Of Origin: WA

Cert. Needed:  Yes  No

Owner Received Date: 4/29/2022

Results Requested By: 5/20/2022

Workorder: 10606394

Workorder Name: D3593500

Report To		Subcontract To				Requested Analysis																																																																																																																											
Kongmeng Vang Pace Analytical Minnesota 1700 Elm Street Minneapolis, MN 55414 Phone (612)607-1700		Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858																																																																																																																															
						<p style="text-align: center;">JCGU JGFU Preserved Containers</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <table border="1"> <thead> <tr> <th>Item</th> <th>Sample ID</th> <th>Sample Type</th> <th>Collect Date/Time</th> <th>Lab ID</th> <th>Matrix</th> <th>Unpreserved</th> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>BNSF-BG14-042722-0-5.5</td> <td>PS</td> <td>4/27/2022 09:00</td> <td>10606394001</td> <td>Solid</td> <td>2</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>2</td> <td>BNSF-BG15-042722-0-10</td> <td>PS</td> <td>4/27/2022 09:25</td> <td>10606394002</td> <td>Solid</td> <td>2</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>3</td> <td>BNSF-BG16-042722-0-10</td> <td>PS</td> <td>4/27/2022 09:45</td> <td>10606394003</td> <td>Solid</td> <td>23</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>4</td> <td>BNSF-BG17-042722-0-10</td> <td>PS</td> <td>4/27/2022 10:05</td> <td>10606394004</td> <td>Solid</td> <td>21</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table> </div> <div style="width: 55%;"> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">8270 SVOC - Pace National</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Sulfides SW9030 - Pace National</p> </div> </div>										Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved	1	2	3	4	5	6	7	8	9	10	11	12	1	BNSF-BG14-042722-0-5.5	PS	4/27/2022 09:00	10606394001	Solid	2													2	BNSF-BG15-042722-0-10	PS	4/27/2022 09:25	10606394002	Solid	2													3	BNSF-BG16-042722-0-10	PS	4/27/2022 09:45	10606394003	Solid	23													4	BNSF-BG17-042722-0-10	PS	4/27/2022 10:05	10606394004	Solid	21													5																		
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2																																																																																																																																	
3																																																																																																																																	
Cooler Temperature on Receipt		°C	Custody Seal Y or N		Received on Ice Y or N			Samples Intact Y or N																																																																																																																									

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.

This chain of custody is considered complete as is since this information is available in the owner laboratory.

JAAG

3.410=3.4

Sample Receipt Checklist

COC Seal Present/Intact:  Y  N If Applicable

COC Signed/Accurate:  Y  N VOA Zero Headspace:  Y  N

Bottles arrive intact:  Y  N Pres. Correct/Check:  Y  N

Correct bottles used:  Y  N

Sufficient volume sent:  Y  N

RAM Screen <0.5 μm/hr:  Y  N

5466 8884 5063



8270 SVOC List

<i>Semi-volatile Organic Compounds and Polycyclic</i>
3,6,4-Methylphenol
Benzoic acid
Bis(2-ethylhexyl) phthalate
Carbazole
Dibenzofuran
Di-n-butyl phthalate
Di-n-octyl phthalate
Pentachlorophenol
Phenol
1-Methylnaphthalene
2-Methylnaphthalene
Acenaphthene
Acenaphthylene
Anthracene
Benz(a)anthracene
Benzo(a)pyrene
Benzo(ghi)perylene
Chrysene
Dibenz(ah)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-cd)pyrene
Naphthalene
Phenanthrene
Pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene

L1488171

## ANALYTICAL REPORT

Eurofins Seattle  
5755 8th Street East  
Tacoma, WA 98424  
Tel: (253)922-2310

Laboratory Job ID: 580-113239-1  
Client Project/Site: D3593500 10606394  
Revision: 1

For:  
Pace Analytical Services, LLC  
1700 Elm Street  
Minneapolis, Minnesota 55414

Attn: Kongmeng Vang



Authorized for release by:  
5/26/2022 12:51:09 PM

Pauline Matlock, Project Manager  
(253)922-2310  
[Pauline.Matlock@et.eurofinsus.com](mailto:Pauline.Matlock@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

10606394

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions . . . . .	4
Client Sample Results . . . . .	5
QC Sample Results . . . . .	9
Chronicle . . . . .	11
Certification Summary . . . . .	13
Sample Summary . . . . .	14
Chain of Custody . . . . .	15
Receipt Checklists . . . . .	16

# Case Narrative

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606394

Job ID: 580-113239-1

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**Job ID: 580-113239-1**

---

**Laboratory: Eurofins Seattle**

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**Narrative**

**Job Narrative  
580-113239-1**

**Comments**

No additional comments.

**Revision**

The report being provided is a revision of the original report sent on 5/16/2022. The report (revision 1) is being revised due to: Client needs TOC reported by dry weight.

**Receipt**

The samples were received on 4/30/2022 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.2° C.

**General Chemistry**

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batches 580-390330 and 580-390484 and analytical batch 580-390698 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 9060A: The method blank for analytical batch 580-390132 contained Organic Carbon above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore re-extraction and re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.





# Definitions/Glossary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606394

Job ID: 580-113239-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606394

Job ID: 580-113239-1

**Client Sample ID: BNSF-BG14-042722-0-5.5**

**Lab Sample ID: 580-113239-1**

Date Collected: 04/27/22 09:00

Matrix: Solid

Date Received: 04/30/22 09:30

Percent Solids: 56.2

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	19000	B	3600	170	mg/Kg	☼		05/10/22 15:54	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	56.3		0.1	0.1	%			05/11/22 11:50	1
Percent Moisture	43.8		0.1	0.1	%			05/11/22 11:50	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	32	J F1	42	15	mg/Kg	☼	05/12/22 19:48	05/14/22 21:37	1



# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606394

Job ID: 580-113239-1

**Client Sample ID: BNSF-BG15-042722-0-10**

**Lab Sample ID: 580-113239-2**

Date Collected: 04/27/22 09:25

Matrix: Solid

Date Received: 04/30/22 09:30

Percent Solids: 68.6

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	6500	B	2900	140	mg/Kg	☼		05/10/22 15:50	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	68.6		0.1	0.1	%			05/11/22 11:50	1
Percent Moisture	31.4		0.1	0.1	%			05/11/22 11:50	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	22	J	35	12	mg/Kg	☼	05/12/22 19:48	05/14/22 21:37	1



# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606394

Job ID: 580-113239-1

**Client Sample ID: BNSF-BG16-042722-0-10**

**Lab Sample ID: 580-113239-3**

Date Collected: 04/27/22 09:45

Matrix: Solid

Date Received: 04/30/22 09:30

Percent Solids: 75.5

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	530	J B	2600	130	mg/Kg	☼		05/10/22 15:58	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	75.5		0.1	0.1	%			05/11/22 11:50	1
Percent Moisture	24.5		0.1	0.1	%			05/11/22 11:50	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		32	11	mg/Kg	☼	05/12/22 19:48	05/14/22 21:37	1



# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606394

Job ID: 580-113239-1

**Client Sample ID: BNSF-BG17-042722-0-10**

**Lab Sample ID: 580-113239-4**

Date Collected: 04/27/22 10:05

Matrix: Solid

Date Received: 04/30/22 09:30

Percent Solids: 53.9

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	31000	B	3700	180	mg/Kg	☼		05/10/22 16:03	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	53.9		0.1	0.1	%			05/11/22 11:50	1
Percent Moisture	46.1		0.1	0.1	%			05/11/22 11:50	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	67		45	16	mg/Kg	☼	05/12/22 19:48	05/14/22 21:37	1



# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606394

Job ID: 580-113239-1

## Method: 9060A - Organic Carbon, Total (TOC)

**Lab Sample ID: MB 580-390132/36**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	157	J	2000	97	mg/Kg			05/10/22 15:42	1

**Lab Sample ID: MB 580-390132/5**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/10/22 13:48	1

**Lab Sample ID: LCS 580-390132/37**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120

**Lab Sample ID: LCS 580-390132/6**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	118000		mg/Kg		98	80 - 120

**Lab Sample ID: LCSD 580-390132/38**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	113000		mg/Kg		94	80 - 120	2	20

**Lab Sample ID: LCSD 580-390132/7**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120	3	20

## Method: EPA 350.1 - Ammonia

**Lab Sample ID: MB 580-390330/1-B**  
**Matrix: Solid**  
**Analysis Batch: 390698**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**  
**Prep Batch: 390484**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		25	8.8	mg/Kg		05/12/22 19:48	05/14/22 21:37	1

# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606394

Job ID: 580-113239-1

## Method: EPA 350.1 - Ammonia (Continued)

**Lab Sample ID: LCS 580-390330/2-B**  
**Matrix: Solid**  
**Analysis Batch: 390698**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Soluble**  
**Prep Batch: 390484**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	50.0	51.5		mg/Kg		103	90 - 110

**Lab Sample ID: 580-113239-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 390698**

**Client Sample ID: BNSF-BG14-042722-0-5.5**  
**Prep Type: Soluble**  
**Prep Batch: 390484**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	32	J F1	87.0	92.6	F1	mg/Kg	✱	69	90 - 110

**Lab Sample ID: 580-113239-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 390698**

**Client Sample ID: BNSF-BG14-042722-0-5.5**  
**Prep Type: Soluble**  
**Prep Batch: 390484**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia as N	32	J F1	86.1	96.4	F1	mg/Kg	✱	74	90 - 110	4	20

**Lab Sample ID: 580-113239-1 DU**  
**Matrix: Solid**  
**Analysis Batch: 390698**

**Client Sample ID: BNSF-BG14-042722-0-5.5**  
**Prep Type: Soluble**  
**Prep Batch: 390484**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia as N	32	J F1	30.1	J	mg/Kg	✱	8	20

# Lab Chronicle

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606394

Job ID: 580-113239-1

**Client Sample ID: BNSF-BG14-042722-0-5.5**

**Lab Sample ID: 580-113239-1**

**Date Collected: 04/27/22 09:00**

**Matrix: Solid**

**Date Received: 04/30/22 09:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	390214	05/11/22 11:50	JSM	FGS SEA

**Client Sample ID: BNSF-BG14-042722-0-5.5**

**Lab Sample ID: 580-113239-1**

**Date Collected: 04/27/22 09:00**

**Matrix: Solid**

**Date Received: 04/30/22 09:30**

**Percent Solids: 56.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	390132	05/10/22 15:54	N1R	FGS SEA
Soluble	Leach	DI Leach			390330	05/11/22 22:39	FCG	FGS SEA
Soluble	Prep	Distill/Ammonia			390484	05/12/22 19:48	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	390698	05/14/22 21:37	MLT	FGS SEA

**Client Sample ID: BNSF-BG15-042722-0-10**

**Lab Sample ID: 580-113239-2**

**Date Collected: 04/27/22 09:25**

**Matrix: Solid**

**Date Received: 04/30/22 09:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	390214	05/11/22 11:50	JSM	FGS SEA

**Client Sample ID: BNSF-BG15-042722-0-10**

**Lab Sample ID: 580-113239-2**

**Date Collected: 04/27/22 09:25**

**Matrix: Solid**

**Date Received: 04/30/22 09:30**

**Percent Solids: 68.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	390132	05/10/22 15:50	N1R	FGS SEA
Soluble	Leach	DI Leach			390330	05/11/22 22:39	FCG	FGS SEA
Soluble	Prep	Distill/Ammonia			390484	05/12/22 19:48	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	390698	05/14/22 21:37	MLT	FGS SEA

**Client Sample ID: BNSF-BG16-042722-0-10**

**Lab Sample ID: 580-113239-3**

**Date Collected: 04/27/22 09:45**

**Matrix: Solid**

**Date Received: 04/30/22 09:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	390214	05/11/22 11:50	JSM	FGS SEA

**Client Sample ID: BNSF-BG16-042722-0-10**

**Lab Sample ID: 580-113239-3**

**Date Collected: 04/27/22 09:45**

**Matrix: Solid**

**Date Received: 04/30/22 09:30**

**Percent Solids: 75.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	390132	05/10/22 15:58	N1R	FGS SEA
Soluble	Leach	DI Leach			390330	05/11/22 22:39	FCG	FGS SEA
Soluble	Prep	Distill/Ammonia			390484	05/12/22 19:48	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	390698	05/14/22 21:37	MLT	FGS SEA



# Lab Chronicle

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606394

Job ID: 580-113239-1

**Client Sample ID: BNSF-BG17-042722-0-10**

**Lab Sample ID: 580-113239-4**

**Date Collected: 04/27/22 10:05**

**Matrix: Solid**

**Date Received: 04/30/22 09:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	390214	05/11/22 11:50	JSM	FGS SEA

**Client Sample ID: BNSF-BG17-042722-0-10**

**Lab Sample ID: 580-113239-4**

**Date Collected: 04/27/22 10:05**

**Matrix: Solid**

**Date Received: 04/30/22 09:30**

**Percent Solids: 53.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	390132	05/10/22 16:03	N1R	FGS SEA
Soluble	Leach	DI Leach			390330	05/11/22 22:39	FCG	FGS SEA
Soluble	Prep	Distill/Ammonia			390484	05/12/22 19:48	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	390698	05/14/22 21:37	MLT	FGS SEA

**Laboratory References:**

FGS SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310



# Accreditation/Certification Summary

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606394

Job ID: 580-113239-1

## Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2954	07-07-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9060A		Solid	Total Organic Carbon - Duplicates
EPA 350.1	Distill/Ammonia	Solid	Ammonia as N
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Oregon	NELAP	4167	07-07-22
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Solids

Washington	State	C788	07-13-22
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9060A		Solid	Total Organic Carbon - Duplicates
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

# Sample Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606394

Job ID: 580-113239-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-113239-1	BNSF-BG14-042722-0-5.5	Solid	04/27/22 09:00	04/30/22 09:30
580-113239-2	BNSF-BG15-042722-0-10	Solid	04/27/22 09:25	04/30/22 09:30
580-113239-3	BNSF-BG16-042722-0-10	Solid	04/27/22 09:45	04/30/22 09:30
580-113239-4	BNSF-BG17-042722-0-10	Solid	04/27/22 10:05	04/30/22 09:30

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Chain of Custody

PASI Minnesota Laboratory



Workorder: 10606394

Workorder Name: D3593500

Report/Invoice To

Kongmeng Vang  
Pace Analytical Minnesota  
1700 Elm Street  
Minneapolis, MN 55414  
Phone (612)607-1700  
Email: kongmeng.vang@pacelabs.com

P.O.  
Eurofins Frontier Global Sciences  
5755 8th Street East  
Tacoma, WA 98424

Results Requested By: 5/20/2022

Requested Analyte

State of Sample Origin: WA

JGCU

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers	
					Unpreserved	Preserved
1	BNSF-BG14-042722-0-5.5	4/27/2022 09:00	10606394001	Solid	1	
2	BNSF-BG15-042722-0-10	4/27/2022 09:25	10606394002	Solid	1	
3	BNSF-BG16-042722-0-10	4/27/2022 09:45	10606394003	Solid	1	
4	BNSF-BG17-042722-0-10	4/27/2022 10:05	10606394004	Solid	1	

SW9060A TOC - Eurofins

350.1 Ammonia

LAB USE ONLY

Transfers	Released By	Date/Time	Received By	Date/Time	Received on Ice	Y or N	Y or N	Y or N	Samples Intact	Y or N
1	<i>[Signature]</i>	4/29/22 17:01	<i>[Signature]</i>	4/30/22 09:30						
2										
3										

Lvl 4 data package, Jacobs UPRR EQEDD

Comments

Cooler Temperature on Receipt °C

Custody Seal

Y or N

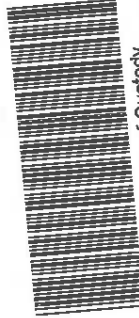
Y or N

Y or N

Y or N

Y or N

*Hand PO*  
*Sm B*  
*Sub/used*  
*A3 0.2/0.4*



590-113239 Chain of Custody



# Login Sample Receipt Checklist

Client: Pace Analytical Services, LLC

Job Number: 580-113239-1

**Login Number: 113239**

**List Source: Eurofins Seattle**

**List Number: 1**

**Creator: Presley, Kim A**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Date: 5/13/2022

CLIENT: Pace Analytical - Minneapolis  
Project: 10606394 D3593500  
Lab Order: S2205004

**CASE NARRATIVE**  
Report ID: S2205004001

Entire Report Reviewed by: *John M. Jacobs*  
John Jacobs, Project Manager

Samples BNSF-BG14-042722-0-5.5, BNSF-BG15-042722-0-10, BNSF-BG16-042722-0-10 and BNSF-BG17-042722-0-10 were received on May 2, 2022.

This report contains:

- Case Narrative - 2 pages
- Sample Analysis Report - 18 pages
- Data Sheets- 3 pages
- Original COC - 1 page

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Standard Methods for the Examination of Water and Wastewater, approved method versions  
 EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, online versions  
 EPA methods 40 CFR Parts 136 and 141 EPA 600/2-78-054 methods  
 NDEP Mining Methods  
 40 CFR Part 50, Appendices B, J, L, O and FEM EQL-0310-189  
 IO Compendium Methods  
 Clean Water Act Methods Update Rule for the Analysis of Effluent, current version.  
 ASTM approved and recognized standards  
 ISO approved and recognized standards  
 USDA Handbook 60  
 Soil Survey Laboratory Manual Ver 4.0  
 ASA/SSSA 9 Methods of Analysis Part 2, 1982  
 ASA/SSSA Methods of Analysis Book 5 Part 3, 1996  
 Other industry approved methods

All Quality Control parameters met the acceptance criteria defined by EPA and Pace Analytical except as indicated in this case narrative:



Date: 5/13/2022

## Definitions

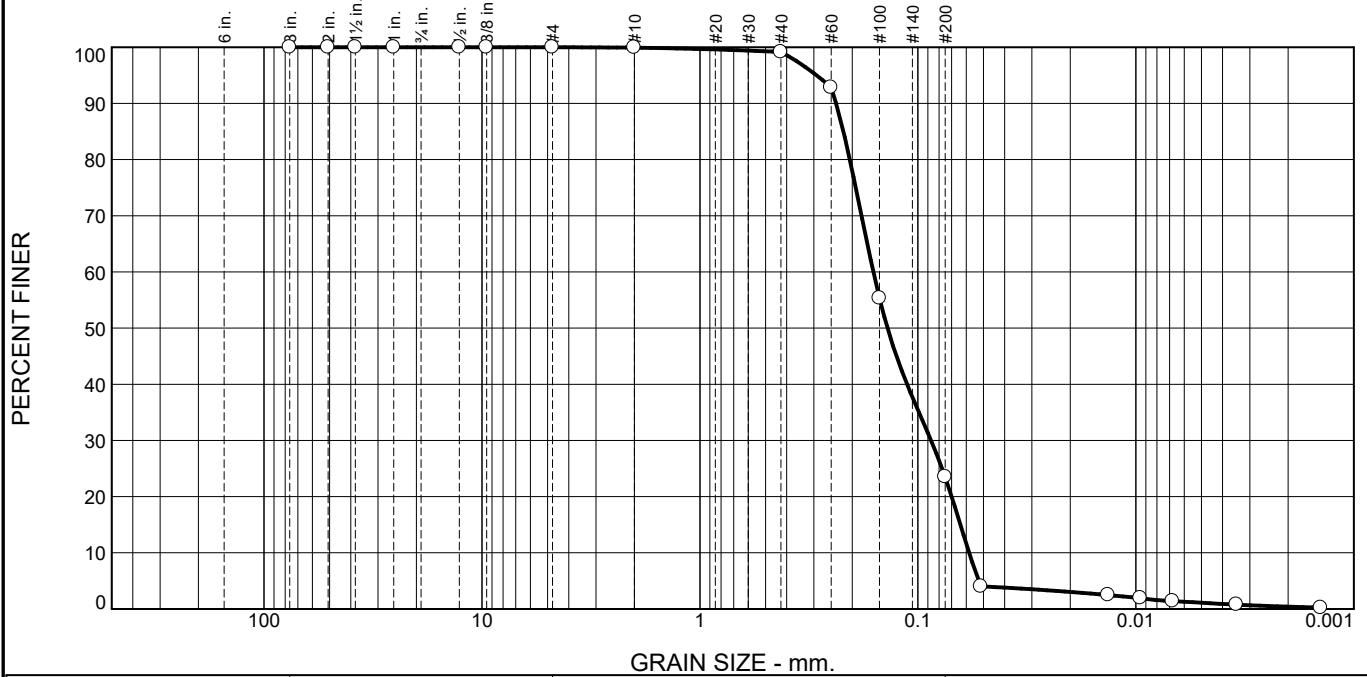
RL Reporting Limit

---

## Qualifiers

- \* Value exceeds Maximum Contaminant Level
- A Check MSA specifications
- B Analyte detected in the associated Method Blank
- C Calculated Value
- D Report limit raised due to dilution
- E Value above quantitation range
- G Analyzed at Pace Gillette, WY laboratory
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by another laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- U Analyte below method detection limit
- X Matrix Effect

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	0.7	75.7	22.4	1.1

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375	100.0		
#4	100.0		
#10	99.9		
#40	99.2		
#60	92.8		
#100	55.3		
#200	23.5		
0.0514 mm.	4.0		
0.0134 mm.	2.5		
0.0095 mm.	1.9		
0.0068 mm.	1.4		
0.0035 mm.	0.8		
0.0014 mm.	0.2		

\* (no specification provided)

**Material Description**

silty sand

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI= NP

**Classification**

USCS (D 2487)= SM                      AASHTO (M 145)= A-2-4(0)

**Coefficients**

D<sub>90</sub>= 0.2372                      D<sub>85</sub>= 0.2196                      D<sub>60</sub>= 0.1600  
D<sub>50</sub>= 0.1378                      D<sub>30</sub>= 0.0870                      D<sub>15</sub>= 0.0639  
D<sub>10</sub>= 0.0582                      C<sub>u</sub>= 2.75                      C<sub>c</sub>= 0.81

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

Date Received: 5/2/2022                      Date Tested: 5/12/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: BNSF-BG14-042722-0-5.5                      Date Sampled: 4/27/2022  
Sample Number: S2205004-001A

<b>Pace Analytical Services, Inc.</b>	Client: Pace Analytical-Minneapolis
<b>Sheridan, Wyoming</b>	Project: 10606394 D3593500
Project No: S2205004	Figure



**GRAIN SIZE DISTRIBUTION TEST DATA**

5/13/2022

**Client:** Pace Analytical-Minneapolis

**Project:** 10606394 D3593500

**Project Number:** S2205004

**Location:** BNSF-BG14-042722-0-5.5

**Sample Number:** S2205004-001A

**Material Description:** silty sand

**Sample Date:** 4/27/2022 9:00

**Date Received:** 5/2/2022      **PL:** NP

**LL:** NV

**PI:** NP

**USCS Classification:** SM

**AASHTO Classification:** A-2-4(0)

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5/12/2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer		
89.85	0.00	3"	0.00	0.00	100.0		
		2"	0.00	0.00	100.0		
		1.5"	0.00	0.00	100.0		
		1"	0.00	0.00	100.0		
		0.5"	0.00	0.00	100.0		
		0.375"	0.00	0.00	100.0		
		#4	0.00	0.00	100.0		
		#10	0.06	0.00	99.9		
		44.00	0.00	#40	0.34	0.00	99.2
				#60	2.78	0.00	92.8
#100	16.52			0.00	55.3		
#200	14.01			0.00	23.5		

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 23.5

Weight of hydrometer sample =44.0

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	14.0	7.5	0.0137	14.0	14.0	0.0514	4.0
15.00	20.0	11.0	4.6	0.0136	11.0	14.5	0.0134	2.5
30.00	20.0	10.0	3.6	0.0136	10.0	14.7	0.0095	1.9
60.00	20.0	9.0	2.6	0.0136	9.0	14.8	0.0068	1.4
240.00	19.0	8.0	1.4	0.0138	8.0	15.0	0.0035	0.8
1440.00	19.0	7.0	0.4	0.0138	7.0	15.1	0.0014	0.2

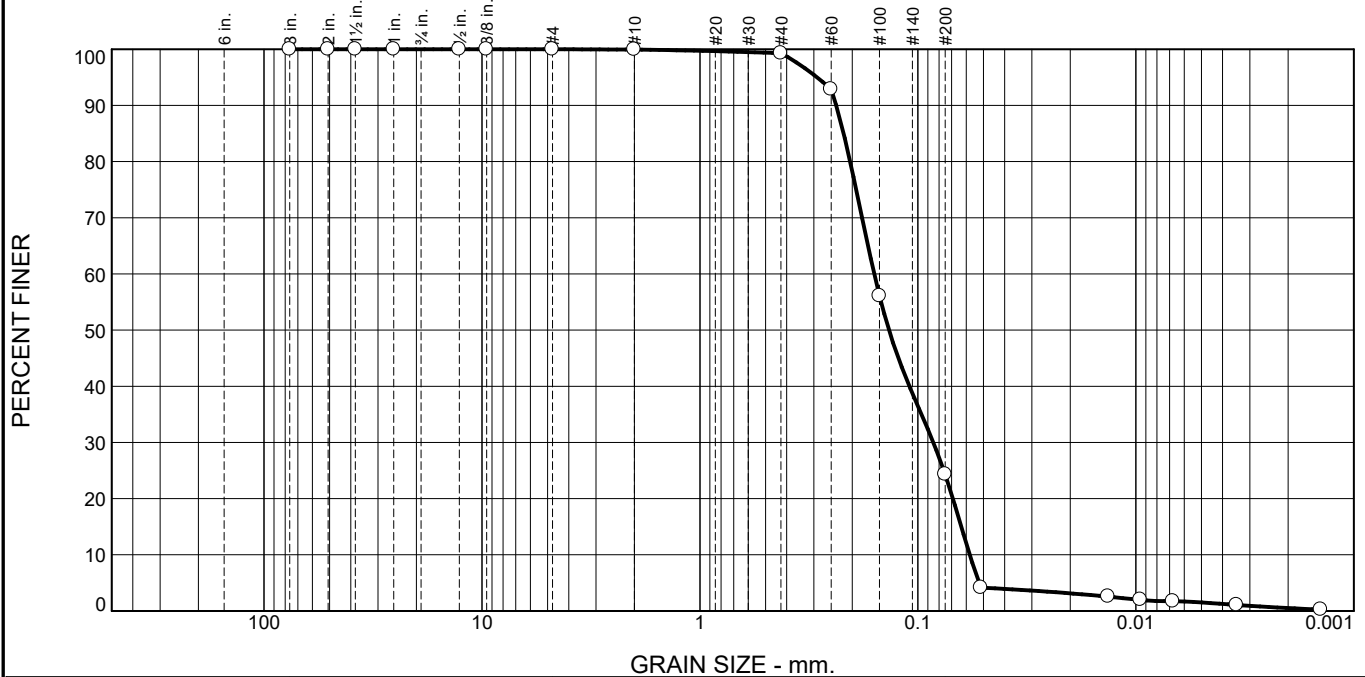
**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.1	0.7	75.7	76.5	22.4	1.1	23.5

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0526	0.0582	0.0639	0.0700	0.0870	0.1122	0.1378	0.1600	0.2053	0.2196	0.2372	0.2917

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.50	2.75	0.81

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	0.6	75.0	22.8	1.5

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375"	100.0		
#4	100.0		
#10	99.9		
#40	99.3		
#60	92.9		
#100	56.1		
#200	24.3		
0.0514 mm.	4.2		
0.0134 mm.	2.6		
0.0095 mm.	2.0		
0.0068 mm.	1.7		
0.0034 mm.	1.1		
0.0014 mm.	0.2		

\* (no specification provided)

**Material Description**

silty sand

**Atterberg Limits (ASTM D 4318)**

PL= NP      LL= NV      PI= NP

**Classification**

USCS (D 2487)= SM      AASHTO (M 145)= A-2-4(0)

**Coefficients**

D<sub>90</sub>= 0.2369      D<sub>85</sub>= 0.2191      D<sub>60</sub>= 0.1586  
D<sub>50</sub>= 0.1357      D<sub>30</sub>= 0.0849      D<sub>15</sub>= 0.0633  
D<sub>10</sub>= 0.0578      C<sub>u</sub>= 2.74      C<sub>c</sub>= 0.79

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

---

**Date Received:** 5/2/2022      **Date Tested:** 5/12/2022

**Tested By:** Steve Holzerland

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Location:** BNSF-BG14-042722-0-5.5  
**Sample Number:** S2205004-001DUP

**Date Sampled:** 4/27/2022

**Pace Analytical Services, Inc.**

**Client:** Pace Analytical-Minneapolis  
**Project:** 10606394 D3593500

**Sheridan, Wyoming**

**Project No:** S2205004

**Figure**

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/13/2022

**Client:** Pace Analytical-Minneapolis

**Project:** 10606394 D3593500

**Project Number:** S2205004

**Location:** BNSF-BG14-042722-0-5.5

**Sample Number:** S2205004-001DUP

**Material Description:** silty sand

**Sample Date:** 4/27/2022 9:00

**Date Received:** 5/2/2022      **PL:** NP

**LL:** NV

**PI:** NP

**USCS Classification:** SM

**AASHTO Classification:** A-2-4(0)

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5/12/2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer		
89.85	0.00	3"	0.00	0.00	100.0		
		2"	0.00	0.00	100.0		
		1.5"	0.00	0.00	100.0		
		1"	0.00	0.00	100.0		
		0.5"	0.00	0.00	100.0		
		0.375"	0.00	0.00	100.0		
		#4	0.00	0.00	100.0		
		#10	0.06	0.00	99.9		
		44.00	0.00	#40	0.28	0.00	99.3
				#60	2.83	0.00	92.9
#100	16.19			0.00	56.1		
#200	13.99			0.00	24.3		

Pace Analytical Services, Inc.

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 24.3

Weight of hydrometer sample =44.0

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	14.0	7.5	0.0137	14.0	14.0	0.0514	4.2
15.00	20.0	11.0	4.6	0.0136	11.0	14.5	0.0134	2.6
30.00	20.0	10.0	3.6	0.0136	10.0	14.7	0.0095	2.0
60.00	20.0	9.5	3.1	0.0136	9.5	14.7	0.0068	1.7
240.00	19.0	8.5	1.9	0.0138	8.5	14.9	0.0034	1.1
1440.00	19.0	7.0	0.4	0.0138	7.0	15.1	0.0014	0.2

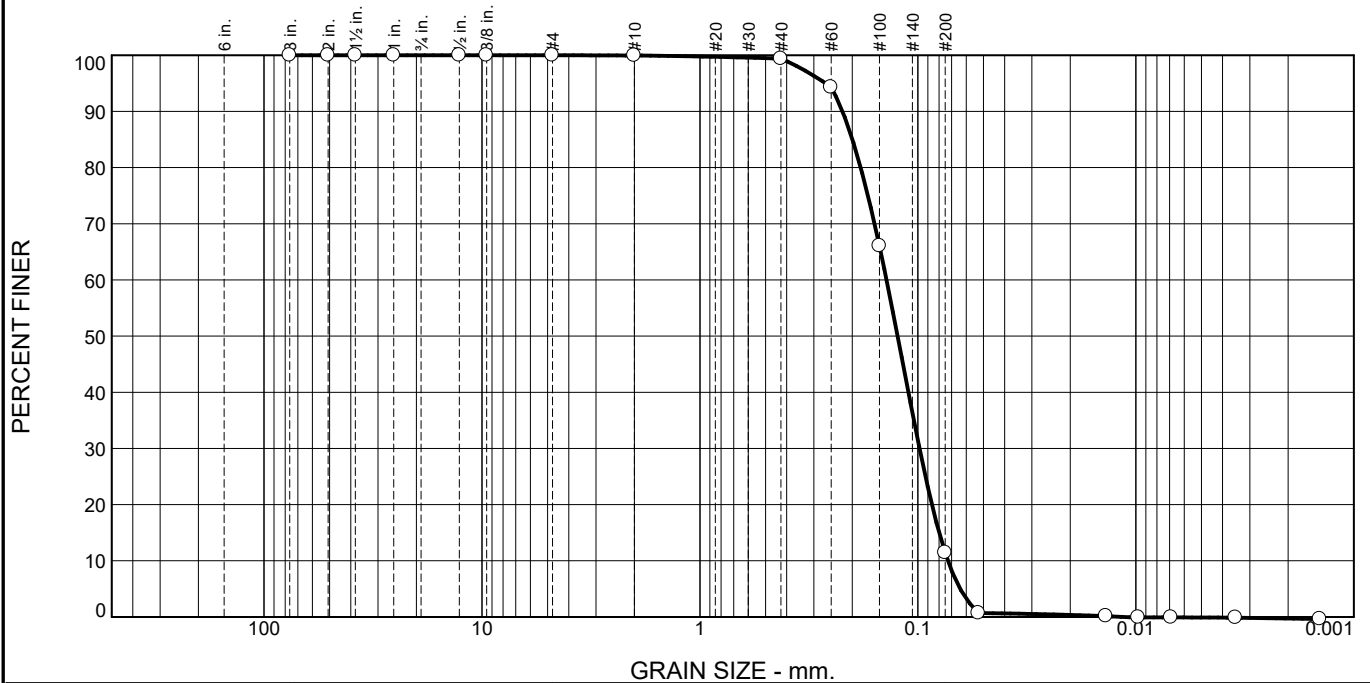
**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.1	0.6	75.0	75.7	22.8	1.5	24.3

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0523	0.0578	0.0633	0.0691	0.0849	0.1094	0.1357	0.1586	0.2047	0.2191	0.2369	0.2903

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.49	2.74	0.79

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.6	88.0	11.4	

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375	100.0		
#4	100.0		
#10	100.0		
#40	99.4		
#60	94.3		
#100	66.0		
#200	11.4		
0.0527 mm.	0.7		
0.0137 mm.	0.1		
0.0097 mm.			
0.0069 mm.			
0.0035 mm.			
0.0014 mm.			

\* (no specification provided)

**Material Description**

poorly graded sand with silt

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= SP-SM      AASHTO (M 145)= A-2-4(0)

**Coefficients**

D<sub>90</sub>= 0.2218      D<sub>85</sub>= 0.1998      D<sub>60</sub>= 0.1393  
D<sub>50</sub>= 0.1240      D<sub>30</sub>= 0.0983      D<sub>15</sub>= 0.0799  
D<sub>10</sub>= 0.0729      C<sub>u</sub>= 1.91              C<sub>c</sub>= 0.95

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

---

Date Received: 5/2/2022      Date Tested: 5/12/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: BNSF-BG15-042722-0-10  
Sample Number: S2205004-002A

Date Sampled: 4/27/2022

**Pace Analytical Services, Inc.**

Client: Pace Analytical-Minneapolis  
Project: 10606394 D3593500

**Sheridan, Wyoming**

Project No: S2205004

Figure

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/12/2022

**Client:** Pace Analytical-Minneapolis

**Project:** 10606394 D3593500

**Project Number:** S2205004

**Location:** BNSF-BG15-042722-0-10

**Sample Number:** S2205004-002A

**Material Description:** poorly graded sand with silt

**Sample Date:** 4/27/2022 9:25

**Date Received:** 5/2/2022    **PL:** NP

**LL:** NV

**USCS Classification:** SP-SM

**AASHTO Classification:** A-2-4(0)

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5/12/2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer		
108.07	0.00	3"	0.00	0.00	100.0		
		2"	0.00	0.00	100.0		
		1.5"	0.00	0.00	100.0		
		1"	0.00	0.00	100.0		
		0.5"	0.00	0.00	100.0		
		0.375"	0.00	0.00	100.0		
		#4	0.00	0.00	100.0		
		#10	0.05	0.00	100.0		
		50.27	0.00	#40	0.28	0.00	99.4
				#60	2.56	0.00	94.3
#100	14.22			0.00	66.0		
#200	27.46			0.00	11.4		

Pace Analytical Services, Inc.

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 11.4

Weight of hydrometer sample = 50.27

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	9.5	3.0	0.0137	9.5	14.7	0.0527	0.7
15.00	20.0	7.0	0.6	0.0136	7.0	15.1	0.0137	0.1
30.00	20.0	6.0	-0.4	0.0136	6.0	15.3	0.0097	-0.1
60.00	20.0	6.0	-0.4	0.0136	6.0	15.3	0.0069	-0.1
240.00	19.0	6.0	-0.6	0.0138	6.0	15.3	0.0035	-0.1
1440.00	19.0	5.0	-1.6	0.0138	5.0	15.5	0.0014	-0.4

**Fractional Components**

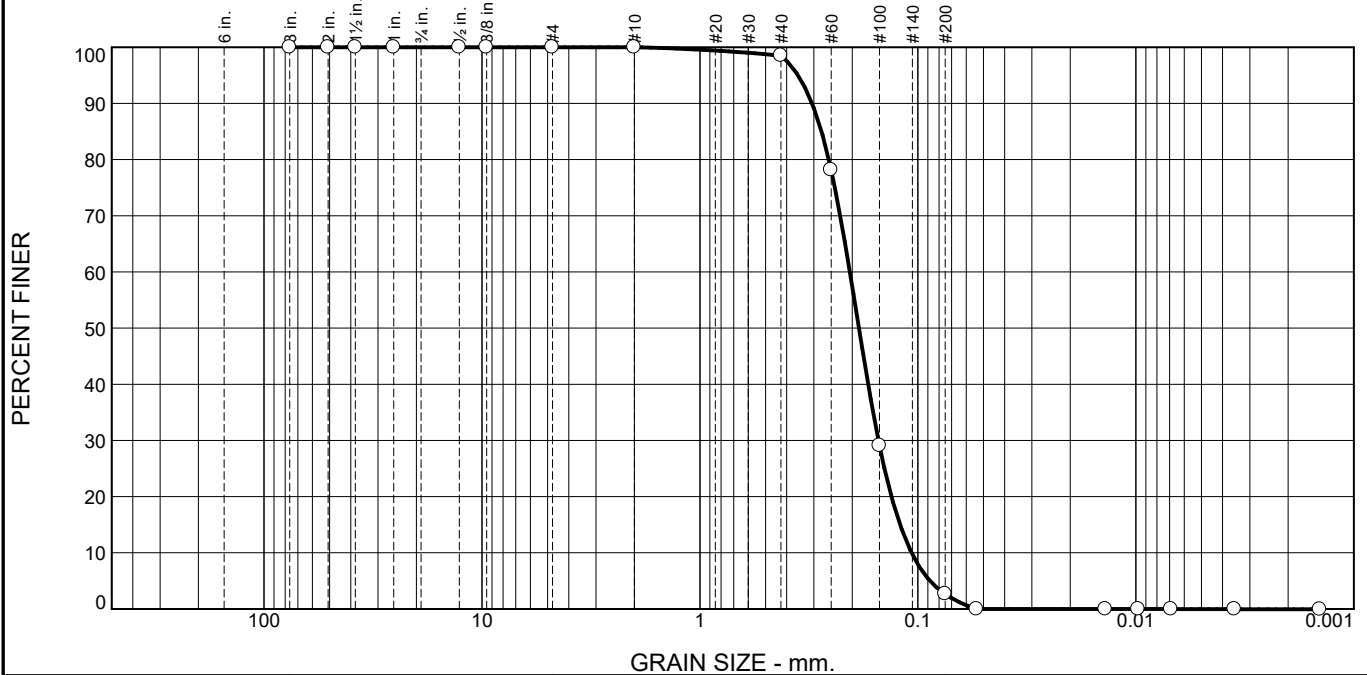
Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	0.6	88.0	88.6			11.4

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0640	0.0729	0.0799	0.0862	0.0983	0.1106	0.1240	0.1393	0.1830	0.1998	0.2218	0.2653

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.38	1.91	0.95



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	1.5	95.8	2.7	

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375	100.0		
#4	100.0		
#10	100.0		
#40	98.5		
#60	78.2		
#100	29.1		
#200	2.7		
0.0537 mm.			
0.0138 mm.			
0.0097 mm.			
0.0069 mm.			
0.0035 mm.			
0.0014 mm.			

\* (no specification provided)

**Material Description**

poorly graded sand

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= SP                      AASHTO (M 145)= A-3

**Coefficients**

D <sub>90</sub> = 0.3058	D <sub>85</sub> = 0.2768	D <sub>60</sub> = 0.2053
D <sub>50</sub> = 0.1864	D <sub>30</sub> = 0.1517	D <sub>15</sub> = 0.1207
D <sub>10</sub> = 0.1070	C <sub>u</sub> = 1.92	C <sub>c</sub> = 1.05

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

Date Received: 5/2/2022                      Date Tested: 5/12/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

**Location:** BNSF-BG16-042722-0-10  
**Sample Number:** S2205004-003A

**Date Sampled:** 4/27/2022

**Pace Analytical Services, Inc.**

**Client:** Pace Analytical-Minneapolis  
**Project:** 10606394 D3593500

**Sheridan, Wyoming**

**Project No:** S2205004

**Figure**

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/12/2022

**Client:** Pace Analytical-Minneapolis

**Project:** 10606394 D3593500

**Project Number:** S2205004

**Location:** BNSF-BG16-042722-0-10

**Sample Number:** S2205004-003A

**Material Description:** poorly graded sand

**Sample Date:** 4/27/2022 9:45

**Date Received:** 5/2/2022      **PL:** NP

**LL:** NV

**USCS Classification:** SP

**AASHTO Classification:** A-3

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5/12/2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
139.16	0.00	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1.5"	0.00	0.00	100.0
		1"	0.00	0.00	100.0
		0.5"	0.00	0.00	100.0
		0.375"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#10	0.00	0.00	100.0
		#40	1.04	0.00	98.5
		70.04	0.00	#60	14.26
#100	34.38			0.00	29.1
#200	18.49			0.00	2.7

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 2.7

Weight of hydrometer sample =70.04

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	6.0	-0.5	0.0137	6.0	15.3	0.0537	0.0
15.00	20.0	6.0	-0.4	0.0136	6.0	15.3	0.0138	0.0
30.00	20.0	6.0	-0.4	0.0136	6.0	15.3	0.0097	0.0
60.00	20.0	6.0	-0.4	0.0136	6.0	15.3	0.0069	0.0
240.00	18.5	5.5	-1.2	0.0139	5.5	15.4	0.0035	0.0
1440.00	19.0	5.0	-1.6	0.0138	5.0	15.5	0.0014	-0.1

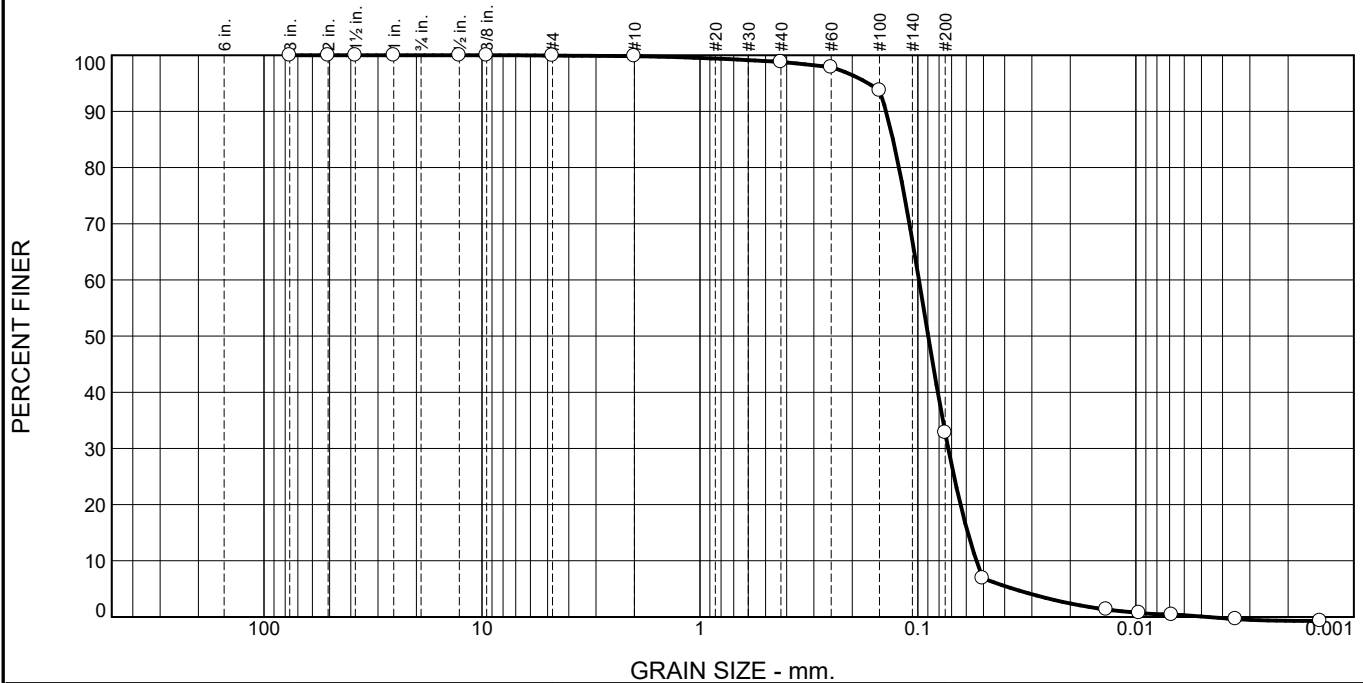
**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	1.5	95.8	97.3			2.7

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0881	0.1070	0.1207	0.1322	0.1517	0.1690	0.1864	0.2053	0.2563	0.2768	0.3058	0.3548

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.83	1.92	1.05

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.1	0.1	1.0	66.0	32.7	0.1

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375"	100.0		
#4	99.9		
#10	99.8		
#40	98.8		
#60	97.9		
#100	93.8		
#200	32.8		
0.0505 mm.	6.9		
0.0137 mm.	1.3		
0.0097 mm.	0.7		
0.0069 mm.	0.4		
0.0035 mm.			
0.0014 mm.			

\* (no specification provided)

**Material Description**

silty sand

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= SM                      AASHTO (M 145)= A-2-4(0)

**Coefficients**

D<sub>90</sub>= 0.1399                      D<sub>85</sub>= 0.1300                      D<sub>60</sub>= 0.0989  
D<sub>50</sub>= 0.0896                      D<sub>30</sub>= 0.0726                      D<sub>15</sub>= 0.0590  
D<sub>10</sub>= 0.0539                      C<sub>u</sub>= 1.83                      C<sub>c</sub>= 0.99

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

Date Received: 5/2/2022                      Date Tested: 5/12/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: BNSF-BG17-042722-0-10  
Sample Number: S2205004-004A

Date Sampled: 4/27/2022

**Pace Analytical Services, Inc.**

Client: Pace Analytical-Minneapolis  
Project: 10606394 D3593500

**Sheridan, Wyoming**

Project No: S2205004

Figure

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/12/2022

**Client:** Pace Analytical-Minneapolis

**Project:** 10606394 D3593500

**Project Number:** S2205004

**Location:** BNSF-BG17-042722-0-10

**Sample Number:** S2205004-004A

**Material Description:** silty sand

**Sample Date:** 4/27/2022 10:05

**Date Received:** 5/2/2022      **PL:** NP

**LL:** NV

**USCS Classification:** SM

**AASHTO Classification:** A-2-4(0)

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5/12/2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer		
76.22	0.00	3"	0.00	0.00	100.0		
		2"	0.00	0.00	100.0		
		1.5"	0.00	0.00	100.0		
		1"	0.00	0.00	100.0		
		0.5"	0.00	0.00	100.0		
		0.375"	0.00	0.00	100.0		
		#4	0.05	0.00	99.9		
		#10	0.07	0.00	99.8		
		50.17	0.00	#40	0.52	0.00	98.8
				#60	0.47	0.00	97.9
#100	2.07			0.00	93.8		
#200	30.61			0.00	32.8		

Pace Analytical Services, Inc.

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 32.8

Weight of hydrometer sample =50.17

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	17.0	10.5	0.0137	17.0	13.5	0.0505	6.9
15.00	19.5	8.5	2.0	0.0137	8.5	14.9	0.0137	1.3
30.00	20.0	7.5	1.1	0.0136	7.5	15.1	0.0097	0.7
60.00	20.0	7.0	0.6	0.0136	7.0	15.1	0.0069	0.4
240.00	19.0	6.0	-0.6	0.0138	6.0	15.3	0.0035	-0.4
1440.00	19.0	5.5	-1.1	0.0138	5.5	15.4	0.0014	-0.7

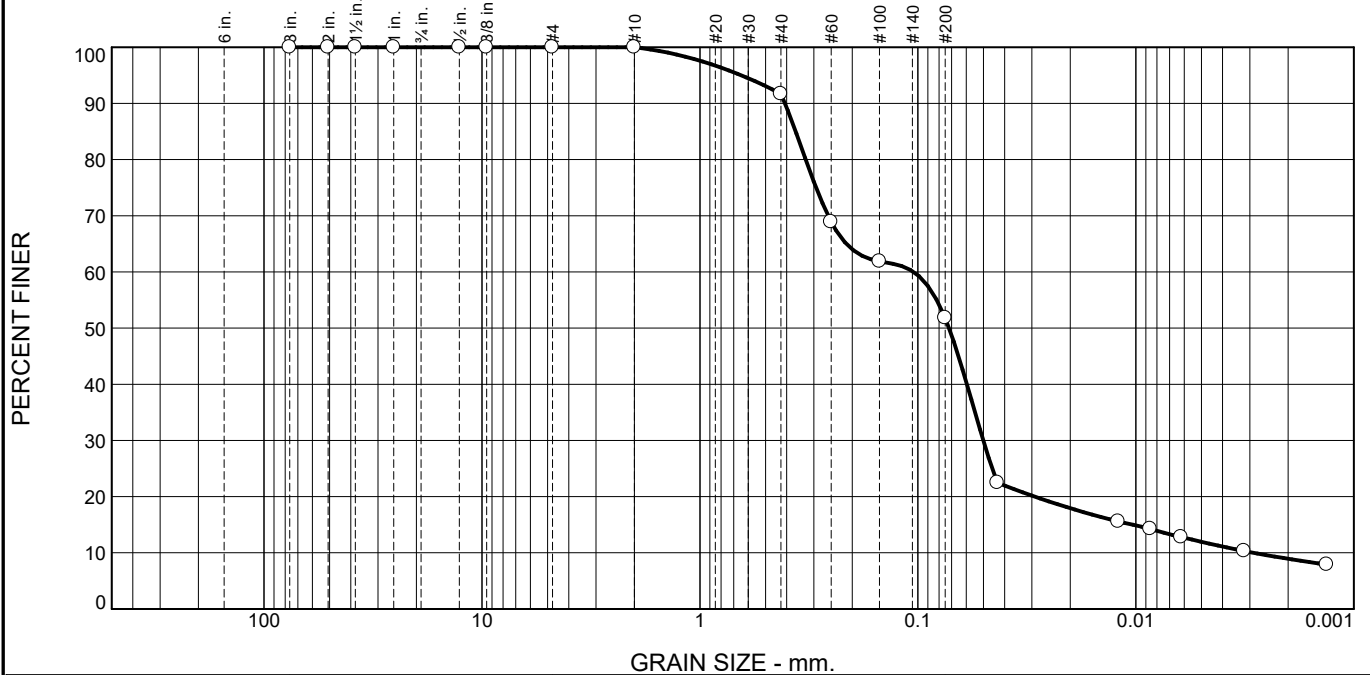
**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.1	0.1	0.1	1.0	66.0	67.1	32.7	0.1	32.8

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0364	0.0539	0.0590	0.0637	0.0726	0.0810	0.0896	0.0989	0.1221	0.1300	0.1399	0.1690

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.09	1.83	0.99

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	8.3	39.9	39.8	12.0

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375	100.0		
#4	100.0		
#10	100.0		
#40	91.7		
#60	68.9		
#100	61.9		
#200	51.8		
0.0432 mm.	22.5		
0.0120 mm.	15.6		
0.0086 mm.	14.3		
0.0062 mm.	12.8		
0.0032 mm.	10.3		
0.0013 mm.	7.9		

\* (no specification provided)

**Material Description**

sandy silt

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= ML                      AASHTO (M 145)= A-4(0)

**Coefficients**

D<sub>90</sub>= 0.4073                      D<sub>85</sub>= 0.3638                      D<sub>60</sub>= 0.1047  
D<sub>50</sub>= 0.0719                      D<sub>30</sub>= 0.0501                      D<sub>15</sub>= 0.0103  
D<sub>10</sub>= 0.0029                      C<sub>u</sub>= 36.16                      C<sub>c</sub>= 8.29

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

---

Date Received: \_\_\_\_\_ Date Tested: 5-11-2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: LCS  
Sample Number: LCS

Date Sampled:

**Pace Analytical Services, Inc.**

Client:  
Project:

**Sheridan, Wyoming**

Project No:

Figure

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/11/2022

**Location:** LCS

**Sample Number:** LCS

**Material Description:** sandy silt

**PL:** NP                      **LL:** NV

**USCS Classification:** ML

**AASHTO Classification:** A-4(0)

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5-11-2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer		
75.00	0.00	3"	0.00	0.00	100.0		
		2"	0.00	0.00	100.0		
		1.5"	0.00	0.00	100.0		
		1"	0.00	0.00	100.0		
		0.5"	0.00	0.00	100.0		
		0.375	0.00	0.00	100.0		
		#4	0.00	0.00	100.0		
		#10	0.00	0.00	100.0		
		75.00	0.00	#40	6.22	0.00	91.7
				#60	17.09	0.00	68.9
#100	5.27			0.00	61.9		
#200	7.55			0.00	51.8		

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 51.8

Weight of hydrometer sample = 75.0

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	39.0	32.5	0.0137	39.0	9.9	0.0432	22.5
15.00	19.5	29.0	22.5	0.0137	29.0	11.5	0.0120	15.6
30.00	20.0	27.0	20.6	0.0136	27.0	11.9	0.0086	14.3
60.00	19.5	25.0	18.5	0.0137	25.0	12.2	0.0062	12.8
240.00	19.0	21.5	14.9	0.0138	21.5	12.8	0.0032	10.3
1440.00	19.0	18.0	11.4	0.0138	18.0	13.3	0.0013	7.9

Pace Analytical Services, Inc.



**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	8.3	39.9	48.2	39.8	12.0	51.8

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
	0.0029	0.0103	0.0291	0.0501	0.0596	0.0719	0.1047	0.3270	0.3638	0.4073	0.6461

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.69	36.16	8.29

Pace Analytical Services, Inc.

# Internal Transfer Chain of Custody



Samples Pre-Logged into eCOC.

State of Origin: WA  
 Cert. Needed:  Yes  No

Owner Received Date: 4/29/2022 Results Requested By: 5/20/2022

Workorder: 10606394 Workorder Name: D3593500

Kongmeng Yang  
 Pace Analytical Minnesota  
 1700 Elm Street  
 Minneapolis, MN 55414  
 Phone (612)607-1700

Pace Analytical Sheridan WY  
 1673 Terra Avenue  
 Sheridan, WY 82801  
 Phone (307) 672-8945

Report To		Subcontract To		Requested Analysis													
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved	Preserved Containers	Comments									
1	BNSF-BG14-042722-0-5.5	PS	4/27/2022 09:00	10606394001	Solid	1		ASTM D422 Hydrometer - Pace WY									
2	BNSF-BG15-042722-0-10	PS	4/27/2022 09:25	10606394002	Solid	1											
3	BNSF-BG16-042722-0-10	PS	4/27/2022 09:45	10606394003	Solid	1											
4	BNSF-BG17-042722-0-10	PS	4/27/2022 10:05	10606394004	Solid	1											
5																	
Transfers		Released By	Date/Time	Received By	Date/Time												
1		<i>[Signature]</i>	4/27/2022 09:00	<i>[Signature]</i>	5/20/22												
2																	
3																	
Cooler Temperature on Receipt		°C	Custody Seal	Y or N	Received on Ice	Y or N	Samples Intact	Y or N									

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

LCS = 25g ASTM grade Sand + 50g QC Lab 50'1

Sieve/Hydrometer

Sample #	Initial Wt (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)
5-5-22	S220504-001	89.85	89.85	108.07	139.16	76.22	75.0	
5-11-22		0	0	0	0	.05	0	
5-12-22		.06	.06	.05	0	.07	0	
		.34	.28	.28	1.04	.52	6.22	
		2.78	2.83	2.56	14.26	.47	17.08	
		16.52	16.19	14.22	34.38	2.07	5.27	
		14.01	13.99	27.46	18.49	30.61	7.55	
5-5-22	Sample Wt	44.0	44.0	50.27	70.04	50.17	75.0	
5-9-22	Start Time	11:15	11:16	11:17	11:18	11:19	11:20	
	Minutes	14	14	9.5	6	17	39	
		19.5	19.5	19.5	19.5	19.5	19.5	
		11	11	7	6	8.5	29	
		20	20	20	20	20	19.5	
		10	10	6	6	7.5	27	
		20	20	20	20	20	20	
		9	9.5	6	6	7	.25	
		20	20	20	20	20	19.5	
		8	8.5	6	5.5	6	21.5	
		19	19	19	18.5	19	19	
		7	7	5	5	5.5	18	
		19	19	19	19	19	19	
		7	7	5	5	5.5	18	

5-10-22 (4) (3) (4) (3) (4) (4)

- 1 Sod. Hex / Sod. carb. see solution prep. log copy
- 2 No. 10 Sieve (2.00 mm) W.S. Tyler Incorporated
- 3 Amex Instruments Inc Gyromax 818 orbital shaker  
SN: A114 1010 501-40
- 4 No. 200 sieve Fisher Brand SN: 211912174
- 5 VWR Scientific Inc convection oven
- 6 Geosystem Soils Test Software version 5
- 7 Ro-Tap RX-29 SN: 16763
8. No 4 sieve soil test Inc. 4.75 mm
- 9 3/8" sieve soil test, Inc. 9.5 mm
- 10 1/2" sieve Gilson Company 16.0 mm
11. Hydrometer: Fisher Brand / ERTCO no. 32982  
ASTM 152 H
12. Thermometer: Fisher Brand / ERTCO SN: 05169100



Solution Preparation Log

Initials	Date	Solution	Chemical	Preparation			DI Volume	pH	Solution Lot #
				Lot #	Amount				
SH	Prep: 4-6-22 Expire: 10-6-22	CEC	Ammonium Acetate	203214	711g		10L	7.30	NH4Acce 041122
CH	Prep: 4/10/22 Expire: 10/11/22	O1 HCl	HCl	1820911	147.2ml 110.2ml 37.1ml		14L		O1HCl-041122
SH	Prep: 4-11-22 Expire: 10-11-22	CEC	Sodium Acetate	201280	272g		2L		NACE 041122
CH	Prep: 4-12-22 Expire: 10-12-22	IMKCl	KCl	10227405	260.75g		3.5L		IMKCl-041222
SH	Prep: 4-13-22 Expire: 10-13-22	MA	Sodium carb.	A0423850	198.5g		25L		MA041322
CH	Prep: 4/13/22 Expire: 10/13/22	IMKCl	KCl	10232839	260.75g		3.5L		IMKCl-041322
CH	Prep: 4/14/22 Expire: 10/14/22	CEC	Comm. Acetate	203214	711.00g		10L	7.07	NH4Acce-041422
CH	Prep: 4/15/22 Expire: 10/15/22	MIXED acid AS	HCl	105225	17mls		2L		MIXEDacid 041522
			Sulfuric	101072	1.1mls				



# Analytical Data Package

**Prepared by:**

**Pace Analytical Services**

**Pace Project No.: 10606394**



## Organic

### GC-FID DRO

Surrogate Recovery Summary (Form 2).....	1
Laboratory Control Spike/Laboratory Control Spike Duplicate Summary (Form 3).....	2
Matrix Spike/Matrix Spike Duplicate Summary (Form 3).....	7
Method Blank Association Summary (Form 4).....	9
Analytical Results with Raw Data (Form 1).....	10
Initial Calibration Summary (Form 6).....	50
Raw Data for Initial Calibration Standards.....	53
Continuing Calibration Summary (Form 7).....	363
Raw Data for Continuing Calibration Standards.....	370
Raw Data QC.....	468
Preparation Logs Raw Data.....	484
Instrument Run Log.....	486

## InOrganic

### ICPMS

Analytical Results (Form 1-IN).....	498
Initial & Continuing Calibration Verification (Form 2A-IN).....	502
CRDL Check Standard (Form 2B-IN).....	504
Blanks (Form 3-IN).....	506
Interference Check Sample (Form 4B-IN).....	508
Matrix Spike Recovery (Form 5A-IN).....	509
Post Digestion Spike Recovery (Form 5B-IN).....	511
Duplicates (Form 6-IN).....	512
Laboratory Control Spike (Form 7-IN).....	513
Serial Dilution (Form 8-IN).....	514
Method Detection Limits (Form 9-IN).....	515
Linear Ranges (Form 11-IN).....	517
Preparation Log (Form 12-IN).....	518
Analysis Run Log (Form 13-IN).....	519
Tune (Form 14-IN).....	520
Internal Standard Relative Intensity Summary (Form 15-IN).....	522
ICPMS Raw Data (Multiple Schedules/Sample).....	523
Preparation Logs Raw Data.....	725

### Mercury

Analytical Results (Form 1-IN).....	726
Initial & Continuing Calibration Verification (Form 2A-IN).....	730
CRDL Check Standard (Form 2B-IN).....	732
Blanks (Form 3-IN).....	735
Matrix Spike Recovery (Form 5A-IN).....	736
Duplicates (Form 6-IN).....	738

Laboratory Control Spike (Form 7-IN) .....	739
Method Detection Limits (Form 9-IN) .....	740
Preparation Log (Form 12-IN) .....	742
Analysis Run Log (Form 13-IN) .....	743
Mercury Raw Data .....	744
Preparation Logs Raw Data .....	753
<b>Gravimetric</b>	
Analytical Results (Form 1-IN) .....	754
Duplicates (Form 6-IN) .....	758
Method Detection Limits (Form 9-IN) .....	760
Preparation Log (Form 12-IN) .....	761
Analysis Run Log (Form 13-IN) .....	762
Percent Moisture Determination Raw Data .....	763



GC-FID DRO - FORM II SVOA-1  
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Minnesota SDG No.: 10606394 Contract: D3593500

Instrument ID: 10GCSF

LAB SAMPLE ID	SAMPLE NAME	NTCS	OTER
4307793	4307793BLANK	91	80
4307794	4307794LCS	82	84
10606394001	BNSF-BG14-042722-0-5.5	72	80
10606394002	BNSF-BG15-042722-0-10	83	87
10606394003	BNSF-BG16-042722-0-10	83	85
10606394004	BNSF-BG17-042722-0-10	93	90

(NTCS) = n-Triacontane (S)

(OTER) = o-Terphenyl (S)

\* Values outside of QC Limits

QC LIMITS

(50-150)

(50-150)

### Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0427R0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 11:41	EB3	ran to stabilize baseline
0427R0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 11:53	EB3	
0427R0000003.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:04	EB3	
0427R0000004.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:15	EB3	
0427R0000005.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:26	EB3	
0427R0000006.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:38	EB3	V
0427R0000007.D	DMO-RTM,362403	/39205	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:49	EB3	
0427R0000008.D	DMO-CAL1,362369	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:00	EB3	level 1 dropped
0427R0000009.D	DMO-CAL2,362370	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:11	EB3	
0427R0000010.D	DMO-CAL3,362371	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:23	EB3	Pass 40% for all target analytes
0427R0000011.D	DMO-CAL4,362372	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:34	EB3	
0427R0000012.D	DMO-CAL5,362373	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:45	EB3	
0427R0000013.D	DMO-CAL6,362374	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:57	EB3	
0427R0000014.D	DMO-CAL7,362375	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:08	EB3	
0427R0000015.D	DMO-CAL8,362376	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:19	EB3	
0427R0000016.D	DMO-CAL9,362377	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:30	EB3	
0427R0000017.D	DMO-CAL10,362378	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:42	EB3	ICAL passing
0427R0000018.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 14:53	EB3	ran to eliminate the possibility of carryover
0427R0000019.D	DMO-ICV,355155	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 15:04	EB3	Pass 15% for all ranges
0427R0000020.D	PBLK,349203	/39205	Sample	1		GCSFAKNW8015-042722_	4/27/22 15:15	EB3	Clean for all ranges
0427R0000021.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 15:27	EB3	Pass 15% for all ranges
0427R0000022.D	4295161	L/39115	Blank	1		GCSFAKNW8015-042722_	4/27/22 15:38	EB3	ok
0427R0000023.D	10604482008	L/39115	Sample	1		GCSFAKNW8015-042722_	4/27/22 15:49	EB3	8015W MDL - passing
0427R0000024.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 16:00	EB3	Pass 15% for all ranges
0427R0000025.D	4295166	L/39113	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:12	EB3	ok
0427R0000025B.	4295167	L/39114	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:12	EB3	ok
0427R0000026.D	10604482012	L/39113	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:23	EB3	AK W MDL - passing
0427R0000026B.	10604482016	L/39114	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:23	EB3	NW W MDL - passing
0427R0000027.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 16:34	EB3	Pass 15% for all ranges
0427R0000028.D	4295299	S/39116	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000028B.	4295310	S/39118	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000028C.	4295311	S/39117	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000028D.	4325687	S/39417	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000029.D	10604453012	S/39116	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	8015S MDL - passing
0427R0000029B.	10604453008	S/39118	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	AK S MDL - passing
0427R0000029C.	10604453016	S/39117	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	NW S MDL - passing
0427R0000029D.	10604453076	S/39417	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	1036S MDL - passing
0427R0000030.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 17:19	EB3	Pass 15% for all ranges
0427R0000031.D	PBLK,4301183	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 17:30	EB3	NR

## Instrument Run Log

Instrument: 10GCSF  
 Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
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Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\W10WINTARGET\CHEM\10GCSF.I\042722R.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 05/19/2022 15:13

ReviewedBy/Date:

## Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot: MECL2-362509

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0502R0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	5/02/22 14:57	TT2	
0502R0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	5/02/22 15:07	TT2	
0502R0000003.D	DMO-RTM,362402	/39205	Sample	1		GCSFAKNW8015-042722_	5/02/22 15:16	TT2	
0502R0000004.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 15:25	TT2	Pass 15% for all ranges
0502R0000005.D	4305172	L/39219	Blank	1		GCSFAKNW8015-042722_	5/02/22 15:35	TT2	ok
0502R0000006.D	4305173	L/39219	LCS	1		GCSFAKNW8015-042722_	5/02/22 15:44	TT2	pass
0502R0000007.D	4305174	L/39219	LCSD	1		GCSFAKNW8015-042722_	5/02/22 15:53	TT2	pass
0502R0000008.D	10606016001	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:03	TT2	
0502R0000009.D	10606016002	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:12	TT2	
0502R0000010.D	10606016003	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:21	TT2	
0502R0000011.D	10606016004	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:31	TT2	
0502R0000012.D	10606016005	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:40	TT2	
0502R0000013.D	10606016007	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:49	TT2	
0502R0000014.D	10606016008	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:59	TT2	
0502R0000015.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 17:08	TT2	Pass 15% for all ranges
0502R0000016.D	4305172	L/39219	Blank	1		GCSFAKNW8015-042722_	5/02/22 17:17	TT2	ok
0502R0000017.D	10606016010	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 17:27	TT2	
0502R0000018.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 17:36	TT2	Pass 15% for all ranges
0502R0000019.D	4307671	L/39247	Blank	1		GCSFAKNW8015-042722_	5/02/22 17:45	TT2	ok
0502R0000020.D	4307672	L/39247	LCS	1		GCSFAKNW8015-042722_	5/02/22 17:55	TT2	passes
0502R0000021.D	4307673	L/39247	LCSD	1		GCSFAKNW8015-042722_	5/02/22 18:04	TT2	passes
0502R0000022.D	10606410001	L/39247	Sample	1		GCSFAKNW8015-042722_	5/02/22 18:13	TT2	RAG
0502R0000023.D	10606410002	L/39247	Sample	1		GCSFAKNW8015-042722_	5/02/22 18:23	TT2	
0502R0000024.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 18:32	TT2	Pass 15% for all ranges
0502R0000025.D	4303622	S/39215	Blank	1		GCSFAKNW8015-042722_	5/02/22 18:41	TT2	rr, MB failing
0502R0000026.D	10605661001	S/39215	Sample	1		GCSFAKNW8015-042722_	5/02/22 18:50	TT2	
0502R0000027.D	4303624	S/39215	MS	1		GCSFAKNW8015-042722_	5/02/22 19:00	TT2	
0502R0000028.D	4303625	S/39215	MSD	1		GCSFAKNW8015-042722_	5/02/22 19:09	TT2	
0502R0000029.D	10605661002	S/39215	Sample	1		GCSFAKNW8015-042722_	5/02/22 19:18	TT2	V
0502R0000030.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 19:28	TT2	Pass 15% for all ranges
0502R0000031.D	4307795	S/39249	Blank	1		GCSFAKNW8015-042722_	5/02/22 19:37	TT2	OK
0502R0000031B.	4307793	S/39248	Blank	1		GCSFAKNW8015-042722_	5/02/22 19:37	TT2	OK
0502R0000032.D	4307796	S/39249	LCS	1		GCSFAKNW8015-042722_	5/02/22 19:46	TT2	Passes
0502R0000032B.	4307794	S/39248	LCS	1		GCSFAKNW8015-042722_	5/02/22 19:46	TT2	Passes
0502R0000033.D	10606390001	S/39249	Sample	1		GCSFAKNW8015-042722_	5/02/22 19:56	TT2	
0502R0000033B.	10606463001	S/39248	Sample	1		GCSFAKNW8015-042722_	5/02/22 19:56	TT2	
0502R0000034.D	4307797	S/39249	MS	1		GCSFAKNW8015-042722_	5/02/22 20:05	TT2	
0502R0000034B.	4307905	S/39248	MS	1		GCSFAKNW8015-042722_	5/02/22 20:05	TT2	
0502R0000035.D	4307798	S/39249	MSD	1		GCSFAKNW8015-042722_	5/02/22 20:14	TT2	
0502R0000035B.	4307906	S/39248	MSD	1		GCSFAKNW8015-042722_	5/02/22 20:14	TT2	
0502R0000036.D	10606390002	S/39249	Sample	1		GCSFAKNW8015-042722_	5/02/22 20:23	TT2	
0502R0000037.D	10606398001	S/39249	Sample	1		GCSFAKNW8015-042722_	5/02/22 20:33	TT2	rr 2X
0502R0000038.D	10606046001	S/39248	Sample	1		GCSFAKNW8015-042722_	5/02/22 20:42	TT2	
0502R0000039.D	10606394001	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 20:51	TT2	rr 1X
0502R0000040.D	10606394002	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:01	TT2	rr 1X
0502R0000041.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 21:10	TT2	Pass 15% for all ranges

### Instrument Run Log

Instrument: 10GCSF  
 Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot: MECL2-362509

Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0502R0000042.D	4307795	S/39249	Blank	1		GCSFAKNW8015-042722_	5/02/22 21:19	TT2	OK
0502R0000043.D	10606394003	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:29	TT2	rr 1X
0502R0000044.D	10606394004	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:38	TT2	rr 1X
0502R0000045.D	10606395001	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:47	TT2	rr 1X
0502R0000046.D	10606395002	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:57	TT2	rr 1X
0502R0000047.D	10606395003	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 22:06	TT2	rr 1X
0502R0000048.D	10606395004	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 22:15	TT2	rr 1X
0502R0000049.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 22:25	TT2	Pass 15% for all ranges
0502R0000050.D	PBLK,4305172	/39205	Sample	1		GCSFAKNW8015-042722_	5/02/22 22:34	TT2	Clean

**Check Maintenance Items Performed:**

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\W10WINTARGET\CHEM10GCSF.I\050222R.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: RAG

Report Date: 05/16/2022 10:12

ReviewedBy/Date:

GC-FID DRO - FORM III SVOA-1  
SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Minnesota

Lab Sample ID: 4307794LCS

Date Extracted: 04/29/2022

Date Analyzed (1): 05/02/2022

Instrument: 10GCSF

LCS Lot No: 358262

Lab File ID: 050222R.B\0502R0000032B.D

SDG No.: 10606394

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
Diesel Fuel Range	50.0	41.4	83	50-150
Motor Oil Range	50.0	46.6	93	50-150

Spike Recovery: 0 out of 2 outside limits.

GC-FID DRO - FORM III SVOA-1  
SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Minnesota

Matrix Spike - Sample No: 4307905MS

Date Extracted: 04/29/2022

Date Analyzed (1): 05/02/2022

Instrument: 10GCSF

Lab File ID: 050222R.B\0502R0000034B.D

Parent Sample ID: 10606463001

SDG No.: 10606394

COMPOUND	SPIKE ADDED (mg/kg)	SAMPLE CONCENTRATION (mg/kg)	MS CONCENTRATION (mg/kg)	MS %REC	QC LIMITS REC.
Diesel Fuel Range	49.0	ND	41.2	83	50-150
Motor Oil Range	49.0	ND	46.9	88	50-150

Spike Recovery: 0 out of 2 outside limits.

GC-FID DRO - FORM III SVOA-2  
SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 10GCSF Matrix Spike Duplicate - Sample No: 4307906MSD  
 Lab File ID (2): 050222R.B\0502R0000035B.D Date Analyzed (2): 05/02/2022

COMPOUND	SPIKE ADDED (mg/kg)	MSD CONCENTRATION (mg/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Diesel Fuel Range	49.2	39.4	79	5	0-30	50-150
Motor Oil Range	49.2	46.9	88	0	0-30	50-150

RPD: 0 out of 2 outside limits.

Spike Recovery: 0 out of 2 outside limits.



GC-FID DRO - FORM IV SVOA-1  
SEMI-VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

4307793BLANK

Lab Name: Pace Analytical - Minnesota SDG No.: 10606394 Contract: D3593500

Instrument ID: 10GCSF Matrix: Solid Lab Sample ID: 4307793

Lab File ID: 050222R.B\0502R0000031B.D Date Analyzed: 05/02/2022 Time: 19:37

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
4307794LCS	4307794	050222R.B\0502R0000032B.	05/02/2022 19:46
BNSF-BG14-042722-0-5.5	10606394001	051022F.B\0510F0000119.D	05/11/2022 09:18
BNSF-BG15-042722-0-10	10606394002	051022F.B\0510F0000121.D	05/11/2022 09:41
BNSF-BG16-042722-0-10	10606394003	051022F.B\0510F0000123.D	05/11/2022 10:04
BNSF-BG17-042722-0-10	10606394004	051022F.B\0510F0000125.D	05/11/2022 10:26

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BNSF-BG14-042722-0-5.5

Lab Name: Pace Analytical - Minnesota Contract: D3593500  
Date Received: 04/29/2022 08:50 Matrix: Solid SDG No.: 10606394  
Date Extracted: 04/29/2022 17:05 Lab Sample ID: 10606394001  
Date Analyzed: 05/11/2022 09:18 Lab File ID: 051022F.B\0510F0000119.D  
Initial wt/vol: 10.03 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: 44.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	19.5	J
	Motor Oil Range	60.0	

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AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000119.D  
 Lab Smp Id: 10606394001 Client Smp ID: BNSF-BG14-042722-0-  
 Inj Date : 11-MAY-2022 09:18  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 10606394001  
 Misc Info : 39248  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\051022F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 11-May-2022 12:52 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 84  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.030	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	44.521	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
\$ 2	o-Terphenyl (S)					CAS #:
2.566	2.566	0.000	244208	40.1286	7.21	(M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.023	4.024	-0.001	175341	36.0550	6.48	(M) BA
S 10	Motor Oil Range					CAS #:
3.431	- 5.300		1413905	334.092	60.0	(M) RNG
S 11	Motor Oil Range SG					CAS #:
3.431	- 5.300		1413905	334.509	60.1	(M) RNG
S 8	Diesel Fuel Range					CAS #:
1.240	- 3.430		733753	108.518	19.5	(M) RNG
S 9	Diesel Fuel Range SG					CAS #:
1.240	- 3.430		733753	108.518	19.5	(M) RNG

QC Flag Legend

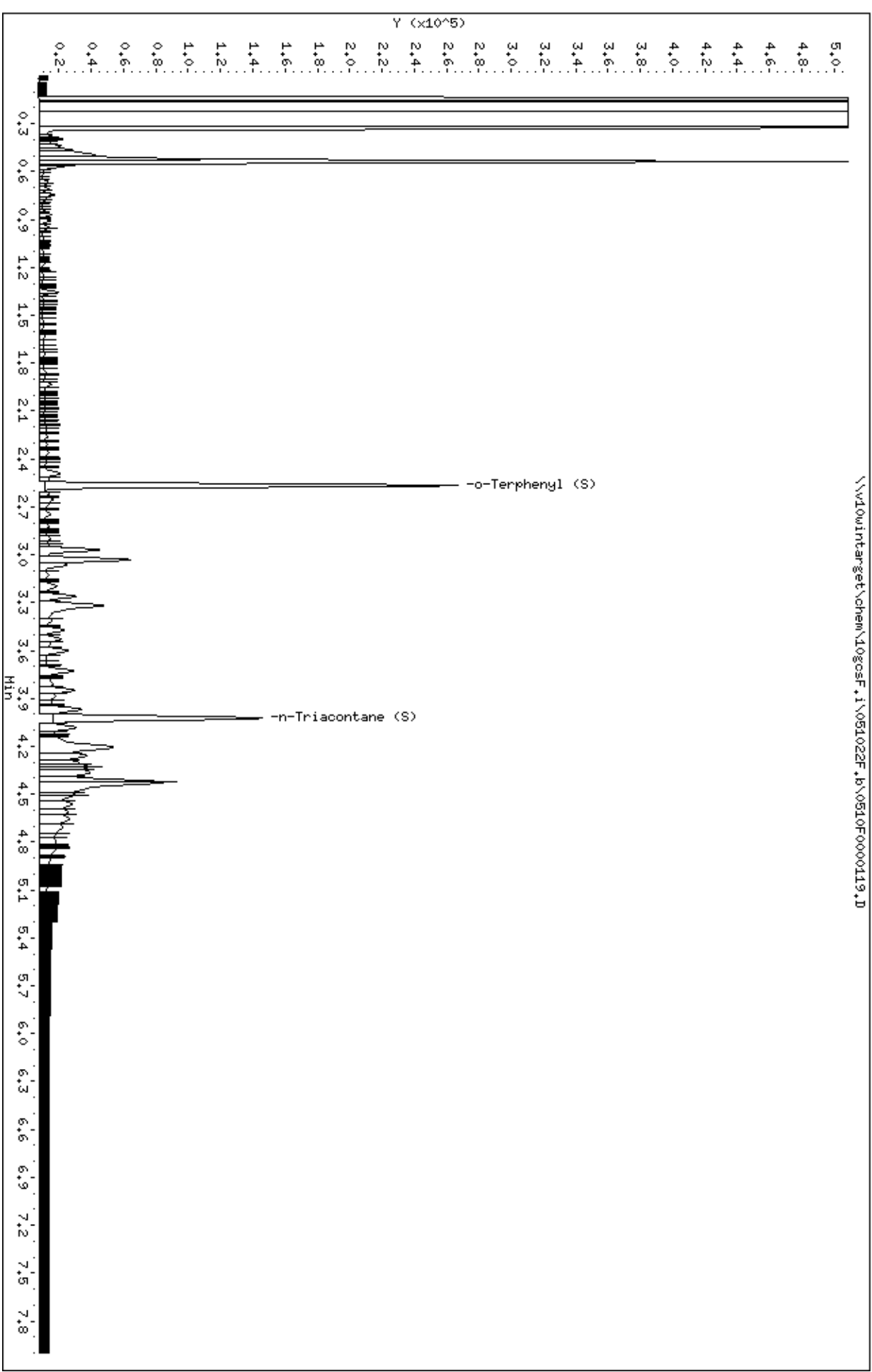
M - Compound response manually integrated.

Review Codes Legend

- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.

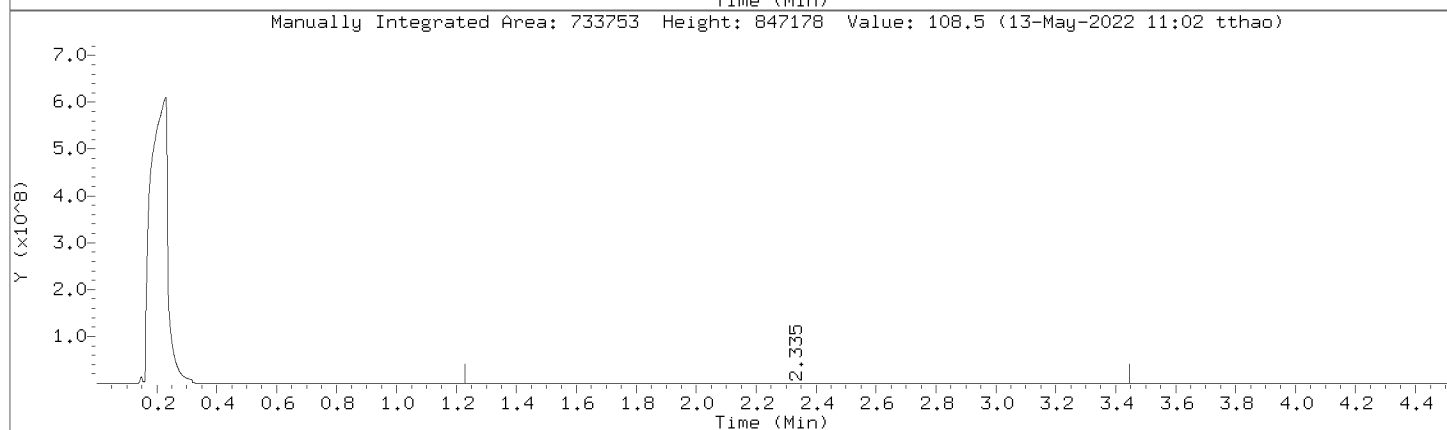
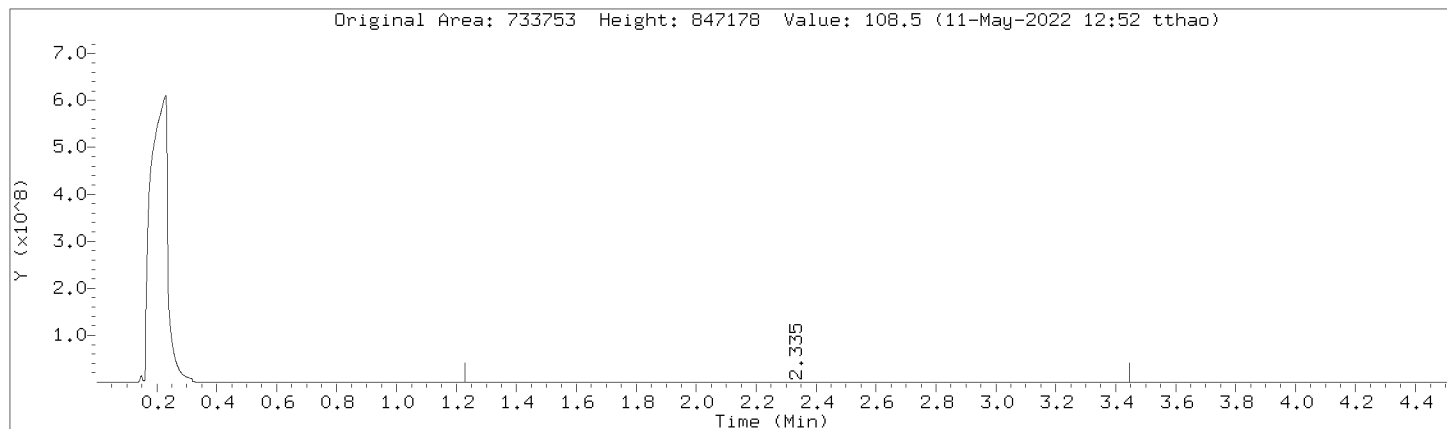
Data File: \\wlowintarget\chem\logosf.i\051022F.b\0510F0000119.D  
Date: 11-MAY-2022 09:18  
Client ID: BNSF-BG14-042722-0-  
Sample Info: 10606394001  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21390001

Instrument: logosf.i  
Operator: TT2  
Column diameter: 0.32



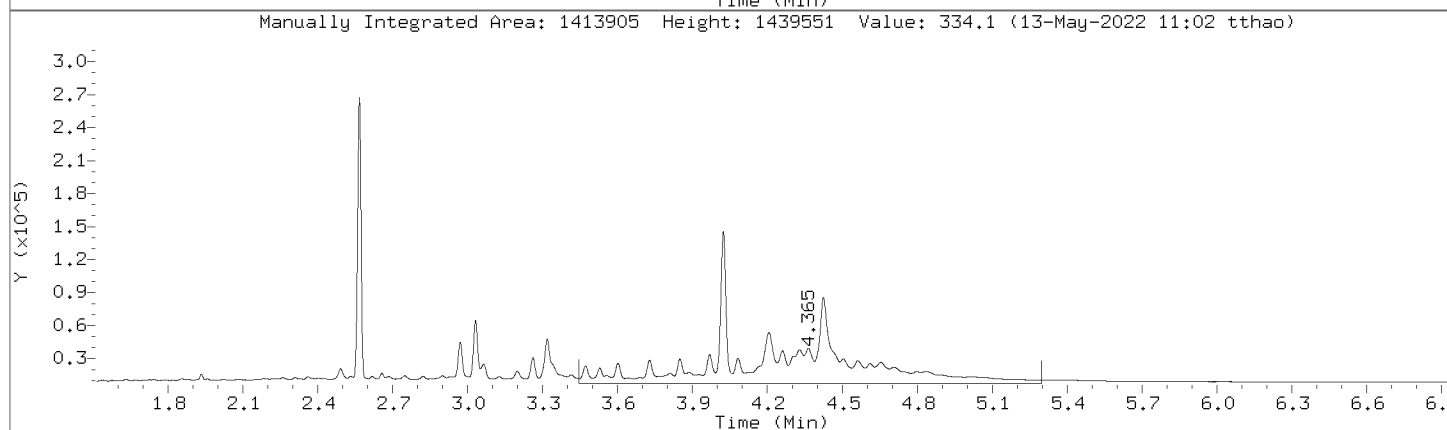
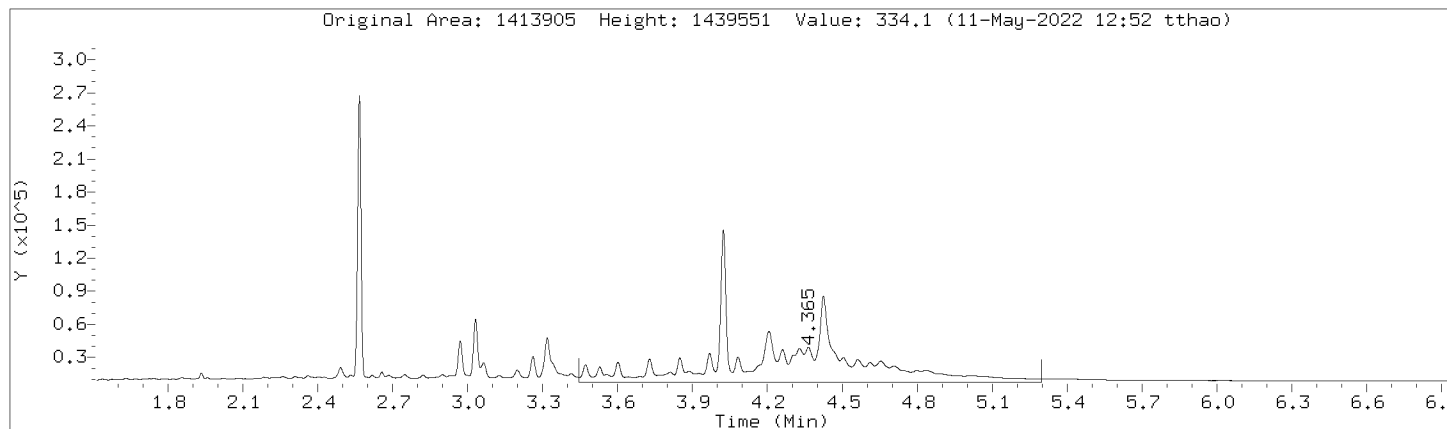
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000119.D  
Injection Date: 11-MAY-2022 09:18  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394001

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



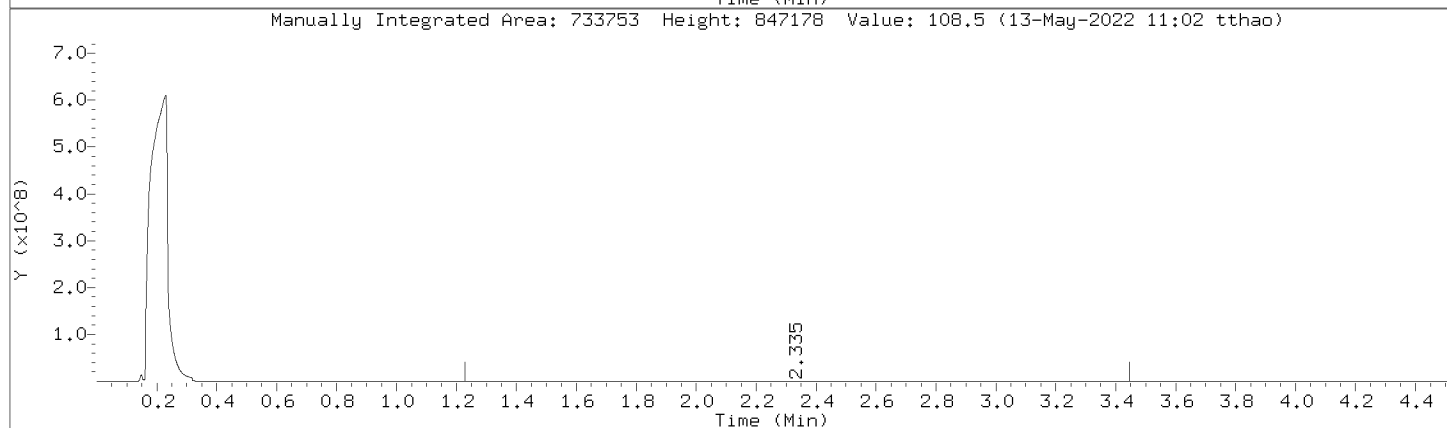
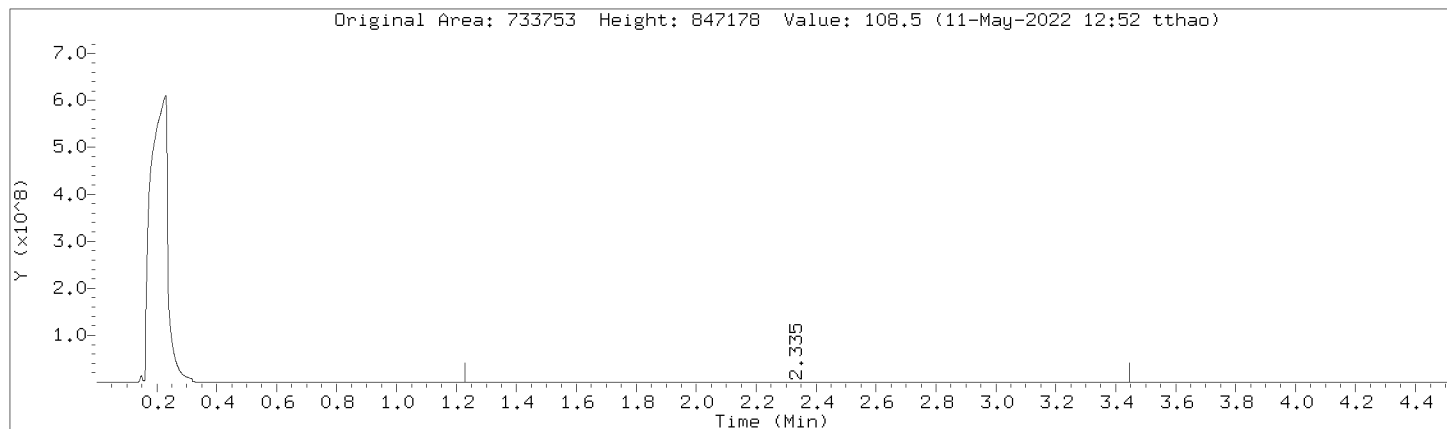
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Injection Date: 11-MAY-2022 09:18  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394001

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000119.D  
Injection Date: 11-MAY-2022 09:18  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394001

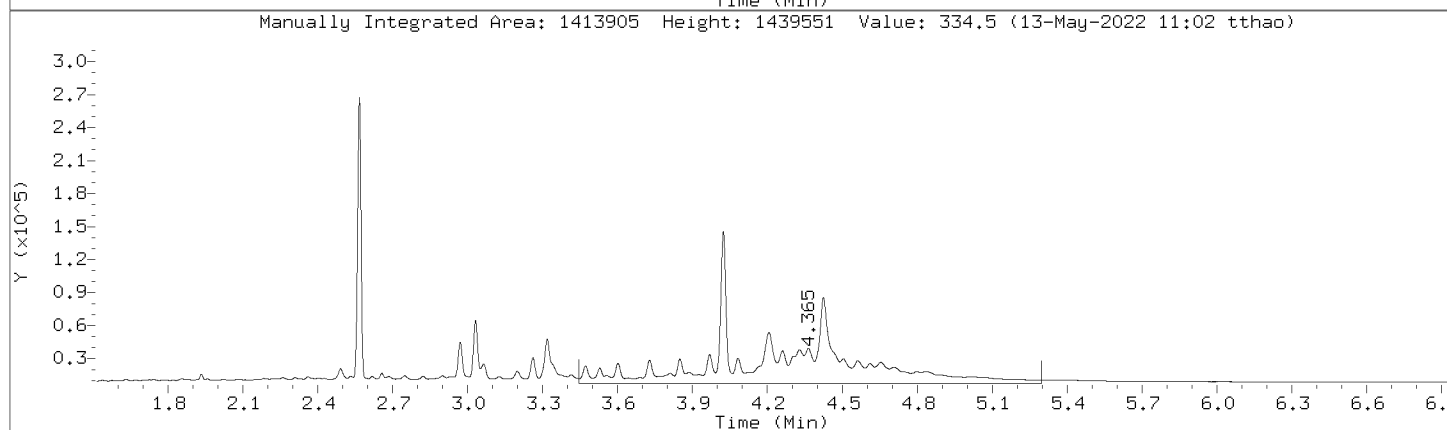
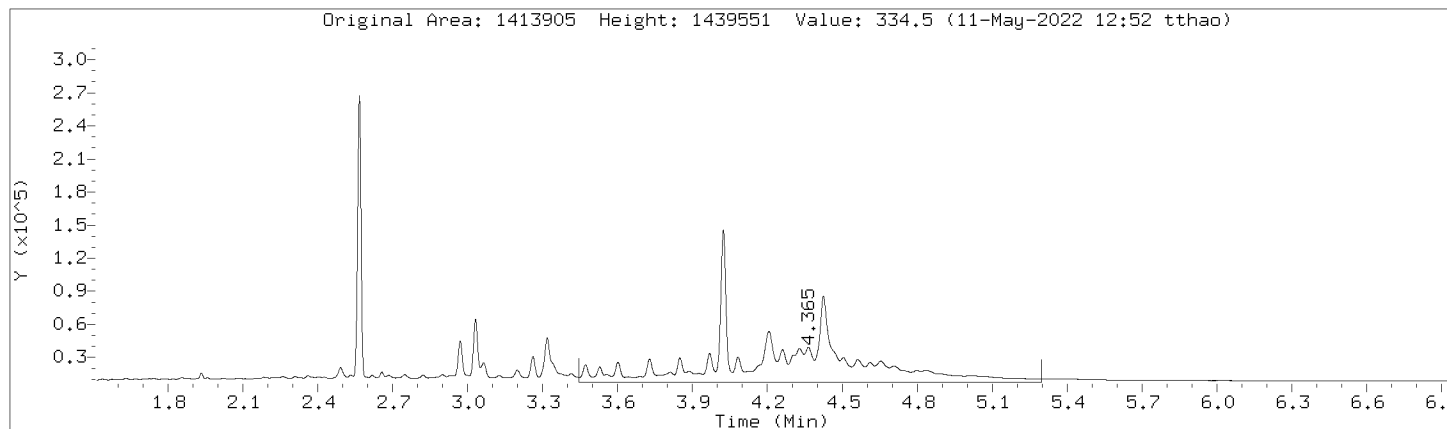
Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:





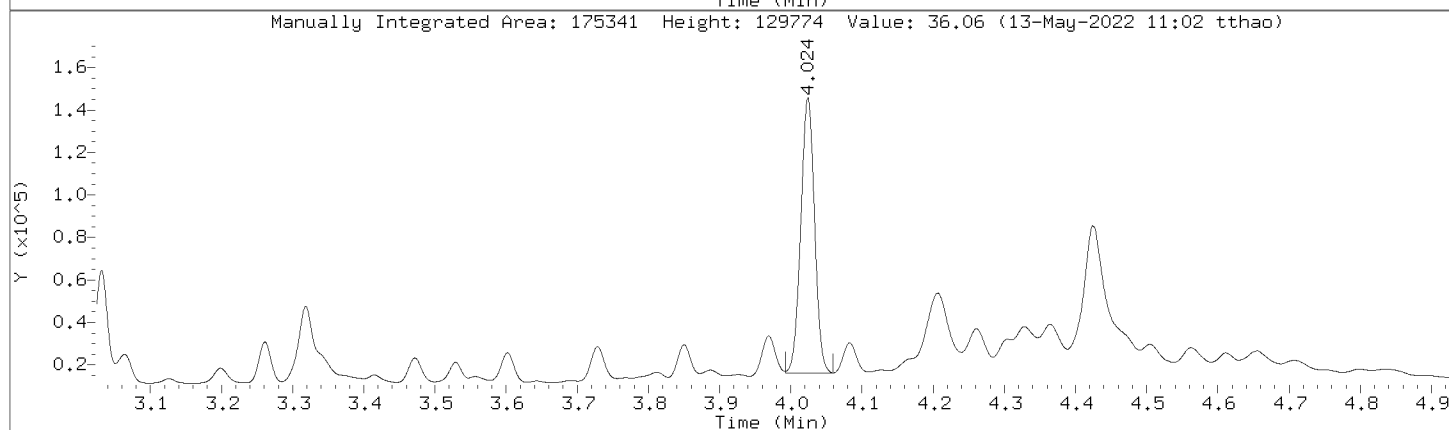
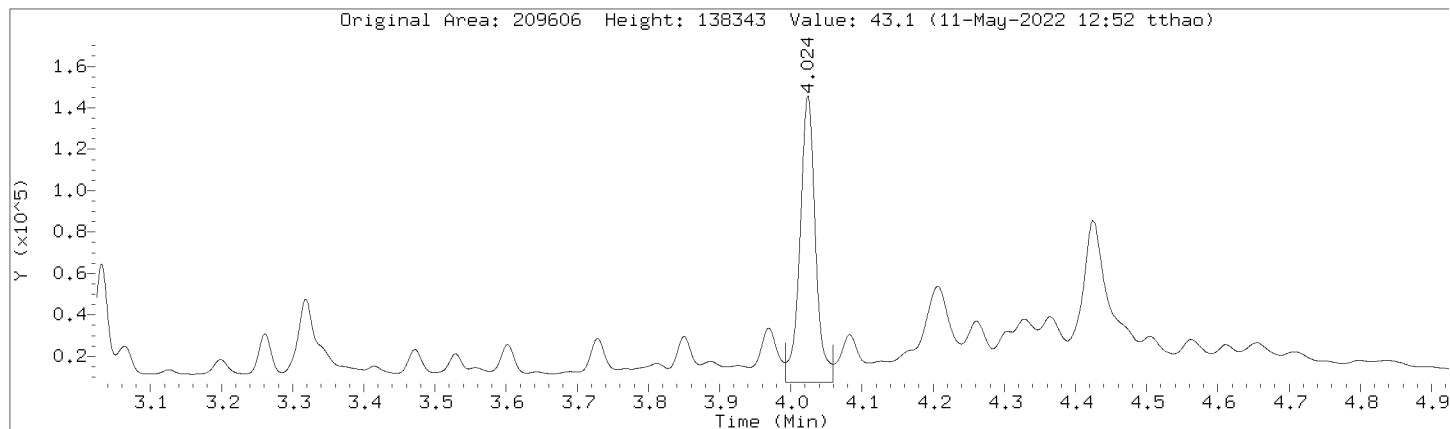
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Injection Date: 11-MAY-2022 09:18  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394001

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



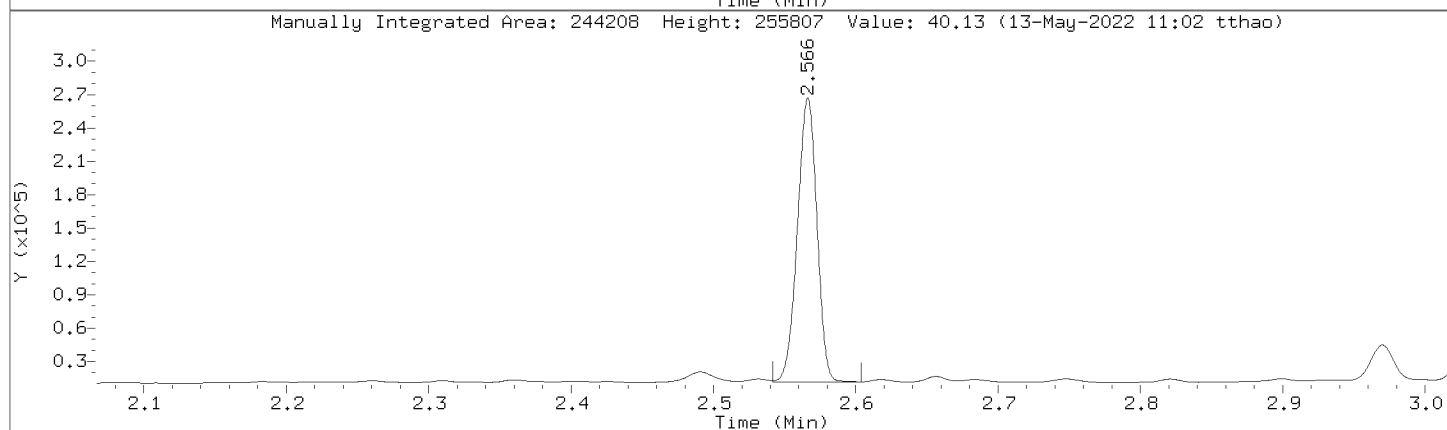
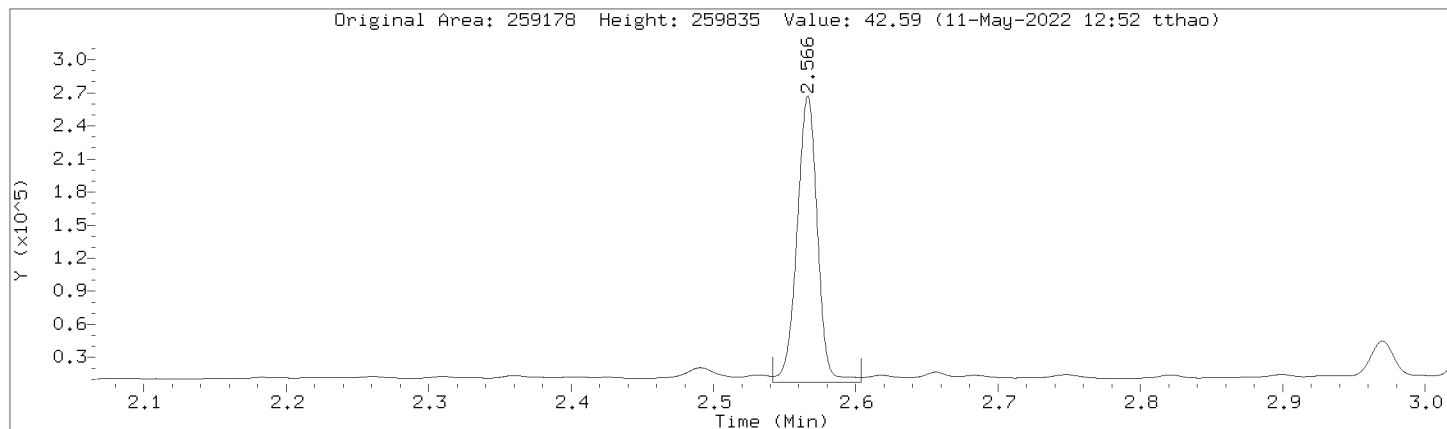
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000119.D  
Injection Date: 11-MAY-2022 09:18  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394001

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000119.D  
 Injection Date: 11-MAY-2022 09:18  
 Instrument: 10gcsF.i  
 Lab Sample ID: 10606394001

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	733753	733753
Motor Oil Range	1413905	1413905
Diesel Fuel Range SG	733753	733753
Motor Oil Range SG	1413905	1413905
n-Triacontane (S)	209606	175341
o-Terphenyl (S)	259178	244208

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BNSF-BG15-042722-0-10

Lab Name: Pace Analytical - Minnesota Contract: D3593500  
Date Received: 04/29/2022 08:50 Matrix: Solid SDG No.: 10606394  
Date Extracted: 04/29/2022 17:05 Lab Sample ID: 10606394002  
Date Analyzed: 05/11/2022 09:41 Lab File ID: 051022F.B\0510F0000121.D  
Initial wt/vol: 10.09 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: 35.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	34.2	
	Motor Oil Range	174	

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AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000121.D  
 Lab Smp Id: 10606394002 Client Smp ID: BNSF-BG15-042722-0-  
 Inj Date : 11-MAY-2022 09:41  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 10606394002  
 Misc Info : 39248  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\051022F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 11-May-2022 12:52 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 85  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.090	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	35.499	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL		FINAL	REVIEW CODE
			RESPONSE	(ug/mL)	(mg/Kg)	
=====	=====	=====	=====	=====	=====	=====
\$ 2	o-Terphenyl (S)				CAS #:	
2.566	2.566	0.000	265709	43.6616	6.71	(M) BA
\$ 3	n-Triacontane (S)				CAS #:	
4.024	4.024	0.000	201356	41.4044	6.36	(M) BA
S 10	Motor Oil Range				CAS #:	
3.431	- 5.300		4518347	1132.36	174	(M) RNG
S 11	Motor Oil Range SG				CAS #:	
3.431	- 5.300		4518347	1132.64	174	(M) RNG
S 8	Diesel Fuel Range				CAS #:	
1.240	- 3.430		1228944	222.840	34.2	(M) RNG
S 9	Diesel Fuel Range SG				CAS #:	
1.240	- 3.430		1228944	222.840	34.2	(M) RNG

QC Flag Legend

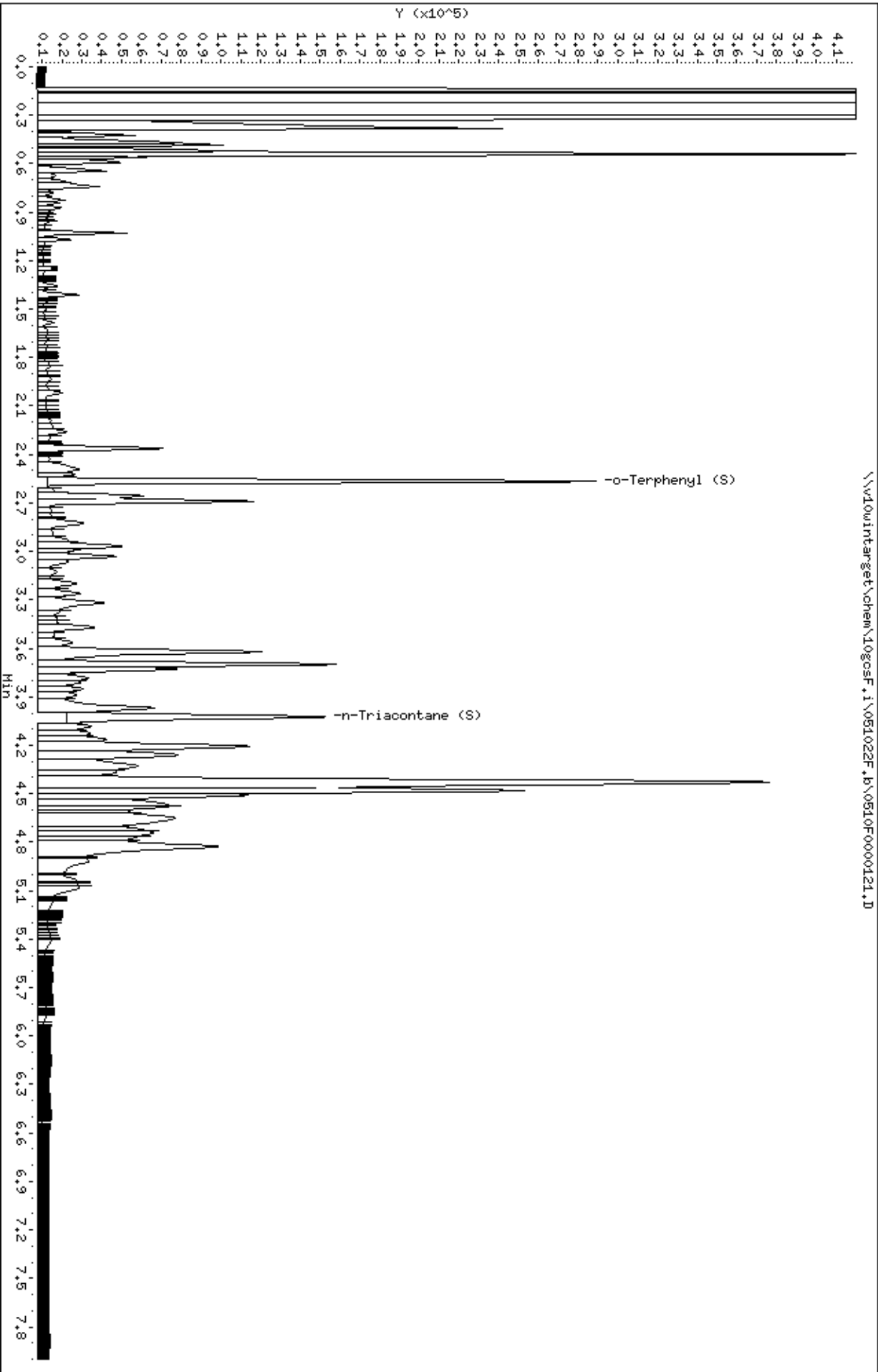
M - Compound response manually integrated.

Review Codes Legend

- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.

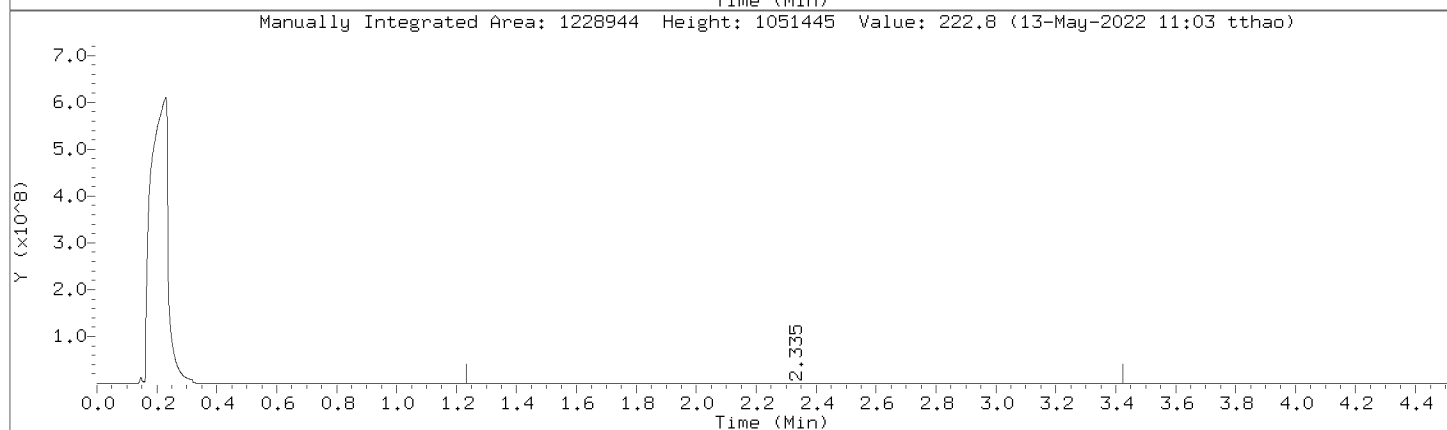
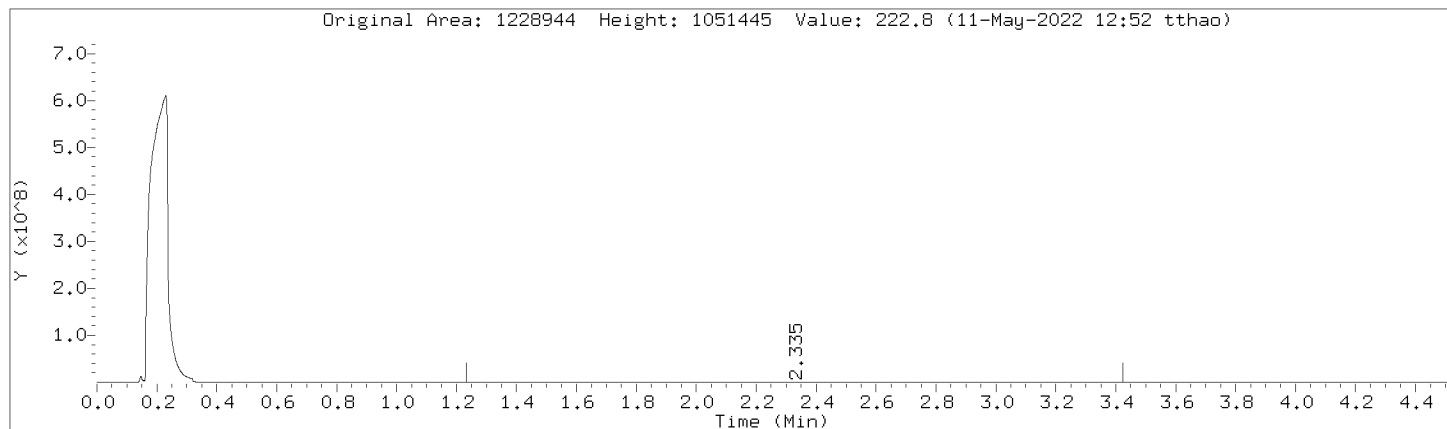
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Date: 11-MAY-2022 09:41  
Client ID: BNSF-BGL5-042722-0-  
Sample Info: 10606394002  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21390001

Instrument: logosf.i  
Operator: TT2  
Column diameter: 0.32



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000121.D  
Injection Date: 11-MAY-2022 09:41  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394002

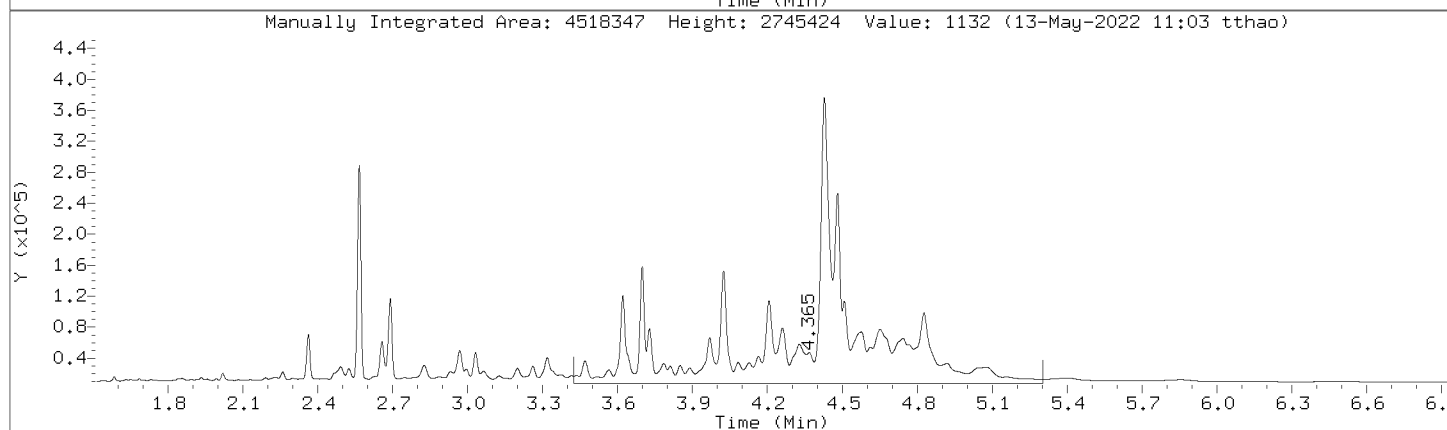
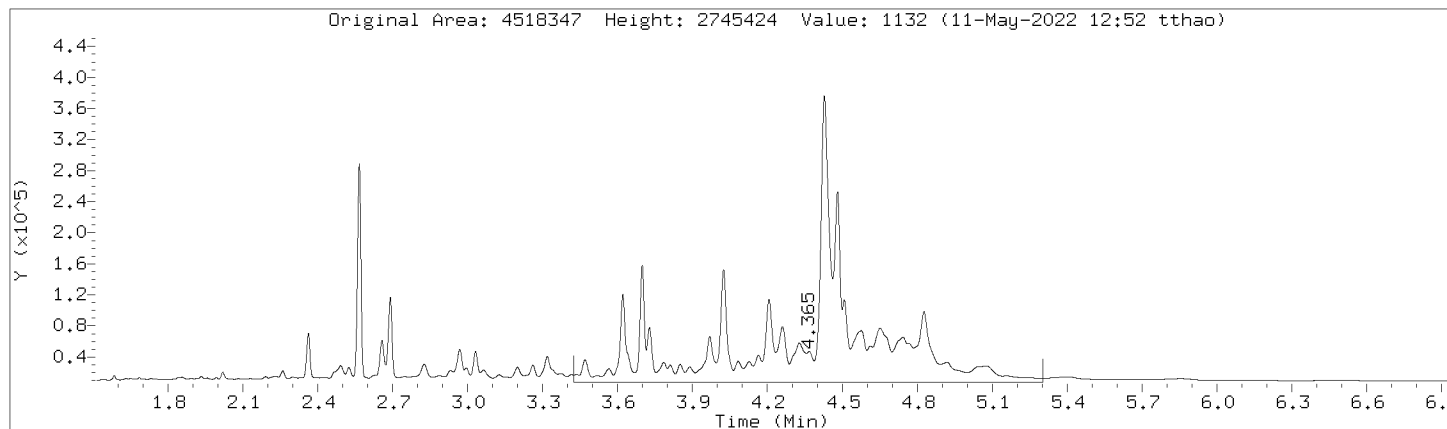
Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:





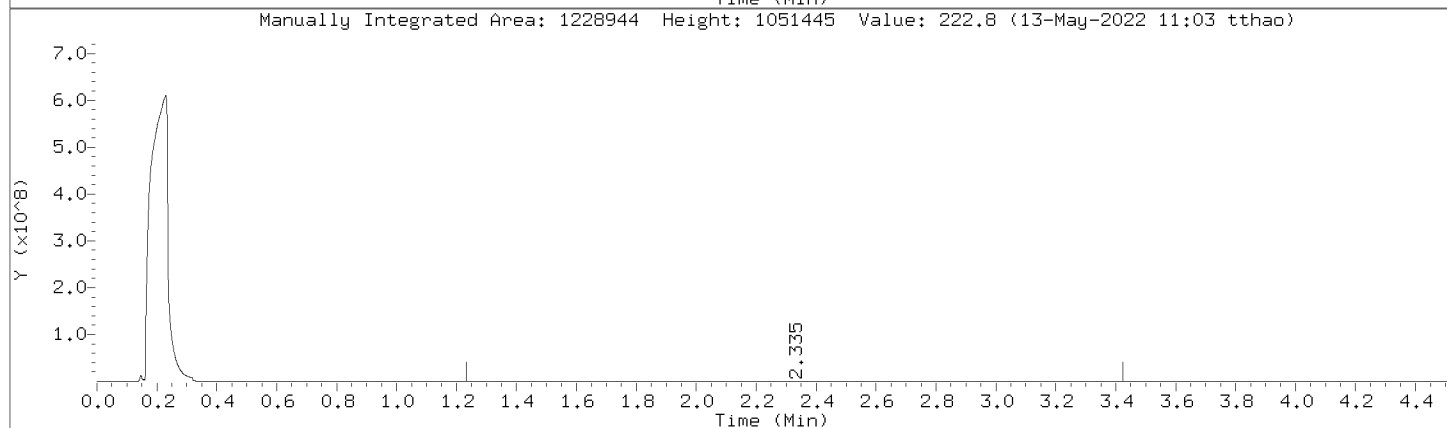
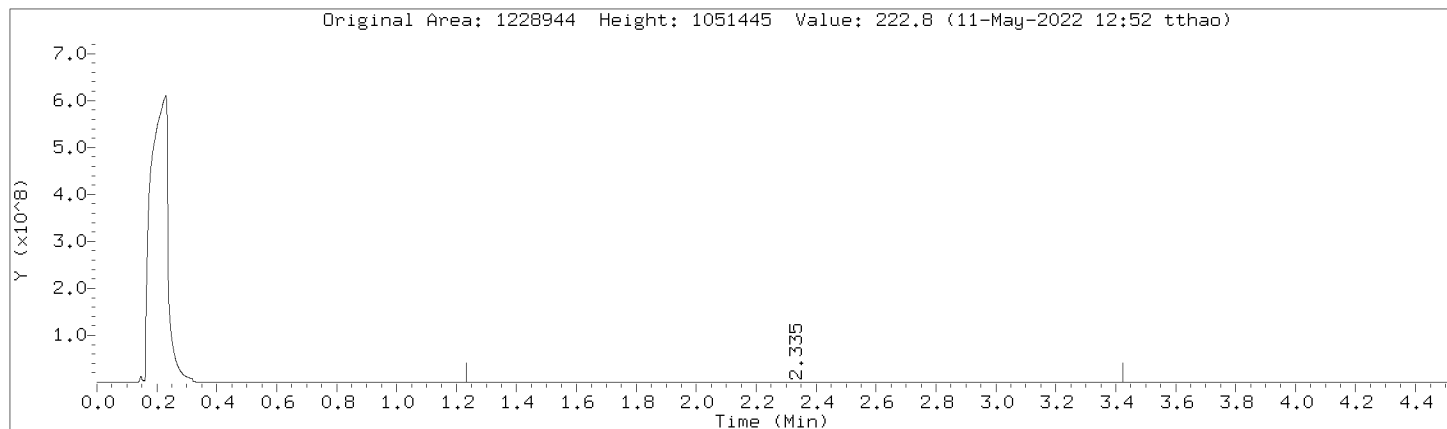
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000121.D  
Injection Date: 11-MAY-2022 09:41  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394002

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



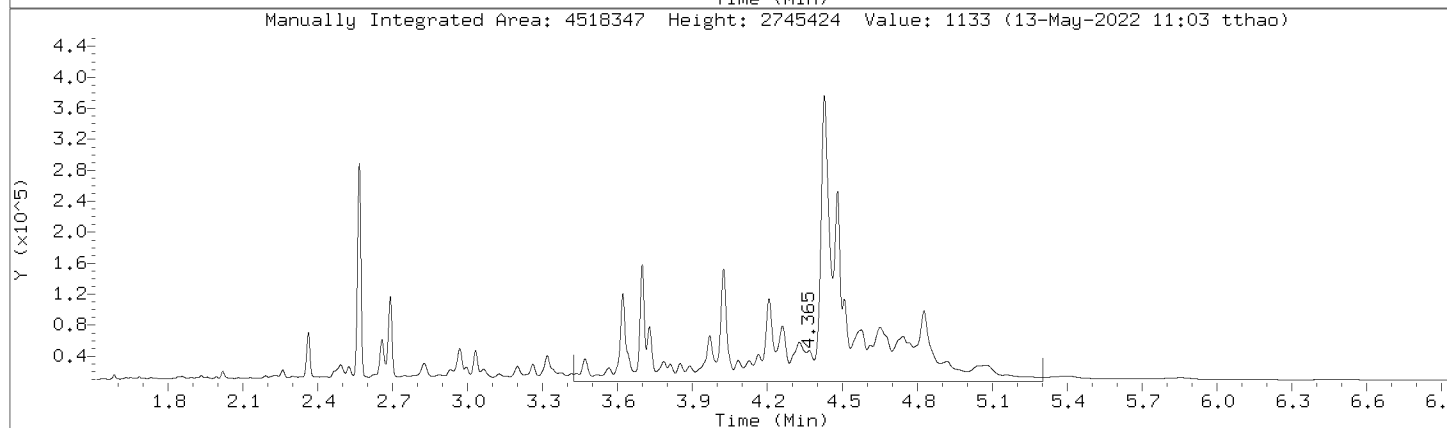
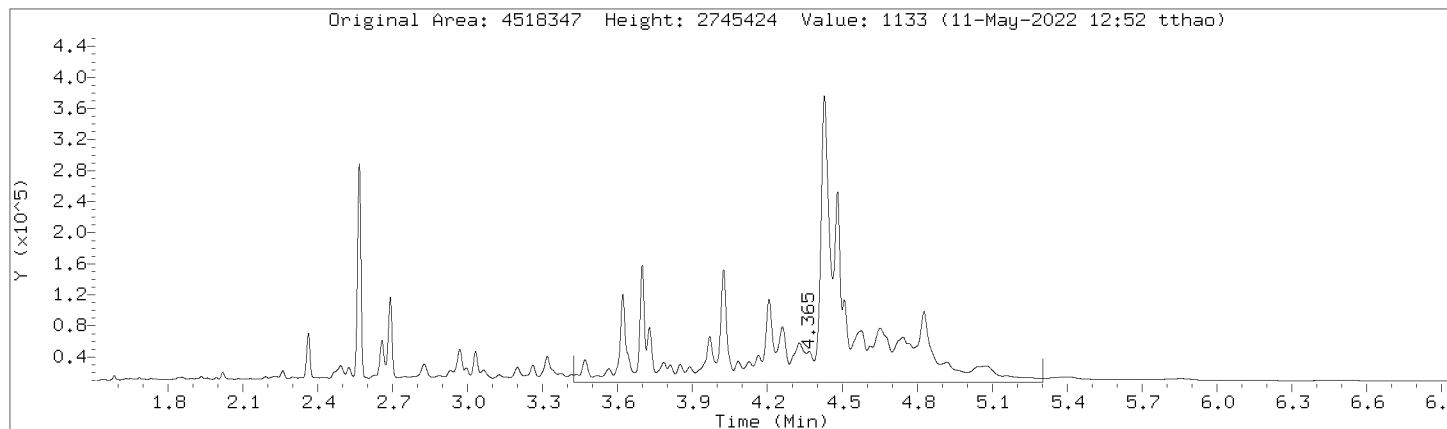
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Injection Date: 11-MAY-2022 09:41  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394002

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



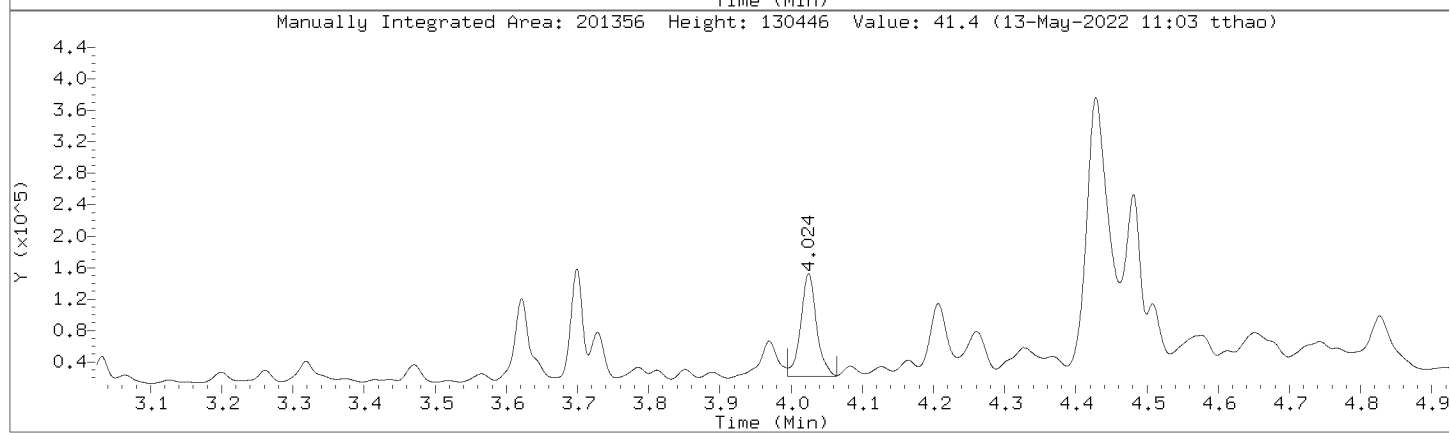
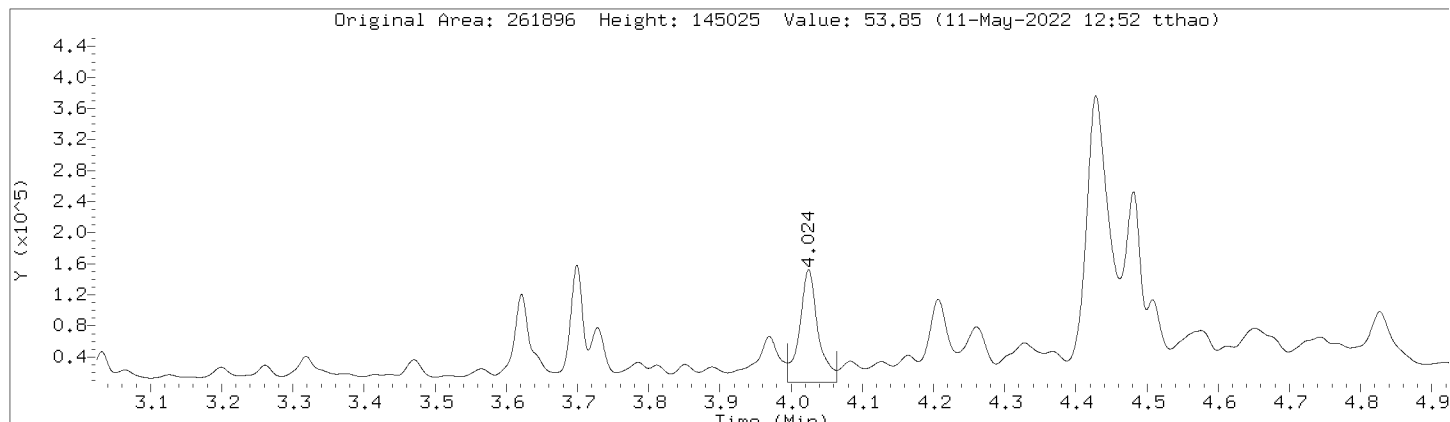
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000121.D  
Injection Date: 11-MAY-2022 09:41  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394002

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



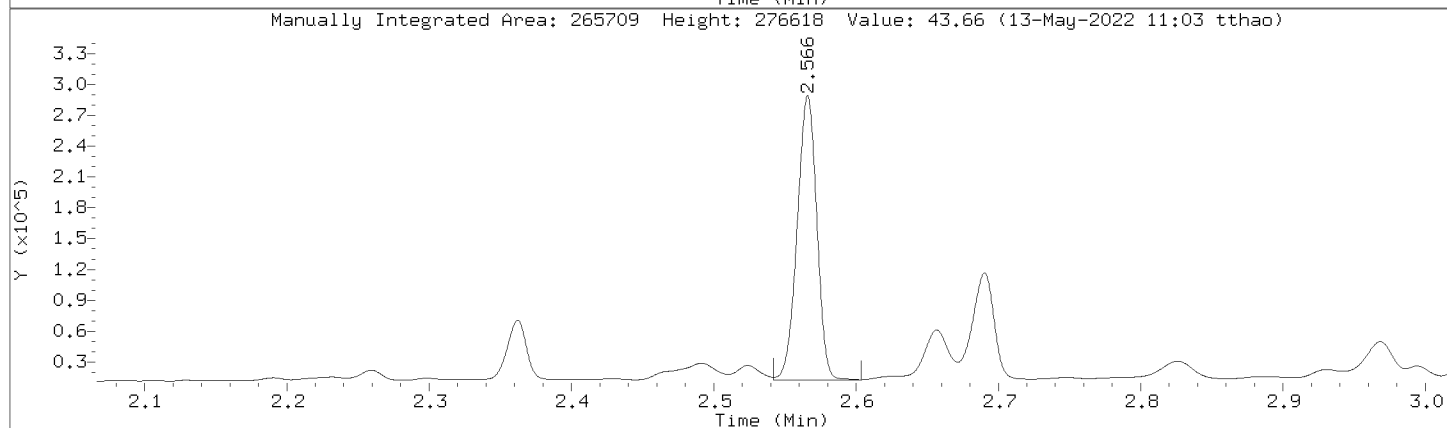
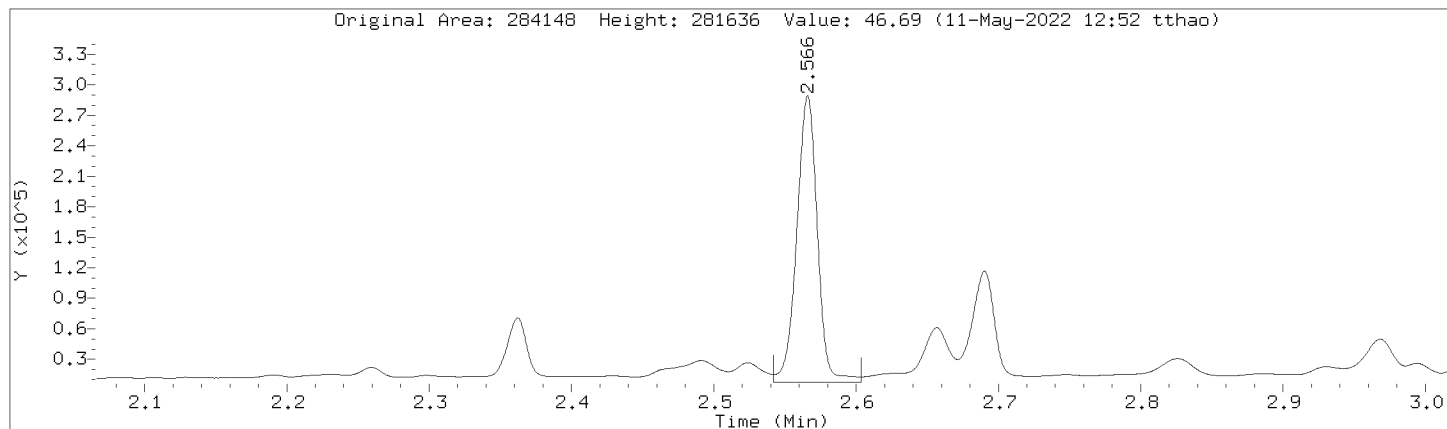
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000121.D  
Injection Date: 11-MAY-2022 09:41  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394002

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000121.D  
 Injection Date: 11-MAY-2022 09:41  
 Instrument: 10gcsF.i  
 Lab Sample ID: 10606394002

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	1228944	1228944
Motor Oil Range	4518347	4518347
Diesel Fuel Range SG	1228944	1228944
Motor Oil Range SG	4518347	4518347
n-Triacontane (S)	261896	201356
o-Terphenyl (S)	284148	265709

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BNSF-BG16-042722-0-10

Lab Name: Pace Analytical - Minnesota Contract: D3593500  
Date Received: 04/29/2022 08:50 Matrix: Solid SDG No.: 10606394  
Date Extracted: 04/29/2022 17:05 Lab Sample ID: 10606394003  
Date Analyzed: 05/11/2022 10:04 Lab File ID: 051022F.B\0510F0000123.D  
Initial wt/vol: 10.19 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: 26.5%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	ND	U
	Motor Oil Range	18.0	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000123.D  
 Lab Smp Id: 10606394003 Client Smp ID: BNSF-BG16-042722-0-  
 Inj Date : 11-MAY-2022 10:04  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 10606394003  
 Misc Info : 39248  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\051022F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 11-May-2022 12:52 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 86  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.190	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	26.511	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
\$ 2	o-Terphenyl (S)					CAS #:
2.565	2.566	-0.001	258873	42.5383	5.68	(M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.023	4.024	-0.001	200946	41.3201	5.52	(M) BA
S 10	Motor Oil Range					CAS #:
3.431	- 5.300		637394	134.421	18.0	(M) RNG
S 11	Motor Oil Range SG					CAS #:
3.431	- 5.300		637394	134.874	18.0	(M) RNG
S 8	Diesel Fuel Range					CAS #:
1.240	- 3.430		424957	37.2286	4.97	(M) RNG
S 9	Diesel Fuel Range SG					CAS #:
1.240	- 3.430		424957	37.2286	4.97	(M) RNG

QC Flag Legend

M - Compound response manually integrated.

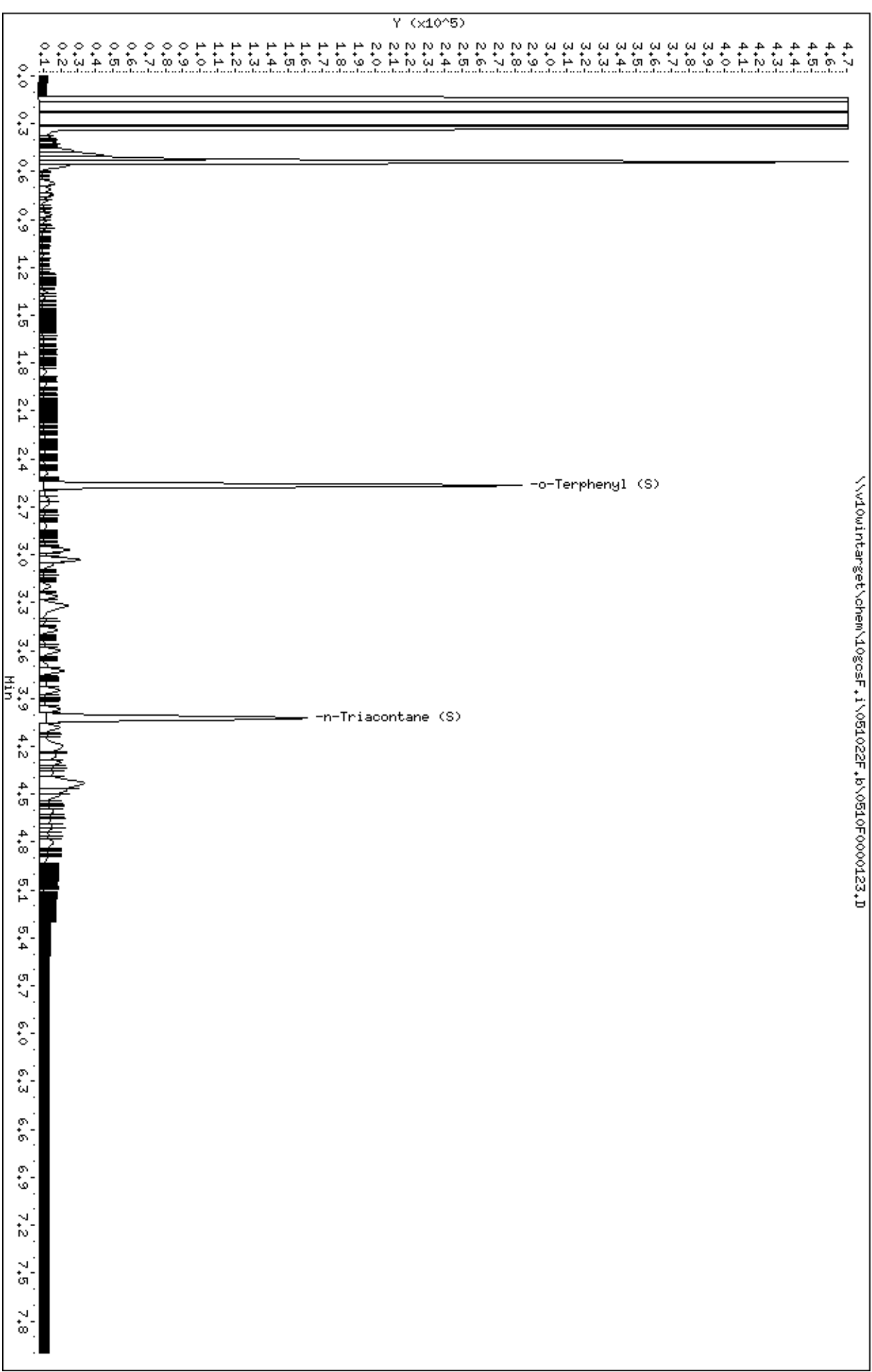
Review Codes Legend

- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.



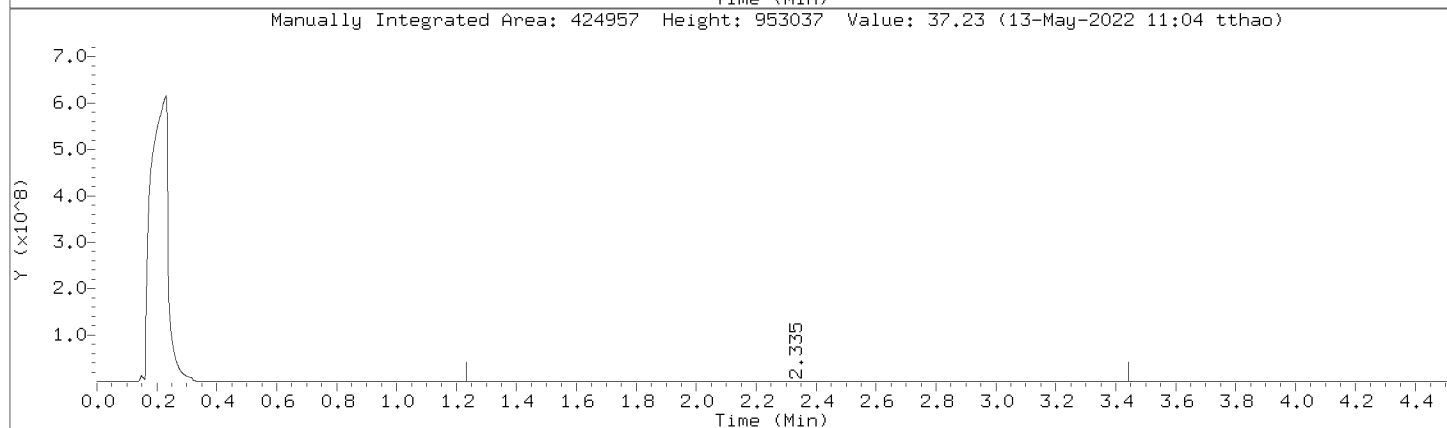
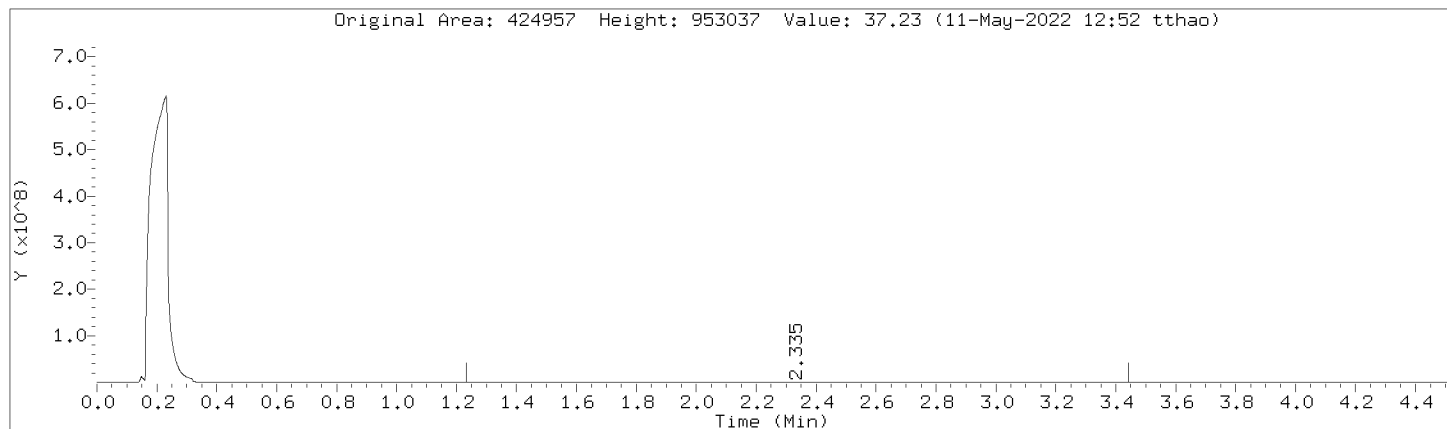
Data File: \\wlowintarget\chem\logosf.i\051022F.b\0510F0000123.D  
Date: 11-MAY-2022 10:04  
Client ID: BNSF-BG16-042722-0-  
Sample Info: 10606394003  
Volume Injected (uL): 1.0  
Column phase: DB-5-USA21390001

Instrument: logosf.i  
Operator: TT2  
Column diameter: 0.32



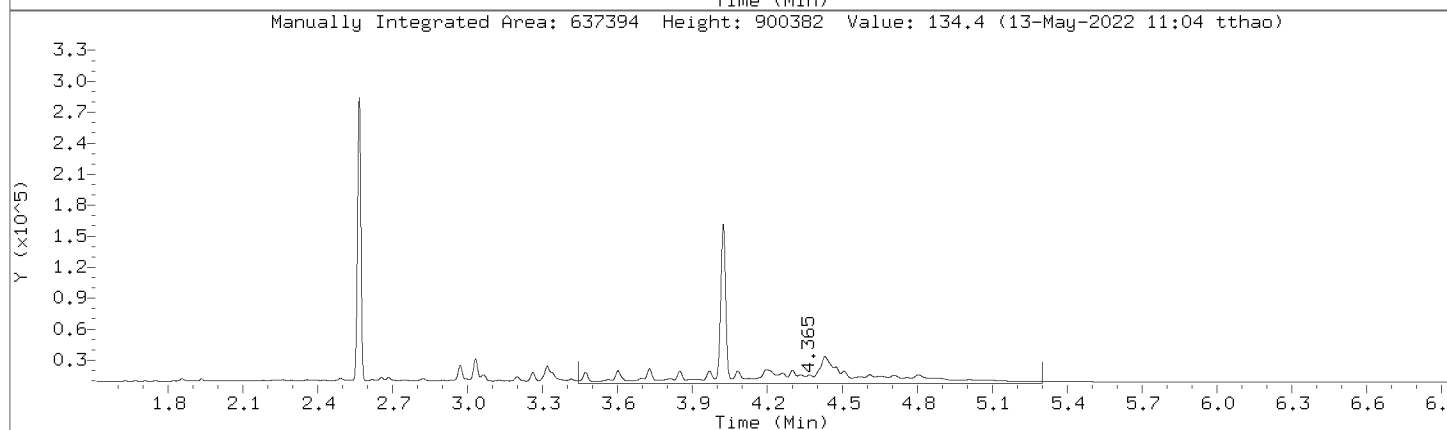
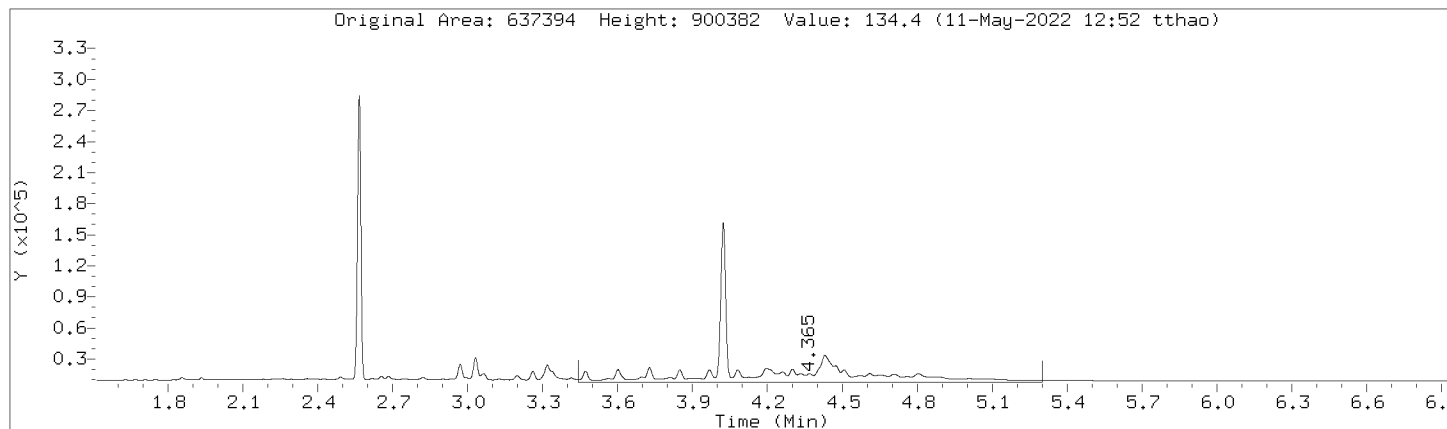
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Injection Date: 11-MAY-2022 10:04  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394003

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



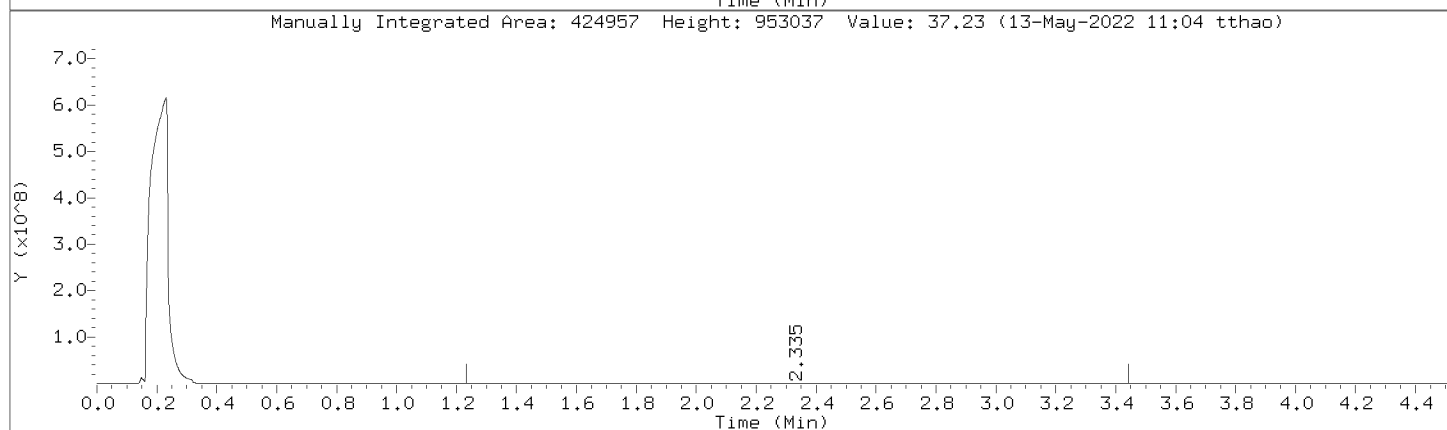
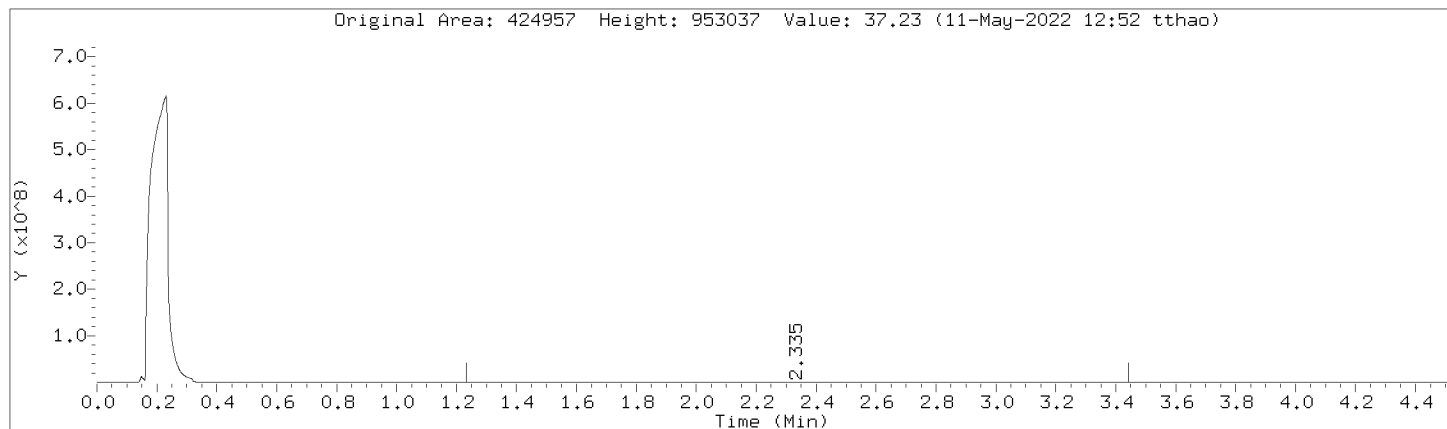
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Injection Date: 11-MAY-2022 10:04  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394003

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



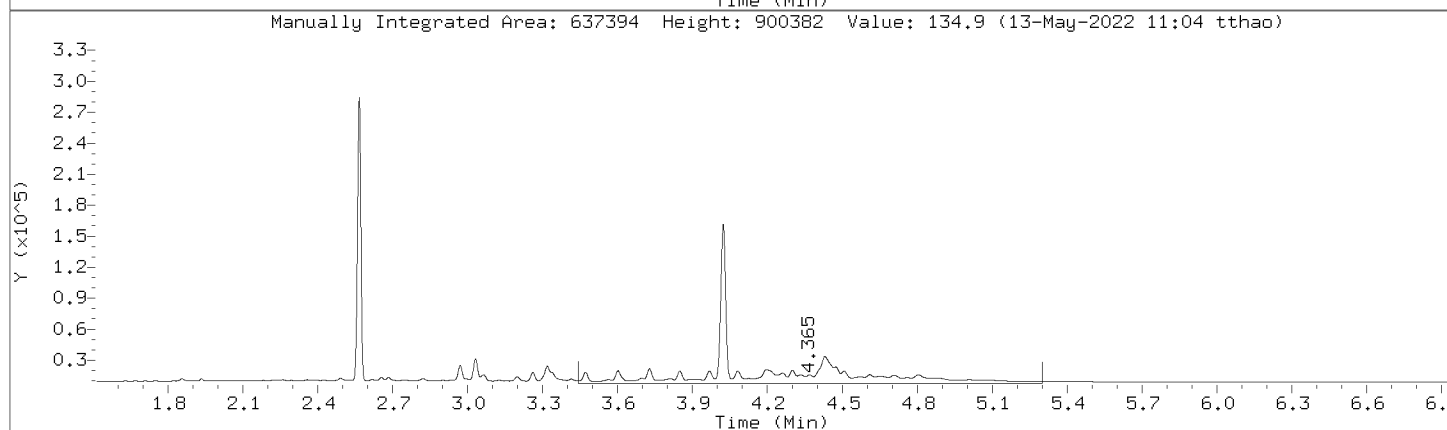
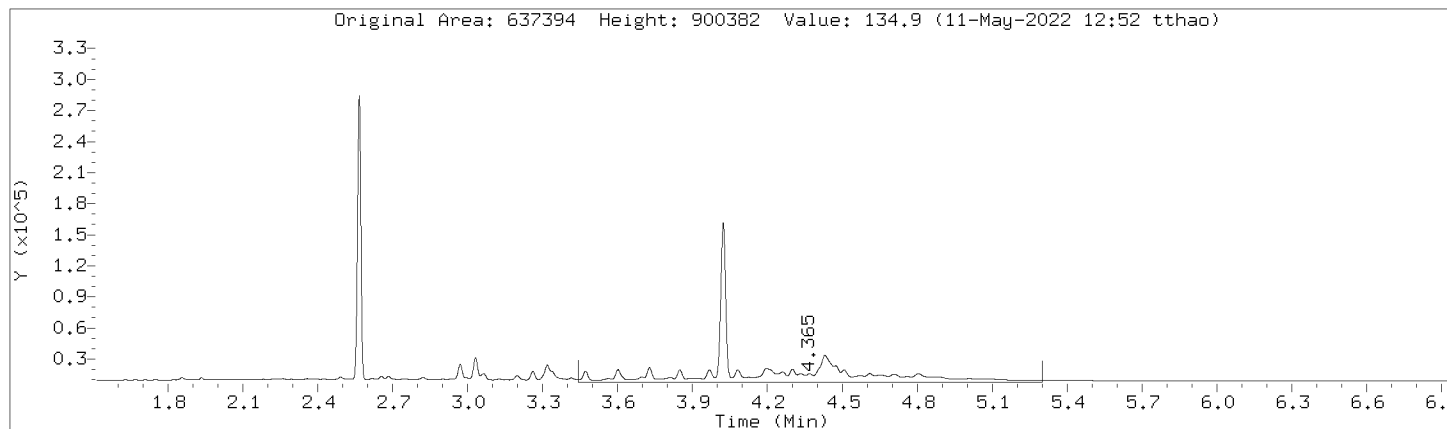
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Injection Date: 11-MAY-2022 10:04  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394003

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



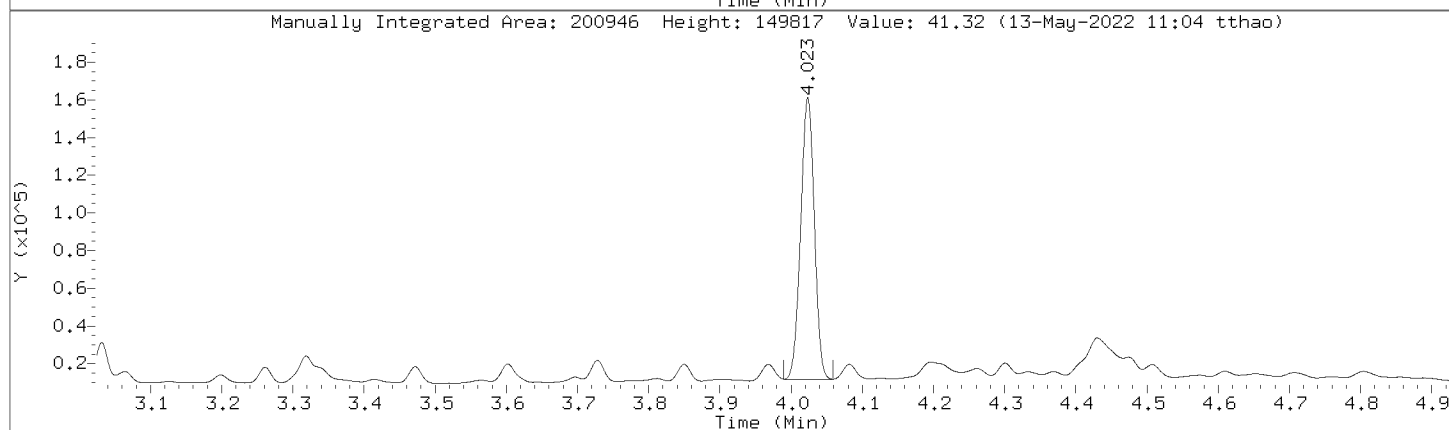
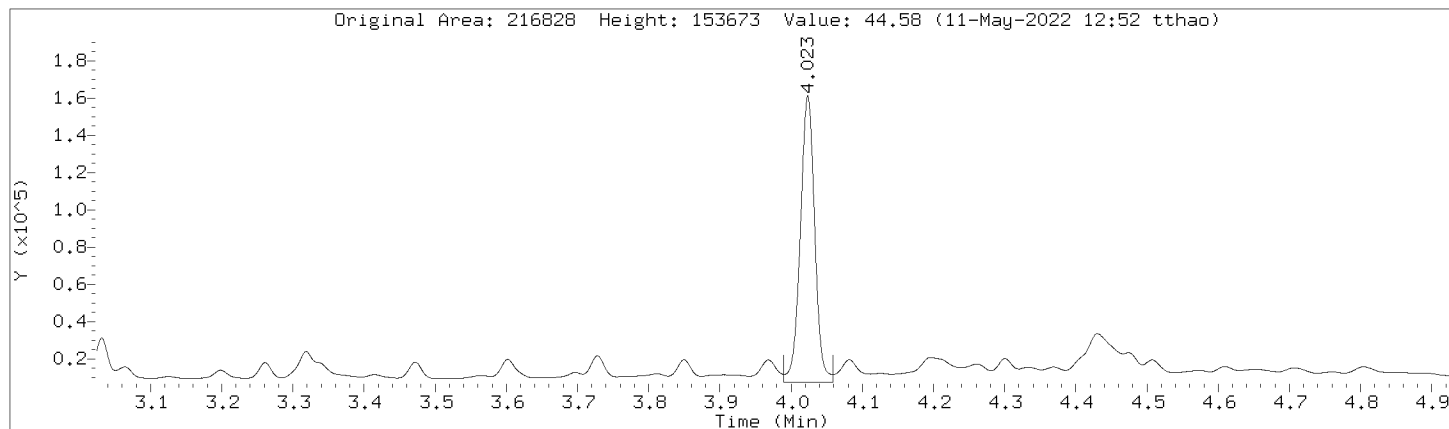
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Injection Date: 11-MAY-2022 10:04  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394003

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



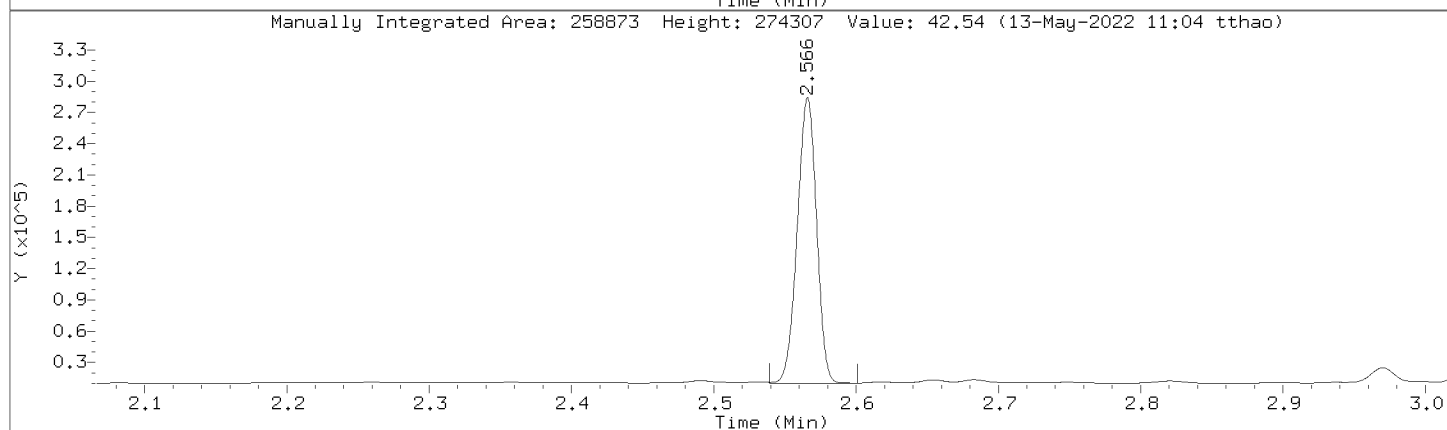
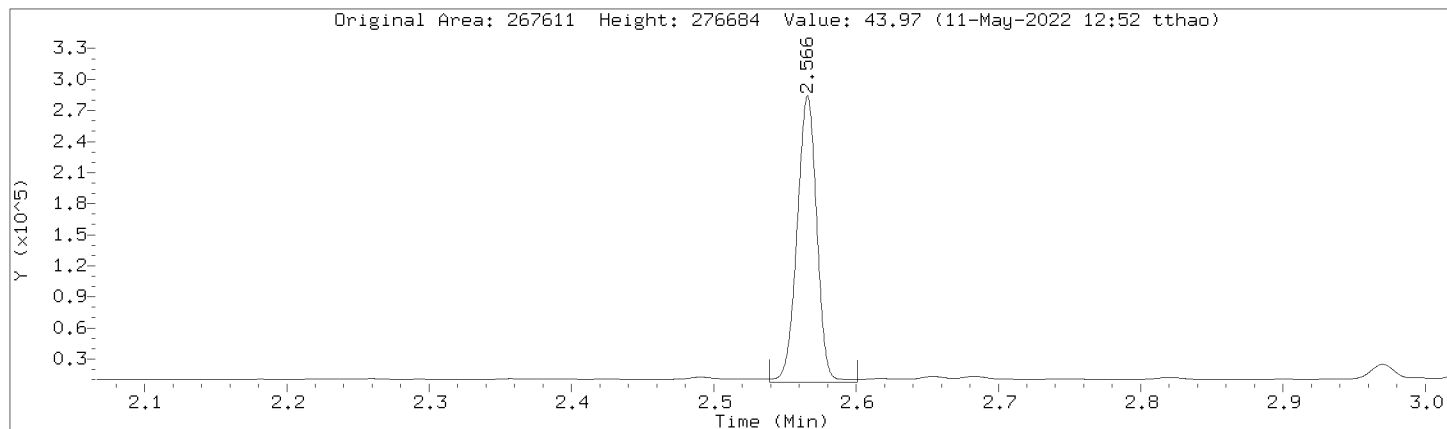
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000123.D  
Injection Date: 11-MAY-2022 10:04  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394003

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000123.D  
 Injection Date: 11-MAY-2022 10:04  
 Instrument: 10gcsF.i  
 Lab Sample ID: 10606394003

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	424957	424957
Motor Oil Range	637394	637394
Diesel Fuel Range SG	424957	424957
Motor Oil Range SG	637394	637394
n-Triacontane (S)	216828	200946
o-Terphenyl (S)	267611	258873

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BNSF-BG17-042722-0-10

Lab Name: Pace Analytical - Minnesota Contract: D3593500  
Date Received: 04/29/2022 08:50 Matrix: Solid SDG No.: 10606394  
Date Extracted: 04/29/2022 17:05 Lab Sample ID: 10606394004  
Date Analyzed: 05/11/2022 10:26 Lab File ID: 051022F.B\0510F0000125.D  
Initial wt/vol: 10.1 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: 50.2%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	64.4	
	Motor Oil Range	363	



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000125.D  
 Lab Smp Id: 10606394004 Client Smp ID: BNSF-BG17-042722-0-  
 Inj Date : 11-MAY-2022 10:26  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 10606394004  
 Misc Info : 39248  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\051022F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 11-May-2022 12:52 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 87  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.100	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	50.185	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
\$ 2	o-Terphenyl (S)					CAS #:
2.565	2.566	-0.001	273454	44.9343	8.93	(M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.024	4.024	0.000	226063	46.4849	9.24	(M) BA
S 10	Motor Oil Range					CAS #:
3.431	- 5.300		7221974	1827.57	363	(M) RNG
S 11	Motor Oil Range SG					CAS #:
3.431	- 5.300		7221974	1827.72	363	(M) RNG
S 8	Diesel Fuel Range					CAS #:
1.240	- 3.430		1666372	323.827	64.4	(M) RNG
S 9	Diesel Fuel Range SG					CAS #:
1.240	- 3.430		1666372	323.827	64.4	(M) RNG

QC Flag Legend

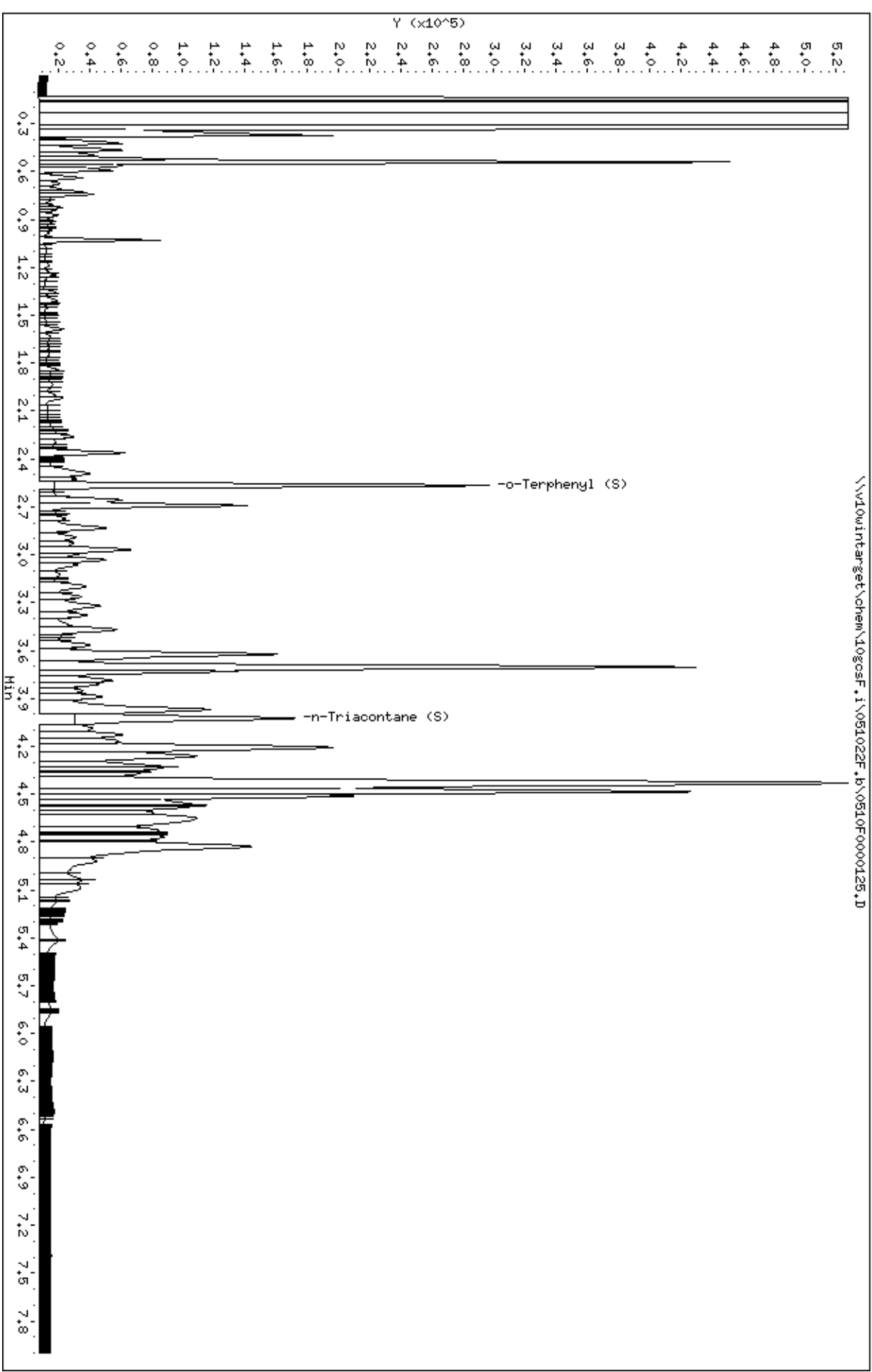
M - Compound response manually integrated.

Review Codes Legend

BA: Indicates that the baseline had to be adjusted correctly by the analyst.  
RNG: Indicates that the analyst integrated a surrogate within the range.

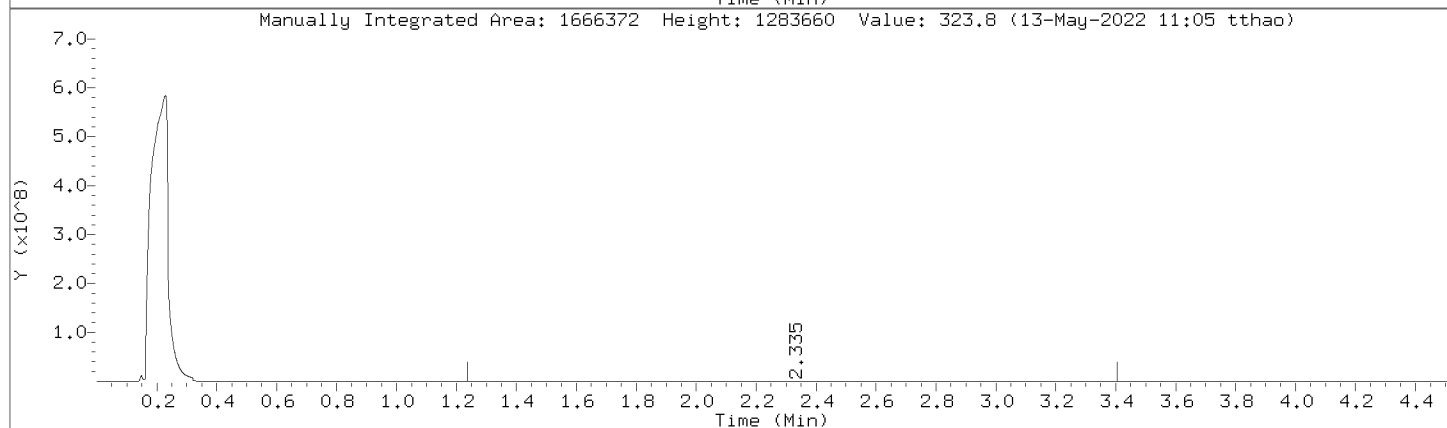
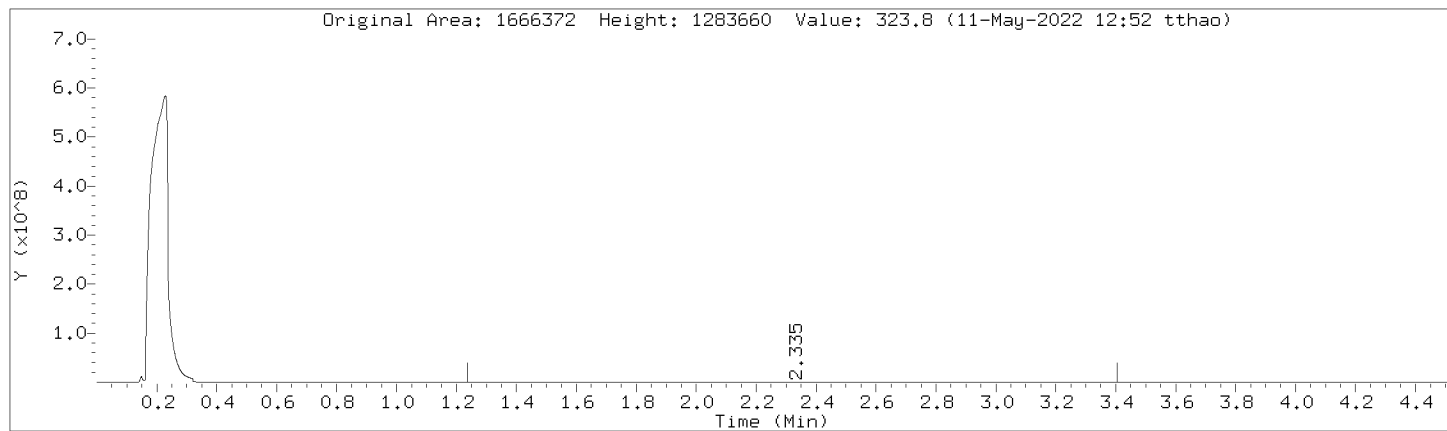
Data File: \\wlowintarget\chem\logosf.i\051022F.b\0510F0000125.D  
Date: 11-MAY-2022 10:26  
Client ID: BNSF-BGL7-042722-0-  
Sample Info: 10606394004  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21390001

Instrument: logosf.i  
Operator: TT2  
Column diameter: 0.32



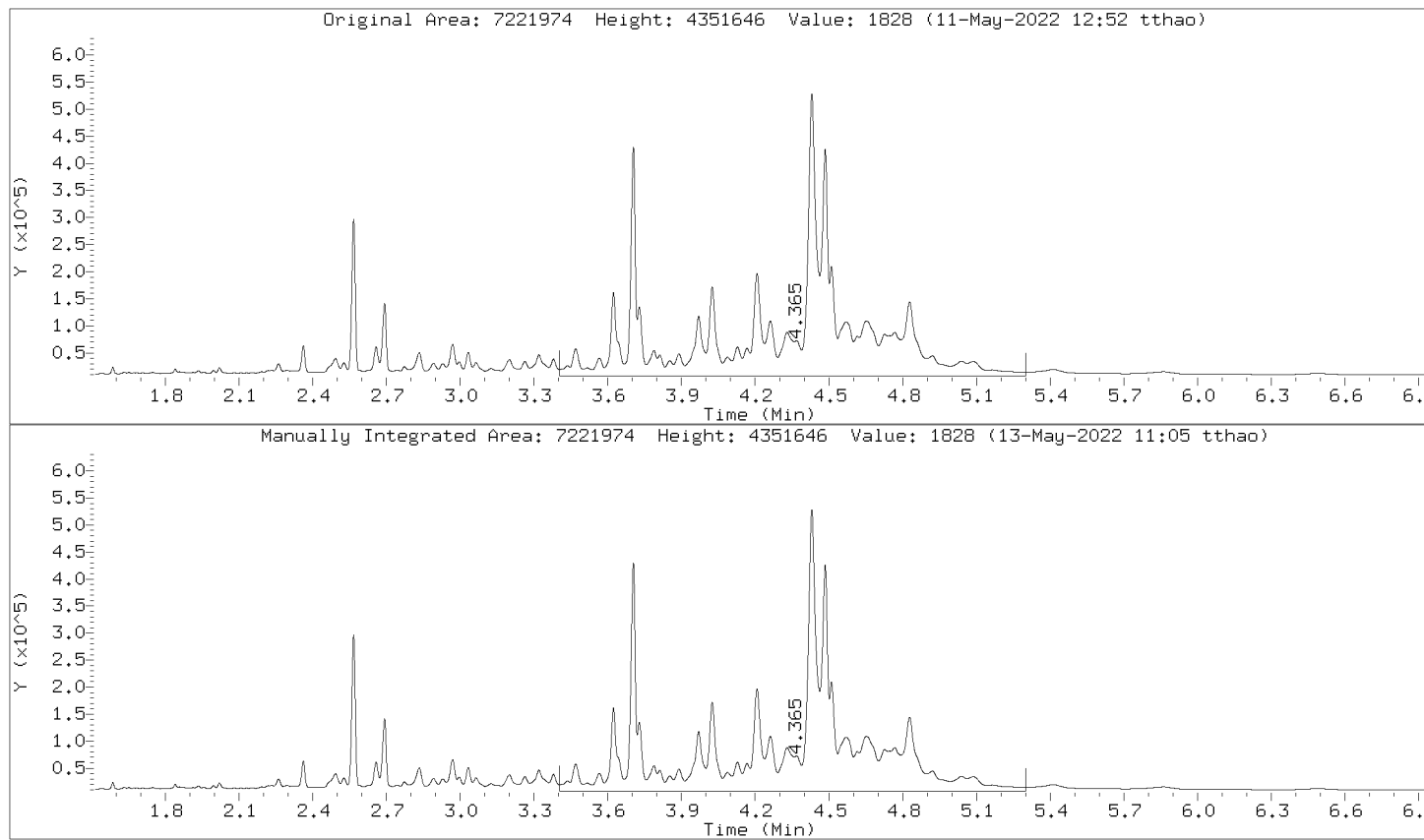
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000125.D  
Injection Date: 11-MAY-2022 10:26  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394004

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



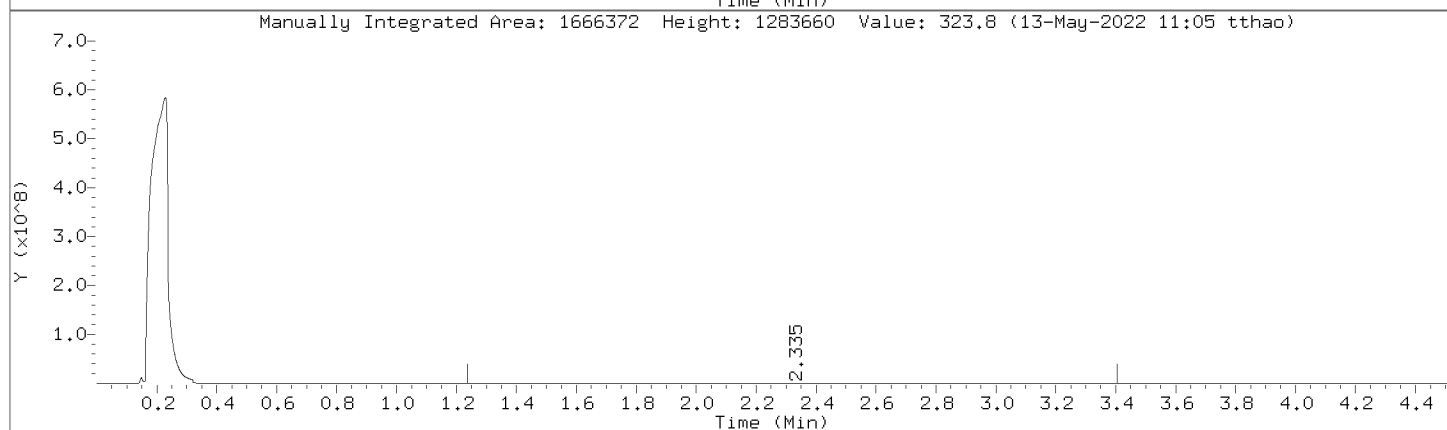
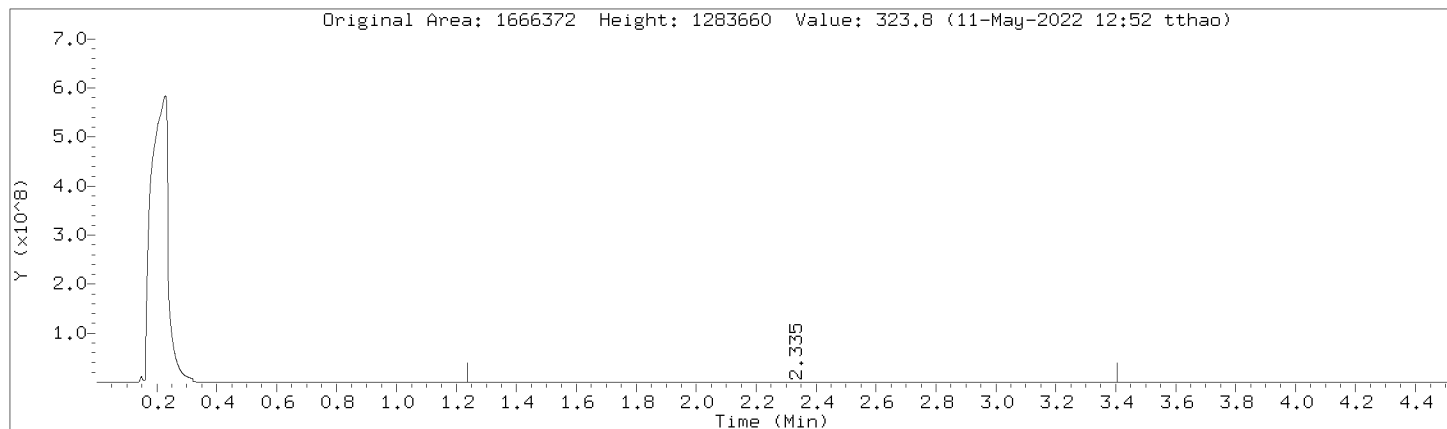
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000125.D  
Injection Date: 11-MAY-2022 10:26  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394004

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



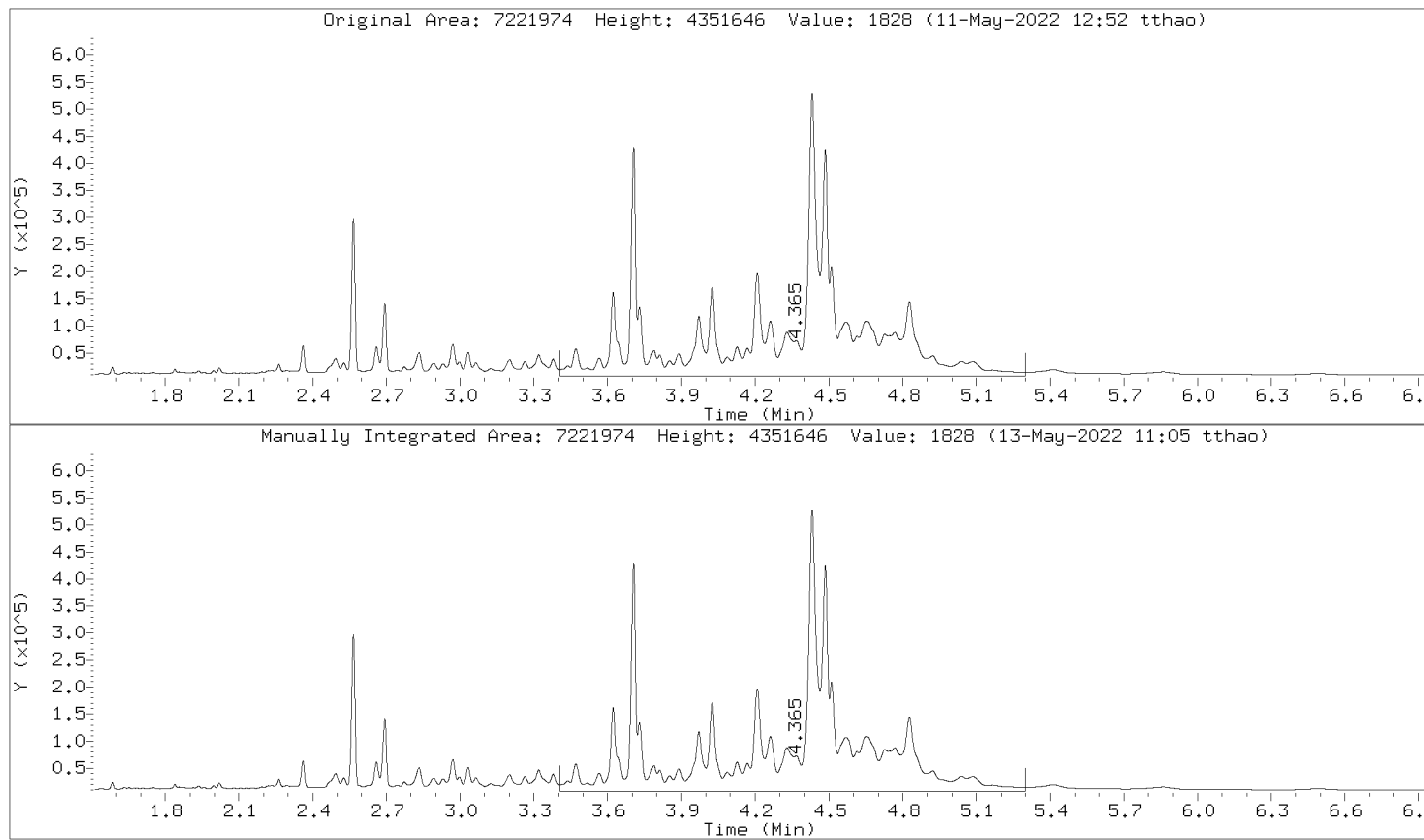
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000125.D  
Injection Date: 11-MAY-2022 10:26  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394004

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



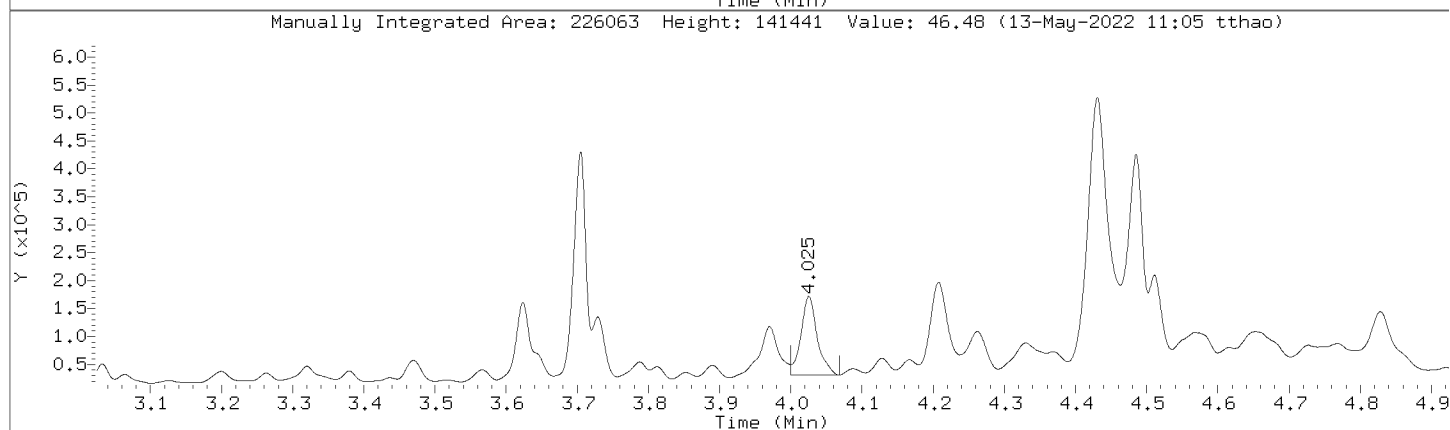
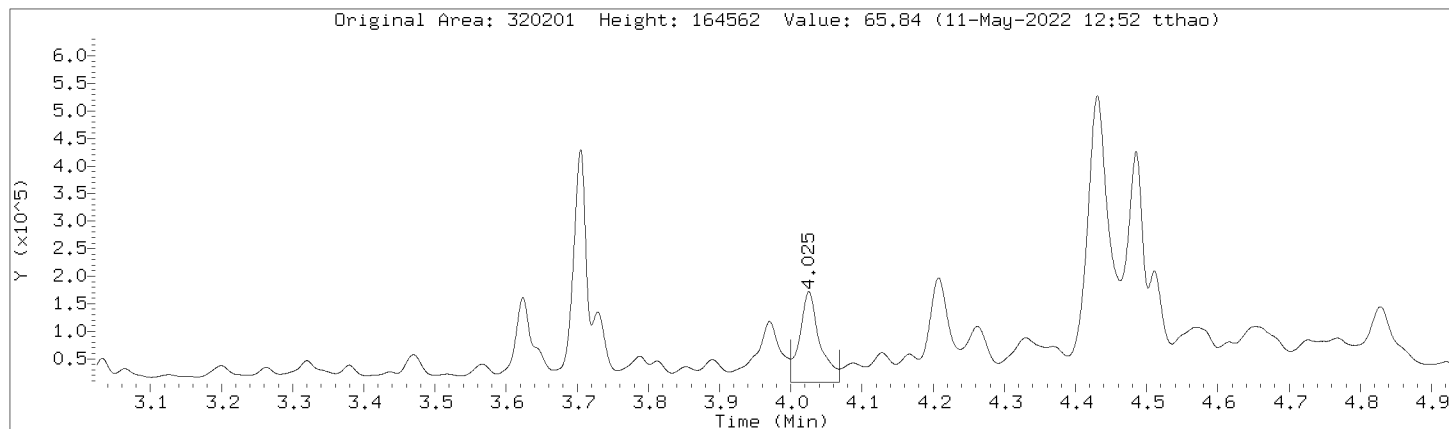
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000125.D  
Injection Date: 11-MAY-2022 10:26  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394004

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000125.D  
Injection Date: 11-MAY-2022 10:26  
Instrument: 10gcsF.i  
Lab Sample ID: 10606394004

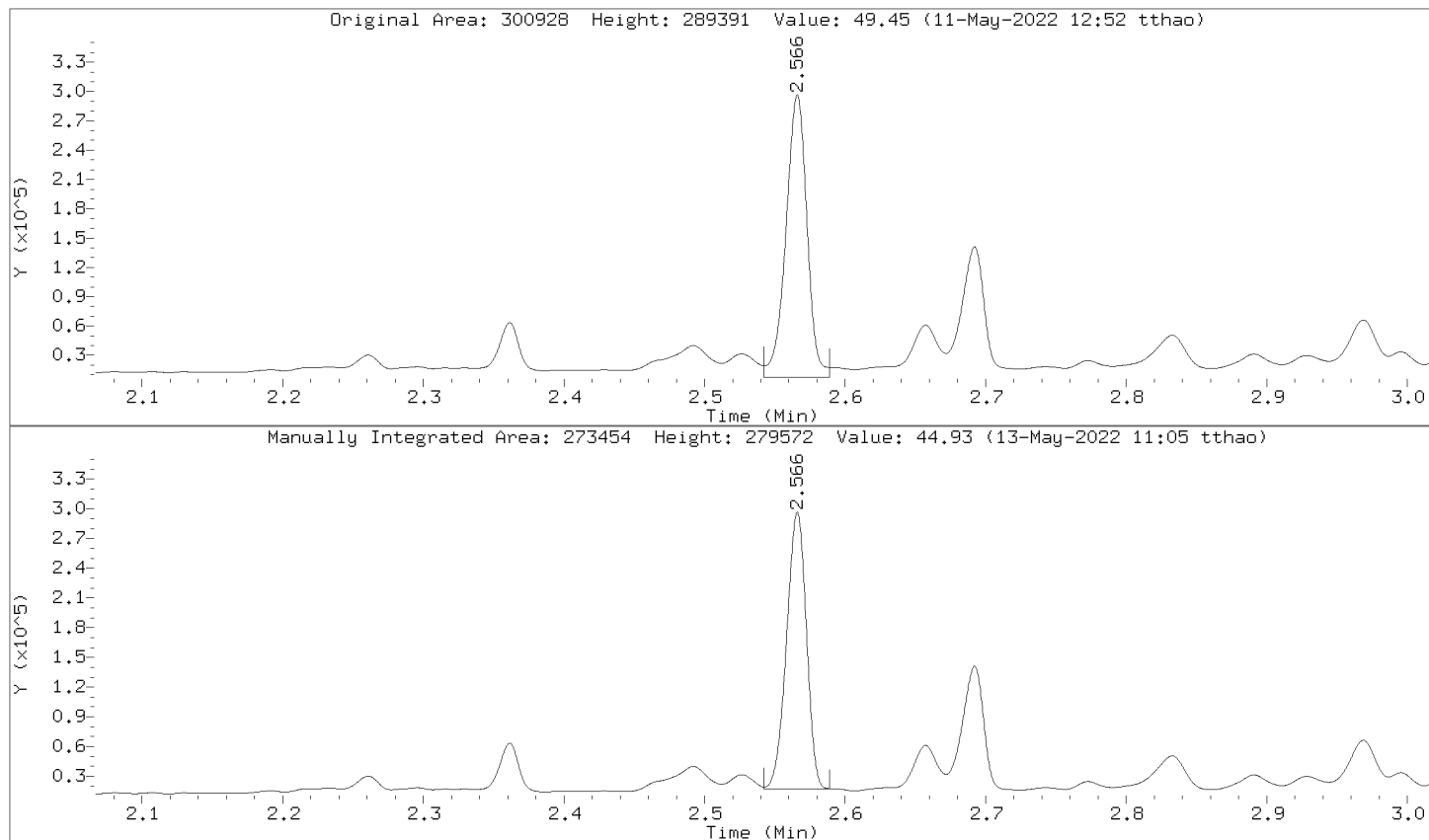
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000125.D  
 Injection Date: 11-MAY-2022 10:26  
 Instrument: 10gcsF.i  
 Lab Sample ID: 10606394004

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	1666372	1666372
Motor Oil Range	7221974	7221974
Diesel Fuel Range SG	1666372	1666372
Motor Oil Range SG	7221974	7221974
n-Triacontane (S)	320201	226063
o-Terphenyl (S)	300928	273454

GC-FID DRO - FORM VI SVOA-1  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10606394  
 Calibration Date(s): 05/09/2022 05/09/2022 Calibration Time(s): 15:31 17:04

**LAB FILE ID**

CAL2 = 050922F.B\0509F0000025.D CAL3 = 050922F.B\0509F0000026.D CAL4 = 050922F.B\0509F0000027.D  
 CAL5 = 050922F.B\0509F0000028.D CAL6 = 050922F.B\0509F0000029.D CAL7 = 050922F.B\0509F0000030.D  
 CAL8 = 050922F.B\0509F0000031.D CAL9 = 050922F.B\0509F0000032.D CAL10 = 050922F.B\0509F0000033.D

COMPOUND	CURVE TYPE	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7
Diesel Fuel Range	Linear	26626.5000	13684.0800	8972.0000	6745.3200	5367.3880	4932.6900
Motor Oil Range	Linear	13188.4000	8188.1600	5792.1400	4949.4600	4343.8560	4130.8680
n-Triacontane (S)	Averaged	4905.0000	5039.2000	4954.2000	4885.7000	4837.3600	4838.6400
o-Terphenyl (S)	Averaged	6519.0000	6256.4000	6082.2000	6043.5000	5907.1200	5904.8600

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VI SVOA-2  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10606394  
 Calibration Date(s): 05/09/2022 05/09/2022 Calibration Time(s): 15:31 17:04

**LAB FILE ID**

CAL2 = 050922F.B\0509F0000025.D CAL3 = 050922F.B\0509F0000026.D CAL4 = 050922F.B\0509F0000027.D  
 CAL5 = 050922F.B\0509F0000028.D CAL6 = 050922F.B\0509F0000029.D CAL7 = 050922F.B\0509F0000030.D  
 CAL8 = 050922F.B\0509F0000031.D CAL9 = 050922F.B\0509F0000032.D CAL10 = 050922F.B\0509F0000033.D

COMPOUND	CURVE TYPE	CAL8	CAL9	CAL10
Diesel Fuel Range	Linear	4693.5700	4485.2455	4385.1072
Motor Oil Range	Linear	3996.9180	4002.9135	3903.8372
n-Triacontane (S)	Averaged	4833.5200	4746.1350	4728.6100
o-Terphenyl (S)	Averaged	5888.9700	6091.3050	6077.4225

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VI SVOA-3  
GC-FID DRO INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10GCSF GC Column: FID SDG No.: 10606394  
 Calibration Date(s): 05/09/2022 05/09/2022 Calibration Time(s): 15:31 17:04

**LAB FILE ID**

CAL2 = 050922F.B\0509F0000025.D CAL3 = 050922F.B\0509F0000026.D CAL4 = 050922F.B\0509F0000027.D  
 CAL5 = 050922F.B\0509F0000028.D CAL6 = 050922F.B\0509F0000029.D CAL7 = 050922F.B\0509F0000030.D  
 CAL8 = 050922F.B\0509F0000031.D CAL9 = 050922F.B\0509F0000032.D CAL10 = 050922F.B\0509F0000033.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Diesel Fuel Range	Linear		0.99993	263699.280	4331.55482	
Motor Oil Range	Linear		0.99992	114634.240	3888.96343	
n-Triacontane (S)	Averaged	1.99736			4863.15167	
o-Terphenyl (S)	Averaged	3.29707			6085.64194	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000007.D  
 Lab Smp Id: DMO-RTM,362403:2 Client Smp ID: DMO-RTM,362403:2  
 Inj Date : 27-APR-2022 12:49  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-rtm,362403:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 77  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL		FINAL	REVIEW CODE
			RESPONSE	(ug/mL)	(ug/mL)	
====	=====	=====	=====	=====	=====	=====
S	1	DRO by AK 102			CAS #:	
0.885	-	3.540	2305153	338.845	339	
-----						
\$	2	o-Terphenyl (S)			CAS #:	
Compound Not Detected.						
-----						
\$	3	n-Triacontane (S)			CAS #:	
Compound Not Detected.						
-----						
S	4	Residual Range Organics AK103			CAS #:	
3.541	-	5.020	2128603	578.081	578	
-----						
S	5	TPH-DRO (C10-C28)			CAS #:	
0.885	-	4.099	3703303	503.789	504	
-----						
S	6	Motor Oil Range (C24-C36)			CAS #:	
3.400	-	5.020	2815723	742.120	742	
-----						
S	7	C10-C36			CAS #:	
0.885	-	5.020	4433757	858.994	859	
-----						
S	8	Diesel Fuel Range			CAS #:	
1.340	-	3.580	1622920	271.885	272	
-----						
S	9	Diesel Fuel Range SG			CAS #:	
1.340	-	3.580	1622920	271.885	272	
-----						
S	10	Motor Oil Range			CAS #:	
3.581	-	5.740	2620070	567.727	568	
-----						

CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/mL)	(ug/mL)	REVIEW CODE
=====	=====	=====	=====	=====	=====	=====
S	11	Motor Oil Range	SG			CAS #:
3.581	-	5.740	2620070	567.727	568	

---

Date : 27-APR-2022 12:49

Client ID: DM0-RTM,362403;2

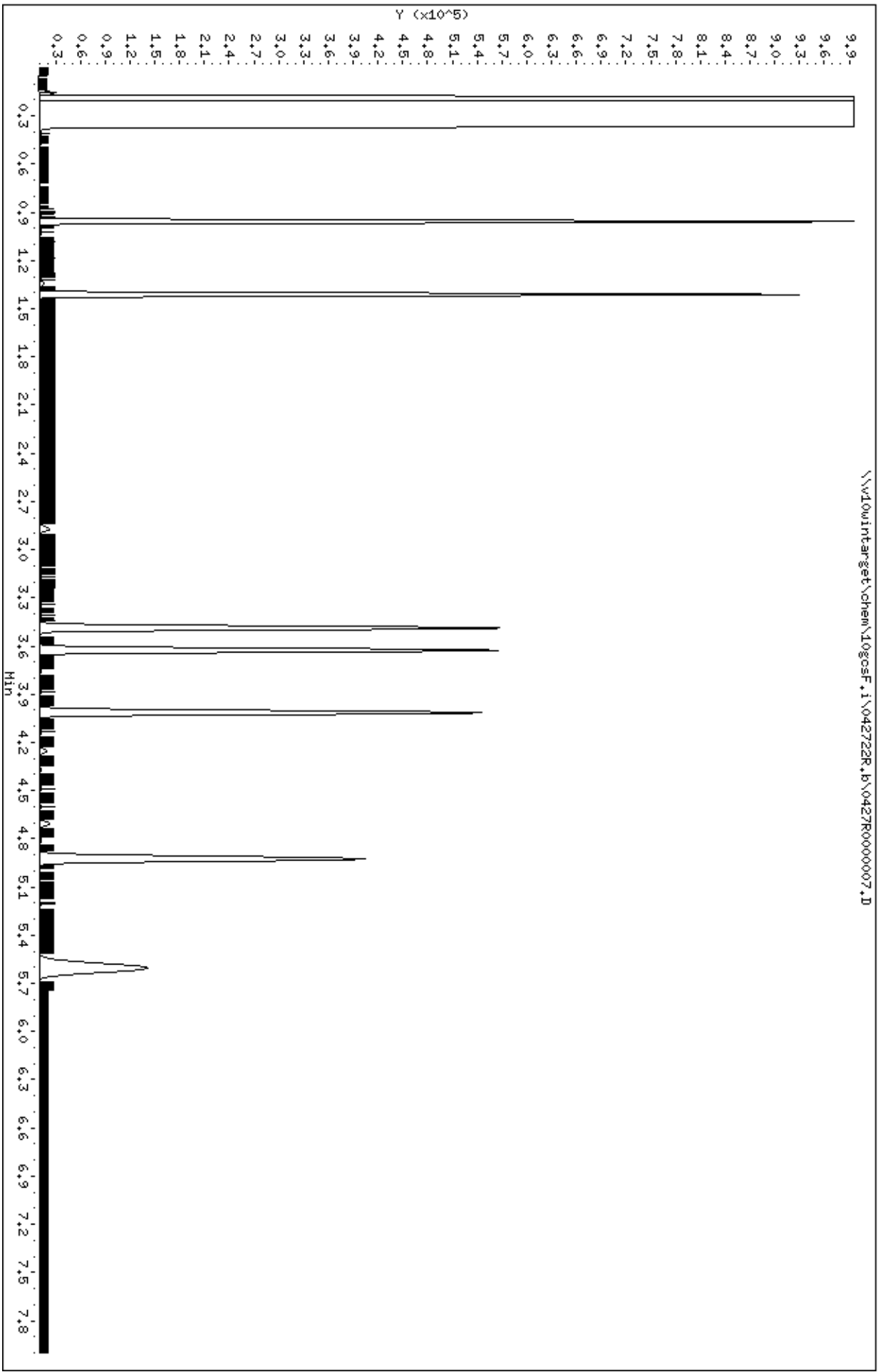
Sample Info: DM0-RTM,362403;2

Instrument: 10gocsf.1

Operator: EB3

Column diameter: 0.32

Column phase: DB-5-US21430033



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b/0427R0000007.D  
Injection Date: 27-APR-2022 12:49  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-RTM,362403:2  
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
 Lab Smp Id: DMO-CAL1,362369:2 Client Smp ID: DMO-CAL1,362369:2  
 Inj Date : 27-APR-2022 13:00  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-call,362369:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 78 Calibration Sample, Level: 1  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		347320 6.00000	(M)	RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.684	2.685 -0.001		3754 0.60000	(MH)	BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.193	4.193 0.000		2820 0.60000	(M)	BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		104920 6.00000	(M)	RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		387621 6.00000	(M)	RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		119128 6.00000	(M)	RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		452378 12.0000	(M)	RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		308284 6.00000	(M)	RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		308284 6.00000	(M)	RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		132846 6.00000 3.70	(M)	RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		132846 6.00000 3.70	(M)	RNG
-----					

QC Flag Legend

M - Compound response manually integrated.  
H - Operator selected an alternate compound hit.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:00

Client ID: DMO-CAL1,362369;2

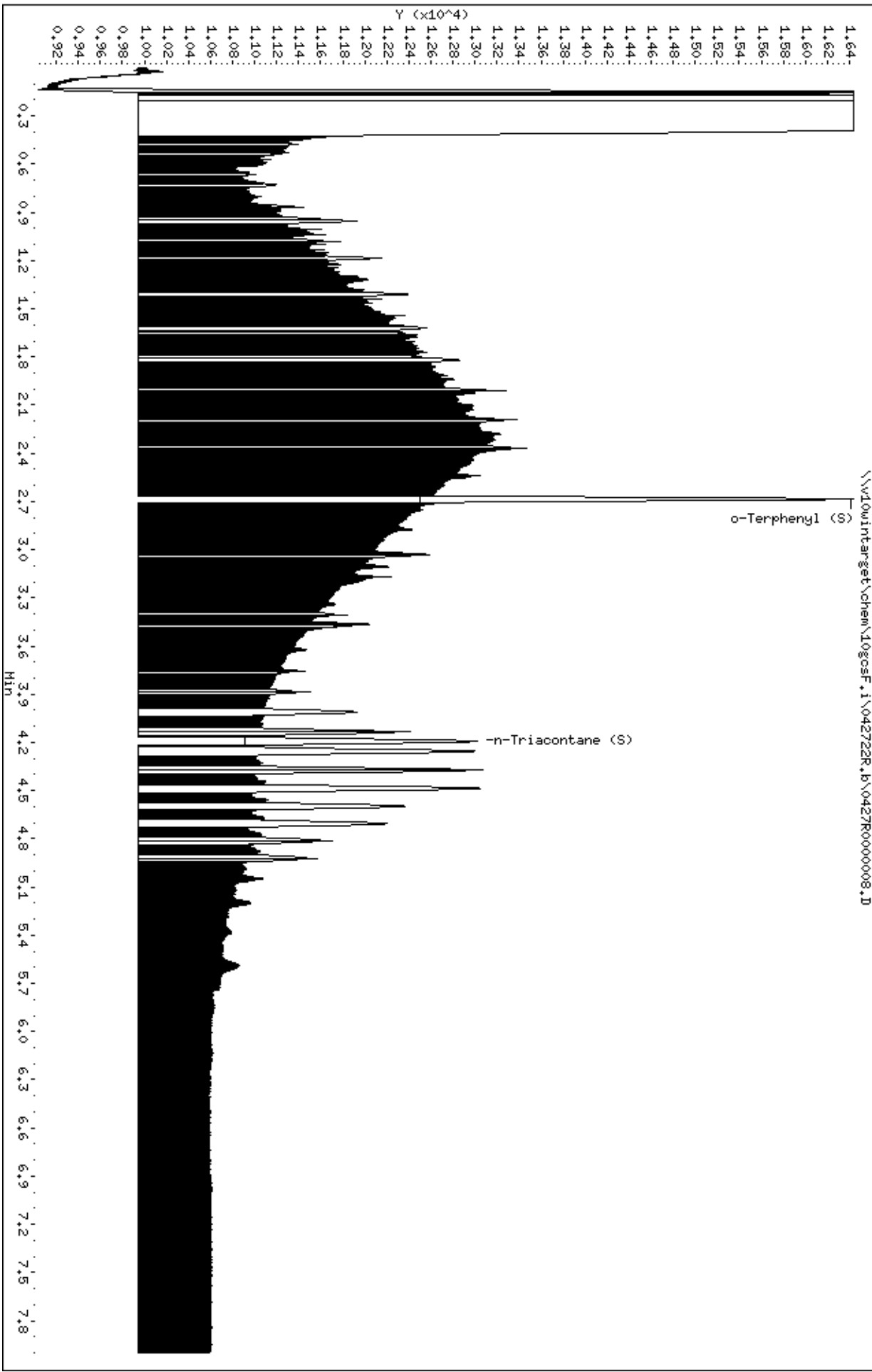
Sample Info: DMO-CAL1,362369;2

Instrument: 10gosc.f.1

Operator: EB3

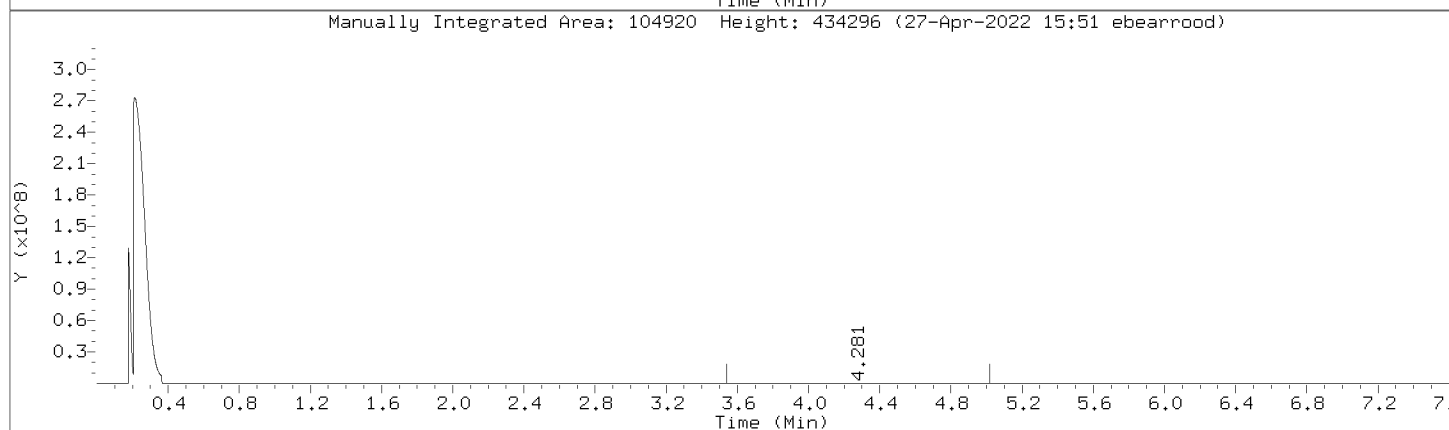
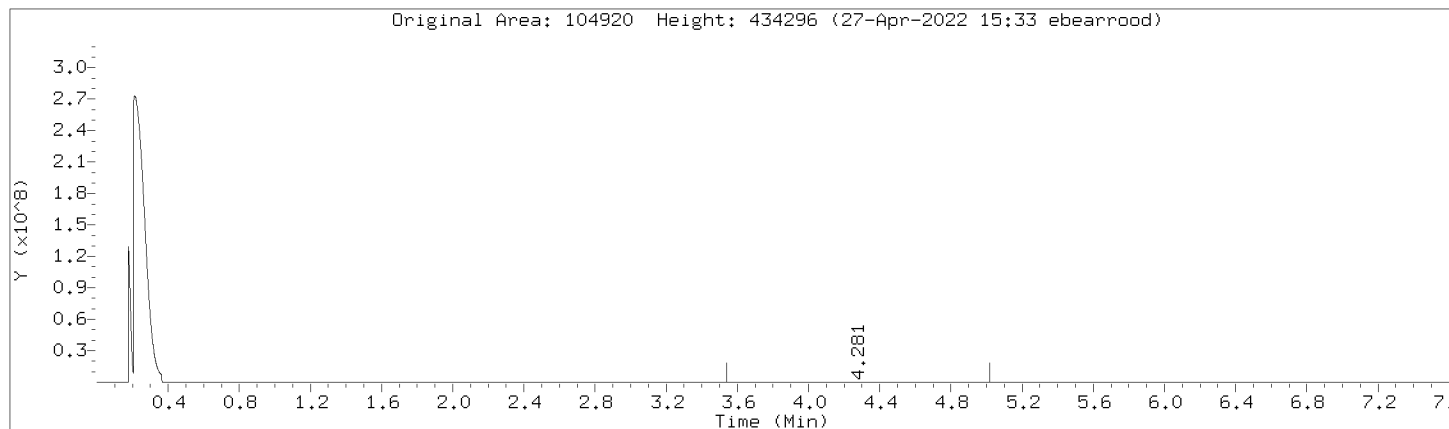
Column diameter: 0.32

Column phase: DB-5-US21430033



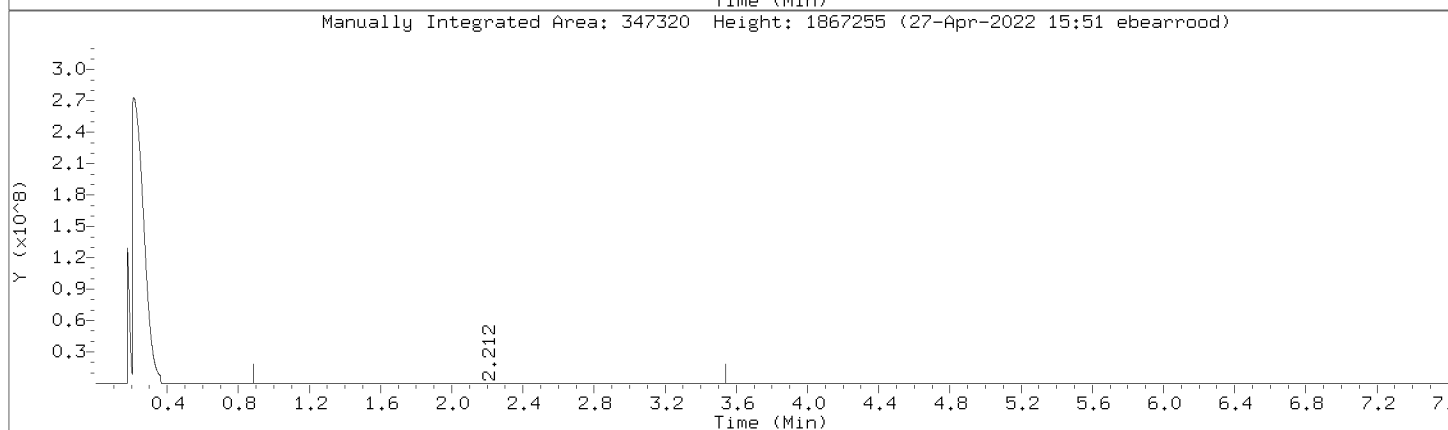
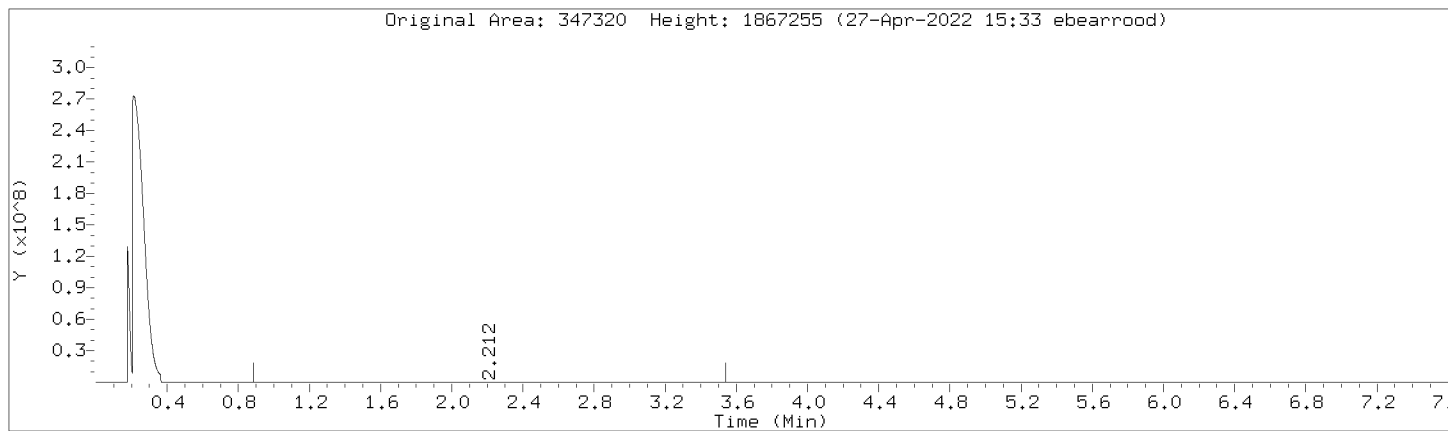
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



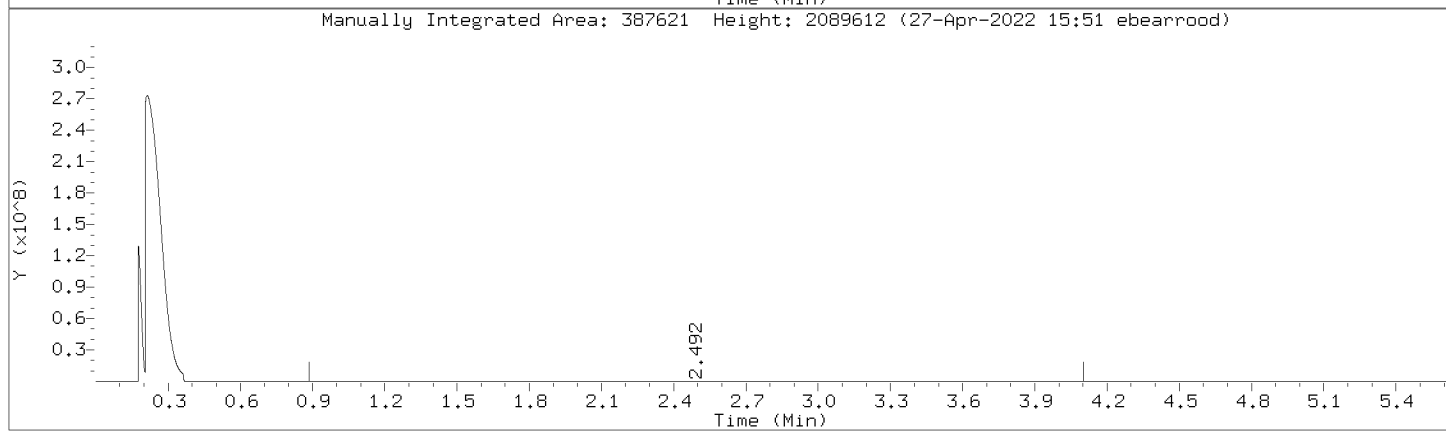
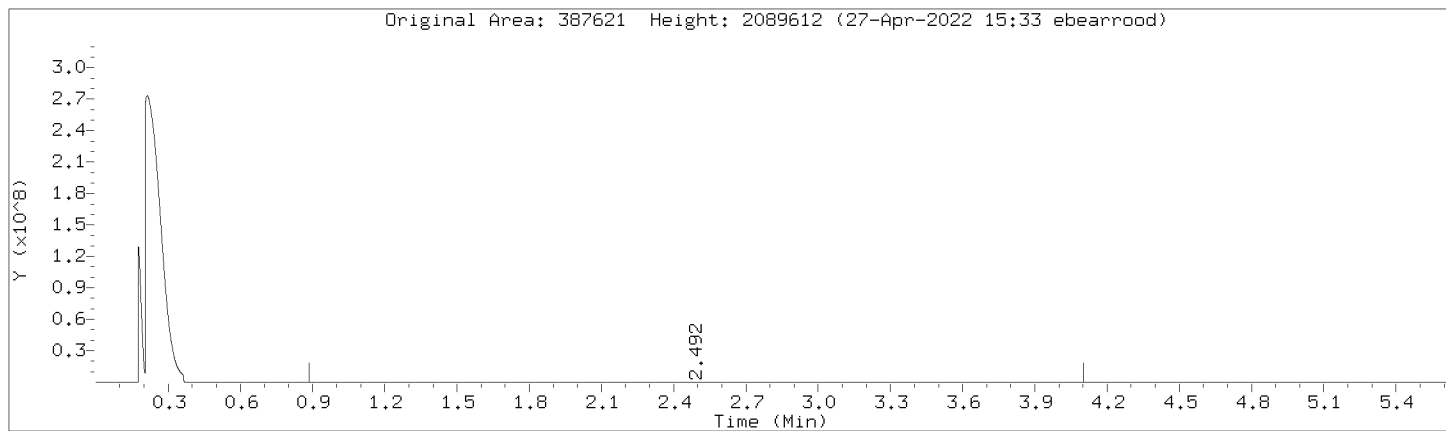
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

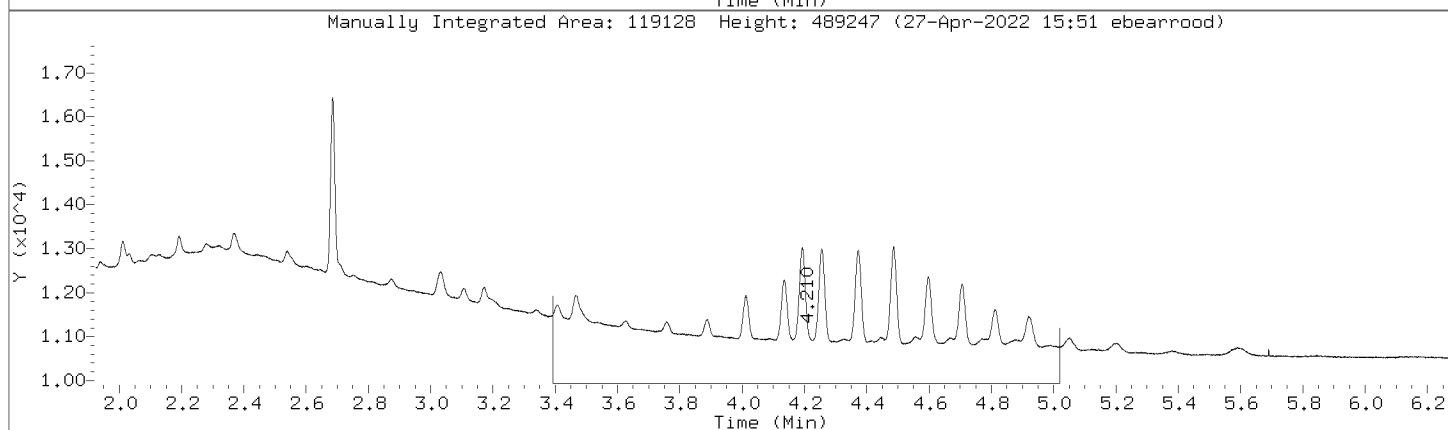
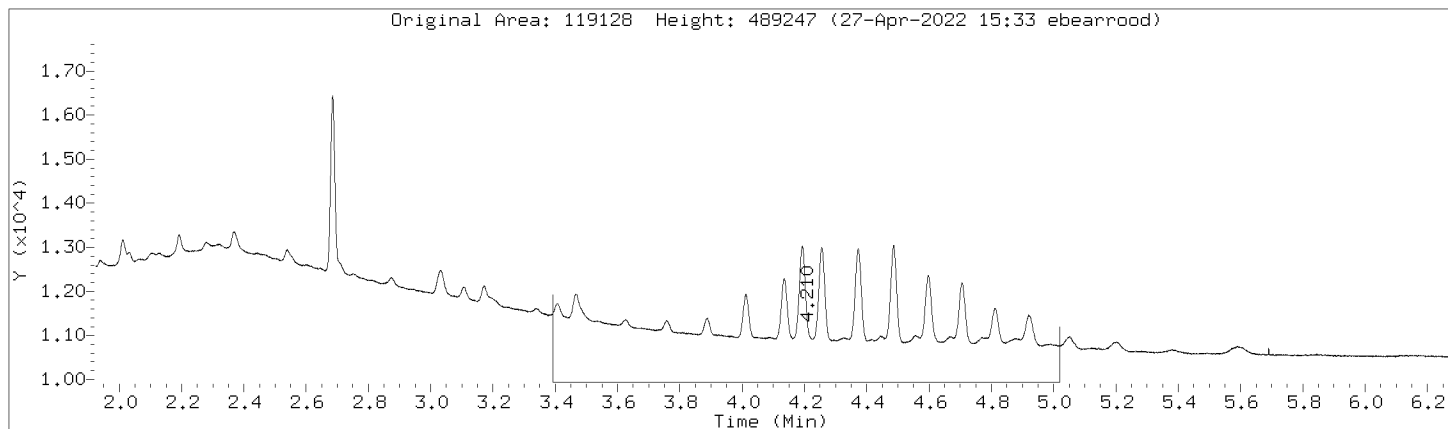
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

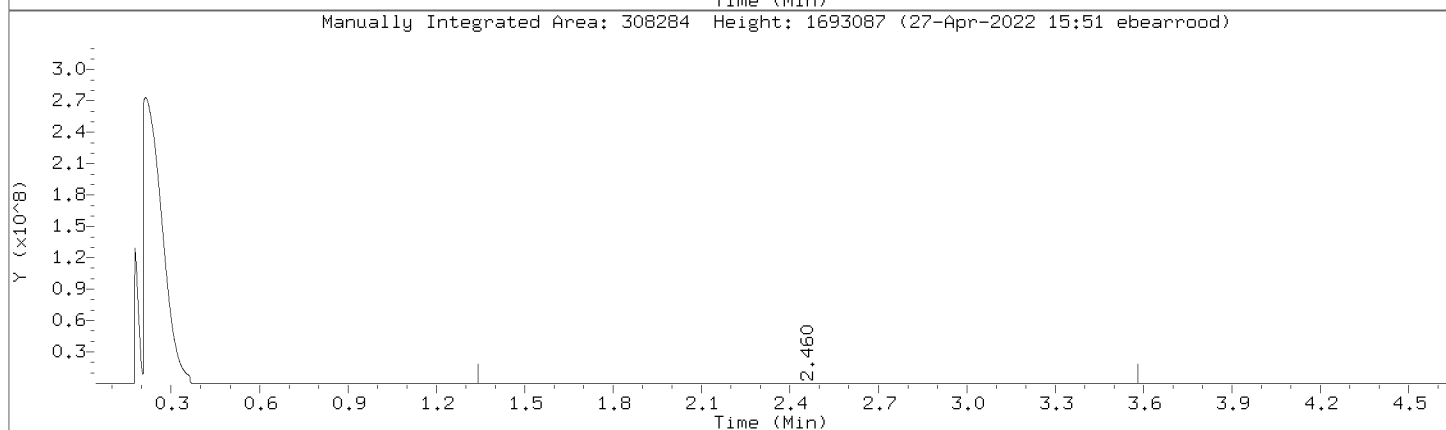
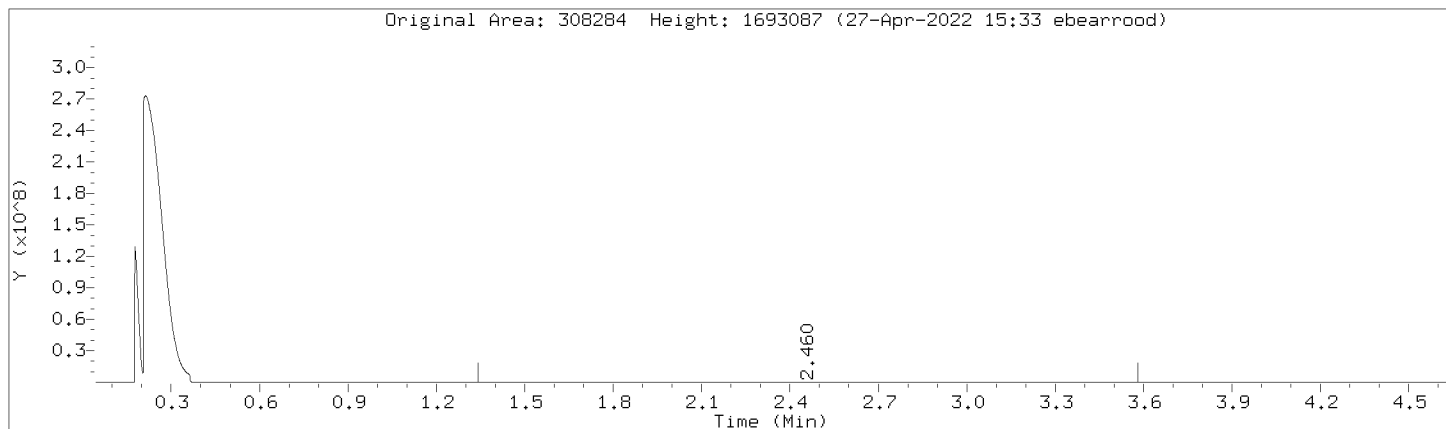
Compound: Motor Oil Range (C24-C36)  
CAS Number:

Review Code: RNG



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

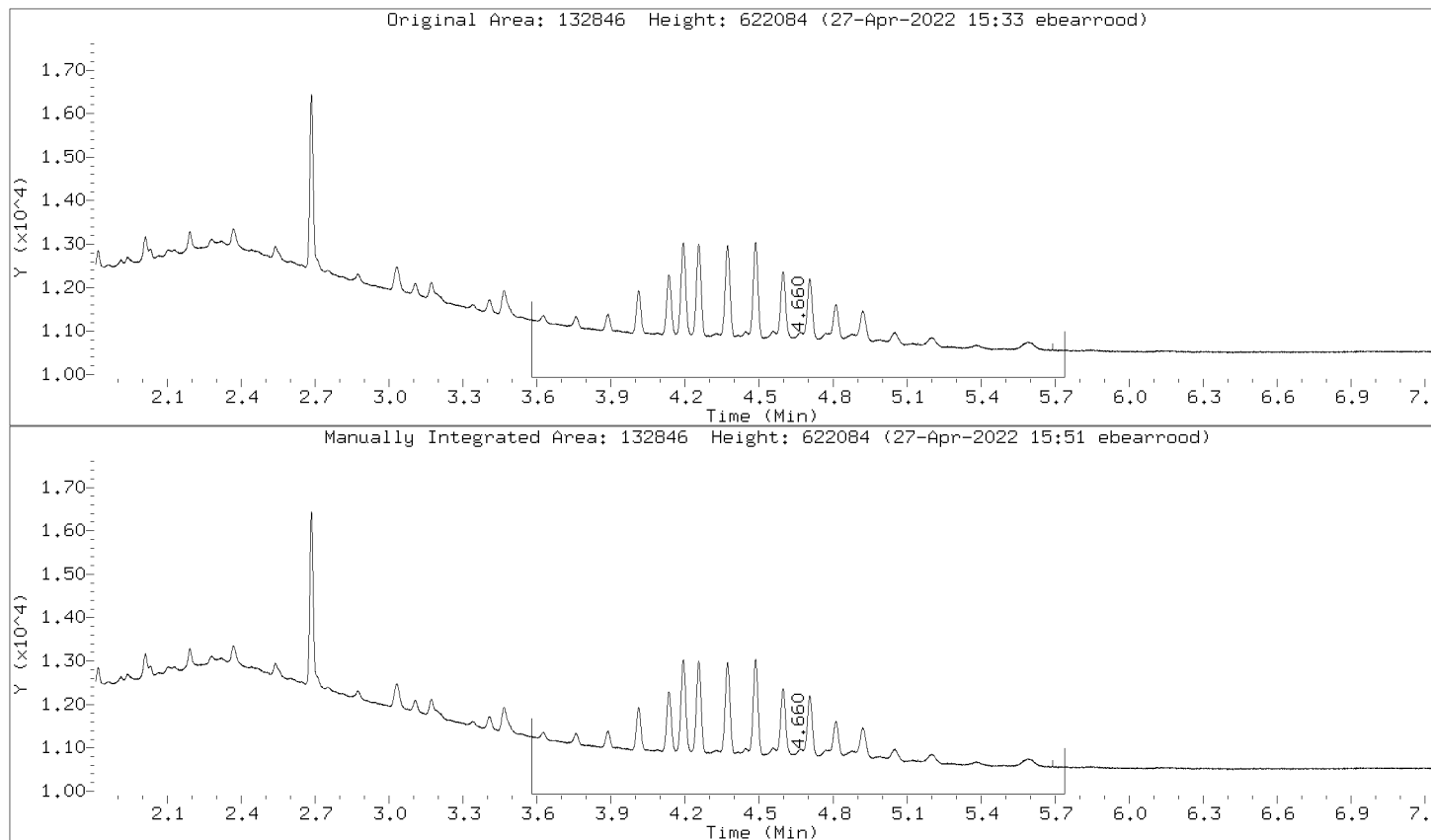
Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:





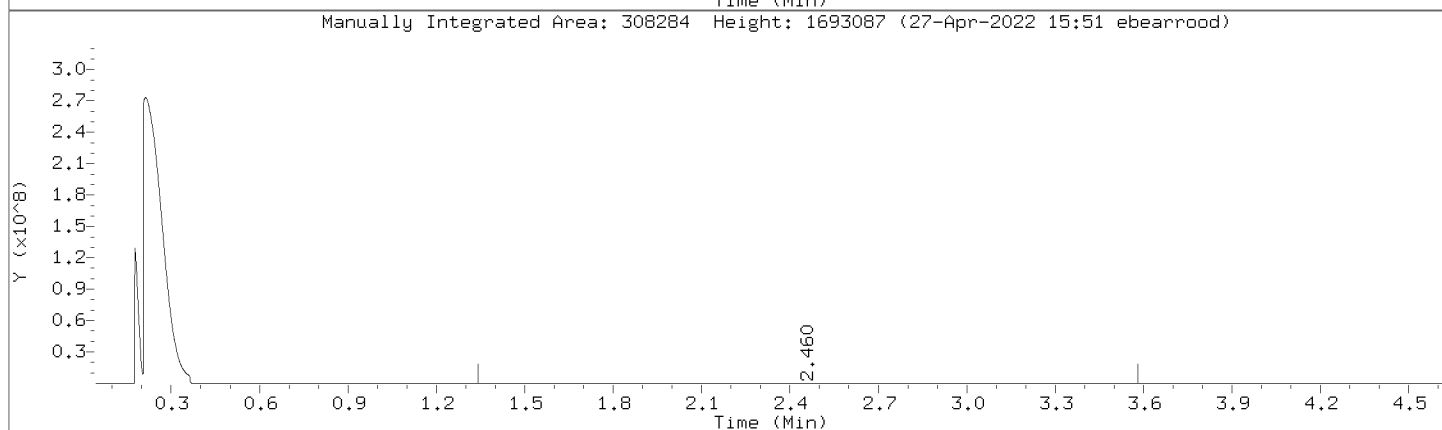
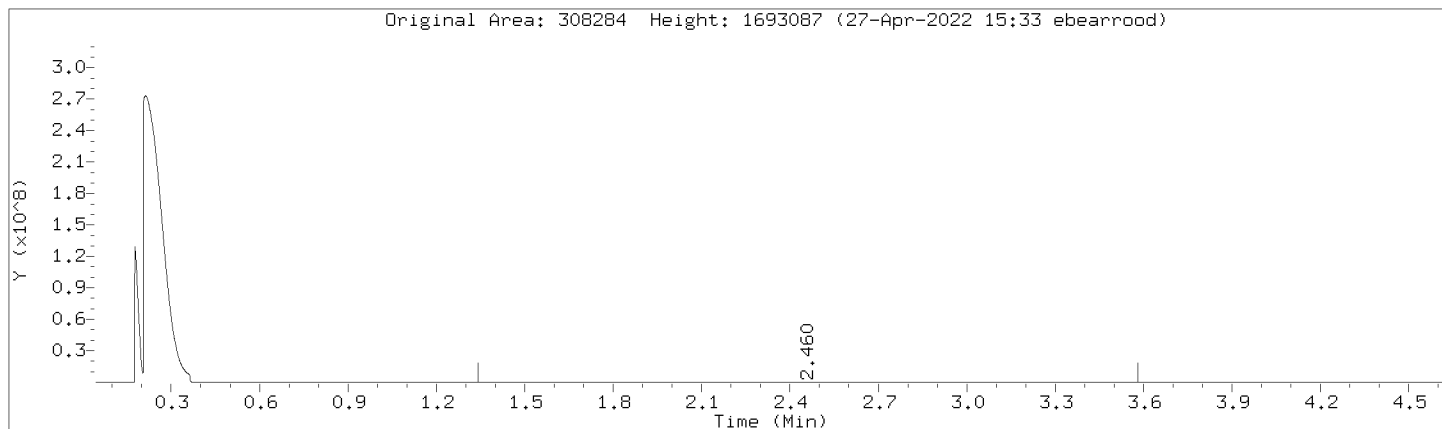
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Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



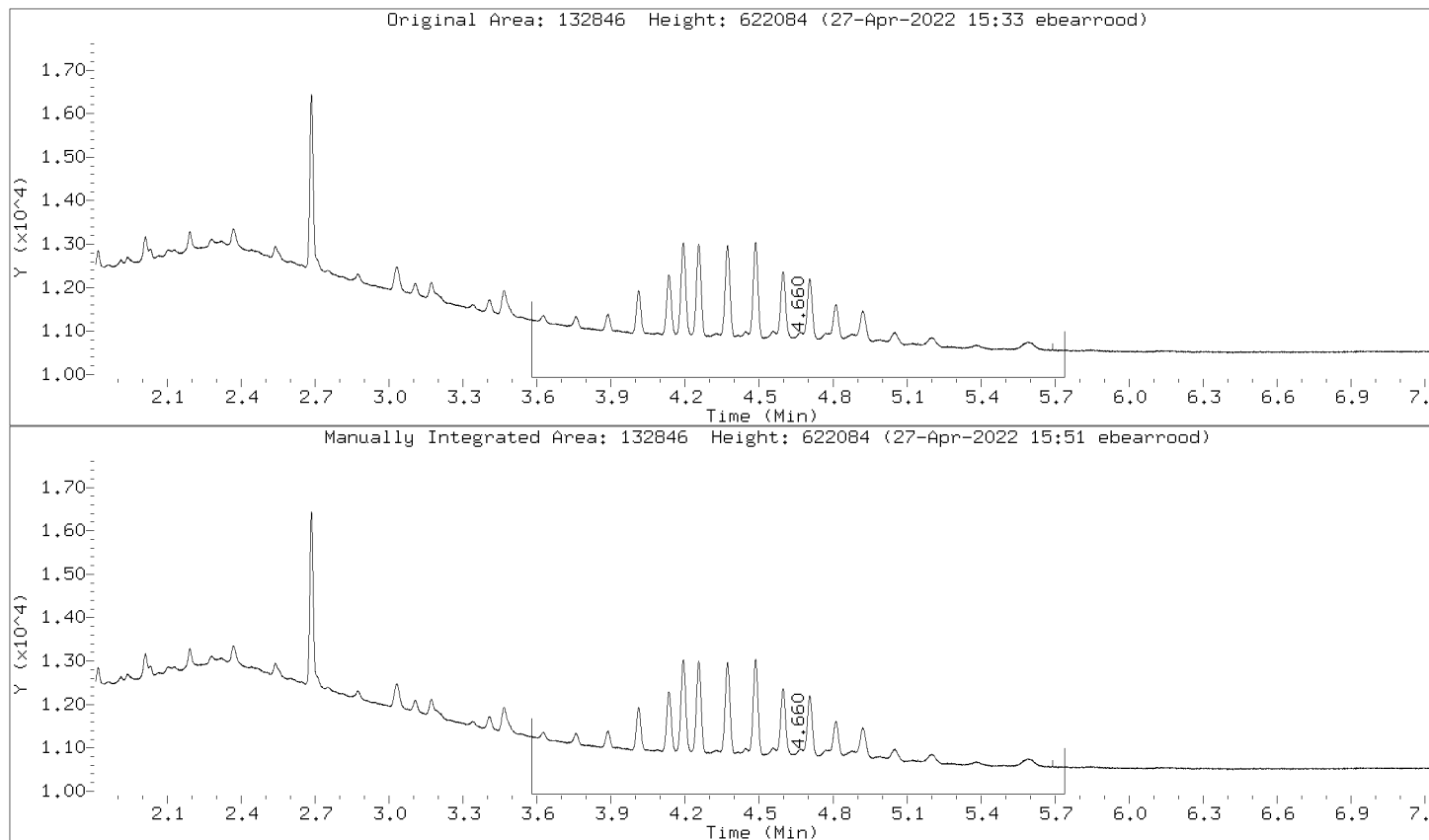
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



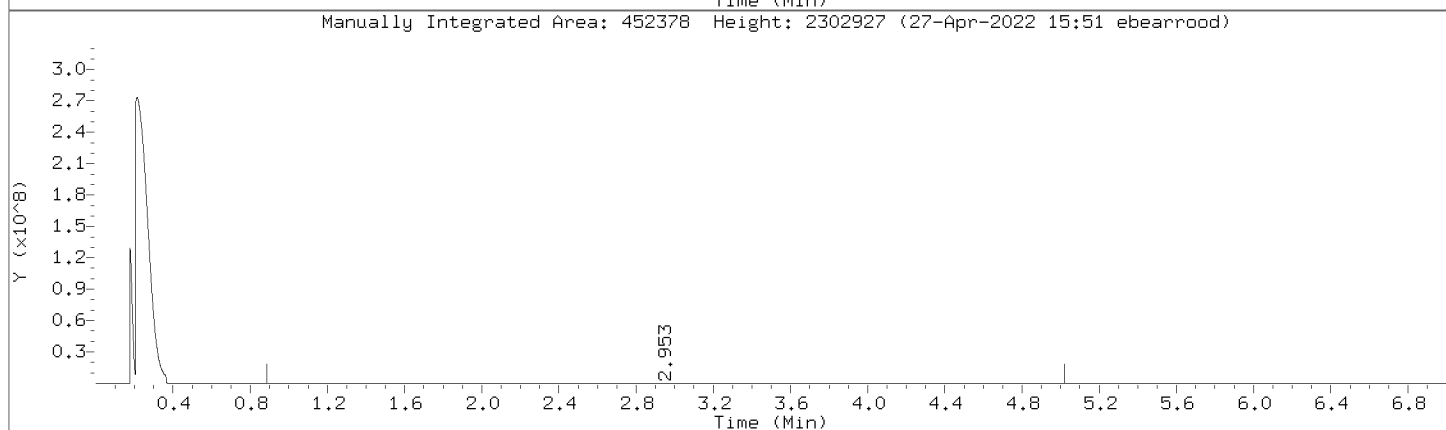
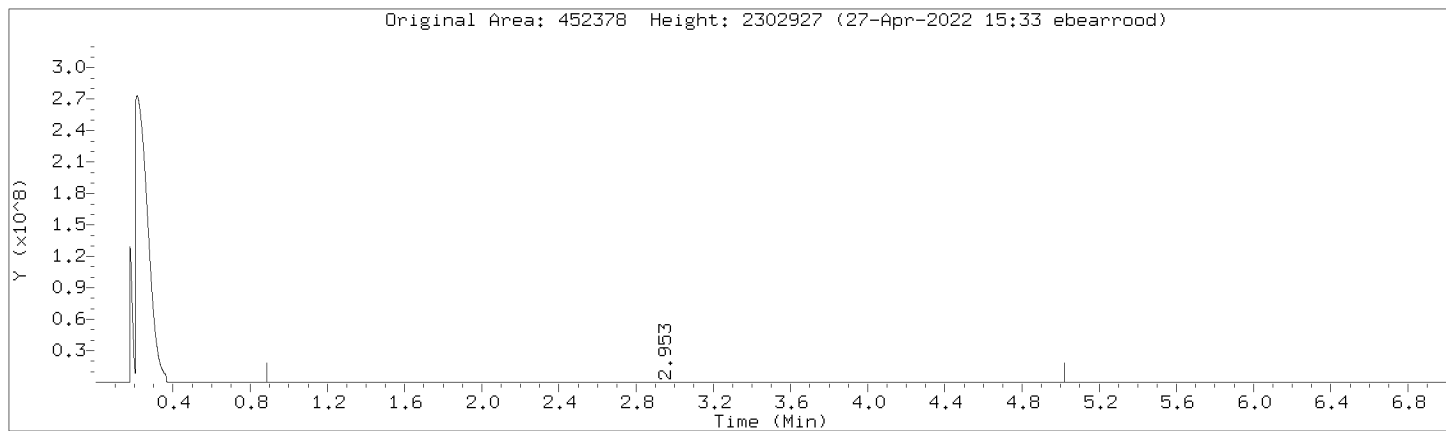
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



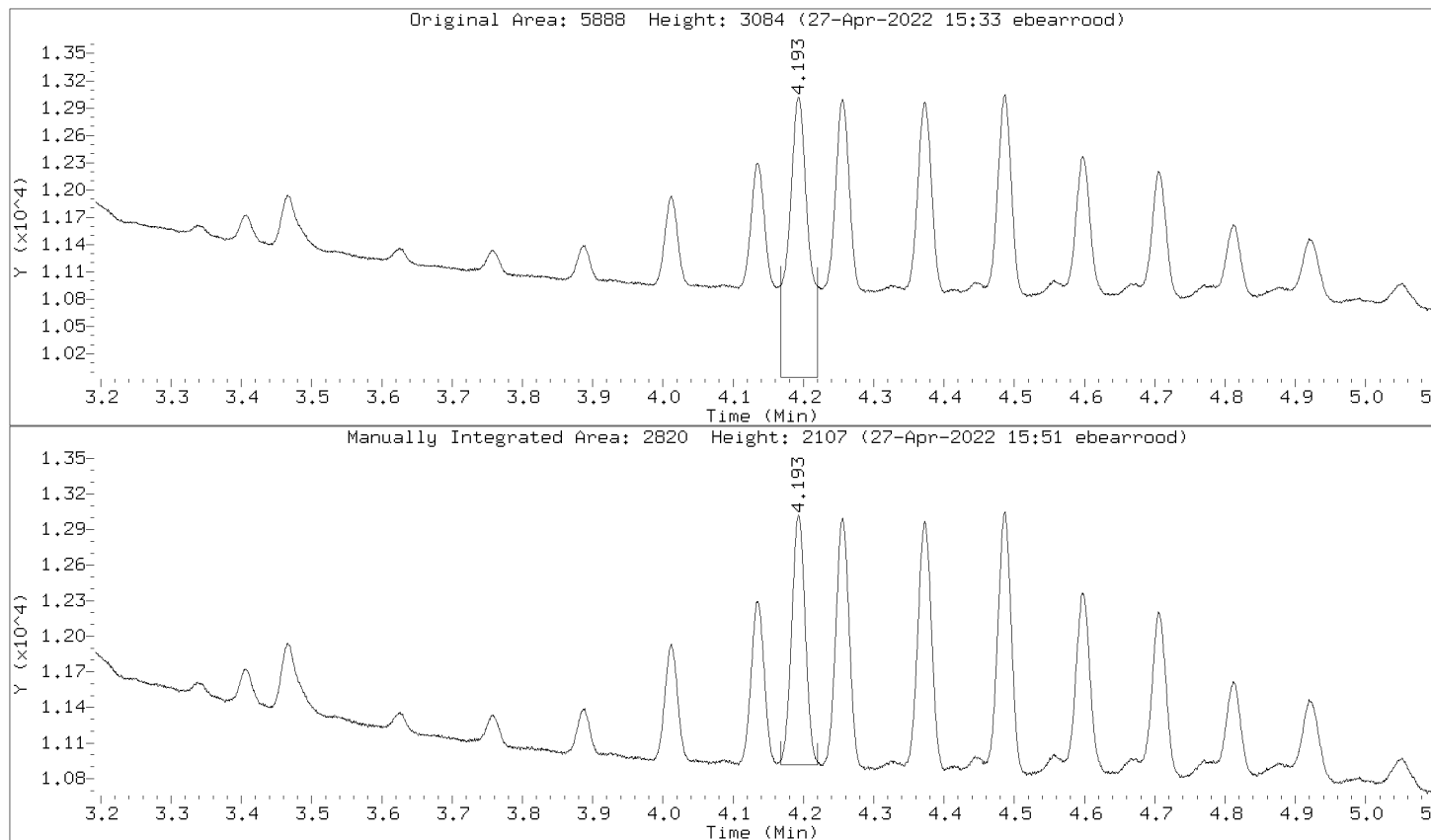
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



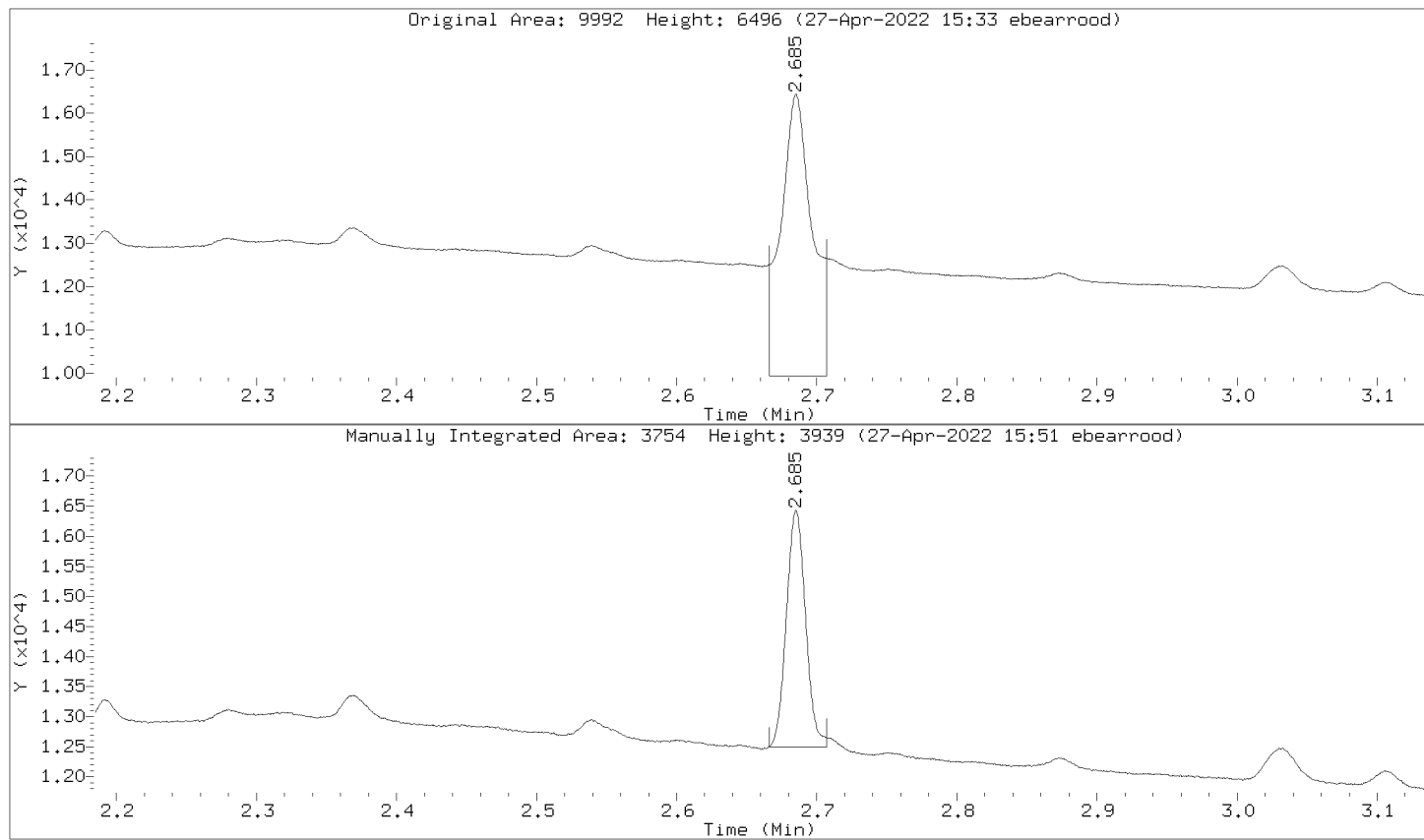
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000008.D  
Injection Date: 27-APR-2022 13:00  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL1,362369:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
 Lab Smp Id: DMO-CAL2,362370:2 Client Smp ID: DMO-CAL2,362370:2  
 Inj Date : 27-APR-2022 13:11  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal2,362370:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 79 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		371077 10.0000	0.708	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.684	2.685 -0.001		6499 1.00000	0.384	(MH) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.193	4.193 0.000		4770 1.00000	0.238	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		121697 10.0000	3.10	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		414945 10.0000	0.851	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		136931 10.0000	2.46	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		493035 20.0000	3.26	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		327992 10.0000	2.63	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		327992 10.0000	2.63	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		151560 10.0000	7.94	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		151560 10.0000	7.94	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.  
H - Operator selected an alternate compound hit.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.



Date : 27-APR-2022 13:11

Client ID: DMO-CAL2.362370:2

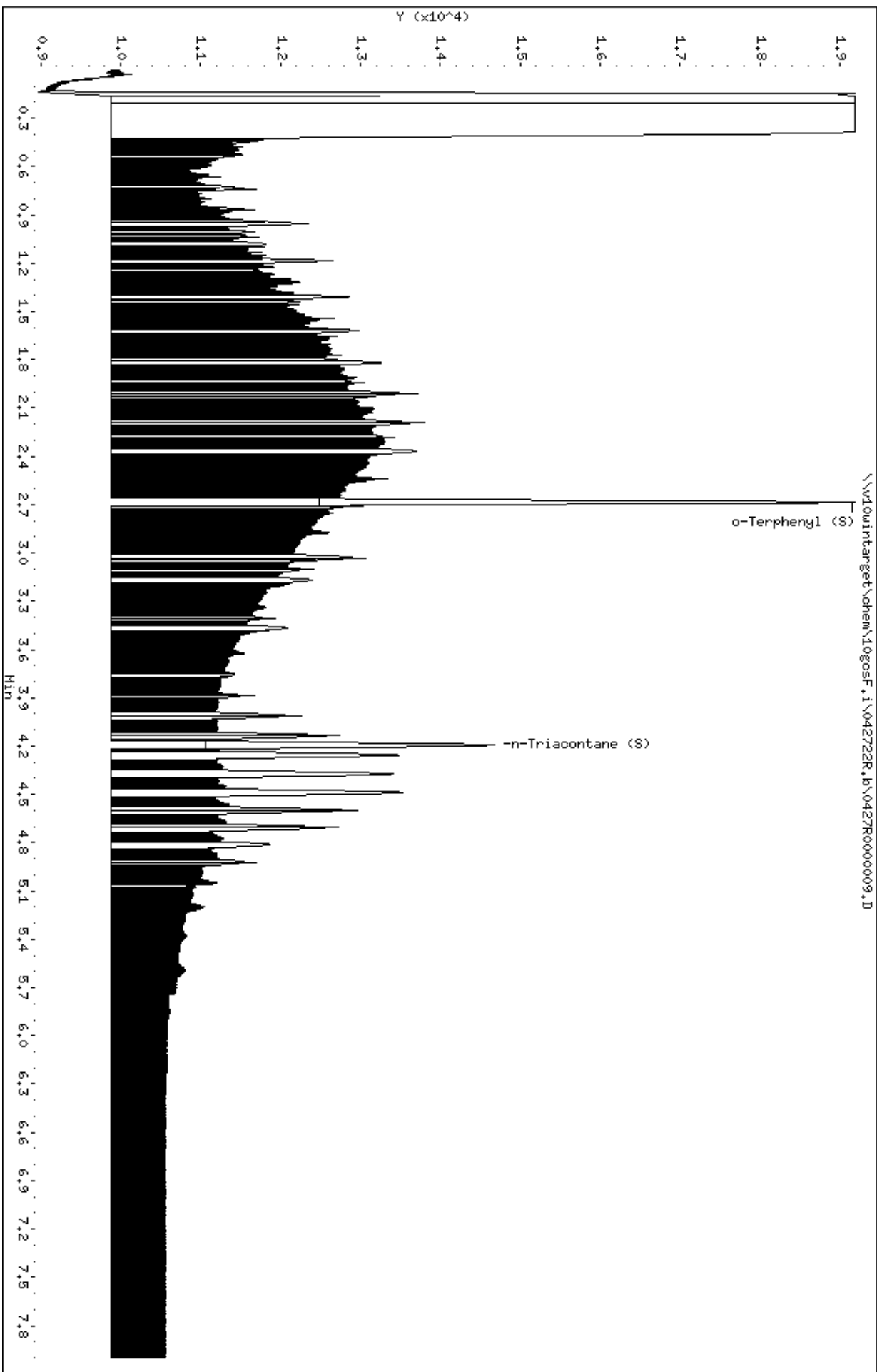
Sample Info: DMO-CAL2.362370:2

Instrument: 10gocsf.1

Operator: EB3

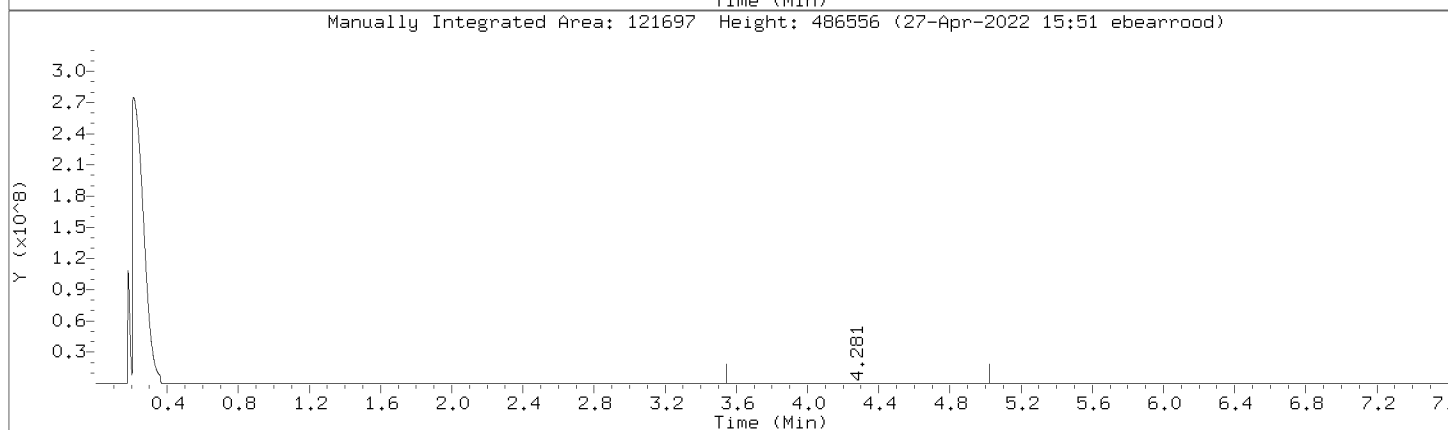
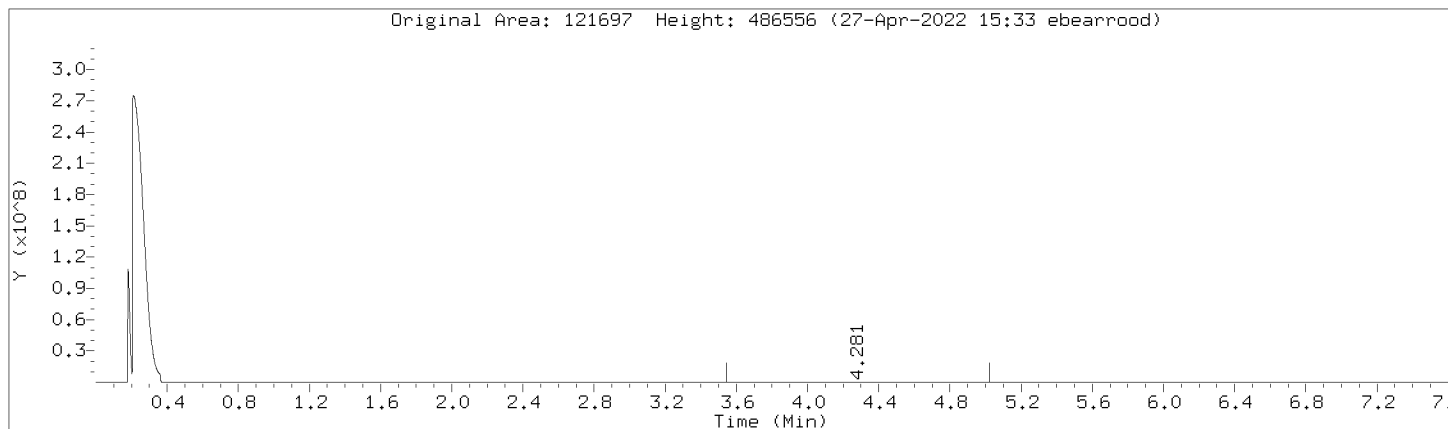
Column diameter: 0.32

Column phase: DB-5-MS21430033



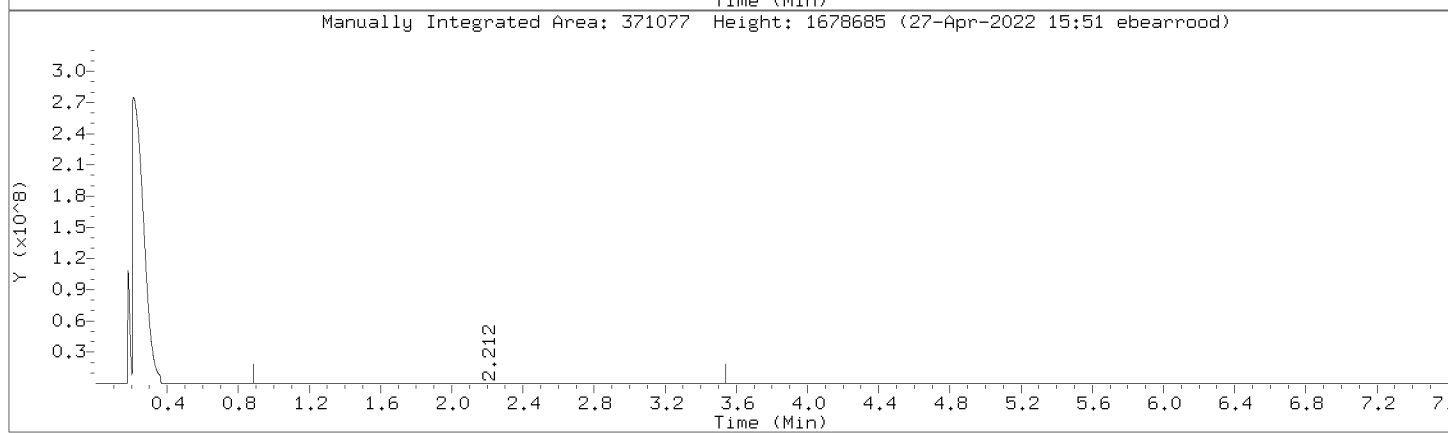
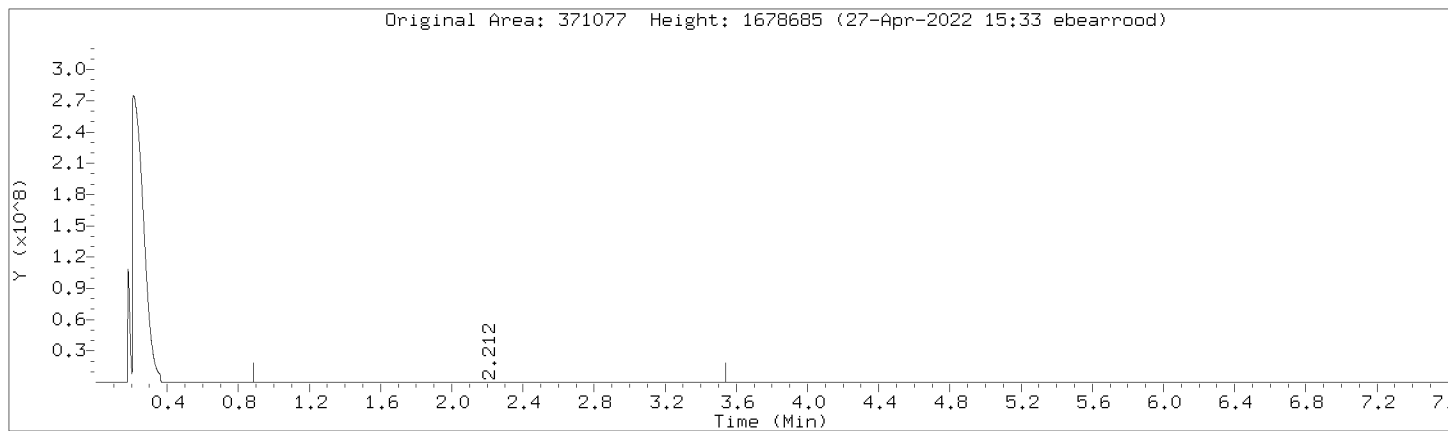
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



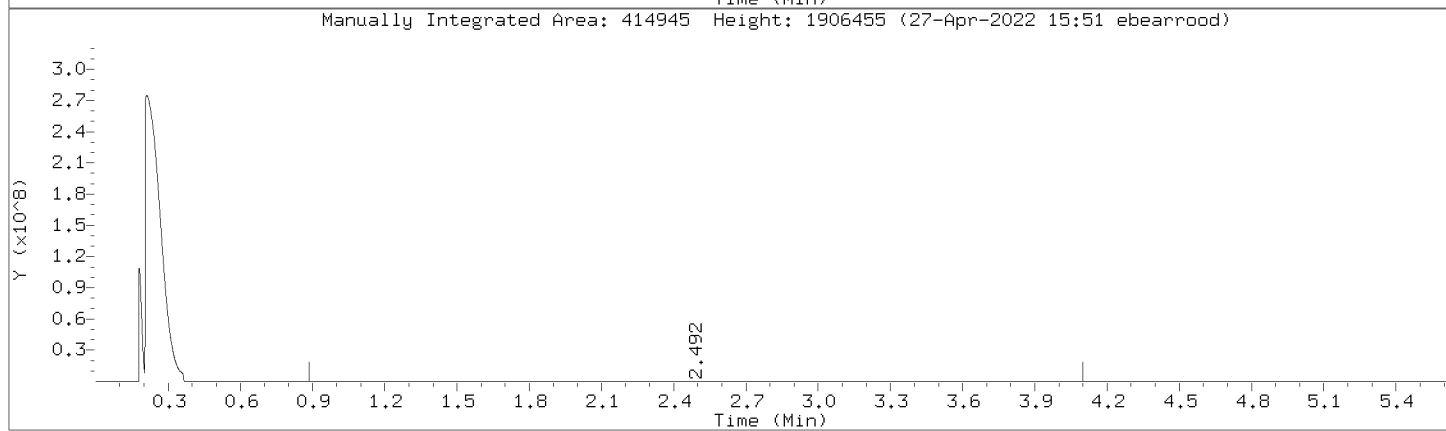
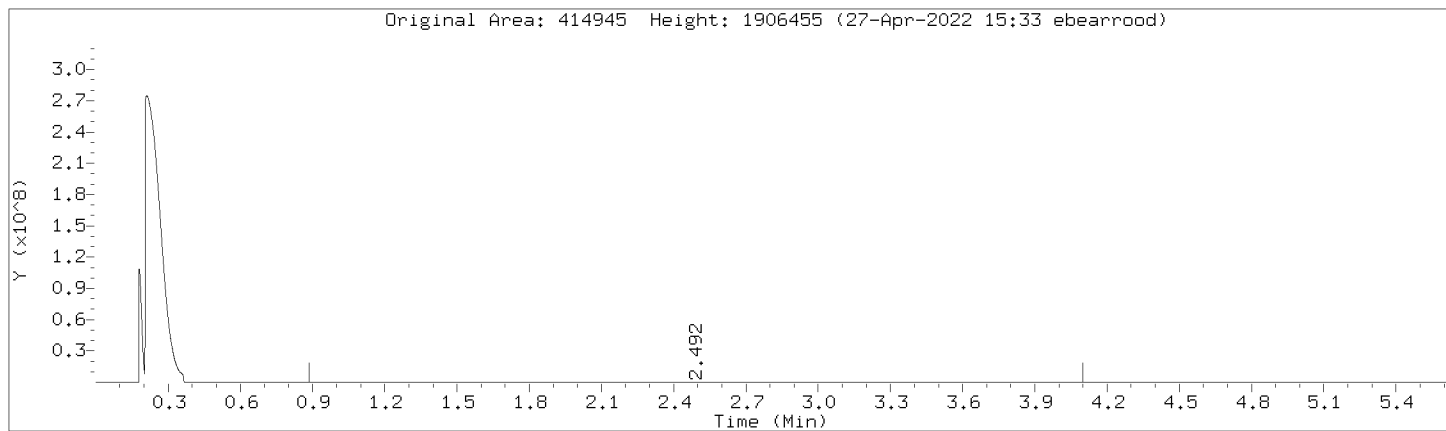
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

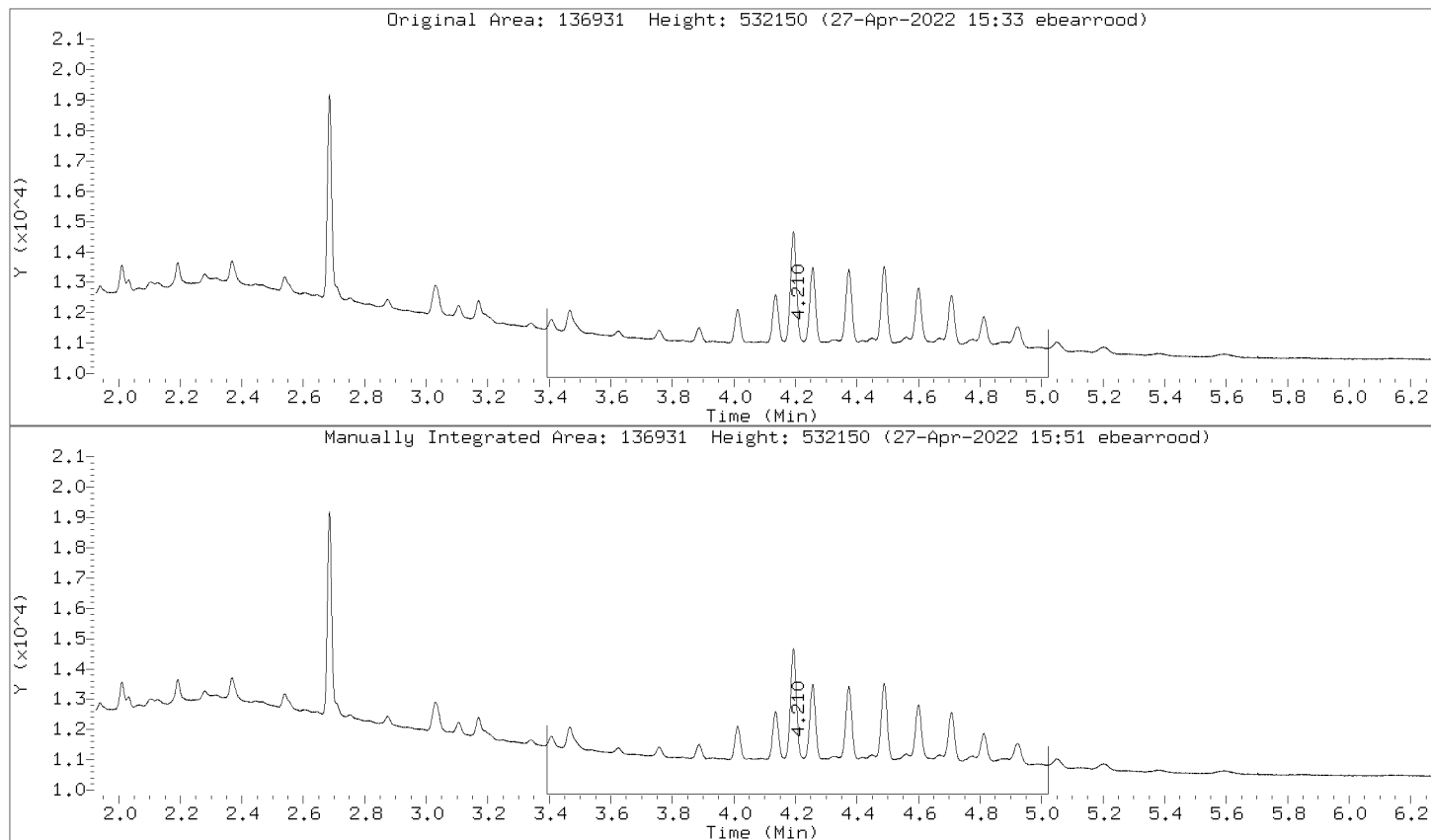
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

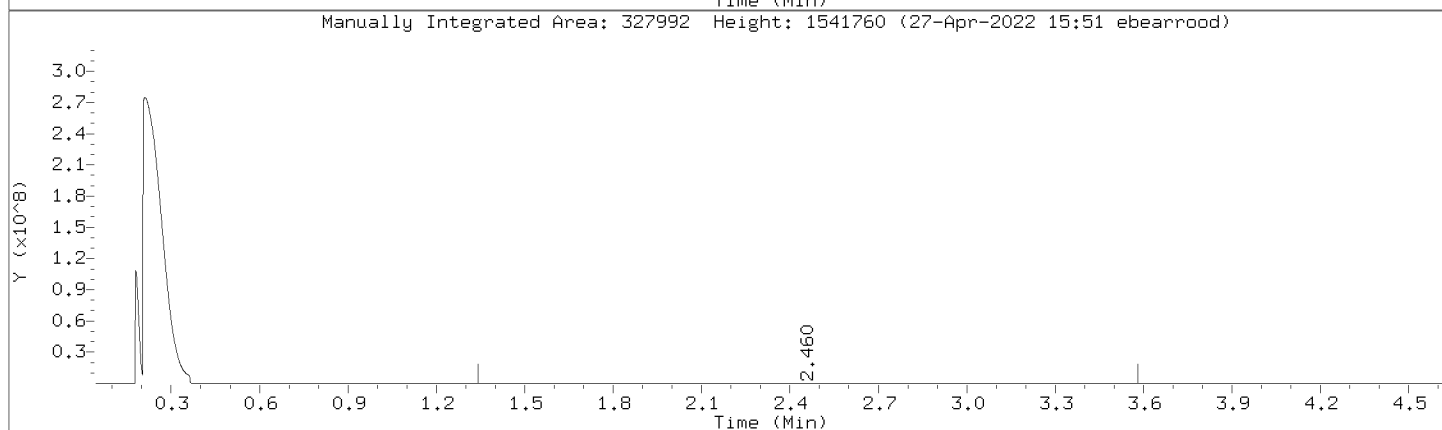
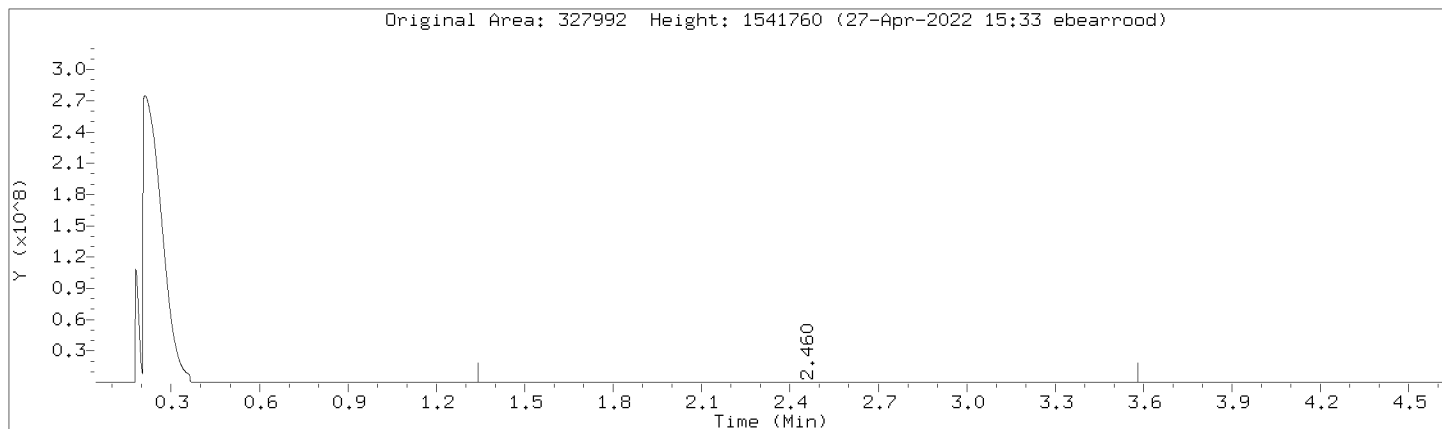
Compound: Motor Oil Range (C24-C36)  
CAS Number:

Review Code: RNG



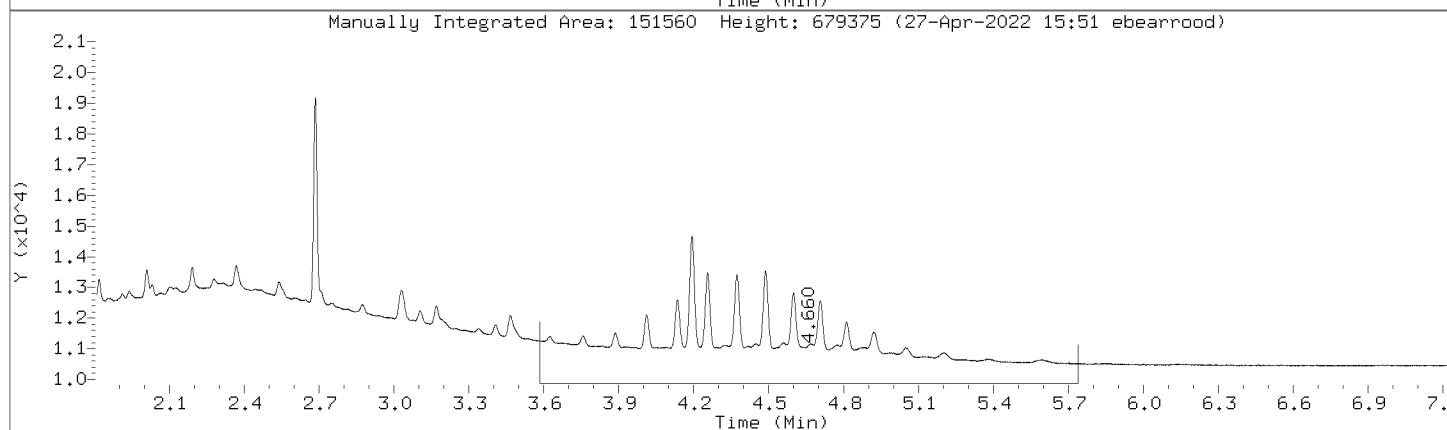
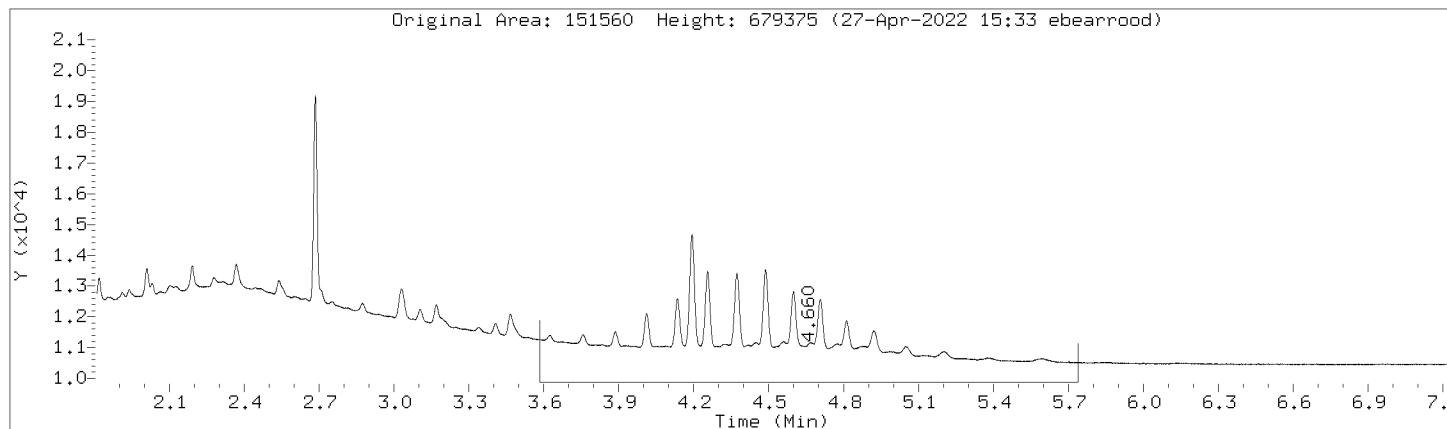
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



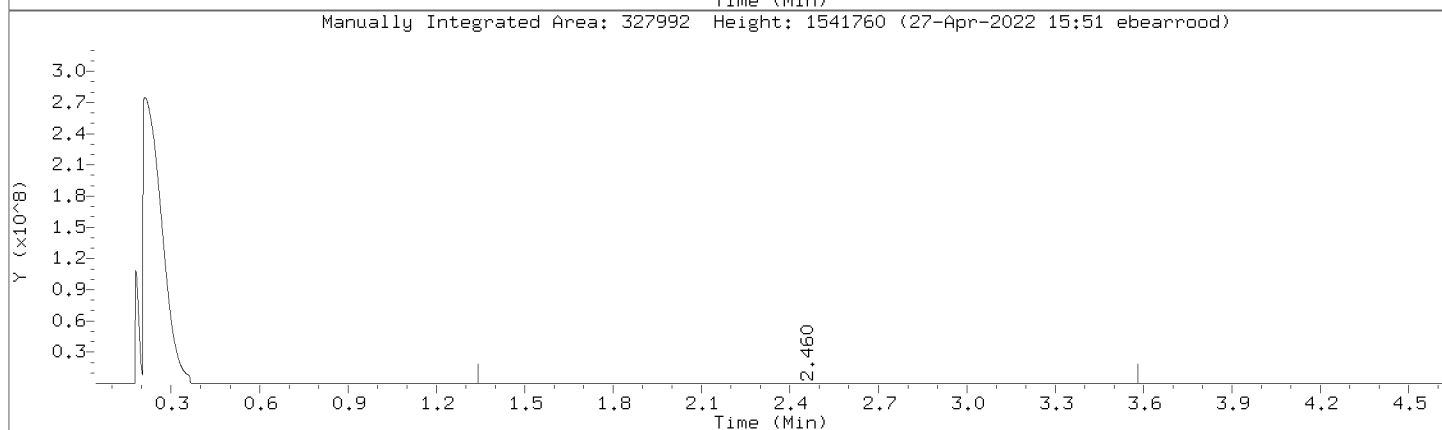
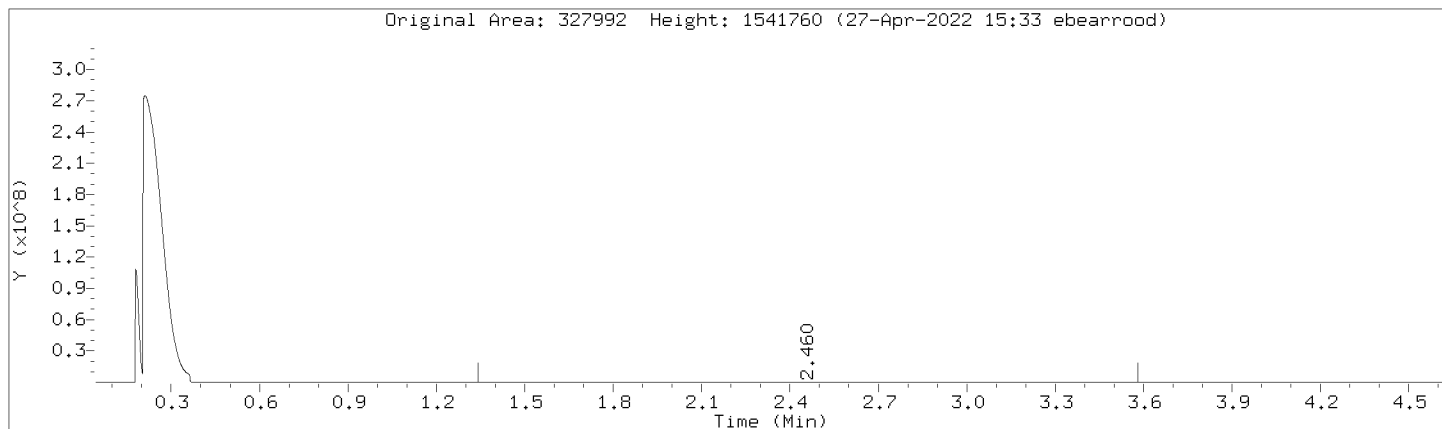
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

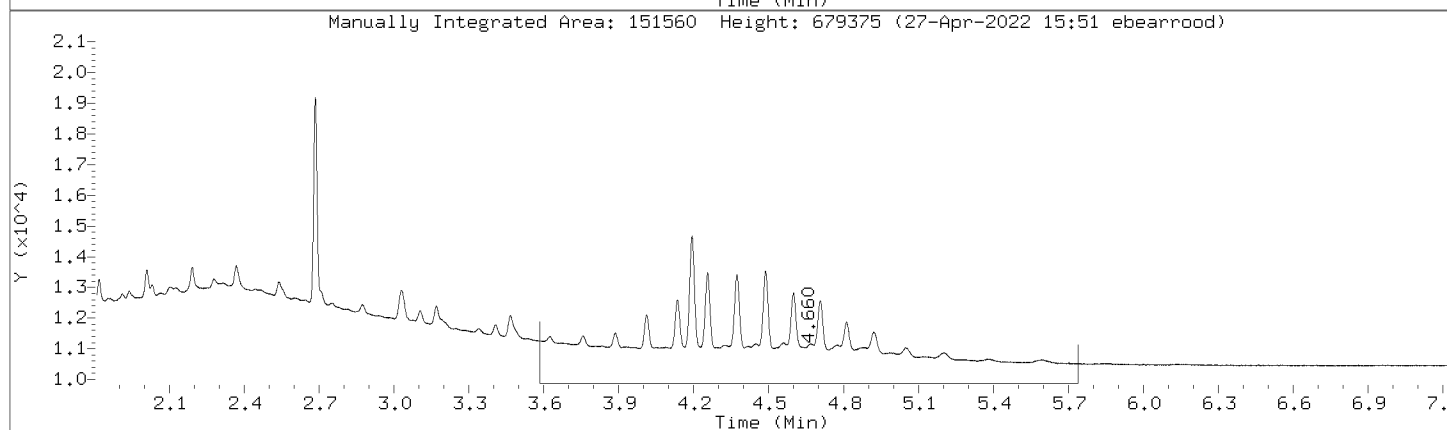
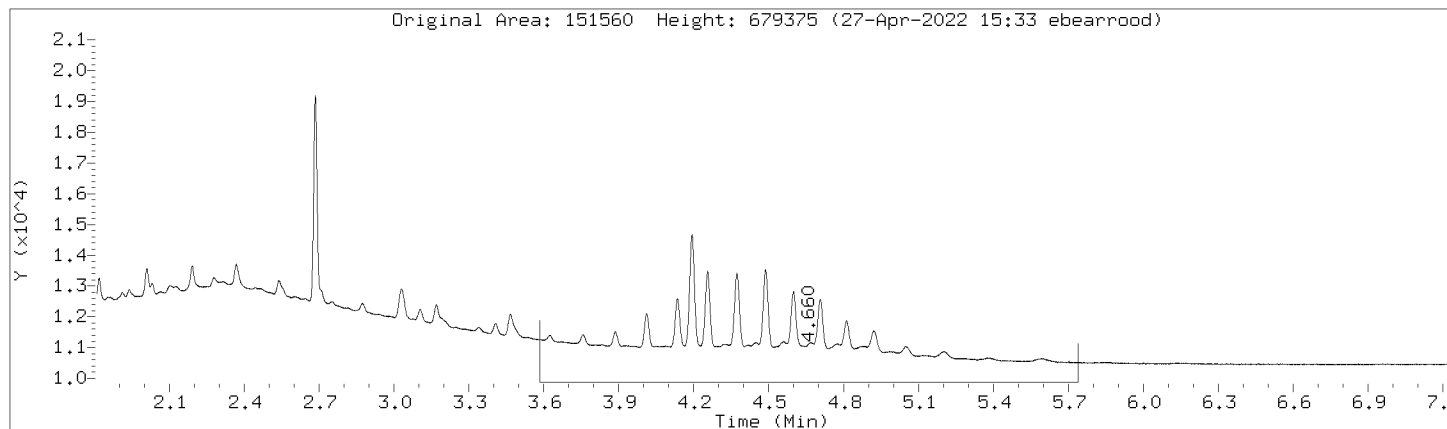
Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:





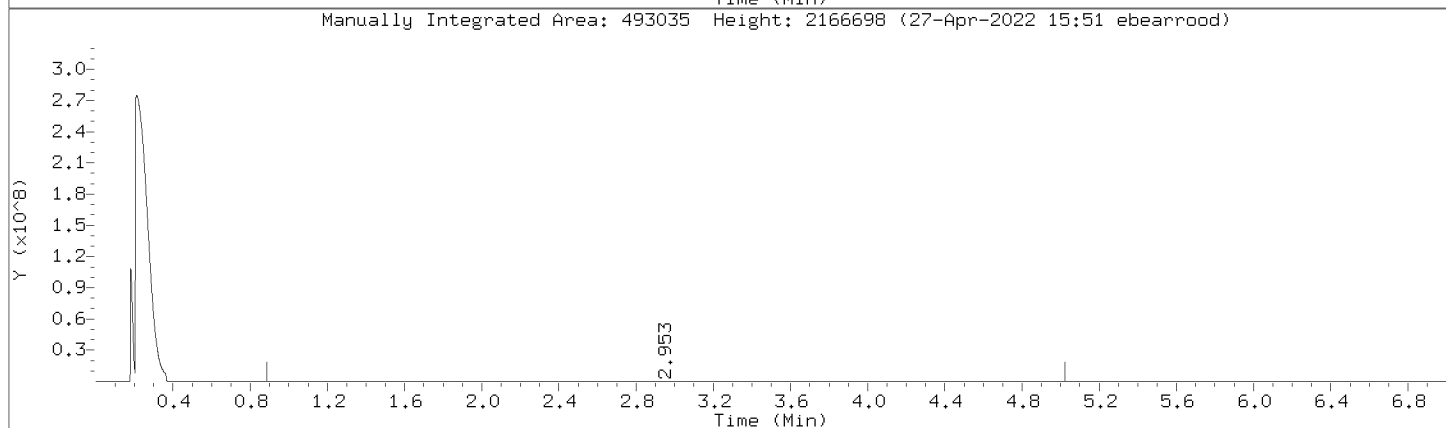
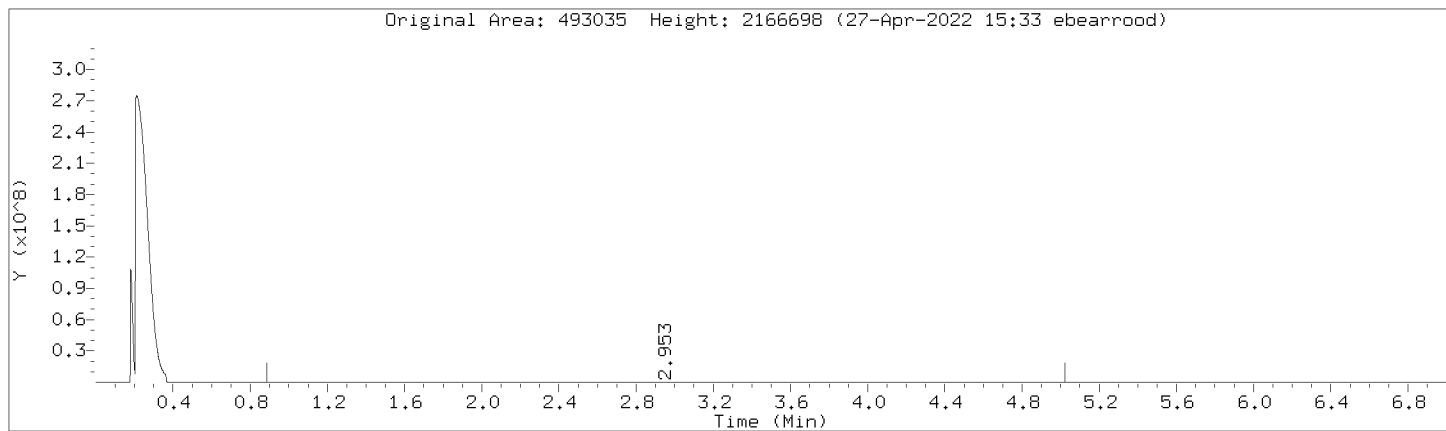
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



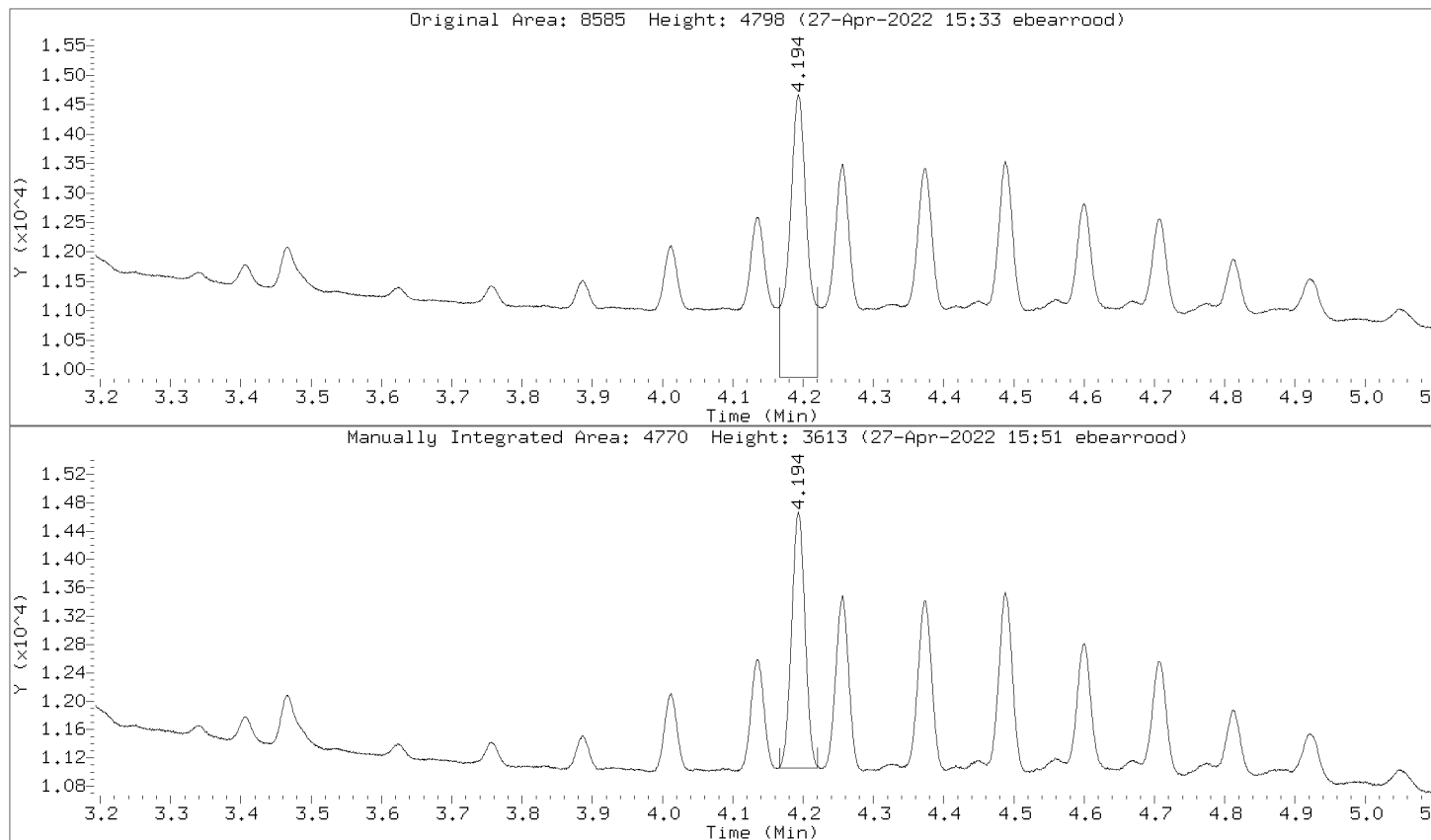
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



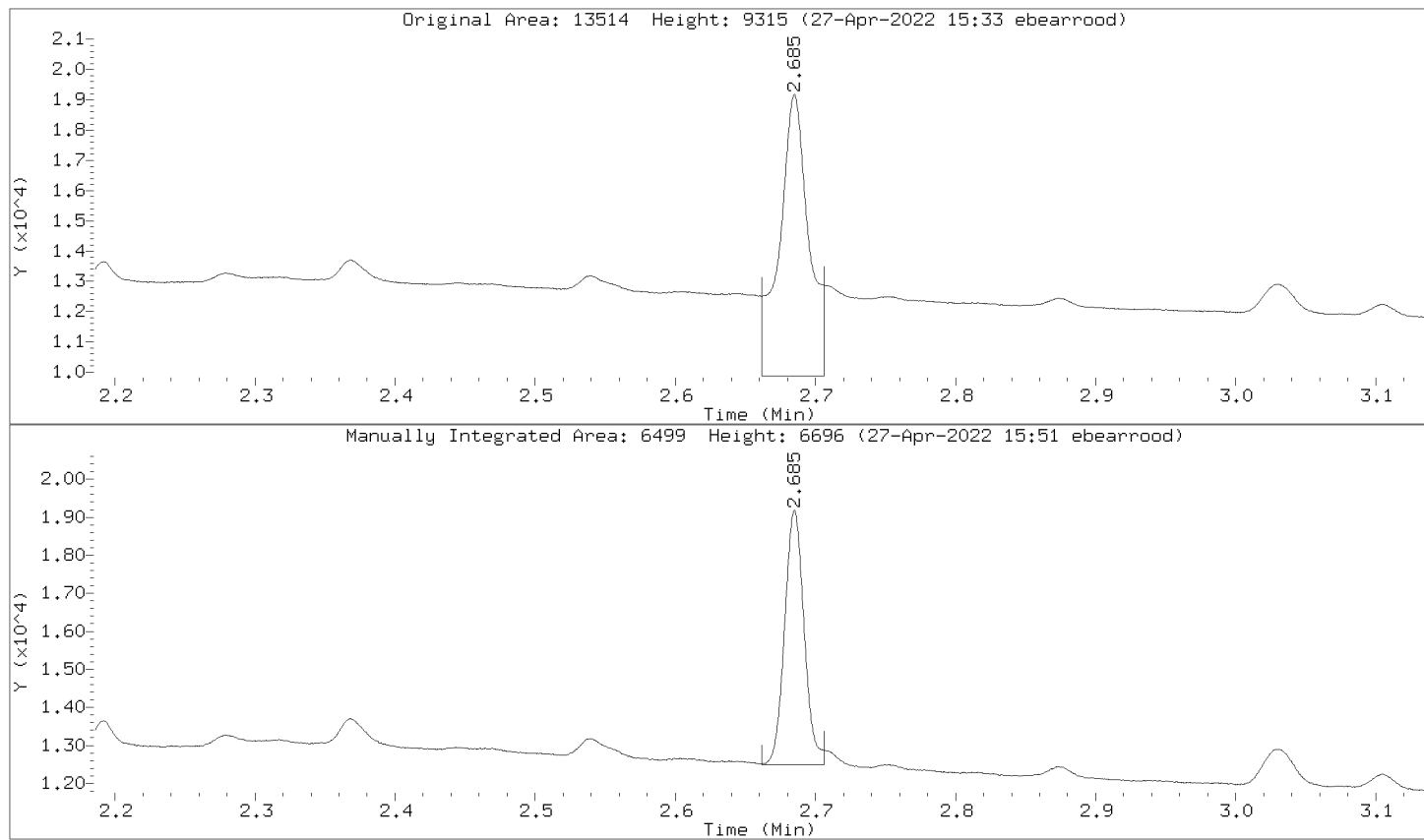
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000009.D  
Injection Date: 27-APR-2022 13:11  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,362370:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
 Lab Smp Id: DMO-CAL3,362371:2 Client Smp ID: DMO-CAL3,362371:2  
 Inj Date : 27-APR-2022 13:23  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal3,362371:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 80 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		458652 25.0000	16.0	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.684	2.685 -0.001		17246 2.50000	2.01	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.191	4.193 -0.002		12697 2.50000	1.77	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		175114 25.0000	18.4	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		514803 25.0000	16.1	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		191130 25.0000	17.4	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		633766 50.0000	33.8	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		399864 25.0000	17.6	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		399864 25.0000	17.6	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		214326 25.0000	22.2	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		214326 25.0000	22.2	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:23

Client ID: DMO-CAL3,362371:2

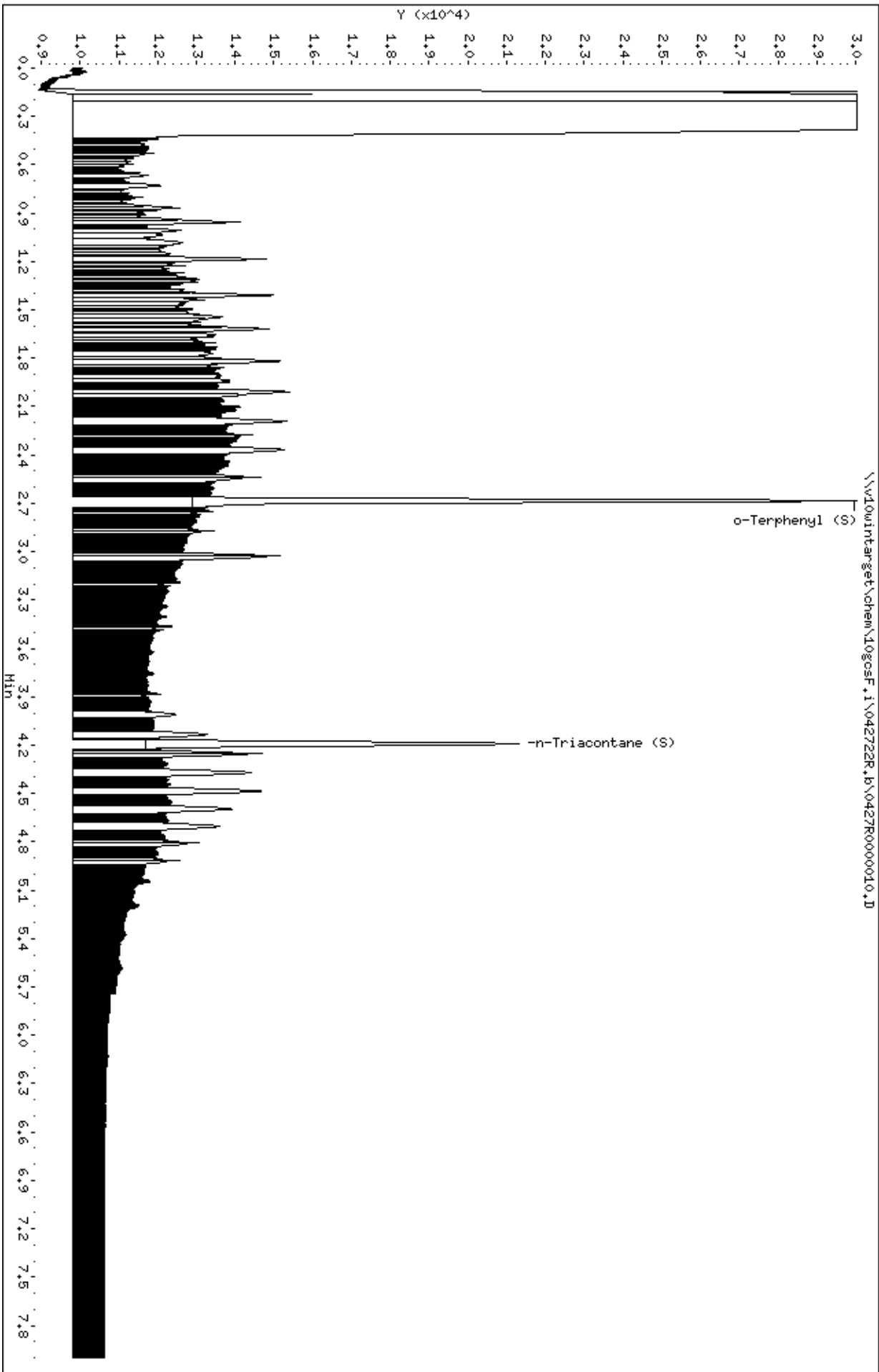
Sample Info: DMO-CAL3,362371:2

Instrument: 10gocsf.1

Operator: EBS

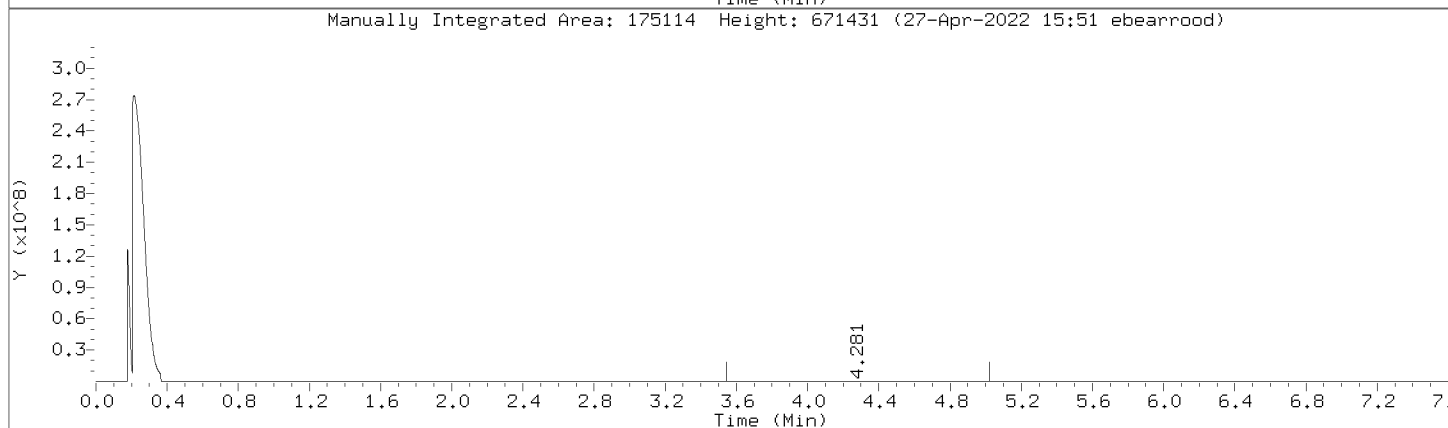
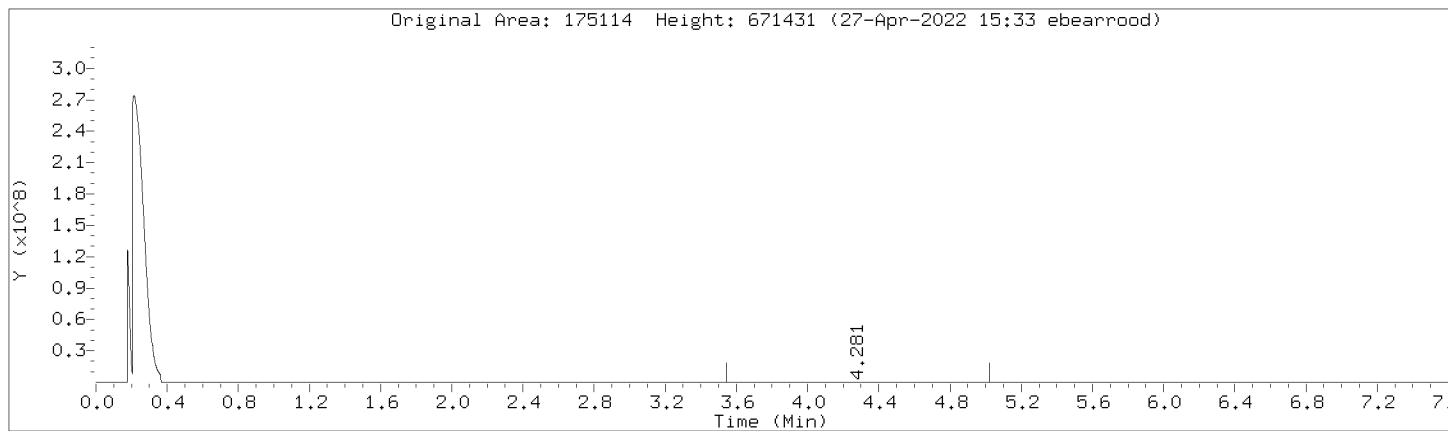
Column diameter: 0.32

Column phase: DB-5-US21430033



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

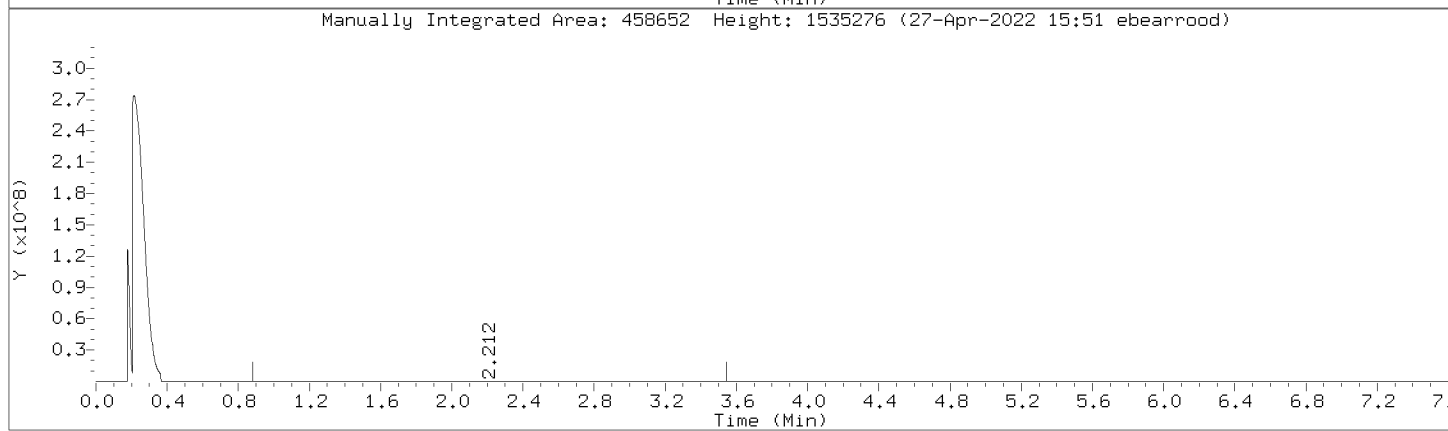
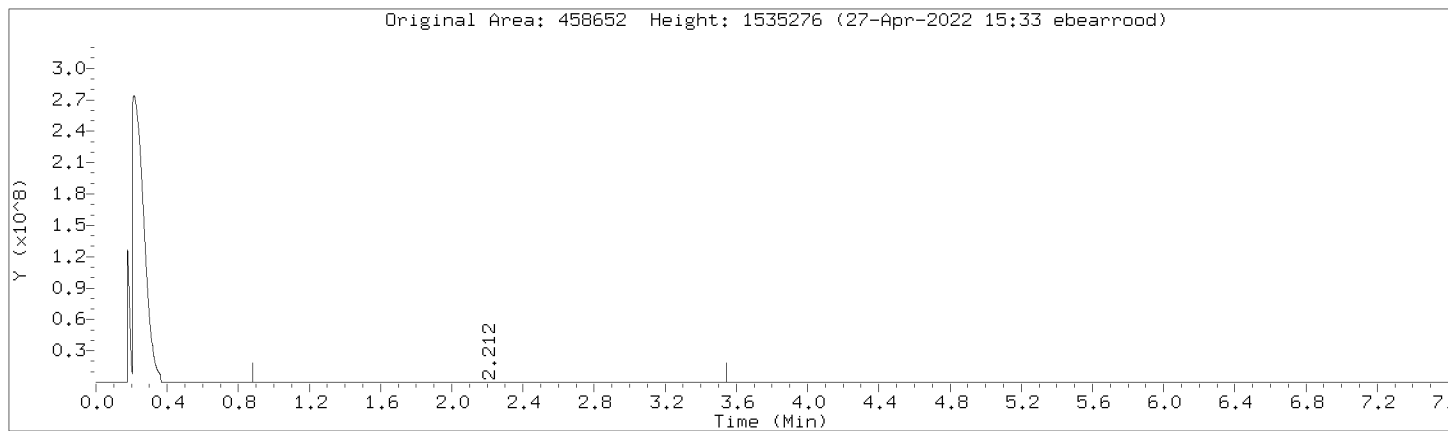
Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:





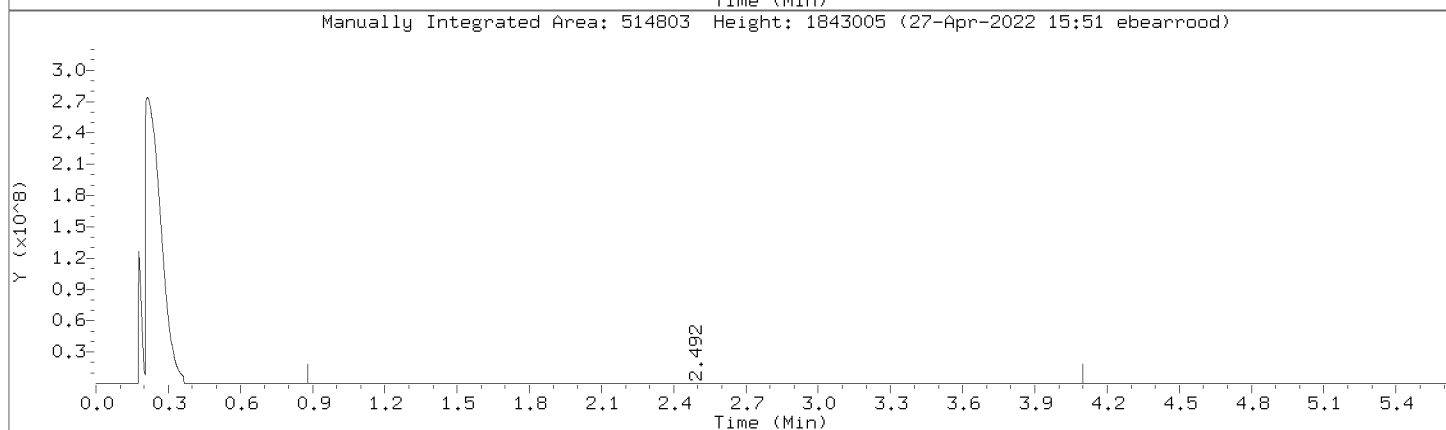
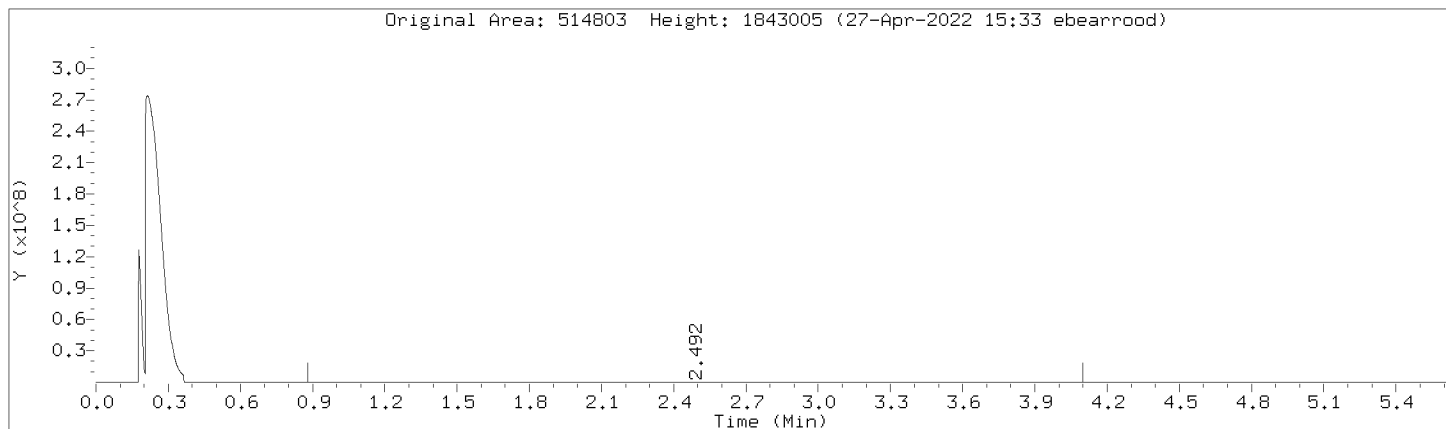
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



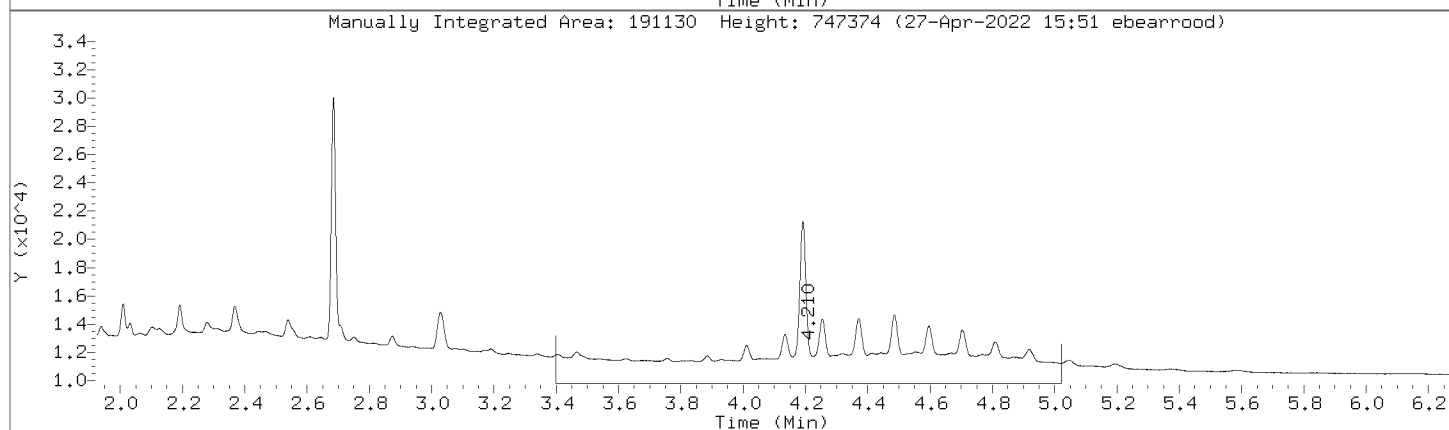
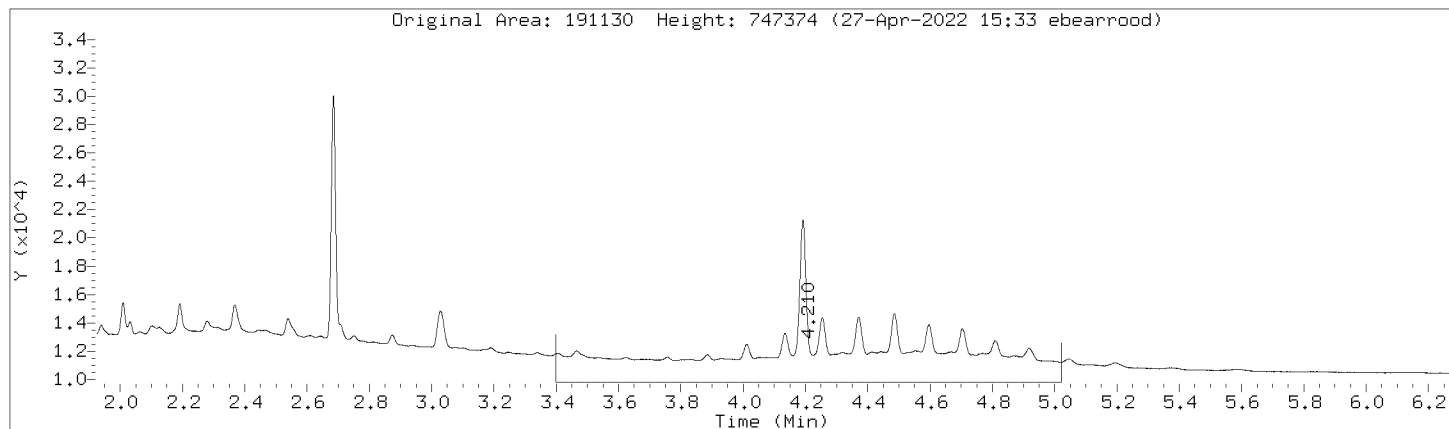
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



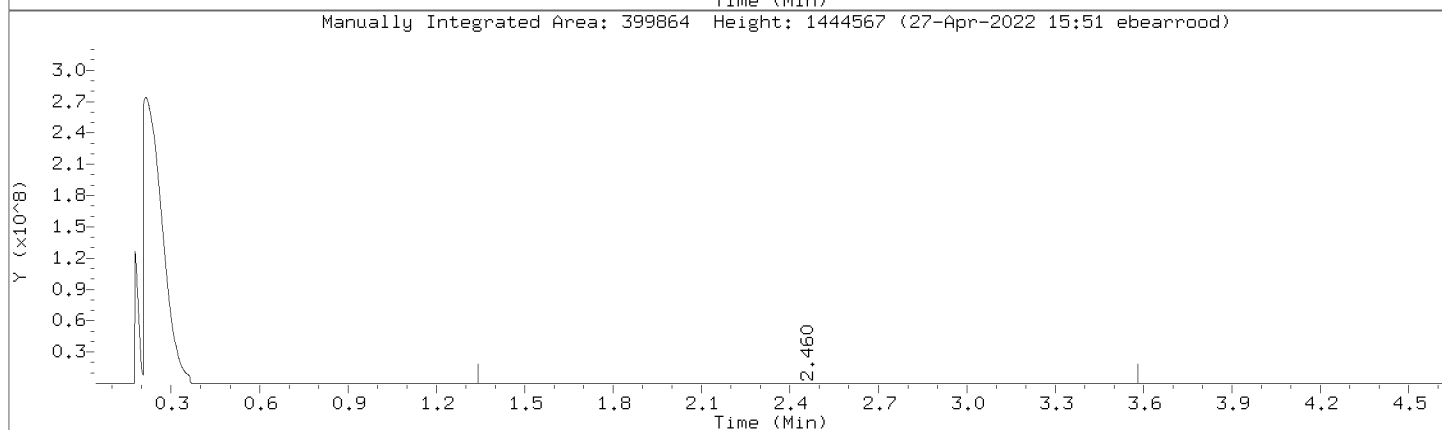
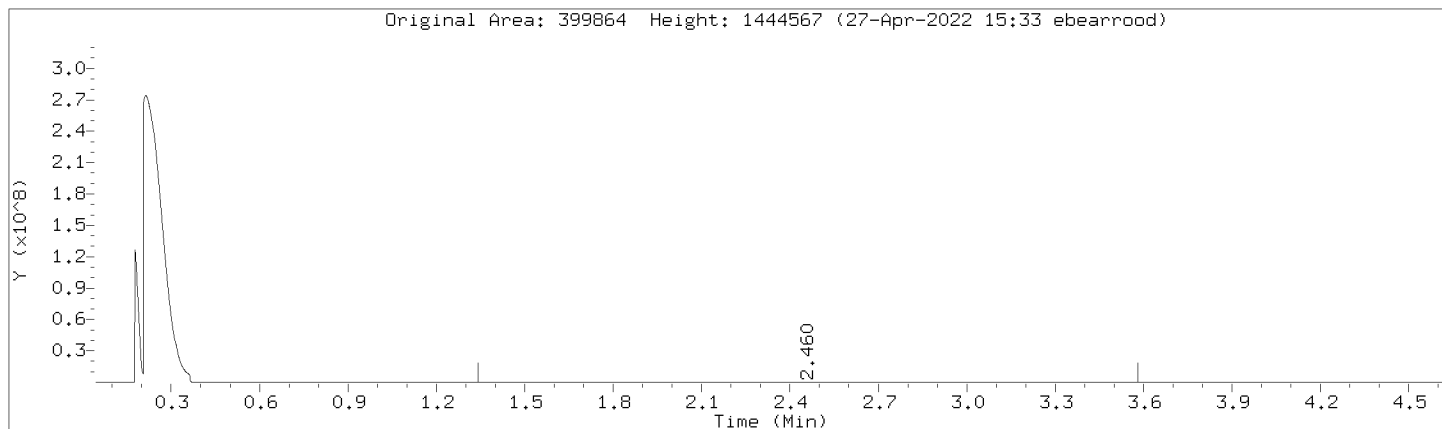
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Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



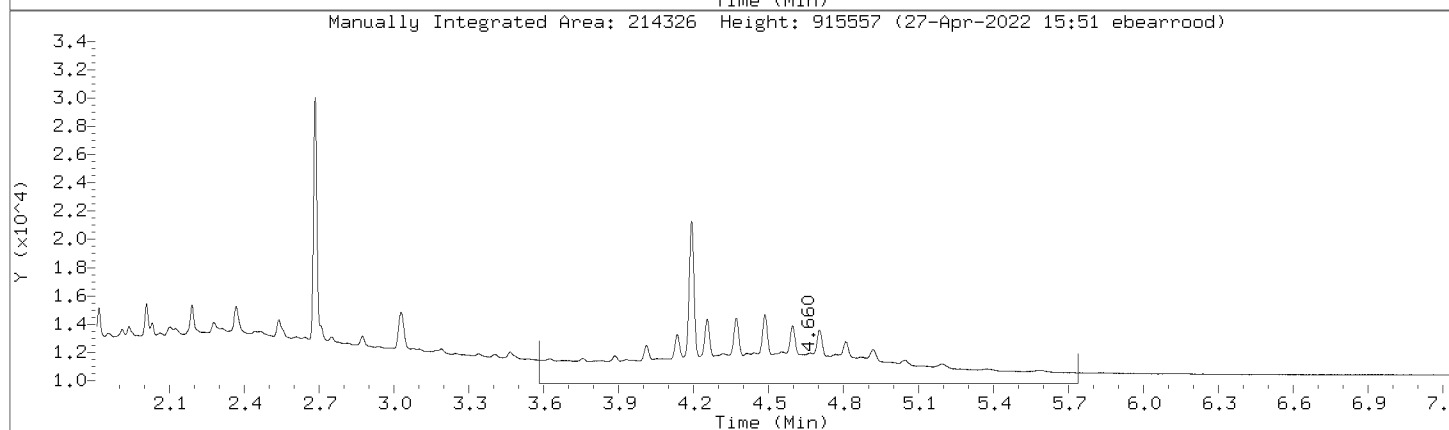
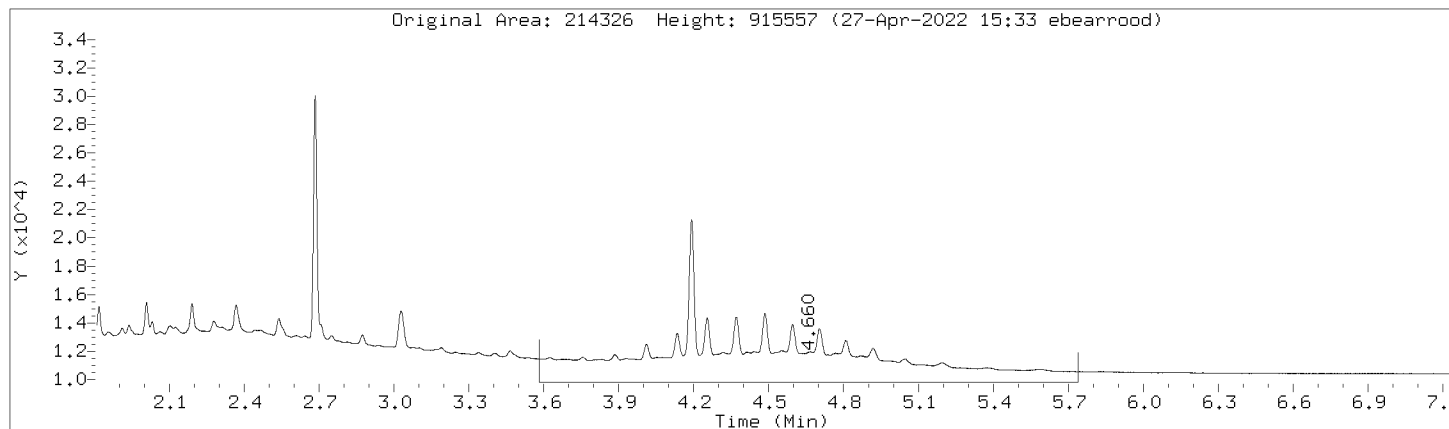
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Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



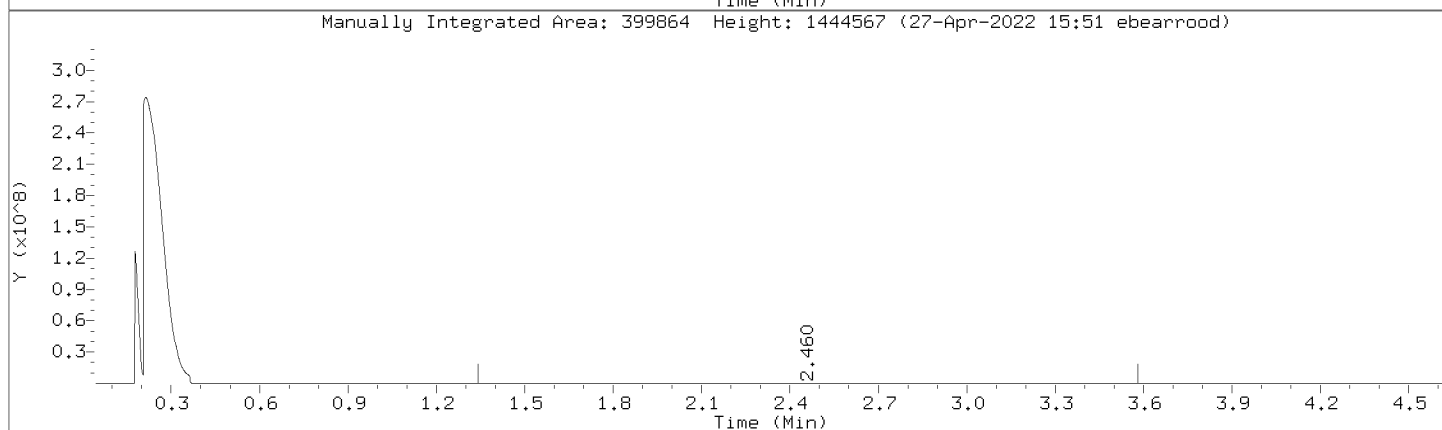
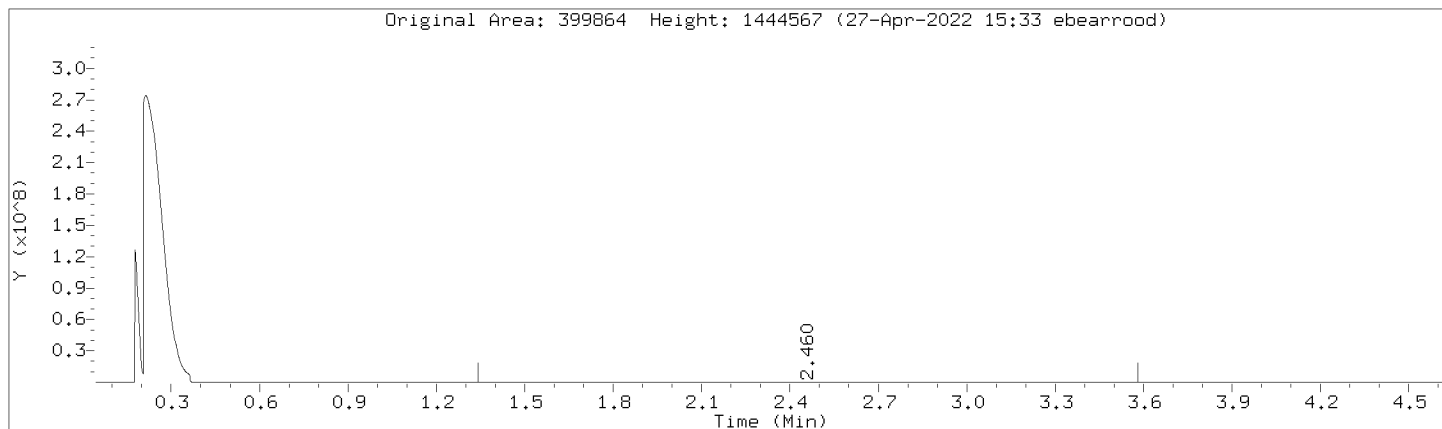
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



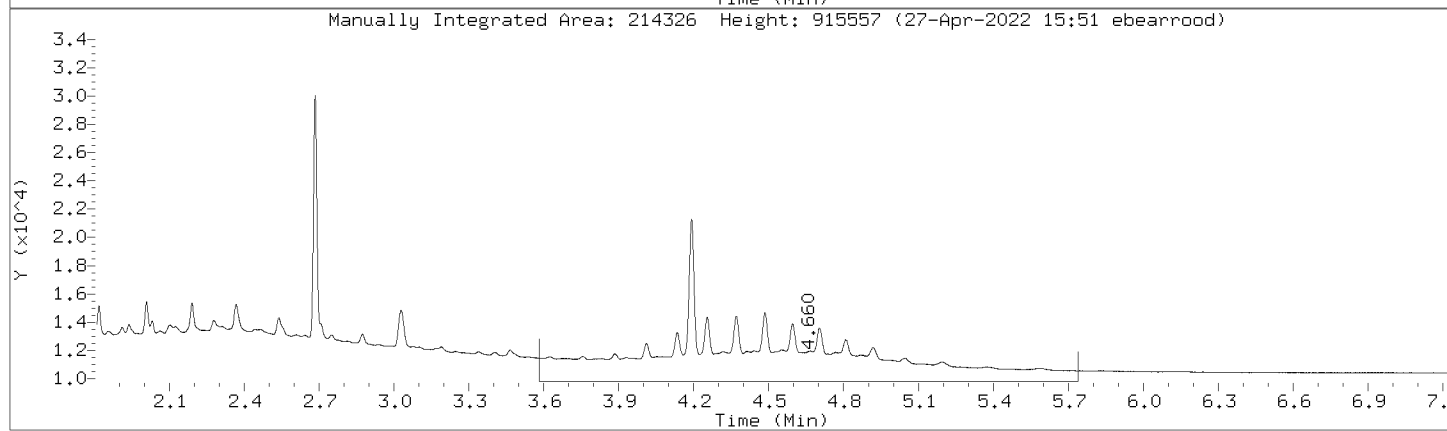
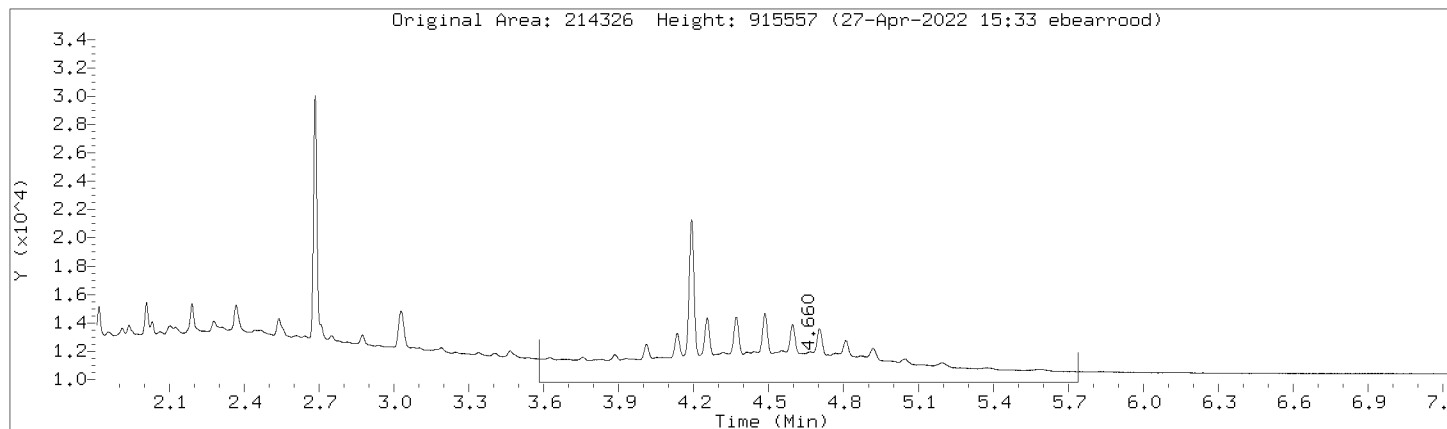
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Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



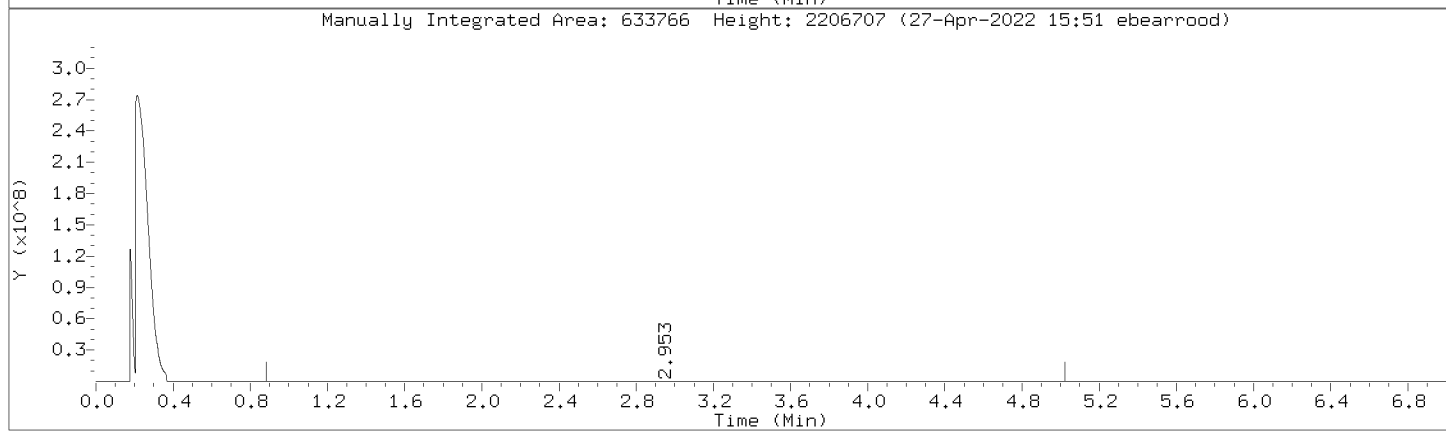
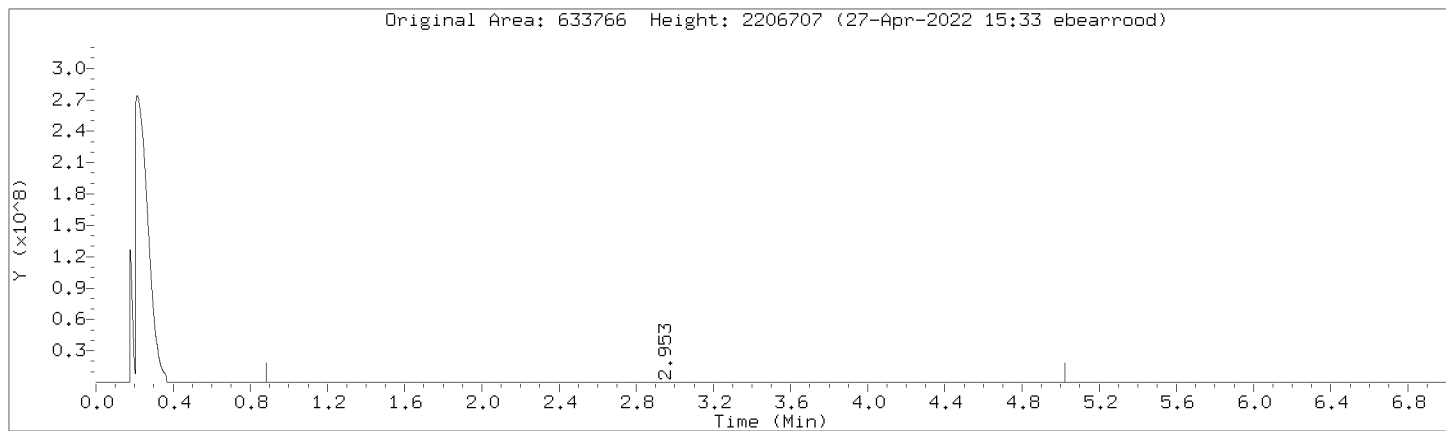
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

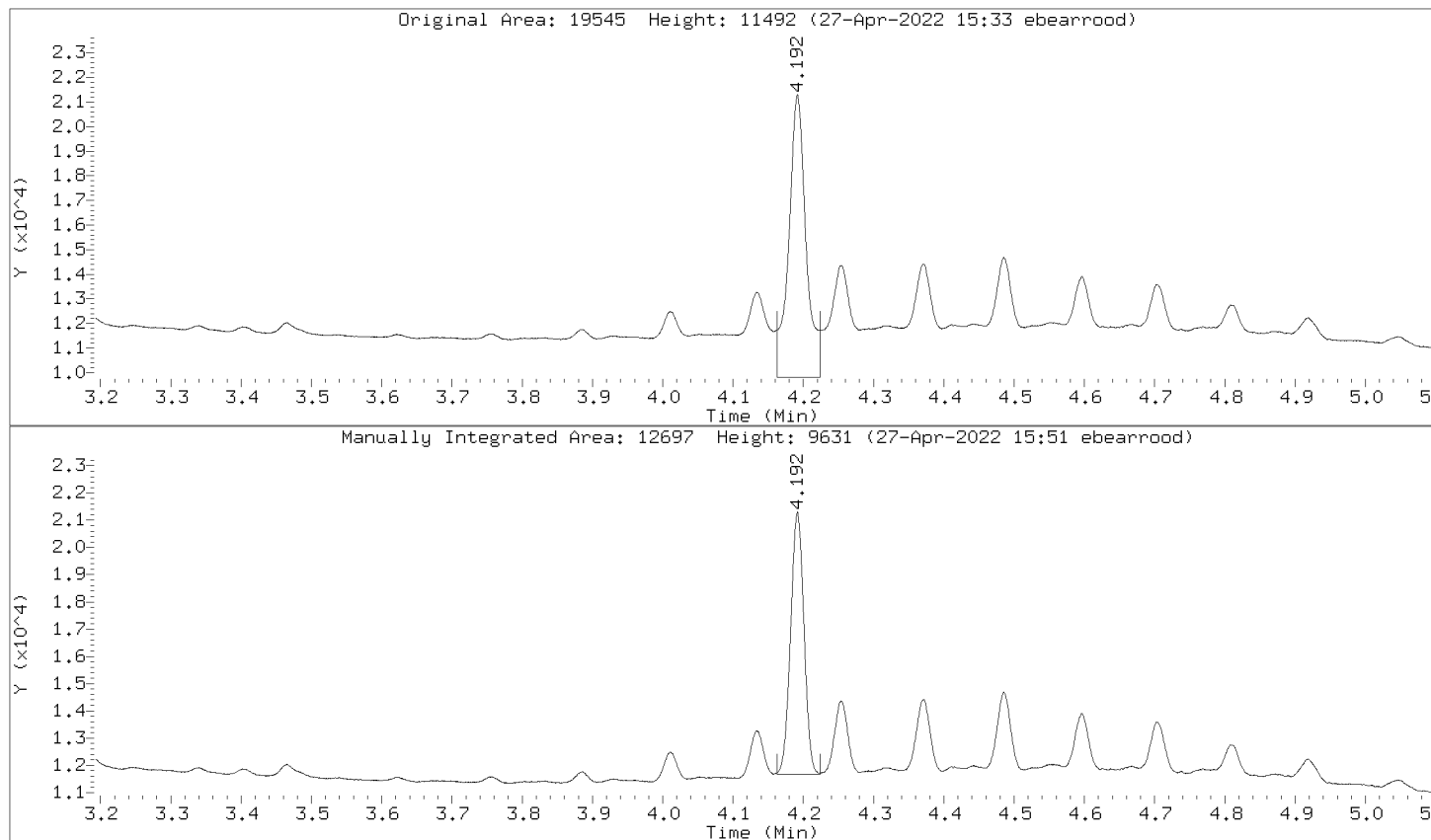
Compound: C10-C36      Review Code: RNG  
CAS Number:





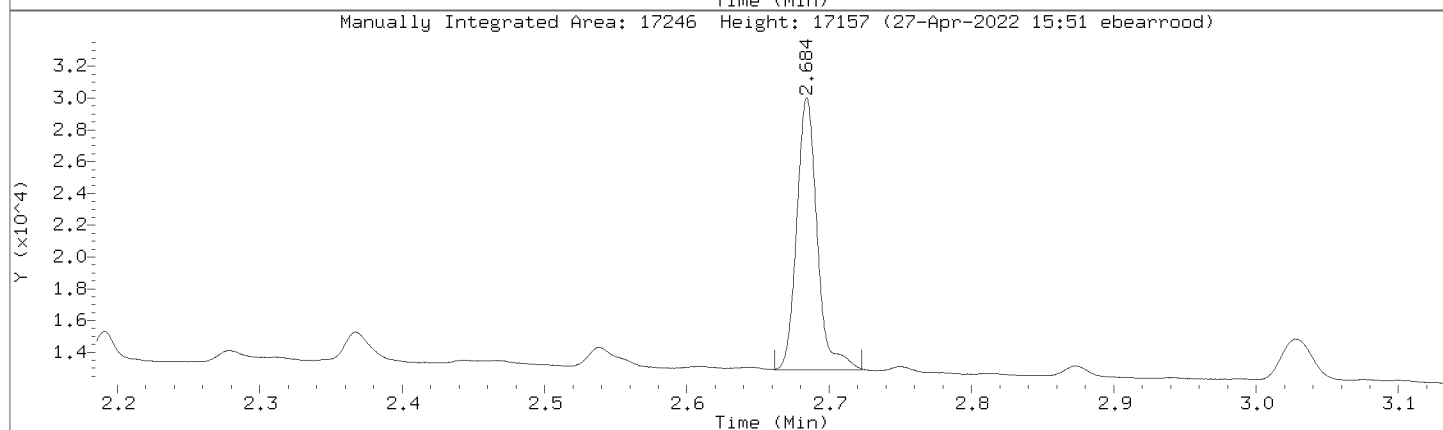
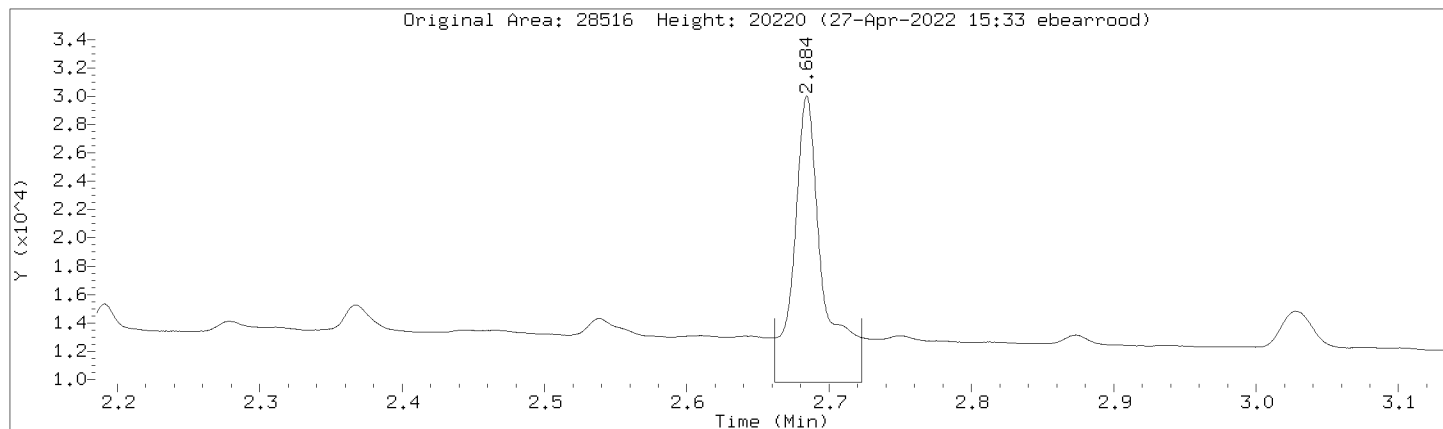
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Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000010.D  
Injection Date: 27-APR-2022 13:23  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,362371:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
 Lab Smp Id: DMO-CAL4,362372:2 Client Smp ID: DMO-CAL4,362372:2  
 Inj Date : 27-APR-2022 13:34  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal4,362372:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 81 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		608687 50.0000	42.2	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.684	2.685 -0.001		34140 5.00000	4.57	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.193	4.193 0.000		25712 5.00000	4.30	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		256015 50.0000	41.6	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		685656 50.0000	42.2	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		279506 50.0000	41.8	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		864702 100.000	84.0	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		525834 50.0000	43.8	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		525834 50.0000	43.8	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		309207 50.0000	43.7	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		309207 50.0000	43.7	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:34

Client ID: DMO-CAL4,362372:2

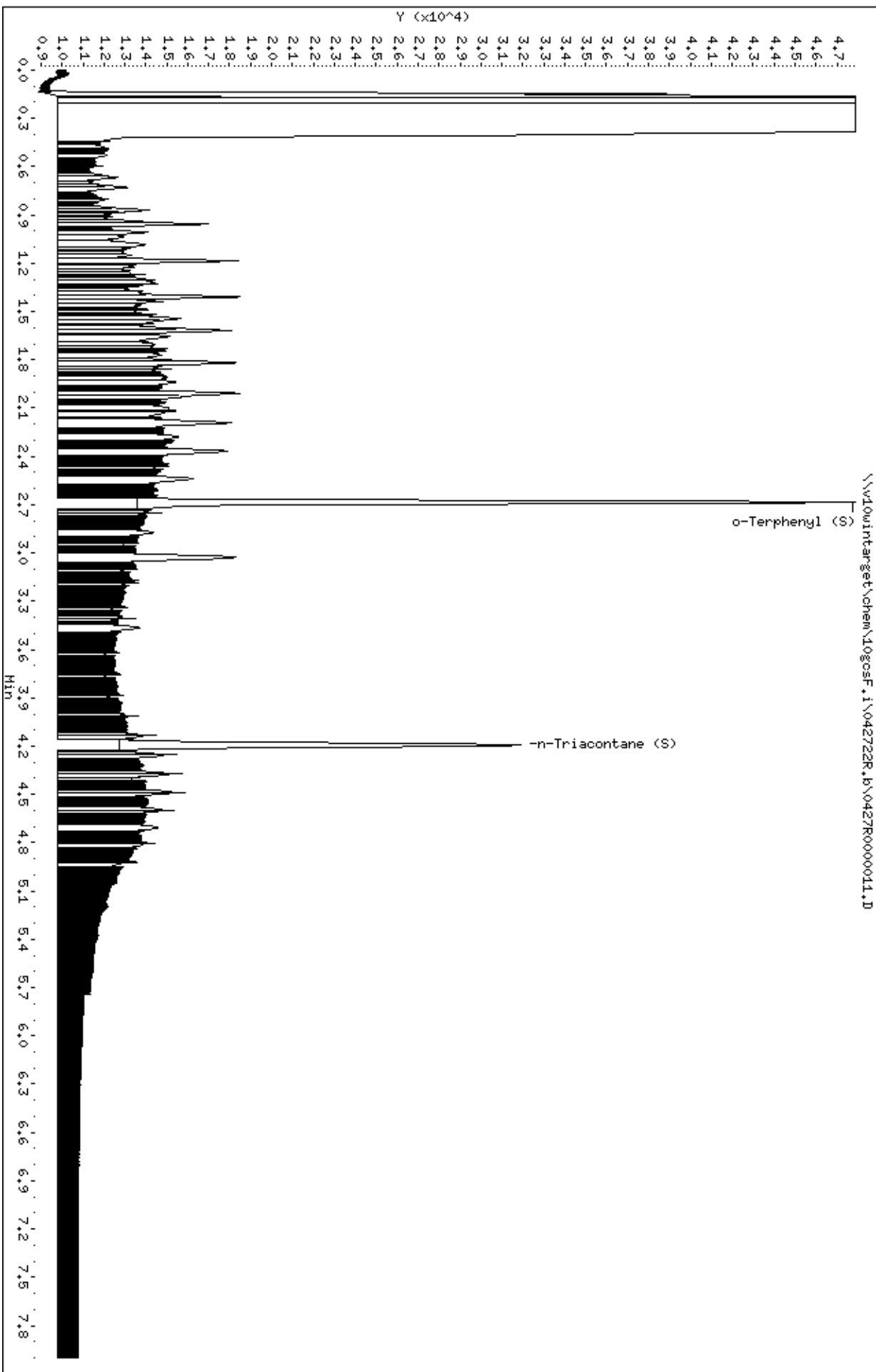
Sample Info: DMO-CAL4,362372:2

Instrument: 10gocsf.1

Operator: EB3

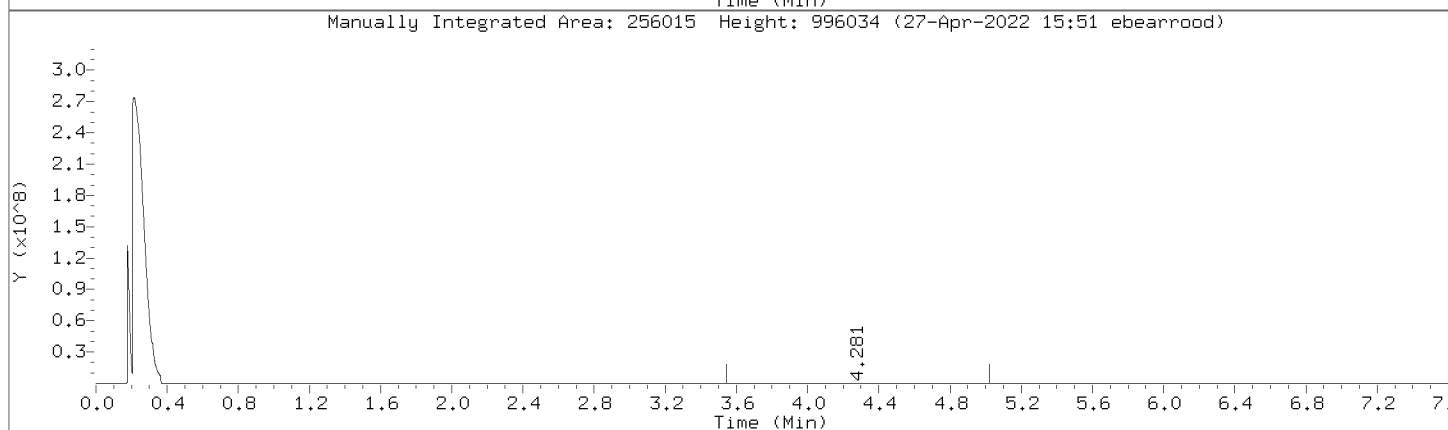
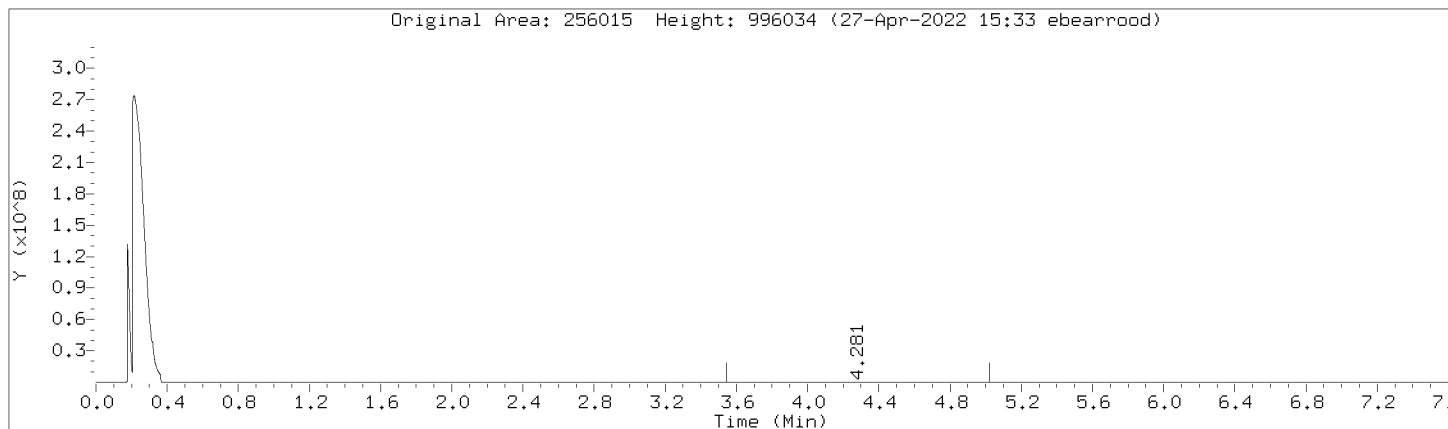
Column diameter: 0.32

Column phase: DB-5-US21430033



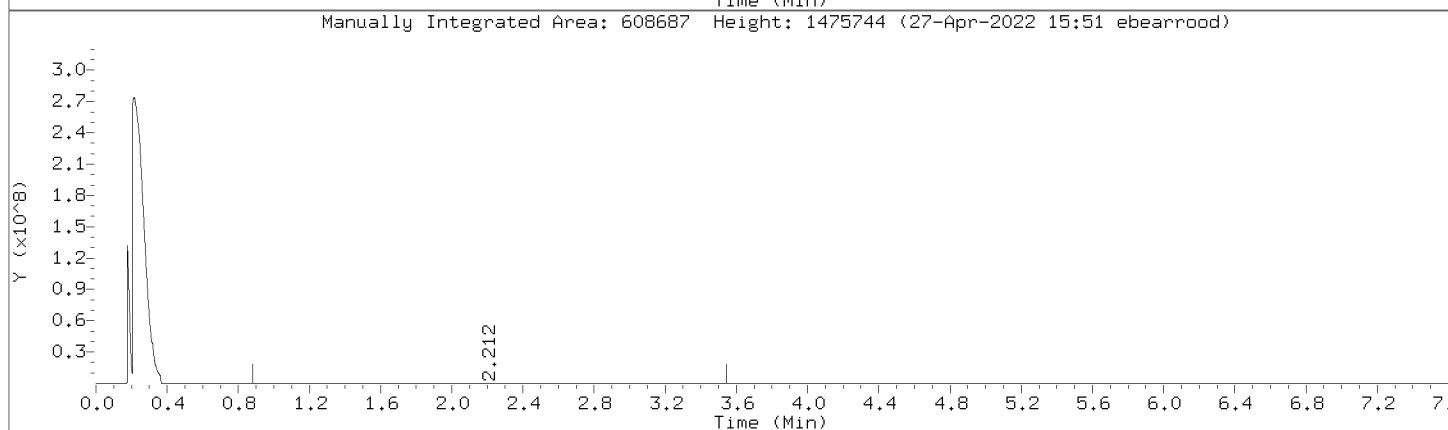
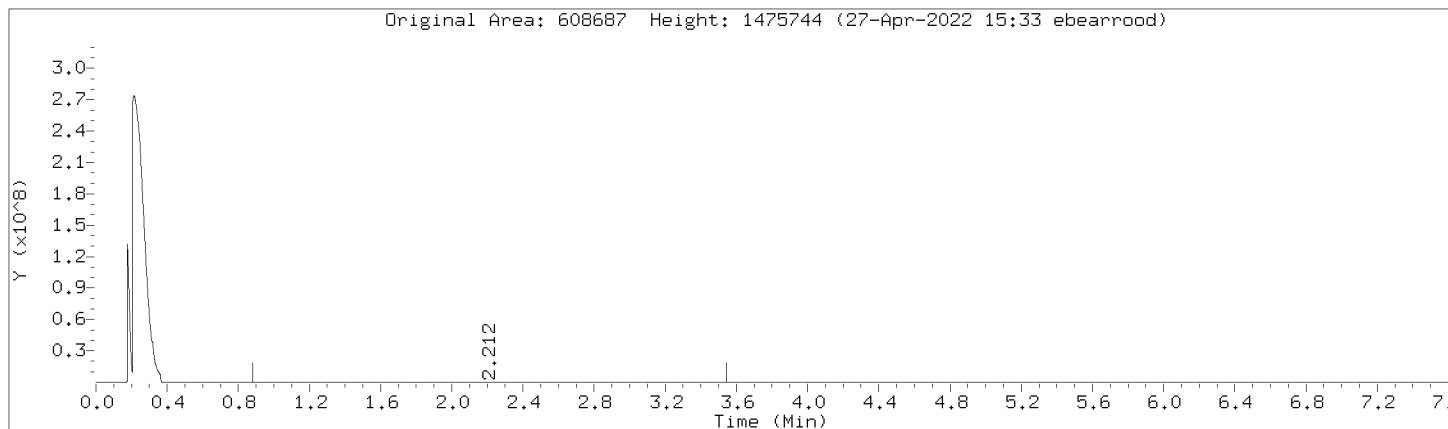
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



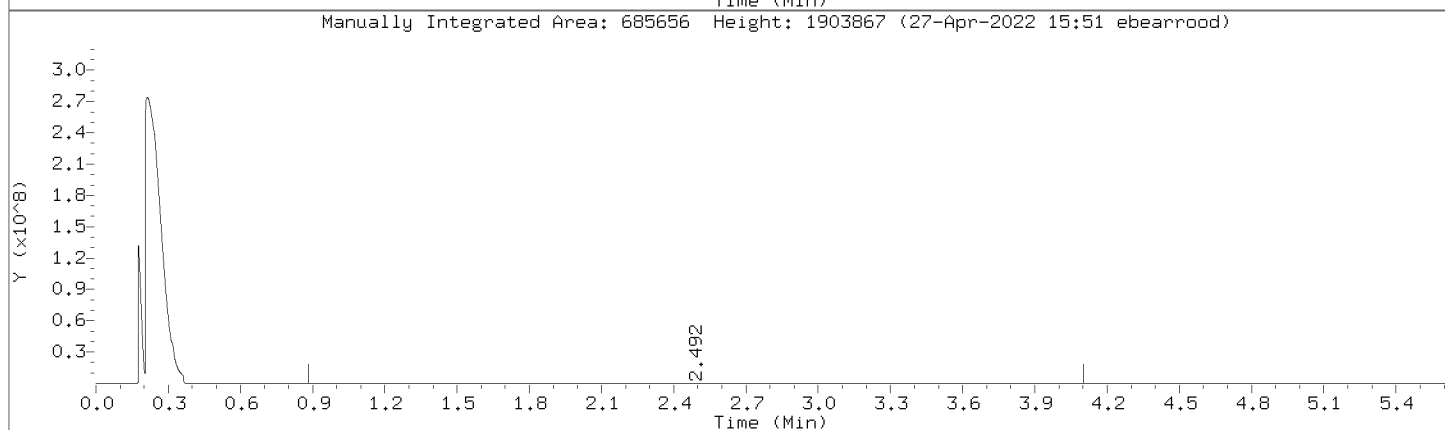
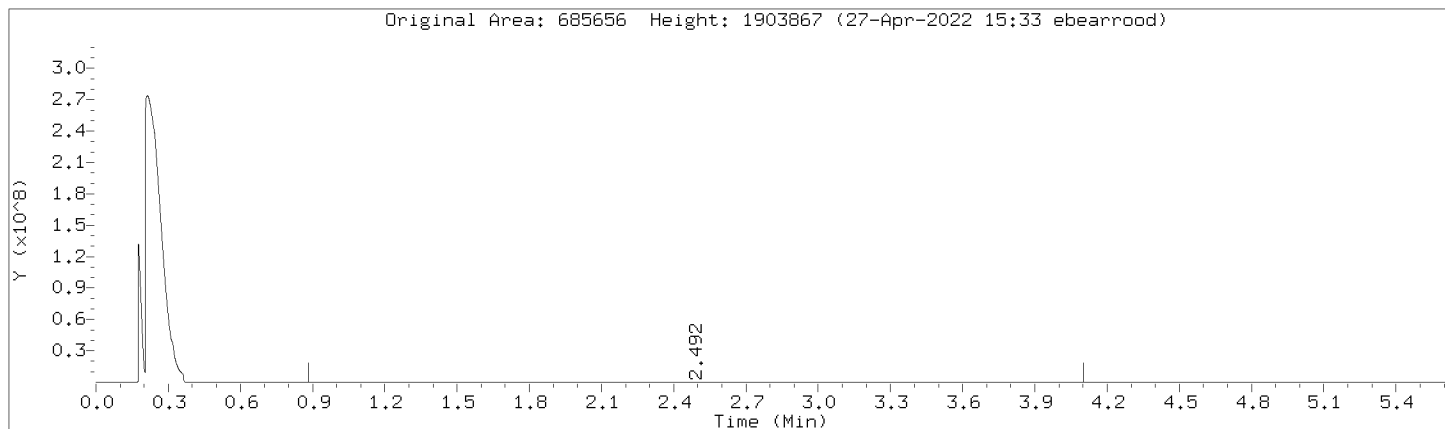
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Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

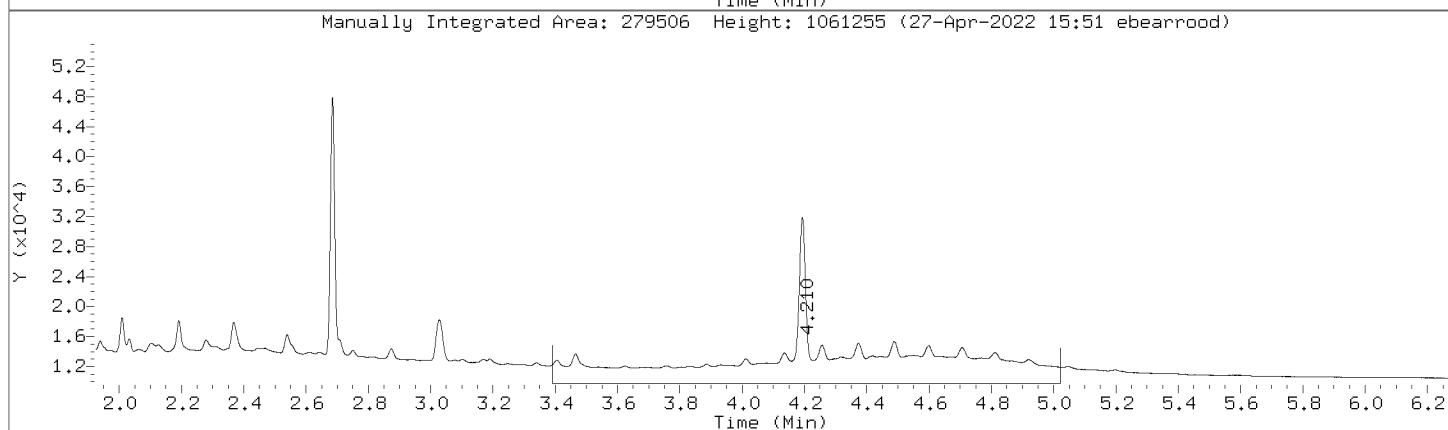
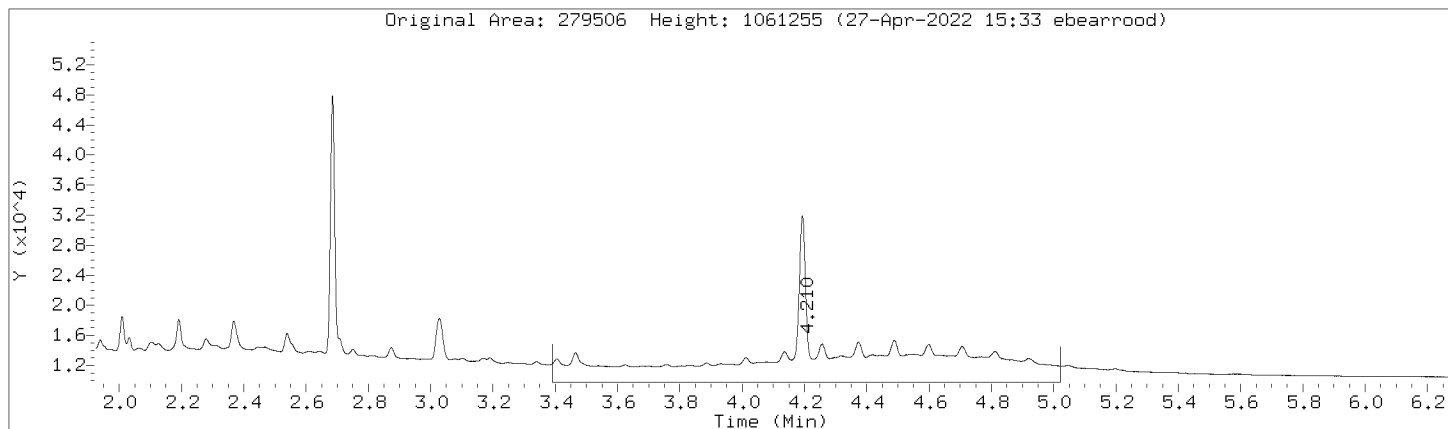
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:





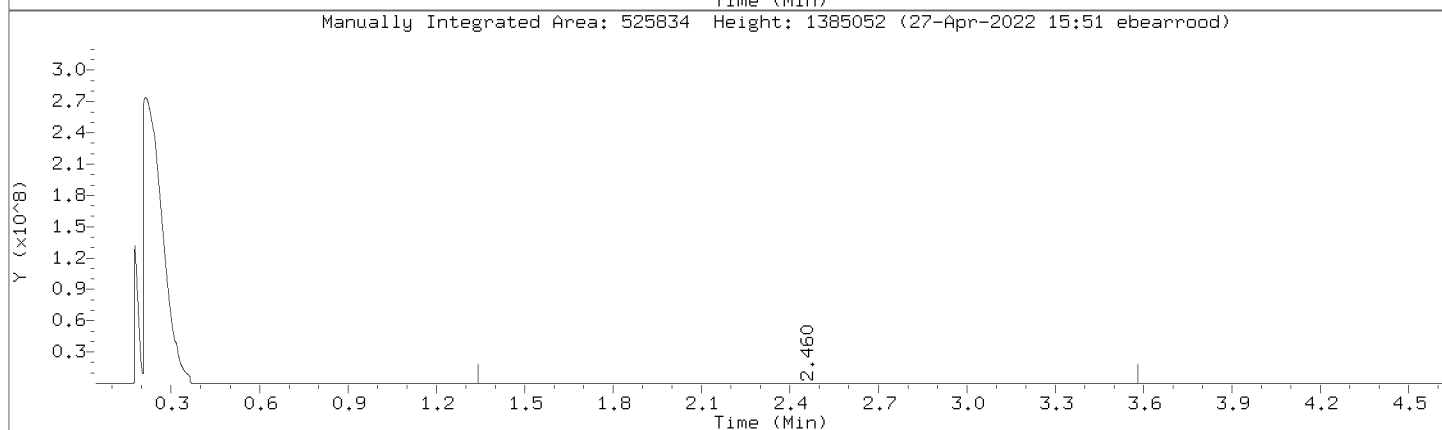
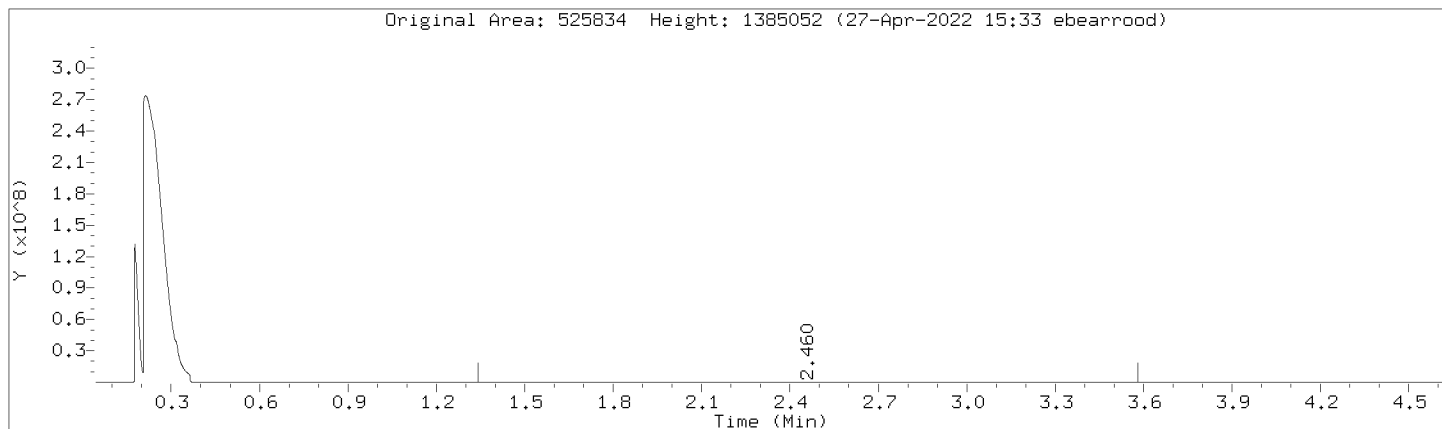
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Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



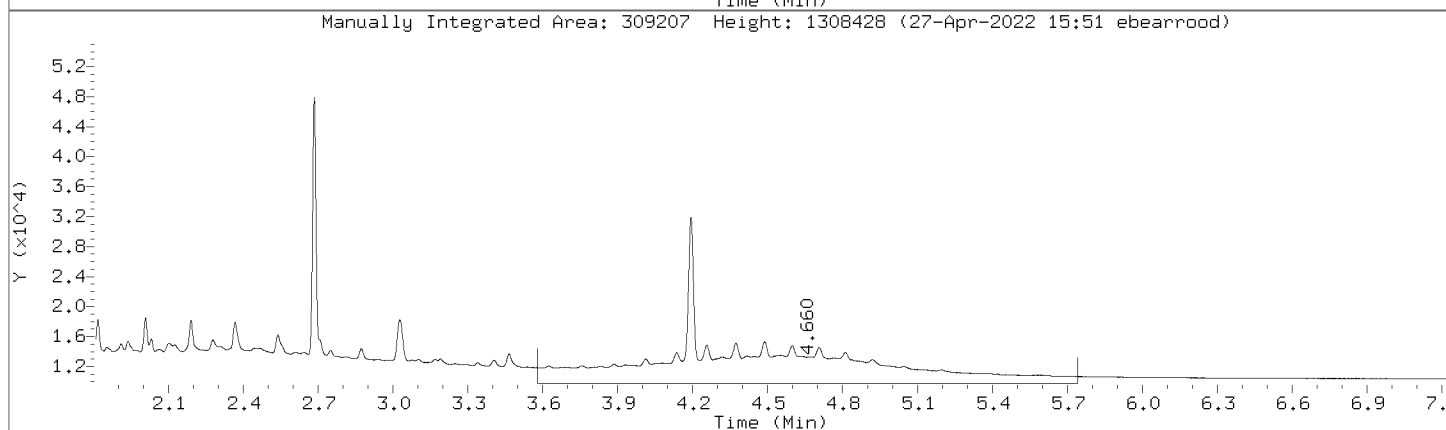
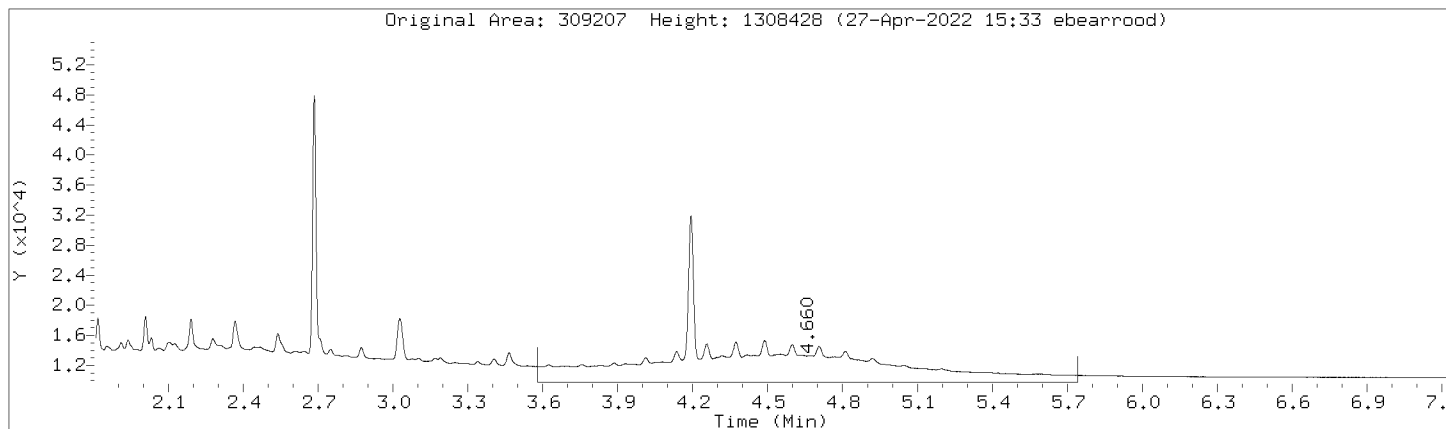
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Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



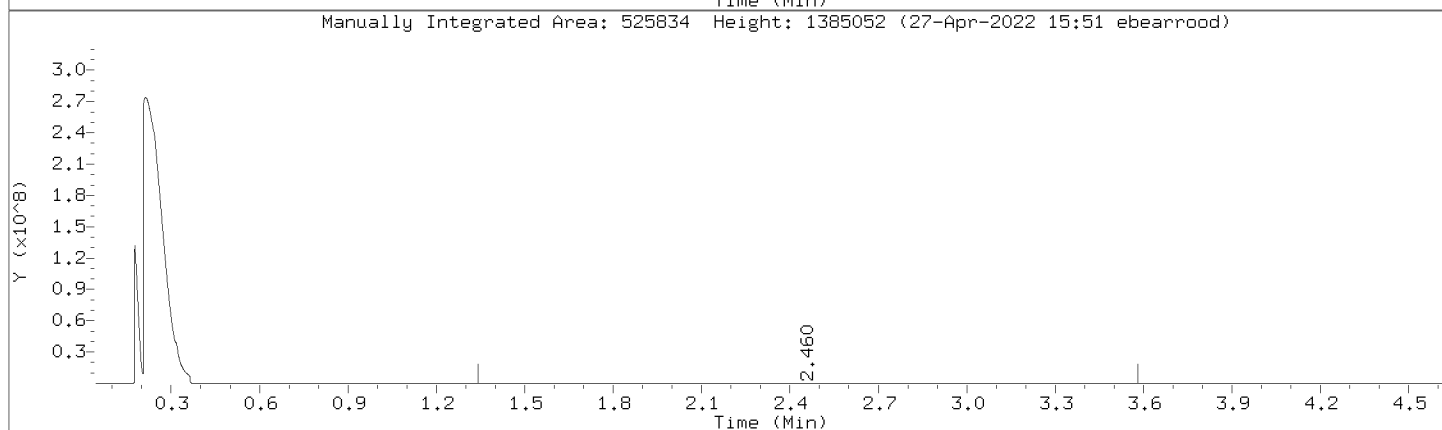
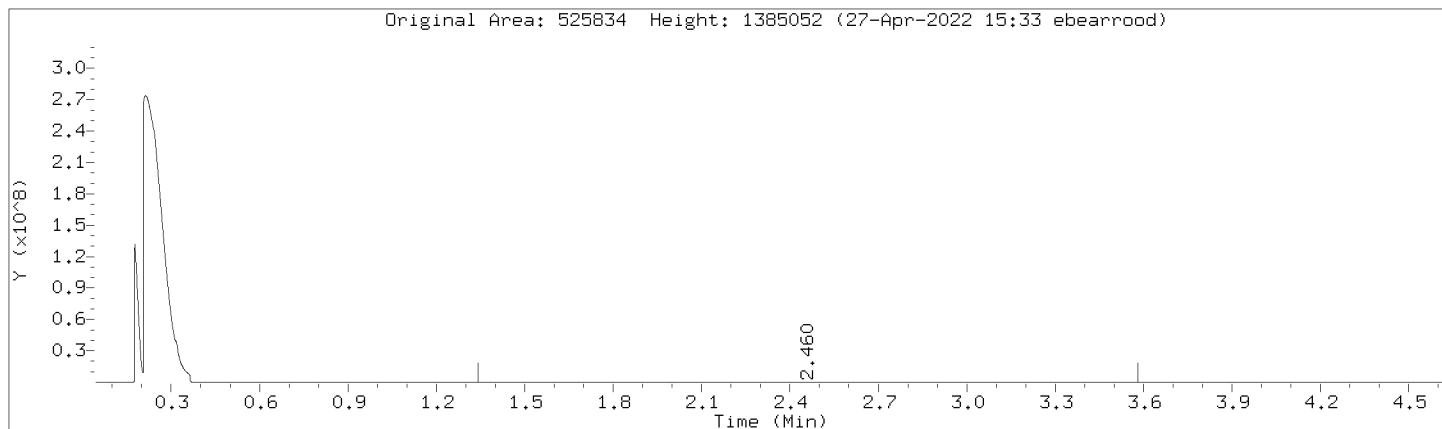
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Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



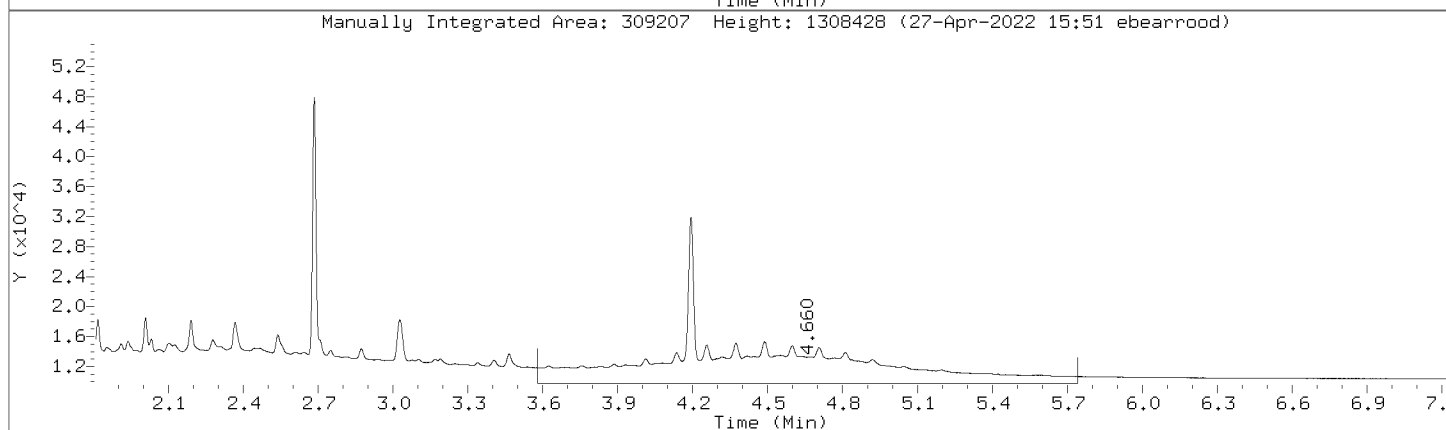
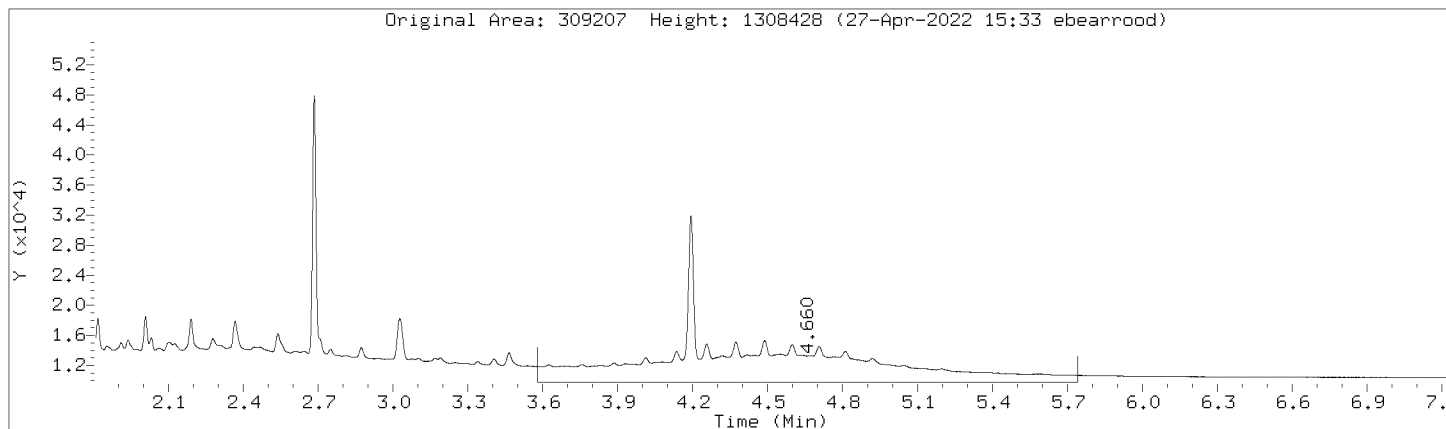
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



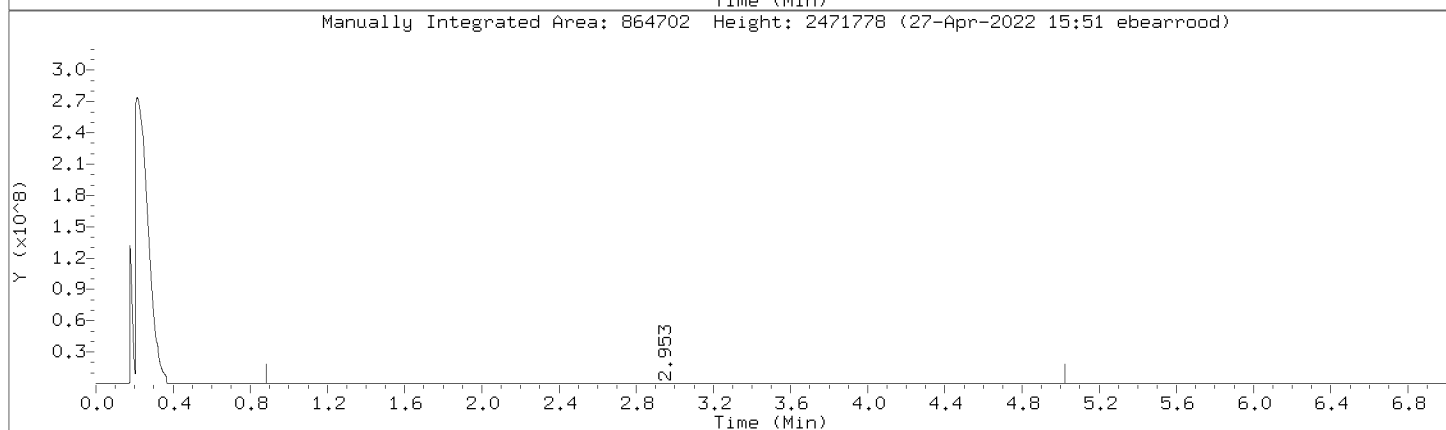
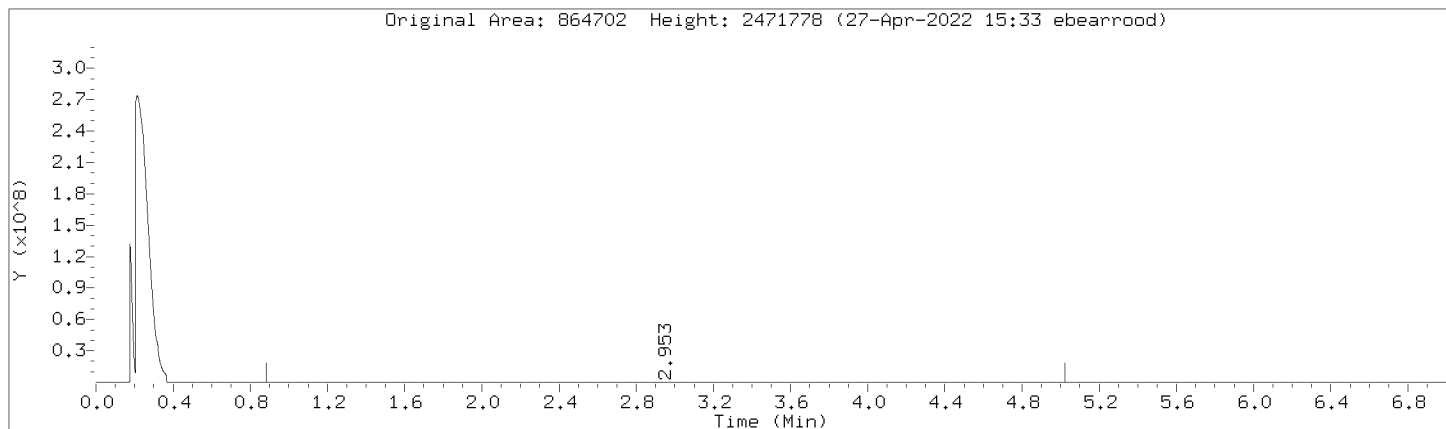
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



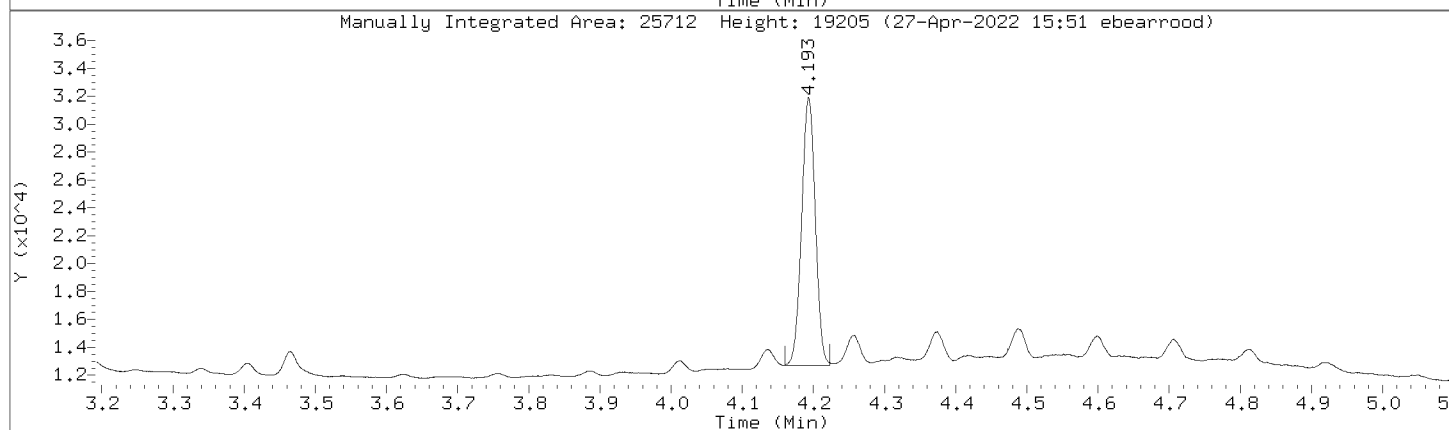
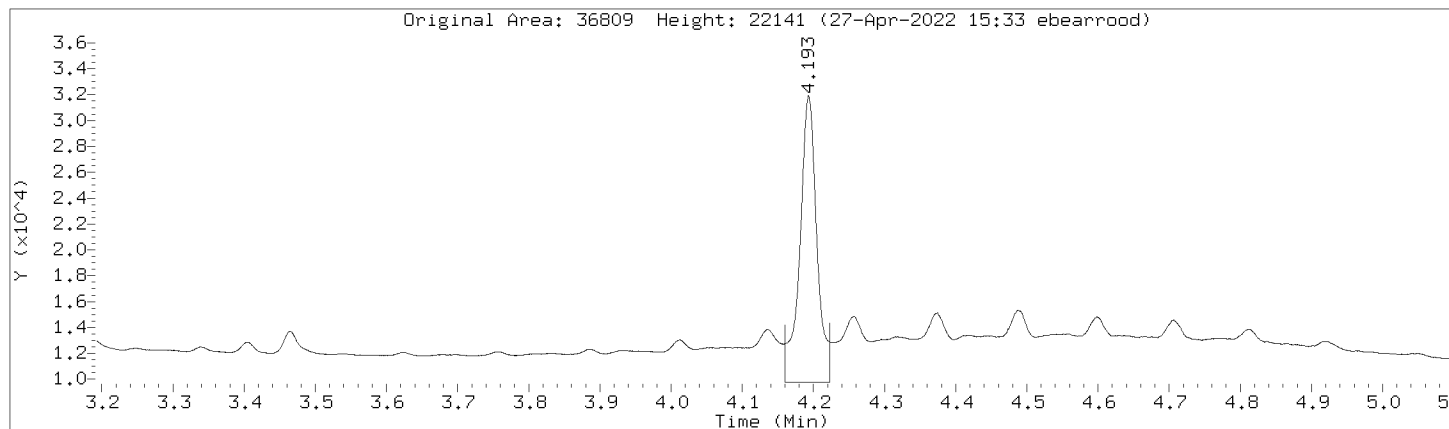
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Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



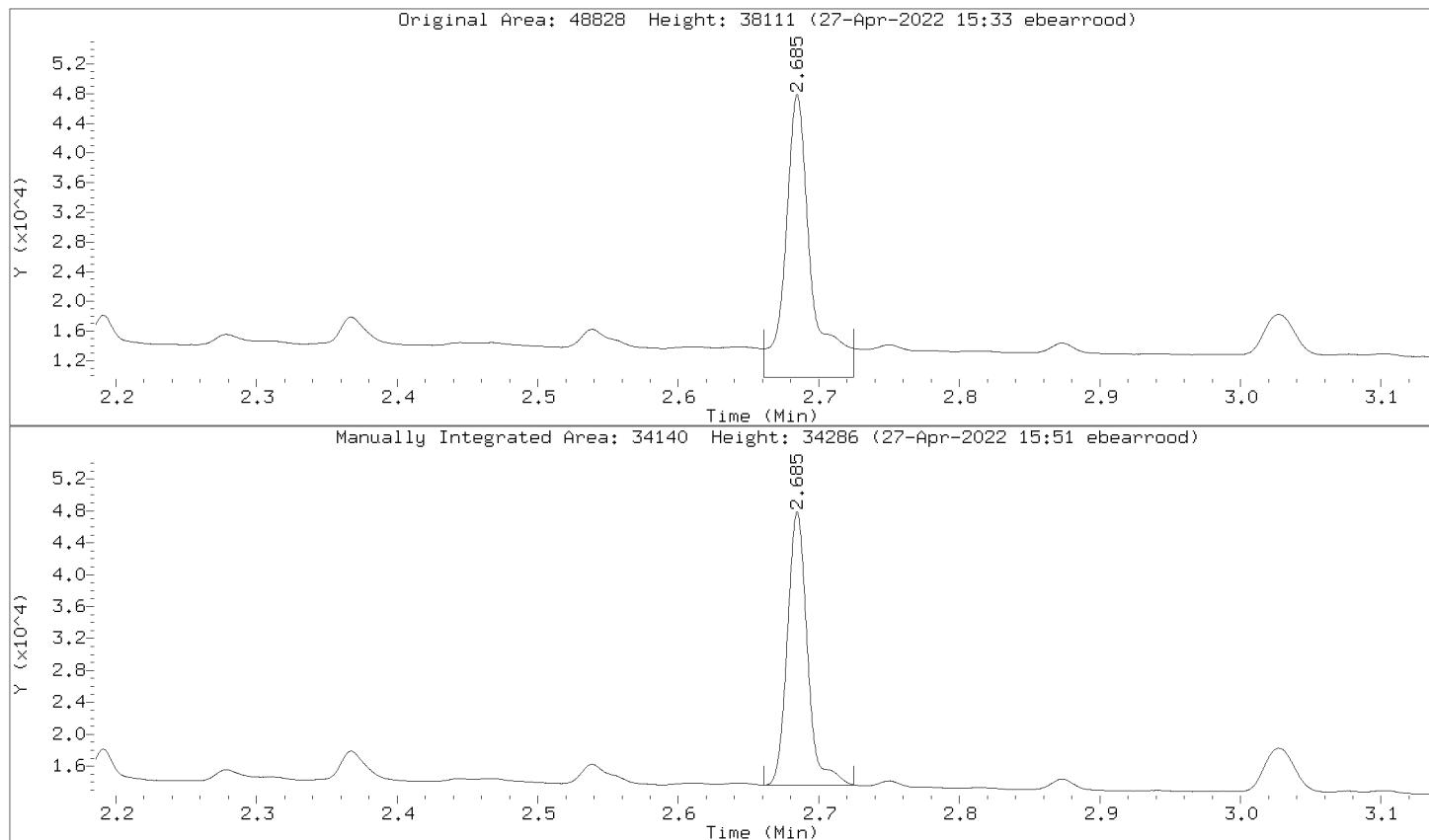
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Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000011.D  
Injection Date: 27-APR-2022 13:34  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,362372:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:





Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
 Lab Smp Id: DMO-CAL5,362373:2 Client Smp ID: DMO-CAL5,362373:2  
 Inj Date : 27-APR-2022 13:45  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal5,362373:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 82 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		889707 100.000	91.4	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.684	2.685 -0.001		67661 10.0000	9.65	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.193	4.193 0.000		51572 10.0000	9.31	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		429960 100.000	91.4	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		1007171 100.000	91.4	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		456691 100.000	90.8	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		1320158 200.000	183	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		759830 100.000	92.4	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		759830 100.000	92.4	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		518403 100.000	91.1	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		518403 100.000	91.1	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 13:45

Client ID: DMO-CAL5.362373:2

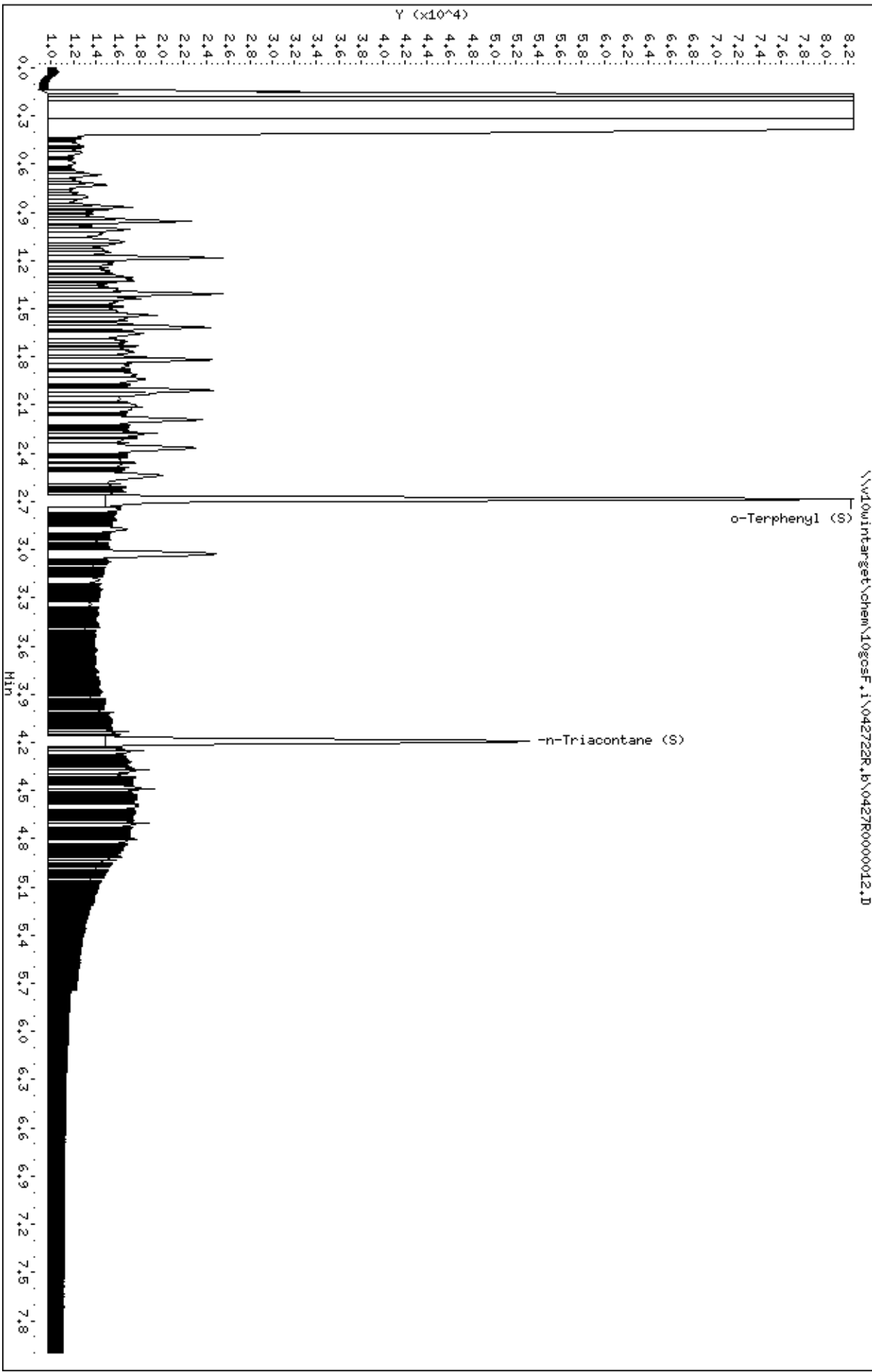
Sample Info: DMO-CAL5.362373:2

Instrument: 10gocsf.1

Operator: EB3

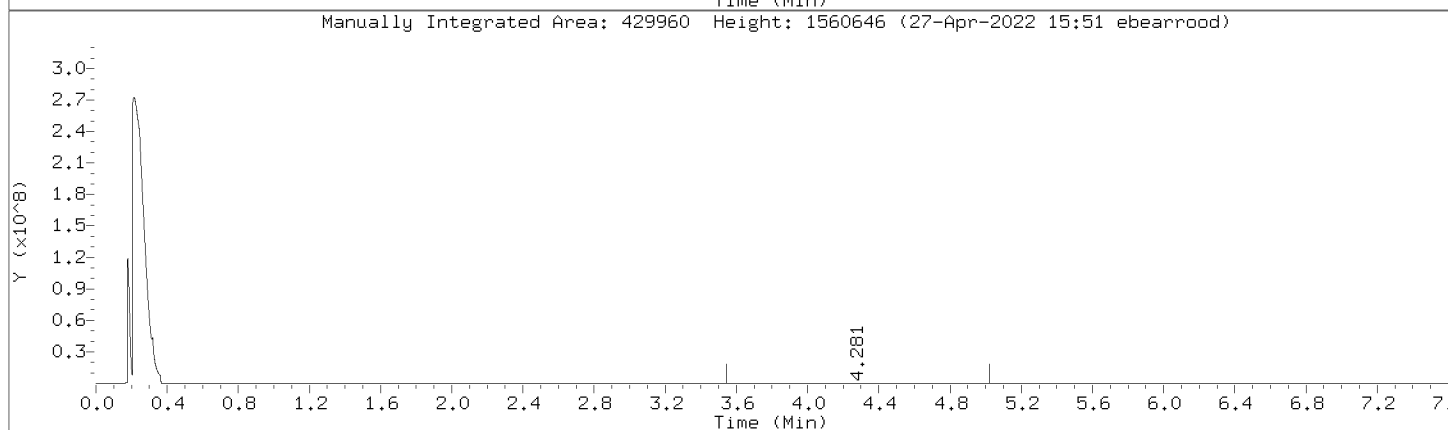
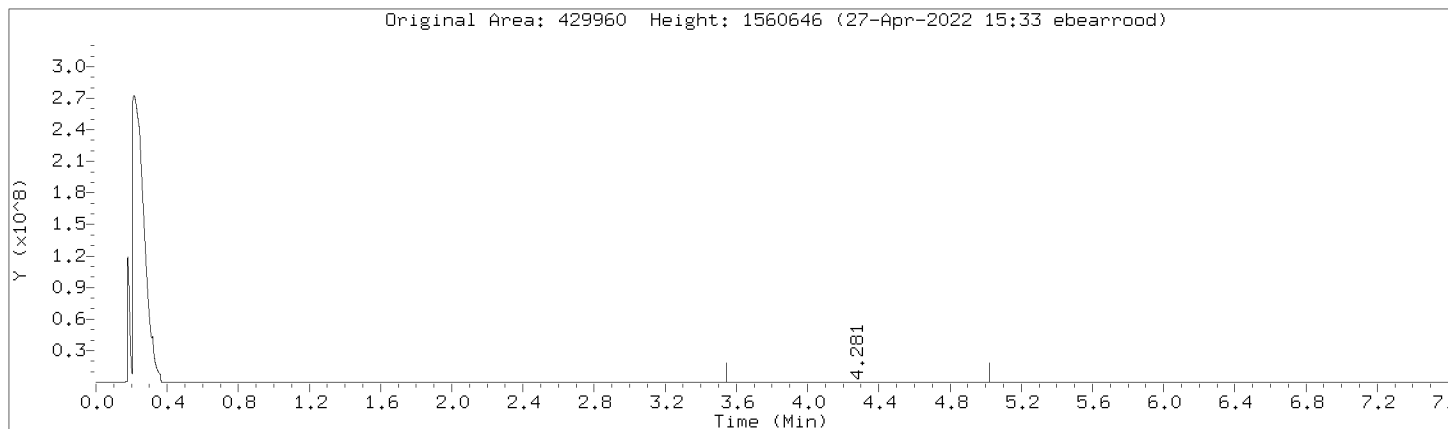
Column diameter: 0.32

Column phase: DB-5-US21430033



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D

Injection Date: 27-APR-2022 13:45

Instrument: 10gcsF.i

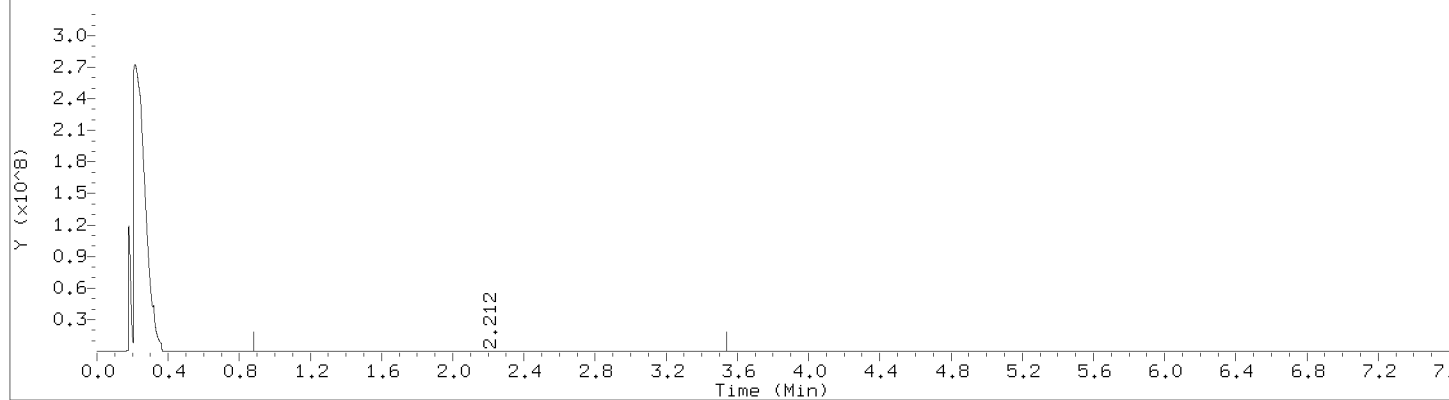
Lab Sample ID: DMO-CAL5,362373:2

Compound: DRO by AK 102

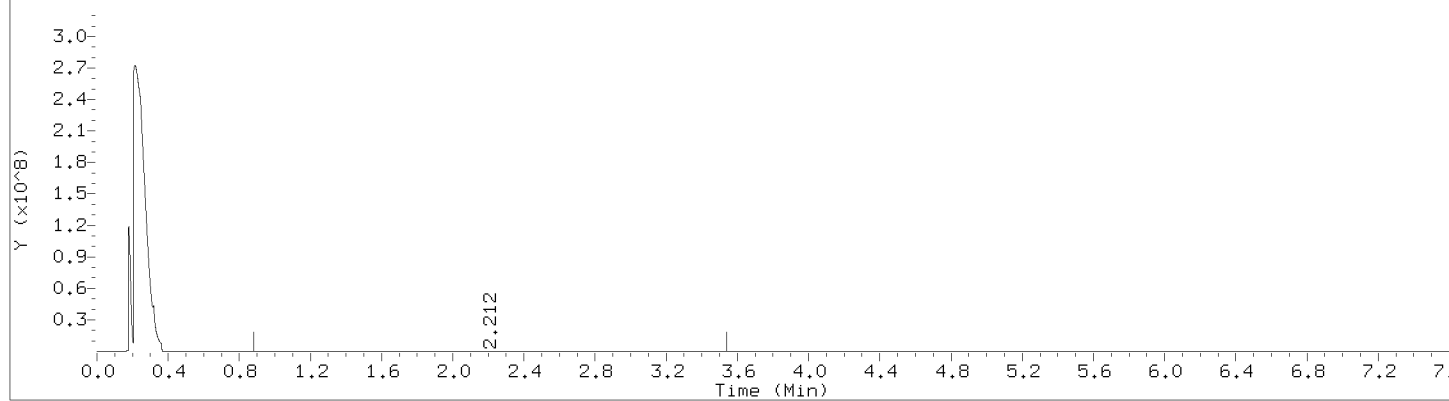
Review Code: RNG

CAS Number:

Original Area: 889707 Height: 1643712 (27-Apr-2022 15:33 ebearrood)

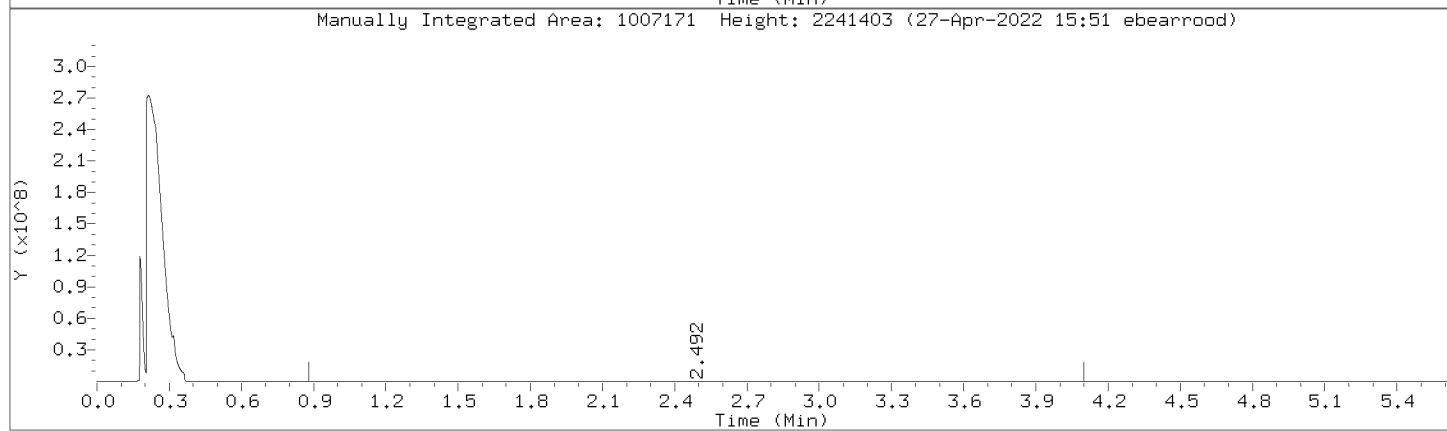
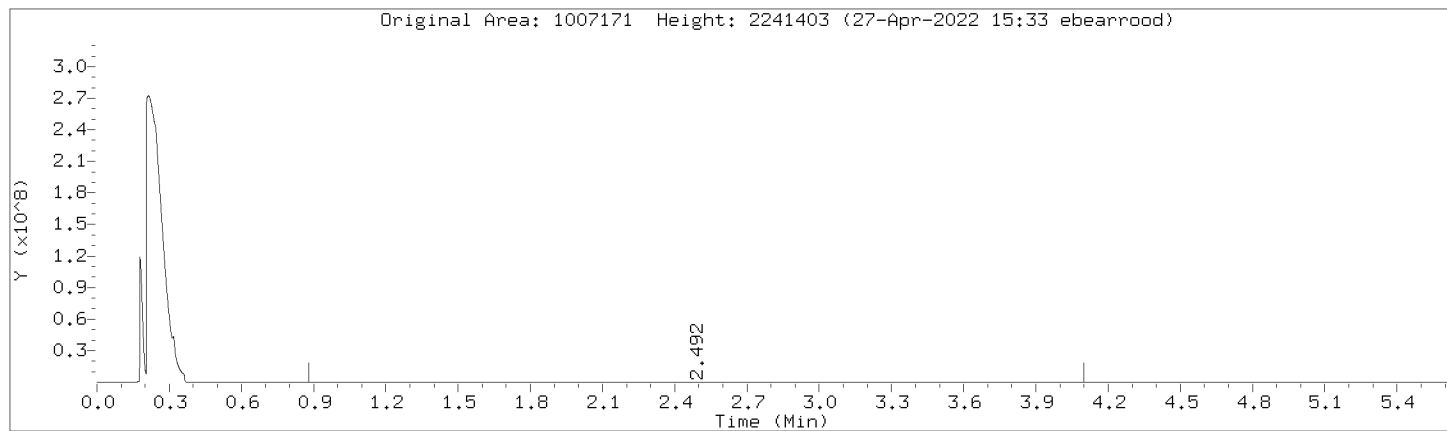


Manually Integrated Area: 889707 Height: 1643712 (27-Apr-2022 15:51 ebearrood)



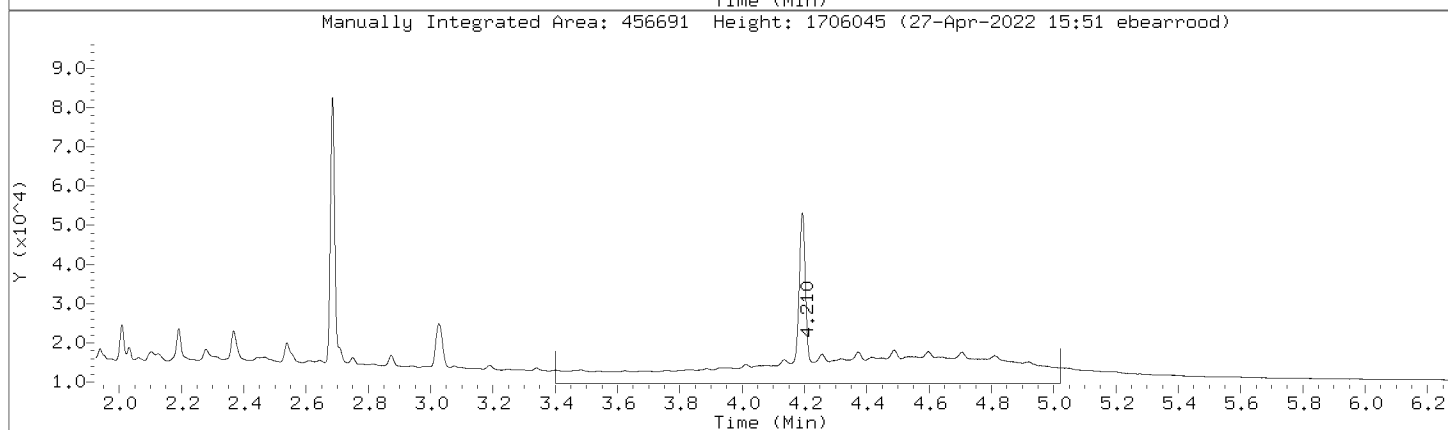
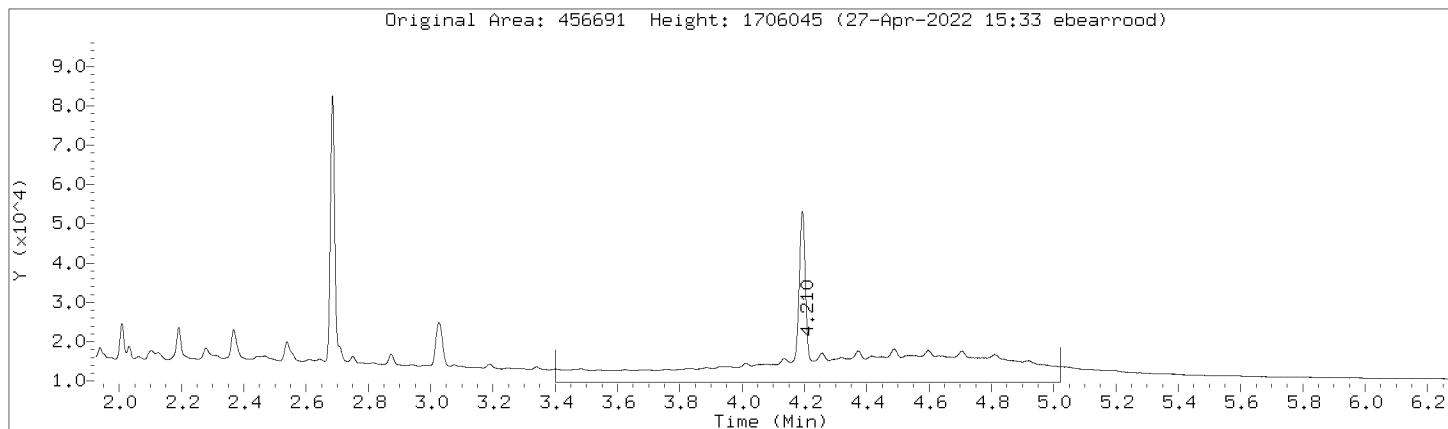
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



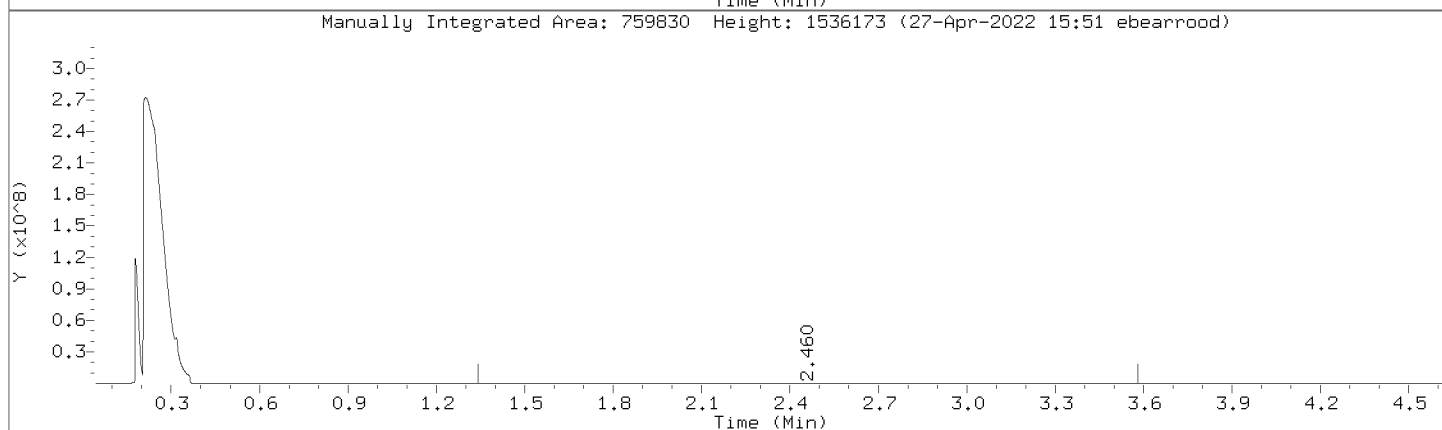
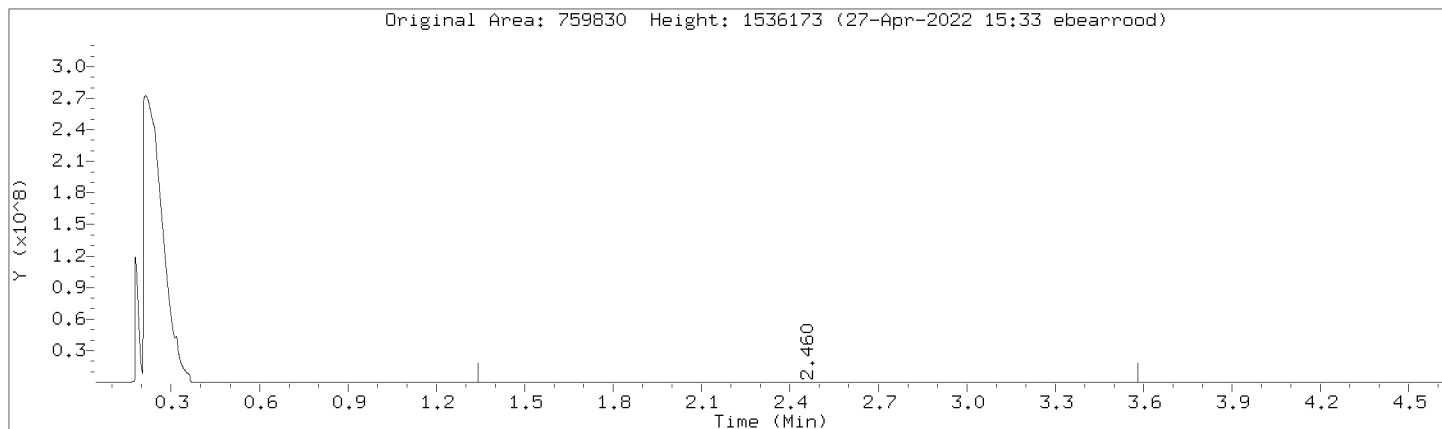
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Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

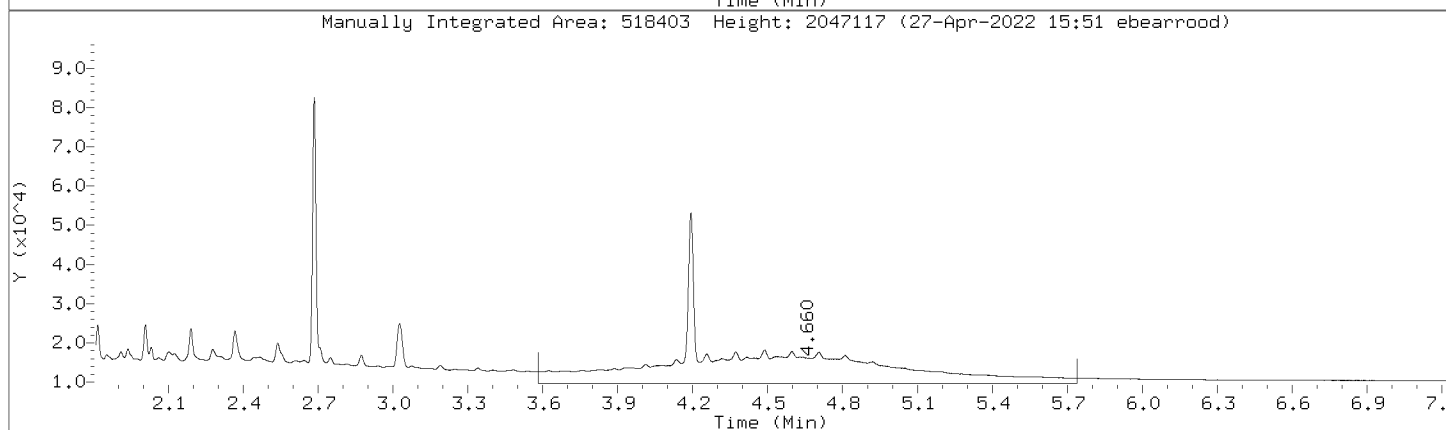
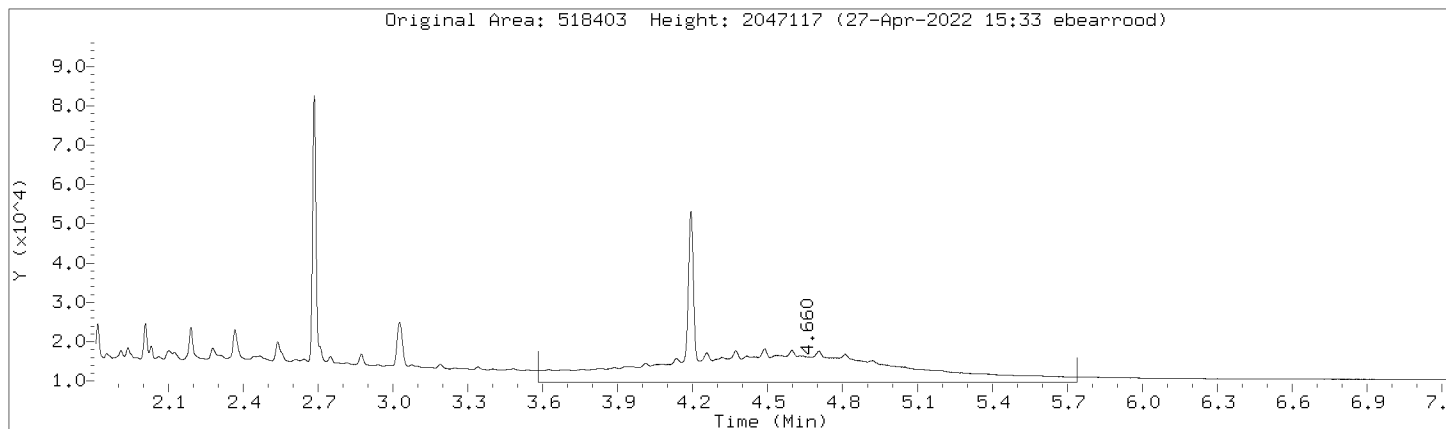
Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:





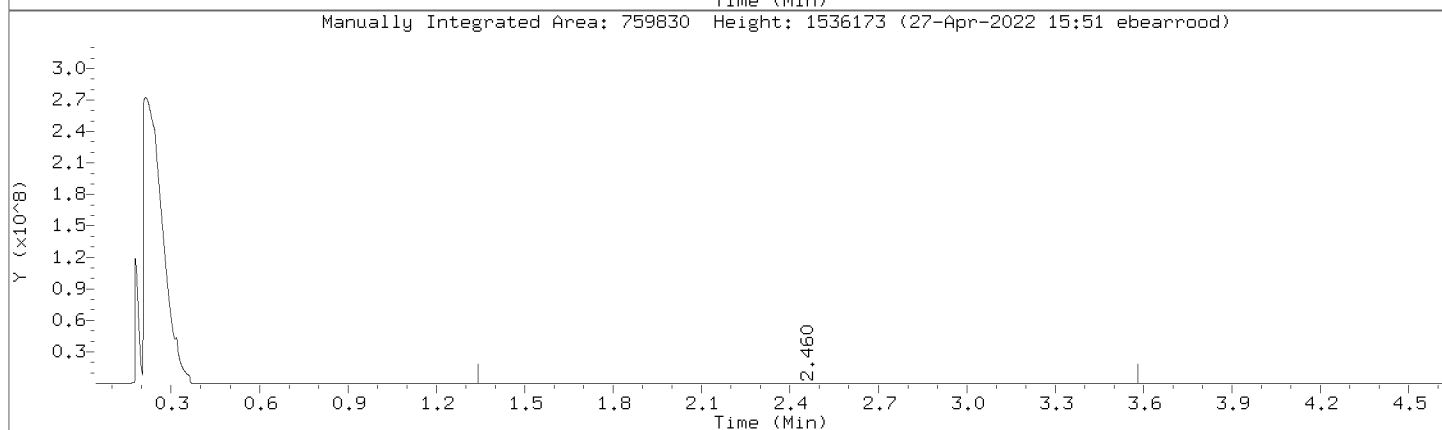
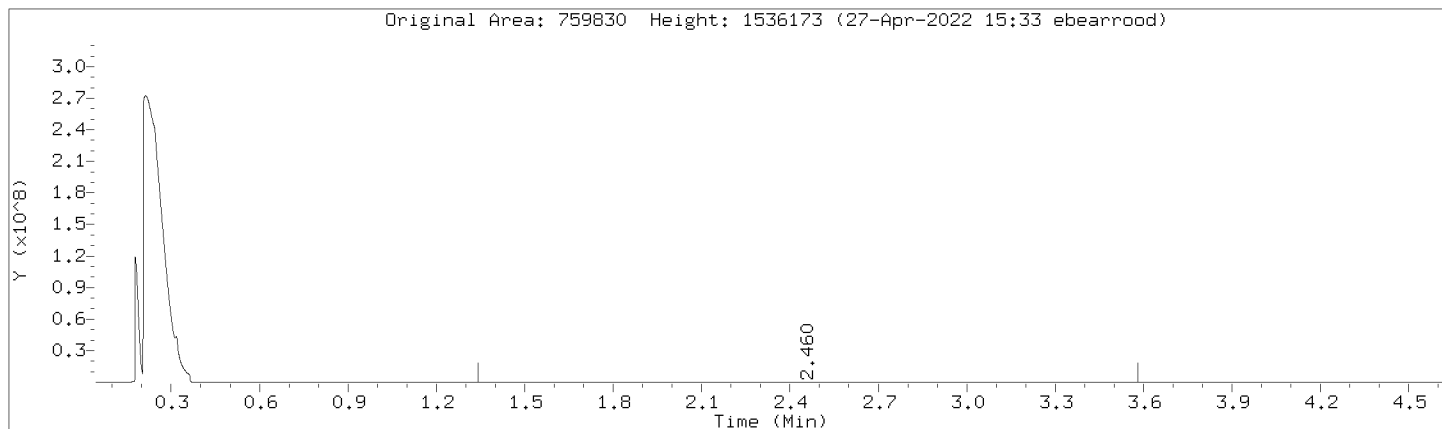
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Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



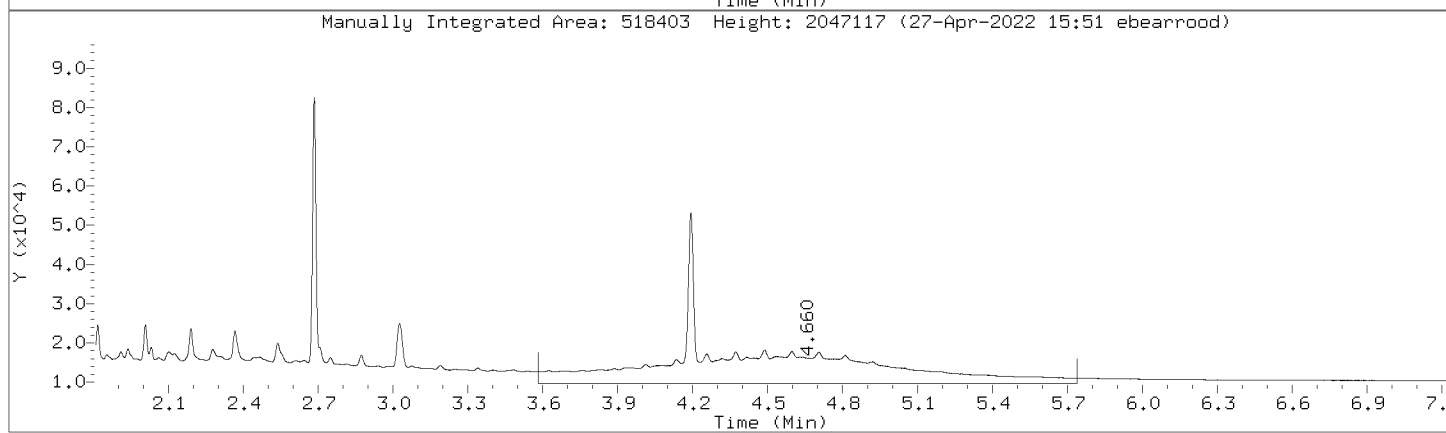
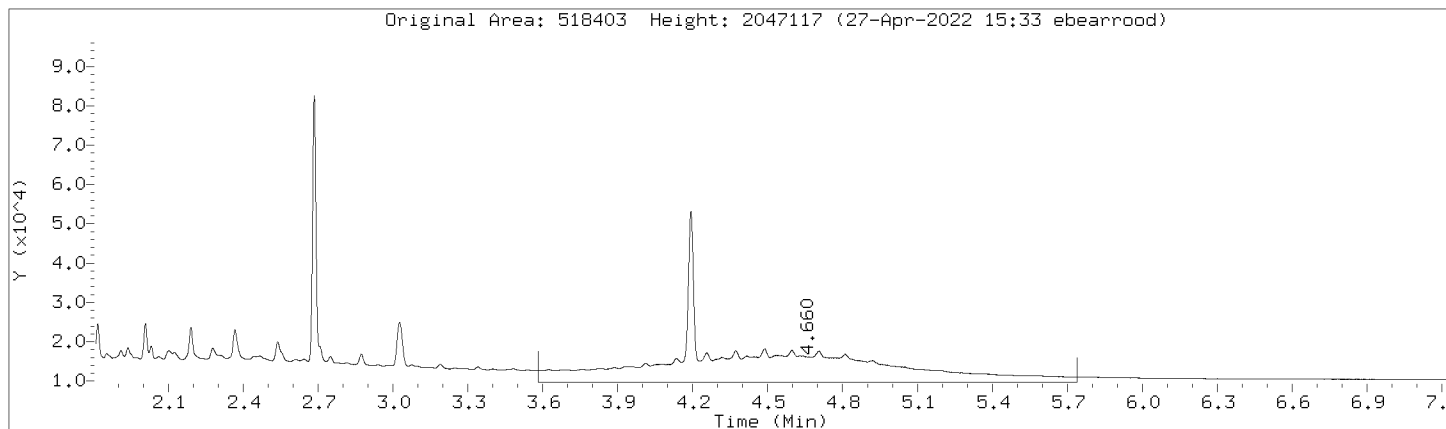
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Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



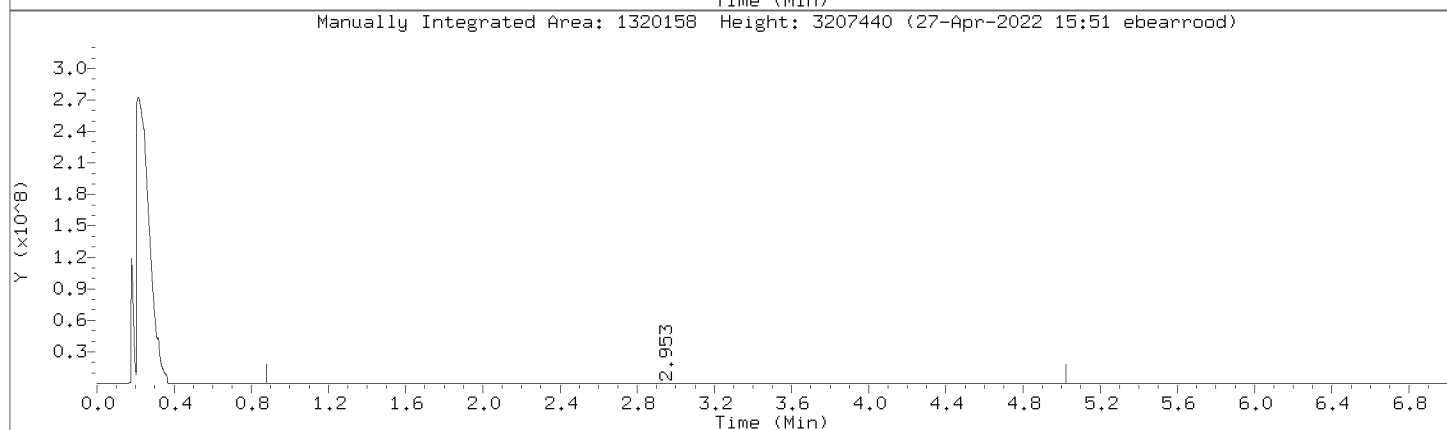
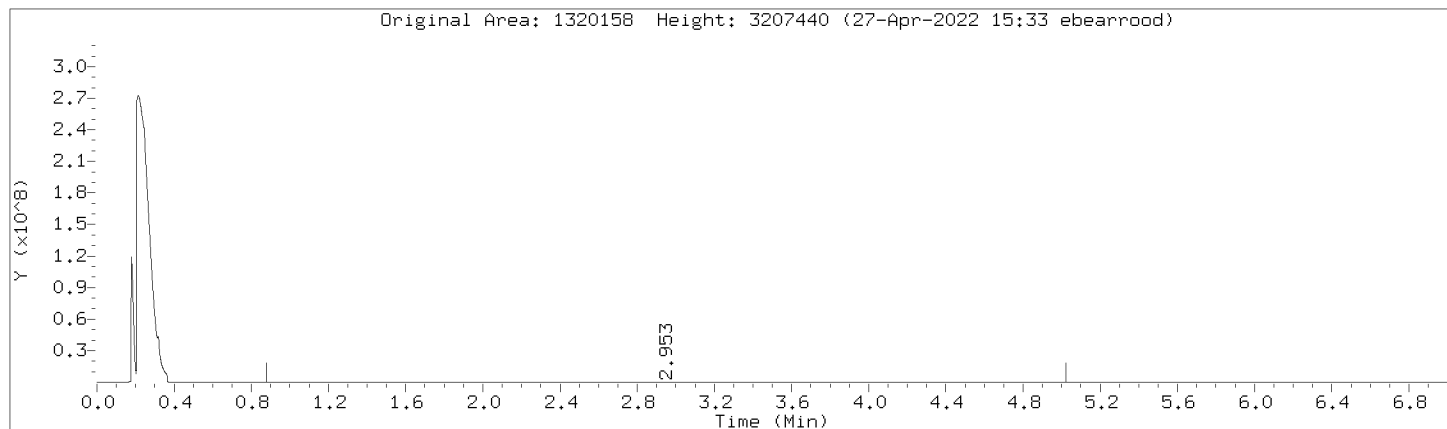
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Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



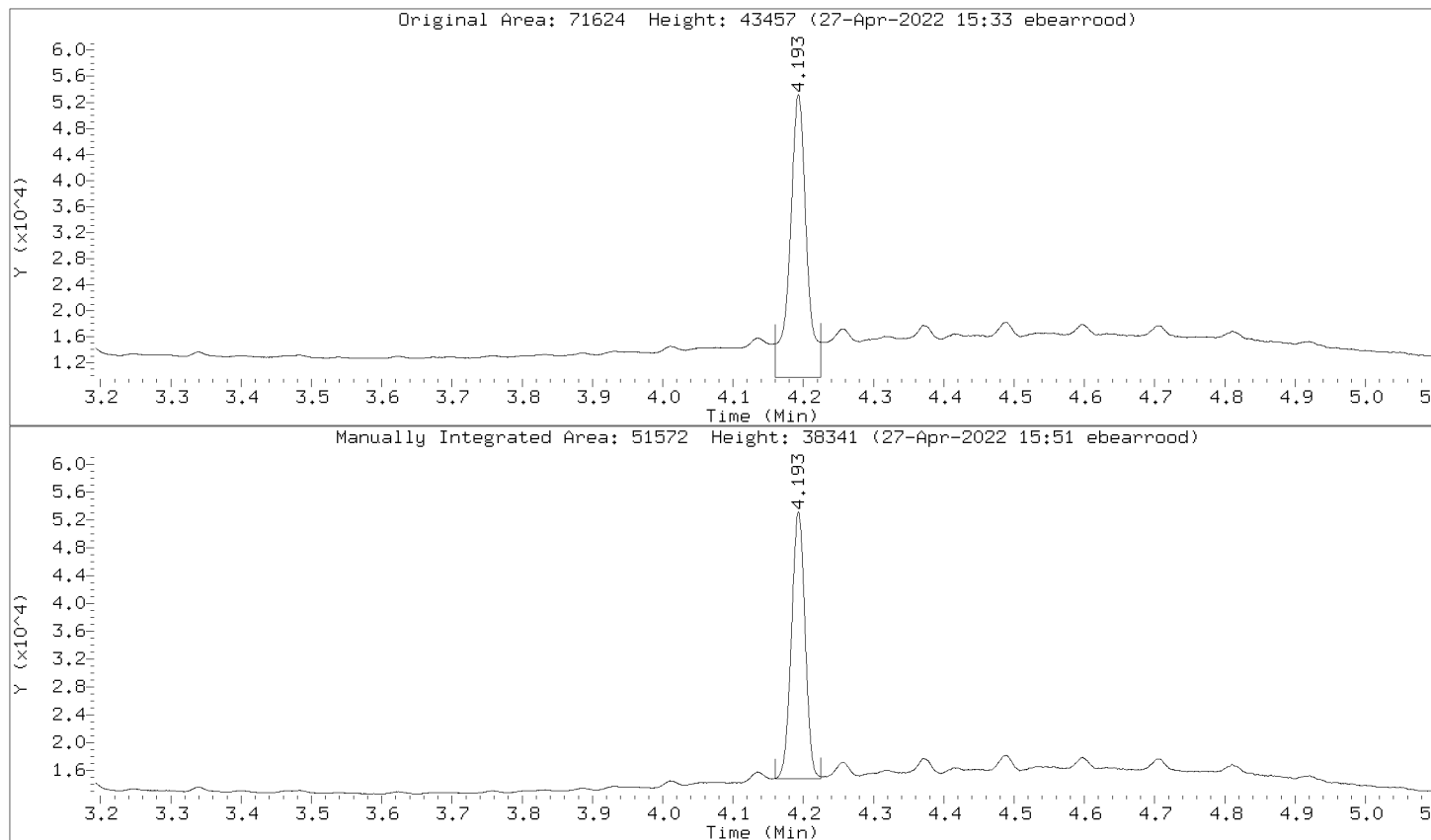
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Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



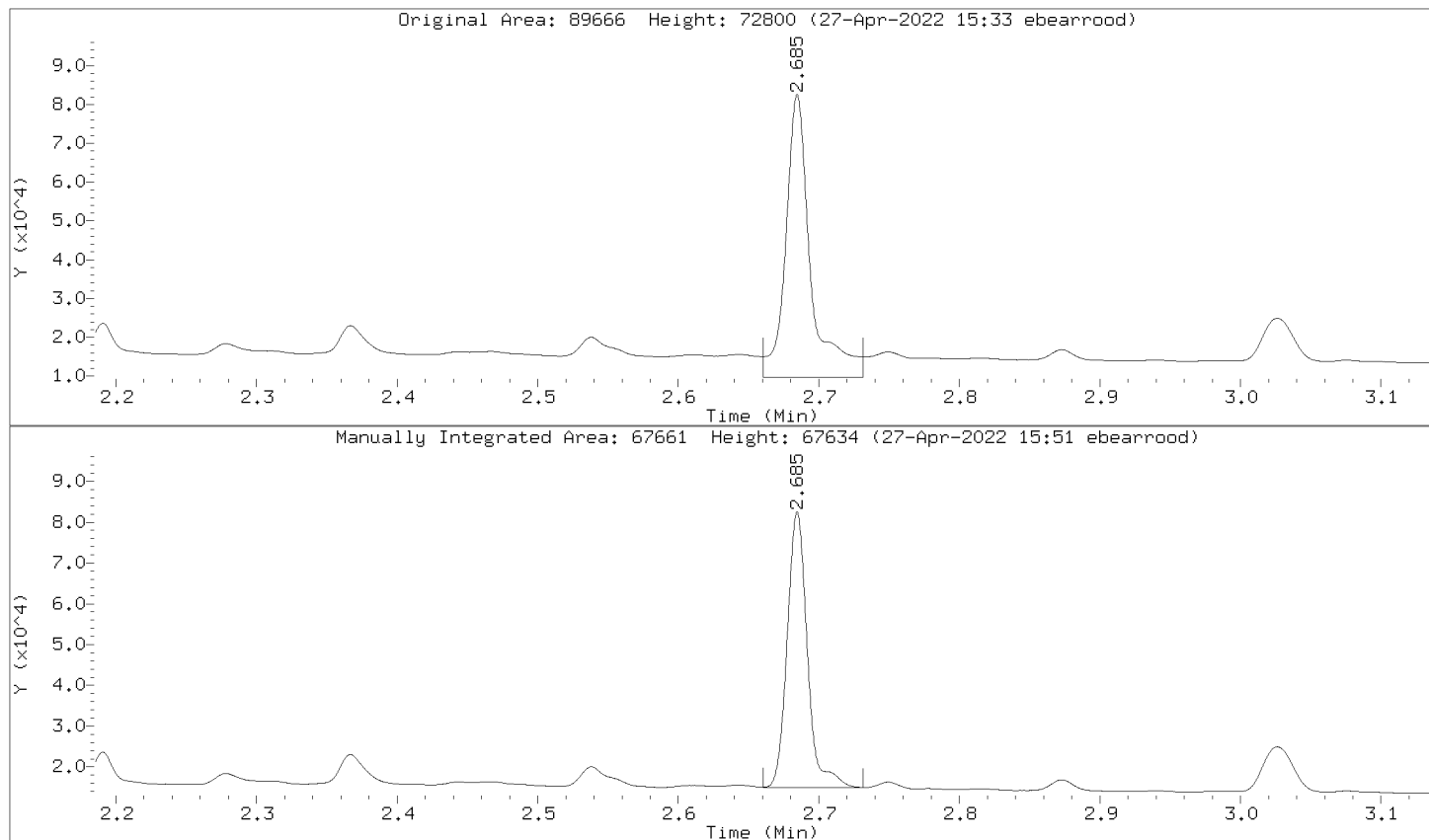
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Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000012.D  
Injection Date: 27-APR-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,362373:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
 Lab Smp Id: DMO-CAL6,362374:2 Client Smp ID: DMO-CAL6,362374:2  
 Inj Date : 27-APR-2022 13:57  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal6,362374:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 83 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		1816320 250.000	253	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.685	2.685 0.000		169620 25.0000	25.1	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.193	4.193 0.000		132262 25.0000	24.9	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		995322 250.000	253	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		2067409 250.000	254	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		1048038 250.000	254	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		2811643 500.000	507	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		1534479 250.000	253	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		1534479 250.000	253	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		1215359 250.000	249	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		1215359 250.000	249	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.



Date : 27-APR-2022 13:57

Client ID: DMO-CAL6,362374;2

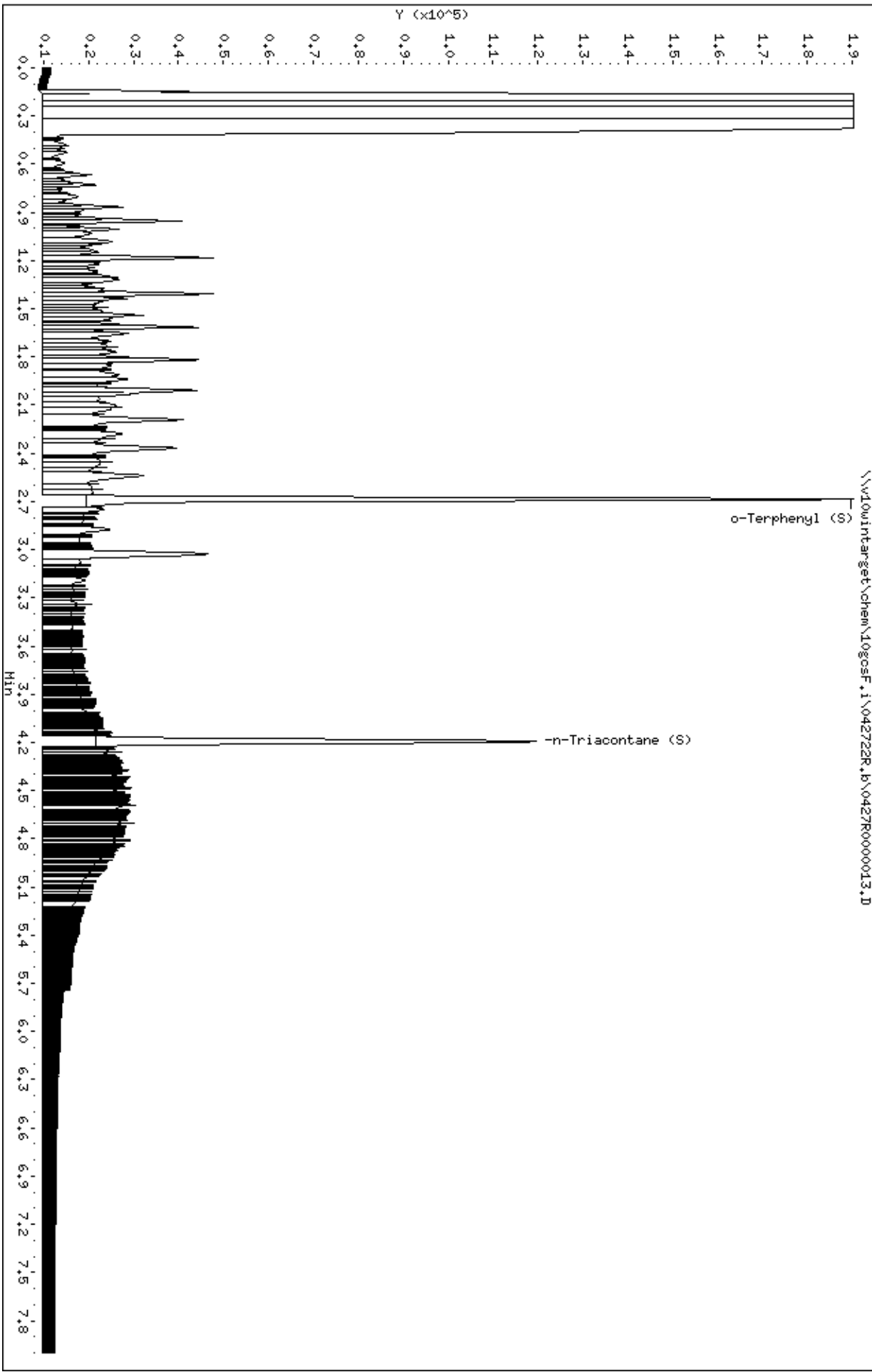
Sample Info: DMO-CAL6,362374;2

Instrument: 10gosc.f.1

Operator: EB3

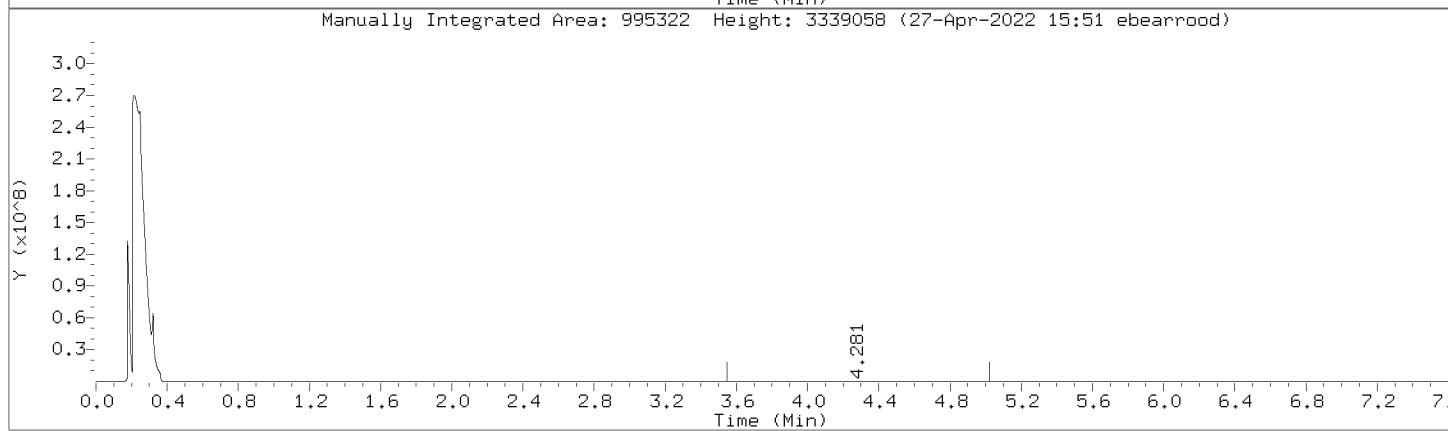
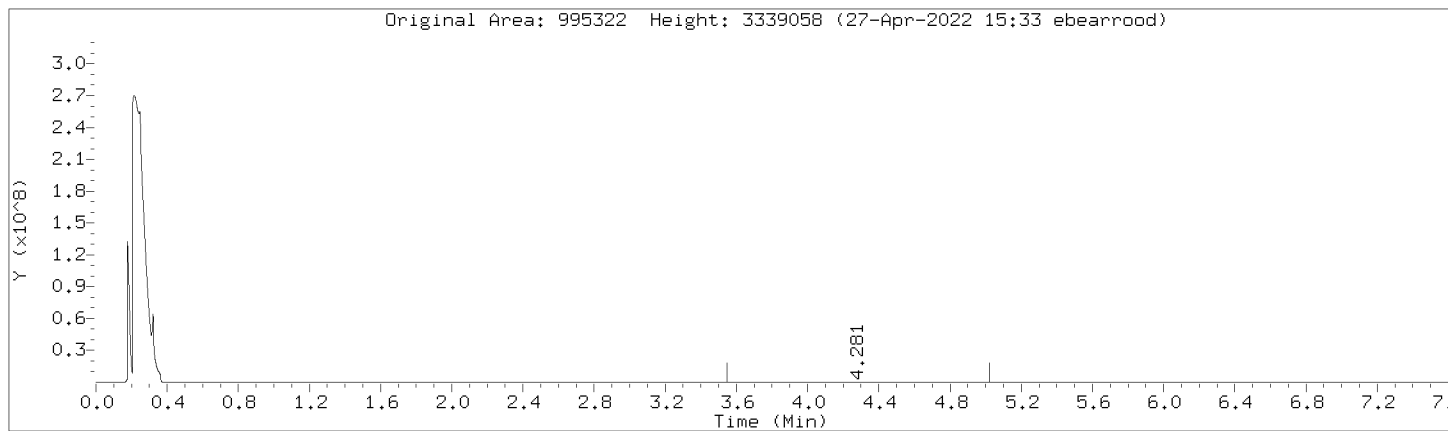
Column diameter: 0.32

Column phase: DB-5-US21430033



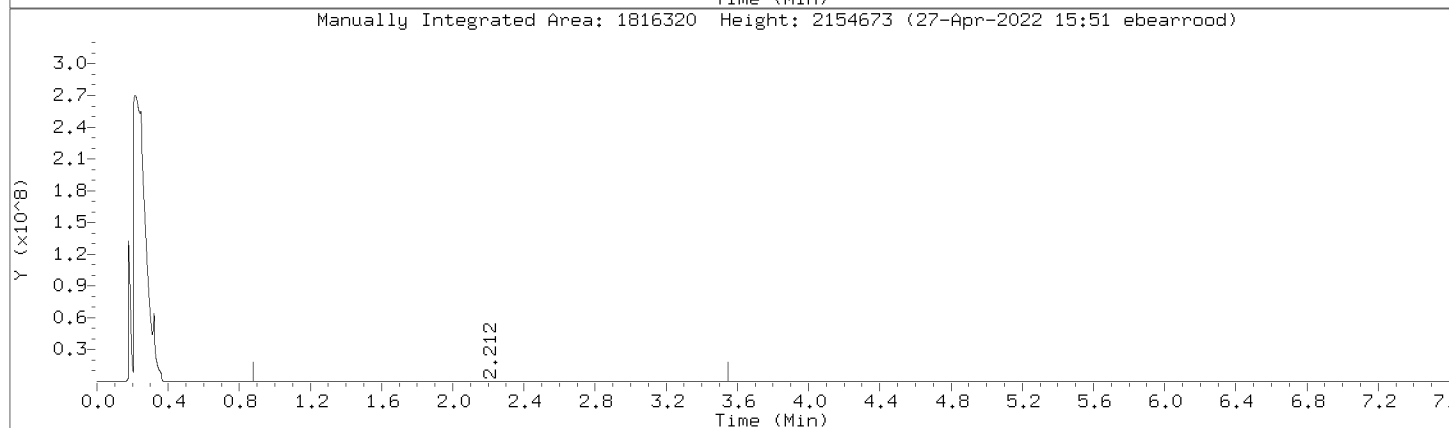
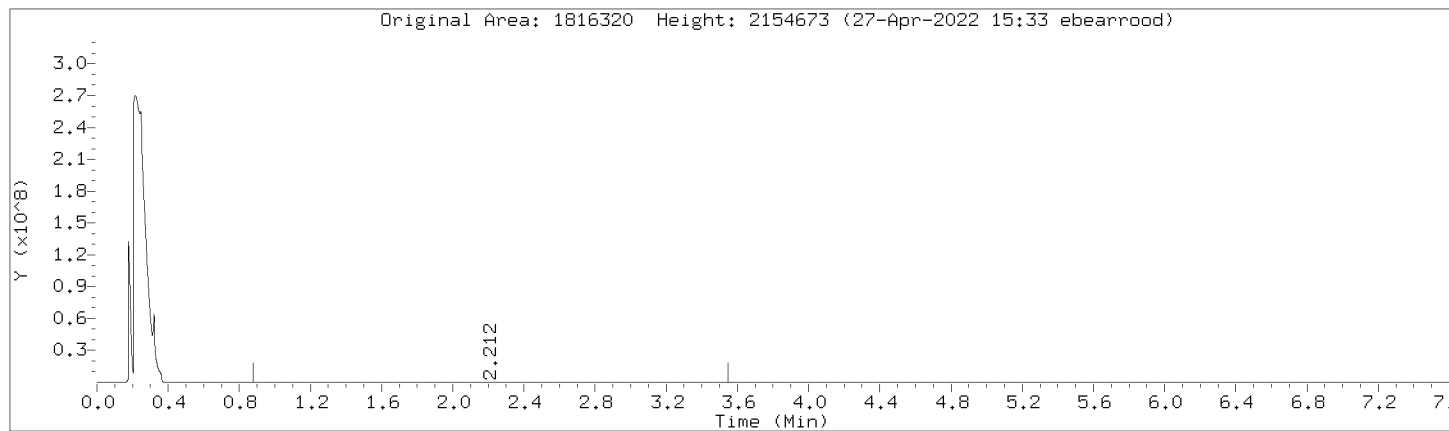
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



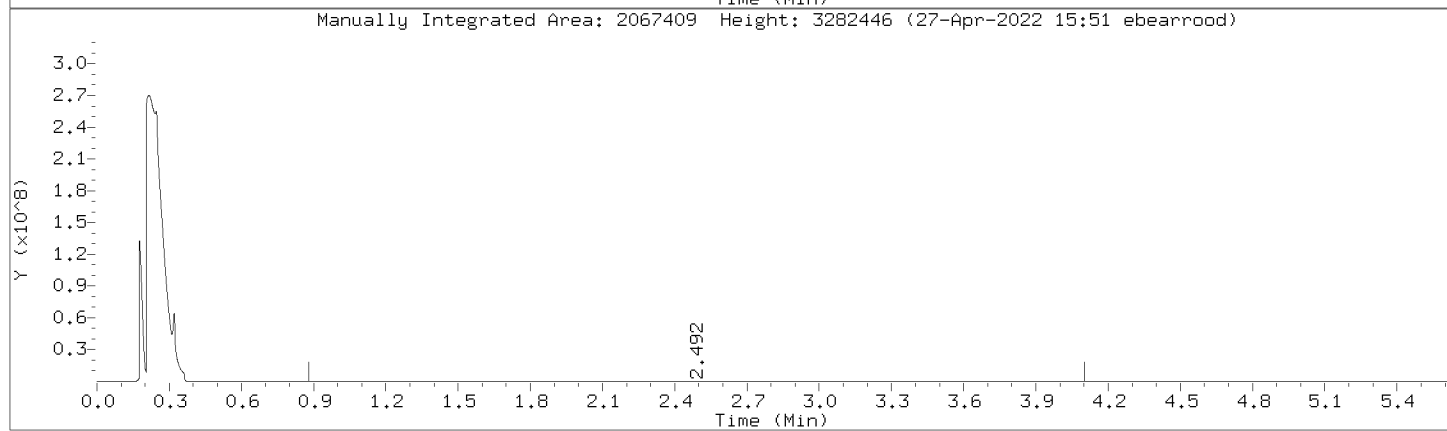
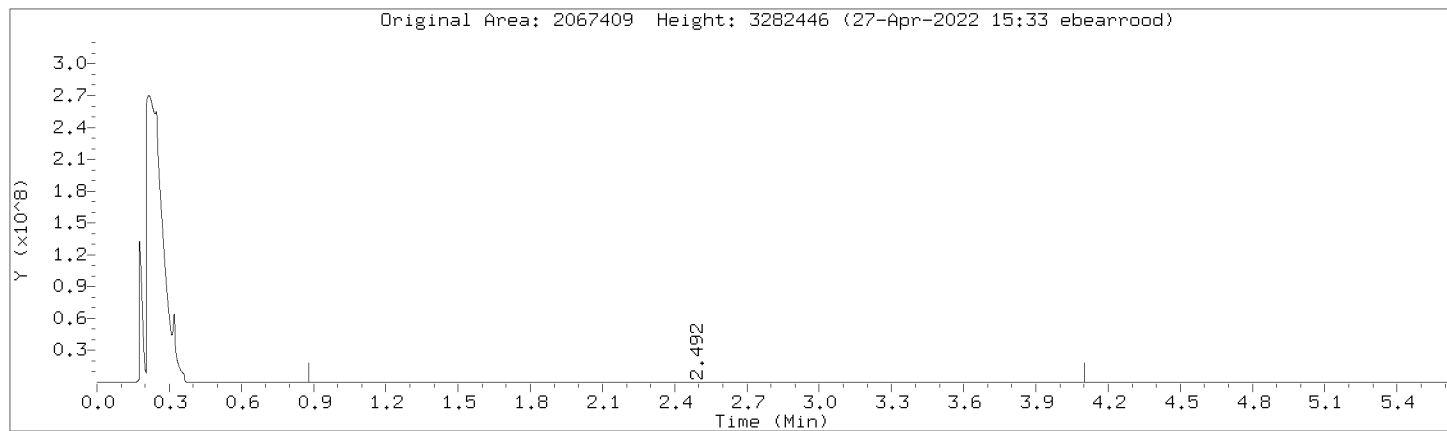
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



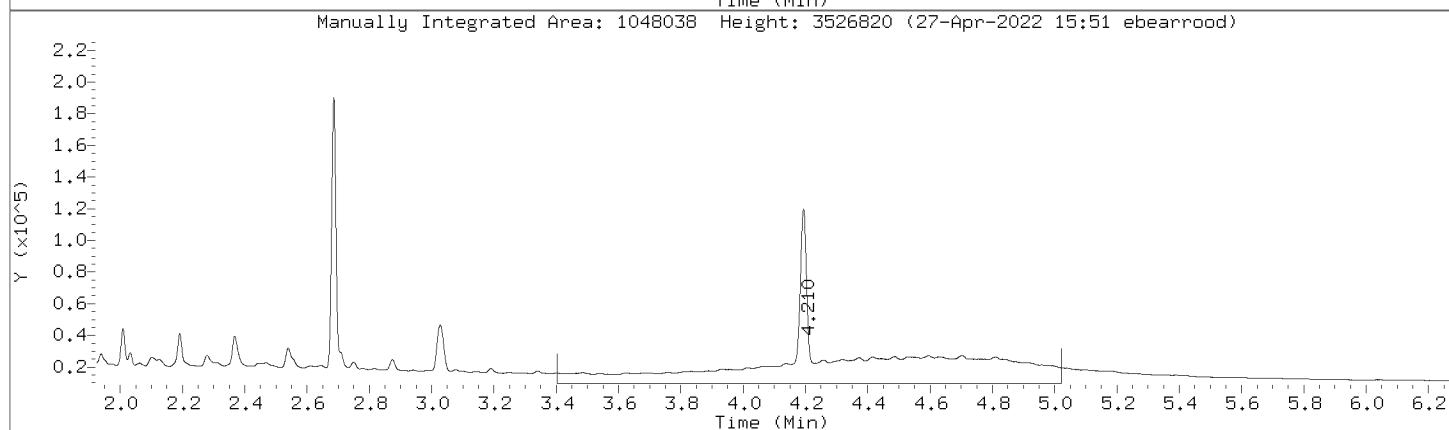
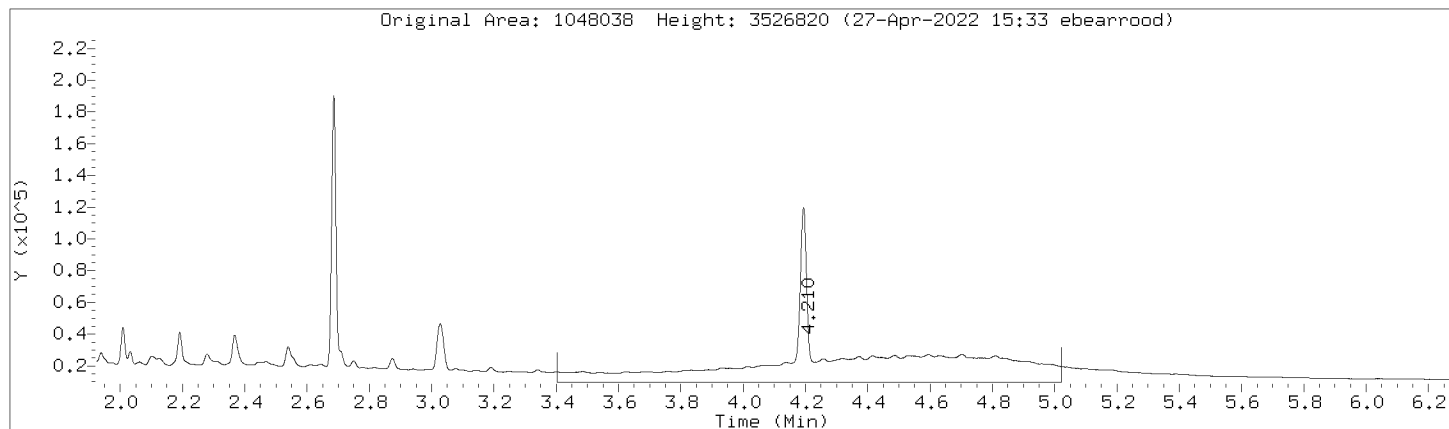
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



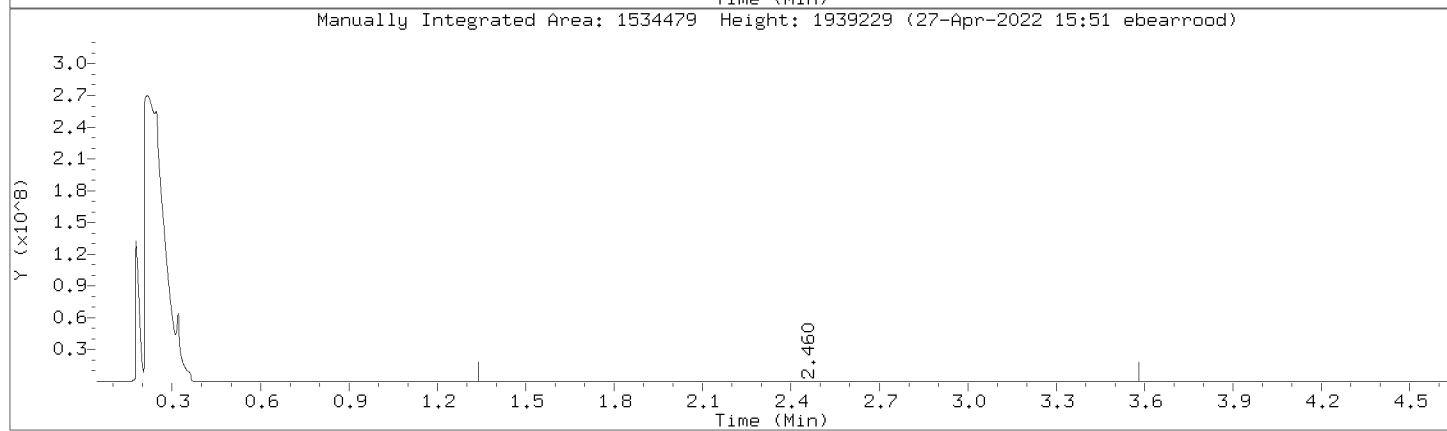
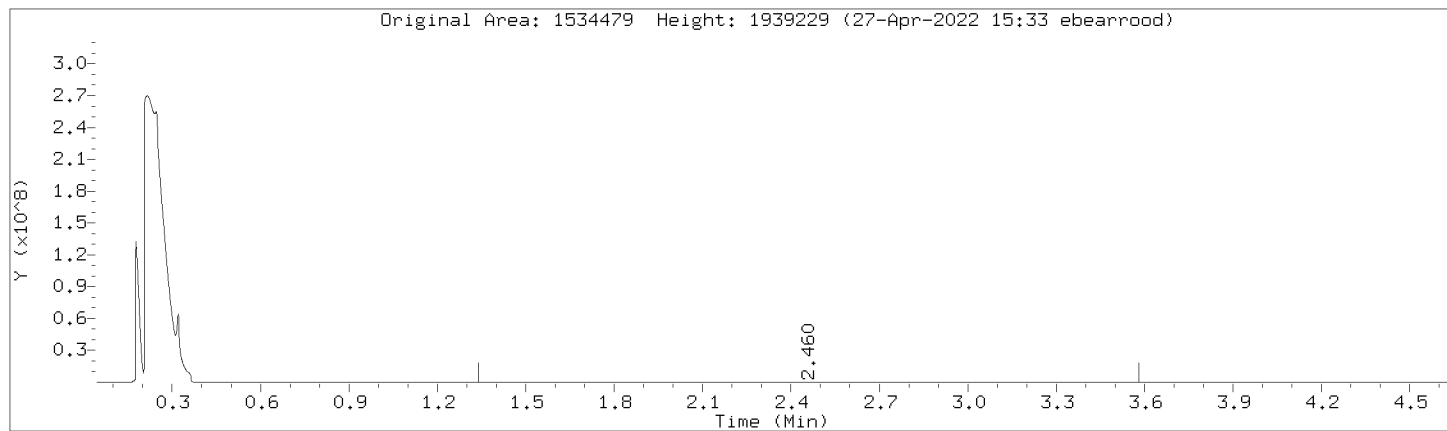
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



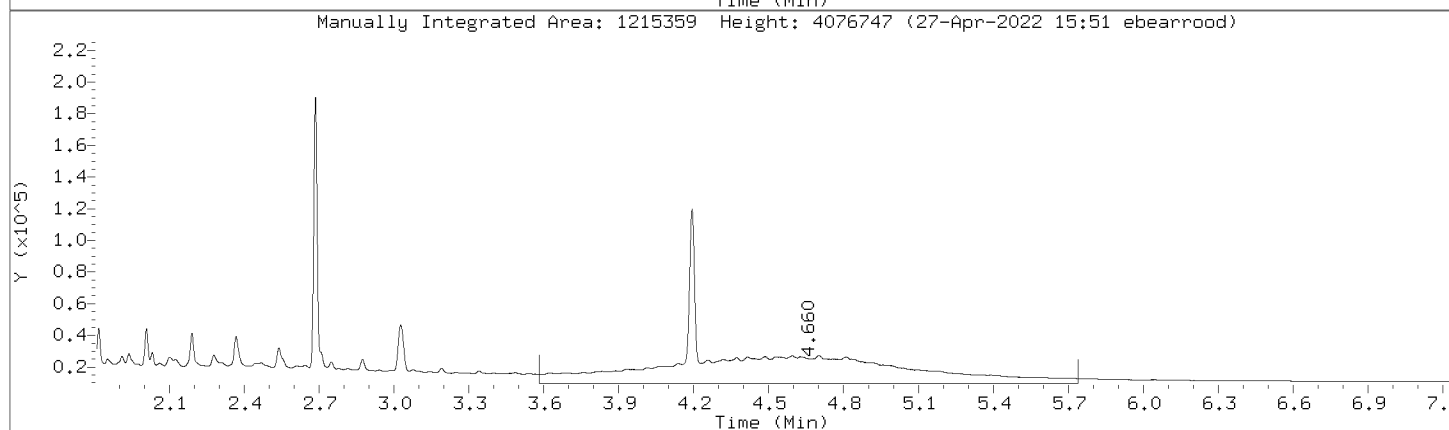
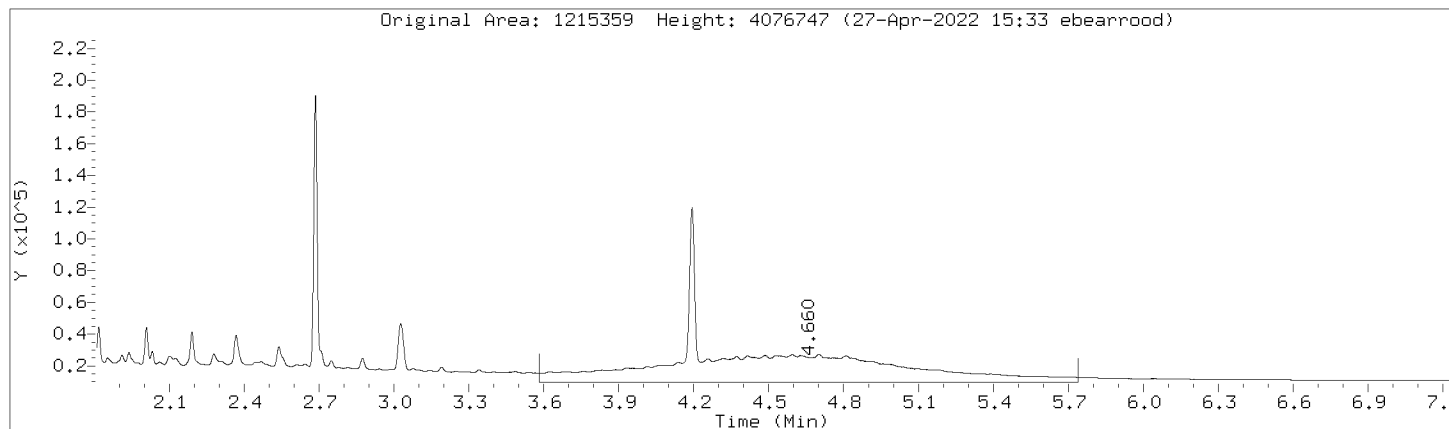
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



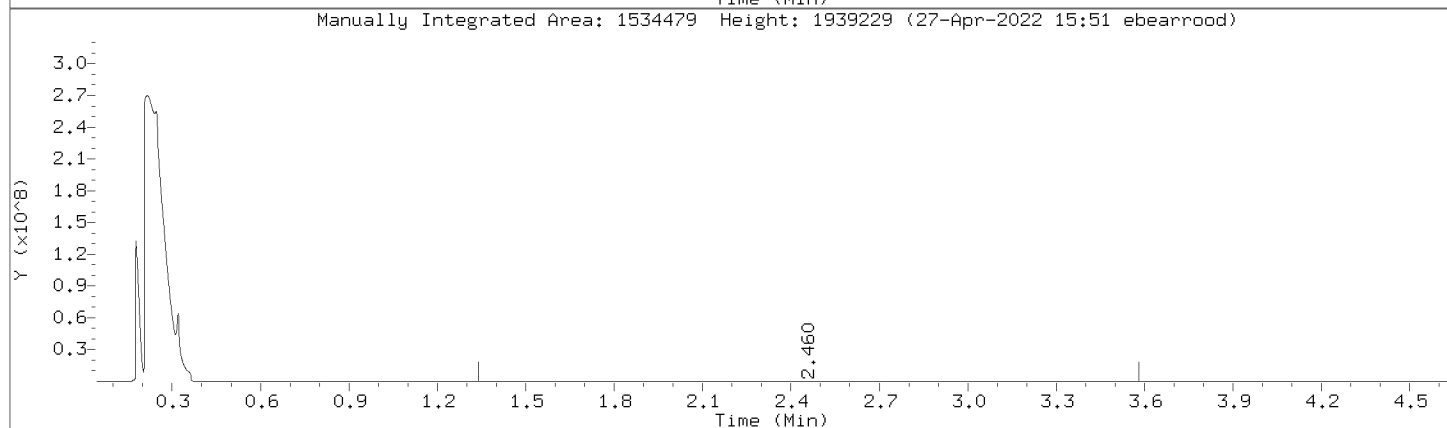
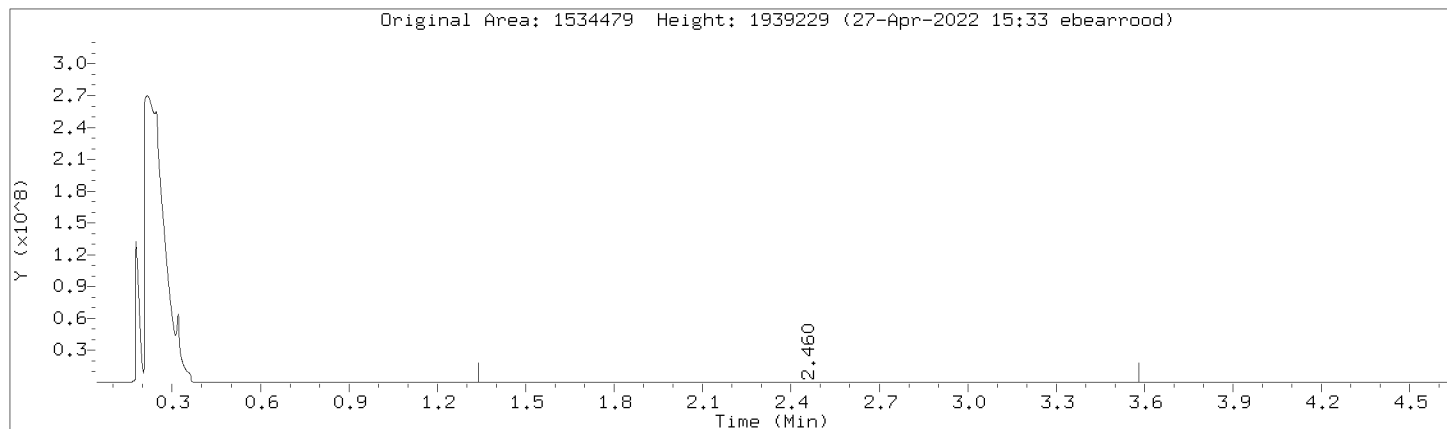
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

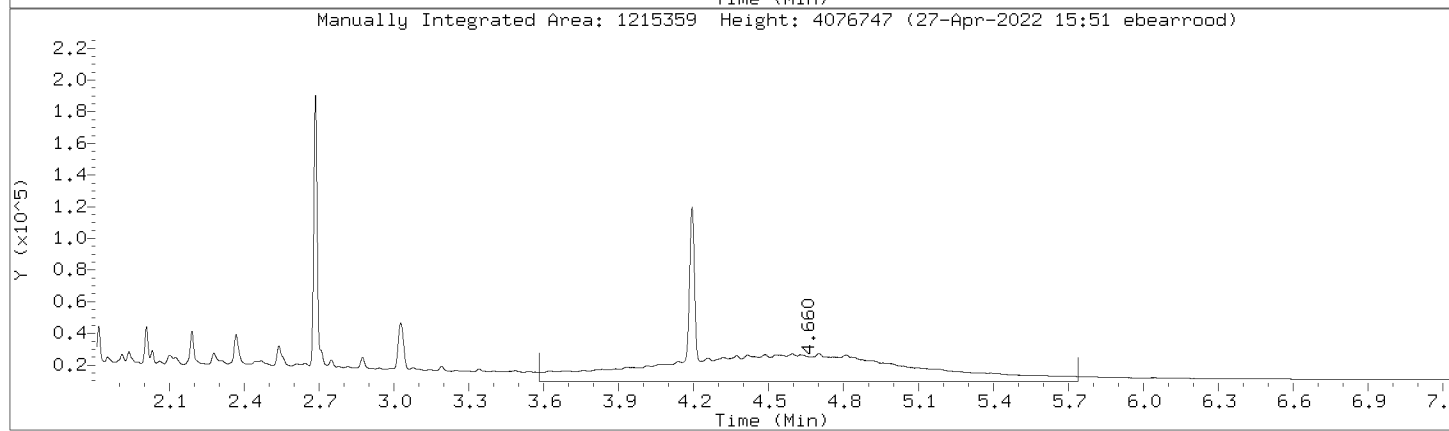
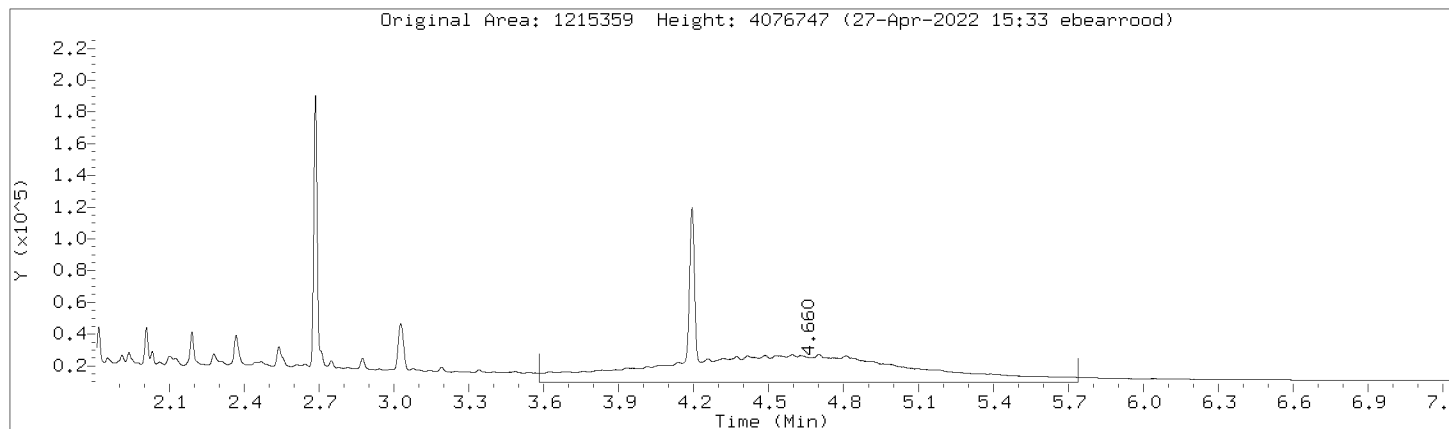
Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:





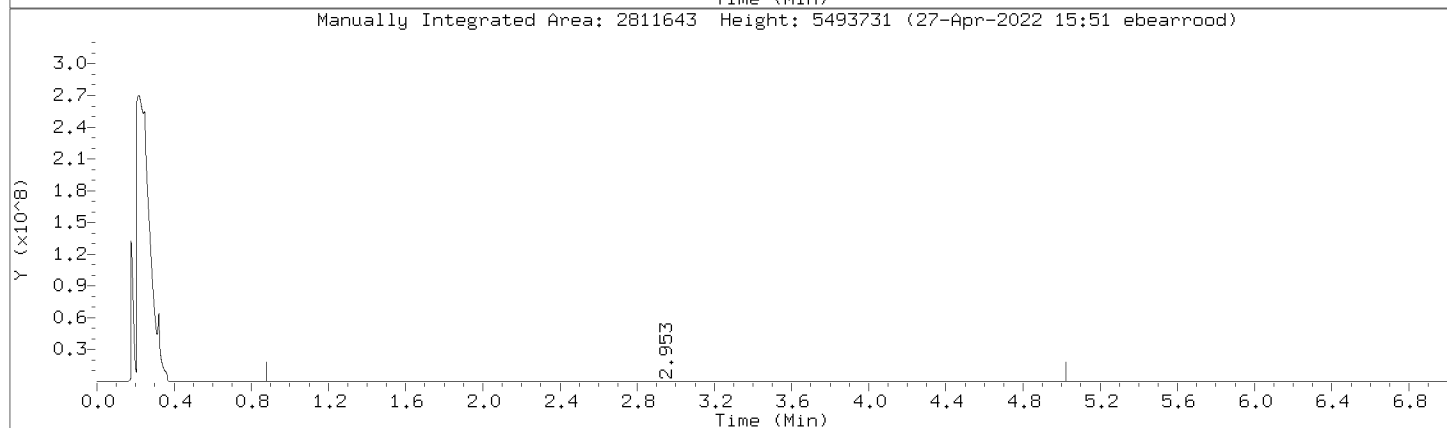
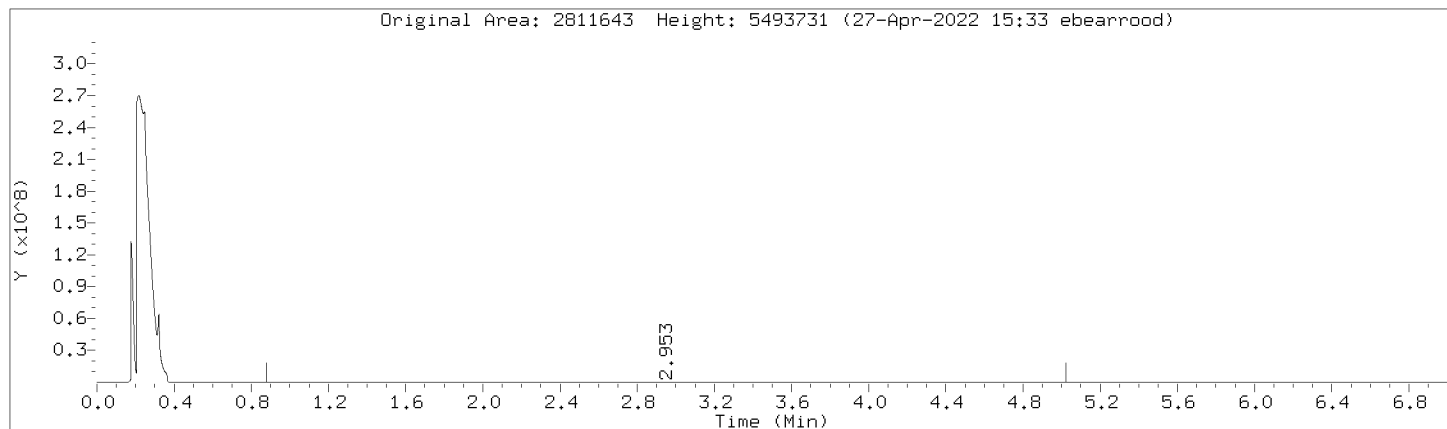
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



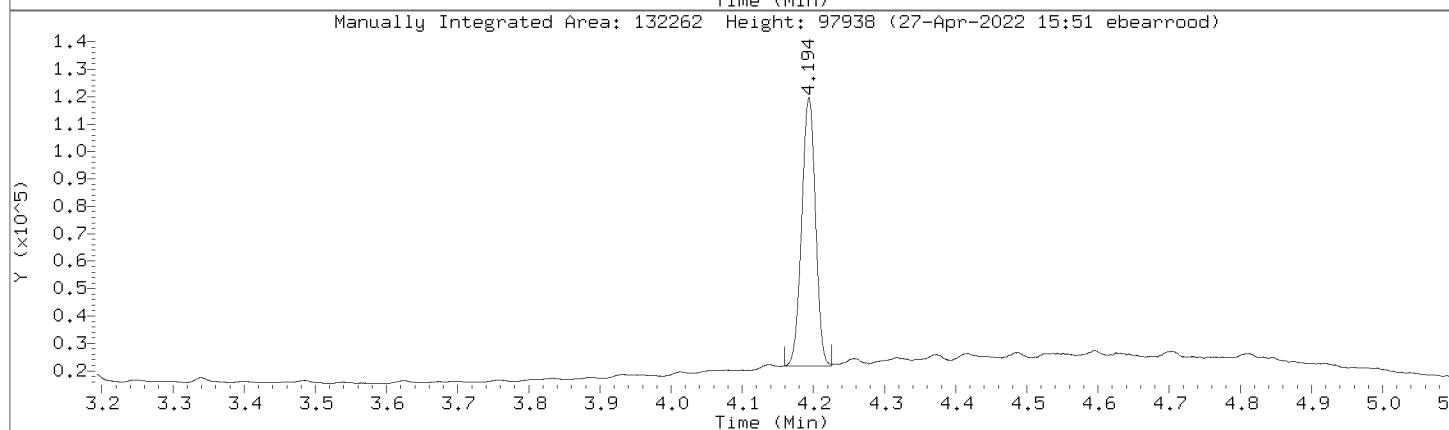
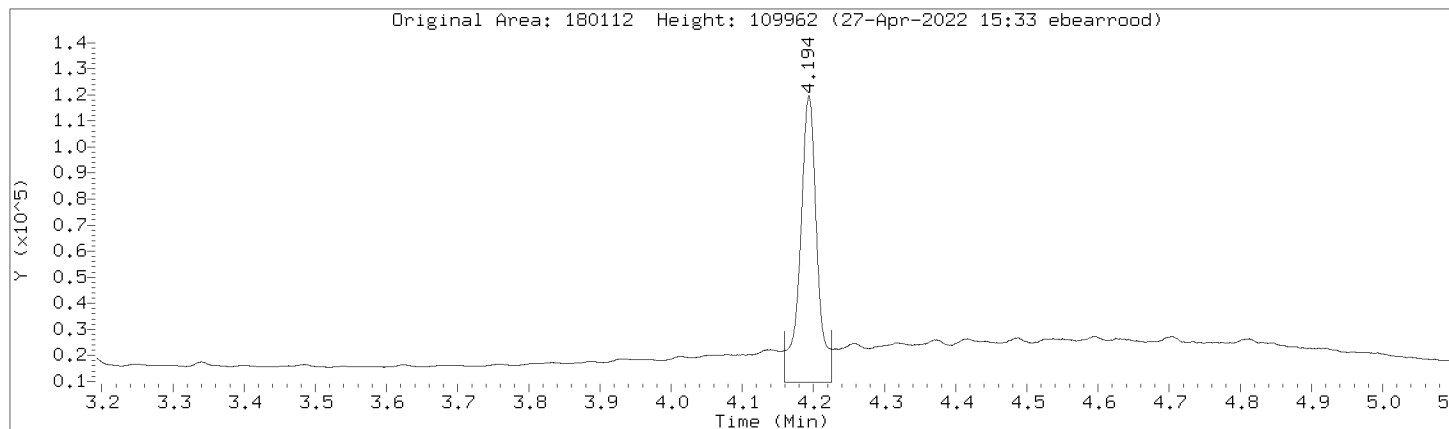
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



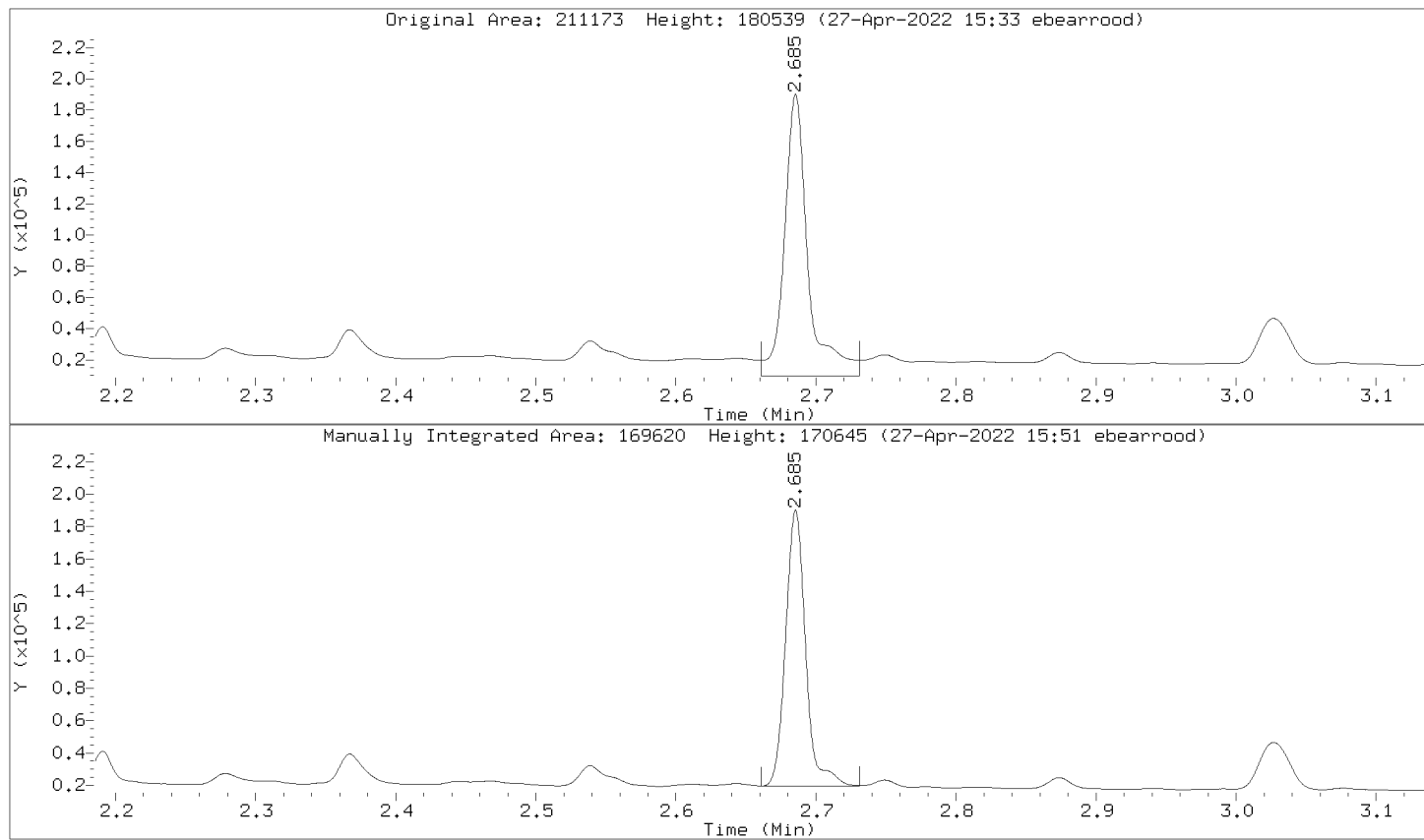
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Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000013.D  
Injection Date: 27-APR-2022 13:57  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,362374:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
 Lab Smp Id: DMO-CAL7,362375:2 Client Smp ID: DMO-CAL7,362375:2  
 Inj Date : 27-APR-2022 14:08  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal7,362375:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 84 Calibration Sample, Level: 7  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		3278745 500.000	509	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.686	2.685 0.001		339936 50.0000	50.9	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.196	4.193 0.003		266300 50.0000	50.9	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		1893104 500.000	511	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		3731684 500.000	508	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		1980340 500.000	511	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		5171850 1000.00	1020	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		2757231 500.000	508	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		2757231 500.000	508	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		2350876 500.000	507	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		2350876 500.000	507	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 14:08

Client ID: DM0-CAL7.362375;2

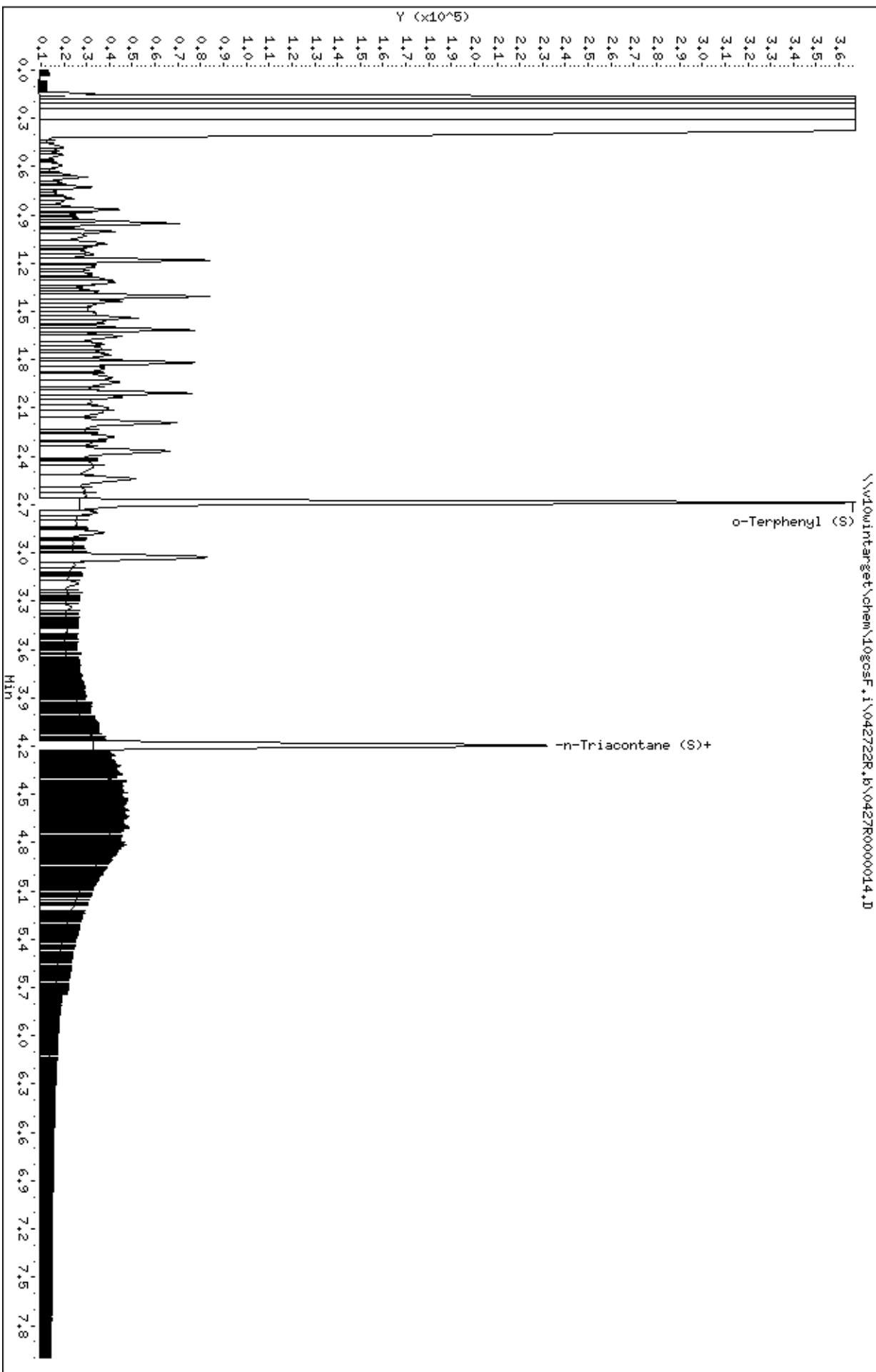
Sample Info: DM0-CAL7.362375;2

Column phase: DB-5-MS21430033

Instrument: 10goscF.1

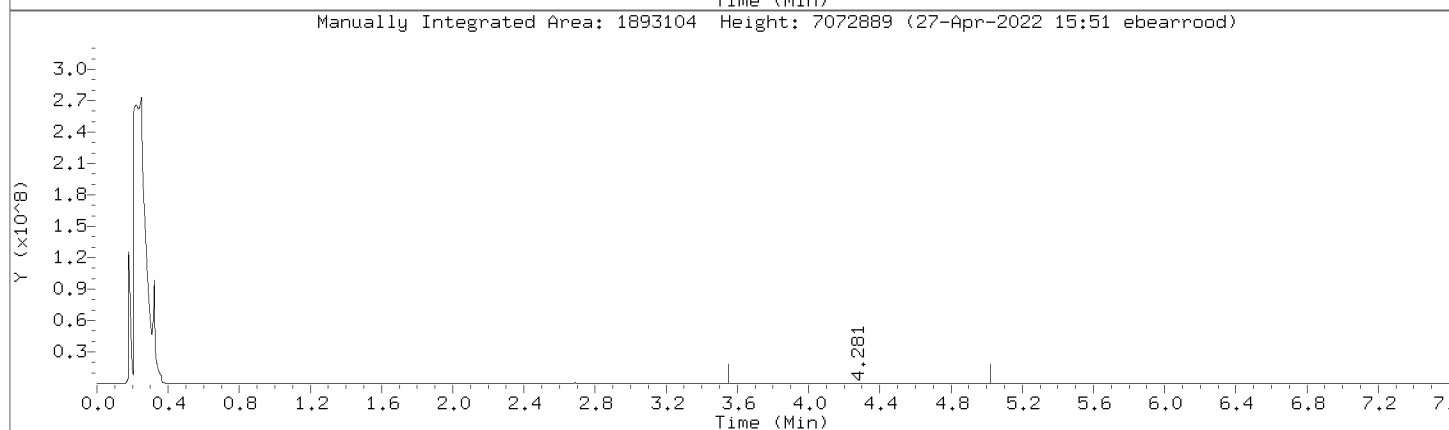
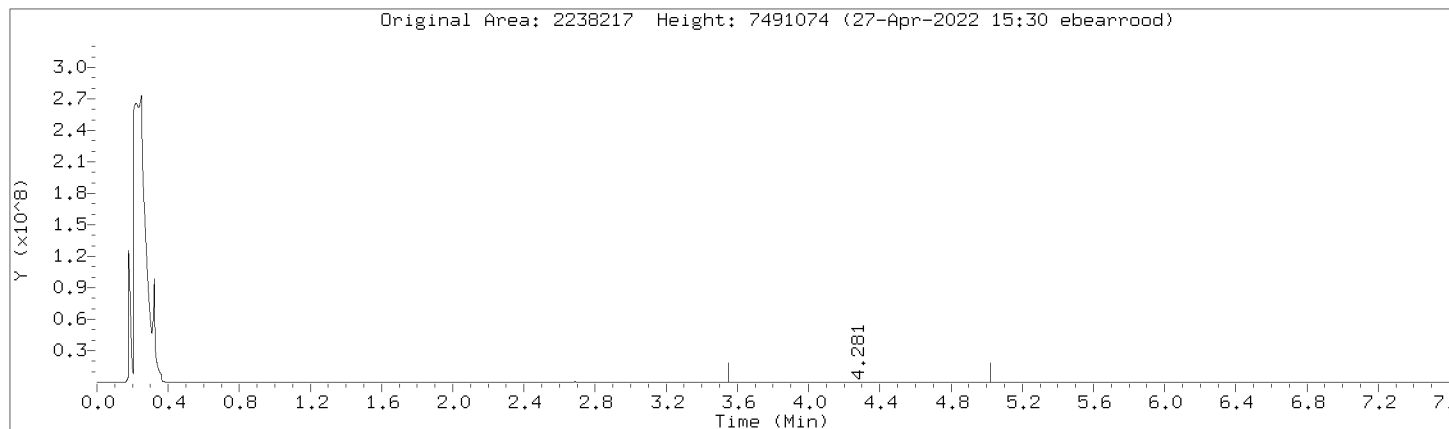
Operator: EB3

Column diameter: 0.32



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

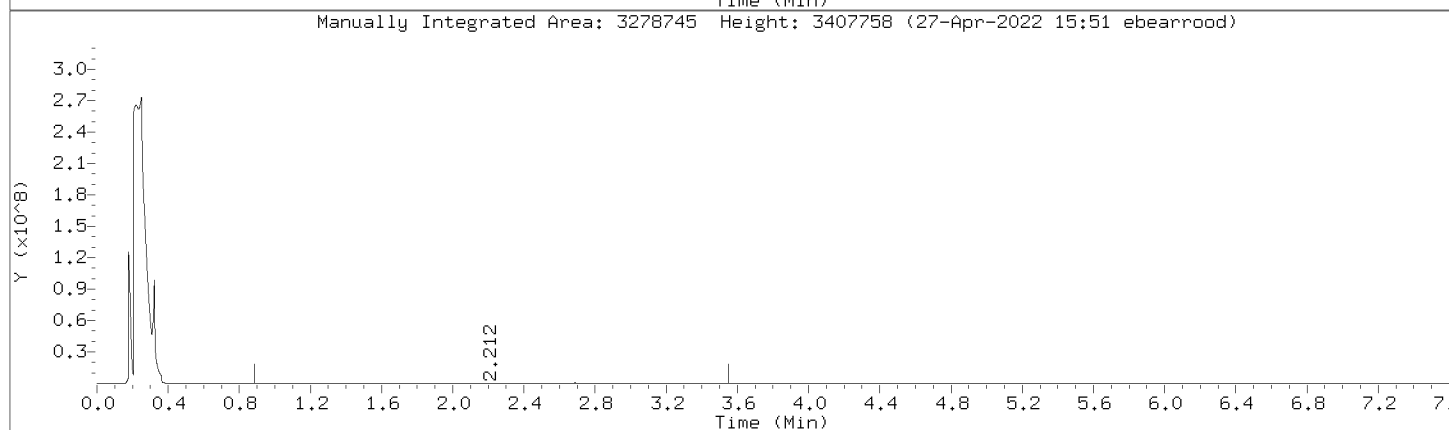
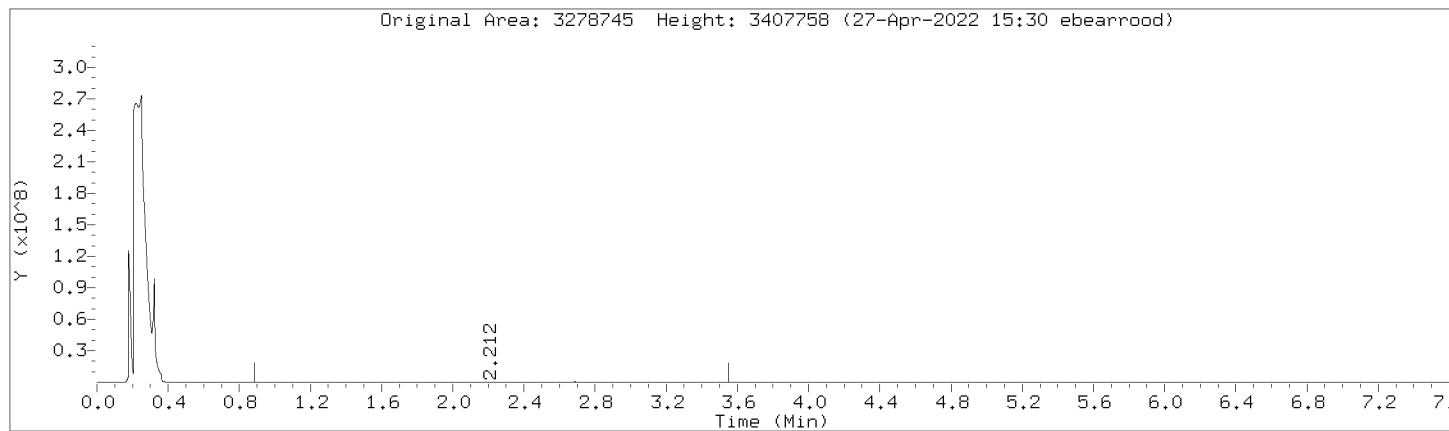
Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:





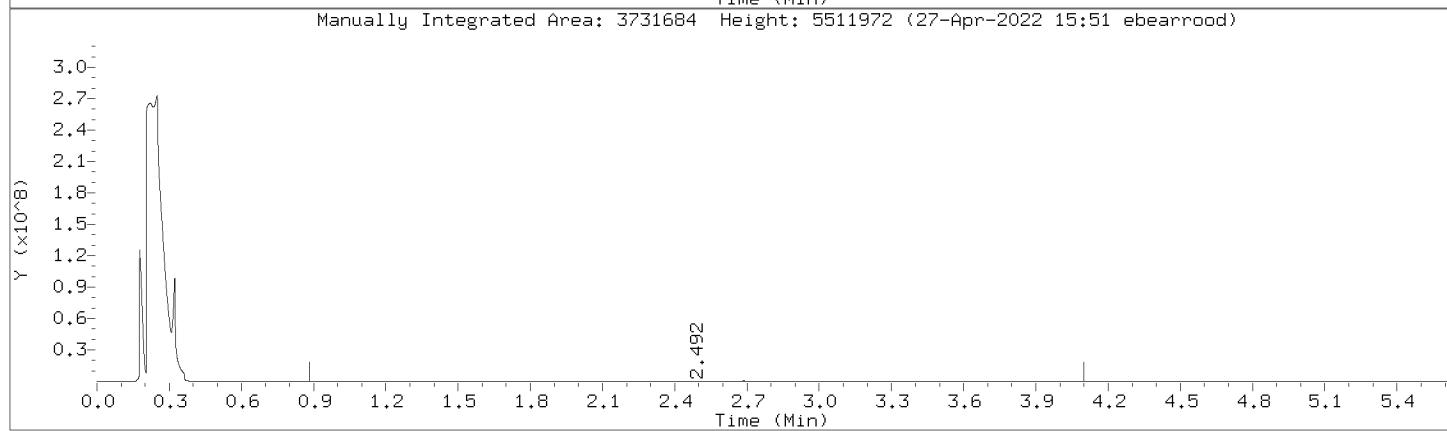
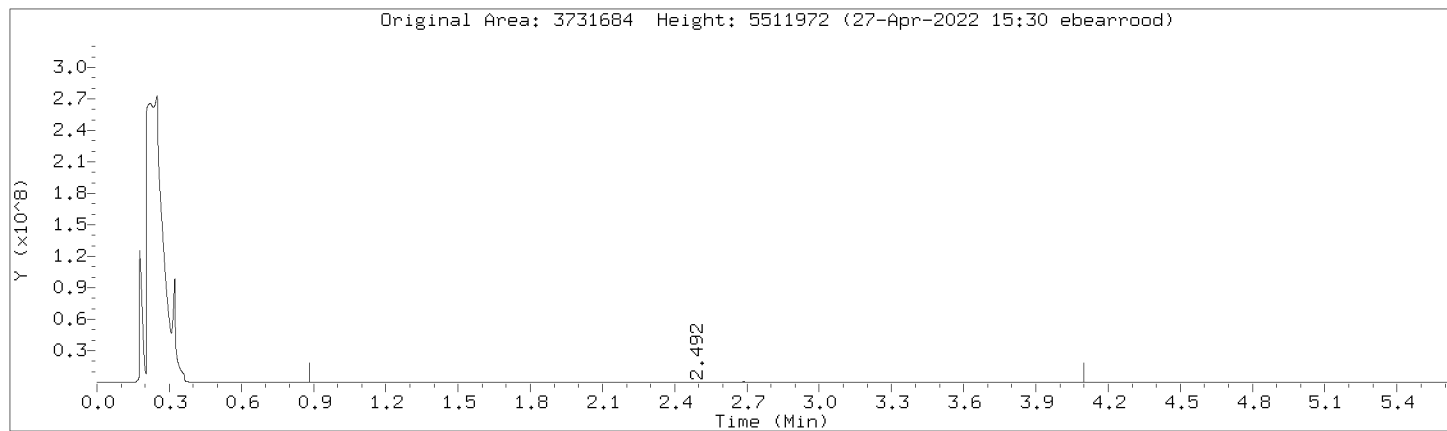
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



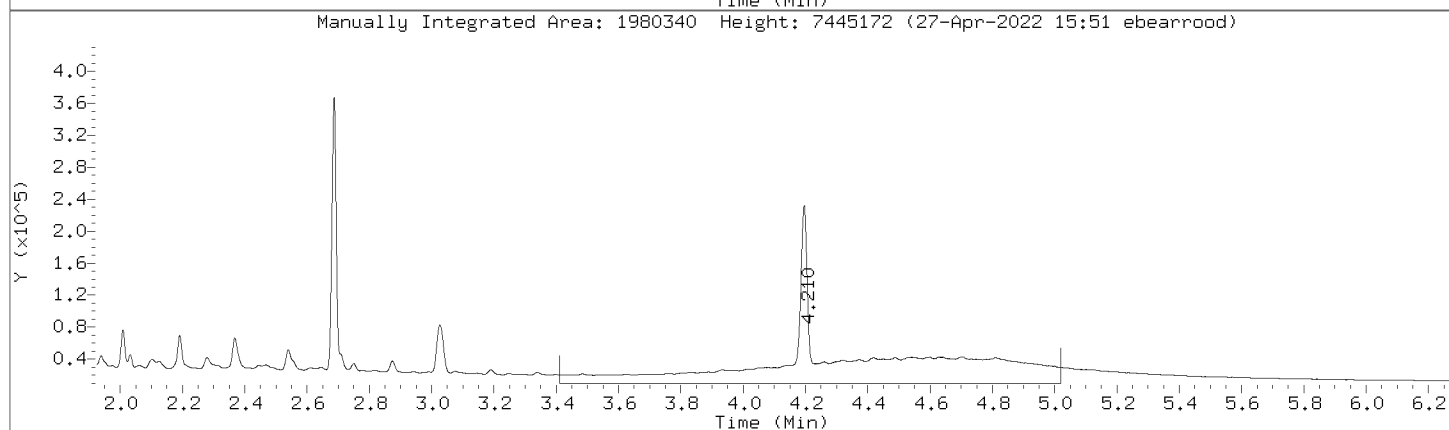
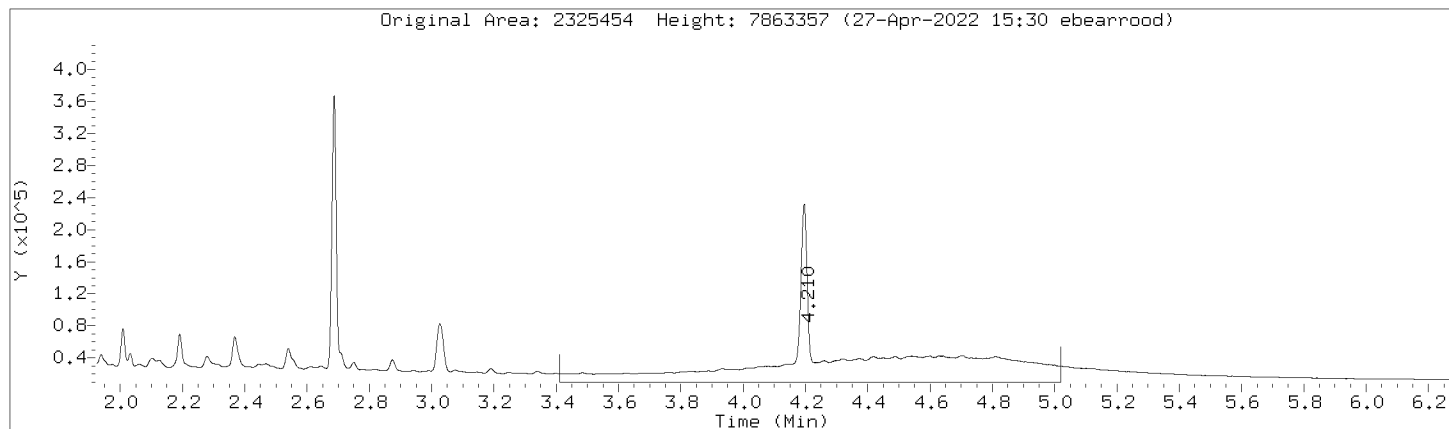
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



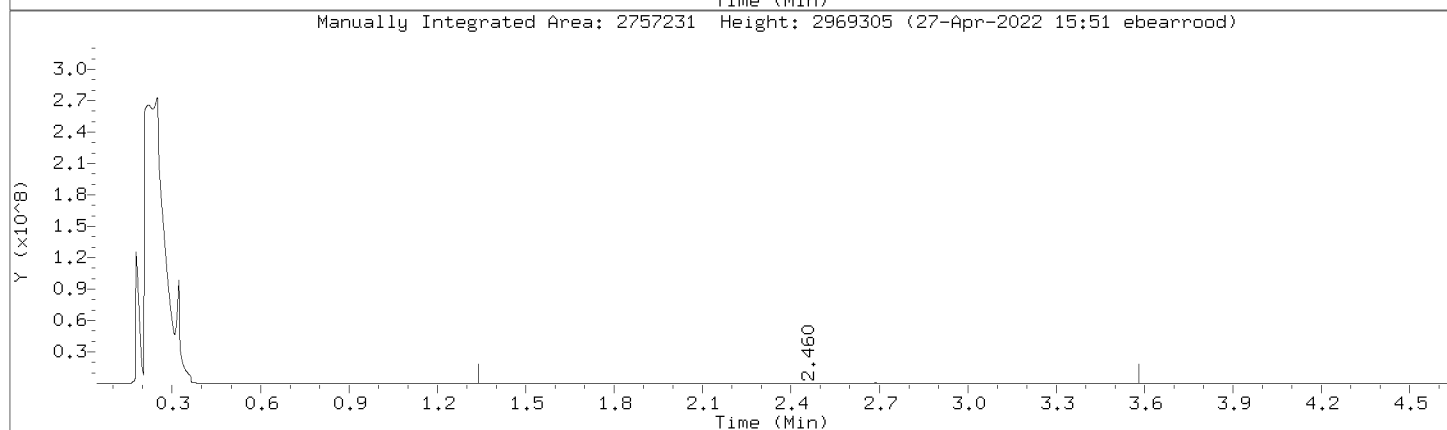
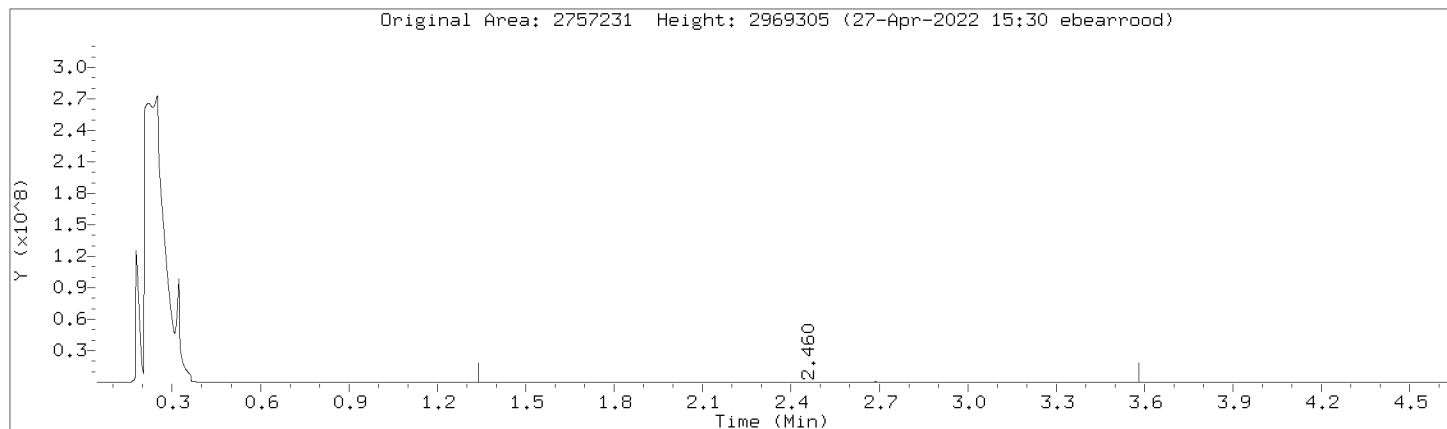
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



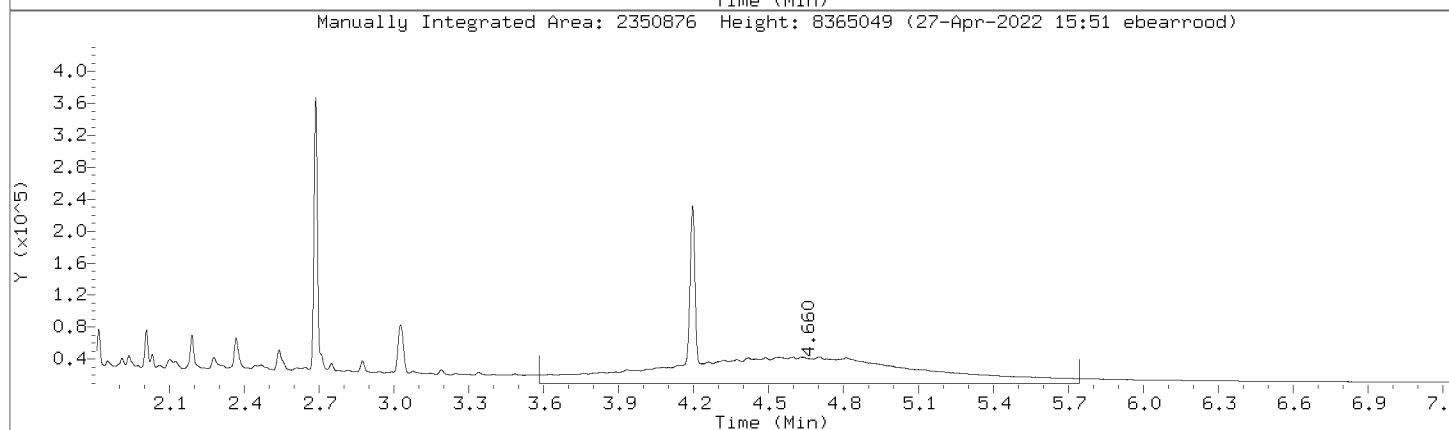
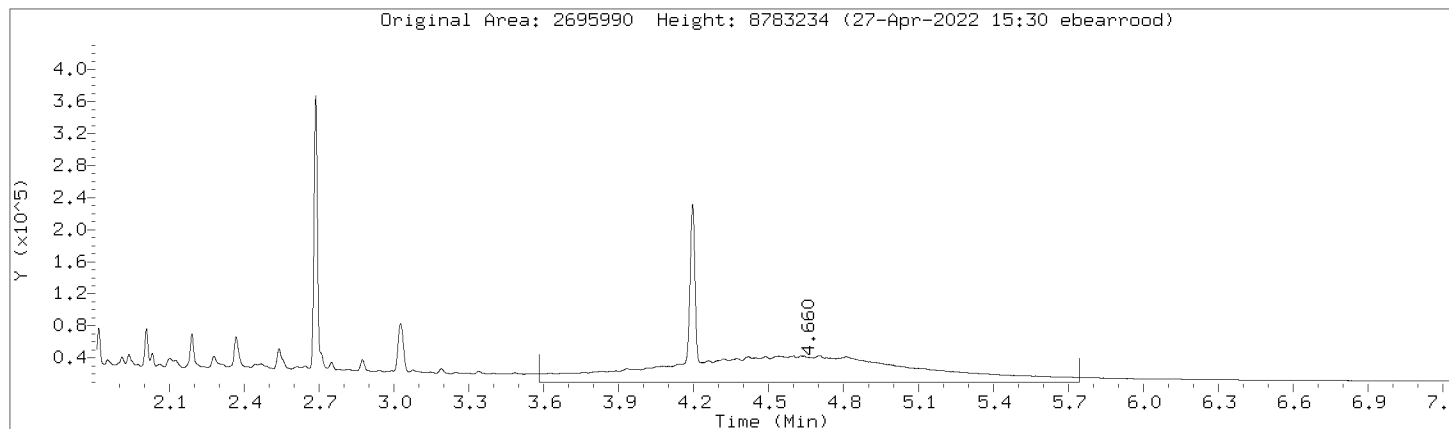
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



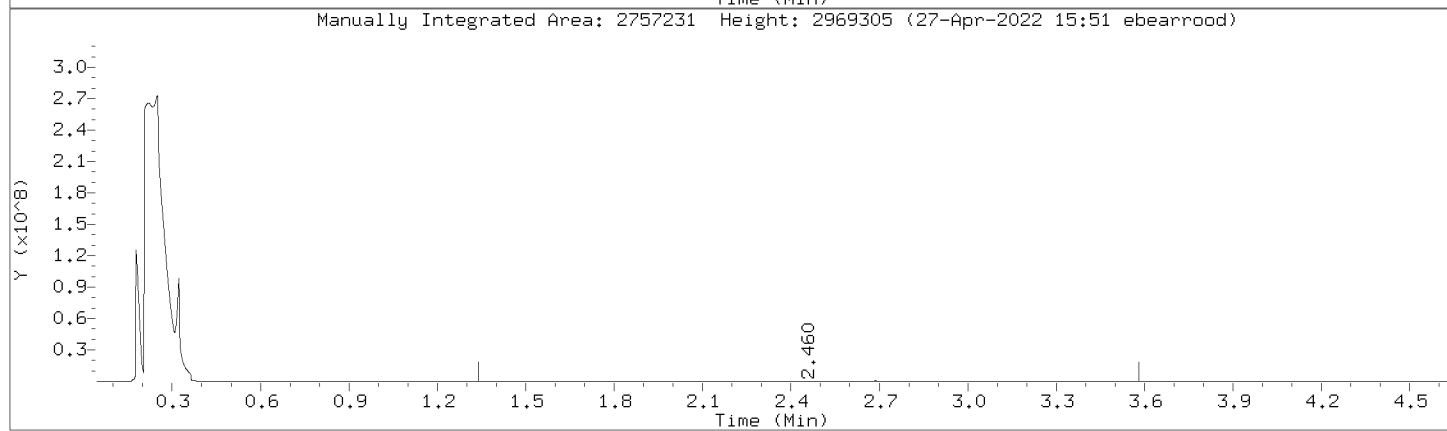
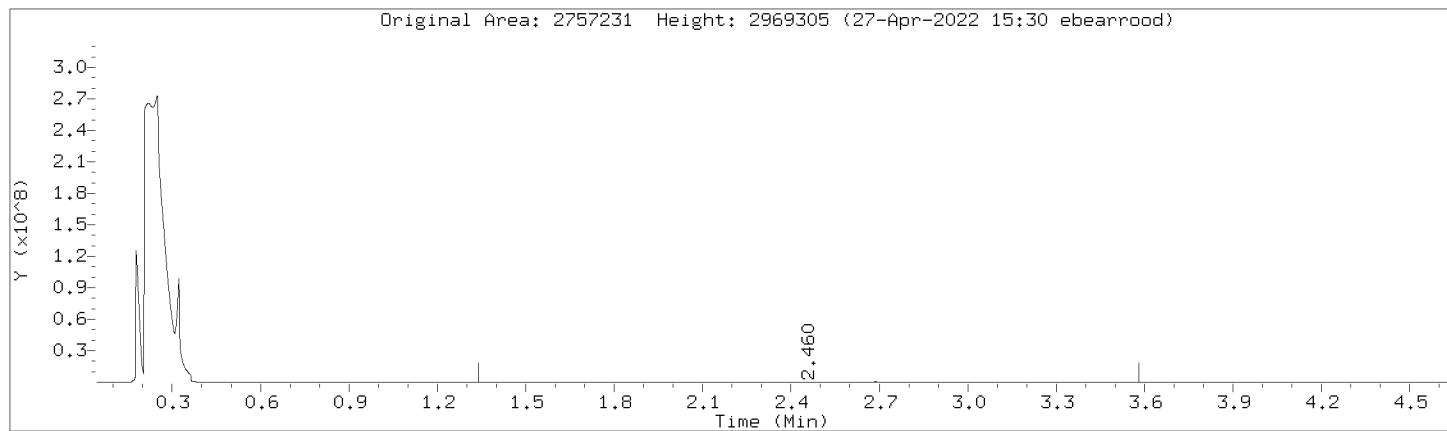
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



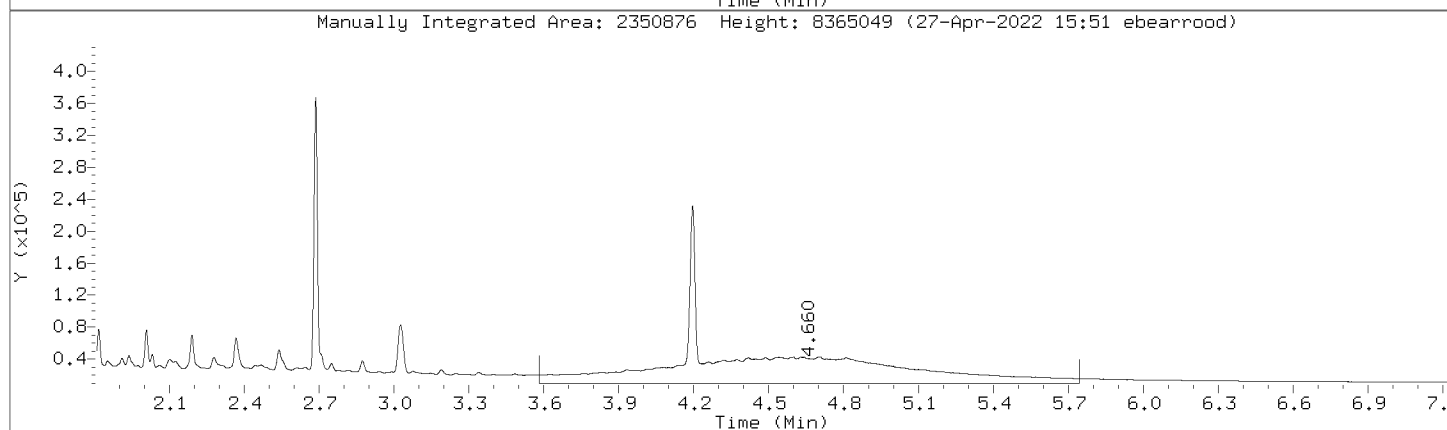
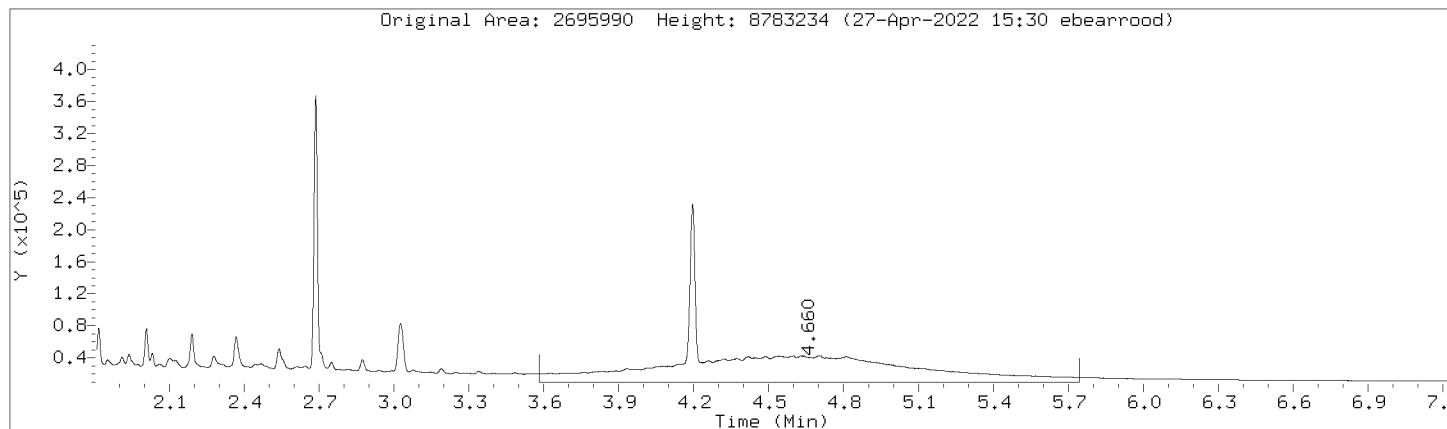
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



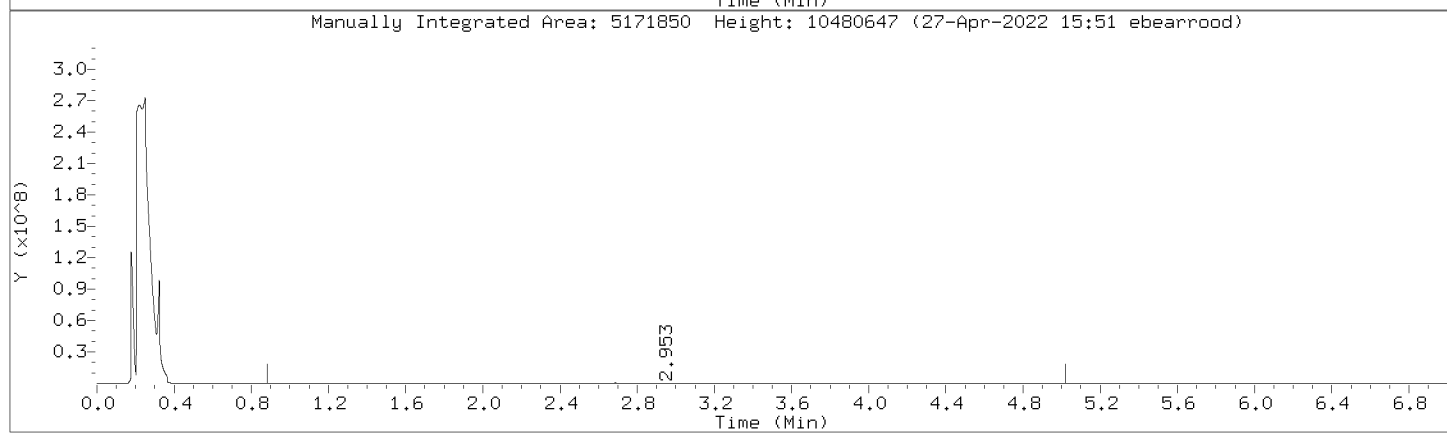
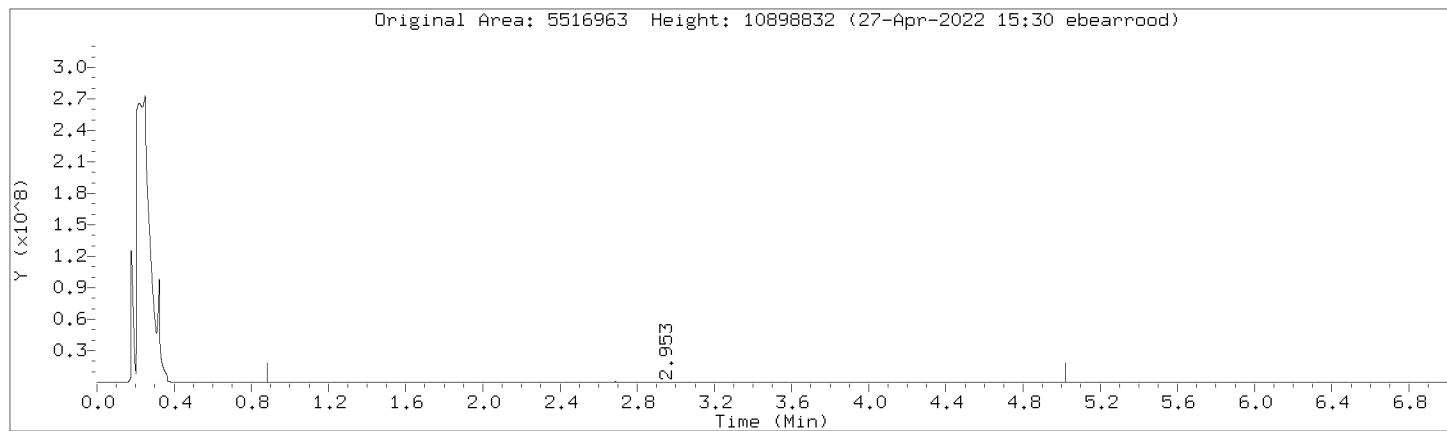
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

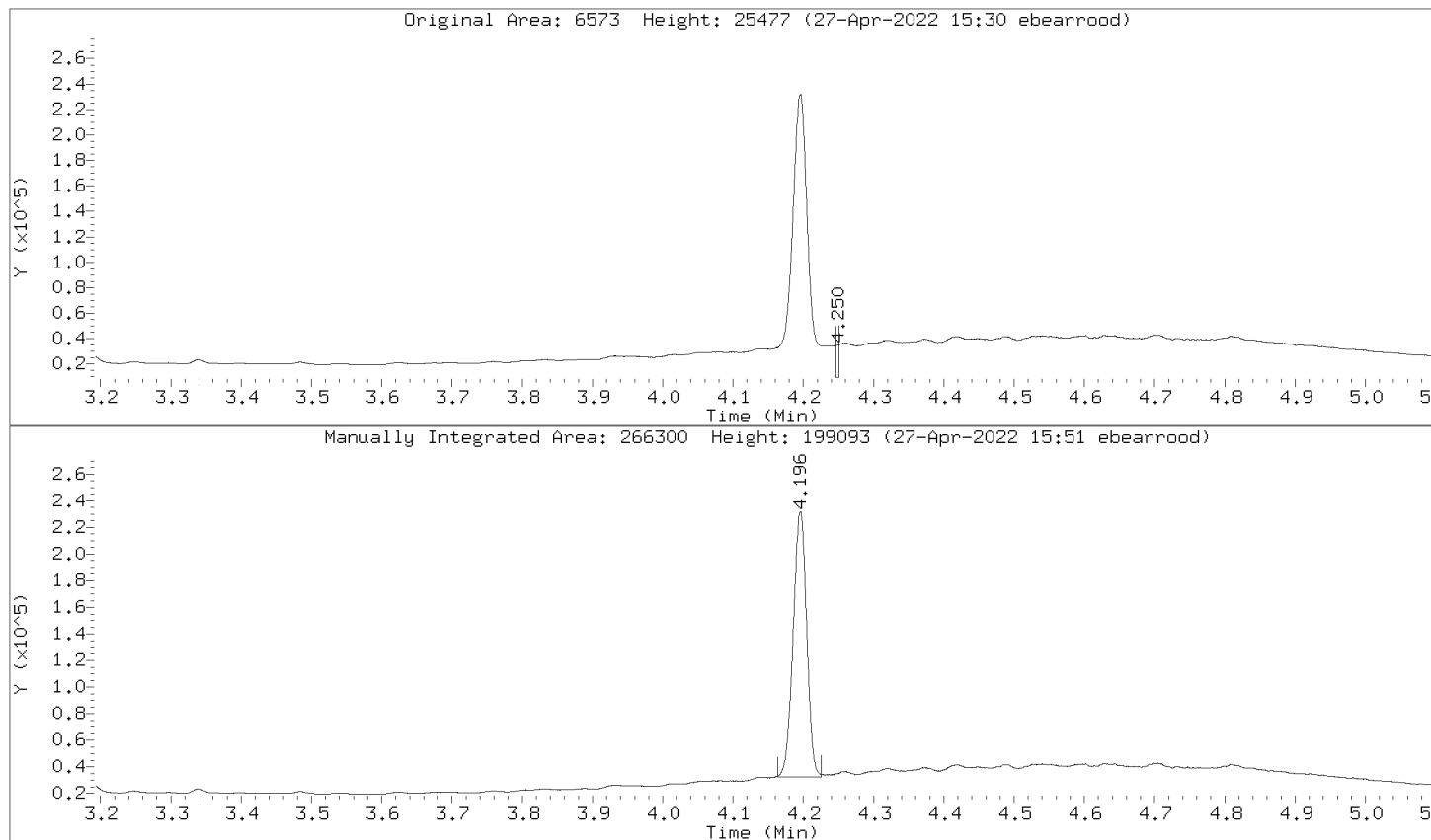
Compound: C10-C36      Review Code: RNG  
CAS Number:





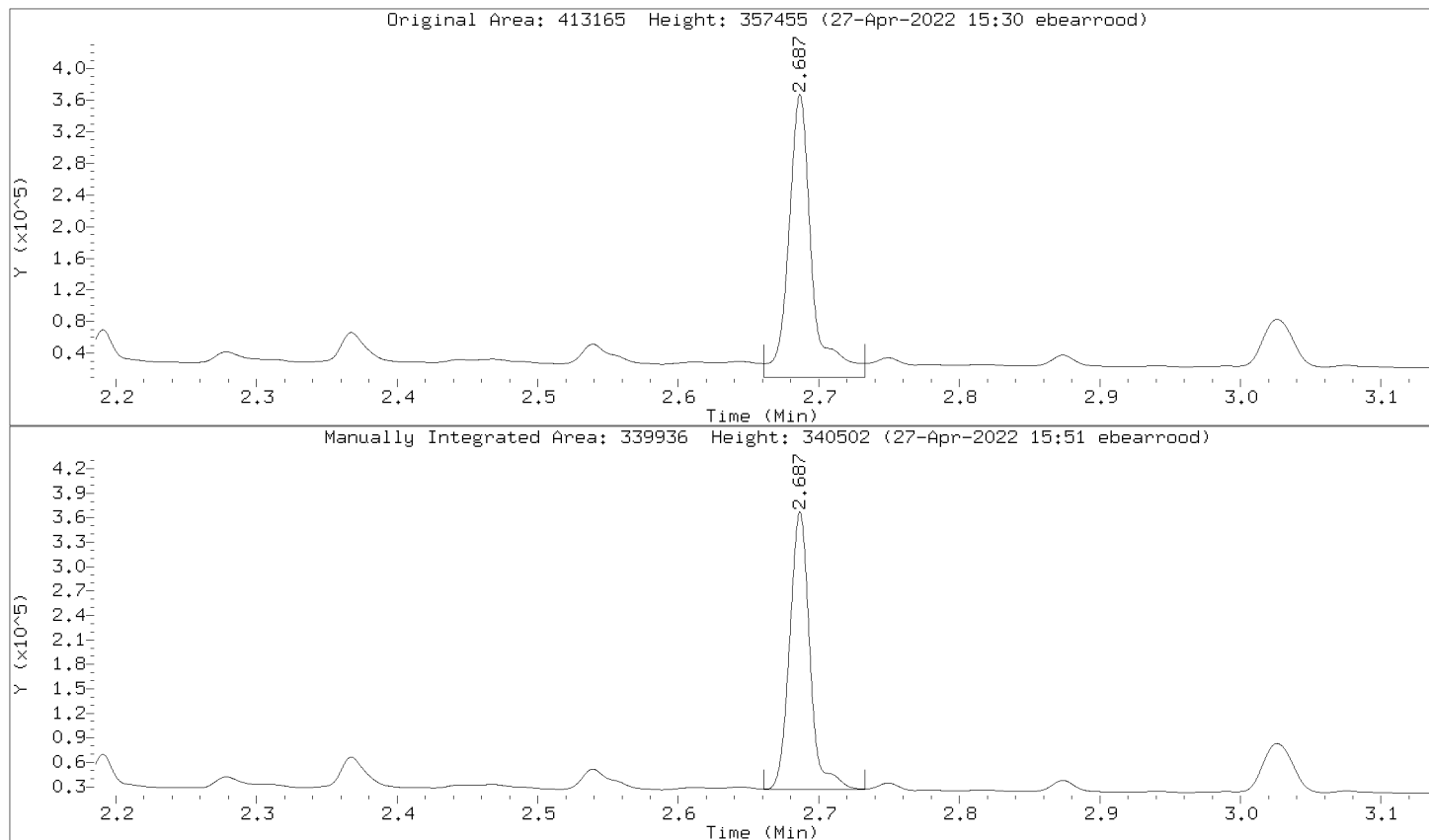
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000014.D  
Injection Date: 27-APR-2022 14:08  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,362375:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
 Lab Smp Id: DMO-CAL8,362376:2 Client Smp ID: DMO-CAL8,362376:2  
 Inj Date : 27-APR-2022 14:19  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal8,362376:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 85 Calibration Sample, Level: 8  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		6183718 1000.00	1020	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.687	2.685 0.002		670939 100.000	101	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.197	4.193 0.004		528228 100.000	102	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		3660871 1000.00	1020	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		7059201 1000.00	1020	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		3812366 1000.00	1020	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		9844589 2000.00	2030	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		5194648 1000.00	1010	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		5194648 1000.00	1010	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		4563549 1000.00	1010	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		4563549 1000.00	1010	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 14:19

Client ID: DM0-CAL8,362376;2

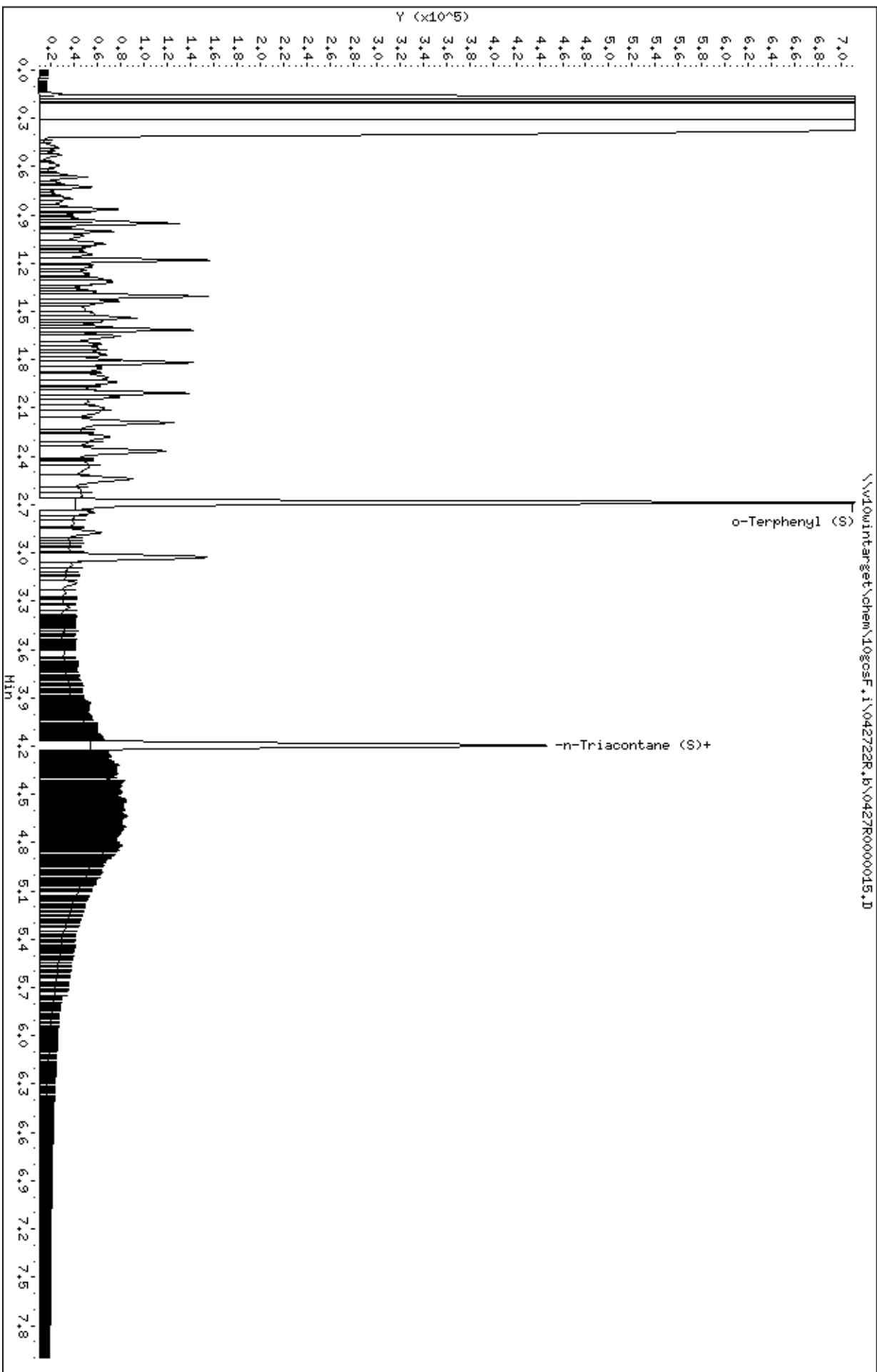
Sample Info: DM0-CAL8,362376;2

Instrument: 10gosf.i

Operator: EB3

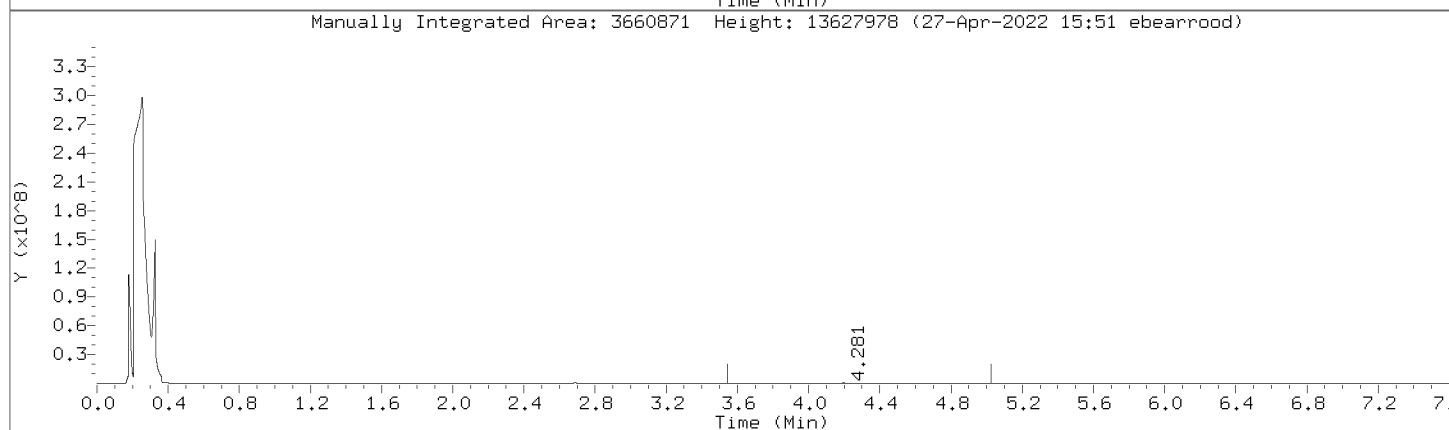
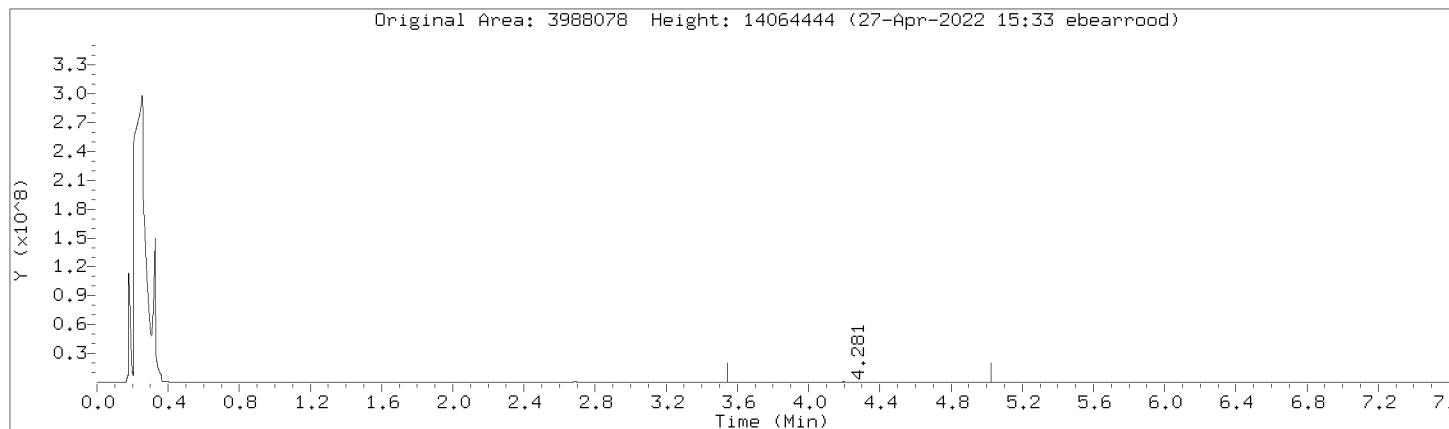
Column diameter: 0.32

Column phase: DB-5-US21430033



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D

Injection Date: 27-APR-2022 14:19

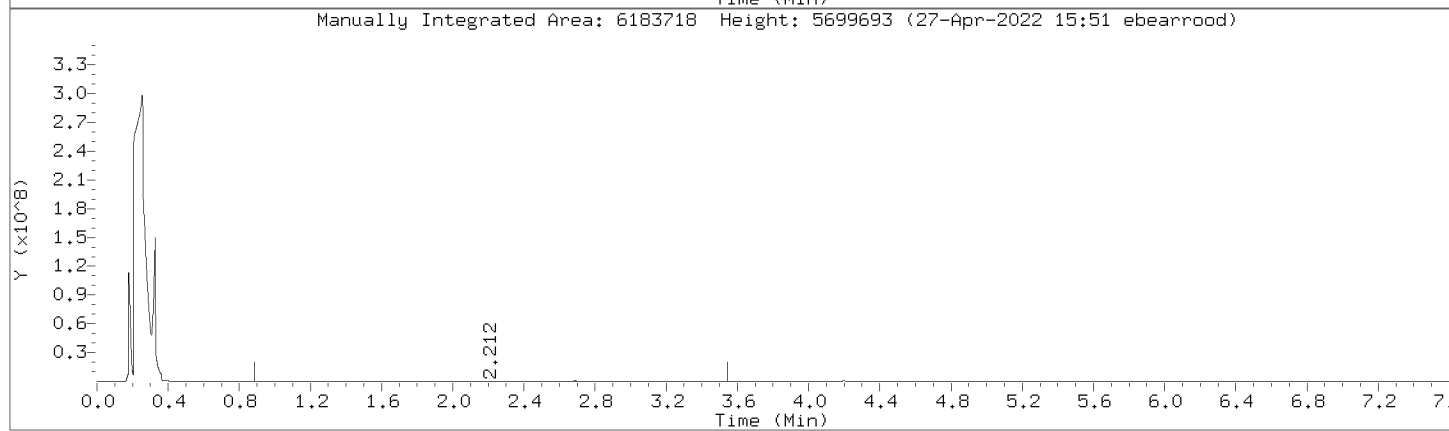
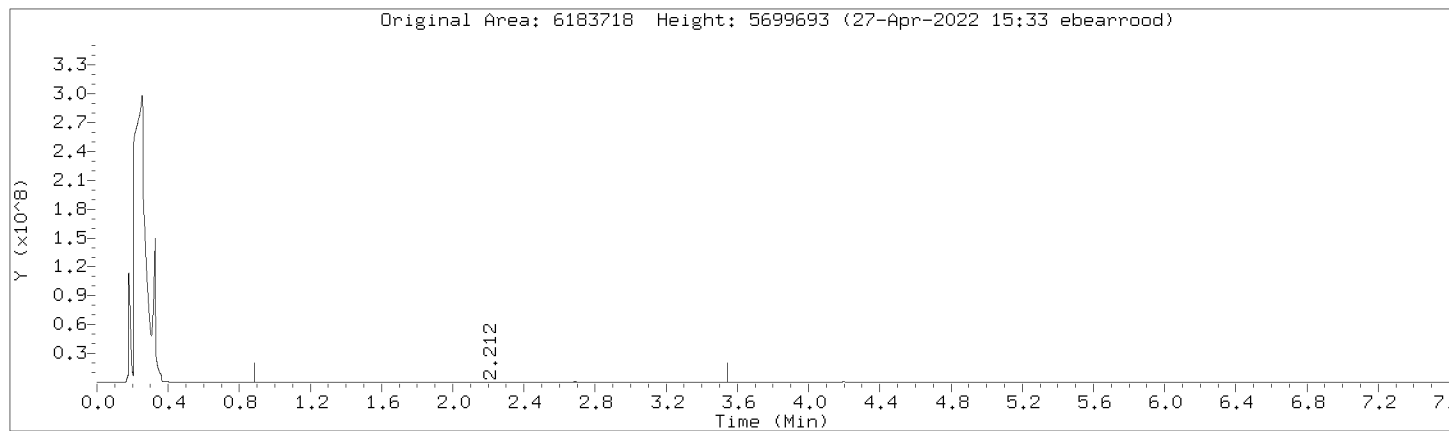
Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL8,362376:2

Compound: DRO by AK 102

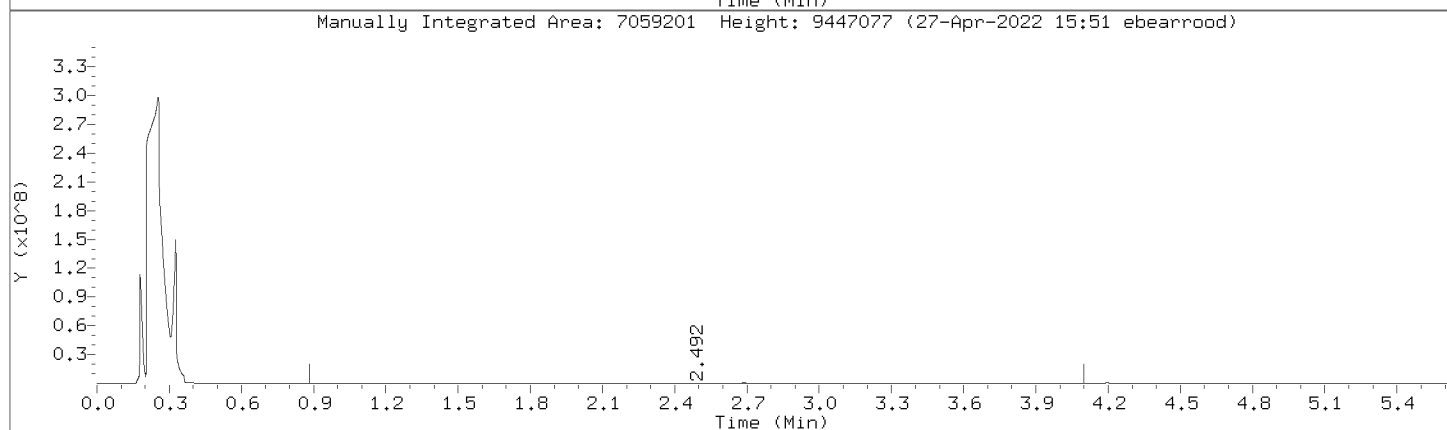
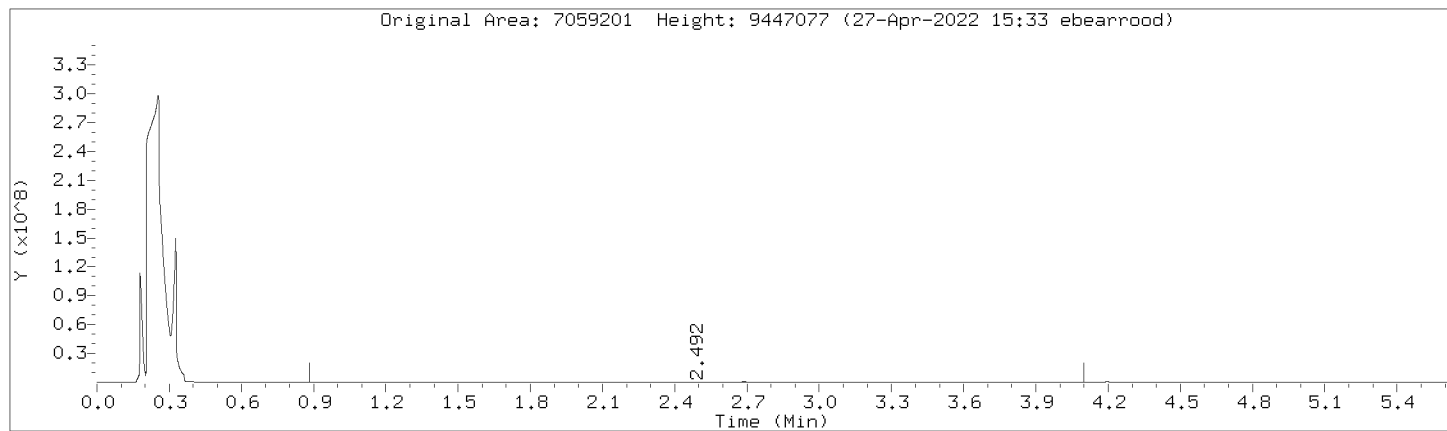
Review Code: RNG

CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D

Injection Date: 27-APR-2022 14:19

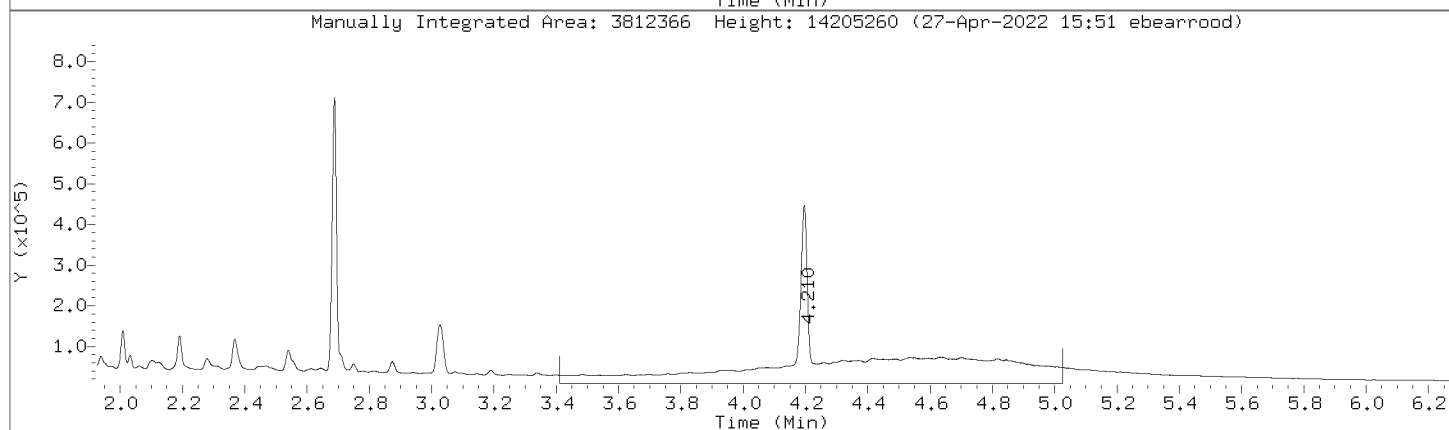
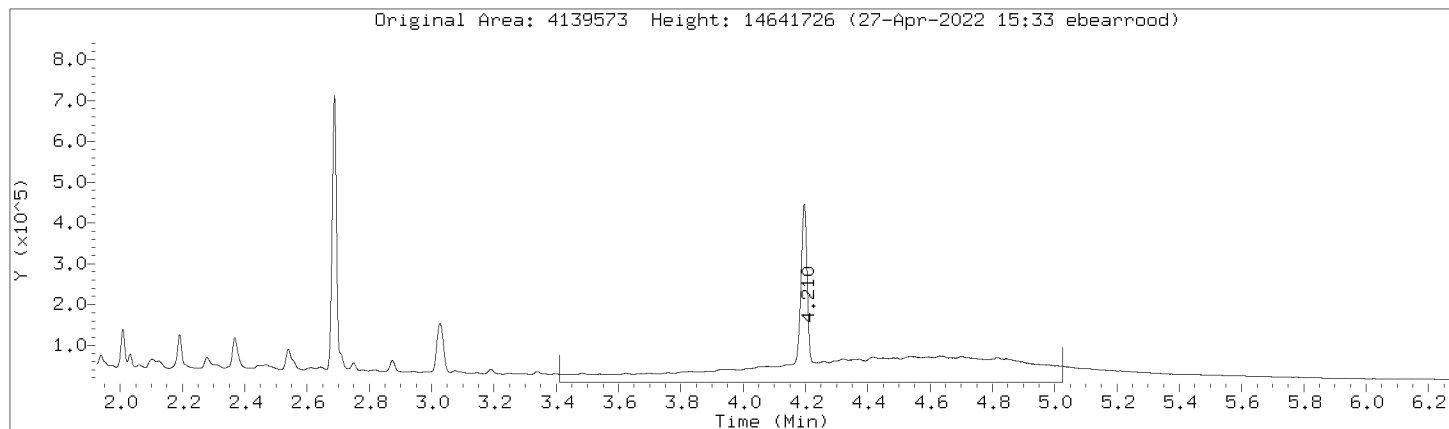
Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL8,362376:2

Compound: Motor Oil Range (C24-C36)

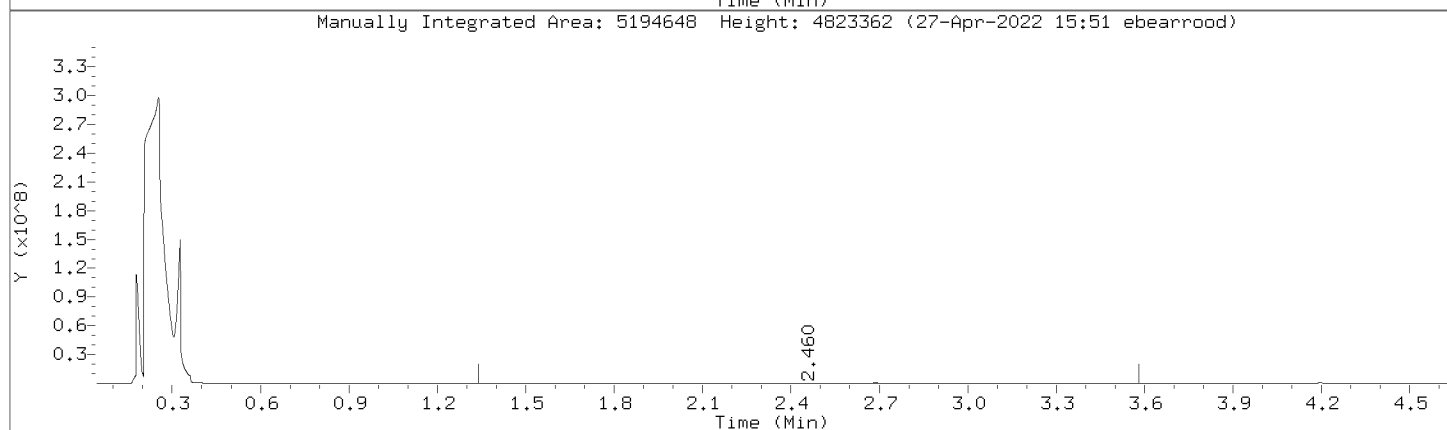
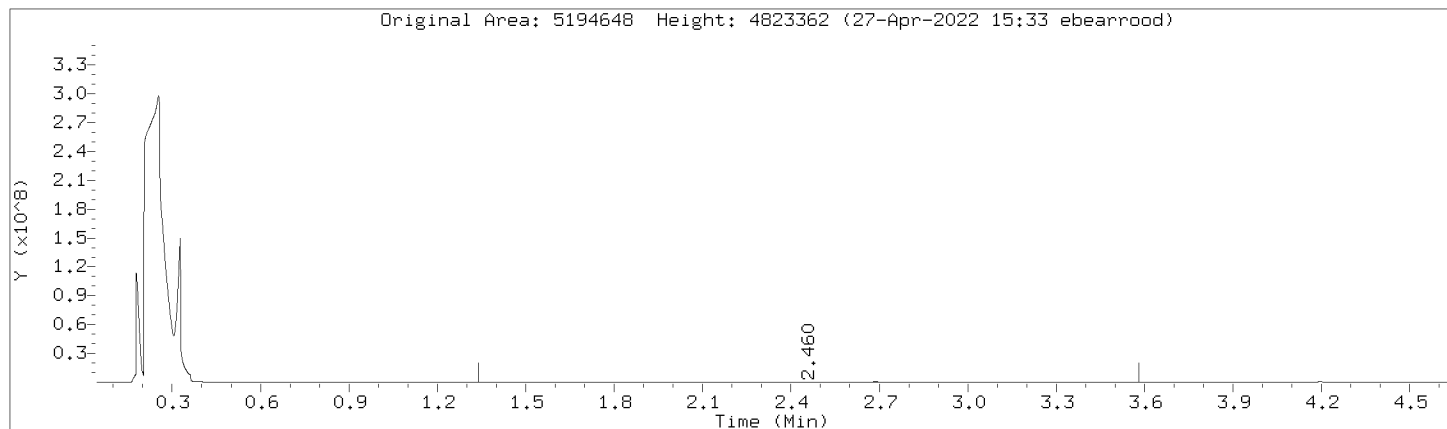
Review Code: RNG

CAS Number:



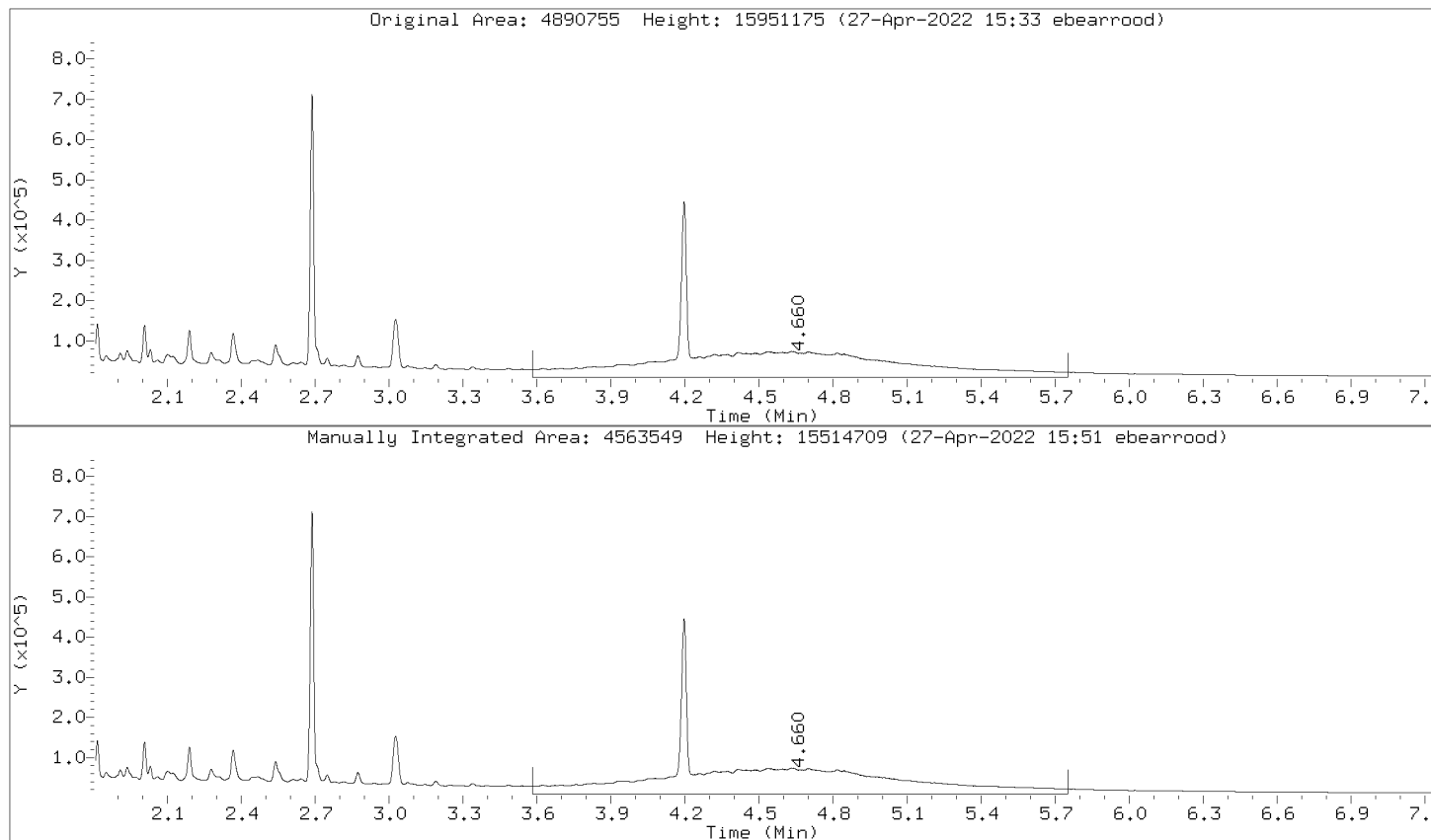
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



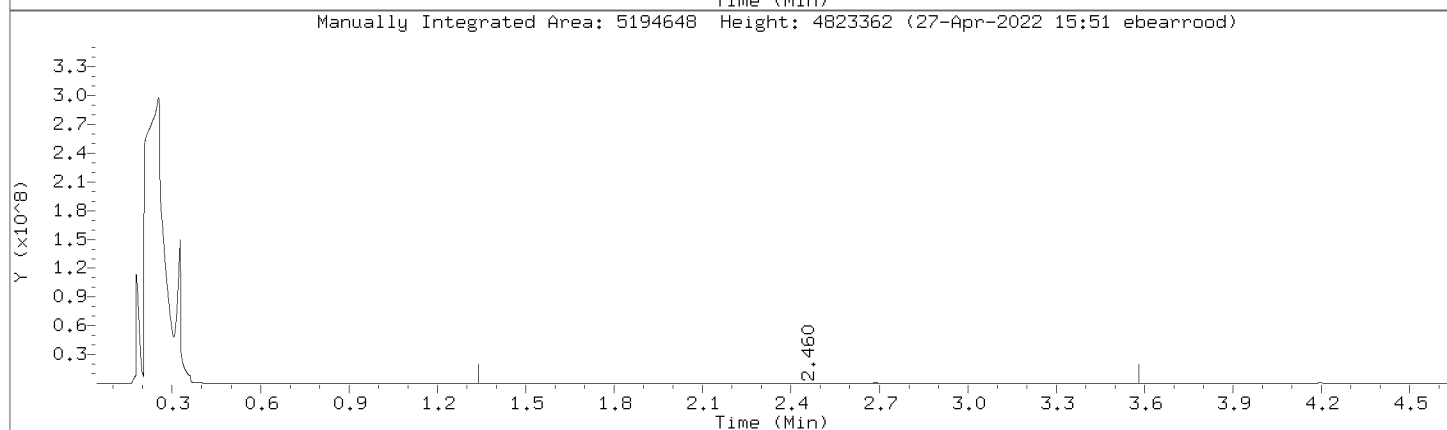
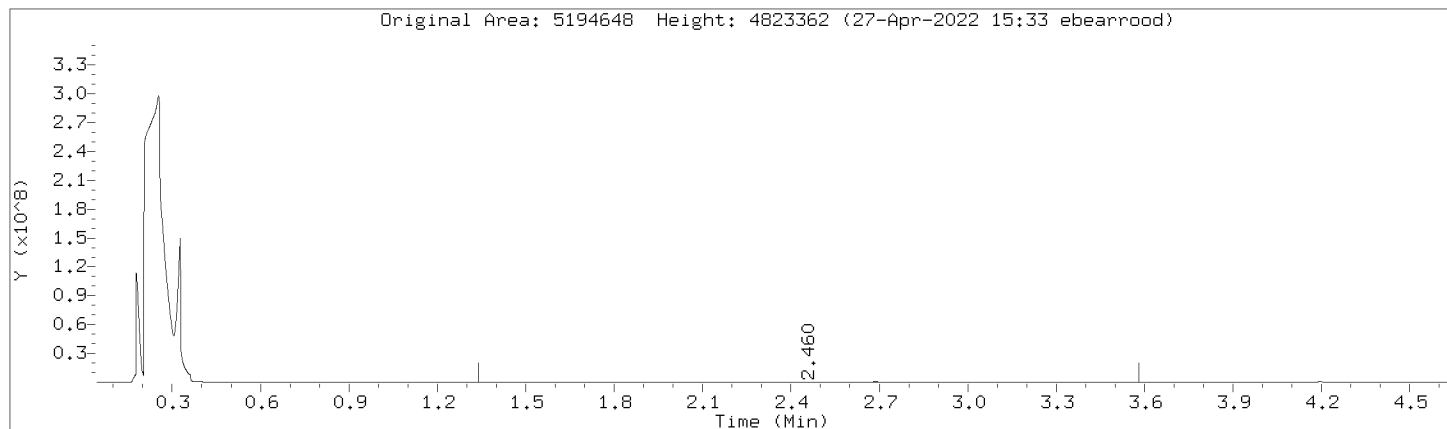
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



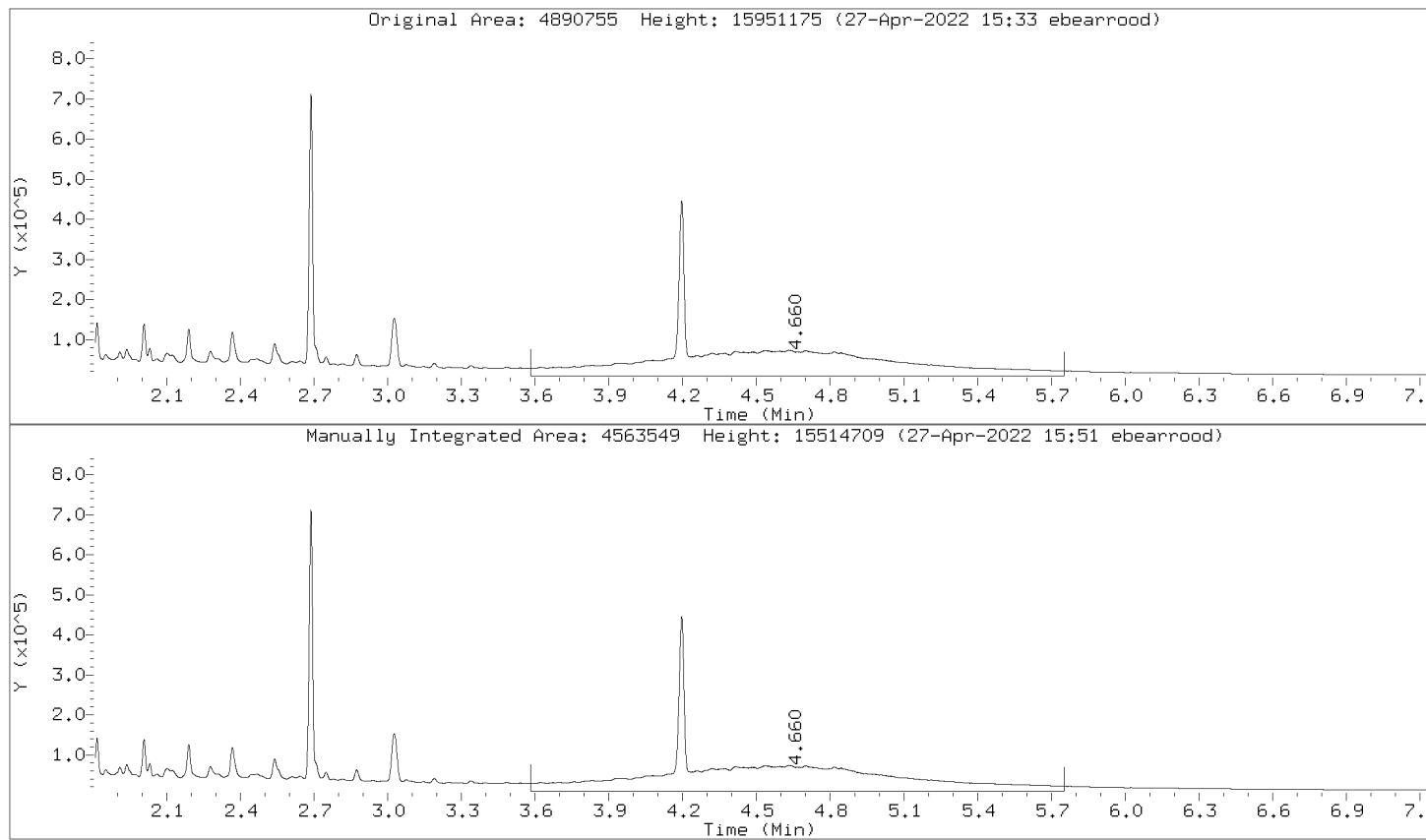
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



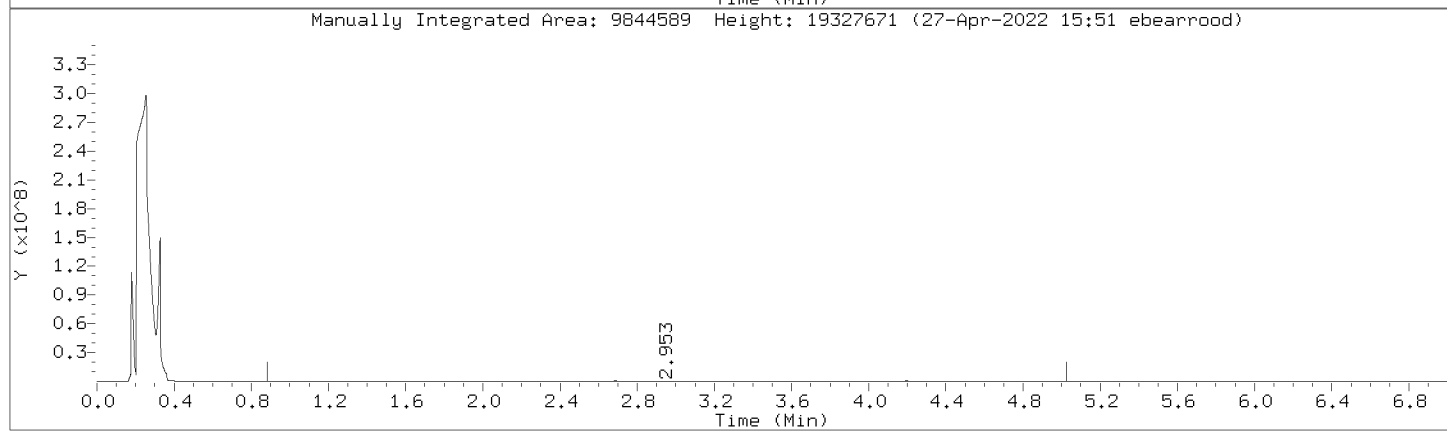
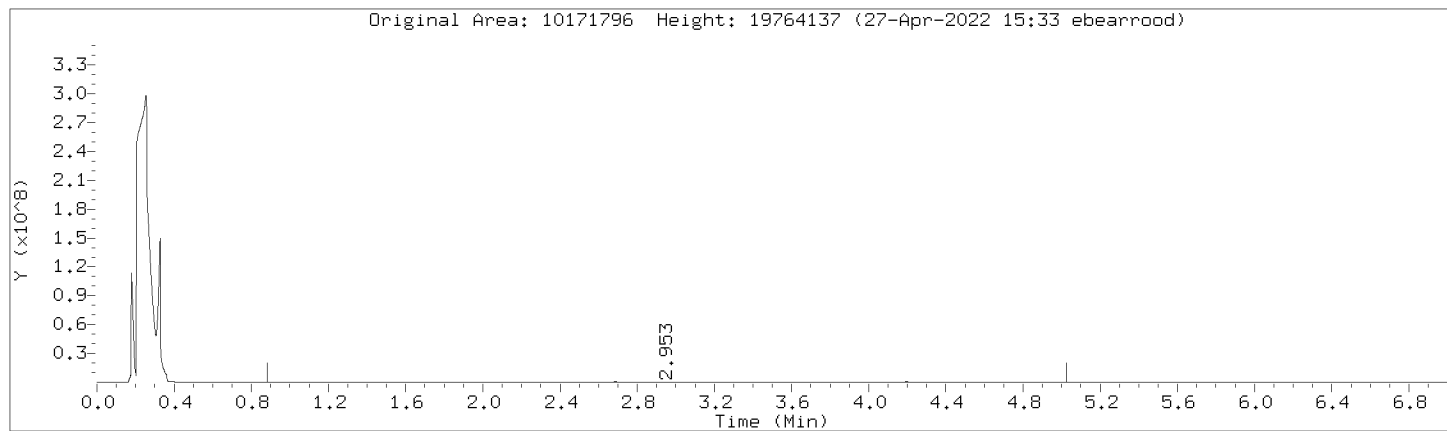
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



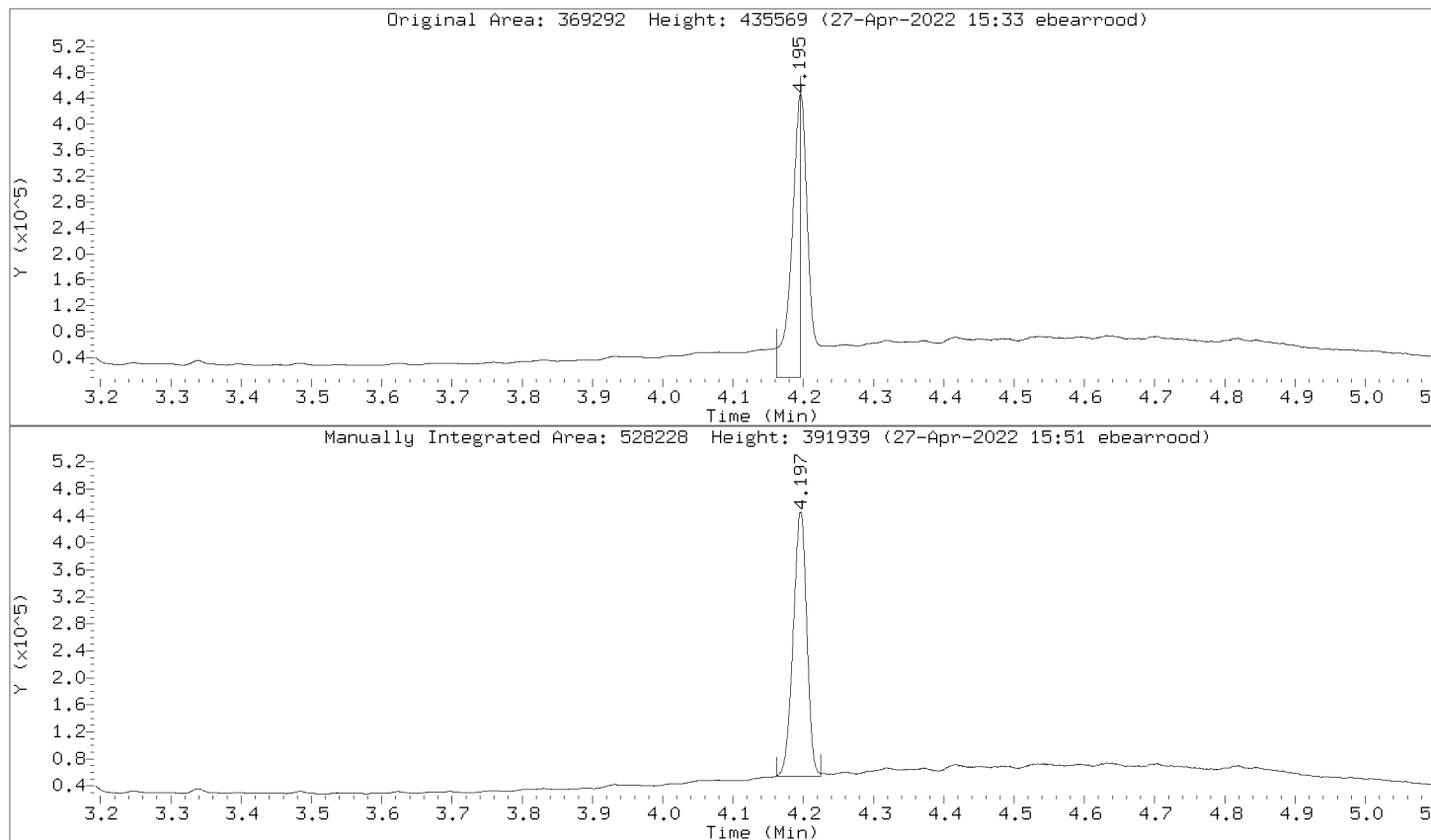
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



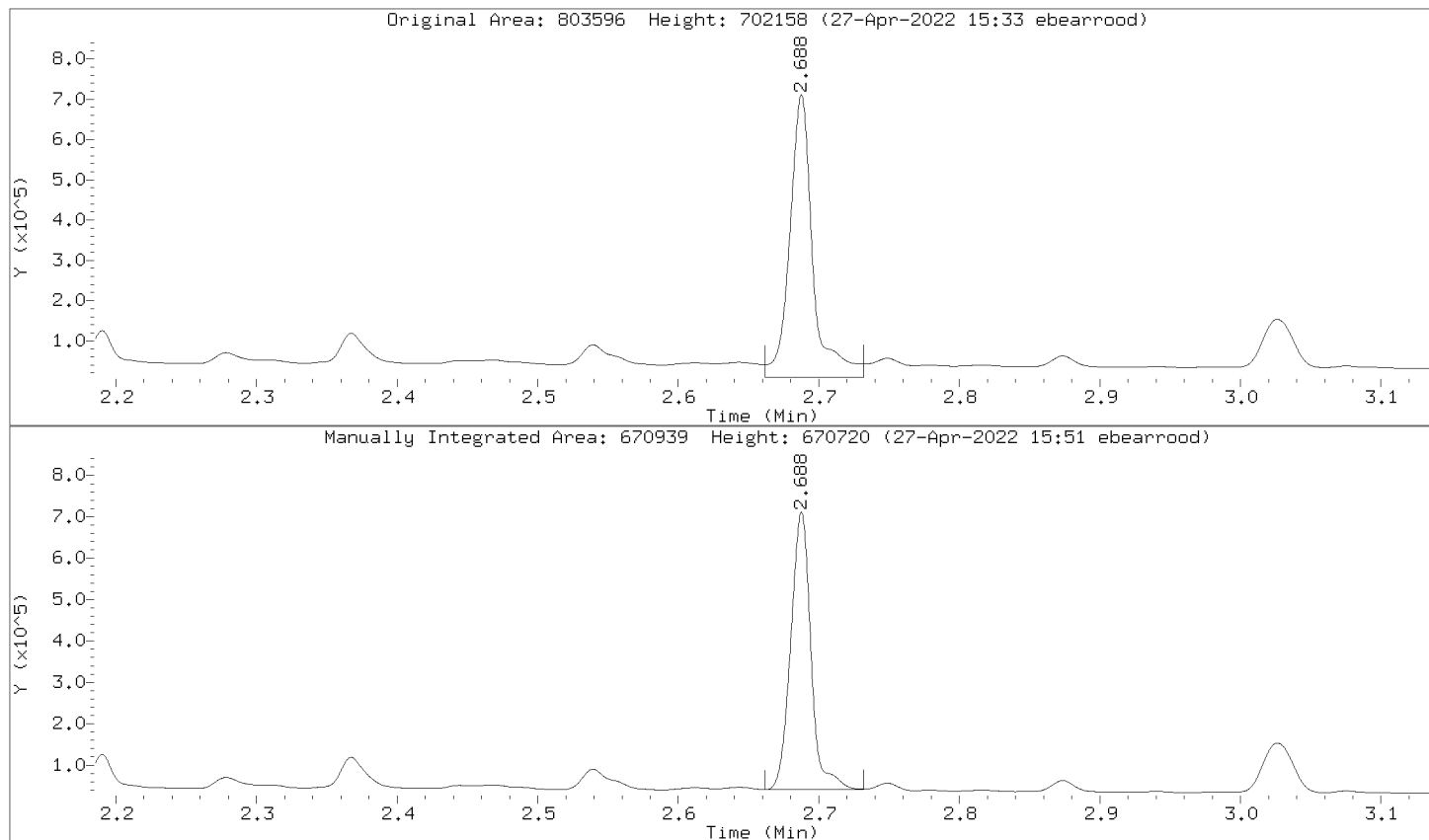
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000015.D  
Injection Date: 27-APR-2022 14:19  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,362376:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:





Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
 Lab Smp Id: DMO-CAL9,362377:2 Client Smp ID: DMO-CAL9,362377:2  
 Inj Date : 27-APR-2022 14:30  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal9,362377:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 86 Calibration Sample, Level: 9  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	-	3.540	11926188 2000.00	2020	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.692	2.685	0.007	1328065 200.000	200	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.202	4.193	0.009	1044249 200.000	202	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	-	5.020	7125460 2000.00	2010	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	-	4.099	13625690 2000.00	2020	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	-	5.020	7409993 2000.00	2010	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	-	5.020	19051649 4000.00	4030	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	-	3.580	10004331 2000.00	2010	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	-	3.580	10004331 2000.00	2010	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	-	5.740	9009436 2000.00	2020	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	-	5.740	9009436 2000.00	2020	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 14:30

Client ID: DM0-CAL9,362377:2

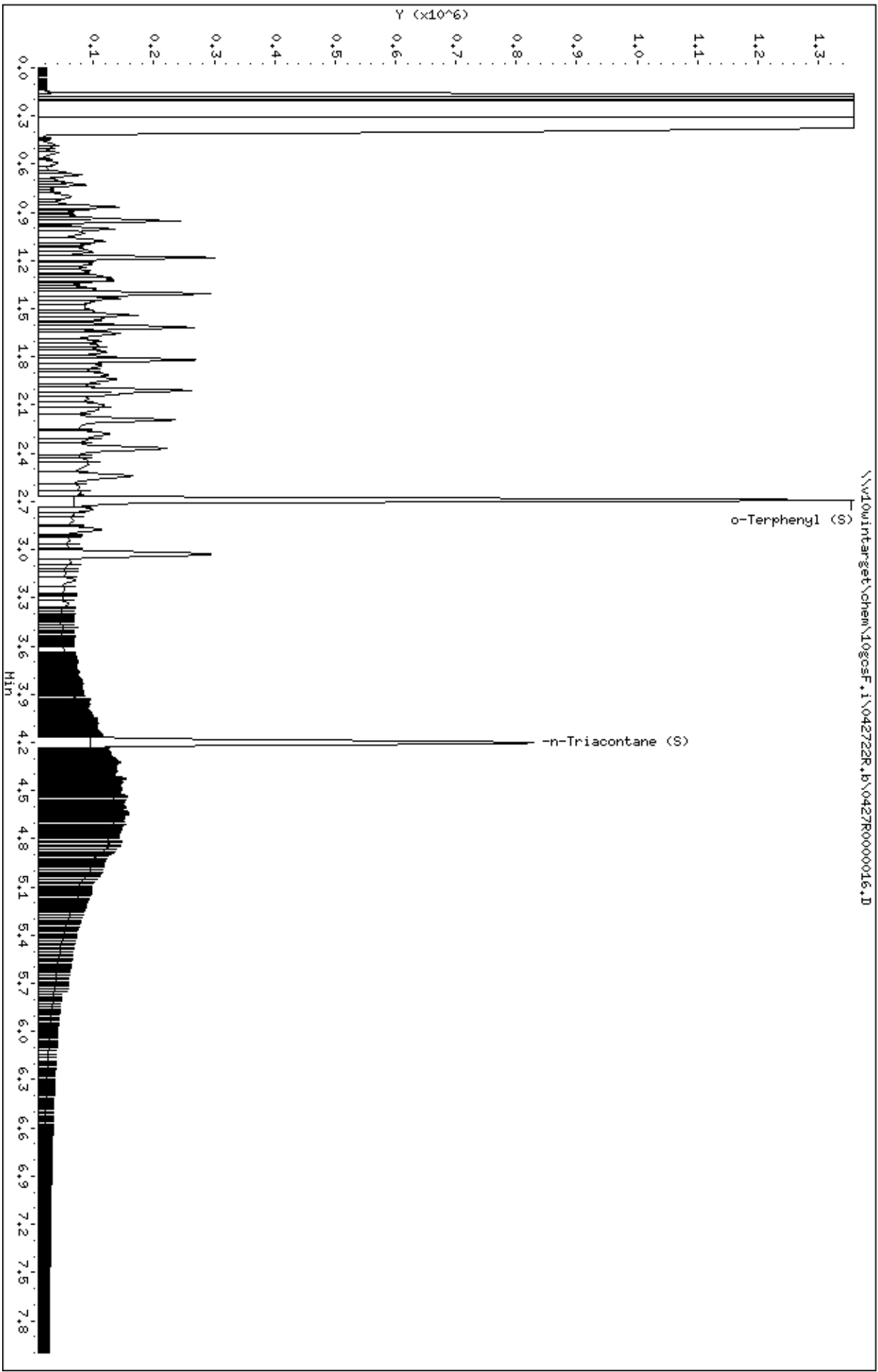
Sample Info: DM0-CAL9,362377:2

Column phase: DB-5-MS21430033

Instrument: 10goscF.1

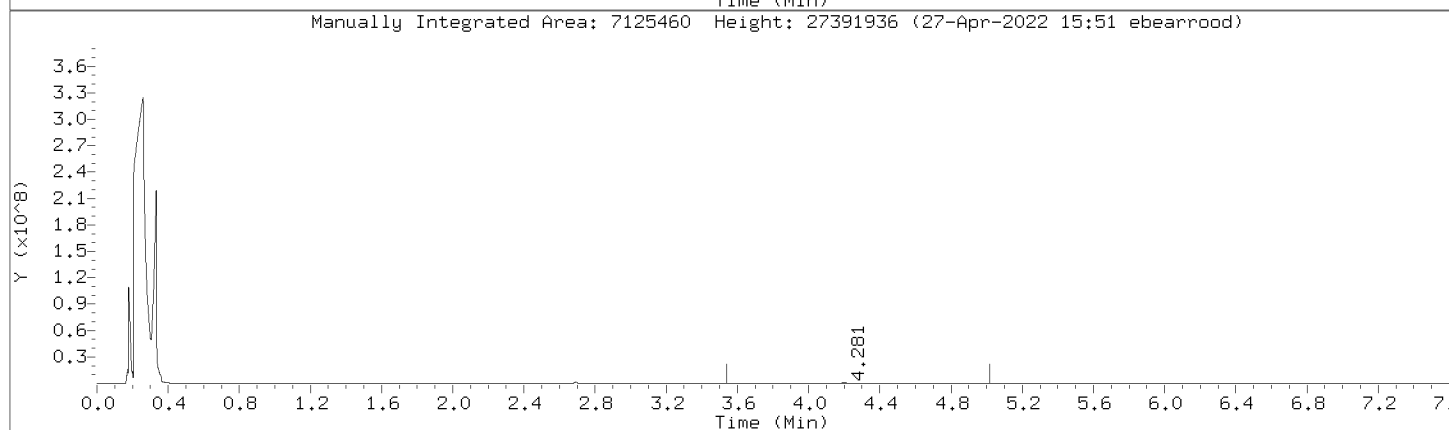
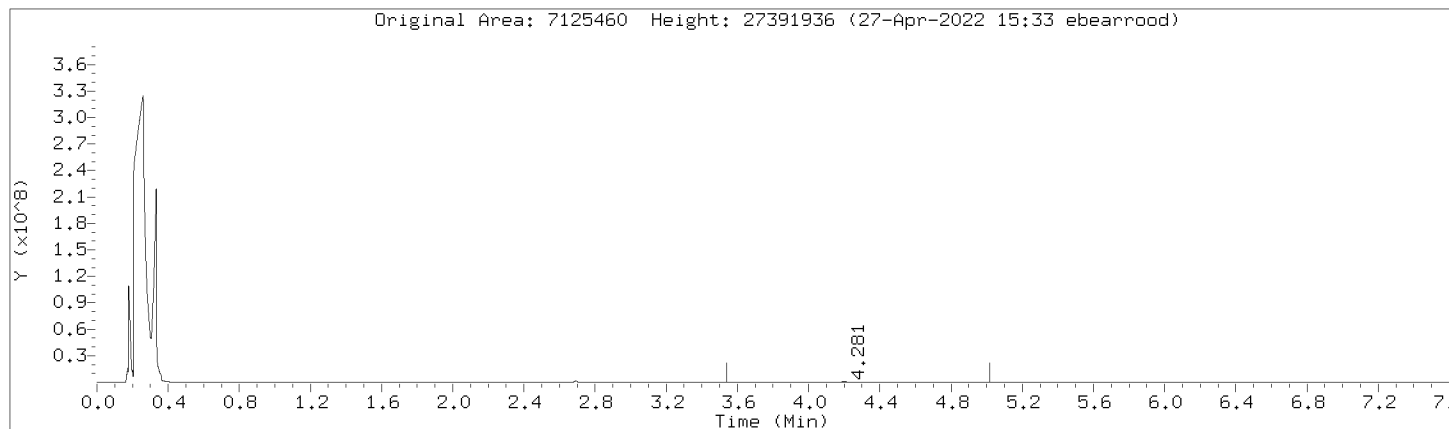
Operator: EB3

Column diameter: 0.32



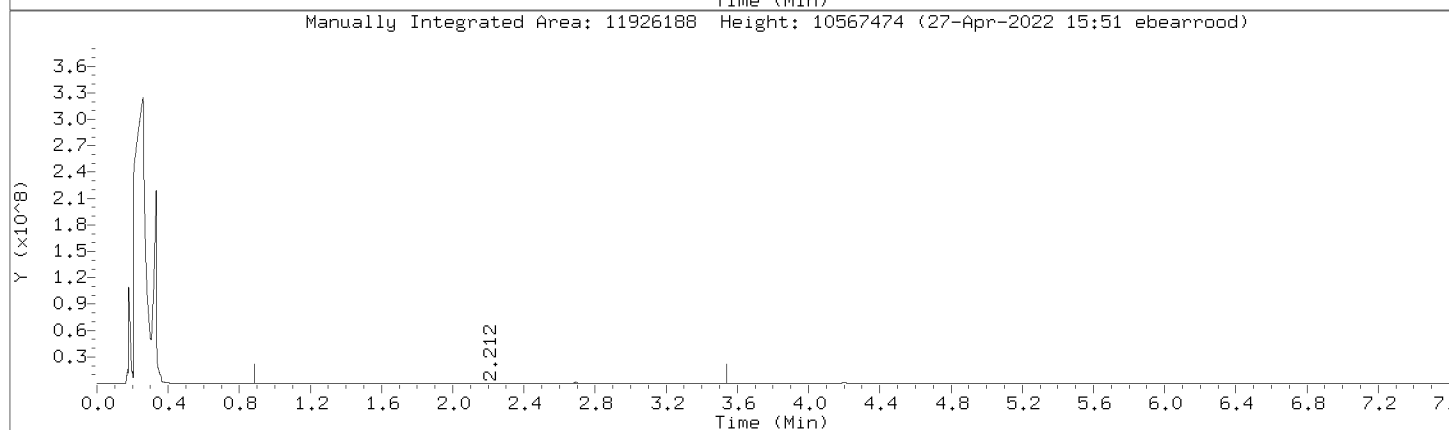
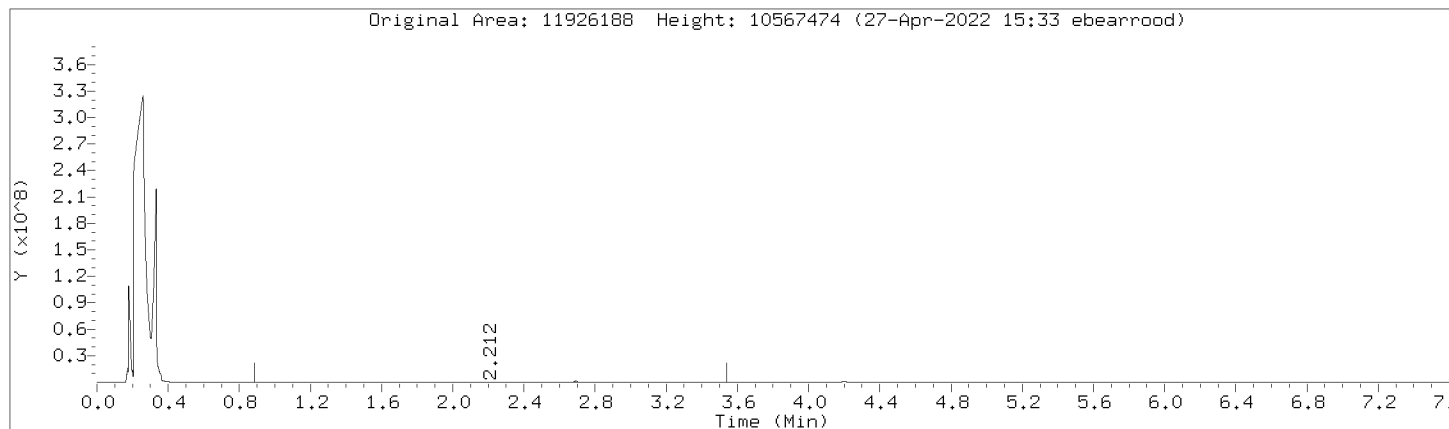
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



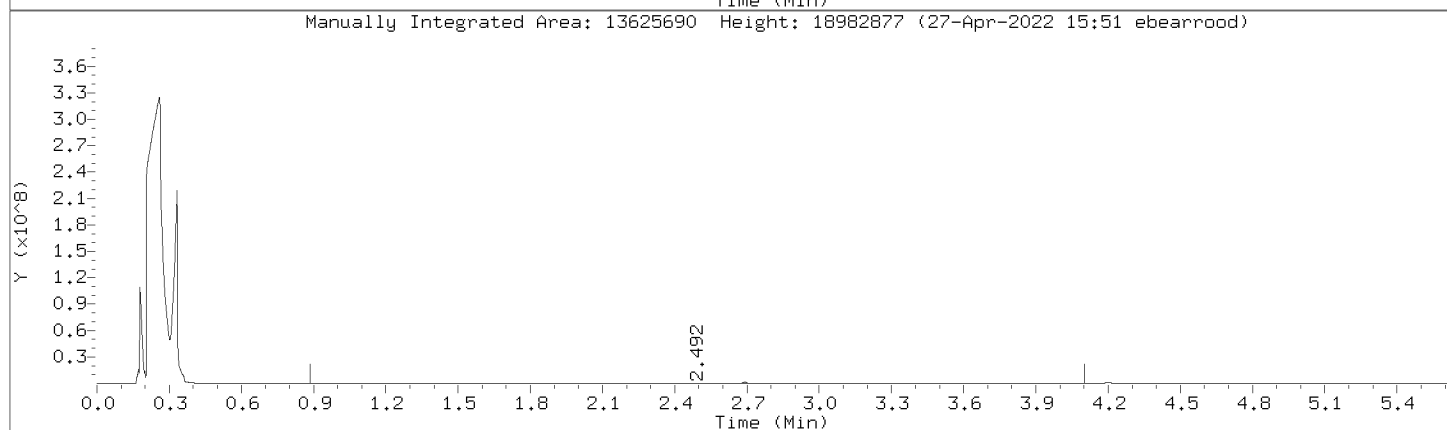
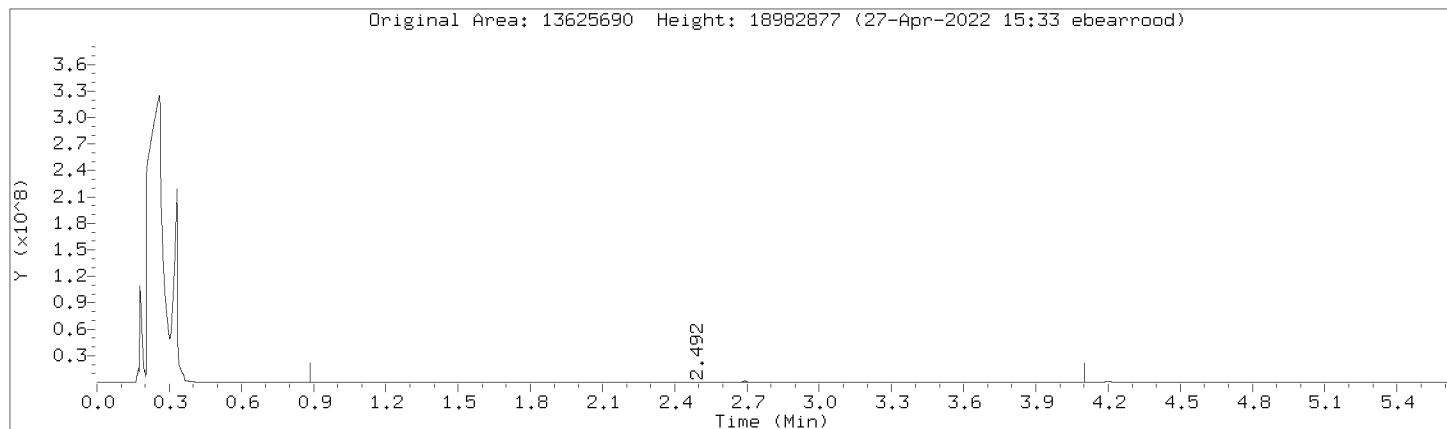
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



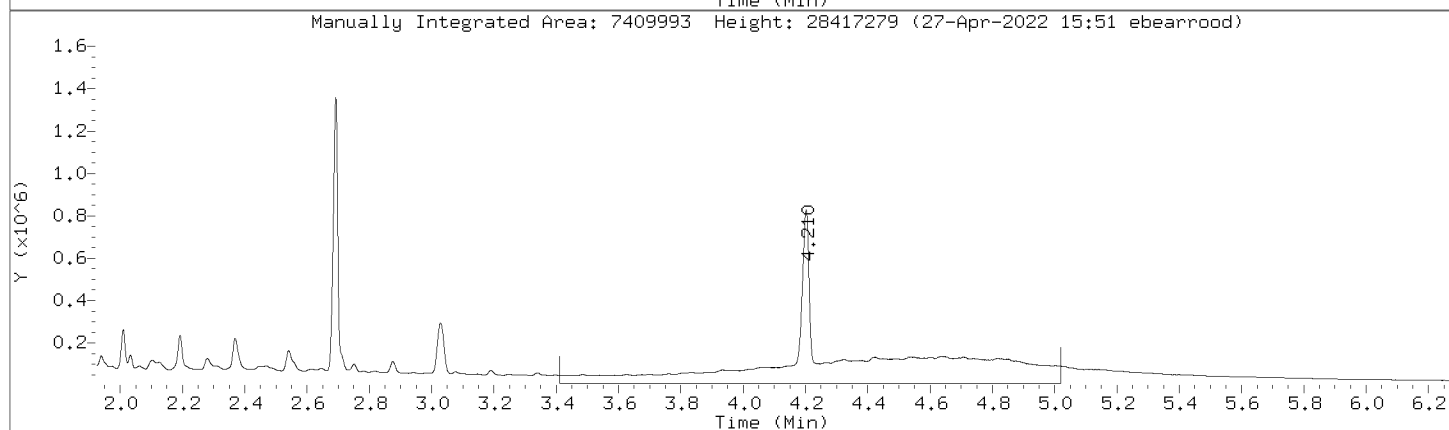
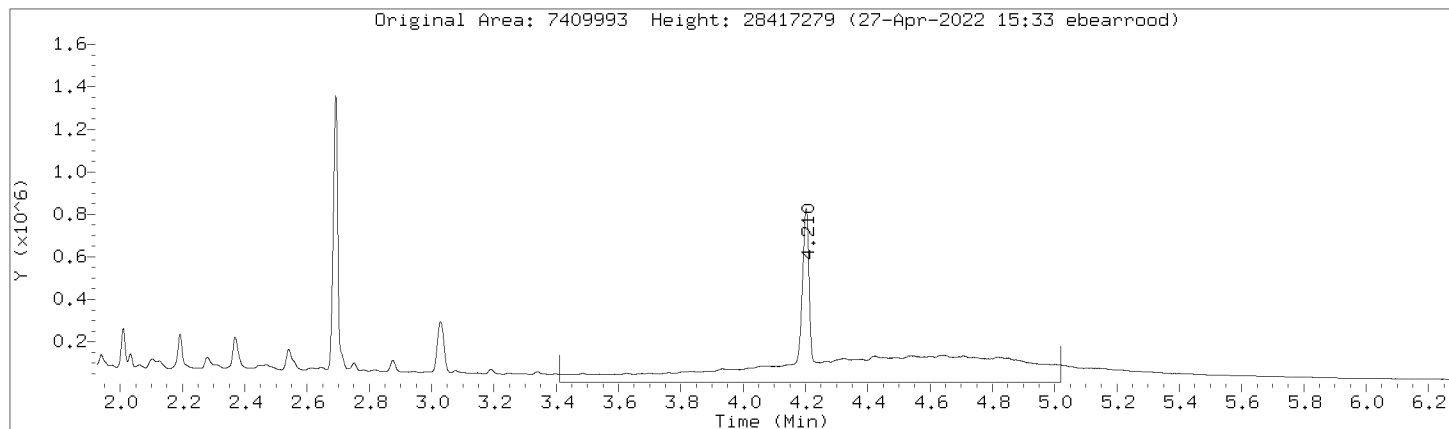
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



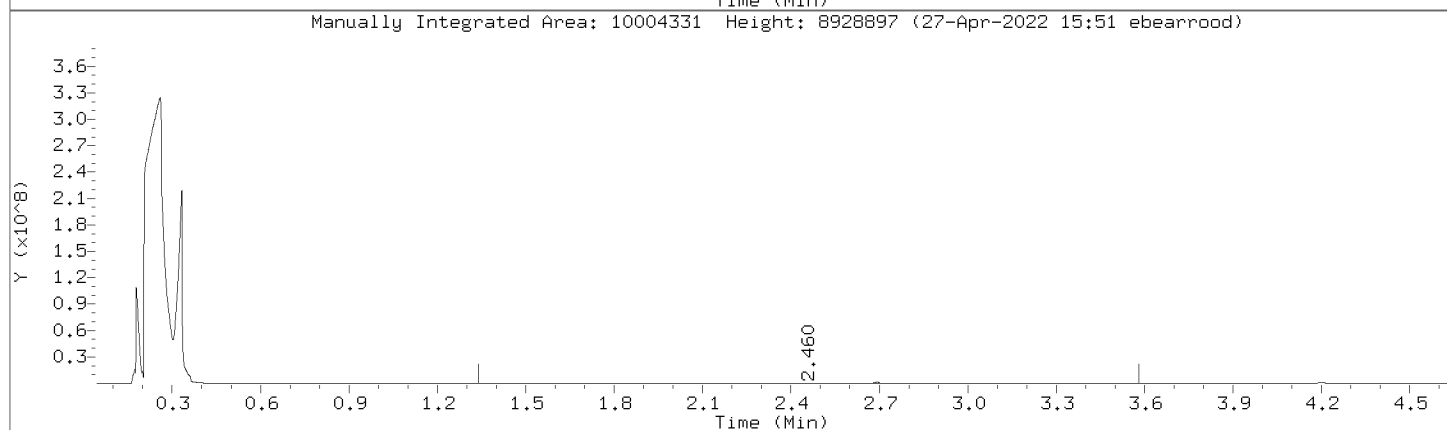
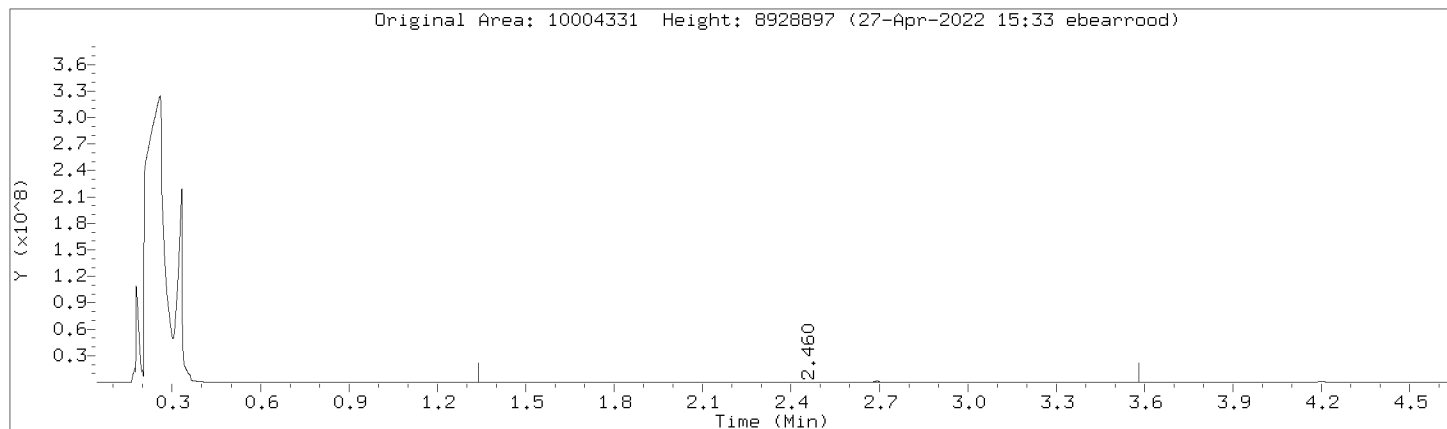
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

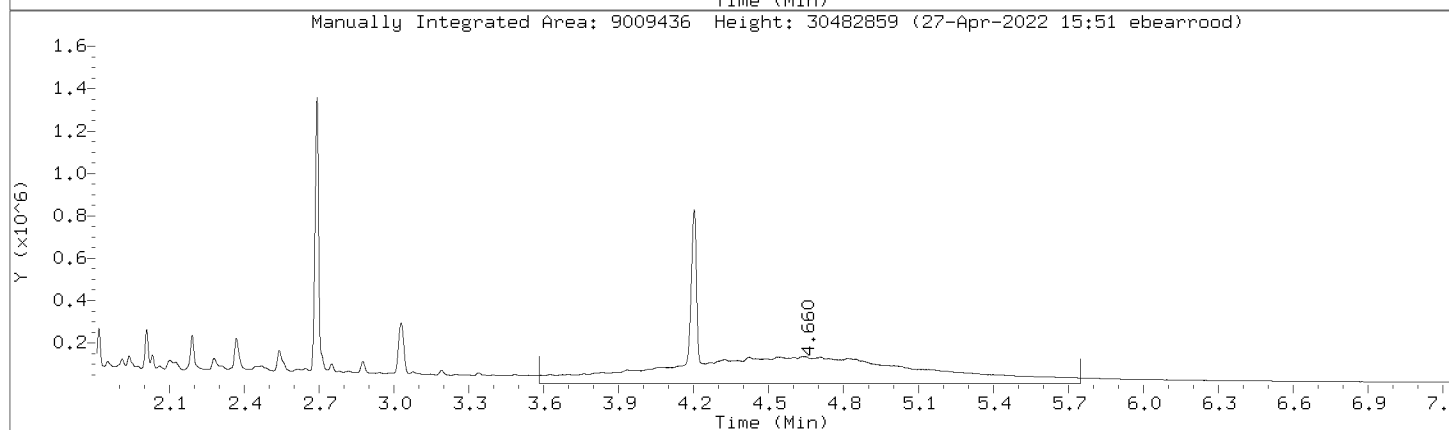
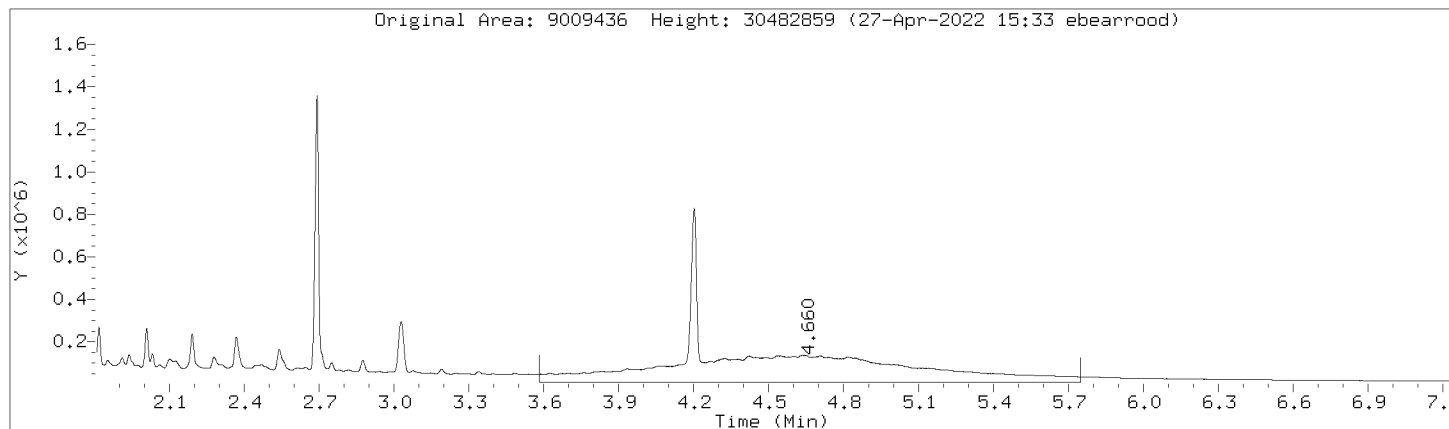
Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:





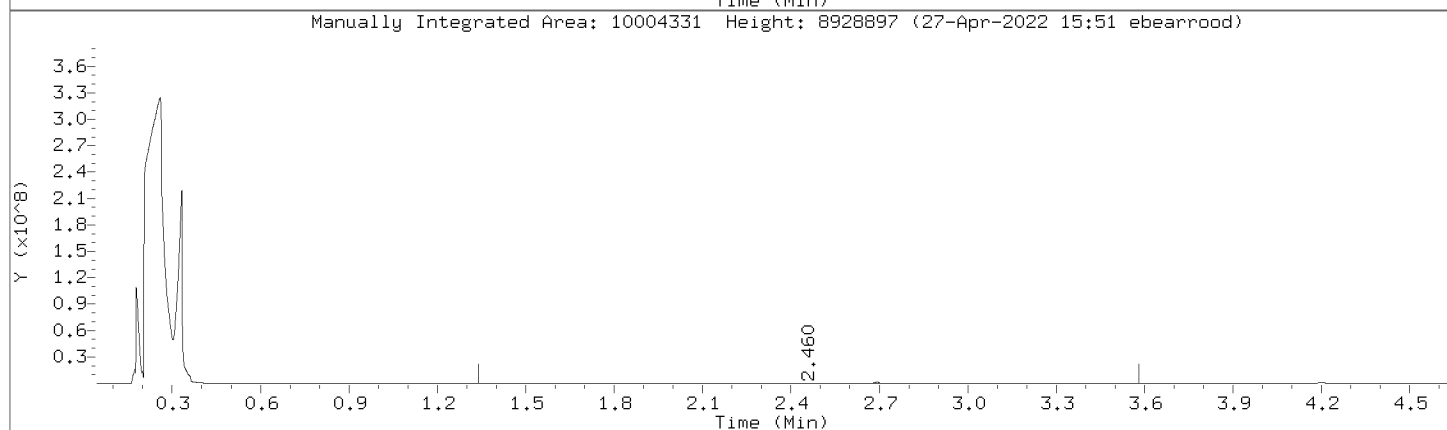
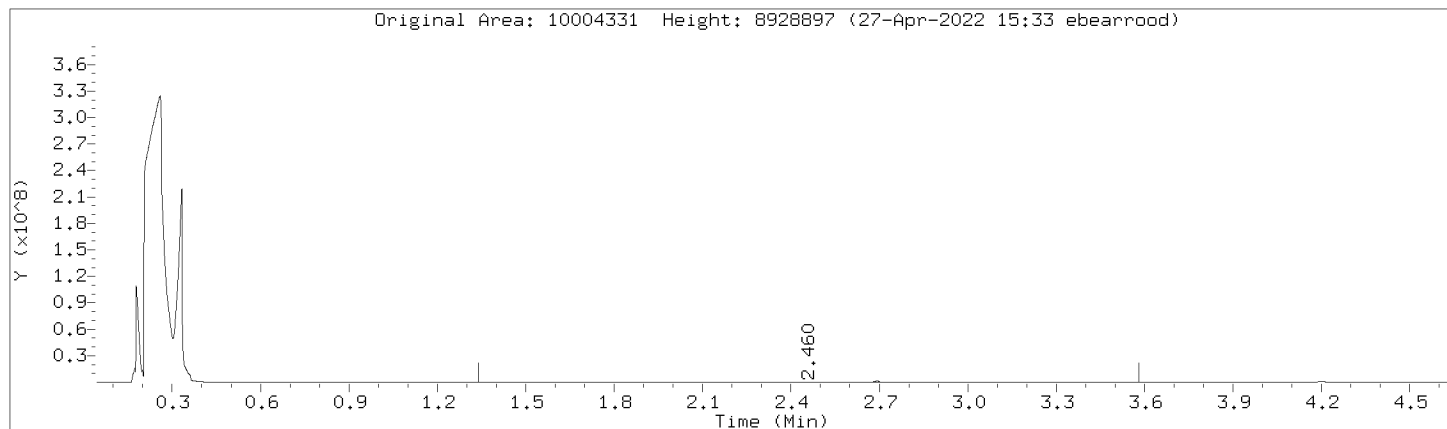
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Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



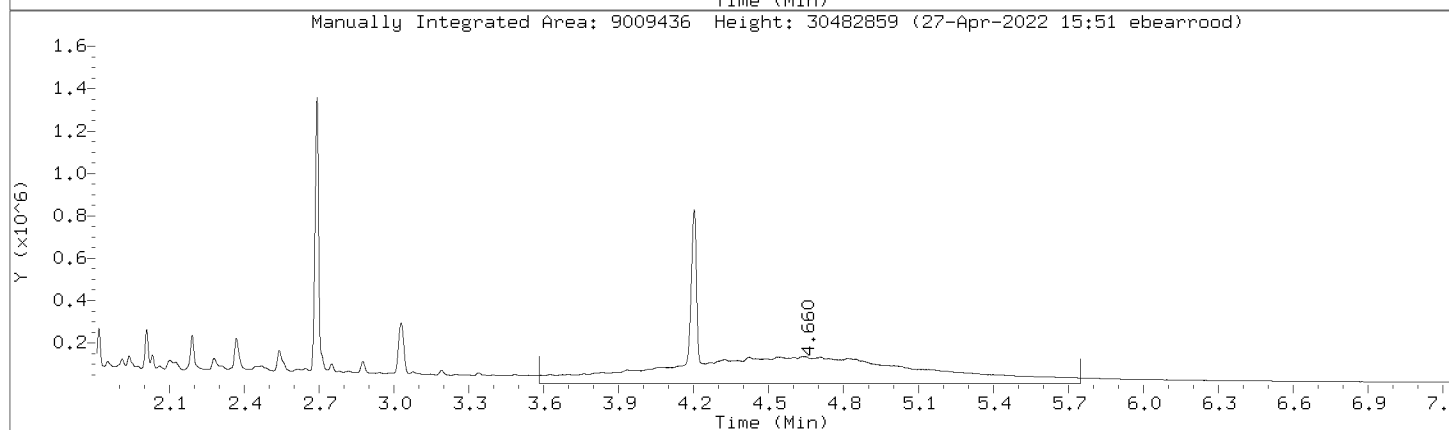
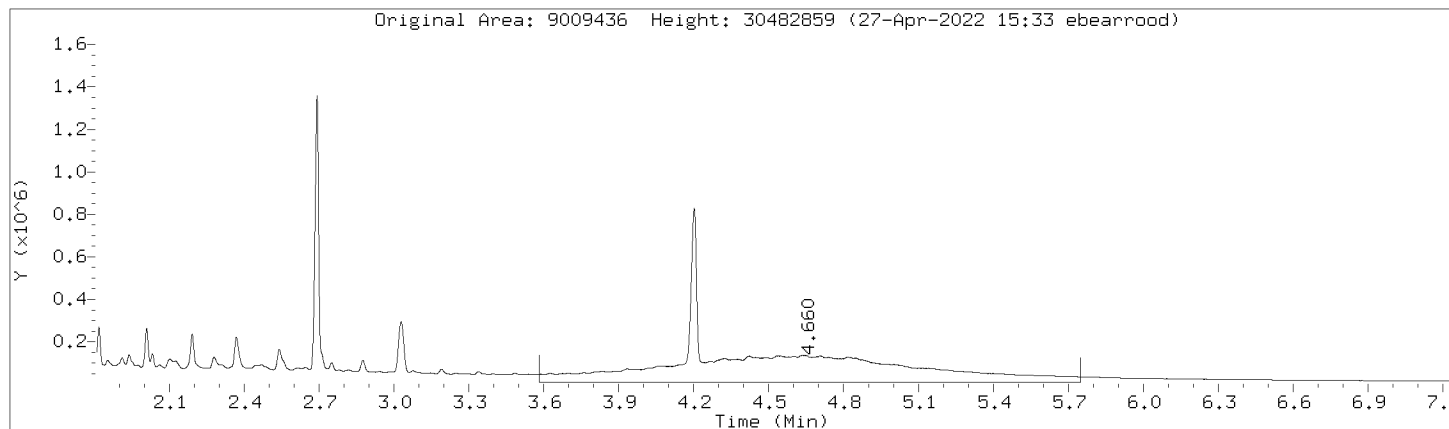
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



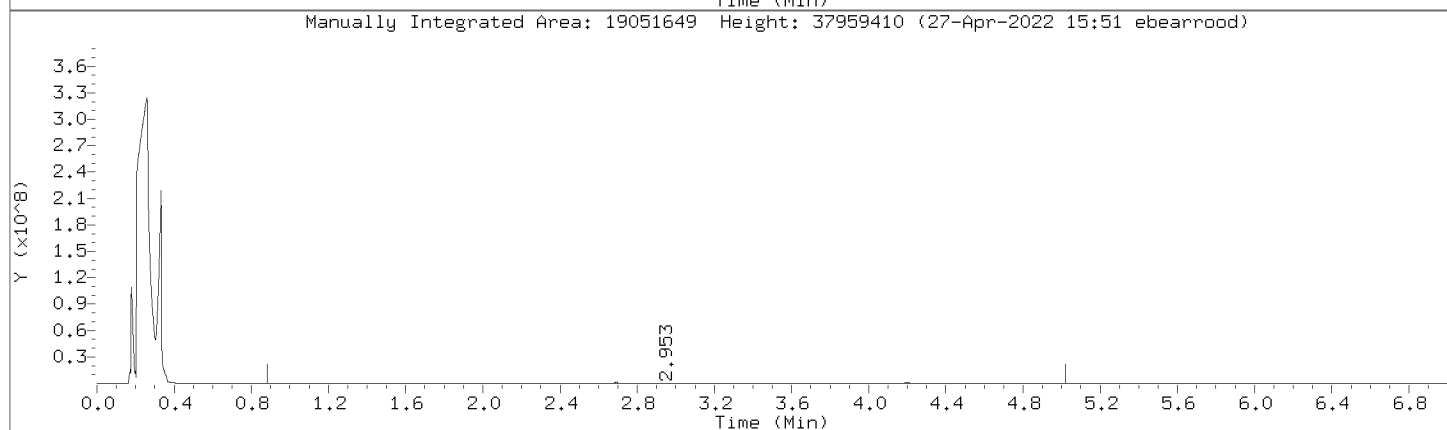
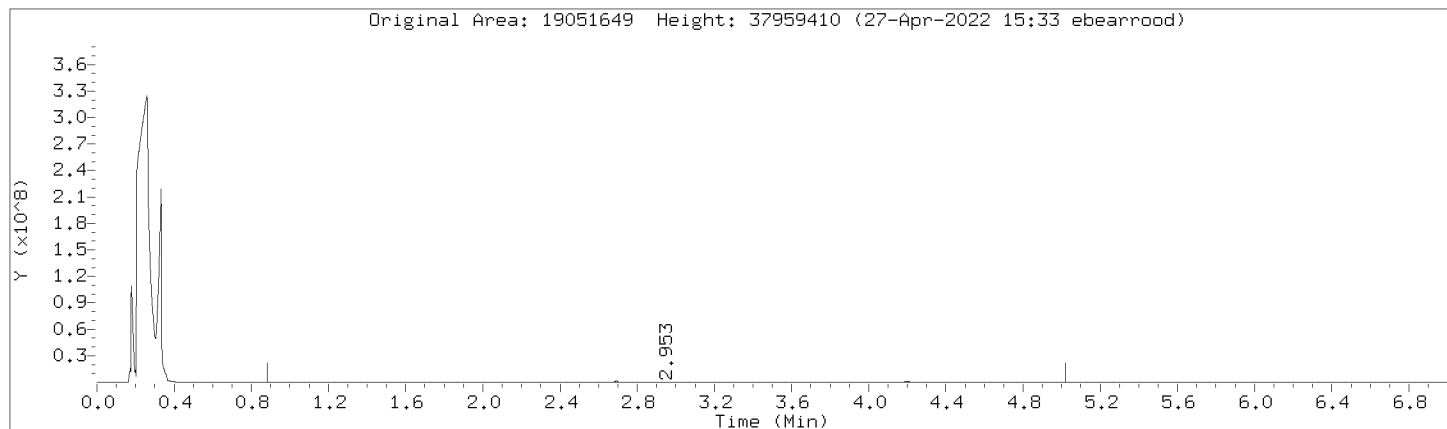
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Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



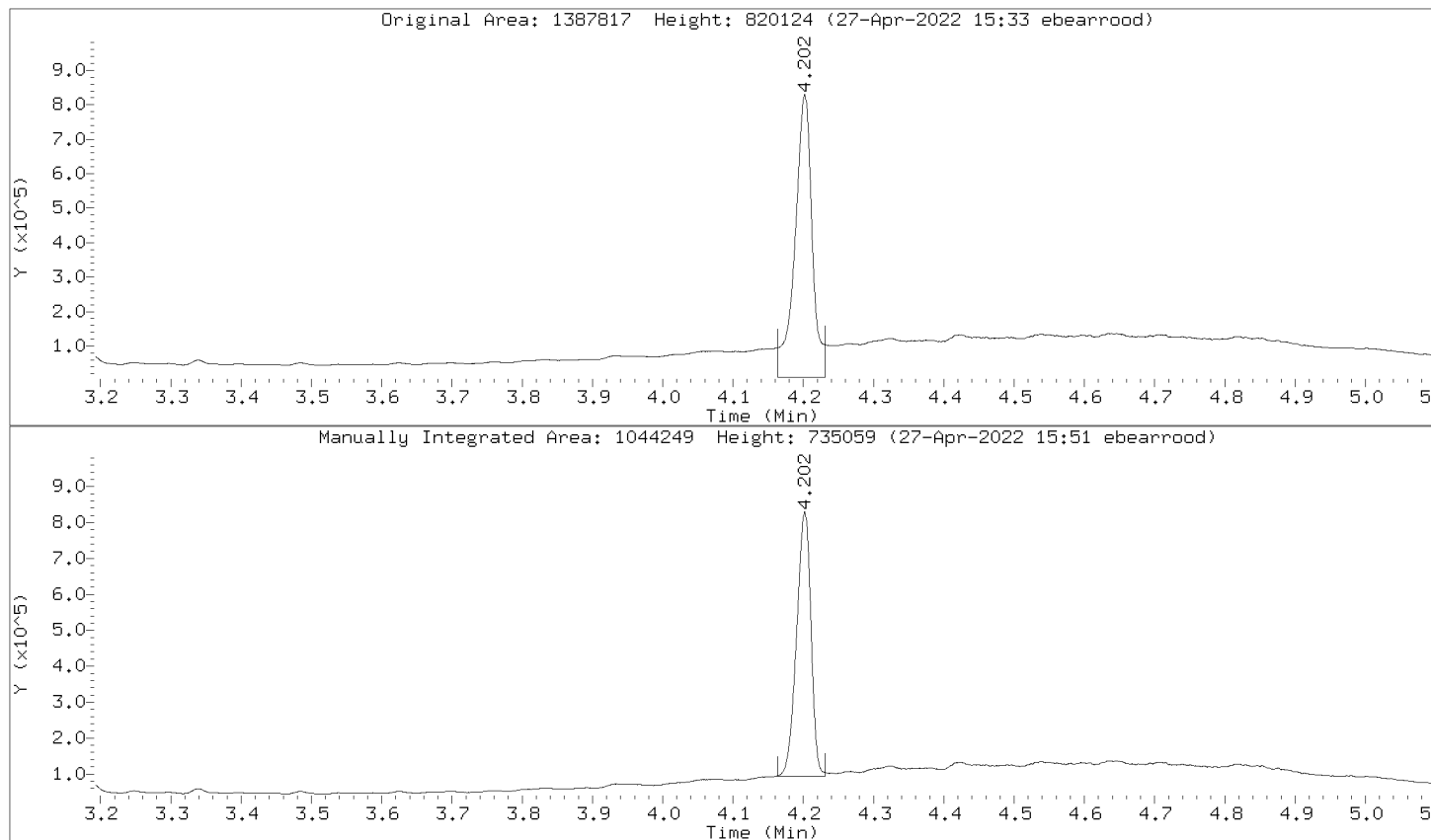
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



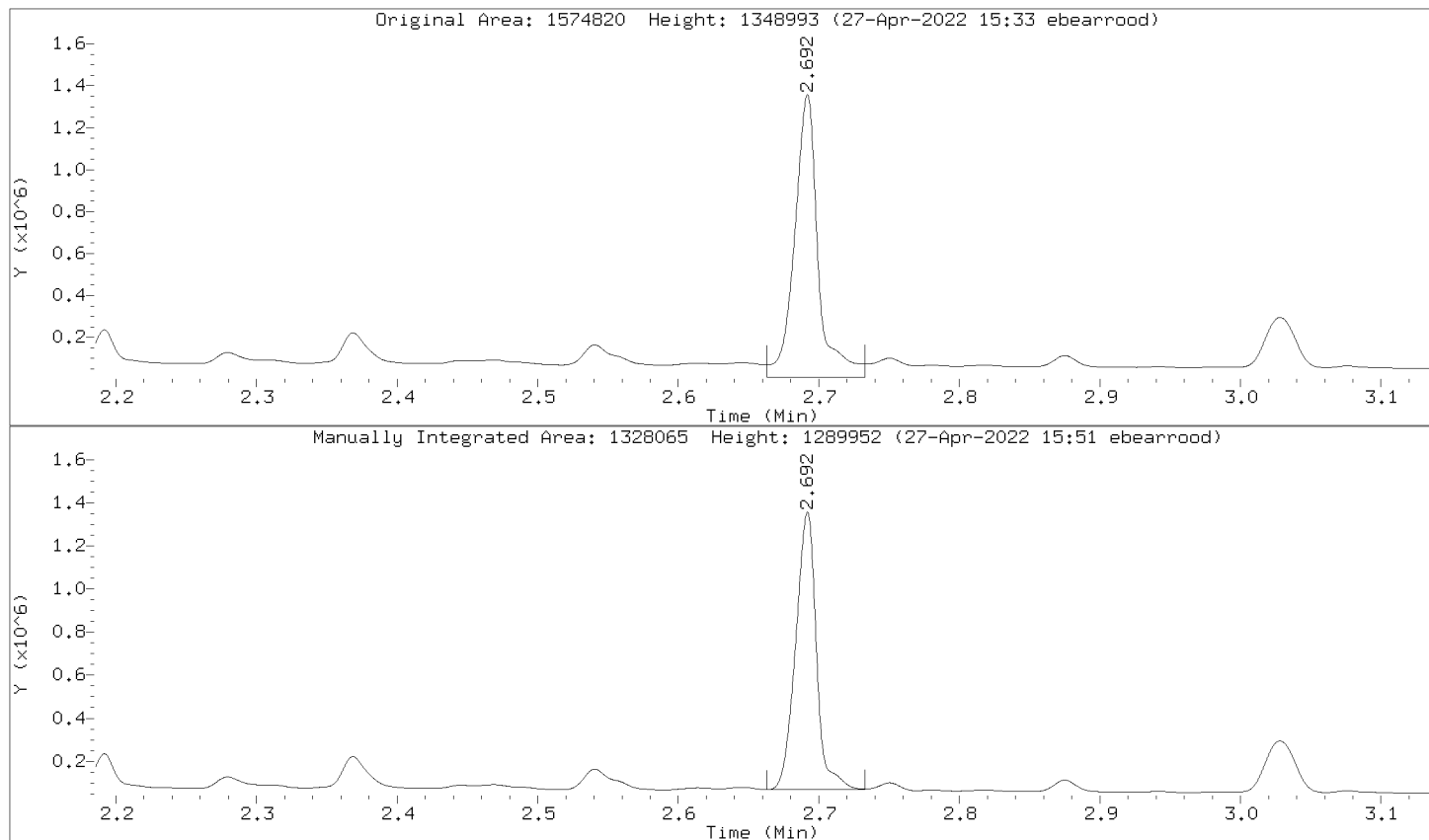
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000016.D  
Injection Date: 27-APR-2022 14:30  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,362377:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
 Lab Smp Id: DMO-CAL10,362378:2 Client Smp ID: DMO-CAL10,362378:2  
 Inj Date : 27-APR-2022 14:42  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal10,362378:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 87 Calibration Sample, Level: 10  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		23156787 4000.00	3980	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.698	2.685 0.013		2641228 400.000	399	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.210	4.193 0.017		2060731 400.000	399	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		14036526 4000.00	3990	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		26459303 4000.00	3980	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		14575028 4000.00	3990	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.885	- 5.020		37193313 8000.00	7970	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		19496130 4000.00	3990	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		19496130 4000.00	3990	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		17707474 4000.00	3990	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		17707474 4000.00	3990	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.



Date : 27-APR-2022 14:42

Client ID: DMO-CALL0,362378;2

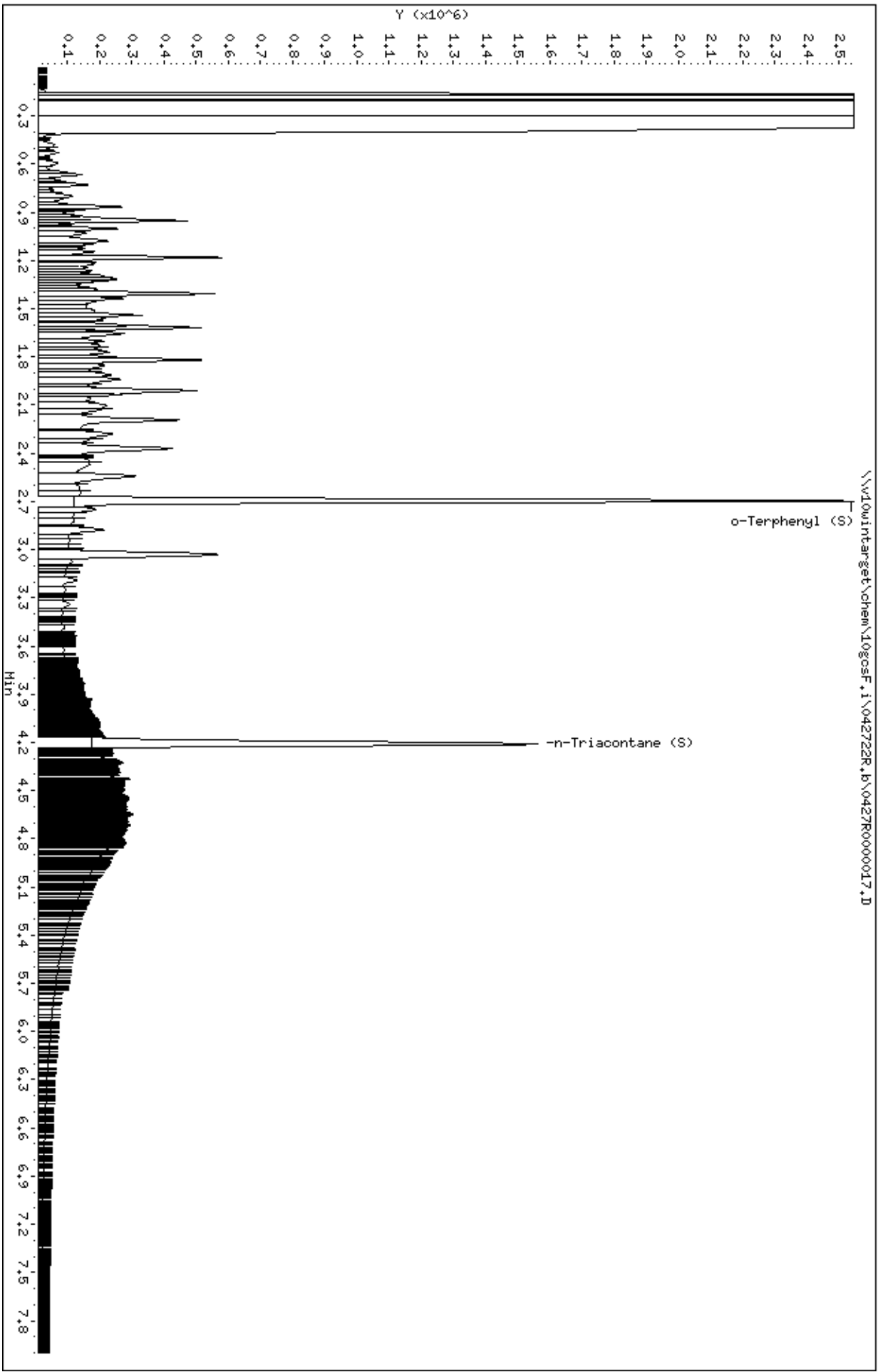
Sample Info: DMO-CALL0,362378;2

Instrument: 10gocsf.1

Operator: EB3

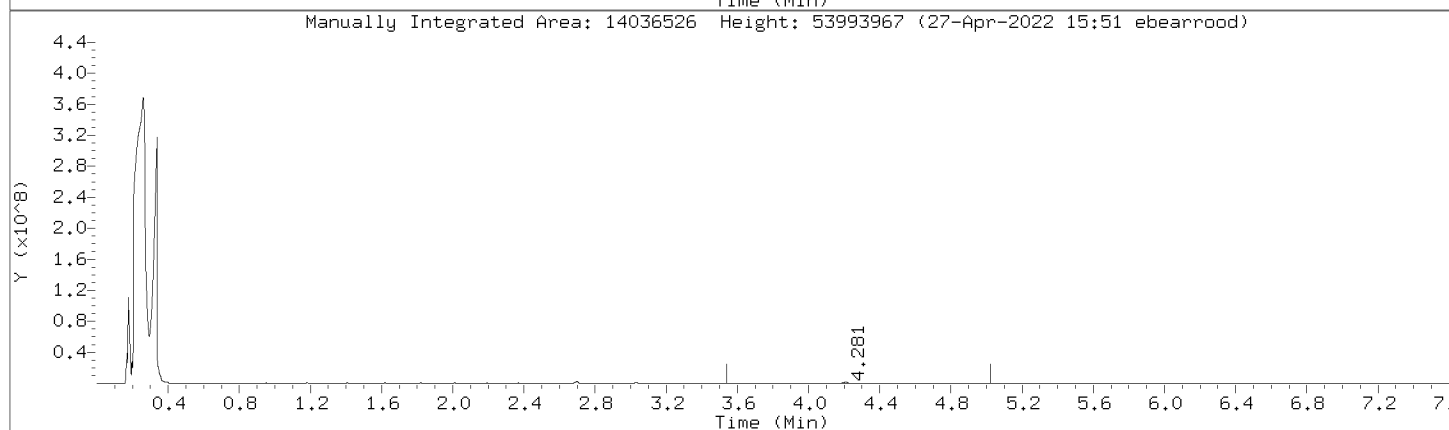
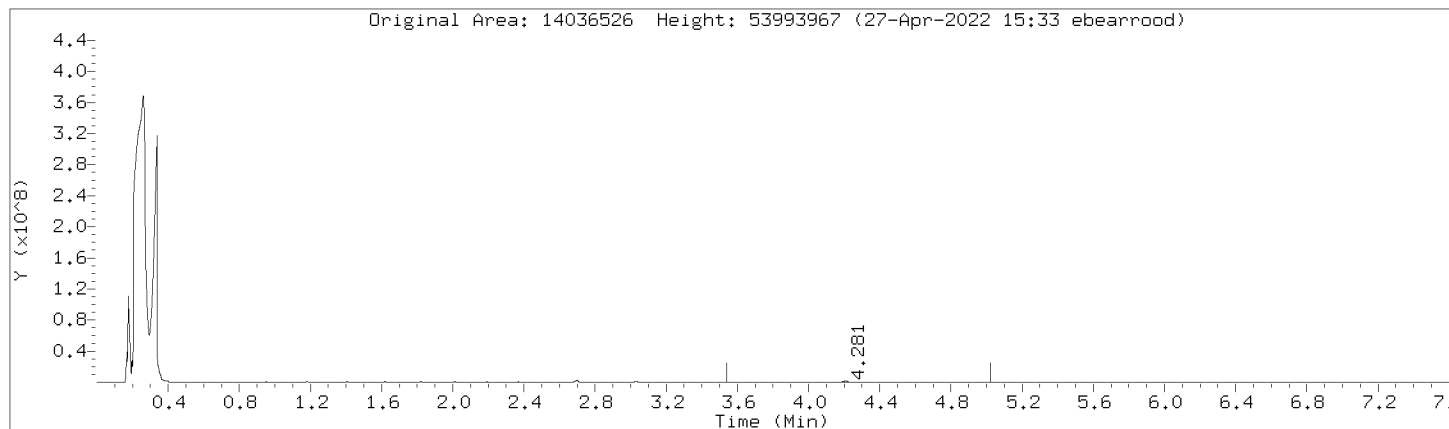
Column diameter: 0.32

Column phase: DB-5-US21430033



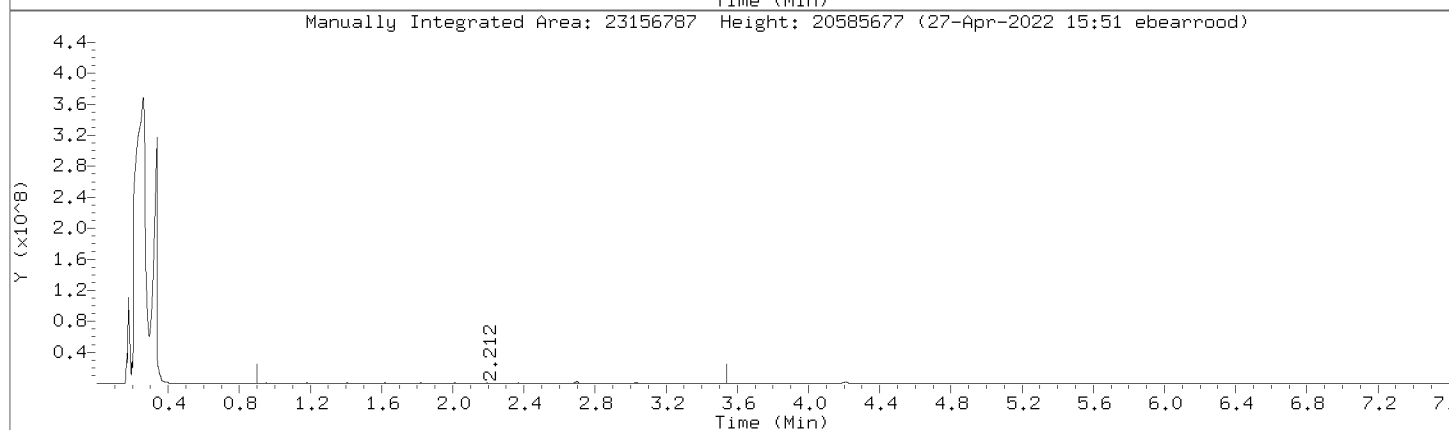
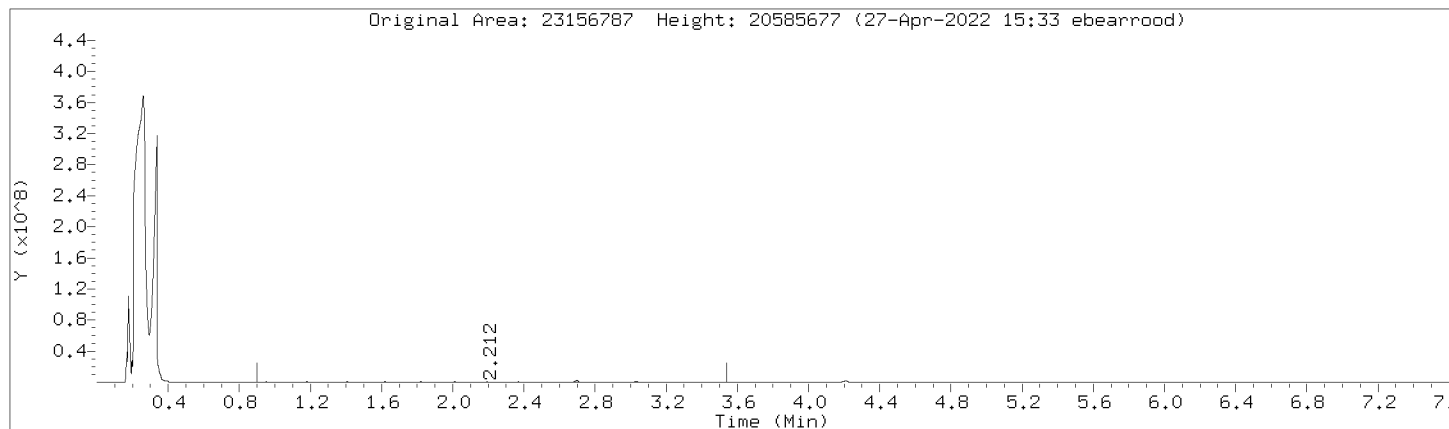
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



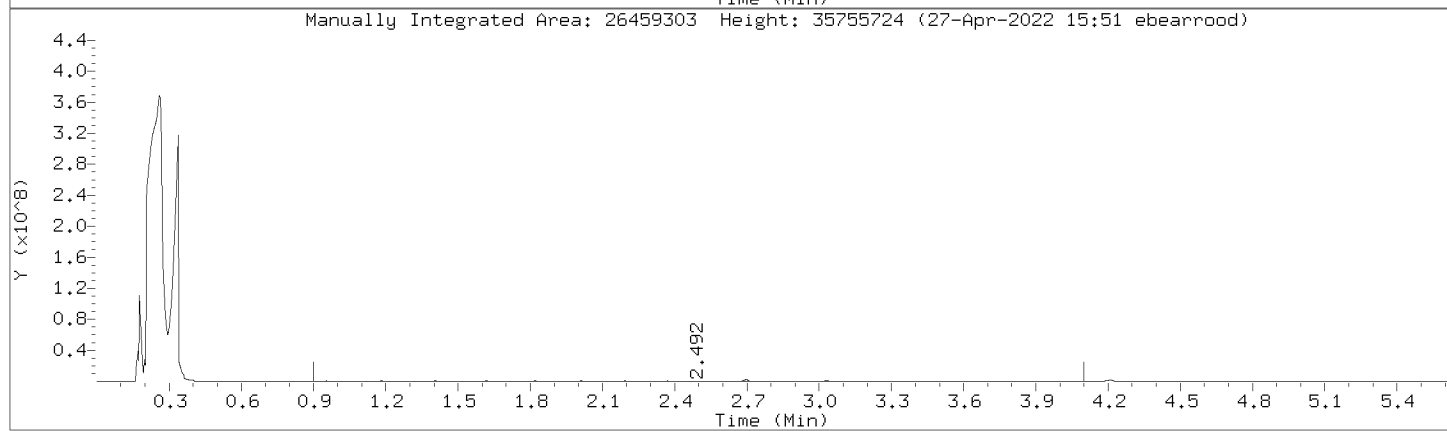
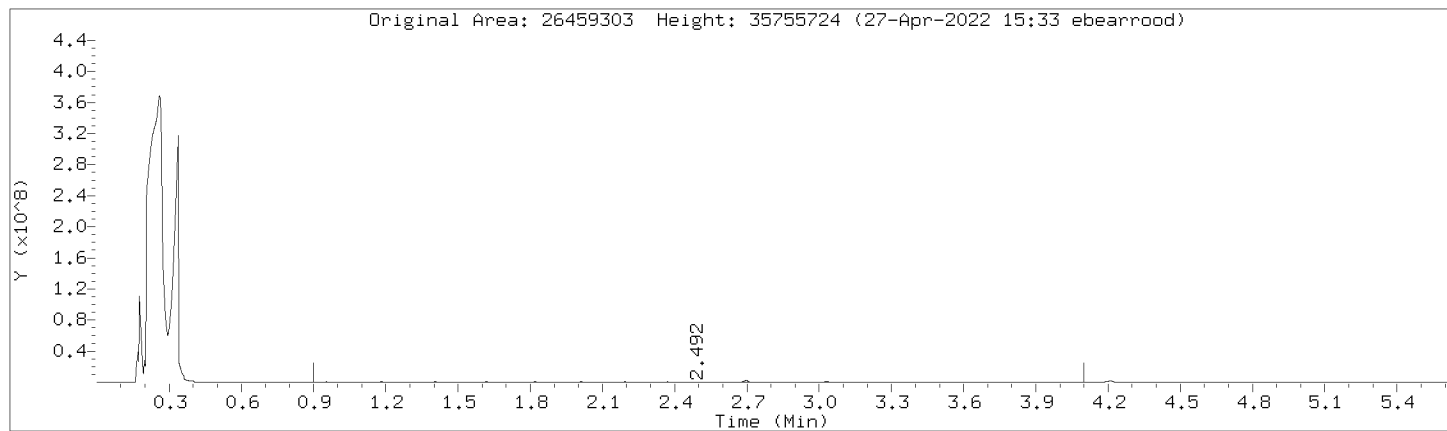
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

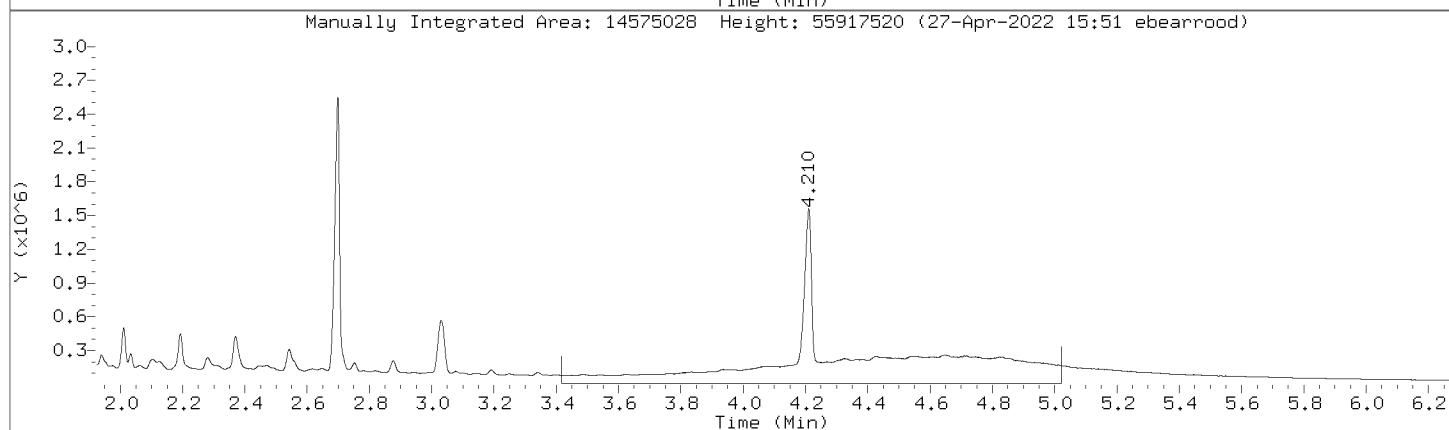
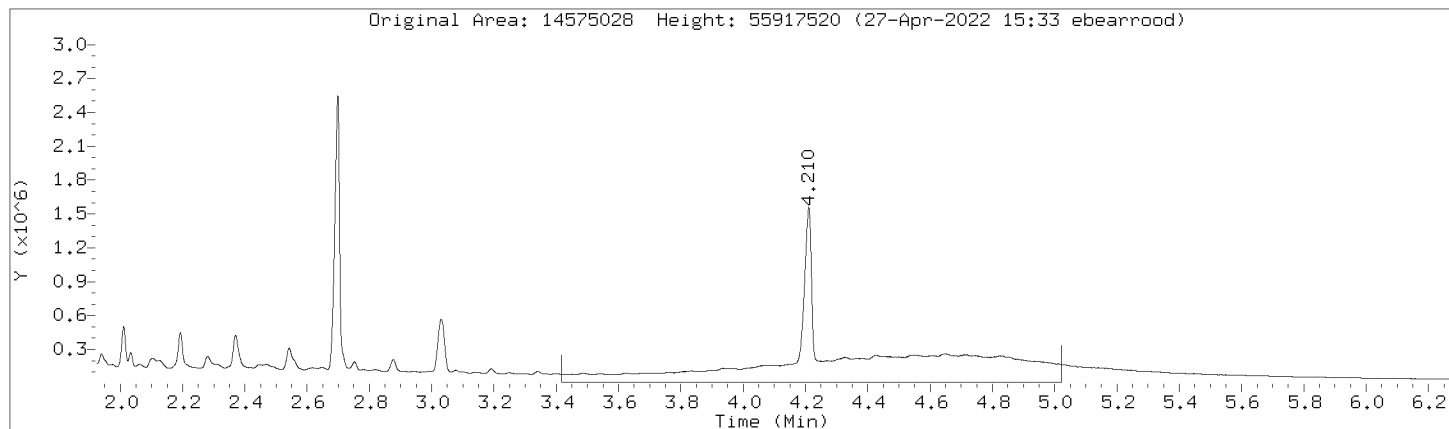
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

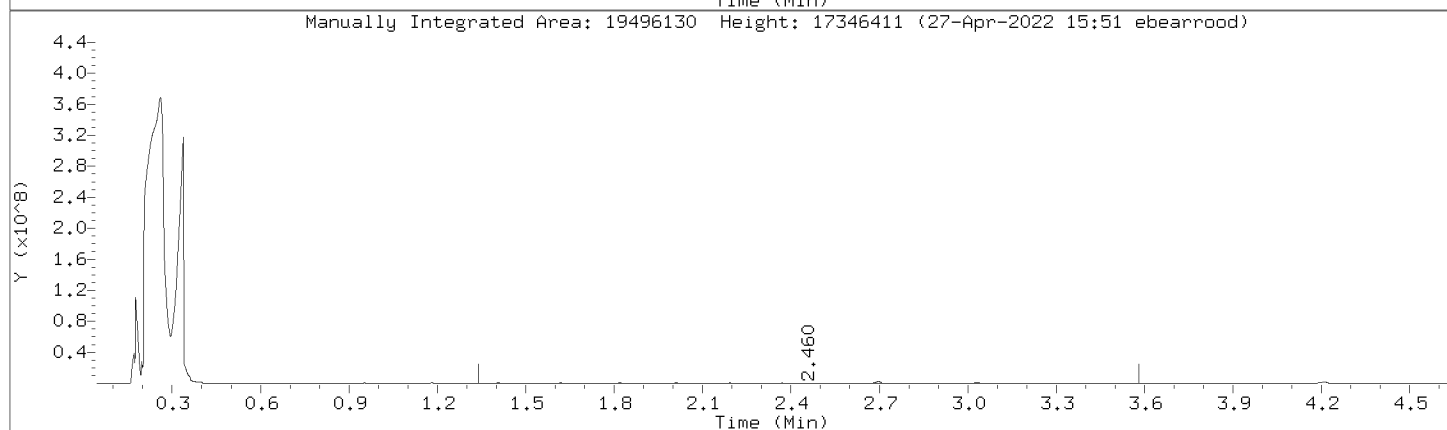
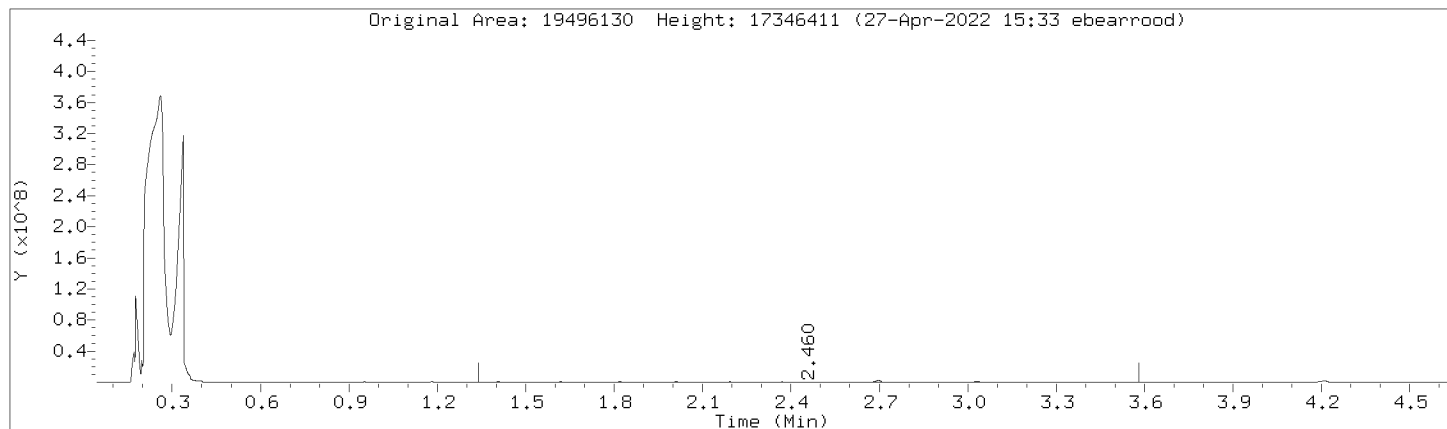
Compound: Motor Oil Range (C24-C36)  
CAS Number:

Review Code: RNG



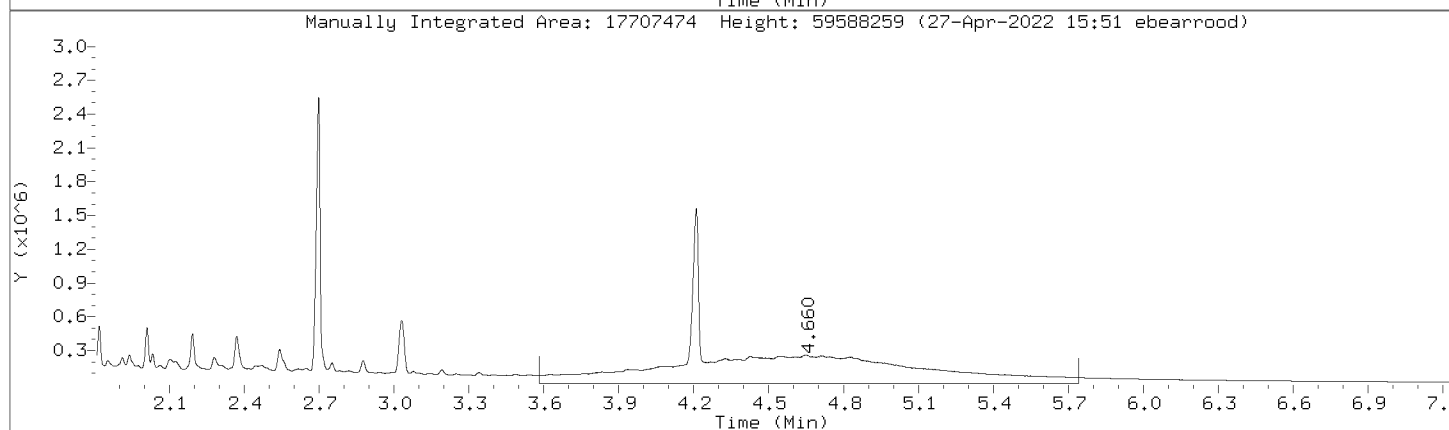
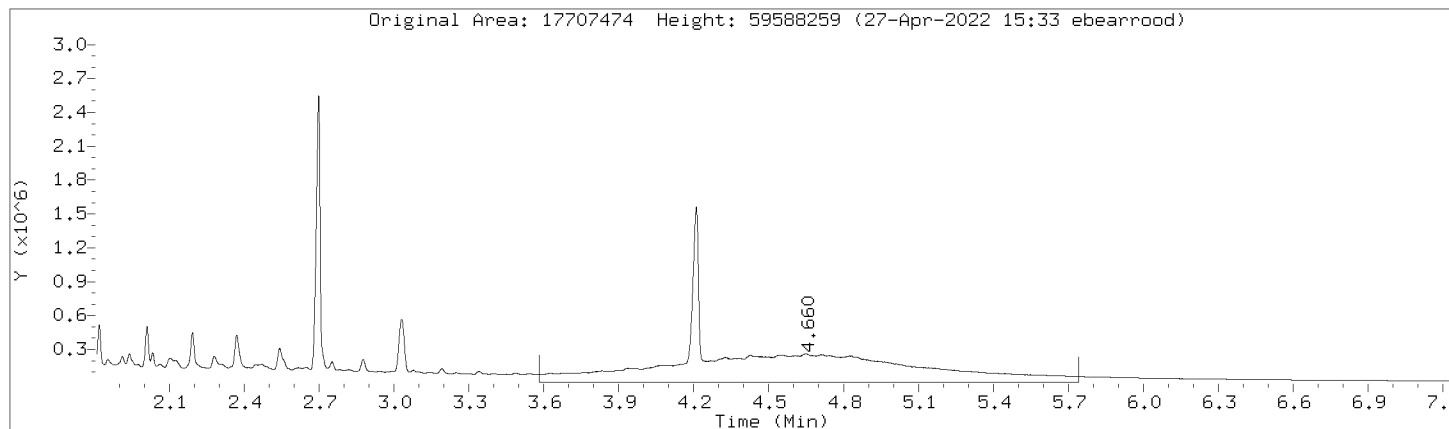
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



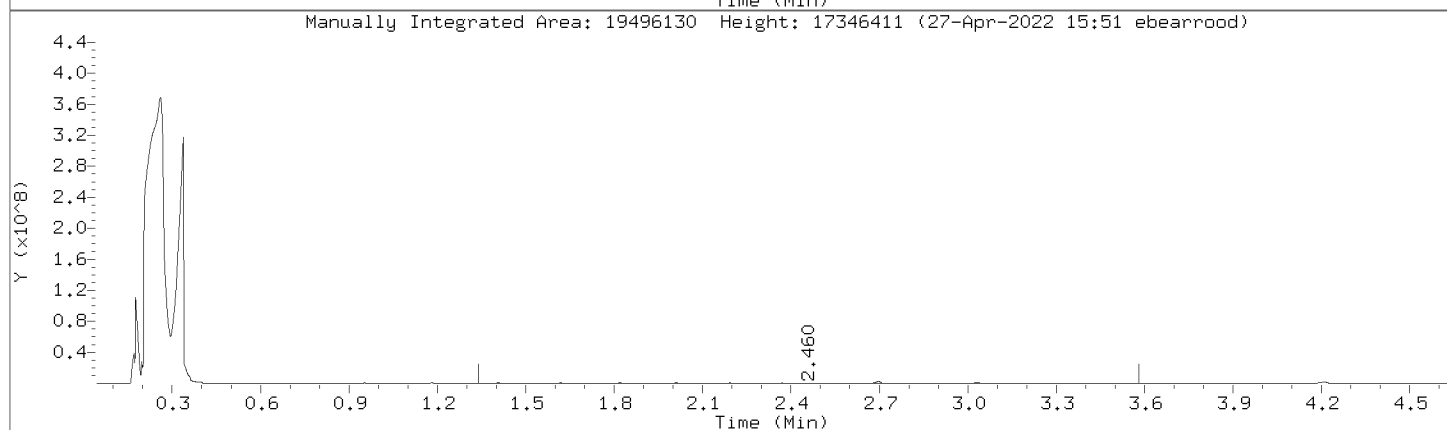
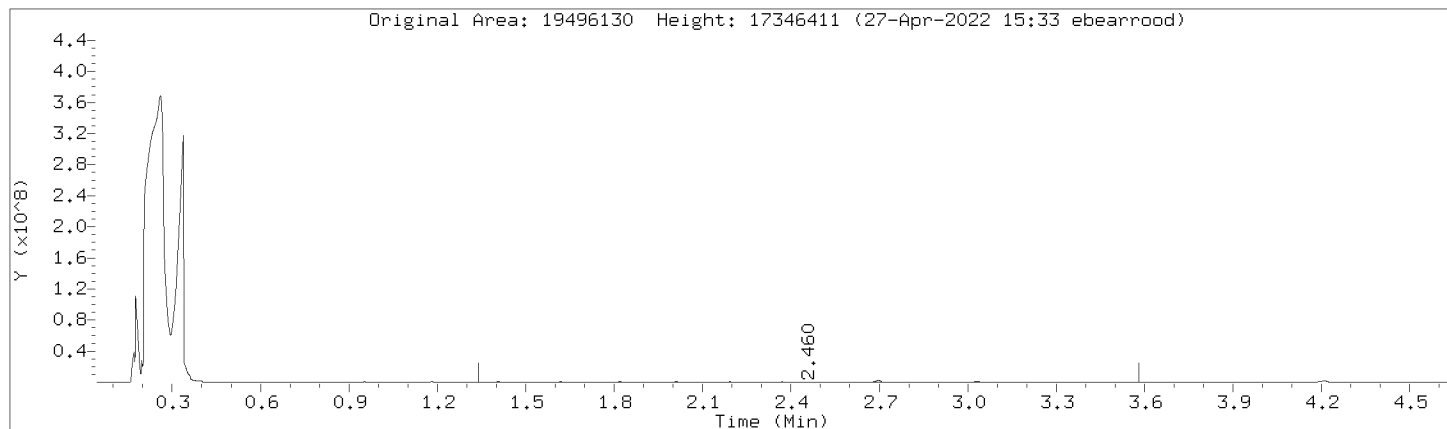
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Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

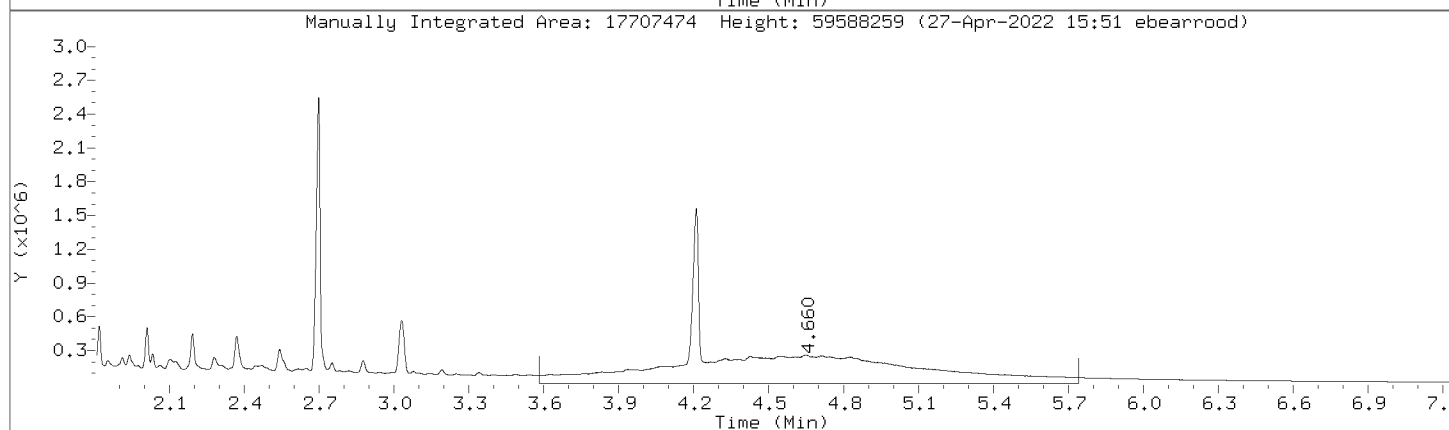
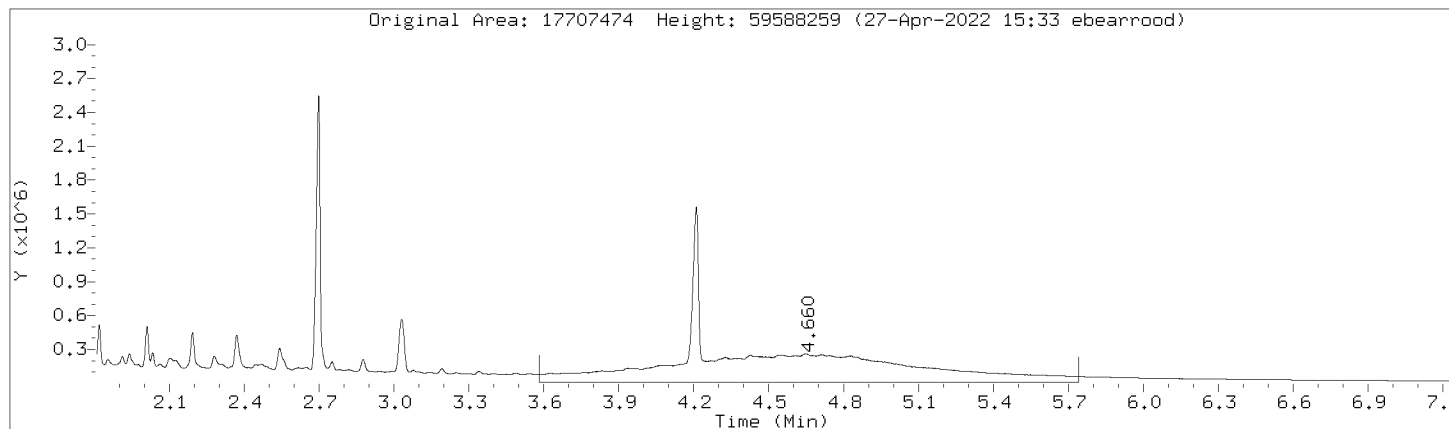
Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:





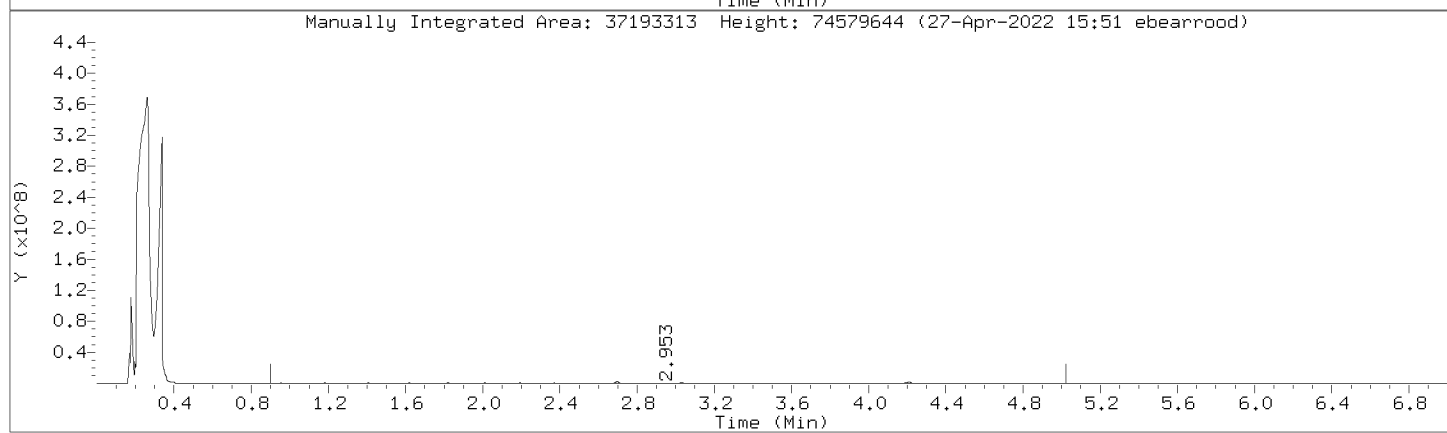
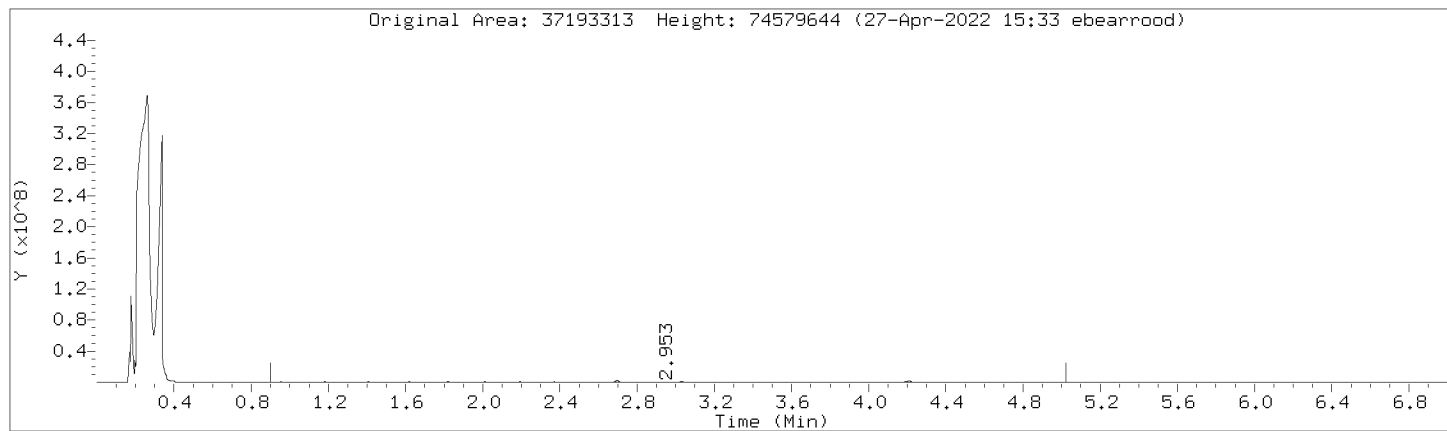
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



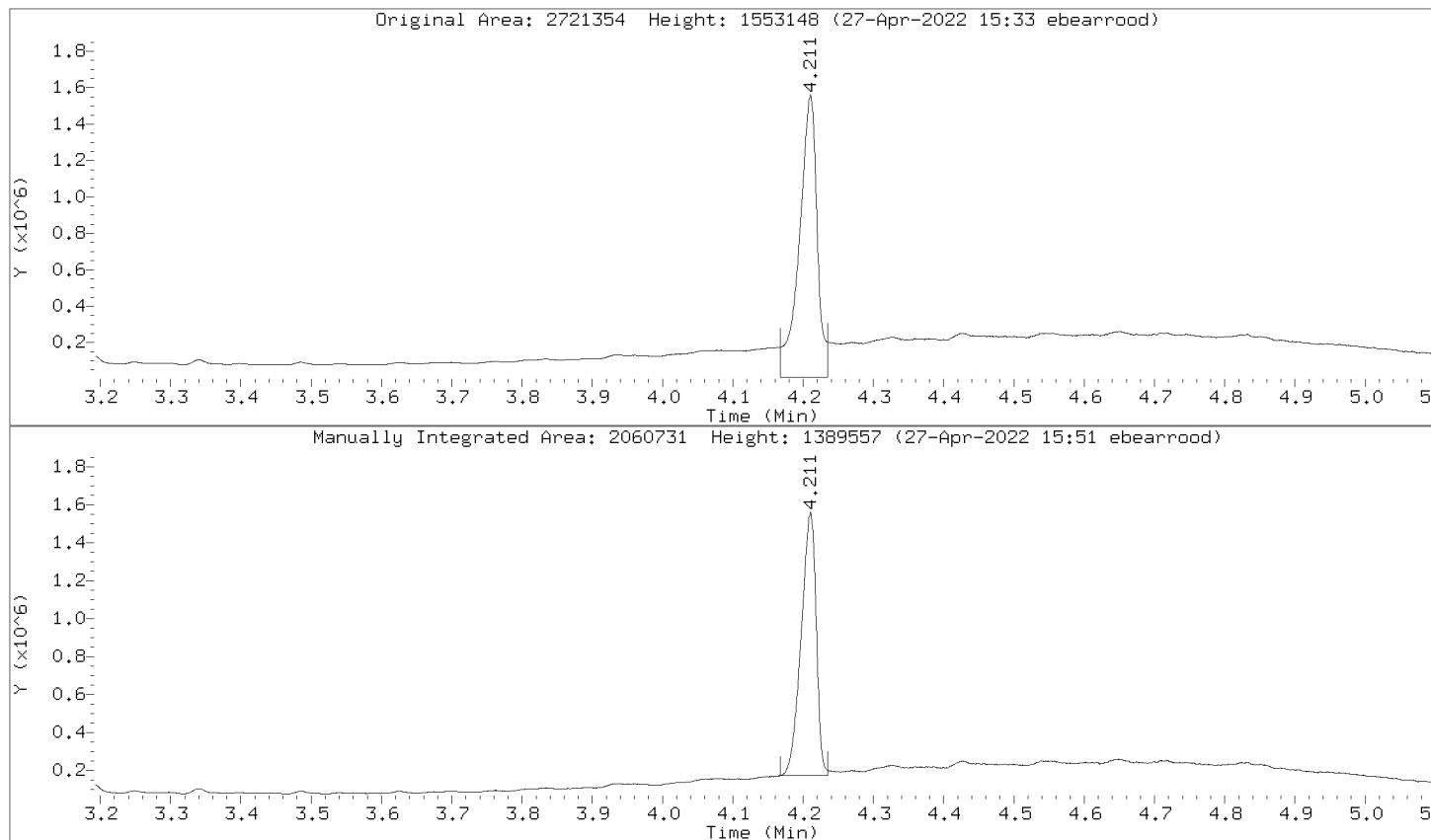
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Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



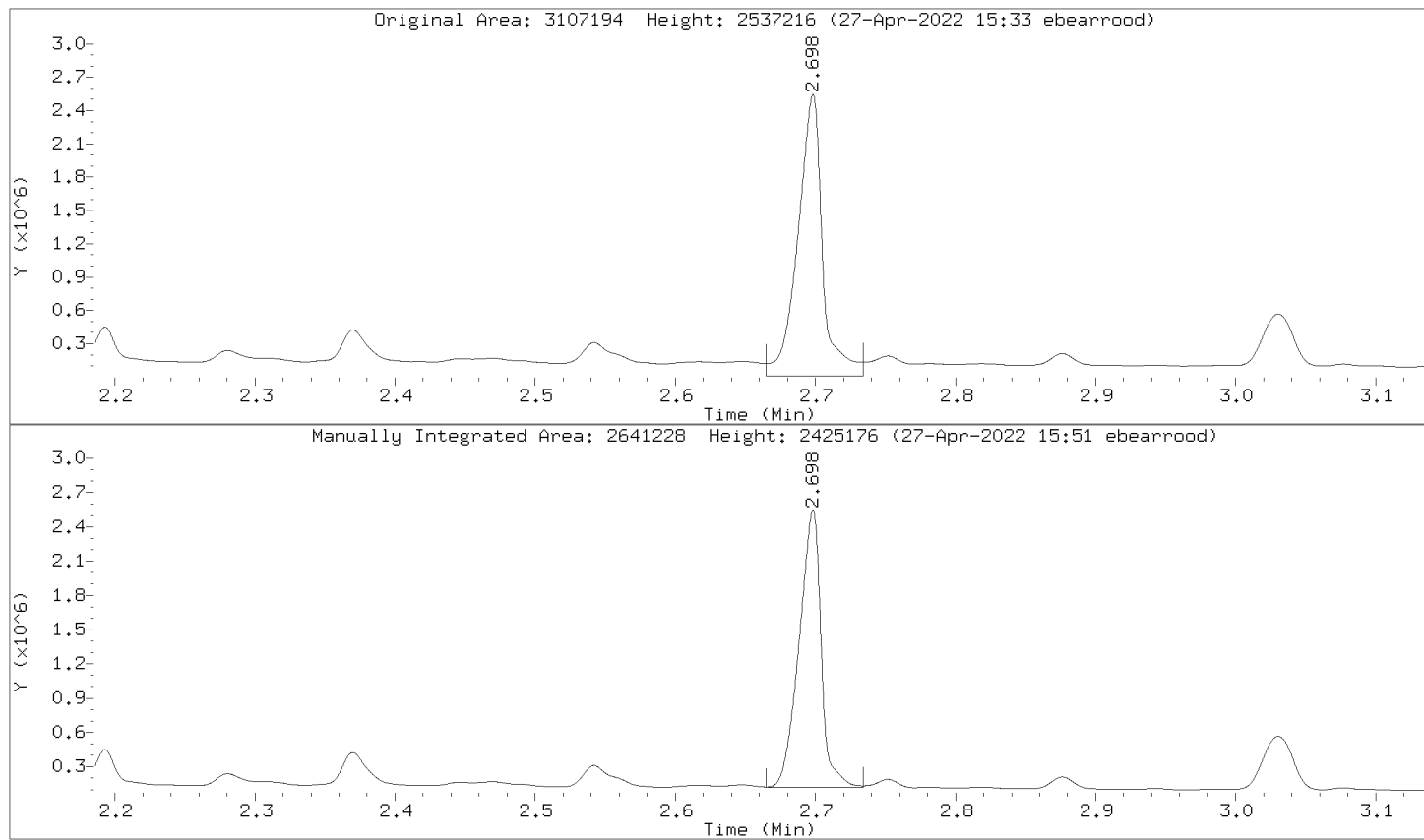
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Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000017.D  
Injection Date: 27-APR-2022 14:42  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,362378:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
 Lab Smp Id: PBLK,349203:2 Client Smp ID: PBLK,349203:2  
 Inj Date : 27-APR-2022 15:15  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : pblk,349203:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\042722R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 27-Apr-2022 16:06 ebearrood Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 89  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			ON-COL RESPONSE (ug/mL)	FINAL (ug/mL)	
S 1	DRO by AK 102			CAS #:	
0.885	- 3.540		316955		(M) RNG
\$ 2	o-Terphenyl (S)			CAS #:	
2.684	2.685 -0.001		322293 48.2082	48.2	(RM) BA
\$ 3	n-Triacontane (S)			CAS #:	
4.192	4.193 -0.001		256654 49.0505	49.0	(RM) BA
S 4	Residual Range Organics AK103			CAS #:	
3.541	- 5.020		105170		(M) RNG
S 5	TPH-DRO (C10-C28)			CAS #:	
0.885	- 4.099		355128		(M) RNG
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.400	- 5.020		376803 68.6955	68.7	(M) RNG
S 7	C10-C36			CAS #:	
0.885	- 5.020		678780 43.5931	43.6	(M) RNG
S 8	Diesel Fuel Range			CAS #:	
1.340	- 3.580		285316		(M) RNG
S 9	Diesel Fuel Range SG			CAS #:	
1.340	- 3.580		285316		(M) RNG
S 10	Motor Oil Range			CAS #:	
3.581	- 5.740		415690 67.8385	67.8	(M) RNG
S 11	Motor Oil Range SG			CAS #:	
3.581	- 5.740		415690 67.8385	67.8	(M) RNG

QC Flag Legend

R - Spike/Surrogate failed recovery limits.  
M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 27-APR-2022 15:15

Client ID: PBLK,349203;2

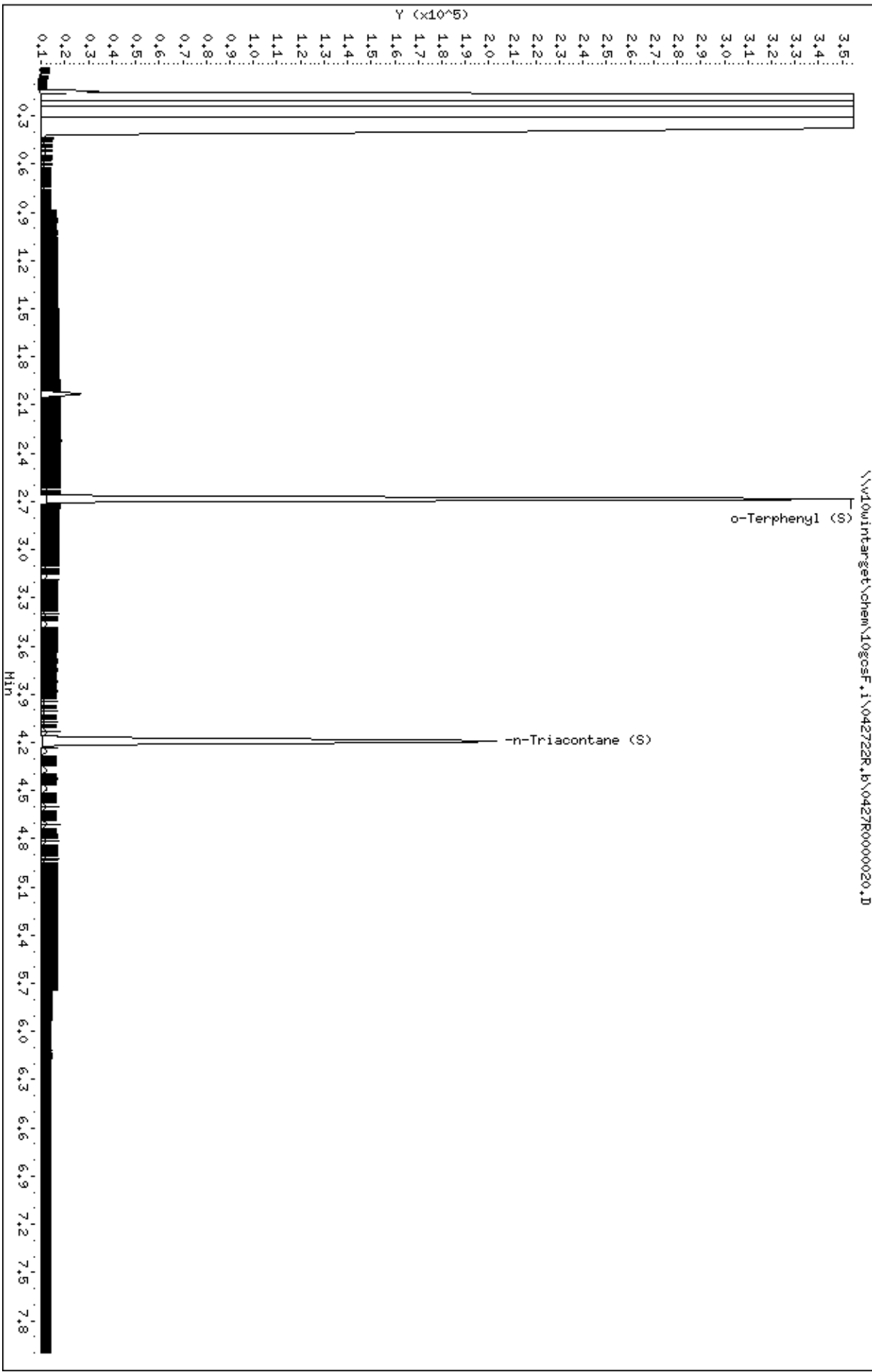
Sample Info: PBLK,349203;2

Instrument: 10gocsf.1

Operator: EB3

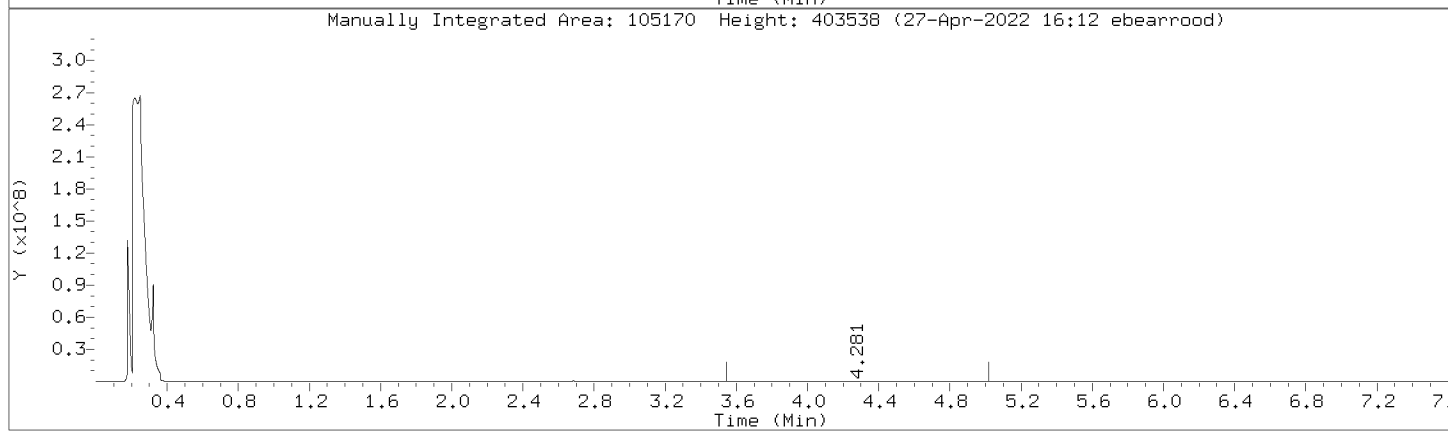
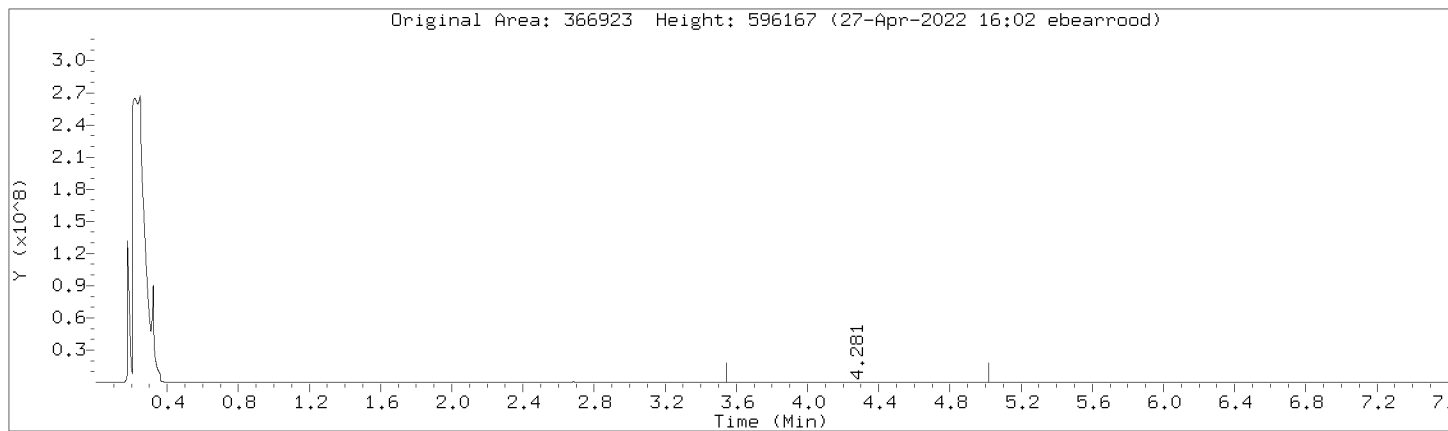
Column diameter: 0.32

Column phase: DB-5-MS21430033



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

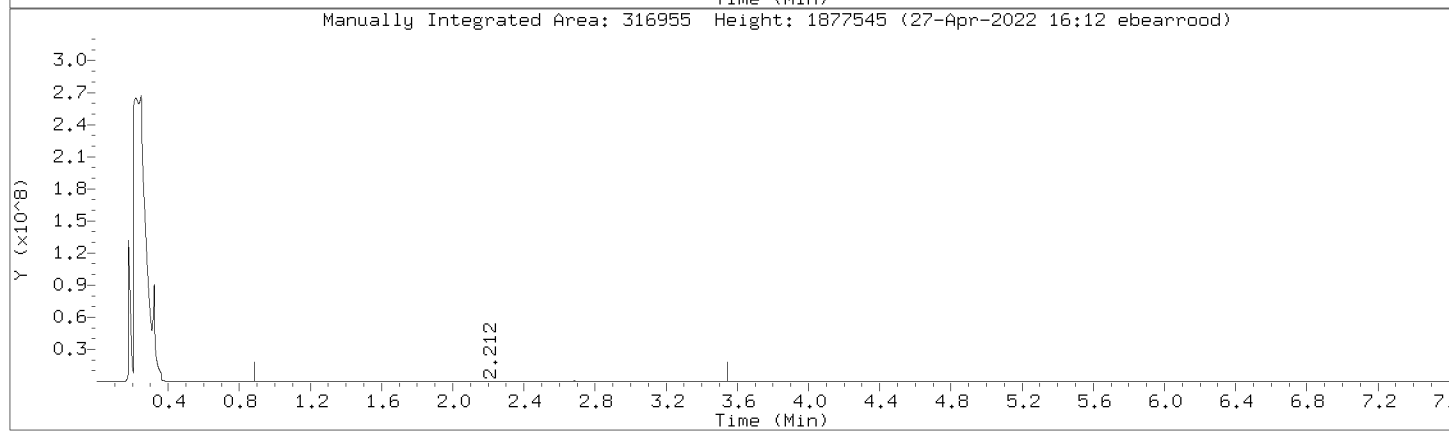
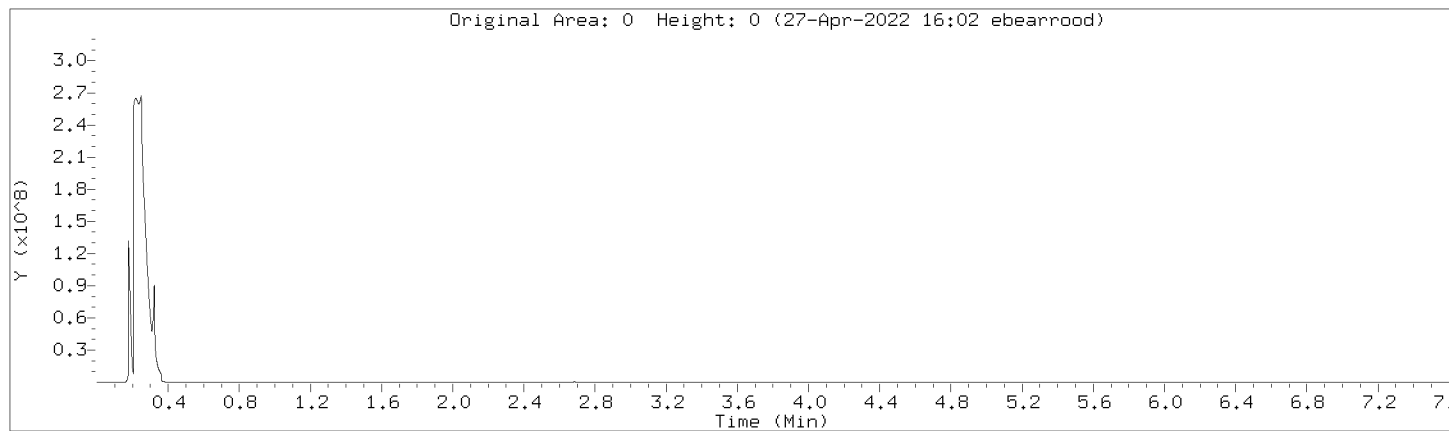
Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:





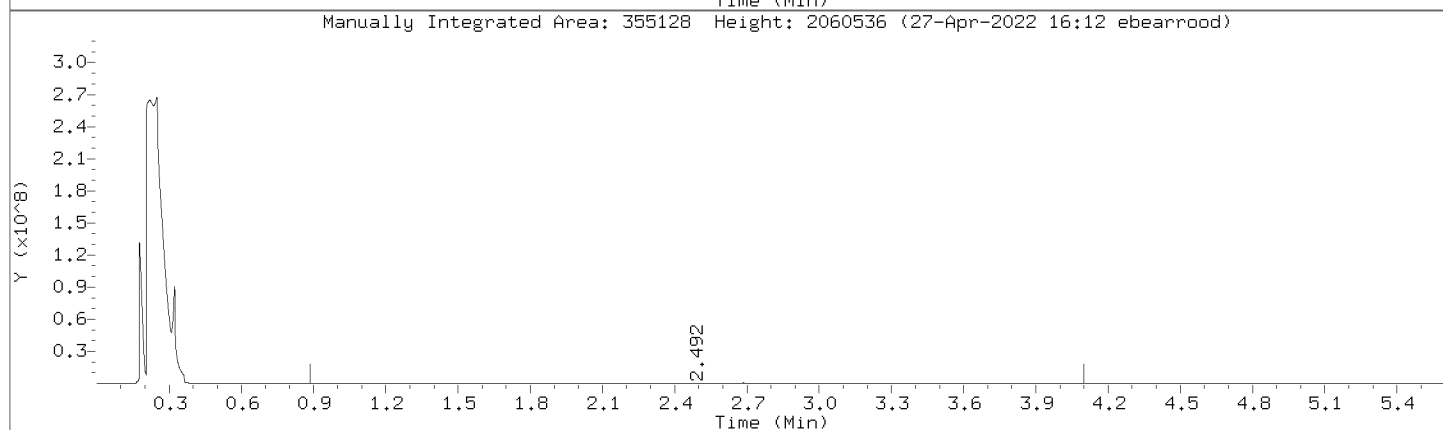
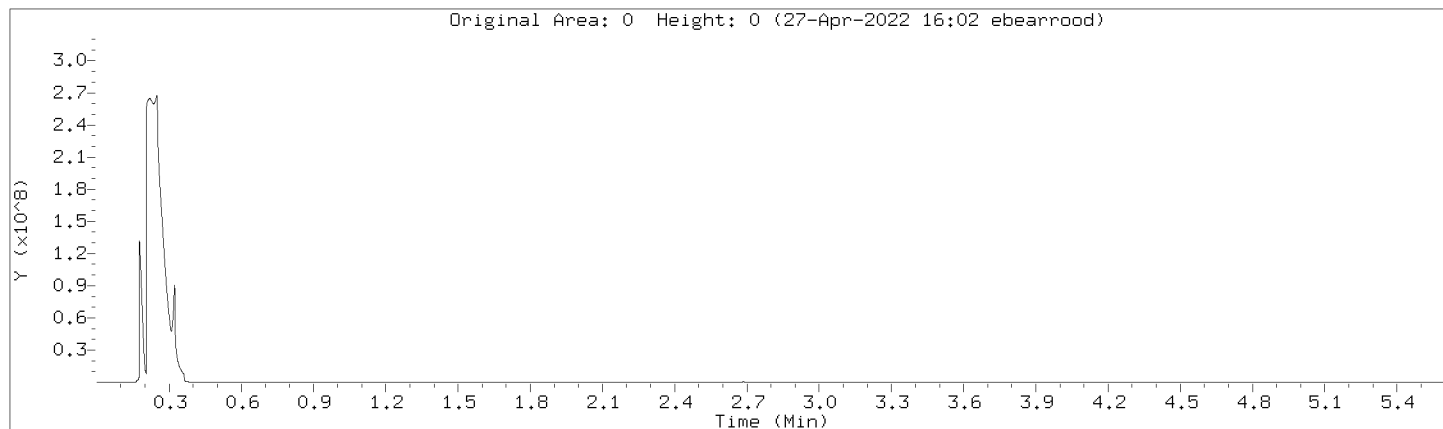
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D

Injection Date: 27-APR-2022 15:15

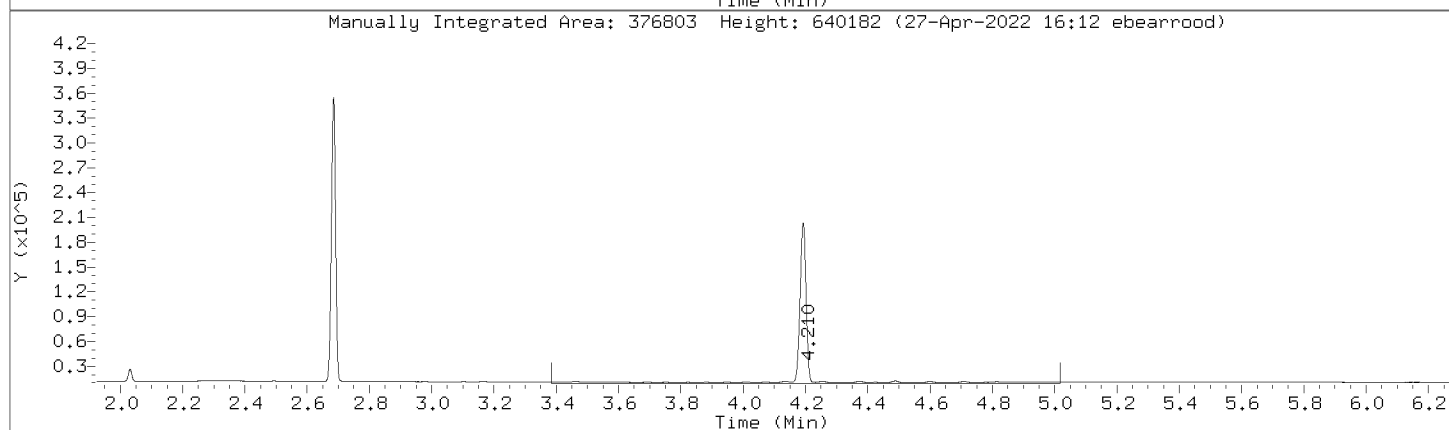
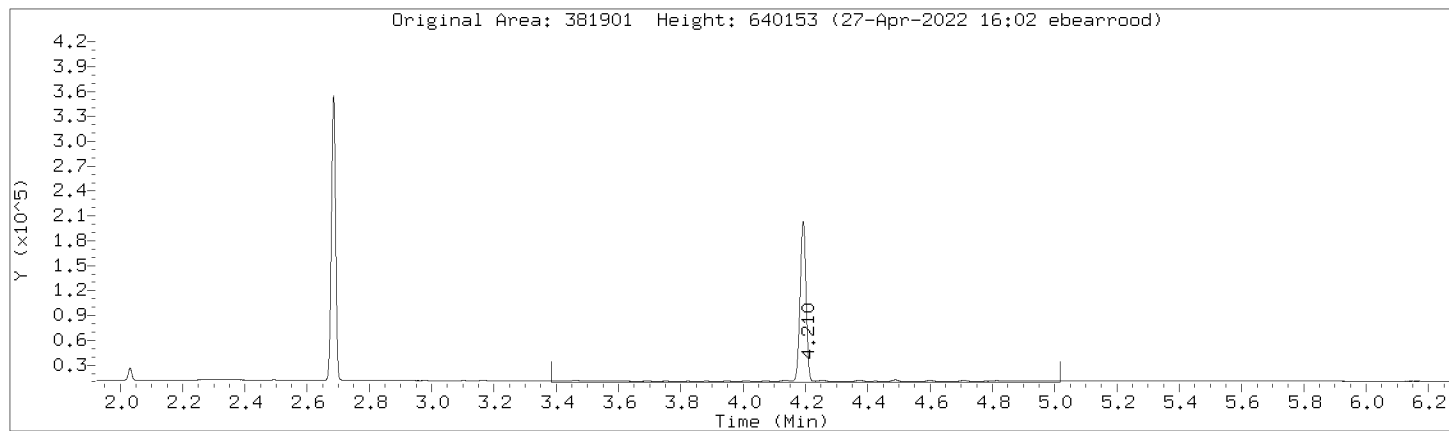
Instrument: 10gcsF.i

Lab Sample ID: PBLK,349203:2

Compound: Motor Oil Range (C24-C36)

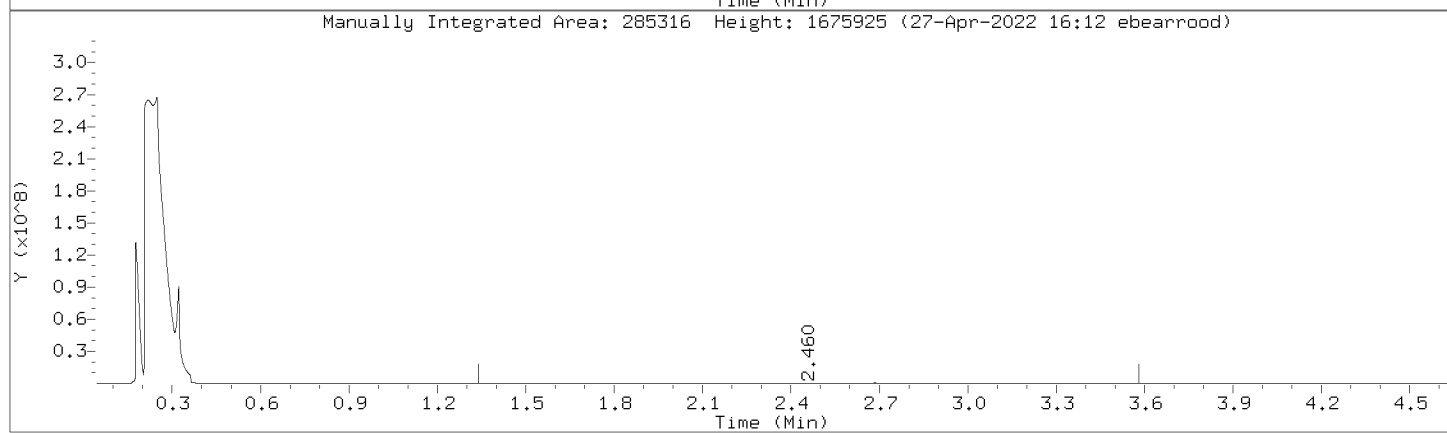
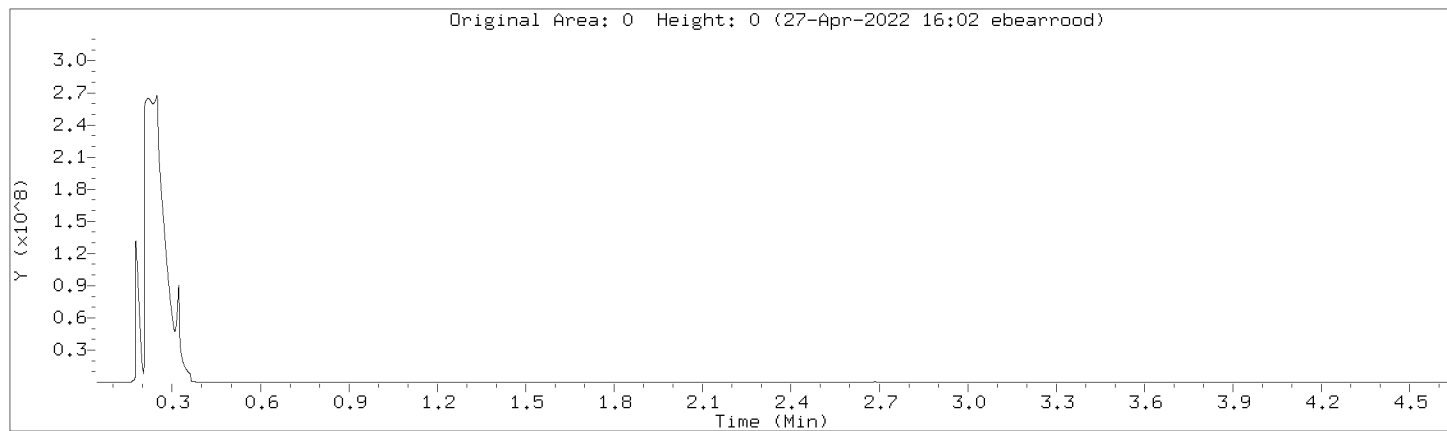
Review Code: RNG

CAS Number:



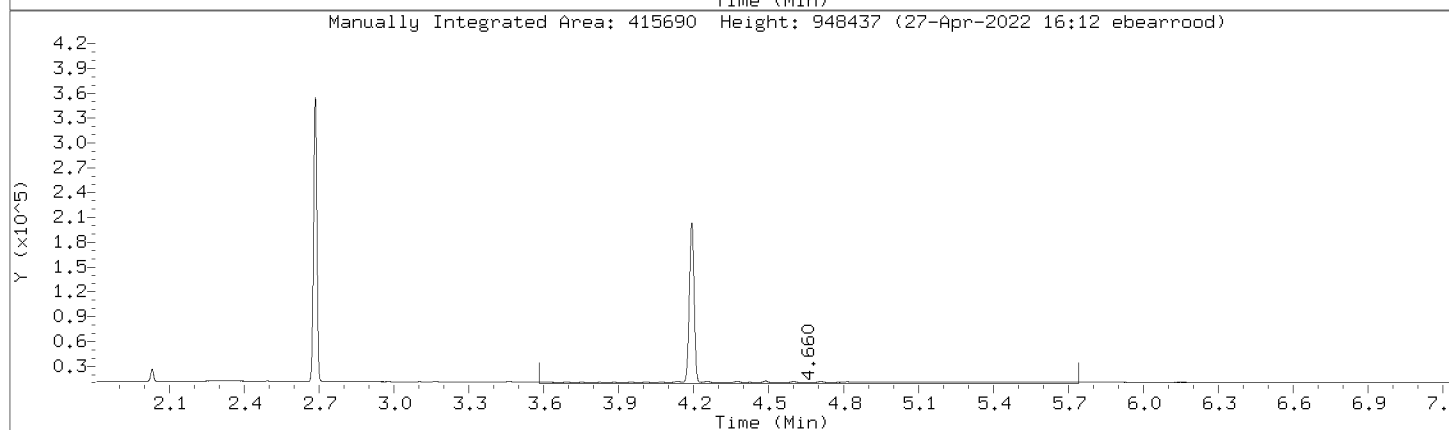
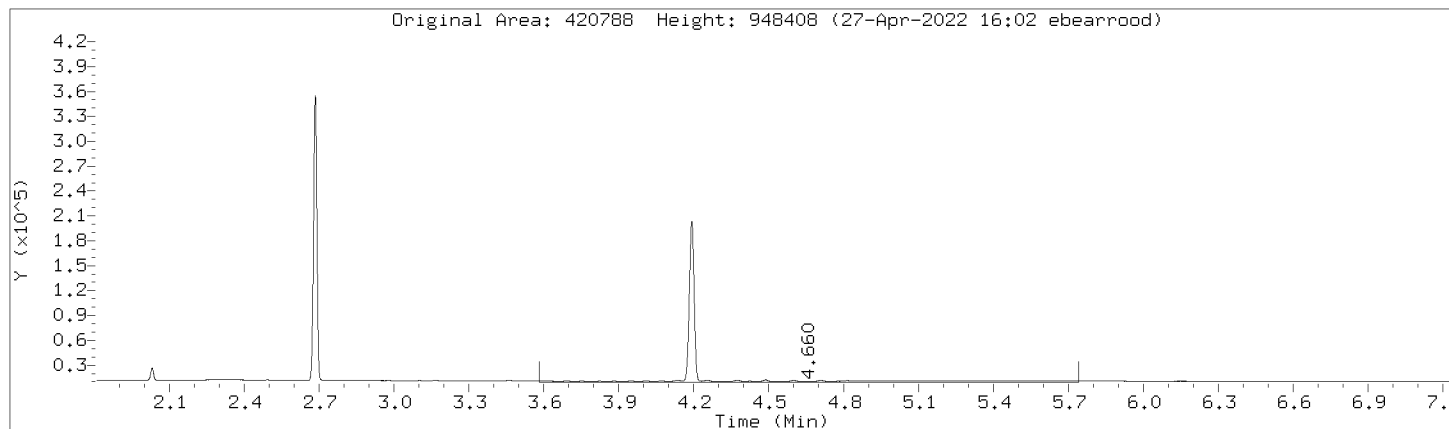
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



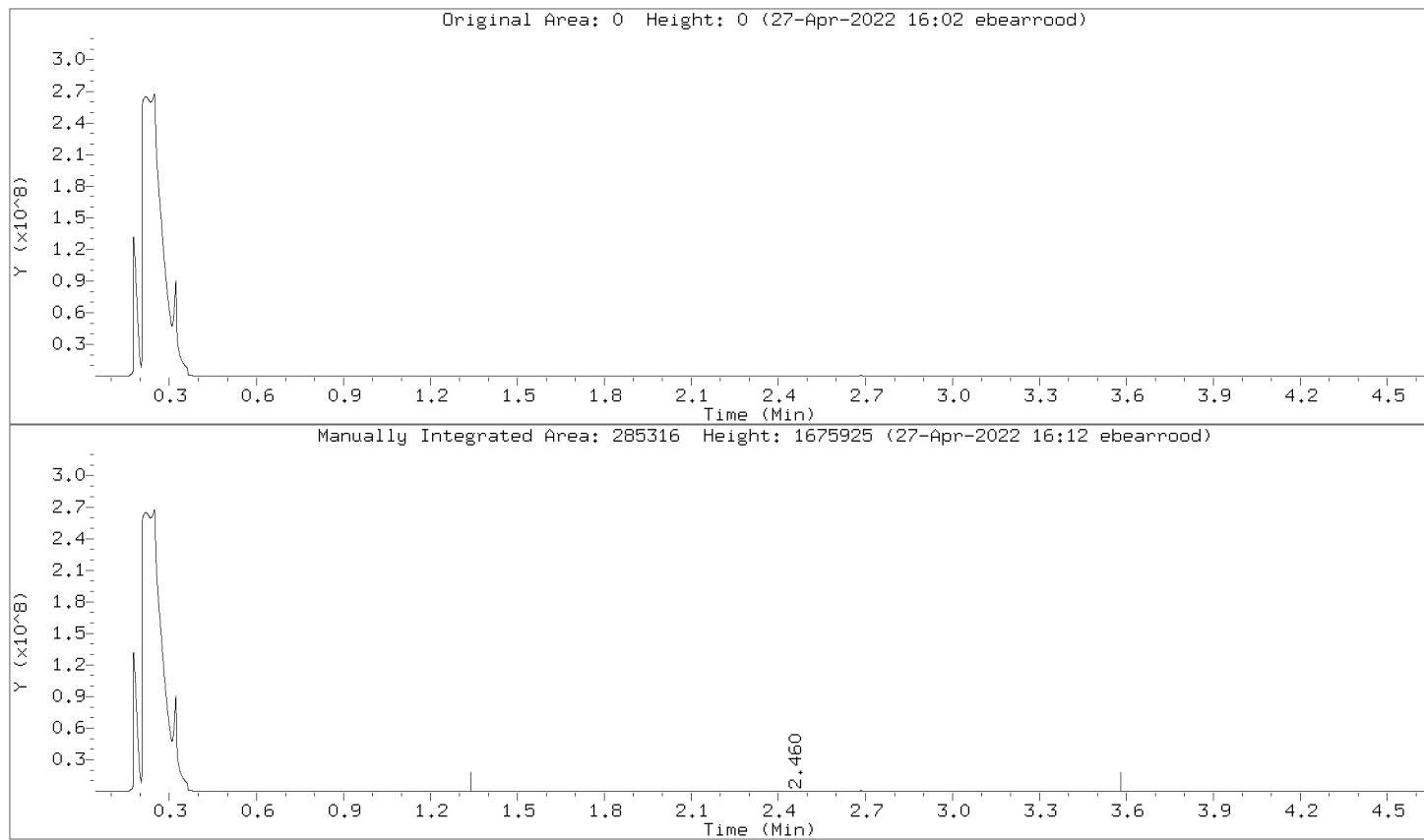
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



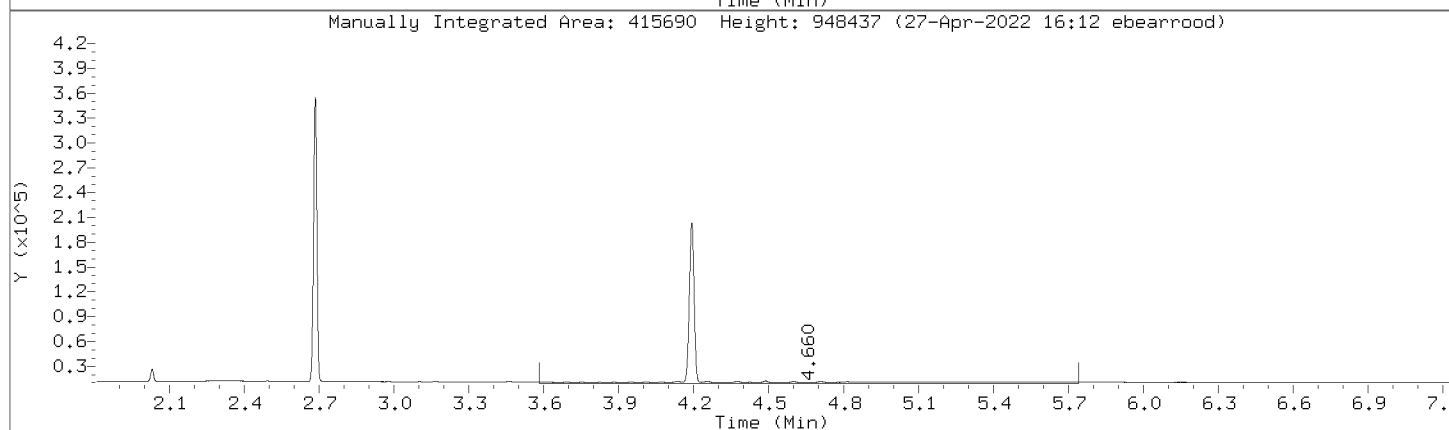
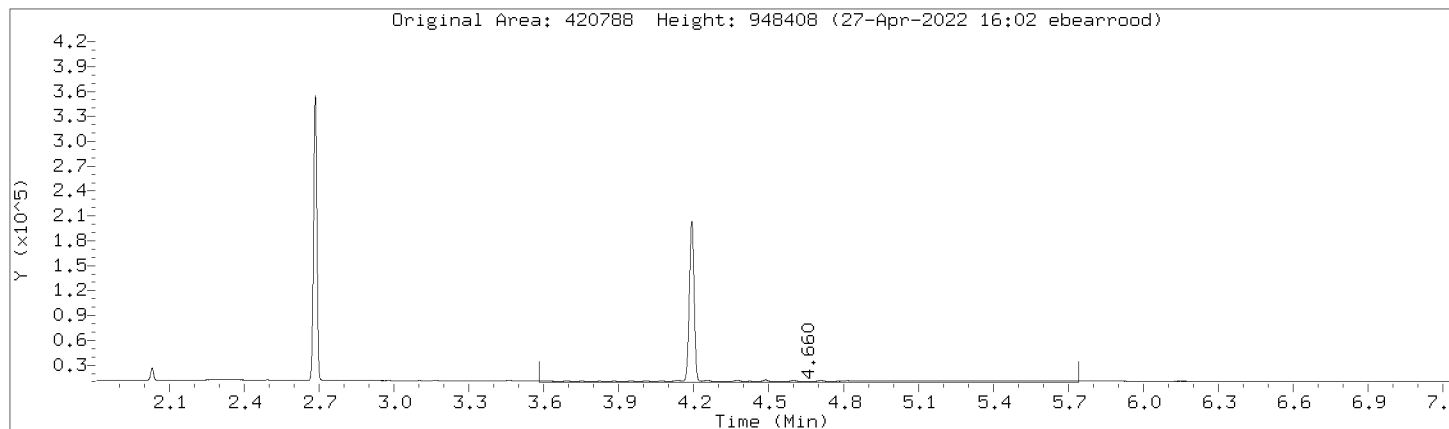
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Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D

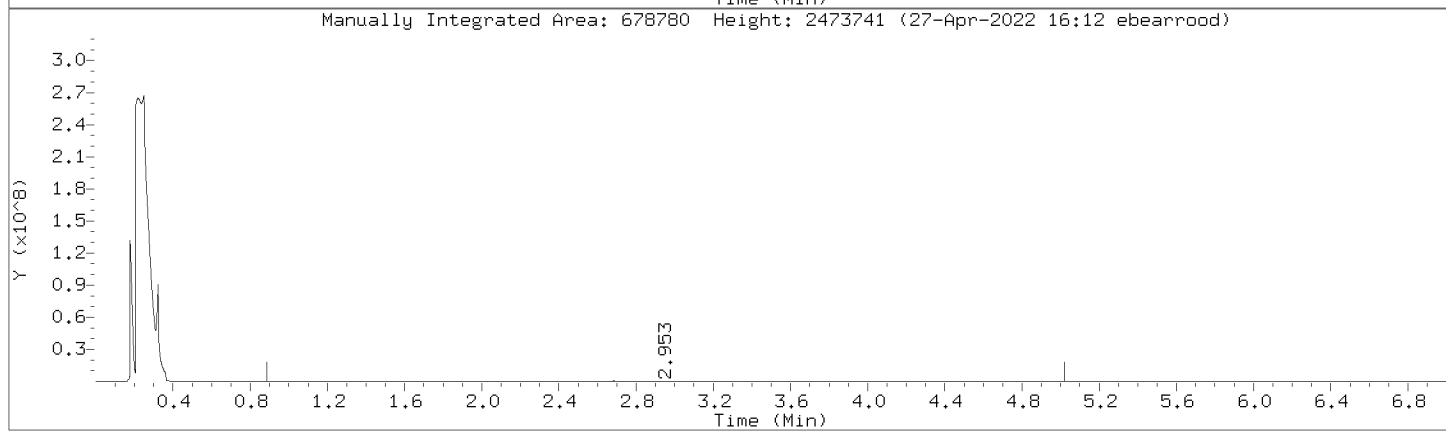
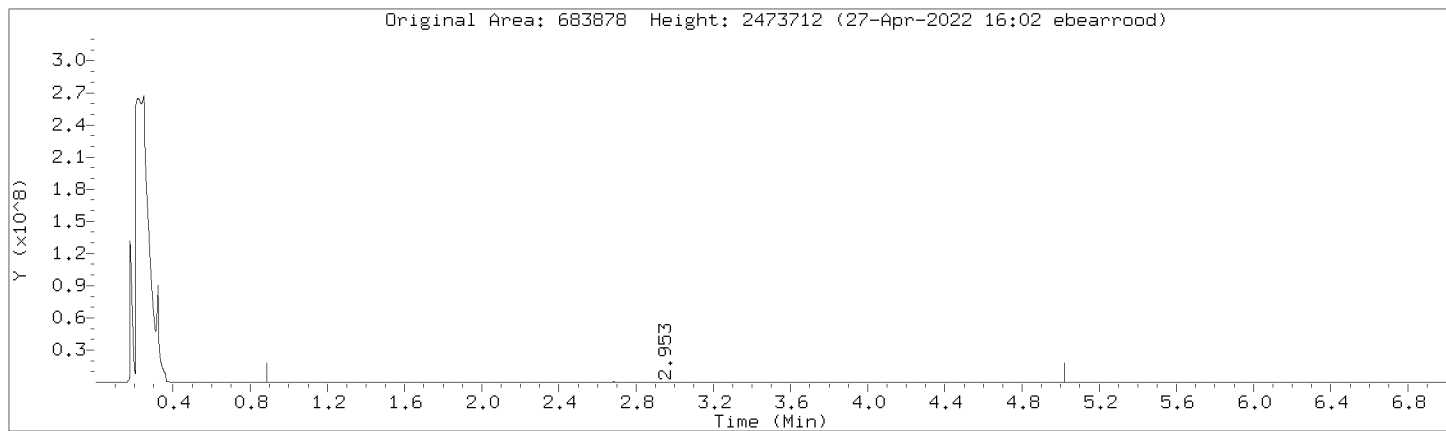
Injection Date: 27-APR-2022 15:15

Instrument: 10gcsF.i

Lab Sample ID: PBLK,349203:2

Compound: C10-C36      Review Code: RNG

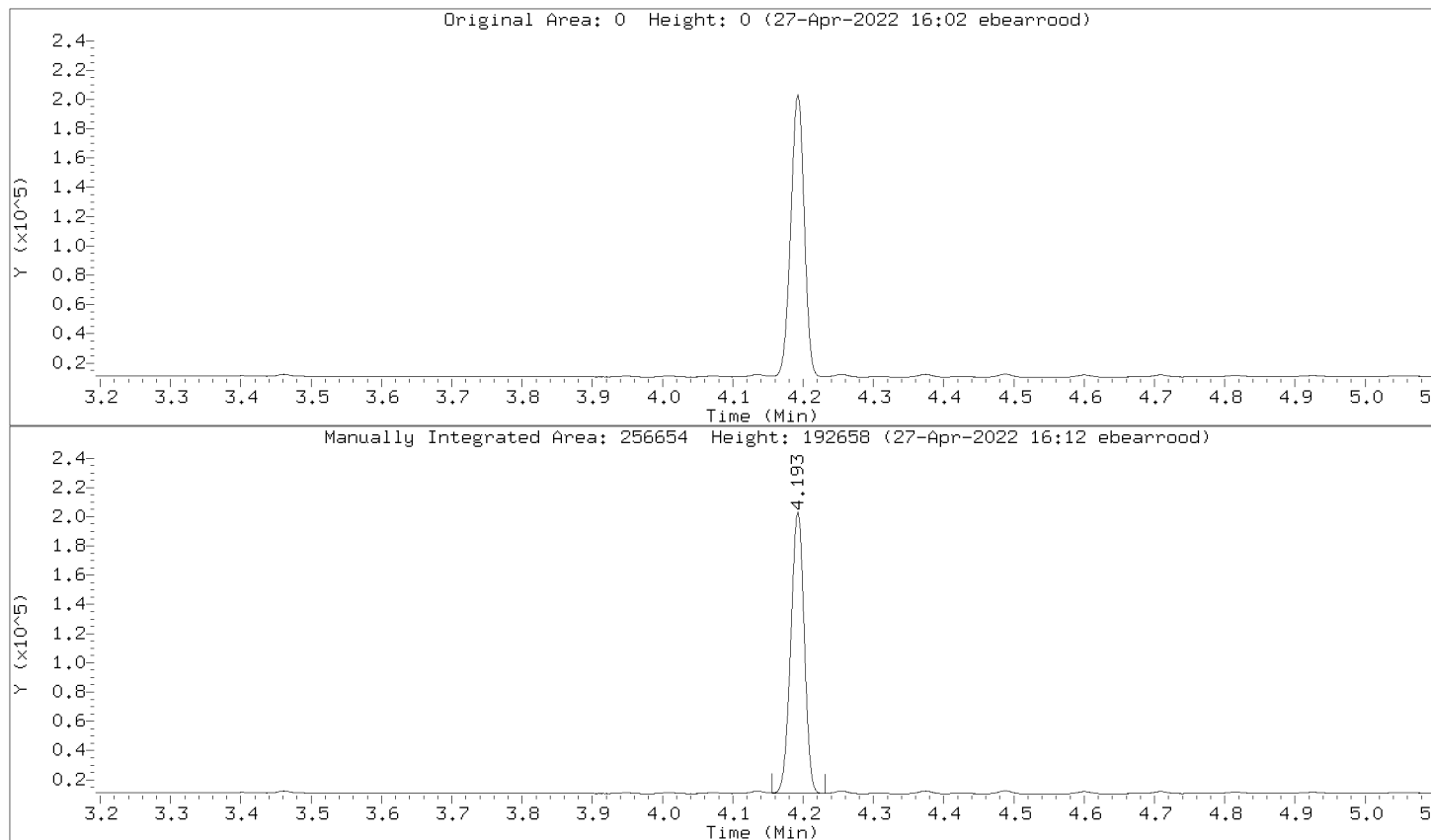
CAS Number:





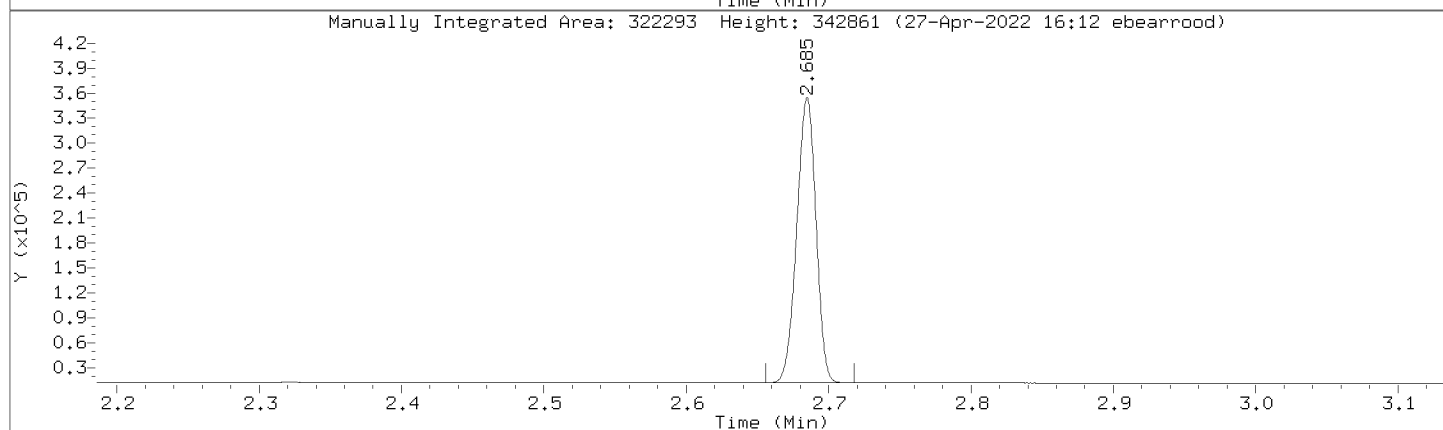
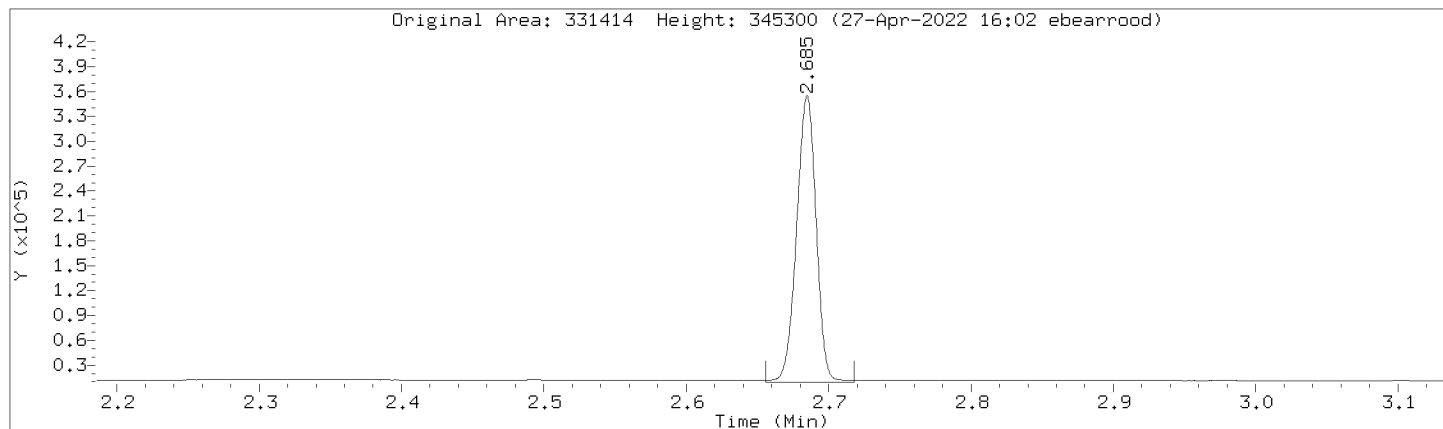
Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\042722R.b\0427R0000020.D  
Injection Date: 27-APR-2022 15:15  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,349203:2

Compound: o-Terphenyl (S)      Review Code: BA  
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000003.D  
 Lab Smp Id: DMO-RTM,362402:2 Client Smp ID: DMO-RTM,362402:2  
 Inj Date : 02-MAY-2022 15:16  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-rtm,362402:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050222R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 03-May-2022 13:08 tthao Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/mL)	(ug/mL)	REVIEW CODE
====	=====	=====	=====	=====	=====	=====
S	1	DRO by AK 102				CAS #:
0.880	-	3.600	2384010	352.631	353	
-----						
\$	2	o-Terphenyl (S)				CAS #:
Compound Not Detected.						
-----						
\$	3	n-Triacontane (S)				CAS #:
Compound Not Detected.						
-----						
S	4	Residual Range Organics AK103				CAS #:
3.601	-	5.180	2209992	601.400	601	
-----						
S	5	TPH-DRO (C10-C28)				CAS #:
0.880	-	4.200	3826453	522.624	523	
-----						
S	6	Motor Oil Range (C24-C36)				CAS #:
3.450	-	5.180	2917053	770.099	770	
-----						
S	7	C10-C36				CAS #:
0.880	-	5.180	4594003	893.792	894	
-----						
S	8	Diesel Fuel Range				CAS #:
1.350	-	3.650	1680432	283.843	284	
-----						
S	9	Diesel Fuel Range SG				CAS #:
1.350	-	3.650	1680432	283.843	284	
-----						
S	10	Motor Oil Range				CAS #:
3.651	-	6.100	2702163	586.343	586	
-----						

CONCENTRATIONS					
		ON-COL		FINAL	
RT	EXP RT	DLT RT	RESPONSE (ug/mL)	(ug/mL)	REVIEW CODE
=====	=====	=====	=====	=====	=====
S	11	Motor Oil Range SG		CAS #:	
3.651	-	6.100	2702163	586.343	586
-----					

Date : 02-MAY-2022 15:16

Client ID: DMO-RTM,362402:2

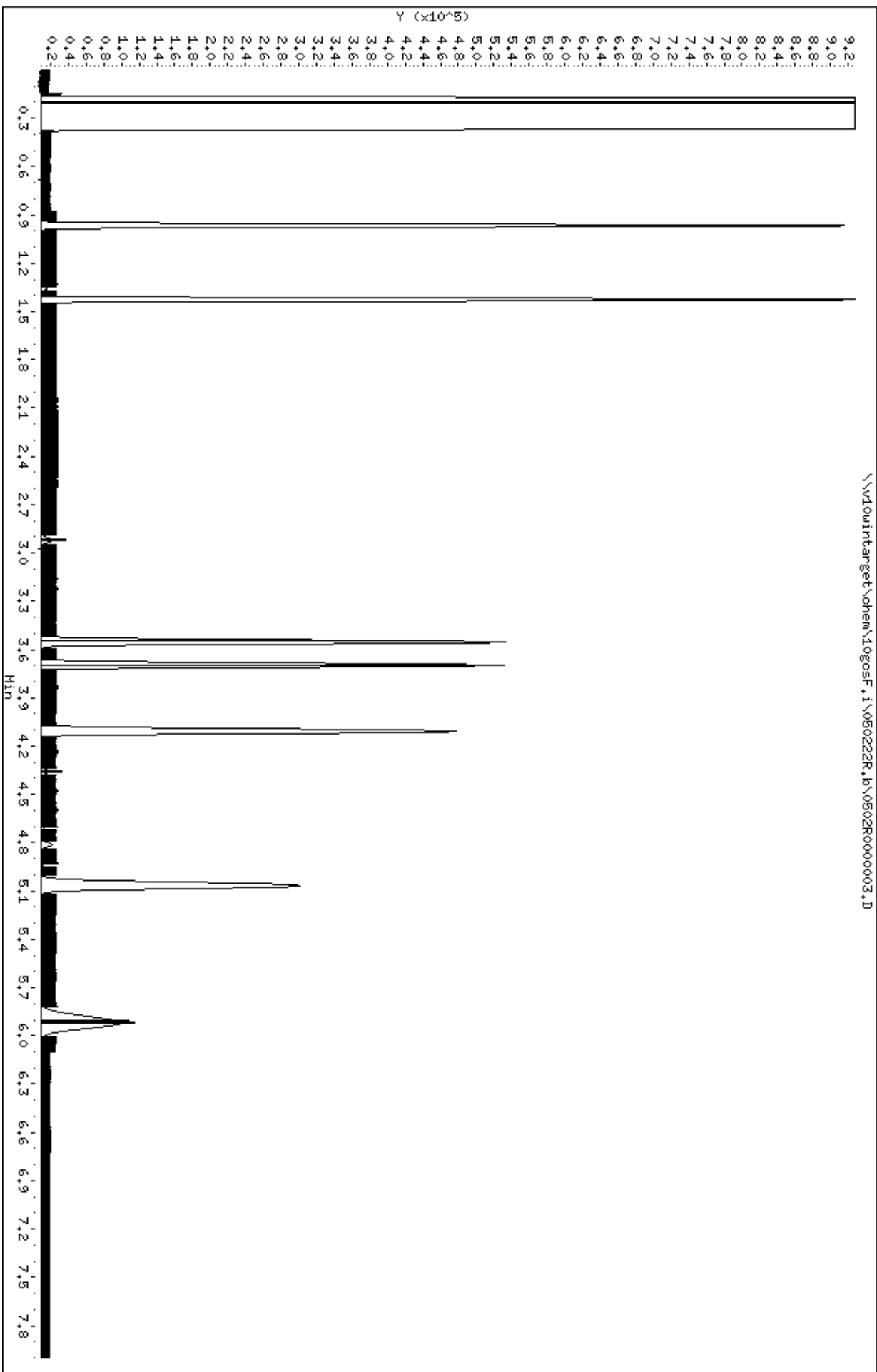
Sample Info: DMO-RTM,362402:2

Instrument: logcsf.i

Operator: TT2

Column phase: DB-5-US21430033

Column diameter: 0.32



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000003.D  
Injection Date: 02-MAY-2022 15:16  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-RTM,362402:2  
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	2235824	2209992
DRO by AK 102	1686390	2384010
TPH-DRO (C10-C28)	3822911	3826453
Motor Oil Range (C24-C36)	2250841	2917053
Diesel Fuel Range	1675765	1680432
Motor Oil Range	2253486	2702163
Diesel Fuel Range SG	1675765	1680432
Motor Oil Range SG	2253486	2702163
C10-C36	3922214	4594003
n-Triacontane (S)	0	0
o-Terphenyl (S)	0	0

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000003.D  
 Lab Smp Id: DMO-RTM,362402:2 Client Smp ID: DMO-RTM,362402:2  
 Inj Date : 09-MAY-2022 10:14  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-rtm,362402:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050922F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 10-May-2022 06:35 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			RESPONSE	ON-COL FINAL	
=====	=====	=====	(ug/mL)	(ug/mL)	=====
S 1					CAS #:
Compound Not Detected.					
\$ 2					CAS #:
2.559	2.565	-0.006	7 0.00423	0.00423	(R)
\$ 3					CAS #:
4.021	4.017	0.004	26 0.02406	0.0241	(R)
S 4					CAS #:
Compound Not Detected.					
S 5					CAS #:
Compound Not Detected.					
S 6					CAS #:
Compound Not Detected.					
S 7					CAS #:
Compound Not Detected.					

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			ON-COL	FINAL	
=====	=====	=====	RESPONSE (ug/mL)	(ug/mL)	=====
S	8	Diesel Fuel Range		CAS #:	
Compound Not Detected.					
-----					
S	9	Diesel Fuel Range SG		CAS #:	
Compound Not Detected.					
-----					
S	10	Motor Oil Range		CAS #:	
Compound Not Detected.					
-----					
S	11	Motor Oil Range SG		CAS #:	
Compound Not Detected.					
-----					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.



Date : 09-MAY-2022 10:14

Client ID: DM0-RTM,362402;2

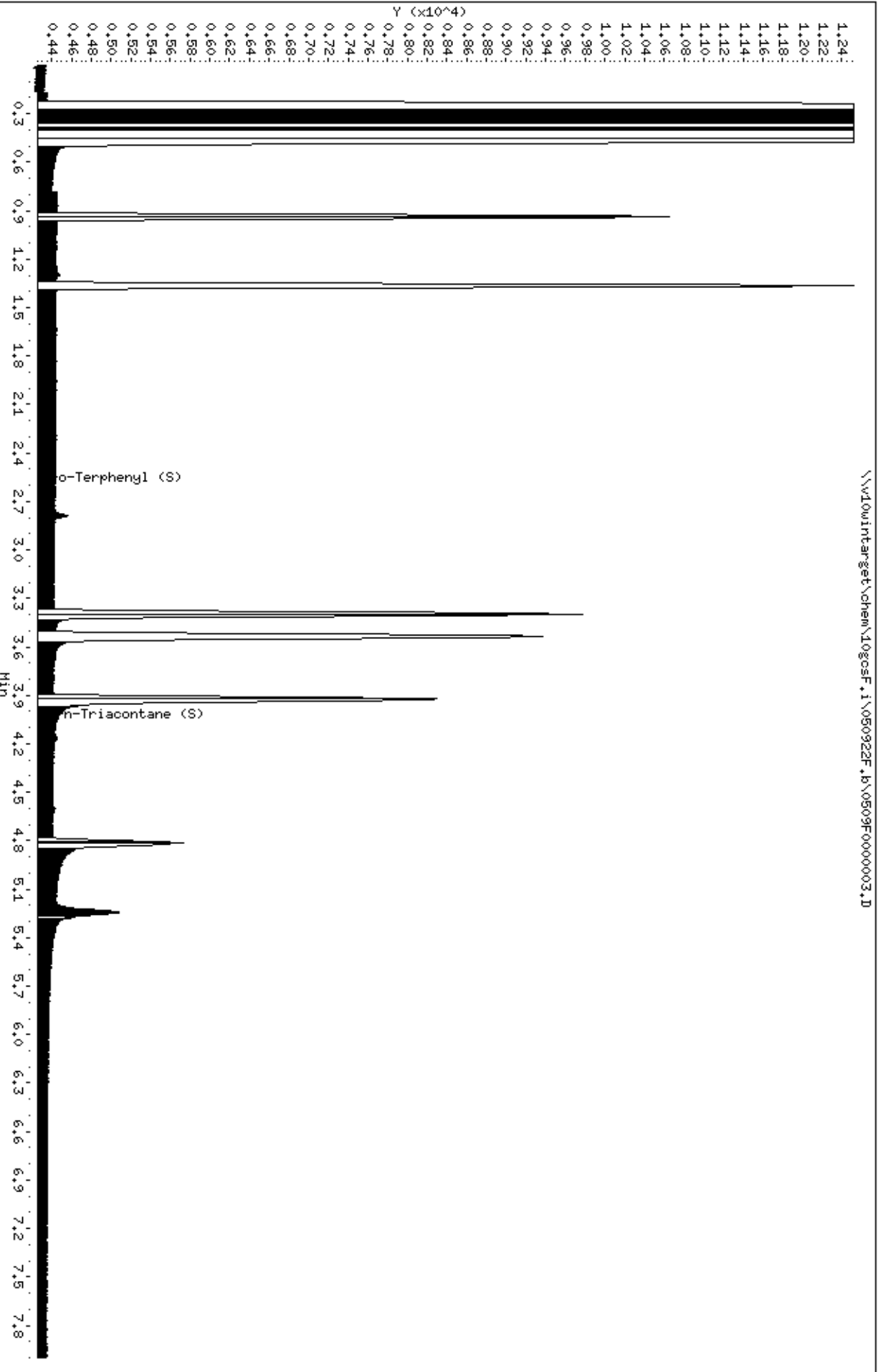
Sample Info: DM0-RTM,362402;2

Instrument: logsf.1

Operator: TT2

Column diameter: 0.32

Column phase: DB-5-USA21390001



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000003.D  
Injection Date: 09-MAY-2022 10:14  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-RTM,362402:2  
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	0	0
DRO by AK 102	0	0
TPH-DRO (C10-C28)	0	0
Motor Oil Range (C24-C36)	0	0
Diesel Fuel Range	0	0
Motor Oil Range	0	0
Diesel Fuel Range SG	0	0
Motor Oil Range SG	0	0
C10-C36	0	0
n-Triacontane (S)	26	26
o-Terphenyl (S)	7	7

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000025.D  
 Lab Smp Id: DMO-CAL2,364980:2 Client Smp ID: DMO-CAL2,364980:2  
 Inj Date : 09-MAY-2022 15:31  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal2,364980:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050922F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 10-May-2022 06:35 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 4 Calibration Sample, Level: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT (ug/mL)	
S 1	0.800	- 3.380	DRO by AK 102	300261 10.0000	CAS #: 1.28 (M) RNG
\$ 2	2.562	2.565 -0.003	o-Terphenyl (S)	6519 1.00000	CAS #: 1.07 (M) BA
\$ 3	4.014	4.017 -0.003	n-Triacontane (S)	4905 1.00000	CAS #: 1.01 (M) BA
S 4	3.381	- 4.820	Residual Range Organics AK103	103492 10.0000	CAS #: 3.06 (M) RNG
S 5	0.800	- 3.950	TPH-DRO (C10-C28)	338750 10.0000	CAS #: 2.06 (M) RNG
S 6	3.240	- 4.820	Motor Oil Range (C24-C36)	115167 10.0000	CAS #: 2.96 (M) RNG
S 7	0.800	- 4.820	C10-C36	403754 20.0000	CAS #: 3.92 (M) RNG
S 8	1.240	- 3.430	Diesel Fuel Range	266265 10.0000	CAS #: 0.592 (M) RNG
S 9	1.240	- 3.430	Diesel Fuel Range SG	266265 10.0000	CAS #: 0.592 (M) RNG
S 10	3.431	- 5.330	Motor Oil Range	131884 10.0000	CAS #: 4.44 (M) RNG
S 11	3.431	- 5.330	Motor Oil Range SG	131884 10.0000	CAS #: 4.91 (MH) RNG

QC Flag Legend

M - Compound response manually integrated.  
H - Operator selected an alternate compound hit.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 09-MAY-2022 15:31

Client ID: DMO-CAL2.364980:2

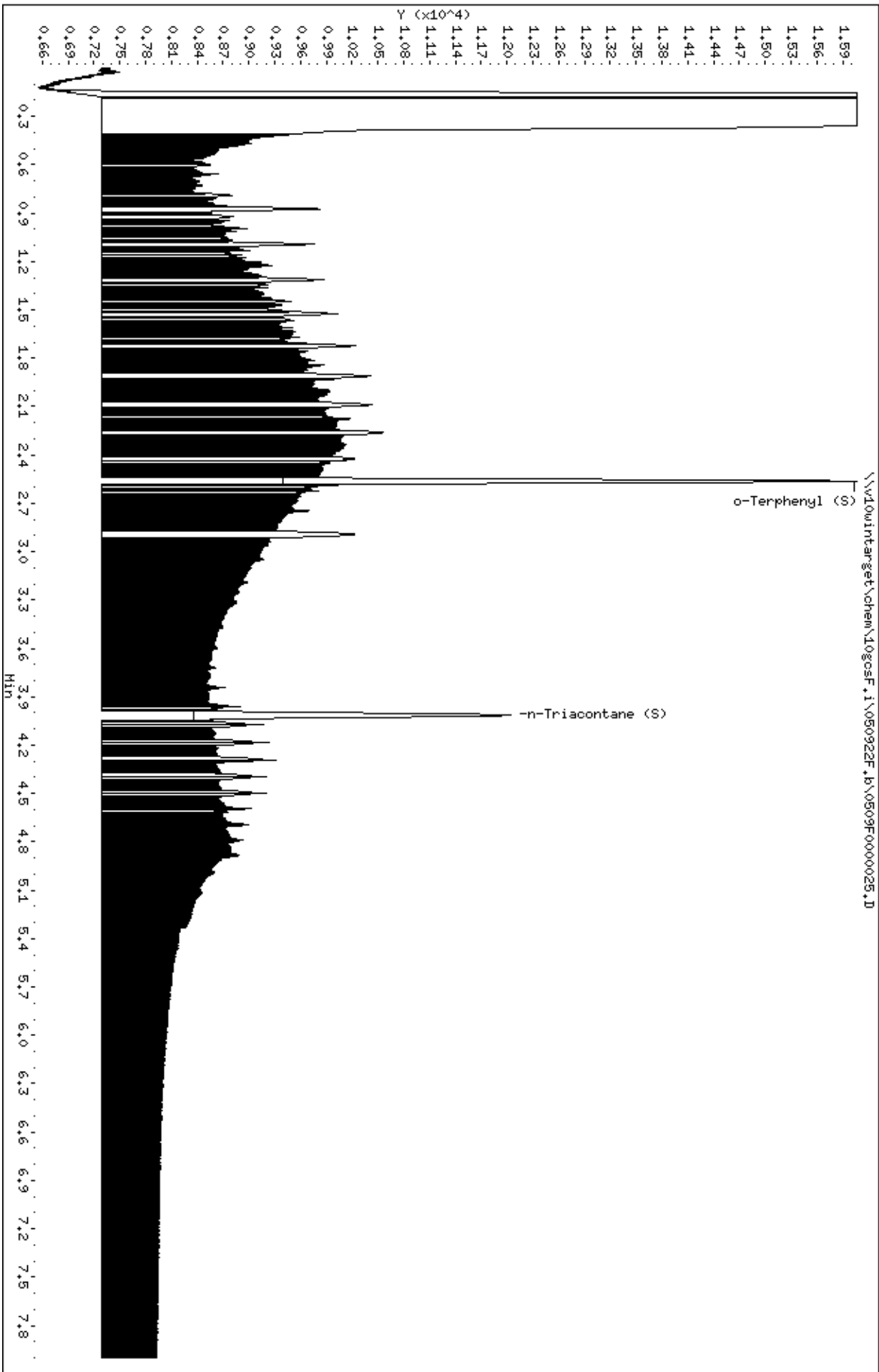
Sample Info: DMO-CAL2.364980:2

Instrument: 10gocsf.1

Operator: TT2

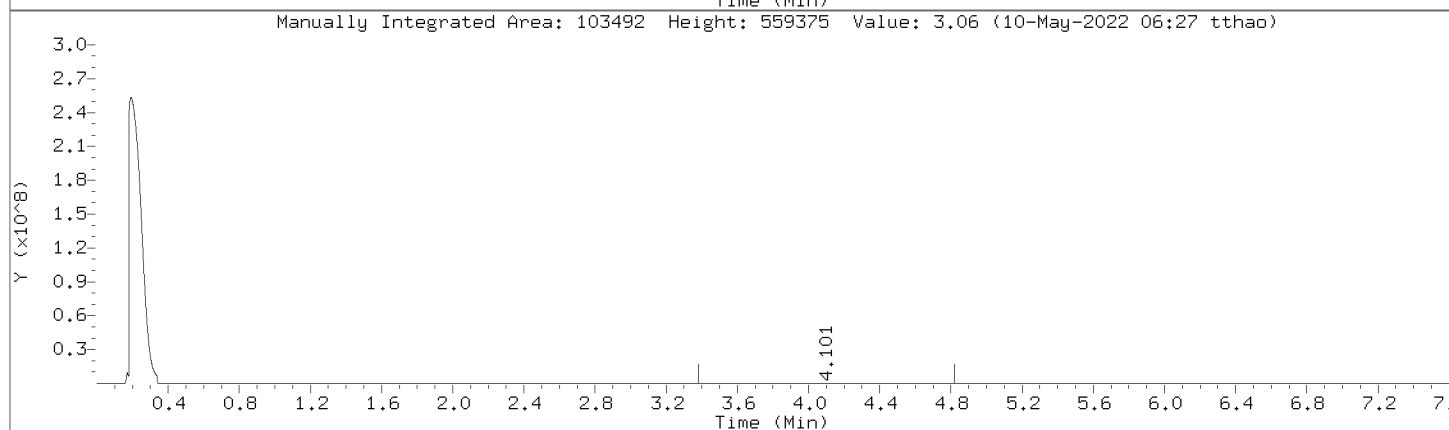
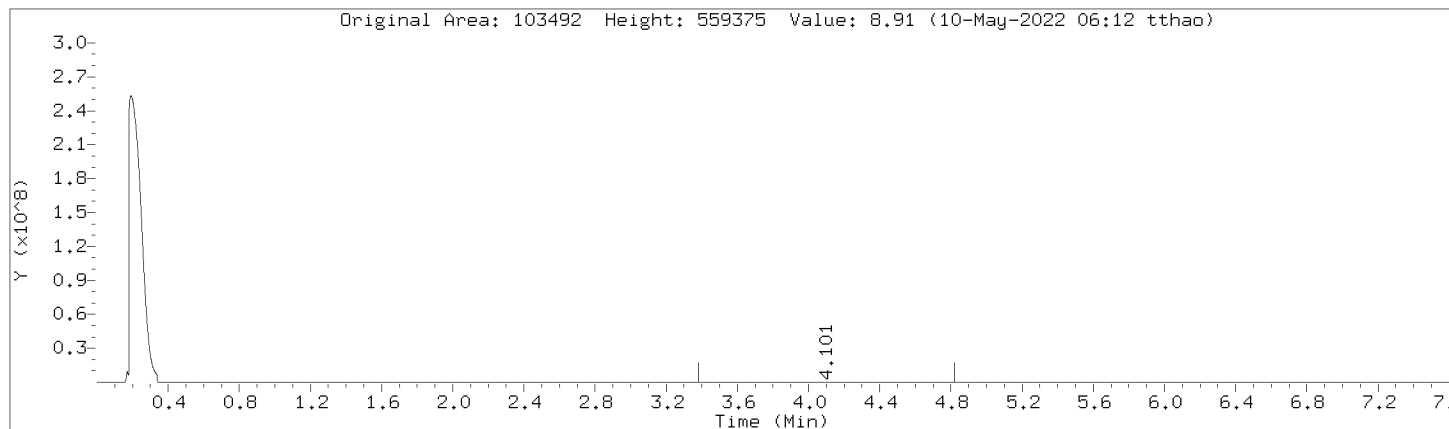
Column phase: DB-5-MS21390001

Column diameter: 0.32



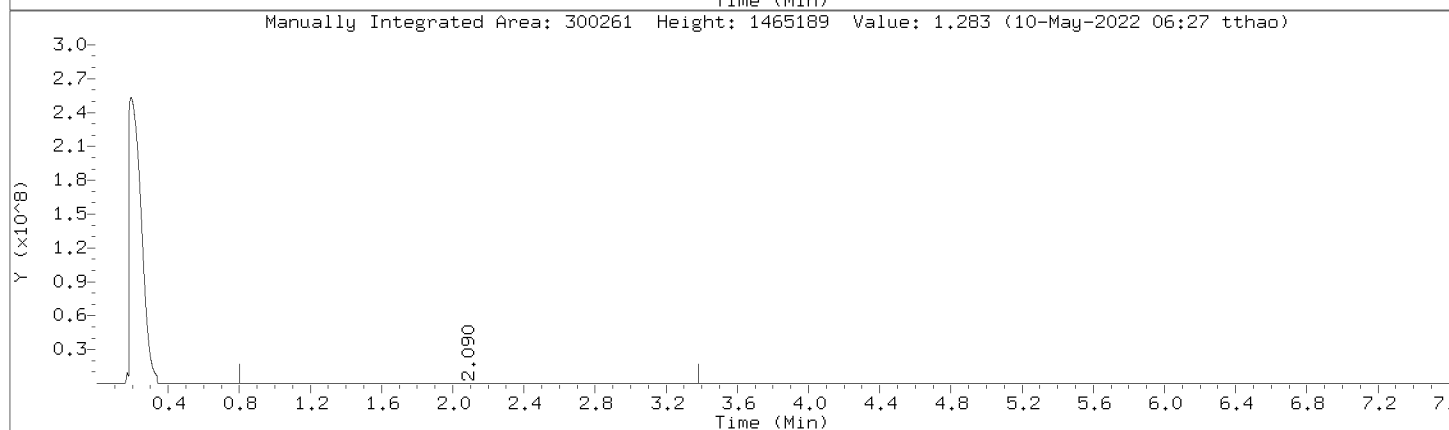
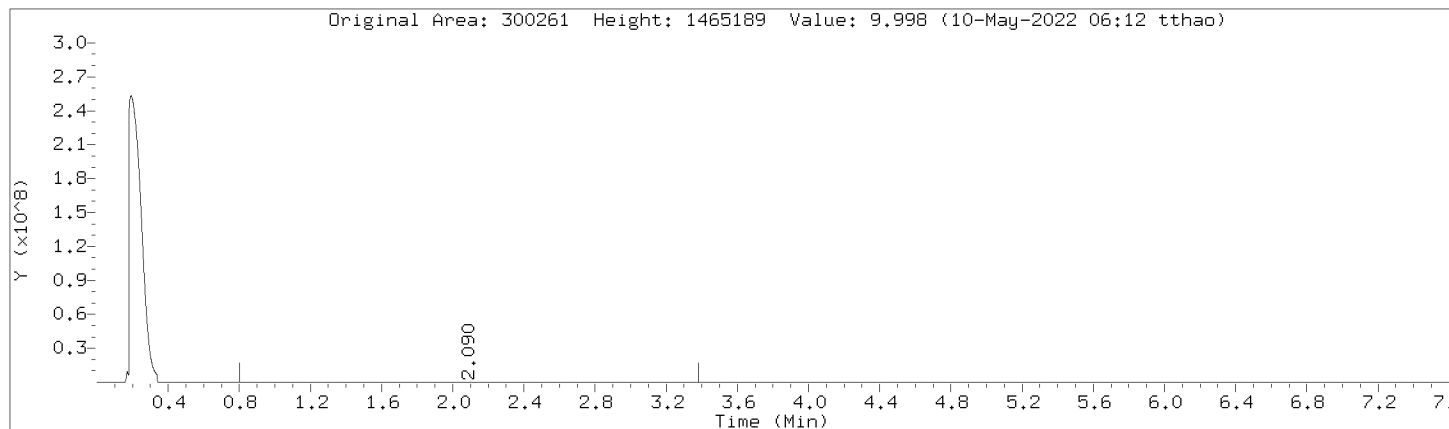
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Injection Date: 09-MAY-2022 15:31  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,364980:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



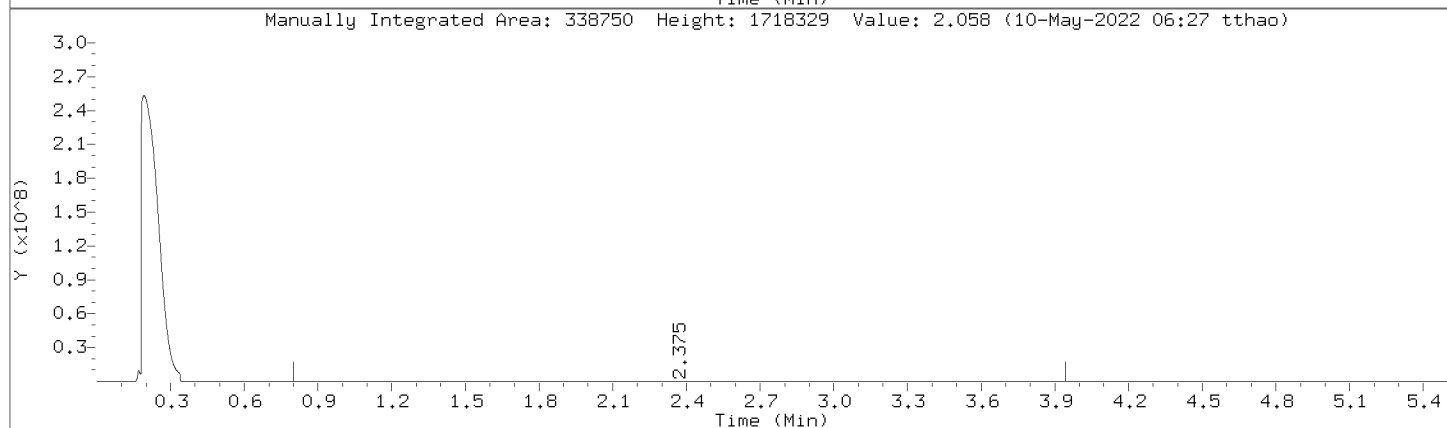
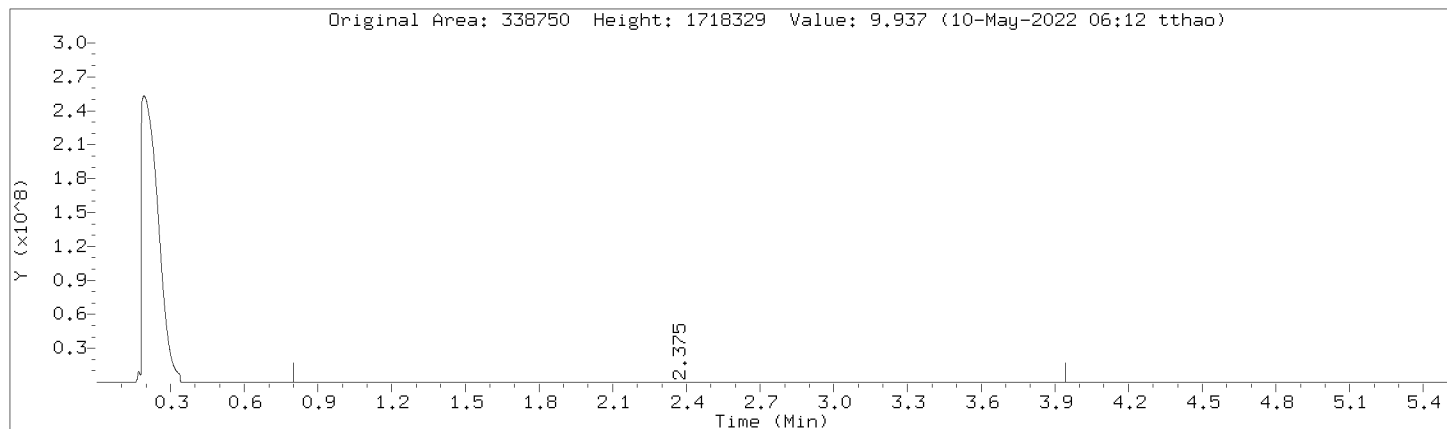
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Injection Date: 09-MAY-2022 15:31  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,364980:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000025.D  
Injection Date: 09-MAY-2022 15:31  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,364980:2

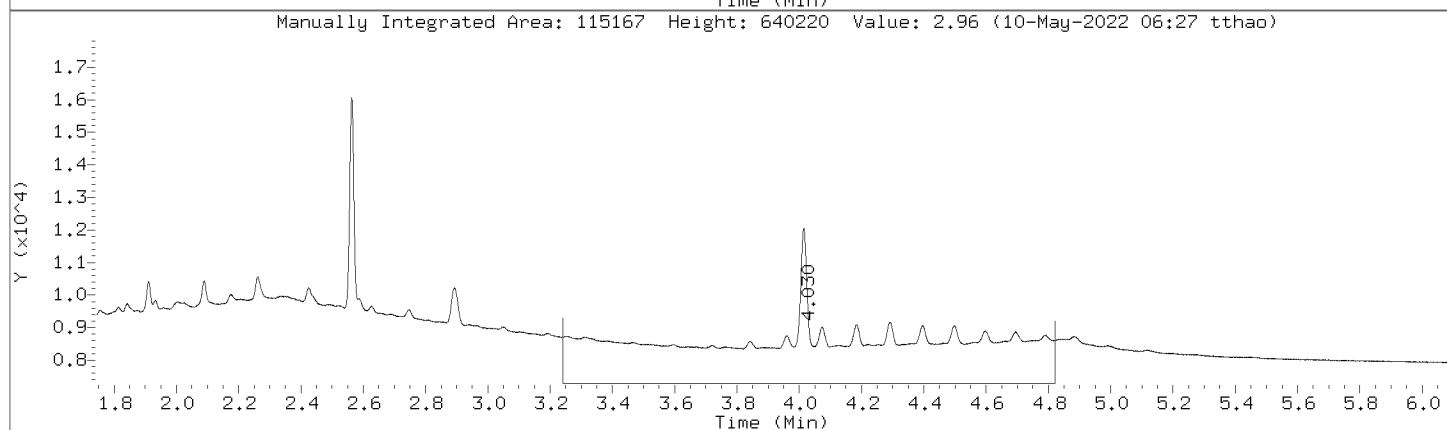
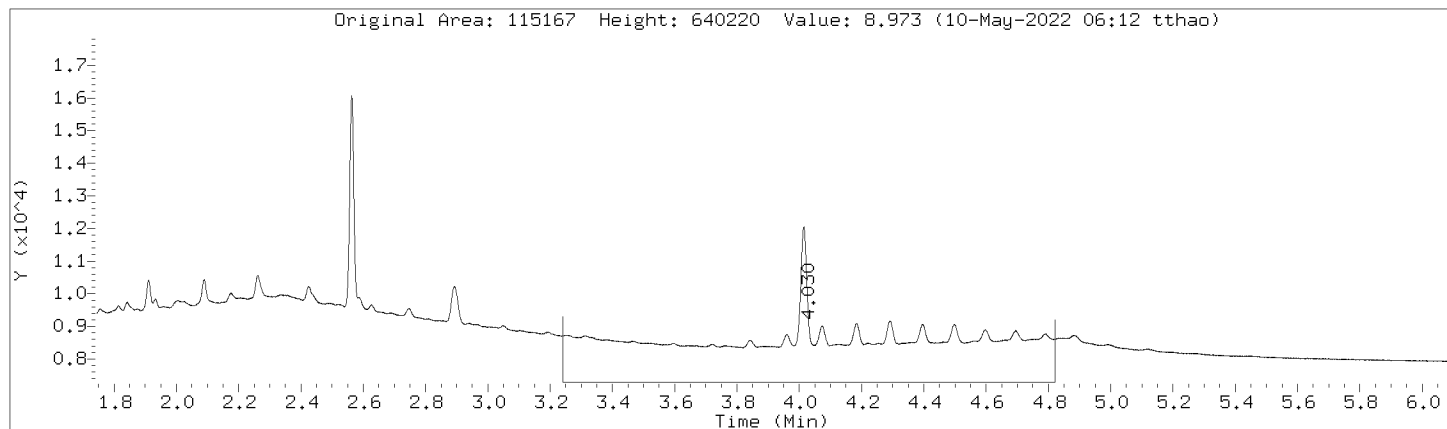
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:





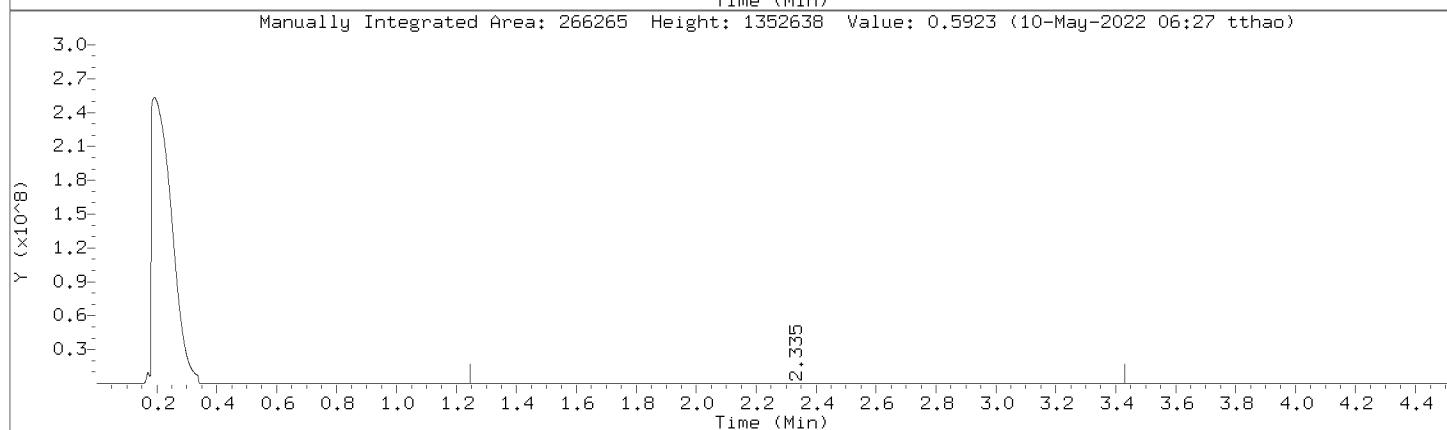
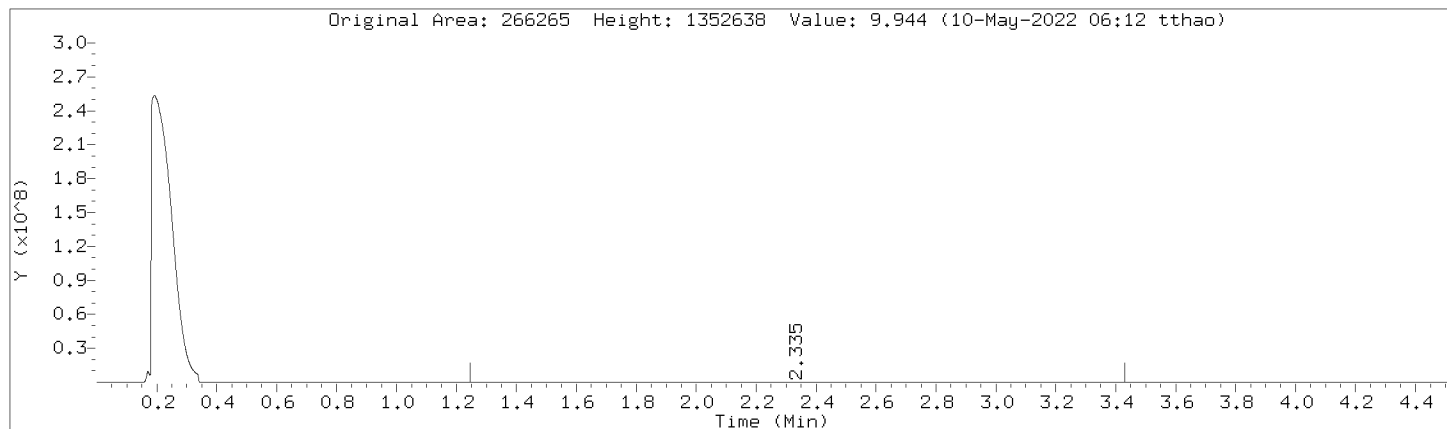
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Injection Date: 09-MAY-2022 15:31  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,364980:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



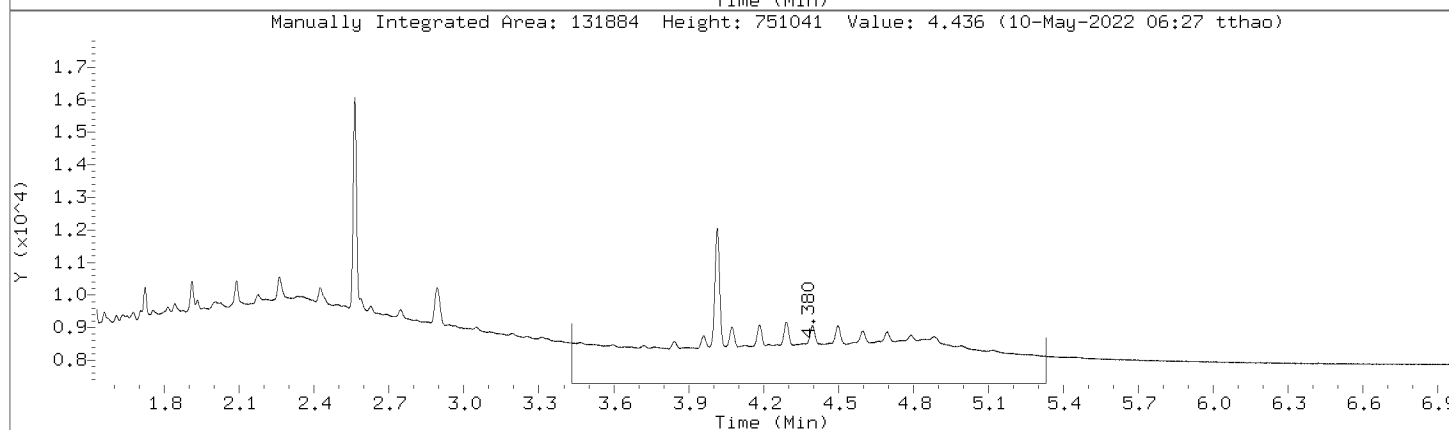
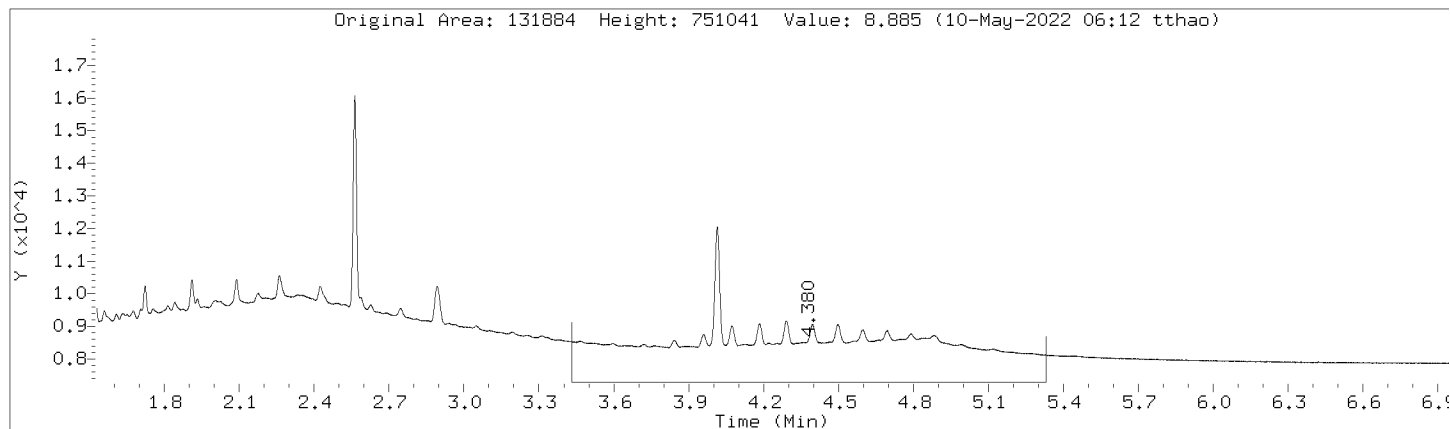
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Injection Date: 09-MAY-2022 15:31  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,364980:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



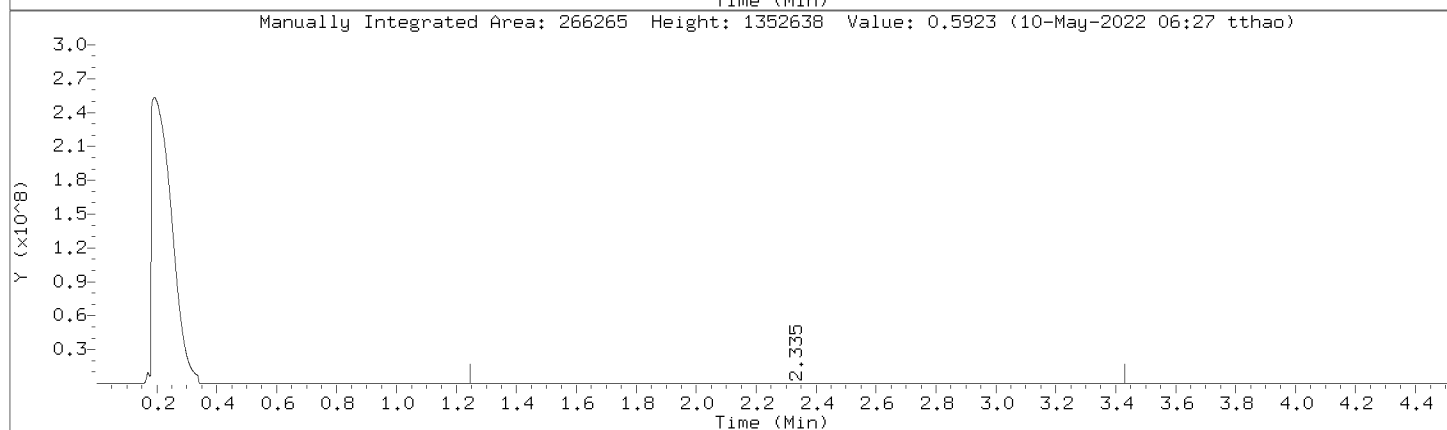
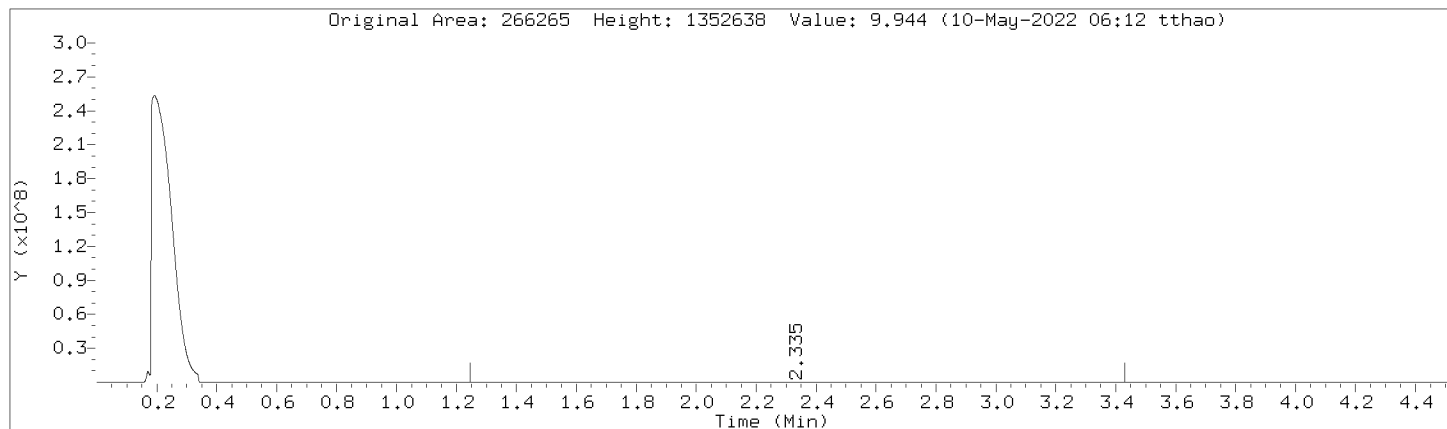
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000025.D  
Injection Date: 09-MAY-2022 15:31  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,364980:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



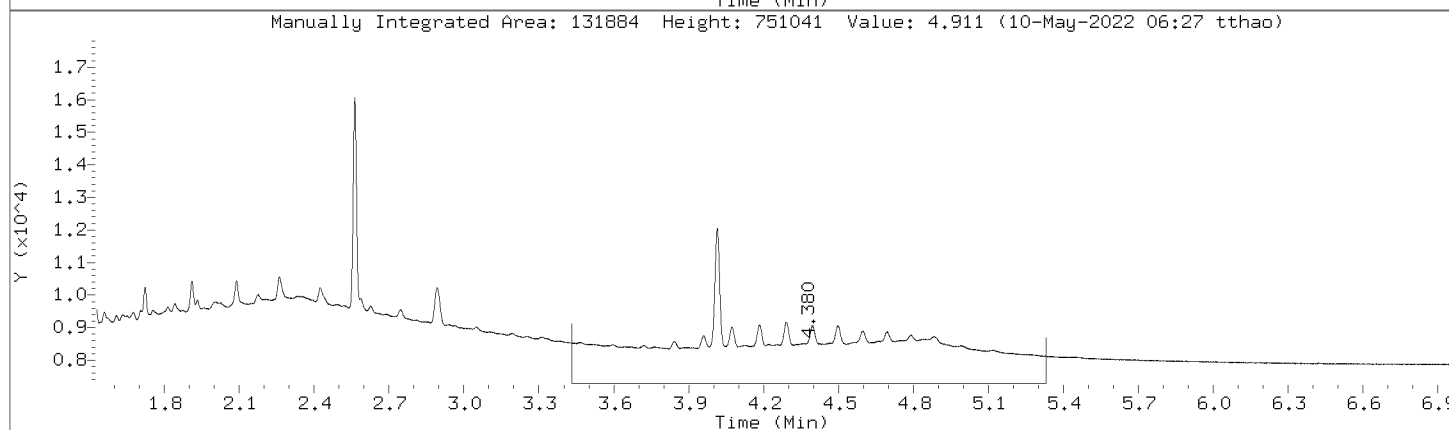
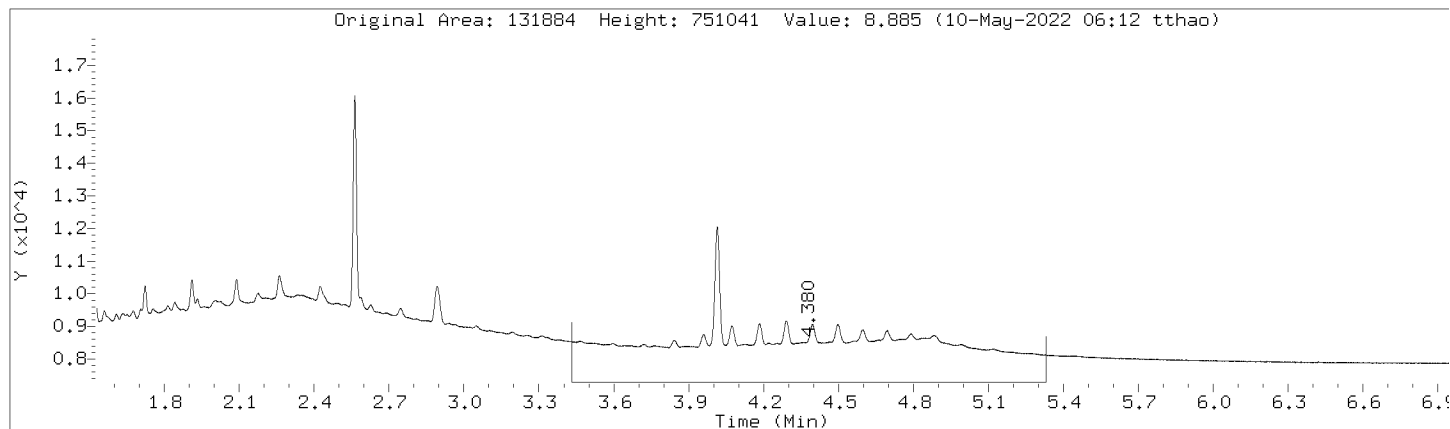
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000025.D  
Injection Date: 09-MAY-2022 15:31  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,364980:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



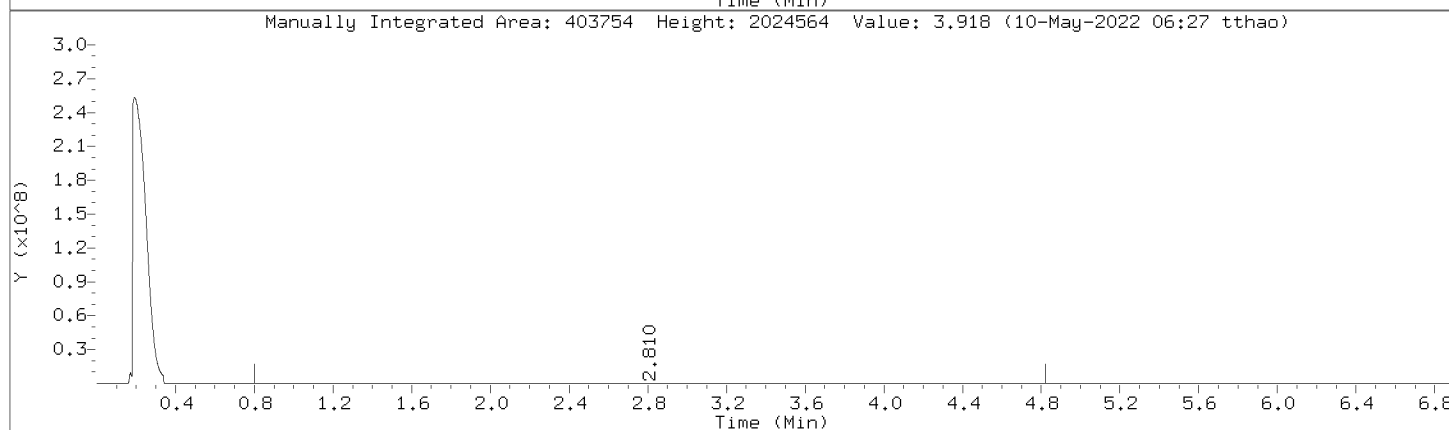
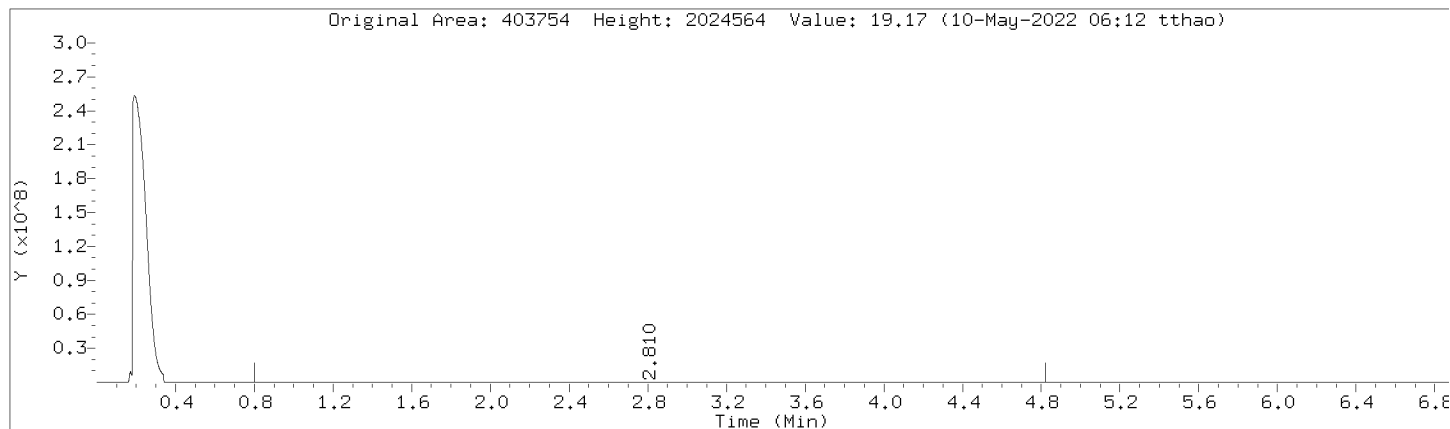
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000025.D  
Injection Date: 09-MAY-2022 15:31  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,364980:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



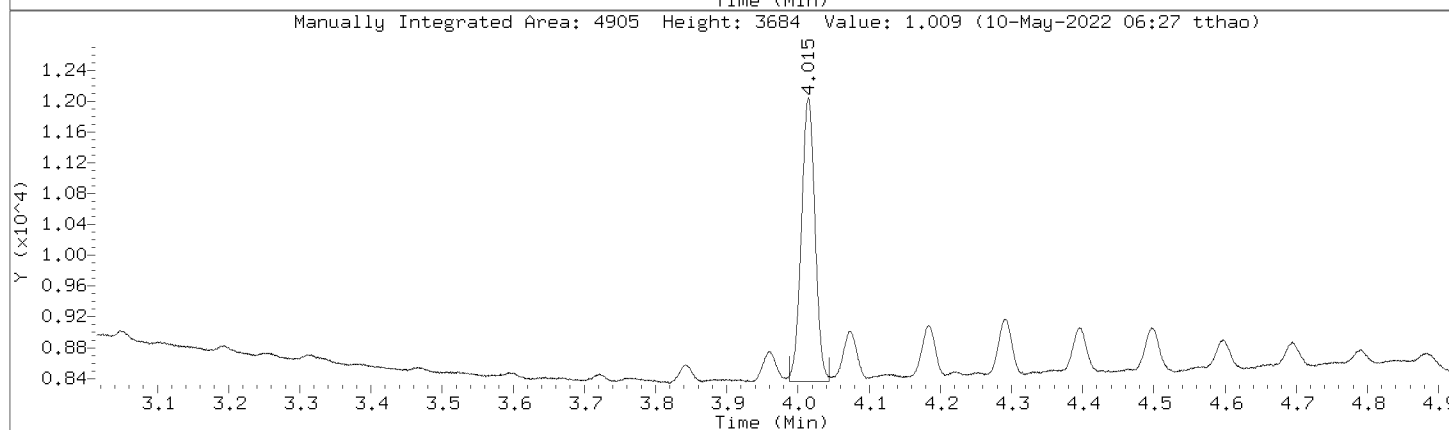
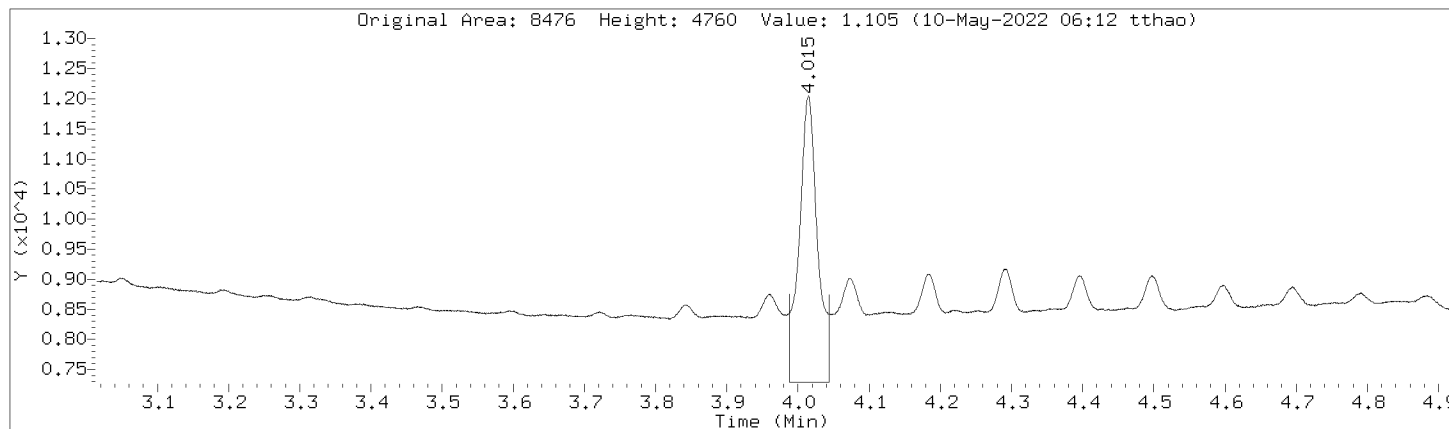
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Injection Date: 09-MAY-2022 15:31  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,364980:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



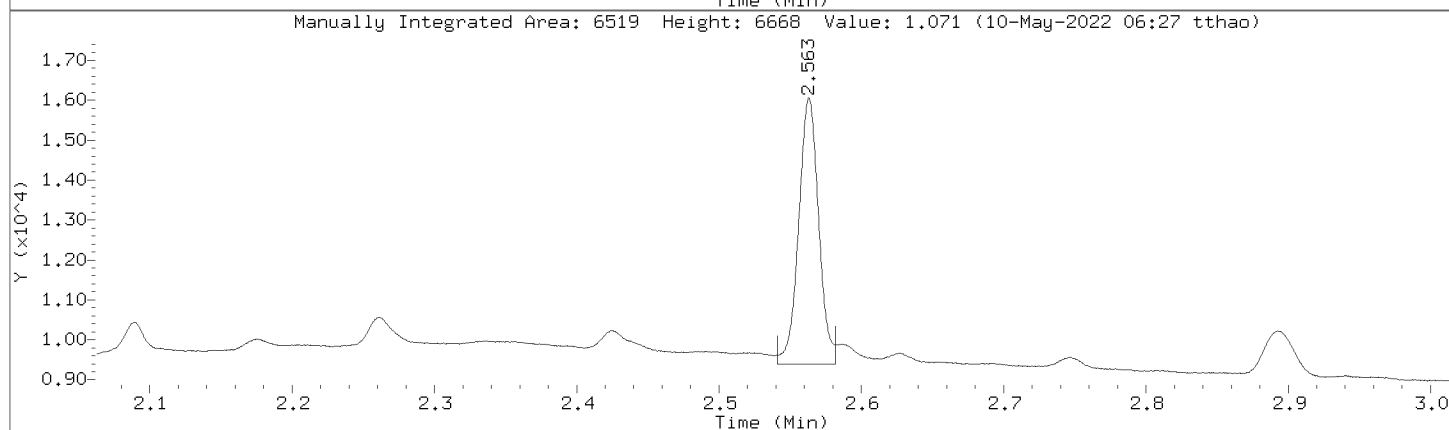
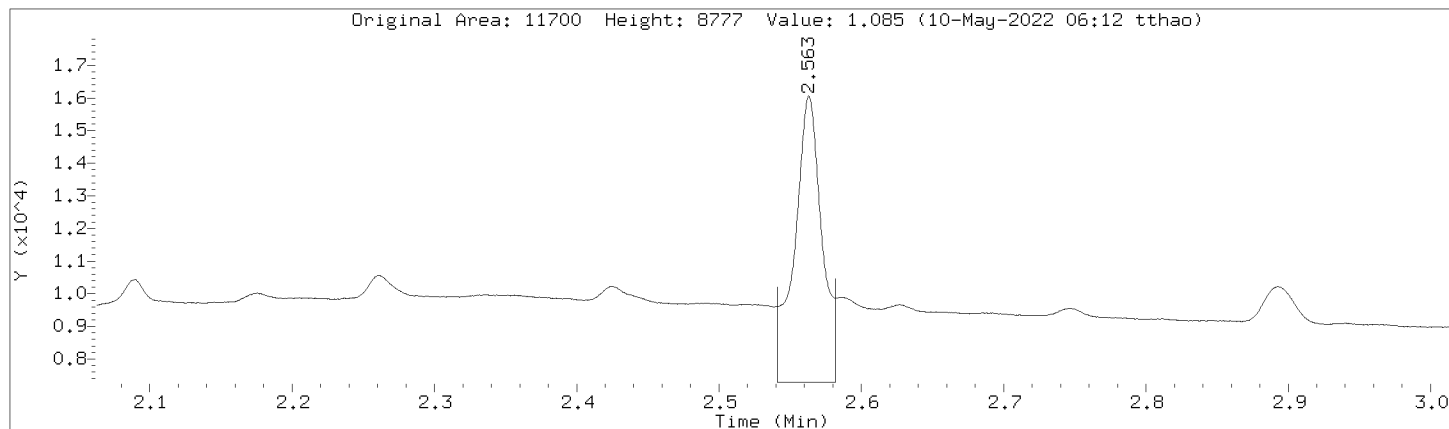
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000025.D  
Injection Date: 09-MAY-2022 15:31  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL2,364980:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000025.D  
 Injection Date: 09-MAY-2022 15:31  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL2,364980:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	103492	103492
DRO by AK 102	300261	300261
TPH-DRO (C10-C28)	338750	338750
Motor Oil Range (C24-C36)	115167	115167
Diesel Fuel Range	266265	266265
Motor Oil Range	131884	131884
Diesel Fuel Range SG	266265	266265
Motor Oil Range SG	131884	131884
C10-C36	403754	403754
n-Triacontane (S)	8476	4905
o-Terphenyl (S)	11700	6519



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000026.D  
 Lab Smp Id: DMO-CAL3,364981:2 Client Smp ID: DMO-CAL3,364981:2  
 Inj Date : 09-MAY-2022 15:43  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal3,364981:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050922F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 10-May-2022 06:35 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 5 Calibration Sample, Level: 3  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT (ug/mL)	
S 1	0.800	- 3.380	389510	25.0000	18.5 (M) RNG
-----					
\$ 2	2.563	2.565 -0.002	15641	2.50000	2.57 (M) BA
-----					
\$ 3	4.015	4.017 -0.002	12598	2.50000	2.59 (M) BA
-----					
S 4	3.381	- 4.820	165785	25.0000	22.5 (M) RNG
-----					
S 5	0.800	- 3.950	442147	25.0000	19.4 (M) RNG
-----					
S 6	3.240	- 4.820	181686	25.0000	22.9 (M) RNG
-----					
S 7	0.800	- 4.820	555295	50.0000	40.0 (M) RNG
-----					
S 8	1.240	- 3.430	342102	25.0000	18.1 (M) RNG
-----					
S 9	1.240	- 3.430	342102	25.0000	18.1 (M) RNG
-----					
S 10	3.431	- 5.330	204704	25.0000	23.2 (M) RNG
-----					
S 11	3.431	- 5.330	204704	25.0000	23.6 (M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 09-MAY-2022 15:43

Client ID: DMO-CAL3,364981:2

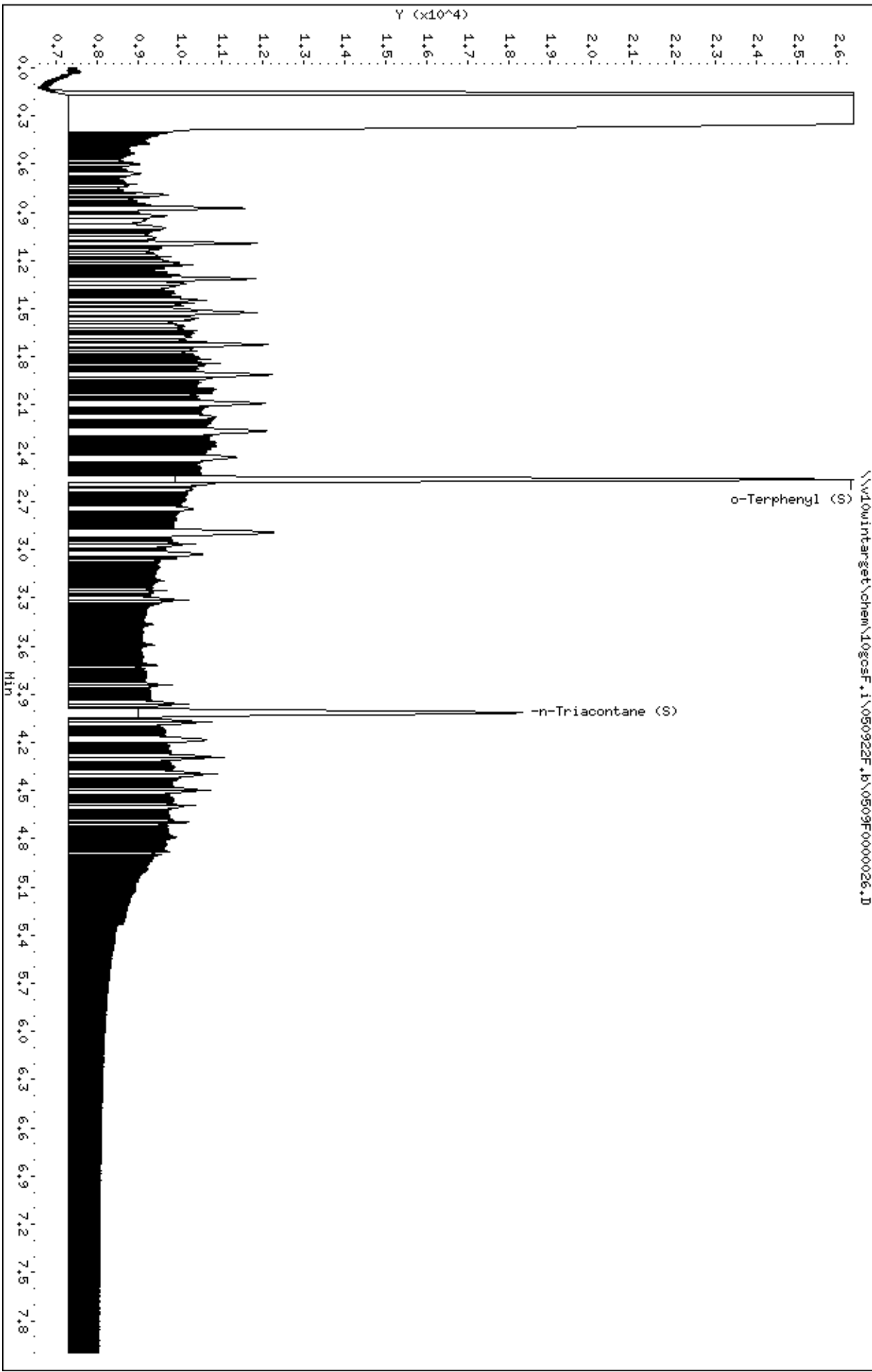
Sample Info: DMO-CAL3,364981:2

Instrument: 10gcsf.1

Operator: TT2

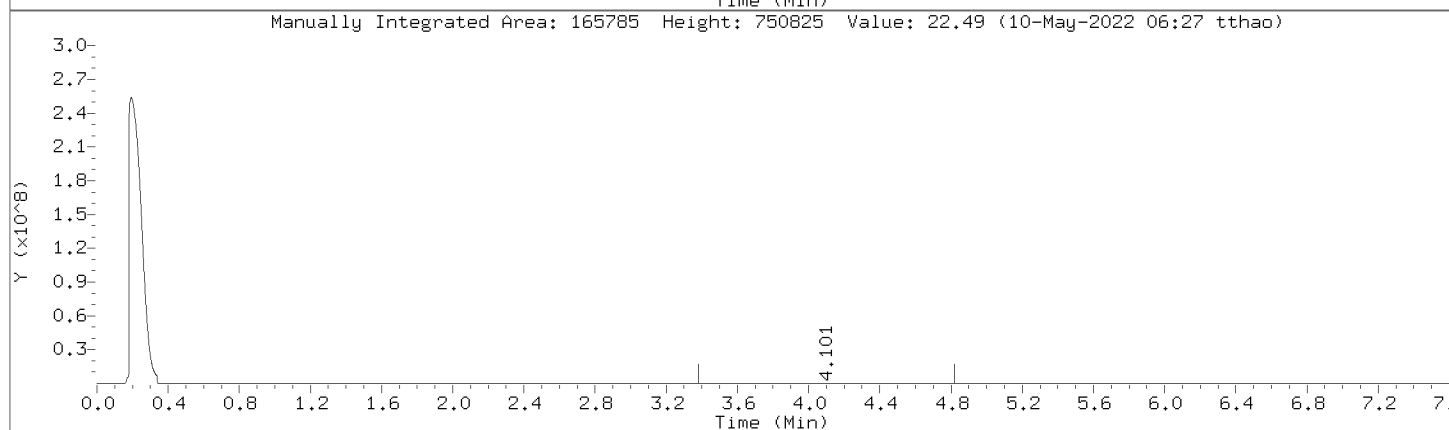
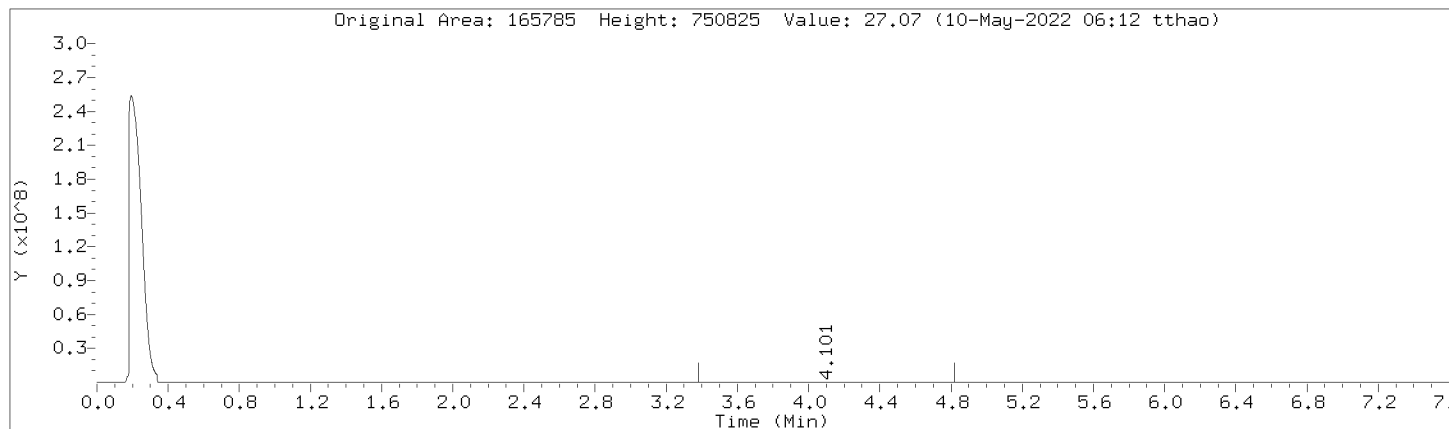
Column phase: DB-5-MS21390001

Column diameter: 0.32



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000026.D  
Injection Date: 09-MAY-2022 15:43  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,364981:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000026.D

Injection Date: 09-MAY-2022 15:43

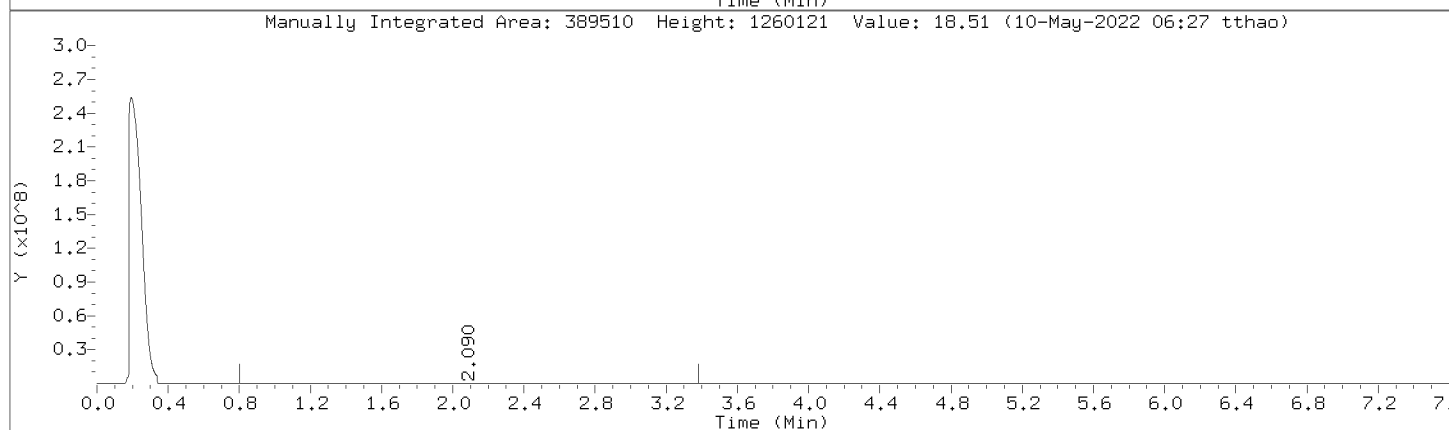
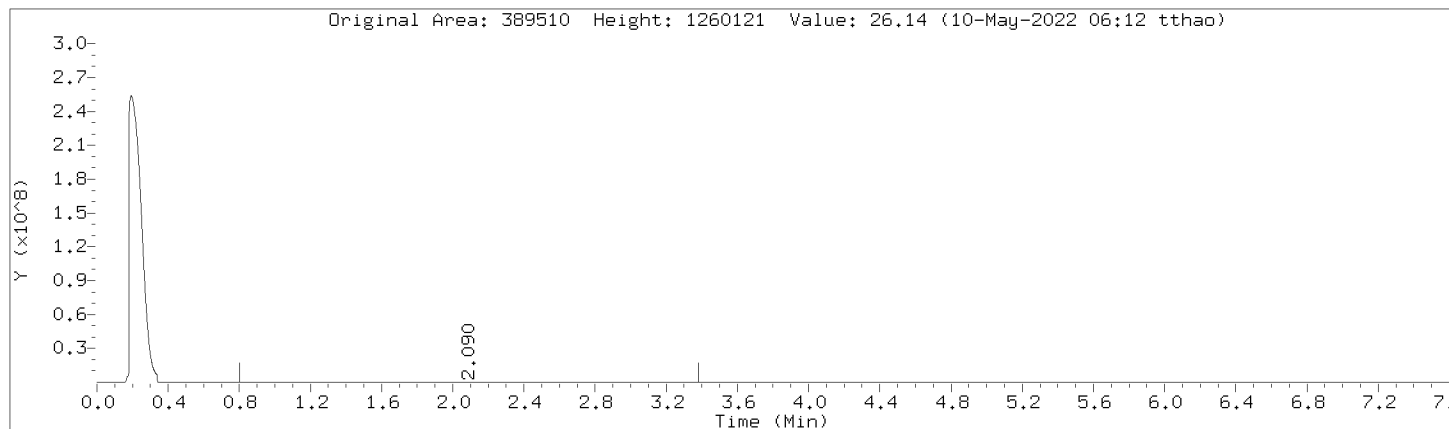
Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL3,364981:2

Compound: DRO by AK 102

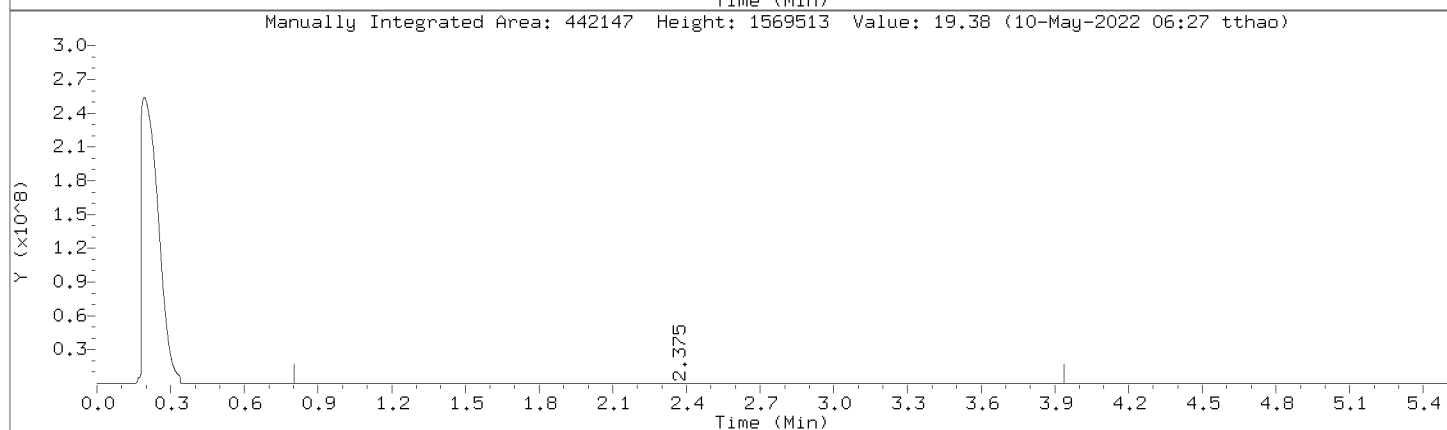
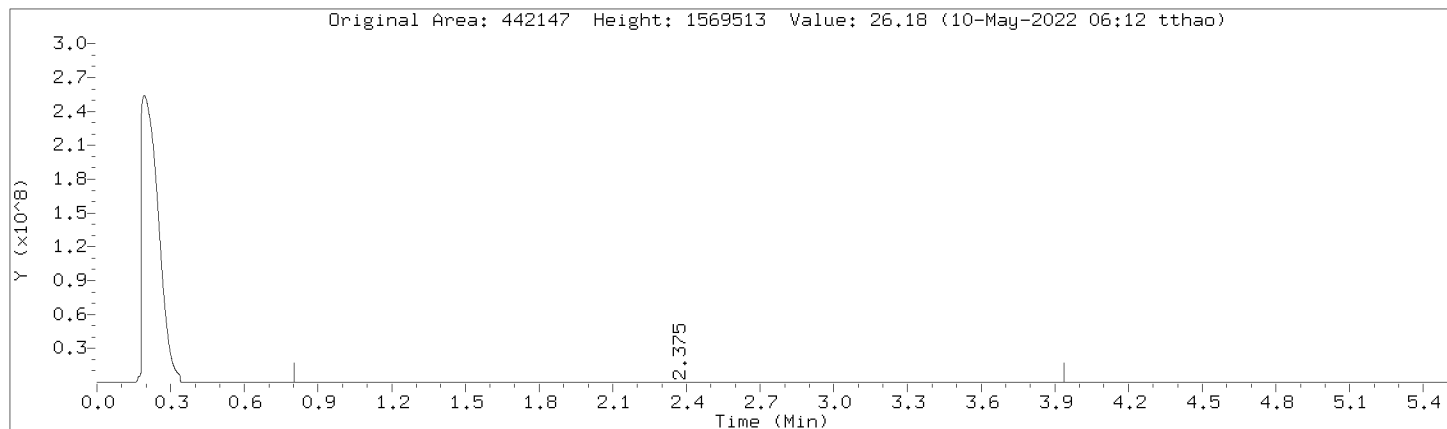
Review Code: RNG

CAS Number:



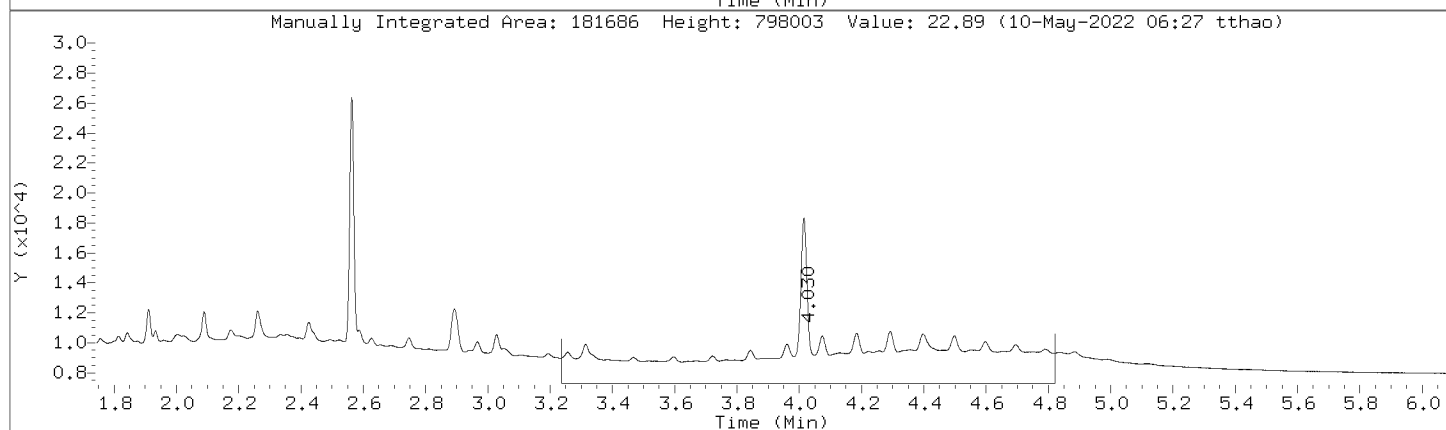
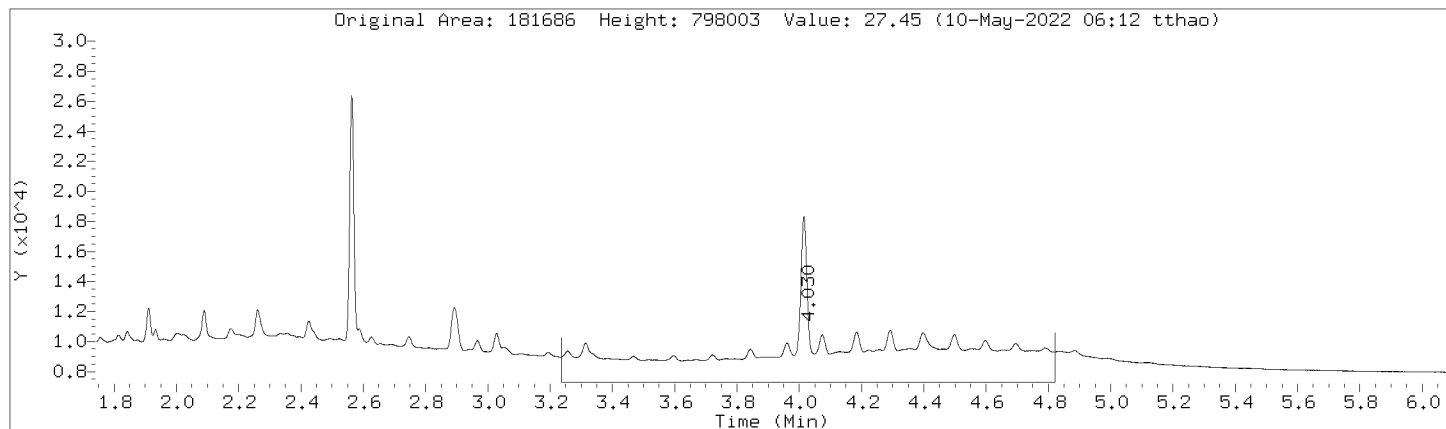
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Injection Date: 09-MAY-2022 15:43  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,364981:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



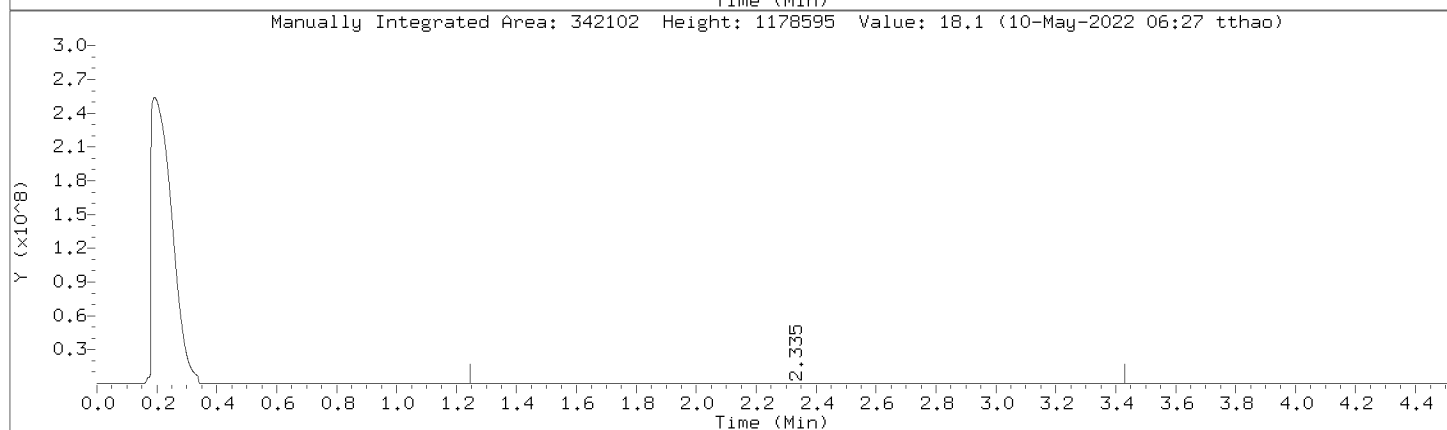
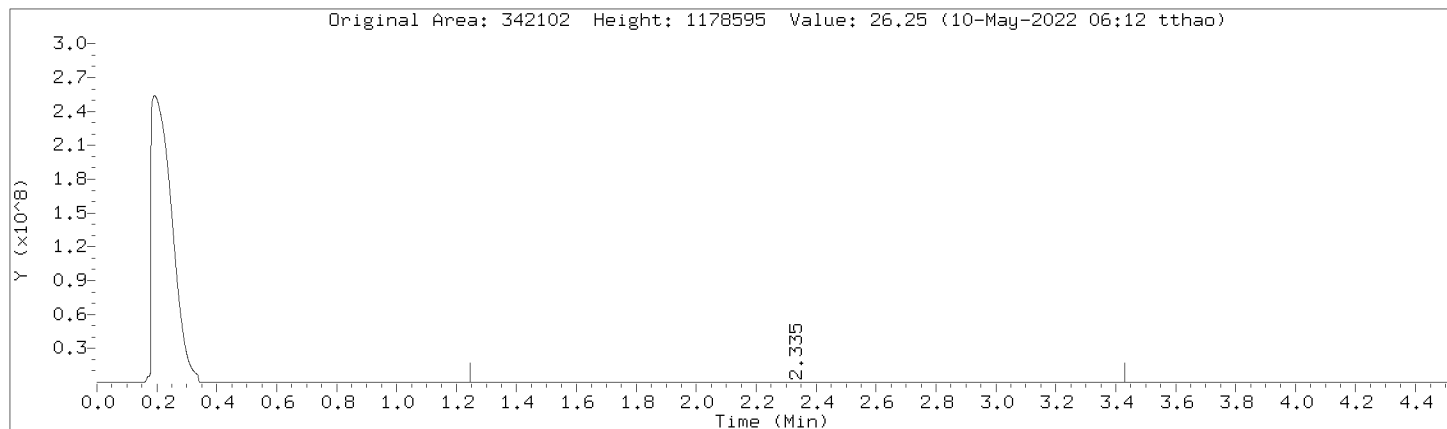
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Injection Date: 09-MAY-2022 15:43  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,364981:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000026.D  
Injection Date: 09-MAY-2022 15:43  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,364981:2

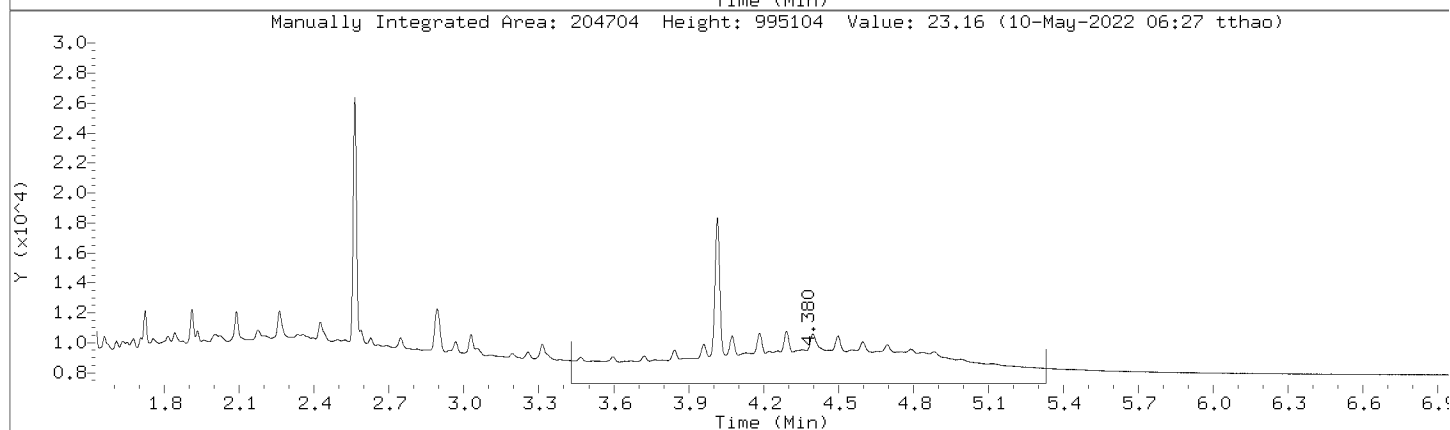
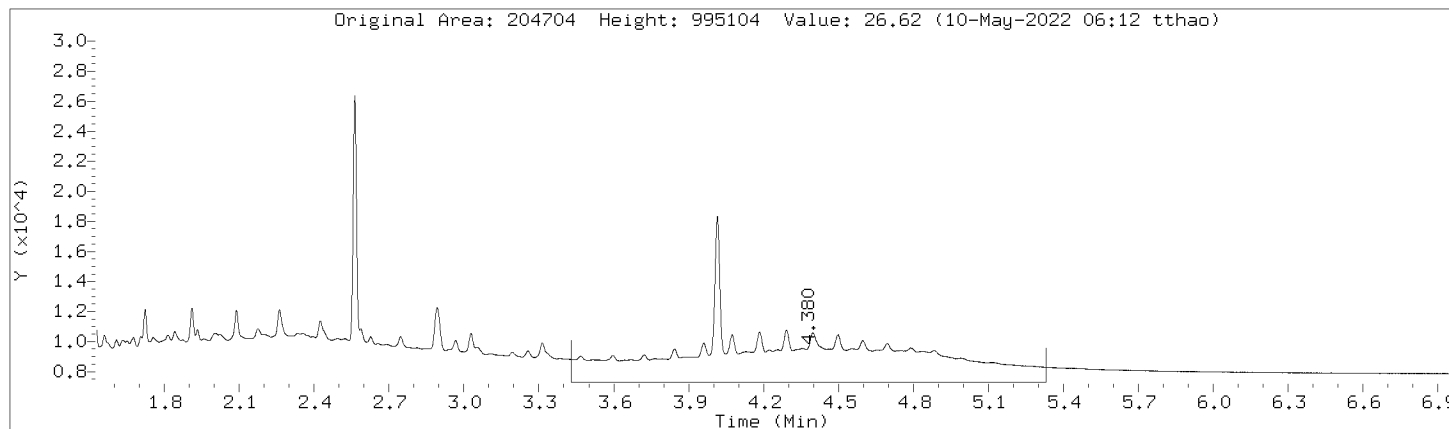
Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:





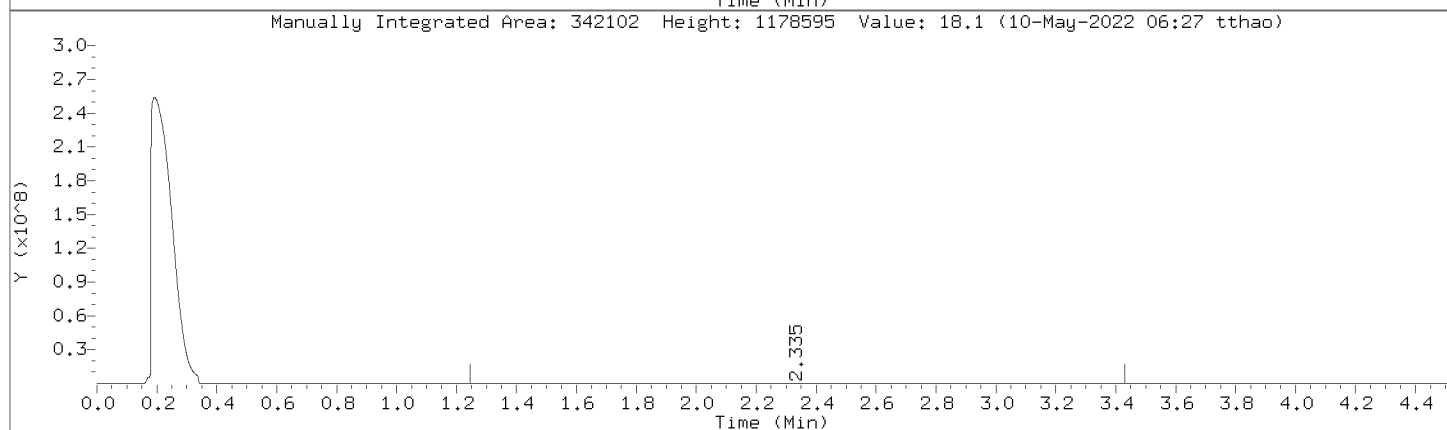
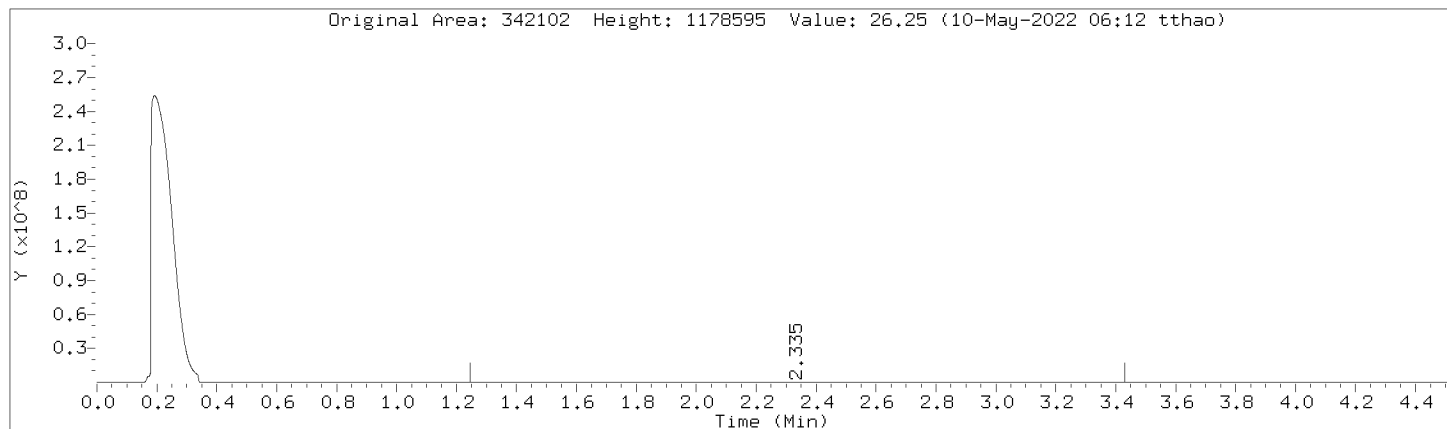
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Injection Date: 09-MAY-2022 15:43  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,364981:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



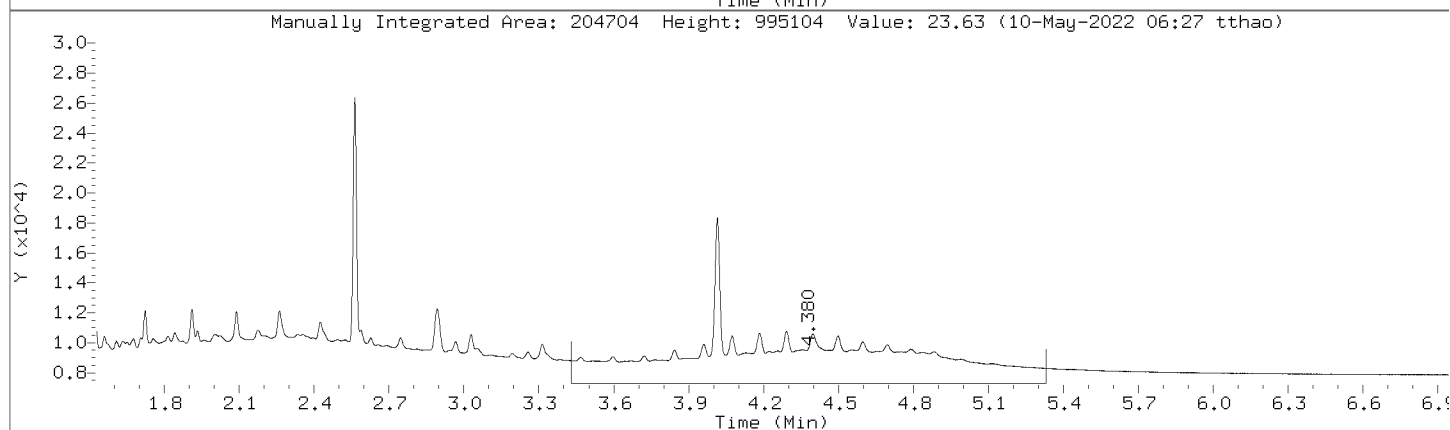
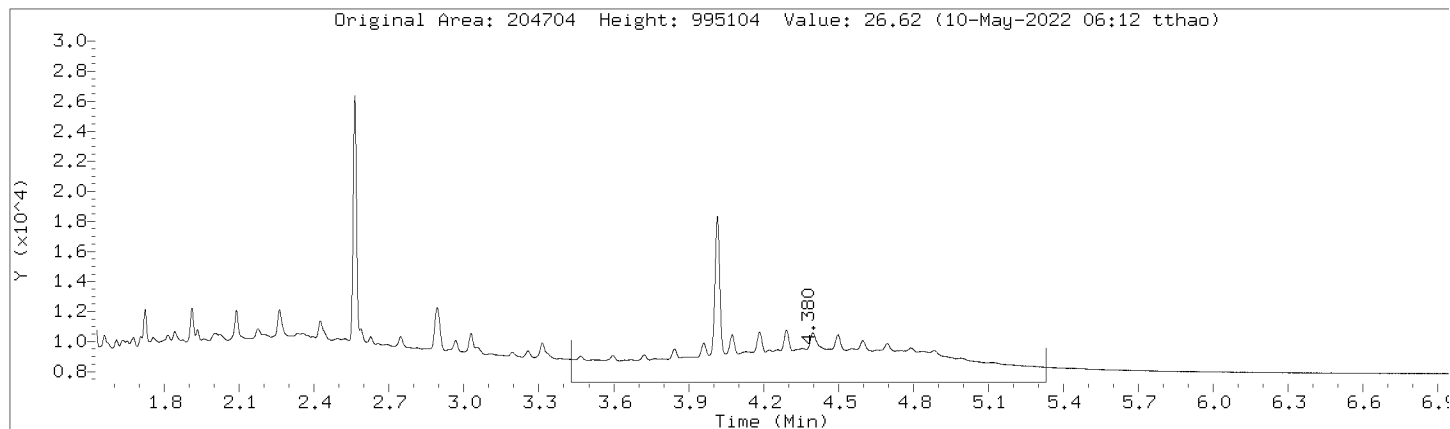
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Injection Date: 09-MAY-2022 15:43  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,364981:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000026.D  
Injection Date: 09-MAY-2022 15:43  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,364981:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000026.D

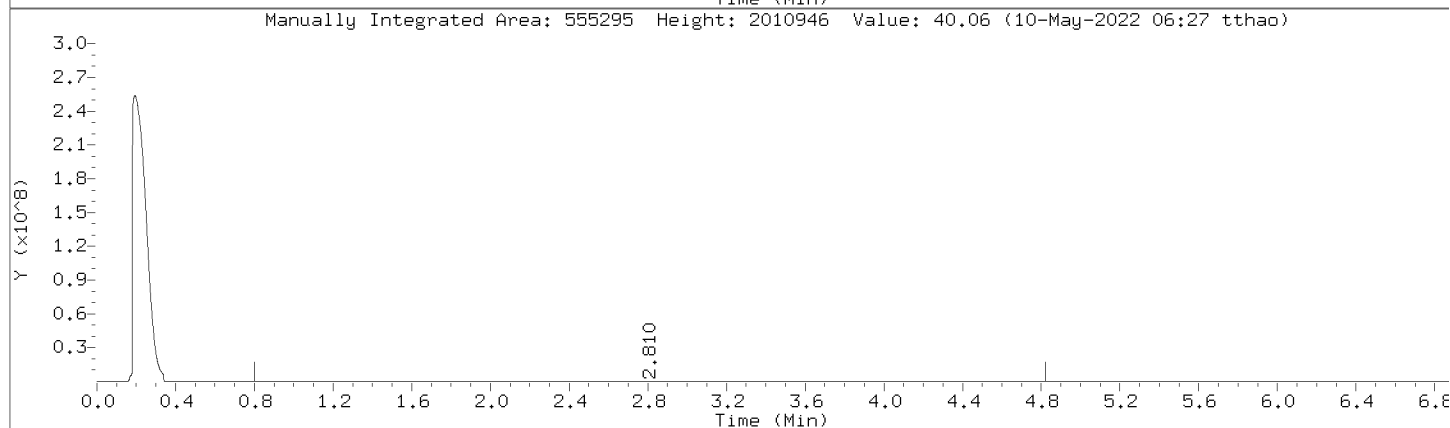
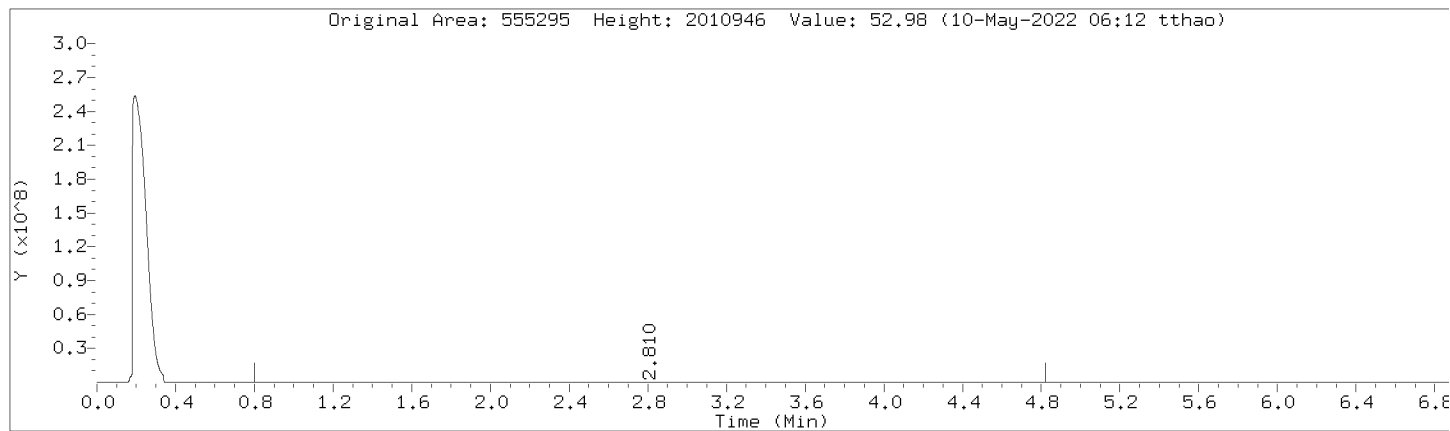
Injection Date: 09-MAY-2022 15:43

Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL3,364981:2

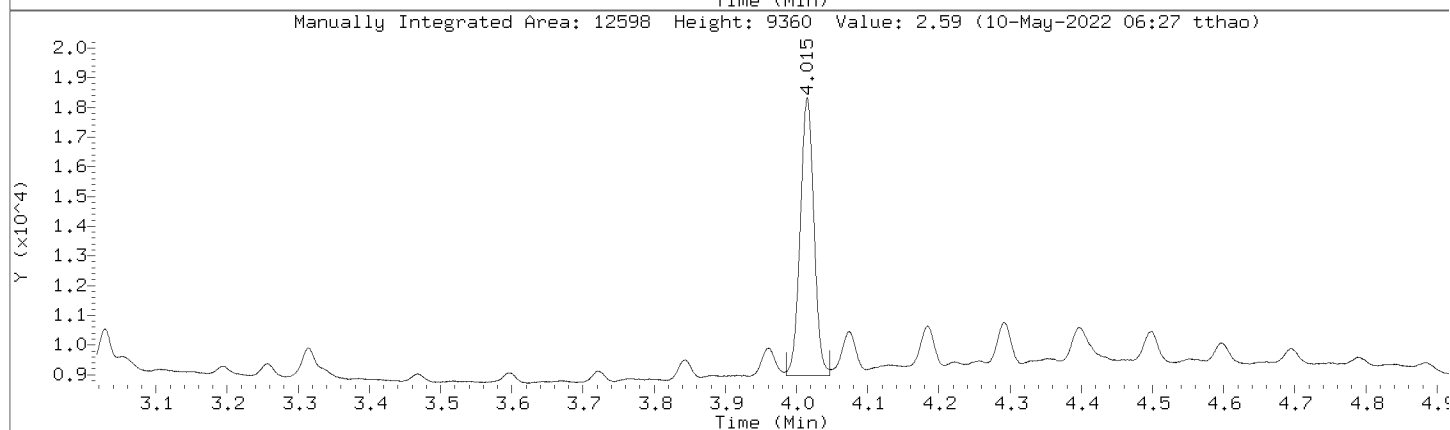
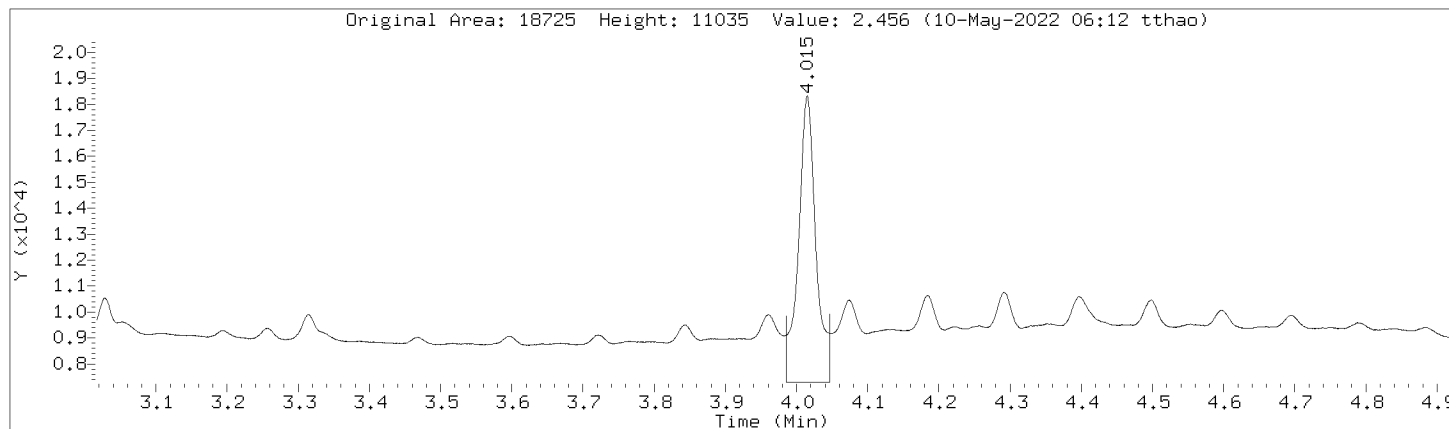
Compound: C10-C36      Review Code: RNG

CAS Number:



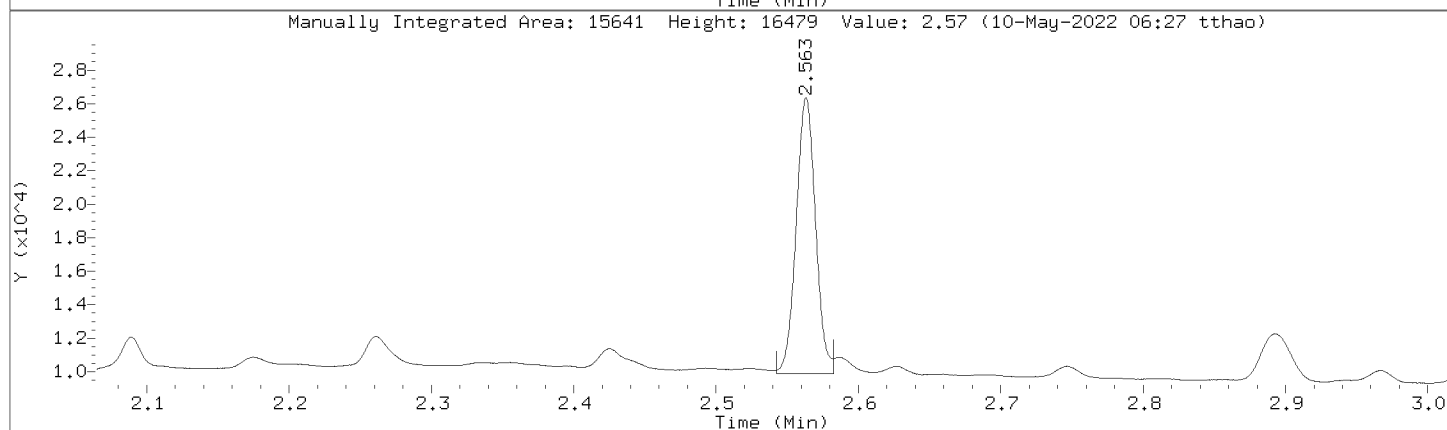
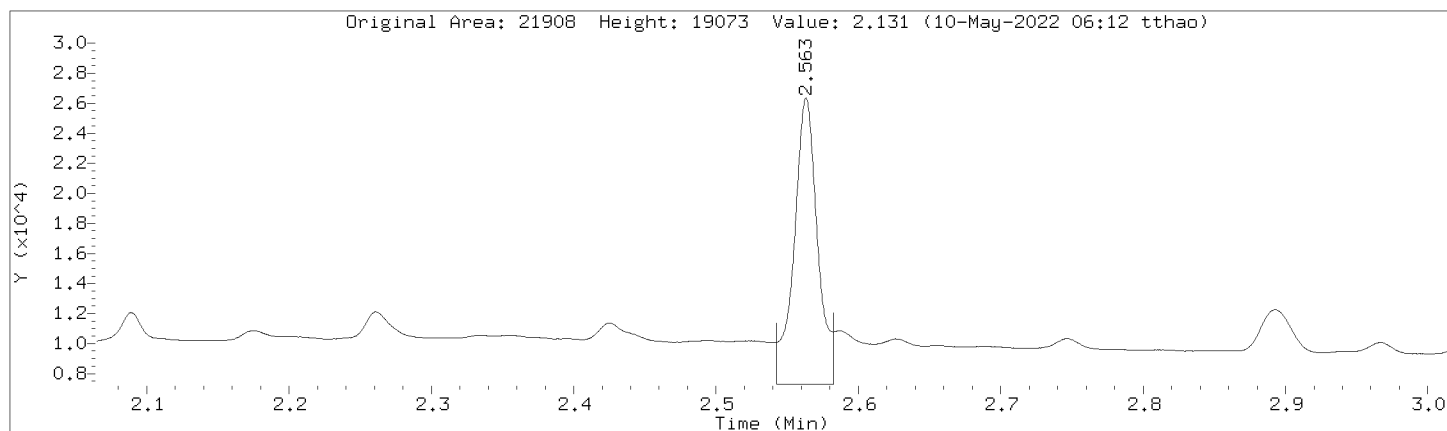
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Injection Date: 09-MAY-2022 15:43  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL3,364981:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000026.D  
 Injection Date: 09-MAY-2022 15:43  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL3,364981:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	165785	165785
DRO by AK 102	389510	389510
TPH-DRO (C10-C28)	442147	442147
Motor Oil Range (C24-C36)	181686	181686
Diesel Fuel Range	342102	342102
Motor Oil Range	204704	204704
Diesel Fuel Range SG	342102	342102
Motor Oil Range SG	204704	204704
C10-C36	555295	555295
n-Triacontane (S)	18725	12598
o-Terphenyl (S)	21908	15641

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AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000027.D  
 Lab Smp Id: DMO-CAL4,364982:2 Client Smp ID: DMO-CAL4,364982:2  
 Inj Date : 09-MAY-2022 15:54  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal4,364982:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050922F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 10-May-2022 06:35 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 6 Calibration Sample, Level: 4  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

AMOUNTS						
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)	REVIEW CODE
====	=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102				CAS #:	
0.800	-	3.380	517634	50.0000	43.2	(M) RNG
-----						
\$ 2	o-Terphenyl (S)				CAS #:	
2.563	2.565	-0.002	30411	5.00000	5.00	(M) BA
-----						
\$ 3	n-Triacontane (S)				CAS #:	
4.014	4.017	-0.003	24771	5.00000	5.09	(M) BA
-----						
S 4	Residual Range Organics AK103				CAS #:	
3.381	-	4.820	234087	50.0000	43.8	(M) RNG
-----						
S 5	TPH-DRO (C10-C28)				CAS #:	
0.800	-	3.950	589190	50.0000	44.0	(M) RNG
-----						
S 6	Motor Oil Range (C24-C36)				CAS #:	
3.240	-	4.820	251409	50.0000	43.8	(M) RNG
-----						
S 7	C10-C36				CAS #:	
0.800	-	4.820	751878	100.000	86.9	(M) RNG
-----						
S 8	Diesel Fuel Range				CAS #:	
1.240	-	3.430	448600	50.0000	42.7	(M) RNG
-----						
S 9	Diesel Fuel Range SG				CAS #:	
1.240	-	3.430	448600	50.0000	42.7	(M) RNG
-----						
S 10	Motor Oil Range				CAS #:	
3.431	-	5.330	289607	50.0000	45.0	(M) RNG
-----						
S 11	Motor Oil Range SG				CAS #:	
3.431	-	5.330	289607	50.0000	45.5	(M) RNG
-----						

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.



Date : 09-MAY-2022 15:54

Client ID: DMO-CAL4,364982;2

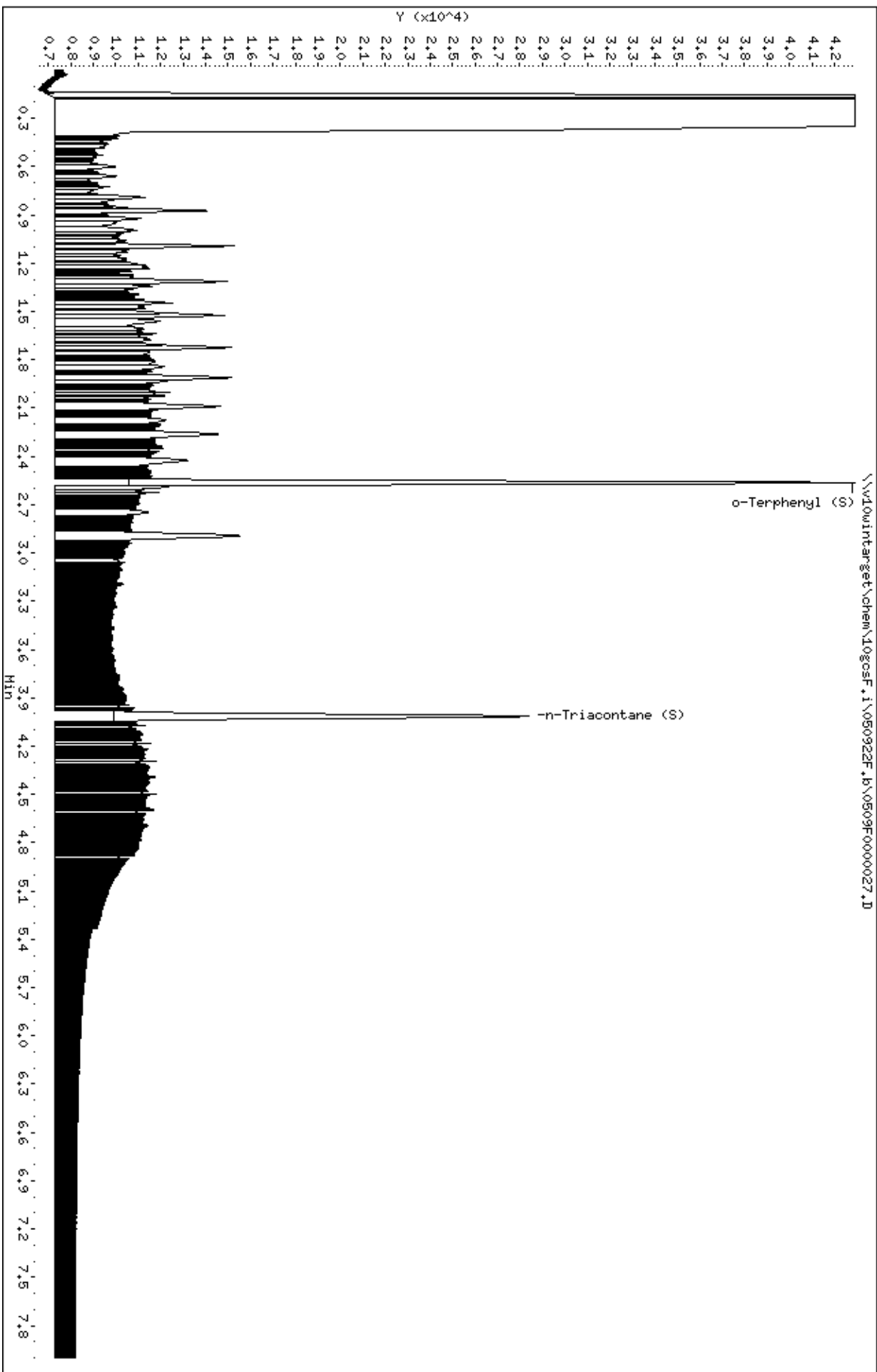
Sample Info: DMO-CAL4,364982;2

Instrument: 10gocsf.1

Operator: TT2

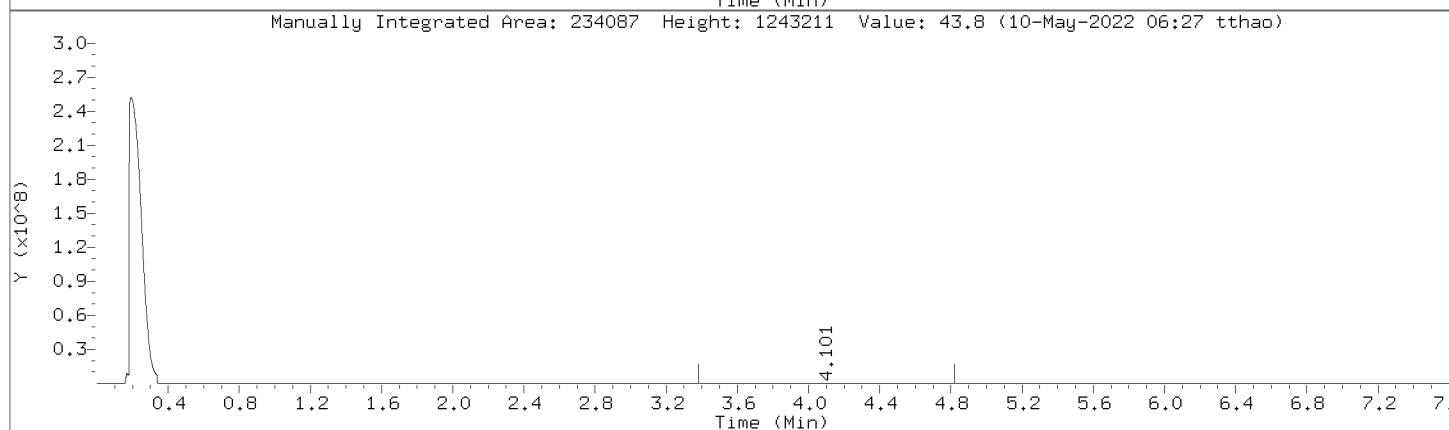
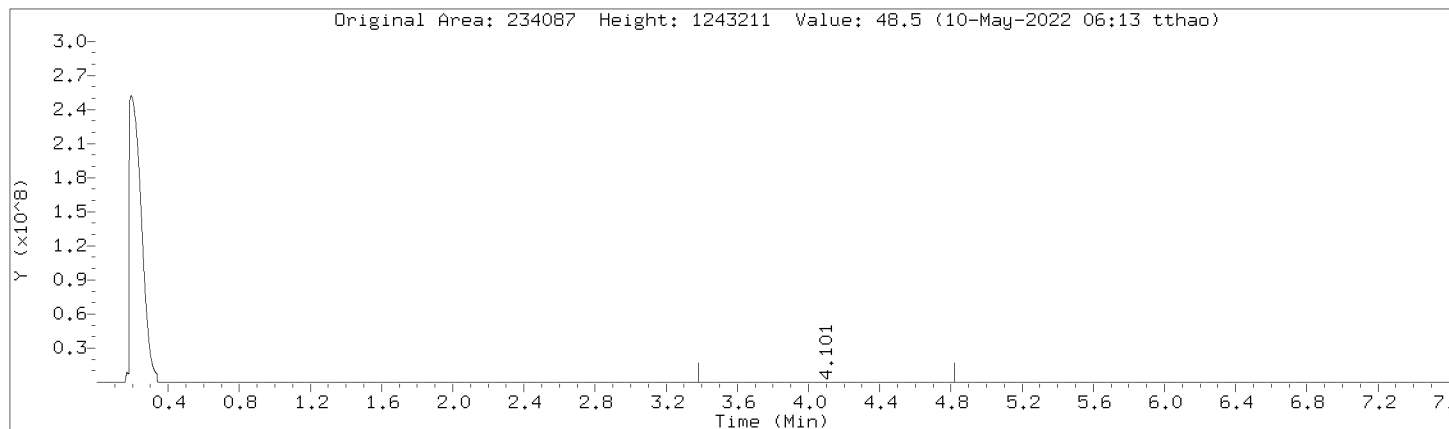
Column phase: DB-5-MS21390001

Column diameter: 0.32



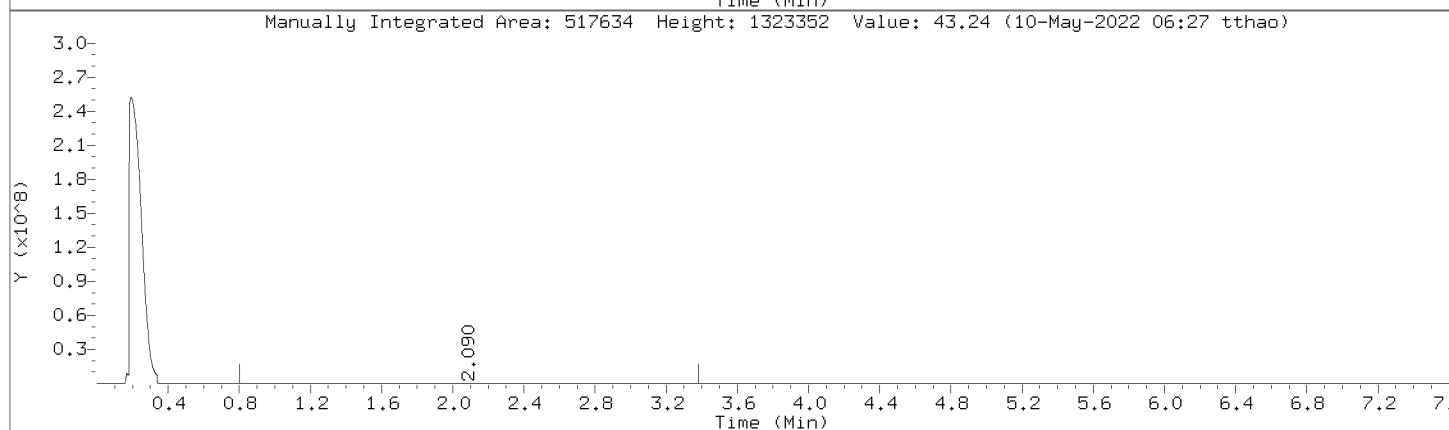
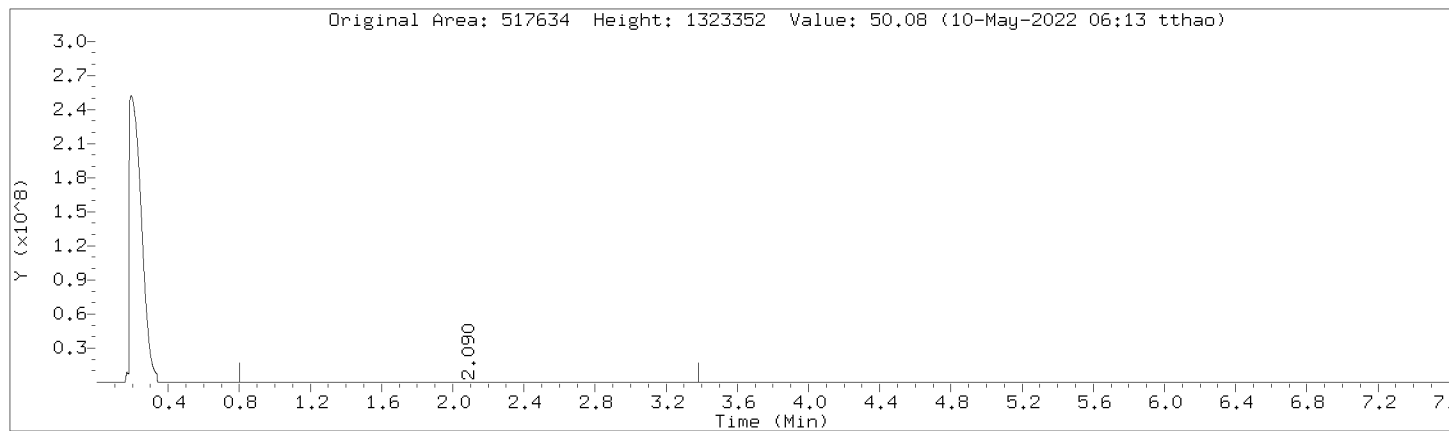
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000027.D  
Injection Date: 09-MAY-2022 15:54  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,364982:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000027.D  
Injection Date: 09-MAY-2022 15:54  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,364982:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000027.D

Injection Date: 09-MAY-2022 15:54

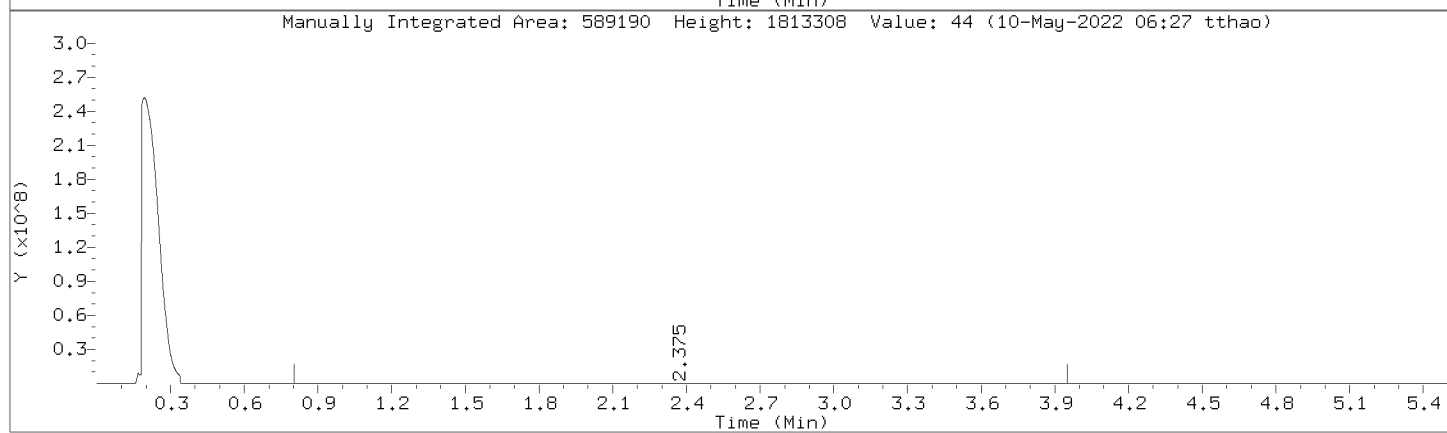
Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL4,364982:2

Compound: TPH-DRO (C10-C28)

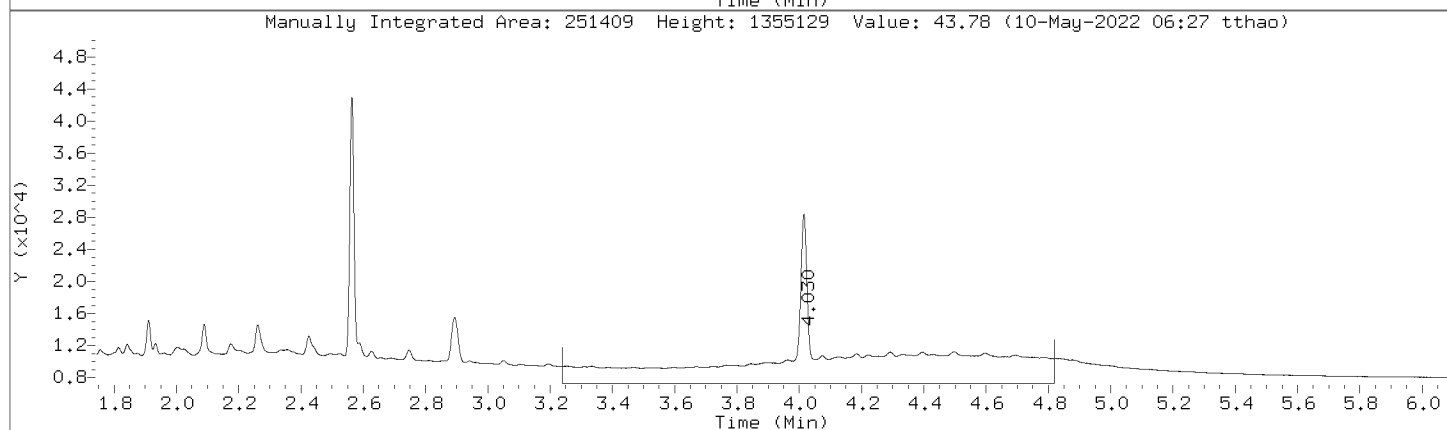
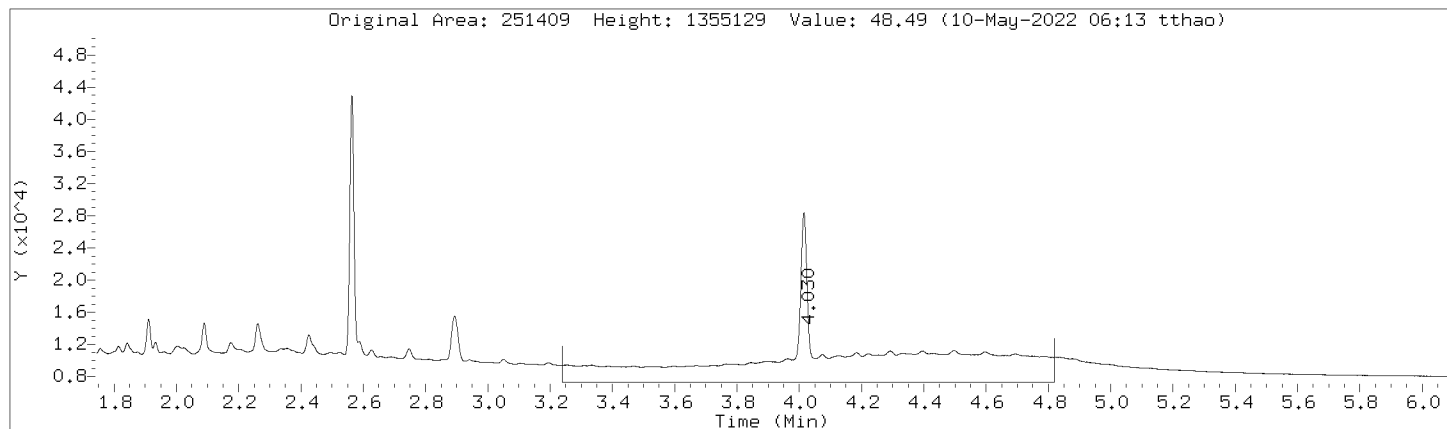
Review Code: RNG

CAS Number:



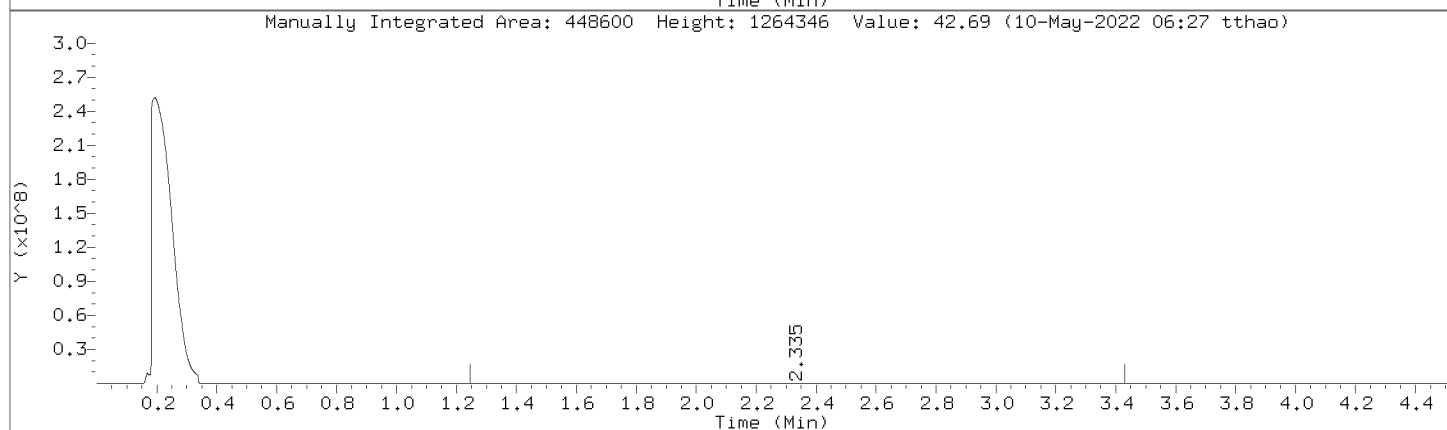
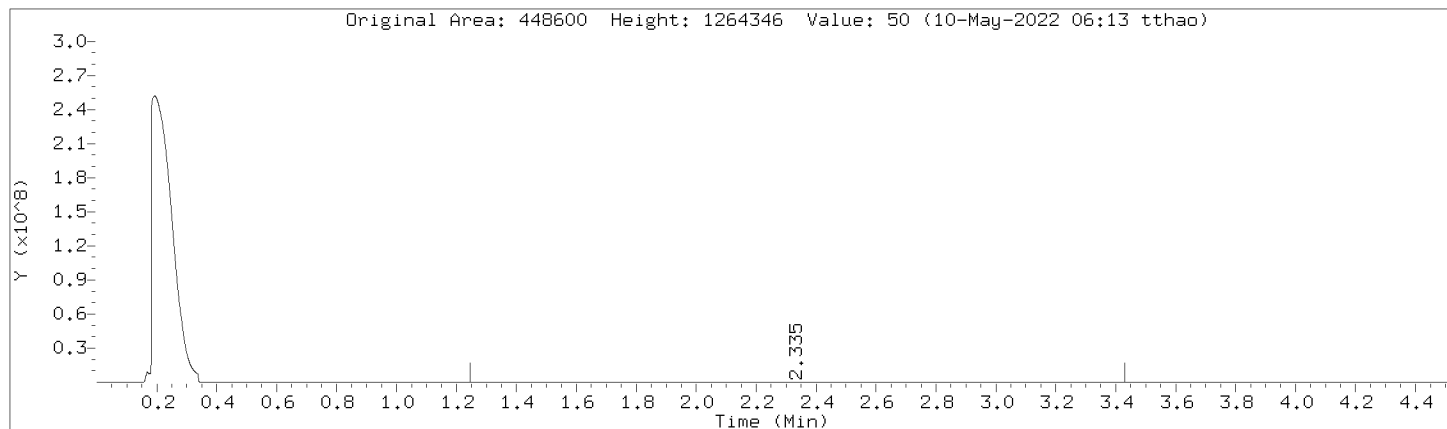
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Injection Date: 09-MAY-2022 15:54  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,364982:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



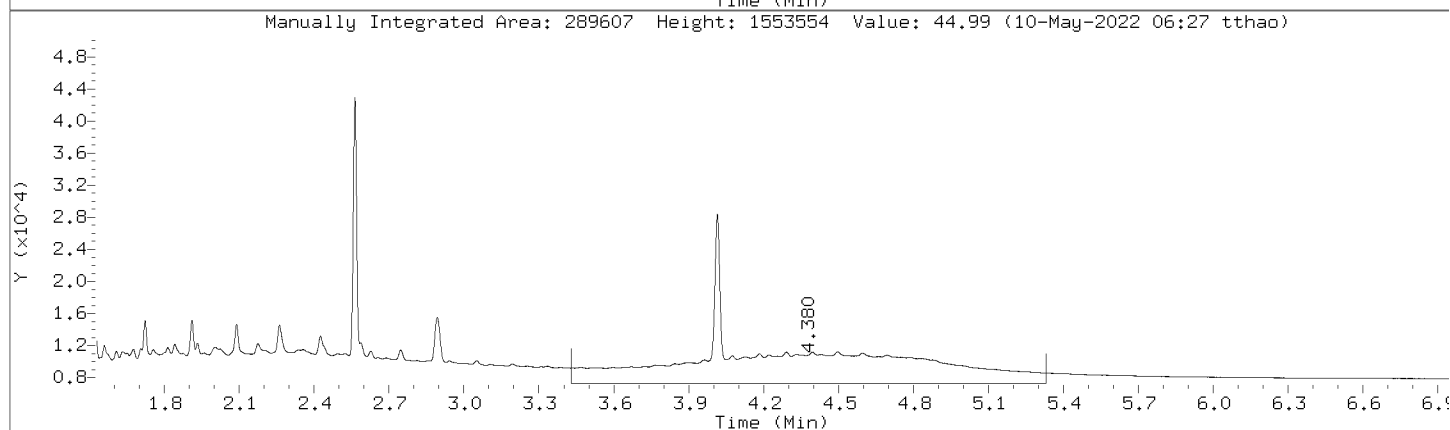
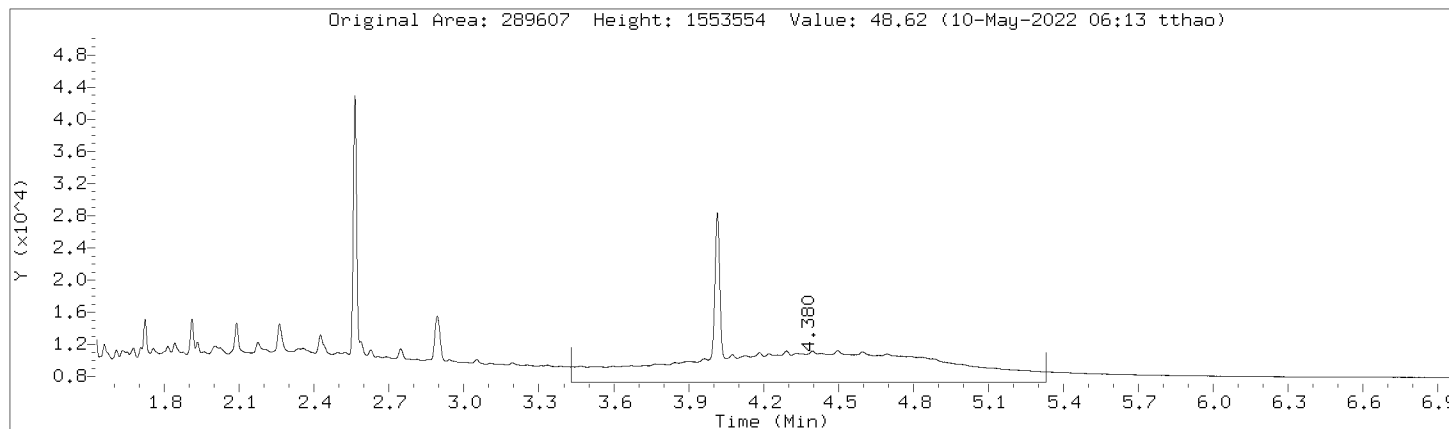
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Injection Date: 09-MAY-2022 15:54  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,364982:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



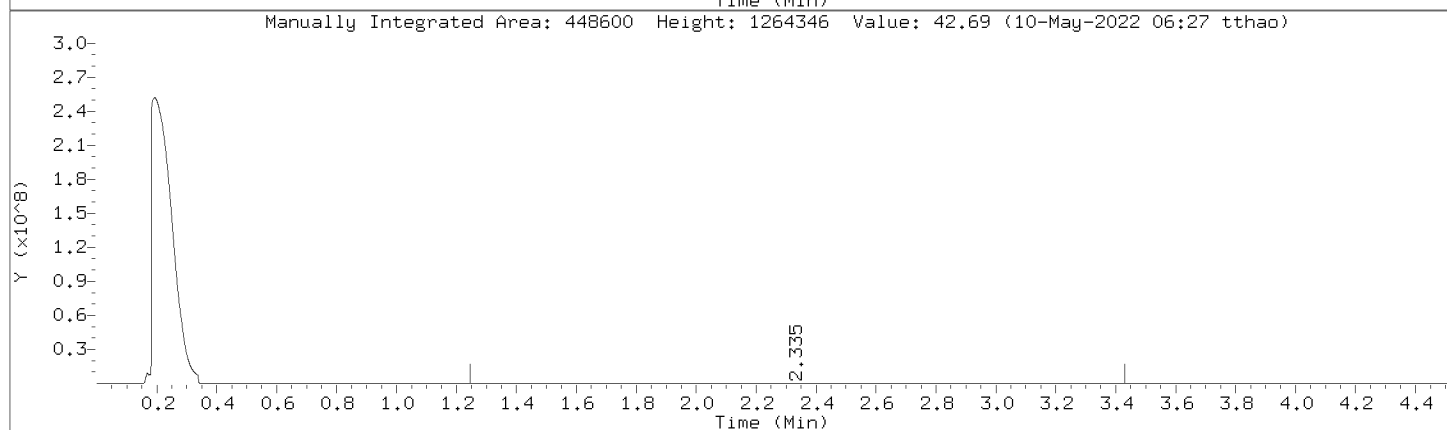
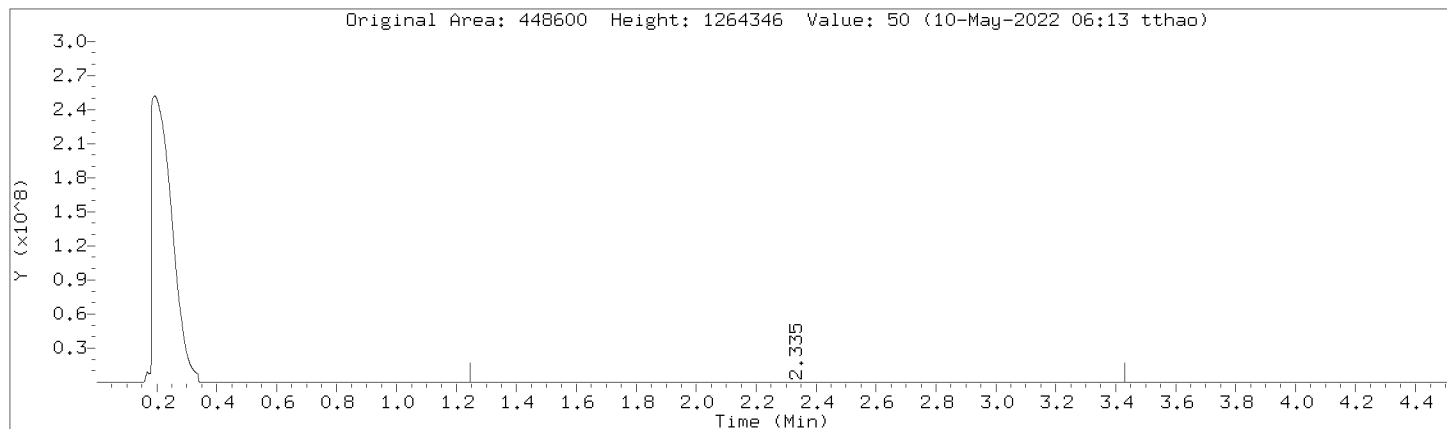
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Injection Date: 09-MAY-2022 15:54  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,364982:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000027.D  
Injection Date: 09-MAY-2022 15:54  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,364982:2

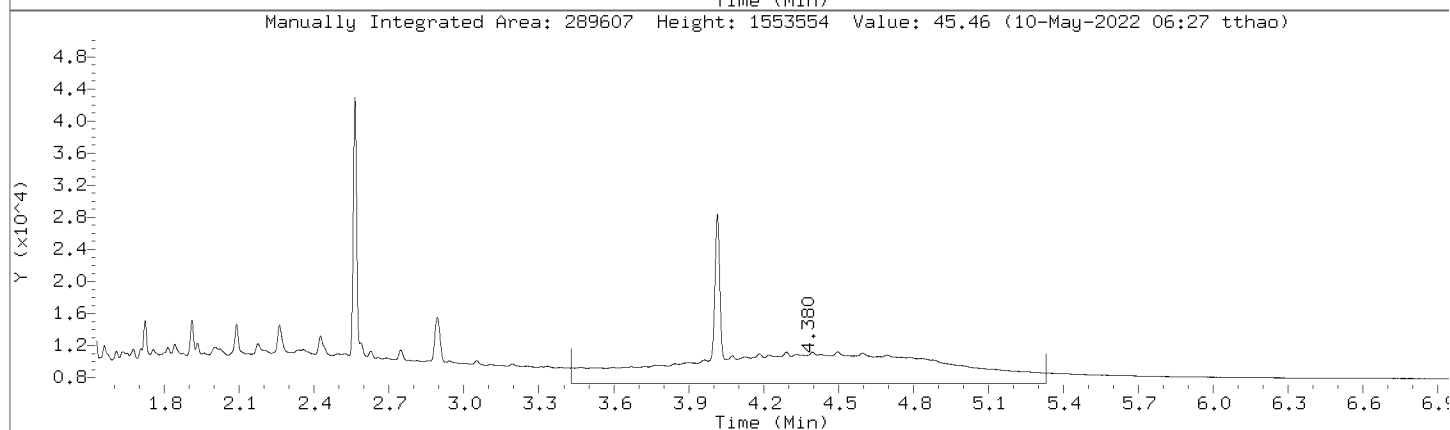
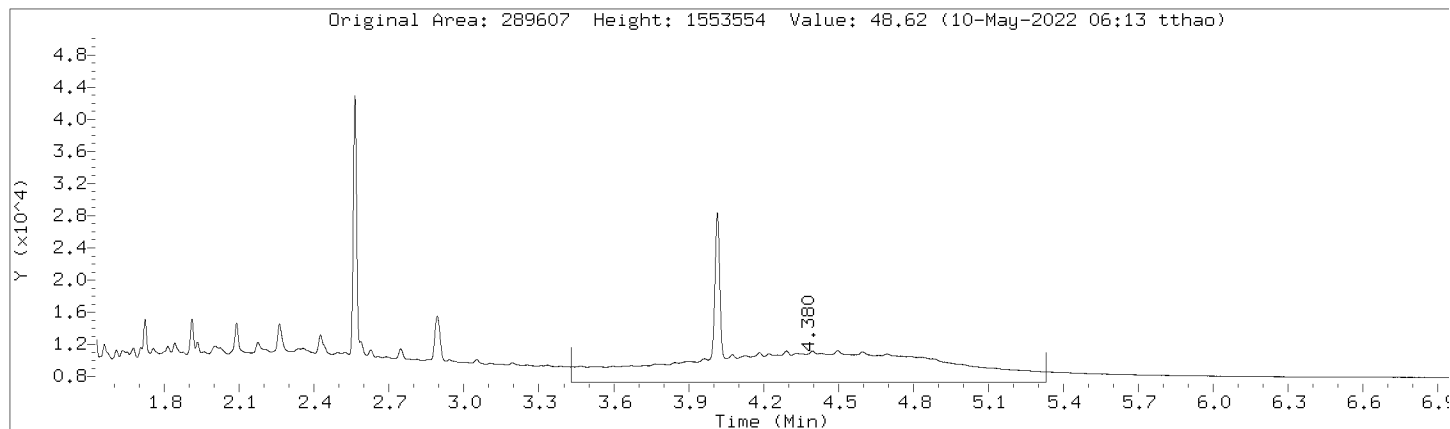
Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000027.D  
Injection Date: 09-MAY-2022 15:54  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,364982:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000027.D

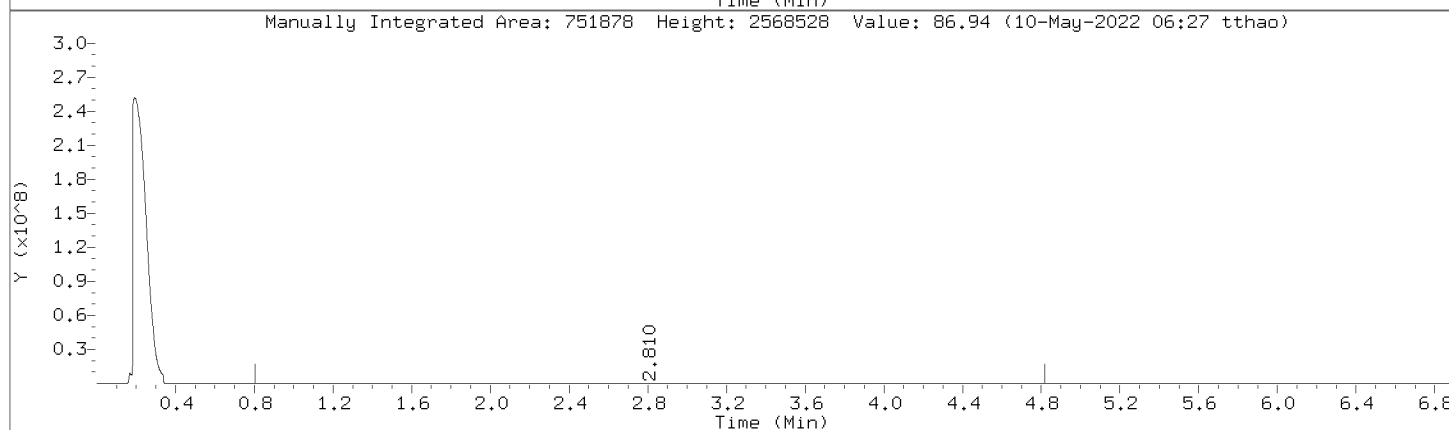
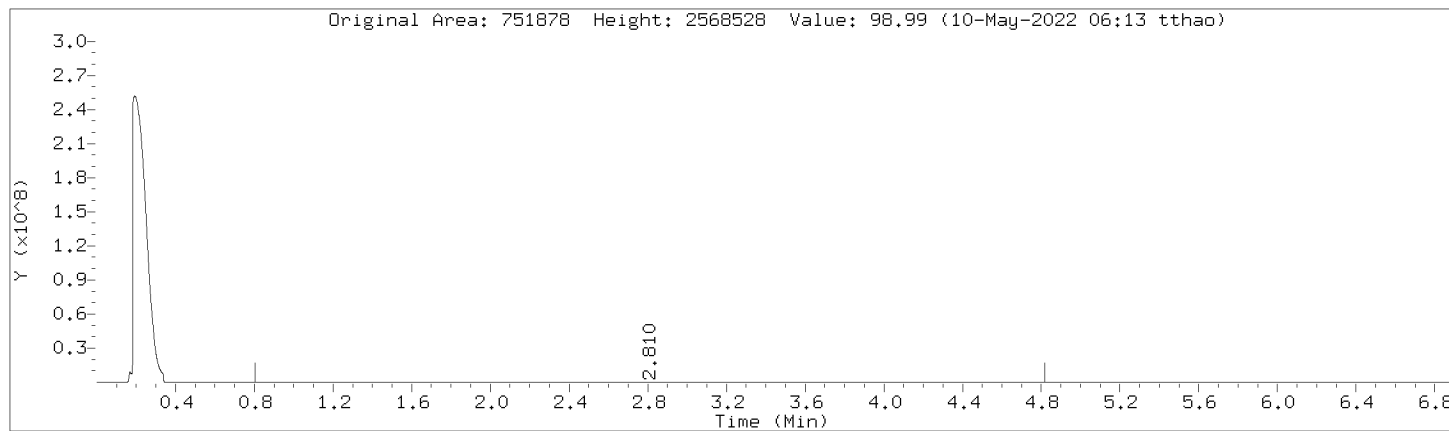
Injection Date: 09-MAY-2022 15:54

Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL4,364982:2

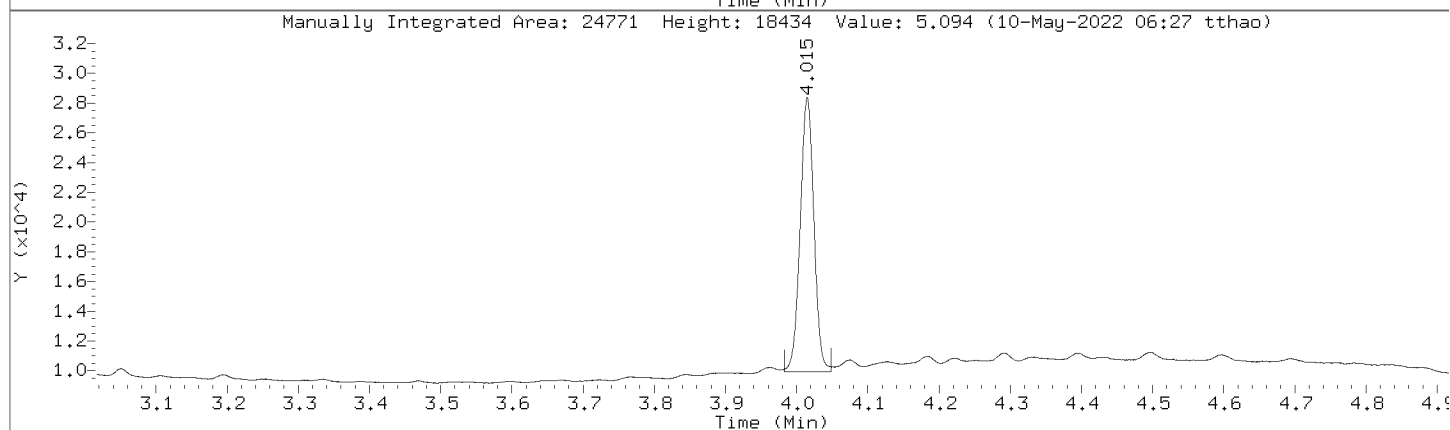
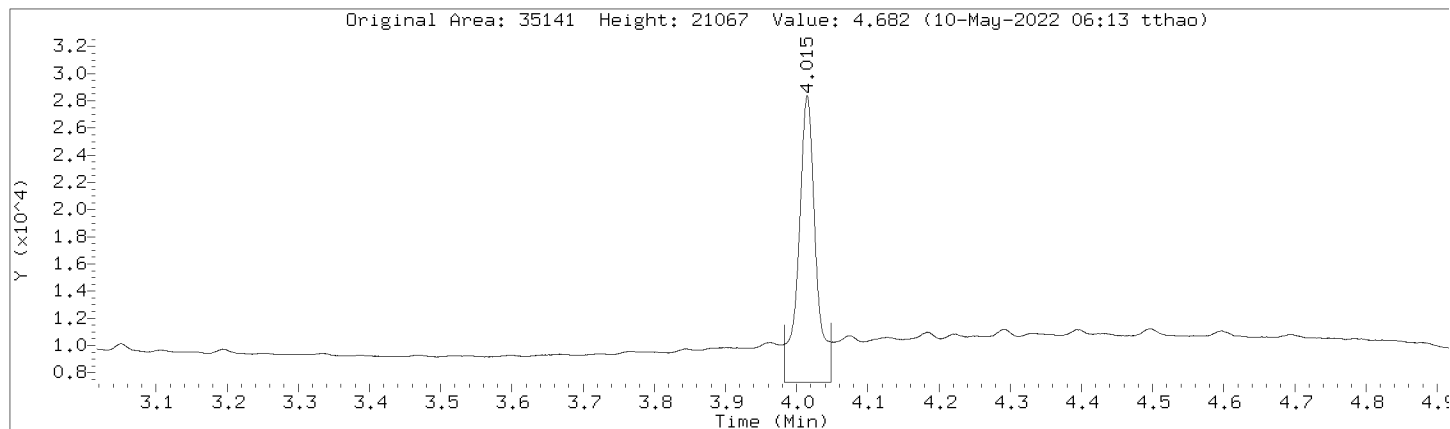
Compound: C10-C36      Review Code: RNG

CAS Number:



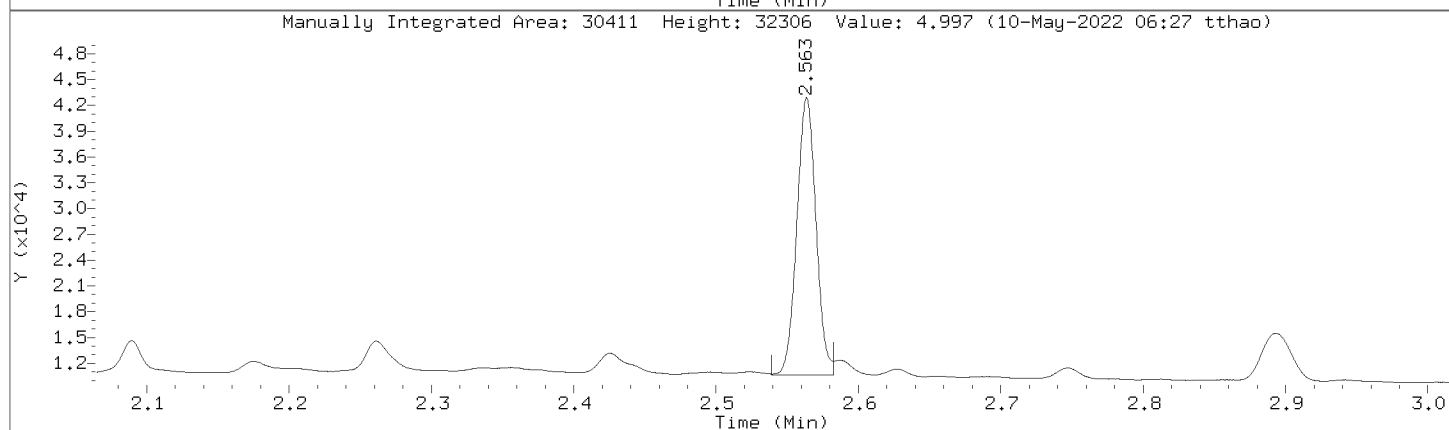
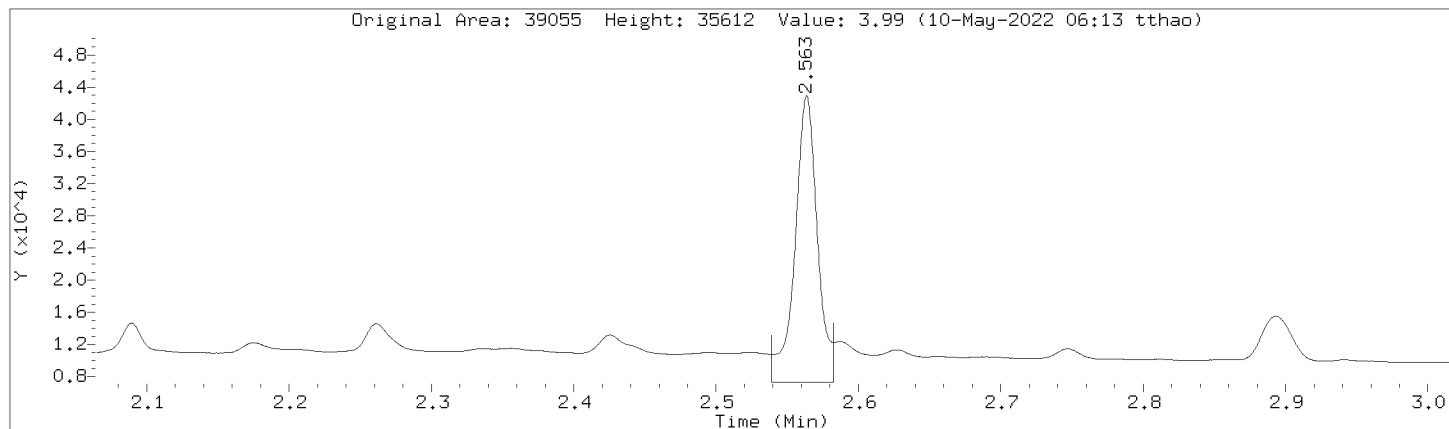
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000027.D  
Injection Date: 09-MAY-2022 15:54  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL4,364982:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000027.D  
 Injection Date: 09-MAY-2022 15:54  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL4,364982:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	234087	234087
DRO by AK 102	517634	517634
TPH-DRO (C10-C28)	589190	589190
Motor Oil Range (C24-C36)	251409	251409
Diesel Fuel Range	448600	448600
Motor Oil Range	289607	289607
Diesel Fuel Range SG	448600	448600
Motor Oil Range SG	289607	289607
C10-C36	751878	751878
n-Triacontane (S)	35141	24771
o-Terphenyl (S)	39055	30411

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AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000028.D  
 Lab Smp Id: DMO-CAL5,364983:2 Client Smp ID: DMO-CAL5,364983:2  
 Inj Date : 09-MAY-2022 16:06  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal5,364983:2  
 Misc Info : 39289  
 Comment : FID  
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 Meth Date : 10-May-2022 06:35 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 7 Calibration Sample, Level: 5  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.800	- 3.380		786984 100.000	95.2	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.564	2.565 -0.001		60435 10.0000	9.93	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.015	4.017 -0.002		48857 10.0000	10.0	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.381	- 4.820		404664 100.000	97.0	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.800	- 3.950		897834 100.000	95.7	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.240	- 4.820		428533 100.000	96.8	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.800	- 4.820		1191648 200.000	192	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.240	- 3.430		674532 100.000	94.8	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.240	- 3.430		674532 100.000	94.8	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.431	- 5.330		494946 100.000	97.8	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.431	- 5.330		494946 100.000	98.2	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 09-MAY-2022 16:06

Client ID: DMO-CAL5.364983;2

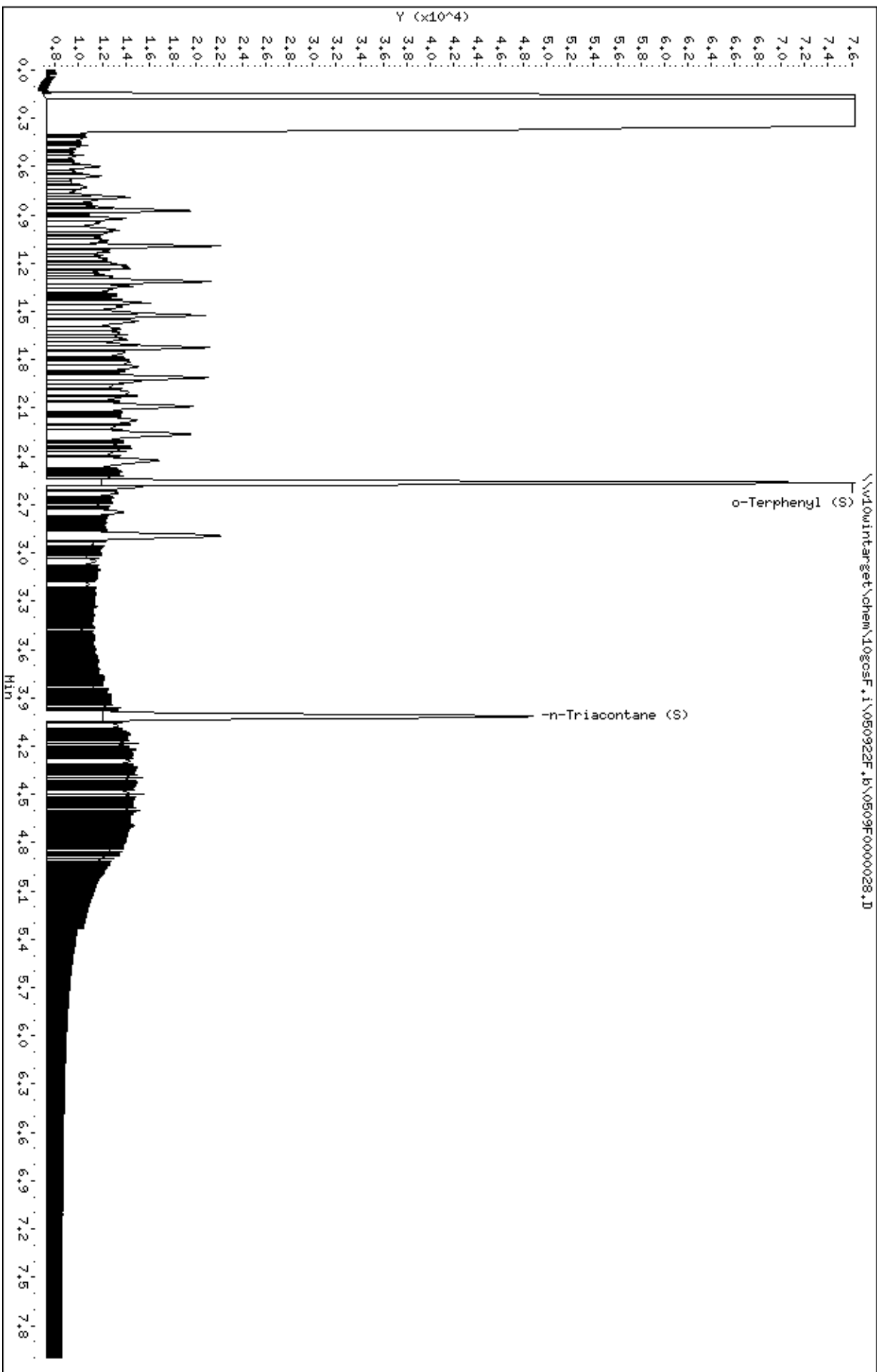
Sample Info: DMO-CAL5.364983;2

Instrument: 10gcsf.1

Operator: TT2

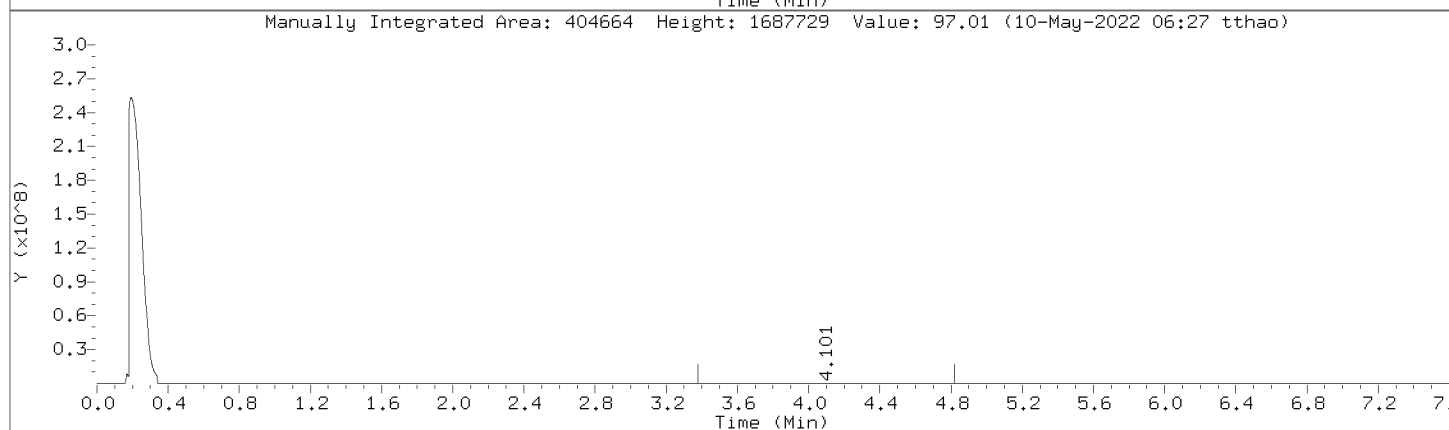
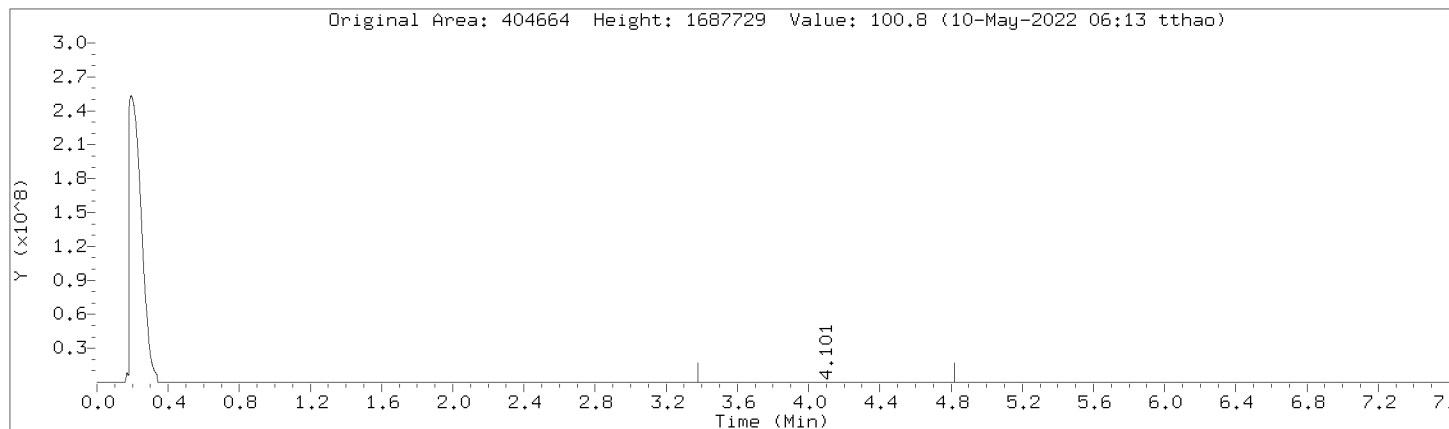
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Column phase: DB-5-USA21390001



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Injection Date: 09-MAY-2022 16:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,364983:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000028.D

Injection Date: 09-MAY-2022 16:06

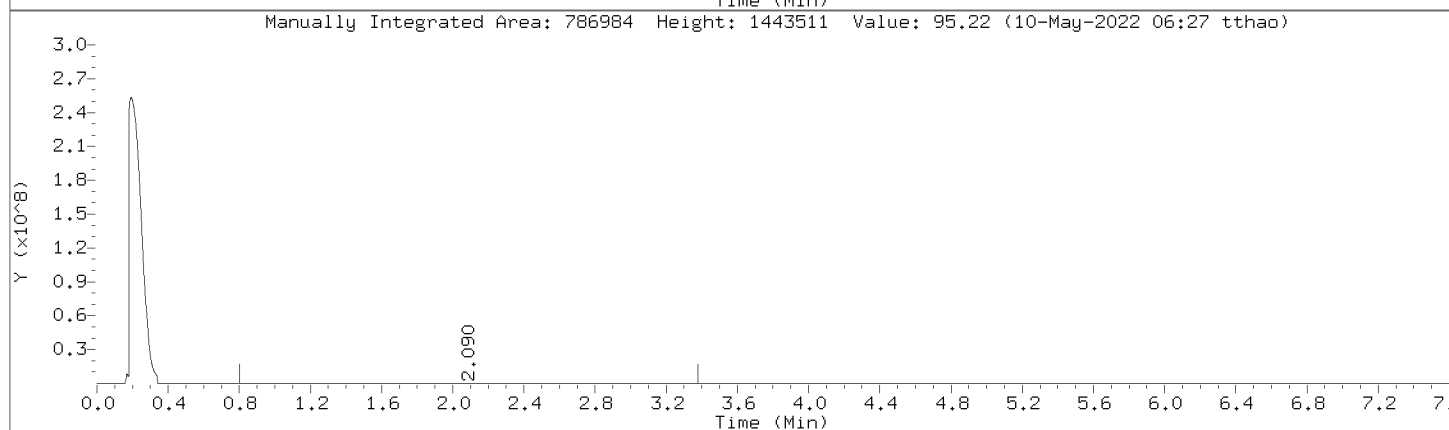
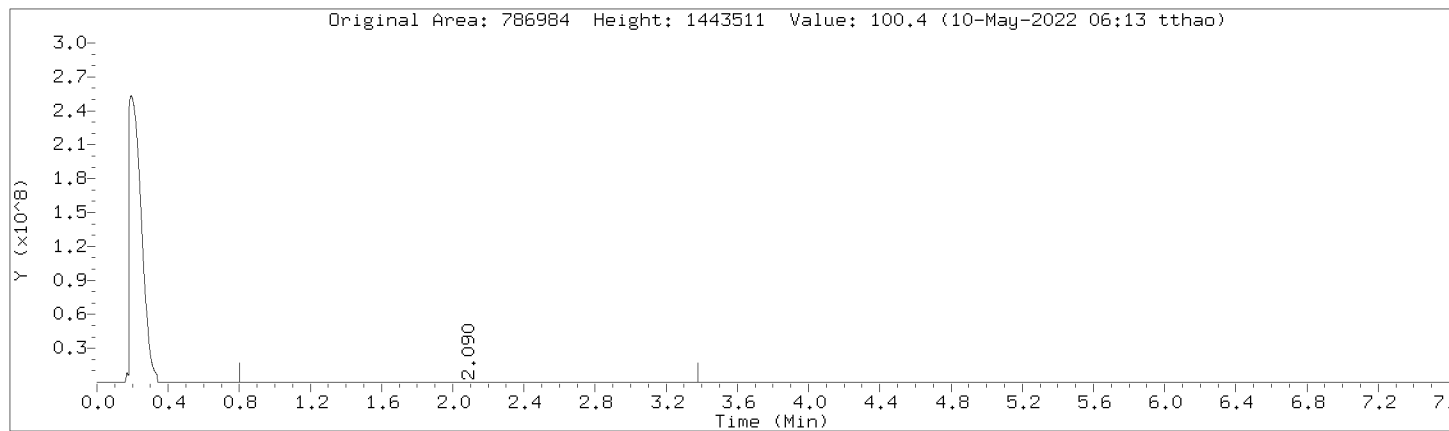
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Lab Sample ID: DMO-CAL5,364983:2

Compound: DRO by AK 102

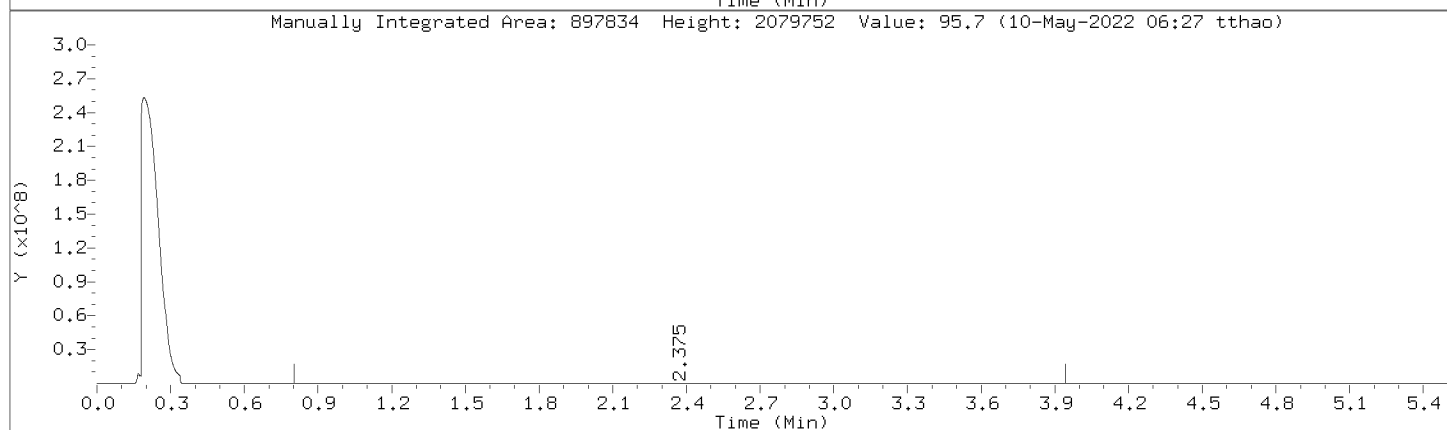
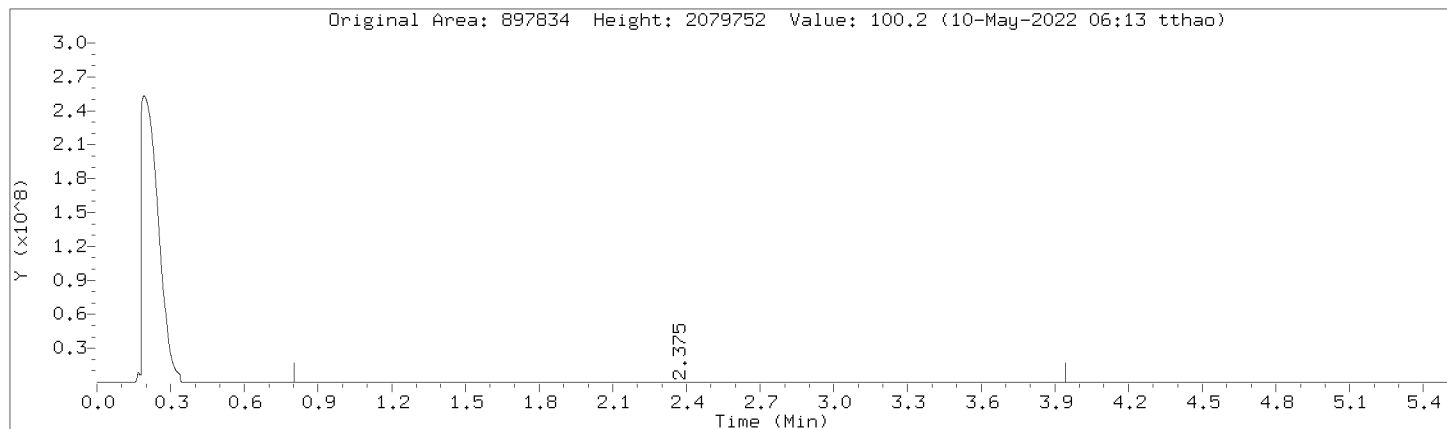
Review Code: RNG

CAS Number:



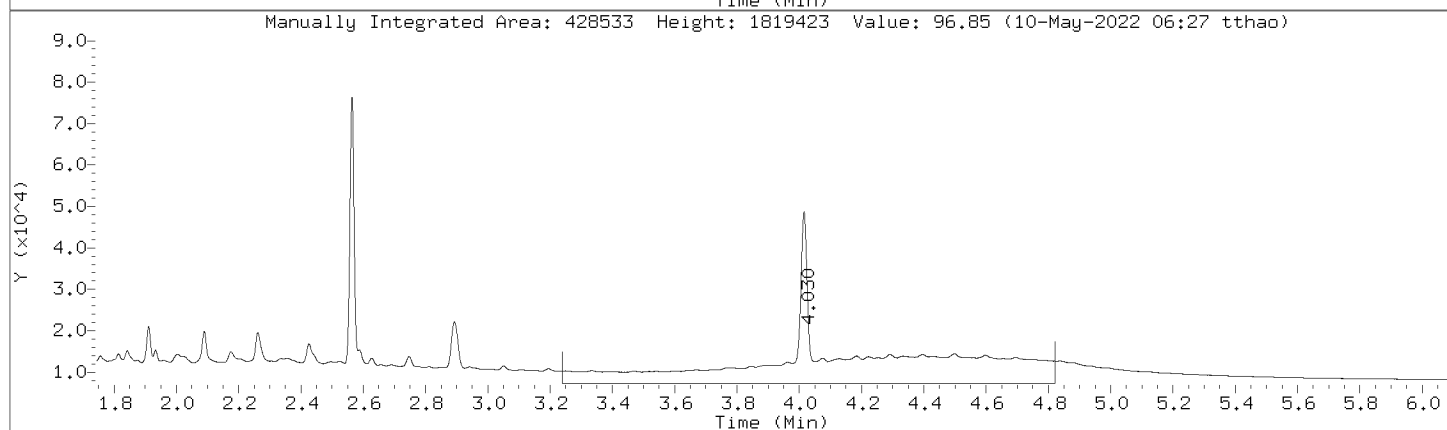
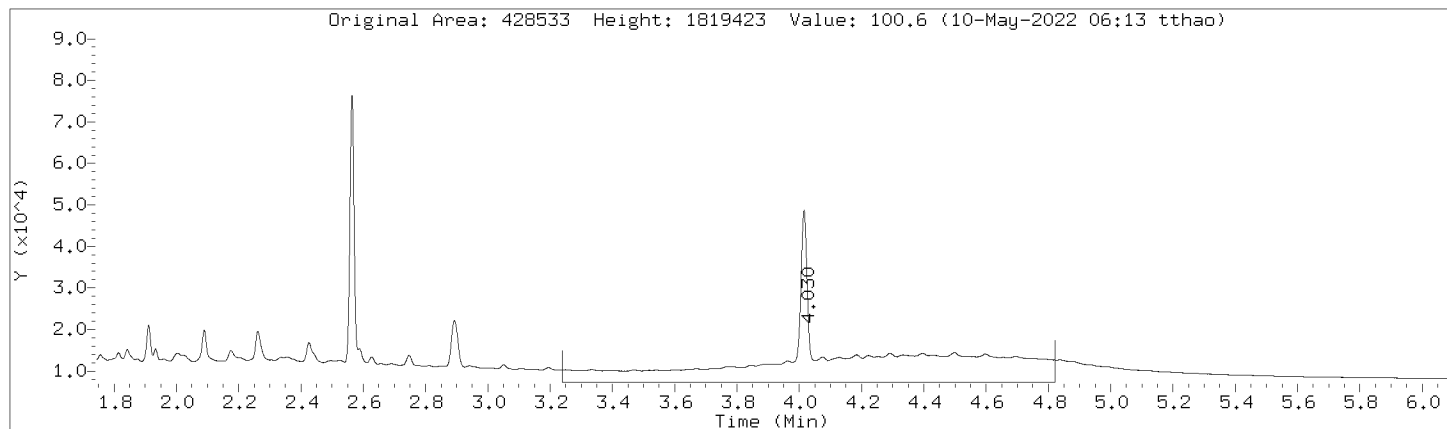
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Injection Date: 09-MAY-2022 16:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,364983:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



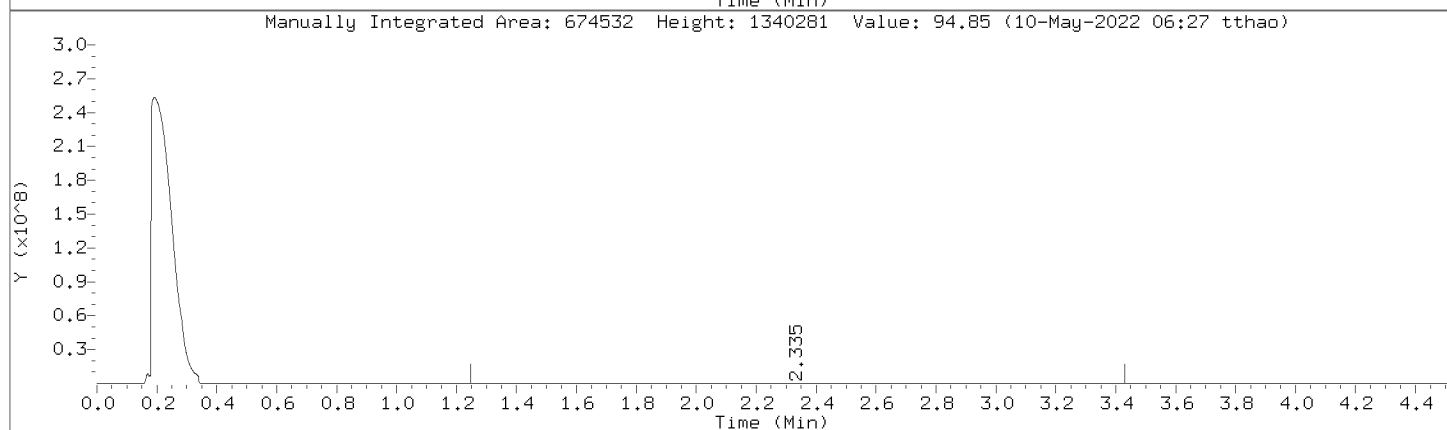
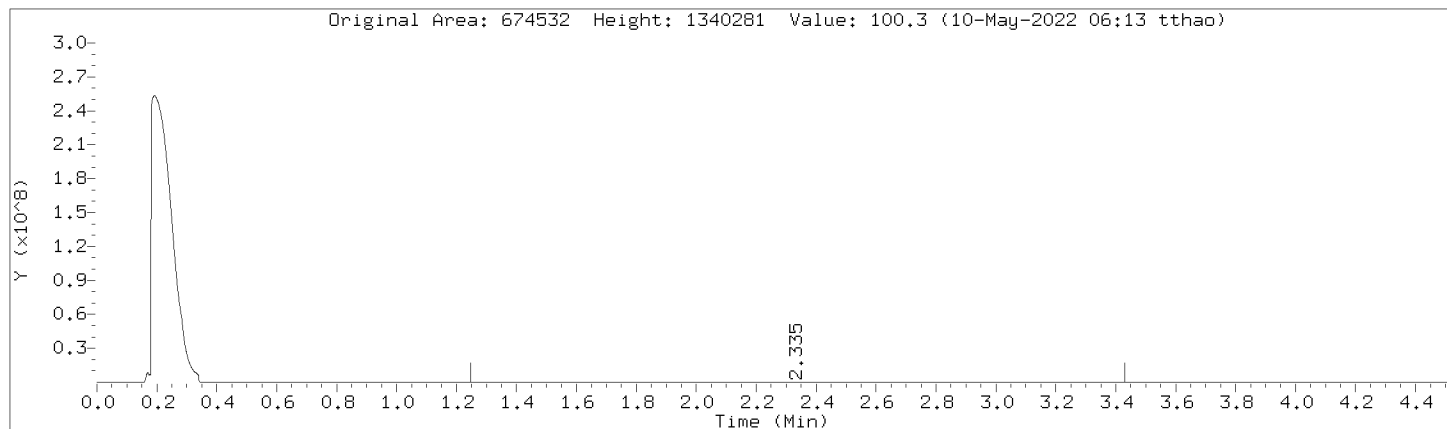
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Injection Date: 09-MAY-2022 16:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,364983:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



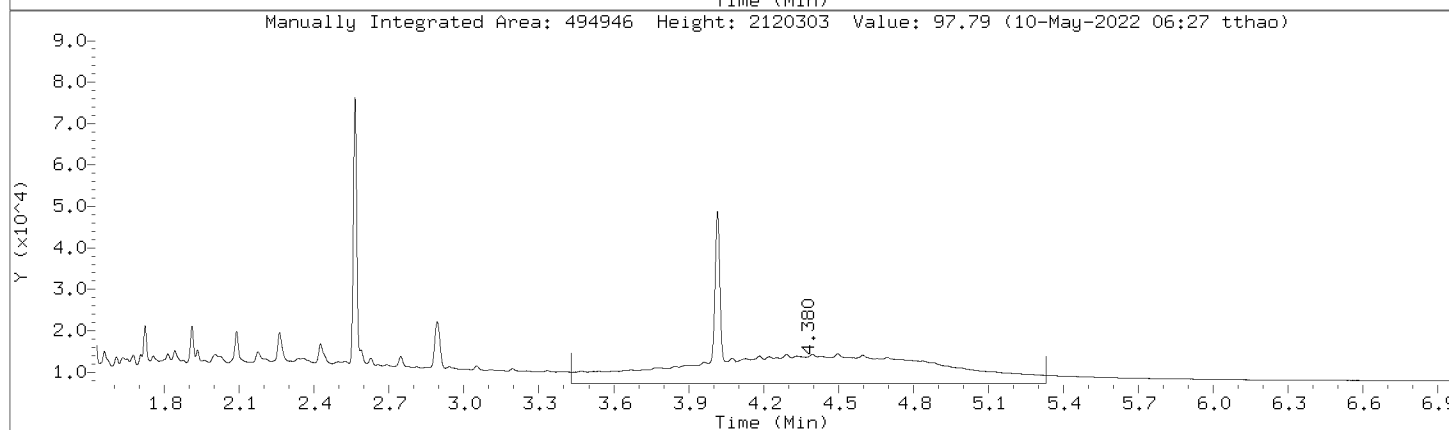
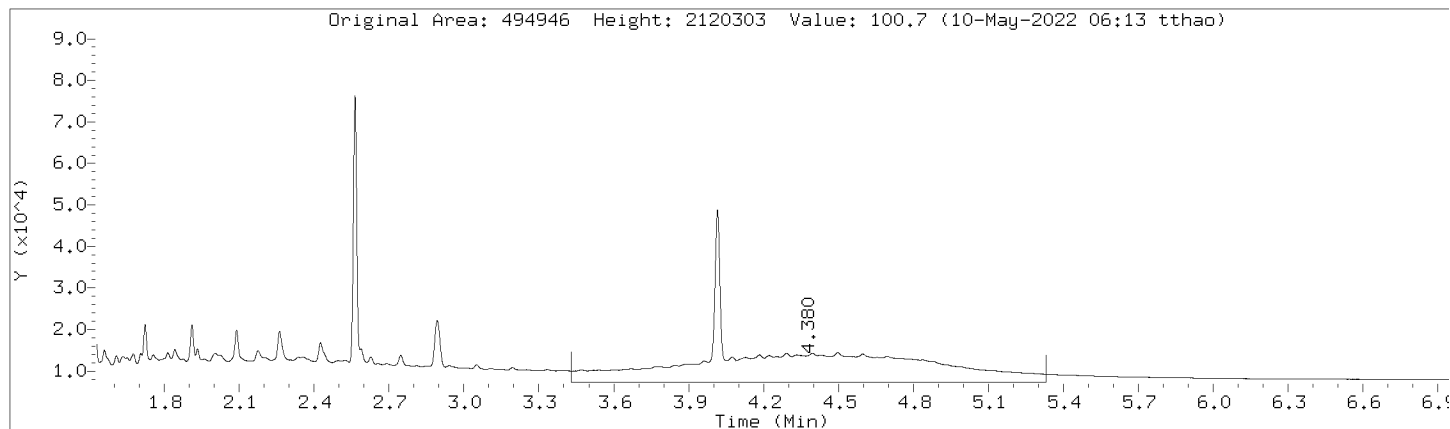
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Injection Date: 09-MAY-2022 16:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,364983:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



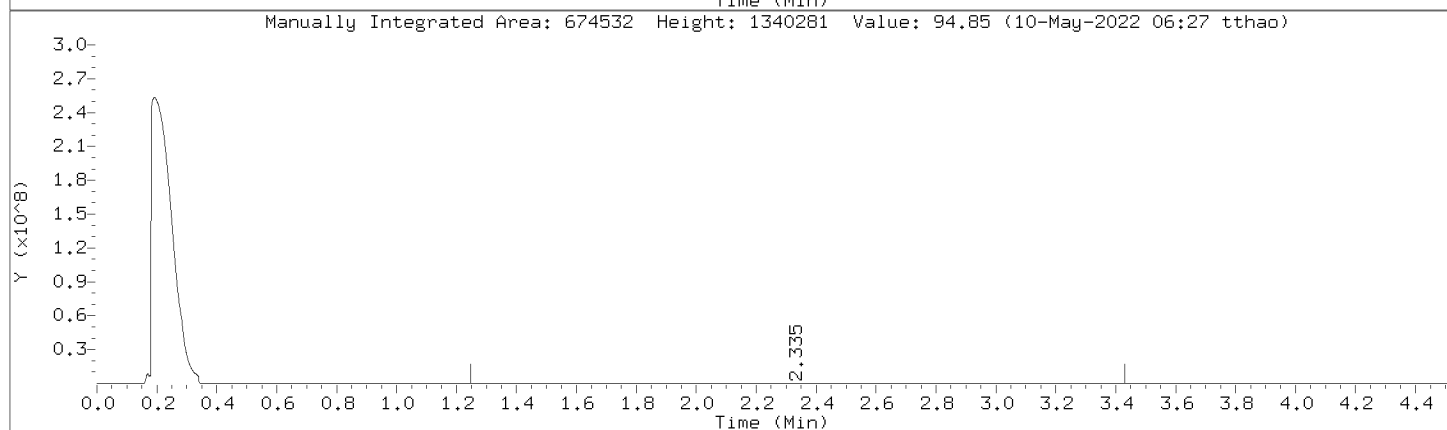
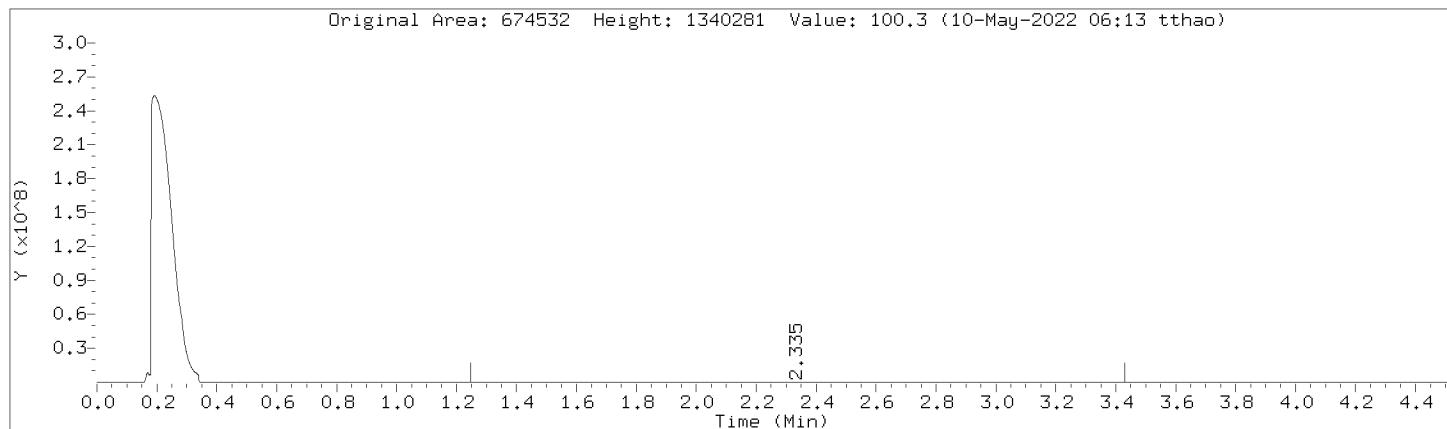
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Injection Date: 09-MAY-2022 16:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,364983:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



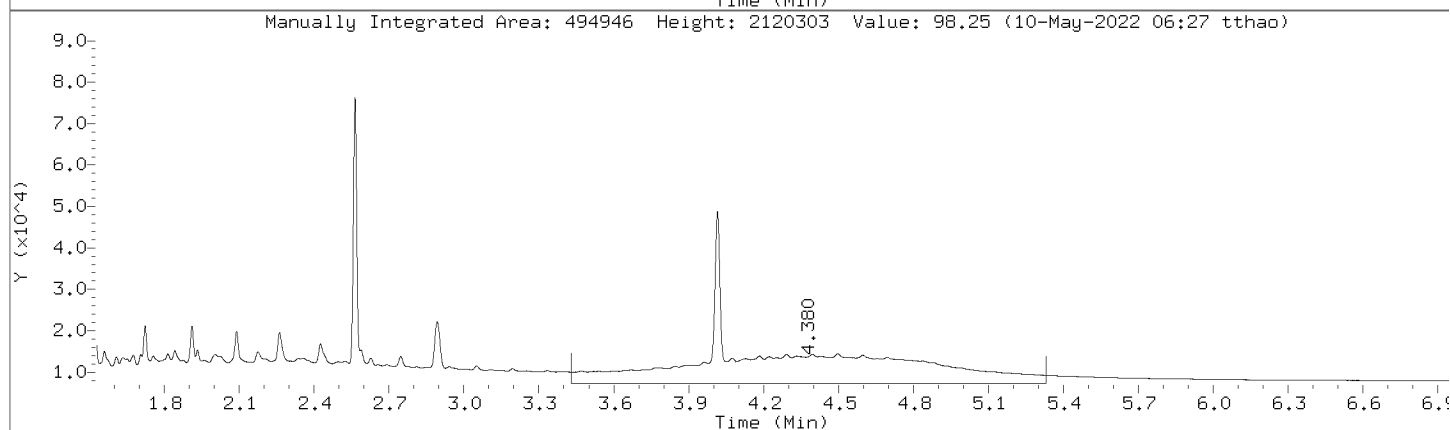
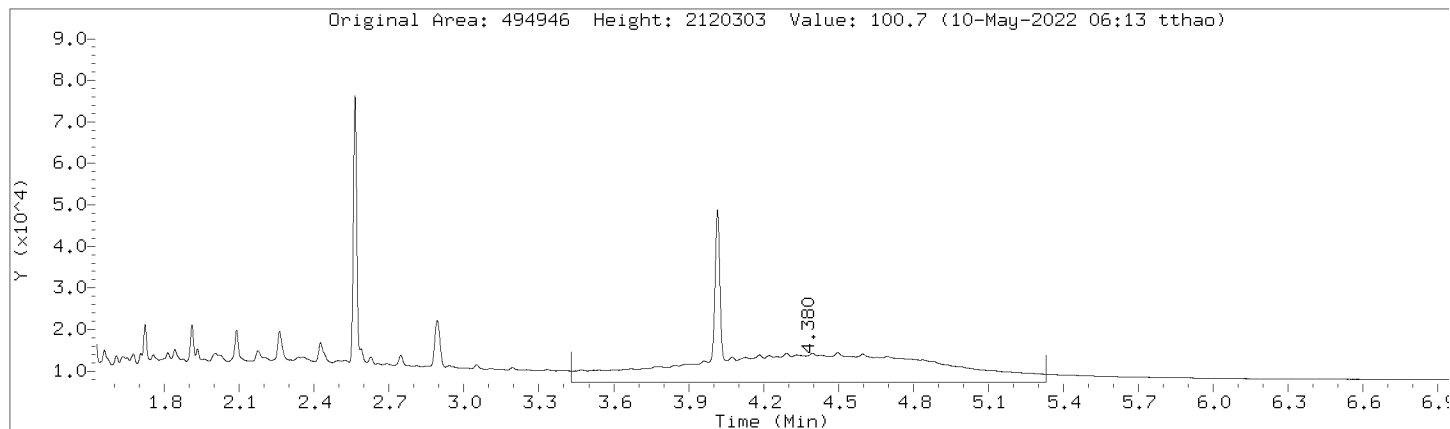
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Injection Date: 09-MAY-2022 16:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,364983:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



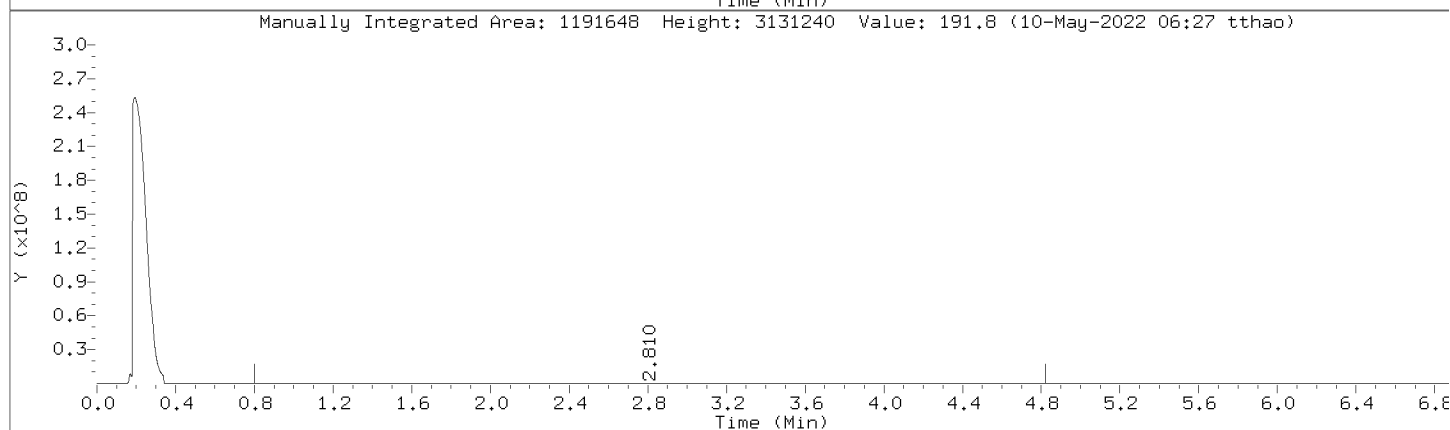
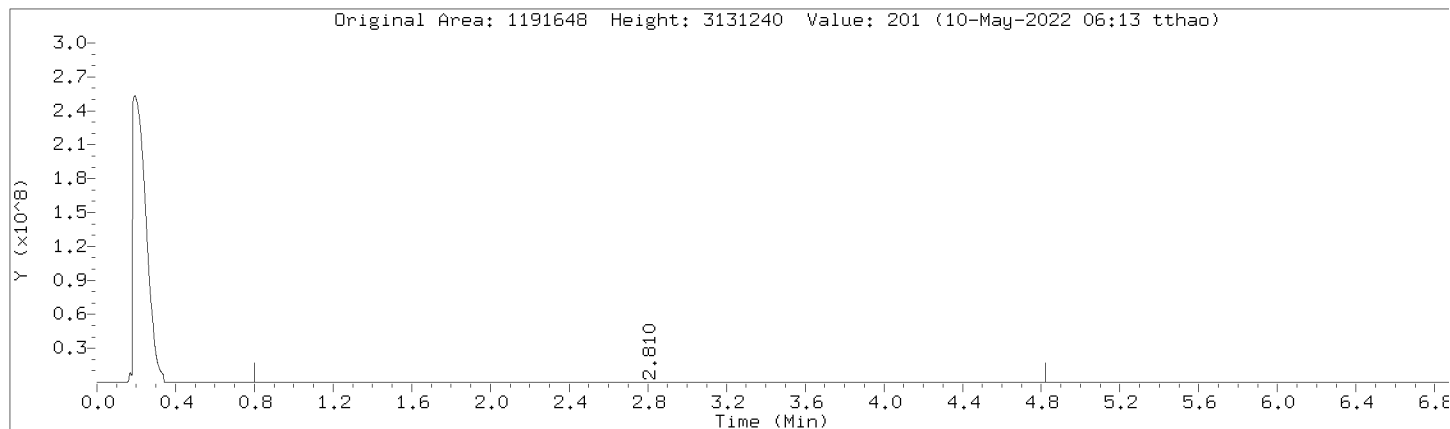
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,364983:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000028.D  
Injection Date: 09-MAY-2022 16:06  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,364983:2

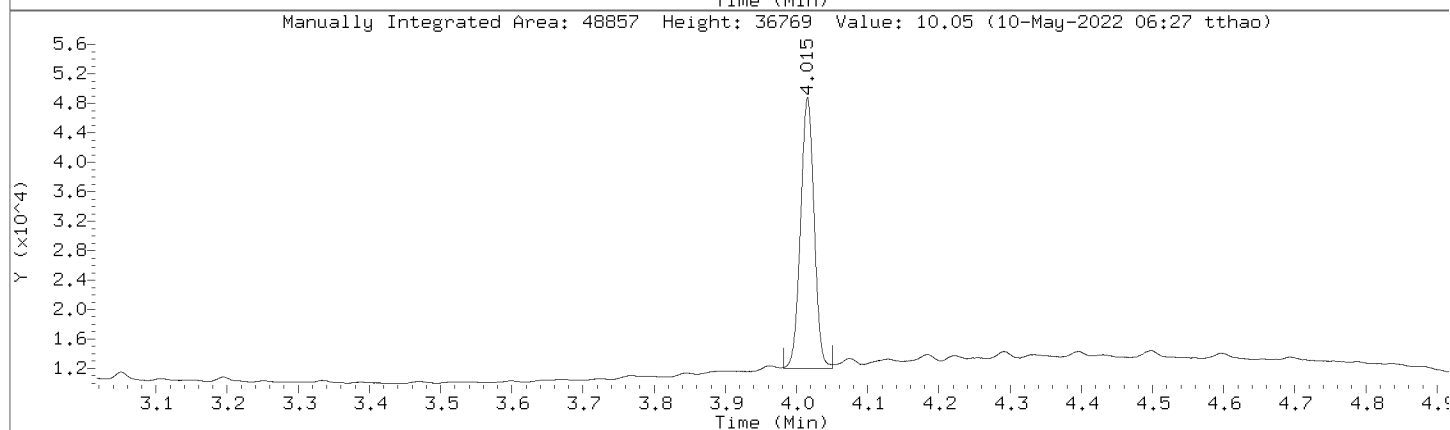
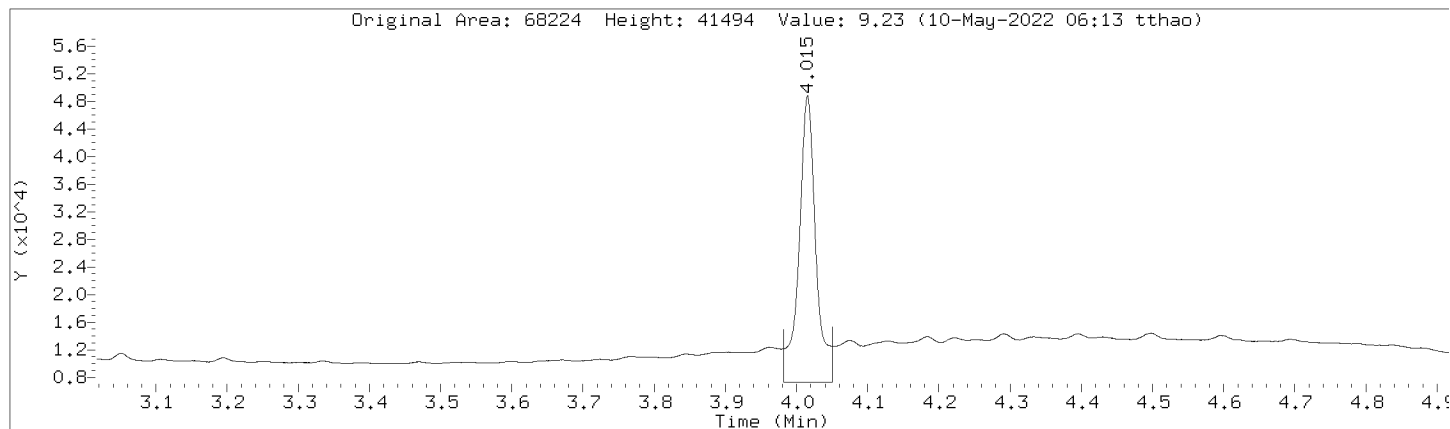
Compound: C10-C36      Review Code: RNG  
CAS Number:





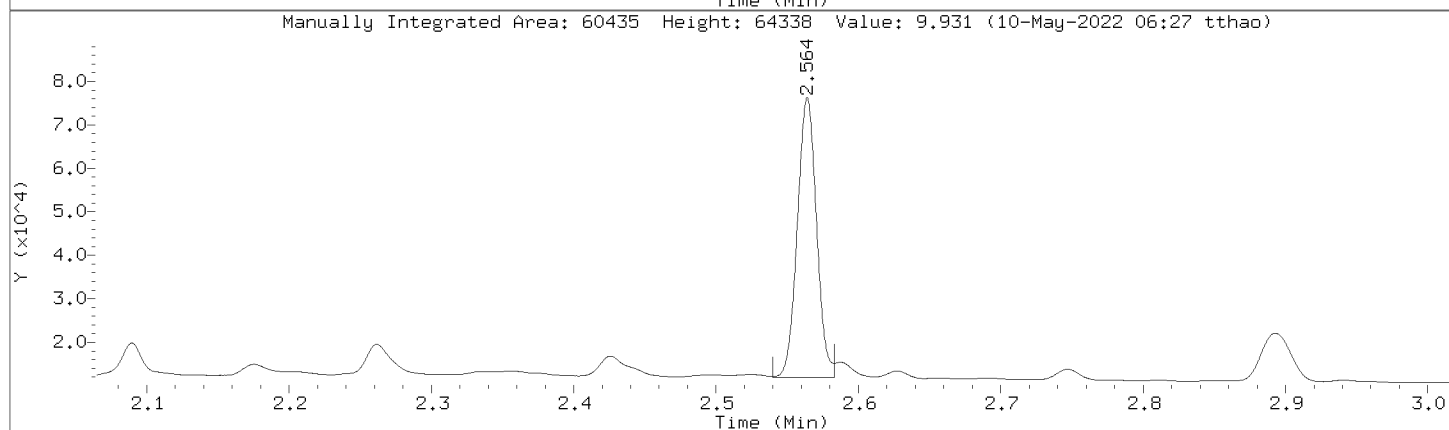
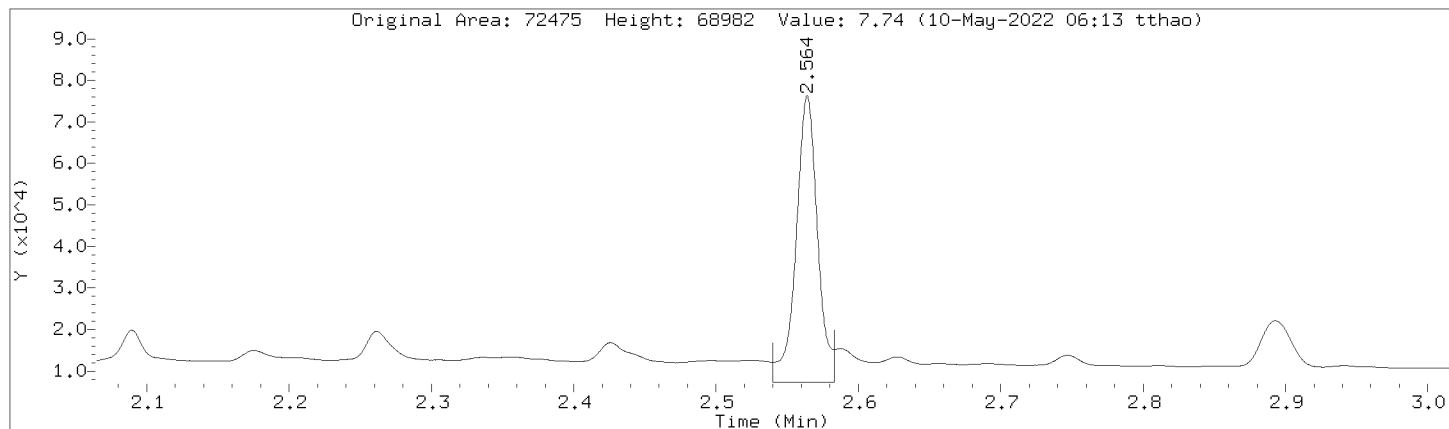
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL5,364983:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000028.D  
 Injection Date: 09-MAY-2022 16:06  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL5,364983:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	404664	404664
DRO by AK 102	786984	786984
TPH-DRO (C10-C28)	897834	897834
Motor Oil Range (C24-C36)	428533	428533
Diesel Fuel Range	674532	674532
Motor Oil Range	494946	494946
Diesel Fuel Range SG	674532	674532
Motor Oil Range SG	494946	494946
C10-C36	1191648	1191648
n-Triacontane (S)	68224	48857
o-Terphenyl (S)	72475	60435

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000029.D  
 Lab Smp Id: DMO-CAL6,364984:2 Client Smp ID: DMO-CAL6,364984:2  
 Inj Date : 09-MAY-2022 16:18  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal6,364984:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050922F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 10-May-2022 06:35 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 8 Calibration Sample, Level: 6  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE	
			RESPONSE	CAL-AMT (ug/mL)		
S 1	0.800	- 3.380	1584516	250.000	249	(M) RNG
-----						
\$ 2	2.564	2.565 -0.001	147678	25.0000	24.3	(M) BA
-----						
\$ 3	4.015	4.017 -0.002	120934	25.0000	24.9	(M) BA
-----						
S 4	3.381	- 4.820	894979	250.000	250	(M) RNG
-----						
S 5	0.800	- 3.950	1810188	250.000	248	(M) RNG
-----						
S 6	3.240	- 4.820	940953	250.000	250	(M) RNG
-----						
S 7	0.800	- 4.820	2479496	500.000	499	(M) RNG
-----						
S 8	1.240	- 3.430	1341847	250.000	249	(M) RNG
-----						
S 9	1.240	- 3.430	1341847	250.000	249	(M) RNG
-----						
S 10	3.431	- 5.330	1085964	250.000	250	(M) RNG
-----						
S 11	3.431	- 5.330	1085964	250.000	250	(M) RNG
-----						

QC Flag Legend

M - Compound response manually integrated.

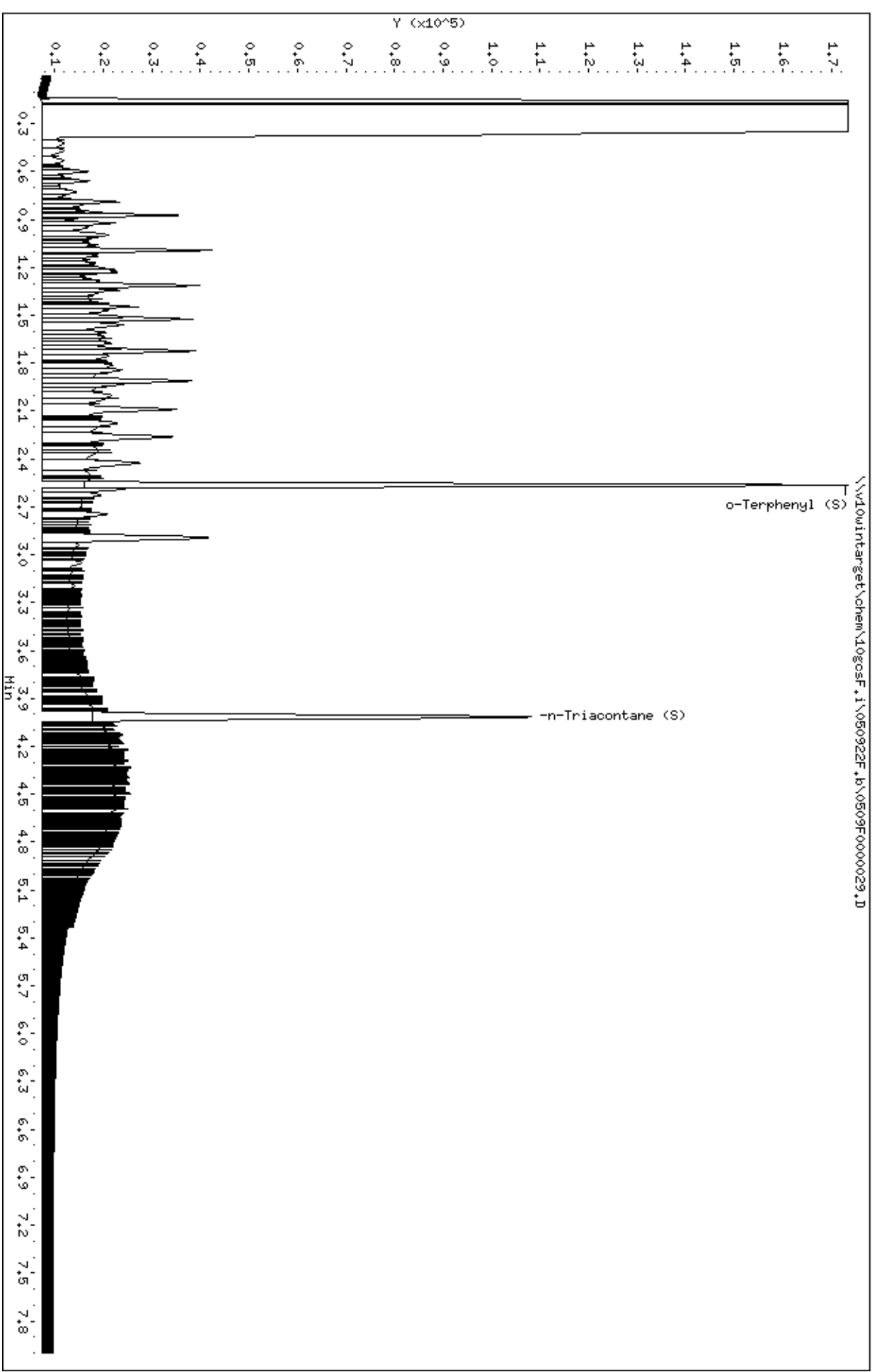
Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

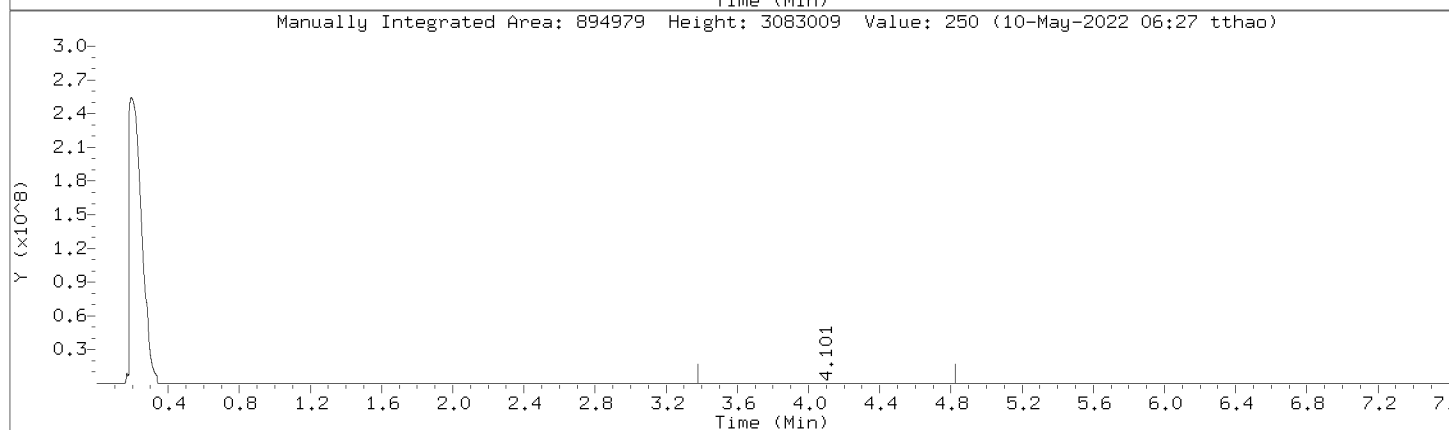
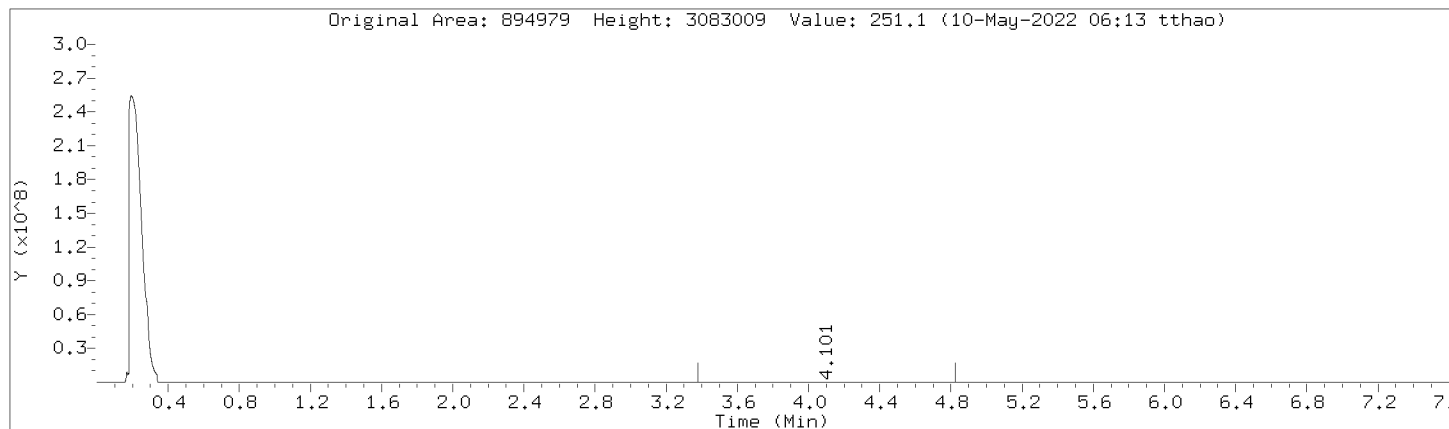
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Date : 09-MAY-2022 16:18  
Client ID: DMO-CAL6,364984;2  
Sample Info: DMO-CAL6,364984;2  
Column phase: DB-5-MS21390001

Instrument: logsf.1  
Operator: TT2  
Column diameter: 0.32



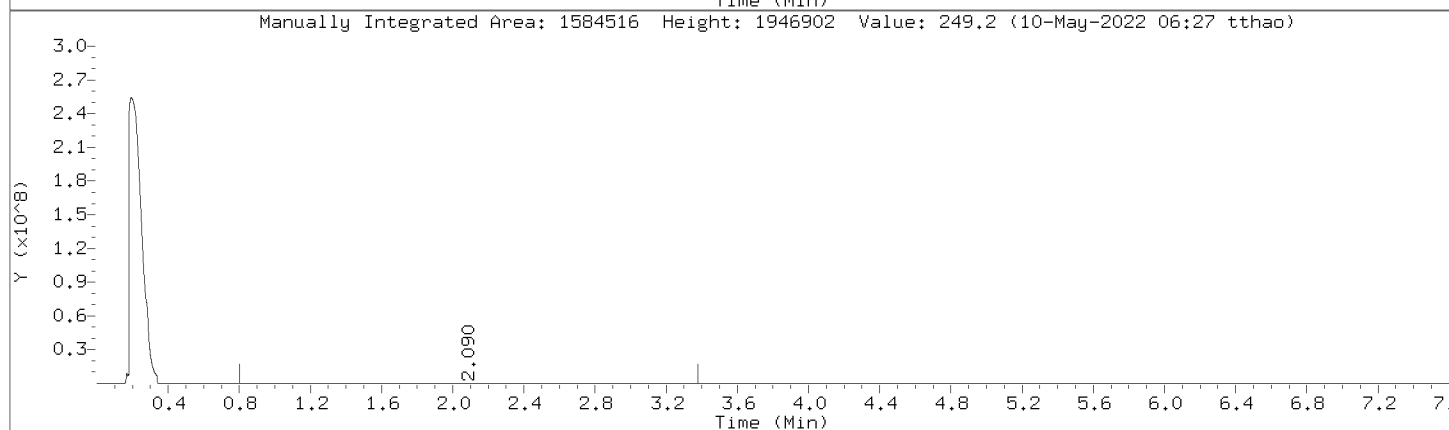
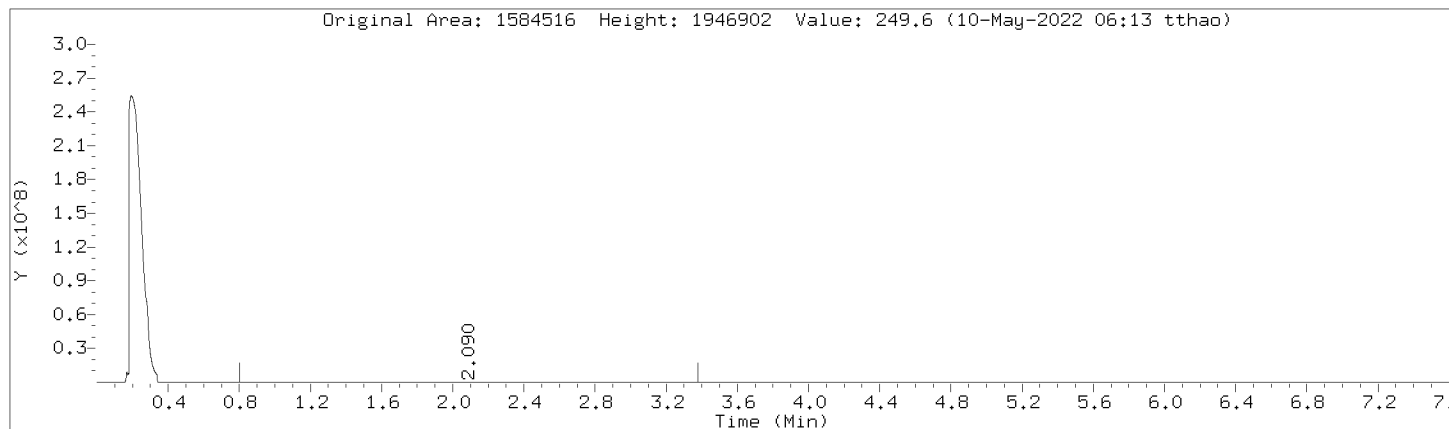
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Injection Date: 09-MAY-2022 16:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,364984:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



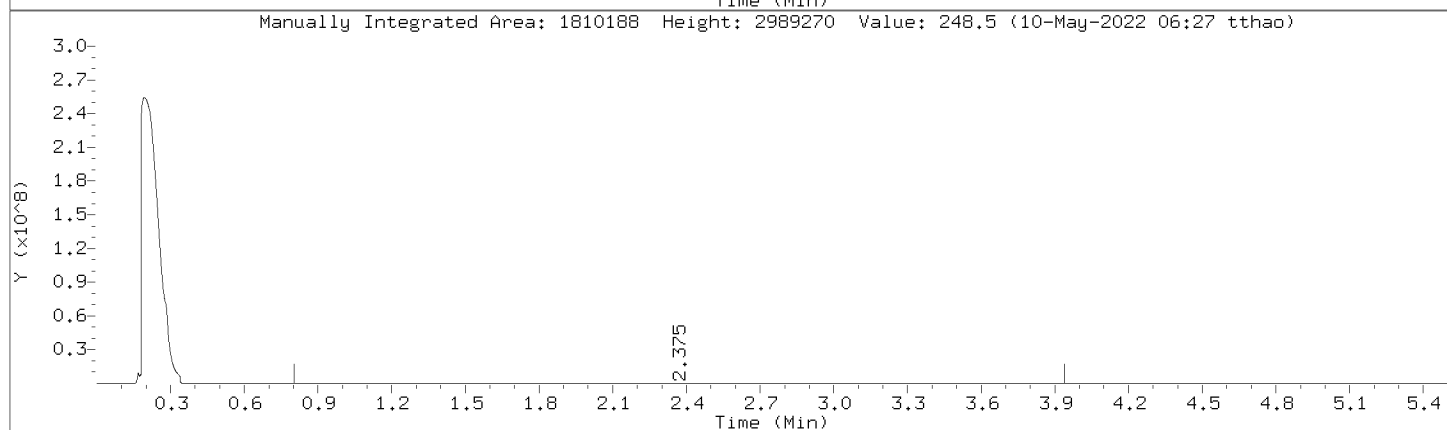
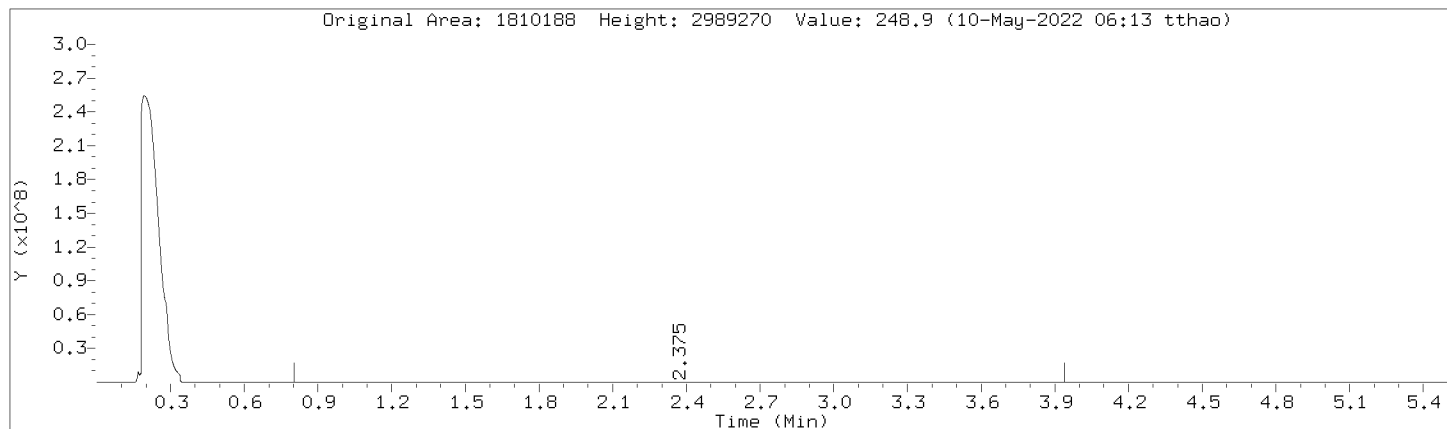
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,364984:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000029.D  
Injection Date: 09-MAY-2022 16:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,364984:2

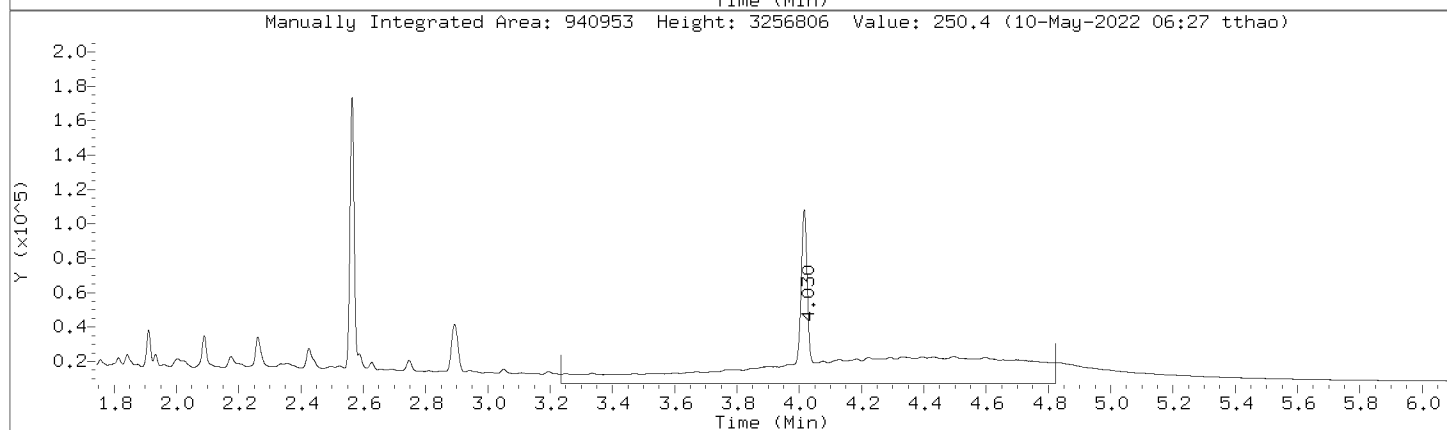
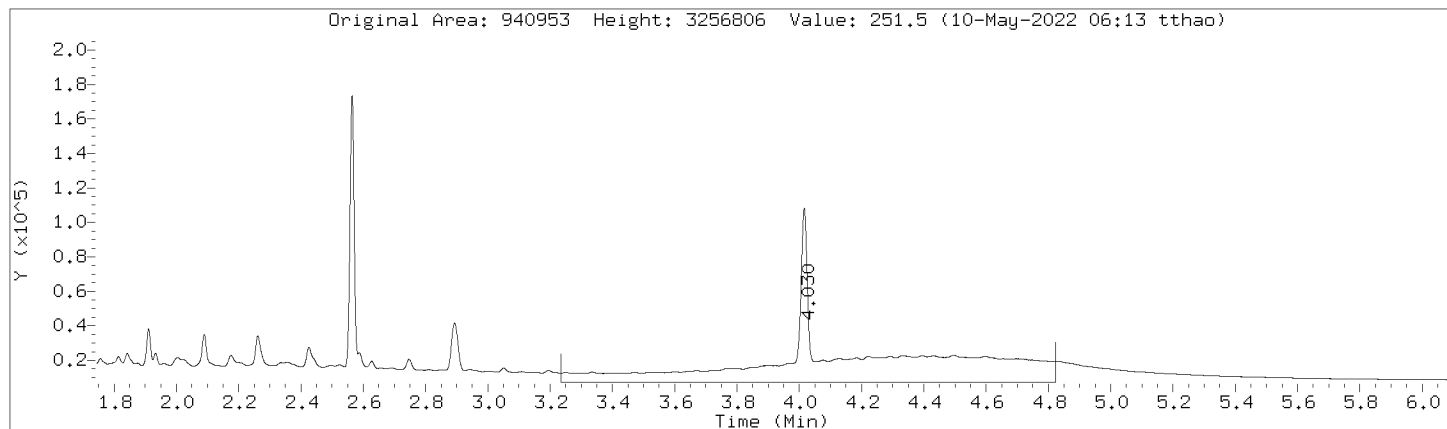
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:





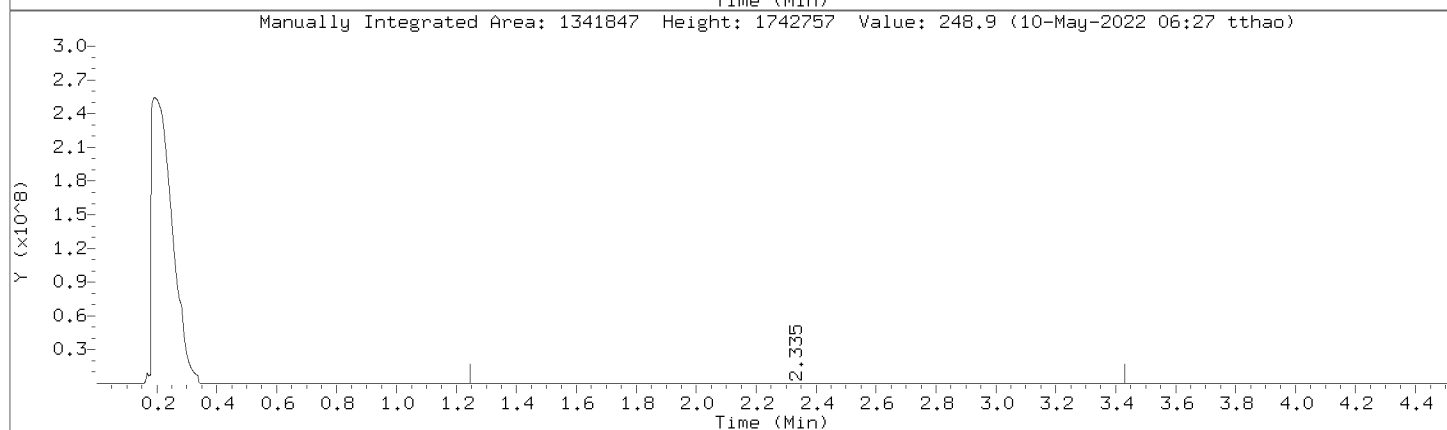
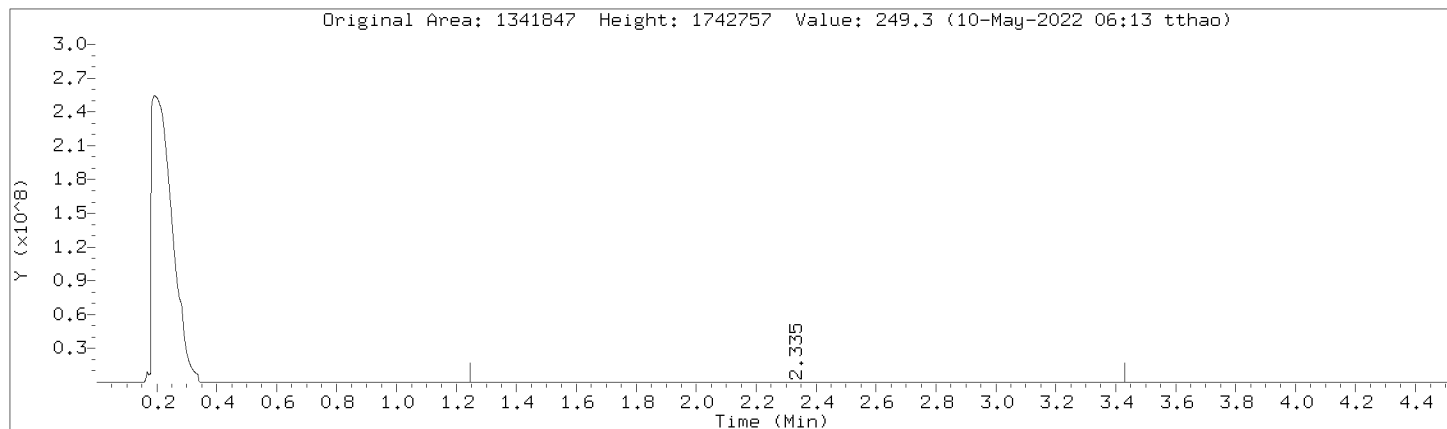
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,364984:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



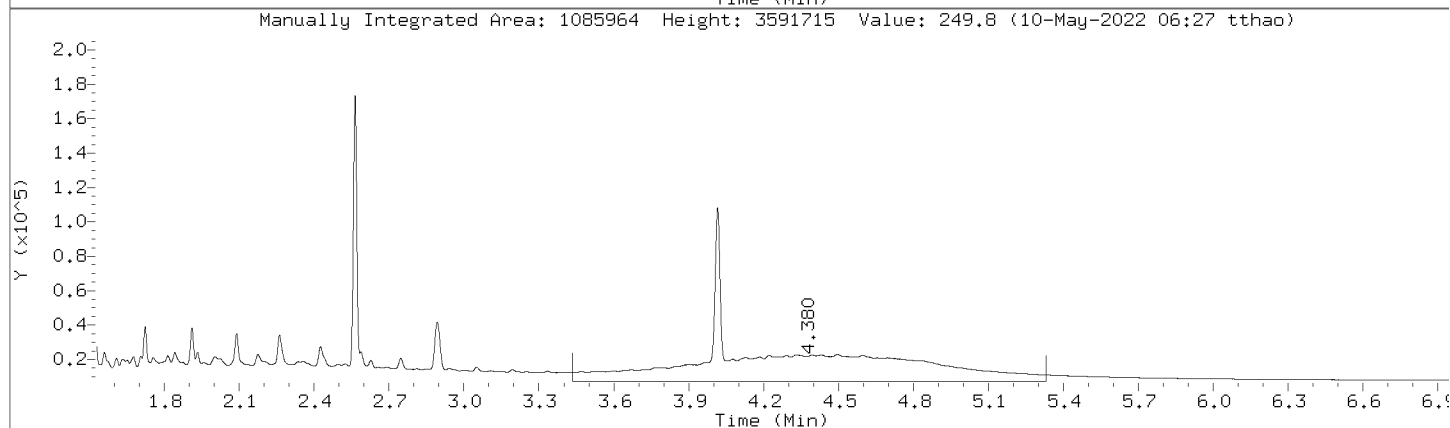
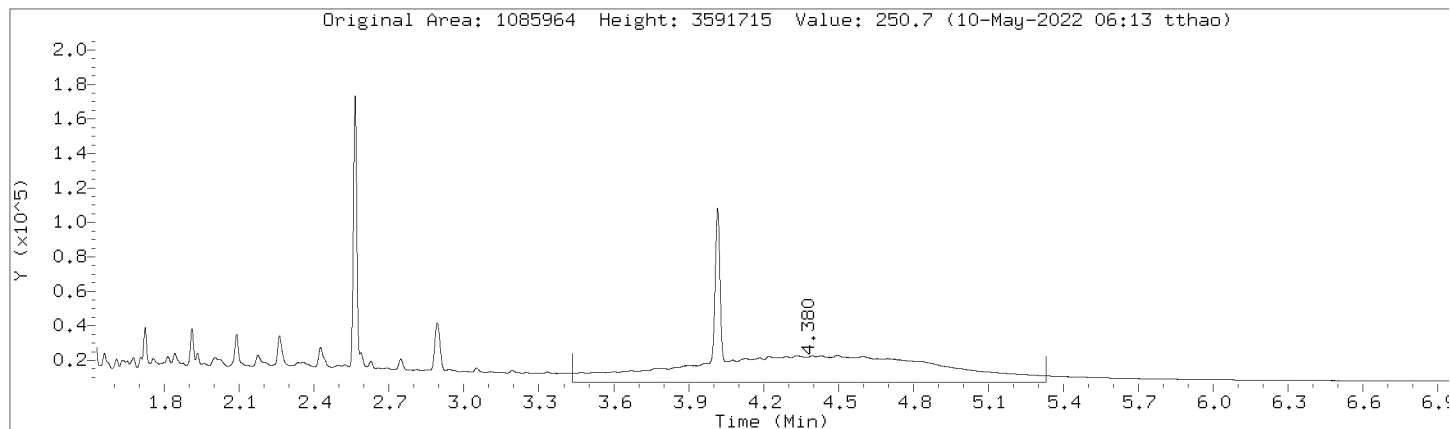
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Injection Date: 09-MAY-2022 16:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,364984:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



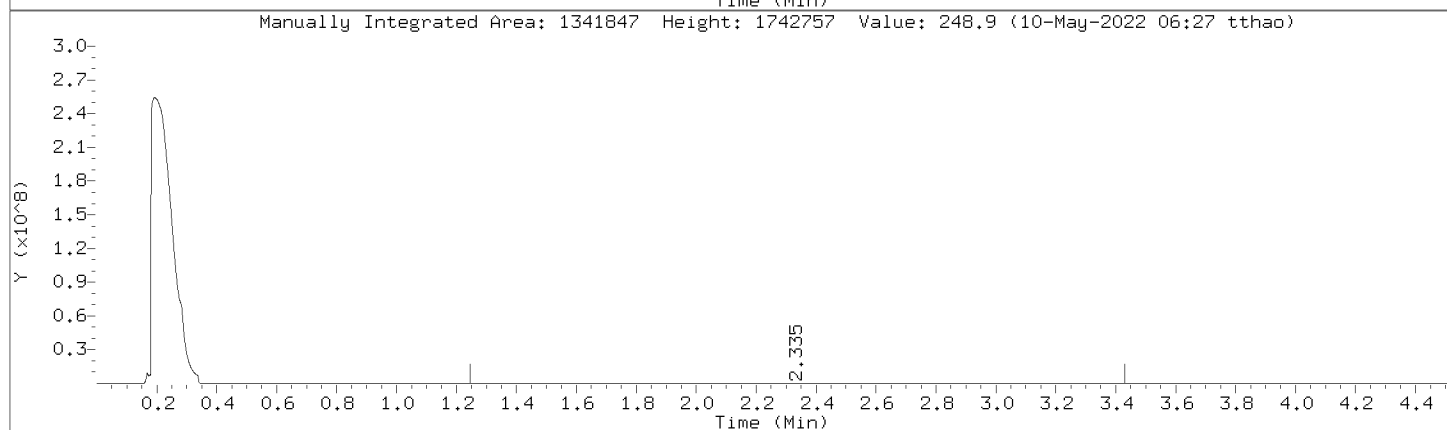
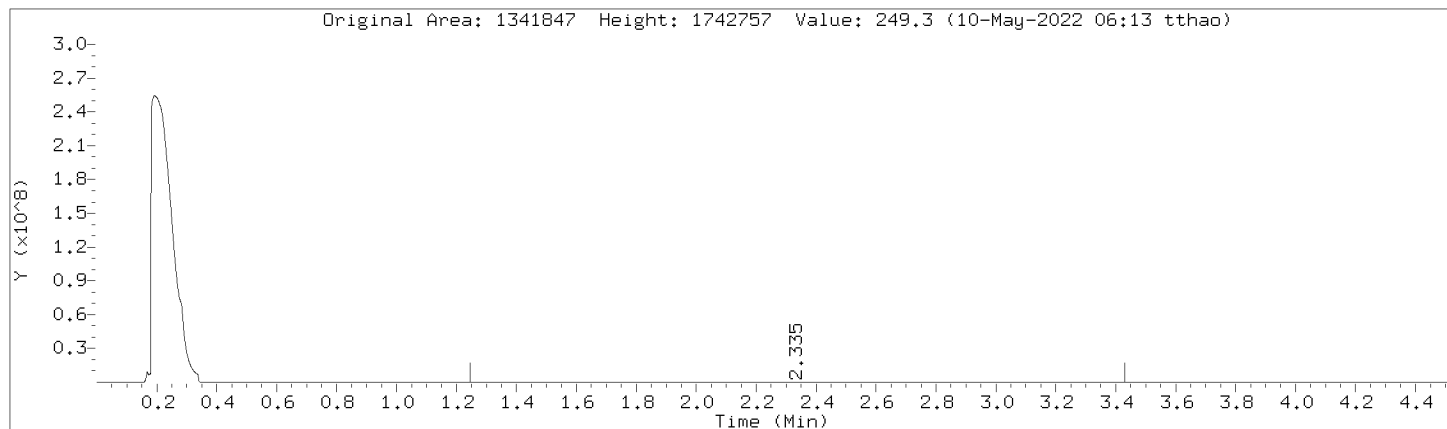
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,364984:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



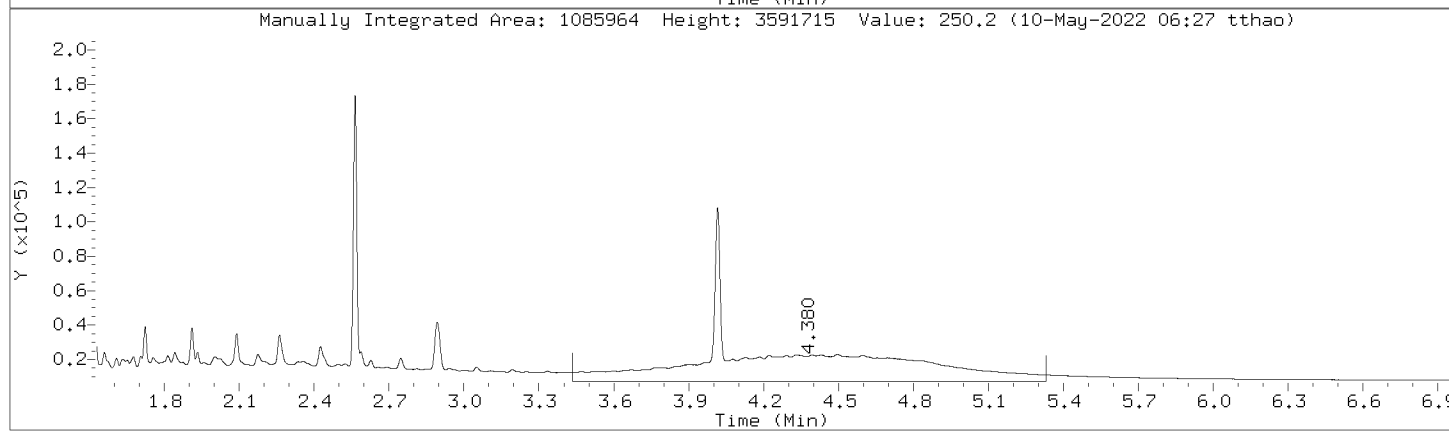
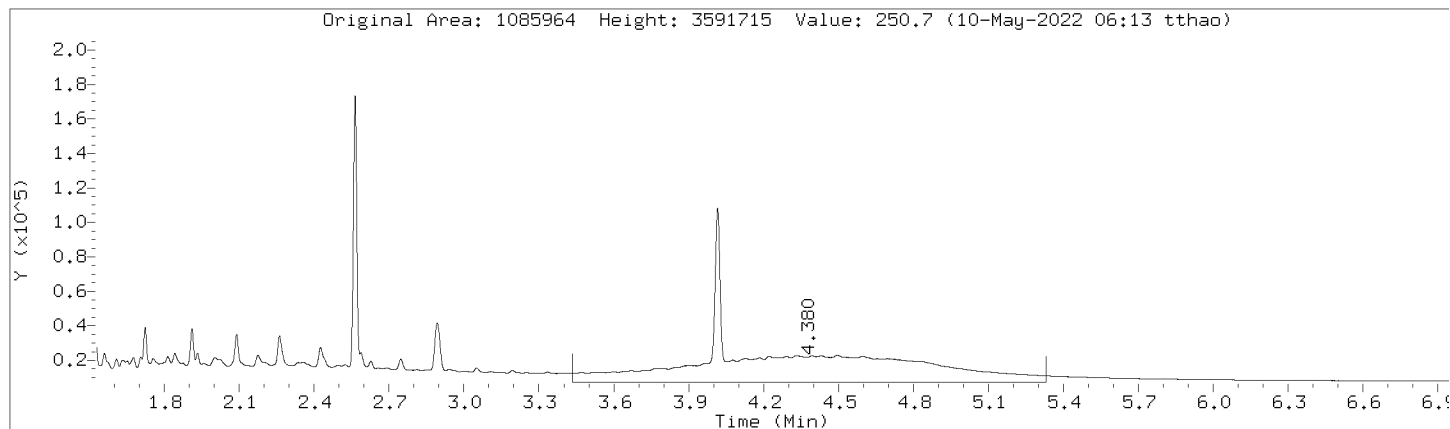
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Injection Date: 09-MAY-2022 16:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,364984:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



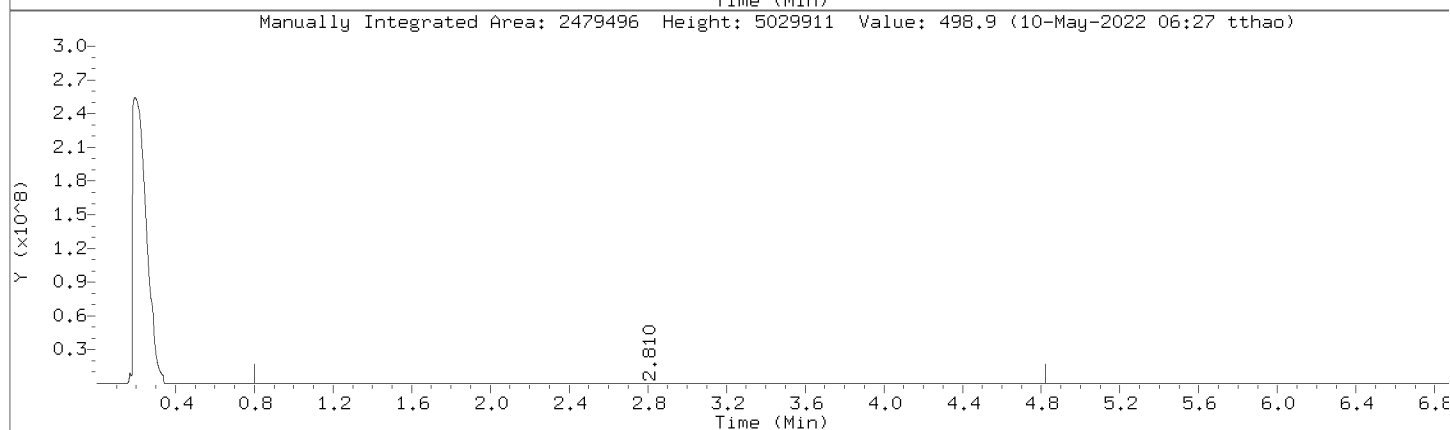
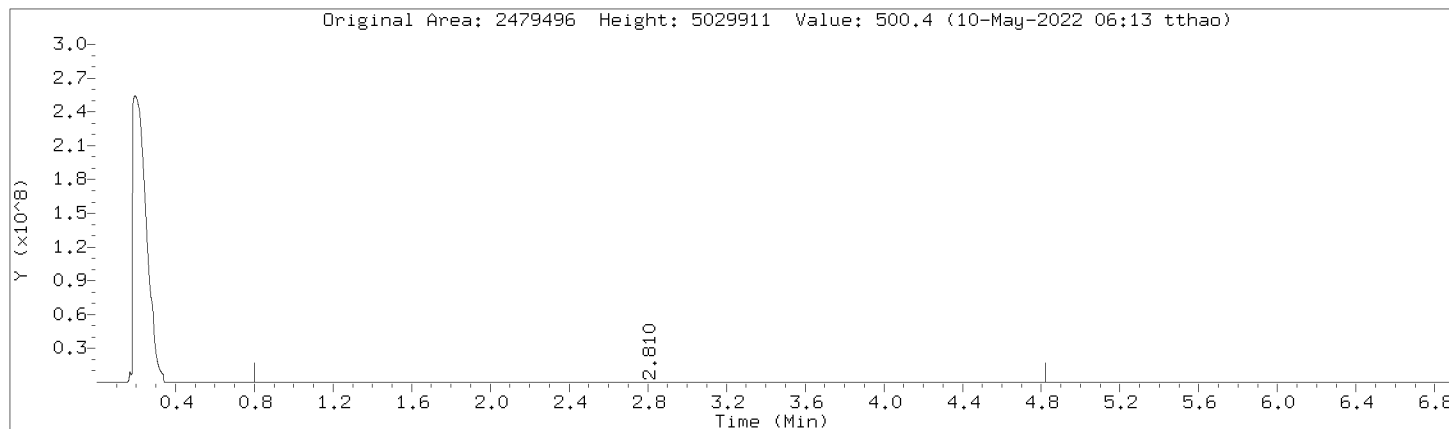
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,364984:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



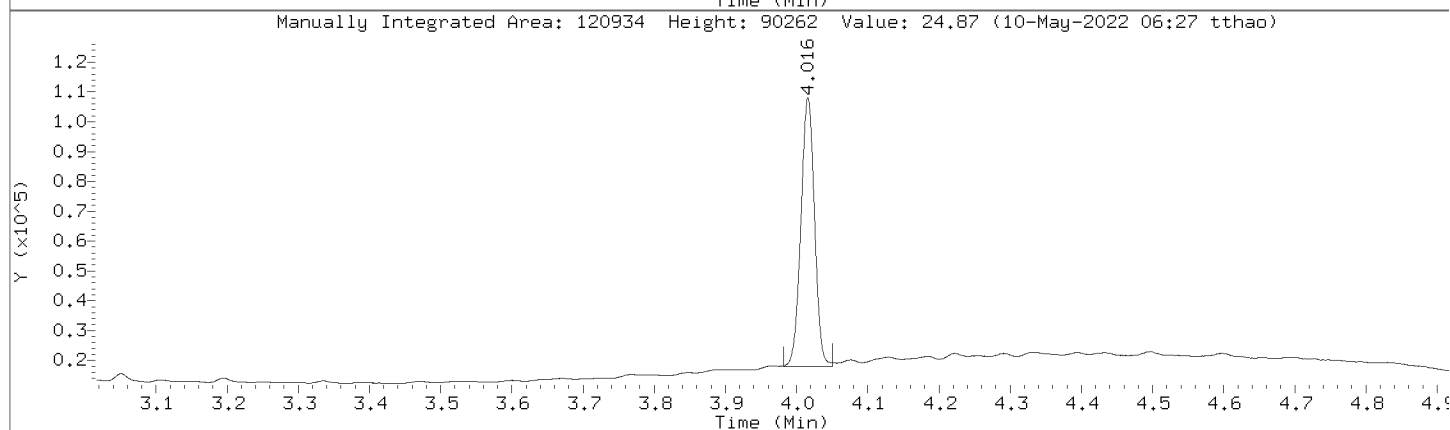
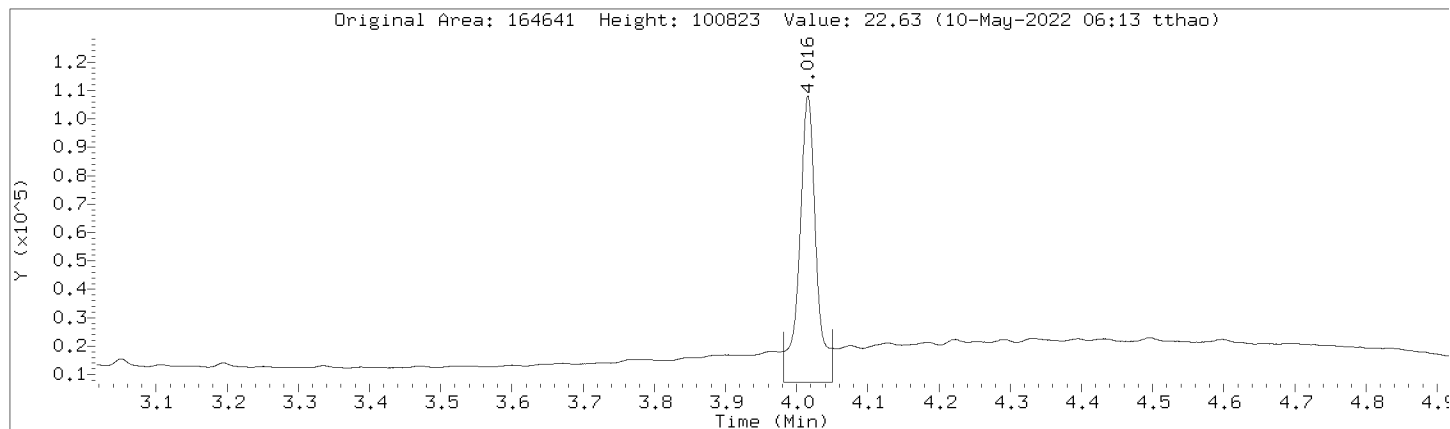
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,364984:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



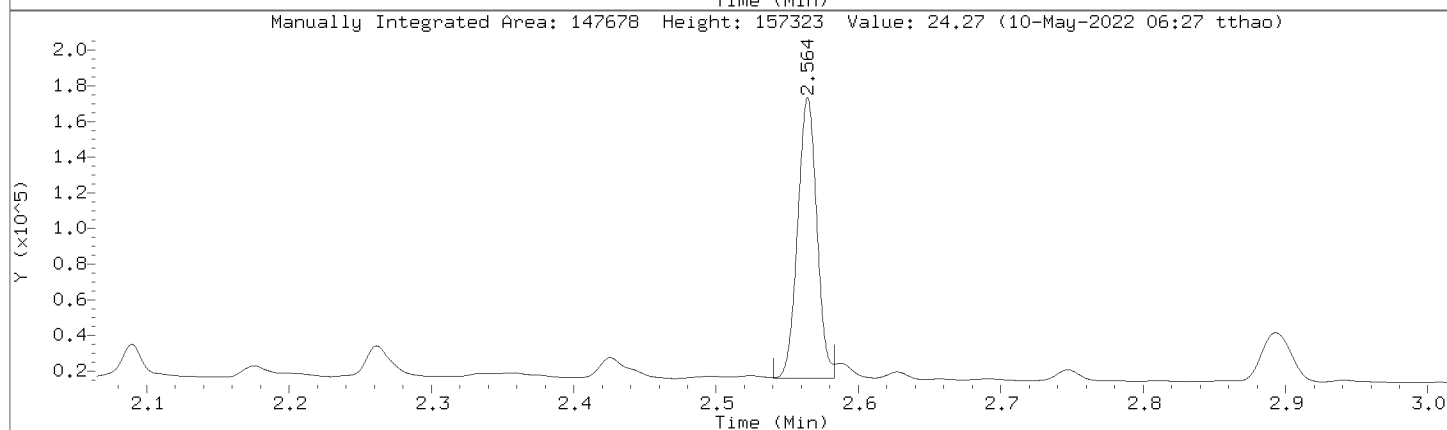
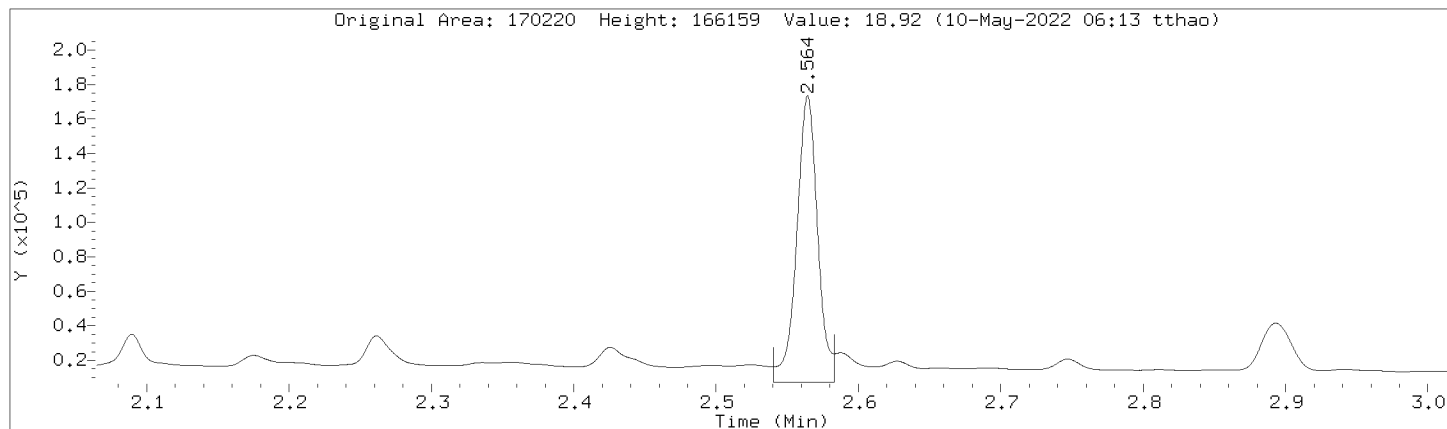
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Injection Date: 09-MAY-2022 16:18  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL6,364984:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000029.D  
 Injection Date: 09-MAY-2022 16:18  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL6,364984:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	894979	894979
DRO by AK 102	1584516	1584516
TPH-DRO (C10-C28)	1810188	1810188
Motor Oil Range (C24-C36)	940953	940953
Diesel Fuel Range	1341847	1341847
Motor Oil Range	1085964	1085964
Diesel Fuel Range SG	1341847	1341847
Motor Oil Range SG	1085964	1085964
C10-C36	2479496	2479496
n-Triacontane (S)	164641	120934
o-Terphenyl (S)	170220	147678



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000030.D  
 Lab Smp Id: DMO-CAL7,364985:2 Client Smp ID: DMO-CAL7,364985:2  
 Inj Date : 09-MAY-2022 16:29  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal7,364985:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050922F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 10-May-2022 06:35 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 9 Calibration Sample, Level: 7  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL (ug/mL) (ug/mL)	
====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.800	- 3.380		2923435 500.000	508	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.565	2.565 0.000		295243 50.0000	48.5	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.017	4.017 0.000		241932 50.0000	49.7	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.381	- 4.820		1703629 500.000	502	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.800	- 3.950		3355850 500.000	507	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.240	- 4.820		1780783 500.000	502	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.800	- 4.820		4627064 1000.00	1010	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.240	- 3.430		2466345 500.000	508	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.240	- 3.430		2466345 500.000	508	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.431	- 5.330		2065434 500.000	502	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.431	- 5.330		2065434 500.000	502	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 09-MAY-2022 16:29

Client ID: DMO-CAL7.364985;2

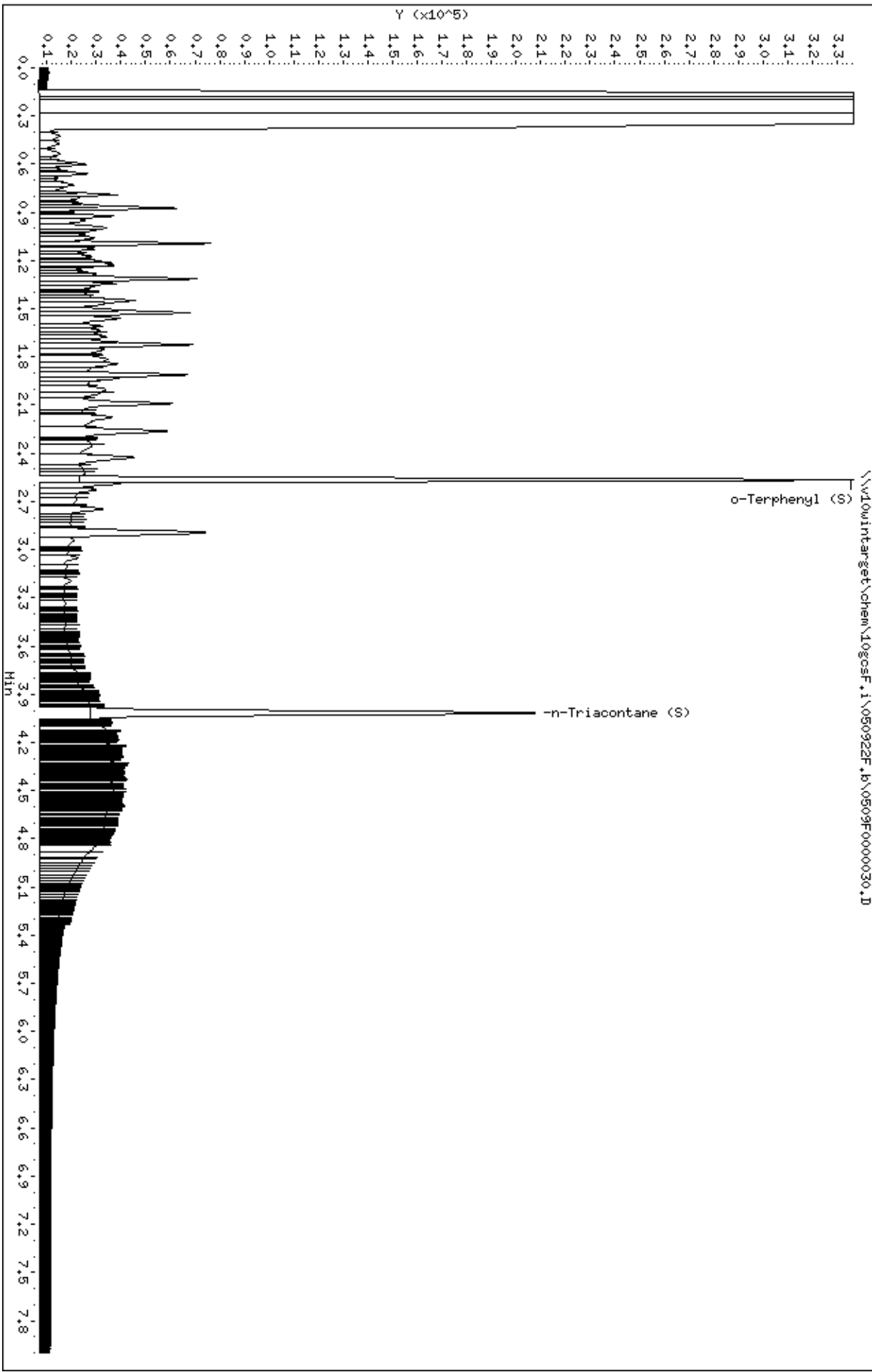
Sample Info: DMO-CAL7.364985;2

Instrument: 10gcsf.1

Operator: TT2

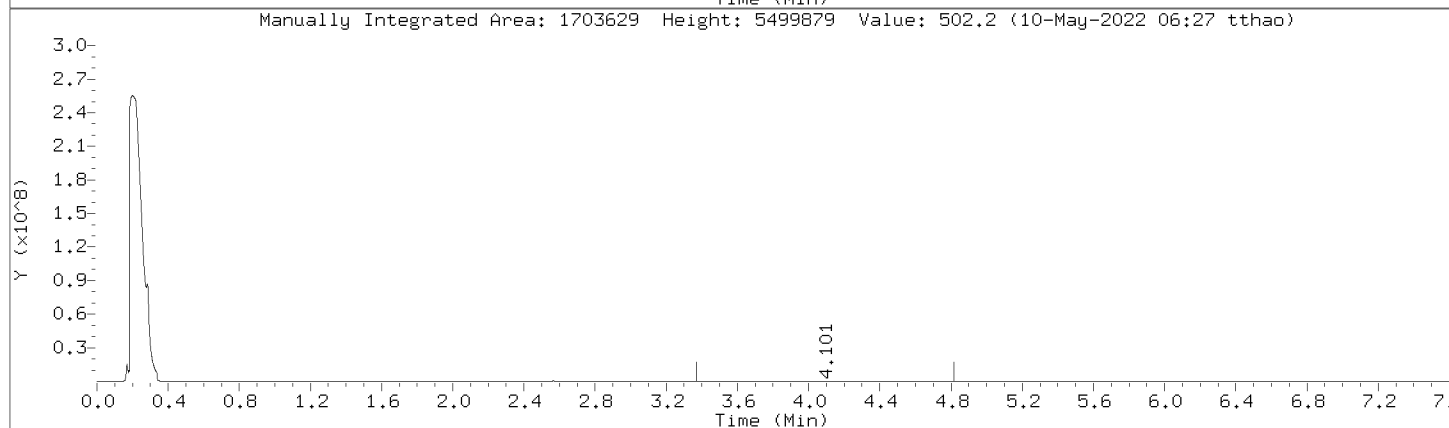
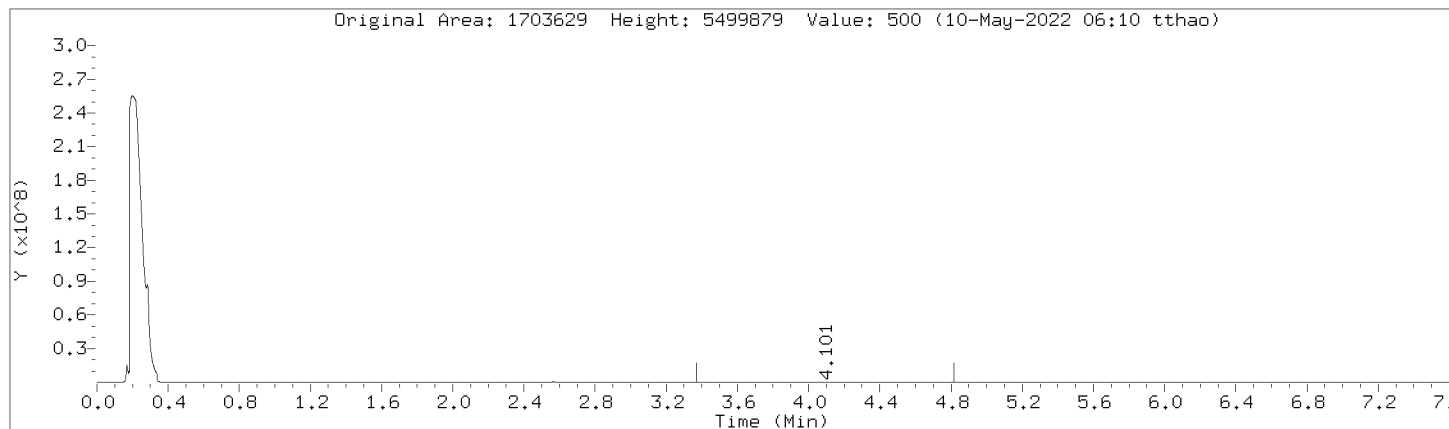
Column phase: DB-5-MS21390001

Column diameter: 0.32



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000030.D  
Injection Date: 09-MAY-2022 16:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,364985:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000030.D

Injection Date: 09-MAY-2022 16:29

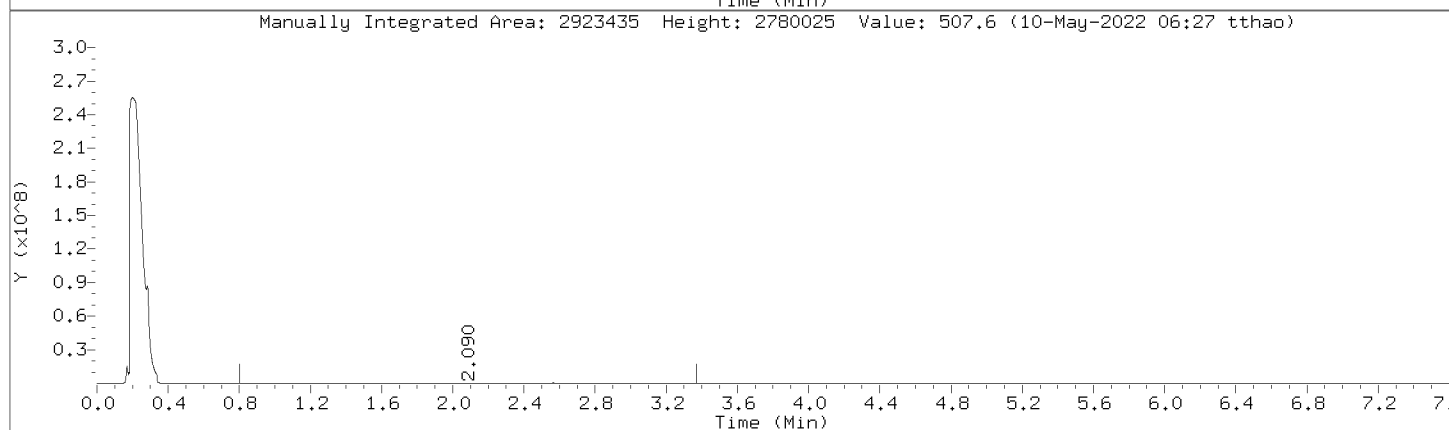
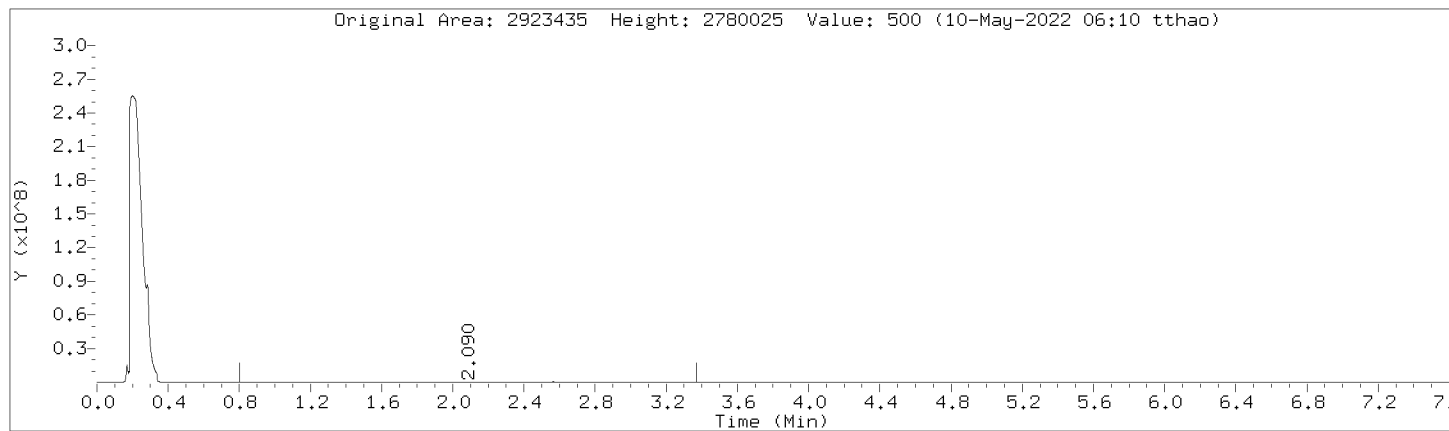
Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL7,364985:2

Compound: DRO by AK 102

Review Code: RNG

CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000030.D

Injection Date: 09-MAY-2022 16:29

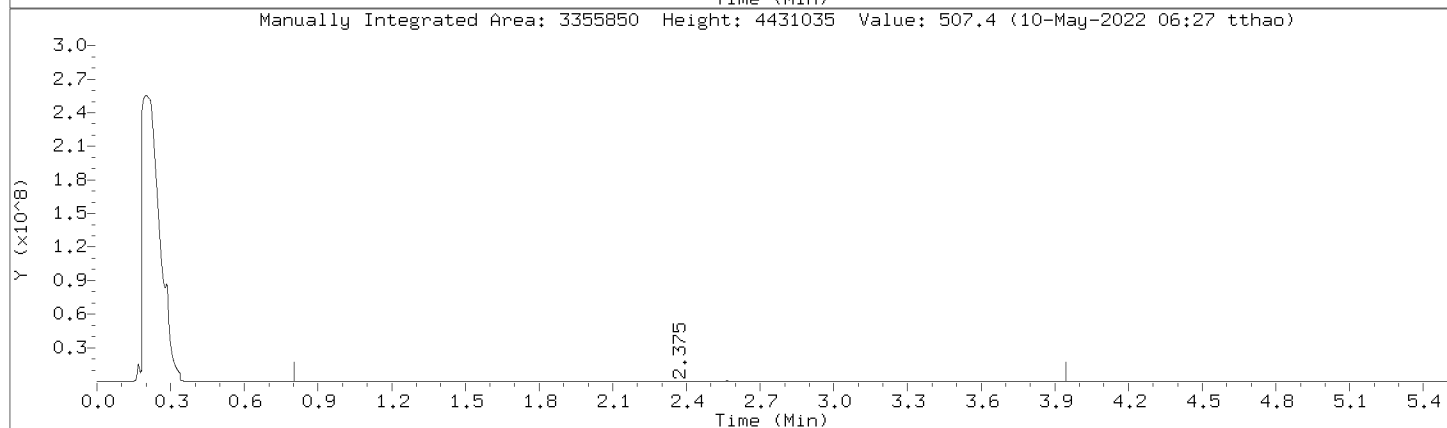
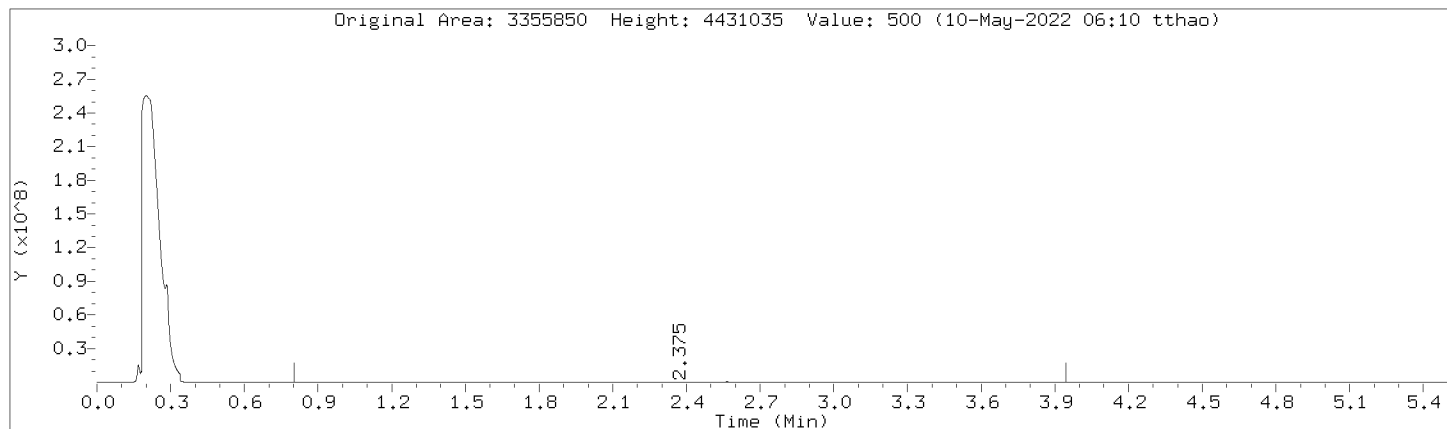
Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL7,364985:2

Compound: TPH-DRO (C10-C28)

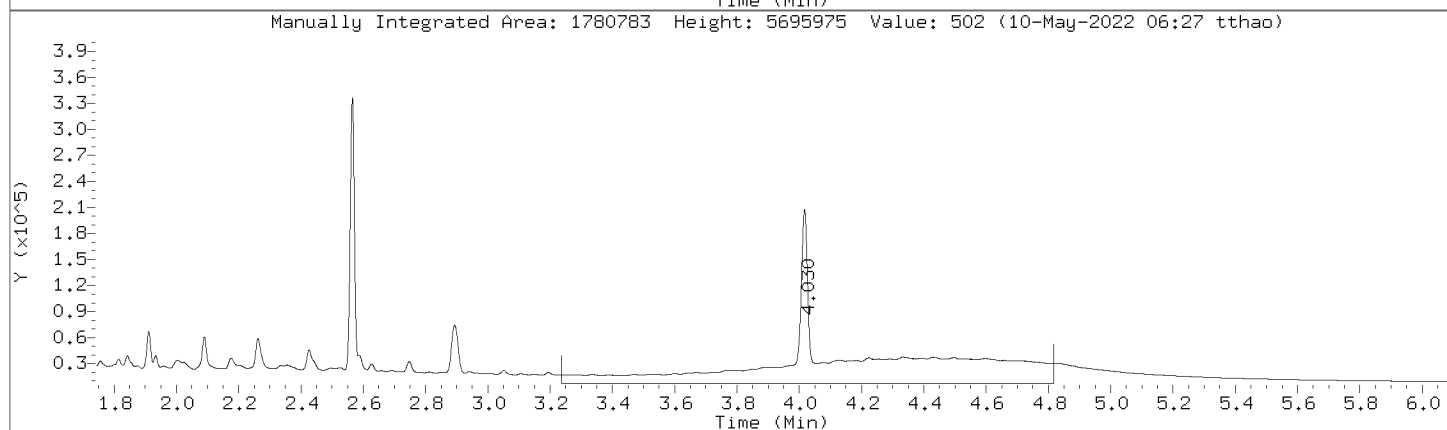
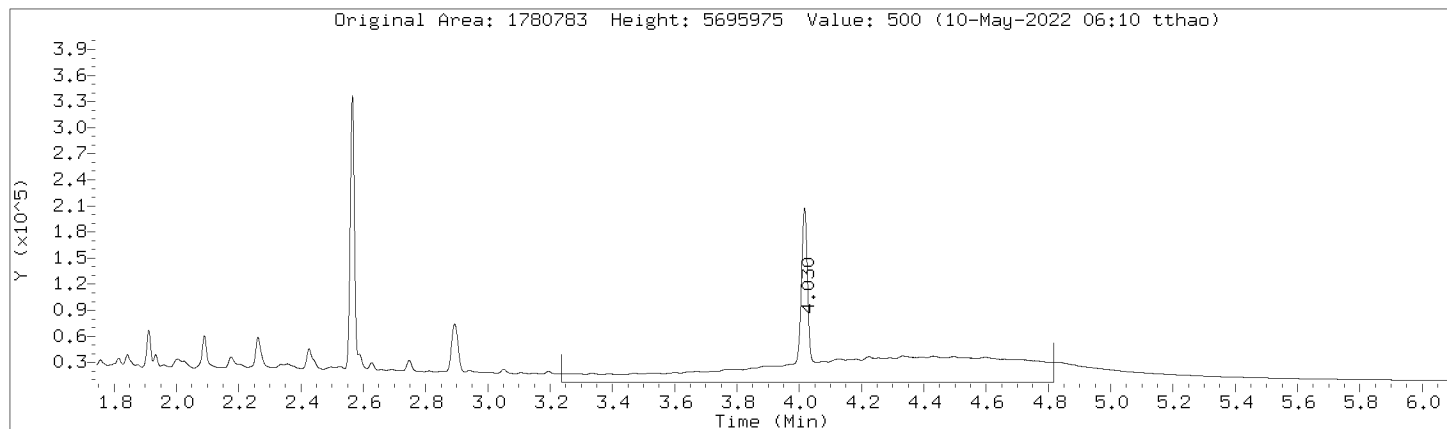
Review Code: RNG

CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000030.D  
Injection Date: 09-MAY-2022 16:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,364985:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000030.D

Injection Date: 09-MAY-2022 16:29

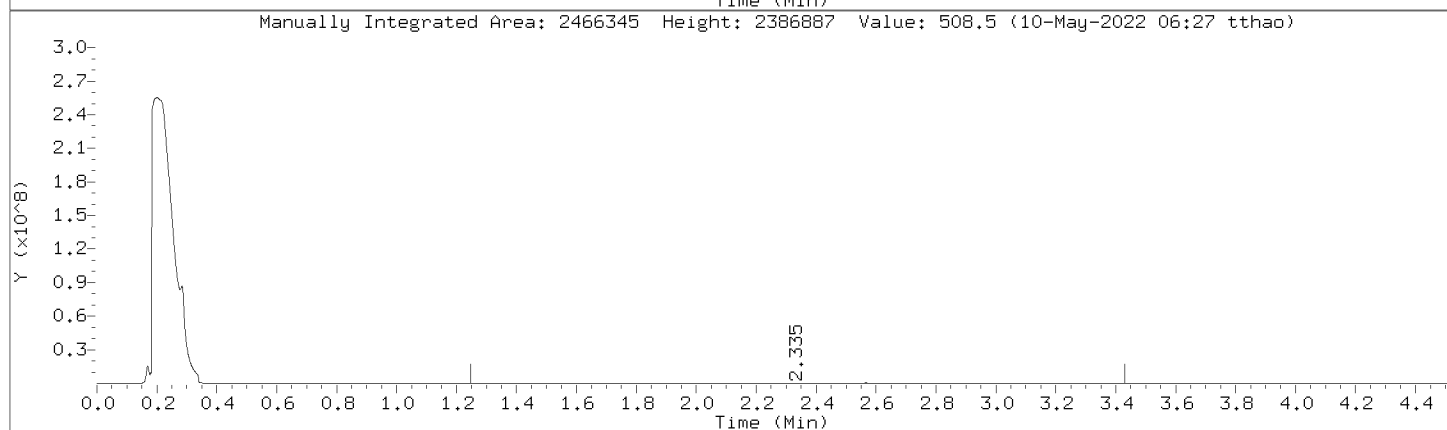
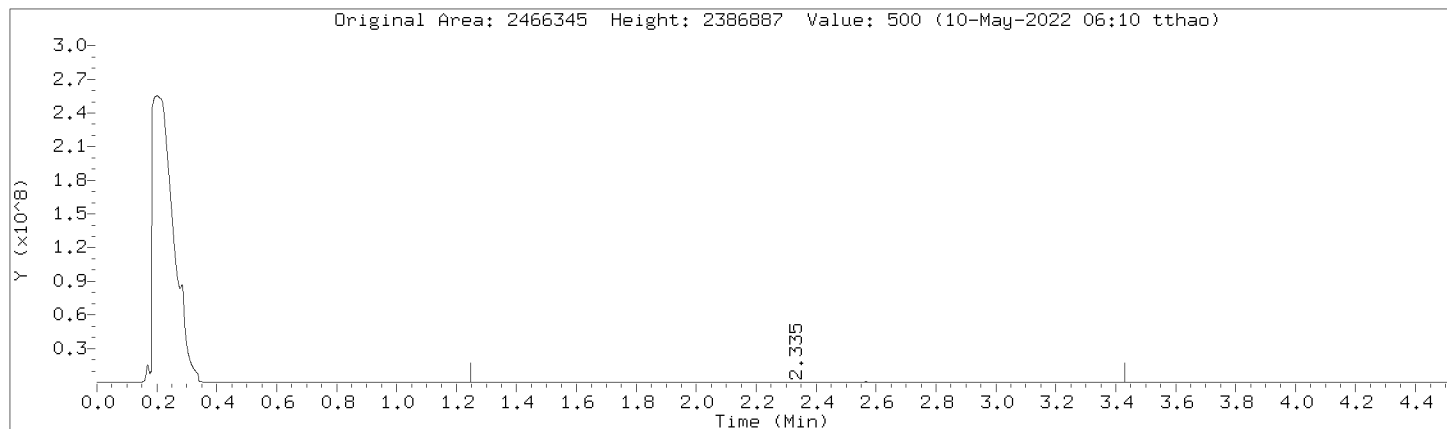
Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL7,364985:2

Compound: Diesel Fuel Range

Review Code: RNG

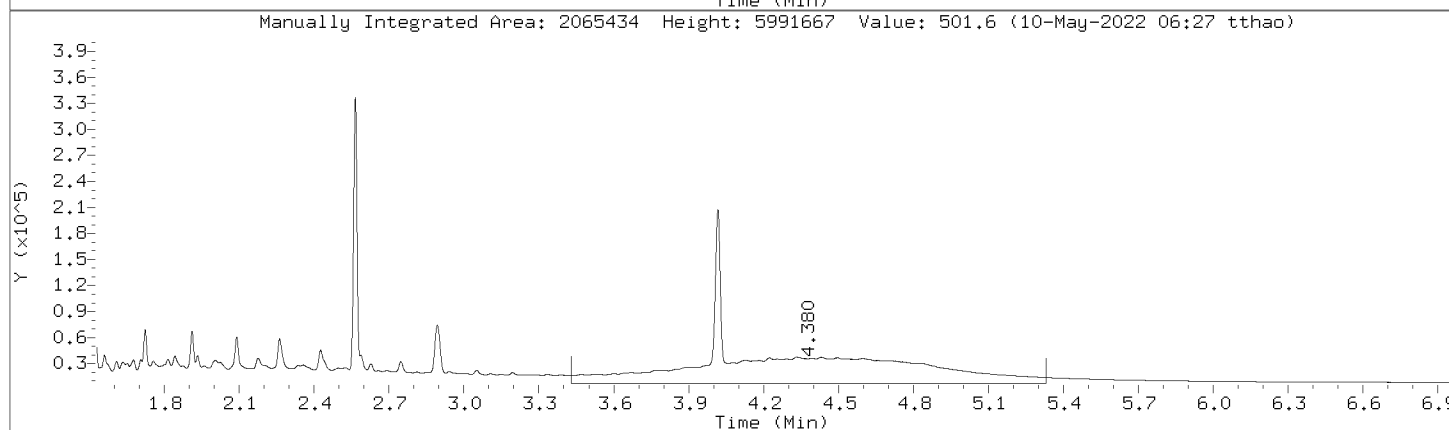
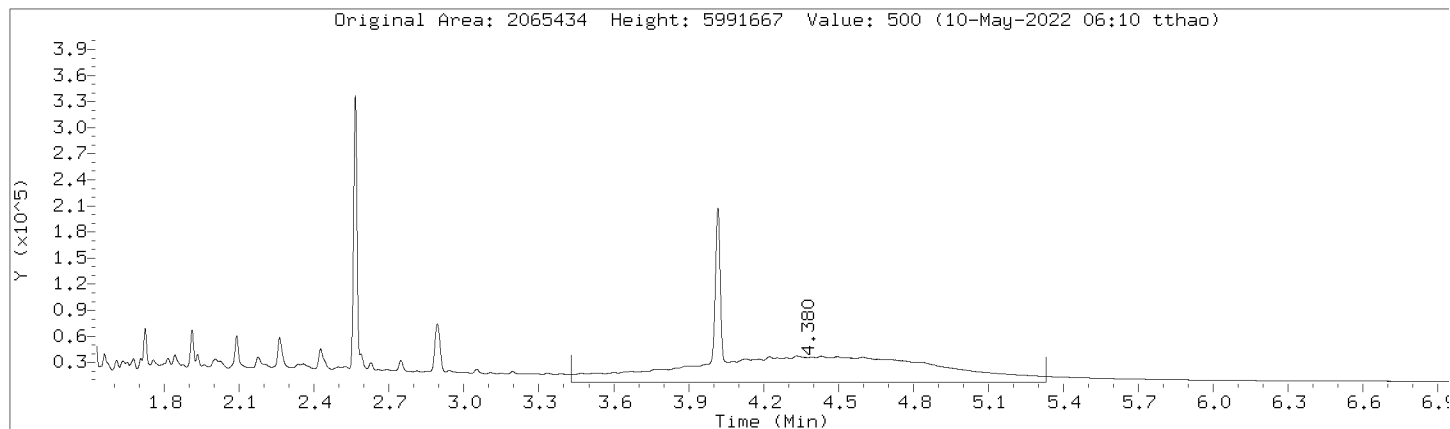
CAS Number:





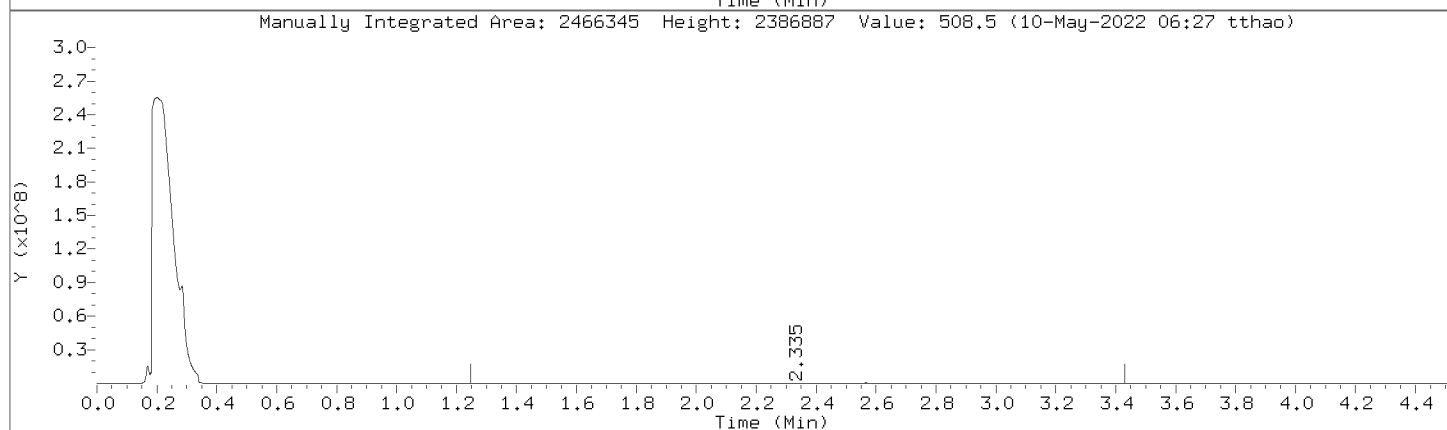
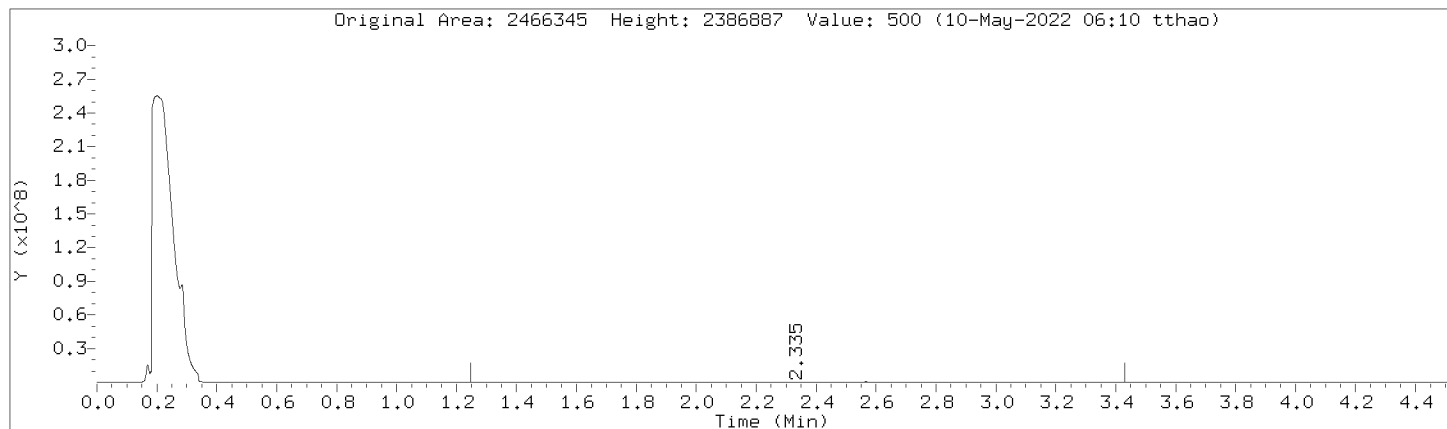
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Injection Date: 09-MAY-2022 16:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,364985:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



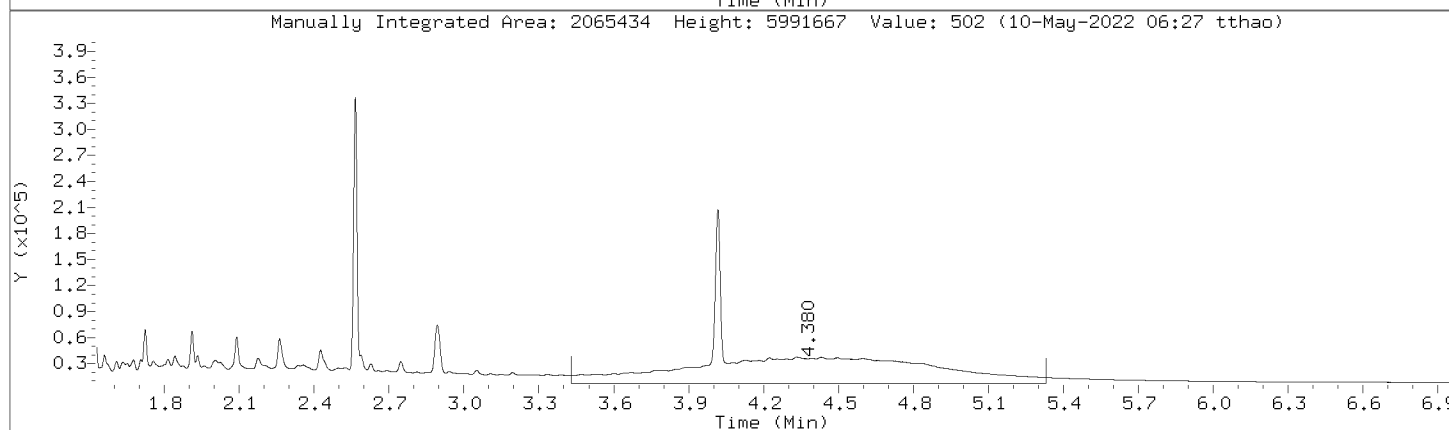
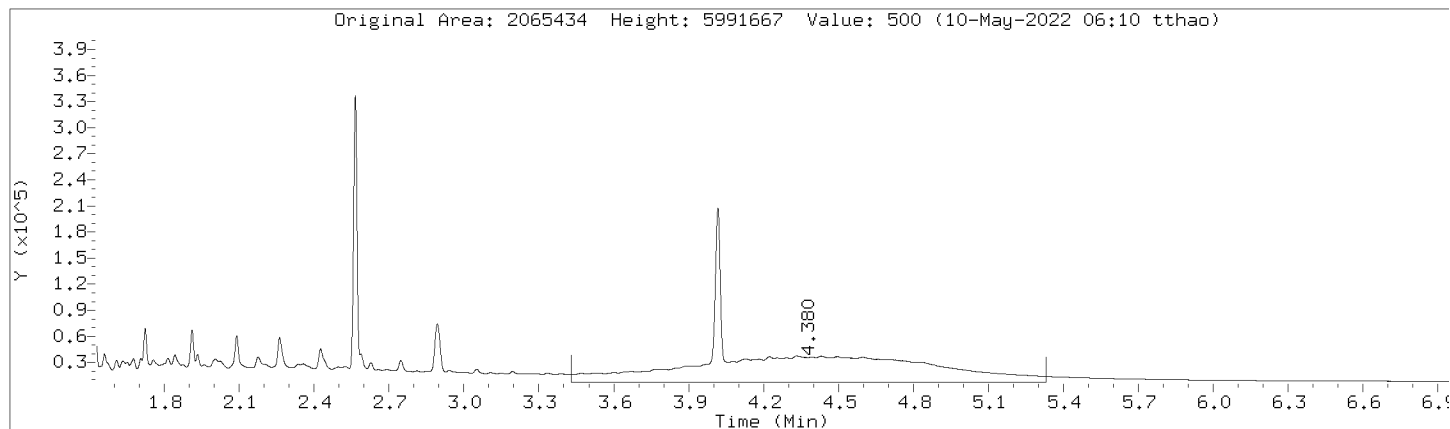
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Injection Date: 09-MAY-2022 16:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,364985:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



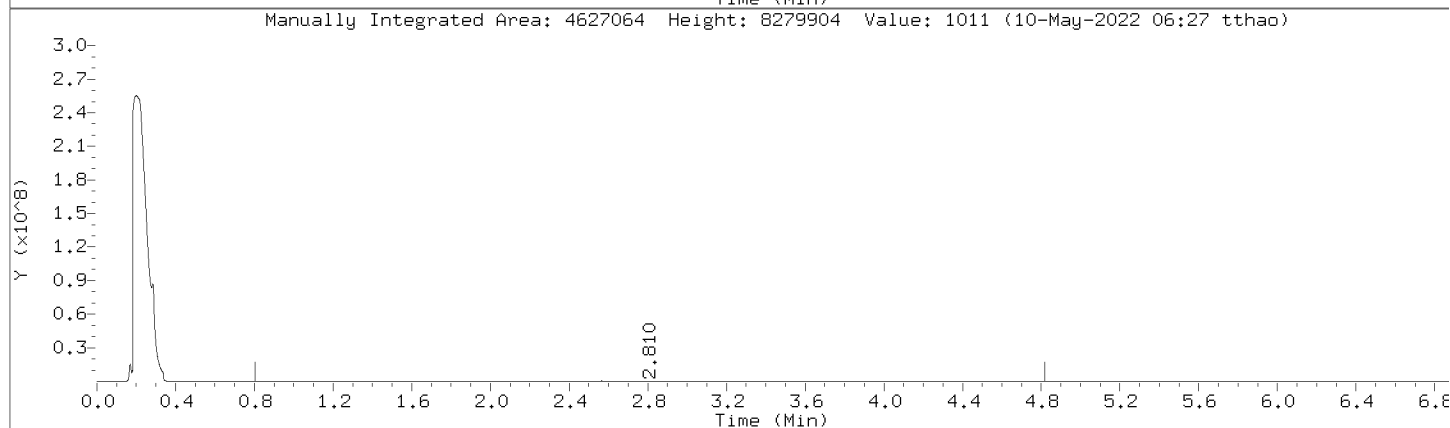
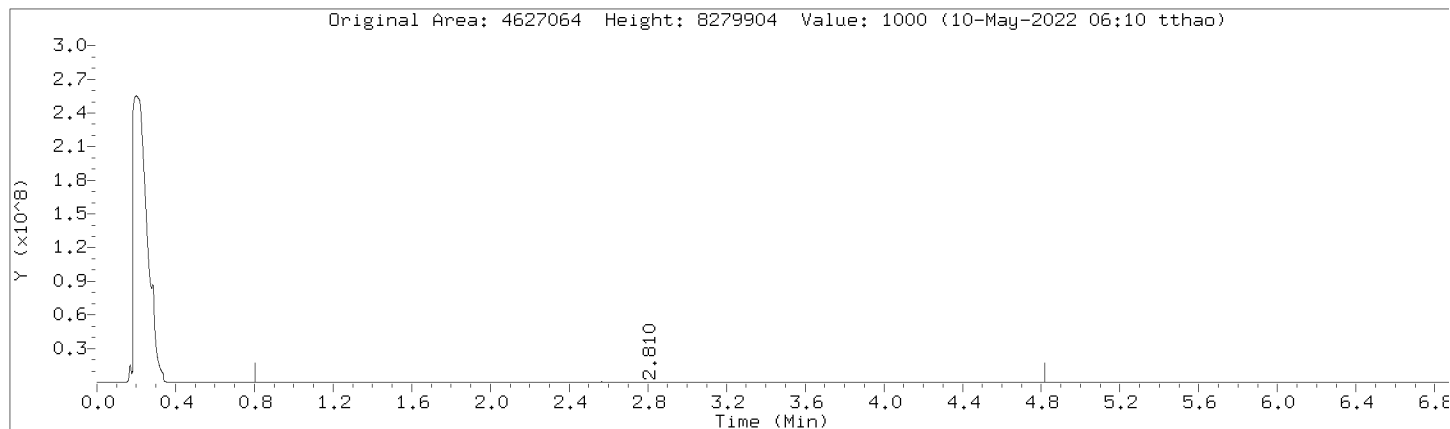
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Injection Date: 09-MAY-2022 16:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,364985:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



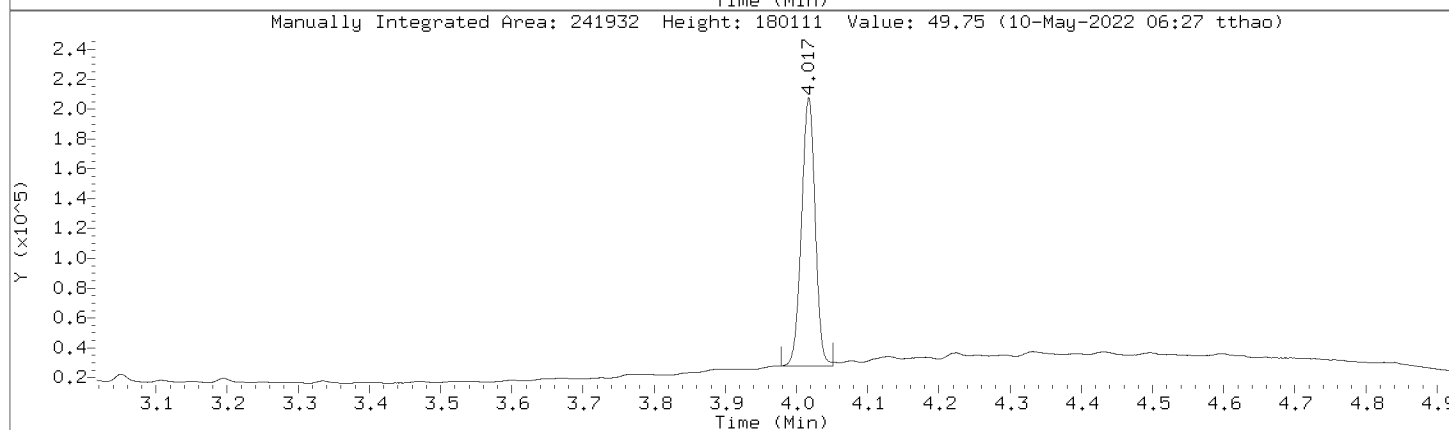
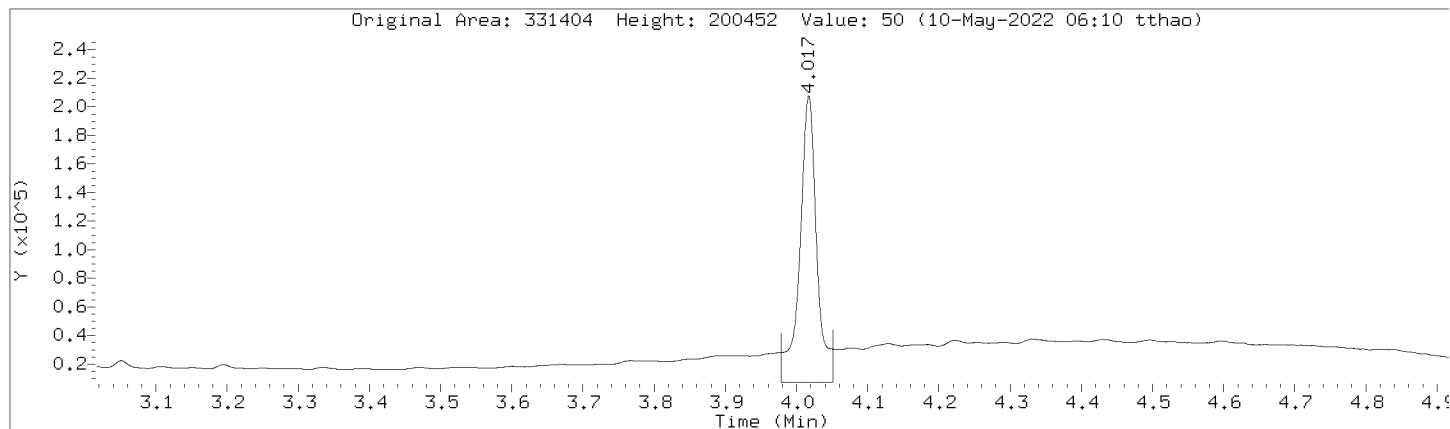
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Injection Date: 09-MAY-2022 16:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,364985:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



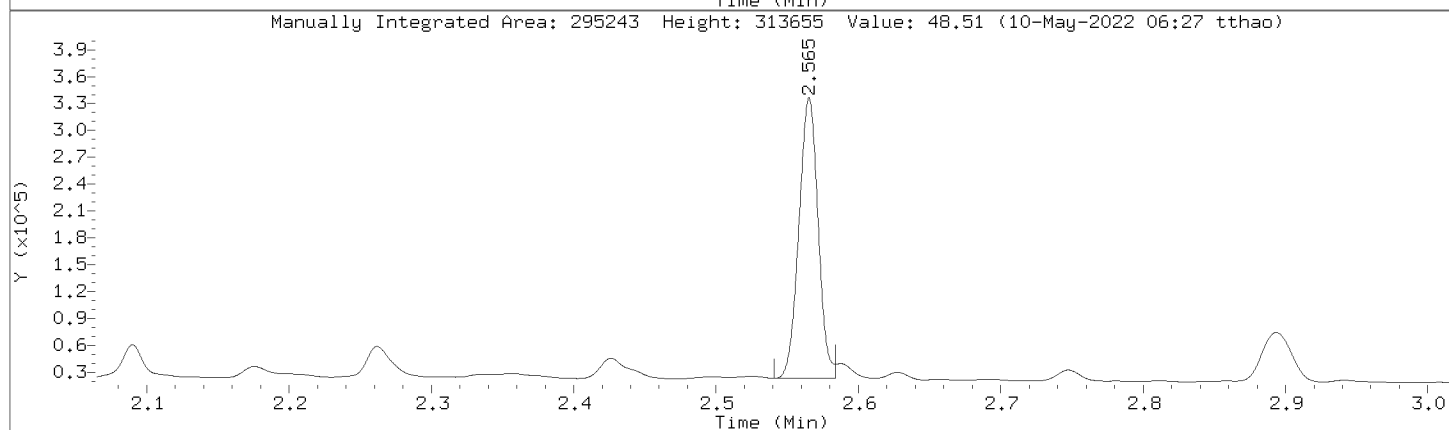
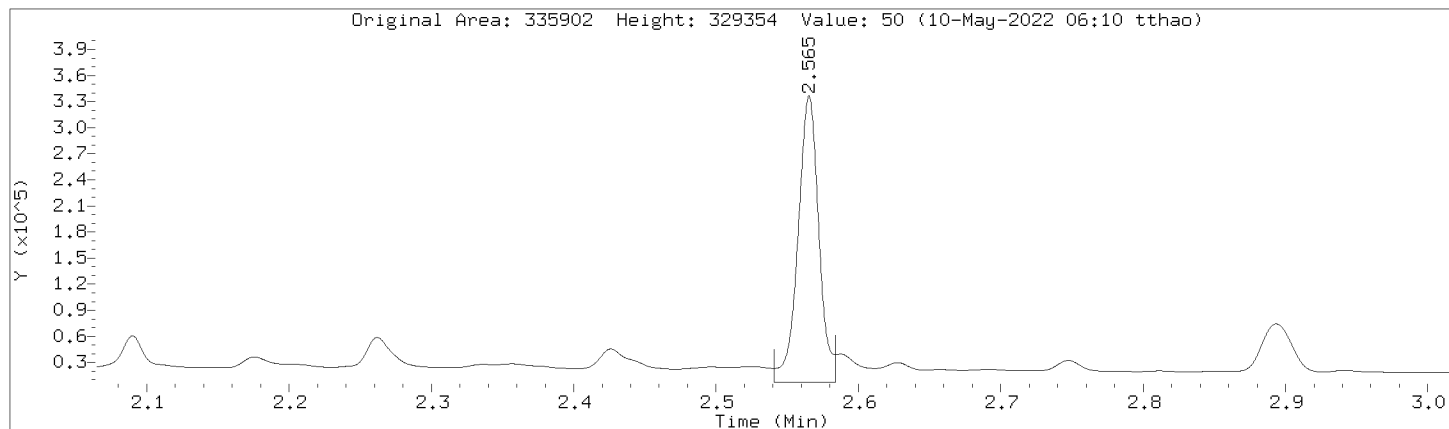
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Injection Date: 09-MAY-2022 16:29  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL7,364985:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000030.D  
 Injection Date: 09-MAY-2022 16:29  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL7,364985:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1703629	1703629
DRO by AK 102	2923435	2923435
TPH-DRO (C10-C28)	3355850	3355850
Motor Oil Range (C24-C36)	1780783	1780783
Diesel Fuel Range	2466345	2466345
Motor Oil Range	2065434	2065434
Diesel Fuel Range SG	2466345	2466345
Motor Oil Range SG	2065434	2065434
C10-C36	4627064	4627064
n-Triacontane (S)	331404	241932
o-Terphenyl (S)	335902	295243

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000031.D  
 Lab Smp Id: DMO-CAL8,364986:2 Client Smp ID: DMO-CAL8,364986:2  
 Inj Date : 09-MAY-2022 16:41  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal8,364986:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050922F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 10-May-2022 06:35 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 10 Calibration Sample, Level: 8  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.800	- 3.380		5582380 1000.00	1020	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.566	2.565 0.001		588897 100.000	96.8	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.019	4.017 0.002		483352 100.000	99.4	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.381	- 4.820		3317081 1000.00	1000	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.800	- 3.950		6405840 1000.00	1020	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.240	- 4.820		3460735 1000.00	1000	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.800	- 4.820		8899462 2000.00	2030	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.240	- 3.430		4693570 1000.00	1020	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.240	- 3.430		4693570 1000.00	1020	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.431	- 5.330		3996918 1000.00	998	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.431	- 5.330		3996918 1000.00	998	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.



Date : 09-MAY-2022 16:41

Client ID: DMO-CAL8,364986;2

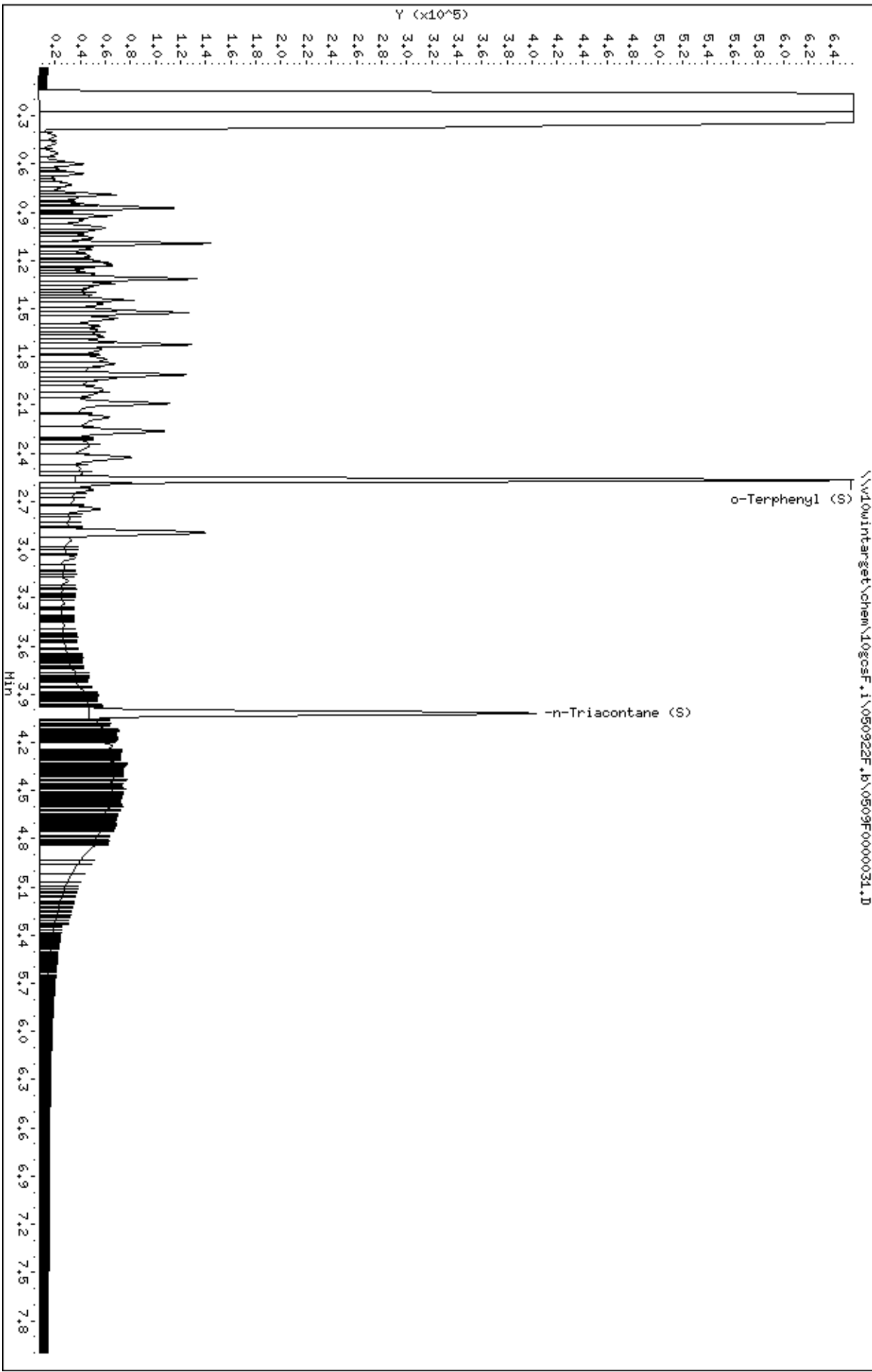
Sample Info: DMO-CAL8,364986;2

Column phase: DB-5-MS21390001

Instrument: 10gocsf.1

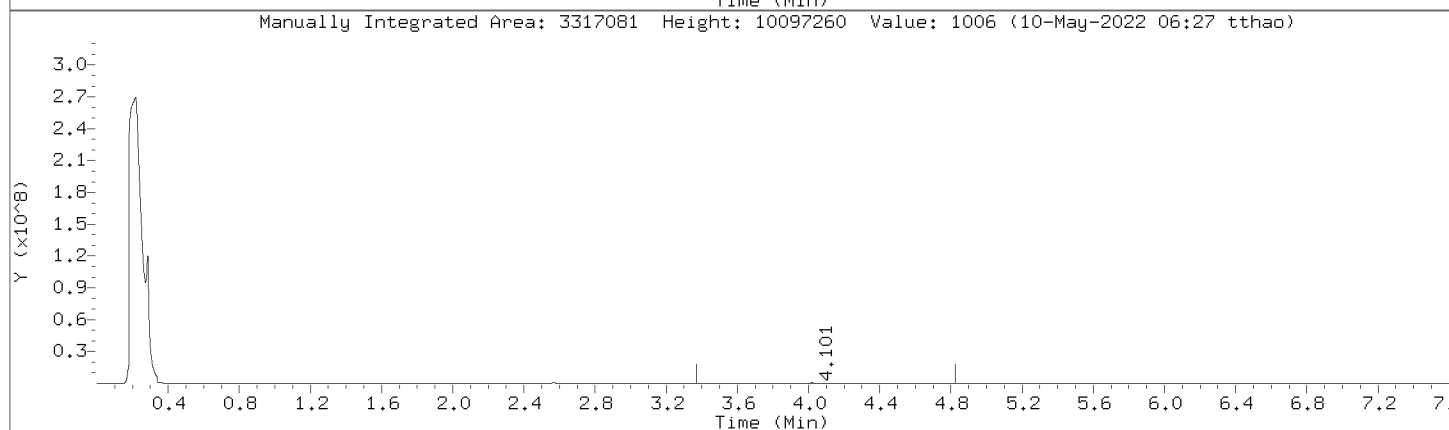
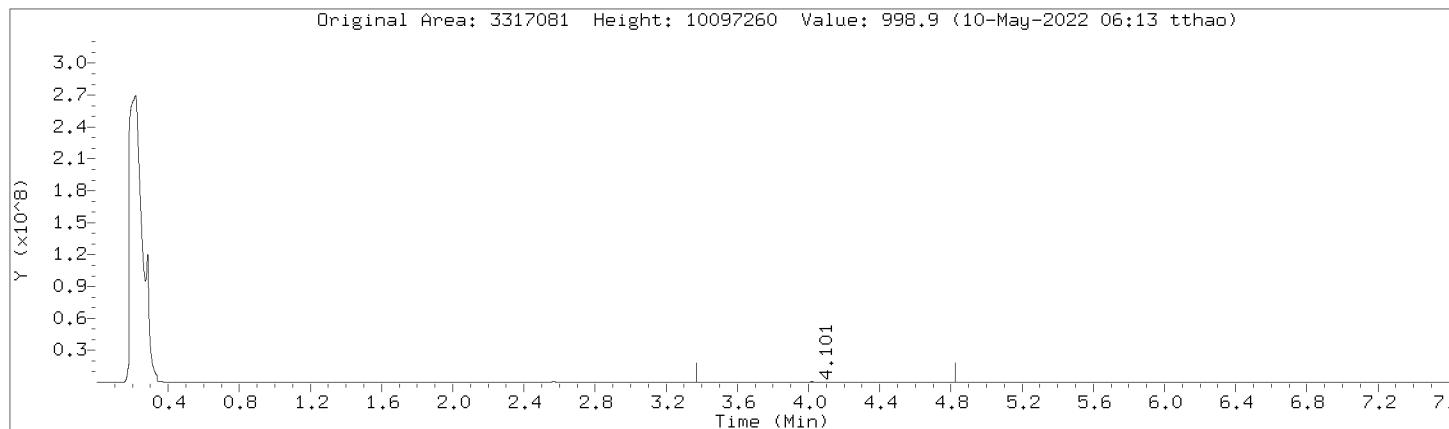
Operator: TT2

Column diameter: 0.32



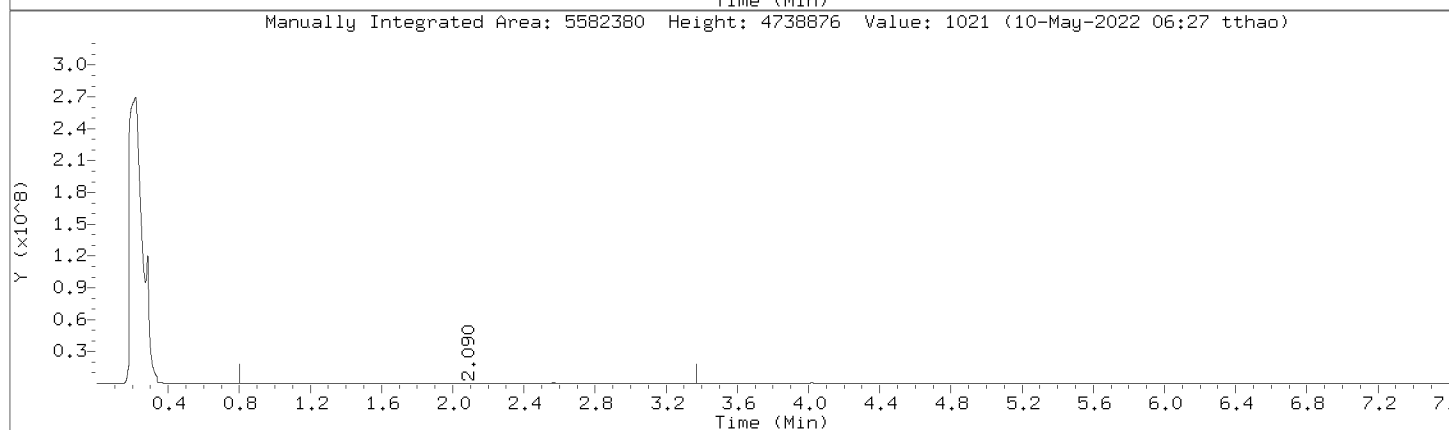
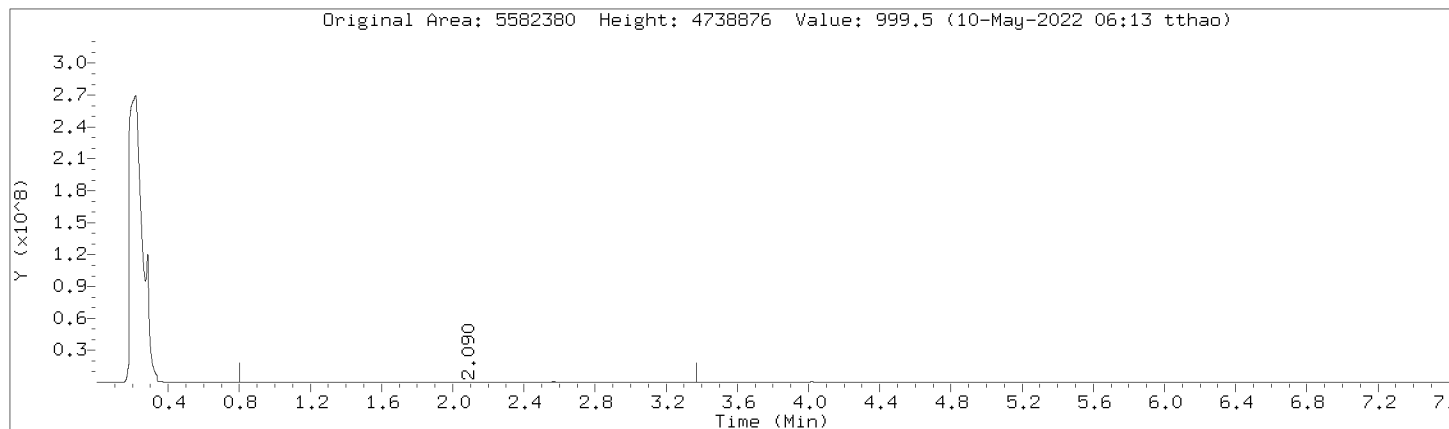
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Injection Date: 09-MAY-2022 16:41  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,364986:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



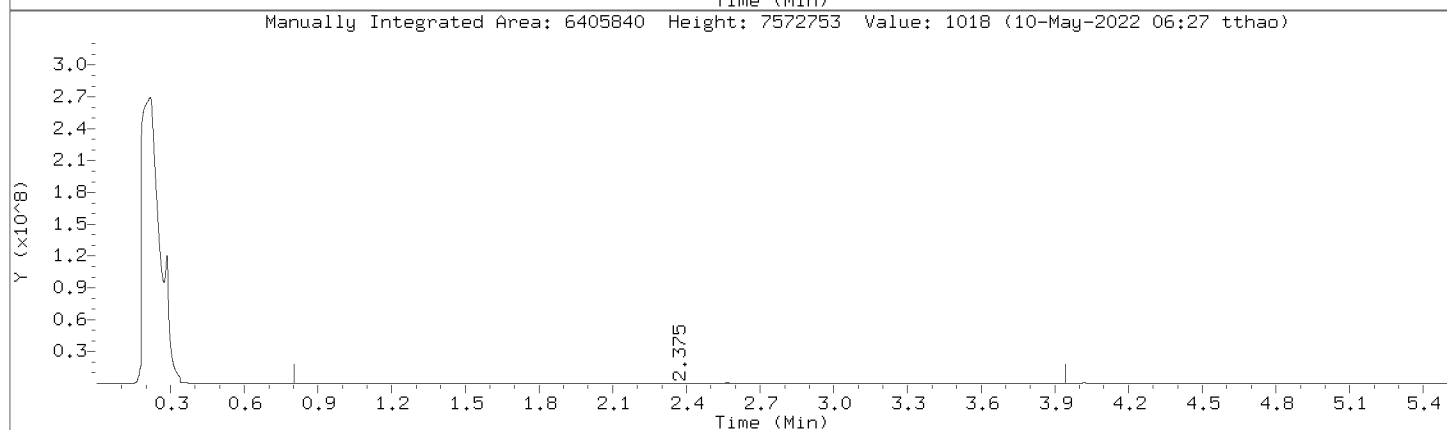
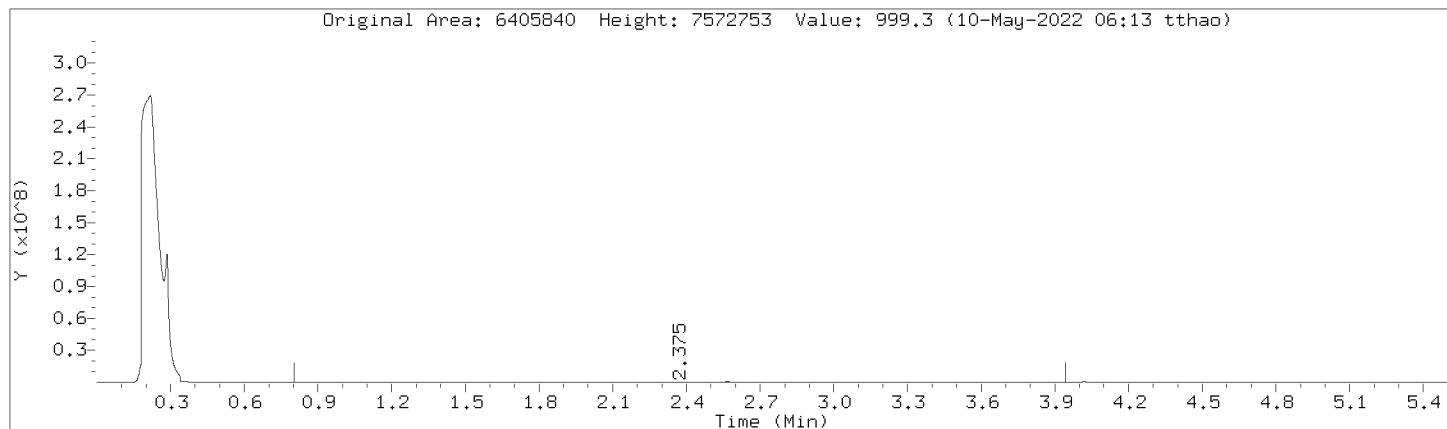
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,364986:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



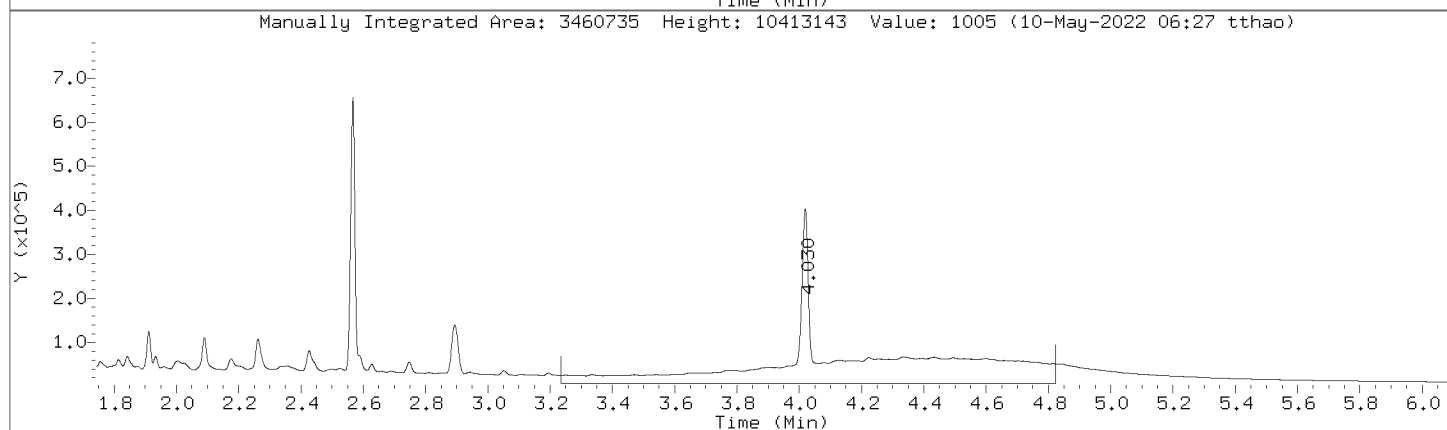
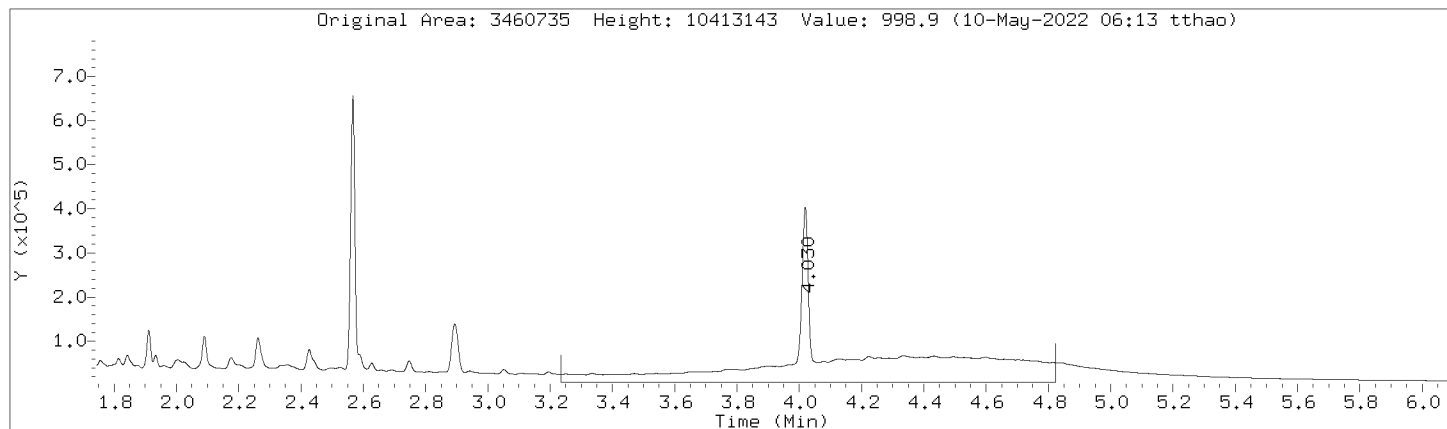
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Injection Date: 09-MAY-2022 16:41  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,364986:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



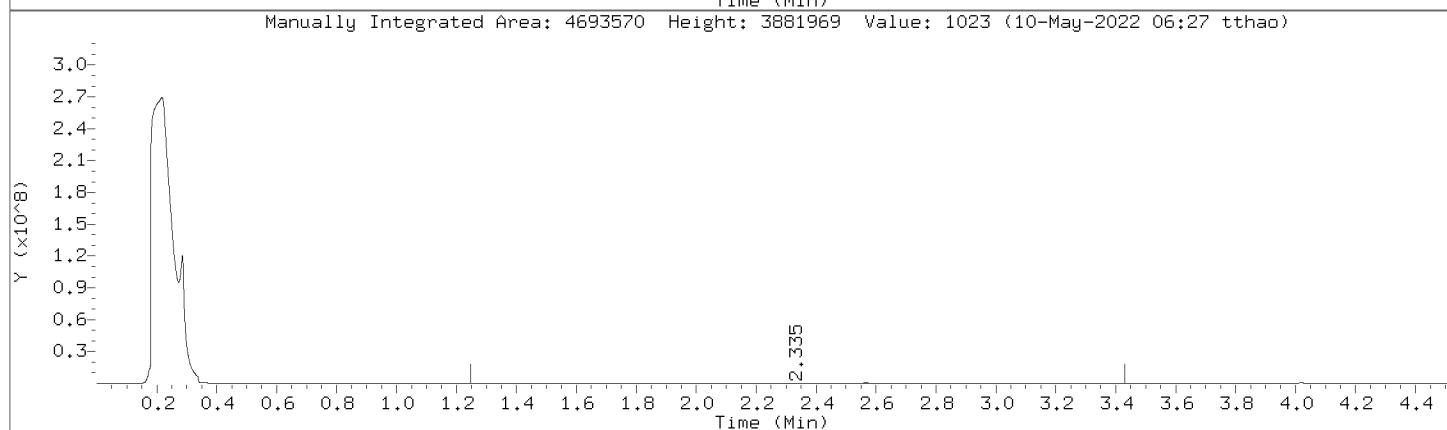
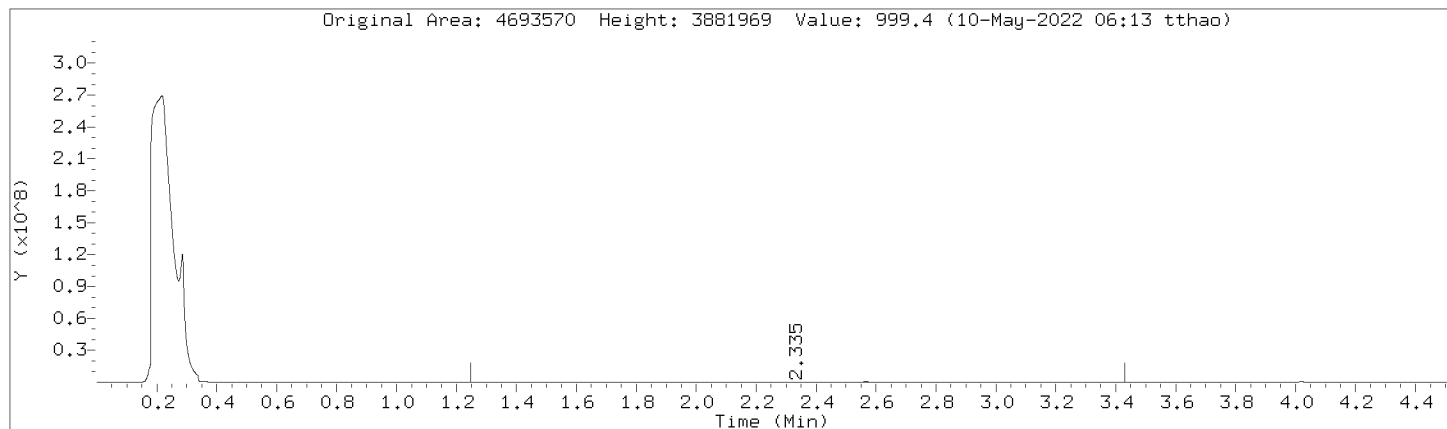
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,364986:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



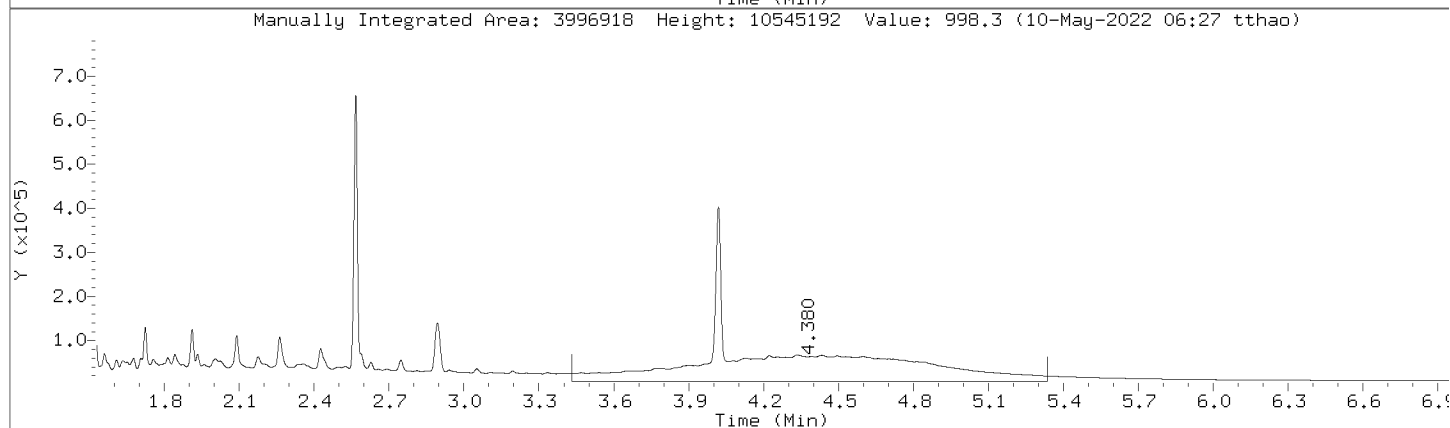
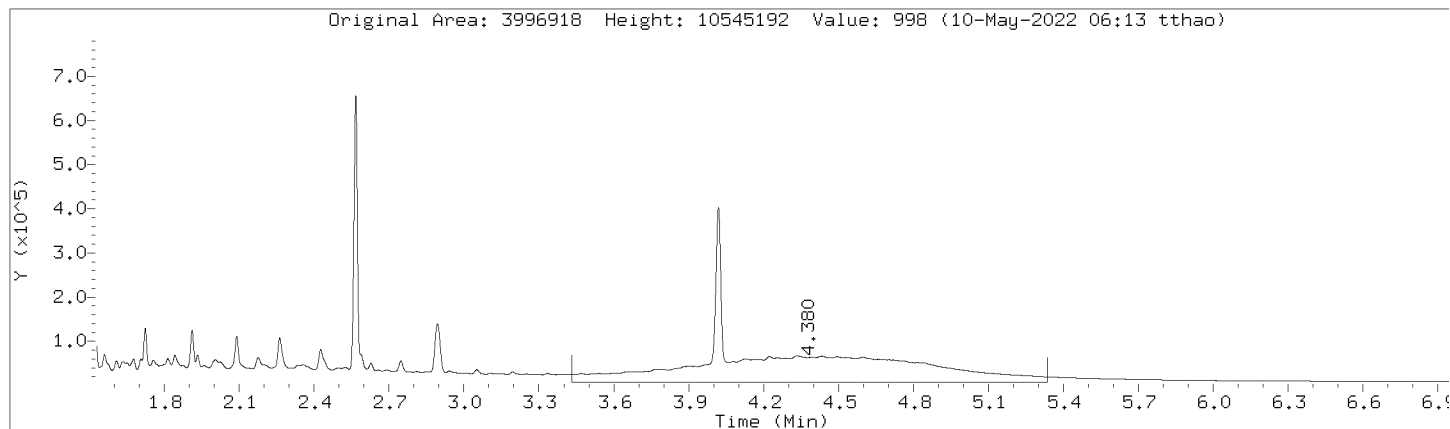
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000031.D  
Injection Date: 09-MAY-2022 16:41  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,364986:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



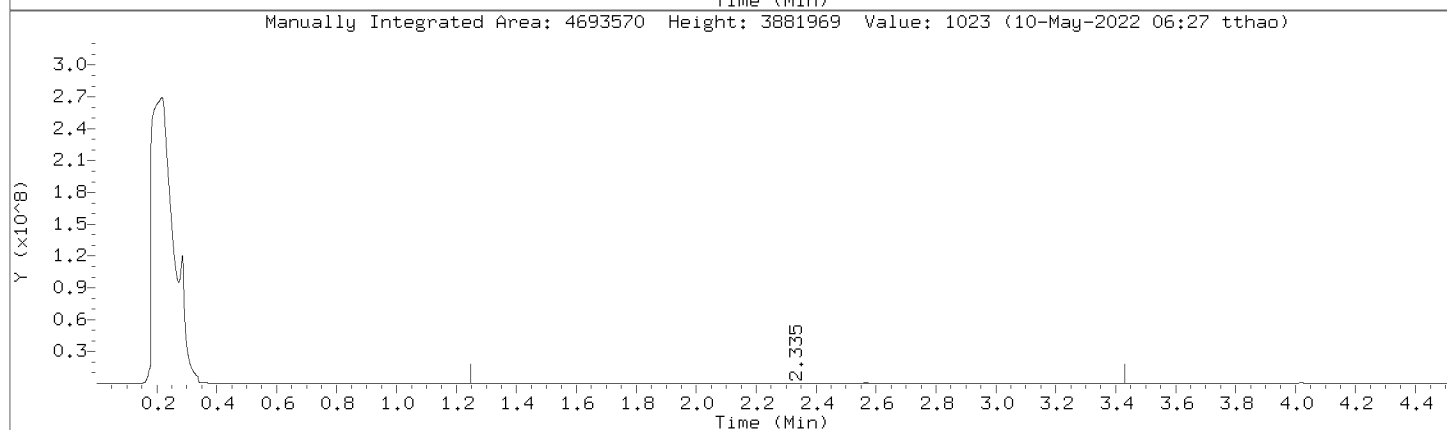
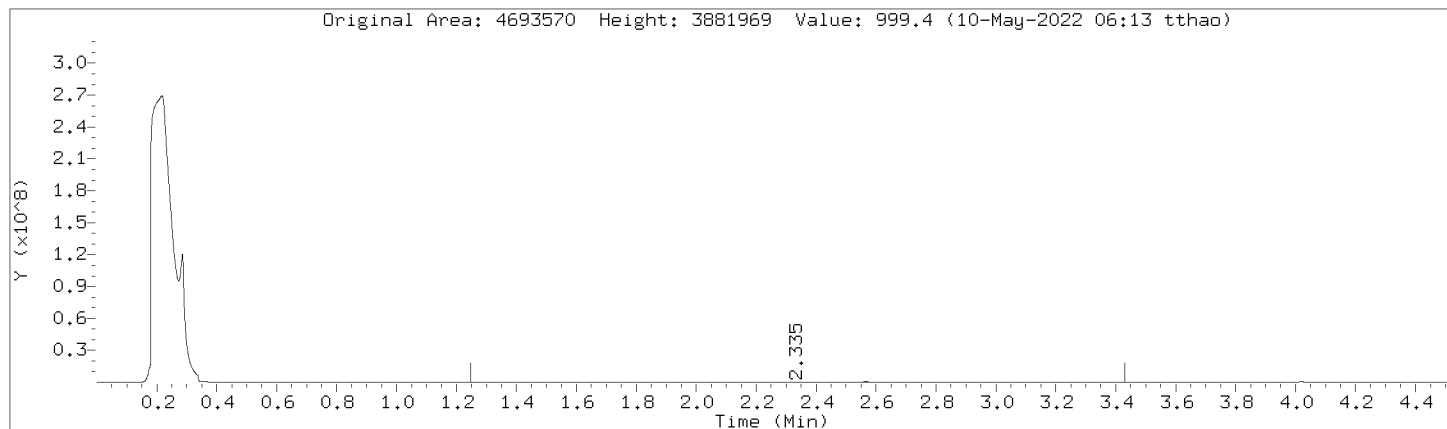
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Injection Date: 09-MAY-2022 16:41  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,364986:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000031.D  
Injection Date: 09-MAY-2022 16:41  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,364986:2

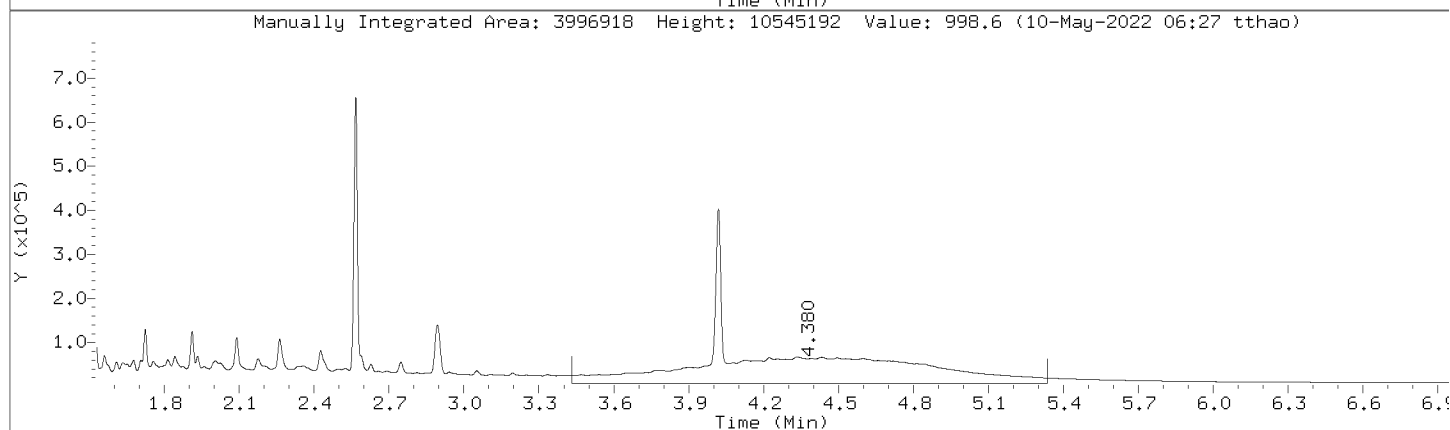
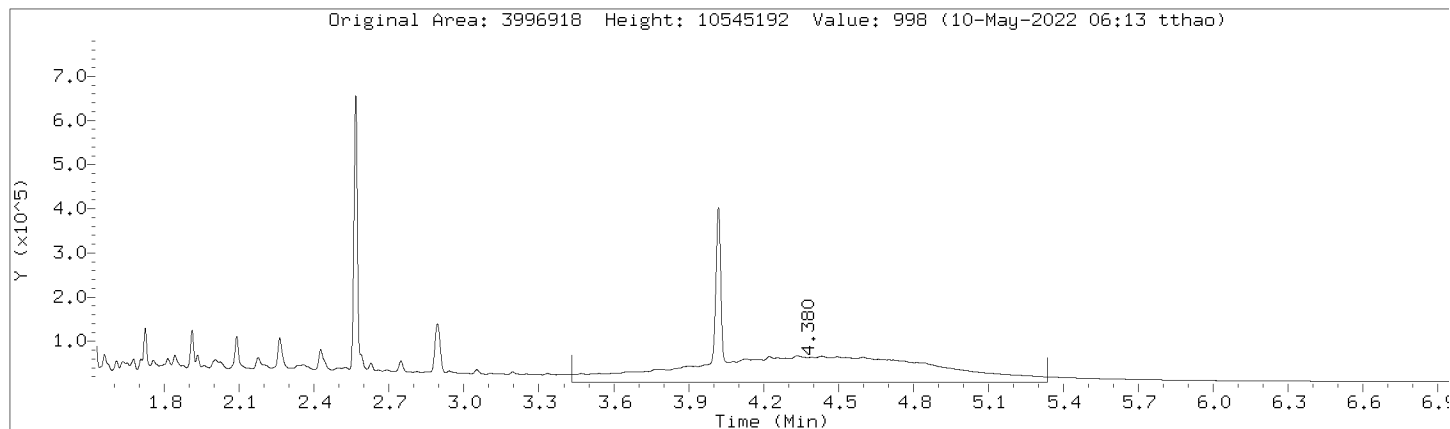
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CAS Number:





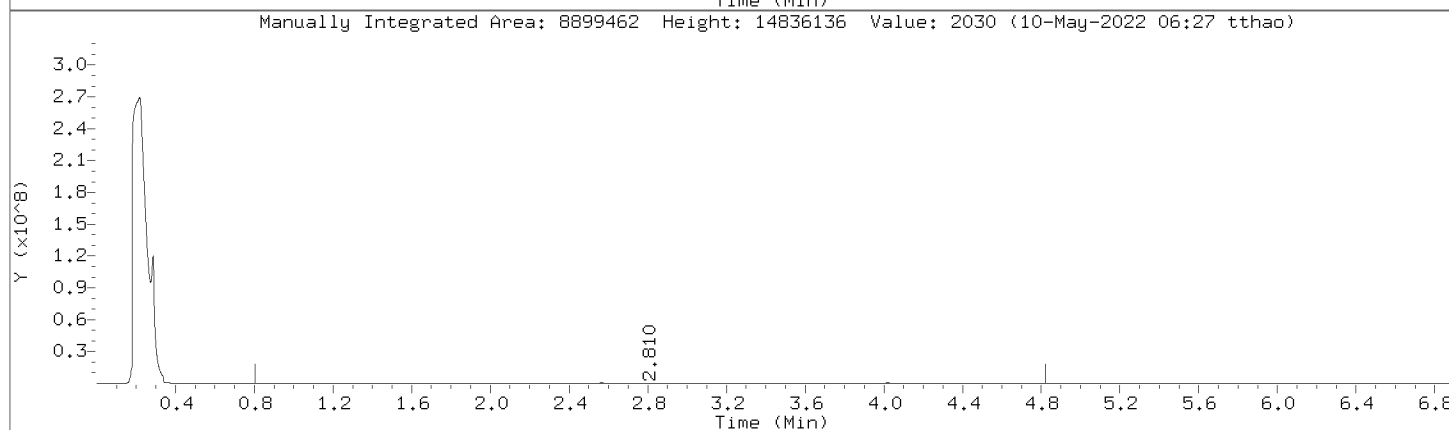
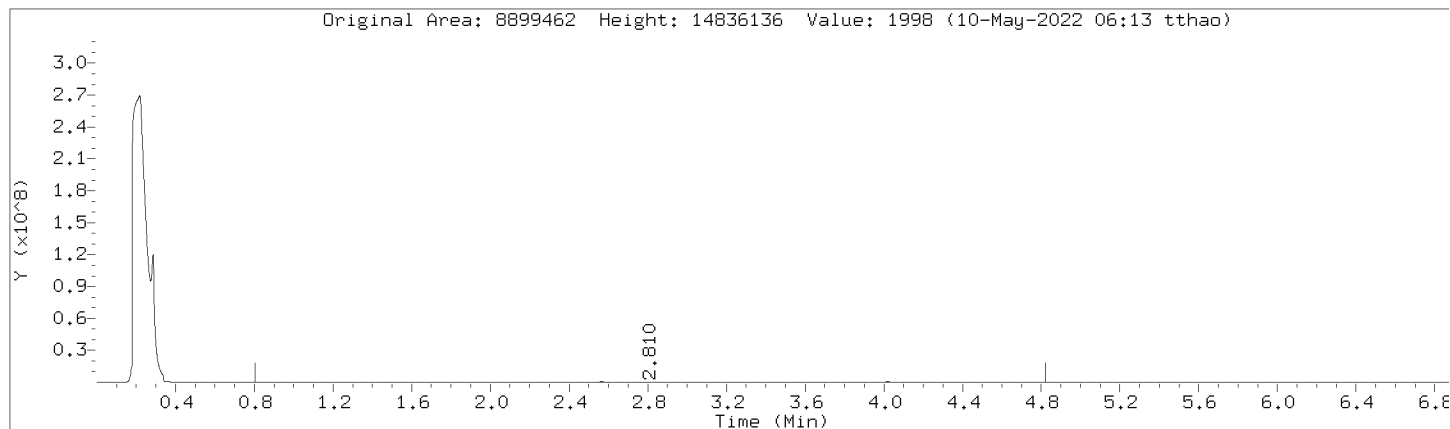
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,364986:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



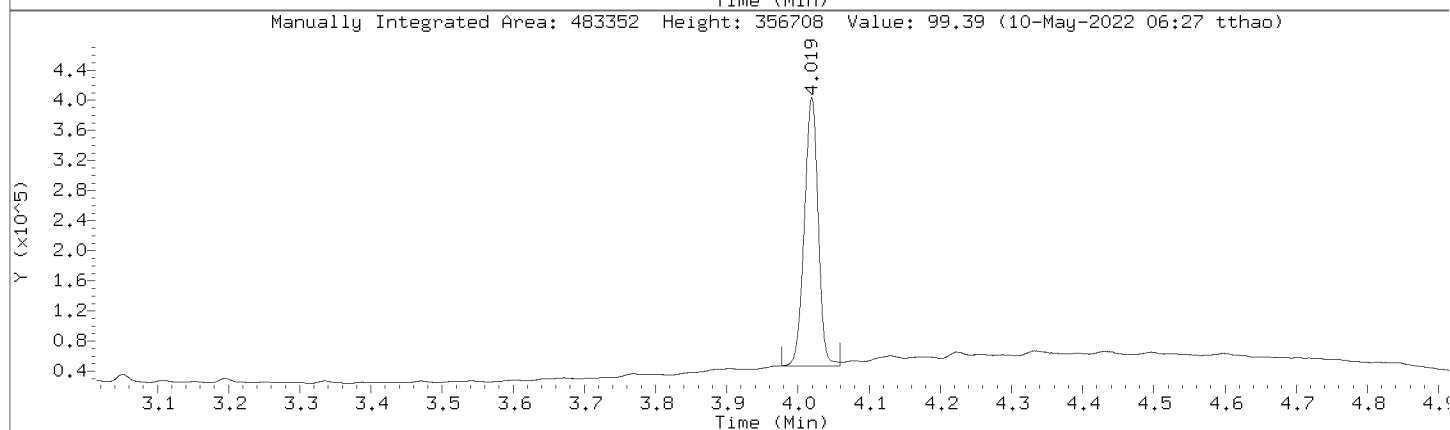
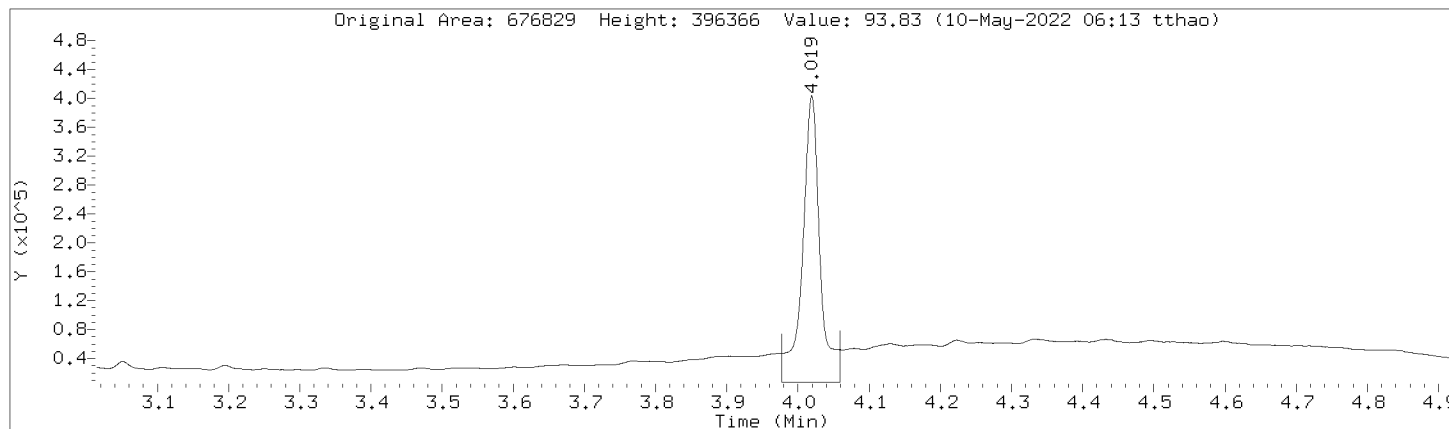
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Injection Date: 09-MAY-2022 16:41  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,364986:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



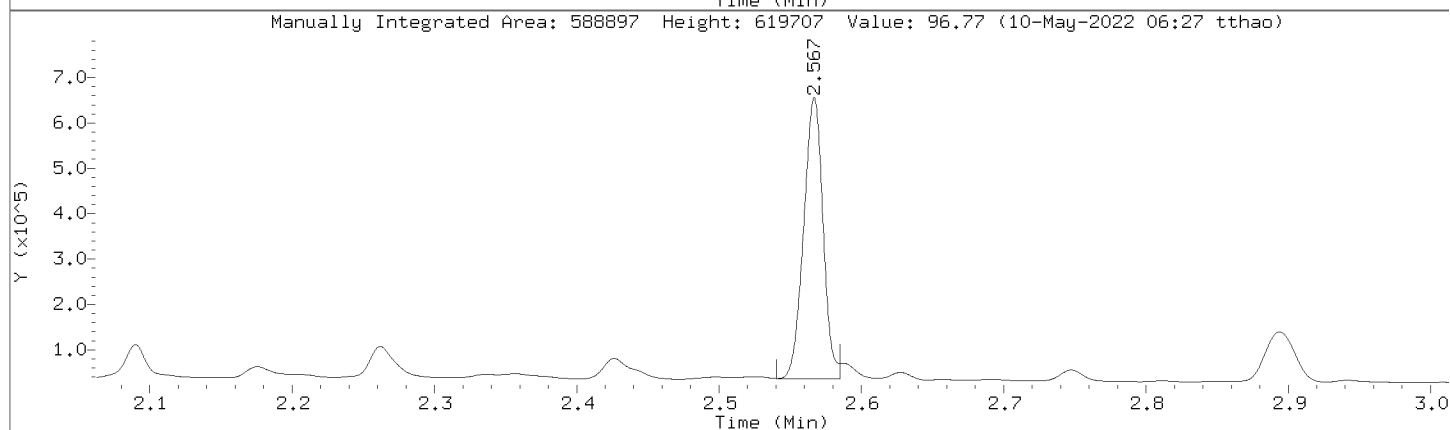
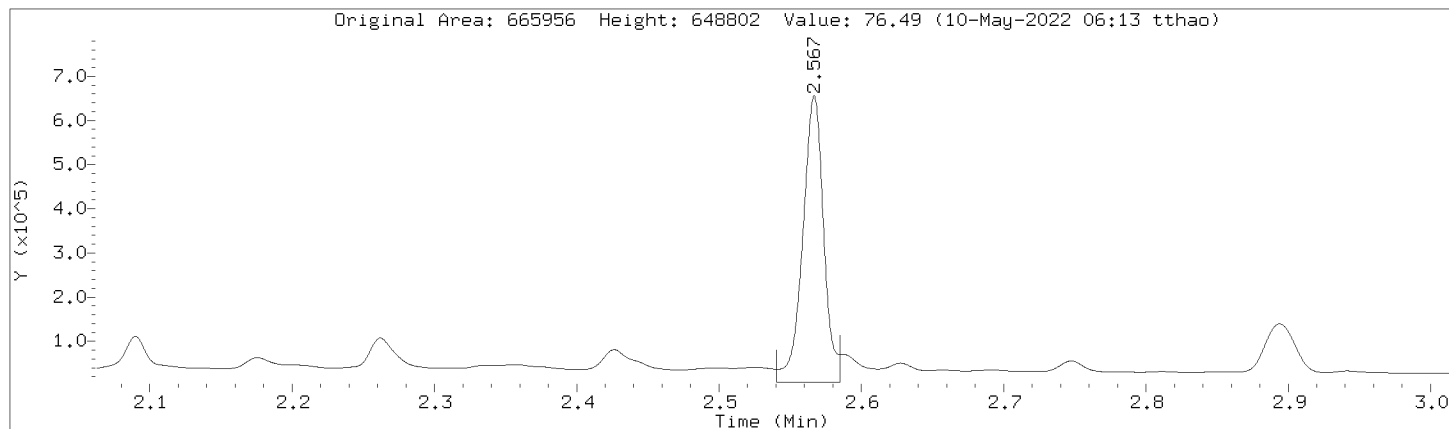
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Injection Date: 09-MAY-2022 16:41  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL8,364986:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000031.D  
 Injection Date: 09-MAY-2022 16:41  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL8,364986:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	3317081	3317081
DRO by AK 102	5582380	5582380
TPH-DRO (C10-C28)	6405840	6405840
Motor Oil Range (C24-C36)	3460735	3460735
Diesel Fuel Range	4693570	4693570
Motor Oil Range	3996918	3996918
Diesel Fuel Range SG	4693570	4693570
Motor Oil Range SG	3996918	3996918
C10-C36	8899462	8899462
n-Triacontane (S)	676829	483352
o-Terphenyl (S)	665956	588897

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000032.D  
 Lab Smp Id: DMO-CAL9,364987:2 Client Smp ID: DMO-CAL9,364987:2  
 Inj Date : 09-MAY-2022 16:53  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal9,364987:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050922F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 10-May-2022 06:35 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 11 Calibration Sample, Level: 9  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	CAL-AMT ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.800	- 3.380		10708209 2000.00	2010	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.570	2.565 0.005		1218261 200.000	200	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.023	4.017 0.006		949227 200.000	195	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.381	- 4.820		6584732 2000.00	2020	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.800	- 3.950		12324573 2000.00	2010	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.240	- 4.820		6862239 2000.00	2020	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.800	- 4.820		17292941 4000.00	4030	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.240	- 3.430		8970491 2000.00	2010	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.240	- 3.430		8970491 2000.00	2010	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.431	- 5.330		8005827 2000.00	2030	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.431	- 5.330		8005827 2000.00	2030	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 09-MAY-2022 16:53

Client ID: DMO-CAL9,364987;2

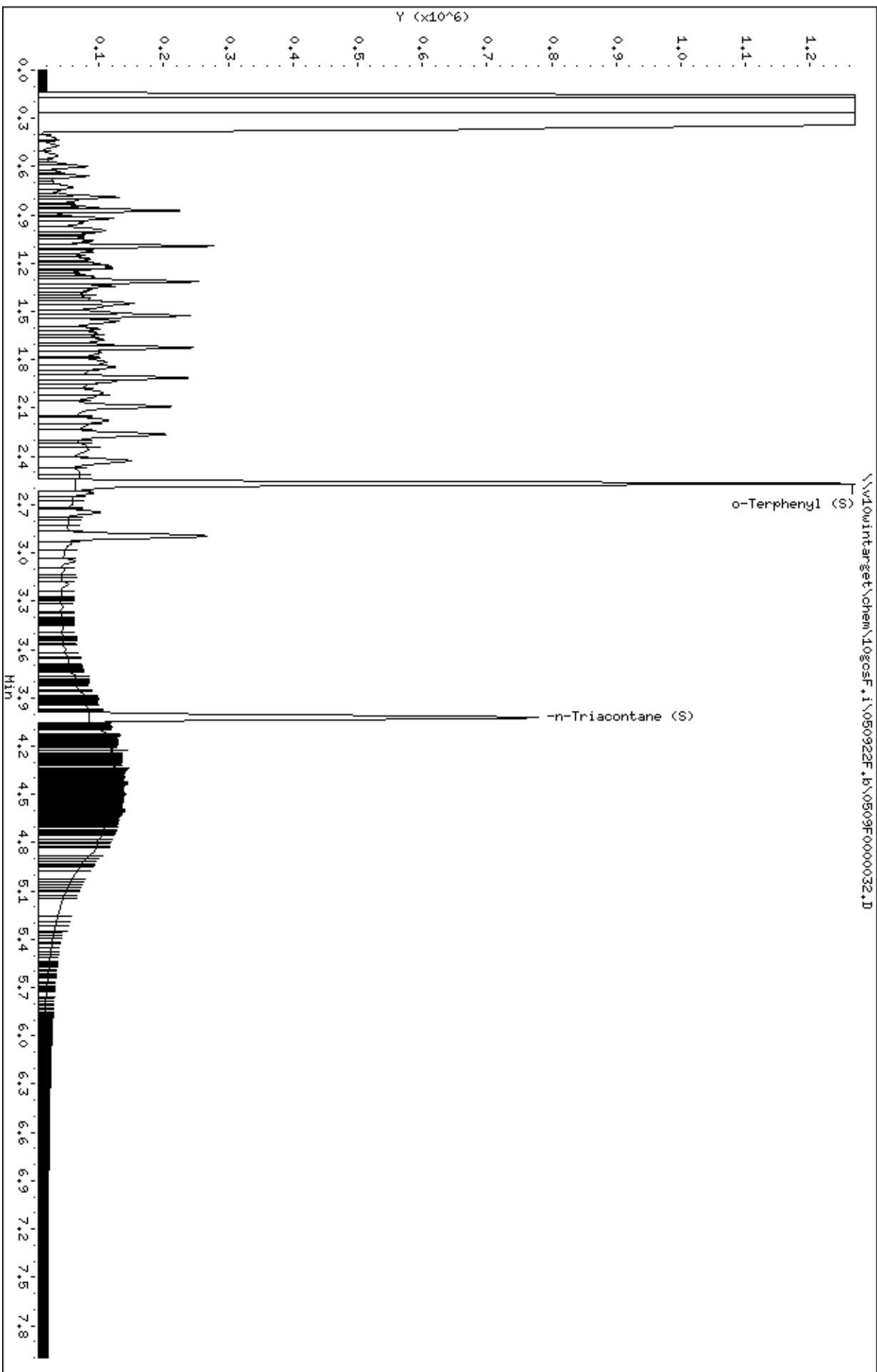
Sample Info: DMO-CAL9,364987;2

Instrument: logsf.1

Operator: TT2

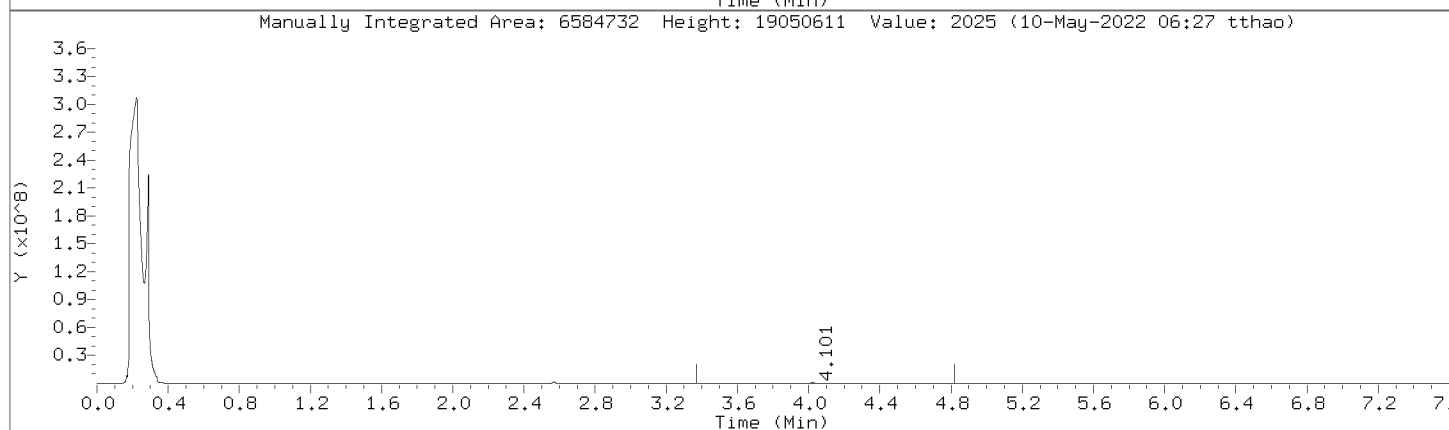
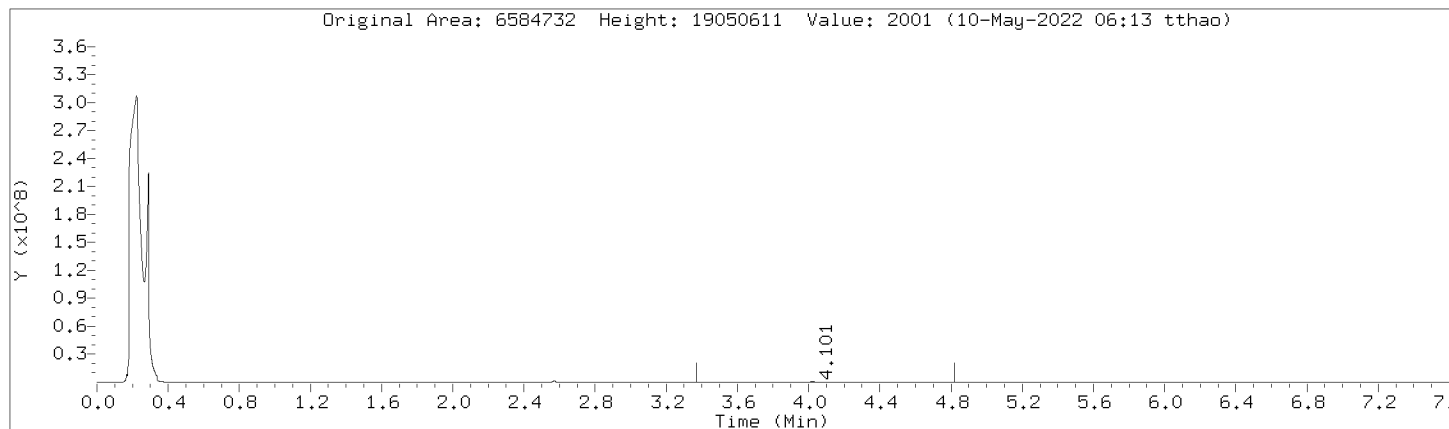
Column phase: DB-5-MS21390001

Column diameter: 0.32



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000032.D  
Injection Date: 09-MAY-2022 16:53  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,364987:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000032.D

Injection Date: 09-MAY-2022 16:53

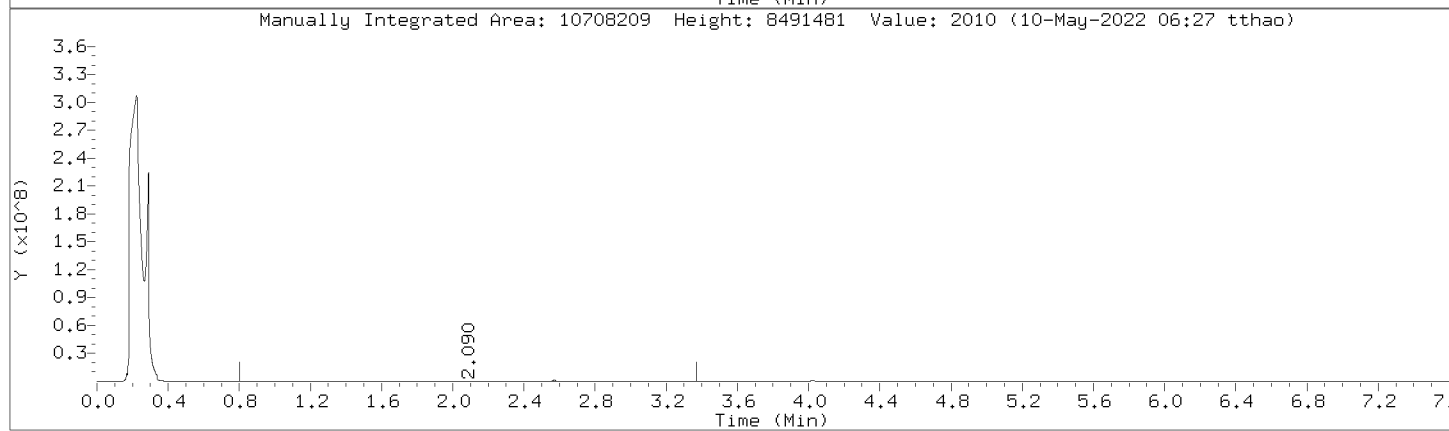
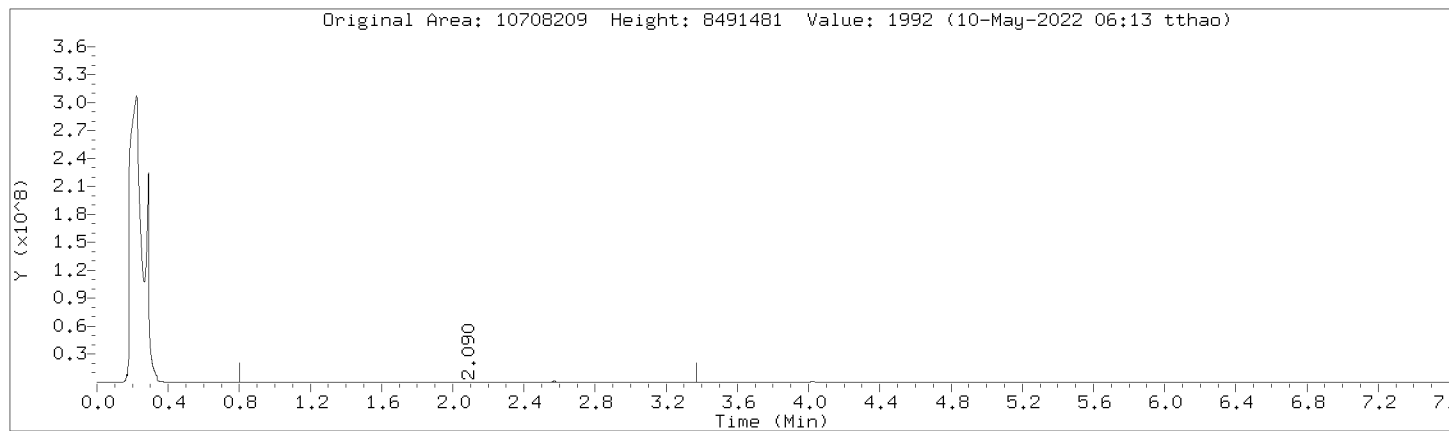
Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL9,364987:2

Compound: DRO by AK 102

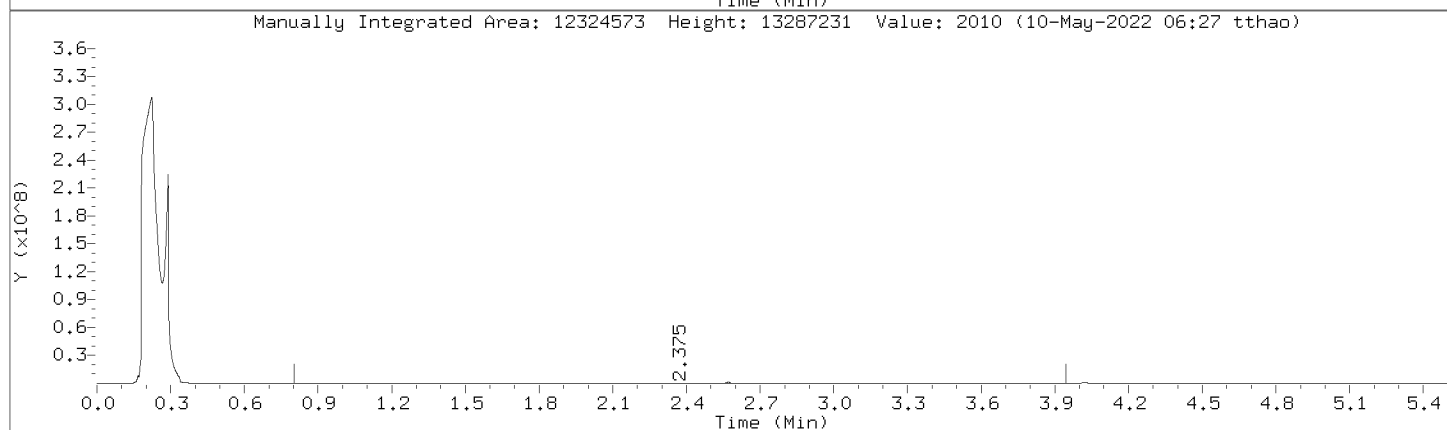
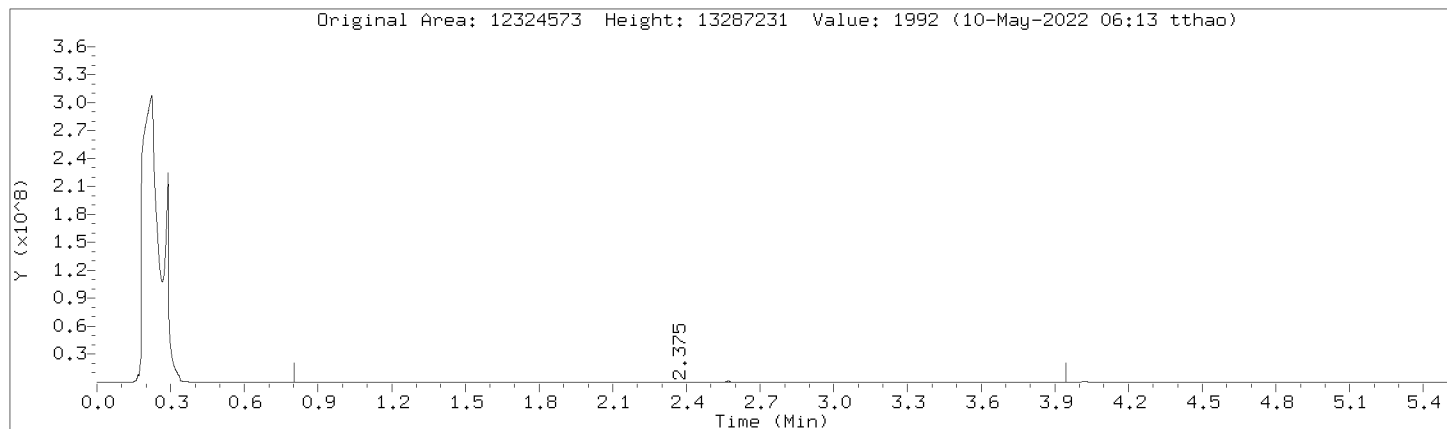
Review Code: RNG

CAS Number:



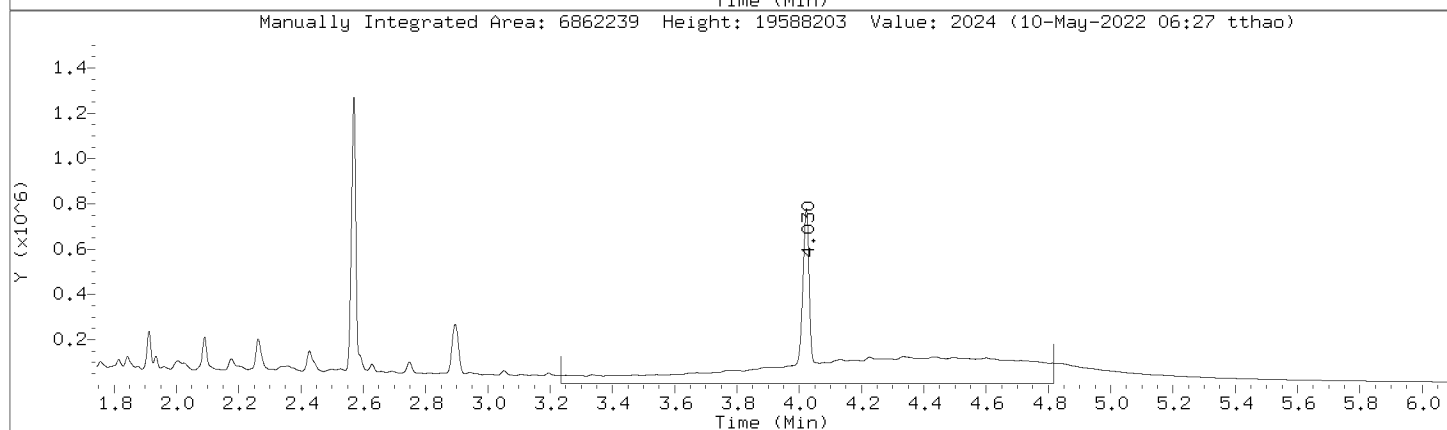
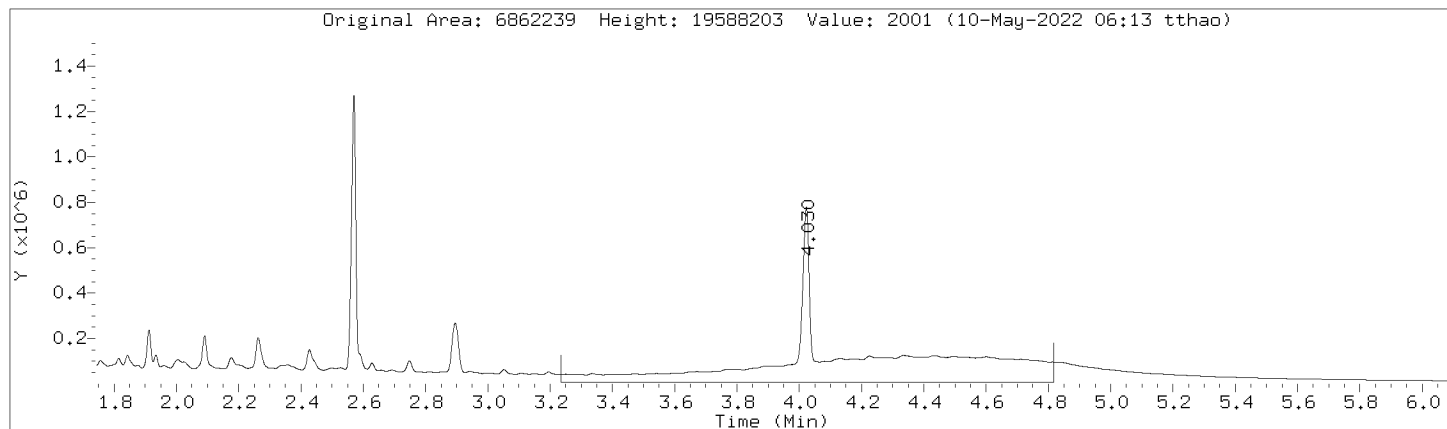
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Injection Date: 09-MAY-2022 16:53  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,364987:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



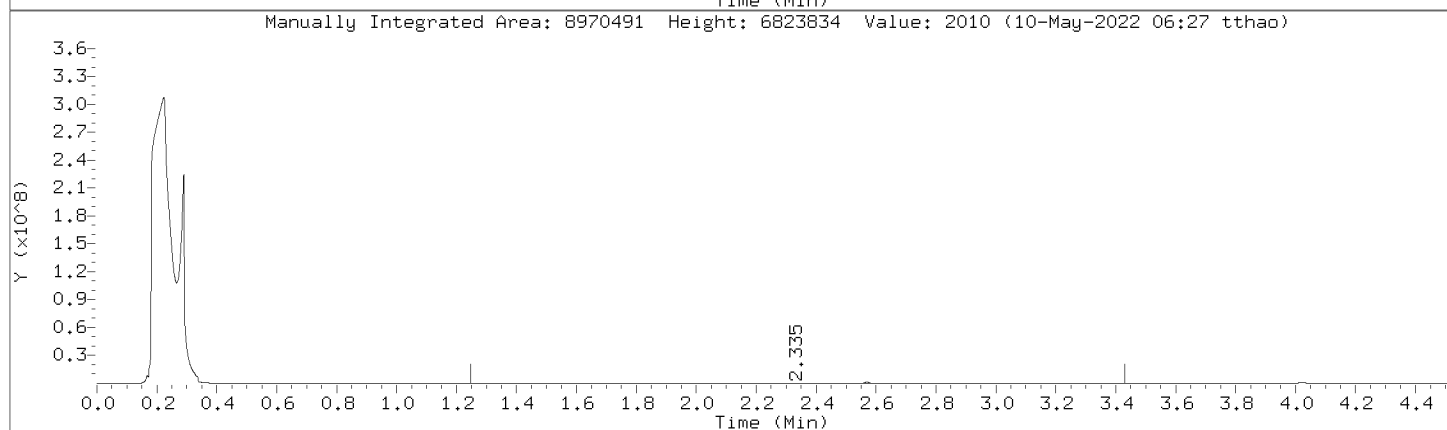
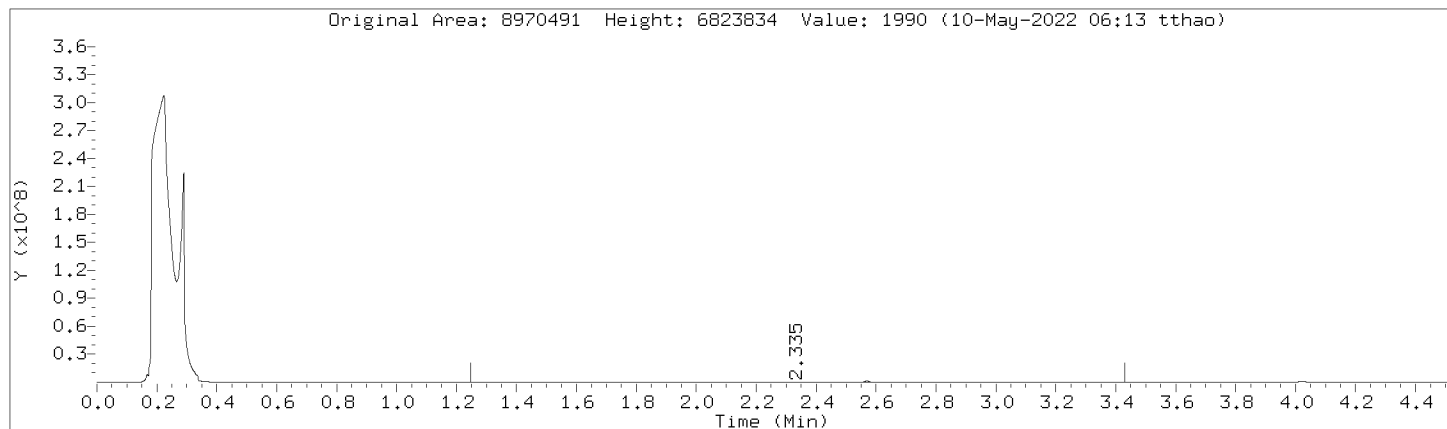
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Injection Date: 09-MAY-2022 16:53  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,364987:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



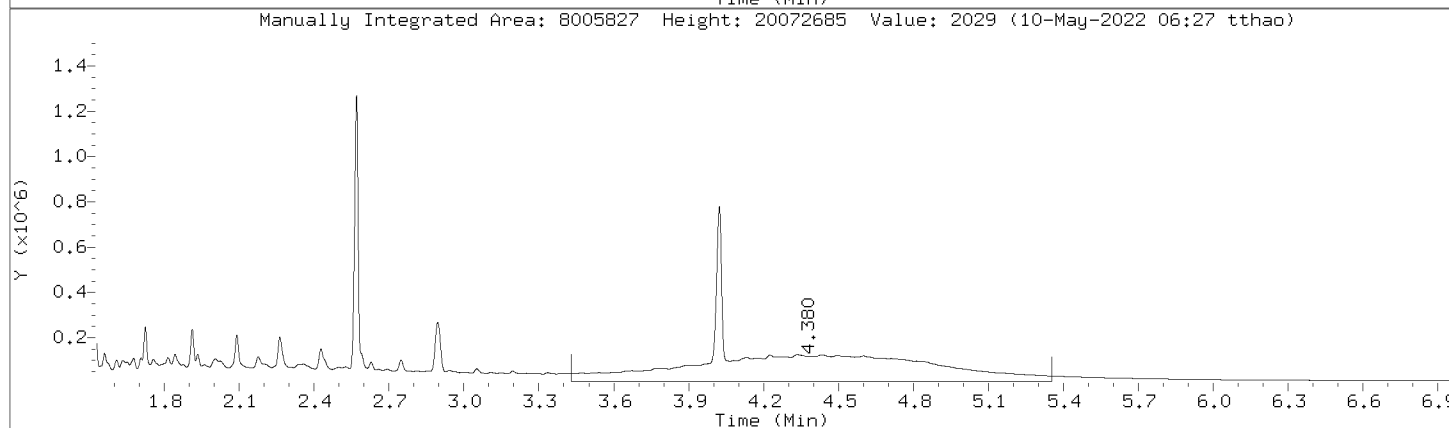
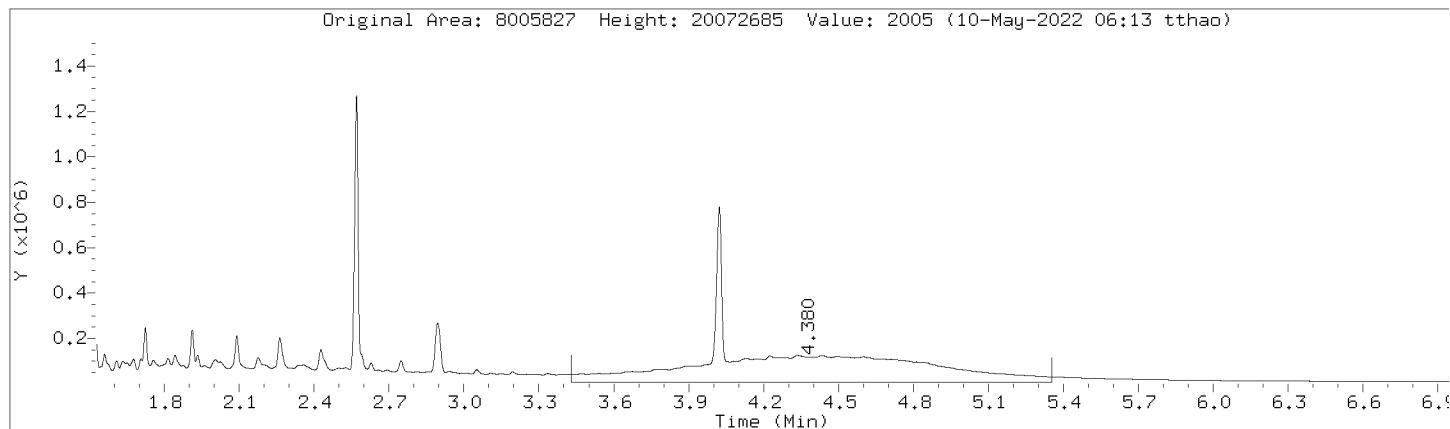
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Injection Date: 09-MAY-2022 16:53  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,364987:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



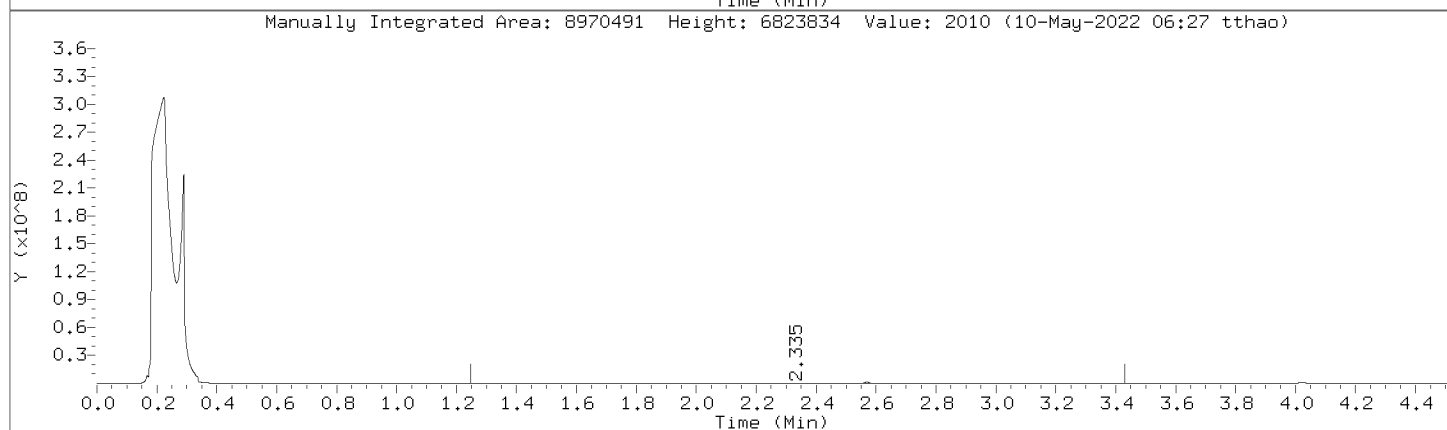
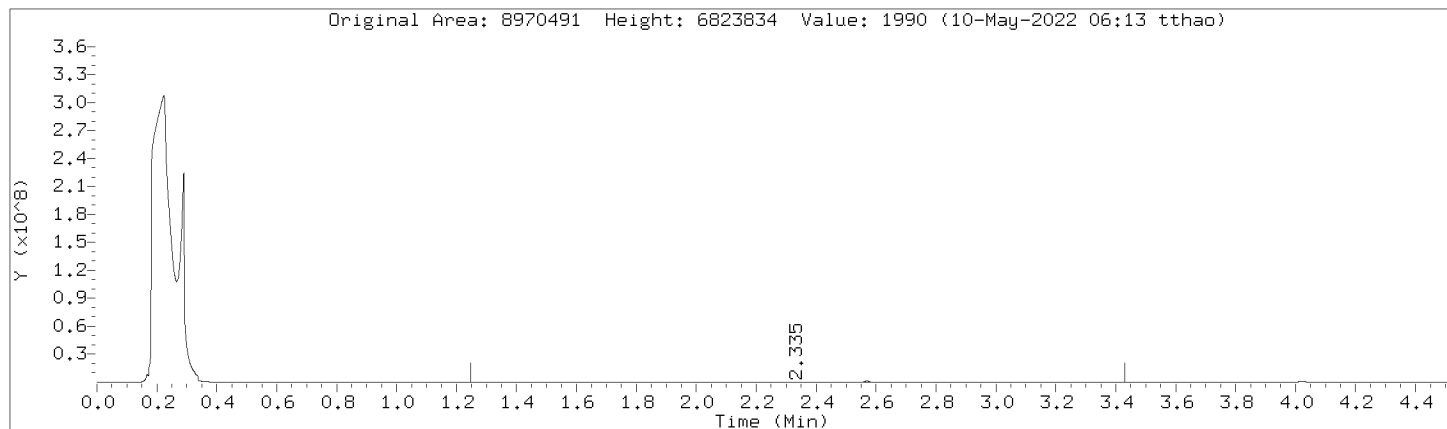
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Injection Date: 09-MAY-2022 16:53  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,364987:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



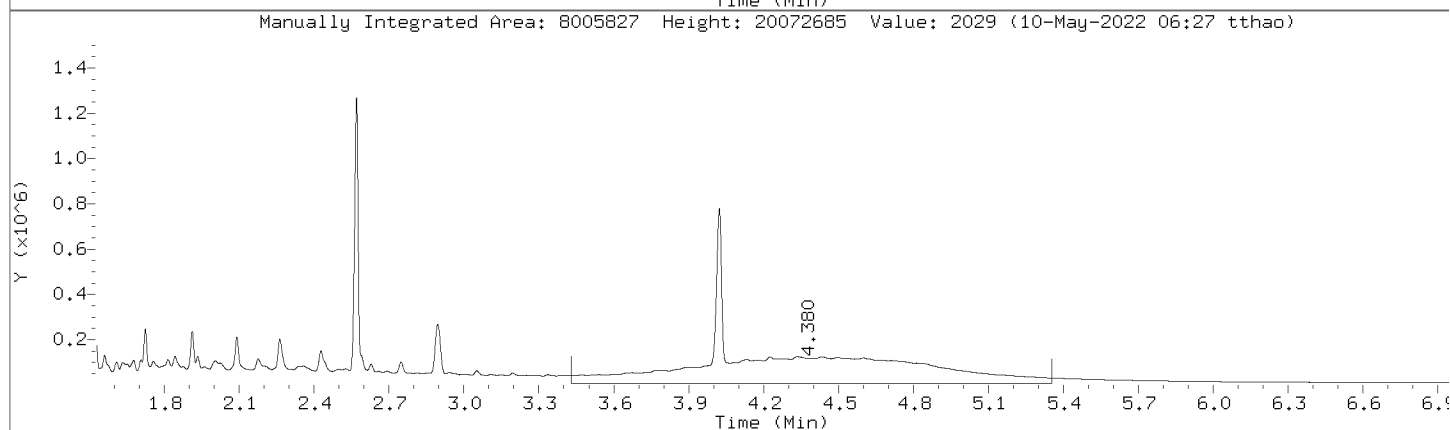
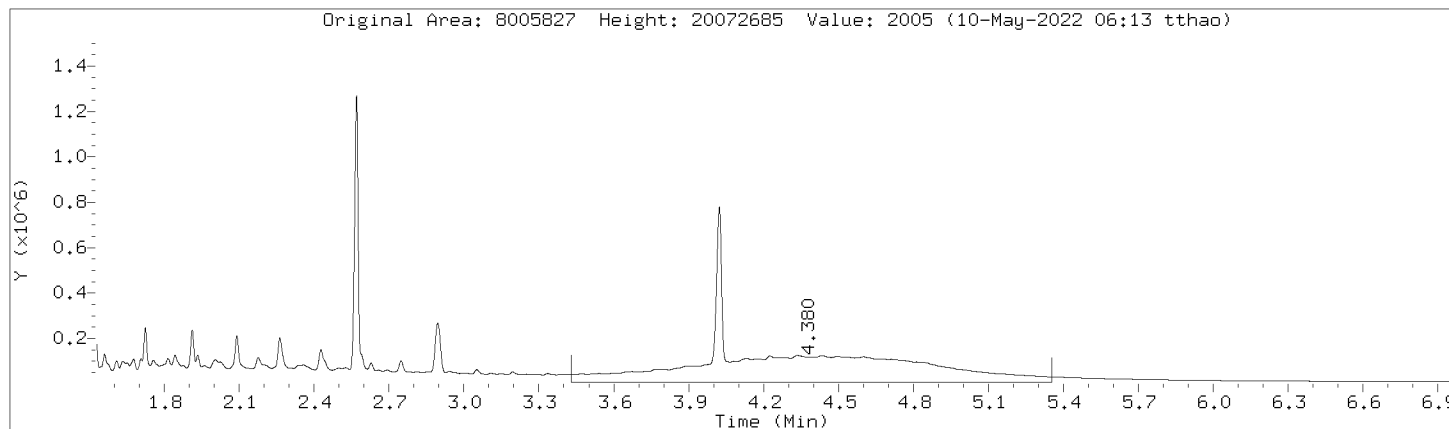
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Injection Date: 09-MAY-2022 16:53  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,364987:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



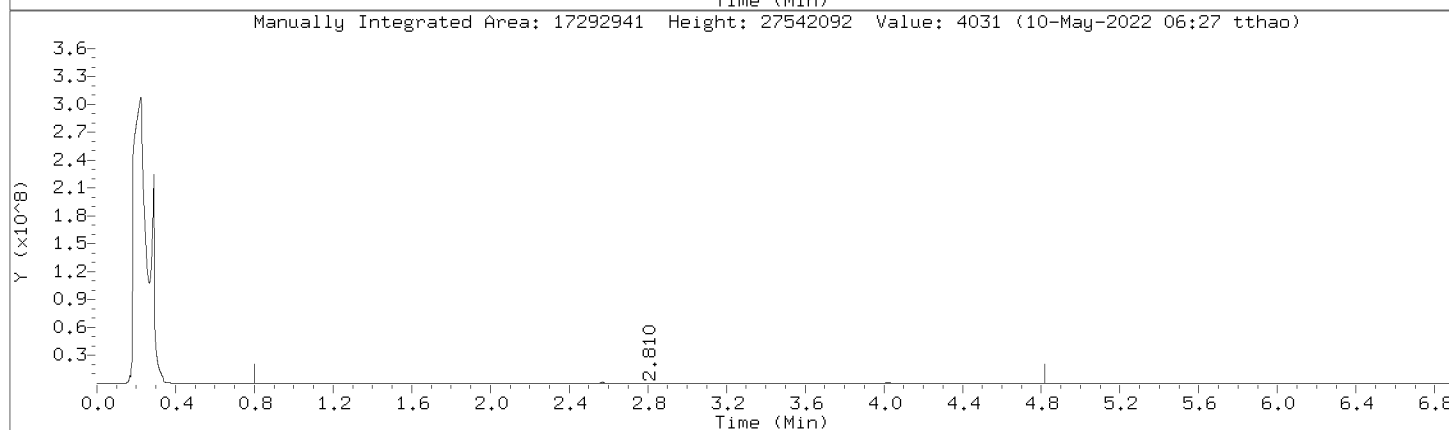
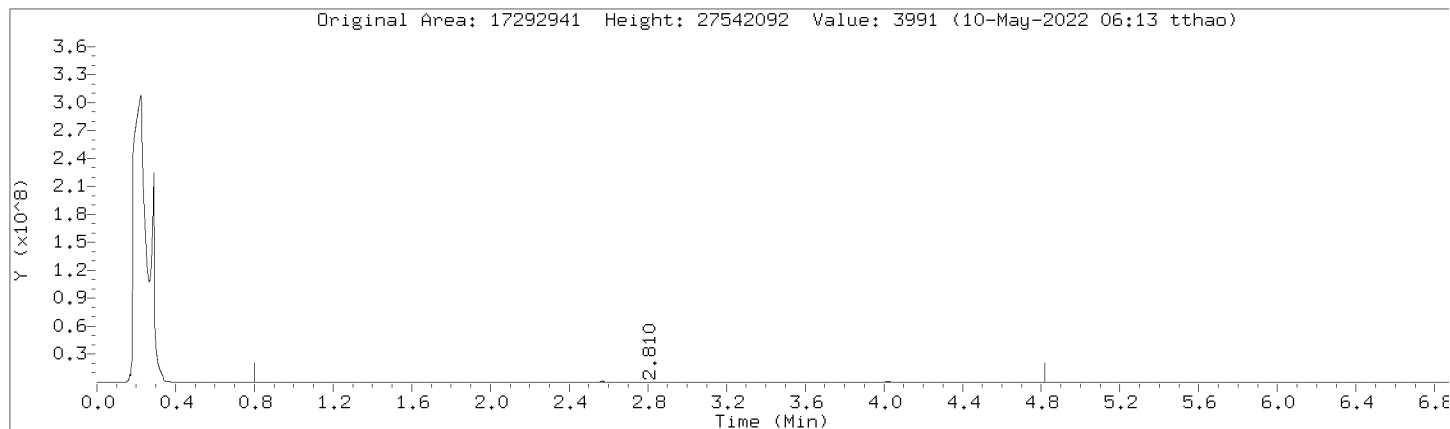
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Injection Date: 09-MAY-2022 16:53  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,364987:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000032.D  
Injection Date: 09-MAY-2022 16:53  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,364987:2

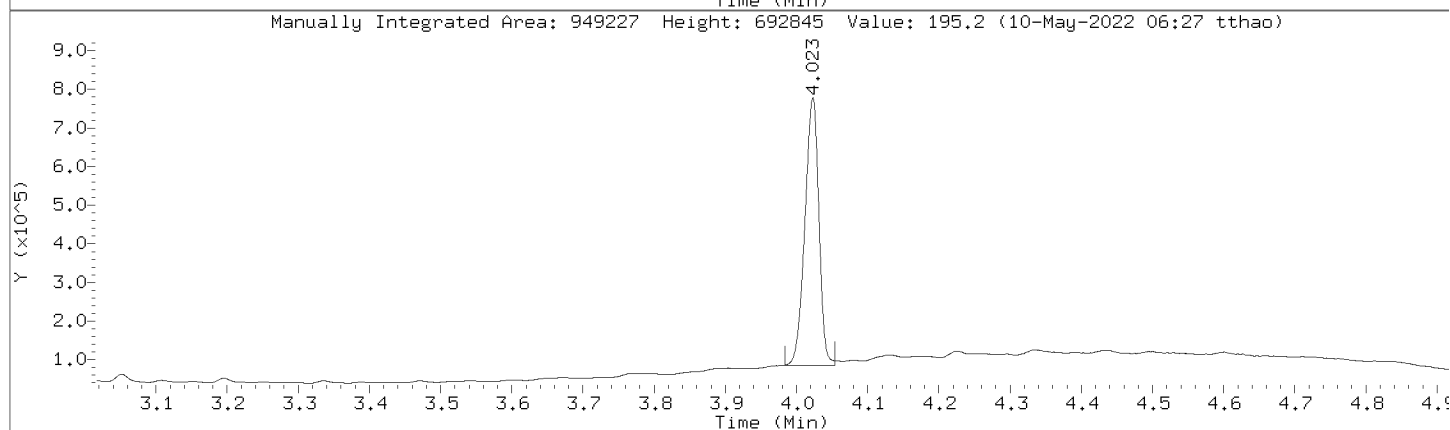
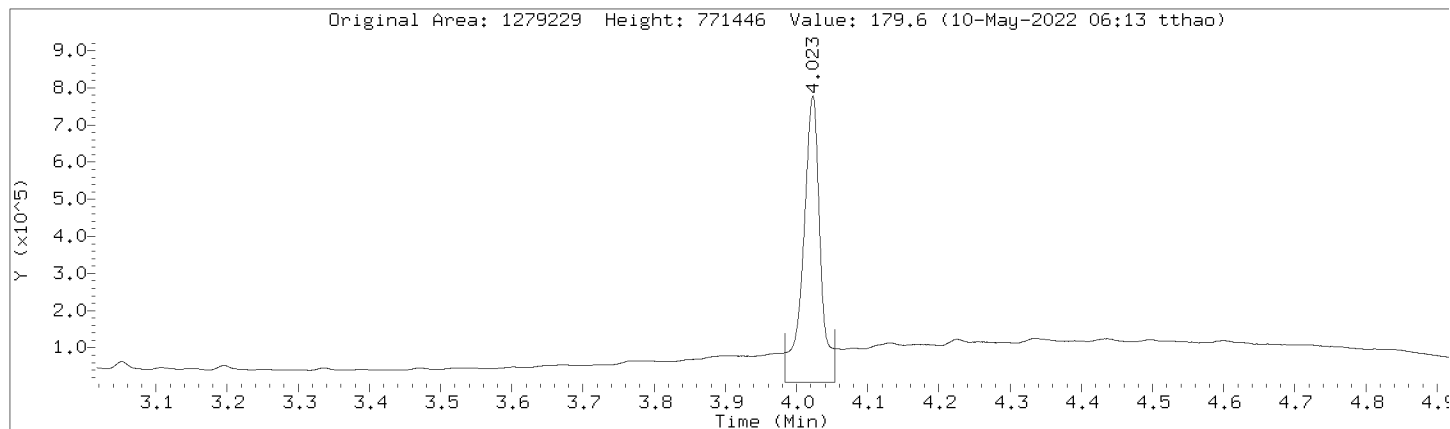
Compound: C10-C36      Review Code: RNG  
CAS Number:





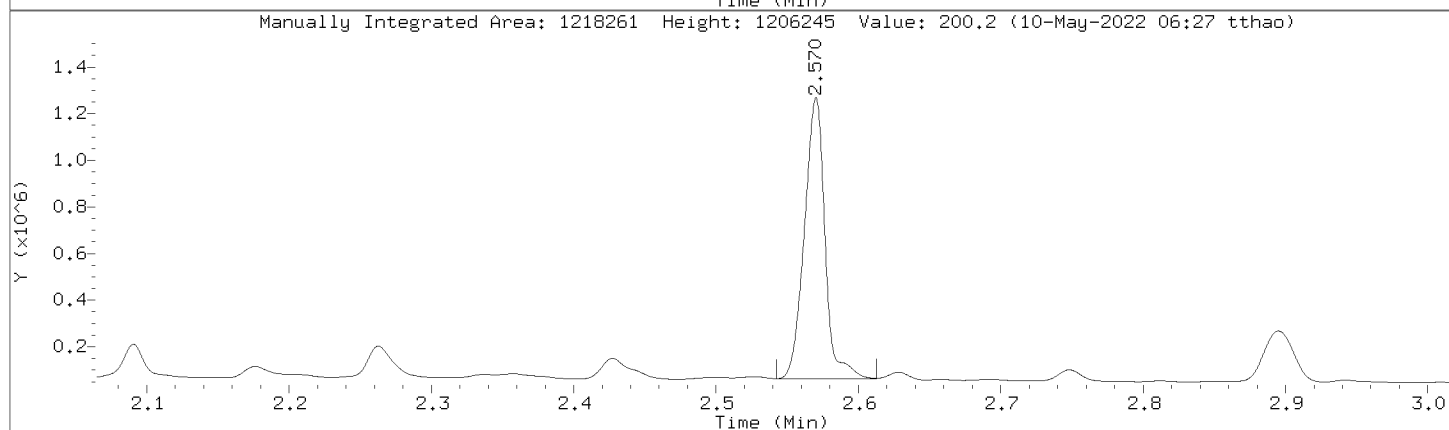
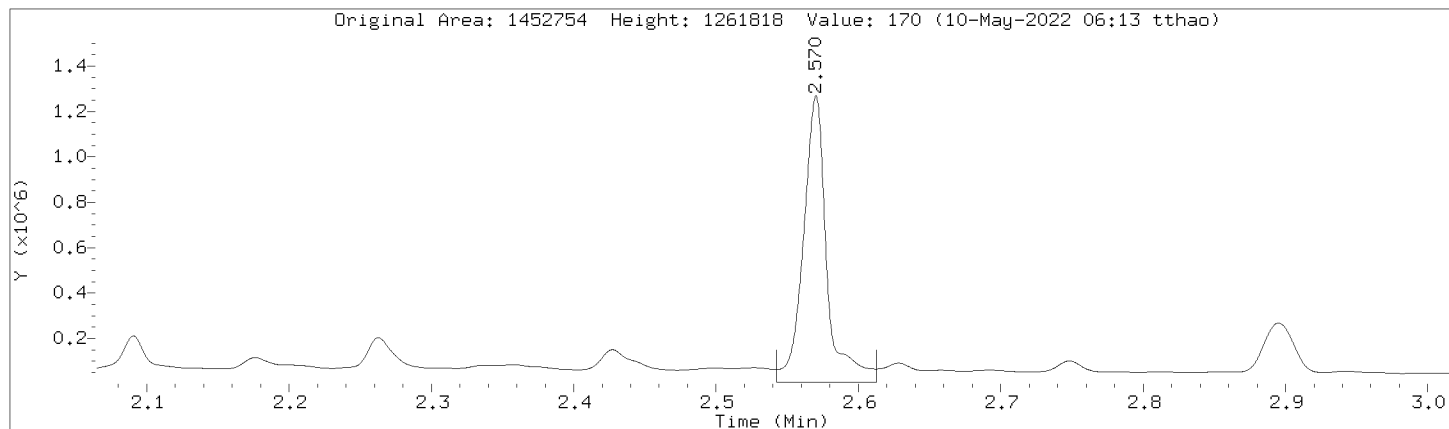
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Injection Date: 09-MAY-2022 16:53  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL9,364987:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000032.D  
 Injection Date: 09-MAY-2022 16:53  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL9,364987:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	6584732	6584732
DRO by AK 102	10708209	10708209
TPH-DRO (C10-C28)	12324573	12324573
Motor Oil Range (C24-C36)	6862239	6862239
Diesel Fuel Range	8970491	8970491
Motor Oil Range	8005827	8005827
Diesel Fuel Range SG	8970491	8970491
Motor Oil Range SG	8005827	8005827
C10-C36	17292941	17292941
n-Triacontane (S)	1279229	949227
o-Terphenyl (S)	1452754	1218261

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000033.D  
 Lab Smp Id: DMO-CAL10,364988:2 Client Smp ID: DMO-CAL10,364988:2  
 Inj Date : 09-MAY-2022 17:04  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-cal10,364988:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050922F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 10-May-2022 06:35 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 12 Calibration Sample, Level: 10  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.800	- 3.380		20961677 4000.00	3990	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.576	2.565 0.011		2430969 400.000	399	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.030	4.017 0.013		1891444 400.000	389	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.381	- 4.820		12872009 4000.00	3990	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.800	- 3.950		24147947 4000.00	3990	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.240	- 4.820		13410309 4000.00	3990	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.800	- 4.820		33833686 8000.00	7980	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.240	- 3.430		17540429 4000.00	3990	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.240	- 3.430		17540429 4000.00	3990	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.431	- 5.330		15615349 4000.00	3980	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.431	- 5.330		15615349 4000.00	3980	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 09-MAY-2022 17:04

Client ID: DMO-CALL10,364988:2

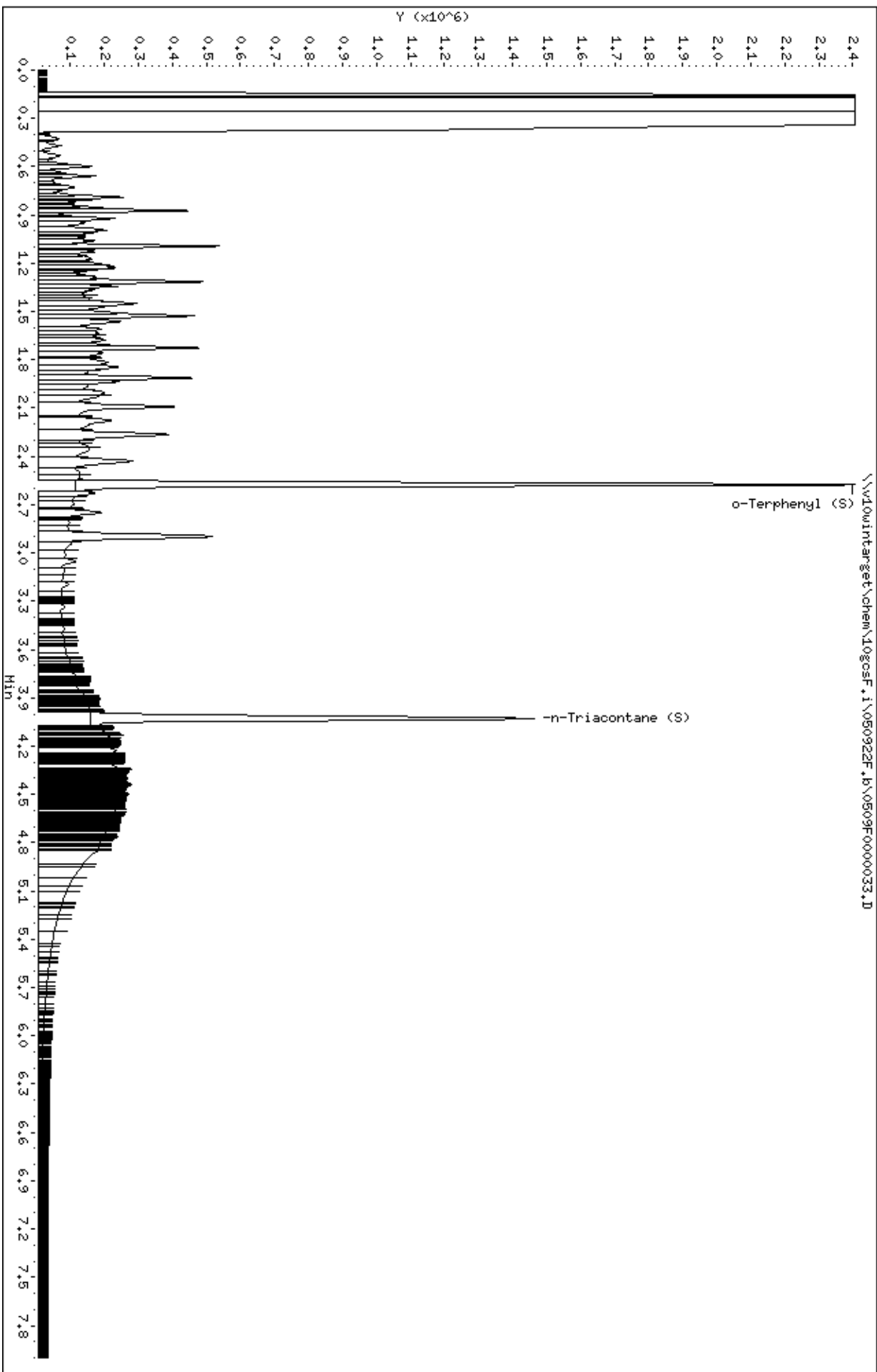
Sample Info: DMO-CALL10,364988:2

Instrument: 10gcsf.1

Operator: TT2

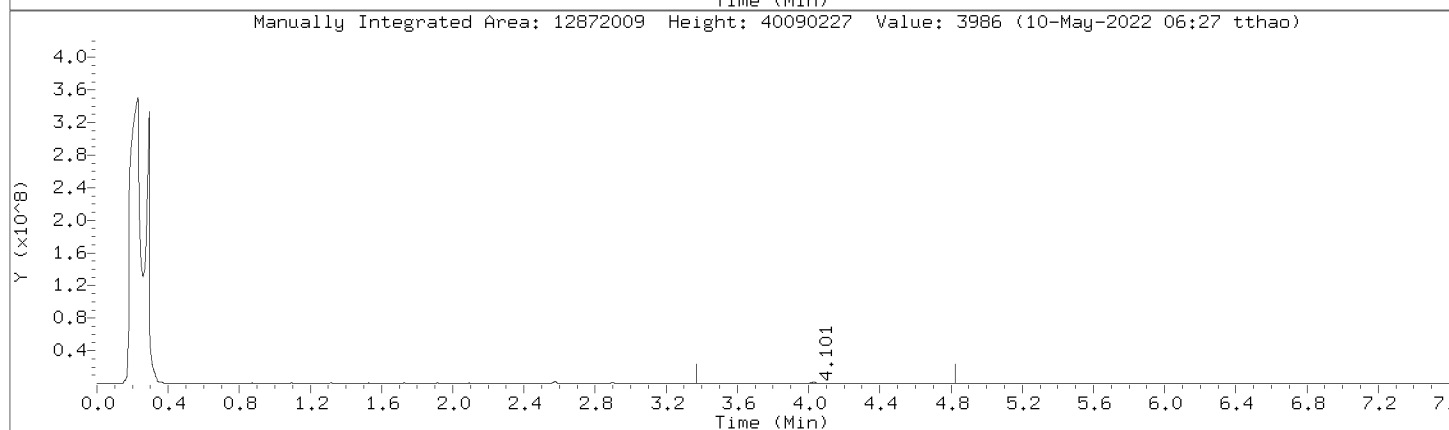
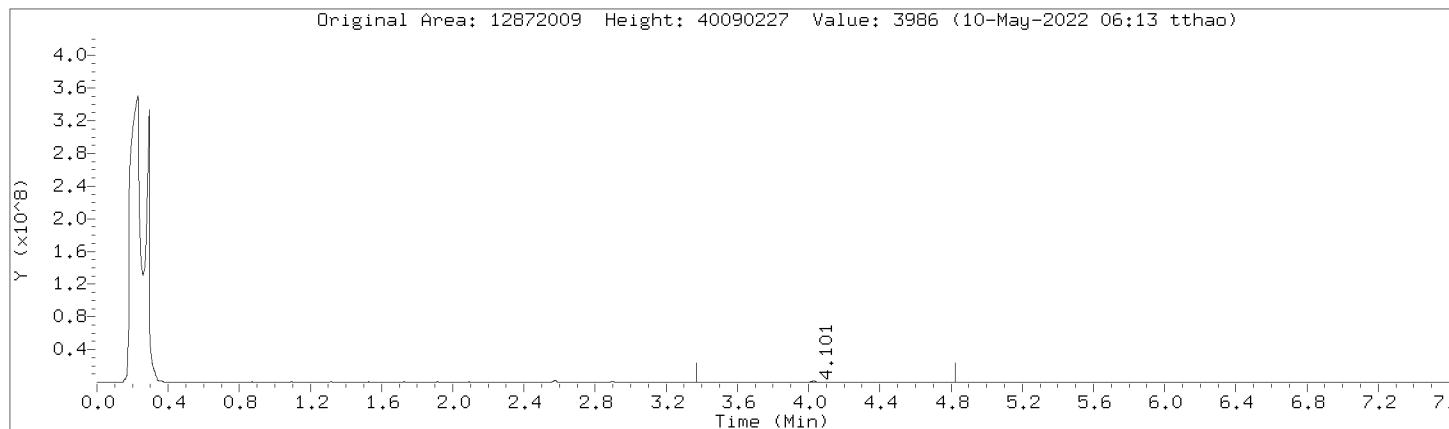
Column diameter: 0.32

Column phase: DB-5-MS21390001



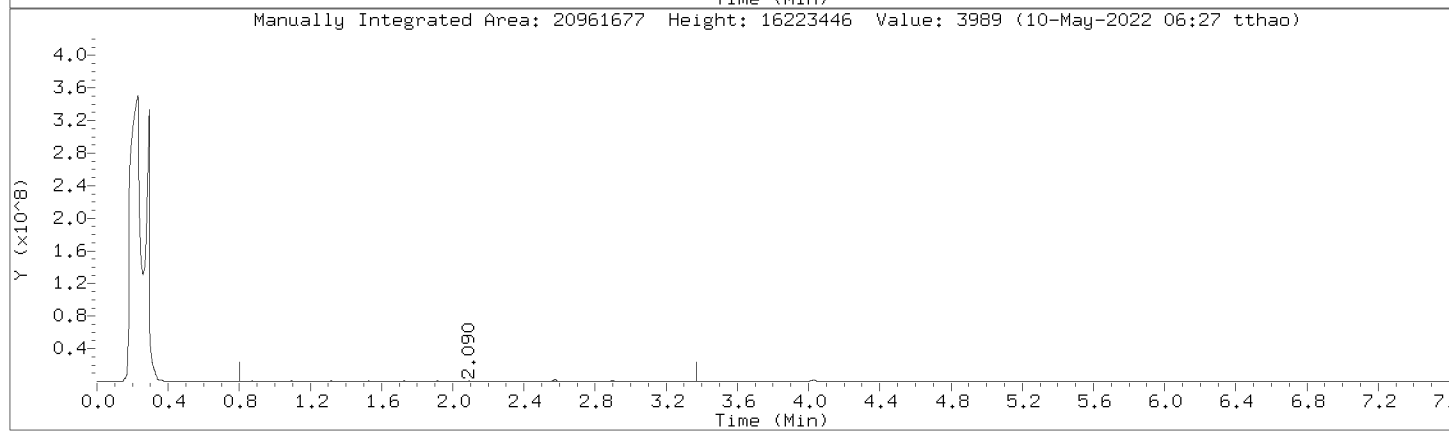
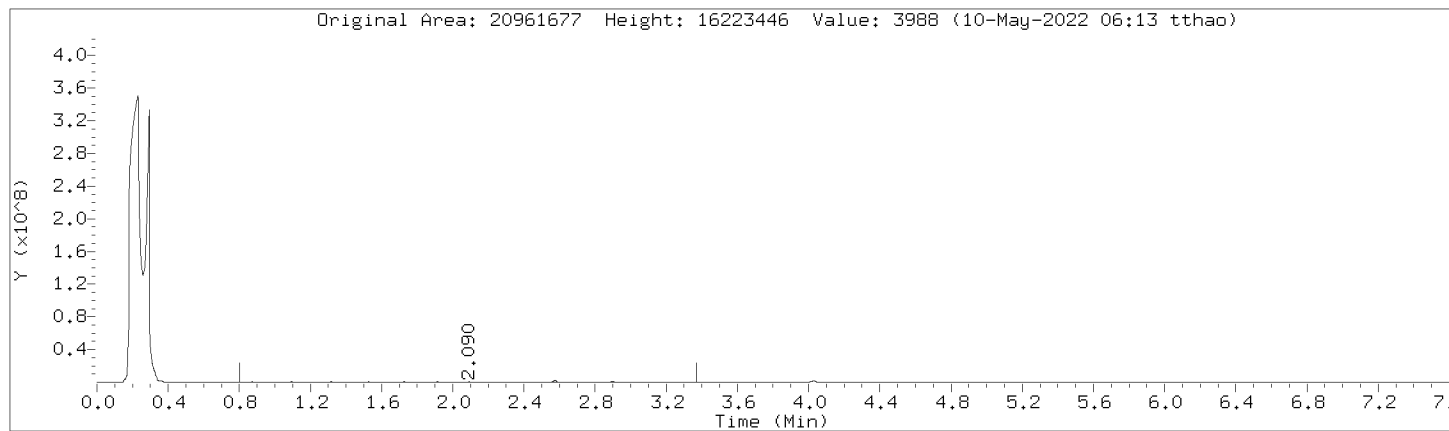
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Injection Date: 09-MAY-2022 17:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,364988:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



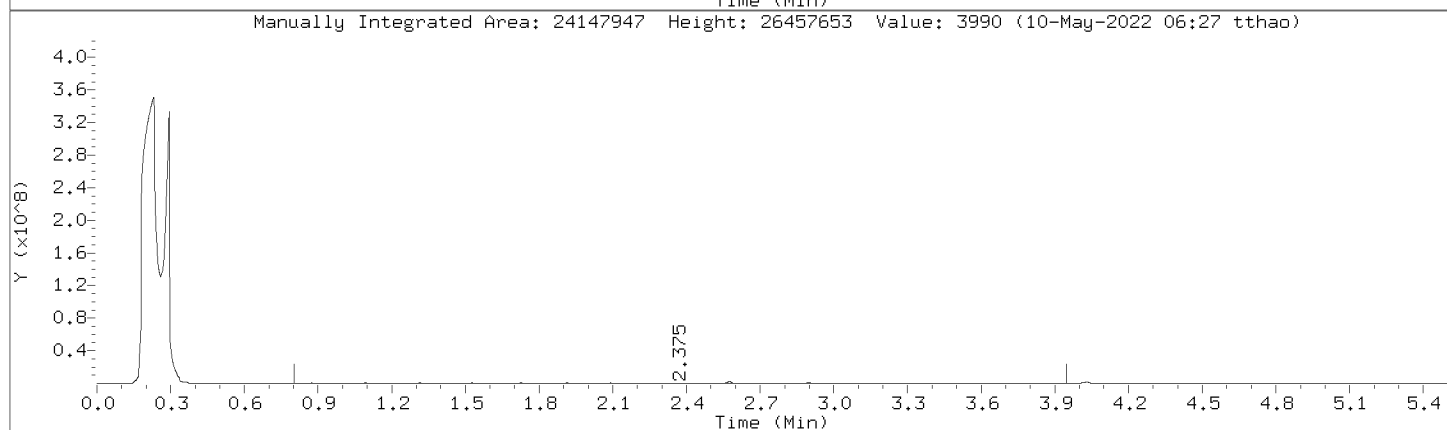
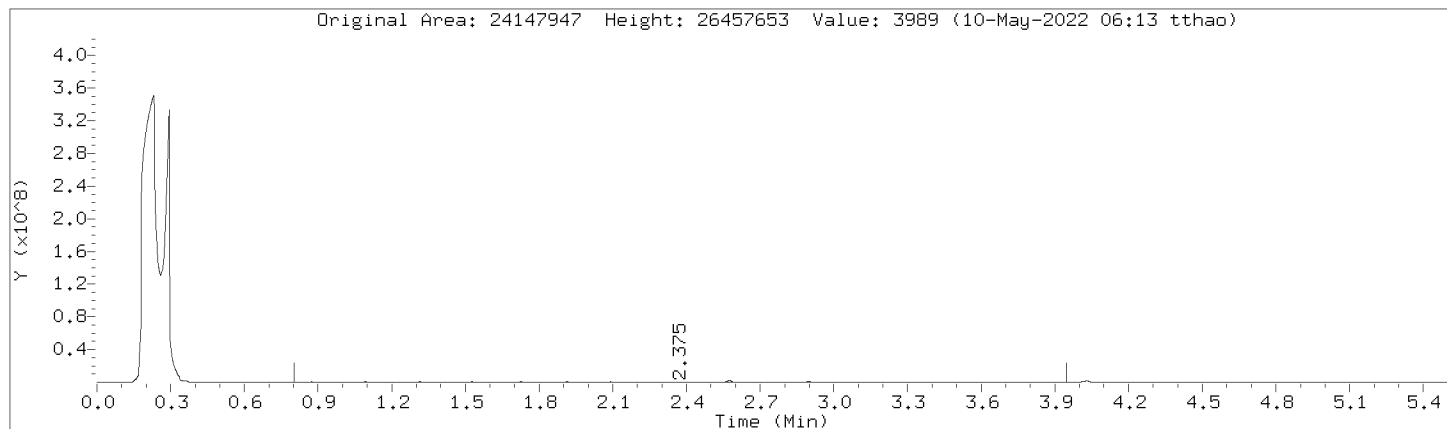
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Injection Date: 09-MAY-2022 17:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,364988:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000033.D  
Injection Date: 09-MAY-2022 17:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,364988:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:

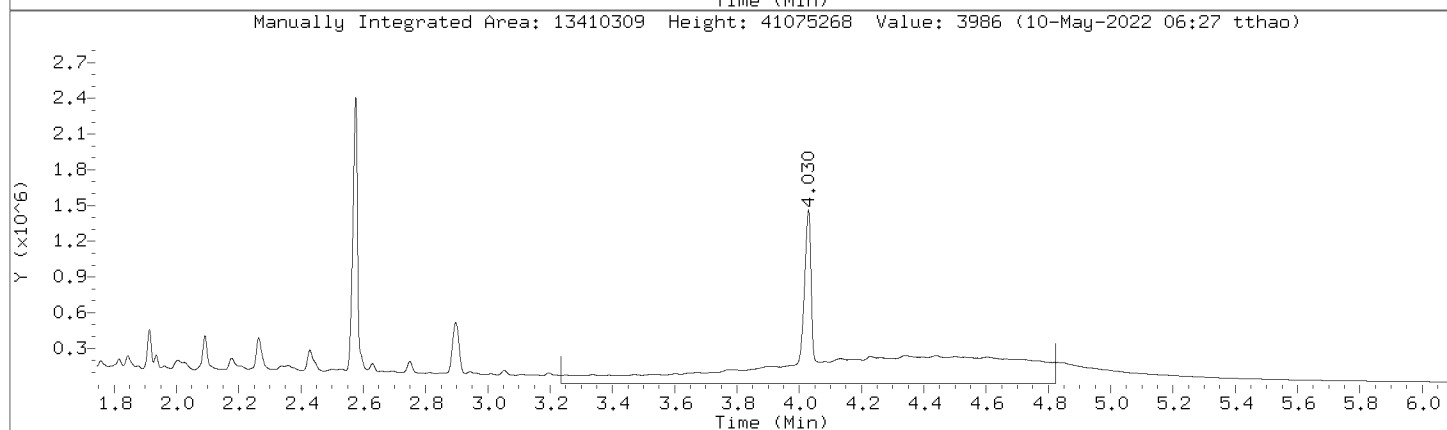
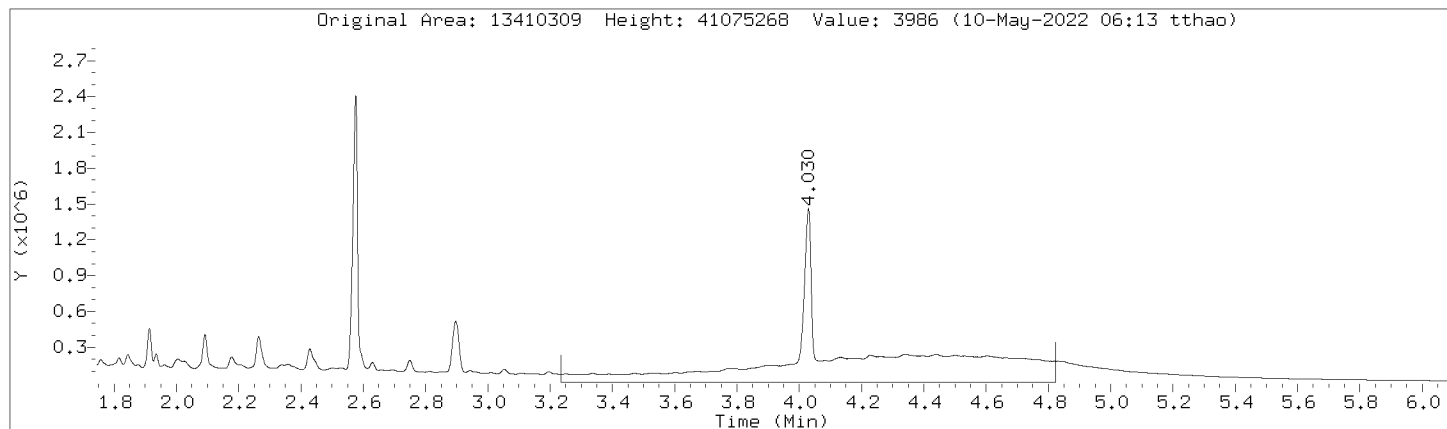




Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000033.D  
Injection Date: 09-MAY-2022 17:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,364988:2

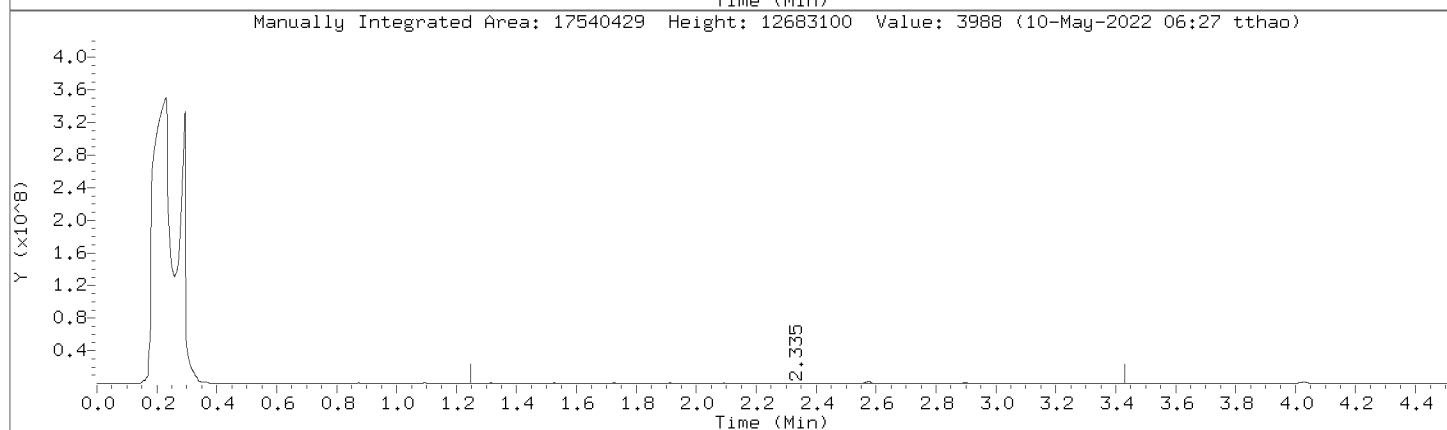
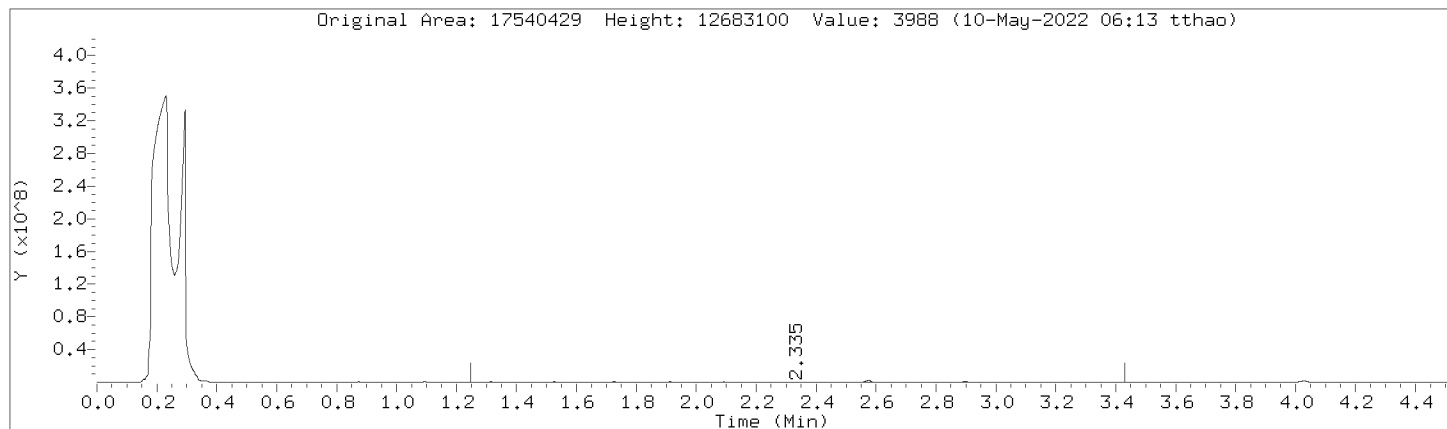
Compound: Motor Oil Range (C24-C36)  
CAS Number:

Review Code: RNG



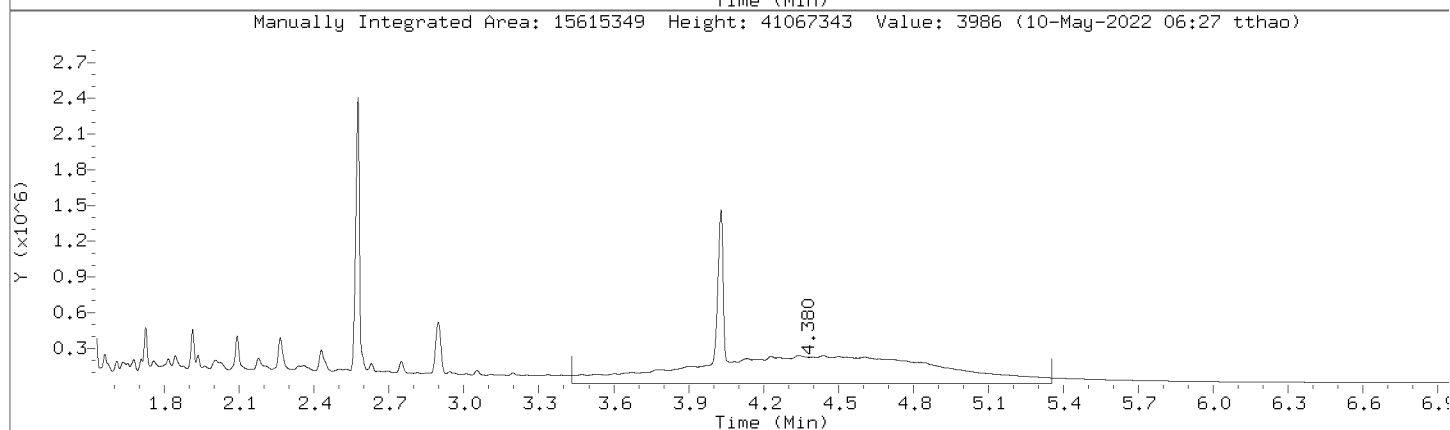
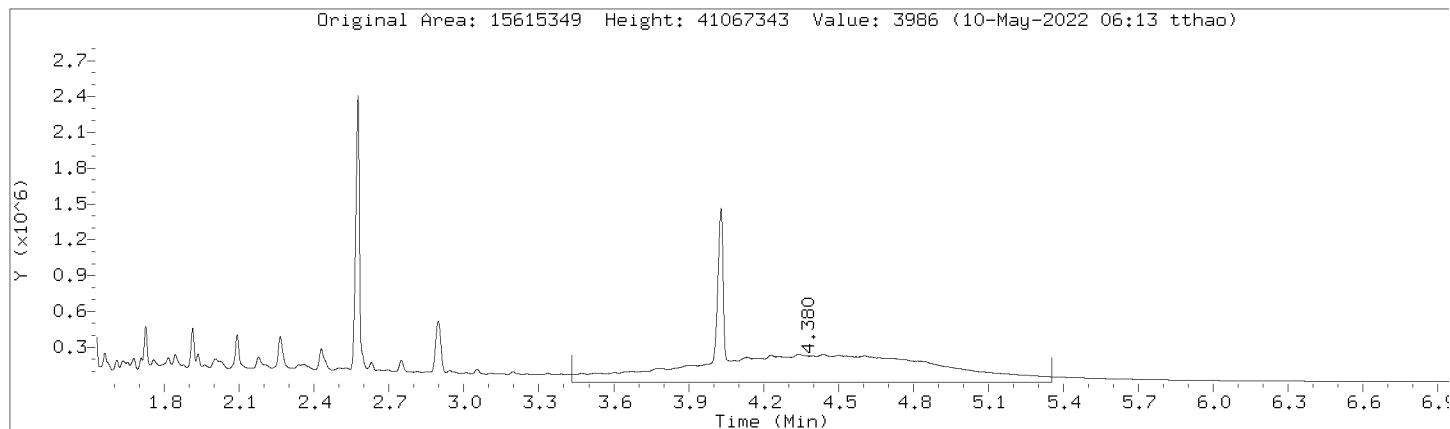
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000033.D  
Injection Date: 09-MAY-2022 17:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,364988:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



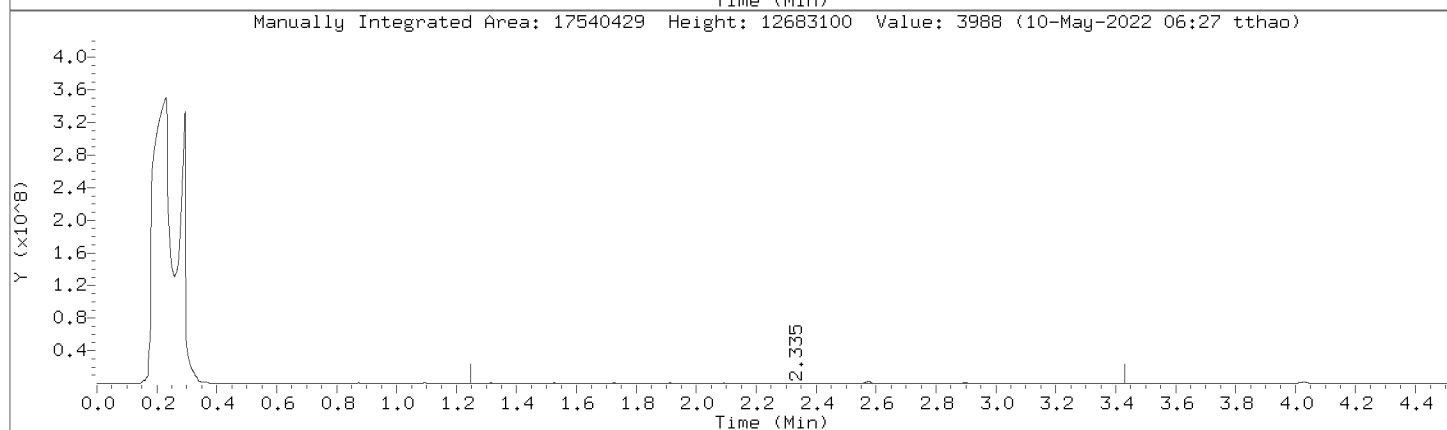
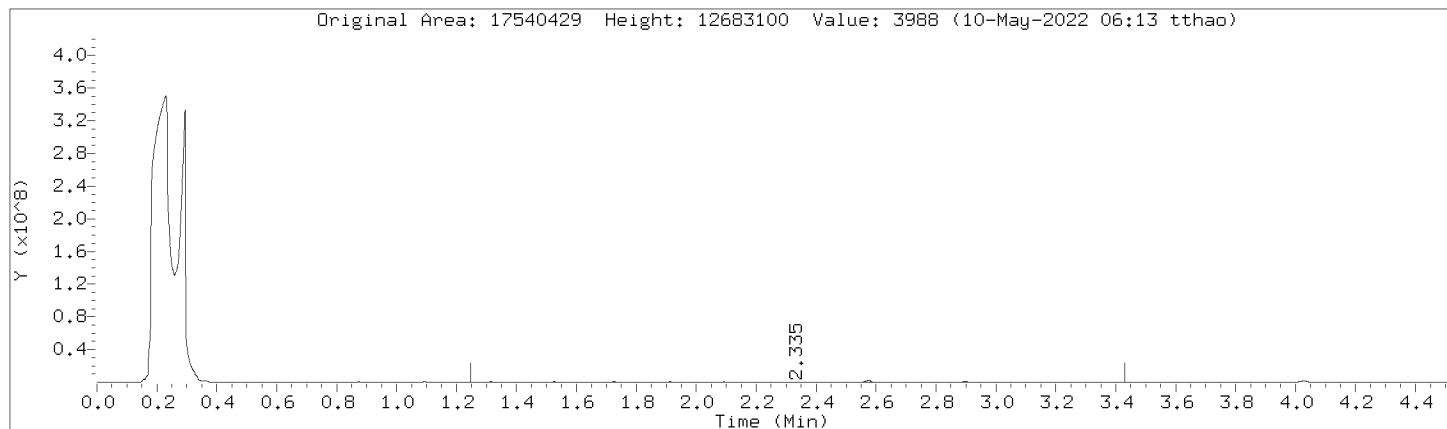
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000033.D  
Injection Date: 09-MAY-2022 17:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,364988:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



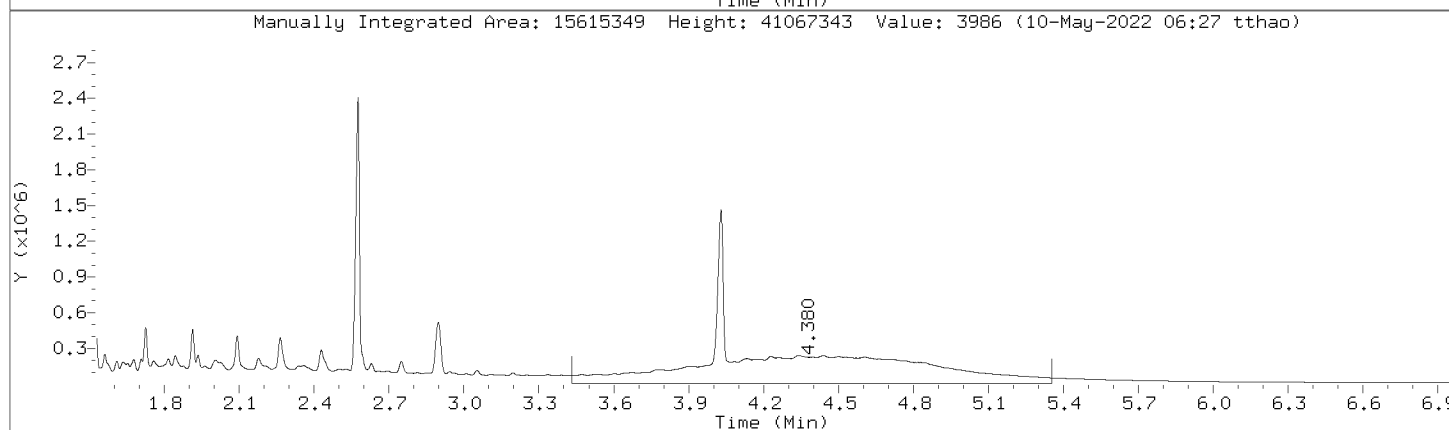
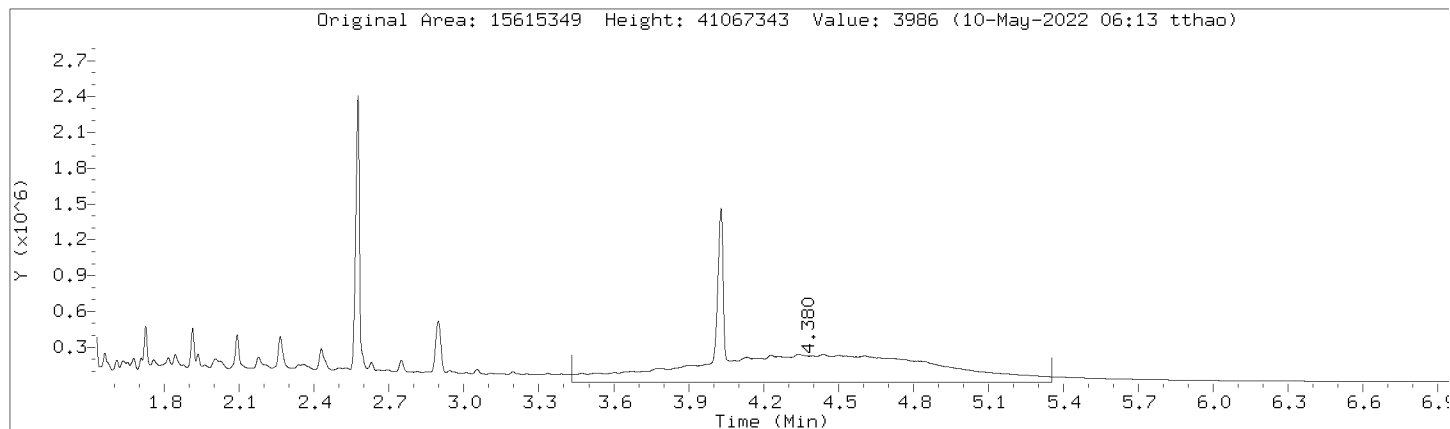
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000033.D  
Injection Date: 09-MAY-2022 17:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,364988:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000033.D  
Injection Date: 09-MAY-2022 17:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,364988:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000033.D

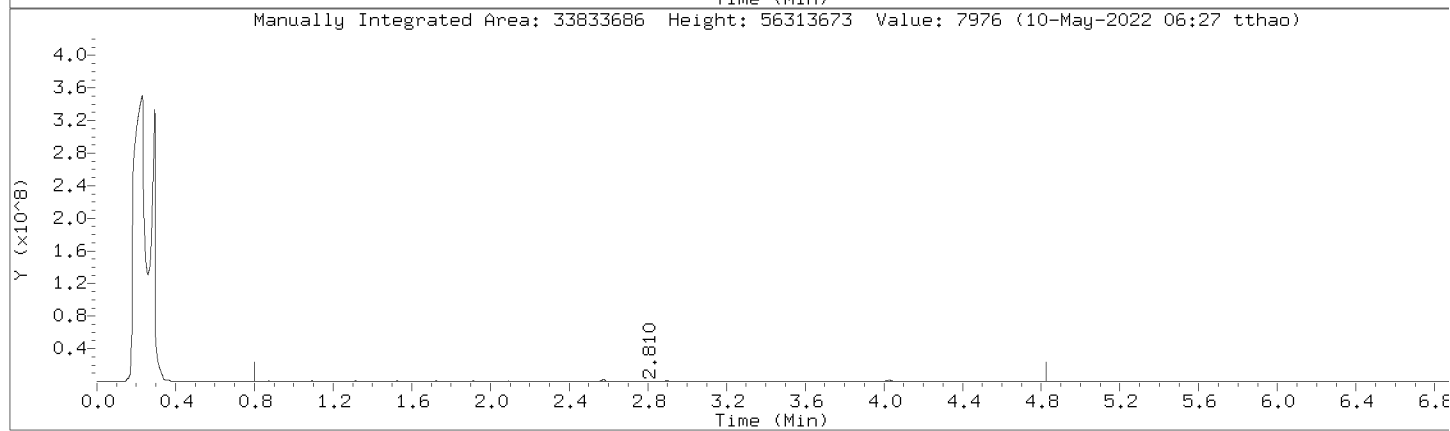
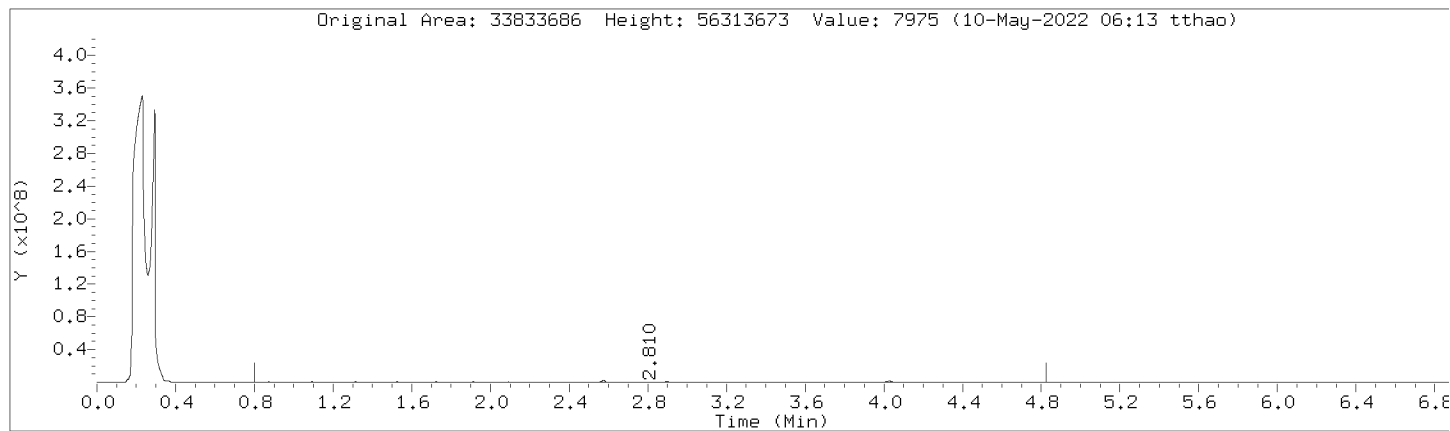
Injection Date: 09-MAY-2022 17:04

Instrument: 10gcsF.i

Lab Sample ID: DMO-CAL10,364988:2

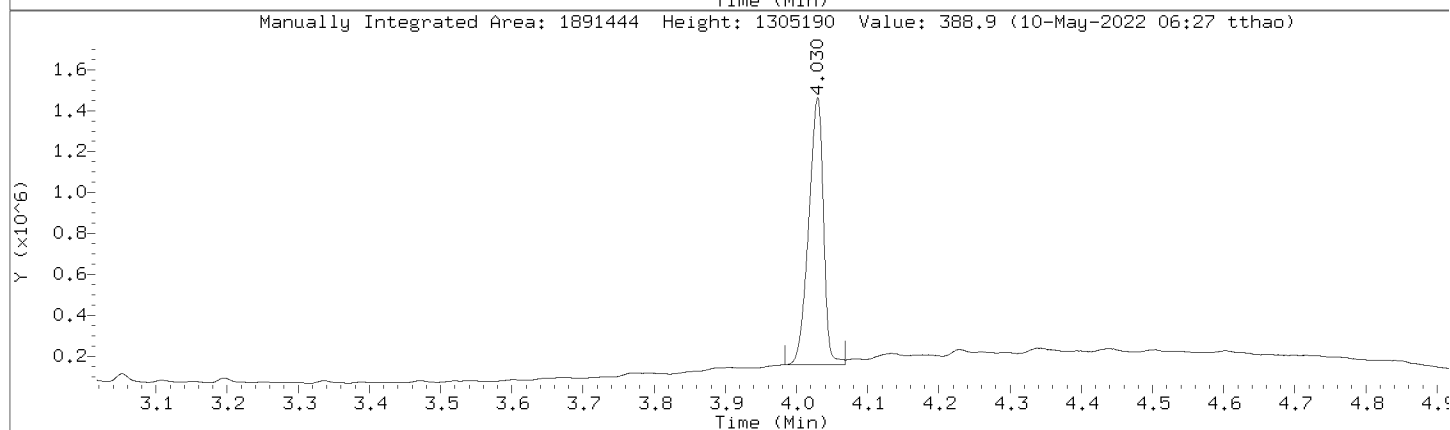
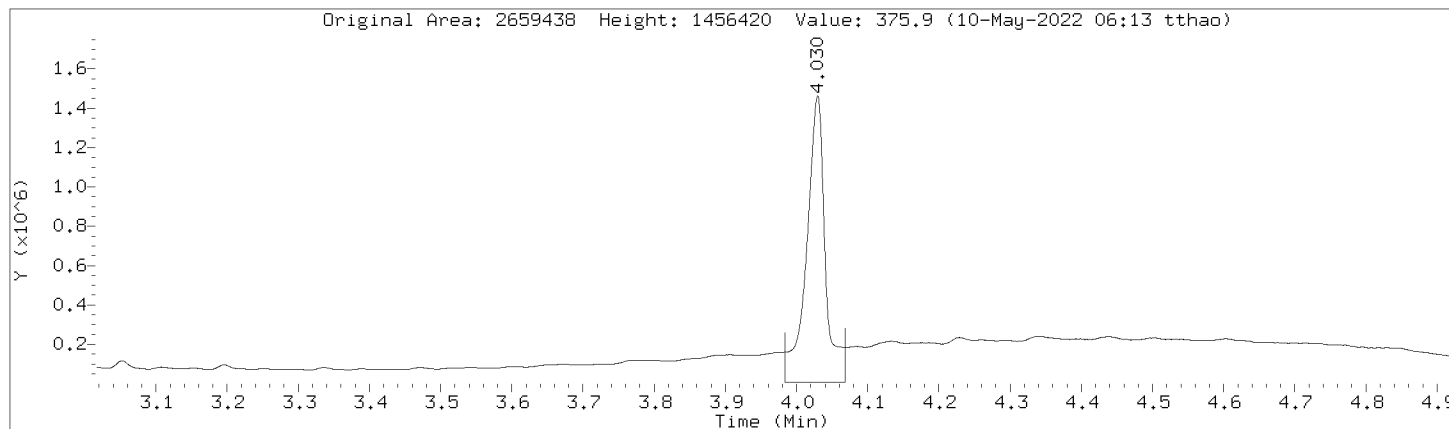
Compound: C10-C36      Review Code: RNG

CAS Number:



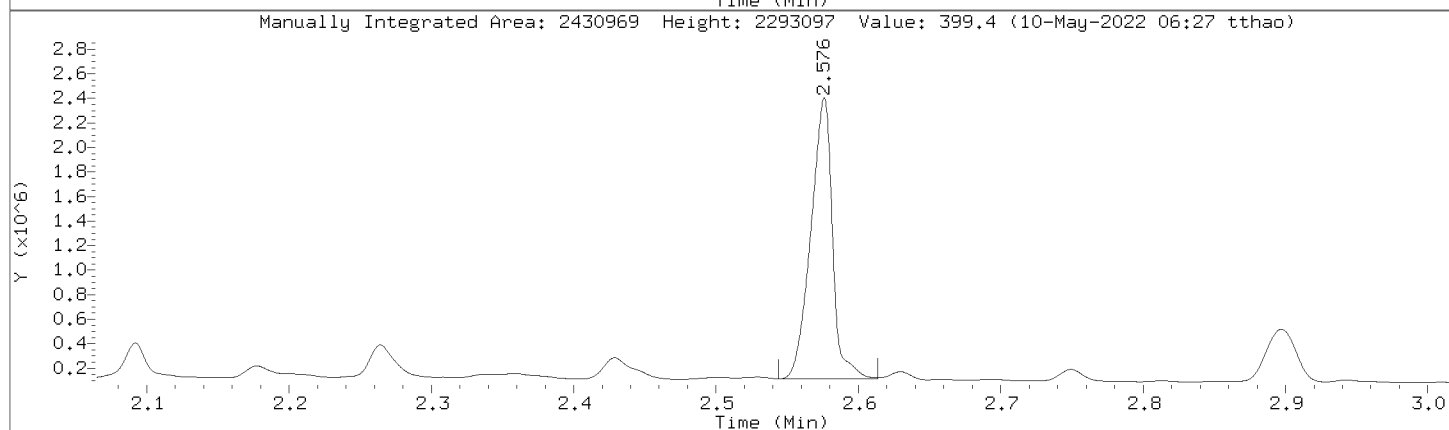
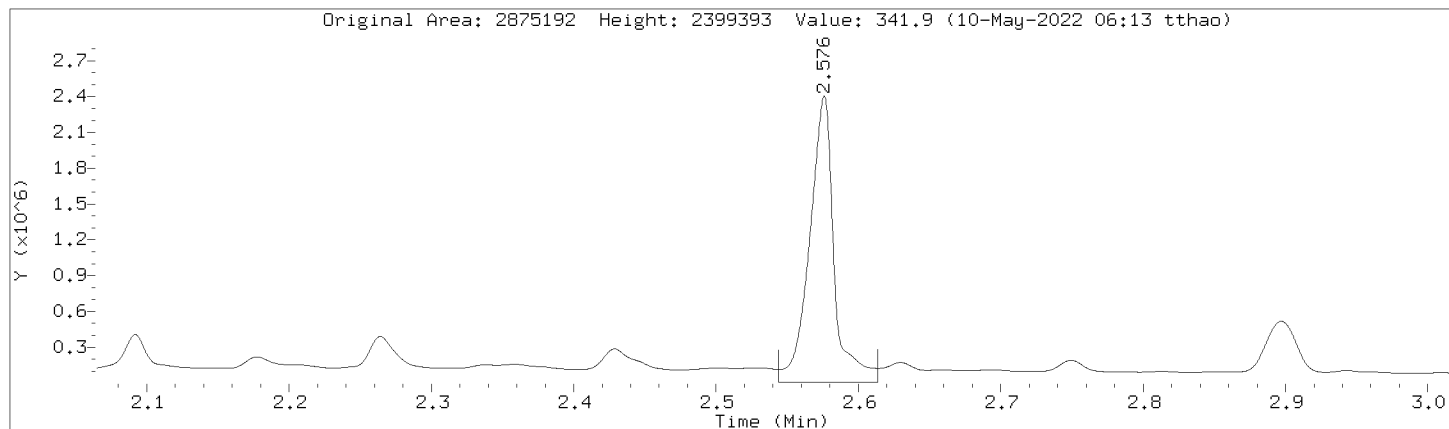
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000033.D  
Injection Date: 09-MAY-2022 17:04  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CAL10,364988:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000033.D  
 Injection Date: 09-MAY-2022 17:04  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CAL10,364988:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	12872009	12872009
DRO by AK 102	20961677	20961677
TPH-DRO (C10-C28)	24147947	24147947
Motor Oil Range (C24-C36)	13410309	13410309
Diesel Fuel Range	17540429	17540429
Motor Oil Range	15615349	15615349
Diesel Fuel Range SG	17540429	17540429
Motor Oil Range SG	15615349	15615349
C10-C36	33833686	33833686
n-Triacontane (S)	2659438	1891444
o-Terphenyl (S)	2875192	2430969



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000036.D  
 Lab Smp Id: PBLK,363301:2 Client Smp ID: PBLK,363301:2  
 Inj Date : 09-MAY-2022 17:39  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : pblk,363301:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050922F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 10-May-2022 06:35 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 14  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			RESPONSE	CAS #:	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102				
0.800	- 3.380		255294		(M) RNG
-----					
\$ 2	o-Terphenyl (S)				
2.564	2.565 -0.001		281232 46.2124	46.2	(RM) BA
-----					
\$ 3	n-Triacontane (S)				
4.016	4.017 -0.001		232021 47.7100	47.7	(RM) BA
-----					
S 4	Residual Range Organics AK103				
3.381	- 4.820		80663		(M) RNG
-----					
S 5	TPH-DRO (C10-C28)				
0.800	- 3.950		288169		(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)				
3.240	- 4.820		90995		(M) RNG
-----					
S 7	C10-C36				
0.800	- 4.820		335957		(M) RNG
-----					
S 8	Diesel Fuel Range				
1.240	- 3.430		231816		(M) RNG
-----					
S 9	Diesel Fuel Range SG				
1.240	- 3.430		231816		(M) RNG
-----					
S 10	Motor Oil Range				
3.431	- 5.330		106438		(M) RNG
-----					
S 11	Motor Oil Range SG				
3.431	- 5.330		106438		(M) RNG
-----					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.  
M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.  
BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 09-MAY-2022 17:39

Client ID: PBLK,363301:2

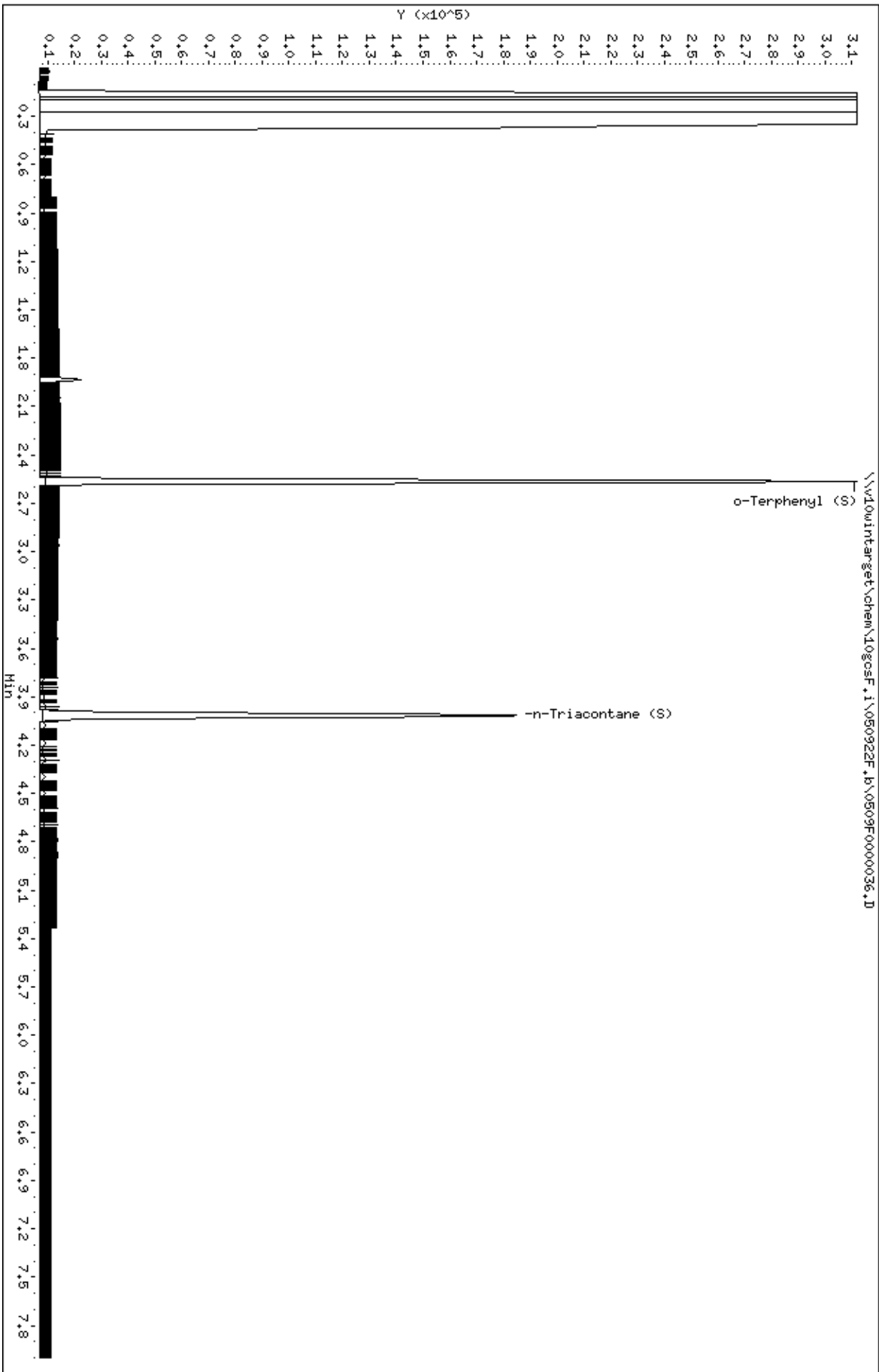
Sample Info: PBLK,363301:2

Instrument: logcsf.1

Operator: TT2

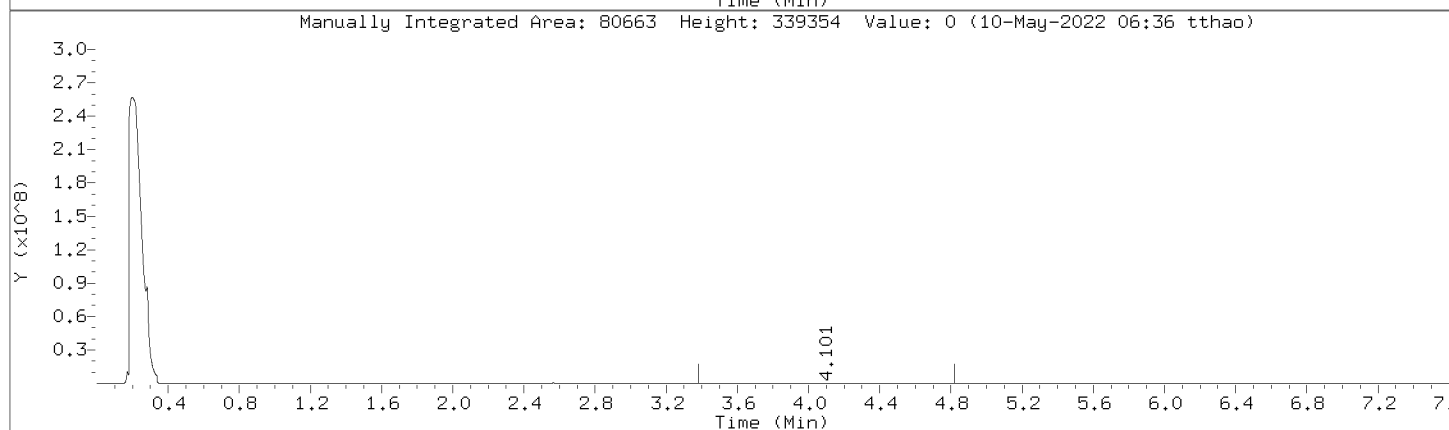
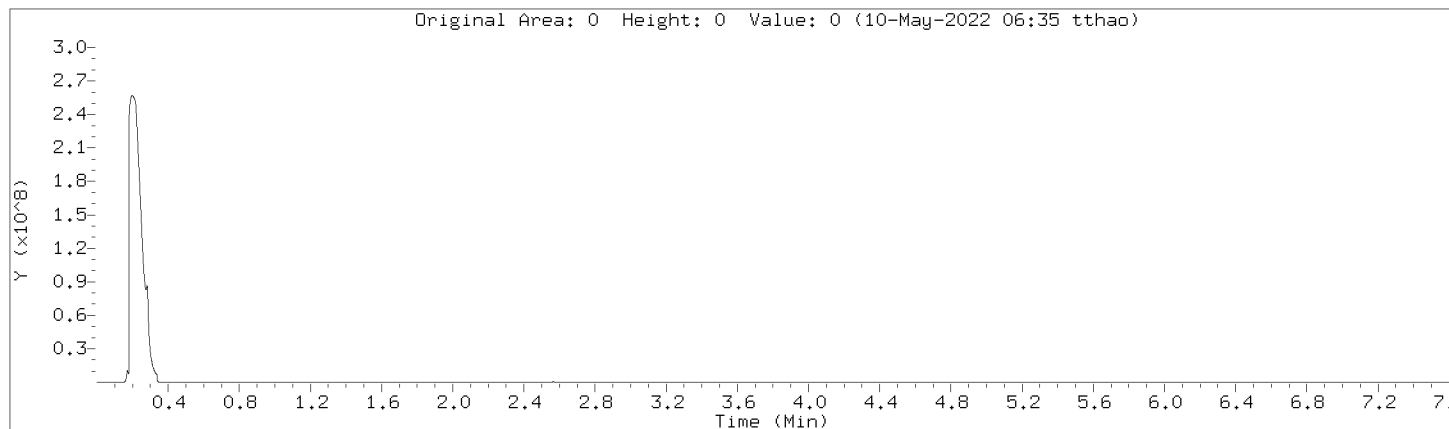
Column diameter: 0.32

Column phase: DB-5-MS21390001



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000036.D  
Injection Date: 09-MAY-2022 17:39  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,363301:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000036.D

Injection Date: 09-MAY-2022 17:39

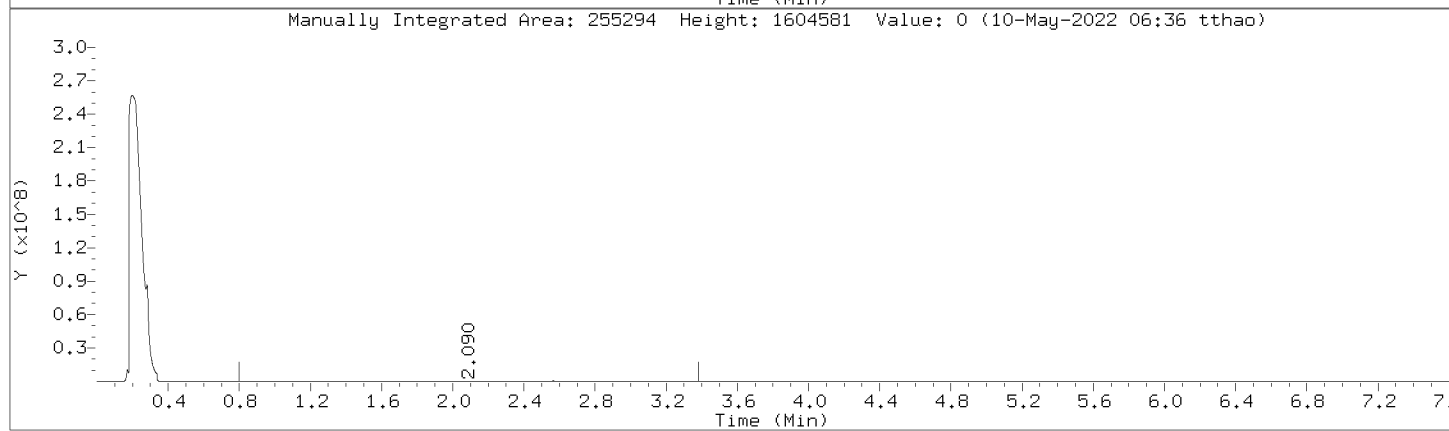
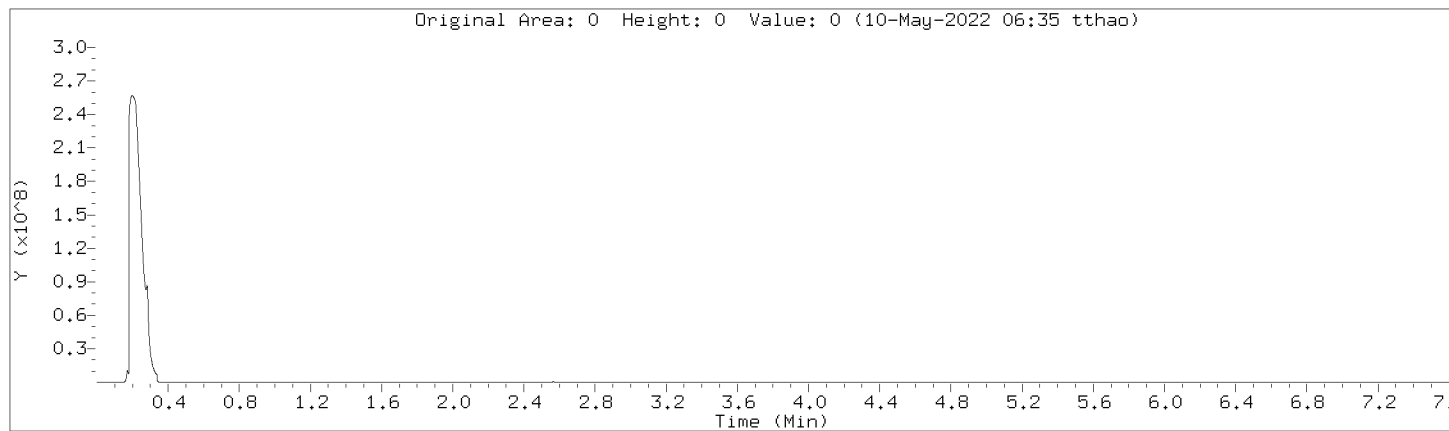
Instrument: 10gcsF.i

Lab Sample ID: PBLK,363301:2

Compound: DRO by AK 102

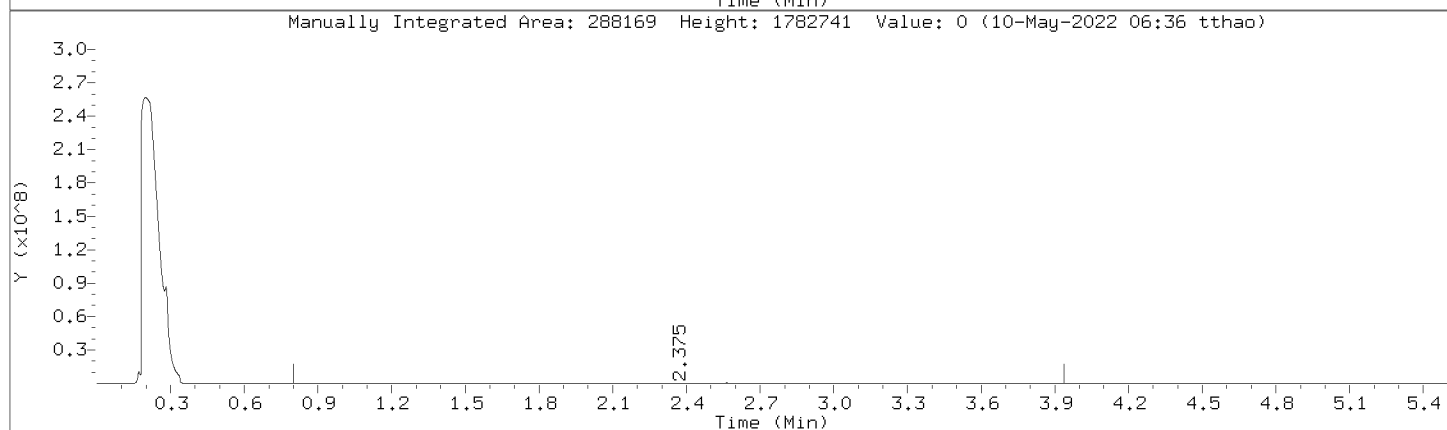
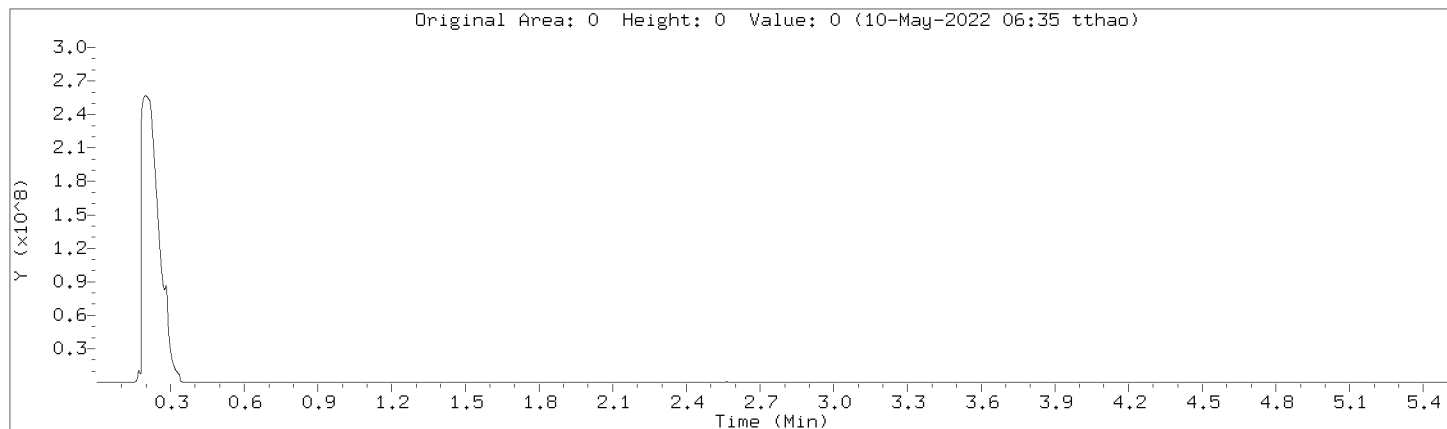
Review Code: RNG

CAS Number:



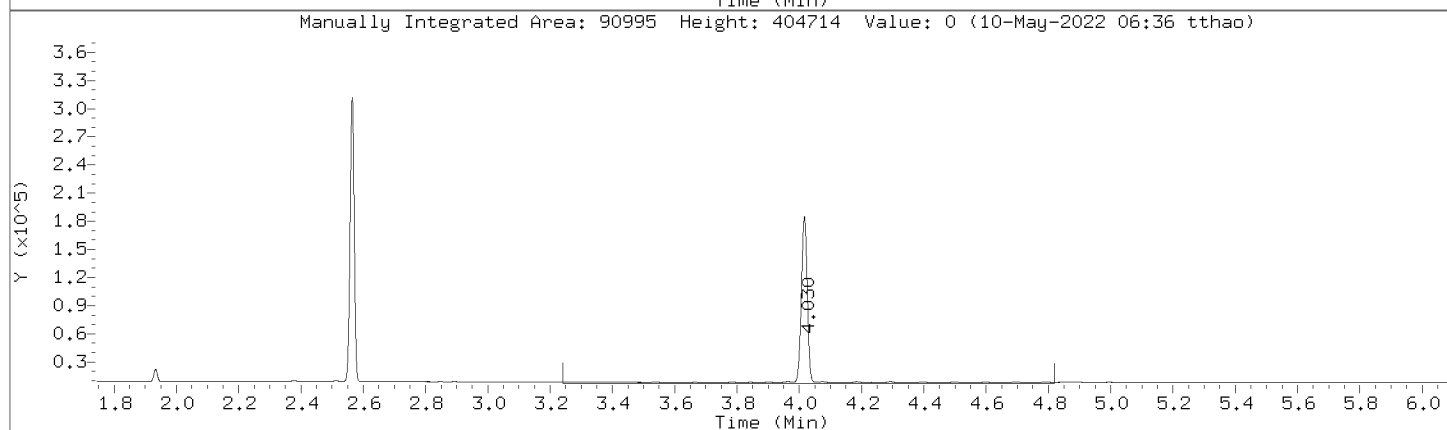
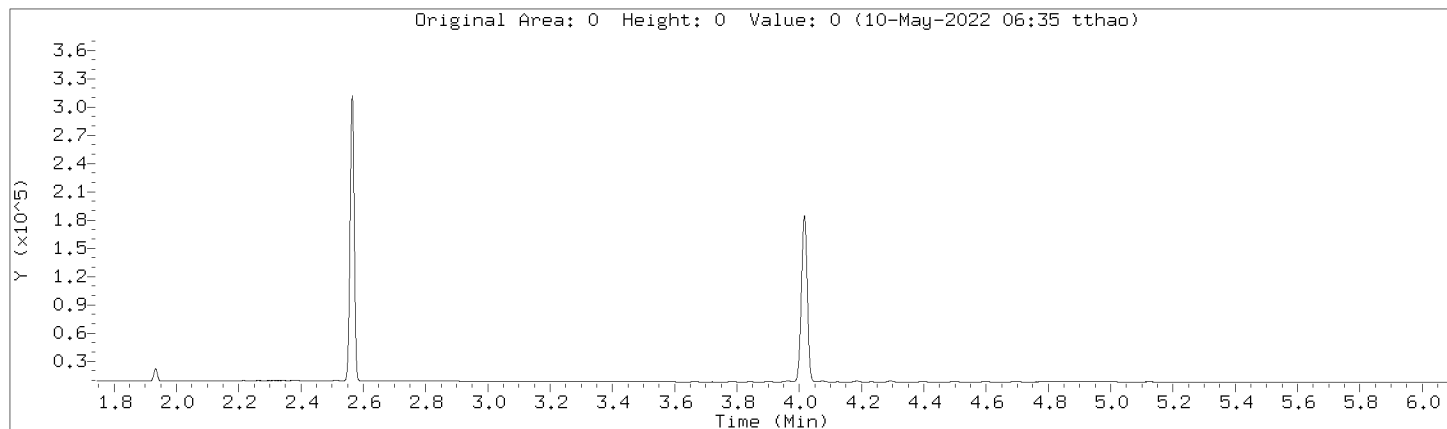
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000036.D  
Injection Date: 09-MAY-2022 17:39  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,363301:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



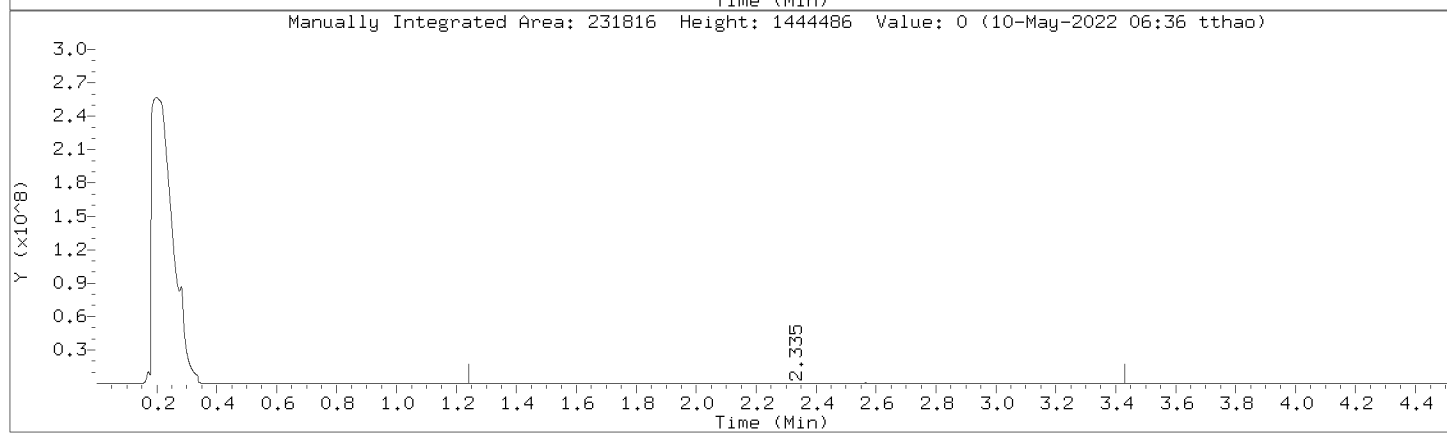
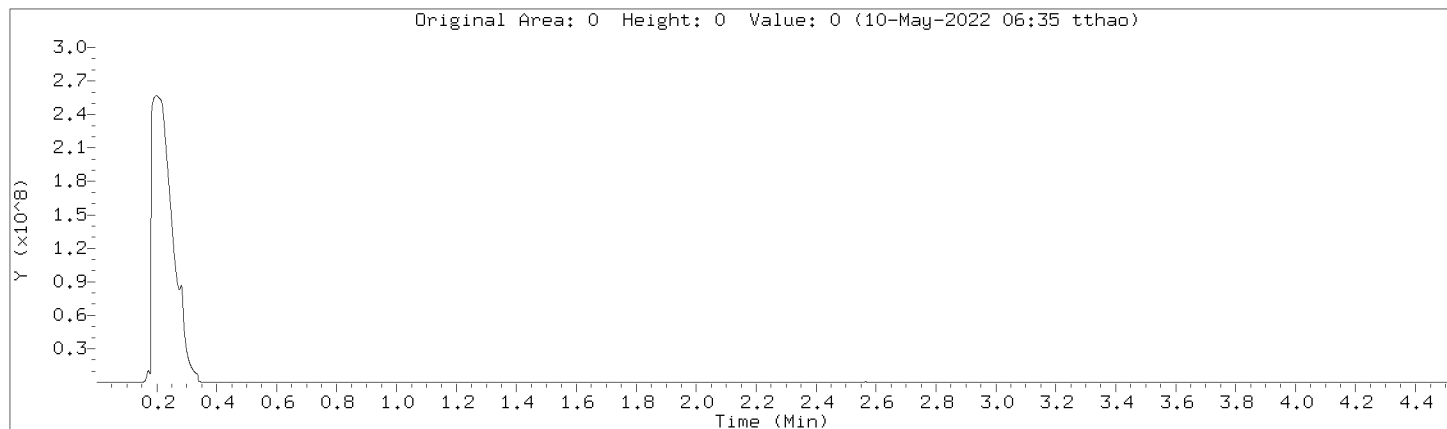
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000036.D  
Injection Date: 09-MAY-2022 17:39  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,363301:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000036.D  
Injection Date: 09-MAY-2022 17:39  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,363301:2

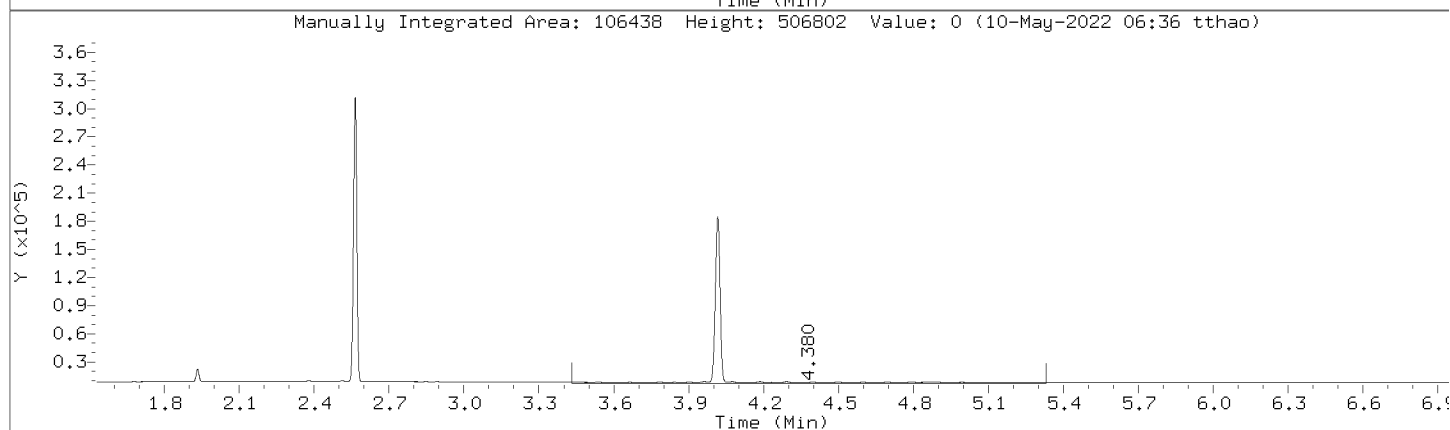
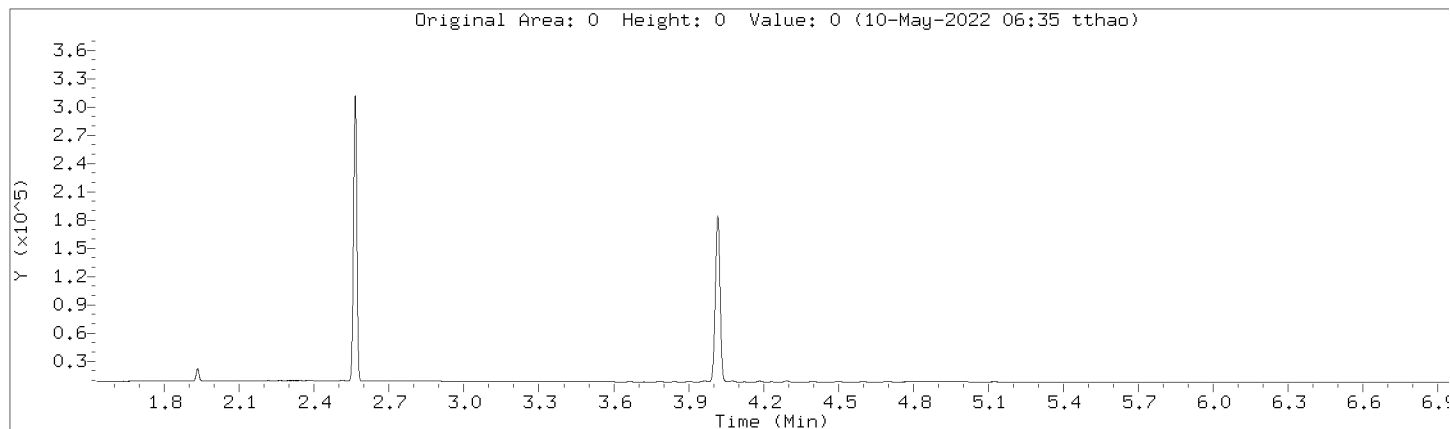
Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:





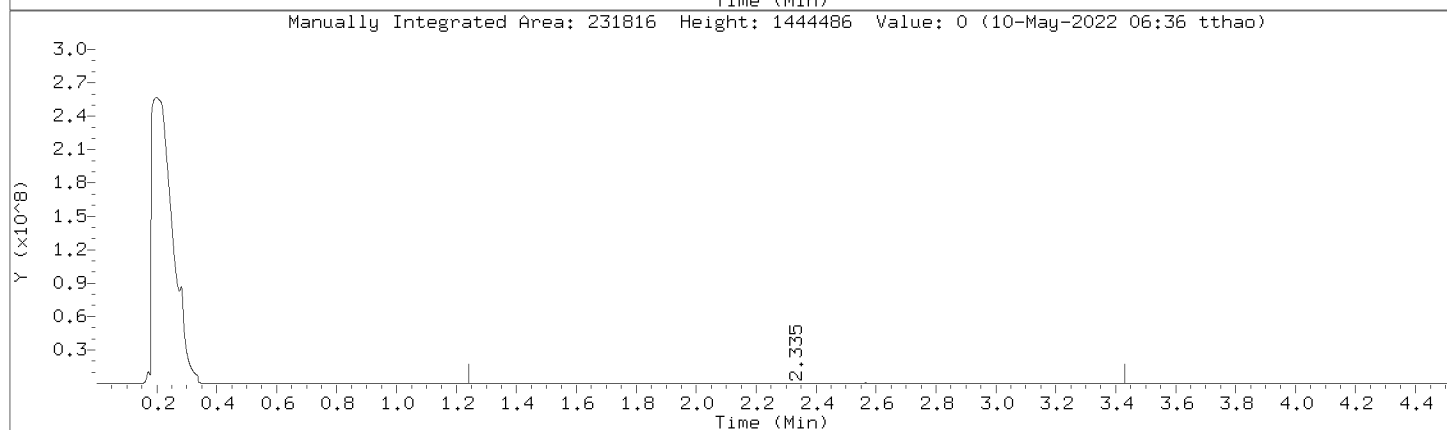
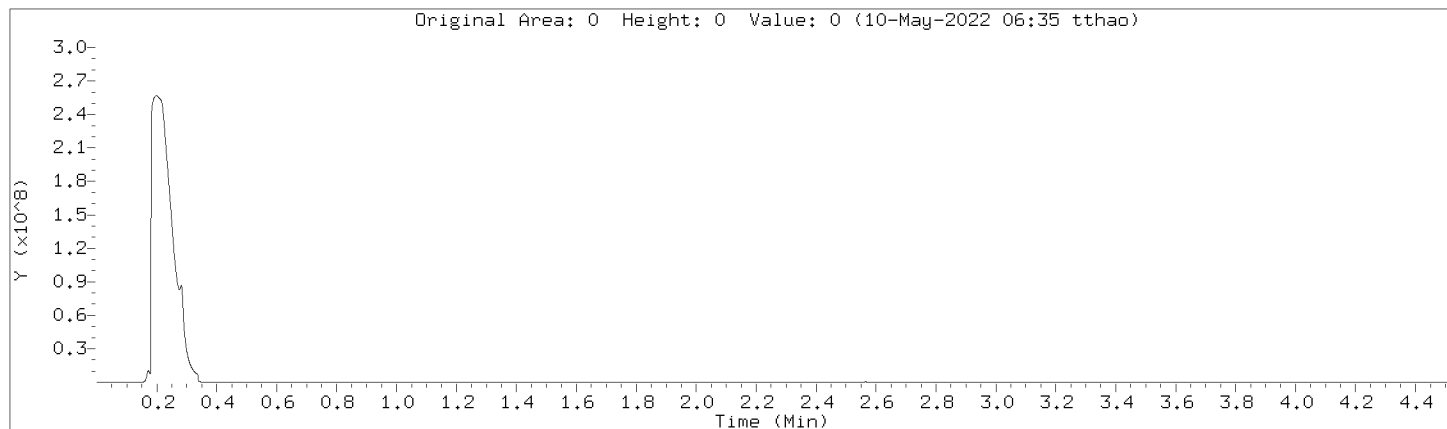
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000036.D  
Injection Date: 09-MAY-2022 17:39  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,363301:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



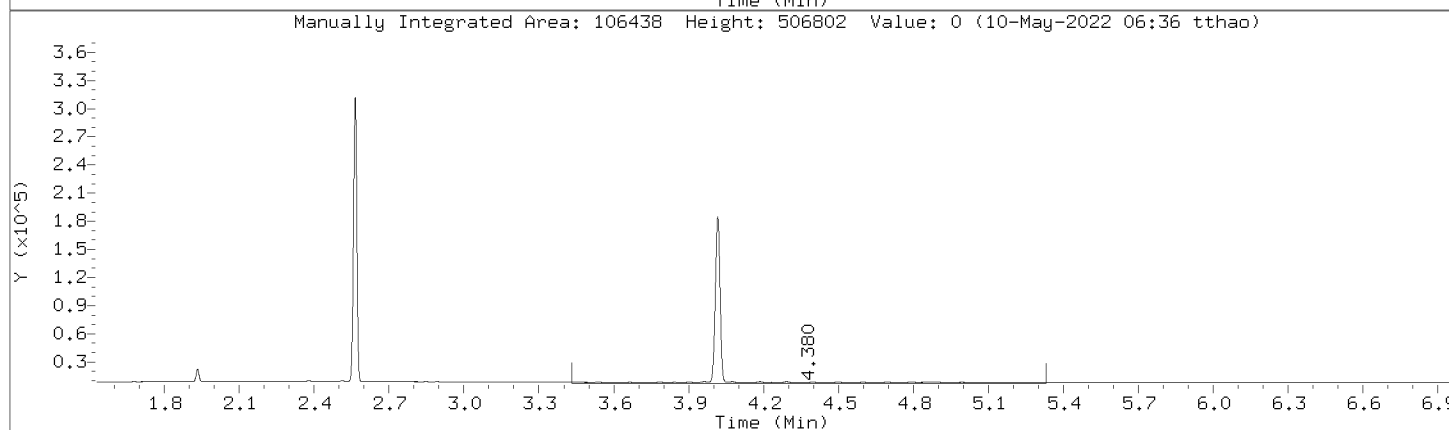
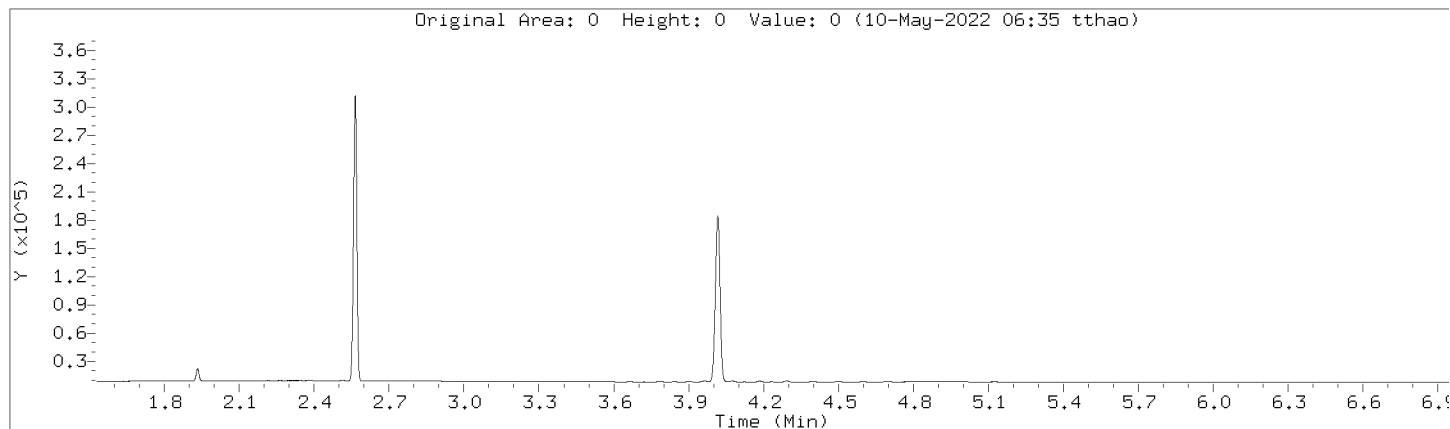
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000036.D  
Injection Date: 09-MAY-2022 17:39  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,363301:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



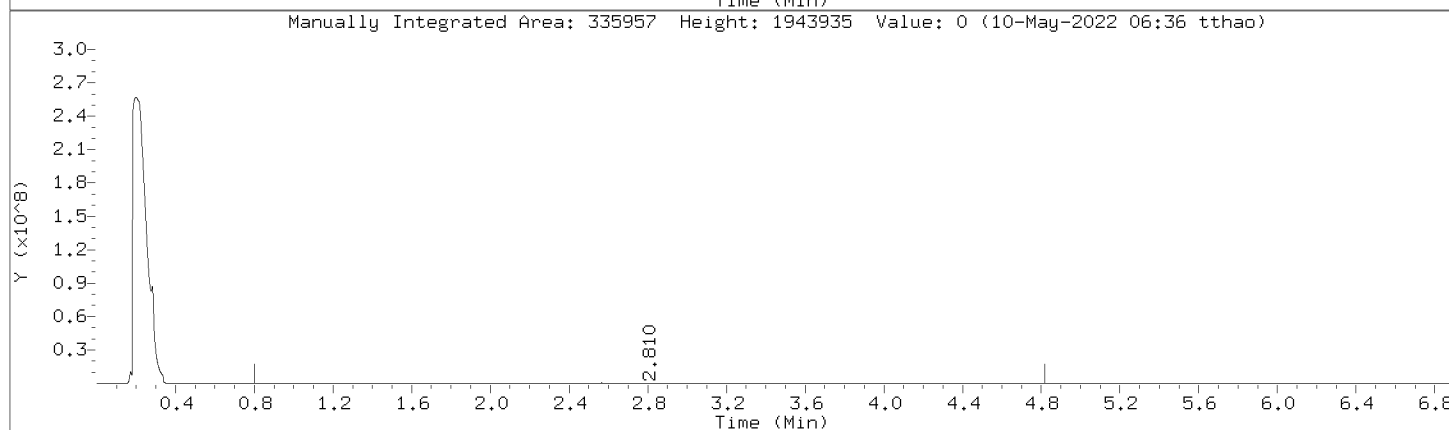
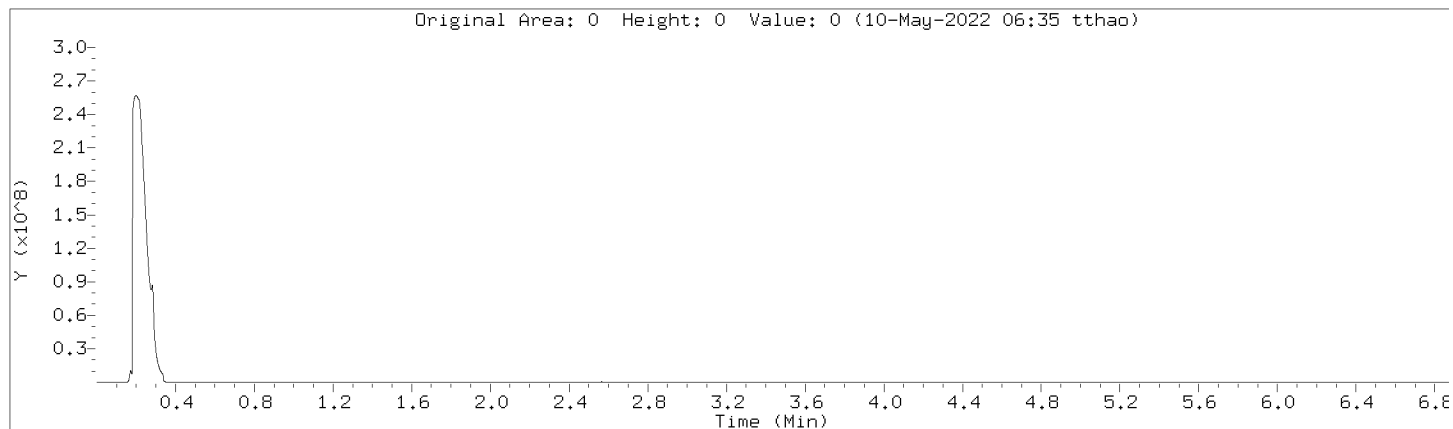
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000036.D  
Injection Date: 09-MAY-2022 17:39  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,363301:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



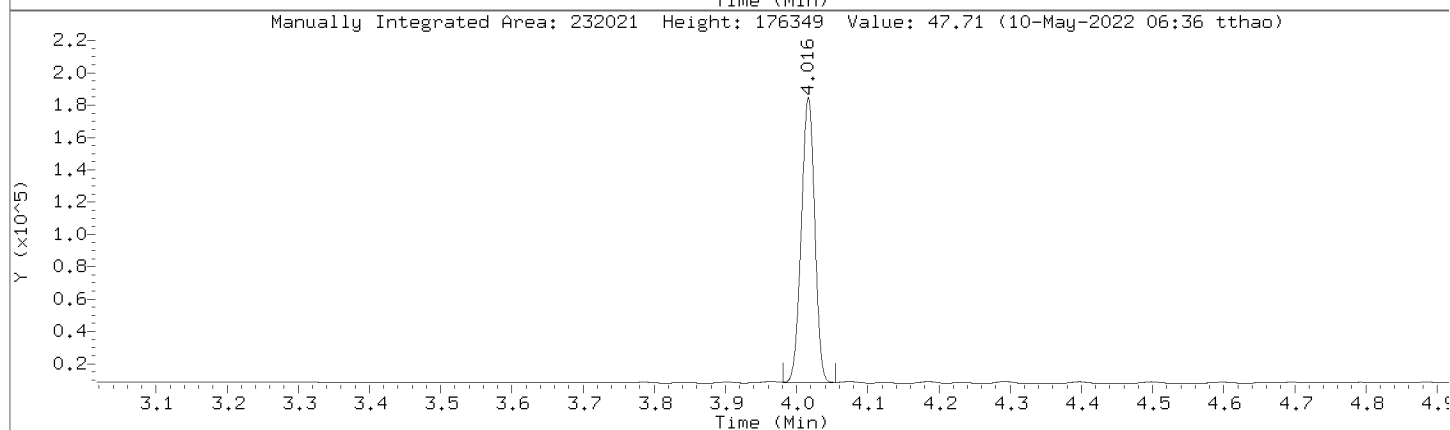
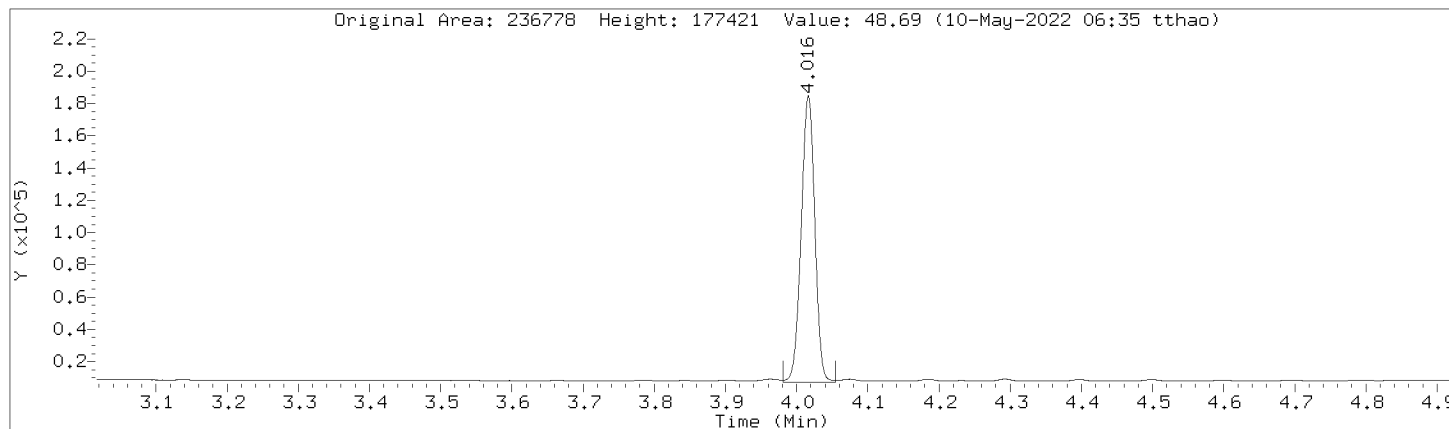
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Injection Date: 09-MAY-2022 17:39  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,363301:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



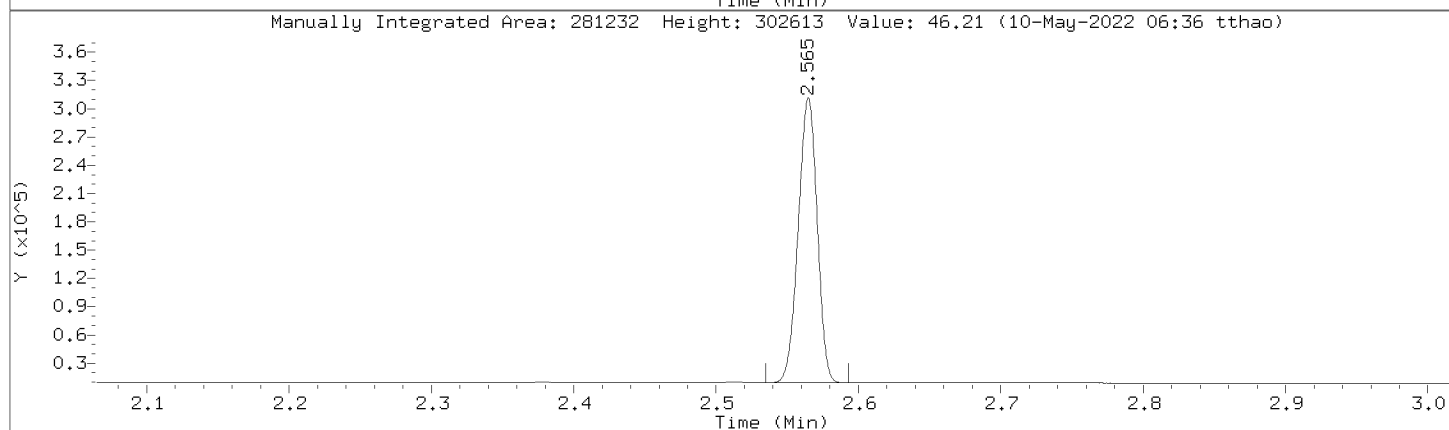
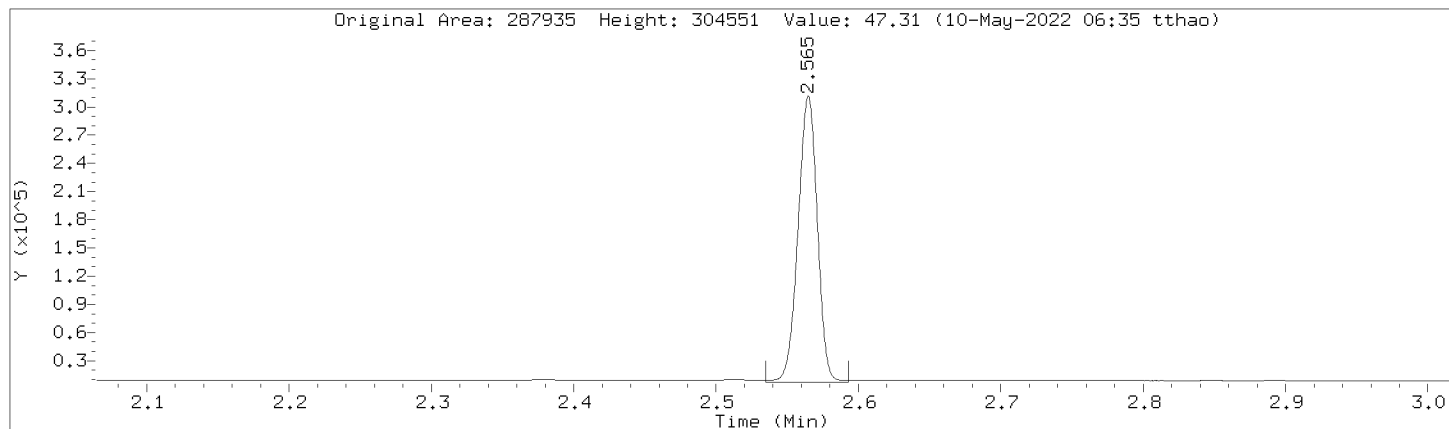
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000036.D  
Injection Date: 09-MAY-2022 17:39  
Instrument: 10gcsF.i  
Lab Sample ID: PBLK,363301:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000036.D  
 Injection Date: 09-MAY-2022 17:39  
 Instrument: 10gcsF.i  
 Lab Sample ID: PBLK,363301:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	0	80663
DRO by AK 102	0	255294
TPH-DRO (C10-C28)	0	288169
Motor Oil Range (C24-C36)	0	90995
Diesel Fuel Range	0	231816
Motor Oil Range	0	106438
Diesel Fuel Range SG	0	231816
Motor Oil Range SG	0	106438
C10-C36	0	335957
n-Triacontane (S)	236778	232021
o-Terphenyl (S)	287935	281232

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\051122F.b\0511F0000003.D  
 Lab Smp Id: DMO-RTM,365036:2 Client Smp ID: DMO-RTM,365036:2  
 Inj Date : 11-MAY-2022 13:45  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-rtm,365036:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\051122F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 11-May-2022 15:29 ebearrood Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 2  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	CONCENTRATIONS		REVIEW CODE
			ON-COL RESPONSE (ug/mL)	FINAL (ug/mL)	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.800	- 3.385		1959631 321.556	322	
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.565	2.566 -0.001		356 0.05850	0.0585	(R)
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.023	4.025 -0.002		166 0.03413	0.0341	(R)
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.386	- 4.800		1839761 544.678	545	
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.800	- 3.940		3141832 471.564	472	
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.250	- 4.800		2418140 692.959	693	
-----					
S 7	C10-C36			CAS #:	
0.800	- 4.800		3799393 813.676	814	
-----					
S 8	Diesel Fuel Range			CAS #:	
1.240	- 3.440		1380903 257.922	258	
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.240	- 3.440		1380903 257.922	258	
-----					
S 10	Motor Oil Range			CAS #:	
3.441	- 5.260		2320387 567.183	567	
-----					
S 11	Motor Oil Range SG			CAS #:	
3.441	- 5.260		2320387 567.559	568	
-----					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.



Date : 11-MAY-2022 13:45

Client ID: DMO-RTM,365036:2

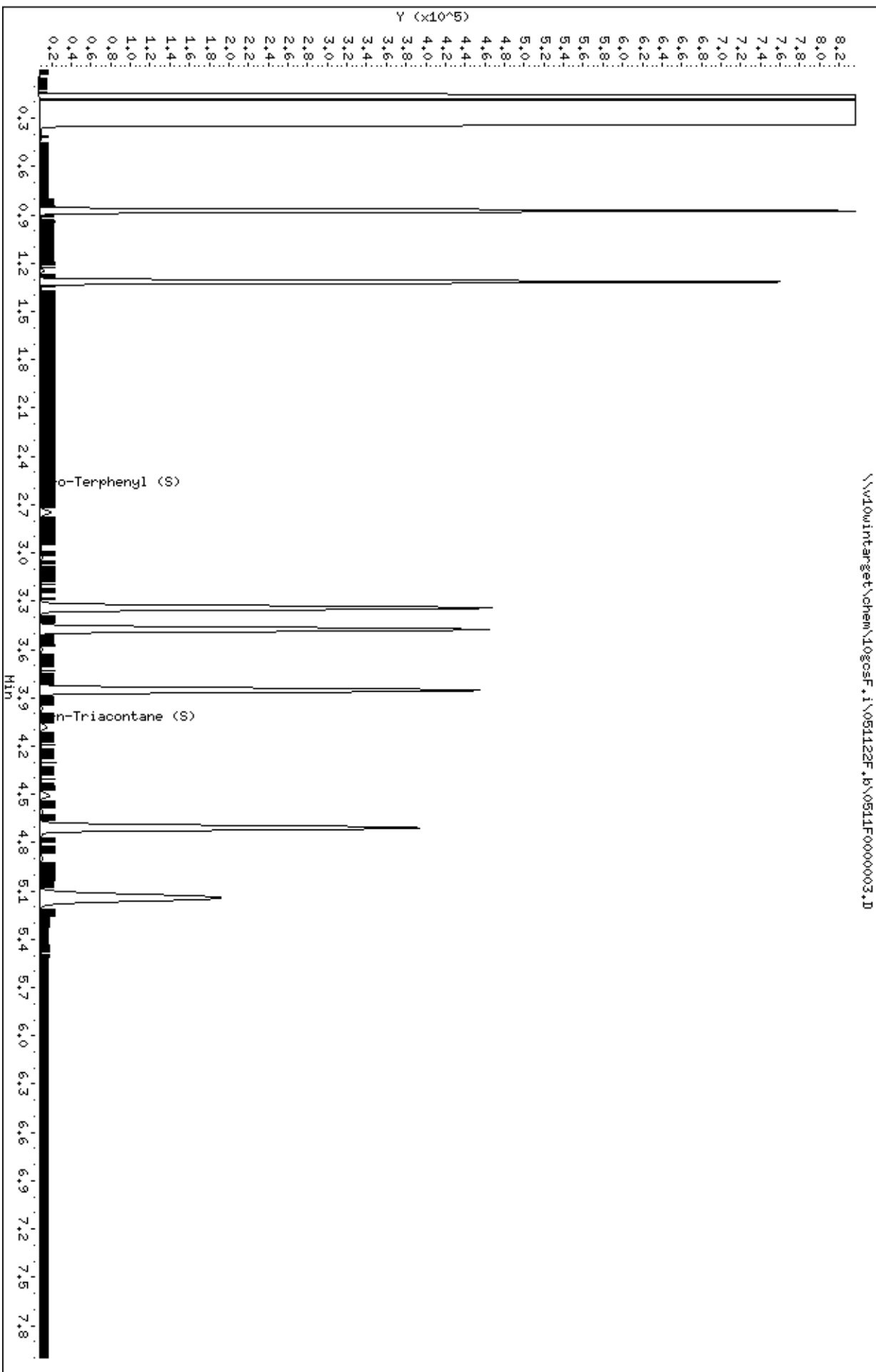
Sample Info: DMO-RTM,365036:2

Instrument: 10gosc.f.1

Operator: EB3

Column diameter: 0.32

Column phase: DB-5-USE21390001



Data File: \\v10wintarget\chem\10gcsF.i\051122F.b\0511F0000003.D  
Injection Date: 11-MAY-2022 13:45  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-RTM,365036:2  
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1839761	1839761
DRO by AK 102	1959631	1959631
TPH-DRO (C10-C28)	3141832	3141832
Motor Oil Range (C24-C36)	2418518	2418140
Diesel Fuel Range	1380445	1380903
Motor Oil Range	2324491	2320387
Diesel Fuel Range SG	1380445	1380903
Motor Oil Range SG	2324491	2320387
C10-C36	3799393	3799393
n-Triacontane (S)	166	166
o-Terphenyl (S)	356	356

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29940885CCV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 05/02/2022 Time: 19:28

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 04/27/2022 04/27/2022

Lab File ID: 050222R.B\0502R0000030.D

Init. Calib. Time(s): 13:00 14:42

SDG No.: 10606394

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	512.1824	0.0100	2.4365	15.0000
Motor Oil Range	Linear	500	519.5084	0.0100	3.9017	15.0000
n-Triacontane (S)	Linear	50	49.51426	0.0100	-0.9715	15.0000
o-Terphenyl (S)	Linear	50	48.93177	0.0100	-2.1365	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29940884CCV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 05/02/2022 Time: 21:10

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 04/27/2022 04/27/2022

Lab File ID: 050222R.B\0502R0000041.D

Init. Calib. Time(s): 13:00 14:42

SDG No.: 10606394

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	506.2076	0.0100	1.2415	15.0000
Motor Oil Range	Linear	500	509.6090	0.0100	1.9218	15.0000
n-Triacontane (S)	Linear	50	50.10416	0.0100	0.2083	15.0000
o-Terphenyl (S)	Linear	50	48.53151	0.0100	-2.9370	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO INITIAL CALIBRATION DATA

SAMPLE NO.

29929189ICV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 05/09/2022 Time: 17:27

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 05/09/2022 05/09/2022

Lab File ID: 050922F.B\0509F0000035.D

Init. Calib. Time(s): 15:19 17:04

SDG No.: 10606394

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	521.2485	0.0100	4.2497	15.0000
Motor Oil Range	Linear	500	509.6966	0.0100	1.9393	15.0000
n-Triacontane (S)	Averaged	4863.151	4934.100	0.0100	1.4589	15.0000
o-Terphenyl (S)	Averaged	6085.641	5925.220	0.0100	-2.6361	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29964171CCV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 05/11/2022 Time: 06:39

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 05/09/2022 05/09/2022

Lab File ID: 051022F.B\0510F0000105.D

Init. Calib. Time(s): 15:19 17:04

SDG No.: 10606394

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	548.4805	0.0100	9.6961	15.0000
Motor Oil Range	Linear	500	592.6948	0.0100	18.5390*	15.0000
n-Triacontane (S)	Averaged	4863.151	5153.240	0.0100	5.9650	15.0000
o-Terphenyl (S)	Averaged	6085.641	6241.920	0.0100	2.5680	15.0000

\* - Value lies outside of established control limits.

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29969737CCV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 05/11/2022 Time: 08:33

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 05/09/2022 05/09/2022

Lab File ID: 051022F.B\0510F0000115.D

Init. Calib. Time(s): 15:19 17:04

SDG No.: 10606394

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	510.7571	0.0100	2.1514	15.0000
Motor Oil Range	Linear	500	501.5497	0.0100	0.3100	15.0000
n-Triacontane (S)	Averaged	4863.151	4881.500	0.0100	0.3773	15.0000
o-Terphenyl (S)	Averaged	6085.641	5930.900	0.0100	-2.5427	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29969738CCV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 05/11/2022 Time: 12:20

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 05/09/2022 05/09/2022

Lab File ID: 051022F.B\0510F0000135.D

Init. Calib. Time(s): 15:19 17:04

SDG No.: 10606394

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	514.9766	0.0100	2.9953	15.0000
Motor Oil Range	Linear	500	512.3110	0.0100	2.4622	15.0000
n-Triacontane (S)	Averaged	4863.151	4860.140	0.0100	-0.0619	15.0000
o-Terphenyl (S)	Averaged	6085.641	5931.320	0.0100	-2.5358	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.



GC-FID DRO - FORM VII SVOA-1  
GC-FID DRO CONTINUING CALIBRATION DATA

SAMPLE NO.

29949982CCV

Lab Name: Pace Analytical - Minnesota

Calibration Date: 05/11/2022 Time: 13:56

Instrument ID: 10GCSF GC Column: FID

Init. Calib. Date(s): 05/09/2022 05/09/2022

Lab File ID: 051122F.B\0511F0000004.D

Init. Calib. Time(s): 15:19 17:04

SDG No.: 10606394

COMPOUND	CURVE	RRF or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Diesel Fuel Range	Linear	500	521.7384	0.0100	4.3477	15.0000
Motor Oil Range	Linear	500	480.8067	0.0100	-3.8387	15.0000
n-Triacontane (S)	Averaged	4863.151	4885.020	0.0100	0.4497	15.0000
o-Terphenyl (S)	Averaged	6085.641	5983.300	0.0100	-1.6817	15.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000030.D  
 Lab Smp Id: DMO-CCV,363721:2 Client Smp ID: DMO-CCV,363721:2  
 Inj Date : 02-MAY-2022 19:28  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,363721:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050222R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 06-May-2022 08:44 rgustafson Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 3 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	(ug/mL)	(ug/mL)	=====
S 1	DRO by AK 102			CAS #:	
0.880	- 3.600		3287397 500.000	510	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.711	2.713 -0.002		327071 50.0000	48.9	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.260	4.262 -0.002		259047 50.0000	49.5	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.601	- 5.180		1897229 500.000	512	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.880	- 4.200		3781526 500.000	516	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.450	- 5.180		1991603 500.000	514	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.880	- 5.180		5184627 1000.00	1020	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.350	- 3.650		2778603 500.000	512	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.350	- 3.650		2778603 500.000	512	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.651	- 6.100		2407440 500.000	520	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.651	- 6.100		2407440 500.000	520	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 02-MAY-2022 19:28

Client ID: DMO-CCV,363721:2

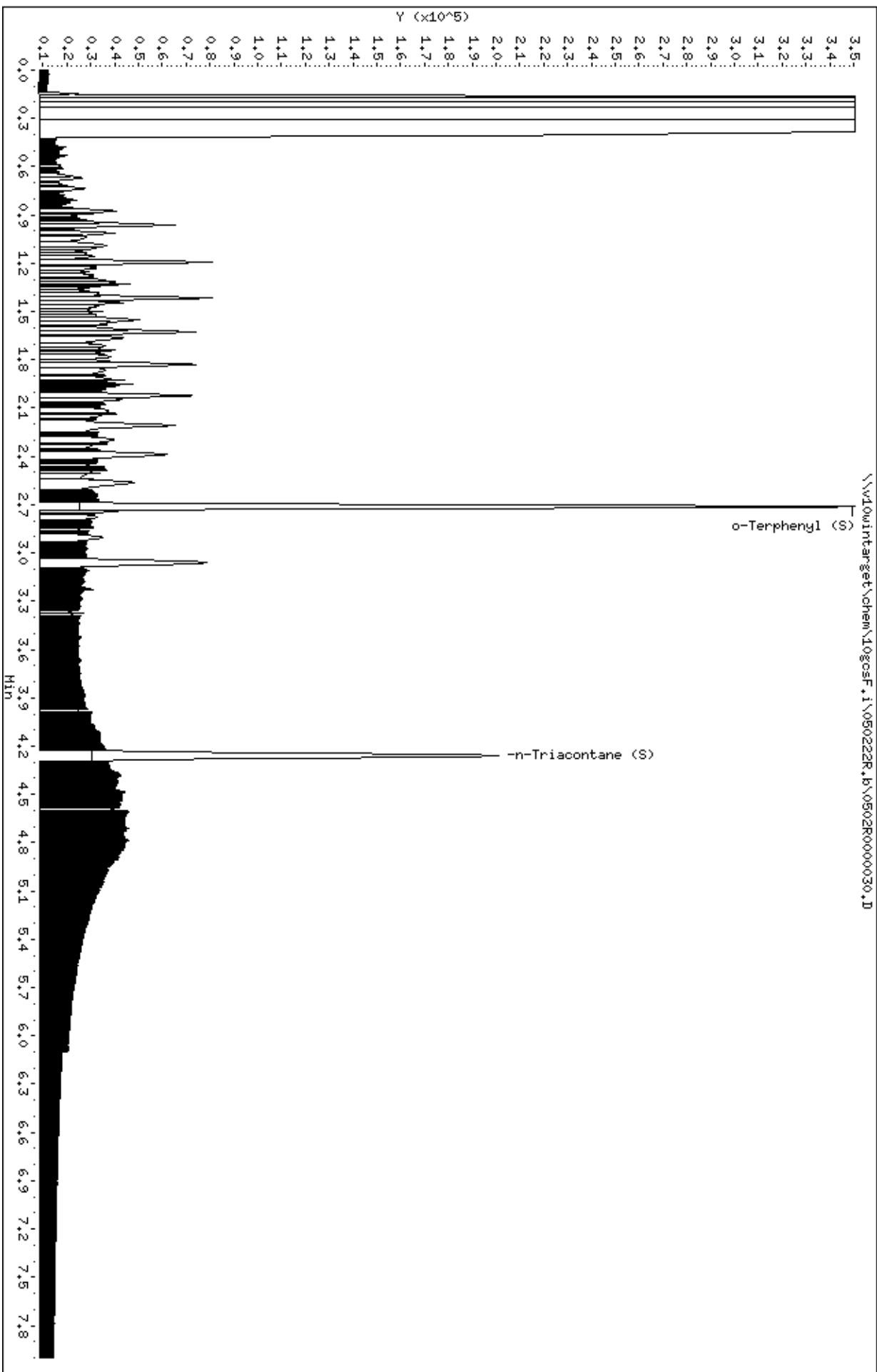
Sample Info: DMO-CCV,363721:2

Instrument: logsf.1

Operator: TT2

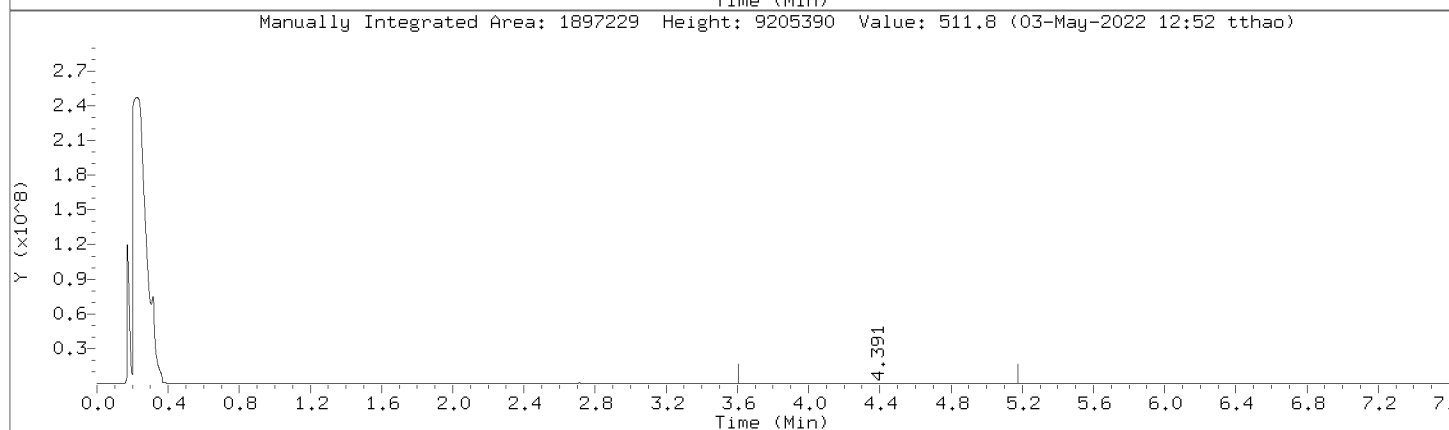
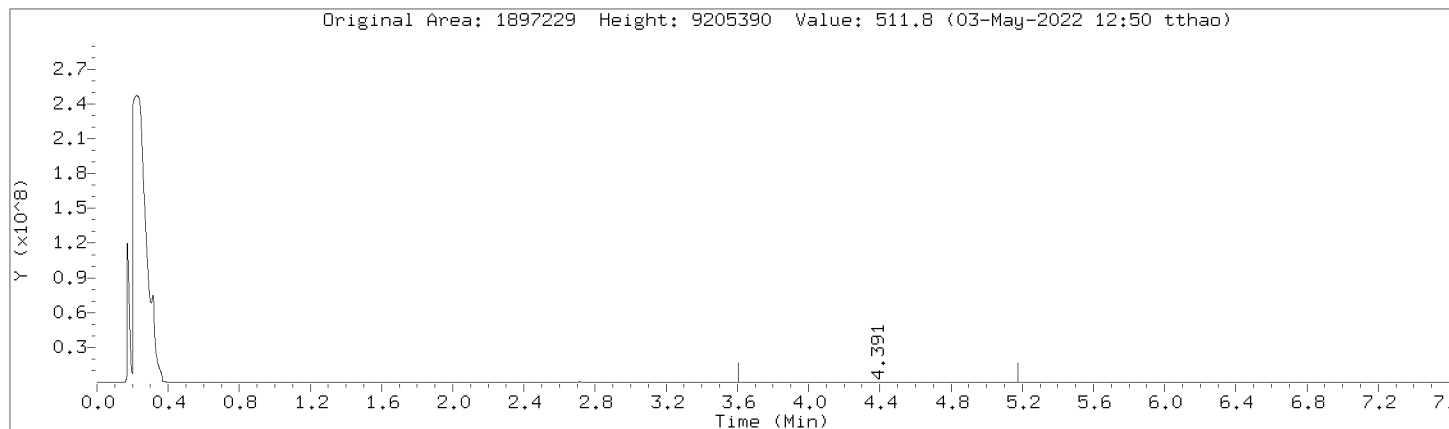
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Column phase: DB-5-MS21430033



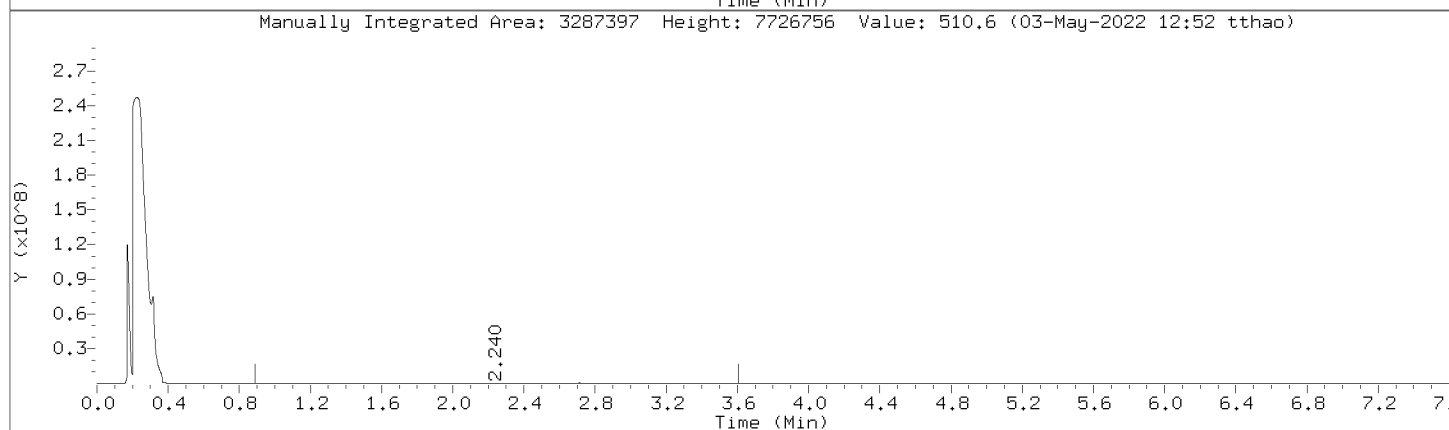
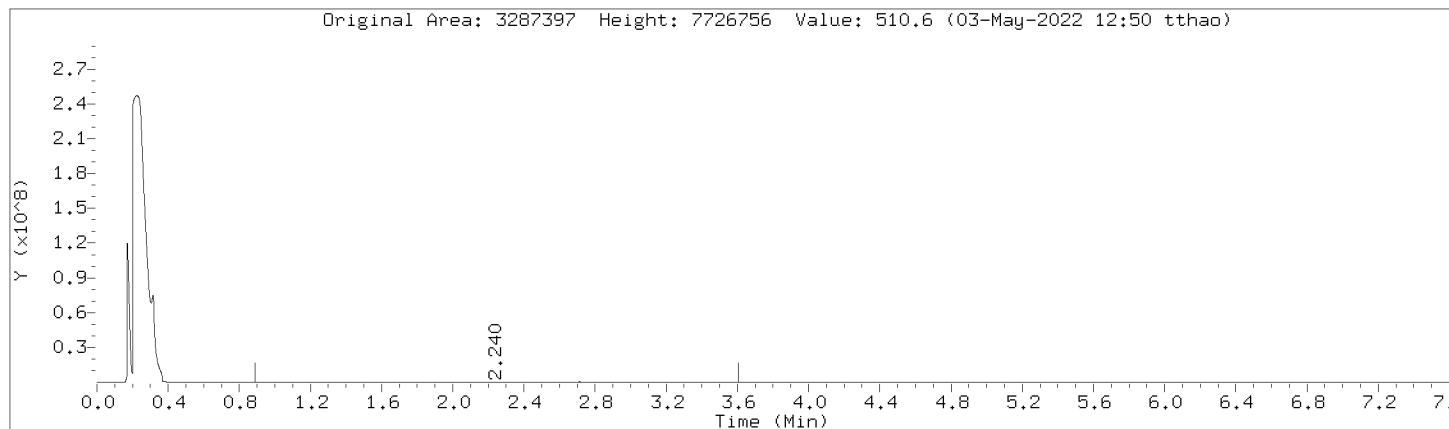
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Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



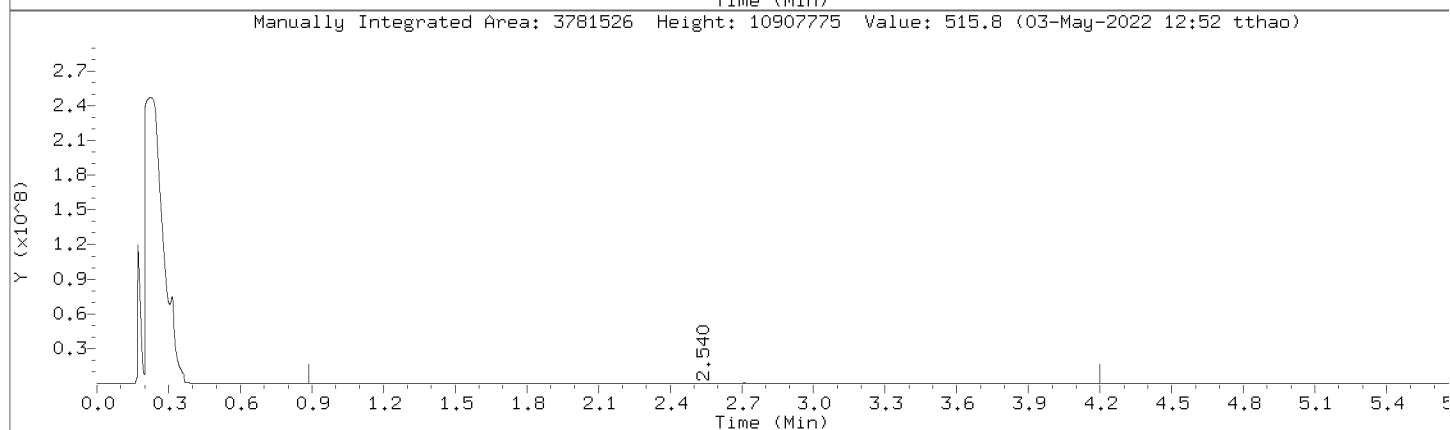
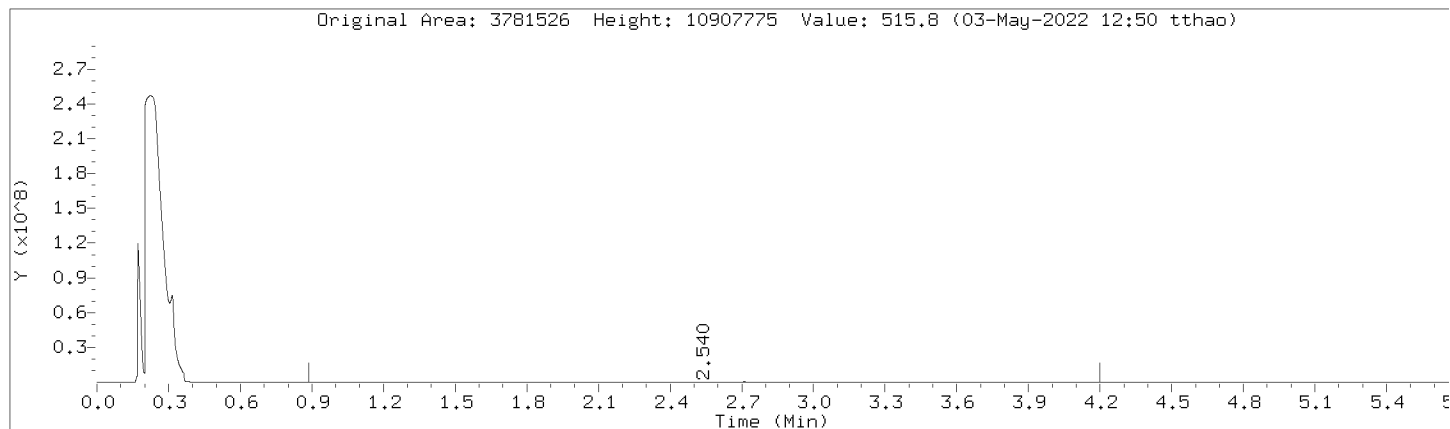
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Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



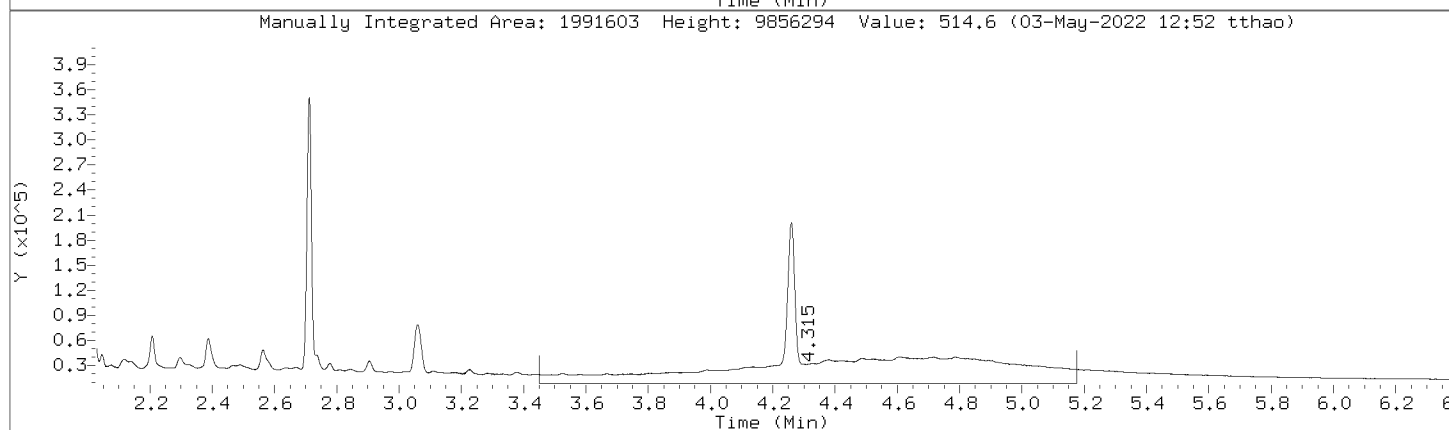
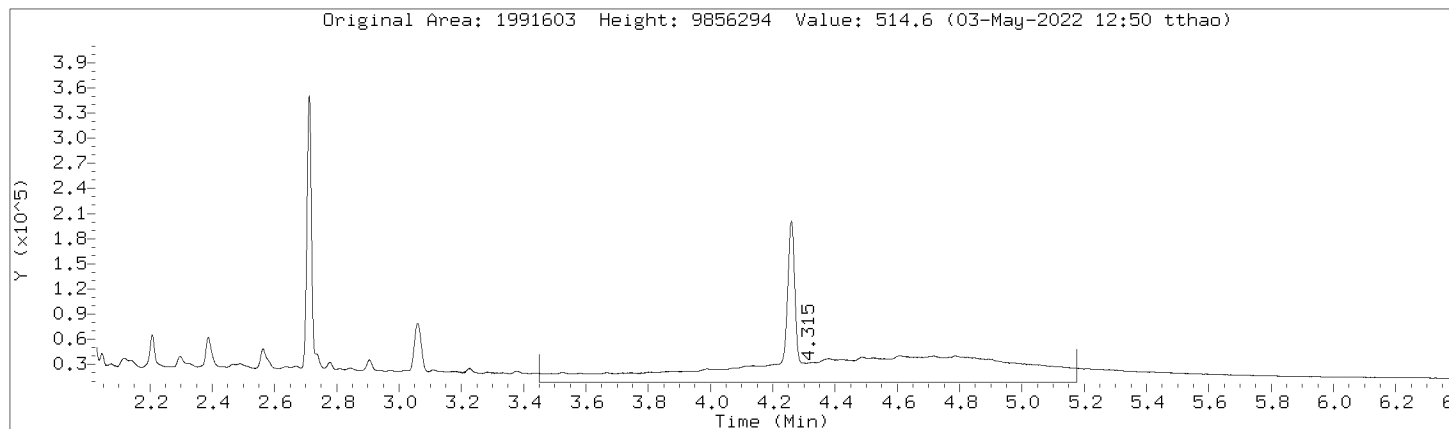
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Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000030.D  
Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

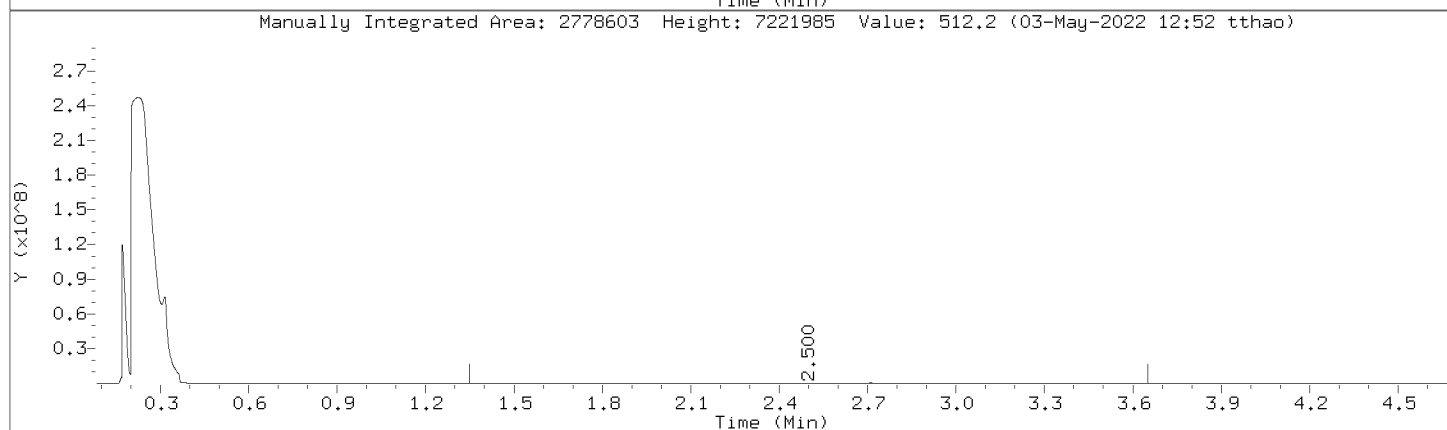
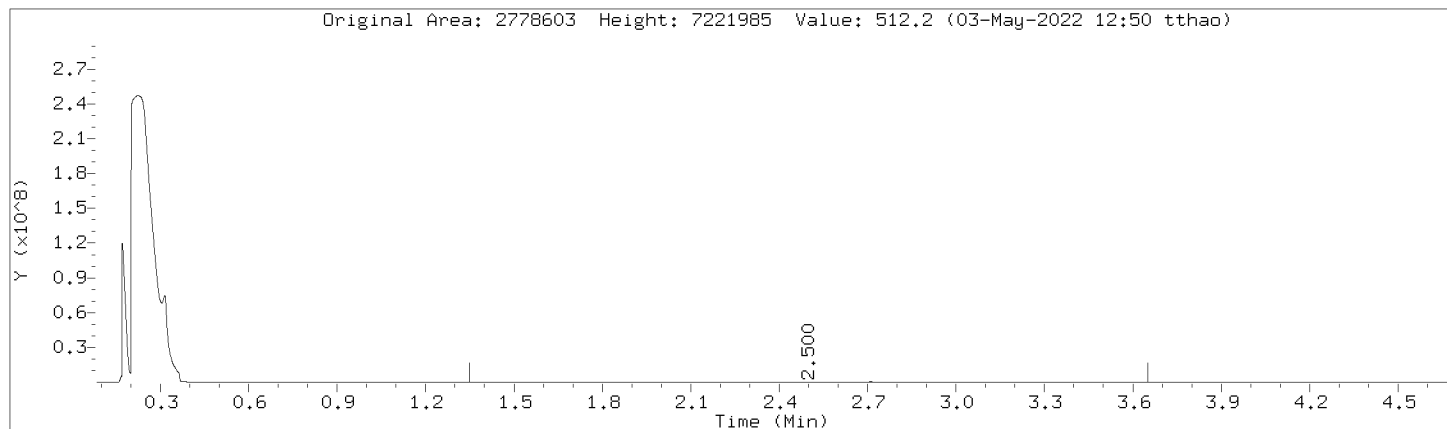
Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:





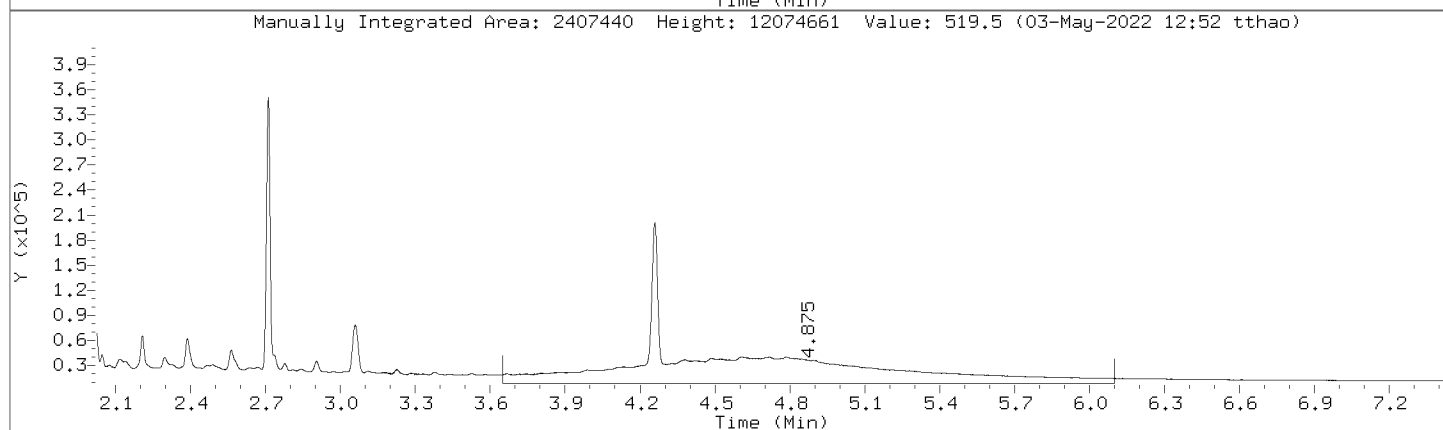
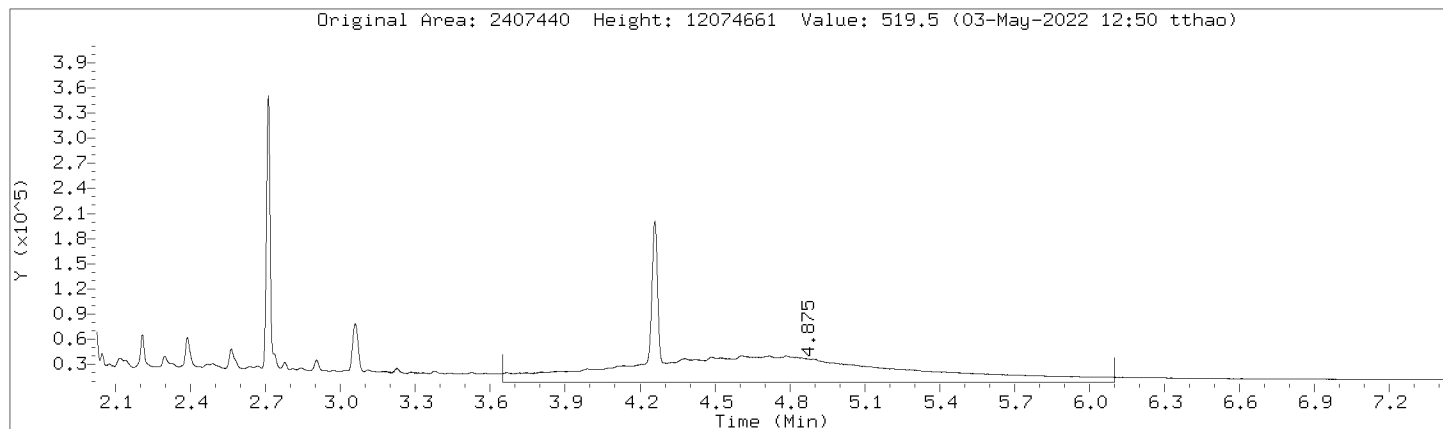
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Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



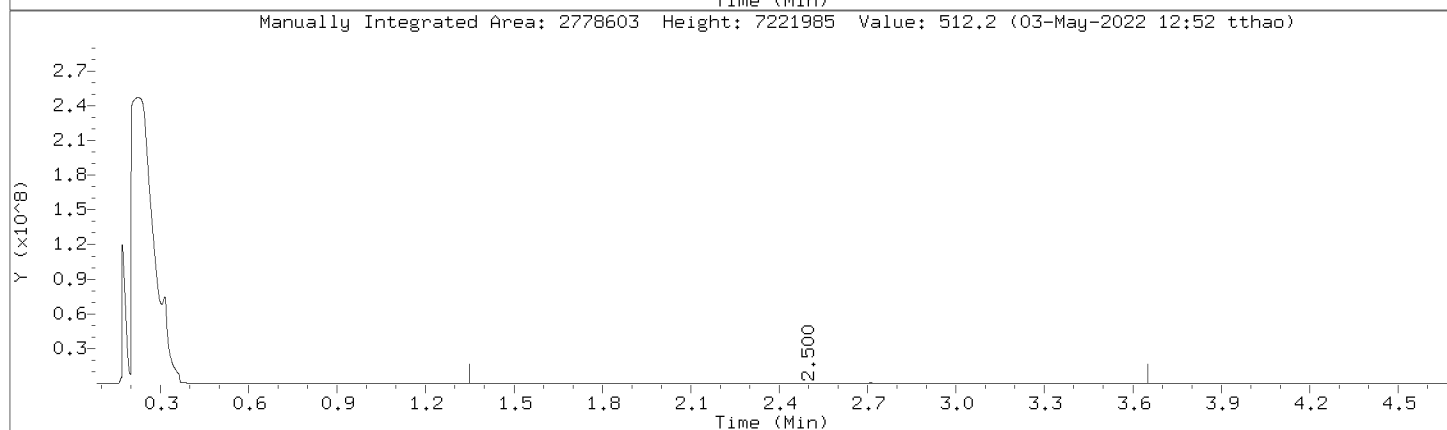
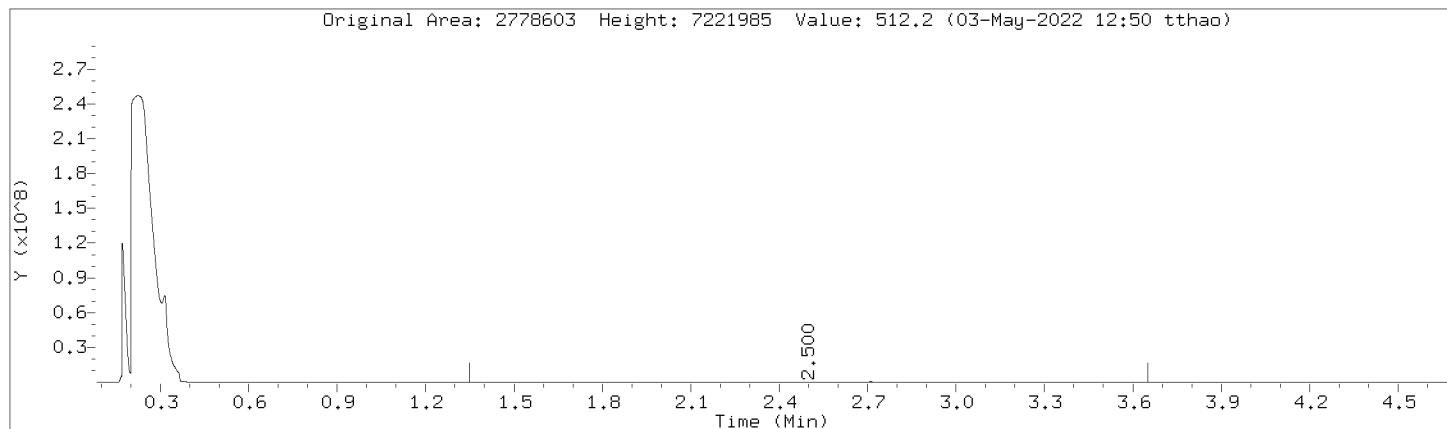
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Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



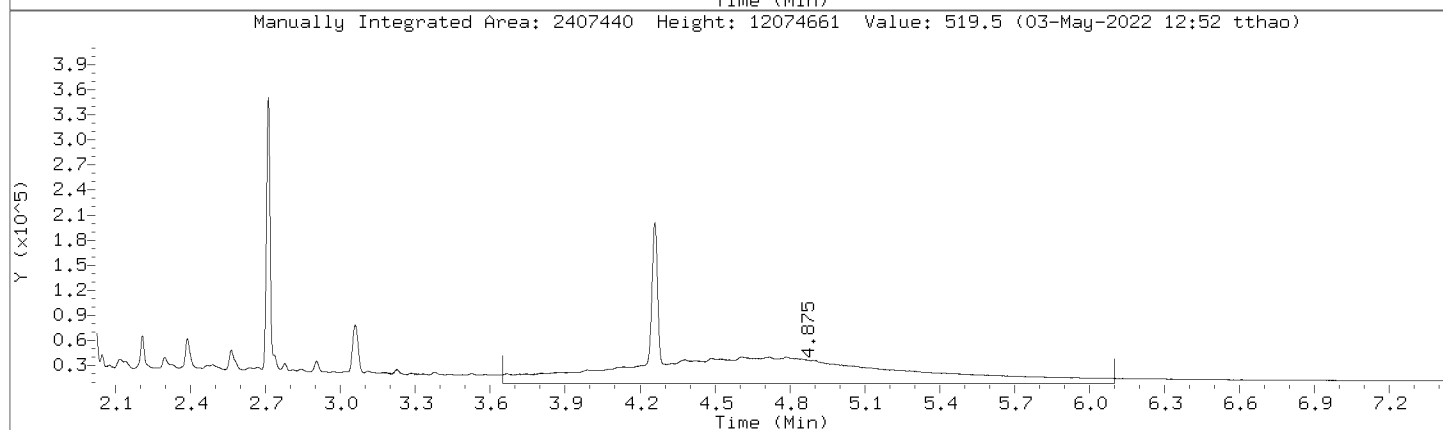
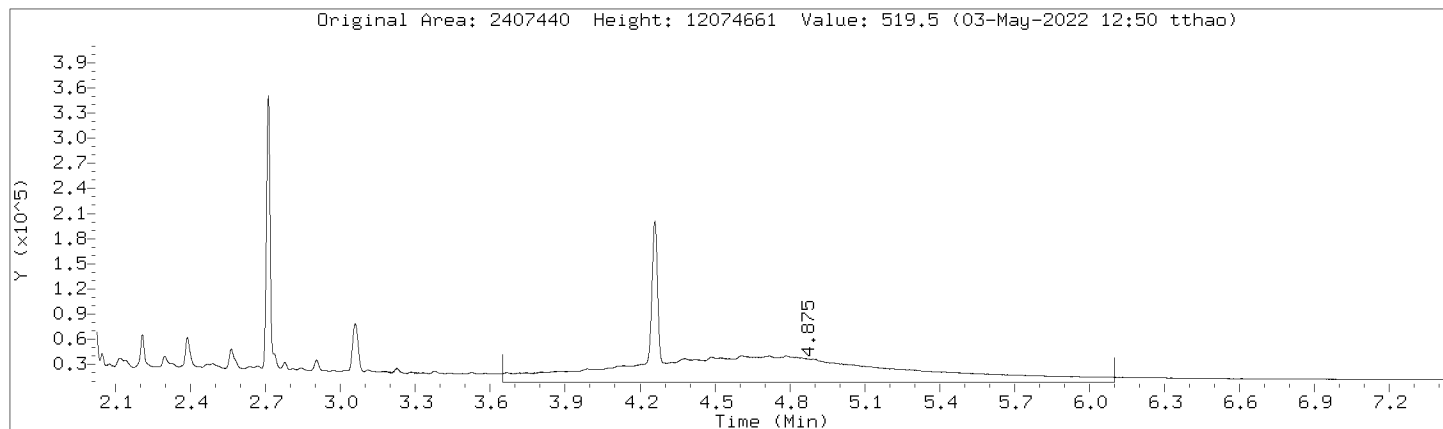
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



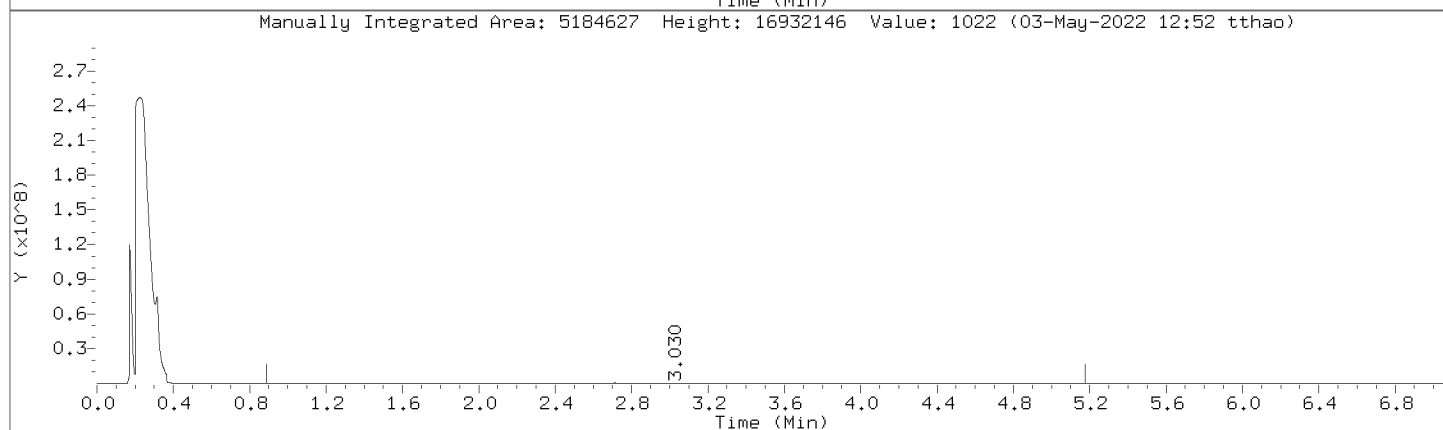
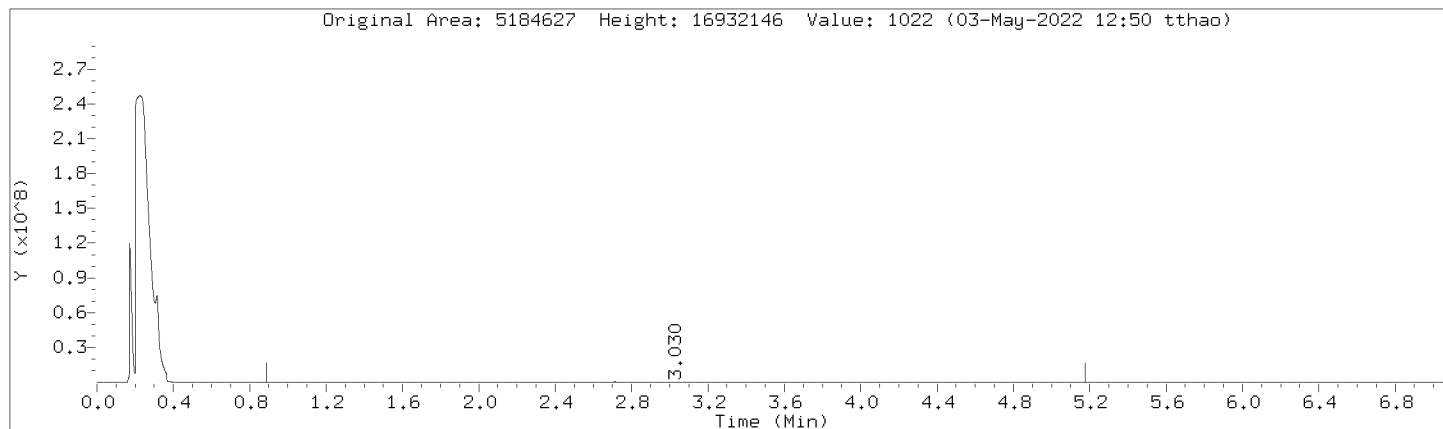
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Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



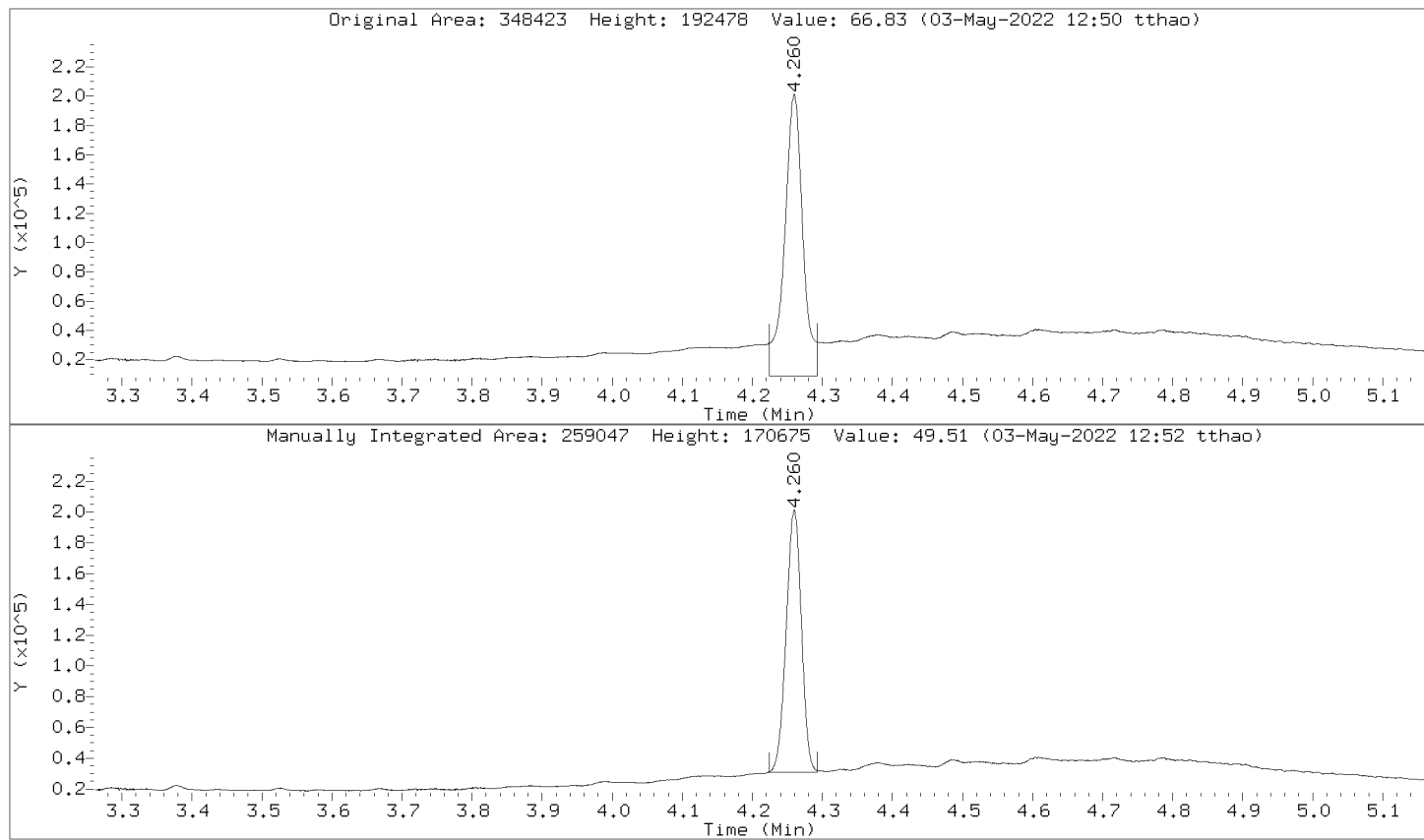
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Lab Sample ID: DMO-CCV,363721:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



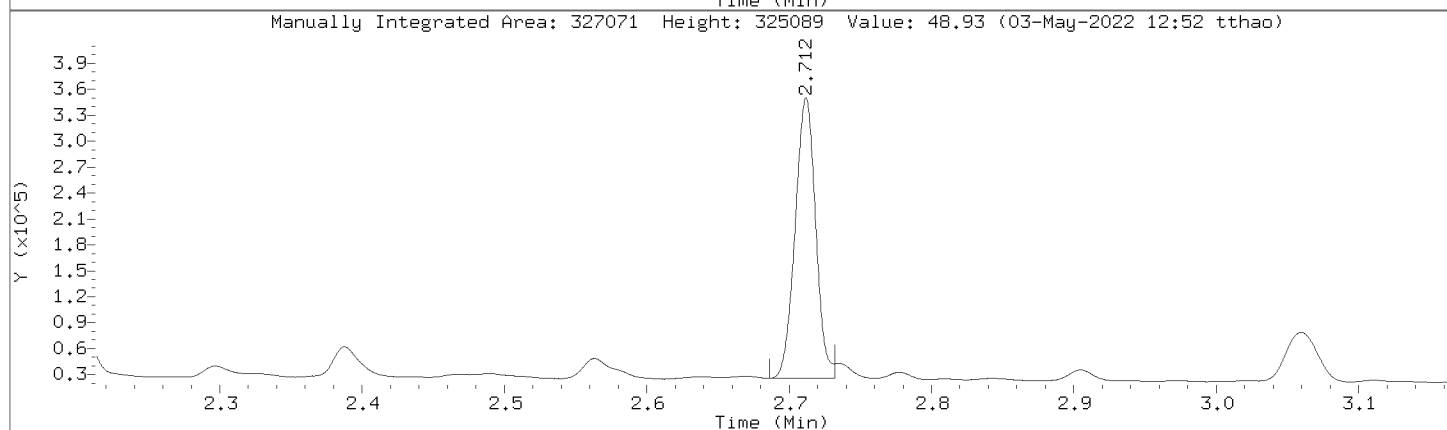
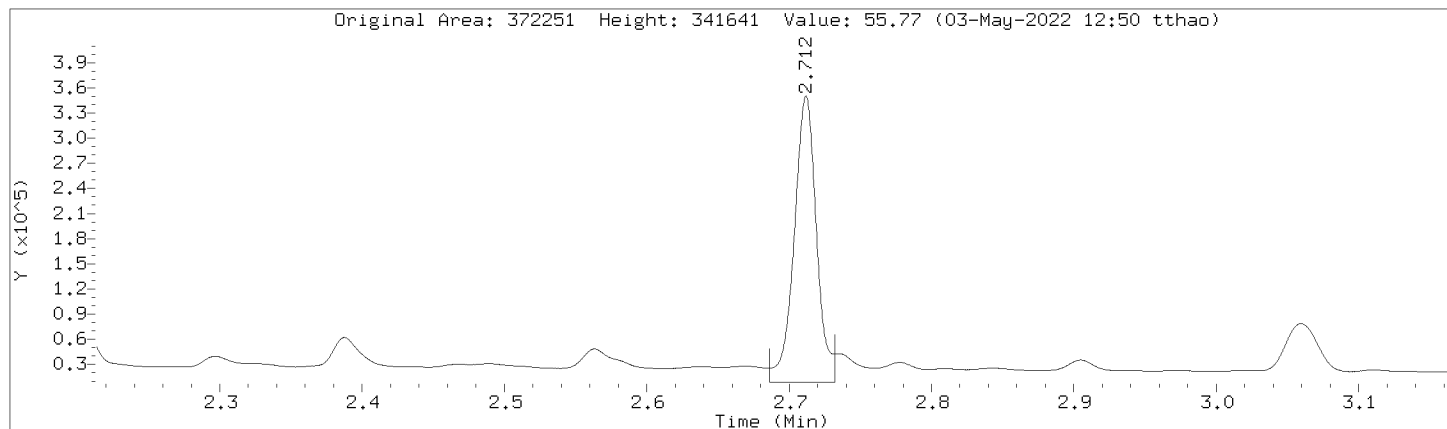
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Injection Date: 02-MAY-2022 19:28  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000030.D  
 Injection Date: 02-MAY-2022 19:28  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,363721:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1897229	1897229
DRO by AK 102	3287397	3287397
TPH-DRO (C10-C28)	3781526	3781526
Motor Oil Range (C24-C36)	1991603	1991603
Diesel Fuel Range	2778603	2778603
Motor Oil Range	2407440	2407440
Diesel Fuel Range SG	2778603	2778603
Motor Oil Range SG	2407440	2407440
C10-C36	5184627	5184627
n-Triacontane (S)	348423	259047
o-Terphenyl (S)	372251	327071

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000041.D  
 Lab Smp Id: DMO-CCV,363721:2 Client Smp ID: DMO-CCV,363721:2  
 Inj Date : 02-MAY-2022 21:10  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,363721:2  
 Misc Info : 39205  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050222R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 06-May-2022 08:44 rgustafson Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 3 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	(ug/mL)	(ug/mL)	=====
S 1	DRO by AK 102			CAS #:	
0.880	- 3.600		3261382 500.000	506	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.711	2.713 -0.002		324428 50.0000	48.5	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.259	4.262 -0.003		262091 50.0000	50.1	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.601	- 5.180		1877802 500.000	506	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.880	- 4.200		3752324 500.000	511	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.450	- 5.180		1969662 500.000	508	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.880	- 5.180		5139184 1000.00	1010	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.350	- 3.650		2749868 500.000	506	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.350	- 3.650		2749868 500.000	506	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.651	- 6.100		2363786 500.000	510	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.651	- 6.100		2363786 500.000	510	(M) RNG
-----					



QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 02-MAY-2022 21:10

Client ID: DMO-CCV,363721:2

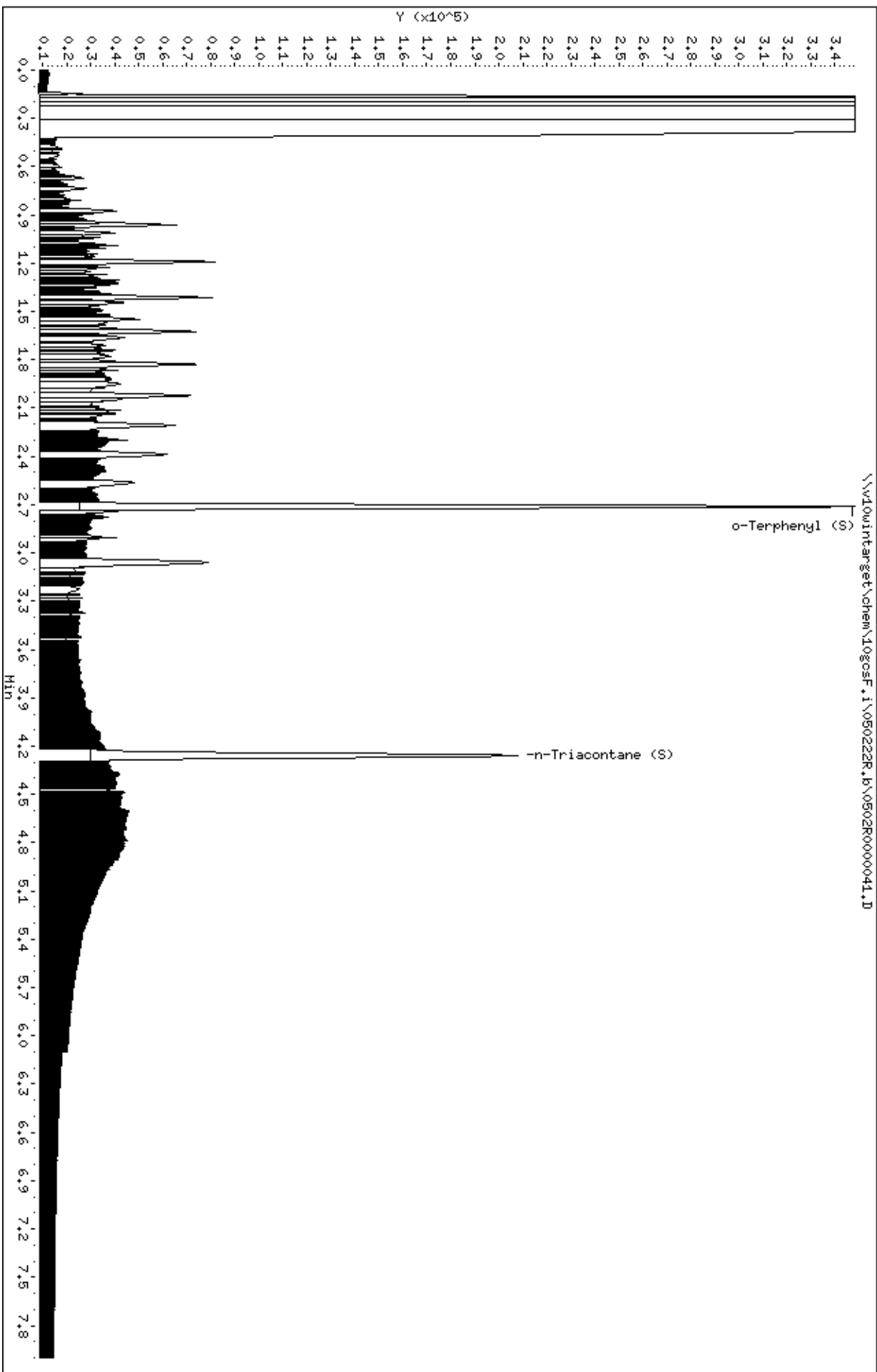
Sample Info: DMO-CCV,363721:2

Instrument: 10gosc.f.1

Operator: TT2

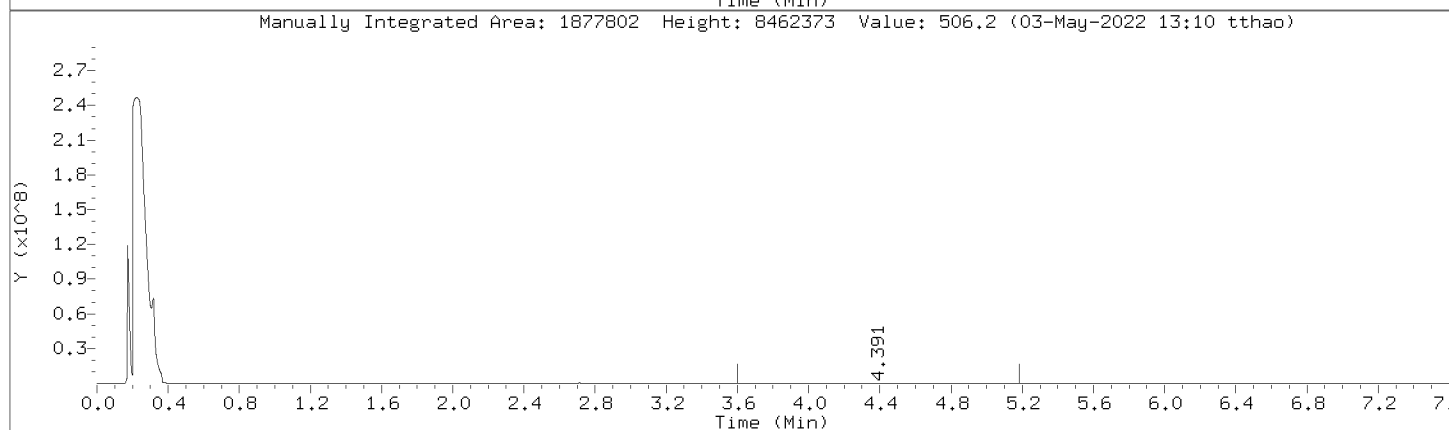
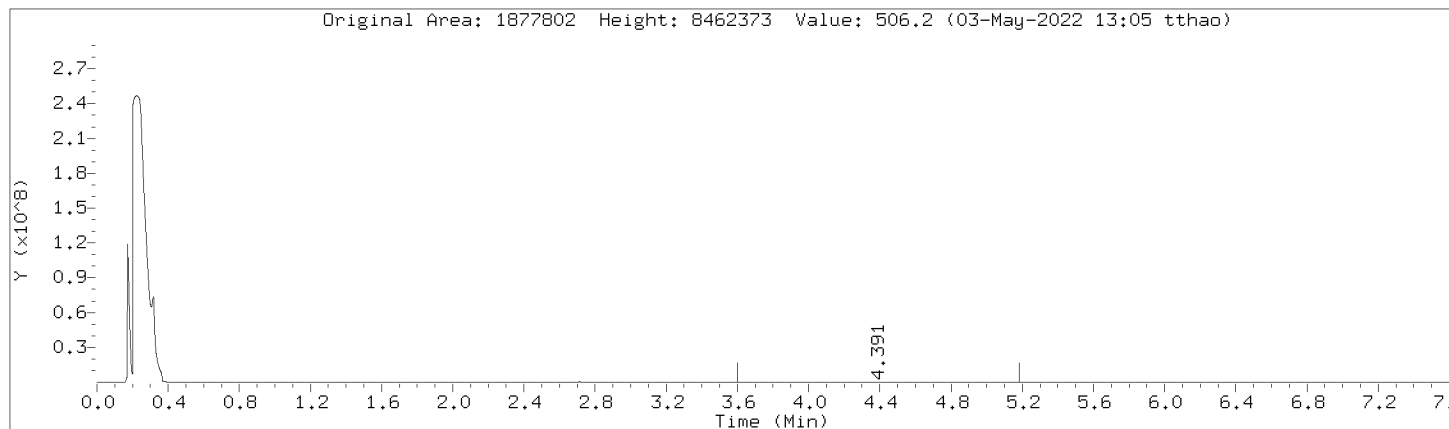
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Column phase: DB-5-MS21430033



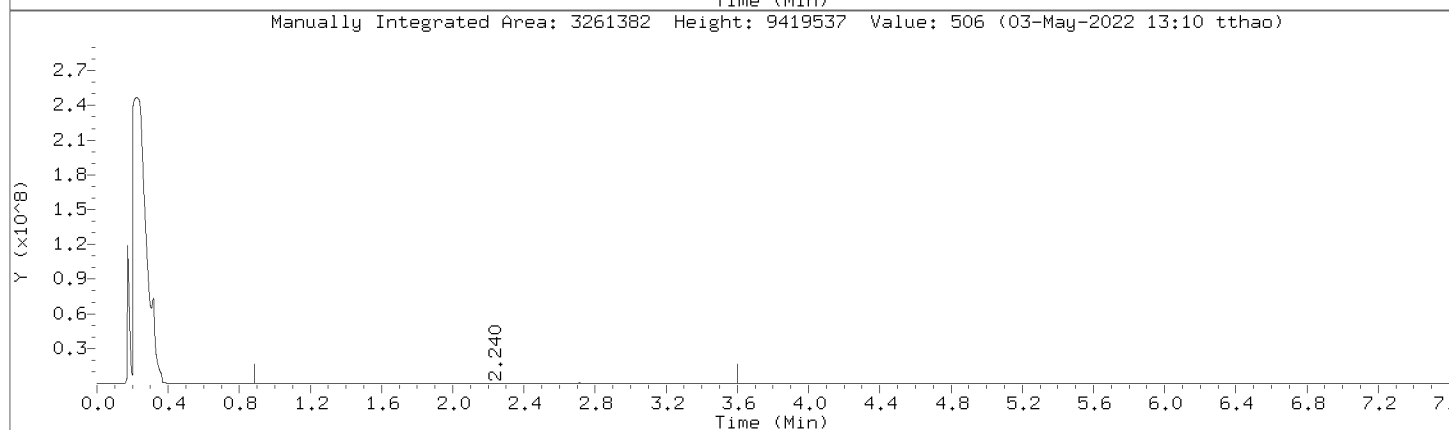
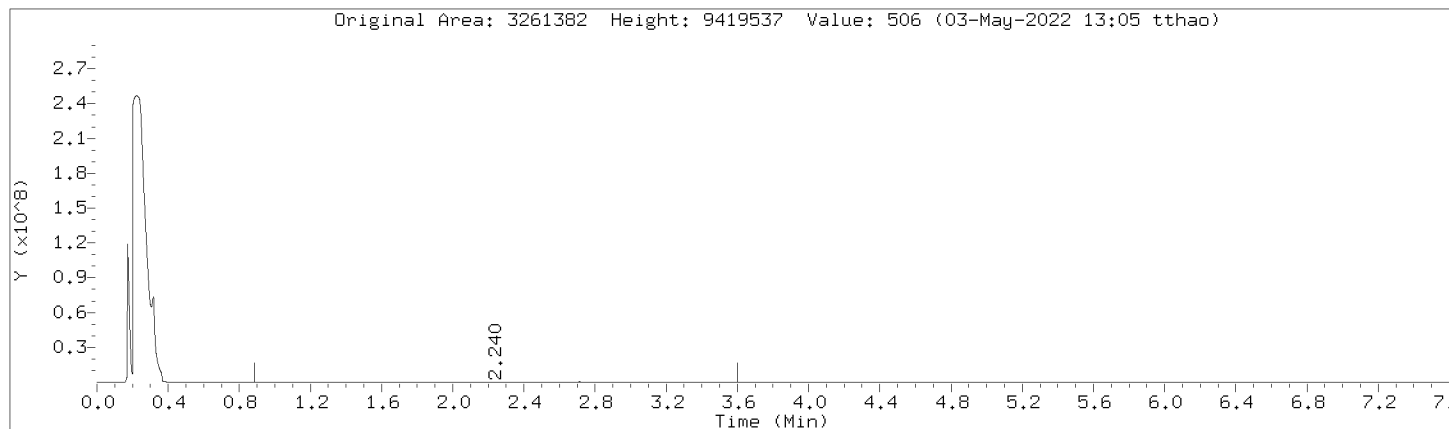
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Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



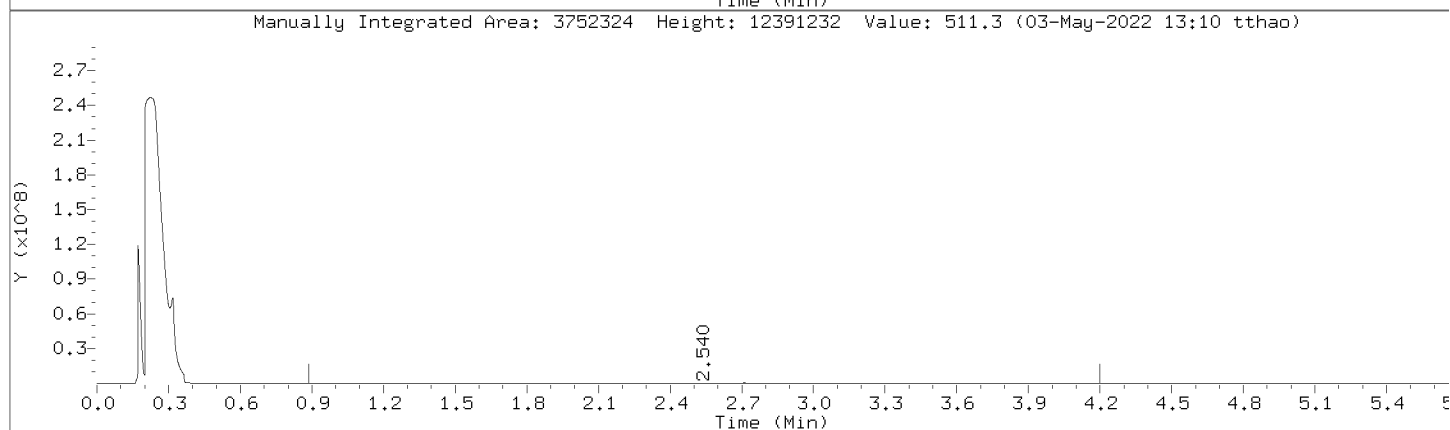
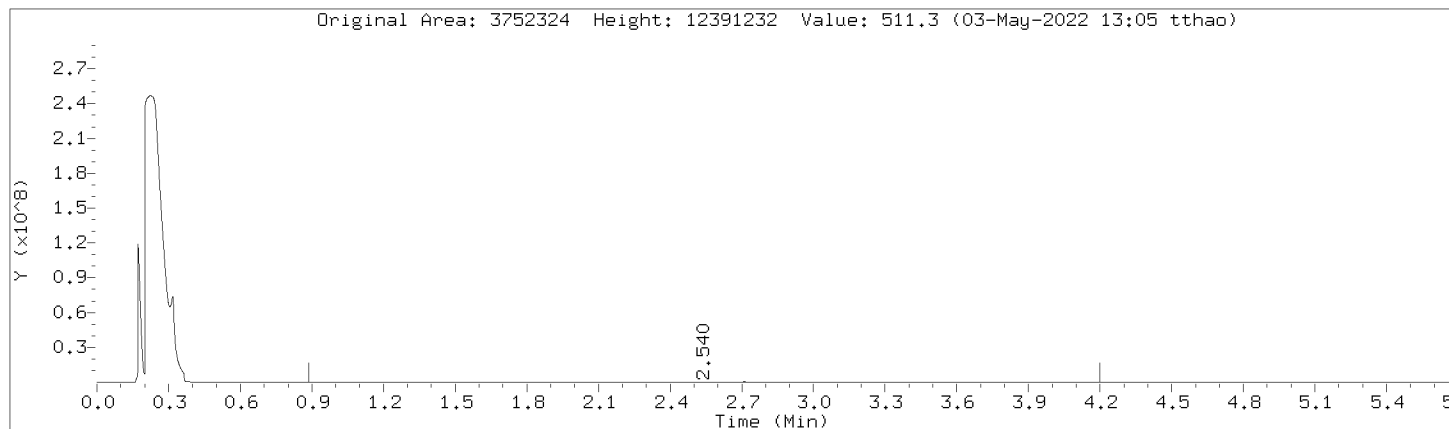
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Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



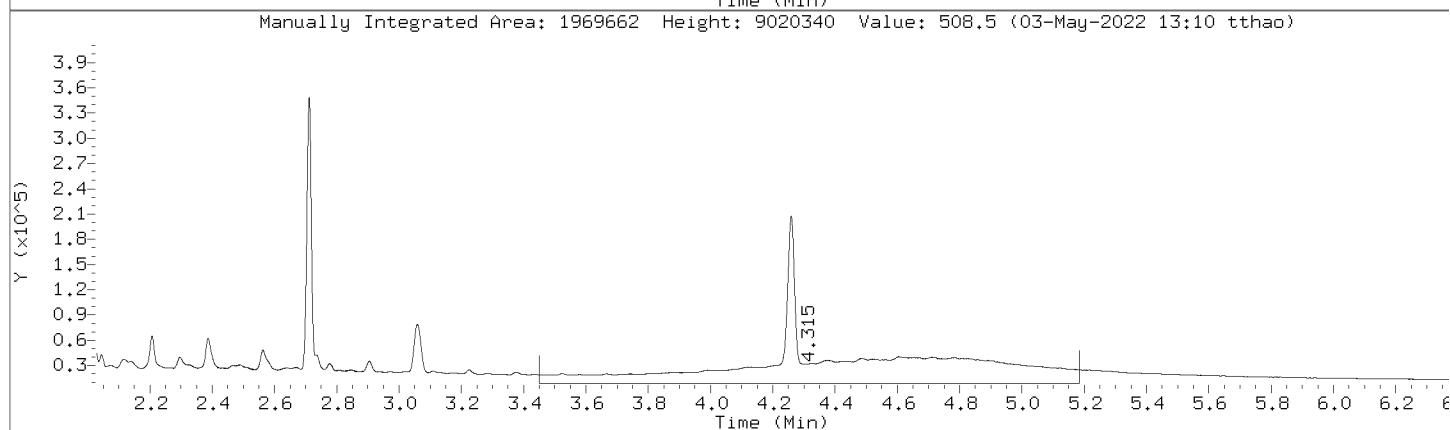
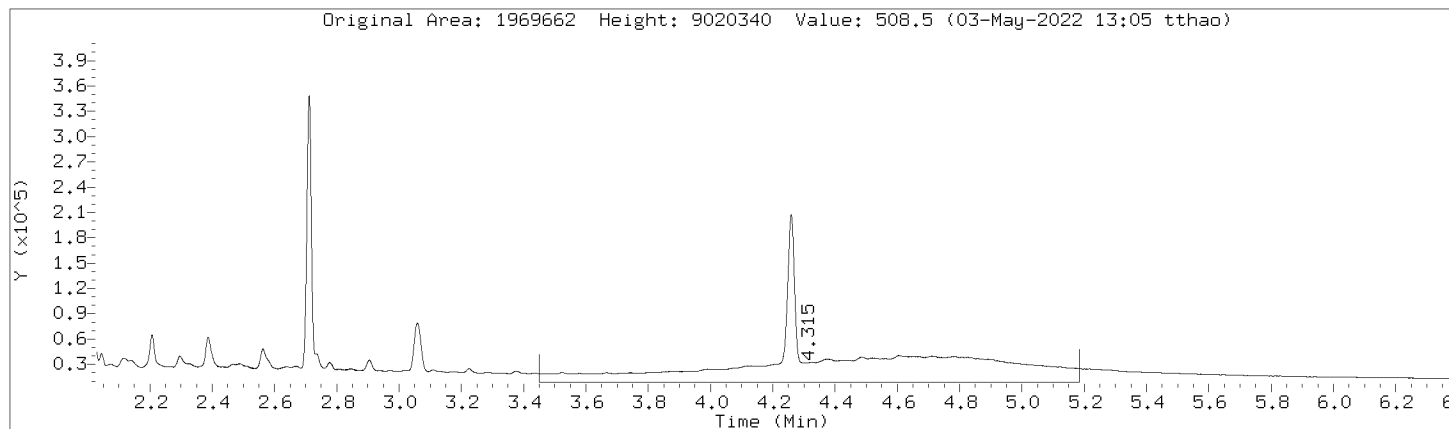
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Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



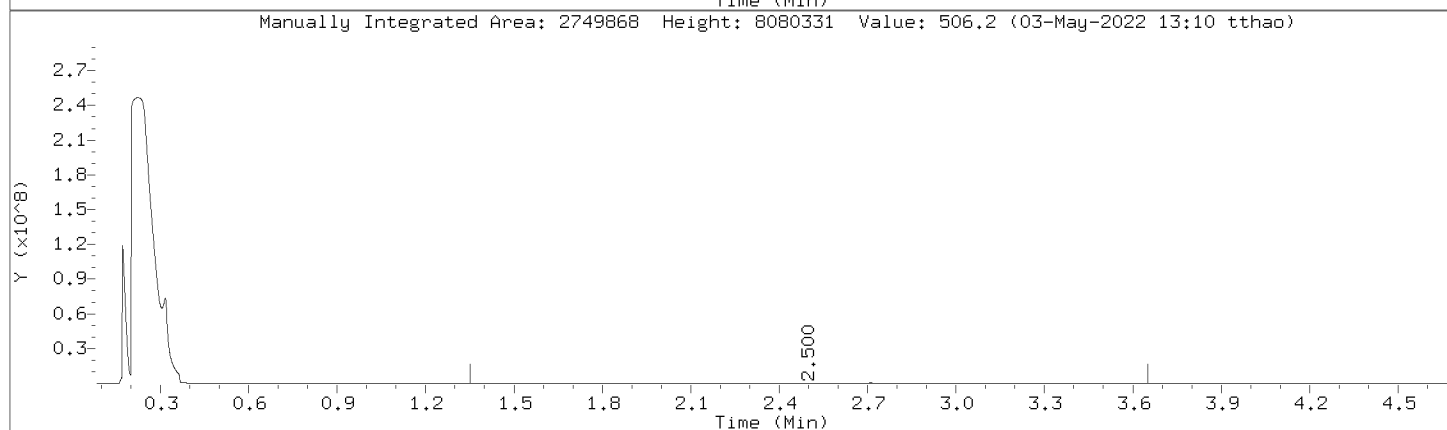
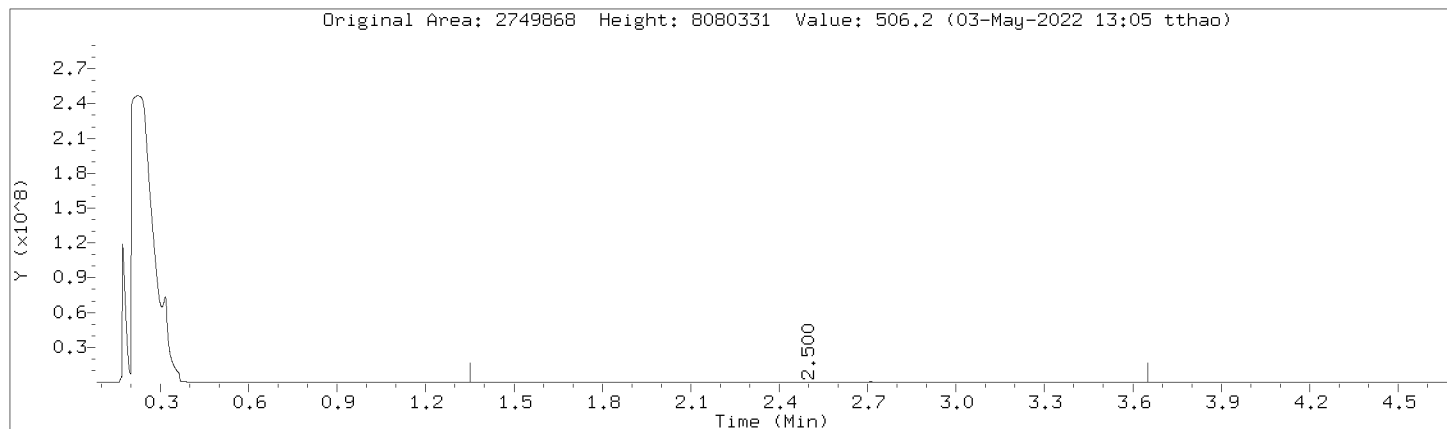
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Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



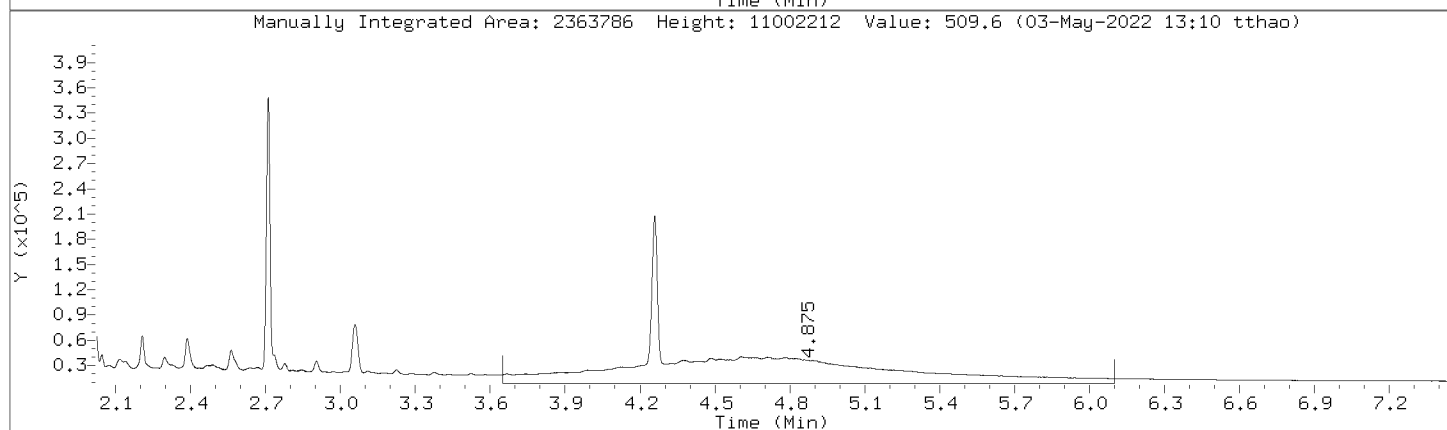
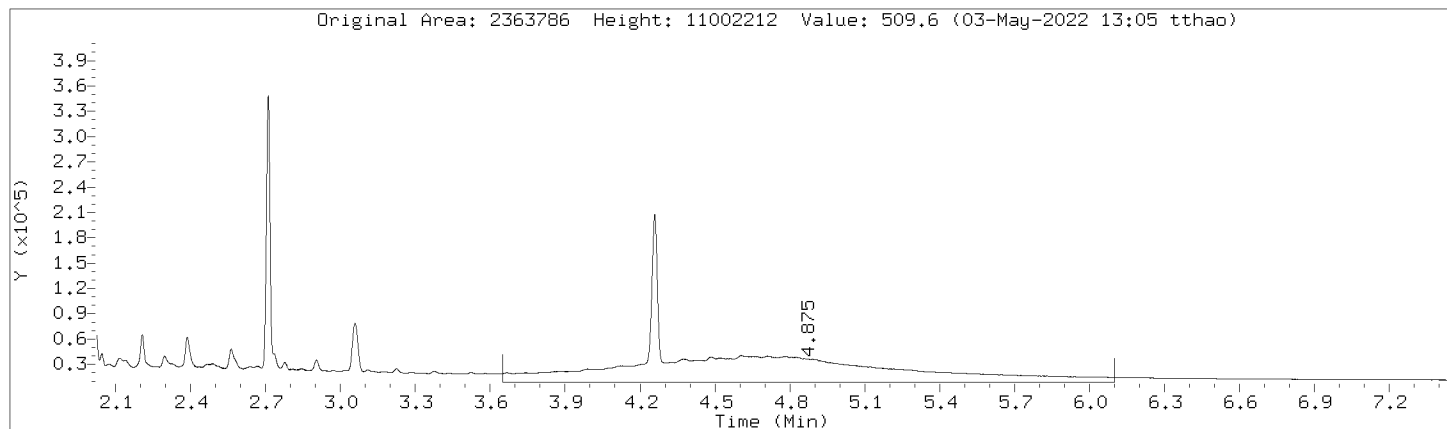
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Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000041.D  
Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

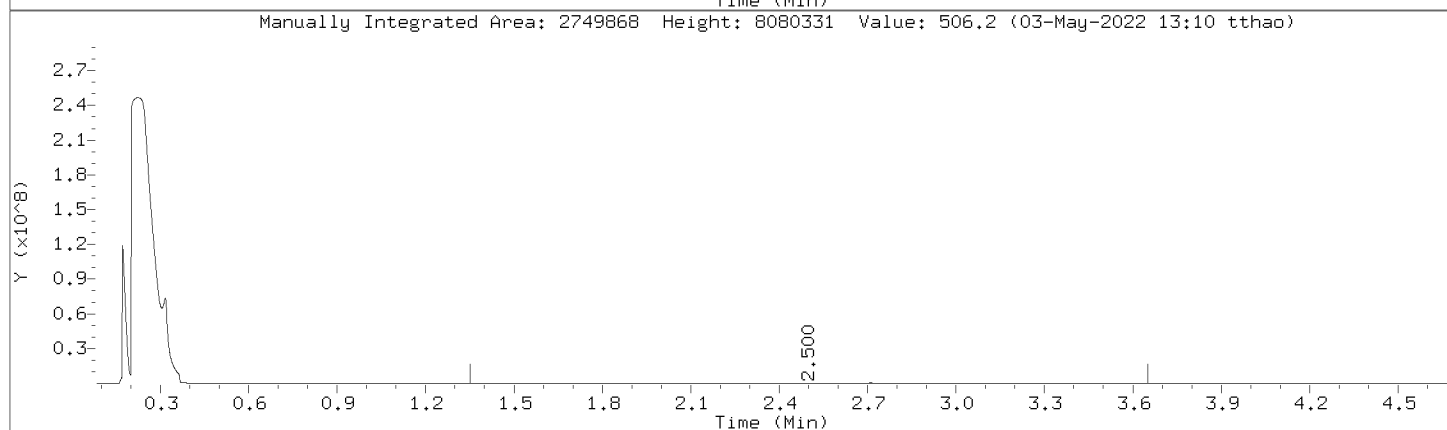
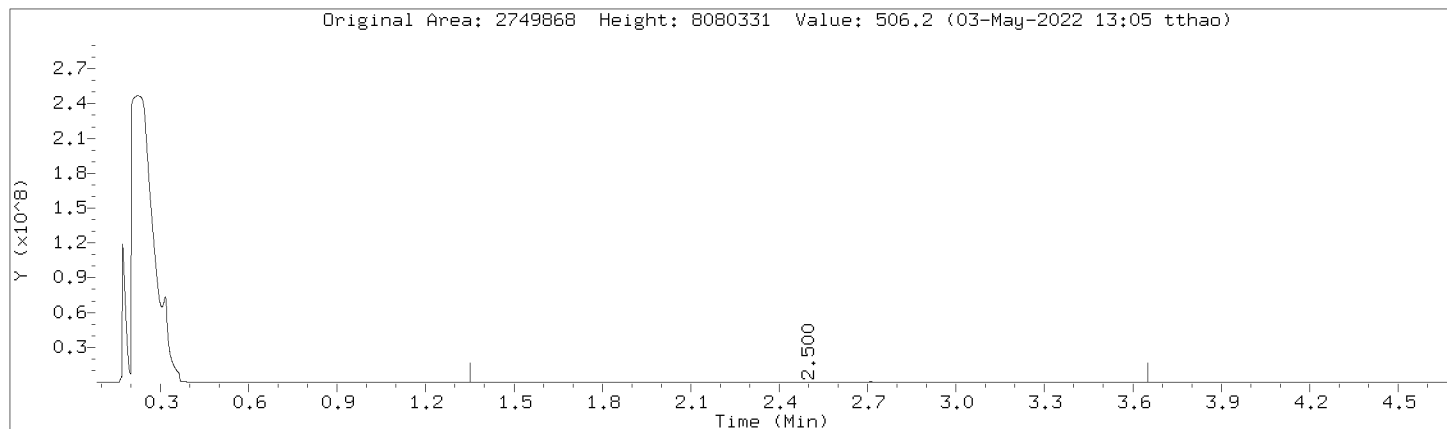
Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





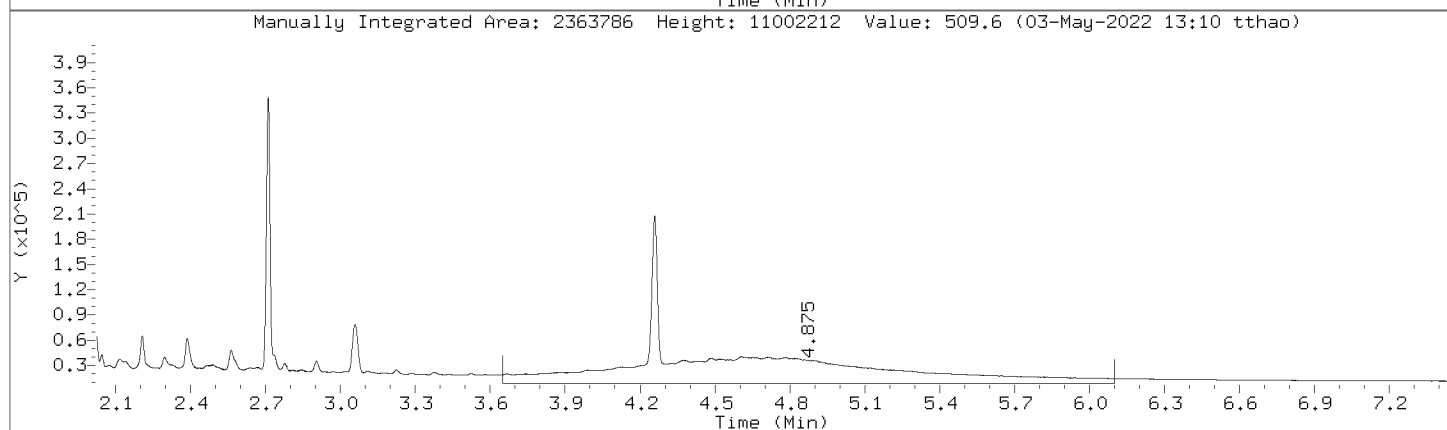
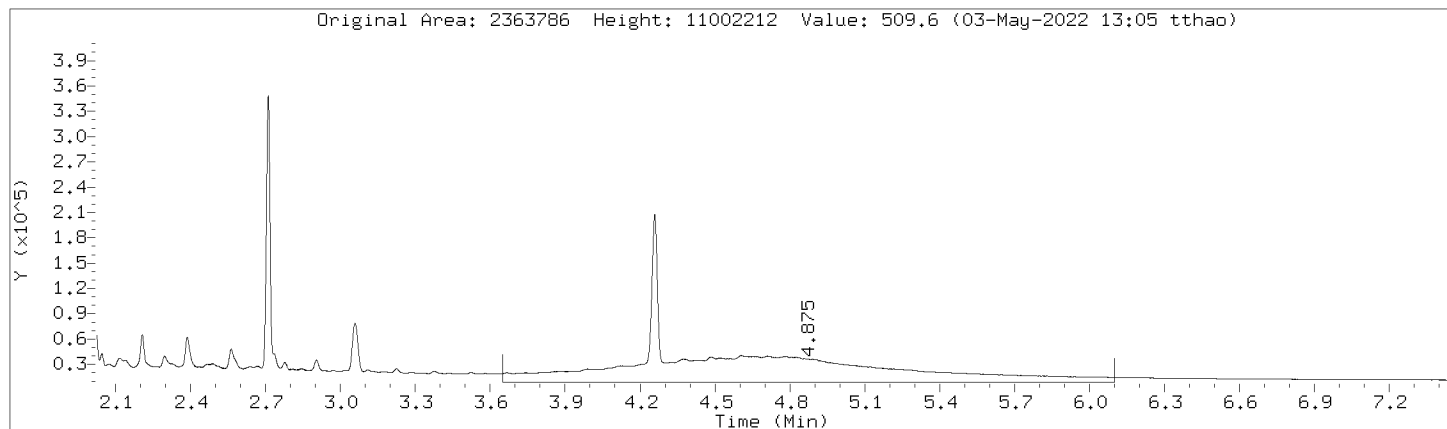
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Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



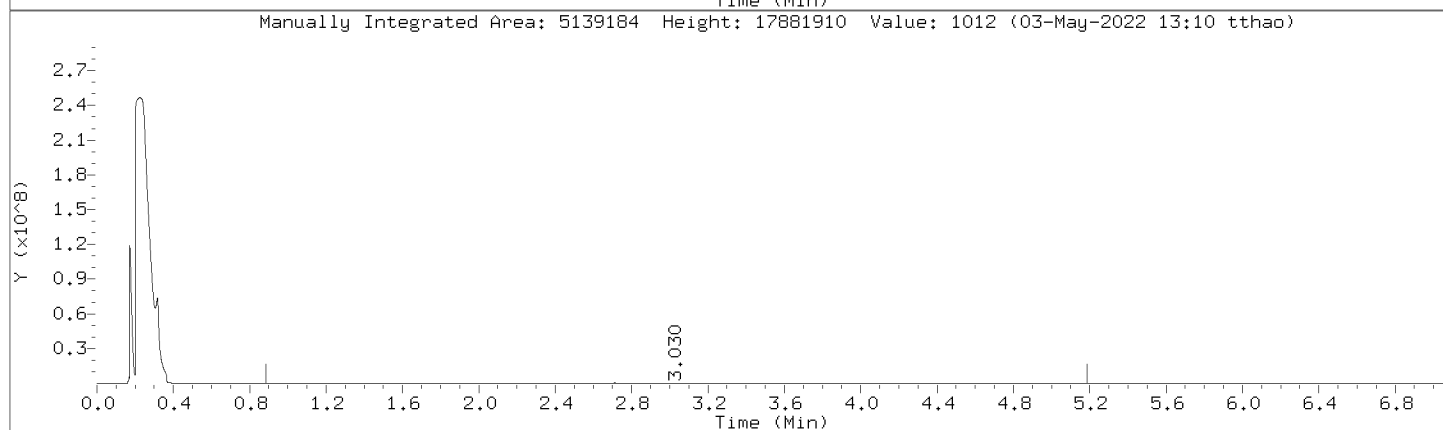
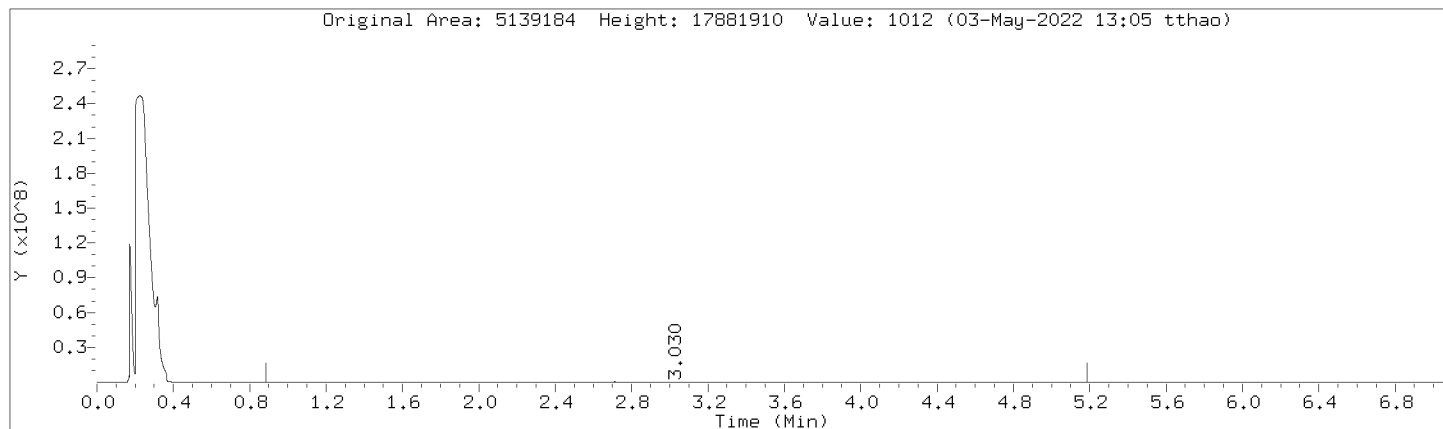
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000041.D  
Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



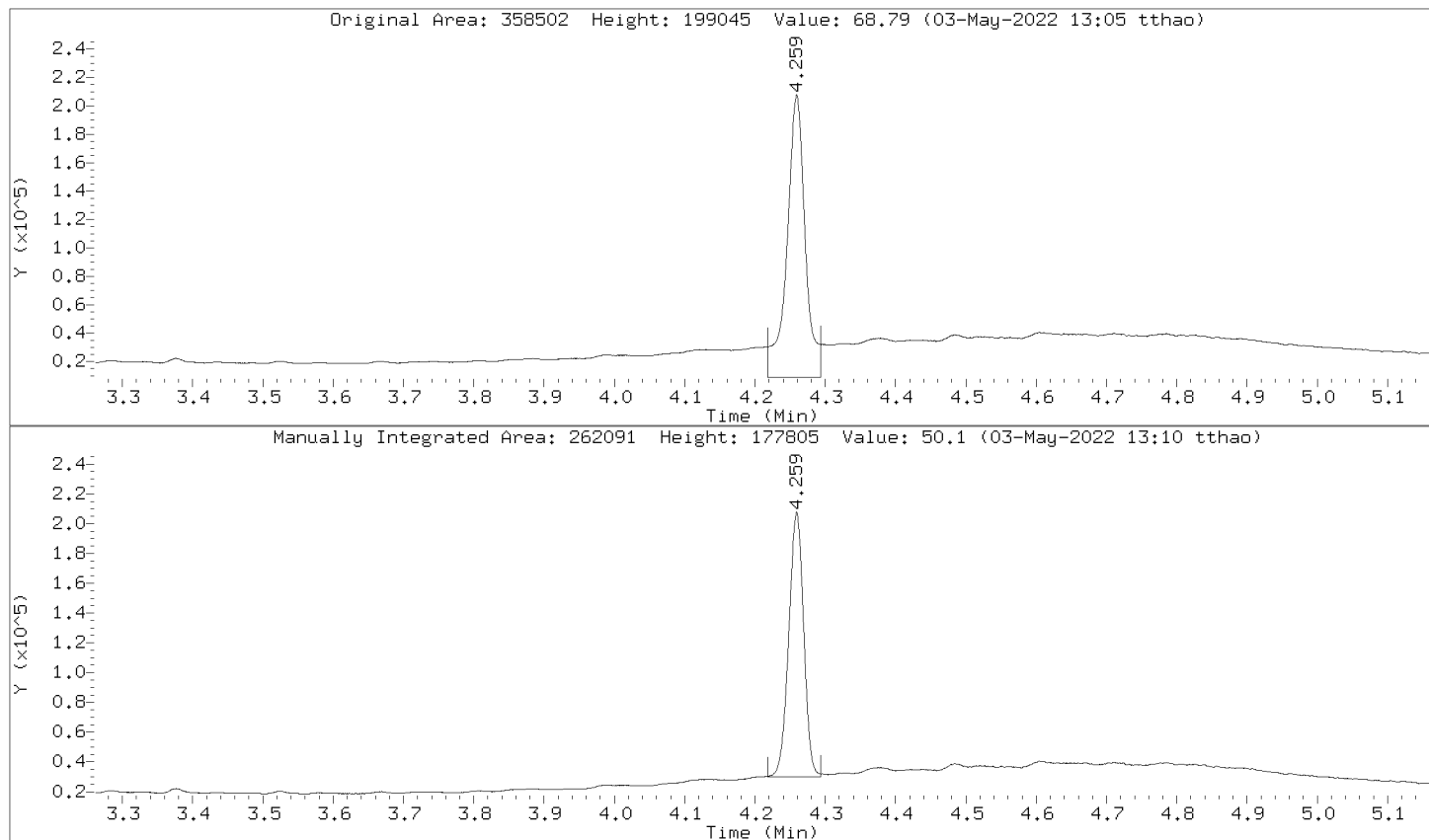
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Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



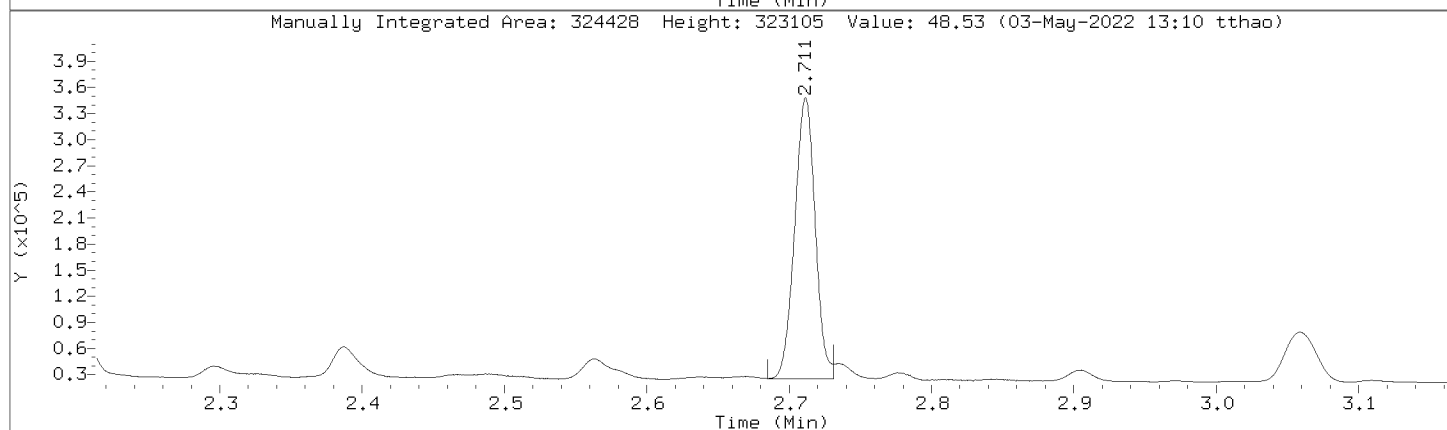
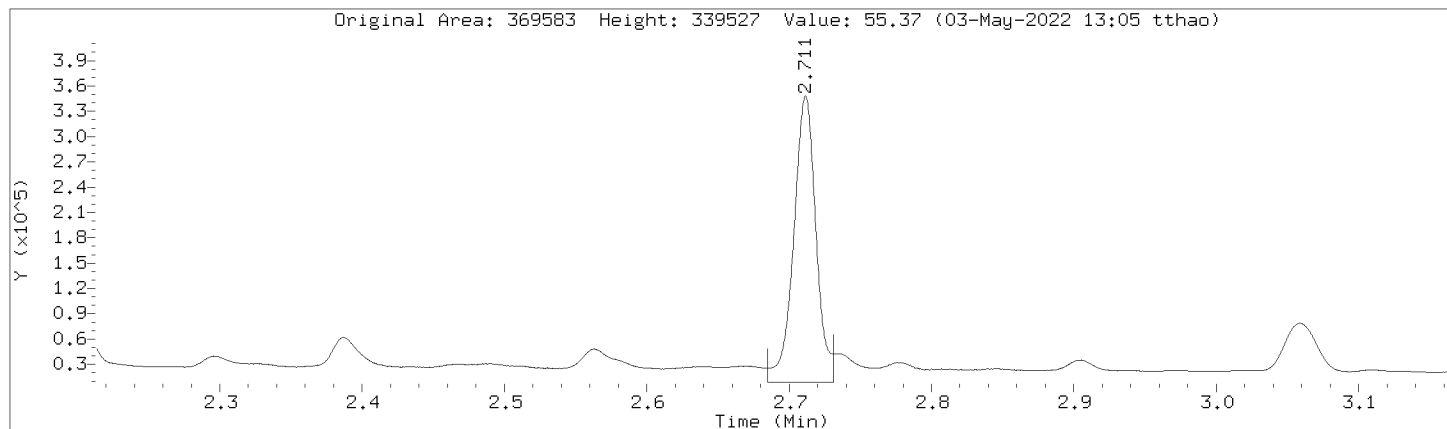
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000041.D  
Injection Date: 02-MAY-2022 21:10  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000041.D  
 Injection Date: 02-MAY-2022 21:10  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,363721:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1877802	1877802
DRO by AK 102	3261382	3261382
TPH-DRO (C10-C28)	3752324	3752324
Motor Oil Range (C24-C36)	1969662	1969662
Diesel Fuel Range	2749868	2749868
Motor Oil Range	2363786	2363786
Diesel Fuel Range SG	2749868	2749868
Motor Oil Range SG	2363786	2363786
C10-C36	5139184	5139184
n-Triacontane (S)	358502	262091
o-Terphenyl (S)	369583	324428

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AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000035.D  
 Lab Smp Id: DMO-ICV,365117:2 Client Smp ID: DMO-ICV,365117:2  
 Inj Date : 09-MAY-2022 17:27  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-icv,365117:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050922F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 10-May-2022 06:35 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 13 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	(ug/mL)	(ug/mL)	=====
S 1	DRO by AK 102			CAS #:	
0.800	- 3.380		2988000 500.000	520	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.565	2.565 0.000		296261 50.0000	48.7	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.017	4.017 0.000		246705 50.0000	50.7	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.381	- 4.820		1737328 500.000	513	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.800	- 3.950		3425790 500.000	519	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.240	- 4.820		1817086 500.000	513	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.800	- 4.820		4725328 1000.00	1030	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.240	- 3.430		2521516 500.000	521	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.240	- 3.430		2521516 500.000	521	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.431	- 5.330		2096826 500.000	510	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.431	- 5.330		2096826 500.000	510	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 09-MAY-2022 17:27

Client ID: DMO-ICV,365117:2

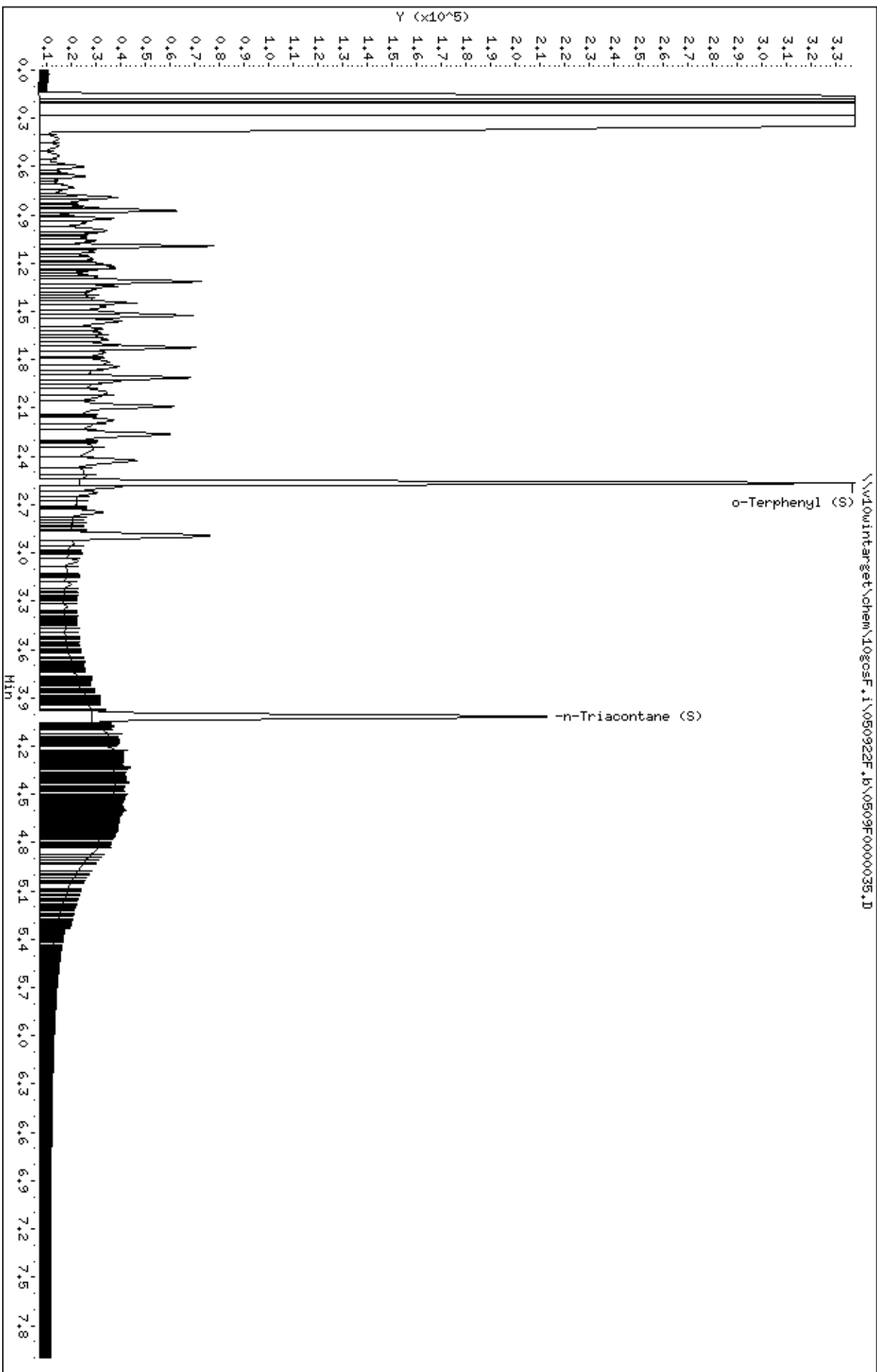
Sample Info: DMO-ICV,365117:2

Instrument: 10gcsf.1

Operator: TT2

Column phase: DB-5-MS21390001

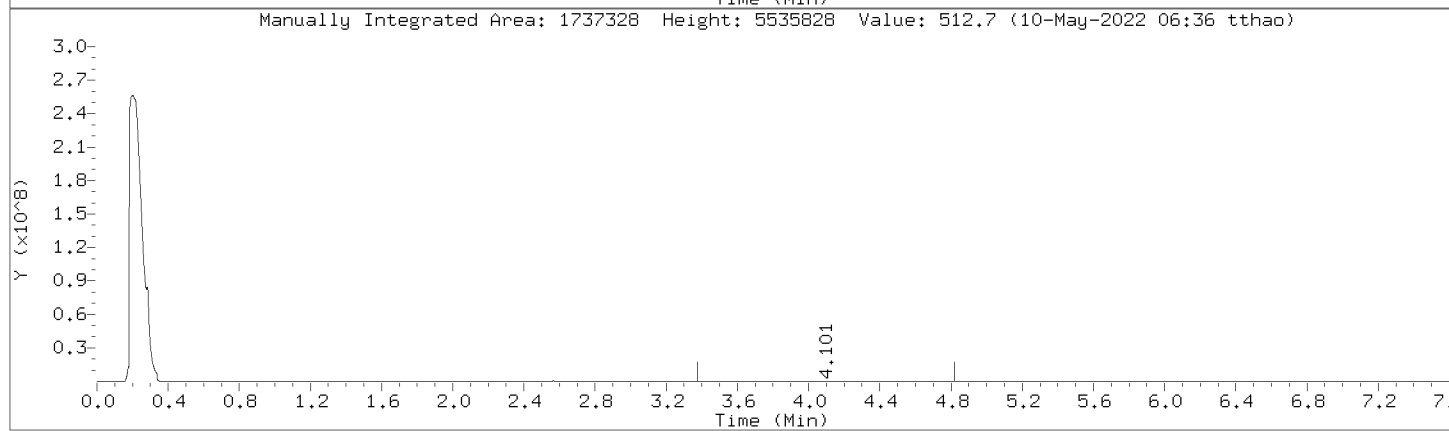
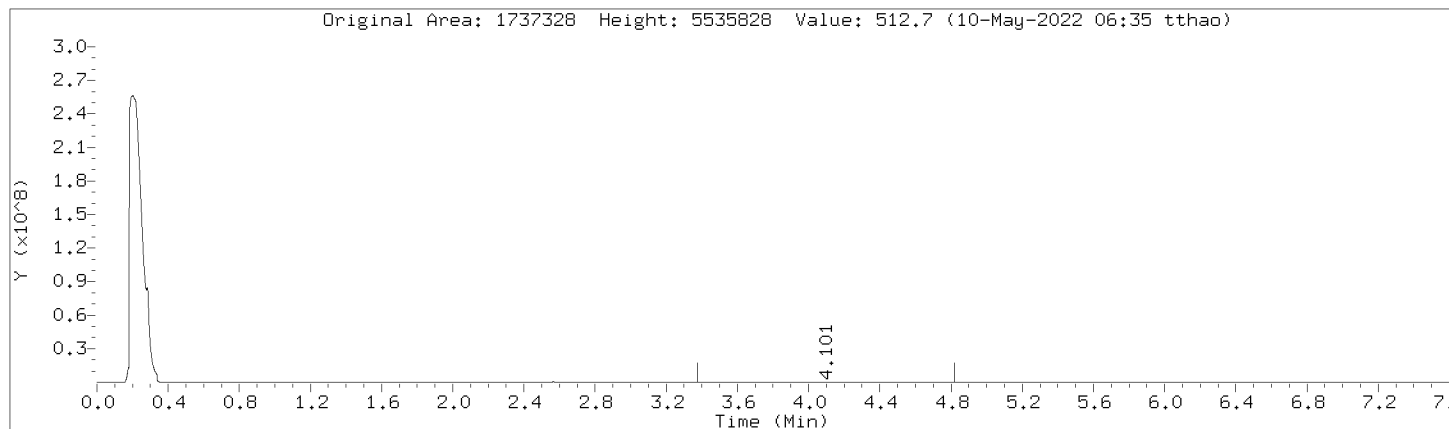
Column diameter: 0.32





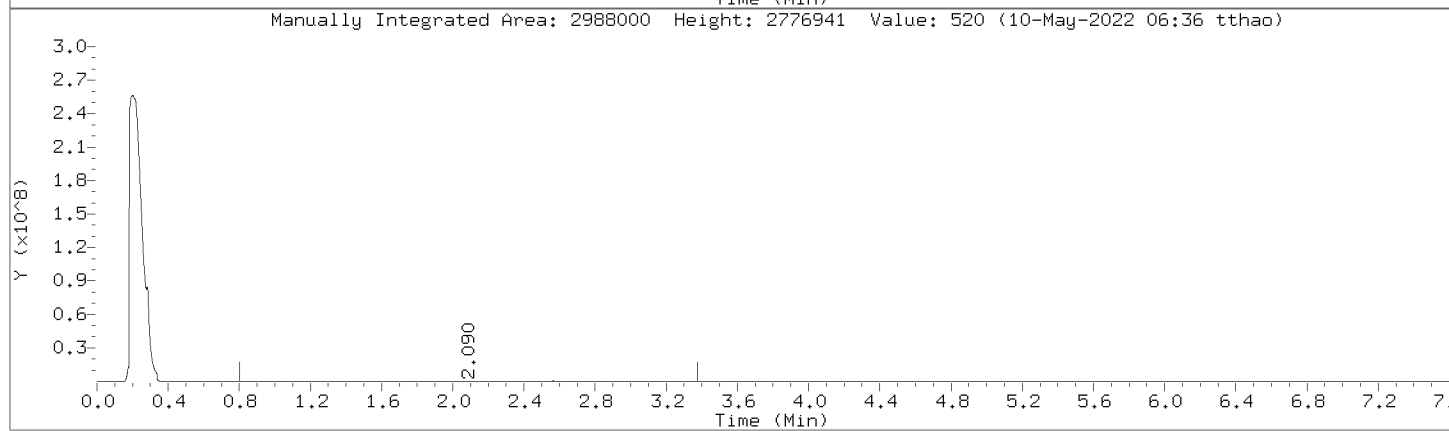
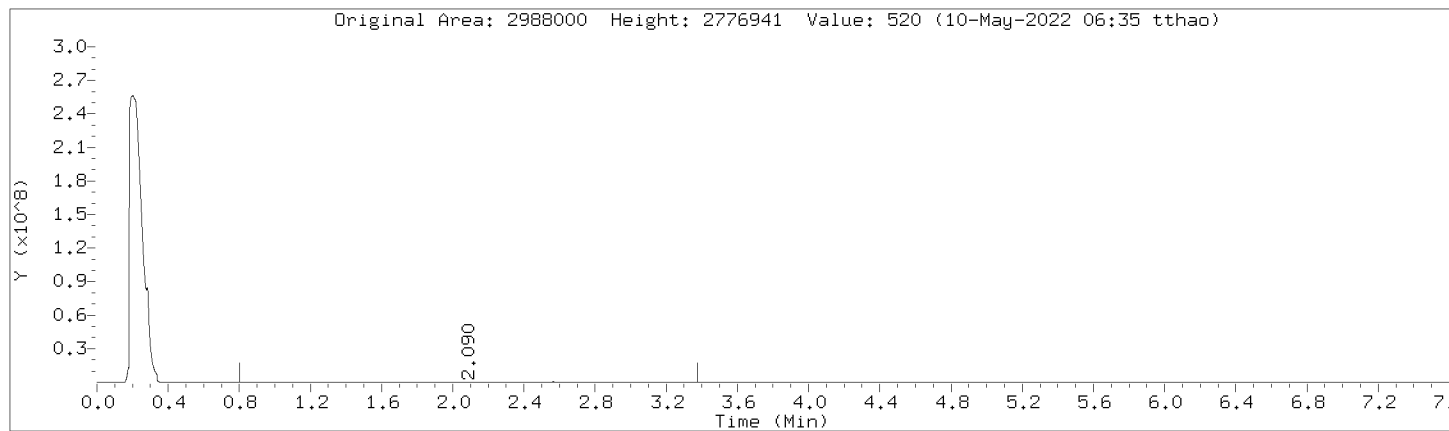
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000035.D  
Injection Date: 09-MAY-2022 17:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,365117:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



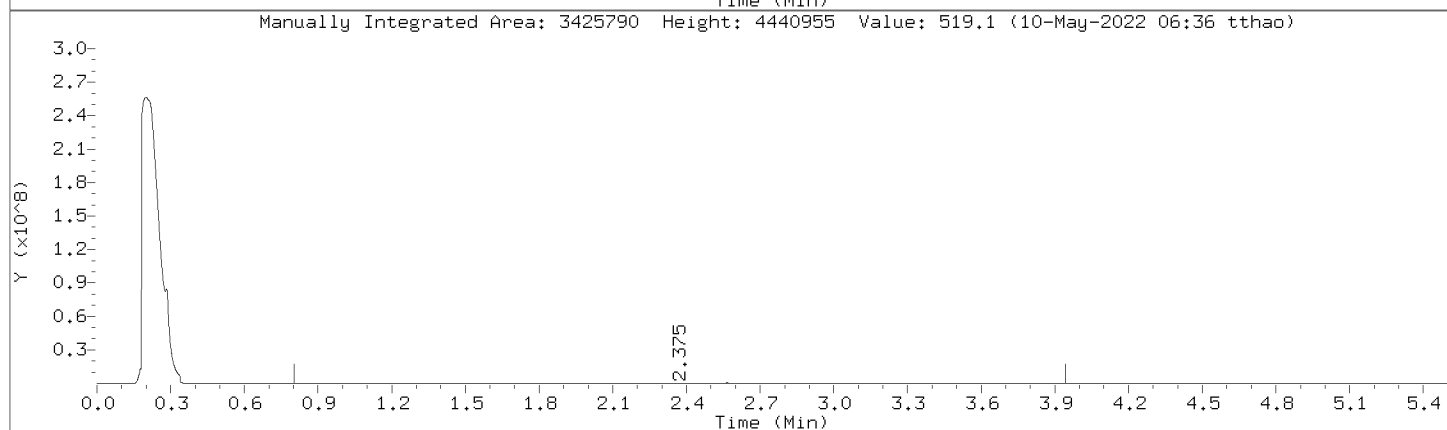
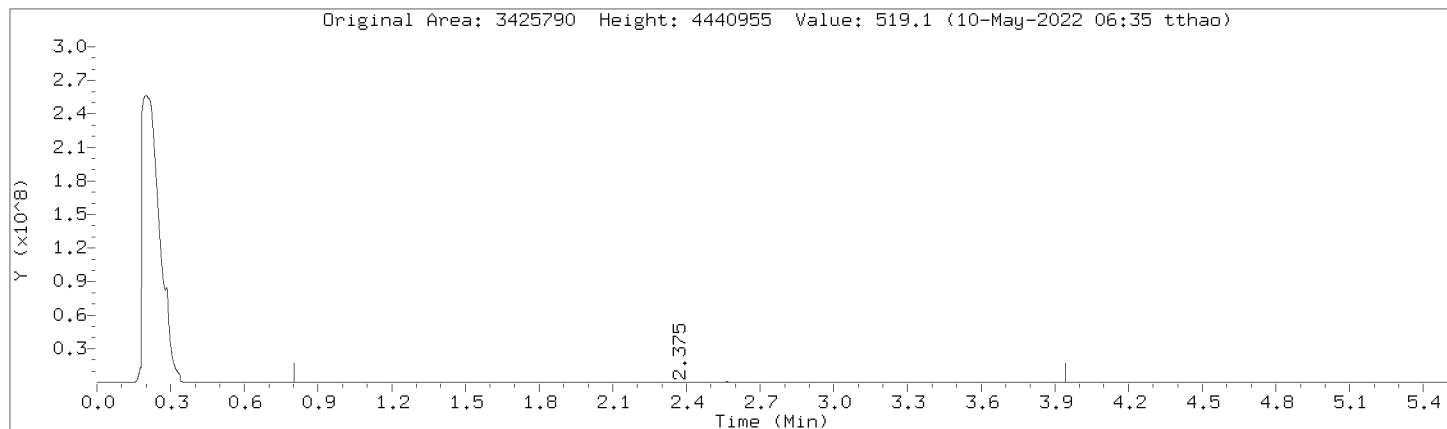
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000035.D  
Injection Date: 09-MAY-2022 17:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,365117:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



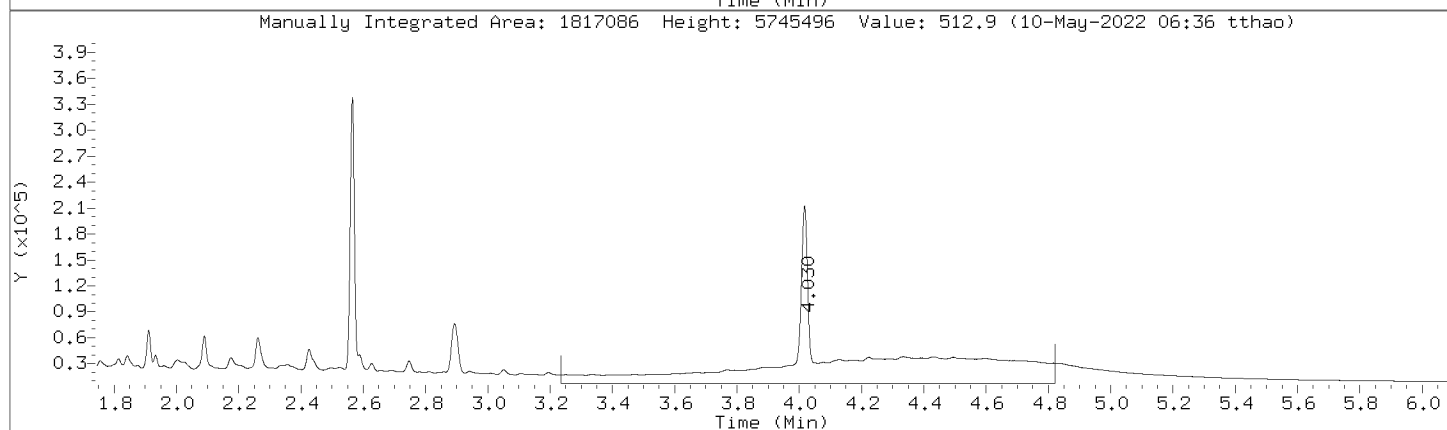
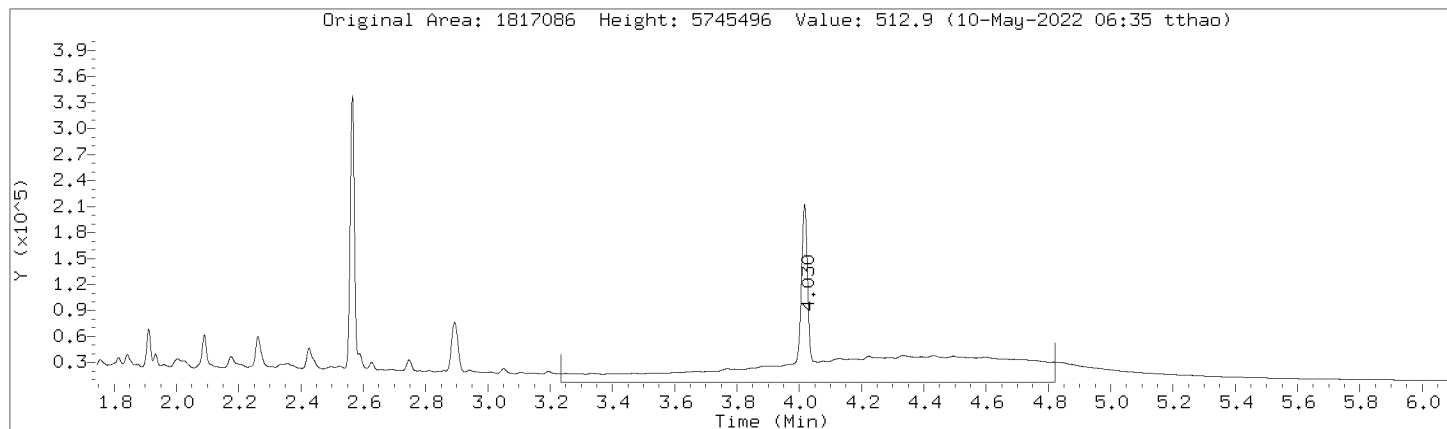
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Injection Date: 09-MAY-2022 17:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,365117:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



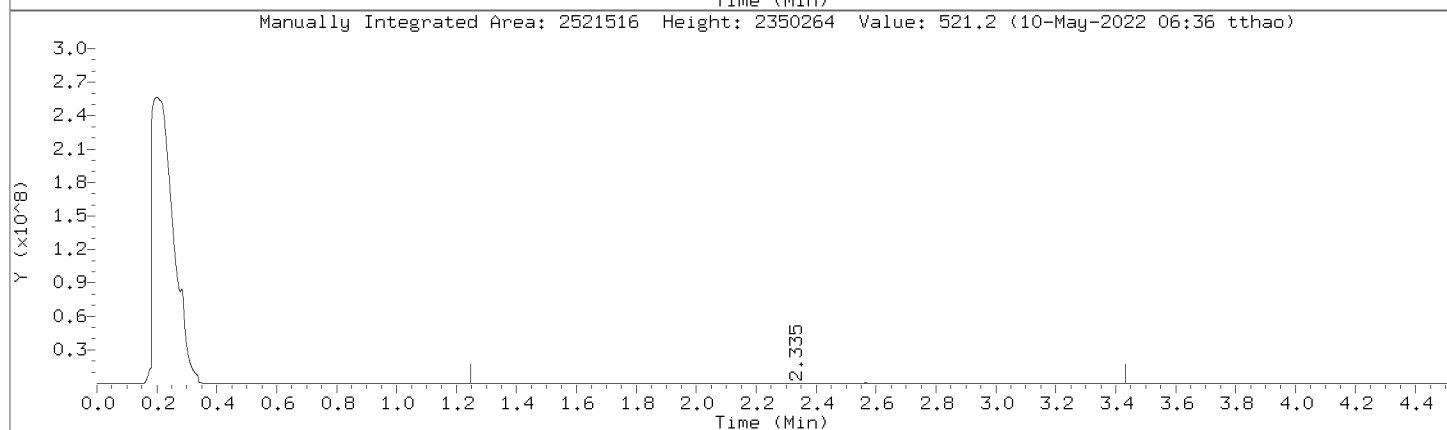
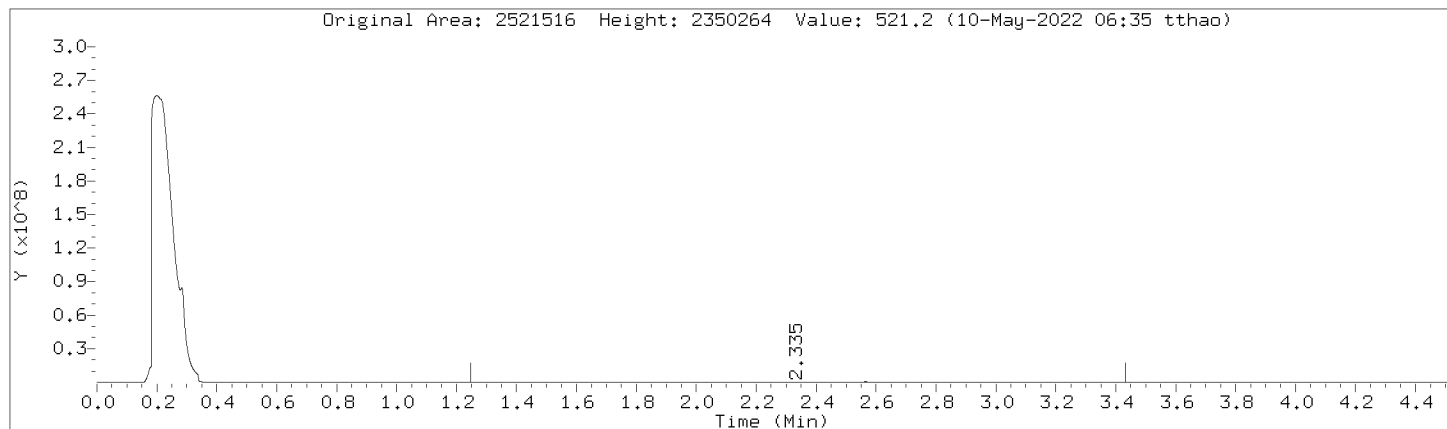
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000035.D  
Injection Date: 09-MAY-2022 17:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,365117:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



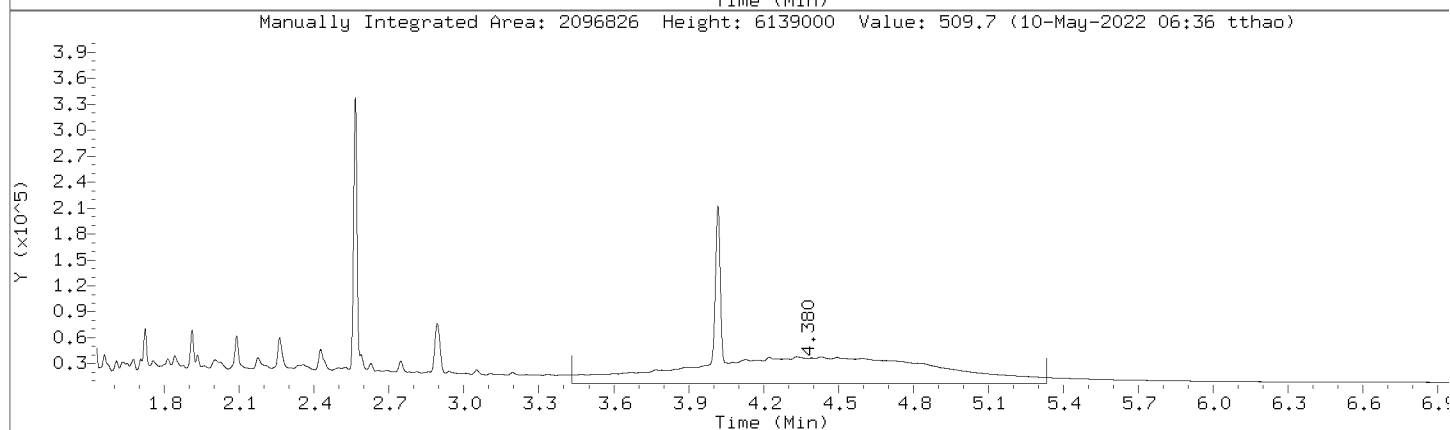
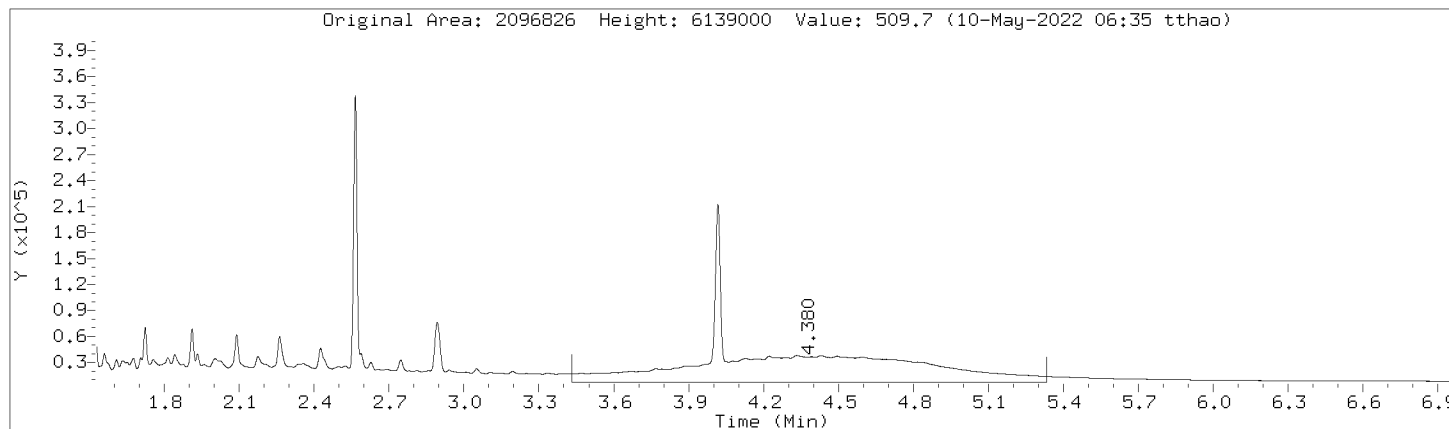
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000035.D  
Injection Date: 09-MAY-2022 17:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,365117:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000035.D  
Injection Date: 09-MAY-2022 17:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,365117:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000035.D

Injection Date: 09-MAY-2022 17:27

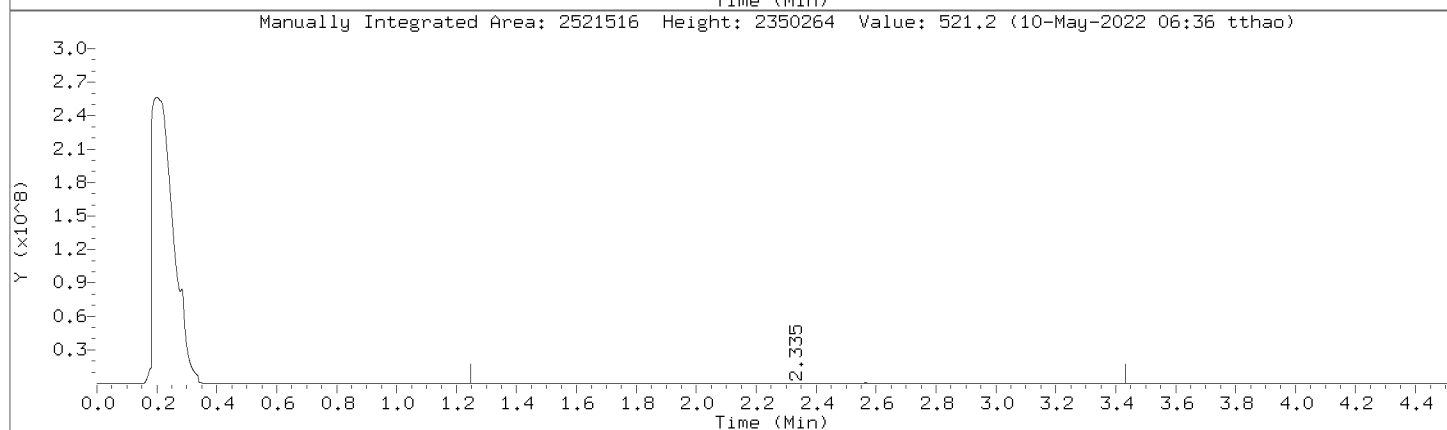
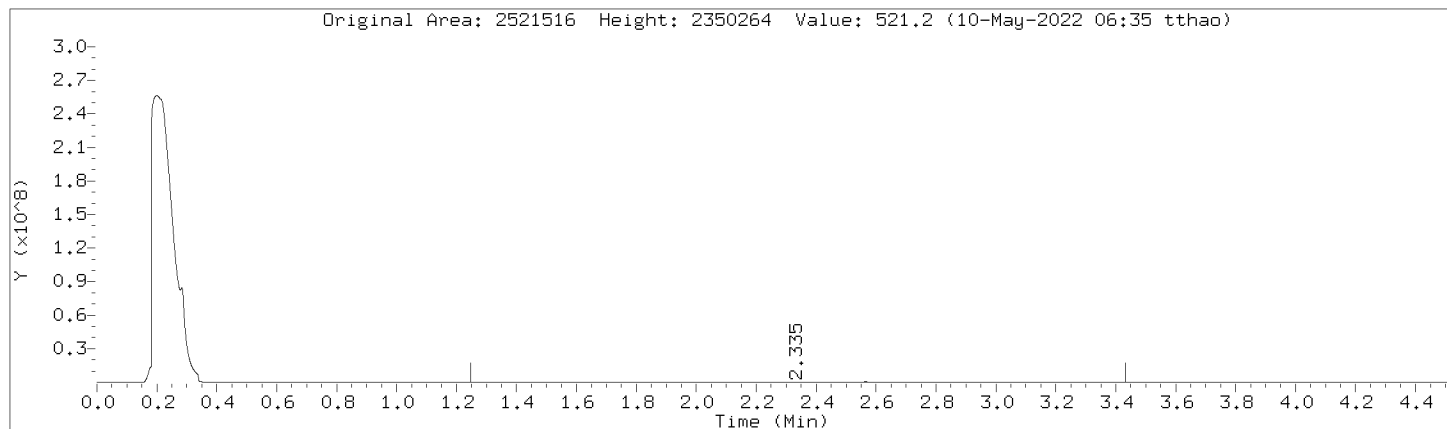
Instrument: 10gcsF.i

Lab Sample ID: DMO-ICV,365117:2

Compound: Diesel Fuel Range SG

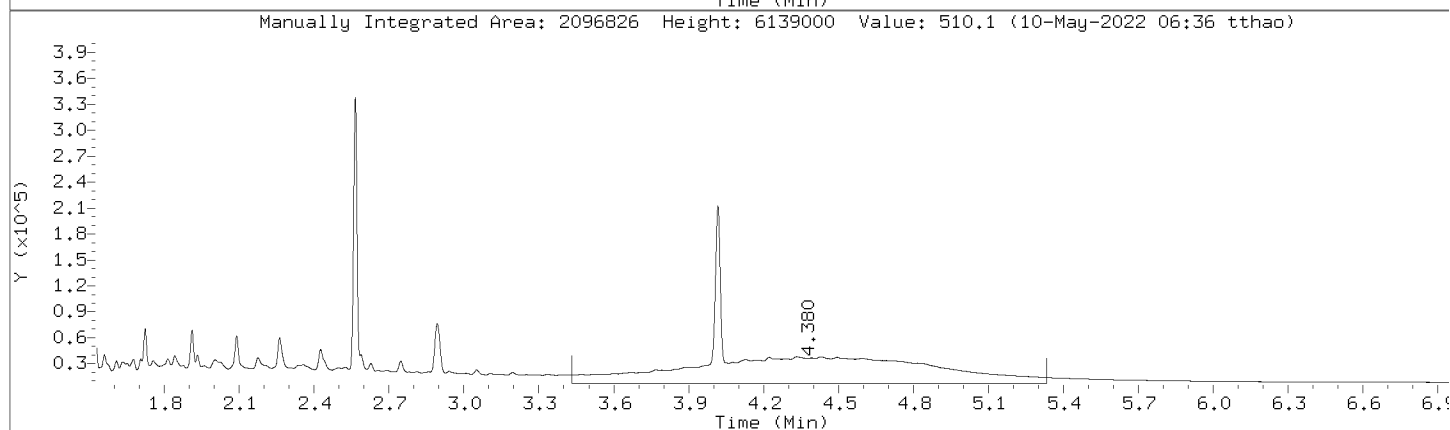
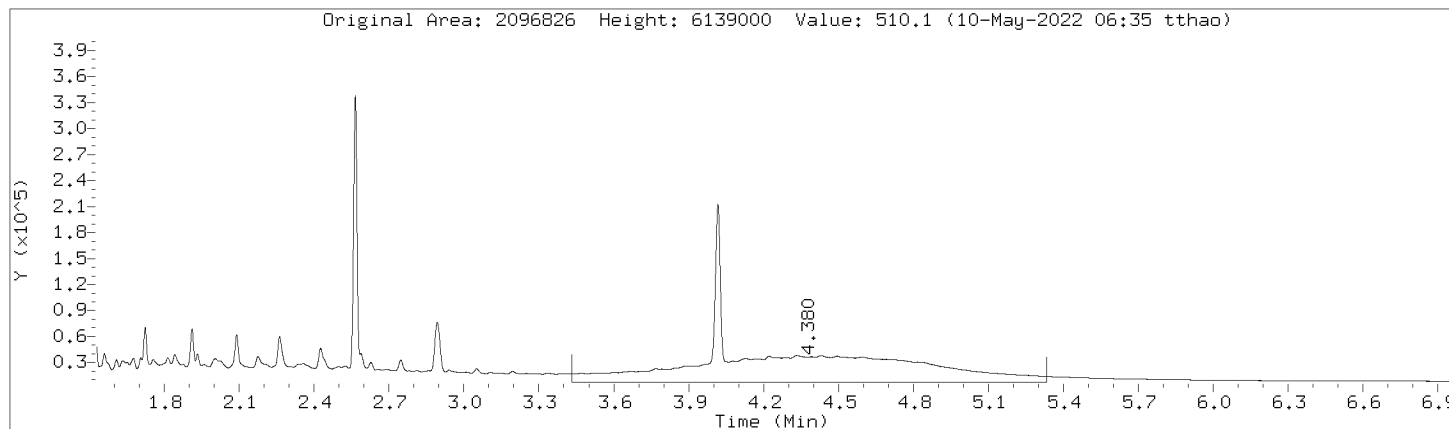
Review Code: RNG

CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000035.D  
Injection Date: 09-MAY-2022 17:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,365117:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000035.D

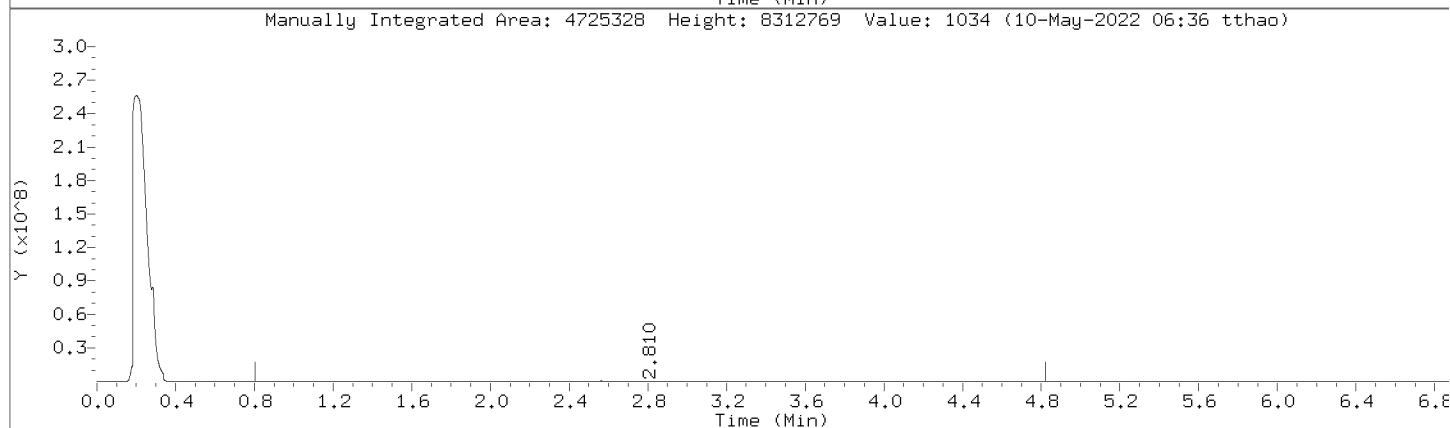
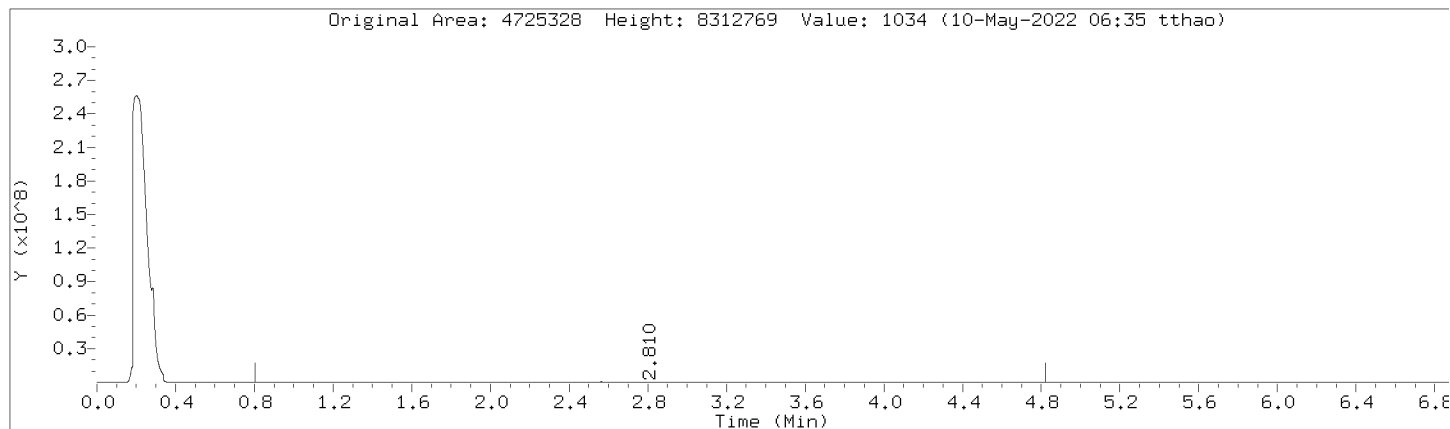
Injection Date: 09-MAY-2022 17:27

Instrument: 10gcsF.i

Lab Sample ID: DMO-ICV,365117:2

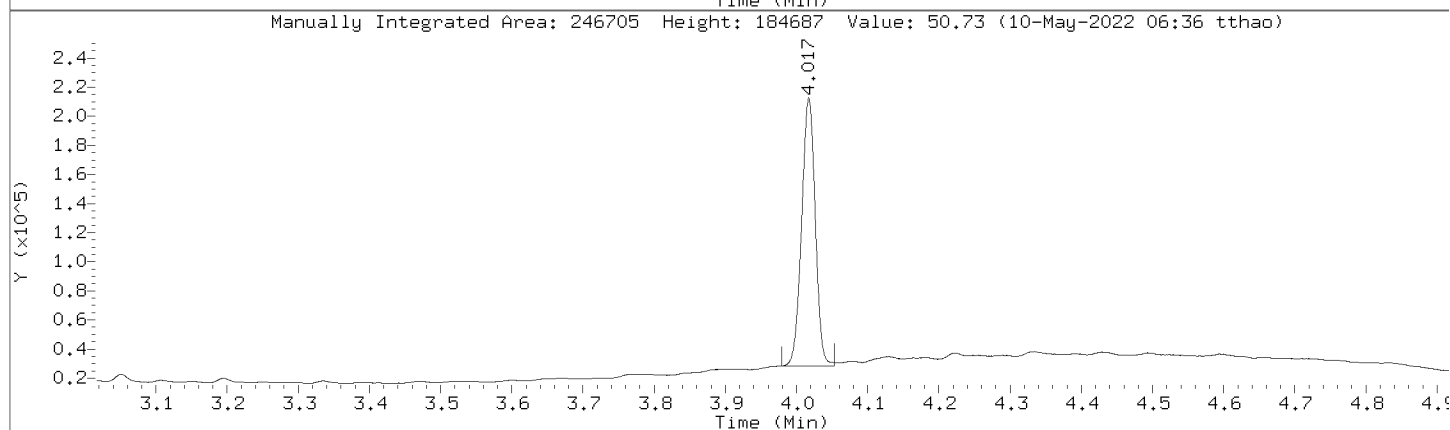
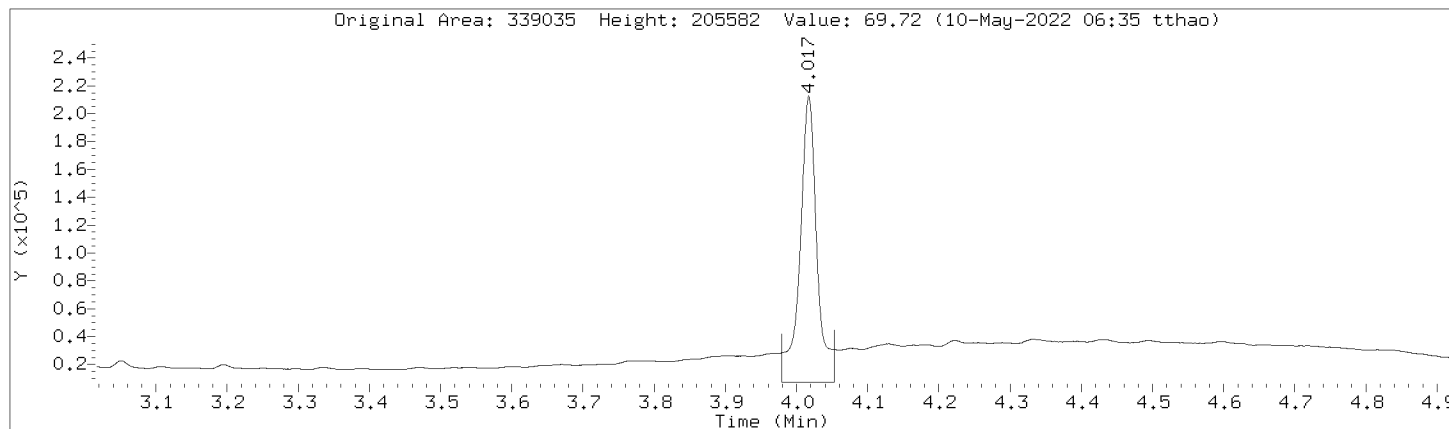
Compound: C10-C36      Review Code: RNG

CAS Number:



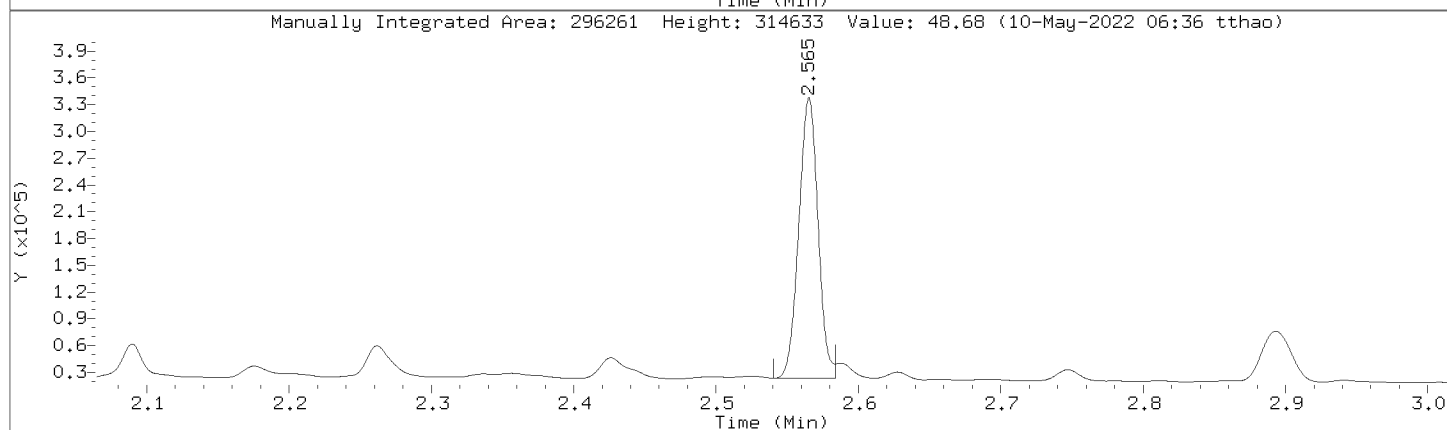
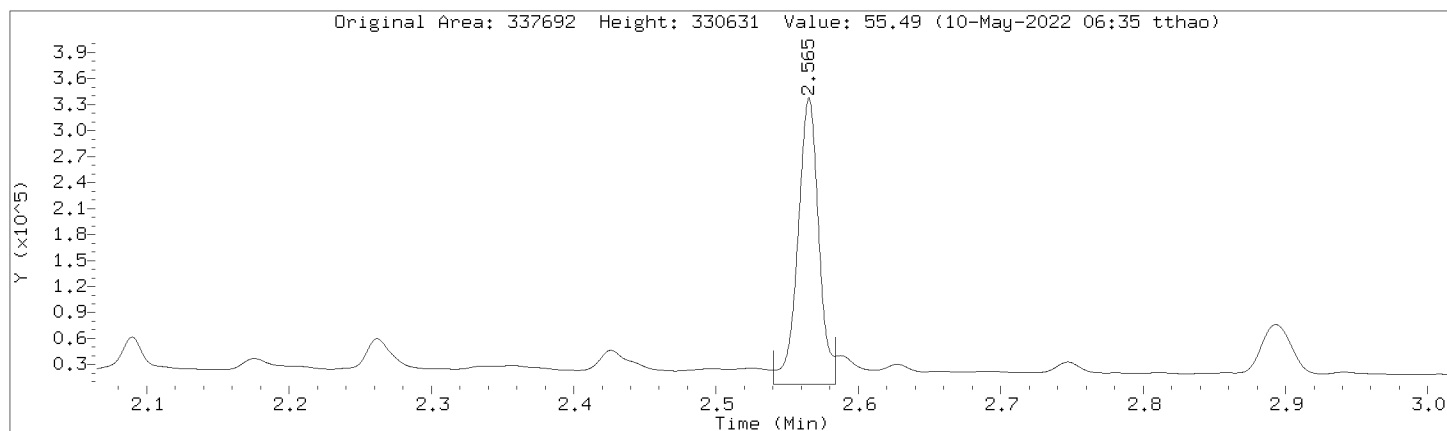
Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000035.D  
Injection Date: 09-MAY-2022 17:27  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-ICV,365117:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050922F.b\0509F0000035.D  
 Injection Date: 09-MAY-2022 17:27  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-ICV,365117:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1737328	1737328
DRO by AK 102	2988000	2988000
TPH-DRO (C10-C28)	3425790	3425790
Motor Oil Range (C24-C36)	1817086	1817086
Diesel Fuel Range	2521516	2521516
Motor Oil Range	2096826	2096826
Diesel Fuel Range SG	2521516	2521516
Motor Oil Range SG	2096826	2096826
C10-C36	4725328	4725328
n-Triacontane (S)	339035	246705
o-Terphenyl (S)	337692	296261

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000105.D  
 Lab Smp Id: DMO-CCV,363721:2 Client Smp ID: DMO-CCV,363721:2  
 Inj Date : 11-MAY-2022 06:39  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,363721:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\051022F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 11-May-2022 12:52 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 3 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	(ug/mL)	(ug/mL)	=====
S 1	DRO by AK 102			CAS #:	
0.800	- 3.380		3119346 500.000	545	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.566	2.566 0.000		312096 50.0000	51.3	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.023	4.024 -0.001		257662 50.0000	53.0	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.381	- 4.810		1956472 500.000	581	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.800	- 3.940		3599653 500.000	548	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.240	- 4.810		2044919 500.000	581	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.800	- 4.810		5075818 1000.00	1120	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.240	- 3.430		2639473 500.000	548	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.240	- 3.430		2639473 500.000	548	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.431	- 5.300		2419603 500.000	593	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.431	- 5.300		2419603 500.000	593	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 11-MAY-2022 06:39

Client ID: DMO-CCV,363721:2

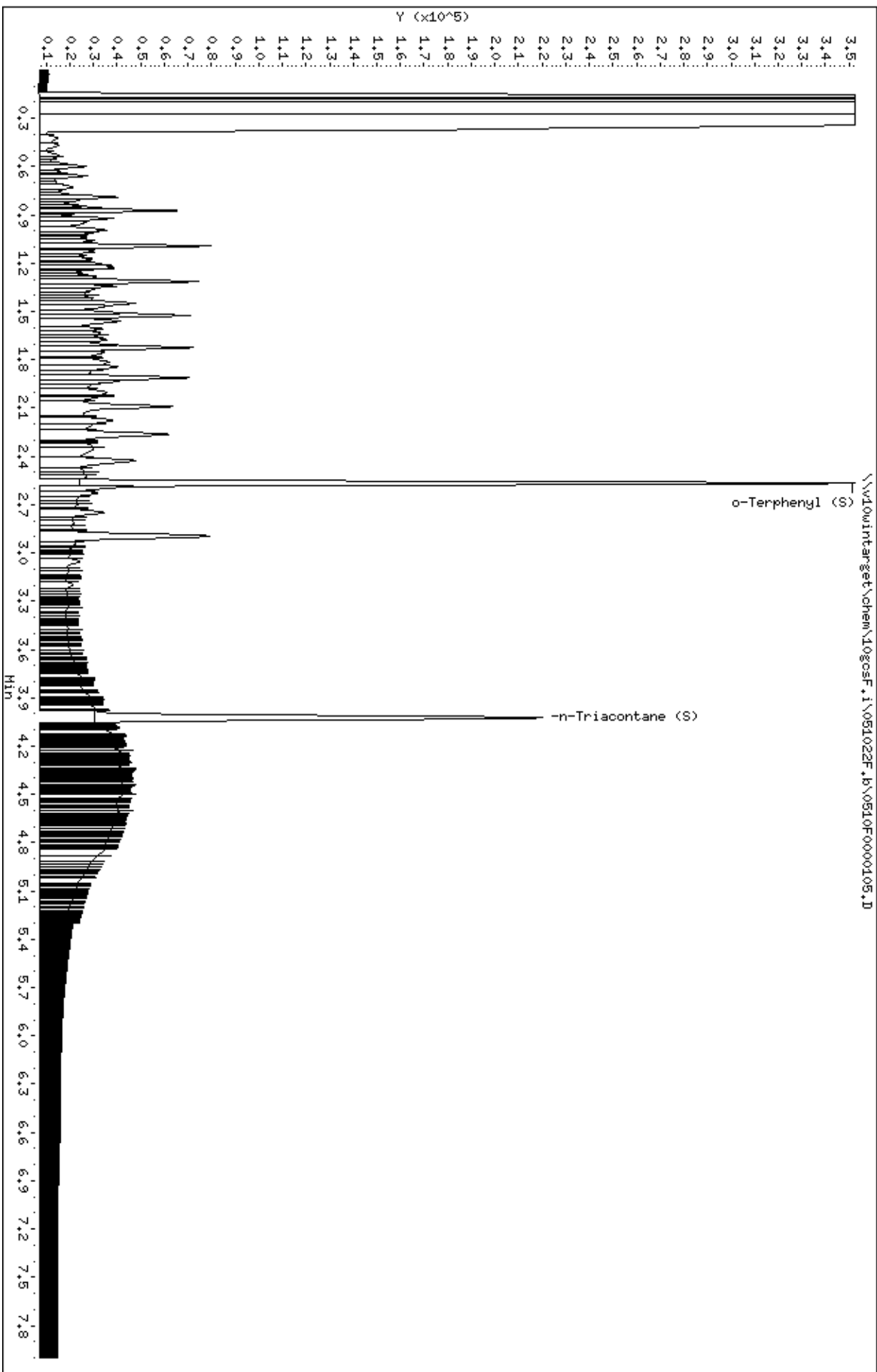
Sample Info: DMO-CCV,363721:2

Instrument: 10gsof.1

Operator: TT2

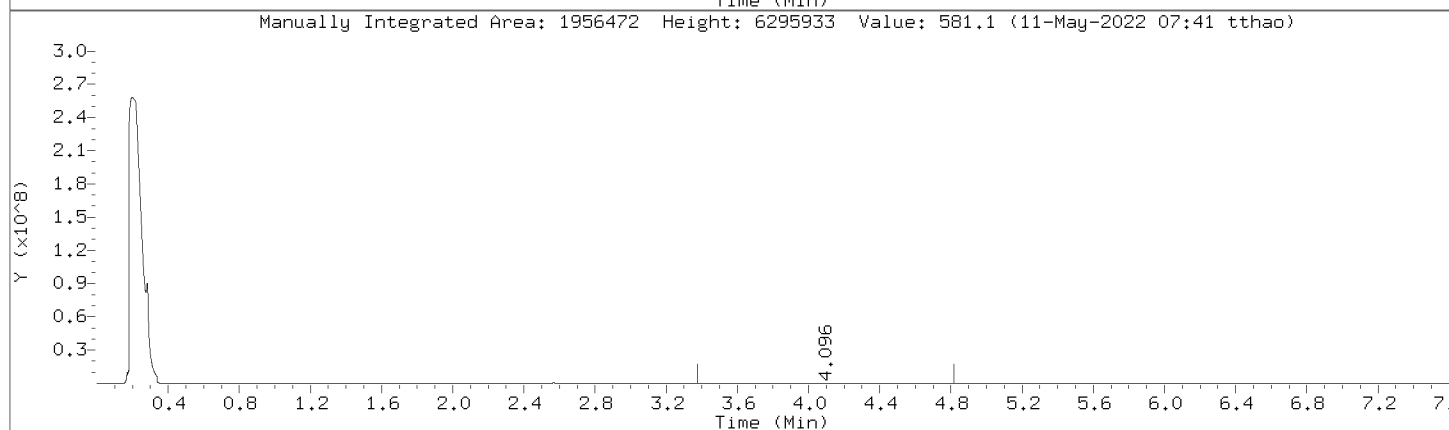
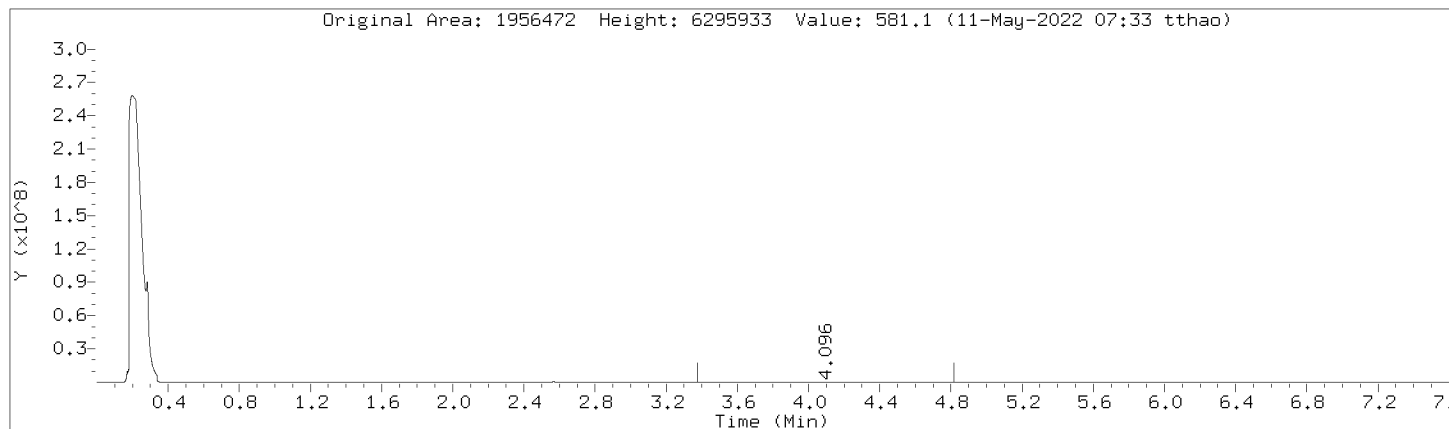
Column phase: DB-5-MS21390001

Column diameter: 0.32



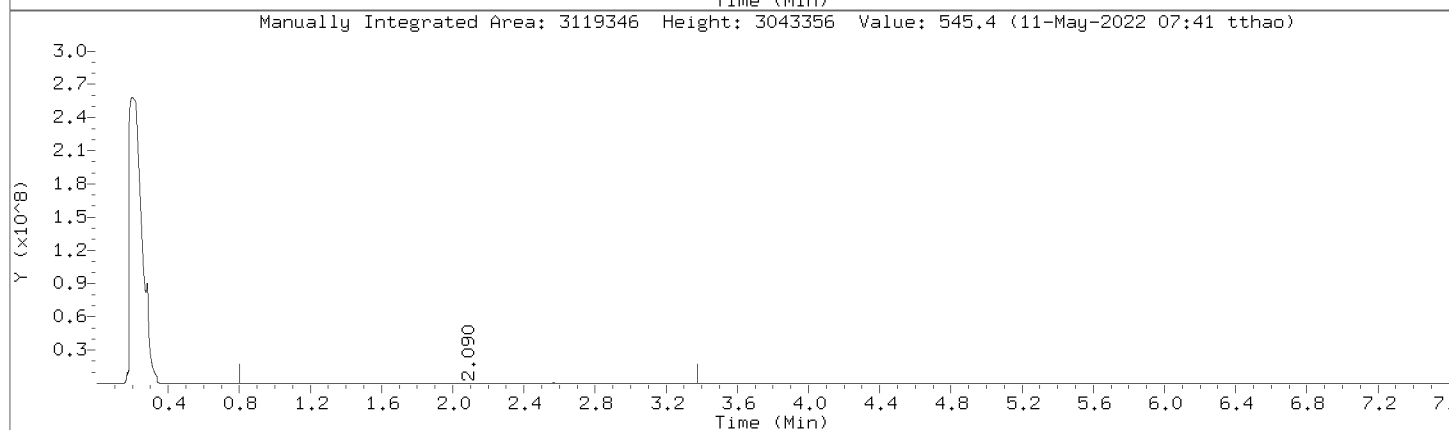
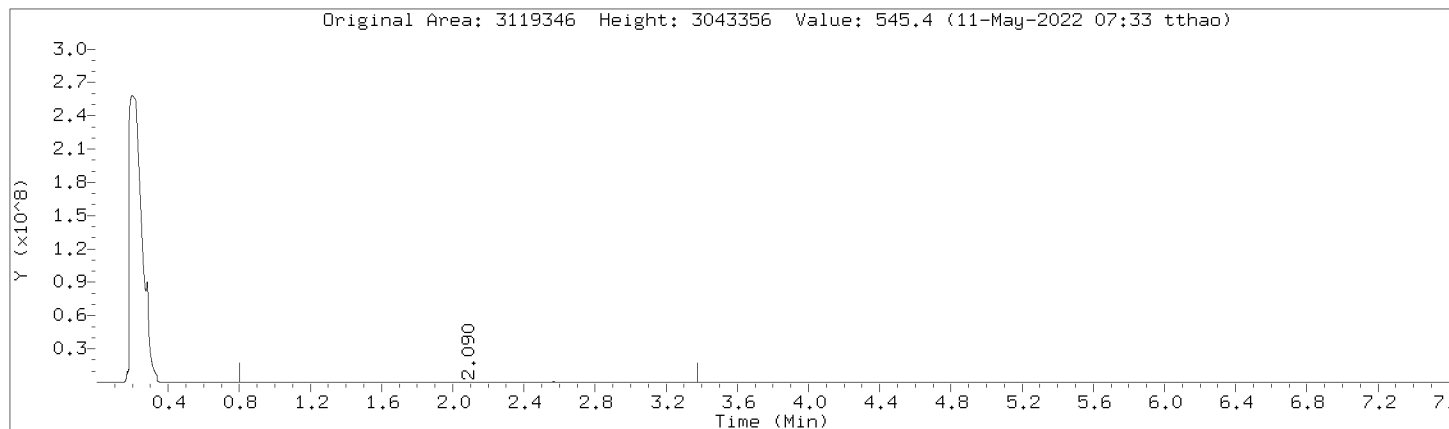
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Injection Date: 11-MAY-2022 06:39  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000105.D  
Injection Date: 11-MAY-2022 06:39  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000105.D

Injection Date: 11-MAY-2022 06:39

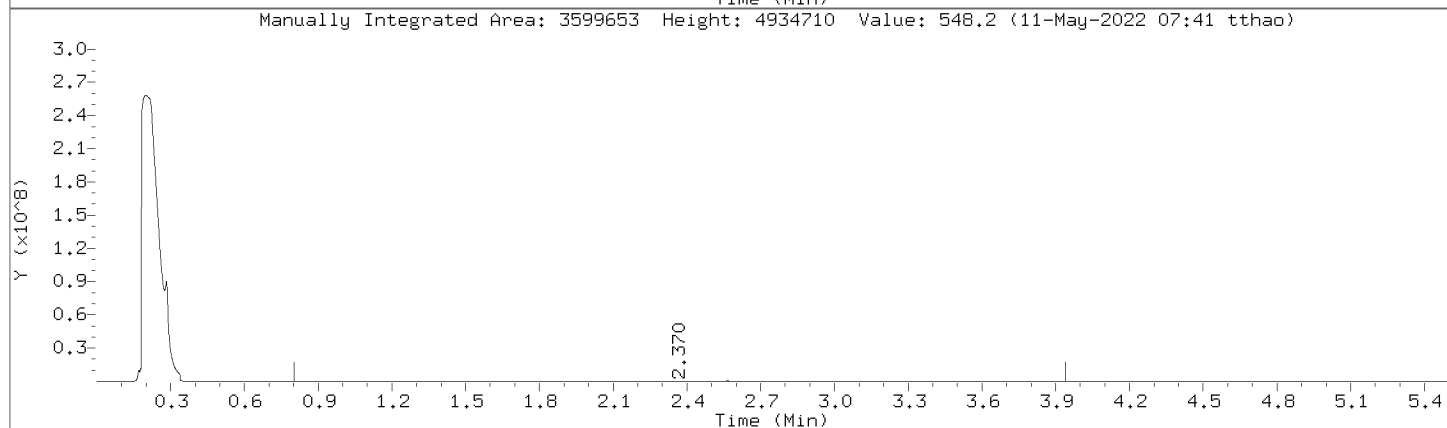
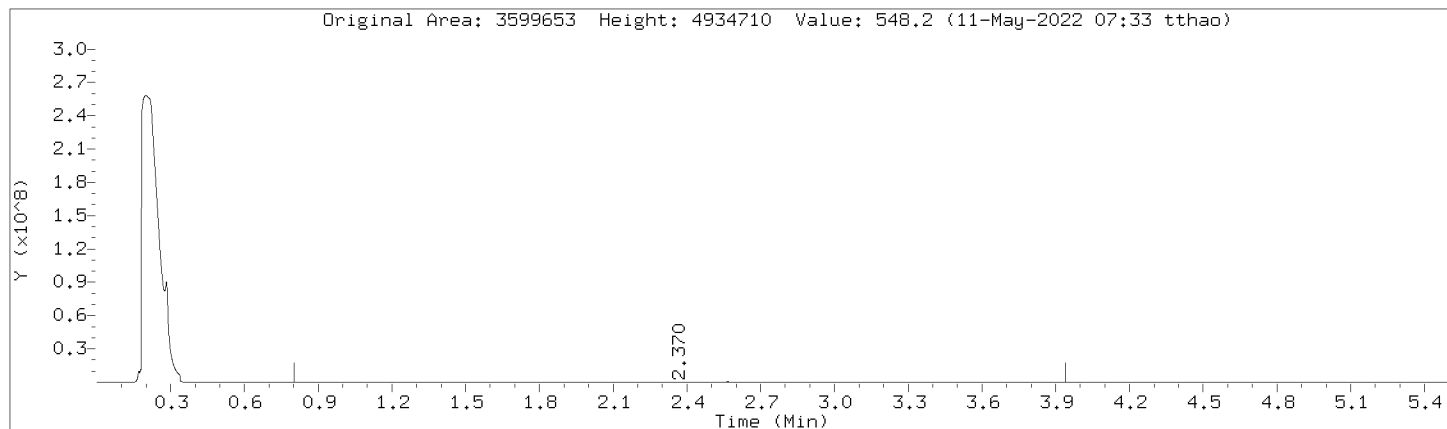
Instrument: 10gcsF.i

Lab Sample ID: DMO-CCV,363721:2

Compound: TPH-DRO (C10-C28)

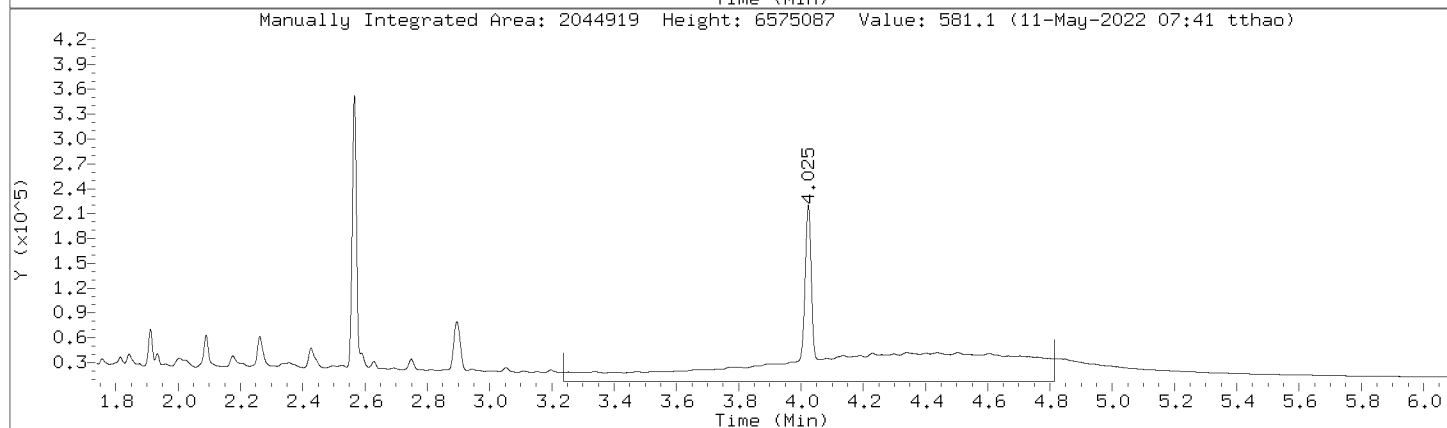
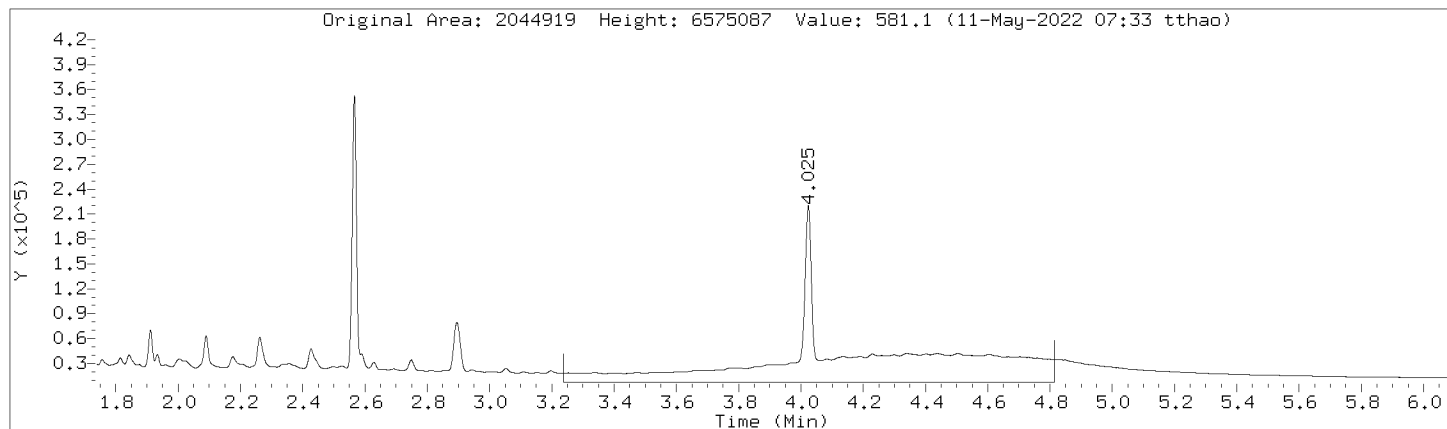
Review Code: RNG

CAS Number:



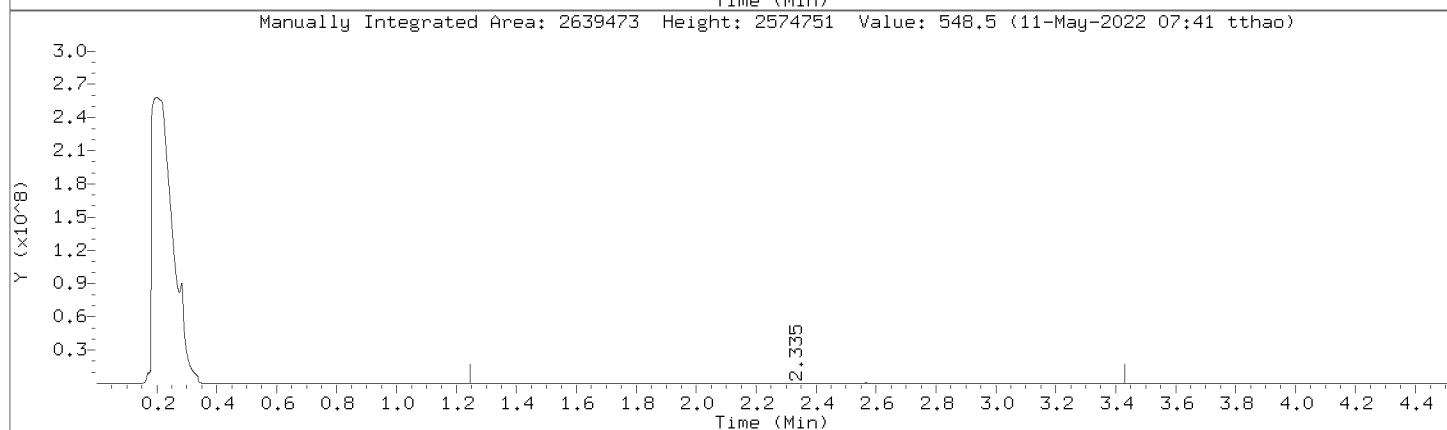
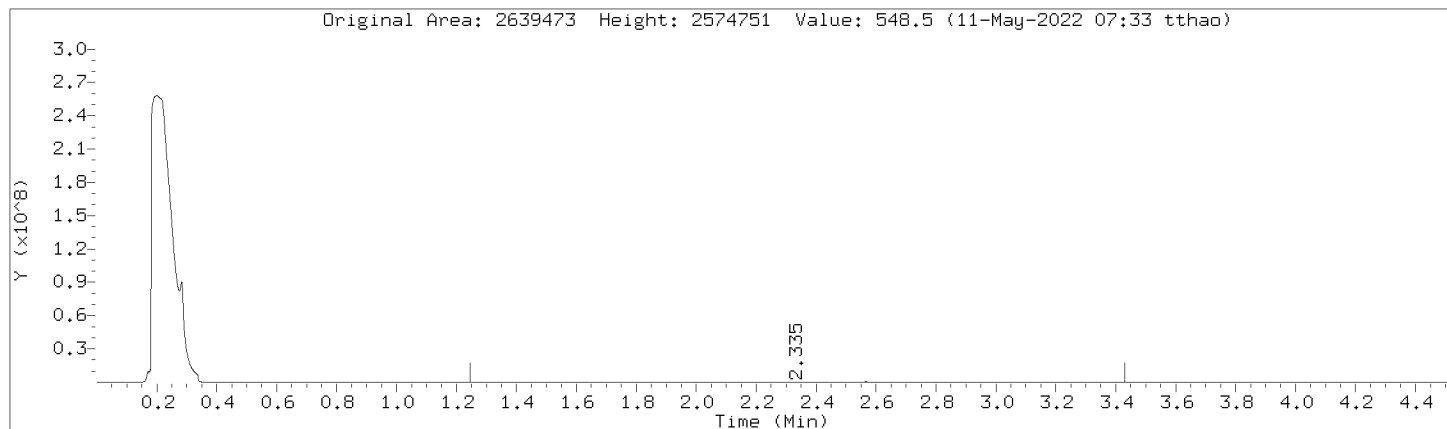
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Injection Date: 11-MAY-2022 06:39  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



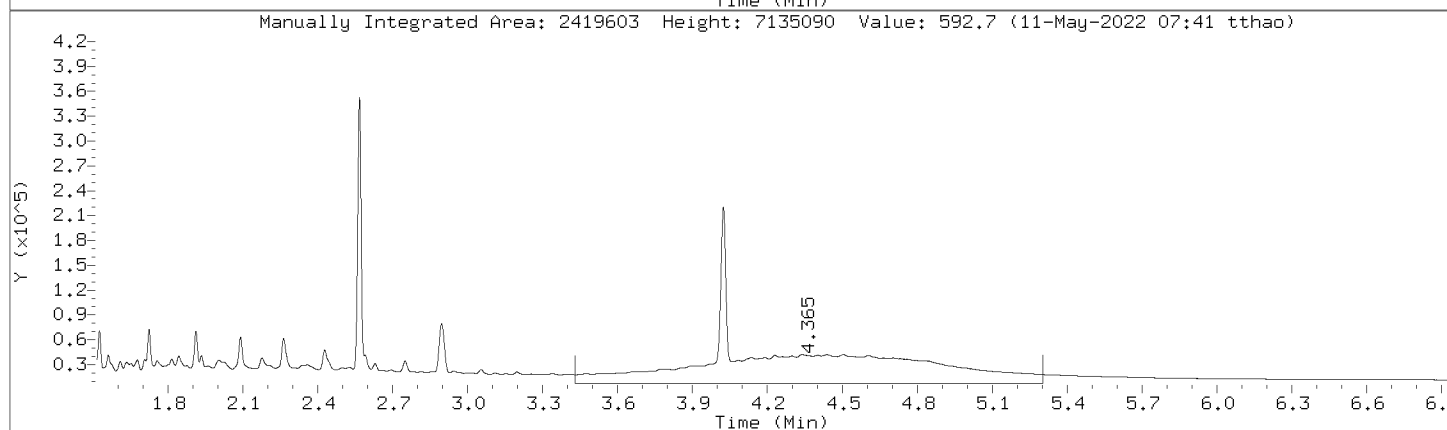
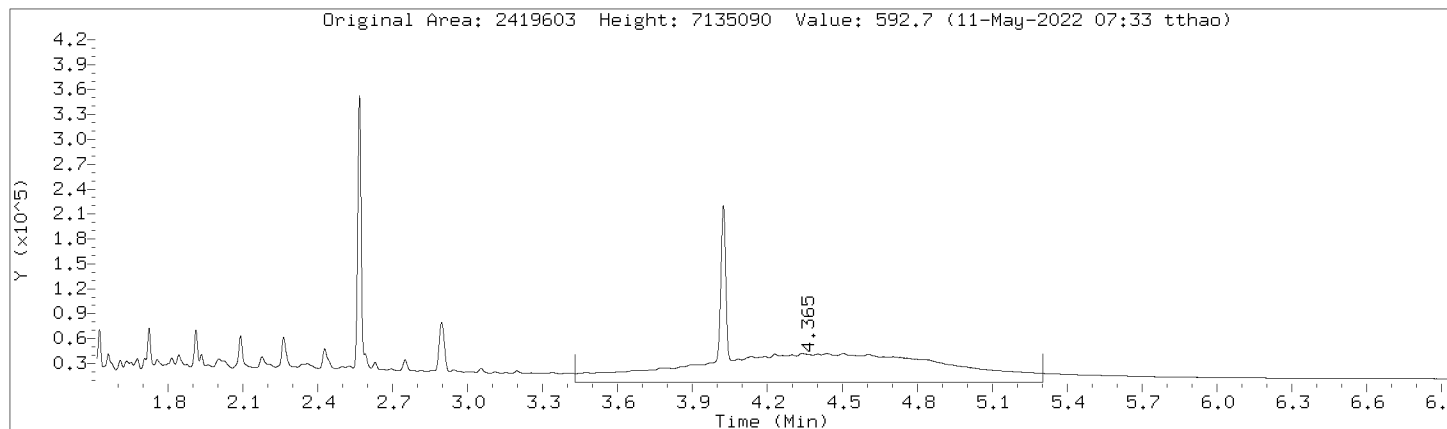
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000105.D  
Injection Date: 11-MAY-2022 06:39  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



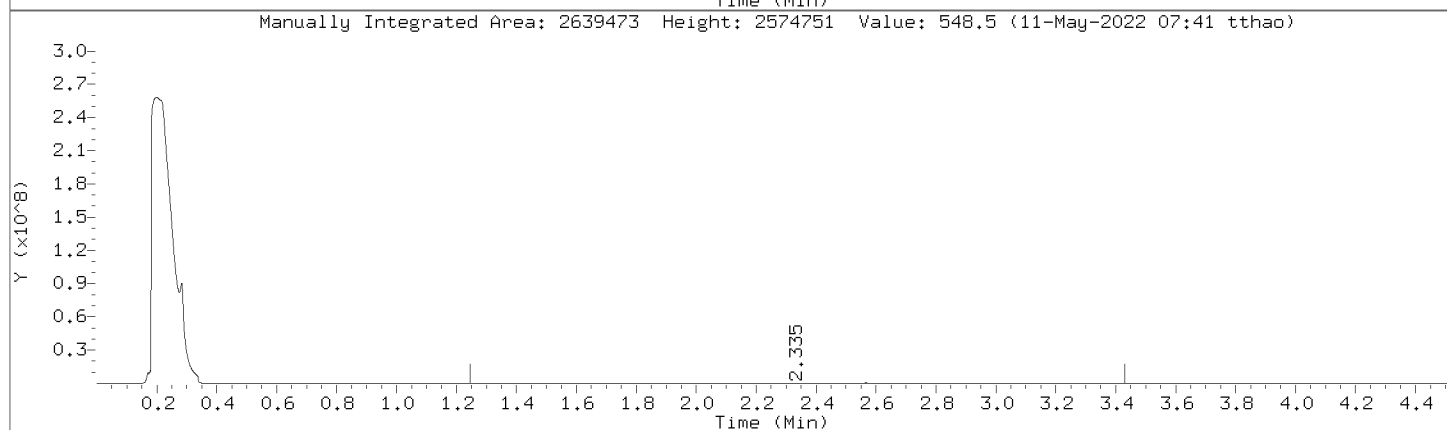
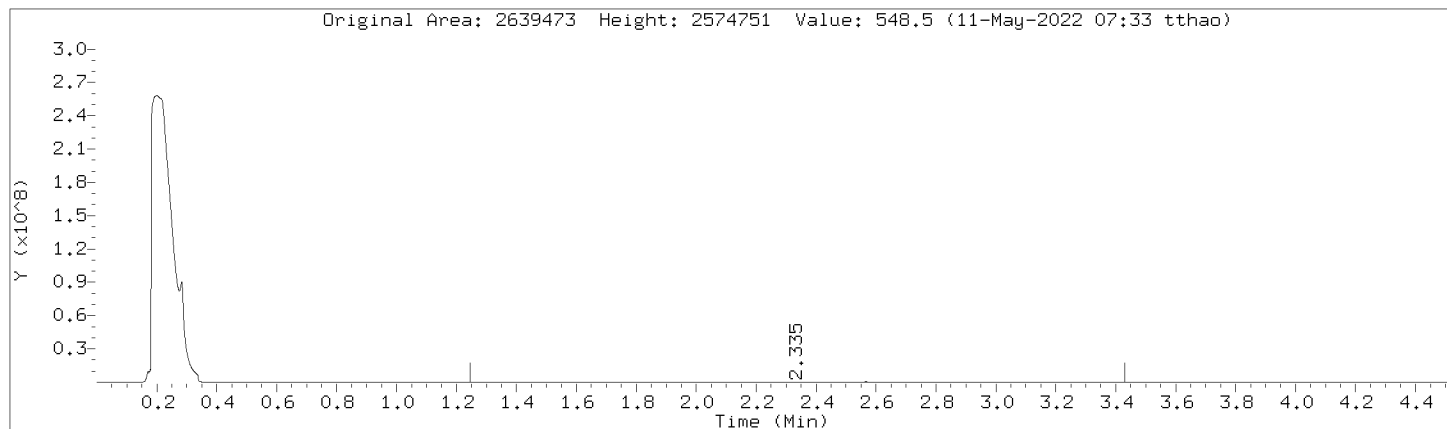
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000105.D  
Injection Date: 11-MAY-2022 06:39  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



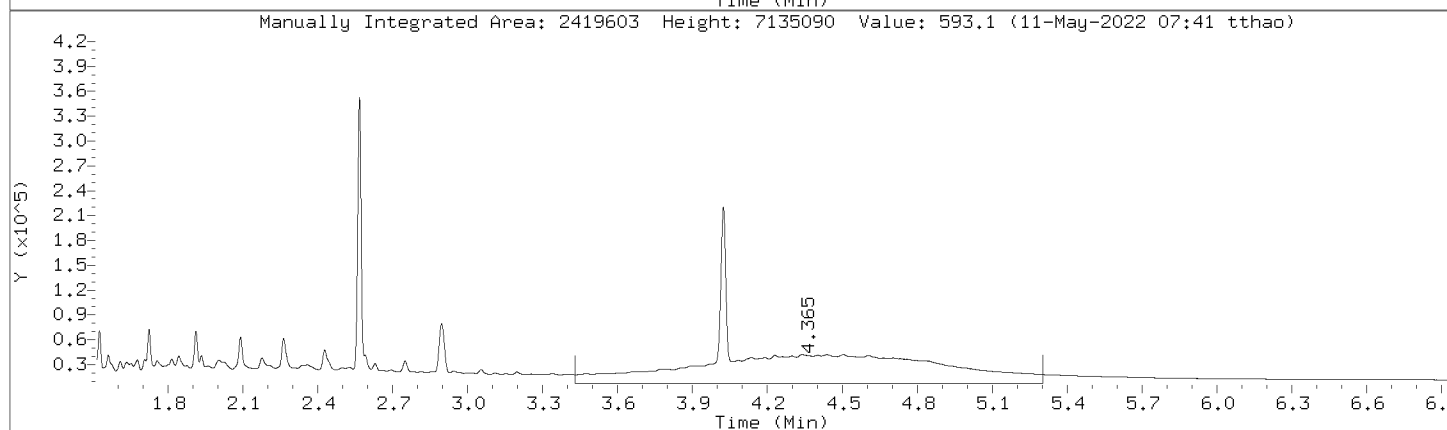
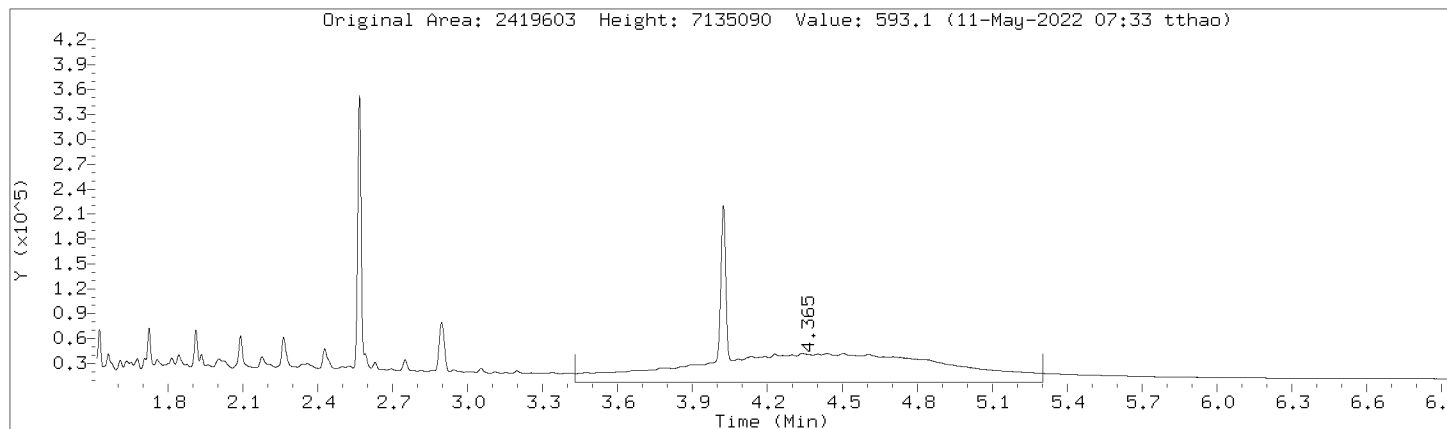
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Injection Date: 11-MAY-2022 06:39  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



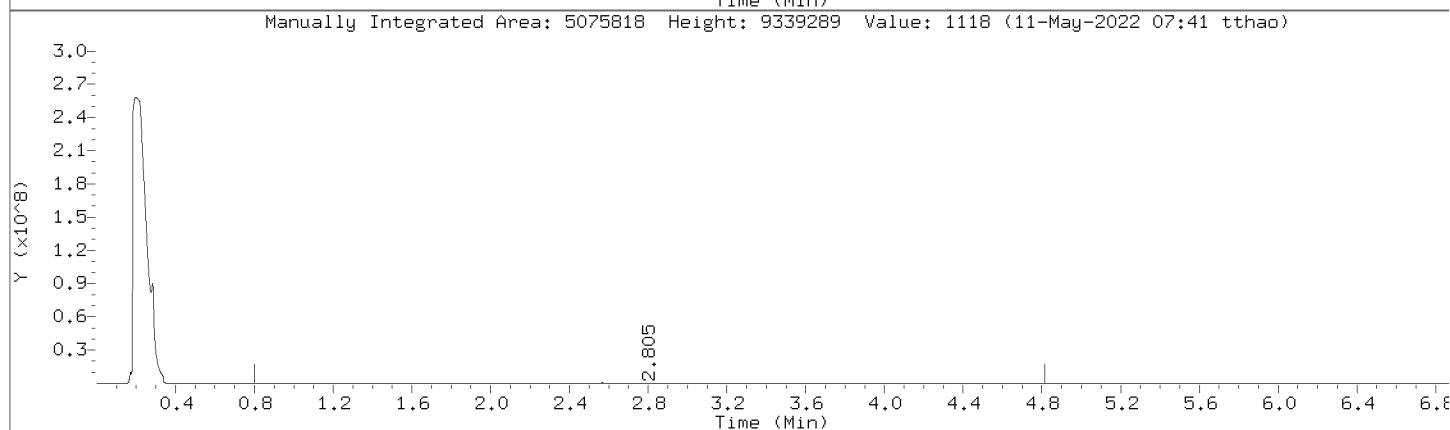
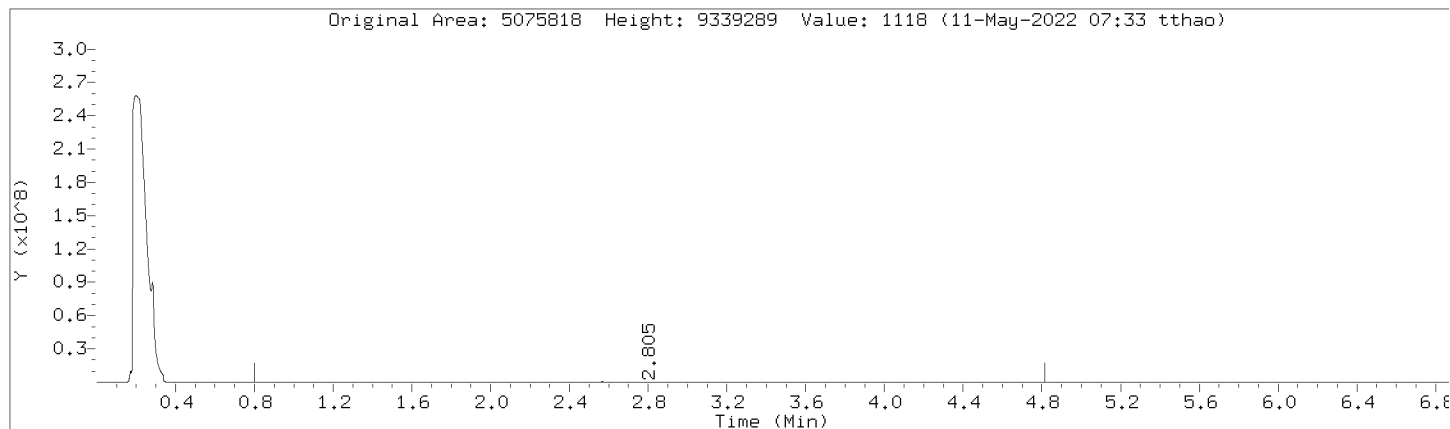
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Injection Date: 11-MAY-2022 06:39  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



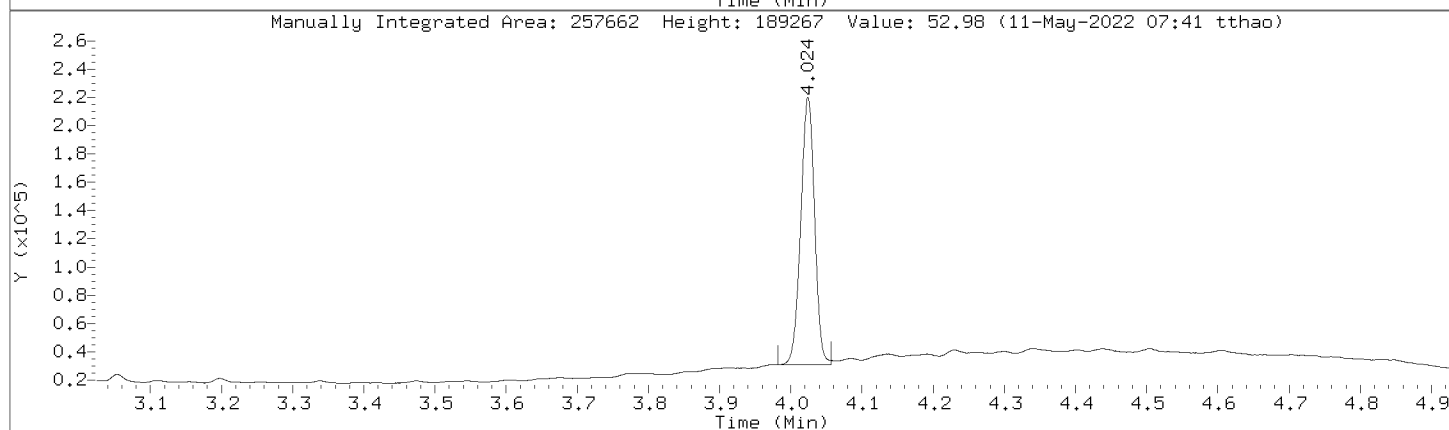
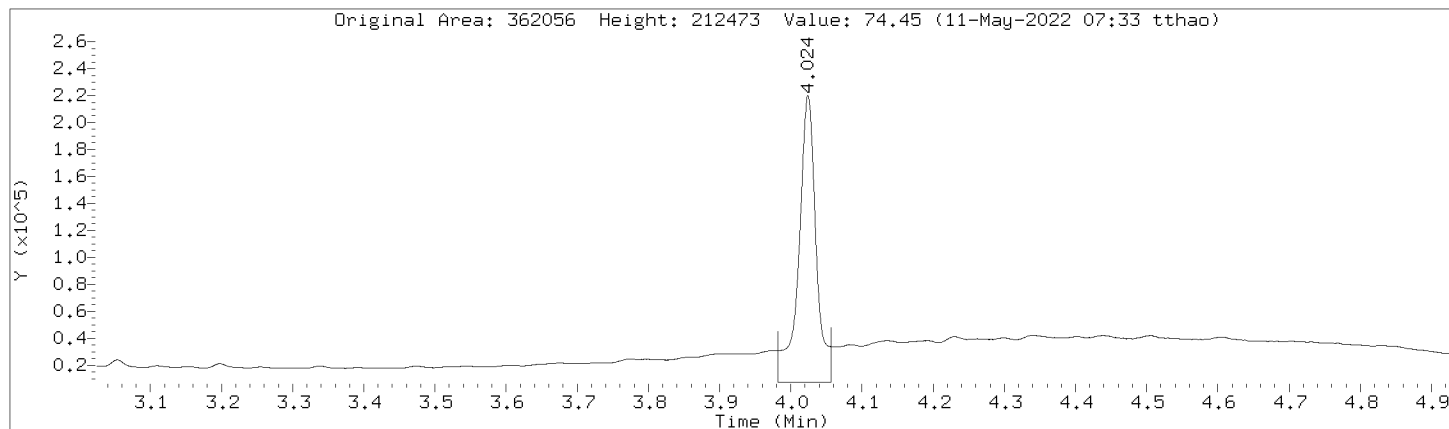
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Injection Date: 11-MAY-2022 06:39  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000105.D  
Injection Date: 11-MAY-2022 06:39  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

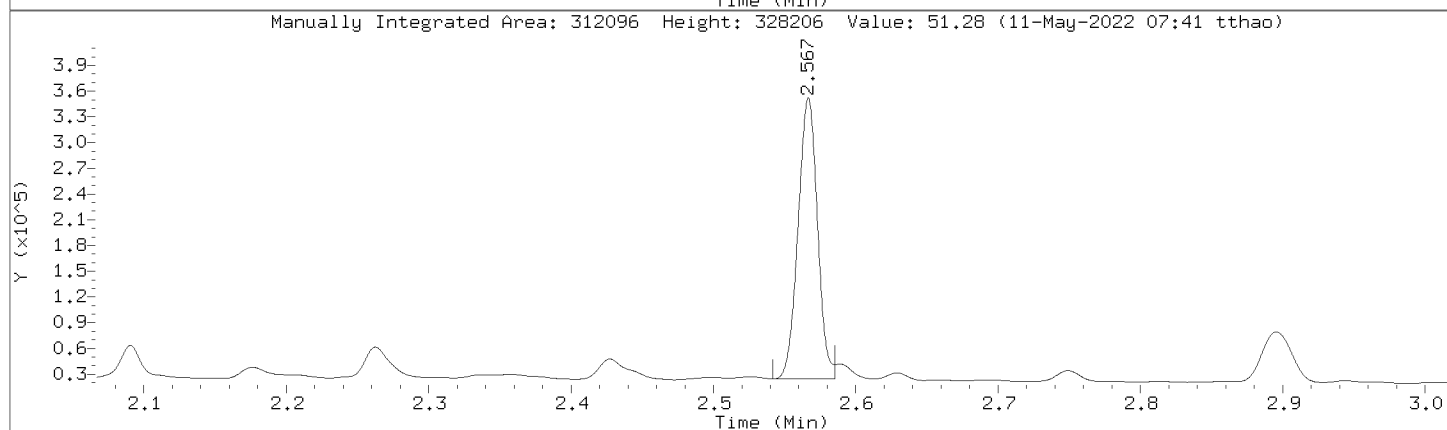
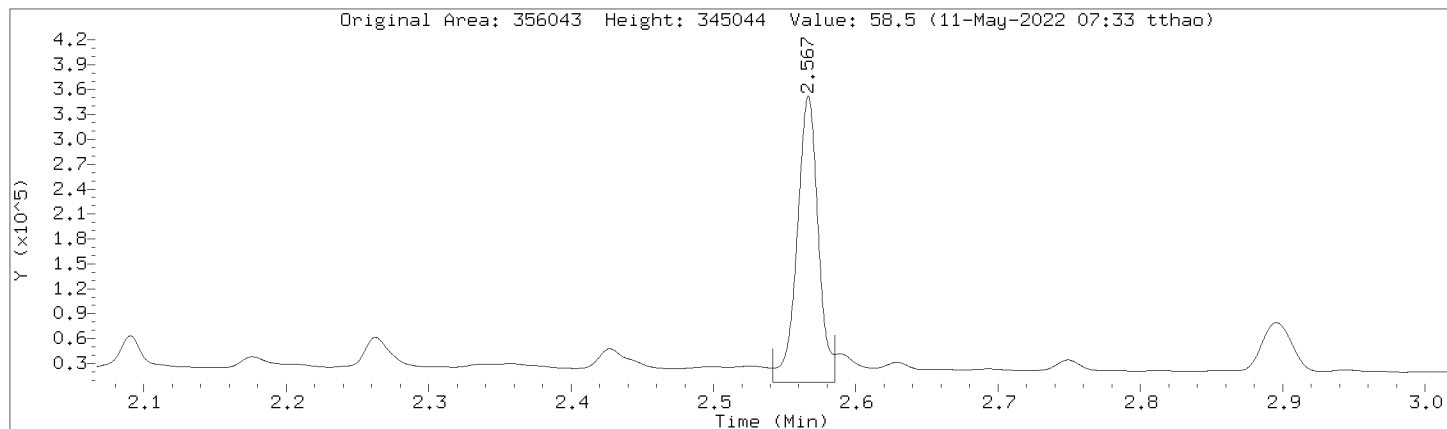
Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:





Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000105.D  
 Injection Date: 11-MAY-2022 06:39  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,363721:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1956472	1956472
DRO by AK 102	3119346	3119346
TPH-DRO (C10-C28)	3599653	3599653
Motor Oil Range (C24-C36)	2044919	2044919
Diesel Fuel Range	2639473	2639473
Motor Oil Range	2419603	2419603
Diesel Fuel Range SG	2639473	2639473
Motor Oil Range SG	2419603	2419603
C10-C36	5075818	5075818
n-Triacontane (S)	362056	257662
o-Terphenyl (S)	356043	312096

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000115.D  
 Lab Smp Id: DMO-CCV,363721:2 Client Smp ID: DMO-CCV,363721:2  
 Inj Date : 11-MAY-2022 08:33  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,363721:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\051022F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 11-May-2022 12:52 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 3 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	=====	=====	=====
S 1	DRO by AK 102			CAS #:	
0.800	- 3.380		2937106 500.000	510	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.566	2.566 0.000		296545 50.0000	48.7	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.023	4.024 -0.001		244075 50.0000	50.2	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.381	- 4.810		1718860 500.000	507	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.800	- 3.940		3361382 500.000	508	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.240	- 4.810		1797438 500.000	507	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.800	- 4.810		4655966 1000.00	1020	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.240	- 3.430		2476072 500.000	511	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.240	- 3.430		2476072 500.000	511	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.431	- 5.300		2065143 500.000	502	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.431	- 5.300		2065143 500.000	502	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 11-MAY-2022 08:33

Client ID: DMO-CCV,363721:2

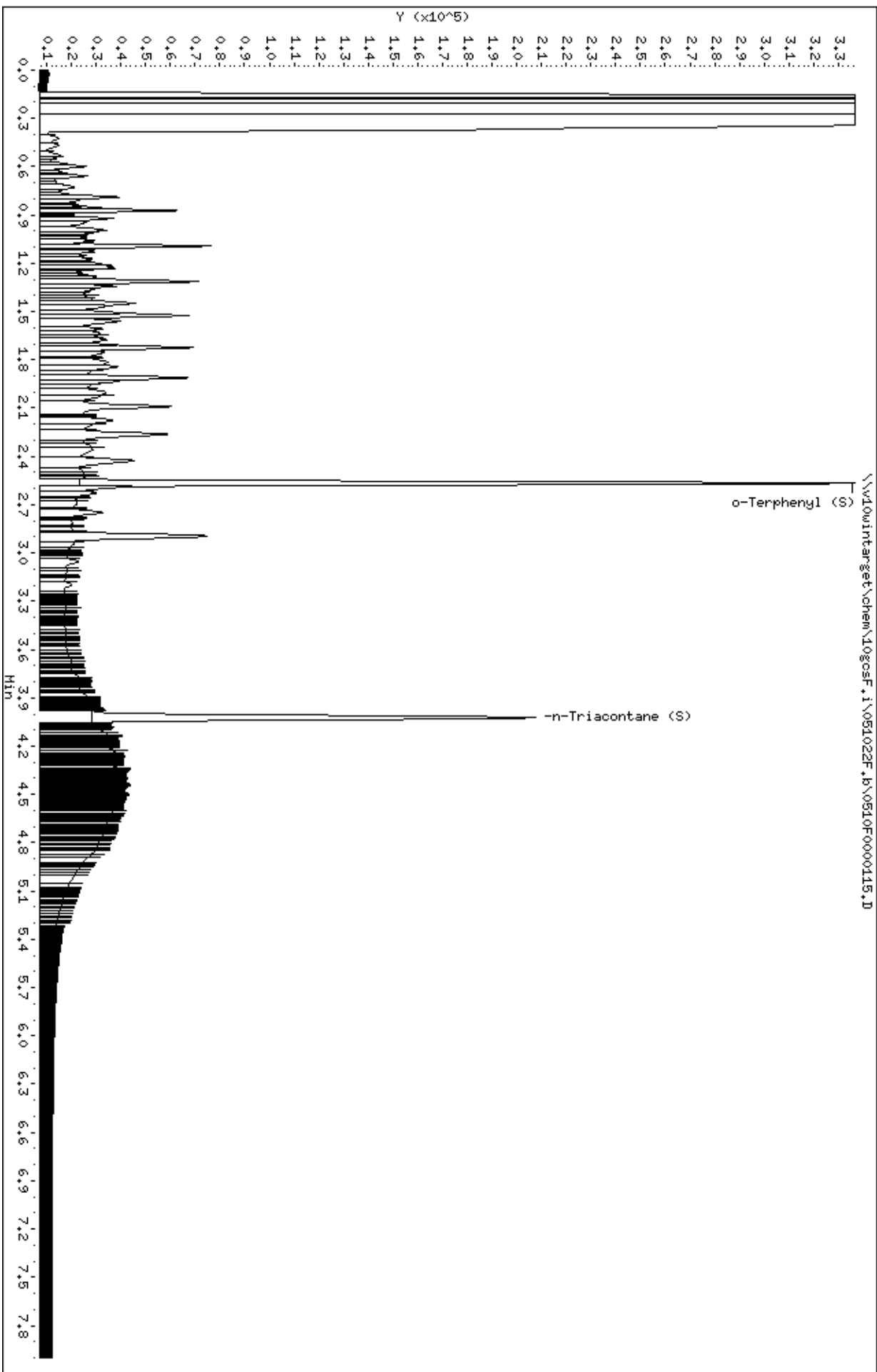
Sample Info: DMO-CCV,363721:2

Instrument: 10gscf.1

Operator: TT2

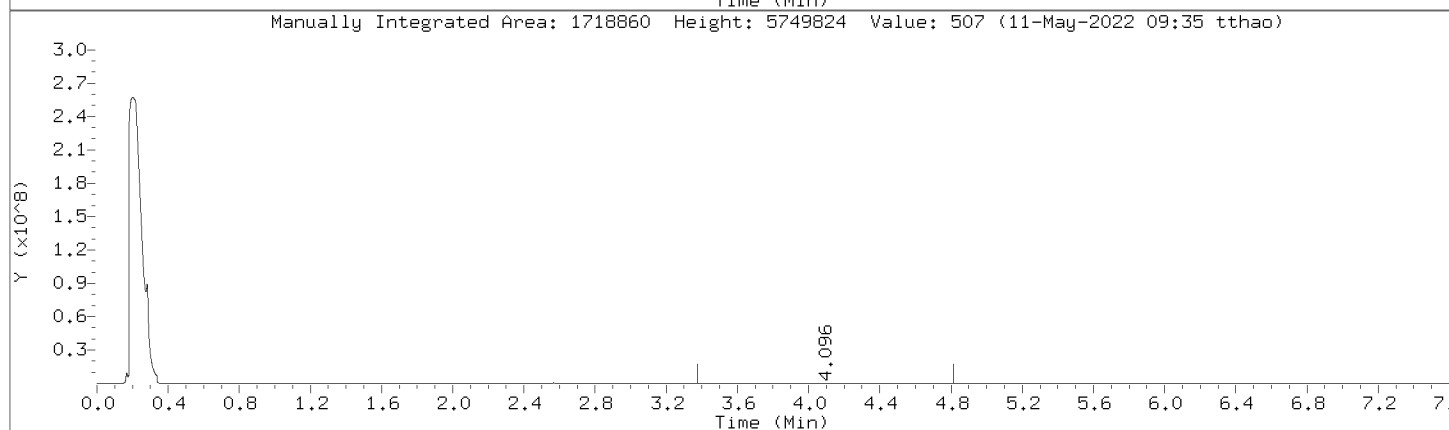
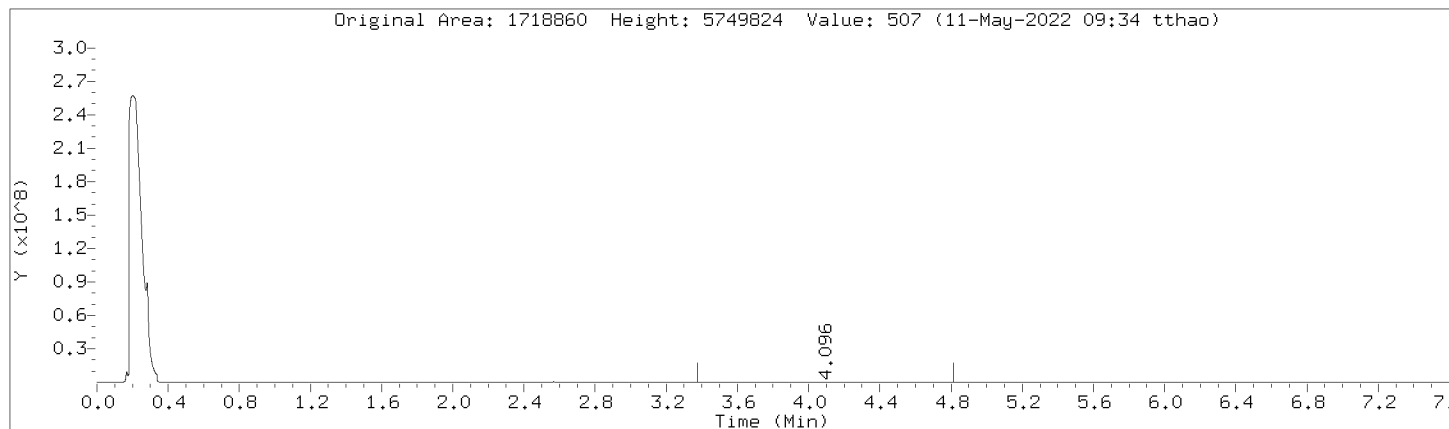
Column diameter: 0.32

Column phase: DB-5-USE21390001



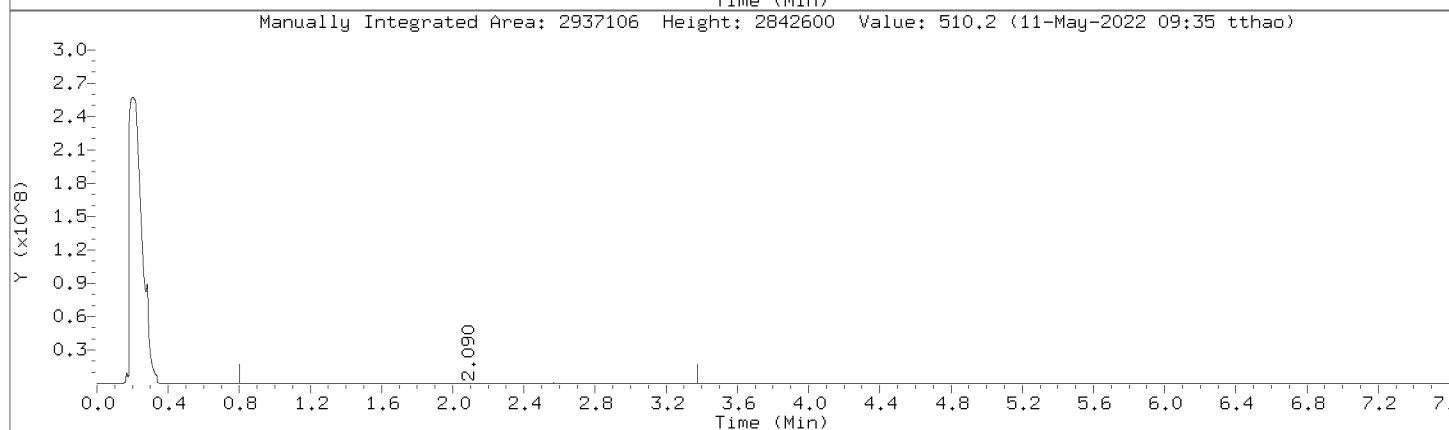
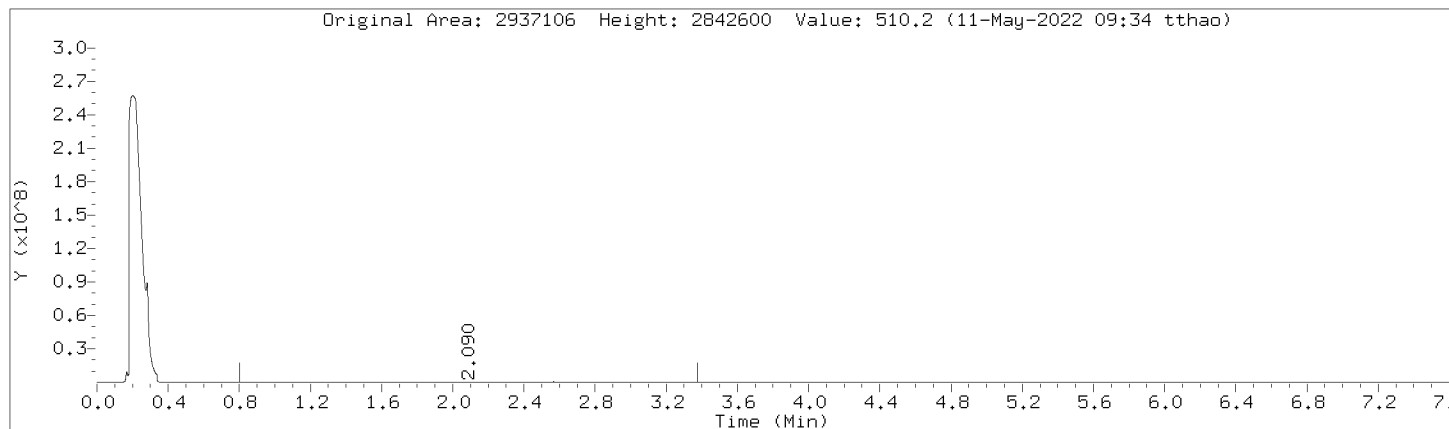
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000115.D  
Injection Date: 11-MAY-2022 08:33  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



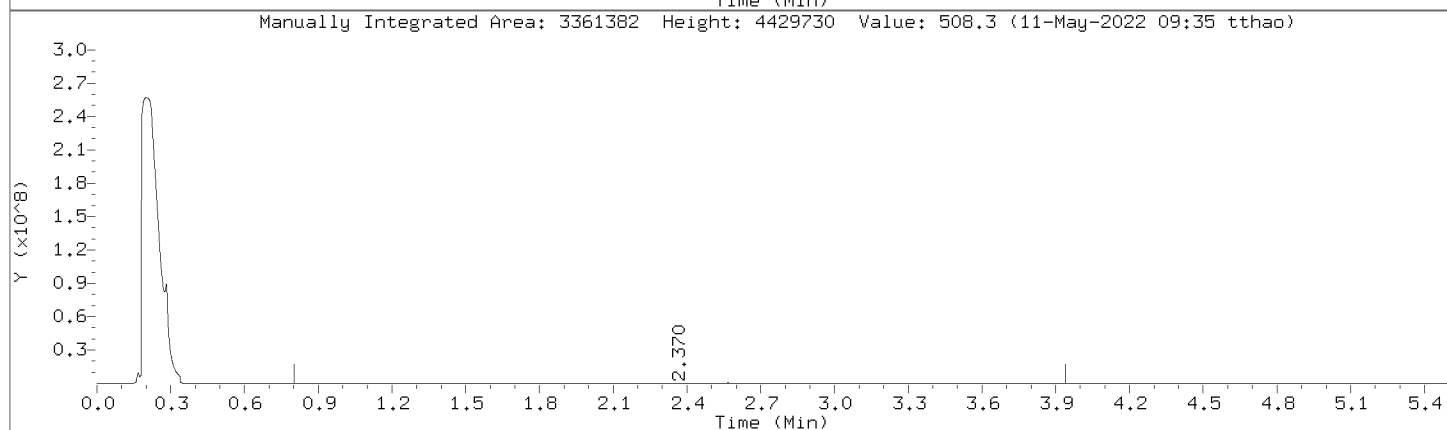
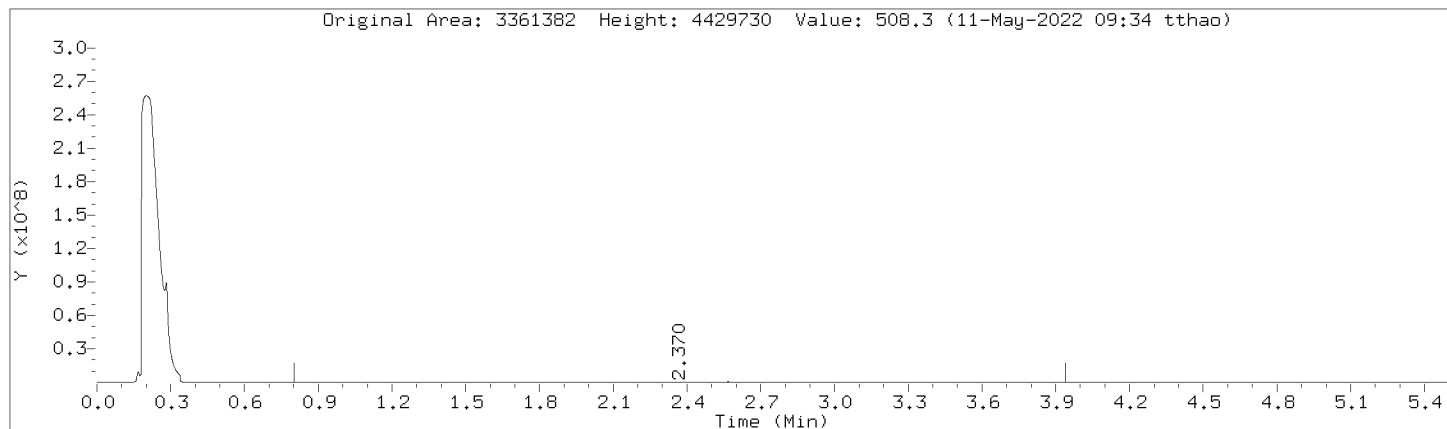
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000115.D  
Injection Date: 11-MAY-2022 08:33  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



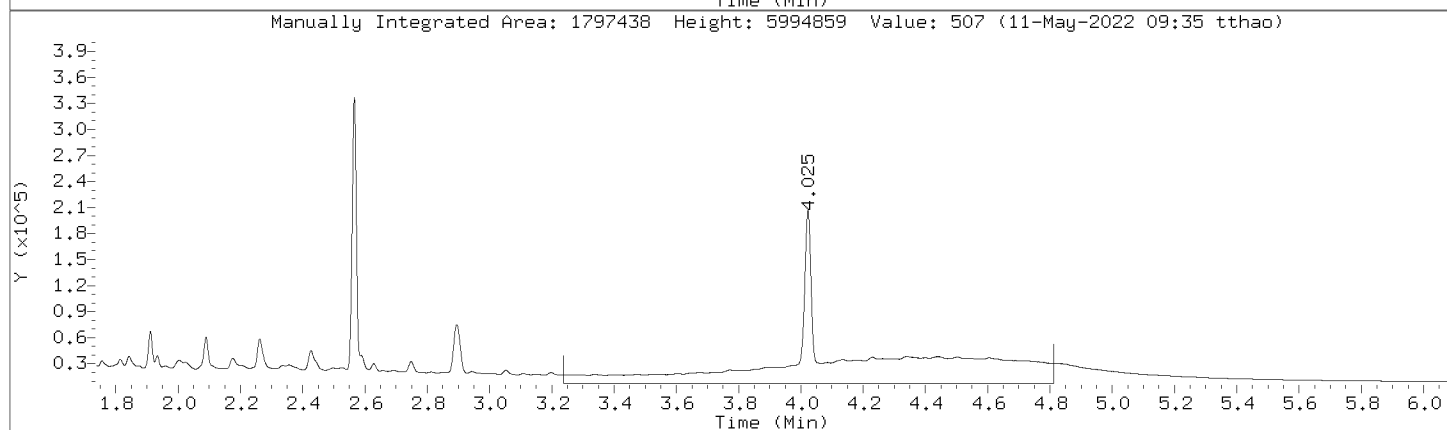
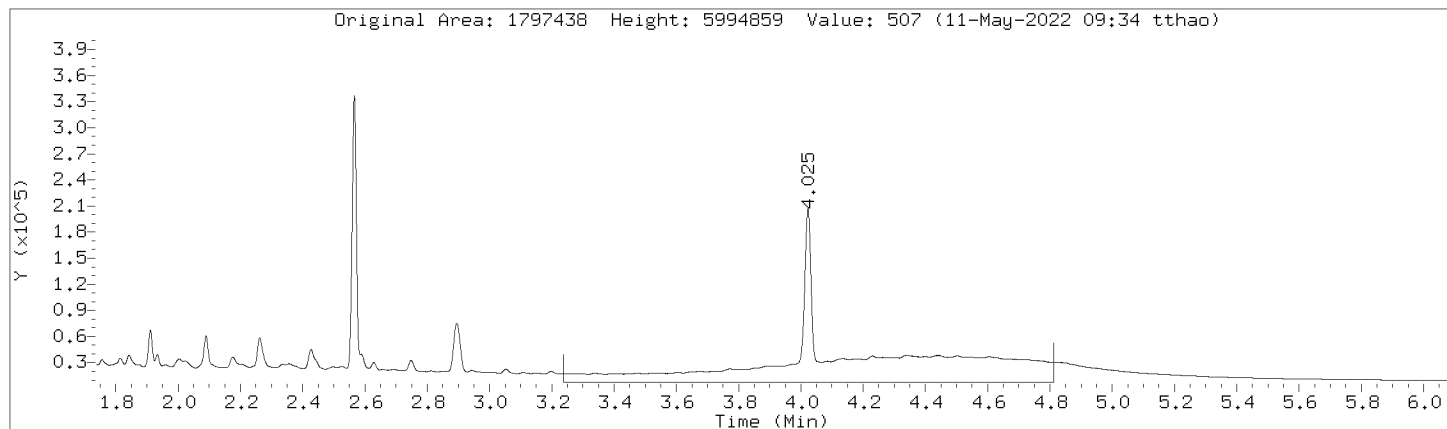
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000115.D  
Injection Date: 11-MAY-2022 08:33  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000115.D  
Injection Date: 11-MAY-2022 08:33  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

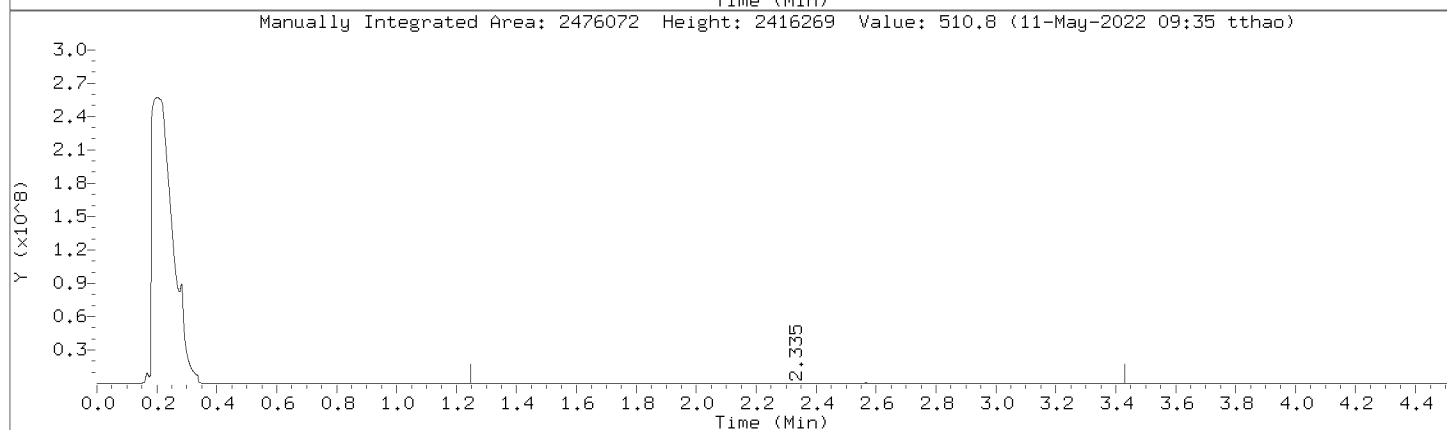
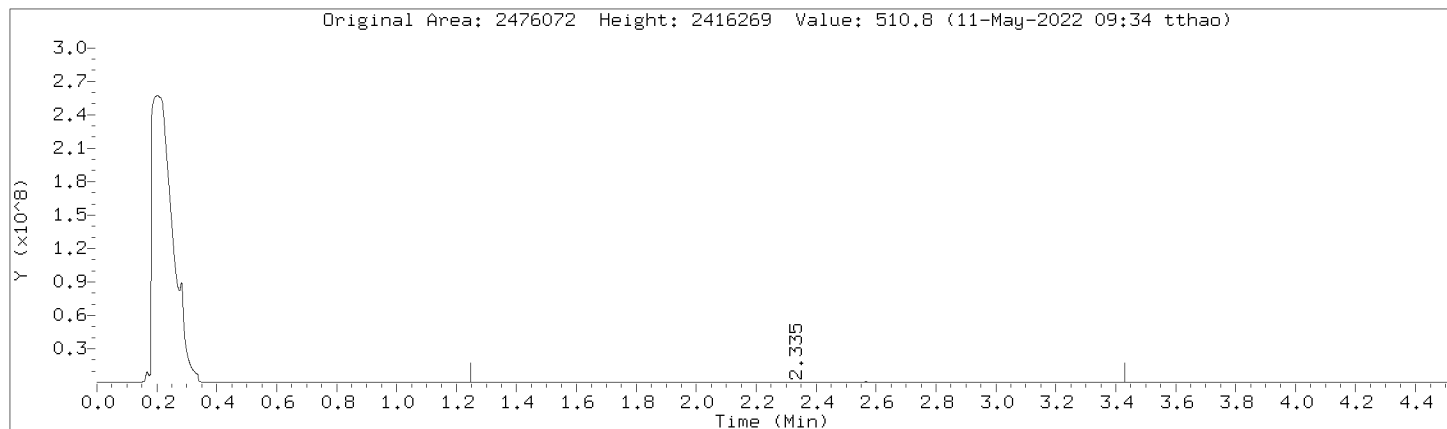
Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:





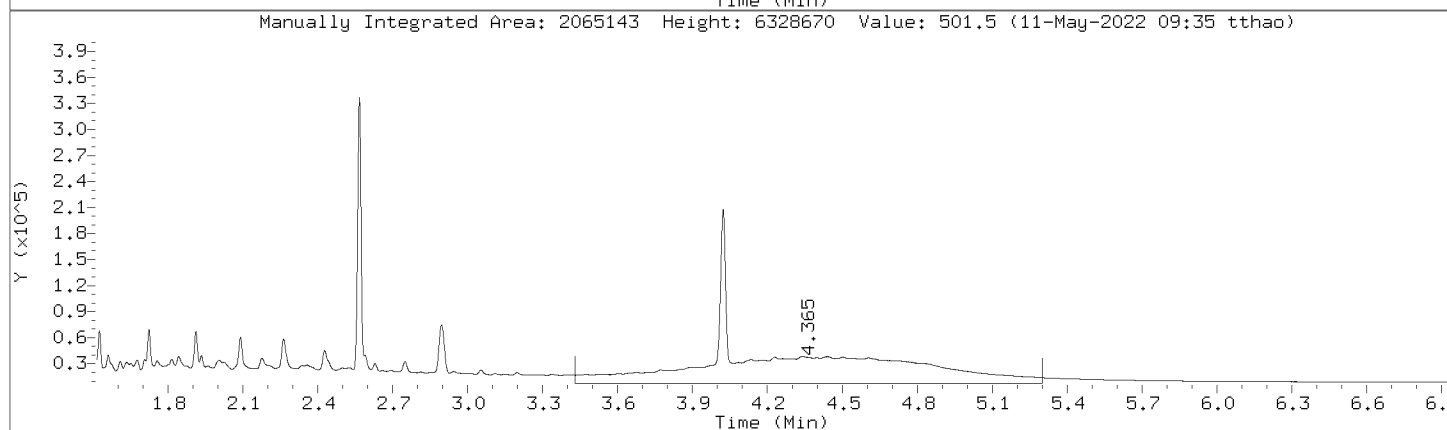
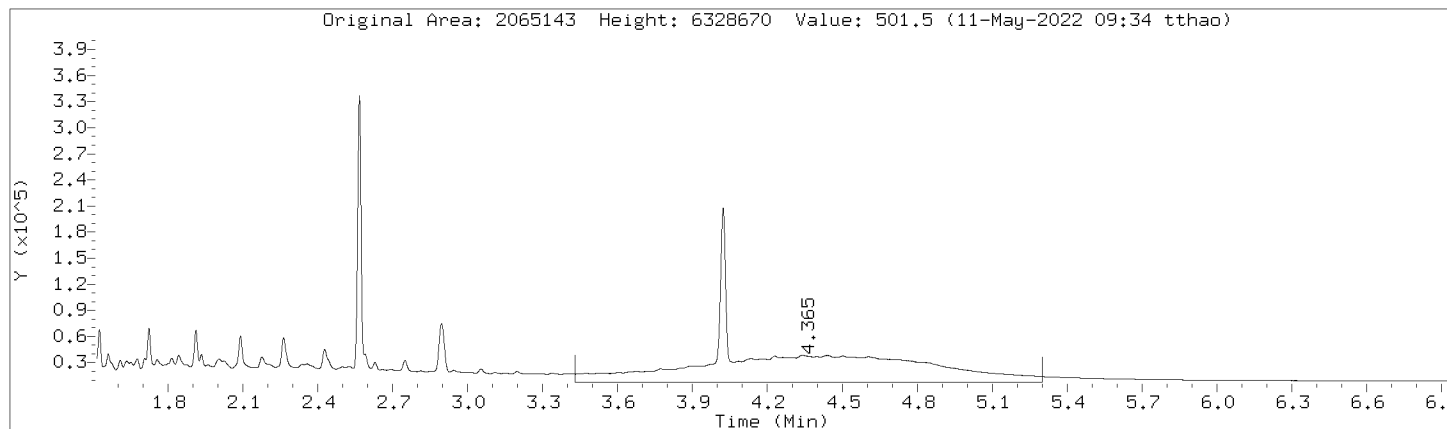
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000115.D  
Injection Date: 11-MAY-2022 08:33  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



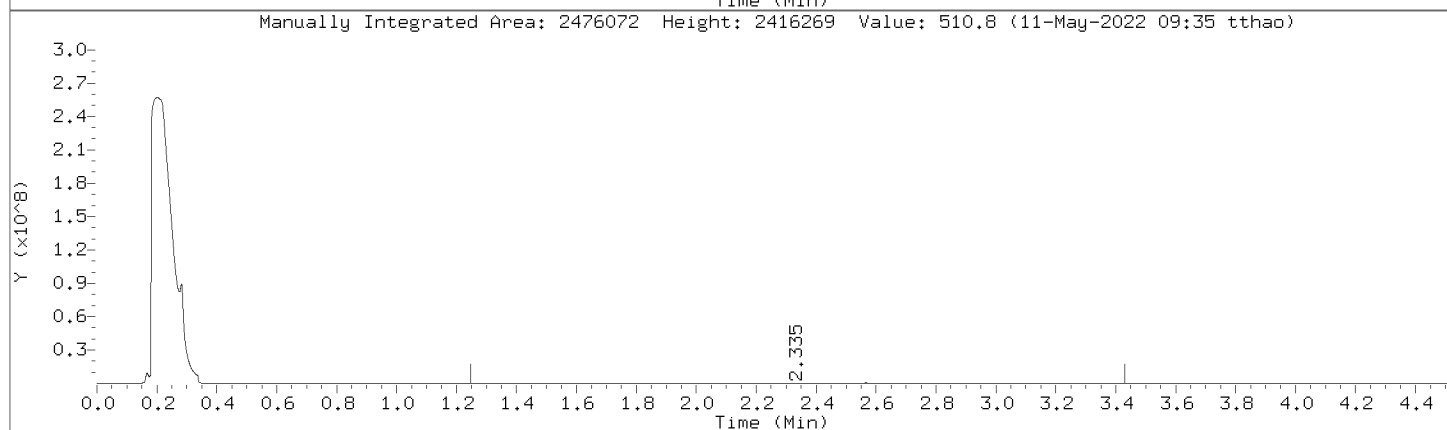
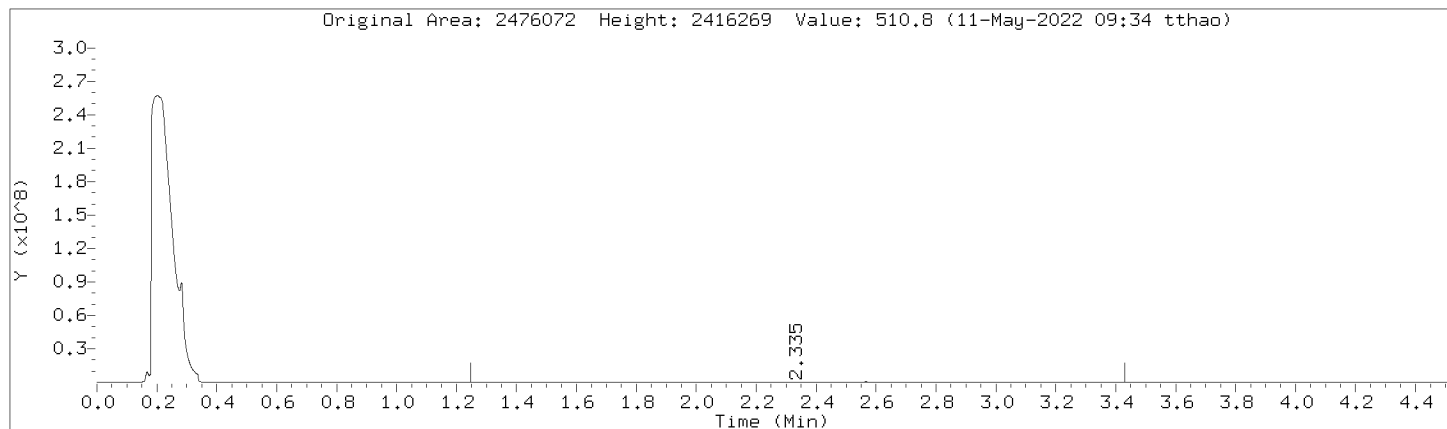
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000115.D  
Injection Date: 11-MAY-2022 08:33  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



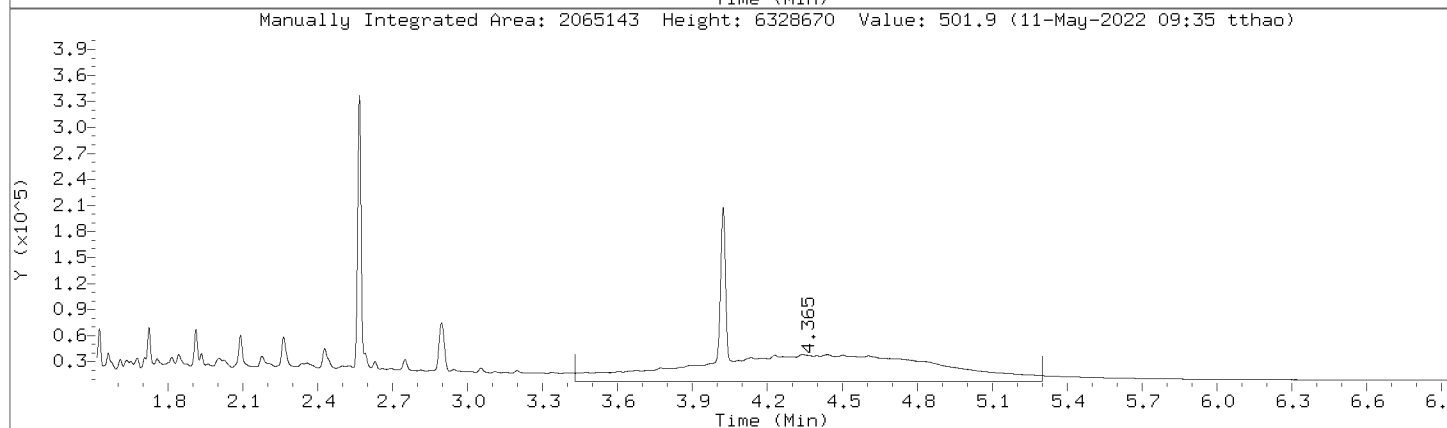
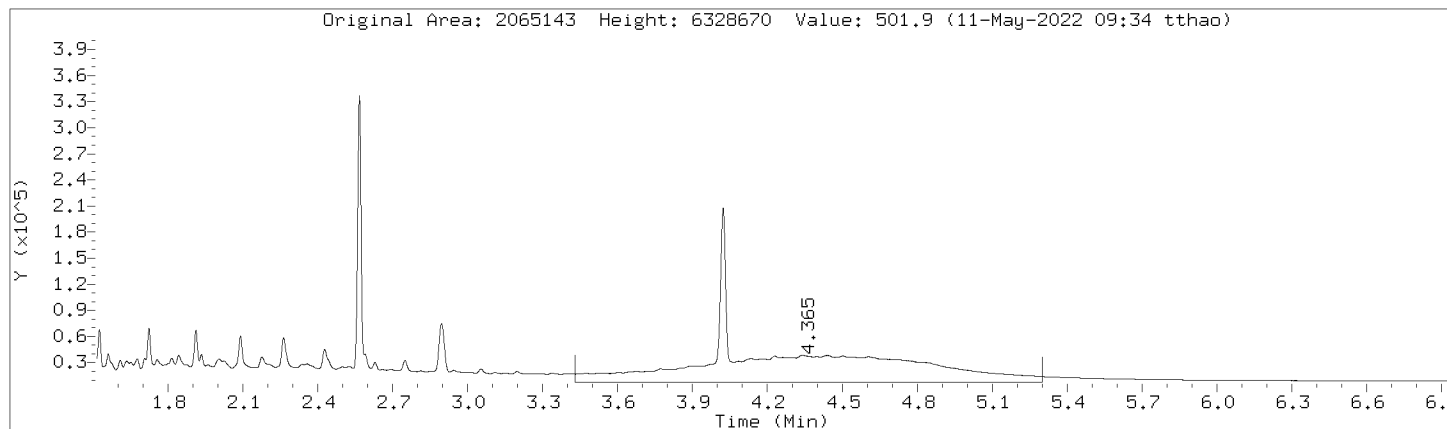
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000115.D  
Injection Date: 11-MAY-2022 08:33  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



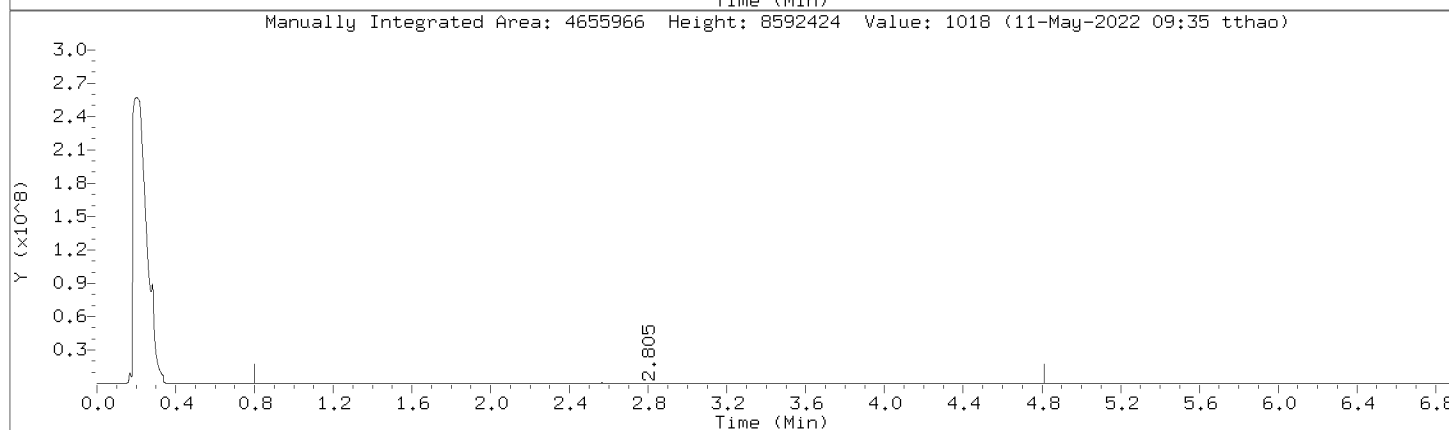
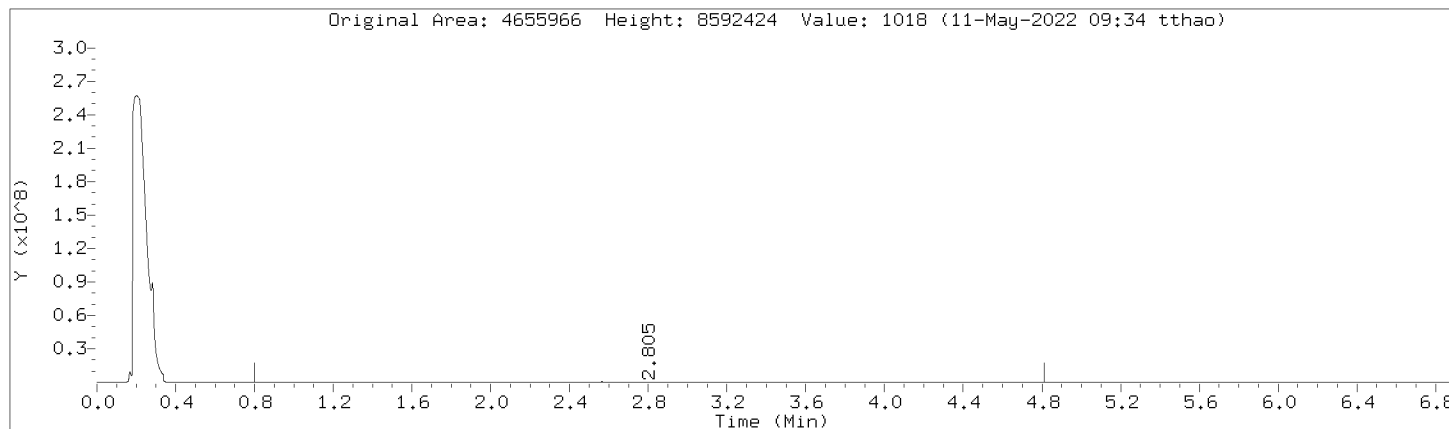
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000115.D  
Injection Date: 11-MAY-2022 08:33  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



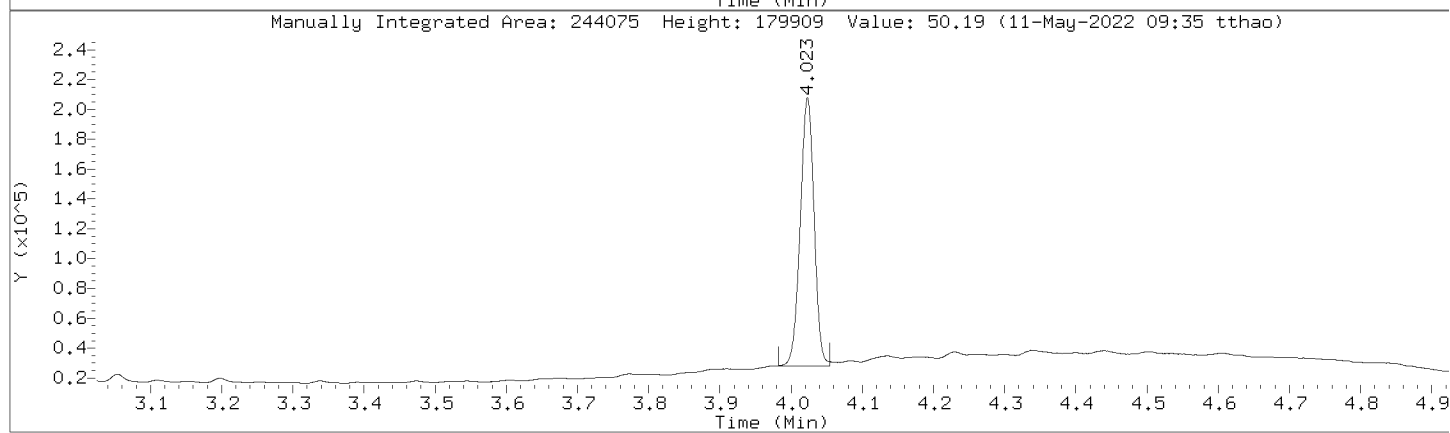
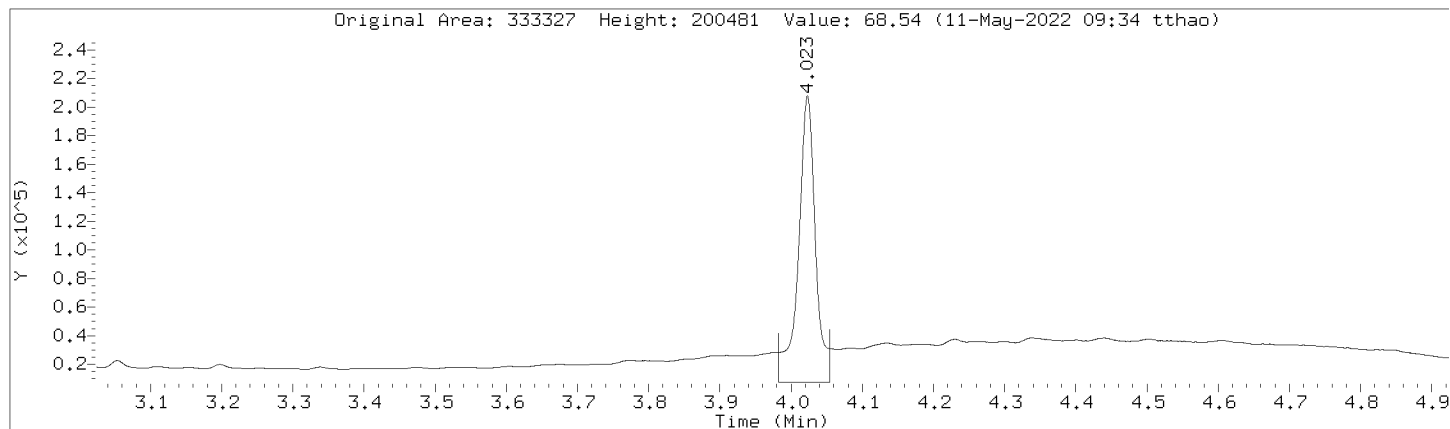
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000115.D  
Injection Date: 11-MAY-2022 08:33  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



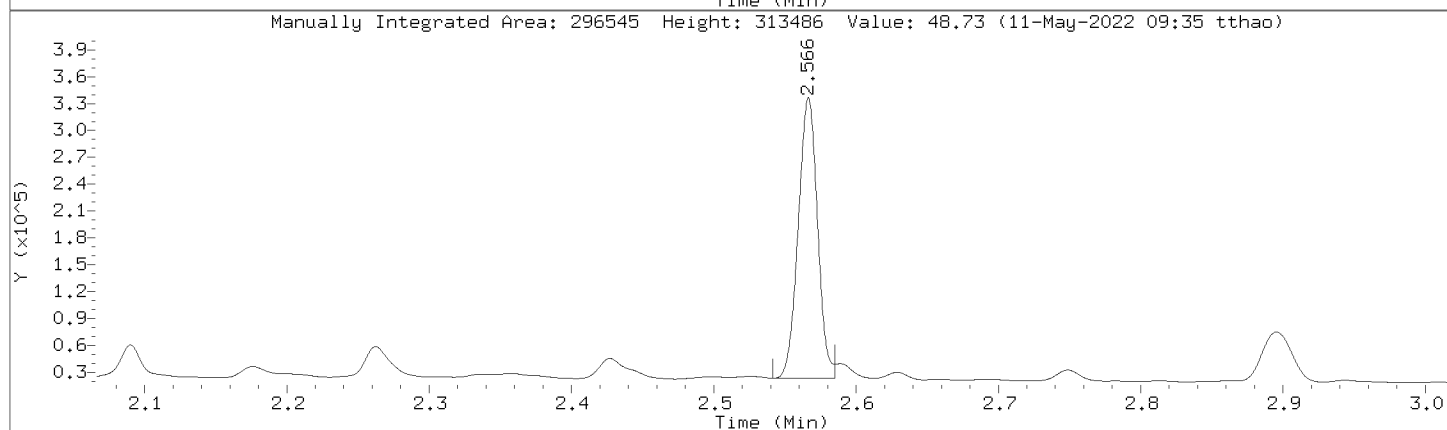
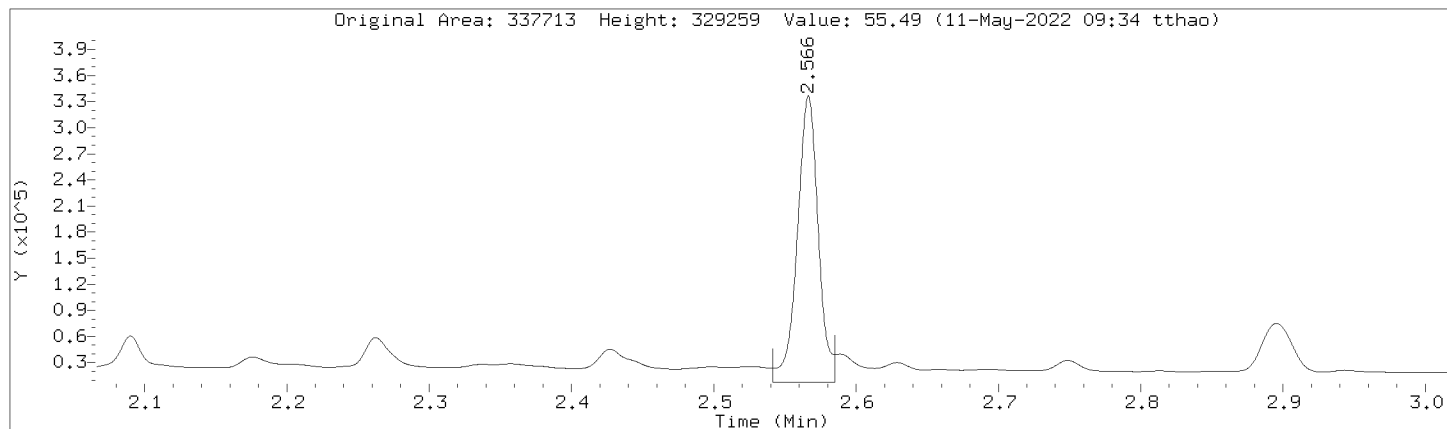
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000115.D  
Injection Date: 11-MAY-2022 08:33  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000115.D  
 Injection Date: 11-MAY-2022 08:33  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,363721:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1718860	1718860
DRO by AK 102	2937106	2937106
TPH-DRO (C10-C28)	3361382	3361382
Motor Oil Range (C24-C36)	1797438	1797438
Diesel Fuel Range	2476072	2476072
Motor Oil Range	2065143	2065143
Diesel Fuel Range SG	2476072	2476072
Motor Oil Range SG	2065143	2065143
C10-C36	4655966	4655966
n-Triacontane (S)	333327	244075
o-Terphenyl (S)	337713	296545

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000135.D  
 Lab Smp Id: DMO-CCV,363721:2 Client Smp ID: DMO-CCV,363721:2  
 Inj Date : 11-MAY-2022 12:20  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,363721:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\051022F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 11-May-2022 12:52 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 3 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10SVOA-TT

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	(ug/mL)	(ug/mL)	=====
S 1	DRO by AK 102			CAS #:	
0.800	- 3.380		2956429 500.000	514	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.566	2.566 0.000		296566 50.0000	48.7	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.024	4.024 0.000		243007 50.0000	50.0	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.381	- 4.810		1744582 500.000	515	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.800	- 3.940		3390094 500.000	513	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.240	- 4.810		1824556 500.000	515	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.800	- 4.810		4701011 1000.00	1030	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.240	- 3.430		2494349 500.000	515	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.240	- 3.430		2494349 500.000	515	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.431	- 5.300		2106993 500.000	512	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.431	- 5.300		2106993 500.000	513	(M) RNG
-----					



QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date : 11-MAY-2022 12:20

Client ID: DMO-CCV,363721:2

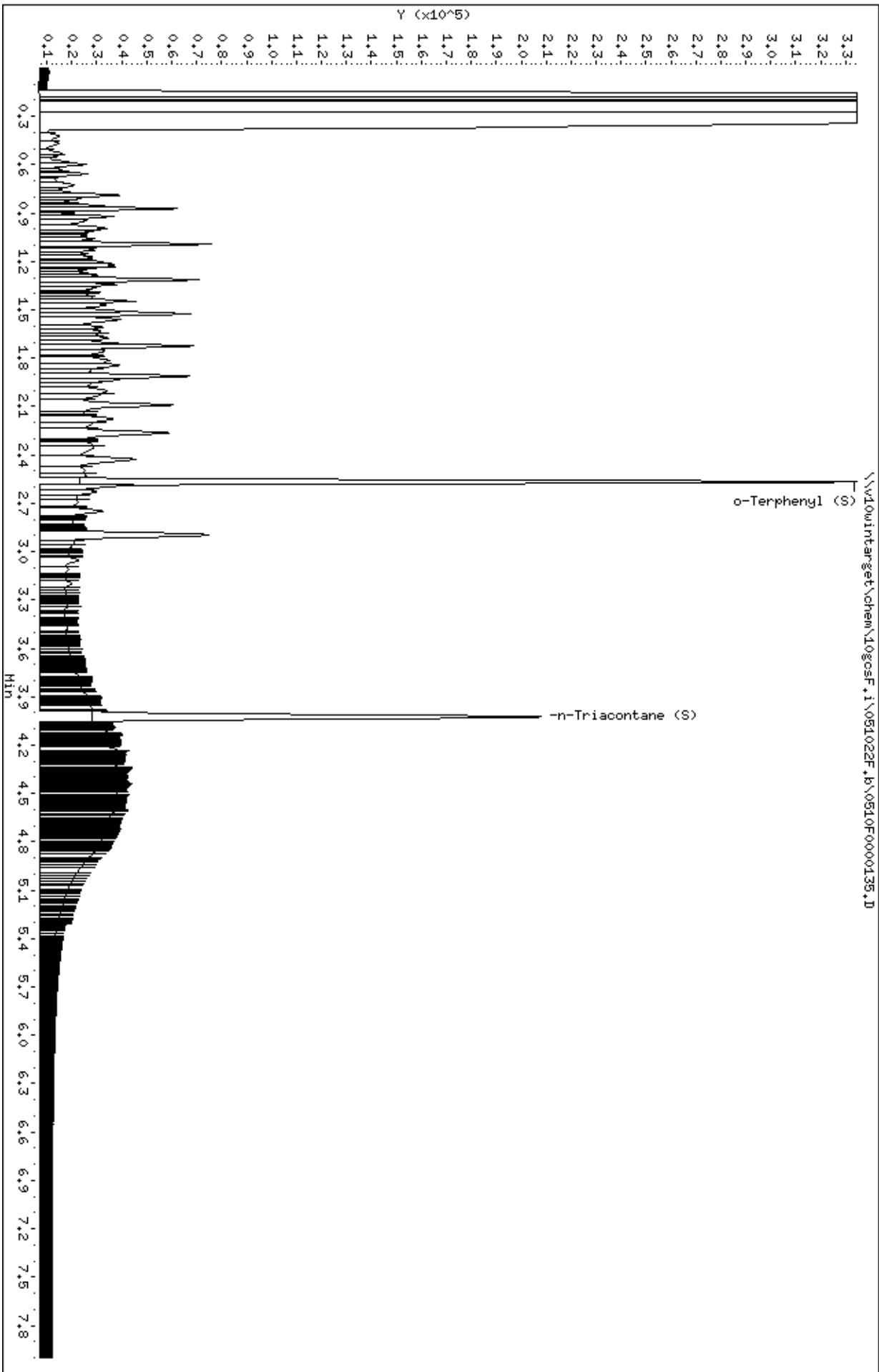
Sample Info: DMO-CCV,363721:2

Instrument: 10gsof.1

Operator: TT2

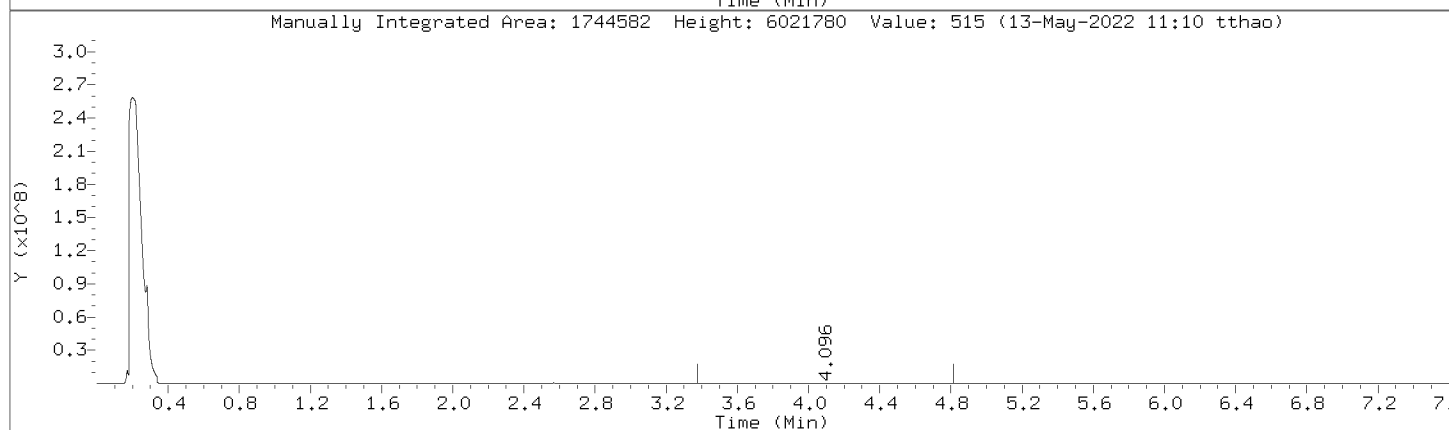
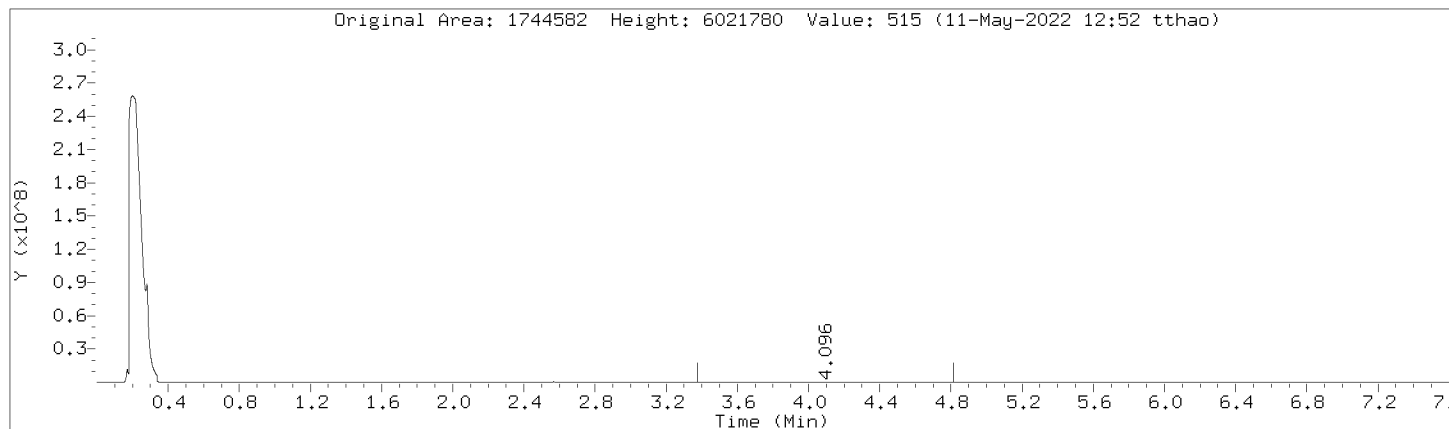
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Column diameter: 0.32



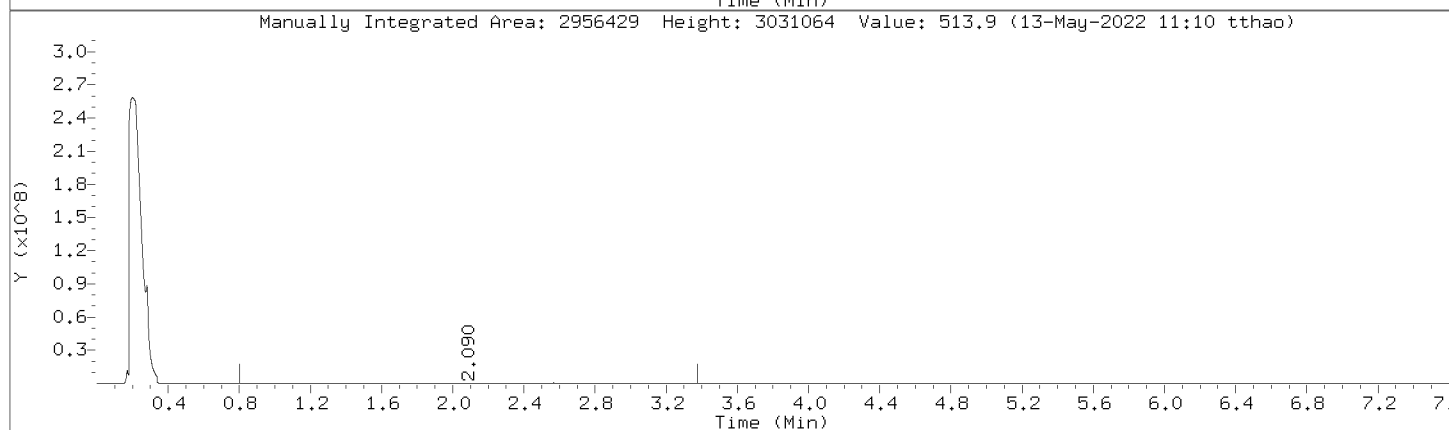
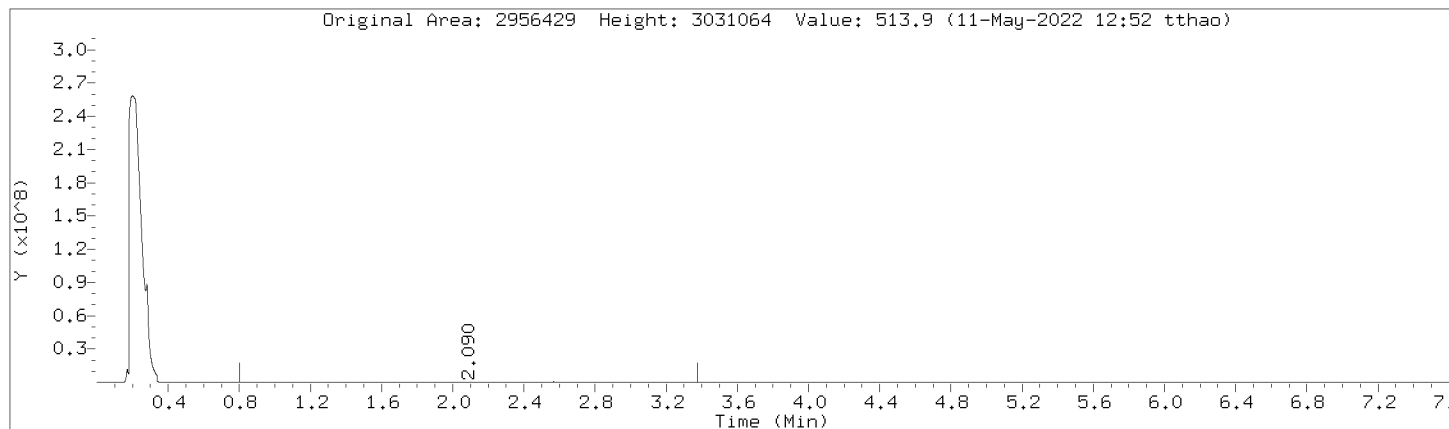
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000135.D  
Injection Date: 11-MAY-2022 12:20  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



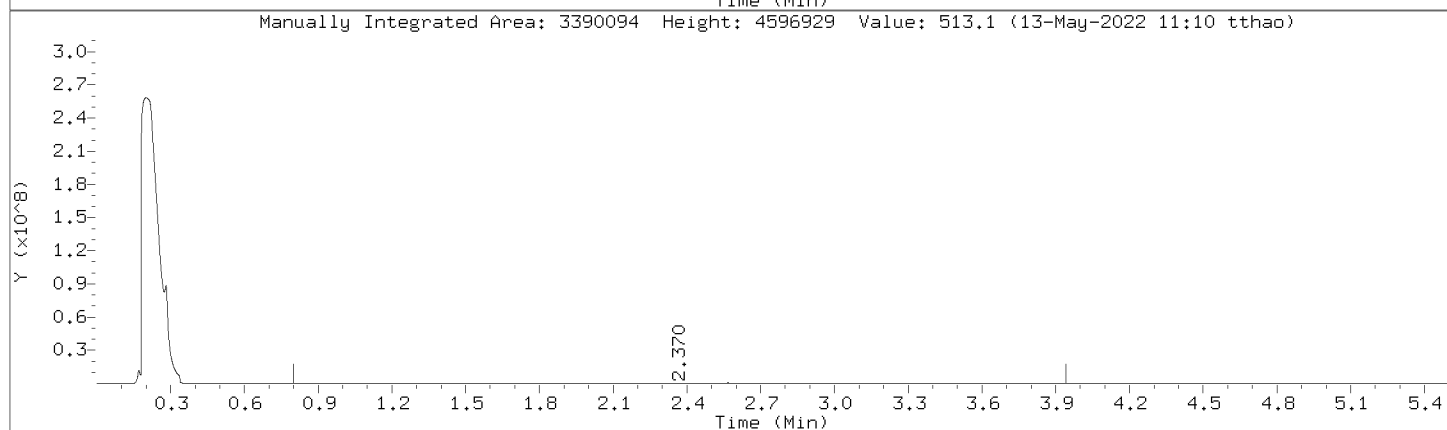
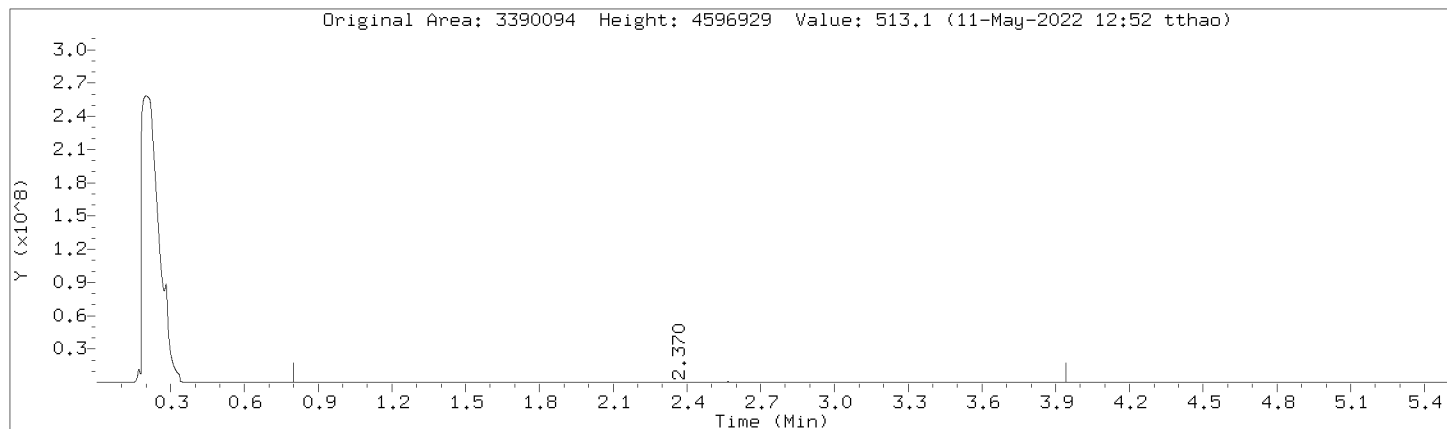
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000135.D  
Injection Date: 11-MAY-2022 12:20  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000135.D  
Injection Date: 11-MAY-2022 12:20  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

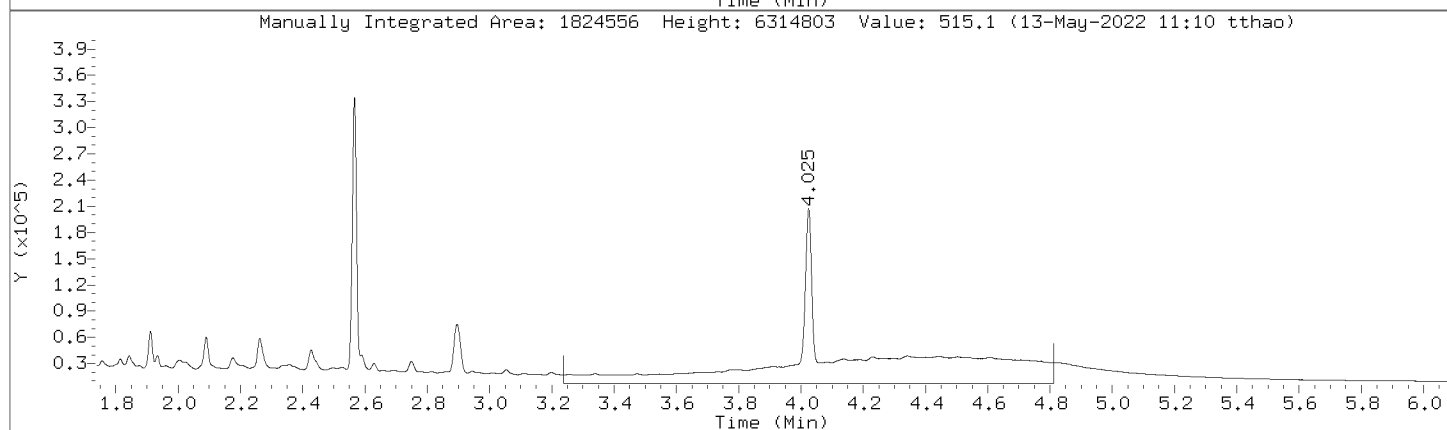
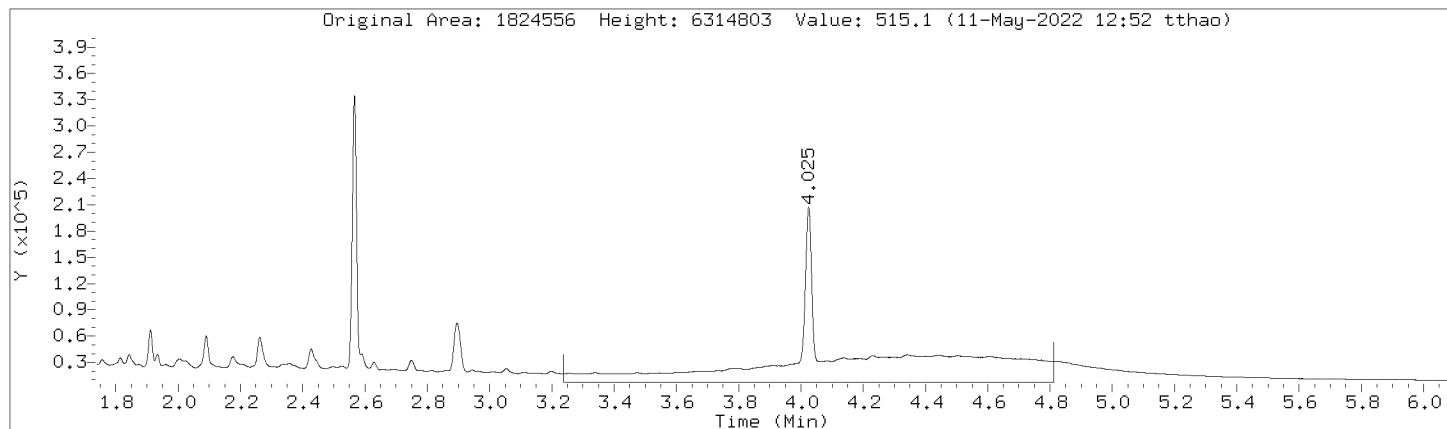
Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000135.D  
Injection Date: 11-MAY-2022 12:20  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

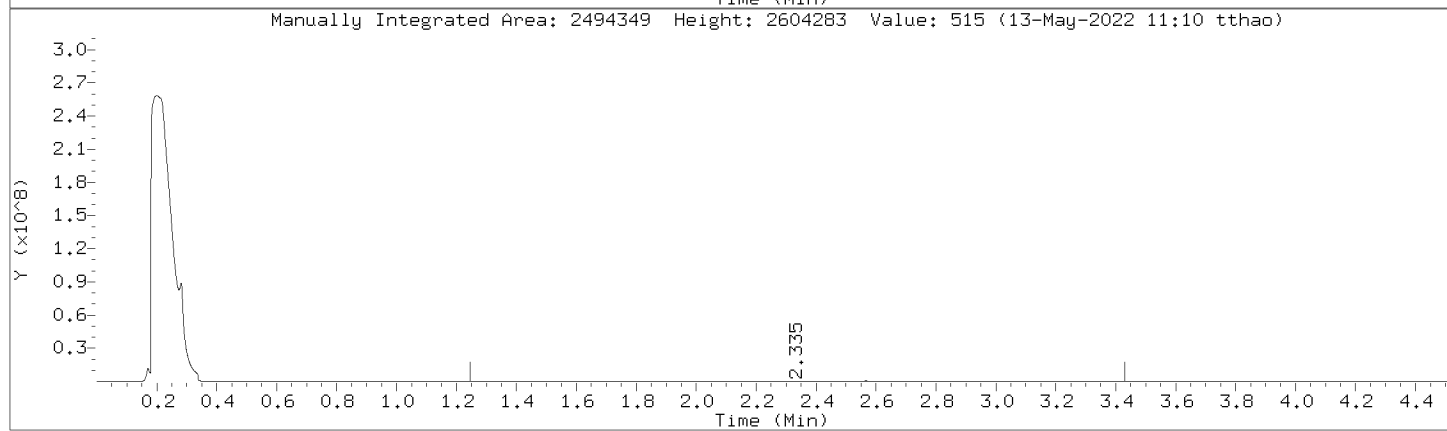
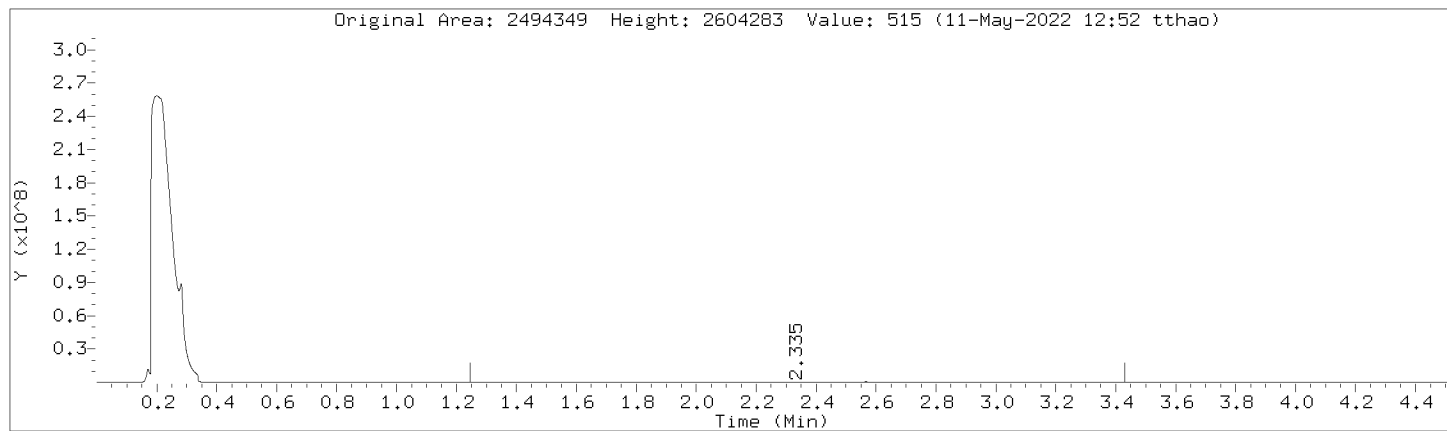
Compound: Motor Oil Range (C24-C36)  
CAS Number:

Review Code: RNG



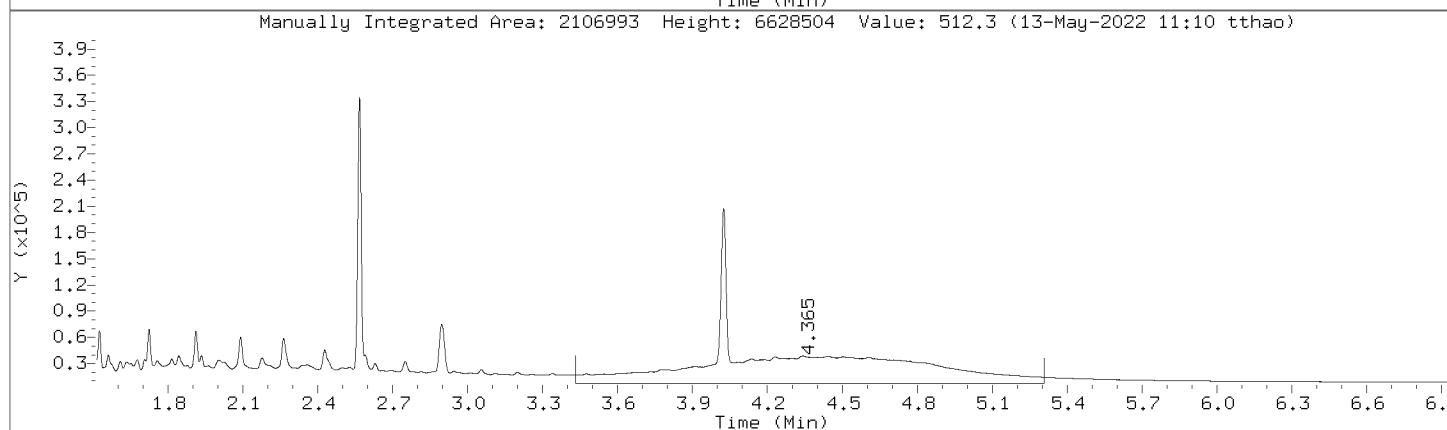
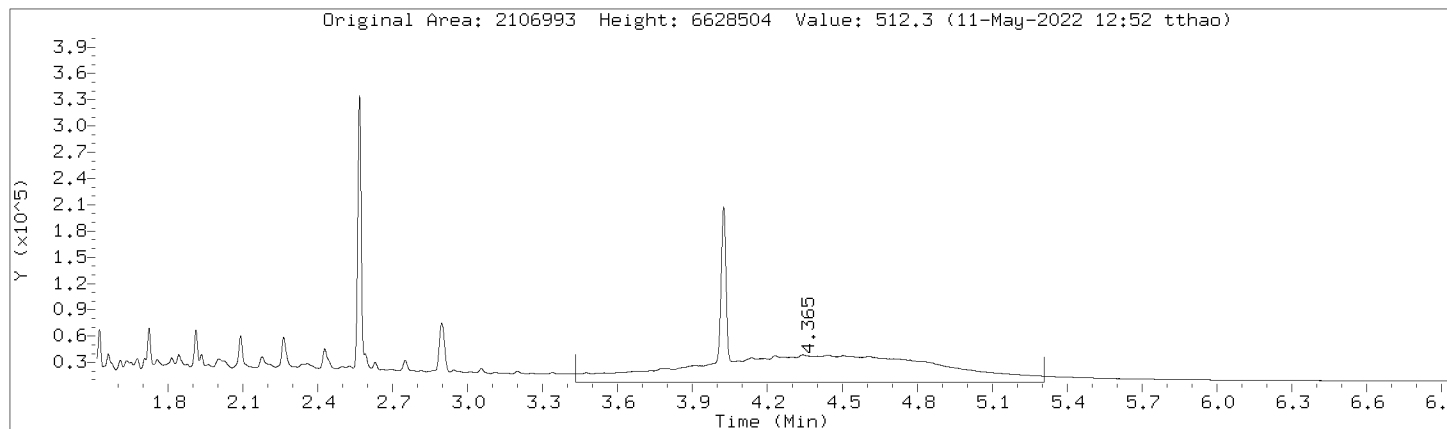
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000135.D  
Injection Date: 11-MAY-2022 12:20  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000135.D  
Injection Date: 11-MAY-2022 12:20  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

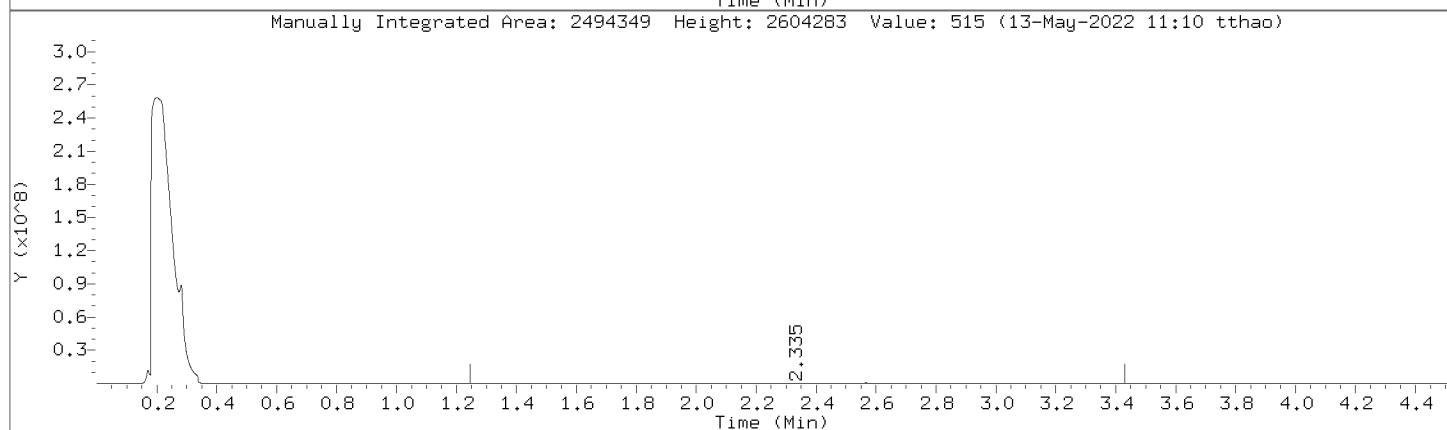
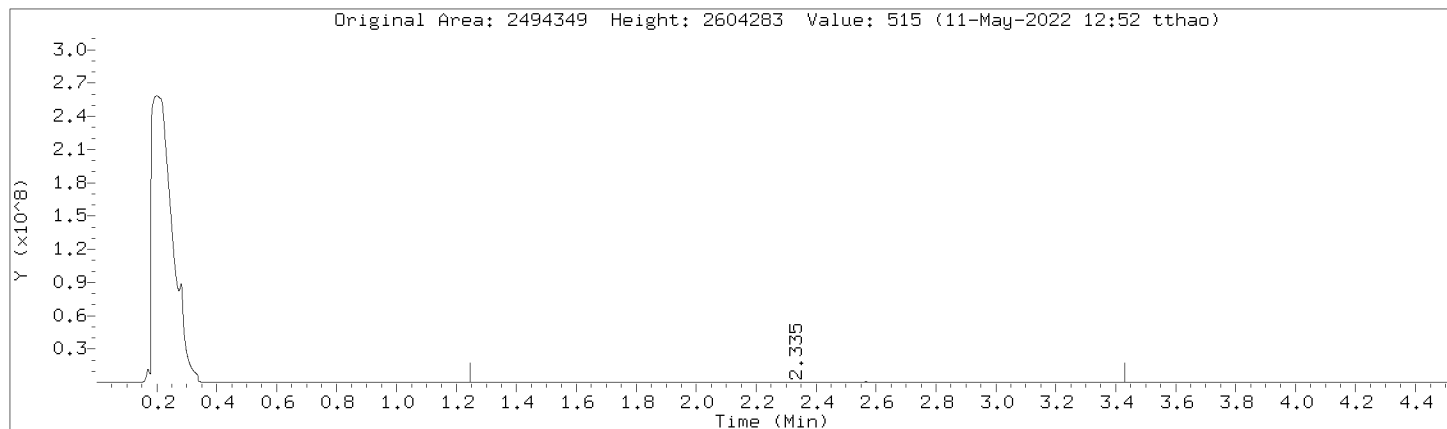
Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





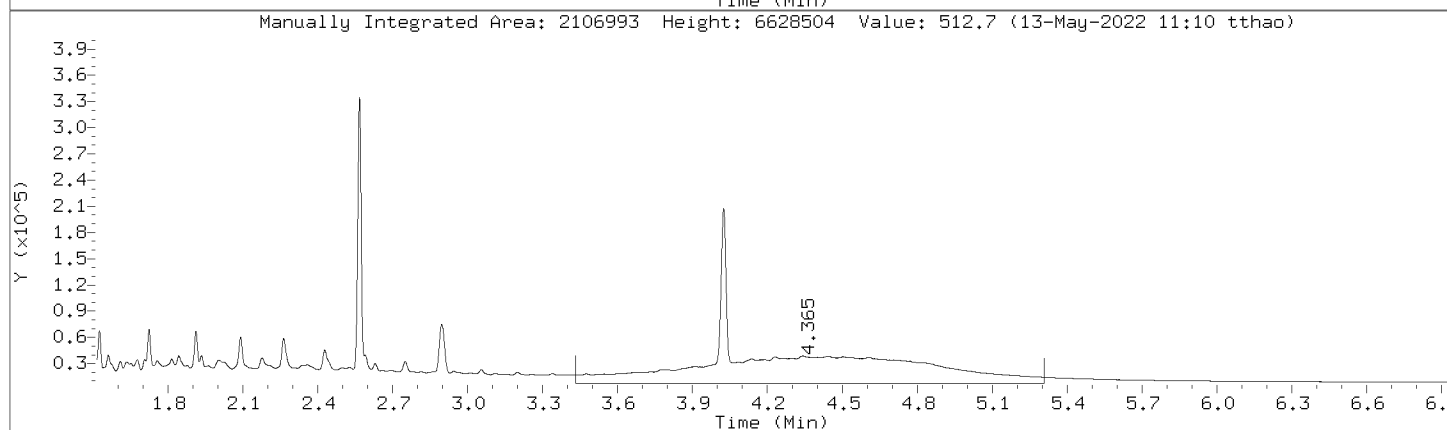
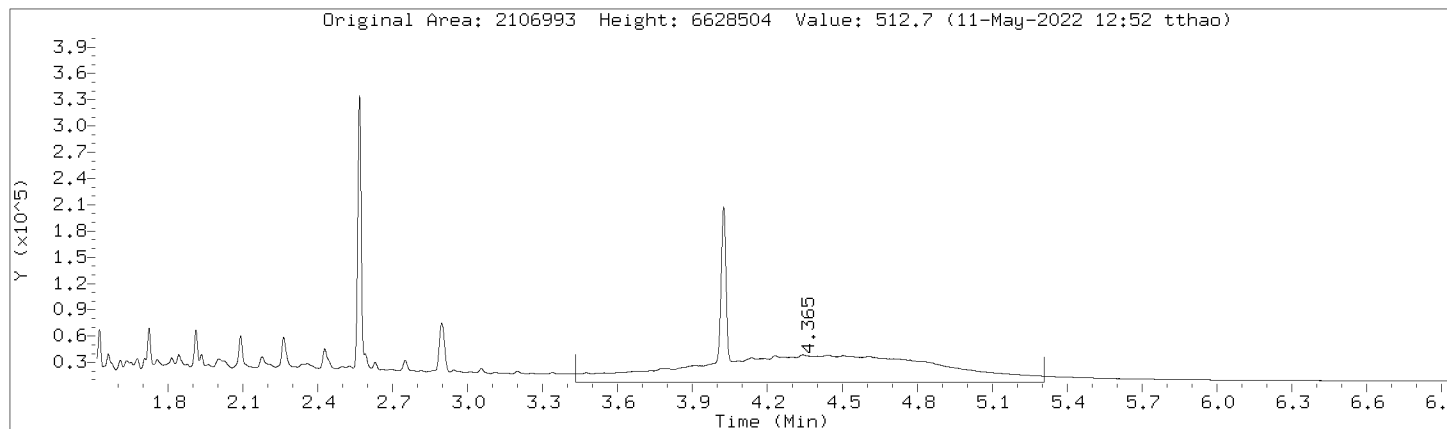
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Injection Date: 11-MAY-2022 12:20  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



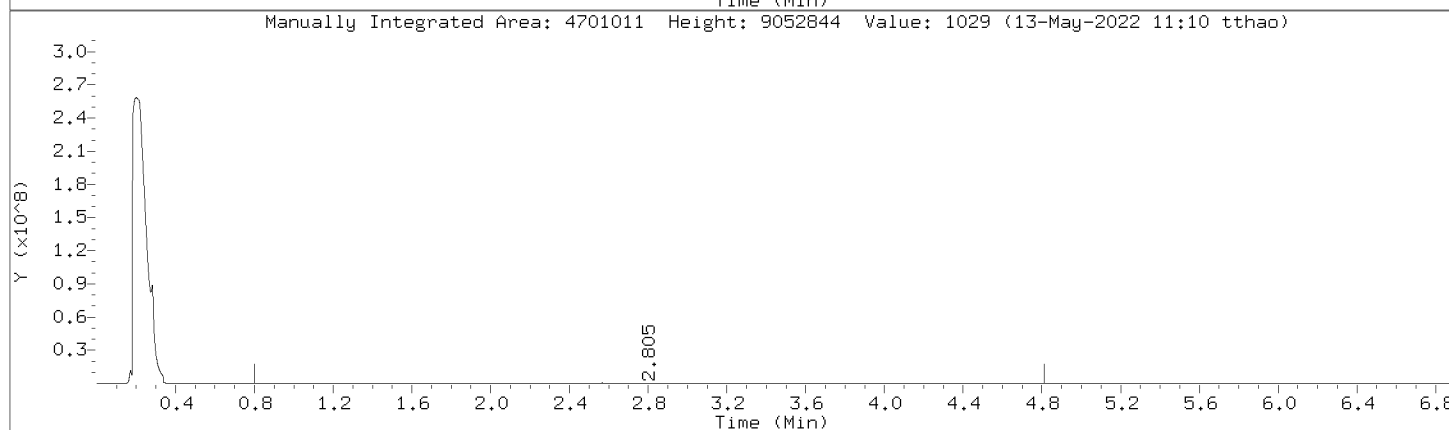
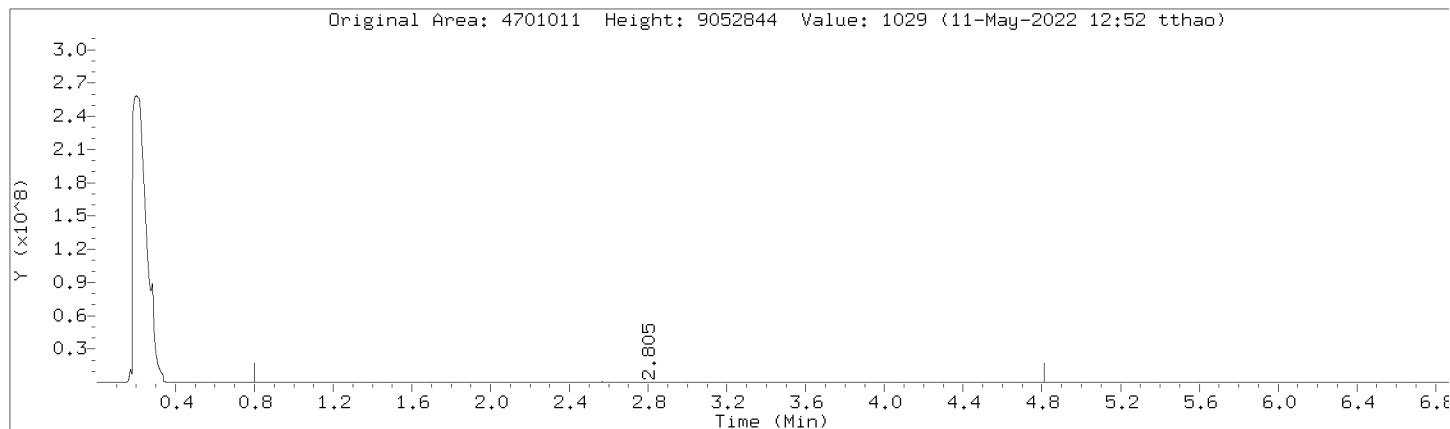
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Injection Date: 11-MAY-2022 12:20  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



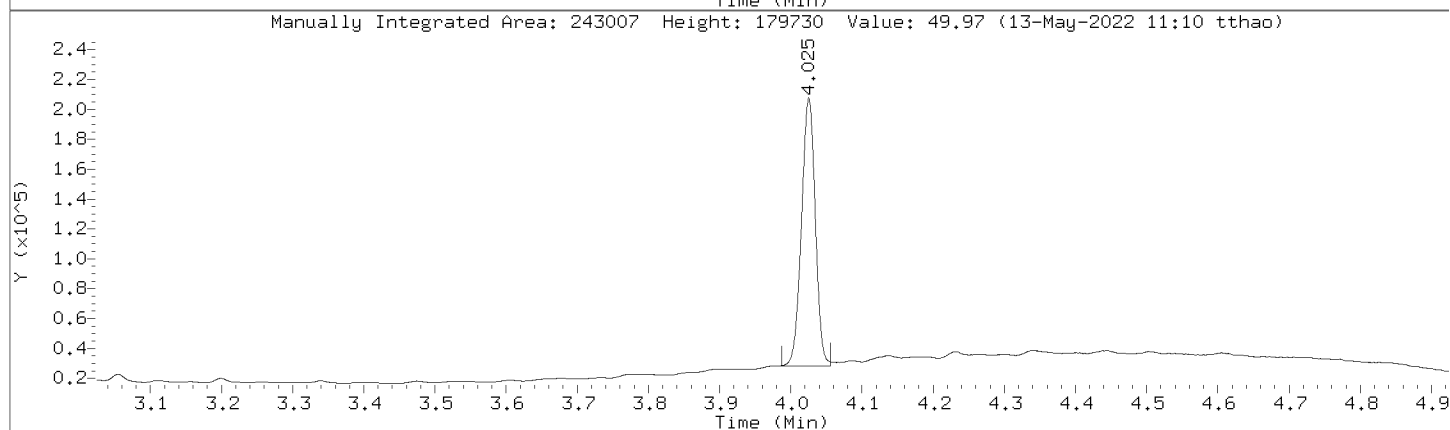
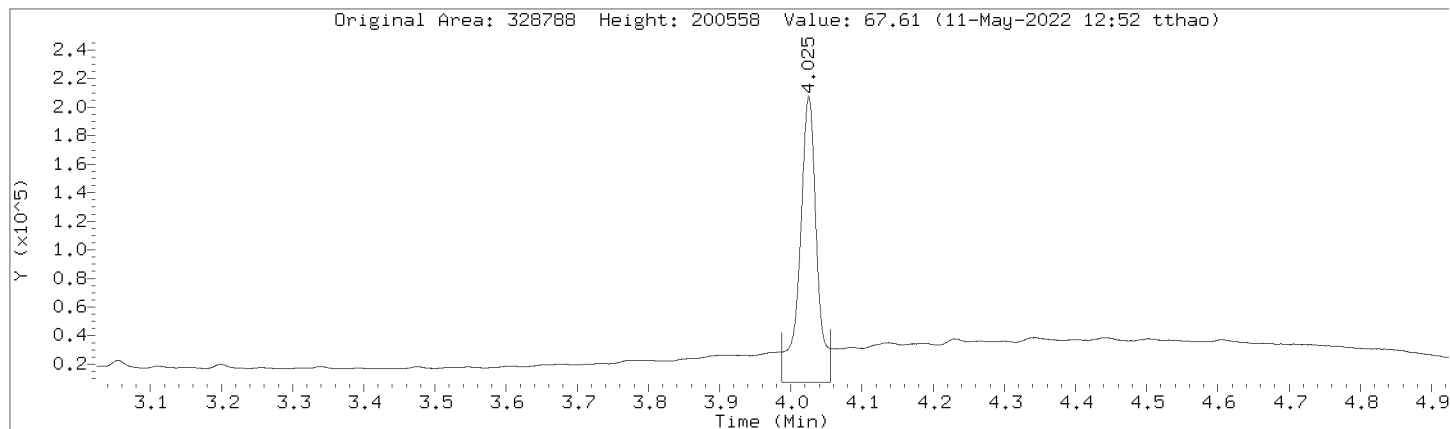
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Injection Date: 11-MAY-2022 12:20  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



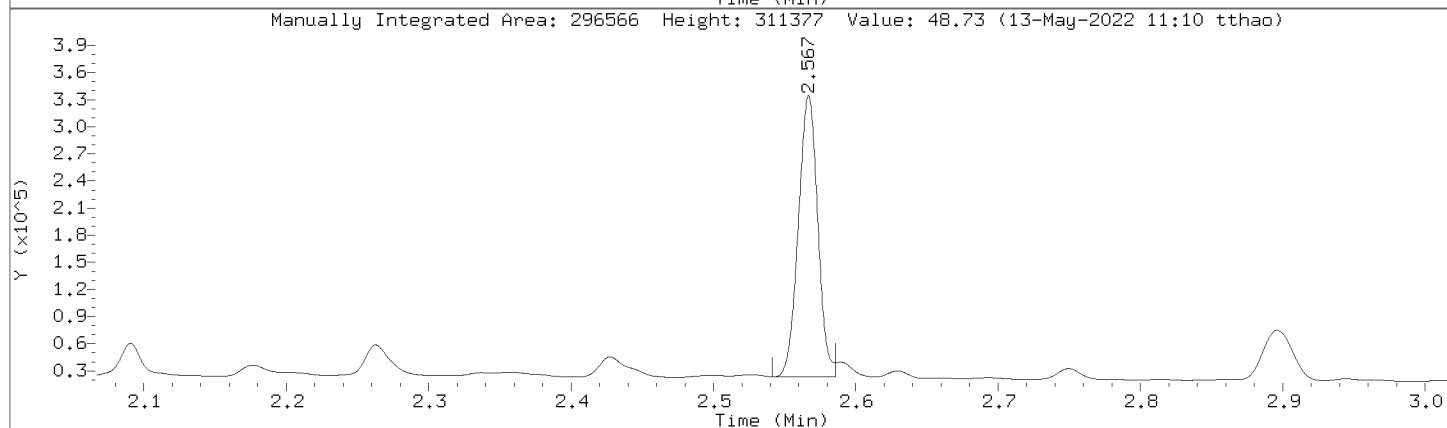
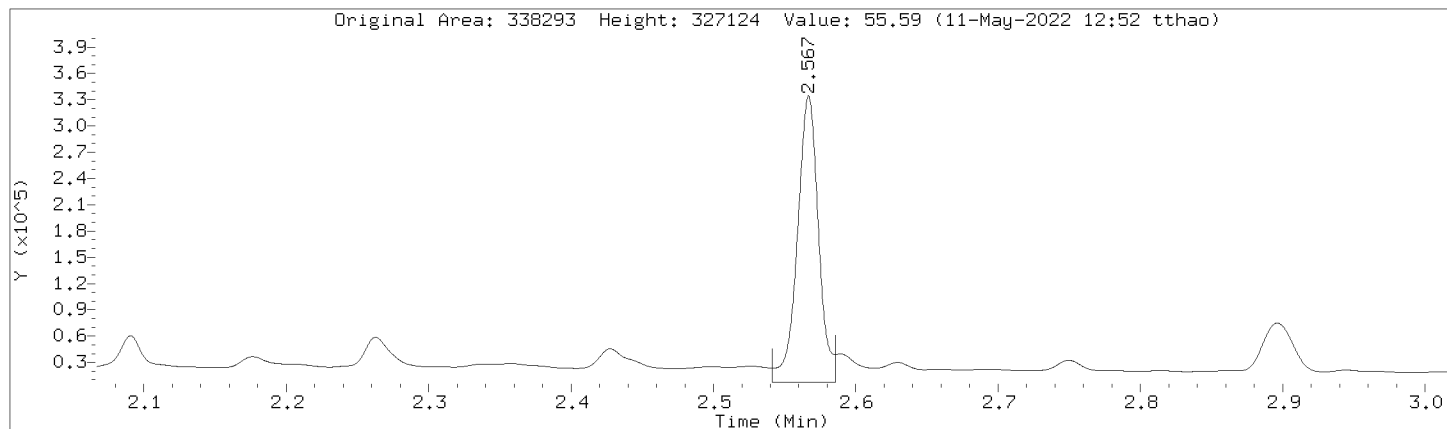
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Injection Date: 11-MAY-2022 12:20  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000135.D  
 Injection Date: 11-MAY-2022 12:20  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,363721:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1744582	1744582
DRO by AK 102	2956429	2956429
TPH-DRO (C10-C28)	3390094	3390094
Motor Oil Range (C24-C36)	1824556	1824556
Diesel Fuel Range	2494349	2494349
Motor Oil Range	2106993	2106993
Diesel Fuel Range SG	2494349	2494349
Motor Oil Range SG	2106993	2106993
C10-C36	4701011	4701011
n-Triacontane (S)	328788	243007
o-Terphenyl (S)	338293	296566

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\051122F.b\0511F0000004.D  
 Lab Smp Id: DMO-CCV,363721:2 Client Smp ID: DMO-CCV,363721:2  
 Inj Date : 11-MAY-2022 13:56  
 Operator : EB3 Inst ID: 10gcsF.i  
 Smp Info : dmo-ccv,363721:2  
 Misc Info : 39289  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\051122F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 11-May-2022 15:29 ebearrood Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 3 Continuing Calibration Sample  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: all.sub  
 Target Version: RC10A Sample Matrix: None  
 Processing Host: W10MNLABS0070

RT	EXP RT	DLT RT	AMOUNTS		REVIEW CODE
			RESPONSE	ON-COL	
=====	=====	=====	(ug/mL)	(ug/mL)	=====
S 1	DRO by AK 102			CAS #:	
0.800	- 3.385		2986945 500.000	520	(M) RNG
-----					
\$ 2	o-Terphenyl (S)			CAS #:	
2.567	2.566 0.001		299165 50.0000	49.2	(M) BA
-----					
\$ 3	n-Triacontane (S)			CAS #:	
4.025	4.025 0.000		244251 50.0000	50.2	(M) BA
-----					
S 4	Residual Range Organics AK103			CAS #:	
3.386	- 4.800		1686041 500.000	497	(M) RNG
-----					
S 5	TPH-DRO (C10-C28)			CAS #:	
0.800	- 3.940		3415073 500.000	517	(M) RNG
-----					
S 6	Motor Oil Range (C24-C36)			CAS #:	
3.250	- 4.800		1765256 500.000	497	(M) RNG
-----					
S 7	C10-C36			CAS #:	
0.800	- 4.800		4672986 1000.00	1020	(M) RNG
-----					
S 8	Diesel Fuel Range			CAS #:	
1.240	- 3.440		2523638 500.000	522	(M) RNG
-----					
S 9	Diesel Fuel Range SG			CAS #:	
1.240	- 3.440		2523638 500.000	522	(M) RNG
-----					
S 10	Motor Oil Range			CAS #:	
3.441	- 5.260		1984474 500.000	481	(M) RNG
-----					
S 11	Motor Oil Range SG			CAS #:	
3.441	- 5.260		1984474 500.000	481	(M) RNG
-----					

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

RNG: Indicates that the analyst integrated a surrogate within the range.

BA: Indicates that the baseline had to be adjusted correctly by the analyst.

Date: 11-MAY-2022 13:56

Client ID: DMO-CCV,363721:2

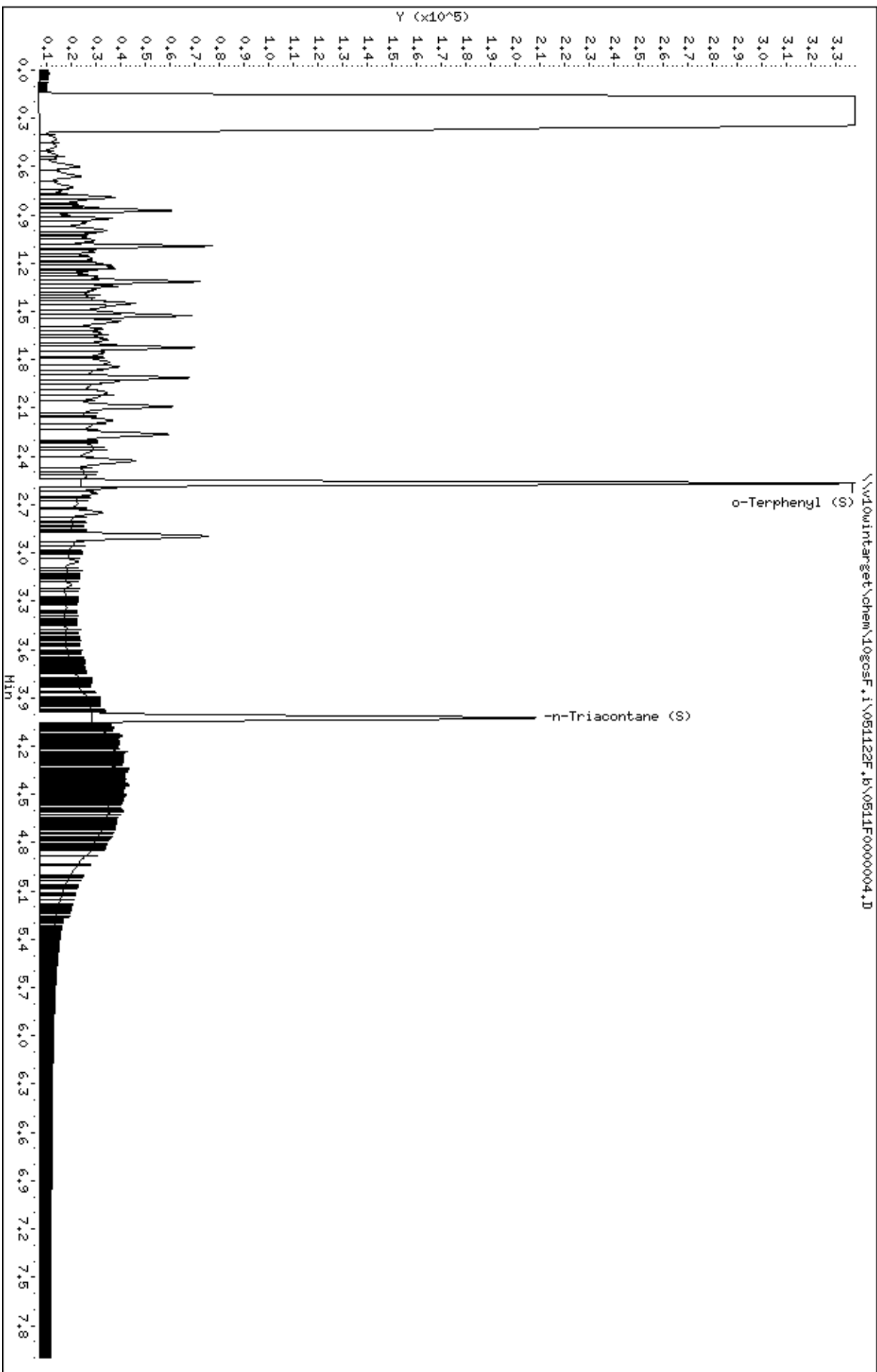
Sample Info: DMO-CCV,363721:2

Instrument: 10gosc.f.1

Operator: EB3

Column diameter: 0.32

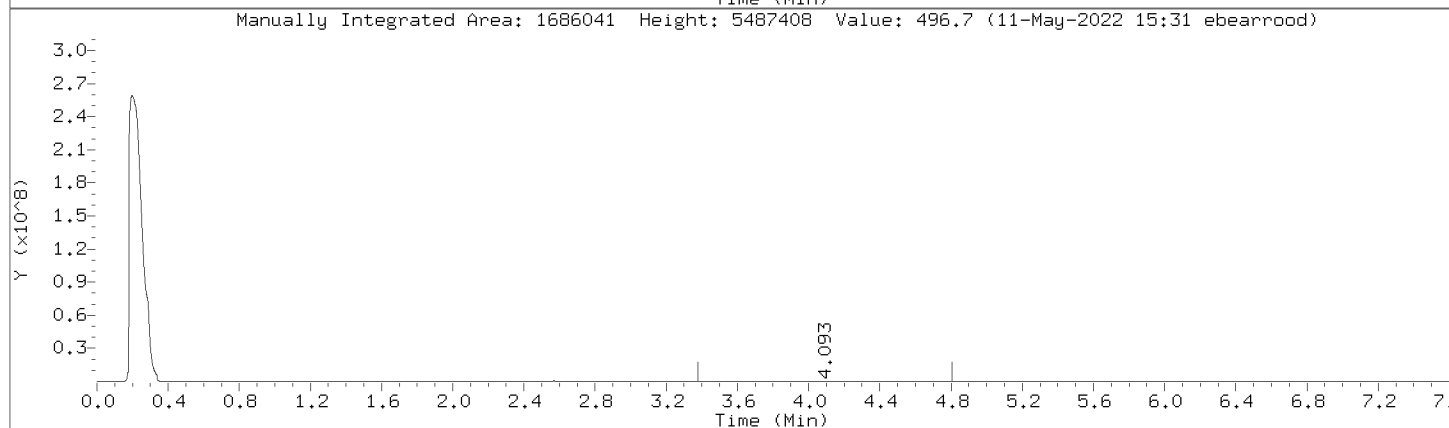
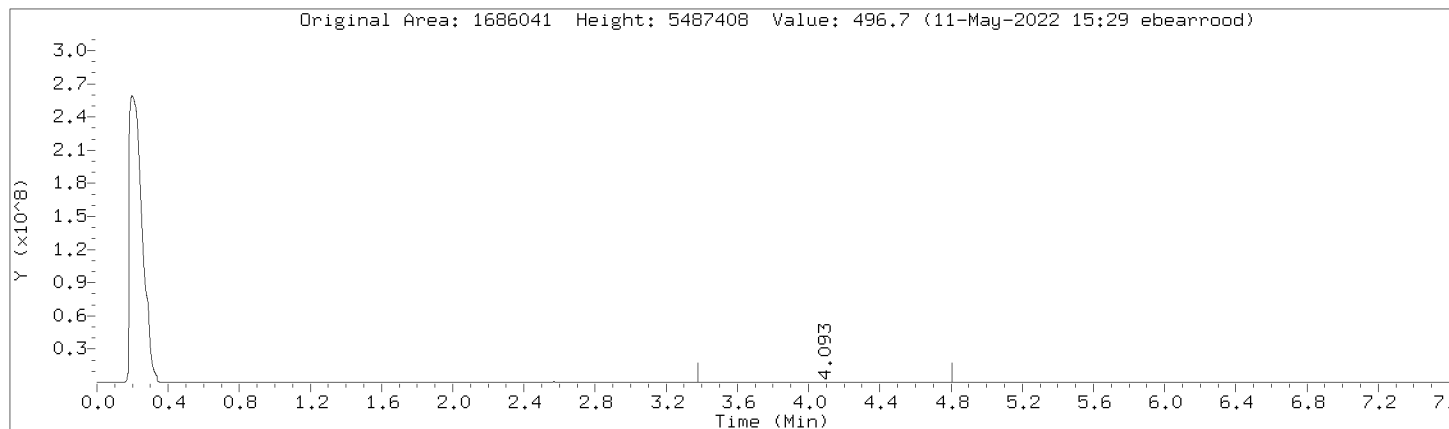
Column phase: DB-5-USE21390001





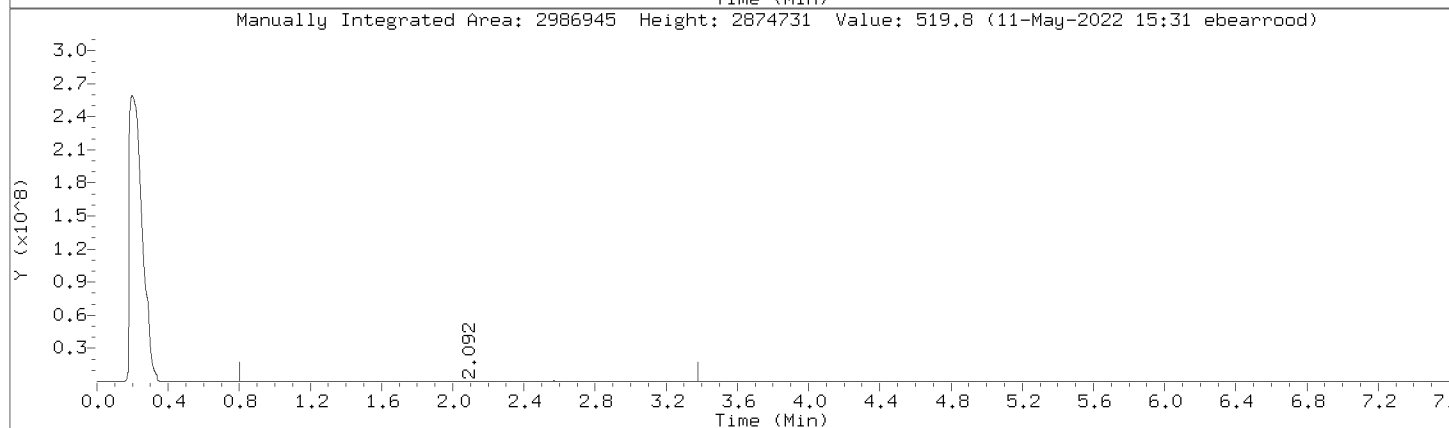
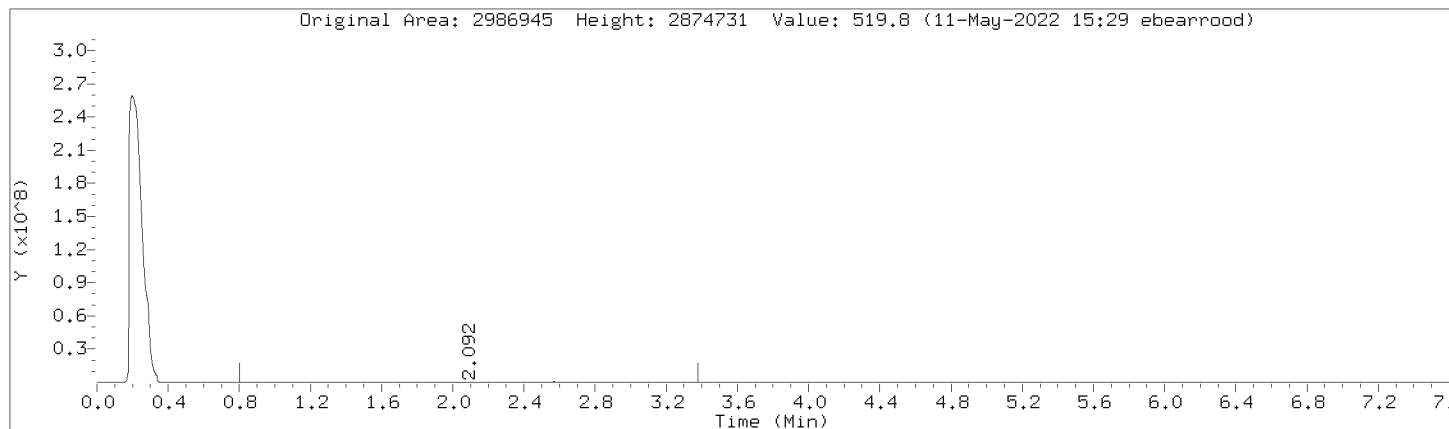
Data File: \\v10wintarget\chem\10gcsF.i\051122F.b\0511F0000004.D  
Injection Date: 11-MAY-2022 13:56  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Residual Range Organics AK103      Review Code: RNG  
CAS Number:



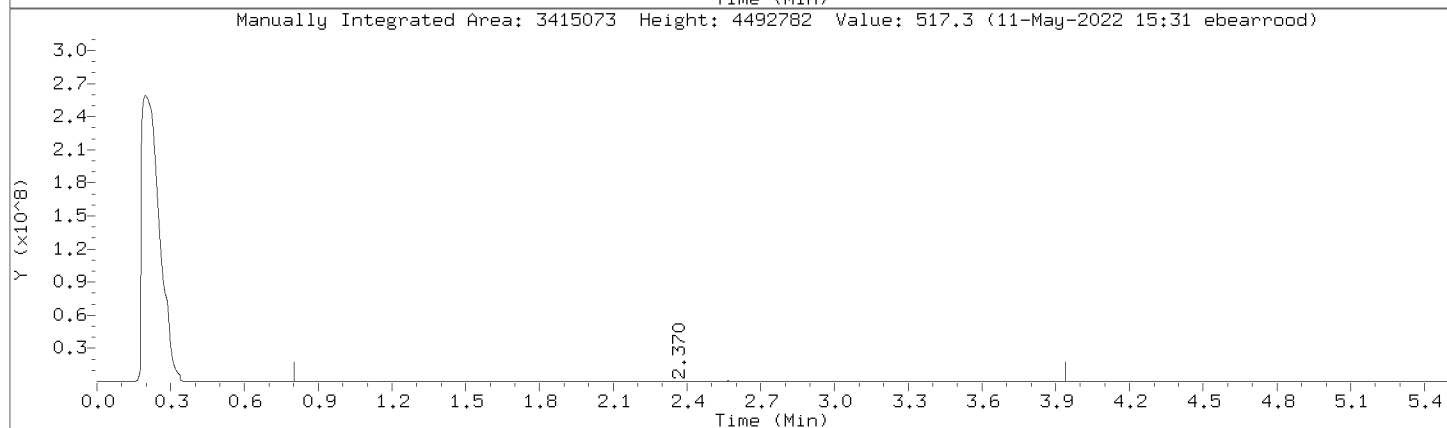
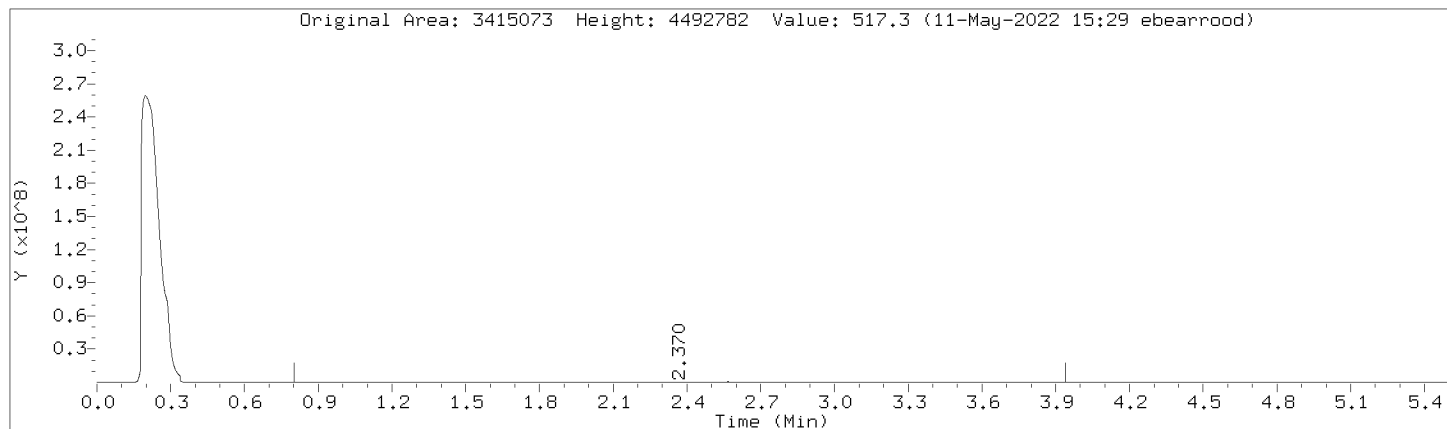
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Injection Date: 11-MAY-2022 13:56  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: DRO by AK 102      Review Code: RNG  
CAS Number:



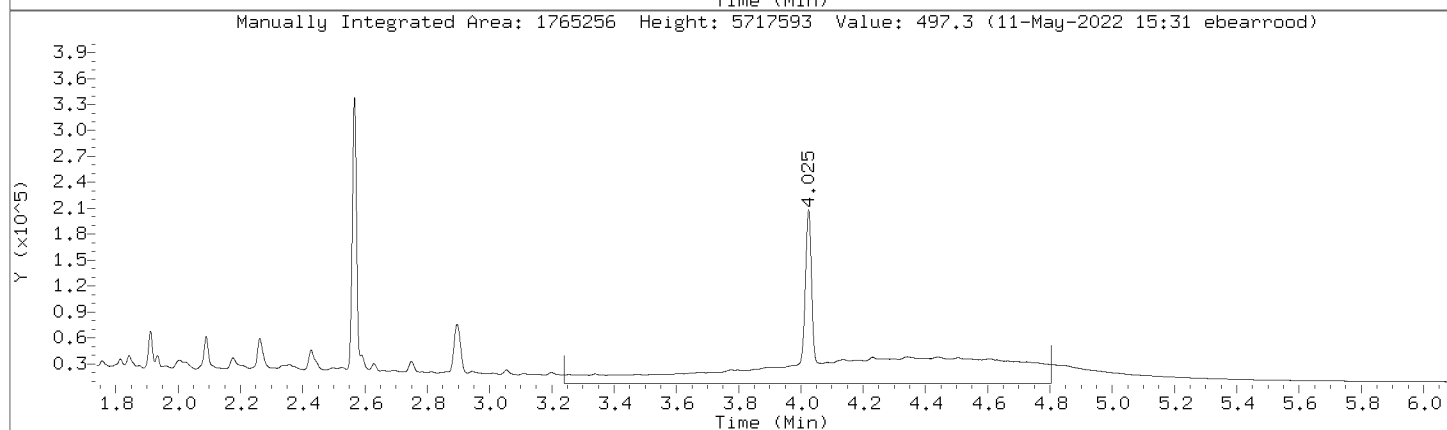
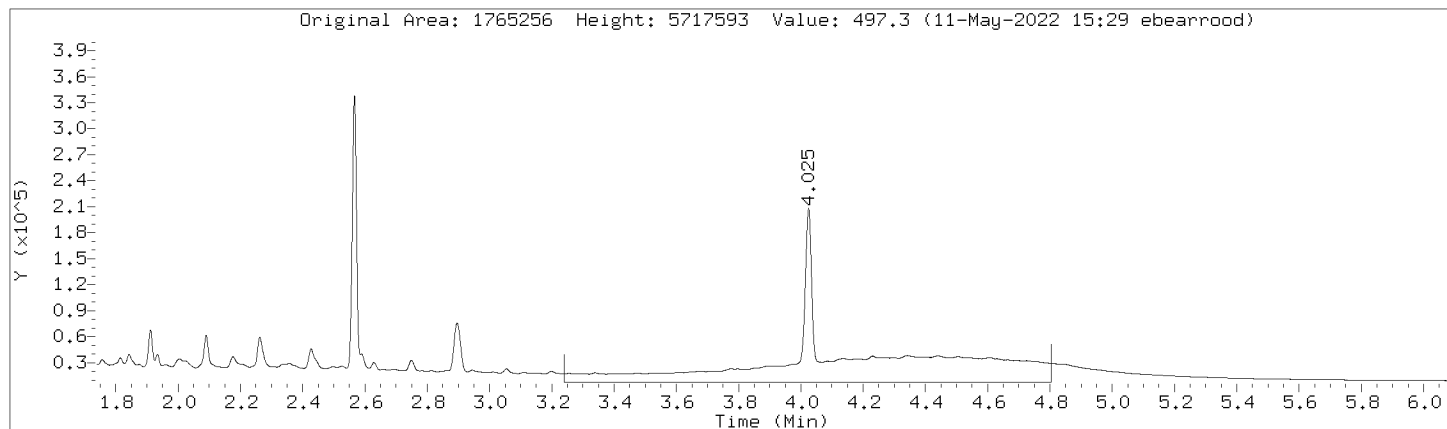
Data File: \\v10wintarget\chem\10gcsF.i\051122F.b\0511F0000004.D  
Injection Date: 11-MAY-2022 13:56  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: TPH-DRO (C10-C28)      Review Code: RNG  
CAS Number:



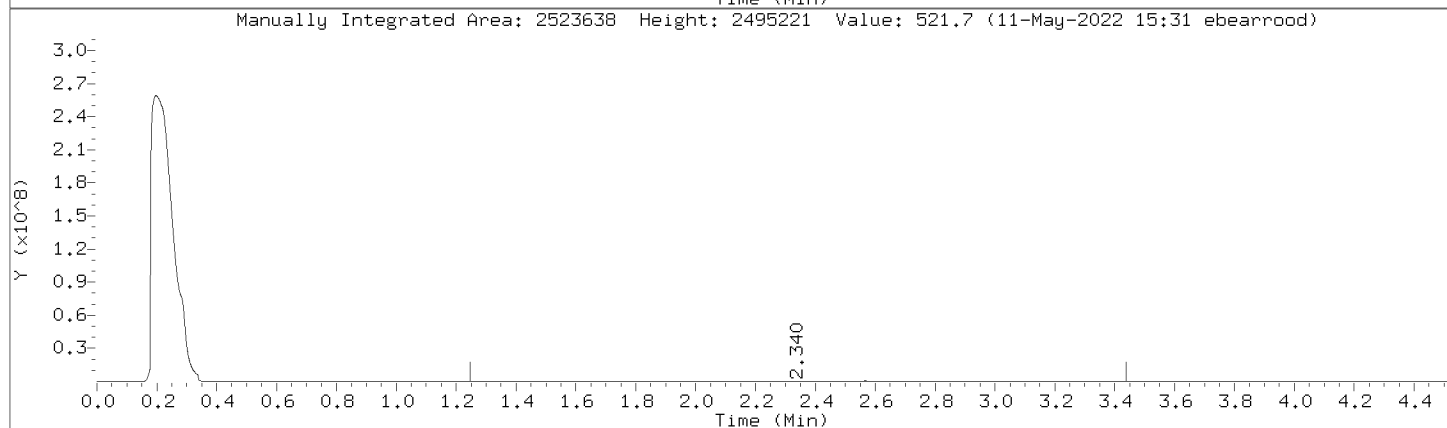
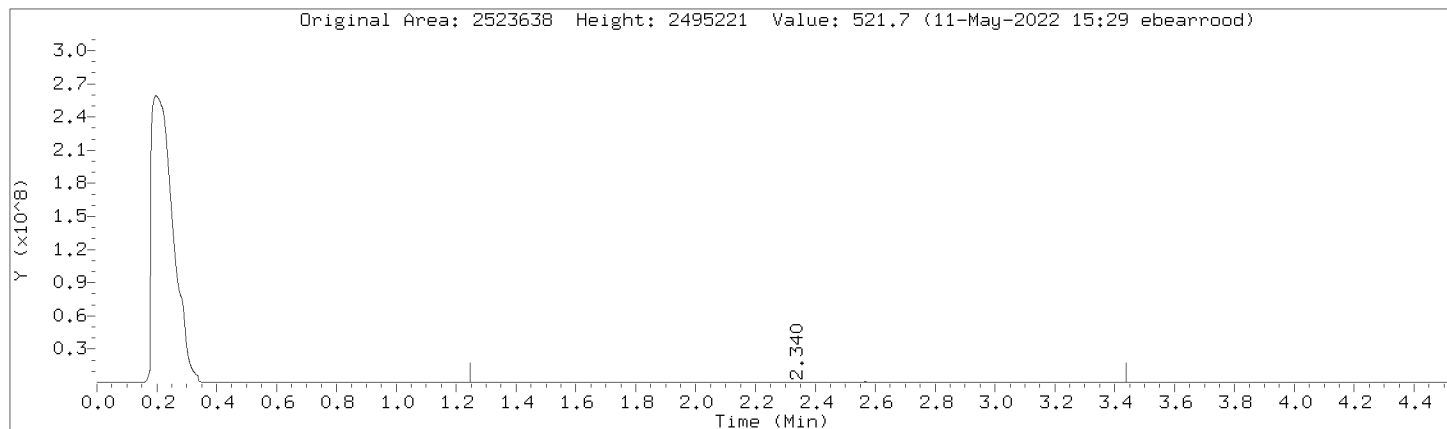
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Injection Date: 11-MAY-2022 13:56  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range (C24-C36)      Review Code: RNG  
CAS Number:



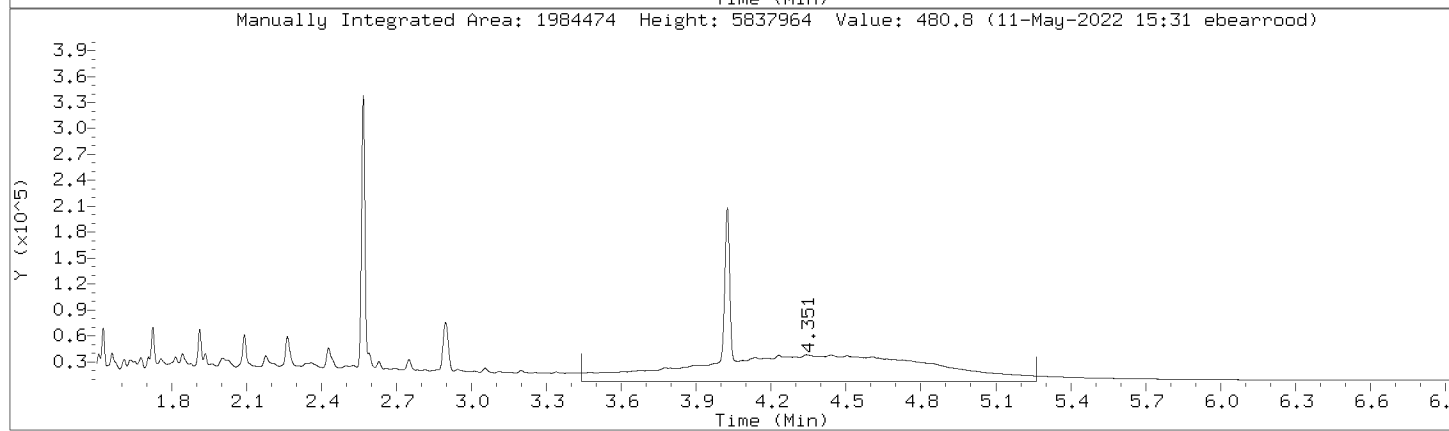
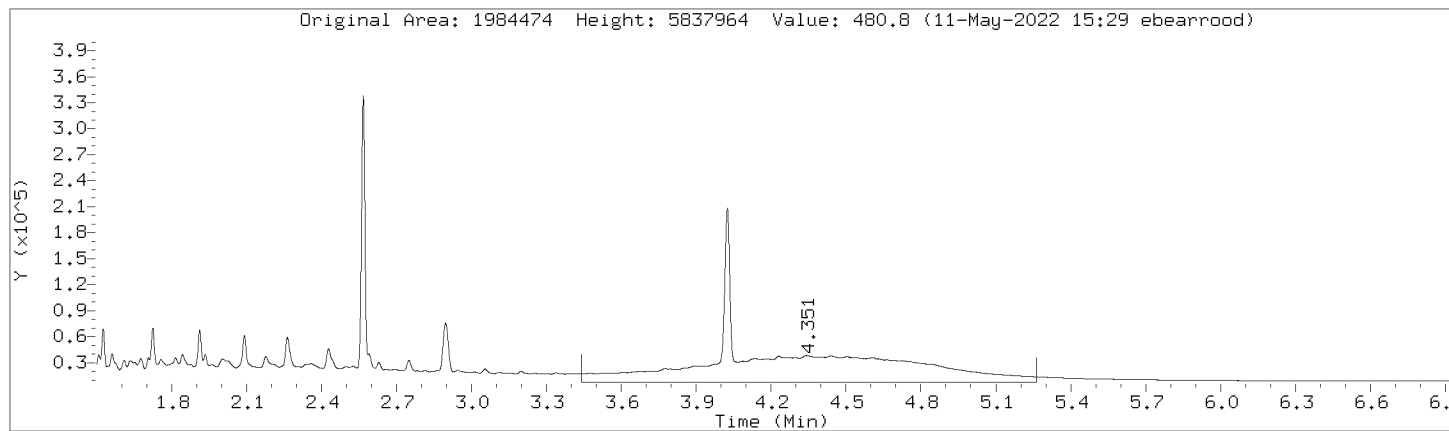
Data File: \\v10wintarget\chem\10gcsF.i\051122F.b\0511F0000004.D  
Injection Date: 11-MAY-2022 13:56  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



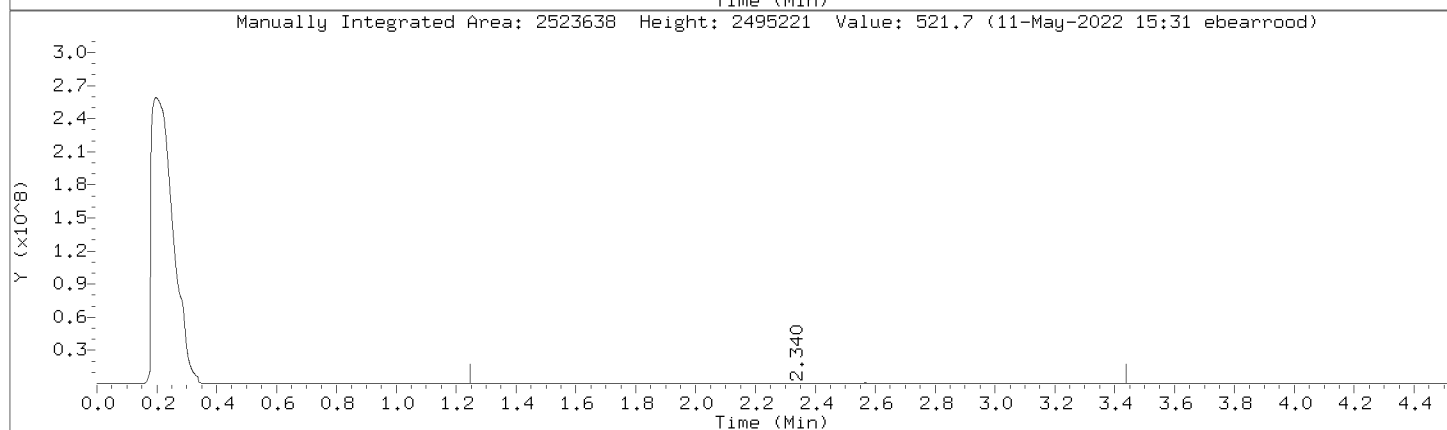
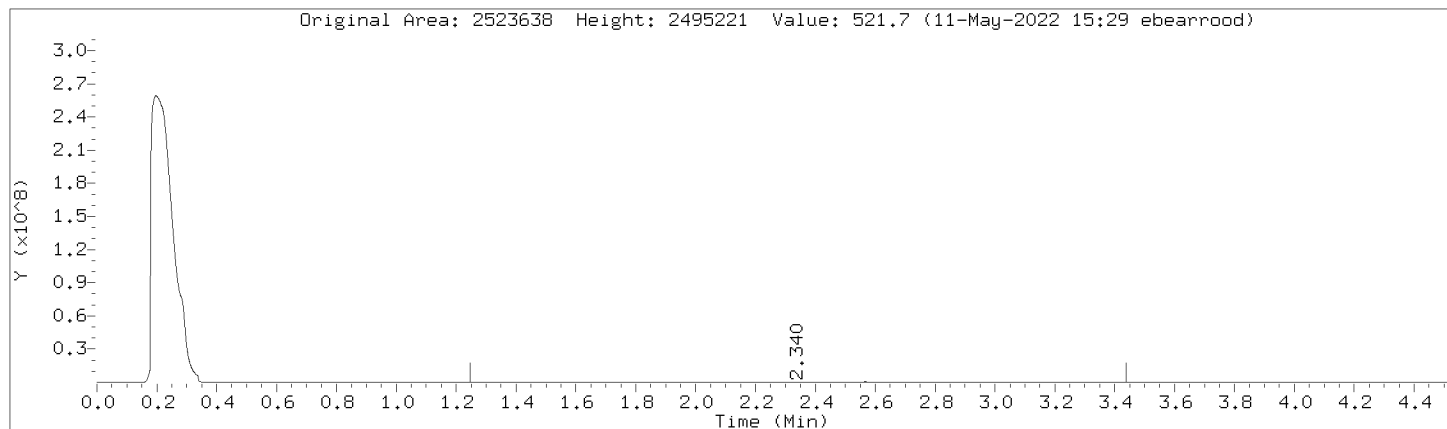
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Injection Date: 11-MAY-2022 13:56  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



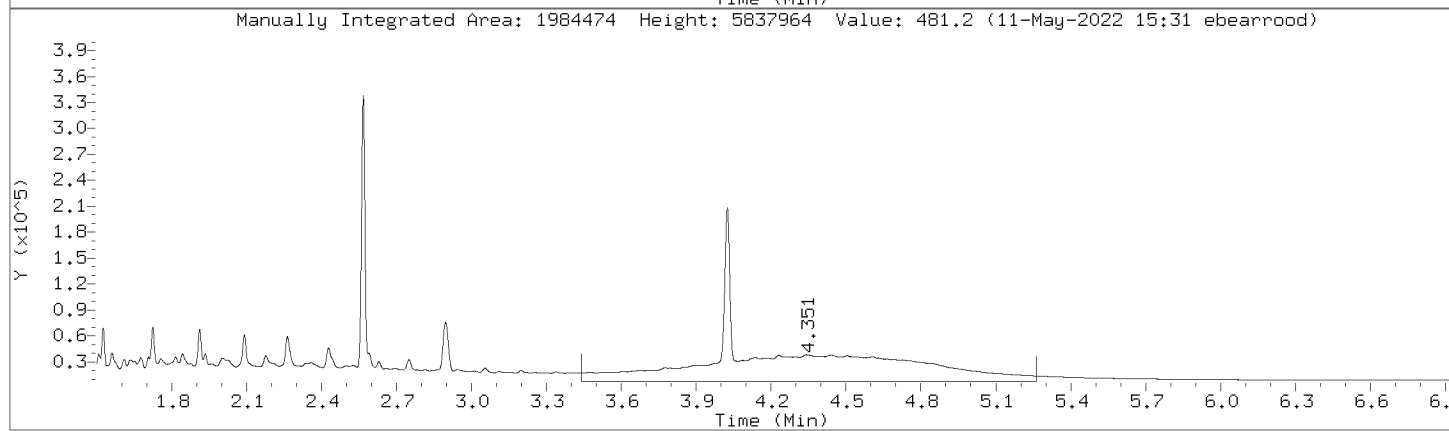
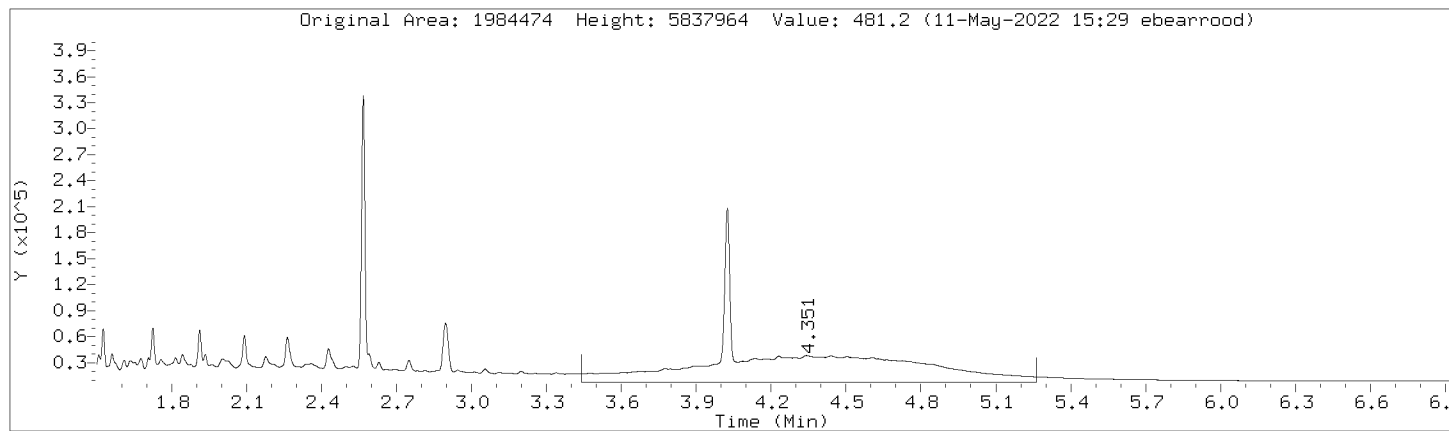
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Injection Date: 11-MAY-2022 13:56  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051122F.b\0511F0000004.D  
Injection Date: 11-MAY-2022 13:56  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

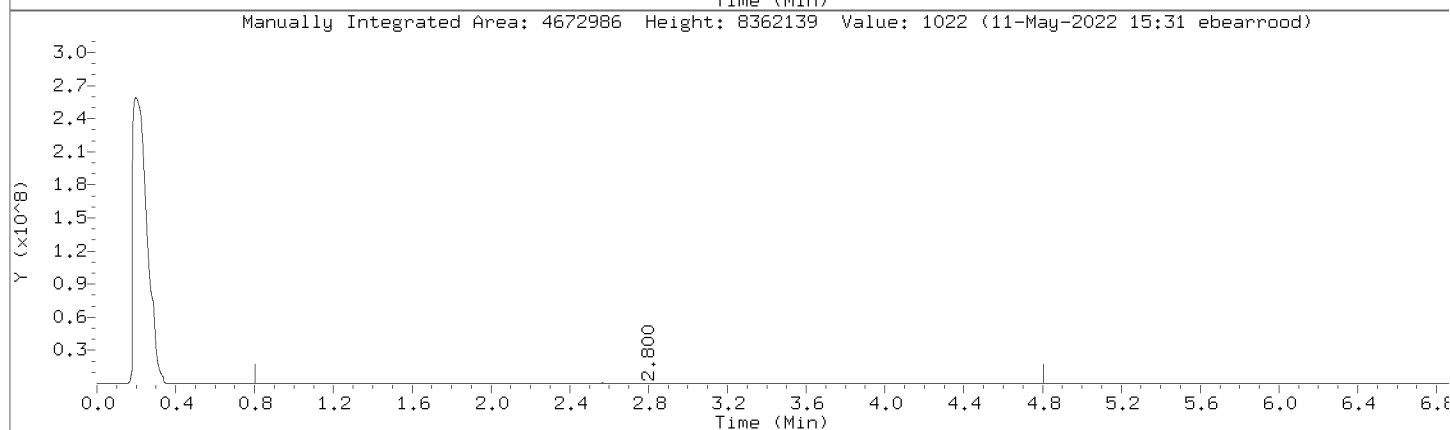
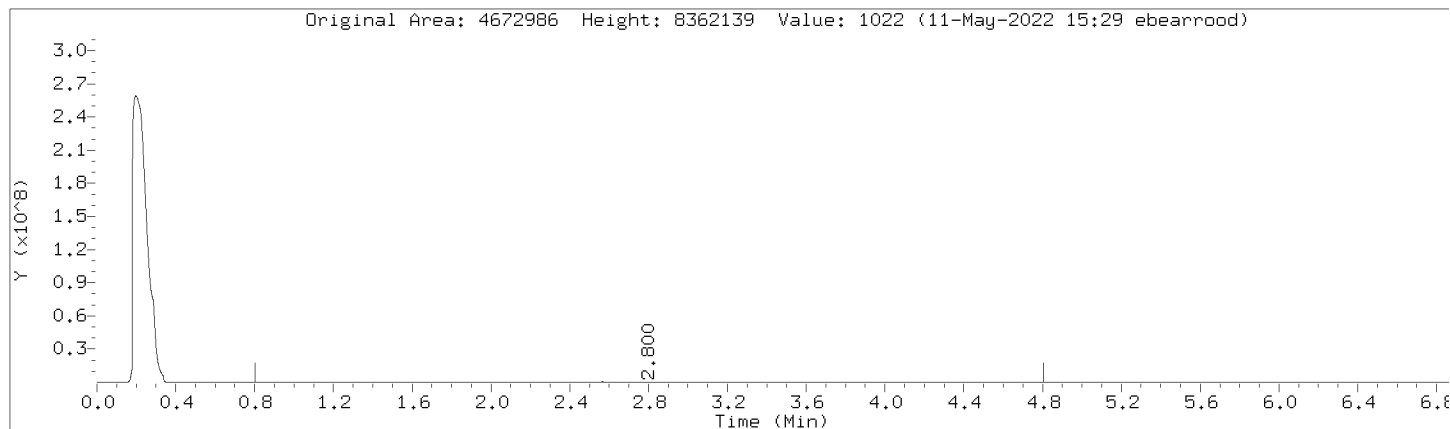
Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





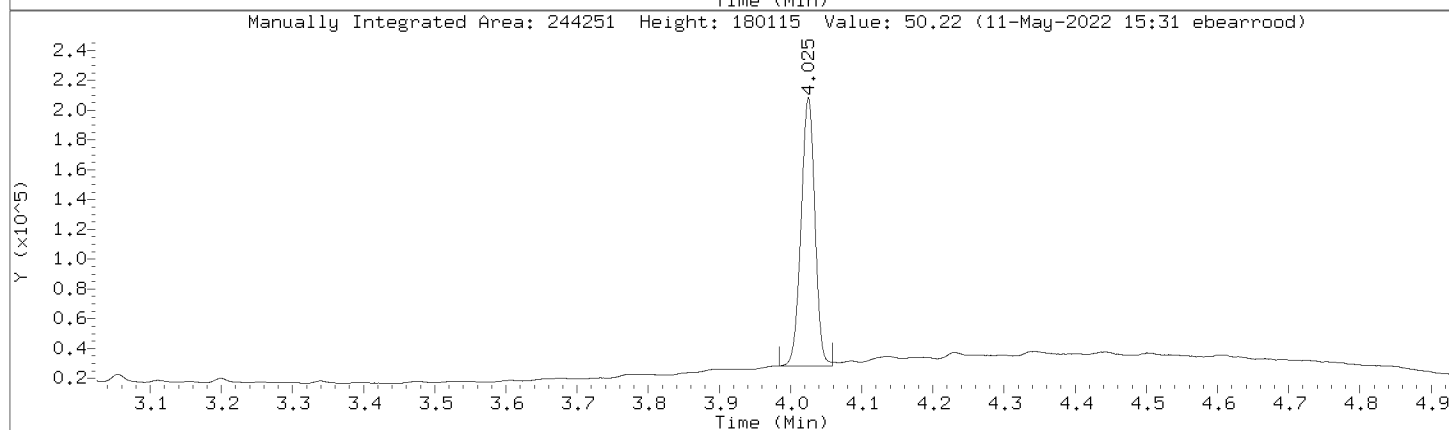
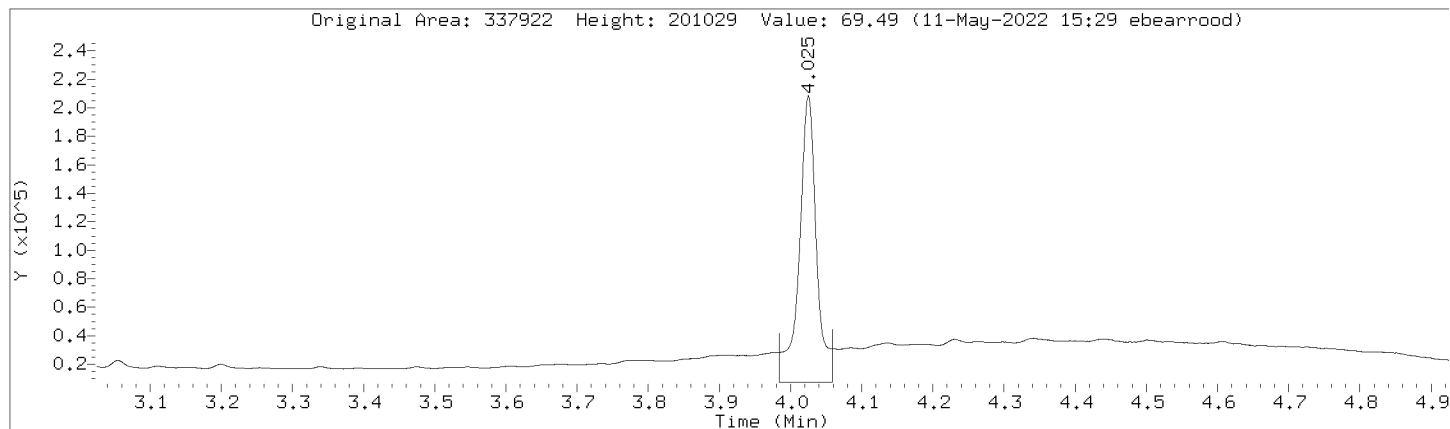
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Injection Date: 11-MAY-2022 13:56  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: C10-C36      Review Code: RNG  
CAS Number:



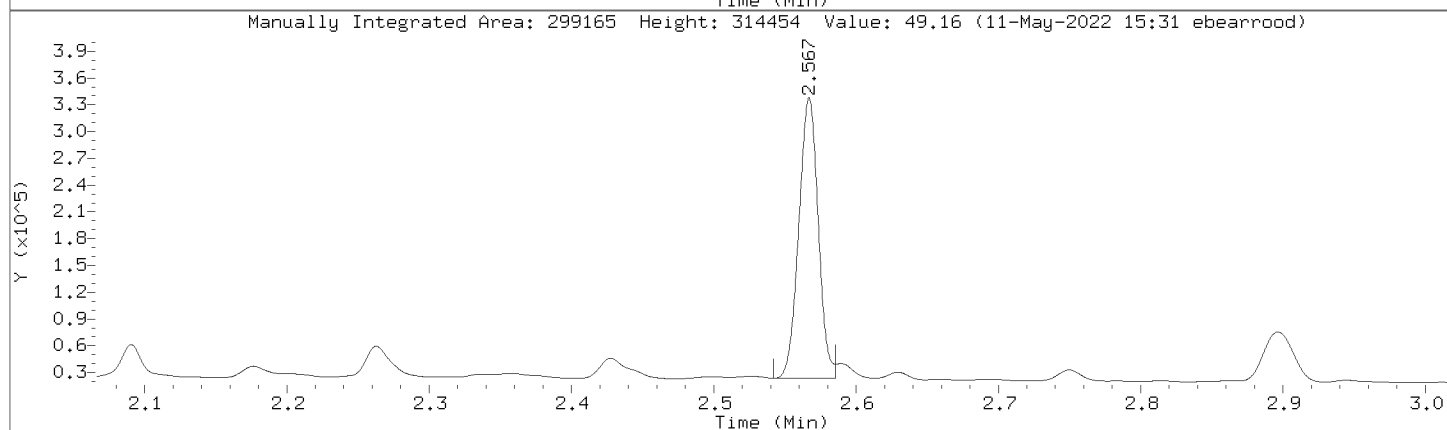
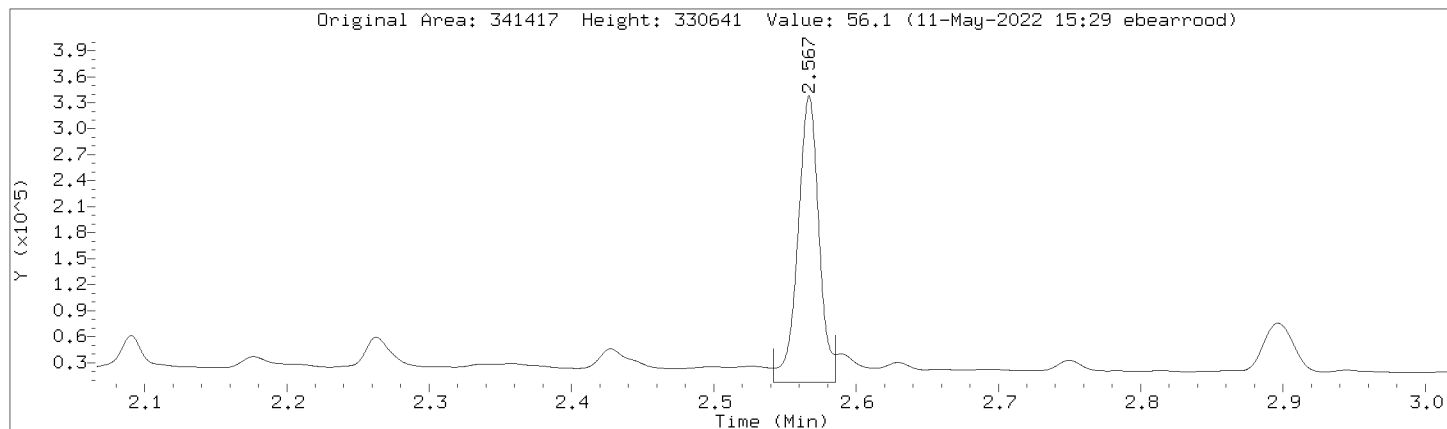
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Injection Date: 11-MAY-2022 13:56  
Instrument: 10gcsF.i  
Lab Sample ID: DMO-CCV,363721:2

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051122F.b\0511F0000004.D  
 Injection Date: 11-MAY-2022 13:56  
 Instrument: 10gcsF.i  
 Lab Sample ID: DMO-CCV,363721:2

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Residual Range Organics AK103	1686041	1686041
DRO by AK 102	2986945	2986945
TPH-DRO (C10-C28)	3415073	3415073
Motor Oil Range (C24-C36)	1765256	1765256
Diesel Fuel Range	2523638	2523638
Motor Oil Range	1984474	1984474
Diesel Fuel Range SG	2523638	2523638
Motor Oil Range SG	1984474	1984474
C10-C36	4672986	4672986
n-Triacontane (S)	337922	244251
o-Terphenyl (S)	341417	299165

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BLANK

Lab Name: Pace Analytical - Minnesota Contract: D3593500  
Date Received: \_\_\_\_\_ Matrix: Solid SDG No.: 10606394  
Date Extracted: 04/29/2022 17:05 Lab Sample ID: 4307793  
Date Analyzed: 05/02/2022 19:37 Lab File ID: 050222R.B\0502R0000031B.D  
Initial wt/vol: 10 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	ND	U
	Motor Oil Range	ND	U

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000031b.D  
 Lab Smp Id: 4307793 Client Smp ID: MB  
 Inj Date : 02-MAY-2022 19:37  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 4307793  
 Misc Info : 39248  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050222R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 06-May-2022 08:44 rgustafson Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 25 QC Sample: BLANK  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE	ON-COL	FINAL	REVIEW CODE
				(ug/mL)	(mg/Kg)	
====	=====	=====	=====	=====	=====	=====
\$ 2	o-Terphenyl (S)				CAS #:	
2.712	2.713	-0.001	268590 40.0754	4.01		(M) BA
\$ 3	n-Triacontane (S)				CAS #:	
4.258	4.262	-0.004	238032 45.4418	4.54		(M) BA
S 10	Motor Oil Range				CAS #:	
3.651	- 6.100		286907 38.6343	3.86		(M) RNG
S 11	Motor Oil Range SG				CAS #:	
3.651	- 6.100		286907 38.6343	3.86		(M) RNG
S 8	Diesel Fuel Range				CAS #:	
1.350	- 3.650		351920 7.60961	0.761		(M) RNG
S 9	Diesel Fuel Range SG				CAS #:	
1.350	- 3.650		351920 7.60961	0.761		(M) RNG

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.

Date : 02-MAY-2022 19:37

Client ID: HB

Sample Info: 4307793

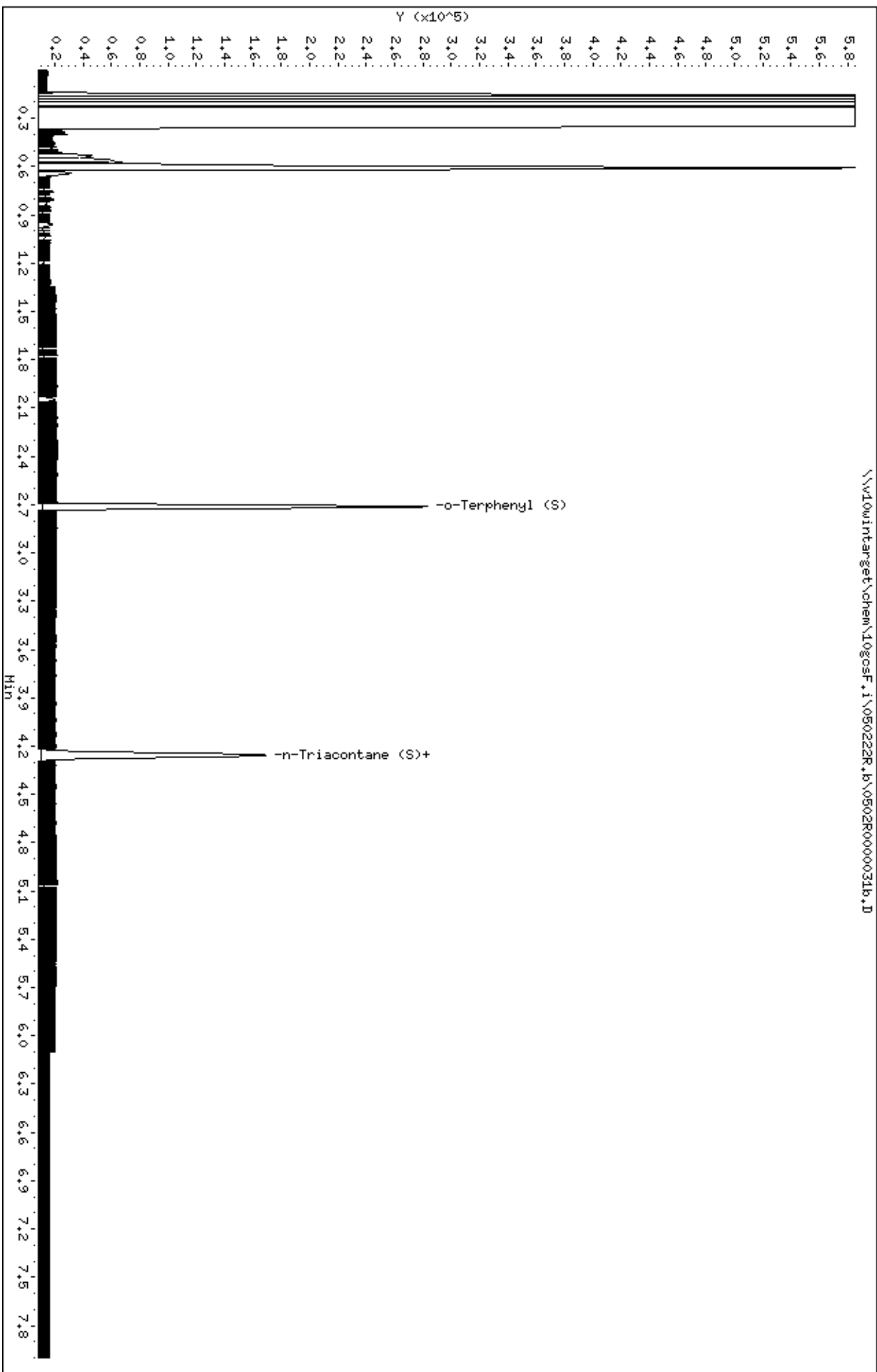
Volume Injected (uL): 1.0

Column phase: DB-5-MS21430033

Instrument: 10gcsf.i

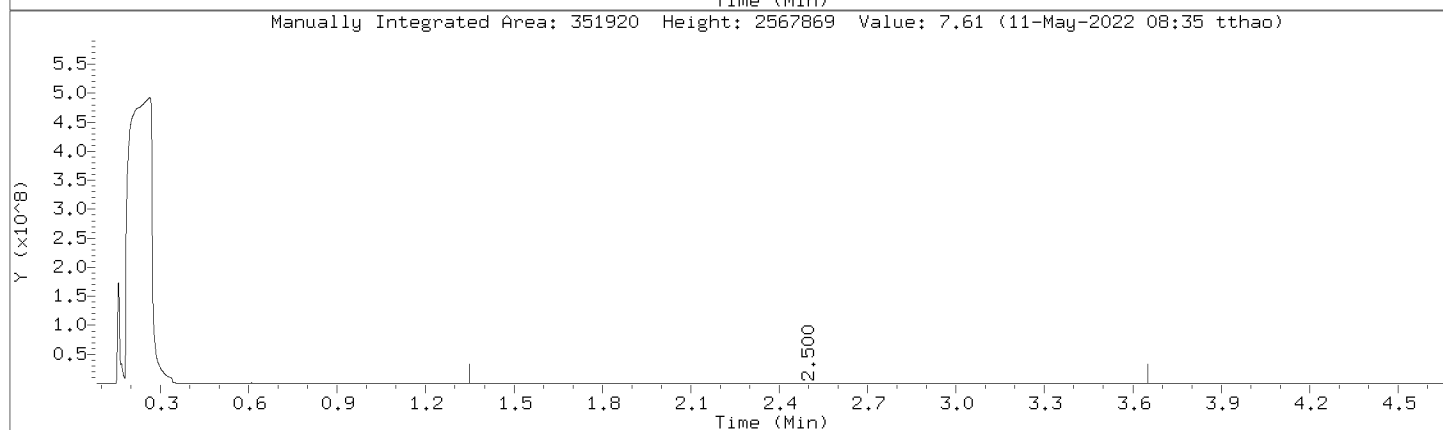
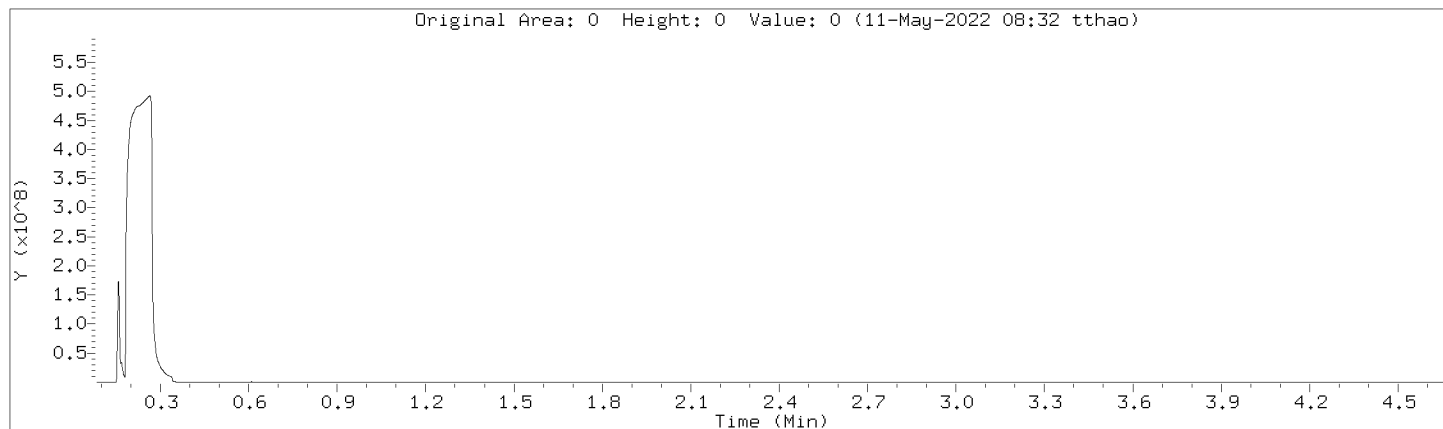
Operator: TT2

Column diameter: 0.32



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Injection Date: 02-MAY-2022 19:37  
Instrument: 10gcsF.i  
Lab Sample ID: 4307793

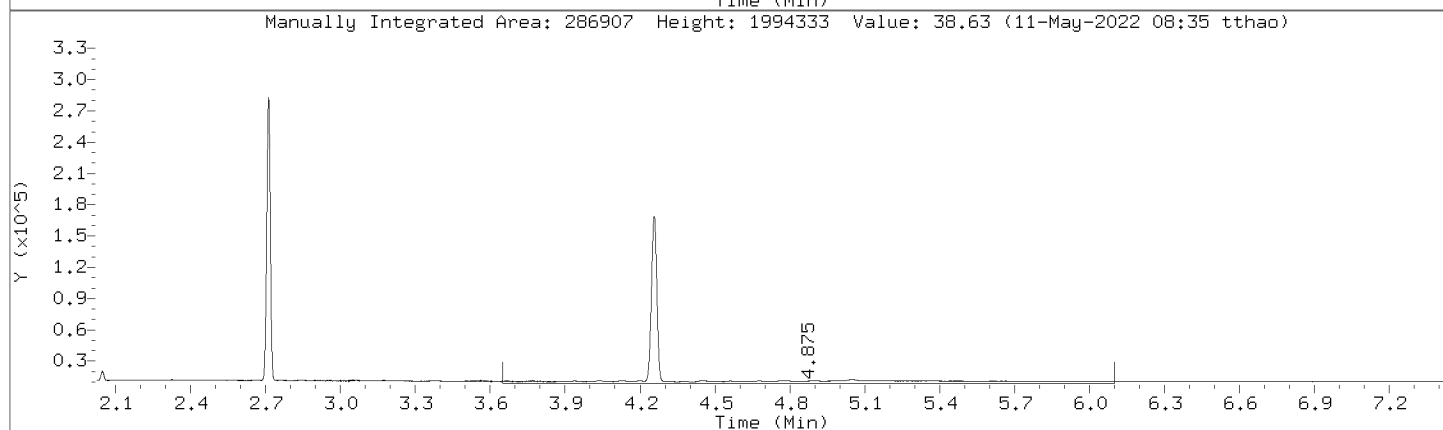
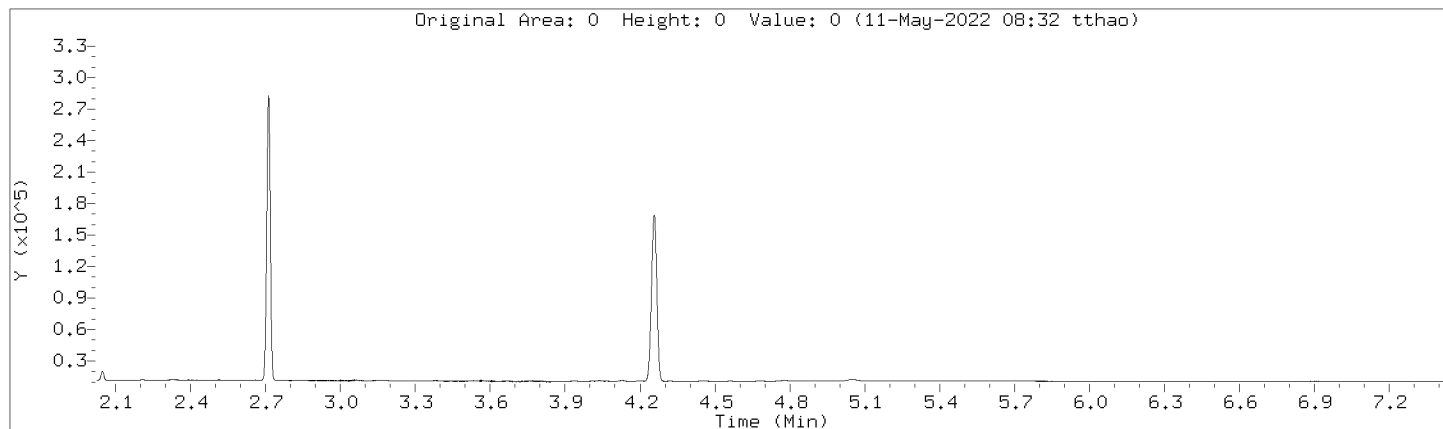
Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:





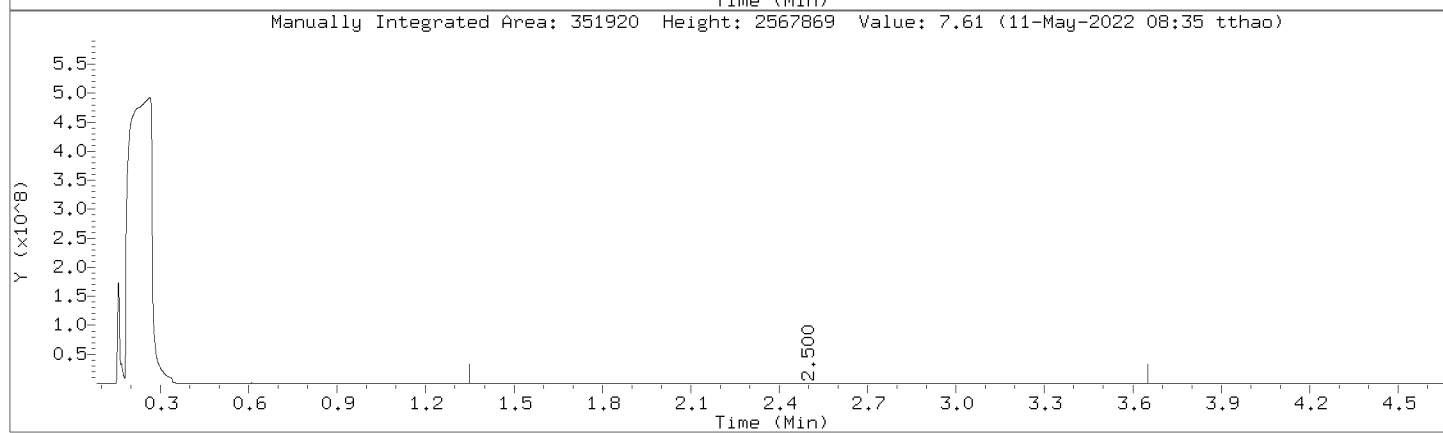
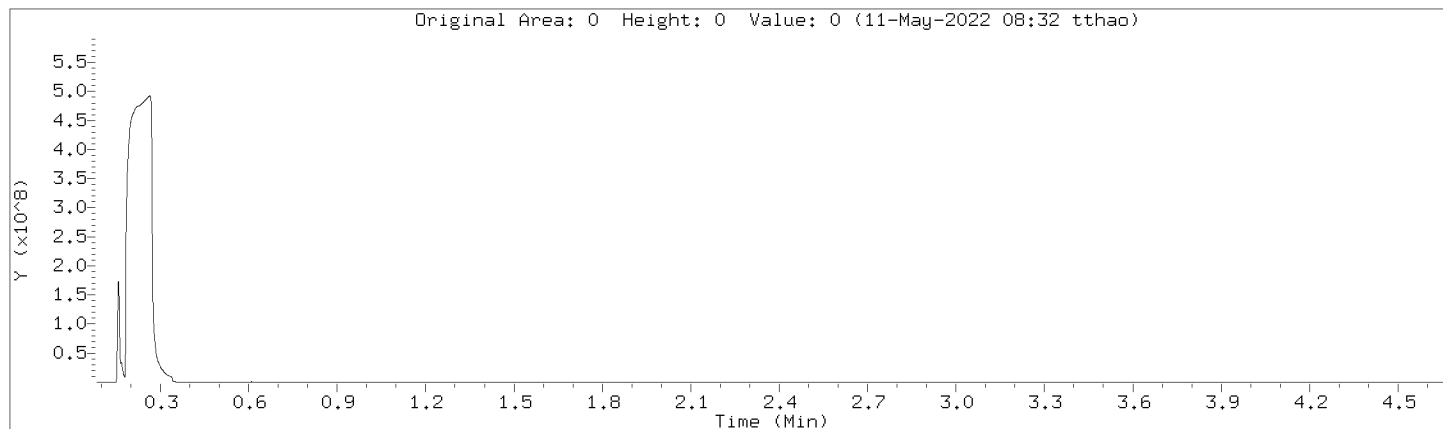
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000031b.D  
Injection Date: 02-MAY-2022 19:37  
Instrument: 10gcsF.i  
Lab Sample ID: 4307793

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



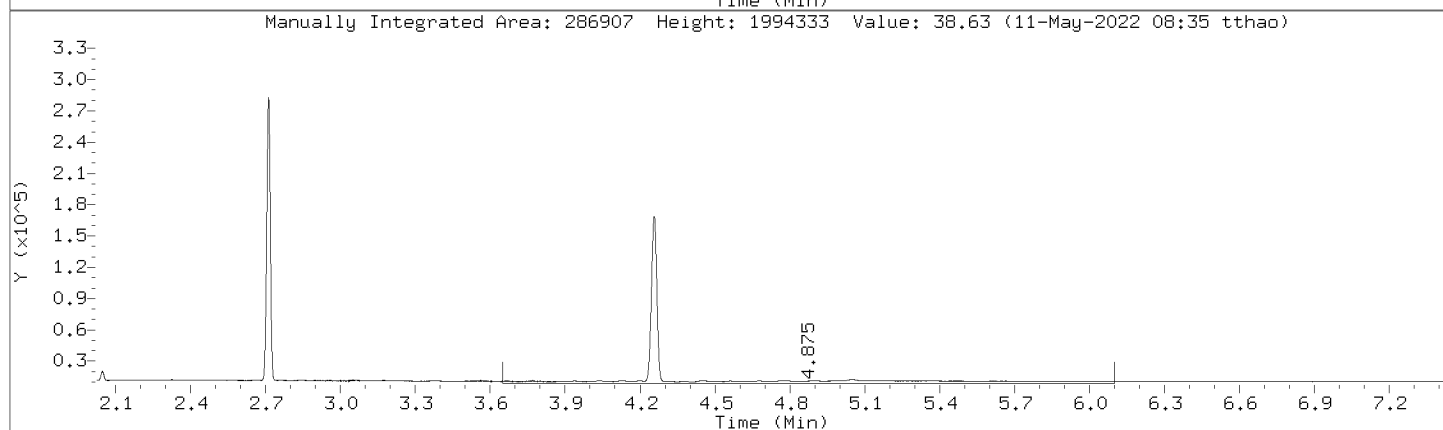
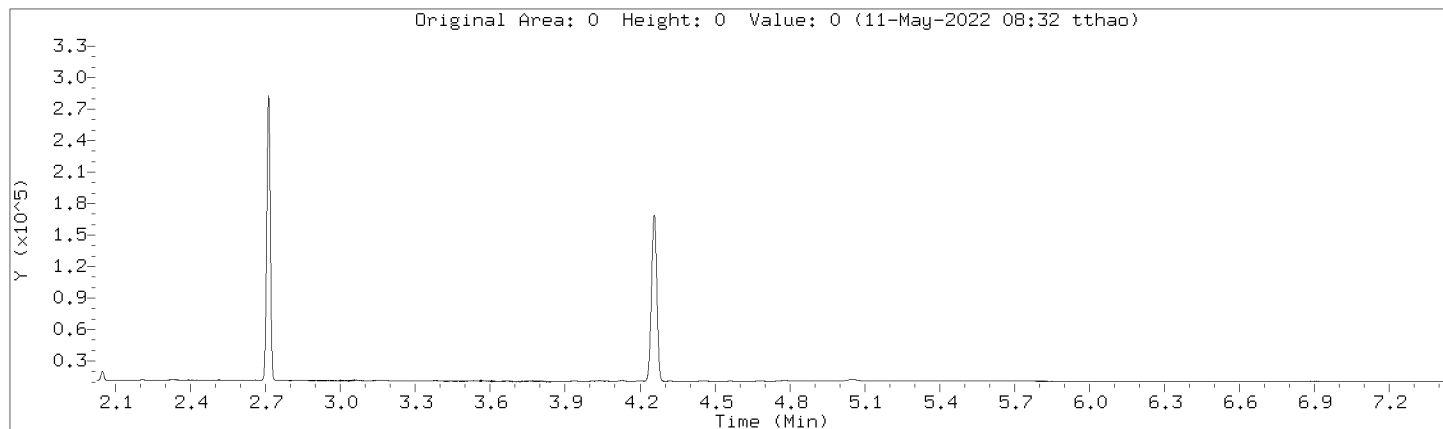
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Injection Date: 02-MAY-2022 19:37  
Instrument: 10gcsF.i  
Lab Sample ID: 4307793

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



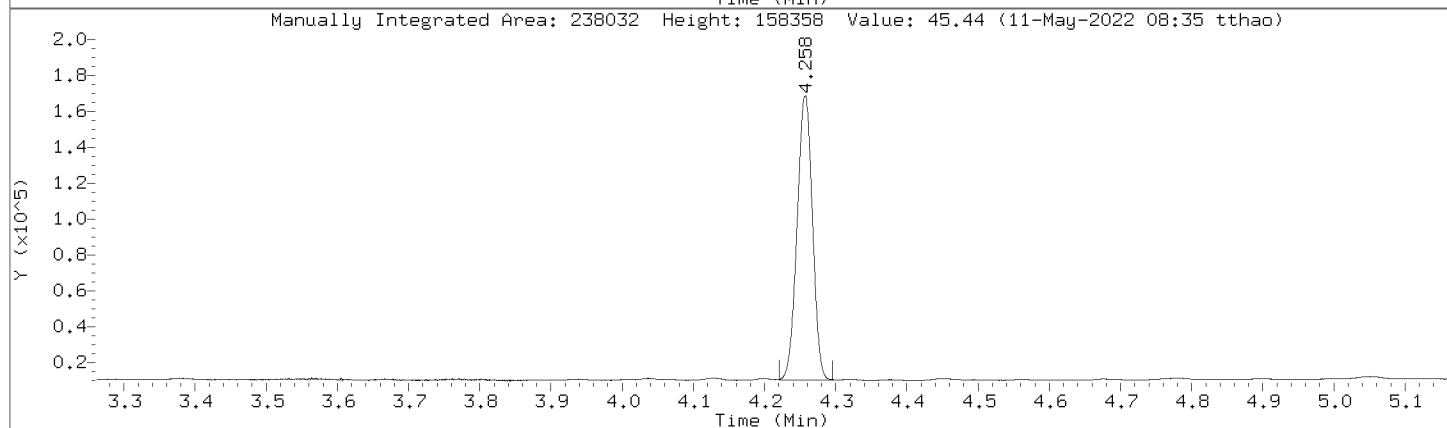
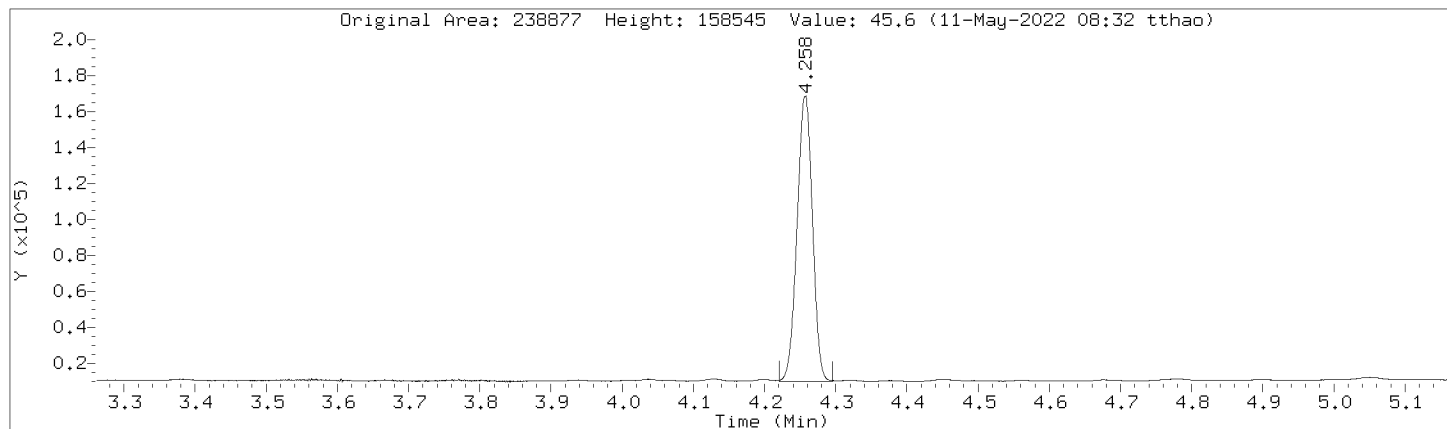
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Injection Date: 02-MAY-2022 19:37  
Instrument: 10gcsF.i  
Lab Sample ID: 4307793

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



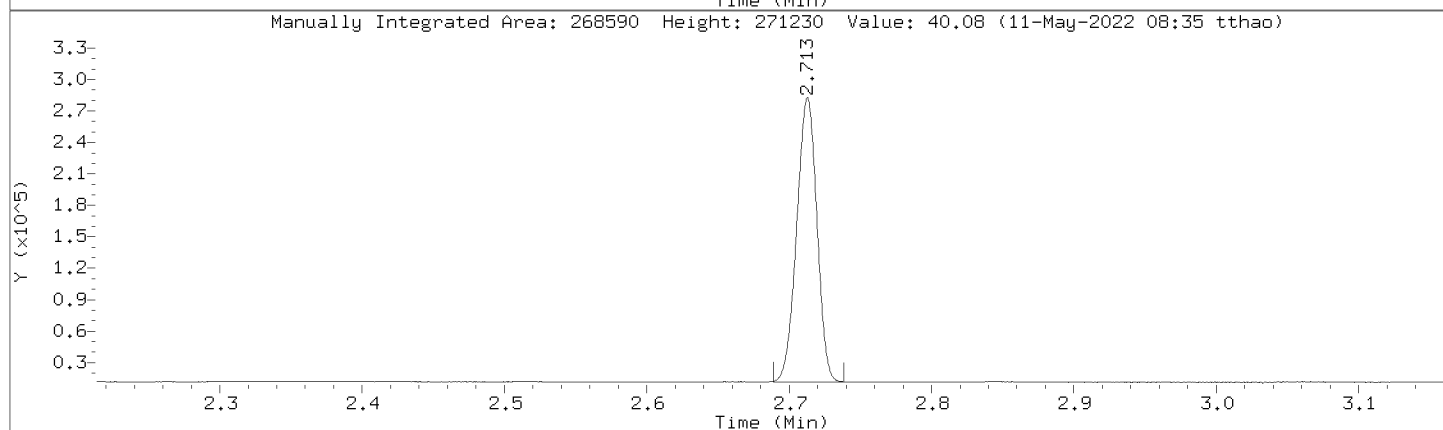
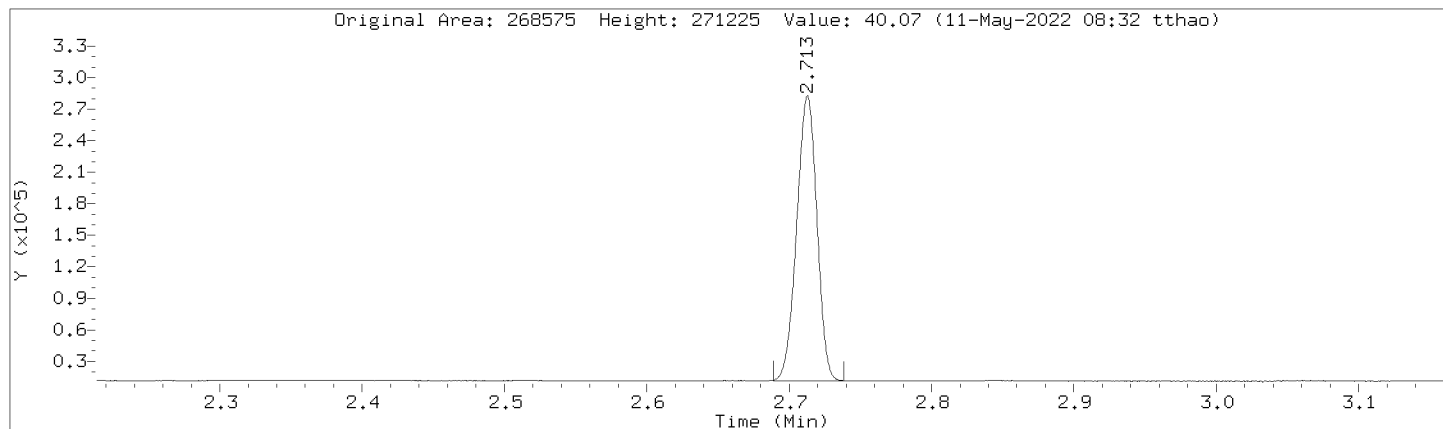
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Injection Date: 02-MAY-2022 19:37  
Instrument: 10gcsF.i  
Lab Sample ID: 4307793

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000031b.D  
 Injection Date: 02-MAY-2022 19:37  
 Instrument: 10gcsF.i  
 Lab Sample ID: 4307793

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	0	351920
Motor Oil Range	0	286907
Diesel Fuel Range SG	0	351920
Motor Oil Range SG	0	286907
n-Triacontane (S)	238877	238032
o-Terphenyl (S)	268575	268590

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

LCS

Lab Name: Pace Analytical - Minnesota Contract: D3593500  
Date Received: \_\_\_\_\_ Matrix: Solid SDG No.: 10606394  
Date Extracted: 04/29/2022 17:05 Lab Sample ID: 4307794  
Date Analyzed: 05/02/2022 19:46 Lab File ID: 050222R.B\0502R0000032B.D  
Initial wt/vol: 10 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	41.4	
	Motor Oil Range	46.6	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000032b.D  
 Lab Smp Id: 4307794 Client Smp ID: MBLCS  
 Inj Date : 02-MAY-2022 19:46  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 4307794  
 Misc Info : 39248  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\050222R.b\GCSFakNW8015-042722\_3920  
 Meth Date : 06-May-2022 08:44 rgustafson Quant Type: ESTD  
 Cal Date : 27-APR-2022 14:42 Cal File: 0427R0000017.D  
 Als bottle: 26 QC Sample: LCS  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE	ON-COL	FINAL	REVIEW CODE
				(ug/mL)	(mg/Kg)	
====	=====	=====	=====	=====	=====	=====
\$ 2	o-Terphenyl (S)				CAS #:	
2.711	2.713	-0.002	280153	41.8265	4.18	(M) BA
\$ 3	n-Triacontane (S)				CAS #:	
4.255	4.262	-0.007	214503	40.8821	4.09	(M) BA
S 10	Motor Oil Range				CAS #:	
3.651	- 6.100		2169720	465.601	46.6	(M) RNG
S 11	Motor Oil Range SG				CAS #:	
3.651	- 6.100		2169720	465.601	46.6	(M) RNG
S 8	Diesel Fuel Range				CAS #:	
1.350	- 3.650		2305427	413.796	41.4	(M) RNG
S 9	Diesel Fuel Range SG				CAS #:	
1.350	- 3.650		2305427	413.796	41.4	(M) RNG

QC Flag Legend

M - Compound response manually integrated.

Review Codes Legend

- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.



Date : 02-MAY-2022 19:46

Client ID: HBLCS

Sample Info: 4307794

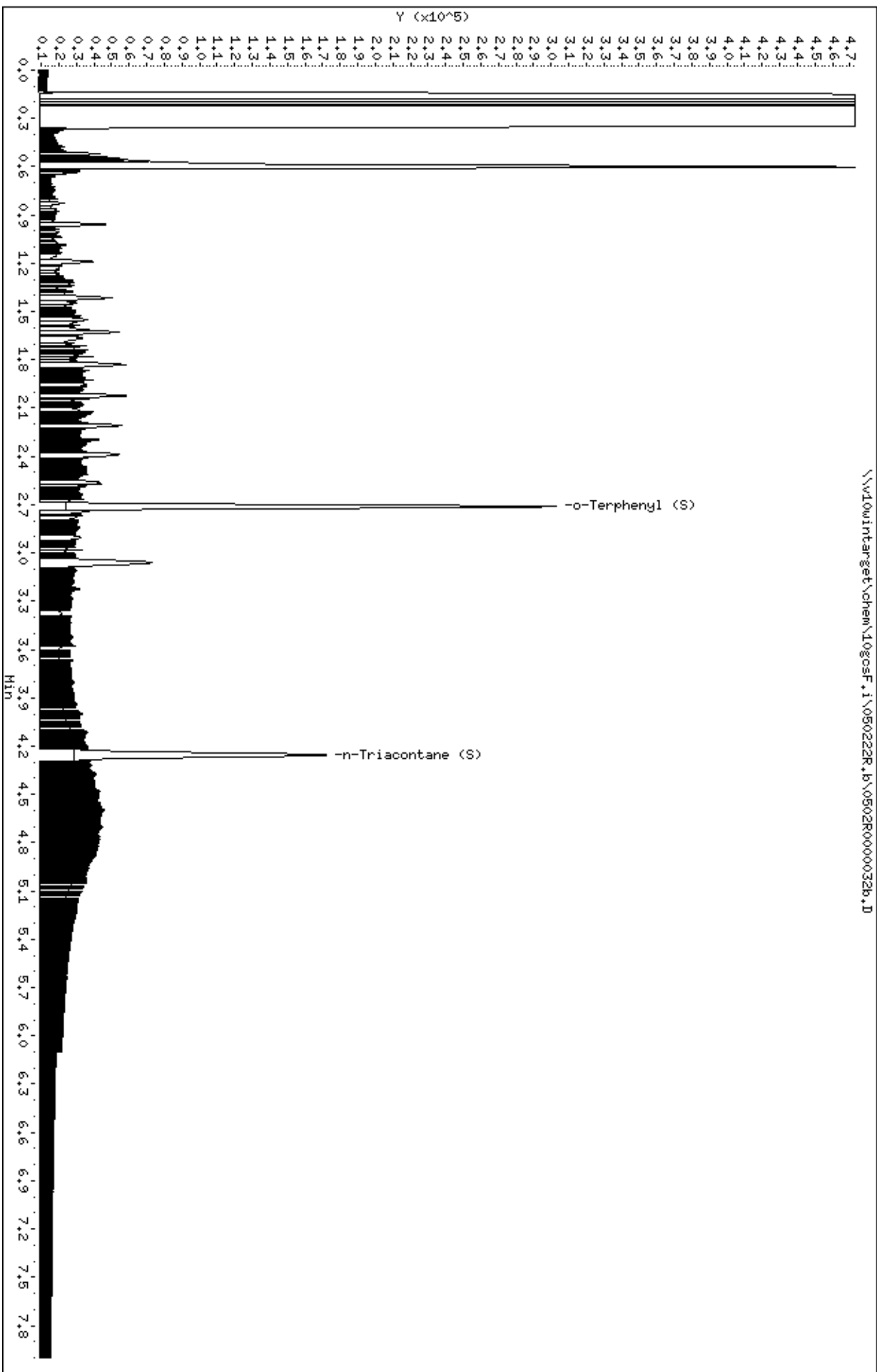
Volume Injected (uL): 1.0

Column phase: DB-5-MS21430033

Instrument: 10gocsf.1

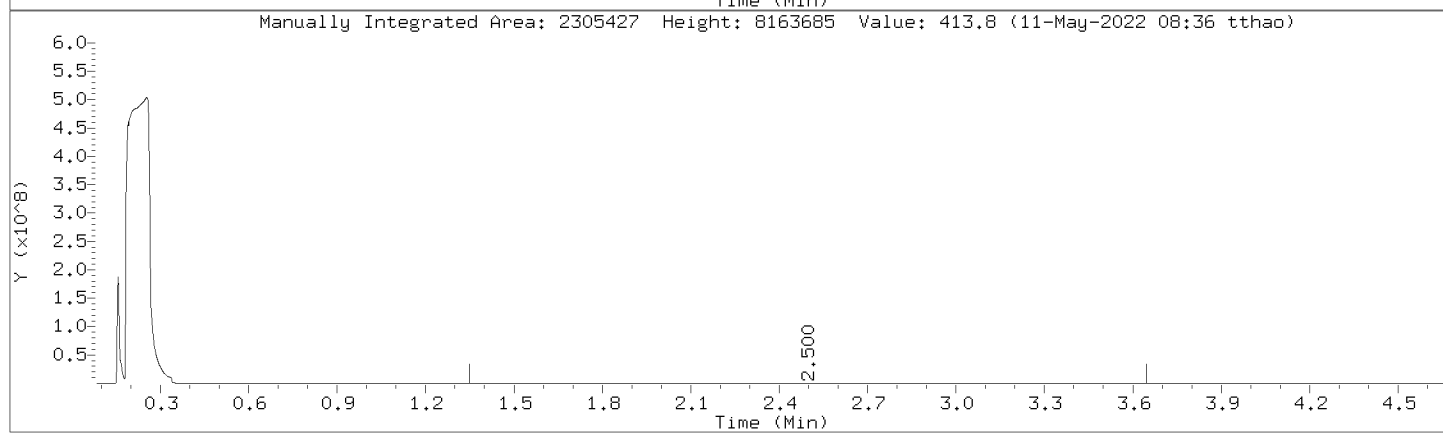
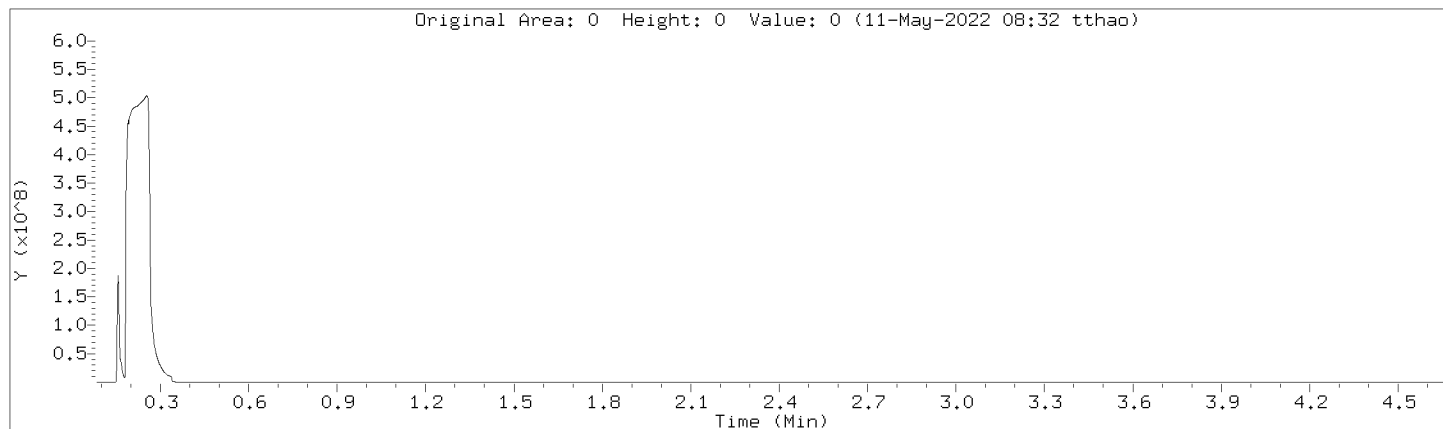
Operator: TT2

Column diameter: 0.32



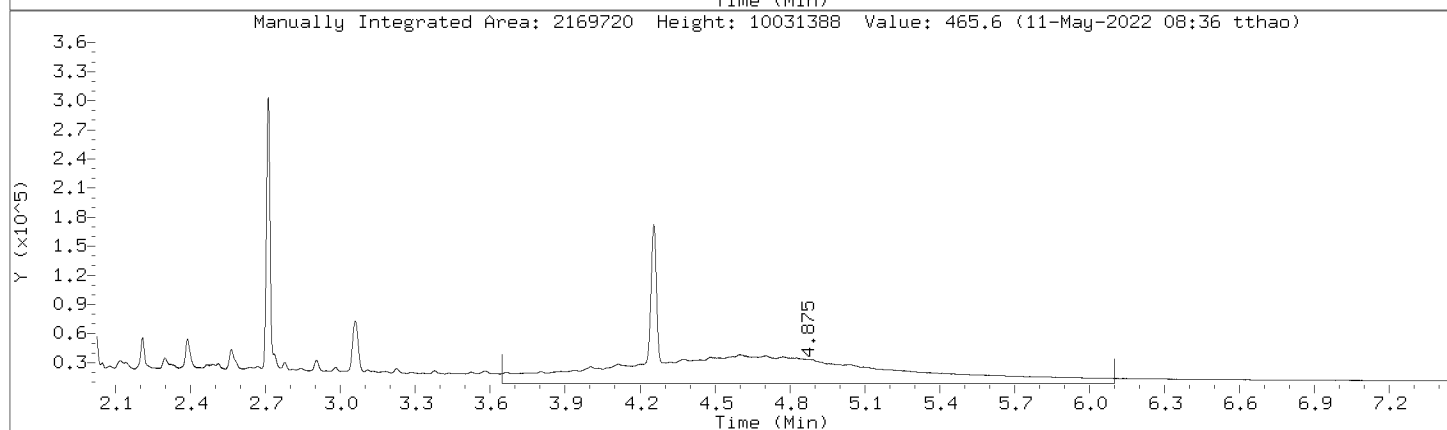
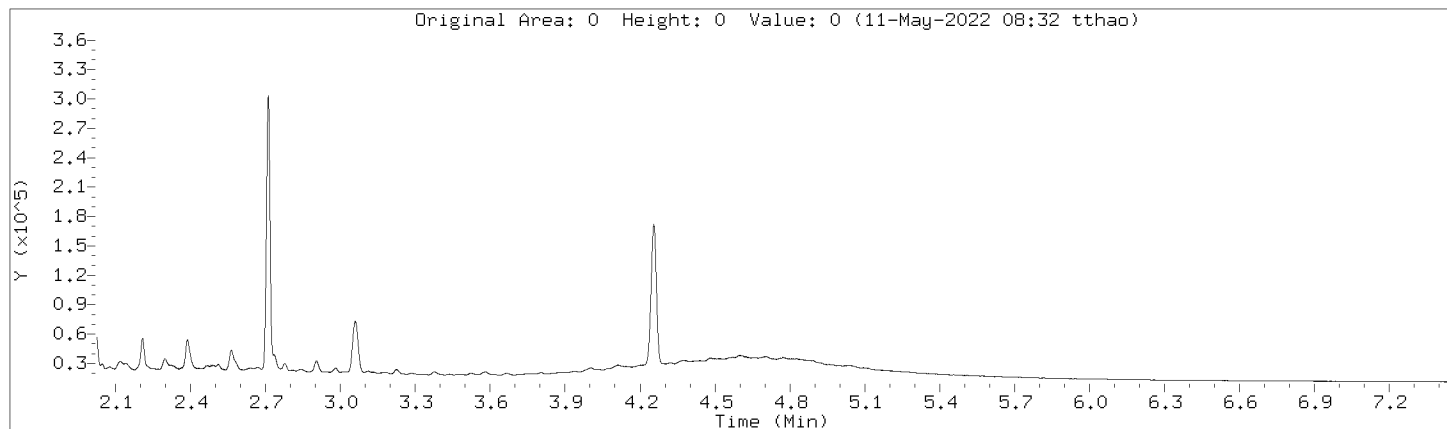
Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000032b.D  
Injection Date: 02-MAY-2022 19:46  
Instrument: 10gcsF.i  
Lab Sample ID: 4307794

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\050222R.b\0502R0000032b.D  
Injection Date: 02-MAY-2022 19:46  
Instrument: 10gcsF.i  
Lab Sample ID: 4307794

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





# Prep Log Report

Batch Information: OEXT 64498 812360 NWDROS

Template Version: ENV-EPL-MIN4-0072-Rev.00 (03Jan2021)

Prep Method	EPA 3550	Analysis Method	NWTPH-Dx	Prepared By	GY1	Extracted Date/Time	04/29/2022 17:05:56:115
Instrument	10BALW	Calibrated	Yes	Sonicator Tune Date	04/29/2022 16:55:55:290	Spiked By	GY1
Dispenser ID 1	Q617	Dispenser ID 2		Syringe ID 1		Syringe ID 2	
Syringe ID 3		Pipette ID 1	PP1-42	Conc. Method	WaterBath	Concentrated By	VH
Concentration Date/Time	05/01/2022	Methylene Chloride	362509	MeCl/Acetone 80:20	363495	Ottawa Sand	357927
Sodium Sulfate	355640-06	Glass Wool	363836	Gravity Filters	None Added	Vial Lot #	22025312
Reviewed By	RS	Reviewed By Date	05/02/2022 06:24	Batch Notes	Syringe Q835, Q825 & Q827. Shares QC w/OEXT 64499 812361 8015DSD10.		

## Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	Matrix	Sample ID Verified By	Spike Verified	Container + Sample Wt (g)	Container Wt (g)	Initial Amount (g)	Final Volume (mL)	Sonicator ID	Water Bath ID	Water Bath Thermo ID	Correction Factor
NWDROS_P	BLANK	4307793	Y	Solid	Scanner	No one to verify			10	1	100P37	100P29	210745396	1
NWDROS_P	LCS	4307794	Y	Solid	Scanner	No one to verify			10	1	100P04	100P29	210745396	1
NWDROS_P	PS	10606046001	Y	Solid	Scanner	No one to verify			10.11	1	100P01	100P29	210745396	1
NWDROS_P	PS	10606394001	Y	Solid	Scanner	No one to verify			10.03	1	100P37	100P29	210745396	1
NWDROS_P	PS	10606394002	Y	Solid	Scanner	No one to verify			10.09	1	100P04	100P29	210745396	1
NWDROS_P	PS	10606394003	Y	Solid	Scanner	No one to verify			10.19	1	100P04	100P29	210745396	1
NWDROS_P	PS	10606394004	Y	Solid	Scanner	No one to verify			10.1	1	100P01	100P29	210745396	1
NWDROS_P	PS	10606395001	Y	Solid	Scanner	No one to verify			10.05	1	100P37	100P29	210745396	1
NWDROS_P	PS	10606395002	Y	Solid	Scanner	No one to verify			10.05	1	100P04	100P29	210745396	1
NWDROS_P	PS	10606395003	Y	Solid	Scanner	No one to verify			10.02	1	100P04	100P29	210745396	1
NWDROS_P	PS	10606395004	Y	Solid	Scanner	No one to verify			10.13	1	100P01	100P29	210745396	1
NWDROS_P	PS	10606463001	Y	Solid	Scanner	No one to verify			10.14	1	100P04	100P29	210745396	1
NWDROS_P	MS	4307905	Y	Solid	Scanner	No one to verify			10.2	1	100P01	100P29	210745396	1
NWDROS_P	MSD	4307906	Y	Solid	Scanner	No one to verify			10.16	1	100P37	100P29	210745396	1



# Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Water Bath Temp   Corr (C)	Sample Notes	DMSO-SPK (uL)	Indices-SS (uL)	Other-SS (uL)
10606394	NWDROS_P	4307793	92.00   93.00			358167 (10)	352759 (25)
	BLANK						
	NWDROS_P	4307794	92.00   93.00		358262 (250)	358167 (10)	352759 (25)
	LCS						
	NWDROS_P	10606046001	92.00   93.00	wet sample		358167 (10)	352759 (25)
	PS						
	NWDROS_P	10606394001	92.00   93.00	1*		358167 (10)	352759 (25)
	PS						
	NWDROS_P	10606394002	92.00   93.00	1*		363304 (10)	352759 (25)
	PS						
	NWDROS_P	10606394003	92.00   93.00	1*		360507 (10)	352759 (25)
	PS						
	NWDROS_P	10606394004	92.00   93.00	1*		360507 (10)	352759 (25)
	PS						
	NWDROS_P	10606395001	92.00   93.00	1*		360507 (10)	352759 (25)
	PS						
	NWDROS_P	10606395002	92.00   93.00	1*		360507 (10)	352759 (25)
	PS						
	NWDROS_P	10606395003	92.00   93.00	wet sample		360507 (10)	352760 (25)
	PS						
	NWDROS_P	10606395004	92.00   93.00	1*		360507 (10)	352760 (25)
	PS						
	NWDROS_P	10606463001	92.00   93.00			358167 (10)	352759 (25)
	PS						
	NWDROS_P	4307905	92.00   93.00		358262 (250)	358167 (10)	352759 (25)
	MS						
	NWDROS_P	4307906	92.00   93.00		358262 (250)	358167 (10)	352759 (25)
	MSD						

### Sample Notes:

1\*: decanted standing water

### Standard Notes:

352759: received 2/21/22, opened 04/21/22 GY1

360507: Received 4/11/22, opened 04/29/22 GY1

352760: received 2/21/22, opened 04/29/22 GY1

363304: Received 4/26/22, opened 04/28/22 GY1

358167: Received 3/25/22, opened 4/28/22 FT1

### Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0427R0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 11:41	EB3	ran to stabilize baseline
0427R0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 11:53	EB3	
0427R0000003.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:04	EB3	
0427R0000004.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:15	EB3	
0427R0000005.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:26	EB3	
0427R0000006.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:38	EB3	V
0427R0000007.D	DMO-RTM,362403	/39205	Sample	1		GCSFAKNW8015-042722_	4/27/22 12:49	EB3	
0427R0000008.D	DMO-CAL1,362369	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:00	EB3	level 1 dropped
0427R0000009.D	DMO-CAL2,362370	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:11	EB3	
0427R0000010.D	DMO-CAL3,362371	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:23	EB3	Pass 40% for all target analytes
0427R0000011.D	DMO-CAL4,362372	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:34	EB3	
0427R0000012.D	DMO-CAL5,362373	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:45	EB3	
0427R0000013.D	DMO-CAL6,362374	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 13:57	EB3	
0427R0000014.D	DMO-CAL7,362375	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:08	EB3	
0427R0000015.D	DMO-CAL8,362376	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:19	EB3	
0427R0000016.D	DMO-CAL9,362377	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:30	EB3	
0427R0000017.D	DMO-CAL10,362378	/39205	Ical	1		GCSFAKNW8015-042722_	4/27/22 14:42	EB3	ICAL passing
0427R0000018.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 14:53	EB3	ran to eliminate the possibility of carryover
0427R0000019.D	DMO-ICV,355155	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 15:04	EB3	Pass 15% for all ranges
0427R0000020.D	PBLK,349203	/39205	Sample	1		GCSFAKNW8015-042722_	4/27/22 15:15	EB3	Clean for all ranges
0427R0000021.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 15:27	EB3	Pass 15% for all ranges
0427R0000022.D	4295161	L/39115	Blank	1		GCSFAKNW8015-042722_	4/27/22 15:38	EB3	ok
0427R0000023.D	10604482008	L/39115	Sample	1		GCSFAKNW8015-042722_	4/27/22 15:49	EB3	8015W MDL - passing
0427R0000024.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 16:00	EB3	Pass 15% for all ranges
0427R0000025.D	4295166	L/39113	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:12	EB3	ok
0427R0000025B.	4295167	L/39114	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:12	EB3	ok
0427R0000026.D	10604482012	L/39113	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:23	EB3	AK W MDL - passing
0427R0000026B.	10604482016	L/39114	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:23	EB3	NW W MDL - passing
0427R0000027.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 16:34	EB3	Pass 15% for all ranges
0427R0000028.D	4295299	S/39116	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000028B.	4295310	S/39118	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000028C.	4295311	S/39117	Blank	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000028D.	4325687	S/39417	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:45	EB3	ok
0427R0000029.D	10604453012	S/39116	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	8015S MDL - passing
0427R0000029B.	10604453008	S/39118	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	AK S MDL - passing
0427R0000029C.	10604453016	S/39117	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	NW S MDL - passing
0427R0000029D.	10604453076	S/39417	Sample	1		GCSFAKNW8015-042722_	4/27/22 16:57	EB3	1036S MDL - passing
0427R0000030.D	DMO-CCV,362365	/39205	CCal	1		GCSFAKNW8015-042722_	4/27/22 17:19	EB3	Pass 15% for all ranges
0427R0000031.D	PBLK,4301183	/	Sample	1		GCSFAKNW8015-042722_	4/27/22 17:30	EB3	NR

**Instrument Run Log**Instrument: 10GCSF  
Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

Surrogate Lot: See extract sheet  
ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
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## Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\W10WINTARGET\CHEM\10GCSF.I\042722R.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 05/19/2022 15:13

ReviewedBy/Date:

### Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot: MECL2-362509

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0502R0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	5/02/22 14:57	TT2	
0502R0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-042722_	5/02/22 15:07	TT2	
0502R0000003.D	DMO-RTM,362402	/39205	Sample	1		GCSFAKNW8015-042722_	5/02/22 15:16	TT2	
0502R0000004.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 15:25	TT2	Pass 15% for all ranges
0502R0000005.D	4305172	L/39219	Blank	1		GCSFAKNW8015-042722_	5/02/22 15:35	TT2	ok
0502R0000006.D	4305173	L/39219	LCS	1		GCSFAKNW8015-042722_	5/02/22 15:44	TT2	pass
0502R0000007.D	4305174	L/39219	LCSD	1		GCSFAKNW8015-042722_	5/02/22 15:53	TT2	pass
0502R0000008.D	10606016001	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:03	TT2	
0502R0000009.D	10606016002	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:12	TT2	
0502R0000010.D	10606016003	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:21	TT2	
0502R0000011.D	10606016004	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:31	TT2	
0502R0000012.D	10606016005	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:40	TT2	
0502R0000013.D	10606016007	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:49	TT2	
0502R0000014.D	10606016008	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 16:59	TT2	
0502R0000015.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 17:08	TT2	Pass 15% for all ranges
0502R0000016.D	4305172	L/39219	Blank	1		GCSFAKNW8015-042722_	5/02/22 17:17	TT2	ok
0502R0000017.D	10606016010	L/39219	Sample	1		GCSFAKNW8015-042722_	5/02/22 17:27	TT2	
0502R0000018.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 17:36	TT2	Pass 15% for all ranges
0502R0000019.D	4307671	L/39247	Blank	1		GCSFAKNW8015-042722_	5/02/22 17:45	TT2	ok
0502R0000020.D	4307672	L/39247	LCS	1		GCSFAKNW8015-042722_	5/02/22 17:55	TT2	passes
0502R0000021.D	4307673	L/39247	LCSD	1		GCSFAKNW8015-042722_	5/02/22 18:04	TT2	passes
0502R0000022.D	10606410001	L/39247	Sample	1		GCSFAKNW8015-042722_	5/02/22 18:13	TT2	RAG
0502R0000023.D	10606410002	L/39247	Sample	1		GCSFAKNW8015-042722_	5/02/22 18:23	TT2	
0502R0000024.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 18:32	TT2	Pass 15% for all ranges
0502R0000025.D	4303622	S/39215	Blank	1		GCSFAKNW8015-042722_	5/02/22 18:41	TT2	rr, MB failing
0502R0000026.D	10605661001	S/39215	Sample	1		GCSFAKNW8015-042722_	5/02/22 18:50	TT2	
0502R0000027.D	4303624	S/39215	MS	1		GCSFAKNW8015-042722_	5/02/22 19:00	TT2	
0502R0000028.D	4303625	S/39215	MSD	1		GCSFAKNW8015-042722_	5/02/22 19:09	TT2	
0502R0000029.D	10605661002	S/39215	Sample	1		GCSFAKNW8015-042722_	5/02/22 19:18	TT2	V
0502R0000030.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 19:28	TT2	Pass 15% for all ranges
0502R0000031.D	4307795	S/39249	Blank	1		GCSFAKNW8015-042722_	5/02/22 19:37	TT2	OK
0502R0000031B.	4307793	S/39248	Blank	1		GCSFAKNW8015-042722_	5/02/22 19:37	TT2	OK
0502R0000032.D	4307796	S/39249	LCS	1		GCSFAKNW8015-042722_	5/02/22 19:46	TT2	Passes
0502R0000032B.	4307794	S/39248	LCS	1		GCSFAKNW8015-042722_	5/02/22 19:46	TT2	Passes
0502R0000033.D	10606390001	S/39249	Sample	1		GCSFAKNW8015-042722_	5/02/22 19:56	TT2	
0502R0000033B.	10606463001	S/39248	Sample	1		GCSFAKNW8015-042722_	5/02/22 19:56	TT2	
0502R0000034.D	4307797	S/39249	MS	1		GCSFAKNW8015-042722_	5/02/22 20:05	TT2	
0502R0000034B.	4307905	S/39248	MS	1		GCSFAKNW8015-042722_	5/02/22 20:05	TT2	
0502R0000035.D	4307798	S/39249	MSD	1		GCSFAKNW8015-042722_	5/02/22 20:14	TT2	
0502R0000035B.	4307906	S/39248	MSD	1		GCSFAKNW8015-042722_	5/02/22 20:14	TT2	
0502R0000036.D	10606390002	S/39249	Sample	1		GCSFAKNW8015-042722_	5/02/22 20:23	TT2	
0502R0000037.D	10606398001	S/39249	Sample	1		GCSFAKNW8015-042722_	5/02/22 20:33	TT2	rr 2X
0502R0000038.D	10606046001	S/39248	Sample	1		GCSFAKNW8015-042722_	5/02/22 20:42	TT2	
0502R0000039.D	10606394001	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 20:51	TT2	rr 1X
0502R0000040.D	10606394002	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:01	TT2	rr 1X
0502R0000041.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 21:10	TT2	Pass 15% for all ranges



### Instrument Run Log

Instrument: 10GCSF  
 Column: DB-5-US21430033 0.32mm Hy

Method: 8015/AK/NW

Solvent lot: MECL2-362509

Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0502R0000042.D	4307795	S/39249	Blank	1		GCSFAKNW8015-042722_	5/02/22 21:19	TT2	OK
0502R0000043.D	10606394003	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:29	TT2	rr 1X
0502R0000044.D	10606394004	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:38	TT2	rr 1X
0502R0000045.D	10606395001	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:47	TT2	rr 1X
0502R0000046.D	10606395002	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 21:57	TT2	rr 1X
0502R0000047.D	10606395003	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 22:06	TT2	rr 1X
0502R0000048.D	10606395004	S/39248	Sample	20		GCSFAKNW8015-042722_	5/02/22 22:15	TT2	rr 1X
0502R0000049.D	DMO-CCV,363721	/39205	CCal	1		GCSFAKNW8015-042722_	5/02/22 22:25	TT2	Pass 15% for all ranges
0502R0000050.D	PBLK,4305172	/39205	Sample	1		GCSFAKNW8015-042722_	5/02/22 22:34	TT2	Clean

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\W10WINTARGET\CHEM10GCSF.I\050222R.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: RAG

Report Date: 05/16/2022 10:12

ReviewedBy/Date:

## Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21390001 0.32mm Hy

Method: 8015/AK/NW

Solvent lot: NA

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0509F0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-050922_	5/09/22 09:51	TT2	
0509F0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-050922_	5/09/22 10:02	TT2	
0509F0000003.D	DMO-RTM,362402	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 10:14	TT2	rr pressure leak
0509F0000004.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-050922_	5/09/22 10:35	TT2	
0509F0000005.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-050922_	5/09/22 10:47	TT2	
0509F0000006.D	DMO-RTM,362402	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 10:59	TT2	
0509F0000007.D	DMO-CAL1,364979	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 11:10	TT2	
0509F0000008.D	DMO-CAL2,364980	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 11:22	TT2	
0509F0000009.D	DMO-CAL3,364981	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 11:33	TT2	Pass 30% for all target analytes
0509F0000010.D	DMO-CAL4,364982	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 11:45	TT2	Pass 40% for all target analytes
0509F0000011.D	DMO-CAL5,364983	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 11:56	TT2	Pass 40% for all target analytes
0509F0000012.D	DMO-CAL6,364984	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 12:08	TT2	
0509F0000013.D	DMO-CAL7,364985	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 12:20	TT2	
0509F0000014.D	DMO-CAL8,364986	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 12:31	TT2	
0509F0000015.D	DMO-CAL9,364987	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 12:43	TT2	
0509F0000016.D	DMO-CAL10,364988	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 12:54	TT2	ICAL Passing
0509F0000017.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-050922_	5/09/22 13:06	TT2	
0509F0000018.D	DMO-ICV,364989	/39289	CCal	1		GCSFAKNW8015-050922_	5/09/22 13:18	TT2	Failing made wrong
0509F0000019.D	PBLK,363301	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 13:29	TT2	
0509F0000020.D	DMO-ICV,355155	/39289	CCal	1		GCSFAKNW8015-050922_	5/09/22 14:13	TT2	possibly conc out.
0509F0000021.D	PBLK,363301	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 14:24	TT2	
0509F0000022.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-050922_	5/09/22 14:57	TT2	
0509F0000023.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-050922_	5/09/22 15:08	TT2	
0509F0000024.D	DMO-CAL1,364979	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 15:19	TT2	Drop CAL1
0509F0000025.D	DMO-CAL2,364980	/39289	Ical	1		GCSFAKNW8015-050922_	5/09/22 15:31	TT2	
0509F0000026.D	DMO-CAL3,364981	/39289	Ical	1		GCSFAKNW8015-050922_	5/09/22 15:43	TT2	Pass 30% for all target analytes
0509F0000027.D	DMO-CAL4,364982	/39289	Ical	1		GCSFAKNW8015-050922_	5/09/22 15:54	TT2	Pass 40% for all target analytes
0509F0000028.D	DMO-CAL5,364983	/39289	Ical	1		GCSFAKNW8015-050922_	5/09/22 16:06	TT2	Pass 40% for all target analytes
0509F0000029.D	DMO-CAL6,364984	/39289	Ical	1		GCSFAKNW8015-050922_	5/09/22 16:18	TT2	
0509F0000030.D	DMO-CAL7,364985	/39289	Ical	1		GCSFAKNW8015-050922_	5/09/22 16:29	TT2	
0509F0000031.D	DMO-CAL8,364986	/39289	Ical	1		GCSFAKNW8015-050922_	5/09/22 16:41	TT2	
0509F0000032.D	DMO-CAL9,364987	/39289	Ical	1		GCSFAKNW8015-050922_	5/09/22 16:53	TT2	
0509F0000033.D	DMO-CAL10,364988	/39289	Ical	1		GCSFAKNW8015-050922_	5/09/22 17:04	TT2	ICAL Passing
0509F0000034.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-050922_	5/09/22 17:16	TT2	ran to stabilize baseline
0509F0000035.D	DMO-ICV,365117	/39289	CCal	1		GCSFAKNW8015-050922_	5/09/22 17:27	TT2	Pass 15% for all ranges
0509F0000036.D	PBLK,363301	/39289	Sample	1		GCSFAKNW8015-050922_	5/09/22 17:39	TT2	Clean

**Instrument Run Log**Instrument: 10GCSF  
Column: DB-5-US21390001 0.32mm Hy

Method: 8015/AK/NW

Solvent lot: NA

Surrogate Lot: See extract sheet  
ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
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## Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\V10WINTARGET\CHEM\10GCSF.I\050922F.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 05/10/2022 06:45

ReviewedBy/Date:

### Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21390001 0.32mm Hy

Method: 8015/NW

Solvent lot: MECL2-

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0510F0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-050922_	5/10/22 09:06	TT2	
0510F0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-050922_	5/10/22 09:18	TT2	
0510F0000003.D	DMO-RTM,365036	/39289	Sample	1		GCSFAKNW8015-050922_	5/10/22 09:29	TT2	
0510F0000004.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/10/22 09:41	TT2	Pass 15% for all ranges
0510F0000005.D	4312717	S/39304	Blank	1		GCSFAKNW8015-050922_	5/10/22 09:52	TT2	OK
0510F0000006.D	4312718	S/39304	LCS	1		GCSFAKNW8015-050922_	5/10/22 10:03	TT2	Passes
0510F0000007.D	10607070001	S/39304	Sample	1		GCSFAKNW8015-050922_	5/10/22 10:15	TT2	
0510F0000008.D	4312719	S/39304	MS	1		GCSFAKNW8015-050922_	5/10/22 10:26	TT2	
0510F0000009.D	4312720	S/39304	MSD	1		GCSFAKNW8015-050922_	5/10/22 10:38	TT2	
0510F0000010.D	10607070002	S/39304	Sample	1		GCSFAKNW8015-050922_	5/10/22 10:49	TT2	
0510F0000011.D	10607070003	S/39304	Sample	1		GCSFAKNW8015-050922_	5/10/22 11:00	TT2	
0510F0000012.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/10/22 11:12	TT2	Pass 15% for all ranges
0510F0000013.D	4305172	L/39219	Blank	1		GCSFAKNW8015-050922_	5/10/22 11:23	TT2	ok
0510F0000014.D	10606016007	L/39219	Sample	1		GCSFAKNW8015-050922_	5/10/22 11:35	TT2	confirms surr failing low, RX OOH
0510F0000015.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/10/22 11:46	EB3	Pass 15% for all ranges
0510F0000016.D	4313841	L/39302	Blank	1		GCSFAKNW8015-050922_	5/10/22 11:57	EB3	ok
0510F0000017.D	4313842	L/39302	LCS	1		GCSFAKNW8015-050922_	5/10/22 12:09	EB3	pass
0510F0000018.D	4313843	L/39302	LCSD	1		GCSFAKNW8015-050922_	5/10/22 12:20	EB3	pass
0510F0000019.D	10607250001	L/39302	Sample	1		GCSFAKNW8015-050922_	5/10/22 12:31	EB3	
0510F0000020.D	4313844	L/39302	Dupe	1		GCSFAKNW8015-050922_	5/10/22 12:43	EB3	
0510F0000021.D	10607250002	L/39302	Sample	1		GCSFAKNW8015-050922_	5/10/22 12:54	EB3	
0510F0000022.D	10607250003	L/39302	Sample	1		GCSFAKNW8015-050922_	5/10/22 13:06	EB3	
0510F0000023.D	10607250004	L/39302	Sample	1		GCSFAKNW8015-050922_	5/10/22 13:17	EB3	
0510F0000024.D	10607250005	L/39302	Sample	1		GCSFAKNW8015-050922_	5/10/22 13:28	EB3	
0510F0000025.D	10607250006	L/39302	Sample	1		GCSFAKNW8015-050922_	5/10/22 13:40	EB3	
0510F0000026.D	10607250007	L/39302	Sample	1		GCSFAKNW8015-050922_	5/10/22 13:51	EB3	
0510F0000027.D	10607250008	L/39302	Sample	1		GCSFAKNW8015-050922_	5/10/22 14:02	EB3	
0510F0000028.D	10607250009	L/39302	Sample	1		GCSFAKNW8015-050922_	5/10/22 14:14	EB3	
0510F0000029.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/10/22 14:25	EB3	Pass 15% for all ranges
0510F0000030.D	4313536	L/39307	Blank	1		GCSFAKNW8015-050922_	5/10/22 14:36	EB3	failing, rr to confirm
0510F0000031.D	4313537	L/39307	LCS	1		GCSFAKNW8015-050922_	5/10/22 14:48	EB3	
0510F0000032.D	4313538	L/39307	LCSD	1		GCSFAKNW8015-050922_	5/10/22 14:59	EB3	
0510F0000033.D	10607094001	L/39307	Sample	1		GCSFAKNW8015-050922_	5/10/22 15:10	EB3	
0510F0000034.D	10607116001	L/39307	Sample	1		GCSFAKNW8015-050922_	5/10/22 15:22	EB3	
0510F0000035.D	10607116002	L/39307	Sample	1		GCSFAKNW8015-050922_	5/10/22 15:33	EB3	V
0510F0000036.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/10/22 15:44	EB3	Pass 15% for all ranges
0510F0000037.D	4313529	L/39306	Blank	1		GCSFAKNW8015-050922_	5/10/22 15:56	EB3	rr air tank ran out
0510F0000038.D	4313530	L/39306	LCS	1		GCSFAKNW8015-050922_	5/10/22 16:07	EB3	
0510F0000039.D	4313531	L/39306	LCSD	1		GCSFAKNW8015-050922_	5/10/22 16:19	EB3	
0510F0000040.D	10607062002	L/39306	Sample	1		GCSFAKNW8015-050922_	5/10/22 16:30	EB3	
0510F0000041.D	4313532	L/39306	Dupe	1		GCSFAKNW8015-050922_	5/10/22 16:41	EB3	V
0510F0000042.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-050922_	5/10/22 18:44	TT2	ran to stabilize the baseline
0510F0000043.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-050922_	5/10/22 18:56	TT2	
0510F0000044.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/10/22 19:07	TT2	Pass 15% for all ranges
0510F0000045.D	4313536	L/39307	Blank	1		GCSFAKNW8015-050922_	5/10/22 19:18	TT2	Glasswoolhit
0510F0000046.D	4313537	L/39307	LCS	1		GCSFAKNW8015-050922_	5/10/22 19:30	TT2	

## Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21390001 0.32mm Hy

Method: 8015/NW

Solvent lot: MECL2-

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0510F0000047.D	4313538	L/39307	LCSD	1		GCSFAKNW8015-050922_	5/10/22 19:41	TT2	
0510F0000048.D	10607094001	L/39307	Sample	1		GCSFAKNW8015-050922_	5/10/22 19:52	TT2	
0510F0000049.D	10607116001	L/39307	Sample	1		GCSFAKNW8015-050922_	5/10/22 20:04	TT2	
0510F0000050.D	10607116002	L/39307	Sample	1		GCSFAKNW8015-050922_	5/10/22 20:15	TT2	V
0510F0000051.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/10/22 20:26	TT2	Pass 15% for all ranges
0510F0000052.D	4313529	L/39306	Blank	1		GCSFAKNW8015-050922_	5/10/22 20:38	TT2	
0510F0000053.D	4313530	L/39306	LCS	1		GCSFAKNW8015-050922_	5/10/22 20:49	TT2	
0510F0000054.D	4313531	L/39306	LCSD	1		GCSFAKNW8015-050922_	5/10/22 21:00	TT2	
0510F0000055.D	10607062002	L/39306	Sample	1		GCSFAKNW8015-050922_	5/10/22 21:12	TT2	
0510F0000056.D	4313532	L/39306	Dupe	1		GCSFAKNW8015-050922_	5/10/22 21:23	TT2	
0510F0000057.D	10607062003	L/39306	Sample	1		GCSFAKNW8015-050922_	5/10/22 21:35	TT2	
0510F0000058.D	10607062004	L/39306	Sample	1		GCSFAKNW8015-050922_	5/10/22 21:46	TT2	
0510F0000059.D	10607062005	L/39306	Sample	1		GCSFAKNW8015-050922_	5/10/22 21:57	TT2	
0510F0000060.D	10607062006	L/39306	Sample	1		GCSFAKNW8015-050922_	5/10/22 22:09	TT2	
0510F0000061.D	10607062007	L/39306	Sample	1		GCSFAKNW8015-050922_	5/10/22 22:20	TT2	
0510F0000062.D	10607257002	L/39306	Sample	1		GCSFAKNW8015-050922_	5/10/22 22:31	TT2	
0510F0000063.D	10607257003	L/39306	Sample	1		GCSFAKNW8015-050922_	5/10/22 22:43	TT2	
0510F0000064.D	10607257004	L/39306	Sample	1		GCSFAKNW8015-050922_	5/10/22 22:54	TT2	rrlowsurr
0510F0000065.D	10607257005	L/39306	Sample	1		GCSFAKNW8015-050922_	5/10/22 23:05	TT2	
0510F0000066.D	4313932	L/39306	Dupe	1		GCSFAKNW8015-050922_	5/10/22 23:17	TT2	
0510F0000067.D	10607257006	L/39306	Sample	1		GCSFAKNW8015-050922_	5/10/22 23:28	TT2	
0510F0000068.D	10607257007	L/39306	Sample	1		GCSFAKNW8015-050922_	5/10/22 23:39	TT2	
0510F0000069.D	10607257008	L/39306	Sample	1		GCSFAKNW8015-050922_	5/10/22 23:51	TT2	
0510F0000070.D	10607257009	L/39306	Sample	1		GCSFAKNW8015-050922_	5/11/22 00:02	TT2	
0510F0000071.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 00:13	TT2	Pass 15% for all ranges
0510F0000072.D	4315536	L/39305	Blank	1		GCSFAKNW8015-050922_	5/11/22 00:25	TT2	OK
0510F0000073.D	4315537	L/39305	LCS	1		GCSFAKNW8015-050922_	5/11/22 00:36	TT2	Passes
0510F0000074.D	4315538	L/39305	LCSD	1		GCSFAKNW8015-050922_	5/11/22 00:47	TT2	Passes
0510F0000075.D	10607414001	L/39305	Sample	1		GCSFAKNW8015-050922_	5/11/22 00:59	TT2	
0510F0000076.D	4315539	L/39305	Dupe	1		GCSFAKNW8015-050922_	5/11/22 01:10	TT2	
0510F0000077.D	10607414002	L/39305	Sample	1		GCSFAKNW8015-050922_	5/11/22 01:22	TT2	rr n-tri out low
0510F0000078.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 01:33	TT2	Pass 15% for all ranges
0510F0000079.D	4312715	S/39308	Blank	1		GCSFAKNW8015-050922_	5/11/22 01:44	TT2	OK
0510F0000080.D	4312716	S/39308	LCS	1		GCSFAKNW8015-050922_	5/11/22 01:56	TT2	Passes
0510F0000081.D	10607156001	S/39308	Sample	1		GCSFAKNW8015-050922_	5/11/22 02:07	TT2	
0510F0000082.D	4313295	S/39308	MS	1		GCSFAKNW8015-050922_	5/11/22 02:18	TT2	
0510F0000083.D	4313296	S/39308	MSD	1		GCSFAKNW8015-050922_	5/11/22 02:30	TT2	
0510F0000084.D	10606997001	S/39308	Sample	1		GCSFAKNW8015-050922_	5/11/22 02:41	TT2	rr 10X
0510F0000085.D	10606997002	S/39308	Sample	1		GCSFAKNW8015-050922_	5/11/22 02:52	TT2	
0510F0000086.D	10606997003	S/39308	Sample	1		GCSFAKNW8015-050922_	5/11/22 03:04	TT2	
0510F0000087.D	10607157001	S/39308	Sample	1		GCSFAKNW8015-050922_	5/11/22 03:15	TT2	
0510F0000088.D	10607157002	S/39308	Sample	1		GCSFAKNW8015-050922_	5/11/22 03:26	TT2	
0510F0000089.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 03:38	TT2	Pass 15% for all ranges
0510F0000090.D	4312715	S/39308	Blank	1		GCSFAKNW8015-050922_	5/11/22 03:49	TT2	OK
0510F0000091.D	10607157003	S/39308	Sample	1		GCSFAKNW8015-050922_	5/11/22 04:00	TT2	
0510F0000092.D	10607157004	S/39308	Sample	1		GCSFAKNW8015-050922_	5/11/22 04:11	TT2	

## Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21390001 0.32mm Hy

Method: 8015/NW

Solvent lot: MECL2-

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0510F0000093.D	10607157005	S/39308	Sample	1		GCSFAKNW8015-050922_	5/11/22 04:23	TT2	
0510F0000094.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 04:34	TT2	Pass 15% for all ranges
0510F0000095.D	4315987	S/39309	Blank	1		GCSFAKNW8015-050922_	5/11/22 04:45	TT2	ok
0510F0000096.D	4315988	S/39309	LCS	1		GCSFAKNW8015-050922_	5/11/22 04:57	TT2	pass
0510F0000097.D	10607441001	S/39309	Sample	50		GCSFAKNW8015-050922_	5/11/22 05:08	TT2	
0510F0000098.D	4315989	S/39309	MS	50		GCSFAKNW8015-050922_	5/11/22 05:19	TT2	
0510F0000099.D	4315990	S/39309	MSD	50		GCSFAKNW8015-050922_	5/11/22 05:31	TT2	
0510F0000100.D	10607441003	S/39309	Sample	50		GCSFAKNW8015-050922_	5/11/22 05:42	TT2	
0510F0000101.D	10607365004	S/39309	Sample	50		GCSFAKNW8015-050922_	5/11/22 05:54	TT2	rr 100X
0510F0000102.D	10607365001	S/39309	Sample	20		GCSFAKNW8015-050922_	5/11/22 06:05	TT2	
0510F0000103.D	10607365012	S/39309	Sample	20		GCSFAKNW8015-050922_	5/11/22 06:16	TT2	rr 100X
0510F0000104.D	10607365006	S/39309	Sample	10		GCSFAKNW8015-050922_	5/11/22 06:28	TT2	rr 20X
0510F0000105.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 06:39	TT2	Pass 20% except NW range / possibly due to matr
0510F0000106.D	4315987	S/39309	Blank	1		GCSFAKNW8015-050922_	5/11/22 06:50	TT2	ok
0510F0000107.D	10607365010	S/39309	Sample	10		GCSFAKNW8015-050922_	5/11/22 07:02	TT2	rr 100X
0510F0000108.D	10607365008	S/39309	Sample	1		GCSFAKNW8015-050922_	5/11/22 07:13	TT2	
0510F0000109.D	10607441002	S/39309	Sample	1		GCSFAKNW8015-050922_	5/11/22 07:24	TT2	
0510F0000110.D	10607441004	S/39309	Sample	1		GCSFAKNW8015-050922_	5/11/22 07:36	TT2	
0510F0000111.D	10607127001	S/39301	Sample	1		GCSFAKNW8015-050922_	5/11/22 07:47	TT2	Opening CCV failing NW range rr with passing CC
0510F0000112.D	10607127002	S/39301	Sample	1		GCSFAKNW8015-050922_	5/11/22 07:58	TT2	
0510F0000113.D	10607127003	S/39301	Sample	1		GCSFAKNW8015-050922_	5/11/22 08:10	TT2	
0510F0000114.D	10607127004	S/39301	Sample	1		GCSFAKNW8015-050922_	5/11/22 08:21	TT2	V
0510F0000115.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 08:33	TT2	Pass 15% for all ranges
0510F0000116.D	PBLK,4308714	/39289	Sample	1		GCSFAKNW8015-050922_	5/11/22 08:44	TT2	
0510F0000117.D	4308714	/39248	Sample	1		GCSFAKNW8015-050922_	5/11/22 08:55	TT2	OK
0510F0000118.D	PBLK,4308714	/39289	Sample	1		GCSFAKNW8015-050922_	5/11/22 09:07	TT2	
0510F0000119.D	10606394001	S/39248	Sample	1		GCSFAKNW8015-050922_	5/11/22 09:18	TT2	
0510F0000120.D	PBLK,4308714	/39289	Sample	1		GCSFAKNW8015-050922_	5/11/22 09:30	TT2	
0510F0000121.D	10606394002	S/39248	Sample	1		GCSFAKNW8015-050922_	5/11/22 09:41	TT2	
0510F0000122.D	PBLK,4308714	/39289	Sample	1		GCSFAKNW8015-050922_	5/11/22 09:52	TT2	
0510F0000123.D	10606394003	S/39248	Sample	1		GCSFAKNW8015-050922_	5/11/22 10:04	TT2	
0510F0000124.D	PBLK,4308714	/39289	Sample	1		GCSFAKNW8015-050922_	5/11/22 10:15	TT2	
0510F0000125.D	10606394004	S/39248	Sample	1		GCSFAKNW8015-050922_	5/11/22 10:26	TT2	
0510F0000126.D	PBLK,4308714	/39289	Sample	1		GCSFAKNW8015-050922_	5/11/22 10:38	TT2	
0510F0000127.D	10606395001	S/39248	Sample	1		GCSFAKNW8015-050922_	5/11/22 10:49	TT2	
0510F0000128.D	PBLK,4308714	/39289	Sample	1		GCSFAKNW8015-050922_	5/11/22 11:00	TT2	
0510F0000129.D	10606395002	S/39248	Sample	1		GCSFAKNW8015-050922_	5/11/22 11:12	TT2	
0510F0000130.D	PBLK,4308714	/39289	Sample	1		GCSFAKNW8015-050922_	5/11/22 11:23	TT2	
0510F0000131.D	10606395003	S/39248	Sample	1		GCSFAKNW8015-050922_	5/11/22 11:34	TT2	
0510F0000132.D	PBLK,4308714	/39289	Sample	1		GCSFAKNW8015-050922_	5/11/22 11:46	TT2	
0510F0000133.D	10606395004	S/39248	Sample	1		GCSFAKNW8015-050922_	5/11/22 11:57	TT2	
0510F0000134.D	PBLK,4308714	/39289	Sample	1		GCSFAKNW8015-050922_	5/11/22 12:08	TT2	
0510F0000135.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 12:20	TT2	Pass 15% for all ranges

**Instrument Run Log**Instrument: 10GCSF  
Column: DB-5-US21390001 0.32mm Hy

Method: 8015/NW

Solvent lot: MECL2-

Surrogate Lot: See extract sheet  
ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
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## Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\V10WINTARGET\CHEM\10GCSF.I\051022F.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 05/19/2022 11:37

ReviewedBy/Date:

### Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21390001 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0511F0000001.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-050922_	5/11/22 13:22	EB3	
0511F0000002.D	MECL2 RINSE	/	Sample	1		GCSFAKNW8015-050922_	5/11/22 13:34	EB3	
0511F0000003.D	DMO-RTM,365036	/39289	Sample	1		GCSFAKNW8015-050922_	5/11/22 13:45	EB3	
0511F0000004.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 13:56	EB3	Pass 15% for all ranges
0511F0000005.D	4305172	L/39219	Blank	1		GCSFAKNW8015-050922_	5/11/22 14:08	EB3	ok
0511F0000006.D	4305173	L/39219	LCS	1		GCSFAKNW8015-050922_	5/11/22 14:19	EB3	pass
0511F0000007.D	4305174	L/39219	LCSD	1		GCSFAKNW8015-050922_	5/11/22 14:30	EB3	pass
0511F0000008.D	10606016007	L/39219	Sample	1		GCSFAKNW8015-050922_	5/11/22 14:41	EB3	this is a RX OOH result, does not confirm
0511F0000009.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 14:53	EB3	Pass 15% for all ranges
0511F0000010.D	4295310	S/39118	Blank	1		GCSFAKNW8015-050922_	5/11/22 15:04	EB3	ok
0511F0000011.D	10604453006	S/39118	Sample	1		GCSFAKNW8015-050922_	5/11/22 15:15	EB3	confirms failing high, RX
0511F0000012.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 15:27	EB3	Pass 15% for all ranges
0511F0000013.D	4313529	L/39306	Blank	1		GCSFAKNW8015-050922_	5/11/22 15:38	EB3	ok
0511F0000014.D	10607257004	L/39306	Sample	1		GCSFAKNW8015-050922_	5/11/22 15:49	EB3	confirms surr failing low, RX
0511F0000015.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 16:01	EB3	Pass 15% for all ranges
0511F0000016.D	4315536	L/39305	Blank	1		GCSFAKNW8015-050922_	5/11/22 16:12	EB3	ok
0511F0000017.D	10607414002	L/39305	Sample	1		GCSFAKNW8015-050922_	5/11/22 16:23	EB3	confirms surr failing low, RX
0511F0000018.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 16:35	EB3	Pass 15% for all ranges
0511F0000019.D	4316005	S/39301	Blank	1		GCSFAKNW8015-050922_	5/11/22 16:46	EB3	ok
0511F0000020.D	4316006	S/39301	LCS	1		GCSFAKNW8015-050922_	5/11/22 16:57	EB3	pass
0511F0000021.D	10607520001	S/39301	Sample	50		GCSFAKNW8015-050922_	5/11/22 17:09	EB3	
0511F0000022.D	4316061	S/39301	MS	50		GCSFAKNW8015-050922_	5/11/22 17:20	EB3	
0511F0000023.D	4316062	S/39301	MSD	50		GCSFAKNW8015-050922_	5/11/22 17:32	EB3	
0511F0000024.D	10607127001	S/39301	Sample	1		GCSFAKNW8015-050922_	5/11/22 17:43	EB3	
0511F0000025.D	10607127002	S/39301	Sample	1		GCSFAKNW8015-050922_	5/11/22 17:54	EB3	
0511F0000026.D	10607127003	S/39301	Sample	1		GCSFAKNW8015-050922_	5/11/22 18:06	EB3	
0511F0000027.D	10607127004	S/39301	Sample	1		GCSFAKNW8015-050922_	5/11/22 18:17	EB3	
0511F0000028.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 18:28	EB3	Pass 15% for all ranges
0511F0000029.D	4316005	/39309	Sample	1		GCSFAKNW8015-050922_	5/11/22 18:40	EB3	ok
0511F0000030.D	10607365004	S/39309	Sample	100		GCSFAKNW8015-050922_	5/11/22 18:51	EB3	
0511F0000031.D	10607365012	S/39309	Sample	100		GCSFAKNW8015-050922_	5/11/22 19:02	EB3	
0511F0000032.D	10607365006	S/39309	Sample	20		GCSFAKNW8015-050922_	5/11/22 19:14	EB3	
0511F0000033.D	10607365010	S/39309	Sample	100		GCSFAKNW8015-050922_	5/11/22 19:25	EB3	
0511F0000034.D	10606997001	S/39308	Sample	10		GCSFAKNW8015-050922_	5/11/22 19:36	EB3	
0511F0000035.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 19:47	EB3	Pass 15% for all ranges
0511F0000036.D	4316165	L/39327	Blank	1		GCSFAKNW8015-050922_	5/11/22 19:59	EB3	ok
0511F0000037.D	4316166	L/39327	LCS	1		GCSFAKNW8015-050922_	5/11/22 20:10	EB3	pass
0511F0000038.D	4316167	L/39327	LCSD	1		GCSFAKNW8015-050922_	5/11/22 20:21	EB3	pass
0511F0000039.D	10607446001	L/39327	Sample	10		GCSFAKNW8015-050922_	5/11/22 20:33	EB3	rr 1X
0511F0000040.D	DMO-CCV,363721	/39289	CCal	1		GCSFAKNW8015-050922_	5/11/22 20:44	EB3	Pass 15% for all ranges
0511F0000041.D	4310138	L/39317	Blank	1		GCSFAKNW8015-050922_	5/11/22 20:55	EB3	ok
0511F0000042.D	4310139	L/39317	LCS	1		GCSFAKNW8015-050922_	5/11/22 21:07	EB3	pass
0511F0000043.D	4310140	L/39317	LCSD	1		GCSFAKNW8015-050922_	5/11/22 21:18	EB3	pass
0511F0000044.D	10606561001	L/39317	Sample	1		GCSFAKNW8015-050922_	5/11/22 21:29	EB3	
0511F0000045.D	4310141	L/39317	Dupe	1		GCSFAKNW8015-050922_	5/11/22 21:41	EB3	
0511F0000046.D	10606563001	L/39317	Sample	1		GCSFAKNW8015-050922_	5/11/22 21:52	EB3	



### Instrument Run Log

 Instrument: 10GCSF  
 Column: DB-5-US21390001 0.32mm Hy

Method: 8015/AK/NW

Solvent lot:

 Surrogate Lot: See extract sheet  
 ISTD Lot: NA

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
0511F0000047.D	DMO-CCV,363721	/39289	Sample	1		GCSFAKNW8015-050922_	5/11/22 22:03	EB3	Pass 15% for all ranges
0511F0000048.D	4316763	L/39328	Sample	1		GCSFAKNW8015-050922_	5/11/22 22:14	EB3	hit in MB, rr to confirm
0511F0000049.D	4316764	L/39328	Sample	1		GCSFAKNW8015-050922_	5/11/22 22:26	EB3	rr
0511F0000050.D	4316765	L/39328	Sample	1		GCSFAKNW8015-050922_	5/11/22 22:37	EB3	
0511F0000051.D	10607576002	L/39328	Sample	1		GCSFAKNW8015-050922_	5/11/22 22:48	EB3	
0511F0000052.D	4316766	L/39328	Sample	1		GCSFAKNW8015-050922_	5/11/22 23:00	EB3	
0511F0000053.D	10607576003	L/39328	Sample	1		GCSFAKNW8015-050922_	5/11/22 23:11	EB3	
0511F0000054.D	10607576004	L/39328	Sample	1		GCSFAKNW8015-050922_	5/11/22 23:22	EB3	
0511F0000055.D	10607576005	L/39328	Sample	1		GCSFAKNW8015-050922_	5/11/22 23:33	EB3	
0511F0000056.D	10607576006	L/39328	Sample	1		GCSFAKNW8015-050922_	5/11/22 23:45	EB3	
0511F0000057.D	10607576007	L/39328	Sample	1		GCSFAKNW8015-050922_	5/11/22 23:56	EB3	
0511F0000058.D	10607576008	L/39328	Sample	1		GCSFAKNW8015-050922_	5/12/22 00:07	EB3	
0511F0000059.D	10607576009	L/39328	Sample	1		GCSFAKNW8015-050922_	5/12/22 00:19	EB3	
0511F0000060.D	10607576010	L/39328	Sample	1		GCSFAKNW8015-050922_	5/12/22 00:30	EB3	
0511F0000061.D	10607576011	L/39328	Sample	1		GCSFAKNW8015-050922_	5/12/22 00:41	EB3	V
0511F0000062.D	DMO-CCV,363721	/39289	Sample	1		GCSFAKNW8015-050922_	5/12/22 00:52	EB3	Pass 15% for all ranges
0511F0000063.D	4310214	S/39318	Sample	1		GCSFAKNW8015-050922_	5/12/22 01:04	EB3	ok
0511F0000064.D	4310215	S/39318	Sample	1		GCSFAKNW8015-050922_	5/12/22 01:15	EB3	pass
0511F0000065.D	10606565003	S/39318	Sample	10		GCSFAKNW8015-050922_	5/12/22 01:26	EB3	
0511F0000066.D	10606560001	S/39318	Sample	10		GCSFAKNW8015-050922_	5/12/22 01:38	EB3	rr 5X
0511F0000067.D	10606565004	S/39318	Sample	10		GCSFAKNW8015-050922_	5/12/22 01:49	EB3	rr 1X
0511F0000068.D	10606565005	S/39318	Sample	10		GCSFAKNW8015-050922_	5/12/22 02:00	EB3	rr 1X
0511F0000069.D	10606565006	S/39318	Sample	10		GCSFAKNW8015-050922_	5/12/22 02:12	EB3	rr 1X
0511F0000070.D	10606560002	S/39318	Sample	1		GCSFAKNW8015-050922_	5/12/22 02:23	EB3	
0511F0000071.D	10606560003	S/39318	Sample	1		GCSFAKNW8015-050922_	5/12/22 02:34	EB3	
0511F0000072.D	4310216	S/39318	Sample	1		GCSFAKNW8015-050922_	5/12/22 02:45	EB3	
0511F0000073.D	4310217	S/39318	Sample	1		GCSFAKNW8015-050922_	5/12/22 02:57	EB3	
0511F0000074.D	10606565001	S/39318	Sample	1		GCSFAKNW8015-050922_	5/12/22 03:08	EB3	
0511F0000075.D	10606565002	S/39318	Sample	1		GCSFAKNW8015-050922_	5/12/22 03:19	EB3	
0511F0000076.D	DMO-CCV,363721	/39289	Sample	1		GCSFAKNW8015-050922_	5/12/22 03:31	EB3	Pass 15% for all ranges
0511F0000077.D	PBLK,4305172	/	Sample	1		GCSFAKNW8015-050922_	5/12/22 03:42	EB3	clean

**Check Maintenance Items Performed:**

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: \\W10WINTARGET\CHEM\10GCSF.I\051122F.B

Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified:

Report Date: 05/12/2022 10:42

ReviewedBy/Date:

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG14-042722-0-5.5

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500  
 Lab Sample ID: 10606394001 Percent Moisture: 44.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-38-2	Arsenic	3.3		mg/kg	1	05/05/2022 19:05
7440-43-9	Cadmium	0.52		mg/kg	1	05/05/2022 19:05
7440-47-3	Chromium	14.2		mg/kg	1	05/05/2022 19:05
7440-50-8	Copper	16.2		mg/kg	1	05/05/2022 19:05
7439-92-1	Lead	8.6		mg/kg	1	05/05/2022 19:05
7440-02-0	Nickel	15.3		mg/kg	1	05/05/2022 19:05
7782-49-2	Selenium	0.45	J	mg/kg	1	05/05/2022 19:05
7440-22-4	Silver	0.41	J	mg/kg	1	05/05/2022 19:05
7440-66-6	Zinc	106		mg/kg	1	05/05/2022 19:05

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG15-042722-0-10
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Lab Name: Pace Analytical - Minnesota      SDG No. : 10606394      Contract: D3593500  
 Lab Sample ID: 10606394002      Percent Moisture: 35.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-38-2	Arsenic	0.18	J	mg/kg	1	05/05/2022 19:08
7440-43-9	Cadmium	ND	U	mg/kg	1	05/05/2022 19:08
7440-47-3	Chromium	2.1	J	mg/kg	1	05/05/2022 19:08
7440-50-8	Copper	5.7		mg/kg	1	05/05/2022 19:08
7439-92-1	Lead	0.32	J	mg/kg	1	05/05/2022 19:08
7440-02-0	Nickel	1.9		mg/kg	1	05/05/2022 19:08
7782-49-2	Selenium	ND	U	mg/kg	1	05/05/2022 19:08
7440-22-4	Silver	ND	U	mg/kg	1	05/05/2022 19:08
7440-66-6	Zinc	6.9	J	mg/kg	1	05/05/2022 19:08

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG16-042722-0-10

Lab Name: Pace Analytical - Minnesota      SDG No. : 10606394      Contract: D3593500  
 Lab Sample ID: 10606394003      Percent Moisture: 26.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-38-2	Arsenic	0.16	J	mg/kg	1	05/05/2022 19:12
7440-43-9	Cadmium	ND	U	mg/kg	1	05/05/2022 19:12
7440-47-3	Chromium	2.3	J	mg/kg	1	05/05/2022 19:12
7440-50-8	Copper	6.0		mg/kg	1	05/05/2022 19:12
7439-92-1	Lead	0.26	J	mg/kg	1	05/05/2022 19:12
7440-02-0	Nickel	2.3		mg/kg	1	05/05/2022 19:12
7782-49-2	Selenium	ND	U	mg/kg	1	05/05/2022 19:12
7440-22-4	Silver	ND	U	mg/kg	1	05/05/2022 19:12
7440-66-6	Zinc	7.1		mg/kg	1	05/05/2022 19:12

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG17-042722-0-10

Lab Name: Pace Analytical - Minnesota      SDG No. : 10606394      Contract: D3593500  
 Lab Sample ID: 10606394004      Percent Moisture: 50.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7440-38-2	Arsenic	0.41	J	mg/kg	1	05/05/2022 19:23
7440-43-9	Cadmium	ND	U	mg/kg	1	05/05/2022 19:23
7440-47-3	Chromium	3.9		mg/kg	1	05/05/2022 19:23
7440-50-8	Copper	8.4		mg/kg	1	05/05/2022 19:23
7439-92-1	Lead	0.59	J	mg/kg	1	05/05/2022 19:23
7440-02-0	Nickel	2.8		mg/kg	1	05/05/2022 19:23
7782-49-2	Selenium	ND	U	mg/kg	1	05/05/2022 19:23
7440-22-4	Silver	ND	U	mg/kg	1	05/05/2022 19:23
7440-66-6	Zinc	9.4	J	mg/kg	1	05/05/2022 19:23

FORM II INORGANIC-1  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Initial Calibration Verification Source: 364486

Continuing Calibration Verification Source: 364486

Concentration Units: ug/L Instrument ID: 10ICMC

Analyte	Initial Calibration Verification				Continuing Calibration Verification						
	05/05/2022 14:38				05/05/2022 15:00			05/05/2022 18:32			Control Limit
	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Arsenic	80	80.8	101.0	90-110	80	80.1	100.1	80	78.5	98.1	90-110
Cadmium	80	81.0	101.3	90-110	80	80.2	100.3	80	79.2	99.1	90-110
Chromium	80	82.3	102.9	90-110	80	82.1	102.7	80	81.0	101.2	90-110
Copper	80	84.2	105.3	90-110	80	83.9	104.8	80	82.2	102.8	90-110
Lead	80	83.2	103.9	90-110	80	82.3	102.8	80	81.8	102.2	90-110
Nickel	80	84.3	105.4	90-110	80	84.0	105.0	80	81.9	102.4	90-110
Selenium	80	81.3	101.6	90-110	80	81.5	101.9	80	81.4	101.7	90-110
Silver	40	42.4	106.0	90-110	40	42.4	106.0	40	41.6	103.9	90-110
Zinc	80	82.1	102.6	90-110	80	82.3	102.9	80	80.4	100.5	90-110

FORM II INORGANIC-2  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Initial Calibration Verification Source: \_\_\_\_\_

Continuing Calibration Verification Source: 364486

Concentration Units: ug/L Instrument ID: 10ICMC

Analyte	Continuing Calibration Verification									Control Limit
	05/05/2022 19:16			05/05/2022 19:41			05/05/2022 20:29			
	True	Found	%R	True	Found	%R	True	Found	%R	
Arsenic	80	79.4	99.3	80	79.3	99.2	80	79.4	99.2	90-110
Cadmium	80	79.8	99.8	80	79.8	99.8	80	79.8	99.7	90-110
Chromium	80	82.5	103.1	80	81.5	101.9	80	81.8	102.2	90-110
Copper	80	83.4	104.2	80	83.3	104.1	80	83.7	104.7	90-110
Lead	80	82.4	103.0	80	82.9	103.6	80	82.9	103.7	90-110
Nickel	80	82.9	103.7	80	83.0	103.7	80	83.2	104.0	90-110
Selenium	80	79.6	99.5	80	79.8	99.8	80	80.6	100.7	90-110
Silver	40	41.8	104.5	40	42.1	105.3	40	42.0	105.1	90-110
Zinc	80	81.5	101.9	80	80.9	101.2	80	82.1	102.6	90-110

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

CRDL Check Standard Source: 364485 Analysis Date/Time: 05/05/2022 14:49

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Arsenic	0.5	0.49	98.6	80-120
Cadmium	0.08	0.087	108.8	80-120
Chromium	2.0	2.1	103.6	80-120
Copper	1.0	1.1	108.1	80-120
Lead	0.5	0.53	105.6	80-120
Nickel	0.5	0.55	109.2	80-120
Selenium	0.5	0.53	105.8	80-120
Silver	0.5	0.42	84.6	80-120
Zinc	5.0	5.3	106.1	80-120



FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

CRDL Check Standard Source: 364485 Analysis Date/Time: 05/05/2022 19:49

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Arsenic	0.5	0.48	95.4	80-120
Cadmium	0.08	0.078	97.5	80-120
Chromium	2.0	2.0	101.1	80-120
Copper	1.0	1.1	106.9	80-120
Lead	0.5	0.52	103.8	80-120
Nickel	0.5	0.53	106.0	80-120
Selenium	0.5	0.50	100.6	80-120
Silver	0.5	0.45	90.6	80-120
Zinc	5.0	5.3	105.3	80-120

FORM III INORGANIC-1  
BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract : D3593500

Method Blank Matrix: Solid Instrument ID: 10ICMC

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	05/05/2022 14:45	C	05/05/2022 15:04	C	05/05/2022 18:35	C	05/05/2022 19:19	C	4308596	C
Arsenic	0.11	U	0.11	U	0.11	U	0.11	U	ND	U
Cadmium	0.031	U	0.031	U	0.048	J	0.037	J	ND	U
Chromium	0.14	U	0.14	U	0.14	U	0.14	U	ND	U
Copper	0.24	U	0.24	U	0.24	U	0.24	U	ND	U
Lead	0.029	U	0.029	U	0.045	J	0.034	J	ND	U
Nickel	0.20	U	0.20	U	0.20	U	0.20	U	ND	U
Selenium	0.086	U	0.086	U	0.086	U	0.086	U	ND	U
Silver	0.14	U	0.14	U	0.19	J	0.18	J	ND	U
Zinc	0.90	U	0.90	U	0.90	U	0.90	U	1.0	J

FORM III INORGANIC-2  
BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract : D3593500

Method Blank Matrix: \_\_\_\_\_ Instrument ID: 10ICMC

Method Blank Concentration Units: \_\_\_\_\_

Analyte	Initial Calibration Blank		Continuing Calibration Blank (ug/L)					
		C	05/05/2022 19:45	C	05/05/2022 20:33	C		C
Arsenic			0.11	U	0.11	U		
Cadmium			0.031	U	0.031	U		
Chromium			0.14	U	0.14	U		
Copper			0.24	U	0.24	U		
Lead			0.029	U	0.029	U		
Nickel			0.20	U	0.20	U		
Selenium			0.086	U	0.086	U		
Silver			0.16	J	0.17	J		
Zinc			0.90	U	0.90	U		

FORM IV INORGANIC-1  
INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Instrument ID: 10ICMC Solution A Run Date: 05/05/2022 14:52

ICS Source: 364484,364483 Solution AB Run Date: 05/05/2022 14:56

Concentration Units: ug/L

Analyte	True		Found				
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Limits
Aluminum	25000	27500	24861.832	99.4	27234.917	99	80-120
Arsenic		100	0.016		100.196	100.2	80-120
Cadmium		100	-0.001		100.802	100.8	80-120
Calcium	25000	27500	24766.638	99.1	27540.707	100.1	80-120
Chromium		100	0.236		101.06	101.1	80-120
Copper		100	0.077		101.324	101.3	80-120
Iron	25000	26250	25154.634	100.6	26308.773	100.2	80-120
Lead		100	0.014		99.69	99.7	80-120
Magnesium	25000	27500	24800.339	99.2	27126.21	98.6	80-120
Molybdenum	500	600	513.805	102.8	622.689	103.8	80-120
Nickel		100	0.061		102.917	102.9	80-120
Potassium	25000	27500	24962.212	99.8	27554.434	100.2	80-120
Selenium		100	0.018		100.518	100.5	80-120
Silver		50	0.034		51.867	103.7	80-120
Sodium	25000	27500	25108.44	100.4	27575.468	100.3	80-120
Titanium	500	600	499.894	100	598.164	99.7	80-120
Zinc		100	0.188		101.163	101.2	80-120

FORM V INORGANIC-1  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4308598MS
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Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Matrix: Solid Basis: Dry Parent Sample ID: 10606046001

Percent Moisture: 27.7

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Arsenic	mg/kg	75-125	64.4	2.1	66.3	94
Cadmium	mg/kg	75-125	62.7	0.089J	66.3	94
Chromium	mg/kg	75-125	73.8	8.2	66.3	99
Copper	mg/kg	75-125	73.2	7.7	66.3	99
Lead	mg/kg	75-125	93.2	3.6	66.3	135*
Nickel	mg/kg	75-125	75.5	9.3	66.3	100
Selenium	mg/kg	75-125	65.1	ND	66.3	98
Silver	mg/kg	75-125	33.3	0.26J	33.2	100
Zinc	mg/kg	75-125	97.9	32.3	66.3	99

\* Spike Recovery outside QC Limits

FORM V INORGANIC-2  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4308599MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Matrix: Solid Basis: Dry Parent Sample ID: 10606046001

Percent Moisture: 27.7

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Arsenic	mg/kg	75-125	59.1	2.1	68.1	84
Cadmium	mg/kg	75-125	57.4	0.089J	68.1	84
Chromium	mg/kg	75-125	67.7	8.2	68.1	87
Copper	mg/kg	75-125	66.8	7.7	68.1	87
Lead	mg/kg	75-125	62.6	3.6	68.1	87
Nickel	mg/kg	75-125	69.4	9.3	68.1	88
Selenium	mg/kg	75-125	60.9	ND	68.1	89
Silver	mg/kg	75-125	30.6	0.26J	34.0	89
Zinc	mg/kg	75-125	89.2	32.3	68.1	84

FORM V INORGANIC-1  
POST-DIGESTION SPIKE SAMPLE RECOVERY

SAMPLE NO.

4310748PDS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Matrix: Solid Parent Sample ID: 10606046001

Analyte	Units	Control Limit %R	DF	Spiked Sample Result (SSR)	DF	Sample Result (SR)	Spike Added (SA)	%R
Arsenic	ug/L	80-120	1	73.7	1	2.2U	80	92.2
Cadmium	ug/L	80-120	1	73.0	1	0.63U	80	91.2
Chromium	ug/L	80-120	1	79.9	1	6.1J	80	92.2
Copper	ug/L	80-120	1	80.7	1	5.8J	80	93.6
Lead	ug/L	80-120	1	76.6	1	2.7J	80	92.4
Nickel	ug/L	80-120	1	82.4	1	7.0J	80	94.3
Selenium	ug/L	80-120	1	76.9	1	1.7U	80	96.2
Silver	ug/L	80-120	1	15.1	1	2.9U	40	37.8*
Zinc	ug/L	80-120	1	99.2J	1	24.3J	80	93.6

FORM VI INORGANIC-1  
 DUPLICATES

SAMPLE NO.

4308599MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 27.7 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Arsenic	20	64.4	59.1	9
Cadmium	20	62.7	57.4	9
Chromium	20	73.8	67.7	9
Copper	20	73.2	66.8	9
Lead	20	93.2	62.6	39*
Nickel	20	75.5	69.4	8
Selenium	20	65.1	60.9	7
Silver	20	33.3	30.6	8
Zinc	20	97.9	89.2	9

\* RPD outside QC Limits



FORM VII INORGANIC-1  
LABORATORY CONTROL SAMPLE

SAMPLE NO.

4308597LCS
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Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Arsenic	mg/kg	49.2	44.3	90	80	120
Cadmium	mg/kg	49.2	44.3	90	80	120
Chromium	mg/kg	49.2	45.7	93	80	120
Copper	mg/kg	49.2	46.2	94	80	120
Lead	mg/kg	49.2	45.6	93	80	120
Nickel	mg/kg	49.2	46.6	95	80	120
Selenium	mg/kg	49.2	48.4	98	80	120
Silver	mg/kg	24.6	23.6	96	80	120
Zinc	mg/kg	49.2	45.5	92	80	120

FORM VIII INORGANIC-1  
SERIAL DILUTIONS

4310749SD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500Matrix: Solid Parent Sample ID: 10606046001

Analyte	Units	Initial Sample Result	Serial Dilution Result	% Difference	Control Limit %D
Arsenic	ug/L	2.2U	10.9U		10
Cadmium	ug/L	0.63U	3.1U		10
Chromium	ug/L	6.1J	14.0U		10
Copper	ug/L	5.8J	24.2U		10
Lead	ug/L	2.7J	2.9U		10
Nickel	ug/L	7.0J	19.9U		10
Selenium	ug/L	1.7U	8.6U		10
Silver	ug/L	2.9U	14.5U		10
Zinc	ug/L	24.3J	89.9U		10

\* Indicates that the % Difference exceeds the control limit.  
No difference is calculated if either result is a non-detect.

FORM IX INORGANIC-1  
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Preparation Method: None Instrument ID: 10ICMC

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Arsenic	0.50	0.11	04/01/2022
Cadmium	0.080	0.031	04/01/2022
Chromium	2.0	0.14	04/01/2022
Copper	1.0	0.24	04/01/2022
Lead	0.50	0.029	04/01/2022
Nickel	0.50	0.20	04/01/2022
Selenium	0.50	0.086	04/01/2022
Silver	0.50	0.14	04/01/2022
Zinc	5.0	0.90	04/01/2022

FORM IX INORGANIC-2  
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Preparation Method: EPA 3050B Instrument ID: 10ICMC

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Arsenic	0.50	0.11	07/19/2021
Cadmium	0.080	0.031	07/19/2021
Chromium	2.0	0.14	07/19/2021
Copper	1.0	0.24	07/19/2021
Lead	0.50	0.029	07/19/2021
Nickel	0.50	0.20	07/19/2021
Selenium	0.50	0.086	07/19/2021
Silver	0.50	0.14	07/19/2021
Zinc	5.0	0.90	07/19/2021

FORM XI - INORGANIC-1  
LINEAR DYNAMIC RANGES

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract : D3593500

Instrument ID: 10ICMC Effective Date:04/26/2022

<b>Analyte</b>	<b>Concentration (ug/L)</b>
Arsenic	450
Cadmium	450
Chromium	450
Copper	450
Lead	450
Nickel	450
Selenium	450
Silver	225
Zinc	450

FORM XII INORGANIC-1  
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Preparation Method: EPA 3050B Batch: MPRP 123945

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
4308596	4308596	05/03/2022	1.067	50
4308597	4308597	05/03/2022	1.016	50
4308598	4308598	05/03/2022	1.043	50
4308599	4308599	05/03/2022	1.017	50
10606394001	BNSF-BG14-042722-0-5.5	05/03/2022	1.022	50
10606394002	BNSF-BG15-042722-0-10	05/03/2022	1.03	50
10606394003	BNSF-BG16-042722-0-10	05/03/2022	1.012	50
10606394004	BNSF-BG17-042722-0-10	05/03/2022	1.07	50

FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Instrument ID: 10ICMC Analysis Method: EPA 6020B

Start Date: 05/05/2022 14:00 End Date: 05/05/2022 20:33

Sample Name	Lab Sample ID	D/F	Date	Time	Ag	As	Cd	Cr	Cu	Ni	Pb	Se	Zn
29907792CAL0	29907792CAL0	1	05/05/2022	14:00	X	X	X	X	X	X	X	X	X
29907793CAL1	29907793CAL1	1	05/05/2022	14:04	X	X	X	X	X	X	X	X	X
29907794CAL2	29907794CAL2	1	05/05/2022	14:08	X	X	X	X	X	X	X	X	X
29907795CAL3	29907795CAL3	1	05/05/2022	14:12	X	X	X	X	X	X	X	X	X
29907796CAL4	29907796CAL4	1	05/05/2022	14:16	X	X	X	X	X	X	X	X	X
29907797CAL5	29907797CAL5	1	05/05/2022	14:20	X	X	X	X	X	X	X	X	X
29907798CAL6	29907798CAL6	1	05/05/2022	14:24	X	X	X	X	X	X	X	X	X
29907799CAL7	29907799CAL7	1	05/05/2022	14:30	X	X	X	X	X	X	X	X	X
29907800ICV	29907800ICV	1	05/05/2022	14:38	X	X	X	X	X	X	X	X	X
29907801ICB	29907801ICB	1	05/05/2022	14:45	X	X	X	X	X	X	X	X	X
29907802CRDL	29907802CRDL	1	05/05/2022	14:49	X	X	X	X	X	X	X	X	X
29907803ICSA	29907803ICSA	1	05/05/2022	14:52	X	X	X	X	X	X	X	X	X
29907804ICSAB	29907804ICSAB	1	05/05/2022	14:56	X	X	X	X	X	X	X	X	X
29907805CCV	29907805CCV	1	05/05/2022	15:00	X	X	X	X	X	X	X	X	X
29907806CCB	29907806CCB	1	05/05/2022	15:04	X	X	X	X	X	X	X	X	X
29907816CCV	29907816CCV	1	05/05/2022	18:32	X	X	X	X	X	X	X	X	X
29907817CCB	29907817CCB	1	05/05/2022	18:35	X	X	X	X	X	X	X	X	X
4308596BLANK	4308596	1	05/05/2022	18:39	X	X	X	X	X	X	X	X	X
4308597LCS	4308597	1	05/05/2022	18:43	X	X	X	X	X	X	X	X	X
10606046001	10606046001	1	05/05/2022	18:46	X	X	X	X	X	X	X	X	X
4310748PDS	4310748	1	05/05/2022	18:50	X	X	X	X	X	X	X	X	X
4310749SD	4310749	5	05/05/2022	18:54	X	X	X	X	X	X	X	X	X
4308598MS	4308598	1	05/05/2022	18:57	X	X	X	X	X	X	X	X	X
4308599MSD	4308599	1	05/05/2022	19:01	X	X	X	X	X	X	X	X	X
BNSF-BG14-042722-0-5.5	10606394001	1	05/05/2022	19:05	X	X	X	X	X	X	X	X	X
BNSF-BG15-042722-0-10	10606394002	1	05/05/2022	19:08	X	X	X	X	X	X	X	X	X
BNSF-BG16-042722-0-10	10606394003	1	05/05/2022	19:12	X	X	X	X	X	X	X	X	X
29907818CCV	29907818CCV	1	05/05/2022	19:16	X	X	X	X	X	X	X	X	X
29907819CCB	29907819CCB	1	05/05/2022	19:19	X	X	X	X	X	X	X	X	X
BNSF-BG17-042722-0-10	10606394004	1	05/05/2022	19:23	X	X	X	X	X	X	X	X	X
29907820CCV	29907820CCV	1	05/05/2022	19:41	X	X	X	X	X	X	X	X	X
29907821CCB	29907821CCB	1	05/05/2022	19:45	X	X	X	X	X	X	X	X	X
29907822CRDL	29907822CRDL	1	05/05/2022	19:49	X	X	X	X	X	X	X	X	X
29907823CCV	29907823CCV	1	05/05/2022	20:29	X	X	X	X	X	X	X	X	X
29907824CCB	29907824CCB	1	05/05/2022	20:33	X	X	X	X	X	X	X	X	X

# US EPA 200.8/6020 Tune Check Report

Acq/Data Batch  
Report Comment  
Instrument Name

D:\DATA\050522.b  
ICMC RJS  
G8403A SG19304531

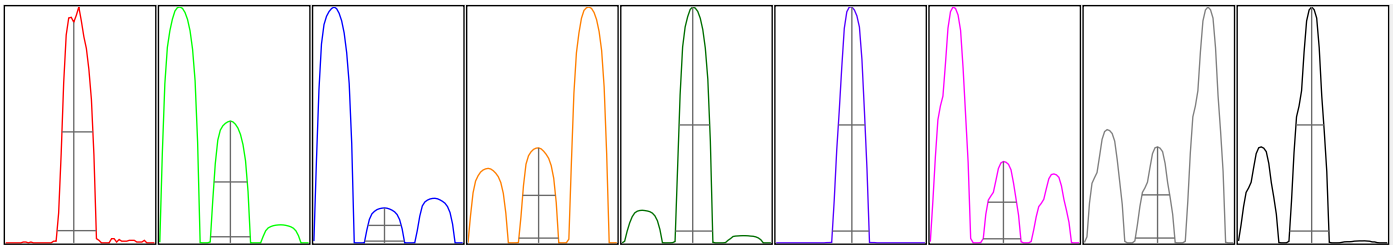
[He]

## Sensitivity

Mass	Count	RSD%	RSD%(Rqd)	RSD%(Flag)	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	32	3.980	5.000		32	34	32	30	32
24	17381	1.228	5.000		17688	17434	17423	17207	17151
25	2564	0.751	5.000		2598	2557	2557	2553	2554
26	3238	1.262	5.000		3277	3241	3253	3248	3169
59	10772	0.340	5.000		10728	10745	10819	10792	10774
115	314290	1.692	5.000		307624	312789	321564	312172	317299
206	9303	2.739	5.000		8910	9196	9397	9543	9470
207	7771	3.012	5.000		7420	7679	7810	7923	8022
208	19163	2.843	5.000		18361	18929	19249	19516	19760

Integration Time [sec] 0.1

## Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Required)	W-5% (Flag)
9	52.45	8.90	8.90 - 9.10		0.776	0.900	
24	27558.19	23.95	23.90 - 24.10		0.788	0.900	
25	4082.47	24.95	24.90 - 25.10		0.787	0.900	
26	5205.52	25.95	25.90 - 26.10		0.786	0.900	
59	18531.29	58.95	58.90 - 59.10		0.737	0.900	
115	603970.78	115.05	114.90 - 115.10		0.729	0.900	
206	17772.12	206.00	205.90 - 206.10		0.748	0.900	
207	15061.63	207.00	206.90 - 207.10		0.783	0.900	
208	37005.46	208.00	207.90 - 208.10		0.779	0.900	

Integration Time [sec] 0.1 Acquisition Time [sec] 212.5 Y Axis Linear

## Tune Parameters

### Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.78 L/min	Dilution Gas	0.15 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	7.0 mm	S/C Temp	2 °C		

### Lens Parameters

Extract 1	0.0 V	Omega Lens	14.2 V	Deflect	2.0 V
Extract 2	-210.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-115 V	Cell Exit	-70 V		

### Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		



# US EPA 200.8/6020 Tune Check Report

Acq/Data Batch  
Report Comment  
Instrument Name

D:\DATA\050522.b  
ICMC RJS  
G8403A SG19304531

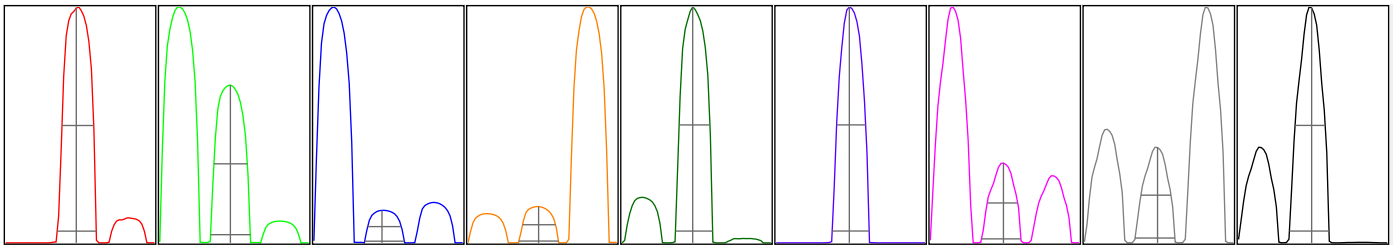
[H2]

## Sensitivity

Mass	Count	RSD%	RSD%(Rqd)	RSD%(Flag)	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	388	1.037	5.000		386	392	391	388	382
24	170556	0.215	5.000		170565	170093	170996	170819	170306
25	23566	0.264	5.000		23650	23612	23501	23534	23531
26	28720	0.304	5.000		28659	28869	28729	28672	28672
59	13407	0.868	5.000		13286	13310	13577	13431	13433
115	780988	1.088	5.000		768715	778567	780073	790978	786608
206	11188	1.818	5.000		10894	11121	11174	11423	11328
207	9412	1.737	5.000		9209	9326	9413	9648	9464
208	23147	1.881	5.000		22622	22817	23184	23693	23420

Integration Time [sec] 0.1

## Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Required)	W-5% (Flag)
9	638.80	8.95	8.90 - 9.10		0.775	0.900	
24	269211.28	23.95	23.90 - 24.10		0.788	0.900	
25	37076.22	24.90	24.90 - 25.10		0.788	0.900	
26	46087.69	25.95	25.90 - 26.10		0.786	0.900	
59	23134.16	58.95	58.90 - 59.10		0.737	0.900	
115	1433422.03	115.00	114.90 - 115.10		0.734	0.900	
206	20140.06	206.00	205.90 - 206.10		0.783	0.900	
207	16903.58	207.00	206.90 - 207.10		0.790	0.900	
208	41614.48	208.00	207.90 - 208.10		0.786	0.900	

Integration Time [sec] 0.1 Acquisition Time [sec] 212.5 Y Axis Linear

## Tune Parameters

### Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.78 L/min	Dilution Gas	0.15 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.20 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	7.0 mm	S/C Temp	2 °C		

### Lens Parameters

Extract 1	0.0 V	Omega Lens	14.2 V	Deflect	3.4 V
Extract 2	-210.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-115 V	Cell Exit	-70 V		

### Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	0.0 mL/min	OctP Bias	-18.0 V		
H2 Flow	3.5 mL/min	OctP RF	200 V		

FORM XV INORGANIC-1  
INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Pace Analytical - Minnesota      SDG No. : 10606394      Contract: D3593500

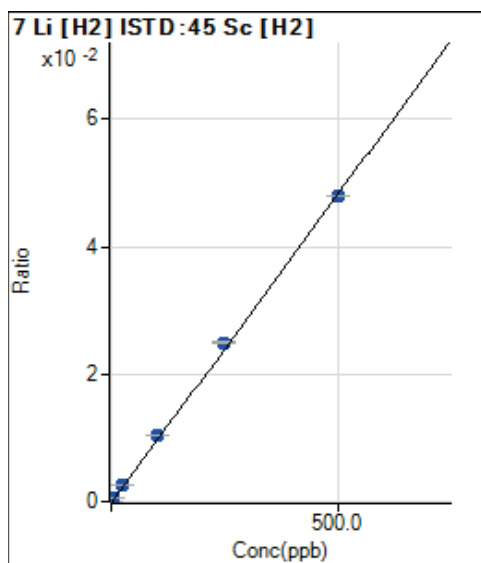
Instrument ID: 10ICMC      Start Date: 05/05/2022 14:00      End Date: 05/05/2022 20:33

Sample Name	Time	GE-72	Ge-72-IS1	In-115	Ir-193-IS	Sc-45-IS	Sc-45-IS1	Tb-159
29907792CAL0	14:00	100.0	100.0	100.0	100.0	100.0	100.0	100.0
29907793CAL1	14:04	100.2	99.7	100.3	100.1	100.5	100.4	101.0
29907794CAL2	14:08	99.7	97.9	101.4	100.4	99.6	99.0	101.7
29907795CAL3	14:12	99.7	98.4	101.1	98.8	98.6	97.7	100.9
29907796CAL4	14:16	97.3	97.0	97.9	96.6	95.8	96.0	99.1
29907797CAL5	14:20	97.2	97.2	96.9	97.7	96.0	97.6	100.0
29907798CAL6	14:24	97.7	98.4	96.7	96.6	97.0	100.2	100.1
29907799CAL7	14:30	97.8	102.4	96.2	98.5	97.0	104.4	101.3
29907800ICV	14:38	105.3	104.6	106.5	105.6	104.1	104.3	106.4
29907801ICB	14:45	103.0	99.1	104.1	100.5	103.6	99.9	102.1
29907802CRDL	14:49	103.3	102.9	103.8	100.2	104.0	103.7	102.3
29907803ICSA	14:52	96.9	99.3	97.2	96.0	97.3	99.6	98.6
29907804ICSAB	14:56	99.7	102.3	97.6	97.2	99.4	102.7	100.3
29907805CCV	15:00	104.7	104.8	104.7	100.4	103.9	105.2	103.5
29907806CCB	15:04	103.6	104.9	103.3	101.0	103.2	105.2	102.6
29907816CCV	18:32	99.7	96.9	100.8	99.4	97.9	96.8	100.6
29907817CCB	18:35	96.5	97.1	98.7	98.9	94.8	96.5	99.2
4308596	18:39	94.6	96.4	97.6	98.6	93.1	96.2	98.6
4308597	18:43	95.3	95.6	97.0	97.3	93.7	94.5	98.8
10606046001	18:46	93.6	93.3	96.7	98.2	92.9	92.8	99.8
4310748	18:50	92.9	93.7	94.3	96.8	91.3	93.0	98.5
4310749	18:54	93.5	94.9	96.1	98.2	91.6	94.7	98.3
4308598	18:57	93.3	94.6	94.9	97.0	91.5	93.6	98.0
4308599	19:01	93.3	93.9	94.9	97.0	91.3	93.2	98.4
BNSF-BG14-042722-0-	19:05	92.2	93.8	95.1	97.6	91.3	93.7	97.2
BNSF-BG15-042722-0-	19:08	92.7	94.1	96.0	98.3	91.0	93.7	98.7
BNSF-BG16-042722-0-	19:12	93.7	94.2	97.8	99.4	91.7	93.7	99.5
29907818CCV	19:16	96.7	94.9	99.0	99.1	93.8	94.5	100.0
29907819CCB	19:19	95.0	95.6	98.0	99.2	93.1	95.1	99.0
BNSF-BG17-042722-0-	19:23	92.5	93.7	96.2	97.6	91.3	93.2	98.7
29907820CCV	19:41	96.1	95.2	98.2	98.4	94.1	94.9	99.6
29907821CCB	19:45	95.6	96.2	98.8	100.0	94.0	95.2	100.1
29907822CRDL	19:49	96.6	96.6	99.2	99.3	95.3	96.4	99.9
29907823CCV	20:29	97.5	96.9	99.5	98.5	96.2	96.3	99.7
29907824CCB	20:33	96.0	96.2	98.9	100.1	94.8	95.8	100.0

Calibration for 182SMPL.d

Batch Folder: D:\DATA\050522B\  
 Analysis File: 050522B.batch.bin  
 DA Date-Time: 05/06/22 01:09:42  
 Calibration Title:  
 Calibration Method: External Calibration  
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	005CALB.d	CAL0	05/05/22 14:00:47
2	006CAL.S.d	CAL1	05/05/22 14:04:58
3	007CAL.S.d	CAL2	05/05/22 14:08:51
4	008CAL.S.d	CAL3	05/05/22 14:12:44
5	009CAL.S.d	CAL4	05/05/22 14:16:36
6	010CAL.S.d	CAL5	05/05/22 14:20:26
7	011CAL.S.d	CAL6	05/05/22 14:24:12
8	012CAL.S.d	CAL7	05/05/22 14:30:29



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	69.17	0.0000	P	2.4	
2	<input type="checkbox"/>	0.500	0.570	342.83	0.0001	P	3.1	14.1
3	<input type="checkbox"/>	5.000	5.551	2692.41	0.0006	P	1.9	11.0
4	<input type="checkbox"/>	25.000	27.750	13005.57	0.0027	P	1.2	11.0
5	<input type="checkbox"/>	100.000	107.666	49396.59	0.0105	P	0.5	7.7
6	<input type="checkbox"/>	250.000	257.478	120037.24	0.0250	P	0.6	3.0
7	<input type="checkbox"/>	500.000	494.585	236761.79	0.0480	P	0.3	-1.1
8	<input type="checkbox"/>			206.00	0.0000	P	3.9	

$y = 9.6949E-005 * x + 1.4045E-005$

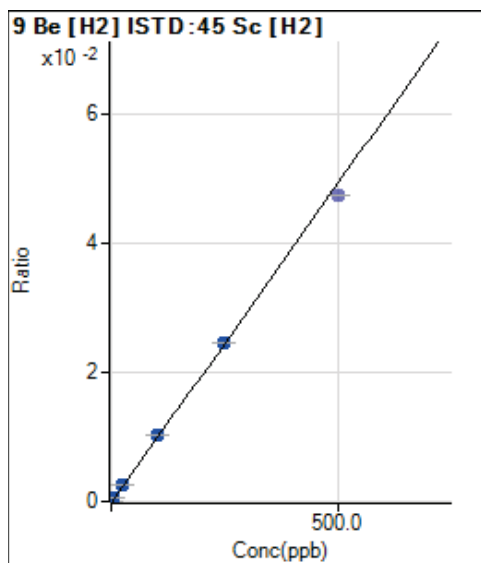
R = 0.9997

DL = 0.01064 ppb

BEC = 0.1449 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	11.33	0.0000	P	10.9	
2	<input type="checkbox"/>	0.200	0.218	118.00	0.0000	P	4.3	8.9
3	<input type="checkbox"/>	5.000	5.389	2614.23	0.0005	P	1.3	7.8
4	<input type="checkbox"/>	25.000	27.060	12903.98	0.0027	P	0.2	8.2
5	<input type="checkbox"/>	100.000	103.524	48481.78	0.0103	P	0.6	3.5
6	<input type="checkbox"/>	250.000	248.377	118275.01	0.0246	P	0.6	-0.6
7	<input checked="" type="checkbox"/>	500.000		234246.43	0.0475	P	0.4	
8	<input type="checkbox"/>			110.50	0.0000	P	9.3	

$y = 9.9073E-005 * x + 2.3009E-006$

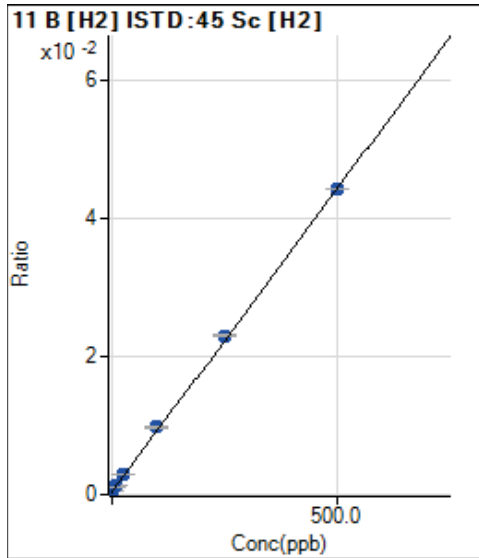
R = 0.9998

DL = 0.007579 ppb

BEC = 0.02322 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2723.41	0.0006	P	1.0	
2	<input type="checkbox"/>	10.000	10.174	7157.03	0.0014	P	1.3	1.7
3	<input type="checkbox"/>	5.000	4.828	4766.42	0.0010	P	1.0	-3.4
4	<input type="checkbox"/>	25.000	26.375	13814.63	0.0029	P	0.5	5.5
5	<input type="checkbox"/>	100.000	104.443	46020.89	0.0097	P	0.8	4.4
6	<input type="checkbox"/>	250.000	255.114	110483.09	0.0230	P	0.5	2.0
7	<input type="checkbox"/>	500.000	496.484	218257.26	0.0442	P	0.3	-0.7
8	<input type="checkbox"/>			3142.16	0.0006	P	1.3	

$y = 8.7942E-005 * x + 5.5300E-004$

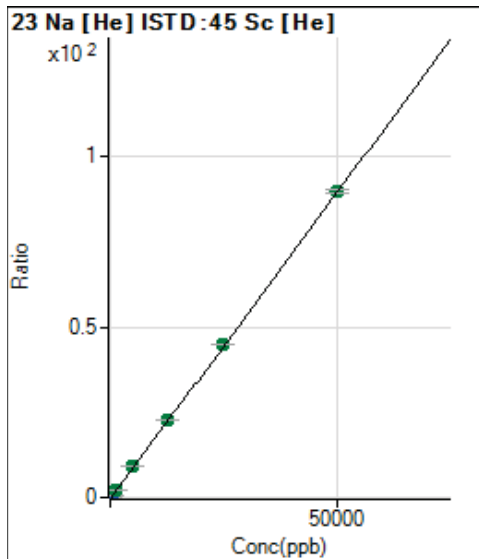
R = 0.9999

DL = 0.1882 ppb

BEC = 6.288 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	11617.92	0.0189	P	3.0	
2	<input type="checkbox"/>	50.000	54.912	72749.51	0.1175	P	0.5	9.8
3	<input type="checkbox"/>	250.000	273.745	313328.63	0.5108	P	0.6	9.5
4	<input type="checkbox"/>	1250.000	1327.663	1461048.57	2.4046	A	0.6	6.2
5	<input type="checkbox"/>	5000.000	5176.978	5504088.04	9.3216	A	0.6	3.5
6	<input type="checkbox"/>	12500.00	12630.31	13428051.88	22.7148	A	0.5	1.0
7	<input type="checkbox"/>	25000.00	24943.71	26802559.60	44.8413	A	0.3	-0.2
8	<input type="checkbox"/>	50000.00	49975.80	53685932.54	89.8225	A	0.7	0.0

$y = 0.0018 * x + 0.0189$

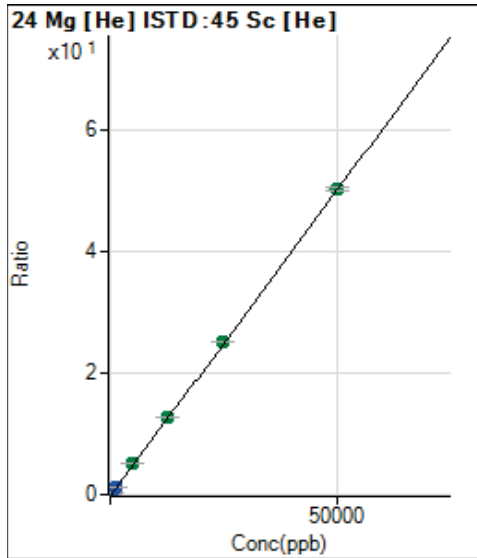
R = 1.0000

DL = 0.9502 ppb

BEC = 10.5 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	1505.09	0.0024	P	5.5	
2	<input type="checkbox"/>	30.000	30.796	20747.84	0.0335	P	0.4	2.7
3	<input type="checkbox"/>	250.000	267.572	167147.16	0.2725	P	1.4	7.0
4	<input type="checkbox"/>	1250.000	1335.586	820443.22	1.3503	P	1.2	6.8
5	<input type="checkbox"/>	5000.000	5205.856	3103459.33	5.2560	A	1.0	4.1
6	<input type="checkbox"/>	12500.00	12657.76	7552746.76	12.7762	A	0.8	1.3
7	<input type="checkbox"/>	25000.00	24937.59	15043746.45	25.1685	A	0.3	-0.2
8	<input type="checkbox"/>	50000.00	49968.94	30140342.88	50.4291	A	0.9	-0.1

$y = 0.0010 * x + 0.0024$

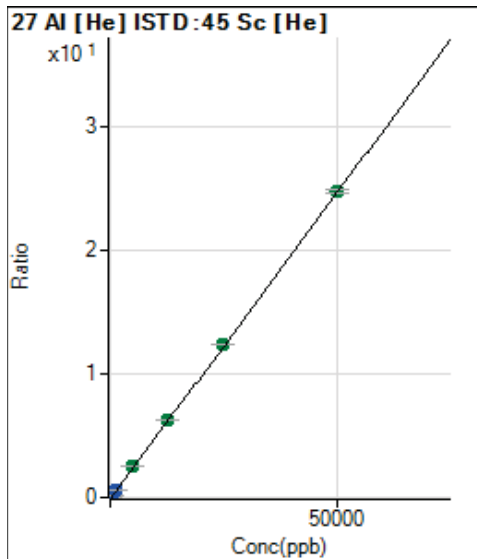
R = 1.0000

DL = 0.3965 ppb

BEC = 2.421 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	74.67	0.0001	P	16.0	
2	<input type="checkbox"/>	30.000	31.547	9736.18	0.0157	P	0.5	5.2
3	<input type="checkbox"/>	250.000	266.007	80812.17	0.1317	P	0.6	6.4
4	<input type="checkbox"/>	1250.000	1328.054	399322.79	0.6572	P	0.8	6.2
5	<input type="checkbox"/>	5000.000	5190.920	1516561.69	2.5684	A	1.0	3.8
6	<input type="checkbox"/>	12500.00	12622.33	3691954.00	6.2453	A	0.6	1.0
7	<input type="checkbox"/>	25000.00	24899.74	7363820.67	12.3198	A	0.2	-0.4
8	<input type="checkbox"/>	50000.00	49998.42	14785661.67	24.7379	A	0.7	0.0

$y = 4.9477E-004 * x + 1.2136E-004$

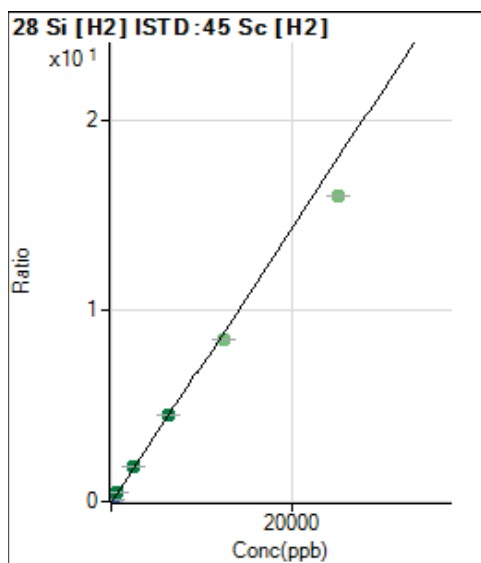
R = 1.0000

DL = 0.1178 ppb

BEC = 0.2453 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	14225.96	0.0029	P	7.3	
2	<input type="checkbox"/>	100.000	101.004	375014.95	0.0759	P	0.8	1.0
3	<input type="checkbox"/>	125.000	131.108	475924.05	0.0976	P	0.5	4.9
4	<input type="checkbox"/>	625.000	662.551	2315872.83	0.4815	A	0.4	6.0
5	<input type="checkbox"/>	2500.000	2573.561	8800586.00	1.8622	A	0.4	2.9
6	<input type="checkbox"/>	6250.000	6216.682	21599221.33	4.4941	A	0.1	-0.5
7	<input checked="" type="checkbox"/>	12500.00		41976410.67	8.5037	A	0.3	
8	<input checked="" type="checkbox"/>	25000.00		82245138.67	16.0017	A	0.4	

$y = 7.2245E-004 * x + 0.0029$

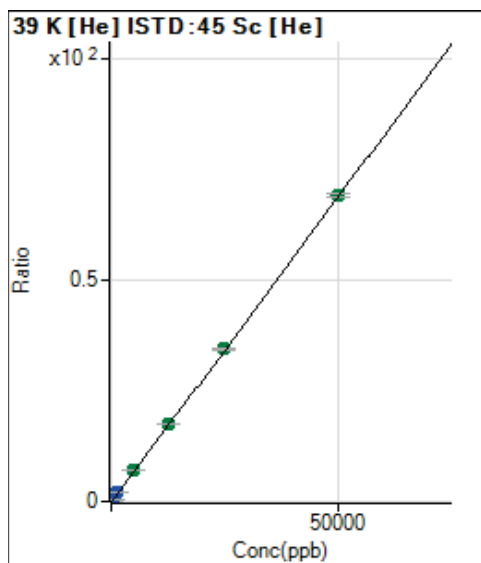
R = 0.9999

DL = 0.8751 ppb

BEC = 3.998 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	75312.55	0.1223	P	1.1	
2	<input type="checkbox"/>	100.000	104.237	164780.86	0.2662	P	0.4	4.2
3	<input type="checkbox"/>	250.000	262.809	297669.74	0.4852	P	0.5	5.1
4	<input type="checkbox"/>	1250.000	1311.465	1174865.04	1.9336	P	0.7	4.9
5	<input type="checkbox"/>	5000.000	5109.309	4239085.41	7.1792	A	0.3	2.2
6	<input type="checkbox"/>	12500.00	12497.62	10276584.22	17.3838	A	0.4	0.0
7	<input type="checkbox"/>	25000.00	24843.86	20583217.61	34.4362	A	0.6	-0.6
8	<input type="checkbox"/>	50000.00	50066.12	41403626.88	69.2728	A	0.7	0.1

$y = 0.0014 * x + 0.1223$

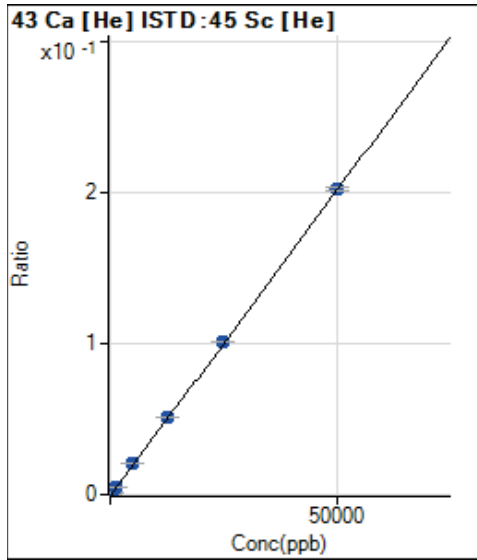
R = 1.0000

DL = 2.845 ppb

BEC = 88.52 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	18.58	0.0000	P	15.5	
2	<input type="checkbox"/>	100.000	91.410	248.27	0.0004	P	2.4	-8.6
3	<input type="checkbox"/>	250.000	255.191	653.74	0.0011	P	2.7	2.1
4	<input type="checkbox"/>	1250.000	1307.466	3242.15	0.0053	P	1.4	4.6
5	<input type="checkbox"/>	5000.000	5154.959	12369.54	0.0209	P	0.3	3.1
6	<input type="checkbox"/>	12500.00	12614.91	30279.45	0.0512	P	0.5	0.9
7	<input type="checkbox"/>	25000.00	25012.04	60684.82	0.1015	P	0.3	0.0
8	<input type="checkbox"/>	50000.00	49948.30	121160.93	0.2027	P	0.8	-0.1

$y = 4.0579E-006 * x + 3.0198E-005$

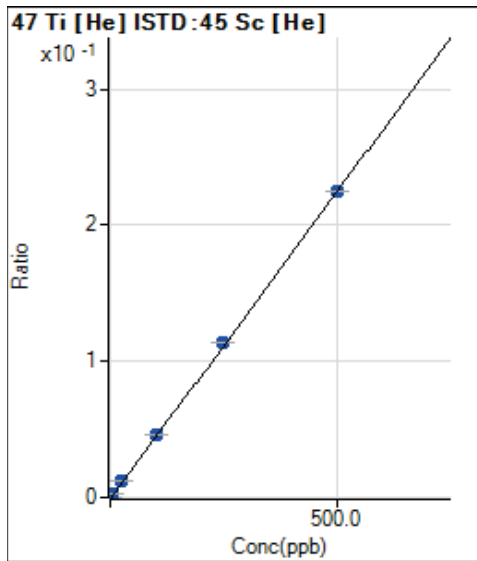
R = 1.0000

DL = 3.451 ppb

BEC = 7.442 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	1.00	0.0000	P	99.6	
2	<input type="checkbox"/>	1.000	1.046	293.33	0.0005	P	7.2	4.6
3	<input type="checkbox"/>	5.000	5.055	1400.74	0.0023	P	1.1	1.1
4	<input type="checkbox"/>	25.000	25.812	7080.04	0.0117	P	0.7	3.2
5	<input type="checkbox"/>	100.000	102.608	27348.28	0.0463	P	1.3	2.6
6	<input type="checkbox"/>	250.000	252.265	67315.52	0.1139	P	0.7	0.9
7	<input type="checkbox"/>	500.000	498.305	134443.93	0.2249	P	0.6	-0.3
8	<input type="checkbox"/>			617.35	0.0010	P	6.0	

$y = 4.5138E-004 * x + 1.6100E-006$

R = 1.0000

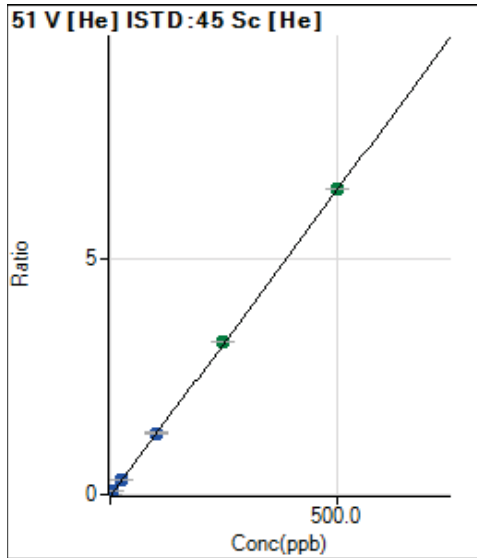
DL = 0.01066 ppb

BEC = 0.003567 ppb

Weight: <None>

Min Conc: <None>





	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	-545.49	-0.0009	P	-55.	
2	<input type="checkbox"/>	1.000	0.964	7174.13	0.0116	P	3.2	-3.6
3	<input type="checkbox"/>	5.000	4.951	38779.29	0.0632	P	1.8	-1.0
4	<input type="checkbox"/>	25.000	25.272	198281.70	0.3263	P	1.5	1.1
5	<input type="checkbox"/>	100.000	100.638	768869.44	1.3022	P	1.0	0.6
6	<input type="checkbox"/>	250.000	250.650	1917993.61	3.2445	A	0.4	0.3
7	<input type="checkbox"/>	500.000	499.535	3865500.57	6.4670	A	0.2	-0.1
8	<input type="checkbox"/>			569.86	0.0010	P	66.7	

$y = 0.0129 * x - 8.8522E-004$

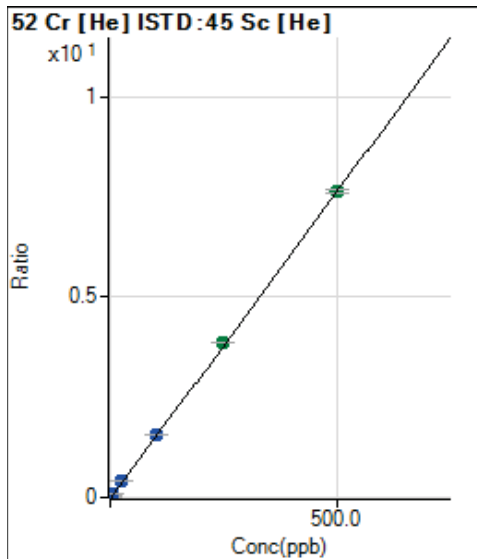
R = 1.0000

DL = 0.1133 ppb

BEC = -0.06837 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2675.59	0.0043	P	1.3	
2	<input type="checkbox"/>	2.000	2.070	22315.70	0.0361	P	1.1	3.5
3	<input type="checkbox"/>	5.000	5.127	50847.03	0.0829	P	0.4	2.5
4	<input type="checkbox"/>	25.000	26.063	245244.40	0.4036	P	0.7	4.3
5	<input type="checkbox"/>	100.000	102.596	930663.94	1.5761	P	0.5	2.6
6	<input type="checkbox"/>	250.000	252.669	2290941.67	3.8753	A	0.1	1.1
7	<input type="checkbox"/>	500.000	498.092	4563740.50	7.6353	A	0.7	-0.4
8	<input type="checkbox"/>			5359.66	0.0090	P	1.5	

$y = 0.0153 * x + 0.0043$

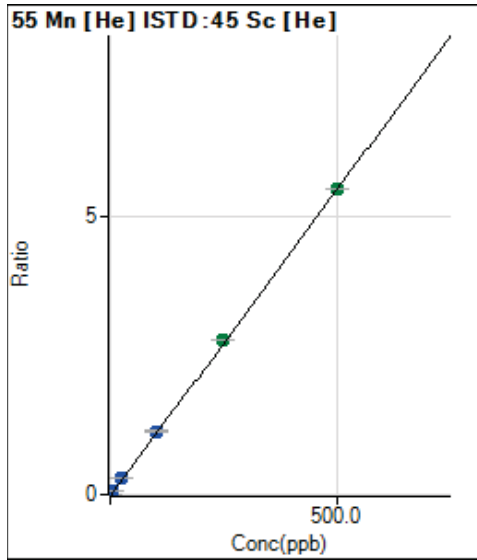
R = 1.0000

DL = 0.01089 ppb

BEC = 0.2835 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	328.67	0.0005	P	17.5	
2	<input type="checkbox"/>	0.500	0.532	3968.55	0.0064	P	0.9	6.4
3	<input type="checkbox"/>	5.000	5.144	35192.16	0.0574	P	0.8	2.9
4	<input type="checkbox"/>	25.000	26.387	177464.35	0.2921	P	0.7	5.5
5	<input type="checkbox"/>	100.000	103.521	675671.75	1.1443	P	0.9	3.5
6	<input type="checkbox"/>	250.000	251.138	1640630.33	2.7753	A	0.1	0.5
7	<input type="checkbox"/>	500.000	498.656	3293457.58	5.5100	A	0.4	-0.3
8	<input type="checkbox"/>			4648.75	0.0078	P	2.1	

$y = 0.0110 * x + 5.3327E-004$

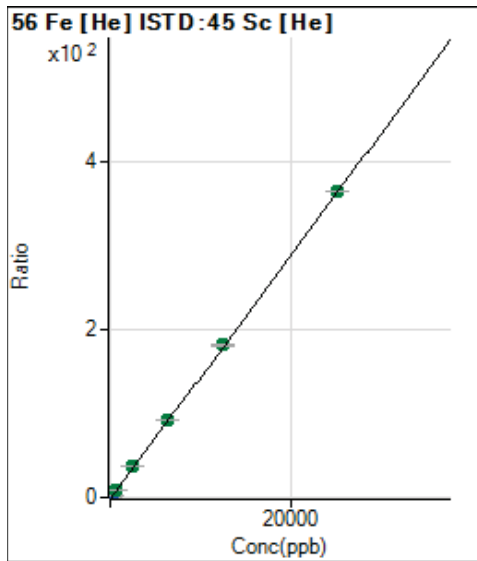
R = 1.0000

DL = 0.02538 ppb

BEC = 0.04827 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	11110.90	0.0180	P	1.7	
2	<input type="checkbox"/>	50.000	51.316	475039.19	0.7675	P	0.1	2.6
3	<input type="checkbox"/>	125.000	129.349	1169914.83	1.9071	P	0.0	3.5
4	<input type="checkbox"/>	625.000	652.570	5801662.33	9.5486	A	0.5	4.4
5	<input type="checkbox"/>	2500.000	2563.759	22119012.00	37.4607	A	1.2	2.6
6	<input type="checkbox"/>	6250.000	6296.522	54372749.33	91.9763	A	0.2	0.7
7	<input type="checkbox"/>	12500.00	12450.88	108700666.6	181.858	A	0.4	-0.4
8	<input type="checkbox"/>	25000.00	25005.83	218289456.0	365.218	A	0.6	0.0

$y = 0.0146 * x + 0.0180$

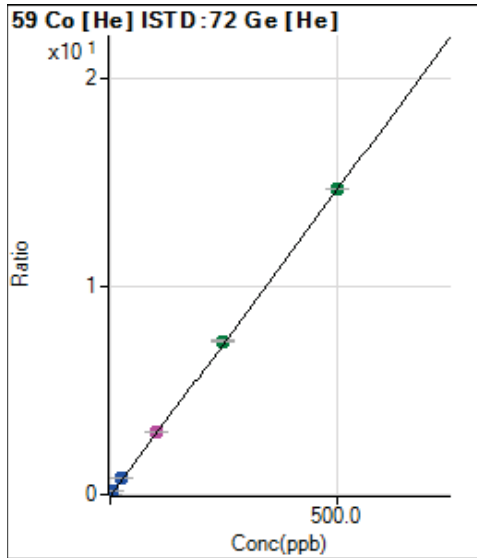
R = 1.0000

DL = 0.06386 ppb

BEC = 1.235 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	50.67	0.0001	P	29.2	
2	<input type="checkbox"/>	0.500	0.543	8150.29	0.0161	P	1.1	8.6
3	<input type="checkbox"/>	5.000	5.290	78571.37	0.1556	P	1.4	5.8
4	<input type="checkbox"/>	25.000	26.266	389765.90	0.7721	P	0.2	5.1
5	<input type="checkbox"/>	100.000	102.078	1478749.50	3.0004	M	0.3	2.1
6	<input type="checkbox"/>	250.000	250.819	3629996.00	7.3722	A	0.4	0.3
7	<input type="checkbox"/>	500.000	499.109	7260329.33	14.6700	A	0.4	-0.2
8	<input type="checkbox"/>			10325.67	0.0208	P	0.1	

$y = 0.0294 * x + 9.9901E-005$

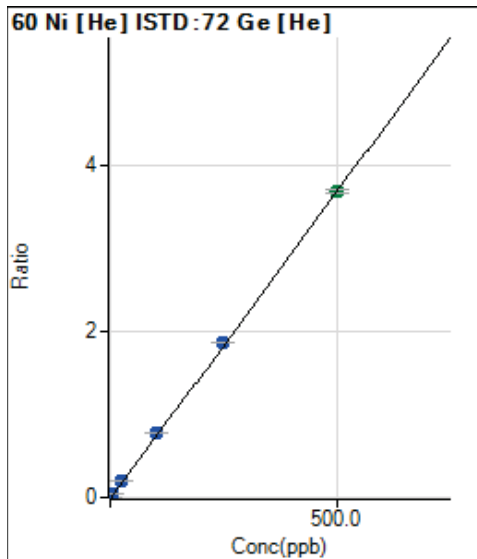
R = 1.0000

DL = 0.002978 ppb

BEC = 0.003399 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	209.33	0.0004	P	10.0	
2	<input type="checkbox"/>	0.500	0.564	2332.86	0.0046	P	4.2	12.8
3	<input type="checkbox"/>	5.000	5.373	20326.16	0.0403	P	1.7	7.5
4	<input type="checkbox"/>	25.000	26.783	100450.04	0.1990	P	1.0	7.1
5	<input type="checkbox"/>	100.000	103.946	380044.03	0.7711	P	0.1	3.9
6	<input type="checkbox"/>	250.000	252.577	922296.17	1.8731	P	0.5	1.0
7	<input type="checkbox"/>	500.000	497.829	1826945.79	3.6915	A	0.8	-0.4
8	<input type="checkbox"/>			4897.50	0.0099	P	0.6	

$y = 0.0074 * x + 4.1332E-004$

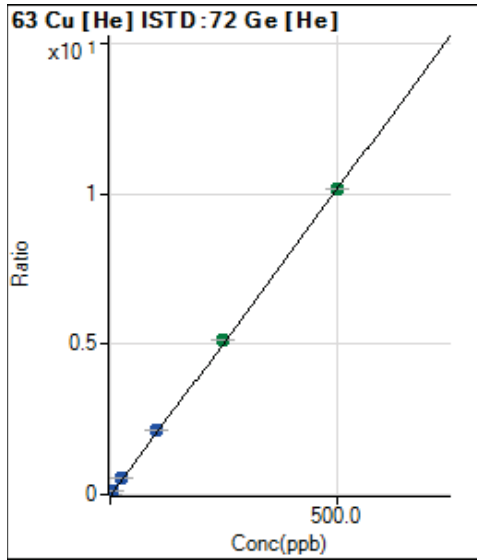
R = 1.0000

DL = 0.01678 ppb

BEC = 0.05575 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	206.00	0.0004	P	13.2	
2	<input type="checkbox"/>	1.000	1.066	11252.36	0.0222	P	1.1	6.6
3	<input type="checkbox"/>	5.000	5.392	55776.27	0.1104	P	0.7	7.8
4	<input type="checkbox"/>	25.000	26.915	277461.10	0.5496	P	0.7	7.7
5	<input type="checkbox"/>	100.000	104.049	1046647.69	2.1236	P	0.2	4.0
6	<input type="checkbox"/>	250.000	252.387	2536119.92	5.1506	A	0.5	1.0
7	<input type="checkbox"/>	500.000	497.897	5028514.00	10.1605	A	0.3	-0.4
8	<input type="checkbox"/>			3675.14	0.0074	P	3.3	

$y = 0.0204 * x + 4.0712E-004$

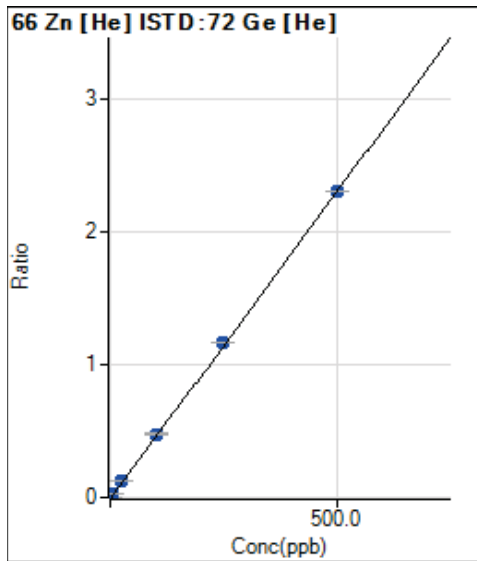
R = 1.0000

DL = 0.007879 ppb

BEC = 0.01995 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	172.00	0.0003	P	16.7	
2	<input type="checkbox"/>	5.000	5.213	12397.97	0.0244	P	1.6	4.3
3	<input type="checkbox"/>	5.000	5.401	12774.30	0.0253	P	1.2	8.0
4	<input type="checkbox"/>	25.000	26.532	62051.74	0.1229	P	1.2	6.1
5	<input type="checkbox"/>	100.000	103.237	235249.33	0.4773	P	0.4	3.2
6	<input type="checkbox"/>	250.000	252.692	575035.40	1.1678	P	0.2	1.1
7	<input type="checkbox"/>	500.000	497.924	1138726.33	2.3009	P	0.4	-0.4
8	<input type="checkbox"/>			4655.42	0.0094	P	2.2	

$y = 0.0046 * x + 3.3981E-004$

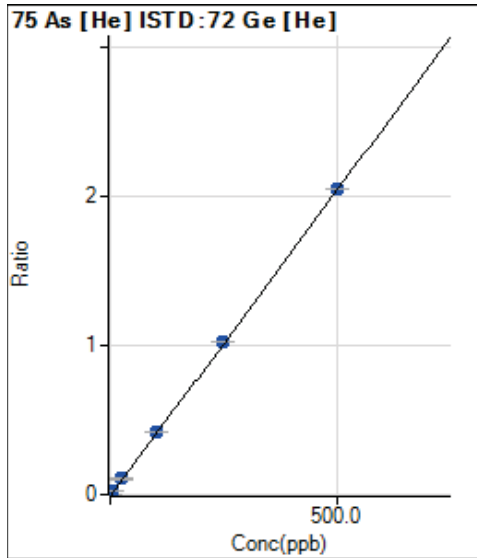
R = 1.0000

DL = 0.03677 ppb

BEC = 0.07355 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	189.50	0.0004	P	2.4	
2	<input type="checkbox"/>	0.500	0.500	1228.55	0.0024	P	2.3	0.0
3	<input type="checkbox"/>	5.000	5.028	10584.53	0.0210	P	1.2	0.6
4	<input type="checkbox"/>	25.000	25.564	53018.65	0.1050	P	0.6	2.3
5	<input type="checkbox"/>	100.000	101.186	204340.91	0.4146	P	0.1	1.2
6	<input type="checkbox"/>	250.000	249.852	503822.59	1.0232	P	0.3	-0.1
7	<input type="checkbox"/>	500.000	499.809	1012823.79	2.0465	P	0.6	0.0
8	<input type="checkbox"/>			442.84	0.0009	P	4.8	

$y = 0.0041 * x + 3.7408E-004$

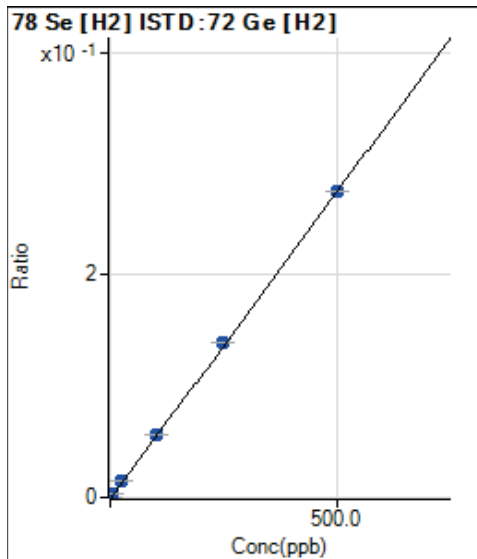
R = 1.0000

DL = 0.006542 ppb

BEC = 0.09138 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	32.00	0.0000	P	25.3	
2	<input type="checkbox"/>	0.500	0.509	509.34	0.0003	P	4.2	1.7
3	<input type="checkbox"/>	5.000	5.097	4732.45	0.0028	P	3.6	1.9
4	<input type="checkbox"/>	25.000	26.107	24239.31	0.0144	P	1.2	4.4
5	<input type="checkbox"/>	100.000	102.777	93916.93	0.0568	P	0.7	2.8
6	<input type="checkbox"/>	250.000	252.014	230721.32	0.1392	P	1.0	0.8
7	<input type="checkbox"/>	500.000	498.381	462185.38	0.2752	P	0.6	-0.3
8	<input type="checkbox"/>			145.67	0.0001	P	9.6	

$y = 5.5216E-004 * x + 1.8752E-005$

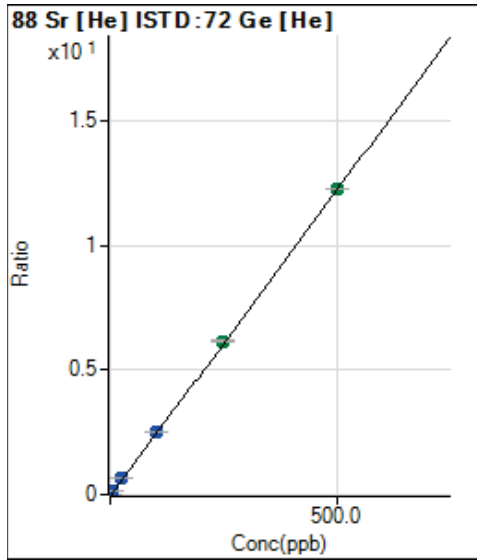
R = 1.0000

DL = 0.02581 ppb

BEC = 0.03396 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	138.33	0.0003	P	8.9	
2	<input type="checkbox"/>	0.500	0.518	6604.92	0.0130	P	2.1	3.6
3	<input type="checkbox"/>	5.000	5.085	63301.29	0.1253	P	0.6	1.7
4	<input type="checkbox"/>	25.000	25.759	319934.23	0.6338	P	0.5	3.0
5	<input type="checkbox"/>	100.000	101.918	1235504.55	2.5069	P	0.3	1.9
6	<input type="checkbox"/>	250.000	250.738	3036539.75	6.1670	A	0.4	0.3
7	<input type="checkbox"/>	500.000	499.208	6076409.70	12.2779	A	0.6	-0.2
8	<input type="checkbox"/>			6846.69	0.0138	P	1.6	

$y = 0.0246 * x + 2.7322E-004$

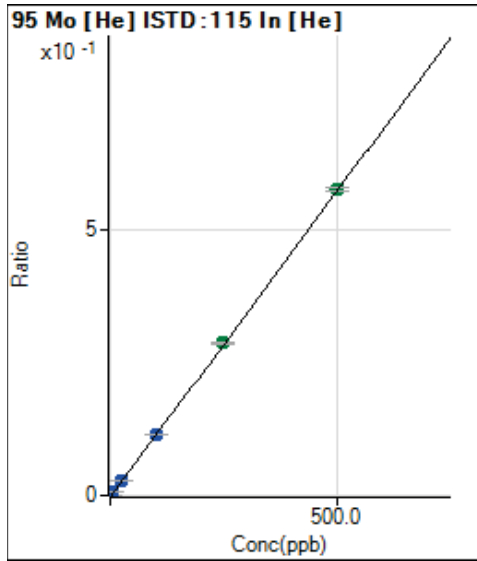
R = 1.0000

DL = 0.002981 ppb

BEC = 0.01111 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	16.00	0.0000	P	38.2	
2	<input type="checkbox"/>	0.500	0.491	3365.08	0.0006	P	2.6	-1.8
3	<input type="checkbox"/>	5.000	4.859	33521.30	0.0056	P	1.5	-2.8
4	<input type="checkbox"/>	25.000	24.835	170709.22	0.0286	P	0.3	-0.7
5	<input type="checkbox"/>	100.000	99.222	660535.22	0.1141	P	0.1	-0.8
6	<input type="checkbox"/>	250.000	249.121	1641511.92	0.2864	A	0.5	-0.4
7	<input type="checkbox"/>	500.000	500.605	3289417.75	0.5755	A	0.8	0.1
8	<input type="checkbox"/>			880.03	0.0002	P	12.9	

$y = 0.0011 * x + 2.7104E-006$

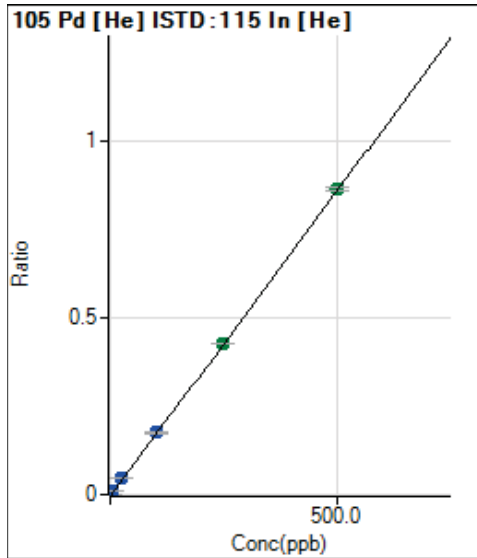
R = 1.0000

DL = 0.002699 ppb

BEC = 0.002358 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	220.00	0.0000	P	22.0	
2	<input type="checkbox"/>	0.500	0.526	5604.49	0.0009	P	2.4	5.3
3	<input type="checkbox"/>	5.000	4.852	50394.73	0.0084	P	2.1	-3.0
4	<input type="checkbox"/>	25.000	25.895	267167.81	0.0447	P	1.0	3.6
5	<input type="checkbox"/>	100.000	101.785	1016464.21	0.1755	P	1.9	1.8
6	<input type="checkbox"/>	250.000	247.386	2445103.24	0.4266	A	0.7	-1.0
7	<input type="checkbox"/>	500.000	500.907	4937042.01	0.8638	A	0.9	0.2
8	<input type="checkbox"/>			996.71	0.0002	P	7.5	

$y = 0.0017 * x + 3.7211E-005$

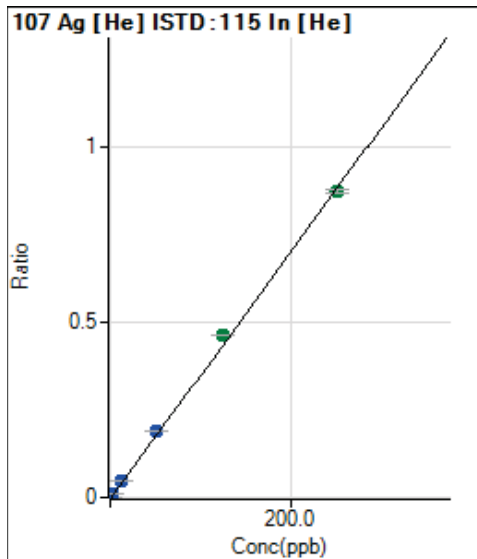
R = 1.0000

DL = 0.01424 ppb

BEC = 0.02158 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	98.33	0.0000	P	42.2	
2	<input type="checkbox"/>	0.500	0.410	8716.06	0.0015	P	3.6	-18.
3	<input type="checkbox"/>	2.500	2.348	50021.89	0.0083	P	5.7	-6.1
4	<input type="checkbox"/>	12.500	13.214	280265.36	0.0469	P	1.9	5.7
5	<input type="checkbox"/>	50.000	52.877	1085834.09	0.1875	P	0.7	5.8
6	<input type="checkbox"/>	125.000	131.053	2663674.86	0.4647	A	0.3	4.8
7	<input type="checkbox"/>	250.000	246.364	4993671.49	0.8736	A	1.0	-1.5
8	<input type="checkbox"/>			1898.48	0.0003	P	5.3	

$y = 0.0035 * x + 1.6627E-005$

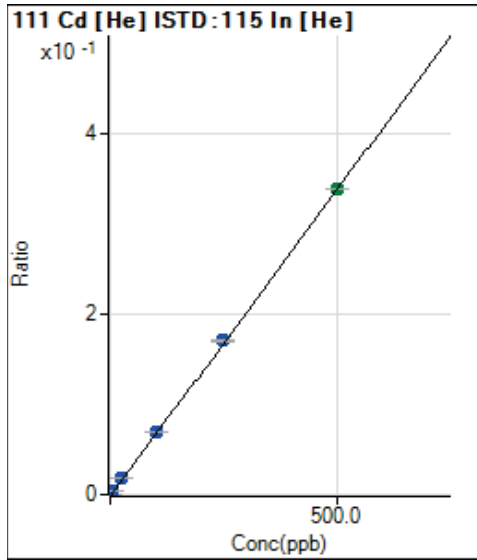
R = 0.9995

DL = 0.005932 ppb

BEC = 0.004689 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	12.67	0.0000	P	12.7	
2	<input type="checkbox"/>	0.080	0.082	342.06	0.0001	P	8.0	2.2
3	<input type="checkbox"/>	5.000	5.044	20542.22	0.0034	P	2.0	0.9
4	<input type="checkbox"/>	25.000	25.660	104116.97	0.0174	P	0.4	2.6
5	<input type="checkbox"/>	100.000	102.445	402567.45	0.0695	P	0.7	2.4
6	<input type="checkbox"/>	250.000	251.358	977670.18	0.1706	P	0.4	0.5
7	<input type="checkbox"/>	500.000	498.799	1934720.32	0.3385	A	0.4	-0.2
8	<input type="checkbox"/>			248.84	0.0000	P	10.3	

$y = 6.7861E-004 * x + 2.1432E-006$

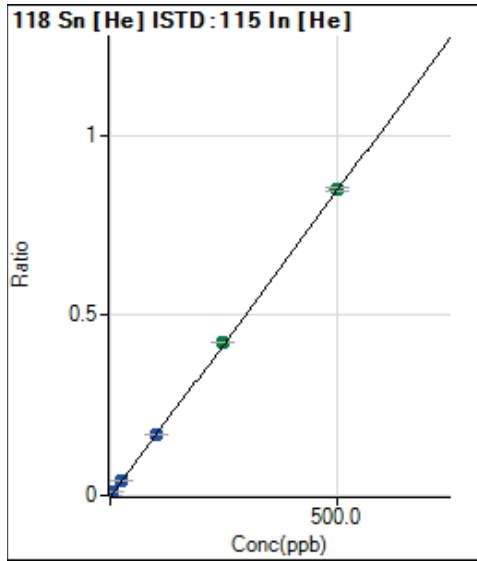
R = 1.0000

DL = 0.001201 ppb

BEC = 0.003158 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	68.33	0.0000	P	22.3	
2	<input type="checkbox"/>	0.500	0.494	5057.62	0.0009	P	2.0	-1.1
3	<input type="checkbox"/>	5.000	4.861	49672.67	0.0083	P	0.4	-2.8
4	<input type="checkbox"/>	25.000	24.937	253709.19	0.0424	P	1.2	-0.3
5	<input type="checkbox"/>	100.000	100.249	987674.79	0.1706	P	0.2	0.2
6	<input type="checkbox"/>	250.000	249.712	2435109.29	0.4248	A	0.4	-0.1
7	<input type="checkbox"/>	500.000	500.099	4862804.20	0.8508	A	1.4	0.0
8	<input type="checkbox"/>			20745.47	0.0036	P	1.1	

$y = 0.0017 * x + 1.1556E-005$

R = 1.0000

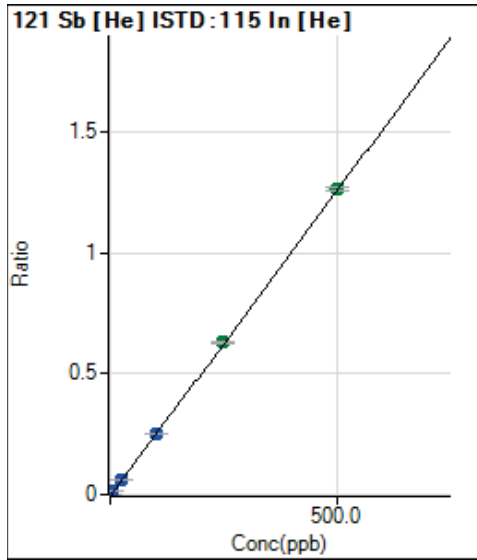
DL = 0.004544 ppb

BEC = 0.006793 ppb

Weight: <None>

Min Conc: <None>





	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	56.67	0.0000	P	56.9	
2	<input type="checkbox"/>	0.500	0.517	7812.24	0.0013	P	0.8	3.3
3	<input type="checkbox"/>	5.000	4.866	73912.66	0.0123	P	1.7	-2.7
4	<input type="checkbox"/>	25.000	24.737	374306.86	0.0626	P	1.1	-1.1
5	<input type="checkbox"/>	100.000	99.418	1456899.36	0.2516	P	0.2	-0.6
6	<input type="checkbox"/>	250.000	249.192	3614447.13	0.6306	A	0.5	-0.3
7	<input type="checkbox"/>	500.000	500.535	7239419.48	1.2667	A	1.4	0.1
8	<input type="checkbox"/>			2730.29	0.0005	P	9.9	

$y = 0.0025 * x + 9.5587E-006$

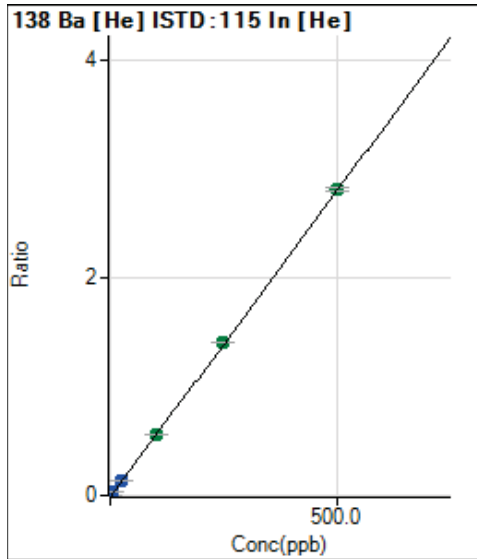
R = 1.0000

DL = 0.006452 ppb

BEC = 0.003777 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	118.33	0.0000	P	19.6	
2	<input type="checkbox"/>	0.300	0.311	10474.04	0.0018	P	1.3	3.5
3	<input type="checkbox"/>	5.000	4.932	166368.26	0.0277	P	1.8	-1.4
4	<input type="checkbox"/>	25.000	25.006	840336.87	0.1406	P	0.7	0.0
5	<input type="checkbox"/>	100.000	99.447	3236489.01	0.5589	A	0.5	-0.6
6	<input type="checkbox"/>	250.000	250.098	8056243.21	1.4056	A	0.8	0.0
7	<input type="checkbox"/>	500.000	500.062	16062892.26	2.8104	A	1.0	0.0
8	<input type="checkbox"/>			3400.45	0.0006	P	7.0	

$y = 0.0056 * x + 2.0002E-005$

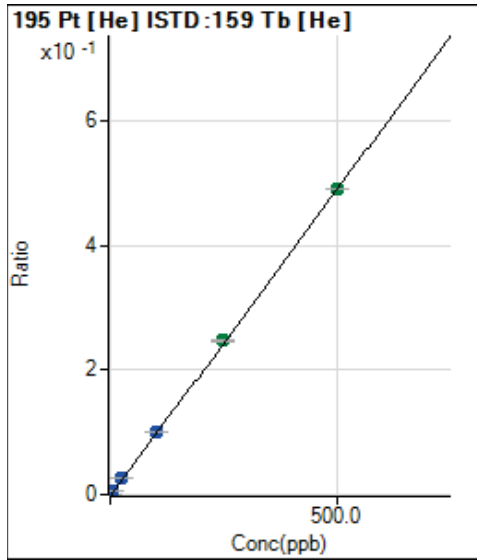
R = 1.0000

DL = 0.002088 ppb

BEC = 0.003559 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	166.00	0.0000	P	15.4	
2	<input type="checkbox"/>	0.500	0.506	7114.57	0.0005	P	1.5	1.2
3	<input type="checkbox"/>	5.000	5.079	70372.77	0.0050	P	0.4	1.6
4	<input type="checkbox"/>	25.000	25.928	355422.60	0.0255	P	0.9	3.7
5	<input type="checkbox"/>	100.000	102.924	1385455.50	0.1013	P	0.6	2.9
6	<input type="checkbox"/>	250.000	251.460	3415591.33	0.2475	A	0.6	0.6
7	<input type="checkbox"/>	500.000	498.638	6781919.83	0.4908	A	0.3	-0.3
8	<input type="checkbox"/>			808.03	0.0001	P	19.1	

$y = 9.8427E-004 * x + 1.2034E-005$

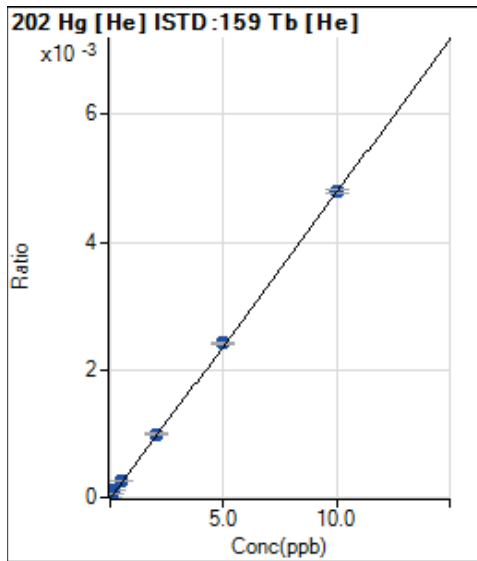
R = 1.0000

DL = 0.005663 ppb

BEC = 0.01223 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	99.33	0.0000	P	10.5	
2	<input type="checkbox"/>	0.200	0.223	1592.10	0.0001	P	0.2	11.4
3	<input type="checkbox"/>	0.100	0.100	773.02	0.0001	P	3.6	-0.3
4	<input type="checkbox"/>	0.500	0.513	3529.47	0.0003	P	2.0	2.6
5	<input type="checkbox"/>	2.000	2.052	13568.92	0.0010	P	1.4	2.6
6	<input type="checkbox"/>	5.000	5.030	33426.45	0.0024	P	0.9	0.6
7	<input type="checkbox"/>	10.000	9.974	66270.51	0.0048	P	0.8	-0.3
8	<input type="checkbox"/>			431.68	0.0000	P	5.5	

$y = 4.8015E-004 * x + 7.1985E-006$

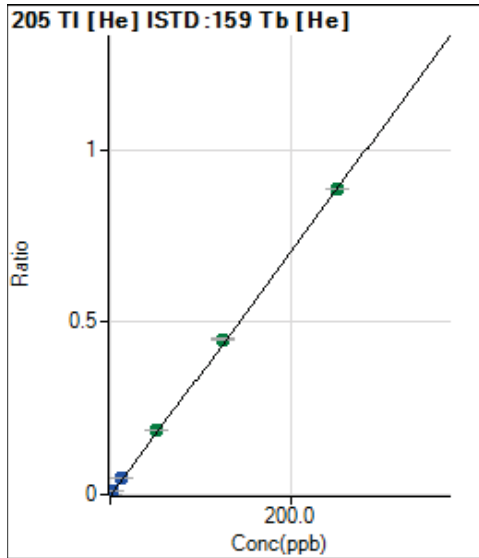
R = 1.0000

DL = 0.004717 ppb

BEC = 0.01499 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	335.01	0.0000	P	12.0	
2	<input type="checkbox"/>	0.100	0.091	4839.25	0.0003	P	2.4	-9.3
3	<input type="checkbox"/>	2.500	2.529	126718.54	0.0090	P	1.5	1.2
4	<input type="checkbox"/>	12.500	13.238	656079.51	0.0471	P	0.2	5.9
5	<input type="checkbox"/>	50.000	51.996	2530419.81	0.1850	A	0.8	4.0
6	<input type="checkbox"/>	125.000	126.443	6209235.12	0.4500	A	0.4	1.2
7	<input type="checkbox"/>	250.000	248.842	12235848.57	0.8855	A	0.4	-0.5
8	<input type="checkbox"/>			3473.82	0.0002	P	10.0	

$y = 0.0036 * x + 2.4259E-005$

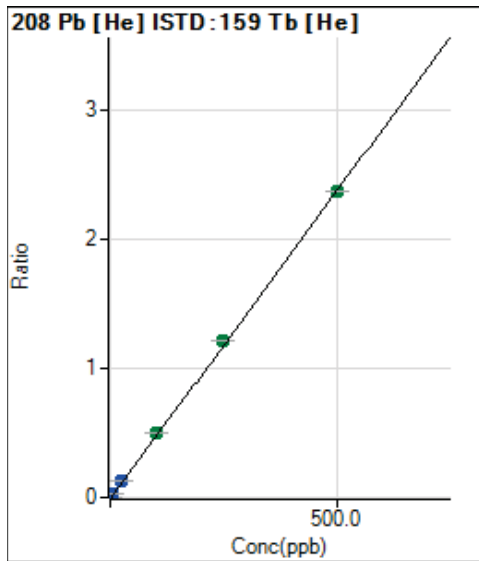
R = 0.9999

DL = 0.002457 ppb

BEC = 0.006817 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	2171.76	0.0002	P	5.6	
2	<input type="checkbox"/>	0.500	0.528	37423.96	0.0027	P	1.4	5.7
3	<input type="checkbox"/>	5.000	5.191	350725.22	0.0250	P	0.8	3.8
4	<input type="checkbox"/>	25.000	26.449	1762442.85	0.1266	P	0.1	5.8
5	<input type="checkbox"/>	100.000	104.326	6822457.41	0.4989	A	0.6	4.3
6	<input type="checkbox"/>	250.000	254.651	16801983.60	1.2176	A	0.6	1.9
7	<input type="checkbox"/>	500.000	496.735	32816529.51	2.3749	A	0.6	-0.7
8	<input type="checkbox"/>			19704.05	0.0014	P	2.7	

$y = 0.0048 * x + 1.5736E-004$

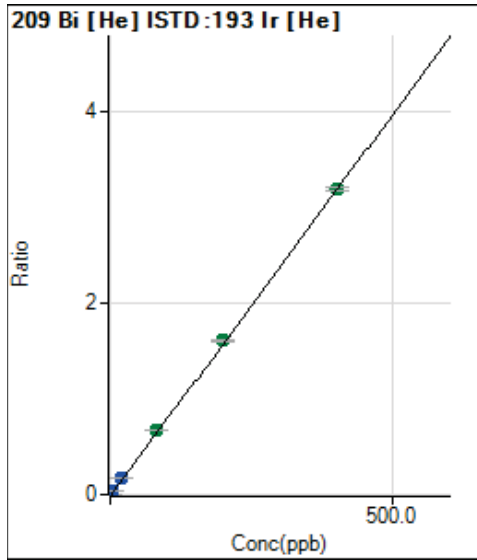
R = 0.9999

DL = 0.005487 ppb

BEC = 0.03291 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	1800.16	0.0002	P	1.7	
2	<input type="checkbox"/>	0.500	0.518	31755.24	0.0044	P	1.5	3.5
3	<input type="checkbox"/>	4.000	4.083	238652.20	0.0329	P	1.2	2.1
4	<input type="checkbox"/>	20.000	21.322	1218957.25	0.1706	P	0.7	6.6
5	<input type="checkbox"/>	80.000	83.434	4660021.81	0.6668	A	1.0	4.3
6	<input type="checkbox"/>	200.000	200.835	11334544.41	1.6046	A	0.9	0.4
7	<input type="checkbox"/>	400.000	398.829	22268338.84	3.1863	A	1.2	-0.3
8	<input type="checkbox"/>			4417.51	0.0006	P	9.6	

$y = 0.0080 * x + 2.4890E-004$

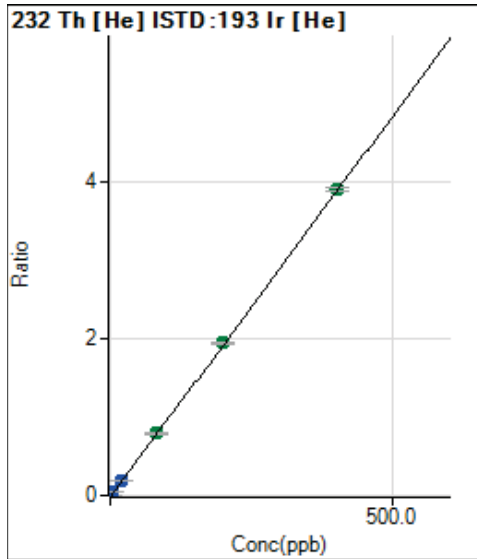
R = 1.0000

DL = 0.001586 ppb

BEC = 0.03116 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	500.02	0.0001	P	6.8	
2	<input type="checkbox"/>	0.500	0.476	34203.15	0.0047	P	1.7	-4.7
3	<input type="checkbox"/>	4.000	3.838	272846.36	0.0376	P	0.5	-4.0
4	<input type="checkbox"/>	20.000	20.378	1423496.96	0.1992	P	0.7	1.9
5	<input type="checkbox"/>	80.000	80.839	5521651.48	0.7900	A	0.3	1.0
6	<input type="checkbox"/>	200.000	199.197	13750568.54	1.9466	A	0.6	-0.4
7	<input type="checkbox"/>	400.000	400.216	27332266.26	3.9110	A	1.5	0.1
8	<input type="checkbox"/>			16191.54	0.0023	P	5.8	

$y = 0.0098 * x + 6.9141E-005$

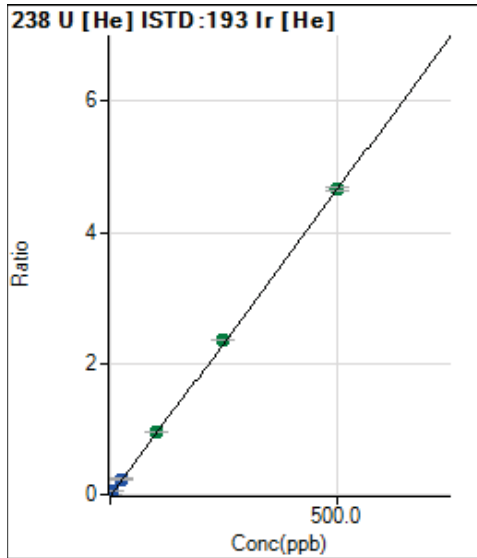
R = 1.0000

DL = 0.001438 ppb

BEC = 0.007075 ppb

Weight: <None>

Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	0.000	0.000	465.01	0.0001	P	5.1	
2	<input type="checkbox"/>	0.500	0.502	34447.30	0.0048	P	1.0	0.4
3	<input type="checkbox"/>	5.000	4.878	331539.05	0.0457	P	1.1	-2.4
4	<input type="checkbox"/>	25.000	25.441	1699623.04	0.2379	P	1.2	1.8
5	<input type="checkbox"/>	100.000	101.913	6657971.15	0.9526	A	0.6	1.9
6	<input type="checkbox"/>	250.000	251.618	16613304.75	2.3519	A	0.4	0.6
7	<input type="checkbox"/>	500.000	498.787	32582057.85	4.6621	A	1.3	-0.2
8	<input type="checkbox"/>			4392.46	0.0006	P	14.6	

$y = 0.0093 * x + 6.4287E-005$

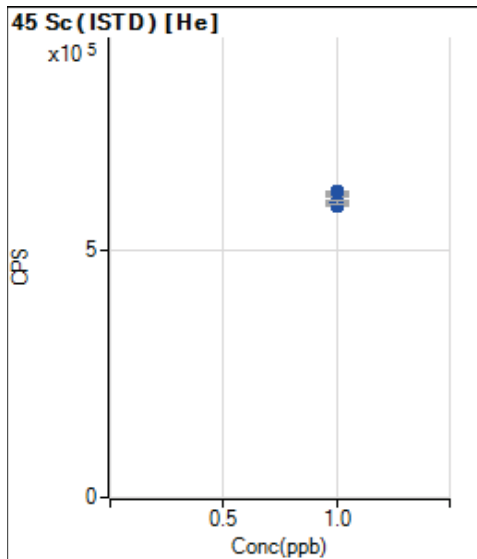
R = 1.0000

DL = 0.001047 ppb

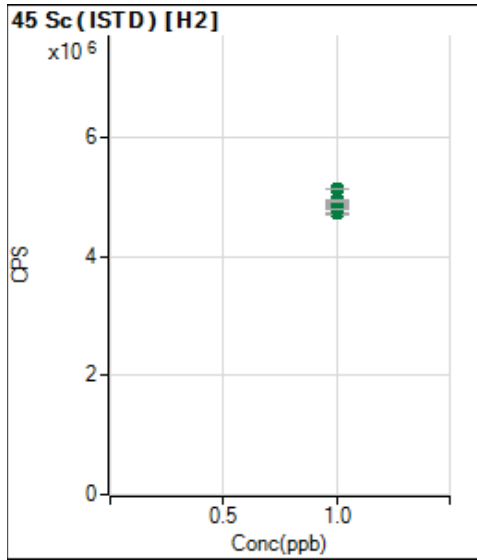
BEC = 0.006878 ppb

Weight: <None>

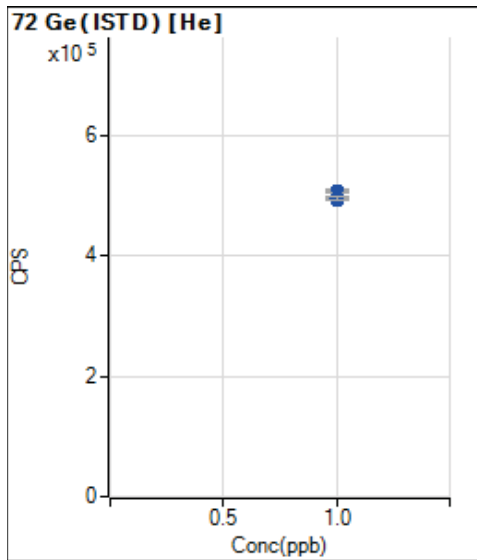
Min Conc: <None>



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		616059.81		P	1.2	
2	<input type="checkbox"/>	1.000		618948.94		P	0.3	
3	<input type="checkbox"/>	1.000		613443.44		P	0.3	
4	<input type="checkbox"/>	1.000		607603.00		P	0.5	
5	<input type="checkbox"/>	1.000		590475.29		P	0.5	
6	<input type="checkbox"/>	1.000		591159.85		P	0.3	
7	<input type="checkbox"/>	1.000		597725.73		P	0.4	
8	<input type="checkbox"/>	1.000		597716.75		P	1.2	

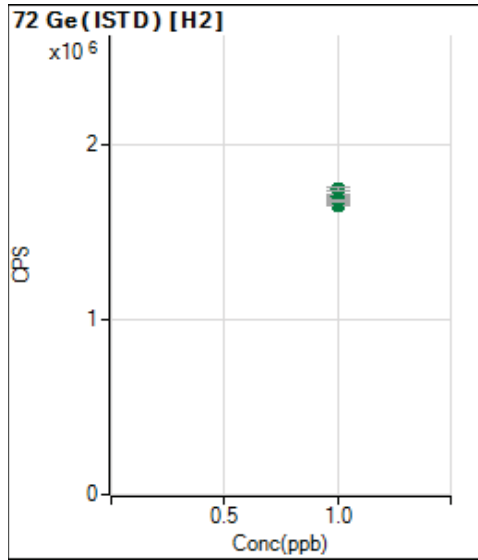


	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		4924870.33		A	0.2	
2	<input type="checkbox"/>	1.000		4943754.67		A	0.7	
3	<input type="checkbox"/>	1.000		4875879.00		A	0.3	
4	<input type="checkbox"/>	1.000		4809239.00		A	0.4	
5	<input type="checkbox"/>	1.000		4725976.83		A	0.2	
6	<input type="checkbox"/>	1.000		4806087.17		A	0.3	
7	<input type="checkbox"/>	1.000		4936293.83		A	0.2	
8	<input type="checkbox"/>	1.000		5139806.00		A	0.5	

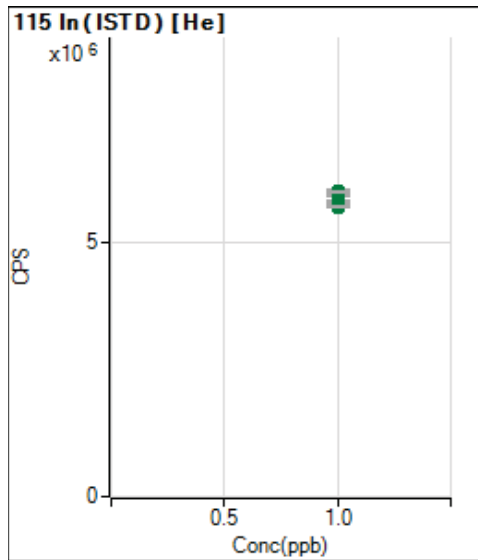


	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		506513.70		P	1.2	
2	<input type="checkbox"/>	1.000		507620.59		P	0.4	
3	<input type="checkbox"/>	1.000		505015.57		P	0.5	
4	<input type="checkbox"/>	1.000		504795.28		P	0.2	
5	<input type="checkbox"/>	1.000		492852.47		P	0.2	
6	<input type="checkbox"/>	1.000		492389.77		P	0.2	
7	<input type="checkbox"/>	1.000		494908.69		P	0.3	
8	<input type="checkbox"/>	1.000		495322.81		P	1.1	

Calibration for 182SMPL.d

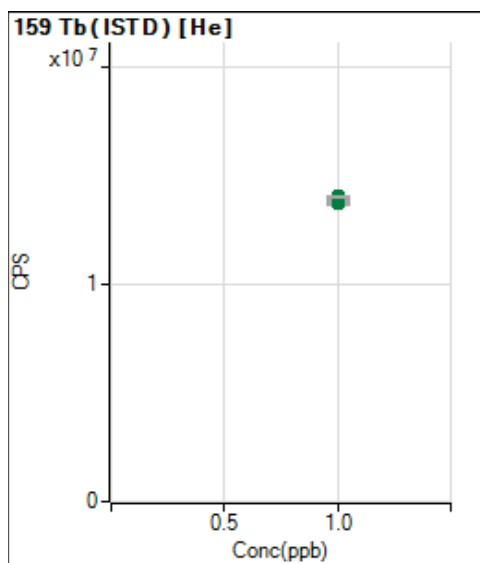


	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		1705947.33		A	0.5	
2	<input type="checkbox"/>	1.000		1700161.33		A	1.2	
3	<input type="checkbox"/>	1.000		1670306.92		A	0.2	
4	<input type="checkbox"/>	1.000		1679247.00		A	0.5	
5	<input type="checkbox"/>	1.000		1654325.71		A	0.9	
6	<input type="checkbox"/>	1.000		1657760.21		A	0.6	
7	<input type="checkbox"/>	1.000		1679385.17		A	0.9	
8	<input type="checkbox"/>	1.000		1746043.38		A	0.6	

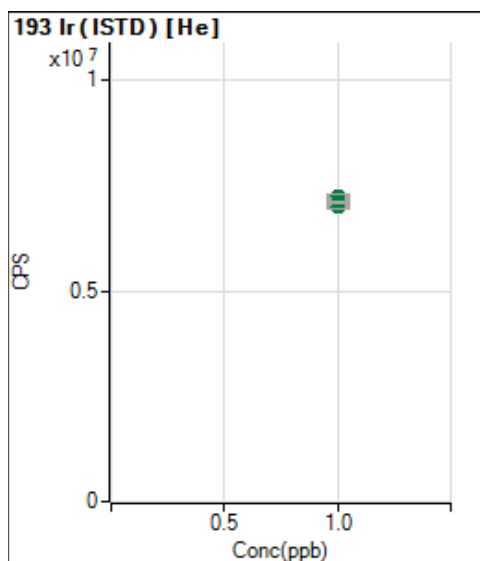


	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		5913357.43		A	0.7	
2	<input type="checkbox"/>	1.000		5931871.22		A	0.7	
3	<input type="checkbox"/>	1.000		5998232.71		A	1.2	
4	<input type="checkbox"/>	1.000		5978616.73		A	0.5	
5	<input type="checkbox"/>	1.000		5790582.31		A	0.5	
6	<input type="checkbox"/>	1.000		5731644.28		A	0.5	
7	<input type="checkbox"/>	1.000		5715841.84		A	1.1	
8	<input type="checkbox"/>	1.000		5688461.85		A	0.7	

Calibration for 182SMPL.d



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		13802456.04		A	0.9	
2	<input type="checkbox"/>	1.000		13945661.46		A	0.8	
3	<input type="checkbox"/>	1.000		14043758.12		A	0.5	
4	<input type="checkbox"/>	1.000		13920715.62		A	0.3	
5	<input type="checkbox"/>	1.000		13674763.55		A	0.8	
6	<input type="checkbox"/>	1.000		13799571.88		A	0.5	
7	<input type="checkbox"/>	1.000		13817811.87		A	0.4	
8	<input type="checkbox"/>	1.000		13977339.79		A	0.8	



	R <sub>jt</sub>	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	<input type="checkbox"/>	1.000		7232565.10		A	0.3	
2	<input type="checkbox"/>	1.000		7241036.14		A	1.2	
3	<input type="checkbox"/>	1.000		7261368.43		A	0.7	
4	<input type="checkbox"/>	1.000		7146085.73		A	0.8	
5	<input type="checkbox"/>	1.000		6989253.34		A	0.6	
6	<input type="checkbox"/>	1.000		7063948.23		A	0.6	
7	<input type="checkbox"/>	1.000		6989483.44		A	1.3	
8	<input type="checkbox"/>	1.000		7121527.39		A	0.6	



Sample Name SysBlk-EPA Tune-352695  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 003SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 13:53:28  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2			66.667
Be	9	2	H2			16.333
B	11	2	H2			3035.643
Na	23	1	He			11763.023
Mg	24	1	He			1440.080
Al	27	1	He			71.333
Si	28	2	H2			13852.597
K	39	1	He			76145.210
Ca	43	1	He			17.900
Ti	47	1	He			3.333
V	51	1	He			4.527
Cr	52	1	He			2633.573
Mn	55	1	He			318.003
Fe	56	1	He			11662.407
Co	59	1	He			82.000
Ni	60	1	He			198.000
Cu	63	1	He			186.667
Zn	66	1	He			166.000
As	75	1	He			186.833
Se	78	2	H2			26.333
Sr	88	1	He			166.667
Mo	95	1	He			21.333
Pd	105	1	He			176.667
Ag	107	1	He			138.333
Cd	111	1	He			15.667
Sn	118	1	He			80.000
Sb	121	1	He			56.667
Ba	138	1	He			138.333
Pt	195	1	He			174.000
Hg	202	1	He			126.000
Tl	205	1	He			321.677
Pb	208	1	He			2031.753
Bi	209	1	He			1693.473
Th	232	1	He			533.350
U	238	1	He			436.680

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He		615387.667
Sc	45	2	H2		4879219.833
Ge	72	1	He		502609.917
Ge	72	2	H2		1719809.000
In	115	1	He		5823128.517
Tb	159	1	He		13764227.293
Ir	193	1	He		7342758.433

Sample Name SysBlk-EPA Tune-352695  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 004SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 13:57:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2			72.000
Be	9	2	H2			16.833
B	11	2	H2			2906.613
Na	23	1	He			11884.803
Mg	24	1	He			1515.093
Al	27	1	He			73.667
Si	28	2	H2			13622.583
K	39	1	He			76421.703
Ca	43	1	He			14.583
Ti	47	1	He			1.333
V	51	1	He			-598.823
Cr	52	1	He			2758.933
Mn	55	1	He			331.340
Fe	56	1	He			11242.337
Co	59	1	He			54.667
Ni	60	1	He			210.000
Cu	63	1	He			198.667
Zn	66	1	He			172.000
As	75	1	He			196.667
Se	78	2	H2			27.000
Sr	88	1	He			163.333
Mo	95	1	He			19.333
Pd	105	1	He			161.667
Ag	107	1	He			110.000
Cd	111	1	He			16.000
Sn	118	1	He			93.333
Sb	121	1	He			60.000
Ba	138	1	He			128.333
Pt	195	1	He			158.000
Hg	202	1	He			122.333
Tl	205	1	He			348.343
Pb	208	1	He			2211.763
Bi	209	1	He			1766.820
Th	232	1	He			550.017
U	238	1	He			458.343

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He		616919.540
Sc	45	2	H2		4877146.500
Ge	72	1	He		505057.783
Ge	72	2	H2		1713173.167
In	115	1	He		5821464.357
Tb	159	1	He		13829863.957
Ir	193	1	He		7367731.970

Sample Name CAL0  
 Sample Type CalBlk  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 005CALB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:00:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.000000	N/A	69.167
Be	9	2	H2	0.000000	N/A	11.333
B	11	2	H2	0.000000	N/A	2723.410
Na	23	1	He	0.000000	N/A	11617.923
Mg	24	1	He	0.000000	N/A	1505.090
Al	27	1	He	0.000000	N/A	74.667
Si	28	2	H2	0.000000	N/A	14225.957
K	39	1	He	0.000000	N/A	75312.553
Ca	43	1	He	0.000000	N/A	18.583
Ti	47	1	He	0.000000	N/A	1.000
V	51	1	He	0.000000	N/A	-545.487
Cr	52	1	He	0.000000	N/A	2675.587
Mn	55	1	He	0.000000	N/A	328.673
Fe	56	1	He	0.000000	N/A	11110.903
Co	59	1	He	0.000000	N/A	50.667
Ni	60	1	He	0.000000	N/A	209.333
Cu	63	1	He	0.000000	N/A	206.000
Zn	66	1	He	0.000000	N/A	172.000
As	75	1	He	0.000000	N/A	189.500
Se	78	2	H2	0.000000	N/A	32.000
Sr	88	1	He	0.000000	N/A	138.333
Mo	95	1	He	0.000000	N/A	16.000
Pd	105	1	He	0.000000	N/A	220.000
Ag	107	1	He	0.000000	N/A	98.333
Cd	111	1	He	0.000000	N/A	12.667
Sn	118	1	He	0.000000	N/A	68.333
Sb	121	1	He	0.000000	N/A	56.667
Ba	138	1	He	0.000000	N/A	118.333
Pt	195	1	He	0.000000	N/A	166.000
Hg	202	1	He	0.000000	N/A	99.333
Tl	205	1	He	0.000000	N/A	335.010
Pb	208	1	He	0.000000	N/A	2171.763
Bi	209	1	He	0.000000	N/A	1800.160
Th	232	1	He	0.000000	N/A	500.017
U	238	1	He	0.000000	N/A	465.010

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100	616059.813
Sc	45	2	H2	100	4924870.333
Ge	72	1	He	100	506513.700
Ge	72	2	H2	100	1705947.330
In	115	1	He	100	5913357.433
Tb	159	1	He	100	13802456.043
Ir	193	1	He	100	7232565.100

Sample Name CAL1  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 006CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:04:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.570360	3.9	342.833
Be	9	2	H2	0.217731	4.7	118.000
B	11	2	H2	10.174380	2.2	7157.027
Na	23	1	He	54.911881	0.6	72749.513
Mg	24	1	He	30.795899	0.4	20747.843
Al	27	1	He	31.547330	0.5	9736.177
Si	28	2	H2	101.004129	0.8	375014.950
K	39	1	He	104.236825	0.7	164780.857
Ca	43	1	He	91.409738	2.6	248.267
Ti	47	1	He	1.046442	7.3	293.333
V	51	1	He	0.963502	2.9	7174.133
Cr	52	1	He	2.069893	1.3	22315.703
Mn	55	1	He	0.532062	1.0	3968.550
Fe	56	1	He	51.316483	0.1	475039.190
Co	59	1	He	0.542882	1.1	8150.293
Ni	60	1	He	0.564153	4.6	2332.860
Cu	63	1	He	1.066368	1.1	11252.360
Zn	66	1	He	5.212787	1.6	12397.973
As	75	1	He	0.499796	2.7	1228.553
Se	78	2	H2	0.508708	4.5	509.343
Sr	88	1	He	0.517954	2.1	6604.917
Mo	95	1	He	0.491144	2.6	3365.077
Pd	105	1	He	0.526380	2.5	5604.490
Ag	107	1	He	0.409748	3.6	8716.063
Cd	111	1	He	0.081788	8.3	342.063
Sn	118	1	He	0.494374	2.1	5057.623
Sb	121	1	He	0.516653	0.8	7812.240
Ba	138	1	He	0.310606	1.3	10474.043
Pt	195	1	He	0.506121	1.5	7114.573
Hg	202	1	He	0.222775	0.2	1592.100
Tl	205	1	He	0.090707	2.6	4839.253
Pb	208	1	He	0.528430	1.4	37423.957
Bi	209	1	He	0.517748	1.6	31755.237
Th	232	1	He	0.476364	1.7	34203.150
U	238	1	He	0.502131	1.0	34447.297

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.4689679	618948.937
Sc	45	2	H2	100.3834483	4943754.667
Ge	72	1	He	100.2185317	507620.593
Ge	72	2	H2	99.66083380	1700161.333
In	115	1	He	100.3130842	5931871.223
Tb	159	1	He	101.0375357	13945661.457
Ir	193	1	He	100.1171236	7241036.143

Sample Name CAL2  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 007CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:08:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.550903	2.0	2692.407
Be	9	2	H2	5.388507	1.3	2614.227
B	11	2	H2	4.827805	2.3	4766.420
Na	23	1	He	273.744511	0.6	313328.633
Mg	24	1	He	267.571750	1.4	167147.157
Al	27	1	He	266.006758	0.6	80812.173
Si	28	2	H2	131.108289	0.5	475924.050
K	39	1	He	262.808581	0.6	297669.743
Ca	43	1	He	255.190777	2.7	653.743
Ti	47	1	He	5.055124	1.1	1400.737
V	51	1	He	4.950541	1.7	38779.293
Cr	52	1	He	5.126852	0.4	50847.033
Mn	55	1	He	5.143951	0.8	35192.163
Fe	56	1	He	129.349012	0.0	1169914.833
Co	59	1	He	5.290169	1.4	78571.367
Ni	60	1	He	5.373028	1.7	20326.157
Cu	63	1	He	5.392451	0.7	55776.270
Zn	66	1	He	5.401424	1.2	12774.300
As	75	1	He	5.028470	1.2	10584.530
Se	78	2	H2	5.097384	3.6	4732.453
Sr	88	1	He	5.085459	0.6	63301.287
Mo	95	1	He	4.859391	1.5	33521.303
Pd	105	1	He	4.851593	2.1	50394.730
Ag	107	1	He	2.347653	5.7	50021.887
Cd	111	1	He	5.044254	2.0	20542.223
Sn	118	1	He	4.860917	0.4	49672.673
Sb	121	1	He	4.866201	1.7	73912.660
Ba	138	1	He	4.932143	1.8	166368.263
Pt	195	1	He	5.078802	0.4	70372.767
Hg	202	1	He	0.099659	4.1	773.023
Tl	205	1	He	2.528930	1.5	126718.540
Pb	208	1	He	5.190973	0.9	350725.217
Bi	209	1	He	4.083223	1.2	238652.203
Th	232	1	He	3.838178	0.5	272846.357
U	238	1	He	4.878194	1.1	331539.047

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.57530530	613443.440
Sc	45	2	H2	99.00522592	4875879.000
Ge	72	1	He	99.70422715	505015.570
Ge	72	2	H2	97.91081396	1670306.917
In	115	1	He	101.4353144	5998232.707
Tb	159	1	He	101.7482546	14043758.123
Ir	193	1	He	100.3982450	7261368.433

Sample Name CAL3  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 008CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:12:44  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	27.749826	1.2	13005.567
Be	9	2	H2	27.059554	0.2	12903.983
B	11	2	H2	26.375478	0.6	13814.633
Na	23	1	He	1327.662842	0.6	1461048.570
Mg	24	1	He	1335.585819	1.2	820443.217
Al	27	1	He	1328.053989	0.8	399322.790
Si	28	2	H2	662.550681	0.4	2315872.833
K	39	1	He	1311.464601	0.8	1174865.037
Ca	43	1	He	1307.465891	1.4	3242.153
Ti	47	1	He	25.811608	0.7	7080.043
V	51	1	He	25.272244	1.5	198281.697
Cr	52	1	He	26.062861	0.7	245244.397
Mn	55	1	He	26.387374	0.7	177464.350
Fe	56	1	He	652.570031	0.5	5801662.333
Co	59	1	He	26.266364	0.2	389765.897
Ni	60	1	He	26.782646	1.0	100450.043
Cu	63	1	He	26.915452	0.7	277461.103
Zn	66	1	He	26.531982	1.2	62051.737
As	75	1	He	25.564414	0.6	53018.650
Se	78	2	H2	26.107145	1.2	24239.313
Sr	88	1	He	25.759033	0.5	319934.233
Mo	95	1	He	24.834847	0.3	170709.217
Pd	105	1	He	25.894544	1.0	267167.807
Ag	107	1	He	13.214382	1.9	280265.357
Cd	111	1	He	25.659702	0.4	104116.970
Sn	118	1	He	24.937426	1.2	253709.190
Sb	121	1	He	24.737186	1.1	374306.857
Ba	138	1	He	25.006496	0.7	840336.867
Pt	195	1	He	25.927802	0.9	355422.597
Hg	202	1	He	0.513039	2.1	3529.473
Tl	205	1	He	13.237605	0.2	656079.510
Pb	208	1	He	26.449246	0.1	1762442.850
Bi	209	1	He	21.322367	0.7	1218957.247
Th	232	1	He	20.378235	0.7	1423496.957
U	238	1	He	25.440943	1.2	1699623.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.62727398	607603.000
Sc	45	2	H2	97.65209385	4809239.000
Ge	72	1	He	99.66073638	504795.283
Ge	72	2	H2	98.43486785	1679247.000
In	115	1	He	101.1035912	5978616.730
Tb	159	1	He	100.8568009	13920715.623
Ir	193	1	He	98.80430563	7146085.727

Sample Name CAL4  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 009CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:16:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	107.665670	0.5	49396.587
Be	9	2	H2	103.523585	0.6	48481.777
B	11	2	H2	104.443217	0.9	46020.893
Na	23	1	He	5176.978239	0.6	5504088.040
Mg	24	1	He	5205.856333	1.0	3103459.330
Al	27	1	He	5190.919749	1.0	1516561.690
Si	28	2	H2	2573.560919	0.4	8800586.000
K	39	1	He	5109.308761	0.3	4239085.405
Ca	43	1	He	5154.959441	0.3	12369.540
Ti	47	1	He	102.607915	1.3	27348.280
V	51	1	He	100.637518	1.0	768869.435
Cr	52	1	He	102.595778	0.5	930663.940
Mn	55	1	He	103.521435	0.9	675671.750
Fe	56	1	He	2563.759043	1.2	22119012.000
Co	59	1	He	102.078033	0.3	1478749.500
Ni	60	1	He	103.946477	0.1	380044.030
Cu	63	1	He	104.049357	0.2	1046647.685
Zn	66	1	He	103.237000	0.4	235249.330
As	75	1	He	101.185672	0.1	204340.905
Se	78	2	H2	102.776820	0.7	93916.927
Sr	88	1	He	101.917669	0.3	1235504.550
Mo	95	1	He	99.221680	0.1	660535.220
Pd	105	1	He	101.785135	1.9	1016464.205
Ag	107	1	He	52.876969	0.7	1085834.090
Cd	111	1	He	102.444744	0.7	402567.450
Sn	118	1	He	100.248825	0.2	987674.790
Sb	121	1	He	99.418011	0.2	1456899.355
Ba	138	1	He	99.447453	0.5	3236489.010
Pt	195	1	He	102.923794	0.6	1385455.500
Hg	202	1	He	2.051685	1.4	13568.920
Tl	205	1	He	51.995727	0.8	2530419.805
Pb	208	1	He	104.326340	0.6	6822457.405
Bi	209	1	He	83.433652	1.0	4660021.805
Th	232	1	He	80.838916	0.3	5521651.480
U	238	1	He	101.912765	0.6	6657971.150

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.84707072	590475.285
Sc	45	2	H2	95.96144697	4725976.833
Ge	72	1	He	97.30288933	492852.465
Ge	72	2	H2	96.97402029	1654325.710
In	115	1	He	97.92376615	5790582.305
Tb	159	1	He	99.07485672	13674763.550
Ir	193	1	He	96.63588558	6989253.335

Sample Name CAL5  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 010CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:20:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	257.477806	0.6	120037.243
Be	9	2	H2	248.376826	0.6	118275.013
B	11	2	H2	255.114443	0.5	110483.087
Na	23	1	He	12630.31068	0.5	13428051.883
Mg	24	1	He	12657.76703	0.8	7552746.760
Al	27	1	He	12622.33112	0.6	3691954.000
Si	28	2	H2	6216.682332	0.1	21599221.333
K	39	1	He	12497.62676	0.4	10276584.223
Ca	43	1	He	12614.91443	0.5	30279.447
Ti	47	1	He	252.265287	0.7	67315.520
V	51	1	He	250.649798	0.4	1917993.613
Cr	52	1	He	252.669139	0.1	2290941.667
Mn	55	1	He	251.138103	0.1	1640630.333
Fe	56	1	He	6296.522007	0.2	54372749.333
Co	59	1	He	250.819222	0.4	3629996.000
Ni	60	1	He	252.577033	0.5	922296.167
Cu	63	1	He	252.386748	0.5	2536119.917
Zn	66	1	He	252.691957	0.2	575035.397
As	75	1	He	249.851574	0.3	503822.593
Se	78	2	H2	252.014226	1.0	230721.320
Sr	88	1	He	250.738284	0.4	3036539.747
Mo	95	1	He	249.121006	0.5	1641511.920
Pd	105	1	He	247.385817	0.7	2445103.243
Ag	107	1	He	131.053035	0.3	2663674.857
Cd	111	1	He	251.357866	0.4	977670.177
Sn	118	1	He	249.712255	0.4	2435109.287
Sb	121	1	He	249.192079	0.5	3614447.133
Ba	138	1	He	250.097866	0.8	8056243.213
Pt	195	1	He	251.459804	0.6	3415591.333
Hg	202	1	He	5.029907	0.9	33426.450
Tl	205	1	He	126.442710	0.4	6209235.117
Pb	208	1	He	254.650862	0.6	16801983.603
Bi	209	1	He	200.834589	0.9	11334544.413
Th	232	1	He	199.197286	0.6	13750568.543
U	238	1	He	251.618271	0.4	16613304.750

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.95819115	591159.853
Sc	45	2	H2	97.58809555	4806087.167
Ge	72	1	He	97.21154037	492389.770
Ge	72	2	H2	97.17534538	1657760.210
In	115	1	He	96.92707312	5731644.283
Tb	159	1	He	99.97910396	13799571.877
Ir	193	1	He	97.66864354	7063948.227



Sample Name CAL6  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 011CAL5.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:24:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	494.584892	0.3	236761.793
Be	9	2	H2	478.959922	0.4	234246.427
B	11	2	H2	496.483596	0.3	218257.257
Na	23	1	He	24943.71725	0.3	26802559.600
Mg	24	1	He	24937.59176	0.3	15043746.447
Al	27	1	He	24899.74030	0.2	7363820.667
Si	28	2	H2	11766.54569	0.3	41976410.667
K	39	1	He	24843.86207	0.6	20583217.607
Ca	43	1	He	25012.04717	0.3	60684.820
Ti	47	1	He	498.304549	0.6	134443.930
V	51	1	He	499.534553	0.2	3865500.567
Cr	52	1	He	498.091584	0.7	4563740.500
Mn	55	1	He	498.655821	0.4	3293457.583
Fe	56	1	He	12450.88663	0.4	108700666.667
Co	59	1	He	499.108519	0.4	7260329.333
Ni	60	1	He	497.829261	0.8	1826945.793
Cu	63	1	He	497.896925	0.3	5028514.000
Zn	66	1	He	497.923880	0.4	1138726.333
As	75	1	He	499.808573	0.6	1012823.793
Se	78	2	H2	498.381183	0.6	462185.377
Sr	88	1	He	499.208500	0.6	6076409.700
Mo	95	1	He	500.604834	0.8	3289417.750
Pd	105	1	He	500.906795	0.9	4937042.010
Ag	107	1	He	246.364074	1.0	4993671.490
Cd	111	1	He	498.798690	0.4	1934720.317
Sn	118	1	He	500.098633	1.4	4862804.197
Sb	121	1	He	500.534820	1.4	7239419.477
Ba	138	1	He	500.061924	1.0	16062892.260
Pt	195	1	He	498.638155	0.3	6781919.833
Hg	202	1	He	9.973605	0.8	66270.507
Tl	205	1	He	248.842334	0.4	12235848.570
Pb	208	1	He	496.734901	0.6	32816529.507
Bi	209	1	He	398.829002	1.2	22268338.837
Th	232	1	He	400.216310	1.5	27332266.257
U	238	1	He	498.787480	1.3	32582057.847

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.02397674	597725.730
Sc	45	2	H2	100.2319553	4936293.833
Ge	72	1	He	97.70884512	494908.687
Ge	72	2	H2	98.44296697	1679385.167
In	115	1	He	96.65984010	5715841.840
Tb	159	1	He	100.1112543	13817811.873
Ir	193	1	He	96.63906709	6989483.440

Sample Name CAL7  
 Sample Type CalStd  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 012CAL.S.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:30:29  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.268541	6.0	206.000
Be	9	2	H2	0.193787	10.4	110.500
B	11	2	H2	0.663447	14.0	3142.160
Na	23	1	He	49975.80067	0.7	53685932.537
Mg	24	1	He	49968.94874	0.9	30140342.883
Al	27	1	He	49998.42278	0.7	14785661.667
Si	28	2	H2	22145.13452	0.4	82245138.667
K	39	1	He	50066.12226	0.7	41403626.883
Ca	43	1	He	49948.30643	0.8	121160.933
Ti	47	1	He	2.284420	6.0	617.347
V	51	1	He	0.142158	34.6	569.863
Cr	52	1	He	0.301799	3.0	5359.657
Mn	55	1	He	0.655745	2.3	4648.753
Fe	56	1	He	25005.83664	0.6	218289456.000
Co	59	1	He	0.705848	0.1	10325.673
Ni	60	1	He	1.277789	0.6	4897.503
Cu	63	1	He	0.343571	3.5	3675.140
Zn	66	1	He	1.960501	2.3	4655.423
As	75	1	He	0.126963	8.2	442.843
Se	78	2	H2	0.117143	12.4	145.667
Sr	88	1	He	0.550900	1.6	6846.687
Mo	95	1	He	0.132135	13.1	880.033
Pd	105	1	He	0.080020	9.6	996.713
Ag	107	1	He	0.089426	5.6	1898.477
Cd	111	1	He	0.061279	10.8	248.843
Sn	118	1	He	2.136907	1.1	20745.470
Sb	121	1	He	0.185804	10.1	2730.290
Ba	138	1	He	0.102772	7.2	3400.453
Pt	195	1	He	0.046457	24.1	808.030
Hg	202	1	He	0.049326	7.2	431.677
Tl	205	1	He	0.063062	11.1	3473.817
Pb	208	1	He	0.261914	3.1	19704.047
Bi	209	1	He	0.046473	16.0	4417.510
Th	232	1	He	0.225538	6.0	16191.543
U	238	1	He	0.059079	16.3	4392.463

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.02251909	597716.750
Sc	45	2	H2	104.3642908	5139806.000
Ge	72	1	He	97.79060533	495322.813
Ge	72	2	H2	102.3503683	1746043.377
In	115	1	He	96.19682074	5688461.850
Tb	159	1	He	101.2670480	13977339.790
Ir	193	1	He	98.46475344	7121527.393

Sample Name ICV  
 Sample Type ICV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 013\_ICV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:38:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.654540	1.6	41726.840
Be	9	2	H2	81.715543	1.1	41593.053
B	11	2	H2	81.911715	1.5	39837.760
Na	23	1	He	1012.939638	0.8	1179610.503
Mg	24	1	He	1012.610915	0.4	657025.030
Al	27	1	He	1011.284355	0.8	321016.040
Si	28	2	H2	508.414466	1.7	1901305.460
K	39	1	He	1009.407091	0.5	972675.167
Ca	43	1	He	1028.663580	0.6	2696.780
Ti	47	1	He	80.578276	0.5	23330.423
V	51	1	He	80.012405	1.1	663939.700
Cr	52	1	He	82.341317	0.6	811939.563
Mn	55	1	He	81.024826	0.5	574554.500
Fe	56	1	He	507.640702	0.2	4766990.500
Co	59	1	He	83.448579	0.5	1308709.413
Ni	60	1	He	84.301679	0.7	333711.677
Cu	63	1	He	84.234274	0.4	917332.460
Zn	66	1	He	82.072147	0.3	202501.673
As	75	1	He	80.812145	0.5	176713.180
Se	78	2	H2	81.272487	1.3	80148.960
Sr	88	1	He	81.593090	0.1	1070829.647
Mo	95	1	He	78.149854	0.3	565785.000
Pd	105	1	He	82.905124	0.5	900453.243
Ag	107	1	He	42.385230	1.0	946566.733
Cd	111	1	He	81.012013	0.6	346200.980
Sn	118	1	He	77.595487	0.1	831391.990
Sb	121	1	He	78.495968	0.0	1250963.993
Ba	138	1	He	78.749387	0.2	2787202.460
Pt	195	1	He	83.715620	0.3	1209759.540
Hg	202	1	He	3.934928	0.5	27841.007
Tl	205	1	He	42.563110	0.7	2223681.687
Pb	208	1	He	83.149796	0.7	5837776.250
Bi	209	1	He	80.685351	0.7	4923754.820
Th	232	1	He	77.819220	1.0	5807213.453
U	238	1	He	78.717521	1.2	5618573.877

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	104.1163411	641418.937
Sc	45	2	H2	104.2975784	5136520.500
Ge	72	1	He	105.3379451	533551.123
Ge	72	2	H2	104.6445824	1785181.460
In	115	1	He	106.4914607	6297220.710
Tb	159	1	He	106.3549498	14679595.197
Ir	193	1	He	105.5806300	7636187.803

Sample Name ICB  
 Sample Type ICB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 014\_ICB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:41:44  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.150074	12.5	145.667
Be	9	2	H2	0.107840	13.0	66.167
B	11	2	H2	0.257726	39.7	2932.453
Na	23	1	He	1.449171	20.5	13769.753
Mg	24	1	He	-0.250533		1405.080
Al	27	1	He	0.293614	13.1	171.000
Si	28	2	H2	2.004811	19.5	22096.143
K	39	1	He	-1.607371		77007.963
Ca	43	1	He	-0.259156		18.700
Ti	47	1	He	0.011424	87.6	4.333
V	51	1	He	0.015430	444.1	-439.677
Cr	52	1	He	0.013038	25.3	2914.300
Mn	55	1	He	0.001960	108.8	356.010
Fe	56	1	He	0.391366	12.1	15239.960
Co	59	1	He	0.012428	2.9	246.000
Ni	60	1	He	0.002776	350.3	229.333
Cu	63	1	He	0.009119	42.0	314.003
Zn	66	1	He	0.003690	295.3	188.667
As	75	1	He	-0.000500		196.667
Se	78	2	H2	0.006518	105.1	39.333
Sr	88	1	He	0.006191	3.0	225.000
Mo	95	1	He	0.015741	4.5	130.000
Pd	105	1	He	0.036936	16.8	630.017
Ag	107	1	He	0.089943	18.5	2096.847
Cd	111	1	He	0.010755	18.7	58.980
Sn	118	1	He	0.012953	22.8	210.000
Sb	121	1	He	0.007292	6.9	175.000
Ba	138	1	He	0.004702	33.3	290.007
Pt	195	1	He	0.005773	16.5	254.667
Hg	202	1	He	0.036680	4.3	356.677
Tl	205	1	He	0.045427	21.3	2673.637
Pb	208	1	He	0.019349	11.4	3591.883
Bi	209	1	He	0.007304	46.4	2280.240
Th	232	1	He	0.013955	5.8	1525.107
U	238	1	He	0.006386	15.7	920.040

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	104.1340612	641528.103
Sc	45	2	H2	103.4396946	5094270.833
Ge	72	1	He	104.4119714	528860.940
Ge	72	2	H2	103.0276530	1757597.497
In	115	1	He	105.6374729	6246721.360
Tb	159	1	He	104.1510365	14375401.040
Ir	193	1	He	102.6114524	7421440.097

Sample Name ICB  
 Sample Type ICB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 015\_ICB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:45:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.135649	14.9	133.333
Be	9	2	H2	0.090220	6.8	55.333
B	11	2	H2	-0.041503		2691.907
Na	23	1	He	1.070626	15.0	13270.997
Mg	24	1	He	-0.157368		1458.417
Al	27	1	He	0.261269	21.6	160.000
Si	28	2	H2	1.690985	20.7	20170.810
K	39	1	He	0.576037	202.5	78562.963
Ca	43	1	He	-0.868242		17.033
Ti	47	1	He	0.009153	57.9	3.667
V	51	1	He	0.044766	151.6	-195.597
Cr	52	1	He	0.014302	106.1	2912.300
Mn	55	1	He	-0.005354		302.667
Fe	56	1	He	0.310561	3.8	14411.777
Co	59	1	He	0.006508	13.5	152.000
Ni	60	1	He	0.003537	176.1	229.333
Cu	63	1	He	0.005094	37.4	266.667
Zn	66	1	He	0.000310	3803.8	178.000
As	75	1	He	-0.000915		193.333
Se	78	2	H2	0.001336	100.0	33.000
Sr	88	1	He	0.002006	74.0	168.333
Mo	95	1	He	0.006125	48.7	60.000
Pd	105	1	He	0.023762	26.4	481.680
Ag	107	1	He	0.031576	14.8	791.697
Cd	111	1	He	0.004665	43.7	32.653
Sn	118	1	He	0.007223	38.8	146.667
Sb	121	1	He	0.004249	16.3	125.000
Ba	138	1	He	0.001692	50.9	181.667
Pt	195	1	He	0.002249	90.3	200.667
Hg	202	1	He	0.019553	1.1	233.667
Tl	205	1	He	0.013165	14.2	1001.713
Pb	208	1	He	0.016508	3.2	3328.517
Bi	209	1	He	0.001967	10.9	1923.510
Th	232	1	He	0.006486	9.1	963.380
U	238	1	He	0.002739	12.3	653.357

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.6364937	638462.790
Sc	45	2	H2	99.89452852	4919676.000
Ge	72	1	He	103.0388575	521905.930
Ge	72	2	H2	99.10634736	1690702.087
In	115	1	He	104.1176776	6156850.433
Tb	159	1	He	102.0647140	14087437.290
Ir	193	1	He	100.5031179	7268953.433

Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 016CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:49:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.590297	3.6	364.000
Be	9	2	H2	0.289416	6.9	158.167
B	11	2	H2	9.418506	1.5	7054.813
Na	23	1	He	54.247631	0.7	74561.707
Mg	24	1	He	29.962859	0.6	20944.723
Al	27	1	He	30.984322	1.5	9902.287
Si	28	2	H2	101.451718	1.0	389094.033
K	39	1	He	102.580921	1.0	169154.660
Ca	43	1	He	102.104682	3.6	284.883
Ti	47	1	He	1.095744	5.0	318.000
V	51	1	He	0.968075	10.1	7464.097
Cr	52	1	He	2.070587	0.6	23113.507
Mn	55	1	He	0.530648	4.7	4099.253
Fe	56	1	He	51.460540	0.3	493223.813
Co	59	1	He	0.548069	0.8	8478.477
Ni	60	1	He	0.545571	2.7	2332.193
Cu	63	1	He	1.081043	1.7	11751.423
Zn	66	1	He	5.302704	1.8	12992.493
As	75	1	He	0.492857	1.2	1251.057
Se	78	2	H2	0.529401	1.9	546.010
Sr	88	1	He	0.514236	0.5	6758.330
Mo	95	1	He	0.489267	2.5	3469.100
Pd	105	1	He	0.538514	4.4	5927.960
Ag	107	1	He	0.423184	5.0	9313.133
Cd	111	1	He	0.086963	1.9	375.383
Sn	118	1	He	0.474645	0.8	5027.610
Sb	121	1	He	0.506121	2.3	7920.633
Ba	138	1	He	0.303739	0.9	10600.810
Pt	195	1	He	0.507537	0.6	7221.303
Hg	202	1	He	0.236340	3.1	1703.447
Tl	205	1	He	0.098463	5.1	5287.777
Pb	208	1	He	0.528239	1.5	37867.760
Bi	209	1	He	0.510501	2.2	31354.077
Th	232	1	He	0.491732	1.3	35316.147
U	238	1	He	0.496410	1.2	34084.690

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	104.0301622	640888.023
Sc	45	2	H2	103.7095731	5107562.000
Ge	72	1	He	103.2689678	523071.470
Ge	72	2	H2	102.8921101	1755285.207
In	115	1	He	103.8010600	6138127.700
Tb	159	1	He	102.2680021	14115496.040
Ir	193	1	He	100.1804368	7245615.310

Sample Name ICSA  
 Sample Type ICSA  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 017ICSA.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:52:50  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.200999	11.0	164.500
Be	9	2	H2	0.044342	36.4	32.833
B	11	2	H2	-0.709593		2407.027
Na	23	1	He	25108.44043	0.3	27060095.433
Mg	24	1	He	24800.33855	0.4	15005601.863
Al	27	1	He	24861.83170	0.4	7374513.667
Si	28	2	H2	6.850831	4.2	38456.480
K	39	1	He	24962.21156	0.3	20742856.773
Ca	43	1	He	24766.63751	0.6	60269.123
Ti	47	1	He	499.893567	0.1	135277.193
V	51	1	He	0.067503	122.8	-8.977
Cr	52	1	He	0.236042	2.2	4771.453
Mn	55	1	He	0.050260	4.9	652.687
Fe	56	1	He	25154.63443	0.3	220255168.000
Co	59	1	He	0.060729	1.8	924.697
Ni	60	1	He	0.060822	7.1	424.010
Cu	63	1	He	0.077410	3.5	974.703
Zn	66	1	He	0.188229	7.6	593.347
As	75	1	He	0.016338	49.3	216.333
Se	78	2	H2	0.018431	61.7	49.000
Sr	88	1	He	0.234656	0.9	2965.333
Mo	95	1	He	513.805101	0.6	3393935.417
Pd	105	1	He	0.006022	129.3	273.340
Ag	107	1	He	0.033748	12.0	783.360
Cd	111	1	He	-0.000676		9.777
Sn	118	1	He	0.023713	23.2	298.337
Sb	121	1	He	0.012485	36.6	236.670
Ba	138	1	He	0.015855	25.1	626.683
Pt	195	1	He	0.001961	91.8	190.000
Hg	202	1	He	0.017407	12.4	211.667
Tl	205	1	He	0.016389	25.4	1123.390
Pb	208	1	He	0.013903	27.4	3045.150
Bi	209	1	He	-0.000867		1680.140
Th	232	1	He	0.012945	10.1	1358.423
U	238	1	He	0.004014	27.2	706.690

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.31415743	599513.417
Sc	45	2	H2	99.62771608	4906535.833
Ge	72	1	He	96.85725183	490595.250
Ge	72	2	H2	99.30738639	1694131.707
In	115	1	He	97.16725917	5745847.343
Tb	159	1	He	98.57423930	13605666.050
Ir	193	1	He	96.03713104	6945948.023

Sample Name ICSAB  
 Sample Type ICSB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 018ICSB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 14:56:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	99.388321	0.7	48807.190
Be	9	2	H2	99.051081	0.2	49646.197
B	11	2	H2	95.942885	1.0	45473.420
Na	23	1	He	27575.46786	1.5	30344212.883
Mg	24	1	He	27126.20966	1.4	16759053.500
Al	27	1	He	27234.91746	1.4	8248909.500
Si	28	2	H2	1264.127270	0.4	4633870.667
K	39	1	He	27554.43442	1.3	23372273.817
Ca	43	1	He	27540.70715	1.9	68428.703
Ti	47	1	He	598.163568	1.5	165281.800
V	51	1	He	99.616577	0.8	789072.943
Cr	52	1	He	101.060134	1.5	950428.190
Mn	55	1	He	100.360630	1.6	679096.917
Fe	56	1	He	26308.77306	1.6	235212149.333
Co	59	1	He	102.316768	1.5	1519223.790
Ni	60	1	He	102.916581	1.7	385665.617
Cu	63	1	He	101.324134	1.9	1044628.710
Zn	66	1	He	101.163159	2.1	236266.627
As	75	1	He	100.195784	2.1	207382.860
Se	78	2	H2	100.517615	0.6	96901.520
Sr	88	1	He	99.904833	1.0	1241429.643
Mo	95	1	He	622.688882	1.5	4129886.167
Pd	105	1	He	99.525658	1.7	990240.660
Ag	107	1	He	51.867363	1.7	1061164.150
Cd	111	1	He	100.801975	1.8	394636.733
Sn	118	1	He	99.482732	1.2	976524.880
Sb	121	1	He	99.218294	1.4	1448611.173
Ba	138	1	He	99.829887	2.0	3236739.223
Pt	195	1	He	98.920607	1.2	1347571.877
Hg	202	1	He	4.061767	0.7	27090.797
Tl	205	1	He	49.499543	0.8	2438084.860
Pb	208	1	He	99.689945	1.0	6597800.373
Bi	209	1	He	105.969666	1.0	5952800.537
Th	232	1	He	95.684354	0.8	6573706.360
U	238	1	He	100.206490	1.4	6584396.777

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.37923668	612235.540
Sc	45	2	H2	102.7012893	5057905.333
Ge	72	1	He	99.74924534	505243.593
Ge	72	2	H2	102.3084169	1745327.707
In	115	1	He	97.57946606	5770222.610
Tb	159	1	He	100.2754491	13840474.793
Ir	193	1	He	97.20705074	7030563.227



Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 019\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:00:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.495457	1.1	41513.927
Be	9	2	H2	80.230180	0.6	41198.473
B	11	2	H2	79.995691	1.0	39317.923
Na	23	1	He	1015.766520	0.7	1179989.017
Mg	24	1	He	1005.328154	0.4	650725.667
Al	27	1	He	1007.625486	0.5	319075.637
Si	28	2	H2	502.114768	1.3	1894560.047
K	39	1	He	1019.867307	0.3	979555.637
Ca	43	1	He	1045.300630	1.8	2733.437
Ti	47	1	He	80.250626	0.8	23179.177
V	51	1	He	79.230630	1.0	655848.787
Cr	52	1	He	82.135635	0.7	807947.353
Mn	55	1	He	80.820008	0.8	571707.393
Fe	56	1	He	503.488874	0.8	4716613.667
Co	59	1	He	83.078496	1.5	1295411.250
Ni	60	1	He	83.987954	0.8	330568.803
Cu	63	1	He	83.872675	1.0	908161.733
Zn	66	1	He	82.304528	1.3	201909.427
As	75	1	He	80.088456	0.8	174130.713
Se	78	2	H2	81.534971	1.0	80493.517
Sr	88	1	He	80.490944	1.3	1050297.953
Mo	95	1	He	77.622043	0.6	552634.940
Pd	105	1	He	82.718174	0.8	883490.923
Ag	107	1	He	42.419951	0.2	931631.367
Cd	111	1	He	80.218339	0.7	337121.400
Sn	118	1	He	77.274622	0.4	814202.227
Sb	121	1	He	77.875358	0.6	1220459.357
Ba	138	1	He	78.280477	0.8	2724557.460
Pt	195	1	He	81.609547	0.3	1147481.373
Hg	202	1	He	3.860921	0.6	26580.757
Tl	205	1	He	41.984646	1.5	2134178.353
Pb	208	1	He	82.257775	0.6	5619116.453
Bi	209	1	He	81.127002	0.7	4705619.303
Th	232	1	He	78.058993	1.5	5536569.500
U	238	1	He	79.586216	1.5	5399195.960

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.8636941	639862.480
Sc	45	2	H2	105.2140120	5181653.667
Ge	72	1	He	104.7387267	530516.000
Ge	72	2	H2	104.7610424	1787168.207
In	115	1	He	104.7244985	6192733.920
Tb	159	1	He	103.4822033	14283085.623
Ir	193	1	He	100.3587881	7258514.683

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 020\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:04:00  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.124826	29.6	135.500
Be	9	2	H2	0.091357	19.9	58.833
B	11	2	H2	-0.596269		2592.393
Na	23	1	He	2.444205	7.5	14782.370
Mg	24	1	He	-0.329465		1341.737
Al	27	1	He	0.437251	4.7	214.667
Si	28	2	H2	0.374274	40.7	16357.150
K	39	1	He	1.701281	41.5	79209.397
Ca	43	1	He	-0.520142		17.850
Ti	47	1	He	0.011554	114.3	4.333
V	51	1	He	-0.005441		-607.400
Cr	52	1	He	-0.003857		2722.930
Mn	55	1	He	-0.009910		269.333
Fe	56	1	He	0.687975	4.4	17852.233
Co	59	1	He	0.009088	12.2	192.667
Ni	60	1	He	-0.005206		196.667
Cu	63	1	He	0.008492	5.2	304.667
Zn	66	1	He	0.006713	79.8	194.667
As	75	1	He	-0.006226		183.000
Se	78	2	H2	0.007196	55.8	40.667
Sr	88	1	He	0.001286	110.6	160.000
Mo	95	1	He	0.029655	11.2	224.667
Pd	105	1	He	0.039023	17.7	638.357
Ag	107	1	He	0.113602	14.8	2560.257
Cd	111	1	He	0.008334	4.9	47.623
Sn	118	1	He	0.008764	10.4	161.667
Sb	121	1	He	0.004642	38.1	130.000
Ba	138	1	He	0.003579	7.8	245.003
Pt	195	1	He	0.003939	37.3	225.333
Hg	202	1	He	0.038836	12.7	366.007
Tl	205	1	He	0.044913	22.1	2606.947
Pb	208	1	He	0.010319	19.9	2926.810
Bi	209	1	He	0.001858	21.6	1926.847
Th	232	1	He	0.012378	9.5	1388.420
U	238	1	He	0.002353	50.5	630.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.1822391	635664.310
Sc	45	2	H2	105.1626367	5179123.500
Ge	72	1	He	103.6331343	524916.023
Ge	72	2	H2	104.8643991	1788931.417
In	115	1	He	103.2744839	6106989.373
Tb	159	1	He	102.5948431	14160608.123
Ir	193	1	He	101.0078518	7305458.643

Sample Name LDR-800ppb-364507  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 021SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:16:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.106812	8.1	123.167
Be	9	2	H2	0.078431	9.0	50.833
B	11	2	H2	-1.657801		2055.640
Na	23	1	He	2.445147	17.2	14150.107
Mg	24	1	He	-0.388655		1248.400
Al	27	1	He	0.905096	2.0	346.337
Si	28	2	H2	1.000778	31.2	18233.430
K	39	1	He	0.546344	110.6	74855.147
Ca	43	1	He	1.455623	62.6	21.967
Ti	47	1	He	0.020702	9.8	6.667
V	51	1	He	0.091307	68.8	181.373
Cr	52	1	He	0.048885	8.6	3098.333
Mn	55	1	He	1022.385142	0.5	6873832.000
Fe	56	1	He	0.545225	6.9	15820.570
Co	59	1	He	0.068845	8.9	1082.043
Ni	60	1	He	1046.173098	0.4	3952720.417
Cu	63	1	He	1069.094531	0.2	11116774.000
Zn	66	1	He	1193.407193	0.2	2809820.083
As	75	1	He	945.223603	0.4	1971963.123
Se	78	2	H2	1031.078602	0.6	998981.417
Sr	88	1	He	0.028395	14.9	495.017
Mo	95	1	He	0.013451	26.6	112.000
Pd	105	1	He	0.020303	15.5	445.010
Ag	107	1	He	0.011333	9.4	350.010
Cd	111	1	He	0.014930	16.6	75.647
Sn	118	1	He	0.014995	9.6	228.333
Sb	121	1	He	0.008302	5.7	188.333
Ba	138	1	He	964.056524	0.5	33380781.170
Pt	195	1	He	0.002269	58.9	208.667
Hg	202	1	He	0.008838	11.9	167.333
Tl	205	1	He	0.006188	32.8	676.693
Pb	208	1	He	1058.214328	0.4	73975820.980
Bi	209	1	He	0.039022	13.9	4350.793
Th	232	1	He	0.080672	2.8	6656.743
U	238	1	He	0.007875	15.5	1070.057

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.77279556	608499.500
Sc	45	2	H2	102.5050168	5048239.167
Ge	72	1	He	100.6010255	509557.977
Ge	72	2	H2	102.8576794	1754697.837
In	115	1	He	104.1849833	6160830.460
Tb	159	1	He	105.9379588	14622040.197
Ir	193	1	He	107.3316513	7762831.553

Sample Name blank-364482  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 022\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:19:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.056367	39.7	96.333
Be	9	2	H2	0.041948	19.4	31.833
B	11	2	H2	-1.699592		1990.463
Na	23	1	He	0.299984	69.1	11921.497
Mg	24	1	He	-0.515110		1181.727
Al	27	1	He	0.186730	9.0	131.333
Si	28	2	H2	0.115317	105.6	14656.710
K	39	1	He	-0.507491		74689.397
Ca	43	1	He	-0.596031		17.067
Ti	47	1	He	-0.001160		0.667
V	51	1	He	0.019926	295.9	-385.273
Cr	52	1	He	0.008055	20.0	2744.263
Mn	55	1	He	0.046704	11.0	644.683
Fe	56	1	He	0.250337	4.7	13329.420
Co	59	1	He	0.004079	27.9	111.333
Ni	60	1	He	0.055761	17.7	418.677
Cu	63	1	He	0.056821	4.8	793.357
Zn	66	1	He	0.060644	13.6	314.000
As	75	1	He	0.162539	10.7	526.343
Se	78	2	H2	0.067772	17.6	95.667
Sr	88	1	He	0.002675	74.2	171.667
Mo	95	1	He	0.005305	21.8	53.333
Pd	105	1	He	0.005878	56.0	286.677
Ag	107	1	He	0.000745	124.7	116.667
Cd	111	1	He	0.001384	97.1	18.657
Sn	118	1	He	0.001141	261.1	81.667
Sb	121	1	He	0.001336	101.9	78.333
Ba	138	1	He	0.029222	10.5	1115.060
Pt	195	1	He	0.001716	97.7	194.000
Hg	202	1	He	0.007939	22.4	155.667
Tl	205	1	He	0.002228	58.5	455.013
Pb	208	1	He	0.084808	8.6	7957.620
Bi	209	1	He	-0.002336		1700.140
Th	232	1	He	0.001952	18.4	651.687
U	238	1	He	0.001450	54.2	575.020

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.73902047	614452.023
Sc	45	2	H2	100.1748844	4933483.167
Ge	72	1	He	99.97457324	506384.910
Ge	72	2	H2	99.93188320	1704785.293
In	115	1	He	102.3718796	6053615.153
Tb	159	1	He	102.4356323	14138633.123
Ir	193	1	He	102.1310010	7386691.140

Sample Name 4309486\_B69970Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 023SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:23:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.047536	5.2	93.500
Be	9	2	H2	0.043917	23.4	33.333
B	11	2	H2	-2.195230		1804.110
Na	23	1	He	4.954580	5.2	17094.850
Mg	24	1	He	3.375993	16.9	3602.133
Al	27	1	He	10.365843	0.7	3232.353
Si	28	2	H2	0.544690	17.7	16449.153
K	39	1	He	2.023779	6.6	76991.147
Ca	43	1	He	10.911457	3.2	45.850
Ti	47	1	He	0.079158	32.6	23.000
V	51	1	He	0.062047	120.0	-48.657
Cr	52	1	He	0.147737	0.8	4067.237
Mn	55	1	He	0.054995	23.5	702.690
Fe	56	1	He	1.932774	0.3	28483.660
Co	59	1	He	0.008122	9.8	172.000
Ni	60	1	He	0.028523	33.0	317.337
Cu	63	1	He	0.218057	4.4	2466.883
Zn	66	1	He	1.404981	1.4	3469.763
As	75	1	He	0.076385	7.7	348.833
Se	78	2	H2	0.032773	20.8	63.667
Sr	88	1	He	0.038123	7.9	615.020
Mo	95	1	He	0.009384	5.9	82.000
Pd	105	1	He	0.003734	138.1	265.007
Ag	107	1	He	0.003747	35.7	181.667
Cd	111	1	He	0.006701	23.7	40.653
Sn	118	1	He	0.025637	24.0	335.010
Sb	121	1	He	0.010426	18.2	218.333
Ba	138	1	He	0.040282	10.6	1496.760
Pt	195	1	He	0.005136	17.7	242.000
Hg	202	1	He	0.010888	18.5	176.000
Tl	205	1	He	0.004590	27.6	575.017
Pb	208	1	He	0.037162	8.6	4743.677
Bi	209	1	He	0.004995	19.5	2126.887
Th	232	1	He	0.003345	20.9	750.030
U	238	1	He	0.003561	21.9	718.360

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.93657975	615669.107
Sc	45	2	H2	101.7774308	5012406.500
Ge	72	1	He	100.2799325	507931.597
Ge	72	2	H2	101.2927278	1728000.587
In	115	1	He	102.7229135	6074373.043
Tb	159	1	He	102.6032021	14161761.873
Ir	193	1	He	101.8203834	7364225.517

Sample Name 4309487\_B69970Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 024SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:28:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	108.345476	0.6	51588.833
Be	9	2	H2	105.391312	0.6	51222.907
B	11	2	H2	104.214422	1.3	47661.790
Na	23	1	He	2071.154958	0.4	2276891.320
Mg	24	1	He	2056.360843	0.7	1264634.827
Al	27	1	He	2039.033745	0.6	614151.063
Si	28	2	H2	519.240140	0.3	1854057.293
K	39	1	He	2045.235720	0.4	1793888.253
Ca	43	1	He	2062.232767	1.5	5111.927
Ti	47	1	He	102.107502	0.7	28055.287
V	51	1	He	102.787415	1.1	809528.113
Cr	52	1	He	106.101419	0.2	992089.957
Mn	55	1	He	103.093151	0.5	693661.560
Fe	56	1	He	2060.664448	0.4	18329777.333
Co	59	1	He	107.458619	0.2	1600719.497
Ni	60	1	He	108.467553	0.5	407780.623
Cu	63	1	He	106.719965	0.7	1103870.583
Zn	66	1	He	106.051464	0.5	248494.433
As	75	1	He	102.662123	0.1	213181.760
Se	78	2	H2	103.869414	0.5	97645.483
Sr	88	1	He	103.767798	1.2	1293526.727
Mo	95	1	He	100.108895	0.7	690596.147
Pd	105	1	He	20.975813	0.7	217253.287
Ag	107	1	He	53.072734	0.7	1129398.993
Cd	111	1	He	102.630196	0.4	417926.743
Sn	118	1	He	98.372910	0.2	1004324.413
Sb	121	1	He	100.226537	0.5	1522006.120
Ba	138	1	He	100.712518	0.6	3396502.760
Pt	195	1	He	20.906839	0.7	293546.040
Hg	202	1	He	0.015344	5.9	207.667
Tl	205	1	He	107.638440	0.7	5460979.293
Pb	208	1	He	105.524839	0.5	7194614.270
Bi	209	1	He	102.116310	0.9	6033134.287
Th	232	1	He	102.860682	0.8	7432129.263
U	238	1	He	101.529746	0.7	7016812.187

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.80633884	608706.147
Sc	45	2	H2	99.59163391	4904758.833
Ge	72	1	He	100.0542966	506788.720
Ge	72	2	H2	99.76714814	1701975.000
In	115	1	He	101.4739321	6000516.310
Tb	159	1	He	103.2914854	14256761.873
Ir	193	1	He	102.2280879	7393713.013

Sample Name 10605796019\_B69970Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 025SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:32:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.899072	6.5	496.677
Be	9	2	H2	0.086787	12.4	53.500
B	11	2	H2	112.570436	0.4	51304.640
Na	23	1	He	2086.215493	1.0	2258284.187
Mg	24	1	He	9733.226232	0.7	5888916.577
Al	27	1	He	4.032061	11.3	1268.057
Si	28	2	H2	577.744599	0.9	2062815.460
K	39	1	He	349.051831	0.7	362251.403
Ca	43	1	He	28198.10285	1.1	68602.637
Ti	47	1	He	0.061694	17.8	17.667
V	51	1	He	0.109160	63.3	318.220
Cr	52	1	He	0.215188	7.1	4578.727
Mn	55	1	He	82.639516	0.6	547598.520
Fe	56	1	He	4.205282	4.6	47619.260
Co	59	1	He	0.140817	9.5	2118.163
Ni	60	1	He	1.342155	1.3	5180.933
Cu	63	1	He	0.207158	5.2	2316.193
Zn	66	1	He	0.721208	5.2	1835.453
As	75	1	He	0.098844	11.1	389.173
Se	78	2	H2	2.995794	1.4	2863.290
Sr	88	1	He	45.739148	1.2	562422.283
Mo	95	1	He	0.064192	25.8	451.343
Pd	105	1	He	0.039814	16.2	625.020
Ag	107	1	He	0.184448	31.0	3955.623
Cd	111	1	He	0.046604	19.4	199.250
Sn	118	1	He	0.051788	11.5	588.353
Sb	121	1	He	0.044118	27.5	715.027
Ba	138	1	He	1.353385	1.8	45024.780
Pt	195	1	He	0.007883	5.4	274.667
Hg	202	1	He	0.004718	32.4	131.333
Tl	205	1	He	0.056577	11.2	3130.400
Pb	208	1	He	0.089603	2.5	8127.653
Bi	209	1	He	0.036567	18.0	3860.640
Th	232	1	He	0.064089	9.5	4962.657
U	238	1	He	1.374773	1.0	92196.477

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.29642701	599404.187
Sc	45	2	H2	99.66414682	4908330.000
Ge	72	1	He	98.68885612	499872.577
Ge	72	2	H2	100.3278166	1711539.710
In	115	1	He	99.84700535	5904310.313
Tb	159	1	He	100.5351704	13876322.707
Ir	193	1	He	98.71525815	7139645.310

Sample Name 4310780\_B69970Dx100  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 026SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:36:01  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.233508	6.6	182.833
Be	9	2	H2	0.066207	11.3	44.167
B	11	2	H2	21.093563	1.2	12001.257
Na	23	1	He	414.661292	1.0	464643.273
Mg	24	1	He	1878.632579	1.0	1154523.967
Al	27	1	He	4.652729	2.8	1473.740
Si	28	2	H2	110.174856	0.8	411102.023
K	39	1	He	68.526058	1.1	131921.640
Ca	43	1	He	5404.762953	2.1	13356.317
Ti	47	1	He	0.041402	21.2	12.333
V	51	1	He	0.032514	81.2	-281.223
Cr	52	1	He	0.069142	2.9	3285.713
Mn	55	1	He	15.821765	1.1	106640.120
Fe	56	1	He	1.359154	3.2	23041.467
Co	59	1	He	0.030658	10.5	506.010
Ni	60	1	He	0.298306	2.5	1326.730
Cu	63	1	He	0.117862	3.0	1421.407
Zn	66	1	He	1.498625	2.4	3671.143
As	75	1	He	0.051284	13.9	295.167
Se	78	2	H2	0.568404	3.7	573.677
Sr	88	1	He	8.790043	0.7	109401.870
Mo	95	1	He	0.019599	15.9	152.000
Pd	105	1	He	0.011648	32.4	345.010
Ag	107	1	He	0.038473	15.6	921.707
Cd	111	1	He	0.011436	11.0	59.640
Sn	118	1	He	0.032253	7.0	400.010
Sb	121	1	He	0.015143	14.3	288.343
Ba	138	1	He	0.279508	1.9	9580.047
Pt	195	1	He	0.001275	113.1	184.667
Hg	202	1	He	0.005237	56.5	135.000
Tl	205	1	He	0.012938	4.9	976.713
Pb	208	1	He	0.061306	2.9	6257.247
Bi	209	1	He	0.004312	101.8	2013.530
Th	232	1	He	0.014610	8.3	1505.103
U	238	1	He	0.259854	0.8	17705.520

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.72656142	608214.670
Sc	45	2	H2	101.1998928	4983963.500
Ge	72	1	He	99.78358729	505417.540
Ge	72	2	H2	101.1205017	1725062.500
In	115	1	He	101.8336991	6021790.617
Tb	159	1	He	100.6486526	13891986.040
Ir	193	1	He	98.18801607	7101512.183



Sample Name 4309488\_B69970Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 027SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:39:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	6.099083	0.1	2993.300
Be	9	2	H2	5.221266	0.6	2569.220
B	11	2	H2	113.417995	0.4	52054.353
Na	23	1	He	2116.467081	0.3	2301166.217
Mg	24	1	He	9509.778497	0.6	5779539.077
Al	27	1	He	107.582133	0.4	32120.737
Si	28	2	H2	587.847187	0.2	2114287.417
K	39	1	He	445.618039	0.7	444179.927
Ca	43	1	He	27537.54330	1.1	67296.783
Ti	47	1	He	5.263498	2.8	1431.407
V	51	1	He	5.266670	3.6	40526.697
Cr	52	1	He	5.524660	0.4	53574.643
Mn	55	1	He	85.330203	1.1	567947.687
Fe	56	1	He	109.007229	0.6	969370.227
Co	59	1	He	5.440952	0.7	79964.897
Ni	60	1	He	6.723990	0.8	25119.597
Cu	63	1	He	5.533345	0.2	56629.580
Zn	66	1	He	6.907566	1.8	16117.613
As	75	1	He	5.271782	0.6	10971.820
Se	78	2	H2	8.007557	2.1	7583.337
Sr	88	1	He	49.870630	0.3	613054.327
Mo	95	1	He	5.198042	1.0	35319.657
Pd	105	1	He	1.072776	1.1	11147.810
Ag	107	1	He	2.401582	5.7	50421.700
Cd	111	1	He	5.132347	0.4	20588.973
Sn	118	1	He	5.110400	2.1	51429.087
Sb	121	1	He	5.064177	1.1	75765.617
Ba	138	1	He	6.401290	1.5	212648.590
Pt	195	1	He	1.044579	0.8	14409.797
Hg	202	1	He	0.000892	181.5	105.667
Tl	205	1	He	5.389376	0.9	265992.667
Pb	208	1	He	5.285933	0.6	352246.143
Bi	209	1	He	5.184875	0.6	295656.230
Th	232	1	He	5.094856	1.0	353735.930
U	238	1	He	6.363975	1.4	422474.277

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.73094921	602081.103
Sc	45	2	H2	100.4040715	4944770.333
Ge	72	1	He	98.65946699	499723.717
Ge	72	2	H2	100.1133585	1707881.167
In	115	1	He	99.90900442	5907976.540
Tb	159	1	He	100.3650225	13852838.127
Ir	193	1	He	98.10875074	7095779.267

Sample Name 4309489\_B69970Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 028SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:43:23  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	6.094143	1.6	2990.963
Be	9	2	H2	5.182149	0.8	2550.050
B	11	2	H2	118.249700	0.1	54155.693
Na	23	1	He	2174.562338	0.4	2380254.597
Mg	24	1	He	9796.464971	0.7	5994626.370
Al	27	1	He	105.473228	0.9	31708.533
Si	28	2	H2	607.506488	0.1	2184507.917
K	39	1	He	452.795202	1.2	453232.547
Ca	43	1	He	28281.33629	0.6	69589.207
Ti	47	1	He	5.206827	0.8	1425.737
V	51	1	He	5.174803	2.9	40080.097
Cr	52	1	He	5.458725	1.2	53329.807
Mn	55	1	He	86.918604	0.4	582491.667
Fe	56	1	He	107.369000	0.5	961525.690
Co	59	1	He	5.382855	1.1	80018.590
Ni	60	1	He	6.631964	0.3	25062.190
Cu	63	1	He	5.459993	0.9	56519.823
Zn	66	1	He	5.741661	2.0	13581.037
As	75	1	He	5.234972	0.5	11021.193
Se	78	2	H2	8.162700	0.9	7769.767
Sr	88	1	He	50.781016	0.6	631373.790
Mo	95	1	He	5.133189	0.5	34767.597
Pd	105	1	He	1.061809	0.7	11001.020
Ag	107	1	He	2.506575	5.4	52442.207
Cd	111	1	He	5.110801	1.6	20436.853
Sn	118	1	He	5.080947	0.4	50972.473
Sb	121	1	He	5.090112	0.3	75911.487
Ba	138	1	He	6.345941	0.5	210145.810
Pt	195	1	He	1.030768	1.8	14146.160
Hg	202	1	He	0.004359	17.6	128.000
Tl	205	1	He	5.378964	0.7	264084.670
Pb	208	1	He	5.264483	0.5	348985.013
Bi	209	1	He	5.222352	0.4	294220.970
Th	232	1	He	5.177064	0.6	355152.290
U	238	1	He	6.485169	1.3	425373.603

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.40252903	606218.437
Sc	45	2	H2	100.4038008	4944757.000
Ge	72	1	He	99.78757928	505437.760
Ge	72	2	H2	100.6267461	1716639.290
In	115	1	He	99.58566036	5888856.050
Tb	159	1	He	99.83921339	13780263.543
Ir	193	1	He	96.93398892	7010813.853

Sample Name 10605796021\_B69970Dx20  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 029SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:47:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.831722	5.5	479.010
Be	9	2	H2	0.040634	26.4	32.000
B	11	2	H2	112.114631	0.1	52685.187
Na	23	1	He	2059.274564	1.7	2273682.570
Mg	24	1	He	9594.613500	1.6	5920745.120
Al	27	1	He	4.142184	2.0	1327.060
Si	28	2	H2	575.251518	0.5	2117408.917
K	39	1	He	346.444749	1.2	367289.943
Ca	43	1	He	27923.51571	1.3	69291.893
Ti	47	1	He	0.026673	39.8	8.333
V	51	1	He	-0.024931		-734.707
Cr	52	1	He	0.159525	7.2	4148.597
Mn	55	1	He	81.528822	1.6	551010.837
Fe	56	1	He	2.707306	2.7	35199.590
Co	59	1	He	0.099069	1.9	1512.750
Ni	60	1	He	1.309670	0.7	5084.903
Cu	63	1	He	0.190047	2.6	2152.837
Zn	66	1	He	1.284734	2.8	3151.680
As	75	1	He	0.056261	14.9	303.500
Se	78	2	H2	2.908933	1.7	2837.620
Sr	88	1	He	45.933572	1.1	567546.610
Mo	95	1	He	0.021269	5.0	162.667
Pd	105	1	He	0.026958	13.6	501.680
Ag	107	1	He	0.082885	18.5	1855.143
Cd	111	1	He	0.013402	21.6	67.303
Sn	118	1	He	0.028888	16.4	363.343
Sb	121	1	He	0.009103	10.1	195.000
Ba	138	1	He	1.293674	2.0	43648.680
Pt	195	1	He	0.002468	68.6	200.667
Hg	202	1	He	0.003046	133.0	120.000
Tl	205	1	He	0.013246	4.3	991.717
Pb	208	1	He	0.045449	5.7	5203.747
Bi	209	1	He	0.002788	64.0	1933.510
Th	232	1	He	0.021165	17.0	1965.170
U	238	1	He	1.317000	1.6	88212.253

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.24906155	611433.583
Sc	45	2	H2	102.7388233	5059753.833
Ge	72	1	He	99.16928670	502306.023
Ge	72	2	H2	102.3600087	1746207.837
In	115	1	He	101.2697838	5988444.290
Tb	159	1	He	100.6747259	13895584.793
Ir	193	1	He	98.57768308	7129695.103

Sample Name 10605796022\_B69970Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 030SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:50:45  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.028765	17.4	84.667
Be	9	2	H2	0.035673	18.0	29.333
B	11	2	H2	1.137163	1.3	3283.860
Na	23	1	He	27.452931	3.3	42326.537
Mg	24	1	He	10.692076	51.6	8219.317
Al	27	1	He	9.450543	2.5	2977.303
Si	28	2	H2	1.884515	50.1	21373.073
K	39	1	He	7.501184	12.4	82307.900
Ca	43	1	He	119.680035	22.8	320.287
Ti	47	1	He	0.092825	11.7	27.000
V	51	1	He	0.004086	296.2	-516.773
Cr	52	1	He	0.778887	0.2	10101.490
Mn	55	1	He	0.123221	51.4	1176.723
Fe	56	1	He	2.879004	1.3	37291.357
Co	59	1	He	0.004435	18.9	118.000
Ni	60	1	He	0.112359	7.2	638.687
Cu	63	1	He	0.043687	3.6	665.353
Zn	66	1	He	2.826847	1.3	6865.643
As	75	1	He	0.024807	13.1	243.667
Se	78	2	H2	-0.000319		32.000
Sr	88	1	He	0.110365	21.8	1531.763
Mo	95	1	He	0.018558	7.8	144.667
Pd	105	1	He	0.007349	142.4	300.007
Ag	107	1	He	0.017102	1.6	465.010
Cd	111	1	He	0.001647	60.2	19.640
Sn	118	1	He	0.022502	15.9	300.007
Sb	121	1	He	0.005631	17.8	143.333
Ba	138	1	He	0.028722	6.4	1091.720
Pt	195	1	He	0.010294	11.4	309.340
Hg	202	1	He	0.006284	25.9	142.667
Tl	205	1	He	0.004200	40.9	546.683
Pb	208	1	He	0.009934	39.1	2858.477
Bi	209	1	He	0.001872	110.1	1916.843
Th	232	1	He	0.006538	9.3	966.713
U	238	1	He	0.003968	37.3	736.693

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.7448107	620648.293
Sc	45	2	H2	102.1113855	5028853.333
Ge	72	1	He	101.1500235	512338.727
Ge	72	2	H2	100.9157865	1721570.167
In	115	1	He	101.7627655	6017596.060
Tb	159	1	He	101.1289355	13958276.873
Ir	193	1	He	100.4616821	7265956.560

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 031\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:54:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	81.833357	0.1	39386.453
Be	9	2	H2	79.946870	0.2	39263.023
B	11	2	H2	79.173170	0.2	37245.523
Na	23	1	He	1004.660625	0.5	1132069.097
Mg	24	1	He	1000.435005	0.7	628067.427
Al	27	1	He	1000.241904	0.9	307202.583
Si	28	2	H2	492.986870	0.2	1779317.623
K	39	1	He	1007.205049	0.6	939194.857
Ca	43	1	He	1003.447626	0.9	2545.687
Ti	47	1	He	80.340672	1.5	22507.143
V	51	1	He	80.693437	3.4	647904.853
Cr	52	1	He	84.721818	5.9	808338.667
Mn	55	1	He	80.576889	0.7	552828.147
Fe	56	1	He	500.103185	0.9	4543907.333
Co	59	1	He	82.585677	1.1	1250896.333
Ni	60	1	He	83.690605	1.1	319961.573
Cu	63	1	He	83.844829	1.1	881868.520
Zn	66	1	He	81.809734	1.5	194953.203
As	75	1	He	79.732492	0.6	168392.620
Se	78	2	H2	79.778992	0.9	75552.270
Sr	88	1	He	80.266165	1.1	1017378.893
Mo	95	1	He	77.677846	1.0	539840.250
Pd	105	1	He	82.328109	1.0	858355.403
Ag	107	1	He	41.983302	0.2	900057.280
Cd	111	1	He	80.092750	0.9	328567.913
Sn	118	1	He	76.956399	0.7	791511.263
Sb	121	1	He	77.808678	0.8	1190336.570
Ba	138	1	He	77.614861	1.1	2636948.970
Pt	195	1	He	81.872371	0.3	1131382.293
Hg	202	1	He	3.868550	0.5	26175.963
Tl	205	1	He	42.099422	0.2	2103300.487
Pb	208	1	He	82.211207	0.8	5519402.547
Bi	209	1	He	79.779859	0.8	4620937.327
Th	232	1	He	76.701557	0.6	5432913.667
U	238	1	He	78.074751	0.7	5289569.920

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.7352300	620589.270
Sc	45	2	H2	100.6255156	4955676.167
Ge	72	1	He	101.7372343	515313.030
Ge	72	2	H2	100.4921556	1714343.247
In	115	1	He	102.2278763	6045099.727
Tb	159	1	He	101.7039932	14037648.957
Ir	193	1	He	100.2127069	7247949.267

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 032\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 15:58:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.068889	31.3	103.167
Be	9	2	H2	0.053431	25.4	37.833
B	11	2	H2	-0.468320		2547.717
Na	23	1	He	-0.248675		11339.373
Mg	24	1	He	-0.492399		1198.393
Al	27	1	He	0.260297	10.5	154.000
Si	28	2	H2	-0.210971		13618.250
K	39	1	He	-0.996772		74433.037
Ca	43	1	He	-1.231123		15.517
Ti	47	1	He	0.020421	10.2	6.667
V	51	1	He	-0.002121		-564.623
Cr	52	1	He	0.001859	218.9	2691.593
Mn	55	1	He	-0.003101		307.337
Fe	56	1	He	0.161474	11.9	12558.063
Co	59	1	He	0.010011	33.4	200.667
Ni	60	1	He	0.011903	39.3	255.333
Cu	63	1	He	0.011560	38.9	327.337
Zn	66	1	He	0.004689	206.3	184.000
As	75	1	He	0.016751	27.1	225.333
Se	78	2	H2	0.008274	54.1	40.000
Sr	88	1	He	0.005795	75.2	211.667
Mo	95	1	He	0.016026	33.6	127.333
Pd	105	1	He	0.014084	52.8	370.010
Ag	107	1	He	0.131929	19.6	2917.000
Cd	111	1	He	0.005799	37.7	36.643
Sn	118	1	He	0.011248	10.0	185.000
Sb	121	1	He	0.006526	68.1	156.667
Ba	138	1	He	0.004861	76.5	285.003
Pt	195	1	He	0.006772	36.1	261.333
Hg	202	1	He	0.029103	14.0	295.667
Tl	205	1	He	0.047226	16.7	2685.303
Pb	208	1	He	0.015141	17.3	3208.503
Bi	209	1	He	0.008142	64.2	2280.253
Th	232	1	He	0.022513	1.0	2100.190
U	238	1	He	0.006758	42.0	925.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.94886481	615744.790
Sc	45	2	H2	101.0807526	4978096.000
Ge	72	1	He	100.4974337	509033.270
Ge	72	2	H2	100.5233872	1714876.040
In	115	1	He	101.8891293	6025068.403
Tb	159	1	He	101.2003932	13968139.790
Ir	193	1	He	100.4256299	7263349.060

Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 033CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:01:50  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.546855	7.3	336.833
Be	9	2	H2	0.234679	2.7	128.333
B	11	2	H2	8.784515	0.6	6657.467
Na	23	1	He	53.126790	0.8	70326.303
Mg	24	1	He	30.529530	2.2	20457.407
Al	27	1	He	31.339713	1.5	9613.427
Si	28	2	H2	98.451819	0.9	371741.117
K	39	1	He	103.792621	1.0	163388.673
Ca	43	1	He	103.182507	3.1	276.117
Ti	47	1	He	0.999243	7.4	278.333
V	51	1	He	0.925393	13.7	6824.960
Cr	52	1	He	2.067514	1.5	22154.713
Mn	55	1	He	0.526343	1.1	3905.197
Fe	56	1	He	51.782620	1.4	476276.927
Co	59	1	He	0.557170	2.4	8370.417
Ni	60	1	He	0.541063	2.1	2248.180
Cu	63	1	He	1.079857	2.2	11401.813
Zn	66	1	He	5.331170	3.1	12686.893
As	75	1	He	0.494391	3.5	1218.217
Se	78	2	H2	0.497427	3.1	506.677
Sr	88	1	He	0.522030	2.3	6661.607
Mo	95	1	He	0.491247	2.9	3395.083
Pd	105	1	He	0.533907	3.2	5731.207
Ag	107	1	He	0.459059	5.9	9841.823
Cd	111	1	He	0.083289	6.5	351.057
Sn	118	1	He	0.488279	3.6	5039.287
Sb	121	1	He	0.515283	2.9	7858.930
Ba	138	1	He	0.303200	2.1	10315.573
Pt	195	1	He	0.511840	1.7	7240.647
Hg	202	1	He	0.237866	3.0	1704.113
Tl	205	1	He	0.104050	4.4	5539.540
Pb	208	1	He	0.527281	1.0	37599.103
Bi	209	1	He	0.495482	1.9	30672.687
Th	232	1	He	0.502597	2.0	36315.560
U	238	1	He	0.486214	1.3	33600.047

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.85197216	615147.873
Sc	45	2	H2	101.9822992	5022496.000
Ge	72	1	He	100.3144074	508106.217
Ge	72	2	H2	101.2398880	1727099.167
In	115	1	He	101.1915977	5983820.867
Tb	159	1	He	101.7082527	14038236.873
Ir	193	1	He	100.8074245	7290962.603

Sample Name CG-CRDL-AIMgCaCrPb  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 034CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:05:32  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.557476	6.2	340.333
Be	9	2	H2	0.239473	2.3	130.000
B	11	2	H2	8.677565	2.4	6578.933
Na	23	1	He	52.698848	1.1	70316.243
Mg	24	1	He	9.614271	1.8	7520.283
Al	27	1	He	21.557593	0.9	6679.503
Si	28	2	H2	97.377919	0.3	366103.123
K	39	1	He	99.780184	0.2	161038.013
Ca	43	1	He	38.581916	6.5	115.633
Ti	47	1	He	1.011270	12.3	283.667
V	51	1	He	1.041292	3.8	7799.823
Cr	52	1	He	0.495831	2.8	7392.547
Mn	55	1	He	0.508300	3.9	3807.843
Fe	56	1	He	51.843216	0.9	479996.363
Co	59	1	He	0.540380	1.2	8178.977
Ni	60	1	He	0.568007	4.3	2366.863
Cu	63	1	He	1.090485	1.6	11595.963
Zn	66	1	He	5.351910	1.7	12827.017
As	75	1	He	0.489294	1.4	1216.383
Se	78	2	H2	0.514865	2.7	520.677
Sr	88	1	He	0.527260	2.7	6774.990
Mo	95	1	He	0.481908	2.2	3347.070
Pd	105	1	He	0.525887	0.2	5676.183
Ag	107	1	He	0.483175	3.5	10403.903
Cd	111	1	He	0.086529	4.7	366.070
Sn	118	1	He	0.486395	2.8	5045.950
Sb	121	1	He	0.502279	6.0	7697.190
Ba	138	1	He	0.313211	1.4	10704.207
Pt	195	1	He	0.490858	1.5	6961.830
Hg	202	1	He	0.237589	2.3	1705.113
Tl	205	1	He	0.100732	7.5	5381.137
Pb	208	1	He	0.116553	1.6	10046.480
Bi	209	1	He	0.519526	3.3	31902.183
Th	232	1	He	0.506523	1.7	36399.137
U	238	1	He	0.498706	0.8	34273.553

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.5100830	619202.230
Sc	45	2	H2	101.5004016	4998763.167
Ge	72	1	He	101.0274536	511717.893
Ge	72	2	H2	100.7119557	1718092.920
In	115	1	He	101.6847944	6012985.350
Tb	159	1	He	101.8577762	14058874.790
Ir	193	1	He	100.2836332	7253079.057



Sample Name 4311407\_B70011Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 035\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:09:13  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.075264	17.0	104.667
Be	9	2	H2	0.035480	25.7	28.500
B	11	2	H2	-1.583127		2027.807
Na	23	1	He	-0.086585		11254.317
Mg	24	1	He	2.897732	8.8	3228.707
Al	27	1	He	2.048413	5.2	682.687
Si	28	2	H2	0.256027	33.7	15062.963
K	39	1	He	0.991293	50.9	74374.470
Ca	43	1	He	0.791494	10.9	20.100
Ti	47	1	He	0.013636	82.8	4.667
V	51	1	He	0.003484	2388.2	-506.553
Cr	52	1	He	0.079312	3.8	3343.723
Mn	55	1	He	0.001889	286.1	333.337
Fe	56	1	He	0.239598	13.9	12957.100
Co	59	1	He	0.005213	14.2	125.333
Ni	60	1	He	0.004760	180.6	222.000
Cu	63	1	He	0.007243	25.3	274.667
Zn	66	1	He	0.070976	25.9	330.673
As	75	1	He	0.026015	11.1	237.833
Se	78	2	H2	0.005721	124.8	37.000
Sr	88	1	He	0.005880	54.1	206.667
Mo	95	1	He	0.001392	54.1	25.333
Pd	105	1	He	0.009483	38.0	315.010
Ag	107	1	He	0.072515	30.8	1608.443
Cd	111	1	He	0.001771	36.2	19.663
Sn	118	1	He	0.008871	11.8	156.667
Sb	121	1	He	0.001153	187.7	73.333
Ba	138	1	He	0.004309	9.1	260.007
Pt	195	1	He	0.000527	184.0	174.667
Hg	202	1	He	0.012688	22.1	185.000
Tl	205	1	He	0.009485	26.0	806.700
Pb	208	1	He	0.024252	18.2	3803.563
Bi	209	1	He	0.003443	40.5	2006.857
Th	232	1	He	0.007288	22.8	1018.380
U	238	1	He	0.002262	40.8	620.020

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.65386687	601606.230
Sc	45	2	H2	99.52905697	4901677.000
Ge	72	1	He	97.71580051	494943.917
Ge	72	2	H2	98.89124673	1687032.583
In	115	1	He	99.42453971	5879328.410
Tb	159	1	He	100.7777751	13909808.123
Ir	193	1	He	100.4407438	7264442.183

Sample Name 4311408\_B70011Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 036SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:12:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	53.604392	0.9	24893.363
Be	9	2	H2	51.951989	0.5	24599.253
B	11	2	H2	50.188990	0.4	23726.887
Na	23	1	He	1013.849083	0.5	1098905.997
Mg	24	1	He	1005.680438	0.8	607343.027
Al	27	1	He	998.186841	0.8	294911.710
Si	28	2	H2	254.079600	0.2	890703.980
K	39	1	He	1005.802245	1.2	902314.077
Ca	43	1	He	988.134080	2.3	2411.833
Ti	47	1	He	49.703084	0.6	13394.750
V	51	1	He	50.109175	0.8	386804.540
Cr	52	1	He	51.616647	0.6	474695.143
Mn	55	1	He	50.309739	0.9	332158.500
Fe	56	1	He	997.478892	0.4	8707810.667
Co	59	1	He	51.940387	0.3	754792.583
Ni	60	1	He	52.690261	0.6	193342.193
Cu	63	1	He	51.991053	0.7	524702.240
Zn	66	1	He	51.117252	0.9	116927.487
As	75	1	He	49.827770	0.3	101031.513
Se	78	2	H2	51.373683	0.4	46914.247
Sr	88	1	He	50.484000	1.0	613957.673
Mo	95	1	He	48.537120	1.6	326705.583
Pd	105	1	He	10.244547	1.4	103640.467
Ag	107	1	He	26.596816	2.2	552269.510
Cd	111	1	He	49.970111	0.6	198551.240
Sn	118	1	He	48.316707	0.7	481340.983
Sb	121	1	He	48.241456	1.2	714812.020
Ba	138	1	He	49.038160	1.2	1613683.880
Pt	195	1	He	10.164283	1.4	138536.893
Hg	202	1	He	0.009905	5.0	165.333
Tl	205	1	He	52.846305	0.3	2601099.337
Pb	208	1	He	51.351125	0.8	3397486.433
Bi	209	1	He	49.875504	1.0	2857361.523
Th	232	1	He	49.872901	0.9	3493436.717
U	238	1	He	49.303858	0.8	3303420.577

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.90938072	597019.750
Sc	45	2	H2	97.00191091	4777218.333
Ge	72	1	He	97.60544219	494384.937
Ge	72	2	H2	96.88218451	1652759.040
In	115	1	He	99.01116310	5854883.973
Tb	159	1	He	100.2011357	13830217.710
Ir	193	1	He	99.09914109	7167409.893

Sample Name 4311409\_B70011Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 037SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:16:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	51.900122	0.6	24052.510
Be	9	2	H2	50.210881	0.9	23724.027
B	11	2	H2	48.944257	1.0	23154.177
Na	23	1	He	981.819216	1.5	1049055.090
Mg	24	1	He	981.003786	1.4	583876.540
Al	27	1	He	968.107551	1.7	281866.073
Si	28	2	H2	238.998762	0.5	836853.227
K	39	1	He	973.446793	1.9	862908.033
Ca	43	1	He	991.184123	3.3	2383.657
Ti	47	1	He	47.056544	0.9	12497.967
V	51	1	He	48.512236	1.8	369011.670
Cr	52	1	He	49.957811	1.6	452836.667
Mn	55	1	He	49.102756	1.8	319482.597
Fe	56	1	He	973.610172	1.8	8375860.667
Co	59	1	He	50.484198	1.8	728732.397
Ni	60	1	He	51.168622	1.7	186510.810
Cu	63	1	He	50.280465	1.8	504053.260
Zn	66	1	He	49.371037	2.2	112181.690
As	75	1	He	47.150823	1.8	94973.850
Se	78	2	H2	48.852992	0.8	44383.303
Sr	88	1	He	48.785346	1.2	589379.523
Mo	95	1	He	46.213255	1.1	307941.073
Pd	105	1	He	9.803464	0.8	98191.797
Ag	107	1	He	25.994824	1.8	534336.360
Cd	111	1	He	48.139001	1.9	189340.243
Sn	118	1	He	45.939985	2.4	453016.503
Sb	121	1	He	46.119261	2.2	676448.973
Ba	138	1	He	47.706062	1.5	1554035.237
Pt	195	1	He	9.569226	2.1	130146.897
Hg	202	1	He	0.005092	45.8	133.000
Tl	205	1	He	50.697458	1.5	2490130.327
Pb	208	1	He	49.474445	2.1	3266427.320
Bi	209	1	He	47.795969	1.0	2718440.790
Th	232	1	He	47.692897	1.0	3316562.867
U	238	1	He	47.278493	0.9	3144699.120

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.51246171	588413.893
Sc	45	2	H2	96.79391558	4766974.833
Ge	72	1	He	96.96701129	491151.197
Ge	72	2	H2	96.38334379	1644249.080
In	115	1	He	98.01838169	5796177.260
Tb	159	1	He	99.99683631	13802019.377
Ir	193	1	He	98.37780010	7115238.437

Sample Name CG-Control\_B70011Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 038\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:20:17  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.118924	23.4	122.833
Be	9	2	H2	0.049988	22.5	34.833
B	11	2	H2	-1.458380		2039.810
Na	23	1	He	-0.100958		10980.767
Mg	24	1	He	2.230540	8.0	2758.617
Al	27	1	He	2.057493	0.8	669.687
Si	28	2	H2	0.841314	17.2	16789.820
K	39	1	He	-1.041489		71016.417
Ca	43	1	He	0.496103	326.8	18.933
Ti	47	1	He	0.034100	18.5	10.000
V	51	1	He	0.013751	380.5	-415.593
Cr	52	1	He	0.079779	3.5	3271.043
Mn	55	1	He	0.006235	42.2	354.010
Fe	56	1	He	0.613747	4.5	15869.940
Co	59	1	He	0.013676	16.1	244.667
Ni	60	1	He	0.001050	305.6	205.333
Cu	63	1	He	0.010938	4.6	307.333
Zn	66	1	He	0.072964	21.1	330.003
As	75	1	He	0.020934	14.2	224.167
Se	78	2	H2	0.008682	111.9	39.000
Sr	88	1	He	0.007926	43.1	228.333
Mo	95	1	He	0.007414	18.6	65.333
Pd	105	1	He	0.008163	47.7	298.340
Ag	107	1	He	0.165033	33.5	3498.837
Cd	111	1	He	0.003003	63.2	24.323
Sn	118	1	He	0.027722	18.7	341.677
Sb	121	1	He	0.020229	16.6	353.343
Ba	138	1	He	0.005164	54.5	285.007
Pt	195	1	He	-0.000920		153.333
Hg	202	1	He	0.004005	48.4	125.667
Tl	205	1	He	0.011688	23.3	906.707
Pb	208	1	He	0.016802	10.4	3275.180
Bi	209	1	He	0.007081	91.0	2193.567
Th	232	1	He	0.030810	11.2	2660.297
U	238	1	He	0.008937	133.1	1064.903

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.41158947	587792.460
Sc	45	2	H2	97.51622902	4802547.833
Ge	72	1	He	96.25999257	487570.050
Ge	72	2	H2	97.06068025	1655804.083
In	115	1	He	98.37802757	5817444.407
Tb	159	1	He	99.86125660	13783306.047
Ir	193	1	He	99.43127024	7191431.350

Sample Name 10606778001\_B70011Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 039\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:23:59  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.105375	16.3	115.333
Be	9	2	H2	0.034486	15.9	27.167
B	11	2	H2	-1.866936		1847.950
Na	23	1	He	2.513534	54.9	12657.090
Mg	24	1	He	3.208423	22.5	3080.350
Al	27	1	He	2.228521	15.8	661.017
Si	28	2	H2	0.242396	36.0	14559.223
K	39	1	He	7.727780	124.7	71994.273
Ca	43	1	He	2.422324	55.6	21.683
Ti	47	1	He	0.014337	61.8	4.333
V	51	1	He	0.064706	9.8	-24.323
Cr	52	1	He	0.107402	44.7	3238.367
Mn	55	1	He	0.004636	144.3	316.000
Fe	56	1	He	0.504370	27.8	13777.900
Co	59	1	He	0.006814	33.1	134.000
Ni	60	1	He	0.011503	82.2	224.000
Cu	63	1	He	0.029691	23.3	454.677
Zn	66	1	He	0.226583	16.0	623.353
As	75	1	He	0.036205	14.8	236.333
Se	78	2	H2	0.002518	198.8	33.000
Sr	88	1	He	0.012216	46.8	258.337
Mo	95	1	He	0.001985	67.3	27.333
Pd	105	1	He	0.006168	13.7	258.340
Ag	107	1	He	0.044533	16.4	935.040
Cd	111	1	He	0.001674	109.5	17.330
Sn	118	1	He	0.013996	27.4	193.333
Sb	121	1	He	0.006413	12.3	140.000
Ba	138	1	He	0.007108	42.6	318.343
Pt	195	1	He	-0.000133		151.333
Hg	202	1	He	0.004224	55.9	117.667
Tl	205	1	He	0.005424	21.5	556.687
Pb	208	1	He	0.014639	42.5	2898.483
Bi	209	1	He	0.003595	75.9	1856.837
Th	232	1	He	0.012685	14.6	1283.410
U	238	1	He	-0.000858		373.343

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.51250612	545289.980
Sc	45	2	H2	96.50486229	4752739.333
Ge	72	1	He	89.51707722	453416.260
Ge	72	2	H2	96.01749642	1638007.917
In	115	1	He	91.42130965	5406068.810
Tb	159	1	He	93.20536699	12864629.810
Ir	193	1	He	92.49020480	6689414.273

Sample Name 10606778001\_B70011Dx1  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 040\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:27:40  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.090170	12.0	108.667
Be	9	2	H2	0.033611	22.3	26.833
B	11	2	H2	-2.039242		1781.940
Na	23	1	He	-0.647254		10281.950
Mg	24	1	He	1.809629	7.6	2480.227
Al	27	1	He	1.913345	10.2	620.347
Si	28	2	H2	0.632845	19.6	15955.207
K	39	1	He	1.073697	11.2	71887.283
Ca	43	1	He	-0.228030		17.017
Ti	47	1	He	0.015508	85.3	5.000
V	51	1	He	0.048899	25.0	-146.363
Cr	52	1	He	0.125252	4.9	3637.793
Mn	55	1	He	0.005754	72.7	346.673
Fe	56	1	He	0.436909	3.8	14185.557
Co	59	1	He	0.006081	16.4	134.000
Ni	60	1	He	0.051573	11.5	382.677
Cu	63	1	He	0.013064	20.1	324.003
Zn	66	1	He	0.047058	6.9	268.000
As	75	1	He	0.029167	17.1	237.333
Se	78	2	H2	-0.001081		29.667
Sr	88	1	He	0.006502	58.1	208.333
Mo	95	1	He	0.002277	39.6	30.667
Pd	105	1	He	0.012028	23.7	333.343
Ag	107	1	He	0.016891	13.1	440.010
Cd	111	1	He	0.000512	31.0	14.327
Sn	118	1	He	0.012299	47.8	186.667
Sb	121	1	He	0.001943	33.7	83.333
Ba	138	1	He	0.003400	31.3	225.000
Pt	195	1	He	0.000080	2276.3	166.000
Hg	202	1	He	0.001416	91.8	108.000
Tl	205	1	He	0.002957	36.7	476.680
Pb	208	1	He	0.009723	8.7	2795.140
Bi	209	1	He	0.000600	126.4	1810.157
Th	232	1	He	0.009420	12.2	1150.060
U	238	1	He	-0.000407		431.677

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.30049606	580947.460
Sc	45	2	H2	96.83504357	4769000.333
Ge	72	1	He	94.95283016	480949.093
Ge	72	2	H2	95.80061282	1634307.997
In	115	1	He	97.27315637	5752109.423
Tb	159	1	He	99.35089755	13712863.963
Ir	193	1	He	98.66422158	7135954.057

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 041\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:31:21  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	86.063882	0.6	39675.523
Be	9	2	H2	83.285187	0.4	39180.970
B	11	2	H2	80.582564	0.5	36266.153
Na	23	1	He	1002.722780	0.5	1092444.177
Mg	24	1	He	1006.804063	0.3	611089.847
Al	27	1	He	1007.621483	0.4	299202.447
Si	28	2	H2	505.560106	0.6	1747553.420
K	39	1	He	1001.295378	0.1	903145.430
Ca	43	1	He	1012.907886	1.6	2484.427
Ti	47	1	He	79.293430	0.2	21476.277
V	51	1	He	78.978402	0.2	613030.517
Cr	52	1	He	81.706808	0.7	753659.043
Mn	55	1	He	80.314255	0.4	532735.290
Fe	56	1	He	499.562429	0.7	4388331.167
Co	59	1	He	83.105582	0.3	1213403.047
Ni	60	1	He	83.821035	0.2	308917.167
Cu	63	1	He	83.614839	0.6	847763.127
Zn	66	1	He	81.973938	0.5	188305.510
As	75	1	He	80.356583	0.5	163596.123
Se	78	2	H2	81.219251	0.7	73623.020
Sr	88	1	He	80.760897	0.4	986787.327
Mo	95	1	He	77.708272	0.4	525855.127
Pd	105	1	He	82.801447	0.6	840621.187
Ag	107	1	He	42.289598	0.8	882791.137
Cd	111	1	He	80.505944	0.6	321581.240
Sn	118	1	He	77.655358	0.9	777693.633
Sb	121	1	He	78.392341	0.6	1167741.467
Ba	138	1	He	78.244966	0.3	2588525.900
Pt	195	1	He	82.319855	0.4	1121948.250
Hg	202	1	He	3.890560	0.3	25962.553
Tl	205	1	He	42.009374	0.4	2069994.970
Pb	208	1	He	82.610658	0.8	5470065.337
Bi	209	1	He	79.887786	0.9	4580906.700
Th	232	1	He	77.636405	0.9	5444065.543
U	238	1	He	79.265987	0.8	5316450.757

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.39362429	600002.980
Sc	45	2	H2	96.39248370	4747204.833
Ge	72	1	He	98.07004627	496738.220
Ge	72	2	H2	96.19543021	1641043.373
In	115	1	He	99.54037408	5886178.110
Tb	159	1	He	100.3079916	13844966.457
Ir	193	1	He	99.21114607	7175510.727

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 042\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:35:01  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.066674	27.6	98.167
Be	9	2	H2	0.064648	15.6	41.667
B	11	2	H2	-1.521319		2007.803
Na	23	1	He	-0.076209		11144.227
Mg	24	1	He	-0.618844		1080.050
Al	27	1	He	0.781740	57.8	300.670
Si	28	2	H2	-0.186743		13188.553
K	39	1	He	-0.083487		72731.297
Ca	43	1	He	-0.086918		17.767
Ti	47	1	He	0.048822	43.3	14.000
V	51	1	He	0.094042	67.3	193.747
Cr	52	1	He	0.044519	87.9	2987.647
Mn	55	1	He	0.029452	122.2	508.010
Fe	56	1	He	0.410189	51.8	14284.387
Co	59	1	He	0.051595	59.2	797.363
Ni	60	1	He	0.051280	82.9	392.007
Cu	63	1	He	0.049348	54.2	698.690
Zn	66	1	He	0.050067	49.2	282.670
As	75	1	He	0.038980	82.5	264.000
Se	78	2	H2	0.013616	43.4	43.333
Sr	88	1	He	0.044658	64.9	676.693
Mo	95	1	He	0.047568	53.9	338.003
Pd	105	1	He	0.025264	66.6	476.680
Ag	107	1	He	0.136509	32.6	2955.357
Cd	111	1	He	0.044192	68.2	188.940
Sn	118	1	He	0.048078	51.9	550.017
Sb	121	1	He	0.037672	71.1	616.690
Ba	138	1	He	0.042242	59.2	1515.113
Pt	195	1	He	0.042294	54.9	737.360
Hg	202	1	He	0.030609	13.4	302.000
Tl	205	1	He	0.065274	29.5	3532.183
Pb	208	1	He	0.049743	52.7	5435.477
Bi	209	1	He	0.046583	66.7	4460.913
Th	232	1	He	0.055834	48.4	4414.200
U	238	1	He	0.044207	66.8	3422.250

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.68013188	595607.440
Sc	45	2	H2	97.26883841	4790364.167
Ge	72	1	He	97.90383228	495896.323
Ge	72	2	H2	96.66883541	1649119.417
In	115	1	He	100.1420814	5921759.220
Tb	159	1	He	100.0469783	13808940.210
Ir	193	1	He	99.80349876	7218353.020



Sample Name 4305774\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 043SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:38:40  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.046773	53.2	88.500
Be	9	2	H2	0.038143	11.7	29.000
B	11	2	H2	-1.993652		1801.940
Na	23	1	He	6.102351	4.7	18102.687
Mg	24	1	He	2.741932	11.1	3162.027
Al	27	1	He	6.311513	1.4	1968.800
Si	28	2	H2	1.248601	50.1	18115.507
K	39	1	He	-0.597279		73696.130
Ca	43	1	He	15.547583	5.9	56.617
Ti	47	1	He	0.060940	21.2	17.667
V	51	1	He	0.060371	126.4	-62.467
Cr	52	1	He	0.167604	4.2	4193.943
Mn	55	1	He	0.072633	2.0	810.687
Fe	56	1	He	3.310301	3.0	40286.577
Co	59	1	He	0.020231	12.6	345.340
Ni	60	1	He	0.024202	10.8	294.667
Cu	63	1	He	0.114552	6.6	1364.067
Zn	66	1	He	0.823211	2.6	2059.490
As	75	1	He	-0.000628		184.667
Se	78	2	H2	0.004556	59.6	35.000
Sr	88	1	He	0.031837	1.9	525.010
Mo	95	1	He	0.012866	21.7	104.667
Pd	105	1	He	0.006705	36.2	291.670
Ag	107	1	He	0.032174	14.7	781.697
Cd	111	1	He	0.016468	26.8	79.647
Sn	118	1	He	0.162117	9.8	1718.467
Sb	121	1	He	0.010538	55.1	216.670
Ba	138	1	He	0.048861	4.8	1761.797
Pt	195	1	He	0.010640	17.4	316.003
Hg	202	1	He	0.013452	12.3	191.667
Tl	205	1	He	0.018678	10.3	1273.407
Pb	208	1	He	0.018841	3.7	3473.530
Bi	209	1	He	0.012069	40.5	2513.617
Th	232	1	He	0.011259	11.8	1305.077
U	238	1	He	0.005563	39.1	846.703

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.51247885	606895.793
Sc	45	2	H2	96.98859753	4776562.667
Ge	72	1	He	98.13339369	497059.083
Ge	72	2	H2	96.46333610	1645613.707
In	115	1	He	101.1273347	5980020.767
Tb	159	1	He	101.7187641	14039687.707
Ir	193	1	He	100.6946071	7282803.017

Sample Name 4305775\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 044SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:42:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	106.753751	0.2	49766.123
Be	9	2	H2	104.334156	1.0	49647.213
B	11	2	H2	101.927479	0.8	45698.600
Na	23	1	He	2056.041984	1.5	2230511.530
Mg	24	1	He	2045.873188	1.7	1241587.610
Al	27	1	He	2035.907173	1.2	605125.957
Si	28	2	H2	516.729011	0.2	1806499.670
K	39	1	He	2039.925767	1.0	1765831.533
Ca	43	1	He	2094.787692	1.2	5124.120
Ti	47	1	He	100.779389	1.1	27325.587
V	51	1	He	101.579454	1.7	789461.697
Cr	52	1	He	105.005684	1.4	968901.667
Mn	55	1	He	102.853249	0.6	682924.190
Fe	56	1	He	2044.598880	1.0	17947066.000
Co	59	1	He	105.826757	1.1	1562200.667
Ni	60	1	He	106.432199	1.2	396524.760
Cu	63	1	He	105.081500	0.9	1077127.083
Zn	66	1	He	105.070071	1.1	243978.047
As	75	1	He	101.581984	0.8	209042.043
Se	78	2	H2	102.910457	0.8	94635.577
Sr	88	1	He	103.439275	0.1	1277822.040
Mo	95	1	He	99.358862	1.0	674686.853
Pd	105	1	He	20.771609	0.9	211770.417
Ag	107	1	He	51.462790	1.2	1077978.553
Cd	111	1	He	102.293810	1.0	410029.383
Sn	118	1	He	97.507365	0.4	979927.377
Sb	121	1	He	99.848558	0.4	1492546.073
Ba	138	1	He	99.961769	1.1	3318374.953
Pt	195	1	He	20.585842	0.8	283449.843
Hg	202	1	He	0.011224	14.2	176.000
Tl	205	1	He	106.335026	0.4	5290445.757
Pb	208	1	He	104.847717	0.0	7010109.120
Bi	209	1	He	101.552317	1.5	5861997.620
Th	232	1	He	101.835039	1.3	7189224.890
U	238	1	He	100.312777	0.9	6773762.813

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.50487214	600688.333
Sc	45	2	H2	97.50411364	4801951.167
Ge	72	1	He	99.15543120	502235.843
Ge	72	2	H2	97.58901817	1664817.250
In	115	1	He	99.88856268	5906767.747
Tb	159	1	He	101.2916994	13980742.290
Ir	193	1	He	99.89133928	7224706.143

Sample Name 10606019001\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 045SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:45:59  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.593414	0.9	817.353
Be	9	2	H2	0.242425	7.6	127.667
B	11	2	H2	5.143910	1.0	4876.120
Na	23	1	He	3307.184670	7.2	3378900.367
Mg	24	1	He	1818.987366	7.0	1041848.763
Al	27	1	He	1816.405637	7.1	509439.507
Si	28	2	H2	11577.08090	0.2	40579426.667
K	39	1	He	983.607279	8.1	839183.400
Ca	43	1	He	7210.621135	7.3	16599.910
Ti	47	1	He	55.879407	7.3	14298.057
V	51	1	He	3.048653	4.5	21899.333
Cr	52	1	He	1.387963	6.7	14523.867
Mn	55	1	He	30.396445	6.3	190720.513
Fe	56	1	He	1314.262484	7.0	10889805.000
Co	59	1	He	0.794546	5.9	11000.823
Ni	60	1	He	1.435363	7.5	5182.937
Cu	63	1	He	2.482590	6.2	23950.327
Zn	66	1	He	11.913571	7.1	25965.153
As	75	1	He	1.773270	6.1	3580.610
Se	78	2	H2	0.231893	8.0	241.000
Sr	88	1	He	50.917430	6.1	587439.287
Mo	95	1	He	0.170086	9.5	1113.380
Pd	105	1	He	0.040260	9.3	600.020
Ag	107	1	He	0.243367	18.1	4922.577
Cd	111	1	He	0.123691	13.3	482.477
Sn	118	1	He	0.156886	4.8	1566.767
Sb	121	1	He	0.141949	11.5	2068.507
Ba	138	1	He	21.831730	6.4	689734.497
Pt	195	1	He	0.011743	10.6	315.337
Hg	202	1	He	0.168915	9.3	1178.387
Tl	205	1	He	0.094111	19.4	4770.903
Pb	208	1	He	0.646817	6.3	43417.647
Bi	209	1	He	0.076564	9.8	5921.433
Th	232	1	He	0.216345	8.8	15007.457
U	238	1	He	0.103884	10.4	7108.667

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.27833364	568489.730
Sc	45	2	H2	98.48063004	4850043.333
Ge	72	1	He	92.81187195	470104.847
Ge	72	2	H2	96.24597163	1641905.583
In	115	1	He	95.30338672	5635629.903
Tb	159	1	He	97.07542392	13398792.717
Ir	193	1	He	95.35341783	6896498.020

Sample Name 4308645\_B69910Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 046SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:49:39  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.369564	6.6	241.333
Be	9	2	H2	0.087318	1.8	53.000
B	11	2	H2	-0.681921		2385.857
Na	23	1	He	640.225464	1.2	702410.950
Mg	24	1	He	355.642814	0.9	217066.083
Al	27	1	He	357.714427	1.7	106385.910
Si	28	2	H2	2332.470410	0.5	8168685.333
K	39	1	He	188.742677	1.2	230049.227
Ca	43	1	He	1379.179336	1.2	3380.187
Ti	47	1	He	11.503739	10.1	3119.410
V	51	1	He	0.606970	7.6	4187.457
Cr	52	1	He	0.292537	2.3	5300.970
Mn	55	1	He	5.963455	1.8	39898.833
Fe	56	1	He	255.905651	1.8	2255758.167
Co	59	1	He	0.161509	2.3	2398.203
Ni	60	1	He	0.285822	2.4	1253.390
Cu	63	1	He	0.497483	1.1	5224.950
Zn	66	1	He	2.626906	2.0	6173.330
As	75	1	He	0.342904	6.7	879.363
Se	78	2	H2	0.047141	16.1	74.333
Sr	88	1	He	9.868889	2.1	120226.177
Mo	95	1	He	0.037774	12.2	275.333
Pd	105	1	He	0.006445	41.9	288.340
Ag	107	1	He	0.059124	1.1	1351.743
Cd	111	1	He	0.029286	12.6	131.620
Sn	118	1	He	0.046225	8.8	538.350
Sb	121	1	He	0.034724	8.0	581.687
Ba	138	1	He	4.149766	1.7	139411.347
Pt	195	1	He	0.001971	86.2	194.667
Hg	202	1	He	0.036239	8.5	342.337
Tl	205	1	He	0.023931	12.3	1523.433
Pb	208	1	He	0.129761	2.6	10828.403
Bi	209	1	He	0.015885	42.4	2703.663
Th	232	1	He	0.045433	4.7	3690.557
U	238	1	He	0.021817	8.1	1930.163

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.51793851	600768.830
Sc	45	2	H2	98.26261415	4839306.333
Ge	72	1	He	97.70137773	494870.863
Ge	72	2	H2	97.32863030	1660375.170
In	115	1	He	101.0204805	5973702.097
Tb	159	1	He	100.8789136	13923767.710
Ir	193	1	He	99.47066096	7194280.310

Sample Name 4305776\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 047SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:53:19  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	106.949910	0.2	49863.447
Be	9	2	H2	103.918712	0.7	49455.397
B	11	2	H2	107.938715	0.4	48242.783
Na	23	1	He	5174.211952	0.8	5442219.083
Mg	24	1	He	3785.362938	0.8	2232861.320
Al	27	1	He	4356.129518	0.3	1259085.120
Si	28	2	H2	12857.13266	0.4	44622805.333
K	39	1	He	3053.141479	0.3	2534828.087
Ca	43	1	He	8846.903034	0.6	20988.773
Ti	47	1	He	196.671142	1.2	51856.470
V	51	1	He	107.104335	0.9	809549.167
Cr	52	1	He	107.699572	0.6	966390.857
Mn	55	1	He	133.681470	0.4	863105.707
Fe	56	1	He	3462.029548	0.8	29545516.667
Co	59	1	He	109.032707	1.0	1556149.460
Ni	60	1	He	110.504074	0.9	398037.540
Cu	63	1	He	110.360117	0.9	1093708.960
Zn	66	1	He	117.856502	0.6	264576.260
As	75	1	He	105.614186	0.7	210127.130
Se	78	2	H2	104.292556	1.0	93784.453
Sr	88	1	He	155.141805	1.0	1852840.440
Mo	95	1	He	102.085649	0.2	675961.853
Pd	105	1	He	20.840881	0.3	207193.043
Ag	107	1	He	51.968816	1.0	1061510.453
Cd	111	1	He	103.940573	0.1	406267.367
Sn	118	1	He	101.545375	0.4	995087.067
Sb	121	1	He	101.926996	0.6	1485662.323
Ba	138	1	He	124.140713	1.3	4018412.233
Pt	195	1	He	20.972399	1.5	280785.803
Hg	202	1	He	0.226397	3.9	1575.427
Tl	205	1	He	109.429838	0.6	5294100.547
Pb	208	1	He	107.579608	0.8	6994097.813
Bi	209	1	He	105.246954	0.1	5855422.620
Th	232	1	He	106.335620	0.6	7235176.973
U	238	1	He	104.703540	0.6	6814105.520

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.82219810	584161.457
Sc	45	2	H2	97.51618502	4802545.667
Ge	72	1	He	95.87043548	485596.890
Ge	72	2	H2	95.42782152	1627948.373
In	115	1	He	97.39957119	5759584.783
Tb	159	1	He	98.49803607	13595148.133
Ir	193	1	He	96.26351163	6962321.147

Sample Name 4305777\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 048SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 16:56:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	103.486617	0.9	49133.240
Be	9	2	H2	100.821968	1.2	48858.147
B	11	2	H2	105.986202	0.9	48285.430
Na	23	1	He	5039.062581	0.4	5389227.210
Mg	24	1	He	3667.679899	0.2	2199780.280
Al	27	1	He	4072.177601	0.2	1196739.127
Si	28	2	H2	12217.45851	0.8	43178789.333
K	39	1	He	2926.679776	0.2	2473492.463
Ca	43	1	He	8642.045919	0.3	20846.567
Ti	47	1	He	170.756848	1.3	45779.643
V	51	1	He	103.417549	0.4	794779.253
Cr	52	1	He	104.286049	0.5	951510.647
Mn	55	1	He	129.838570	0.6	852352.877
Fe	56	1	He	3309.684875	0.4	28719886.000
Co	59	1	He	104.742877	0.5	1523580.207
Ni	60	1	He	106.003298	0.2	389151.427
Cu	63	1	He	106.608217	0.4	1076788.917
Zn	66	1	He	113.317684	0.5	259265.843
As	75	1	He	103.320835	0.5	209503.843
Se	78	2	H2	103.119006	0.5	94214.200
Sr	88	1	He	149.555178	0.6	1820363.047
Mo	95	1	He	99.748624	0.8	665314.290
Pd	105	1	He	20.702600	1.1	207321.467
Ag	107	1	He	51.150123	0.3	1052438.550
Cd	111	1	He	102.055725	0.5	401815.120
Sn	118	1	He	99.149822	0.7	978707.303
Sb	121	1	He	99.964759	0.5	1467729.510
Ba	138	1	He	120.848276	0.7	3940497.547
Pt	195	1	He	20.633746	0.5	280141.250
Hg	202	1	He	0.163571	2.9	1182.053
Tl	205	1	He	105.965405	0.2	5198584.507
Pb	208	1	He	104.124828	0.8	6864647.710
Bi	209	1	He	101.421788	1.3	5715969.707
Th	232	1	He	101.622098	1.4	7004193.230
U	238	1	He	100.963630	1.1	6656104.693

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.40939572	593939.543
Sc	45	2	H2	99.30405951	4890596.167
Ge	72	1	He	97.70310260	494879.600
Ge	72	2	H2	96.96450925	1654163.457
In	115	1	He	98.11323970	5801786.553
Tb	159	1	He	99.88009682	13785906.460
Ir	193	1	He	97.52408906	7053493.230

Sample Name 10606019002\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 049SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:00:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.258982	8.3	190.167
Be	9	2	H2	0.246962	6.4	130.000
B	11	2	H2	-1.151082		2194.163
Na	23	1	He	58.602768	1.9	75335.627
Mg	24	1	He	5.678073	6.6	4959.193
Al	27	1	He	12.981866	1.8	3971.200
Si	28	2	H2	29.844156	0.3	118750.840
K	39	1	He	8.084927	8.7	80955.340
Ca	43	1	He	21.100861	13.6	70.250
Ti	47	1	He	0.163210	7.3	45.667
V	51	1	He	0.182053	19.8	893.867
Cr	52	1	He	0.841201	2.9	10455.733
Mn	55	1	He	0.451733	2.5	3351.727
Fe	56	1	He	5.266101	1.7	57607.453
Co	59	1	He	0.140561	4.8	2114.830
Ni	60	1	He	0.387548	5.1	1642.763
Cu	63	1	He	1.399948	1.4	14481.870
Zn	66	1	He	3.580801	2.0	8439.140
As	75	1	He	0.082030	9.2	354.837
Se	78	2	H2	0.081821	25.6	106.667
Sr	88	1	He	0.200137	3.7	2596.923
Mo	95	1	He	0.093728	3.1	656.020
Pd	105	1	He	0.007544	28.9	298.340
Ag	107	1	He	0.156290	14.8	3390.440
Cd	111	1	He	0.160891	5.1	661.233
Sn	118	1	He	0.115433	5.6	1235.063
Sb	121	1	He	0.075165	6.0	1186.727
Ba	138	1	He	0.244325	0.9	8274.197
Pt	195	1	He	0.010939	20.5	317.340
Hg	202	1	He	0.002165	134.1	114.667
Tl	205	1	He	0.151659	6.6	7844.047
Pb	208	1	He	0.242781	1.8	18336.617
Bi	209	1	He	0.151994	2.2	10504.323
Th	232	1	He	0.095328	3.4	7185.387
U	238	1	He	0.067841	3.5	5014.340

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.49119791	606764.690
Sc	45	2	H2	98.62258979	4857034.667
Ge	72	1	He	98.67935391	499824.447
Ge	72	2	H2	97.88250105	1669823.913
In	115	1	He	100.4394379	5939342.970
Tb	159	1	He	100.7995768	13912817.290
Ir	193	1	He	99.27444197	7180088.643

Sample Name 10606019003\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 050SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:04:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.769330	2.2	1376.897
Be	9	2	H2	0.285332	2.2	149.000
B	11	2	H2	6.303281	3.0	5396.463
Na	23	1	He	3710.672068	1.6	3826245.047
Mg	24	1	He	2227.678027	1.7	1287782.480
Al	27	1	He	4982.220141	1.8	1410586.960
Si	28	2	H2	19353.19227	0.4	68156701.333
K	39	1	He	1506.587545	1.3	1260717.377
Ca	43	1	He	8322.778809	1.6	19343.213
Ti	47	1	He	133.895779	3.2	34579.923
V	51	1	He	6.963022	2.2	51079.577
Cr	52	1	He	2.327246	2.1	22887.180
Mn	55	1	He	36.336282	1.6	230032.680
Fe	56	1	He	3494.409547	0.8	29215268.667
Co	59	1	He	0.827337	1.0	11523.903
Ni	60	1	He	2.335625	3.2	8365.080
Cu	63	1	He	3.573704	1.9	34603.660
Zn	66	1	He	13.505382	2.0	29603.413
As	75	1	He	1.251628	3.3	2593.900
Se	78	2	H2	0.146000	4.9	161.333
Sr	88	1	He	73.163234	2.1	849168.450
Mo	95	1	He	0.194337	0.9	1281.393
Pd	105	1	He	0.041558	7.9	616.687
Ag	107	1	He	0.087920	6.8	1860.140
Cd	111	1	He	0.061320	5.5	248.103
Sn	118	1	He	0.178463	3.6	1786.793
Sb	121	1	He	0.153732	6.0	2258.537
Ba	138	1	He	47.605429	1.4	1516152.790
Pt	195	1	He	0.009341	6.1	285.333
Hg	202	1	He	0.020870	16.0	231.667
Tl	205	1	He	0.079393	6.1	4122.350
Pb	208	1	He	0.845983	2.4	56460.160
Bi	209	1	He	0.040449	5.7	3973.997
Th	232	1	He	0.355486	0.6	24628.477
U	238	1	He	0.131369	0.7	8981.513

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.89687802	572300.333
Sc	45	2	H2	98.96286271	4873792.667
Ge	72	1	He	93.17901569	471964.480
Ge	72	2	H2	95.15983259	1623376.623
In	115	1	He	95.83725670	5667199.543
Tb	159	1	He	97.37714257	13440437.300
Ir	193	1	He	96.10582207	6950916.147



Sample Name 10606021001\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 051SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:07:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.389011	0.6	722.687
Be	9	2	H2	0.118391	9.7	68.167
B	11	2	H2	2.888105	4.4	3921.510
Na	23	1	He	6558.519695	1.2	6840732.607
Mg	24	1	He	5902.232798	1.3	3453205.573
Al	27	1	He	7.044972	5.0	2090.153
Si	28	2	H2	15774.76865	0.6	55396382.667
K	39	1	He	766.931133	0.9	684722.753
Ca	43	1	He	14193.97979	0.4	33397.670
Ti	47	1	He	0.596542	2.9	157.000
V	51	1	He	0.251117	21.6	1372.620
Cr	52	1	He	0.388275	3.9	5963.897
Mn	55	1	He	5.591323	1.1	36109.723
Fe	56	1	He	60.808382	0.7	525118.707
Co	59	1	He	0.198629	2.7	2867.623
Ni	60	1	He	3.092167	1.6	11271.040
Cu	63	1	He	0.291284	4.1	3067.000
Zn	66	1	He	4.488816	1.3	10179.573
As	75	1	He	0.247036	4.0	669.020
Se	78	2	H2	0.299716	9.9	301.667
Sr	88	1	He	91.526208	0.3	1087193.577
Mo	95	1	He	0.912107	3.4	6073.977
Pd	105	1	He	0.050525	14.4	718.360
Ag	107	1	He	0.030619	12.9	723.357
Cd	111	1	He	0.099523	5.6	402.583
Sn	118	1	He	0.161074	1.3	1650.113
Sb	121	1	He	0.070893	5.9	1091.720
Ba	138	1	He	19.228403	0.3	624503.663
Pt	195	1	He	0.011979	16.5	324.003
Hg	202	1	He	0.002060	48.8	111.333
Tl	205	1	He	0.065701	4.6	3508.827
Pb	208	1	He	1.968917	1.3	130124.650
Bi	209	1	He	0.061572	3.7	5141.070
Th	232	1	He	0.016299	6.7	1585.110
U	238	1	He	0.034731	10.6	2698.640

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.07149989	579536.707
Sc	45	2	H2	98.67621557	4859675.667
Ge	72	1	He	95.34284265	482924.560
Ge	72	2	H2	95.95291862	1636906.253
In	115	1	He	97.70793239	5777819.283
Tb	159	1	He	98.51168703	13597032.300
Ir	193	1	He	95.96771409	6940927.397

Sample Name 10606021002\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 052SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:11:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.003614	5.3	1019.537
Be	9	2	H2	0.152984	2.7	85.500
B	11	2	H2	0.488587	28.3	2917.783
Na	23	1	He	5145.388910	0.1	5421988.040
Mg	24	1	He	6901.324332	0.3	4077221.187
Al	27	1	He	47.001962	2.8	13680.877
Si	28	2	H2	19443.14493	1.4	68789328.000
K	39	1	He	818.574339	0.8	733199.390
Ca	43	1	He	10149.38184	0.2	24120.243
Ti	47	1	He	1.084296	9.6	287.333
V	51	1	He	1.141735	9.7	8135.047
Cr	52	1	He	0.877474	1.7	10409.047
Mn	55	1	He	16.387079	0.8	106268.830
Fe	56	1	He	34.765899	2.2	307709.833
Co	59	1	He	1.720629	1.8	24569.987
Ni	60	1	He	0.305508	2.5	1298.730
Cu	63	1	He	0.328221	0.5	3445.087
Zn	66	1	He	2.761617	1.9	6352.073
As	75	1	He	0.117743	7.6	415.177
Se	78	2	H2	0.045758	8.9	72.333
Sr	88	1	He	33.958989	0.9	405106.610
Mo	95	1	He	0.206108	6.4	1386.740
Pd	105	1	He	0.015853	30.4	373.343
Ag	107	1	He	0.025846	15.0	626.683
Cd	111	1	He	0.114248	4.5	461.093
Sn	118	1	He	0.086990	10.3	923.370
Sb	121	1	He	0.034573	9.5	561.687
Ba	138	1	He	1.207133	0.3	39384.310
Pt	195	1	He	0.010612	21.8	308.007
Hg	202	1	He	0.003355	126.3	120.667
Tl	205	1	He	0.082389	1.4	4350.747
Pb	208	1	He	0.164903	2.7	12962.493
Bi	209	1	He	0.084635	7.4	6451.707
Th	232	1	He	0.045984	1.5	3617.203
U	238	1	He	0.040377	2.6	3082.057

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.99459803	585223.543
Sc	45	2	H2	99.42835381	4896717.500
Ge	72	1	He	95.73299794	484900.750
Ge	72	2	H2	96.34862955	1643656.873
In	115	1	He	97.88236793	5788134.280
Tb	159	1	He	99.30511765	13706545.213
Ir	193	1	He	96.46348098	6976784.060

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 053\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:15:17  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	84.130873	0.9	39386.950
Be	9	2	H2	81.890898	0.4	39122.823
B	11	2	H2	78.922614	1.1	36124.323
Na	23	1	He	995.570110	1.6	1103250.607
Mg	24	1	He	998.565787	1.8	616431.620
Al	27	1	He	1002.279530	1.7	302692.230
Si	28	2	H2	507.277801	0.5	1780653.087
K	39	1	He	1002.966755	1.6	920000.873
Ca	43	1	He	1001.378700	1.5	2498.207
Ti	47	1	He	79.014582	1.9	21765.373
V	51	1	He	78.695932	2.5	621241.797
Cr	52	1	He	81.181319	2.2	761585.687
Mn	55	1	He	80.033017	2.2	539905.770
Fe	56	1	He	498.382609	2.0	4452597.667
Co	59	1	He	82.341223	1.5	1222862.210
Ni	60	1	He	82.978273	2.4	311034.260
Cu	63	1	He	83.420443	1.6	860281.583
Zn	66	1	He	81.842330	1.1	191231.783
As	75	1	He	79.913452	1.5	165482.980
Se	78	2	H2	81.237782	0.6	74580.257
Sr	88	1	He	81.209208	1.3	1009288.450
Mo	95	1	He	76.998770	1.2	528678.480
Pd	105	1	He	82.070042	1.3	845376.473
Ag	107	1	He	41.904694	1.4	887539.777
Cd	111	1	He	79.832741	1.2	323563.720
Sn	118	1	He	76.900932	0.8	781451.160
Sb	121	1	He	77.383735	0.5	1169641.390
Ba	138	1	He	77.637801	0.8	2606137.200
Pt	195	1	He	81.422917	2.2	1118678.413
Hg	202	1	He	3.854727	2.0	25932.827
Tl	205	1	He	41.596581	2.6	2066070.593
Pb	208	1	He	81.632226	2.3	5448861.243
Bi	209	1	He	79.149885	0.6	4550920.350
Th	232	1	He	77.018110	1.4	5415099.083
U	238	1	He	78.390787	2.2	5271487.633

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.07429443	610356.913
Sc	45	2	H2	97.88810683	4820862.333
Ge	72	1	He	99.76266387	505311.560
Ge	72	2	H2	97.41695561	1661881.953
In	115	1	He	101.0020869	5972614.417
Tb	159	1	He	101.1438483	13960335.210
Ir	193	1	He	99.47906623	7194888.227

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 054\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:18:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.080409	12.7	105.500
Be	9	2	H2	0.048864	5.5	34.500
B	11	2	H2	-1.881153		1872.117
Na	23	1	He	-0.085473		11290.987
Mg	24	1	He	-0.582123		1120.053
Al	27	1	He	0.195571	10.3	131.667
Si	28	2	H2	0.197291	66.7	14640.867
K	39	1	He	-1.381674		72639.393
Ca	43	1	He	-1.658162		14.167
Ti	47	1	He	0.005006	43.4	2.333
V	51	1	He	0.009272	59.7	-461.777
Cr	52	1	He	0.001983	264.1	2639.583
Mn	55	1	He	-0.002781		303.337
Fe	56	1	He	0.139166	2.6	12113.027
Co	59	1	He	0.007339	15.0	156.667
Ni	60	1	He	-0.002664		195.333
Cu	63	1	He	0.006906	20.7	272.000
Zn	66	1	He	0.000582	45.1	170.000
As	75	1	He	-0.006724		172.000
Se	78	2	H2	0.011182	40.6	41.333
Sr	88	1	He	0.002258	237.1	163.337
Mo	95	1	He	0.014051	29.5	112.667
Pd	105	1	He	0.014658	16.2	373.343
Ag	107	1	He	0.139171	21.0	3047.030
Cd	111	1	He	0.004647	44.9	31.650
Sn	118	1	He	0.008954	39.9	160.000
Sb	121	1	He	0.004159	44.1	120.000
Ba	138	1	He	0.003290	15.4	230.000
Pt	195	1	He	0.000610	264.0	174.000
Hg	202	1	He	0.025601	19.7	268.333
Tl	205	1	He	0.047147	25.8	2641.960
Pb	208	1	He	0.003992	30.7	2431.773
Bi	209	1	He	0.003564	119.9	1973.520
Th	232	1	He	0.016361	6.5	1630.117
U	238	1	He	0.002668	25.2	635.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.96903486	603547.853
Sc	45	2	H2	98.08463654	4830541.167
Ge	72	1	He	97.99467813	496356.470
Ge	72	2	H2	97.22051070	1658530.707
In	115	1	He	101.0316772	5974364.197
Tb	159	1	He	99.83243622	13779328.127
Ir	193	1	He	98.43721019	7119535.310

Sample Name 10606022001\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 055SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:22:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.422026	3.2	1709.430
Be	9	2	H2	0.308584	1.2	162.500
B	11	2	H2	5.907369	2.8	5301.600
Na	23	1	He	3760.647795	0.4	3963097.440
Mg	24	1	He	2112.578424	0.5	1248235.817
Al	27	1	He	6389.226280	0.9	1848816.873
Si	28	2	H2	22061.82550	0.5	78802597.333
K	39	1	He	1739.558962	0.3	1476646.647
Ca	43	1	He	7590.972550	0.0	18032.630
Ti	47	1	He	226.750688	2.3	59855.803
V	51	1	He	7.661972	1.2	57501.423
Cr	52	1	He	2.964311	1.2	29098.800
Mn	55	1	He	31.219642	0.4	202041.873
Fe	56	1	He	3801.566347	0.7	32480324.000
Co	59	1	He	0.783989	1.9	11142.260
Ni	60	1	He	2.273809	2.2	8315.723
Cu	63	1	He	3.359733	0.9	33204.437
Zn	66	1	He	14.196338	0.4	31743.273
As	75	1	He	1.452434	1.4	3042.820
Se	78	2	H2	0.139059	7.2	156.000
Sr	88	1	He	64.886129	0.6	768455.167
Mo	95	1	He	0.217397	3.3	1463.417
Pd	105	1	He	0.050005	12.2	715.023
Ag	107	1	He	0.092934	8.9	2005.160
Cd	111	1	He	0.053502	11.3	222.737
Sn	118	1	He	0.243380	3.8	2465.237
Sb	121	1	He	0.219324	5.0	3270.420
Ba	138	1	He	46.299121	0.1	1507329.563
Pt	195	1	He	0.011954	20.5	326.673
Hg	202	1	He	0.042468	9.4	378.677
Tl	205	1	He	0.080850	3.3	4282.387
Pb	208	1	He	1.016861	0.7	68900.367
Bi	209	1	He	0.040994	10.5	4074.023
Th	232	1	He	0.607092	4.1	42422.333
U	238	1	He	0.203325	1.5	13887.610

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.93127896	584833.460
Sc	45	2	H2	100.3732484	4943252.333
Ge	72	1	He	95.05455100	481464.323
Ge	72	2	H2	95.72814361	1633071.710
In	115	1	He	97.95319881	5792322.763
Tb	159	1	He	99.46759175	13728970.630
Ir	193	1	He	97.73225914	7068549.267

Sample Name 10606022002\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 056SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:26:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.667775	59.1	890.193
Be	9	2	H2	0.539674	54.1	184.500
B	11	2	H2	8.923725	96.0	4360.963
Na	23	1	He	3144.577555	0.7	3290493.073
Mg	24	1	He	1722.481098	0.4	1010291.520
Al	27	1	He	2048.016326	1.0	588170.313
Si	28	2	H2	17831.94061	57.4	41854434.667
K	39	1	He	952.809864	1.0	834745.120
Ca	43	1	He	6714.788492	1.3	15831.677
Ti	47	1	He	67.878281	1.5	17784.160
V	51	1	He	3.191603	4.5	23467.657
Cr	52	1	He	1.282381	2.5	13923.293
Mn	55	1	He	26.134763	0.5	167899.797
Fe	56	1	He	1378.105922	0.3	11691984.333
Co	59	1	He	0.648537	2.0	9240.940
Ni	60	1	He	1.398926	2.7	5200.940
Cu	63	1	He	2.521619	0.4	25012.120
Zn	66	1	He	11.975185	1.2	26847.430
As	75	1	He	1.639973	1.6	3418.403
Se	78	2	H2	0.469340	61.1	299.000
Sr	88	1	He	47.662881	1.3	565431.113
Mo	95	1	He	0.184719	4.0	1246.057
Pd	105	1	He	0.032627	10.1	541.680
Ag	107	1	He	0.161148	5.3	3407.100
Cd	111	1	He	0.215736	3.7	860.807
Sn	118	1	He	0.174496	6.3	1786.797
Sb	121	1	He	0.196502	3.4	2936.993
Ba	138	1	He	21.831688	0.7	711046.813
Pt	195	1	He	0.012415	25.6	333.340
Hg	202	1	He	0.204213	2.2	1445.413
Tl	205	1	He	0.144612	2.8	7400.483
Pb	208	1	He	0.719096	3.1	49367.653
Bi	209	1	He	0.180631	2.2	11965.637
Th	232	1	He	0.282292	4.0	19994.080
U	238	1	He	0.252082	1.8	17116.410

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.21146520	580398.977
Sc	45	2	H2	78.71926793	3876821.873
Ge	72	1	He	95.21333644	482268.593
Ge	72	2	H2	76.04070734	1297214.417
In	115	1	He	97.98592320	5794257.873
Tb	159	1	He	99.50294476	13733850.213
Ir	193	1	He	97.78223279	7072163.643

Sample Name 10606022003\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 057SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:29:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.733316	0.6	1853.280
Be	9	2	H2	0.304072	2.1	159.833
B	11	2	H2	5.917288	3.6	5290.760
Na	23	1	He	3789.256092	0.8	3983148.170
Mg	24	1	He	2172.716666	1.2	1280495.737
Al	27	1	He	7161.060497	0.9	2066950.000
Si	28	2	H2	23487.64685	0.1	83654869.333
K	39	1	He	1798.806237	0.3	1520693.413
Ca	43	1	He	7603.276137	1.0	18016.187
Ti	47	1	He	276.058053	1.7	72690.360
V	51	1	He	8.436581	0.9	63210.370
Cr	52	1	He	2.988268	0.1	29241.093
Mn	55	1	He	31.995672	0.7	206535.013
Fe	56	1	He	4011.107292	0.8	34184270.667
Co	59	1	He	0.807189	0.6	11501.880
Ni	60	1	He	2.376281	0.6	8705.280
Cu	63	1	He	3.533200	1.0	35003.283
Zn	66	1	He	14.609486	0.5	32750.817
As	75	1	He	1.470834	0.8	3087.500
Se	78	2	H2	0.121653	5.1	139.667
Sr	88	1	He	64.787746	0.3	769372.460
Mo	95	1	He	0.235667	8.9	1582.097
Pd	105	1	He	0.034740	10.6	561.683
Ag	107	1	He	0.072860	5.8	1590.103
Cd	111	1	He	0.053188	6.4	221.050
Sn	118	1	He	0.249753	3.9	2523.583
Sb	121	1	He	0.260343	2.9	3863.977
Ba	138	1	He	47.798044	0.5	1553285.913
Pt	195	1	He	0.012572	11.0	336.007
Hg	202	1	He	0.036392	8.5	339.673
Tl	205	1	He	0.075734	4.7	4043.983
Pb	208	1	He	1.027782	0.9	69825.047
Bi	209	1	He	0.039059	6.3	3984.017
Th	232	1	He	0.679090	4.0	47627.583
U	238	1	He	0.223869	2.8	15324.487

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.69457305	583375.210
Sc	45	2	H2	100.0861207	4929111.667
Ge	72	1	He	95.31195635	482768.117
Ge	72	2	H2	95.27809298	1625394.083
In	115	1	He	97.77720539	5781915.643
Tb	159	1	He	99.76238530	13769659.380
Ir	193	1	He	98.21729057	7103629.480

Sample Name 10606024001\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 058SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:33:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	28.015188	1.1	12884.963
Be	9	2	H2	0.070150	18.6	43.667
B	11	2	H2	7.825939	0.8	5857.970
Na	23	1	He	15314.48147	0.2	15926567.677
Mg	24	1	He	7363.940084	0.4	4299338.270
Al	27	1	He	10.360974	2.5	3034.980
Si	28	2	H2	7001.015023	0.2	23884340.667
K	39	1	He	5812.115671	0.6	4713422.117
Ca	43	1	He	30614.69446	0.1	71866.803
Ti	47	1	He	0.239015	14.3	63.333
V	51	1	He	0.143402	48.5	562.547
Cr	52	1	He	0.533677	2.7	7240.463
Mn	55	1	He	79.517280	0.6	508418.750
Fe	56	1	He	209.847010	0.4	1782903.290
Co	59	1	He	1.159636	1.0	16402.553
Ni	60	1	He	2.443876	0.3	8892.730
Cu	63	1	He	0.460547	0.7	4704.770
Zn	66	1	He	2.043516	4.6	4693.433
As	75	1	He	2.598841	0.6	5284.467
Se	78	2	H2	0.038657	39.9	64.667
Sr	88	1	He	730.291885	0.1	8618301.747
Mo	95	1	He	3.393925	1.7	22331.480
Pd	105	1	He	0.384226	1.5	4002.267
Ag	107	1	He	0.022597	5.9	553.350
Cd	111	1	He	0.052399	0.3	215.647
Sn	118	1	He	0.580287	0.9	5712.877
Sb	121	1	He	0.578626	3.2	8430.937
Ba	138	1	He	90.200117	1.1	2899610.270
Pt	195	1	He	0.010194	5.1	299.333
Hg	202	1	He	0.009475	15.0	159.333
Tl	205	1	He	0.032968	3.3	1920.160
Pb	208	1	He	0.086639	1.3	7752.577
Bi	209	1	He	0.032761	7.3	3530.537
Th	232	1	He	0.020434	6.9	1858.483
U	238	1	He	0.626259	0.5	40917.797

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.87858031	578348.207
Sc	45	2	H2	95.83000865	4719503.667
Ge	72	1	He	94.73177724	479829.430
Ge	72	2	H2	94.55642416	1613082.793
In	115	1	He	96.72708261	5719818.130
Tb	159	1	He	98.27020525	13563701.883
Ir	193	1	He	95.59964214	6914306.353



Sample Name 10606024002\_B69910Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 059SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:37:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.247711	3.1	1604.083
Be	9	2	H2	0.049565	11.8	35.167
B	11	2	H2	4.064086	2.9	4440.150
Na	23	1	He	7746.750761	0.1	8027386.967
Mg	24	1	He	23536.35567	0.5	13679649.800
Al	27	1	He	64.898448	2.1	18560.823
Si	28	2	H2	24929.62410	0.7	87852800.000
K	39	1	He	3477.458274	0.4	2836361.103
Ca	43	1	He	23114.91064	0.3	54034.000
Ti	47	1	He	1.763701	13.1	459.343
V	51	1	He	3.965176	7.8	29056.780
Cr	52	1	He	1.213003	4.7	13202.817
Mn	55	1	He	6.019259	0.1	38606.040
Fe	56	1	He	196.072330	0.8	1659440.670
Co	59	1	He	0.132966	2.2	1910.133
Ni	60	1	He	0.508798	2.0	1994.810
Cu	63	1	He	0.309827	2.6	3207.030
Zn	66	1	He	1.435990	3.5	3323.727
As	75	1	He	0.658198	2.4	1462.407
Se	78	2	H2	0.238337	2.1	244.000
Sr	88	1	He	98.901546	0.5	1159326.103
Mo	95	1	He	0.645870	1.3	4221.307
Pd	105	1	He	0.051290	8.6	711.693
Ag	107	1	He	0.013486	7.1	365.010
Cd	111	1	He	0.030192	14.0	128.240
Sn	118	1	He	0.190721	3.1	1903.483
Sb	121	1	He	0.057255	8.2	875.037
Ba	138	1	He	4.426360	1.2	141024.137
Pt	195	1	He	0.005650	23.6	240.000
Hg	202	1	He	0.010505	17.3	167.000
Tl	205	1	He	0.023164	13.5	1455.093
Pb	208	1	He	0.039126	4.1	4697.040
Bi	209	1	He	0.019809	17.0	2813.690
Th	232	1	He	0.032515	5.5	2673.630
U	238	1	He	0.396626	1.4	26062.850

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.47813218	575881.207
Sc	45	2	H2	99.02868508	4877034.333
Ge	72	1	He	94.08760184	476566.593
Ge	72	2	H2	95.11996969	1622696.583
In	115	1	He	95.79174764	5664508.430
Tb	159	1	He	98.81516862	13638920.213
Ir	193	1	He	95.54945538	6910676.563

Sample Name 4309483\_B69981Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 060SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:40:55  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	110.517975	0.7	51605.410
Be	9	2	H2	107.686670	0.5	51328.930
B	11	2	H2	106.052773	1.1	47520.027
Na	23	1	He	2205.780719	3.5	2335519.963
Mg	24	1	He	2196.024214	3.9	1300961.077
Al	27	1	He	2180.507109	3.9	632701.023
Si	28	2	H2	538.904970	1.1	1886564.127
K	39	1	He	2207.416400	3.7	1859633.203
Ca	43	1	He	2216.624246	4.1	5292.143
Ti	47	1	He	108.618531	4.6	28746.960
V	51	1	He	108.661861	4.4	824404.670
Cr	52	1	He	112.644024	4.1	1014475.333
Mn	55	1	He	110.693874	3.6	717524.873
Fe	56	1	He	2203.379252	3.8	18880474.000
Co	59	1	He	114.690840	4.9	1637362.043
Ni	60	1	He	115.760559	4.7	417098.803
Cu	63	1	He	113.679130	4.3	1127066.000
Zn	66	1	He	112.910123	4.7	253560.553
As	75	1	He	109.551744	4.6	218023.937
Se	78	2	H2	106.635276	0.5	97859.297
Sr	88	1	He	111.397712	4.9	1330794.357
Mo	95	1	He	107.157860	4.3	703056.500
Pd	105	1	He	22.262814	3.9	219309.763
Ag	107	1	He	57.034447	2.7	1154765.320
Cd	111	1	He	110.201320	3.5	426876.473
Sn	118	1	He	105.489157	3.6	1024450.660
Sb	121	1	He	107.230642	3.4	1549019.040
Ba	138	1	He	108.301371	4.5	3473531.613
Pt	195	1	He	21.945176	2.9	292295.790
Hg	202	1	He	0.007889	26.8	148.667
Tl	205	1	He	114.247873	3.2	5498389.710
Pb	208	1	He	112.120914	2.8	7251835.937
Bi	209	1	He	109.129826	3.7	6062483.240
Th	232	1	He	109.929975	4.6	7467083.637
U	238	1	He	108.129900	3.1	7027773.230

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.25910103	586853.040
Sc	45	2	H2	97.67122802	4810181.333
Ge	72	1	He	96.01853809	486347.050
Ge	72	2	H2	97.39013806	1661424.460
In	115	1	He	96.61353623	5713103.727
Tb	159	1	He	98.04213593	13532222.717
Ir	193	1	He	96.21322403	6958684.063

Sample Name 10606366001\_B69981Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 061SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:44:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.138274	7.4	134.000
Be	9	2	H2	0.069077	14.7	44.667
B	11	2	H2	-1.340831		2124.313
Na	23	1	He	4.684739	30.2	16429.167
Mg	24	1	He	5.231139	38.9	4652.463
Al	27	1	He	6.604306	27.8	2041.817
Si	28	2	H2	2.917446	1.0	24391.917
K	39	1	He	1.863640	48.4	75159.987
Ca	43	1	He	16.136154	11.1	57.617
Ti	47	1	He	0.176535	44.1	49.000
V	51	1	He	0.014759	655.1	-416.887
Cr	52	1	He	0.603763	12.3	8185.647
Mn	55	1	He	0.178605	51.9	1510.760
Fe	56	1	He	4.616453	36.4	51490.570
Co	59	1	He	0.113894	71.6	1716.143
Ni	60	1	He	0.245788	30.7	1113.380
Cu	63	1	He	0.209358	39.2	2330.210
Zn	66	1	He	0.928268	11.0	2305.523
As	75	1	He	0.099619	73.2	389.337
Se	78	2	H2	0.021796	19.5	51.667
Sr	88	1	He	0.129771	55.5	1725.143
Mo	95	1	He	0.118560	67.1	826.703
Pd	105	1	He	0.008787	91.7	311.670
Ag	107	1	He	0.216457	36.9	4665.893
Cd	111	1	He	0.102984	74.9	428.190
Sn	118	1	He	0.123204	64.3	1315.087
Sb	121	1	He	0.117703	57.5	1828.497
Ba	138	1	He	0.145235	48.6	4974.417
Pt	195	1	He	0.027002	62.3	536.017
Hg	202	1	He	0.005348	29.3	136.000
Tl	205	1	He	0.126152	65.9	6560.497
Pb	208	1	He	0.099113	79.2	8753.100
Bi	209	1	He	0.100924	80.1	7579.537
Th	232	1	He	0.113244	68.1	8443.657
U	238	1	He	0.097015	81.3	6969.373

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.73083775	602080.417
Sc	45	2	H2	99.13669808	4882353.833
Ge	72	1	He	98.35239731	498168.367
Ge	72	2	H2	98.39013220	1678483.833
In	115	1	He	100.7437781	5957339.693
Tb	159	1	He	100.8543829	13920381.873
Ir	193	1	He	99.64688645	7207025.933

Sample Name 10606366002\_B69981Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 062SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:48:14  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.284313	3.0	203.500
Be	9	2	H2	0.040428	21.0	30.833
B	11	2	H2	66.143274	0.9	31150.643
Na	23	1	He	154.203860	0.8	179299.083
Mg	24	1	He	222.073257	0.7	137251.387
Al	27	1	He	10.321540	1.0	3167.343
Si	28	2	H2	85.391738	1.6	315815.117
K	39	1	He	57.958796	0.8	122565.653
Ca	43	1	He	1803.209601	0.8	4451.320
Ti	47	1	He	0.242654	4.8	67.333
V	51	1	He	-0.027132		-748.873
Cr	52	1	He	0.123204	3.4	3774.500
Mn	55	1	He	16.786437	0.4	112684.953
Fe	56	1	He	19.826007	1.2	186344.783
Co	59	1	He	0.026679	4.6	447.343
Ni	60	1	He	0.056736	7.4	422.010
Cu	63	1	He	0.122995	3.5	1476.077
Zn	66	1	He	1.078598	3.6	2693.590
As	75	1	He	0.027126	18.8	245.500
Se	78	2	H2	0.041929	20.6	71.000
Sr	88	1	He	10.427738	0.4	129918.360
Mo	95	1	He	1.356230	0.8	9322.390
Pd	105	1	He	0.004171	32.7	265.000
Ag	107	1	He	0.037756	1.6	898.373
Cd	111	1	He	0.013712	7.7	68.323
Sn	118	1	He	0.024394	2.7	316.677
Sb	121	1	He	0.026663	21.9	460.010
Ba	138	1	He	0.870896	2.0	29332.887
Pt	195	1	He	0.003193	26.7	211.333
Hg	202	1	He	0.004904	36.4	133.000
Tl	205	1	He	0.017706	4.0	1215.070
Pb	208	1	He	0.063764	5.9	6437.293
Bi	209	1	He	0.008181	23.0	2233.563
Th	232	1	He	0.015206	17.6	1548.440
U	238	1	He	0.059084	2.7	4382.443

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.33943018	605829.710
Sc	45	2	H2	99.30201208	4890495.333
Ge	72	1	He	99.90613876	506038.280
Ge	72	2	H2	99.32616637	1694452.083
In	115	1	He	100.9365070	5968736.443
Tb	159	1	He	100.8907079	13925395.623
Ir	193	1	He	98.26734768	7107249.893

Sample Name 10606366007\_B69981Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 063SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:51:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.236853	0.8	1112.373
Be	9	2	H2	0.034041	18.6	27.333
B	11	2	H2	84.275929	0.6	38367.150
Na	23	1	He	2213.185796	0.4	2394455.590
Mg	24	1	He	1347.818191	0.1	816527.047
Al	27	1	He	26.888822	0.0	8044.860
Si	28	2	H2	1248.915518	0.9	4360472.333
K	39	1	He	178.790863	1.2	221236.533
Ca	43	1	He	5217.050960	0.9	12704.007
Ti	47	1	He	0.638502	9.9	173.667
V	51	1	He	0.300811	14.1	1803.590
Cr	52	1	He	0.303185	2.7	5385.673
Mn	55	1	He	3.932053	1.0	26352.353
Fe	56	1	He	33.470227	0.5	303729.477
Co	59	1	He	0.028890	0.6	475.343
Ni	60	1	He	0.137937	7.6	719.353
Cu	63	1	He	0.819936	0.4	8584.553
Zn	66	1	He	0.919734	6.2	2298.857
As	75	1	He	0.178547	4.2	553.510
Se	78	2	H2	0.049105	5.9	76.333
Sr	88	1	He	21.987602	0.7	270991.910
Mo	95	1	He	0.651224	2.7	4455.377
Pd	105	1	He	0.009391	44.7	316.677
Ag	107	1	He	0.018298	9.7	483.343
Cd	111	1	He	0.007494	33.6	42.863
Sn	118	1	He	0.019146	2.9	261.670
Sb	121	1	He	0.029544	6.7	500.013
Ba	138	1	He	1.383647	1.4	46228.900
Pt	195	1	He	0.002764	65.8	204.667
Hg	202	1	He	0.003931	17.5	126.000
Tl	205	1	He	0.012372	9.2	946.710
Pb	208	1	He	0.023788	7.8	3758.563
Bi	209	1	He	0.006312	13.0	2123.557
Th	232	1	He	0.010320	22.7	1205.070
U	238	1	He	0.035466	7.5	2806.993

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.26949889	599238.293
Sc	45	2	H2	97.81701189	4817361.000
Ge	72	1	He	98.88756875	500879.083
Ge	72	2	H2	97.56739031	1664448.290
In	115	1	He	100.2734881	5929529.763
Tb	159	1	He	100.4740037	13867880.207
Ir	193	1	He	98.08128529	7093792.810

Sample Name 10606366008\_B69981Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 064SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:55:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.297095	7.6	207.500
Be	9	2	H2	0.031312	4.9	26.167
B	11	2	H2	67.401712	0.6	31384.120
Na	23	1	He	157.344987	0.9	181921.910
Mg	24	1	He	219.744817	1.2	135233.507
Al	27	1	He	11.839993	2.8	3606.787
Si	28	2	H2	89.149640	0.9	325904.750
K	39	1	He	58.940572	0.9	122846.250
Ca	43	1	He	1782.868472	1.1	4382.023
Ti	47	1	He	0.219243	14.6	60.667
V	51	1	He	-0.034807		-805.317
Cr	52	1	He	0.230504	6.4	4749.457
Mn	55	1	He	16.821991	0.6	112428.980
Fe	56	1	He	23.181065	0.9	215087.563
Co	59	1	He	0.026012	12.2	432.010
Ni	60	1	He	0.074878	16.4	484.010
Cu	63	1	He	0.125568	4.3	1484.083
Zn	66	1	He	0.961561	3.0	2390.203
As	75	1	He	0.024376	3.7	236.833
Se	78	2	H2	0.038030	23.7	66.667
Sr	88	1	He	10.551805	0.6	129838.007
Mo	95	1	He	1.397665	1.9	9526.533
Pd	105	1	He	-0.000185		218.333
Ag	107	1	He	0.012310	19.8	356.677
Cd	111	1	He	0.009452	38.2	50.620
Sn	118	1	He	0.027790	8.6	348.343
Sb	121	1	He	0.021369	20.8	376.677
Ba	138	1	He	0.880729	1.7	29416.300
Pt	195	1	He	0.002137	65.2	197.333
Hg	202	1	He	0.001719	110.9	112.000
Tl	205	1	He	0.007648	7.1	718.363
Pb	208	1	He	0.065807	2.3	6585.643
Bi	209	1	He	0.004530	10.5	2026.860
Th	232	1	He	0.008633	18.1	1091.723
U	238	1	He	0.054503	7.2	4079.010

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.90894221	603177.647
Sc	45	2	H2	98.33572944	4842907.167
Ge	72	1	He	98.67226098	499788.520
Ge	72	2	H2	98.33359958	1677519.417
In	115	1	He	100.1005174	5919301.387
Tb	159	1	He	101.1003355	13954329.373
Ir	193	1	He	98.29559381	7109292.813

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 065\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 17:59:14  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.773147	0.5	38255.223
Be	9	2	H2	80.653743	1.0	38035.747
B	11	2	H2	79.055704	1.2	35715.350
Na	23	1	He	992.808108	0.2	1085026.155
Mg	24	1	He	989.332260	0.6	602356.965
Al	27	1	He	1002.468213	0.4	298584.360
Si	28	2	H2	498.966505	0.4	1729204.957
K	39	1	He	1002.754700	0.3	907098.850
Ca	43	1	He	1009.514517	1.4	2483.785
Ti	47	1	He	80.204145	0.9	21788.070
V	51	1	He	80.322569	0.3	625366.820
Cr	52	1	He	81.637261	0.0	755333.810
Mn	55	1	He	80.227475	0.1	533794.035
Fe	56	1	He	498.138173	0.1	4389233.500
Co	59	1	He	82.459881	0.8	1216027.440
Ni	60	1	He	83.152096	0.0	309513.580
Cu	63	1	He	83.120332	0.1	851161.065
Zn	66	1	He	81.445967	0.3	188962.090
As	75	1	He	79.794428	0.4	164074.985
Se	78	2	H2	80.676271	0.5	73191.530
Sr	88	1	He	80.953649	0.1	999006.000
Mo	95	1	He	76.834450	0.6	524184.395
Pd	105	1	He	82.025355	0.7	839521.745
Ag	107	1	He	41.660887	2.5	876646.355
Cd	111	1	He	79.851026	0.2	321579.130
Sn	118	1	He	76.910824	0.4	776585.845
Sb	121	1	He	77.987417	0.7	1171187.560
Ba	138	1	He	77.860292	0.9	2596768.945
Pt	195	1	He	81.840435	1.8	1111818.375
Hg	202	1	He	3.890408	1.6	25878.055
Tl	205	1	He	42.369959	1.5	2081050.045
Pb	208	1	He	82.658517	1.3	5455784.060
Bi	209	1	He	79.571804	0.5	4545173.060
Th	232	1	He	76.311737	1.6	5330280.550
U	238	1	He	78.635265	1.5	5253563.670

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.69083893	601834.000
Sc	45	2	H2	96.63040874	4758922.333
Ge	72	1	He	99.04906323	501697.075
Ge	72	2	H2	96.26974610	1642311.163
In	115	1	He	100.3548656	5934341.910
Tb	159	1	He	99.99392772	13801617.920
Ir	193	1	He	98.82611378	7147663.015

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 066\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:02:54  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.079231	14.5	103.500
Be	9	2	H2	0.050573	9.0	34.833
B	11	2	H2	-1.145405		2154.820
Na	23	1	He	0.400911	73.5	11579.573
Mg	24	1	He	-0.451345		1175.060
Al	27	1	He	0.706465	32.4	278.333
Si	28	2	H2	-0.009112		13728.380
K	39	1	He	-0.214351		72116.867
Ca	43	1	He	-0.758657		16.033
Ti	47	1	He	0.042629	30.6	12.333
V	51	1	He	0.070126	127.1	12.357
Cr	52	1	He	0.034724	25.6	2882.290
Mn	55	1	He	0.026244	51.7	486.677
Fe	56	1	He	0.365562	27.7	13821.223
Co	59	1	He	0.042867	36.9	669.353
Ni	60	1	He	0.033193	46.8	324.673
Cu	63	1	He	0.040765	28.9	610.017
Zn	66	1	He	0.048396	64.2	277.337
As	75	1	He	0.032979	33.2	250.667
Se	78	2	H2	0.018810	36.9	48.000
Sr	88	1	He	0.043956	34.2	666.690
Mo	95	1	He	0.041291	23.3	294.003
Pd	105	1	He	0.024573	22.2	466.677
Ag	107	1	He	0.154940	23.0	3315.430
Cd	111	1	He	0.040242	23.7	172.613
Sn	118	1	He	0.041212	42.3	478.347
Sb	121	1	He	0.031853	29.5	528.350
Ba	138	1	He	0.034122	34.0	1240.067
Pt	195	1	He	0.037704	33.8	672.020
Hg	202	1	He	0.031073	4.3	303.000
Tl	205	1	He	0.065292	20.6	3510.500
Pb	208	1	He	0.042049	25.1	4905.377
Bi	209	1	He	0.036258	31.0	3850.650
Th	232	1	He	0.048614	19.4	3890.623
U	238	1	He	0.034904	29.1	2790.333

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.98160014	591304.067
Sc	45	2	H2	96.74805989	4764716.500
Ge	72	1	He	97.22275758	492446.587
Ge	72	2	H2	96.58086630	1647618.710
In	115	1	He	99.16740649	5864123.203
Tb	159	1	He	99.26055131	13700393.963
Ir	193	1	He	98.97187813	7158205.517



Sample Name 4305856\_B69911Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 067SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:06:34  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.065506	21.8	97.500
Be	9	2	H2	0.048569	25.3	34.000
B	11	2	H2	-1.700355		1928.960
Na	23	1	He	8.232889	6.0	20006.800
Mg	24	1	He	2.210986	2.6	2778.613
Al	27	1	He	4.793208	5.8	1482.077
Si	28	2	H2	0.487947	9.7	15494.070
K	39	1	He	3.087454	29.2	75211.960
Ca	43	1	He	5.288630	27.3	30.717
Ti	47	1	He	0.087099	20.1	24.333
V	51	1	He	0.018404	352.6	-385.263
Cr	52	1	He	0.991916	1.2	11615.283
Mn	55	1	He	0.126313	5.5	1146.717
Fe	56	1	He	7.519512	0.7	76006.247
Co	59	1	He	0.022968	5.2	380.677
Ni	60	1	He	0.035782	40.5	333.340
Cu	63	1	He	0.068242	10.1	884.027
Zn	66	1	He	0.679632	8.3	1709.440
As	75	1	He	0.024919	20.4	233.833
Se	78	2	H2	0.014403	60.2	44.000
Sr	88	1	He	0.037584	22.6	588.353
Mo	95	1	He	0.039772	3.8	284.667
Pd	105	1	He	0.000784	375.0	226.670
Ag	107	1	He	0.040896	3.4	950.040
Cd	111	1	He	0.025499	3.4	114.283
Sn	118	1	He	0.033190	44.1	400.027
Sb	121	1	He	0.025360	2.7	433.343
Ba	138	1	He	0.027776	2.9	1035.050
Pt	195	1	He	0.007155	41.2	262.667
Hg	202	1	He	0.014725	9.3	196.333
Tl	205	1	He	0.030403	3.6	1821.810
Pb	208	1	He	0.020479	10.9	3511.863
Bi	209	1	He	0.015905	12.3	2707.000
Th	232	1	He	0.014302	10.5	1503.440
U	238	1	He	0.003726	16.2	713.363

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.49493990	594466.547
Sc	45	2	H2	97.07820733	4780975.833
Ge	72	1	He	96.97260969	491179.553
Ge	72	2	H2	96.66812241	1649107.253
In	115	1	He	99.38556935	5877023.953
Tb	159	1	He	99.66669279	13756451.463
Ir	193	1	He	99.53343547	7198820.517

Sample Name 4305857\_B69911Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 068SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:10:14  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	110.686786	0.4	50281.153
Be	9	2	H2	108.053050	0.2	50105.187
B	11	2	H2	105.694031	0.1	46083.580
Na	23	1	He	2166.239880	1.6	2288059.030
Mg	24	1	He	2146.582742	1.5	1268603.210
Al	27	1	He	2141.418344	0.6	619862.540
Si	28	2	H2	541.267828	0.2	1843383.417
K	39	1	He	2169.367923	0.9	1824271.900
Ca	43	1	He	2218.957393	0.9	5285.043
Ti	47	1	He	107.390498	0.2	28357.863
V	51	1	He	107.974284	0.7	817304.337
Cr	52	1	He	110.939858	0.9	996784.210
Mn	55	1	He	109.365725	1.0	707161.293
Fe	56	1	He	2179.083611	1.3	18626981.333
Co	59	1	He	111.895381	1.3	1609007.083
Ni	60	1	He	112.761408	0.7	409225.793
Cu	63	1	He	111.696981	0.2	1115324.293
Zn	66	1	He	110.969168	0.6	250999.547
As	75	1	He	107.678182	0.6	215843.177
Se	78	2	H2	107.990818	0.8	97316.597
Sr	88	1	He	109.269509	0.8	1314879.720
Mo	95	1	He	105.775650	0.5	702558.460
Pd	105	1	He	22.071380	1.2	220089.580
Ag	107	1	He	54.730162	1.8	1121318.787
Cd	111	1	He	108.152611	0.4	424038.760
Sn	118	1	He	103.842617	0.2	1020745.430
Sb	121	1	He	106.290212	0.4	1554052.633
Ba	138	1	He	106.667171	0.7	3463579.740
Pt	195	1	He	21.823307	0.8	294436.333
Hg	202	1	He	0.012386	27.9	180.000
Tl	205	1	He	112.931749	1.1	5505633.043
Pb	208	1	He	110.796277	0.1	7259058.797
Bi	209	1	He	108.834951	1.1	6105082.407
Th	232	1	He	109.030438	1.1	7479981.763
U	238	1	He	107.043550	1.8	7023450.937

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.95661092	584989.520
Sc	45	2	H2	95.01768269	4679497.667
Ge	72	1	He	96.59061673	489244.707
Ge	72	2	H2	95.63588773	1631497.873
In	115	1	He	97.70067943	5777390.390
Tb	159	1	He	99.25944643	13700241.463
Ir	193	1	He	97.07012665	7020660.103

Sample Name 10606019001\_B69911Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 069SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:13:53  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.606506	3.2	808.853
Be	9	2	H2	0.211592	3.7	110.833
B	11	2	H2	5.041101	0.8	4746.580
Na	23	1	He	3186.629456	0.3	3297984.847
Mg	24	1	He	1743.469781	0.1	1011416.287
Al	27	1	He	1733.972620	0.2	492560.987
Si	28	2	H2	11450.72733	0.1	39425432.000
K	39	1	He	943.098079	0.6	817942.880
Ca	43	1	He	6932.917149	0.9	16167.080
Ti	47	1	He	51.267825	2.4	13284.933
V	51	1	He	2.922219	3.0	21210.597
Cr	52	1	He	1.228131	1.0	13294.043
Mn	55	1	He	29.378130	1.2	186638.163
Fe	56	1	He	1278.595566	0.0	10729897.333
Co	59	1	He	0.566545	0.9	8048.230
Ni	60	1	He	1.239802	1.5	4614.747
Cu	63	1	He	2.364688	1.0	23378.077
Zn	66	1	He	10.900134	0.7	24358.373
As	75	1	He	1.671195	1.4	3466.587
Se	78	2	H2	0.209972	5.5	219.667
Sr	88	1	He	48.725936	0.4	575869.067
Mo	95	1	He	0.142862	1.3	964.707
Pd	105	1	He	0.033451	13.6	548.347
Ag	107	1	He	0.254542	12.4	5311.057
Cd	111	1	He	0.080960	5.7	329.827
Sn	118	1	He	0.125425	8.7	1300.073
Sb	121	1	He	0.130840	1.4	1968.487
Ba	138	1	He	20.924083	0.5	679599.027
Pt	195	1	He	0.014811	3.2	364.677
Hg	202	1	He	0.160062	6.3	1151.720
Tl	205	1	He	0.066363	11.9	3568.850
Pb	208	1	He	0.572950	1.7	39691.223
Bi	209	1	He	0.036089	6.0	3790.600
Th	232	1	He	0.194780	3.1	13919.323
U	238	1	He	0.096404	2.5	6813.500

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.18162797	574054.563
Sc	45	2	H2	96.73567040	4764106.333
Ge	72	1	He	94.85054139	480430.987
Ge	72	2	H2	95.59142563	1630739.373
In	115	1	He	97.71400632	5778178.457
Tb	159	1	He	99.28166472	13703308.133
Ir	193	1	He	97.57561527	7057219.897

Sample Name 4308646\_B69911Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 070SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:17:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.372069	2.1	236.833
Be	9	2	H2	0.066162	21.0	41.833
B	11	2	H2	-0.613990		2358.187
Na	23	1	He	644.350492	0.2	684642.800
Mg	24	1	He	353.598807	0.3	209036.713
Al	27	1	He	353.578343	0.8	101857.063
Si	28	2	H2	2346.326828	0.7	8024256.667
K	39	1	He	187.986892	1.1	222192.450
Ca	43	1	He	1425.138094	1.1	3382.257
Ti	47	1	He	10.474926	0.7	2751.940
V	51	1	He	0.566838	5.2	3755.810
Cr	52	1	He	0.262190	4.9	4864.157
Mn	55	1	He	5.965721	0.7	38660.187
Fe	56	1	He	267.030256	5.1	2279417.167
Co	59	1	He	0.123894	2.1	1819.453
Ni	60	1	He	0.271567	2.5	1180.050
Cu	63	1	He	0.484268	1.9	5002.877
Zn	66	1	He	2.614159	2.6	6038.610
As	75	1	He	0.335151	1.8	849.030
Se	78	2	H2	0.048974	14.9	75.000
Sr	88	1	He	9.675875	1.7	115840.653
Mo	95	1	He	0.035920	7.6	258.000
Pd	105	1	He	0.008918	64.9	308.340
Ag	107	1	He	0.060410	12.9	1353.413
Cd	111	1	He	0.021458	15.7	97.953
Sn	118	1	He	0.039492	11.5	461.677
Sb	121	1	He	0.033069	11.5	546.680
Ba	138	1	He	4.103979	0.7	135350.373
Pt	195	1	He	0.003482	36.6	214.000
Hg	202	1	He	0.036372	8.2	341.340
Tl	205	1	He	0.017517	14.6	1198.397
Pb	208	1	He	0.125885	3.8	10508.303
Bi	209	1	He	0.012276	39.4	2473.620
Th	232	1	He	0.044894	9.1	3620.567
U	238	1	He	0.022090	5.3	1930.160

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.44187086	581818.413
Sc	45	2	H2	95.95895621	4725854.167
Ge	72	1	He	96.00464640	486276.687
Ge	72	2	H2	95.97466099	1637277.167
In	115	1	He	99.15092967	5863148.870
Tb	159	1	He	100.2803788	13841155.207
Ir	193	1	He	98.55313840	7127919.893

Sample Name 4305858\_B69911Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 071SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:21:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	106.514407	0.7	49707.757
Be	9	2	H2	102.768780	0.3	48955.110
B	11	2	H2	105.833407	0.6	47398.957
Na	23	1	He	5119.088392	0.5	5358638.047
Mg	24	1	He	3746.335346	0.6	2199314.393
Al	27	1	He	4169.602960	0.7	1199397.960
Si	28	2	H2	12346.36411	1.2	42890900.000
K	39	1	He	2985.261054	0.6	2468121.473
Ca	43	1	He	8769.728572	0.8	20706.100
Ti	47	1	He	169.033721	0.9	44357.220
V	51	1	He	107.415385	0.7	808029.390
Cr	52	1	He	108.180516	0.2	966040.667
Mn	55	1	He	134.403801	0.1	863615.957
Fe	56	1	He	3439.278213	0.6	29211364.000
Co	59	1	He	108.379113	0.7	1552055.663
Ni	60	1	He	109.381322	0.2	395327.323
Cu	63	1	He	109.952381	0.1	1093355.540
Zn	66	1	He	116.115146	0.5	261545.260
As	75	1	He	105.226658	0.3	210061.870
Se	78	2	H2	104.823451	0.5	95272.763
Sr	88	1	He	153.903576	0.2	1844291.277
Mo	95	1	He	101.917638	0.9	677481.500
Pd	105	1	He	20.910235	1.2	208689.033
Ag	107	1	He	52.756610	0.2	1081848.630
Cd	111	1	He	104.151921	1.0	408678.410
Sn	118	1	He	101.176054	0.7	995348.397
Sb	121	1	He	101.704431	0.4	1488250.240
Ba	138	1	He	124.395369	1.1	4042443.480
Pt	195	1	He	20.787693	0.1	284915.623
Hg	202	1	He	0.171999	3.6	1249.397
Tl	205	1	He	108.405383	0.7	5368628.253
Pb	208	1	He	106.569456	0.5	7092466.043
Bi	209	1	He	103.686853	0.4	5909841.787
Th	232	1	He	103.410915	0.5	7208341.767
U	238	1	He	103.526882	0.7	6902282.817

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.36690627	581356.587
Sc	45	2	H2	97.60932115	4807132.500
Ge	72	1	He	96.18930741	487212.020
Ge	72	2	H2	96.45986315	1645554.460
In	115	1	He	97.78399144	5782316.927
Tb	159	1	He	100.8287202	13916839.790
Ir	193	1	He	98.62159037	7132870.727

Sample Name 4305859\_B69911Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 072SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:24:52  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	103.414541	0.7	48309.113
Be	9	2	H2	100.375214	0.9	47859.967
B	11	2	H2	104.190335	0.5	46749.630
Na	23	1	He	4869.697919	0.2	5131398.780
Mg	24	1	He	3580.615904	0.3	2115790.337
Al	27	1	He	4032.489760	0.4	1167526.917
Si	28	2	H2	11819.13310	1.4	41097913.333
K	39	1	He	2881.927900	0.1	2400689.180
Ca	43	1	He	8311.281106	0.7	19752.667
Ti	47	1	He	173.668342	1.1	45872.560
V	51	1	He	104.139971	0.4	788478.967
Cr	52	1	He	104.739554	0.7	941476.210
Mn	55	1	He	129.119455	0.3	835076.520
Fe	56	1	He	3325.268820	0.5	28427726.000
Co	59	1	He	105.449371	0.6	1511349.040
Ni	60	1	He	106.922784	0.5	386762.747
Cu	63	1	He	107.650905	0.7	1071345.960
Zn	66	1	He	114.550691	0.3	258239.373
As	75	1	He	102.655319	0.5	205102.797
Se	78	2	H2	101.547223	0.2	91804.480
Sr	88	1	He	148.069599	0.6	1775873.673
Mo	95	1	He	99.279969	1.4	657420.397
Pd	105	1	He	20.383702	1.2	202665.077
Ag	107	1	He	51.907324	1.2	1060303.813
Cd	111	1	He	102.140371	0.9	399269.560
Sn	118	1	He	99.228345	1.1	972484.830
Sb	121	1	He	99.033739	1.2	1443599.043
Ba	138	1	He	121.605854	1.3	3936712.443
Pt	195	1	He	20.309703	0.5	276081.197
Hg	202	1	He	0.273052	2.7	1908.803
Tl	205	1	He	105.810948	0.4	5197310.547
Pb	208	1	He	104.210074	0.4	6878648.757
Bi	209	1	He	102.866689	1.1	5758240.747
Th	232	1	He	103.787093	1.3	7105050.933
U	238	1	He	102.073736	1.3	6683658.237

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.98192285	585145.457
Sc	45	2	H2	97.70497510	4811843.333
Ge	72	1	He	96.26931973	487617.293
Ge	72	2	H2	95.94202516	1636720.417
In	115	1	He	97.41623020	5760569.890
Tb	159	1	He	100.0015969	13802676.460
Ir	193	1	He	96.86447693	7005786.353

Sample Name 10606019002\_B69911Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 073SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:28:31  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.220378	2.0	169.833
Be	9	2	H2	0.168988	1.5	91.333
B	11	2	H2	-1.686921		1940.790
Na	23	1	He	62.016055	0.6	77159.783
Mg	24	1	He	5.066151	5.8	4474.043
Al	27	1	He	5.122037	3.9	1572.420
Si	28	2	H2	29.720442	0.5	116836.637
K	39	1	He	7.389970	18.2	78438.793
Ca	43	1	He	19.441969	13.2	64.617
Ti	47	1	He	0.149818	4.9	41.000
V	51	1	He	0.022997	15.7	-347.847
Cr	52	1	He	0.523669	0.2	7322.517
Mn	55	1	He	0.390220	2.8	2868.957
Fe	56	1	He	4.196834	1.9	46976.390
Co	59	1	He	0.094779	2.5	1424.740
Ni	60	1	He	0.368330	7.7	1552.087
Cu	63	1	He	1.506020	1.1	15375.457
Zn	66	1	He	8.129343	1.5	18714.723
As	75	1	He	0.072309	6.8	330.833
Se	78	2	H2	0.061849	15.4	88.000
Sr	88	1	He	0.142402	9.7	1865.137
Mo	95	1	He	0.086981	7.5	605.350
Pd	105	1	He	0.003998	74.7	260.007
Ag	107	1	He	0.186946	20.1	4007.293
Cd	111	1	He	0.095490	3.0	394.567
Sn	118	1	He	0.125196	4.0	1323.410
Sb	121	1	He	0.070419	8.2	1106.720
Ba	138	1	He	0.178720	2.8	6038.040
Pt	195	1	He	0.015657	7.7	379.343
Hg	202	1	He	0.006917	39.7	145.333
Tl	205	1	He	0.100681	6.7	5287.767
Pb	208	1	He	1.038523	2.0	70790.257
Bi	209	1	He	0.079947	7.4	6374.993
Th	232	1	He	0.066926	11.4	5196.090
U	238	1	He	0.039787	4.1	3133.747

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.12195015	592168.707
Sc	45	2	H2	97.38826626	4796245.833
Ge	72	1	He	97.48618974	493780.907
Ge	72	2	H2	97.50997841	1663468.873
In	115	1	He	99.66463028	5893525.823
Tb	159	1	He	100.1325699	13820753.957
Ir	193	1	He	99.32434068	7183697.600

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 074\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:32:11  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.833053	0.6	38359.990
Be	9	2	H2	80.682054	0.5	38126.643
B	11	2	H2	77.912228	1.4	35308.407
Na	23	1	He	978.850611	0.6	1072402.823
Mg	24	1	He	978.259283	0.5	596983.703
Al	27	1	He	985.331721	1.1	294146.530
Si	28	2	H2	499.805490	0.5	1735571.040
K	39	1	He	982.713711	0.7	892502.073
Ca	43	1	He	1002.305317	2.4	2471.583
Ti	47	1	He	78.430336	1.1	21356.113
V	51	1	He	78.363096	1.2	611517.157
Cr	52	1	He	80.991618	1.1	751098.230
Mn	55	1	He	79.488093	0.7	530088.500
Fe	56	1	He	493.745338	0.5	4360660.000
Co	59	1	He	80.961407	0.8	1202098.917
Ni	60	1	He	81.880177	1.4	306866.510
Cu	63	1	He	82.249899	1.2	848016.147
Zn	66	1	He	80.424870	1.5	187868.017
As	75	1	He	78.514060	0.7	162553.740
Se	78	2	H2	81.377868	0.2	74296.477
Sr	88	1	He	79.520632	1.1	988047.697
Mo	95	1	He	76.184150	0.9	521820.073
Pd	105	1	He	81.223632	1.1	834630.870
Ag	107	1	He	41.571329	1.5	878356.133
Cd	111	1	He	79.242633	0.9	320392.960
Sn	118	1	He	75.862775	0.9	769012.880
Sb	121	1	He	76.934643	1.1	1159995.793
Ba	138	1	He	77.131188	1.2	2582728.607
Pt	195	1	He	81.252906	0.4	1110109.333
Hg	202	1	He	3.832538	0.9	25638.593
Tl	205	1	He	41.749765	0.6	2062201.847
Pb	208	1	He	81.757245	0.8	5426781.867
Bi	209	1	He	79.120983	1.6	4546170.350
Th	232	1	He	76.016880	0.6	5341593.253
U	238	1	He	78.167801	0.5	5253932.217

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.91630405	603223.000
Sc	45	2	H2	96.82348658	4768431.167
Ge	72	1	He	99.73232181	505157.873
Ge	72	2	H2	96.88307844	1652774.290
In	115	1	He	100.7546230	5957980.993
Tb	159	1	He	100.5537087	13878881.457
Ir	193	1	He	99.41591151	7190320.520



Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 075\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:35:51  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.112289	14.0	118.500
Be	9	2	H2	0.066728	17.4	42.333
B	11	2	H2	-1.643776		1941.293
Na	23	1	He	0.131809	228.1	11155.903
Mg	24	1	He	-0.820190		943.373
Al	27	1	He	0.725011	70.8	280.337
Si	28	2	H2	0.319503	248.0	14835.577
K	39	1	He	-1.408365		70271.140
Ca	43	1	He	-0.670380		16.050
Ti	47	1	He	0.049533	86.3	14.000
V	51	1	He	0.074310	98.0	46.300
Cr	52	1	He	0.045595	94.4	2944.310
Mn	55	1	He	0.035946	110.7	543.350
Fe	56	1	He	0.409531	64.8	14027.573
Co	59	1	He	0.054407	76.2	829.370
Ni	60	1	He	0.044016	79.7	361.337
Cu	63	1	He	0.045840	93.3	655.357
Zn	66	1	He	0.050487	73.9	280.003
As	75	1	He	0.038883	107.5	260.500
Se	78	2	H2	0.001750	151.2	32.667
Sr	88	1	He	0.046085	79.0	686.697
Mo	95	1	He	0.053614	79.5	374.673
Pd	105	1	He	0.033109	42.4	550.017
Ag	107	1	He	0.187223	26.5	3968.957
Cd	111	1	He	0.047526	79.1	200.270
Sn	118	1	He	0.054608	78.4	608.357
Sb	121	1	He	0.047227	75.5	751.700
Ba	138	1	He	0.042129	80.2	1495.127
Pt	195	1	He	0.043001	85.6	744.697
Hg	202	1	He	0.028554	23.4	286.333
Tl	205	1	He	0.073433	34.1	3910.657
Pb	208	1	He	0.045232	83.6	5117.150
Bi	209	1	He	0.041557	84.3	4154.197
Th	232	1	He	0.059064	68.5	4622.777
U	238	1	He	0.040219	90.4	3148.927

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.80689926	584067.207
Sc	45	2	H2	96.51115349	4753049.167
Ge	72	1	He	96.51189099	488845.950
Ge	72	2	H2	97.09887506	1656455.667
In	115	1	He	98.71541673	5837395.433
Tb	159	1	He	99.21355788	13693907.717
Ir	193	1	He	98.89169394	7152406.143

Sample Name 4308596\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 076SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:39:30  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.133689	6.1	128.000
Be	9	2	H2	0.069445	19.3	43.500
B	11	2	H2	-2.234278		1689.930
Na	23	1	He	5.200762	6.4	16183.850
Mg	24	1	He	4.008278	7.7	3722.163
Al	27	1	He	3.013581	4.7	925.030
Si	28	2	H2	1.317994	49.9	18209.910
K	39	1	He	1.878680	74.0	71632.587
Ca	43	1	He	10.236136	15.2	41.167
Ti	47	1	He	0.035064	58.4	10.000
V	51	1	He	0.024921	76.6	-323.080
Cr	52	1	He	0.115072	7.6	3503.097
Mn	55	1	He	0.067111	4.7	731.353
Fe	56	1	He	0.844994	11.8	17427.977
Co	59	1	He	0.019312	43.7	319.337
Ni	60	1	He	0.029102	33.9	301.337
Cu	63	1	He	0.042049	15.0	606.013
Zn	66	1	He	1.111108	2.9	2622.910
As	75	1	He	0.027068	15.3	232.333
Se	78	2	H2	0.015290	49.3	44.667
Sr	88	1	He	0.038255	12.4	581.683
Mo	95	1	He	0.026697	23.9	192.667
Pd	105	1	He	0.019473	55.6	408.347
Ag	107	1	He	0.078904	17.6	1710.120
Cd	111	1	He	0.011751	47.7	58.300
Sn	118	1	He	0.851755	1.6	8432.590
Sb	121	1	He	0.015542	50.5	281.673
Ba	138	1	He	0.042536	13.5	1495.097
Pt	195	1	He	0.009491	69.5	290.670
Hg	202	1	He	0.015508	10.6	199.333
Tl	205	1	He	0.026033	26.3	1590.117
Pb	208	1	He	0.024645	17.3	3745.230
Bi	209	1	He	0.015975	54.5	2680.323
Th	232	1	He	0.026345	21.4	2325.233
U	238	1	He	0.012426	52.5	1283.417

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.13302933	573755.167
Sc	45	2	H2	96.24539014	4739960.667
Ge	72	1	He	94.61294136	479227.510
Ge	72	2	H2	96.38206161	1644227.207
In	115	1	He	97.63064595	5773249.060
Tb	159	1	He	98.64494833	13615425.633
Ir	193	1	He	98.58923671	7130530.727

Sample Name 4308597\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 077SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:43:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	50.390175	0.8	22795.087
Be	9	2	H2	49.152459	0.9	22667.750
B	11	2	H2	46.791588	2.1	21718.730
Na	23	1	He	906.408956	2.0	950860.477
Mg	24	1	He	896.013078	2.0	523244.433
Al	27	1	He	890.925241	1.7	254459.110
Si	28	2	H2	242.950166	1.3	830079.437
K	39	1	He	909.487267	1.8	795493.373
Ca	43	1	He	936.734574	1.7	2211.050
Ti	47	1	He	44.135676	3.3	11498.827
V	51	1	He	44.773808	2.4	334050.747
Cr	52	1	He	46.412897	2.4	412874.333
Mn	55	1	He	45.653838	2.8	291420.447
Fe	56	1	He	903.998184	2.6	7629915.833
Co	59	1	He	46.919971	2.1	665601.000
Ni	60	1	He	47.330411	2.6	169561.740
Cu	63	1	He	46.930754	2.3	462375.237
Zn	66	1	He	46.213008	2.4	103211.997
As	75	1	He	44.994115	2.3	89077.190
Se	78	2	H2	49.153834	0.6	44299.690
Sr	88	1	He	46.044279	2.0	546612.870
Mo	95	1	He	44.175465	2.8	291238.000
Pd	105	1	He	9.436716	3.1	93515.680
Ag	107	1	He	23.996992	3.6	488083.497
Cd	111	1	He	44.963915	3.0	174988.677
Sn	118	1	He	44.227268	2.7	431546.153
Sb	121	1	He	44.156830	2.2	640825.093
Ba	138	1	He	44.641817	3.2	1438877.533
Pt	195	1	He	9.148533	2.5	122953.023
Hg	202	1	He	3.904114	3.3	25661.667
Tl	205	1	He	47.926205	2.6	2325867.467
Pb	208	1	He	46.296421	2.6	3020337.353
Bi	209	1	He	45.023283	2.6	2532417.200
Th	232	1	He	44.409973	3.1	3054129.953
U	238	1	He	44.441516	2.6	2923163.187

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.66969637	577061.357
Sc	45	2	H2	94.47224363	4652635.500
Ge	72	1	He	95.27062742	482558.780
Ge	72	2	H2	95.61553247	1631150.623
In	115	1	He	96.96238453	5733732.373
Tb	159	1	He	98.77732511	13633696.880
Ir	193	1	He	97.26876526	7035026.770

Sample Name 10606046001\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 078SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:46:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.235495	2.9	1939.793
Be	9	2	H2	0.182962	5.1	93.333
B	11	2	H2	-1.639208		1867.780
Na	23	1	He	176.671483	2.2	192502.407
Mg	24	1	He	1949.457904	1.7	1127444.723
Al	27	1	He	3473.608422	1.6	983786.480
Si	28	2	H2	471.931059	2.4	1570577.833
K	39	1	He	501.935145	1.7	466800.307
Ca	43	1	He	1790.422649	1.5	4176.080
Ti	47	1	He	542.636402	2.5	140187.963
V	51	1	He	23.114698	2.1	170791.637
Cr	52	1	He	6.148597	1.4	56404.513
Mn	55	1	He	117.966611	2.4	746285.397
Fe	56	1	He	8200.868856	2.5	68559624.000
Co	59	1	He	3.341103	1.5	46626.153
Ni	60	1	He	6.968899	0.4	24704.207
Cu	63	1	He	5.786540	1.3	56201.907
Zn	66	1	He	24.275610	1.0	53361.497
As	75	1	He	1.602146	1.7	3288.377
Se	78	2	H2	0.084755	4.2	104.333
Sr	88	1	He	13.496176	2.2	157573.737
Mo	95	1	He	0.145394	2.8	970.707
Pd	105	1	He	0.021887	17.0	428.343
Ag	107	1	He	0.191754	28.7	3982.293
Cd	111	1	He	0.066975	9.2	272.160
Sn	118	1	He	1.101947	2.3	10782.570
Sb	121	1	He	0.045682	8.4	715.027
Ba	138	1	He	40.369587	2.5	1296840.733
Pt	195	1	He	0.002582	32.2	200.667
Hg	202	1	He	0.046468	13.7	406.343
Tl	205	1	He	0.057381	3.6	3145.407
Pb	208	1	He	2.740380	2.5	182537.667
Bi	209	1	He	0.033155	27.4	3647.250
Th	232	1	He	1.319199	2.0	92049.637
U	238	1	He	0.221334	3.7	15150.563

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.92251460	572458.270
Sc	45	2	H2	92.75874674	4568248.000
Ge	72	1	He	93.64519064	474325.720
Ge	72	2	H2	93.31661194	1591932.250
In	115	1	He	96.66096259	5715908.217
Tb	159	1	He	99.75084748	13768066.877
Ir	193	1	He	98.19878915	7102291.353

Sample Name 4310748\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 079SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:50:29  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.000289	0.4	36474.193
Be	9	2	H2	75.563977	1.2	34296.527
B	11	2	H2	75.258685	1.0	32844.037
Na	23	1	He	1954.565330	2.3	1985081.893
Mg	24	1	He	3789.105676	2.6	2151019.757
Al	27	1	He	5347.997846	2.7	1487592.540
Si	28	2	H2	1446.864420	1.1	4800533.000
K	39	1	He	2275.490625	2.7	1835564.970
Ca	43	1	He	3638.239791	2.4	8316.653
Ti	47	1	He	643.350641	3.2	163253.367
V	51	1	He	95.682671	2.6	695963.030
Cr	52	1	He	79.918616	2.8	690754.603
Mn	55	1	He	196.450636	3.1	1220502.790
Fe	56	1	He	9428.318062	3.5	77418632.000
Co	59	1	He	77.166068	3.0	1067368.290
Ni	60	1	He	82.405451	3.2	287712.757
Cu	63	1	He	80.690149	3.1	775040.023
Zn	66	1	He	99.179336	2.9	215799.290
As	75	1	He	73.735773	2.7	142227.117
Se	78	2	H2	76.934216	0.4	67902.847
Sr	88	1	He	87.026661	3.1	1007338.007
Mo	95	1	He	73.391845	2.9	470653.157
Pd	105	1	He	75.285521	2.3	724318.423
Ag	107	1	He	15.137653	4.7	299535.287
Cd	111	1	He	72.984627	2.9	276286.163
Sn	118	1	He	74.515647	3.1	707221.423
Sb	121	1	He	72.489585	2.7	1023316.363
Ba	138	1	He	115.155887	2.6	3610193.070
Pt	195	1	He	73.788784	2.6	987484.083
Hg	202	1	He	0.022598	9.0	245.333
Tl	205	1	He	37.155344	2.3	1797657.110
Pb	208	1	He	76.639959	2.7	4983077.973
Bi	209	1	He	71.443369	2.5	3997349.313
Th	232	1	He	11.307304	4.6	774137.383
U	238	1	He	71.826997	3.6	4700772.533

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.25731536	562199.647
Sc	45	2	H2	92.99660410	4579962.167
Ge	72	1	He	92.91131381	470608.533
Ge	72	2	H2	93.65557102	1597714.713
In	115	1	He	94.32107184	5577542.113
Tb	159	1	He	98.47732116	13592288.967
Ir	193	1	He	96.79470279	7000739.893

Sample Name 4310749\_B69966Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 080SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:54:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.827729	4.3	439.510
Be	9	2	H2	0.097728	16.5	55.833
B	11	2	H2	-2.104172		1715.097
Na	23	1	He	34.658598	2.1	45775.000
Mg	24	1	He	373.293352	1.0	213869.423
Al	27	1	He	667.537229	0.7	186360.250
Si	28	2	H2	87.720831	1.9	308899.010
K	39	1	He	96.005666	1.7	143747.410
Ca	43	1	He	347.765356	3.8	812.790
Ti	47	1	He	102.483836	1.2	26094.383
V	51	1	He	4.521248	1.2	32522.717
Cr	52	1	He	1.208161	0.5	12889.670
Mn	55	1	He	22.483789	0.8	140429.397
Fe	56	1	He	1570.592208	0.4	12948240.667
Co	59	1	He	0.636829	1.1	8907.403
Ni	60	1	He	1.335546	3.9	4883.500
Cu	63	1	He	1.110681	1.1	10922.117
Zn	66	1	He	5.010800	0.7	11120.277
As	75	1	He	0.307202	4.2	772.520
Se	78	2	H2	0.023868	8.4	51.667
Sr	88	1	He	2.526676	1.2	29545.553
Mo	95	1	He	0.039892	2.0	276.000
Pd	105	1	He	0.021086	18.7	418.343
Ag	107	1	He	0.143737	33.9	2983.700
Cd	111	1	He	0.023738	15.4	103.617
Sn	118	1	He	0.213657	2.9	2131.847
Sb	121	1	He	0.014651	21.0	265.003
Ba	138	1	He	7.567668	1.6	241837.273
Pt	195	1	He	0.004346	75.4	220.667
Hg	202	1	He	0.014824	12.4	194.333
Tl	205	1	He	0.071120	24.3	3748.913
Pb	208	1	He	0.540186	0.8	37160.220
Bi	209	1	He	0.012928	46.9	2496.957
Th	232	1	He	0.246867	3.0	17623.663
U	238	1	He	0.046944	2.7	3573.863

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.55903768	564058.437
Sc	45	2	H2	94.65184565	4661480.667
Ge	72	1	He	93.45569001	473365.873
Ge	72	2	H2	94.87555027	1618526.917
In	115	1	He	96.10335731	5682935.023
Tb	159	1	He	98.25936174	13562205.213
Ir	193	1	He	98.23821150	7105142.600

Sample Name 4308598\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 081SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 18:57:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	54.796588	1.7	24546.480
Be	9	2	H2	48.881462	0.8	22328.747
B	11	2	H2	46.722911	0.8	21484.553
Na	23	1	He	1156.055058	2.0	1181052.770
Mg	24	1	He	3157.723788	2.3	1796762.367
Al	27	1	He	5174.027016	1.6	1442429.500
Si	28	2	H2	672.796843	0.6	2253383.167
K	39	1	He	1440.872577	1.5	1190178.937
Ca	43	1	He	3045.715285	2.0	6980.380
Ti	47	1	He	621.657105	1.9	158100.417
V	51	1	He	72.488086	2.6	528282.780
Cr	52	1	He	55.616701	2.8	482495.637
Mn	55	1	He	175.779961	2.3	1094516.087
Fe	56	1	He	9768.589507	1.9	80390930.667
Co	59	1	He	52.065077	1.4	723493.187
Ni	60	1	He	56.953286	1.9	199823.133
Cu	63	1	He	55.223066	1.5	532933.643
Zn	66	1	He	73.823624	1.6	161407.530
As	75	1	He	48.557016	1.3	94151.660
Se	78	2	H2	49.092549	0.2	43756.377
Sr	88	1	He	63.206665	1.8	735028.217
Mo	95	1	He	46.058423	2.1	297218.363
Pd	105	1	He	9.841974	2.1	95463.527
Ag	107	1	He	25.114804	3.0	499969.197
Cd	111	1	He	47.261133	1.5	180029.480
Sn	118	1	He	49.513917	2.3	472891.257
Sb	121	1	He	36.873705	1.8	523801.683
Ba	138	1	He	93.663186	1.7	2954737.247
Pt	195	1	He	9.605134	2.2	128015.110
Hg	202	1	He	4.148071	2.2	27031.687
Tl	205	1	He	49.563405	1.6	2385405.223
Pb	208	1	He	70.229502	1.7	4542548.603
Bi	209	1	He	47.445853	1.6	2659961.627
Th	232	1	He	48.758656	1.6	3342158.390
U	238	1	He	46.971497	1.8	3079574.330

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.46431311	563474.877
Sc	45	2	H2	93.57927257	4608657.833
Ge	72	1	He	93.33713645	472765.383
Ge	72	2	H2	94.55843418	1613117.083
In	115	1	He	94.92264870	5613115.503
Tb	159	1	He	97.97302685	13522683.967
Ir	193	1	He	96.96279959	7012897.603

Sample Name 4308599\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 082SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:01:28  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	49.668200	1.2	22168.327
Be	9	2	H2	44.573027	1.7	20281.213
B	11	2	H2	42.476662	2.3	19684.780
Na	23	1	He	1062.011638	1.5	1083824.203
Mg	24	1	He	2825.423394	1.4	1604868.307
Al	27	1	He	4645.394775	1.2	1292631.293
Si	28	2	H2	601.603669	1.6	2008284.793
K	39	1	He	1299.621809	1.4	1078228.863
Ca	43	1	He	2827.760058	1.3	6470.113
Ti	47	1	He	581.796300	1.9	147686.170
V	51	1	He	64.826879	2.5	471529.013
Cr	52	1	He	49.748104	2.0	431054.647
Mn	55	1	He	155.891832	1.6	968927.440
Fe	56	1	He	8681.211798	1.6	71310805.333
Co	59	1	He	46.169681	1.8	641314.377
Ni	60	1	He	51.027598	2.1	178976.757
Cu	63	1	He	49.101345	2.1	473667.480
Zn	66	1	He	65.545531	2.4	143264.030
As	75	1	He	43.458501	2.7	84245.303
Se	78	2	H2	44.768827	0.9	39624.197
Sr	88	1	He	57.649985	2.7	670109.573
Mo	95	1	He	41.056788	1.5	264822.083
Pd	105	1	He	8.735842	1.9	84719.230
Ag	107	1	He	22.502999	2.2	447782.283
Cd	111	1	He	42.167442	1.4	160555.160
Sn	118	1	He	42.061290	1.5	401532.660
Sb	121	1	He	31.410660	2.0	446005.630
Ba	138	1	He	80.831055	2.1	2548802.200
Pt	195	1	He	8.484626	2.5	113537.663
Hg	202	1	He	3.735922	2.6	24450.057
Tl	205	1	He	44.613514	3.0	2155552.623
Pb	208	1	He	46.026969	2.8	2989426.593
Bi	209	1	He	42.367593	2.5	2375729.237
Th	232	1	He	43.749644	1.7	2999118.913
U	238	1	He	41.989699	1.4	2753280.583

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.28749370	562385.563
Sc	45	2	H2	93.21122904	4590532.167
Ge	72	1	He	93.30399552	472597.520
Ge	72	2	H2	93.89627033	1601820.917
In	115	1	He	94.87575481	5610342.500
Tb	159	1	He	98.36153863	13576308.133
Ir	193	1	He	96.97413144	7013717.187



Sample Name 10606394001\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 083SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:05:08  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.576546	2.0	2112.317
Be	9	2	H2	0.276169	6.6	136.833
B	11	2	H2	-1.457548		1960.460
Na	23	1	He	210.478708	2.0	223279.663
Mg	24	1	He	2140.102601	1.9	1215773.497
Al	27	1	He	5287.802542	1.6	1471219.333
Si	28	2	H2	653.660342	2.7	2192650.083
K	39	1	He	639.268541	2.1	565228.273
Ca	43	1	He	2493.740605	0.9	5707.553
Ti	47	1	He	699.609522	2.1	177567.720
V	51	1	He	30.278654	1.6	219955.303
Cr	52	1	He	8.067502	2.7	71937.283
Mn	55	1	He	198.937409	2.5	1236169.787
Fe	56	1	He	11101.61469	1.9	91178168.000
Co	59	1	He	5.085642	0.6	69866.910
Ni	60	1	He	8.661581	1.9	30189.820
Cu	63	1	He	9.210172	0.9	87976.807
Zn	66	1	He	60.205740	0.9	130087.947
As	75	1	He	1.855541	2.6	3722.813
Se	78	2	H2	0.256339	11.5	256.667
Sr	88	1	He	21.146495	1.1	243051.273
Mo	95	1	He	0.195554	10.2	1279.393
Pd	105	1	He	0.044652	27.8	641.690
Ag	107	1	He	0.233358	26.3	4750.883
Cd	111	1	He	0.293139	4.2	1130.483
Sn	118	1	He	1.039011	6.5	10001.990
Sb	121	1	He	0.099529	11.1	1470.093
Ba	138	1	He	70.646110	2.3	2232600.280
Pt	195	1	He	0.011393	26.2	312.003
Hg	202	1	He	0.071404	5.8	556.677
Tl	205	1	He	0.150063	6.7	7493.840
Pb	208	1	He	4.899851	2.0	316475.463
Bi	209	1	He	0.091584	8.5	6921.960
Th	232	1	He	1.480774	1.9	102630.847
U	238	1	He	0.736222	4.2	49037.560

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.28776370	562387.227
Sc	45	2	H2	93.71135727	4615162.833
Ge	72	1	He	92.21754975	467094.523
Ge	72	2	H2	93.78774040	1599969.453
In	115	1	He	95.09573796	5623350.890
Tb	159	1	He	97.22538516	13419491.050
Ir	193	1	He	97.58723803	7058060.520

Sample Name 10606394002\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 084SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:08:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.504632	8.1	290.500
Be	9	2	H2	0.079281	11.8	46.833
B	11	2	H2	-2.252692		1637.090
Na	23	1	He	220.405883	2.8	232618.603
Mg	24	1	He	149.895107	3.2	86177.427
Al	27	1	He	1277.339389	3.2	354389.033
Si	28	2	H2	313.010446	1.4	1056413.210
K	39	1	He	54.961180	4.9	111097.620
Ca	43	1	He	1060.756144	3.3	2430.070
Ti	47	1	He	195.778832	3.6	49546.000
V	51	1	He	9.456574	2.7	68150.670
Cr	52	1	He	1.399000	5.5	14452.463
Mn	55	1	He	20.407083	2.7	126706.970
Fe	56	1	He	2253.268401	3.4	18459805.333
Co	59	1	He	0.715683	2.3	9928.727
Ni	60	1	He	1.281421	1.1	4656.760
Cu	63	1	He	3.789036	3.0	36516.360
Zn	66	1	He	4.602316	1.6	10148.233
As	75	1	He	0.121400	7.0	409.177
Se	78	2	H2	0.044689	29.5	69.667
Sr	88	1	He	9.160308	2.8	105970.220
Mo	95	1	He	0.053234	6.6	362.677
Pd	105	1	He	0.015919	45.3	366.677
Ag	107	1	He	0.047277	13.9	1045.050
Cd	111	1	He	0.010674	7.9	53.270
Sn	118	1	He	0.738744	1.2	7201.920
Sb	121	1	He	0.009904	23.2	196.667
Ba	138	1	He	3.909144	3.5	124894.900
Pt	195	1	He	0.000940	99.3	176.667
Hg	202	1	He	0.025367	9.9	264.000
Tl	205	1	He	0.011655	22.4	895.040
Pb	208	1	He	0.213776	4.4	16077.147
Bi	209	1	He	0.006021	58.4	2110.220
Th	232	1	He	0.114380	3.7	8442.793
U	238	1	He	0.059626	1.4	4420.790

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.99725836	560597.540
Sc	45	2	H2	93.66489242	4612874.500
Ge	72	1	He	92.73029403	469691.643
Ge	72	2	H2	94.06461276	1604692.750
In	115	1	He	96.01957591	5677980.730
Tb	159	1	He	98.74147403	13628748.550
Ir	193	1	He	98.32008660	7111064.270

Sample Name 10606394003\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 085SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:12:27  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.524759	2.0	299.500
Be	9	2	H2	0.068659	20.9	42.000
B	11	2	H2	-2.697178		1456.903
Na	23	1	He	296.453590	2.6	311456.043
Mg	24	1	He	184.244319	2.6	106369.413
Al	27	1	He	1567.943441	2.0	438125.873
Si	28	2	H2	261.548571	3.0	885051.750
K	39	1	He	52.553220	5.5	110023.120
Ca	43	1	He	1336.925313	2.2	3080.500
Ti	47	1	He	258.178513	2.8	65805.893
V	51	1	He	11.872387	2.7	86301.480
Cr	52	1	He	1.724982	2.8	17374.973
Mn	55	1	He	26.015019	3.4	162602.583
Fe	56	1	He	2722.825703	2.6	22464644.000
Co	59	1	He	0.913577	2.6	12787.627
Ni	60	1	He	1.712204	4.9	6219.340
Cu	63	1	He	4.491894	3.4	43683.343
Zn	66	1	He	5.269764	3.5	11713.407
As	75	1	He	0.116972	0.8	404.677
Se	78	2	H2	0.047128	16.4	72.000
Sr	88	1	He	11.592838	2.8	135405.823
Mo	95	1	He	0.062031	2.0	428.010
Pd	105	1	He	0.016364	5.6	378.343
Ag	107	1	He	0.024825	17.1	605.017
Cd	111	1	He	0.008033	5.8	43.920
Sn	118	1	He	0.875058	4.2	8676.073
Sb	121	1	He	0.010228	20.5	205.000
Ba	138	1	He	3.691962	2.2	120102.420
Pt	195	1	He	0.001042	172.6	179.333
Hg	202	1	He	0.017616	21.2	215.000
Tl	205	1	He	0.010473	8.3	845.033
Pb	208	1	He	0.191905	2.3	14763.207
Bi	209	1	He	0.011374	38.3	2440.277
Th	232	1	He	0.123759	3.0	9189.993
U	238	1	He	0.038532	4.5	3050.383

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.66159158	564690.230
Sc	45	2	H2	93.67466256	4613355.667
Ge	72	1	He	93.66985664	474450.657
Ge	72	2	H2	94.24963469	1607849.127
In	115	1	He	97.78450874	5782347.517
Tb	159	1	He	99.52074956	13736307.713
Ir	193	1	He	99.36981790	7186986.770

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 086\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:16:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.286625	0.8	37190.590
Be	9	2	H2	79.842055	1.1	36821.940
B	11	2	H2	76.606485	0.1	33924.913
Na	23	1	He	995.578065	0.3	1044214.050
Mg	24	1	He	996.966510	0.5	582531.110
Al	27	1	He	995.398514	0.4	284533.093
Si	28	2	H2	493.748823	0.4	1673447.920
K	39	1	He	1000.876291	0.7	869076.370
Ca	43	1	He	1030.832126	1.0	2433.567
Ti	47	1	He	80.049347	1.0	20870.423
V	51	1	He	80.274812	1.1	599851.687
Cr	52	1	He	82.517276	1.0	732697.060
Mn	55	1	He	81.125674	0.5	518017.607
Fe	56	1	He	508.810352	0.7	4302444.000
Co	59	1	He	82.235086	0.5	1183528.583
Ni	60	1	He	82.922262	0.2	301242.947
Cu	63	1	He	83.366129	0.7	833168.543
Zn	66	1	He	81.488207	0.3	184515.640
As	75	1	He	79.414616	0.6	159369.713
Se	78	2	H2	79.616456	0.8	71168.853
Sr	88	1	He	80.758337	0.1	972651.810
Mo	95	1	He	76.846156	0.6	516953.717
Pd	105	1	He	82.192146	1.3	829497.540
Ag	107	1	He	41.804831	1.0	867510.977
Cd	111	1	He	79.843652	0.7	317058.390
Sn	118	1	He	76.857288	0.3	765180.877
Sb	121	1	He	77.679813	0.8	1150304.543
Ba	138	1	He	78.204080	0.8	2571928.817
Pt	195	1	He	81.967295	0.8	1114066.250
Hg	202	1	He	3.869855	0.9	25753.143
Tl	205	1	He	42.143077	0.9	2070803.043
Pb	208	1	He	82.420432	1.6	5442115.303
Bi	209	1	He	79.735326	2.0	4565623.887
Th	232	1	He	77.019460	1.1	5393261.587
U	238	1	He	78.370534	1.1	5249042.837

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.75629511	577594.857
Sc	45	2	H2	94.49301913	4653658.667
Ge	72	1	He	96.66879099	489640.670
Ge	72	2	H2	94.85292823	1618140.997
In	115	1	He	98.95309462	5851450.177
Tb	159	1	He	100.0337047	13807108.127
Ir	193	1	He	99.07274138	7165500.517

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 087\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:19:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.042939	40.0	85.333
Be	9	2	H2	0.068012	11.2	42.333
B	11	2	H2	-2.306510		1640.590
Na	23	1	He	-0.937727		9856.623
Mg	24	1	He	-0.993377		826.693
Al	27	1	He	0.709023	30.8	271.000
Si	28	2	H2	-0.150111		13021.427
K	39	1	He	-1.433138		69013.673
Ca	43	1	He	-1.286681		14.333
Ti	47	1	He	0.041427	70.4	11.667
V	51	1	He	0.055592	134.0	-94.093
Cr	52	1	He	0.026639	82.1	2726.263
Mn	55	1	He	0.019023	76.2	426.677
Fe	56	1	He	0.666599	22.2	15936.727
Co	59	1	He	0.039324	32.5	604.680
Ni	60	1	He	0.023436	74.7	282.670
Cu	63	1	He	0.036014	52.3	550.013
Zn	66	1	He	0.043604	81.2	260.670
As	75	1	He	0.020002	75.0	219.500
Se	78	2	H2	0.003423	182.7	33.667
Sr	88	1	He	0.032664	29.8	518.347
Mo	95	1	He	0.043125	29.9	303.337
Pd	105	1	He	0.022276	7.2	438.343
Ag	107	1	He	0.180015	23.9	3798.893
Cd	111	1	He	0.036687	49.4	156.947
Sn	118	1	He	0.037807	25.6	440.013
Sb	121	1	He	0.029934	49.2	495.013
Ba	138	1	He	0.032838	39.4	1186.733
Pt	195	1	He	0.029649	39.7	562.013
Hg	202	1	He	0.036978	9.0	340.673
Tl	205	1	He	0.067595	23.9	3612.207
Pb	208	1	He	0.033921	28.3	4360.303
Bi	209	1	He	0.032571	32.4	3650.570
Th	232	1	He	0.041150	32.0	3377.160
U	238	1	He	0.030894	43.4	2528.620

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.13840651	573788.293
Sc	45	2	H2	95.13734405	4685390.833
Ge	72	1	He	95.02219518	481300.437
Ge	72	2	H2	95.55576372	1630131.000
In	115	1	He	98.03242927	5797007.943
Tb	159	1	He	98.95288867	13657928.963
Ir	193	1	He	99.24986562	7178311.143

Sample Name 10606394004\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 088SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:23:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.660680	4.6	358.667
Be	9	2	H2	0.080059	14.9	47.000
B	11	2	H2	-1.889568		1776.440
Na	23	1	He	200.580426	0.8	213433.290
Mg	24	1	He	222.968283	1.1	127992.110
Al	27	1	He	1454.102555	1.3	404913.457
Si	28	2	H2	415.180208	3.4	1390587.790
K	39	1	He	81.650858	0.4	132251.647
Ca	43	1	He	1075.450596	0.9	2472.713
Ti	47	1	He	213.600887	2.2	54257.480
V	51	1	He	12.101221	1.5	87671.173
Cr	52	1	He	2.104810	0.8	20589.107
Mn	55	1	He	25.346681	1.4	157888.557
Fe	56	1	He	2728.536358	1.6	22434232.667
Co	59	1	He	0.871618	1.9	12047.653
Ni	60	1	He	1.500539	6.6	5405.017
Cu	63	1	He	4.450583	2.9	42733.857
Zn	66	1	He	4.993829	4.3	10967.507
As	75	1	He	0.216458	3.1	590.343
Se	78	2	H2	0.073746	6.5	95.000
Sr	88	1	He	9.033065	1.9	104196.877
Mo	95	1	He	0.065254	2.0	442.010
Pd	105	1	He	0.018536	13.7	393.343
Ag	107	1	He	0.078591	21.5	1678.453
Cd	111	1	He	0.011679	11.2	57.253
Sn	118	1	He	0.770196	2.3	7517.093
Sb	121	1	He	0.009544	6.1	191.667
Ba	138	1	He	6.096058	1.8	194935.833
Pt	195	1	He	0.002650	74.7	199.333
Hg	202	1	He	0.024578	8.1	258.667
Tl	205	1	He	0.022462	9.9	1418.427
Pb	208	1	He	0.315354	3.4	22674.157
Bi	209	1	He	0.009539	26.4	2293.567
Th	232	1	He	0.129716	5.3	9433.470
U	238	1	He	0.134284	1.7	9310.063

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.33781349	562695.563
Sc	45	2	H2	93.24612336	4592250.667
Ge	72	1	He	92.48490021	468448.690
Ge	72	2	H2	93.65757108	1597748.833
In	115	1	He	96.15963831	5686263.120
Tb	159	1	He	98.65389903	13616661.050
Ir	193	1	He	97.55680562	7055859.477

Sample Name 10606395001\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 089SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:27:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.729211	3.8	390.173
Be	9	2	H2	0.072863	16.5	43.833
B	11	2	H2	-1.867111		1790.110
Na	23	1	He	229.177307	2.1	240923.007
Mg	24	1	He	262.991705	2.4	149831.537
Al	27	1	He	1708.632724	2.5	472962.820
Si	28	2	H2	425.778935	2.4	1429570.750
K	39	1	He	96.040147	1.7	142604.587
Ca	43	1	He	1232.549564	1.5	2814.870
Ti	47	1	He	244.173718	2.1	61656.307
V	51	1	He	14.254357	2.3	102747.477
Cr	52	1	He	2.441096	2.2	23350.537
Mn	55	1	He	28.708105	2.7	177727.187
Fe	56	1	He	3218.931673	2.9	26306999.333
Co	59	1	He	1.001176	1.1	13855.920
Ni	60	1	He	1.781609	2.6	6392.753
Cu	63	1	He	5.263291	1.7	50591.470
Zn	66	1	He	6.116818	0.9	13421.553
As	75	1	He	0.267714	2.6	689.853
Se	78	2	H2	0.101967	14.6	120.333
Sr	88	1	He	10.559926	1.9	122000.987
Mo	95	1	He	0.070203	11.6	474.677
Pd	105	1	He	0.019715	27.2	405.010
Ag	107	1	He	0.028457	19.3	668.357
Cd	111	1	He	0.012887	9.0	61.917
Sn	118	1	He	0.746796	2.3	7295.287
Sb	121	1	He	0.012301	21.6	231.670
Ba	138	1	He	7.569597	1.9	242138.680
Pt	195	1	He	0.002532	84.9	198.000
Hg	202	1	He	0.018149	8.4	216.667
Tl	205	1	He	0.013481	9.5	983.380
Pb	208	1	He	0.374107	3.4	26506.977
Bi	209	1	He	0.010438	14.1	2366.917
Th	232	1	He	0.137622	4.2	10075.660
U	238	1	He	0.157689	2.4	10958.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.81402452	559468.710
Sc	45	2	H2	93.48891486	4604207.833
Ge	72	1	He	92.64762565	469272.917
Ge	72	2	H2	93.96198884	1602942.040
In	115	1	He	96.20561428	5688981.843
Tb	159	1	He	98.67583052	13619688.133
Ir	193	1	He	98.49827654	7123951.973

Sample Name 10606395002\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 090SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:30:45  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.852209	3.8	441.010
Be	9	2	H2	0.083033	23.2	48.000
B	11	2	H2	-2.483838		1526.410
Na	23	1	He	240.031813	1.8	250354.657
Mg	24	1	He	369.317372	2.8	208625.590
Al	27	1	He	1933.899608	2.3	532180.420
Si	28	2	H2	477.557306	0.9	1587176.790
K	39	1	He	130.864181	1.5	168503.727
Ca	43	1	He	1328.760982	3.7	3015.440
Ti	47	1	He	291.142337	2.7	73084.663
V	51	1	He	15.277046	2.9	109511.177
Cr	52	1	He	3.021332	1.5	28156.317
Mn	55	1	He	30.251728	2.1	186173.543
Fe	56	1	He	3458.487319	2.4	28099460.000
Co	59	1	He	1.587873	3.2	21824.297
Ni	60	1	He	2.113857	5.3	7505.277
Cu	63	1	He	4.798308	2.9	45878.703
Zn	66	1	He	7.890195	3.2	17168.823
As	75	1	He	0.316266	3.8	778.687
Se	78	2	H2	0.101642	16.5	118.333
Sr	88	1	He	11.171228	3.2	128326.410
Mo	95	1	He	0.067973	6.8	459.343
Pd	105	1	He	0.017042	17.1	378.343
Ag	107	1	He	0.018975	6.1	476.677
Cd	111	1	He	0.017311	6.5	78.913
Sn	118	1	He	0.817336	6.0	7965.660
Sb	121	1	He	0.012918	11.8	240.000
Ba	138	1	He	9.362169	2.8	299031.577
Pt	195	1	He	0.001440	75.9	183.333
Hg	202	1	He	0.016663	20.5	207.333
Tl	205	1	He	0.019466	7.0	1275.073
Pb	208	1	He	0.572303	4.0	39458.037
Bi	209	1	He	0.010621	17.7	2390.253
Th	232	1	He	0.200638	3.2	14534.887
U	238	1	He	0.178932	4.0	12437.693

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.26729406	556100.523
Sc	45	2	H2	92.63726808	4562265.333
Ge	72	1	He	92.13520252	466677.423
Ge	72	2	H2	92.69427464	1581315.503
In	115	1	He	96.06836512	5680865.810
Tb	159	1	He	98.78541848	13634813.963
Ir	193	1	He	98.98407412	7159087.600



Sample Name 10606395003\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 091SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:34:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.733884	1.8	1720.433
Be	9	2	H2	0.151437	14.1	79.167
B	11	2	H2	-2.769872		1415.570
Na	23	1	He	170.435065	2.0	180996.293
Mg	24	1	He	1972.461942	1.7	1109491.157
Al	27	1	He	3469.991738	1.8	955865.607
Si	28	2	H2	452.241932	2.3	1508011.457
K	39	1	He	403.966024	2.7	378649.007
Ca	43	1	He	1950.394879	3.0	4423.180
Ti	47	1	He	627.936719	2.2	157797.197
V	51	1	He	28.454664	1.8	204626.623
Cr	52	1	He	6.613046	2.8	58819.377
Mn	55	1	He	177.287125	2.0	1090843.543
Fe	56	1	He	8958.452114	2.1	72849925.333
Co	59	1	He	3.772262	1.9	52057.757
Ni	60	1	He	7.438097	2.1	26062.590
Cu	63	1	He	5.486428	2.9	52698.947
Zn	66	1	He	40.917945	2.8	88823.093
As	75	1	He	1.938958	3.6	3898.527
Se	78	2	H2	0.092104	1.0	110.000
Sr	88	1	He	15.259465	2.2	176147.057
Mo	95	1	He	0.153821	5.0	1010.040
Pd	105	1	He	0.022027	8.2	423.343
Ag	107	1	He	0.022061	15.7	535.017
Cd	111	1	He	0.089247	3.8	352.823
Sn	118	1	He	0.886363	4.5	8551.027
Sb	121	1	He	0.042326	2.7	656.687
Ba	138	1	He	37.799011	3.1	1195745.947
Pt	195	1	He	0.001112	65.8	178.667
Hg	202	1	He	0.015351	6.8	198.000
Tl	205	1	He	0.062489	1.5	3352.110
Pb	208	1	He	2.782698	2.3	182940.970
Bi	209	1	He	0.026445	12.2	3287.150
Th	232	1	He	1.279552	2.7	89832.853
U	238	1	He	0.361696	2.9	24604.977

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.38654222	556835.163
Sc	45	2	H2	92.89798898	4575105.500
Ge	72	1	He	92.61418003	469103.510
Ge	72	2	H2	92.63262268	1580263.753
In	115	1	He	95.20604529	5629873.757
Tb	159	1	He	98.48349154	13593140.630
Ir	193	1	He	98.80782273	7146340.103

Sample Name 10606395004\_B69966Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 092SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:38:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.464286	2.5	2497.873
Be	9	2	H2	0.261329	5.5	129.500
B	11	2	H2	-2.084991		1697.930
Na	23	1	He	280.820485	4.4	292249.867
Mg	24	1	He	2871.138068	4.1	1618960.967
Al	27	1	He	5869.656195	3.7	1621451.833
Si	28	2	H2	583.219529	2.8	1948670.583
K	39	1	He	837.644025	2.8	714242.123
Ca	43	1	He	3538.057563	4.0	8032.447
Ti	47	1	He	701.276637	3.5	176732.620
V	51	1	He	33.591965	5.2	242300.593
Cr	52	1	He	9.343881	4.4	82343.737
Mn	55	1	He	307.475304	4.1	1896874.623
Fe	56	1	He	11511.93982	4.0	93874829.333
Co	59	1	He	5.679526	3.6	77751.827
Ni	60	1	He	11.061190	3.0	38367.620
Cu	63	1	He	13.720863	3.1	130521.487
Zn	66	1	He	43.628424	3.5	93985.997
As	75	1	He	2.450409	3.6	4843.647
Se	78	2	H2	0.151676	7.7	163.333
Sr	88	1	He	27.560272	3.6	315635.343
Mo	95	1	He	0.160299	7.6	1052.047
Pd	105	1	He	0.029282	9.0	493.347
Ag	107	1	He	0.039007	4.1	871.703
Cd	111	1	He	0.203633	8.0	789.503
Sn	118	1	He	1.248591	3.6	12015.250
Sb	121	1	He	0.075009	11.3	1121.727
Ba	138	1	He	94.972056	3.7	3002949.643
Pt	195	1	He	0.002204	86.4	191.333
Hg	202	1	He	0.028259	6.1	280.000
Tl	205	1	He	0.076015	5.6	3972.293
Pb	208	1	He	6.406972	4.9	414882.357
Bi	209	1	He	0.051458	14.4	4667.583
Th	232	1	He	1.622110	4.7	112610.927
U	238	1	He	0.510074	4.3	34176.703

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.64843887	558448.603
Sc	45	2	H2	93.26433027	4593147.333
Ge	72	1	He	91.91199435	465546.843
Ge	72	2	H2	93.38928652	1593172.040
In	115	1	He	95.13424192	5625627.767
Tb	159	1	He	97.65984588	13479457.300
Ir	193	1	He	97.81240595	7074345.937

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 093\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:41:44  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	81.073279	0.4	36792.797
Be	9	2	H2	79.140920	1.0	36647.520
B	11	2	H2	75.325068	1.1	33536.060
Na	23	1	He	989.252702	0.5	1041140.063
Mg	24	1	He	986.755128	0.7	578521.630
Al	27	1	He	984.789765	0.6	282449.540
Si	28	2	H2	489.849407	0.3	1667112.287
K	39	1	He	985.272591	0.3	859508.893
Ca	43	1	He	1010.216276	1.3	2393.250
Ti	47	1	He	80.136442	0.6	20964.210
V	51	1	He	79.442947	0.6	595603.160
Cr	52	1	He	81.544702	0.4	726530.330
Mn	55	1	He	80.255134	0.4	514186.917
Fe	56	1	He	508.165137	1.2	4311647.333
Co	59	1	He	82.095424	0.9	1174959.917
Ni	60	1	He	82.999172	0.7	299841.720
Cu	63	1	He	83.252043	1.0	827398.413
Zn	66	1	He	80.924549	0.5	182222.420
As	75	1	He	79.336959	0.8	158329.047
Se	78	2	H2	79.812915	0.8	71639.133
Sr	88	1	He	80.478048	1.1	963878.373
Mo	95	1	He	76.978733	0.5	513862.853
Pd	105	1	He	81.960634	0.4	820805.277
Ag	107	1	He	42.127184	1.9	867454.153
Cd	111	1	He	79.846716	0.0	314630.107
Sn	118	1	He	77.406031	0.4	764710.483
Sb	121	1	He	77.986904	0.2	1145972.587
Ba	138	1	He	78.083405	0.7	2548220.640
Pt	195	1	He	82.267833	0.2	1112849.250
Hg	202	1	He	3.885456	0.4	25734.770
Tl	205	1	He	42.303237	0.6	2068835.333
Pb	208	1	He	82.904300	0.2	5448461.720
Bi	209	1	He	79.637944	0.9	4531532.223
Th	232	1	He	77.573223	0.8	5397868.667
U	238	1	He	78.769063	1.2	5242475.860

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.07033063	579529.503
Sc	45	2	H2	94.87980089	4672707.167
Ge	72	1	He	96.13356163	486929.660
Ge	72	2	H2	95.24767977	1624875.250
In	115	1	He	98.19056475	5806359.060
Tb	159	1	He	99.55672142	13741272.713
Ir	193	1	He	98.44813877	7120325.727

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 094\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:45:24  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.052475	27.1	89.667
Be	9	2	H2	0.052121	15.4	35.000
B	11	2	H2	-2.594017		1523.243
Na	23	1	He	-1.637075		9214.567
Mg	24	1	He	-1.296170		656.690
Al	27	1	He	0.499491	2.1	213.333
Si	28	2	H2	-0.129037		13101.273
K	39	1	He	-5.446943		66410.263
Ca	43	1	He	-1.017754		15.083
Ti	47	1	He	0.060098	34.0	16.667
V	51	1	He	0.032262	42.5	-270.293
Cr	52	1	He	-0.000242		2511.553
Mn	55	1	He	0.006983	52.8	353.343
Fe	56	1	He	0.811410	6.7	17299.587
Co	59	1	He	0.011014	17.8	205.333
Ni	60	1	He	-0.002504		191.333
Cu	63	1	He	0.009654	8.5	292.667
Zn	66	1	He	0.011369	46.4	190.000
As	75	1	He	-0.009348		162.667
Se	78	2	H2	-0.007031		24.333
Sr	88	1	He	0.006934	20.9	215.000
Mo	95	1	He	0.014403	24.3	112.667
Pd	105	1	He	0.014130	29.2	360.010
Ag	107	1	He	0.163138	26.0	3482.143
Cd	111	1	He	0.007929	13.0	43.977
Sn	118	1	He	0.011160	24.0	178.333
Sb	121	1	He	0.005812	25.7	141.667
Ba	138	1	He	0.010138	19.0	450.013
Pt	195	1	He	0.004545	71.0	228.000
Hg	202	1	He	0.030674	9.6	303.000
Tl	205	1	He	0.054403	22.3	3010.387
Pb	208	1	He	0.005436	22.4	2533.447
Bi	209	1	He	0.007386	35.3	2226.890
Th	232	1	He	0.017451	2.8	1733.460
U	238	1	He	0.007468	22.5	970.047

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.96588948	578886.083
Sc	45	2	H2	95.19651312	4688304.833
Ge	72	1	He	95.63461100	484402.407
Ge	72	2	H2	96.22977359	1641629.253
In	115	1	He	98.81093759	5843043.923
Tb	159	1	He	100.1028108	13816646.460
Ir	193	1	He	100.0004983	7232601.143

Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 095CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:49:05  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.509884	5.6	301.333
Be	9	2	H2	0.223084	8.7	115.833
B	11	2	H2	6.654237	2.7	5402.970
Na	23	1	He	50.098131	0.5	63906.107
Mg	24	1	He	28.264265	2.1	18174.480
Al	27	1	He	30.390980	0.5	8896.317
Si	28	2	H2	95.796592	0.8	342243.260
K	39	1	He	97.295768	0.9	150624.903
Ca	43	1	He	94.996609	3.2	243.967
Ti	47	1	He	1.080997	5.7	287.333
V	51	1	He	1.004685	2.7	7115.277
Cr	52	1	He	2.022076	1.2	20730.643
Mn	55	1	He	0.531749	1.0	3761.160
Fe	56	1	He	51.288689	0.4	450210.407
Co	59	1	He	0.527652	2.9	7634.020
Ni	60	1	He	0.530071	3.4	2124.163
Cu	63	1	He	1.069178	1.4	10868.747
Zn	66	1	He	5.263221	1.0	12059.017
As	75	1	He	0.476522	2.1	1137.047
Se	78	2	H2	0.503433	0.5	489.010
Sr	88	1	He	0.502403	3.0	6176.390
Mo	95	1	He	0.479091	3.0	3247.043
Pd	105	1	He	0.501002	3.1	5287.697
Ag	107	1	He	0.452522	5.2	9514.947
Cd	111	1	He	0.077654	2.2	321.750
Sn	118	1	He	0.488998	1.1	4949.237
Sb	121	1	He	0.535134	3.8	8002.337
Ba	138	1	He	0.310335	0.8	10350.617
Pt	195	1	He	0.500992	0.6	6966.503
Hg	202	1	He	0.240802	3.3	1693.780
Tl	205	1	He	0.104438	3.3	5459.493
Pb	208	1	He	0.519183	1.8	36399.470
Bi	209	1	He	0.496390	1.2	30271.550
Th	232	1	He	0.485185	0.4	34552.523
U	238	1	He	0.488312	1.3	33245.903

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.26817482	586908.940
Sc	45	2	H2	96.38783721	4746976.000
Ge	72	1	He	96.55194782	489048.843
Ge	72	2	H2	96.60196152	1647978.583
In	115	1	He	99.22157842	5867326.583
Tb	159	1	He	99.91654564	13790937.293
Ir	193	1	He	99.31485810	7183011.767

Sample Name 4305766\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 096SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:52:44  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.045470	67.5	73.667
Be	9	2	H2	0.047739	48.0	27.333
B	11	2	H2	-2.352802		1350.893
Na	23	1	He	9.338049	4.4	20961.470
Mg	24	1	He	1.250322	22.1	2178.510
Al	27	1	He	137.893708	1.0	40192.850
Si	28	2	H2	1.606805	108.2	15769.040
K	39	1	He	-3.551518		69013.683
Ca	43	1	He	7.044640	15.2	34.567
Ti	47	1	He	0.095583	25.0	26.333
V	51	1	He	0.026324	162.2	-320.303
Cr	52	1	He	0.179056	5.2	4167.267
Mn	55	1	He	0.038336	4.6	562.677
Fe	56	1	He	3.077839	2.2	37040.697
Co	59	1	He	0.009233	11.7	182.000
Ni	60	1	He	0.010458	30.0	240.667
Cu	63	1	He	0.050984	12.7	709.353
Zn	66	1	He	3.128038	1.7	7253.160
As	75	1	He	-0.008110		167.167
Se	78	2	H2	0.010401	143.3	33.000
Sr	88	1	He	0.021614	23.5	395.010
Mo	95	1	He	0.010417	8.8	86.667
Pd	105	1	He	-0.001767		201.667
Ag	107	1	He	0.051221	8.2	1170.057
Cd	111	1	He	0.005247	22.5	33.650
Sn	118	1	He	0.039034	15.7	460.010
Sb	121	1	He	0.009386	14.6	196.667
Ba	138	1	He	0.024832	5.3	941.710
Pt	195	1	He	0.006921	46.5	262.000
Hg	202	1	He	0.016584	19.5	210.667
Tl	205	1	He	0.012485	3.1	955.043
Pb	208	1	He	0.007760	11.8	2703.460
Bi	209	1	He	0.006658	78.2	2186.897
Th	232	1	He	0.004636	25.5	830.040
U	238	1	He	0.002941	33.1	665.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.45736100	588074.440
Sc	45	2	H2	83.18663178	4096833.750
Ge	72	1	He	96.79907243	490300.563
Ge	72	2	H2	83.34506415	1421822.897
In	115	1	He	99.82304542	5902893.477
Tb	159	1	He	100.7418214	13904845.627
Ir	193	1	He	100.2606181	7251414.477

Sample Name 4305767\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 097SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 19:56:24  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	98.928127	1.0	45279.650
Be	9	2	H2	97.200086	1.0	45407.460
B	11	2	H2	93.237654	0.9	41261.063
Na	23	1	He	1936.389916	0.2	2049462.367
Mg	24	1	He	1927.261209	0.2	1140804.957
Al	27	1	He	2008.568465	0.2	582249.313
Si	28	2	H2	513.008602	0.4	1760835.707
K	39	1	He	1940.002025	0.1	1641341.330
Ca	43	1	He	1971.463078	1.1	4704.363
Ti	47	1	He	101.093299	1.0	26732.520
V	51	1	He	97.783306	0.9	741183.157
Cr	52	1	He	100.258897	0.1	902370.997
Mn	55	1	He	98.220707	0.3	636054.460
Fe	56	1	He	1956.985044	0.3	16753904.000
Co	59	1	He	99.723170	0.3	1454689.997
Ni	60	1	He	100.904426	0.7	371498.603
Cu	63	1	He	99.554944	0.1	1008418.583
Zn	66	1	He	102.313463	0.2	234768.913
As	75	1	He	101.057623	0.7	205500.040
Se	78	2	H2	102.987895	0.3	93048.020
Sr	88	1	He	98.199507	0.8	1198701.860
Mo	95	1	He	99.245000	0.6	666200.107
Pd	105	1	He	19.969571	0.5	201270.797
Ag	107	1	He	50.376473	1.4	1043156.860
Cd	111	1	He	97.365180	0.8	385801.387
Sn	118	1	He	97.557581	0.4	969172.823
Sb	121	1	He	99.420268	1.2	1469071.277
Ba	138	1	He	95.812717	0.7	3144225.370
Pt	195	1	He	20.500466	0.4	278061.103
Hg	202	1	He	0.015925	30.7	204.333
Tl	205	1	He	102.524377	0.8	5024524.927
Pb	208	1	He	100.249775	0.3	6602632.140
Bi	209	1	He	97.240285	1.6	5505936.167
Th	232	1	He	97.631821	1.1	6760680.523
U	238	1	He	96.601906	0.6	6398295.943

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.09220706	585824.873
Sc	45	2	H2	95.72549152	4714356.333
Ge	72	1	He	97.98018099	496283.040
Ge	72	2	H2	95.88581006	1635761.417
In	115	1	He	98.74150614	5838938.193
Tb	159	1	He	99.77875014	13771918.130
Ir	193	1	He	97.97046993	7085778.017

Sample Name 60398600001\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 098SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:00:03  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.654708	0.7	2209.827
Be	9	2	H2	0.085138	13.9	51.000
B	11	2	H2	73.424333	0.8	33291.503
Na	23	1	He	31629.05014	0.2	32569899.517
Mg	24	1	He	28338.86171	0.2	16384365.177
Al	27	1	He	90.376639	2.1	25684.737
Si	28	2	H2	4666.946647	0.1	16026306.000
K	39	1	He	2093.197769	0.6	1726224.817
Ca	43	1	He	57288.08958	0.5	133190.327
Ti	47	1	He	0.817660	94.5	212.380
V	51	1	He	1.947839	1.2	13940.503
Cr	52	1	He	0.570548	9.6	7494.600
Mn	55	1	He	0.367846	5.4	2633.580
Fe	56	1	He	10.814502	14.7	100794.527
Co	59	1	He	0.070450	40.5	1040.047
Ni	60	1	He	1.467793	3.6	5419.693
Cu	63	1	He	0.651670	5.1	6574.833
Zn	66	1	He	6.193500	2.5	13892.663
As	75	1	He	0.661118	5.3	1477.910
Se	78	2	H2	1.060873	1.8	990.037
Sr	88	1	He	149.692754	0.6	1766564.450
Mo	95	1	He	9.829421	2.7	63405.703
Pd	105	1	He	0.085058	0.6	1031.717
Ag	107	1	He	0.195506	32.3	3972.297
Cd	111	1	He	0.065872	34.3	262.257
Sn	118	1	He	0.156521	21.8	1556.767
Sb	121	1	He	1.483469	2.2	21114.307
Ba	138	1	He	47.543334	1.2	1499174.250
Pt	195	1	He	0.012629	29.6	330.670
Hg	202	1	He	0.015619	7.5	198.667
Tl	205	1	He	0.068910	36.7	3642.243
Pb	208	1	He	0.079810	29.1	7284.160
Bi	209	1	He	0.036640	57.4	3733.977
Th	232	1	He	0.063341	37.4	4744.333
U	238	1	He	10.156874	1.7	656381.867

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.98830583	572863.583
Sc	45	2	H2	96.43244752	4749173.000
Ge	72	1	He	94.72891717	479814.943
Ge	72	2	H2	95.99217794	1637575.997
In	115	1	He	94.88367564	5610810.887
Tb	159	1	He	97.93002726	13516748.967
Ir	193	1	He	95.53608990	6909709.897



Sample Name 4308653\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 099SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:03:43  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.058402	0.3	38244.367
Be	9	2	H2	78.232532	0.4	36757.943
B	11	2	H2	152.436233	0.5	66179.733
Na	23	1	He	32972.32137	0.3	34526061.150
Mg	24	1	He	29804.45907	0.3	17522643.907
Al	27	1	He	2004.100057	0.2	577697.187
Si	28	2	H2	5649.840604	0.2	19365794.667
K	39	1	He	3974.028235	0.9	3268659.327
Ca	43	1	He	58976.71354	0.5	139432.537
Ti	47	1	He	79.670276	0.7	20949.860
V	51	1	He	81.445425	1.1	613808.543
Cr	52	1	He	81.422173	0.0	729202.833
Mn	55	1	He	80.156564	0.2	516223.927
Fe	56	1	He	973.732134	0.2	8294777.667
Co	59	1	He	78.845300	0.9	1132662.663
Ni	60	1	He	81.113844	0.1	294135.803
Cu	63	1	He	79.847550	0.2	796546.333
Zn	66	1	He	83.968537	0.6	189775.390
As	75	1	He	81.053407	0.5	162353.850
Se	78	2	H2	81.366457	0.1	73543.303
Sr	88	1	He	226.154213	0.4	2718561.627
Mo	95	1	He	90.751210	2.2	584354.750
Pd	105	1	He	79.688566	2.1	769817.100
Ag	107	1	He	16.260862	3.0	323058.923
Cd	111	1	He	80.687480	1.3	306718.137
Sn	118	1	He	79.629001	0.8	758934.857
Sb	121	1	He	81.058389	1.4	1149035.167
Ba	138	1	He	127.886263	0.8	4026250.567
Pt	195	1	He	78.555230	0.8	1047044.187
Hg	202	1	He	0.011506	31.4	172.333
Tl	205	1	He	40.045589	1.5	1929708.563
Pb	208	1	He	80.210950	1.5	5194083.073
Bi	209	1	He	76.492845	1.6	4236492.853
Th	232	1	He	11.179160	0.5	757577.463
U	238	1	He	90.580262	0.8	5868033.037

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.55929777	582541.833
Sc	45	2	H2	96.26963782	4741154.833
Ge	72	1	He	96.49191785	488744.783
Ge	72	2	H2	95.91432774	1636247.913
In	115	1	He	94.73678475	5602124.703
Tb	159	1	He	98.09856007	13540010.633
Ir	193	1	He	95.82515286	6930616.563

Sample Name 4308654\_B69917Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 100SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:07:22  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.093089	3.4	578.677
Be	9	2	H2	0.061201	8.2	40.333
B	11	2	H2	14.555768	1.2	8837.580
Na	23	1	He	6566.974510	0.8	6994806.773
Mg	24	1	He	5926.823510	0.9	3541123.280
Al	27	1	He	20.097351	3.0	5956.560
Si	28	2	H2	975.903431	0.9	3413079.000
K	39	1	He	431.391894	0.8	424974.880
Ca	43	1	He	11896.09964	1.1	28586.367
Ti	47	1	He	0.093739	52.7	26.000
V	51	1	He	0.345928	10.7	2127.447
Cr	52	1	He	0.144472	9.5	3879.860
Mn	55	1	He	0.079700	6.3	836.697
Fe	56	1	He	2.373999	7.7	31194.410
Co	59	1	He	0.014637	21.2	261.333
Ni	60	1	He	0.324236	3.3	1388.740
Cu	63	1	He	0.143830	5.3	1647.433
Zn	66	1	He	1.654077	0.5	3934.543
As	75	1	He	0.146660	1.9	480.343
Se	78	2	H2	0.236762	7.8	249.000
Sr	88	1	He	30.472066	0.5	369545.453
Mo	95	1	He	1.974481	1.6	13246.850
Pd	105	1	He	0.046904	8.6	688.360
Ag	107	1	He	0.157140	27.9	3347.120
Cd	111	1	He	0.013931	14.0	67.617
Sn	118	1	He	0.047825	7.9	541.683
Sb	121	1	He	0.296806	4.0	4434.073
Ba	138	1	He	9.608980	1.2	314891.140
Pt	195	1	He	0.004236	34.4	222.000
Hg	202	1	He	0.008712	39.8	156.000
Tl	205	1	He	0.063142	28.8	3408.820
Pb	208	1	He	0.016604	15.8	3243.510
Bi	209	1	He	0.015874	32.9	2623.640
Th	232	1	He	0.010868	10.1	1225.070
U	238	1	He	2.068701	0.4	135605.780

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.06520890	591819.147
Sc	45	2	H2	97.89725766	4821313.000
Ge	72	1	He	97.31633122	492920.550
Ge	72	2	H2	97.58959478	1664827.087
In	115	1	He	98.57112741	5828863.090
Tb	159	1	He	99.27669882	13702622.717
Ir	193	1	He	96.64791877	6990123.643

Sample Name 4305768\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 101SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:11:01  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	109.666405	0.2	50062.930
Be	9	2	H2	104.921959	0.3	48892.253
B	11	2	H2	183.384399	0.1	78438.157
Na	23	1	He	34624.51838	0.6	35757221.133
Mg	24	1	He	31312.26516	0.7	18156109.313
Al	27	1	He	2204.149400	0.8	626630.543
Si	28	2	H2	5343.582959	0.1	18167325.333
K	39	1	He	4237.716598	1.0	3433069.740
Ca	43	1	He	61435.08756	0.3	143247.160
Ti	47	1	He	106.724421	1.1	27677.243
V	51	1	He	109.493228	0.4	813991.733
Cr	52	1	He	109.194556	0.3	963628.690
Mn	55	1	He	105.913199	0.5	672625.643
Fe	56	1	He	2106.491744	0.8	17685750.000
Co	59	1	He	106.069785	0.7	1500849.747
Ni	60	1	He	108.082308	0.3	385965.300
Cu	63	1	He	105.706002	0.6	1038573.440
Zn	66	1	He	111.135422	0.6	247343.460
As	75	1	He	108.409726	0.5	213823.277
Se	78	2	H2	107.416543	0.8	96121.690
Sr	88	1	He	261.614403	0.6	3097500.477
Mo	95	1	He	117.237501	1.1	750173.293
Pd	105	1	He	21.382776	1.2	205421.780
Ag	107	1	He	54.727805	0.8	1080282.460
Cd	111	1	He	106.904461	0.4	403803.057
Sn	118	1	He	105.430864	0.9	998406.000
Sb	121	1	He	108.755580	0.6	1531902.057
Ba	138	1	He	155.684492	0.4	4870173.053
Pt	195	1	He	21.285621	0.6	282073.790
Hg	202	1	He	0.010448	18.2	164.333
Tl	205	1	He	109.888130	0.4	5261885.133
Pb	208	1	He	106.804049	0.5	6872670.160
Bi	209	1	He	103.711914	1.3	5719861.997
Th	232	1	He	107.613808	0.9	7258579.270
U	238	1	He	118.150005	0.6	7622525.303

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.25827474	574526.753
Sc	45	2	H2	95.48385740	4702456.167
Ge	72	1	He	95.03965177	481388.857
Ge	72	2	H2	94.96480429	1620049.543
In	115	1	He	94.12652450	5566037.833
Tb	159	1	He	97.48774788	13455703.550
Ir	193	1	He	95.43437984	6902353.650

Sample Name 4305769\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 102SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:14:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	107.102304	0.6	49221.870
Be	9	2	H2	102.354945	0.4	48016.453
B	11	2	H2	178.846786	0.3	77075.163
Na	23	1	He	32916.93779	0.4	34163166.157
Mg	24	1	He	29762.84889	0.2	17343412.657
Al	27	1	He	2093.765082	0.7	598204.353
Si	28	2	H2	5123.351576	0.3	17536046.667
K	39	1	He	4072.139660	0.7	3317982.660
Ca	43	1	He	58306.71758	0.6	136627.740
Ti	47	1	He	103.155801	0.8	26885.447
V	51	1	He	105.358164	0.4	787134.110
Cr	52	1	He	105.621995	0.1	936812.067
Mn	55	1	He	102.369137	0.8	653349.167
Fe	56	1	He	2048.619189	0.2	17285335.333
Co	59	1	He	102.602660	0.5	1459042.293
Ni	60	1	He	104.847109	0.5	376291.323
Cu	63	1	He	102.637715	0.3	1013482.103
Zn	66	1	He	107.803969	0.5	241134.653
As	75	1	He	104.623133	0.8	207392.943
Se	78	2	H2	105.704695	1.0	95263.000
Sr	88	1	He	248.544307	0.3	2957465.267
Mo	95	1	He	114.658364	0.7	733609.353
Pd	105	1	He	20.870540	0.9	200493.743
Ag	107	1	He	53.406608	1.0	1054067.770
Cd	111	1	He	103.941520	0.4	392574.537
Sn	118	1	He	102.601743	0.5	971542.250
Sb	121	1	He	105.964566	0.8	1492475.290
Ba	138	1	He	150.315615	0.7	4701746.390
Pt	195	1	He	20.417276	0.5	274126.137
Hg	202	1	He	0.010162	14.3	164.667
Tl	205	1	He	104.864805	0.6	5087362.113
Pb	208	1	He	102.429779	0.5	6677956.310
Bi	209	1	He	100.989457	0.5	5562423.250
Th	232	1	He	105.806609	0.6	7127023.223
U	238	1	He	114.349998	0.8	7367443.430

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	93.72214637	577384.480
Sc	45	2	H2	96.12487936	4734025.667
Ge	72	1	He	95.51611470	483802.207
Ge	72	2	H2	95.63920964	1631554.543
In	115	1	He	94.11664331	5565453.523
Tb	159	1	He	98.76857066	13632488.550
Ir	193	1	He	95.30127520	6892726.770

Sample Name 60398600001\_B69917Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 103SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:18:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.710353	3.8	399.010
Be	9	2	H2	0.094210	9.3	56.000
B	11	2	H2	8.029692	0.3	6059.717
Na	23	1	He	3382.171138	0.5	3617071.717
Mg	24	1	He	3027.777494	0.5	1814313.777
Al	27	1	He	10.912420	0.6	3275.363
Si	28	2	H2	498.183564	0.4	1745984.163
K	39	1	He	220.038670	0.6	252851.087
Ca	43	1	He	6012.274747	0.5	14493.147
Ti	47	1	He	0.044966	24.8	13.000
V	51	1	He	0.228681	17.2	1231.940
Cr	52	1	He	0.131062	10.4	3767.827
Mn	55	1	He	0.039099	16.7	572.680
Fe	56	1	He	2.385415	60.3	31372.687
Co	59	1	He	0.013343	16.1	242.667
Ni	60	1	He	0.173629	3.1	838.697
Cu	63	1	He	0.078829	4.6	994.037
Zn	66	1	He	0.890682	5.7	2196.837
As	75	1	He	0.089666	8.3	365.507
Se	78	2	H2	0.133072	13.1	154.000
Sr	88	1	He	15.521528	0.7	188400.870
Mo	95	1	He	0.999039	3.0	6774.963
Pd	105	1	He	0.024231	9.8	465.010
Ag	107	1	He	0.211368	29.2	4507.463
Cd	111	1	He	0.012653	18.7	63.113
Sn	118	1	He	0.060942	6.1	678.357
Sb	121	1	He	0.154665	5.9	2360.220
Ba	138	1	He	4.783150	1.1	158332.190
Pt	195	1	He	-0.000807		154.000
Hg	202	1	He	0.003380	15.8	121.000
Tl	205	1	He	0.040094	21.2	2286.890
Pb	208	1	He	0.014777	14.6	3126.833
Bi	209	1	He	0.020045	16.2	2883.703
Th	232	1	He	0.033936	5.1	2825.323
U	238	1	He	1.054233	1.6	69935.650

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.30726765	593310.373
Sc	45	2	H2	97.71920898	4812544.333
Ge	72	1	He	97.36944594	493189.583
Ge	72	2	H2	97.92912481	1670619.290
In	115	1	He	99.53214807	5885691.677
Tb	159	1	He	99.36200968	13714397.710
Ir	193	1	He	97.50457948	7052082.187

Sample Name 4308653\_B69917Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 104SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:22:00  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	81.226471	0.7	37184.073
Be	9	2	H2	78.727060	0.4	36774.817
B	11	2	H2	85.893752	0.5	38210.927
Na	23	1	He	5173.382909	0.6	5464039.290
Mg	24	1	He	4863.305902	0.7	2880279.437
Al	27	1	He	1960.380178	0.8	569028.560
Si	28	2	H2	1445.201008	0.8	4934898.667
K	39	1	He	2157.796829	0.6	1819945.077
Ca	43	1	He	7843.383714	0.3	18687.510
Ti	47	1	He	79.625797	0.6	21083.720
V	51	1	He	79.521040	0.9	603405.867
Cr	52	1	He	80.702789	0.6	727771.603
Mn	55	1	He	80.750683	0.6	523642.030
Fe	56	1	He	982.685644	0.7	8429006.500
Co	59	1	He	80.146340	1.3	1156302.707
Ni	60	1	He	81.431360	0.9	296553.980
Cu	63	1	He	81.475958	0.7	816276.873
Zn	66	1	He	81.163285	1.0	184230.583
As	75	1	He	79.143319	0.8	159214.733
Se	78	2	H2	78.386594	0.2	71092.470
Sr	88	1	He	94.504938	0.6	1140988.237
Mo	95	1	He	80.276206	0.4	532120.893
Pd	105	1	He	79.978897	0.8	795344.287
Ag	107	1	He	16.466914	3.2	336736.243
Cd	111	1	He	80.136651	0.5	313559.667
Sn	118	1	He	78.400717	0.6	769116.397
Sb	121	1	He	78.265792	0.4	1142023.577
Ba	138	1	He	83.204104	0.4	2696283.603
Pt	195	1	He	80.032080	0.5	1088556.163
Hg	202	1	He	0.004301	38.6	128.000
Tl	205	1	He	40.077358	0.4	1970785.593
Pb	208	1	He	81.025552	0.3	5354284.423
Bi	209	1	He	78.838616	0.9	4467055.040
Th	232	1	He	10.874158	0.8	753882.280
U	238	1	He	79.716314	0.3	5283212.423

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.21445276	586577.980
Sc	45	2	H2	95.70894286	4713541.333
Ge	72	1	He	96.90712084	490847.843
Ge	72	2	H2	96.23986808	1641801.460
In	115	1	He	97.50437071	5765781.953
Tb	159	1	He	100.1031519	13816693.540
Ir	193	1	He	98.02967843	7090060.310

Sample Name 4308654\_B69917Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 105SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:25:40  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.266220	5.9	190.500
Be	9	2	H2	0.082367	7.2	50.000
B	11	2	H2	0.294051	76.7	2766.927
Na	23	1	He	713.938555	11.7	707214.260
Mg	24	1	He	646.824501	11.8	355880.450
Al	27	1	He	4.469550	14.8	1265.053
Si	28	2	H2	95.141420	0.2	342371.780
K	39	1	He	52.454839	29.1	105829.513
Ca	43	1	He	1297.723037	11.4	2877.703
Ti	47	1	He	0.028058	58.5	8.000
V	51	1	He	0.096415	28.1	190.320
Cr	52	1	He	0.078503	37.0	3020.323
Mn	55	1	He	0.018862	23.2	404.677
Fe	56	1	He	0.984402	17.5	17662.713
Co	59	1	He	0.017025	25.2	272.003
Ni	60	1	He	0.053677	31.4	367.340
Cu	63	1	He	0.052209	9.4	668.687
Zn	66	1	He	0.387107	19.8	959.367
As	75	1	He	0.043736	36.6	250.333
Se	78	2	H2	0.025909	7.5	55.000
Sr	88	1	He	3.343281	13.6	37270.213
Mo	95	1	He	0.222501	13.4	1401.410
Pd	105	1	He	0.031395	30.2	493.347
Ag	107	1	He	0.179113	31.1	3530.507
Cd	111	1	He	0.011537	38.9	53.417
Sn	118	1	He	0.050108	24.9	525.013
Sb	121	1	He	0.043345	21.1	643.353
Ba	138	1	He	1.017923	11.4	31161.857
Pt	195	1	He	0.007347	30.6	244.667
Hg	202	1	He	0.003949	66.5	115.000
Tl	205	1	He	0.070908	33.8	3502.200
Pb	208	1	He	0.021432	24.8	3295.183
Bi	209	1	He	0.019243	36.6	2643.650
Th	232	1	He	0.012420	28.9	1240.070
U	238	1	He	0.224529	12.5	14127.787

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	88.91292232	547756.783
Sc	45	2	H2	97.06160791	4780158.333
Ge	72	1	He	90.09753668	456356.367
Ge	72	2	H2	97.51934056	1663628.587
In	115	1	He	92.58200204	5474704.700
Tb	159	1	He	92.52713019	12771016.473
Ir	193	1	He	91.19866504	6596002.820

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 106\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:29:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.687718	0.4	38538.607
Be	9	2	H2	81.272180	0.4	38190.470
B	11	2	H2	78.823870	0.8	35491.000
Na	23	1	He	998.810050	0.3	1075229.150
Mg	24	1	He	997.342981	0.7	598117.180
Al	27	1	He	996.013980	0.5	292224.353
Si	28	2	H2	497.530433	0.4	1718070.120
K	39	1	He	994.129906	0.4	886502.487
Ca	43	1	He	1013.498116	0.3	2456.203
Ti	47	1	He	79.667089	1.5	21318.060
V	51	1	He	78.981563	0.6	605729.157
Cr	52	1	He	81.755401	0.8	745101.310
Mn	55	1	He	80.307617	0.4	526354.603
Fe	56	1	He	501.513366	0.4	4353010.667
Co	59	1	He	82.294949	0.4	1194913.083
Ni	60	1	He	83.168651	0.5	304815.263
Cu	63	1	He	83.739346	0.4	844334.873
Zn	66	1	He	82.080769	0.4	187507.297
As	75	1	He	79.393857	0.1	160742.210
Se	78	2	H2	80.579794	0.4	73569.163
Sr	88	1	He	81.303120	0.5	987891.627
Mo	95	1	He	77.217883	1.4	522174.250
Pd	105	1	He	82.025119	0.8	832173.480
Ag	107	1	He	42.025554	0.7	876746.107
Cd	111	1	He	79.763969	0.4	318413.537
Sn	118	1	He	77.047212	0.4	771130.143
Sb	121	1	He	77.759242	0.3	1157575.893
Ba	138	1	He	77.975189	0.8	2577883.710
Pt	195	1	He	82.537623	0.5	1117896.833
Hg	202	1	He	3.905600	0.9	25899.453
Tl	205	1	He	42.243746	0.6	2068523.720
Pb	208	1	He	82.949286	0.8	5458291.920
Bi	209	1	He	80.571913	0.7	4585985.450
Th	232	1	He	77.719396	1.4	5409370.753
U	238	1	He	78.547139	0.8	5229271.797

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.23420548	592860.267
Sc	45	2	H2	96.28251803	4741789.167
Ge	72	1	He	97.52740218	493989.653
Ge	72	2	H2	96.88156433	1652748.460
In	115	1	He	99.47635737	5882392.573
Tb	159	1	He	99.68134598	13758473.963
Ir	193	1	He	98.47674780	7122394.893



Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 107\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:33:00  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.139682	7.7	130.167
Be	9	2	H2	0.088727	5.0	52.333
B	11	2	H2	-1.578985		1953.960
Na	23	1	He	1.072623	7.4	12143.323
Mg	24	1	He	-0.656085		1040.043
Al	27	1	He	0.263459	29.8	147.000
Si	28	2	H2	-0.300149		12603.360
K	39	1	He	-1.036764		70570.913
Ca	43	1	He	-1.525808		14.033
Ti	47	1	He	0.010322	55.5	3.667
V	51	1	He	0.045011	30.3	-176.483
Cr	52	1	He	-0.006759		2476.217
Mn	55	1	He	-0.007690		262.000
Fe	56	1	He	0.179237	10.2	12063.673
Co	59	1	He	0.008821	18.8	174.667
Ni	60	1	He	0.002509	65.1	210.000
Cu	63	1	He	0.007334	41.4	270.667
Zn	66	1	He	0.011634	168.3	191.333
As	75	1	He	0.003747	16.3	189.333
Se	78	2	H2	0.013447	71.4	43.000
Sr	88	1	He	0.005198	81.6	195.000
Mo	95	1	He	0.015391	1.9	119.333
Pd	105	1	He	0.022700	44.3	446.677
Ag	107	1	He	0.168157	23.6	3583.833
Cd	111	1	He	0.008682	15.4	46.980
Sn	118	1	He	0.019501	28.1	261.670
Sb	121	1	He	0.006019	44.4	145.000
Ba	138	1	He	0.006025	15.4	315.010
Pt	195	1	He	0.003815	32.8	218.000
Hg	202	1	He	0.027818	12.8	283.667
Tl	205	1	He	0.058959	21.0	3228.773
Pb	208	1	He	0.006162	32.3	2578.457
Bi	209	1	He	0.006140	38.6	2156.890
Th	232	1	He	0.020681	10.3	1963.497
U	238	1	He	0.005050	41.8	806.703

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.80911117	584080.833
Sc	45	2	H2	95.79836991	4717945.500
Ge	72	1	He	95.98854877	486195.150
Ge	72	2	H2	96.22470524	1641542.790
In	115	1	He	98.89925476	5848266.433
Tb	159	1	He	100.0159935	13804663.543
Ir	193	1	He	100.1107318	7240573.850

Sample Name 60398600002\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 108SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:36:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	7.211455	0.0	3325.530
Be	9	2	H2	0.078135	7.2	46.833
B	11	2	H2	45.159842	0.9	21096.843
Na	23	1	He	10079.10707	0.9	10280285.473
Mg	24	1	He	18127.07653	0.8	10374010.263
Al	27	1	He	110.251060	1.3	30999.123
Si	28	2	H2	4472.675010	0.7	15080419.333
K	39	1	He	8745.963866	0.9	6918828.857
Ca	43	1	He	84750.36275	0.7	195022.853
Ti	47	1	He	1.192002	2.8	306.003
V	51	1	He	0.448621	12.5	2790.427
Cr	52	1	He	0.582632	5.5	7523.280
Mn	55	1	He	2.964592	2.4	18874.160
Fe	56	1	He	53.666386	0.7	454645.800
Co	59	1	He	0.514879	1.5	7186.447
Ni	60	1	He	1.461233	1.3	5306.313
Cu	63	1	He	0.213219	4.8	2244.850
Zn	66	1	He	3.511353	1.5	7814.120
As	75	1	He	0.160184	2.6	485.843
Se	78	2	H2	0.768436	2.0	714.353
Sr	88	1	He	249.785721	0.3	2898360.473
Mo	95	1	He	4.023164	0.4	26014.367
Pd	105	1	He	0.141959	8.5	1585.103
Ag	107	1	He	0.058199	11.1	1253.403
Cd	111	1	He	0.020351	18.5	89.650
Sn	118	1	He	0.054380	9.3	585.013
Sb	121	1	He	0.074013	9.2	1106.720
Ba	138	1	He	44.289728	0.3	1399334.667
Pt	195	1	He	0.004632	24.6	224.667
Hg	202	1	He	0.017472	16.6	211.000
Tl	205	1	He	0.042364	3.5	2370.237
Pb	208	1	He	0.098775	1.8	8527.737
Bi	209	1	He	0.007415	111.0	2143.557
Th	232	1	He	0.026542	3.2	2286.887
U	238	1	He	1.103641	1.3	72264.923

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.04195508	567033.497
Sc	45	2	H2	94.68061798	4662897.667
Ge	72	1	He	93.14207164	471777.353
Ge	72	2	H2	94.49795967	1612085.420
In	115	1	He	95.06069538	5621278.697
Tb	159	1	He	98.14568634	13546515.217
Ir	193	1	He	96.26437578	6962383.647

Sample Name 60398600002\_B69917Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 109SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:40:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.877970	4.6	469.843
Be	9	2	H2	0.065924	23.2	41.833
B	11	2	H2	2.921904	1.7	3837.657
Na	23	1	He	1024.671879	0.7	1077342.980
Mg	24	1	He	1848.440827	0.4	1081803.917
Al	27	1	He	12.906731	1.8	3768.817
Si	28	2	H2	460.145434	1.3	1588742.417
K	39	1	He	882.180700	0.6	776531.293
Ca	43	1	He	8582.699496	0.2	20189.430
Ti	47	1	He	0.145568	18.1	39.000
V	51	1	He	-0.007322		-567.583
Cr	52	1	He	0.101455	12.4	3415.740
Mn	55	1	He	0.305022	7.1	2260.853
Fe	56	1	He	6.052754	2.2	61647.640
Co	59	1	He	0.057608	3.4	866.697
Ni	60	1	He	0.174207	3.8	824.030
Cu	63	1	He	0.031224	6.0	504.677
Zn	66	1	He	0.462675	5.1	1197.387
As	75	1	He	0.017783	16.9	216.000
Se	78	2	H2	0.078692	10.0	102.667
Sr	88	1	He	24.988795	0.8	297198.167
Mo	95	1	He	0.399976	1.0	2695.597
Pd	105	1	He	0.025869	21.2	476.677
Ag	107	1	He	0.031945	18.5	756.693
Cd	111	1	He	0.002706	31.0	23.183
Sn	118	1	He	0.023644	13.6	301.677
Sb	121	1	He	0.010689	4.5	213.333
Ba	138	1	He	4.408820	0.7	144525.800
Pt	195	1	He	-0.000249		162.000
Hg	202	1	He	0.006681	27.9	143.000
Tl	205	1	He	0.012273	7.9	933.373
Pb	208	1	He	0.014510	16.3	3115.163
Bi	209	1	He	0.001648	59.0	1863.507
Th	232	1	He	0.007924	32.2	1043.390
U	238	1	He	0.110097	2.4	7775.727

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.01458226	579186.060
Sc	45	2	H2	96.20898986	4738168.000
Ge	72	1	He	95.43061651	483369.147
Ge	72	2	H2	96.75058354	1650513.997
In	115	1	He	98.55868800	5828127.503
Tb	159	1	He	99.55029443	13740385.630
Ir	193	1	He	98.33964799	7112479.060

Sample Name 60398600003\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 110SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:43:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.480513	2.7	1208.217
Be	9	2	H2	0.064267	18.6	41.167
B	11	2	H2	577.400901	0.3	243668.197
Na	23	1	He	34999.35778	1.1	35138396.977
Mg	24	1	He	40991.74944	1.2	23106542.993
Al	27	1	He	73.917837	1.5	20494.377
Si	28	2	H2	3599.355437	0.6	12357768.000
K	39	1	He	4038.405933	1.6	3183631.100
Ca	43	1	He	244436.5539	1.0	554044.083
Ti	47	1	He	0.252918	0.9	64.667
V	51	1	He	0.024451	296.0	-315.650
Cr	52	1	He	0.599940	2.3	7559.297
Mn	55	1	He	0.408993	1.5	2822.283
Fe	56	1	He	8.115613	1.8	76291.467
Co	59	1	He	0.078697	7.8	1120.047
Ni	60	1	He	0.247231	3.4	1043.373
Cu	63	1	He	0.138025	2.0	1497.417
Zn	66	1	He	6.582635	1.4	14282.370
As	75	1	He	0.101037	2.5	365.833
Se	78	2	H2	2.183157	2.2	1996.140
Sr	88	1	He	421.870555	0.5	4818837.743
Mo	95	1	He	0.311298	3.5	1974.810
Pd	105	1	He	0.230918	1.2	2385.230
Ag	107	1	He	0.019613	10.2	471.677
Cd	111	1	He	0.045658	10.0	181.310
Sn	118	1	He	0.042589	11.7	460.010
Sb	121	1	He	0.067407	8.7	986.710
Ba	138	1	He	56.305571	1.8	1733338.413
Pt	195	1	He	0.008437	9.6	270.000
Hg	202	1	He	0.011257	17.0	167.333
Tl	205	1	He	0.018981	1.1	1218.400
Pb	208	1	He	0.016393	4.4	3128.503
Bi	209	1	He	0.005801	28.0	2003.520
Th	232	1	He	0.012023	13.4	1266.740
U	238	1	He	1.911625	0.7	121679.530

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	90.67150211	558590.687
Sc	45	2	H2	96.38736343	4746952.667
Ge	72	1	He	91.69414766	464443.420
Ge	72	2	H2	95.57603829	1630476.873
In	115	1	He	92.63905908	5478078.687
Tb	159	1	He	96.16165237	13272669.800
Ir	193	1	He	93.82256404	6785778.023

Sample Name 60398600003\_B69917Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 111SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:47:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.382548	7.8	247.333
Be	9	2	H2	0.065491	15.6	42.500
B	11	2	H2	63.835608	0.6	29826.153
Na	23	1	He	3581.548976	0.5	3828537.653
Mg	24	1	He	4214.500168	0.4	2524132.983
Al	27	1	He	9.119457	1.0	2748.257
Si	28	2	H2	373.821867	0.6	1320165.747
K	39	1	He	411.136023	0.2	409332.807
Ca	43	1	He	24790.15137	0.2	59685.597
Ti	47	1	He	0.046253	33.9	13.333
V	51	1	He	0.029709	237.1	-296.097
Cr	52	1	He	0.097841	7.6	3465.087
Mn	55	1	He	0.033834	6.0	538.010
Fe	56	1	He	1.788919	1.0	26195.423
Co	59	1	He	0.010780	20.3	204.667
Ni	60	1	He	0.048601	16.3	380.010
Cu	63	1	He	0.022880	3.5	429.343
Zn	66	1	He	0.823056	3.9	2034.820
As	75	1	He	0.020503	10.6	225.000
Se	78	2	H2	0.208254	17.6	225.000
Sr	88	1	He	42.053622	0.1	508205.003
Mo	95	1	He	0.032058	6.4	232.667
Pd	105	1	He	0.024095	18.2	463.343
Ag	107	1	He	0.010342	26.1	313.340
Cd	111	1	He	0.004268	25.2	29.627
Sn	118	1	He	0.018354	28.2	251.670
Sb	121	1	He	0.006633	26.3	155.000
Ba	138	1	He	5.536820	0.6	183136.053
Pt	195	1	He	0.001247	74.8	184.667
Hg	202	1	He	0.005099	13.8	134.333
Tl	205	1	He	0.003812	9.1	526.687
Pb	208	1	He	0.012439	95.5	3019.450
Bi	209	1	He	0.002251	143.7	1906.847
Th	232	1	He	0.004505	10.5	808.367
U	238	1	He	0.190579	3.3	13181.767

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.27921355	593137.543
Sc	45	2	H2	98.20689356	4836562.167
Ge	72	1	He	96.98344914	491234.457
Ge	72	2	H2	98.70366533	1683832.543
In	115	1	He	99.46246662	5881571.163
Tb	159	1	He	100.8926853	13925668.540
Ir	193	1	He	98.75462584	7142492.603

Sample Name 60398600004\_B69917Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 112SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:51:17  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.590190	1.6	1252.050
Be	9	2	H2	0.067976	13.2	42.667
B	11	2	H2	616.904929	1.4	258772.043
Na	23	1	He	36983.70285	0.5	38039446.100
Mg	24	1	He	43081.80597	0.2	24879605.463
Al	27	1	He	94.923127	0.9	26944.567
Si	28	2	H2	3886.923215	1.6	13272605.000
K	39	1	He	4281.594650	0.3	3453881.510
Ca	43	1	He	259215.4895	0.6	601915.460
Ti	47	1	He	0.185031	25.5	48.667
V	51	1	He	0.072268	177.7	28.650
Cr	52	1	He	0.533228	0.4	7159.760
Mn	55	1	He	0.608821	1.8	4154.600
Fe	56	1	He	8.582424	1.4	82041.780
Co	59	1	He	0.080071	4.0	1155.383
Ni	60	1	He	1.068573	1.6	3925.873
Cu	63	1	He	0.129597	3.9	1437.410
Zn	66	1	He	3.230019	0.9	7188.467
As	75	1	He	0.116996	7.5	401.677
Se	78	2	H2	2.298948	1.8	2082.483
Sr	88	1	He	448.282685	0.5	5192335.547
Mo	95	1	He	0.337290	8.6	2158.173
Pd	105	1	He	0.240749	2.5	2500.243
Ag	107	1	He	0.013340	19.4	353.343
Cd	111	1	He	0.007135	26.2	38.610
Sn	118	1	He	0.035033	11.3	393.343
Sb	121	1	He	0.082014	1.9	1200.063
Ba	138	1	He	59.949680	0.6	1862477.627
Pt	195	1	He	0.006446	18.3	246.667
Hg	202	1	He	0.008335	8.1	150.333
Tl	205	1	He	0.019150	11.2	1240.070
Pb	208	1	He	0.024391	8.1	3676.877
Bi	209	1	He	0.006807	36.9	2063.530
Th	232	1	He	0.010562	27.1	1171.733
U	238	1	He	2.026186	1.3	129241.923

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.88527903	572228.877
Sc	45	2	H2	95.88486627	4722205.333
Ge	72	1	He	92.97960680	470954.447
Ge	72	2	H2	94.75116170	1616404.913
In	115	1	He	93.47453262	5527483.223
Tb	159	1	He	97.24212433	13421801.467
Ir	193	1	He	94.04241454	6801678.853

Sample Name 60398600004\_B69917Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 113SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:54:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.355680	14.4	237.833
Be	9	2	H2	0.046791	21.1	34.000
B	11	2	H2	68.508602	0.8	32229.547
Na	23	1	He	3779.710194	0.8	4058984.733
Mg	24	1	He	4447.493196	0.7	2676303.293
Al	27	1	He	11.638076	0.8	3504.083
Si	28	2	H2	389.886592	0.3	1394300.373
K	39	1	He	434.005663	1.2	430108.327
Ca	43	1	He	26205.76564	0.8	63393.690
Ti	47	1	He	0.031080	60.7	9.333
V	51	1	He	-0.021324		-691.880
Cr	52	1	He	0.097051	10.2	3474.423
Mn	55	1	He	0.057352	21.6	695.350
Fe	56	1	He	1.659888	2.1	25196.980
Co	59	1	He	0.023652	2.6	390.010
Ni	60	1	He	0.135271	1.4	694.687
Cu	63	1	He	0.142891	7.2	1630.097
Zn	66	1	He	0.529941	4.8	1368.070
As	75	1	He	0.014919	79.3	213.333
Se	78	2	H2	0.229761	6.2	245.000
Sr	88	1	He	44.969921	0.9	542637.153
Mo	95	1	He	0.035749	1.9	257.333
Pd	105	1	He	0.023947	19.5	461.683
Ag	107	1	He	0.005064	20.3	203.333
Cd	111	1	He	0.002603	20.2	22.950
Sn	118	1	He	0.013352	30.2	201.667
Sb	121	1	He	0.008679	19.4	185.000
Ba	138	1	He	5.976314	4.9	197352.873
Pt	195	1	He	-0.000716		155.333
Hg	202	1	He	0.003904	40.3	124.333
Tl	205	1	He	0.003687	32.8	513.350
Pb	208	1	He	0.012282	13.5	2963.480
Bi	209	1	He	0.003162	97.2	1930.173
Th	232	1	He	0.004081	6.3	768.363
U	238	1	He	0.202020	3.6	13754.020

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.74154637	595985.790
Sc	45	2	H2	99.49173281	4899838.833
Ge	72	1	He	96.84528901	490534.657
Ge	72	2	H2	98.60135638	1682087.207
In	115	1	He	99.35199491	5875038.577
Tb	159	1	He	99.38420379	13717461.043
Ir	193	1	He	97.42800743	7046544.063

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 114\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 20:58:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.148730	0.6	38685.983
Be	9	2	H2	79.659823	0.3	38279.020
B	11	2	H2	81.377704	0.5	37382.860
Na	23	1	He	987.066493	1.0	1095597.743
Mg	24	1	He	989.059218	1.4	611519.940
Al	27	1	He	982.092807	1.2	297049.290
Si	28	2	H2	494.967987	0.5	1747928.877
K	39	1	He	985.297416	1.2	906450.247
Ca	43	1	He	1004.333918	2.4	2509.057
Ti	47	1	He	78.096101	0.9	21546.703
V	51	1	He	78.412974	1.2	619957.857
Cr	52	1	He	80.752352	0.9	758780.730
Mn	55	1	He	79.235831	0.8	535390.710
Fe	56	1	He	493.545398	1.1	4416393.167
Co	59	1	He	81.659108	1.0	1217844.543
Ni	60	1	He	82.083279	1.0	309001.550
Cu	63	1	He	82.717181	1.2	856624.437
Zn	66	1	He	80.384835	1.5	188607.933
As	75	1	He	78.395106	1.0	163027.757
Se	78	2	H2	79.371048	0.8	73436.473
Sr	88	1	He	79.947001	0.9	997789.360
Mo	95	1	He	75.951965	0.7	528000.960
Pd	105	1	He	81.191672	0.7	846773.633
Ag	107	1	He	41.293753	2.1	885551.733
Cd	111	1	He	78.849042	0.3	323568.877
Sn	118	1	He	75.676665	0.1	778608.763
Sb	121	1	He	76.174125	0.6	1165686.440
Ba	138	1	He	76.704166	0.9	2606808.917
Pt	195	1	He	80.831702	1.5	1126042.917
Hg	202	1	He	3.785318	1.0	25822.617
Tl	205	1	He	41.500503	2.1	2090054.240
Pb	208	1	He	80.894681	1.3	5475088.307
Bi	209	1	He	78.962472	1.7	4599915.767
Th	232	1	He	76.227993	1.2	5430383.040
U	238	1	He	77.629257	0.9	5289495.757

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.21403032	611217.770
Sc	45	2	H2	98.45749915	4848904.167
Ge	72	1	He	100.1804998	507427.957
Ge	72	2	H2	98.18048837	1674907.420
In	115	1	He	102.2589668	6046938.220
Tb	159	1	He	102.5354243	14152406.873
Ir	193	1	He	100.7862788	7289433.227



Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 115\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:02:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.086819	6.3	108.833
Be	9	2	H2	0.049359	17.9	34.833
B	11	2	H2	1.368403	11.4	3261.853
Na	23	1	He	2.276362	6.8	13708.033
Mg	24	1	He	0.004502	2845.3	1461.750
Al	27	1	He	0.157350	22.9	119.000
Si	28	2	H2	-0.334725		12820.287
K	39	1	He	-2.788705		70711.870
Ca	43	1	He	2.615565	54.0	24.383
Ti	47	1	He	0.011259	32.3	4.000
V	51	1	He	0.008635	568.7	-461.853
Cr	52	1	He	0.001535	1216.9	2607.577
Mn	55	1	He	-0.008859		260.000
Fe	56	1	He	0.164256	9.4	12204.440
Co	59	1	He	0.008538	20.9	173.333
Ni	60	1	He	0.000135	2269.2	204.667
Cu	63	1	He	0.007761	45.9	279.333
Zn	66	1	He	-0.002850		161.333
As	75	1	He	-0.002381		180.000
Se	78	2	H2	0.005914	207.3	37.000
Sr	88	1	He	0.008921	62.3	243.337
Mo	95	1	He	0.011941	28.9	98.000
Pd	105	1	He	0.018149	22.1	408.343
Ag	107	1	He	0.168172	26.0	3647.190
Cd	111	1	He	0.006834	41.4	40.317
Sn	118	1	He	0.015240	6.0	223.333
Sb	121	1	He	0.005955	35.8	146.667
Ba	138	1	He	0.006458	24.8	335.010
Pt	195	1	He	0.005674	45.1	245.333
Hg	202	1	He	0.029577	18.8	298.000
Tl	205	1	He	0.050421	26.9	2835.347
Pb	208	1	He	0.005835	27.4	2580.113
Bi	209	1	He	0.005395	72.1	2130.213
Th	232	1	He	0.019833	10.0	1918.497
U	238	1	He	0.005180	35.4	821.700

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.94129699	597216.373
Sc	45	2	H2	98.37199436	4844693.167
Ge	72	1	He	97.54285356	494067.917
Ge	72	2	H2	98.13661460	1674158.957
In	115	1	He	100.7470479	5957533.047
Tb	159	1	He	100.9207630	13929543.957
Ir	193	1	He	100.9145614	7298711.350

Sample Name 4308551\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 116SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:05:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.078627	39.8	104.500
Be	9	2	H2	0.047928	19.9	34.000
B	11	2	H2	0.228773	29.3	2762.423
Na	23	1	He	7.900037	16.1	18833.610
Mg	24	1	He	2.918059	6.5	3073.677
Al	27	1	He	18.396664	6.9	5254.930
Si	28	2	H2	0.542173	20.0	15811.580
K	39	1	He	1.398100	372.0	70783.707
Ca	43	1	He	11.621143	17.8	44.050
Ti	47	1	He	0.074035	2.3	20.000
V	51	1	He	0.035599	123.8	-231.687
Cr	52	1	He	0.124378	8.8	3567.113
Mn	55	1	He	0.288449	6.2	2120.827
Fe	56	1	He	3.111274	9.0	36169.910
Co	59	1	He	0.006289	11.4	134.667
Ni	60	1	He	0.006160	180.0	218.000
Cu	63	1	He	0.058526	1.6	756.020
Zn	66	1	He	1.756386	8.7	3977.887
As	75	1	He	0.003896	174.0	183.667
Se	78	2	H2	0.004350	184.1	35.000
Sr	88	1	He	0.034394	26.6	525.017
Mo	95	1	He	0.010341	12.9	83.333
Pd	105	1	He	0.014013	48.1	348.343
Ag	107	1	He	0.046618	16.1	1035.047
Cd	111	1	He	0.003266	34.9	24.987
Sn	118	1	He	0.051349	3.9	565.017
Sb	121	1	He	0.009848	18.5	198.333
Ba	138	1	He	0.090191	5.9	3007.020
Pt	195	1	He	0.009995	6.7	294.670
Hg	202	1	He	0.015573	11.8	198.000
Tl	205	1	He	0.014915	17.0	1038.387
Pb	208	1	He	0.006460	34.7	2533.447
Bi	209	1	He	0.004033	81.1	1970.190
Th	232	1	He	0.008449	32.0	1070.053
U	238	1	He	0.002221	10.7	598.353

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.73674692	571313.830
Sc	45	2	H2	97.87127728	4820033.500
Ge	72	1	He	93.20789348	472110.750
Ge	72	2	H2	97.10888182	1656626.377
In	115	1	He	96.73423861	5720241.290
Tb	159	1	He	97.72610218	13488602.297
Ir	193	1	He	97.29318320	7036792.813

Sample Name 4308552\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 117SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:09:35  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	106.158427	0.4	48204.767
Be	9	2	H2	103.672168	0.5	48051.907
B	11	2	H2	102.554723	0.3	44771.180
Na	23	1	He	2079.492995	1.5	2184668.093
Mg	24	1	He	2061.713245	1.2	1211750.633
Al	27	1	He	2059.294303	1.4	592773.893
Si	28	2	H2	517.031016	0.5	1760632.917
K	39	1	He	2056.949205	1.3	1723747.890
Ca	43	1	He	2065.076415	2.3	4891.833
Ti	47	1	He	101.840162	2.0	26740.527
V	51	1	He	103.050006	1.4	775623.853
Cr	52	1	He	107.246821	1.7	958272.980
Mn	55	1	He	104.435226	1.5	671505.500
Fe	56	1	He	2077.156939	1.5	17657056.667
Co	59	1	He	107.098021	1.3	1537329.873
Ni	60	1	He	107.450234	1.0	389271.220
Cu	63	1	He	106.615164	1.2	1062666.503
Zn	66	1	He	108.762139	0.9	245574.213
As	75	1	He	102.201666	1.2	204507.383
Se	78	2	H2	103.128393	0.7	92796.100
Sr	88	1	He	104.638702	1.4	1256897.847
Mo	95	1	He	100.724460	2.1	670541.793
Pd	105	1	He	20.814290	1.9	208045.667
Ag	107	1	He	53.644949	1.9	1101653.630
Cd	111	1	He	103.566668	2.1	406982.690
Sn	118	1	He	99.251958	2.0	977861.030
Sb	121	1	He	101.171052	1.9	1482621.803
Ba	138	1	He	102.147473	2.4	3324288.493
Pt	195	1	He	20.783007	1.9	283786.833
Hg	202	1	He	0.014585	8.3	197.000
Tl	205	1	He	108.012537	0.9	5329792.423
Pb	208	1	He	105.670501	0.7	7007162.817
Bi	209	1	He	102.387729	1.1	5862709.080
Th	232	1	He	103.226175	0.9	7228716.560
U	238	1	He	102.036529	1.0	6834420.107

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.42933852	581741.207
Sc	45	2	H2	94.97443959	4677368.000
Ge	72	1	He	96.42063317	488383.717
Ge	72	2	H2	95.48991331	1629007.627
In	115	1	He	97.94827245	5792031.450
Tb	159	1	He	100.4665836	13866856.043
Ir	193	1	He	99.08339924	7166271.353

Sample Name 10606337001\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 118SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:13:15  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	105.835572	0.2	49456.787
Be	9	2	H2	0.091420	7.9	54.667
B	11	2	H2	173.647228	0.6	76166.803
Na	23	1	He	48300.33744	0.8	48965340.937
Mg	24	1	He	31324.03548	0.8	17831220.150
Al	27	1	He	9.148026	3.3	2621.567
Si	28	2	H2	9538.111925	0.2	33182541.333
K	39	1	He	6796.487957	1.0	5363658.670
Ca	43	1	He	96106.60186	0.8	219987.663
Ti	47	1	He	0.226689	15.4	58.667
V	51	1	He	1.145420	7.1	7867.827
Cr	52	1	He	0.726206	1.9	8724.610
Mn	55	1	He	295.291786	0.5	1840550.917
Fe	56	1	He	16.146069	1.1	143176.180
Co	59	1	He	0.684931	2.5	9484.440
Ni	60	1	He	2.189114	2.4	7802.770
Cu	63	1	He	9.640525	0.4	92423.293
Zn	66	1	He	81.812240	0.6	177375.893
As	75	1	He	3.578589	0.8	7043.880
Se	78	2	H2	0.218928	16.6	231.333
Sr	88	1	He	759.756918	0.6	8760552.787
Mo	95	1	He	5.805973	0.4	37636.153
Pd	105	1	He	0.406192	4.9	4157.317
Ag	107	1	He	0.194178	30.0	3970.637
Cd	111	1	He	0.256911	4.7	994.597
Sn	118	1	He	0.067074	3.5	708.360
Sb	121	1	He	0.518381	3.0	7447.047
Ba	138	1	He	11.965812	0.4	379157.170
Pt	195	1	He	0.008432	17.5	277.333
Hg	202	1	He	0.012141	13.2	177.667
Tl	205	1	He	0.052431	12.1	2872.007
Pb	208	1	He	0.112489	3.5	9474.680
Bi	209	1	He	0.015789	20.1	2593.643
Th	232	1	He	0.054750	20.3	4175.727
U	238	1	He	6.426537	0.6	416063.873

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	91.55906149	564058.583
Sc	45	2	H2	97.73808934	4813474.167
Ge	72	1	He	92.56398198	468849.250
Ge	72	2	H2	97.08454539	1656211.210
In	115	1	He	95.31533854	5636336.657
Tb	159	1	He	98.76889367	13632533.133
Ir	193	1	He	95.66395487	6918957.813

Sample Name 4309986\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 119SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:16:54  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	178.633295	0.8	86388.137
Be	9	2	H2	74.419803	1.4	36759.620
B	11	2	H2	249.762799	0.5	112232.617
Na	23	1	He	49612.21516	0.6	52609149.217
Mg	24	1	He	32655.09900	0.3	19444383.877
Al	27	1	He	1890.990420	0.4	552074.207
Si	28	2	H2	10365.42283	0.9	37338028.000
K	39	1	He	8582.673550	1.0	7066033.437
Ca	43	1	He	96728.28135	0.6	231599.140
Ti	47	1	He	79.552893	1.2	21186.860
V	51	1	He	78.058123	0.9	595769.237
Cr	52	1	He	78.502365	0.3	712142.813
Mn	55	1	He	365.604656	0.7	2383557.583
Fe	56	1	He	973.535142	0.6	8399237.167
Co	59	1	He	77.522731	0.7	1126820.167
Ni	60	1	He	79.518351	0.7	291755.167
Cu	63	1	He	86.096679	0.6	869007.873
Zn	66	1	He	156.430848	0.3	357580.333
As	75	1	He	81.125992	0.4	164420.610
Se	78	2	H2	78.302768	0.9	73951.743
Sr	88	1	He	816.149871	1.0	9926444.437
Mo	95	1	He	84.182080	0.6	566873.143
Pd	105	1	He	77.282740	0.7	780762.697
Ag	107	1	He	14.652149	3.2	304441.010
Cd	111	1	He	76.095508	0.2	302475.910
Sn	118	1	He	78.268434	0.7	779992.227
Sb	121	1	He	77.961702	0.8	1155626.077
Ba	138	1	He	88.369975	0.2	2909147.767
Pt	195	1	He	77.529881	1.2	1082978.873
Hg	202	1	He	0.011775	18.6	182.333
Tl	205	1	He	38.045905	1.3	1921311.220
Pb	208	1	He	76.102546	0.8	5164692.010
Bi	209	1	He	75.220867	0.1	4311176.397
Th	232	1	He	11.109805	0.4	779044.730
U	238	1	He	83.801782	0.5	5617579.917

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	95.76991831	589999.980
Sc	45	2	H2	101.2064920	4984288.500
Ge	72	1	He	97.63141582	494516.497
Ge	72	2	H2	100.2154425	1709622.667
In	115	1	He	99.05153593	5857271.363
Tb	159	1	He	102.8031665	14189361.873
Ir	193	1	He	99.15517239	7171462.393

Sample Name 4309987\_B69957Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 120SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:20:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	22.452077	0.3	11129.747
Be	9	2	H2	0.083774	16.3	53.833
B	11	2	H2	38.061962	1.2	19813.947
Na	23	1	He	10741.47299	6.4	11189798.163
Mg	24	1	He	6941.158622	6.1	4058704.317
Al	27	1	He	4.866090	31.7	1452.410
Si	28	2	H2	1959.193188	0.6	7205339.167
K	39	1	He	1496.853388	7.1	1268050.683
Ca	43	1	He	20836.29622	6.5	48985.447
Ti	47	1	He	0.122104	23.3	32.667
V	51	1	He	0.329366	18.3	1945.713
Cr	52	1	He	0.248191	26.0	4708.107
Mn	55	1	He	63.865415	6.5	408968.443
Fe	56	1	He	4.522536	21.4	48519.170
Co	59	1	He	0.202616	28.9	2922.983
Ni	60	1	He	0.527775	10.4	2103.490
Cu	63	1	He	2.198870	7.6	22026.000
Zn	66	1	He	18.018468	6.1	40685.427
As	75	1	He	0.802946	13.6	1777.947
Se	78	2	H2	0.063688	24.7	94.667
Sr	88	1	He	161.608906	6.5	1934433.100
Mo	95	1	He	1.277353	9.6	8575.937
Pd	105	1	He	0.114897	12.1	1373.410
Ag	107	1	He	0.181739	32.0	3827.253
Cd	111	1	He	0.108883	52.1	437.467
Sn	118	1	He	0.076623	63.4	815.040
Sb	121	1	He	0.155532	34.9	2331.897
Ba	138	1	He	2.585946	8.9	84853.883
Pt	195	1	He	0.054527	86.7	891.380
Hg	202	1	He	0.008565	33.0	156.667
Tl	205	1	He	0.088209	41.3	4640.930
Pb	208	1	He	0.077398	63.1	7222.570
Bi	209	1	He	0.058901	91.0	5014.607
Th	232	1	He	0.021993	58.5	1991.853
U	238	1	He	1.417334	10.2	94615.870

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.22659143	580492.163
Sc	45	2	H2	103.1563910	5080318.500
Ge	72	1	He	96.30977010	487822.180
Ge	72	2	H2	102.8677274	1754869.250
In	115	1	He	98.87582414	5846880.897
Tb	159	1	He	100.7705814	13908815.207
Ir	193	1	He	98.66726347	7136174.063

Sample Name 4308553\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 121SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:24:13  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	203.718513	0.5	100434.790
Be	9	2	H2	97.860460	0.4	49278.990
B	11	2	H2	273.905557	0.2	125213.140
Na	23	1	He	50845.28210	0.7	54696312.520
Mg	24	1	He	33502.02675	0.8	20237012.617
Al	27	1	He	1974.361607	0.4	584757.417
Si	28	2	H2	10020.38303	0.5	36801298.667
K	39	1	He	8862.086984	0.4	7399299.473
Ca	43	1	He	99030.13953	0.4	240541.800
Ti	47	1	He	101.627616	0.6	27458.190
V	51	1	He	103.295708	1.0	799985.090
Cr	52	1	He	105.011631	0.5	965518.500
Mn	55	1	He	397.697211	0.3	2630287.250
Fe	56	1	He	2042.940021	0.5	17868665.333
Co	59	1	He	103.488603	0.5	1524843.833
Ni	60	1	He	104.990713	0.3	390429.487
Cu	63	1	He	111.474089	0.7	1140491.917
Zn	66	1	He	181.505843	0.4	420553.873
As	75	1	He	106.358018	0.6	218450.980
Se	78	2	H2	103.544216	0.5	99358.807
Sr	88	1	He	857.109197	1.6	10566767.550
Mo	95	1	He	107.980260	0.9	734279.687
Pd	105	1	He	20.418010	0.9	208466.703
Ag	107	1	He	51.818649	1.7	1086981.130
Cd	111	1	He	101.245810	1.0	406407.567
Sn	118	1	He	100.000957	1.2	1006354.880
Sb	121	1	He	100.972439	1.1	1511433.677
Ba	138	1	He	112.929959	0.8	3754245.260
Pt	195	1	He	20.275093	0.6	287614.053
Hg	202	1	He	0.014310	9.6	202.667
Tl	205	1	He	104.020097	1.6	5332029.190
Pb	208	1	He	101.157956	0.6	6968252.290
Bi	209	1	He	99.398854	0.6	5795692.413
Th	232	1	He	104.138590	0.8	7425353.220
U	238	1	He	109.423345	0.6	7462736.557

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.15574533	598537.503
Sc	45	2	H2	103.1809500	5081528.000
Ge	72	1	He	98.96931646	501293.147
Ge	72	2	H2	101.8339591	1737233.707
In	115	1	He	100.0338090	5915356.683
Tb	159	1	He	104.3559034	14403677.703
Ir	193	1	He	100.8828904	7296420.727

Sample Name 4308554\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 122SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:27:53  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	207.223333	0.2	102847.810
Be	9	2	H2	99.766436	0.4	50576.257
B	11	2	H2	279.763356	0.3	128691.223
Na	23	1	He	50612.91702	0.5	55629544.170
Mg	24	1	He	33348.66665	0.5	20582112.190
Al	27	1	He	1986.123461	0.8	601010.893
Si	28	2	H2	10179.18551	0.1	37635762.667
K	39	1	He	8802.721927	0.8	7509910.093
Ca	43	1	He	98099.37942	0.6	243457.473
Ti	47	1	He	102.842561	0.5	28389.267
V	51	1	He	103.621987	0.4	819955.893
Cr	52	1	He	105.142224	0.2	987737.500
Mn	55	1	He	397.250995	0.9	2684379.667
Fe	56	1	He	2055.229805	0.4	18366768.000
Co	59	1	He	104.744470	0.1	1567983.127
Ni	60	1	He	105.638028	0.6	399100.210
Cu	63	1	He	112.072121	0.6	1164907.873
Zn	66	1	He	182.846611	0.8	430412.803
As	75	1	He	107.024484	0.6	223325.450
Se	78	2	H2	106.626493	0.9	103012.147
Sr	88	1	He	860.909102	0.5	10783401.923
Mo	95	1	He	108.929412	0.8	756184.877
Pd	105	1	He	20.654611	1.3	215275.140
Ag	107	1	He	52.004798	1.5	1113602.353
Cd	111	1	He	101.704889	1.0	416762.877
Sn	118	1	He	100.497659	0.7	1032483.110
Sb	121	1	He	101.592359	1.1	1552439.507
Ba	138	1	He	113.244996	1.0	3843194.733
Pt	195	1	He	20.487949	0.4	296346.000
Hg	202	1	He	0.012801	3.0	196.000
Tl	205	1	He	104.541019	0.8	5463734.500
Pb	208	1	He	102.026816	0.9	7165789.943
Bi	209	1	He	99.624762	0.6	5987029.287
Th	232	1	He	104.393080	1.0	7672462.800
U	238	1	He	109.137997	0.9	7672012.180

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.26690668	611543.520
Sc	45	2	H2	103.8756891	5115743.000
Ge	72	1	He	100.5476173	509287.457
Ge	72	2	H2	102.5294206	1749097.913
In	115	1	He	102.1164361	6038509.867
Tb	159	1	He	106.4071295	14686797.280
Ir	193	1	He	103.9825053	7520602.390



Sample Name 10606337001\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 123SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:31:33  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	11.853866	0.4	5850.963
Be	9	2	H2	0.116231	3.8	69.500
B	11	2	H2	21.509356	0.4	12295.493
Na	23	1	He	5211.148101	0.1	5812377.830
Mg	24	1	He	3312.951190	0.2	2072567.577
Al	27	1	He	16.685662	2.0	5188.910
Si	28	2	H2	1001.731855	0.4	3654454.250
K	39	1	He	705.348424	0.3	679215.903
Ca	43	1	He	9913.996675	0.7	24939.763
Ti	47	1	He	0.048915	15.8	14.667
V	51	1	He	0.178227	29.1	879.607
Cr	52	1	He	0.135971	5.3	3980.550
Mn	55	1	He	30.432249	0.3	208613.563
Fe	56	1	He	3.161328	0.9	39774.537
Co	59	1	He	0.097651	3.3	1540.087
Ni	60	1	He	0.551382	2.6	2334.863
Cu	63	1	He	1.115553	1.8	12016.973
Zn	66	1	He	10.122722	1.3	24433.863
As	75	1	He	0.376841	5.7	993.870
Se	78	2	H2	0.039448	12.0	71.000
Sr	88	1	He	75.672855	0.6	965337.330
Mo	95	1	He	0.603731	2.4	4322.000
Pd	105	1	He	0.051065	18.4	776.693
Ag	107	1	He	0.209729	33.0	4722.557
Cd	111	1	He	0.047102	11.9	211.553
Sn	118	1	He	0.050221	3.6	601.687
Sb	121	1	He	0.063852	4.4	1061.717
Ba	138	1	He	1.241246	1.5	43386.273
Pt	195	1	He	0.003555	44.4	229.333
Hg	202	1	He	0.002924	70.9	127.000
Tl	205	1	He	0.045782	20.7	2761.987
Pb	208	1	He	0.034728	4.6	4773.690
Bi	209	1	He	0.019745	15.0	3083.770
Th	232	1	He	0.039127	9.3	3422.150
U	238	1	He	0.643258	0.2	46081.353

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.5518165	619459.333
Sc	45	2	H2	102.1282117	5029682.000
Ge	72	1	He	102.3914805	518626.877
Ge	72	2	H2	102.6182596	1750613.460
In	115	1	He	104.8832658	6202122.397
Tb	159	1	He	106.9556309	14762503.947
Ir	193	1	He	104.8509875	7583415.930

Sample Name 4309986\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 124SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:35:13  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	92.067112	0.4	44026.640
Be	9	2	H2	78.303729	0.6	38216.697
B	11	2	H2	98.934050	0.5	45570.693
Na	23	1	He	6973.839120	0.7	7558706.763
Mg	24	1	He	5174.303473	0.2	3146350.577
Al	27	1	He	1934.375444	0.6	576490.207
Si	28	2	H2	1951.605352	0.4	6957778.500
K	39	1	He	2631.843371	0.8	2262917.780
Ca	43	1	He	11719.94191	0.8	28660.250
Ti	47	1	He	79.996758	0.9	21747.343
V	51	1	He	79.170924	0.9	616854.803
Cr	52	1	He	80.691271	0.4	747141.620
Mn	55	1	He	110.094779	0.3	732922.417
Fe	56	1	He	994.479347	0.5	8758046.000
Co	59	1	He	81.517068	0.2	1201281.250
Ni	60	1	He	83.096961	0.5	309100.553
Cu	63	1	He	83.361691	0.1	853051.123
Zn	66	1	He	90.101810	0.2	208880.860
As	75	1	He	79.472442	0.6	163300.383
Se	78	2	H2	78.867113	0.9	74464.660
Sr	88	1	He	155.130925	0.6	1912961.273
Mo	95	1	He	80.147845	0.3	550469.583
Pd	105	1	He	81.186311	0.6	836527.123
Ag	107	1	He	15.649647	2.4	331608.543
Cd	111	1	He	79.601092	0.4	322721.060
Sn	118	1	He	79.164254	0.3	804668.007
Sb	121	1	He	78.208654	0.4	1182420.060
Ba	138	1	He	79.336950	0.3	2663886.003
Pt	195	1	He	81.598159	0.3	1153691.667
Hg	202	1	He	0.002848	133.6	123.000
Tl	205	1	He	40.363316	0.3	2063240.127
Pb	208	1	He	80.935712	0.3	5559581.403
Bi	209	1	He	78.588269	0.8	4681512.323
Th	232	1	He	11.660715	0.3	849907.540
U	238	1	He	78.554456	0.2	5473545.123

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.76297100	602278.377
Sc	45	2	H2	99.99773259	4924758.667
Ge	72	1	He	98.98126282	501353.657
Ge	72	2	H2	100.1870323	1709138.003
In	115	1	He	101.0268808	5974080.567
Tb	159	1	He	104.0570134	14362423.540
Ir	193	1	He	103.0644325	7454202.177

Sample Name 4309987\_B69957Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 125SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:38:52  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.408828	0.7	1248.550
Be	9	2	H2	0.079518	10.2	51.333
B	11	2	H2	4.084201	1.9	4600.033
Na	23	1	He	988.179989	4.8	1095254.880
Mg	24	1	He	634.756821	4.4	392485.370
Al	27	1	He	2.693682	0.5	888.697
Si	28	2	H2	186.571984	0.3	694312.293
K	39	1	He	132.043885	6.9	185959.920
Ca	43	1	He	1876.922438	5.4	4666.183
Ti	47	1	He	0.025612	41.0	8.000
V	51	1	He	0.095553	34.2	221.943
Cr	52	1	He	0.053230	39.8	3147.017
Mn	55	1	He	5.829347	3.6	39650.153
Fe	56	1	He	0.682854	11.3	17103.353
Co	59	1	He	0.029385	9.8	494.677
Ni	60	1	He	0.117540	2.3	659.353
Cu	63	1	He	0.230656	0.8	2623.580
Zn	66	1	He	1.810315	3.1	4463.367
As	75	1	He	0.075886	9.3	351.333
Se	78	2	H2	0.009107	32.4	41.667
Sr	88	1	He	14.392243	3.4	181637.713
Mo	95	1	He	0.121831	8.4	876.030
Pd	105	1	He	0.030404	15.9	551.683
Ag	107	1	He	0.175123	35.9	3905.617
Cd	111	1	He	0.019379	16.3	93.843
Sn	118	1	He	0.025861	5.8	341.677
Sb	121	1	He	0.018196	5.3	341.677
Ba	138	1	He	0.263653	3.8	9223.157
Pt	195	1	He	0.005019	67.1	246.667
Hg	202	1	He	-0.000189		103.333
Tl	205	1	He	0.066898	28.9	3802.263
Pb	208	1	He	0.014371	13.8	3291.843
Bi	209	1	He	0.013593	22.1	2686.993
Th	232	1	He	0.011823	7.7	1388.420
U	238	1	He	0.127052	7.9	9396.823

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.19580644	611105.500
Sc	45	2	H2	102.3994574	5043040.500
Ge	72	1	He	101.3012987	513104.957
Ge	72	2	H2	102.6672841	1751449.793
In	115	1	He	103.9443133	6146598.780
Tb	159	1	He	105.5877705	14573705.613
Ir	193	1	He	103.9883987	7521028.637

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 126\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:42:32  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.719645	0.5	40233.647
Be	9	2	H2	81.101073	0.6	39771.347
B	11	2	H2	80.087944	0.3	37588.870
Na	23	1	He	1010.414340	1.4	1123912.847
Mg	24	1	He	995.172633	1.1	616783.077
Al	27	1	He	980.664072	1.3	297334.000
Si	28	2	H2	498.047360	0.3	1794815.837
K	39	1	He	987.147797	1.2	910230.067
Ca	43	1	He	1020.997445	0.8	2556.880
Ti	47	1	He	78.868967	1.4	21811.437
V	51	1	He	78.787752	0.9	624470.503
Cr	52	1	He	81.807050	1.3	770505.440
Mn	55	1	He	79.942452	1.2	541463.060
Fe	56	1	He	500.626796	1.0	4490600.667
Co	59	1	He	82.300251	1.1	1239767.337
Ni	60	1	He	83.066912	0.9	315853.033
Cu	63	1	He	83.692103	0.3	875481.727
Zn	66	1	He	81.224099	0.5	192505.987
As	75	1	He	78.644755	0.8	165192.713
Se	78	2	H2	80.707717	0.9	76394.693
Sr	88	1	He	80.229699	0.4	1011404.307
Mo	95	1	He	77.049203	0.7	541046.330
Pd	105	1	He	82.657890	0.3	870792.907
Ag	107	1	He	42.017666	1.7	910141.730
Cd	111	1	He	79.636419	0.8	330098.647
Sn	118	1	He	76.756897	0.4	797698.113
Sb	121	1	He	77.159880	1.0	1192709.773
Ba	138	1	He	77.285508	0.7	2653149.333
Pt	195	1	He	82.416194	1.1	1173749.753
Hg	202	1	He	3.892879	1.3	27145.560
Tl	205	1	He	42.074706	2.4	2166212.210
Pb	208	1	He	82.132546	1.6	5682772.233
Bi	209	1	He	78.609844	1.2	4761722.220
Th	232	1	He	76.139104	0.6	5640172.627
U	238	1	He	77.302988	0.8	5477159.290

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.45492305	612701.813
Sc	45	2	H2	100.4786454	4948443.000
Ge	72	1	He	101.1843865	512512.780
Ge	72	2	H2	100.4473492	1713578.873
In	115	1	He	103.2935939	6108119.417
Tb	159	1	He	104.8234228	14468206.867
Ir	193	1	He	104.8040816	7580023.430

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 127\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:46:12  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.200355	10.7	166.333
Be	9	2	H2	0.089208	15.8	55.333
B	11	2	H2	0.312711	18.2	2884.777
Na	23	1	He	3.624131	7.7	15302.917
Mg	24	1	He	-0.191556		1356.740
Al	27	1	He	0.335672	16.4	173.333
Si	28	2	H2	0.051923	365.3	14540.520
K	39	1	He	-0.509362		73305.927
Ca	43	1	He	0.437894	216.9	19.283
Ti	47	1	He	0.011133	99.2	4.000
V	51	1	He	0.010990	558.3	-448.313
Cr	52	1	He	0.009742	144.1	2708.923
Mn	55	1	He	0.008667	31.8	379.343
Fe	56	1	He	0.221000	6.5	12824.297
Co	59	1	He	0.020090	24.7	348.007
Ni	60	1	He	0.004573	147.6	225.333
Cu	63	1	He	0.021678	20.7	428.010
Zn	66	1	He	0.016477	98.2	209.333
As	75	1	He	-0.000939		186.500
Se	78	2	H2	0.022950	50.8	54.000
Sr	88	1	He	0.020750	33.1	395.013
Mo	95	1	He	0.021330	10.9	164.667
Pd	105	1	He	0.022380	12.5	458.343
Ag	107	1	He	0.171504	24.3	3778.893
Cd	111	1	He	0.019827	23.6	94.303
Sn	118	1	He	0.023827	20.7	315.010
Sb	121	1	He	0.013652	23.4	266.670
Ba	138	1	He	0.013953	26.0	595.020
Pt	195	1	He	0.011029	23.4	328.673
Hg	202	1	He	0.022370	13.2	257.333
Tl	205	1	He	0.060693	22.4	3443.817
Pb	208	1	He	0.012277	26.3	3101.837
Bi	209	1	He	0.013532	17.9	2680.333
Th	232	1	He	0.026362	11.0	2453.583
U	238	1	He	0.012121	17.4	1333.413

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.89178317	603071.937
Sc	45	2	H2	100.9069917	4969538.500
Ge	72	1	He	99.43740975	503664.103
Ge	72	2	H2	100.6460365	1716968.373
In	115	1	He	102.2605790	6047033.550
Tb	159	1	He	103.9754186	14351161.453
Ir	193	1	He	103.7916151	7506796.137

Sample Name 10606337002\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 128SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:49:52  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	161.722899	42.0	59406.300
Be	9	2	H2	0.096097	60.9	44.000
B	11	2	H2	252.601466	43.1	86171.620
Na	23	1	He	50613.50840	0.8	53102535.877
Mg	24	1	He	33716.66766	0.5	19863881.367
Al	27	1	He	22.198323	1.4	6482.083
Si	28	2	H2	12556.56728	42.3	34321993.333
K	39	1	He	7047.287489	0.6	5753379.910
Ca	43	1	He	98766.48425	1.1	233973.450
Ti	47	1	He	0.369650	9.1	98.333
V	51	1	He	1.275350	5.6	9122.177
Cr	52	1	He	0.994706	0.9	11431.140
Mn	55	1	He	249.384652	0.7	1608753.413
Fe	56	1	He	17.327637	1.1	158253.087
Co	59	1	He	0.571008	2.9	8176.973
Ni	60	1	He	2.063373	1.3	7610.663
Cu	63	1	He	8.305520	0.2	82298.393
Zn	66	1	He	46.828548	0.9	104969.550
As	75	1	He	3.971619	1.5	8056.573
Se	78	2	H2	0.330081	35.5	264.333
Sr	88	1	He	782.979245	1.0	9327862.153
Mo	95	1	He	6.027903	0.2	40229.947
Pd	105	1	He	0.420711	1.7	4425.740
Ag	107	1	He	0.057650	11.6	1281.737
Cd	111	1	He	0.164049	6.2	658.440
Sn	118	1	He	0.061412	2.4	673.353
Sb	121	1	He	0.533583	1.7	7890.607
Ba	138	1	He	12.010763	1.3	391791.857
Pt	195	1	He	0.007681	79.5	277.337
Hg	202	1	He	0.018641	13.4	228.667
Tl	205	1	He	0.036995	16.3	2206.880
Pb	208	1	He	0.131122	2.7	11108.507
Bi	209	1	He	0.008704	36.2	2296.903
Th	232	1	He	0.026484	18.0	2363.570
U	238	1	He	7.162447	1.5	483760.773

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.75667470	583757.793
Sc	45	2	H2	84.75551572	4174099.250
Ge	72	1	He	95.63841938	484421.697
Ge	72	2	H2	83.23621456	1419965.980
In	115	1	He	98.13312040	5802962.170
Tb	159	1	He	102.6305613	14165538.123
Ir	193	1	He	99.83494795	7220627.603

Sample Name 10606337002\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 129SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:53:31  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	13.279994	1.1	6351.497
Be	9	2	H2	0.075086	18.8	47.500
B	11	2	H2	20.413365	1.8	11458.830
Na	23	1	He	5229.706257	0.9	5773858.247
Mg	24	1	He	3478.986970	1.1	2154260.020
Al	27	1	He	7.154807	2.5	2244.840
Si	28	2	H2	974.419824	0.7	3449431.833
K	39	1	He	715.242803	1.1	680704.363
Ca	43	1	He	9985.860222	1.3	24864.970
Ti	47	1	He	0.054243	17.7	16.000
V	51	1	He	0.129327	54.4	482.027
Cr	52	1	He	0.141036	2.3	3987.887
Mn	55	1	He	25.131085	0.5	170583.827
Fe	56	1	He	2.302651	1.0	31680.243
Co	59	1	He	0.075264	5.0	1185.387
Ni	60	1	He	0.443278	1.4	1896.793
Cu	63	1	He	0.909470	0.7	9722.583
Zn	66	1	He	5.306415	0.7	12742.273
As	75	1	He	0.380415	1.9	990.203
Se	78	2	H2	0.030853	28.0	60.333
Sr	88	1	He	76.436012	0.5	963826.367
Mo	95	1	He	0.583601	2.7	4151.287
Pd	105	1	He	0.053585	17.4	798.363
Ag	107	1	He	0.032745	18.6	818.363
Cd	111	1	He	0.026724	10.2	124.920
Sn	118	1	He	0.019120	10.3	271.670
Sb	121	1	He	0.054033	6.6	901.703
Ba	138	1	He	1.187339	0.8	41246.453
Pt	195	1	He	0.000129	1066.3	178.667
Hg	202	1	He	0.005306	59.7	143.333
Tl	205	1	He	0.012014	16.7	985.043
Pb	208	1	He	0.022114	5.5	3866.903
Bi	209	1	He	0.005004	44.3	2186.883
Th	232	1	He	0.009956	6.4	1260.073
U	238	1	He	0.704587	0.9	50342.290

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.53197185	613176.480
Sc	45	2	H2	99.09297781	4880200.667
Ge	72	1	He	101.2102969	512644.020
Ge	72	2	H2	98.95193169	1688067.837
In	115	1	He	104.2114345	6162394.610
Tb	159	1	He	106.5037850	14700138.113
Ir	193	1	He	104.6663653	7570063.013

Sample Name 10606337003\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 130SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 21:57:10  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	102.605224	0.4	49028.897
Be	9	2	H2	0.062570	9.1	41.833
B	11	2	H2	169.801067	0.5	76217.003
Na	23	1	He	48433.85587	0.8	49721960.923
Mg	24	1	He	30761.59230	0.9	17732402.653
Al	27	1	He	12.748346	0.7	3672.120
Si	28	2	H2	9300.258243	0.4	33083314.000
K	39	1	He	6777.156974	0.6	5416436.797
Ca	43	1	He	95699.92669	0.4	221837.980
Ti	47	1	He	0.253029	39.8	66.000
V	51	1	He	1.134284	2.9	7885.393
Cr	52	1	He	0.570276	1.8	7470.580
Mn	55	1	He	347.493758	0.2	2193381.417
Fe	56	1	He	26.526713	0.5	231593.867
Co	59	1	He	0.782784	1.2	10911.427
Ni	60	1	He	2.079316	0.9	7475.263
Cu	63	1	He	14.935548	0.5	144131.613
Zn	66	1	He	142.914098	0.6	311977.363
As	75	1	He	3.619623	0.8	7174.113
Se	78	2	H2	0.207757	7.2	224.333
Sr	88	1	He	748.695936	1.1	8695042.163
Mo	95	1	He	5.792523	1.8	37705.063
Pd	105	1	He	0.378440	2.0	3903.903
Ag	107	1	He	0.017495	12.9	445.010
Cd	111	1	He	0.439245	3.1	1699.653
Sn	118	1	He	0.042519	9.9	475.013
Sb	121	1	He	0.483571	1.8	6981.783
Ba	138	1	He	12.037429	0.5	383089.733
Pt	195	1	He	0.005545	16.6	240.000
Hg	202	1	He	0.011433	25.3	174.000
Tl	205	1	He	0.023600	7.5	1486.767
Pb	208	1	He	0.161740	1.5	12775.750
Bi	209	1	He	0.008497	50.6	2213.557
Th	232	1	He	0.012254	8.6	1320.077
U	238	1	He	5.810154	1.2	380061.910

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.72115428	571217.770
Sc	45	2	H2	99.93722338	4921778.667
Ge	72	1	He	93.23692922	472257.820
Ge	72	2	H2	98.58498503	1681807.920
In	115	1	He	95.72830072	5660756.587
Tb	159	1	He	99.45826974	13727683.963
Ir	193	1	He	96.64924675	6990219.690



Sample Name 10606337003\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 131SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:00:49  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	11.098202	0.9	5613.877
Be	9	2	H2	0.060771	23.2	42.833
B	11	2	H2	18.017498	1.0	11009.340
Na	23	1	He	5024.558751	0.8	5588727.210
Mg	24	1	He	3181.200478	1.1	1984510.593
Al	27	1	He	3.694654	4.7	1204.053
Si	28	2	H2	955.253276	0.3	3569299.333
K	39	1	He	693.329185	0.4	667036.553
Ca	43	1	He	9815.956830	0.3	24623.310
Ti	47	1	He	0.038274	10.7	11.667
V	51	1	He	0.145624	26.3	617.620
Cr	52	1	He	0.110245	3.5	3725.817
Mn	55	1	He	35.445242	0.2	242235.313
Fe	56	1	He	3.185409	0.3	39878.133
Co	59	1	He	0.090004	2.6	1418.740
Ni	60	1	He	0.406077	1.1	1769.447
Cu	63	1	He	1.598127	0.6	17062.667
Zn	66	1	He	15.246138	0.4	36576.553
As	75	1	He	0.354192	2.3	942.530
Se	78	2	H2	0.034497	52.2	67.667
Sr	88	1	He	73.921500	0.6	939587.070
Mo	95	1	He	0.568031	1.0	4053.920
Pd	105	1	He	0.045815	12.7	718.357
Ag	107	1	He	0.011507	5.9	355.010
Cd	111	1	He	0.049421	4.5	220.603
Sn	118	1	He	0.015390	25.6	233.337
Sb	121	1	He	0.053428	5.0	895.037
Ba	138	1	He	1.209909	0.7	42160.903
Pt	195	1	He	0.000388	360.6	180.667
Hg	202	1	He	0.002711	39.0	123.667
Tl	205	1	He	0.005830	19.5	655.023
Pb	208	1	He	0.024060	13.3	3963.587
Bi	209	1	He	0.002500	74.4	2003.527
Th	232	1	He	0.004678	25.3	856.703
U	238	1	He	0.580838	1.4	40931.013

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.2665661	617702.020
Sc	45	2	H2	104.5808075	5150469.167
Ge	72	1	He	102.0203356	516746.977
Ge	72	2	H2	105.0576301	1792227.837
In	115	1	He	104.5442535	6182075.390
Tb	159	1	He	105.4293778	14551843.530
Ir	193	1	He	103.0306300	7451757.390

Sample Name 10606337004\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 132SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:04:29  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	105.814580	0.6	53184.330
Be	9	2	H2	0.042409	25.1	33.667
B	11	2	H2	172.808424	0.1	81543.083
Na	23	1	He	48824.37298	0.9	53010304.210
Mg	24	1	He	31698.51432	1.0	19325350.960
Al	27	1	He	9.784590	1.6	2997.640
Si	28	2	H2	9279.632629	0.4	34723810.667
K	39	1	He	6860.769347	0.4	5798403.453
Ca	43	1	He	95418.71948	0.1	233930.027
Ti	47	1	He	0.336189	10.6	92.667
V	51	1	He	1.069882	29.2	7830.090
Cr	52	1	He	0.521545	0.9	7450.580
Mn	55	1	He	261.735991	0.3	1747290.330
Fe	56	1	He	14.384634	0.2	137810.790
Co	59	1	He	0.598108	3.4	8890.060
Ni	60	1	He	1.972454	2.4	7561.977
Cu	63	1	He	9.320179	1.2	95847.103
Zn	66	1	He	68.751465	0.1	159906.200
As	75	1	He	3.640552	0.4	7682.707
Se	78	2	H2	0.225333	8.7	253.667
Sr	88	1	He	747.855302	0.2	9249134.237
Mo	95	1	He	5.847542	1.0	39854.867
Pd	105	1	He	0.398163	1.8	4289.020
Ag	107	1	He	0.008636	12.2	280.003
Cd	111	1	He	0.216036	3.2	881.523
Sn	118	1	He	0.038506	3.6	456.677
Sb	121	1	He	0.516810	2.9	7807.237
Ba	138	1	He	11.569433	0.4	385450.983
Pt	195	1	He	0.004014	11.0	228.667
Hg	202	1	He	0.009179	5.0	166.000
Tl	205	1	He	0.016918	6.6	1208.400
Pb	208	1	He	0.090220	3.0	8421.063
Bi	209	1	He	0.000864	331.4	1863.500
Th	232	1	He	0.007307	2.9	1025.050
U	238	1	He	6.244573	1.0	426117.897

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.06045943	604111.083
Sc	45	2	H2	105.1252483	5177282.167
Ge	72	1	He	99.27916132	502862.553
Ge	72	2	H2	103.8927540	1772355.663
In	115	1	He	100.2159913	5926129.777
Tb	159	1	He	103.6285298	14303282.287
Ir	193	1	He	100.8455362	7293719.057

Sample Name 10606337004\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 133SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:08:09  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	11.365189	0.5	5910.320
Be	9	2	H2	0.044751	8.9	35.667
B	11	2	H2	18.776804	1.0	11674.840
Na	23	1	He	5030.188419	0.5	5784989.080
Mg	24	1	He	3274.212044	0.4	2111875.180
Al	27	1	He	4.772961	0.4	1585.757
Si	28	2	H2	950.875692	0.1	3653795.167
K	39	1	He	695.842983	0.2	691914.027
Ca	43	1	He	9647.696681	0.2	25023.553
Ti	47	1	He	0.056509	18.0	17.333
V	51	1	He	0.199786	8.9	1087.153
Cr	52	1	He	0.139086	5.1	4134.593
Mn	55	1	He	26.354843	0.3	186314.463
Fe	56	1	He	2.187198	3.7	31924.083
Co	59	1	He	0.072025	3.7	1178.720
Ni	60	1	He	0.421906	5.5	1882.793
Cu	63	1	He	1.028286	1.0	11372.467
Zn	66	1	He	7.591014	3.4	18828.220
As	75	1	He	0.363138	5.5	989.203
Se	78	2	H2	0.021656	48.6	56.333
Sr	88	1	He	74.184358	0.8	970177.460
Mo	95	1	He	0.569521	3.7	4151.947
Pd	105	1	He	0.036434	11.6	631.687
Ag	107	1	He	0.005210	22.1	221.670
Cd	111	1	He	0.028790	7.0	136.917
Sn	118	1	He	0.013991	21.9	223.333
Sb	121	1	He	0.051292	8.6	880.033
Ba	138	1	He	1.161870	0.3	41363.407
Pt	195	1	He	0.000702	72.7	189.333
Hg	202	1	He	0.004790	34.3	141.333
Tl	205	1	He	0.004426	25.4	595.023
Pb	208	1	He	0.016857	10.1	3540.207
Bi	209	1	He	0.002520	32.0	2050.193
Th	232	1	He	0.003872	19.3	815.030
U	238	1	He	0.609869	0.5	43934.180

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.6727418	638686.100
Sc	45	2	H2	107.5460328	5296502.667
Ge	72	1	He	104.9667192	531670.813
Ge	72	2	H2	107.5229805	1834285.417
In	115	1	He	106.7943314	6315130.540
Tb	159	1	He	107.7760978	14875748.530
Ir	193	1	He	105.3737014	7621221.553

Sample Name 10606337005\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 134SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:11:48  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	106.770532	0.4	51372.610
Be	9	2	H2	0.048399	13.8	35.167
B	11	2	H2	174.829964	0.5	78941.083
Na	23	1	He	51456.04857	0.9	54736144.187
Mg	24	1	He	32466.67287	0.9	19393080.130
Al	27	1	He	9.635191	0.5	2893.283
Si	28	2	H2	9805.724541	0.4	35124530.667
K	39	1	He	7121.281123	0.8	5893671.373
Ca	43	1	He	104078.5111	0.4	249979.237
Ti	47	1	He	0.213647	12.8	58.000
V	51	1	He	1.154822	8.5	8326.213
Cr	52	1	He	0.732504	2.2	9211.580
Mn	55	1	He	523.275101	0.5	3422080.167
Fe	56	1	He	47.685360	0.2	422848.290
Co	59	1	He	1.191029	0.4	17292.913
Ni	60	1	He	2.532843	2.2	9453.087
Cu	63	1	He	23.741431	0.3	238844.150
Zn	66	1	He	240.020264	0.5	546443.227
As	75	1	He	4.226918	0.2	8708.117
Se	78	2	H2	0.243824	3.5	260.000
Sr	88	1	He	800.987053	0.4	9703993.187
Mo	95	1	He	6.312719	0.8	42217.647
Pd	105	1	He	0.425117	1.3	4479.087
Ag	107	1	He	0.006545	18.4	231.670
Cd	111	1	He	0.690603	2.4	2737.677
Sn	118	1	He	0.043708	28.0	500.023
Sb	121	1	He	0.508096	1.5	7532.097
Ba	138	1	He	13.451290	0.5	439727.883
Pt	195	1	He	0.005524	70.2	244.667
Hg	202	1	He	0.011170	14.5	176.000
Tl	205	1	He	0.018401	10.1	1256.733
Pb	208	1	He	0.305231	2.5	22645.963
Bi	209	1	He	0.001691	119.2	1870.163
Th	232	1	He	0.008049	24.2	1053.387
U	238	1	He	7.335043	1.2	489212.090

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	96.06796783	591836.143
Sc	45	2	H2	100.6356512	4956175.333
Ge	72	1	He	97.25098452	492589.560
Ge	72	2	H2	99.36132768	1695051.917
In	115	1	He	98.33719020	5815029.547
Tb	159	1	He	101.4987549	14009321.040
Ir	193	1	He	98.57553709	7129539.893

Sample Name 10606337005\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 135SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:15:28  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	11.266252	1.0	5770.597
Be	9	2	H2	0.029039	18.2	27.000
B	11	2	H2	18.600973	1.3	11416.803
Na	23	1	He	5450.808576	4.6	5934015.537
Mg	24	1	He	3444.633592	4.6	2103381.217
Al	27	1	He	11.369496	5.9	3474.407
Si	28	2	H2	1003.164065	0.6	3795325.000
K	39	1	He	748.568861	5.2	699095.877
Ca	43	1	He	10833.78163	5.0	26598.080
Ti	47	1	He	0.076540	17.7	22.000
V	51	1	He	0.127877	72.9	444.933
Cr	52	1	He	0.136162	4.2	3891.193
Mn	55	1	He	54.703793	4.8	365761.560
Fe	56	1	He	6.931428	8.5	72060.060
Co	59	1	He	0.130170	3.6	1974.810
Ni	60	1	He	0.293656	7.0	1302.730
Cu	63	1	He	2.616396	5.6	27047.057
Zn	66	1	He	75.916437	4.1	176580.353
As	75	1	He	0.426519	4.7	1066.373
Se	78	2	H2	0.018800	38.8	52.667
Sr	88	1	He	80.944284	5.3	1001067.747
Mo	95	1	He	0.637516	7.2	4397.360
Pd	105	1	He	0.043431	14.5	670.023
Ag	107	1	He	0.006759	50.8	241.670
Cd	111	1	He	0.076159	10.5	321.543
Sn	118	1	He	0.026078	4.3	335.010
Sb	121	1	He	0.060720	3.4	976.713
Ba	138	1	He	1.410857	3.7	47561.480
Pt	195	1	He	0.000604	109.8	178.000
Hg	202	1	He	0.002070	22.8	115.667
Tl	205	1	He	0.002888	49.8	485.013
Pb	208	1	He	0.048548	9.1	5485.467
Bi	209	1	He	0.002501	123.6	1956.853
Th	232	1	He	0.000750	72.9	556.683
U	238	1	He	0.740698	4.1	50790.727

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.28454102	605491.560
Sc	45	2	H2	105.9140474	5216129.500
Ge	72	1	He	99.39684421	503458.633
Ge	72	2	H2	105.9161168	1806873.167
In	115	1	He	101.2821816	5989177.420
Tb	159	1	He	102.2050030	14106800.620
Ir	193	1	He	100.5667479	7273555.517

Sample Name 10606337006\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 136SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:19:07  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	109.636148	1.7	55261.207
Be	9	2	H2	0.036726	8.9	30.833
B	11	2	H2	176.518407	0.9	83478.110
Na	23	1	He	51191.20188	0.2	55066909.180
Mg	24	1	He	32916.90227	0.3	19883090.537
Al	27	1	He	14.846195	3.0	4469.343
Si	28	2	H2	9513.814449	1.0	35704238.667
K	39	1	He	7072.846626	0.2	5920017.827
Ca	43	1	He	99580.53113	0.5	241873.497
Ti	47	1	He	0.294866	20.9	80.667
V	51	1	He	1.186561	8.3	8663.493
Cr	52	1	He	1.008098	2.2	11843.473
Mn	55	1	He	319.324568	0.4	2111958.000
Fe	56	1	He	19.173637	0.5	178395.730
Co	59	1	He	0.744527	0.5	10920.770
Ni	60	1	He	2.369920	0.3	8934.757
Cu	63	1	He	10.680149	0.9	108466.893
Zn	66	1	He	79.037086	0.5	181583.777
As	75	1	He	4.005848	1.6	8332.233
Se	78	2	H2	0.239975	3.8	268.667
Sr	88	1	He	782.740607	0.7	9563432.360
Mo	95	1	He	6.316380	1.8	42422.910
Pd	105	1	He	0.390913	5.2	4153.983
Ag	107	1	He	0.004488	25.1	190.000
Cd	111	1	He	0.246229	3.7	988.400
Sn	118	1	He	0.024406	10.6	310.010
Sb	121	1	He	0.519225	3.2	7728.853
Ba	138	1	He	12.518318	0.6	410984.240
Pt	195	1	He	0.007201	23.3	269.333
Hg	202	1	He	0.009217	4.5	163.667
Tl	205	1	He	0.014512	9.7	1068.387
Pb	208	1	He	0.132165	3.4	11108.517
Bi	209	1	He	0.004180	11.1	2026.857
Th	232	1	He	0.006265	23.7	936.710
U	238	1	He	7.615501	1.2	511432.607

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.15160882	598512.020
Sc	45	2	H2	105.4421974	5192891.500
Ge	72	1	He	98.08048100	496791.073
Ge	72	2	H2	104.1273452	1776357.667
In	115	1	He	98.75759638	5839889.667
Tb	159	1	He	101.9983973	14078283.957
Ir	193	1	He	99.25719645	7178841.350

Sample Name 10606337006\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 137SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:22:47  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	11.651332	0.5	5983.017
Be	9	2	H2	0.028239	14.7	26.667
B	11	2	H2	19.119657	0.9	11689.177
Na	23	1	He	5309.247962	1.1	5945685.747
Mg	24	1	He	3412.492445	0.8	2143431.167
Al	27	1	He	3.465279	3.4	1142.043
Si	28	2	H2	969.539557	0.3	3679521.500
K	39	1	He	718.937060	1.3	693637.047
Ca	43	1	He	10100.77405	0.9	25512.417
Ti	47	1	He	0.046325	8.8	14.000
V	51	1	He	0.156226	54.1	708.560
Cr	52	1	He	0.146824	5.1	4100.583
Mn	55	1	He	32.398534	1.9	222954.857
Fe	56	1	He	2.376908	0.9	32811.390
Co	59	1	He	0.077830	3.3	1238.057
Ni	60	1	He	0.247965	10.5	1168.050
Cu	63	1	He	1.121418	1.8	12079.027
Zn	66	1	He	8.139639	1.4	19679.973
As	75	1	He	0.390390	1.7	1022.873
Se	78	2	H2	0.024010	47.2	58.000
Sr	88	1	He	77.168523	1.4	984412.483
Mo	95	1	He	0.615916	1.6	4365.347
Pd	105	1	He	0.045980	9.2	715.023
Ag	107	1	He	0.003515	61.3	178.333
Cd	111	1	He	0.025059	5.3	117.550
Sn	118	1	He	0.016469	15.1	243.333
Sb	121	1	He	0.056665	7.8	940.043
Ba	138	1	He	1.273189	0.4	44066.733
Pt	195	1	He	0.000542	196.5	182.667
Hg	202	1	He	0.001830	140.6	117.333
Tl	205	1	He	0.002298	51.3	471.680
Pb	208	1	He	0.015607	10.1	3371.857
Bi	209	1	He	-0.000735		1803.497
Th	232	1	He	0.001258	50.2	605.020
U	238	1	He	0.750863	3.0	52664.833

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.9643847	622001.000
Sc	45	2	H2	106.2268373	5231534.000
Ge	72	1	He	102.3998317	518669.177
Ge	72	2	H2	106.2184635	1812031.043
In	115	1	He	103.8585435	6141526.907
Tb	159	1	He	105.3089614	14535223.113
Ir	193	1	He	102.8168803	7436297.803

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 138\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:26:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	81.480106	2.2	40858.137
Be	9	2	H2	79.110120	2.1	40478.873
B	11	2	H2	79.021638	3.1	38731.070
Na	23	1	He	1011.745382	0.8	1176748.757
Mg	24	1	He	995.870090	0.2	645417.607
Al	27	1	He	978.248825	0.8	310155.720
Si	28	2	H2	493.011705	2.6	1853790.043
K	39	1	He	989.992964	1.1	954276.653
Ca	43	1	He	983.400712	2.0	2575.897
Ti	47	1	He	78.177577	0.6	22607.627
V	51	1	He	78.478761	0.5	650419.243
Cr	52	1	He	81.264307	0.7	800374.523
Mn	55	1	He	79.565296	0.9	563500.477
Fe	56	1	He	498.185276	0.8	4672585.833
Co	59	1	He	82.881304	0.6	1287509.627
Ni	60	1	He	83.525714	1.1	327516.160
Cu	63	1	He	84.116194	0.8	907371.250
Zn	66	1	He	81.682746	0.3	199633.717
As	75	1	He	79.017825	0.3	171158.187
Se	78	2	H2	80.508251	1.5	79725.567
Sr	88	1	He	80.133946	1.3	1041738.500
Mo	95	1	He	77.233836	1.8	559474.020
Pd	105	1	He	81.733740	1.6	888260.663
Ag	107	1	He	41.707961	2.7	931965.220
Cd	111	1	He	79.630529	1.3	340513.797
Sn	118	1	He	76.740817	1.5	822725.533
Sb	121	1	He	76.676319	1.2	1222733.837
Ba	138	1	He	77.115821	1.2	2731066.730
Pt	195	1	He	81.939180	1.0	1193989.333
Hg	202	1	He	3.795356	2.9	27079.093
Tl	205	1	He	41.573375	2.1	2190053.300
Pb	208	1	He	81.303547	1.3	5755776.763
Bi	209	1	He	78.743697	1.2	4833965.657
Th	232	1	He	75.991311	1.1	5704788.663
U	238	1	He	77.087272	1.0	5535200.543

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.9915934	640650.417
Sc	45	2	H2	104.8701079	5164716.833
Ge	72	1	He	104.3404031	528498.437
Ge	72	2	H2	105.1011983	1792971.087
In	115	1	He	106.5661885	6301639.630
Tb	159	1	He	107.2461861	14802607.697
Ir	193	1	He	106.2146777	7682045.717



Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 139\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:30:06  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.156752	11.9	152.000
Be	9	2	H2	0.049585	51.8	37.500
B	11	2	H2	-0.001262		2874.273
Na	23	1	He	5.926018	5.6	18558.263
Mg	24	1	He	0.163559	46.2	1640.107
Al	27	1	He	0.230033	31.2	148.000
Si	28	2	H2	-0.233514		14138.817
K	39	1	He	-1.133510		75905.540
Ca	43	1	He	-0.588178		17.517
Ti	47	1	He	0.011697	17.3	4.333
V	51	1	He	0.031196	178.5	-302.790
Cr	52	1	He	-0.004944		2683.587
Mn	55	1	He	0.012657	1.9	423.343
Fe	56	1	He	0.094929	5.1	12215.777
Co	59	1	He	0.008476	16.0	181.333
Ni	60	1	He	-0.000855		211.333
Cu	63	1	He	0.011502	7.8	333.340
Zn	66	1	He	0.007568	131.3	194.667
As	75	1	He	-0.005232		183.167
Se	78	2	H2	0.005548	109.2	39.000
Sr	88	1	He	0.019161	9.2	386.677
Mo	95	1	He	0.013580	15.6	114.000
Pd	105	1	He	0.013693	34.8	378.343
Ag	107	1	He	0.179006	24.9	4052.310
Cd	111	1	He	0.006235	22.5	39.647
Sn	118	1	He	0.009275	32.4	170.000
Sb	121	1	He	0.005010	25.9	138.333
Ba	138	1	He	0.004307	23.7	275.007
Pt	195	1	He	0.003789	47.1	229.333
Hg	202	1	He	0.027956	7.1	300.000
Tl	205	1	He	0.050362	20.5	2958.693
Pb	208	1	He	0.001666	72.8	2405.107
Bi	209	1	He	0.007714	37.0	2370.253
Th	232	1	He	0.017822	1.8	1856.813
U	238	1	He	0.003374	30.5	731.693

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.0872940	628918.793
Sc	45	2	H2	105.5613342	5198758.833
Ge	72	1	He	102.5384407	519371.250
Ge	72	2	H2	104.7178383	1786431.167
In	115	1	He	105.2201511	6222043.627
Tb	159	1	He	105.4133903	14549636.863
Ir	193	1	He	105.5141368	7631378.637

Sample Name 10606337007\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 140SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:33:46  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	111.792695	0.8	53996.367
Be	9	2	H2	0.155945	9.6	88.333
B	11	2	H2	187.902326	1.2	84969.550
Na	23	1	He	47854.01952	1.0	49966684.257
Mg	24	1	He	36567.33285	0.5	21439743.013
Al	27	1	He	129.661694	0.6	37340.163
Si	28	2	H2	12980.10214	1.1	46672420.000
K	39	1	He	7176.680623	0.7	5829552.623
Ca	43	1	He	129558.9125	0.8	305444.220
Ti	47	1	He	1.005656	2.8	264.667
V	51	1	He	0.753934	3.4	5156.557
Cr	52	1	He	0.668652	2.0	8474.463
Mn	55	1	He	5227.958609	0.2	33557387.333
Fe	56	1	He	2802.498234	0.3	23788456.667
Co	59	1	He	15.095521	0.6	215076.040
Ni	60	1	He	9.527526	0.5	34435.197
Cu	63	1	He	720.518823	0.6	7125782.167
Zn	66	1	He	3651.871398	0.3	8177300.500
As	75	1	He	19.690195	0.3	39246.997
Se	78	2	H2	0.268637	8.5	283.333
Sr	88	1	He	1052.440843	0.6	12544507.727
Mo	95	1	He	6.264594	1.9	40959.267
Pd	105	1	He	0.567051	5.6	5769.563
Ag	107	1	He	0.118442	4.9	2481.907
Cd	111	1	He	16.625674	0.6	64154.977
Sn	118	1	He	0.053861	3.4	586.687
Sb	121	1	He	0.465262	3.2	6748.347
Ba	138	1	He	31.829527	1.0	1017112.200
Pt	195	1	He	0.014775	27.9	367.343
Hg	202	1	He	0.077103	8.5	611.350
Tl	205	1	He	0.032511	5.3	1935.160
Pb	208	1	He	19.637253	0.4	1300687.407
Bi	209	1	He	0.023812	13.9	3117.093
Th	232	1	He	0.054312	24.6	4251.573
U	238	1	He	14.869658	0.7	987352.613

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	94.30159173	580954.210
Sc	45	2	H2	101.0262639	4975412.500
Ge	72	1	He	95.68124942	484638.637
Ge	72	2	H2	99.40952436	1695874.127
In	115	1	He	96.14352947	5685310.547
Tb	159	1	He	100.2115112	13831649.793
Ir	193	1	He	98.18086960	7100995.310

Sample Name 10606337007\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 141SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:37:26  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	11.942418	1.1	6066.047
Be	9	2	H2	0.046008	23.8	35.500
B	11	2	H2	20.009396	0.7	11971.230
Na	23	1	He	5034.054705	2.8	5545080.750
Mg	24	1	He	3837.749966	2.7	2370663.767
Al	27	1	He	19.425395	2.3	5954.523
Si	28	2	H2	1333.772768	0.3	5002846.833
K	39	1	He	743.700459	2.3	703221.503
Ca	43	1	He	13281.47297	2.8	32987.227
Ti	47	1	He	0.107673	16.0	30.667
V	51	1	He	0.104854	53.5	284.173
Cr	52	1	He	0.115807	7.0	3742.487
Mn	55	1	He	545.474953	2.8	3687014.083
Fe	56	1	He	292.787605	2.8	2626778.500
Co	59	1	He	1.596270	3.0	23982.343
Ni	60	1	He	1.125743	3.4	4468.027
Cu	63	1	He	76.434014	2.8	795795.020
Zn	66	1	He	380.553914	3.6	896895.397
As	75	1	He	1.999890	4.3	4365.830
Se	78	2	H2	0.031740	7.6	65.333
Sr	88	1	He	106.324259	3.2	1333893.363
Mo	95	1	He	0.631813	3.5	4470.713
Pd	105	1	He	0.058084	15.5	843.370
Ag	107	1	He	0.037085	15.0	906.703
Cd	111	1	He	1.692635	3.1	7057.633
Sn	118	1	He	0.012824	9.5	205.000
Sb	121	1	He	0.051025	6.4	850.037
Ba	138	1	He	3.218810	2.8	111065.463
Pt	195	1	He	0.000905	161.0	188.667
Hg	202	1	He	0.010370	18.2	177.333
Tl	205	1	He	0.006957	16.5	713.357
Pb	208	1	He	2.032018	2.5	143799.503
Bi	209	1	He	0.004273	106.5	2126.870
Th	232	1	He	0.008355	13.9	1135.063
U	238	1	He	1.481000	3.7	104671.397

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.33797337	611981.333
Sc	45	2	H2	105.1069974	5176383.333
Ge	72	1	He	100.7596530	510361.447
Ge	72	2	H2	105.6024396	1801522.000
In	115	1	He	103.7622669	6135833.727
Tb	159	1	He	105.5793481	14572543.117
Ir	193	1	He	104.1349437	7531627.597

Sample Name 10606337008\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 142SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:41:06  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	107.393329	0.1	54776.493
Be	9	2	H2	0.172619	6.2	102.000
B	11	2	H2	188.149373	0.5	89842.350
Na	23	1	He	50090.12365	0.3	54799115.847
Mg	24	1	He	35719.25282	0.6	21942644.673
Al	27	1	He	163.528016	0.6	49322.033
Si	28	2	H2	12790.04179	0.2	48564330.667
K	39	1	He	7388.869033	0.2	6286356.990
Ca	43	1	He	128549.8056	0.2	317539.403
Ti	47	1	He	2.334230	2.9	642.347
V	51	1	He	0.983771	3.6	7214.260
Cr	52	1	He	0.621736	3.1	8441.120
Mn	55	1	He	4805.172229	0.8	32315974.000
Fe	56	1	He	2830.229476	0.8	25170628.667
Co	59	1	He	13.255808	0.8	196789.640
Ni	60	1	He	8.509415	0.5	32066.467
Cu	63	1	He	780.567903	0.6	8043079.167
Zn	66	1	He	3618.818410	0.2	8442796.333
As	75	1	He	34.118357	0.8	70717.013
Se	78	2	H2	0.241426	11.5	272.000
Sr	88	1	He	1028.548189	0.6	12773336.060
Mo	95	1	He	6.326956	0.2	43148.377
Pd	105	1	He	0.550176	1.8	5846.257
Ag	107	1	He	0.079951	7.0	1780.130
Cd	111	1	He	16.611875	0.8	66862.047
Sn	118	1	He	0.042272	2.9	495.010
Sb	121	1	He	0.527817	2.0	7977.343
Ba	138	1	He	29.774093	0.8	992399.387
Pt	195	1	He	0.012790	68.6	356.700
Hg	202	1	He	0.085471	5.5	699.020
Tl	205	1	He	0.019624	6.3	1363.417
Pb	208	1	He	19.857731	1.0	1378009.397
Bi	209	1	He	0.027764	6.7	3477.200
Th	232	1	He	0.057735	8.3	4677.543
U	238	1	He	14.692439	0.6	1014931.027

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.80414046	608692.603
Sc	45	2	H2	106.6840169	5254049.500
Ge	72	1	He	99.69019594	504944.500
Ge	72	2	H2	104.8404630	1788523.080
In	115	1	He	100.2797145	5929897.953
Tb	159	1	He	104.9897066	14491158.113
Ir	193	1	He	102.1397952	7387327.183

Sample Name 10606337008\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 143SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:44:45  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	12.008829	0.4	6147.413
Be	9	2	H2	0.047709	8.9	36.667
B	11	2	H2	20.594934	0.5	12334.353
Na	23	1	He	5247.664103	0.1	5900227.207
Mg	24	1	He	3762.944334	0.4	2372863.713
Al	27	1	He	21.714944	1.3	6785.243
Si	28	2	H2	1340.923410	0.5	5069300.500
K	39	1	He	761.500085	0.1	733131.030
Ca	43	1	He	13162.55046	0.6	33373.477
Ti	47	1	He	0.239998	14.8	68.667
V	51	1	He	0.158153	32.5	724.030
Cr	52	1	He	0.130352	7.4	3958.547
Mn	55	1	He	499.070245	0.2	3443609.917
Fe	56	1	He	294.066464	0.1	2693127.750
Co	59	1	He	1.390639	0.8	21362.290
Ni	60	1	He	0.983476	3.4	4017.230
Cu	63	1	He	81.646331	0.3	868864.750
Zn	66	1	He	374.782315	0.2	903005.750
As	75	1	He	3.423500	0.5	7502.113
Se	78	2	H2	0.029756	13.7	63.667
Sr	88	1	He	102.290605	1.2	1311740.217
Mo	95	1	He	0.635961	4.6	4580.080
Pd	105	1	He	0.056789	10.6	843.367
Ag	107	1	He	0.022047	12.4	591.687
Cd	111	1	He	1.668461	0.3	7079.953
Sn	118	1	He	0.015966	10.3	241.667
Sb	121	1	He	0.053523	5.6	905.037
Ba	138	1	He	2.977984	0.8	104582.563
Pt	195	1	He	0.000591	75.5	186.667
Hg	202	1	He	0.010523	30.8	181.333
Tl	205	1	He	0.004802	2.8	611.687
Pb	208	1	He	2.078951	1.1	149384.897
Bi	209	1	He	0.004183	6.0	2163.557
Th	232	1	He	0.010584	48.9	1321.980
U	238	1	He	1.477379	0.6	106316.693

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.3630402	624456.957
Sc	45	2	H2	105.9365387	5217237.167
Ge	72	1	He	102.9350670	521380.217
Ge	72	2	H2	106.0808930	1809684.163
In	115	1	He	105.5447301	6241237.143
Tb	159	1	He	107.1926630	14795220.197
Ir	193	1	He	105.9587520	7663535.720

Sample Name 10606337009\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 144SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:48:25  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	36.637223	0.4	19607.140
Be	9	2	H2	0.108953	3.8	72.000
B	11	2	H2	209.899617	0.4	104535.113
Na	23	1	He	42073.93714	0.3	47452357.627
Mg	24	1	He	49655.75921	0.4	31444767.030
Al	27	1	He	84.574983	0.8	26332.810
Si	28	2	H2	9665.653955	0.6	38410717.333
K	39	1	He	6362.540298	0.8	5590767.627
Ca	43	1	He	177922.6148	0.6	453047.263
Ti	47	1	He	5.529818	4.3	1567.083
V	51	1	He	0.864588	6.5	6469.853
Cr	52	1	He	0.804756	4.4	10463.837
Mn	55	1	He	4152.786127	1.1	28789477.333
Fe	56	1	He	145.113572	1.0	1341091.623
Co	59	1	He	0.211464	1.5	3265.040
Ni	60	1	He	1.152301	0.6	4630.750
Cu	63	1	He	15.166211	1.7	160203.323
Zn	66	1	He	923.556575	0.9	2206182.750
As	75	1	He	57.901471	1.0	122738.190
Se	78	2	H2	0.066412	11.3	103.667
Sr	88	1	He	1520.312939	0.4	19331140.960
Mo	95	1	He	1.314230	0.8	9062.903
Pd	105	1	He	0.827019	1.8	8761.133
Ag	107	1	He	0.013128	9.6	378.343
Cd	111	1	He	3.156020	0.6	12836.870
Sn	118	1	He	0.035429	9.0	430.010
Sb	121	1	He	0.093667	3.7	1476.757
Ba	138	1	He	34.620714	0.7	1165170.737
Pt	195	1	He	0.004580	29.9	242.000
Hg	202	1	He	0.011339	17.5	185.000
Tl	205	1	He	0.009731	19.4	861.703
Pb	208	1	He	0.834676	1.4	60702.650
Bi	209	1	He	0.004361	35.9	2130.207
Th	232	1	He	0.035096	0.3	3093.730
U	238	1	He	21.185197	1.0	1486934.977

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.8558198	627492.773
Sc	45	2	H2	111.6453252	5498387.500
Ge	72	1	He	102.0716728	517007.007
Ge	72	2	H2	109.6445777	1870478.747
In	115	1	He	101.2600468	5987868.507
Tb	159	1	He	106.0381704	14635871.867
Ir	193	1	He	103.7967136	7507164.887

Sample Name 10606337009\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 145SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:52:04  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.121349	30.8	2252.337
Be	9	2	H2	0.056167	47.2	34.500
B	11	2	H2	29.925619	35.2	14070.693
Na	23	1	He	4685.847715	8.7	5142611.280
Mg	24	1	He	5565.666846	9.0	3423601.927
Al	27	1	He	17.595359	9.3	5377.970
Si	28	2	H2	1229.510962	28.6	3940937.667
K	39	1	He	700.714964	9.9	664236.787
Ca	43	1	He	19353.22935	8.9	47871.637
Ti	47	1	He	0.592064	21.5	163.000
V	51	1	He	0.145793	40.9	632.817
Cr	52	1	He	0.147091	21.0	4023.233
Mn	55	1	He	460.563415	9.0	3100732.500
Fe	56	1	He	16.581324	9.7	158539.563
Co	59	1	He	0.027649	16.2	466.010
Ni	60	1	He	0.210521	9.3	1012.040
Cu	63	1	He	1.722454	9.7	18202.043
Zn	66	1	He	101.506125	9.0	240342.887
As	75	1	He	6.117045	8.7	13018.340
Se	78	2	H2	0.011052	45.5	39.667
Sr	88	1	He	162.991987	9.0	2052890.903
Mo	95	1	He	0.143993	6.6	1022.040
Pd	105	1	He	0.085707	14.8	1120.053
Ag	107	1	He	0.010247	36.6	318.340
Cd	111	1	He	0.343868	12.5	1425.557
Sn	118	1	He	0.013460	21.3	208.333
Sb	121	1	He	0.007264	22.1	171.667
Ba	138	1	He	3.653175	8.6	124660.490
Pt	195	1	He	-0.001583		152.667
Hg	202	1	He	0.003564	68.1	128.667
Tl	205	1	He	0.001991	46.3	453.347
Pb	208	1	He	0.094430	6.0	8779.480
Bi	209	1	He	0.004607	88.3	2113.540
Th	232	1	He	0.005994	2.4	950.047
U	238	1	He	2.247609	7.7	156113.117

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.37823245	612229.353
Sc	45	2	H2	94.09374297	4633994.833
Ge	72	1	He	101.6061651	514649.147
Ge	72	2	H2	94.51572321	1612388.457
In	115	1	He	103.0814135	6095572.430
Tb	159	1	He	104.7497162	14458033.537
Ir	193	1	He	102.8849405	7441220.307

Sample Name 10606337010\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 146SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:55:43  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	55.017152	0.4	29640.697
Be	9	2	H2	0.071462	12.0	52.000
B	11	2	H2	175.426472	0.2	88571.173
Na	23	1	He	45999.51927	1.7	52740265.880
Mg	24	1	He	38841.13498	1.7	25006107.127
Al	27	1	He	64.315517	2.9	20372.700
Si	28	2	H2	10487.27354	0.1	42009121.333
K	39	1	He	6060.762814	1.4	5418178.250
Ca	43	1	He	136477.2937	1.3	353334.343
Ti	47	1	He	1.423271	4.0	410.677
V	51	1	He	1.218446	7.9	9488.400
Cr	52	1	He	0.513673	3.8	7791.423
Mn	55	1	He	3631.774411	1.6	25597396.000
Fe	56	1	He	243.893445	2.0	2283586.667
Co	59	1	He	0.697214	2.4	10826.707
Ni	60	1	He	1.515603	2.5	6125.970
Cu	63	1	He	164.046669	0.7	1760608.750
Zn	66	1	He	1517.083845	1.2	3685984.750
As	75	1	He	37.555074	0.7	81047.853
Se	78	2	H2	0.138593	9.4	179.000
Sr	88	1	He	1111.769759	1.6	14378268.537
Mo	95	1	He	4.059378	1.1	28787.690
Pd	105	1	He	0.589430	2.4	6498.210
Ag	107	1	He	0.068340	10.0	1598.437
Cd	111	1	He	6.297080	0.9	26359.027
Sn	118	1	He	0.042141	24.2	513.350
Sb	121	1	He	0.775601	0.9	12160.363
Ba	138	1	He	33.591684	1.2	1164001.727
Pt	195	1	He	0.006483	31.8	274.000
Hg	202	1	He	0.147254	3.4	1160.053
Tl	205	1	He	0.011467	17.3	968.377
Pb	208	1	He	45.360965	1.6	3231311.643
Bi	209	1	He	0.057992	4.6	5411.220
Th	232	1	He	0.028305	7.3	2626.953
U	238	1	He	17.399839	1.2	1236153.237

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.5720016	638065.480
Sc	45	2	H2	112.5409596	5542496.333
Ge	72	1	He	103.8307052	525916.747
Ge	72	2	H2	110.1701682	1879445.043
In	115	1	He	104.2707342	6165901.217
Tb	159	1	He	107.8813327	14890273.530
Ir	193	1	He	105.0523913	7597982.597



Sample Name 10606337010\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 147SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 22:59:22  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	6.035783	0.3	3233.513
Be	9	2	H2	0.032574	26.0	29.833
B	11	2	H2	19.274124	0.7	12130.690
Na	23	1	He	4791.464597	0.5	5553441.793
Mg	24	1	He	4048.167327	0.6	2630782.773
Al	27	1	He	8.935246	1.3	2923.293
Si	28	2	H2	1075.890285	0.6	4209946.500
K	39	1	He	622.085197	0.2	631671.203
Ca	43	1	He	14014.44460	0.4	36620.007
Ti	47	1	He	0.169705	3.4	50.333
V	51	1	He	0.147150	51.6	655.497
Cr	52	1	He	0.074947	15.3	3533.770
Mn	55	1	He	376.464108	1.0	2677273.333
Fe	56	1	He	25.381853	0.5	250182.520
Co	59	1	He	0.073387	6.2	1215.390
Ni	60	1	He	0.252518	1.9	1230.720
Cu	63	1	He	16.936105	0.5	186317.827
Zn	66	1	He	155.498296	1.0	387048.417
As	75	1	He	3.763720	0.4	8498.323
Se	78	2	H2	0.014113	60.2	49.667
Sr	88	1	He	110.020404	0.2	1457208.623
Mo	95	1	He	0.398411	2.1	2957.650
Pd	105	1	He	0.049183	3.9	783.363
Ag	107	1	He	0.016247	8.2	476.677
Cd	111	1	He	0.648041	1.0	2836.760
Sn	118	1	He	0.009679	28.7	180.000
Sb	121	1	He	0.076264	7.4	1300.073
Ba	138	1	He	3.369288	0.2	121687.830
Pt	195	1	He	0.001520	128.2	206.667
Hg	202	1	He	0.018543	19.7	246.000
Tl	205	1	He	0.002135	26.7	486.680
Pb	208	1	He	4.703049	0.4	345943.817
Bi	209	1	He	0.006845	26.2	2403.597
Th	232	1	He	0.004626	22.4	905.043
U	238	1	He	1.723520	1.0	128042.990

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	104.4692797	643593.250
Sc	45	2	H2	109.5719000	5396274.000
Ge	72	1	He	106.3117095	538483.373
Ge	72	2	H2	109.7575843	1872406.580
In	115	1	He	108.5594141	6419506.183
Tb	159	1	He	110.6975917	15278986.437
Ir	193	1	He	109.4613647	7916864.467

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 148\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:03:02  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	83.181358	1.0	42648.397
Be	9	2	H2	81.183617	1.5	42472.143
B	11	2	H2	80.082578	1.3	40099.120
Na	23	1	He	1025.310831	1.2	1209070.840
Mg	24	1	He	1007.804020	1.1	662258.023
Al	27	1	He	992.644354	1.3	319116.783
Si	28	2	H2	502.549397	1.2	1931957.417
K	39	1	He	1005.005627	0.8	981123.840
Ca	43	1	He	1017.487949	3.5	2701.543
Ti	47	1	He	80.101692	1.0	23489.343
V	51	1	He	79.874094	1.1	671249.440
Cr	52	1	He	82.684599	1.3	825724.583
Mn	55	1	He	80.751835	0.9	579928.560
Fe	56	1	He	505.841692	1.6	4810651.667
Co	59	1	He	83.456544	0.7	1326560.997
Ni	60	1	He	84.346407	1.0	338410.947
Cu	63	1	He	85.070508	0.6	939006.397
Zn	66	1	He	82.297494	0.9	205806.020
As	75	1	He	79.710332	1.1	176657.263
Se	78	2	H2	81.535347	0.2	82033.360
Sr	88	1	He	80.481368	0.7	1070532.170
Mo	95	1	He	78.047592	0.3	575324.417
Pd	105	1	He	83.091266	0.3	918883.817
Ag	107	1	He	42.675827	2.0	970316.367
Cd	111	1	He	80.379220	0.7	349747.860
Sn	118	1	He	77.486119	0.3	845318.477
Sb	121	1	He	77.594552	0.3	1259112.610
Ba	138	1	He	78.375735	0.5	2824408.813
Pt	195	1	He	83.273160	0.6	1241733.707
Hg	202	1	He	3.926461	1.3	28666.063
Tl	205	1	He	42.114916	1.3	2270371.633
Pb	208	1	He	82.762912	1.6	5995590.373
Bi	209	1	He	79.053458	2.2	5007081.280
Th	232	1	He	75.906273	1.8	5879483.873
U	238	1	He	77.750902	0.4	5760804.493

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	105.4476138	649620.373
Sc	45	2	H2	107.2055771	5279735.667
Ge	72	1	He	106.7690561	540799.897
Ge	72	2	H2	106.7662186	1821375.457
In	115	1	He	108.4298474	6411844.447
Tb	159	1	He	109.7492550	15148092.690
Ir	193	1	He	109.5970272	7926676.340

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 149\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:06:42  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.150358	3.7	150.333
Be	9	2	H2	0.034433	19.7	30.000
B	11	2	H2	-0.425051		2708.247
Na	23	1	He	5.720529	0.9	18466.487
Mg	24	1	He	0.464484	48.6	1845.130
Al	27	1	He	0.192681	26.1	137.333
Si	28	2	H2	0.037836	1095.1	15318.413
K	39	1	He	-0.762269		76805.247
Ca	43	1	He	0.577216	284.5	20.617
Ti	47	1	He	0.006912	182.3	3.000
V	51	1	He	0.079918	114.6	95.400
Cr	52	1	He	-0.006767		2686.257
Mn	55	1	He	0.261540	7.5	2168.833
Fe	56	1	He	0.104128	22.8	12393.263
Co	59	1	He	0.008601	51.6	185.333
Ni	60	1	He	-0.001413		212.000
Cu	63	1	He	0.021901	5.4	449.343
Zn	66	1	He	0.071497	5.9	352.677
As	75	1	He	-0.014910		164.667
Se	78	2	H2	-0.002026		32.000
Sr	88	1	He	0.028977	25.7	518.347
Mo	95	1	He	0.012229	43.5	106.000
Pd	105	1	He	0.018934	14.4	441.677
Ag	107	1	He	0.194434	26.9	4462.440
Cd	111	1	He	0.008035	48.9	47.980
Sn	118	1	He	0.013050	21.1	213.333
Sb	121	1	He	0.004444	15.9	131.667
Ba	138	1	He	0.006148	35.9	345.010
Pt	195	1	He	0.004865	67.0	251.333
Hg	202	1	He	0.023929	12.9	279.333
Tl	205	1	He	0.056494	36.3	3363.823
Pb	208	1	He	0.002794	83.7	2551.790
Bi	209	1	He	0.007412	107.5	2430.270
Th	232	1	He	0.020036	18.0	2091.857
U	238	1	He	0.005604	48.3	920.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.8588474	633672.023
Sc	45	2	H2	106.6439718	5252077.333
Ge	72	1	He	103.8918999	526226.707
Ge	72	2	H2	106.4062011	1815233.747
In	115	1	He	106.9675082	6325371.100
Tb	159	1	He	108.3340359	14952757.697
Ir	193	1	He	109.2297790	7900114.880

Sample Name 10606337011\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 150SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:10:21  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	42.394302	0.8	21773.760
Be	9	2	H2	0.089913	9.4	59.167
B	11	2	H2	118.041334	0.2	57729.007
Na	23	1	He	63237.92702	0.4	68688367.310
Mg	24	1	He	23229.97955	0.5	14169398.123
Al	27	1	He	206.285591	0.5	61756.973
Si	28	2	H2	14046.12889	0.1	53593236.000
K	39	1	He	6231.871954	0.1	5276003.153
Ca	43	1	He	102268.8394	0.2	250839.517
Ti	47	1	He	7.337589	3.2	2002.807
V	51	1	He	1.710974	0.1	12854.120
Cr	52	1	He	0.614215	1.1	8312.370
Mn	55	1	He	3270.242089	0.3	21837683.333
Fe	56	1	He	1095.142836	0.8	9677439.333
Co	59	1	He	0.988726	1.1	14583.970
Ni	60	1	He	2.040999	1.0	7775.417
Cu	63	1	He	977.945237	0.7	9980750.667
Zn	66	1	He	2459.930448	0.4	5684295.833
As	75	1	He	18.752286	1.0	38579.890
Se	78	2	H2	0.289453	7.0	320.333
Sr	88	1	He	683.471974	0.6	8406748.207
Mo	95	1	He	6.316215	0.9	42823.403
Pd	105	1	He	0.368586	4.0	3967.260
Ag	107	1	He	0.203771	4.3	4359.040
Cd	111	1	He	14.539158	0.5	58180.250
Sn	118	1	He	0.039877	9.6	468.343
Sb	121	1	He	0.310583	5.2	4690.827
Ba	138	1	He	23.177000	0.4	768039.490
Pt	195	1	He	0.013218	4.1	356.010
Hg	202	1	He	0.212797	3.4	1554.093
Tl	205	1	He	0.042408	3.6	2488.590
Pb	208	1	He	13.106363	1.0	892663.170
Bi	209	1	He	0.239035	2.7	15783.000
Th	232	1	He	0.192391	2.2	14254.547
U	238	1	He	15.185871	0.8	1038575.377

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.10440538	604381.817
Sc	45	2	H2	107.2071406	5279812.667
Ge	72	1	He	98.74056647	500134.497
Ge	72	2	H2	105.1651825	1794062.623
In	115	1	He	99.69695518	5895437.310
Tb	159	1	He	102.9695650	14212328.953
Ir	193	1	He	101.1172615	7313371.767

Sample Name 4308555\_B69957Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 151SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:14:01  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	141.385297	0.6	73501.160
Be	9	2	H2	98.240198	0.3	52149.373
B	11	2	H2	222.762917	0.4	107902.877
Na	23	1	He	68001.92725	1.0	76379360.530
Mg	24	1	He	26228.48028	0.6	16543684.337
Al	27	1	He	2201.642928	0.6	680847.023
Si	28	2	H2	15208.43638	0.8	58872041.333
K	39	1	He	8555.430505	0.6	7461375.513
Ca	43	1	He	109843.5941	0.7	278586.430
Ti	47	1	He	110.811374	0.5	31261.387
V	51	1	He	104.435276	1.0	844529.333
Cr	52	1	He	104.409629	1.4	1002400.143
Mn	55	1	He	3529.159344	0.8	24369208.000
Fe	56	1	He	3178.603970	0.8	29023756.000
Co	59	1	He	105.543156	0.6	1602159.460
Ni	60	1	He	105.490899	0.8	404149.397
Cu	63	1	He	1119.235409	0.7	11795586.000
Zn	66	1	He	2663.390696	0.8	6355405.500
As	75	1	He	123.650866	0.5	261626.380
Se	78	2	H2	103.923269	1.0	104233.547
Sr	88	1	He	813.756518	0.7	10336184.847
Mo	95	1	He	110.535328	0.2	766079.063
Pd	105	1	He	20.094461	0.5	209100.633
Ag	107	1	He	52.259418	0.7	1117335.063
Cd	111	1	He	117.064695	0.6	478905.430
Sn	118	1	He	101.072883	0.6	1036676.287
Sb	121	1	He	101.629307	0.7	1550429.717
Ba	138	1	He	125.979765	0.5	4268317.957
Pt	195	1	He	20.335220	1.0	294117.330
Hg	202	1	He	0.229795	3.6	1726.117
Tl	205	1	He	102.931793	0.7	5379396.170
Pb	208	1	He	114.297412	0.6	8027035.717
Bi	209	1	He	97.668732	0.7	5862912.620
Th	232	1	He	102.955052	0.1	7558316.553
U	238	1	He	117.529291	0.9	8253034.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.4460852	624968.563
Sc	45	2	H2	108.7702647	5356794.500
Ge	72	1	He	101.9674828	516479.270
Ge	72	2	H2	106.4391937	1815796.583
In	115	1	He	101.9477858	6028536.973
Tb	159	1	He	106.3985078	14685607.280
Ir	193	1	He	103.8658281	7512163.637

Sample Name 10606337011\_B69957Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 152SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:17:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	4.786127	1.3	2467.200
Be	9	2	H2	0.069016	23.3	47.167
B	11	2	H2	13.126086	0.5	8811.733
Na	23	1	He	6579.937400	0.2	7422264.263
Mg	24	1	He	2430.685746	0.8	1538942.320
Al	27	1	He	23.837265	0.6	7467.877
Si	28	2	H2	1435.043609	0.5	5365623.000
K	39	1	He	642.075867	0.3	632431.930
Ca	43	1	He	10467.46989	1.1	26639.583
Ti	47	1	He	0.731736	1.4	208.000
V	51	1	He	0.229207	8.5	1305.863
Cr	52	1	He	0.090435	8.9	3590.457
Mn	55	1	He	340.569348	0.0	2358637.250
Fe	56	1	He	113.635028	0.3	1051410.980
Co	59	1	He	0.118480	4.0	1880.127
Ni	60	1	He	0.378414	3.7	1690.103
Cu	63	1	He	101.145984	0.4	1083706.333
Zn	66	1	He	250.553570	0.4	607867.917
As	75	1	He	1.874312	1.2	4224.123
Se	78	2	H2	0.027631	7.2	60.667
Sr	88	1	He	68.160630	0.8	880101.603
Mo	95	1	He	0.644185	1.2	4668.110
Pd	105	1	He	0.044749	6.3	718.353
Ag	107	1	He	0.263382	31.2	5966.403
Cd	111	1	He	1.484200	1.6	6338.590
Sn	118	1	He	0.025196	15.9	341.677
Sb	121	1	He	0.037651	5.6	658.353
Ba	138	1	He	2.326233	0.9	82231.160
Pt	195	1	He	0.002214	153.5	211.333
Hg	202	1	He	0.028653	4.2	311.667
Tl	205	1	He	0.038137	26.2	2378.577
Pb	208	1	He	1.360490	1.0	99070.973
Bi	209	1	He	0.033246	11.7	3953.983
Th	232	1	He	0.056506	9.4	4774.253
U	238	1	He	1.518296	0.6	109573.287

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.7325428	626733.313
Sc	45	2	H2	104.7968538	5161109.167
Ge	72	1	He	103.6400910	524951.260
Ge	72	2	H2	104.5836532	1784142.040
In	115	1	He	106.2035134	6280193.357
Tb	159	1	He	107.7488593	14871988.947
Ir	193	1	He	106.2772910	7686574.260

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 153\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:21:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	82.090966	1.2	41490.187
Be	9	2	H2	79.577117	1.1	41040.553
B	11	2	H2	78.246345	1.2	38687.793
Na	23	1	He	1022.667223	0.6	1175850.293
Mg	24	1	He	1002.659225	1.4	642387.270
Al	27	1	He	988.412397	0.9	309805.157
Si	28	2	H2	492.318502	0.8	1866051.583
K	39	1	He	996.544677	0.5	949176.783
Ca	43	1	He	1019.349971	1.4	2639.077
Ti	47	1	He	79.122396	1.1	22620.320
V	51	1	He	79.114212	0.7	648207.077
Cr	52	1	He	81.731521	0.7	795790.290
Mn	55	1	He	80.800924	0.5	565748.457
Fe	56	1	He	502.091615	1.0	4655529.167
Co	59	1	He	82.895655	0.6	1283521.373
Ni	60	1	He	83.915464	0.5	327966.687
Cu	63	1	He	83.950579	0.6	902634.917
Zn	66	1	He	81.243492	0.5	197913.733
As	75	1	He	78.710458	1.1	169933.740
Se	78	2	H2	80.352471	1.1	79712.237
Sr	88	1	He	80.099946	0.7	1037872.693
Mo	95	1	He	77.339026	1.0	557032.250
Pd	105	1	He	82.593786	0.8	892459.310
Ag	107	1	He	42.129555	2.3	936001.860
Cd	111	1	He	79.942346	0.4	339886.703
Sn	118	1	He	76.968569	1.3	820410.873
Sb	121	1	He	77.478169	1.2	1228376.597
Ba	138	1	He	77.742715	0.5	2737462.563
Pt	195	1	He	81.600891	0.5	1193218.080
Hg	202	1	He	3.858457	1.9	27625.560
Tl	205	1	He	41.831781	0.2	2211478.613
Pb	208	1	He	81.403014	1.0	5783038.900
Bi	209	1	He	78.681487	1.3	4860348.887
Th	232	1	He	75.819397	1.3	5727572.623
U	238	1	He	77.244082	1.1	5581135.753

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.8072728	633354.293
Sc	45	2	H2	105.6778449	5204496.833
Ge	72	1	He	104.0013573	526781.123
Ge	72	2	H2	105.2623160	1795719.670
In	115	1	He	105.9475733	6265058.707
Tb	159	1	He	107.6186500	14854016.863
Ir	193	1	He	106.8812405	7730255.303

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 154\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:25:00  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.268170	42.0	159.833
Be	9	2	H2	0.078793	33.3	40.500
B	11	2	H2	1.510734	160.5	2716.747
Na	23	1	He	7.054870	6.5	19726.453
Mg	24	1	He	0.006079	2309.8	1531.757
Al	27	1	He	0.159802	19.0	125.333
Si	28	2	H2	1.046596	153.5	14415.097
K	39	1	He	-2.498178		74304.050
Ca	43	1	He	1.209617	193.3	21.950
Ti	47	1	He	0.014166	87.1	5.000
V	51	1	He	0.046427	95.3	-177.063
Cr	52	1	He	-0.015026		2572.233
Mn	55	1	He	0.295141	4.6	2372.867
Fe	56	1	He	0.130321	2.7	12471.333
Co	59	1	He	0.009560	17.0	198.000
Ni	60	1	He	-0.003860		200.000
Cu	63	1	He	0.029819	8.8	528.010
Zn	66	1	He	0.088866	17.7	390.010
As	75	1	He	-0.017343		157.500
Se	78	2	H2	0.020438	90.6	41.000
Sr	88	1	He	0.025787	17.4	471.677
Mo	95	1	He	0.013738	34.7	116.000
Pd	105	1	He	0.014794	20.7	393.343
Ag	107	1	He	0.187580	25.1	4274.043
Cd	111	1	He	0.006550	30.5	41.313
Sn	118	1	He	0.010238	45.2	181.667
Sb	121	1	He	0.004841	96.4	136.667
Ba	138	1	He	0.005429	30.1	316.677
Pt	195	1	He	0.002264	72.7	211.333
Hg	202	1	He	0.027922	17.4	305.333
Tl	205	1	He	0.054968	27.6	3255.447
Pb	208	1	He	0.002055	126.8	2478.443
Bi	209	1	He	0.005283	101.3	2260.233
Th	232	1	He	0.019636	7.5	2028.513
U	238	1	He	0.006697	34.1	985.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.5196511	625421.773
Sc	45	2	H2	85.13518054	4192797.250
Ge	72	1	He	102.6449735	519910.853
Ge	72	2	H2	84.98759747	1449843.650
In	115	1	He	106.0389969	6270464.910
Tb	159	1	He	107.4317901	14828225.613
Ir	193	1	He	107.4905535	7774324.260



Sample Name CRDL  
 Sample Type CRDL  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 155CRD.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:28:41  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.656944	8.7	399.343
Be	9	2	H2	0.244716	16.2	136.333
B	11	2	H2	9.481915	2.1	7126.013
Na	23	1	He	58.919126	0.4	78171.353
Mg	24	1	He	30.547597	1.2	20849.673
Al	27	1	He	31.052059	1.6	9704.160
Si	28	2	H2	99.128668	0.6	382828.803
K	39	1	He	101.843247	1.2	164768.733
Ca	43	1	He	102.084025	5.4	278.583
Ti	47	1	He	0.962796	5.1	273.333
V	51	1	He	0.942614	11.1	7096.117
Cr	52	1	He	2.047745	1.0	22381.713
Mn	55	1	He	0.756308	4.1	5570.407
Fe	56	1	He	51.393534	0.9	481676.540
Co	59	1	He	0.542435	0.9	8327.727
Ni	60	1	He	0.551614	1.9	2337.530
Cu	63	1	He	1.114524	1.2	12016.983
Zn	66	1	He	5.314074	2.2	12921.763
As	75	1	He	0.475714	2.2	1205.050
Se	78	2	H2	0.516994	1.7	537.010
Sr	88	1	He	0.538125	0.5	7011.770
Mo	95	1	He	0.483464	3.5	3459.763
Pd	105	1	He	0.520735	3.0	5791.247
Ag	107	1	He	0.450371	9.1	9995.300
Cd	111	1	He	0.087979	3.6	383.053
Sn	118	1	He	0.480599	1.1	5135.983
Sb	121	1	He	0.525406	3.2	8294.183
Ba	138	1	He	0.303496	2.4	10687.560
Pt	195	1	He	0.504728	0.7	7453.430
Hg	202	1	He	0.234079	0.4	1751.787
Tl	205	1	He	0.106054	5.5	5883.017
Pb	208	1	He	0.517594	1.9	38550.213
Bi	209	1	He	0.492194	0.5	32062.447
Th	232	1	He	0.505766	0.5	38431.520
U	238	1	He	0.485886	1.4	35319.650

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.7266921	626697.270
Sc	45	2	H2	104.3373493	5138479.167
Ge	72	1	He	102.4820480	519085.613
Ge	72	2	H2	103.4825350	1765357.543
In	115	1	He	104.7417244	6193752.550
Tb	159	1	He	106.1273001	14648173.947
Ir	193	1	He	106.0325876	7668875.927

Sample Name 4308560\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 156SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:32:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.146843	11.3	146.500
Be	9	2	H2	0.034904	1.6	29.833
B	11	2	H2	-1.331878		2258.007
Na	23	1	He	7.531274	7.8	20268.833
Mg	24	1	He	2.460504	7.0	3082.013
Al	27	1	He	3.151928	3.6	1051.707
Si	28	2	H2	-0.009966		14925.483
K	39	1	He	-1.669088		75051.147
Ca	43	1	He	11.224414	31.1	47.383
Ti	47	1	He	0.068408	34.3	20.333
V	51	1	He	0.006548	1328.1	-500.603
Cr	52	1	He	0.296467	2.2	5559.077
Mn	55	1	He	0.273568	3.5	2224.843
Fe	56	1	He	9.164419	1.3	95027.087
Co	59	1	He	0.007772	23.1	169.333
Ni	60	1	He	0.004584	159.2	230.667
Cu	63	1	He	0.063177	4.1	874.697
Zn	66	1	He	0.535987	3.0	1452.077
As	75	1	He	-0.015499		160.167
Se	78	2	H2	-0.002472		31.000
Sr	88	1	He	0.040142	8.0	650.020
Mo	95	1	He	0.015462	2.6	128.000
Pd	105	1	He	0.004707	39.2	283.340
Ag	107	1	He	0.069529	19.2	1643.443
Cd	111	1	He	0.005890	50.9	38.313
Sn	118	1	He	0.018317	24.3	266.670
Sb	121	1	He	0.007710	24.6	181.667
Ba	138	1	He	0.020681	12.4	851.703
Pt	195	1	He	0.004485	45.7	242.667
Hg	202	1	He	0.013384	32.9	201.000
Tl	205	1	He	0.013005	25.7	1040.050
Pb	208	1	He	0.003364	50.7	2560.117
Bi	209	1	He	0.003623	54.4	2156.887
Th	232	1	He	0.004659	23.7	890.033
U	238	1	He	0.001439	61.6	603.353

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.5615128	625679.667
Sc	45	2	H2	105.1886306	5180403.667
Ge	72	1	He	101.7944332	515602.750
Ge	72	2	H2	104.5225630	1783099.873
In	115	1	He	105.6611339	6248120.517
Tb	159	1	He	106.9414305	14760543.947
Ir	193	1	He	107.3608162	7764940.927

Sample Name 4308561\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 157SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:36:00  
 Comment

### Analytes

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	105.029963	0.4	51605.900
Be	9	2	H2	102.339809	1.0	51326.750
B	11	2	H2	100.485737	0.9	47523.180
Na	23	1	He	2075.366932	0.6	2308482.257
Mg	24	1	He	2044.376598	0.4	1272147.013
Al	27	1	He	2009.984651	0.3	612565.583
Si	28	2	H2	515.674484	0.6	1900132.627
K	39	1	He	2034.851558	0.4	1806273.620
Ca	43	1	He	2047.721035	1.6	5136.070
Ti	47	1	He	100.536668	1.6	27949.420
V	51	1	He	101.724361	0.3	810648.120
Cr	52	1	He	105.427828	0.6	997441.873
Mn	55	1	He	102.741812	0.7	699451.000
Fe	56	1	He	2058.213606	0.7	18524073.333
Co	59	1	He	107.108446	0.4	1618956.040
Ni	60	1	He	107.509284	0.8	410114.553
Cu	63	1	He	106.422263	0.8	1116952.957
Zn	66	1	He	105.135748	0.7	249967.893
As	75	1	He	101.187360	0.6	213210.187
Se	78	2	H2	103.859690	1.3	100304.517
Sr	88	1	He	102.731307	0.4	1299414.043
Mo	95	1	He	99.837039	0.7	703718.647
Pd	105	1	He	20.802769	0.7	220154.370
Ag	107	1	He	52.880017	1.5	1149787.407
Cd	111	1	He	101.622878	0.5	422830.790
Sn	118	1	He	97.386713	0.1	1015895.530
Sb	121	1	He	99.270311	0.4	1540293.467
Ba	138	1	He	100.801770	0.2	3473525.260
Pt	195	1	He	20.458215	0.6	297114.427
Hg	202	1	He	0.013909	20.6	204.667
Tl	205	1	He	106.002510	0.8	5562637.003
Pb	208	1	He	103.777504	0.0	7318474.320
Bi	209	1	He	100.274990	1.0	6114959.490
Th	232	1	He	100.799538	0.3	7517803.430
U	238	1	He	99.410218	0.3	7091519.893

### ISTD

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	99.97366651	615897.583
Sc	45	2	H2	102.7658562	5061085.167
Ge	72	1	He	101.5262686	514244.460
Ge	72	2	H2	102.4934534	1748484.333
In	115	1	He	103.6821756	6131097.643
Tb	159	1	He	106.8375088	14746200.197
Ir	193	1	He	105.5193678	7631756.970

Sample Name 10606389001\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 158SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:39:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	34.767821	0.2	17929.237
Be	9	2	H2	1.794948	3.1	954.030
B	11	2	H2	8.422668	2.4	6851.720
Na	23	1	He	19133.71524	2.7	20920808.020
Mg	24	1	He	66493.45160	3.0	40807737.727
Al	27	1	He	406.003217	3.1	122226.503
Si	28	2	H2	3686.472149	0.9	14124141.000
K	39	1	He	5840.949542	2.7	4980397.530
Ca	43	1	He	448549.0352	2.9	1106937.483
Ti	47	1	He	3.482699	2.4	957.367
V	51	1	He	0.925361	9.0	6749.420
Cr	52	1	He	0.781856	6.9	9922.707
Mn	55	1	He	792.533019	2.8	5325228.833
Fe	56	1	He	944.891688	3.2	8402837.500
Co	59	1	He	10.869277	3.6	157887.177
Ni	60	1	He	34.152269	2.8	125326.643
Cu	63	1	He	0.723450	4.4	7493.947
Zn	66	1	He	237.901256	2.1	543296.500
As	75	1	He	1.581561	3.6	3383.400
Se	78	2	H2	0.291869	13.4	321.670
Sr	88	1	He	3139.730296	2.4	38152842.767
Mo	95	1	He	0.167637	14.8	1149.387
Pd	105	1	He	1.653422	4.9	17007.000
Ag	107	1	He	0.269132	28.0	5701.260
Cd	111	1	He	0.311439	11.4	1256.517
Sn	118	1	He	0.131619	17.5	1385.080
Sb	121	1	He	0.151882	19.5	2316.883
Ba	138	1	He	18.965157	1.8	627989.120
Pt	195	1	He	0.023327	21.6	492.677
Hg	202	1	He	0.009738	13.9	167.667
Tl	205	1	He	0.698523	5.4	35392.333
Pb	208	1	He	1.007543	4.2	70144.937
Bi	209	1	He	0.081696	32.0	6325.017
Th	232	1	He	0.242002	18.4	17078.200
U	238	1	He	2.119430	3.3	139784.783

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	98.73152847	608245.270
Sc	45	2	H2	107.5563850	5297012.500
Ge	72	1	He	97.57048887	494207.893
Ge	72	2	H2	104.8829739	1789248.293
In	115	1	He	99.62715354	5891309.690
Tb	159	1	He	102.2171355	14108475.207
Ir	193	1	He	97.27317817	7035345.937

Sample Name 4309988\_B69958Dx5  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 159SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:43:19  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	7.463023	0.2	3902.673
Be	9	2	H2	0.415563	4.2	230.000
B	11	2	H2	0.411370	38.4	3117.157
Na	23	1	He	3835.326229	0.2	4401522.433
Mg	24	1	He	13272.31297	0.2	8532489.663
Al	27	1	He	84.699073	1.9	26766.010
Si	28	2	H2	773.211091	1.8	2970821.750
K	39	1	He	1149.538152	0.9	1089108.293
Ca	43	1	He	87733.96159	0.2	226772.277
Ti	47	1	He	1.008238	15.5	291.007
V	51	1	He	0.165484	45.7	804.593
Cr	52	1	He	0.199577	6.8	4714.100
Mn	55	1	He	156.991083	0.7	1105068.503
Fe	56	1	He	191.587213	0.4	1793618.043
Co	59	1	He	2.146867	0.9	33790.983
Ni	60	1	He	6.775901	1.3	27081.770
Cu	63	1	He	0.204304	6.8	2446.883
Zn	66	1	He	47.676203	0.9	117957.333
As	75	1	He	0.306181	1.6	870.197
Se	78	2	H2	0.052302	14.7	87.333
Sr	88	1	He	597.174799	0.7	7852819.467
Mo	95	1	He	0.035157	16.4	274.000
Pd	105	1	He	0.318179	2.7	3722.180
Ag	107	1	He	0.063894	13.8	1545.097
Cd	111	1	He	0.062628	8.9	283.617
Sn	118	1	He	0.036537	16.3	468.343
Sb	121	1	He	0.024833	12.3	460.010
Ba	138	1	He	3.642604	1.2	130193.923
Pt	195	1	He	0.004331	56.7	246.000
Hg	202	1	He	0.004592	42.4	142.000
Tl	205	1	He	0.144367	2.8	8125.880
Pb	208	1	He	0.204316	2.0	17131.047
Bi	209	1	He	0.018288	26.9	3073.750
Th	232	1	He	0.040716	21.8	3633.890
U	238	1	He	0.397419	3.0	29406.813

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	103.3861225	636920.353
Sc	45	2	H2	107.4387068	5291217.000
Ge	72	1	He	105.5588223	534669.897
Ge	72	2	H2	107.5808688	1835272.960
In	115	1	He	107.4412864	6353387.300
Tb	159	1	He	109.4400830	15105419.360
Ir	193	1	He	107.6112316	7783052.383

Sample Name 4308562\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 160SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:46:58  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	127.320486	0.3	65360.477
Be	9	2	H2	91.714956	0.4	48071.147
B	11	2	H2	97.103289	0.4	48090.977
Na	23	1	He	20890.97807	0.5	22629089.663
Mg	24	1	He	67425.24413	0.2	40998005.223
Al	27	1	He	2254.648502	0.2	672193.060
Si	28	2	H2	4109.491501	0.6	15717822.000
K	39	1	He	7746.326039	0.8	6519744.070
Ca	43	1	He	444415.0431	0.7	1086546.260
Ti	47	1	He	102.542891	1.0	27887.300
V	51	1	He	101.435900	1.5	790720.733
Cr	52	1	He	102.474569	0.3	948543.020
Mn	55	1	He	861.540657	0.3	5735655.500
Fe	56	1	He	2879.010453	0.7	25343620.000
Co	59	1	He	113.905429	1.2	1646758.540
Ni	60	1	He	136.310659	0.7	497325.300
Cu	63	1	He	101.675883	0.9	1020738.250
Zn	66	1	He	333.002414	0.5	756969.980
As	75	1	He	104.144740	0.9	209892.733
Se	78	2	H2	107.434136	0.5	106870.283
Sr	88	1	He	3185.113047	0.6	38532121.090
Mo	95	1	He	101.804051	1.1	677340.270
Pd	105	1	He	21.342719	0.6	213205.127
Ag	107	1	He	50.069241	1.7	1027584.777
Cd	111	1	He	98.895424	0.5	388426.977
Sn	118	1	He	97.451910	0.5	959652.280
Sb	121	1	He	98.438904	0.8	1441835.497
Ba	138	1	He	123.023235	0.9	4001546.193
Pt	195	1	He	19.960069	1.1	274908.333
Hg	202	1	He	0.012281	41.1	183.000
Tl	205	1	He	102.867468	0.8	5119455.340
Pb	208	1	He	98.891120	1.0	6613726.413
Bi	209	1	He	97.998685	1.0	5513399.293
Th	232	1	He	103.228007	0.3	7102415.310
U	238	1	He	103.114987	0.3	6785936.773

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.80190715	602518.247
Sc	45	2	H2	107.3934873	5288990.000
Ge	72	1	He	97.11677097	491909.750
Ge	72	2	H2	105.5705000	1800977.127
In	115	1	He	97.87702229	5787818.173
Tb	159	1	He	101.3236110	13985146.873
Ir	193	1	He	97.34270169	7040374.270

Sample Name 4308563\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 161SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:50:38  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	129.001419	0.5	66121.913
Be	9	2	H2	94.578495	0.3	49495.533
B	11	2	H2	99.479754	1.1	49122.440
Na	23	1	He	20135.60817	1.0	20683210.527
Mg	24	1	He	64704.38969	0.8	37307771.110
Al	27	1	He	2252.423948	0.8	636793.227
Si	28	2	H2	3962.787035	1.0	15134937.667
K	39	1	He	7481.720127	0.8	5973996.787
Ca	43	1	He	422792.6163	0.7	980250.013
Ti	47	1	He	104.987563	0.3	27075.143
V	51	1	He	104.282751	1.3	771000.730
Cr	52	1	He	104.811794	1.0	919955.793
Mn	55	1	He	831.672408	1.1	5250600.333
Fe	56	1	He	2868.770573	0.8	23948386.000
Co	59	1	He	116.160140	0.9	1596155.833
Ni	60	1	He	137.219238	0.9	475832.187
Cu	63	1	He	104.104077	0.8	993330.063
Zn	66	1	He	322.959281	1.0	697736.040
As	75	1	He	106.314495	0.9	203647.490
Se	78	2	H2	109.999746	0.3	109522.240
Sr	88	1	He	3049.185040	0.9	35059770.310
Mo	95	1	He	104.909770	0.4	663276.667
Pd	105	1	He	22.208647	0.8	210818.920
Ag	107	1	He	51.389807	0.7	1002305.453
Cd	111	1	He	100.948287	0.9	376784.127
Sn	118	1	He	100.117340	0.5	936798.163
Sb	121	1	He	100.990858	0.9	1405661.800
Ba	138	1	He	119.563247	0.6	3695642.030
Pt	195	1	He	20.576496	0.7	269888.597
Hg	202	1	He	0.012373	5.2	175.000
Tl	205	1	He	105.018025	1.5	4977752.740
Pb	208	1	He	101.310497	1.5	6453747.040
Bi	209	1	He	99.066253	0.8	5347769.713
Th	232	1	He	104.007406	1.0	6866567.397
U	238	1	He	104.552281	1.9	6603200.527

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	92.73255090	571287.980
Sc	45	2	H2	107.2286370	5280871.333
Ge	72	1	He	92.28842773	467453.530
Ge	72	2	H2	105.6672621	1802627.837
In	115	1	He	92.99391637	5499062.667
Tb	159	1	He	96.48360899	13317107.720
Ir	193	1	He	93.38775694	6754330.317

Sample Name 10606389001\_B69958Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 162SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:54:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	3.753816	1.7	2104.147
Be	9	2	H2	0.266575	3.7	159.833
B	11	2	H2	0.120233	111.5	3137.327
Na	23	1	He	1918.513423	5.0	2254383.197
Mg	24	1	He	6673.683138	4.9	4381805.560
Al	27	1	He	44.327599	5.8	14339.633
Si	28	2	H2	386.260434	2.8	1569554.540
K	39	1	He	574.739769	5.1	595883.623
Ca	43	1	He	44802.26199	2.2	118351.380
Ti	47	1	He	0.446486	5.1	132.333
V	51	1	He	0.125899	69.7	465.620
Cr	52	1	He	0.133828	12.2	4160.603
Mn	55	1	He	79.234322	4.4	569799.977
Fe	56	1	He	96.796766	4.7	931222.293
Co	59	1	He	1.087585	1.9	17468.460
Ni	60	1	He	3.465529	3.4	14218.287
Cu	63	1	He	0.136703	7.1	1740.110
Zn	66	1	He	24.296224	2.7	61326.140
As	75	1	He	0.165292	8.2	572.510
Se	78	2	H2	0.047876	12.7	88.000
Sr	88	1	He	302.300493	3.5	4048958.167
Mo	95	1	He	0.033233	23.2	268.667
Pd	105	1	He	0.163994	5.6	2110.180
Ag	107	1	He	0.241358	38.9	5743.003
Cd	111	1	He	0.045205	9.2	216.283
Sn	118	1	He	0.042769	15.4	555.017
Sb	121	1	He	0.020673	13.7	408.343
Ba	138	1	He	1.841878	4.8	68386.680
Pt	195	1	He	0.003825	12.5	246.000
Hg	202	1	He	0.006806	29.8	162.667
Tl	205	1	He	0.105046	15.2	6188.187
Pb	208	1	He	0.110726	8.6	10690.013
Bi	209	1	He	0.016016	44.2	3030.417
Th	232	1	He	0.049868	17.9	4464.153
U	238	1	He	0.204757	8.9	15881.450

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	105.7141432	651262.353
Sc	45	2	H2	113.0361841	5566885.500
Ge	72	1	He	107.5880119	544948.020
Ge	72	2	H2	114.1263399	1946935.250
In	115	1	He	111.6495901	6602239.337
Tb	159	1	He	112.8994975	15582903.517
Ir	193	1	He	111.2825172	8048580.503



Sample Name 4309988\_B69958Dx50  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 163SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/05/22 23:57:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.893214	1.8	567.010
Be	9	2	H2	0.117561	16.2	78.500
B	11	2	H2	-1.606572		2319.180
Na	23	1	He	397.325766	1.7	482560.213
Mg	24	1	He	1377.999872	1.5	917319.257
Al	27	1	He	14.292929	6.6	4737.440
Si	28	2	H2	77.852047	1.9	333081.520
K	39	1	He	117.564700	3.2	187423.627
Ca	43	1	He	9111.161096	2.2	24364.390
Ti	47	1	He	0.165504	28.0	50.333
V	51	1	He	0.084065	68.8	132.800
Cr	52	1	He	0.122582	33.8	4095.920
Mn	55	1	He	16.457186	2.1	120081.223
Fe	56	1	He	21.616115	5.2	219751.473
Co	59	1	He	0.284938	17.7	4685.447
Ni	60	1	He	0.817348	6.2	3578.450
Cu	63	1	He	0.151021	28.7	1928.803
Zn	66	1	He	5.320733	3.1	13777.220
As	75	1	He	0.082692	38.1	394.007
Se	78	2	H2	0.012780	78.7	51.000
Sr	88	1	He	61.084321	1.7	830662.177
Mo	95	1	He	0.065742	60.6	525.347
Pd	105	1	He	0.044417	11.7	765.030
Ag	107	1	He	0.075923	30.5	1920.160
Cd	111	1	He	0.061491	55.0	294.577
Sn	118	1	He	0.074685	63.8	930.047
Sb	121	1	He	0.062552	54.6	1126.733
Ba	138	1	He	0.435548	10.0	16586.777
Pt	195	1	He	0.011058	54.3	366.007
Hg	202	1	He	0.004378	56.6	148.667
Tl	205	1	He	0.078439	48.2	4842.717
Pb	208	1	He	0.080061	43.9	8624.510
Bi	209	1	He	0.055754	60.3	5694.837
Th	232	1	He	0.063858	61.0	5681.543
U	238	1	He	0.092371	41.0	7609.177

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	106.8909196	658512.000
Sc	45	2	H2	114.3906902	5633593.167
Ge	72	1	He	109.1458710	552838.790
Ge	72	2	H2	115.7598998	1974802.920
In	115	1	He	113.7055821	6723817.497
Tb	159	1	He	115.7891281	15981743.510
Ir	193	1	He	113.5867193	8215233.420

Sample Name 10606389002\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 164SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:01:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	9.092479	0.2	4944.640
Be	9	2	H2	0.059363	6.8	45.167
B	11	2	H2	29.845895	0.9	17545.817
Na	23	1	He	11511.87489	0.3	12999919.810
Mg	24	1	He	25810.74244	0.6	16355593.507
Al	27	1	He	15.678906	7.2	4947.557
Si	28	2	H2	5362.919214	0.7	21408558.667
K	39	1	He	1951.293172	0.2	1768912.733
Ca	43	1	He	80145.04143	0.3	204213.300
Ti	47	1	He	0.246983	4.6	71.000
V	51	1	He	0.432828	10.6	2962.270
Cr	52	1	He	0.398755	5.4	6562.817
Mn	55	1	He	0.649466	0.4	4840.143
Fe	56	1	He	10.464757	0.9	107285.260
Co	59	1	He	0.120032	4.6	1930.803
Ni	60	1	He	0.278751	9.6	1319.400
Cu	63	1	He	0.493925	1.7	5581.087
Zn	66	1	He	4.032547	1.4	10097.527
As	75	1	He	1.164521	2.1	2736.093
Se	78	2	H2	2.690754	0.8	2882.290
Sr	88	1	He	868.949592	1.3	11373593.163
Mo	95	1	He	0.675153	0.7	4957.543
Pd	105	1	He	0.438819	4.4	5054.290
Ag	107	1	He	0.021015	17.9	580.017
Cd	111	1	He	0.017399	11.2	88.773
Sn	118	1	He	0.036744	11.8	471.677
Sb	121	1	He	0.242779	4.0	3972.263
Ba	138	1	He	75.929411	0.4	2716300.897
Pt	195	1	He	0.273651	138.7	4361.297
Hg	202	1	He	0.007742	44.6	170.000
Tl	205	1	He	0.058153	5.4	3597.187
Pb	208	1	He	0.069636	2.6	7629.203
Bi	209	1	He	0.006139	39.3	2393.583
Th	232	1	He	0.014221	20.2	1670.123
U	238	1	He	16.464085	0.6	1236463.523

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	101.9155266	627860.603
Sc	45	2	H2	112.1118586	5521363.667
Ge	72	1	He	105.0771420	532230.120
Ge	72	2	H2	112.3006071	1915789.210
In	115	1	He	107.6401116	6365144.543
Tb	159	1	He	112.7550878	15562971.437
Ir	193	1	He	111.0518936	8031900.503

Sample Name 10606389002\_B69958Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 165SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:05:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.053192	0.3	642.510
Be	9	2	H2	0.054023	5.0	42.333
B	11	2	H2	1.219664	11.4	3652.447
Na	23	1	He	1165.022877	4.4	1396376.123
Mg	24	1	He	2624.685809	4.7	1752351.377
Al	27	1	He	4.054145	4.9	1406.070
Si	28	2	H2	553.997767	0.2	2229957.000
K	39	1	He	195.958885	5.4	259785.740
Ca	43	1	He	8092.385106	4.2	21728.400
Ti	47	1	He	0.053544	15.9	17.000
V	51	1	He	0.067783	110.8	-24.267
Cr	52	1	He	0.279043	11.3	5701.793
Mn	55	1	He	0.112225	8.7	1172.053
Fe	56	1	He	2.400664	6.0	35113.380
Co	59	1	He	0.016961	1.6	333.340
Ni	60	1	He	0.053744	11.2	452.010
Cu	63	1	He	0.105678	7.0	1427.407
Zn	66	1	He	0.594848	4.3	1719.443
As	75	1	He	0.114301	13.4	468.677
Se	78	2	H2	0.263011	4.7	316.667
Sr	88	1	He	86.615791	3.1	1186385.060
Mo	95	1	He	0.072815	7.7	581.347
Pd	105	1	He	0.052805	24.5	863.370
Ag	107	1	He	0.017314	24.0	523.347
Cd	111	1	He	0.003566	46.3	30.560
Sn	118	1	He	0.017230	16.4	275.003
Sb	121	1	He	0.026843	5.9	521.680
Ba	138	1	He	7.357055	4.3	278367.300
Pt	195	1	He	0.000881	255.2	207.333
Hg	202	1	He	0.001372	15.8	125.667
Tl	205	1	He	0.011436	18.6	1038.387
Pb	208	1	He	0.009630	7.8	3251.850
Bi	209	1	He	0.003249	93.0	2276.907
Th	232	1	He	0.005753	3.4	1040.050
U	238	1	He	1.646987	4.0	128164.320

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	107.4408056	661899.627
Sc	45	2	H2	112.3216340	5531694.833
Ge	72	1	He	110.0020381	557175.393
Ge	72	2	H2	113.2110227	1931320.420
In	115	1	He	113.9193315	6736457.260
Tb	159	1	He	115.8579775	15991246.427
Ir	193	1	He	114.7482539	8299242.170

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 166\_CC.V.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:08:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	74.957500	5.6	41989.730
Be	9	2	H2	73.038494	5.5	41745.467
B	11	2	H2	70.923244	5.5	39165.523
Na	23	1	He	1002.885199	1.2	1201598.653
Mg	24	1	He	992.146194	1.3	662292.843
Al	27	1	He	972.702491	1.0	317641.397
Si	28	2	H2	463.225528	5.6	1946681.210
K	39	1	He	997.548293	0.4	989791.183
Ca	43	1	He	1021.982781	1.7	2756.453
Ti	47	1	He	79.638184	0.4	23721.043
V	51	1	He	79.648345	0.9	679890.243
Cr	52	1	He	83.050070	0.8	842424.187
Mn	55	1	He	81.000862	0.9	590882.543
Fe	56	1	He	510.828550	0.9	4934735.833
Co	59	1	He	82.985468	0.9	1363496.540
Ni	60	1	He	84.298868	0.8	349612.720
Cu	63	1	He	84.531671	0.8	964462.957
Zn	66	1	He	81.372339	0.7	210352.293
As	75	1	He	79.082059	0.4	181181.877
Se	78	2	H2	77.501582	5.6	85507.107
Sr	88	1	He	80.597369	0.8	1108208.657
Mo	95	1	He	77.804654	1.3	601471.063
Pd	105	1	He	82.818694	1.2	960488.267
Ag	107	1	He	42.636903	0.9	1016810.063
Cd	111	1	He	80.241494	1.0	366165.193
Sn	118	1	He	77.162417	1.2	882798.763
Sb	121	1	He	76.922681	1.1	1309007.743
Ba	138	1	He	77.835799	0.4	2941700.477
Pt	195	1	He	82.711708	1.0	1303896.583
Hg	202	1	He	3.881067	0.6	29957.540
Tl	205	1	He	42.010668	1.1	2394346.943
Pb	208	1	He	81.799901	1.7	6264688.400
Bi	209	1	He	77.628427	1.9	5206137.007
Th	232	1	He	74.933987	1.2	6145653.240
U	238	1	He	76.258332	2.0	5981843.453

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	107.1072206	659844.543
Sc	45	2	H2	117.3110378	5777416.500
Ge	72	1	He	110.3609866	558993.517
Ge	72	2	H2	117.2131123	1999593.960
In	115	1	He	113.7163267	6724452.863
Tb	159	1	He	116.0291004	16014865.593
Ir	193	1	He	116.0376506	8392498.623

Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 167\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:12:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.105630	14.5	132.500
Be	9	2	H2	0.070503	6.0	50.667
B	11	2	H2	-1.645542		2227.997
Na	23	1	He	2.493351	44.6	14762.420
Mg	24	1	He	0.118212	38.6	1625.107
Al	27	1	He	0.136535	37.0	119.333
Si	28	2	H2	-0.343435		14408.343
K	39	1	He	0.440829	1284.8	77761.757
Ca	43	1	He	0.608524	183.3	20.617
Ti	47	1	He	0.010410	64.8	4.000
V	51	1	He	0.011152	494.1	-458.463
Cr	52	1	He	-0.000440		2747.600
Mn	55	1	He	0.023673	34.4	503.343
Fe	56	1	He	0.200225	15.4	13287.390
Co	59	1	He	0.015715	65.6	300.723
Ni	60	1	He	0.003092	269.5	232.667
Cu	63	1	He	0.015089	53.4	378.673
Zn	66	1	He	0.028787	4.9	252.667
As	75	1	He	-0.008362		180.833
Se	78	2	H2	0.001205	327.1	37.000
Sr	88	1	He	0.032232	9.5	568.350
Mo	95	1	He	0.012529	35.4	110.667
Pd	105	1	He	0.018679	10.7	453.343
Ag	107	1	He	0.205472	33.2	4815.907
Cd	111	1	He	0.005603	25.5	38.643
Sn	118	1	He	0.013629	38.3	226.667
Sb	121	1	He	0.003096	36.5	113.333
Ba	138	1	He	0.004321	23.9	288.337
Pt	195	1	He	0.002506	50.3	225.333
Hg	202	1	He	0.025373	24.6	299.667
Tl	205	1	He	0.056738	33.9	3475.507
Pb	208	1	He	0.001561	99.9	2560.120
Bi	209	1	He	0.007482	4.8	2536.957
Th	232	1	He	0.021325	6.8	2276.887
U	238	1	He	0.004696	6.4	888.373

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.9767672	634398.480
Sc	45	2	H2	110.8091949	5457209.167
Ge	72	1	He	105.4476203	534106.643
Ge	72	2	H2	111.6511682	1904710.123
In	115	1	He	110.5848555	6539277.777
Tb	159	1	He	112.7462669	15561753.933
Ir	193	1	He	113.6562082	8220259.253

Sample Name 10606297001\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 168SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:16:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.979477	2.9	1647.423
Be	9	2	H2	0.058405	9.2	44.000
B	11	2	H2	18.394037	1.8	11806.433
Na	23	1	He	136332.7557	0.5	154355664.367
Mg	24	1	He	15159.24709	0.5	9639689.650
Al	27	1	He	53.287799	2.6	16687.117
Si	28	2	H2	4224.355599	1.0	16615692.333
K	39	1	He	2107.657003	0.2	1911082.940
Ca	43	1	He	66349.72400	0.2	169650.097
Ti	47	1	He	1.475327	8.3	420.677
V	51	1	He	0.626004	11.0	4549.270
Cr	52	1	He	0.559147	4.7	8132.277
Mn	55	1	He	217.632281	0.8	1515234.247
Fe	56	1	He	617.128933	0.4	5689714.833
Co	59	1	He	0.245541	3.8	3801.840
Ni	60	1	He	1.119487	1.9	4527.383
Cu	63	1	He	1.966124	2.7	21057.240
Zn	66	1	He	78.017989	0.8	187478.393
As	75	1	He	0.545668	1.2	1355.060
Se	78	2	H2	0.170034	5.0	210.333
Sr	88	1	He	149.617849	0.6	1912129.607
Mo	95	1	He	0.955432	28.3	6880.757
Pd	105	1	He	0.076812	9.4	1060.050
Ag	107	1	He	0.065418	17.6	1553.430
Cd	111	1	He	0.009681	8.4	54.430
Sn	118	1	He	0.066757	5.9	781.697
Sb	121	1	He	0.184953	4.1	2983.680
Ba	138	1	He	67.089261	0.7	2355752.050
Pt	195	1	He	0.010857	3.0	353.343
Hg	202	1	He	0.017954	15.7	246.000
Tl	205	1	He	0.024021	9.6	1706.793
Pb	208	1	He	0.464944	2.9	37014.950
Bi	209	1	He	0.010493	7.1	2690.323
Th	232	1	He	0.018007	2.4	1981.837
U	238	1	He	0.560343	0.8	42868.880

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	102.2680222	630032.187
Sc	45	2	H2	110.4493207	5439485.833
Ge	72	1	He	102.5859998	519612.143
Ge	72	2	H2	109.4331949	1866872.667
In	115	1	He	105.6509351	6247517.430
Tb	159	1	He	112.6759714	15552051.437
Ir	193	1	He	111.7983121	8085885.710

Sample Name 10606389009\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 169SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:19:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.131264	17.4	147.000
Be	9	2	H2	0.038944	15.3	33.833
B	11	2	H2	-3.411627		1388.897
Na	23	1	He	87.216624	9.7	113977.263
Mg	24	1	He	10.959845	10.9	8765.993
Al	27	1	He	10.078611	4.6	3307.703
Si	28	2	H2	0.770664	23.8	18917.353
K	39	1	He	0.559165	534.1	79686.933
Ca	43	1	He	48.290235	10.3	146.817
Ti	47	1	He	0.089774	14.5	27.333
V	51	1	He	-0.007509		-637.373
Cr	52	1	He	0.457057	5.5	7348.520
Mn	55	1	He	0.223173	11.0	1946.807
Fe	56	1	He	3.230783	1.3	42264.127
Co	59	1	He	0.005560	18.1	140.667
Ni	60	1	He	0.044524	19.8	397.343
Cu	63	1	He	0.091343	5.6	1214.720
Zn	66	1	He	0.953520	2.8	2539.560
As	75	1	He	-0.008103		182.500
Se	78	2	H2	0.002384	381.7	38.000
Sr	88	1	He	0.124875	11.8	1793.460
Mo	95	1	He	0.009906	37.5	92.000
Pd	105	1	He	0.005073	110.4	301.673
Ag	107	1	He	0.019205	21.6	553.350
Cd	111	1	He	0.000905	125.2	17.983
Sn	118	1	He	0.027129	8.5	378.343
Sb	121	1	He	0.010581	13.4	238.333
Ba	138	1	He	0.053822	10.3	2115.180
Pt	195	1	He	0.017695	19.4	462.010
Hg	202	1	He	0.008983	6.1	181.000
Tl	205	1	He	0.005076	33.7	663.357
Pb	208	1	He	0.001853	38.3	2613.463
Bi	209	1	He	0.004903	58.9	2350.253
Th	232	1	He	0.005144	28.3	973.380
U	238	1	He	0.002098	58.8	683.360

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	105.2018693	648106.440
Sc	45	2	H2	111.4850367	5490493.500
Ge	72	1	He	105.6883272	535325.857
Ge	72	2	H2	110.7596305	1889500.960
In	115	1	He	110.7333052	6548056.137
Tb	159	1	He	113.8983354	15720767.680
Ir	193	1	He	112.8912969	8164936.543

Sample Name 10606426001\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 170SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:23:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.394661	4.3	282.000
Be	9	2	H2	0.060694	22.9	44.833
B	11	2	H2	-0.548878		2721.247
Na	23	1	He	91608.86725	0.9	102195745.143
Mg	24	1	He	272.927907	1.5	172475.153
Al	27	1	He	237.010855	1.6	72861.617
Si	28	2	H2	729.687168	0.2	2857769.083
K	39	1	He	4586.302581	0.6	4008182.130
Ca	43	1	He	572.658492	2.3	1461.323
Ti	47	1	He	2.195218	4.7	616.347
V	51	1	He	0.452961	30.9	3096.977
Cr	52	1	He	6.236932	1.8	62002.923
Mn	55	1	He	490.574075	1.2	3364786.083
Fe	56	1	He	54978.92779	1.2	498414784.000
Co	59	1	He	0.488258	0.8	7644.687
Ni	60	1	He	4.274625	1.0	16985.897
Cu	63	1	He	0.746553	1.7	8274.370
Zn	66	1	He	31.716967	1.2	77711.183
As	75	1	He	8.071204	0.8	17677.430
Se	78	2	H2	0.019735	53.3	56.667
Sr	88	1	He	2.083226	1.6	27249.343
Mo	95	1	He	0.153356	3.8	1130.047
Pd	105	1	He	-0.001031		223.333
Ag	107	1	He	0.022394	20.9	605.023
Cd	111	1	He	0.002864	11.4	25.800
Sn	118	1	He	2.806840	0.4	30205.967
Sb	121	1	He	3.893134	2.5	62239.707
Ba	138	1	He	20.925098	0.7	742178.947
Pt	195	1	He	0.010646	5.4	348.010
Hg	202	1	He	0.013675	9.4	212.667
Tl	205	1	He	0.012535	14.8	1063.387
Pb	208	1	He	0.089018	3.4	9009.533
Bi	209	1	He	0.002311	70.4	2130.213
Th	232	1	He	0.016169	10.0	1808.477
U	238	1	He	0.007875	16.7	1098.393

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	100.7695275	620800.563
Sc	45	2	H2	109.4747976	5391491.833
Ge	72	1	He	104.4474545	529040.667
Ge	72	2	H2	112.1502897	1913224.873
In	115	1	He	106.7112131	6310215.457
Tb	159	1	He	111.9675408	15454270.603
Ir	193	1	He	110.1371450	7965740.713



Sample Name 10606426001\_B69958Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 171SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:27:20  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.172948	6.8	178.500
Be	9	2	H2	0.042173	29.2	37.500
B	11	2	H2	-2.699548		1828.443
Na	23	1	He	9332.225795	3.0	11202681.497
Mg	24	1	He	29.952152	2.9	21804.350
Al	27	1	He	26.804136	2.2	8932.020
Si	28	2	H2	74.173310	1.0	327178.927
K	39	1	He	459.836548	4.2	505343.403
Ca	43	1	He	65.572823	3.8	197.833
Ti	47	1	He	0.216758	6.6	66.333
V	51	1	He	0.123169	53.5	484.527
Cr	52	1	He	0.683049	2.4	9883.353
Mn	55	1	He	49.322889	2.7	364018.377
Fe	56	1	He	5604.532409	2.9	54631897.333
Co	59	1	He	0.051785	4.7	913.367
Ni	60	1	He	0.456713	0.6	2138.163
Cu	63	1	He	0.099775	4.7	1374.737
Zn	66	1	He	3.526543	1.9	9359.040
As	75	1	He	0.785494	1.9	2019.810
Se	78	2	H2	0.000970	1066.5	38.667
Sr	88	1	He	0.254424	5.5	3672.170
Mo	95	1	He	0.042740	6.0	354.677
Pd	105	1	He	-0.001725		233.337
Ag	107	1	He	0.011256	12.7	386.677
Cd	111	1	He	0.002638	20.5	26.933
Sn	118	1	He	0.319338	6.4	3795.540
Sb	121	1	He	0.436651	5.6	7623.803
Ba	138	1	He	2.042484	1.8	78712.960
Pt	195	1	He	-0.000442		188.000
Hg	202	1	He	0.004755	71.2	154.000
Tl	205	1	He	0.001467	89.5	476.680
Pb	208	1	He	0.008258	23.6	3190.170
Bi	209	1	He	0.002284	114.4	2236.893
Th	232	1	He	0.004700	37.1	963.380
U	238	1	He	0.002077	82.6	700.027

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	108.3801657	667686.647
Sc	45	2	H2	117.6410059	5793667.000
Ge	72	1	He	111.1109261	562792.063
Ge	72	2	H2	117.7637399	2008987.377
In	115	1	He	115.7968401	6847481.057
Tb	159	1	He	117.5220382	16220927.677
Ir	193	1	He	115.6071354	8361361.333

Sample Name 10606389003\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 172SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:30:59  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	24.930725	0.6	14038.650
Be	9	2	H2	0.114573	2.2	78.833
B	11	2	H2	18.526400	0.6	12601.913
Na	23	1	He	21674.40550	21.3	22722326.327
Mg	24	1	He	79962.62900	20.9	47082259.297
Al	27	1	He	14.060712	21.2	4129.910
Si	28	2	H2	7109.631849	0.0	29677901.333
K	39	1	He	5238.676798	22.2	4287915.350
Ca	43	1	He	396830.4503	21.7	938540.603
Ti	47	1	He	0.189569	8.8	51.667
V	51	1	He	0.169208	12.1	762.370
Cr	52	1	He	0.698696	25.5	8810.000
Mn	55	1	He	0.603224	20.0	4213.283
Fe	56	1	He	13.744224	18.5	128333.580
Co	59	1	He	0.124913	19.6	1809.450
Ni	60	1	He	1.371245	19.3	5080.233
Cu	63	1	He	0.288588	23.7	3008.987
Zn	66	1	He	30.444430	21.3	67467.787
As	75	1	He	0.449721	23.1	1062.873
Se	78	2	H2	0.470571	3.5	543.010
Sr	88	1	He	2843.274347	20.7	33479829.503
Mo	95	1	He	0.106749	20.5	715.357
Pd	105	1	He	1.518919	22.3	15079.833
Ag	107	1	He	0.009114	30.1	280.007
Cd	111	1	He	0.080498	23.1	322.203
Sn	118	1	He	0.170728	13.1	1735.127
Sb	121	1	He	0.077887	19.4	1178.393
Ba	138	1	He	24.383256	22.1	778012.617
Pt	195	1	He	0.010416	16.3	307.340
Hg	202	1	He	0.011189	34.0	172.000
Tl	205	1	He	0.022794	17.1	1441.753
Pb	208	1	He	0.010645	56.7	2856.810
Bi	209	1	He	0.015531	22.5	2586.983
Th	232	1	He	0.016499	22.4	1580.120
U	238	1	He	6.268110	21.0	398673.443

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	97.22215392	598946.620
Sc	45	2	H2	117.2568908	5774749.833
Ge	72	1	He	96.91992536	490912.700
Ge	72	2	H2	114.2635339	1949275.707
In	115	1	He	98.69282629	5836059.580
Tb	159	1	He	100.6546057	13892807.710
Ir	193	1	He	96.47102786	6977329.893

Sample Name 10606389003\_B69958Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 173SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:34:39  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	2.841309	2.3	1687.930
Be	9	2	H2	0.048571	30.5	41.500
B	11	2	H2	-0.402567		3017.800
Na	23	1	He	1952.762046	0.3	2435931.837
Mg	24	1	He	7260.482619	0.1	5060847.007
Al	27	1	He	3.550352	1.4	1296.727
Si	28	2	H2	746.247479	0.7	3160035.750
K	39	1	He	456.193917	0.5	519479.067
Ca	43	1	He	35352.97890	0.5	99076.680
Ti	47	1	He	0.034936	27.6	12.000
V	51	1	He	-0.015128		-745.530
Cr	52	1	He	0.099402	11.2	4049.907
Mn	55	1	He	0.062103	4.4	842.030
Fe	56	1	He	1.870934	1.9	31321.430
Co	59	1	He	0.011701	4.0	256.000
Ni	60	1	He	0.137222	4.4	825.360
Cu	63	1	He	0.043712	10.1	749.353
Zn	66	1	He	2.944266	0.4	8043.577
As	75	1	He	0.038693	6.9	307.167
Se	78	2	H2	0.045632	17.9	89.333
Sr	88	1	He	252.582702	1.3	3583503.593
Mo	95	1	He	0.012498	7.9	120.000
Pd	105	1	He	0.130599	4.1	1843.467
Ag	107	1	He	0.005691	33.3	258.337
Cd	111	1	He	0.006984	37.0	48.313
Sn	118	1	He	0.027975	40.1	415.010
Sb	121	1	He	0.012345	7.1	286.677
Ba	138	1	He	2.153639	1.1	85161.907
Pt	195	1	He	0.000517	313.6	206.667
Hg	202	1	He	0.003940	30.0	149.667
Tl	205	1	He	0.002402	31.7	540.020
Pb	208	1	He	0.001065	146.7	2675.143
Bi	209	1	He	0.003351	40.0	2323.590
Th	232	1	He	0.002119	51.3	756.697
U	238	1	He	0.545120	2.2	43499.333

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	112.0806895	690484.087
Sc	45	2	H2	118.3847175	5830293.833
Ge	72	1	He	113.8919875	576878.520
Ge	72	2	H2	119.1079146	2031918.290
In	115	1	He	118.7906334	7024514.753
Tb	159	1	He	119.3310762	16470619.340
Ir	193	1	He	116.5915429	8432559.247

Sample Name 10606389004\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 174SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:38:18  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	5.831535	1.1	3303.027
Be	9	2	H2	0.028408	14.7	29.167
B	11	2	H2	9.889033	1.7	8110.010
Na	23	1	He	2227.167812	0.5	2675293.710
Mg	24	1	He	23745.74685	0.6	15945238.510
Al	27	1	He	27.694755	0.7	9197.837
Si	28	2	H2	4360.728042	0.3	17975913.333
K	39	1	He	1400.059262	0.6	1367932.897
Ca	43	1	He	56971.08332	0.4	153836.250
Ti	47	1	He	0.617976	1.0	186.667
V	51	1	He	1.310765	5.1	10701.350
Cr	52	1	He	0.575088	1.9	8751.293
Mn	55	1	He	1.008084	0.3	7765.407
Fe	56	1	He	31.445232	0.4	317555.897
Co	59	1	He	0.043417	4.8	764.020
Ni	60	1	He	0.248736	2.8	1253.393
Cu	63	1	He	0.240935	1.5	2955.643
Zn	66	1	He	1.507653	2.7	4055.913
As	75	1	He	1.700546	1.8	4072.743
Se	78	2	H2	0.786859	2.9	893.363
Sr	88	1	He	236.411413	0.8	3228273.597
Mo	95	1	He	0.450903	2.7	3480.433
Pd	105	1	He	0.122377	3.2	1658.447
Ag	107	1	He	0.003900	20.9	203.333
Cd	111	1	He	0.001478	93.5	21.043
Sn	118	1	He	0.031919	2.6	440.010
Sb	121	1	He	0.051920	3.0	941.707
Ba	138	1	He	57.798871	0.4	2170092.470
Pt	195	1	He	0.007909	26.1	317.340
Hg	202	1	He	0.006368	18.2	164.333
Tl	205	1	He	0.188558	3.8	11139.733
Pb	208	1	He	0.058571	3.5	7004.067
Bi	209	1	He	0.003558	68.3	2306.910
Th	232	1	He	0.009027	56.8	1308.787
U	238	1	He	2.701184	0.3	210636.917

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	108.0005521	665348.000
Sc	45	2	H2	115.7531694	5700693.500
Ge	72	1	He	109.6126527	555203.103
Ge	72	2	H2	115.5350487	1970967.080
In	115	1	He	112.9688111	6680249.593
Tb	159	1	He	116.0457853	16017168.510
Ir	193	1	He	115.0612912	8321882.793

Sample Name 10606389004\_B69958Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 175SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:41:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.660391	5.7	441.343
Be	9	2	H2	0.025514	19.7	27.333
B	11	2	H2	-1.676890		2292.843
Na	23	1	He	234.887992	1.4	294655.133
Mg	24	1	He	2454.089367	1.4	1656544.923
Al	27	1	He	5.587635	0.9	1928.800
Si	28	2	H2	442.188647	1.3	1822792.833
K	39	1	He	140.159338	0.7	211089.327
Ca	43	1	He	5795.168104	0.4	15736.697
Ti	47	1	He	0.089163	13.6	28.000
V	51	1	He	0.164510	50.3	836.093
Cr	52	1	He	0.079659	24.9	3717.150
Mn	55	1	He	0.119978	2.9	1242.060
Fe	56	1	He	4.194228	1.4	52986.993
Co	59	1	He	0.005651	32.7	149.333
Ni	60	1	He	0.035483	12.9	380.010
Cu	63	1	He	0.055117	1.6	860.697
Zn	66	1	He	0.311162	1.2	998.707
As	75	1	He	0.178379	6.1	620.343
Se	78	2	H2	0.073681	7.5	117.333
Sr	88	1	He	23.674501	0.9	327282.253
Mo	95	1	He	0.045072	9.3	370.677
Pd	105	1	He	0.009255	21.3	361.677
Ag	107	1	He	0.002563	43.1	175.000
Cd	111	1	He	0.001374	137.0	20.933
Sn	118	1	He	0.009896	49.4	193.337
Sb	121	1	He	0.009295	47.3	225.007
Ba	138	1	He	5.705250	0.3	218195.467
Pt	195	1	He	0.000010	2059.5	194.667
Hg	202	1	He	0.002796	29.0	138.000
Tl	205	1	He	0.023461	7.8	1741.797
Pb	208	1	He	0.006870	17.1	3073.497
Bi	209	1	He	0.000945	294.6	2150.213
Th	232	1	He	0.001957	35.3	740.030
U	238	1	He	0.269865	2.7	21684.857

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	108.4830880	668320.710
Sc	45	2	H2	114.8340250	5655426.833
Ge	72	1	He	110.9249818	561850.230
Ge	72	2	H2	115.7898708	1975314.210
In	115	1	He	115.0059104	6800710.557
Tb	159	1	He	117.0912574	16161469.343
Ir	193	1	He	115.9074294	8383080.293

Sample Name 10606389008\_B69958Dx1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 176SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:45:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	16.345311	0.4	9196.617
Be	9	2	H2	0.022396	3.6	26.000
B	11	2	H2	118.537480	0.9	63148.180
Na	23	1	He	80028.16829	0.4	94985688.587
Mg	24	1	He	14721.24746	0.4	9812992.353
Al	27	1	He	10.373124	1.0	3469.740
Si	28	2	H2	5632.890806	0.5	23426456.000
K	39	1	He	15392.17407	0.2	14121055.623
Ca	43	1	He	20934.13382	0.7	56122.677
Ti	47	1	He	0.133971	13.0	41.000
V	51	1	He	3.164168	1.5	26471.237
Cr	52	1	He	0.702276	2.1	9974.067
Mn	55	1	He	0.049954	5.9	716.687
Fe	56	1	He	3.314623	0.5	43882.183
Co	59	1	He	0.025064	4.7	463.343
Ni	60	1	He	0.322471	8.6	1553.423
Cu	63	1	He	1.029029	1.2	11856.170
Zn	66	1	He	1.826036	3.4	4860.820
As	75	1	He	4.380393	0.5	10139.547
Se	78	2	H2	1.824879	3.6	2031.480
Sr	88	1	He	757.429693	0.1	10317972.970
Mo	95	1	He	7.070660	1.0	54039.913
Pd	105	1	He	0.373050	4.0	4522.430
Ag	107	1	He	0.001532	78.4	146.667
Cd	111	1	He	0.002448	56.1	25.273
Sn	118	1	He	0.032720	5.9	446.677
Sb	121	1	He	0.187682	4.5	3220.397
Ba	138	1	He	22.403000	0.2	836938.947
Pt	195	1	He	0.006232	26.1	294.003
Hg	202	1	He	0.005744	46.7	161.000
Tl	205	1	He	0.032188	5.3	2245.210
Pb	208	1	He	0.003533	51.3	2818.487
Bi	209	1	He	0.001564	249.8	2170.217
Th	232	1	He	0.000772	87.0	636.687
U	238	1	He	4.294874	0.7	333967.270

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	107.2013635	660424.520
Sc	45	2	H2	116.8050312	5752496.333
Ge	72	1	He	109.3508678	553877.127
Ge	72	2	H2	116.0039843	1978966.873
In	115	1	He	112.3926140	6646176.997
Tb	159	1	He	117.2047004	16177127.260
Ir	193	1	He	114.8414522	8305982.793

Sample Name 10606389008\_B69958Dx10  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 177SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:49:17  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	1.853630	2.7	1121.207
Be	9	2	H2	0.018363	31.6	23.833
B	11	2	H2	10.320036	1.0	8452.197
Na	23	1	He	8222.992112	0.9	10207052.140
Mg	24	1	He	1497.450342	0.7	1044229.980
Al	27	1	He	5.352775	0.8	1910.793
Si	28	2	H2	565.276426	0.5	2380021.667
K	39	1	He	1577.293387	0.6	1587293.883
Ca	43	1	He	2129.147725	0.8	5981.387
Ti	47	1	He	0.032862	41.2	11.333
V	51	1	He	0.336284	11.5	2392.957
Cr	52	1	He	0.118875	6.7	4252.627
Mn	55	1	He	0.024504	2.2	554.677
Fe	56	1	He	1.169978	2.5	24232.697
Co	59	1	He	0.003773	26.7	121.333
Ni	60	1	He	0.038801	18.5	403.343
Cu	63	1	He	0.133006	6.0	1796.117
Zn	66	1	He	0.291829	0.3	971.367
As	75	1	He	0.430758	2.4	1229.883
Se	78	2	H2	0.168949	3.9	224.667
Sr	88	1	He	74.742183	0.8	1057905.817
Mo	95	1	He	0.690383	3.6	5566.440
Pd	105	1	He	0.030560	17.9	628.353
Ag	107	1	He	0.003175	68.2	195.000
Cd	111	1	He	0.000985	138.6	19.663
Sn	118	1	He	0.008481	46.6	181.667
Sb	121	1	He	0.021196	9.7	441.677
Ba	138	1	He	2.229560	1.1	87724.457
Pt	195	1	He	-0.000021		199.333
Hg	202	1	He	0.003675	59.8	148.667
Tl	205	1	He	0.002921	13.9	575.020
Pb	208	1	He	0.000469	339.4	2648.463
Bi	209	1	He	-0.000276		2100.210
Th	232	1	He	0.001576	57.4	720.027
U	238	1	He	0.426677	2.4	34509.153

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	111.9841745	689889.497
Sc	45	2	H2	117.5060108	5787018.667
Ge	72	1	He	113.6017597	575408.477
Ge	72	2	H2	117.5495455	2005333.333
In	115	1	He	118.2003057	6989606.567
Tb	159	1	He	120.2141043	16592498.917
Ir	193	1	He	117.7323035	8515065.497

Sample Name CCV  
 Sample Type CCV  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 178\_CCV.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:52:56  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	78.911504	1.3	44326.007
Be	9	2	H2	77.447612	1.3	44388.780
B	11	2	H2	74.974155	0.3	41332.600
Na	23	1	He	1015.332085	0.2	1275306.050
Mg	24	1	He	995.377076	0.1	696640.277
Al	27	1	He	983.307693	0.3	336671.583
Si	28	2	H2	491.089490	1.5	2068545.750
K	39	1	He	1001.254388	0.5	1041336.547
Ca	43	1	He	1018.046169	0.8	2878.970
Ti	47	1	He	79.877953	0.5	24946.060
V	51	1	He	79.620974	0.9	712626.537
Cr	52	1	He	82.758652	0.3	880188.270
Mn	55	1	He	80.610411	0.4	616548.127
Fe	56	1	He	507.327651	0.3	5138570.333
Co	59	1	He	83.353332	0.6	1421809.997
Ni	60	1	He	84.485286	0.7	363755.043
Cu	63	1	He	84.863421	0.3	1005198.380
Zn	66	1	He	81.522941	0.5	218779.730
As	75	1	He	79.374547	0.3	188788.583
Se	78	2	H2	80.746657	1.9	89008.090
Sr	88	1	He	80.388681	0.2	1147504.930
Mo	95	1	He	77.072421	0.8	619852.023
Pd	105	1	He	82.826300	0.6	999350.323
Ag	107	1	He	42.417726	1.6	1052360.817
Cd	111	1	He	80.294009	0.5	381190.697
Sn	118	1	He	76.579708	0.6	911492.693
Sb	121	1	He	76.292178	0.8	1350663.367
Ba	138	1	He	77.167102	0.3	3034066.207
Pt	195	1	He	82.713933	1.1	1338692.333
Hg	202	1	He	3.865684	1.3	30634.763
Tl	205	1	He	42.174683	0.6	2467892.203
Pb	208	1	He	82.018450	0.5	6449567.770
Bi	209	1	He	79.016034	1.0	5407689.293
Th	232	1	He	75.592521	0.9	6326512.200
U	238	1	He	77.089959	0.6	6171201.783

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	112.3007639	691839.877
Sc	45	2	H2	117.4402527	5783780.167
Ge	72	1	He	114.5716664	580321.187
Ge	72	2	H2	116.9835890	1995678.413
In	115	1	He	118.3021198	6995627.197
Tb	159	1	He	119.1237821	16442007.673
Ir	193	1	He	118.4126321	8564270.703



Sample Name CCB  
 Sample Type CCB  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 179\_CCB.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 00:56:36  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.112953	12.7	140.500
Be	9	2	H2	0.042021	11.9	36.333
B	11	2	H2	-2.093705		2073.310
Na	23	1	He	5.762505	1.0	19738.103
Mg	24	1	He	-0.183412		1525.090
Al	27	1	He	0.202496	20.2	149.667
Si	28	2	H2	-0.381817		14684.587
K	39	1	He	-1.987219		80739.280
Ca	43	1	He	-0.838839		18.117
Ti	47	1	He	0.001903	199.6	1.667
V	51	1	He	0.009424	420.6	-514.603
Cr	52	1	He	-0.010975		2820.277
Mn	55	1	He	0.015592	6.2	476.677
Fe	56	1	He	0.244957	8.2	14601.307
Co	59	1	He	0.008304	21.7	194.667
Ni	60	1	He	-0.008716		197.333
Cu	63	1	He	0.008570	13.7	329.337
Zn	66	1	He	0.014424	42.2	230.000
As	75	1	He	-0.012529		182.667
Se	78	2	H2	0.002237	424.7	39.000
Sr	88	1	He	0.023995	40.0	488.347
Mo	95	1	He	0.010640	23.9	102.667
Pd	105	1	He	0.012457	21.2	403.343
Ag	107	1	He	0.192731	24.5	4812.567
Cd	111	1	He	0.006914	16.2	46.980
Sn	118	1	He	0.009037	20.7	185.000
Sb	121	1	He	0.003704	66.5	130.000
Ba	138	1	He	0.005900	19.1	365.010
Pt	195	1	He	0.004980	64.1	276.670
Hg	202	1	He	0.025293	14.2	316.003
Tl	205	1	He	0.046554	23.5	3103.733
Pb	208	1	He	0.001300	222.0	2671.803
Bi	209	1	He	0.008069	38.2	2690.323
Th	232	1	He	0.021376	11.3	2386.907
U	238	1	He	0.005020	17.5	955.043

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	109.6596881	675569.270
Sc	45	2	H2	114.1375735	5621127.500
Ge	72	1	He	111.7252642	565903.770
Ge	72	2	H2	114.2569172	1949162.830
In	115	1	He	116.1740941	6869789.433
Tb	159	1	He	118.3496476	16335158.090
Ir	193	1	He	118.7236329	8586764.040

Sample Name rinse-1  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 180SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 01:00:16  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.071968	8.4	118.167
Be	9	2	H2	0.025552	13.8	27.167
B	11	2	H2	-2.672170		1787.437
Na	23	1	He	4.429304	3.8	18015.903
Mg	24	1	He	-0.185397		1515.090
Al	27	1	He	0.125846	12.5	123.333
Si	28	2	H2	-0.238092		15270.343
K	39	1	He	-2.414562		79879.657
Ca	43	1	He	0.087270	1719.3	20.517
Ti	47	1	He	0.003038	188.3	2.000
V	51	1	He	-0.006984		-654.483
Cr	52	1	He	-0.016732		2744.937
Mn	55	1	He	0.008412	67.2	420.677
Fe	56	1	He	0.224056	5.7	14313.683
Co	59	1	He	0.002408	20.9	95.333
Ni	60	1	He	-0.009225		192.667
Cu	63	1	He	0.001984	86.5	250.000
Zn	66	1	He	0.048635	4.8	315.333
As	75	1	He	-0.015149		174.333
Se	78	2	H2	-0.006137		30.000
Sr	88	1	He	0.017521	30.6	393.343
Mo	95	1	He	0.003490	53.1	46.000
Pd	105	1	He	0.001300	349.6	270.007
Ag	107	1	He	0.036307	15.8	995.043
Cd	111	1	He	0.001285	56.9	20.657
Sn	118	1	He	0.011375	10.8	211.667
Sb	121	1	He	0.002479	49.7	108.333
Ba	138	1	He	0.001595	11.0	198.333
Pt	195	1	He	0.000656	282.0	206.667
Hg	202	1	He	0.012065	32.7	211.667
Tl	205	1	He	0.009969	8.2	973.380
Pb	208	1	He	-0.003412		2298.450
Bi	209	1	He	0.002446	74.5	2293.577
Th	232	1	He	0.005930	19.1	1086.720
U	238	1	He	0.001446	39.1	665.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	109.0304202	671692.603
Sc	45	2	H2	114.1285276	5620682.000
Ge	72	1	He	110.2797337	558581.960
Ge	72	2	H2	114.5760631	1954607.290
In	115	1	He	115.7859619	6846837.787
Tb	159	1	He	118.0673971	16296200.593
Ir	193	1	He	118.1686776	8546626.540

Sample Name rinse-2  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 181SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 01:03:57  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.049140	12.2	105.167
Be	9	2	H2	0.018594	15.0	23.167
B	11	2	H2	-2.953229		1639.757
Na	23	1	He	3.538605	2.8	16832.857
Mg	24	1	He	-0.313490		1420.083
Al	27	1	He	0.168665	10.7	136.667
Si	28	2	H2	-0.402471		14522.510
K	39	1	He	-1.134210		80548.443
Ca	43	1	He	-0.445516		18.967
Ti	47	1	He	0.009694	58.9	4.000
V	51	1	He	-0.032468		-872.843
Cr	52	1	He	-0.025970		2632.913
Mn	55	1	He	0.009664	54.1	427.343
Fe	56	1	He	0.211938	12.2	14103.473
Co	59	1	He	0.001303	96.1	76.667
Ni	60	1	He	-0.014443		170.000
Cu	63	1	He	-0.001759		206.000
Zn	66	1	He	0.032464	29.5	272.000
As	75	1	He	-0.017088		168.833
Se	78	2	H2	-0.010542		25.000
Sr	88	1	He	0.019173	20.1	413.343
Mo	95	1	He	0.002850	22.5	40.667
Pd	105	1	He	0.000338	1409.3	256.670
Ag	107	1	He	0.017731	10.2	540.013
Cd	111	1	He	0.000600	21.3	17.323
Sn	118	1	He	0.003016	65.2	113.333
Sb	121	1	He	0.001651	35.5	93.333
Ba	138	1	He	0.001634	73.7	198.333
Pt	195	1	He	0.000347	572.8	200.000
Hg	202	1	He	0.008234	19.0	180.333
Tl	205	1	He	0.003240	15.6	578.350
Pb	208	1	He	-0.003414		2280.113
Bi	209	1	He	0.005694	59.5	2473.607
Th	232	1	He	0.004238	26.0	928.377
U	238	1	He	0.001079	60.1	625.020

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	108.3358951	667413.913
Sc	45	2	H2	113.5278451	5591099.167
Ge	72	1	He	109.6230309	555255.670
Ge	72	2	H2	113.2808883	1932512.290
In	115	1	He	114.8722785	6792808.420
Tb	159	1	He	117.1157820	16164854.343
Ir	193	1	He	116.1897462	8403499.040

Sample Name rinse-3  
 Sample Type Sample  
 Operator R Schnobrich  
 Instrument 10ICMC - 200.8 6020 A/B  
 Batch Name 050522B.b  
 Data File Name 182SMPL.d  
 Data Path Name D:\DATA  
 Acq. Date Time 05/06/22 01:07:37  
 Comment

**Analytes**

Name	Mass	Tune Step	Tune Mode	Conc.	Conc %RSD	Intensity
Li	7	2	H2	0.060120	27.2	110.167
Be	9	2	H2	0.015306	55.1	21.167
B	11	2	H2	-2.997276		1604.590
Na	23	1	He	2.769740	12.6	15858.483
Mg	24	1	He	-0.181185		1503.423
Al	27	1	He	0.026183	56.9	89.333
Si	28	2	H2	-0.364129		14555.340
K	39	1	He	-1.917210		79562.897
Ca	43	1	He	-0.330447		19.200
Ti	47	1	He	0.003084	106.7	2.000
V	51	1	He	0.004864	1804.8	-543.833
Cr	52	1	He	-0.023055		2653.580
Mn	55	1	He	0.004070	61.4	384.677
Fe	56	1	He	0.165732	28.9	13607.013
Co	59	1	He	0.001749	14.2	84.000
Ni	60	1	He	-0.013479		174.000
Cu	63	1	He	-0.000533		220.000
Zn	66	1	He	0.013780	6.0	224.000
As	75	1	He	-0.015187		173.167
Se	78	2	H2	-0.011867		23.333
Sr	88	1	He	0.016234	18.9	373.343
Mo	95	1	He	0.000536	168.3	22.667
Pd	105	1	He	-0.001443		236.667
Ag	107	1	He	0.008687	12.5	323.343
Cd	111	1	He	-0.000421		12.663
Sn	118	1	He	0.001402	55.5	95.000
Sb	121	1	He	-0.000589		55.000
Ba	138	1	He	0.001053	82.7	176.667
Pt	195	1	He	0.000591	119.7	203.333
Hg	202	1	He	0.005976	31.1	162.333
Tl	205	1	He	0.002704	80.6	546.680
Pb	208	1	He	-0.003244		2286.780
Bi	209	1	He	0.003984	143.5	2376.927
Th	232	1	He	0.002734	42.3	811.700
U	238	1	He	0.001714	14.2	680.023

**ISTD**

Name	Mass	Tune Step	Tune Mode	% Rec	Intensity
Sc	45	1	He	107.9799708	665221.207
Sc	45	2	H2	112.5785951	5544349.833
Ge	72	1	He	109.6073926	555176.460
Ge	72	2	H2	112.1108590	1912552.207
In	115	1	He	115.2559378	6815495.567
Tb	159	1	He	116.8010796	16121417.677
Ir	193	1	He	117.0897842	8468594.873



# Prep Log Report

Batch Information: MPRP 812437 6020BS\_P

Template Version: ENV-EPL-MIN4-0015-Rev.00 (13Dec2020)

Prep Method	EPA 3050B	Analysis Method	EPA 6020B	Prepared By	NJ1	Instrument	10BL04
Block ID	10MET50	Thermometer ID	210354356	Correction Factor (C)	.5	Block Temp (C)	93.4
Corrected Temp. (C)	93.90	Digestion Start Date/Time	05/03/2022 17:29:42:290	Digestion End Date/Time	05/03/2022 19:58:35:255	Block End Temp (C)	95.4
Corrected End Temp. (C)	95.90	Digestion Vessel	360406	Resin Pellets Solid Matrix	344615	Metals Pipette 1	Q765
Metals Pipette 2		Bottle Disp. 1	Q814	Bottle Disp. 2	Q791	Bottle Disp. 3	Q452
Reviewed By	RJS	Reviewed By Date	05/04/2022 08:02	Batch Notes			

## Sample Information:

QC Rule	Sample Type	Lab Sample ID	Matrix	Initial Weight (g)	Conc. HNO3 (mL)	H2O2 (mL)	Conc. HCL (mL)	Final Volume (mL)	Sample Notes	Hg-SPK (mL)	METALS-STK1 (mL)	METALS-STK2 (mL)
6020BS_P	BLANK	4308596	Solid	1.067	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	LCS	4308597	Solid	1.016	357589 (7.5)	332176 (2.5)	357590 (5)	50		363145 (.25)	343315 (.5)	343316 (.5)
6020BS_P	PS	10606046001	Solid	1.039	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	MS	4308598	Solid	1.043	357589 (7.5)	332176 (2.5)	357590 (5)	50		363145 (.25)	343315 (.5)	343316 (.5)
6020BS_P	MSD	4308599	Solid	1.017	357589 (7.5)	332176 (2.5)	357590 (5)	50		363145 (.25)	343315 (.5)	343316 (.5)
6020BS_P	PS	10606394001	Solid	1.022	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10606394002	Solid	1.03	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10606394003	Solid	1.012	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10606394004	Solid	1.07	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10606395001	Solid	1.05	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10606395002	Solid	1.085	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10606395003	Solid	1.02	357589 (7.5)	332176 (2.5)	357590 (5)	50				
6020BS_P	PS	10606395004	Solid	1.031	357589 (7.5)	332176 (2.5)	357590 (5)	50				

## Standard Notes:

343315: ZPACEMN-116 (MIX 1)

343316: ZPACEMN-106

363145: Intermediate Spike for IC/PMS Soil

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG14-042722-0-5.5

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500  
Lab Sample ID: 10606394001 Percent Moisture: 44.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.025	J	mg/kg	1	05/10/2022 12:32

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG15-042722-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500  
Lab Sample ID: 10606394002 Percent Moisture: 35.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	ND	U	mg/kg	1	05/10/2022 12:36

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG16-042722-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500  
Lab Sample ID: 10606394003 Percent Moisture: 26.5

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	ND	U	mg/kg	1	05/10/2022 12:38



FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG17-042722-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500  
Lab Sample ID: 10606394004 Percent Moisture: 50.2

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
7439-97-6	Mercury	0.058		mg/kg	1	05/10/2022 12:43

FORM II INORGANIC-1  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Initial Calibration Verification Source: 365356

Continuing Calibration Verification Source: 365356

Concentration Units: ug/L Instrument ID: 10HG09

Analyte	Initial Calibration Verification				Continuing Calibration Verification						
	05/10/2022 12:08				05/10/2022 12:23			05/10/2022 12:40			Control Limit
	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
Mercury	5.0	5.0	101.0	90-110	5.0	4.9	98.6	5.0	4.9	97.2	90-110

FORM II INORGANIC-2  
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Initial Calibration Verification Source: \_\_\_\_\_

Continuing Calibration Verification Source: 365356

Concentration Units: ug/L Instrument ID: 10HG09

	Continuing Calibration Verification			Control Limit
	05/10/2022 12:53			
Analyte	True	Found	%R	
Mercury	5.0	4.9	97.2	90-110

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

CRDL Check Standard Source: 365084,365351 Analysis Date/Time: 05/10/2022 12:11

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.2	0.19	95.0	70-130

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

CRDL Check Standard Source: 365084,365351 Analysis Date/Time: 05/10/2022 12:22

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.2	0.18	90.0	70-130

FORM II INORGANIC-1  
CRDL CHECK STANDARD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

CRDL Check Standard Source: 365084,365351 Analysis Date/Time: 05/10/2022 12:51

Concentration Units: ug/L

Analyte	CRDL Check Standard			
	True	Found	%R	Control Limit %R
Mercury	0.2	0.19	95.0	70-130

FORM III INORGANIC-1  
BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract : D3593500

Method Blank Matrix: Solid Instrument ID: 10HG09

Method Blank Concentration Units: mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Method Blank	
	05/10/2022 12:09	C	05/10/2022 12:25	C	05/10/2022 12:41	C	05/10/2022 12:54	C	4308604	C
Mercury	0.087	U	0.087	U	0.087	U	0.087	U	ND	U

FORM V INORGANIC-1  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4308606MS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Matrix: Solid Basis: Dry Parent Sample ID: BNSF-BG14-042722-0-5.5

Percent Moisture: 44.5

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Mercury	mg/kg	80-120	0.86	0.025J	0.81	102



FORM V INORGANIC-2  
MATRIX SPIKE SAMPLE RECOVERY

SAMPLE NO.

4308607MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Matrix: Solid Basis: Dry Parent Sample ID: BNSF-BG14-042722-0-5.5

Percent Moisture: 44.5

Analyte	Units	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R
Mercury	mg/kg	80-120	0.81	0.025J	0.79	100

FORM VI INORGANIC-1  
DUPLICATES

SAMPLE NO.

4308607MSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Matrix: Solid Concentration Units: mg/kg

Percent Moisture: 44.5 Basis: Dry

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Mercury	20	0.86	0.81	6

FORM VII INORGANIC-1  
LABORATORY CONTROL SAMPLE

SAMPLE NO.

4308605LCS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
Mercury	mg/kg	0.48	0.49	101	80	120

FORM IX INORGANIC-1  
INSTRUMENT DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Preparation Method: None Instrument ID: 10HG09

Concentration Units: ug/L

Analyte	PQL	IDL	IDL Date
Mercury	0.20	0.087	03/30/2021

FORM IX INORGANIC-2  
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Preparation Method: EPA 7471B Instrument ID: 10HG09

Concentration Units: mg/kg

Analyte	PQL	MDL	MDL Date
Mercury	0.020	0.0087	03/30/2021

FORM XII INORGANIC-1  
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Preparation Method: EPA 7471B Batch: MERP 37092

Lab Sample ID	Sample Name	Preparation Date	Initial Weight (g)	Final Volume (mL)
4308604	4308604	05/03/2022	0.325	30
4308605	4308605	05/03/2022	0.31	30
4308606	4308606	05/03/2022	0.331	30
4308607	4308607	05/03/2022	0.342	30
10606394001	BNSF-BG14-042722-0-5.5	05/03/2022	0.32	30
10606394002	BNSF-BG15-042722-0-10	05/03/2022	0.351	30
10606394003	BNSF-BG16-042722-0-10	05/03/2022	0.301	30
10606394004	BNSF-BG17-042722-0-10	05/03/2022	0.34	30

FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Instrument ID: 10HG09 Analysis Method: EPA 7471B

Start Date: 05/10/2022 11:40 End Date: 05/10/2022 12:54

Sample Name	Lab Sample ID	D/F	Date	Time	Hg
29937326CAL0	29937326CAL0	1	05/10/2022	11:40	X
29937327CAL1	29937327CAL1	1	05/10/2022	11:41	X
29937328CAL2	29937328CAL2	1	05/10/2022	11:43	X
29937329CAL3	29937329CAL3	1	05/10/2022	11:45	X
29937330CAL4	29937330CAL4	1	05/10/2022	11:46	X
29937331CAL5	29937331CAL5	1	05/10/2022	11:48	X
29937332ICV	29937332ICV	1	05/10/2022	12:08	X
29937333ICB	29937333ICB	1	05/10/2022	12:09	X
29937334CRDL	29937334CRDL	1	05/10/2022	12:11	X
29937336CRDL	29937336CRDL	1	05/10/2022	12:22	X
29937337CCV	29937337CCV	1	05/10/2022	12:23	X
29937341CCB	29937341CCB	1	05/10/2022	12:25	X
4308604BLANK	4308604	1	05/10/2022	12:27	X
4308605LCS	4308605	1	05/10/2022	12:28	X
BNSF-BG14-042722-0-5.5	10606394001	1	05/10/2022	12:32	X
4308606MS	4308606	1	05/10/2022	12:33	X
4308607MSD	4308607	1	05/10/2022	12:35	X
BNSF-BG15-042722-0-10	10606394002	1	05/10/2022	12:36	X
BNSF-BG16-042722-0-10	10606394003	1	05/10/2022	12:38	X
29937342CCV	29937342CCV	1	05/10/2022	12:40	X
29937343CCB	29937343CCB	1	05/10/2022	12:41	X
BNSF-BG17-042722-0-10	10606394004	1	05/10/2022	12:43	X
29937345CRDL	29937345CRDL	1	05/10/2022	12:51	X
29937346CCV	29937346CCV	1	05/10/2022	12:53	X
29937347CCB	29937347CCB	1	05/10/2022	12:54	X

**Report Generated By Teledyne Leeman QuickTrace**

**Analyst:** 10metalsuser,LENA WIGER

**Worksheet file:** S:\DATA\Metals\10HG09\10MAY22SOLIDSB10HG09.wszf

**Creation Date:** 5/10/2022 11:37:52 AM

**Comment:** EPA 7471/7471B

## Results

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
Calibration Blank	STD	05/10/22 11:40:16 am	0.00	396	3.07			1.0000	N/A
Replicates			387.3 394.0 413.5 388.5						
Standard #1 (0.2 ug/L)	STD	05/10/22 11:41:53 am	0.20	2001	0.59	-8.65%		1.0000	N/A
Replicates			2007.6 1983.7 2009.2 2002.2						
Standard #2 (1 ug/L)	STD	05/10/22 11:43:30 am	1.00	8271	0.43	-1.69%		1.0000	N/A
Replicates			8222.4 8275.4 8307.4 8278.9						
Standard #3 (3 ug/L)	STD	05/10/22 11:45:08 am	3.00	24464	0.48	1.67%		1.0000	N/A
Replicates			24298.3 24465.4 24534.6 24557.6						
Standard #4 (5 ug/L)	STD	05/10/22 11:46:46 am	5.00	40040	0.28	0.77%		1.0000	N/A
Replicates			40170.4 39908.9 39995.1 40084.9						
Standard #5 (10 ug/L)	STD	05/10/22 11:48:24 am	10.00	78656	1.20	-0.32%		1.0000	N/A
Replicates			79916.4 77791.3 78108.6 78809.6						
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Calibration</p> <p>Equation: Abs = 7833.940x + 569.366</p> <p>R2: 0.99992 RSE: 5.20%</p> <p>SEE: 305.9292</p> <p>Flags:</p> </div> <div style="width: 50%;"> </div> </div>									
ICV	ICV	05/10/22 12:08:01 pm	5.05	40149	0.17			1.0000	101.05
Replicates			40126.1 40249.5 40091.5 40128.0						
ICB	ICB	05/10/22 12:09:40 pm	-0.02	419	7.42			1.0000	N/A
Replicates			418.1 404.3 426.0 429.3						
CRDL	CRDL	05/10/22 12:11:17 pm	0.19	2089	1.96			1.0000	96.98
Replicates			2116.6 2078.5 2108.5 2051.5						
4312191_43583	UNK	05/10/22 12:14:10 pm	-0.01	506	32.13			1.0000	N/A
Replicates			530.4 497.9 512.9 482.9						
4312192_43583	UNK	05/10/22 12:15:46 pm	4.92	39076	0.32			1.0000	N/A
Replicates			39232.3 38930.6 39057.1 39085.3						
10605980004_43583	UNK	05/10/22 12:17:23 pm	0.11	1428	1.12			1.0000	N/A
Replicates			1426.4 1432.7 1415.2 1437.4						
4312193_43583	UNK	05/10/22 12:19:00 pm	5.22	41466	0.23			1.0000	N/A
Replicates			41491.5 41533.0 41515.0 41325.5						



Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
4312194_43583	UNK	05/10/22 12:20:36 pm	5.11	40610	0.13			1.0000	N/A
Replicates		40566.2 40570.3 40678.5 40626.5							
CRDL	CRDL	05/10/22 12:22:14 pm	0.18	1984	1.24			1.0000	90.26
Replicates		1983.0 2007.2 1979.0 1965.0							
CCV	CCV	05/10/22 12:23:52 pm	4.93	39184	0.61			1.0000	98.58
Replicates		39116.9 38928.1 39198.3 39493.6							
CCB	CCB	05/10/22 12:25:31 pm	-0.02	449	12.78			1.0000	N/A
Replicates		426.2 458.7 457.2 454.4							
4308604_43535	UNK	05/10/22 12:27:08 pm	0.00	557	89.73			1.0000	N/A
Replicates		557.7 554.7 571.5 545.2							
4308605_43535	UNK	05/10/22 12:28:45 pm	5.07	40296	0.09			1.0000	N/A
Replicates		40267.4 40326.1 40325.8 40265.8							
10606046001_43535	UNK	05/10/22 12:30:22 pm	0.05	993	2.85			1.0000	N/A
Replicates		980.1 991.1 1009.1 990.6							
10606394001_43535	UNK	05/10/22 12:32:00 pm	0.15	1711	1.07			1.0000	N/A
Replicates		1714.8 1699.9 1726.2 1702.2							
4308606_43535	UNK	05/10/22 12:33:38 pm	5.26	41794	0.31			1.0000	N/A
Replicates		41722.1 41957.4 41826.7 41668.9							
4308607_43535	UNK	05/10/22 12:35:15 pm	5.14	40829	0.19			1.0000	N/A
Replicates		40717.3 40859.9 40877.1 40863.4							
10606394002_43535	UNK	05/10/22 12:36:53 pm	0.03	798	3.64			1.0000	N/A
Replicates		794.2 793.8 810.3 793.0							
10606394003_43535	UNK	05/10/22 12:38:30 pm	0.01	623	44.08			1.0000	N/A
Replicates		610.2 610.1 612.8 658.1							
CCV	CCV	05/10/22 12:40:08 pm	4.86	38633	0.19			1.0000	97.18
Replicates		38527.9 38659.3 38690.6 38653.3							
CCB	CCB	05/10/22 12:41:47 pm	-0.02	389	14.59			1.0000	N/A
Replicates		390.5 418.4 392.6 354.4							
10606394004_43535	UNK	05/10/22 12:43:24 pm	0.33	3174	0.71			1.0000	N/A
Replicates		3179.3 3197.9 3156.9 3162.6							
10606395001_43535	UNK	05/10/22 12:45:00 pm	0.02	761	9.48			1.0000	N/A
Replicates		780.4 766.3 761.8 736.8							
10606395002_43535	UNK	05/10/22 12:46:37 pm	0.05	979	3.03			1.0000	N/A
Replicates		983.0 976.6 964.1 993.9							
10606395003_43535	UNK	05/10/22 12:48:14 pm	0.03	803	2.59			1.0000	N/A
Replicates		794.5 808.8 804.8 802.3							
10606395004_43535	UNK	05/10/22 12:49:51 pm	0.20	2160	0.92			1.0000	N/A
Replicates		2159.0 2148.4 2181.2 2152.4							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
CRDL		CRDL 05/10/22 12:51:28 pm	0.19	2081	1.12			1.0000	96.47
Replicates		2096.8 2094.3 2065.8 2066.5							
CCV		CCV 05/10/22 12:53:07 pm	4.86	38665	1.38			1.0000	97.26
Replicates		38681.9 38050.6 38595.4 39330.6							
CCB		CCB 05/10/22 12:54:45 pm	-0.02	445	5.62			1.0000	N/A
Replicates		448.0 448.1 434.3 448.8							
4315272_43568		UNK 05/10/22 12:56:23 pm	0.00	551	67.67			1.0000	N/A
Replicates		558.9 564.1 538.1 543.9							
4315273_43568		UNK 05/10/22 12:58:00 pm	5.22	41441	0.38			1.0000	N/A
Replicates		41215.3 41509.3 41465.5 41574.8							
10607417001_43568		UNK 05/10/22 12:59:38 pm	0.09	1253	1.58			1.0000	N/A
Replicates		1267.6 1243.7 1246.0 1254.0							
4315274_43568		UNK 05/10/22 01:01:15 pm	5.23	41505	0.72			1.0000	N/A
Replicates		41262.0 41341.9 41489.9 41925.4							
4315275_43568		UNK 05/10/22 01:02:53 pm	5.45	43284	0.71			1.0000	N/A
Replicates		42838.2 43370.9 43516.4 43410.7							
CRDL		CRDL 05/10/22 01:04:30 pm	0.18	1958	1.45			1.0000	88.61
Replicates		1928.9 1975.9 1964.4 1961.9							
CCV		CCV 05/10/22 01:06:09 pm	4.90	38934	0.60			1.0000	97.95
Replicates		39132.4 38685.6 38790.8 39128.6							
CCB		CCB 05/10/22 01:07:48 pm	-0.02	439	11.05			1.0000	N/A
Replicates		427.5 459.5 438.0 430.8							
4315290_43569		UNK 05/10/22 01:09:26 pm	0.00	550	40.95			1.0000	N/A
Replicates		560.8 542.1 550.1 547.4							
4315291_43569		UNK 05/10/22 01:11:03 pm	5.29	42015	0.70			1.0000	N/A
Replicates		41667.1 41885.5 42280.5 42228.0							
10606264001_43569		UNK 05/10/22 01:12:39 pm	0.01	680	2.85			1.0000	N/A
Replicates		683.3 677.0 681.0 677.0							
4315292_43569		UNK 05/10/22 01:14:16 pm	5.27	41893	0.56			1.0000	N/A
Replicates		41672.8 41787.0 41903.5 42207.3							
4315293_43569		UNK 05/10/22 01:15:53 pm	5.09	40440	1.22			1.0000	N/A
Replicates		39786.0 40366.8 40714.8 40891.1							
CRDL		CRDL 05/10/22 01:17:30 pm	0.18	1977	1.56			1.0000	89.85
Replicates		1983.1 1947.2 1999.7 1978.5							
CCV		CCV 05/10/22 01:19:09 pm	5.00	39757	0.38			1.0000	100.05
Replicates		39598.0 39884.5 39663.8 39881.5							
CCB		CCB 05/10/22 01:20:47 pm	-0.02	438	16.45			1.0000	N/A
Replicates		421.6 459.3 416.3 452.8							

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
4315282_43570	UNK	05/10/22 01:22:24 pm	-0.01	473	20.24			1.0000	N/A
Replicates		465.5 486.5 490.0 448.0							
4315283_43570	UNK	05/10/22 01:24:01 pm	5.24	41611	0.18			1.0000	N/A
Replicates		41513.3 41591.0 41668.2 41671.0							
10607169001_43570	UNK	05/10/22 01:25:38 pm	0.34	3212	0.84			1.0000	N/A
Replicates		3194.7 3194.1 3219.8 3240.3							
4315284_43570	UNK	05/10/22 01:27:16 pm	5.67	44955	0.77			1.0000	N/A
Replicates		44529.7 44896.5 45043.3 45351.3							
4315285_43570	UNK	05/10/22 01:28:53 pm	5.49	43547	0.17			1.0000	N/A
Replicates		43456.8 43576.0 43630.7 43522.7							
10607169002_43570	UNK	05/10/22 01:30:31 pm	0.34	3224	0.65			1.0000	N/A
Replicates		3218.0 3248.1 3224.6 3207.3							
10607169003_43570	UNK	05/10/22 01:32:09 pm	0.56	4957	1.23			1.0000	N/A
Replicates		5008.8 4951.3 4884.5 4984.5							
10607169004_43570	UNK	05/10/22 01:33:47 pm	0.46	4190	0.45			1.0000	N/A
Replicates		4180.0 4197.3 4209.8 4174.3							
10607169005_43570	UNK	05/10/22 01:35:24 pm	0.34	3231	0.30			1.0000	N/A
Replicates		3225.6 3227.3 3242.5 3227.8							
CRDL	CRDL	05/10/22 01:37:01 pm	0.19	2028	1.11			1.0000	93.10
Replicates		2024.5 2024.8 2012.3 2050.8							
CCV	CCV	05/10/22 01:38:39 pm	5.03	39955	0.31			1.0000	100.55
Replicates		39786.6 39938.6 40042.1 40054.4							
CCB	CCB	05/10/22 01:40:18 pm	-0.02	393	5.74			1.0000	N/A
Replicates		381.7 406.3 391.8 393.8							
4312183_43584	UNK	05/10/22 01:41:55 pm	0.00	540	93.12			1.0000	N/A
Replicates		507.0 528.7 552.0 570.7							
4312184_43584	UNK	05/10/22 01:43:32 pm	5.25	41671	0.53			1.0000	N/A
Replicates		41971.0 41677.7 41480.9 41553.7							
10606797001_43584	UNK	05/10/22 01:45:08 pm	-0.01	529	34.03			1.0000	N/A
Replicates		533.1 514.2 545.9 522.2							
4312185_43584	UNK	05/10/22 01:46:45 pm	4.74	37674	0.18			1.0000	N/A
Replicates		37578.2 37676.7 37712.9 37727.9							
4312186_43584	UNK	05/10/22 01:48:22 pm	4.91	38999	0.13			1.0000	N/A
Replicates		38947.0 39037.6 39042.6 38969.4							
10606981001_43584	UNK	05/10/22 01:50:00 pm	0.19	2038	1.60			1.0000	N/A
Replicates		2016.3 2034.3 2071.6 2031.1							
10606796001_43584	UNK	05/10/22 01:51:37 pm	-0.01	515	38.28			1.0000	N/A
Replicates		508.8 545.3 497.8 507.5							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
CRDL	CRDL	05/10/22 01:53:14 pm	0.19	2038	0.43			1.0000	93.72
Replicates		2031.9 2032.8 2044.1 2042.1							
CCV	CCV	05/10/22 01:54:52 pm	4.89	38845	0.32			1.0000	97.72
Replicates		38665.9 38864.6 38926.8 38922.8							
CCB	CCB	05/10/22 01:56:31 pm	-0.02	439	11.70			1.0000	N/A
Replicates		423.6 429.1 453.4 451.4							
4307147_43503	UNK	05/10/22 01:58:09 pm	0.00	573	365.90			1.0000	N/A
Replicates		582.6 584.9 557.2 567.2							
4307148_43503	UNK	05/10/22 01:59:47 pm	5.14	40847	1.97			1.0000	N/A
Replicates		40175.4 40237.0 41142.0 41833.8							
10606192001_43503	UNK	05/10/22 02:01:24 pm	0.21	2253	0.61			1.0000	N/A
Replicates		2260.7 2239.8 2261.3 2248.8							
4307149_43503	UNK	05/10/22 02:03:02 pm	5.26	41809	0.12			1.0000	N/A
Replicates		41809.1 41868.8 41750.8 41806.0							
4307150_43503	UNK	05/10/22 02:04:39 pm	5.03	39978	2.15			1.0000	N/A
Replicates		39078.3 39487.0 40409.0 40937.5							
10606192002_43503	UNK	05/10/22 02:06:16 pm	0.15	1781	1.32			1.0000	N/A
Replicates		1790.0 1798.0 1767.8 1766.3							
10606192003_43503	UNK	05/10/22 02:07:53 pm	0.21	2204	1.19			1.0000	N/A
Replicates		2194.5 2181.1 2216.8 2222.8							
CRDL	CRDL	05/10/22 02:09:30 pm	0.18	2009	1.50			1.0000	91.89
Replicates		2004.6 2004.6 1987.9 2039.1							
CCV	CCV	05/10/22 02:11:09 pm	4.90	38994	1.05			1.0000	98.10
Replicates		38441.2 38961.5 39198.0 39373.5							
CCB	CCB	05/10/22 02:12:48 pm	-0.02	417	8.43			1.0000	N/A
Replicates		400.7 421.3 414.0 431.3							
4303400_43454	UNK	05/10/22 02:14:25 pm	0.00	566	420.64			1.0000	N/A
Replicates		550.7 574.2 581.2 557.9							
4303401_43454	UNK	05/10/22 02:16:02 pm	5.09	40449	0.12			1.0000	N/A
Replicates		40380.8 40466.3 40486.3 40462.3							
10605435001_43454	UNK	05/10/22 02:17:39 pm	0.14	1678	1.50			1.0000	N/A
Replicates		1681.3 1692.9 1653.9 1682.1							
10605435002_43454	UNK	05/10/22 02:19:16 pm	0.17	1903	0.94			1.0000	N/A
Replicates		1918.3 1903.0 1887.7 1901.7							
10605435003_43454	UNK	05/10/22 02:20:54 pm	0.18	1954	0.62			1.0000	N/A
Replicates		1942.7 1951.6 1958.9 1961.9							
10605661001_43454	UNK	05/10/22 02:22:31 pm	0.04	853	3.54			1.0000	N/A
Replicates		843.4 862.1 844.8 860.8							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
4303402_43454	UNK	05/10/22 02:24:09 pm	4.38	34852	1.03			1.0000	N/A
Replicates		34790.8 34555.1 34699.1 35361.3							
4303403_43454	UNK	05/10/22 02:25:47 pm	4.38	34861	0.16			1.0000	N/A
Replicates		34787.8 34853.5 34919.2 34884.7							
10605661002_43454	UNK	05/10/22 02:27:25 pm	0.07	1093	2.82			1.0000	N/A
Replicates		1075.3 1106.8 1086.8 1103.5							
CRDL	CRDL	05/10/22 02:29:02 pm	0.18	1968	2.42			1.0000	89.30
Replicates		1955.4 1944.2 1955.5 2018.7							
CCV	CCV	05/10/22 02:30:41 pm	4.90	38983	0.66			1.0000	98.07
Replicates		39184.7 38683.6 38861.3 39201.8							
CCB	CCB	05/10/22 02:32:20 pm	-0.02	398	9.58			1.0000	N/A
Replicates		403.1 377.9 417.1 395.1							
4310680_43571	UNK	05/10/22 02:33:57 pm	0.01	652	20.04			1.0000	N/A
Replicates		642.0 634.8 670.3 661.8							
4310681_43571	UNK	05/10/22 02:35:34 pm	5.25	41670	1.82			1.0000	N/A
Replicates		41550.1 42443.9 41991.9 40693.2							
10606360001_43571	UNK	05/10/22 02:37:12 pm	0.22	2260	0.97			1.0000	N/A
Replicates		2270.8 2256.7 2239.0 2275.2							
4310682_43571	UNK	05/10/22 02:38:49 pm	4.35	34679	0.10			1.0000	N/A
Replicates		34631.9 34679.9 34706.6 34696.6							
4310683_43571	UNK	05/10/22 02:40:26 pm	4.65	36984	0.06			1.0000	N/A
Replicates		36999.3 36977.2 36957.2 37003.2							
10606360002_43571	UNK	05/10/22 02:42:03 pm	0.10	1385	3.17			1.0000	N/A
Replicates		1371.0 1420.5 1361.5 1385.3							
10606361001_43571	UNK	05/10/22 02:43:41 pm	0.12	1480	2.33			1.0000	N/A
Replicates		1477.1 1452.6 1484.6 1503.9							
10606361002_43571	UNK	05/10/22 02:45:18 pm	0.11	1466	1.88			1.0000	N/A
Replicates		1444.2 1478.1 1462.4 1480.9							
CRDL	CRDL	05/10/22 02:46:55 pm	0.18	1995	2.55			1.0000	91.01
Replicates		1947.2 1995.3 2035.0 2003.5							
CCV	CCV	05/10/22 02:48:34 pm	4.88	38837	0.78			1.0000	97.70
Replicates		38527.6 38661.9 38965.4 39193.6							
CCB	CCB	05/10/22 02:50:13 pm	-0.02	442	3.01			1.0000	N/A
Replicates		436.9 445.6 442.4 444.1							
4310663_43573	UNK	05/10/22 02:51:50 pm	0.00	604	20.13			1.0000	N/A
Replicates		596.6 613.0 606.3 601.3							
4310664_43573	UNK	05/10/22 02:53:28 pm	5.15	40896	0.14			1.0000	N/A
Replicates		40813.5 40910.2 40922.9 40936.2							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
10606414001_43573	UNK	05/10/22 02:55:06 pm	1.43	11802	1.54			1.0000	N/A
Replicates		11979.1 11903.1 11731.8 11593.6							
10606414002_43573	UNK	05/10/22 02:56:44 pm	0.60	5245	1.75			1.0000	N/A
Replicates		5251.8 5152.8 5226.5 5350.8							
10606414003_43573	UNK	05/10/22 02:58:22 pm	0.06	1011	1.14			1.0000	N/A
Replicates		1012.3 1015.2 1003.5 1011.7							
10606414004_43573	UNK	05/10/22 02:59:59 pm	0.57	5041	0.24			1.0000	N/A
Replicates		5054.7 5033.7 5031.7 5042.9							
10606414005_43573	UNK	05/10/22 03:01:36 pm	85.61	671274	0.51		O	1.0000	N/A
Replicates		667007.4 670233.3 672841.3 675012.6							
4310665_43573	UNK	05/10/22 03:05:41 pm	97.17	761807	0.20		O	1.0000	N/A
Replicates		759682.8 761888.7 762611.7 763044.2							
4310666_43573	UNK	05/10/22 03:10:05 pm	95.98	752484	1.05		O	1.0000	N/A
Replicates		744199.6 749091.8 753994.3 762651.3							
10606414006_43573	UNK	05/10/22 03:14:46 pm	5.06	40192	0.06			1.0000	N/A
Replicates		40177.7 40178.0 40182.3 40229.8							
CRDL	CRDL	05/10/22 03:16:24 pm	0.17	1887	1.03			1.0000	84.12
Replicates		1868.5 1892.6 1887.9 1900.1							
CCV	CCV	05/10/22 03:18:02 pm	4.95	39375	0.91			1.0000	99.07
Replicates		39893.8 39253.6 39116.6 39234.3							
CCB	CCB	05/10/22 03:19:41 pm	-0.02	390	9.04			1.0000	N/A
Replicates		376.3 399.6 407.6 375.8							
4315286_43581	UNK	05/10/22 03:21:19 pm	-0.01	473	19.16			1.0000	N/A
Replicates		448.8 473.9 476.1 493.6							
4315287_43581	UNK	05/10/22 03:22:56 pm	5.14	40845	0.20			1.0000	N/A
Replicates		40731.4 40852.0 40906.7 40891.0							
10606158001_43581	UNK	05/10/22 03:24:34 pm	0.26	2623	1.40			1.0000	N/A
Replicates		2585.9 2632.9 2654.2 2617.7							
4315288_43581	UNK	05/10/22 03:26:11 pm	5.82	46131	0.13			1.0000	N/A
Replicates		46141.2 46201.1 46128.1 46053.1							
4315289_43581	UNK	05/10/22 03:27:49 pm	5.54	43955	0.23			1.0000	N/A
Replicates		43824.2 43953.9 43977.4 44063.4							
10607008001_43581	UNK	05/10/22 03:29:27 pm	1.67	13674	0.31			1.0000	N/A
Replicates		13619.3 13666.1 13709.3 13699.6							
10607011001_43581	UNK	05/10/22 03:31:05 pm	0.50	4470	0.47			1.0000	N/A
Replicates		4487.7 4479.2 4445.7 4469.2							
10607172001_43581	UNK	05/10/22 03:32:43 pm	0.02	721	6.01			1.0000	N/A
Replicates		725.8 715.9 710.9 730.9							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
CCV	CCV	05/10/22 03:34:21 pm	4.91	39003	0.45			1.0000	98.12
Replicates		38759.0 39013.3 39074.6 39163.8							
CCB	CCB	05/10/22 03:36:00 pm	-0.03	372	3.57			1.0000	N/A
Replicates		371.0 366.9 369.2 382.7							
10607172003_43581	UNK	05/10/22 03:37:38 pm	0.02	717	14.15			1.0000	N/A
Replicates		701.9 748.0 707.3 711.8							
10607172005_43581	UNK	05/10/22 03:39:15 pm	0.03	827	4.59			1.0000	N/A
Replicates		839.0 826.1 811.4 832.6							
10607172007_43581	UNK	05/10/22 03:40:53 pm	0.01	631	28.38			1.0000	N/A
Replicates		613.9 619.9 639.9 651.9							
10607223002_43581	UNK	05/10/22 03:42:31 pm	0.40	3694	0.57			1.0000	N/A
Replicates		3684.0 3675.5 3714.5 3703.0							
10607223003_43581	UNK	05/10/22 03:44:08 pm	0.60	5249	0.47			1.0000	N/A
Replicates		5222.0 5241.2 5262.2 5270.7							
10607223004_43581	UNK	05/10/22 03:45:46 pm	0.61	5339	1.87			1.0000	N/A
Replicates		5217.0 5329.8 5415.5 5394.8							
10606445002_43581	UNK	05/10/22 03:47:23 pm	-0.01	478	26.95			1.0000	N/A
Replicates		485.2 449.2 507.5 469.0							
10607170001_43581	UNK	05/10/22 03:49:21 pm	0.03	804	10.82			1.0000	N/A
Replicates		817.3 821.8 809.8 766.5							
CCV	CCV	05/10/22 03:50:59 pm	4.85	38555	0.35			1.0000	96.98
Replicates		38359.7 38570.0 38646.3 38642.0							
CCB	CCB	05/10/22 03:52:38 pm	-0.02	378	4.56			1.0000	N/A
Replicates		369.3 373.6 389.1 381.1							
10607170003_43581	UNK	05/10/22 03:54:16 pm	0.01	609	48.62			1.0000	N/A
Replicates		609.6 633.4 585.7 609.2							
10607170004_43581	UNK	05/10/22 03:55:54 pm	0.03	768	2.75			1.0000	N/A
Replicates		769.3 761.5 766.2 774.5							
10607170005_43581	UNK	05/10/22 03:57:32 pm	0.04	852	3.65			1.0000	N/A
Replicates		858.7 862.0 844.7 841.0							
10607170007_43581	UNK	05/10/22 03:59:10 pm	0.07	1120	3.10			1.0000	N/A
Replicates		1114.6 1099.3 1139.6 1125.8							
10607170008_43581	UNK	05/10/22 04:00:47 pm	0.01	672	16.07			1.0000	N/A
Replicates		682.5 650.4 667.4 686.7							
10606414005Dx50_43573	UNK	05/10/22 04:03:24 pm	2.60	20956	1.13			1.0000	N/A
Replicates		21201.9 21080.3 20859.3 20681.5							
4310665Dx50_43573	UNK	05/10/22 04:05:02 pm	3.26	26111	1.86			1.0000	N/A
Replicates		26567.1 26381.8 26006.5 25488.8							

Sample Name	Type	Date/Time	Conc (ug/L)	μAbs	%RSD	Residual	Flags	DF	% Recovery
4310666Dx50_43573	UNK	05/10/22 04:06:39 pm	3.34	26701	1.11			1.0000	N/A
Replicates		26338.5 26621.8 26831.3 27012.6							
CRDL	CRDL	05/10/22 04:08:35 pm	0.18	1977	0.35			1.0000	89.82
Replicates		1976.6 1981.0 1979.2 1969.7							
CCV	CCV	05/10/22 04:10:13 pm	4.93	39199	0.45			1.0000	98.62
Replicates		38964.2 39195.1 39263.3 39372.3							
CCB	CCB	05/10/22 04:11:52 pm	-0.02	403	16.85			1.0000	N/A
Replicates		390.4 406.3 441.1 376.1							



# Prep Log Report

Batch Information: MERP 812439 7471B S\_P

Template Version: ENV-EPL-MIN4-0028-Rev.00 (13Dec2020)

Prep Method	EPA 7471B	Analysis Method	EPA 7471B	Prepared By	NJ1	Instrument	10BL04
Block ID	10MET54	Thermometer ID	210354363	Correction Factor (C)	.8	Block Temp (C)	94
Corrected Temp. (C)	94.80	Digestion Start Date/Time	05/03/2022 12:07:41:655	Digestion End Date/Time	05/03/2022 12:51:10:405	Block End Temp (C)	96
Corrected End Temp. (C)	96.80	Digestion Vessel	360406	Resin Pellets Solid Matrix	344615	Metals Pipette 1	Q473
Metals Pipette 2	Q778	Bottle Disp. 1	Q814	Bottle Disp. 2	Q791	Bottle Disp. 3	Q452
Bottle Disp. 4	Q671	Bottle Disp. 5		Reviewed By	MT2	Reviewed By Date	05/04/2022 08:49
Batch Notes							

## Sample Information:

QC Rule	Sample Type	Lab Sample ID	Matrix	Initial Weight (g)	Aqua Regia (mL)	5% KMnO4 (mL)	12% NH2OH-HCL (mL)	Final Volume (mL)	Sample Notes	MERCURY-SPK (mL)
7471B_S_P	BLANK	4308604	Solid	0.325	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	LCS	4308605	Solid	0.31	364106 (3)	362590 (9)	363339 (3.6)	30		350870 (.15)
7471B_S_P	PS	10606046001	Solid	0.338	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	PS	10606394001	Solid	0.32	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	MS	4308606	Solid	0.331	364106 (3)	362590 (9)	363339 (3.6)	30		350870 (.15)
7471B_S_P	MSD	4308607	Solid	0.342	364106 (3)	362590 (9)	363339 (3.6)	30		350870 (.15)
7471B_S_P	PS	10606394002	Solid	0.351	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	PS	10606394003	Solid	0.301	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	PS	10606394004	Solid	0.34	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	PS	10606395001	Solid	0.339	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	PS	10606395002	Solid	0.321	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	PS	10606395003	Solid	0.309	364106 (3)	362590 (9)	363339 (3.6)	30		
7471B_S_P	PS	10606395004	Solid	0.306	364106 (3)	362590 (9)	363339 (3.6)	30		

## Standard Notes:

350870: LCS, MS, MSD Spike Solution

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG14-042722-0-5.5

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500  
Lab Sample ID: 10606394001 Percent Moisture: \_\_\_\_\_

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	44.5		%	1	04/29/2022 13:02

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG15-042722-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500  
Lab Sample ID: 10606394002 Percent Moisture: \_\_\_\_\_

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	35.5		%	1	04/29/2022 13:02

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG16-042722-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500  
Lab Sample ID: 10606394003 Percent Moisture: \_\_\_\_\_

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	26.5		%	1	04/29/2022 13:03

FORM I INORGANIC-1  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BNSF-BG17-042722-0-10

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500  
Lab Sample ID: 10606394004 Percent Moisture: \_\_\_\_\_

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Percent Moisture	50.2		%	1	04/29/2022 13:03

FORM VI INORGANIC-1  
DUPLICATES

SAMPLE NO.

4307525DUP

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Matrix: Solid Concentration Units: %

Percent Moisture: \_\_\_\_\_ Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	30	33.2	32.1	4

FORM VI INORGANIC-2  
DUPLICATES

SAMPLE NO.

4307526DUP

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Matrix: Solid Concentration Units: %

Percent Moisture: \_\_\_\_\_ Basis: Wet

Analyte	RPD Control Limit	Sample	Duplicate	RPD
Percent Moisture	30	9.3	9.4	0

FORM IX INORGANIC-1  
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Preparation Method: ASTM D2974 Instrument ID: 10BALP

Concentration Units: %

Analyte	PQL	MDL	MDL Date
Percent Moisture	0.10	0.10	01/01/2003



FORM XII INORGANIC-1  
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Preparation Method: ASTM D2974 Batch: MPRP 123910

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
4307525	4307525	04/29/2022	1	1
4307526	4307526	04/29/2022	1	1
10606394001	BNSF-BG14-042722-0-5.5	04/29/2022	1	1
10606394002	BNSF-BG15-042722-0-10	04/29/2022	1	1
10606394003	BNSF-BG16-042722-0-10	04/29/2022	1	1
10606394004	BNSF-BG17-042722-0-10	04/29/2022	1	1

FORM XIII INORGANIC-1  
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10606394 Contract: D3593500

Instrument ID: 10BALP

Analysis Method: ASTM D2974

Start Date: 04/29/2022 13:01

End Date: 04/29/2022 13:04

Sample Name	Lab Sample ID	D/F	Date	Time	MO IST
10606390001	10606390001	1	04/29/2022	13:01	X
4307525DUP	4307525	1	04/29/2022	13:02	X
BNSF-BG14-042722-0-5.5	10606394001	1	04/29/2022	13:02	X
BNSF-BG15-042722-0-10	10606394002	1	04/29/2022	13:02	X
BNSF-BG16-042722-0-10	10606394003	1	04/29/2022	13:03	X
BNSF-BG17-042722-0-10	10606394004	1	04/29/2022	13:03	X
10605980004	10605980004	1	04/29/2022	13:04	X
4307526DUP	4307526	1	04/29/2022	13:04	X



# Prep Log Report

Batch Information: 812294 123910 DW

Template Version: ENV-EPL-MIN4-0033-Rev.00 (13Dec2020)

Analysis Method	ASTM D2974	Analyzed By	JDL	Instrument	10BALP	Oven ID	10WET49
Acceptance Range	100-110 C	Thermometer ID	559926	Oven Correction Factor (C)	0	Oven Temp In1 (C)   Corr   Date/Time   Init	105.0   105.0   04/29/2022 13:17   JDL
Oven Temp Out1 (C)   Corr   Date/Time   Init	101.0   101.0   04/30/2022 08:02   JDL	Desic. In 1 ID   Date/Time   Init	10MET41   04/30/2022 08:02   JDL	Desic. Out 1 Date/Time   Init	04/30/2022 08:36   JDL	Reviewed By	CR2
Reviewed By Date	05/02/2022 08:30	Batch Notes					

## Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	ID	TS Posted (%)	Percent Moisture	Run Date/Time	Posted Dry Weight /w Dish (g)	Dish Weight (g)	Wet Weight /w Dish (g)	Dry Weight 1 (g)	Dry Wt Use 1	Sample Notes
DRY WEIGHT	PS	10606390001	Y		66.79	33.21	04/29/2022 13:01:49	6.9994	1.3181	9.8244	6.9994	M	
DRY WEIGHT	DUP	4307525	Y		67.95	32.05	04/29/2022 13:02:06	7.0766	1.3201	9.7923	7.0766	M	
DRY WEIGHT	PS	10606390002	Y		70.25	29.75	04/29/2022 13:02:19	7.0001	1.3153	9.4078	7.0001	M	
DRY WEIGHT	PS	10606394001	Y		55.48	44.52	04/29/2022 13:02:30	5.6691	1.3151	9.1631	5.6691	M	
DRY WEIGHT	PS	10606394002	Y		64.50	35.50	04/29/2022 13:02:46	6.5146	1.3188	9.3742	6.5146	M	
DRY WEIGHT	PS	10606394003	Y		73.49	26.51	04/29/2022 13:03:00	7.3976	1.3212	9.5897	7.3976	M	
DRY WEIGHT	PS	10606394004	Y		49.82	50.18	04/29/2022 13:03:11	5.4803	1.3189	9.6726	5.4803	M	
DRY WEIGHT	PS	10606395001	Y		48.55	51.45	04/29/2022 13:03:22	5.5291	1.3218	9.9871	5.5291	M	
DRY WEIGHT	PS	10606395002	Y		53.58	46.42	04/29/2022 13:03:33	5.7245	1.3195	9.5412	5.7245	M	
DRY WEIGHT	PS	10606395003	Y		76.66	23.34	04/29/2022 13:03:43	7.5059	1.3222	9.3891	7.5059	M	
DRY WEIGHT	PS	10606395004	Y		70.35	29.65	04/29/2022 13:03:55	6.9657	1.3229	9.3442	6.9657	M	
DRY WEIGHT	PS	10605980004	Y		90.65	9.346	04/29/2022 13:04:06	9.0855	1.3183	9.8863	9.0855	M	
DRY WEIGHT	DUP	4307526	Y		90.65	9.354	04/29/2022 13:04:18	9.1268	1.3221	9.9322	9.1268	M	
DRY WEIGHT	PS	10606346001	Y		97.45	2.554	04/29/2022 13:04:29	9.3677	1.3182	9.5787	9.3677	M	
DRY WEIGHT	PS	10606346002	Y		83.78	16.22	04/29/2022 13:04:40	8.2631	1.3197	9.6069	8.2631	M	

## Pace Analytical - Minnesota

Sample Delivery Group: L1488171  
Samples Received: 04/30/2022  
Project Number: 10606394  
Description: D3593500  
Site: 001  
Report To: Kongmeng Vang  
1700 Elm Street Suite 200  
Minneapolis, MN 55414

Entire Report Reviewed By:



Nancy McLain  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

# TABLE OF CONTENTS

<b>Cp: Cover Page</b>	<b>1</b>
<b>Tc: Table of Contents</b>	<b>2</b>
<b>Ss: Sample Summary</b>	<b>8</b>
<b>Cn: Case Narrative</b>	<b>9</b>
<b>Su: Summary Results</b>	<b>10</b>
<b>2540 G-2011 Total Solids</b>	<b>11</b>
<b>Sample Result Inorganic Analysis Data Sheet</b>	<b>11</b>
L1488171-01 05/03/22 15:50 LOGBAL1	11
L1488171-02 05/03/22 15:50 LOGBAL1	12
L1488171-03 05/04/22 10:53 LOGBAL1	13
L1488171-04 05/04/22 10:53 LOGBAL1	14
BLANK(R3787827-1) WG1857874 05/03/22 15:50 LOGBAL1	15
BLANK(R3788267-1) WG1858159 05/04/22 10:53 LOGBAL1	16
LCS(R3787827-2) WG1857874 05/03/22 15:50 LOGBAL1	17
LCS(R3788267-2) WG1858159 05/04/22 10:53 LOGBAL1	18
DUP(R3787827-3) WG1857874 05/03/22 15:50 LOGBAL1	19
DUP(R3788267-3) WG1858159 05/04/22 10:53 LOGBAL1	20
<b>Blank</b>	<b>21</b>
LOGBAL1 WG1857874	21
LOGBAL1 WG1858159	22
<b>Laboratory Duplicate</b>	<b>23</b>
WG1857874 DUP(R3787827-3)	23
WG1858159 DUP(R3788267-3)	24
<b>Laboratory Control Sample / Duplicate</b>	<b>25</b>
WG1857874 LCS(R3787827-2)	25
WG1858159 LCS(R3788267-2)	26
<b>Detection Limit Summary</b>	<b>27</b>
2540 G-2011 - Solid	27
<b>Analysis Log</b>	<b>28</b>
LOGBAL1 WG1857874	28
LOGBAL1 WG1858159	29
<b>Preparation Logs</b>	<b>30</b>
WG1857874	30
WG1858159	31
<b>8270E Semi Volatile Organic Compounds (GC/MS)</b>	<b>33</b>
<b>Surrogate Recovery</b>	<b>33</b>
Solid Surrogate Summary	33
<b>Matrix Spike / Duplicate</b>	<b>34</b>
WG1860981 MS(R3791358-3) MSD(R3791358-4)	34
<b>Laboratory Control Sample / Duplicate</b>	<b>35</b>



WG1860981 LCS(R3791358-1)	35
<b>Method Blank</b>	<b>36</b>
WG1860981 R3791358-2 BNAMS4 05/12/22 06:29	36
<b>GC/MS Performance Check</b>	<b>37</b>
BNAMS4 020922 02/09/22 10:23	37
<b>0209_05</b>	<b>38</b>
BNAMS4 051222 05/12/22 04:55	39
<b>0512_02T-1</b>	<b>40</b>
BNAMS24 033122 03/31/22 17:02	41
<b>0331_02</b>	<b>42</b>
BNAMS24 051222 05/12/22 04:53	43
<b>0512_02T-1</b>	<b>44</b>
<b>Internal Standard &amp; Retention Time</b>	<b>45</b>
BNAMS4 05/12/22 05:16	45
BNAMS24 05/12/22 05:15	47
<b>Sample Result Summary Organic Analysis Data Sheet</b>	<b>49</b>
L1488171-01 05/12/22 11:00 BNAMS4	49
<b>Raw Data - 0512_19</b>	<b>50</b>
L1488171-02 05/12/22 15:36 BNAMS24	52
<b>Raw Data - 0512_31</b>	<b>53</b>
L1488171-03 05/12/22 10:18 BNAMS4	56
<b>Raw Data - 0512_17</b>	<b>57</b>
L1488171-04 05/12/22 11:21 BNAMS4	59
<b>Raw Data - 0512_20</b>	<b>60</b>
<b>GC/MS Initial Calibration</b>	<b>63</b>
BNAMS4 02/09/22 10:43	63
<b>Calibration Plots</b>	<b>65</b>
2,4-Dinitrophenol	65
4,6-Dinitro-2-methylphenol	66
Benzidine	67
Hydroquinone	68
<b>Calibration Summary</b>	<b>69</b>
<b>Raw Data</b>	<b>71</b>
0209_06	71
0209_07	77
0209_08	82
0209_09	87
0209_10	98
0209_11	101
0209_12	112



0209_13	121
0209_15	132
0209_16	136
0209_17	142
0209_18	149
0209_19	157
0209_20	163
BNAMS24 03/31/22 17:24	169
Calibration Plots	171
2,4-Dinitrophenol	171
2-nitrodiphenylamine	172
4,6-Dinitro-2-methylphenol	173
Benzidine	174
Benzoic Acid	175
Di-n-octyl phthalate	176
Pentachlorophenol	177
Calibration Summary	178
Raw Data	183
0331_03	183
0331_04	198
0331_05	213
0331_06	220
0331_07	231
0331_08	238
0331_09	245
0331_10	254
0331_12	263
0331_13	265
0331_14	269
0331_15	271
0331_16	273
0331_17	275
GC/MS Calibration Verification	277
BNAMS4 02/09/22 15:56	277
BNAMS4 - 020922	278
1_bis(2-Chloroethyl)ether	281
2_bis(2-Chloroethyl)ether	282
3_Benzo(b)fluoranthene	283
BNAMS4 02/09/22 16:16	284
BNAMS4 - 020922	285

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Su

<sup>6</sup>Gl

<sup>7</sup>Al

<sup>8</sup>Sc

BNAMS4 05/12/22 05:16	287
<b>BNAMS4 - 051222</b>	<b>288</b>
1_bis(2-Chloroethyl)ether	291
2_bis(2-Chloroethyl)ether	292
3_Nitrobenzene-d5	293
4_Nitrobenzene-d5	294
5_Dibenz(a,h)anthracene	295
6_Dibenz(a,h)anthracene	296
7_Benzo(b)fluoranthene	297
8_bis(2-Chloroethyl)ether	298
BNAMS4 05/12/22 05:37	299
<b>BNAMS4 - 051222</b>	<b>300</b>
1_Hydroquinone	302
2_Hydroquinone	303
BNAMS24 03/31/22 22:44	304
<b>BNAMS24 - 033122</b>	<b>305</b>
5_Benzo(b)fluoranthene	308
6_bis(2-Chloroethyl)ether	309
7_bis(2-Chloroethyl)ether	310
8_Nitrobenzene-d5	311
9_Nitrobenzene-d5	312
BNAMS24 03/31/22 23:06	313
<b>BNAMS24 - 033122</b>	<b>314</b>
BNAMS24 05/12/22 05:15	316
<b>BNAMS24 - 051222</b>	<b>317</b>
1_bis(2-Chloroethyl)ether	320
2_bis(2-Chloroethyl)ether	321
3_Nitrobenzene-d5	322
4_Nitrobenzene-d5	323
5_Benzo(b)fluoranthene	324
BNAMS24 05/12/22 05:36	325
<b>BNAMS24 - 051222</b>	<b>326</b>
1_Benzoic Acid	328
2_Benzoic Acid	329
3_Hydroquinone	330
4_Hydroquinone	331
<b>Analytical Sequence</b>	<b>332</b>
BNAMS4 02/09/22 10:43	332
BNAMS24 03/31/22 17:24	333
<b>Detection Limit Summary</b>	<b>334</b>





8270E - Solid	334
<b>QC Result Summary Organic Analysis Data Sheet</b>	<b>335</b>
BLANK(R3791358-2) WG1860981 05/12/22 06:29 BNAMS4	335
<b>Raw Data - 0512_06</b>	<b>336</b>
LCS(R3791358-1) WG1860981 05/12/22 06:09 BNAMS4	338
<b>Raw Data - 0512_05</b>	<b>339</b>
1_bis(2-Chloroethyl)ether	343
2_bis(2-Chloroethyl)ether	344
3_Nitrobenzene-d5	345
4_Nitrobenzene-d5	346
MS(R3791358-3) WG1860981 05/12/22 16:14 BNAMS4	347
<b>Raw Data - 0512_34</b>	<b>348</b>
1_bis(2-Chloroethyl)ether	351
2_bis(2-Chloroethyl)ether	352
3_Phenol	353
4_Phenol	354
5_Hydroquinone	355
6_Hydroquinone	356
MSD(R3791358-4) WG1860981 05/12/22 16:35 BNAMS4	357
<b>Raw Data - 0512_35</b>	<b>358</b>
1_bis(2-Chloroethyl)ether	361
2_bis(2-Chloroethyl)ether	362
3_Phenol	363
4_Phenol	364
5_Hydroquinone	365
6_Hydroquinone	366
<b>Preparation Logs</b>	<b>367</b>
WG1860981	367
<b>9034/9030B Wet Chemistry</b>	<b>369</b>
<b>Sample Result Inorganic Analysis Data Sheet</b>	<b>369</b>
L1488171-01 05/04/22 19:00 MAN TITR	369
L1488171-02 05/04/22 19:00 MAN TITR	370
L1488171-03 05/04/22 19:00 MAN TITR	371
L1488171-04 05/04/22 19:00 MAN TITR	372
BLANK(R3788164-1) WG1858884 05/04/22 19:00 MAN TITR	373
LCS(R3788164-2) WG1858884 05/04/22 19:00 MAN TITR	374
<b>Blank</b>	<b>375</b>
MAN TITR WG1858884	375
<b>Laboratory Control Sample / Duplicate</b>	<b>376</b>
WG1858884 LCS(R3788164-2)	376



<b>Detection Limit Summary</b>	<b>377</b>
9034/9030B - Solid	377
<b>Analysis Log</b>	<b>378</b>
MAN TITR WG1858884	378
<b>Preparation Logs</b>	<b>379</b>
WG1858884	379
<b>GI: Glossary of Terms</b>	<b>381</b>
<b>AI: Accreditations &amp; Locations</b>	<b>383</b>
<b>Sc: Sample Chain of Custody</b>	<b>384</b>



# SAMPLE SUMMARY

## BNSF-BG14-042722-0-5.5 L1488171-01 Solid

Collected by \_\_\_\_\_ Collected date/time 04/27/22 09:00 Received date/time 04/30/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1857874	1	05/03/22 15:38	05/03/22 15:50	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9034/9030B	WG1858884	1	05/02/22 16:22	05/04/22 19:00	BMD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1860981	1	05/11/22 03:10	05/12/22 11:00	AGW	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Su
- 6 Gl
- 7 Al
- 8 Sc

## BNSF-BG15-042722-0-10 L1488171-02 Solid

Collected by \_\_\_\_\_ Collected date/time 04/27/22 09:25 Received date/time 04/30/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1857874	1	05/03/22 15:38	05/03/22 15:50	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9034/9030B	WG1858884	1	05/02/22 16:22	05/04/22 19:00	BMD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1860981	1	05/11/22 03:10	05/12/22 15:36	AGW	Mt. Juliet, TN

## BNSF-BG16-042722-0-10 L1488171-03 Solid

Collected by \_\_\_\_\_ Collected date/time 04/27/22 09:45 Received date/time 04/30/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1858159	1	05/04/22 10:20	05/04/22 10:53	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9034/9030B	WG1858884	1	05/02/22 16:22	05/04/22 19:00	BMD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1860981	1	05/11/22 03:10	05/12/22 10:18	AGW	Mt. Juliet, TN

## BNSF-BG17-042722-0-10 L1488171-04 Solid

Collected by \_\_\_\_\_ Collected date/time 04/27/22 10:05 Received date/time 04/30/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1858159	1	05/04/22 10:20	05/04/22 10:53	CMK	Mt. Juliet, TN
Wet Chemistry by Method 9034/9030B	WG1858884	1	05/02/22 16:22	05/04/22 19:00	BMD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1860981	1	05/11/22 03:10	05/12/22 11:21	AGW	Mt. Juliet, TN

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Nancy McLain  
Project Manager



## Report Revision History

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Level II Report - Version 1: 05/13/22 16:03

2540 G-2011 Total Solids

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1488171-01  
Client Sample ID: BNSF-BG14-042722-0-5.5  
Lab File ID: 05  
Instrument ID: LOGBAL1  
Analytical Batch: WG1857874  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): 62.8

SDG: L1488171  
Collected Date/Time: 04/27/22 09:00  
Received Date/Time: 04/30/22 09:00  
Preparation Date/Time: 05/03/22 15:38  
Analysis Date/Time: 05/03/22 15:50  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 9.667 g  
Final Wt/Vol: 6.543 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	62.8	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1488171-02  
Client Sample ID: BNSF-BG15-042722-0-10  
Lab File ID: 06  
Instrument ID: LOGBAL1  
Analytical Batch: WG1857874  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): 70.7

SDG: L1488171  
Collected Date/Time: 04/27/22 09:25  
Received Date/Time: 04/30/22 09:00  
Preparation Date/Time: 05/03/22 15:38  
Analysis Date/Time: 05/03/22 15:50  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 6.083 g  
Final Wt/Vol: 4.673 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	70.7	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** L1488171-03  
**Client Sample ID:** BNSF-BG16-042722-0-10  
**Lab File ID:** 04  
**Instrument ID:** LOGBAL1  
**Analytical Batch:** WG1858159  
**Dilution Factor:** 1  
**Analytical Method:** 2540 G-2011  
**Matrix:** Solid  
**Total Solids (%):** 77.0

**SDG:** L1488171  
**Collected Date/Time:** 04/27/22 09:45  
**Received Date/Time:** 04/30/22 09:00  
**Preparation Date/Time:** 05/04/22 10:20  
**Analysis Date/Time:** 05/04/22 10:53  
**Prep Method:** SM 2540 G  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 10.798 g  
**Final Wt/Vol:** 8.597 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	77.0	%



SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1488171-04  
Client Sample ID: BNSF-BG17-042722-0-10  
Lab File ID: 05  
Instrument ID: LOGBAL1  
Analytical Batch: WG1858159  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): 58.1

SDG: L1488171  
Collected Date/Time: 04/27/22 10:05  
Received Date/Time: 04/30/22 09:00  
Preparation Date/Time: 05/04/22 10:20  
Analysis Date/Time: 05/04/22 10:53  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 14.269 g  
Final Wt/Vol: 8.816 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	58.1	

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3787827-1  
Client Sample ID: BLANK  
Lab File ID: 01  
Instrument ID: LOGBAL1  
Analytical Batch: WG1857874  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1488171  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 05/03/22 15:38  
Analysis Date/Time: 05/03/22 15:50  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 1.247 g  
Final Wt/Vol: 1.247 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	0.000	

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3788267-1  
Client Sample ID: BLANK  
Lab File ID: 01  
Instrument ID: LOGBAL1  
Analytical Batch: WG1858159  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1488171  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 05/04/22 10:19  
Analysis Date/Time: 05/04/22 10:53  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 1.251 g  
Final Wt/Vol: 1.25 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	0.00100 %	

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3787827-2  
Client Sample ID: LCS  
Lab File ID: 03  
Instrument ID: LOGBAL1  
Analytical Batch: WG1857874  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1488171  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 05/03/22 15:38  
Analysis Date/Time: 05/03/22 15:50  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 11.27 g  
Final Wt/Vol: 6.269 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	50.0	

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3788267-2  
Client Sample ID: LCS  
Lab File ID: 03  
Instrument ID: LOGBAL1  
Analytical Batch: WG1858159  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1488171  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 05/04/22 10:19  
Analysis Date/Time: 05/04/22 10:53  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 11.253 g  
Final Wt/Vol: 6.252 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	50.0	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3787827-3  
Client Sample ID: DUP  
Lab File ID: 02  
Instrument ID: LOGBAL1  
Analytical Batch: WG1857874  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): 82.7

SDG: L1488171  
Collected Date/Time: 04/27/22 09:45  
Received Date/Time: 04/30/22 09:00  
Preparation Date/Time: 05/03/22 15:38  
Analysis Date/Time: 05/03/22 15:50  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 10.618 g  
Final Wt/Vol: 9.019 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	82.9	%

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3788267-3  
Client Sample ID: DUP  
Lab File ID: 02  
Instrument ID: LOGBAL1  
Analytical Batch: WG1858159  
Dilution Factor: 1  
Analytical Method: 2540 G-2011  
Matrix: Solid  
Total Solids (%): 84.4

SDG: L1488171  
Collected Date/Time: 04/27/22 15:28  
Received Date/Time: 04/29/22 09:00  
Preparation Date/Time: 05/04/22 10:19  
Analysis Date/Time: 05/04/22 10:53  
Prep Method: SM 2540 G  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 9.867 g  
Final Wt/Vol: 8.44 g

Analyte	CAS	Result	Qualifier
Total Solids	TSOLIDS	83.4	%

<b>SDG:</b>	L1488171	<b>Calibration (begin) date/time:</b>	_____
<b>Instrument ID:</b>	LOGBAL1	<b>Calibration (end) date/time:</b>	_____
<b>Analytical Method:</b>	2540 G-2011	<b>Analytical Run:</b>	WG1857874

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	Sample ID: BLANK	Result	BLANK Qual
	File ID:	01	
<b>Analyte</b>		%	
TOTAL SOLIDS		0.000	

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<b>SDG:</b>	L1488171	<b>Calibration (begin) date/time:</b>	_____
<b>Instrument ID:</b>	LOGBAL1	<b>Calibration (end) date/time:</b>	_____
<b>Analytical Method:</b>	2540 G-2011	<b>Analytical Run:</b>	WG1858159

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	Sample ID: BLANK	Result	BLANK Qual
	File ID:	01	
<b>Analyte</b>		%	
TOTAL SOLIDS		0.00100	

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**DUP Sample / File ID:** R3787827-3 / 02  
**OS Sample / File ID:** L1488173-01 / 07  
**Instrument ID:** LOGBAL1  
**Analytical Method:** 2540 G-2011

**SDG:** L1488171  
**Analytical Batch:** WG1857874  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	OS Result %	DUP Result %	RPD %	RPD Limits %
Total Solids	82.7	82.9	0.239	10

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

**DUP Sample / File ID:** R3788267-3 / 02  
**OS Sample / File ID:** L1488260-04 / 06  
**Instrument ID:** LOGBAL1  
**Analytical Method:** 2540 G-2011

**SDG:** L1488171  
**Analytical Batch:** WG1858159  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	OS Result %	DUP Result %	RPD %	RPD Limits %
Total Solids	84.4	83.4	1.11	10

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE  
 LABORATORY CONTROL SAMPLE DUPLICATE  
 RECOVERY  
 L1488171-01,02

SAMPLE NO.:  
 R3787827-2

**LCS Sample / File ID:** R3787827-2 / 03  
**LCSD Sample / File ID:** \_\_\_\_\_  
**Instrument ID:** LOGBAL1  
**Analytical Method:** 2540 G-2011

**SDG:** L1488171  
**Analytical Batch:** WG1857874  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	%	%		%	%	%	%	%
Total Solids	50.0	50.0		100		85.0 - 115		

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE  
 LABORATORY CONTROL SAMPLE DUPLICATE  
 RECOVERY  
 L1488171-03,04

SAMPLE NO.:  
 R3788267-2

**LCS Sample / File ID:** R3788267-2 / 03  
**LCSD Sample / File ID:** \_\_\_\_\_  
**Instrument ID:** LOGBAL1  
**Analytical Method:** 2540 G-2011

**SDG:** L1488171  
**Analytical Batch:** WG1858159  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	%	%		%	%	%	%	%
Total Solids	50.0	50.0		100		85.0 - 115		

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1488171-01,02,03,04  
Matrix: Solid

Analytical Method: 2540 G-2011  
Prep Method: SM 2540 G

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Analyte	CAS	Wavelength	Mass	MDL %	RDL %
Total Solids	TSOLIDS				

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ANALYSIS LOG

**SDG:** L1488171 **Analytical Method:** 2540 G-2011  
**Instrument ID:** LOGBAL1 **Calibration Start Date:** \_\_\_\_\_  
**Analytical Run:** WG1857874 **Calibration End Date:** \_\_\_\_\_

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3787827-1	01	05/03/22 15:50	1	WG1857874
DUP	R3787827-3	02	05/03/22 15:50	1	WG1857874
LCS	R3787827-2	03	05/03/22 15:50	1	WG1857874
OS	L1488173-01	07	05/03/22 15:50		
BNSF-BG15-042722-0-10	L1488171-02	06	05/03/22 15:50	1	WG1857874
BNSF-BG14-042722-0-5.5	L1488171-01	05	05/03/22 15:50	1	WG1857874

ANALYSIS LOG

<b>SDG:</b>	L1488171	<b>Analytical Method:</b>	2540 G-2011
<b>Instrument ID:</b>	LOGBAL1	<b>Calibration Start Date:</b>	_____
<b>Analytical Run:</b>	WG1858159	<b>Calibration End Date:</b>	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3788267-1	01	05/04/22 10:53	1	WG1858159
DUP	R3788267-3	02	05/04/22 10:53	1	WG1858159
LCS	R3788267-2	03	05/04/22 10:53	1	WG1858159
OS	L1488260-04	06	05/04/22 10:53		
BNSF-BG16-042722-0-10	L1488171-03	04	05/04/22 10:53	1	WG1858159
BNSF-BG17-042722-0-10	L1488171-04	05	05/04/22 10:53	1	WG1858159



# Total Solids WetChem Prep Benchsheet

Batch: WG1857874

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1488088	WG1856953	BJM688	PREPREPBAL4	30-APR-22
L1488171	WG1856959	BJM688	PREPREPBAL4	30-APR-22
L1488173	WG1857196	BJM688	PREPREPBAL1	01-MAY-22
L1488179	WG1857196	BJM688	PREPREPBAL1	01-MAY-22
L1488286	WG1857211	BJM688	PREPREPBAL2	03-MAY-22

Analyst: MT3521    Prep Start Date/Time: 05/03/22 15:34-05/04/22 09:38    Prep End Date/Time: 05/04/22 09:38    SOP: 0178    Method: SM 2540G    Oven ID: 2305  
 Balance ID: LOGBAL1    LCS True Value: 50

LCS: 22B23211 Amt. Used: 50 Exp. Date:08/23/22

Sample Number	Matrix	State	Collect Date	Vessel ID	Vessel Wt (g)	Sample + Vessel Wt (g)	Oven Wt1 (g)	Oven Wt2 (g)	Wt Diff (g)	% TS Result	% Moisture Result	TS % Recovery	Moisture % Rec.	TS RPD	% Moisture RPD	Box ID	Review Analyst	Review Date
BLANK				MM1	1.247	1.247	1.246	1.247	0.001	0	100						CMK3616	05/04/22 09:38:19
LCS				MM2	1.270	11.270	6.268	6.269	0.001	49.99	50.01	99.98	100.02				CMK3616	05/04/22 09:38:19
DUP(L1488173-01)				MM3	1.274	10.618	9.016	9.019	0.003	82.8874	17.1126			0.24	1.15	MON BOX 1, 0502 PP1	CMK3616	05/04/22 09:38:19
1. L1488088-01	SS	TN	04/28/22 23:00	MM4	1.270	12.098	9.616	9.625	0.009	77.1611	22.8389					PP4 0430	CMK3616	05/04/22 09:38:19
2. L1488171-01	SS	WA	04/27/22 09:00	MM5	1.267	9.667	6.536	6.543	0.007	62.8095	37.1905					PP4 0430	CMK3616	05/04/22 09:38:19
3. L1488171-02	SS	WA	04/27/22 09:25	MM6	1.271	6.083	4.671	4.673	0.002	70.6983	29.3017					PP4 0430	CMK3616	05/04/22 09:38:19
4. L1488173-01	SS	FL	04/27/22 09:45	MM7	1.265	9.838	8.351	8.354	0.003	82.6898	17.3102						CMK3616	05/04/22 09:38:19
5. L1488179-01	SS	FL	04/28/22 12:57	MM8	1.265	13.172	12.751	12.754	0.003	96.4895	3.5105					MON BOX 1, 0502 PP1	CMK3616	05/04/22 09:38:19
6. L1488286-01	SS	FL	04/28/22 09:47	MM9	1.271	11.118	10.539	10.543	0.004	94.1607	5.8393					Tues02 / 0503PP02	CMK3616	05/04/22 09:38:19
7. L1488286-02	SS	FL	04/28/22 09:52	MM10	1.273	10.055	7.803	7.806	0.003	74.3908	25.6092					Tues02 / 0503PP02	CMK3616	05/04/22 09:38:19
8. L1488286-03	SS	FL	04/28/22 11:10	MM11	1.258	9.925	8.309	8.309	0	81.3546	18.6454					Tues02 / 0503PP02	CMK3616	05/04/22 09:38:19
9. L1488286-04	SS	FL	04/28/22 11:15	MM12	1.271	11.728	9.985	9.985	0	83.3317	16.6683					Tues02 / 0503PP02	CMK3616	05/04/22 09:38:19
10. L1488286-05	SS	FL	04/28/22 11:21	MM13	1.270	11.724	9.752	9.753	0.001	81.146	18.854					Tues02 / 0503PP02	CMK3616	05/04/22 09:38:19

Comments:

Reviewed By:CMK3616 on 05/04/22 09:38:19

#	Type	Time In	Obs. Temp In (°C)	Corrected Temp In (°C)	Time Out	Obs. Temp Out (°C)	Corrected Temp Out (°C)	Samples
1	Oven	05/03/22 15:50:47	104	104	05/04/22 05:59:18	104	104	BLANK, LCS, DUP(L1488173-01), L1488088-01, L1488286-05, L1488286-04, L1488286-03, L1488286-02, L1488286-01, L1488179-01, L1488173-01, L1488171-02, L1488171-01
2	Oven	05/04/22 06:03:23	104	104	05/04/22 09:33:33	104	104	BLANK, LCS, DUP(L1488173-01), L1488088-01, L1488171-01, L1488171-02, L1488173-01, L1488179-01, L1488286-01, L1488286-02, L1488286-03, L1488286-04, L1488286-05

# Total Solids WetChem Prep Benchsheet

Batch: WG1858159

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1488171	WG1856959	BJM688	PREPREPBAL4	30-APR-22
L1488260	WG1858119	BJM688	PREPREPBAL2	03-MAY-22
L1488314	WG1857155	BJM688	PREPREPBAL2	03-MAY-22
L1488355	WG1858119	BJM688	PREPREPBAL2	03-MAY-22

Analyst: MT3521 Prep Start Date/Time: 05/04/22 10:19-10:20 Prep End Date/Time: 05/05/22 08:37 SOP: 0178 Method: SM 2540G Oven ID: 2305  
Balance ID: LOGBAL1 LCS True Value: 50

LCS: 22B23211 Amt. Used: 50 Exp. Date:08/23/22

Sample Number	Matrix	State	Collect Date	Vessel ID	Vessel Wt (g)	Sample + Vessel Wt (g)	Oven Wt1 (g)	Oven Wt2 (g)	Wt Diff (g)	% TS Result	% Moisture Result	TS % Recovery	Moisture % Rec.	TS RPD	% Moisture RPD	Box ID	Review Analyst	Review Date
BLANK				DD1	1.251	1.251	1.251	1.250	0.001	0.001	99.999						CMK3616	05/05/22 08:37:30
LCS				DD2	1.251	11.253	6.251	6.252	0.001	50	50	100	100				CMK3616	05/05/22 08:37:30
DUP(L1488260-04)				DD3	1.252	9.867	8.421	8.440	0.019	83.4359	16.5641			1.11	5.76	Tues03 / 0503PP02	CMK3616	05/05/22 08:37:30
1. L1488171-03	SS	WA	04/27/22 09:45	DD4	1.246	10.798	8.596	8.597	0.001	76.9577	23.0423					PP4 0430	CMK3616	05/05/22 08:37:30
2. L1488171-04	SS	WA	04/27/22 10:05	DD5	1.255	14.269	8.805	8.816	0.011	58.099	41.901					PP4 0430	CMK3616	05/05/22 08:37:30
3. L1488260-04	SS	WA	04/27/22 15:28	DD6	1.257	10.159	8.741	8.767	0.026	84.3631	15.6369						CMK3616	05/05/22 08:37:30
4. L1488260-05	SS	WA	04/27/22 15:37	DD7	1.254	14.207	12.985	13.004	0.019	90.7126	9.2874					Tues03 / 0503PP02	CMK3616	05/05/22 08:37:30
5. L1488314-06	SS	CA	04/27/22 13:11	DD8	1.259	12.447	12.058	12.069	0.011	96.6214	3.3786					Tues02 / 0503PP02	CMK3616	05/05/22 08:37:30
6. L1488314-07	SS	CA	04/27/22 13:20	DD9	1.262	15.382	13.487	13.533	0.046	86.9051	13.0949					Tues02 / 0503PP02	CMK3616	05/05/22 08:37:30
7. L1488314-08	SS	CA	04/27/22 13:25	DD10	1.257	9.394	8.950	8.962	0.012	94.6909	5.3091					Tues02 / 0503PP02	CMK3616	05/05/22 08:37:30
8. L1488314-10	SS	CA	04/27/22 14:00	DD11	1.260	12.480	10.707	10.722	0.015	84.3316	15.6684					Tues02 / 0503PP02	CMK3616	05/05/22 08:37:30
9. L1488355-01	SS	AL	04/28/22 08:35	DD12	1.256	11.122	9.739	9.767	0.028	86.266	13.734					Tues03 / 0503PP02	CMK3616	05/05/22 08:37:30
10. L1488355-02	SS	AL	04/28/22 08:40	DD13	1.248	15.165	13.602	13.638	0.036	89.0278	10.9722					Tues03 / 0503PP02	CMK3616	05/05/22 08:37:30

Comments:

Reviewed By:CMK3616 on 05/05/22 08:37:30

#	Type	Time In	Obs. Temp In (°C)	Corrected Temp In (°C)	Time Out	Obs. Temp Out (°C)	Corrected Temp Out (°C)	Samples
1	Oven-05/04/22 4hr	10:53:18	104	104	05/05/22 05:03:22	104	104	BLANK, LCS, DUP(L1488260-04), L1488171-03, L1488355-02, L1488355-01, L1488314-10, L1488314-08, L1488314-07, L1488314-06, L1488260-05, L1488260-04, L1488171-04
2	Oven-05/05/22 1hr	05:05:48	104	104	05/05/22 08:30:21	104	104	BLANK, LCS, DUP(L1488260-04), L1488171-03, L1488171-04, L1488260-04, L1488260-05, L1488314-06, L1488314-07, L1488314-08, L1488314-10, L1488355-01, L1488355-02

8270E Semi Volatile Organic Compounds (GC/MS)

Analytical Method: 8270E  
 Matrix: Solid

SDG: L1488171

Sample ID	Lab Sample ID	Instrument	File ID	DMC-1 % Rec.	DMC-2 % Rec.	DMC-3 % Rec.	DMC-4 % Rec.	DMC-5 % Rec.	DMC-6 % Rec.	TOT Out
BNSF-BG14-04272 2-0-5,5	L1488171-01	BNAMS4	0512_19	63.6	61.9	63.2	53.9	58.2	61.9	0
BNSF-BG15-04272 2-0-10	L1488171-02	BNAMS24	0512_31	43.0	40.1	41.6	41.0	48.8	48.0	0
BNSF-BG16-04272 2-0-10	L1488171-03	BNAMS4	0512_17	55.1	53.5	55.3	49.8	51.7	54.4	0
BNSF-BG17-04272 2-0-10	L1488171-04	BNAMS4	0512_20	54.7	54.3	56.2	52.2	63.8	50.9	0
OS	L1488161-03	BNAMS4	0512_33	49.1	44.5	52.5	44.4	49.5	50.9	0
MS	R3791358-3	BNAMS4	0512_34	45.9	45.1	46.7	42.3	60.0	50.5	0
MSD	R3791358-4	BNAMS4	0512_35	36.4	37.7	34.9	35.8	41.9	38.3	0
BLANK	R3791358-2	BNAMS4	0512_06	62.8	61.9	64.9	56.2	54.2	64.0	0
LCS	R3791358-1	BNAMS4	0512_05	59.3	59.8	54.4	60.7	68.2	64.3	0

Parm Abbreviation	Parameter	QC LIMITS
DMC-1	2-Fluorophenol	12.0 - 120
DMC-2	Phenol-d5	10.0 - 120
DMC-3	Nitrobenzene-d5	10.0 - 122
DMC-4	2-Fluorobiphenyl	15.0 - 120
DMC-5	2,4,6-Tribromophenol	10.0 - 127
DMC-6	p-Terphenyl-d14	10.0 - 120

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

MATRIX SPIKE /  
MATRIX SPIKE DUPLICATE RECOVERY  
L1488171-01,02,03,04

SAMPLE NO.:  
R3791358-3  
R3791358-4

**MS Sample / File ID:** R3791358-3 / 0512\_34  
**MSD Sample / File ID:** R3791358-4 / 0512\_35  
**OS Sample / File ID:** L1488161-03 / 0512\_33  
**Instrument ID:** BNAMS4  
**Analytical Method:** 8270E

**SDG:** L1488171  
**Analytical Batch:** WG1860981  
**Matrix:** Solid

Analyte	Spike Amount (dry) mg/kg	OS Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	RPD %	RPD Limit %
Acenaphthene	0.828	U	0.392	0.337	47.3	40.5	5	18.0 - 120	14.9	32
Acenaphthylene	0.828	U	0.406	0.335	49.1	40.2	5	25.0 - 120	19.3	32
Anthracene	0.828	U	0.448	0.339	54.1	40.7	5	22.0 - 120	27.7	29
Benzoic Acid	1.66	U	1.24	0.806	74.7	48.5	5	10.0 - 152	42.5*	40
Benzo(a)anthracene	0.828	U	0.448	0.353	54.1	42.4	5	25.0 - 120	23.7	29
Benzo(b)fluoranthene	0.828	U	0.446	0.353	53.9	42.4	5	19.0 - 122	23.4	31
Benzo(k)fluoranthene	0.828	U	0.472	0.352	57.1	42.2	5	23.0 - 120	29.3	30
Benzo(g,h,i)perylene	0.828	U	0.428	0.345	51.7	41.4	5	10.0 - 120	21.5	33
Benzo(a)pyrene	0.828	U	0.497	0.389	60.0	46.7	5	24.0 - 120	24.3	30
Carbazole	0.828	U	0.449	0.322	54.2	38.6	5	31.0 - 120	33.0*	24
Chrysene	0.828	U	0.441	0.347	53.3	41.6	5	21.0 - 120	24.1	29
Dibenz(a,h)anthracene	0.828	U	0.465	0.349	56.1	41.9	5	10.0 - 120	28.4	32
Dibenzofuran	0.828	U	0.393	0.328	47.5	39.4	5	24.0 - 120	18.0	30
Fluoranthene	0.828	U	0.458	0.348	55.3	41.7	5	18.0 - 126	27.4	32
Fluorene	0.828	U	0.397	0.339	48.0	40.7	5	25.0 - 120	15.9	30
Indeno(1,2,3-cd)pyrene	0.828	U	0.456	0.336	55.0	40.3	5	10.0 - 120	30.2	32
1-Methylnaphthalene	0.828	U	0.374	0.299	45.1	35.8	5	10.0 - 120	22.4	36
2-Methylnaphthalene	0.828	U	0.352	0.288	42.5	34.6	5	10.0 - 120	19.9	37
Naphthalene	0.828	U	0.356	0.295	42.9	35.4	5	10.0 - 120	18.8	35
Phenanthrene	0.828	U	0.457	0.340	55.2	40.8	5	17.0 - 120	29.3	31
Bis(2-ethylhexyl)phthalate	0.828	U	0.546	0.389	66.0	46.7	5	17.0 - 126	33.6*	30
Di-n-butyl phthalate	0.828	U	0.549	0.404	66.3	48.4	5	30.0 - 120	30.5*	29
Di-n-octyl phthalate	0.828	U	0.515	0.382	62.2	45.8	5	21.0 - 123	29.8*	29
Pyrene	0.828	U	0.404	0.331	48.7	39.7	5	16.0 - 121	19.8	32
3&4-Methyl Phenol	0.828	U	0.478	0.345	57.7	41.4	5	12.0 - 123	32.2	38
Pentachlorophenol	0.828	U	0.494	0.322	59.7	38.6	5	10.0 - 160	42.3*	31
Phenol	0.828	U	0.383	0.322	46.2	38.6	5	12.0 - 120	17.3	38

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE  
LABORATORY CONTROL SAMPLE DUPLICATE  
RECOVERY  
L1488171-01,02,03,04

LCS Sample / File ID: R3791358-1 / 0512\_05  
LCSD Sample / File ID: \_\_\_\_\_  
Instrument ID: BNAMS4  
Analytical Method: 8270E

SDG: L1488171  
Analytical Batch: WG1860981  
Dilution Factor: 1  
Matrix: Solid

Analyte	Spike Amount <i>mg/kg</i>	LCS Result <i>mg/kg</i>	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limit %
Acenaphthene	0.666	0.418		62.8		38.0 - 120		
Acenaphthylene	0.666	0.440		66.1		40.0 - 120		
Anthracene	0.666	0.419		62.9		42.0 - 120		
Benzoic Acid	1.33	0.211		15.9		10.0 - 120		
Benzo(a)anthracene	0.666	0.435		65.3		44.0 - 120		
Benzo(b)fluoranthene	0.666	0.395		59.3		43.0 - 120		
Benzo(k)fluoranthene	0.666	0.400		60.1		44.0 - 120		
Benzo(g,h,i)perylene	0.666	0.434		65.2		43.0 - 120		
Benzo(a)pyrene	0.666	0.433		65.0		45.0 - 120		
Carbazole	0.666	0.405		60.8		48.0 - 120		
Chrysene	0.666	0.441		66.2		43.0 - 120		
Dibenz(a,h)anthracene	0.666	0.403		60.5		44.0 - 120		
Dibenzofuran	0.666	0.413		62.0		44.0 - 120		
Fluoranthene	0.666	0.419		62.9		44.0 - 120		
Fluorene	0.666	0.414		62.2		41.0 - 120		
Indeno(1,2,3-cd)pyrene	0.666	0.415		62.3		45.0 - 120		
1-Methylnaphthalene	0.666	0.330		49.5		34.0 - 120		
2-Methylnaphthalene	0.666	0.317		47.6		34.0 - 120		
Naphthalene	0.666	0.323		48.5		18.0 - 120		
Phenanthrene	0.666	0.414		62.2		42.0 - 120		
Bis(2-ethylhexyl)phthalate	0.666	0.523		78.5		41.0 - 120		
Di-n-butyl phthalate	0.666	0.481		72.2		43.0 - 120		
Di-n-octyl phthalate	0.666	0.485		72.8		40.0 - 120		
Pyrene	0.666	0.425		63.8		41.0 - 120		
3&4-Methyl Phenol	0.666	0.459		68.9		42.0 - 120		
Pentachlorophenol	0.666	0.390		58.6		29.0 - 120		
Phenol	0.666	0.395		59.3		28.0 - 120		

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

**Lab Sample ID:** R3791358-2  
**Lab File ID:** 0512\_06  
**Instrument ID:** BNAMS4  
**Analytical Batch:** WG1860981  
**Analytical Method:** 8270E

**SDG:** L1488171  
**Preparation Date/Time:** 05/11/22 03:08  
**Analysis Date/Time:** 05/12/22 06:29  
**Dilution Factor:** 1  
**Matrix:** Solid

Sample ID	Lab Sample ID	Instrument	File ID	Analysis date/time
LCS	R3791358-1	BNAMS4	0512_05	05/12/22 06:09
BNSF-BG16-042722-0-10	L1488171-03	BNAMS4	0512_17	05/12/22 10:18
BNSF-BG14-042722-0-5.5	L1488171-01	BNAMS4	0512_19	05/12/22 11:00
BNSF-BG17-042722-0-10	L1488171-04	BNAMS4	0512_20	05/12/22 11:21
BNSF-BG15-042722-0-10	L1488171-02	BNAMS24	0512_31	05/12/22 15:36
OS	L1488161-03	BNAMS4	0512_33	05/12/22 15:53
MS	R3791358-3	BNAMS4	0512_34	05/12/22 16:14
MSD	R3791358-4	BNAMS4	0512_35	05/12/22 16:35

## Sample Narrative:

Dilution due to matrix

GC/MS INSTRUMENT  
PERFORMANCE CHECK

Lab File ID: 0209\_05  
Instrument ID: BNAMS4  
Analysis Date/Time: 02/09/22 10:23

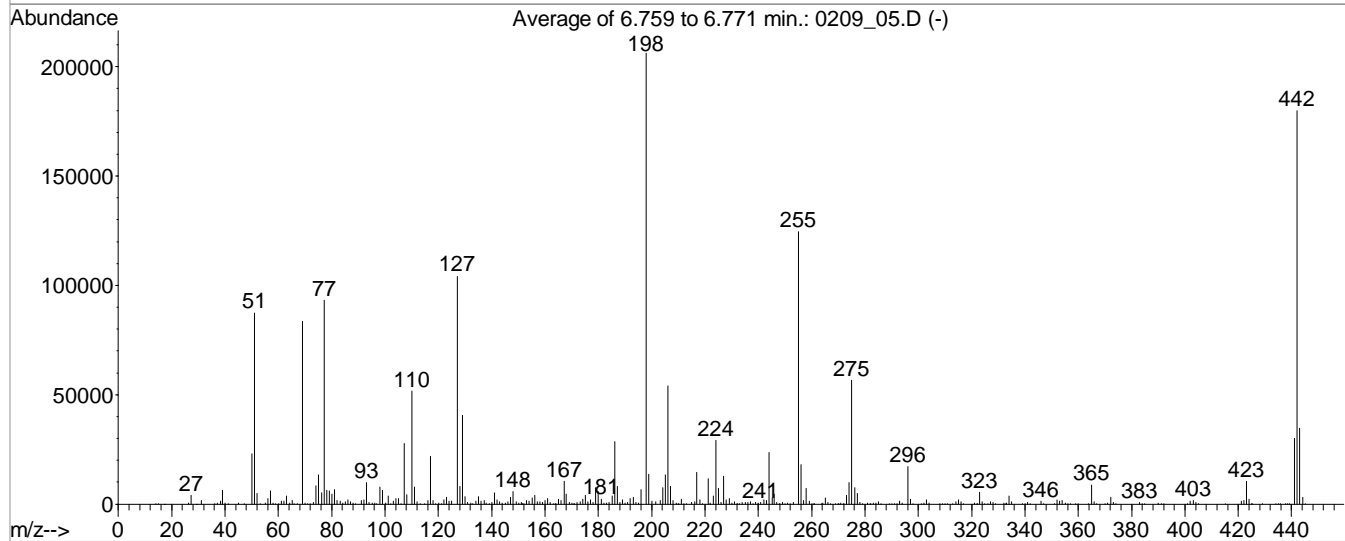
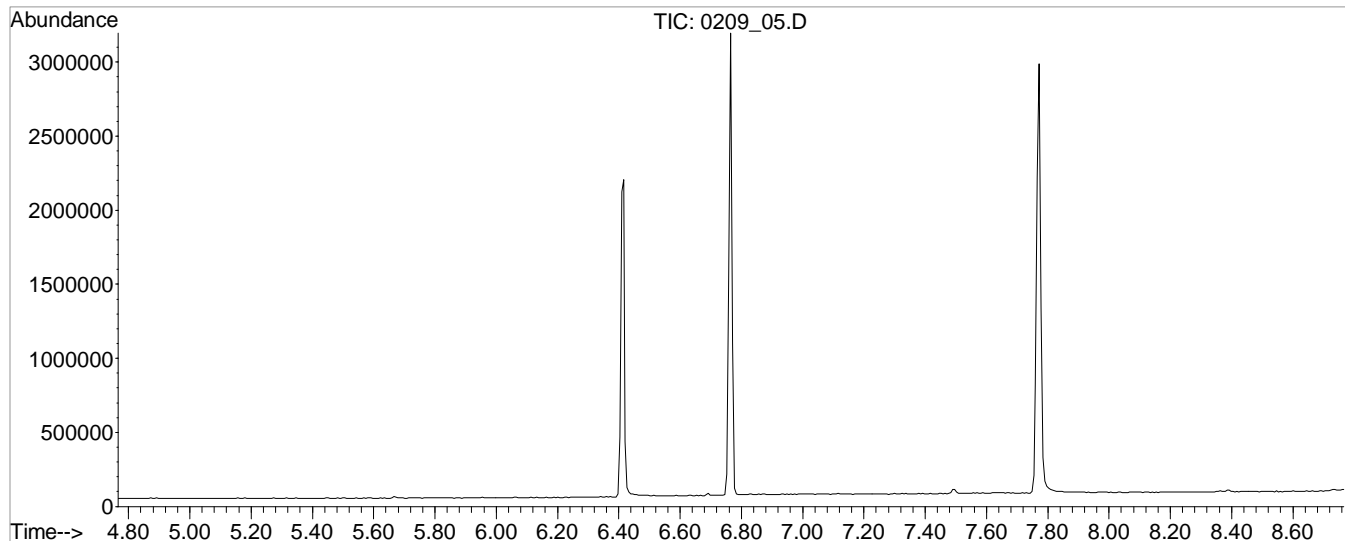
SDG: L1488171  
Analytical Method: 8270E

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	198	10	80	42
68	69	0	2	0
69	69	100	100	100
70	69	0	2	1
127	198	10	80	50
197	198	0	2	0
198	198	50	100	100
199	198	5	9	7
275	198	10	60	28
365	198	1	100	4
441	442	0.0001	24	17
442	198	50	100	87
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-500	500	0209_06	02/09/22 10:43
STD-1000	1000	0209_07	02/09/22 11:04
STD-4000	4000	0209_08	02/09/22 11:25
STD-10000	10000	0209_09	02/09/22 11:46
STD-20000	20000	0209_10	02/09/22 12:07
STD-30000	30000	0209_11	02/09/22 12:27
STD-40000	40000	0209_12	02/09/22 12:48
STD-50000	50000	0209_13	02/09/22 13:09
STD-1K1	1K1	0209_14	02/09/22 13:30
STD-4K1	4K1	0209_15	02/09/22 13:51
STD-10K1	10K1	0209_16	02/09/22 14:11
STD-20K1	20K1	0209_17	02/09/22 14:32
STD-30K1	30K1	0209_18	02/09/22 14:53
STD-40K1	40K1	0209_19	02/09/22 15:14
STD-50K1	50K1	0209_20	02/09/22 15:35
SSCV	BNAMS40209220209_21577847	0209_21	02/09/22 15:56
SSCV	BNAMS40209220209_22577847	0209_22	02/09/22 16:16



Data File : C:\MSDCHEM\1\DATA\020922\0209\_05.D Vial: 2  
 Acq On : 9 Feb 2022 10:23 am Operator: 917  
 Sample : TUNE 50 PPM Inst : BNAMS4  
 Misc : DFTTP TUNE 22B07163 exp. 05/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Method : C:\MSDCHEM\1\METHODS\TUNED.M (RTE Integrator)  
 Title : 8270 BNA



Spectrum Information: Average of 6.759 to 6.771 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	42.4	87399	PASS
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	83556	PASS
70	69	0.00	2	0.7	564	PASS
127	198	10	80	50.5	104194	PASS
197	198	0.00	2	0.0	0	PASS
198	198	50	100	100.0	206269	PASS
199	198	5	9	6.6	13692	PASS
275	198	10	60	27.5	56626	PASS
365	198	1	100	4.3	8784	PASS
441	442	0.01	24	16.7	30103	PASS
442	198	50	100	87.1	179744	PASS
443	442	15	24	19.4	34822	PASS

GC/MS INSTRUMENT  
PERFORMANCE CHECK

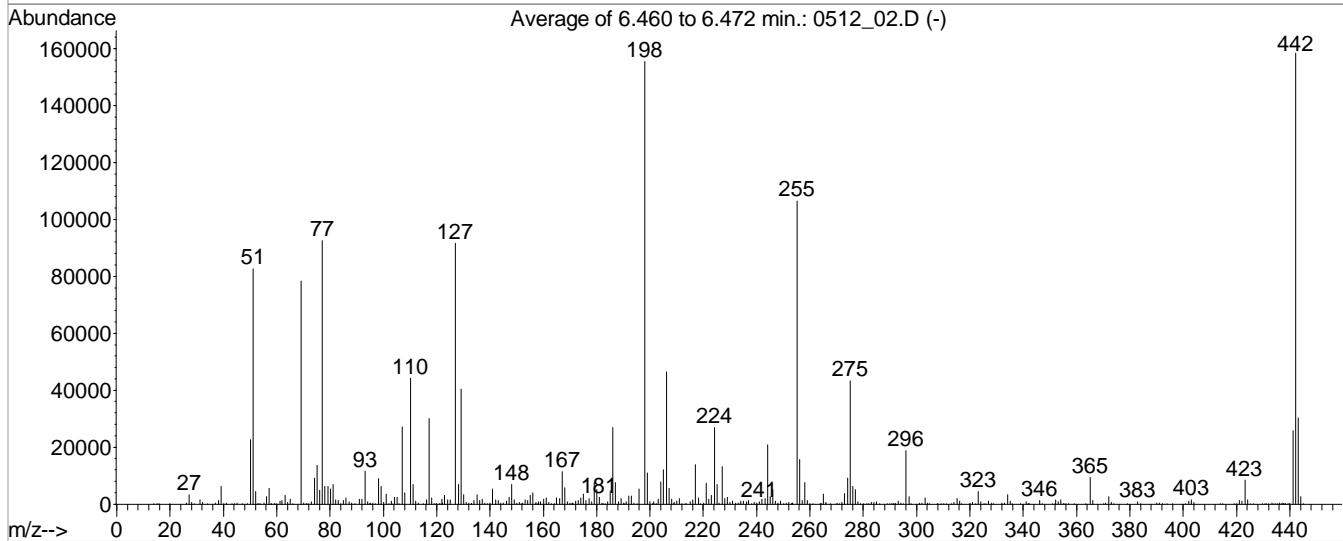
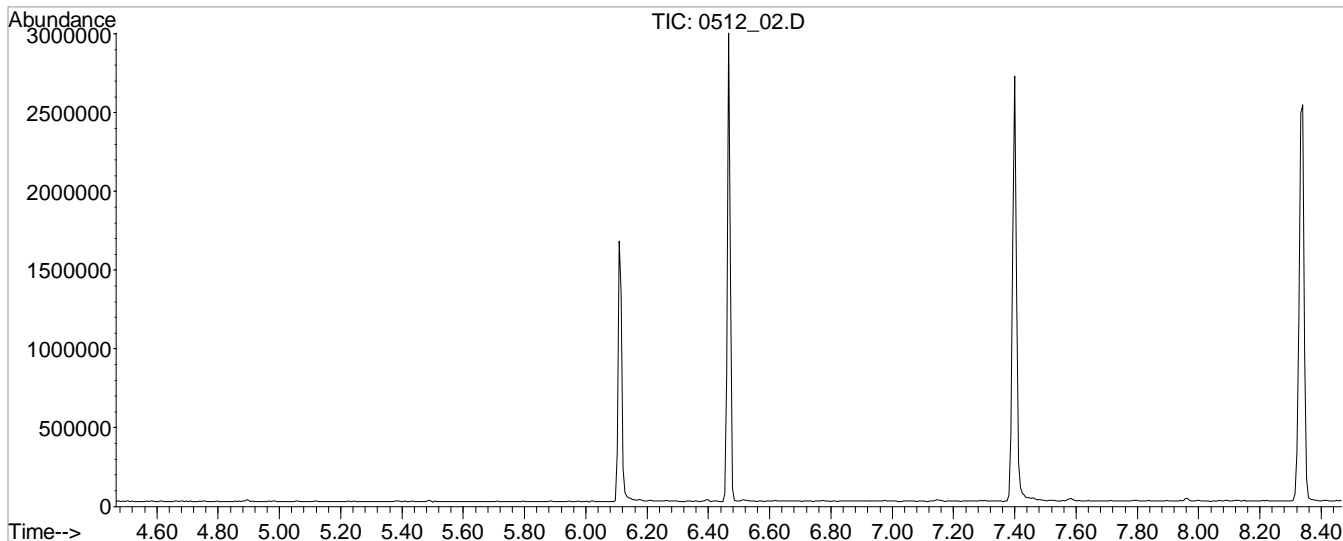
Lab File ID: 0512\_02T-1  
Instrument ID: BNAMS4  
Analysis Date/Time: 05/12/22 04:55

SDG: L1488171  
Analytical Method: 8270E

Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	442	10	80	52
68	69	0	2	0
69	69	100	100	100
70	69	0	2	0
127	442	10	80	58
197	198	0	2	0
198	442	50	100	98
199	198	5	9	7
275	442	10	60	27
365	198	1	100	6
441	442	0.0001	24	16
442	442	50	100	100
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	BNAMS40512220512_03577847	0512_03	05/12/22 05:16
ICV	BNAMS40512220512_04577847	0512_04	05/12/22 05:37
LCS	R3791358-1	0512_05	05/12/22 06:09
BLANK	R3791358-2	0512_06	05/12/22 06:29
BNSF-BG16-042722-0-10	L1488171-03	0512_17	05/12/22 10:18
BNSF-BG14-042722-0-5.5	L1488171-01	0512_19	05/12/22 11:00
BNSF-BG17-042722-0-10	L1488171-04	0512_20	05/12/22 11:21
OS	L1488161-03	0512_33	05/12/22 15:53
MS	R3791358-3	0512_34	05/12/22 16:14
MSD	R3791358-4	0512_35	05/12/22 16:35

Data File : C:\MSDCHEM\1\DATA\051222\0512 02.D Vial: 2  
 Acq On : 12 May 2022 4:55 am Operator: 3545  
 Sample : TUNE 50 PPM 22D18771 exp 08/11/22 Inst : BNAMS4  
 Misc : DFTTP TUNE Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Method : C:\MSDCHEM\1\METHODS\TUNED.M (RTE Integrator)  
 Title : 8270 BNA



Spectrum Information: Average of 6.460 to 6.472 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	442	10	80	52.1	82546	PASS
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	78288	PASS
70	69	0.00	2	0.5	426	PASS
127	442	10	80	57.8	91682	PASS
197	198	0.00	2	0.0	0	PASS
198	442	50	100	98.1	155440	PASS
199	198	5	9	7.0	10902	PASS
275	442	10	60	27.4	43408	PASS
365	198	1	100	6.0	9330	PASS
441	442	0.01	24	16.3	25779	PASS
442	442	50	100	100.0	158498	PASS
443	442	15	24	19.1	30244	PASS

GC/MS INSTRUMENT  
PERFORMANCE CHECK

Lab File ID: 0331\_02  
Instrument ID: BNAMS24  
Analysis Date/Time: 03/31/22 17:02

SDG: L1488171  
Analytical Method: 8270E

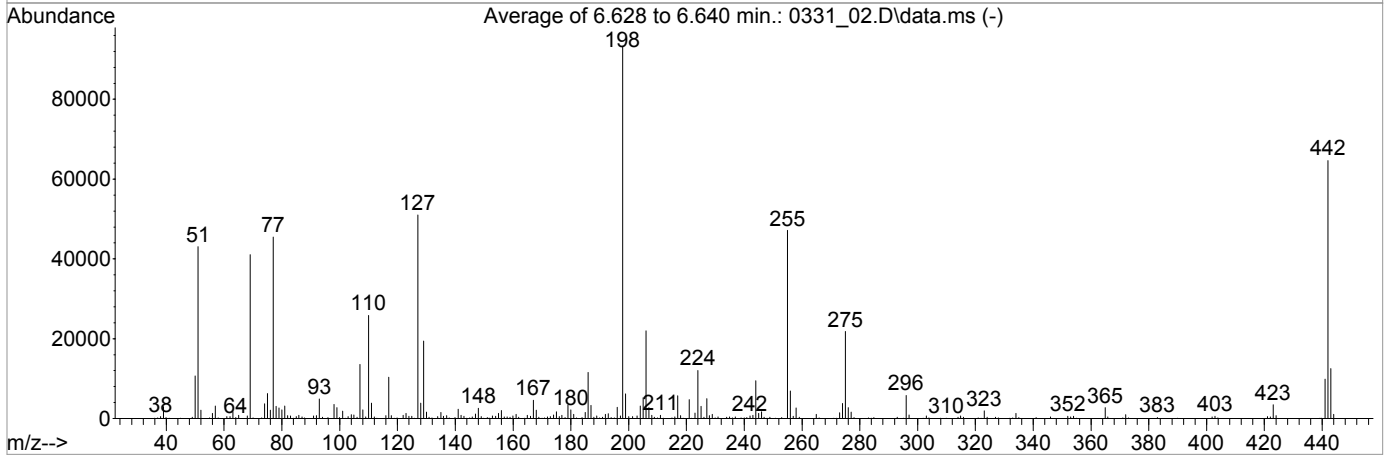
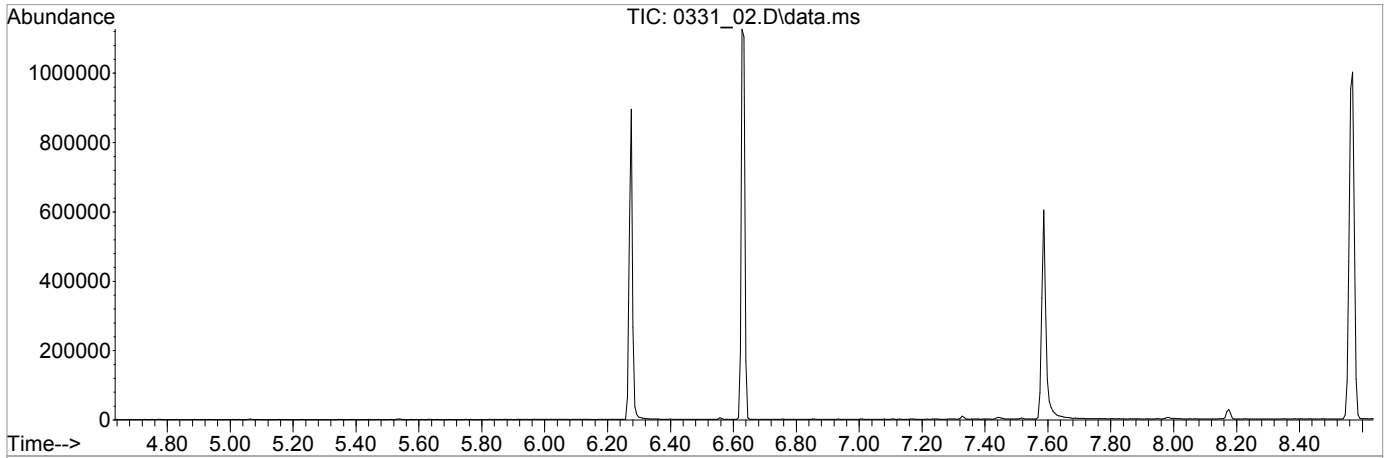
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	198	10	80	46
68	69	0	2	2
69	69	100	100	100
70	69	0	2	0
127	198	10	80	55
197	198	0	2	1
198	198	50	100	100
199	198	5	9	7
275	198	10	60	23
365	198	1	100	3
441	442	0.0001	24	15
442	198	50	100	69
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
STD-500	500	0331_03	03/31/22 17:24
STD-1000	1000	0331_04	03/31/22 17:45
STD-4000	4000	0331_05	03/31/22 18:07
STD-10000	10000	0331_06	03/31/22 18:28
STD-20000	20000	0331_07	03/31/22 18:49
STD-30000	30000	0331_08	03/31/22 19:11
STD-40000	40000	0331_09	03/31/22 19:32
STD-50000	50000	0331_10	03/31/22 19:53
STD-1K1	1K1	0331_11	03/31/22 20:15
STD-4K1	4K1	0331_12	03/31/22 20:36
STD-10K1	10K1	0331_13	03/31/22 20:58
STD-20K1	20K1	0331_14	03/31/22 21:19
STD-30K1	30K1	0331_15	03/31/22 21:40
STD-40K1	40K1	0331_16	03/31/22 22:02
STD-50K1	50K1	0331_17	03/31/22 22:23
SSCV	BNAMS240331220331_18576947	0331_18	03/31/22 22:44
SSCV	BNAMS240331220331_19576947	0331_19	03/31/22 23:06

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_02.D  
 Acq On : 31 Mar 2022 5:02 pm  
 Operator : 3545  
 Sample : TUNE 50 PPM 22C25374 exp 8/11/22  
 Misc : DFTPP Tune  
 ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e

Method : C:\msdchem\1\methods\TUNED.M  
 Title :  
 Last Update : Mon Mar 28 16:39:56 2022



Spectrum Information: Average of 6.628 to 6.640 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	46.2	43070	PASS
68	69	0.00	2	1.5	616	PASS
69	69	100	100	100.0	41045	PASS
70	69	0.00	2	0.5	194	PASS
127	198	10	80	54.7	51035	PASS
197	198	0.00	2	0.7	627	PASS
198	198	50	100	100.0	93259	PASS
199	198	5	9	6.6	6186	PASS
275	198	10	60	23.4	21794	PASS
365	198	1	100	3.0	2770	PASS
441	442	0.01	24	15.3	9884	PASS
442	198	50	100	69.4	64677	PASS
443	442	15	24	19.3	12480	PASS

GC/MS INSTRUMENT  
PERFORMANCE CHECK

Lab File ID: 0512\_02T-1  
 Instrument ID: BNAMS24  
 Analysis Date/Time: 05/12/22 04:53

SDG: L1488171  
 Analytical Method: 8270E

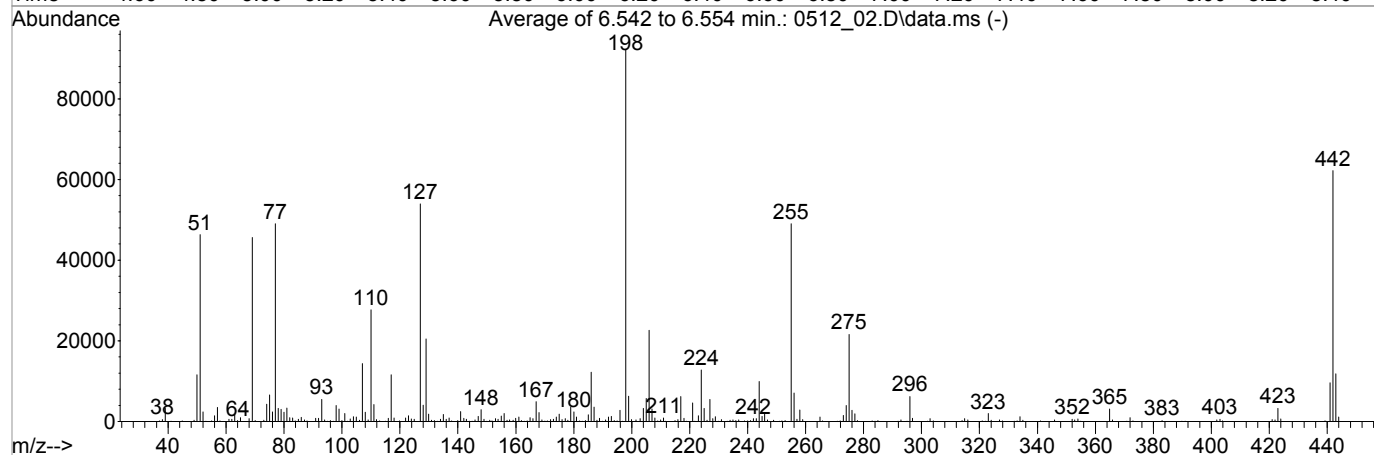
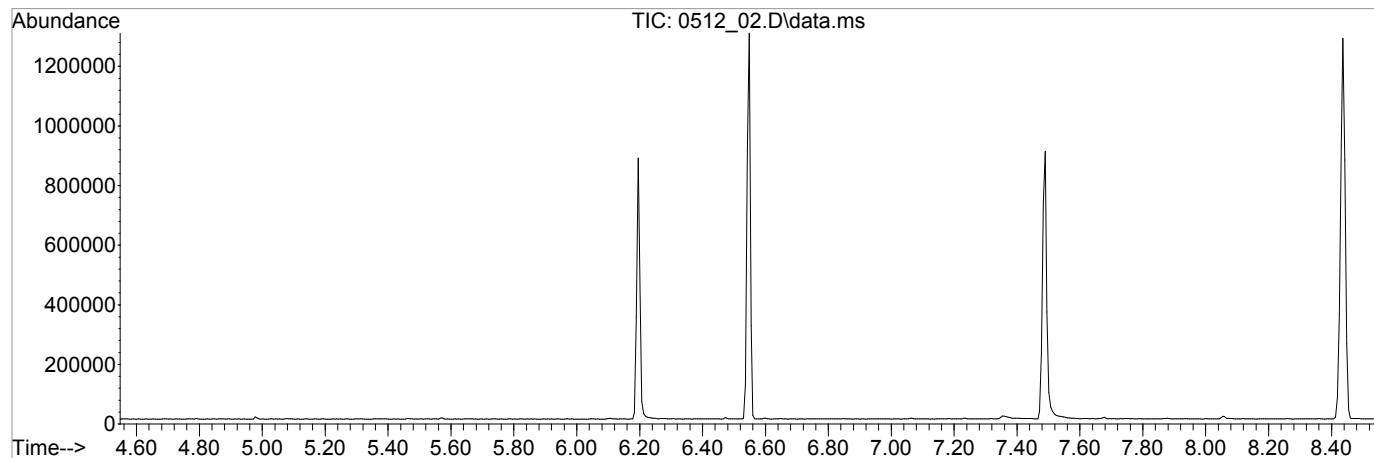
Target Mass (m/e)	Relative Mass	Low Limit	High Limit	% Relative Abundance
51	198	10	80	50
68	69	0	2	2
69	69	100	100	100
70	69	0	2	0
127	198	10	80	58
197	198	0	2	0
198	198	50	100	100
199	198	5	9	7
275	198	10	60	23
365	198	1	100	3
441	442	0.0001	24	15
442	198	50	100	67
443	442	15	24	19

Sample ID	Lab Sample ID	File ID	Analysis date/time
ICV	BNAMS240512220512_03576947	0512_03	05/12/22 05:15
ICV	BNAMS240512220512_04576947	0512_04	05/12/22 05:36
BNSF-BG15-042722-0-10	L1488171-02	0512_31	05/12/22 15:36

Data Path : C:\msdchem\1\data\051222\  
 Data File : 0512\_02.D  
 Acq On : 12 May 2022 4:53 am  
 Operator : 3545  
 Sample : TUNE 50 PPM 22D25444 exp 10/15/22  
 Misc : DFTPP Tune  
 ALS Vial : 2 Sample Multiplier: 1

Integration File: events.e

Method : C:\msdchem\1\methods\TUNED.M  
 Title :  
 Last Update : Mon Mar 28 16:39:56 2022



Spectrum Information: Average of 6.542 to 6.554 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	50.2	46335	PASS
68	69	0.00	2	1.5	700	PASS
69	69	100	100	100.0	45635	PASS
70	69	0.00	2	0.5	213	PASS
127	198	10	80	58.5	53988	PASS
197	198	0.00	2	0.1	74	PASS
198	198	50	100	100.0	92267	PASS
199	198	5	9	6.8	6286	PASS
275	198	10	60	23.4	21605	PASS
365	198	1	100	3.4	3098	PASS
441	442	0.01	24	15.4	9578	PASS
442	198	50	100	67.4	62216	PASS
443	442	15	24	19.0	11836	PASS

INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1488171	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS4	<b>Calibration Start Date:</b>	02/09/22 10:43
<b>Std File:</b>	0512_03	<b>Calibration End Date:</b>	02/09/22 15:35
		<b>Std Analysis Date:</b>	05/12/22 05:16

Sample ID	File ID	1,4-DCB		ACE		CHR		NAP	
		Response	RT	Response	RT	Response	RT	Response	RT
STANDARD		58440	3.25	121507	5.15	215510	9.01	243744	3.98
UPPER LIMIT		116880		243014		431020		487488	
LOWER LIMIT		29220		60754		107755		121872	
LCS R3791358-1 WG1860981 1x	0512_05	45677	3.25	91874	5.15	165152	9.02	213425	3.98
BLANK R3791358-2 WG1860981 1x	0512_06	44998	3.25	86904	5.14	146910	9	173167	3.98
L1488171-03 WG1860981 1x	0512_17	43085	3.25	86069	5.14	150815	9	170731	3.98
L1488171-01 WG1860981 1x	0512_19	41738	3.25	81577	5.14	142443	9	161671	3.98
L1488171-04 WG1860981 1x	0512_20	45789	3.25	89686	5.14	187199	9	177614	3.98
OS L1488161-03 WG1860981 5x	0512_33	49876	3.25	96612	5.14	168032	9	190994	3.98
MS R3791358-3 WG1860981 5x	0512_34	48344	3.25	97916	5.14	183271	9.01	194202	3.98
MSD R3791358-4 WG1860981 5x	0512_35	48980	3.25	98142	5.14	186844	9	195552	3.98

1,4-DCB - 1,4-DICHLOROBENZENE-D4    ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12    NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12    PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.



INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1488171	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS4	<b>Calibration Start Date:</b>	02/09/22 10:43
<b>Std File:</b>	0512_03	<b>Calibration End Date:</b>	02/09/22 15:35
		<b>Std Analysis Date:</b>	05/12/22 05:16

Sample ID	File ID	PER		PHEN	
		Response	RT	Response	RT
STANDARD		203511	11.66	225435	6.26
UPPER LIMIT		407022		450870	
LOWER LIMIT		101756		112718	
LCS R3791358-1 WG1860981 1x	0512_05	181936	11.67	182316	6.27
BLANK R3791358-2 WG1860981 1x	0512_06	143602	11.67	163811	6.26
L1488171-03 WG1860981 1x	0512_17	174083	11.66	163138	6.26
L1488171-01 WG1860981 1x	0512_19	163637	11.67	160225	6.26
L1488171-04 WG1860981 1x	0512_20	197472	11.67	173222	6.26
OS L1488161-03 WG1860981 5x	0512_33	187222	11.67	183067	6.26
MS R3791358-3 WG1860981 5x	0512_34	181801	11.66	182794	6.26
MSD R3791358-4 WG1860981 5x	0512_35	182436	11.67	189840	6.26

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1488171	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS24	<b>Calibration Start Date:</b>	03/31/22 17:24
<b>Std File:</b>	0512_03	<b>Calibration End Date:</b>	03/31/22 22:23
		<b>Std Analysis Date:</b>	05/12/22 05:15

Sample ID	File ID	1,4-DCB		ACE		CHR		NAP	
		Response	RT	Response	RT	Response	RT	Response	RT
STANDARD		27485	3.34	59224	5.23	68291	9.11	112815	4.07
UPPER LIMIT		54970		118448		136582		225630	
LOWER LIMIT		13743		29612		34146		56408	
L1488171-02 WG1860981 1x	0512_31	23688	3.34	52271	5.23	62579	9.11	98932	4.07

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.  
 D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

INTERNAL STANDARD  
AND RETENTION TIME

<b>SDG:</b>	L1488171	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS24	<b>Calibration Start Date:</b>	03/31/22 17:24
<b>Std File:</b>	0512_03	<b>Calibration End Date:</b>	03/31/22 22:23
		<b>Std Analysis Date:</b>	05/12/22 05:15

Sample ID	File ID	PER		PHEN	
		Response	RT	Response	RT
STANDARD		61434	11.77	96683	6.35
UPPER LIMIT		122868		193366	
LOWER LIMIT		30717		48342	
L1488171-02 WG1860981 1x	0512_31	50635	11.77	85936	6.35

1,4-DCB - 1,4-DICHLOROBENZENE-D4      ACE - ACENAPHTHENE-D10  
 CHR - CHRYSENE-D12      NAP - NAPHTHALENE-D8  
 PER - PERYLENE-D12      PHEN - PHENANTHRENE-D10

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:  
BNSF-BG14-042722-0-5.5

<b>Lab Sample ID:</b> L1488171-01	<b>SDG:</b> L1488171
<b>Client Sample ID:</b> BNSF-BG14-042722-0-5.5	<b>Collected Date/Time:</b> 04/27/22 09:00
<b>Lab File ID:</b> 0512_19	<b>Received Date/Time:</b> 04/30/22 09:00
<b>Instrument ID:</b> BNAMS4	<b>Preparation Date/Time:</b> 05/11/22 03:10
<b>Analytical Batch:</b> WG1860981	<b>Analysis Date/Time:</b> 05/12/22 11:00
<b>Dilution Factor:</b> 1	<b>Prep Method:</b> 3546
<b>Analytical Method:</b> 8270E	<b>Sample Vol Used:</b> _____
<b>Matrix:</b> Solid	<b>Initial Wt/Vol:</b> 15.49 g
<b>Total Solids (%):</b> 62.8	<b>Final Wt/Vol:</b> 0.5 mL

Analyte	CAS	RT	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	0	U		0.00858	0.0530
Acenaphthylene	208-96-8	0	U		0.00747	0.0530
Anthracene	120-12-7	0	U		0.00944	0.0530
Benzoic Acid	65-85-0	3.79	U		0.188	2.66
Benzo(a)anthracene	56-55-3	0	U		0.00935	0.0530
Benzo(b)fluoranthene	205-99-2	0	U		0.00989	0.0530
Benzo(k)fluoranthene	207-08-9	0	U		0.00943	0.0530
Benzo(g,h,i)perylene	191-24-2	0	U		0.00970	0.0530
Benzo(a)pyrene	50-32-8	0	U		0.00986	0.0530
Carbazole	86-74-8	0	U		0.0164	0.530
Chrysene	218-01-9	0	U		0.0105	0.0530
Dibenz(a,h)anthracene	53-70-3	0	U		0.0147	0.0530
Dibenzofuran	132-64-9	0	U		0.0174	0.530
Fluoranthene	206-44-0	0	U		0.00957	0.0530
Fluorene	86-73-7	0	U		0.00863	0.0530
Indeno(1,2,3-cd)pyrene	193-39-5	13.69	U		0.0150	0.0530
1-Methylnaphthalene	90-12-0	0	U		0.00678	0.0530
2-Methylnaphthalene	91-57-6	0	U		0.00688	0.0530
Naphthalene	91-20-3	0	U		0.0133	0.0530
Phenanthrene	85-01-8	0	U		0.0105	0.0530
Bis(2-ethylhexyl)phthalate	117-81-7	9.08	U		0.0672	0.530
Di-n-butyl phthalate	84-74-2	6.71	U		0.0182	0.530
Di-n-octyl phthalate	117-84-0	0	U		0.0358	0.530
Pyrene	129-00-0	0	U		0.0103	0.0530
3&4-Methyl Phenol	3&4-Methyl Phenol	0	U		0.0166	0.530
Pentachlorophenol	87-86-5	0	U		0.0143	0.530
Phenol	108-95-2	0	U		0.0213	0.530

Data File : C:\MSDCHEM\1\DATA\051222\0512 19.D Vial: 24  
 Acq On : 12 May 2022 11:00 am Operator: 3545  
 Sample : L1488171-01 1x WG1860981 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 13:57 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	41738	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	161671	8000.00	ppb	0.00
46) Acenaphthene-d10	5.14	164	81577	8000.00	ppb	0.00
70) Phenanthrene-d10	6.26	188	160225	8000.00	ppb	0.00
84) Chrysene-d12	9.00	240	142443	8000.00	ppb	0.00
94) Perylene-d12	11.67	264	163637	8000.00	ppb	0.00

System Monitoring Compounds						
4) 2-Fluorophenol	2.60	112	86253	12717.3063996	ppb	0.02
Spiked Amount	20000.000	Range 20 - 120	Recovery	=	63.59%	
7) Phenol-d5	3.04	99	100754	12377.2141472	ppb	0.00
Spiked Amount	20000.000	Range 20 - 120	Recovery	=	61.89%	
24) Nitrobenzene-d5	3.56	82	43241	6303.5938219	ppb	0.00
Spiked Amount	10000.000	Range 18 - 125	Recovery	=	63.04%	
50) 2-Fluorobiphenyl	4.66	172	73983	5376.1013449	ppb	0.00
Spiked Amount	10000.000	Range 28 - 120	Recovery	=	53.76%	
73) 2,4,6-Tribromophenol	5.72	330	21122	11645.3927446	ppb	0.00
Spiked Amount	20000.000	Range 17 - 137	Recovery	=	58.23%	
87) p-Terphenyl-d14	7.65	244	120432	6186.6387263	ppb	0.00
Spiked Amount	10000.000	Range 13 - 131	Recovery	=	61.87%	

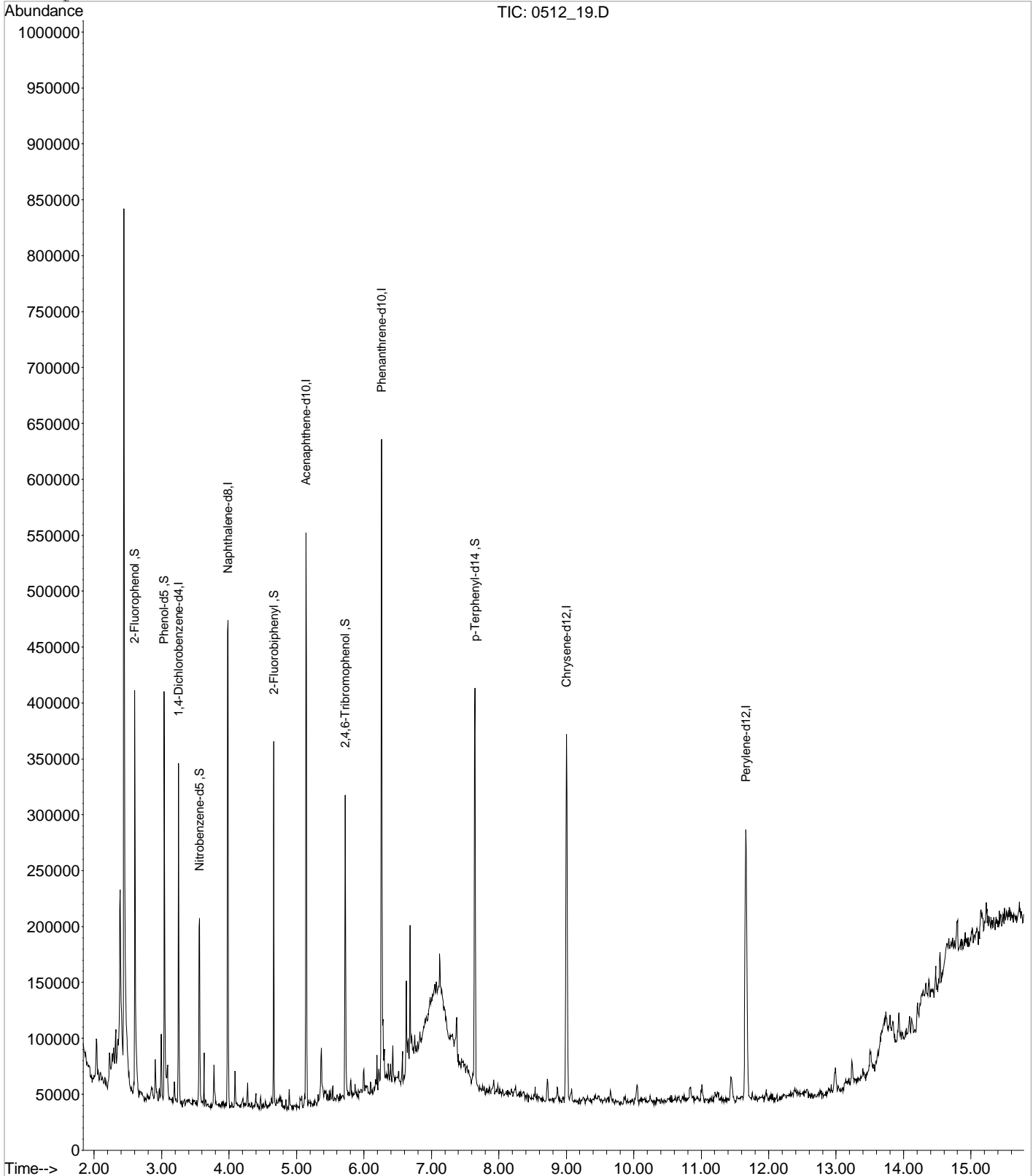
Target Compounds Qvalue

Data File : C:\MSDCHEM\1\DATA\051222\0512 19.D  
Acq On : 12 May 2022 11:00 am  
Sample : L1488171-01 1x WG1860981  
Misc : SOIL ISTD 22E03623 exp 11/03/22  
MS Integration Params: RTEINT.P  
Quant Time: May 13 13:57 2022

Vial: 24  
Operator: 3545  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804E04BV.RES

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Thu May 05 15:59:02 2022  
Response via : Initial Calibration



SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1488171-02  
Client Sample ID: BNSF-BG15-042722-0-10  
Lab File ID: 0512\_31  
Instrument ID: BNAMS24  
Analytical Batch: WG1860981  
Dilution Factor: 1  
Analytical Method: 8270E  
Matrix: Solid  
Total Solids (%): 70.7

SDG: L1488171  
Collected Date/Time: 04/27/22 09:25  
Received Date/Time: 04/30/22 09:00  
Preparation Date/Time: 05/11/22 03:10  
Analysis Date/Time: 05/12/22 15:36  
Prep Method: 3546  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 15.28 g  
Final Wt/Vol: 0.5 mL

Analyte	CAS	RT	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	0	U		0.00762	0.0471
Acenaphthylene	208-96-8	0	U		0.00663	0.0471
Anthracene	120-12-7	0	U		0.00839	0.0471
Benzoic Acid	65-85-0	3.86	U		0.167	2.36
Benzo(a)anthracene	56-55-3	0	U		0.00830	0.0471
Benzo(b)fluoranthene	205-99-2	0	U		0.00878	0.0471
Benzo(k)fluoranthene	207-08-9	0	U		0.00837	0.0471
Benzo(g,h,i)perylene	191-24-2	0	U		0.00861	0.0471
Benzo(a)pyrene	50-32-8	0	U		0.00876	0.0471
Carbazole	86-74-8	0	U		0.0146	0.471
Chrysene	218-01-9	0	U		0.00936	0.0471
Dibenz(a,h)anthracene	53-70-3	0	U		0.0131	0.0471
Dibenzofuran	132-64-9	0	U		0.0154	0.471
Fluoranthene	206-44-0	0	U		0.00850	0.0471
Fluorene	86-73-7	0	U		0.00767	0.0471
Indeno(1,2,3-cd)pyrene	193-39-5	0	U		0.0133	0.0471
1-Methylnaphthalene	90-12-0	0	U		0.00603	0.0471
2-Methylnaphthalene	91-57-6	0	U		0.00611	0.0471
Naphthalene	91-20-3	0	U		0.0118	0.0471
Phenanthrene	85-01-8	0	U		0.00935	0.0471
Bis(2-ethylhexyl)phthalate	117-81-7	9.18	U		0.0597	0.471
Di-n-butyl phthalate	84-74-2	6.79	U		0.0161	0.471
Di-n-octyl phthalate	117-84-0	0	U		0.0318	0.471
Pyrene	129-00-0	0	U		0.00917	0.0471
3&4-Methyl Phenol	3&4-Methyl Phenol	3.53	0.0455	J	0.0147	0.471
Pentachlorophenol	87-86-5	0	U		0.0127	0.471
Phenol	108-95-2	0	U		0.0190	0.471

Data Path : C:\msdchem\1\data\051222\  
 Data File : 0512\_31.D  
 Acq On : 12 May 2022 3:36 pm  
 Operator : 3545  
 Sample : L1488171-02 1x WG1860981  
 Misc : SOIL ISTD 22E03623 exp. 11/03/22  
 ALS Vial : 146 Sample Multiplier: 1

Quant Time: May 12 16:21:05 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

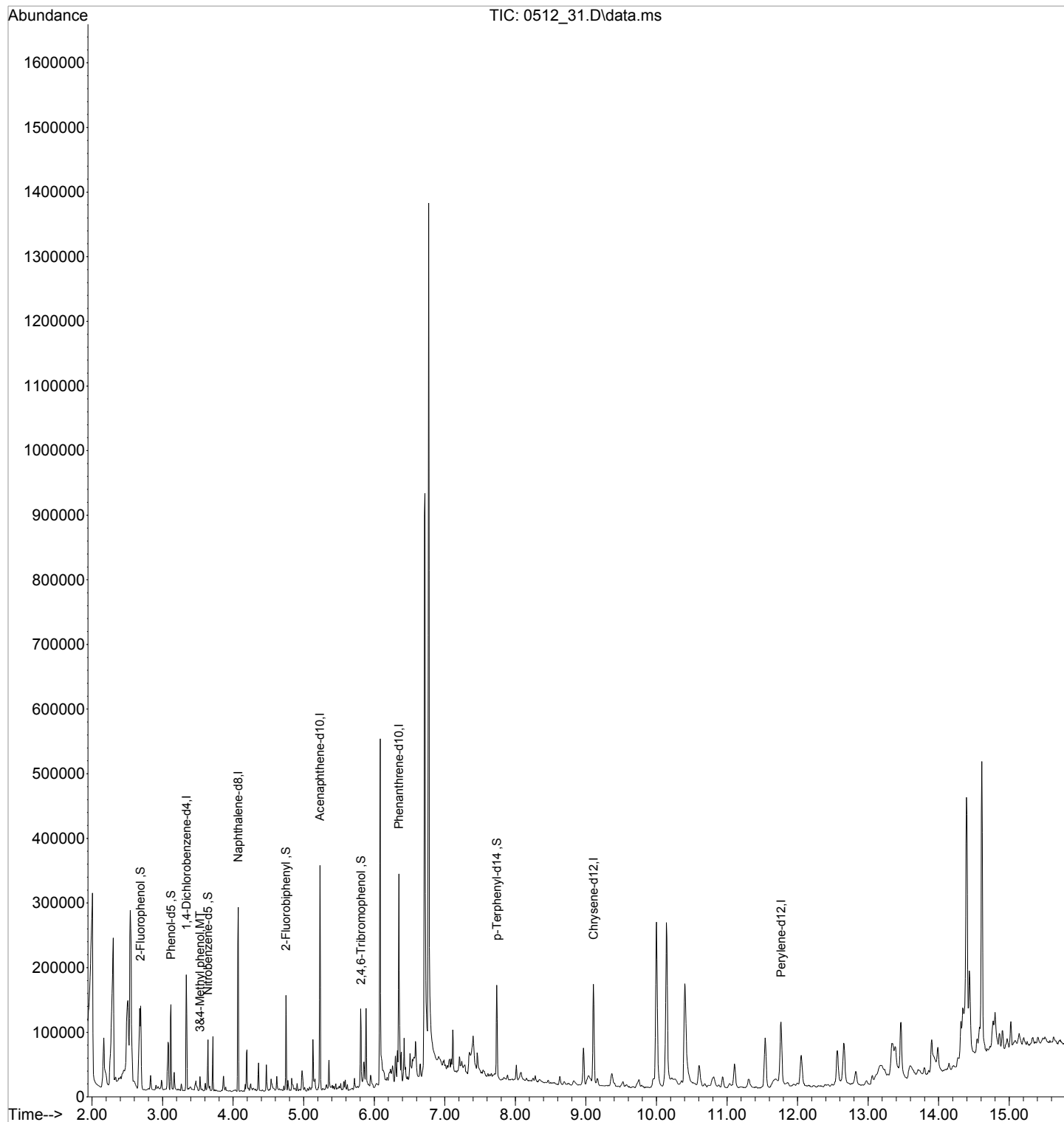
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.337	152	23688	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.072	136	98932	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.231	164	52271	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.348	188	85936	8000.0000000	ppb	0.00
84) Chrysene-d12	9.107	240	62579	8000.0000000	ppb	0.00
94) Perylene-d12	11.766	264	50635	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.690	112	31846	8586.8422785	ppb	0.01
Spiked Amount	20000.000	Range	20 - 120	Recovery	= 42.93%	
7) Phenol-d5	3.119	99	35269	8015.1251279	ppb	0.00
Spiked Amount	20000.000	Range	20 - 120	Recovery	= 40.08%	
24) Nitrobenzene-d5	3.643	82	15653	4160.4006183	ppb	0.00
Spiked Amount	10000.000	Range	18 - 125	Recovery	= 41.60%	
50) 2-Fluorobiphenyl	4.748	172	34137	4112.6062267	ppb	0.00
Spiked Amount	10000.000	Range	28 - 120	Recovery	= 41.13%	
73) 2,4,6-Tribromophenol	5.813	330	8794	9767.5104430	ppb	0.00
Spiked Amount	20000.000	Range	17 - 137	Recovery	= 48.84%	
87) p-Terphenyl-d14	7.736	244	41509	4793.2574854	ppb	0.00
Spiked Amount	10000.000	Range	13 - 131	Recovery	= 47.93%	
Target Compounds						Qvalue
21) 3&4-Methyl phenol	3.531	107	3801	986.1730118	ppb	93

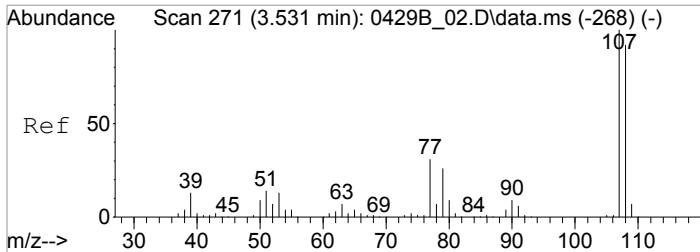
(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\051222\  
Data File : 0512\_31.D  
Acq On : 12 May 2022 3:36 pm  
Operator : 3545  
Sample : L1488171-02 1x WG1860981  
Misc : SOIL ISTD 22E03623 exp. 11/03/22  
ALS Vial : 146 Sample Multiplier: 1

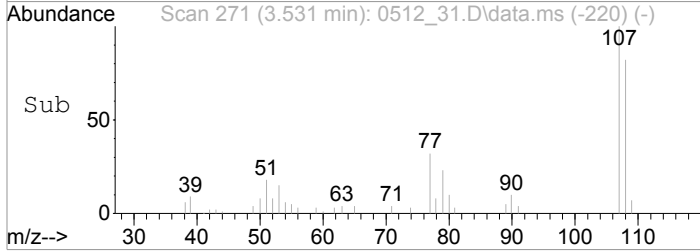
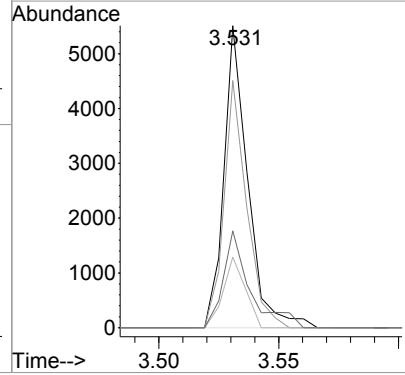
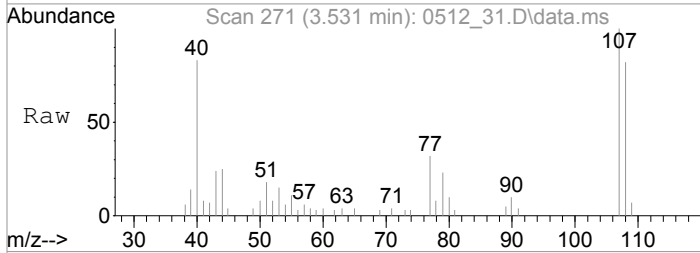
Quant Time: May 12 16:21:05 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M





#21  
 3&4-Methyl phenol  
 Concen: 986.1730118 ppb  
 RT: 3.531 min Scan# 271  
 Delta R.T. 0.000 min  
 Lab File: 0512\_31.D  
 Acq: 12 May 2022 3:36 pm

Tgt Ion	Resp	Lower	Upper
107	3801		
108	81.9	70.8	110.8
79	23.4	5.5	45.5
77	32.1	10.8	50.8



SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** L1488171-03  
**Client Sample ID:** BNSF-BG16-042722-0-10  
**Lab File ID:** 0512\_17  
**Instrument ID:** BNAMS4  
**Analytical Batch:** WG1860981  
**Dilution Factor:** 1  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** 77.0

**SDG:** L1488171  
**Collected Date/Time:** 04/27/22 09:45  
**Received Date/Time:** 04/30/22 09:00  
**Preparation Date/Time:** 05/11/22 03:10  
**Analysis Date/Time:** 05/12/22 10:18  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15.10 g  
**Final Wt/Vol:** 0.5 mL

Analyte	CAS	RT	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	0	U		0.00700	0.0433
Acenaphthylene	208-96-8	0	U		0.00609	0.0433
Anthracene	120-12-7	0	U		0.00771	0.0433
Benzoic Acid	65-85-0	0	U		0.153	2.17
Benzo(a)anthracene	56-55-3	0	U		0.00763	0.0433
Benzo(b)fluoranthene	205-99-2	0	U		0.00807	0.0433
Benzo(k)fluoranthene	207-08-9	0	U		0.00769	0.0433
Benzo(g,h,i)perylene	191-24-2	0	U		0.00791	0.0433
Benzo(a)pyrene	50-32-8	0	U		0.00804	0.0433
Carbazole	86-74-8	0	U		0.0134	0.433
Chrysene	218-01-9	0	U		0.00860	0.0433
Dibenz(a,h)anthracene	53-70-3	0	U		0.0120	0.0433
Dibenzofuran	132-64-9	0	U		0.0142	0.433
Fluoranthene	206-44-0	0	U		0.00781	0.0433
Fluorene	86-73-7	0	U		0.00704	0.0433
Indeno(1,2,3-cd)pyrene	193-39-5	0	U		0.0122	0.0433
1-Methylnaphthalene	90-12-0	0	U		0.00554	0.0433
2-Methylnaphthalene	91-57-6	0	U		0.00561	0.0433
Naphthalene	91-20-3	0	U		0.0109	0.0433
Phenanthrene	85-01-8	0	U		0.00859	0.0433
Bis(2-ethylhexyl)phthalate	117-81-7	9.08	U		0.0548	0.433
Di-n-butyl phthalate	84-74-2	6.71	U		0.0148	0.433
Di-n-octyl phthalate	117-84-0	0	U		0.0292	0.433
Pyrene	129-00-0	0	U		0.00842	0.0433
3&4-Methyl Phenol	3&4-Methyl Phenol	0	U		0.0135	0.433
Pentachlorophenol	87-86-5	0	U		0.0116	0.433
Phenol	108-95-2	0	U		0.0174	0.433

Data File : C:\MSDCHEM\1\DATA\051222\0512 17.D Vial: 22  
 Acq On : 12 May 2022 10:18 am Operator: 3545  
 Sample : L1488171-03 1x WG1860981 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 11:53 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	43085	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	170731	8000.00	ppb	0.00
46) Acenaphthene-d10	5.14	164	86069	8000.00	ppb	0.00
70) Phenanthrene-d10	6.26	188	163138	8000.00	ppb	0.00
84) Chrysene-d12	9.00	240	150815	8000.00	ppb	0.00
94) Perylene-d12	11.66	264	174083	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.60	112	77203	11027.0829044	ppb	0.02
Spiked Amount 20000.000	Range 20 - 120		Recovery =	55.14%		
7) Phenol-d5	3.04	99	89952	10704.7608528	ppb	0.00
Spiked Amount 20000.000	Range 20 - 120		Recovery =	53.52%		
24) Nitrobenzene-d5	3.55	82	40007	5522.6588818	ppb	0.00
Spiked Amount 10000.000	Range 18 - 125		Recovery =	55.23%		
50) 2-Fluorobiphenyl	4.66	172	72306	4980.0169266	ppb	0.00
Spiked Amount 10000.000	Range 28 - 120		Recovery =	49.80%		
73) 2,4,6-Tribromophenol	5.72	330	19065	10323.5973549	ppb	0.00
Spiked Amount 20000.000	Range 17 - 137		Recovery =	51.62%		
87) p-Terphenyl-d14	7.65	244	112090	5438.4645204	ppb	0.00
Spiked Amount 10000.000	Range 13 - 131		Recovery =	54.38%		

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

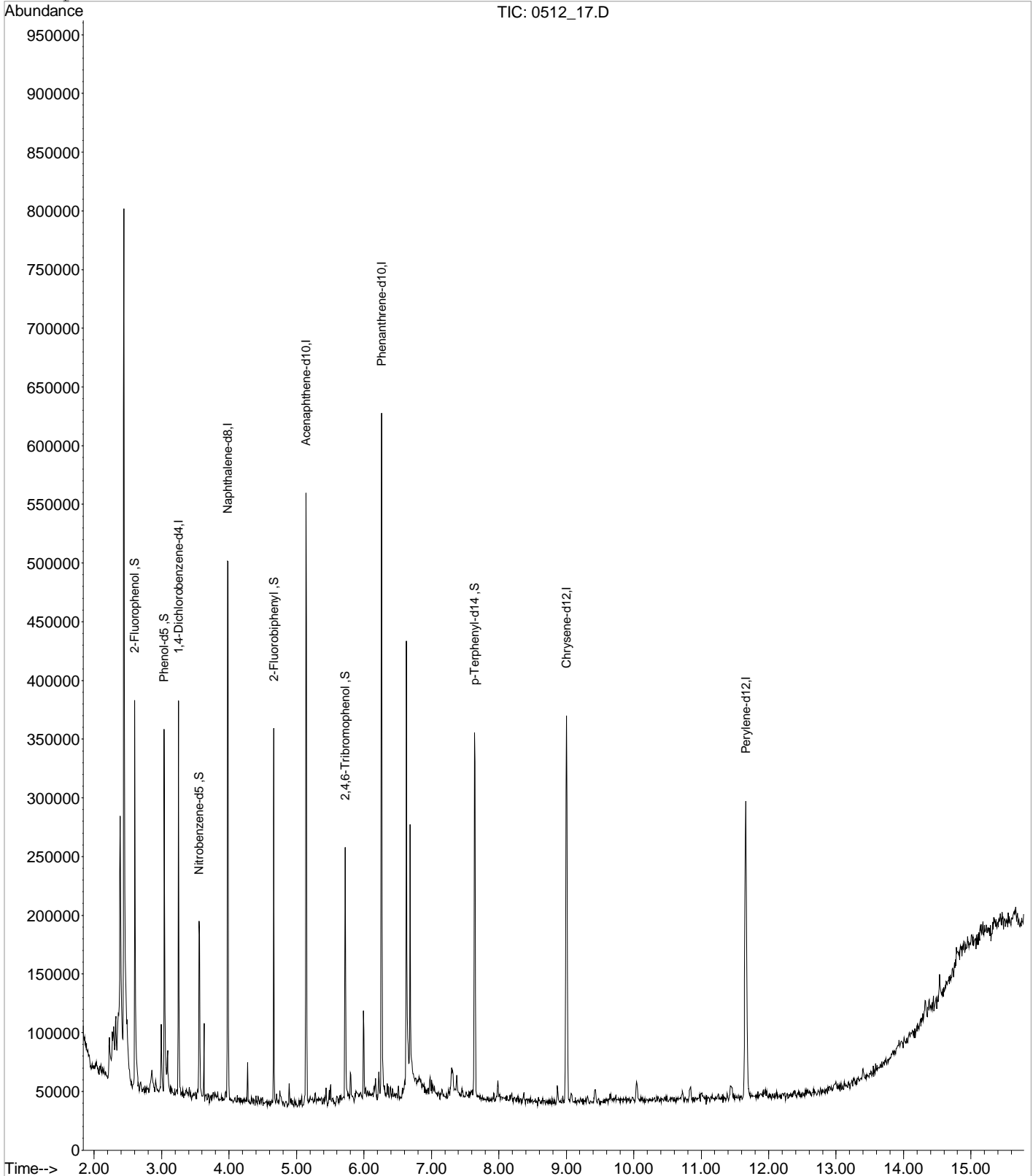
0512\_17.D S804E04BV.M Fri May 13 11:55:10 2022

Data File : C:\MSDCHEM\1\DATA\051222\0512 17.D  
Acq On : 12 May 2022 10:18 am  
Sample : L1488171-03 1x WG1860981  
Misc : SOIL ISTD 22E03623 exp 11/03/22  
MS Integration Params: RTEINT.P  
Quant Time: May 13 11:53 2022

Vial: 22  
Operator: 3545  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804E04BV.RES

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Thu May 05 15:59:02 2022  
Response via : Initial Calibration



SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: L1488171-04  
 Client Sample ID: BNSF-BG17-042722-0-10  
 Lab File ID: 0512\_20  
 Instrument ID: BNAMS4  
 Analytical Batch: WG1860981  
 Dilution Factor: 1  
 Analytical Method: 8270E  
 Matrix: Solid  
 Total Solids (%): 58.1

SDG: L1488171  
 Collected Date/Time: 04/27/22 10:05  
 Received Date/Time: 04/30/22 09:00  
 Preparation Date/Time: 05/11/22 03:10  
 Analysis Date/Time: 05/12/22 11:21  
 Prep Method: 3546  
 Sample Vol Used: \_\_\_\_\_  
 Initial Wt/Vol: 15.52 g  
 Final Wt/Vol: 0.5 mL

Analyte	CAS	RT	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	5.32	U		0.00928	0.0573
Acenaphthylene	208-96-8	0	U		0.00807	0.0573
Anthracene	120-12-7	6.26	U		0.0102	0.0573
Benzoic Acid	65-85-0	3.79	U		0.203	2.87
Benzo(a)anthracene	56-55-3	9	U		0.0101	0.0573
Benzo(b)fluoranthene	205-99-2	0	U		0.0107	0.0573
Benzo(k)fluoranthene	207-08-9	0	U		0.0102	0.0573
Benzo(g,h,i)perylene	191-24-2	0	U		0.0105	0.0573
Benzo(a)pyrene	50-32-8	0	U		0.0107	0.0573
Carbazole	86-74-8	6.65	U		0.0177	0.573
Chrysene	218-01-9	9	U		0.0114	0.0573
Dibenz(a,h)anthracene	53-70-3	0	U		0.0159	0.0573
Dibenzofuran	132-64-9	5.32	U		0.0188	0.573
Fluoranthene	206-44-0	7.26	U		0.0103	0.0573
Fluorene	86-73-7	5.59	U		0.00933	0.0573
Indeno(1,2,3-cd)pyrene	193-39-5	13.54	U		0.0162	0.0573
1-Methylnaphthalene	90-12-0	0	U		0.00733	0.0573
2-Methylnaphthalene	91-57-6	0	U		0.00744	0.0573
Naphthalene	91-20-3	0	U		0.0144	0.0573
Phenanthrene	85-01-8	6.26	U		0.0114	0.0573
Bis(2-ethylhexyl)phthalate	117-81-7	9.08	U		0.0726	0.573
Di-n-butyl phthalate	84-74-2	6.71	U		0.0196	0.573
Di-n-octyl phthalate	117-84-0	10.21	U		0.0387	0.573
Pyrene	129-00-0	7.26	U		0.0112	0.0573
3&4-Methyl Phenol	3&4-Methyl Phenol	3.46	0.127	J	0.0179	0.573
Pentachlorophenol	87-86-5	0	U		0.0154	0.573
Phenol	108-95-2	3.05	U		0.0231	0.573

Data File : C:\MSDCHEM\1\DATA\051222\0512 20.D Vial: 25  
 Acq On : 12 May 2022 11:21 am Operator: 3545  
 Sample : L1488171-04 1x WG1860981 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 13:58 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	45789	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	177614	8000.00	ppb	0.00
46) Acenaphthene-d10	5.14	164	89686	8000.00	ppb	0.00
70) Phenanthrene-d10	6.26	188	173222	8000.00	ppb	0.00
84) Chrysene-d12	9.00	240	187199	8000.00	ppb	0.00
94) Perylene-d12	11.67	264	197472	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.60	112	81380	10937.2738658	ppb	0.02
Spiked Amount 20000.000	Range 20 - 120		Recovery =	54.69%		
7) Phenol-d5	3.04	99	96969	10858.3541146	ppb	0.00
Spiked Amount 20000.000	Range 20 - 120		Recovery =	54.29%		
24) Nitrobenzene-d5	3.56	82	42444	5632.0140256	ppb	0.00
Spiked Amount 10000.000	Range 18 - 125		Recovery =	56.32%		
50) 2-Fluorobiphenyl	4.66	172	78813	5209.2649097	ppb	0.00
Spiked Amount 10000.000	Range 28 - 120		Recovery =	52.09%		
73) 2,4,6-Tribromophenol	5.72	330	25010	12754.3997605	ppb	0.00
Spiked Amount 20000.000	Range 17 - 137		Recovery =	63.77%		
87) p-Terphenyl-d14	7.65	244	130312	5093.7174956	ppb	0.00
Spiked Amount 10000.000	Range 13 - 131		Recovery =	50.94%		

Target Compounds

21) 3&4-Methyl phenol	3.46	107	17740	2294.7741260	ppb	93
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(#) = qualifier out of range (m) = manual integration

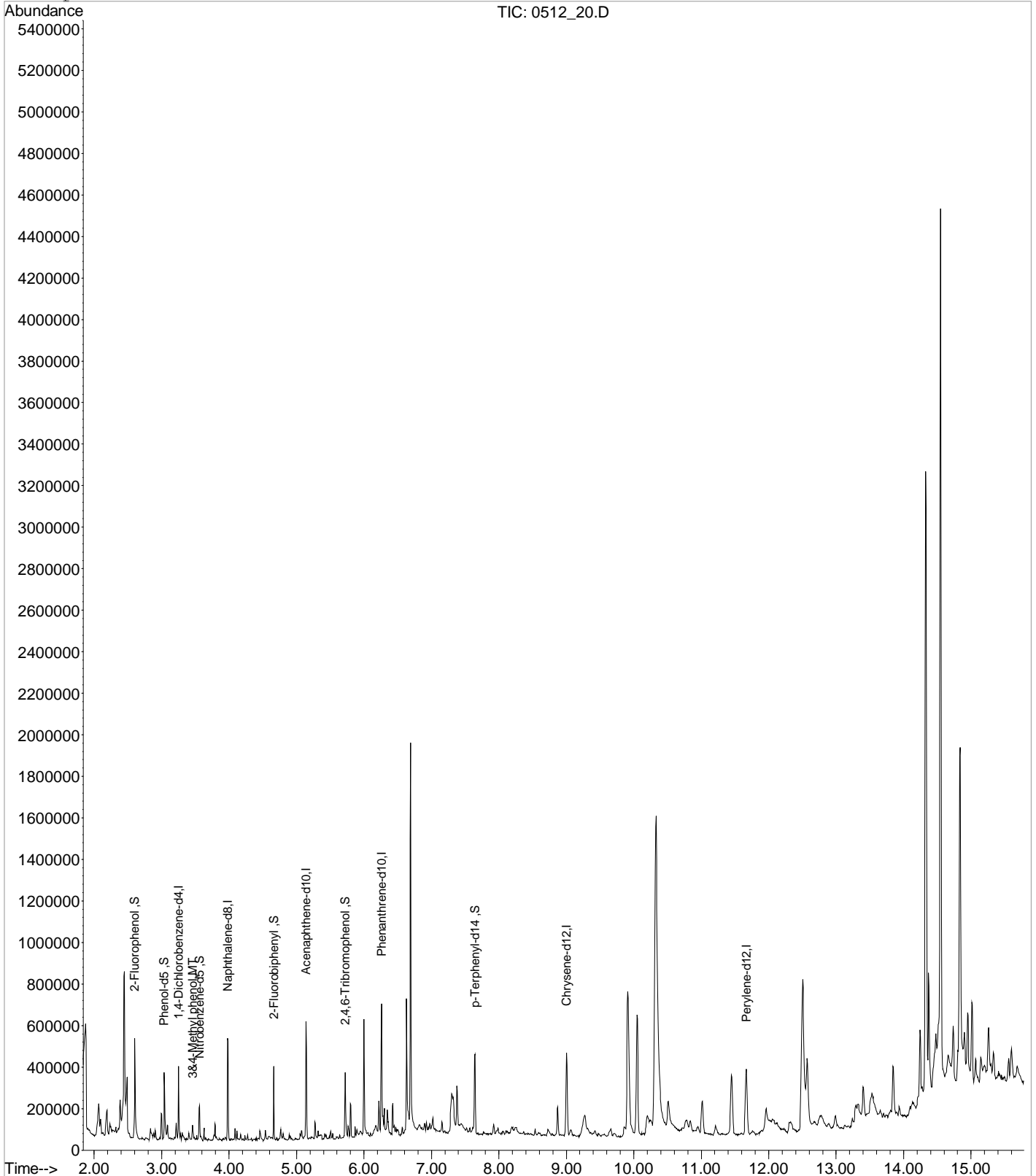
0512\_20.D S804E04BV.M Fri May 13 13:58:56 2022

Data File : C:\MSDCHEM\1\DATA\051222\0512 20.D  
Acq On : 12 May 2022 11:21 am  
Sample : L1488171-04 1x WG1860981  
Misc : SOIL ISTD 22E03623 exp 11/03/22  
MS Integration Params: RTEINT.P  
Quant Time: May 13 13:58 2022

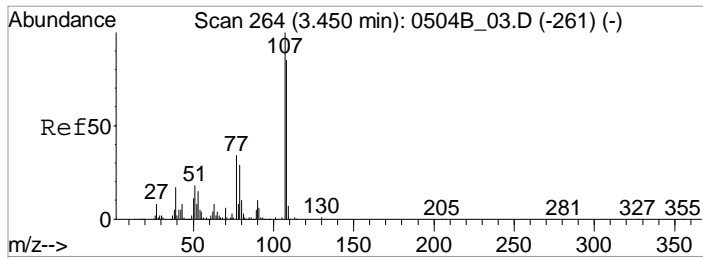
Vial: 25  
Operator: 3545  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804E04BV.RES

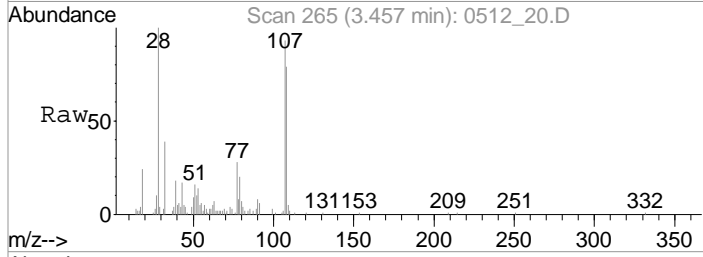
Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Thu May 05 15:59:02 2022  
Response via : Initial Calibration





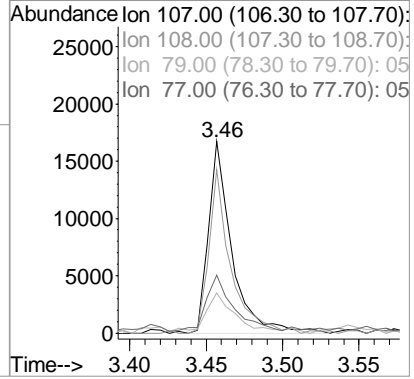
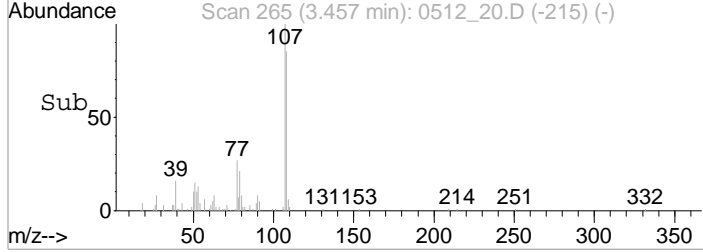


#21  
 3&4-Methyl phenol  
 Concen: 2294.7741260 ppb  
 RT: 3.46 min Scan# 265  
 Delta R.T. 0.01 min  
 Lab File: 0512\_20.D  
 Acq: 12 May 2022 11:21 am



Tgt Ion:107 Resp: 17740

Ion	Ratio	Lower	Upper
107	100		
108	85.4	69.9	109.9
79	19.4	7.2	47.2
77	28.6	11.4	51.4



SDG:

L1488171

Analytical Method:

8270E

Instrument ID:

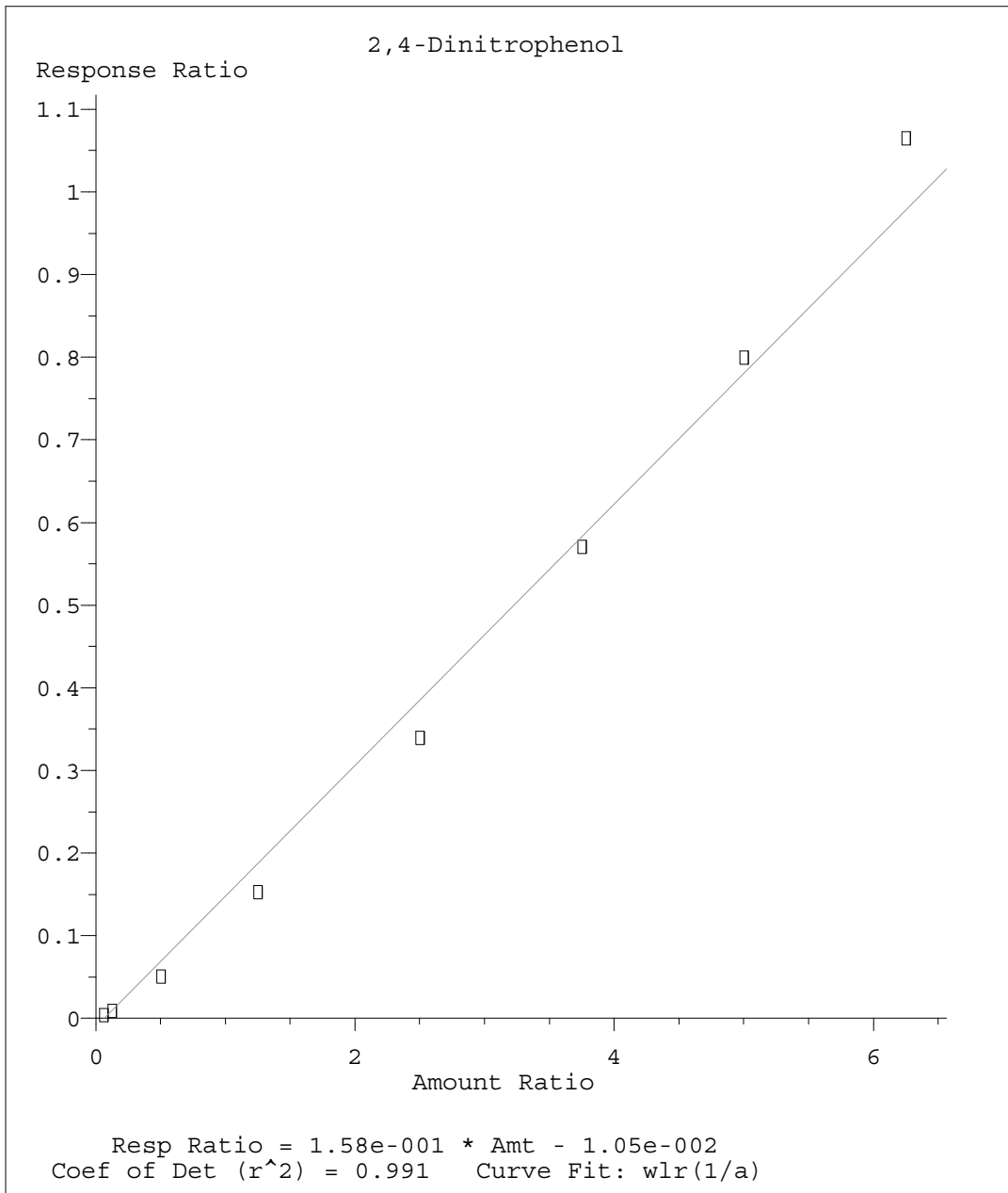
BNAMS4

Analyte	RRF: 500	RRF: 1000	RRF: 4000	RRF: 10000	RRF: 20000	RRF: 30000	RRF: 40000	RRF: 50000	RRF: 4K1	RRF: 10K1
Analysis date/time	02/09/22 10:43	02/09/22 11:04	02/09/22 11:25	02/09/22 11:46	02/09/22 12:07	02/09/22 12:27	02/09/22 12:48	02/09/22 13:09	02/09/22 13:51	02/09/22 14:11
PHENOL	1.86	1.7610	1.6110	1.6190	1.5890	1.5540	1.5380	1.6160		
3&4-METHYL PHENOL	1.5470	1.4040	1.3310	1.3490	1.31	1.2870	1.2680	1.31		
NAPHTHALENE	1.1570	1.1090	0.9970	1.0020	0.9730	0.9690	0.9590	0.9840		
2-METHYLNAPHTHALENE	0.7650	0.7160	0.6390	0.6560	0.6250	0.6280	0.6270	0.6560		
1-METHYLNAPHTHALENE	0.7270	0.6540	0.6070	0.61	0.5920	0.59	0.5960	0.6150		
ACENAPHTHYLENE	1.9170	1.8280	1.7420	1.7820	1.7190	1.7290	1.74	1.7750		
ACENAPHTHENE	1.33	1.2470	1.1440	1.17	1.1090	1.1180	1.11	1.1350		
DIBENZOFURAN	1.8720	1.7490	1.5850	1.6110	1.5540	1.5280	1.5350	1.55		
FLUORENE	1.4190	1.3880	1.3130	1.3260	1.2610	1.2670	1.27	1.2890		
PHENANTHRENE	1.1840	1.1520	1.0180	1.0260	1.0090	1.0070	0.9990	1.0250		
ANTHRACENE	1.1850	1.1120	1.0030	1.0530	1.0410	1.0380	1.0290	1.0620		
CARBAZOLE	1.0770	1.0220	0.94	0.9840	0.9550	0.9160	0.9280	0.9550		
DI-N-BUTYL PHTHALATE	1.1590	1.0630	1.0420	1.1170	1.1170	1.1430	1.2090	1.2550		
FLUORANTHENE	1.2040	1.1390	1.0510	1.0870	1.0630	1.0850	1.1220	1.1950		
PYRENE	1.3430	1.3720	1.2060	1.2780	1.2960	1.2780	1.2720	1.2520		
BENZO(A)ANTHRACENE	1.27	1.23	1.0720	1.1390	1.1430	1.1290	1.1310	1.1030		
CHRYSENE	1.2320	1.2020	1.0740	1.1040	1.0990	1.0820	1.0840	1.0520		
BIS(2-ETHYLHEXYL)PHTHALATE	0.7150	0.6660	0.6360	0.7410	0.7620	0.7650	0.7620	0.7520		
DI-N-OCTYL PHTHALATE	1.1290	1.0730	1.0570	1.2150	1.2870	1.2960	1.3010	1.2770		
BENZO(B)FLUORANTHENE	1.3280	1.1770	1.0640	1.1090	1.1020	1.1070	1.0910	1.1410		
BENZO(K)FLUORANTHENE	1.2610	1.1670	1.0410	1.1050	1.1010	1.1030	1.0950	1.1080		
BENZO(A)PYRENE	1.0460	1.0160	0.9140	0.97	0.9830	0.9890	0.9780	1		
INDENO(1,2,3-CD)PYRENE	1.0370	1.0050	0.9320	0.9830	0.9830	0.9540	0.9270	0.9370		
DIBENZ(A,H)ANTHRACENE	1.0930	1.1170	0.99	1.0520	1.0270	1.0160	0.9840	0.9890		
BENZO(G,H,I)PERYLENE	1.15	1.0620	0.9870	1.04	1.0060	0.9740	0.93	0.9250		
2-FLUOROPHENOL	1.4680	1.4030	1.2730	1.2720	1.2630	1.2240	1.2140	1.2830		
PHENOL-D5	1.8550	1.5980	1.5240	1.5320	1.5050	1.4770	1.4580	1.5320		
NITROBENZENE-D5	0.39	0.3210	0.3390	0.3160	0.34	0.3450	0.3410	0.3230		
2-FLUOROBIPHENYL	1.5680	1.4650	1.3320	1.3440	1.2780	1.2630	1.2610	1.2850		
2,4,6-TRIBROMOPHENOL	0.0790	0.0770	0.0830	0.0910	0.0930	0.0940	0.1010	0.1070		
P-TERPHENYL-D14	1.1760	1.1190	0.9890	1.0850	1.1070	1.0910	1.1020	1.0760		
PENTACHLOROPHENOL		0.0960	0.1020	0.12	0.1250	0.1290	0.1350	0.1420		
BENZOIC ACID									0.1110	0.1390
File ID:	0209_06	0209_07	0209_08	0209_09	0209_10	0209_11	0209_12	0209_13	0209_15	0209_16

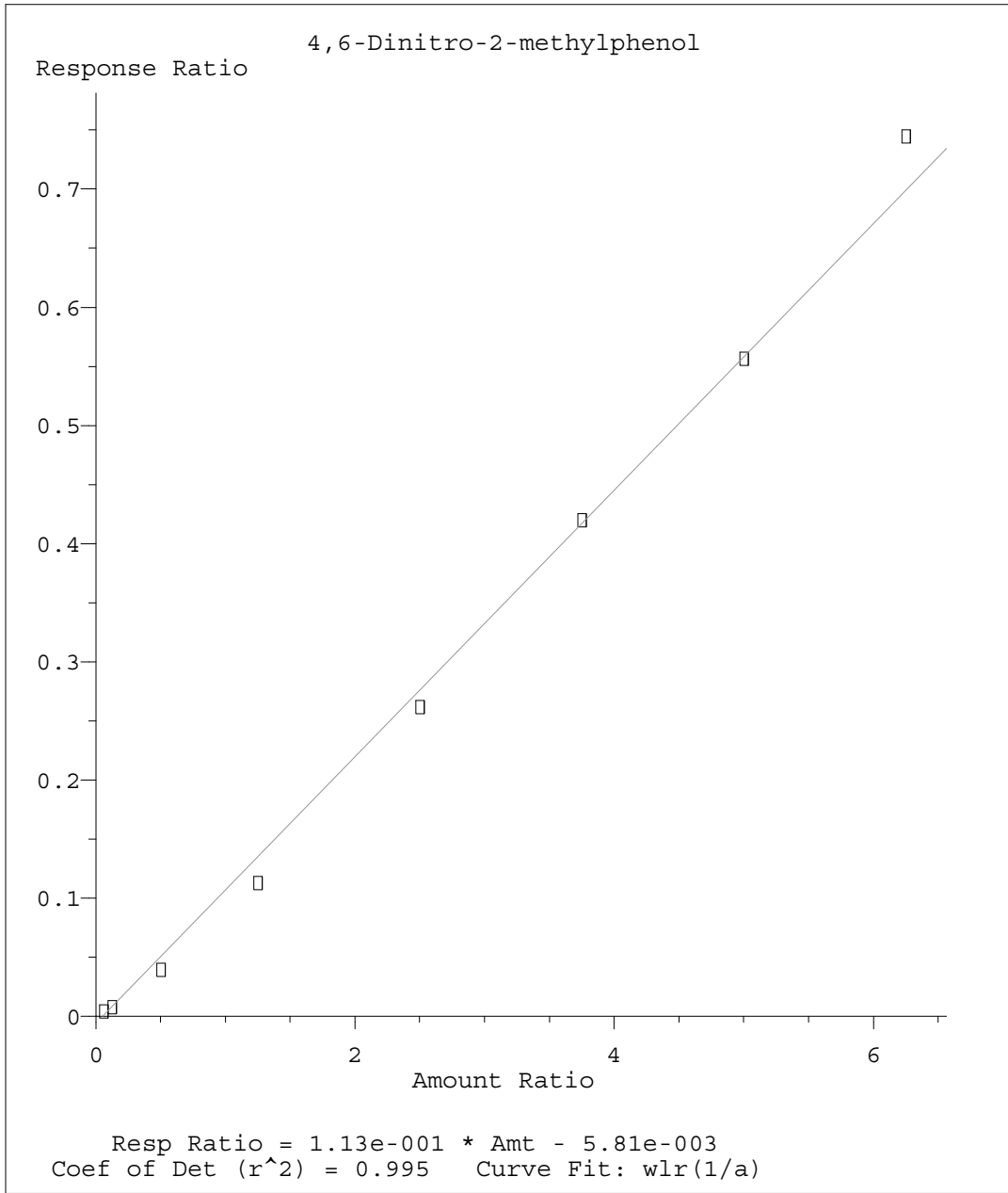
SDG: L1488171  
Instrument ID: BNAMS4

Analytical Method: 8270E

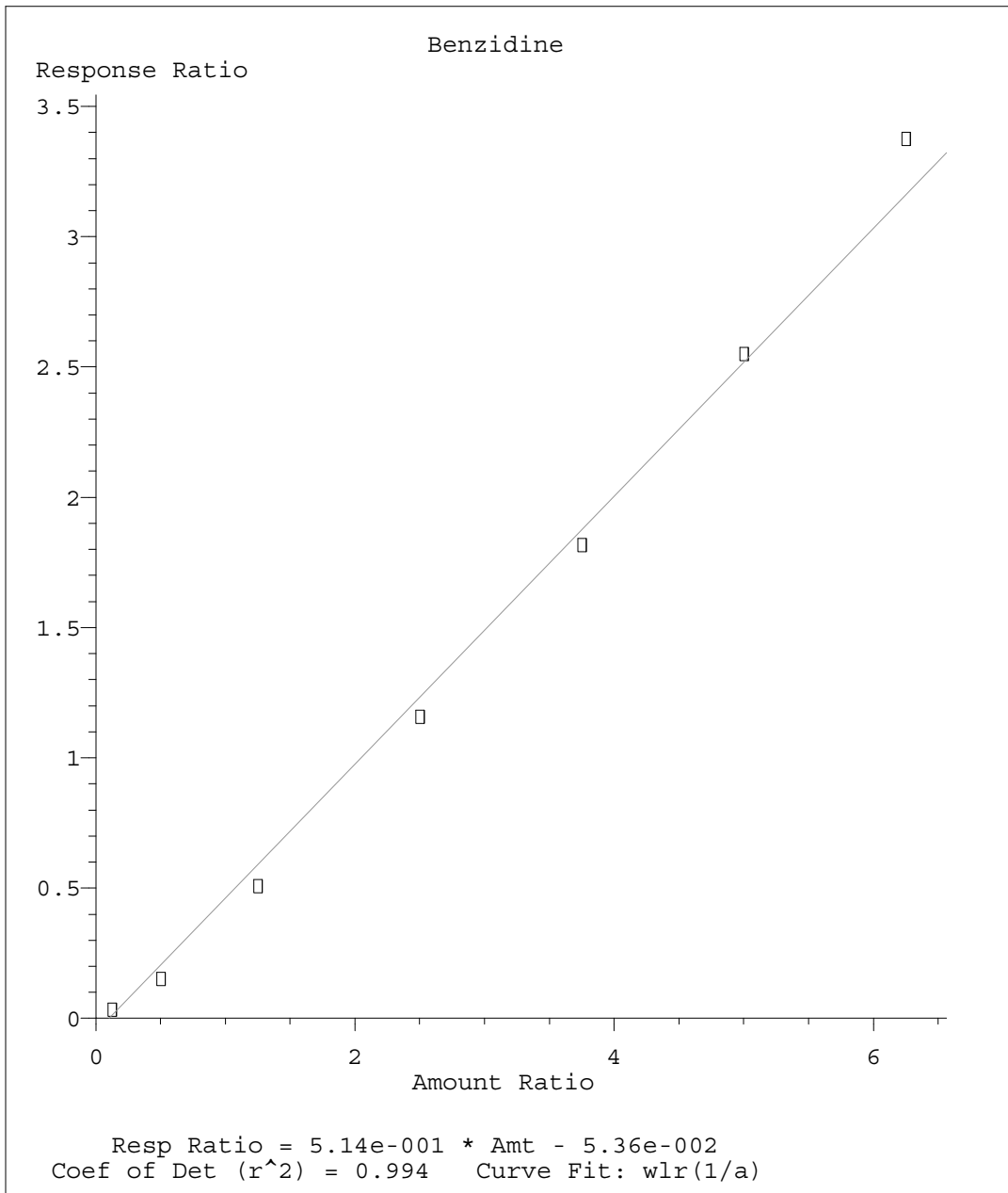
Analyte	RRF: 20K1	RRF: 30K1	RRF: 40K1	RRF: 50K1	RRF. Avg	%RSD	COD
Analysis date/time	02/09/22 14:32	02/09/22 14:53	02/09/22 15:14	02/09/22 15:35			
PHENOL					1.643512	6.71	
3&4-METHYL PHENOL					1.350649	6.63	
NAPHTHALENE					1.018747	7.18	
2-METHYLNAPHTHALENE					0.663826	7.61	
1-METHYLNAPHTHALENE					0.623837	7.43	
ACENAPHTHYLENE					1.779211	3.71	
ACENAPHTHENE					1.170435	6.73	
DIBENZOFURAN					1.623192	7.59	
FLUORENE					1.316666	4.46	
PHENANTHRENE					1.052577	6.87	
ANTHRACENE					1.065424	5.42	
CARBAZOLE					0.972084	5.54	
DI-N-BUTYL PHTHALATE					1.138017	6.21	
FLUORANTHENE					1.1182	5.15	
PYRENE					1.28723	3.99	
BENZO(A)ANTHRACENE					1.151953	5.68	
CHRYSENE					1.116357	5.8	
BIS(2-ETHYLHEXYL)PHTHALATE					0.724997	6.75	
DI-N-OCTYL PHTHALATE					1.204403	8.59	
BENZO(B)FLUORANTHENE					1.139642	7.29	
BENZO(K)FLUORANTHENE					1.122546	5.83	
BENZO(A)PYRENE					0.987052	3.86	
INDENO(1,2,3-CD)PYRENE					0.969769	4.03	
DIBENZ(A,H)ANTHRACENE					1.033545	4.86	
BENZO(G,H,I)PERYLENE					1.009366	7.35	
2-FLUOROPHENOL					1.299982	6.82	
PHENOL-D5					1.560263	8.09	
NITROBENZENE-D5					0.339442	6.83	
2-FLUOROBIPHENYL					1.349543	8.23	
2,4,6-TRIBROMOPHENOL					0.090561	11.74	
P-TERPHENYL-D14					1.093292	4.78	
PENTACHLOROPHENOL					0.121187	13.94	
BENZOIC ACID	0.1430	0.1360	0.1310	0.1260	0.13089	8.56	
File ID:	0209_17	0209_18	0209_19	0209_20			



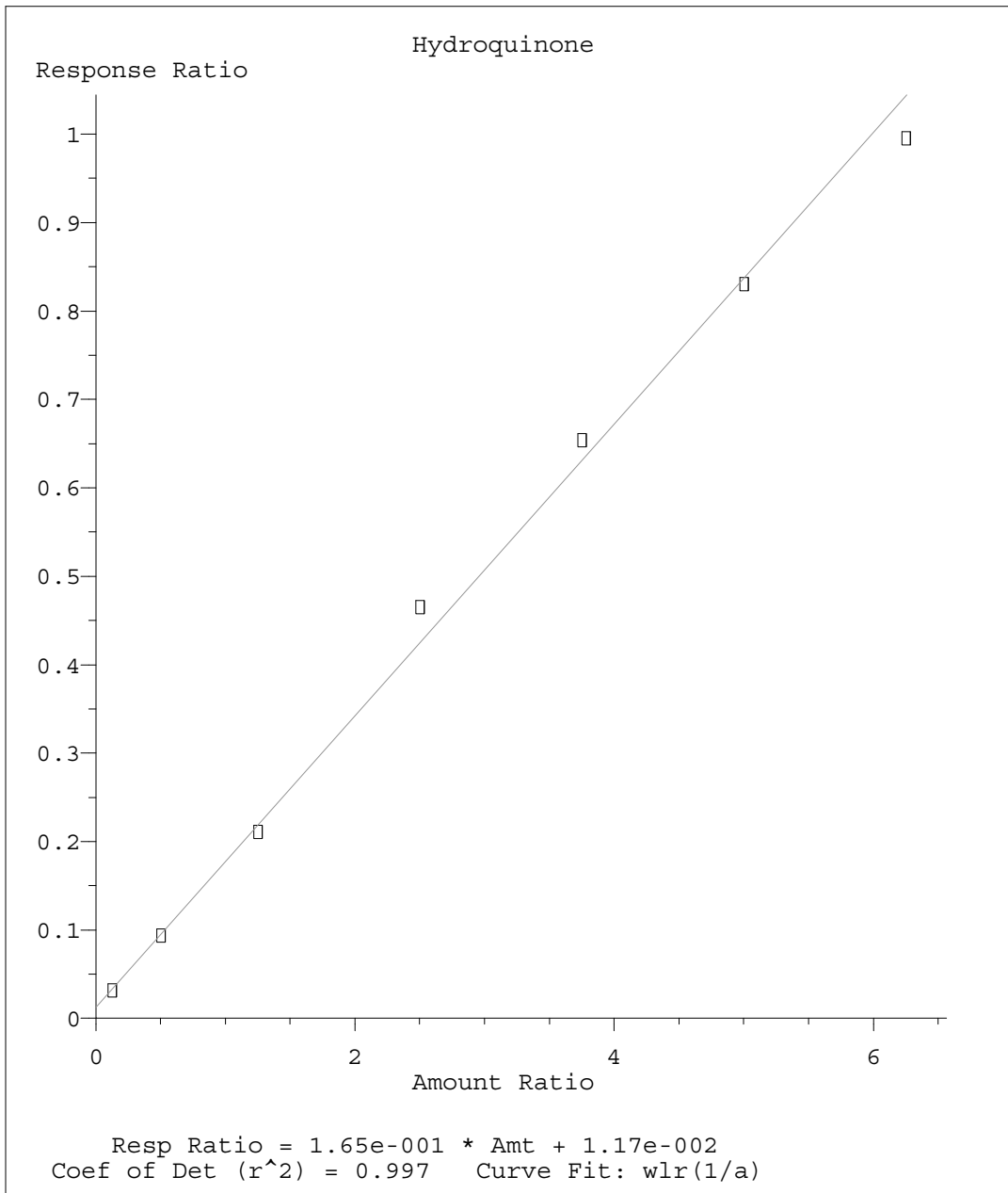
Method Name: C:\MSDCHEM\1\METHODS\S804B09V.M



Method Name: C:\MSDCHEM\1\METHODS\S804B09V.M



Method Name: C:\MSDCHEM\1\METHODS\S804B09V.M



Method Name: C:\MSDCHEM\1\METHODS\S804B09V.M

Response Factor Report BNAMS4

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration

Calibration Files

500 =0209 06.D 1K =0209 07.D 4K =0209 08.D  
 10K =0209\_09.D 20K =0209\_10.D 30K =0209\_11.D

Compound	500	1K	4K	10K	20K	30K	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	-----ISTD-----							
2) TM Pyridine	1.278	1.248	1.226	1.224	1.215	1.222	1.238	2.11
3) MT N-Nitrosodimeth	0.791	0.721	0.658	0.658	0.631	0.611	0.664	9.34
4) S 2-Fluorophenol	1.468	1.403	1.273	1.272	1.263	1.224	1.300	6.82
5) MT Aniline	0.809	0.804	0.729	0.745	0.717	0.697	0.740	6.02
6) MT bis(2-Chloroeth	1.328	1.237	1.062	1.037	1.077	1.116	1.150	8.78
7) S Phenol-d5	1.855	1.598	1.524	1.532	1.505	1.477	1.560	8.09
8) MC Phenol	1.860	1.761	1.611	1.619	1.589	1.554	1.644	6.71
9) Benzaldehyde							0.356	4.92
10) MT 2-Chlorophenol	1.477	1.400	1.305	1.295	1.266	1.249	1.316	6.22
11) T n-Decane	0.972	0.830	0.789	0.770	0.731	0.709	0.775	11.94
12) MT 1,3-Dichloroben	1.717	1.603	1.455	1.474	1.421	1.398	1.488	7.66
13) MTC 1,4-Dichloroben	1.747	1.661	1.518	1.503	1.485	1.442	1.531	7.38
14) MT Benzyl Alcohol	1.106	1.048	0.989	1.007	1.002	0.992	1.018	4.06
15) MT 1,2-Dichloroben	1.627	1.513	1.396	1.385	1.360	1.324	1.408	7.72
16) MT bis(2-Chloroiso	0.614	0.531	0.483	0.469	0.447	0.442	0.482	13.00
17) MT 2,2-oxybis(1-ch	0.614	0.531	0.483	0.469	0.447	0.442	0.482	13.00
18) MT 2-Methylphenol	1.336	1.276	1.157	1.194	1.153	1.132	1.189	6.54
19) MT Hexachloroethan	0.600	0.593	0.549	0.559	0.545	0.530	0.556	4.83
20) MP N-Nitrosodi-n-p	0.979	0.933	0.849	0.875	0.841	0.818	0.869	6.73
21) MT 3&4-Methyl phen	1.547	1.404	1.331	1.349	1.310	1.287	1.351	6.63
22) MT Acetophenone							1.654	2.40
23) I Naphthalene-d8	-----ISTD-----							
24) S Nitrobenzene-d5	0.390	0.321	0.339	0.316	0.340	0.345	0.339	6.83
25) MT Nitrobenzene	0.370	0.342	0.326	0.333	0.320	0.320	0.332	5.25
26) MT Isophorone	0.663	0.613	0.559	0.595	0.580	0.586	0.595	5.24
27) MCT 2-Nitrophenol	0.172	0.163	0.155	0.163	0.165	0.169	0.167	4.46
28) MT 2,4-Dimethylphe	0.342	0.334	0.302	0.302	0.297	0.303	0.311	5.62
29) MT bis(2-Chloretho	0.449	0.419	0.366	0.371	0.360	0.359	0.381	9.03
30) MCT 2,4-Dichlorophe	0.284	0.271	0.247	0.260	0.255	0.257	0.262	4.42
31) MT Benzoic Acid							0.131	8.56
32) MT 1,2,4-Trichloro	0.335	0.317	0.288	0.289	0.278	0.274	0.293	7.40
33) MT alpha-terpineol							0.251	14.78
34) MT Naphthalene	1.157	1.109	0.997	1.002	0.973	0.969	1.019	7.18
35) MT 4-Chloroaniline	0.127	0.128	0.116	0.119	0.113	0.115	0.118	5.02
36) MCT Hexachloro-1,3-	0.188	0.166	0.153	0.158	0.152	0.151	0.160	7.77
37) Hydroquinone							0.185	16.97
38) MT Quinoline							0.533	14.37
39) MT Caprolactam							0.055	10.67
40) MCT 4-Chloro-3-meth	0.283	0.267	0.250	0.262	0.259	0.262	0.264	3.75
41) MT 2-Methylnaphtha	0.765	0.716	0.639	0.656	0.625	0.628	0.664	7.61
42) MT 1-Methylnaphtha	0.727	0.654	0.607	0.610	0.592	0.590	0.624	7.43
43) MT 1,2,4,5-Tetrach							0.214	14.86
44) Diphenyl Ether							0.342	14.08
45) Diphenyl Oxide							0.342	14.08
46) I Acenaphthene-d10	-----ISTD-----							
47) MPT Hexachlorocyclo	0.392	0.376	0.366	0.371	0.367	0.370	0.375	2.29
48) MCT 2,4,6-Trichloro	0.395	0.343	0.318	0.333	0.327	0.352	0.347	6.74
49) MT 2,4,5-Trichloro	0.362	0.375	0.352	0.375	0.364	0.343	0.361	3.07
50) S 2-Fluorobipheny	1.568	1.465	1.332	1.344	1.278	1.263	1.350	8.23
51) MT Biphenyl	1.711	1.622	1.487	1.490	1.411	1.401	1.499	7.42
52) MT 2-Chloronaphtha	1.276	1.255	1.149	1.153	1.091	1.072	1.144	7.16
53) MT 2-Nitroaniline	0.334	0.327	0.326	0.364	0.362	0.370	0.355	6.12
54) MT Acenaphthylene	1.917	1.828	1.742	1.782	1.719	1.729	1.779	3.71

(#) = Out of Range ### Number of calibration levels exceeded format ###  
 S804B09V.M Sat Feb 19 13:22:02 2022



Response Factor Report BNAMS4

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration

Calibration Files

500 =0209 06.D 1K =0209 07.D 4K =0209 08.D  
 10K =0209\_09.D 20K =0209\_10.D 30K =0209\_11.D

Compound	500	1K	4K	10K	20K	30K	Avg	%RSD
55) MT Dimethyl phthal	1.249	1.203	1.131	1.200	1.165	1.172	1.185	3.02
56) MT 2,6-Dinitrotolu	0.255	0.251	0.256	0.286	0.283	0.287	0.275	6.29
57) MT 3-Nitroaniline	0.267	0.255	0.278	0.308	0.306	0.315	0.296	8.64
58) MCT Acenaphthene	1.330	1.247	1.144	1.170	1.109	1.118	1.170	6.73
59) MPT 2,4-Dinitrophen	0.062	0.072	0.100	0.122	0.136	0.152	0.122	33.30
60) MT Dibenzofuran	1.872	1.749	1.585	1.611	1.554	1.528	1.623	7.59
61) MT 2,4-Dinitrotolu	0.292	0.296	0.313	0.350	0.366	0.367	0.344	11.15
62) T 2,3,4,6-Tetrach							0.228	3.11
63) MPT 4-Nitrophenol	0.235	0.200	0.222	0.250	0.253	0.263	0.244	9.73
64) MT Fluorene	1.419	1.388	1.313	1.326	1.261	1.267	1.317	4.46
65) MT 4-Chlorophenyl-	0.726	0.679	0.607	0.624	0.592	0.580	0.624	8.28
66) MT Diethyl phthala	1.293	1.255	1.186	1.217	1.177	1.194	1.214	3.32
67) MT 4-Nitroaniline	0.274	0.262	0.287	0.298	0.303	0.298	0.277	8.67
68) MT Azobenzene	1.317	1.240	1.192	1.245	1.172	1.163	1.211	4.41
69) MT Atrazine							0.327	2.53
70) I Phenanthrene-d10	-----ISTD-----							
71) MT 4,6-Dinitro-2-m	0.062	0.063	0.079	0.090	0.105	0.112	0.093	24.46
72) MCT N-Nitrosodiphen	0.639	0.604	0.572	0.592	0.585	0.597	0.608	4.74
73) S 2,4,6-Tribromop	0.079	0.077	0.083	0.091	0.093	0.094	0.091	11.74
74) MT 4-Bromophenyl-p	0.199	0.199	0.191	0.194	0.192	0.193	0.197	3.66
75) MT Hexachlorobenze	0.243	0.233	0.202	0.209	0.207	0.212	0.220	6.70
76) T n-octadecane	0.153	0.127	0.114	0.120	0.113	0.113	0.122	10.82
77) MCT Pentachlorophen		0.096	0.102	0.120	0.125	0.129	0.121	13.94
78) MT Phenanthrene	1.184	1.152	1.018	1.026	1.009	1.007	1.053	6.87
79) MT Anthracene	1.185	1.112	1.003	1.053	1.041	1.038	1.065	5.42
80) MT Carbazole	1.077	1.022	0.940	0.984	0.955	0.916	0.972	5.54
81) MT Di-n-butyl phth	1.159	1.063	1.042	1.117	1.117	1.143	1.138	6.21
82) MT 2-nitrodiphenyl							0.202	14.20
83) MCT Fluoranthene	1.204	1.139	1.051	1.087	1.063	1.085	1.118	5.15
84) I Chrysene-d12	-----ISTD-----							
85) MT Benzidine							0.423	25.01
86) MT Pyrene	1.343	1.372	1.206	1.278	1.296	1.278	1.287	3.99
87) S p-Terphenyl-d14	1.176	1.119	0.989	1.085	1.107	1.091	1.093	4.78
88) MT Benzylbutyl pht	0.532	0.484	0.472	0.528	0.551	0.549	0.526	5.91
89) MT 3,3-Dichloroben							0.412	4.48
90) MT Benzo(a)anthrac	1.270	1.230	1.072	1.139	1.143	1.129	1.152	5.68
91) MT Chrysene	1.232	1.202	1.074	1.104	1.099	1.082	1.116	5.80
92) MT bis(2-Ethylhexy	0.715	0.666	0.636	0.741	0.762	0.765	0.725	6.75
93) MC Di-n-octyl phth	1.129	1.073	1.057	1.215	1.287	1.296	1.204	8.59
94) I Perylene-d12	-----ISTD-----							
95) MT Benzo(b)fluoran	1.328	1.177	1.064	1.109	1.102	1.107	1.140	7.29
96) MT Benzo(k)fluoran	1.261	1.167	1.041	1.105	1.101	1.103	1.123	5.83
97) MC Benzo(a)pyrene	1.046	1.016	0.914	0.970	0.983	0.989	0.987	3.86
98) MT Indeno(1,2,3-cd	1.037	1.005	0.932	0.983	0.983	0.954	0.970	4.03
99) MT Dibenz(a,h)anth	1.093	1.117	0.990	1.052	1.027	1.016	1.034	4.86
100) MT Benzo(g,h,i)per	1.150	1.062	0.987	1.040	1.006	0.974	1.009	7.35

Data File : C:\MSDCHEM\1\DATA\020922\0209 06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:40 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	73198m	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	291221	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	151021	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	282418	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	254847	8000.00	ppb	0.00
94) Perylene-d12	12.39	264	266366	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	6716	564.7582426	ppb	0.00
Spiked Amount 666.000			Recovery =	84.80%		
7) Phenol-d5	3.28	99	8487	594.6294949	ppb	0.00
Spiked Amount 666.000			Recovery =	89.28%		
24) Nitrobenzene-d5	3.82	82	7103	566.4718290	ppb	0.00
Spiked Amount 333.000			Recovery =	170.11%		
50) 2-Fluorobiphenyl	4.95	172	14804	581.0921036	ppb	0.00
Spiked Amount 333.000			Recovery =	174.50%		
73) 2,4,6-Tribromophenol	6.02	330	1390	434.7822532	ppb	0.00
Spiked Amount 666.000			Recovery =	65.28%		
87) p-Terphenyl-d14	8.04	244	18732	537.8468042	ppb	0.00
Spiked Amount 333.000			Recovery =	161.52%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue	#
2) Pyridine	2.31	79	5846	516.2841543	ppb		85
3) N-Nitrosodimethylamine	2.29	42	3617	595.1420623	ppb		89
5) Aniline	3.34	66	3700	546.4526374	ppb		87
6) bis(2-Chloroethyl)ether	3.36	93	6074m	280.2271058	ppb		
8) Phenol	3.29	94	8510	566.0388074	ppb		95
10) 2-Chlorophenol	3.41	128	6755	561.1658820	ppb		97
11) n-Decane	3.40	41	4449	627.4781303	ppb	#	89
12) 1,3-Dichlorobenzene	3.49	146	7856	577.2009286	ppb		95
13) 1,4-Dichlorobenzene	3.53	146	7993	570.5643647	ppb		92
14) Benzyl Alcohol	3.58	79	5058	543.2830139	ppb		94
15) 1,2-Dichlorobenzene	3.61	146	7444	578.0573187	ppb		94
16) bis(2-Chloroisopropyl)ethe	3.65	121	2809	637.4442809	ppb	#	55
17) 2,2-oxybis(1-chloropropane	3.65	121	2809	637.4442809	ppb	#	55
18) 2-Methylphenol	3.62	108	6113	561.9967038	ppb		97
19) Hexachloroethane	3.80	117	2744	539.6006744	ppb		98
20) N-Nitrosodi-n-propylamine	3.72	70	4481	563.7205314	ppb		99
21) 3&4-Methyl phenol	3.70	107	7078	572.8724821	ppb		95
25) Nitrobenzene	3.84	77	6737	557.6116506	ppb		91
26) Isophorone	3.96	82	12066	556.7216060	ppb		99
27) 2-Nitrophenol	4.02	139	3136	514.9782790	ppb		93
28) 2,4-Dimethylphenol	4.01	107	6231	550.9528074	ppb		95
29) bis(2-Chlorethoxy)methane	4.08	93	8179	590.2143618	ppb		94
30) 2,4-Dichlorophenol	4.15	162	5177	543.3798696	ppb		95
32) 1,2,4-Trichlorobenzene	4.22	180	6095	571.5118181	ppb		98
34) Naphthalene	4.27	128	21058	567.8297386	ppb		99
35) 4-Chloroaniline	4.29	65	2308	535.6261108	ppb		97
36) Hexachloro-1,3-butadiene	4.33	225	3425	588.6986796	ppb	#	84
40) 4-Chloro-3-methylphenol	4.57	107	5149	536.1373266	ppb		88
41) 2-Methylnaphthalene	4.71	142	13922	576.1219160	ppb		99
42) 1-Methylnaphthalene	4.78	142	13232	582.6684229	ppb		99
47) Hexachlorocyclopentadiene	4.81	237	3703	523.3554859	ppb		94
48) 2,4,6-Trichlorophenol	4.89	196	3726	568.8364160	ppb		87
49) 2,4,5-Trichlorophenol	4.91	196	3416	501.1076239	ppb		93

(#) = qualifier out of range (m) = manual integration

0209\_06.D S804B09V.M Mon Feb 14 15:44:29 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:40 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	16154	571.0219592	ppb	98
52) 2-Chloronaphthalene	5.05	162	12048	558.0401136	ppb	95
53) 2-Nitroaniline	5.10	138	3154	471.2803774	ppb #	93
54) Acenaphthylene	5.34	152	18097	538.8052071	ppb	98
55) Dimethyl phthalate	5.22	163	11792	527.1899145	ppb	93
56) 2,6-Dinitrotoluene	5.27	165	2406	463.9446622	ppb	92
57) 3-Nitroaniline	5.39	138	2518	450.9660011	ppb	89
58) Acenaphthene	5.46	153	12554	568.1820999	ppb	96
60) Dibenzofuran	5.59	168	17674	576.7899184	ppb #	97
61) 2,4-Dinitrotoluene	5.56	165	2753	423.9069814	ppb #	80
63) 4-Nitrophenol	5.49	139	2219	481.1339126	ppb	93
64) Fluorene	5.84	166	13394	538.8741946	ppb	99
65) 4-Chlorophenyl-phenylether	5.83	204	6853	581.3973883	ppb	96
66) Diethyl phthalate	5.73	149	12208	532.7351724	ppb	97
67) 4-Nitroaniline	5.84	138	2583	493.9183878	ppb	98
68) Azobenzene	5.95	77	12432	543.8645129	ppb	96
71) 4,6-Dinitro-2-methylphenol	5.86	198	1098	335.9892172	ppb	80
72) N-Nitrosodiphenylamine	5.92	169	11278	525.5181216	ppb	95
74) 4-Bromophenyl-phenylether	6.21	248	3507	503.5169622	ppb	90
75) Hexachlorobenzene	6.26	284	4283	552.6506620	ppb	97
76) n-octadecane	6.45	55	2700	624.8296052	ppb #	88
77) Pentachlorophenol	6.41	266	1641	395.0735832	ppb	87
78) Phenanthrene	6.59	178	20891	562.2158818	ppb	93
79) Anthracene	6.63	178	20925	556.3404017	ppb	99
80) Carbazole	6.75	167	19009	553.9274983	ppb	99
81) Di-n-butyl phthalate	7.02	149	20464	509.3768613	ppb	99
83) Fluoranthene	7.64	202	21245	538.1889960	ppb	98
86) Pyrene	7.88	202	21399	521.8526444	ppb	98
88) Benzylbutyl phthalate	8.68	149	8466	504.9149051	ppb	93
90) Benzo(a)anthracene	9.52	228	20222	551.0613246	ppb	94
91) Chrysene	9.58	228	19627	551.9009123	ppb	97
92) bis(2-Ethylhexyl)phthalate	9.62	149	11394	493.3450222	ppb	98
93) Di-n-octyl phthalate	10.92	149	17985	468.7583125	ppb	99
95) Benzo(b)fluoranthene	11.57	252	22101	582.4447660	ppb	95
96) Benzo(k)fluoranthene	11.62	252	20993	561.6702641	ppb	98
97) Benzo(a)pyrene	12.25	252	17410	529.7489985	ppb	97
98) Indeno(1,2,3-cd)pyrene	14.20	276	17264	534.6681369	ppb	98
99) Dibenz(a,h)anthracene	14.24	278	18203	528.7141684	ppb	95
100) Benzo(g,h,i)perylene	14.52	276	19143	569.6031683	ppb	95

(#) = qualifier out of range (m) = manual integration

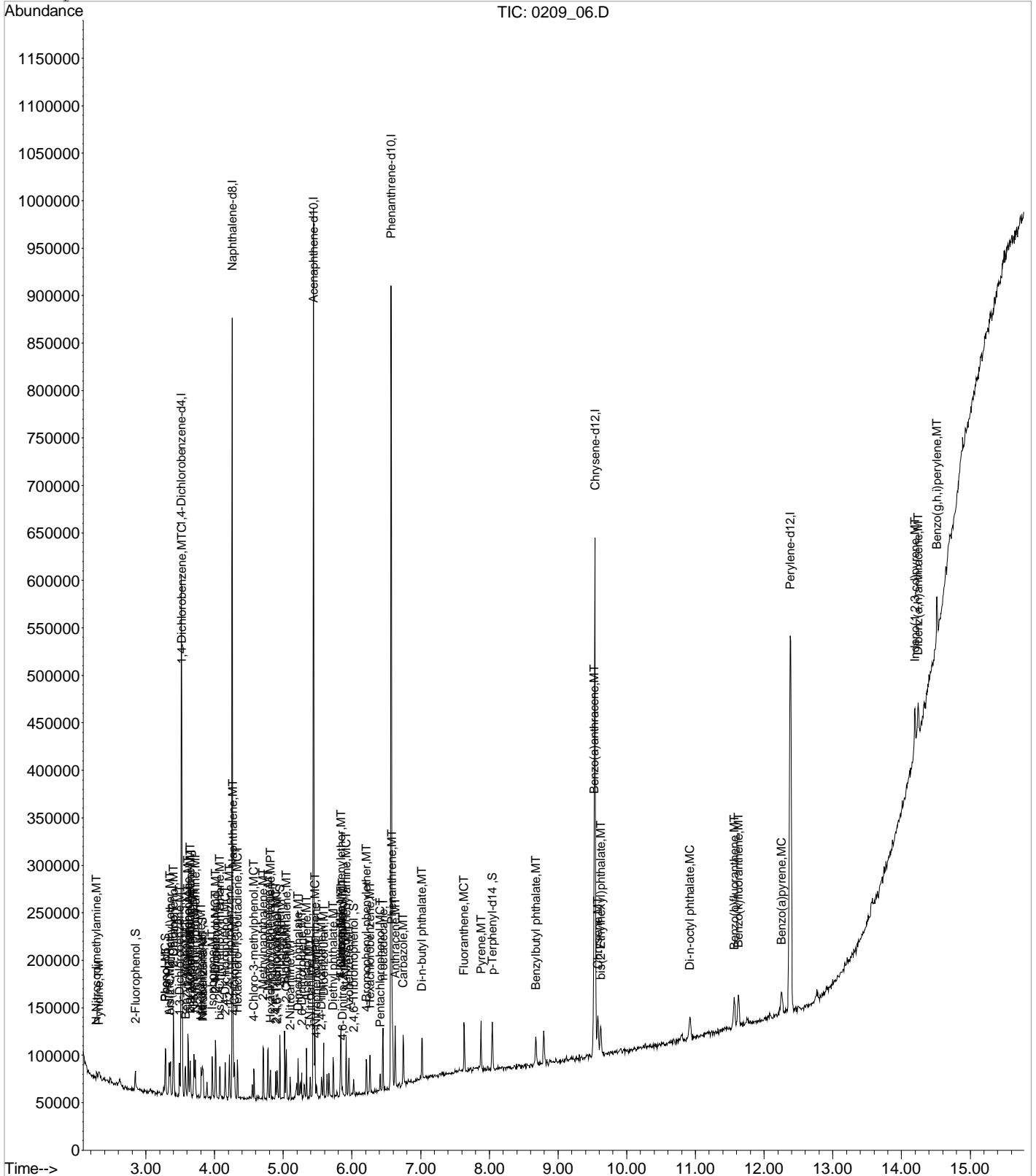
0209\_06.D S804B09V.M Mon Feb 14 15:44:29 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 06.D
Acq On : 9 Feb 2022 10:43 am
Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:40 2022

Vial: 3
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

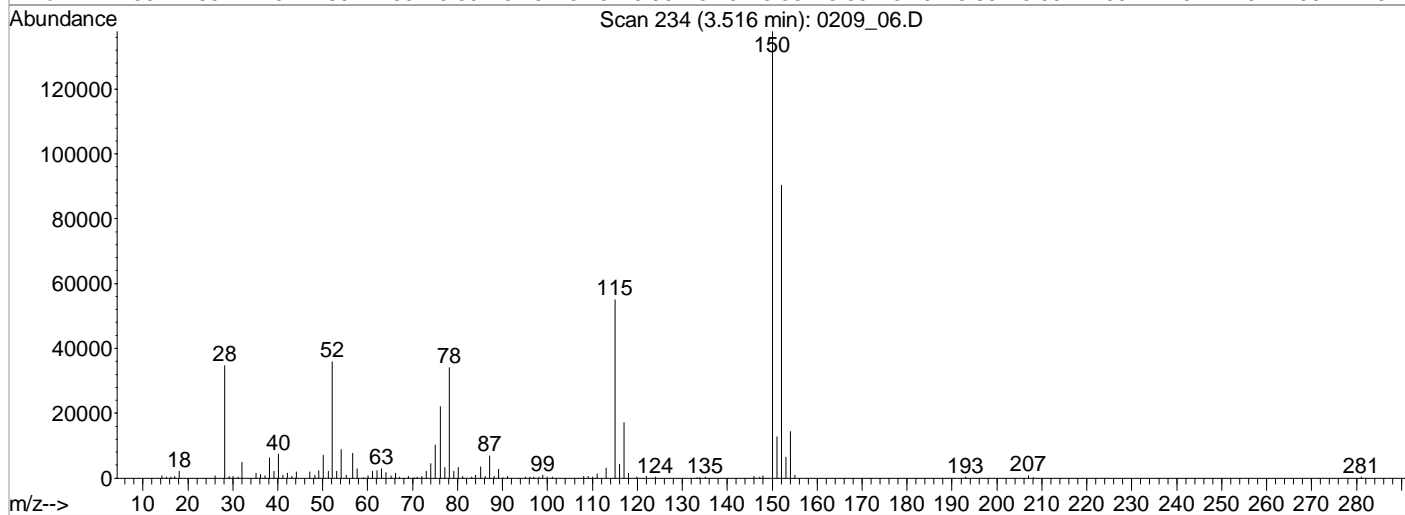
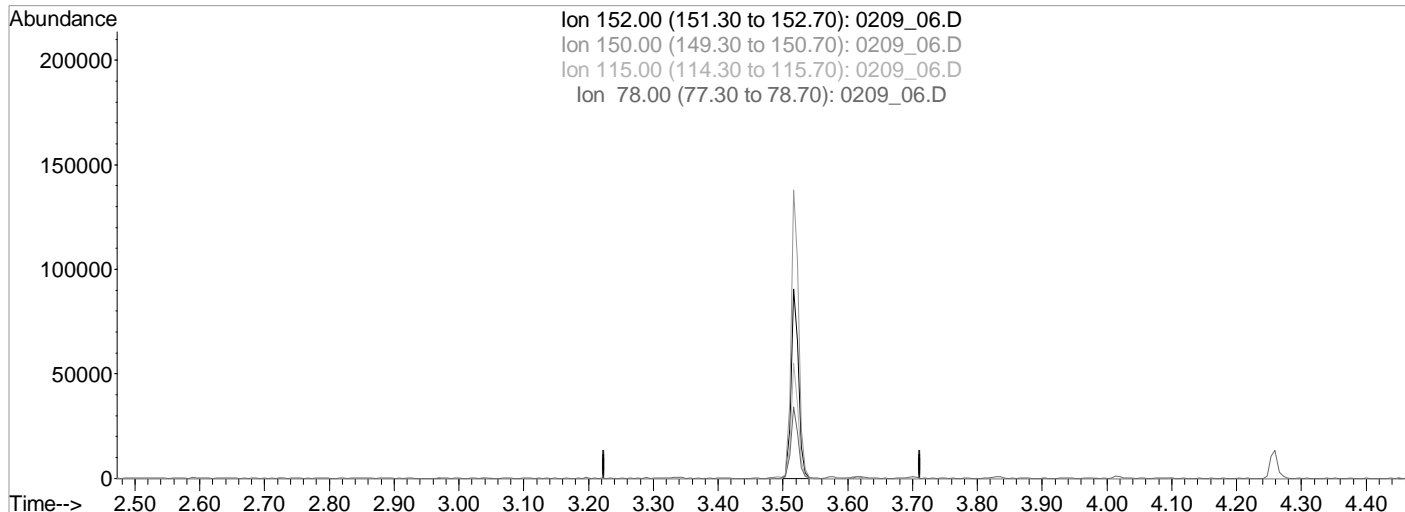
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:18:21 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:37 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_06.D

(1) 1,4-Dichlorobenzene-d4 (I)  
 3.52min (-3.516) 0.0000000 ppb d

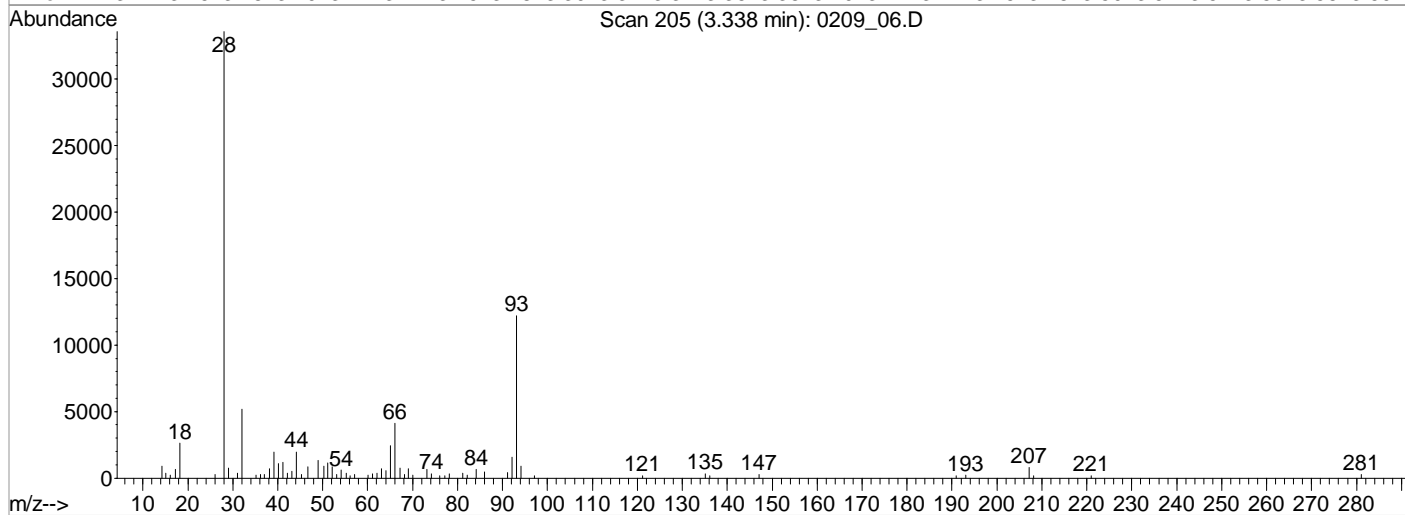
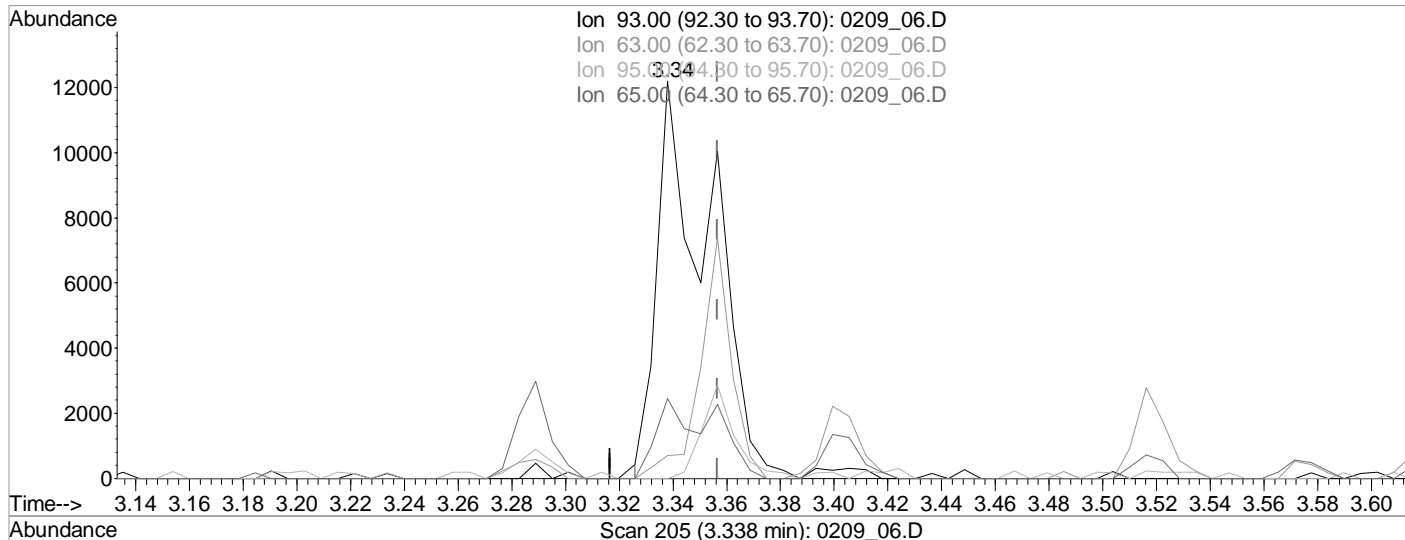
response 0

Ion	Exp%	Act%
152.00	100	0.00
150.00	155.20	0.00
115.00	59.30	0.00
78.00	35.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:38 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_06.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.018) 773.8770947 ppb

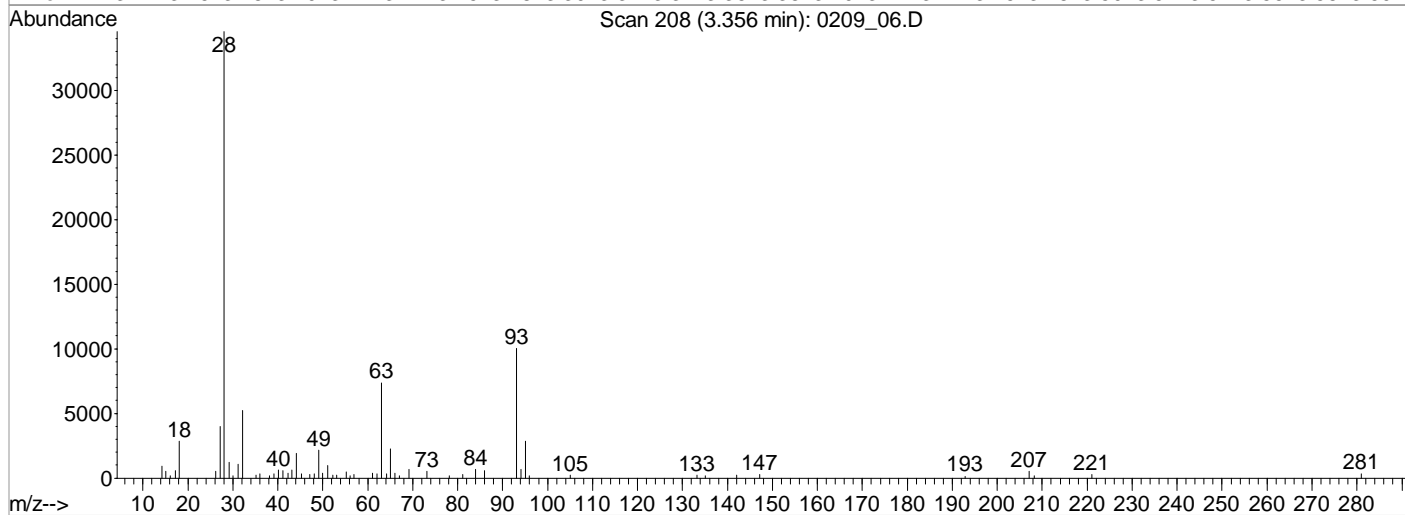
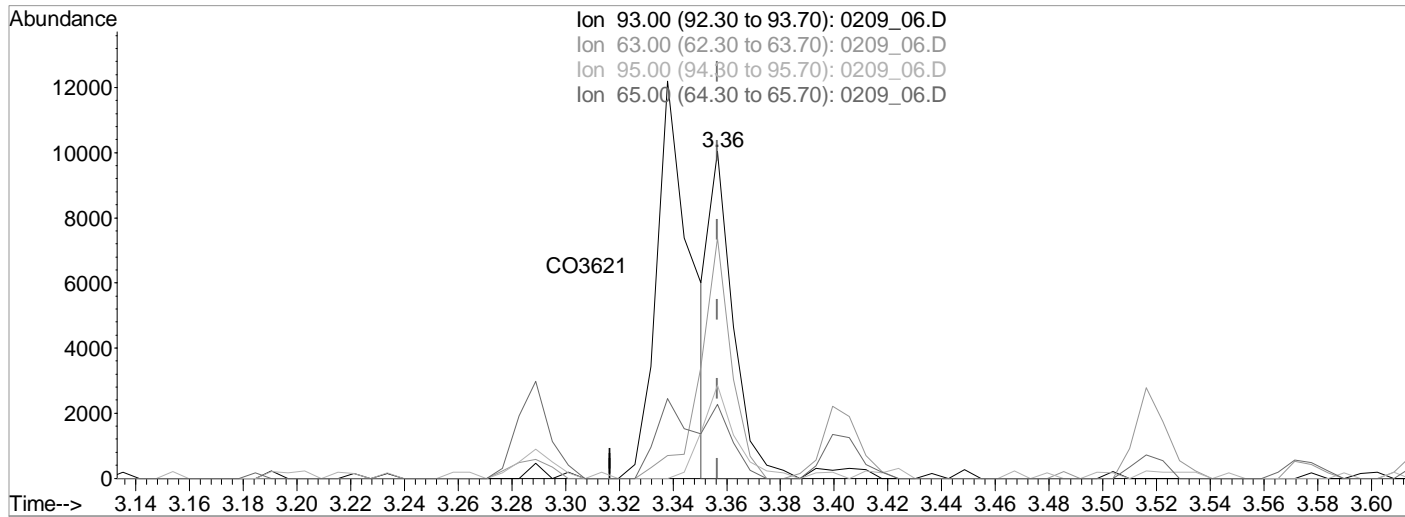
response 16774

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.71#
95.00	30.20	0.00#
65.00	24.00	20.09

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_06.D Vial: 3  
 Acq On : 9 Feb 2022 10:43 am Operator: 917  
 Sample : STD SVMS 500 PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:40 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:18:21 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_06.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (0.000) 280.2271058 ppb m

response 6074

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	73.44
95.00	30.20	28.46
65.00	24.00	22.56

Data File : C:\MSDCHEM\1\DATA\020922\0209 07.D Vial: 4  
 Acq On : 9 Feb 2022 11:04 am Operator: 917  
 Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:47 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:19:47 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	76270	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	301288	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	154859	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	290690	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	252819	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	273649	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	13374	1024.1746086	ppb	0.00
Spiked Amount 666.000				Recovery = 153.78%		
7) Phenol-d5	3.28	99	15234	943.4936610	ppb	0.00
Spiked Amount 666.000				Recovery = 141.67%		
24) Nitrobenzene-d5	3.82	82	12081m	907.8777697	ppb	0.00
Spiked Amount 333.000				Recovery = 272.64%		
50) 2-Fluorobiphenyl	4.95	172	28365	1006.2816806	ppb	0.00
Spiked Amount 333.000				Recovery = 302.19%		
73) 2,4,6-Tribromophenol	6.02	330	2781	902.8887466	ppb	0.00
Spiked Amount 666.000				Recovery = 135.57%		
87) p-Terphenyl-d14	8.04	244	35378	990.0403797	ppb	0.00
Spiked Amount 333.000				Recovery = 297.31%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.31	79	11901	998.1129452	ppb	94
3) N-Nitrosodimethylamine	2.29	42	6873	995.7330245	ppb	90
5) Aniline	3.34	66	7669	1035.6691945	ppb #	95
6) bis(2-Chloroethyl)ether	3.36	93	11795m	558.9513471	ppb	
8) Phenol	3.29	94	16788	1012.5031366	ppb	99
10) 2-Chlorophenol	3.41	128	13345	1010.2445624	ppb	99
11) n-Decane	3.40	41	7909	952.1233752	ppb #	90
12) 1,3-Dichlorobenzene	3.49	146	15281	1004.7592285	ppb	96
13) 1,4-Dichlorobenzene	3.53	146	15836	1022.2006471	ppb	96
14) Benzyl Alcohol	3.58	79	9993	992.2878509	ppb	94
15) 1,2-Dichlorobenzene	3.61	146	14424	1004.8210774	ppb	99
16) bis(2-Chloroisopropyl)ethe	3.65	121	5060	980.4227239	ppb	68
17) 2,2-oxybis(1-chloropropane	3.65	121	5060	980.4227239	ppb	68
18) 2-Methylphenol	3.62	108	12162	1008.5121853	ppb	98
19) Hexachloroethane	3.80	117	5649	1022.8026899	ppb	95
20) N-Nitrosodi-n-propylamine	3.72	70	8897	1006.4466665	ppb	95
21) 3&4-Methyl phenol	3.70	107	13385	969.5977105	ppb	96
25) Nitrobenzene	3.84	77	12867	971.7918627	ppb	97
26) Isophorone	3.96	82	23074	973.7600763	ppb	99
27) 2-Nitrophenol	4.02	139	6136	971.3209513	ppb	95
28) 2,4-Dimethylphenol	4.01	107	12562	1035.6727790	ppb	99
29) bis(2-Chlorethoxy)methane	4.08	93	15787	1022.5280775	ppb	95
30) 2,4-Dichlorophenol	4.15	162	10201	995.5789595	ppb	97
32) 1,2,4-Trichlorobenzene	4.22	180	11941	1016.2429131	ppb	99
34) Naphthalene	4.27	128	41782	1027.7434603	ppb	99
35) 4-Chloroaniline	4.29	65	4826	1042.1949294	ppb	96
36) Hexachloro-1,3-butadiene	4.33	225	6244	957.7274149	ppb	92
40) 4-Chloro-3-methylphenol	4.57	107	10067	981.5027088	ppb	86
41) 2-Methylnaphthalene	4.71	142	26958	1007.7179044	ppb	99
42) 1-Methylnaphthalene	4.78	142	24628	978.4163804	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	7287	986.5856772	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	6640	943.0418676	ppb	95
49) 2,4,5-Trichlorophenol	4.91	196	7255	1017.6821826	ppb	93

(#) = qualifier out of range (m) = manual integration



Data File : C:\MSDCHEM\1\DATA\020922\0209 07.D Vial: 4  
 Acq On : 9 Feb 2022 11:04 am Operator: 917  
 Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:47 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:19:47 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	31396	1013.2193660	ppb	98
52) 2-Chloronaphthalene	5.05	162	24285	1032.7965655	ppb	97
53) 2-Nitroaniline	5.10	138	6335	936.9430644	ppb #	96
54) Acenaphthylene	5.34	152	35382	988.1131522	ppb	99
55) Dimethyl phthalate	5.22	163	23291	982.3490986	ppb	96
56) 2,6-Dinitrotoluene	5.27	165	4865	928.8368997	ppb	99
57) 3-Nitroaniline	5.39	138	4936	887.3217022	ppb	91
58) Acenaphthene	5.46	153	24135	997.3544259	ppb	99
59) 2,4-Dinitrophenol	5.46	184	1390	781.2926895	ppb #	1
60) Dibenzofuran	5.59	168	33852	1004.0506798	ppb	100
61) 2,4-Dinitrotoluene	5.56	165	5734	923.6569672	ppb #	77
63) 4-Nitrophenol	5.49	139	3863	823.0078370	ppb	97
64) Fluorene	5.84	166	26866	1011.0676989	ppb	98
65) 4-Chlorophenyl-phenylether	5.83	204	13151	1006.1449282	ppb	94
66) Diethyl phthalate	5.73	149	24302	1000.2320751	ppb	99
67) 4-Nitroaniline	5.84	138	5080	917.9528314	ppb	96
68) Azobenzene	5.95	77	23996	967.7887017	ppb	99
71) 4,6-Dinitro-2-methylphenol	5.86	198	2275	821.1747835	ppb	91
72) N-Nitrosodiphenylamine	5.92	169	21933	980.5621274	ppb	94
74) 4-Bromophenyl-phenylether	6.21	248	7249	1016.9661888	ppb	94
75) Hexachlorobenzene	6.26	284	8451	1030.4154727	ppb	97
76) n-octadecane	6.45	55	4622	932.7469322	ppb #	89
77) Pentachlorophenol	6.41	266	3482	901.2827855	ppb	97
78) Phenanthrene	6.59	178	41877	1043.2531380	ppb	98
79) Anthracene	6.63	178	40406	993.3957930	ppb	99
80) Carbazole	6.75	167	37131	991.6965643	ppb	98
81) Di-n-butyl phthalate	7.02	149	38609	933.6214592	ppb	99
83) Fluoranthene	7.64	202	41394	994.6744483	ppb	99
86) Pyrene	7.88	202	43345	1046.3115430	ppb	97
88) Benzylbutyl phthalate	8.68	149	15306	914.0065001	ppb	96
90) Benzo(a)anthracene	9.52	228	38865	1021.2752983	ppb	91
91) Chrysene	9.58	228	37999	1029.2590925	ppb	96
92) bis(2-Ethylhexyl)phthalate	9.62	149	21050	914.9946856	ppb	99
93) Di-n-octyl phthalate	10.92	149	33904	915.3989320	ppb	97
95) Benzo(b)fluoranthene	11.56	252	40261	966.1548100	ppb	98
96) Benzo(k)fluoranthene	11.62	252	39928	986.7291781	ppb	93
97) Benzo(a)pyrene	12.26	252	34757	1008.2775726	ppb	99
98) Indeno(1,2,3-cd)pyrene	14.20	276	34378	995.1350728	ppb	98
99) Dibenz(a,h)anthracene	14.24	278	38216	1041.3233414	ppb	97
100) Benzo(g,h,i)perylene	14.52	276	36328	970.1482120	ppb	88

(#) = qualifier out of range (m) = manual integration

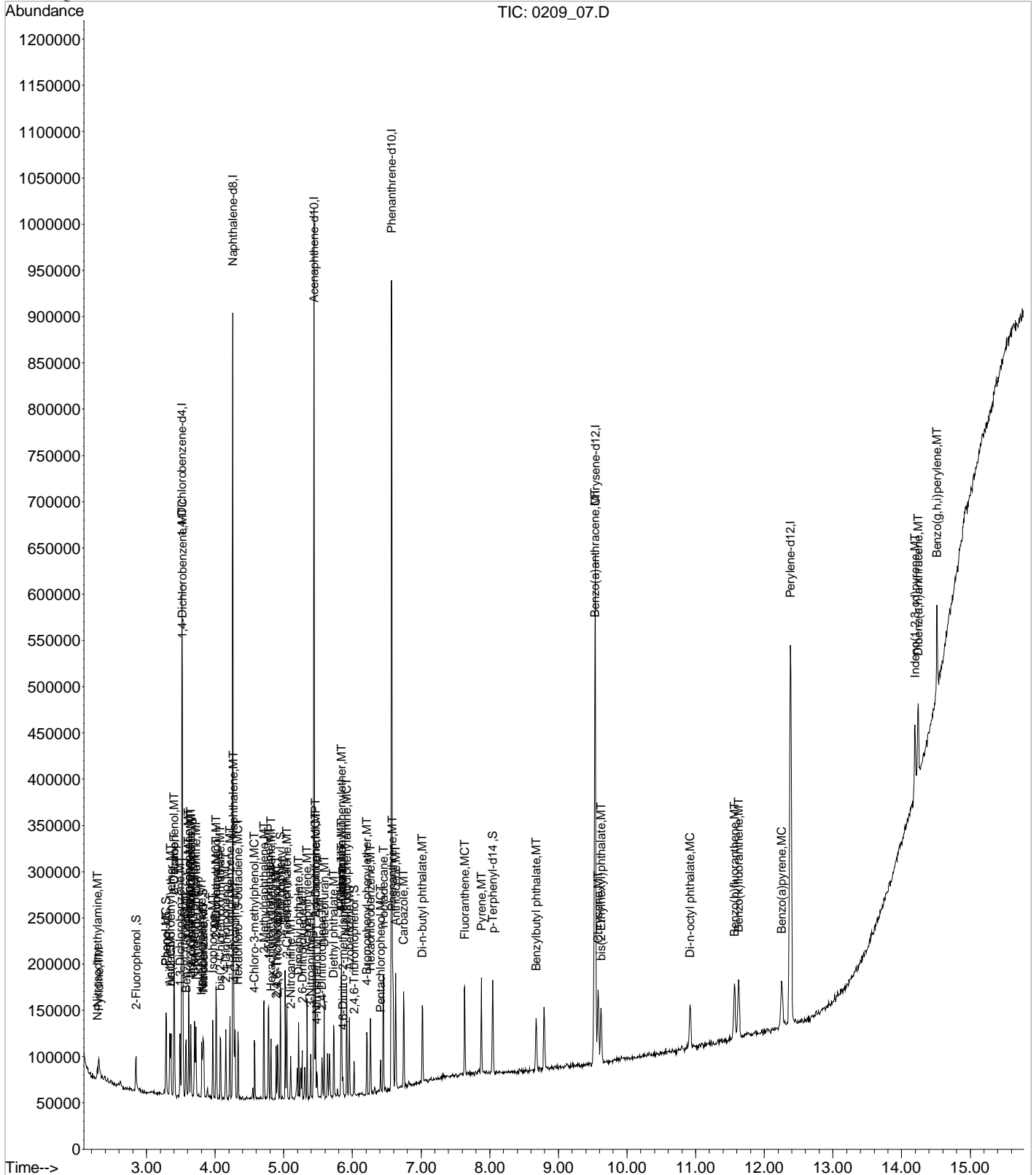
0209\_07.D S804B09V.M Mon Feb 14 15:47:33 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 07.D
Acq On : 9 Feb 2022 11:04 am
Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:47 2022

Vial: 4
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

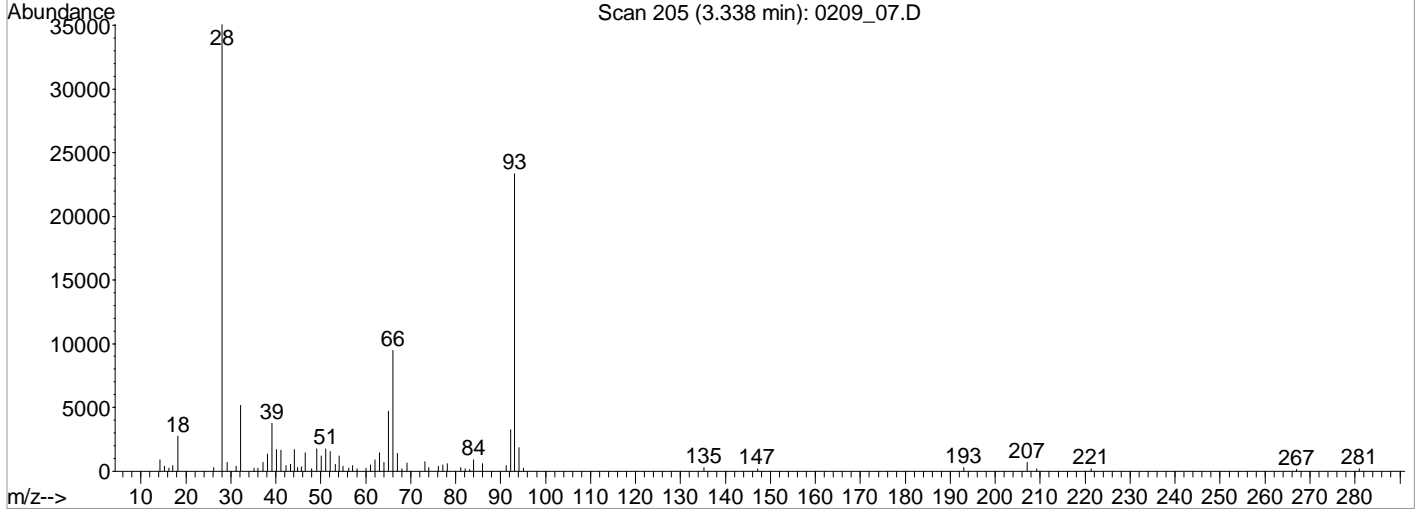
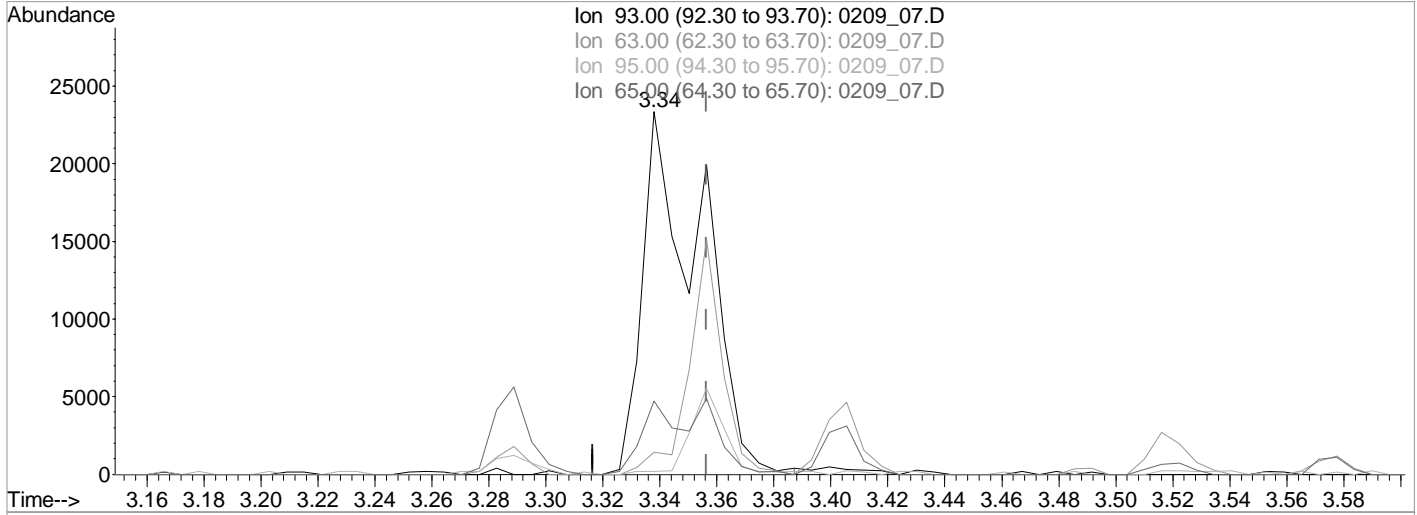
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:44:48 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_07.D Vial: 4  
 Acq On : 9 Feb 2022 11:04 am Operator: 917  
 Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:46 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:44:48 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_07.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.018) 1569.5183226 ppb m

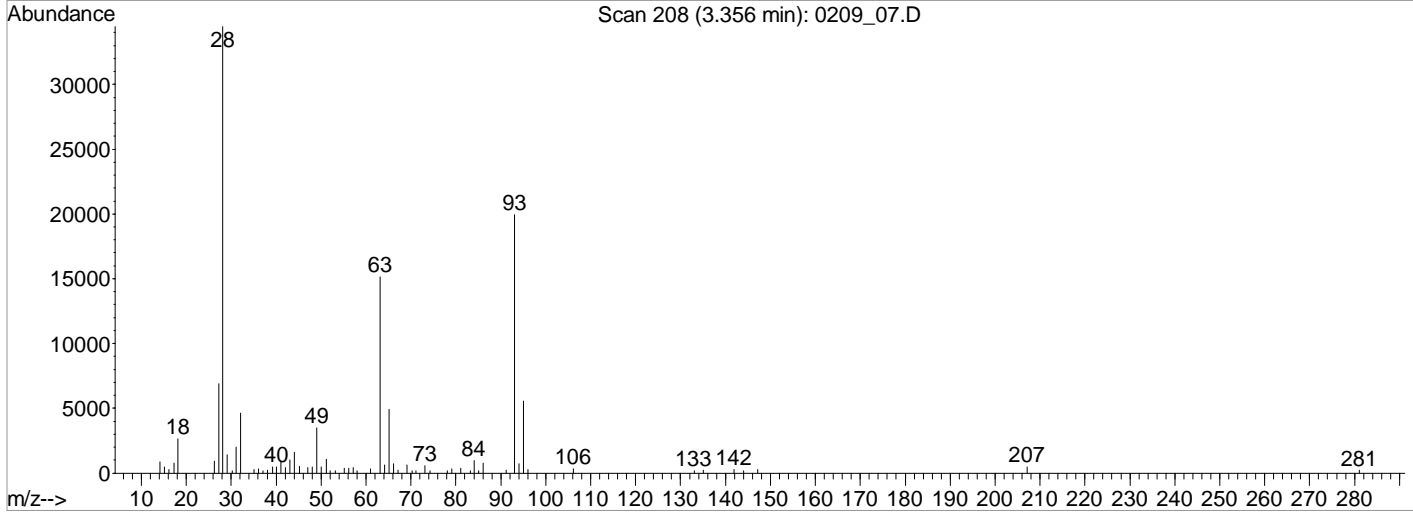
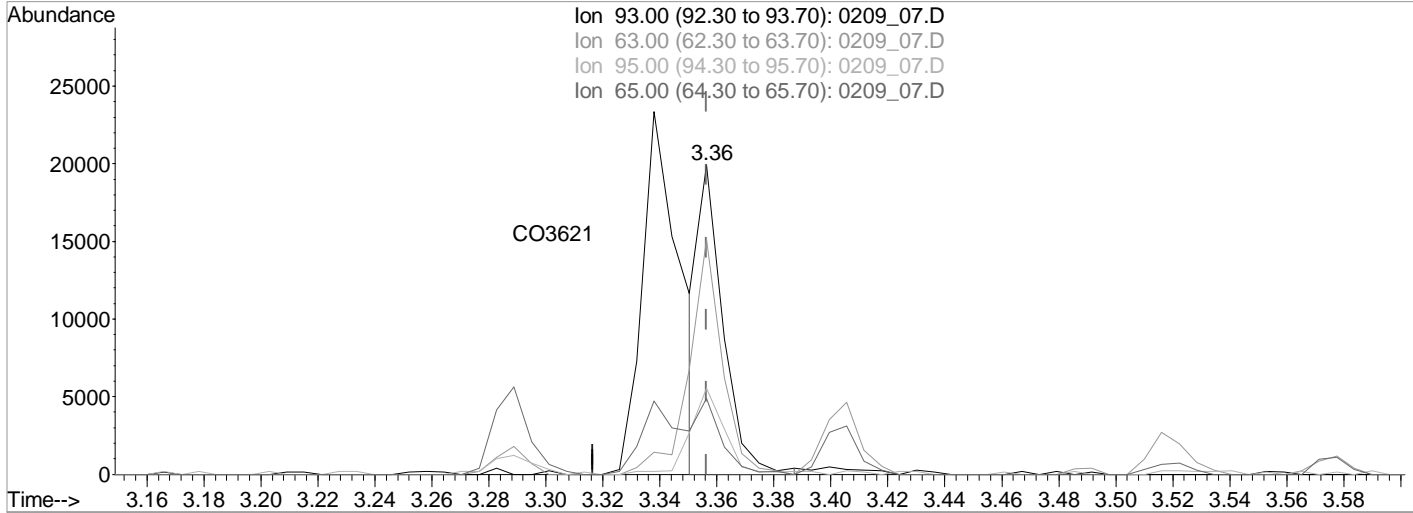
response 33120

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	6.09#
95.00	30.20	0.87#
65.00	24.00	20.20

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 07.D Vial: 4  
 Acq On : 9 Feb 2022 11:04 am Operator: 917  
 Sample : STD SVMS 1K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:47 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:44:48 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_07.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (-0.000) 558.9513471 ppb m

response 11795

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	75.97
95.00	30.20	27.78
65.00	24.00	24.57

Data File : C:\MSDCHEM\1\DATA\020922\0209 08.D Vial: 5  
 Acq On : 9 Feb 2022 11:25 am Operator: 917  
 Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:16 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:27:29 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	76560	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	308834	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	158910	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	298649	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	273094	8000.00	ppb	0.00
94) Perylene-d12	12.39	264	293434	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	48725	3687.4891163	ppb	0.00
Spiked Amount 666.000			Recovery =	553.68%		
7) Phenol-d5	3.28	99	58350	3669.2378705	ppb	0.00
Spiked Amount 666.000			Recovery =	550.94%		
24) Nitrobenzene-d5	3.82	82	52297	3806.9552688	ppb	0.00
Spiked Amount 333.000			Recovery =	1143.23%		
50) 2-Fluorobiphenyl	4.95	172	105816	3650.6056885	ppb	0.00
Spiked Amount 333.000			Recovery =	1096.28%		
73) 2,4,6-Tribromophenol	6.02	330	12407	4051.9112414	ppb	0.00
Spiked Amount 666.000			Recovery =	608.40%		
87) p-Terphenyl-d14	8.04	244	135025	3509.7450349	ppb	0.00
Spiked Amount 333.000			Recovery =	1053.98%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.30	79	46914	3922.1462465	ppb	92
3) N-Nitrosodimethylamine	2.29	42	25194	3641.3603720	ppb	92
5) Aniline	3.34	66	27896	3708.8809048	ppb	97
6) bis(2-Chloroethyl)ether	3.36	93	40648m	2249.7087184	ppb	
8) Phenol	3.29	94	61675	3690.2190244	ppb	98
10) 2-Chlorophenol	3.41	128	49941	3753.5004602	ppb	98
11) n-Decane	3.40	41	30186	3678.8814437	ppb	# 100
12) 1,3-Dichlorobenzene	3.49	146	55691	3642.1568344	ppb	98
13) 1,4-Dichlorobenzene	3.53	146	58102	3708.7838455	ppb	99
14) Benzyl Alcohol	3.58	79	37857	3754.5482410	ppb	99
15) 1,2-Dichlorobenzene	3.61	146	53437	3702.5382219	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	18481	3590.7364409	ppb	70
17) 2,2-oxybis(1-chloropropane	3.65	121	18481	3590.7364409	ppb	70
18) 2-Methylphenol	3.62	108	44297	3648.9823869	ppb	97
19) Hexachloroethane	3.80	117	21006	3760.3383531	ppb	98
20) N-Nitrosodi-n-propylamine	3.72	70	32491	3653.6742608	ppb	97
21) 3&4-Methyl phenol	3.70	107	50954	3714.7273657	ppb	98
25) Nitrobenzene	3.84	77	50279	3739.7466534	ppb	97
26) Isophorone	3.96	82	86386	3587.9344294	ppb	100
27) 2-Nitrophenol	4.02	139	23882	3723.7157111	ppb	97
28) 2,4-Dimethylphenol	4.01	107	46618	3705.4455563	ppb	99
29) bis(2-Chlorethoxy)methane	4.08	93	56471	3541.6753632	ppb	94
30) 2,4-Dichlorophenol	4.15	162	38182	3640.7331375	ppb	98
32) 1,2,4-Trichlorobenzene	4.22	180	44416	3667.8194095	ppb	98
34) Naphthalene	4.27	128	153901	3659.2817273	ppb	100
35) 4-Chloroaniline	4.29	65	17865	3711.5524610	ppb	100
36) Hexachloro-1,3-butadiene	4.33	225	23634	3587.0389463	ppb	99
40) 4-Chloro-3-methylphenol	4.57	107	38533	3687.7972059	ppb	91
41) 2-Methylnaphthalene	4.71	142	98637	3587.8315328	ppb	99
42) 1-Methylnaphthalene	4.78	142	93691	3657.5057324	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	29092	3855.5923968	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	25288	3567.6924956	ppb	87
49) 2,4,5-Trichlorophenol	4.91	196	27944	3797.4870871	ppb	97

(#) = qualifier out of range (m) = manual integration

0209\_08.D S804B09V.M Mon Feb 14 15:48:49 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 08.D Vial: 5  
 Acq On : 9 Feb 2022 11:25 am Operator: 917  
 Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:16 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:27:29 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	118174	3700.2138562	ppb	99
52) 2-Chloronaphthalene	5.05	162	91273	3741.8140427	ppb	98
53) 2-Nitroaniline	5.10	138	25895	3812.3559871	ppb	97
54) Acenaphthylene	5.34	152	138397	3781.4678851	ppb	98
55) Dimethyl phthalate	5.22	163	89878	3716.0291707	ppb	100
56) 2,6-Dinitrotoluene	5.27	165	20369	3881.8398479	ppb	95
57) 3-Nitroaniline	5.39	138	22058	4014.9800104	ppb	98
58) Acenaphthene	5.46	153	90926	3664.8708952	ppb	99
59) 2,4-Dinitrophenol	5.46	184	7954	4699.4207519	ppb	# 65
60) Dibenzofuran	5.59	168	125970	3636.1153668	ppb	99
61) 2,4-Dinitrotoluene	5.56	165	24897	4010.3299275	ppb	99
63) 4-Nitrophenol	5.49	139	17661	3896.6279998	ppb	97
64) Fluorene	5.84	166	104287	3810.5999505	ppb	98
65) 4-Chlorophenyl-phenylether	5.83	204	48245	3589.6378717	ppb	99
66) Diethyl phthalate	5.73	149	94239	3779.5583767	ppb	99
67) 4-Nitroaniline	5.84	138	22766	4121.6546071	ppb	99
68) Azobenzene	5.95	77	94745	3764.1896388	ppb	100
71) 4,6-Dinitro-2-methylphenol	5.86	198	11741	4386.5146094	ppb	93
72) N-Nitrosodiphenylamine	5.92	169	85367	3739.0321479	ppb	100
74) 4-Bromophenyl-phenylether	6.21	248	28452	3863.3232975	ppb	96
75) Hexachlorobenzene	6.26	284	30100	3536.3795647	ppb	97
76) n-octadecane	6.45	55	17047	3425.2915399	ppb	93
77) Pentachlorophenol	6.41	266	15204	3960.8681961	ppb	97
78) Phenanthrene	6.59	178	152049	3634.5438187	ppb	98
79) Anthracene	6.63	178	149791	3592.4300031	ppb	99
80) Carbazole	6.75	167	140338	3658.3915478	ppb	98
81) Di-n-butyl phthalate	7.02	149	155562	3744.3117272	ppb	100
83) Fluoranthene	7.64	202	156913	3676.5726891	ppb	99
86) Pyrene	7.88	202	164730	3625.2603146	ppb	99
88) Benzylbutyl phthalate	8.68	149	64453	3668.2506321	ppb	98
90) Benzo(a)anthracene	9.52	228	146345	3535.0092132	ppb	100
91) Chrysene	9.58	228	146632	3641.3605935	ppb	99
92) bis(2-Ethylhexyl)phthalate	9.62	149	86899	3598.8379231	ppb	99
93) Di-n-octyl phthalate	10.92	149	144282	3711.0126159	ppb	98
95) Benzo(b)fluoranthene	11.57	252	156039	3531.8820648	ppb	99
96) Benzo(k)fluoranthene	11.63	252	152687	3534.5271144	ppb	98
97) Benzo(a)pyrene	12.26	252	134154	3619.3303945	ppb	98
98) Indeno(1,2,3-cd)pyrene	14.20	276	136698	3696.1693366	ppb	97
99) Dibenz(a,h)anthracene	14.24	278	145241	3640.5893699	ppb	98
100) Benzo(g,h,i)perylene	14.52	276	144798	3642.3839778	ppb	99

(#) = qualifier out of range (m) = manual integration

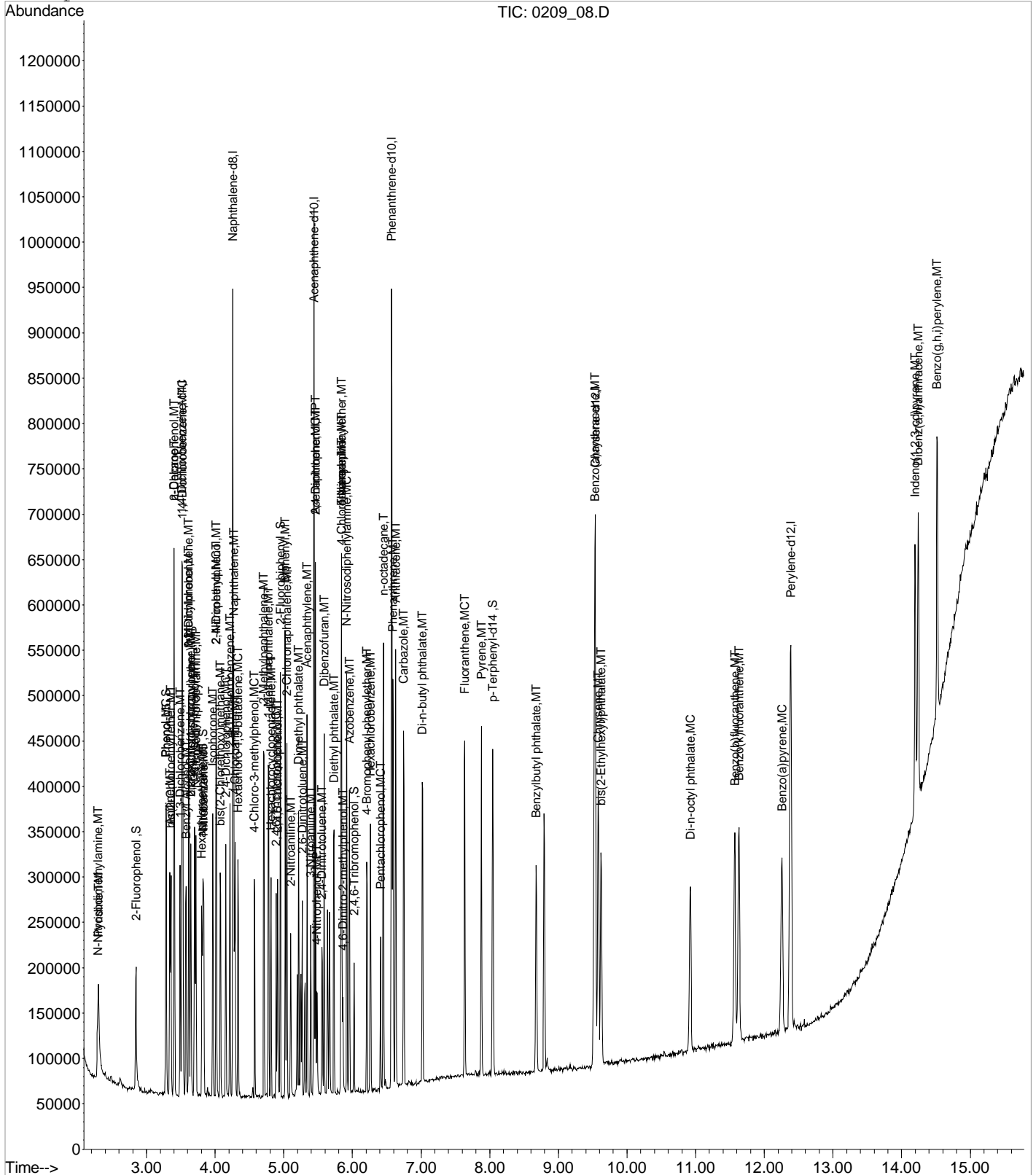
0209\_08.D S804B09V.M Mon Feb 14 15:48:50 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 08.D
Acq On : 9 Feb 2022 11:25 am
Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:16 2022

Vial: 5
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

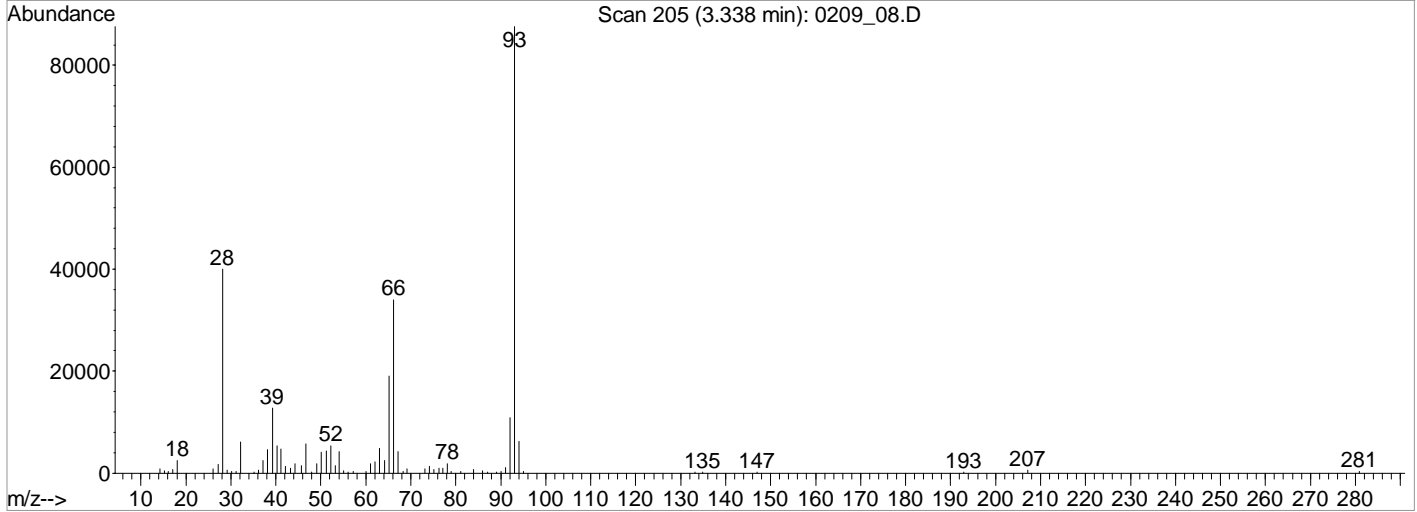
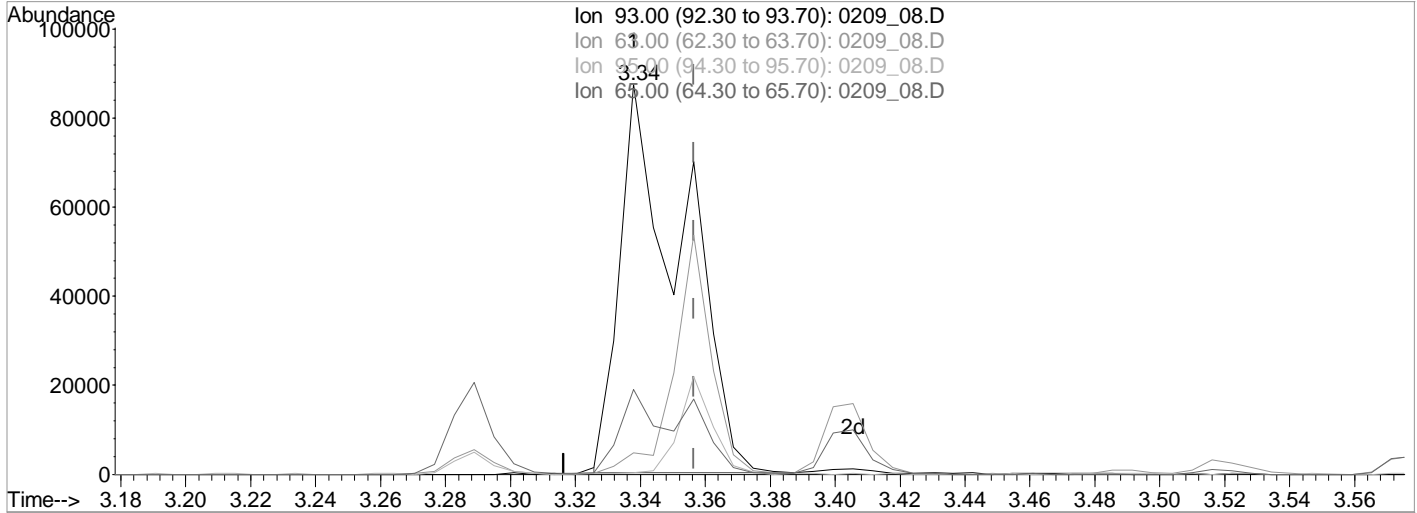
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:47:45 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 08.D Vial: 5  
 Acq On : 9 Feb 2022 11:25 am Operator: 917  
 Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:29 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:27:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_08.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.018) 6535.1580902 ppb  
 Qvalue = 38  
 response 118078

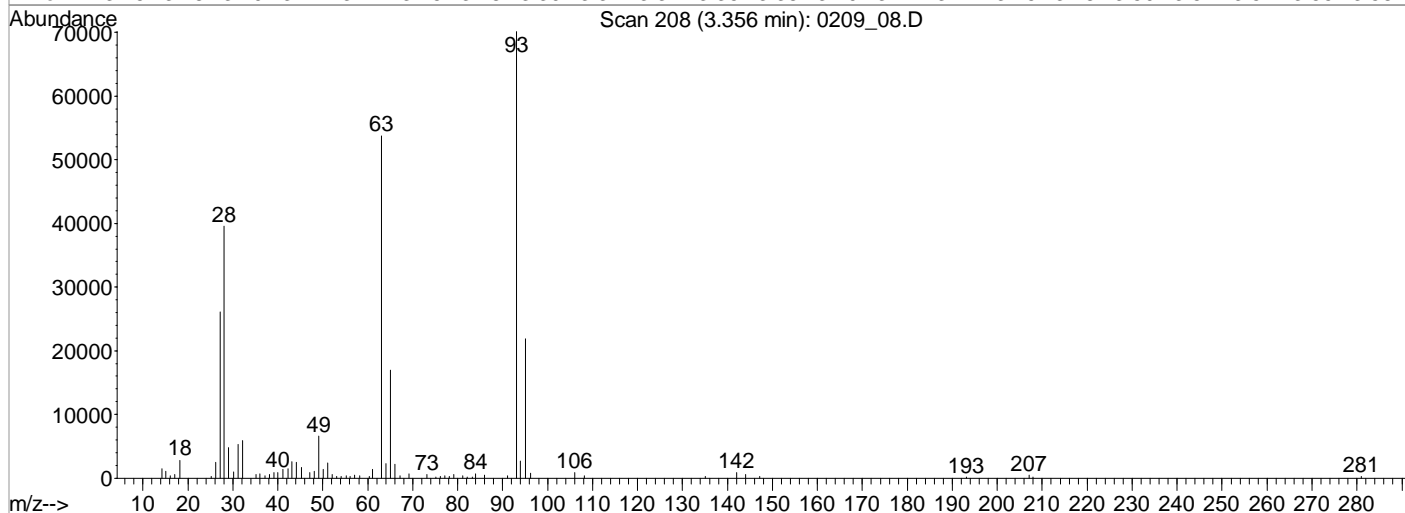
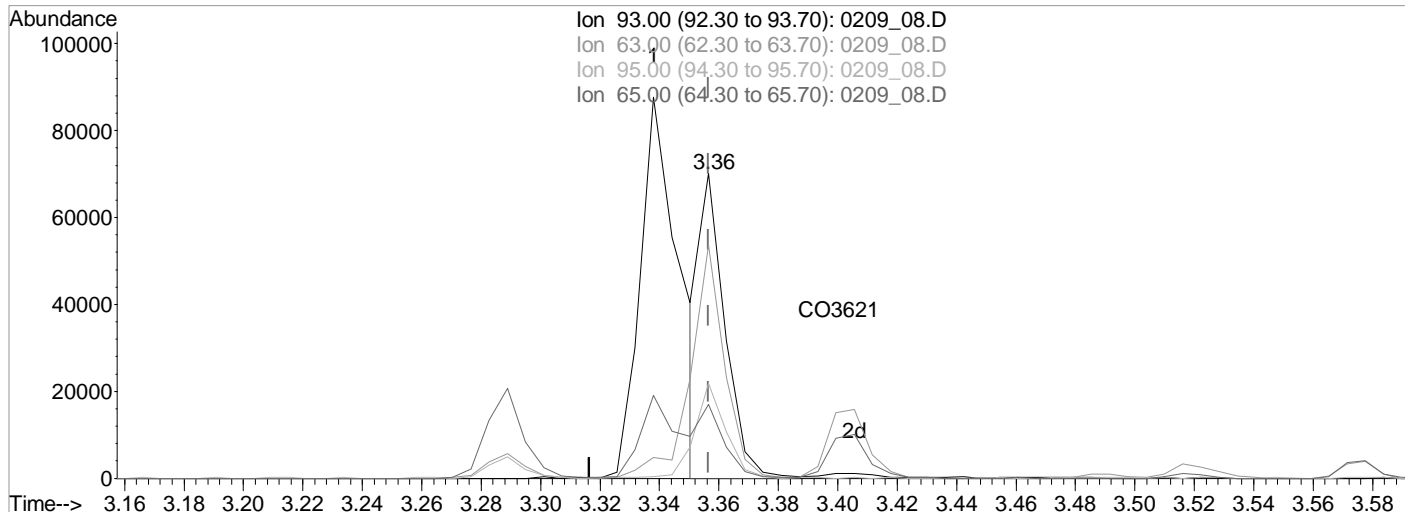
Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.23#
95.00	30.20	0.18#
65.00	24.00	21.53



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_08.D Vial: 5  
 Acq On : 9 Feb 2022 11:25 am Operator: 917  
 Sample : STD SVMS 4K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:16 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 14:25:02 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_08.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (-0.000) 2249.7087184 ppb m

response 40648

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	76.56
95.00	30.20	31.18
65.00	24.00	24.14

Data File : C:\MSDCHEM\1\DATA\020922\0209 09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:51 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	79698	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	318573	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	166698	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	313275	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	276256	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	294444	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	126685	10000.0000000	ppb	0.00
Spiked Amount 666.000			Recovery = 1501.50%			
7) Phenol-d5	3.28	99	152664	10000.0000000	ppb	0.00
Spiked Amount 666.000			Recovery = 1501.50%			
24) Nitrobenzene-d5	3.82	82	126003m	9983.3614604	ppb	0.00
Spiked Amount 333.000			Recovery = 2998.01%			
50) 2-Fluorobiphenyl	4.95	172	280043	10000.0000000	ppb	0.00
Spiked Amount 333.000			Recovery = 3003.00%			
73) 2,4,6-Tribromophenol	6.02	330	35551	10000.0000000	ppb	0.00
Spiked Amount 666.000			Recovery = 1501.50%			
87) p-Terphenyl-d14	8.04	244	374818	10000.0000000	ppb	0.00
Spiked Amount 333.000			Recovery = 3003.00%			

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.29	79	121910	9699.8002912	ppb	99
3) N-Nitrosodimethylamine	2.28	42	65505	10000.0000000	ppb	100
5) Aniline	3.34	66	74198	10000.0000000	ppb	100
6) bis(2-Chloroethyl)ether	3.36	93	103260m	10000.0000000	ppb	100
8) Phenol	3.29	94	161240	10000.0000000	ppb	100
10) 2-Chlorophenol	3.41	128	128999	10000.0000000	ppb	100
11) n-Decane	3.40	41	76738	10000.0000000	ppb	100
12) 1,3-Dichlorobenzene	3.49	146	146804	10000.0000000	ppb	100
13) 1,4-Dichlorobenzene	3.53	146	149745	10000.0000000	ppb	100
14) Benzyl Alcohol	3.58	79	100344	10000.0000000	ppb	100
15) 1,2-Dichlorobenzene	3.61	146	137930	10000.0000000	ppb	100
16) bis(2-Chloroisopropyl)ethe	3.65	121	46703	10000.0000000	ppb	100
17) 2,2-oxybis(1-chloropropane	3.65	121	46703	10000.0000000	ppb	100
18) 2-Methylphenol	3.62	108	118936	10000.0000000	ppb	100
19) Hexachloroethane	3.80	117	55684	10000.0000000	ppb	100
20) N-Nitrosodi-n-propylamine	3.72	70	87187	10000.0000000	ppb	100
21) 3&4-Methyl phenol	3.70	107	134402	10000.0000000	ppb	100
25) Nitrobenzene	3.84	77	132607	10000.0000000	ppb	100
26) Isophorone	3.96	82	237119	10000.0000000	ppb	100
27) 2-Nitrophenol	4.02	139	64981	10000.0000000	ppb	100
28) 2,4-Dimethylphenol	4.01	107	120179	10000.0000000	ppb	100
29) bis(2-Chlorethoxy)methane	4.08	93	147555	10000.0000000	ppb	100
30) 2,4-Dichlorophenol	4.15	162	103418	10000.0000000	ppb	100
32) 1,2,4-Trichlorobenzene	4.22	180	115136	10000.0000000	ppb	100
34) Naphthalene	4.27	128	399013	10000.0000000	ppb	100
35) 4-Chloroaniline	4.29	65	47430	10000.0000000	ppb	100
36) Hexachloro-1,3-butadiene	4.33	225	62939	10000.0000000	ppb	100
40) 4-Chloro-3-methylphenol	4.58	107	104251	10000.0000000	ppb	100
41) 2-Methylnaphthalene	4.71	142	261134	10000.0000000	ppb	100
42) 1-Methylnaphthalene	4.78	142	242812	10000.0000000	ppb	100
47) Hexachlorocyclopentadiene	4.81	237	77267	10000.0000000	ppb	100
48) 2,4,6-Trichlorophenol	4.89	196	69331	10000.0000000	ppb	100
49) 2,4,5-Trichlorophenol	4.91	196	78067	10000.0000000	ppb	100

(#) = qualifier out of range (m) = manual integration

0209\_09.D S804B09V.M Mon Feb 14 15:53:06 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:51 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

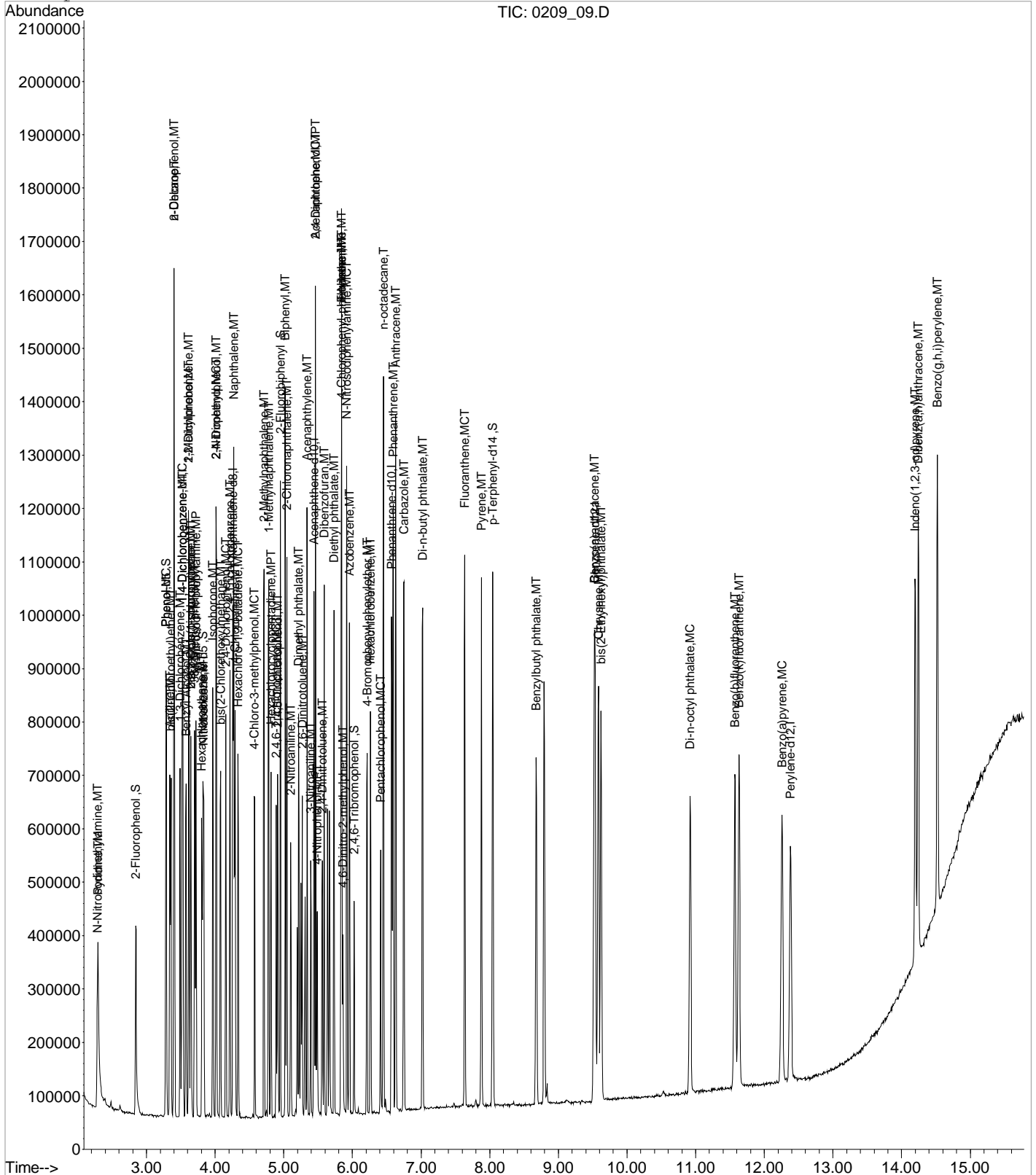
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	310488	10000.0000000	ppb	100
52) 2-Chloronaphthalene	5.05	162	240256	10000.0000000	ppb	100
53) 2-Nitroaniline	5.10	138	75937	10000.0000000	ppb	100
54) Acenaphthylene	5.34	152	371391	10000.0000000	ppb	100
55) Dimethyl phthalate	5.22	163	250120	10000.0000000	ppb	100
56) 2,6-Dinitrotoluene	5.27	165	59648	10000.0000000	ppb	100
57) 3-Nitroaniline	5.39	138	64174	10000.0000000	ppb	100
58) Acenaphthene	5.46	153	243837	10000.0000000	ppb	100
59) 2,4-Dinitrophenol	5.46	184	25454	10000.0000000	ppb	100
60) Dibenzofuran	5.59	168	335686	10000.0000000	ppb	100
61) 2,4-Dinitrotoluene	5.56	165	72875	10000.0000000	ppb	100
63) 4-Nitrophenol	5.49	139	52065	10000.0000000	ppb	100
64) Fluorene	5.84	166	276379	10000.0000000	ppb	100
65) 4-Chlorophenyl-phenylether	5.83	204	130111	10000.0000000	ppb	100
66) Diethyl phthalate	5.73	149	253571	10000.0000000	ppb	100
67) 4-Nitroaniline	5.84	138	62120	10000.0000000	ppb	100
68) Azobenzene	5.95	77	259354	10000.0000000	ppb	100
71) 4,6-Dinitro-2-methylphenol	5.86	198	35354	10000.0000000	ppb	100
72) N-Nitrosodiphenylamine	5.92	169	231908	10000.0000000	ppb	100
74) 4-Bromophenyl-phenylether	6.21	248	75834	10000.0000000	ppb	100
75) Hexachlorobenzene	6.26	284	81756	10000.0000000	ppb	100
76) n-octadecane	6.45	55	46905	10000.0000000	ppb	100
77) Pentachlorophenol	6.41	266	46865	10000.0000000	ppb	100
78) Phenanthrene	6.59	178	401719	10000.0000000	ppb	100
79) Anthracene	6.63	178	412471	10000.0000000	ppb	100
80) Carbazole	6.75	167	385300	10000.0000000	ppb	100
81) Di-n-butyl phthalate	7.02	149	437342	10000.0000000	ppb	100
83) Fluoranthene	7.64	202	425654	10000.0000000	ppb	100
86) Pyrene	7.88	202	441403	10000.0000000	ppb	100
88) Benzylbutyl phthalate	8.68	149	182425	10000.0000000	ppb	100
90) Benzo(a)anthracene	9.52	228	393248	10000.0000000	ppb	100
91) Chrysene	9.58	228	381309	10000.0000000	ppb	100
92) bis(2-Ethylhexyl)phthalate	9.62	149	255742	10000.0000000	ppb	100
93) Di-n-octyl phthalate	10.92	149	419500	10000.0000000	ppb	100
95) Benzo(b)fluoranthene	11.57	252	408147	10000.0000000	ppb	100
96) Benzo(k)fluoranthene	11.63	252	406682	10000.0000000	ppb	100
97) Benzo(a)pyrene	12.26	252	356920	10000.0000000	ppb	100
98) Indeno(1,2,3-cd)pyrene	14.20	276	361749	10000.0000000	ppb	100
99) Dibenz(a,h)anthracene	14.24	278	387330	10000.0000000	ppb	100
100) Benzo(g,h,i)perylene	14.52	276	382610	10000.0000000	ppb	100

(#) = qualifier out of range (m) = manual integration

0209\_09.D S804B09V.M Mon Feb 14 15:53:07 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 09.D Vial: 6
Acq On : 9 Feb 2022 11:46 am Operator: 917
Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:51 2022 Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:49:28 2022
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\050422B\0504B 03.D Vial: 3  
 Acq On : 4 May 2022 8:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 16:03 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	72810	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	308811	8000.00	ppb	0.00
46) Acenaphthene-d10	5.15	164	153956	8000.00	ppb	0.00
70) Phenanthrene-d10	6.26	188	290793	8000.00	ppb	0.00
84) Chrysene-d12	9.01	240	239869	8000.00	ppb	0.00
94) Perylene-d12	11.67	264	248833	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.58	112	125991	10648.8093607	ppb	0.00
Spiked Amount 20000.000				Recovery =	53.24%	
7) Phenol-d5	3.03	99	154852	10904.8081827	ppb	0.00
Spiked Amount 20000.000				Recovery =	54.52%	
24) Nitrobenzene-d5	3.56	82	148958m	11368.3042392	ppb	0.00
Spiked Amount 10000.000				Recovery =	113.68%	
50) 2-Fluorobiphenyl	4.67	172	266294	10253.4023911	ppb	0.00
Spiked Amount 10000.000				Recovery =	102.53%	
73) 2,4,6-Tribromophenol	5.72	330	38217	11609.7274995	ppb	0.00
Spiked Amount 20000.000				Recovery =	58.05%	
87) p-Terphenyl-d14	7.65	244	342371	10444.2393420	ppb	0.00
Spiked Amount 10000.000				Recovery =	104.44%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue	
2) Pyridine	1.99	79	148014	13138.2970554	ppb		91
3) N-Nitrosodimethylamine	1.98	42	78031	12904.7576433	ppb		92
5) Aniline	3.08	66	77309	11476.0102541	ppb	#	36
6) bis(2-Chloroethyl)ether	3.09	93	134334	12837.6695153	ppb		98
8) Phenol	3.04	94	159489	10662.4454340	ppb		91
10) 2-Chlorophenol	3.14	128	126641	10574.2456665	ppb		95
11) n-Decane	3.14	41	83245	11800.6717158	ppb		97
12) 1,3-Dichlorobenzene	3.22	146	137383	10145.3675510	ppb		93
13) 1,4-Dichlorobenzene	3.27	146	142112	10196.1300433	ppb		97
14) Benzyl Alcohol	3.32	79	102792	11097.2164608	ppb		96
15) 1,2-Dichlorobenzene	3.35	146	135933	10609.6074912	ppb		95
16) bis(2-Chloroisopropyl)ethe	3.38	121	46434	10591.0535705	ppb	#	39
17) 2,2-oxybis(1-chloropropane	3.38	121	46434	10591.0535705	ppb	#	39
18) 2-Methylphenol	3.37	108	122831	11350.0352901	ppb		95
19) Hexachloroethane	3.54	117	58879	11637.4411130	ppb		95
20) N-Nitrosodi-n-propylamine	3.46	70	100110	12658.3109219	ppb		93
21) 3&4-Methyl phenol	3.45	107	139627	11358.6276700	ppb		95
25) Nitrobenzene	3.57	77	149196	11645.3460556	ppb		93
26) Isophorone	3.70	82	273139	11884.7047612	ppb		96
27) 2-Nitrophenol	3.76	139	67830	10504.2391718	ppb		81
28) 2,4-Dimethylphenol	3.76	107	131358	10953.2526094	ppb		95
29) bis(2-Chlorethoxy)methane	3.82	93	162553	11062.0210610	ppb		98
30) 2,4-Dichlorophenol	3.89	162	100259	9923.8153739	ppb		95
32) 1,2,4-Trichlorobenzene	3.95	180	112134	9915.5942513	ppb		97
34) Naphthalene	4.00	128	374919m	9533.8516433	ppb		
35) 4-Chloroaniline	4.02	65	50343	11017.8017774	ppb	#	49
36) Hexachloro-1,3-butadiene	4.06	225	66952	10852.4043763	ppb		96
40) 4-Chloro-3-methylphenol	4.32	107	102521	10066.9036815	ppb		91
41) 2-Methylnaphthalene	4.43	142	242446	9461.4504064	ppb		96
42) 1-Methylnaphthalene	4.49	142	232320	9647.4495585	ppb		98
47) Hexachlorocyclopentadiene	4.53	237	49301	6835.0157549	ppb		95
48) 2,4,6-Trichlorophenol	4.61	196	68606	10274.1845518	ppb		90
49) 2,4,5-Trichlorophenol	4.64	196	71338	10265.3745585	ppb		91

(#) = qualifier out of range (m) = manual integration

0504B\_03.D S804E04BV.M Thu May 05 16:04:03 2022

Data File : C:\MSDCHEM\1\DATA\050422B\0504B 03.D Vial: 3  
 Acq On : 4 May 2022 8:09 pm Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 16:03 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	4.73	154	301118	10441.1941443	ppb	99
52) 2-Chloronaphthalene	4.76	162	225125	10228.5696808	ppb	97
53) 2-Nitroaniline	4.82	138	77356	11338.4162347	ppb	92
54) Acenaphthylene	5.05	152	349630	10211.1489350	ppb	99
55) Dimethyl phthalate	4.94	163	241288	10581.7152130	ppb	99
56) 2,6-Dinitrotoluene	4.99	165	57670	10908.4044924	ppb #	77
57) 3-Nitroaniline	5.11	138	60805	10682.3816714	ppb	93
58) Acenaphthene	5.17	153	225966	10032.0397375	ppb	98
59) 2,4-Dinitrophenol	5.19	184	25739	8991.4846740	ppb #	1
60) Dibenzofuran	5.29	168	313173	10025.5416474	ppb	96
61) 2,4-Dinitrotoluene	5.27	165	75641	11425.1613528	ppb #	70
63) 4-Nitrophenol	5.22	139	45267	9627.8896252	ppb #	76
64) Fluorene	5.54	166	256925	10139.6783842	ppb	97
65) 4-Chlorophenyl-phenylether	5.54	204	121190	10085.5561793	ppb	97
66) Diethyl phthalate	5.44	149	247489	10594.0855044	ppb	99
67) 4-Nitroaniline	5.56	138	65508	12287.5656579	ppb #	84
68) Azobenzene	5.66	77	297244	12755.6777858	ppb	93
71) 4,6-Dinitro-2-methylphenol	5.58	198	37511	9563.0231518	ppb	99
72) N-Nitrosodiphenylamine	5.62	169	211635	9577.4859602	ppb	97
74) 4-Bromophenyl-phenylether	5.91	248	72523	10112.5929308	ppb #	81
75) Hexachlorobenzene	5.96	284	77452	9706.0758801	ppb	98
76) n-octadecane	6.15	55	48116	10814.2343337	ppb #	96
77) Pentachlorophenol	6.12	266	38231	8678.9089734	ppb	98
78) Phenanthrene	6.28	178	384570	10051.4266576	ppb	96
79) Anthracene	6.32	178	388432	10029.9451799	ppb	100
80) Carbazole	6.45	167	353123	9993.7408883	ppb	98
81) Di-n-butyl phthalate	6.71	149	434009	10491.9411679	ppb	98
83) Fluoranthene	7.27	202	378397	9309.6678860	ppb	99
86) Pyrene	7.49	202	390486	10117.3151564	ppb	98
88) Benzylbutyl phthalate	8.22	149	171356	10857.8701556	ppb	93
90) Benzo(a)anthracene	8.99	228	347193	10051.9932243	ppb	98
91) Chrysene	9.05	228	348883	10422.9918589	ppb	99
92) bis(2-Ethylhexyl)phthalate	9.08	149	240106	11045.4381754	ppb	98
93) Di-n-octyl phthalate	10.28	149	361907	10021.6890694	ppb	99
95) Benzo(b)fluoranthene	10.90	252	334061	9424.0897312	ppb	99
96) Benzo(k)fluoranthene	10.96	252	351862	10077.4373458	ppb	96
97) Benzo(a)pyrene	11.55	252	295004	9608.8207390	ppb	94
98) Indeno(1,2,3-cd)pyrene	13.68	276	275571	9135.8130051	ppb	97
99) Dibenz(a,h)anthracene	13.73	278	313847	9762.7192535	ppb	97
100) Benzo(g,h,i)perylene	14.03	276	325162	10356.9766358	ppb	95

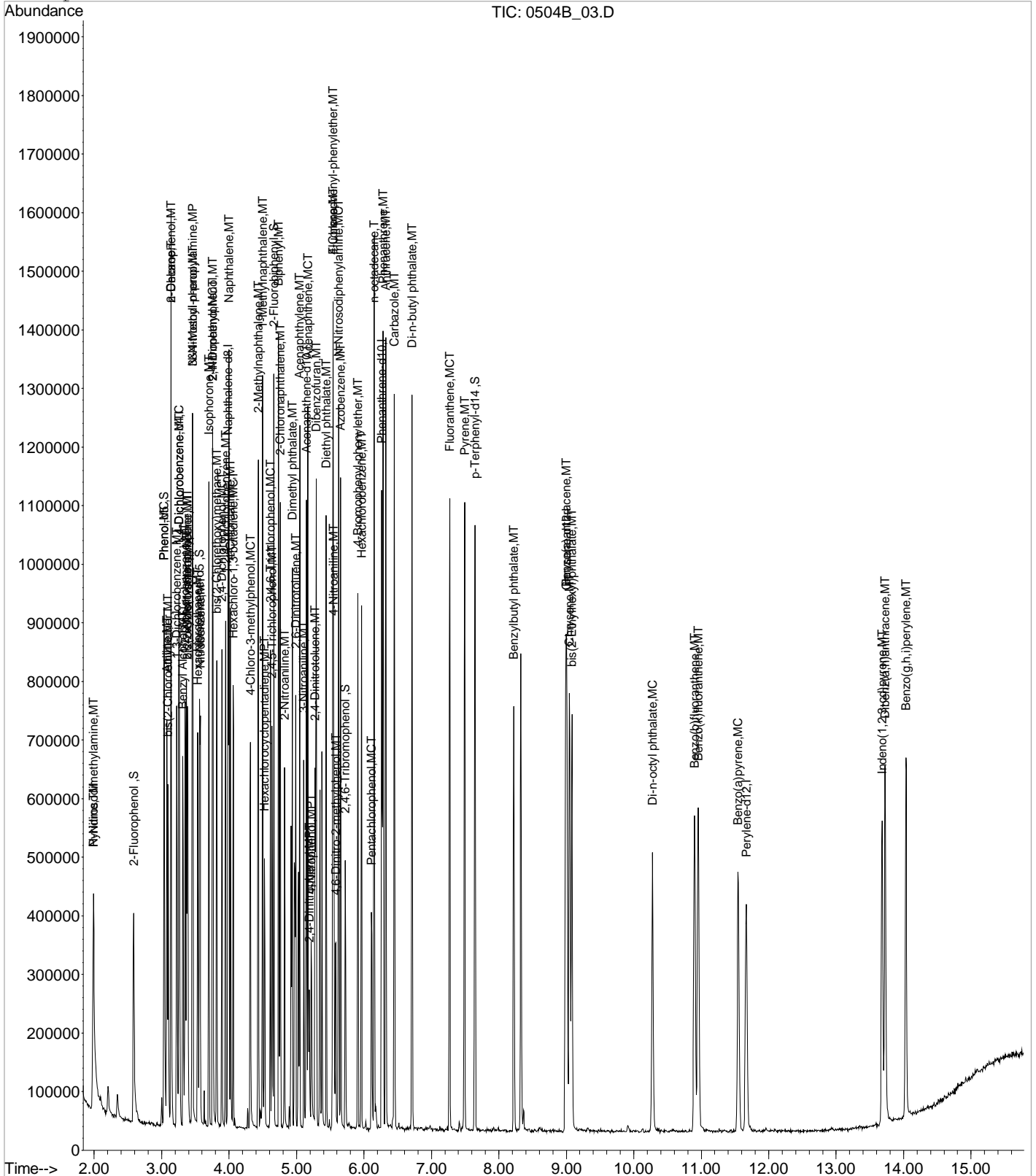
(#) = qualifier out of range (m) = manual integration  
 0504B\_03.D S804E04BV.M Thu May 05 16:04:03 2022

Data File : C:\MSDCHEM\1\DATA\050422B\0504B 03.D
Acq On : 4 May 2022 8:09 pm
Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22
Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22
MS Integration Params: RTEINT.P
Quant Time: May 5 16:03 2022

Vial: 3
Operator: 3545
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804E04BV.RES

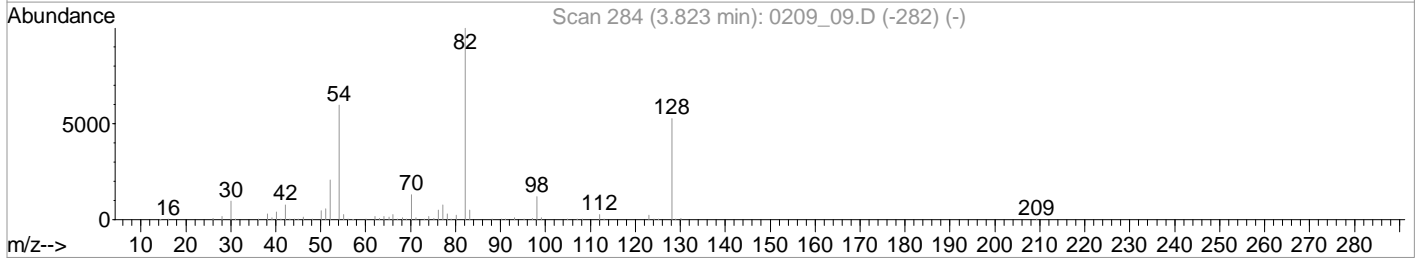
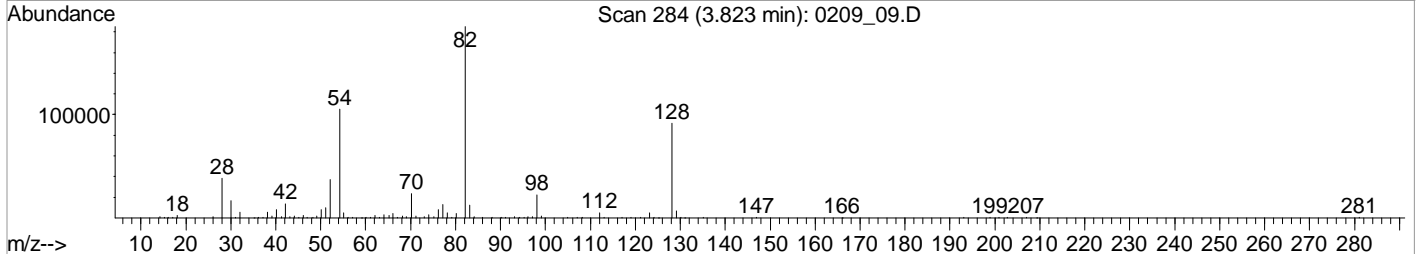
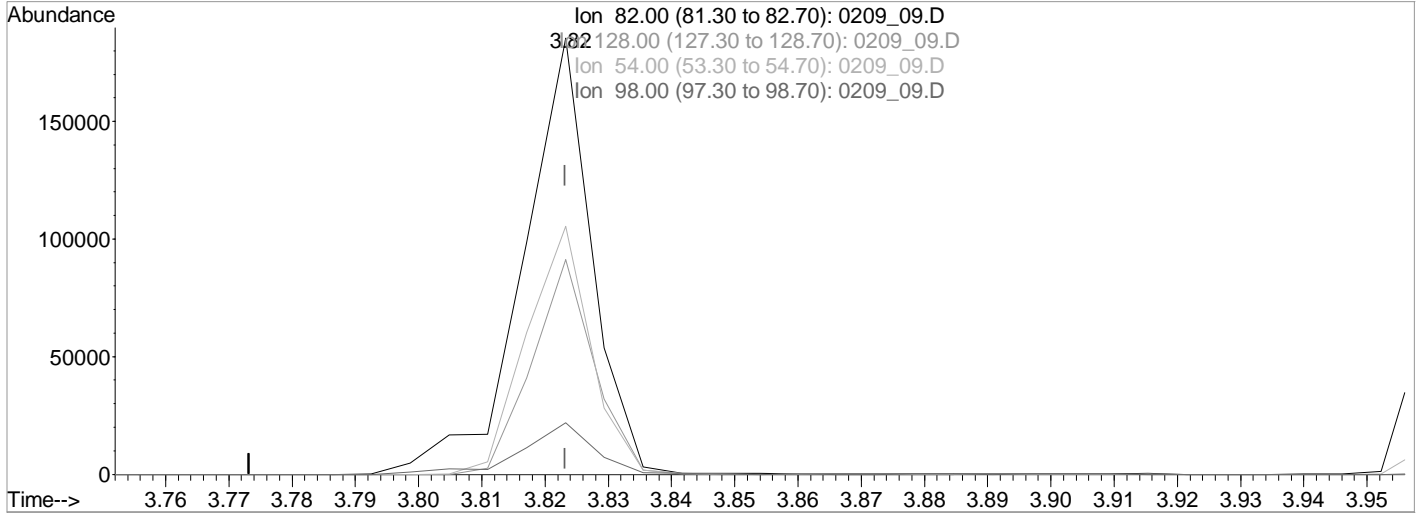
Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)
Title : 8270 BNA
Last Update : Thu May 05 15:59:02 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:46 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_09.D

(24) Nitrobenzene-d5 (S)  
 3.82min (0.000) 11153.2092574 ppb  
 Qvalue = 100  
 response 140768

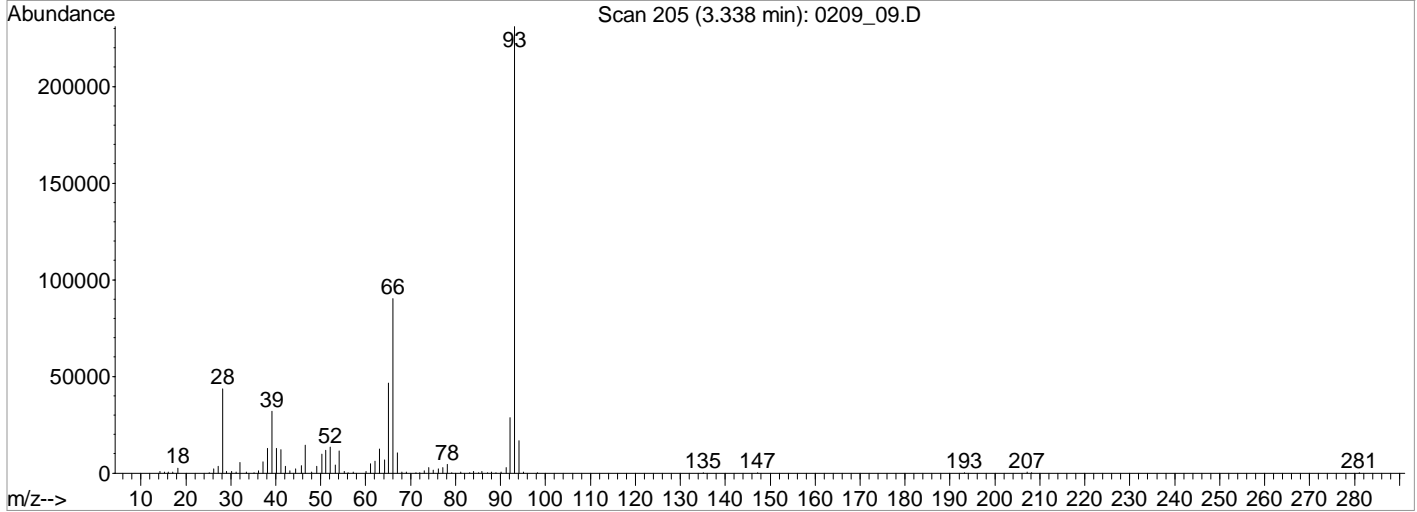
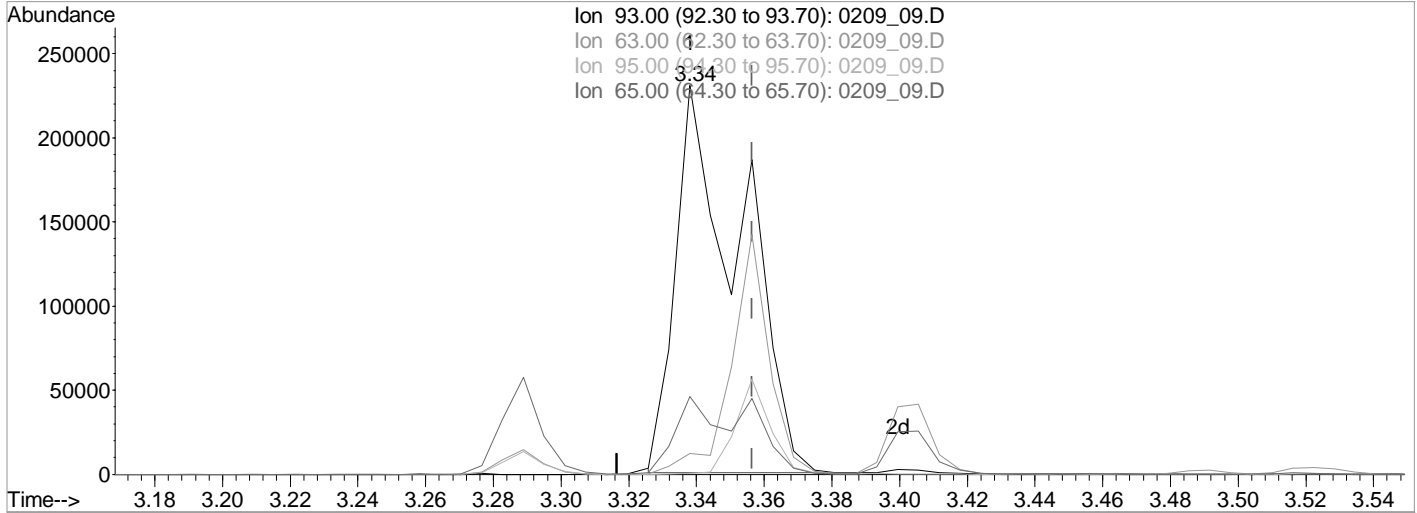
Ion	Exp%	Act%
82.00	100	100
128.00	49.30	49.28
54.00	56.90	56.86
98.00	11.80	11.80



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:49:28 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_09.D

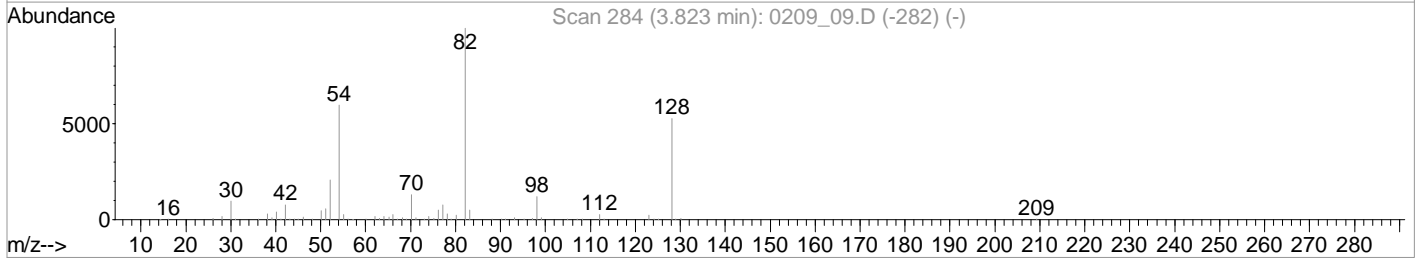
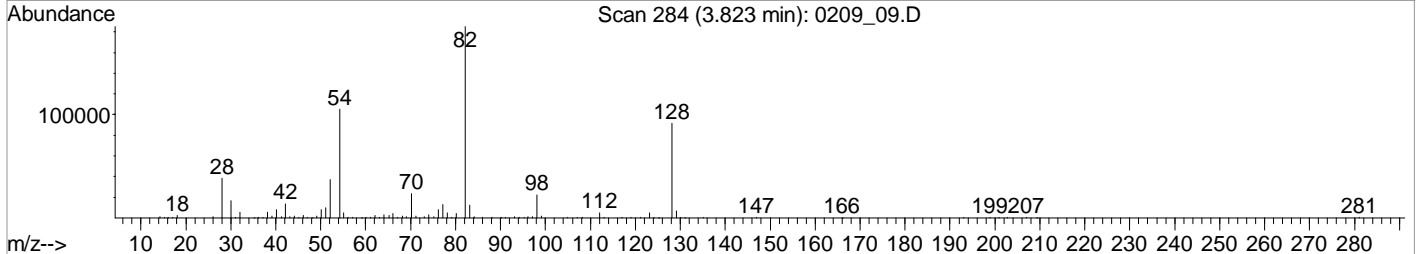
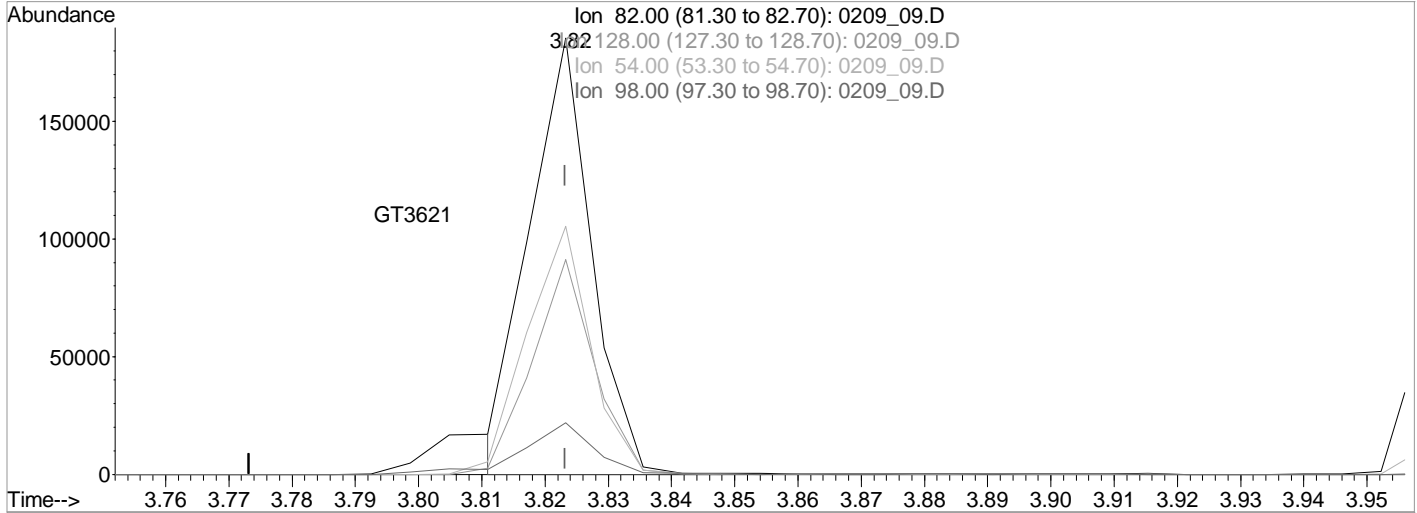
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.018) 29901.8981212 ppb  
 Qvalue = 37  
 response 308767

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.25#
95.00	30.20	0.25#
65.00	24.00	19.97

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_09.D

(24) Nitrobenzene-d5 (S)  
 3.82min (0.000) 9983.3614604 ppb m

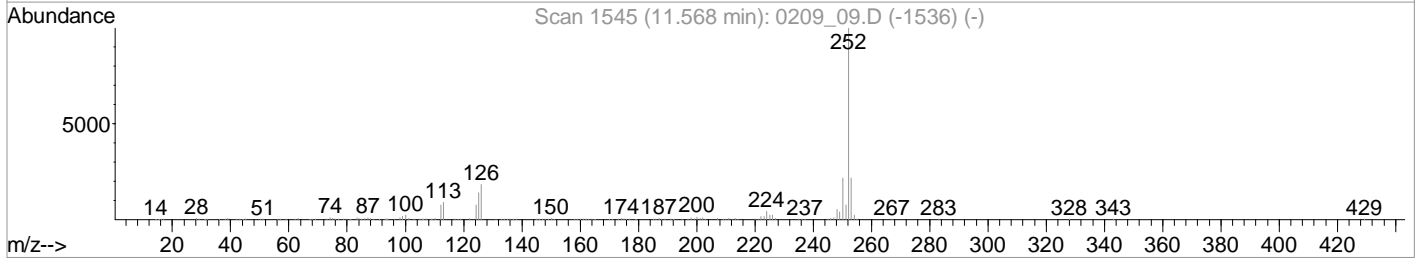
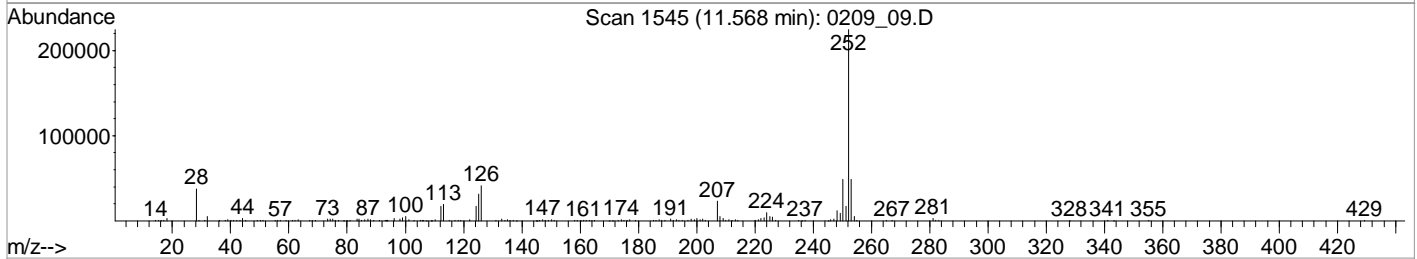
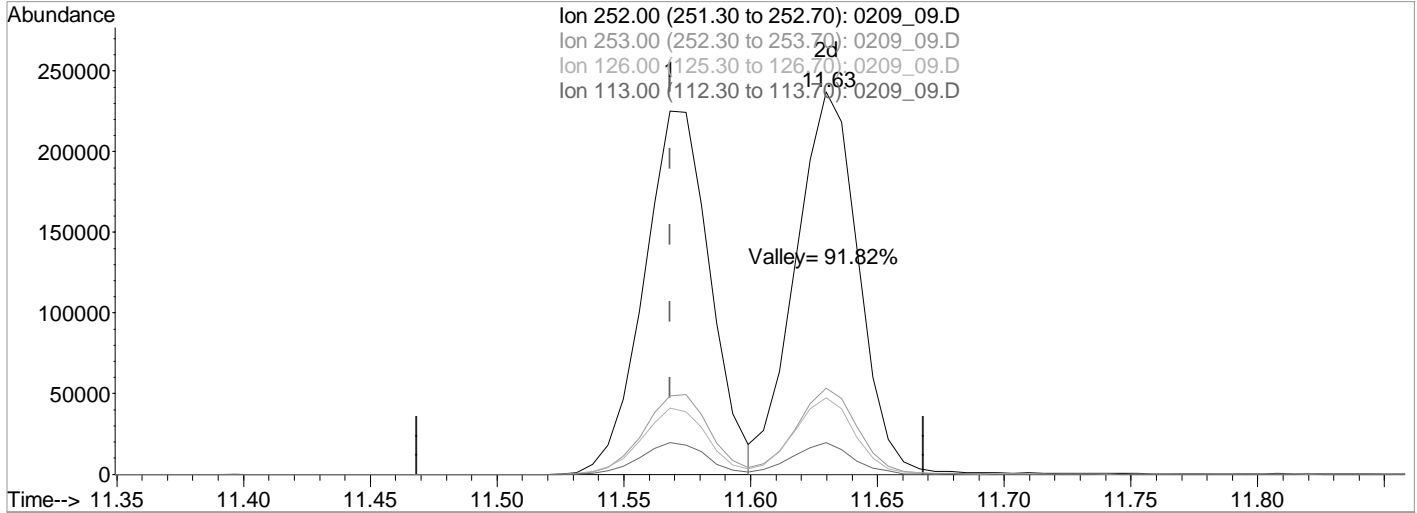
response 126003

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	49.28
54.00	56.90	56.86
98.00	11.80	11.80

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:48 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 11:39:40 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_09.D

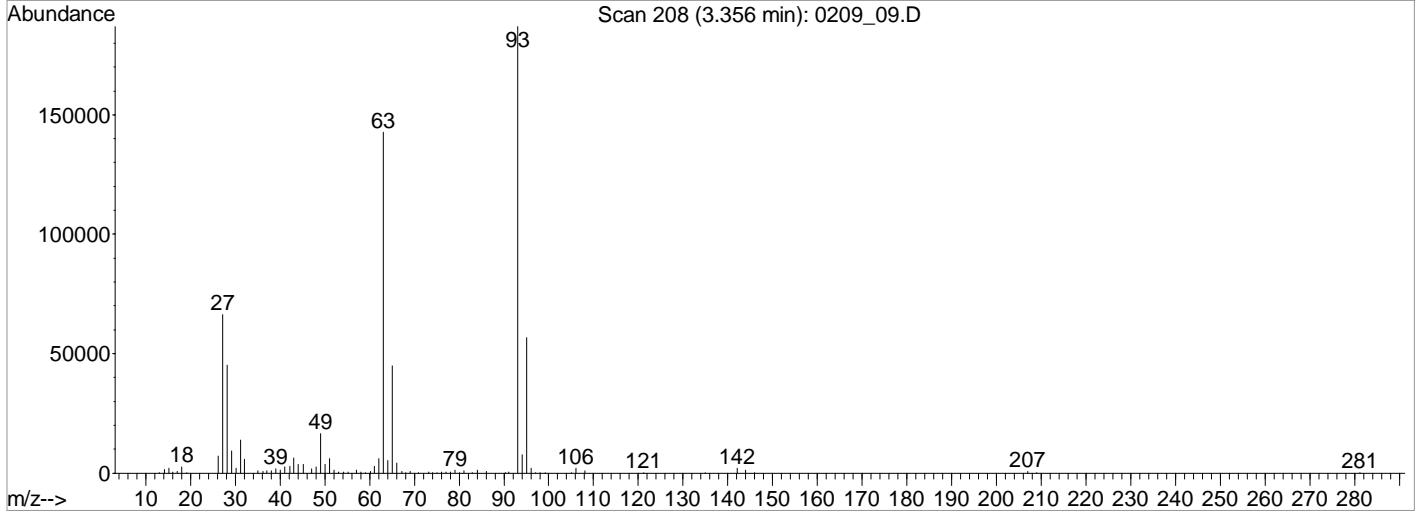
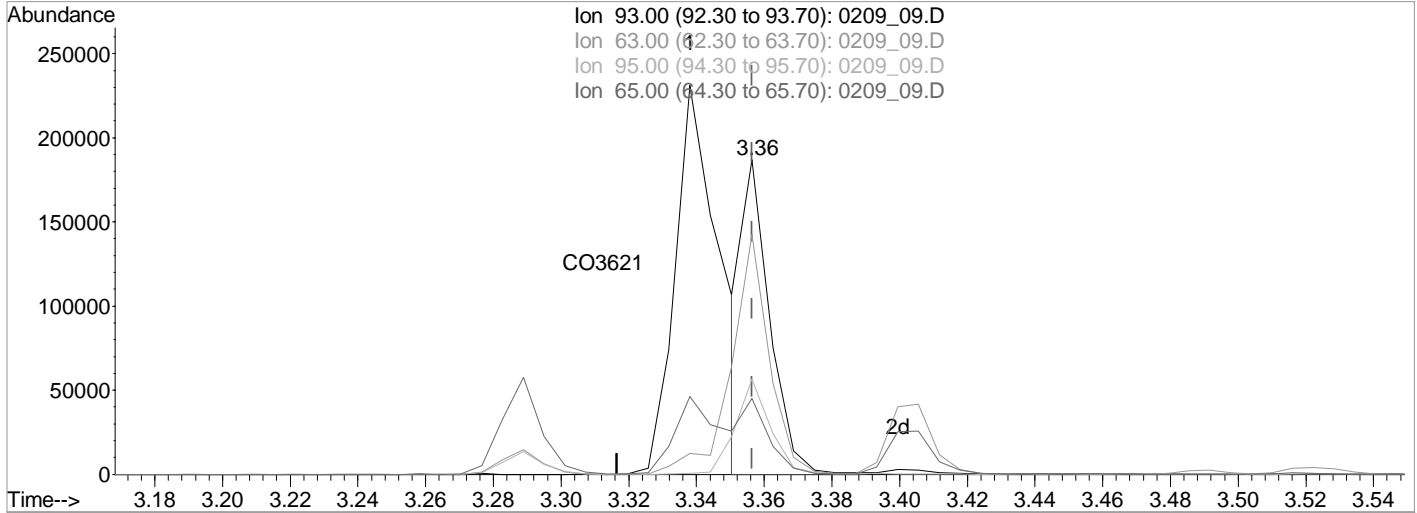
(95) Benzo(b)fluoranthene (MT)  
 11.57min (0.000) 10000.0000000 ppb  
 Qvalue = 100  
 response 408147

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.58
126.00	18.30	18.28
113.00	8.80	8.83

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_09.D Vial: 6  
 Acq On : 9 Feb 2022 11:46 am Operator: 917  
 Sample : MSTD SVMS 10K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:51 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:49:28 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_09.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (0.000) 10000.0000000 ppb m

response	Ion	Exp%	Act%
103260	93.00	100	100
	63.00	76.20	76.22
	95.00	30.20	30.24
	65.00	24.00	24.04

Data File : C:\MSDCHEM\1\DATA\020922\0209 10.D Vial: 7  
 Acq On : 9 Feb 2022 12:07 pm Operator: 917  
 Sample : STD SVMS 20K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:56 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:33:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	86208	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	347138	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	183569	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	330840	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	285073	8000.00	ppb	0.01
94) Perylene-d12	12.39	264	302743	8000.00	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.85	112	272239	18661.6543157	ppb	0.00
Spiked Amount	666.000		Recovery	= 2802.05%		
7) Phenol-d5	3.28	99	324364	18496.6942819	ppb	0.00
Spiked Amount	666.000		Recovery	= 2777.28%		
24) Nitrobenzene-d5	3.82	82	295460	19368.4291281	ppb	0.00
Spiked Amount	333.000		Recovery	= 5816.35%		
50) 2-Fluorobiphenyl	4.95	172	586401	17903.9561881	ppb	0.00
Spiked Amount	333.000		Recovery	= 5376.56%		
73) 2,4,6-Tribromophenol	6.03	330	77136	22666.6083724	ppb	0.00
Spiked Amount	666.000		Recovery	= 3403.39%		
87) p-Terphenyl-d14	8.04	244	789163	20272.1352079	ppb	0.00
Spiked Amount	333.000		Recovery	= 6087.73%		
Target Compounds						
2) Pyridine	2.30	79	261928	19542.3134867	ppb	96
3) N-Nitrosodimethylamine	2.29	42	136057	17864.3509858	ppb	95
5) Aniline	3.34	66	154541	18585.4791613	ppb	96
6) bis(2-Chloroethyl)ether	3.36	93	232095m	9847.6121887	ppb	
8) Phenol	3.29	94	342395	18553.0677715	ppb	100
10) 2-Chlorophenol	3.41	128	272840	18496.2866686	ppb	99
11) n-Decane	3.40	41	157445	17389.9510473	ppb	99
12) 1,3-Dichlorobenzene	3.49	146	306344	18199.5524043	ppb	98
13) 1,4-Dichlorobenzene	3.53	146	320047	18479.3195352	ppb	99
14) Benzyl Alcohol	3.58	79	215987	19320.0163386	ppb	100
15) 1,2-Dichlorobenzene	3.61	146	293093	18376.6949746	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	96264	17046.2821911	ppb	# 60
17) 2,2-oxybis(1-chloropropane	3.65	121	96264	17046.2821911	ppb	# 60
18) 2-Methylphenol	3.62	108	248477	18585.3987464	ppb	98
19) Hexachloroethane	3.80	117	117446	18955.2970174	ppb	99
20) N-Nitrosodi-n-propylamine	3.72	70	181180	18494.1786409	ppb	94
21) 3&4-Methyl phenol	3.71	107	282323	18610.6871902	ppb	98
25) Nitrobenzene	3.84	77	277783	18685.5725230	ppb	99
26) Isophorone	3.97	82	502937	19075.1991737	ppb	92
27) 2-Nitrophenol	4.02	139	143139	20204.6602031	ppb	98
28) 2,4-Dimethylphenol	4.01	107	257480	18549.1054427	ppb	100
29) bis(2-Chlorethoxy)methane	4.08	93	312005	17922.1424470	ppb	99
30) 2,4-Dichlorophenol	4.15	162	221280	19202.5171699	ppb	97
32) 1,2,4-Trichlorobenzene	4.22	180	241090	18087.6469240	ppb	98
34) Naphthalene	4.27	128	844829	18259.7283814	ppb	100
35) 4-Chloroaniline	4.29	65	98492	18538.6186811	ppb	96
36) Hexachloro-1,3-butadiene	4.34	225	131833	18272.6824704	ppb	96
40) 4-Chloro-3-methylphenol	4.58	107	224609	19504.8371308	ppb	97
41) 2-Methylnaphthalene	4.71	142	542000	18003.1584047	ppb	100
42) 1-Methylnaphthalene	4.78	142	513619	18228.4010365	ppb	100
47) Hexachlorocyclopentadiene	4.81	237	168652	19525.3320136	ppb	98
48) 2,4,6-Trichlorophenol	4.89	196	150293	18865.1085833	ppb	99
49) 2,4,5-Trichlorophenol	4.91	196	167246	19927.2482835	ppb	97

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\020922\0209 10.D Vial: 7  
 Acq On : 9 Feb 2022 12:07 pm Operator: 917  
 Sample : STD SVMS 20K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:56 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:33:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
51) Biphenyl	5.02	154	647595	17888.5309328	ppb		100
52) 2-Chloronaphthalene	5.05	162	500906	18068.1297005	ppb		99
53) 2-Nitroaniline	5.11	138	166348	21452.1290308	ppb		100
54) Acenaphthylene	5.34	152	788960	18919.6543485	ppb		100
55) Dimethyl phthalate	5.22	163	534597	19479.6555890	ppb		95
56) 2,6-Dinitrotoluene	5.27	165	129766	21567.5036117	ppb	#	79
57) 3-Nitroaniline	5.40	138	140498	22117.3384802	ppb	#	85
58) Acenaphthene	5.46	153	508839	18134.1011029	ppb		99
59) 2,4-Dinitrophenol	5.47	184	62248	30503.8465152	ppb	#	8
60) Dibenzofuran	5.59	168	713375	18240.2762900	ppb		99
61) 2,4-Dinitrotoluene	5.56	165	167911	23398.2738002	ppb		94
63) 4-Nitrophenol	5.49	139	116283	22354.0769151	ppb		90
64) Fluorene	5.84	166	578867	18529.5764942	ppb		98
65) 4-Chlorophenyl-phenylether	5.83	204	271726	17962.4414075	ppb		98
66) Diethyl phthalate	5.73	149	540003	19010.0642596	ppb		100
67) 4-Nitroaniline	5.84	138	139219	21654.3738027	ppb		98
68) Azobenzene	5.95	77	538003	18780.1955363	ppb		100
71) 4,6-Dinitro-2-methylphenol	5.86	198	86560	28504.1559685	ppb		91
72) N-Nitrosodiphenylamine	5.92	169	483553	19435.6144222	ppb		99
74) 4-Bromophenyl-phenylether	6.21	248	158468	19591.0940675	ppb		99
75) Hexachlorobenzene	6.26	284	171080	18685.5046189	ppb		98
76) n-octadecane	6.45	55	93724	17633.1560311	ppb		98
77) Pentachlorophenol	6.41	266	103486	24396.1140361	ppb		98
78) Phenanthrene	6.59	178	834889	18436.2632779	ppb		99
79) Anthracene	6.63	178	861133	19130.3122795	ppb		100
80) Carbazole	6.75	167	789748	18989.7533321	ppb		100
81) Di-n-butyl phthalate	7.02	149	923993	20402.1772648	ppb		100
83) Fluoranthene	7.64	202	879416	18984.1216772	ppb		100
86) Pyrene	7.88	202	923400	19934.4915246	ppb		99
88) Benzylbutyl phthalate	8.68	149	392900	21875.2708207	ppb		95
90) Benzo(a)anthracene	9.52	228	814305	19407.2635003	ppb		99
91) Chrysene	9.58	228	783536	19067.5727386	ppb		98
92) bis(2-Ethylhexyl)phthalate	9.62	149	543287	22108.5689402	ppb		99
93) Di-n-octyl phthalate	10.92	149	917409	23020.5211479	ppb		99
95) Benzo(b)fluoranthene	11.57	252	833715	18841.8209418	ppb		100
96) Benzo(k)fluoranthene	11.64	252	832949	19248.9008472	ppb		99
97) Benzo(a)pyrene	12.26	252	744155	19933.4238986	ppb		99
98) Indeno(1,2,3-cd)pyrene	14.20	276	743921	19873.7191700	ppb		97
99) Dibenz(a,h)anthracene	14.25	278	777012m	19311.3833174	ppb		
100) Benzo(g,h,i)perylene	14.53	276	761773	18997.7471488	ppb		99

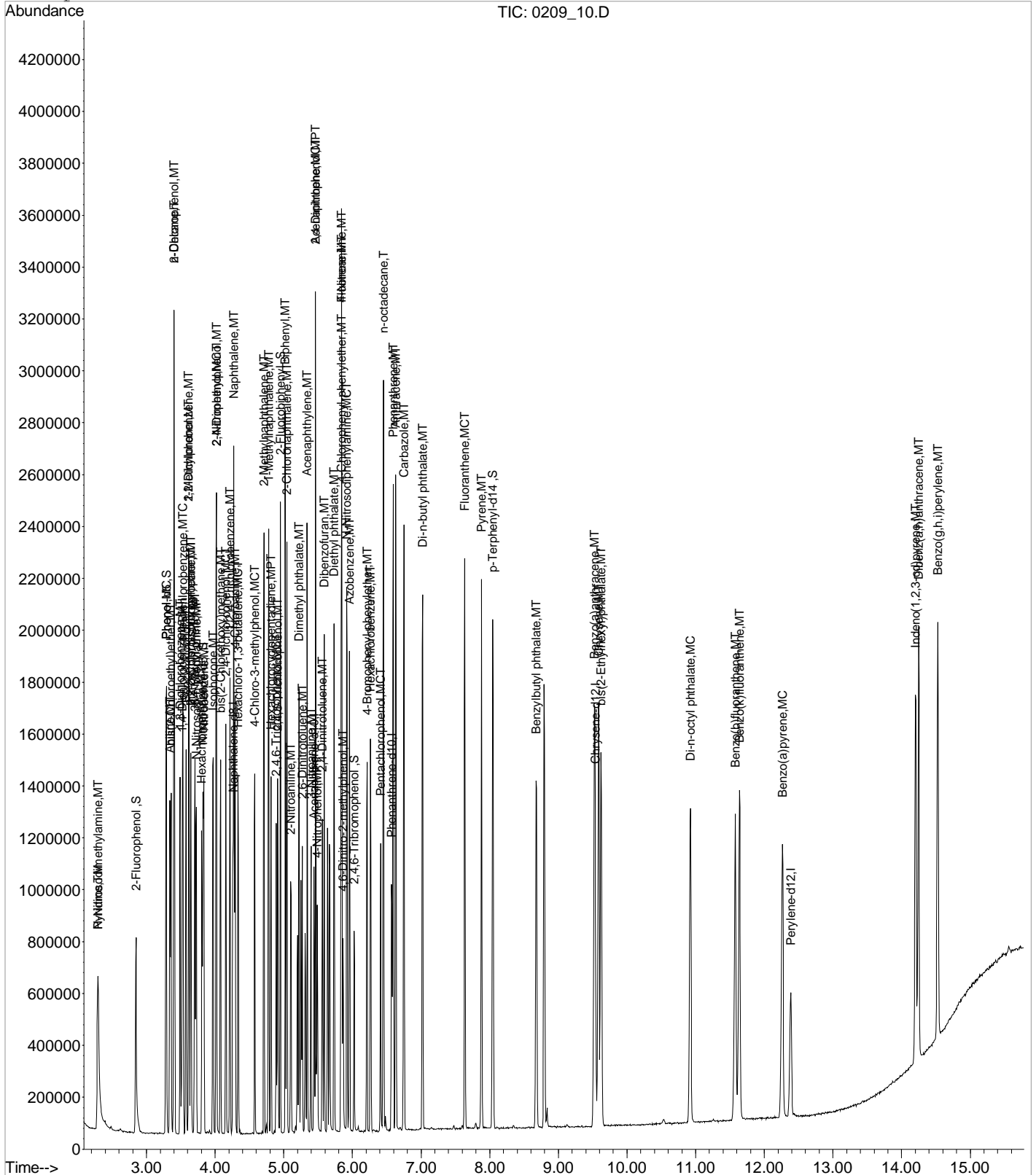
(#) = qualifier out of range (m) = manual integration  
 0209\_10.D S804B09V.M Mon Feb 14 15:57:34 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 10.D
Acq On : 9 Feb 2022 12:07 pm
Sample : STD SVMS 20K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 15:56 2022

Vial: 7
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:53:30 2022
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:00 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	86467	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	338831	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	181617	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	323775	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	286155	8000.00	ppb	0.01
94) Perylene-d12	12.39	264	297513	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	396904	27493.7551409	ppb	0.00
Spiked Amount 666.000			Recovery	= 4128.19%		
7) Phenol-d5	3.28	99	479003	27648.7325708	ppb	0.00
Spiked Amount 666.000			Recovery	= 4151.46%		
24) Nitrobenzene-d5	3.82	82	437748	29586.2873557	ppb	0.00
Spiked Amount 333.000			Recovery	= 8884.77%		
50) 2-Fluorobiphenyl	4.95	172	859895	27104.5580823	ppb	0.00
Spiked Amount 333.000			Recovery	= 8139.51%		
73) 2,4,6-Tribromophenol	6.03	330	114484	33482.6410351	ppb	0.00
Spiked Amount 666.000			Recovery	= 5027.42%		
87) p-Terphenyl-d14	8.05	244	1170779	29880.1096870	ppb	0.00
Spiked Amount 333.000			Recovery	= 8973.01%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.30	79	396351	29618.5269538	ppb	94
3) N-Nitrosodimethylamine	2.29	42	198133	26503.0481554	ppb	92
5) Aniline	3.34	66	225992	27485.7338400	ppb	95
6) bis(2-Chloroethyl)ether	3.36	93	361980m	14180.1077032	ppb	
8) Phenol	3.29	94	503929	27623.8813249	ppb	98
10) 2-Chlorophenol	3.41	128	404850	27781.0061873	ppb	99
11) n-Decane	3.40	41	230021	26008.7813892	ppb	100
12) 1,3-Dichlorobenzene	3.49	146	453285	27340.7451256	ppb	97
13) 1,4-Dichlorobenzene	3.53	146	467492	27327.4140627	ppb	99
14) Benzyl Alcohol	3.58	79	321645	28881.3226194	ppb	100
15) 1,2-Dichlorobenzene	3.61	146	429368	27283.2803134	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	143314	26071.8989188	ppb	# 61
17) 2,2-oxybis(1-chloropropane	3.65	121	143314	26071.8989188	ppb	# 61
18) 2-Methylphenol	3.62	108	367051	27764.9362732	ppb	99
19) Hexachloroethane	3.80	117	171733	27925.7118393	ppb	97
20) N-Nitrosodi-n-propylamine	3.72	70	265139	27395.8653183	ppb	97
21) 3&4-Methyl phenol	3.71	107	417216	27806.7541719	ppb	98
25) Nitrobenzene	3.84	77	406583	28393.2636833	ppb	99
26) Isophorone	3.97	82	744063	29182.2832651	ppb	95
27) 2-Nitrophenol	4.02	139	215234	31062.4386869	ppb	97
28) 2,4-Dimethylphenol	4.02	107	384614	28805.1997458	ppb	95
29) bis(2-Chlorethoxy)methane	4.08	93	456276	27421.6832015	ppb	98
30) 2,4-Dichlorophenol	4.15	162	325979	29214.7349032	ppb	95
32) 1,2,4-Trichlorobenzene	4.22	180	348647	27320.8062112	ppb	98
34) Naphthalene	4.27	128	1231112	27743.8370133	ppb	100
35) 4-Chloroaniline	4.29	65	145575	28488.9054183	ppb	98
36) Hexachloro-1,3-butadiene	4.34	225	192487	27814.1495195	ppb	96
40) 4-Chloro-3-methylphenol	4.58	107	332331	29713.9819067	ppb	96
41) 2-Methylnaphthalene	4.71	142	798214	27717.0946035	ppb	99
42) 1-Methylnaphthalene	4.78	142	749807	27754.8528533	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	252254	29658.8428408	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	239963	30793.8957639	ppb	99
49) 2,4,5-Trichlorophenol	4.92	196	233799	28176.8965672	ppb	90

(#) = qualifier out of range (m) = manual integration

0209\_11.D S804B09V.M Mon Feb 14 16:00:15 2022



Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:00 2022 Quant Results File: S804B09V.RES

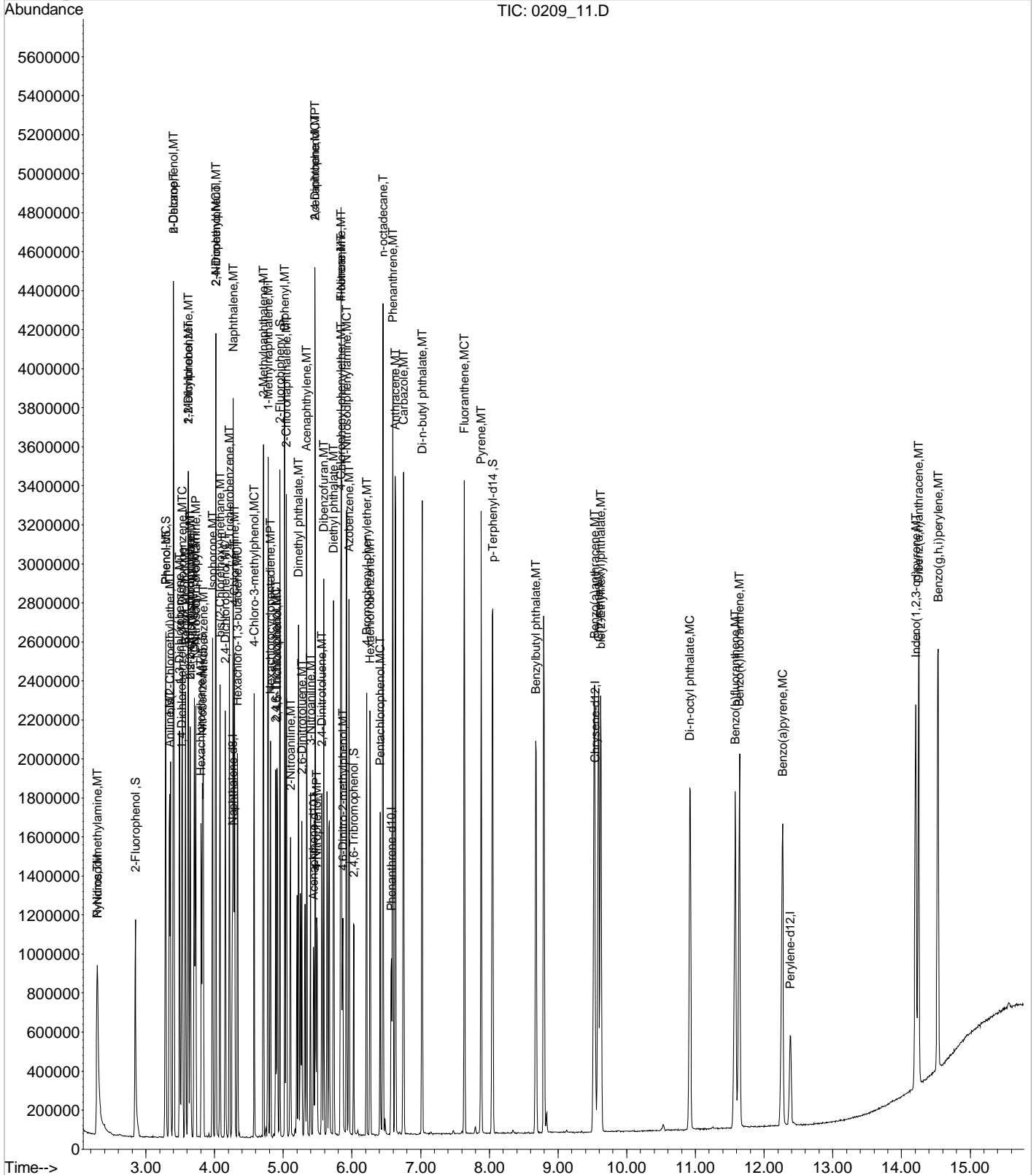
Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
51) Biphenyl	5.02	154	954298	27218.6284076	ppb		100
52) 2-Chloronaphthalene	5.05	162	729917	27135.9728440	ppb		99
53) 2-Nitroaniline	5.11	138	252000	32376.8830601	ppb		99
54) Acenaphthylene	5.34	152	1177864	28861.1488889	ppb		100
55) Dimethyl phthalate	5.22	163	798035	29545.0865909	ppb		98
56) 2,6-Dinitrotoluene	5.27	165	195650	32359.8783339	ppb		87
57) 3-Nitroaniline	5.40	138	214569	33432.8235967	ppb		92
58) Acenaphthene	5.46	153	761361	27946.6119578	ppb		100
59) 2,4-Dinitrophenol	5.47	184	103583	46428.3381283	ppb	#	5
60) Dibenzofuran	5.59	168	1040729	27378.1723117	ppb		100
61) 2,4-Dinitrotoluene	5.56	165	250004	34055.0234732	ppb		91
63) 4-Nitrophenol	5.49	139	179386	34053.8922654	ppb		94
64) Fluorene	5.84	166	862949	28336.6208660	ppb		98
65) 4-Chlorophenyl-phenylether	5.83	204	395130	26949.9161147	ppb		98
66) Diethyl phthalate	5.73	149	813472	29234.3554715	ppb		99
67) 4-Nitroaniline	5.85	138	203025	31398.8262569	ppb		98
68) Azobenzene	5.95	77	792154	28294.2375148	ppb		99
71) 4,6-Dinitro-2-methylphenol	5.87	198	135786	42108.9352390	ppb		92
72) N-Nitrosodiphenylamine	5.92	169	724399	29920.2193573	ppb		99
74) 4-Bromophenyl-phenylether	6.21	248	234282	29717.3604968	ppb		98
75) Hexachlorobenzene	6.27	284	257996	29176.9503169	ppb		98
76) n-octadecane	6.45	55	136953	26966.7219366	ppb		98
77) Pentachlorophenol	6.41	266	156898	36203.1890934	ppb		96
78) Phenanthrene	6.59	178	1222718	28027.8670594	ppb		99
79) Anthracene	6.64	178	1260001	28852.9977991	ppb		100
80) Carbazole	6.75	167	1111930	27598.9585677	ppb		99
81) Di-n-butyl phthalate	7.02	149	1387515	31180.0704196	ppb		100
83) Fluoranthene	7.64	202	1317288	29355.2678784	ppb		100
86) Pyrene	7.88	202	1371296	29511.1301678	ppb		99
88) Benzylbutyl phthalate	8.68	149	589200	32078.9480949	ppb		96
90) Benzo(a)anthracene	9.53	228	1211731	28941.4341701	ppb		99
91) Chrysene	9.59	228	1161595	28425.9125421	ppb		99
92) bis(2-Ethylhexyl)phthalate	9.62	149	821035	32597.5941135	ppb		99
93) Di-n-octyl phthalate	10.92	149	1390793	33747.8146961	ppb		99
95) Benzo(b)fluoranthene	11.58	252	1234766	28728.7906567	ppb		99
96) Benzo(k)fluoranthene	11.64	252	1230724	29160.2102659	ppb		98
97) Benzo(a)pyrene	12.27	252	1103829	30107.7078810	ppb		99
98) Indeno(1,2,3-cd)pyrene	14.21	276	1064818	28983.0879255	ppb		98
99) Dibenz(a,h)anthracene	14.25	278	1133383m	28860.8413210	ppb		
100) Benzo(g,h,i)perylene	14.53	276	1087164	27868.5544106	ppb		94

(#) = qualifier out of range (m) = manual integration  
 0209\_11.D S804B09V.M Mon Feb 14 16:00:15 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8
Acq On : 9 Feb 2022 12:27 pm Operator: 917
Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 14 16:00 2022 Quant Results File: S804B09V.RES

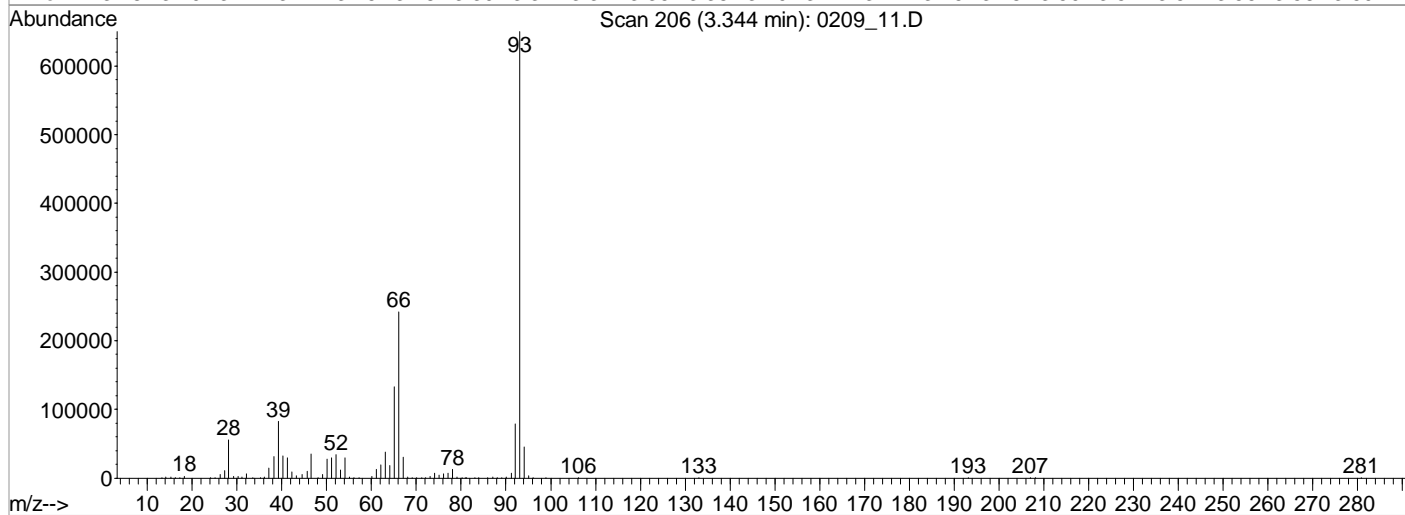
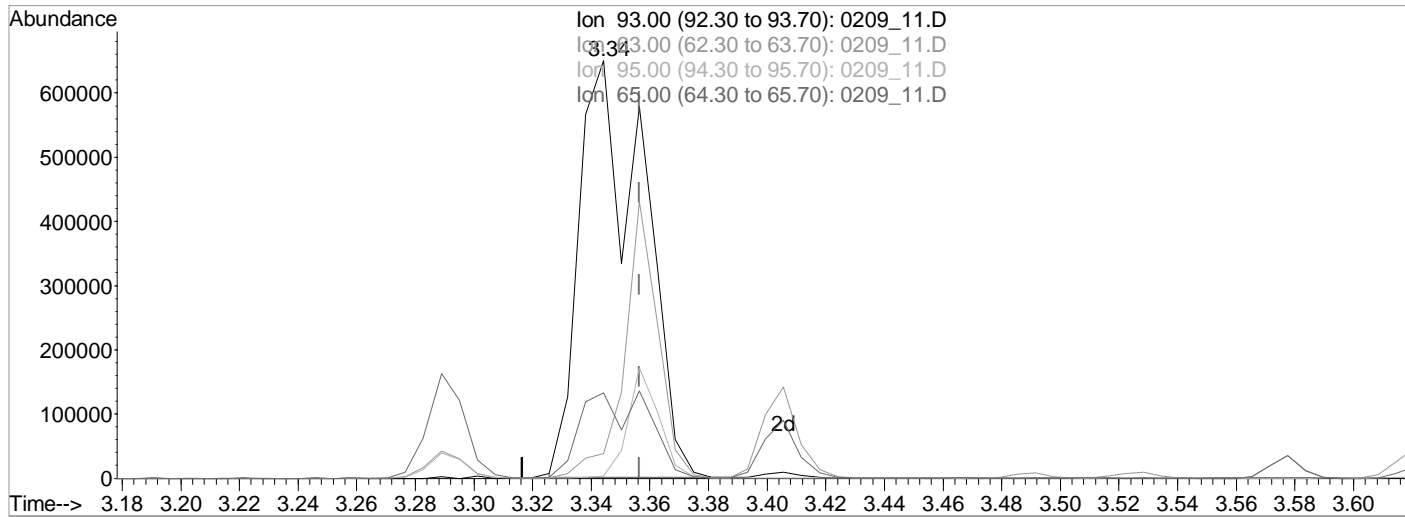
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 15:58:05 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:41 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

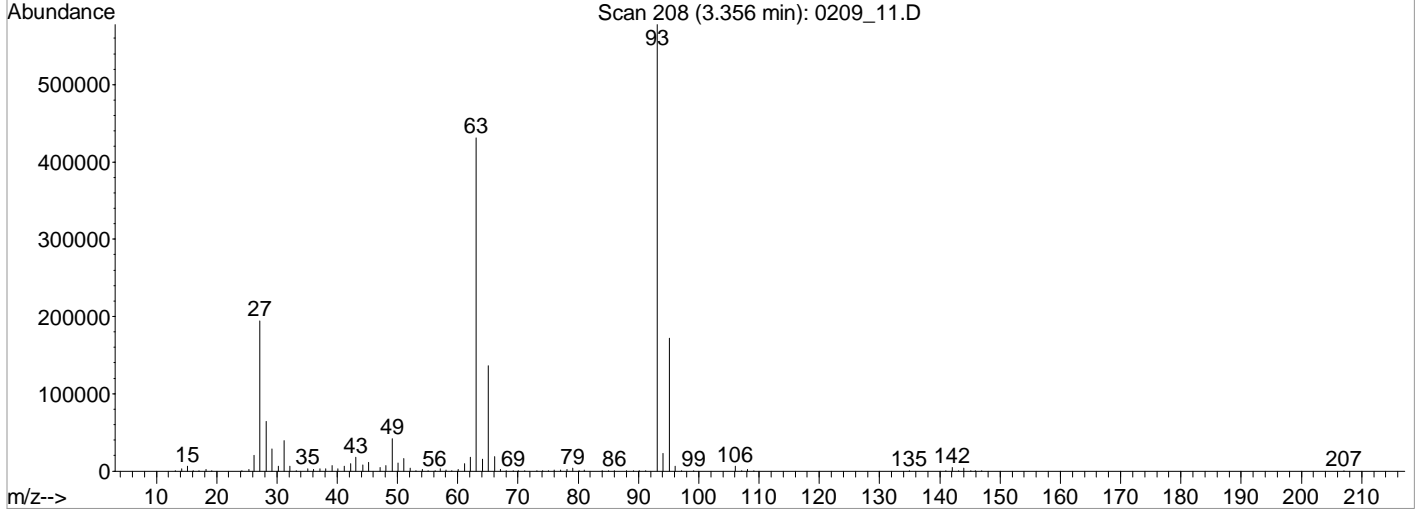
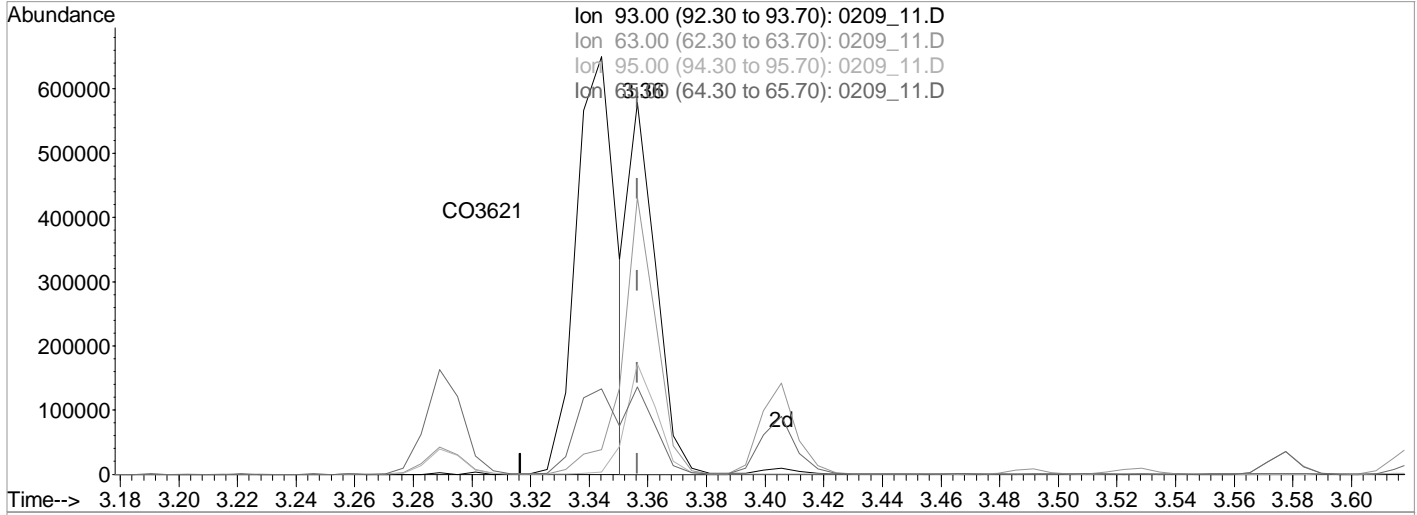
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 38212.7225291 ppb  
 Qvalue = 38  
 response 975468

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.77#
95.00	30.20	0.50#
65.00	24.00	20.39

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:41 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

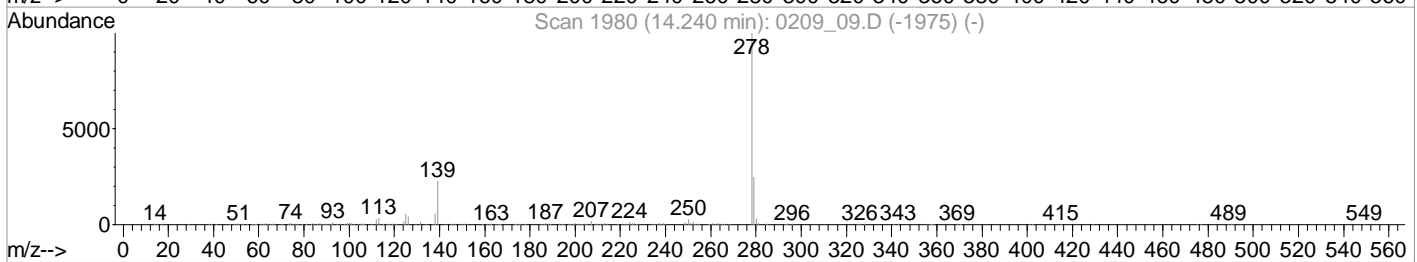
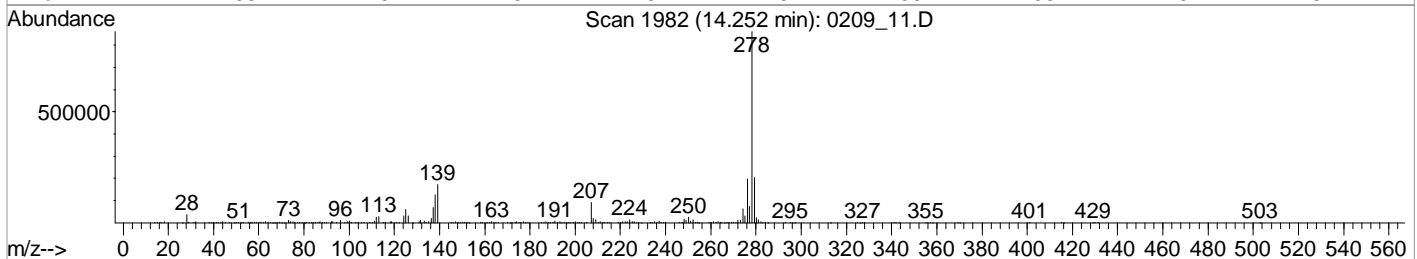
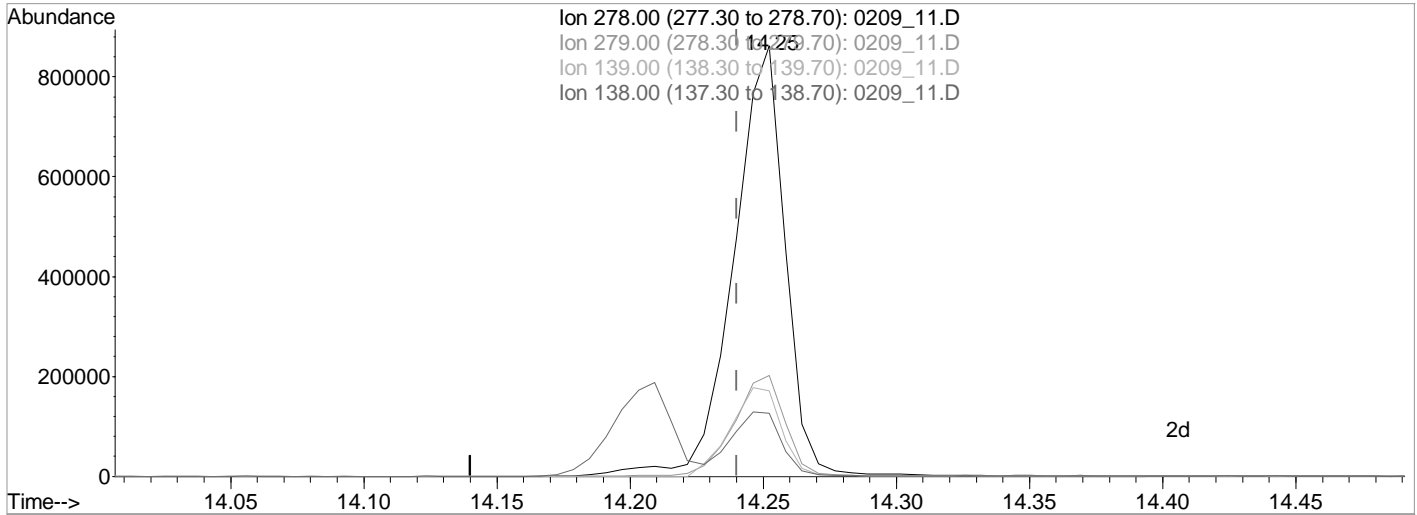
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 38212.7225291 ppb  
 Qvalue = 38  
 response 975468

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.77#
95.00	30.20	0.50#
65.00	24.00	20.39

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:41 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

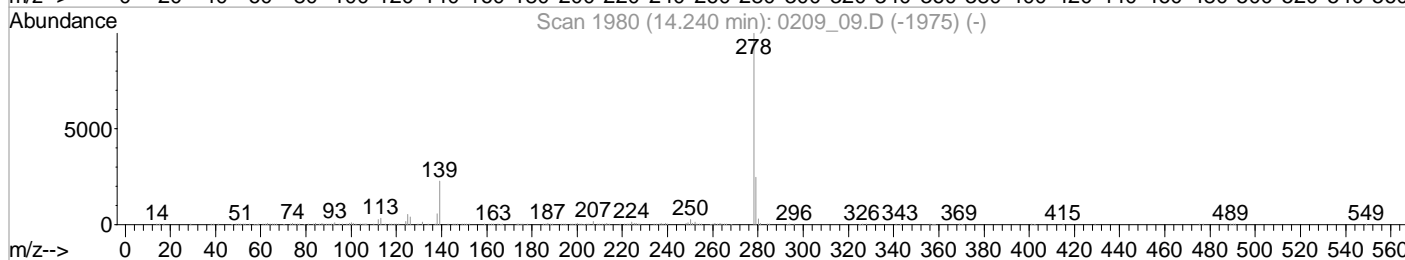
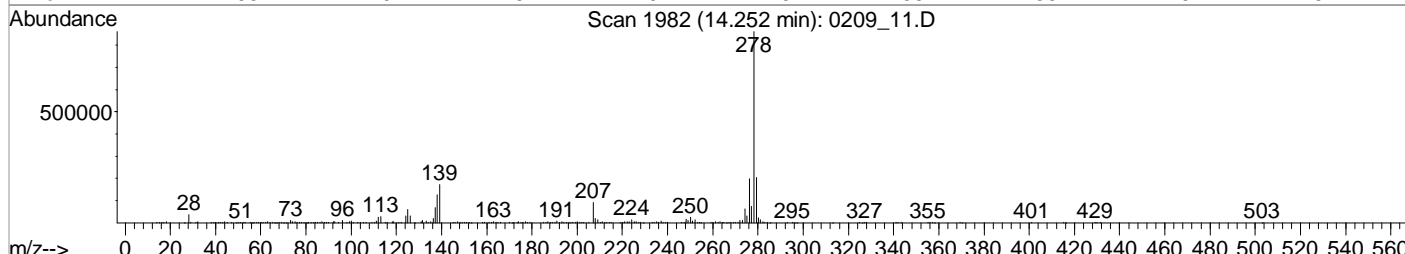
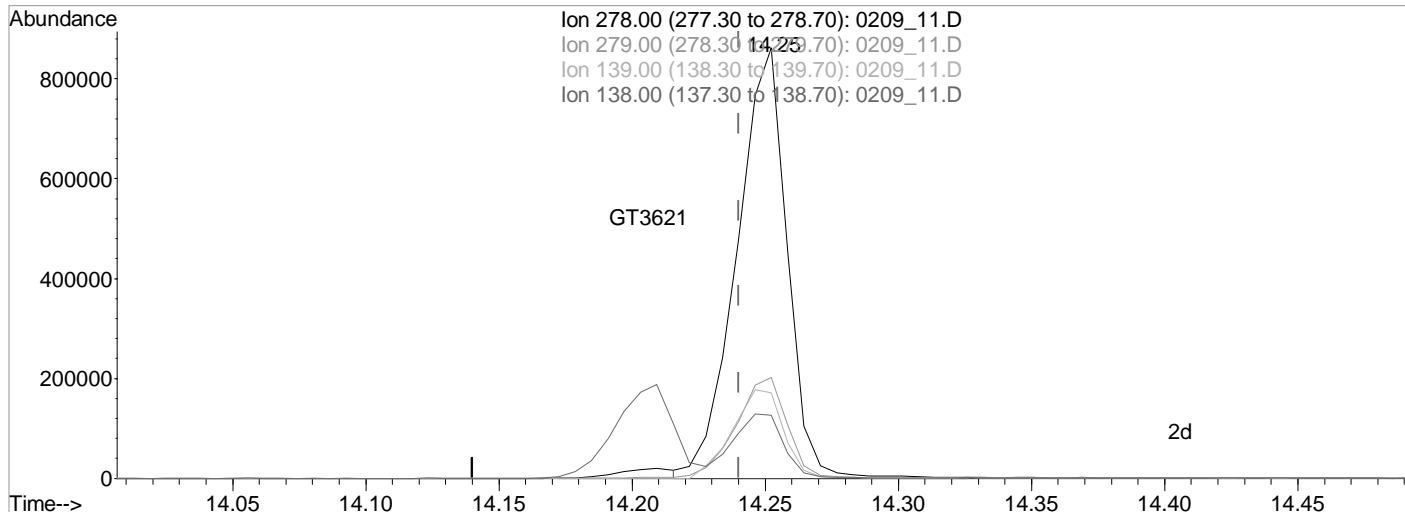
(99) Dibenz(a,h)anthracene (MT)  
 14.25min (+0.012) 29724.9225085 ppb  
 Qvalue = 96  
 response 1167316

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.43
139.00	22.10	19.81
138.00	16.70	14.55

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:46 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:40:00 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

(99) Dibenz(a,h)anthracene (MT)  
 14.25min (+0.012) 28882.0021811 ppb m

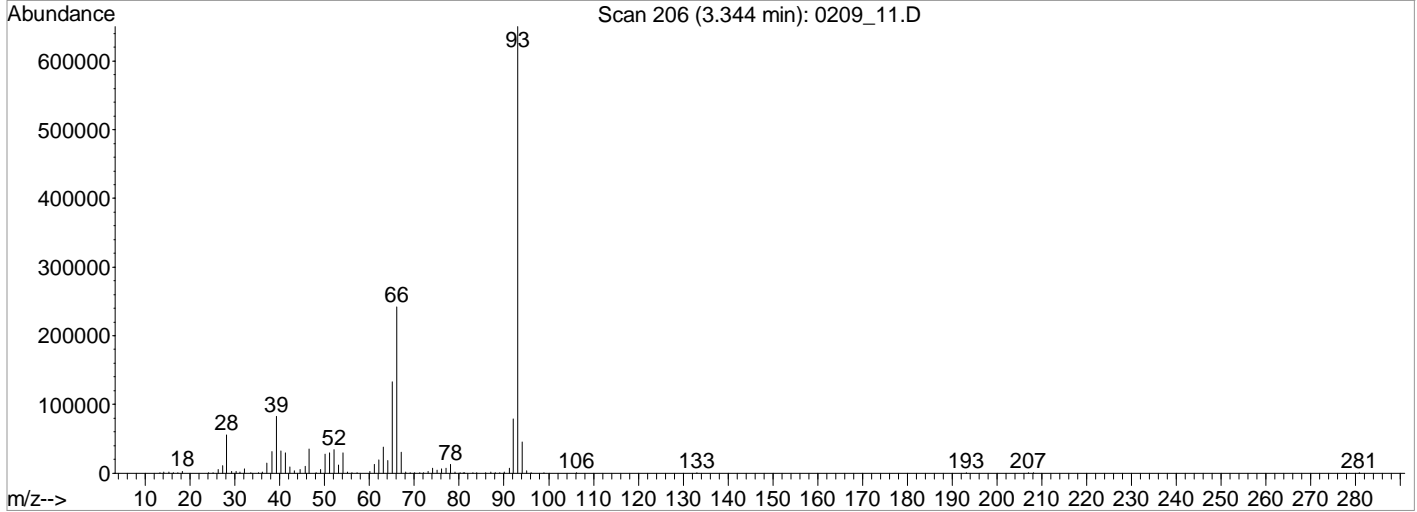
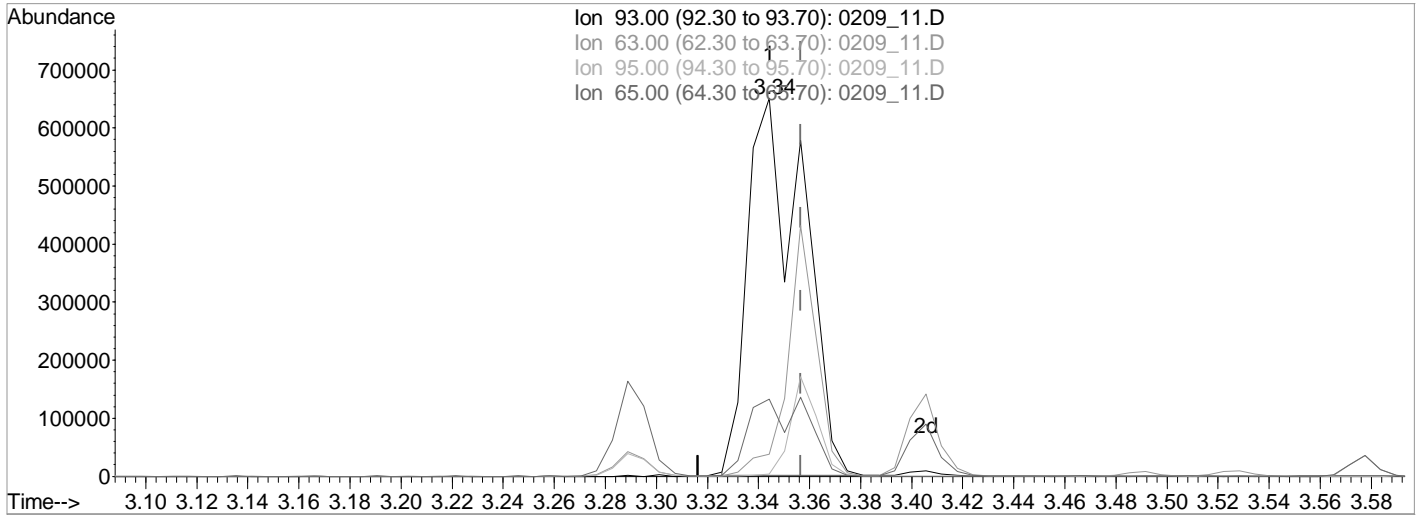
response 1134214

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.46
139.00	22.10	19.84
138.00	16.70	14.59

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:46 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:58:05 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

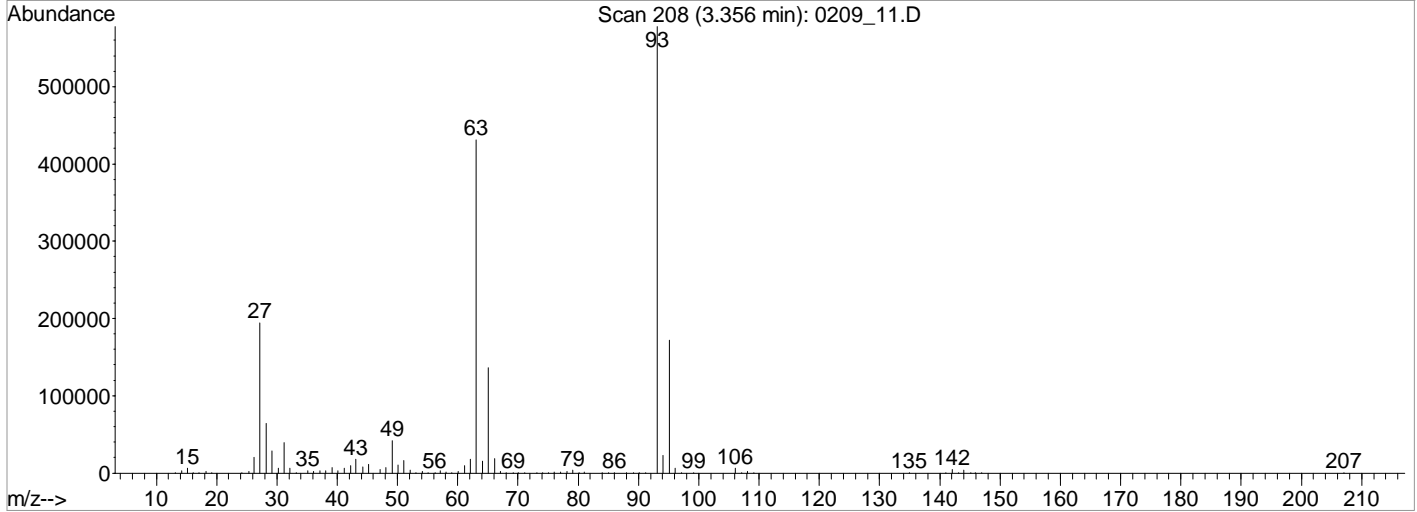
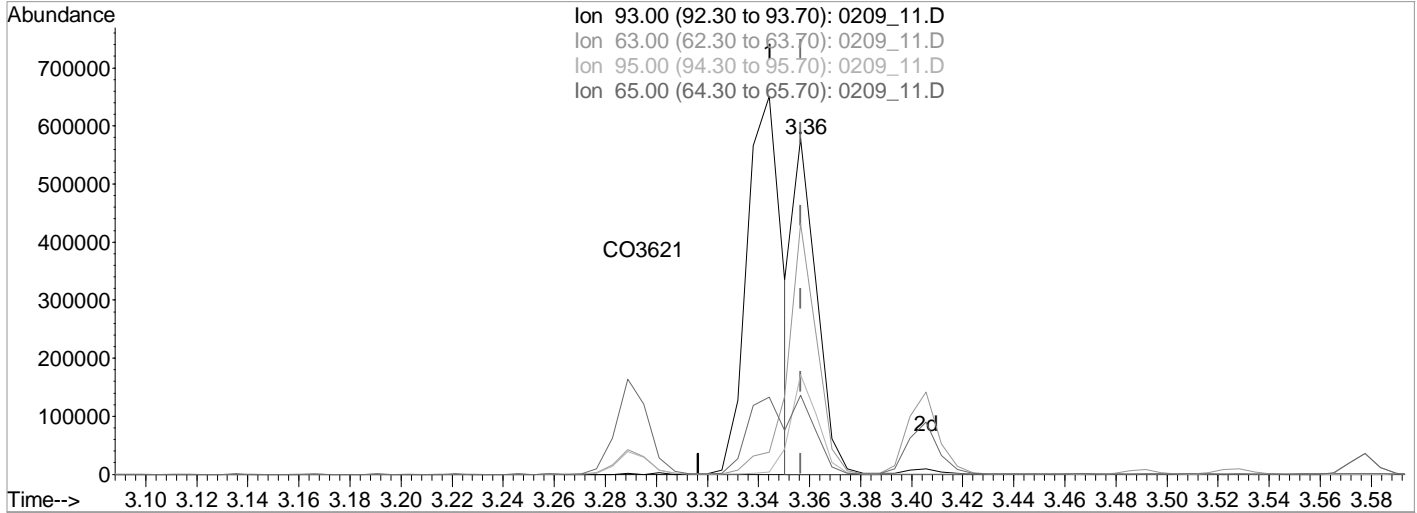
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 38212.7225291 ppb  
 Qvalue = 38  
 response 975468

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.77#
95.00	30.20	0.50#
65.00	24.00	20.39

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
 Acq On : 9 Feb 2022 12:27 pm Operator: 917  
 Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 15:59 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 15:58:05 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_11.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (-0.000) 14180.1077032 ppb m

response 361980

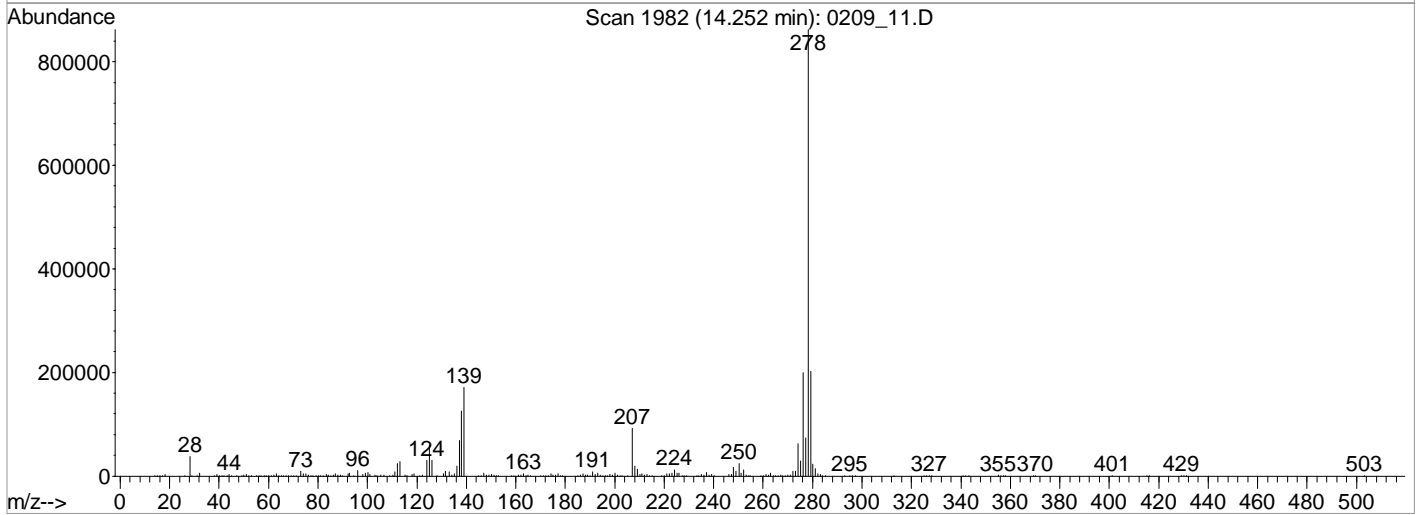
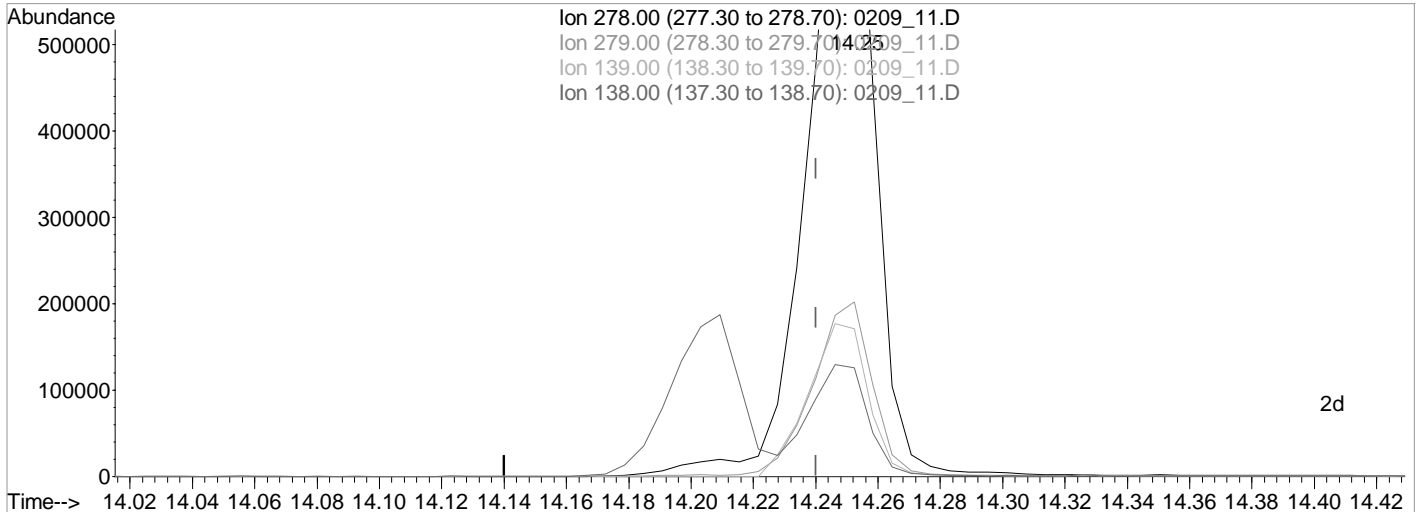
Ion	Exp%	Act%
93.00	100	100
63.00	76.20	74.57
95.00	30.20	29.67
65.00	24.00	23.57



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
Acq On : 9 Feb 2022 12:27 pm Operator: 917  
Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Feb 14 15:59 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Mon Feb 14 15:58:05 2022  
Response via : Multiple Level Calibration



TIC: 0209\_11.D

(99) Dibenz(a,h)anthracene (MT)  
14.25min (+0.012) 29577.4840246 ppb m

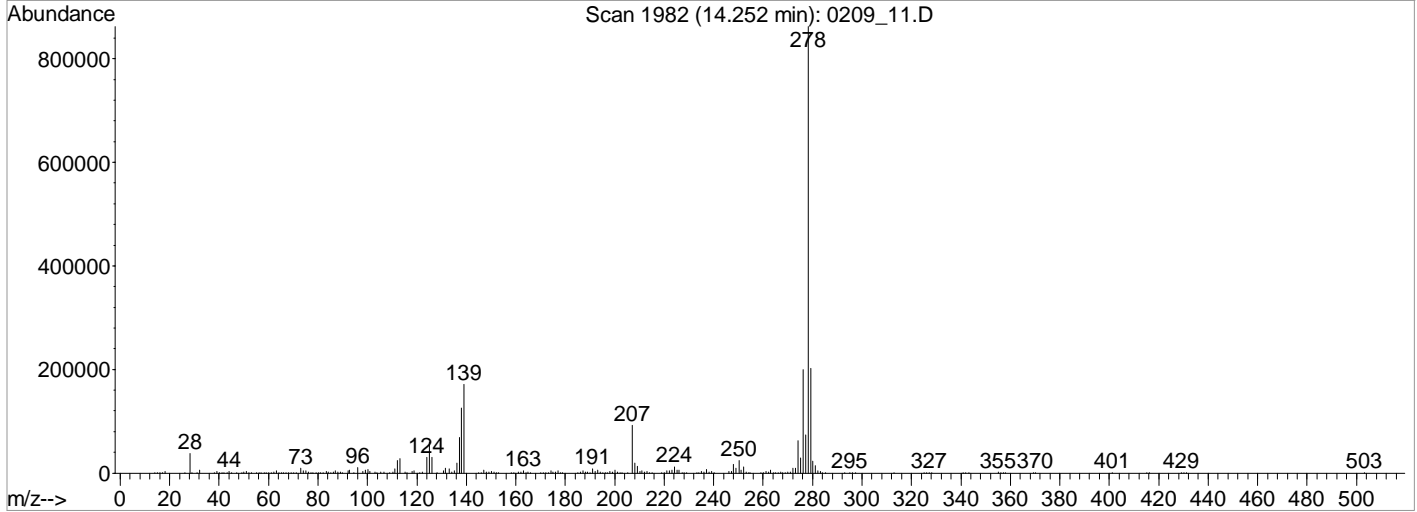
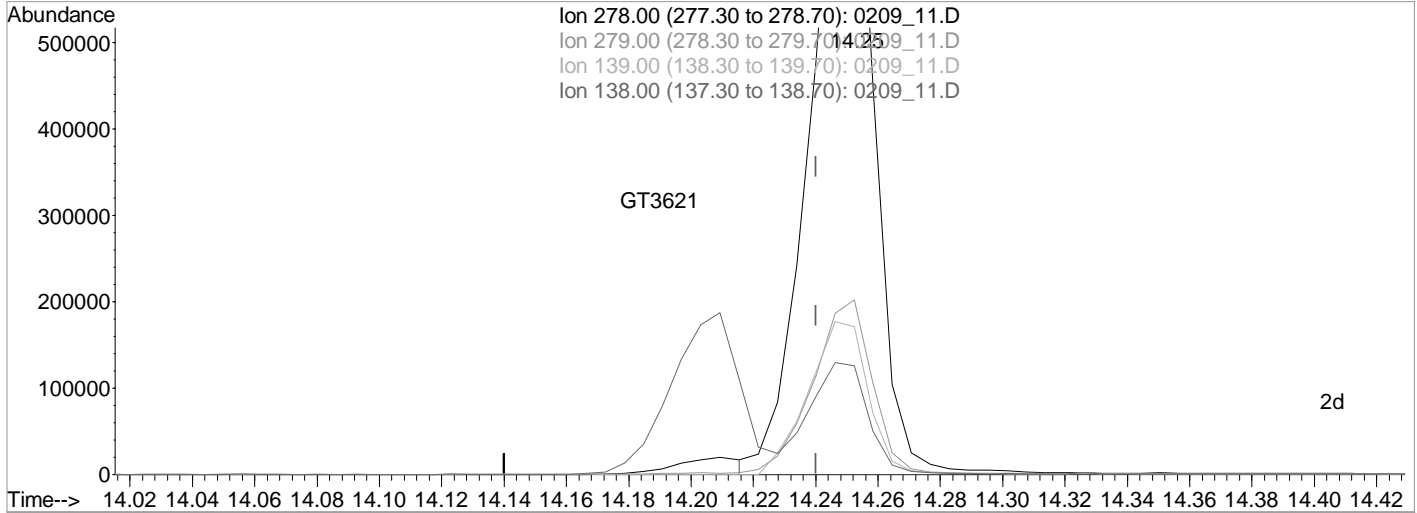
response 1161526

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.46
139.00	22.10	19.84
138.00	16.70	14.59

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 11.D Vial: 8  
Acq On : 9 Feb 2022 12:27 pm Operator: 917  
Sample : STD SVMS 30K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Feb 14 16:00 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Mon Feb 14 15:58:05 2022  
Response via : Multiple Level Calibration



TIC: 0209\_11.D

(99) Dibenz(a,h)anthracene (MT)  
14.25min (+0.012) 28860.8413210 ppb m

response 1133383

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.46
139.00	22.10	19.84
138.00	16.70	14.59

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:10 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	87467m	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	341732	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	182560	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	318126	8000.00	ppb	0.00
84) Chrysene-d12	9.55	240	292226	8000.00	ppb	0.02
94) Perylene-d12	12.39	264	304548	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	531044	37370.2200771	ppb	0.00
Spiked Amount 666.000				Recovery = 5611.14%		
7) Phenol-d5	3.28	99	637749	37392.5144194	ppb	0.00
Spiked Amount 666.000				Recovery = 5614.49%		
24) Nitrobenzene-d5	3.82	82	583502	40242.1631535	ppb	0.00
Spiked Amount 333.000				Recovery = 12084.73%		
50) 2-Fluorobiphenyl	4.95	172	1151371	37386.3354702	ppb	0.00
Spiked Amount 333.000				Recovery = 11227.13%		
73) 2,4,6-Tribromophenol	6.03	330	159920	44407.1598699	ppb	0.00
Spiked Amount 666.000				Recovery = 6667.74%		
87) p-Terphenyl-d14	8.05	244	1610324	40322.5863908	ppb	0.00
Spiked Amount 333.000				Recovery = 12108.88%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.29	79	530979	39242.0417090	ppb	94
3) N-Nitrosodimethylamine	2.28	42	266600	36709.1991107	ppb	92
5) Aniline	3.34	66	302187	37348.2466300	ppb	94
6) bis(2-Chloroethyl)ether	3.36	93	492159m	27672.6256004	ppb	
8) Phenol	3.29	94	672710	37444.4764522	ppb	97
10) 2-Chlorophenol	3.41	128	540976	37608.6060560	ppb	99
11) n-Decane	3.40	41	301867	35628.1919174	ppb	98
12) 1,3-Dichlorobenzene	3.49	146	608753	37429.1238340	ppb	99
13) 1,4-Dichlorobenzene	3.53	146	623673	37255.8873494	ppb	99
14) Benzyl Alcohol	3.58	79	428419	38508.7772803	ppb	100
15) 1,2-Dichlorobenzene	3.61	146	571666	37149.2358810	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	186702	35455.3036766	ppb	# 59
17) 2,2-oxybis(1-chloropropane	3.65	121	186702	35455.3036766	ppb	# 59
18) 2-Methylphenol	3.62	108	484867	37303.1335811	ppb	98
19) Hexachloroethane	3.80	117	230924	38001.5428483	ppb	98
20) N-Nitrosodi-n-propylamine	3.72	70	356081	37487.0261982	ppb	99
21) 3&4-Methyl phenol	3.71	107	554387	37549.4457488	ppb	98
25) Nitrobenzene	3.84	77	541148	38169.6686673	ppb	97
26) Isophorone	3.97	82	988961	38885.7931128	ppb	97
27) 2-Nitrophenol	4.02	139	293528	41077.0676710	ppb	94
28) 2,4-Dimethylphenol	4.02	107	507150	38214.6705164	ppb	96
29) bis(2-Chlorethoxy)methane	4.08	93	608273	37406.3337815	ppb	97
30) 2,4-Dichlorophenol	4.15	162	436215	39017.8213772	ppb	94
32) 1,2,4-Trichlorobenzene	4.22	180	470672	37610.3096616	ppb	98
34) Naphthalene	4.27	128	1638066	37641.7190686	ppb	100
35) 4-Chloroaniline	4.29	65	192978	38165.4842430	ppb	98
36) Hexachloro-1,3-butadiene	4.34	225	260451	38150.0890158	ppb	96
40) 4-Chloro-3-methylphenol	4.58	107	441649	39189.2944371	ppb	95
41) 2-Methylnaphthalene	4.71	142	1071294	37779.6978255	ppb	99
42) 1-Methylnaphthalene	4.78	142	1018387	38216.0571488	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	340960	39863.7559909	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	320804	40515.0174392	ppb	97
49) 2,4,5-Trichlorophenol	4.92	196	322612	39149.4243208	ppb	90

(#) = qualifier out of range (m) = manual integration

0209\_12.D S804B09V.M Mon Feb 14 16:14:43 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:10 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
51) Biphenyl	5.02	154	1303316	38111.3359445	ppb		99
52) 2-Chloronaphthalene	5.05	162	979007	37511.8057862	ppb		98
53) 2-Nitroaniline	5.11	138	342351	42317.5955894	ppb		98
54) Acenaphthylene	5.34	152	1588608	39126.7393856	ppb		99
55) Dimethyl phthalate	5.22	163	1058778	39157.6162617	ppb		100
56) 2,6-Dinitrotoluene	5.27	165	260810	41603.1785962	ppb		95
57) 3-Nitroaniline	5.40	138	286828	42495.3425702	ppb		96
58) Acenaphthene	5.47	153	1013503	37945.6657033	ppb		96
59) 2,4-Dinitrophenol	5.47	184	145907	52538.8415132	ppb	#	17
60) Dibenzofuran	5.59	168	1401121	37825.9781253	ppb		100
61) 2,4-Dinitrotoluene	5.57	165	344829	43923.7949054	ppb		97
63) 4-Nitrophenol	5.49	139	240093	43064.5466551	ppb		95
64) Fluorene	5.84	166	1159234	38581.5718380	ppb		99
65) 4-Chlorophenyl-phenylether	5.84	204	535116	37555.3657476	ppb		88
66) Diethyl phthalate	5.73	149	1089772	39339.9868130	ppb		99
67) 4-Nitroaniline	5.85	138	213656	33796.9567868	ppb		96
68) Azobenzene	5.95	77	1061155	38402.5673874	ppb		100
71) 4,6-Dinitro-2-methylphenol	5.87	198	176996	48081.6828813	ppb		99
72) N-Nitrosodiphenylamine	5.92	169	982230	40631.4208105	ppb		99
74) 4-Bromophenyl-phenylether	6.21	248	315621	40228.8334657	ppb		94
75) Hexachlorobenzene	6.27	284	348572	39928.9901746	ppb		99
76) n-octadecane	6.45	55	187466	38513.5503620	ppb		98
77) Pentachlorophenol	6.41	266	214451	45834.3096376	ppb		97
78) Phenanthrene	6.59	178	1588877	37960.1017014	ppb		99
79) Anthracene	6.64	178	1636676	38630.5645907	ppb		100
80) Carbazole	6.75	167	1476577	38198.2056116	ppb		99
81) Di-n-butyl phthalate	7.02	149	1922913	42491.4478801	ppb		100
83) Fluoranthene	7.64	202	1784764	40137.6631631	ppb		99
86) Pyrene	7.88	202	1858834	39532.6283317	ppb		99
88) Benzylbutyl phthalate	8.68	149	805471	41893.8726269	ppb		98
90) Benzo(a)anthracene	9.53	228	1652877	39280.5024417	ppb		99
91) Chrysene	9.59	228	1584261	38850.3193263	ppb		99
92) bis(2-Ethylhexyl)phthalate	9.62	149	1113109	42031.3076523	ppb		99
93) Di-n-octyl phthalate	10.92	149	1901374	43218.2087672	ppb		99
95) Benzo(b)fluoranthene	11.59	252	1661740	38302.6598317	ppb		99
96) Benzo(k)fluoranthene	11.65	252	1666940	39007.6629727	ppb		98
97) Benzo(a)pyrene	12.27	252	1488575	39615.4990577	ppb		100
98) Indeno(1,2,3-cd)pyrene	14.22	276	1411209	38225.8587590	ppb		98
99) Dibenz(a,h)anthracene	14.26	278	1497799m	38054.6751967	ppb		
100) Benzo(g,h,i)perylene	14.54	276	1416806	36871.9258324	ppb		94

(#) = qualifier out of range (m) = manual integration

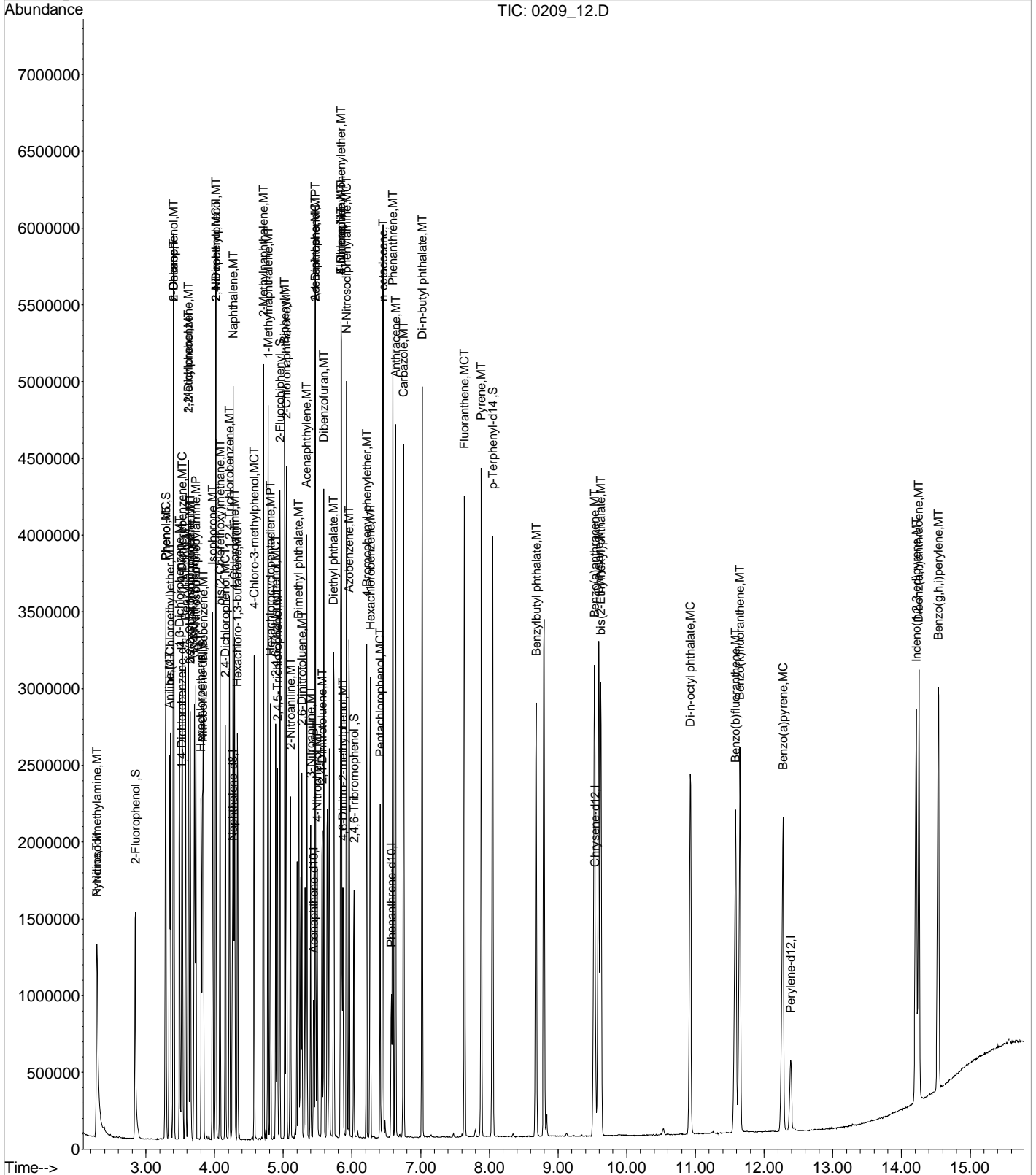
0209\_12.D S804B09V.M Mon Feb 14 16:14:43 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D  
Acq On : 9 Feb 2022 12:48 pm  
Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22  
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22  
MS Integration Params: RTEINT.P  
Quant Time: Feb 14 16:10 2022

Vial: 9  
Operator: 917  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804B09V.RES

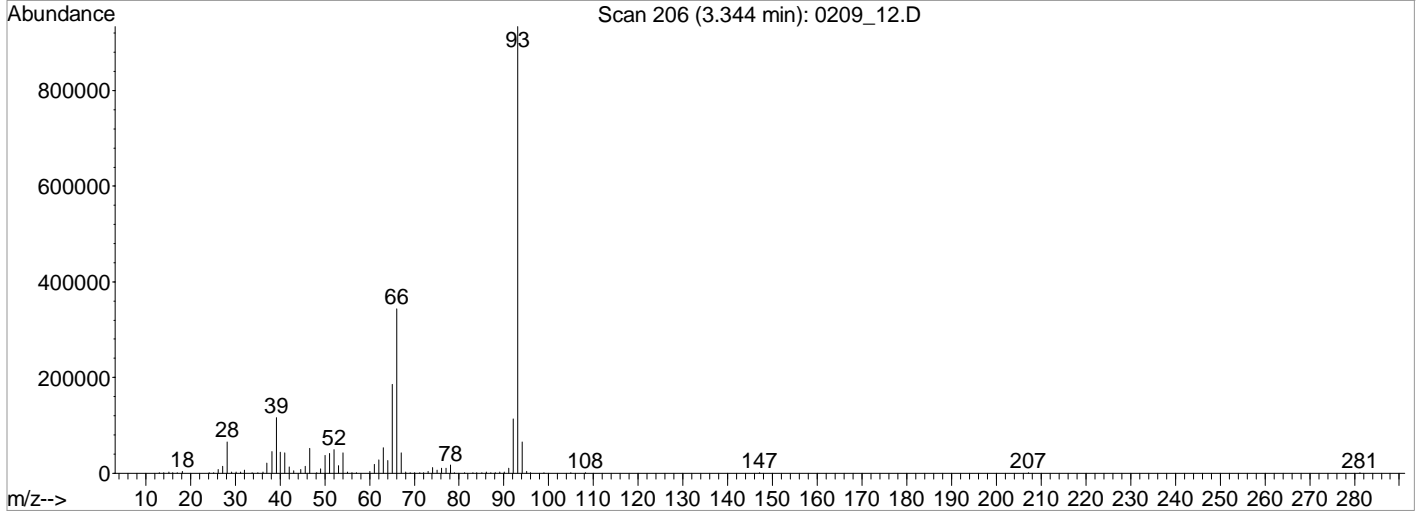
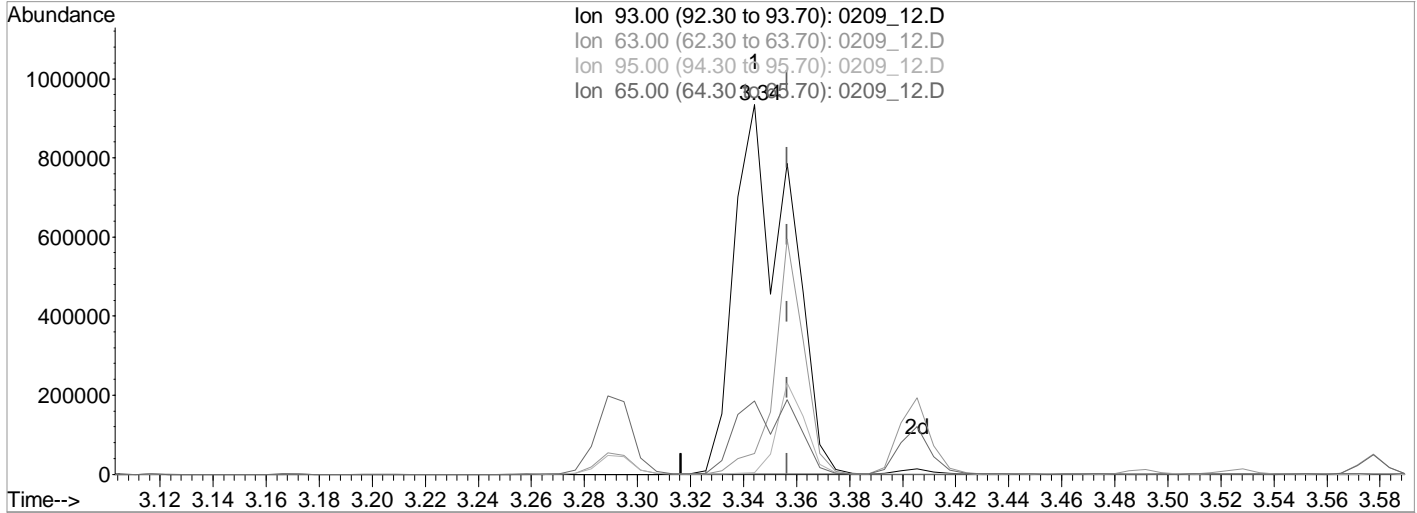
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Mon Feb 14 16:14:29 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:02 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 0.0000000 ppb

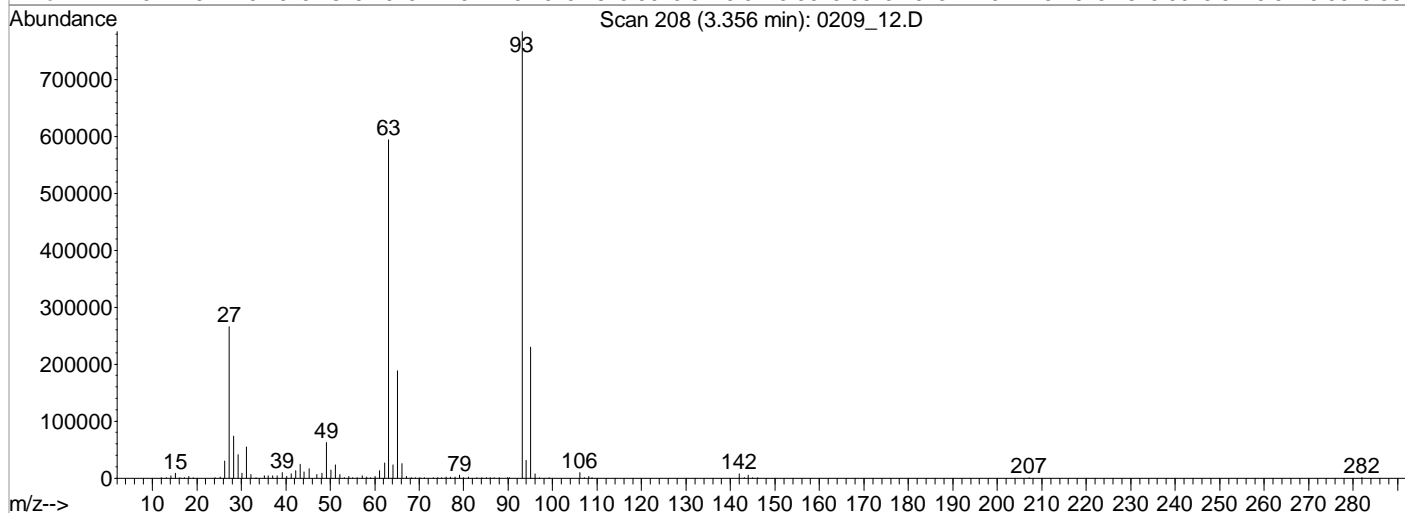
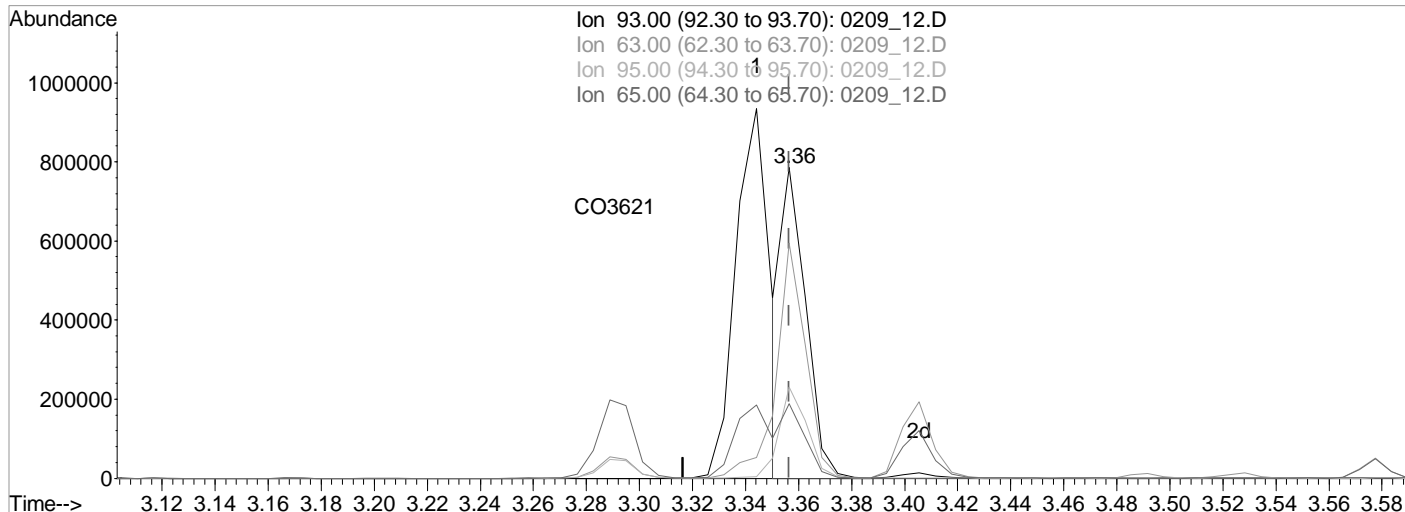
response 1313644

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.62#
95.00	30.20	0.39#
65.00	24.00	19.74

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:02 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 0.0000000 ppb

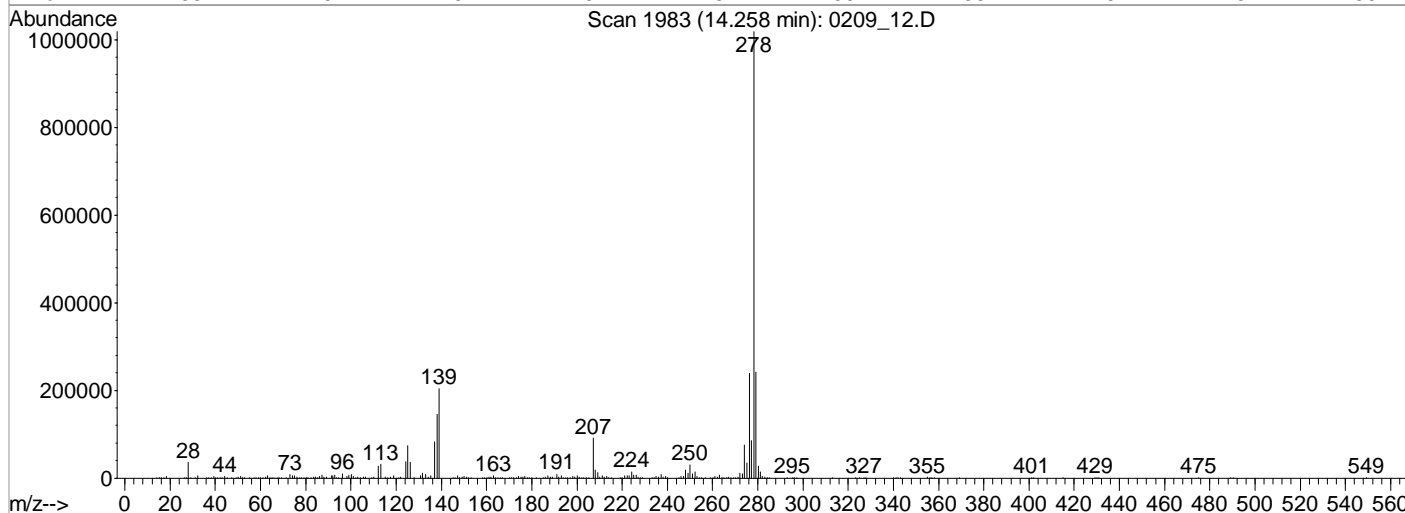
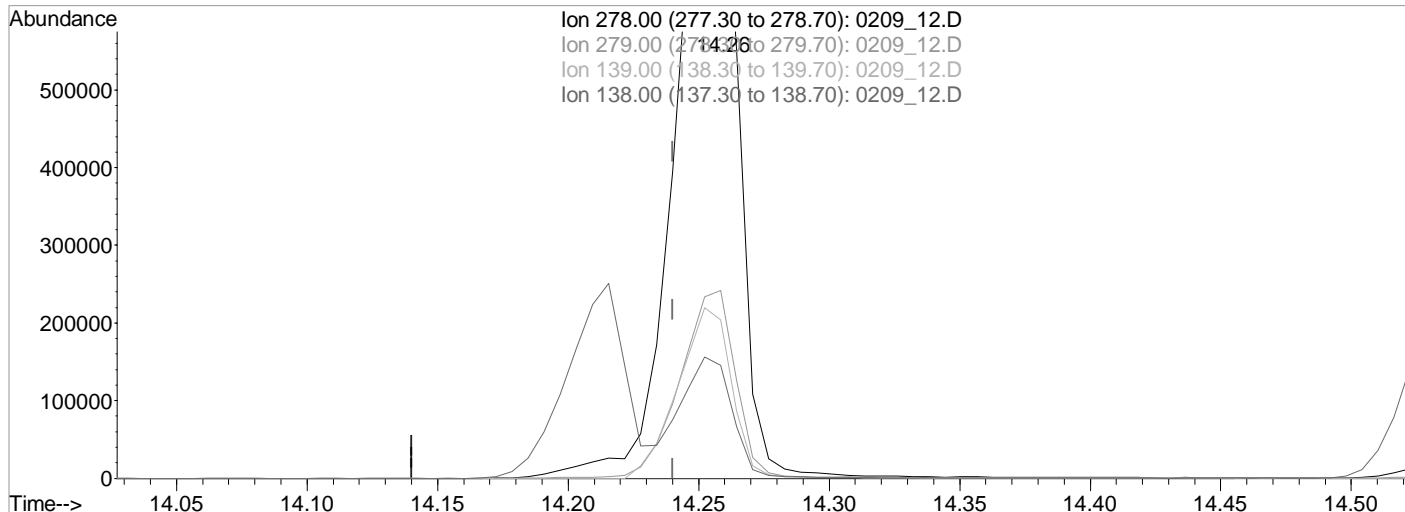
response 1313644

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.62#
95.00	30.20	0.39#
65.00	24.00	19.74

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:02 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(99) Dibenz(a,h)anthracene (MT)  
 14.26min (+0.018) 39213.5930184 ppb  
 Qvalue = 96  
 response 1543413

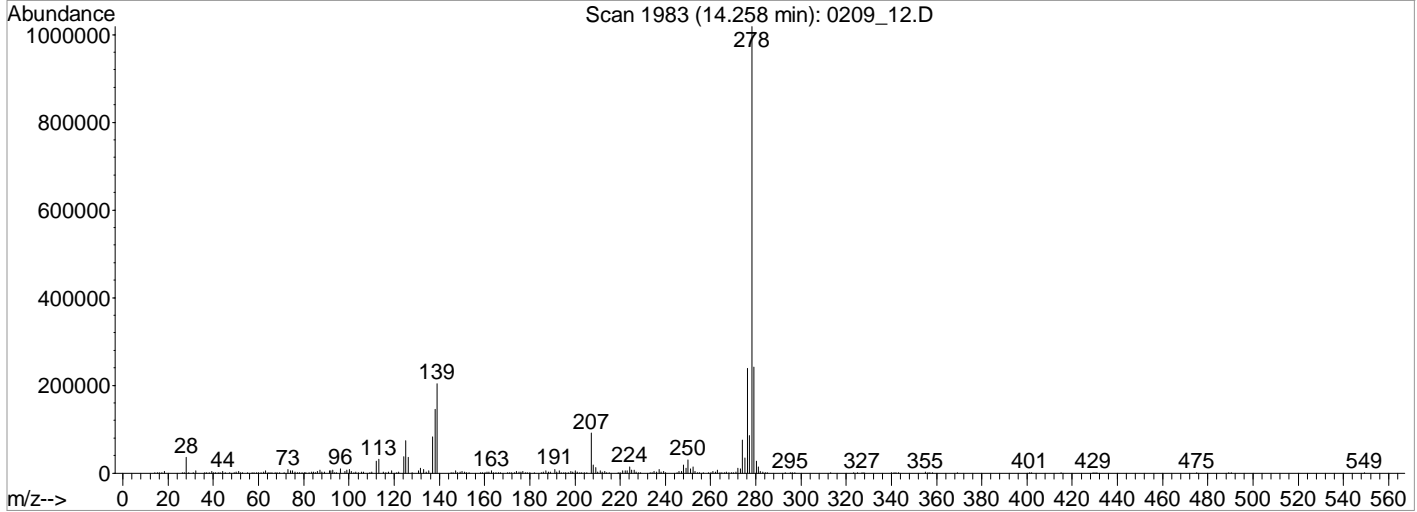
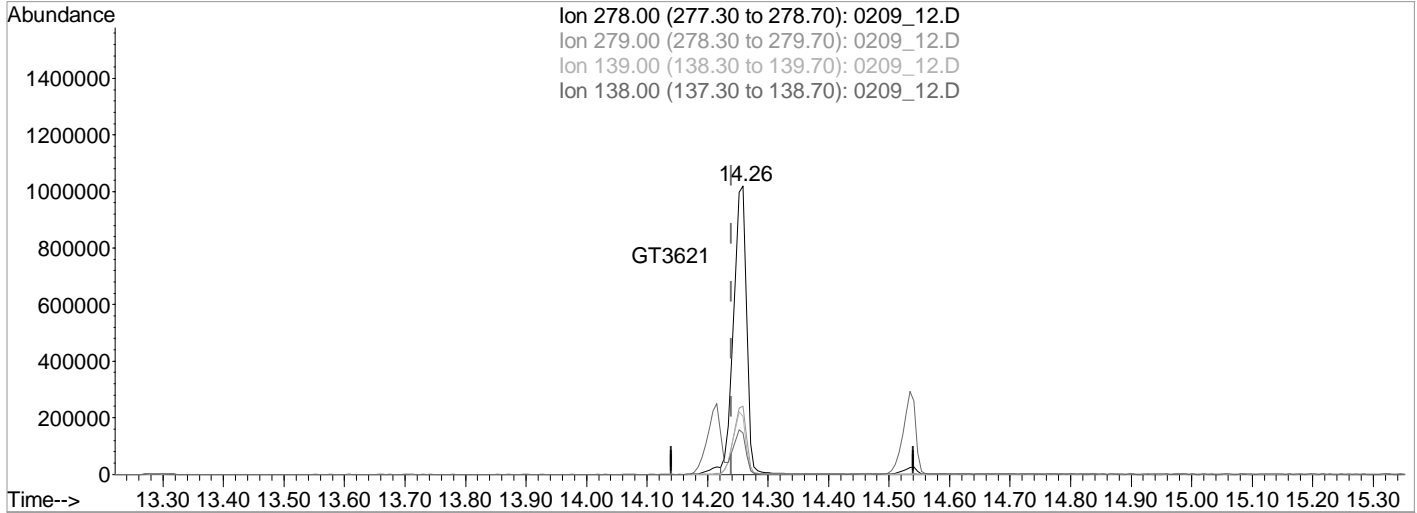
Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.68
139.00	22.10	20.02
138.00	16.70	14.26



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:03 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(99) Dibenz(a,h)anthracene (MT)  
 14.26min (+0.018) 38054.6751967 ppb m

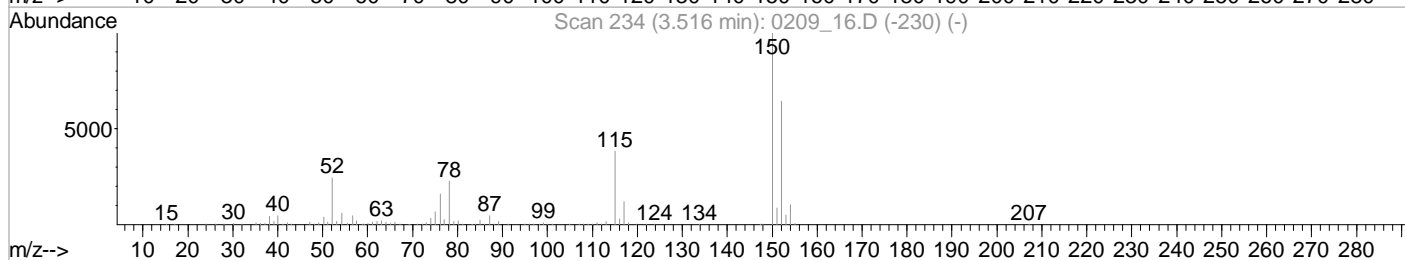
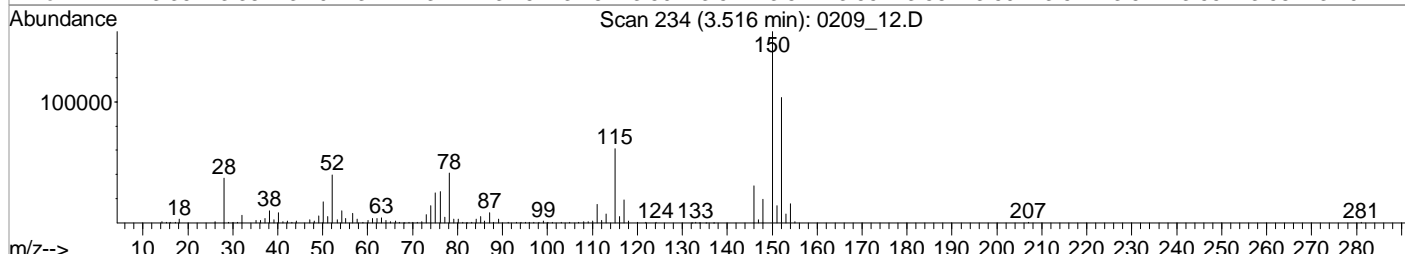
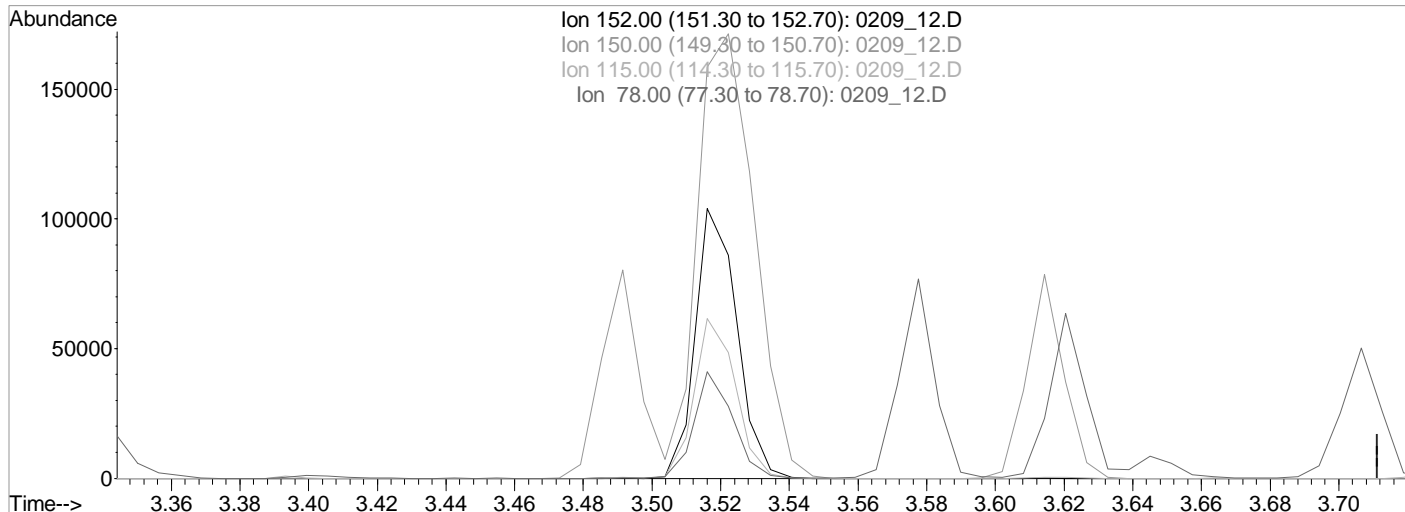
response 1497799

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	23.71
139.00	22.10	20.02
138.00	16.70	14.29

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:08 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(1) 1,4-Dichlorobenzene-d4 (I)  
 3.52min (-3.516) 0.0000000 ppb d

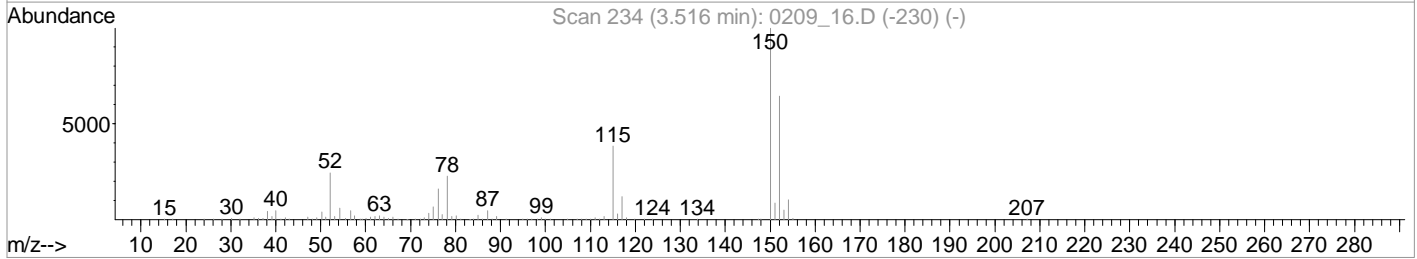
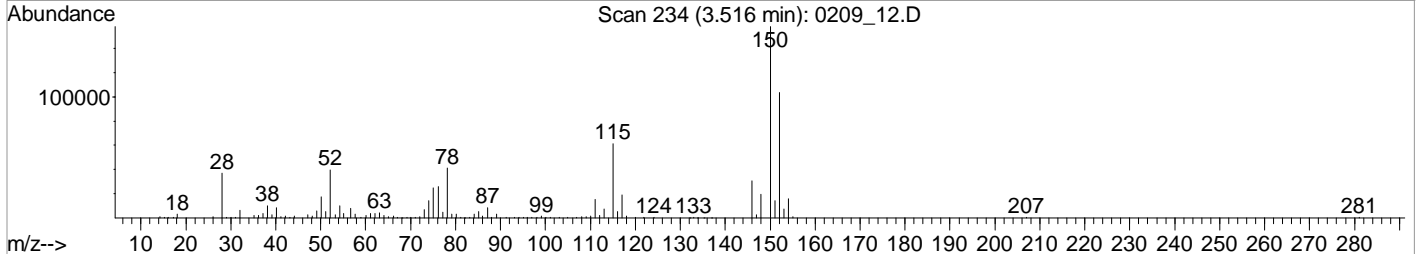
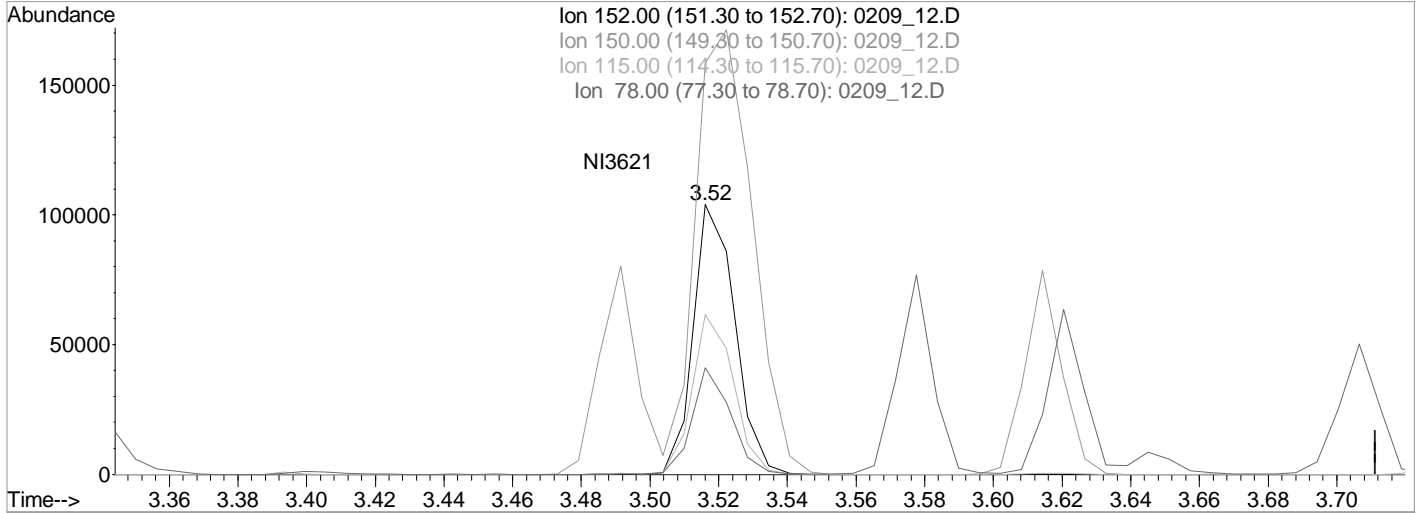
response 0

Ion	Exp%	Act%
152.00	100	0.00
150.00	155.20	0.00
115.00	59.30	0.00
78.00	35.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 12.D Vial: 9  
 Acq On : 9 Feb 2022 12:48 pm Operator: 917  
 Sample : STD SVMS 40K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:10 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:00:35 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_12.D

(1) 1,4-Dichlorobenzene-d4 (I)  
 3.52min (-0.000) 8000.0000000 ppb m

response 87467

Ion	Exp%	Act%
152.00	100	100
150.00	155.20	152.53
115.00	59.30	59.26
78.00	35.00	39.45

Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:18 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:51:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	85491	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	336033	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	182036	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	303150	8000.00	ppb	0.00
84) Chrysene-d12	9.55	240	299422	8000.00	ppb	0.02
94) Perylene-d12	12.39	264	295920	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.85	112	685540	49268.3997408	ppb	0.00
Spiked Amount 666.000			Recovery =	7397.66%		
7) Phenol-d5	3.28	99	818468	48972.9451566	ppb	0.00
Spiked Amount 666.000			Recovery =	7353.30%		
24) Nitrobenzene-d5	3.82	82	678256m	46463.7671389	ppb	0.00
Spiked Amount 333.000			Recovery =	13953.08%		
50) 2-Fluorobiphenyl	4.95	172	1462149	47291.9672001	ppb	0.00
Spiked Amount 333.000			Recovery =	14201.79%		
73) 2,4,6-Tribromophenol	6.03	330	203186	60808.6198147	ppb	0.00
Spiked Amount 666.000			Recovery =	9130.42%		
87) p-Terphenyl-d14	8.05	244	2013746	49101.9592081	ppb	0.00
Spiked Amount 333.000			Recovery =	14745.33%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.29	79	681495	51757.7992292	ppb	97
3) N-Nitrosodimethylamine	2.29	42	339759	47575.2742185	ppb	91
5) Aniline	3.34	66	389920	49209.1195109	ppb	95
6) bis(2-Chloroethyl)ether	3.36	93	649750m	23889.2924070	ppb	
8) Phenol	3.30	94	863642	49070.2900117	ppb	97
10) 2-Chlorophenol	3.41	128	694562	49319.1896257	ppb	99
11) n-Decane	3.40	41	379161	45241.9961601	ppb	99
12) 1,3-Dichlorobenzene	3.49	146	771098	48302.1674606	ppb	98
13) 1,4-Dichlorobenzene	3.53	146	785122	47710.9860129	ppb	99
14) Benzyl Alcohol	3.58	79	544123	50046.4969320	ppb	99
15) 1,2-Dichlorobenzene	3.61	146	721401	47687.1870177	ppb	98
16) bis(2-Chloroisopropyl)ethe	3.65	121	236106	45340.6582642	ppb	# 62
17) 2,2-oxybis(1-chloropropane	3.65	121	236106	45340.6582642	ppb	# 62
18) 2-Methylphenol	3.62	108	617710	48432.5889244	ppb	97
19) Hexachloroethane	3.80	117	291009	48857.5187075	ppb	98
20) N-Nitrosodi-n-propylamine	3.73	70	450158	48279.2340149	ppb	100
21) 3&4-Methyl phenol	3.71	107	699728	48282.1151226	ppb	99
25) Nitrobenzene	3.84	77	688841	49328.1690268	ppb	96
26) Isophorone	3.97	82	1236245	49353.4494025	ppb	98
27) 2-Nitrophenol	4.02	139	376131	54074.7423875	ppb	93
28) 2,4-Dimethylphenol	4.02	107	650314	49809.6897293	ppb	97
29) bis(2-Chlorethoxy)methane	4.08	93	768717	47811.7231221	ppb	97
30) 2,4-Dichlorophenol	4.16	162	555918	50650.3447239	ppb	92
32) 1,2,4-Trichlorobenzene	4.22	180	603526	48910.7083770	ppb	98
34) Naphthalene	4.27	128	2066329	48053.2072182	ppb	100
35) 4-Chloroaniline	4.29	65	244067	48960.4771090	ppb	97
36) Hexachloro-1,3-butadiene	4.34	225	331135	49231.5094775	ppb	96
40) 4-Chloro-3-methylphenol	4.58	107	567518	51390.2025153	ppb	94
41) 2-Methylnaphthalene	4.71	142	1377022	49298.2911741	ppb	100
42) 1-Methylnaphthalene	4.78	142	1292317	49222.1326390	ppb	99
47) Hexachlorocyclopentadiene	4.81	237	433861	50998.3780748	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	404822	51460.1647062	ppb	97
49) 2,4,5-Trichlorophenol	4.92	196	414908	50566.0675110	ppb	92

(#) = qualifier out of range (m) = manual integration

Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:18 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 12:51:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.03	154	1635800	47695.0348514	ppb	100
52) 2-Chloronaphthalene	5.05	162	1229770	46888.0832571	ppb	98
53) 2-Nitroaniline	5.11	138	428726	53629.0313312	ppb	98
54) Acenaphthylene	5.35	152	2019937	49878.2058817	ppb	99
55) Dimethyl phthalate	5.23	163	1363440	50652.8594150	ppb	93
56) 2,6-Dinitrotoluene	5.27	165	333483	53864.1240120	ppb	99
57) 3-Nitroaniline	5.40	138	367978	55415.3653662	ppb #	84
58) Acenaphthene	5.47	153	1291393	48280.6520842	ppb	97
59) 2,4-Dinitrophenol	5.47	184	193721	74186.7854642	ppb #	30
60) Dibenzofuran	5.59	168	1763845	47451.1885412	ppb	100
61) 2,4-Dinitrotoluene	5.57	165	444272	57870.2558482	ppb	95
63) 4-Nitrophenol	5.49	139	304788	55592.5457447	ppb	88
64) Fluorene	5.85	166	1466642	48807.2477794	ppb	99
65) 4-Chlorophenyl-phenylether	5.84	204	682219	47746.6307713	ppb	90
66) Diethyl phthalate	5.74	149	1359007	49088.2502660	ppb	99
67) 4-Nitroaniline	5.86	138	295753	46508.5221381	ppb	98
68) Azobenzene	5.96	77	1359895	49264.7305857	ppb	99
71) 4,6-Dinitro-2-methylphenol	5.87	198	225615	67060.1415206	ppb	91
72) N-Nitrosodiphenylamine	5.92	169	1246858	54771.8942299	ppb	98
74) 4-Bromophenyl-phenylether	6.21	248	403603	54605.9256471	ppb	91
75) Hexachlorobenzene	6.27	284	439934	53323.4768919	ppb	99
76) n-octadecane	6.45	55	229571	49422.1734343	ppb	98
77) Pentachlorophenol	6.42	266	268709	62089.4694687	ppb	95
78) Phenanthrene	6.59	178	1942260	48514.3249917	ppb	98
79) Anthracene	6.64	178	2011440	49796.1324302	ppb	100
80) Carbazole	6.75	167	1809779	49009.1104903	ppb	99
81) Di-n-butyl phthalate	7.02	149	2377465	55951.5065493	ppb	99
83) Fluoranthene	7.64	202	2263702	53951.1908184	ppb	100
86) Pyrene	7.88	202	2343672	48458.5250985	ppb	99
88) Benzylbutyl phthalate	8.68	149	1016118	51813.7045194	ppb	98
90) Benzo(a)anthracene	9.53	228	2063460	47568.5271200	ppb	100
91) Chrysene	9.60	228	1968627	46730.6970697	ppb	99
92) bis(2-Ethylhexyl)phthalate	9.63	149	1407831	52163.0604523	ppb	99
93) Di-n-octyl phthalate	10.93	149	2390033	53481.2603710	ppb	99
95) Benzo(b)fluoranthene	11.59	252	2109399	50044.2348538	ppb	99
96) Benzo(k)fluoranthene	11.65	252	2049426	49265.8283619	ppb	98
97) Benzo(a)pyrene	12.28	252	1849955	50765.3229273	ppb	99
98) Indeno(1,2,3-cd)pyrene	14.22	276	1733830m	48105.1614875	ppb	
99) Dibenz(a,h)anthracene	14.26	278	1829680m	47566.6475034	ppb	
100) Benzo(g,h,i)perylene	14.54	276	1711126	45290.2795709	ppb	98

(#) = qualifier out of range (m) = manual integration

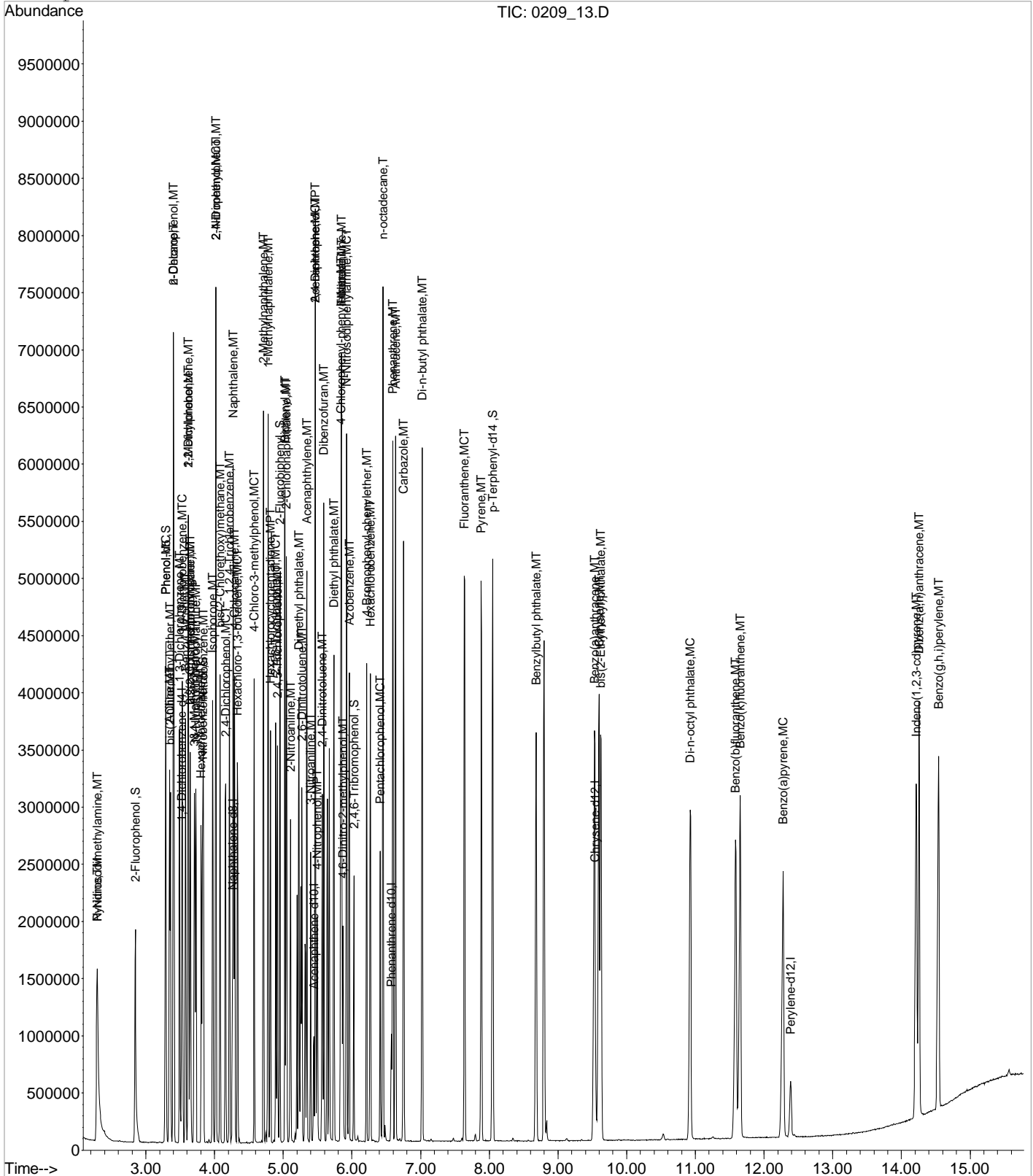
0209\_13.D S804B09V.M Mon Feb 14 16:18:48 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D
Acq On : 9 Feb 2022 1:09 pm
Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22
MS Integration Params: RTEINT.P
Quant Time: Feb 14 16:18 2022

Vial: 10
Operator: 917
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804B09V.RES

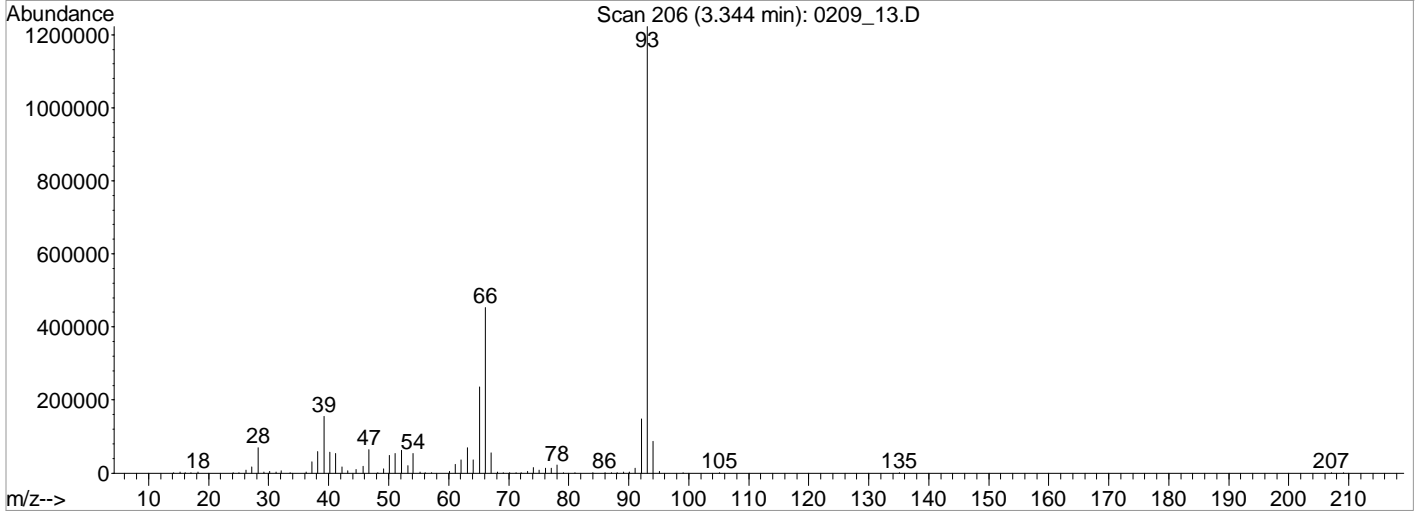
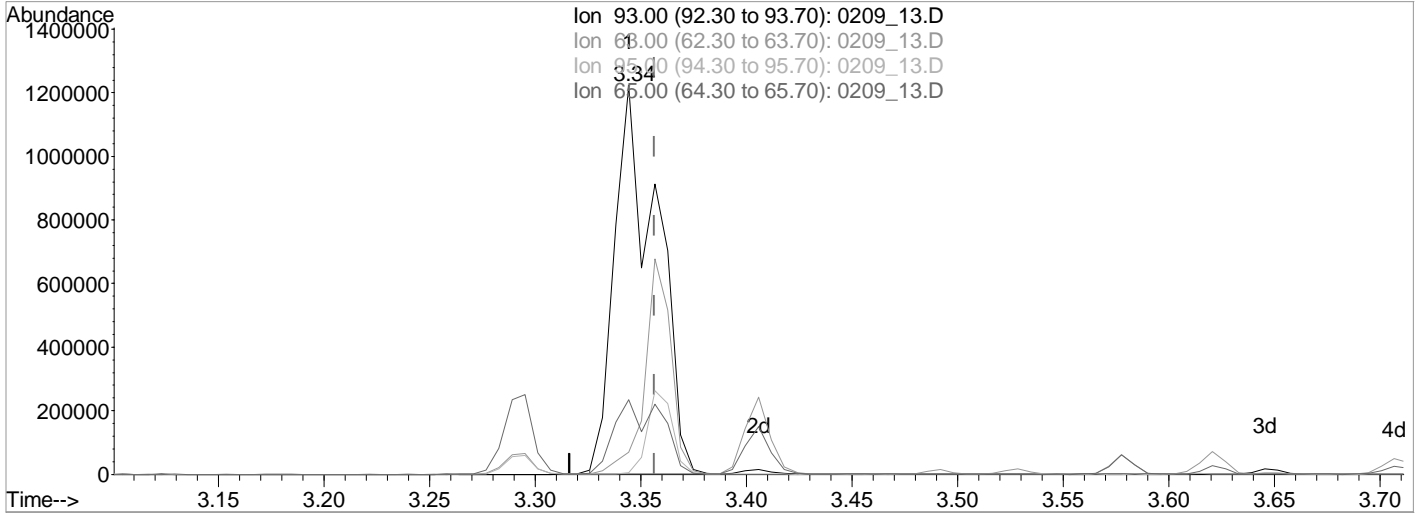
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 16:14:29 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 12:57 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

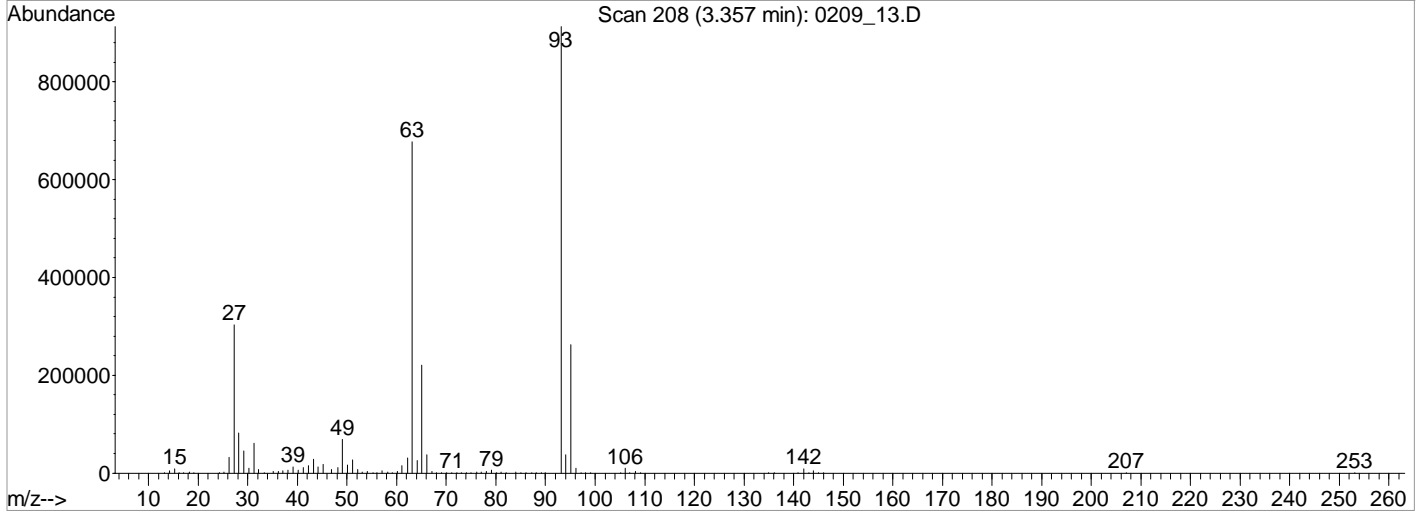
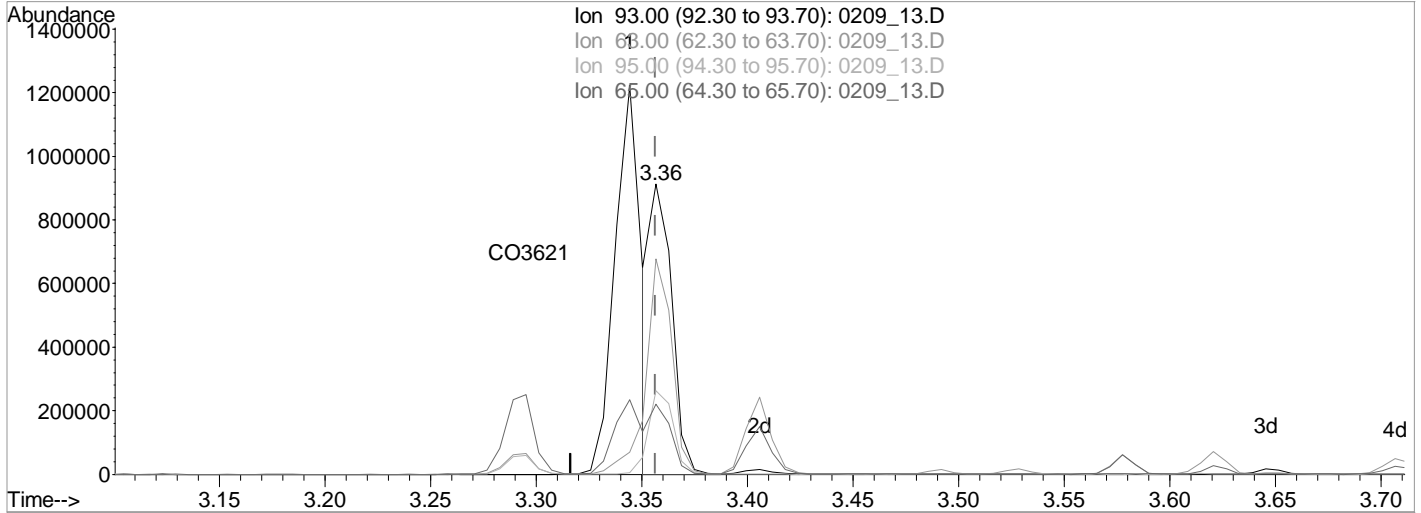
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.012) 62045.3548033 ppb  
 Qvalue = 37  
 response 1687533

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.65#
95.00	30.20	0.34#
65.00	24.00	19.20

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:16 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (+0.000) 23889.2924070 ppb m

response 649750

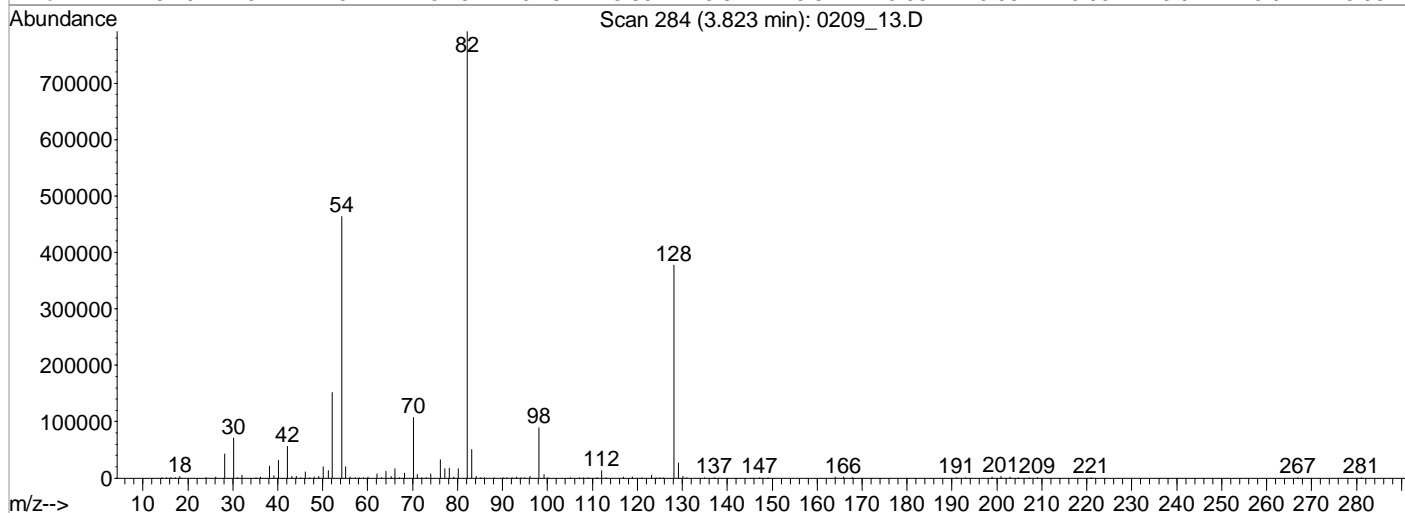
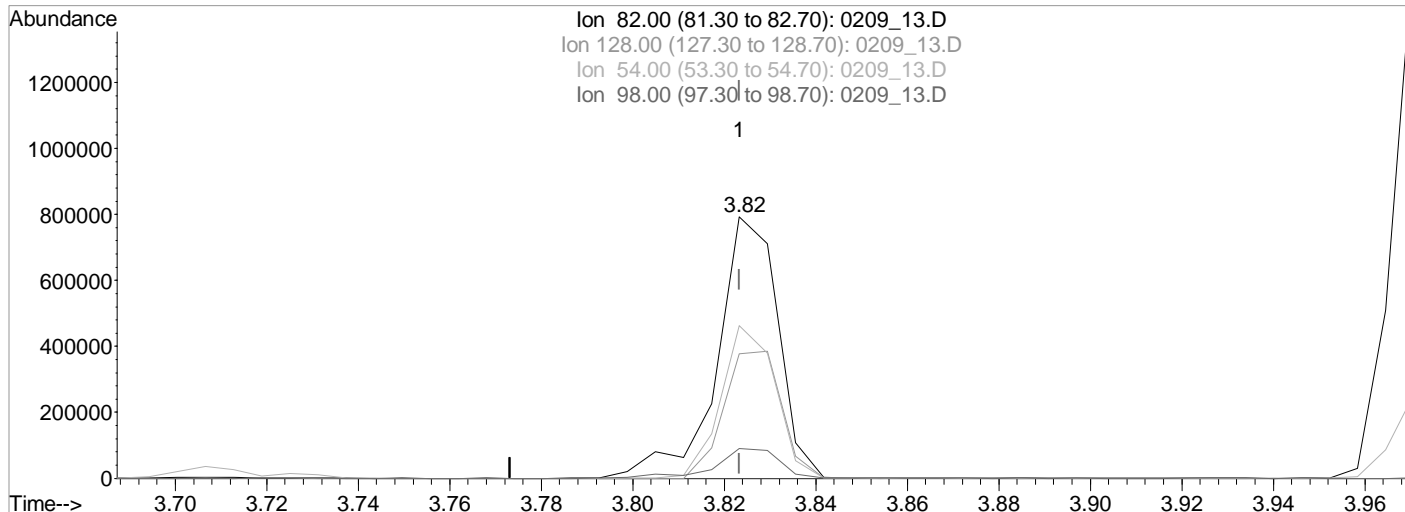
Ion	Exp%	Act%
93.00	100	100
63.00	76.20	74.11
95.00	30.20	28.75
65.00	24.00	24.19



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:16 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(24) Nitrobenzene-d5 (S)  
 3.82min (+0.000) 50604.5375924 ppb m

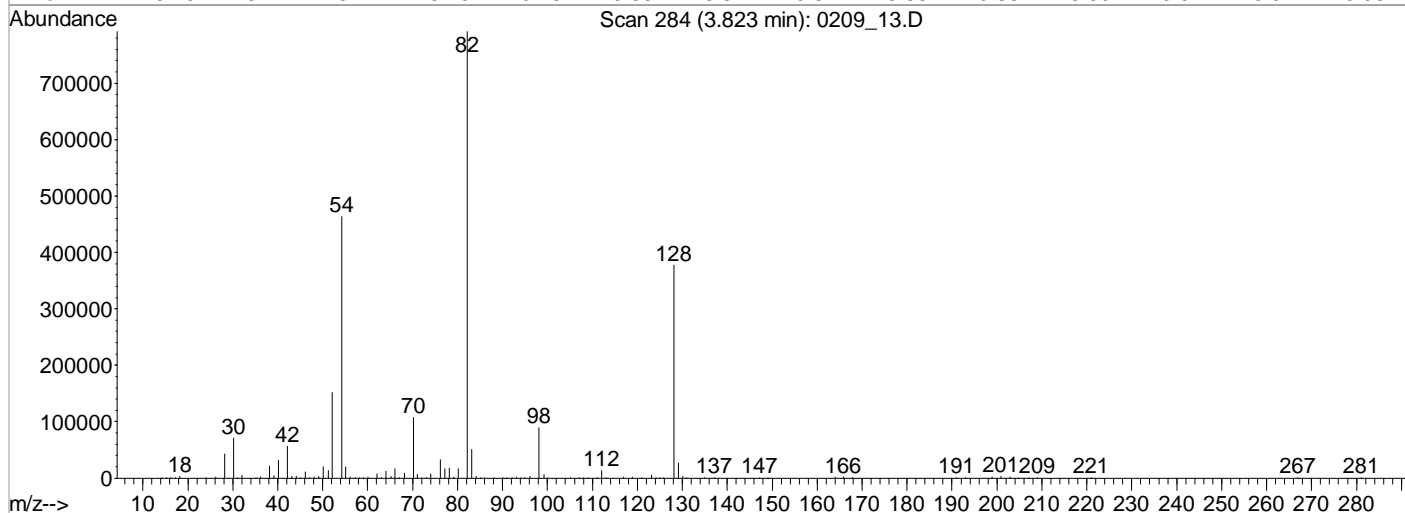
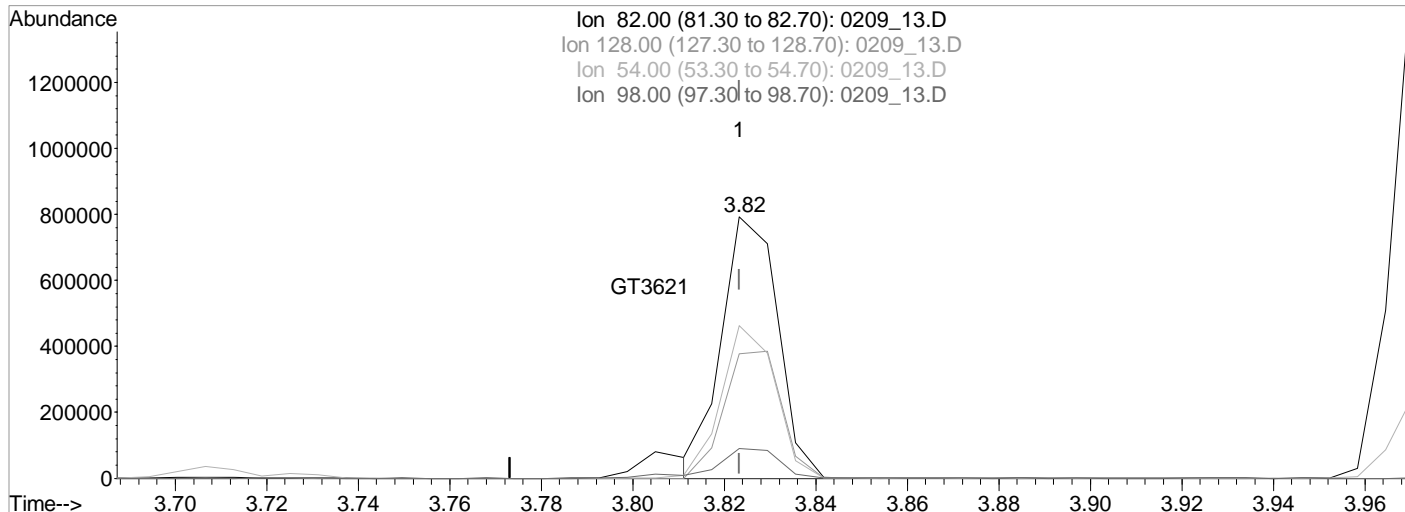
response 738701

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	47.68
54.00	56.90	58.54
98.00	11.80	11.31

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:17 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(24) Nitrobenzene-d5 (S)  
 3.82min (+0.000) 46463.7671389 ppb m

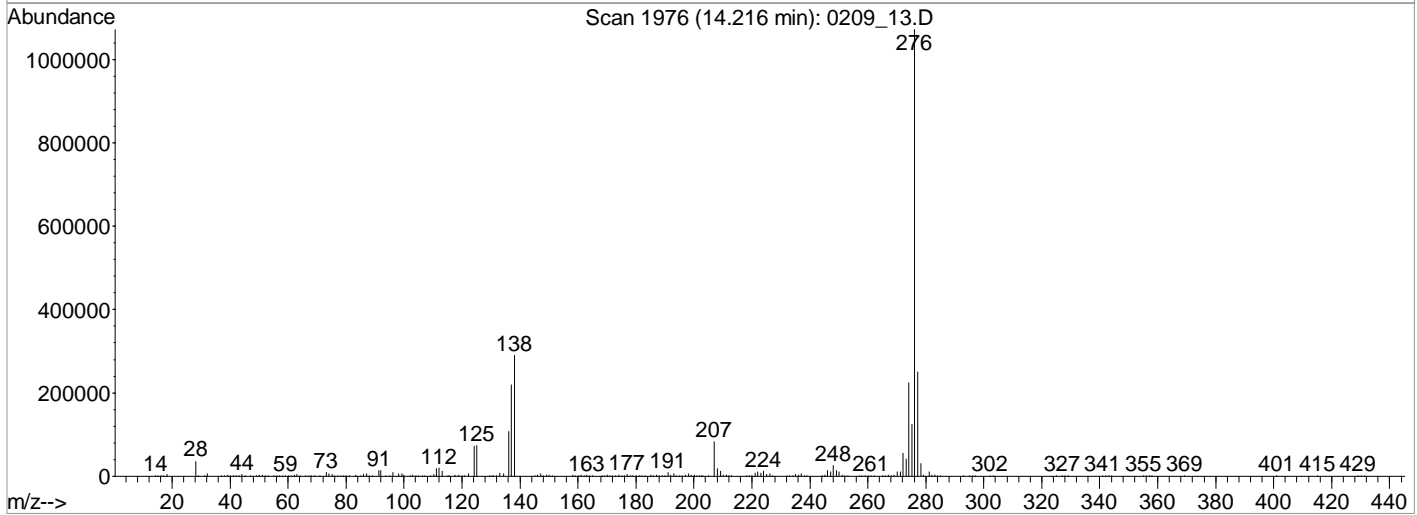
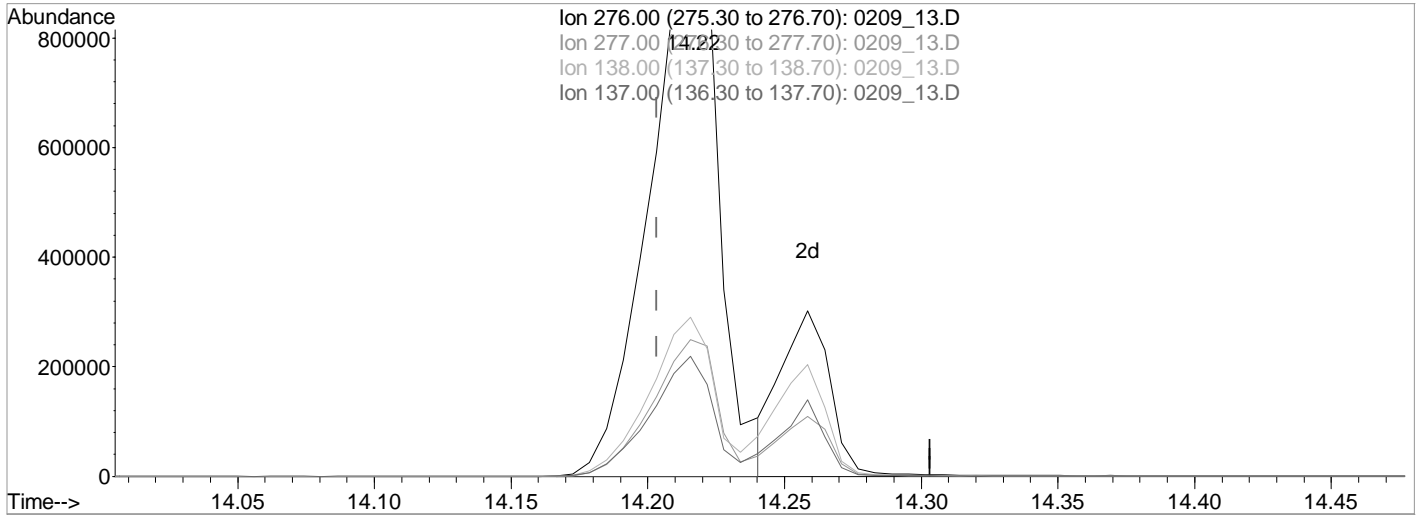
response 678256

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	47.68
54.00	56.90	58.54
98.00	11.80	11.31

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:17 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(98) Indeno(1,2,3-cd)pyrene (MT)  
 14.22min (+0.012) 49190.5747186 ppb m

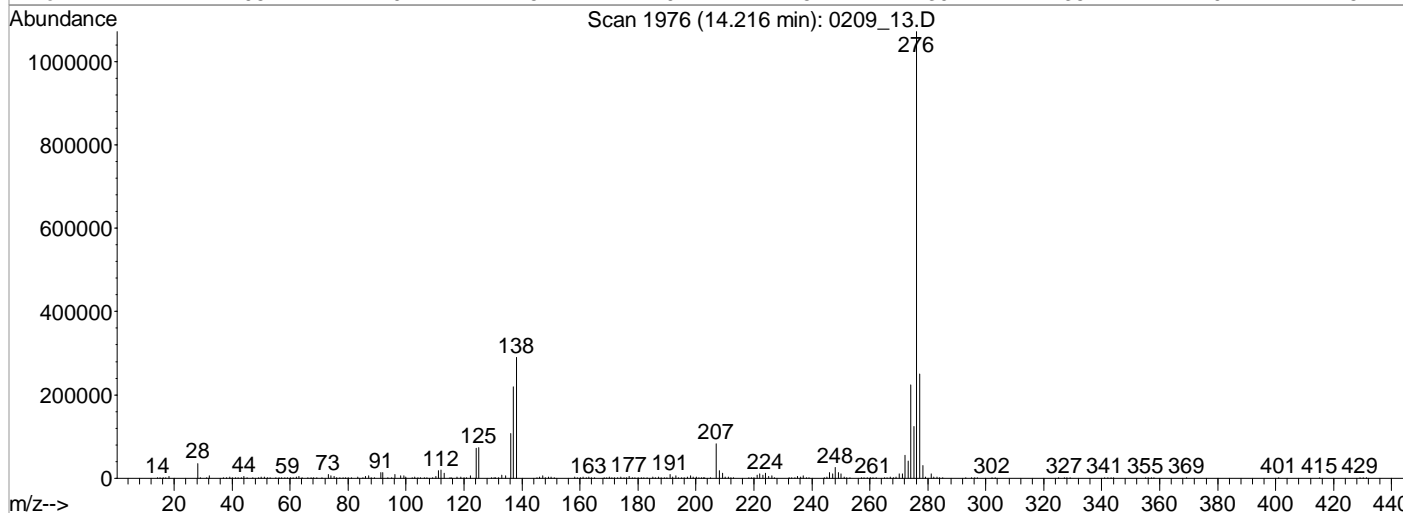
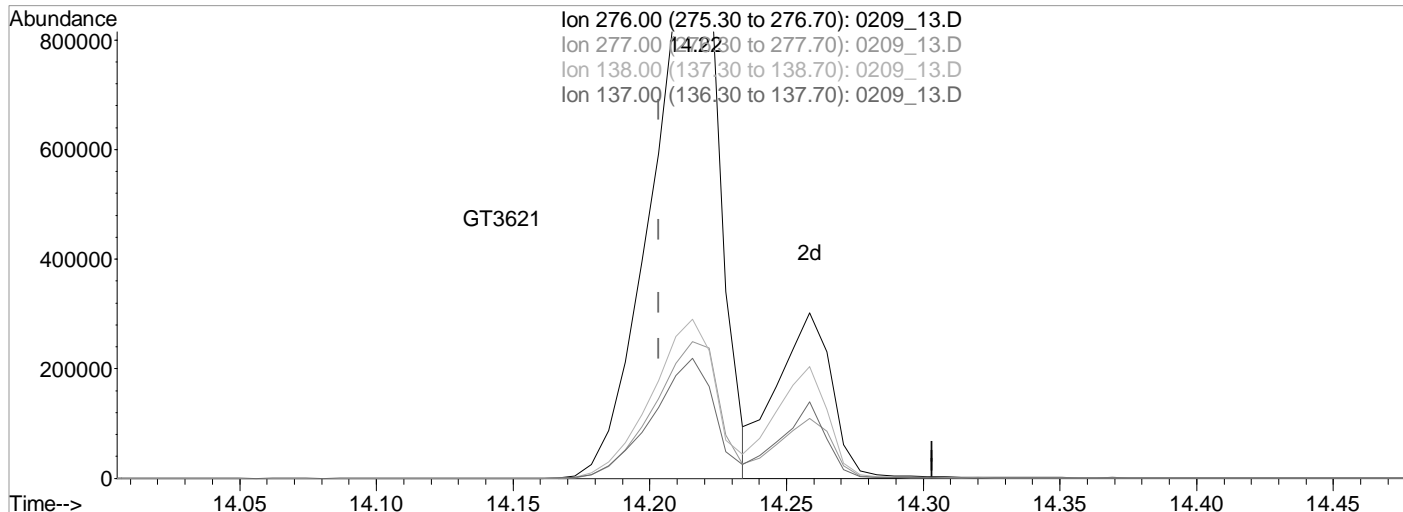
response 1772951

Ion	Exp%	Act%
276.00	100	100
277.00	24.10	23.27
138.00	25.30	27.03
137.00	18.00	20.45

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:17 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(98) Indeno(1,2,3-cd)pyrene (MT)  
 14.22min (+0.012) 48105.1614875 ppb m

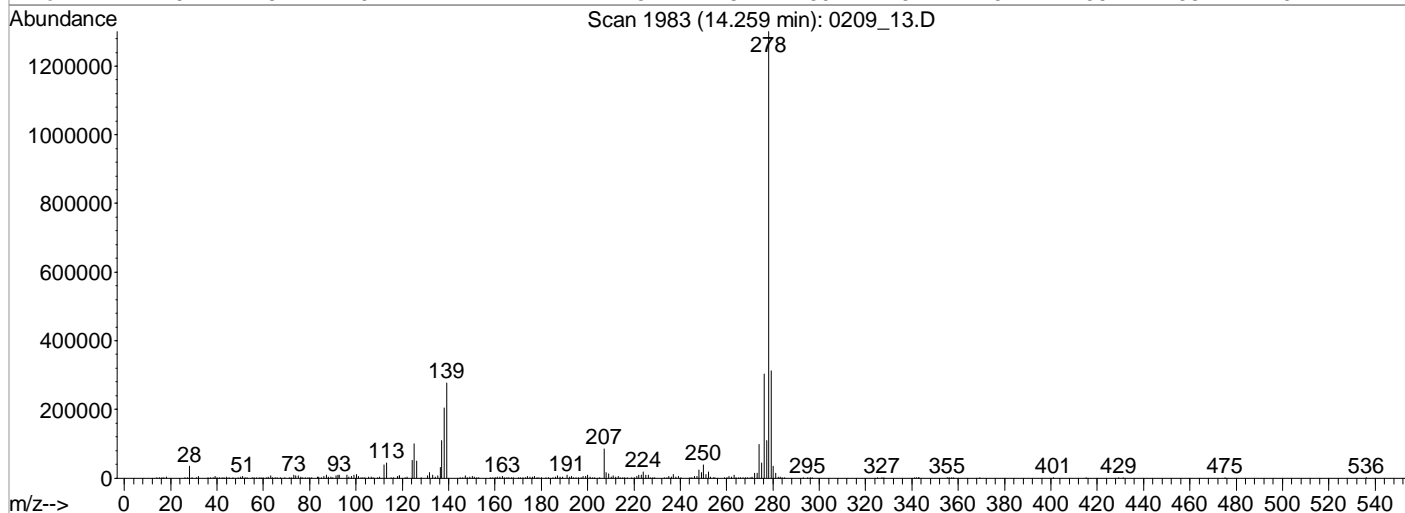
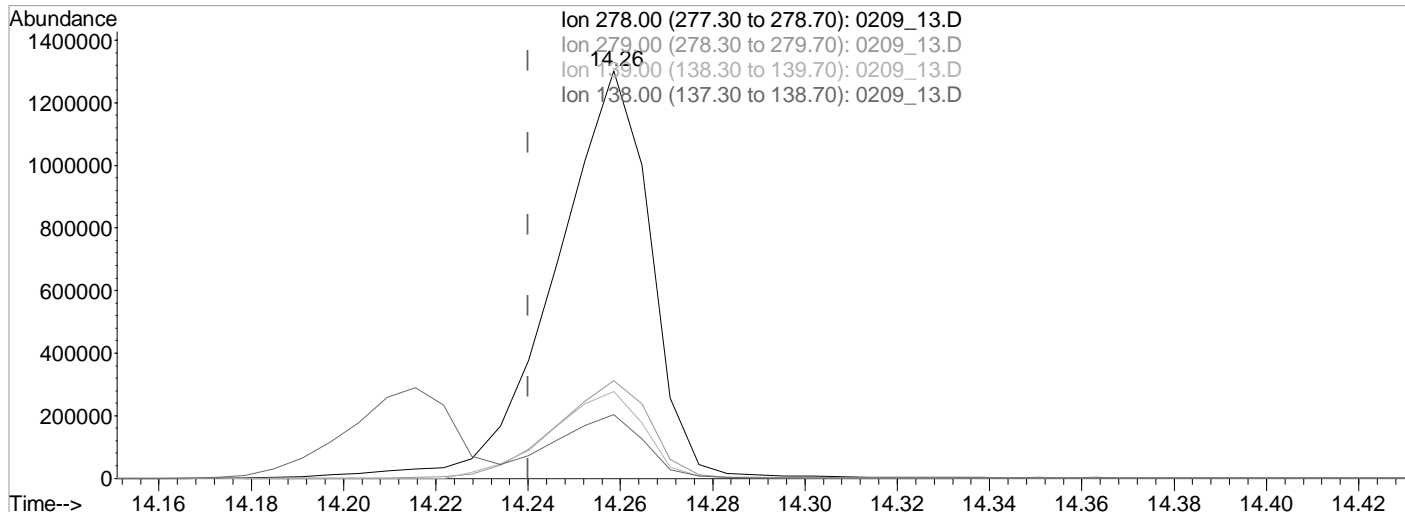
response 1733830

Ion	Exp%	Act%
276.00	100	100
277.00	24.10	23.27
138.00	25.30	27.03
137.00	18.00	20.45

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:18 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(99) Dibenz(a,h)anthracene (MT)  
 14.26min (+0.019) 48815.3733897 ppb m

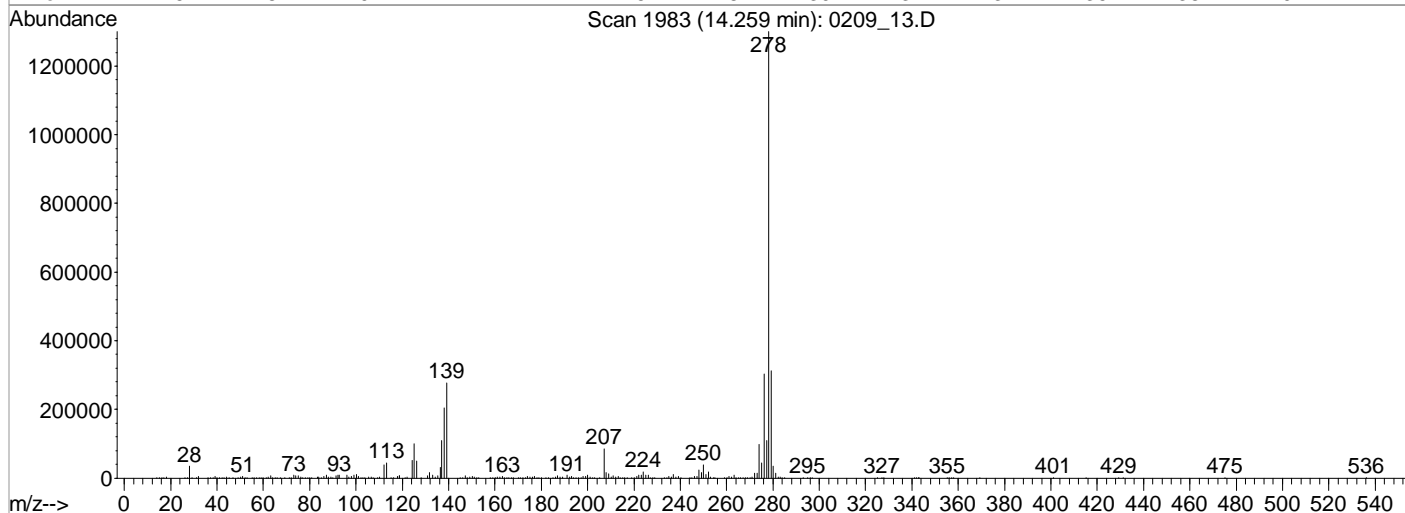
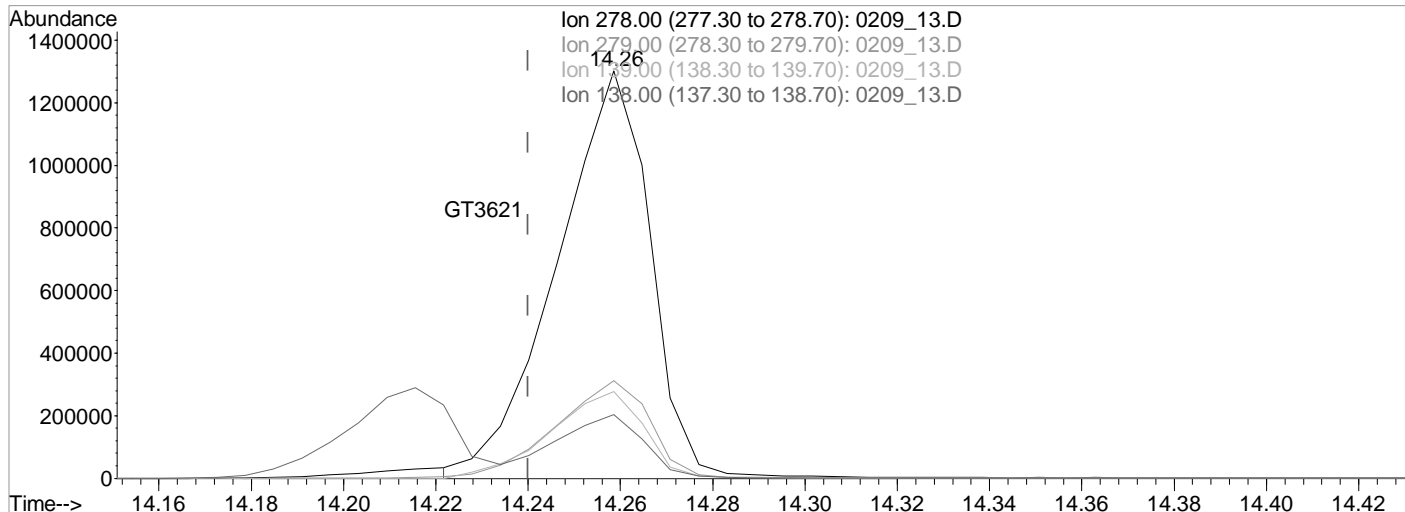
response 1877713

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	24.02
139.00	22.10	21.24
138.00	16.70	15.70

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 13.D Vial: 10  
 Acq On : 9 Feb 2022 1:09 pm Operator: 917  
 Sample : STD SVMS 50K PPB 22B06090 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:18 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:14:29 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_13.D

(99) Dibenz(a,h)anthracene (MT)  
 14.26min (+0.019) 47566.6475034 ppb m

response 1829680

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	24.02
139.00	22.10	21.24
138.00	16.70	15.70

Data File : C:\MSDCHEM\1\DATA\020922\0209 15.D Vial: 12  
 Acq On : 9 Feb 2022 1:51 pm Operator: 917  
 Sample : STD TCL 4K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:24 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:23:05 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	81654	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	334983	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	163201	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	305950	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	267428	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	282139	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.00	172	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	14487	3988.9621728	ppb	93
22) Acetophenone	3.73	105	65150	3858.1826323	ppb	99
31) Benzoic Acid	4.03	105	18644	3581.9887151	ppb	99
33) alpha-terpineol	4.25	59	44003	4561.5078513	ppb	98
37) Hydroquinone	4.46	110	31357	3954.3453573	ppb	98
38) Quinoline	4.48	129	94131	4566.3745617	ppb	98
39) Caprolactam	4.49	113	8784	3805.5673121	ppb	95
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	42391	4650.8872010	ppb	100
44) Diphenyl Ether	5.09	170	60249	4582.2445482	ug/ml	97
45) Diphenyl Oxide	5.09	170	60249	4582.2445482	ug/ml	97
62) 2,3,4,6-Tetrachlorophenol	5.67	232	18117	3892.8021929	ppb	95
69) Atrazine	6.32	200	26177	3922.3101062	ppb	95
82) 2-nitrodiphenylamine	7.16	167	24613	3523.7990565	ppb #	100
85) Benzidine	7.76	184	40054	2829.4094773	ppb	99
89) 3,3-Dichlorobenzidine	9.49	252	52096	3783.8744076	ppb	98

(#) = qualifier out of range (m) = manual integration

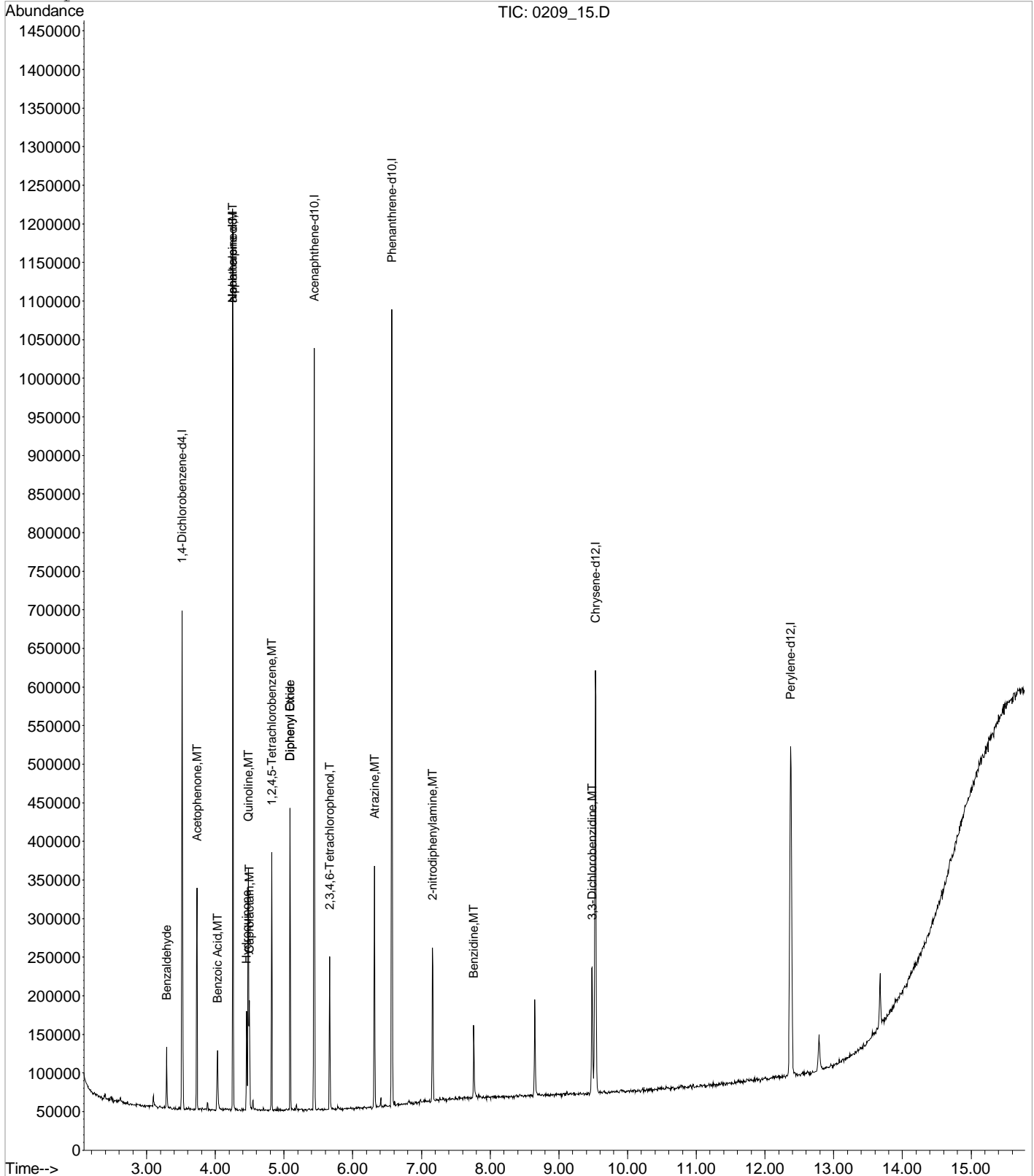
0209\_15.D S804B09V.M Fri Feb 18 15:25:33 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 15.D  
 Acq On : 9 Feb 2022 1:51 pm  
 Sample : STD TCL 4K1 PPB 22B06091 exp. 07/15/22  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:24 2022

Vial: 12  
 Operator: 917  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:23:05 2022  
 Response via : Initial Calibration

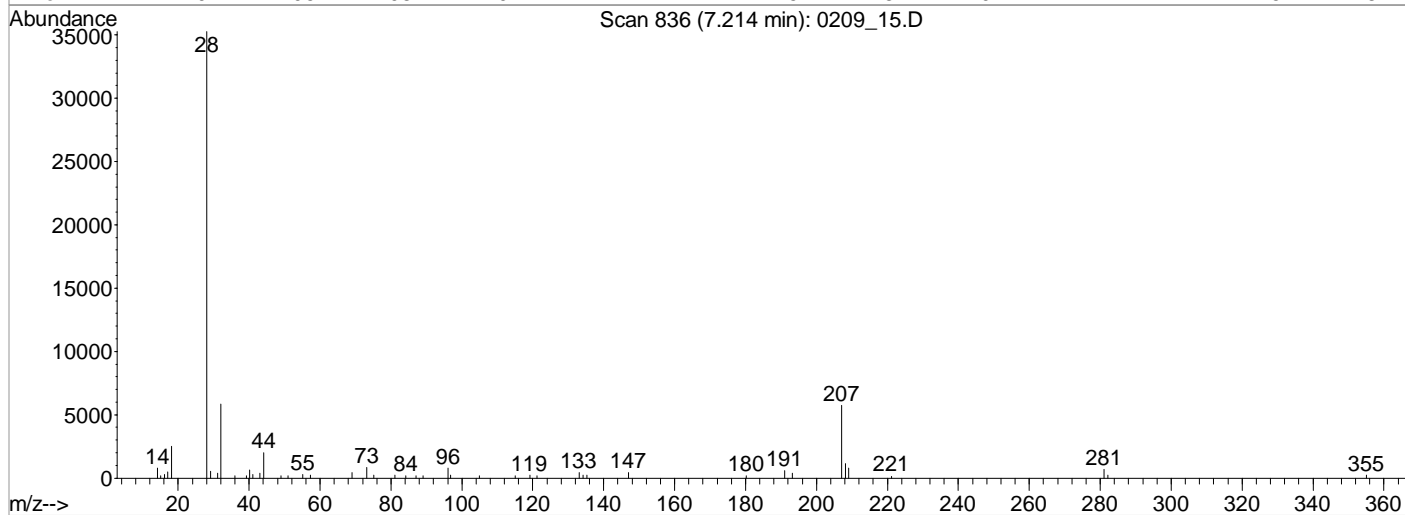
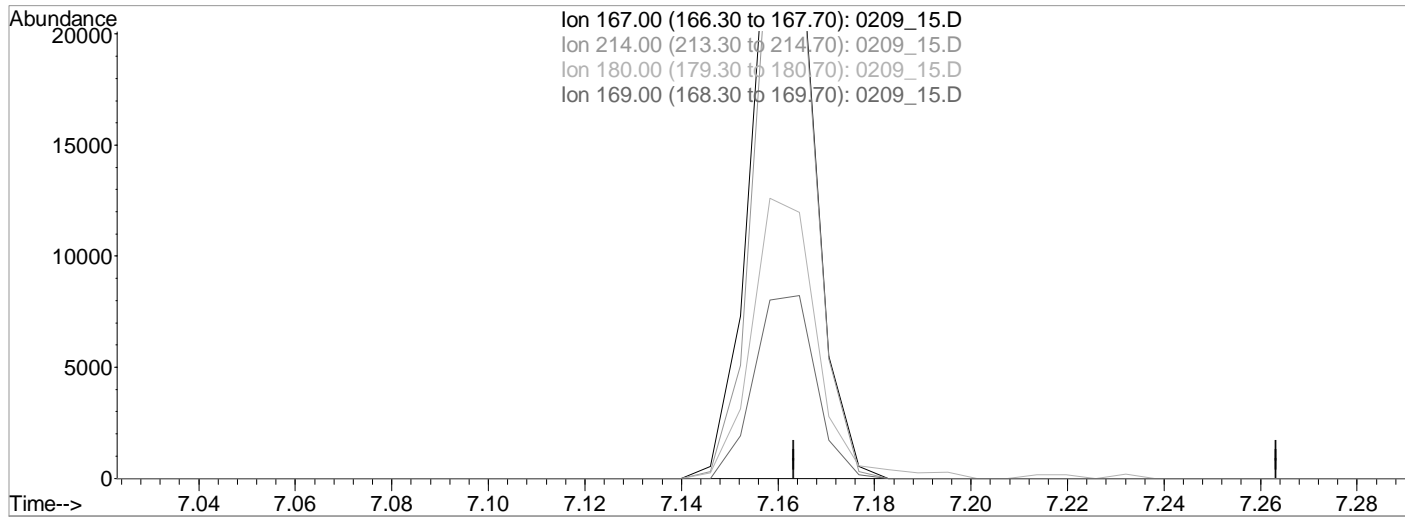




Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_15.D Vial: 12  
 Acq On : 9 Feb 2022 1:51 pm Operator: 917  
 Sample : STD TCL 4K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 13:57 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:26:53 2022  
 Response via : Single Level Calibration



TIC: 0209\_15.D

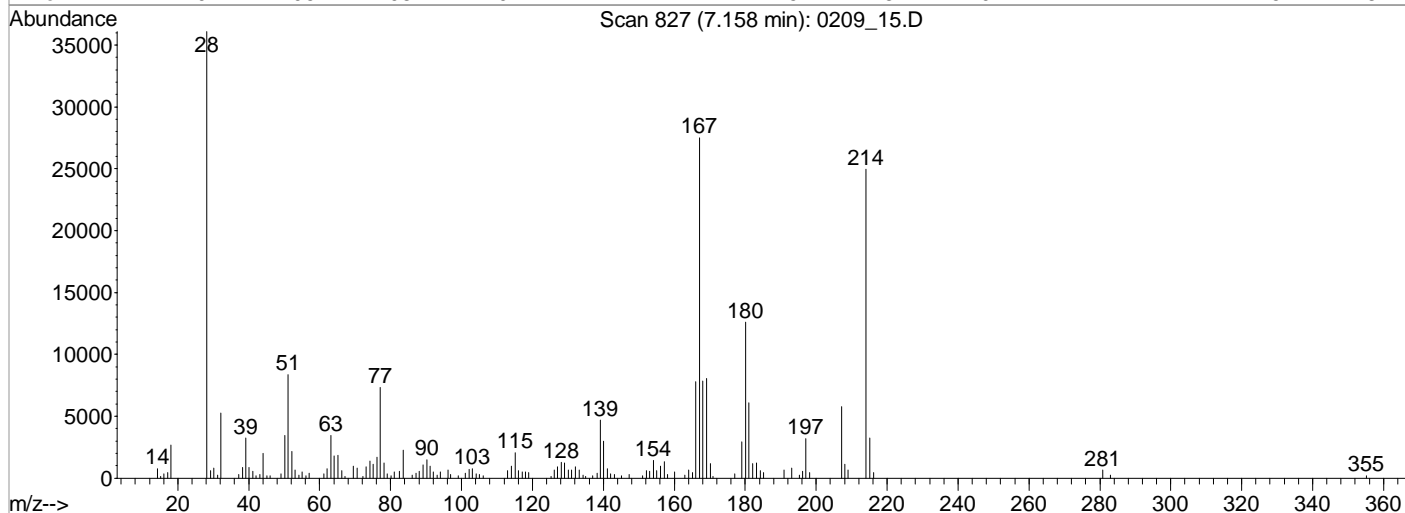
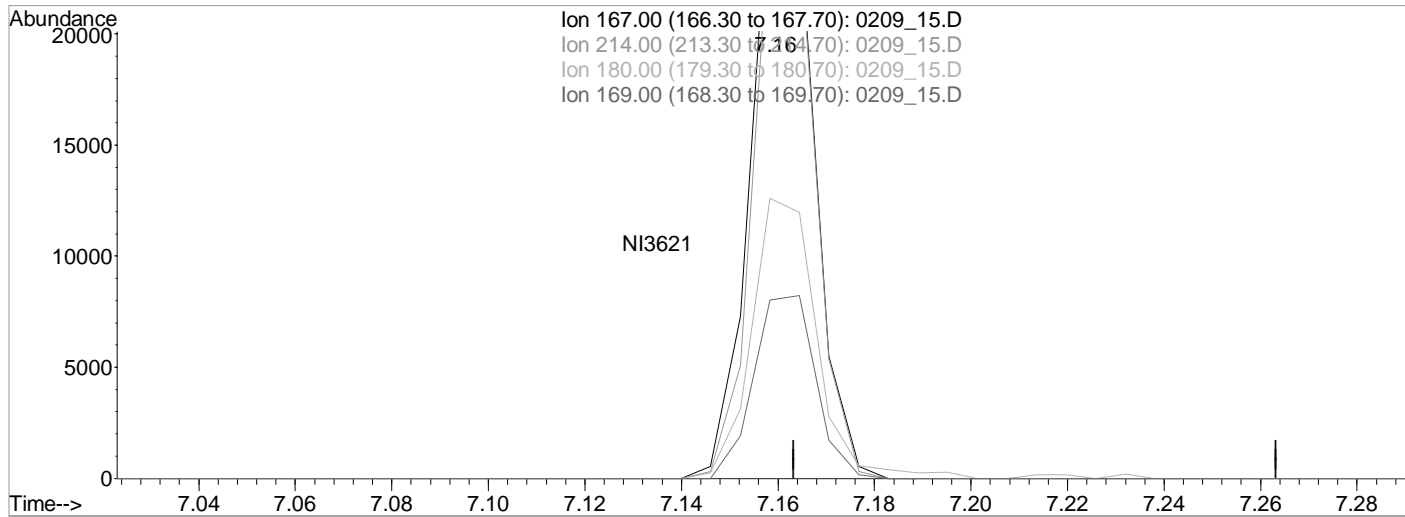
(82) 2-nitrodiphenylamine (MT)  
 7.21min (-7.213) 0.0000000 ppb  
 Qvalue = 0  
 response 0

Ion	Exp%	Act%
167.00	100	0.00
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_15.D Vial: 12  
 Acq On : 9 Feb 2022 1:51 pm Operator: 917  
 Sample : STD TCL 4K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:28 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:26:53 2022  
 Response via : Single Level Calibration



TIC: 0209\_15.D

(82) 2-nitrodiphenylamine (MT)  
 7.16min (-0.055) 0.0000000 ppb m

response 24613

Ion	Exp%	Act%
167.00	100	100
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 16.D Vial: 13  
 Acq On : 9 Feb 2022 2:11 pm Operator: 917  
 Sample : MSTD TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:12 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:11:22 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	80802	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	355632	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	160695	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	305525	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	266241	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	277583	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
7) Phenol-d5	0.00	99	0d	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	

Target Compounds

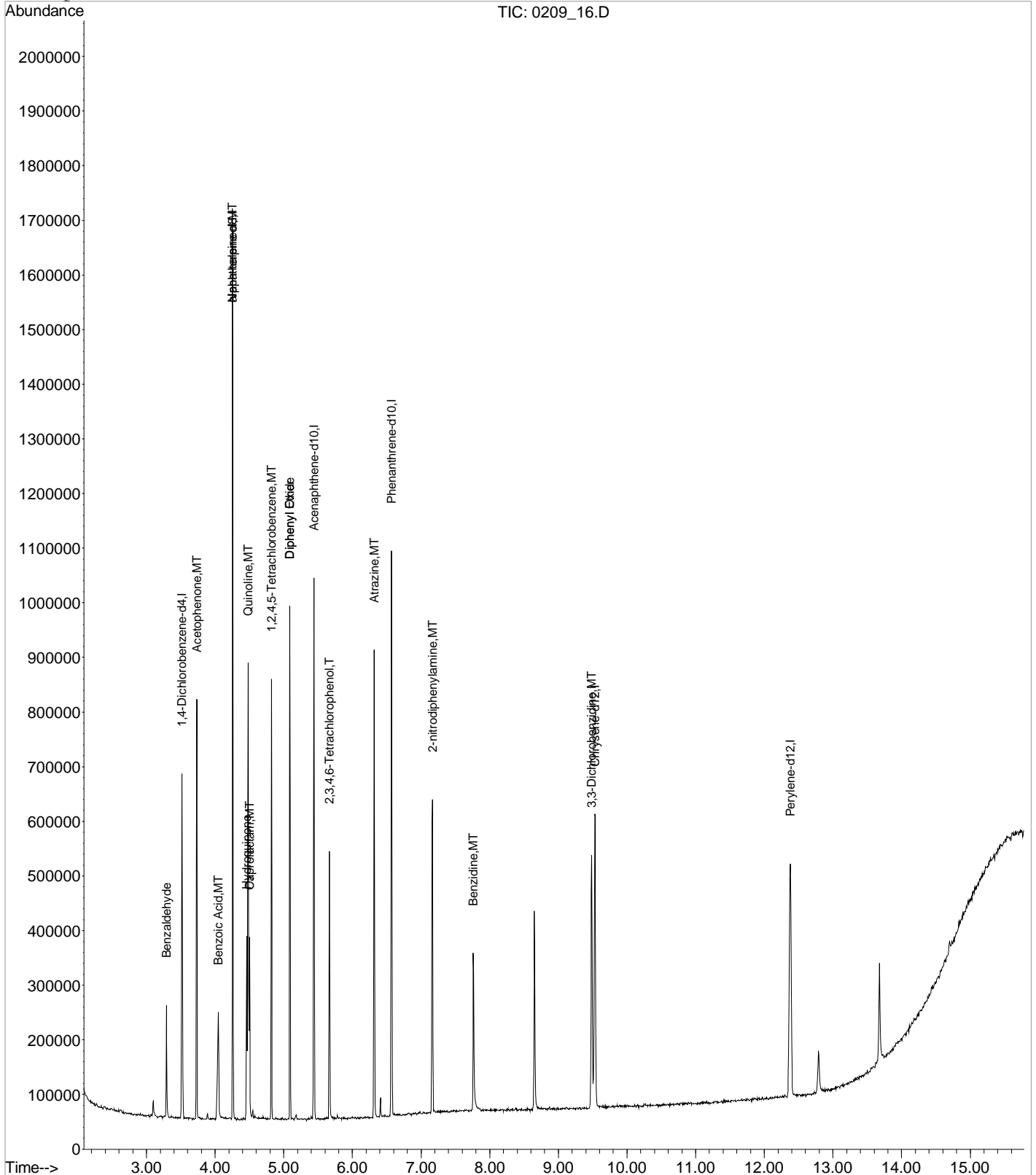
	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	34568	9618.5822945	ppb	100
22) Acetophenone	3.73	105	164650	9853.3849640	ppb	100
31) Benzoic Acid	4.04	105	61639	11154.8218541	ppb	100
33) alpha-terpineol	4.25	59	113780	11109.9986247	ppb	100
37) Hydroquinone	4.46	110	74981	8906.6267747	ppb	100
38) Quinoline	4.48	129	235712	10770.6642496	ppb	100
39) Caprolactam	4.50	113	23969	9781.3529859	ppb	100
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	105301	10882.1968071	ppb	100
44) Diphenyl Ether	5.09	170	155858	11165.5328771	ug/ml	100
45) Diphenyl Oxide	5.09	170	155858	11165.5328771	ug/ml	100
62) 2,3,4,6-Tetrachlorophenol	5.67	232	45074	9836.0924902	ppb	100
69) Atrazine	6.32	200	67082	10208.1844301	ppb	100
82) 2-nitrodiphenylamine	7.16	167	72572	10161.7203217	ppb	# 100
85) Benzidine	7.76	184	134678	9556.0521113	ppb	100
89) 3,3-Dichlorobenzidine	9.49	252	138838	10164.4628275	ppb	100

(#) = qualifier out of range (m) = manual integration

0209\_16.D S804B09V.M Fri Feb 18 15:13:48 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 16.D Vial: 13  
Acq On : 9 Feb 2022 2:11 pm Operator: 917  
Sample : MSTD TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Feb 18 15:12 2022 Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Fri Feb 18 15:11:22 2022  
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\050422B\0504B 04.D Vial: 4  
 Acq On : 4 May 2022 8:30 pm Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 16:01 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	73015	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	326671	8000.00	ppb	0.00
46) Acenaphthene-d10	5.15	164	140220	8000.00	ppb	0.00
70) Phenanthrene-d10	6.26	188	265524	8000.00	ppb	0.00
84) Chrysene-d12	9.00	240	228051	8000.00	ppb	0.00
94) Perylene-d12	11.66	264	216467	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	
50) 2-Fluorobiphenyl	0.00	172	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	

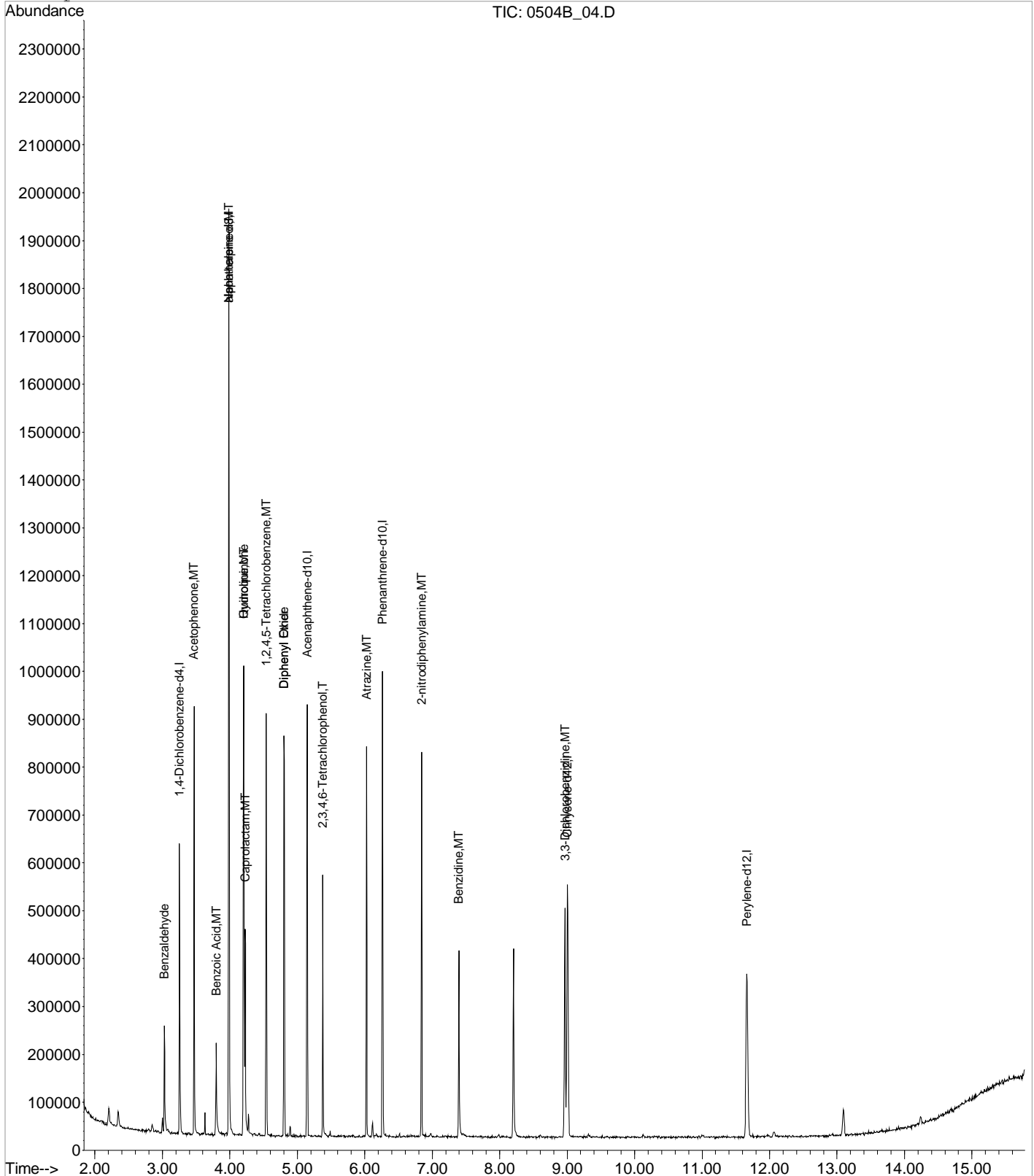
Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue	
9) Benzaldehyde	3.03	105	37553	11563.5576519	ppb	#	88
22) Acetophenone	3.47	105	174657	11566.9732918	ppb		96
31) Benzoic Acid	3.80	105	51228	9584.7085299	ppb		94
33) alpha-terpineol	3.98	59	120439	11752.9375562	ppb		96
37) Hydroquinone	4.21	110	72844m	10246.0904601	ppb		
38) Quinoline	4.21	129	226702	10414.3753050	ppb		100
39) Caprolactam	4.23	113	30661	13621.5202940	ppb	#	81
43) 1,2,4,5-Tetrachlorobenzene	4.54	216	102104	11677.3256633	ppb		99
44) Diphenyl Ether	4.81	170	138570	9934.7053971	ug/ml#		87
45) Diphenyl Oxide	4.81	170	138570	9934.7053971	ug/ml#		87
62) 2,3,4,6-Tetrachlorophenol	5.38	232	46425	11610.2298348	ppb		99
69) Atrazine	6.02	200	60218	10501.7393261	ppb		98
82) 2-nitrodiphenylamine	6.84	167	76767	11463.4210047	ppb	#	100
85) Benzidine	7.39	184	138285	10272.0957612	ppb		99
89) 3,3-Dichlorobenzidine	8.97	252	124301	10587.2179159	ppb		99

(#) = qualifier out of range (m) = manual integration  
 0504B\_04.D S804E04BV.M Thu May 05 16:01:48 2022

Data File : C:\MSDCHEM\1\DATA\050422B\0504B 04.D Vial: 4  
 Acq On : 4 May 2022 8:30 pm Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 5 16:01 2022 Quant Results File: S804E04BV.RES

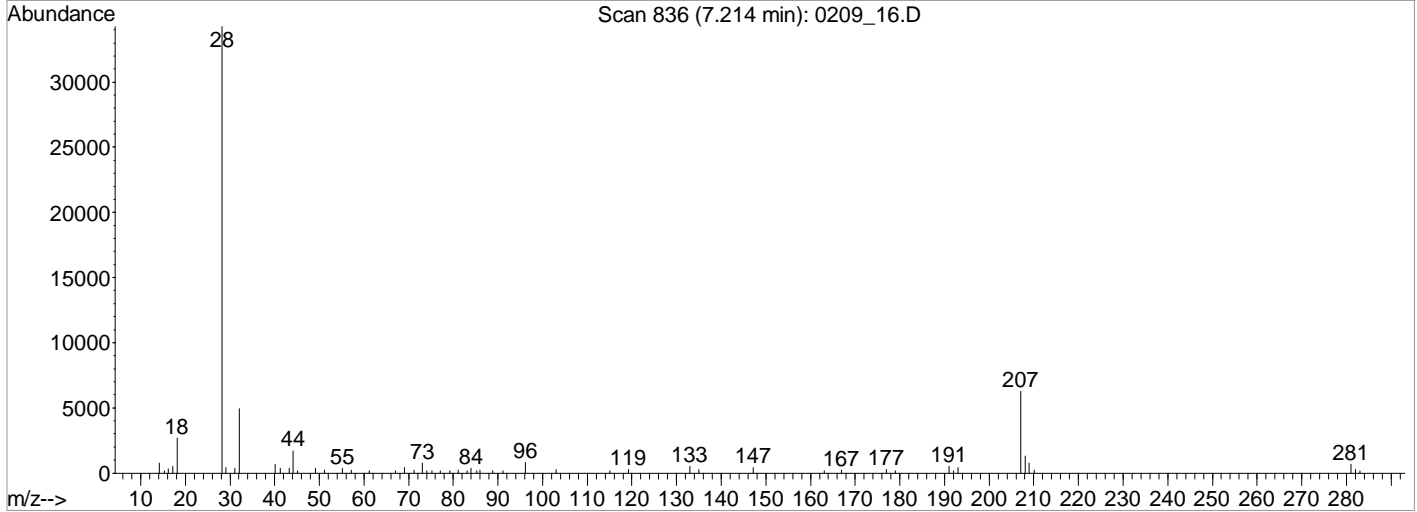
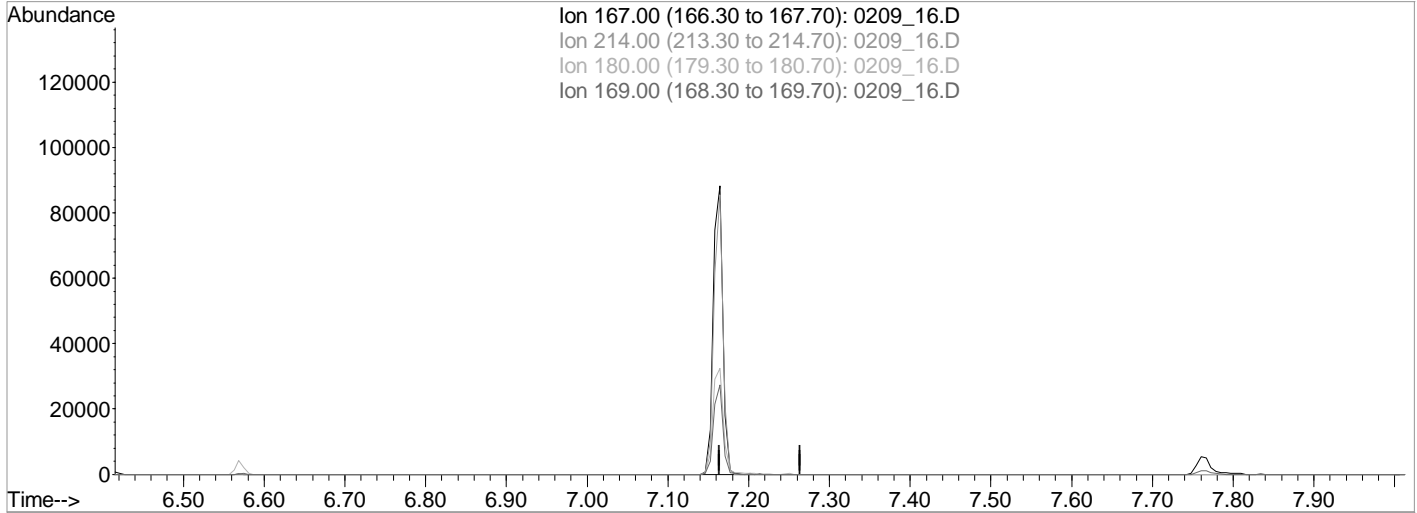
Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_16.D Vial: 13  
 Acq On : 9 Feb 2022 2:11 pm Operator: 917  
 Sample : MSTD TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:56 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:30:22 2022  
 Response via : Single Level Calibration



TIC: 0209\_16.D

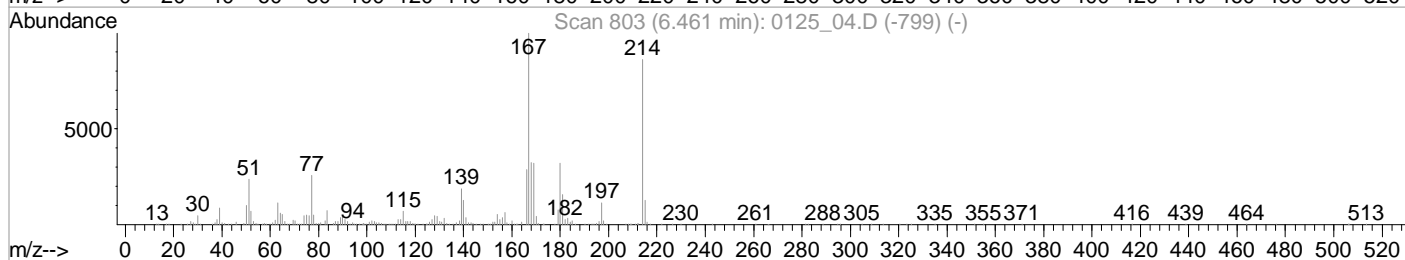
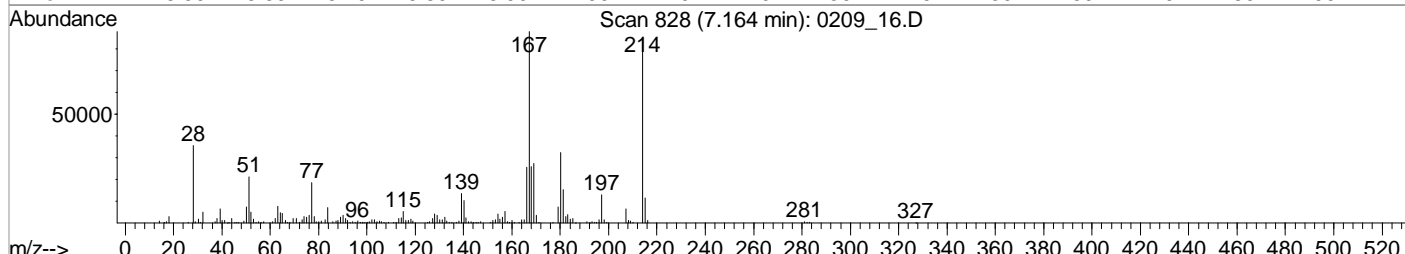
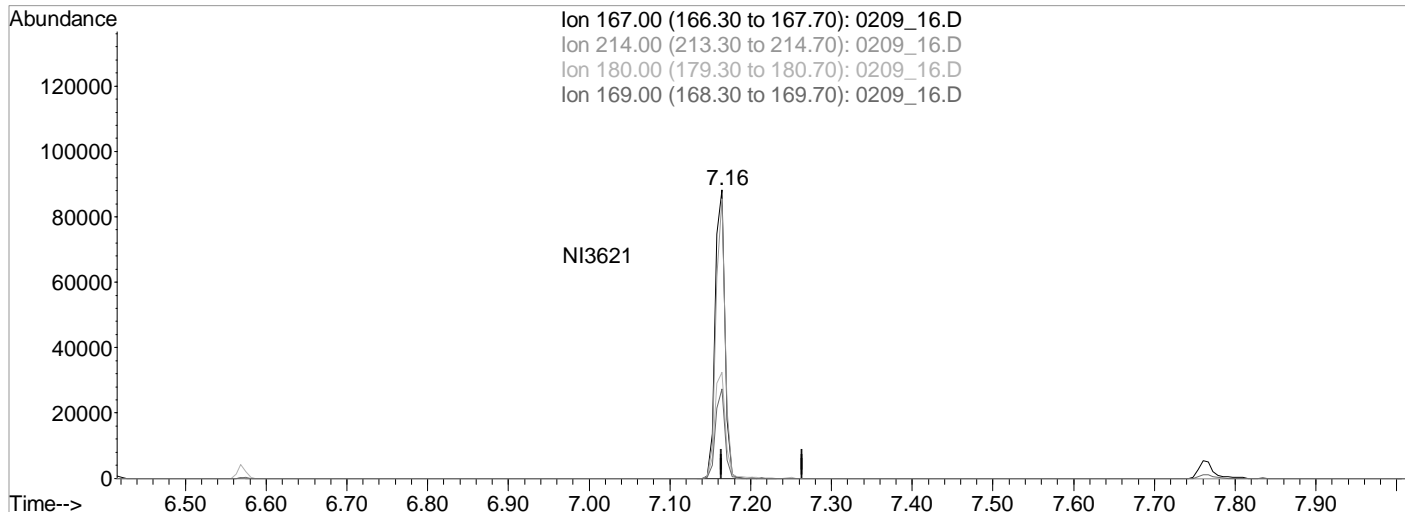
(82) 2-nitrodiphenylamine (MT)  
 7.21min (-7.213) 0.0000000 ppb  
 Qvalue = 0  
 response 0

Ion	Exp%	Act%
167.00	100	0.00
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 16.D Vial: 13  
 Acq On : 9 Feb 2022 2:11 pm Operator: 917  
 Sample : MSTD TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 11:56 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:30:22 2022  
 Response via : Single Level Calibration



TIC: 0209\_16.D

(82) 2-nitrodiphenylamine (MT)  
 7.21min (-7.213) 0.0000000 ppb  
 Qvalue = 0  
 response 0

Ion	Exp%	Act%
167.00	100	0.00
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00



Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:27 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:25:47 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	80706	8000.00	ppb	0.00
23) Naphthalene-d8	4.25	136	399771	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	165153	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	310543	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	267602	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	278906	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.00	172	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery	=	0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery	=	0.00%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	70662	19685.1634252	ppb	97
22) Acetophenone	3.73	105	331215	19844.9495807	ppb	100
31) Benzoic Acid	4.06	105	142776	22985.3864980	ppb	97
33) alpha-terpineol	4.25	59	228650	19861.3528537	ppb	100
37) Hydroquinone	4.47	110	185756	19628.8303703	ppb	97
38) Quinoline	4.48	129	490490	19937.9498035	ppb	99
39) Caprolactam	4.50	113	57125	20737.8999620	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	213585	19635.6089839	ppb	99
44) Diphenyl Ether	5.09	170	314838	20064.4401459	ug/ml	100
45) Diphenyl Oxide	5.09	170	314838	20064.4401459	ug/ml	100
62) 2,3,4,6-Tetrachlorophenol	5.67	232	91641	19458.1801546	ppb	98
69) Atrazine	6.32	200	137477	20355.8128288	ppb	99
82) 2-nitrodiphenylamine	7.16	167	162587	22933.0128430	ppb	# 100
85) Benzidine	7.76	184	309145	21823.7641043	ppb	99
89) 3,3-Dichlorobenzidine	9.49	252	286959	20829.0616750	ppb	99

(#) = qualifier out of range (m) = manual integration

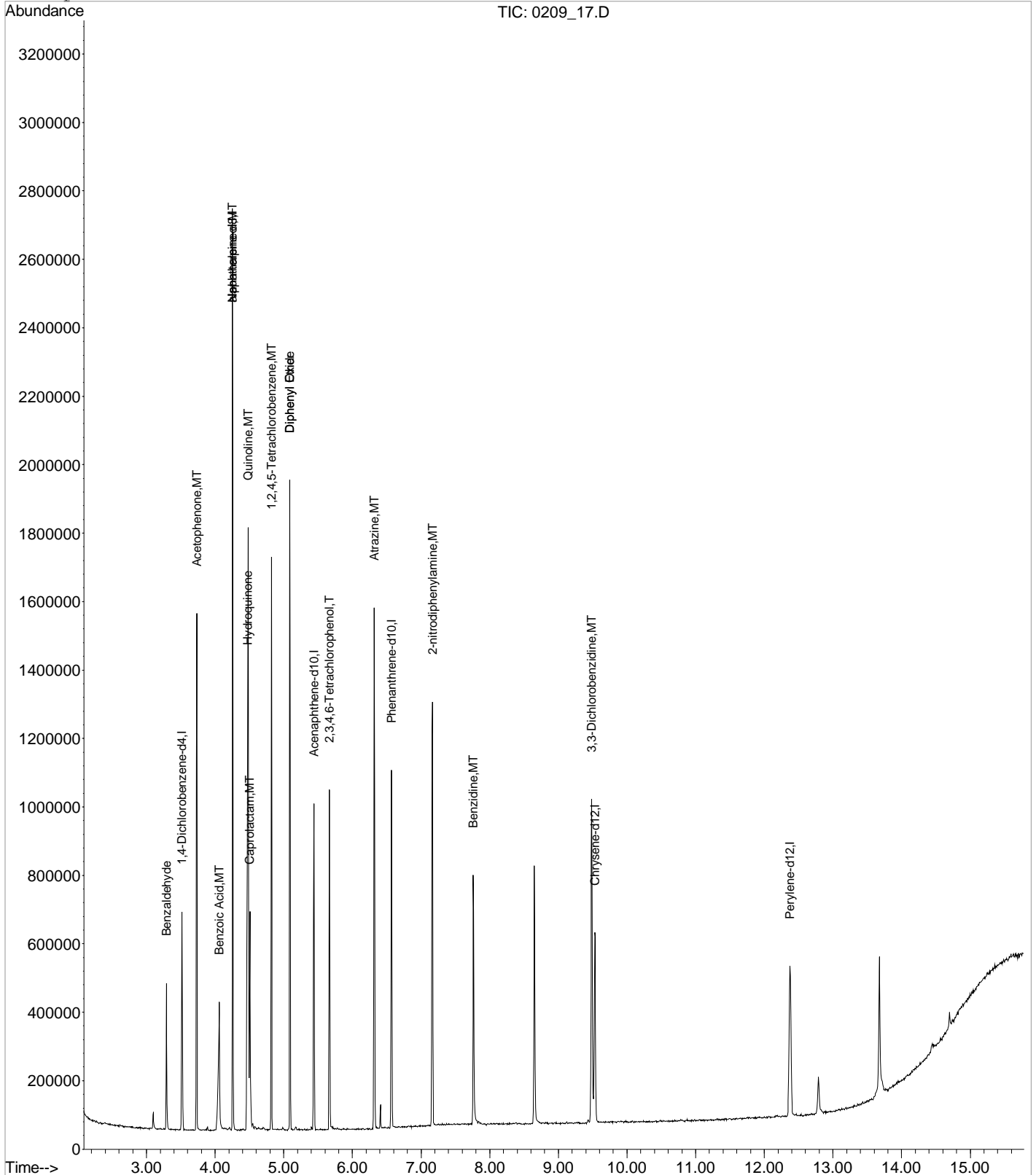
0209\_17.D S804B09V.M Fri Feb 18 15:28:47 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D  
 Acq On : 9 Feb 2022 2:32 pm  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:27 2022

Vial: 14  
 Operator: 917  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804B09V.RES

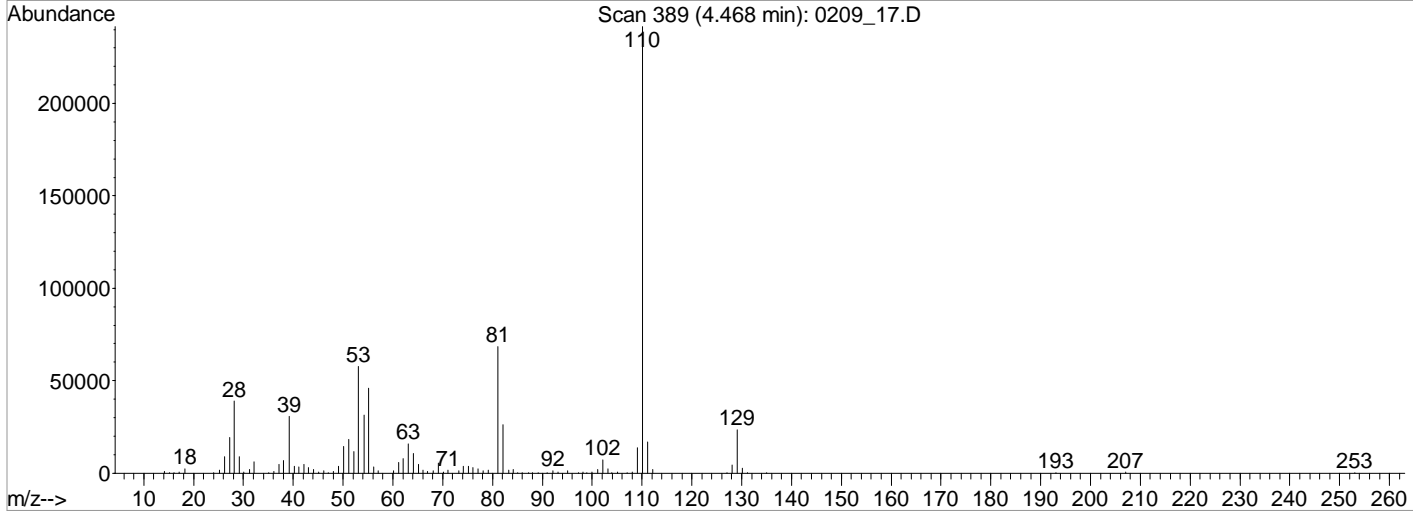
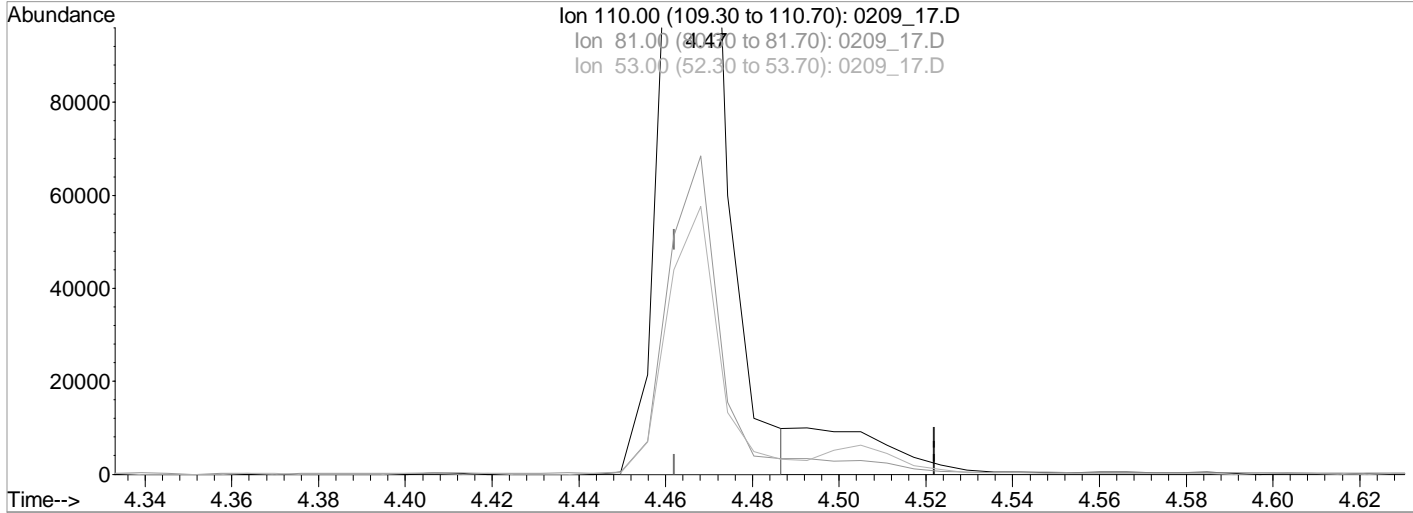
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:25:47 2022  
 Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209\_17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:36 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:34:51 2022  
 Response via : Single Level Calibration



TIC: 0209\_17.D

(37) Hydroquinone  
 4.47min (+0.006) 18327.5298072 ppb m

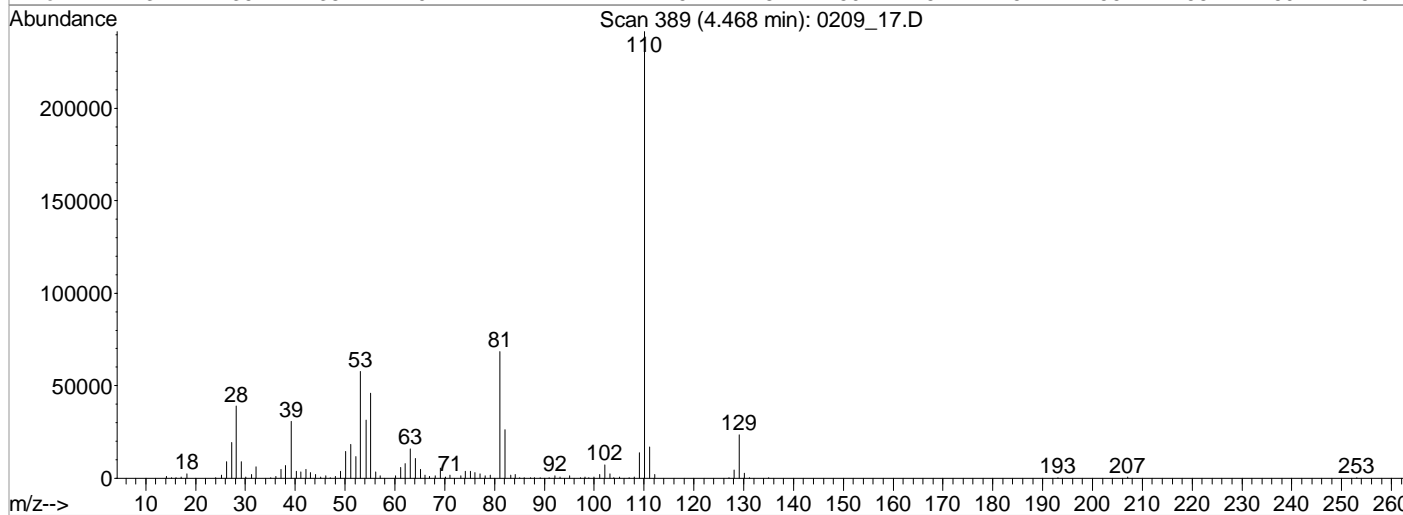
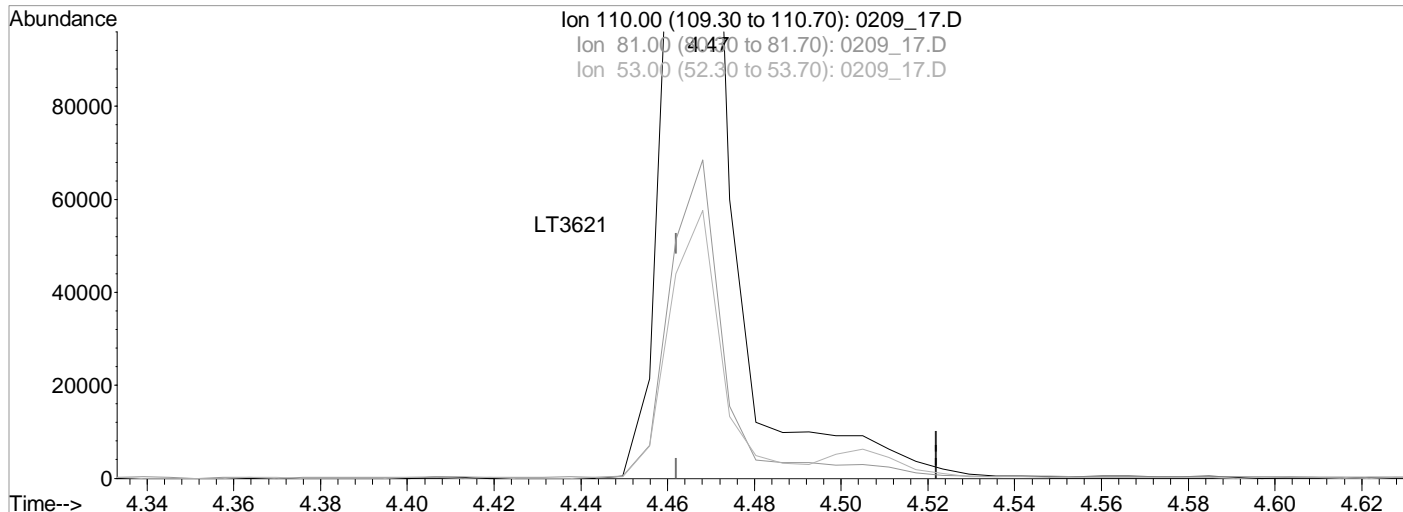
response 185555

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.35
53.00	25.90	23.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:36 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:34:51 2022  
 Response via : Single Level Calibration



TIC: 0209\_17.D

(37) Hydroquinone  
 4.47min (+0.006) 19899.5756395 ppb m

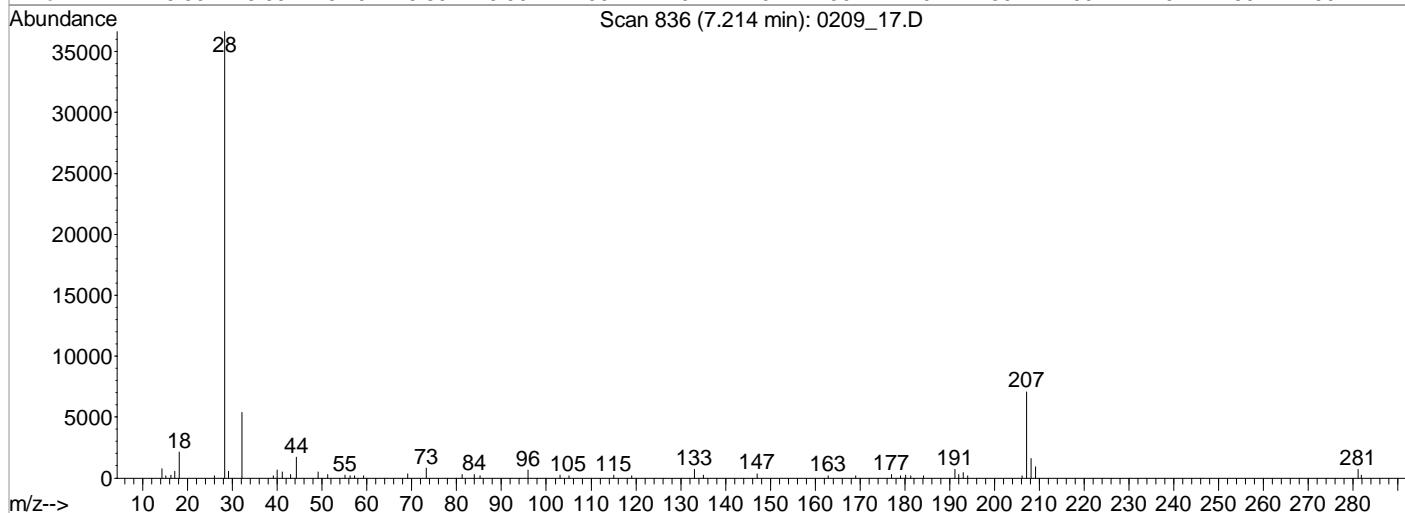
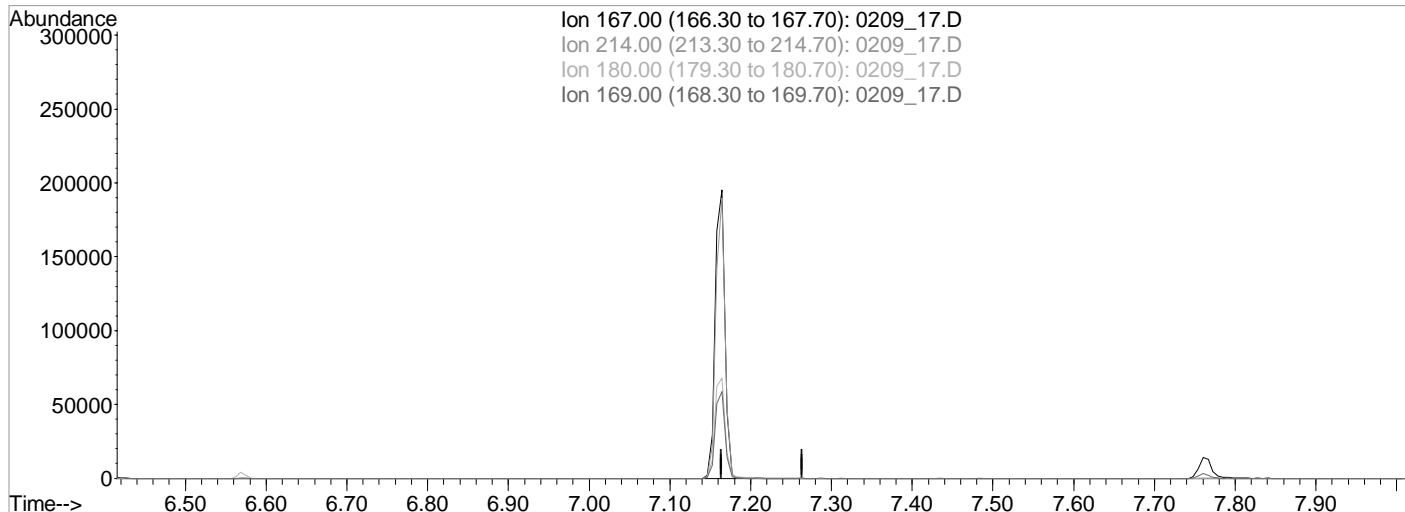
response 201471

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.35
53.00	25.90	23.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
Acq On : 9 Feb 2022 2:32 pm Operator: 917  
Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Feb 14 16:36 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Mon Feb 14 16:34:51 2022  
Response via : Single Level Calibration



TIC: 0209\_17.D

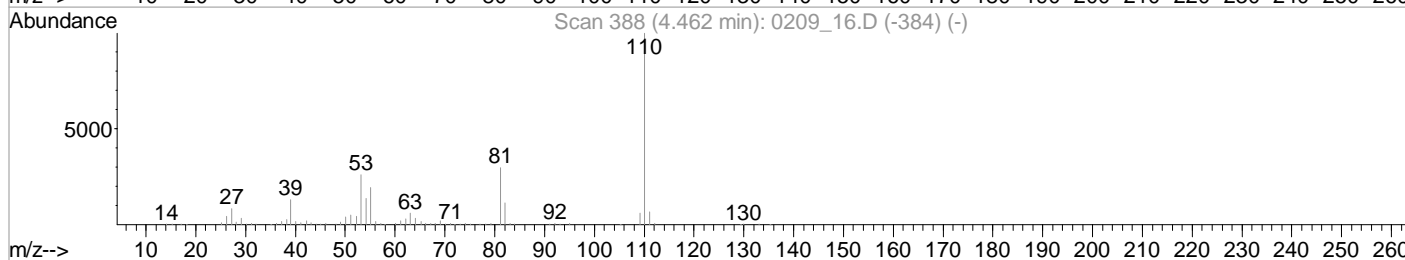
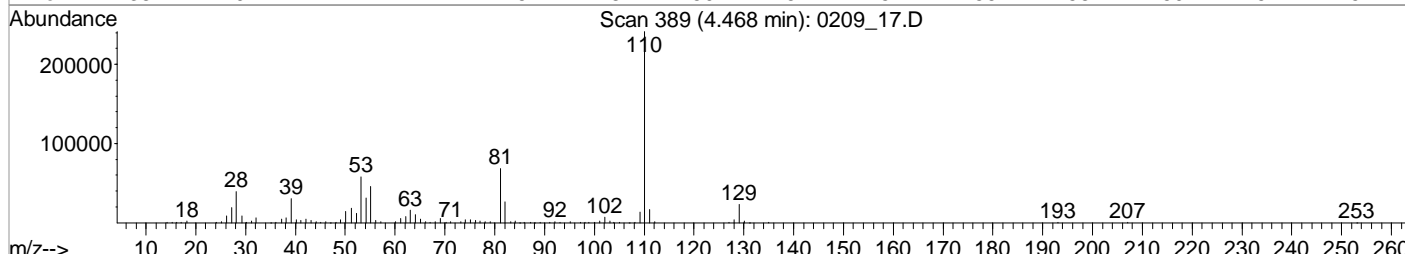
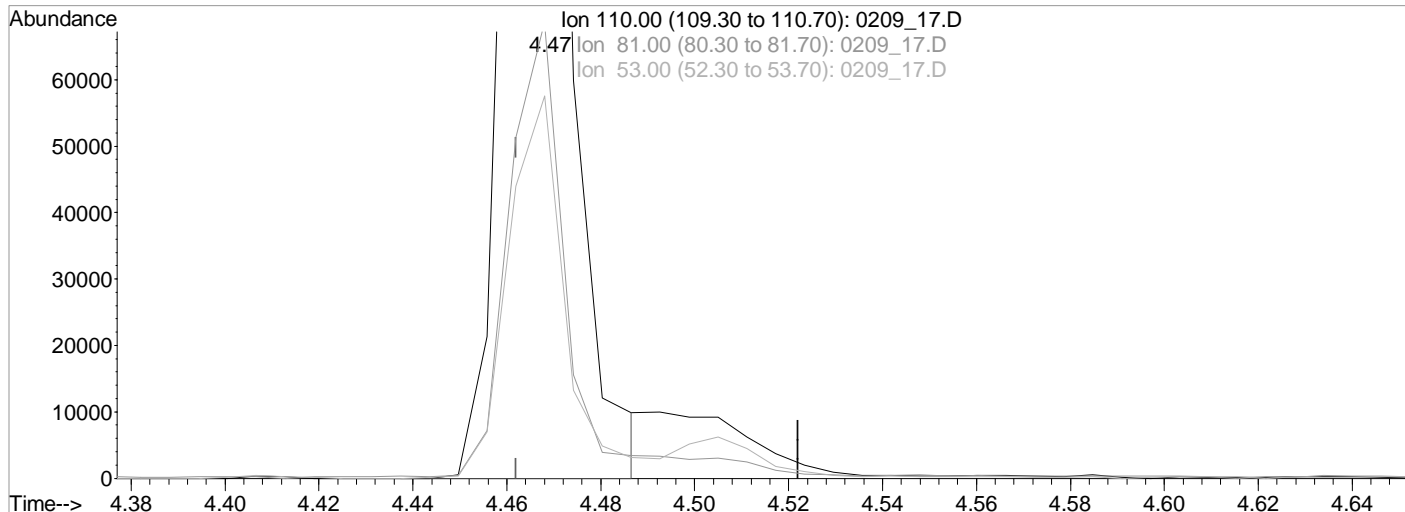
(82) 2-nitrodiphenylamine (MT)  
7.21min (-7.213) 0.0000000 ppb  
Qvalue = 0  
response 0

Ion	Exp%	Act%
167.00	100	0.00
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:27 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:25:47 2022  
 Response via : Single Level Calibration



TIC: 0209\_17.D

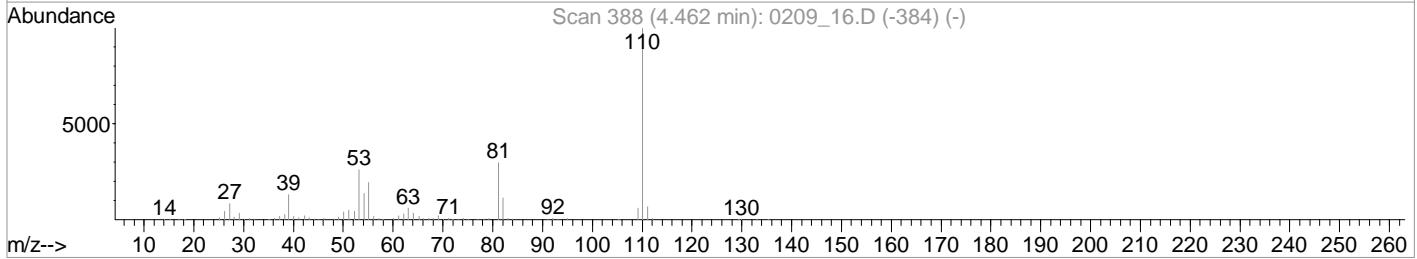
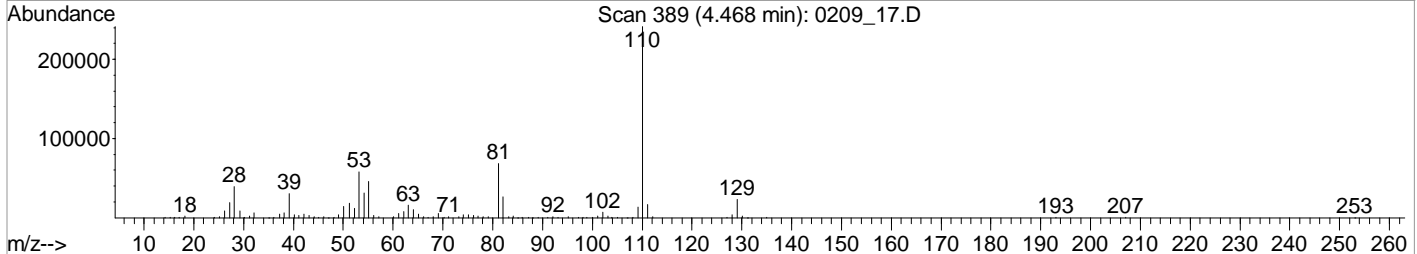
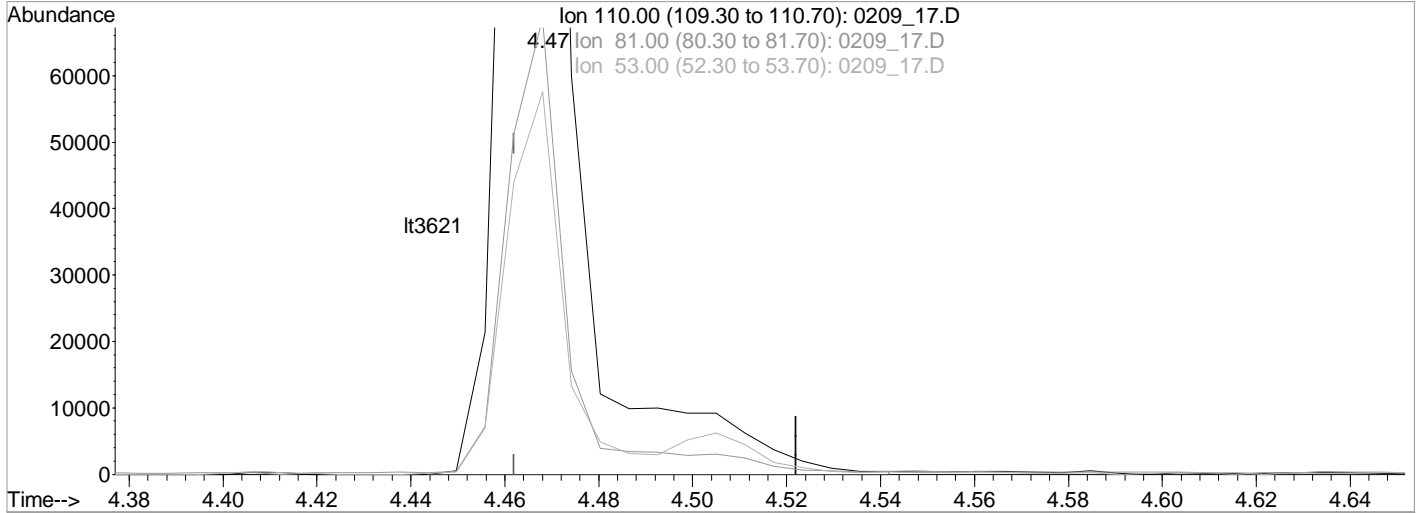
(37) Hydroquinone  
 4.47min (+0.006) 19628.8303703 ppb  
 Qvalue = 97  
 response 185756

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.22
53.00	25.90	23.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 17.D Vial: 14  
 Acq On : 9 Feb 2022 2:32 pm Operator: 917  
 Sample : STD TCL 20K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:27 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:25:47 2022  
 Response via : Single Level Calibration



TIC: 0209\_17.D

(37) Hydroquinone  
 4.47min (+0.006) 19628.8303703 ppb  
 Qvalue = 97  
 response 185756

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.22
53.00	25.90	23.82
0.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:30 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:28:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	82108	8000.00	ppb	0.00
23) Naphthalene-d8	4.25	136	454114	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	168401	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	315216	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	275976	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	284329	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	106225	29087.0842194	ppb	99
22) Acetophenone	3.73	105	505456	29767.5922833	ppb	99
31) Benzoic Acid	4.08	105	230790	32708.4514047	ppb	98
33) alpha-terpineol	4.25	59	348279	26632.4613626	ppb	100
37) Hydroquinone	4.47	110	296671	27928.9894085	ppb	96
38) Quinoline	4.48	129	748414	26781.7307239	ppb	99
39) Caprolactam	4.51	113	91827	29346.4351921	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	326532	26426.8725297	ppb	100
44) Diphenyl Ether	5.09	170	472571	26512.6637447	ug/ml	99
45) Diphenyl Oxide	5.09	170	472571	26512.6637447	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.67	232	141749	29517.1352371	ppb	99
69) Atrazine	6.32	200	207850	30182.1541051	ppb	99
82) 2-nitrodiphenylamine	7.16	167	262818	36543.3967385	ppb #	100
85) Benzidine	7.77	184	501082	34300.0121056	ppb	100
89) 3,3-Dichlorobenzidine	9.49	252	434215	30561.3628394	ppb	99

(#) = qualifier out of range (m) = manual integration

0209\_18.D S804B09V.M Fri Feb 18 15:31:52 2022

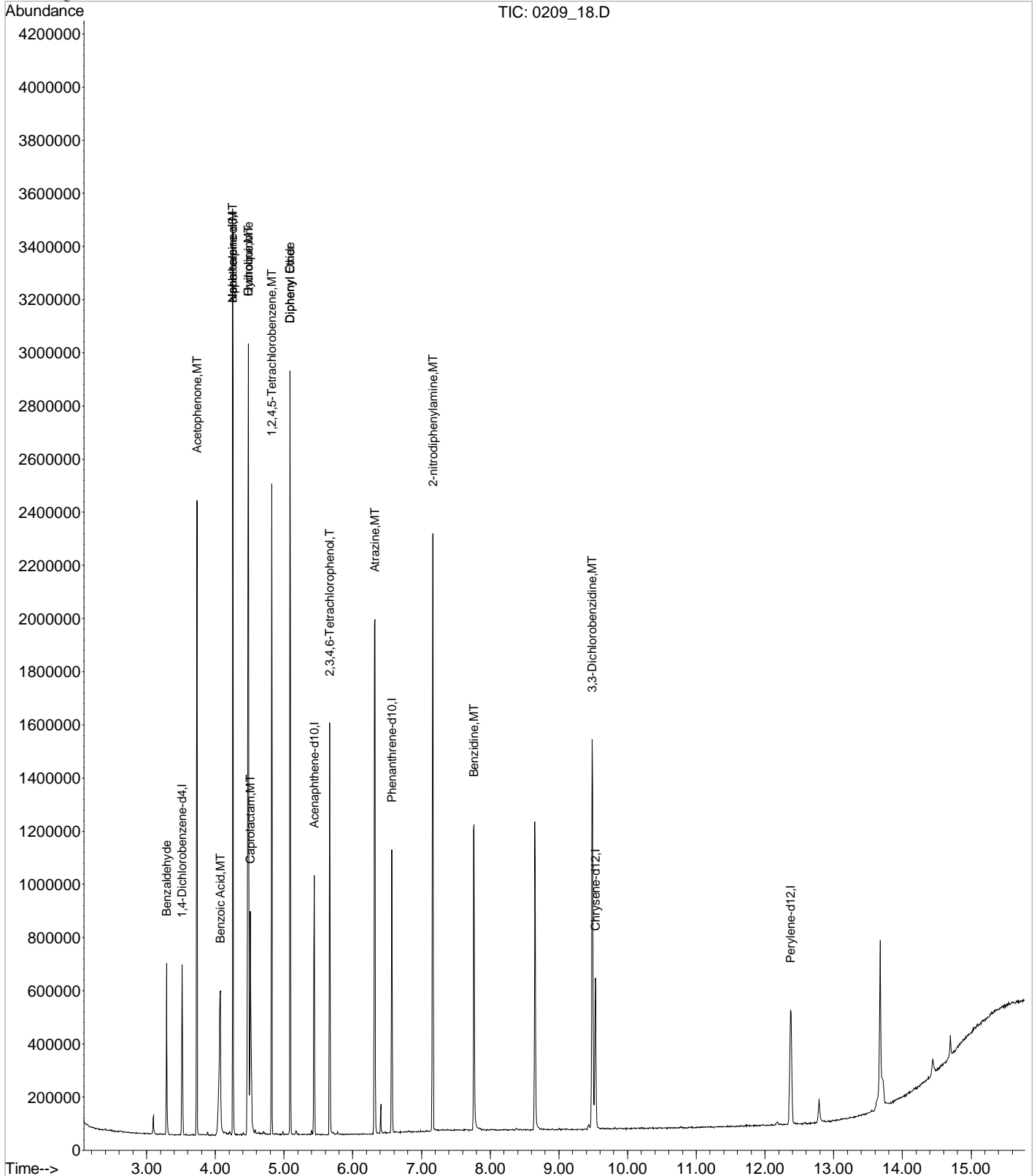


Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D  
Acq On : 9 Feb 2022 2:53 pm  
Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
MS Integration Params: RTEINT.P  
Quant Time: Feb 18 15:30 2022

Vial: 15  
Operator: 917  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804B09V.RES

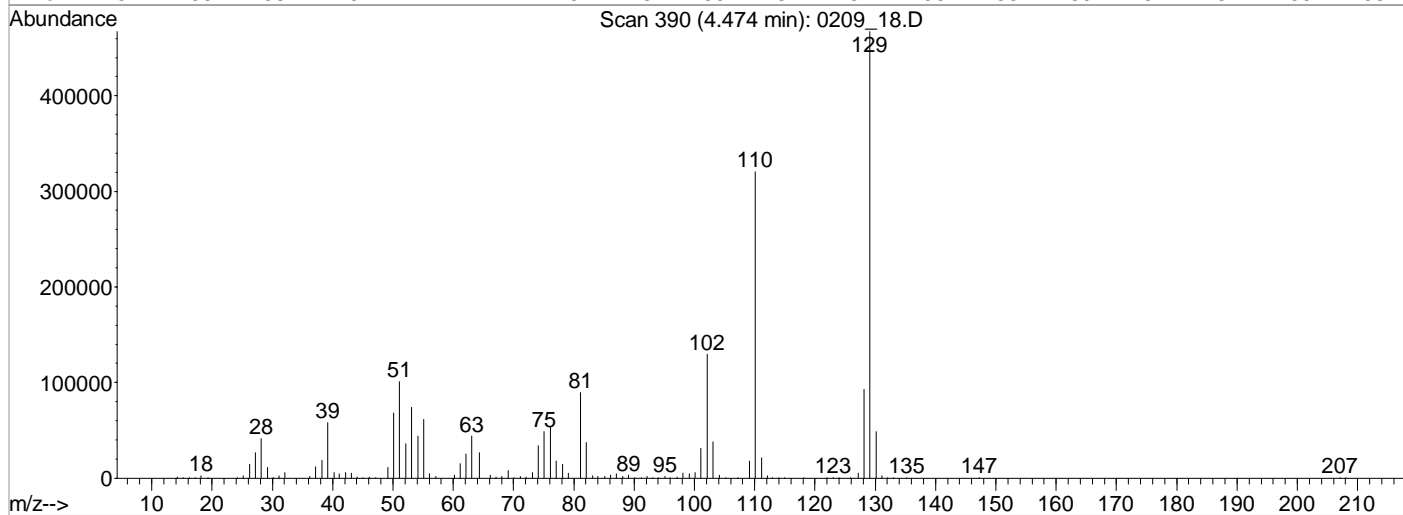
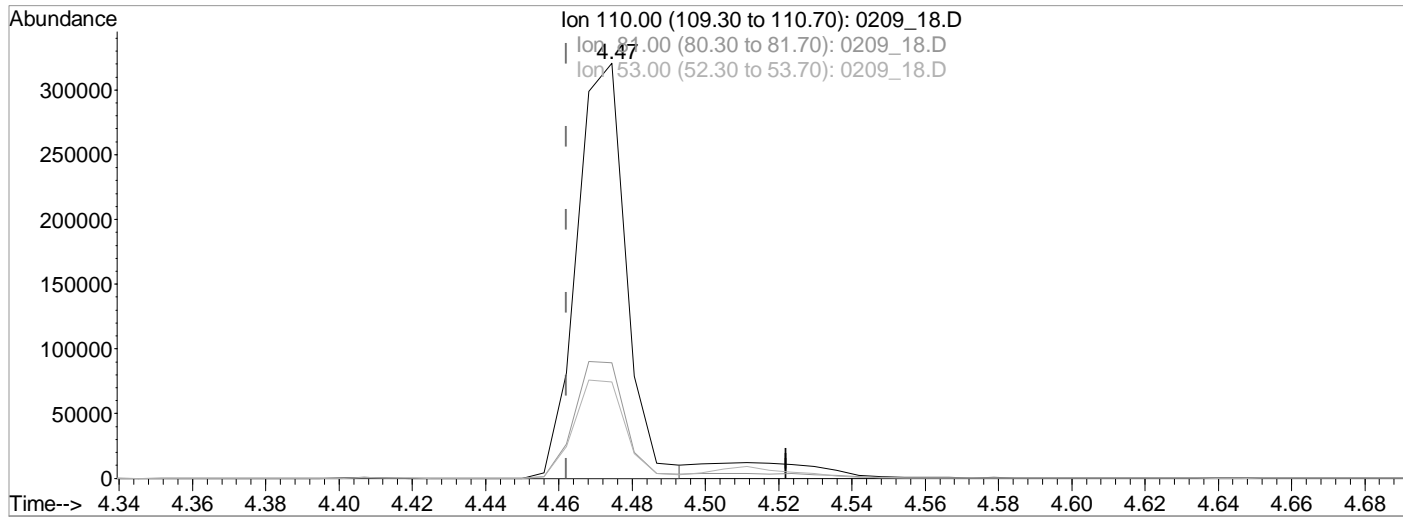
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Fri Feb 18 15:28:57 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:37:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

(37) Hydroquinone  
 4.47min (+0.012) 26335.0012438 ppb m

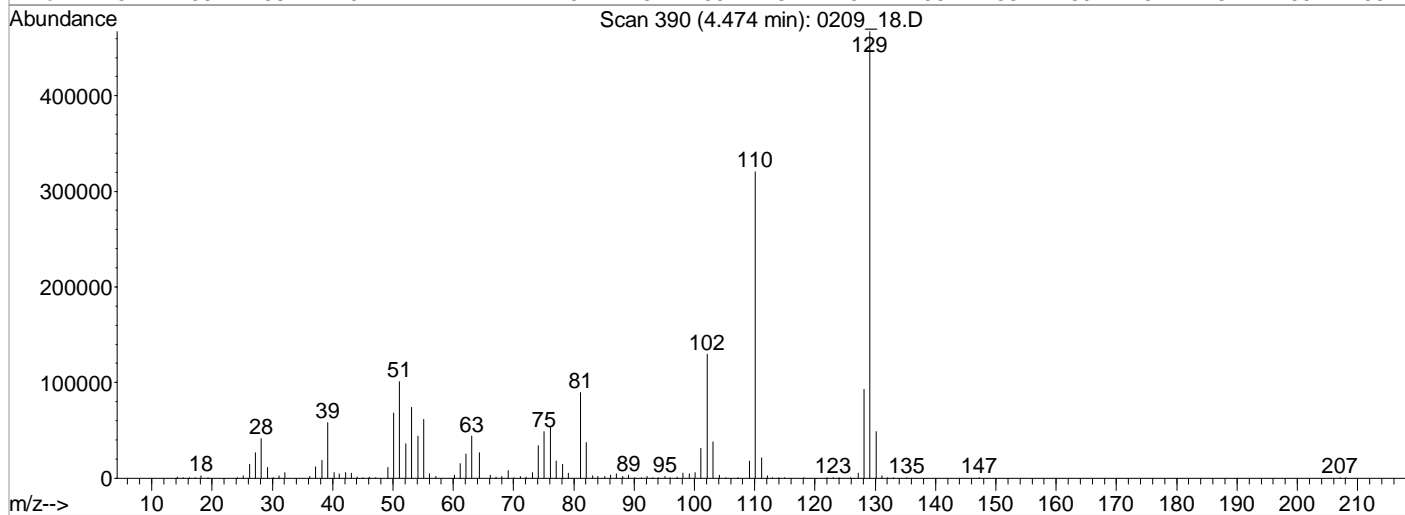
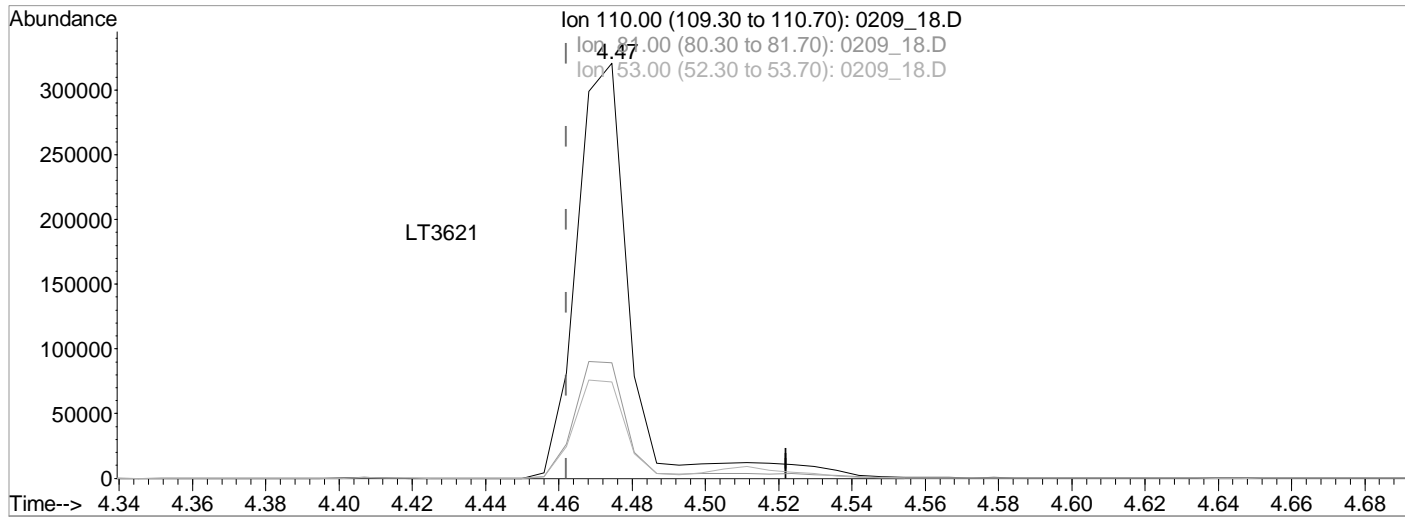
response 296613

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	27.93
53.00	25.90	23.20
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:37:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

(37) Hydroquinone  
 4.47min (+0.012) 28839.3802835 ppb m

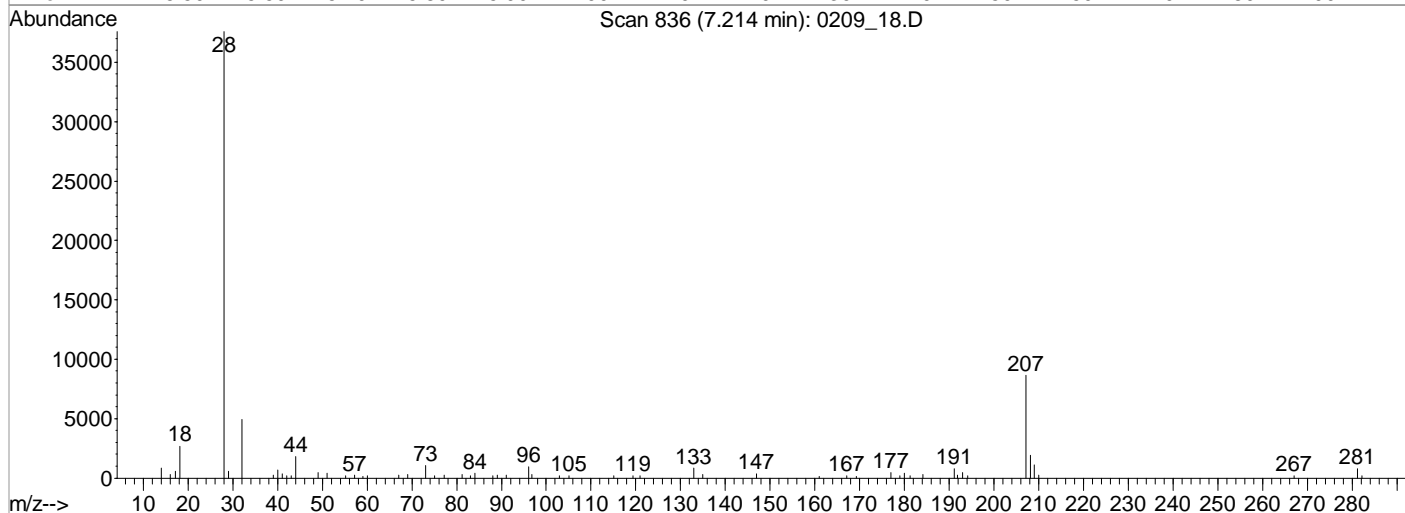
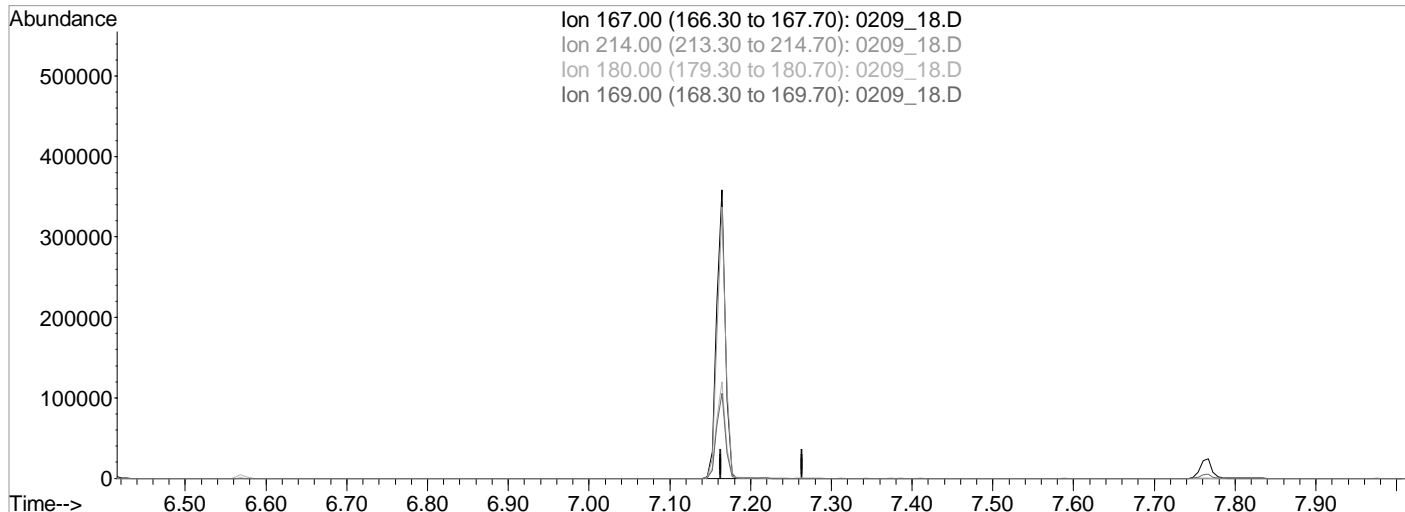
response 324820

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	27.93
53.00	25.90	23.20
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15
Acq On : 9 Feb 2022 2:53 pm Operator: 917
Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 14 16:39 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Mon Feb 14 16:37:26 2022
Response via : Single Level Calibration



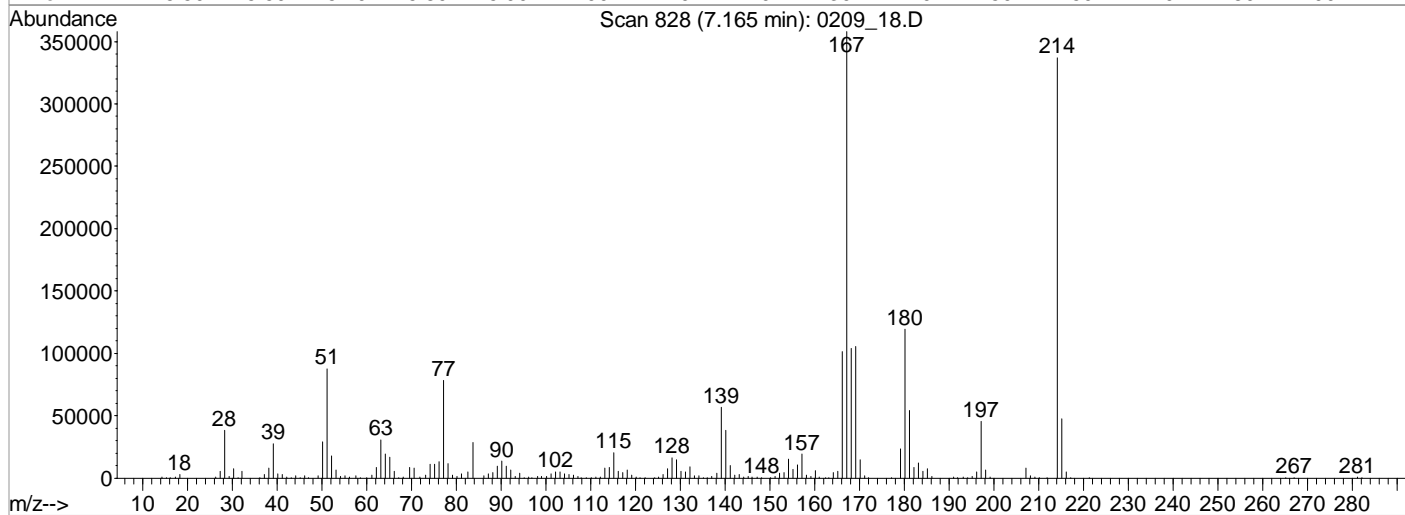
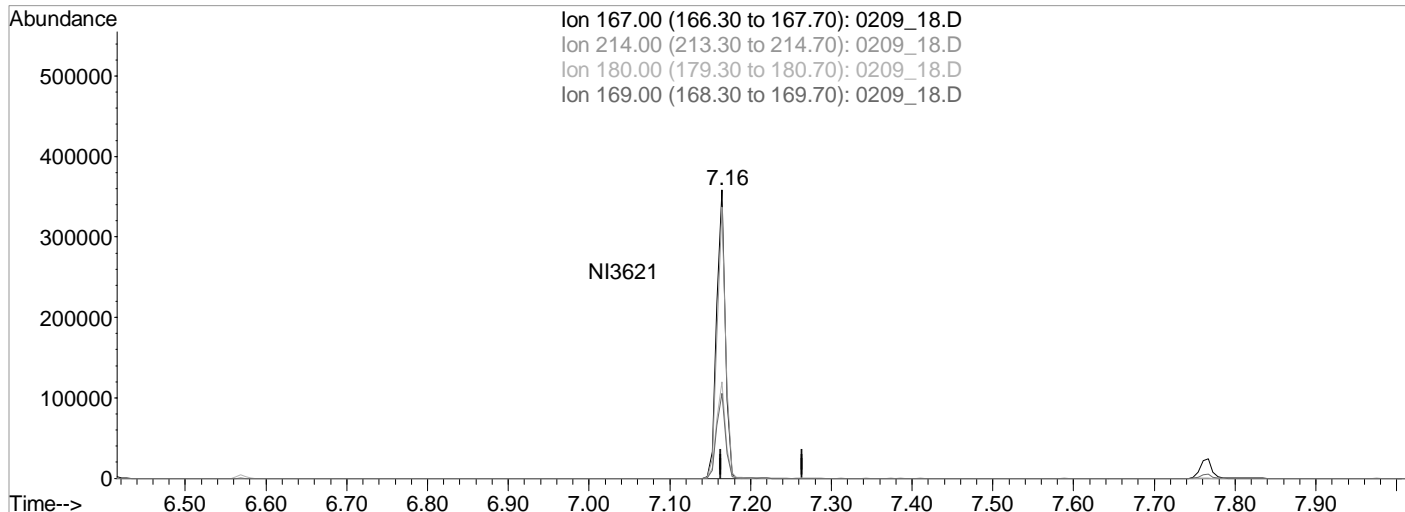
TIC: 0209\_18.D

(82) 2-nitrodiphenylamine (MT)
7.21min (-7.213) 0.0000000 ppb
Qvalue = 0
response 0
Ion Exp% Act%
167.00 100 0.00
214.00 0.00 0.00
180.00 0.00 0.00
169.00 0.00 0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
Acq On : 9 Feb 2022 2:53 pm Operator: 917  
Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Feb 14 16:40 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Mon Feb 14 16:37:26 2022  
Response via : Single Level Calibration



TIC: 0209\_18.D

(82) 2-nitrodiphenylamine (MT)  
7.16min (-0.049) 0.0000000 ppb m

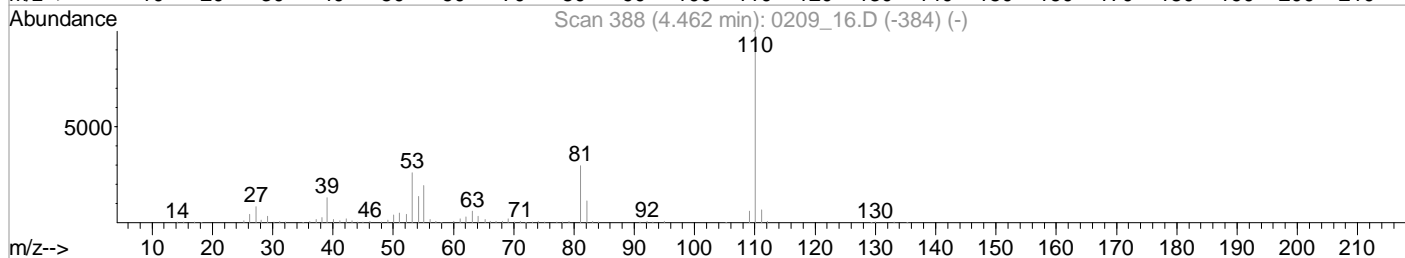
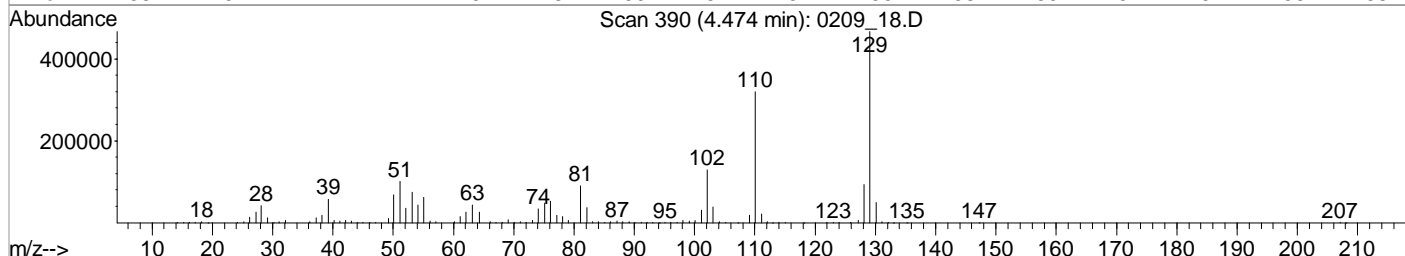
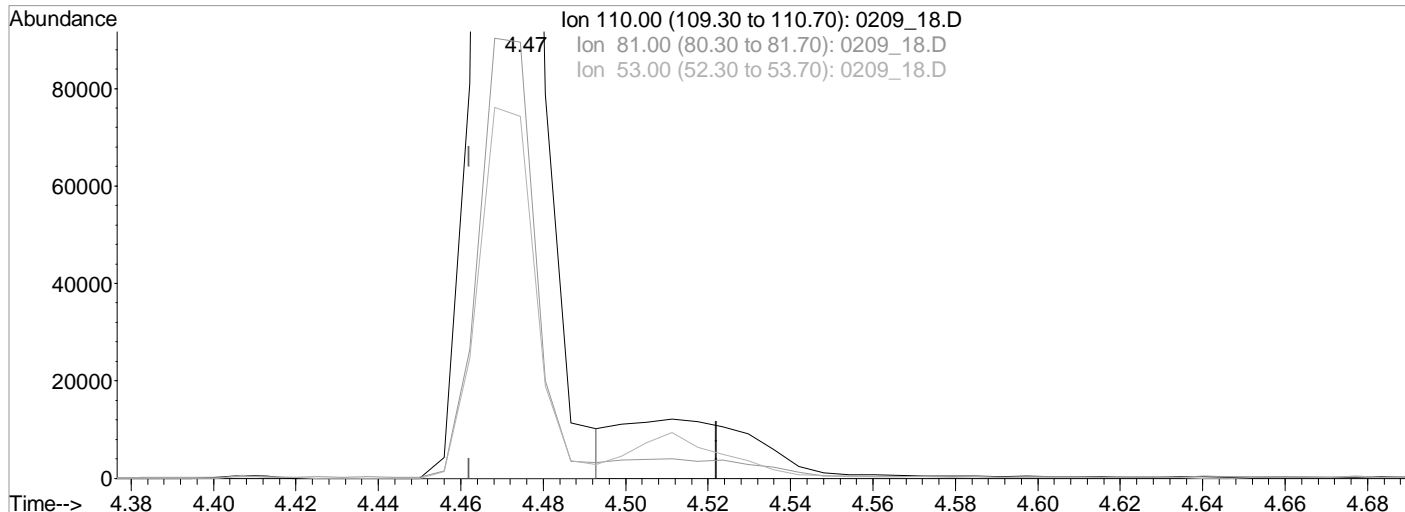
response 263020

Ion	Exp%	Act%
167.00	100	100
214.00	0.00	0.00
180.00	0.00	0.00
169.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:30 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:28:57 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

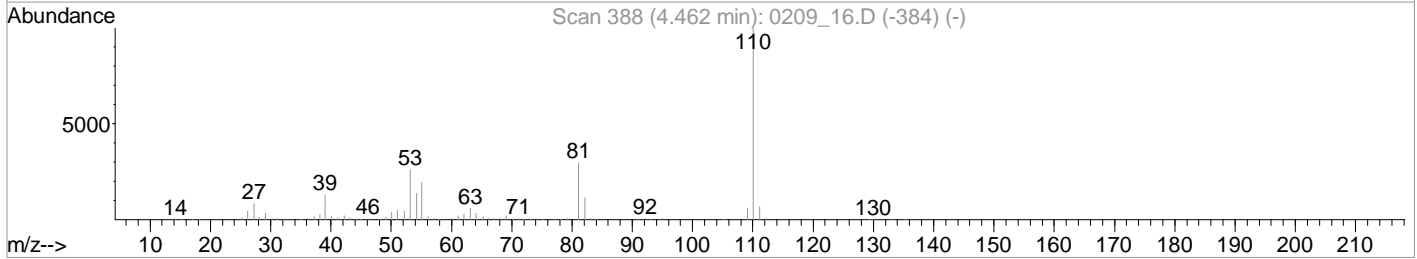
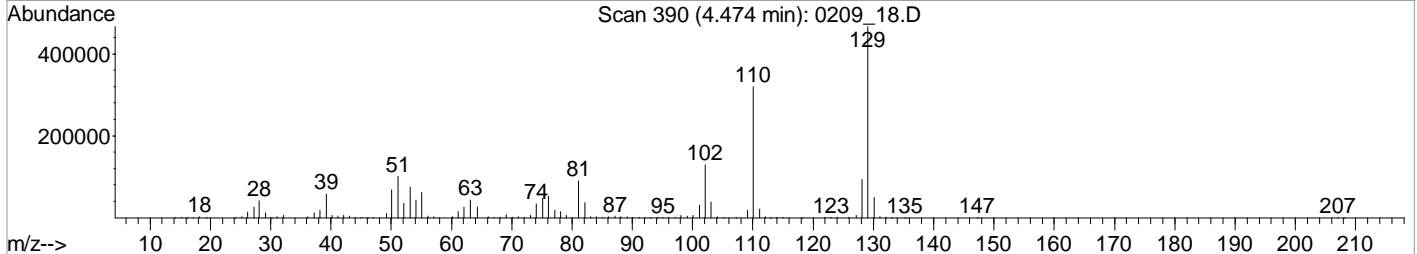
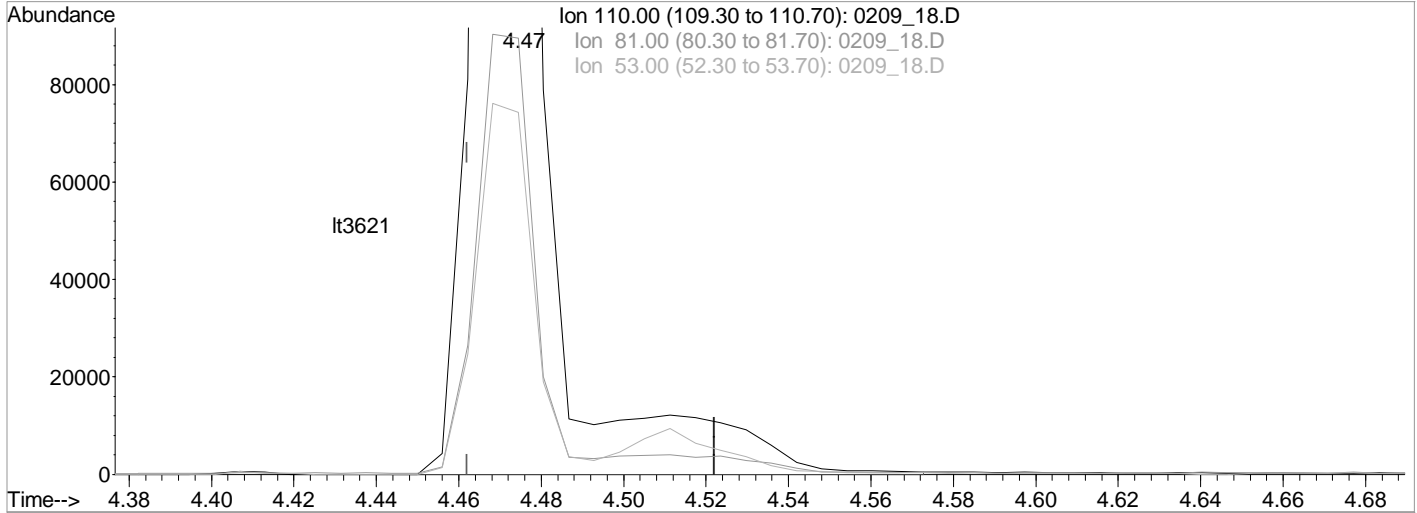
(37) Hydroquinone  
 4.47min (+0.012) 27928.9894085 ppb  
 Qvalue = 96  
 response 296671

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	27.88
53.00	25.90	23.20
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 18.D Vial: 15  
 Acq On : 9 Feb 2022 2:53 pm Operator: 917  
 Sample : STD TCL 30K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:30 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:28:57 2022  
 Response via : Single Level Calibration



TIC: 0209\_18.D

(37) Hydroquinone  
 4.47min (+0.012) 27928.9894085 ppb  
 Qvalue = 96  
 response 296671

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	27.88
53.00	25.90	23.20
0.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:33 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:32:01 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	83834	8000.00	ppb	0.00
23) Naphthalene-d8	4.25	136	509998	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	170524	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	328342	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	284281	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	291842	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	146822	39375.8434486	ppb	99
22) Acetophenone	3.73	105	707524	40810.0206029	ppb	99
31) Benzoic Acid	4.08	105	332830	42001.2174148	ppb	98
33) alpha-terpineol	4.25	59	473632	32249.3875896	ppb	100
37) Hydroquinone	4.47	110	423227	35941.1634228	ppb	98
38) Quinoline	4.48	129	1027793	32749.0578074	ppb	99
39) Caprolactam	4.52	113	131001	37278.2903404	ppb	96
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	446831	32200.2864656	ppb	99
44) Diphenyl Ether	5.09	170	646081	32275.2551573	ug/ml	99
45) Diphenyl Oxide	5.09	170	646081	32275.2551573	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.67	232	194914	40082.6466467	ppb	98
69) Atrazine	6.32	200	283883	40709.7789465	ppb	98
82) 2-nitrodiphenylamine	7.16	167	372323	47622.4782969	ppb #	100
85) Benzidine	7.77	184	724521	48145.9688179	ppb	99
89) 3,3-Dichlorobenzidine	9.49	252	596043	40725.7384781	ppb	99

(#) = qualifier out of range (m) = manual integration

0209\_19.D S804B09V.M Fri Feb 18 15:34:19 2022



Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D

Vial: 16

Acq On : 9 Feb 2022 3:14 pm

Operator: 917

Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22

Inst : BNAMS4

Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Feb 18 15:33 2022

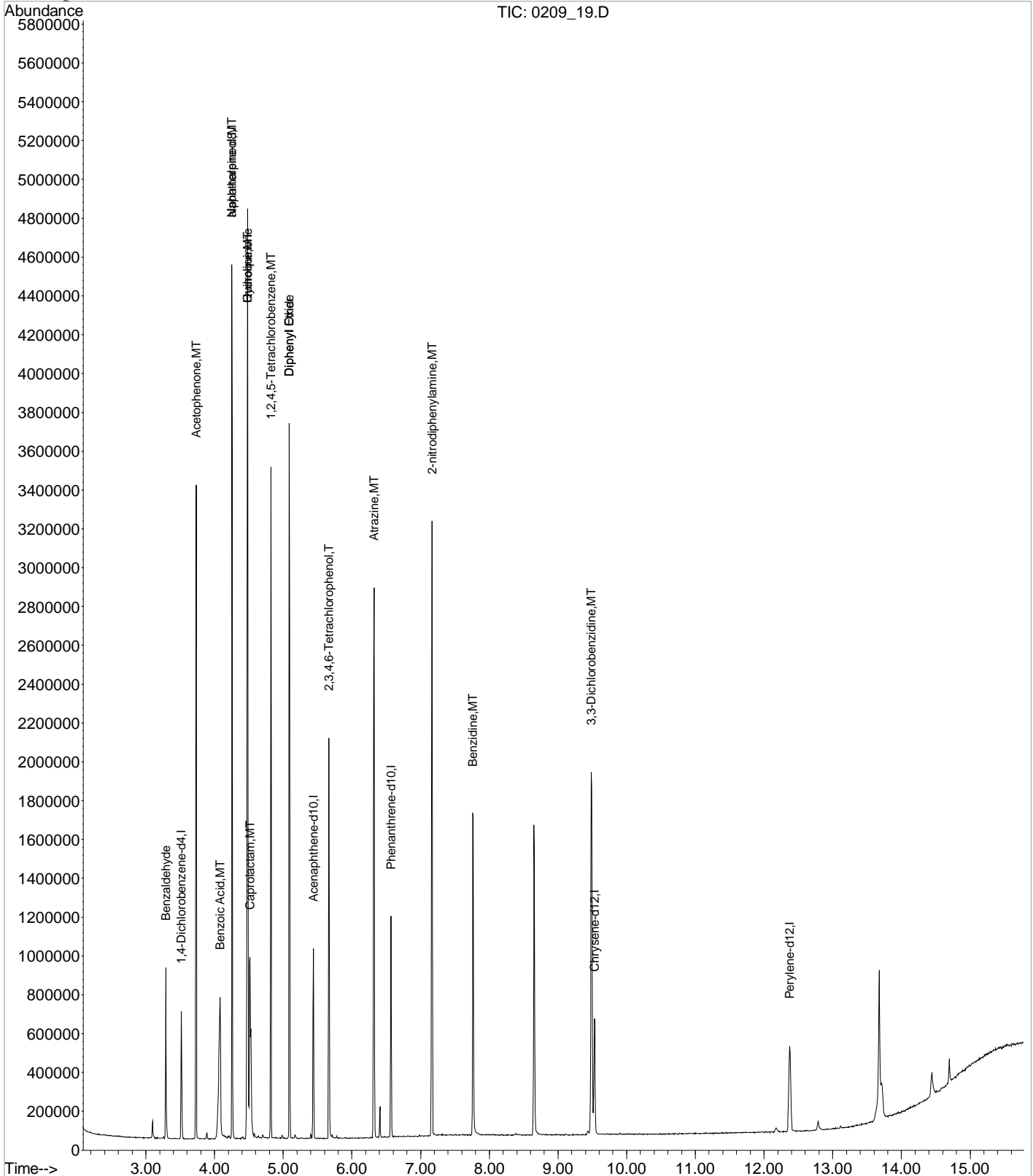
Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)

Title : 8270 BNA

Last Update : Fri Feb 18 15:32:01 2022

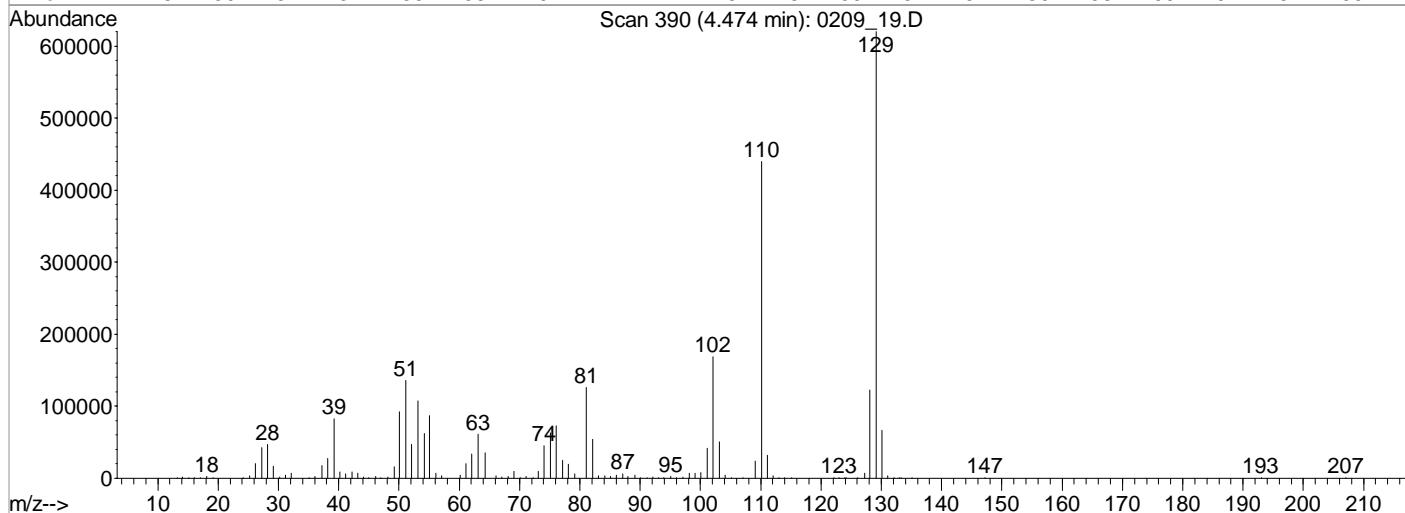
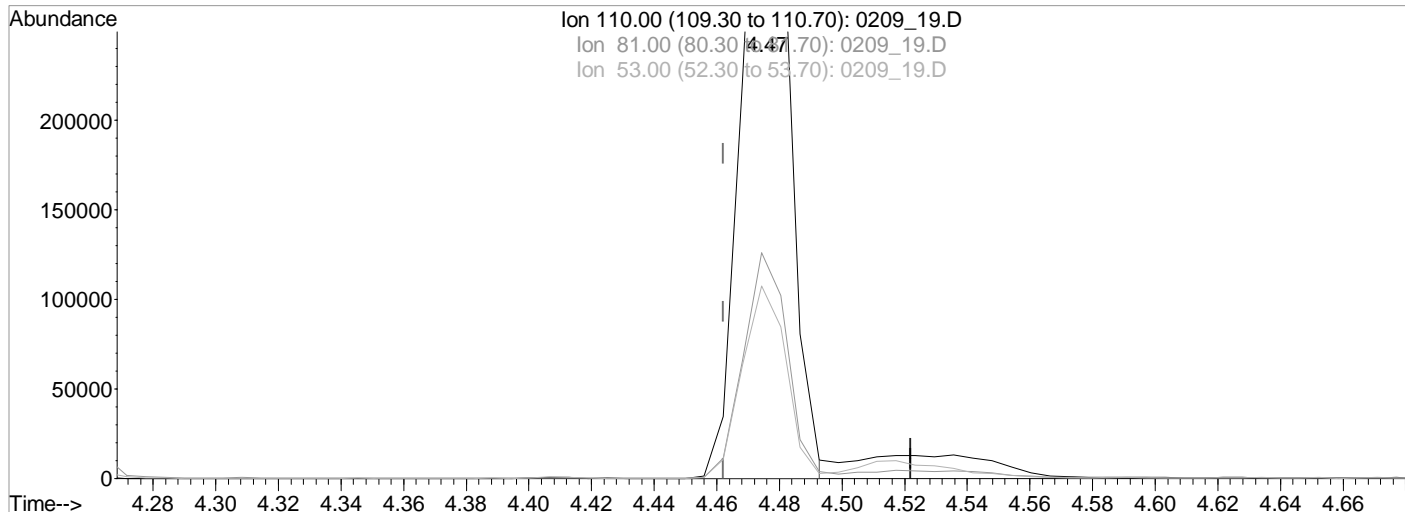
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 14:12 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:41:34 2022  
 Response via : Single Level Calibration



TIC: 0209\_19.D

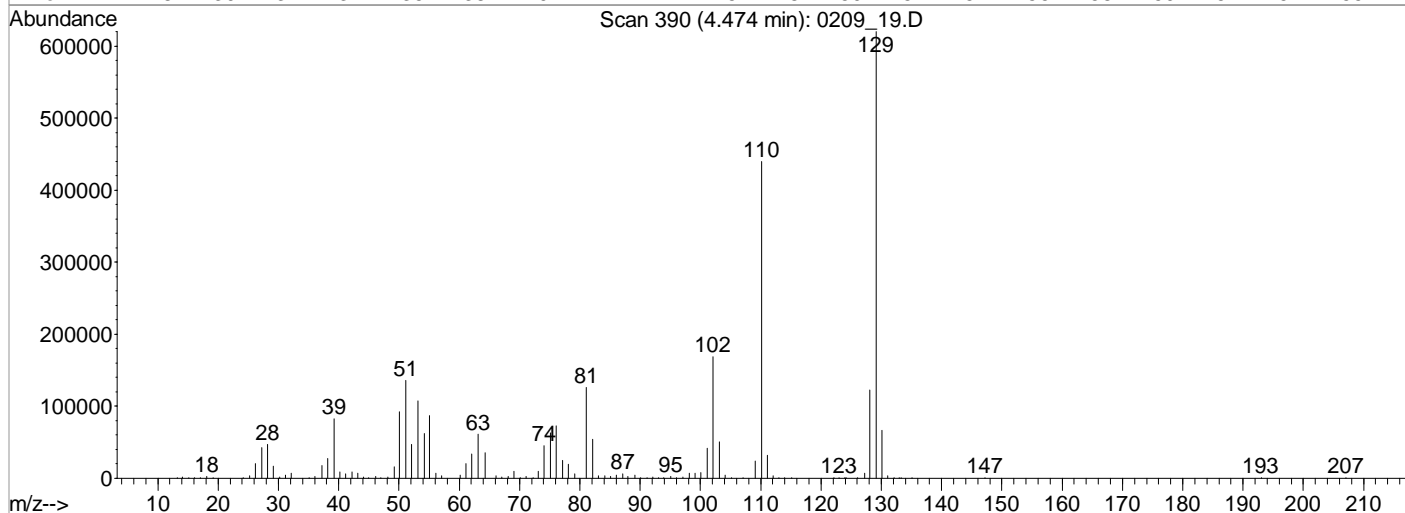
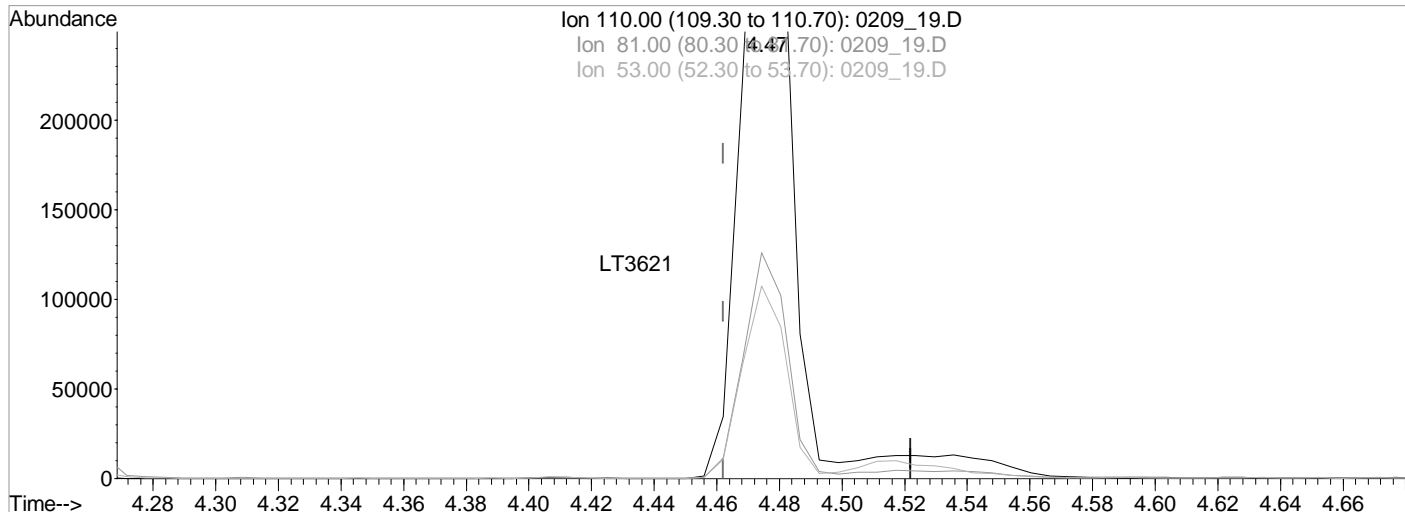
(37) Hydroquinone  
 4.47min (+0.012) 34295.7817388 ppb  
 Qvalue = 98  
 response 423227

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.68
53.00	25.90	24.49
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 16:42 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 16:41:34 2022  
 Response via : Single Level Calibration



TIC: 0209\_19.D

(37) Hydroquinone  
 4.47min (+0.012) 37693.9430263 ppb m

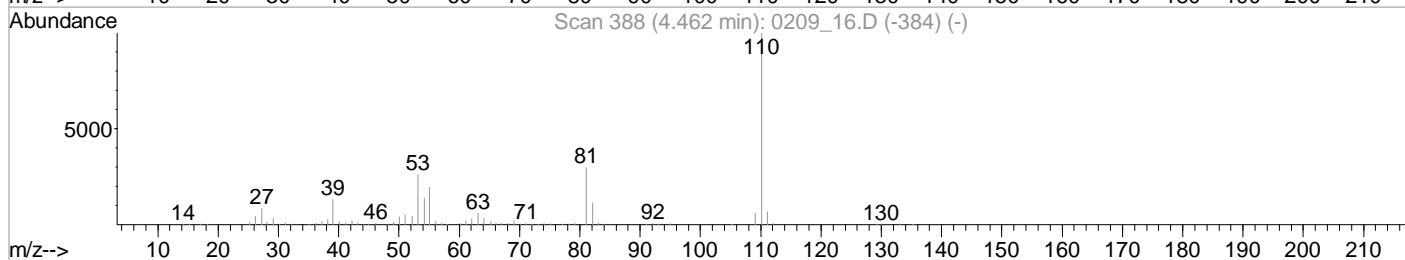
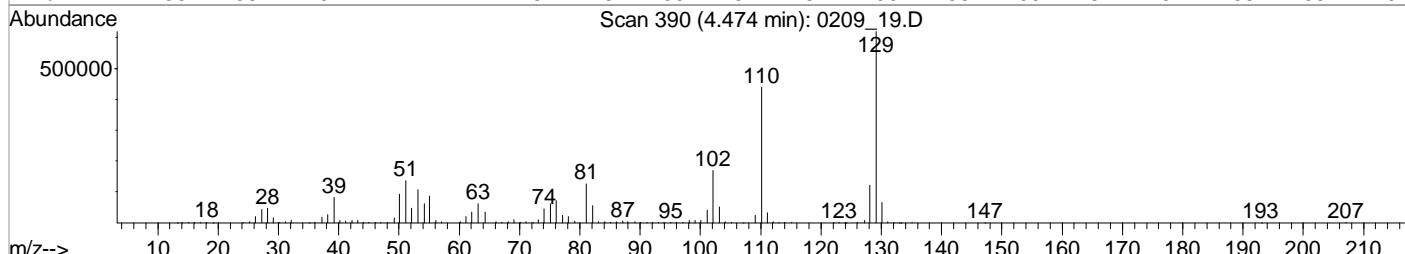
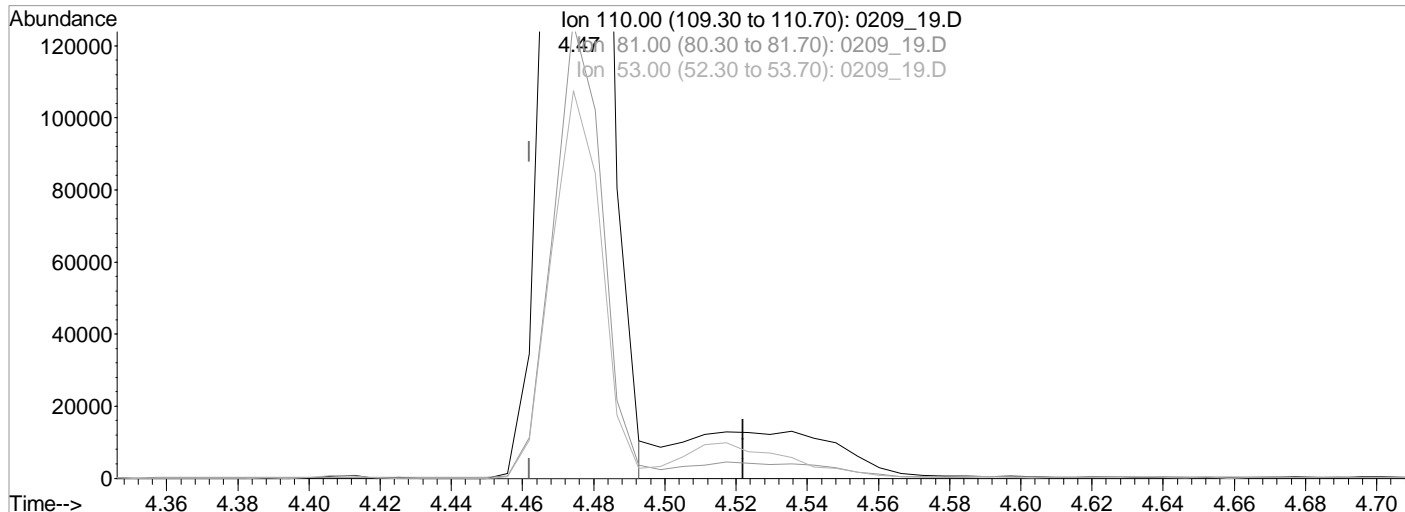
response 465162

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.73
53.00	25.90	24.49
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:33 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:32:01 2022  
 Response via : Single Level Calibration



TIC: 0209\_19.D

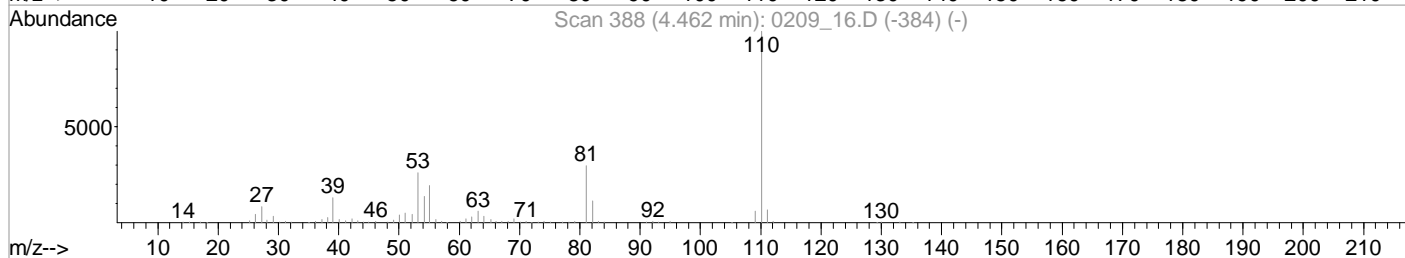
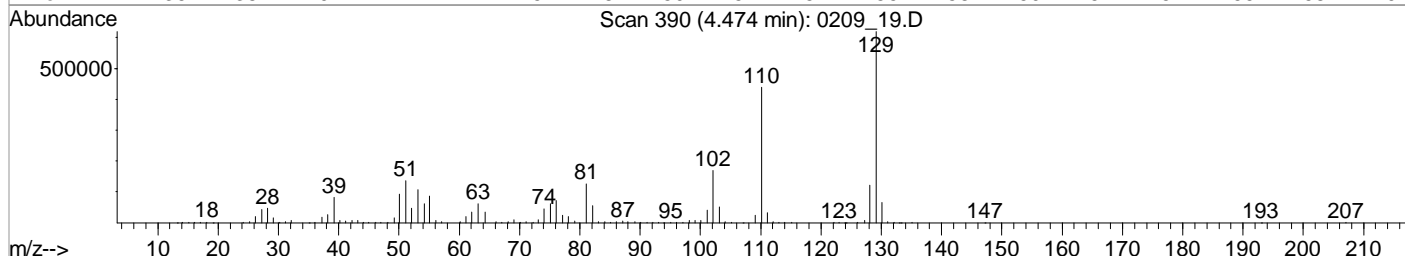
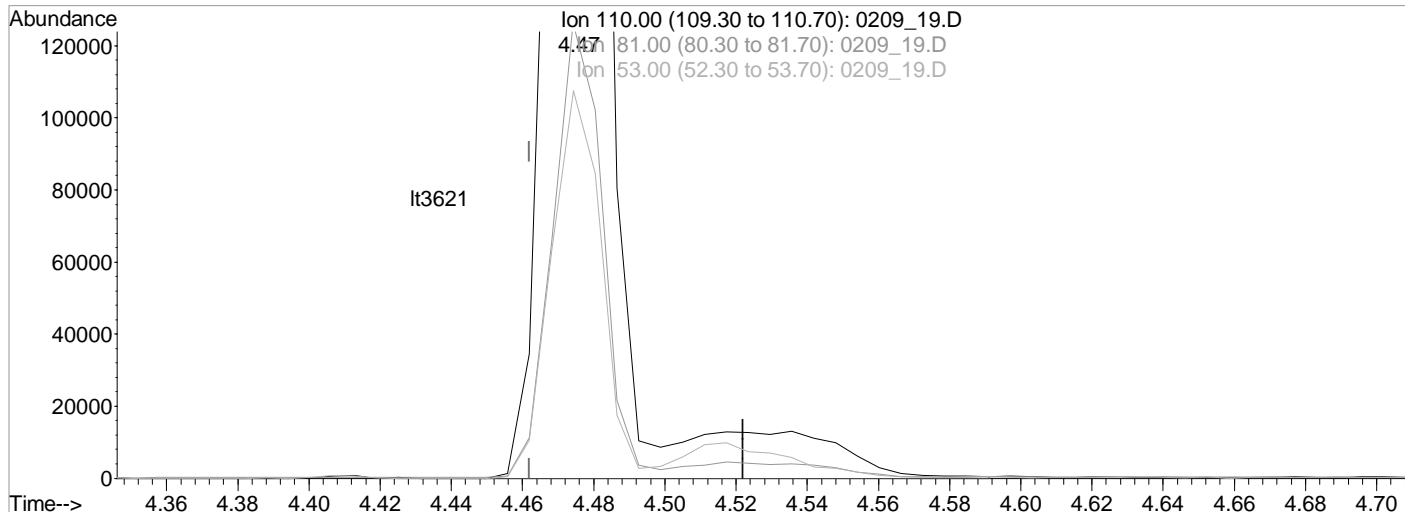
(37) Hydroquinone  
 4.47min (+0.012) 35941.1634228 ppb  
 Qvalue = 98  
 response 423227

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.68
53.00	25.90	24.49
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 19.D Vial: 16  
 Acq On : 9 Feb 2022 3:14 pm Operator: 917  
 Sample : STD TCL 40K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:33 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:32:01 2022  
 Response via : Single Level Calibration



TIC: 0209\_19.D

(37) Hydroquinone  
 4.47min (+0.012) 35941.1634228 ppb  
 Qvalue = 98  
 response 423227

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	28.68
53.00	25.90	24.49
0.00	0.00	0.00

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:35 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:34:26 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	83009	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	544163	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	169785	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	322067	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	282788	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	287879	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.00	82	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	183661	49745.1431448	ppb	99
22) Acetophenone	3.73	105	865298	50406.4769034	ppb	99
31) Benzoic Acid	4.09	105	430114	50870.0842217	ppb	99
33) alpha-terpineol	4.26	59	585384	37356.0327033	ppb	88
37) Hydroquinone	4.48	110	541268	43079.4928047	ppb	99
38) Quinoline	4.48	129	1284138	38348.1410544	ppb	98
39) Caprolactam	4.52	113	168983	45067.5402951	ppb	97
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	553375	37374.5040763	ppb	99
44) Diphenyl Ether	5.09	170	805278	37702.3146356	ug/ml	99
45) Diphenyl Oxide	5.09	170	805278	37702.3146356	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.67	232	249561	51543.7801154	ppb	98
69) Atrazine	6.32	200	349005	50266.3324683	ppb	97
82) 2-nitrodiphenylamine	7.16	167	469250	59305.8856301	ppb #	100
85) Benzidine	7.77	184	954392	63756.2258960	ppb	100
89) 3,3-Dichlorobenzidine	9.49	252	753855	51780.4778435	ppb	99

(#) = qualifier out of range (m) = manual integration

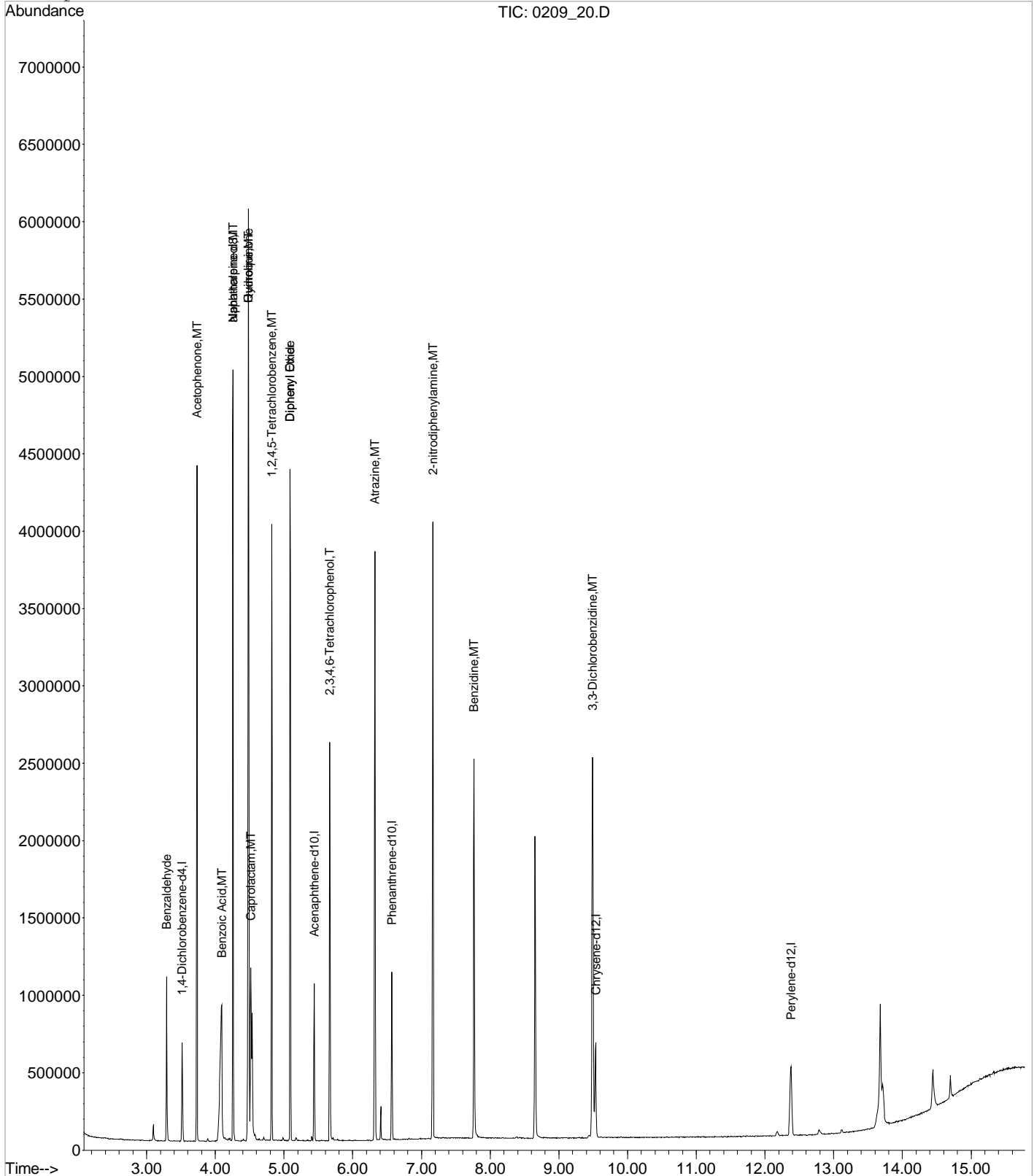
0209\_20.D S804B09V.M Fri Feb 18 15:37:53 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D  
Acq On : 9 Feb 2022 3:35 pm  
Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
MS Integration Params: RTEINT.P  
Quant Time: Feb 18 15:35 2022

Vial: 17  
Operator: 917  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804B09V.RES

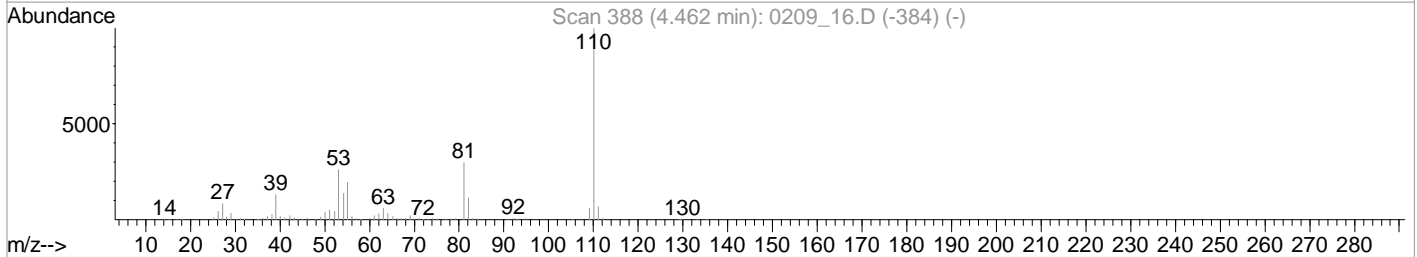
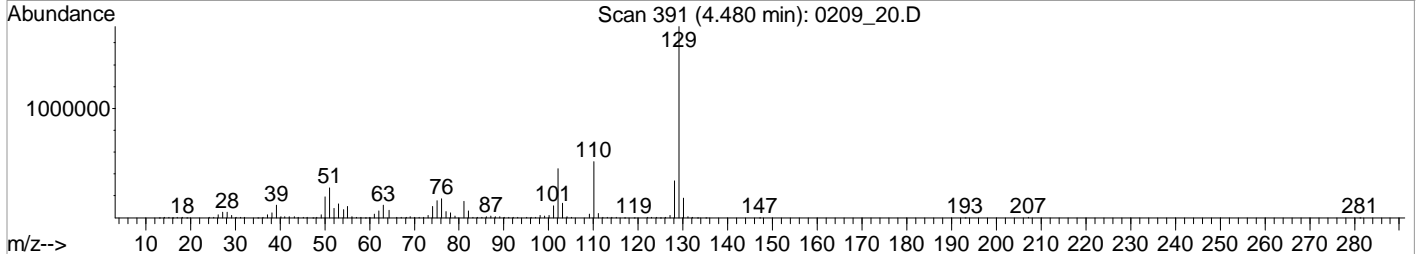
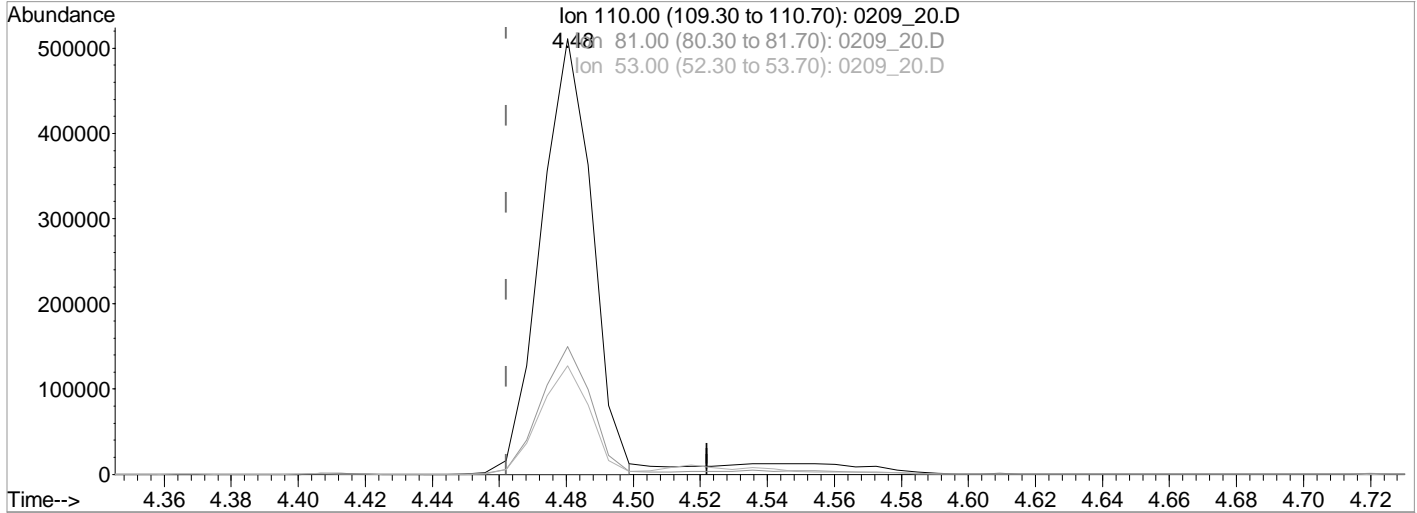
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Fri Feb 18 15:34:26 2022  
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 14:22 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 14:20:22 2022  
 Response via : Single Level Calibration



TIC: 0209\_20.D

(37) Hydroquinone  
 4.48min (+0.018) 40935.8278868 ppb  
 Qvalue = 99  
 response 541268

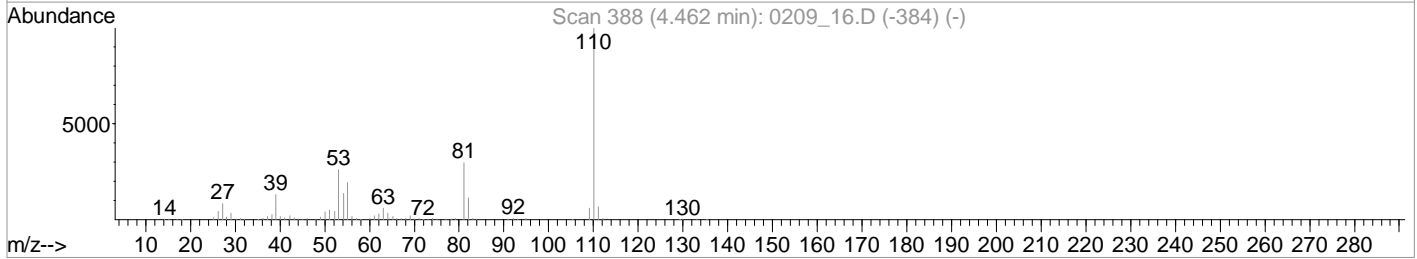
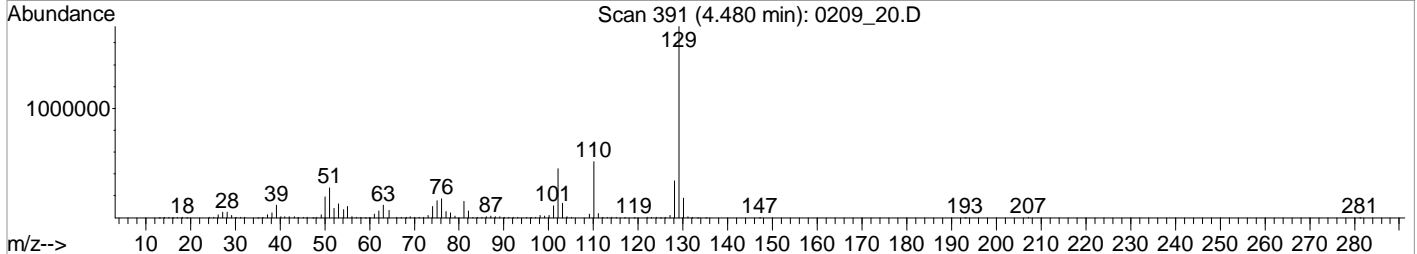
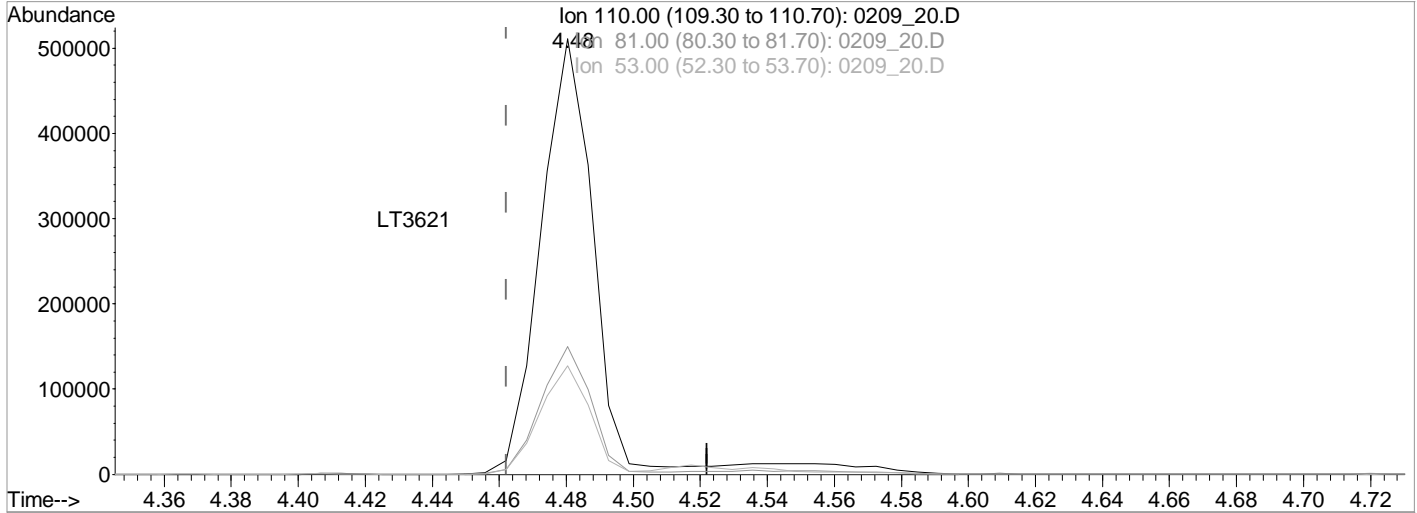
Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.30
53.00	25.90	24.86
0.00	0.00	0.00



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 14 14:22 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Mon Feb 14 14:20:22 2022  
 Response via : Single Level Calibration



TIC: 0209\_20.D

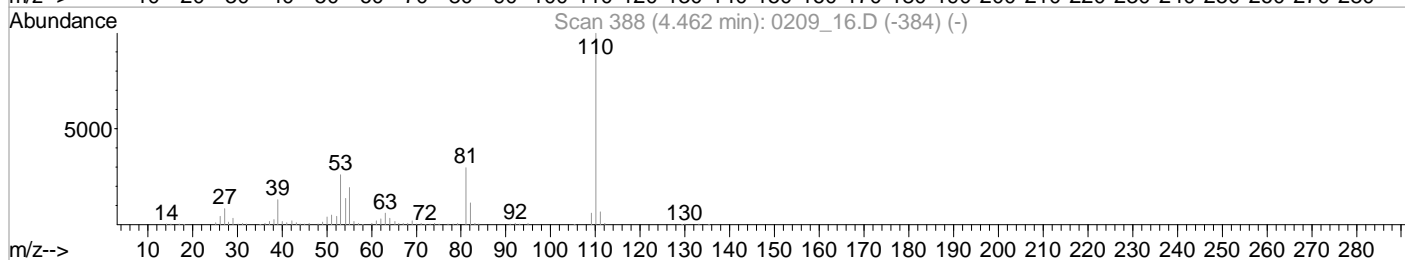
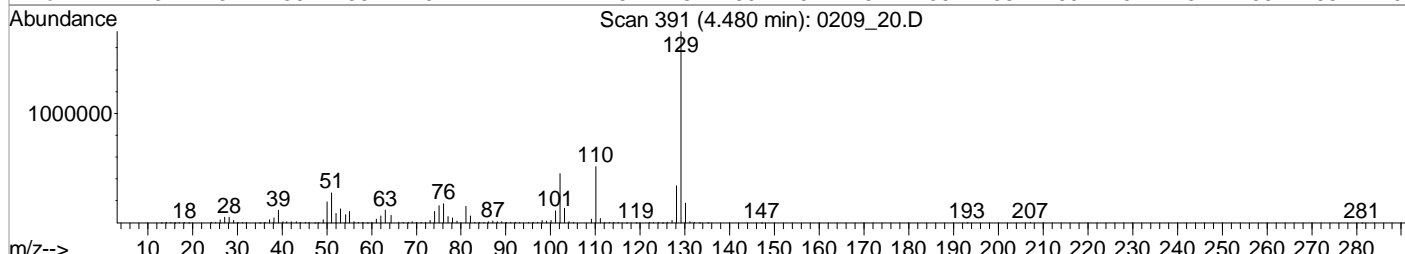
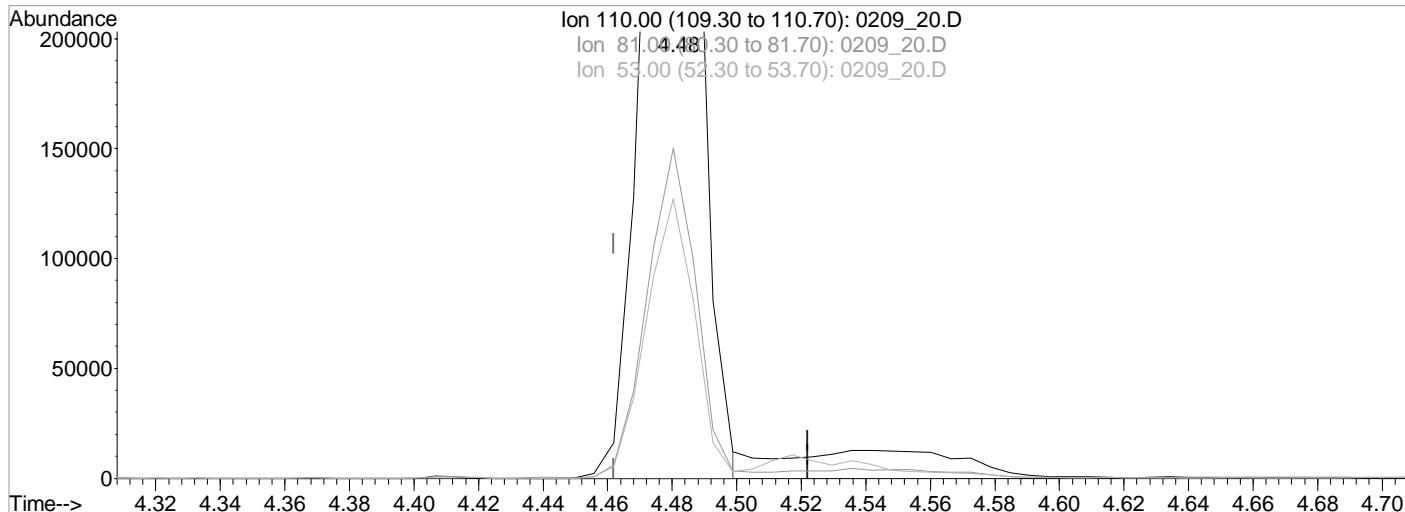
(37) Hydroquinone  
 4.48min (+0.018) 40935.8278868 ppb  
 Qvalue = 99  
 response 541268

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.30
53.00	25.90	24.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:35 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:34:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_20.D

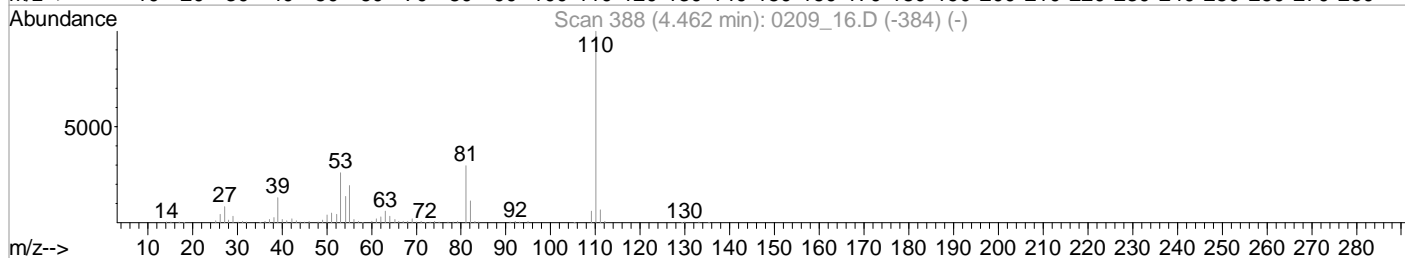
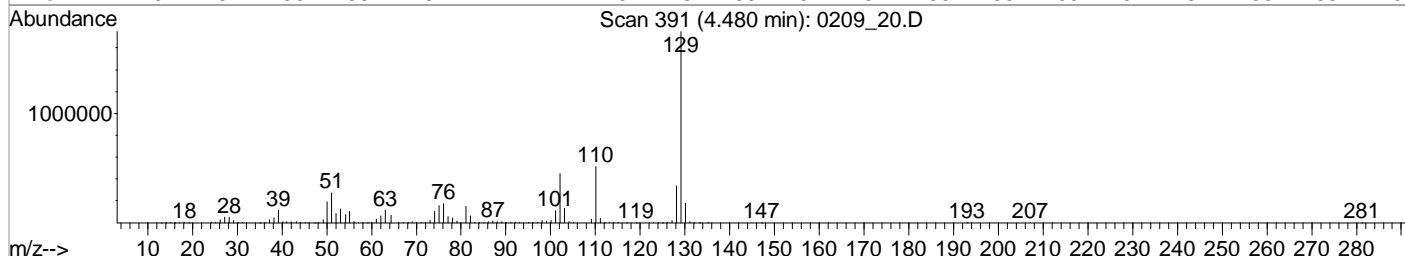
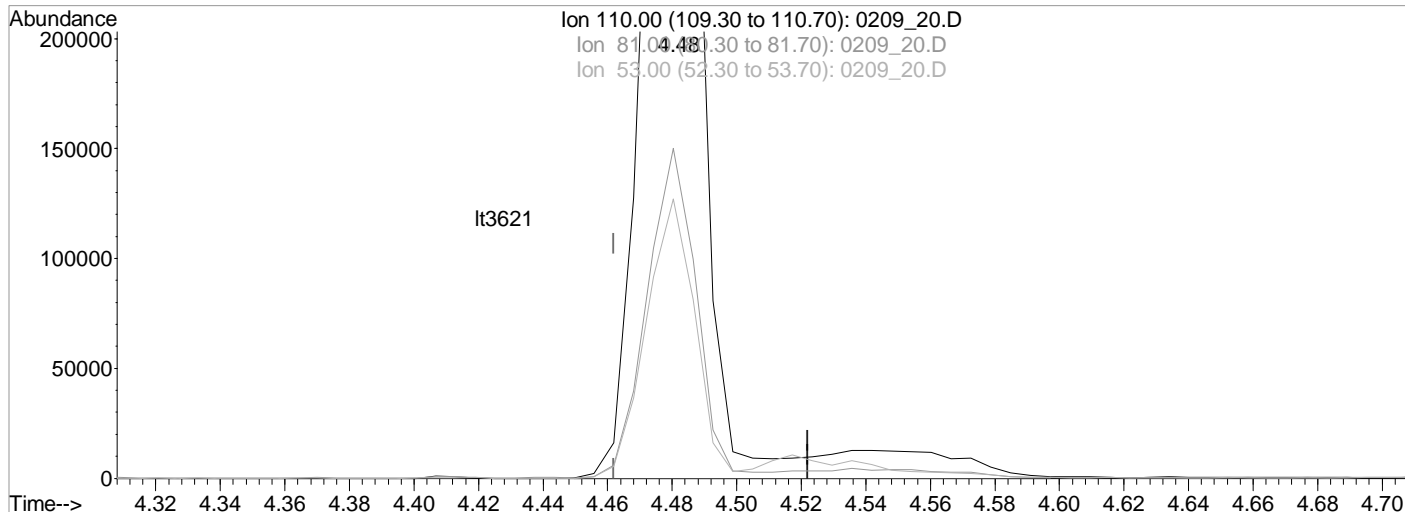
(37) Hydroquinone  
 4.48min (+0.018) 43079.4928047 ppb  
 Qvalue = 99  
 response 541268

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.30
53.00	25.90	24.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 20.D Vial: 17  
 Acq On : 9 Feb 2022 3:35 pm Operator: 917  
 Sample : STD TCL 50K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 18 15:35 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 15:34:26 2022  
 Response via : Single Level Calibration



TIC: 0209\_20.D

(37) Hydroquinone

4.48min (+0.018) 43079.4928047 ppb

Qvalue = 99

response 541268

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	29.30
53.00	25.90	24.86
0.00	0.00	0.00

SDG:

L1488171

Analytical Method:

8270E

Instrument ID:

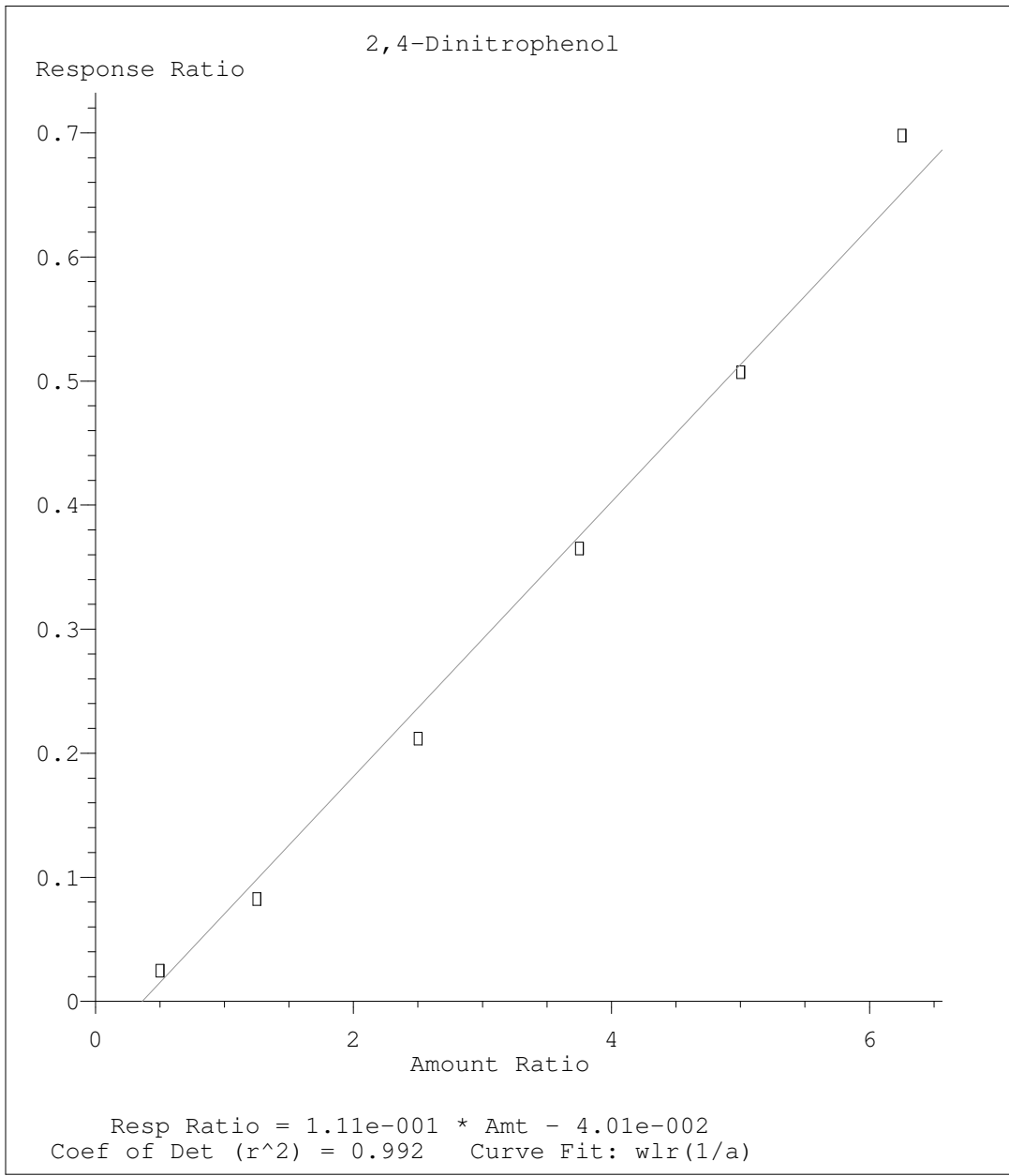
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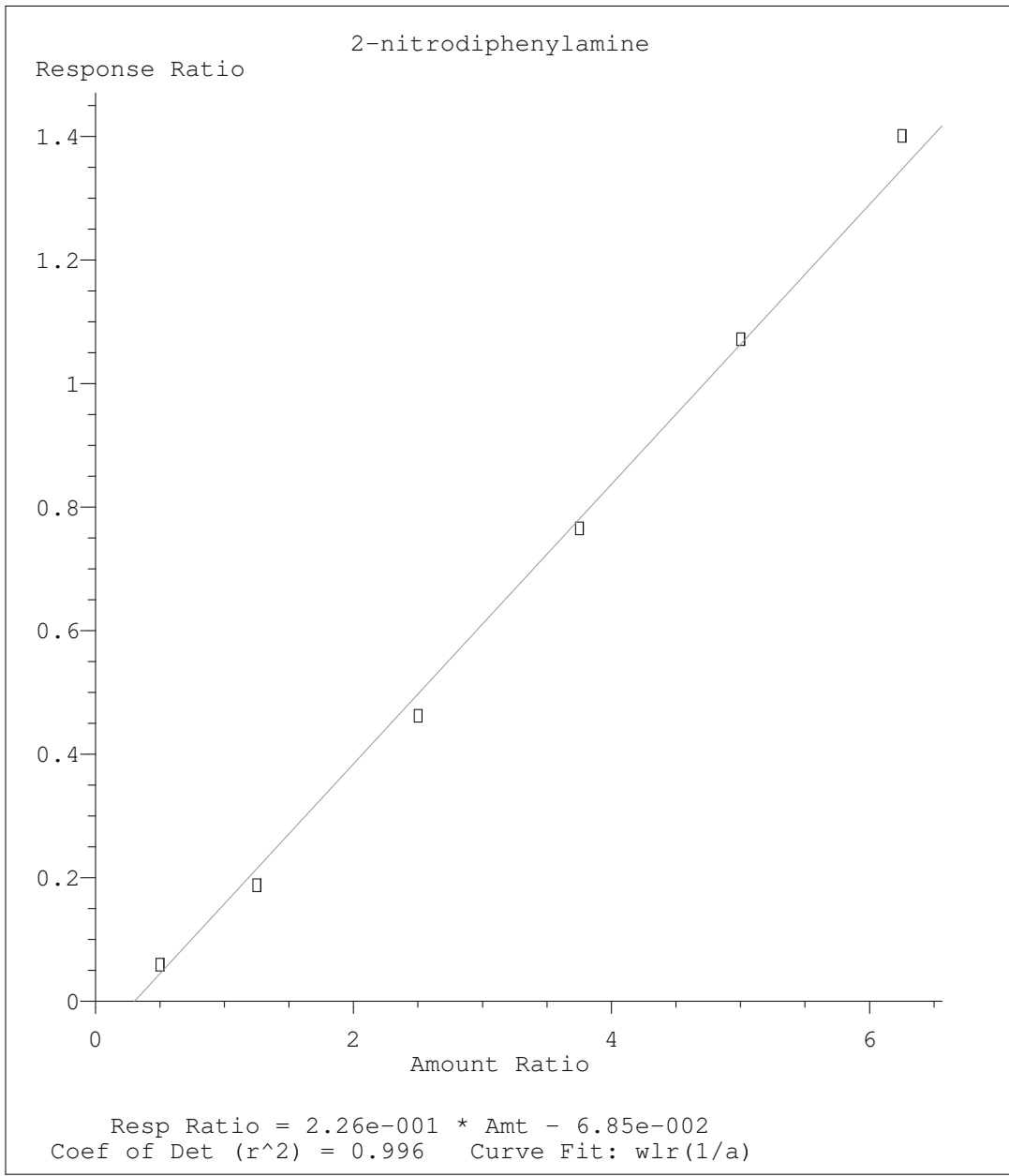
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Analysis date/time	03/31/22 17:24	03/31/22 17:45	03/31/22 18:07	03/31/22 18:28	03/31/22 18:49	03/31/22 19:11	03/31/22 19:32	03/31/22 19:53	03/31/22 20:36	03/31/22 20:58
PHENOL	1.6010	1.4820	1.57	1.5980	1.6240	1.5830	1.5520	1.5950		
3&4-METHYL PHENOL	1.2840	1.2150	1.25	1.3490	1.3650	1.3210	1.3020	1.3260		
NAPHTHALENE	1.1320	1.0560	0.9950	1.0120	0.9840	0.9710	0.92	0.9180		
2-METHYLNAPHTHALENE	0.6570	0.6280	0.6150	0.6330	0.6320	0.6340	0.61	0.61		
1-METHYLNAPHTHALENE	0.6470	0.6310	0.5970	0.61	0.6130	0.6110	0.5890	0.5870		
ACENAPHTHYLENE	1.7480	1.6720	1.6690	1.7240	1.7160	1.7160	1.66	1.6580		
ACENAPHTHENE	1.2270	1.2160	1.14	1.1450	1.1430	1.1340	1.0890	1.0960		
DIBENZOFURAN	1.67	1.5920	1.5340	1.5580	1.5120	1.5070	1.4530	1.4390		
FLUORENE	1.33	1.2780	1.2650	1.3060	1.2780	1.2680	1.2160	1.21		
PHENANTHRENE	1.2170	1.0870	1.0560	1.0550	1.0490	1.0380	0.99	0.9910		
ANTHRACENE	1.0170	0.9560	0.9850	1.0270	1.0410	1.03	0.9950	1.0030		
CARBAZOLE	0.8390	0.7930	0.8460	0.8840	0.8890	0.9070	0.8560	0.8770		
DI-N-BUTYL PHTHALATE	1.1240	1.0760	1.2080	1.3430	1.4080	1.4320	1.3520	1.3760		
FLUORANTHENE	1.0230	0.9560	0.9940	1.0520	1.0770	1.0860	1.0510	1.06		
PYRENE	1.7080	1.5380	1.5110	1.5060	1.48	1.4410	1.4010	1.4030		
BENZO(A)ANTHRACENE	1.0880	1.0760	1.0630	1.1220	1.1430	1.1580	1.1270	1.1560		
CHRYSENE	1.2550	1.2220	1.1770	1.1820	1.1810	1.1590	1.1150	1.1450		
BENZO(B)FLUORANTHENE	1.0580	1.0570	1.1180	1.2060	1.2260	1.2690	1.2170	1.2290		
BENZO(K)FLUORANTHENE	1.0520	1.0420	1.1760	1.2870	1.2760	1.2720	1.2350	1.2510		
BENZO(A)PYRENE	0.8090	0.7610	0.88	0.9960	1.0210	1.0590	1.0250	1.0520		
INDENO(1,2,3-CD)PYRENE	0.7840	0.7330	0.8210	0.9050	0.9080	0.9490	0.9110	0.9090		
DIBENZ(A,H)ANTHRACENE	0.8410	0.8770	0.9470	1.0240	1.0220	1.0470	1.0010	0.9960		
BENZO(G,H,I)PERYLENE	0.9080	0.9740	1.0220	1.1050	1.0720	1.0840	1.0350	1.0150		
2-FLUOROPHENOL	1.2870	1.1960	1.2160	1.2670	1.2950	1.2550	1.2340	1.2710		
PHENOL-D5	1.48	1.4190	1.4560	1.5090	1.54	1.4980	1.4750	1.5120		
NITROBENZENE-D5	0.3150	0.2930	0.2820	0.30	0.3090	0.3140	0.3110	0.3090		
2-FLUOROBIPHENYL	1.3980	1.3490	1.2660	1.2910	1.2610	1.2260	1.18	1.1910		
P-TERPHENYL-D14	1.1680	1.1310	1.1060	1.1160	1.1180	1.0990	1.0520	1.0660		
DI-N-OCTYL PHTHALATE		0.9020	1.0920	1.3640	1.5790	1.6750	1.6490	1.7180		
2,4,6-TRIBROMOPHENOL		0.0630	0.0730	0.0820	0.0890	0.0940	0.0910	0.0940		
PENTACHLOROPHENOL			0.0760	0.0930	0.1090	0.1160	0.1160	0.1220		
BIS(2-ETHYLHEXYL)PHTHALATE			0.8310	0.9730	1.0620	1.0810	1.0540	1.0880		
BENZOIC ACID									0.0530	0.07
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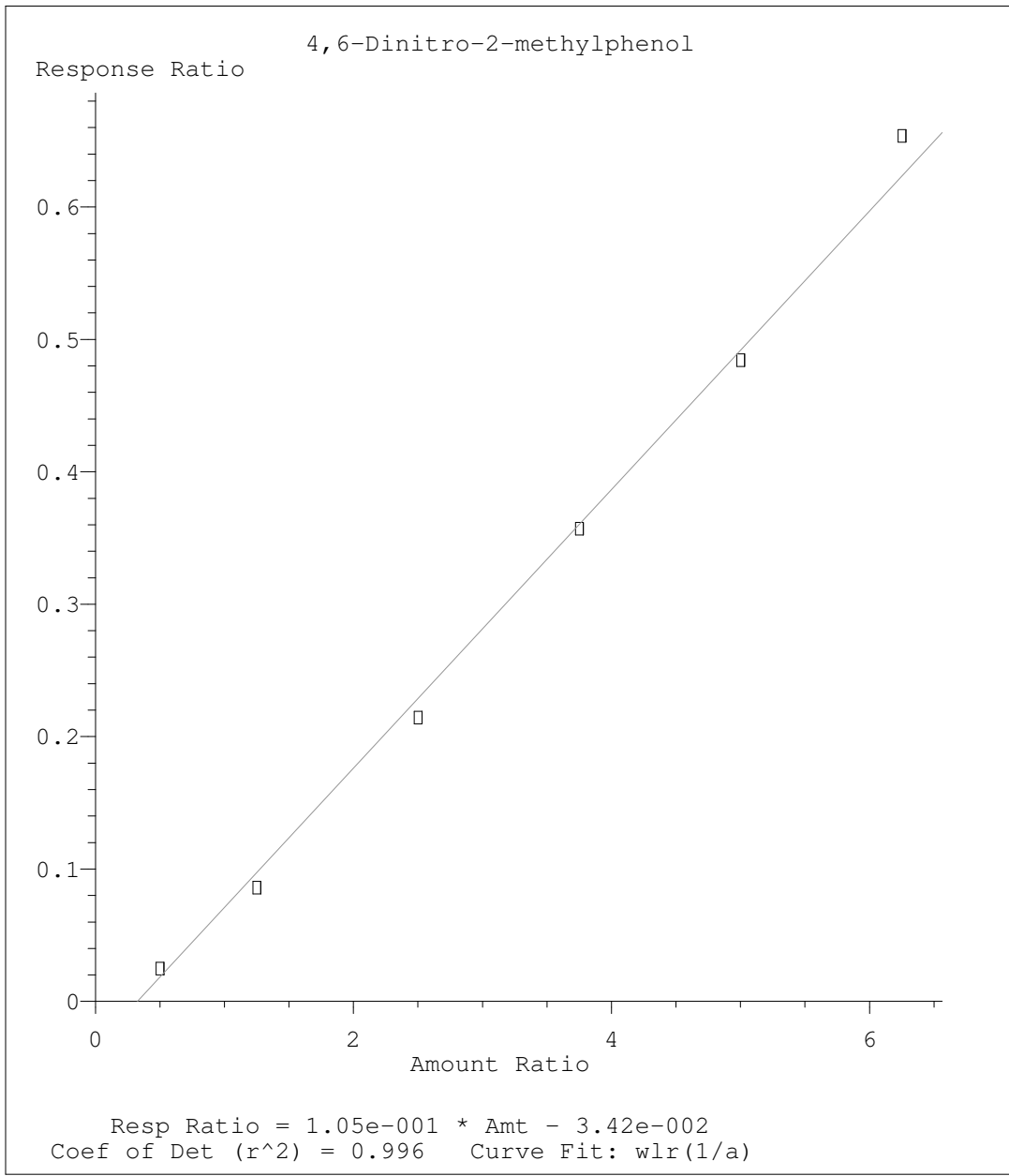
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Instrument ID: BNAMS24

Analytical Method: 8270E

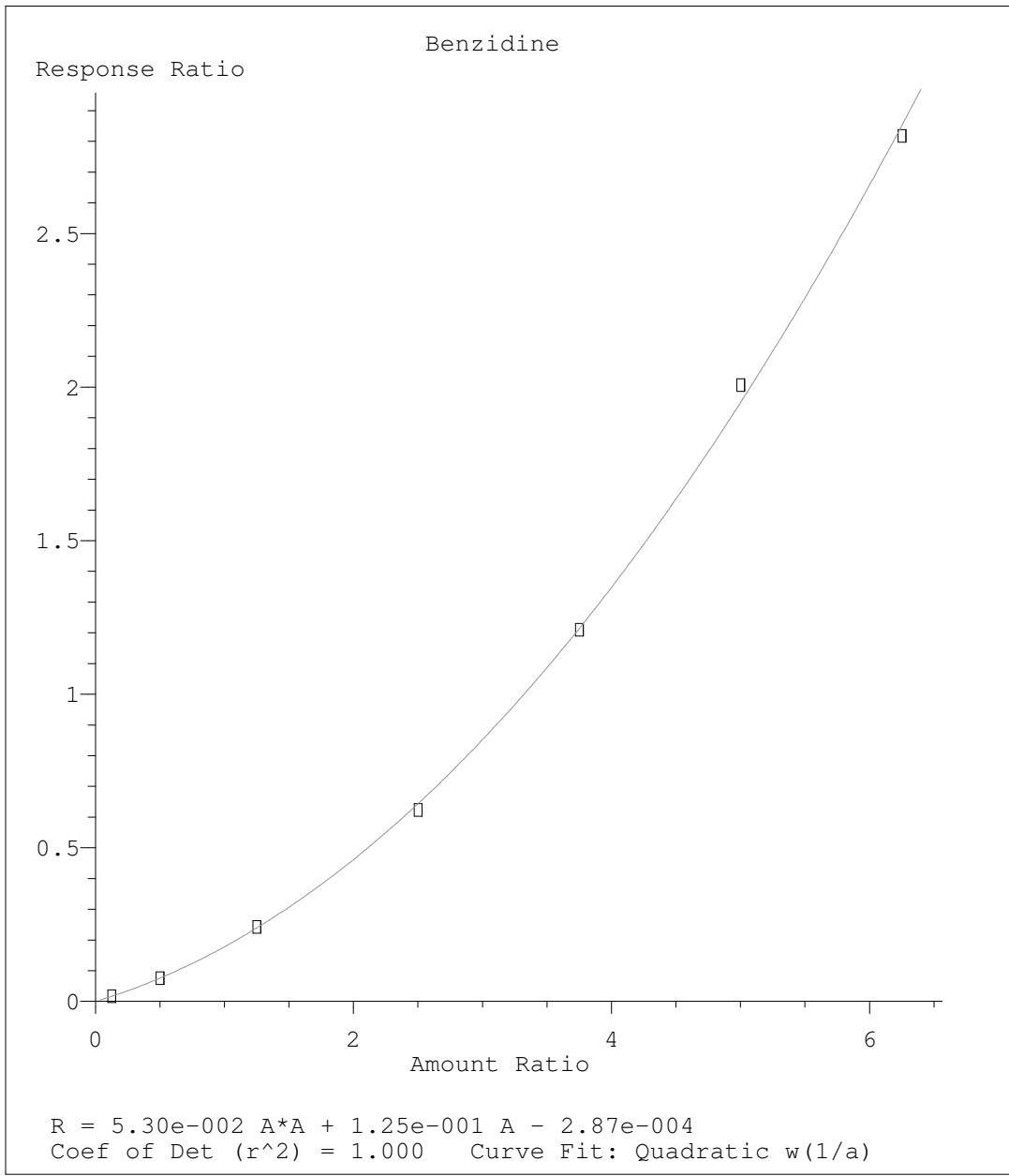
Analyte	RRF: 20K1	RRF: 30K1	RRF: 40K1	RRF: 50K1	RRF. Avg	%RSD	COD
Analysis date/time	03/31/22 21:19	03/31/22 21:40	03/31/22 22:02	03/31/22 22:23			
PHENOL					1.575372	2.77	
3&4-METHYL PHENOL					1.301686	3.86	
NAPHTHALENE					0.998617	7.08	
2-METHYLNAPHTHALENE					0.627399	2.53	
1-METHYLNAPHTHALENE					0.610754	3.34	
ACENAPHTHYLENE					1.695228	2.03	
ACENAPHTHENE					1.148837	4.33	
DIBENZOFURAN					1.532971	4.89	
FLUORENE					1.268965	3.21	
PHENANTHRENE					1.060304	6.75	
ANTHRACENE					1.006737	2.77	
CARBAZOLE					0.861194	4.17	
DI-N-BUTYL PHTHALATE					1.289953	10.48	
FLUORANTHENE					1.03753	4.25	
PYRENE					1.498492	6.58	
BENZO(A)ANTHRACENE					1.116712	3.28	
CHRYSENE					1.179486	3.71	
BENZO(B)FLUORANTHENE					1.172442	7.06	
BENZO(K)FLUORANTHENE					1.198822	8.32	
BENZO(A)PYRENE					0.950358	12.31	
INDENO(1,2,3-CD)PYRENE					0.86497	8.78	
DIBENZ(A,H)ANTHRACENE					0.969471	7.71	
BENZO(G,H,I)PERYLENE					1.02699	6.23	
2-FLUOROPHENOL					1.252515	2.77	
PHENOL-D5					1.486088	2.5	
NITROBENZENE-D5					0.30424	3.85	
2-FLUOROBIPHENYL					1.270391	5.89	
P-TERPHENYL-D14					1.107064	3.26	
DI-N-OCTYL PHTHALATE					1.425428	22.38	0.997
2,4,6-TRIBROMOPHENOL					0.083814	14.11	
PENTACHLOROPHENOL					0.105171	16.65	0.999
BIS(2-ETHYLHEXYL)PHTHALATE					1.014597	9.75	
BENZOIC ACID	0.0820	0.0890	0.09	0.0920	0.07914	19.21	0.999
File ID:	0331_14	0331_15	0331_16	0331_17			

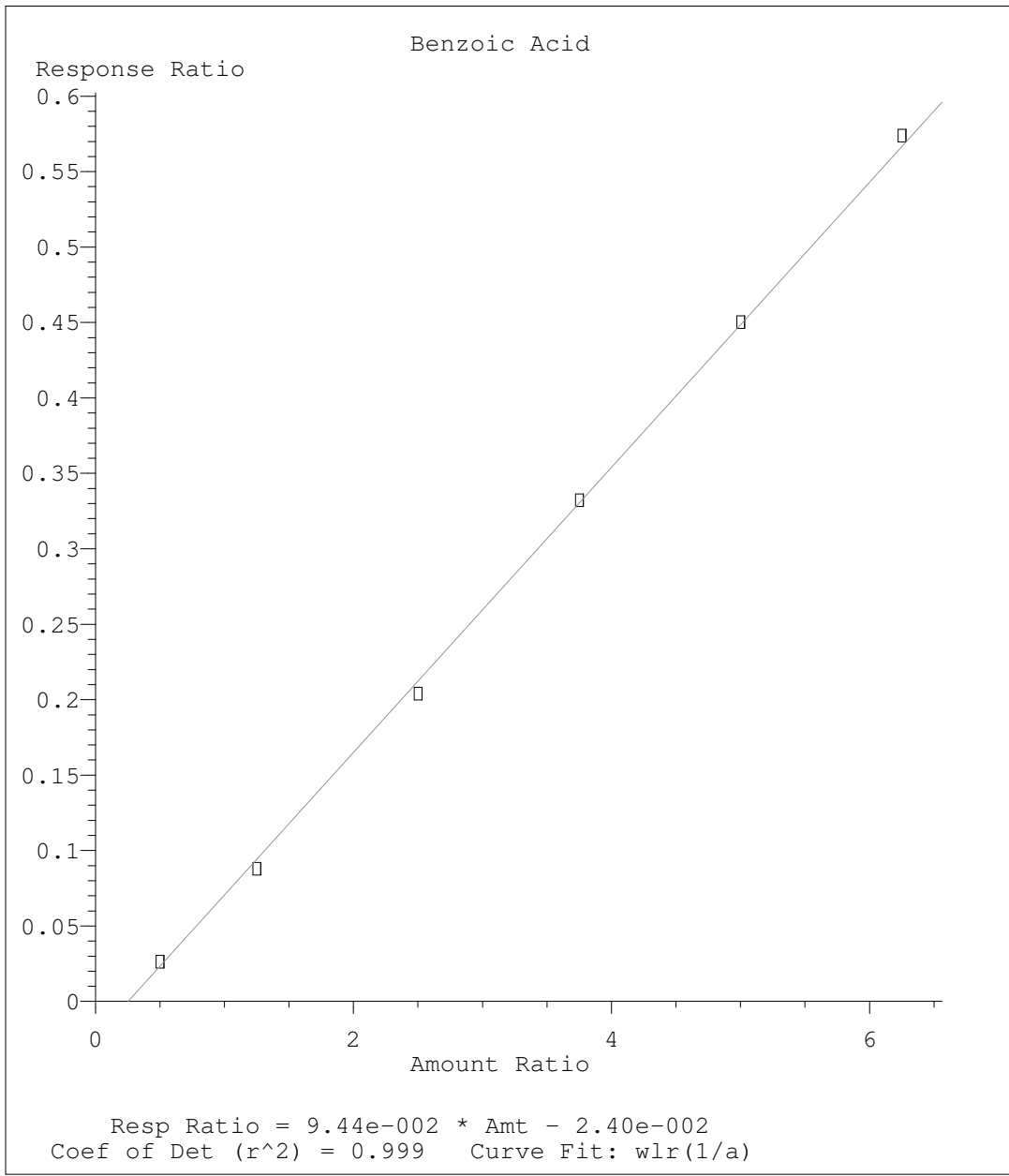


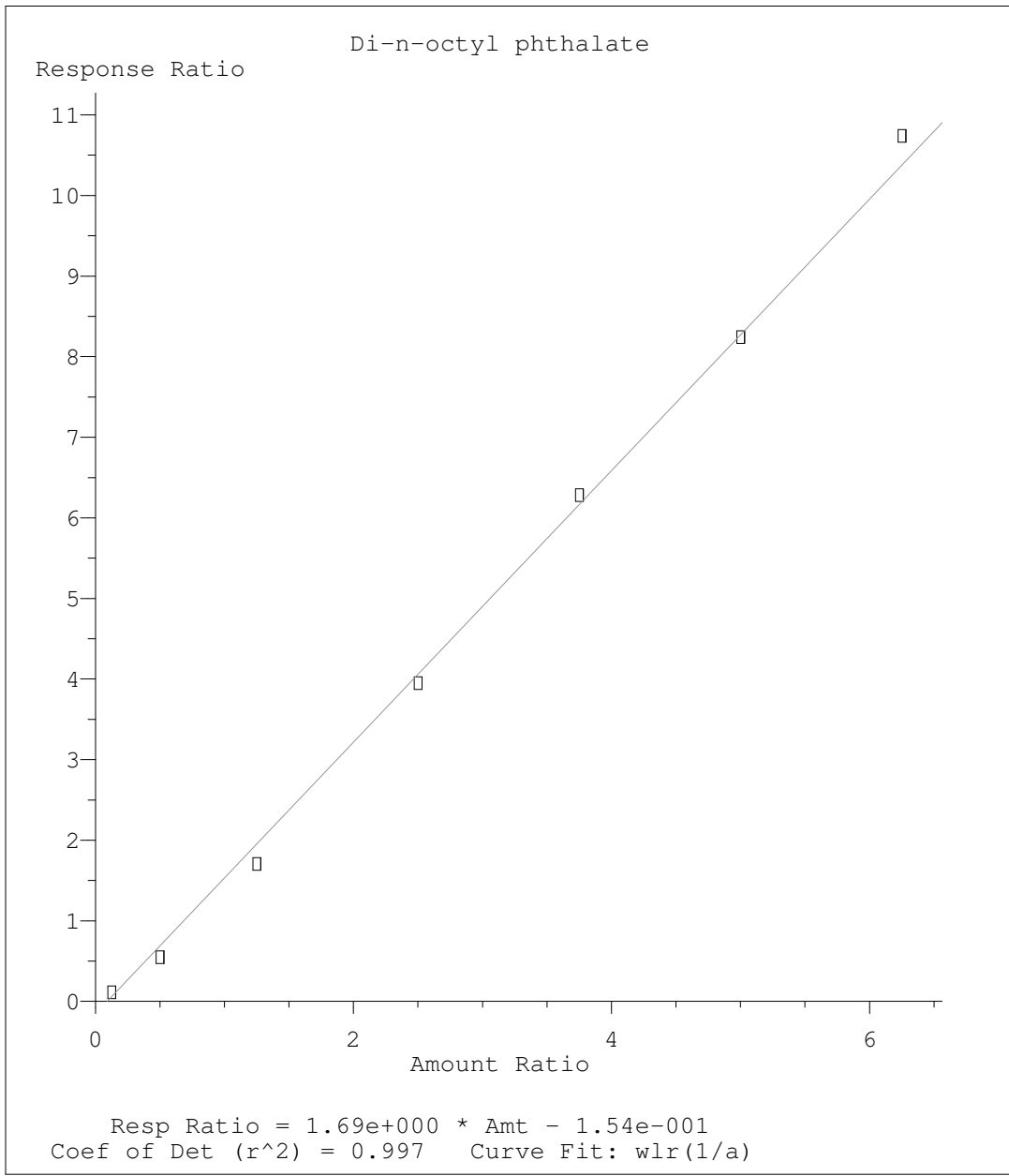


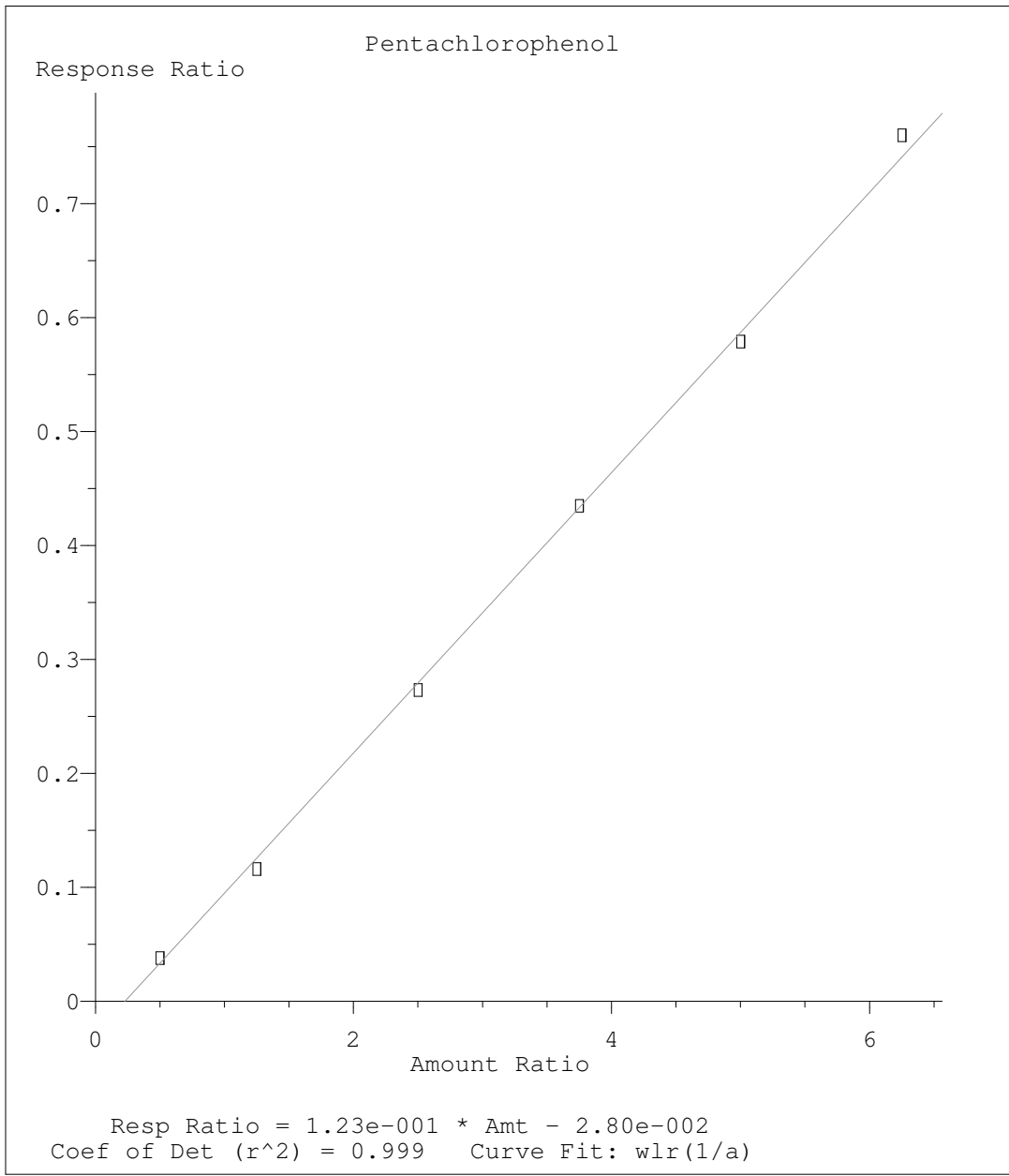












Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA  
 Last Update : Mon Apr 04 16:54:30 2022  
 Response Via : Initial Calibration

10606394

Calibration Files  
 500 =0331\_03.D 1K =0331\_04.D 4K =0331\_05.D 10K =0331\_06.D 20K =0331\_07.D 30K =0331\_08.D 40K =0331\_09.D  
 50K =0331\_10.D 1K1 =0331\_11.D 4K1 =0331\_12.D 10K1 =0331\_13.D 20K1 =0331\_14.D 30K1 =0331\_15.D 40K1 =0331\_16.D  
 50K1 =0331\_17.D

Compound	500	1K	4K	10K	20K	30K	40K	50K	1K1	4K1	10K1	20K1	30K1	40K1	50K1	Avg
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%RSD

1) I	1,4-Dichlorobenzen...	1.368	1.258	1.308	1.360	1.358	1.325	1.303	1.336							1.327	2
2) TM	Pyridine															0.698	13
3) MT	N-Nitrosodimet...	0.884	0.802	0.684	0.678	0.667	0.627	0.616	0.628							1.253	2
4) S	2-Fluorophenol	1.287	1.196	1.216	1.267	1.295	1.255	1.234	1.271							0.688	4
5) MT	Aniline	0.699	0.608	0.690	0.711	0.706	0.698	0.689	0.700							1.353	2
6) MT	bis(2-Chloroet...	1.410	1.346	1.328	1.368	1.353	1.334	1.326	1.358							1.486	2
7) S	Phenol-d5	1.480	1.419	1.456	1.509	1.540	1.498	1.475	1.512							1.575	2
8) MC	Phenol	1.601	1.482	1.570	1.598	1.624	1.583	1.552	1.595							0.335	8
9) MC	Benzaldehyde									0.316	0.313	0.324	0.339	0.380		1.312	3
10) MT	2-Chlorophenol	1.250	1.255	1.285	1.345	1.373	1.332	1.318	1.338							0.843	7
11) T	n-Decane	0.981	0.866	0.859	0.852	0.842	0.800	0.768	0.779							1.504	4
12) MT	1,3-Dichlorobe...	1.581	1.584	1.528	1.528	1.507	1.445	1.417	1.437							1.505	3
13) MTC	1,4-Dichlorobe...	1.578	1.562	1.514	1.534	1.522	1.461	1.426	1.442							0.961	5
14) MT	Benzyl Alcohol	0.936	0.879	0.900	0.977	1.007	0.992	0.983	1.014							1.451	5
15) MT	1,2-Dichlorobe...	1.624	1.492	1.457	1.469	1.449	1.392	1.355	1.370							0.501	3
16) MT	bis(2-Chlorois...	0.540	0.503	0.500	0.507	0.504	0.490	0.476	0.487							0.501	3
17) MT	2,2-oxybis(1-c...	0.540	0.503	0.500	0.507	0.504	0.490	0.476	0.487							1.180	4
18) MT	2-Methylphenol	1.141	1.074	1.178	1.234	1.242	1.197	1.183	1.191							0.628	3
19) MT	Hexachloroethane	0.665	0.625	0.628	0.635	0.635	0.613	0.601	0.619								

Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA

Last Update : Mon Apr 04 16:54:30 2022  
 (0) MP N-Nitrosodi-n-... 0.798 0.775 0.805 0.849 0.881 0.863 0.857 0.887  
 (3) MT 3&4-Methyl phenol 1.284 1.215 1.250 1.349 1.365 1.321 1.302 1.326

(6) MT Acetophenone 1.735 1.675 1.724 1.710 1.742 1.749 1.720 1.722  
 (1) 1

Peak #	Retention Time	Area	Height	Width	Height	Area	Height	Width	Height
23) I	Naphthalene-d8	0.315	0.293	0.282	0.300	0.309	0.314	0.311	0.309
24) S	Nitrobenzene-d5	0.297	0.295	0.296	0.315	0.314	0.320	0.313	0.311
25) MT	Nitrobenzene	0.585	0.546	0.560	0.609	0.628	0.641	0.623	0.622
26) MT	Isophorone	0.114	0.122	0.144	0.156	0.161	0.161	0.160	0.161
27) MCT	2-Nitrophenol	0.291	0.282	0.288	0.310	0.308	0.314	0.303	0.299
28) MT	2,4-Dimethylph...	0.421	0.400	0.398	0.410	0.408	0.411	0.395	0.393
29) MT	bis(2-Chloreth...	0.225	0.212	0.222	0.243	0.249	0.252	0.243	0.246
30) MCT	2,4-Dichloroph...	0.309	0.301	0.278	0.283	0.281	0.279	0.267	0.265
31) MT	Benzoic Acid	0.300	0.269	0.254	0.238	0.220	0.198	0.246	0.246
32) MT	1,2,4-Trichlor...	1.132	1.056	0.995	1.012	0.984	0.971	0.920	0.918
33) MT	alpha-terpineol	0.094	0.099	0.103	0.108	0.110	0.109	0.111	0.111
34) MT	Naphthalene	0.169	0.156	0.151	0.153	0.152	0.152	0.145	0.142
35) MT	4-Chloroaniline	0.190	0.191	0.172	0.180	0.173	0.162	0.153	0.175
36) MCT	Hexachloro-1,3...	0.547	0.506	0.492	0.448	0.409	0.368	0.462	0.462
37) Hydroquinone		0.056	0.061	0.065	0.063	0.061	0.059	0.061	0.061
38) MT	Quinoline	0.227	0.216	0.220	0.247	0.262	0.271	0.268	0.269
39) MT	Caprolactam	0.657	0.628	0.615	0.633	0.632	0.634	0.610	0.610
40) MCT	4-Chloro-3-met...	0.647	0.631	0.597	0.610	0.613	0.611	0.589	0.587
41) MT	2-Methylnaphth...	0.249	0.230	0.223	0.198	0.176	0.215	0.215	0.215
42) MT	1-Methylnaphth...	0.372	0.348	0.331	0.295	0.266	0.322	0.322	0.322
43) MT	1,2,4,5-Tetrac...								
44) Diphenyl Ether									

Response Factor Report BNAMS24

Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA  
 Last Update : Mon Apr 04 16:54:30 2022  
 (45) Diphenyl Oxide

10606394

0.372 0.348 0.331 0.295 0.266

Peak #	Retention Time (min)	Response Factor	Area	Height	Width	Height	Area	Height	Width
46)	1.237	0.225	0.246	0.261	0.273	0.282	0.278	0.285	0.285
47)	0.254	0.252	0.277	0.307	0.320	0.326	0.324	0.330	0.330
48)	0.255	0.244	0.276	0.318	0.335	0.336	0.334	0.344	0.344
49)	1.398	1.349	1.266	1.291	1.261	1.226	1.180	1.191	1.191
50)	1.595	1.471	1.421	1.442	1.421	1.389	1.345	1.367	1.367
51)	1.156	1.154	1.117	1.125	1.093	1.087	1.047	1.059	1.059
52)	0.247	0.301	0.338	0.357	0.358	0.364	0.364	0.364	0.364
53)	1.748	1.672	1.669	1.724	1.716	1.716	1.660	1.658	1.658
54)	1.195	1.180	1.209	1.272	1.284	1.286	1.244	1.233	1.233
55)	0.206	0.241	0.269	0.293	0.298	0.291	0.291	0.294	0.294
56)	0.211	0.247	0.271	0.279	0.271	0.271	0.271	0.270	0.270
57)	1.227	1.216	1.140	1.145	1.143	1.134	1.089	1.096	1.096
58)	0.049	0.066	0.085	0.097	0.101	0.112	0.101	0.112	0.112
59)	1.670	1.592	1.534	1.558	1.512	1.507	1.453	1.439	1.439
60)	0.268	0.322	0.348	0.365	0.358	0.368	0.358	0.368	0.368
61)	0.139	0.174	0.191	0.206	0.203	0.209	0.203	0.209	0.209
62)	1.330	1.278	1.265	1.306	1.278	1.268	1.216	1.210	1.210
63)	0.650	0.571	0.598	0.583	0.574	0.567	0.540	0.540	0.540
64)	1.276	1.231	1.264	1.346	1.329	1.330	1.270	1.256	1.256
65)	0.168	0.192	0.148	0.137	0.146	0.149	0.153	0.153	0.153
66)	1.230	1.233	1.287	1.356	1.347	1.335	1.280	1.287	1.287
67)	0.169	0.200	0.219	0.231	0.241	0.241	0.241	0.241	0.241
68)	0.187	0.187	0.187	0.187	0.187	0.187	0.187	0.187	0.187
69)	1.269	1.269	1.269	1.269	1.269	1.269	1.269	1.269	1.269
70)	0.578	0.578	0.578	0.578	0.578	0.578	0.578	0.578	0.578
71)	1.288	1.288	1.288	1.288	1.288	1.288	1.288	1.288	1.288
72)	0.156	0.156	0.156	0.156	0.156	0.156	0.156	0.156	0.156
73)	1.294	1.294	1.294	1.294	1.294	1.294	1.294	1.294	1.294

Method Path : C:\msdchem\1\methods\  
Method File : S824C31V.M  
Title : 8270 BNA  
Last Update : Mon Apr 04 16:54:30 2022  
9) MT Atrazine

10606394	00) I Phenanthrene-d10	0.229	0.256	0.277	0.309	0.308	0.318	0.319	0.288	12
06394	01) MT 4,6-Dinitro-2-...	0.049	0.069	0.086	0.095	0.097	0.105			24
93	72) MCT N-Nitrosodiphe...	0.625	0.589	0.613	0.637	0.650	0.639	0.609	0.615	3
12	73) S 2,4,6-Tribromo...	0.063	0.073	0.082	0.089	0.094	0.091	0.094		14
11	74) MT 4-Bromophenyl-...	0.195	0.193	0.190	0.191	0.192	0.194	0.184	0.187	1
93	75) MT Hexachlorobenzene	0.253	0.236	0.221	0.221	0.221	0.219	0.207	0.208	6
72	76) T n-octadecane	0.162	0.138	0.146	0.148	0.155	0.153	0.146	0.145	4
99	77) MCT Pentachlorophenol	0.076	0.093	0.109	0.116	0.116	0.116	0.122		16
65#	78) MT Phenanthrene	1.217	1.087	1.056	1.055	1.049	1.038	0.990	0.991	6
75	79) MT Anthracene	1.017	0.956	0.985	1.027	1.041	1.030	0.995	1.003	2
77	80) MT Carbazole	0.839	0.793	0.846	0.884	0.889	0.907	0.856	0.877	4
17	81) MT Di-n-butyl pht...	1.124	1.076	1.208	1.343	1.408	1.432	1.352	1.376	10
48	82) MT 2-nitrodipheny...	0.119	0.150	0.185	0.204	0.214	0.224	0.183	0.183	22
37	83) MCT Fluoranthene	1.023	0.956	0.994	1.052	1.077	1.086	1.051	1.060	4
25	84) I Chrysene-d12	0.131	0.151	0.194	0.249	0.323	0.401	0.451	0.271	45
85)	85) MT Benzidine									6
78	86) MT Pyrene	1.708	1.538	1.511	1.506	1.480	1.441	1.401	1.403	3
58	87) S p-Terphenyl-d14	1.168	1.131	1.106	1.116	1.118	1.099	1.052	1.066	10
26	88) MT Benzylbutyl ph...	0.562	0.651	0.709	0.733	0.724	0.748			12
16	89) MT 3,3-Dichlororobe...	0.272	0.322	0.358	0.368	0.380	0.379	0.346	0.346	12
20	90) MT Benzo(a)anthra...	1.088	1.076	1.063	1.122	1.143	1.158	1.127	1.156	3
38	91) MT Chrysene	1.255	1.222	1.177	1.182	1.181	1.159	1.115	1.145	3
11	92) MT bis(2-Ethylhex...	0.831	0.973	1.062	1.081	1.054	1.088			9
95	93) MC Di-n-octyl pht...	0.902	1.092	1.364	1.579	1.675	1.649	1.718		22



Response Factor Report BNAMS24

Method Path : C:\msdchem\1\methods\  
 Method File : S824C31V.M  
 Title : 8270 BNA  
 Last Update : Mon Apr 04 16:54:30 2022

94)	I	Perylene-d12	1.058	1.057	1.118	1.206	1.226	1.269	1.217	1.229
95)	MT	Benzo(b)fluora...	1.052	1.042	1.176	1.287	1.276	1.272	1.235	1.251
96)	MT	Benzo(k)fluora...	0.809	0.761	0.880	0.996	1.021	1.059	1.025	1.052
97)	MC	Benzo(a)pyrene	0.784	0.733	0.821	0.905	0.908	0.949	0.911	0.909
98)	MT	Indeno(1,2,3-c...	0.841	0.877	0.947	1.024	1.022	1.047	1.001	0.996
99)	MT	Dibenz(a,h)ant...	0.908	0.974	1.022	1.105	1.072	1.084	1.035	1.015
100)	MT	Benzo(g,h,i)pe...								

(#) = Out of Range

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:01:33 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.410	152	31379	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.145	136	126523	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	63425	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.433	188	100259	8000.0000000	ppb	0.00
84) Chrysene-d12	9.251	240	65923	8000.0000000	ppb	0.00
94) Perylene-d12	11.957	264	60338	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.740	112	2524	507.9989337	ppb	0.00
Spiked Amount	20000.000		Recovery	=	2.54%	
7) Phenol-d5	3.175	99	2902	490.2811940	ppb	0.00
Spiked Amount	20000.000		Recovery	=	2.45%	
24) Nitrobenzene-d5	3.710	82	2493m	524.6305136	ppb	0.00
Spiked Amount	10000.000		Recovery	=	5.25%	
50) 2-Fluorobiphenyl	4.828	172	5540	541.1485688	ppb	0.00
Spiked Amount	10000.000		Recovery	=	5.41%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	7.845	244	4811	523.3093824	ppb	0.00
Spiked Amount	10000.000		Recovery	=	5.23%	
<b>Target Compounds</b>						
2) Pyridine	2.263	79	2682m	502.9288558	ppb	
3) N-Nitrosodimethylamine	2.204	42	1734m	651.9362692	ppb	
5) Aniline	3.228	66	1370	491.5376500	ppb	# 79
6) bis(2-Chloroethyl)ether	3.245	93	2765m	515.1374508	ppb	
8) Phenol	3.181	94	3140	501.1068373	ppb	93
10) 2-Chlorophenol	3.292	128	2452	464.8748538	ppb	95
11) n-Decane	3.292	41	1924	575.6723728	ppb	# 36
12) 1,3-Dichlorobenzene	3.381	146	3101	517.2524205	ppb	96
13) 1,4-Dichlorobenzene	3.416	146	3094	514.0708349	ppb	# 68
14) Benzyl Alcohol	3.469	79	1836	479.0055036	ppb	99
15) 1,2-Dichlorobenzene	3.504	146	3184	552.5060104	ppb	97
16) bis(2-Chloroisopropyl)...	3.539	121	1060	532.7713266	ppb	87
17) 2,2-oxybis(1-chloropro...	3.539	121	1060	532.7713266	ppb	87
18) 2-Methylphenol	3.510	108	2237	462.2064517	ppb	86
19) Hexachloroethane	3.698	117	1305	524.0277072	ppb	97
20) N-Nitrosodi-n-propylamine	3.610	70	1565	469.7971863	ppb	98
21) 3&4-Methyl phenol	3.592	107	2518	475.7854675	ppb	95
25) Nitrobenzene	3.722	77	2349	471.8104374	ppb	92
26) Isophorone	3.851	82	4629	480.4591456	ppb	99
28) 2,4-Dimethylphenol	3.904	107	2304	469.9159942	ppb	92
29) bis(2-Chlorethoxy)methane	3.969	93	3329	513.4626234	ppb	98
30) 2,4-Dichlorophenol	4.039	162	1782	464.4492046	ppb	84
32) 1,2,4-Trichlorobenzene	4.104	180	2444	545.7286958	ppb	94
34) Naphthalene	4.157	128	8954m	559.6849764	ppb	
36) Hexachloro-1,3-butadiene	4.222	225	1339	554.5918131	ppb	91
40) 4-Chloro-3-methylphenol	4.463	107	1795	460.1058487	ppb	92
41) 2-Methylnaphthalene	4.592	142	5197	519.2282987	ppb	# 95
42) 1-Methylnaphthalene	4.657	142	5117	530.1816916	ppb	# 96
47) Hexachlorocyclopentadiene	4.692	237	939m	453.4144396	ppb	
48) 2,4,6-Trichlorophenol	4.769	196	1005	412.4968894	ppb	93
49) 2,4,5-Trichlorophenol	4.792	196	1011	400.6238575	ppb	94
51) Biphenyl	4.898	154	6324	553.1433075	ppb	99

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

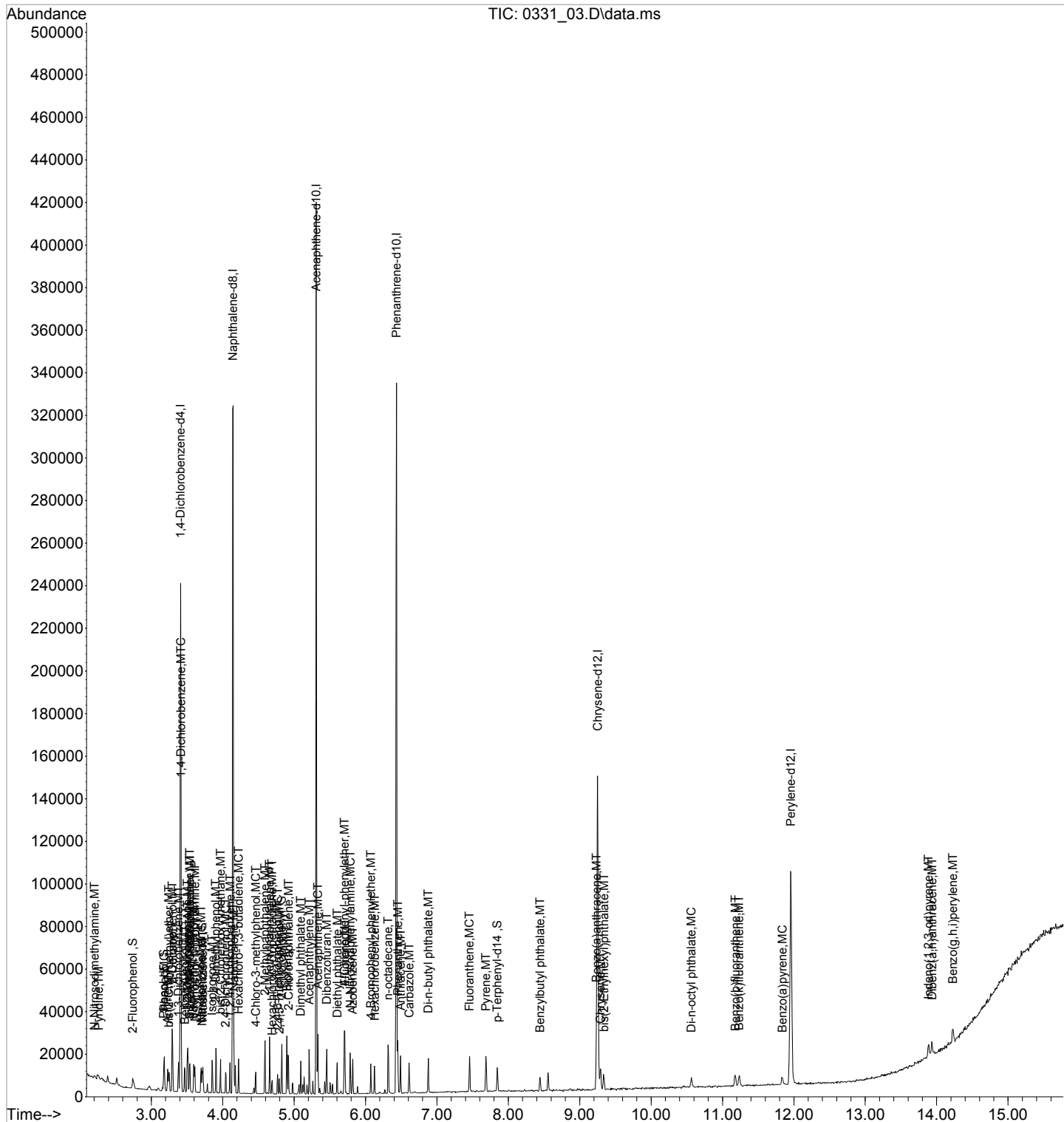
Quant Time: Apr 04 16:01:33 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
52) 2-Chloronaphthalene	4.922	162	4581	513.4164333	ppb		95
54) Acenaphthylene	5.210	152	6929	506.9901865	ppb		99
55) Dimethyl phthalate	5.092	163	4737	469.5927938	ppb		91
58) Acenaphthene	5.333	153	4864	535.9579409	ppb		98
60) Dibenzofuran	5.457	168	6619	535.9944213	ppb	#	89
64) Fluorene	5.710	166	5272	509.1051045	ppb		96
65) 4-Chlorophenyl-phenyle...	5.704	204	2576	557.7817146	ppb		99
66) Diethyl phthalate	5.604	149	5060	474.0047284	ppb		98
68) Azobenzene	5.822	77	4874	453.2199158	ppb	#	86
72) N-Nitrosodiphenylamine	5.786	169	3919	491.1822538	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	1225	512.3795821	ppb		96
75) Hexachlorobenzene	6.128	284	1585	573.4533593	ppb		94
76) n-octadecane	6.316	55	1016	548.9786212	ppb	#	29
78) Phenanthrene	6.451	178	7629	577.0254334	ppb		98
79) Anthracene	6.492	178	6370	494.8391331	ppb		97
80) Carbazole	6.610	167	5256	474.4175216	ppb	#	62
81) Di-n-butyl phthalate	6.880	149	7044	418.5148193	ppb		99
83) Fluoranthene	7.457	202	6410	485.9650062	ppb		99
86) Pyrene	7.686	202	7038	567.1001911	ppb		97
88) Benzylbutyl phthalate	8.445	149	2045	380.9486504	ppb		99
90) Benzo(a)anthracene	9.233	228	4484	484.9718122	ppb		93
91) Chrysene	9.292	228	5171	530.7402982	ppb		97
92) bis(2-Ethylhexyl)phtha...	9.339	149	2721	339.4590534	ppb		94
93) Di-n-octyl phthalate	10.563	149	3967	353.0003114	ppb		96
95) Benzo(b)fluoranthene	11.180	252	3990	438.5119188	ppb		99
96) Benzo(k)fluoranthene	11.233	252	3967	408.5899278	ppb		99
97) Benzo(a)pyrene	11.839	252	3050	406.0798426	ppb		95
98) Indeno(1,2,3-cd)pyrene	13.886	276	2955	433.0546037	ppb		93
99) Dibenz(a,h)anthracene	13.939	278	3172	410.5654286	ppb		98
100) Benzo(g,h,i)perylene	14.227	276	3424	410.7757987	ppb		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

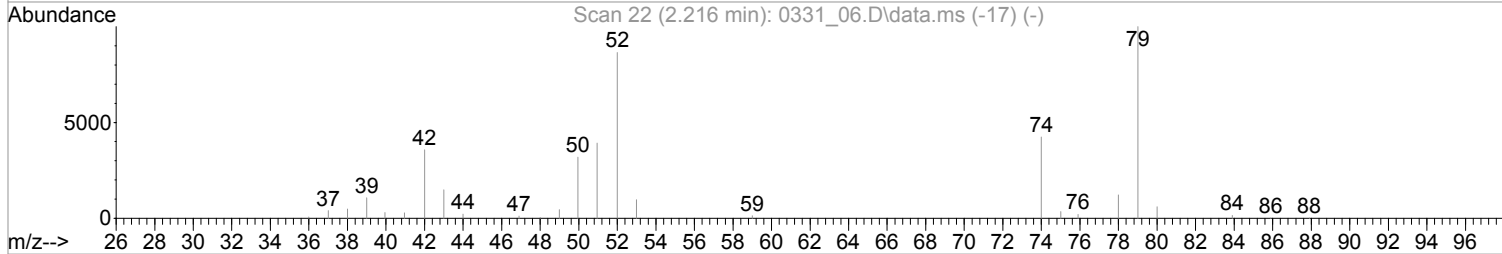
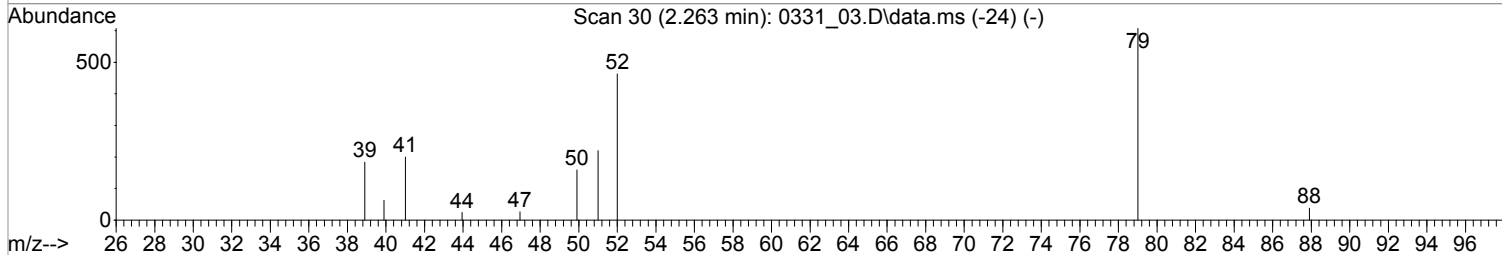
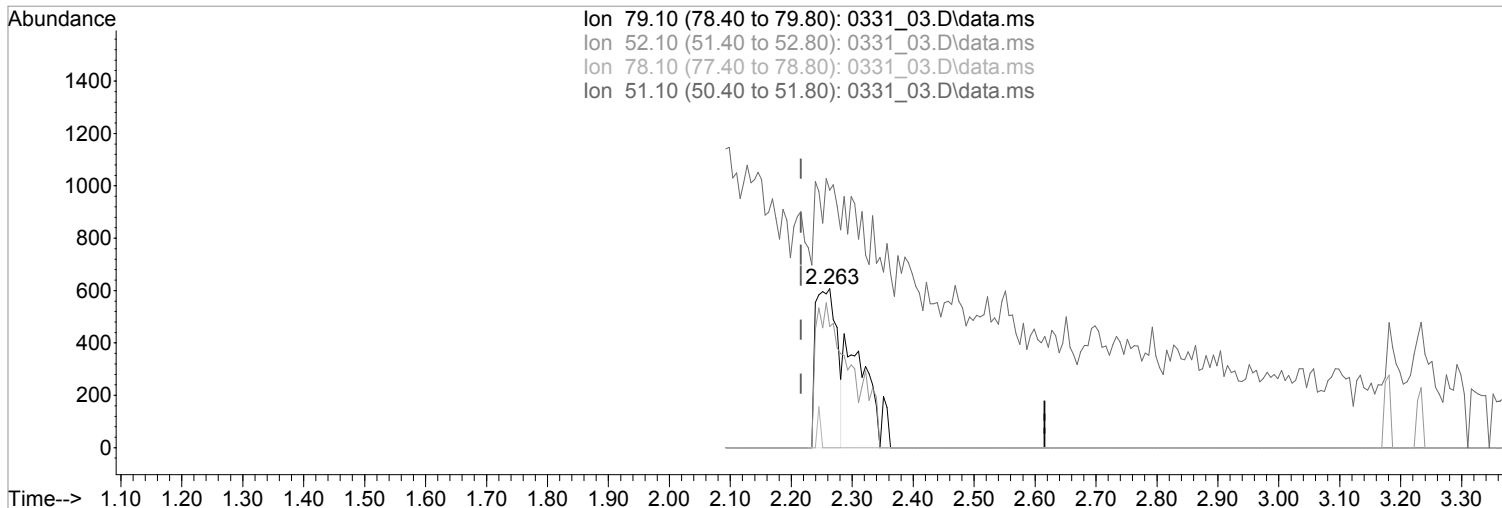
Quant Time: Apr 04 16:01:33 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

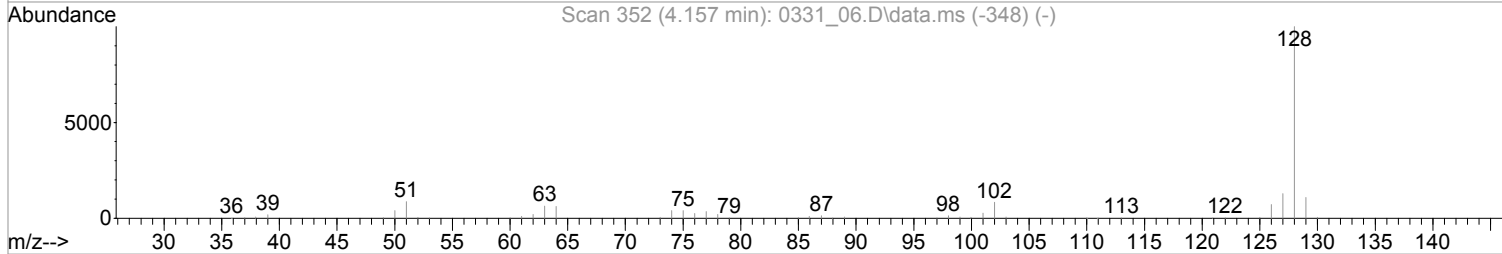
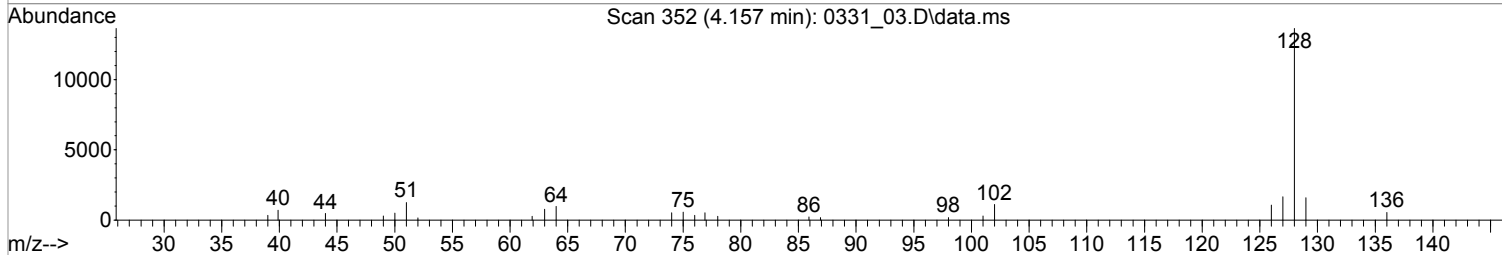
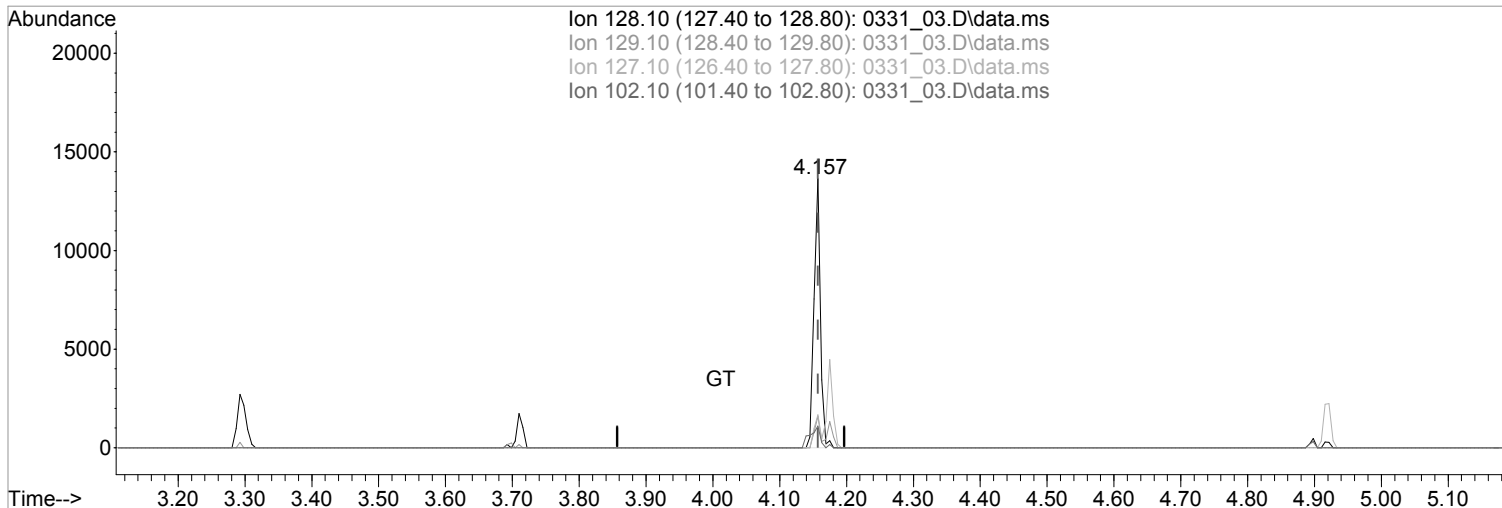
(2) Pyridine (TM)  
 2.263min (+0.047) 273.5917974 ppb  
 Qvalue = 88  
 response 1459

Ion	Exp%	Act%
79.10	100	100
52.10	86.50	76.28
78.10	12.30	0.00#
51.10	40.80	36.24

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(34) Naphthalene (MT)  
 4.157min (-0.000) 559.6849764 ppb m

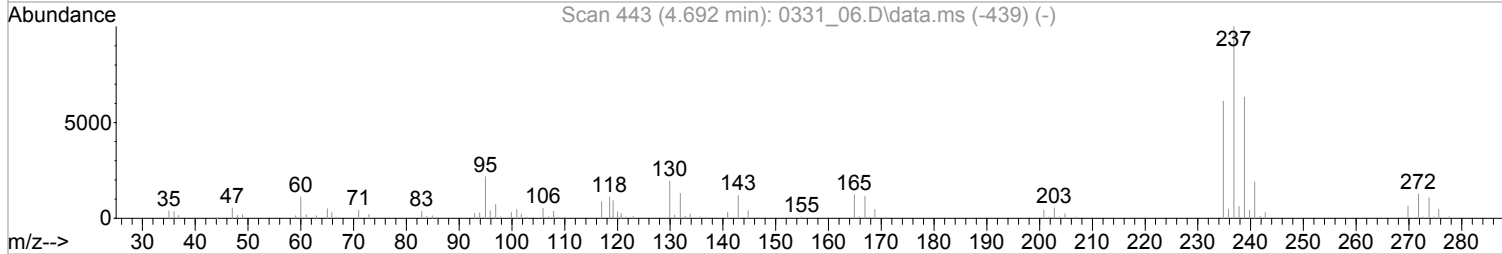
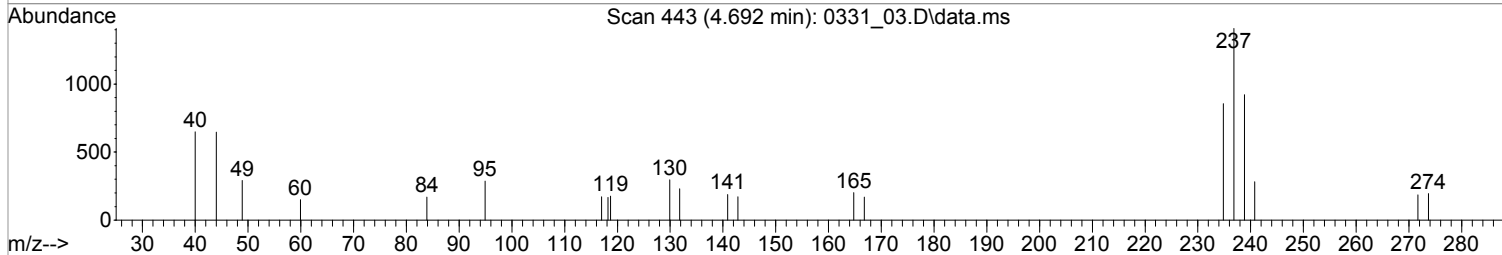
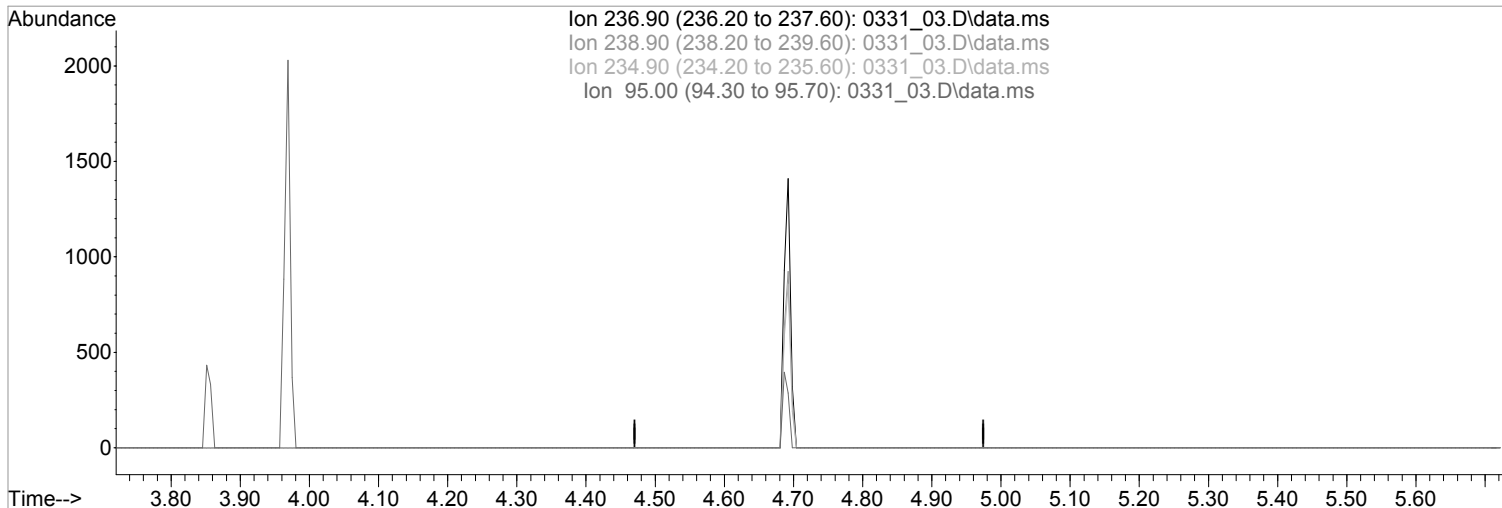
response 8954

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.62
127.10	12.80	12.25
102.10	8.30	8.14

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_03.D  
Acq On : 31 Mar 2022 5:24 pm  
Operator : 3545  
Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 15:59:57 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



TIC: 0331\_03.D\data.ms

(47) Hexachlorocyclopentadiene (MPT)

4.692min (-4.692) 0.0000000 ppb

Qvalue = 0

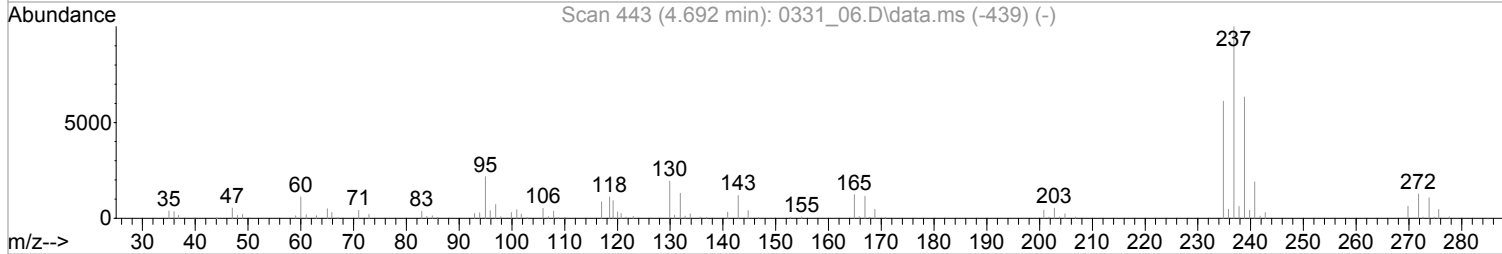
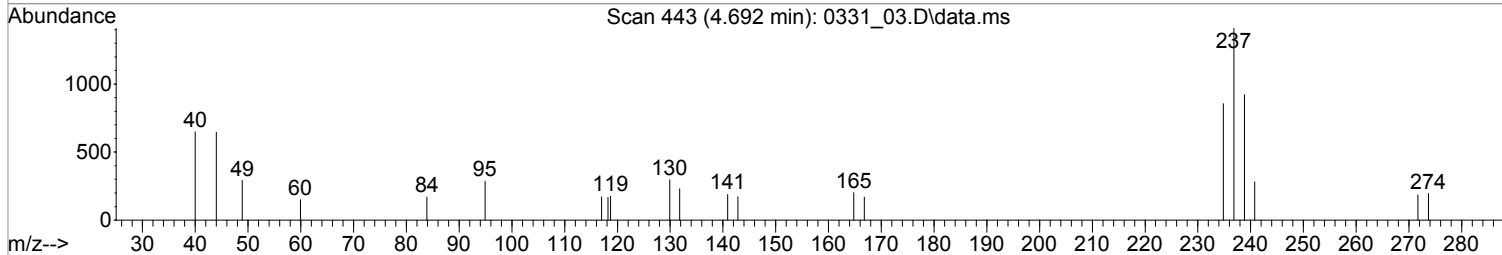
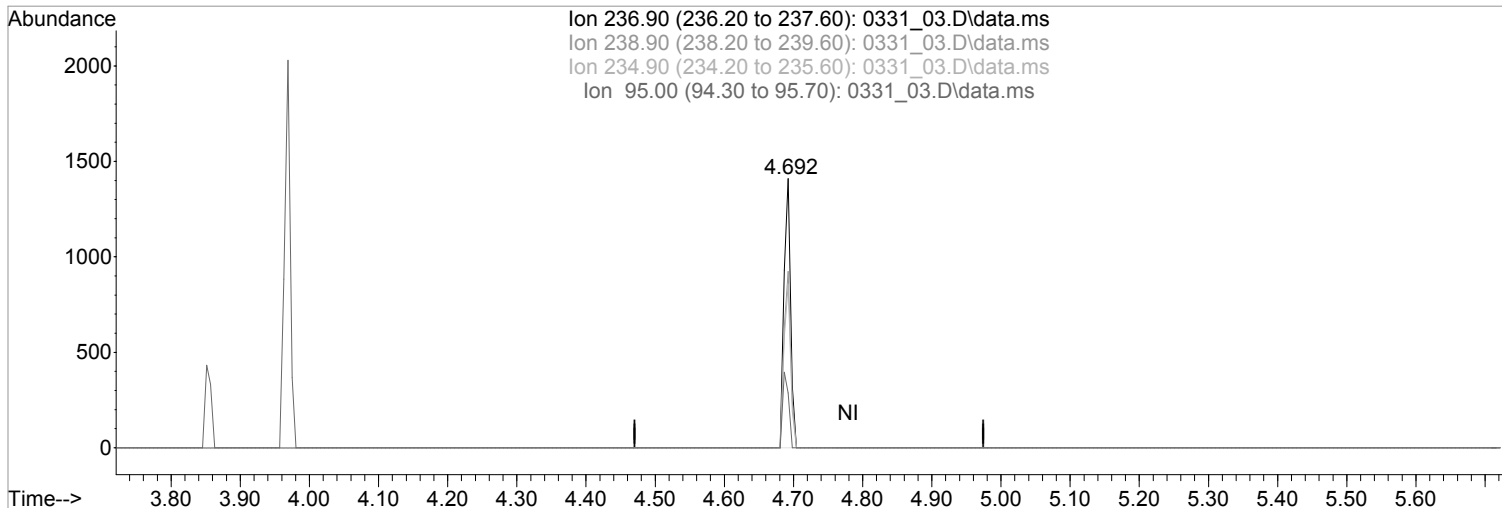
response 0

Ion	Exp%	Act%
236.90	100	0.00
238.90	63.30	0.00#
234.90	61.10	0.00#
95.00	21.70	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(47) Hexachlorocyclopentadiene (MPT)

4.692min (-0.000) 453.4144396 ppb m

response 939

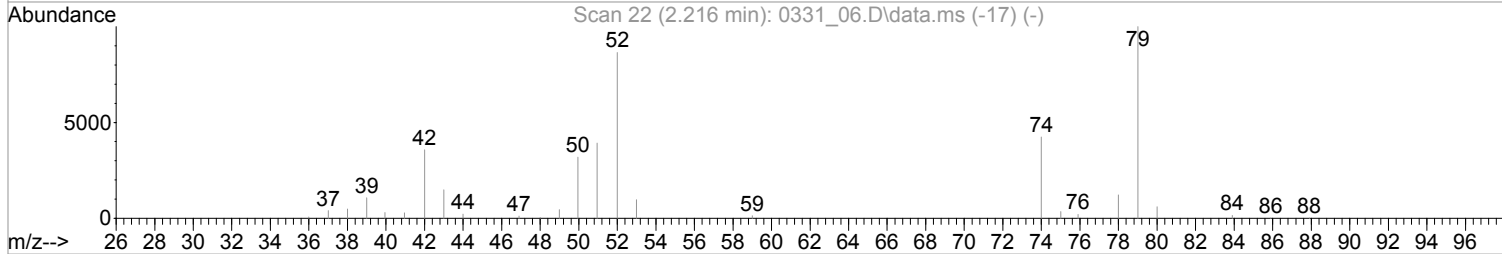
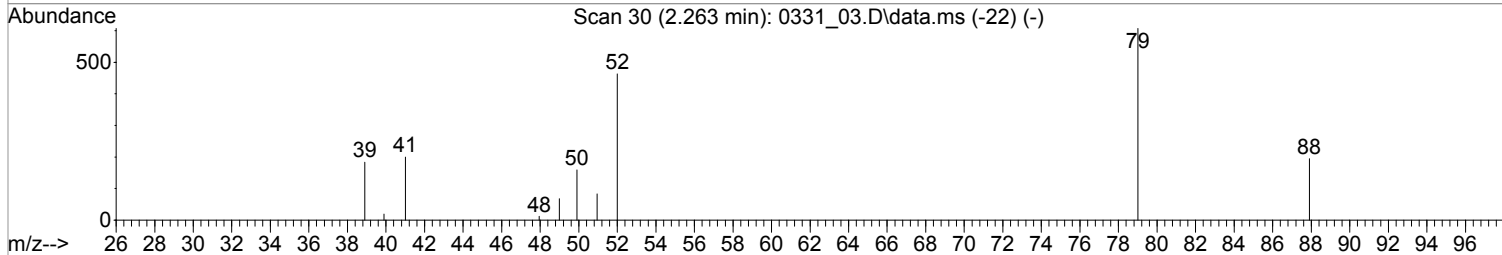
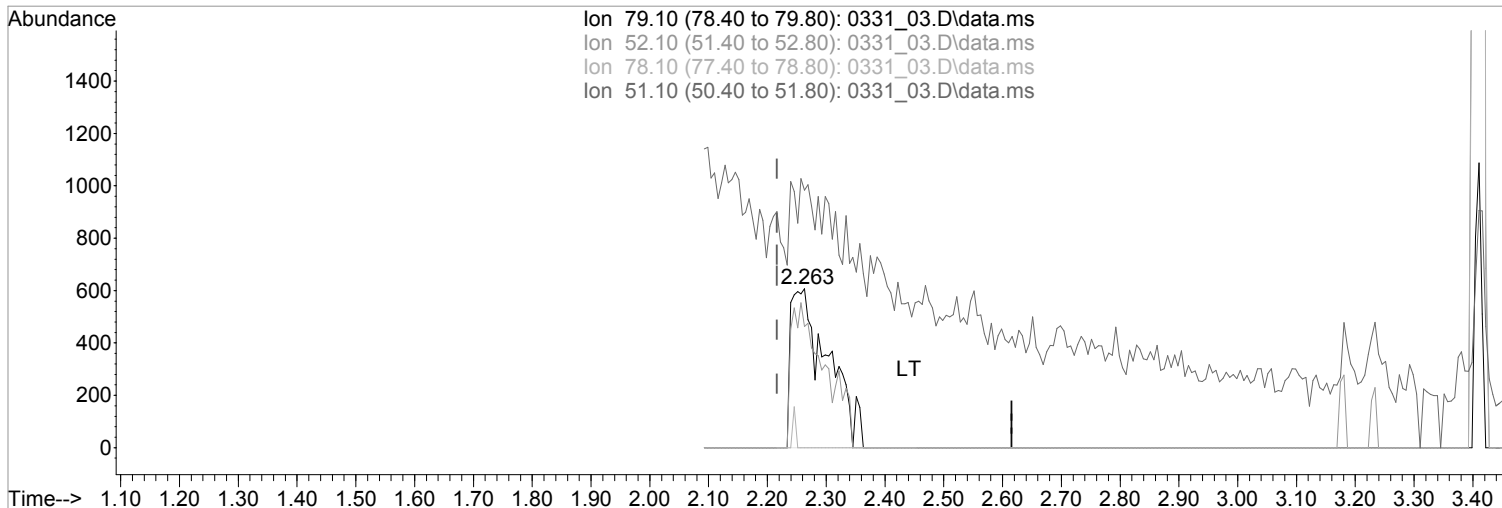
Ion	Exp%	Act%
236.90	100	100
238.90	63.30	65.51
234.90	61.10	60.75
95.00	21.70	20.37



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(2) Pyridine (TM)  
 2.263min (+0.047) 502.9288558 ppb m

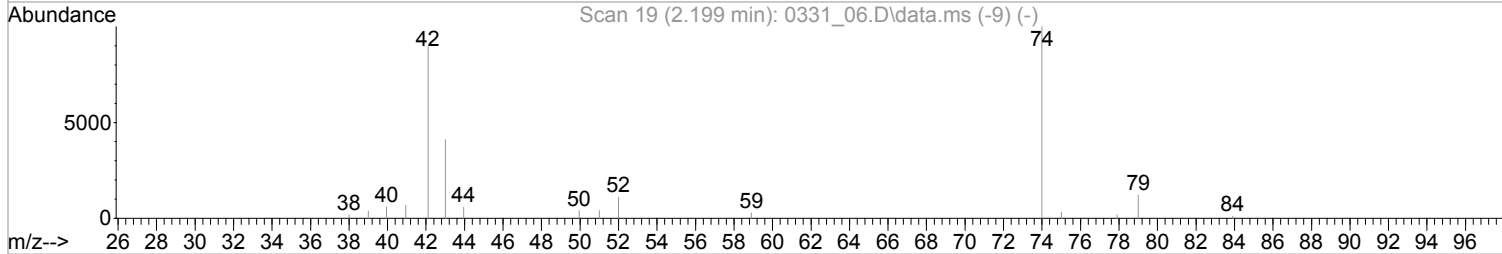
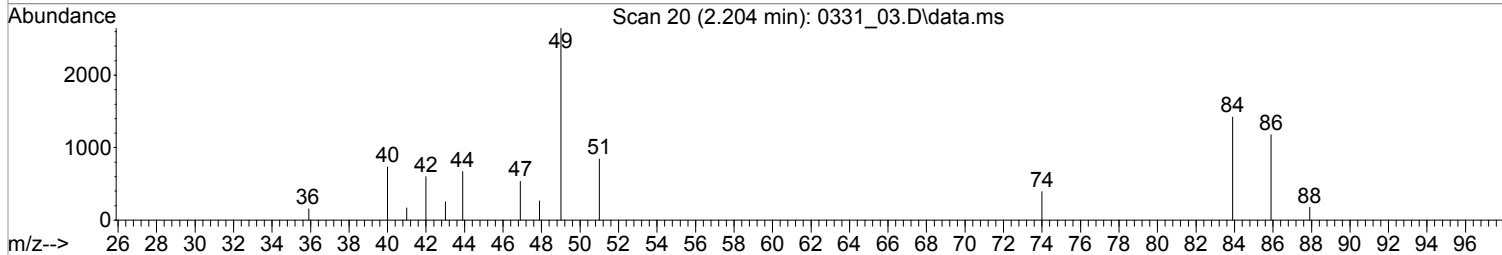
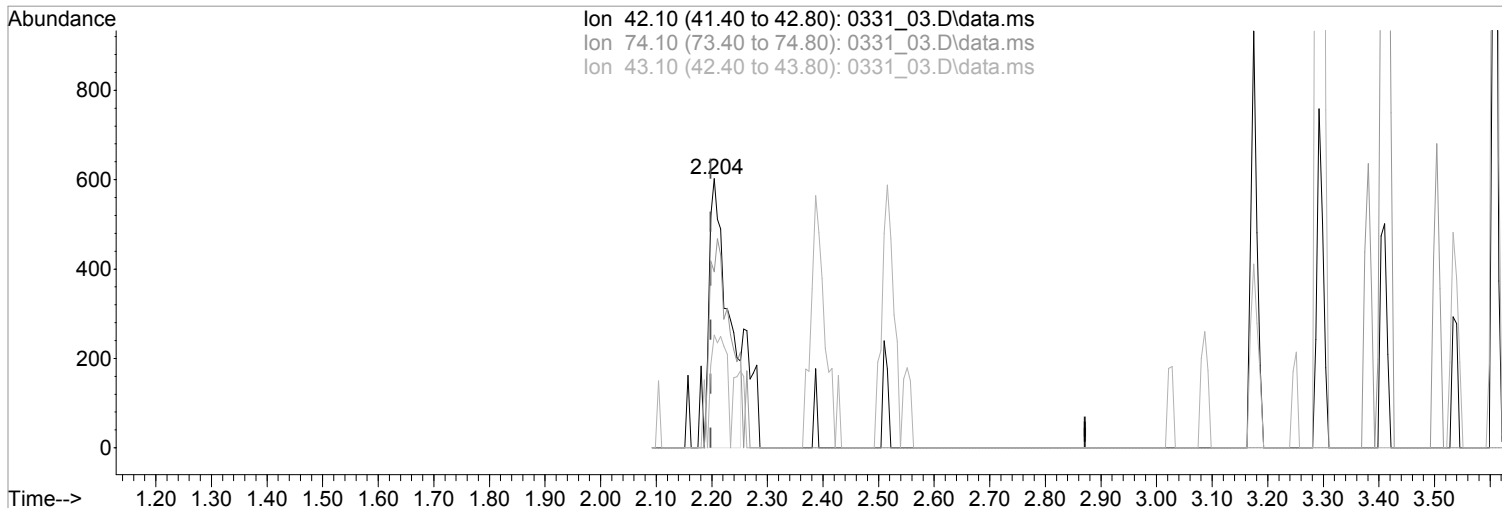
response 2682

Ion	Exp%	Act%
79.10	100	100
52.10	86.50	76.28
78.10	12.30	0.00#
51.10	40.80	162.11#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(3) N-Nitrosodimethylamine (MT)

2.204min (+0.006) 539.1445272 ppb

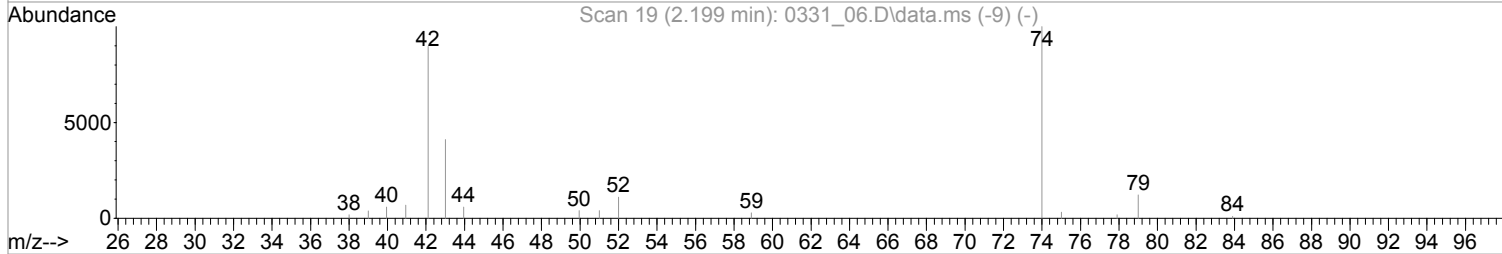
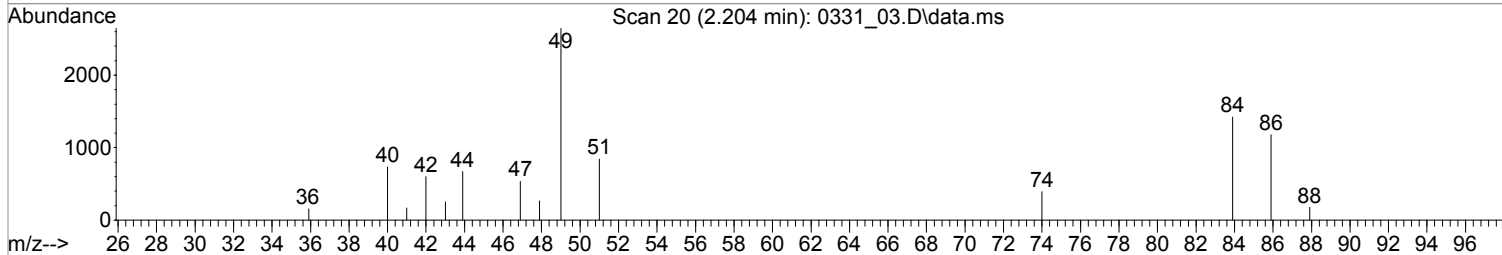
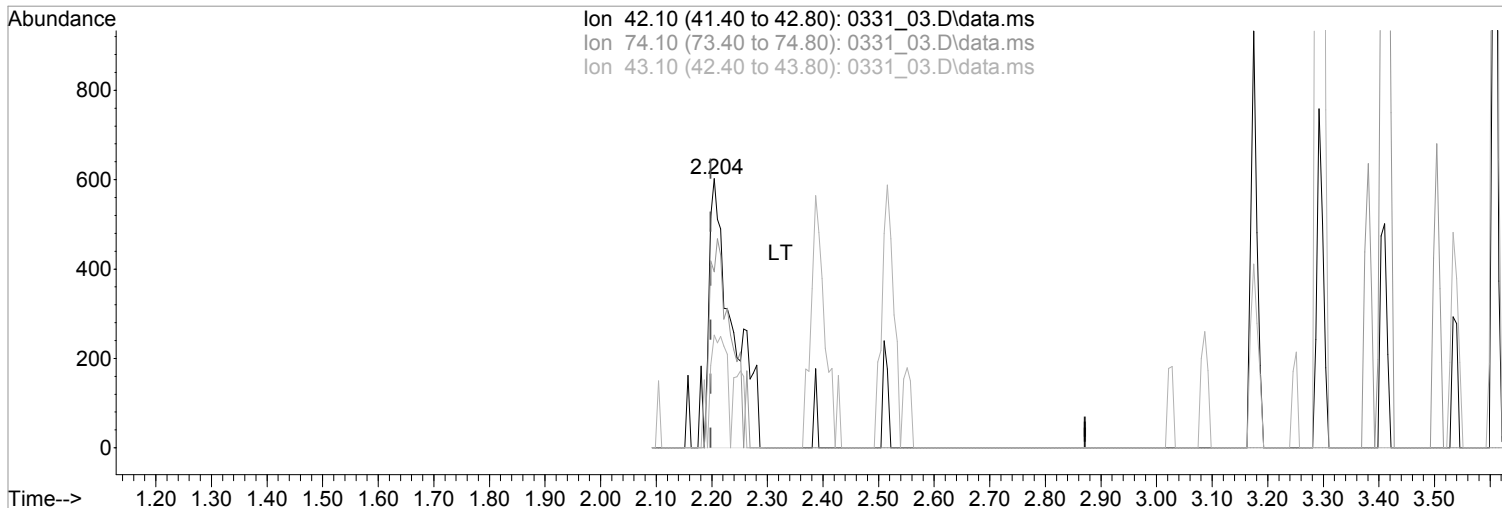
Qvalue = 64  
 response 1434

Ion	Exp%	Act%
42.10	100	100
74.10	109.30	86.75#
43.10	46.50	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(3) N-Nitrosodimethylamine (MT)  
 2.204min (+0.006) 651.9362692 ppb m

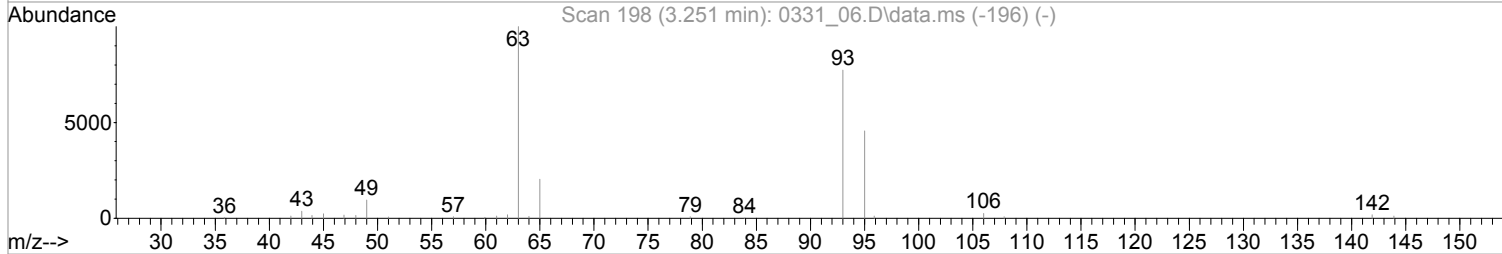
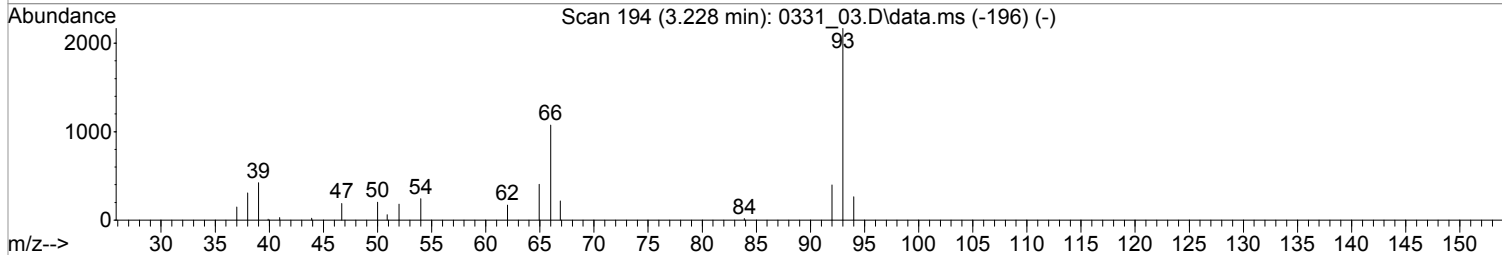
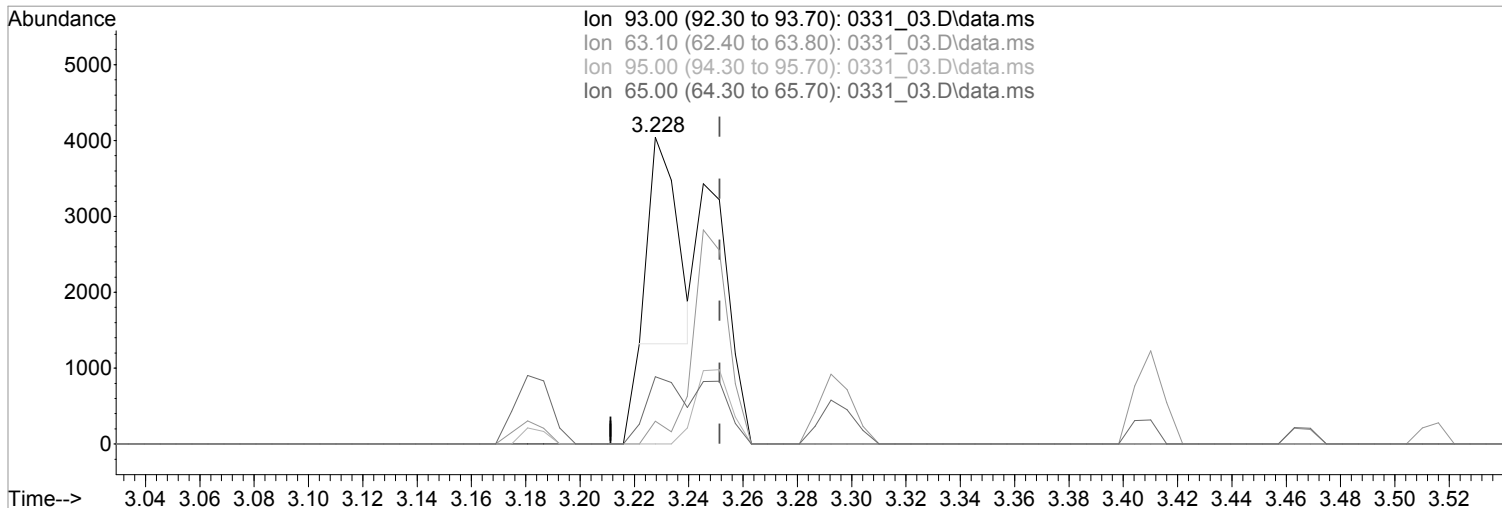
response 1734

Ion	Exp%	Act%
42.10	100	100
74.10	109.30	71.74#
43.10	46.50	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

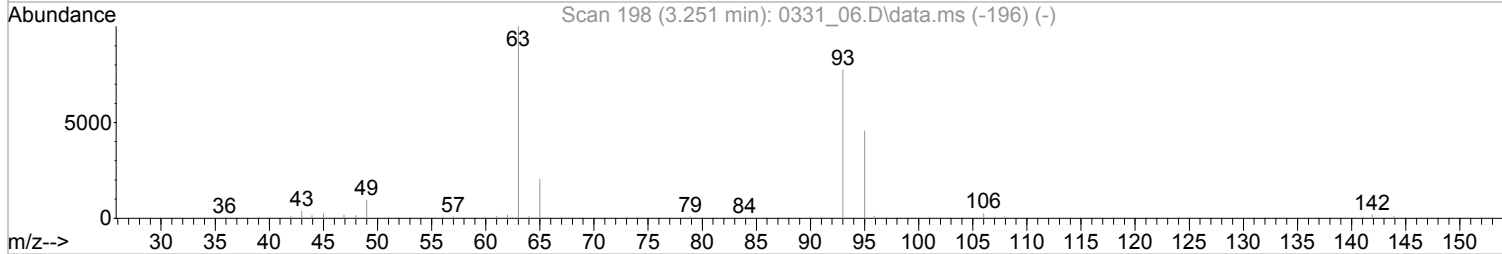
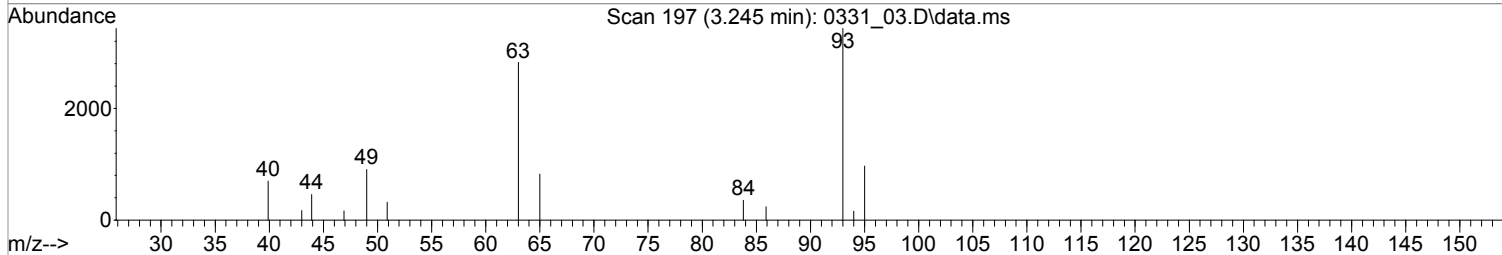
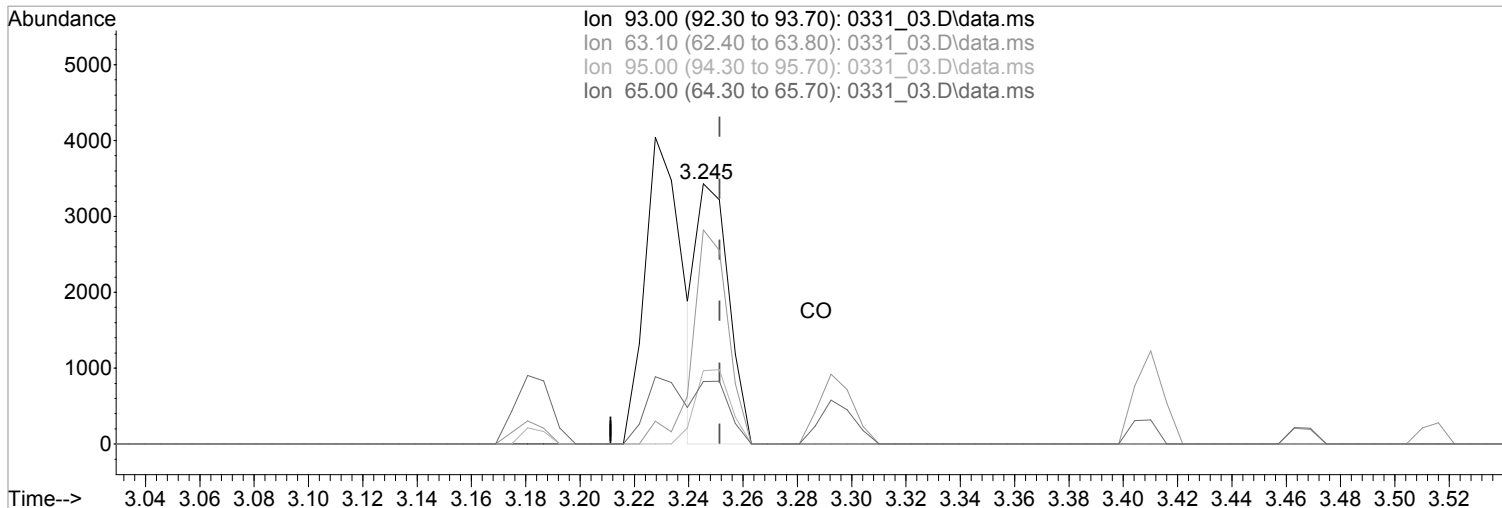
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 356.9632390 ppb  
 Qvalue = 42  
 response 1916

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	11.06#
95.00	31.90	0.00#
65.00	23.10	22.97

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.245min (-0.006) 515.1374508 ppb m

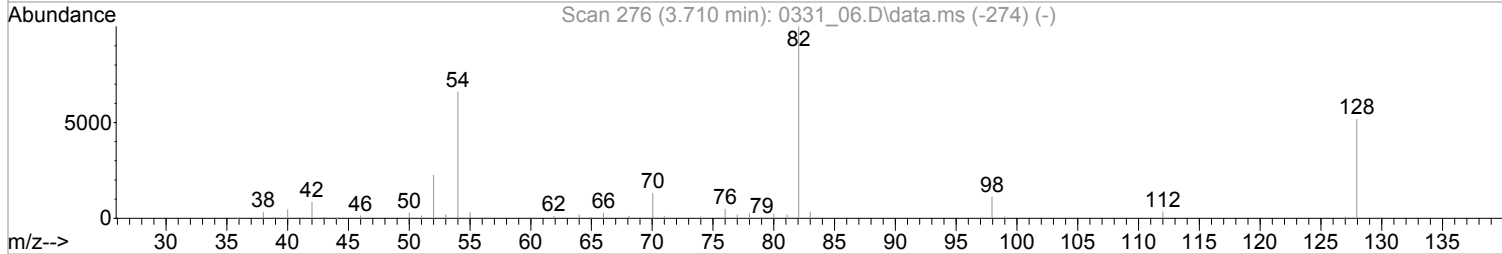
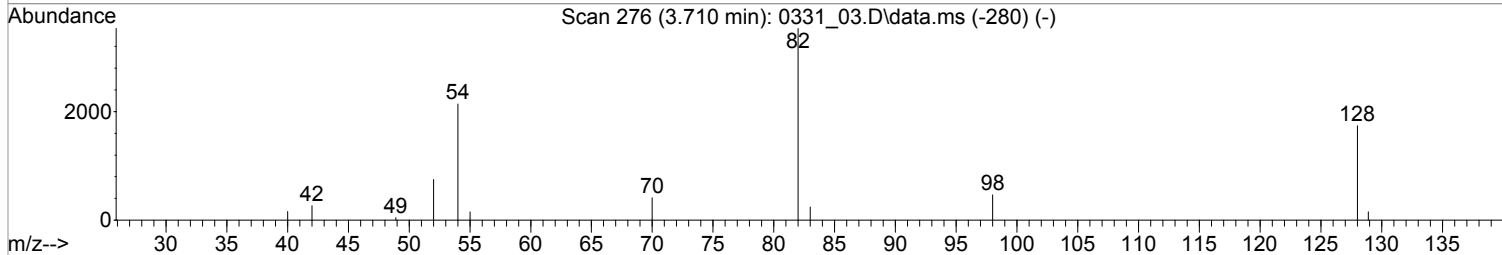
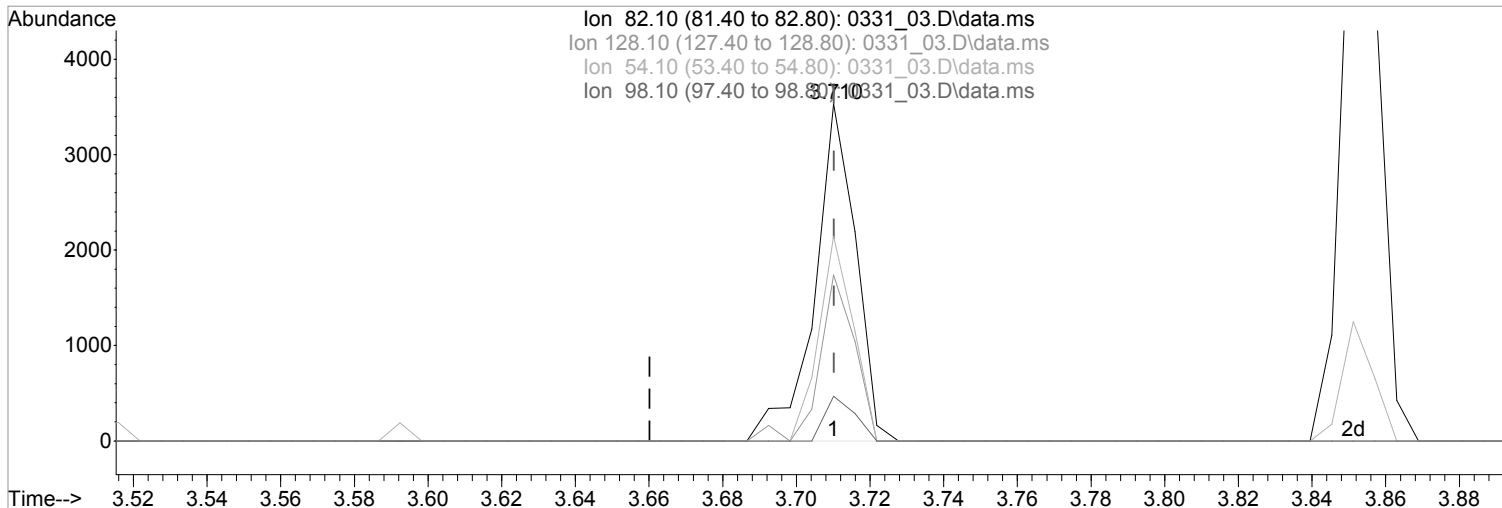
response 2765

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	82.25
95.00	31.90	28.18
65.00	23.10	24.05

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(24) Nitrobenzene-d5 (S)

3.710min (-0.000) 575.7677839 ppb

Qvalue = 98

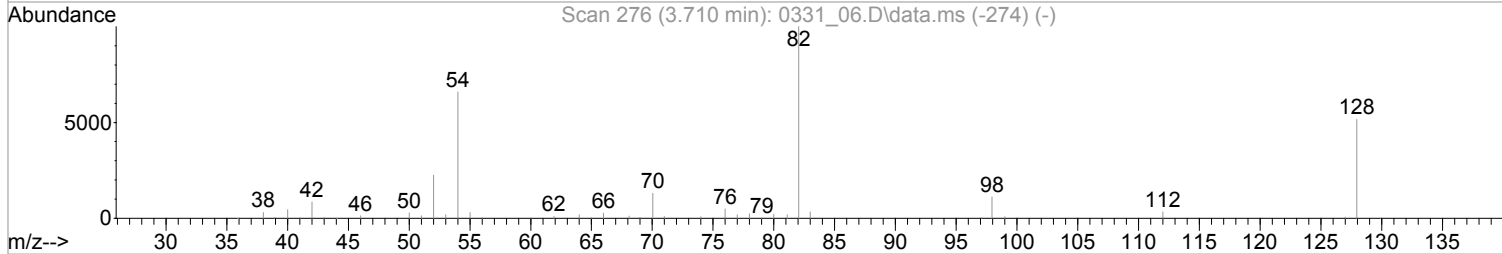
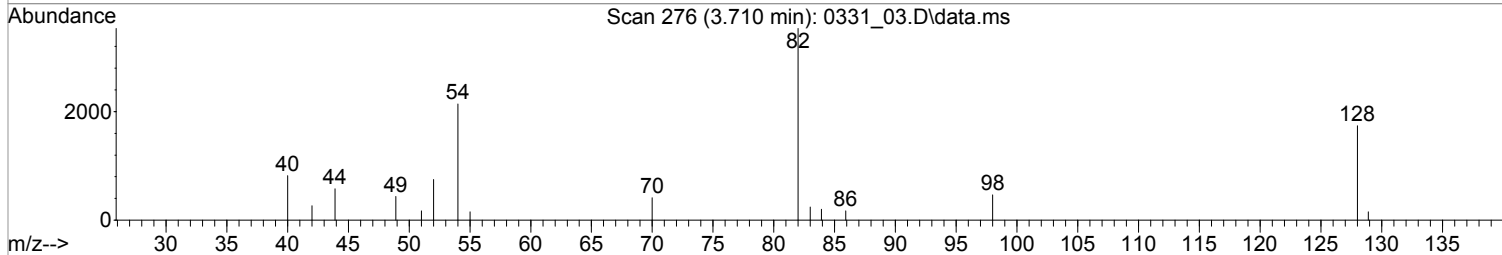
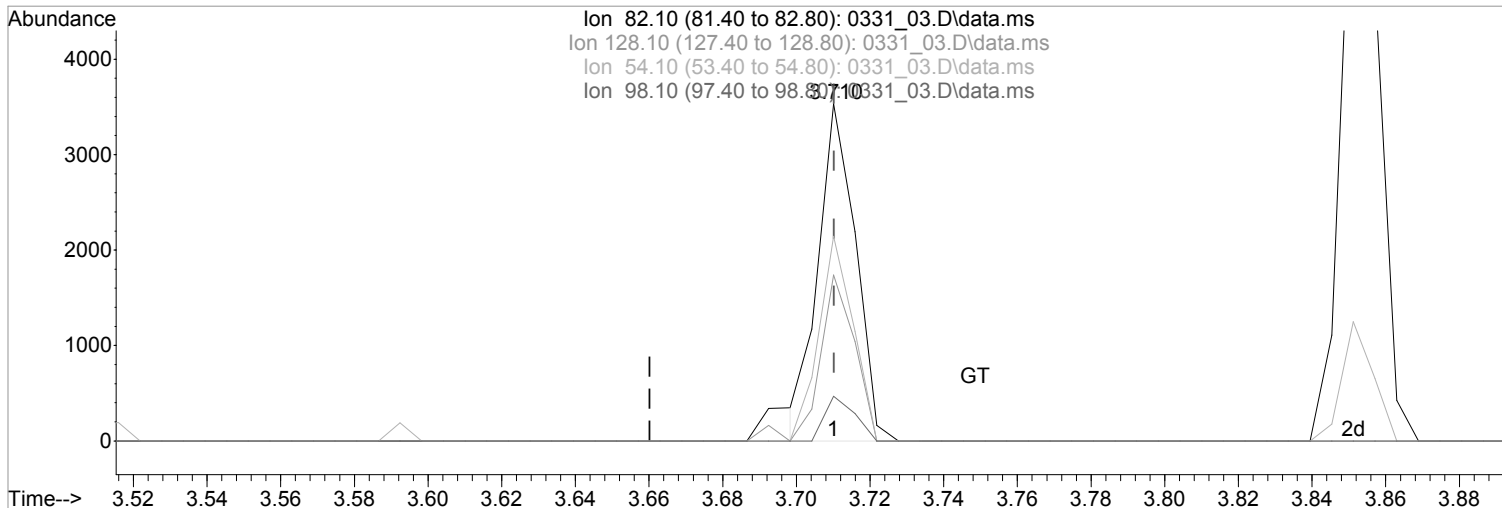
response 2736

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	49.19
54.10	60.00	60.68
98.10	11.40	13.25

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 524.6305136 ppb m

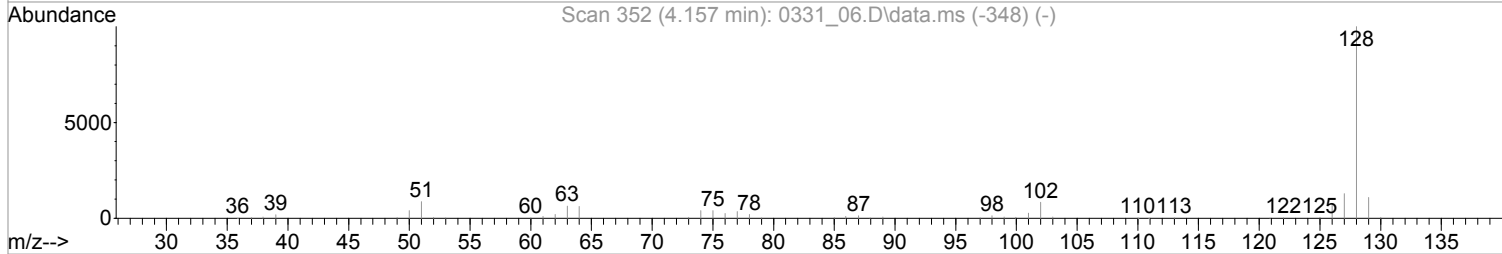
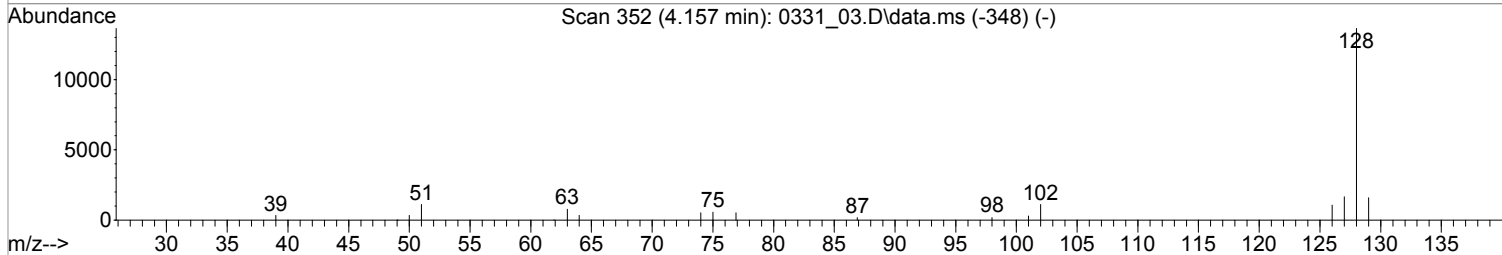
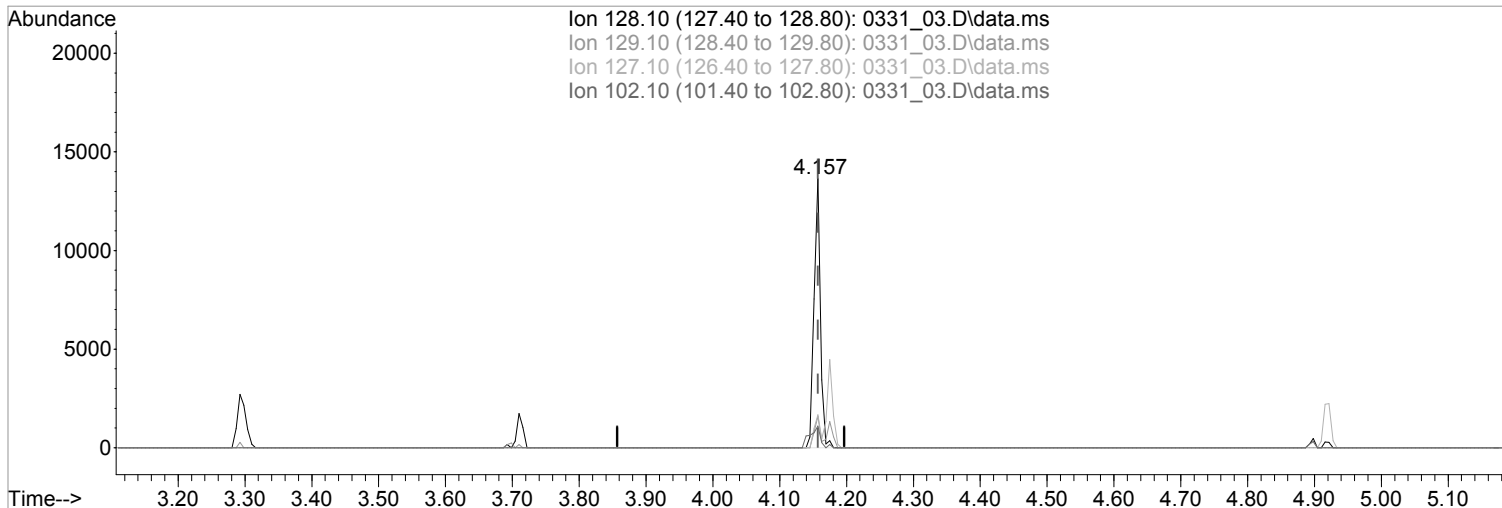
response 2493

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	49.19
54.10	60.00	60.68
98.10	11.40	13.25

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_03.D  
 Acq On : 31 Mar 2022 5:24 pm  
 Operator : 3545  
 Sample : STD SVMS 500 PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 04 16:00:09 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_03.D\data.ms

(34) Naphthalene (MT)  
 4.157min (-0.000) 567.6233271 ppb  
 Qvalue = 99  
 response 9081

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.62
127.10	12.80	12.25
102.10	8.30	8.14



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:03:57 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.410	152	32256	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.145	136	127295	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	64408	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.434	188	102417	8000.0000000	ppb	0.00
84) Chrysene-d12	9.251	240	66477	8000.0000000	ppb	0.00
94) Perylene-d12	11.957	264	60703	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.740	112	4822	936.6323900	ppb	0.00
Spiked Amount	20000.000		Recovery	=	4.68%	
7) Phenol-d5	3.175	99	5723	949.8206996	ppb	0.00
Spiked Amount	20000.000		Recovery	=	4.75%	
24) Nitrobenzene-d5	3.710	82	4668m	952.9123725	ppb	0.00
Spiked Amount	10000.000		Recovery	=	9.53%	
50) 2-Fluorobiphenyl	4.828	172	10861	1003.4240800	ppb	0.00
Spiked Amount	10000.000		Recovery	=	10.03%	
73) 2,4,6-Tribromophenol	5.887	330	805m	762.4927132	ppb	0.00
Spiked Amount	20000.000		Recovery	=	3.81%	
87) p-Terphenyl-d14	7.845	244	9398	990.6430560	ppb	0.00
Spiked Amount	10000.000		Recovery	=	9.91%	
<b>Target Compounds</b>						
2) Pyridine	2.240	79	5071	922.3587099	ppb #	95
3) N-Nitrosodimethylamine	2.199	42	3234	1026.8244509	ppb	87
5) Aniline	3.228	66	2453	863.4817222	ppb #	87
6) bis(2-Chloroethyl)ether	3.246	93	5429m	969.2851721	ppb	
8) Phenol	3.181	94	5974	926.4330927	ppb	95
10) 2-Chlorophenol	3.293	128	5060	967.2165217	ppb	98
11) n-Decane	3.293	41	3492	944.9158398	ppb #	99
12) 1,3-Dichlorobenzene	3.381	146	6386	1018.6606650	ppb	98
13) 1,4-Dichlorobenzene	3.416	146	6299	1004.0019603	ppb #	88
14) Benzyl Alcohol	3.463	79	3546	919.2846602	ppb	99
15) 1,2-Dichlorobenzene	3.504	146	6014	964.5647258	ppb	96
16) bis(2-Chloroisopropyl)...	3.540	121	2029	960.5974778	ppb	92
17) 2,2-oxybis(1-chloropro...	3.540	121	2029	960.5974778	ppb	92
18) 2-Methylphenol	3.510	108	4331	904.7290329	ppb	93
19) Hexachloroethane	3.698	117	2518	960.5419697	ppb	92
20) N-Nitrosodi-n-propylamine	3.610	70	3124	940.7078404	ppb	99
21) 3&4-Methyl phenol	3.593	107	4900	923.0511547	ppb	97
25) Nitrobenzene	3.722	77	4690	963.4605718	ppb	95
26) Isophorone	3.851	82	8692	914.5714399	ppb	99
27) 2-Nitrophenol	3.904	139	1821	795.4129864	ppb	93
28) 2,4-Dimethylphenol	3.904	107	4491	938.6524583	ppb	93
29) bis(2-Chlorethoxy)methane	3.969	93	6359	961.9096115	ppb	97
30) 2,4-Dichlorophenol	4.045	162	3374	906.2632690	ppb	98
32) 1,2,4-Trichlorobenzene	4.104	180	4786	1015.7513152	ppb	92
34) Naphthalene	4.157	128	16810m	985.5431213	ppb	
35) 4-Chloroaniline	4.175	65	1501	912.0664575	ppb #	88
36) Hexachloro-1,3-butadiene	4.222	225	2489	971.6089660	ppb	97
40) 4-Chloro-3-methylphenol	4.463	107	3435	911.5050154	ppb	94
41) 2-Methylnaphthalene	4.593	142	9991	973.4222268	ppb	99
42) 1-Methylnaphthalene	4.657	142	10035	1003.1618197	ppb	97
47) Hexachlorocyclopentadiene	4.693	237	1808	901.7104811	ppb	98
48) 2,4,6-Trichlorophenol	4.769	196	2025	896.9514026	ppb	91

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

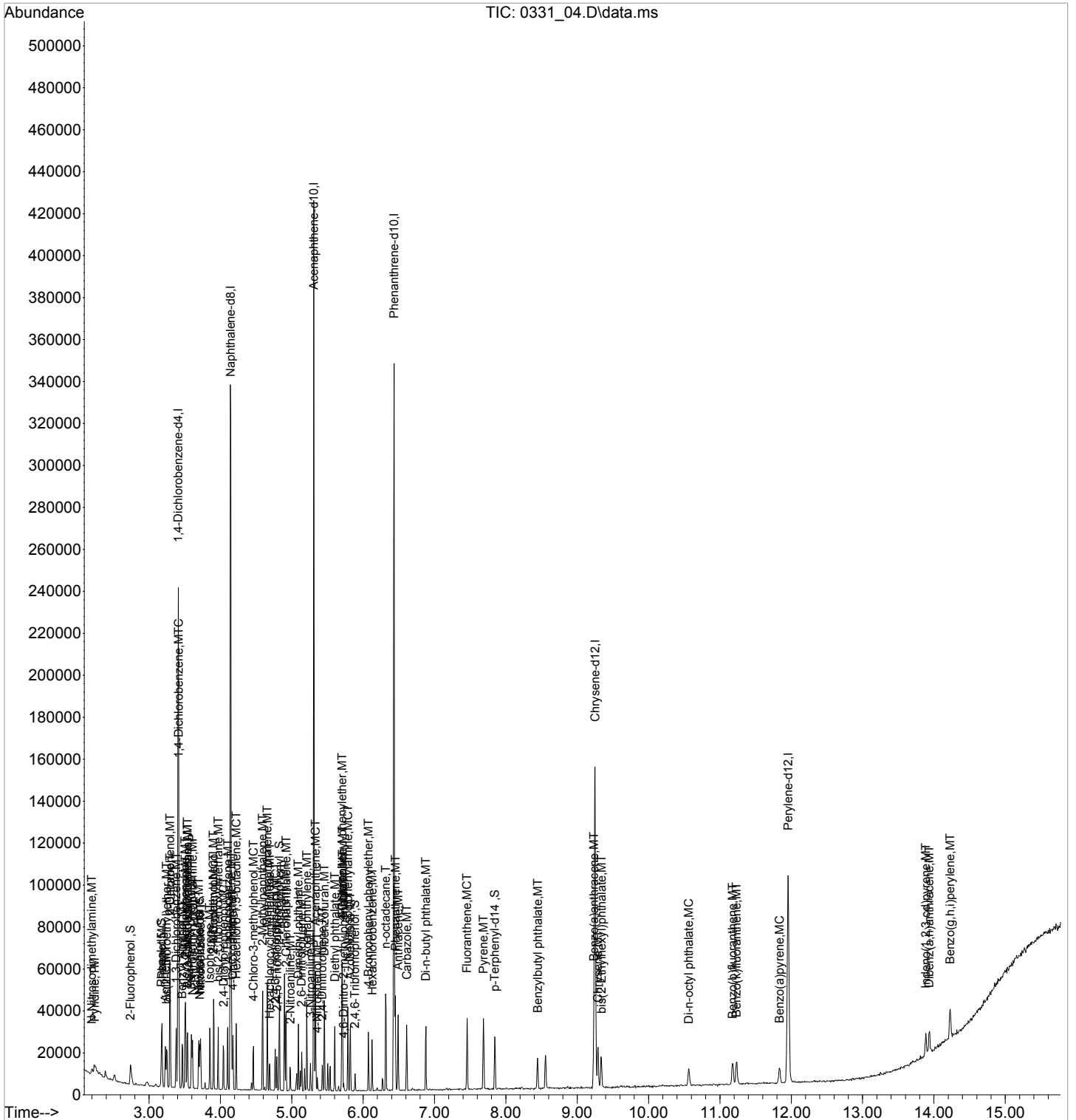
Quant Time: Apr 04 16:03:57 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.793	196	1963	850.5173304	ppb		91
51) Biphenyl	4.898	154	11839	968.2645048	ppb		98
52) 2-Chloronaphthalene	4.922	162	9292	1011.9321511	ppb		98
53) 2-Nitroaniline	4.981	138	1866	769.8225109	ppb	#	93
54) Acenaphthylene	5.210	152	13458	962.9526656	ppb		99
55) Dimethyl phthalate	5.092	163	9503	956.7755123	ppb		93
56) 2,6-Dinitrotoluene	5.140	165	1655	763.6081461	ppb		92
57) 3-Nitroaniline	5.263	138	1426	717.7969135	ppb		98
58) Acenaphthene	5.334	153	9791	1025.5166899	ppb		99
60) Dibenzofuran	5.457	168	12817	986.5464047	ppb	#	98
61) 2,4-Dinitrotoluene	5.428	165	1767	681.0093031	ppb	#	73
63) 4-Nitrophenol	5.357	139	902m	644.5700639	ppb		
64) Fluorene	5.710	166	10290	969.6872468	ppb		98
65) 4-Chlorophenyl-phenylether	5.704	204	4599	927.0569857	ppb		97
66) Diethyl phthalate	5.604	149	9914	938.9461138	ppb		98
67) 4-Nitroaniline	5.710	138	1350	1129.6086293	ppb	#	26
68) Azobenzene	5.822	77	9927	953.6061374	ppb		97
71) 4,6-Dinitro-2-methylph...	5.728	198	471m	535.7640762	ppb		
72) N-Nitrosodiphenylamine	5.787	169	7540	933.3328472	ppb		98
74) 4-Bromophenyl-phenylether	6.075	248	2477	1001.8199448	ppb		98
75) Hexachlorobenzene	6.128	284	3015	994.7736888	ppb		95
76) n-octadecane	6.316	55	1765	890.0022714	ppb	#	72
78) Phenanthrene	6.451	178	13916	956.6809370	ppb		99
79) Anthracene	6.492	178	12234	935.1720946	ppb		99
80) Carbazole	6.610	167	10150	920.4021822	ppb		98
81) Di-n-butyl phthalate	6.881	149	13780	872.5812197	ppb		99
83) Fluoranthene	7.457	202	12239	921.2610703	ppb		99
86) Pyrene	7.686	202	12779	956.9026432	ppb		99
88) Benzylbutyl phthalate	8.445	149	3894	816.5523448	ppb		98
90) Benzo(a)anthracene	9.233	228	8944	973.9225740	ppb		98
91) Chrysene	9.292	228	10158	1003.0718203	ppb		98
92) bis(2-Ethylhexyl)phtha...	9.339	149	5877	866.1250077	ppb		97
93) Di-n-octyl phthalate	10.563	149	7493	775.1486260	ppb		98
95) Benzo(b)fluoranthene	11.174	252	8017	933.1712569	ppb		97
96) Benzo(k)fluoranthene	11.233	252	7909	891.1685866	ppb		97
97) Benzo(a)pyrene	11.833	252	5772	843.0478053	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.886	276	5564	868.6523357	ppb		93
99) Dibenz(a,h)anthracene	13.933	278	6652	939.8770333	ppb		97
100) Benzo(g,h,i)perylene	14.227	276	7392	967.8372314	ppb		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

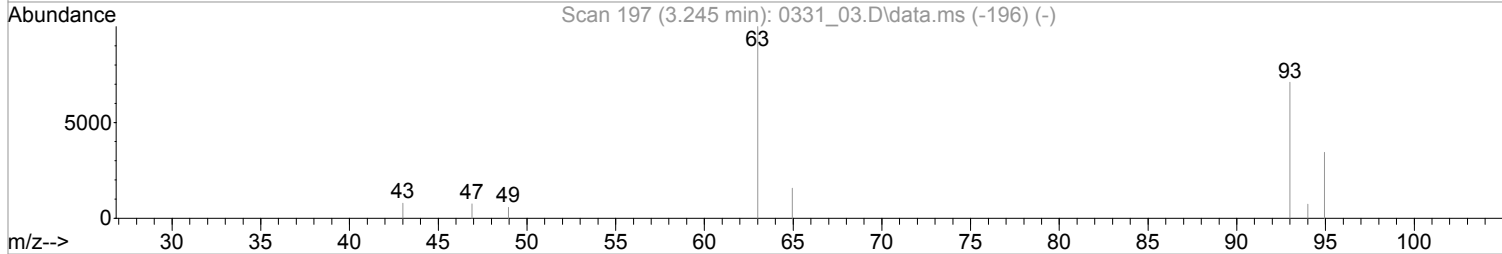
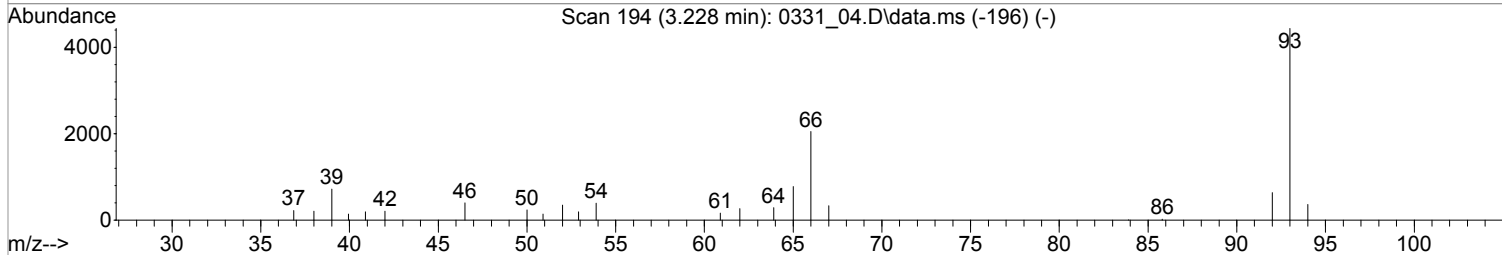
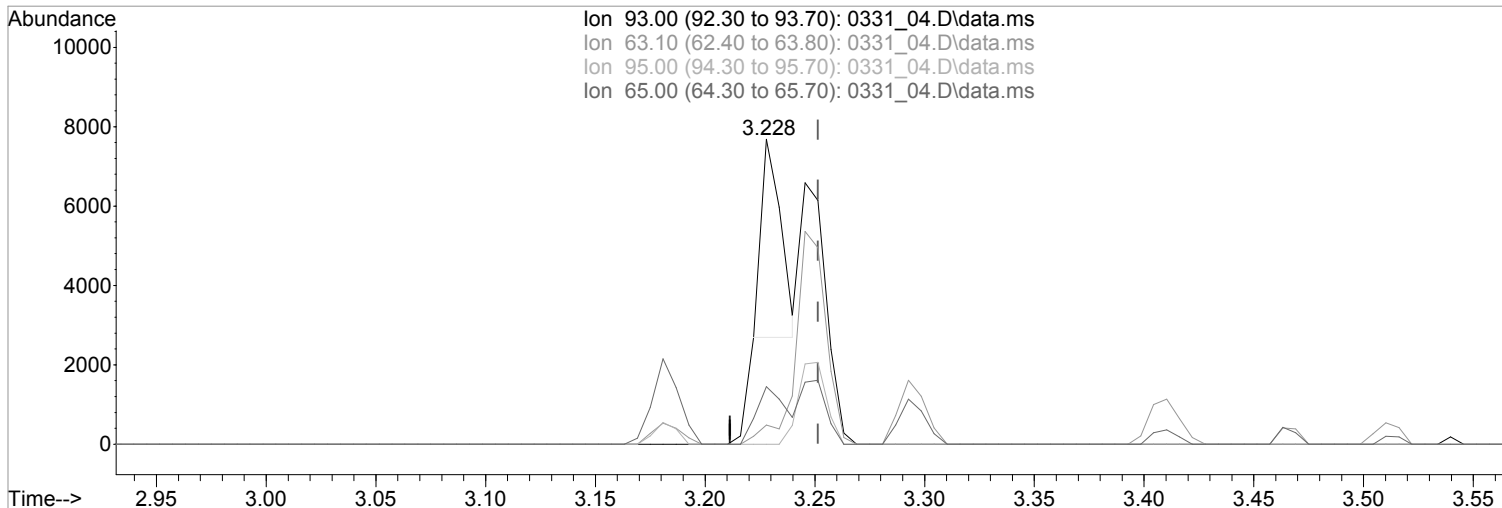
Quant Time: Apr 04 16:03:57 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

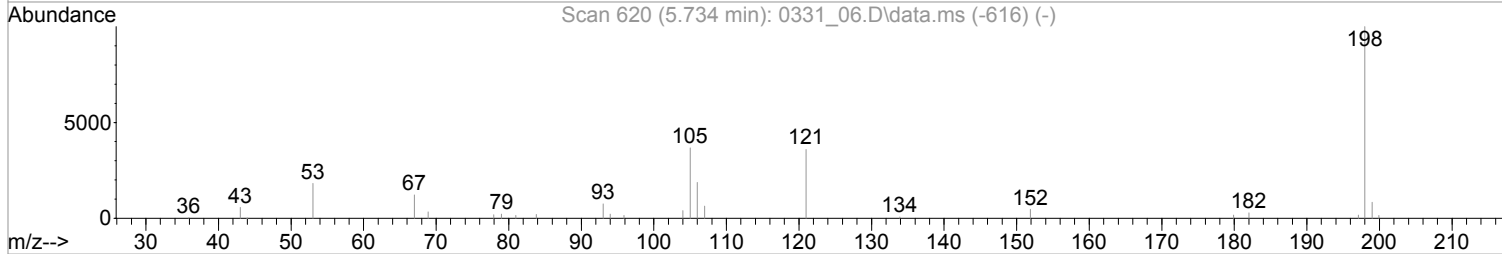
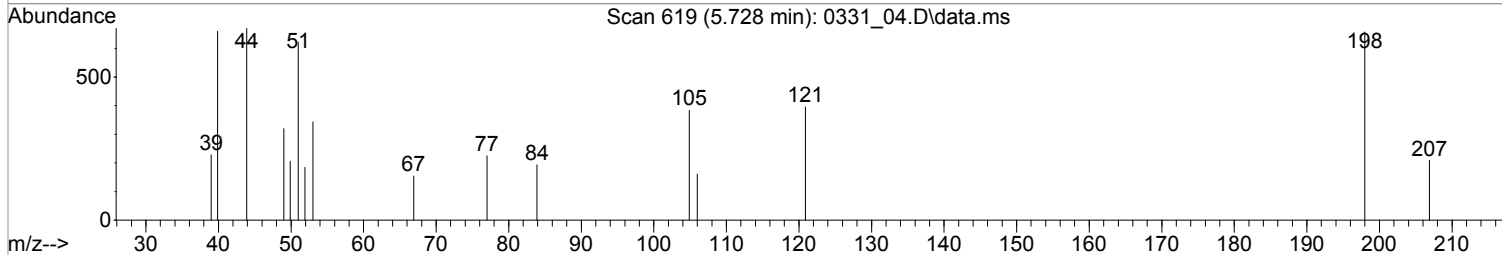
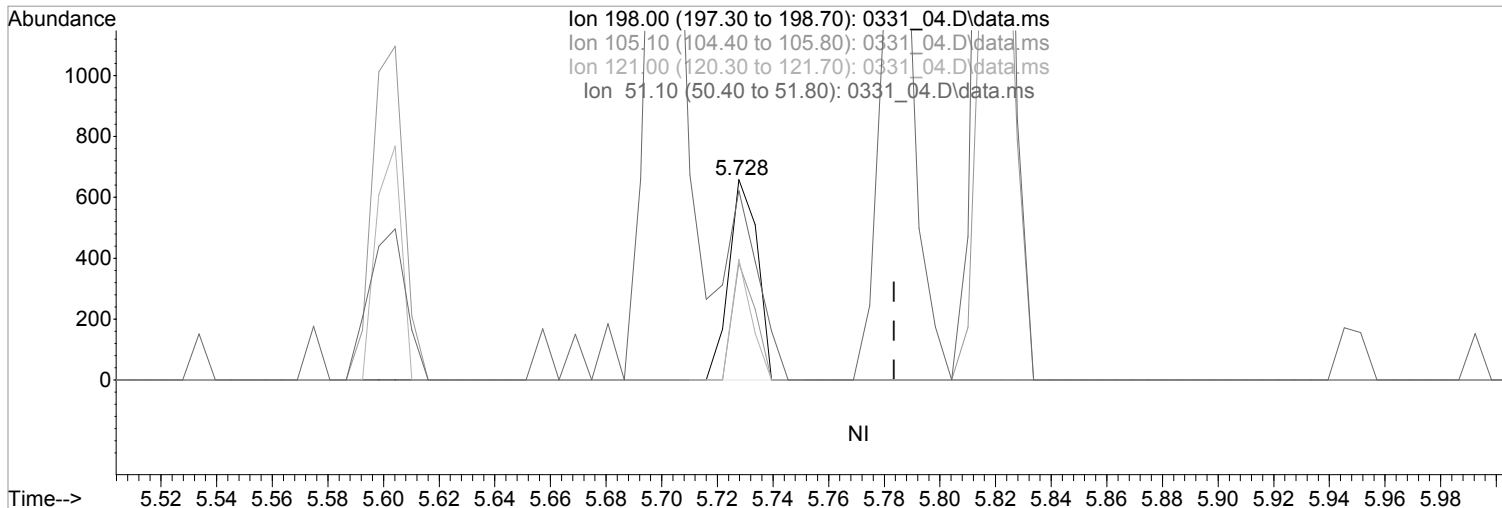
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.023) 555.9686915 ppb  
 Qvalue = 36  
 response 3114

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.69#
95.00	31.90	0.00#
65.00	23.10	15.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(71) 4,6-Dinitro-2-methylphenol (MT)  
 5.728min (-0.006) 535.7640762 ppb m

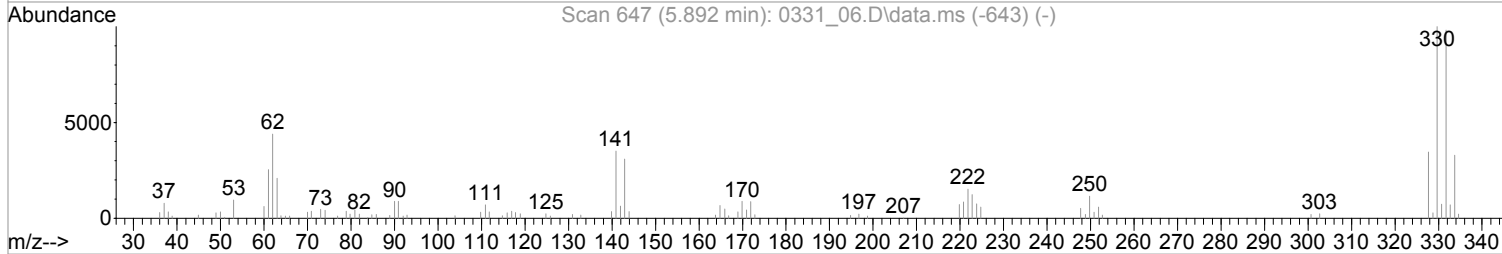
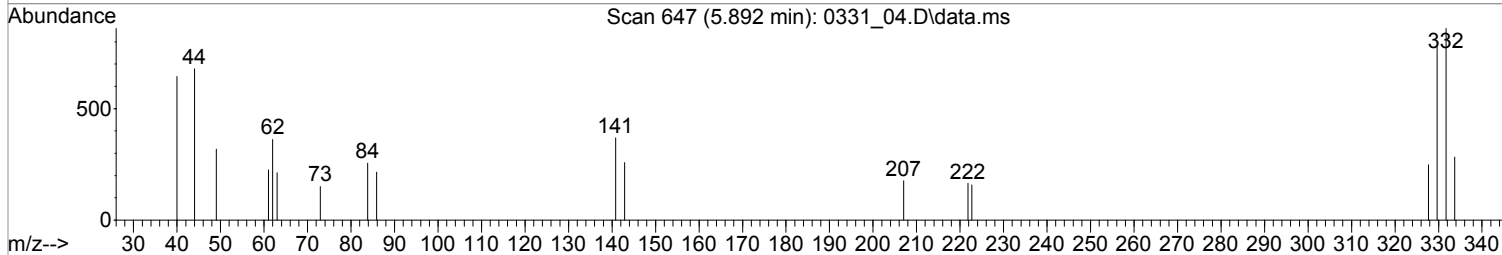
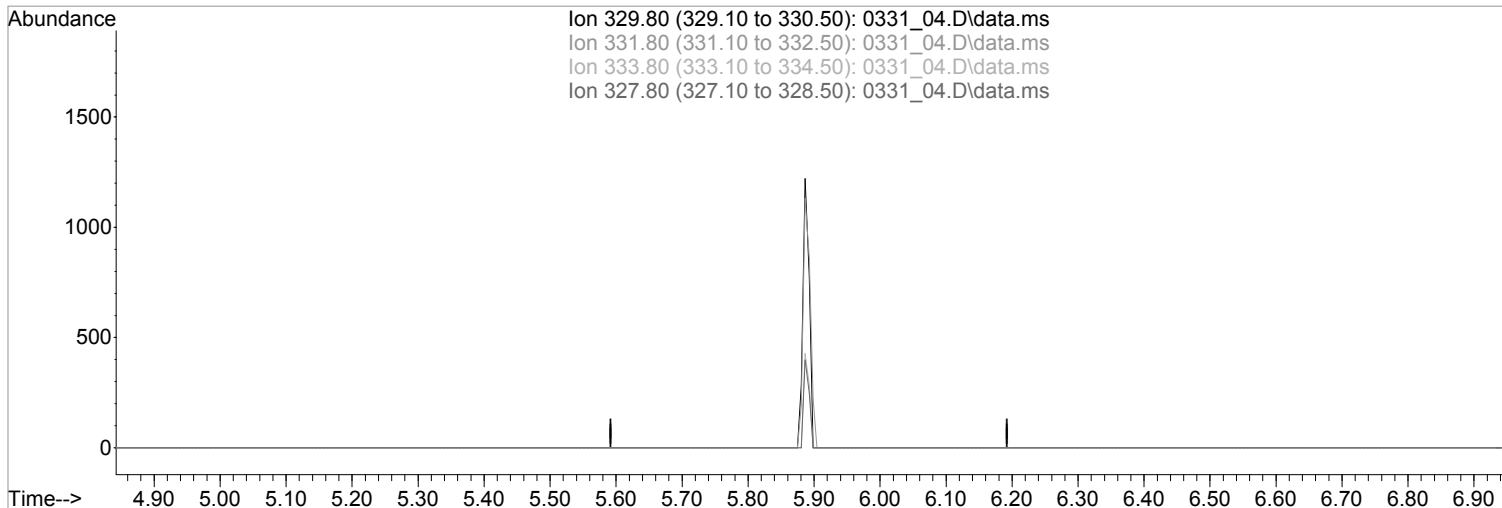
response 471

Ion	Exp%	Act%
198.00	100	100
105.10	38.30	58.36#
121.00	35.90	60.18#
51.10	39.60	94.53#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

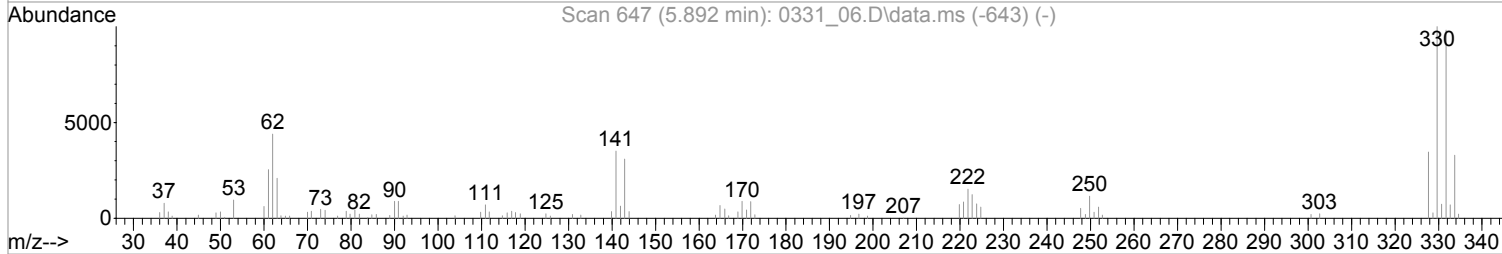
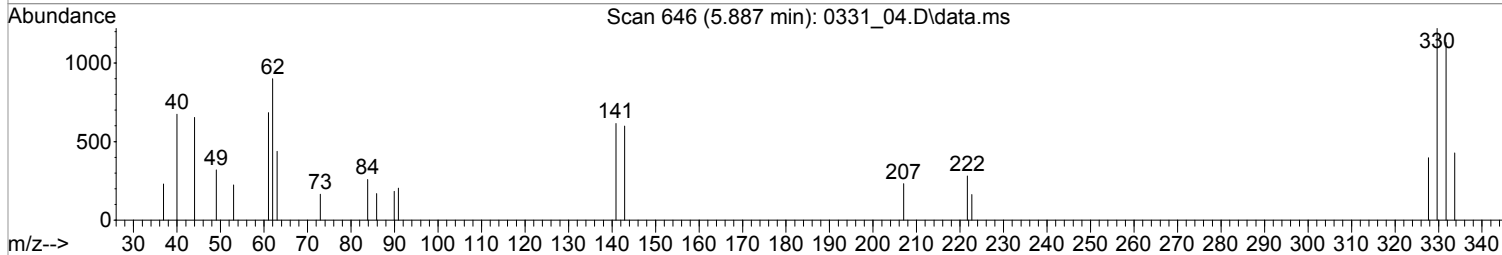
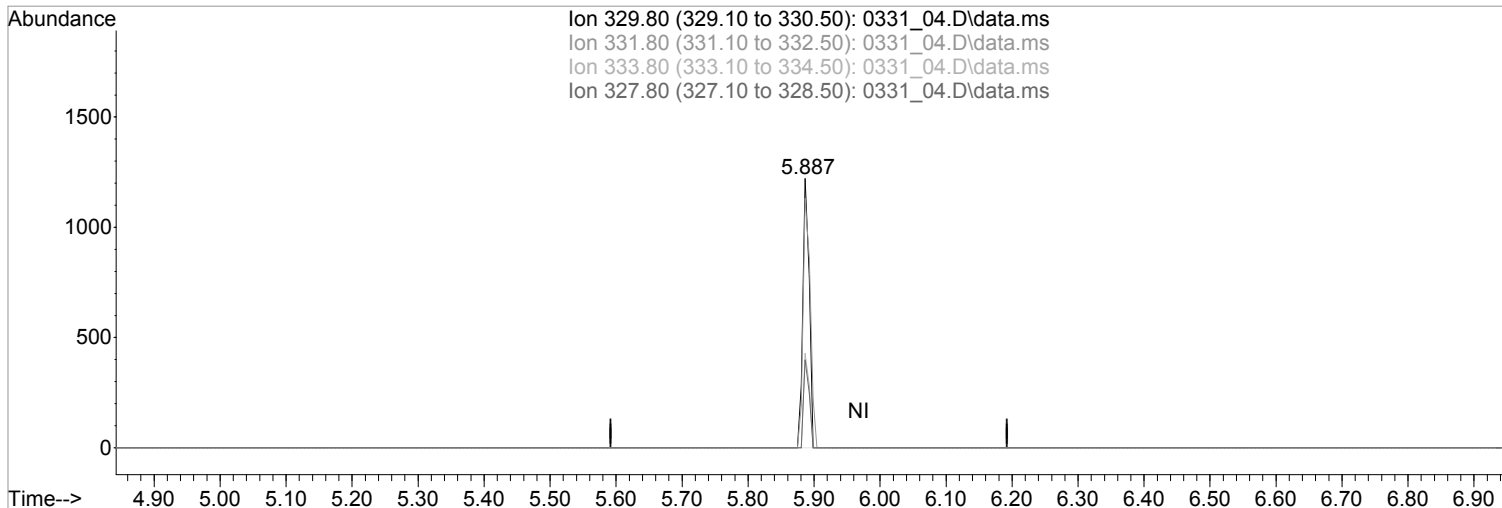
(73) 2,4,6-Tribromophenol (S)  
 5.892min (-5.892) 0.000000 ppb  
 Qvalue = 0  
 response 0

Ion	Exp%	Act%
329.80	100	0.00
331.80	98.20	0.00#
333.80	33.00	0.00#
327.80	34.60	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(73) 2,4,6-Tribromophenol (S)  
 5.887min (-0.006) 762.4927132 ppb m

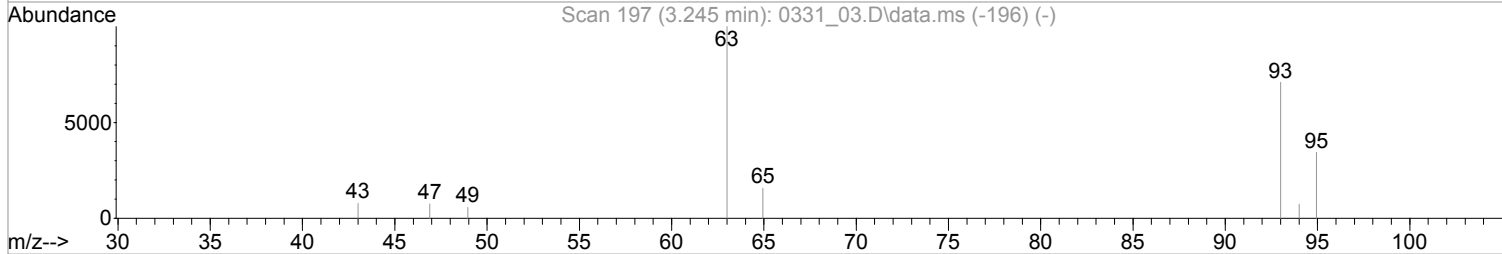
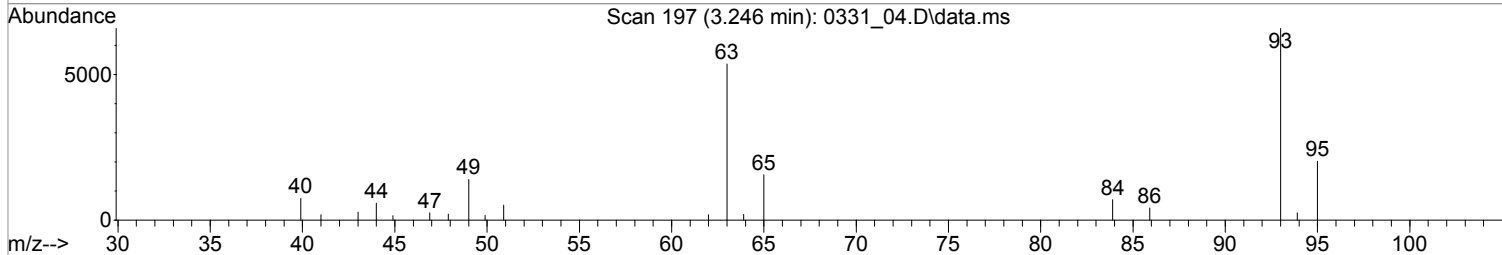
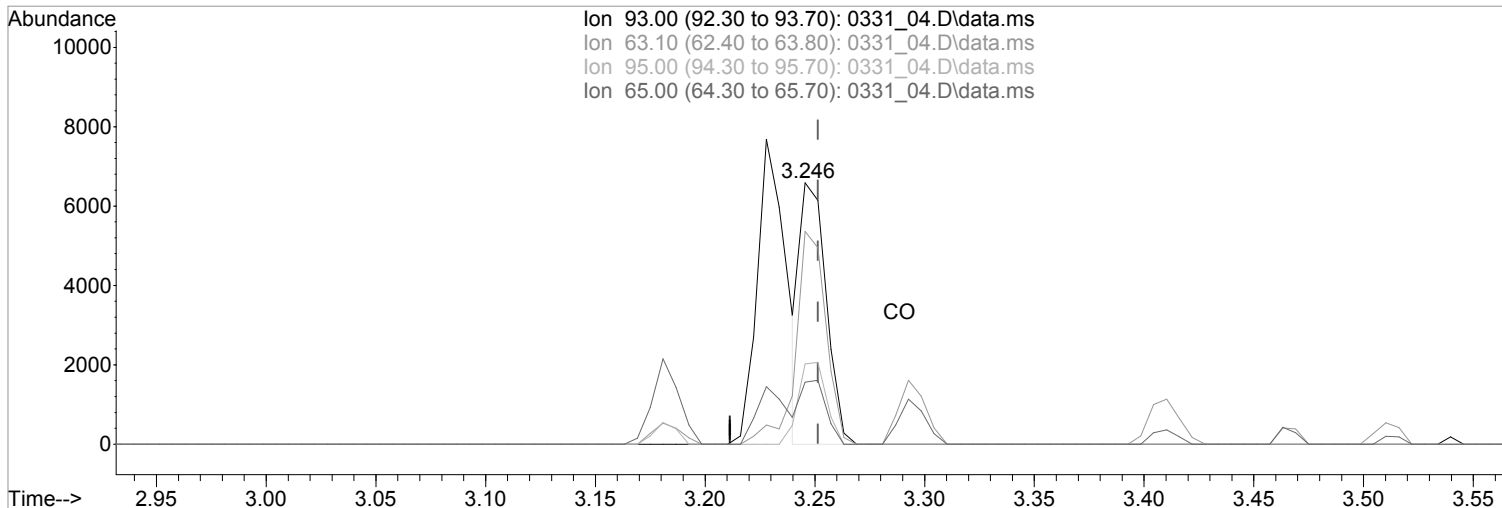
response 805

Ion	Exp%	Act%
329.80	100	100
331.80	98.20	92.62
333.80	33.00	35.08
327.80	34.60	32.62

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.246min (-0.006) 969.2851721 ppb m

response 5429

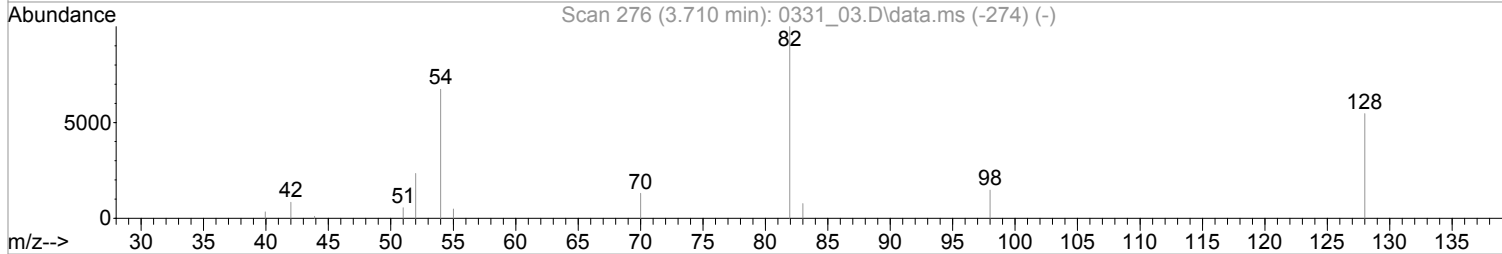
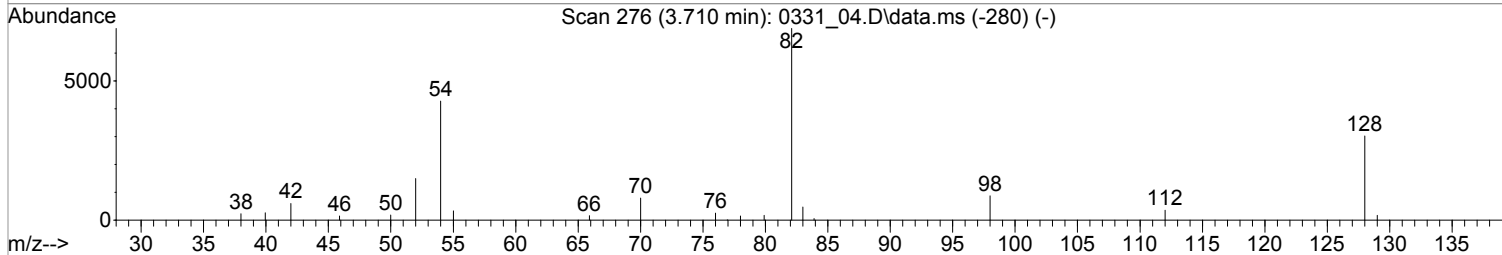
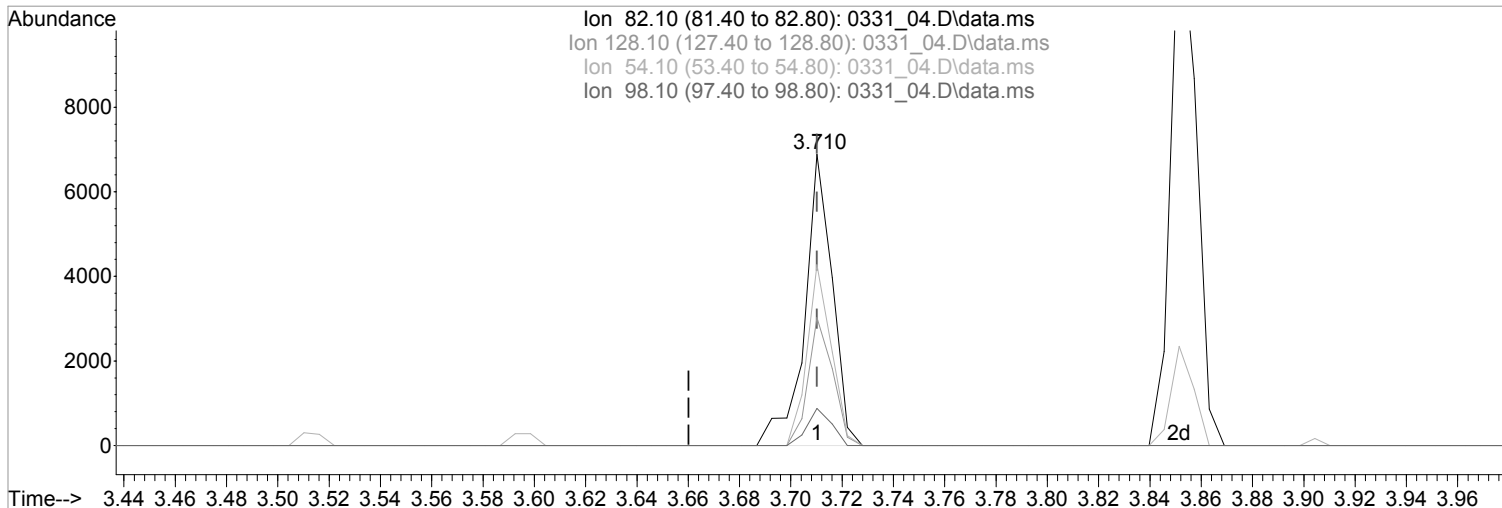
Ion	Exp%	Act%
93.00	100	100
63.10	76.00	81.46
95.00	31.90	30.67
65.00	23.10	23.69



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

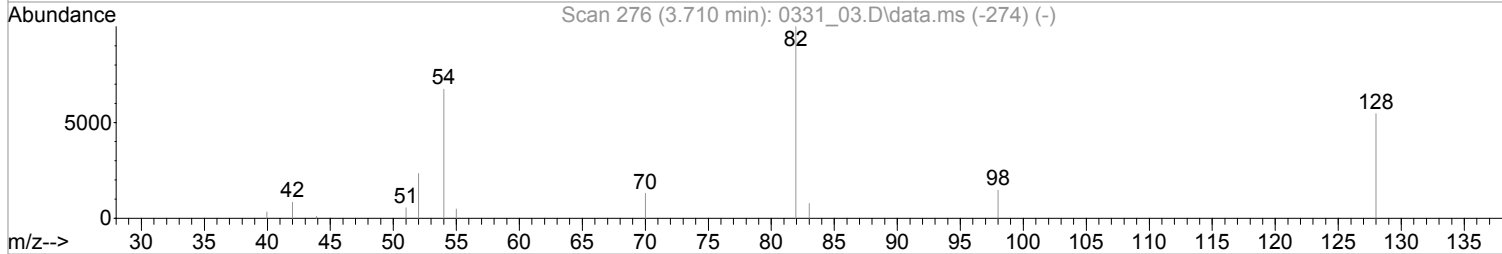
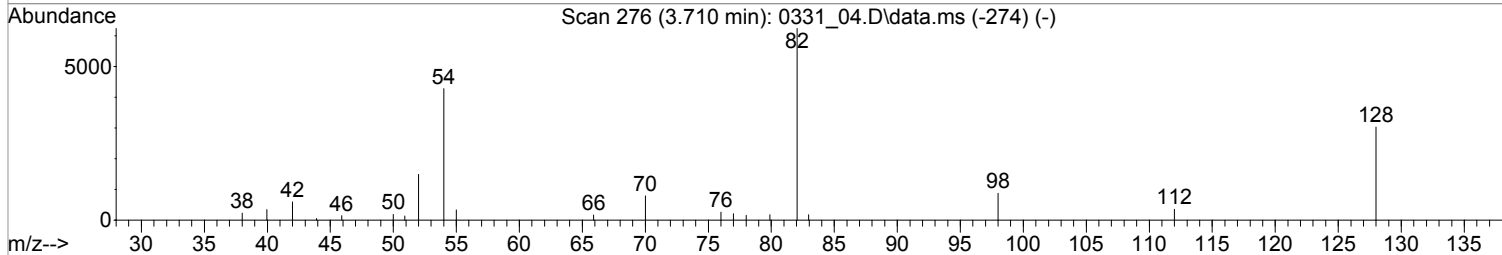
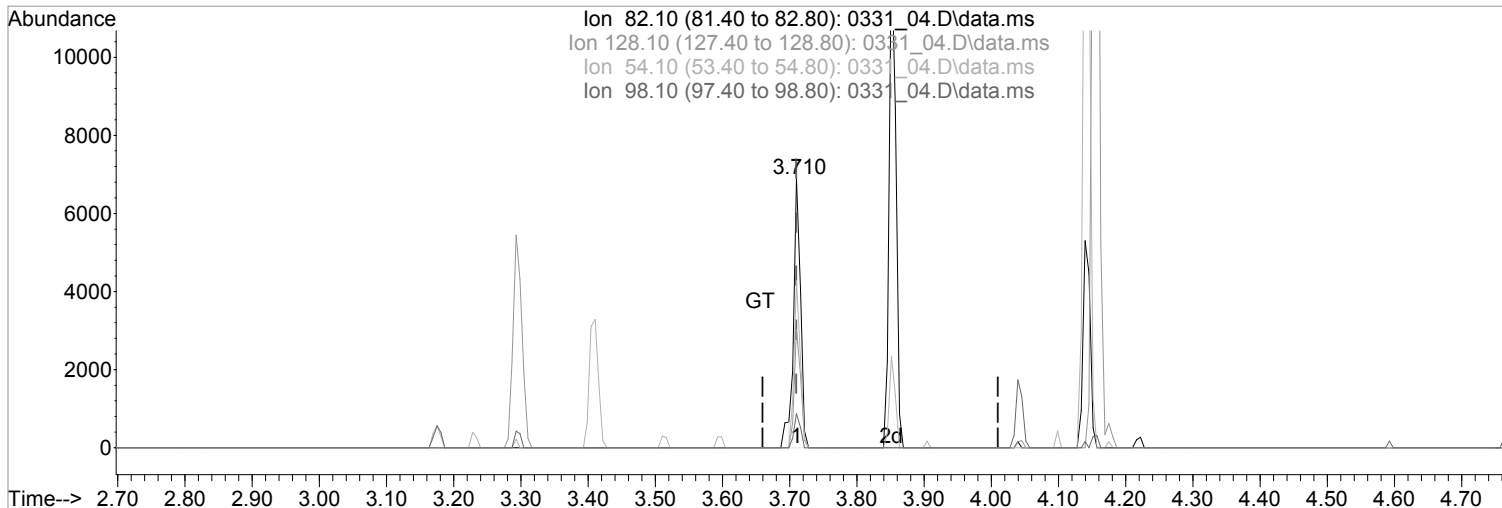
(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 1046.2030654 ppb  
 Qvalue = 97  
 response 5125

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	43.96
54.10	60.00	62.09
98.10	11.40	12.73

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 952.9123725 ppb m

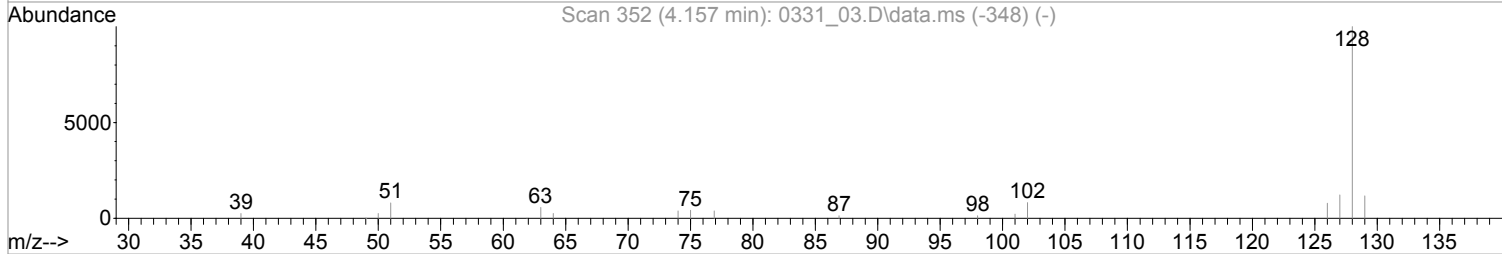
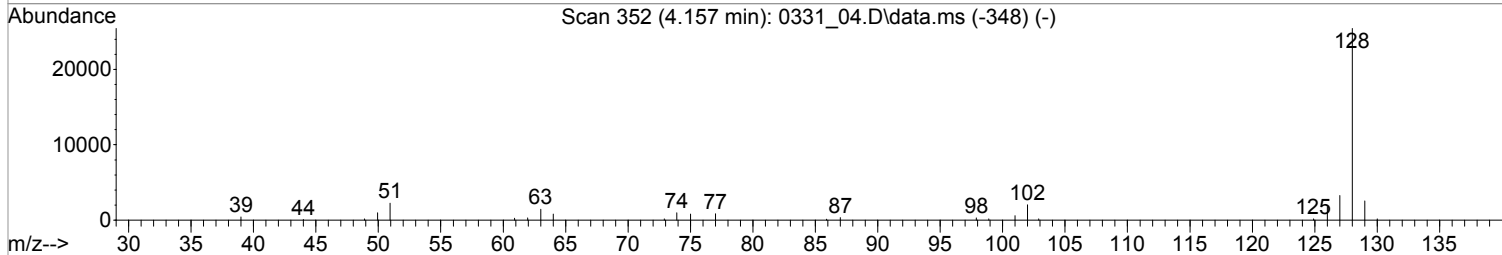
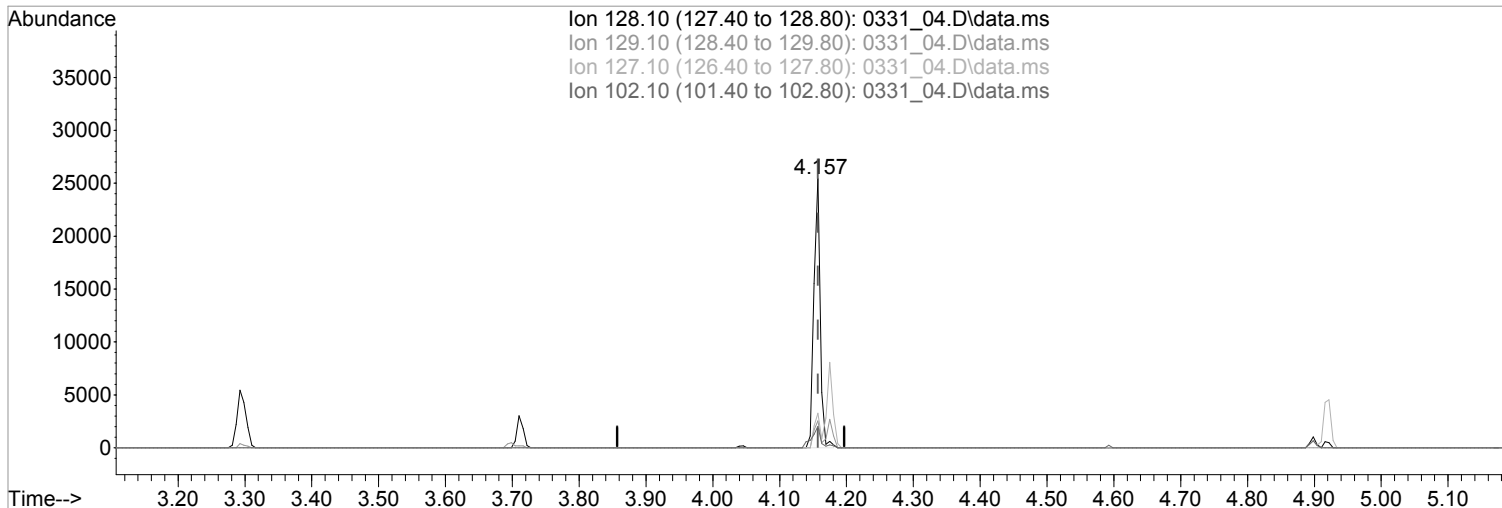
response 4668

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	43.96
54.10	60.00	62.09
98.10	11.40	12.73

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

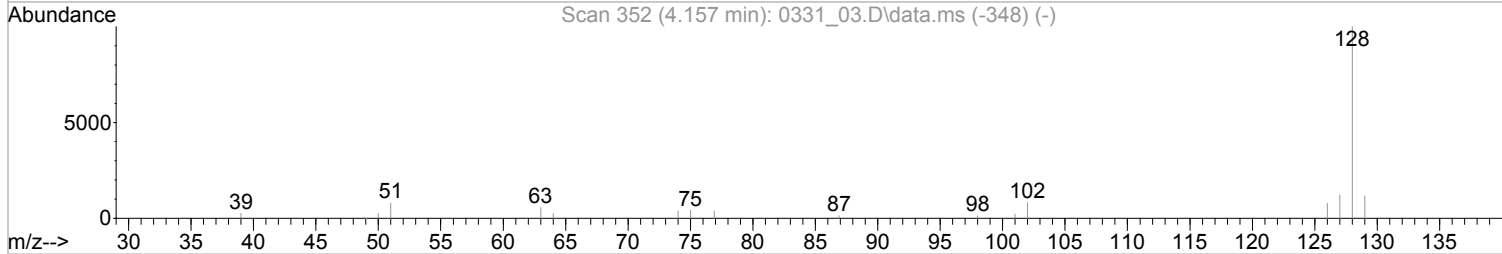
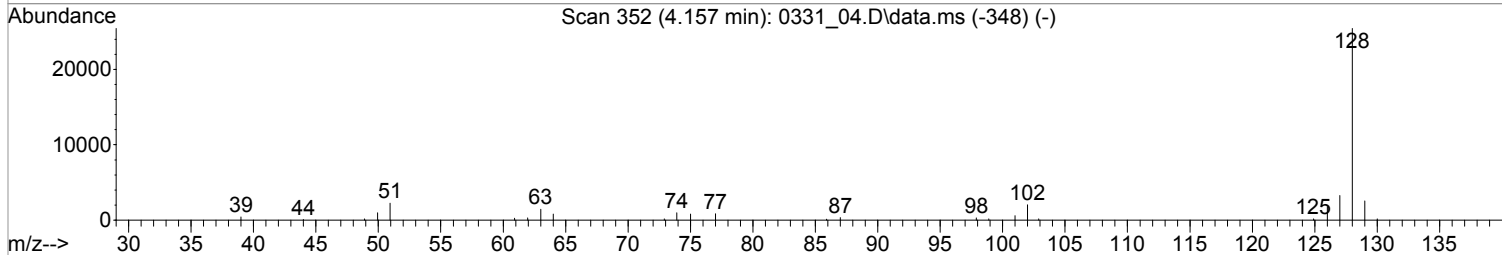
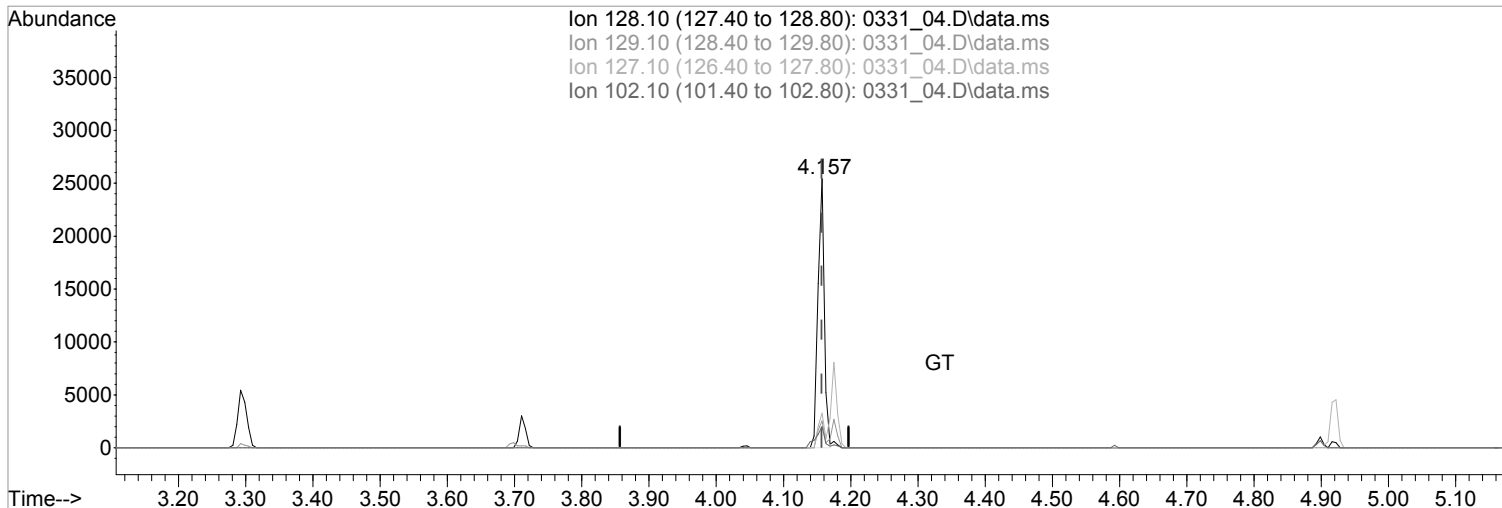
(34) Naphthalene (MT)  
 4.157min (+0.000) 1004.1869471 ppb  
 Qvalue = 99  
 response 17128

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	9.95
127.10	12.80	12.89
102.10	8.30	7.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

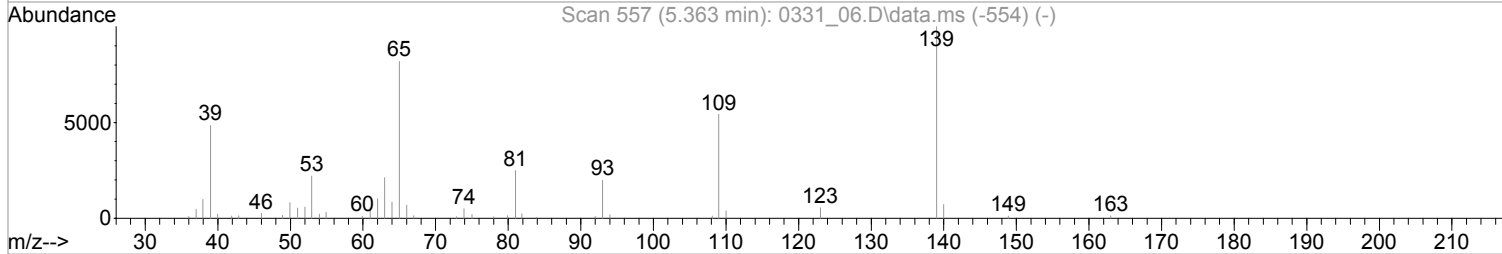
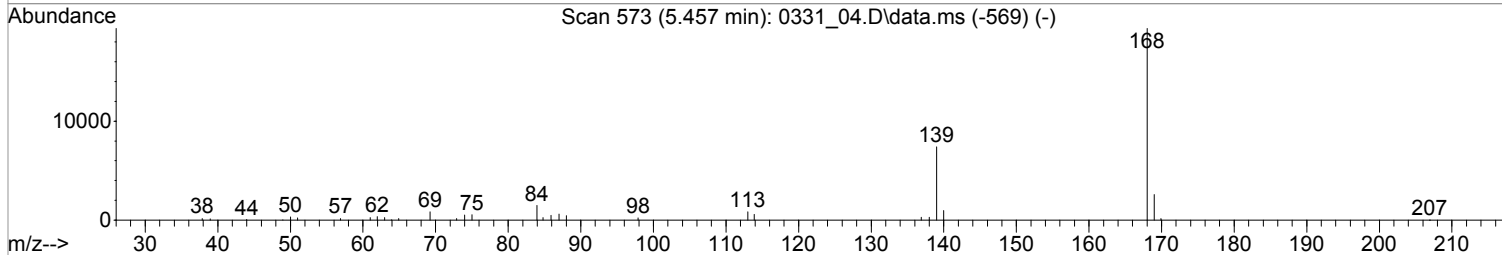
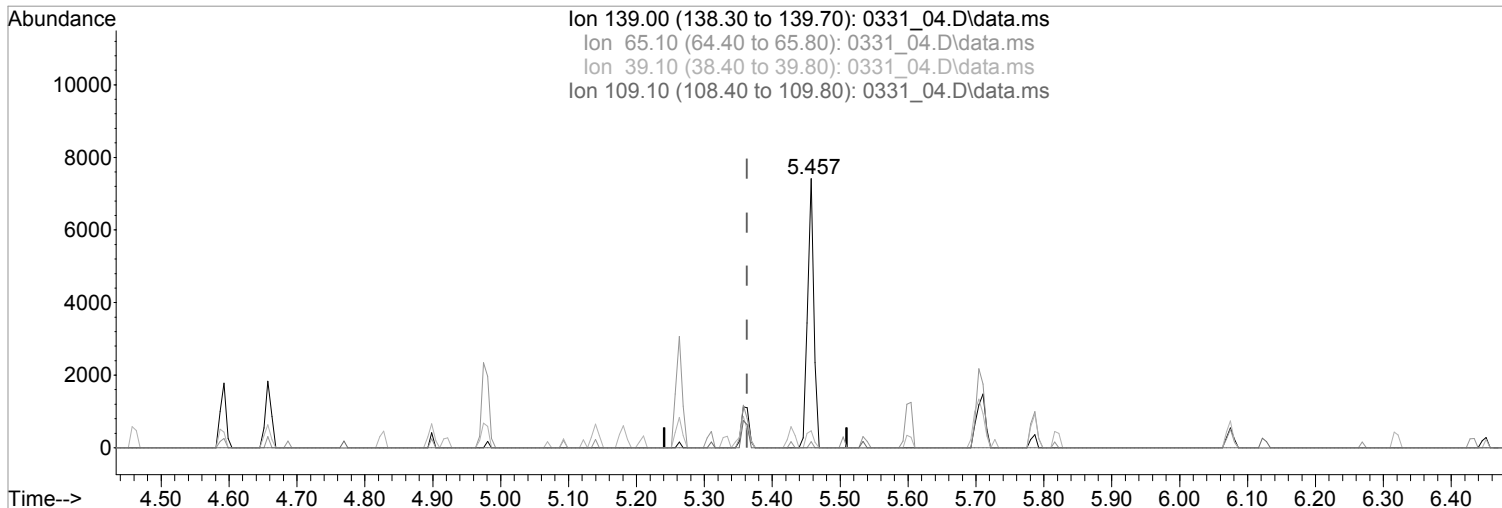
(34) Naphthalene (MT)  
 4.157min (+0.000) 985.5431213 ppb m  
 response 16810  

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	9.95
127.10	12.80	12.89
102.10	8.30	7.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(63) 4-Nitrophenol (MPT)

5.457min (+0.094) 3396.4983522 ppb

Qvalue = 22

response 4753

Ion	Exp%	Act%
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139.00	100	100
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65.10	82.10	2.23#
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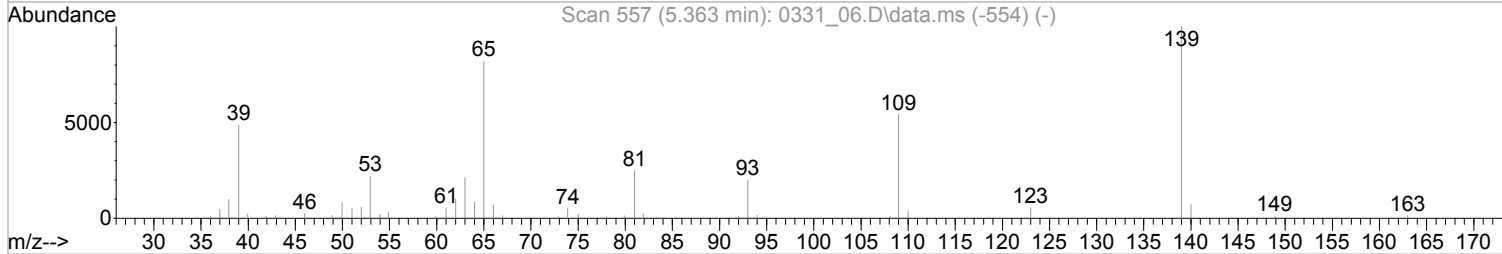
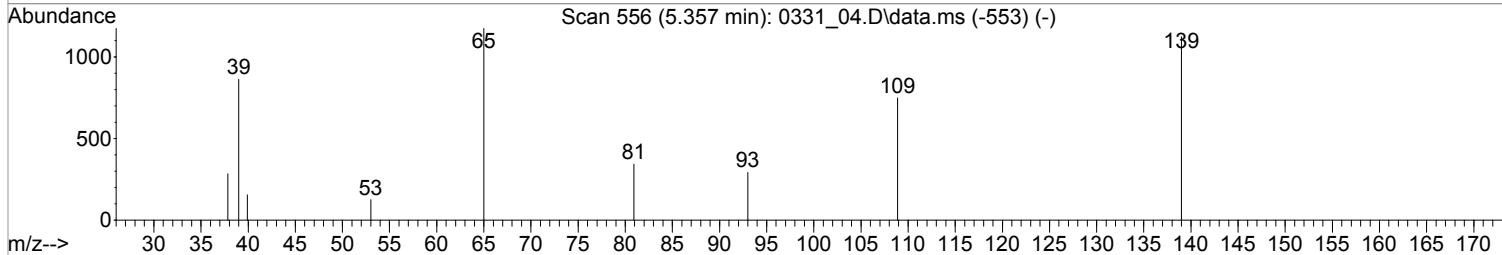
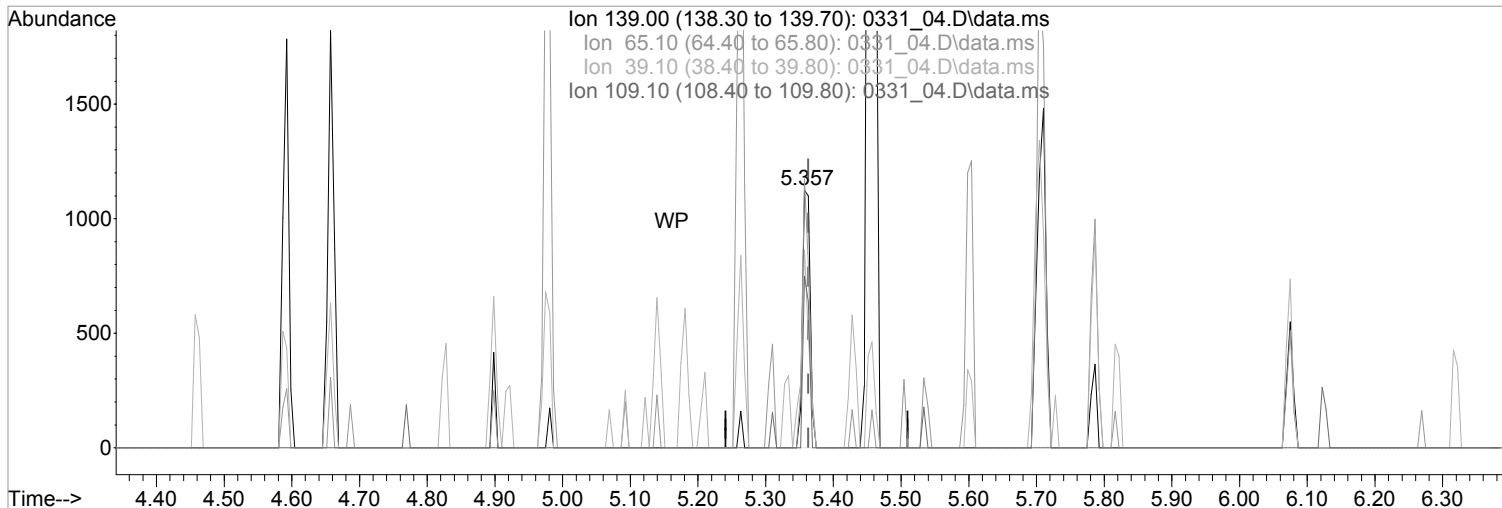
39.10	50.10	6.25#
-------	-------	-------

109.10	54.20	0.00#
--------	-------	-------

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(63) 4-Nitrophenol (MPT)  
 5.357min (-0.006) 644.5700639 ppb m

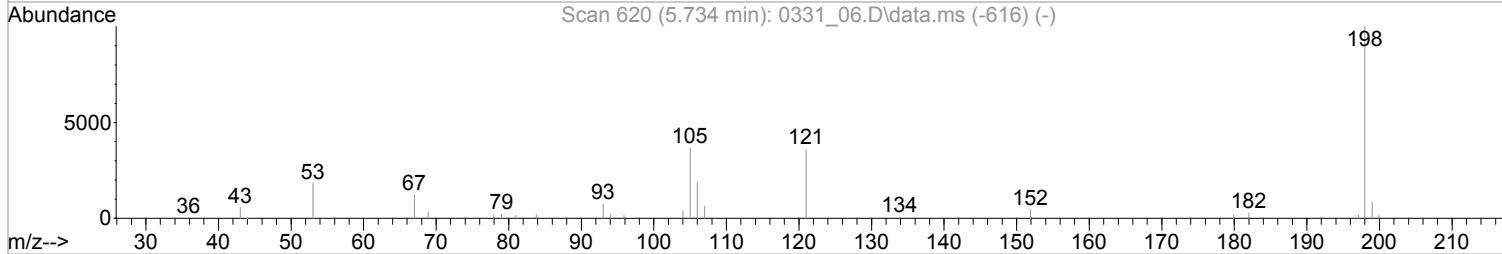
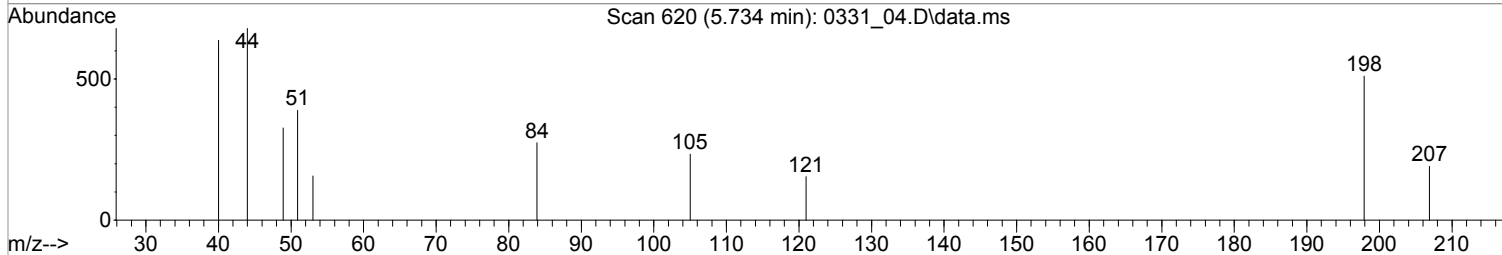
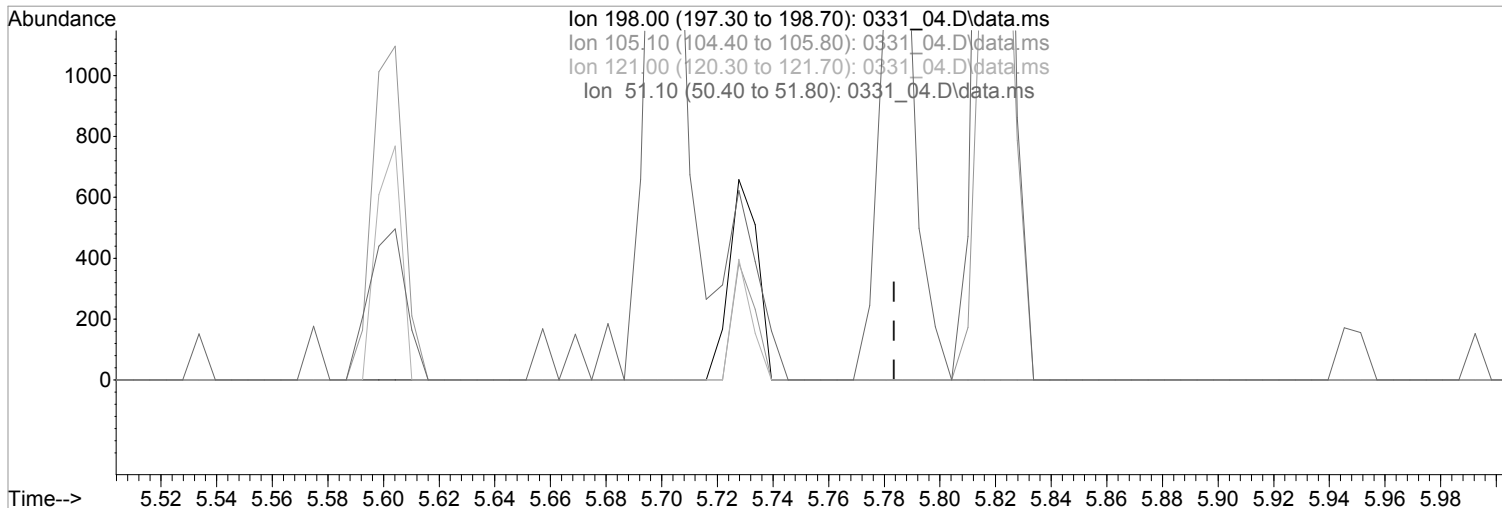
response 902

Ion	Exp%	Act%
139.00	100	100
65.10	82.10	104.45#
39.10	50.10	76.78#
109.10	54.20	66.64

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_04.D  
 Acq On : 31 Mar 2022 5:45 pm  
 Operator : 3545  
 Sample : STD SVMS 1K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 16:02:19 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:02:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_04.D\data.ms

(71) 4,6-Dinitro-2-methylphenol (MT)

5.734min (-5.734) 0.0000000 ppb

Qvalue = 0

response 0

Ion	Exp%	Act%
198.00	100	0.00
105.10	38.30	0.00#
121.00	35.90	0.00#
51.10	39.60	0.00#

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:56 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32931	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	134192	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	68434	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	110035	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	75687	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	68115	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.740	112	20022	3891.5864703	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	19.46%		
7) Phenol-d5	3.175	99	23979	3964.4247535	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	19.82%		
24) Nitrobenzene-d5	3.710	82	18889m	3716.0923649	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	37.16%		
50) 2-Fluorobiphenyl	4.828	172	43311	3761.7107736	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	37.62%		
73) 2,4,6-Tribromophenol	5.887	330	4029	4030.7044309	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	20.15%		
87) p-Terphenyl-d14	7.845	244	41873	3888.8628771	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	38.89%		
Target Compounds							
2) Pyridine	2.216	79	21534	3938.4403708	ppb		94
3) N-Nitrosodimethylamine	2.199	42	11264	3472.0697452	ppb		95
5) Aniline	3.228	66	11366	4105.7800811	ppb		98
6) bis(2-Chloroethyl)ether	3.246	93	21863m	3862.9262686	ppb		
8) Phenol	3.181	94	25852	4025.6057139	ppb		98
10) 2-Chlorophenol	3.293	128	21155	4004.6431903	ppb		98
11) n-Decane	3.293	41	14144	3818.9599168	ppb	#	99
12) 1,3-Dichlorobenzene	3.381	146	25164	3907.4447803	ppb		98
13) 1,4-Dichlorobenzene	3.416	146	24933	3887.4438033	ppb		94
14) Benzyl Alcohol	3.463	79	14813	3865.4913504	ppb		98
15) 1,2-Dichlorobenzene	3.504	146	23998	3815.1262164	ppb		98
16) bis(2-Chloroisopropyl)...	3.540	121	8233	3868.6994504	ppb		96
17) 2,2-oxybis(1-chloropro...	3.540	121	8233	3868.6994504	ppb		96
18) 2-Methylphenol	3.510	108	19393	4098.2322025	ppb		93
19) Hexachloroethane	3.699	117	10345	3916.9383750	ppb		97
20) N-Nitrosodi-n-propylamine	3.610	70	13250	3986.8930302	ppb		99
21) 3&4-Methyl phenol	3.593	107	20590	3899.2085753	ppb		99
25) Nitrobenzene	3.722	77	19872	3920.2115447	ppb		99
26) Isophorone	3.851	82	37595	3862.4180344	ppb		99
27) 2-Nitrophenol	3.904	139	8158	3765.4491378	ppb		97
28) 2,4-Dimethylphenol	3.904	107	19338	3914.0923671	ppb		99
29) bis(2-Chlorethoxy)methane	3.969	93	26704	3881.1098229	ppb		99
30) 2,4-Dichlorophenol	4.046	162	14915	3922.8669546	ppb		97
32) 1,2,4-Trichlorobenzene	4.104	180	18671	3739.3208108	ppb		99
34) Naphthalene	4.157	128	66762	3730.9538948	ppb		99
35) 4-Chloroaniline	4.175	65	6627	3995.5309124	ppb		99
36) Hexachloro-1,3-butadiene	4.222	225	10146	3792.9384009	ppb		97
40) 4-Chloro-3-methylphenol	4.463	107	14789	3835.8318603	ppb		97
41) 2-Methylnaphthalene	4.593	142	41264	3847.8046515	ppb		99
42) 1-Methylnaphthalene	4.657	142	40069	3795.6779953	ppb		99
47) Hexachlorocyclopentadiene	4.693	237	8420	4086.1645114	ppb		98
48) 2,4,6-Trichlorophenol	4.769	196	9486	4095.1983274	ppb		97



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

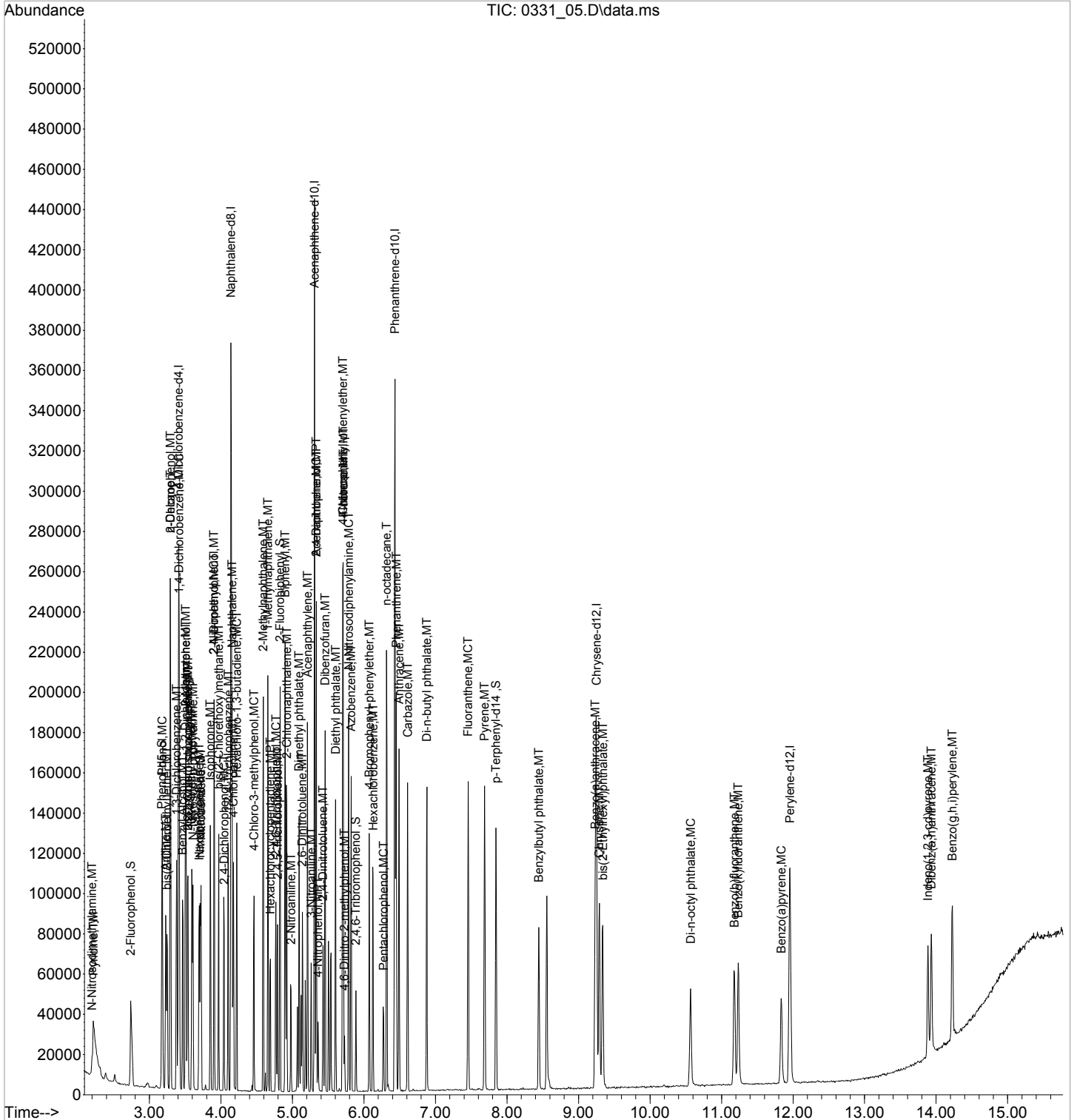
Quant Time: Apr 04 16:04:56 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.793	196	9443	4052.6426870	ppb		98
51) Biphenyl	4.898	154	48637	3783.8360827	ppb		99
52) 2-Chloronaphthalene	4.922	162	38216	3901.4979240	ppb		99
53) 2-Nitroaniline	4.981	138	8468	3715.5917121	ppb		98
54) Acenaphthylene	5.210	152	57104	3893.6362427	ppb		99
55) Dimethyl phthalate	5.093	163	41358	3976.3045598	ppb		94
56) 2,6-Dinitrotoluene	5.140	165	8241	4058.3383916	ppb		93
57) 3-Nitroaniline	5.263	138	7203	3973.0272299	ppb		97
58) Acenaphthene	5.334	153	39005	3812.6378437	ppb		99
59) 2,4-Dinitrophenol	5.334	184	1680	2974.9807456	ppb	#	1
60) Dibenzofuran	5.457	168	52497	3820.1946803	ppb		99
61) 2,4-Dinitrotoluene	5.428	165	9165	3955.2754297	ppb	#	77
63) 4-Nitrophenol	5.357	139	4753	3887.5582689	ppb	#	79
64) Fluorene	5.710	166	43283	3878.0382895	ppb		97
65) 4-Chlorophenyl-phenyle...	5.704	204	20472	3980.7165957	ppb		94
66) Diethyl phthalate	5.604	149	43240	3934.3678190	ppb		99
67) 4-Nitroaniline	5.710	138	6586	4870.9541902	ppb		96
68) Azobenzene	5.822	77	44023	4042.6599452	ppb		99
71) 4,6-Dinitro-2-methylph...	5.728	198	2707	3732.3952874	ppb	#	74
72) N-Nitrosodiphenylamine	5.787	169	33745	3976.2689220	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	10458	3934.5051940	ppb		94
75) Hexachlorobenzene	6.128	284	12174	3745.1457104	ppb		98
76) n-octadecane	6.316	55	8008	3901.5281337	ppb	#	96
77) Pentachlorophenol	6.275	266	4167	3264.5837369	ppb		98
78) Phenanthrene	6.451	178	58086	3771.2225902	ppb		99
79) Anthracene	6.492	178	54209	3942.0610534	ppb		99
80) Carbazole	6.610	167	46540	4035.1322148	ppb		99
81) Di-n-butyl phthalate	6.881	149	66469	4091.3433685	ppb		100
83) Fluoranthene	7.457	202	54696	3935.3597347	ppb		100
86) Pyrene	7.687	202	57163	3814.3474206	ppb		99
88) Benzylbutyl phthalate	8.445	149	21276	4173.7997939	ppb		99
90) Benzo(a)anthracene	9.233	228	40230	3881.3641678	ppb		98
91) Chrysene	9.292	228	44552	3860.0833542	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.339	149	31447	4260.6941032	ppb		98
93) Di-n-octyl phthalate	10.569	149	41318	4058.3889660	ppb		98
95) Benzo(b)fluoranthene	11.180	252	38068	4038.8782196	ppb		98
96) Benzo(k)fluoranthene	11.233	252	40040	4172.0316530	ppb		99
97) Benzo(a)pyrene	11.833	252	29980	4117.7691399	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.886	276	27978	4070.8609426	ppb		97
99) Dibenz(a,h)anthracene	13.933	278	32250	4143.8879049	ppb		98
100) Benzo(g,h,i)perylene	14.227	276	34820	4106.9338075	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_05.D  
Acq On : 31 Mar 2022 6:07 pm  
Operator : 3545  
Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 5 Sample Multiplier: 1

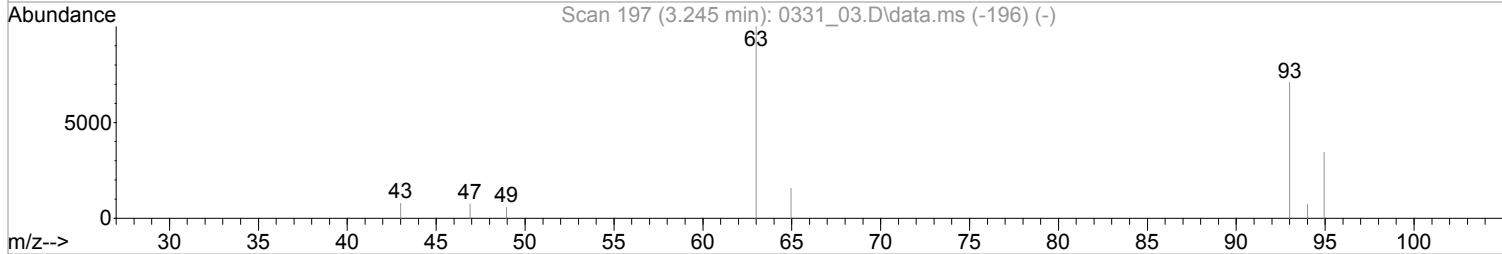
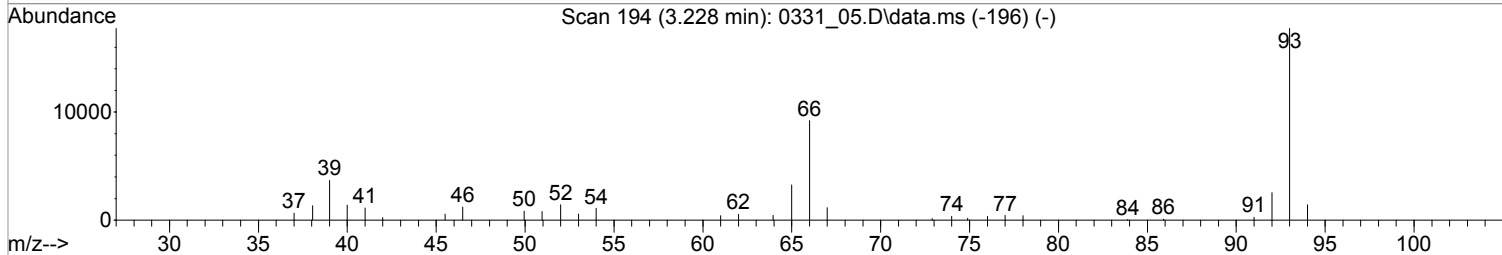
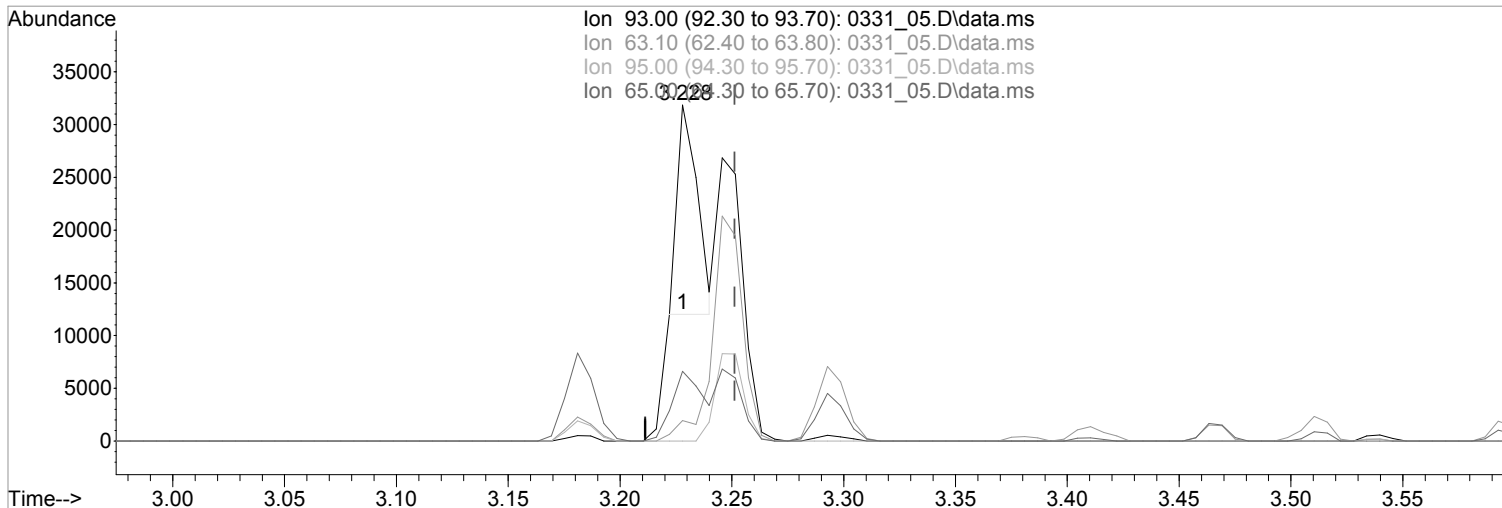
Quant Time: Apr 04 16:04:56 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:04:13 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

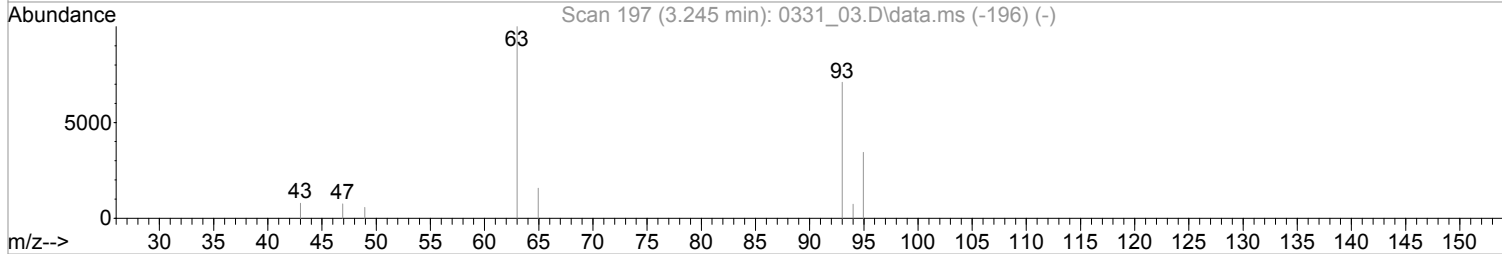
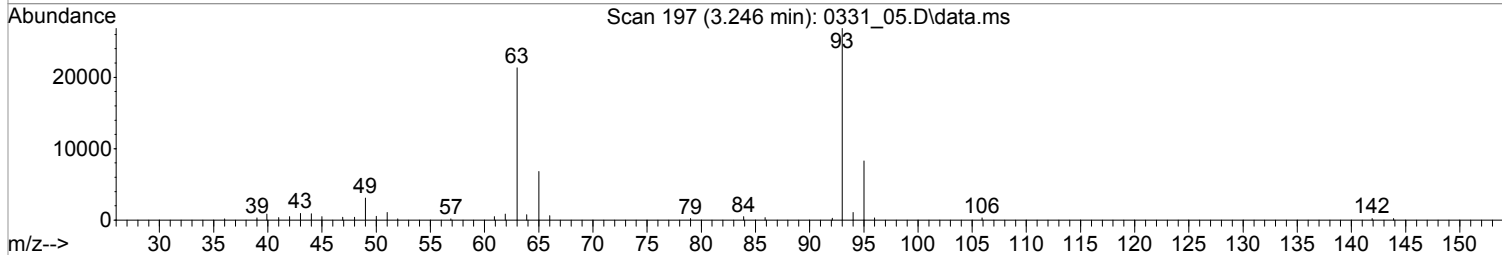
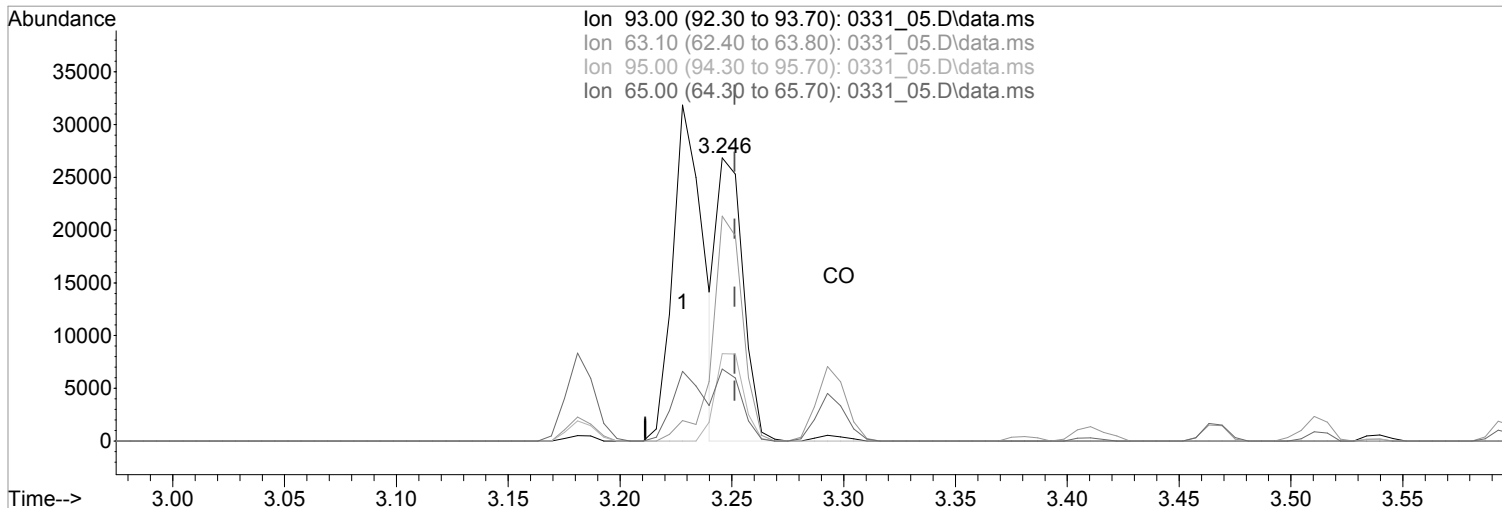
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.023) 2176.4408259 ppb  
 Qvalue = 37  
 response 12318

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	6.47#
95.00	31.90	0.00#
65.00	23.10	18.86

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_05.D  
Acq On : 31 Mar 2022 6:07 pm  
Operator : 3545  
Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:04:13 2022  
Response via : Initial Calibration  
DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
3.246min (-0.006) 3862.9262686 ppb m

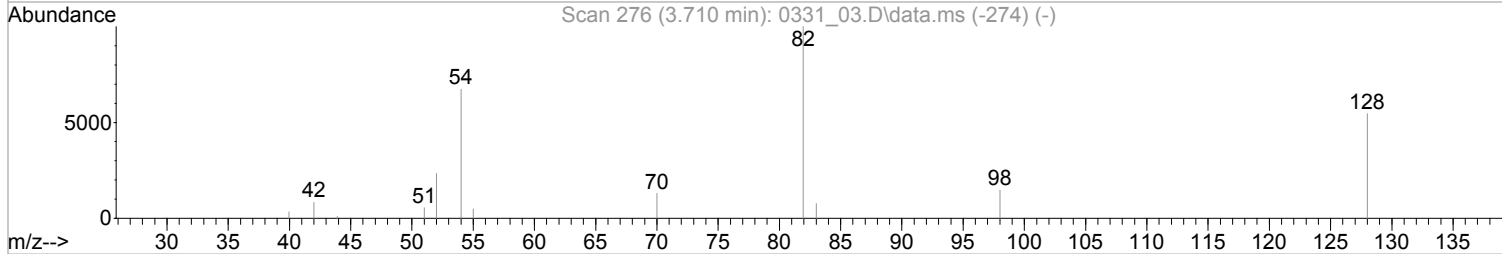
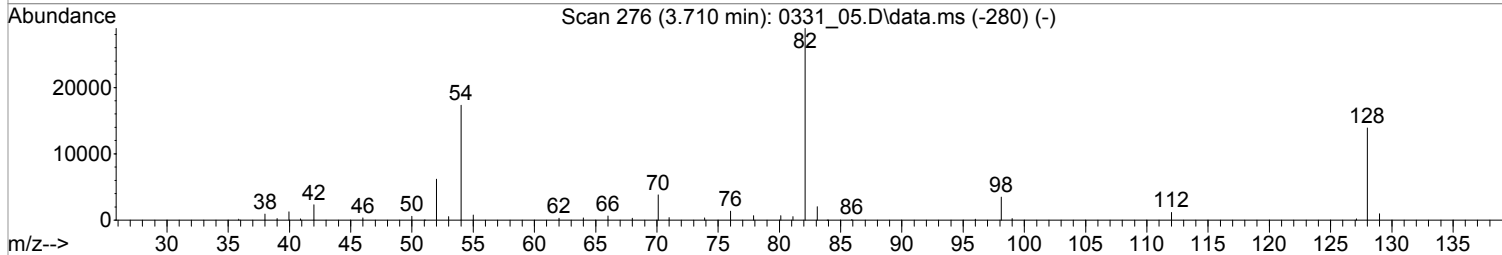
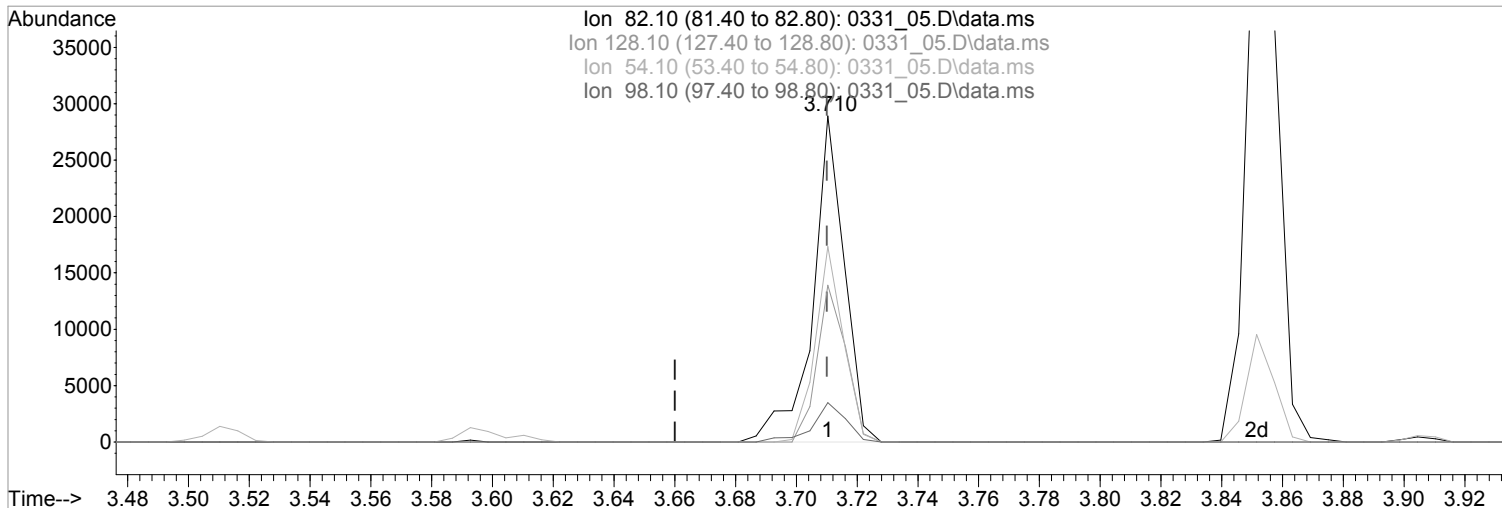
response 21863

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	79.43
95.00	31.90	30.91
65.00	23.10	25.46

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
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Quant Time: Apr 04 16:04:18 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

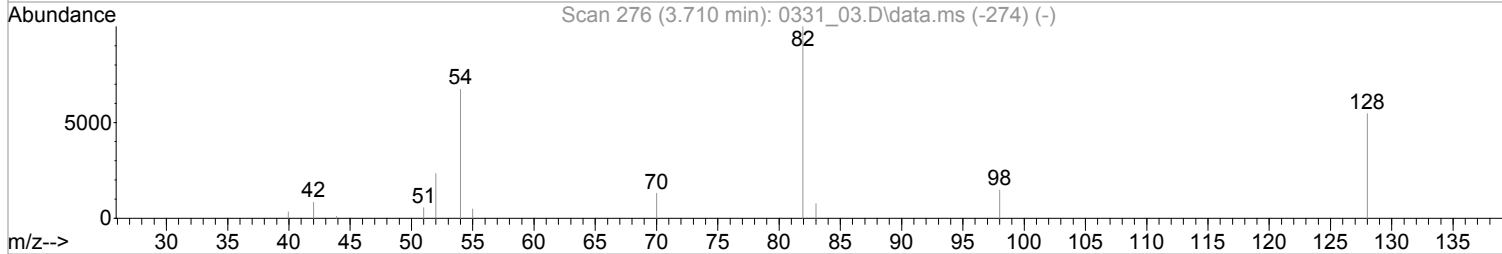
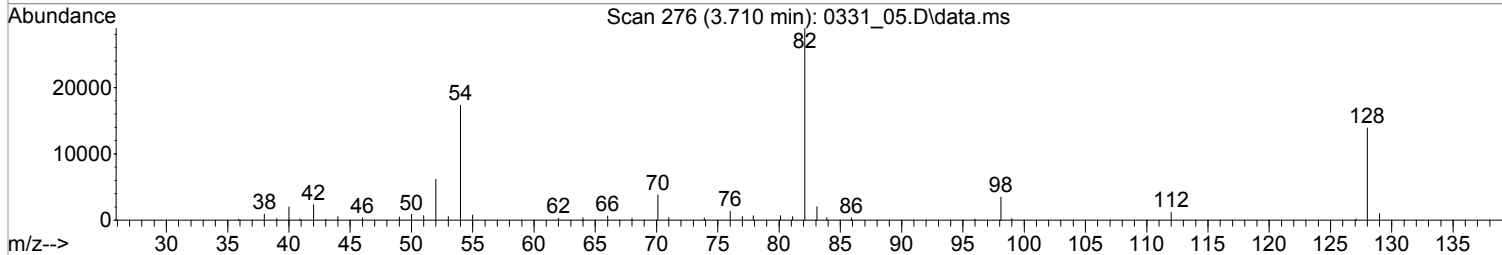
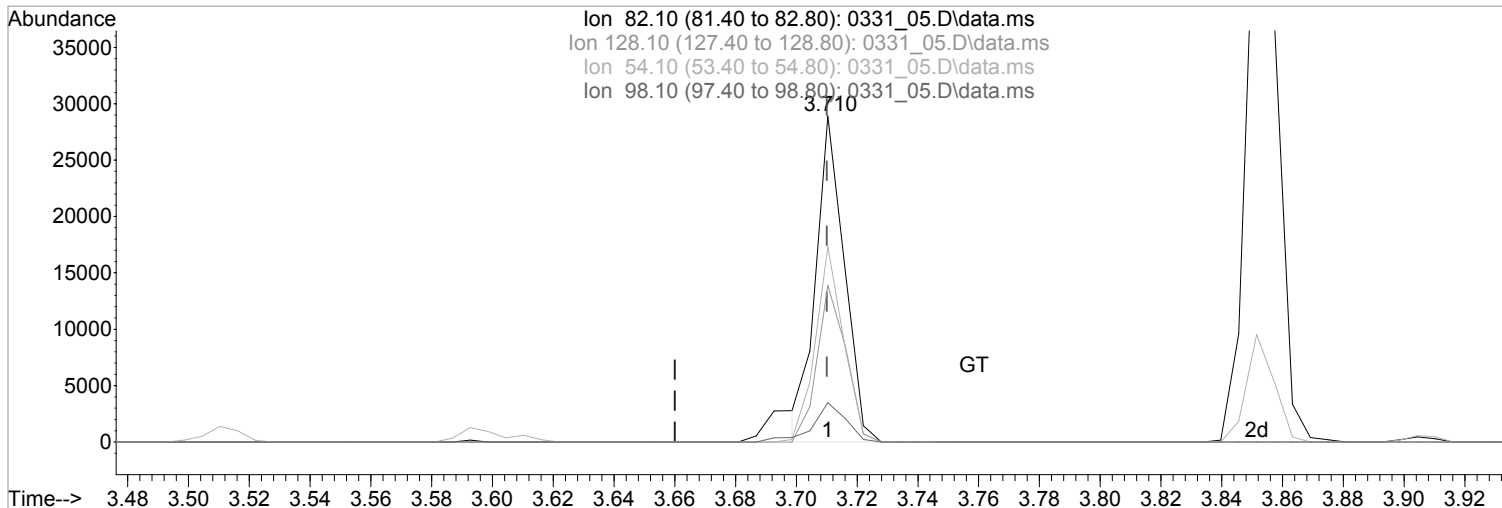
(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 4137.4947602 ppb  
 Qvalue = 99  
 response 21031

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	48.14
54.10	60.00	60.01
98.10	11.40	12.09

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_05.D  
 Acq On : 31 Mar 2022 6:07 pm  
 Operator : 3545  
 Sample : STD SVMS 4K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 04 16:04:18 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:04:13 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_05.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 3716.0923649 ppb m

response 18889

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	48.14
54.10	60.00	60.01
98.10	11.40	12.09

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:57:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.410	152	31797	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.145	136	129715	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	67221	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.434	188	109300	8000.0000000	ppb	0.00
84) Chrysene-d12	9.251	240	79132	8000.0000000	ppb	0.00
94) Perylene-d12	11.957	264	68335	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.740	112	50347	10000.0000000	ppb	0.00
Spiked Amount	20000.000		Recovery	=	50.00%	
7) Phenol-d5	3.175	99	59979	10000.0000000	ppb	0.00
Spiked Amount	20000.000		Recovery	=	50.00%	
24) Nitrobenzene-d5	3.710	82	48718m	10000.0000000	ppb	0.00
Spiked Amount	10000.000		Recovery	=	100.00%	
50) 2-Fluorobiphenyl	4.828	172	108502	10000.0000000	ppb	0.00
Spiked Amount	10000.000		Recovery	=	100.00%	
73) 2,4,6-Tribromophenol	5.892	330	11267	10000.0000000	ppb	0.00
Spiked Amount	20000.000		Recovery	=	50.00%	
87) p-Terphenyl-d14	7.845	244	110355	10000.0000000	ppb	0.00
Spiked Amount	10000.000		Recovery	=	100.00%	
Target Compounds						
2) Pyridine	2.216	79	54038	10000.0000000	ppb	100
3) N-Nitrosodimethylamine	2.199	42	26952	10000.0000000	ppb	100
5) Aniline	3.228	66	28243	10000.0000000	ppb	100
6) bis(2-Chloroethyl)ether	3.251	93	54390m	10000.0000000	ppb	100
8) Phenol	3.181	94	63496	10000.0000000	ppb	100
10) 2-Chlorophenol	3.293	128	53448	10000.0000000	ppb	100
11) n-Decane	3.293	41	33867	10000.0000000	ppb	# 100
12) 1,3-Dichlorobenzene	3.381	146	60750	10000.0000000	ppb	100
13) 1,4-Dichlorobenzene	3.422	146	60988	10000.0000000	ppb	100
14) Benzyl Alcohol	3.469	79	38840	10000.0000000	ppb	100
15) 1,2-Dichlorobenzene	3.504	146	58396	10000.0000000	ppb	100
16) bis(2-Chloroisopropyl)...	3.540	121	20161	10000.0000000	ppb	100
17) 2,2-oxybis(1-chloropro...	3.540	121	20161	10000.0000000	ppb	100
18) 2-Methylphenol	3.516	108	49043	10000.0000000	ppb	100
19) Hexachloroethane	3.698	117	25235	10000.0000000	ppb	100
20) N-Nitrosodi-n-propylamine	3.610	70	33756	10000.0000000	ppb	100
21) 3&4-Methyl phenol	3.593	107	53628	10000.0000000	ppb	100
25) Nitrobenzene	3.722	77	51043	10000.0000000	ppb	100
26) Isophorone	3.851	82	98776	10000.0000000	ppb	100
27) 2-Nitrophenol	3.904	139	23329	10000.0000000	ppb	100
28) 2,4-Dimethylphenol	3.904	107	50267	10000.0000000	ppb	100
29) bis(2-Chloroethoxy)methane	3.969	93	66470	10000.0000000	ppb	100
30) 2,4-Dichlorophenol	4.045	162	39336	10000.0000000	ppb	100
32) 1,2,4-Trichlorobenzene	4.104	180	45914	10000.0000000	ppb	100
34) Naphthalene	4.157	128	164019	10000.0000000	ppb	100
35) 4-Chloroaniline	4.175	65	16770	10000.0000000	ppb	100
36) Hexachloro-1,3-butadiene	4.222	225	24753	10000.0000000	ppb	100
40) 4-Chloro-3-methylphenol	4.463	107	39997	10000.0000000	ppb	100
41) 2-Methylnaphthalene	4.593	142	102616	10000.0000000	ppb	100
42) 1-Methylnaphthalene	4.657	142	98949	10000.0000000	ppb	100
47) Hexachlorocyclopentadiene	4.692	237	21949	10000.0000000	ppb	100
48) 2,4,6-Trichlorophenol	4.769	196	25822	10000.0000000	ppb	100

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:57:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

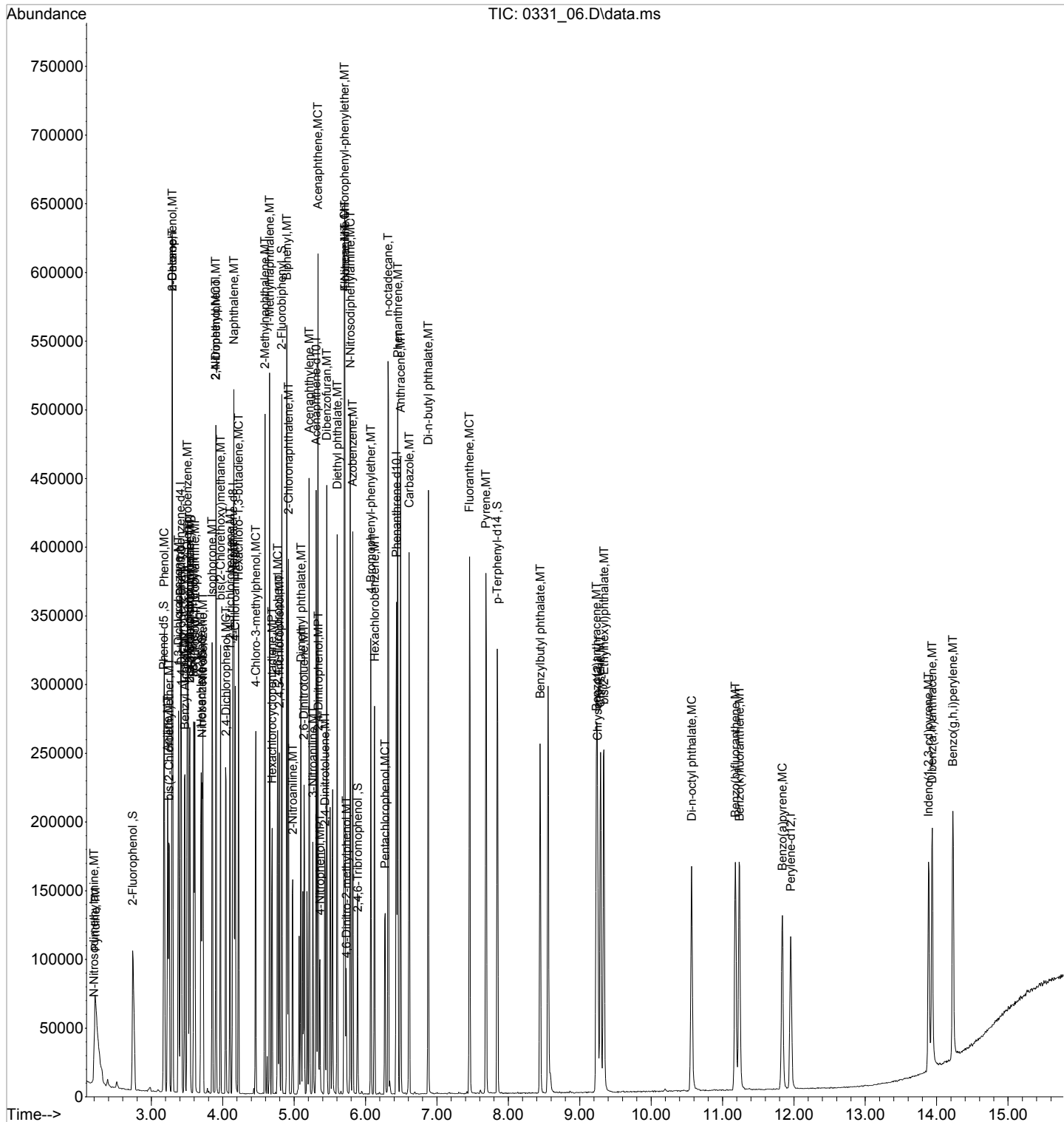
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
49) 2,4,5-Trichlorophenol	4.792	196	26746	10000.0000000	ppb	100
51) Biphenyl	4.898	154	121171	10000.0000000	ppb	100
52) 2-Chloronaphthalene	4.922	162	94566	10000.0000000	ppb	100
53) 2-Nitroaniline	4.981	138	25298	10000.0000000	ppb	100
54) Acenaphthylene	5.210	152	144849	10000.0000000	ppb	100
55) Dimethyl phthalate	5.098	163	106912	10000.0000000	ppb	100
56) 2,6-Dinitrotoluene	5.140	165	22620	10000.0000000	ppb	100
57) 3-Nitroaniline	5.263	138	20734	10000.0000000	ppb	100
58) Acenaphthene	5.334	153	96185	10000.0000000	ppb	100
59) 2,4-Dinitrophenol	5.340	184	5547	10000.0000000	ppb	100
60) Dibenzofuran	5.457	168	130881	10000.0000000	ppb	100
61) 2,4-Dinitrotoluene	5.434	165	27080	10000.0000000	ppb	100
63) 4-Nitrophenol	5.363	139	14605	10000.0000000	ppb	100
64) Fluorene	5.710	166	109752	10000.0000000	ppb	100
65) 4-Chlorophenyl-phenyle...	5.704	204	48947	10000.0000000	ppb	100
66) Diethyl phthalate	5.604	149	113139	10000.0000000	ppb	100
67) 4-Nitroaniline	5.710	138	12473	10000.0000000	ppb	100
68) Azobenzene	5.822	77	113978	10000.0000000	ppb	100
71) 4,6-Dinitro-2-methylph...	5.734	198	9382	10000.0000000	ppb	100
72) N-Nitrosodiphenylamine	5.787	169	86982	10000.0000000	ppb	100
74) 4-Bromophenyl-phenylether	6.075	248	26064	10000.0000000	ppb	100
75) Hexachlorobenzene	6.128	284	30132	10000.0000000	ppb	100
76) n-octadecane	6.316	55	20176	10000.0000000	ppb	100
77) Pentachlorophenol	6.275	266	12679	10000.0000000	ppb	100
78) Phenanthrene	6.451	178	144135	10000.0000000	ppb	100
79) Anthracene	6.492	178	140337	10000.0000000	ppb	100
80) Carbazole	6.610	167	120779	10000.0000000	ppb	100
81) Di-n-butyl phthalate	6.881	149	183487	10000.0000000	ppb	100
83) Fluoranthene	7.457	202	143797	10000.0000000	ppb	100
86) Pyrene	7.686	202	148972	10000.0000000	ppb	100
88) Benzylbutyl phthalate	8.445	149	64438	10000.0000000	ppb	100
90) Benzo(a)anthracene	9.233	228	110985	10000.0000000	ppb	100
91) Chrysene	9.292	228	116952	9997.5209649	ppb	100
92) bis(2-Ethylhexyl)phtha...	9.339	149	96218	10000.0000000	ppb	100
93) Di-n-octyl phthalate	10.569	149	134897	10000.0000000	ppb	100
95) Benzo(b)fluoranthene	11.180	252	103049	10000.0000000	ppb	100
96) Benzo(k)fluoranthene	11.239	252	109958	10000.0000000	ppb	100
97) Benzo(a)pyrene	11.839	252	85063	10000.0000000	ppb	100
98) Indeno(1,2,3-cd)pyrene	13.886	276	77280	10000.0000000	ppb	100
99) Dibenz(a,h)anthracene	13.939	278	87499	10000.0000000	ppb	100
100) Benzo(g,h,i)perylene	14.227	276	94402	10000.0000000	ppb	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_06.D  
Acq On : 31 Mar 2022 6:28 pm  
Operator : 3545  
Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:57:16 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 15:56:28 2022  
Response via : Initial Calibration  
DataAcq Meth: BNA24PS.M



Data Path : C:\msdchem\1\data\042922B\  
 Data File : 0429B\_02.D  
 Acq On : 29 Apr 2022 5:31 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 29 19:29:41 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.343	152	34721	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.072	136	141814	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.237	164	72983	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.348	188	122329	8000.0000000	ppb	0.00
84) Chrysene-d12	9.113	240	94191	8000.0000000	ppb	0.00
94) Perylene-d12	11.766	264	87365	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.678	112	51787	9526.5470780	ppb	0.00
Spiked Amount	20000.000		Recovery	=	47.63%	
7) Phenol-d5	3.113	99	62394	9673.7789380	ppb	0.00
Spiked Amount	20000.000		Recovery	=	48.37%	
24) Nitrobenzene-d5	3.648	82	53608m	9939.9649697	ppb	0.00
Spiked Amount	10000.000		Recovery	=	99.40%	
50) 2-Fluorobiphenyl	4.754	172	110751	9556.0525709	ppb	0.00
Spiked Amount	10000.000		Recovery	=	95.56%	
73) 2,4,6-Tribromophenol	5.813	330	12747	9946.0609950	ppb	0.00
Spiked Amount	20000.000		Recovery	=	49.73%	
87) p-Terphenyl-d14	7.736	244	121362	9310.8734599	ppb	0.00
Spiked Amount	10000.000		Recovery	=	93.11%	
Target Compounds						
2) Pyridine	2.149	79	53826	9347.1354793	ppb	97
3) N-Nitrosodimethylamine	2.131	42	24901	8213.8766926	ppb	93
5) Aniline	3.166	66	30037	10064.5052197	ppb	# 24
6) bis(2-Chloroethyl)ether	3.184	93	59920m	10205.4074214	ppb	
8) Phenol	3.119	94	66790	9768.4580572	ppb	96
10) 2-Chlorophenol	3.231	128	55720	9785.6997436	ppb	93
11) n-Decane	3.225	41	30829	8422.3241625	ppb	# 96
12) 1,3-Dichlorobenzene	3.313	146	61737	9460.6674667	ppb	99
13) 1,4-Dichlorobenzene	3.354	146	62717	9601.6296348	ppb	99
14) Benzyl Alcohol	3.401	79	41147	9865.3111340	ppb	99
15) 1,2-Dichlorobenzene	3.437	146	59098	9383.6062355	ppb	99
16) bis(2-Chloroisopropyl)...	3.472	121	19823	9114.7355717	ppb	92
17) 2,2-oxybis(1-chloropro...	3.472	121	19823	9114.7355717	ppb	92
18) 2-Methylphenol	3.448	108	51422	10040.6622639	ppb	97
19) Hexachloroethane	3.625	117	25427	9335.2205902	ppb	94
20) N-Nitrosodi-n-propylamine	3.543	70	35264	9681.1510235	ppb	99
21) 3&4-Methyl phenol	3.531	107	55759	9869.7553944	ppb	99
25) Nitrobenzene	3.654	77	55107	10109.6027410	ppb	98
26) Isophorone	3.784	82	102182	9576.8327252	ppb	100
27) 2-Nitrophenol	3.837	139	25409	9852.4073272	ppb	87
28) 2,4-Dimethylphenol	3.843	107	52260	9847.6018926	ppb	99
29) bis(2-Chlorethoxy)methane	3.901	93	67640	9435.2004785	ppb	99
30) 2,4-Dichlorophenol	3.978	162	42013	10020.5506012	ppb	96
32) 1,2,4-Trichlorobenzene	4.031	180	46298	9233.9072755	ppb	95
34) Naphthalene	4.090	128	166007	9377.7384495	ppb	100
35) 4-Chloroaniline	4.107	65	18448	9916.6835713	ppb	97
36) Hexachloro-1,3-butadiene	4.148	225	25433	9404.1037456	ppb	97
40) 4-Chloro-3-methylphenol	4.395	107	42870	9773.1491472	ppb	97
41) 2-Methylnaphthalene	4.519	142	105002	9441.1403741	ppb	99
42) 1-Methylnaphthalene	4.584	142	101389	9364.7404413	ppb	100
47) Hexachlorocyclopentadiene	4.619	237	21972	9229.5812969	ppb	96
48) 2,4,6-Trichlorophenol	4.695	196	27403	10053.0413465	ppb	94

Data Path : C:\msdchem\1\data\042922B\  
 Data File : 0429B\_02.D  
 Acq On : 29 Apr 2022 5:31 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1

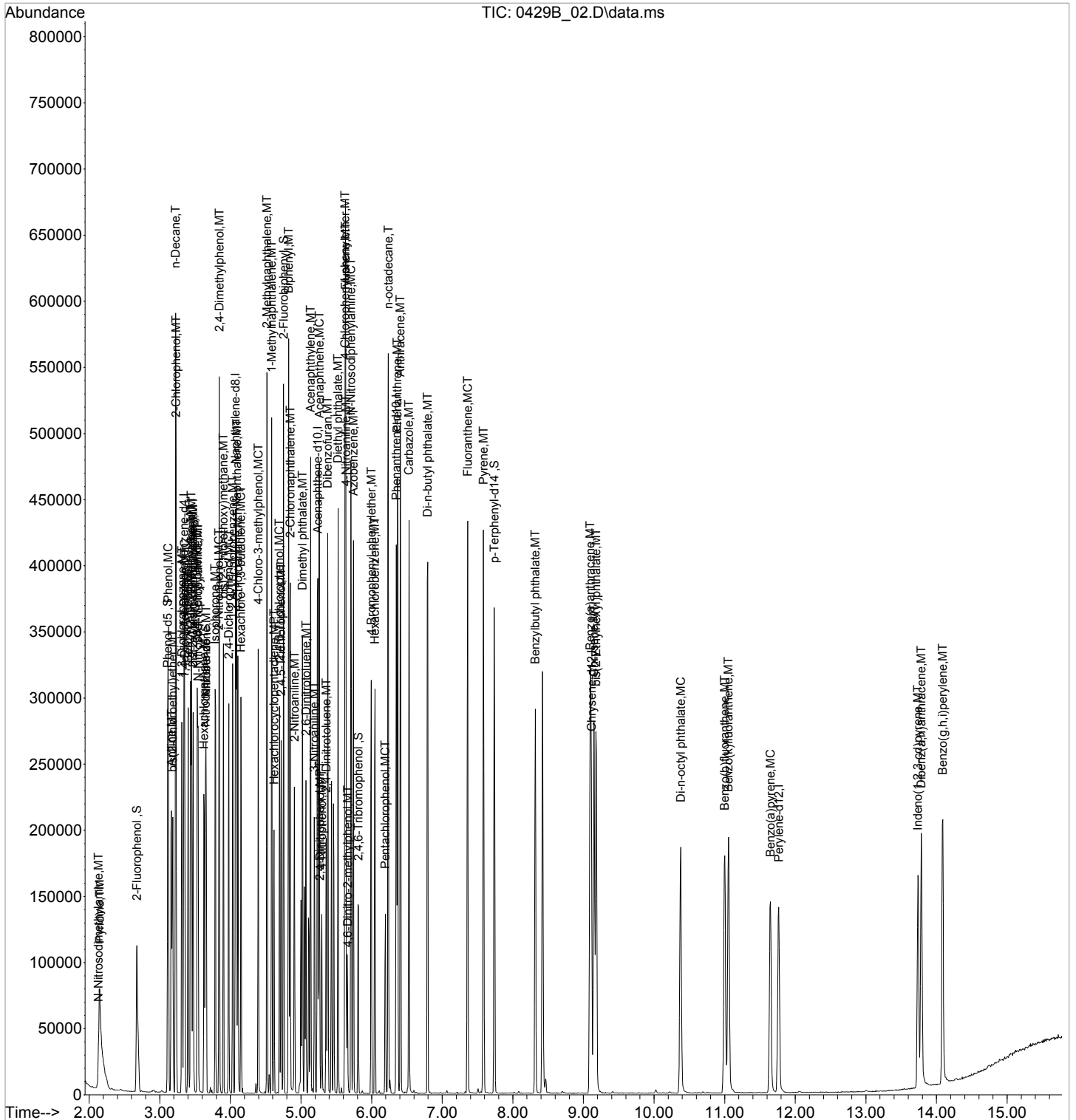
Quant Time: Apr 29 19:29:41 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.719	196	29365	10543.7507224	ppb		93
51) Biphenyl	4.825	154	124290	9517.3986670	ppb		99
52) 2-Chloronaphthalene	4.848	162	97251	9649.1517606	ppb		99
53) 2-Nitroaniline	4.907	138	31669	10592.9410083	ppb		99
54) Acenaphthylene	5.137	152	150810	9751.4770077	ppb		100
55) Dimethyl phthalate	5.019	163	109339	9682.2634147	ppb		92
56) 2,6-Dinitrotoluene	5.072	165	25467	10330.6989938	ppb		81
57) 3-Nitroaniline	5.189	138	25785	10953.1348418	ppb		97
58) Acenaphthene	5.260	153	99101	9455.5726306	ppb		98
59) 2,4-Dinitrophenol	5.266	184	5993	8840.0167598	ppb	#	1
60) Dibenzofuran	5.378	168	137045	9799.3572344	ppb		100
61) 2,4-Dinitrotoluene	5.360	165	30940	10024.9623613	ppb		97
63) 4-Nitrophenol	5.295	139	18931	11108.1142510	ppb		97
64) Fluorene	5.631	166	112911	9753.3710928	ppb		97
65) 4-Chlorophenyl-phenyle...	5.625	204	50189	9518.9986133	ppb		99
66) Diethyl phthalate	5.525	149	115221	9807.0550971	ppb		98
67) 4-Nitroaniline	5.637	138	21489	15075.5679791	ppb		99
68) Azobenzene	5.742	77	117275	9932.7788080	ppb		99
71) 4,6-Dinitro-2-methylph...	5.660	198	10709	9259.2700472	ppb		98
72) N-Nitrosodiphenylamine	5.707	169	91384	9604.8298764	ppb		100
74) 4-Bromophenyl-phenylether	5.995	248	27848	9535.9568611	ppb		90
75) Hexachlorobenzene	6.048	284	31371	9196.1430755	ppb		99
76) n-octadecane	6.236	55	19676	8631.4403952	ppb		100
77) Pentachlorophenol	6.195	266	11706	8043.4149505	ppb		98
78) Phenanthrene	6.366	178	151616	9351.3664803	ppb		99
79) Anthracene	6.407	178	152674	9917.6724685	ppb		98
80) Carbazole	6.531	167	135830	10314.6742137	ppb		99
81) Di-n-butyl phthalate	6.795	149	187224	9491.7916435	ppb		99
83) Fluoranthene	7.360	202	150751	9502.1110437	ppb		99
86) Pyrene	7.583	202	156977	8897.3825763	ppb		99
88) Benzylbutyl phthalate	8.319	149	73740	9107.1006176	ppb		97
90) Benzo(a)anthracene	9.095	228	128467	9770.8170872	ppb		99
91) Chrysene	9.148	228	131331	9457.0343856	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.177	149	104028	8708.3756522	ppb		99
93) Di-n-octyl phthalate	10.377	149	154290	8506.4476678	ppb		99
95) Benzo(b)fluoranthene	11.001	252	117962	9213.0472428	ppb		100
96) Benzo(k)fluoranthene	11.054	252	126080	9630.3948039	ppb		99
97) Benzo(a)pyrene	11.648	252	100734	9706.0216441	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.736	276	91330	9668.6280520	ppb		97
99) Dibenz(a,h)anthracene	13.783	278	104495	9869.9144856	ppb		98
100) Benzo(g,h,i)perylene	14.089	276	110936	9891.4243184	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\042922B\  
 Data File : 0429B\_02.D  
 Acq On : 29 Apr 2022 5:31 pm  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22D19627 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 3 Sample Multiplier: 1

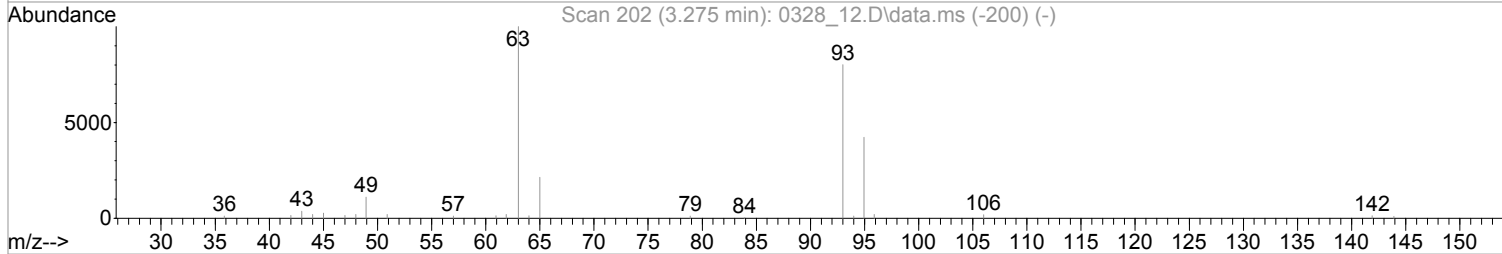
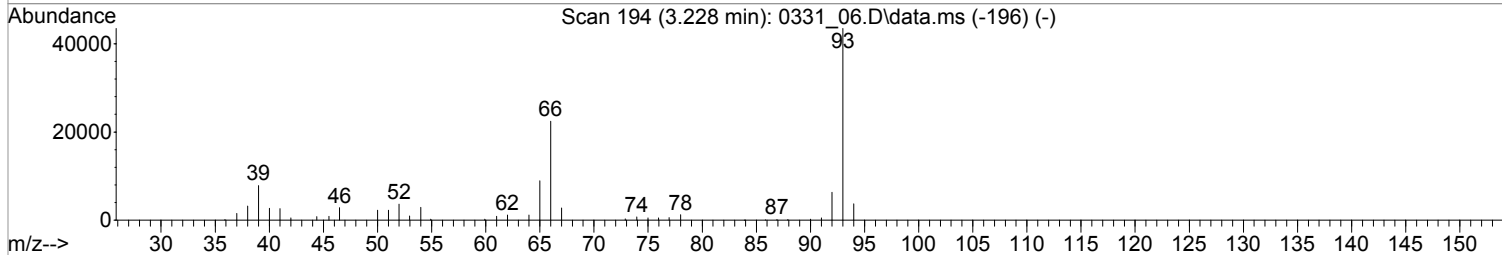
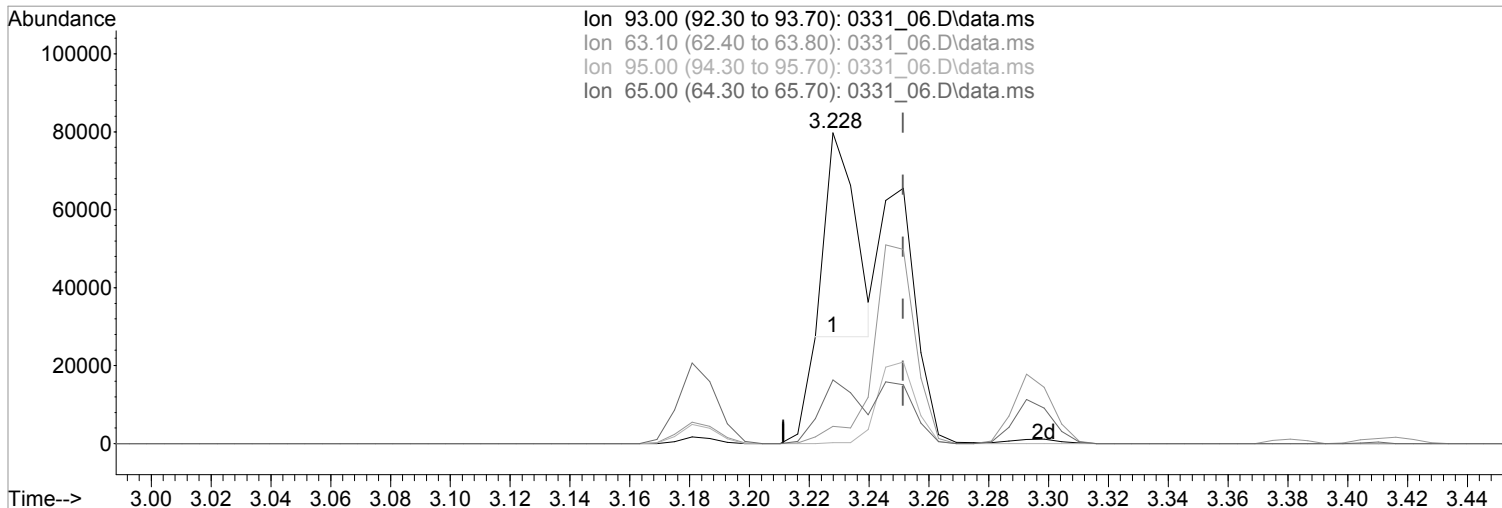
Quant Time: Apr 29 19:29:41 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

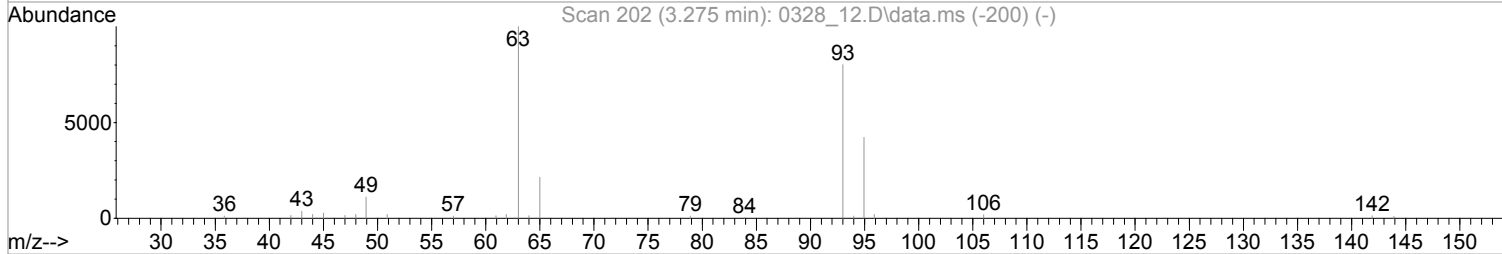
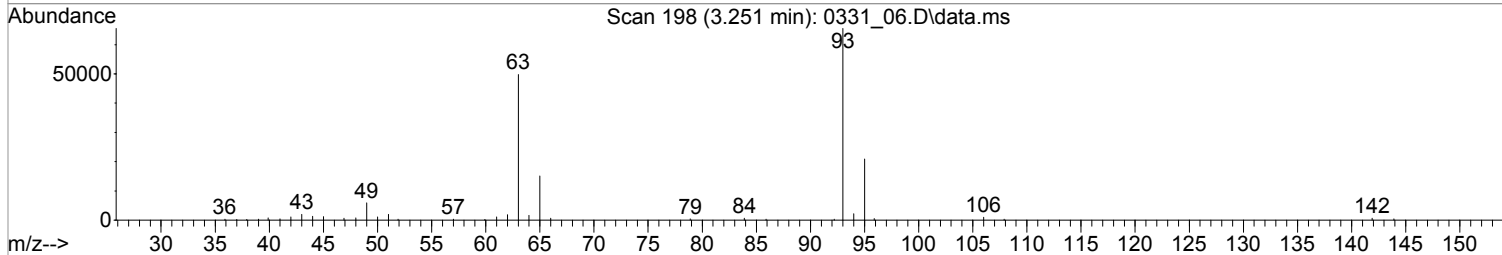
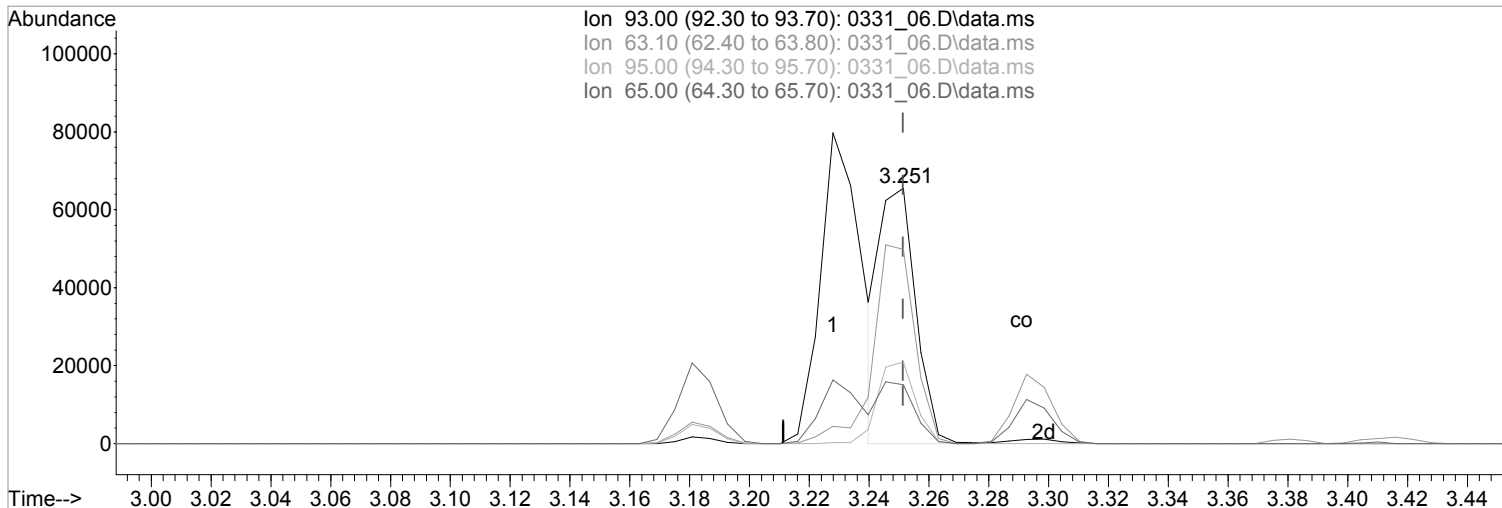
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 6479.8676227 ppb  
 Qvalue = 37  
 response 35244

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.09#
95.00	31.90	0.47#
65.00	23.10	19.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (0.000) 10000.000000 ppb m

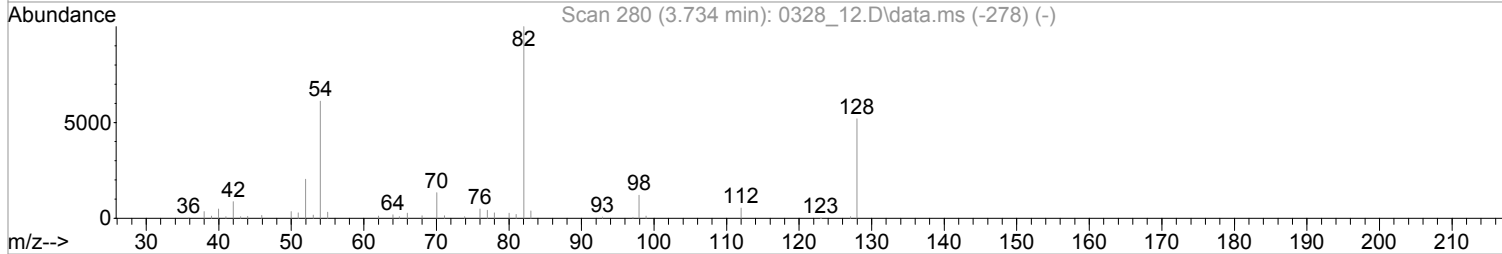
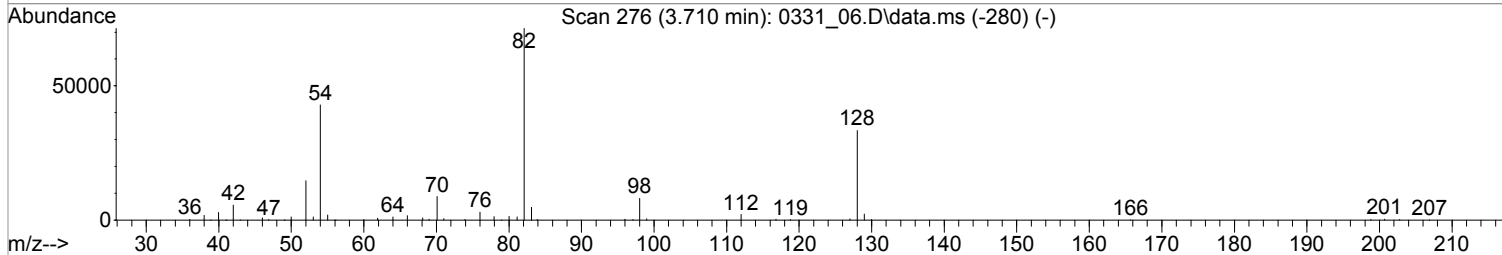
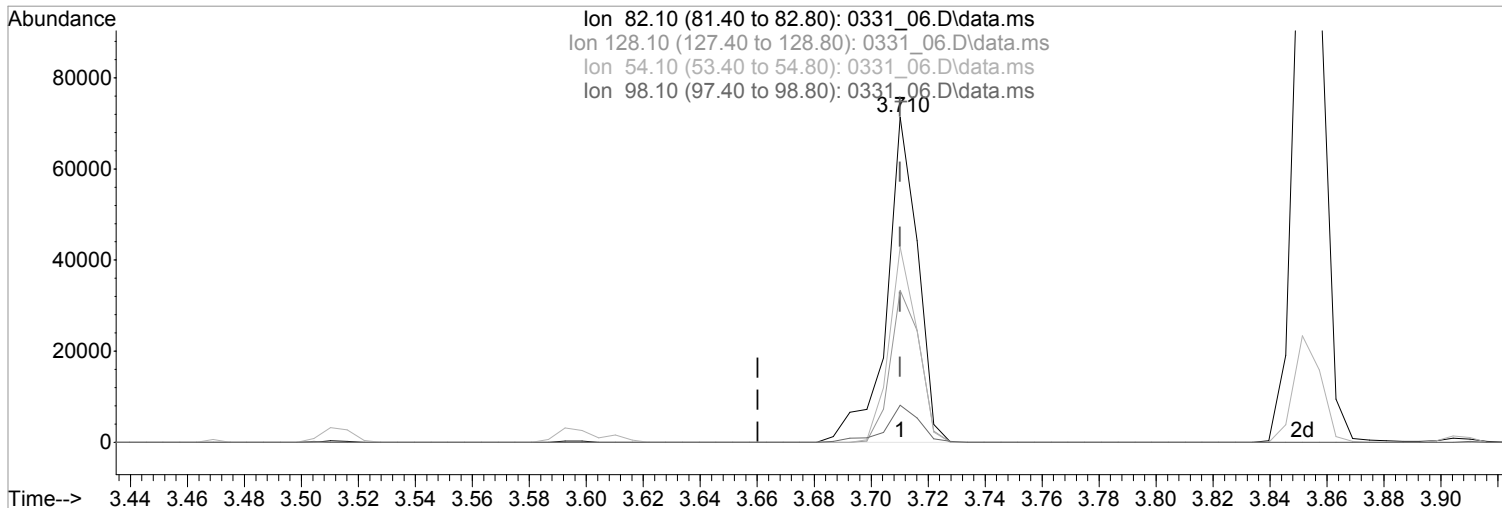
response 54390

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.04
95.00	31.90	31.89
65.00	23.10	23.09

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

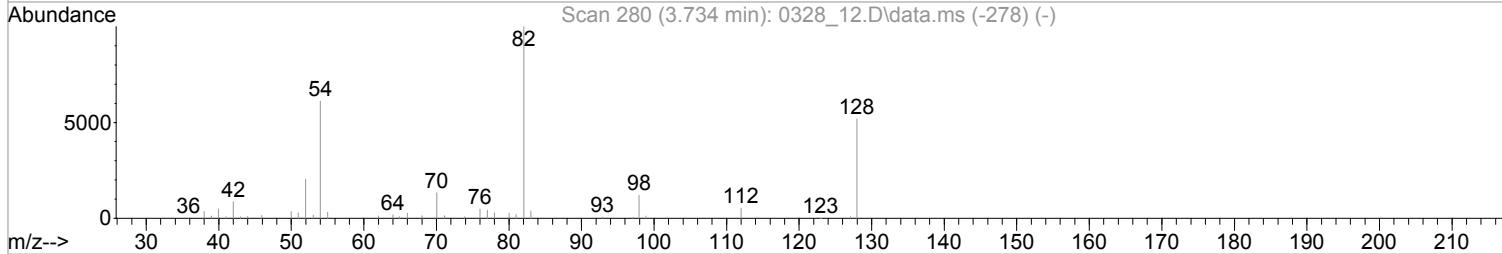
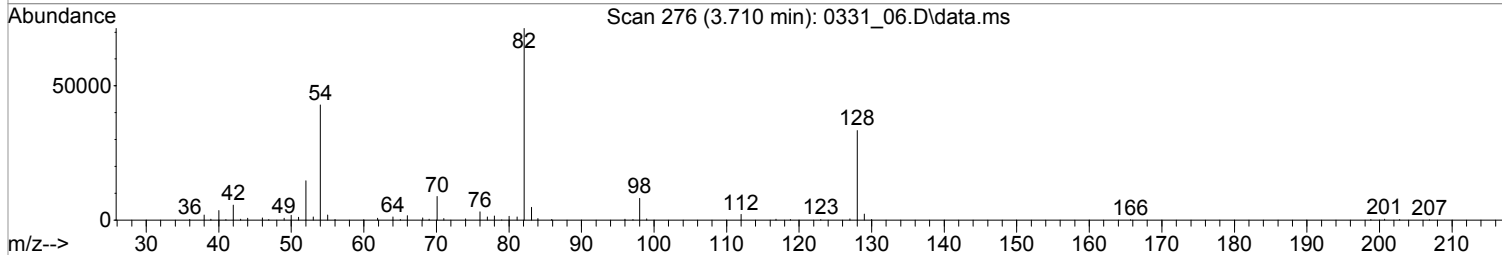
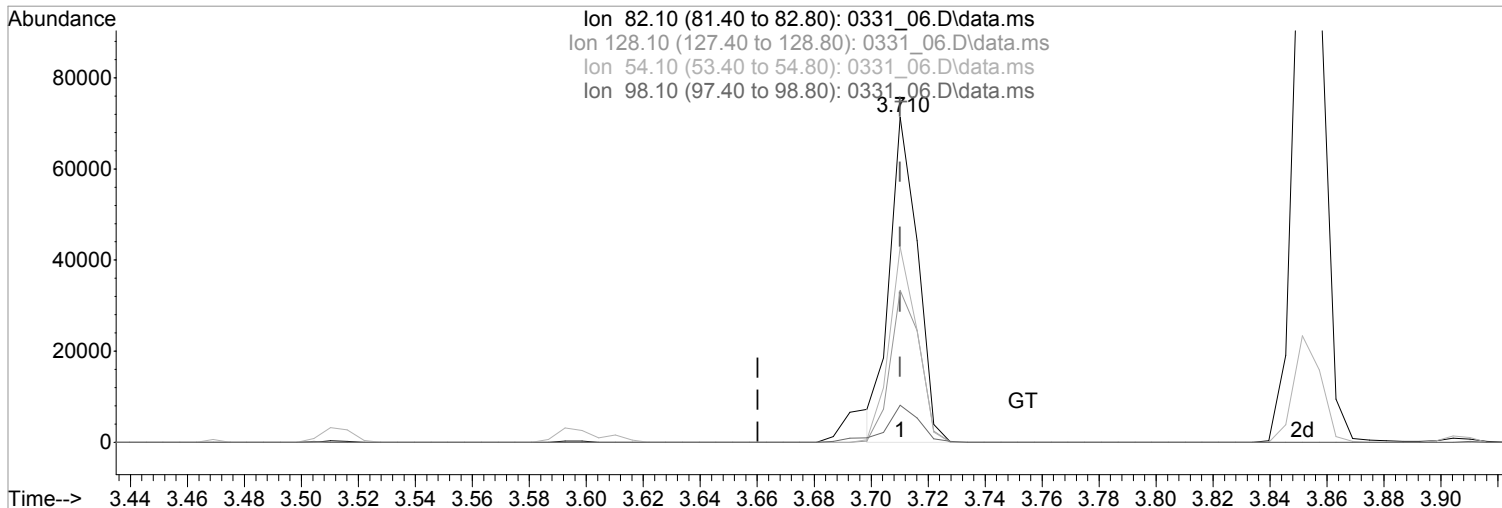
(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 11089.1251693 ppb  
 Qvalue = 100  
 response 54024

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	46.75
54.10	60.00	60.04
98.10	11.40	11.42

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 10000.0000000 ppb m

response 48718

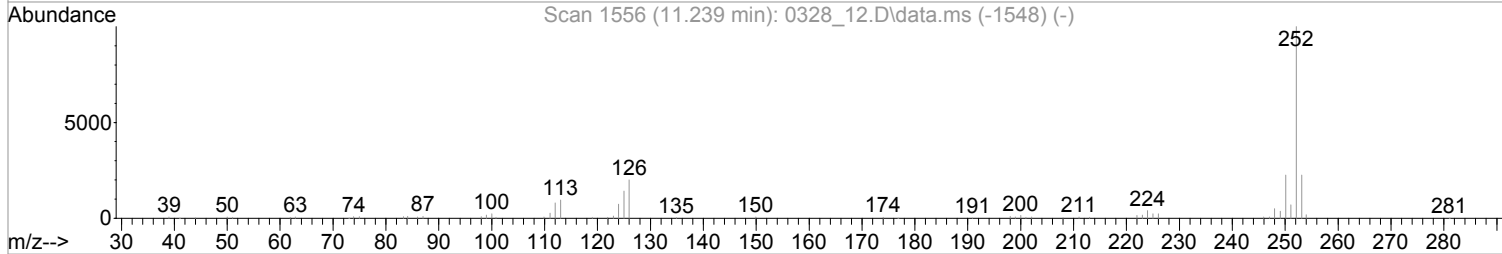
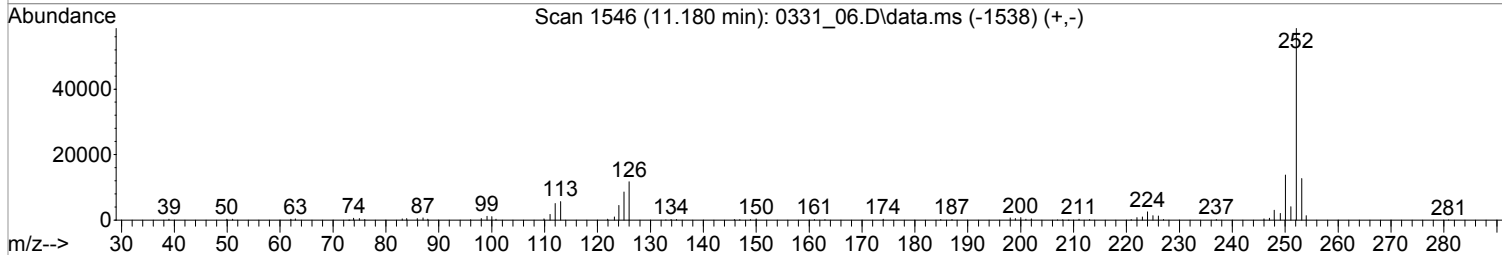
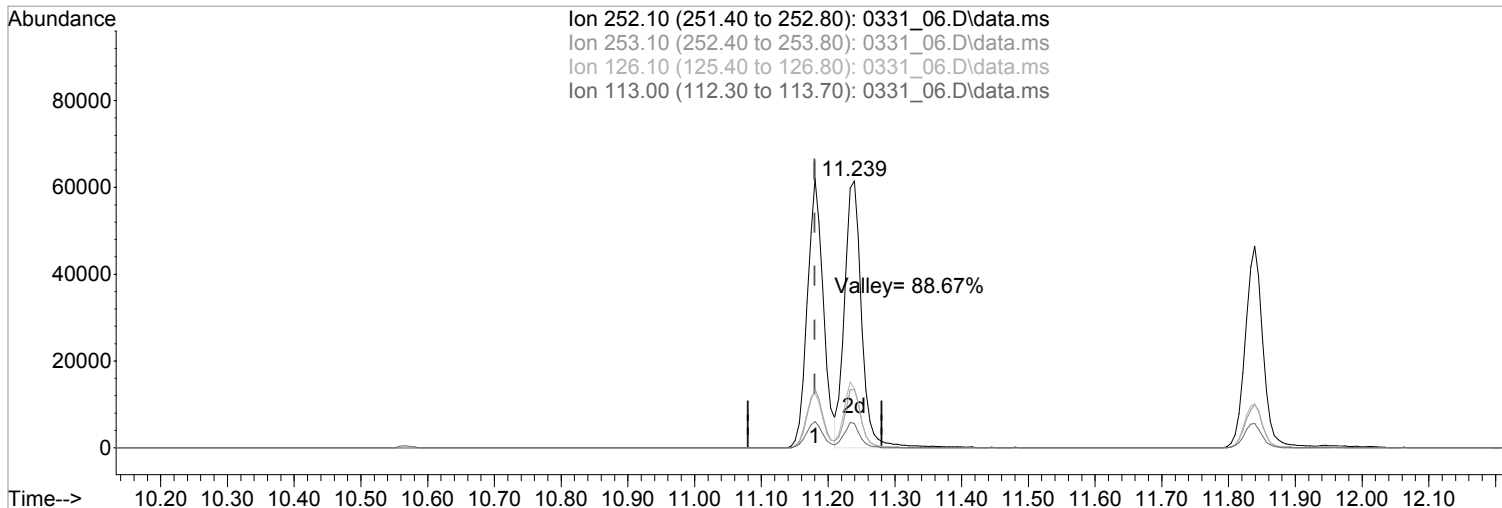
Ion	Exp%	Act%
82.10	100	100
128.10	46.80	46.75
54.10	60.00	60.04
98.10	11.40	11.42



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_06.D  
 Acq On : 31 Mar 2022 6:28 pm  
 Operator : 3545  
 Sample : MSTD SVMS 10K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 04 15:56:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:56:28 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_06.D\data.ms

(95) Benzo(b)fluoranthene (MT)  
 11.180min (0.000) 10000.0000000 ppb  
 Qvalue = 100  
 response 103049

Ion	Exp%	Act%
252.10	100	100
253.10	21.80	21.75
126.10	20.00	20.04
113.00	9.70	9.74

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:06:30 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.410	152	32792	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.140	136	134078	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	70723	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.434	188	112936	8000.0000000	ppb	0.00
84) Chrysene-d12	9.251	240	84930	8000.0000000	ppb	0.00
94) Perylene-d12	11.957	264	75119	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.740	112	106152	20861.0973521	ppb	0.00
Spiked Amount	20000.000		Recovery	=	104.31%	
7) Phenol-d5	3.175	99	126213	21001.8195808	ppb	0.00
Spiked Amount	20000.000		Recovery	=	105.01%	
24) Nitrobenzene-d5	3.710	82	103619m	20771.1930820	ppb	0.00
Spiked Amount	10000.000		Recovery	=	207.71%	
50) 2-Fluorobiphenyl	4.828	172	223030	19027.3520423	ppb	0.00
Spiked Amount	10000.000		Recovery	=	190.27%	
73) 2,4,6-Tribromophenol	5.892	330	25243	24542.1885073	ppb	0.00
Spiked Amount	20000.000		Recovery	=	122.71%	
87) p-Terphenyl-d14	7.845	244	237308	19778.2683501	ppb	0.00
Spiked Amount	10000.000		Recovery	=	197.78%	
<b>Target Compounds</b>						
2) Pyridine	2.210	79	111293	20520.0582576	ppb	98
3) N-Nitrosodimethylamine	2.199	42	54707	17512.4649974	ppb	97
5) Aniline	3.228	66	57894	20863.9637808	ppb	# 16
6) bis(2-Chloroethyl)ether	3.251	93	110886m	19845.2727506	ppb	
8) Phenol	3.181	94	133099	20780.4249322	ppb	98
10) 2-Chlorophenol	3.293	128	112522	21384.5068803	ppb	98
11) n-Decane	3.293	41	68989	18920.4635757	ppb	# 100
12) 1,3-Dichlorobenzene	3.381	146	123575	19382.0792001	ppb	99
13) 1,4-Dichlorobenzene	3.416	146	124782	19676.3481368	ppb	97
14) Benzyl Alcohol	3.469	79	82542	21814.2426793	ppb	99
15) 1,2-Dichlorobenzene	3.504	146	118829	19192.9016445	ppb	98
16) bis(2-Chloroisopropyl)...	3.540	121	41324	19661.8731881	ppb	99
17) 2,2-oxybis(1-chloropro...	3.540	121	41324	19661.8731881	ppb	99
18) 2-Methylphenol	3.516	108	101827	21477.9744707	ppb	99
19) Hexachloroethane	3.698	117	52039	19890.3601889	ppb	98
20) N-Nitrosodi-n-propylamine	3.610	70	72194	21832.9659564	ppb	98
21) 3&4-Methyl phenol	3.598	107	111931	21421.6043465	ppb	96
25) Nitrobenzene	3.722	77	105247	20884.2027666	ppb	98
26) Isophorone	3.857	82	210585	21841.1908819	ppb	91
27) 2-Nitrophenol	3.904	139	52249	24618.0078291	ppb	95
28) 2,4-Dimethylphenol	3.910	107	103310	21041.1313099	ppb	96
29) bis(2-Chlorethoxy)methane	3.969	93	136801	20048.2800815	ppb	100
30) 2,4-Dichlorophenol	4.045	162	83454	22074.7247902	ppb	99
32) 1,2,4-Trichlorobenzene	4.104	180	94214	19197.4563184	ppb	97
34) Naphthalene	4.157	128	329834	18763.7653181	ppb	100
35) 4-Chloroaniline	4.175	65	36268	21893.3392059	ppb	96
36) Hexachloro-1,3-butadiene	4.222	225	50893	19291.4613634	ppb	97
40) 4-Chloro-3-methylphenol	4.463	107	87785	23024.4502760	ppb	100
41) 2-Methylnaphthalene	4.593	142	211946	19970.4058612	ppb	100
42) 1-Methylnaphthalene	4.657	142	205339	19719.8276242	ppb	99
47) Hexachlorocyclopentadiene	4.692	237	48263	22542.2258944	ppb	99
48) 2,4,6-Trichlorophenol	4.769	196	56577	23494.5231526	ppb	99

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

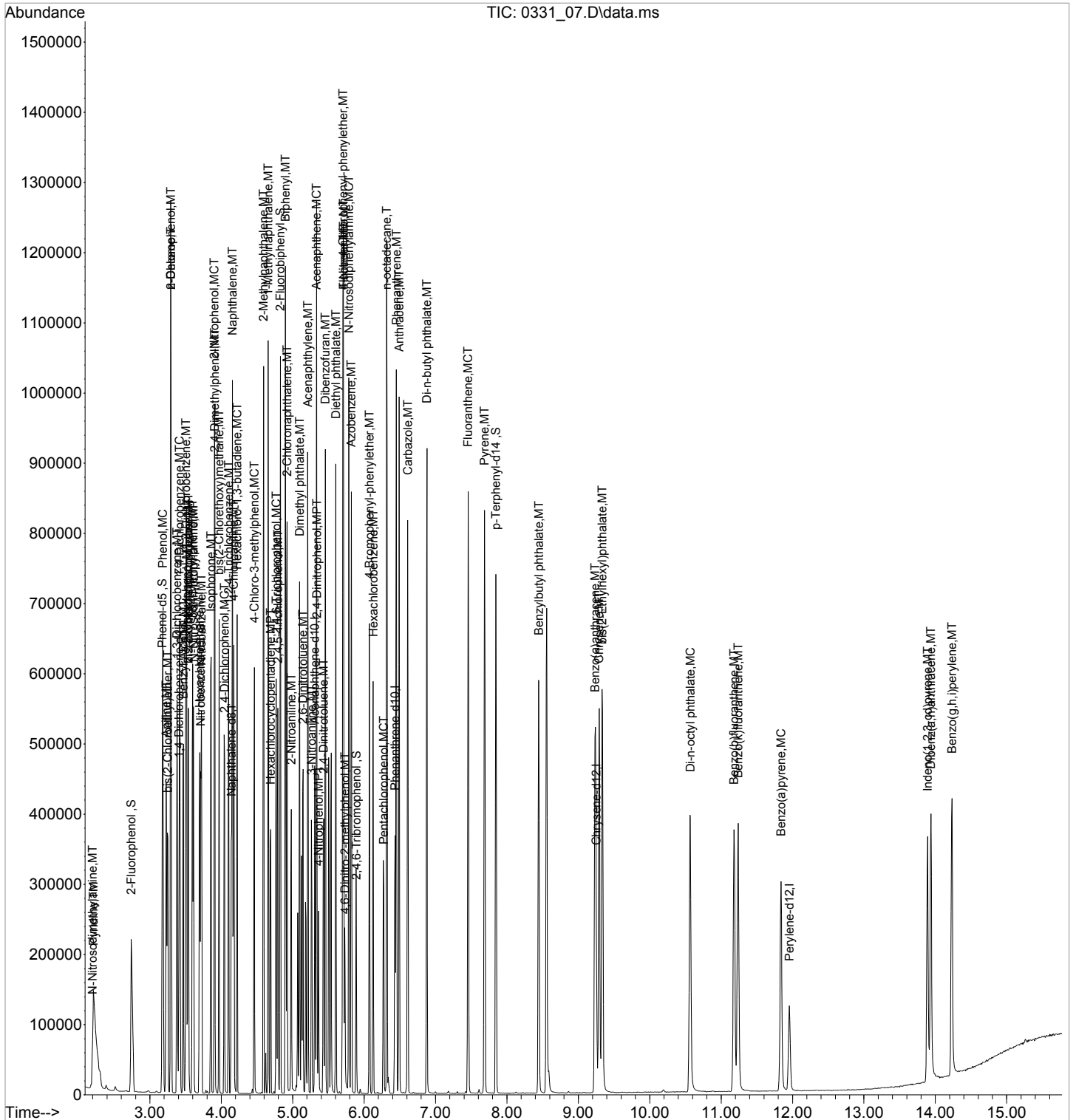
Quant Time: Apr 04 16:06:30 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	59315	24551.4730430	ppb		98
51) Biphenyl	4.898	154	251259	19173.6958276	ppb		100
52) 2-Chloronaphthalene	4.922	162	193285	19212.2177403	ppb		99
53) 2-Nitroaniline	4.981	138	59759	25988.3511479	ppb		98
54) Acenaphthylene	5.210	152	303372	20149.8725762	ppb		100
55) Dimethyl phthalate	5.098	163	227095	21158.3884957	ppb		97
56) 2,6-Dinitrotoluene	5.145	165	51741	24536.2501075	ppb	#	80
57) 3-Nitroaniline	5.263	138	47887	25616.1751347	ppb		99
58) Acenaphthene	5.334	153	202163	19347.9009194	ppb		98
59) 2,4-Dinitrophenol	5.340	184	14976	29432.6206918	ppb	#	70
60) Dibenzofuran	5.457	168	267370	19040.7081128	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	61558	25802.4933154	ppb		99
63) 4-Nitrophenol	5.363	139	33738	26954.3131233	ppb		97
64) Fluorene	5.710	166	226042	19747.7794311	ppb		98
65) 4-Chlorophenyl-phenyle...	5.704	204	101491	19118.9264213	ppb		99
66) Diethyl phthalate	5.604	149	234955	20771.6196118	ppb		100
67) 4-Nitroaniline	5.710	138	24185	16136.9020443	ppb		95
68) Azobenzene	5.822	77	238153	21105.6381926	ppb		99
71) 4,6-Dinitro-2-methylph...	5.734	198	24209	33263.5986863	ppb		96
72) N-Nitrosodiphenylamine	5.787	169	183408	21087.6244155	ppb		100
74) 4-Bromophenyl-phenylether	6.075	248	54290	19982.1021032	ppb		95
75) Hexachlorobenzene	6.128	284	62307	18977.7188118	ppb		100
76) n-octadecane	6.316	55	43712	20878.0975737	ppb		99
77) Pentachlorophenol	6.275	266	30833	25917.7797076	ppb		99
78) Phenanthrene	6.451	178	296157	19005.7829735	ppb		100
79) Anthracene	6.492	178	293833	20894.2352570	ppb		98
80) Carbazole	6.610	167	250897	21148.1675444	ppb		99
81) Di-n-butyl phthalate	6.881	149	397421	23698.6563151	ppb		100
83) Fluoranthene	7.457	202	304212	21412.2235528	ppb		100
86) Pyrene	7.686	202	314336	18911.5981484	ppb		99
88) Benzylbutyl phthalate	8.445	149	150478	26024.5200637	ppb		97
90) Benzo(a)anthracene	9.233	228	242646	21018.4091374	ppb		99
91) Chrysene	9.292	228	250717	19529.3570288	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.333	149	225383	26777.0888674	ppb		98
93) Di-n-octyl phthalate	10.569	149	335350	29247.6424441	ppb		99
95) Benzo(b)fluoranthene	11.180	252	230240	22096.3443995	ppb		98
96) Benzo(k)fluoranthene	11.239	252	239541	22391.4257258	ppb		99
97) Benzo(a)pyrene	11.839	252	191805	23713.6445070	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.892	276	170517	22398.0952594	ppb		98
99) Dibenz(a,h)anthracene	13.939	278	192016	22172.7985225	ppb		98
100) Benzo(g,h,i)perylene	14.233	276	201342	21390.6206879	ppb		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_07.D  
Acq On : 31 Mar 2022 6:49 pm  
Operator : 3545  
Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 7 Sample Multiplier: 1

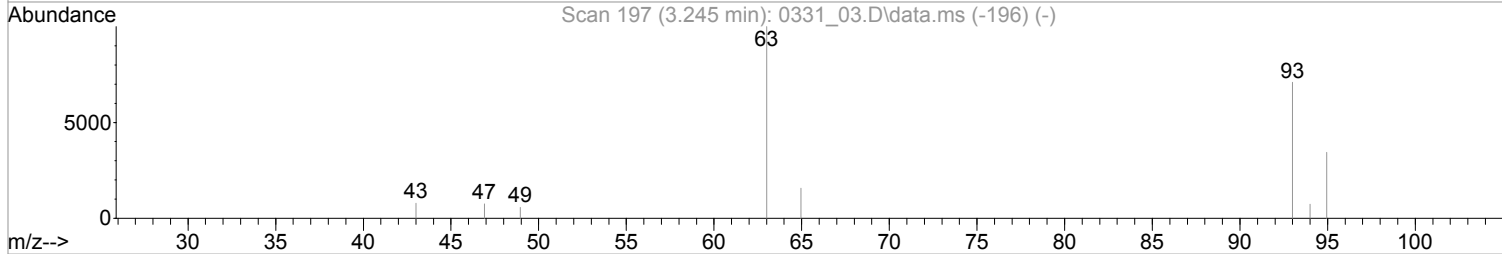
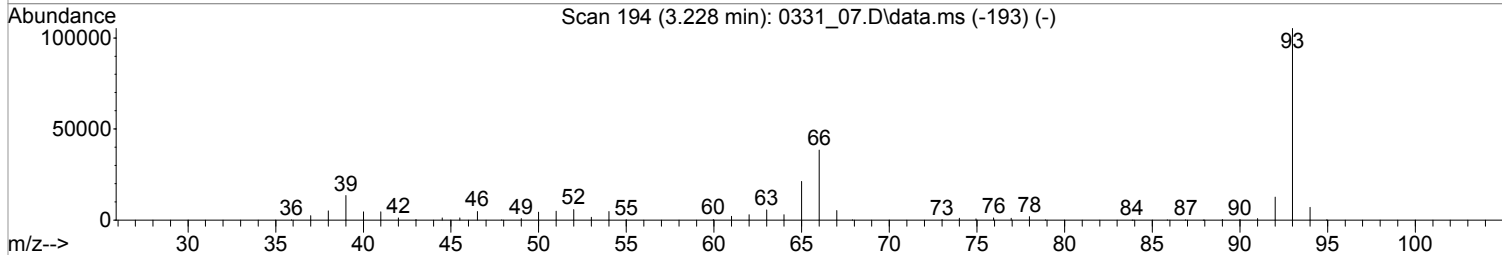
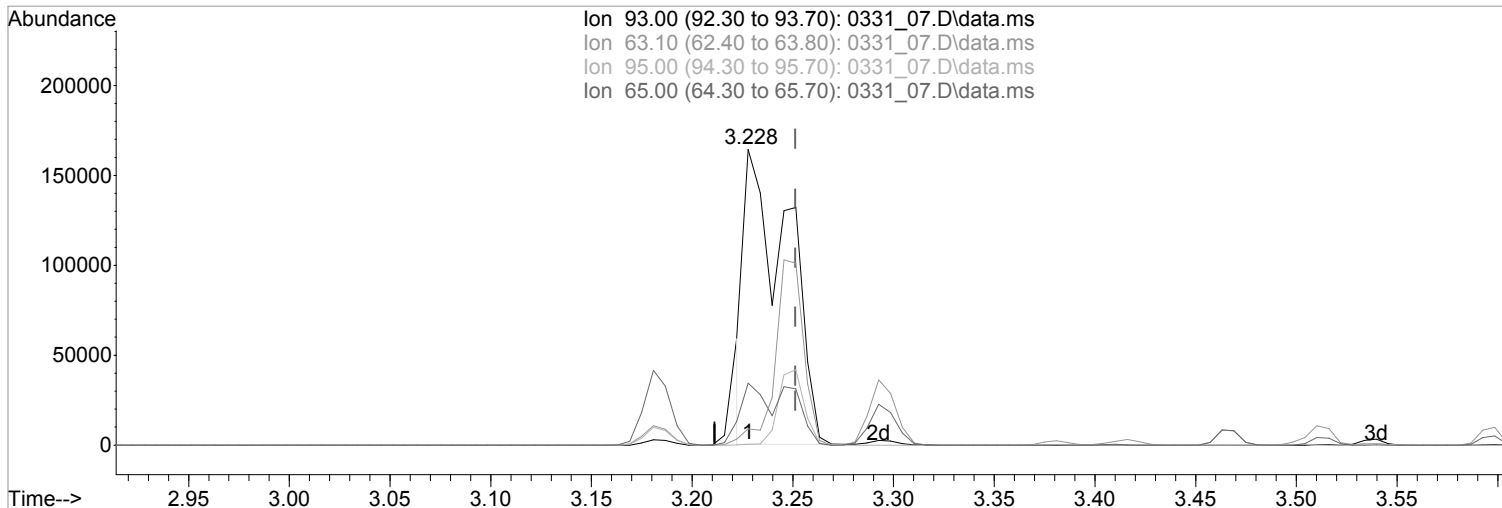
Quant Time: Apr 04 16:06:30 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:05:43 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

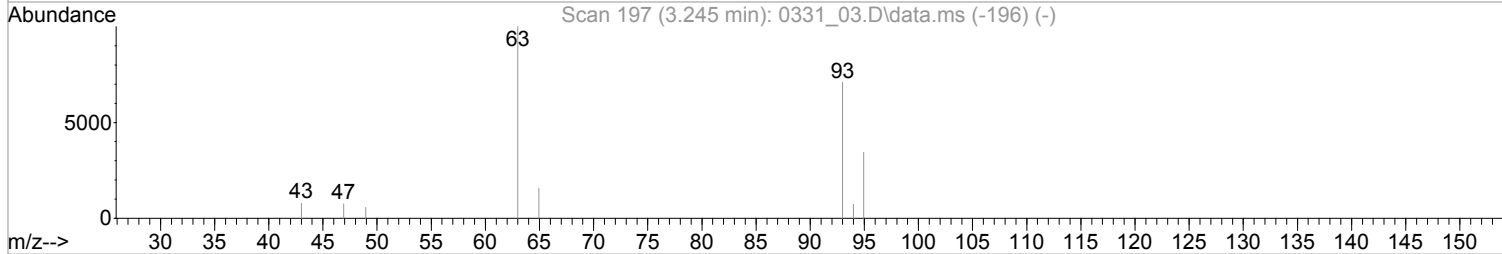
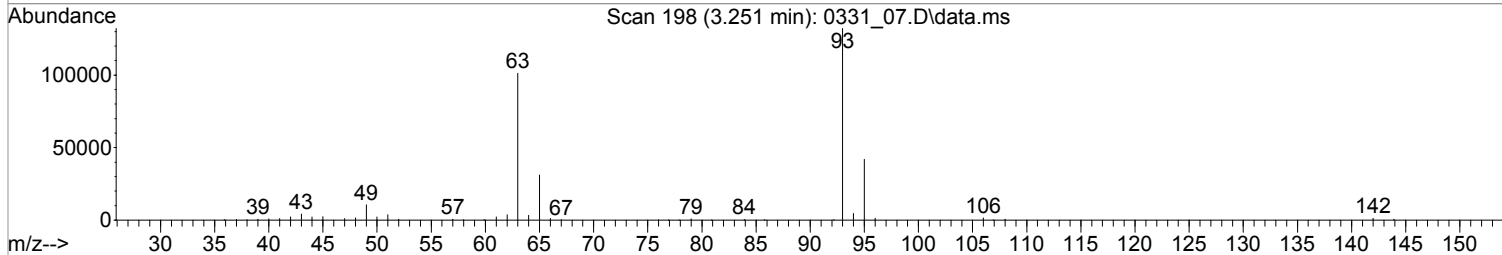
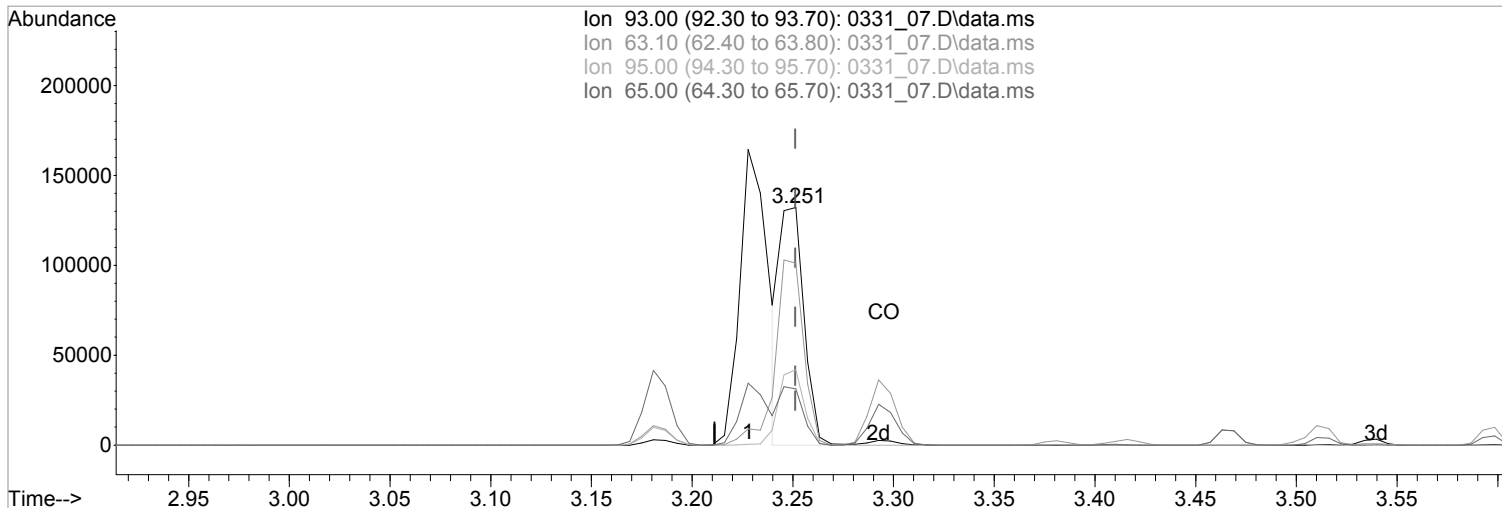
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 43763.3668852 ppb  
 Qvalue = 38  
 response 244529

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.53#
95.00	31.90	0.24#
65.00	23.10	20.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (+0.000) 19845.2727506 ppb m

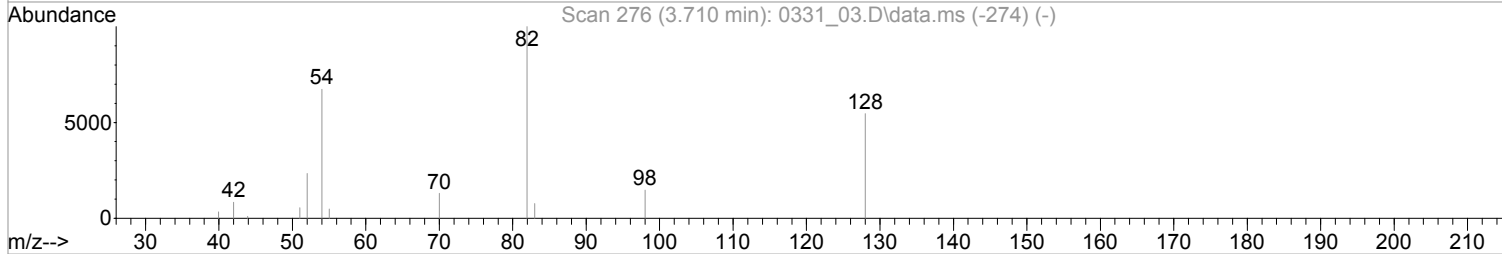
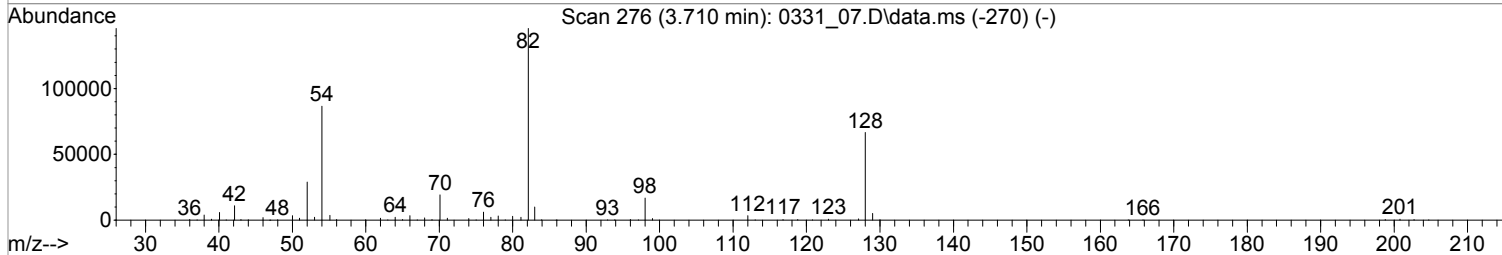
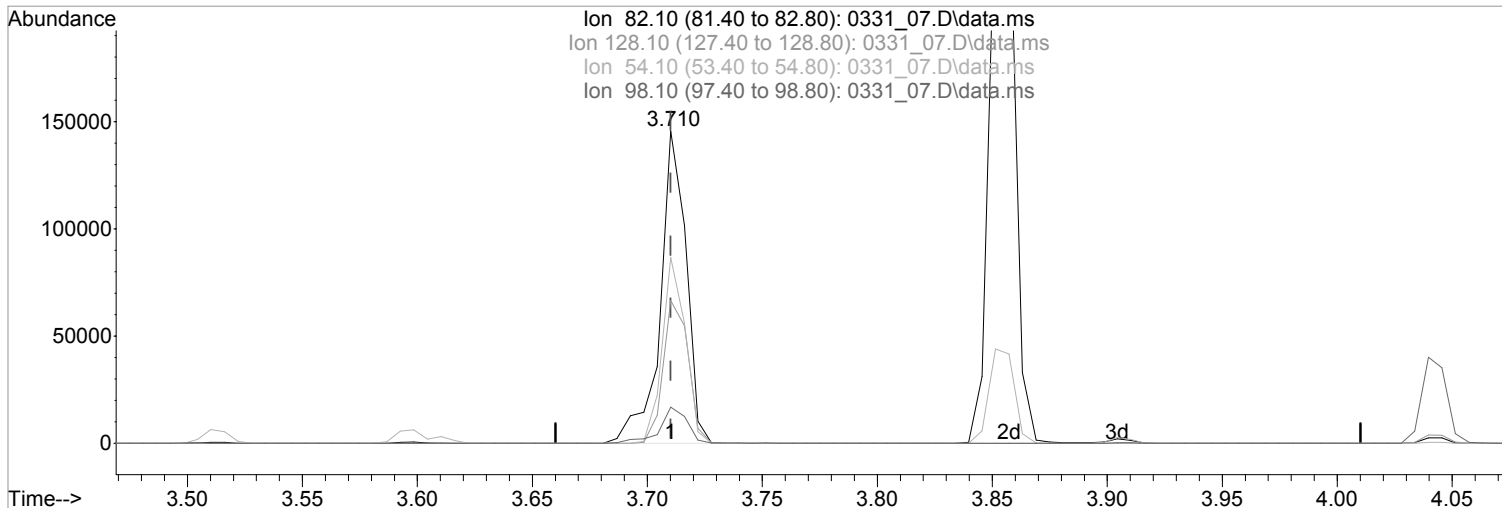
response 110886

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.56
95.00	31.90	31.70
65.00	23.10	23.63

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_07.D  
 Acq On : 31 Mar 2022 6:49 pm  
 Operator : 3545  
 Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
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Quant Time: Apr 04 16:05:48 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:05:43 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

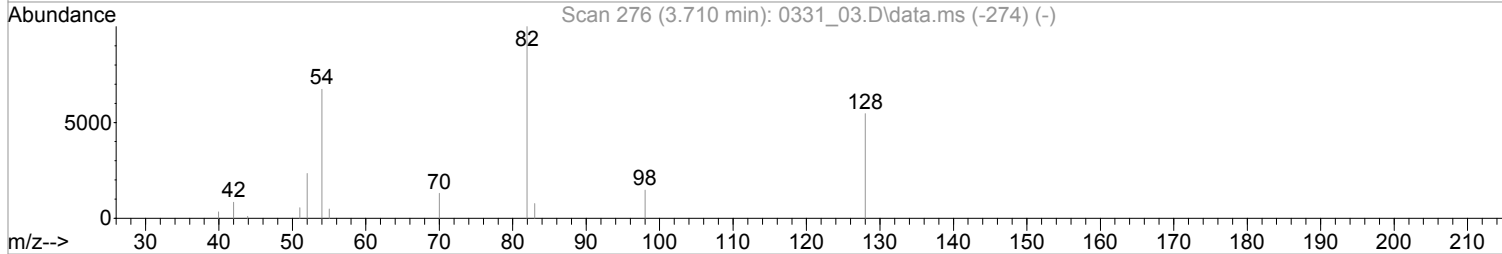
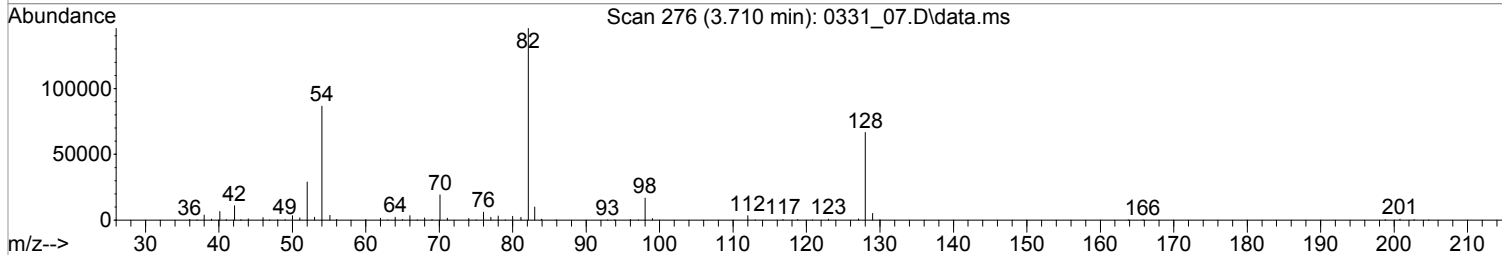
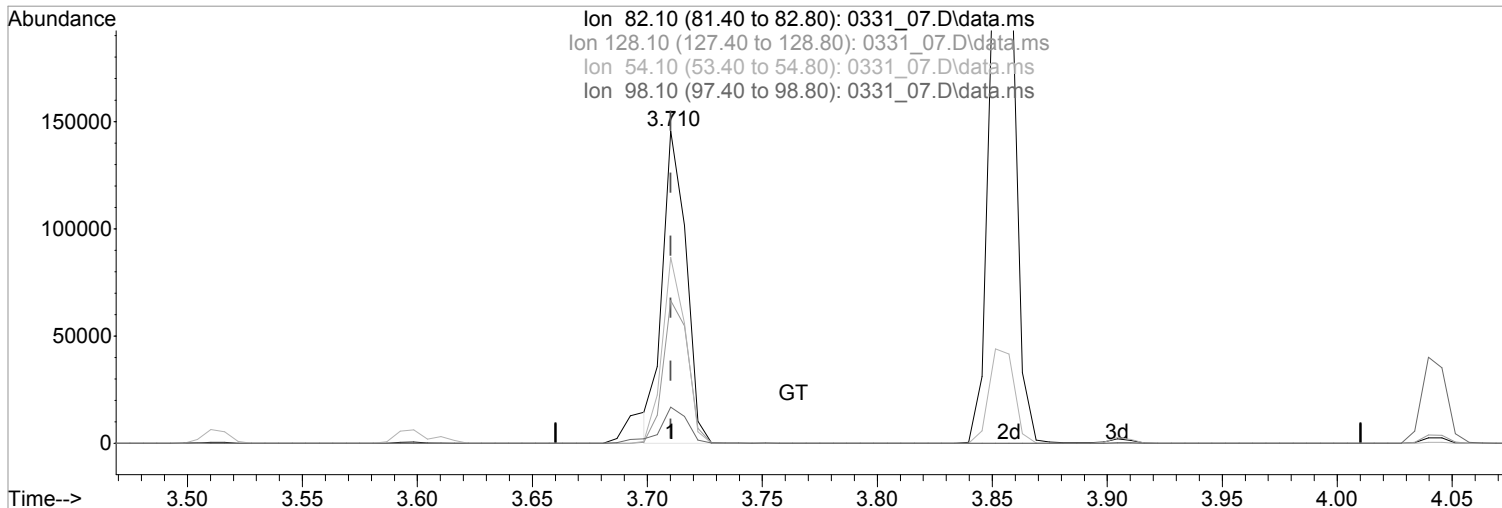
(24) Nitrobenzene-d5 (S)  
 3.710min (0.000) 22875.1937247 ppb  
 Qvalue = 99  
 response 114115

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.73
54.10	60.00	59.51
98.10	11.40	11.59

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_07.D  
Acq On : 31 Mar 2022 6:49 pm  
Operator : 3545  
Sample : STD SVMS 20K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 04 16:05:48 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:05:43 2022  
Response via : Initial Calibration  
DataAcq Meth: BNA24PS.M



TIC: 0331\_07.D\data.ms

(24) Nitrobenzene-d5 (S)  
3.710min (0.000) 20771.1930820 ppb m

response 103619

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.73
54.10	60.00	59.51
98.10	11.40	11.59



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:49 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.410	152	33533	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	132888	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	71209	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	113292	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	87467	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	76329	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.740	112	157758	30058.8366266	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	150.29%		
7) Phenol-d5	3.175	99	188380	30349.6666052	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	151.75%		
24) Nitrobenzene-d5	3.710	82	156535m	31417.3001484	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	314.17%		
50) 2-Fluorobiphenyl	4.828	172	327473	28019.5521228	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	280.20%		
73) 2,4,6-Tribromophenol	5.893	330	40030	36711.9598208	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	183.56%		
87) p-Terphenyl-d14	7.845	244	360600	29247.0817353	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	292.47%		
<b>Target Compounds</b>							
					Qvalue		
2) Pyridine	2.210	79	166662	29894.4173979	ppb	100	
3) N-Nitrosodimethylamine	2.199	42	78907	25331.1714229	ppb	95	
5) Aniline	3.228	66	87768	30666.1270466	ppb	#	21
6) bis(2-Chloroethyl)ether	3.252	93	167703m	29396.0633812	ppb		
8) Phenol	3.181	94	199062	30156.9423564	ppb	98	
10) 2-Chlorophenol	3.293	128	167459	30696.8769867	ppb	98	
11) n-Decane	3.293	41	100554	27262.1829473	ppb	#	100
12) 1,3-Dichlorobenzene	3.381	146	181714	28044.3611384	ppb	99	
13) 1,4-Dichlorobenzene	3.416	146	183675	28414.8902144	ppb	96	
14) Benzyl Alcohol	3.469	79	124720	31658.3456118	ppb	99	
15) 1,2-Dichlorobenzene	3.505	146	175099	27881.5403292	ppb	98	
16) bis(2-Chloroisopropyl)...	3.540	121	61647	28780.6723560	ppb	98	
17) 2,2-oxybis(1-chloropro...	3.540	121	61647	28780.6723560	ppb	98	
18) 2-Methylphenol	3.516	108	150526	30596.0667961	ppb	98	
19) Hexachloroethane	3.699	117	77143	28865.7035157	ppb	98	
20) N-Nitrosodi-n-propylamine	3.610	70	108538	31521.0408970	ppb	98	
21) 3&4-Methyl phenol	3.599	107	166101	30650.5927115	ppb	97	
25) Nitrobenzene	3.722	77	159382	31629.7704116	ppb	99	
26) Isophorone	3.857	82	319221	32801.1162840	ppb	91	
27) 2-Nitrophenol	3.904	139	80408	36138.7503562	ppb	94	
28) 2,4-Dimethylphenol	3.910	107	156274	31782.4235741	ppb	96	
29) bis(2-Chlorethoxy)methane	3.969	93	204569	30233.5957475	ppb	100	
30) 2,4-Dichlorophenol	4.046	162	125694	32863.6826156	ppb	98	
32) 1,2,4-Trichlorobenzene	4.104	180	138967	28801.2375631	ppb	97	
34) Naphthalene	4.157	128	484005	28128.6272547	ppb	99	
35) 4-Chloroaniline	4.175	65	54919	32675.6461647	ppb	96	
36) Hexachloro-1,3-butadiene	4.222	225	75737	29172.5927324	ppb	97	
40) 4-Chloro-3-methylphenol	4.463	107	134853	34638.6550486	ppb	98	
41) 2-Methylnaphthalene	4.593	142	316159	30065.4368411	ppb	100	
42) 1-Methylnaphthalene	4.657	142	304694	29606.4143326	ppb	100	
47) Hexachlorocyclopentadiene	4.693	237	75322	34074.3338440	ppb	99	
48) 2,4,6-Trichlorophenol	4.769	196	87140	34725.8348305	ppb	100	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

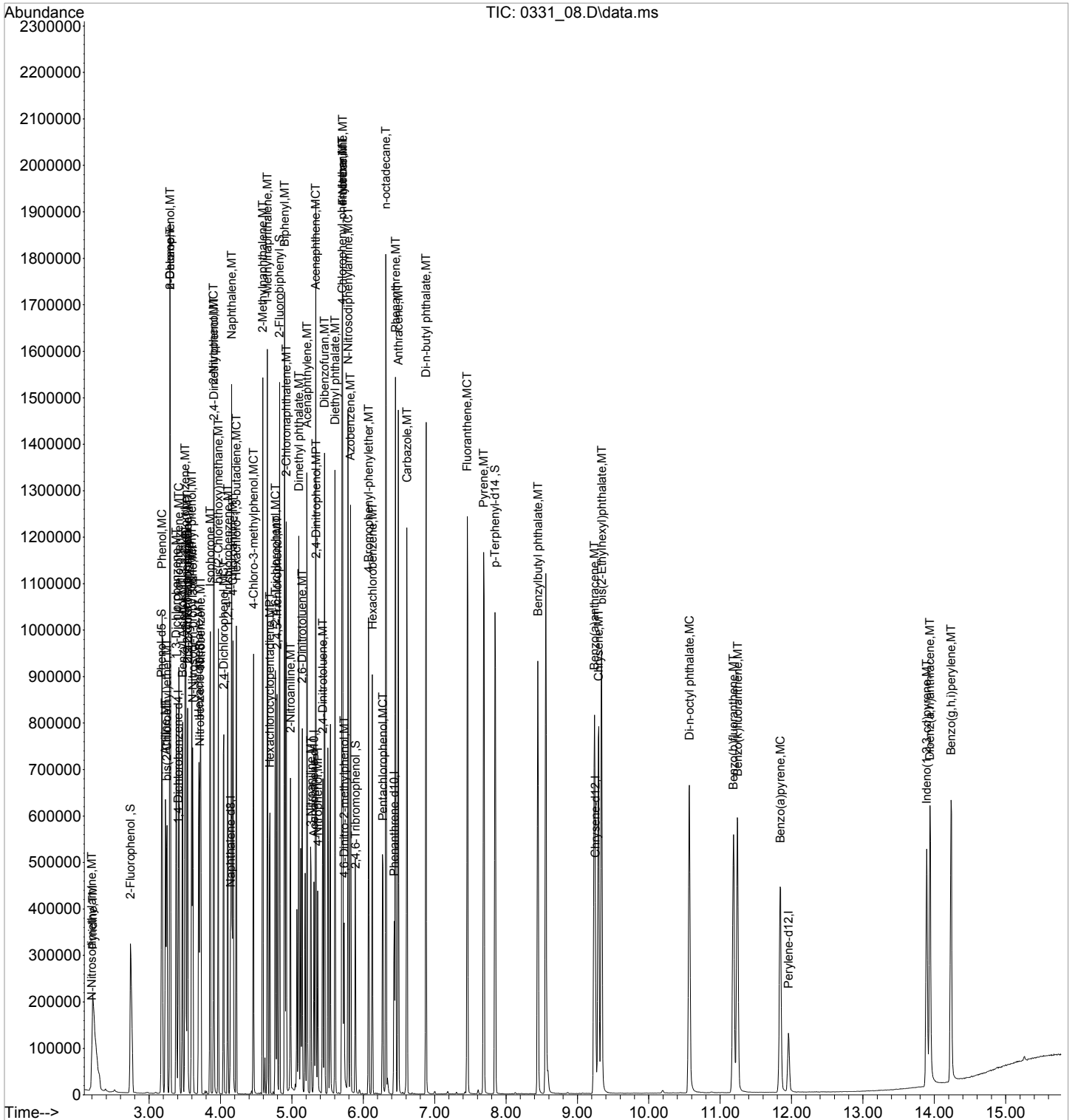
Quant Time: Apr 04 16:07:49 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.793	196	89614	35235.8306483	ppb		99
51) Biphenyl	4.899	154	370899	28344.5233795	ppb		99
52) 2-Chloronaphthalene	4.922	162	290244	28880.4016682	ppb		99
53) 2-Nitroaniline	4.981	138	95458	38358.7007923	ppb		99
54) Acenaphthylene	5.210	152	458154	30177.5291948	ppb		99
55) Dimethyl phthalate	5.099	163	343325	31405.3999860	ppb		94
56) 2,6-Dinitrotoluene	5.146	165	79641	35496.2824813	ppb		83
57) 3-Nitroaniline	5.269	138	74618	37042.4932595	ppb	#	82
58) Acenaphthene	5.334	153	302900	28980.0110439	ppb		98
59) 2,4-Dinitrophenol	5.340	184	25983	43826.4078457	ppb	#	52
60) Dibenzofuran	5.457	168	402364	28734.3638947	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	97371	37793.9835615	ppb		95
63) 4-Nitrophenol	5.363	139	54940	40107.1900866	ppb		98
64) Fluorene	5.710	166	338730	29464.9250158	ppb		98
65) 4-Chlorophenyl-phenyle...	5.704	204	151460	28589.2736068	ppb		98
66) Diethyl phthalate	5.604	149	355063	30937.0312942	ppb		99
67) 4-Nitroaniline	5.710	138	39081	27211.9905793	ppb		94
68) Azobenzene	5.822	77	356467	31032.1721850	ppb		100
71) 4,6-Dinitro-2-methylph...	5.734	198	40447	47521.4488194	ppb		96
72) N-Nitrosodiphenylamine	5.787	169	271452	30777.8016182	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	82403	30239.5448272	ppb		95
75) Hexachlorobenzene	6.128	284	93062	28547.9722569	ppb		99
76) n-octadecane	6.316	55	65192	30769.5273176	ppb		98
77) Pentachlorophenol	6.275	266	49246	37560.7979317	ppb		99
78) Phenanthrene	6.451	178	440824	28484.0401965	ppb		99
79) Anthracene	6.493	178	437751	30755.2925924	ppb		98
80) Carbazole	6.610	167	385203	31999.4175581	ppb		99
81) Di-n-butyl phthalate	6.881	149	608371	34873.9743472	ppb		100
83) Fluoranthene	7.457	202	461554	31933.8146061	ppb		100
86) Pyrene	7.687	202	472544	27909.1131163	ppb		99
88) Benzylbutyl phthalate	8.445	149	240272	38056.0281756	ppb		98
90) Benzo(a)anthracene	9.239	228	379776	31620.6351628	ppb		99
91) Chrysene	9.298	228	380085	28883.5511661	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.339	149	354516	38301.5951884	ppb		98
93) Di-n-octyl phthalate	10.569	149	549350	42584.0048156	ppb		100
95) Benzo(b)fluoranthene	11.186	252	363170	33596.9345021	ppb		98
96) Benzo(k)fluoranthene	11.245	252	363957	32700.0638399	ppb		99
97) Benzo(a)pyrene	11.845	252	303156	35565.4967114	ppb		100
98) Indeno(1,2,3-cd)pyrene	13.892	276	271655	34294.8931437	ppb		99
99) Dibenz(a,h)anthracene	13.939	278	299709	33335.5644575	ppb		97
100) Benzo(g,h,i)perylene	14.233	276	310410	32010.1091947	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_08.D  
Acq On : 31 Mar 2022 7:11 pm  
Operator : 3545  
Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 8 Sample Multiplier: 1

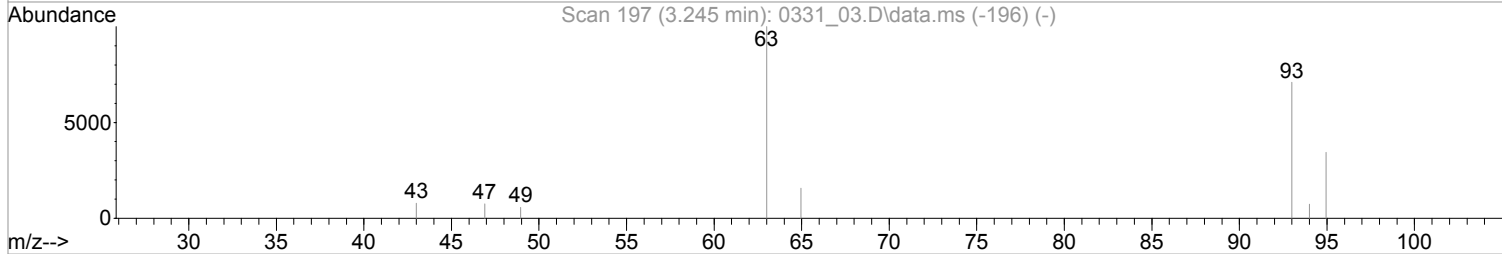
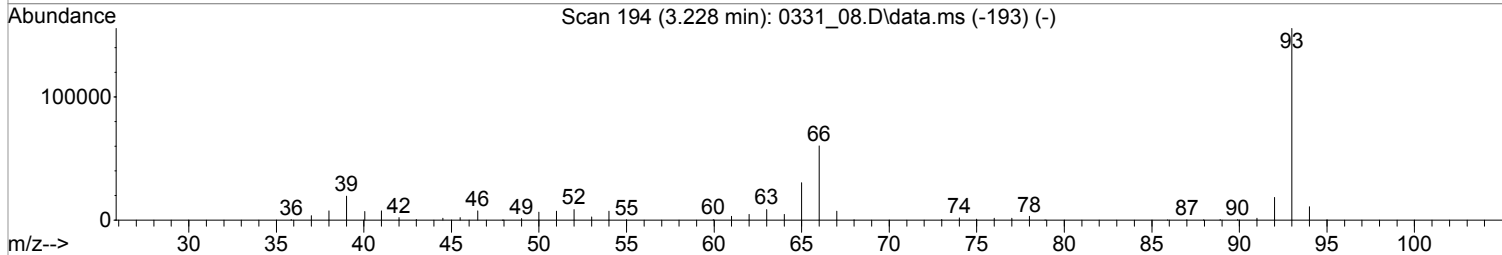
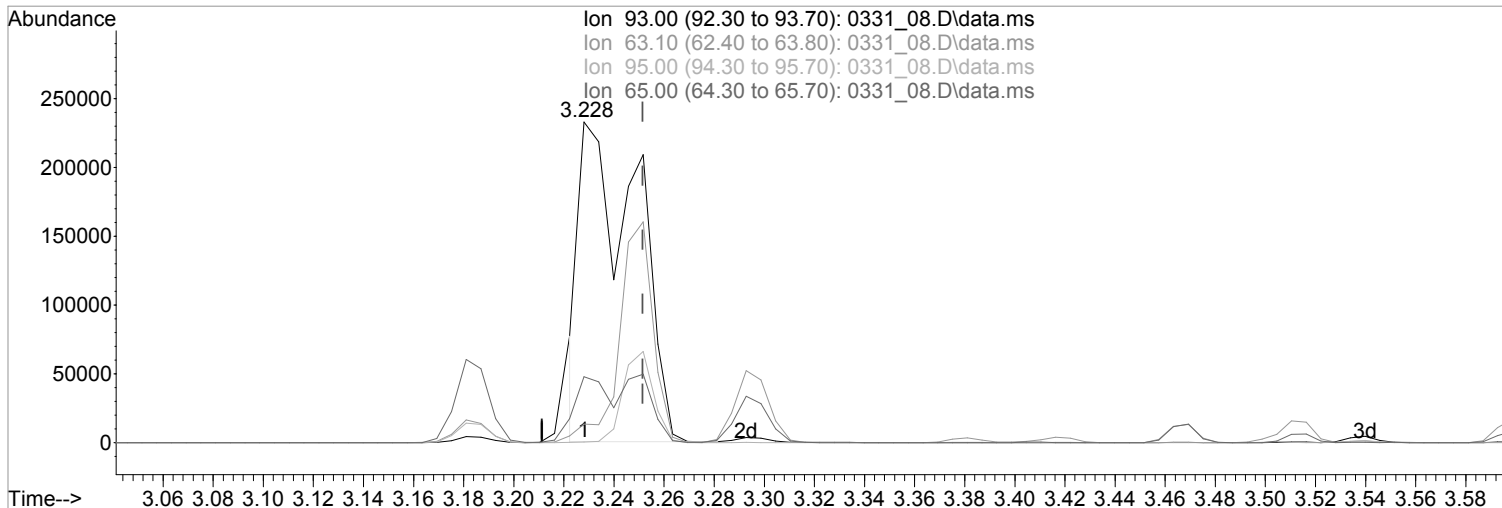
Quant Time: Apr 04 16:07:49 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:07:10 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

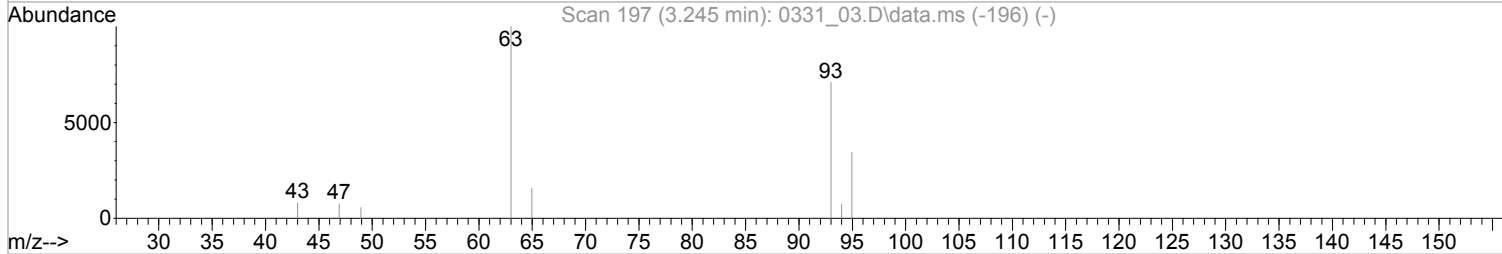
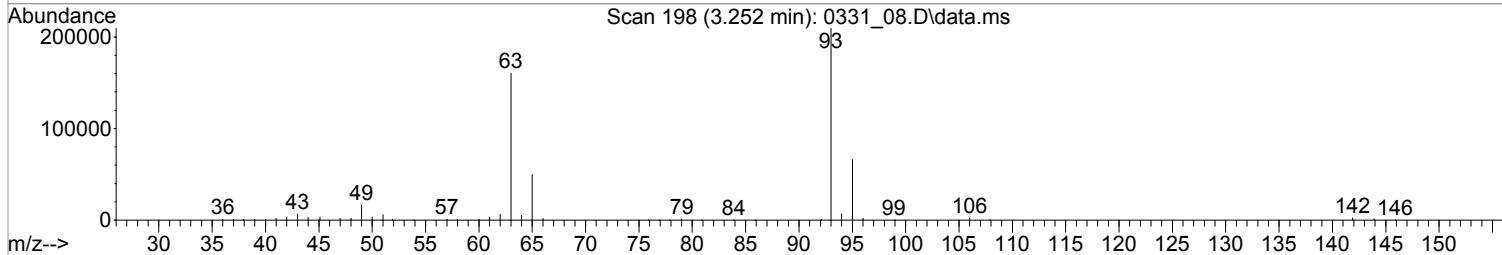
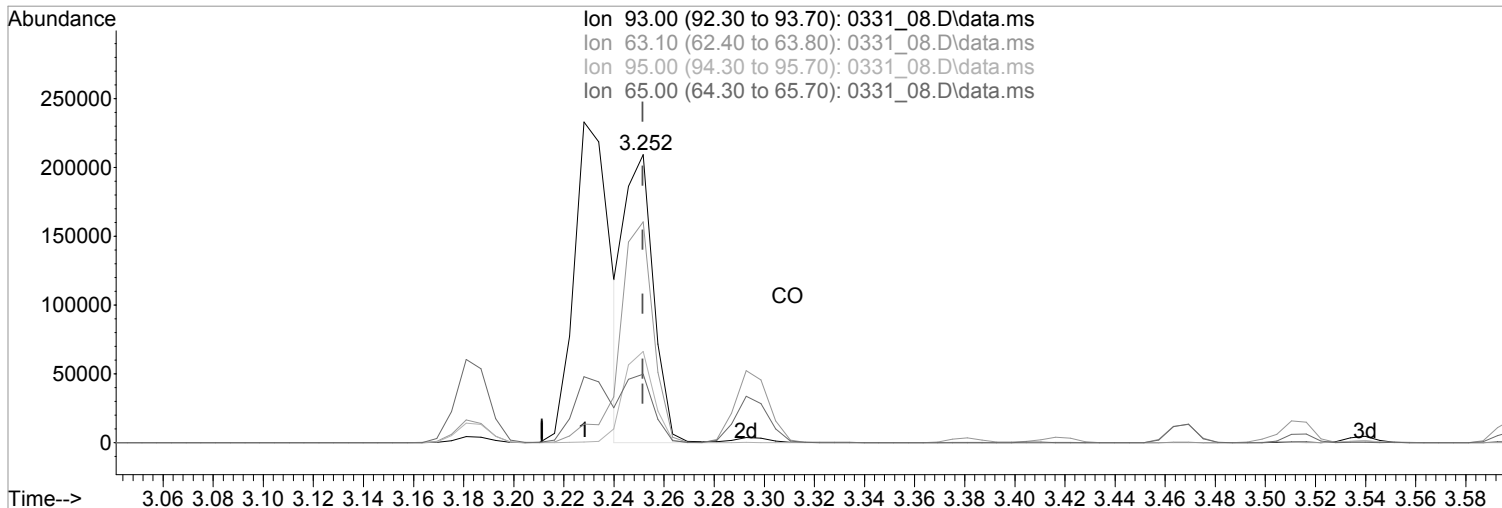
(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.023) 64297.1729842 ppb  
 Qvalue = 37  
 response 366812

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	4.74#
95.00	31.90	0.23#
65.00	23.10	20.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.252min (+0.000) 29396.0633812 ppb m

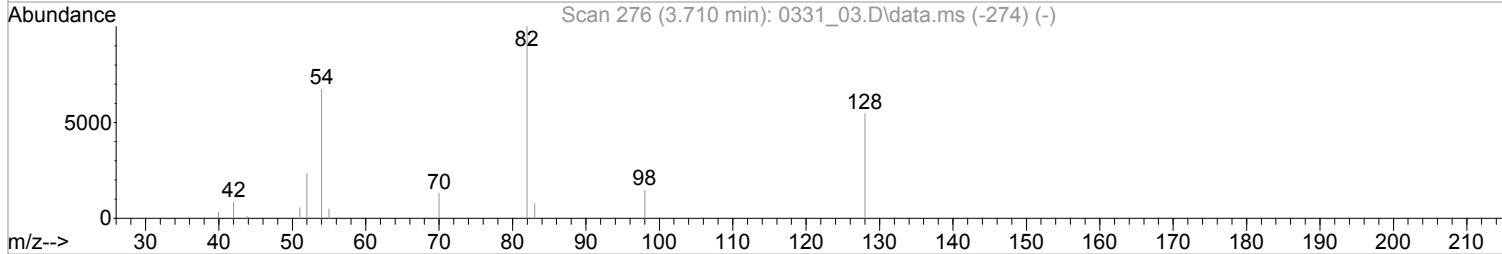
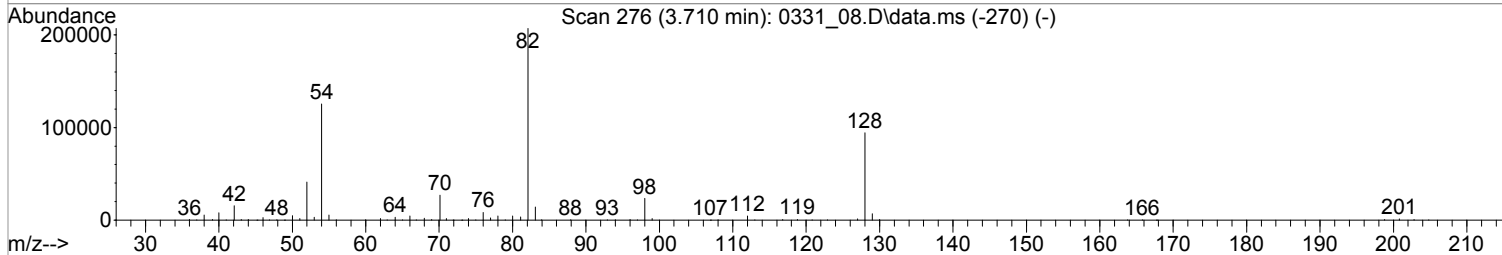
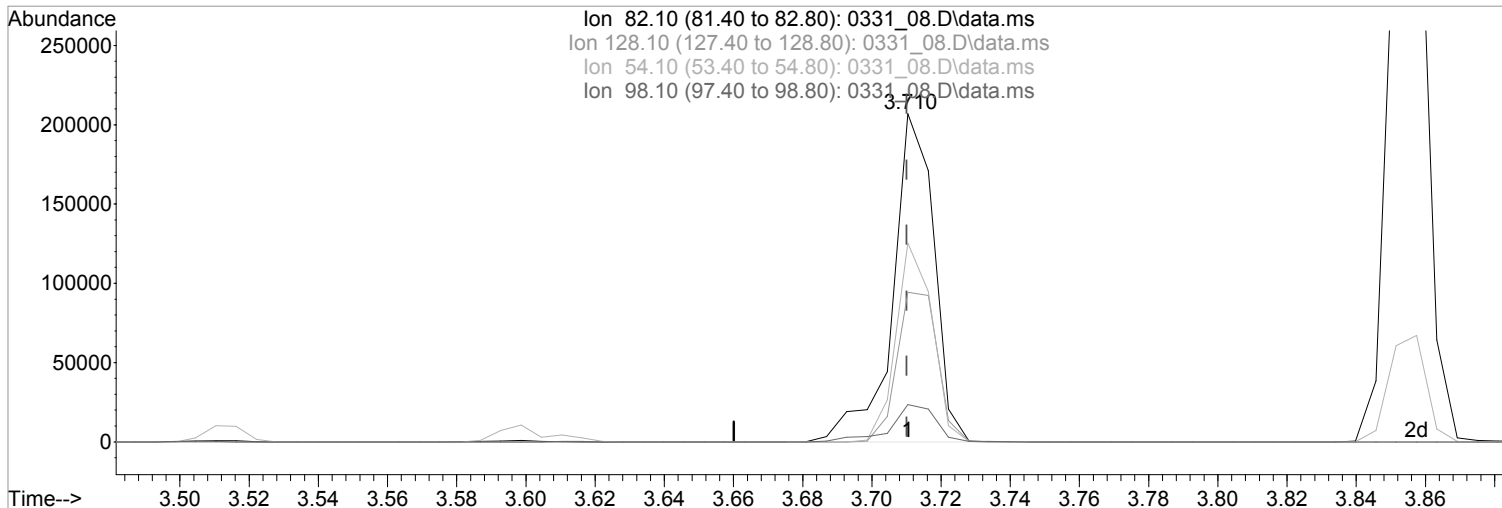
response 167703

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.64
95.00	31.90	31.63
65.00	23.10	23.78

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

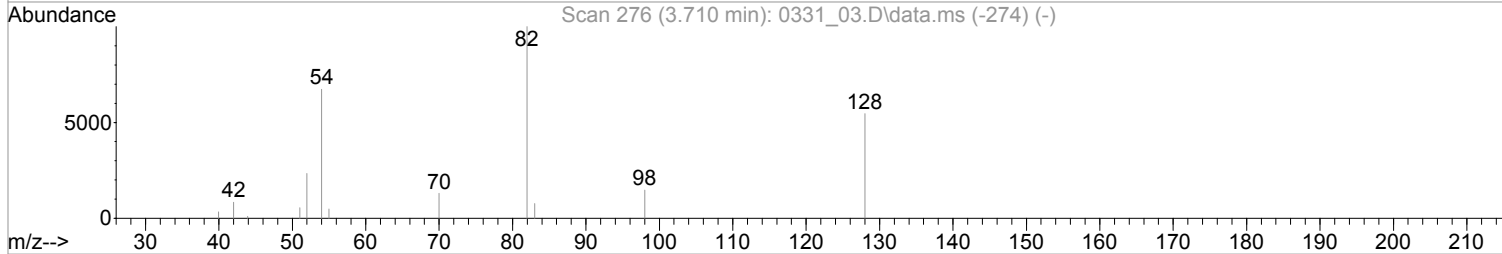
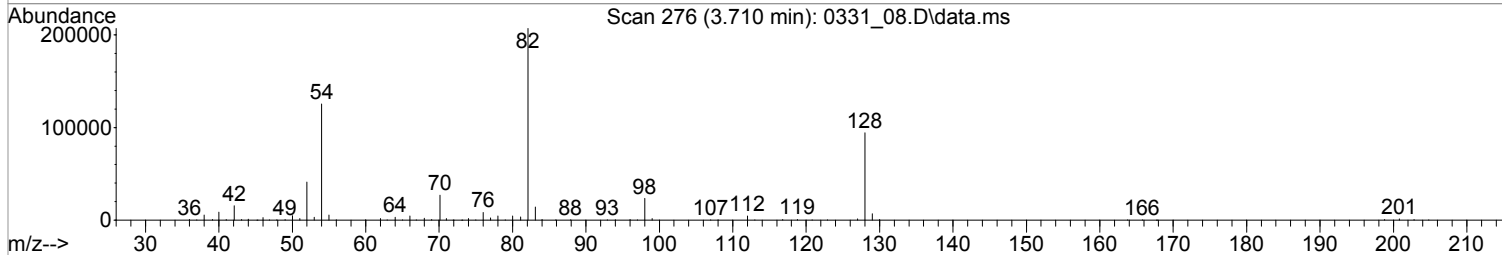
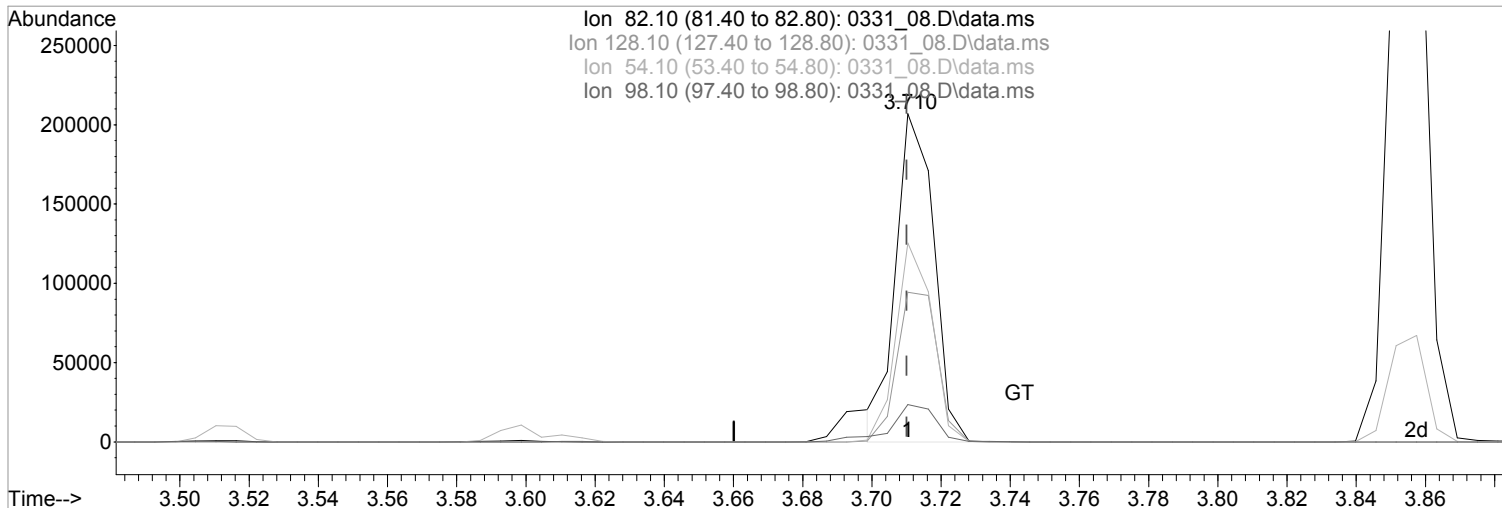
(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 34452.1549448 ppb  
 Qvalue = 99  
 response 171656

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.54
54.10	60.00	60.63
98.10	11.40	11.35

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_08.D  
 Acq On : 31 Mar 2022 7:11 pm  
 Operator : 3545  
 Sample : STD SVMS 30K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 04 16:07:13 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:07:10 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_08.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (+0.000) 31417.3001484 ppb m

response 156535

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.54
54.10	60.00	60.63
98.10	11.40	11.35

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:09:21 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.410	152	33061	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	133057	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	71412	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	114930	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.251	240	88961	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	77968	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.740	112	203931	39398.3935171	ppb	0.00	
Spiked Amount	20000.000			Recovery = 196.99%			
7) Phenol-d5	3.175	99	243776	39757.9207209	ppb	0.00	
Spiked Amount	20000.000			Recovery = 198.79%			
24) Nitrobenzene-d5	3.710	82	206939m	41156.7993172	ppb	0.00	
Spiked Amount	10000.000			Recovery = 411.57%			
50) 2-Fluorobiphenyl	4.828	172	421450	36358.0213610	ppb	0.00	
Spiked Amount	10000.000			Recovery = 363.58%			
73) 2,4,6-Tribromophenol	5.892	330	52112	45093.5757565	ppb	0.00	
Spiked Amount	20000.000			Recovery = 225.47%			
87) p-Terphenyl-d14	7.845	244	468126	37487.3348476	ppb	0.00	
Spiked Amount	10000.000			Recovery = 374.87%			
<b>Target Compounds</b>							
					Qvalue		
2) Pyridine	2.210	79	215337	39199.7597546	ppb	99	
3) N-Nitrosodimethylamine	2.199	42	101884	34057.7162643	ppb	95	
5) Aniline	3.228	66	113937	40229.0431035	ppb	# 20	
6) bis(2-Chloroethyl)ether	3.251	93	219184m	39099.6807544	ppb		
8) Phenol	3.187	94	256473	39374.8144871	ppb	94	
10) 2-Chlorophenol	3.293	128	217896	40356.4763866	ppb	98	
11) n-Decane	3.293	41	127032	35472.1283692	ppb	# 98	
12) 1,3-Dichlorobenzene	3.381	146	234296	37078.5499497	ppb	99	
13) 1,4-Dichlorobenzene	3.422	146	235807	37329.3526295	ppb	99	
14) Benzyl Alcohol	3.469	79	162508	41457.2445089	ppb	100	
15) 1,2-Dichlorobenzene	3.504	146	223975	36604.1805905	ppb	98	
16) bis(2-Chloroisopropyl)...	3.540	121	78759	37548.9281211	ppb	99	
17) 2,2-oxybis(1-chloropro...	3.540	121	78759	37548.9281211	ppb	99	
18) 2-Methylphenol	3.516	108	195561	40184.3520115	ppb	99	
19) Hexachloroethane	3.698	117	99275	37916.4240494	ppb	97	
20) N-Nitrosodi-n-propylamine	3.616	70	141625	41367.6274712	ppb	94	
21) 3&4-Methyl phenol	3.598	107	215277	40147.0649295	ppb	97	
25) Nitrobenzene	3.722	77	207934	40842.8260253	ppb	99	
26) Isophorone	3.857	82	414425	41877.8923137	ppb	93	
27) 2-Nitrophenol	3.904	139	106429	45894.6910183	ppb	93	
28) 2,4-Dimethylphenol	3.910	107	201269	40480.4960184	ppb	97	
29) bis(2-Chlorethoxy)methane	3.969	93	263088	38782.5012305	ppb	99	
30) 2,4-Dichlorophenol	4.045	162	161714	41566.3970266	ppb	95	
32) 1,2,4-Trichlorobenzene	4.104	180	177380	36961.8874658	ppb	97	
34) Naphthalene	4.157	128	612175m	35905.5101669	ppb		
35) 4-Chloroaniline	4.175	65	72463	42304.5815986	ppb	93	
36) Hexachloro-1,3-butadiene	4.222	225	96557	37316.3930938	ppb	98	
40) 4-Chloro-3-methylphenol	4.463	107	178473	44634.5178058	ppb	95	
41) 2-Methylnaphthalene	4.592	142	405791	38526.0570869	ppb	99	
42) 1-Methylnaphthalene	4.657	142	392103	38134.7387840	ppb	100	
47) Hexachlorocyclopentadiene	4.692	237	99377	43836.3485368	ppb	100	
48) 2,4,6-Trichlorophenol	4.769	196	115768	44826.2313232	ppb	99	



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

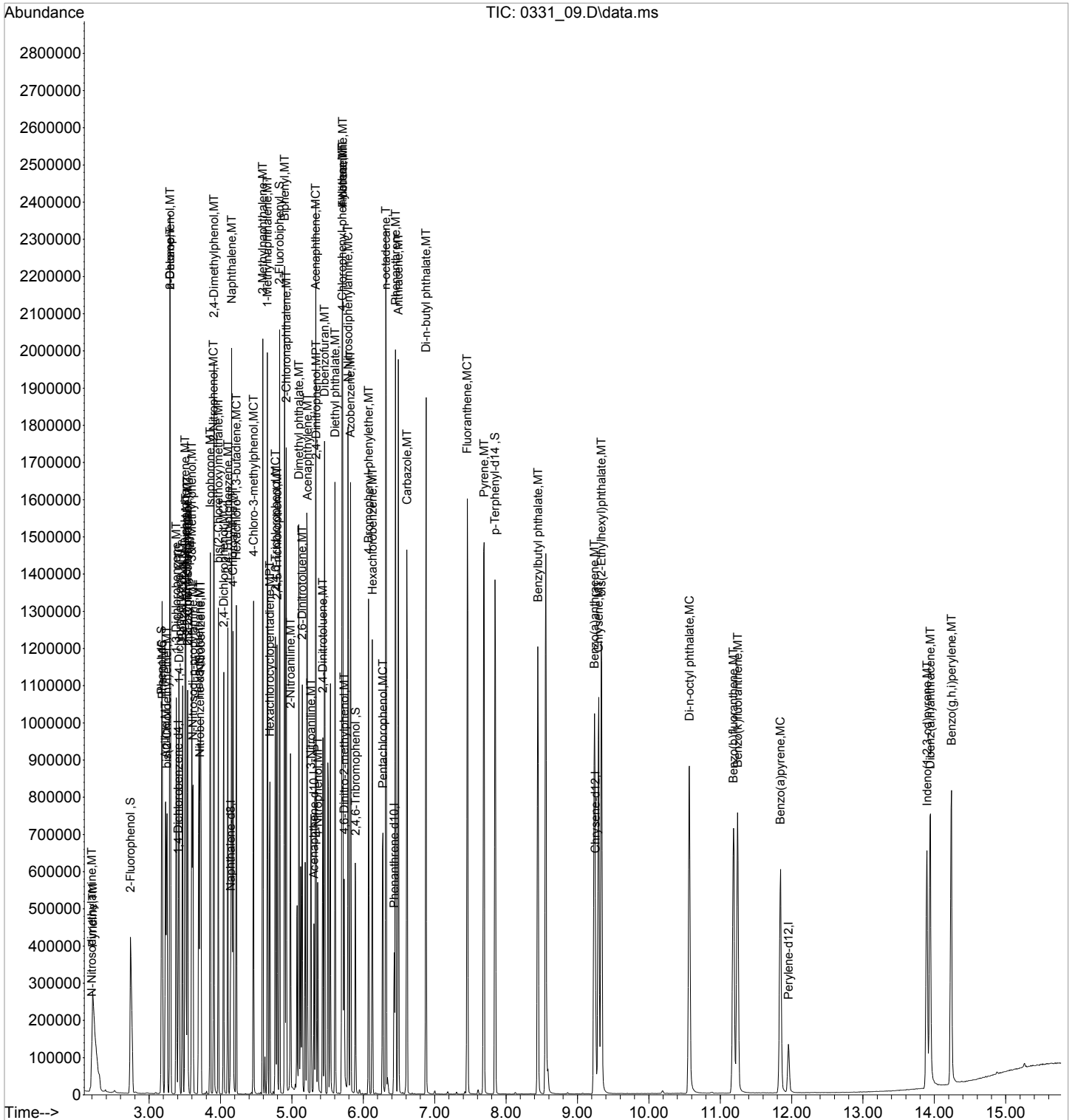
Quant Time: Apr 04 16:09:21 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	119302	45453.5255064	ppb		96
51) Biphenyl	4.898	154	480393	36947.6299186	ppb		99
52) 2-Chloronaphthalene	4.922	162	373851	37326.0436365	ppb		98
53) 2-Nitroaniline	4.981	138	127833	48518.5215917	ppb		99
54) Acenaphthylene	5.216	152	592569	38881.8295975	ppb		99
55) Dimethyl phthalate	5.098	163	444091	40193.5954557	ppb		92
56) 2,6-Dinitrotoluene	5.145	165	103807	44504.8915003	ppb		87
57) 3-Nitroaniline	5.269	138	96588	45668.5841609	ppb		87
58) Acenaphthene	5.334	153	388931	37316.7229950	ppb		99
59) 2,4-Dinitrophenol	5.339	184	36205	54603.2195077	ppb	#	61
60) Dibenzofuran	5.457	168	518647	37194.8213715	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	127967	47082.0688130	ppb		92
63) 4-Nitrophenol	5.363	139	72385	49365.8107588	ppb		89
64) Fluorene	5.710	166	434013	37758.1780561	ppb		99
65) 4-Chlorophenyl-phenyle...	5.704	204	192964	36606.8438369	ppb		98
66) Diethyl phthalate	5.604	149	453615	39207.5189475	ppb		99
67) 4-Nitroaniline	5.710	138	53281	37694.5684669	ppb		94
68) Azobenzene	5.822	77	456869	39433.4676522	ppb		99
71) 4,6-Dinitro-2-methylph...	5.734	198	55654	57714.6966225	ppb		89
72) N-Nitrosodiphenylamine	5.787	169	350165	38968.2162355	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	105898	38256.7651444	ppb		98
75) Hexachlorobenzene	6.128	284	118963	36265.8792912	ppb		99
76) n-octadecane	6.316	55	83858	38849.3842584	ppb		99
77) Pentachlorophenol	6.275	266	66534	47058.4196872	ppb		99
78) Phenanthrene	6.451	178	568662	36528.3050546	ppb		99
79) Anthracene	6.492	178	571694	39427.9021495	ppb		98
80) Carbazole	6.610	167	491734	39824.5607550	ppb		99
81) Di-n-butyl phthalate	6.881	149	777001	42748.1261335	ppb		100
83) Fluoranthene	7.457	202	603883	40747.9721884	ppb		100
86) Pyrene	7.692	202	623307	36620.5339470	ppb		100
88) Benzylbutyl phthalate	8.445	149	321842	47972.5534686	ppb		99
90) Benzo(a)anthracene	9.239	228	501256	40668.1622367	ppb		99
91) Chrysene	9.298	228	495769	37273.1327916	ppb		100
92) bis(2-Ethylhexyl)phtha...	9.333	149	468790	47601.6976177	ppb		99
93) Di-n-octyl phthalate	10.569	149	733280	52235.2983621	ppb		100
95) Benzo(b)fluoranthene	11.186	252	474283	42112.1585885	ppb		98
96) Benzo(k)fluoranthene	11.245	252	481495	41725.0907736	ppb		99
97) Benzo(a)pyrene	11.845	252	399588	44516.7656301	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.898	276	354988	42850.6886914	ppb		96
99) Dibenz(a,h)anthracene	13.945	278	390368	41733.1534265	ppb		100
100) Benzo(g,h,i)perylene	14.239	276	403531	40288.2616536	ppb		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

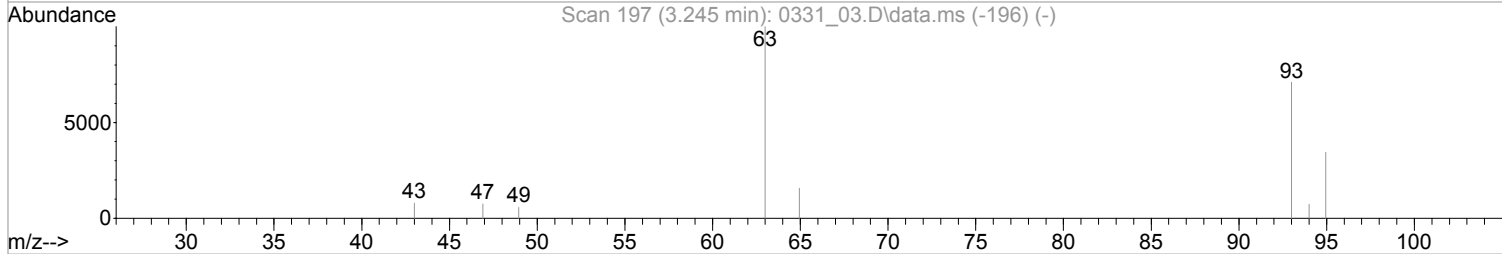
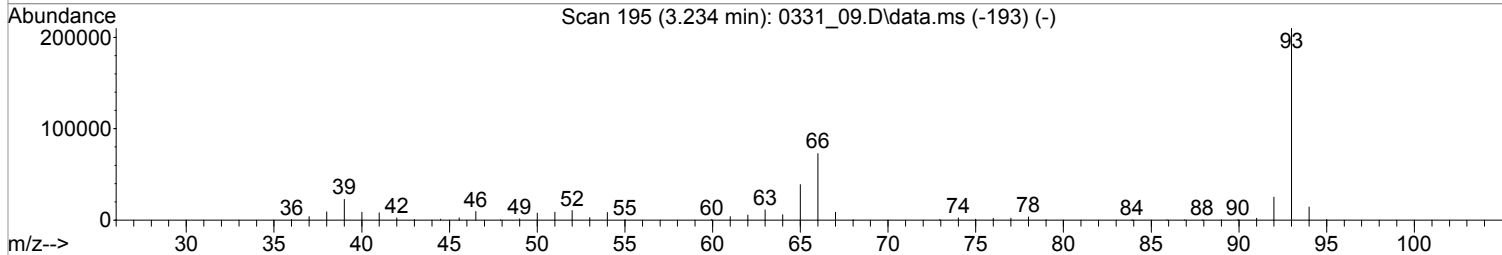
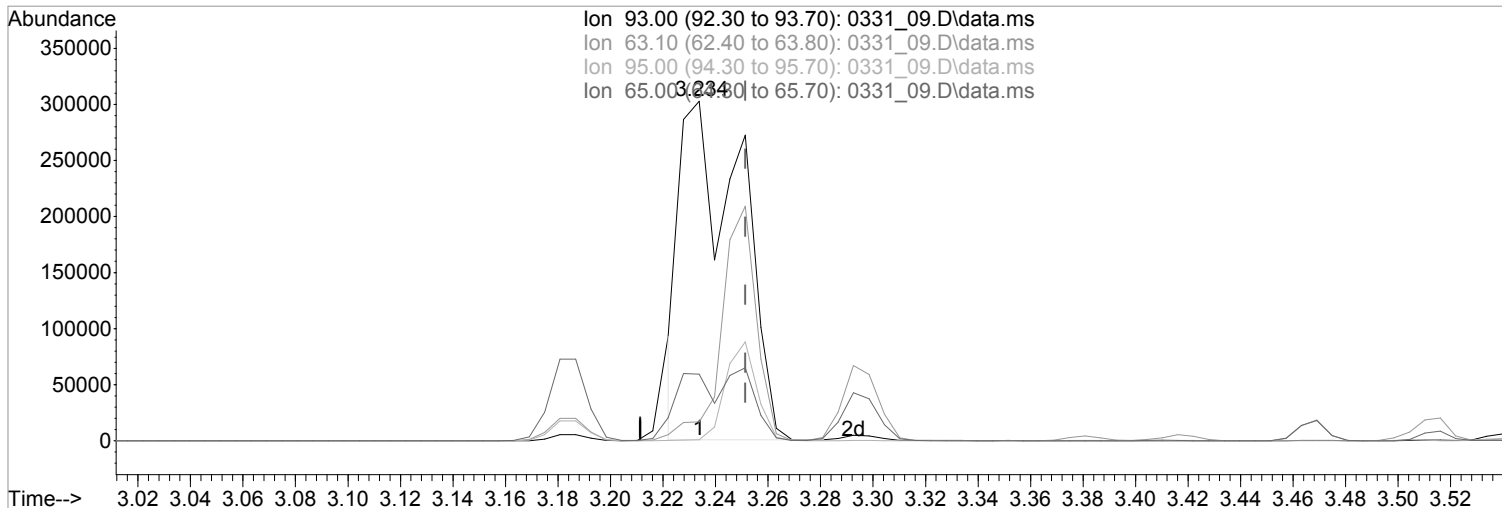
Quant Time: Apr 04 16:09:21 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

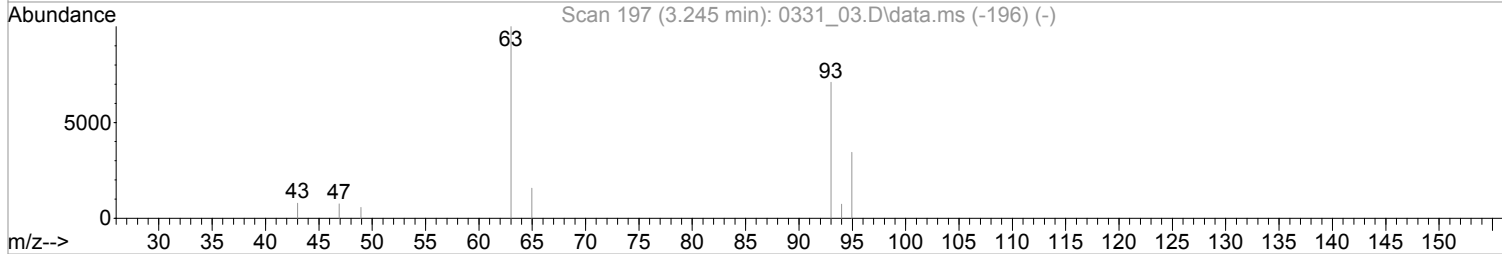
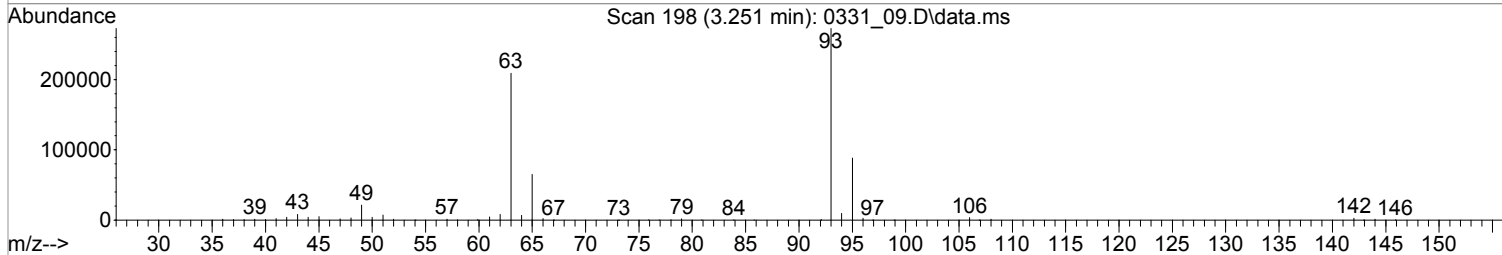
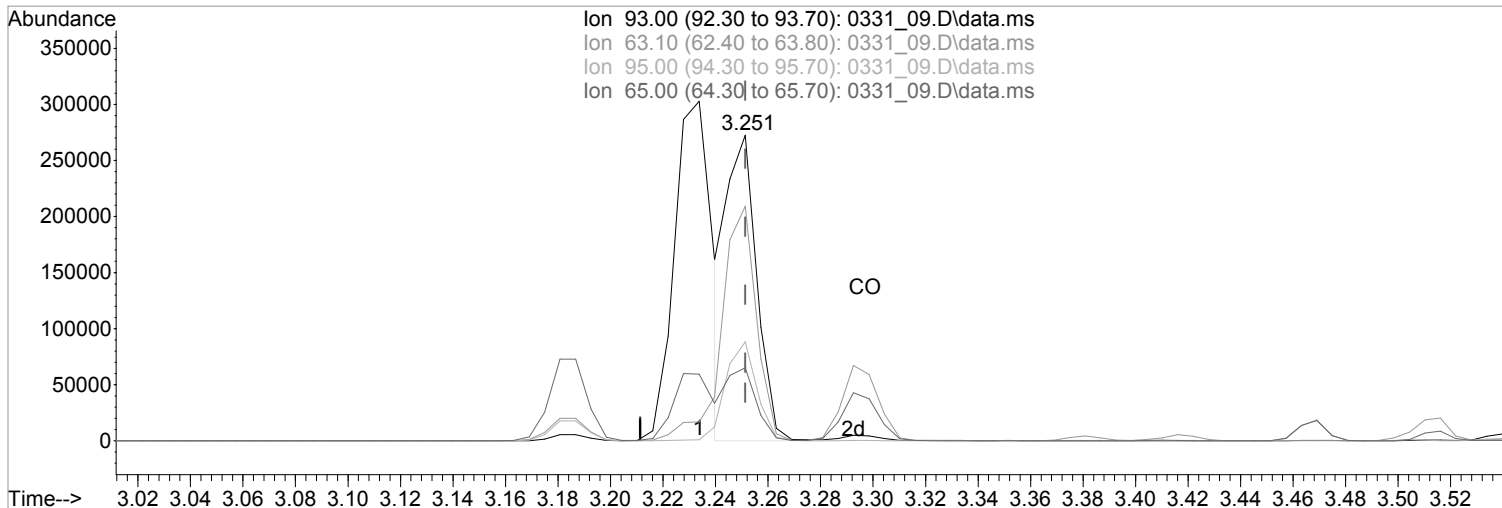
(6) bis(2-Chloroethyl)ether (MT)  
 3.234min (-0.018) 85884.8291794 ppb  
 Qvalue = 36  
 response 481451

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	4.59#
95.00	31.90	0.31#
65.00	23.10	19.03

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (-0.000) 39099.6807544 ppb m

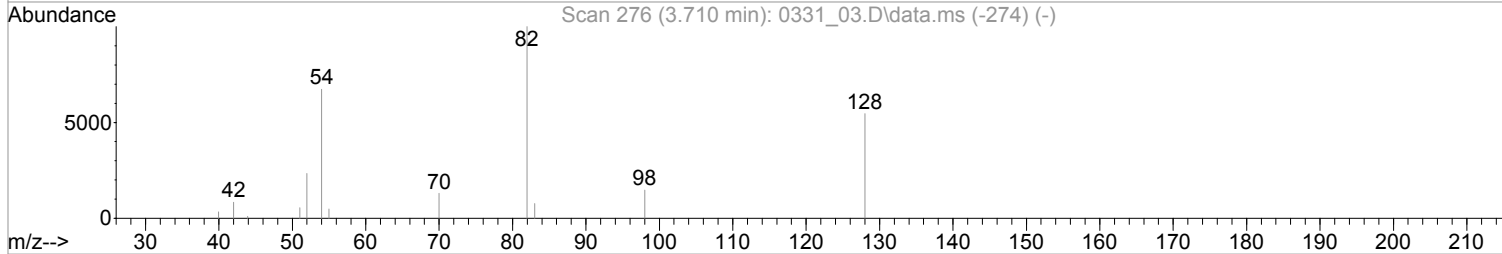
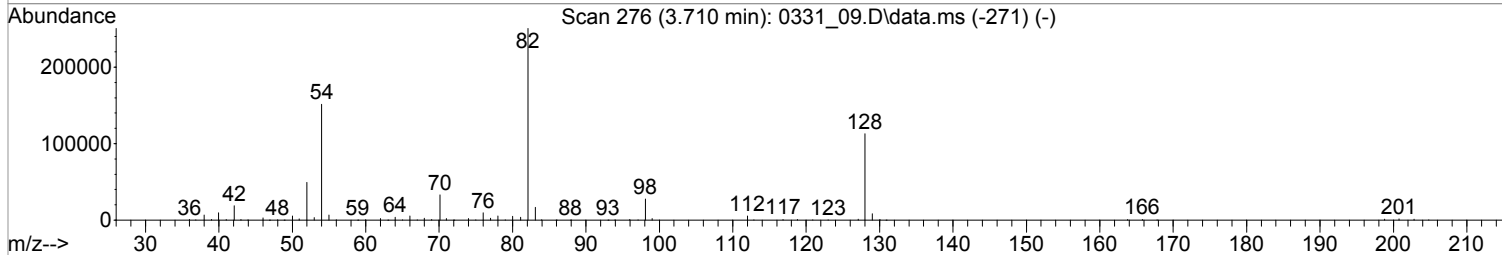
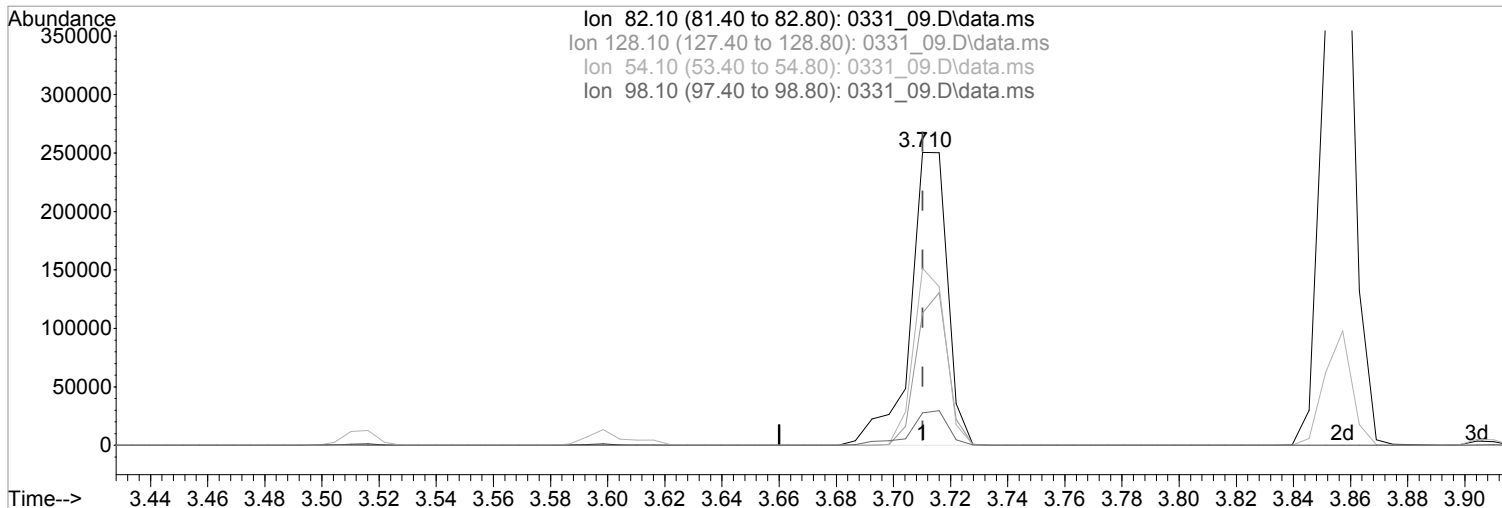
response 219184

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	76.70
95.00	31.90	32.33
65.00	23.10	23.85

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

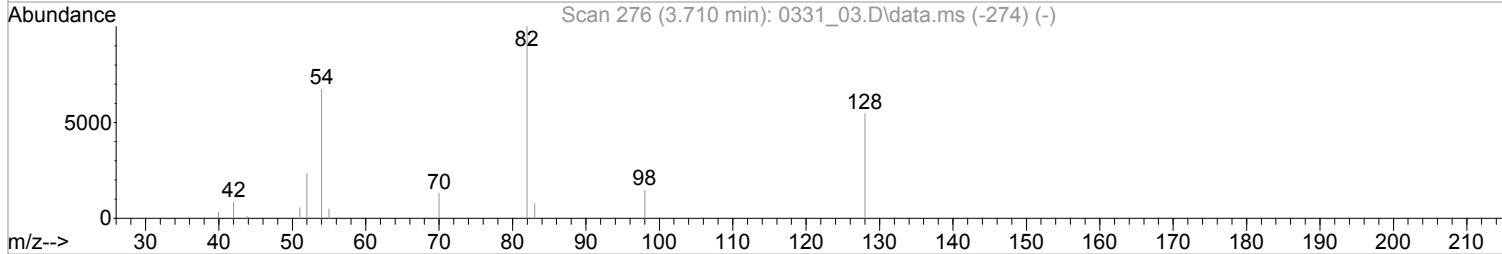
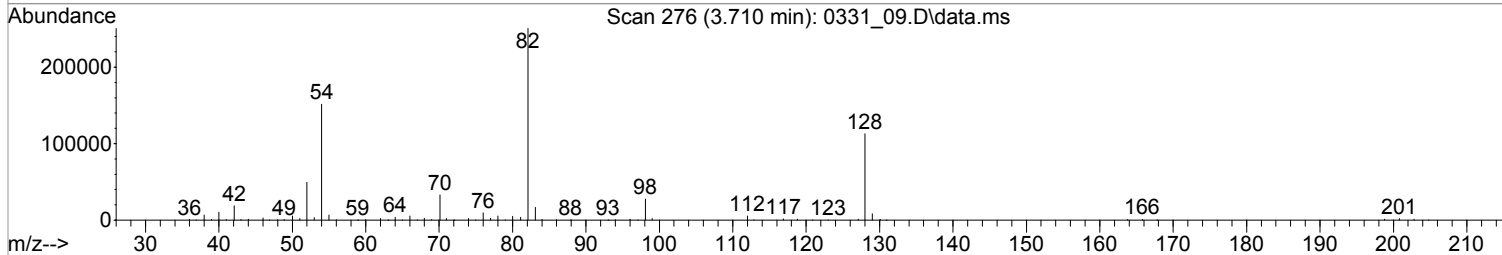
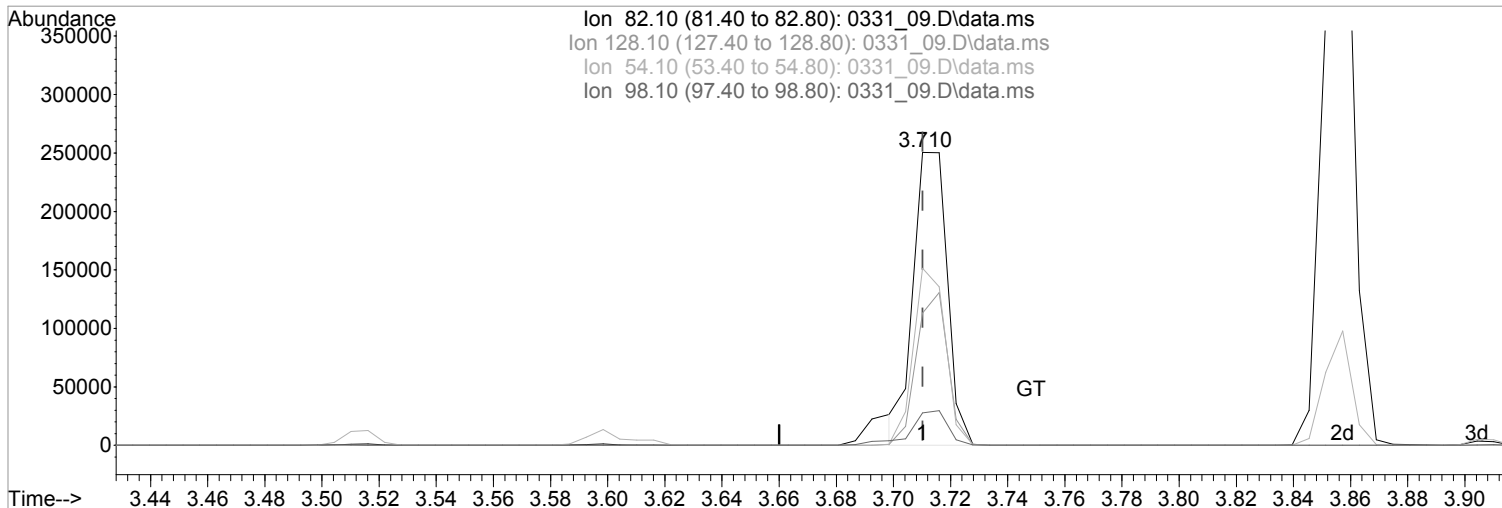
(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 44885.2725233 ppb  
 Qvalue = 99  
 response 225686

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.16
54.10	60.00	60.49
98.10	11.40	11.07

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

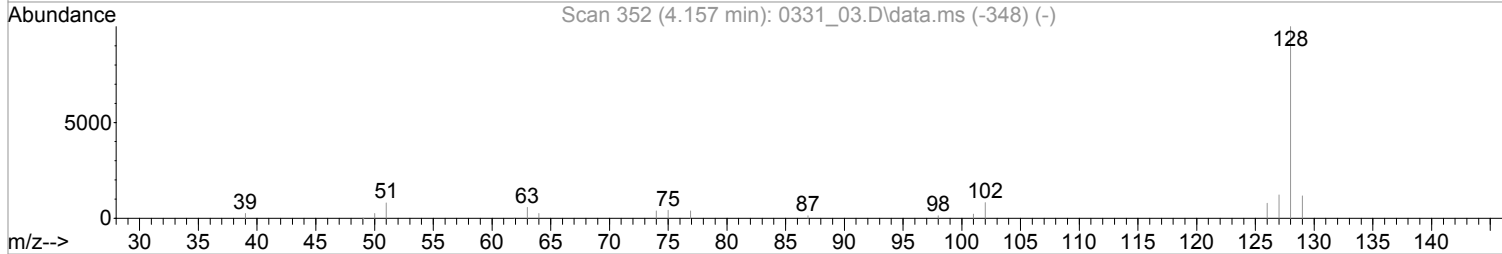
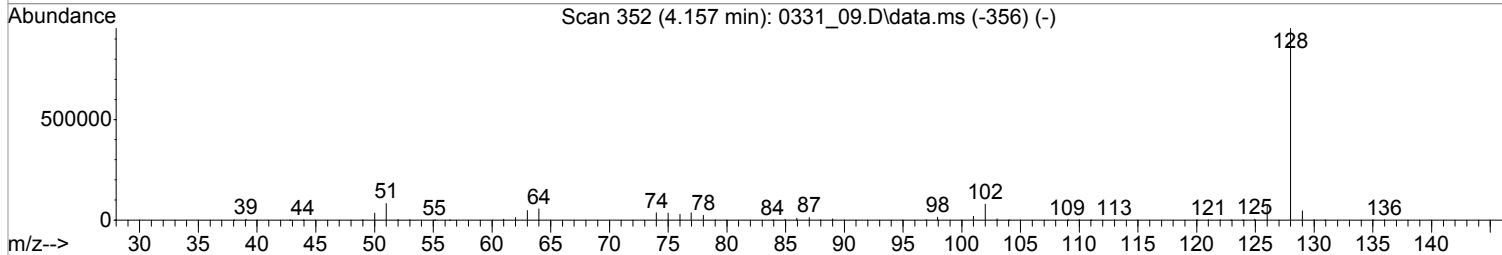
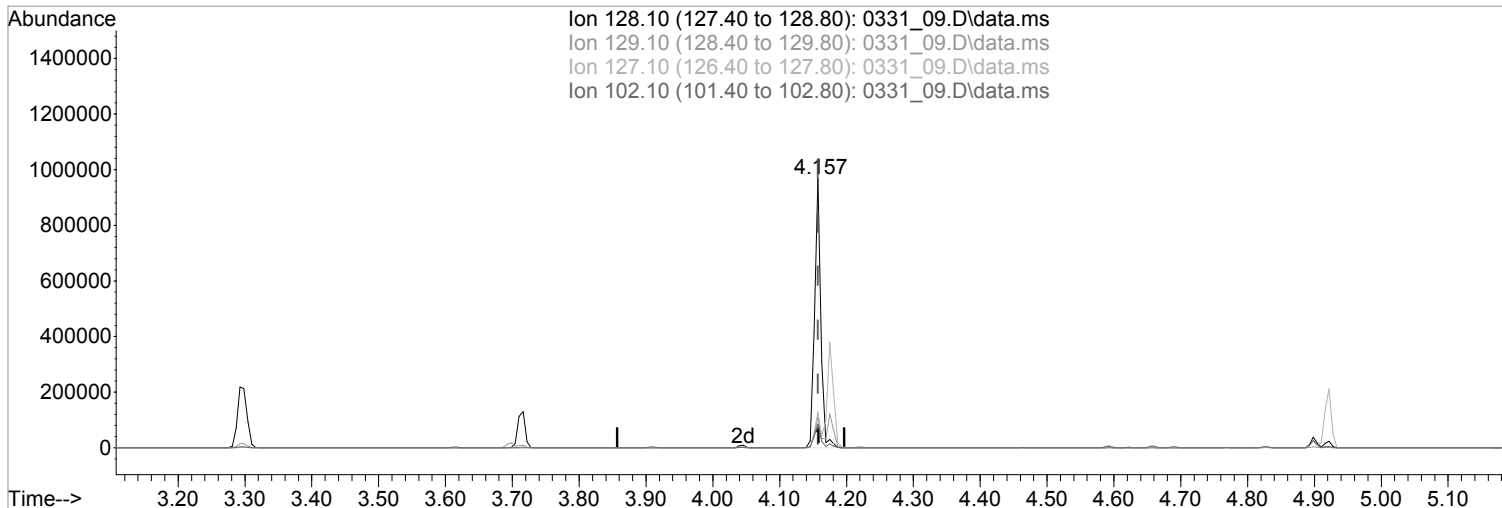
(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 41156.7993172 ppb m  
 response 206939  

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.16
54.10	60.00	60.49
98.10	11.40	11.07

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

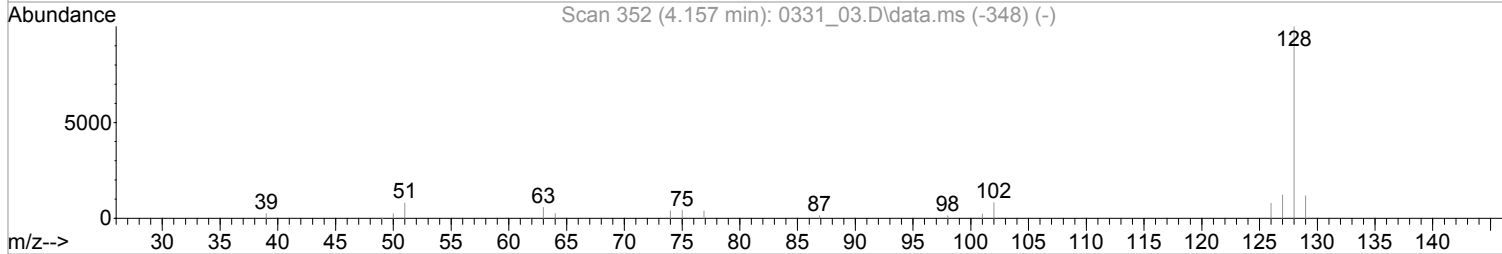
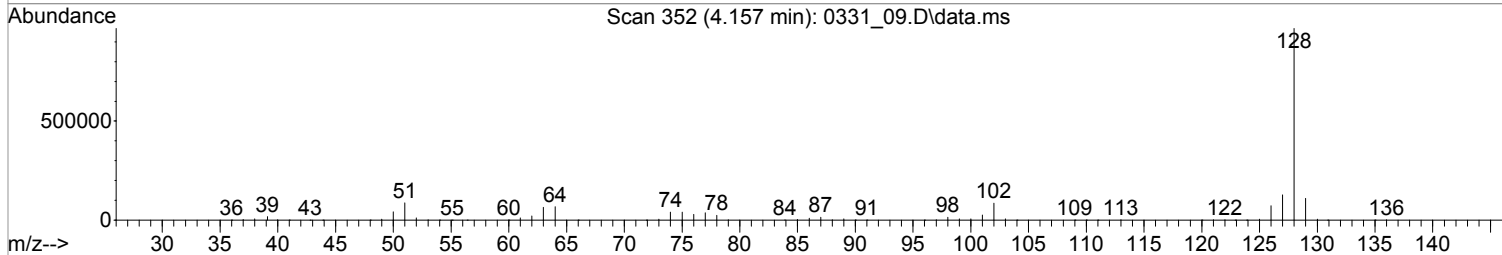
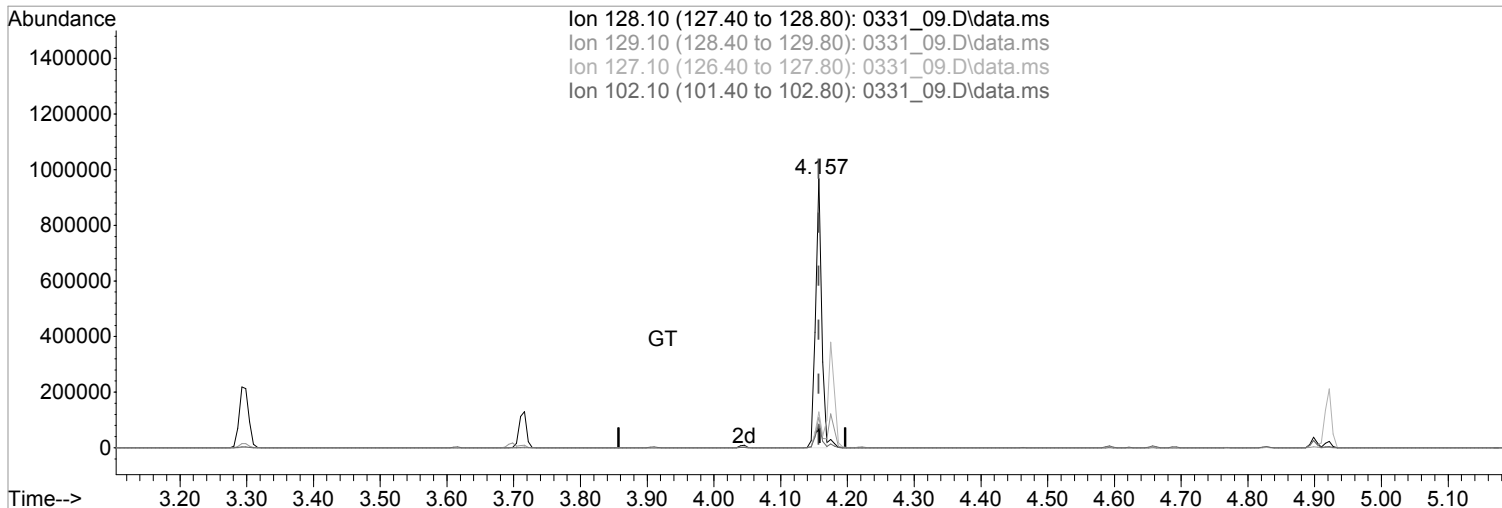
(34) Naphthalene (MT)  
 4.157min (-0.000) 36849.7545549 ppb  
 Qvalue = 99  
 response 628274

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.30
127.10	12.80	13.27
102.10	8.30	8.84

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_09.D  
 Acq On : 31 Mar 2022 7:32 pm  
 Operator : 3545  
 Sample : STD SVMS 40K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 04 16:08:34 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:08:32 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_09.D\data.ms

(34) Naphthalene (MT)  
 4.157min (-0.000) 35905.5101669 ppb m

response 612175

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.30
127.10	12.80	13.27
102.10	8.30	8.84



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:49 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
<b>Internal Standards</b>							
1) 1,4-Dichlorobenzene-d4	3.410	152	33286	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	137379	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	72853	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	116755	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.257	240	89872	8000.0000000	ppb	0.01	
94) Perylene-d12	11.957	264	80041	8000.0000000	ppb	0.00	
<b>System Monitoring Compounds</b>							
4) 2-Fluorophenol	2.740	112	264507	50865.2212692	ppb	0.00	
Spiked Amount	20000.000		Recovery	= 254.33%			
7) Phenol-d5	3.175	99	314531	50994.8347848	ppb	0.00	
Spiked Amount	20000.000		Recovery	= 254.97%			
24) Nitrobenzene-d5	3.716	82	265314m	50896.3023359	ppb	0.00	
Spiked Amount	10000.000		Recovery	= 508.96%			
50) 2-Fluorobiphenyl	4.828	172	542476	46477.6781496	ppb	0.00	
Spiked Amount	10000.000		Recovery	= 464.78%			
73) 2,4,6-Tribromophenol	5.892	330	68453	57096.1272770	ppb	0.00	
Spiked Amount	20000.000		Recovery	= 285.48%			
87) p-Terphenyl-d14	7.851	244	598918	47904.8278187	ppb	0.00	
Spiked Amount	10000.000		Recovery	= 479.05%			
<b>Target Compounds</b>							
2) Pyridine	2.210	79	278007	50410.1333313	ppb	99	
3) N-Nitrosodimethylamine	2.199	42	130731	44346.4125409	ppb	94	
5) Aniline	3.234	66	145606	51021.5276676	ppb	#	20
6) bis(2-Chloroethyl)ether	3.251	93	282472m	50210.3023281	ppb		
8) Phenol	3.187	94	331731	50697.6796332	ppb	94	
10) 2-Chlorophenol	3.293	128	278445	51157.0179990	ppb	99	
11) n-Decane	3.293	41	162108	45699.6951523	ppb	#	99
12) 1,3-Dichlorobenzene	3.381	146	298942	47484.7663177	ppb	98	
13) 1,4-Dichlorobenzene	3.416	146	300039	47630.8185250	ppb	96	
14) Benzyl Alcohol	3.469	79	210910	53164.6348947	ppb	100	
15) 1,2-Dichlorobenzene	3.504	146	285067	46841.6039443	ppb	98	
16) bis(2-Chloroisopropyl)...	3.540	121	101326	48405.0979156	ppb	97	
17) 2,2-oxybis(1-chloropro...	3.540	121	101326	48405.0979156	ppb	97	
18) 2-Methylphenol	3.516	108	247855	50552.3018914	ppb	97	
19) Hexachloroethane	3.698	117	128718	49195.4518813	ppb	97	
20) N-Nitrosodi-n-propylamine	3.616	70	184502	53267.2220924	ppb	96	
21) 3&4-Methyl phenol	3.598	107	275858	51070.2615719	ppb	97	
25) Nitrobenzene	3.728	77	266900	50623.3549262	ppb	92	
26) Isophorone	3.857	82	534310	51945.3365587	ppb	94	
27) 2-Nitrophenol	3.910	139	138474	56448.2096839	ppb	83	
28) 2,4-Dimethylphenol	3.910	107	256556	49891.1889295	ppb	97	
29) bis(2-Chlorethoxy)methane	3.969	93	337131	48344.0868992	ppb	98	
30) 2,4-Dichlorophenol	4.045	162	210856	52200.5777632	ppb	95	
32) 1,2,4-Trichlorobenzene	4.104	180	227453	46408.3958517	ppb	98	
34) Naphthalene	4.157	128	788352m	45448.6219591	ppb		
35) 4-Chloroaniline	4.175	65	95090	53256.5383024	ppb	92	
36) Hexachloro-1,3-butadiene	4.222	225	121864	46056.5273806	ppb	98	
40) 4-Chloro-3-methylphenol	4.463	107	230866	55010.5698340	ppb	96	
41) 2-Methylnaphthalene	4.592	142	523350	48378.6737429	ppb	99	
42) 1-Methylnaphthalene	4.657	142	504378	47829.6186952	ppb	100	
47) Hexachlorocyclopentadiene	4.692	237	129995	55448.3866010	ppb	98	
48) 2,4,6-Trichlorophenol	4.769	196	150352	56098.9471818	ppb	97	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:49 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	156604	57367.9164041	ppb		96
51) Biphenyl	4.898	154	622475	47445.6021582	ppb		99
52) 2-Chloronaphthalene	4.922	162	482181	47644.7044791	ppb		98
53) 2-Nitroaniline	4.981	138	165837	59582.9836669	ppb		98
54) Acenaphthylene	5.216	152	755128	48762.9428449	ppb		100
55) Dimethyl phthalate	5.098	163	561198	49753.6083527	ppb		90
56) 2,6-Dinitrotoluene	5.145	165	134010	55279.7104365	ppb		90
57) 3-Nitroaniline	5.269	138	123042	55709.9964627	ppb		92
58) Acenaphthene	5.334	153	499015	47386.0236386	ppb		99
59) 2,4-Dinitrophenol	5.339	184	50832	70033.2715714	ppb	#	80
60) Dibenzofuran	5.457	168	655054	46514.0746116	ppb		99
61) 2,4-Dinitrotoluene	5.434	165	167787	58777.2992537	ppb		88
63) 4-Nitrophenol	5.369	139	95099	61185.9537290	ppb		93
64) Fluorene	5.710	166	550987	47365.7672850	ppb		98
65) 4-Chlorophenyl-phenyle...	5.704	204	245888	46285.2052677	ppb		97
66) Diethyl phthalate	5.604	149	571768	48579.8844394	ppb		98
67) 4-Nitroaniline	5.716	138	69559	48705.2165231	ppb		94
68) Azobenzene	5.822	77	585843	49665.8520799	ppb		99
71) 4,6-Dinitro-2-methylph...	5.734	198	76313	72546.8457901	ppb		83
72) N-Nitrosodiphenylamine	5.792	169	449103	49379.3048872	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	136813	48957.3690334	ppb		98
75) Hexachlorobenzene	6.128	284	151571	46098.9591670	ppb		98
76) n-octadecane	6.322	55	105949	48515.7513457	ppb		99
77) Pentachlorophenol	6.275	266	88723	59665.7277510	ppb		97
78) Phenanthrene	6.451	178	723203	46303.2942577	ppb		98
79) Anthracene	6.492	178	732119	49804.4207366	ppb		98
80) Carbazole	6.616	167	639932	51048.7019619	ppb		100
81) Di-n-butyl phthalate	6.881	149	1004284	53860.2373075	ppb		99
83) Fluoranthene	7.463	202	773416	51234.8738508	ppb		99
86) Pyrene	7.692	202	788011	46387.8040121	ppb		99
88) Benzylbutyl phthalate	8.445	149	420027	60257.2779756	ppb		100
90) Benzo(a)anthracene	9.239	228	649552	52041.4055443	ppb		98
91) Chrysene	9.298	228	642927	48317.4143460	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.339	149	610913	59781.2931036	ppb		99
93) Di-n-octyl phthalate	10.569	149	964940	65192.1281284	ppb		100
95) Benzo(b)fluoranthene	11.192	252	615009	52794.8465110	ppb		99
96) Benzo(k)fluoranthene	11.251	252	625919	52512.1784771	ppb		98
97) Benzo(a)pyrene	11.845	252	526182	56195.4572647	ppb		98
98) Indeno(1,2,3-cd)pyrene	13.898	276	454752	52932.6248519	ppb		99
99) Dibenz(a,h)anthracene	13.945	278	498154	51557.8237309	ppb		98
100) Benzo(g,h,i)perylene	14.239	276	507520	49307.3651933	ppb		97

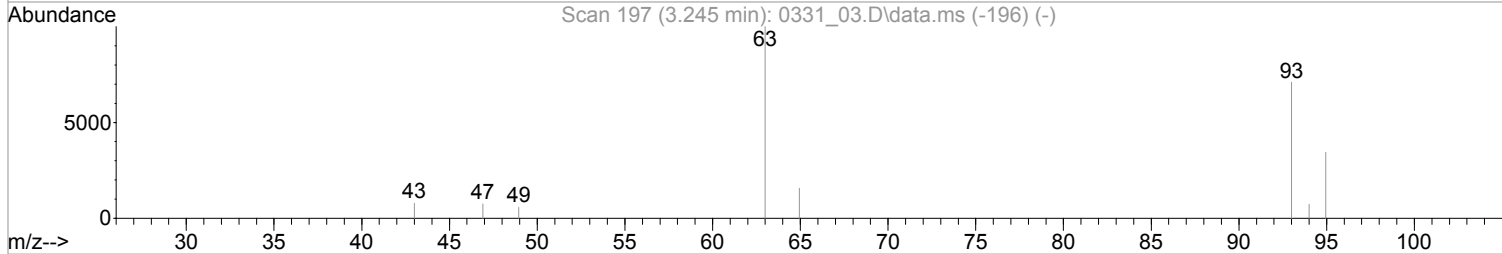
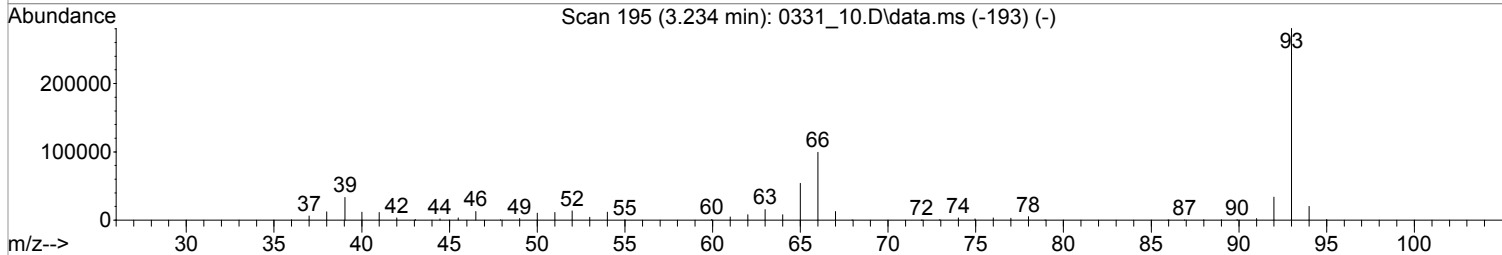
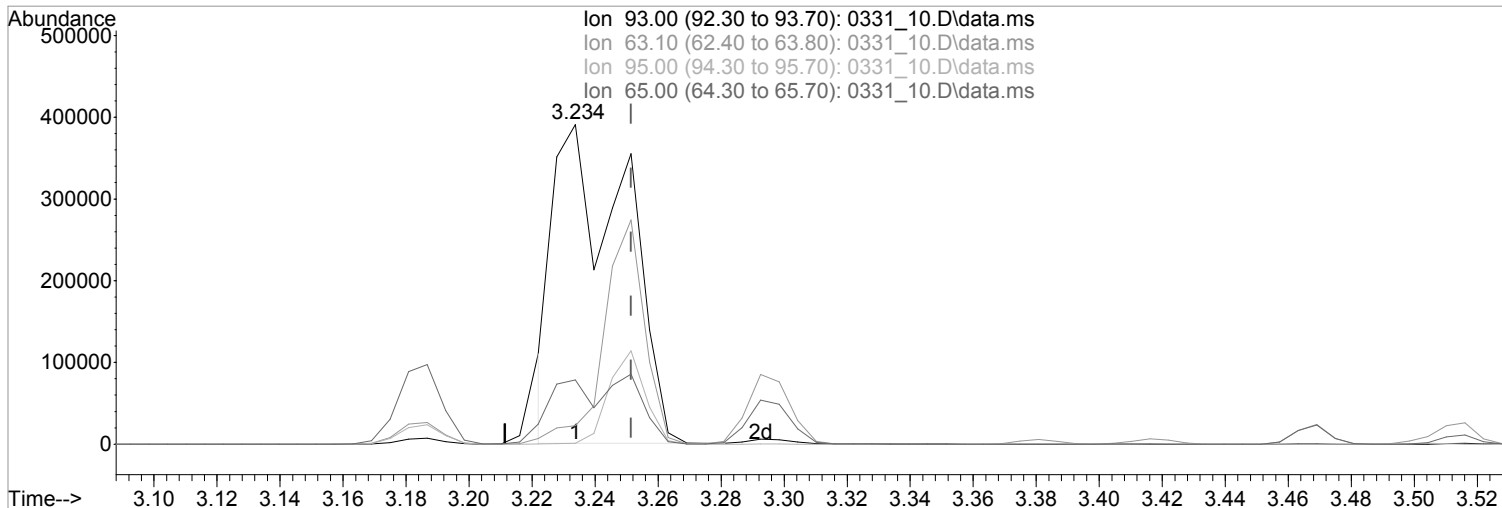
(#) = qualifier out of range (m) = manual integration (+) = signals summed



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

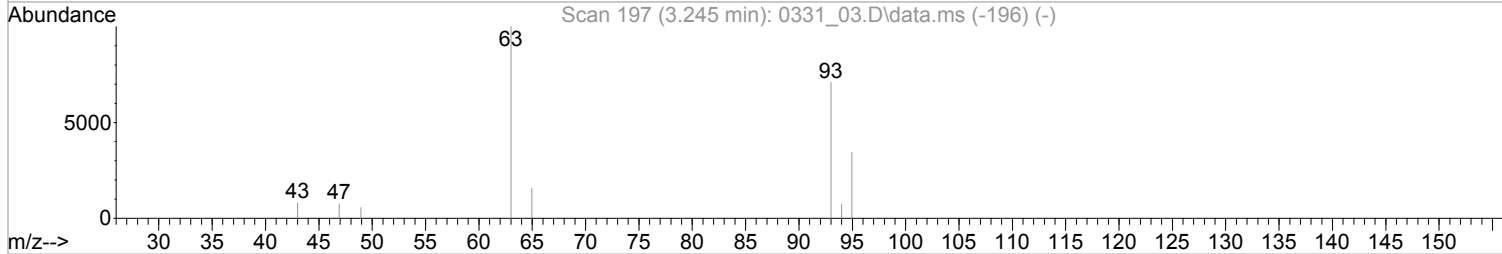
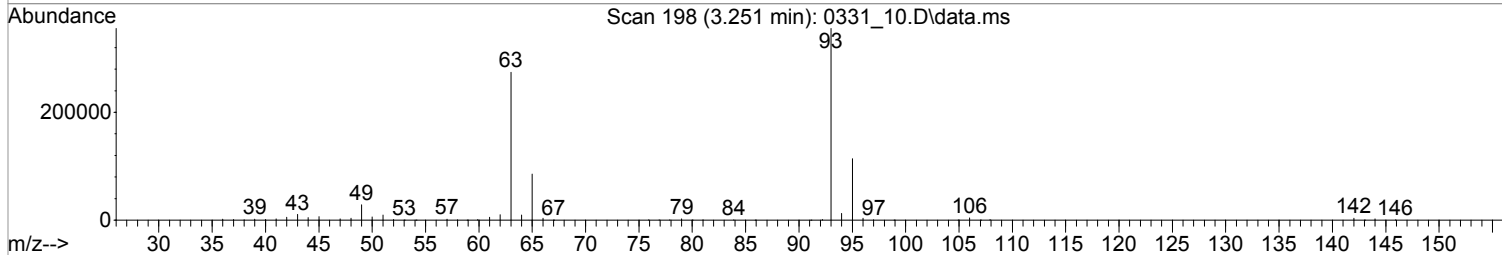
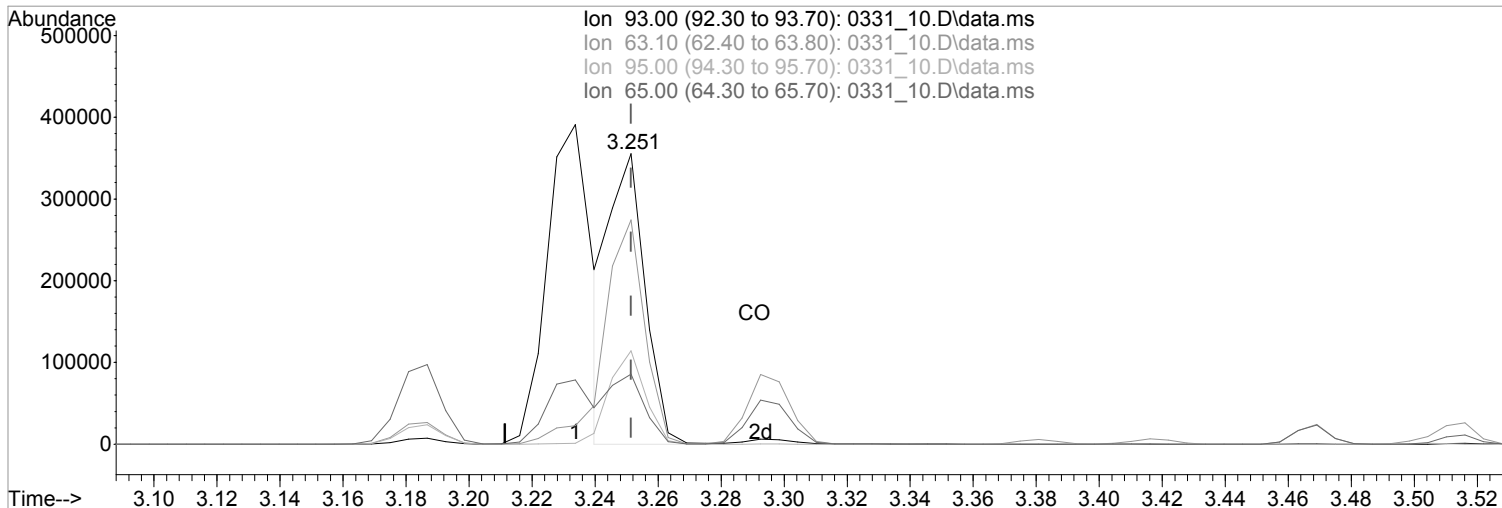
(6) bis(2-Chloroethyl)ether (MT)  
 3.234min (-0.018) 109615.2445090 ppb  
 Qvalue = 37  
 response 616671

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	4.88#
95.00	31.90	0.29#
65.00	23.10	19.61

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.251min (-0.000) 50210.3023281 ppb m

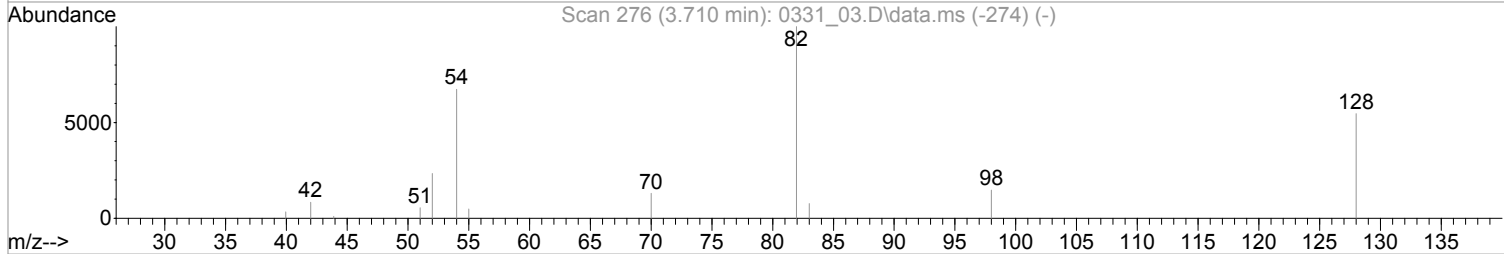
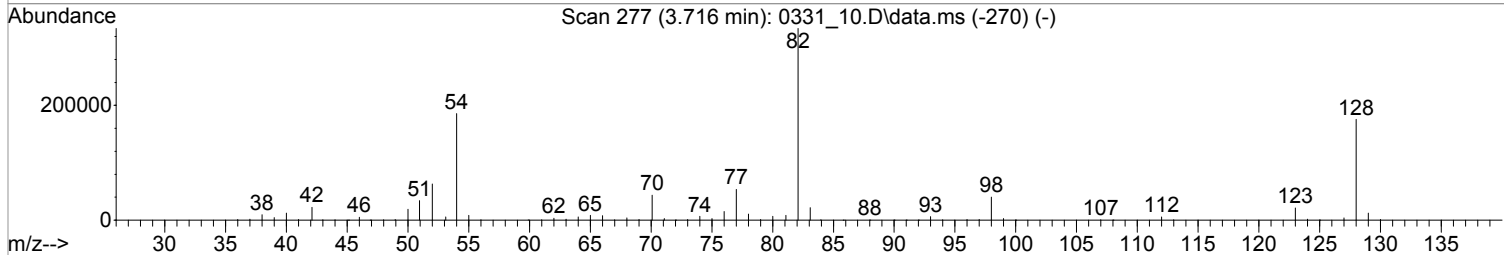
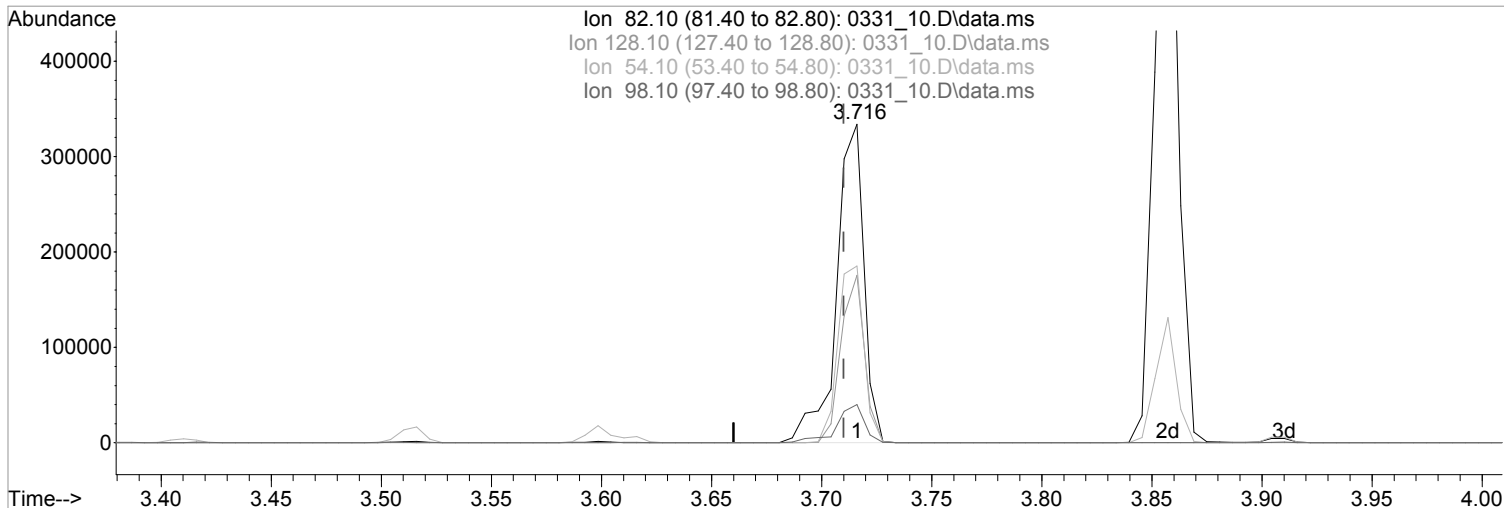
response 282472

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	77.21
95.00	31.90	32.08
65.00	23.10	24.05

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

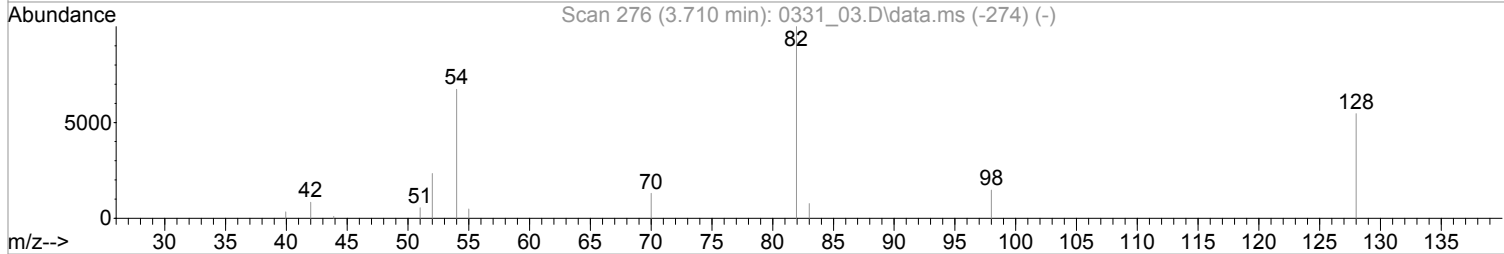
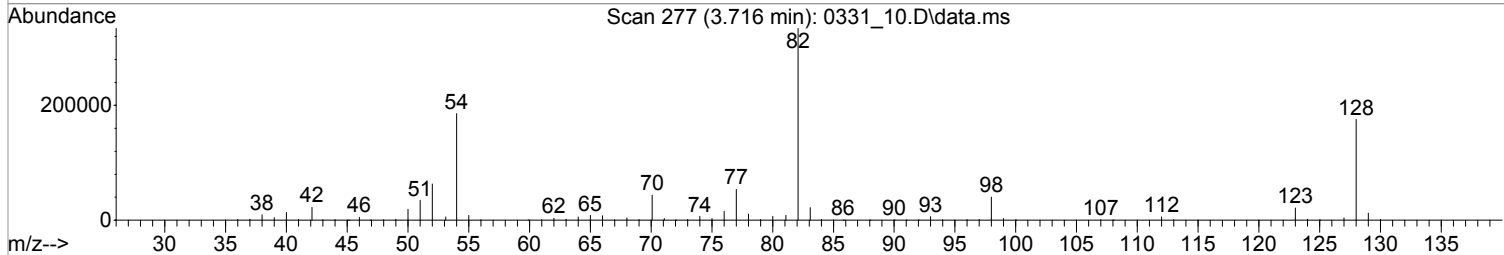
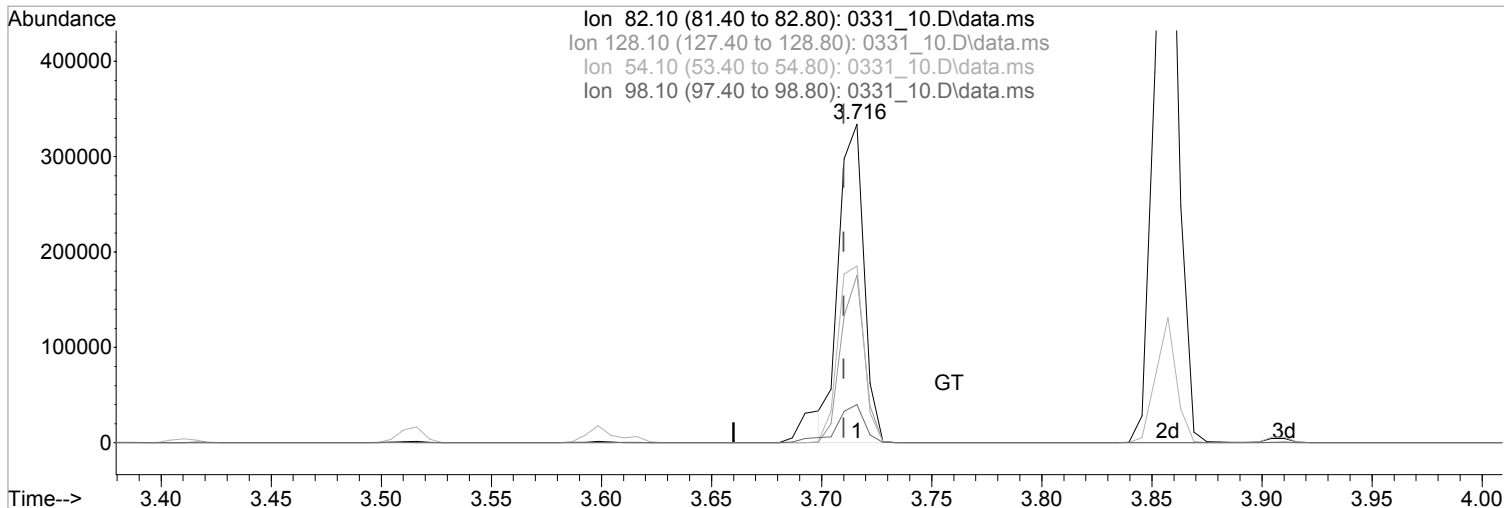
(24) Nitrobenzene-d5 (S)  
 3.716min (+0.006) 55620.7953288 ppb  
 Qvalue = 93  
 response 289942

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	52.57
54.10	60.00	55.54
98.10	11.40	12.01

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.716min (+0.006) 50896.3023359 ppb m

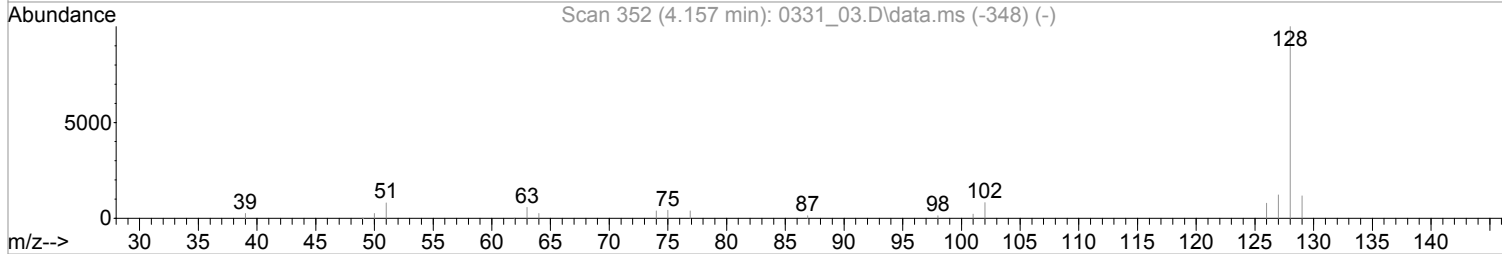
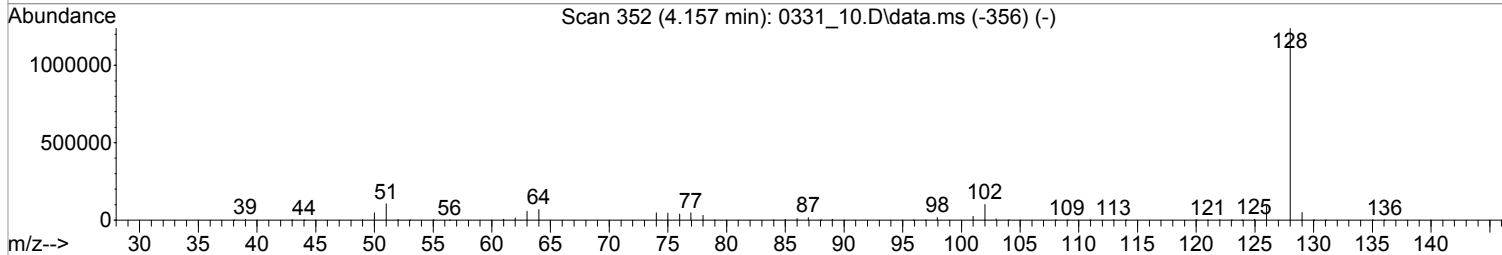
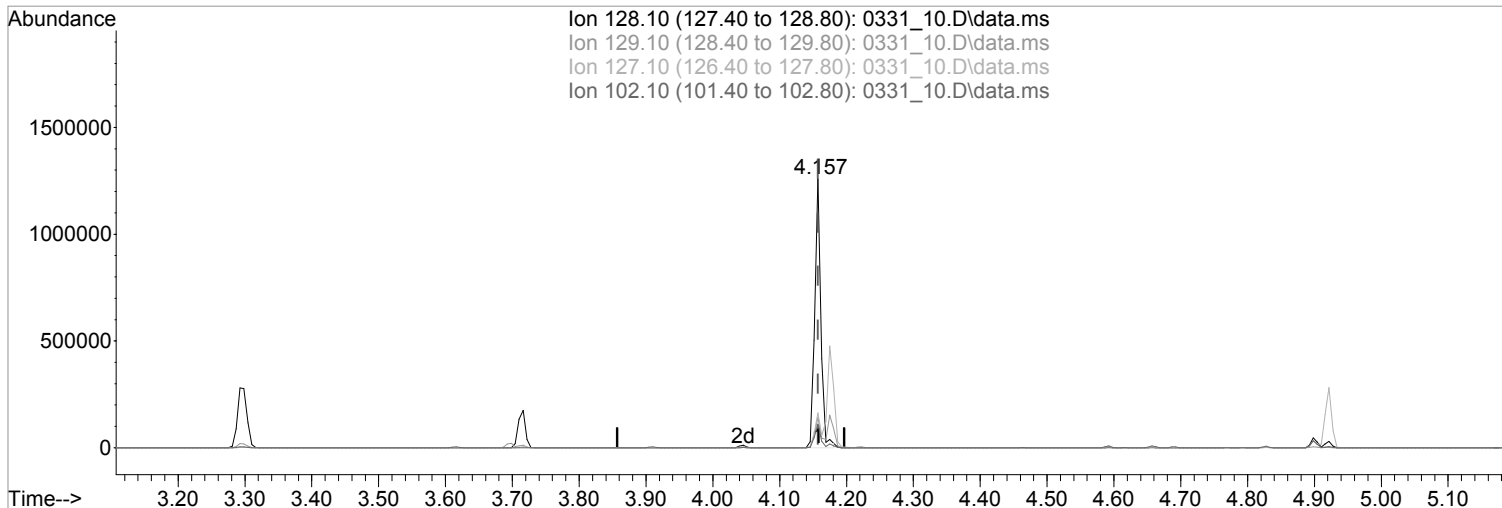
response 265314

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	52.57
54.10	60.00	55.54
98.10	11.40	12.01

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_10.D  
Acq On : 31 Mar 2022 7:53 pm  
Operator : 3545  
Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:10:00 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



TIC: 0331\_10.D\data.ms

(34) Naphthalene (MT)  
4.157min (-0.000) 46677.1469504 ppb  
Qvalue = 99  
response 809662

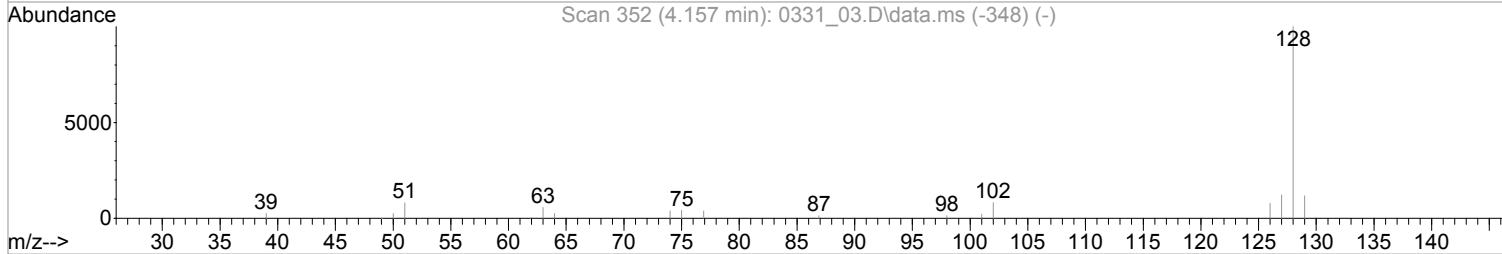
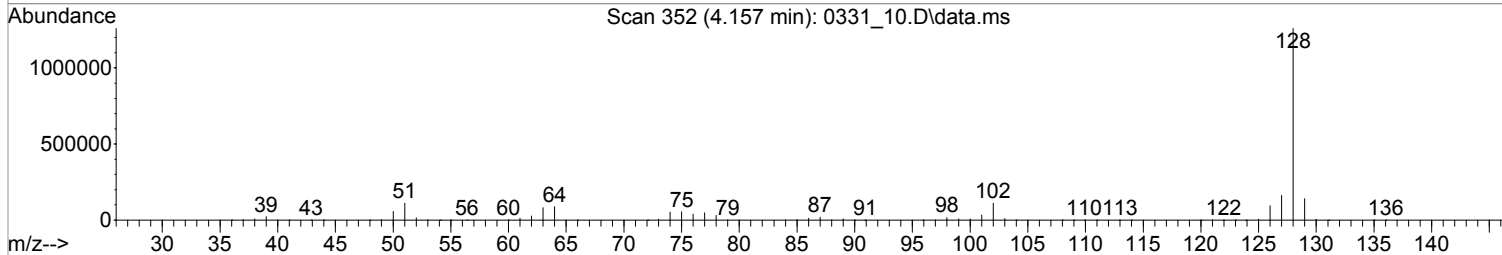
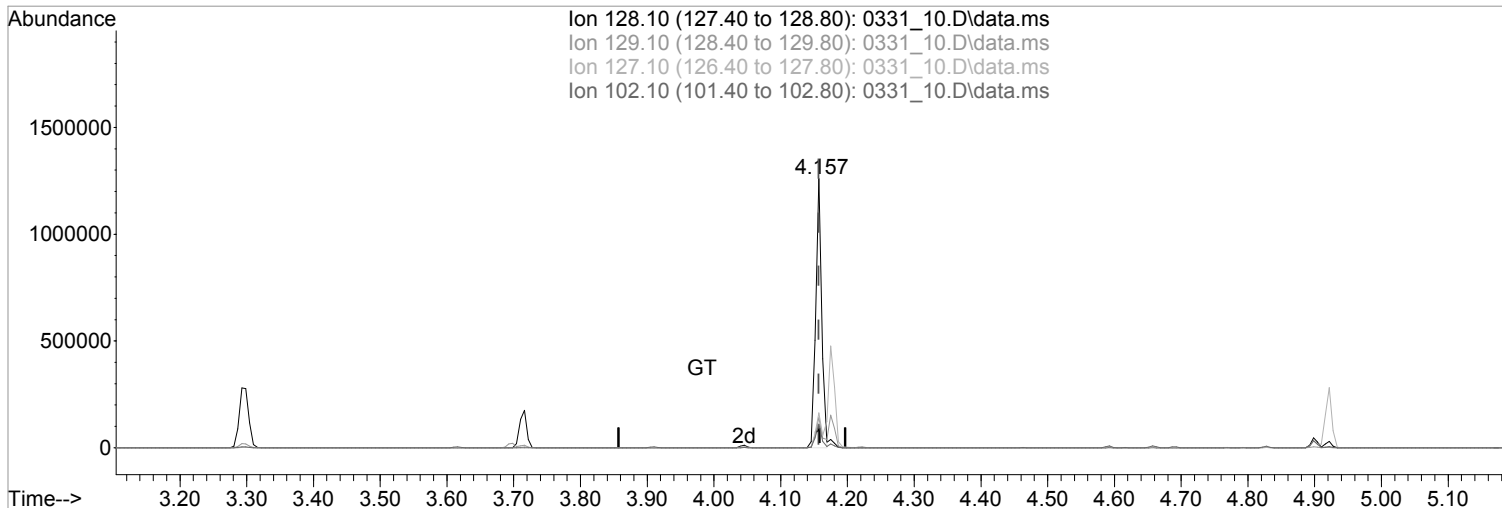
Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.15
127.10	12.80	12.91
102.10	8.30	8.85



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_10.D  
 Acq On : 31 Mar 2022 7:53 pm  
 Operator : 3545  
 Sample : STD SVMS 50K PPB 22C23059 exp 8/25/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 04 16:10:03 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:10:00 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_10.D\data.ms

(34) Naphthalene (MT)  
 4.157min (-0.000) 45448.6219591 ppb m

response 788352

Ion	Exp%	Act%
128.10	100	100
129.10	10.90	11.15
127.10	12.80	12.91
102.10	8.30	8.85

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_12.D  
 Acq On : 31 Mar 2022 8:36 pm  
 Operator : 3545  
 Sample : STD TCL 4K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 12 Sample Multiplier: 1

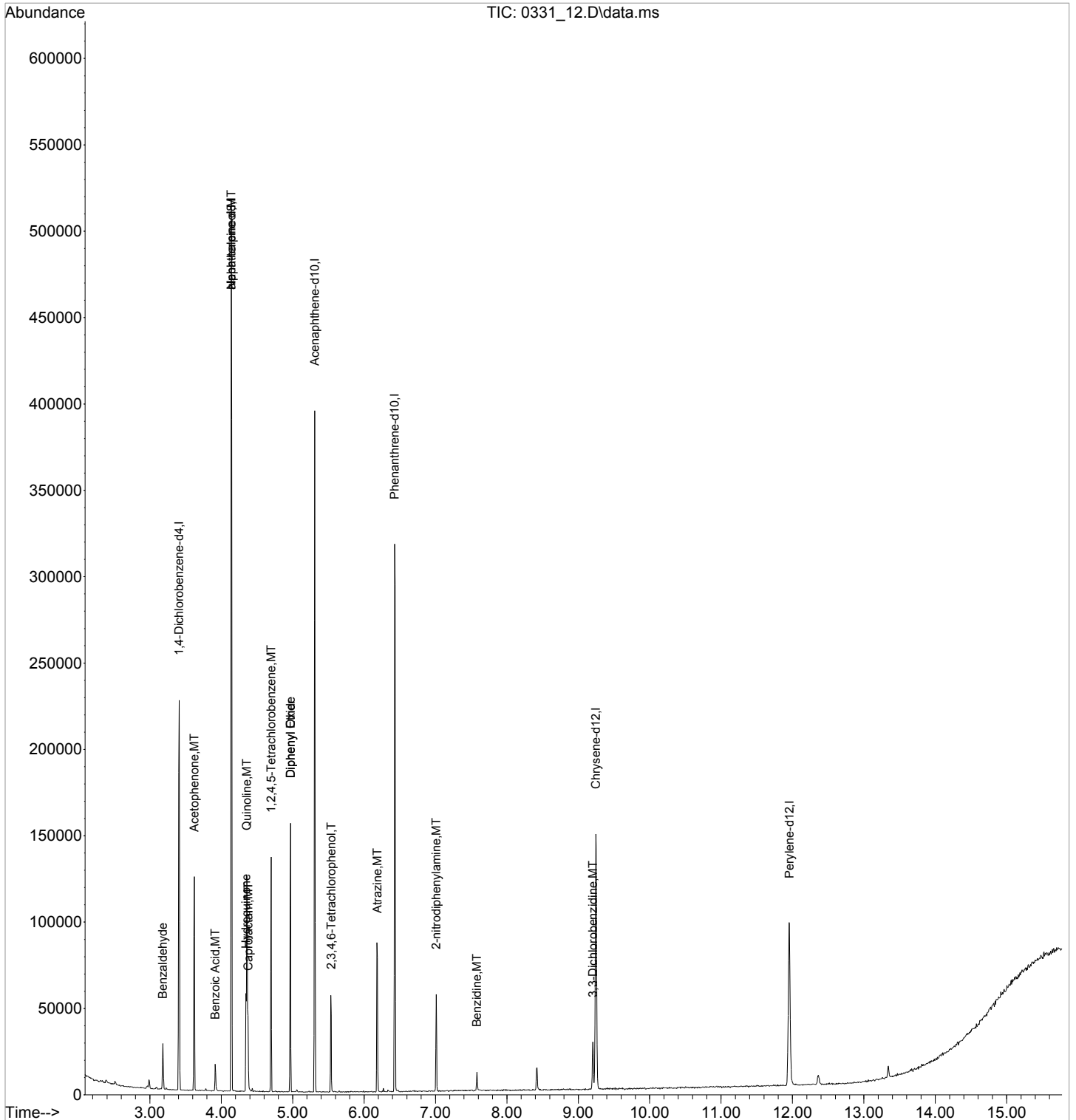
Quant Time: Apr 04 16:53:59 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:34:56 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32210	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	136220	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	65230	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.428	188	103120	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	67182	8000.0000000	ppb	0.00	
94) Perylene-d12	11.957	264	58564	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
9) Benzaldehyde	3.181	105	5045	3745.7880779	ppb	98	Qvalue
22) Acetophenone	3.622	105	26979	3891.1883832	ppb	98	
31) Benzoic Acid	3.916	105	3581	4259.0418639	ppb	99	
33) alpha-terpineol	4.140	59	18311	4364.0779192	ppb	98	
37) Hydroquinone	4.346	110	12976	4367.0078087	ppb	93	
38) Quinoline	4.357	129	34471	4382.7379345	ppb	99	
39) Caprolactam	4.375	113	3806	3675.2281435	ppb	92	
43) 1,2,4,5-Tetrachloroben...	4.699	216	15681	4281.5578499	ppb	96	
44) Diphenyl Ether	4.969	170	23710	4319.7401334	ug/ml	99	
45) Diphenyl Oxide	4.969	170	23710	4319.7401334	ug/ml	99	
62) 2,3,4,6-Tetrachlorophenol	5.540	232	5528	3126.3602471	ppb	95	
69) Atrazine	6.187	200	8336	3551.1011360	ppb	97	
82) 2-nitrodiphenylamine	7.010	167	6112	4515.3978890	ppb	95	
85) Benzidine	7.581	184	5065	3995.7989172	ppb	70	#
89) 3,3-Dichlorobenzidine	9.204	252	9134	3139.1498939	ppb	99	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_12.D  
Acq On : 31 Mar 2022 8:36 pm  
Operator : 3545  
Sample : STD TCL 4K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 04 16:53:59 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:34:56 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_13.D  
 Acq On : 31 Mar 2022 8:58 pm  
 Operator : 3545  
 Sample : MSTD TCL 10K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 13 Sample Multiplier: 1

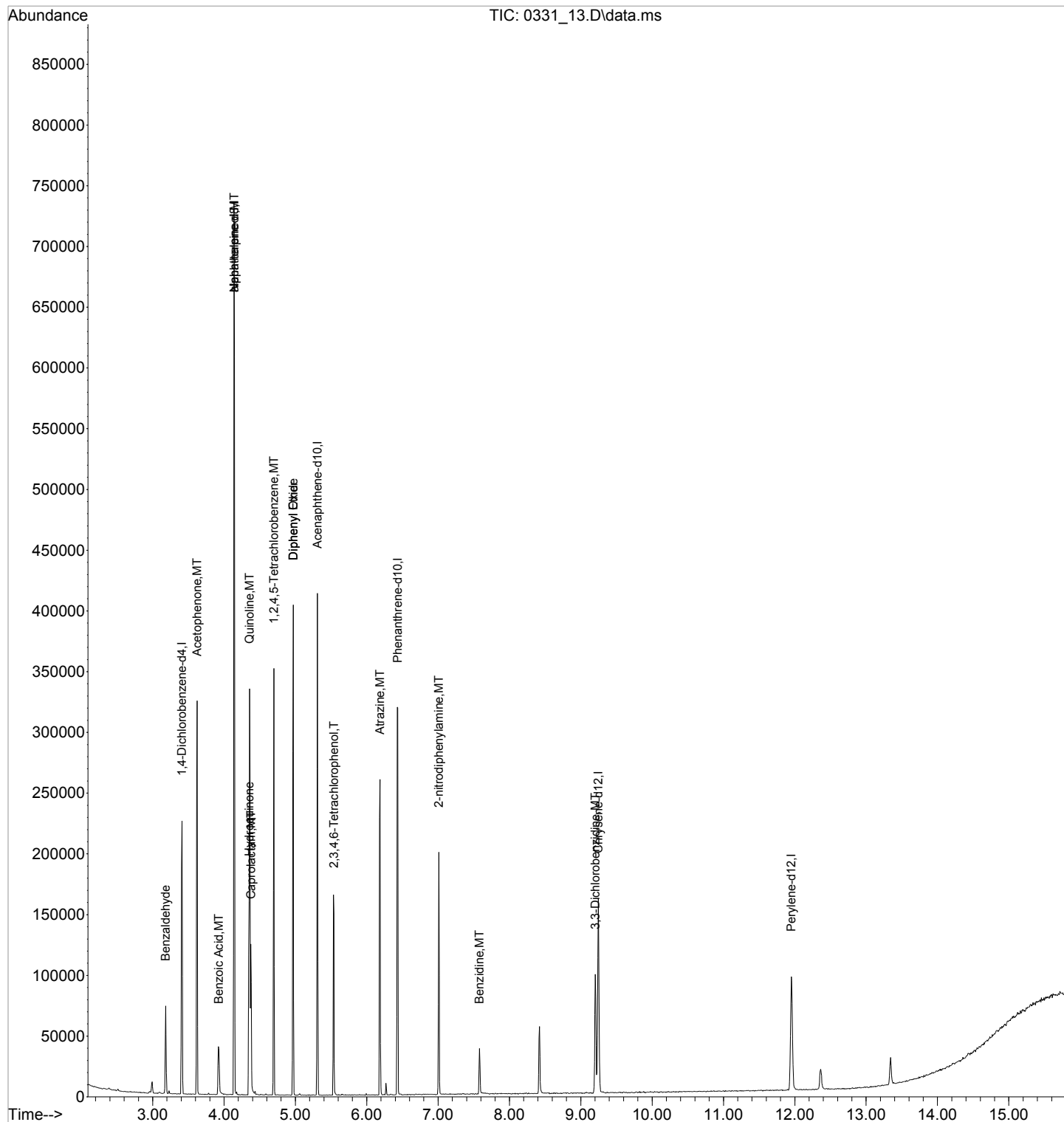
Quant Time: Apr 04 15:59:35 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 15:59:06 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32646	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	151075	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	66741	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	106483	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	70148	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	60010	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
							Qvalue
9) Benzaldehyde	3.181	105	13218	10000.0000000	ppb	100	
22) Acetophenone	3.622	105	70363	10000.0000000	ppb	100	
31) Benzoic Acid	3.928	105	13285	10000.0000000	ppb	100	
33) alpha-terpineol	4.140	59	47885	10000.0000000	ppb	100	
37) Hydroquinone	4.351	110	32456	10000.0000000	ppb	100	
38) Quinoline	4.357	129	92947	10000.0000000	ppb	100	
39) Caprolactam	4.375	113	11523	10000.0000000	ppb	100	
43) 1,2,4,5-Tetrachloroben...	4.698	216	42102	10000.0000000	ppb	100	
44) Diphenyl Ether	4.969	170	62422	10000.0000000	ug/ml	100	
45) Diphenyl Oxide	4.969	170	62422	10000.0000000	ug/ml	100	
62) 2,3,4,6-Tetrachlorophenol	5.540	232	16672	10000.0000000	ppb	100	
69) Atrazine	6.187	200	23085	10000.0000000	ppb	100	
82) 2-nitrodiphenylamine	7.010	167	19997	10000.0000000	ppb	100	
85) Benzidine	7.581	184	16992	10045.5217263	ppb	100	
89) 3,3-Dichlorobenzidine	9.204	252	28248	10000.0000000	ppb	100	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_13.D  
Acq On : 31 Mar 2022 8:58 pm  
Operator : 3545  
Sample : MSTD TCL 10K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 04 15:59:35 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 15:59:06 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\042922B\  
 Data File : 0429B\_03.D  
 Acq On : 29 Apr 2022 5:52 pm  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D05698 exp 9/10/22  
 Misc : TCL CAL ISTD 22D02367 exp. 10/02/22  
 ALS Vial : 4 Sample Multiplier: 1

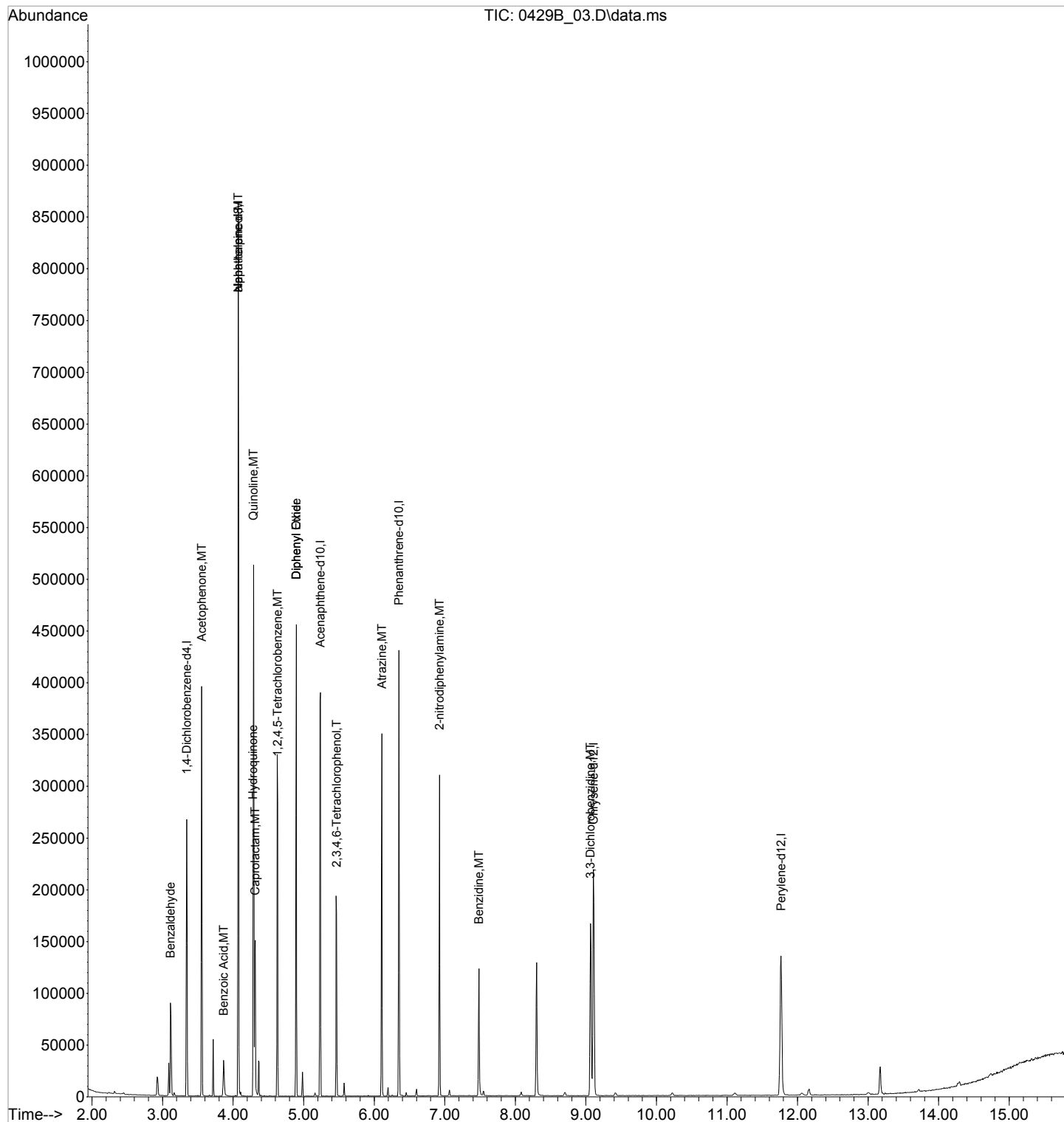
Quant Time: Apr 29 19:31:04 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.343	152	35936	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.072	136	162496	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.237	164	73371	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.348	188	124542	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.107	240	92211	8000.0000000	ppb	0.00	
94) Perylene-d12	11.766	264	82708	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
							Qvalue
9) Benzaldehyde	3.113	105	17877	11897.0055136	ppb		99
22) Acetophenone	3.554	105	77833	10061.9271599	ppb		99
31) Benzoic Acid	3.866	105	10441	7475.1145537	ppb		97
33) alpha-terpineol	4.072	59	52436	10476.3063443	ppb		97
37) Hydroquinone	4.284	110	36399	10269.0622148	ppb		95
38) Quinoline	4.290	129	104932	11184.0158031	ppb		99
39) Caprolactam	4.313	113	14776	11961.0857284	ppb		97
43) 1,2,4,5-Tetrachloroben...	4.631	216	44745	10241.6699254	ppb		97
44) Diphenyl Ether	4.895	170	67529	10313.7021917	ug/ml		98
45) Diphenyl Oxide	4.895	170	67529	10313.7021917	ug/ml		98
62) 2,3,4,6-Tetrachlorophenol	5.466	232	19384	9746.2450545	ppb		98
69) Atrazine	6.107	200	28050	10623.3414640	ppb		97
82) 2-nitrodiphenylamine	6.925	167	30889	11185.4538926	ppb		96
85) Benzidine	7.483	184	45803	16815.2055310	ppb		97
89) 3,3-Dichlorobenzidine	9.066	252	45034	11276.1739458	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\042922B\  
 Data File : 0429B\_03.D  
 Acq On : 29 Apr 2022 5:52 pm  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D05698 exp 9/10/22  
 Misc : TCL CAL ISTD 22D02367 exp. 10/02/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 29 19:31:04 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_14.D  
 Acq On : 31 Mar 2022 9:19 pm  
 Operator : 3545  
 Sample : STD TCL 20K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 04 16:18:05 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:17:36 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

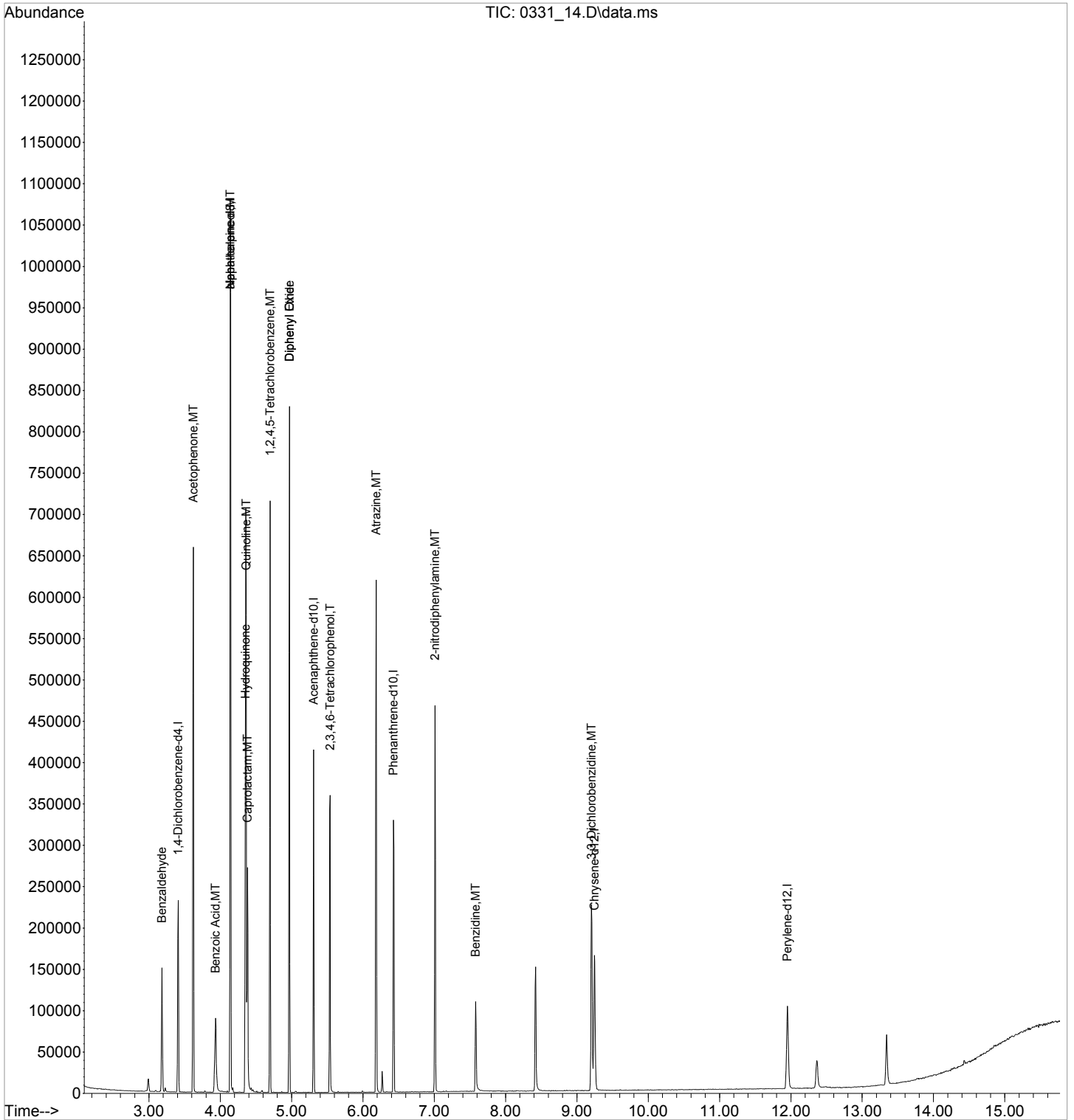
Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.410	152	32976	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.140	136	166588	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	65899	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.428	188	106386	8000.0000000	ppb	0.00
84) Chrysene-d12	9.245	240	74217	8000.0000000	ppb	0.00
94) Perylene-d12	11.951	264	60508	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.181	105	27985	21379.1641942	ppb	99
22) Acetophenone	3.622	105	140981	19984.9142749	ppb	99
31) Benzoic Acid	3.934	105	33954	31589.3324189	ppb	99
33) alpha-terpineol	4.140	59	99072	17348.5751577	ppb	99
37) Hydroquinone	4.351	110	75121	19593.8858186	ppb	97
38) Quinoline	4.363	129	186747	17405.5577263	ppb	97
39) Caprolactam	4.381	113	27181	22332.1892729	ppb	99
43) 1,2,4,5-Tetrachloroben...	4.698	216	82323	16891.5493678	ppb	98
44) Diphenyl Ether	4.969	170	122968	16869.4038963	ug/ml	99
45) Diphenyl Oxide	4.969	170	122968	16869.4038963	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.540	232	36060	24550.3580536	ppb	100
69) Atrazine	6.187	200	50889	24345.8931400	ppb	99
82) 2-nitrodiphenylamine	7.010	167	49155	28494.9593074	ppb	96
85) Benzidine	7.581	184	46245	31477.4601229	ppb	97
89) 3,3-Dichlorobenzidine	9.204	252	66399	26100.6280685	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_14.D  
Acq On : 31 Mar 2022 9:19 pm  
Operator : 3545  
Sample : STD TCL 20K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 04 16:18:05 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:17:36 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_15.D  
 Acq On : 31 Mar 2022 9:40 pm  
 Operator : 3545  
 Sample : STD TCL 30K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 15 Sample Multiplier: 1

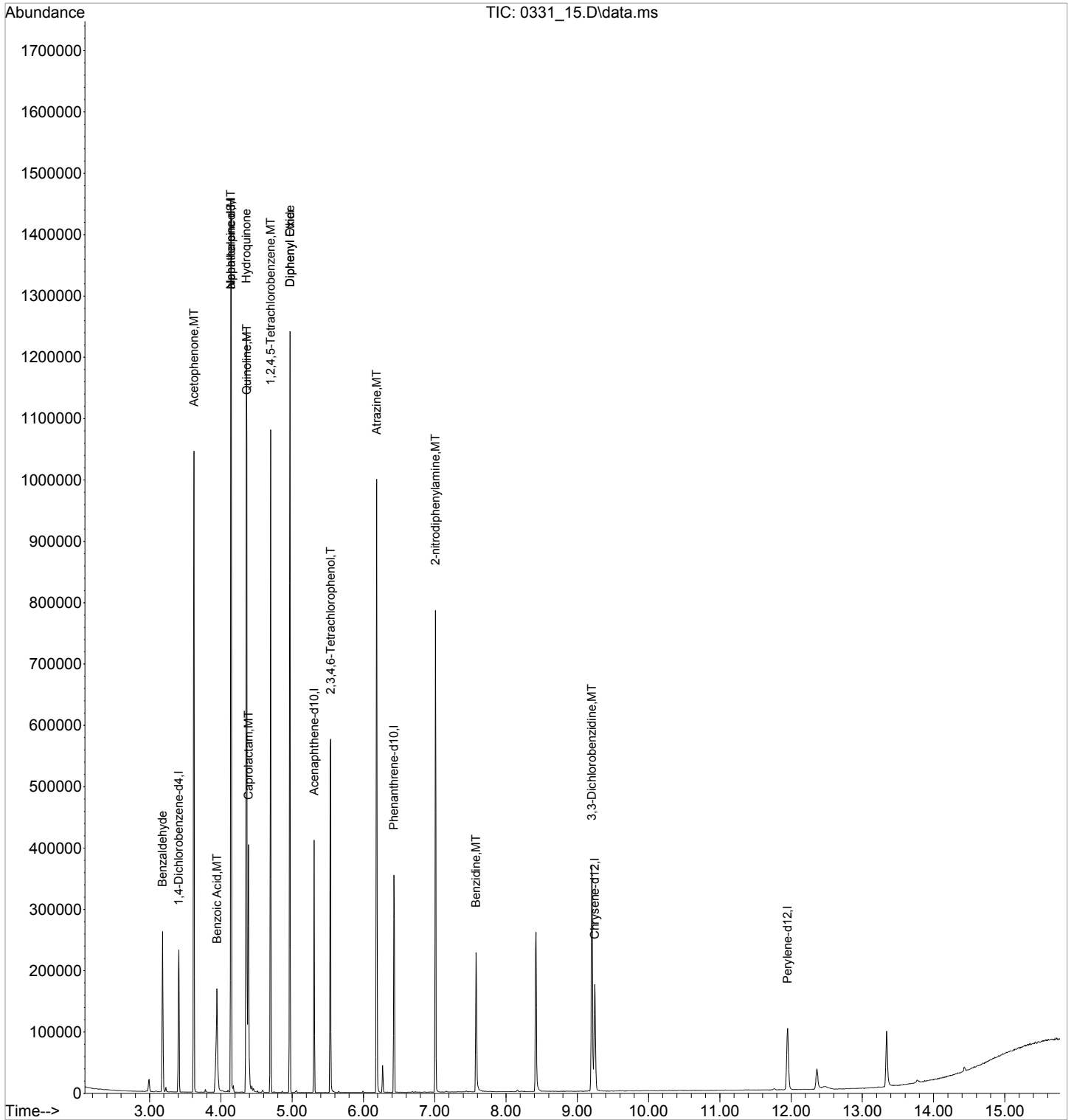
Quant Time: Apr 04 16:18:53 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:18:23 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.410	152	33491	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.140	136	188855	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	68194	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.428	188	108406	8000.0000000	ppb	0.00
84) Chrysene-d12	9.245	240	76700	8000.0000000	ppb	0.00
94) Perylene-d12	11.951	264	62471	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.181	105	47780	35331.1828973	ppb	99
22) Acetophenone	3.622	105	218733	30535.6925993	ppb	99
31) Benzoic Acid	3.946	105	62710	44951.7521731	ppb	98
33) alpha-terpineol	4.140	59	155586	24856.2891851	ppb	99
37) Hydroquinone	4.357	110	122674	28368.5569619	ppb	99
38) Quinoline	4.363	129	289912	24633.9225551	ppb	99
39) Caprolactam	4.387	113	44595	31110.4386175	ppb	95
43) 1,2,4,5-Tetrachloroben...	4.698	216	124397	23425.2808780	ppb	98
44) Diphenyl Ether	4.969	170	188595	23751.4157709	ug/ml	99
45) Diphenyl Oxide	4.969	170	188595	23751.4157709	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.540	232	59018	36738.7005414	ppb	100
69) Atrazine	6.187	200	78865	34581.5780215	ppb	100
82) 2-nitrodiphenylamine	7.010	167	82992	42681.4519179	ppb	95
85) Benzidine	7.581	184	92797	53450.6210134	ppb	98
89) 3,3-Dichlorobenzidine	9.204	252	105817	37396.9826583	ppb	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_15.D  
Acq On : 31 Mar 2022 9:40 pm  
Operator : 3545  
Sample : STD TCL 30K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 04 16:18:53 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:18:23 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_16.D  
 Acq On : 31 Mar 2022 10:02 pm  
 Operator : 3545  
 Sample : STD TCL 40K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 16 Sample Multiplier: 1

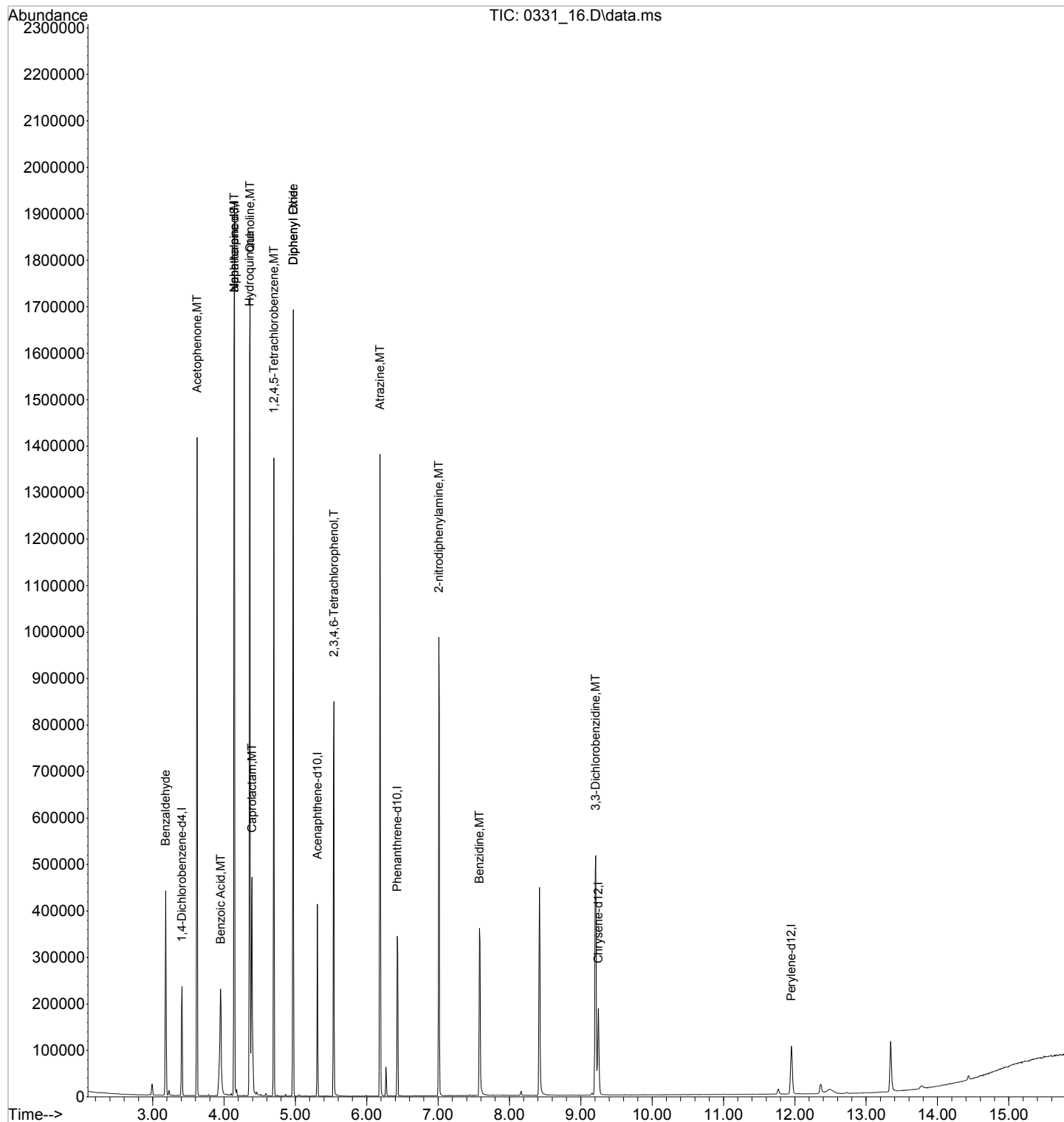
Quant Time: Apr 04 16:19:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:19:11 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.410	152	32750	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.145	136	205762	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	66340	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.428	188	109489	8000.0000000	ppb	0.00
84) Chrysene-d12	9.245	240	77049	8000.0000000	ppb	0.00
94) Perylene-d12	11.951	264	63298	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.181	105	80706	58934.1841835	ppb	99
22) Acetophenone	3.622	105	286364	40736.1958980	ppb	99
31) Benzoic Acid	3.951	105	92634	55421.4497707	ppb	99
33) alpha-terpineol	4.145	59	203905	30960.7071165	ppb	87
37) Hydroquinone	4.357	110	166918	35817.9389554	ppb	95
38) Quinoline	4.363	129	378568	30619.3304379	ppb	98
39) Caprolactam	4.392	113	62917	39916.3623369	ppb	96
43) 1,2,4,5-Tetrachloroben...	4.698	216	161130	29125.9548510	ppb	98
44) Diphenyl Ether	4.969	170	243421	29360.2543064	ug/ml	99
45) Diphenyl Oxide	4.969	170	243421	29360.2543064	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.539	232	79933	48949.8236216	ppb	97
69) Atrazine	6.186	200	105331	46070.2880297	ppb	99
82) 2-nitrodiphenylamine	7.010	167	117319	55081.7026593	ppb	94
85) Benzidine	7.580	184	154562	76641.7310555	ppb	97
89) 3,3-Dichlorobenzidine	9.210	252	146578	49144.2966400	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_16.D  
Acq On : 31 Mar 2022 10:02 pm  
Operator : 3545  
Sample : STD TCL 40K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 04 16:19:37 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:19:11 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_17.D  
 Acq On : 31 Mar 2022 10:23 pm  
 Operator : 3545  
 Sample : STD TCL 50K1 PPB 22C23060 exp 9/10/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 17 Sample Multiplier: 1

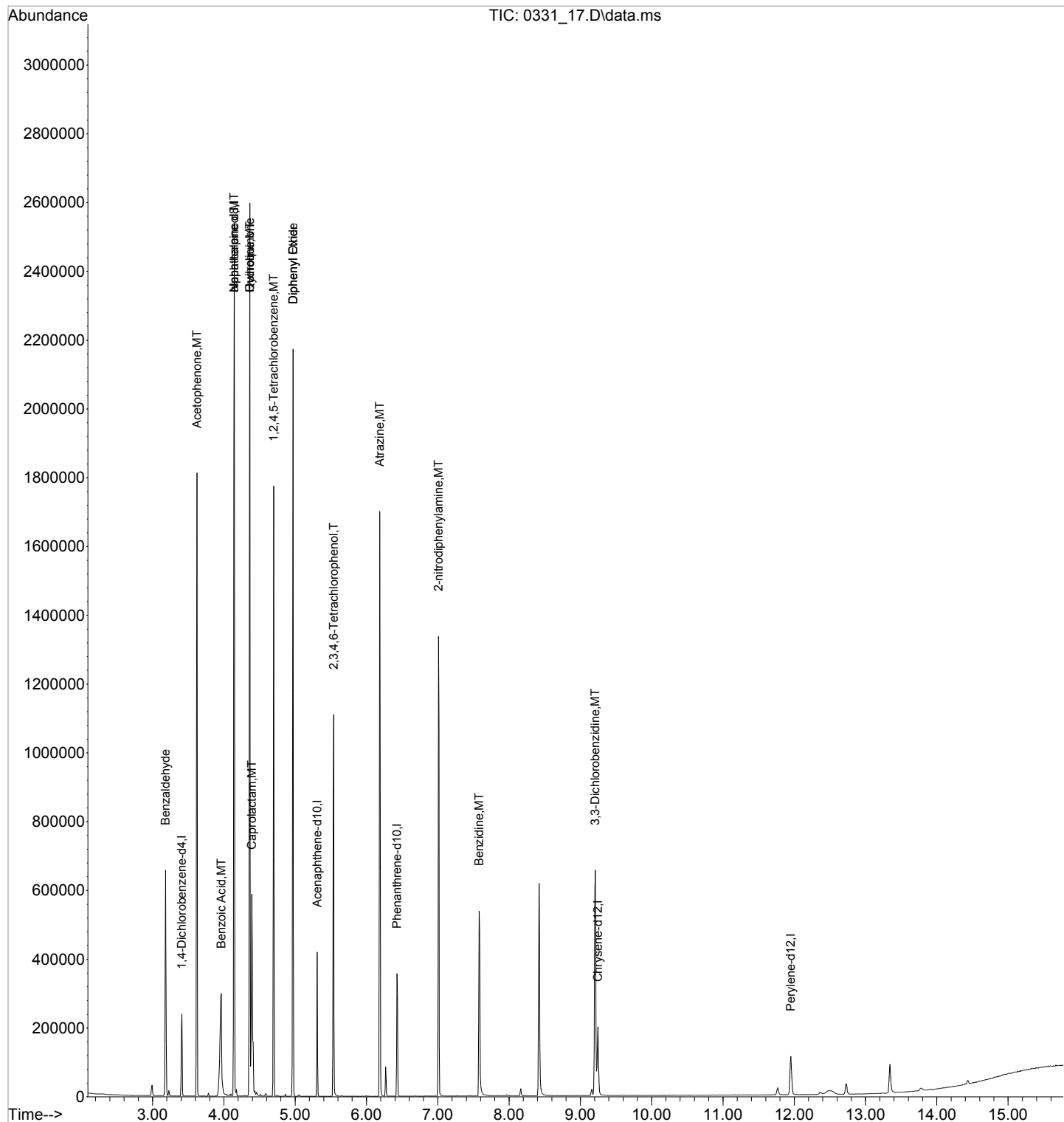
Quant Time: Apr 04 16:20:23 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:19:57 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	34438	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.145	136	228625	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	68678	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.428	188	112052	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	79417	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	67284	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
50) 2-Fluorobiphenyl	0.000	172	0d	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000						Recovery = 0.00%
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000						Recovery = 0.00%
Target Compounds							
							Qvalue
9) Benzaldehyde	3.181	105	118679	76388.9545388	ppb		99
22) Acetophenone	3.622	105	370115	49916.2518975	ppb		99
31) Benzoic Acid	3.963	105	131168	66363.7153033	ppb		98
33) alpha-terpineol	4.145	59	264407	37546.5934006	ppb		88
37) Hydroquinone	4.363	110	219123	43068.6482517	ppb		98
38) Quinoline	4.363	129	481916	36507.3343524	ppb		99
39) Caprolactam	4.393	113	83764	47847.9644639	ppb		94
43) 1,2,4,5-Tetrachloroben...	4.698	216	204315	34816.2846862	ppb		97
44) Diphenyl Ether	4.969	170	310150	35229.6306939	ug/ml		99
45) Diphenyl Oxide	4.969	170	310150	35229.6306939	ug/ml		99
62) 2,3,4,6-Tetrachlorophenol	5.540	232	103514	59031.1652154	ppb		96
69) Atrazine	6.187	200	137008	56457.3564133	ppb		100
82) 2-nitrodiphenylamine	7.010	167	156949	67745.4868336	ppb		93
85) Benzidine	7.581	184	223719	93371.1103111	ppb		97
89) 3,3-Dichlorobenzidine	9.210	252	187922	58883.7932200	ppb		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_17.D  
Acq On : 31 Mar 2022 10:23 pm  
Operator : 3545  
Sample : STD TCL 50K1 PPB 22C23060 exp 9/10/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 04 16:20:23 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:19:57 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1488171	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0209_21	<b>Analysis date/time:</b>	02/09/22 15:56
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.623837	0.62111570		0.4360		10	9.956	99.60	70 - 130
2-METHYLNAPHTHALENE	0.663826	0.63308330		4.63		10	9.537	95.40	70 - 130
3&4-METHYL PHENOL	1.350649	1.338996		0.8630		10	9.914	99.10	70 - 130
ACENAPHTHENE	1.170435	1.121669		4.17		10	9.583	95.80	70 - 130
ACENAPHTHYLENE	1.779211	1.817918		2.18		10	10.22	102	70 - 130
ANTHRACENE	1.065424	1.034061		2.94		10	9.706	97.10	70 - 130
BENZO(A)ANTHRACENE	1.151953	1.120667		2.72		10	9.728	97.30	70 - 130
BENZO(A)PYRENE	0.987052	1.048235		6.20		10	10.62	106	70 - 130
BENZO(B)FLUORANTHENE	1.139642	1.101573		3.34		10	9.666	96.70	70 - 130
BENZO(G,H,I)PERYLENE	1.009366	1.078476		6.85		10	10.68	107	70 - 130
BENZO(K)FLUORANTHENE	1.122546	1.14238		0.74		10	9.926	99.30	70 - 130
BIS(2-ETHYLHEXYL)PHTHALATE	0.724997	0.79033960		9.01		10	10.90	109	70 - 130
CARBAZOLE	0.972084	1.021167		5.05		10	10.50	105	70 - 130
CHRYSENE	1.116357	1.141252		2.23		10	10.22	102	70 - 130
DI-N-BUTYL PHTHALATE	1.138017	1.178124		3.52		10	10.35	104	70 - 130
DI-N-OCTYL PHTHALATE	1.204403	1.241811		3.11		10	10.31	103	70 - 130
DIBENZ(A,H)ANTHRACENE	1.033545	1.082655		4.75		10	10.48	105	70 - 130
DIBENZOFURAN	1.623192	1.575663		2.93		10	9.707	97.10	70 - 130
FLUORANTHENE	1.1182	1.053931		5.75		10	9.425	94.30	70 - 130
FLUORENE	1.316666	1.307861		0.6690		10	9.933	99.30	70 - 130
INDENO(1,2,3-CD)PYRENE	0.969769	1.039433		7.18		10	10.72	107	70 - 130
NAPHTHALENE	1.018747	1.008173		1.04		10	9.896	99	70 - 130
PENTACHLOROPHENOL	0.121187	0.14212140		17.30		10	11.73	117	70 - 130
PHENANTHRENE	1.052577	1.027167		2.41		10	9.759	97.60	70 - 130
PHENOL	1.643512	1.610572		2		10	9.800	98	70 - 130
PYRENE	1.287230	1.281216		0.4670		10	9.953	99.50	70 - 130
2,4,6-TRIBROMOPHENOL	0.090561	0.08983042		0.8070		10	9.919	99.20	70 - 130
2-FLUOROBIPHENYL	1.349543	1.323445		1.93		10	9.807	98.10	70 - 130
2-FLUOROPHENOL	1.299982	1.279613		1.57		10	9.843	98.40	70 - 130
NITROBENZENE-D5	0.339442	0.35322840		4.06		10	10.41	104	70 - 130
P-TERPHENYL-D14	1.093292	1.098755		0.50		10	10.05	101	70 - 130
PHENOL-D5	1.560263	1.524287		2.31		10	9.769	97.70	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.



Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	88915	8000.00	ppb	0.00
23) Naphthalene-d8	4.26	136	355224	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	184704	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	340250	8000.00	ppb	0.00
84) Chrysene-d12	9.54	240	293653	8000.00	ppb	0.00
94) Perylene-d12	12.38	264	310728	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.84	112	142221	9843.3121001	ppb	0.00
Spiked Amount	666.000			Recovery = 1477.97%		
7) Phenol-d5	3.28	99	169415	9769.4265067	ppb	0.00
Spiked Amount	666.000			Recovery = 1466.88%		
24) Nitrobenzene-d5	3.82	82	156844	10406.1534584	ppb	0.00
Spiked Amount	333.000			Recovery = 3124.97%		
50) 2-Fluorobiphenyl	4.95	172	305557	9806.6161349	ppb	0.00
Spiked Amount	333.000			Recovery = 2944.93%		
73) 2,4,6-Tribromophenol	6.02	330	38206	9919.3409749	ppb	0.00
Spiked Amount	666.000			Recovery = 1489.39%		
87) p-Terphenyl-d14	8.04	244	403316	10049.9749250	ppb	0.00
Spiked Amount	333.000			Recovery = 3018.01%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.29	79	157472	11446.0495914	ppb	90
3) N-Nitrosodimethylamine	2.28	42	68975	9340.9358063	ppb	87
5) Aniline	3.34	66	79389	9650.2197215	ppb	92
6) bis(2-Chloroethyl)ether	3.36	93	152062m	11899.7254383	ppb	
8) Phenol	3.29	94	179005	9799.5751289	ppb	98
10) 2-Chlorophenol	3.40	128	146262	10000.5197227	ppb	95
11) n-Decane	3.40	41	82952	9629.2271328	ppb	98
12) 1,3-Dichlorobenzene	3.49	146	164692	9959.1733450	ppb	95
13) 1,4-Dichlorobenzene	3.53	146	167144	9819.9981031	ppb	97
14) Benzyl Alcohol	3.57	79	113873	10066.8014240	ppb	99
15) 1,2-Dichlorobenzene	3.61	146	157389	10059.2311925	ppb	100
16) bis(2-Chloroisopropyl)ethe	3.65	121	53196	9935.6902402	ppb	64
17) 2,2-oxybis(1-chloropropane	3.65	121	53196	9935.6902402	ppb	64
18) 2-Methylphenol	3.62	108	133745	10120.0527818	ppb	98
19) Hexachloroethane	3.80	117	62812	10166.1307570	ppb	99
20) N-Nitrosodi-n-propylamine	3.72	70	98111	10158.5564450	ppb	96
21) 3&4-Methyl phenol	3.70	107	148821	9913.7205681	ppb	99
25) Nitrobenzene	3.83	77	149817	10165.9220817	ppb	94
26) Isophorone	3.96	82	260097	9838.5361753	ppb	95
27) 2-Nitrophenol	4.01	139	75876	10214.9836033	ppb	# 76
28) 2,4-Dimethylphenol	4.01	107	139227	10092.5405476	ppb	98
29) bis(2-Chlorethoxy)methane	4.08	93	172239	10189.7011915	ppb	95
30) 2,4-Dichlorophenol	4.15	162	116228	10001.3018153	ppb	94
32) 1,2,4-Trichlorobenzene	4.22	180	126978	9761.1362823	ppb	99
34) Naphthalene	4.27	128	447659	9896.2058674	ppb	99
35) 4-Chloroaniline	4.28	65	50393	9587.7463840	ppb	95
36) Hexachloro-1,3-butadiene	4.33	225	78373	11043.8206612	ppb	98
40) 4-Chloro-3-methylphenol	4.57	107	115951	9898.0134487	ppb	92
41) 2-Methylnaphthalene	4.71	142	281108	9536.8809357	ppb	100
42) 1-Methylnaphthalene	4.78	142	275794	9956.3737843	ppb	100
47) Hexachlorocyclopentadiene	4.81	237	69461	8026.8498870	ppb	97
48) 2,4,6-Trichlorophenol	4.89	196	77627	9689.8796793	ppb	95
49) 2,4,5-Trichlorophenol	4.91	196	82579	9904.7566201	ppb	95

(#) = qualifier out of range (m) = manual integration

0209 21.D S804B09V.M Sat Feb 19 13:14:48 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

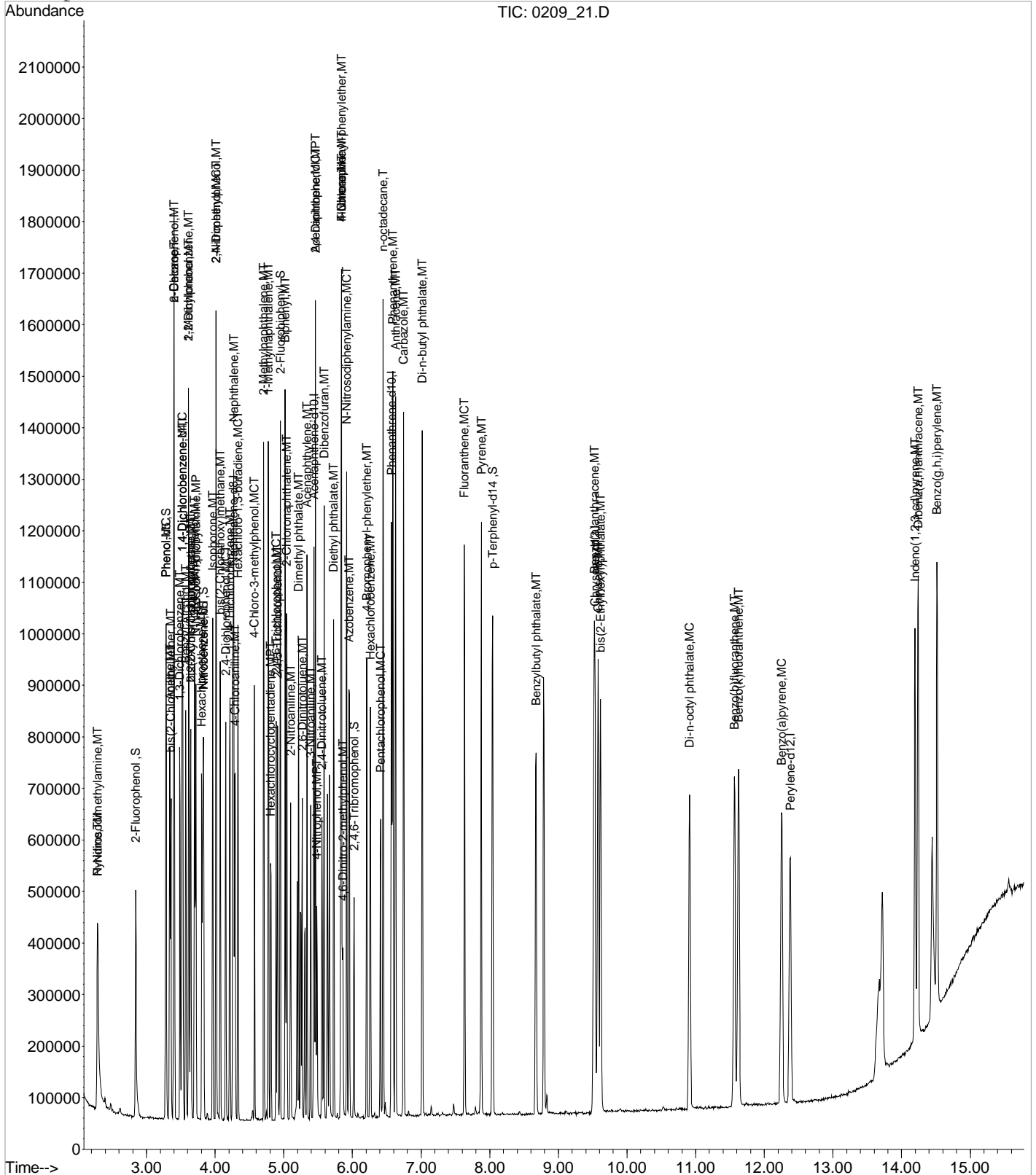
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	5.02	154	339927	9824.7030690	ppb	100
52) 2-Chloronaphthalene	5.05	162	263674	9985.7067521	ppb	97
53) 2-Nitroaniline	5.10	138	85461	10441.1102055	ppb	99
54) Acenaphthylene	5.34	152	419721	10217.5539048	ppb	99
55) Dimethyl phthalate	5.22	163	271177	9912.7354425	ppb	96
56) 2,6-Dinitrotoluene	5.27	165	66568	10495.3544301	ppb	96
57) 3-Nitroaniline	5.39	138	71255	10434.3274272	ppb	94
58) Acenaphthene	5.46	153	258971	9583.3554787	ppb	98
59) 2,4-Dinitrophenol	5.46	184	32249	9366.7731553	ppb #	41
60) Dibenzofuran	5.59	168	363789	9707.1874050	ppb	99
61) 2,4-Dinitrotoluene	5.56	165	83714	10539.5845559	ppb	88
63) 4-Nitrophenol	5.48	139	57927	10269.5341891	ppb	86
64) Fluorene	5.84	166	301959	9933.1298206	ppb	99
65) 4-Chlorophenyl-phenylether	5.83	204	140076	9716.6624786	ppb	96
66) Diethyl phthalate	5.73	149	278249	9927.9939388	ppb	99
67) 4-Nitroaniline	5.84	138	71180	11128.8378074	ppb	100
68) Azobenzene	5.95	77	286668	10253.9212561	ppb	99
71) 4,6-Dinitro-2-methylphenol	5.86	198	41701	9106.4716264	ppb	91
72) N-Nitrosodiphenylamine	5.92	169	255428	9879.1219938	ppb	99
74) 4-Bromophenyl-phenylether	6.21	248	81712	9737.7454867	ppb	90
75) Hexachlorobenzene	6.26	284	87977	9422.4970036	ppb	97
76) n-octadecane	6.45	55	48997	9411.5588818	ppb	98
77) Pentachlorophenol	6.41	266	60446	11727.4301888	ppb	97
78) Phenanthrene	6.59	178	436867	9758.5964787	ppb	98
79) Anthracene	6.63	178	439799	9705.6272941	ppb	99
80) Carbazole	6.75	167	434315	10504.9193533	ppb	99
81) Di-n-butyl phthalate	7.02	149	501071	10352.4273975	ppb	99
83) Fluoranthene	7.63	202	448250	9425.2443016	ppb	99
86) Pyrene	7.88	202	470291	9953.2786119	ppb	99
88) Benzylbutyl phthalate	8.68	149	199983	10350.8994468	ppb	96
90) Benzo(a)anthracene	9.52	228	411359	9728.4110603	ppb	99
91) Chrysene	9.58	228	418915	10222.9958461	ppb	99
92) bis(2-Ethylhexyl)phthalate	9.62	149	290107	10901.2883412	ppb	99
93) Di-n-octyl phthalate	10.91	149	455827	10310.5936140	ppb	100
95) Benzo(b)fluoranthene	11.56	252	427862	9665.9587742	ppb	99
96) Benzo(k)fluoranthene	11.62	252	432781	9925.9826493	ppb	98
97) Benzo(a)pyrene	12.26	252	407145	10619.8621200	ppb	98
98) Indeno(1,2,3-cd)pyrene	14.20	276	403726	10718.3514750	ppb	98
99) Dibenz(a,h)anthracene	14.24	278	420514	10475.1647908	ppb	98
100) Benzo(g,h,i)perylene	14.52	276	418891	10684.6875266	ppb	99

(#) = qualifier out of range (m) = manual integration

0209\_21.D S804B09V.M Sat Feb 19 13:14:48 2022

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18
Acq On : 9 Feb 2022 3:56 pm Operator: 917
Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 19 13:13 2022 Quant Results File: S804B09V.RES

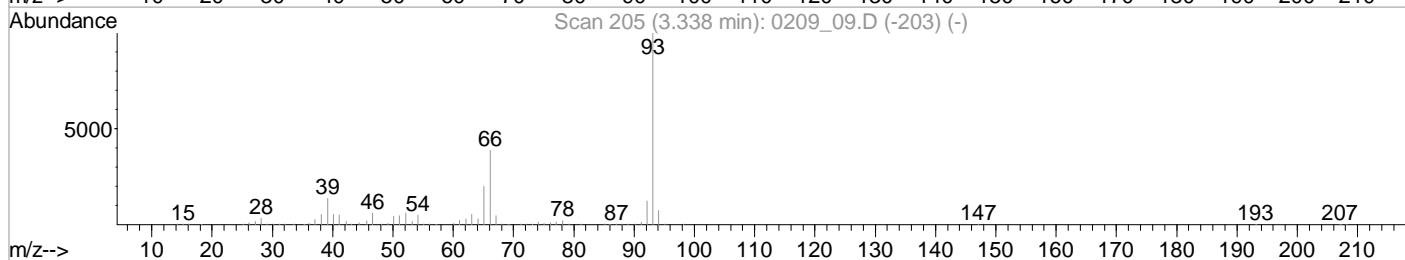
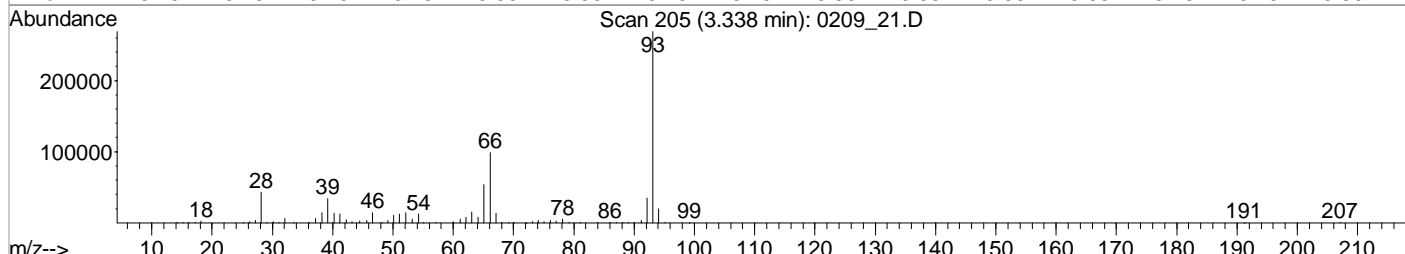
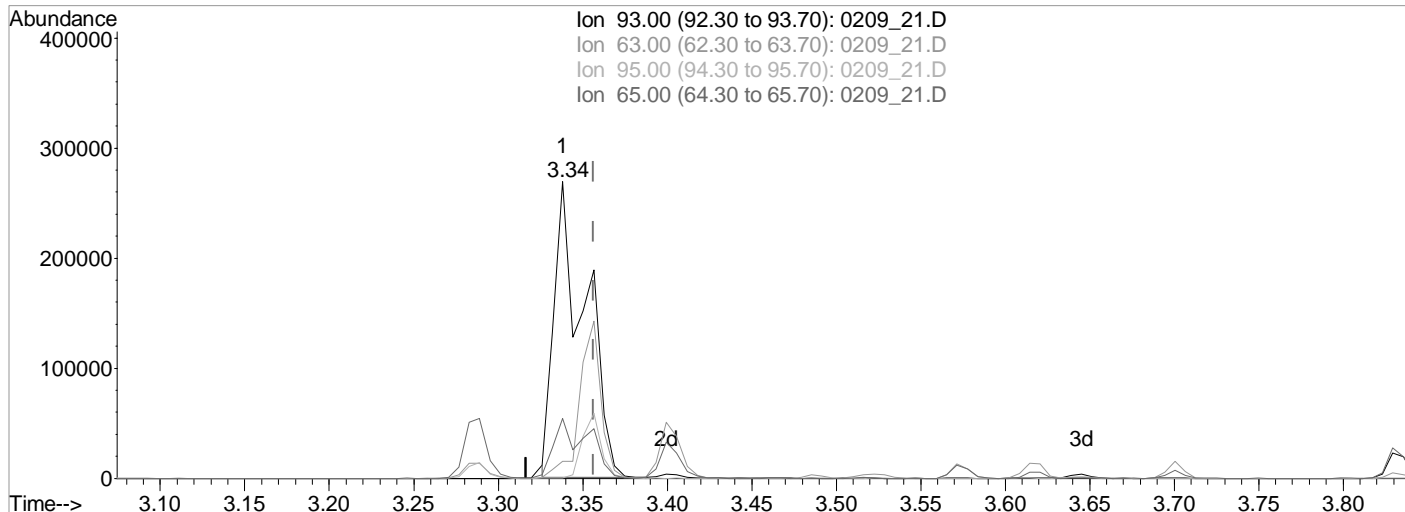
Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)
Title : 8270 BNA
Last Update : Fri Feb 18 17:49:17 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_21.D

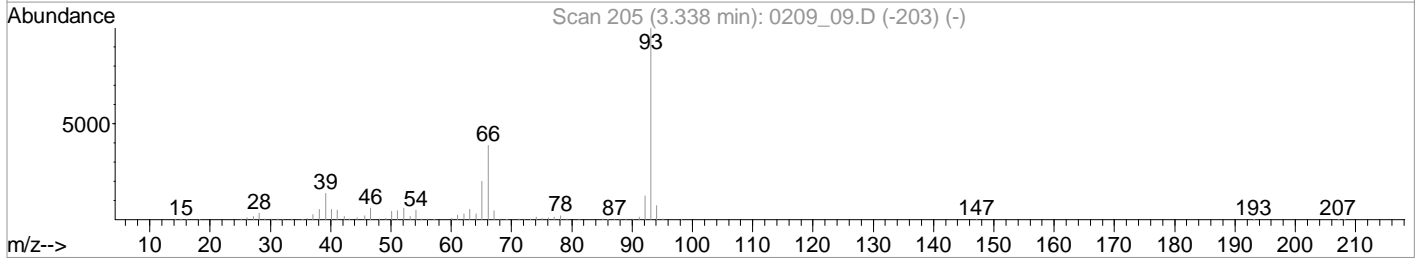
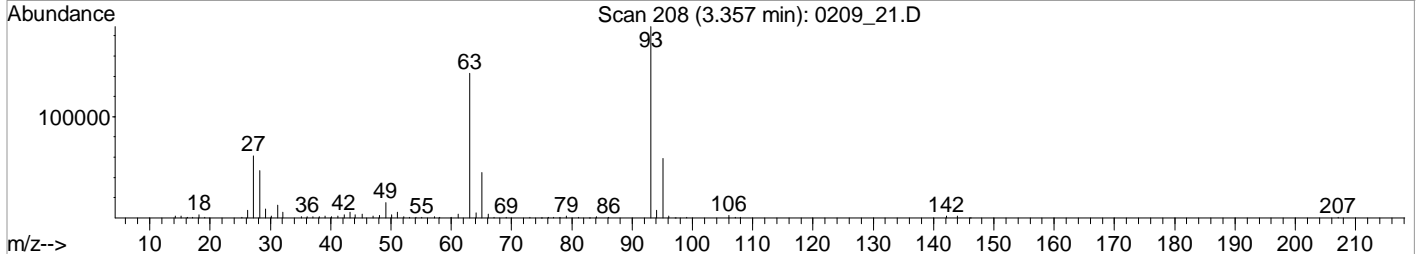
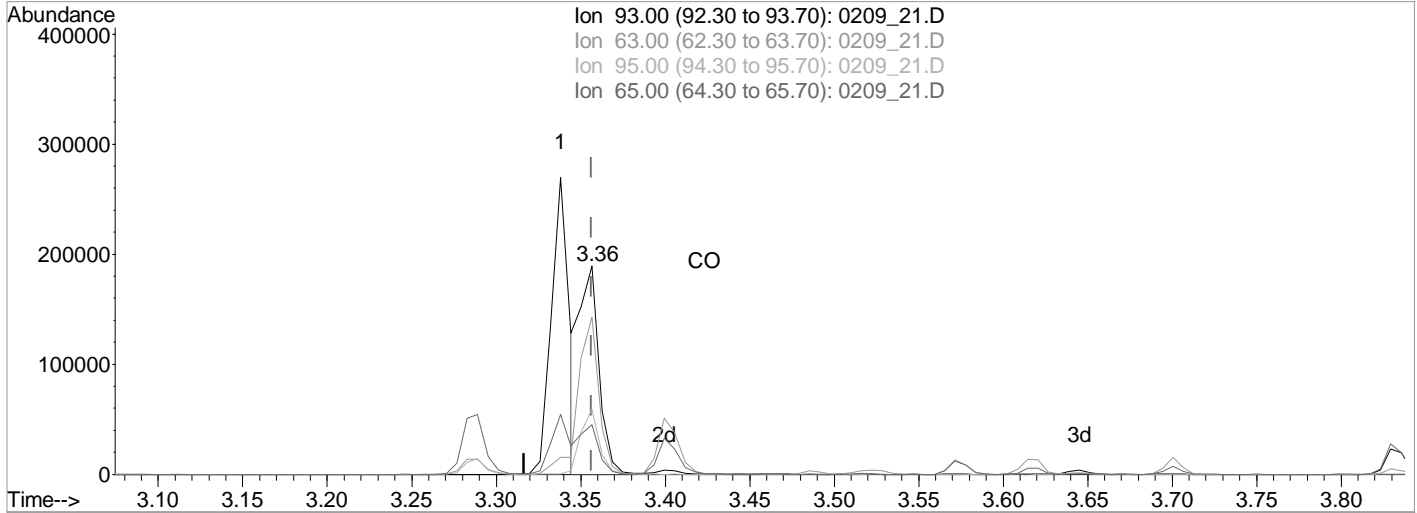
(6) bis(2-Chloroethyl)ether (MT)  
 3.34min (-0.018) 26968.5738731 ppb  
 Qvalue = 37  
 response 344621

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.32#
95.00	30.20	0.19#
65.00	24.00	19.88

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_21.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.36min (+0.000) 11899.7254383 ppb m

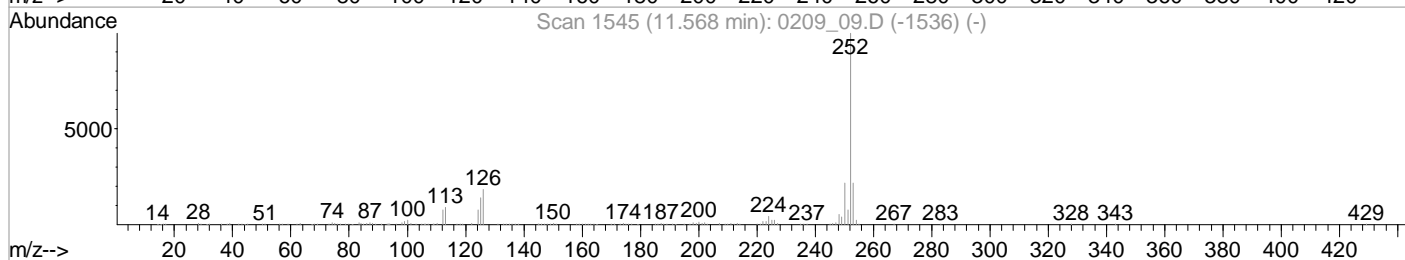
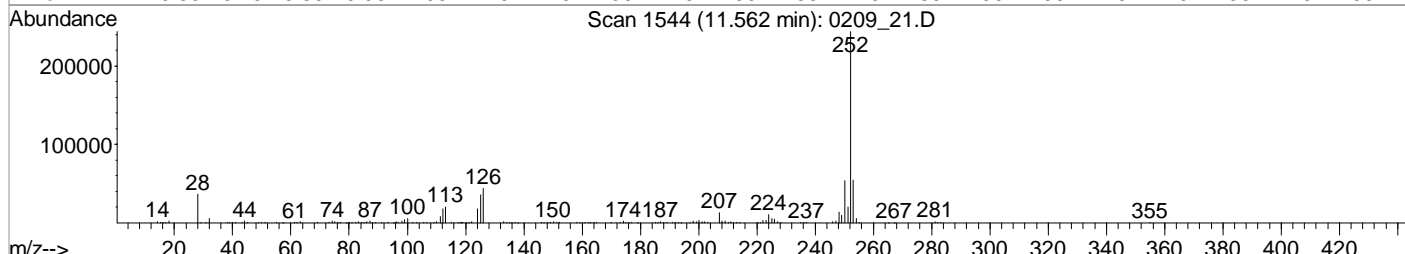
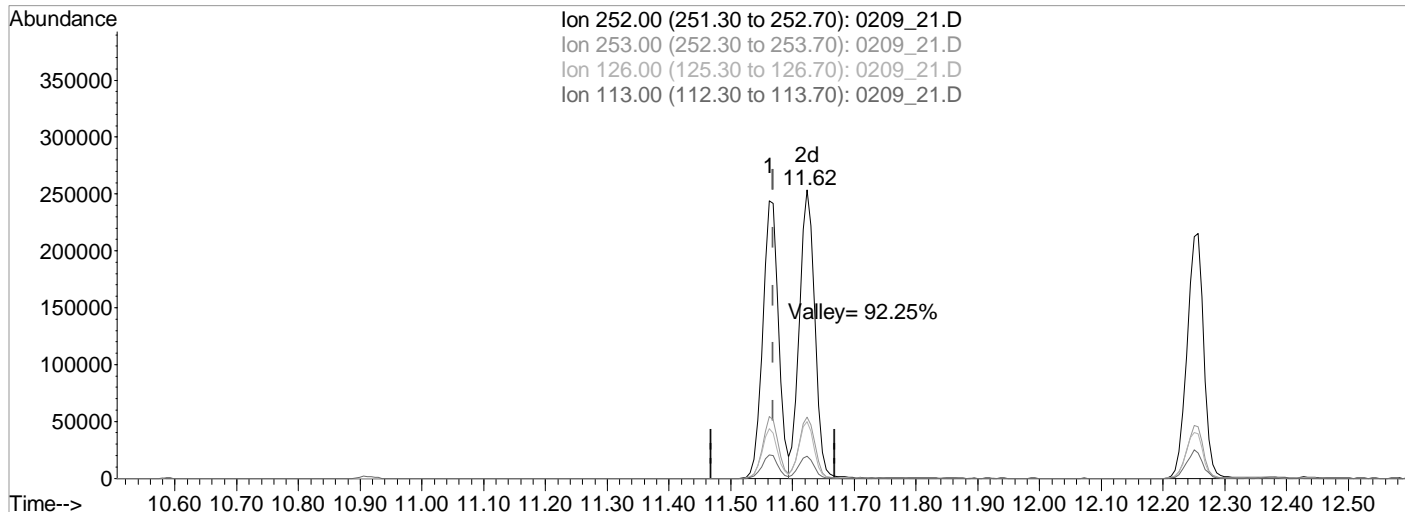
response 152062

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	75.41
95.00	30.20	31.11
65.00	24.00	23.78

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\020922\0209 21.D Vial: 18  
 Acq On : 9 Feb 2022 3:56 pm Operator: 917  
 Sample : SSCV SVMS 10K PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:13 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Multiple Level Calibration



TIC: 0209\_21.D

(95) Benzo(b)fluoranthene (MT)  
 11.56min (-0.006) 9665.9587742 ppb  
 Qvalue = 99  
 response 427862

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	22.19
126.00	18.30	17.93
113.00	8.80	8.37

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1488171	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0209_22	<b>Analysis date/time:</b>	02/09/22 16:16
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.130890	0.11422550		12.70		10	8.727	87.30	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data File : C:\MSDCHEM\1\DATA\020922\0209 22.D Vial: 19  
 Acq On : 9 Feb 2022 4:16 pm Operator: 917  
 Sample : SSCV TCL 10K1 PPB 22B06091 exp. 07/15/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Feb 19 13:15 2022 Quant Results File: S804B09V.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Fri Feb 18 17:49:17 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.52	152	85079	8000.00	ppb	0.00
23) Naphthalene-d8	4.25	136	383109	8000.00	ppb	0.00
46) Acenaphthene-d10	5.44	164	171657	8000.00	ppb	0.00
70) Phenanthrene-d10	6.57	188	322325	8000.00	ppb	0.00
84) Chrysene-d12	9.53	240	279649	8000.00	ppb	0.00
94) Perylene-d12	12.37	264	289195	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.00	82	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.00	172	0d	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 666.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 333.000			Recovery =	0.00%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.29	105	37078	9798.3476806	ppb	95
22) Acetophenone	3.73	105	170064	9665.7562550	ppb #	83
31) Benzoic Acid	4.05	105	54701	8726.7995983	ppb	99
33) alpha-terpineol	4.25	59	122109	10160.5025665	ppb	99
37) Hydroquinone	4.46	110	38203	4269.0301296	ppb	96
38) Quinoline	4.48	129	266786	10450.3090905	ppb	100
39) Caprolactam	4.50	113	34287	12988.4396711	ppb #	51
43) 1,2,4,5-Tetrachlorobenzene	4.82	216	109368	10665.4487633	ppb	98
44) Diphenyl Ether	5.09	170	160063	9785.0929631	ug/ml	99
45) Diphenyl Oxide	5.09	170	160063	9785.0929631	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.67	232	44534	9097.6464207	ppb	97
69) Atrazine	6.32	200	72810	10372.2835887	ppb	98
82) 2-nitrodiphenylamine	7.16	167	77558	9540.6082926	ppb #	100
85) Benzidine	7.76	184	172118	10413.7591707	ppb	99
89) 3,3-Dichlorobenzidine	9.48	252	141066	9798.2449383	ppb	99

(#) = qualifier out of range (m) = manual integration

0209\_22.D S804B09V.M Sat Feb 19 13:16:13 2022

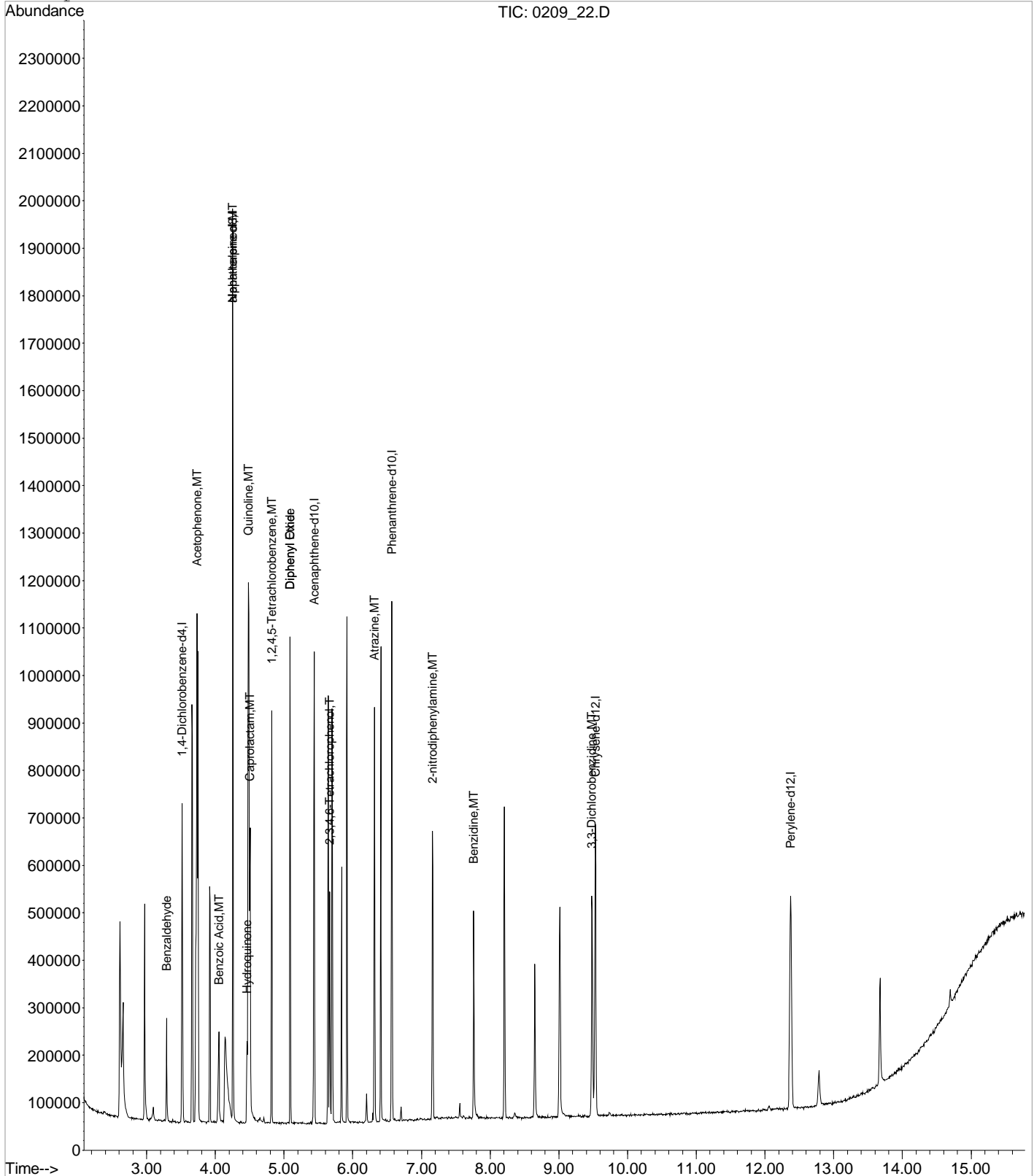


Data File : C:\MSDCHEM\1\DATA\020922\0209 22.D  
Acq On : 9 Feb 2022 4:16 pm  
Sample : SSCV TCL 10K1 PPB 22B06091 exp. 07/15/22  
Misc : TCL ICAL ISTD 22A26810 exp. 07/26/22  
MS Integration Params: RTEINT.P  
Quant Time: Feb 19 13:15 2022

Vial: 19  
Operator: 917  
Inst : BNAMS4  
Multiplr: 1.00

Quant Results File: S804B09V.RES

Method : C:\MSDCHEM\1\METHODS\S804B09V.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Fri Feb 18 17:49:17 2022  
Response via : Initial Calibration



GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1488171	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0512_03	<b>Analysis date/time:</b>	05/12/22 05:16
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.623837	0.59078380		5.30	20	10	9.470	94.70	
2-METHYLNAPHTHALENE	0.663826	0.61807470	0.40	6.89	20	10	9.311	93.10	
3&4-METHYL PHENOL	1.350649	1.455086	0.60	7.73	20	10	10.77	108	
ACENAPHTHENE	1.170435	1.184399	0.90	1.19	20	10	10.12	101	
ACENAPHTHYLENE	1.779211	1.743090	0.90	2.03	20	10	9.797	98	
ANTHRACENE	1.065424	1.038110	0.70	2.56	20	10	9.744	97.40	
BENZO(A)ANTHRACENE	1.151953	1.054229	0.80	8.48	20	10	9.152	91.50	
BENZO(A)PYRENE	0.987052	0.94596170	0.70	4.16	20	10	9.584	95.80	
BENZO(B)FLUORANTHENE	1.139642	1.075083	0.70	5.66	20	10	9.434	94.30	
BENZO(G,H,I)PERYLENE	1.009366	1.059084	0.50	4.93	20	10	10.49	105	
BENZO(K)FLUORANTHENE	1.122546	1.121056	0.70	0.1330	20	10	9.987	99.90	
BIS(2-ETHYLHEXYL)PHTHALATE	0.724997	0.77686980	0.01	7.15	20	10	10.72	107	
CARBAZOLE	0.972084	0.92941380	0.01	4.39	20	10	9.561	95.60	
CHRYSENE	1.116357	1.022902	0.70	8.37	20	10	9.163	91.60	
DI-N-BUTYL PHTHALATE	1.138017	1.276980	0.01	12.20	20	10	11.22	112	
DI-N-OCTYL PHTHALATE	1.204403	1.152355	0.01	4.32	20	10	9.568	95.70	
DIBENZ(A,H)ANTHRACENE	1.033545	1.047535	0.40	1.35	20	10	10.14	101	
DIBENZOFURAN	1.623192	1.548079	0.80	4.63	20	10	9.537	95.40	
FLUORANTHENE	1.1182	1.080620	0.60	3.36	20	10	9.664	96.60	
FLUORENE	1.316666	1.284528	0.90	2.44	20	10	9.756	97.60	
INDENO(1,2,3-CD)PYRENE	0.969769	0.93817440	0.50	3.26	20	10	9.674	96.70	
NAPHTHALENE	1.018747	0.955386	0.70	6.22	20	10	9.378	93.80	
PENTACHLOROPHENOL	0.121187	0.10241530	0.05	15.50	20	10	8.451	84.50	
PHENANTHRENE	1.052577	1.045431	0.70	0.6790	20	10	9.932	99.30	
PHENOL	1.643512	1.6564	0.80	0.7840	20	10	10.08	101	
PYRENE	1.287230	1.154415	0.60	10.30	20	10	8.968	89.70	
2,4,6-TRIBROMOPHENOL	0.090561	0.09682968		6.92	20	10	10.69	107	70 - 130
2-FLUOROBIPHENYL	1.349543	1.351784		0.1660	20	10	10.02	100	70 - 130
2-FLUOROPHENOL	1.299982	1.294497		0.4220	20	10	9.958	99.60	70 - 130
NITROBENZENE-D5	0.339442	0.366194		7.88	20	10	10.79	108	70 - 130
P-TERPHENYL-D14	1.093292	1.035612		5.28	20	10	9.472	94.70	70 - 130
PHENOL-D5	1.560263	1.618398		3.73	20	10	10.37	104	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data File : C:\MSDCHEM\1\DATA\051222\0512 03.D Vial: 3  
 Acq On : 12 May 2022 5:16 am Operator: 3545  
 Sample : ICVMSV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 8:49 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	58440	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	243744	8000.00	ppb	0.00
46) Acenaphthene-d10	5.15	164	121507	8000.00	ppb	0.00
70) Phenanthrene-d10	6.26	188	225435	8000.00	ppb	0.00
84) Chrysene-d12	9.01	240	215510	8000.00	ppb	0.00
94) Perylene-d12	11.66	264	203511	8000.00	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	2.58	112	94563	9957.8044797	ppb	0.00
Spiked Amount 20000.000			Recovery =	49.79%		
7) Phenol-d5	3.03	99	118224	10372.6012977	ppb	0.00
Spiked Amount 20000.000			Recovery =	51.86%		
24) Nitrobenzene-d5	3.56	82	111572m	10788.1232904	ppb	0.00
Spiked Amount 10000.000			Recovery =	107.88%		
50) 2-Fluorobiphenyl	4.67	172	205314	10016.6040107	ppb	0.00
Spiked Amount 10000.000			Recovery =	100.17%		
73) 2,4,6-Tribromophenol	5.72	330	27286	10692.2206649	ppb	0.00
Spiked Amount 20000.000			Recovery =	53.46%		
87) p-Terphenyl-d14	7.65	244	278981	9472.4248540	ppb	0.00
Spiked Amount 10000.000			Recovery =	94.72%		
Target Compounds						
2) Pyridine	2.00	79	112656	12458.6628230	ppb	89
3) N-Nitrosodimethylamine	1.99	42	64148	13217.4179903	ppb	97
5) Aniline	3.08	66	59561	11015.4863458	ppb #	35
6) bis(2-Chloroethyl)ether	3.09	93	103931m	12374.4576688	ppb	
8) Phenol	3.04	94	121000	10078.4160060	ppb	89
10) 2-Chlorophenol	3.14	128	99230	10322.8324863	ppb	94
11) n-Decane	3.14	41	73336	12952.2916011	ppb	95
12) 1,3-Dichlorobenzene	3.22	146	107568	9896.8891833	ppb	92
13) 1,4-Dichlorobenzene	3.26	146	110595	9886.0073988	ppb	94
14) Benzyl Alcohol	3.32	79	75509	10156.2710746	ppb	98
15) 1,2-Dichlorobenzene	3.35	146	103736	10087.5276257	ppb	93
16) bis(2-Chloroisopropyl)ethe	3.38	121	34548	9817.6332039	ppb #	34
17) 2,2-oxybis(1-chloropropane	3.38	121	34548	9817.6332039	ppb #	34
18) 2-Methylphenol	3.36	108	94295	10855.7219953	ppb	93
19) Hexachloroethane	3.54	117	48015	11823.7388262	ppb	98
20) N-Nitrosodi-n-propylamine	3.46	70	75946	11964.2099710	ppb	96
21) 3&4-Methyl phenol	3.45	107	106294	10773.2324652	ppb	92
25) Nitrobenzene	3.57	77	109813	10859.4493247	ppb	97
26) Isophorone	3.70	82	211607	11665.2362936	ppb	98
27) 2-Nitrophenol	3.75	139	52628	10325.6756397	ppb	90
28) 2,4-Dimethylphenol	3.76	107	79579	8407.0548620	ppb	92
29) bis(2-Chlorethoxy)methane	3.81	93	120019	10347.8070880	ppb	91
30) 2,4-Dichlorophenol	3.89	162	78708	9870.3604360	ppb	96
32) 1,2,4-Trichlorobenzene	3.94	180	86187	9655.6613271	ppb	96
34) Naphthalene	4.00	128	291087	9378.0507276	ppb	98
35) 4-Chloroaniline	4.02	65	39223	10875.6569019	ppb #	44
36) Hexachloro-1,3-butadiene	4.06	225	54619	11216.6969230	ppb	98
40) 4-Chloro-3-methylphenol	4.31	107	79984	9950.5028150	ppb #	79
41) 2-Methylnaphthalene	4.43	142	188315	9310.7879615	ppb #	95
42) 1-Methylnaphthalene	4.49	142	180000	9470.1585585	ppb #	97
47) Hexachlorocyclopentadiene	4.53	237	38555	6772.6685134	ppb	96
48) 2,4,6-Trichlorophenol	4.61	196	51983	9863.7469879	ppb	94
49) 2,4,5-Trichlorophenol	4.64	196	55621	10141.1681604	ppb	94

(#) = qualifier out of range (m) = manual integration  
 0512\_03.D S804E04BV.M Fri May 13 09:53:05 2022

Data File : C:\MSDCHEM\1\DATA\051222\0512 03.D Vial: 3  
 Acq On : 12 May 2022 5:16 am Operator: 3545  
 Sample : ICVMS SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 8:49 2022 Quant Results File: S804E04BV.RES

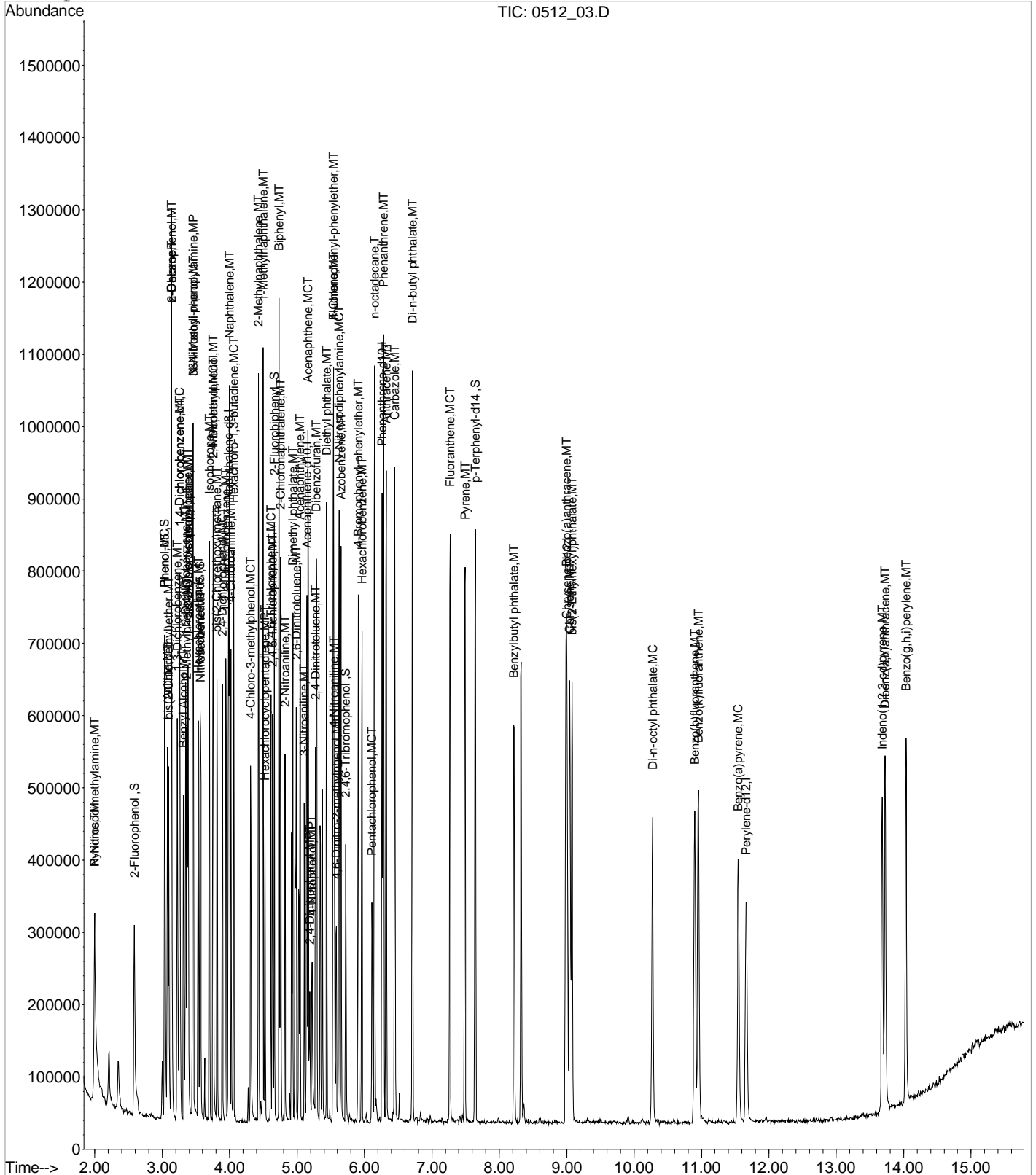
Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Biphenyl	4.73	154	230803	10140.2864663	ppb	99
52) 2-Chloronaphthalene	4.75	162	174675	10055.8145360	ppb	95
53) 2-Nitroaniline	4.82	138	57279	10637.7343118	ppb #	87
54) Acenaphthylene	5.05	152	264747	9796.9815168	ppb	98
55) Dimethyl phthalate	4.94	163	190221	10569.9790524	ppb	99
56) 2,6-Dinitrotoluene	4.99	165	45373	10874.3698051	ppb	82
57) 3-Nitroaniline	5.11	138	48008	10686.5551772	ppb	98
58) Acenaphthene	5.16	153	179891	10119.3100475	ppb	95
59) 2,4-Dinitrophenol	5.19	184	20311	8990.2173629	ppb #	1
60) Dibenzofuran	5.29	168	235128	9537.2507980	ppb	93
61) 2,4-Dinitrotoluene	5.27	165	60529	11584.1427349	ppb #	73
63) 4-Nitrophenol	5.23	139	32194	8676.0021304	ppb #	82
64) Fluorene	5.54	166	195099	9755.9188432	ppb	100
65) 4-Chlorophenyl-phenylether	5.53	204	92543	9758.2504916	ppb	90
66) Diethyl phthalate	5.44	149	199803	10836.8958214	ppb	99
67) 4-Nitroaniline	5.56	138	48174	11449.3159492	ppb #	75
68) Azobenzene	5.66	77	223023	12126.4985004	ppb	92
71) 4,6-Dinitro-2-methylphenol	5.58	198	30268	9936.8340399	ppb	94
72) N-Nitrosodiphenylamine	5.62	169	160343	9360.0170719	ppb	97
74) 4-Bromophenyl-phenylether	5.91	248	58451	10513.3546485	ppb	89
75) Hexachlorobenzene	5.96	284	64943	10497.9861765	ppb	99
76) n-octadecane	6.15	55	39229	11373.0278281	ppb	94
77) Pentachlorophenol	6.12	266	28860	8451.0059343	ppb	96
78) Phenanthrene	6.28	178	294596	9932.1153784	ppb	99
79) Anthracene	6.32	178	292533	9743.6354709	ppb	98
80) Carbazole	6.45	167	261903	9561.0404869	ppb	98
81) Di-n-butyl phthalate	6.71	149	359845	11221.0936815	ppb	99
83) Fluoranthene	7.27	202	304512	9663.9243083	ppb	99
86) Pyrene	7.49	202	310985	8968.2137395	ppb	98
88) Benzylbutyl phthalate	8.22	149	144575	10196.3615523	ppb	98
90) Benzo(a)anthracene	8.99	228	283996	9151.6657023	ppb	96
91) Chrysene	9.05	228	275557	9162.8533548	ppb	98
92) bis(2-Ethylhexyl)phthalate	9.08	149	209279	10715.4961724	ppb	93
93) Di-n-octyl phthalate	10.27	149	310430	9567.8492404	ppb	99
95) Benzo(b)fluoranthene	10.90	252	273489	9433.5159110	ppb	96
96) Benzo(k)fluoranthene	10.96	252	285184	9986.7225195	ppb	94
97) Benzo(a)pyrene	11.55	252	240642	9583.7108531	ppb	96
98) Indeno(1,2,3-cd)pyrene	13.68	276	238661	9674.2038139	ppb	95
99) Dibenz(a,h)anthracene	13.73	278	266481m	10135.3594492	ppb	
100) Benzo(g,h,i)perylene	14.03	276	269419	10492.5613567	ppb	97

(#) = qualifier out of range (m) = manual integration  
 0512\_03.D S804E04BV.M Fri May 13 09:53:05 2022

Data File : C:\MSDCHEM\1\DATA\051222\0512 03.D Vial: 3
Acq On : 12 May 2022 5:16 am Operator: 3545
Sample : ICMSC SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4
Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 13 8:49 2022 Quant Results File: S804E04BV.RES

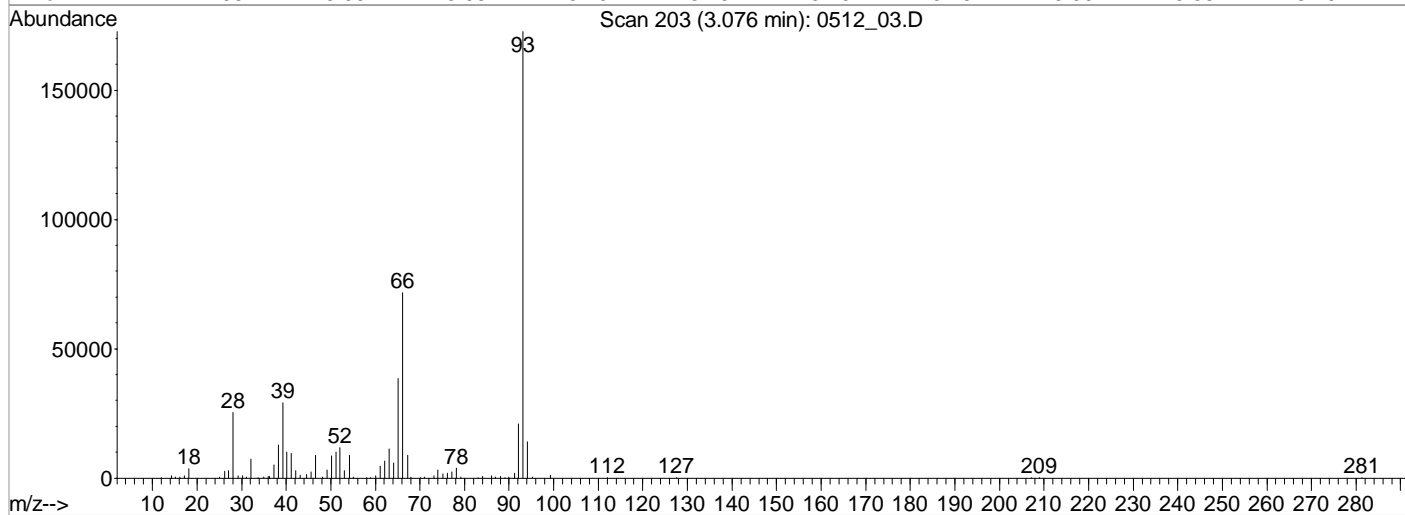
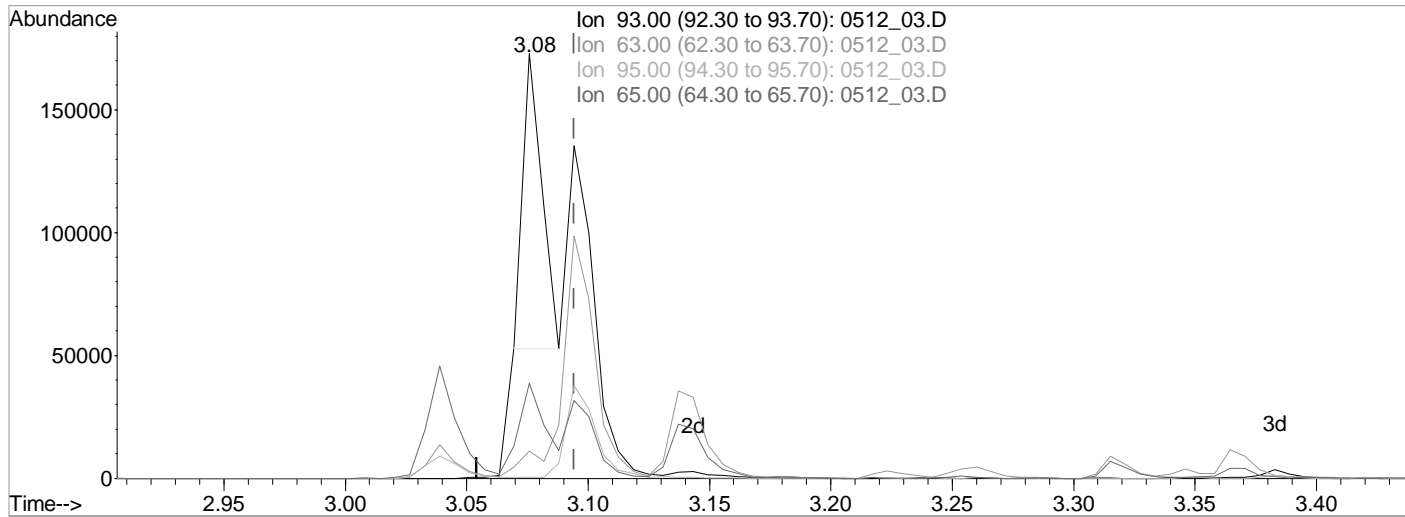
Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)
Title : 8270 BNA
Last Update : Thu May 05 15:59:02 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512\_03.D Vial: 3  
 Acq On : 12 May 2022 5:16 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 9:10 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_03.D

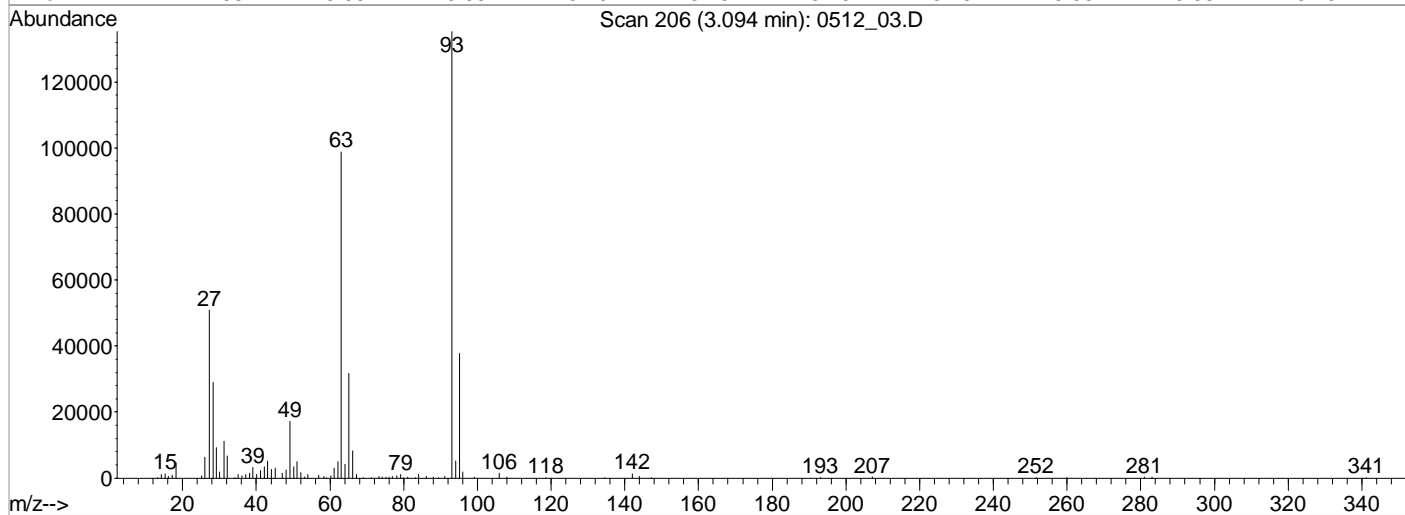
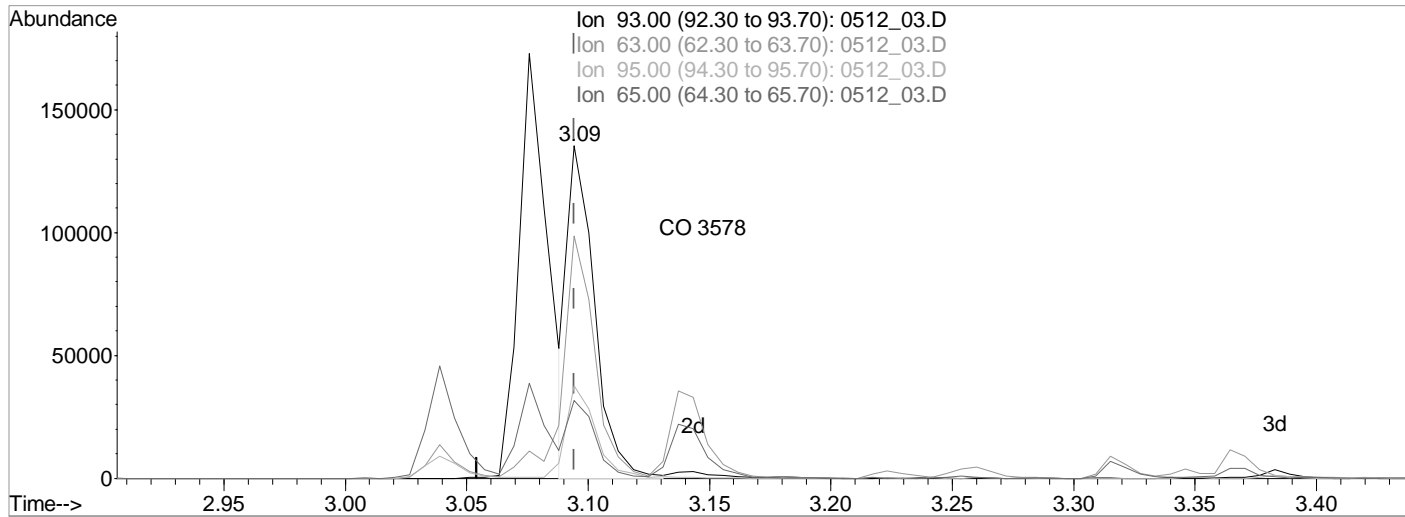
(6) bis(2-Chloroethyl)ether (MT)  
 3.08min (-0.019) 7794.6545857 ppb  
 Qvalue = 39  
 response 65466

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.52#
95.00	30.20	0.12#
65.00	24.00	22.79

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 03.D Vial: 3  
 Acq On : 12 May 2022 5:16 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 9:10 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_03.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.08min (-0.019) 7794.6545857 ppb

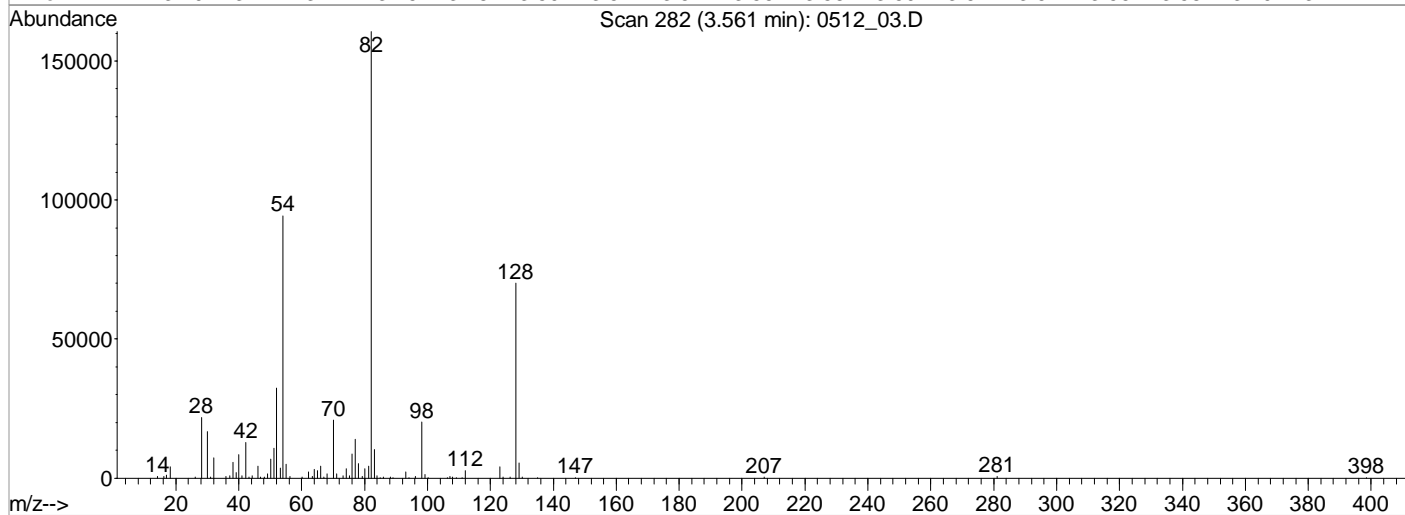
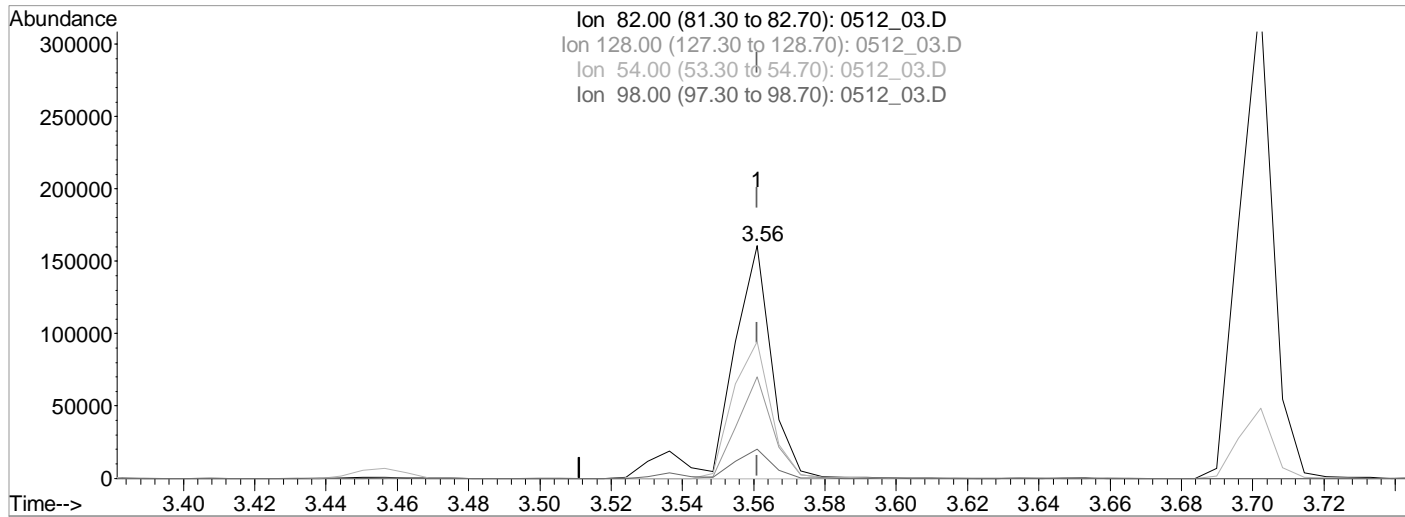
Qvalue = 39  
 response 65466

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	5.52#
95.00	30.20	0.12#
65.00	24.00	22.79

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512\_03.D Vial: 3  
 Acq On : 12 May 2022 5:16 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 9:10 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_03.D

(24) Nitrobenzene-d5 (S)  
 3.56min (-0.000) 12351.8268169 ppb  
 Qvalue = 95  
 response 127744

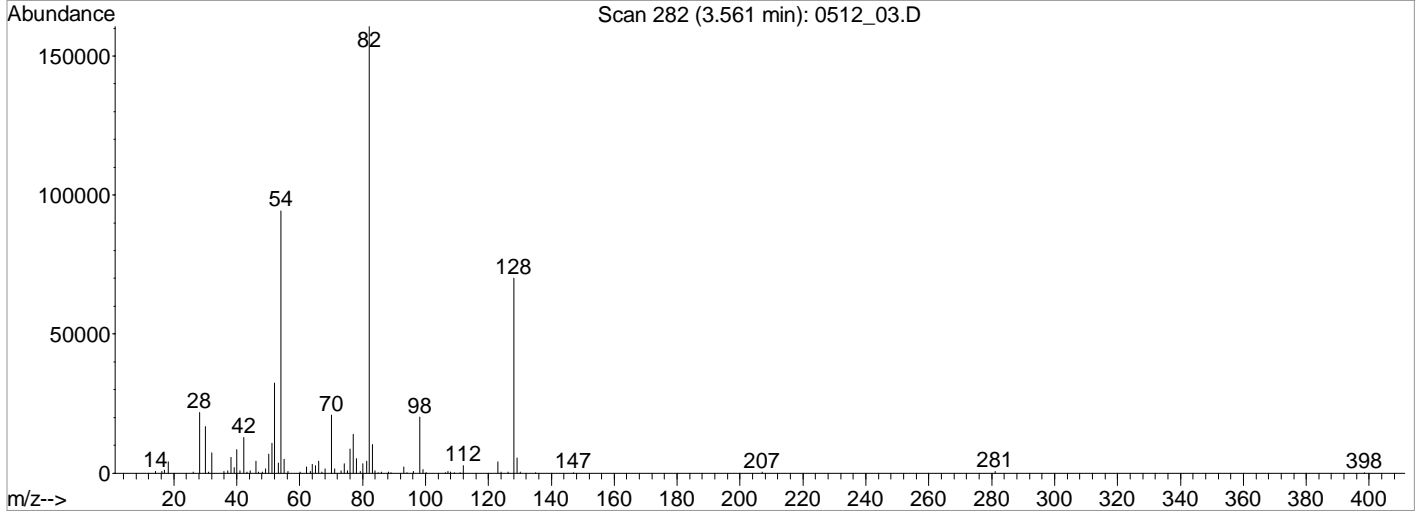
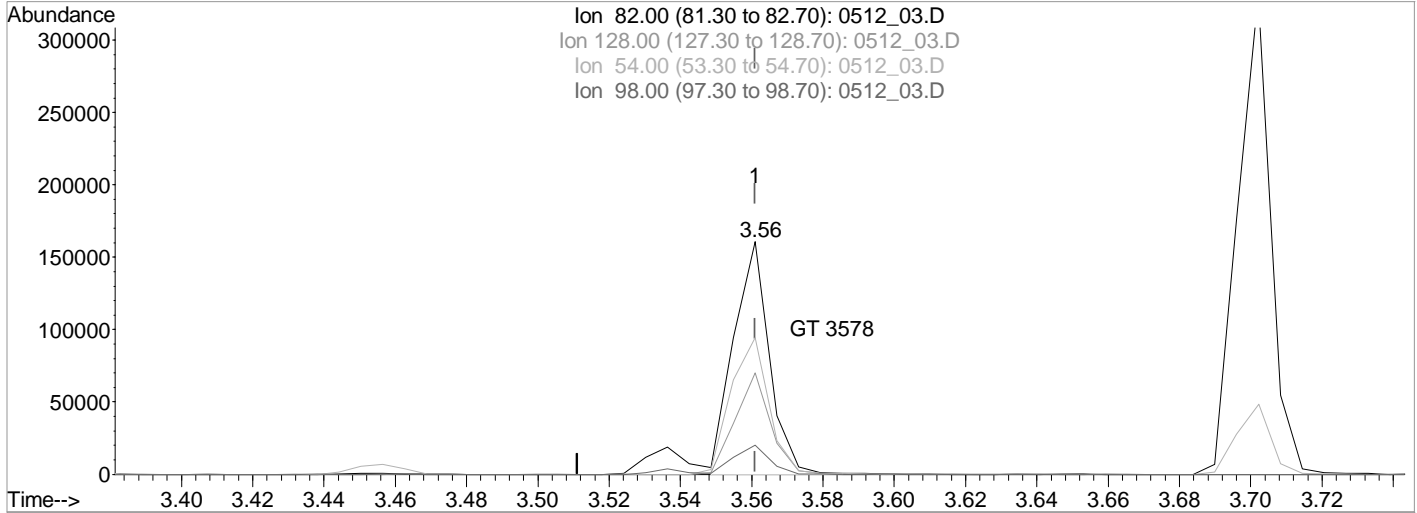
Ion	Exp%	Act%
82.00	100	100
128.00	49.30	43.69
54.00	56.90	58.59
98.00	11.80	12.56



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512\_03.D Vial: 3  
 Acq On : 12 May 2022 5:16 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 9:12 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_03.D

(24) Nitrobenzene-d5 (S)  
 3.56min (-0.000) 10788.1232904 ppb m

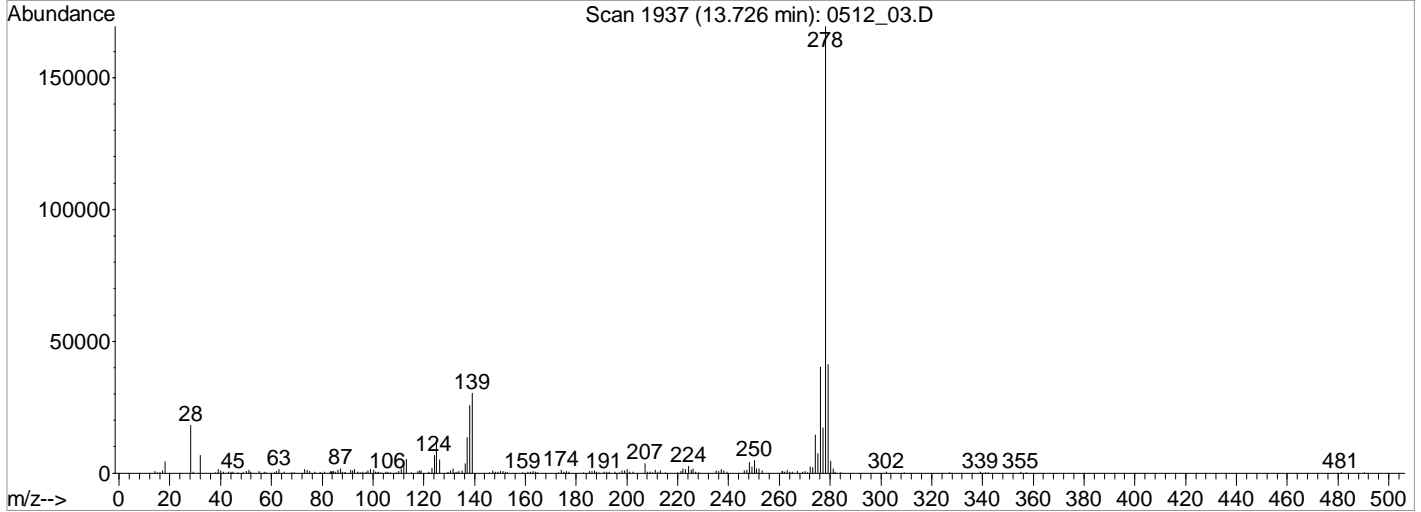
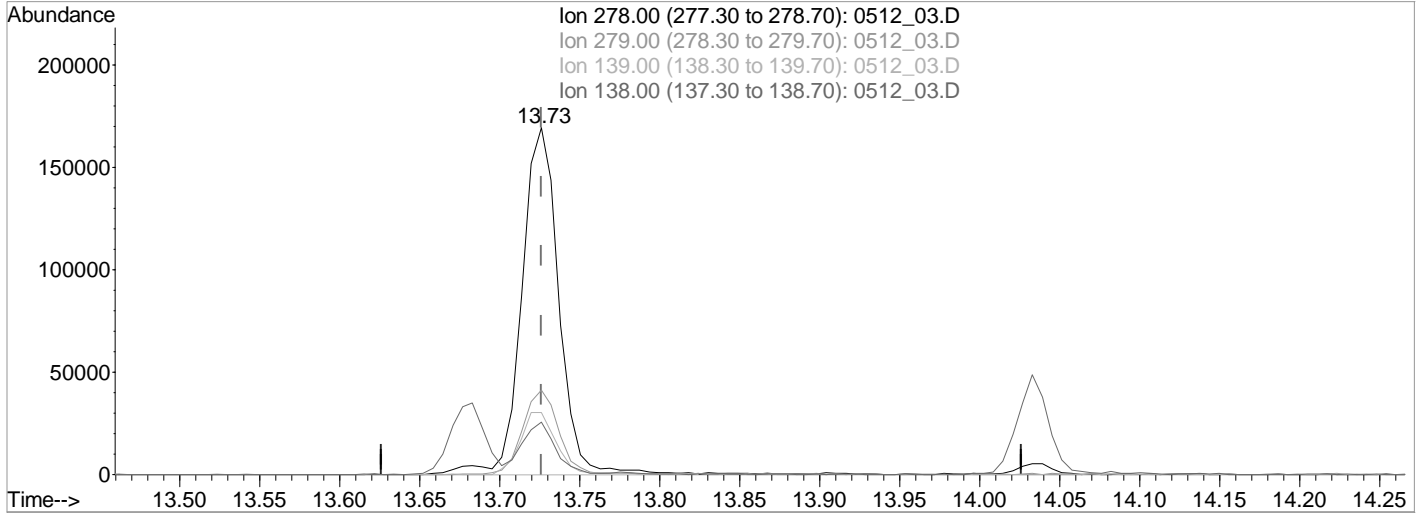
response 111572

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	43.69
54.00	56.90	58.69
98.00	11.80	12.56

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 03.D Vial: 3  
 Acq On : 12 May 2022 5:16 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 9:12 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_03.D

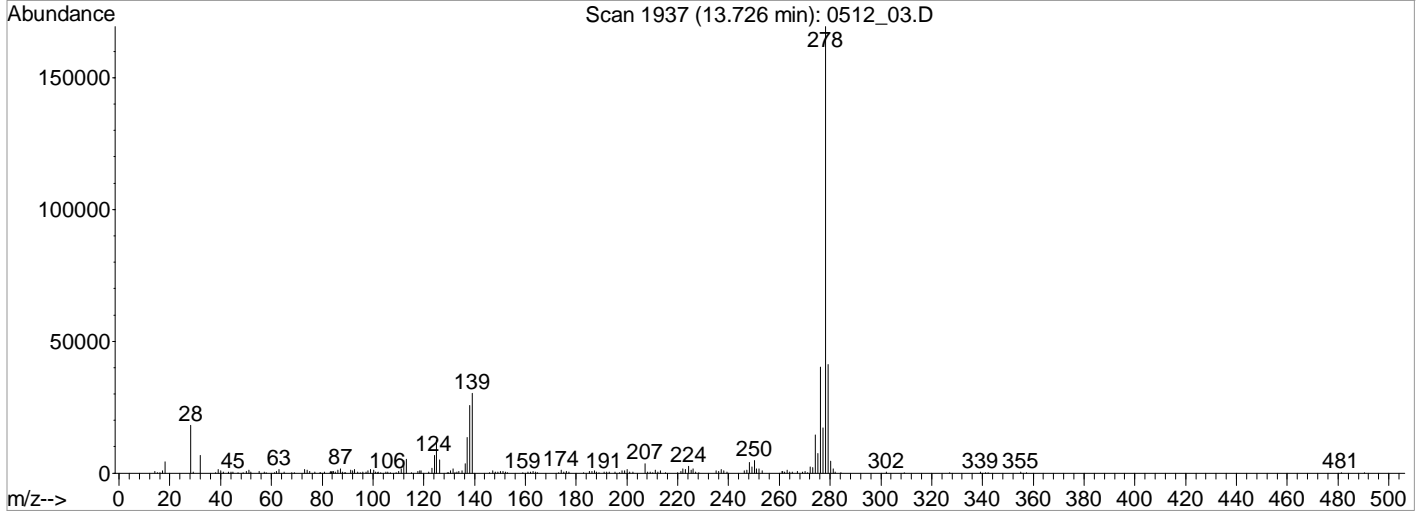
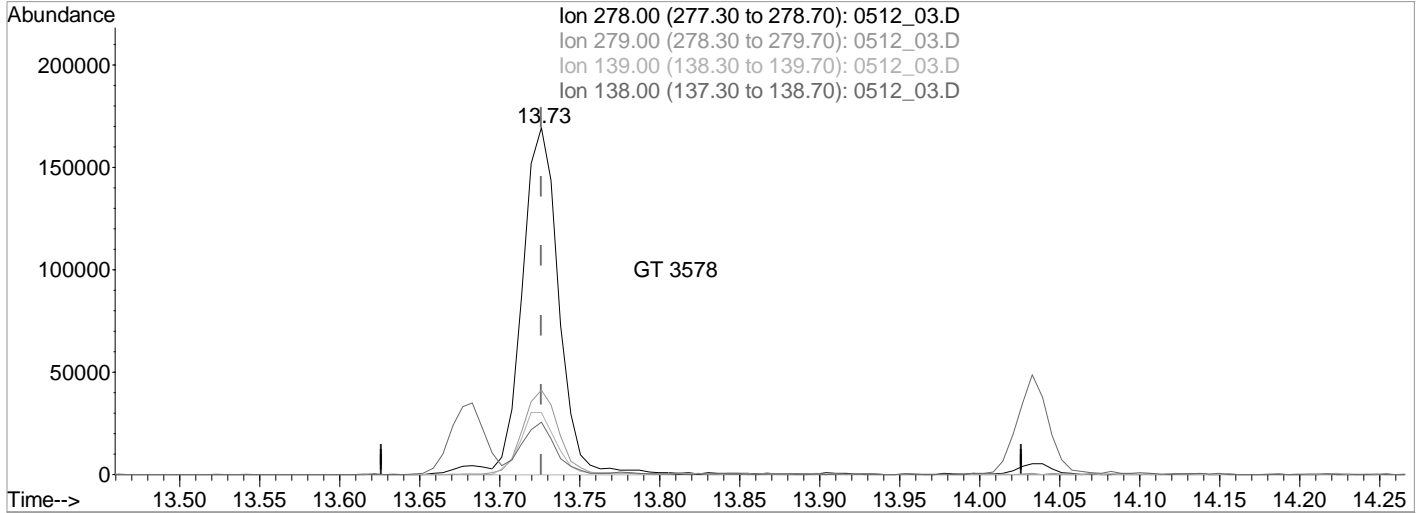
(99) Dibenz(a,h)anthracene (MT)  
 13.73min (-0.000) 10410.1937053 ppb  
 Qvalue = 96  
 response 273707

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	24.24
139.00	22.10	17.90
138.00	16.70	14.97

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 03.D Vial: 3  
 Acq On : 12 May 2022 5:16 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 9:13 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_03.D

(99) Dibenz(a,h)anthracene (MT)  
 13.73min (-0.000) 10135.3594492 ppb m

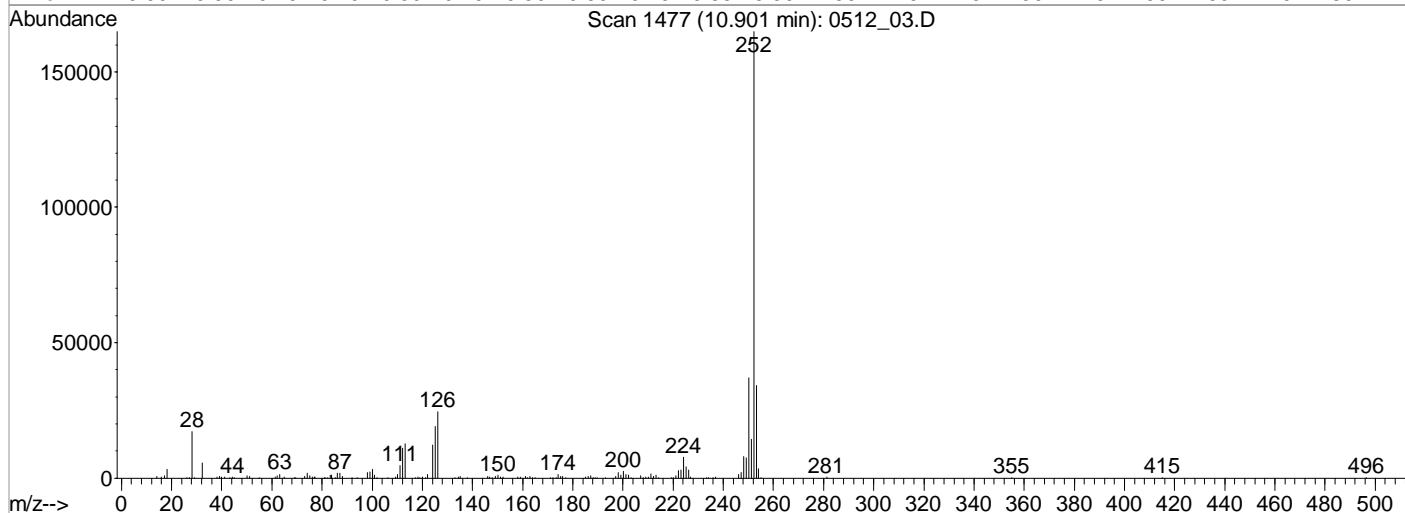
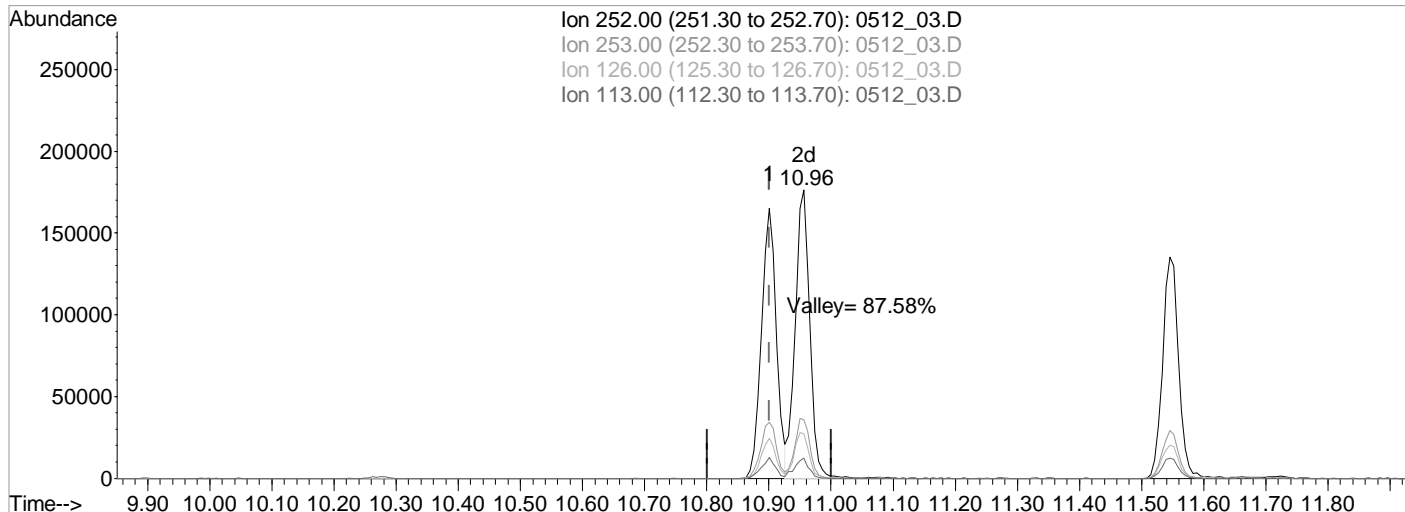
response 266481

Ion	Exp%	Act%
278.00	100	100
279.00	24.40	24.24
139.00	22.10	17.90
138.00	16.70	15.06

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512\_03.D Vial: 3  
 Acq On : 12 May 2022 5:16 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 9:13 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_03.D

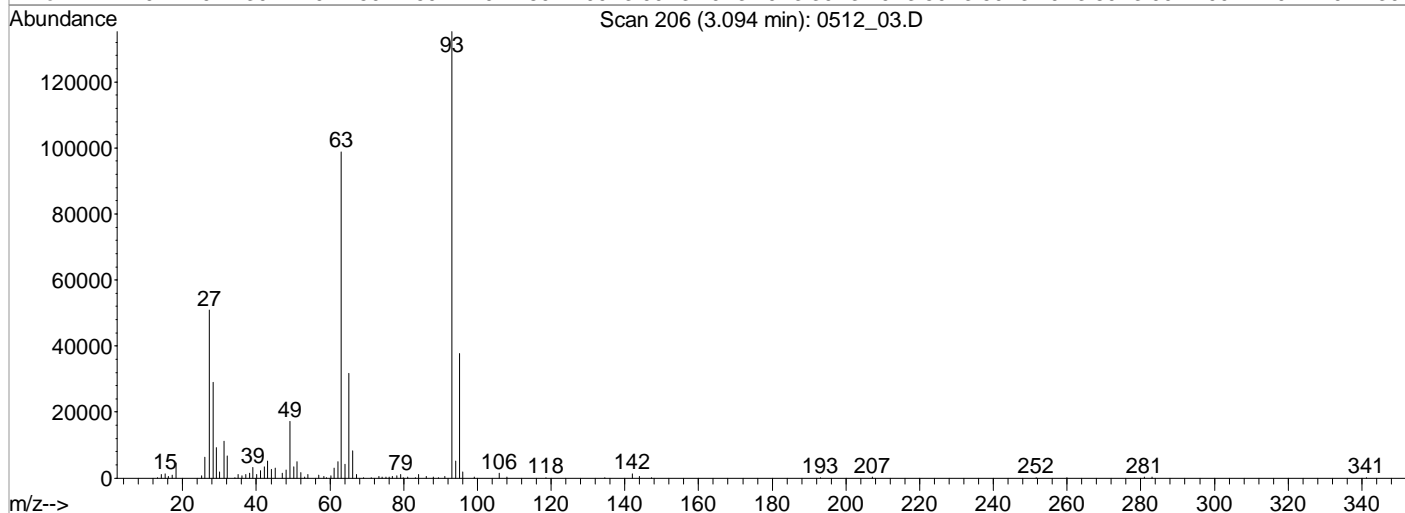
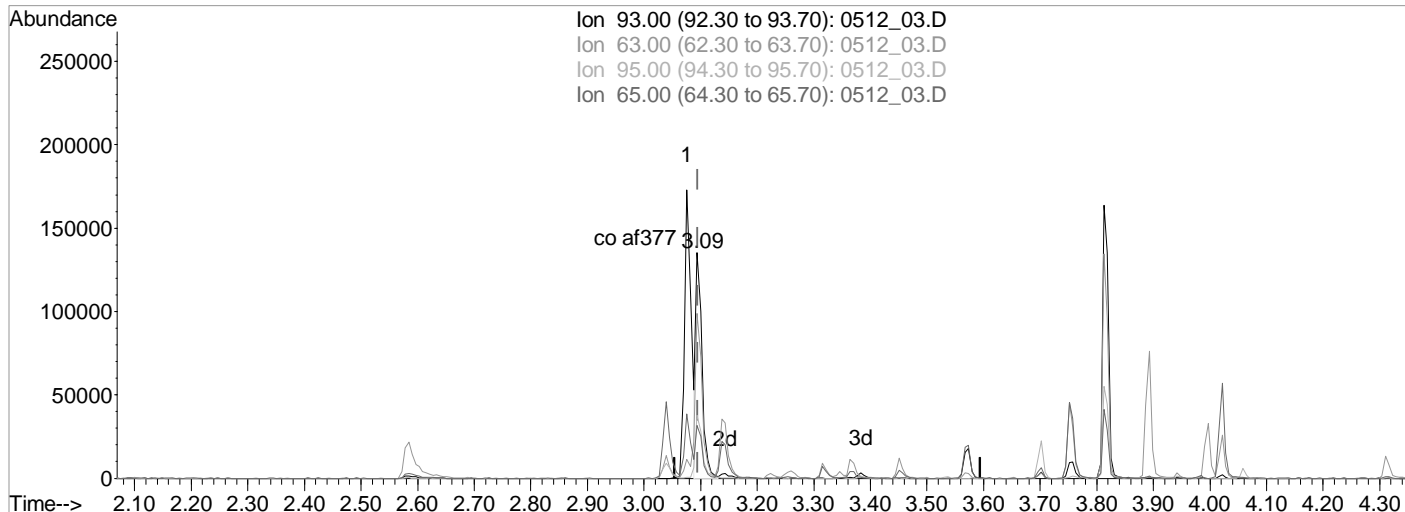
(95) Benzo(b)fluoranthene (MT)  
 10.90min (-0.000) 9433.5159110 ppb  
 Qvalue = 96  
 response 273489

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	20.95
126.00	18.30	14.92
113.00	8.80	7.84

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512\_03.D Vial: 3  
 Acq On : 12 May 2022 5:16 am Operator: 3545  
 Sample : ICV SVMS 10K PPB 22D1927 exp 10/01/22 Inst : BNAMS4  
 Misc : SVMS ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 8:49 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_03.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.09min (-0.000) 12374.4576688 ppb m

response 103931

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	72.94
95.00	30.20	27.88
65.00	24.00	23.40

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1488171	<b>Calibration (begin) date/time:</b>	02/09/22 10:43
<b>Instrument ID:</b>	BNAMS4	<b>Calibration (end) date/time:</b>	02/09/22 15:35
<b>Lab File ID:</b>	0512_04	<b>Analysis date/time:</b>	05/12/22 05:37
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.130890	0.12091910		7.62	20	10	9.238	92.40	

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data File : C:\MSDCHEM\1\DATA\051222\0512 04.D Vial: 4  
 Acq On : 12 May 2022 5:37 am Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 9:14 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	55679	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	244944	8000.00	ppb	0.00
46) Acenaphthene-d10	5.14	164	109355	8000.00	ppb	0.00
70) Phenanthrene-d10	6.26	188	198337	8000.00	ppb	0.00
84) Chrysene-d12	9.00	240	194596	8000.00	ppb	0.00
94) Perylene-d12	11.66	264	174434	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
7) Phenol-d5	0.00	99	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
24) Nitrobenzene-d5	0.00	82	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	
50) 2-Fluorobiphenyl	0.00	172	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.0000000	ppb	
Spiked Amount 20000.000				Recovery =	0.00%	
87) p-Terphenyl-d14	0.00	244	0	0.0000000	ppb	
Spiked Amount 10000.000				Recovery =	0.00%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	3.03	105	30895	12475.4349239	ppb	92
22) Acetophenone	3.47	105	129450	11242.3332371	ppb	92
31) Benzoic Acid	3.80	105	37023	9238.1900631	ppb	93
33) alpha-terpineol	3.98	59	93380	12152.8163126	ppb	98
37) Hydroquinone	4.21	110	39390	7231.3116452	ppb	95
38) Quinoline	4.20	129	161923	9920.4230019	ppb	94
39) Caprolactam	4.23	113	21369	12660.9776447	ppb #	71
43) 1,2,4,5-Tetrachlorobenzene	4.54	216	76665	11693.4200934	ppb	98
44) Diphenyl Ether	4.80	170	104410	9983.2431349	ug/ml#	83
45) Diphenyl Oxide	4.80	170	104410	9983.2431349	ug/ml#	83
62) 2,3,4,6-Tetrachlorophenol	5.38	232	37310	11964.2497868	ppb	98
69) Atrazine	6.02	200	47315	10580.4726519	ppb	98
82) 2-nitrodiphenylamine	6.84	167	63977	12789.7951003	ppb #	100
85) Benzidine	7.39	184	94451	8388.5593823	ppb	98
89) 3,3-Dichlorobenzidine	8.97	252	96461	9628.4651227	ppb	99

(#) = qualifier out of range (m) = manual integration

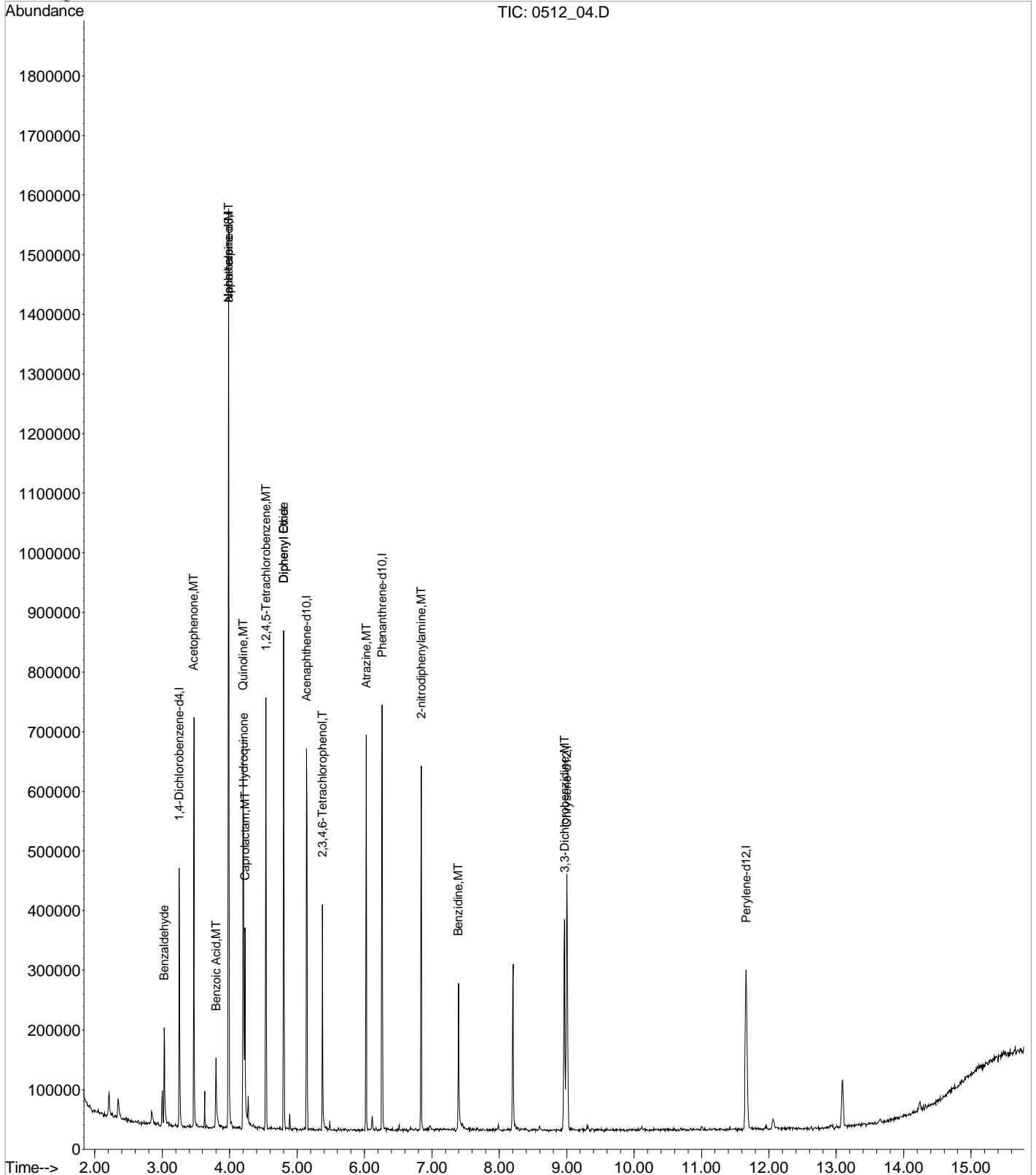
0512\_04.D S804E04BV.M Thu May 12 09:15:37 2022

Data File : C:\MSDCHEM\1\DATA\051222\0512 04.D  
 Acq On : 12 May 2022 5:37 am  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 9:14 2022

Vial: 4  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804E04BV.RES

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration

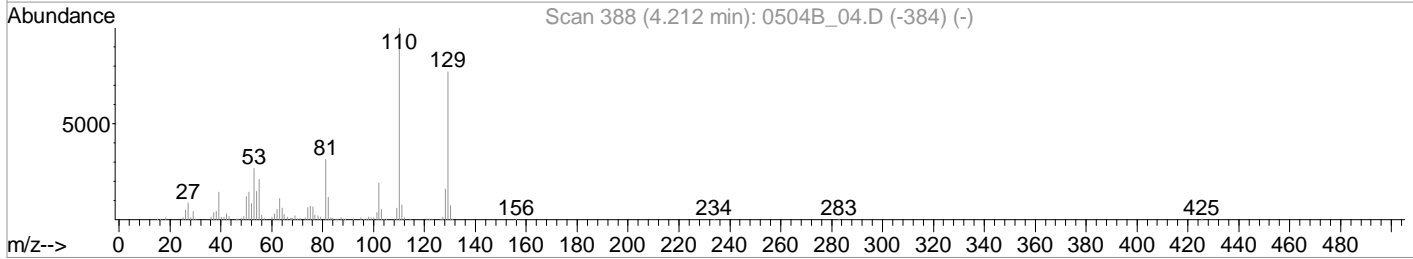
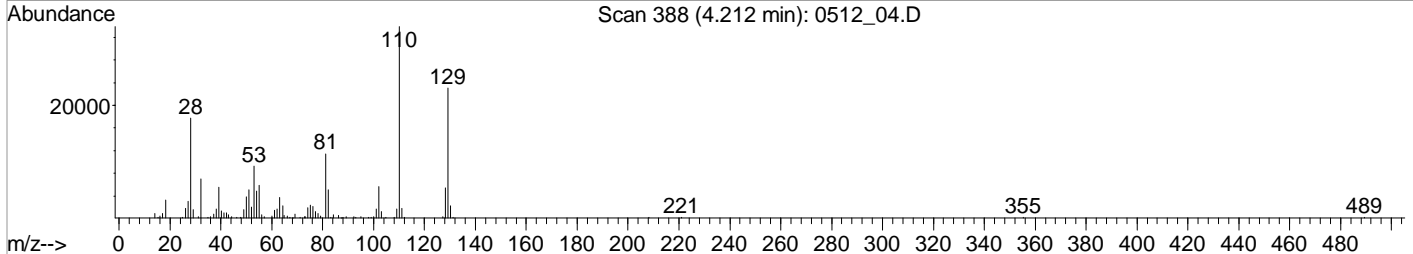
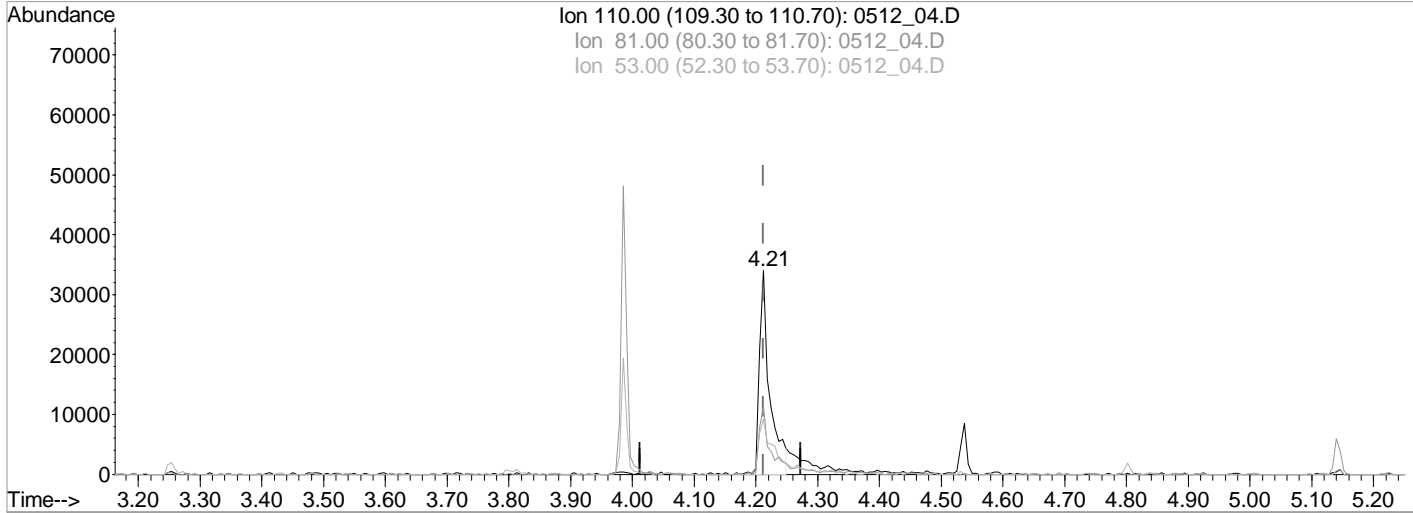




Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512\_04.D Vial: 4  
 Acq On : 12 May 2022 5:37 am Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 9:14 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Single Level Calibration



TIC: 0512\_04.D

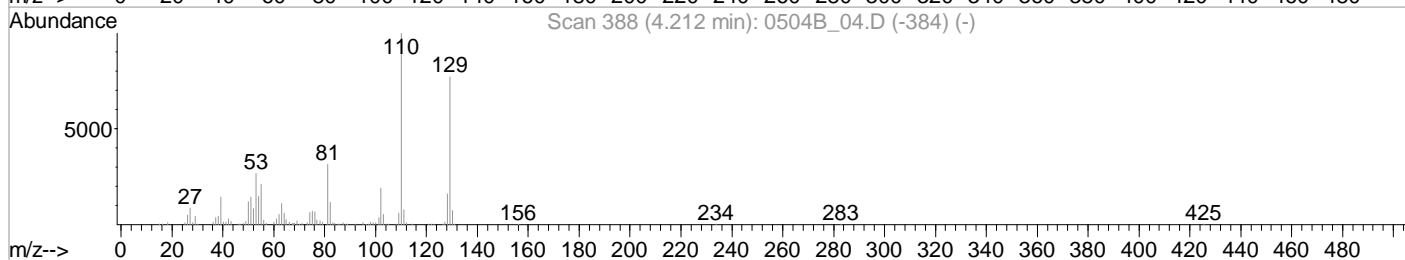
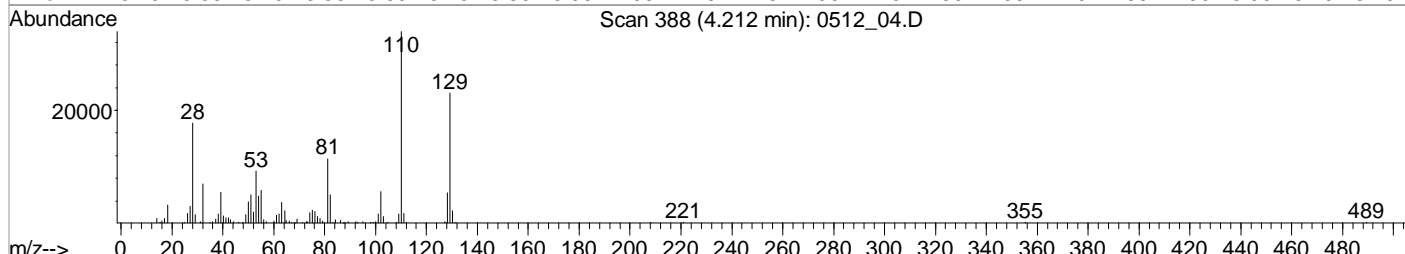
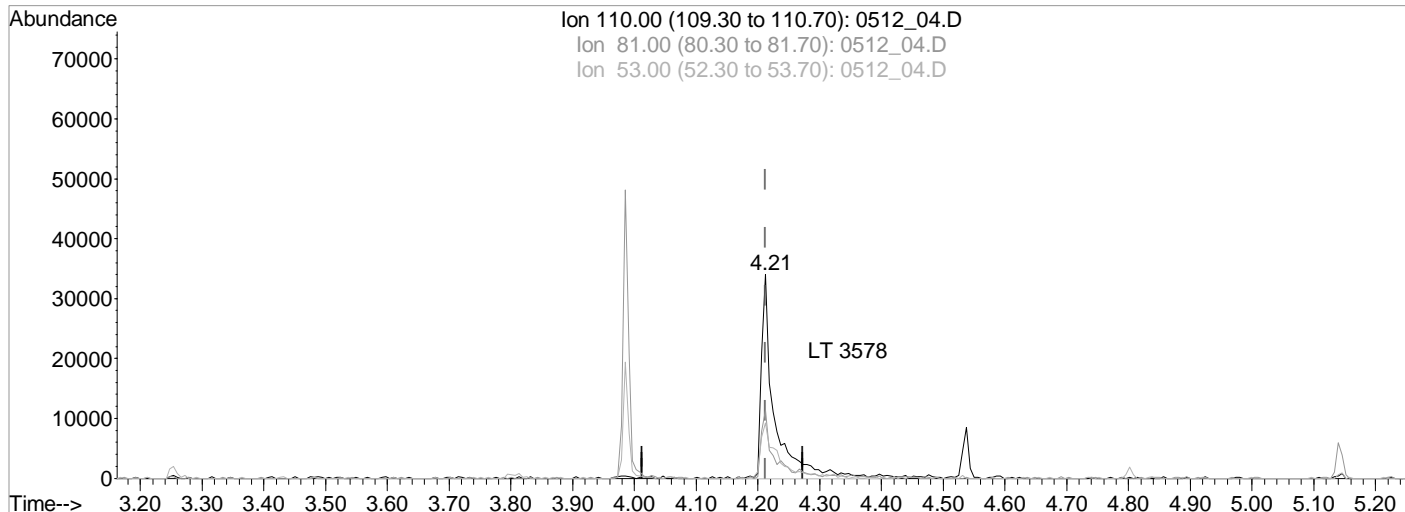
(37) Hydroquinone  
 4.21min (+0.000) 7231.3116452 ppb  
 Qvalue = 95  
 response 39390

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	33.59
53.00	25.90	27.36
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512\_04.D Vial: 4  
 Acq On : 12 May 2022 5:37 am Operator: 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 09/10/22 Inst : BNAMS4  
 Misc : TCL ICAL ISTD 22D16229 exp 10/16/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 9:14 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Single Level Calibration



TIC: 0512\_04.D

(37) Hydroquinone  
 4.21min (+0.000) 7231.3116452 ppb  
 Qvalue = 95  
 response 39390

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	33.59
53.00	25.90	27.36
0.00	0.00	0.00

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1488171	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0331_18	<b>Analysis date/time:</b>	03/31/22 22:44
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.610754	0.64112010		4.97		10	10.50	105	70 - 130
2-METHYLNAPHTHALENE	0.627399	0.64607670		2.98		10	10.30	103	70 - 130
3&4-METHYL PHENOL	1.301686	1.329116		2.11		10	10.21	102	70 - 130
ACENAPHTHENE	1.148837	1.199481		4.41		10	10.44	104	70 - 130
ACENAPHTHYLENE	1.695228	1.857736		9.59		10	10.96	110	70 - 130
ANTHRACENE	1.006737	1.045115		3.81		10	10.38	104	70 - 130
BENZO(A)ANTHRACENE	1.116712	1.133629		1.51		10	10.15	102	70 - 130
BENZO(A)PYRENE	0.950358	1.085630		14.20		10	11.42	114	70 - 130
BENZO(B)FLUORANTHENE	1.172442	1.217118		3.81		10	10.38	104	70 - 130
BENZO(G,H,I)PERYLENE	1.026990	1.111795		8.26		10	10.83	108	70 - 130
BENZO(K)FLUORANTHENE	1.198822	1.286310		7.30		10	10.73	107	70 - 130
BIS(2-ETHYLHEXYL)PHTHALATE	1.014597	1.069942		5.45		10	10.55	106	70 - 130
CARBAZOLE	0.861194	0.95543070		10.90		10	11.09	111	70 - 130
CHRYSENE	1.179486	1.253499		6.28		10	10.63	106	70 - 130
DI-N-BUTYL PHTHALATE	1.289953	1.485565		15.20		10	11.52	115	70 - 130
DI-N-OCTYL PHTHALATE	1.425428	1.425258		0.0119		10	9.188	91.90	70 - 130
DIBENZ(A,H)ANTHRACENE	0.969471	1.067733		10.10		10	11.01	110	70 - 130
DIBENZOFURAN	1.532971	1.604143		4.64		10	10.46	105	70 - 130
FLUORANTHENE	1.037530	1.086566		4.73		10	10.47	105	70 - 130
FLUORENE	1.268965	1.347410		6.18		10	10.62	106	70 - 130
INDENO(1,2,3-CD)PYRENE	0.864970	0.96418880		11.50		10	11.15	112	70 - 130
NAPHTHALENE	0.998617	1.032092		3.35		10	10.34	103	70 - 130
PENTACHLOROPHENOL	0.105171	0.11822170		12.40		10	11.43	114	70 - 130
PHENANTHRENE	1.060304	1.114125		5.08		10	10.51	105	70 - 130
PHENOL	1.575372	1.630722		3.51		10	10.35	104	70 - 130
PYRENE	1.498492	1.578251		5.32		10	10.53	105	70 - 130
2,4,6-TRIBROMOPHENOL	0.083814	0.08113972		3.19		10	9.681	96.80	70 - 130
2-FLUOROBIPHENYL	1.270391	1.246534		1.88		10	9.812	98.10	70 - 130
2-FLUOROPHENOL	1.252515	1.217577		2.79		10	9.721	97.20	70 - 130
NITROBENZENE-D5	0.304240	0.29725250		2.30		10	9.770	97.70	70 - 130
P-TERPHENYL-D14	1.107064	1.061220		4.14		10	9.586	95.90	70 - 130
PHENOL-D5	1.486088	1.435091		3.43		10	9.657	96.60	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 17:01:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.410	152	32498	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.140	136	129280	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.310	164	67005	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.434	188	107114	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.245	240	77504	8000.0000000	ppb	0.00	
94) Perylene-d12	11.951	264	68794	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	2.740	112	49461	9721.0515879	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	48.61%		
7) Phenol-d5	3.175	99	58297	9656.8420263	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	48.28%		
24) Nitrobenzene-d5	3.710	82	48036m	9770.3438575	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	97.70%		
50) 2-Fluorobiphenyl	4.828	172	104405	9812.2063195	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	98.12%		
73) 2,4,6-Tribromophenol	5.886	330	10864	9680.9076507	ppb	0.00	
Spiked Amount	20000.000		Recovery	=	48.40%		
87) p-Terphenyl-d14	7.845	244	102811	9585.8929227	ppb	0.00	
Spiked Amount	10000.000		Recovery	=	95.86%		
Target Compounds							
2) Pyridine	2.216	79	56827	10543.3045205	ppb	99	
3) N-Nitrosodimethylamine	2.199	42	26162	9220.1486386	ppb	99	
5) Aniline	3.228	66	29495	10558.9289085	ppb	97	
6) bis(2-Chloroethyl)ether	3.245	93	55703m	10136.1427628	ppb		
8) Phenol	3.181	94	66244	10351.3432882	ppb	96	
10) 2-Chlorophenol	3.293	128	56605	10621.1407363	ppb	98	
11) n-Decane	3.293	41	32743	9557.1097558	ppb	# 100	
12) 1,3-Dichlorobenzene	3.381	146	62683	10262.6996716	ppb	100	
13) 1,4-Dichlorobenzene	3.416	146	63047	10312.3985770	ppb	96	
14) Benzyl Alcohol	3.463	79	40660	10415.3909180	ppb	100	
15) 1,2-Dichlorobenzene	3.504	146	60642	10287.4111665	ppb	98	
16) bis(2-Chloroisopropyl)...	3.540	121	21521	10572.3791808	ppb	98	
17) 2,2-oxybis(1-chloropro...	3.540	121	21521	10572.3791808	ppb	98	
18) 2-Methylphenol	3.510	108	50596	10555.1684687	ppb	96	
19) Hexachloroethane	3.698	117	26205	10278.9609507	ppb	97	
20) N-Nitrosodi-n-propylamine	3.610	70	35112	10298.7989609	ppb	99	
21) 3&4-Methyl phenol	3.593	107	53992	10210.7212151	ppb	99	
25) Nitrobenzene	3.722	77	53649	10796.3440550	ppb	98	
26) Isophorone	3.851	82	101269	10411.4636677	ppb	100	
27) 2-Nitrophenol	3.904	139	25159	10701.2848374	ppb	93	
28) 2,4-Dimethylphenol	3.904	107	52280	10806.4841322	ppb	99	
29) bis(2-Chlorethoxy)methane	3.969	93	71047	10871.2890055	ppb	97	
30) 2,4-Dichlorophenol	4.040	162	40871	10693.2795032	ppb	# 86	
32) 1,2,4-Trichlorobenzene	4.098	180	47514	10395.1948767	ppb	94	
34) Naphthalene	4.157	128	166786	10335.2044265	ppb	100	
35) 4-Chloroaniline	4.175	65	17354	10233.0364786	ppb	98	
36) Hexachloro-1,3-butadiene	4.222	225	27825	11286.0704472	ppb	98	
40) 4-Chloro-3-methylphenol	4.463	107	41378	10347.5683022	ppb	99	
41) 2-Methylnaphthalene	4.592	142	104406	10297.6968942	ppb	99	
42) 1-Methylnaphthalene	4.657	142	103605	10497.1978691	ppb	100	
47) Hexachlorocyclopentadiene	4.692	237	19130	8752.6966899	ppb	98	
48) 2,4,6-Trichlorophenol	4.769	196	27186	10863.2348945	ppb	97	

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

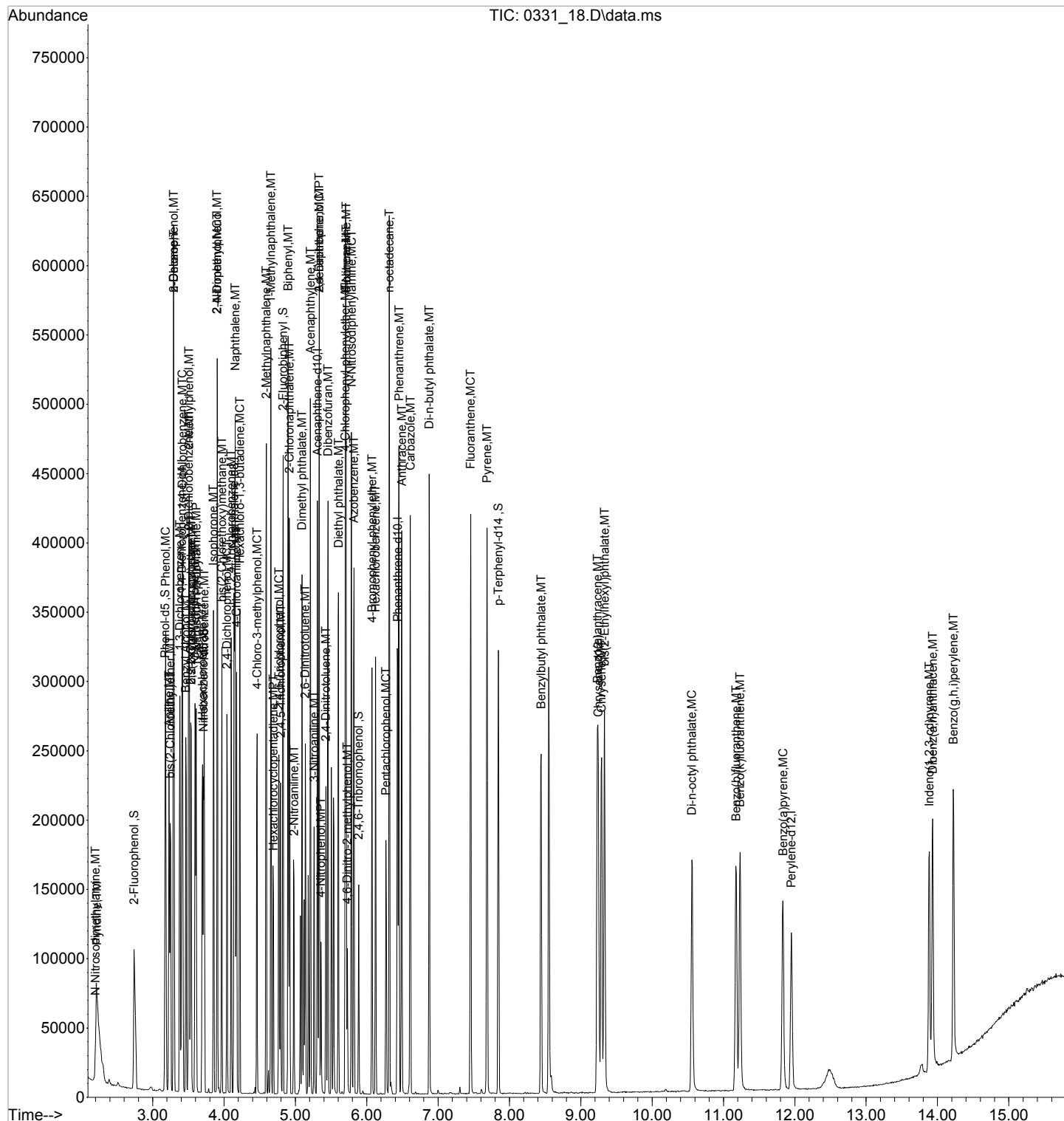
Quant Time: Apr 04 17:01:16 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.792	196	27202	10638.5015338	ppb		96
51) Biphenyl	4.898	154	118579	9890.1836667	ppb		99
52) 2-Chloronaphthalene	4.916	162	97364	10522.2343151	ppb		97
53) 2-Nitroaniline	4.981	138	26879	9792.8659732	ppb		99
54) Acenaphthylene	5.210	152	155597	10958.6228399	ppb		99
55) Dimethyl phthalate	5.092	163	110449	10653.1510320	ppb		94
56) 2,6-Dinitrotoluene	5.139	165	24488	10819.8125221	ppb		94
57) 3-Nitroaniline	5.263	138	21957	10159.1833892	ppb		95
58) Acenaphthene	5.334	153	100464	10440.8237247	ppb		99
59) 2,4-Dinitrophenol	5.334	184	6639	10067.3246842	ppb	#	1
60) Dibenzofuran	5.457	168	134357	10464.2761664	ppb		99
61) 2,4-Dinitrotoluene	5.428	165	28361	10009.1795744	ppb		83
63) 4-Nitrophenol	5.357	139	15677	10019.4582644	ppb		84
64) Fluorene	5.710	166	112854	10618.1767720	ppb		99
65) 4-Chlorophenyl-phenyle...	5.698	204	50559	10444.6934063	ppb		87
66) Diethyl phthalate	5.604	149	118174	10955.7827258	ppb		100
67) 4-Nitroaniline	5.710	138	14373	10982.9600230	ppb		99
68) Azobenzene	5.822	77	118542	10935.8381151	ppb		100
71) 4,6-Dinitro-2-methylph...	5.728	198	10278	9898.9697426	ppb	#	76
72) N-Nitrosodiphenylamine	5.787	169	89933	10794.9785060	ppb		99
74) 4-Bromophenyl-phenylether	6.075	248	26731	10453.6669917	ppb		91
75) Hexachlorobenzene	6.122	284	31578	10571.7081466	ppb		99
76) n-octadecane	6.316	55	19875	9957.1898370	ppb		98
77) Pentachlorophenol	6.269	266	15829	11430.0132536	ppb		91
78) Phenanthrene	6.451	178	149173	10507.5981260	ppb		99
79) Anthracene	6.492	178	139933	10381.2108124	ppb		99
80) Carbazole	6.610	167	127925	11094.2622659	ppb		100
81) Di-n-butyl phthalate	6.875	149	198906	11516.4267189	ppb		99
83) Fluoranthene	7.457	202	145483	10472.6197639	ppb		99
86) Pyrene	7.686	202	152901	10532.2669087	ppb		99
88) Benzylbutyl phthalate	8.445	149	68827	10330.4950097	ppb		95
90) Benzo(a)anthracene	9.233	228	109826	10151.4892180	ppb		99
91) Chrysene	9.292	228	121439	10627.5018659	ppb		99
92) bis(2-Ethylhexyl)phtha...	9.333	149	103656	10545.4870384	ppb		98
93) Di-n-octyl phthalate	10.557	149	138079	9187.8214826	ppb		100
95) Benzo(b)fluoranthene	11.174	252	104663	10381.0496709	ppb		98
96) Benzo(k)fluoranthene	11.233	252	110613	10729.7840645	ppb		99
97) Benzo(a)pyrene	11.833	252	93356	11423.3722820	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.886	276	82913	11147.0755413	ppb		95
99) Dibenz(a,h)anthracene	13.933	278	91817	11013.5644462	ppb		99
100) Benzo(g,h,i)perylene	14.221	276	95606	10825.7600661	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_18.D  
Acq On : 31 Mar 2022 10:44 pm  
Operator : 3545  
Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 18 Sample Multiplier: 1

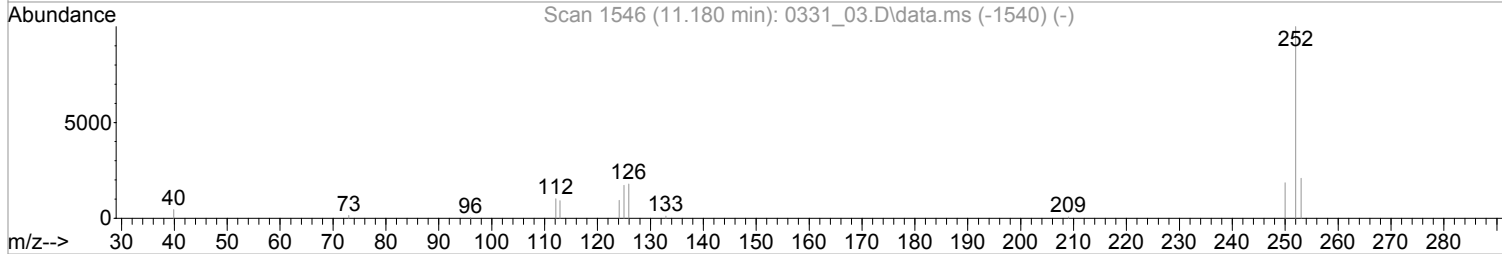
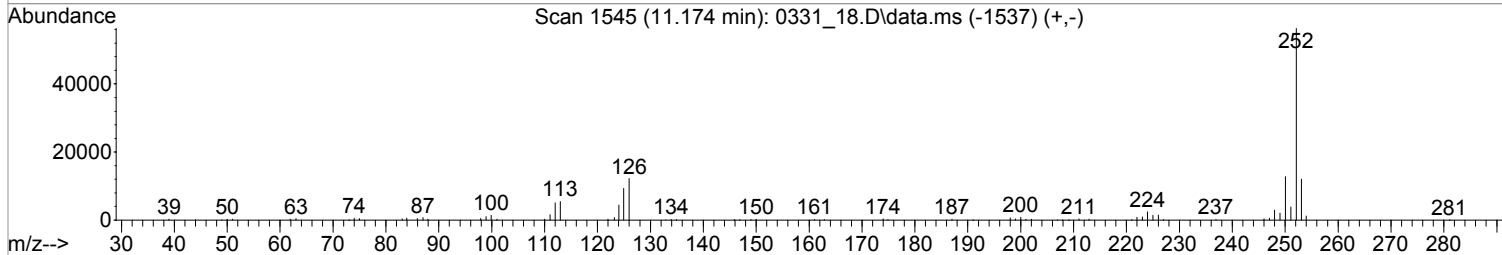
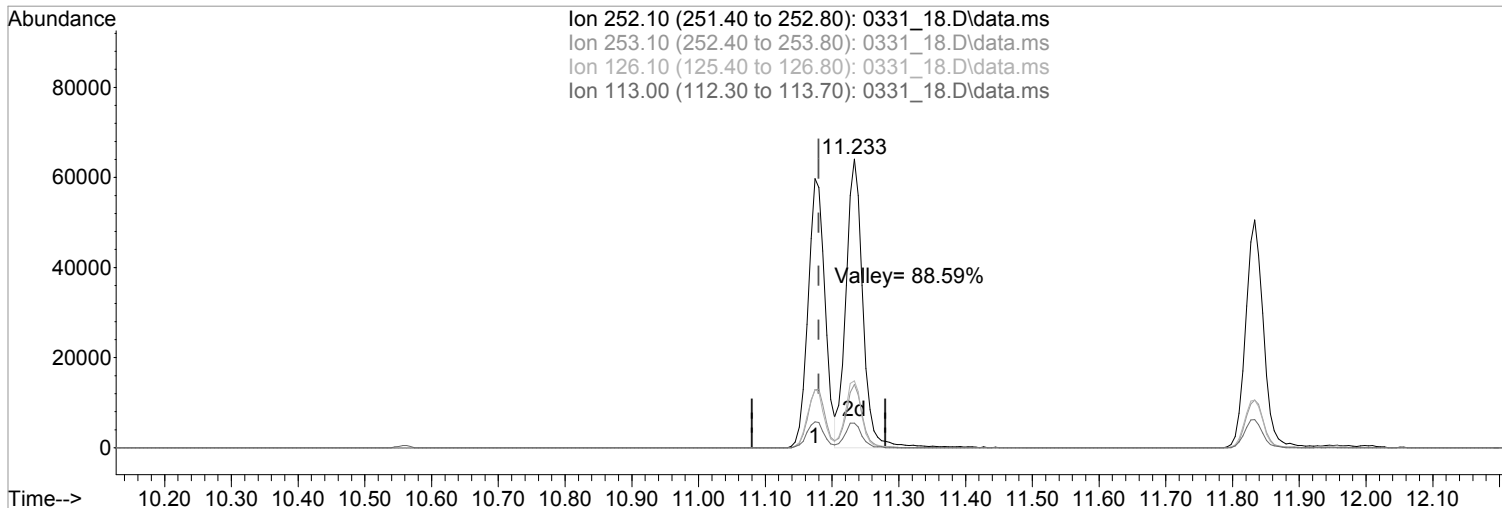
Quant Time: Apr 04 17:01:16 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:54:30 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:39:37 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:39:09 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

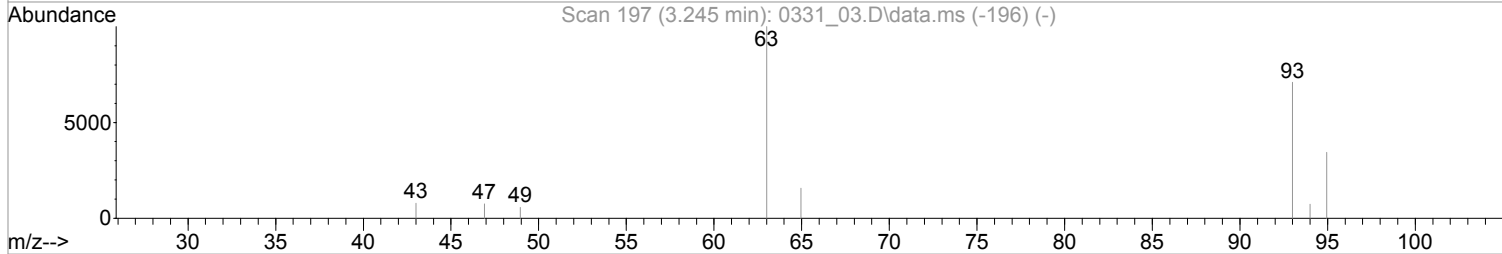
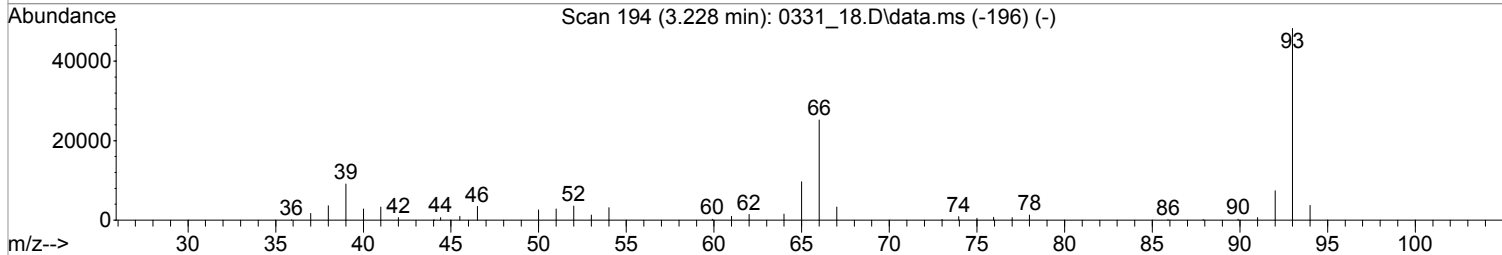
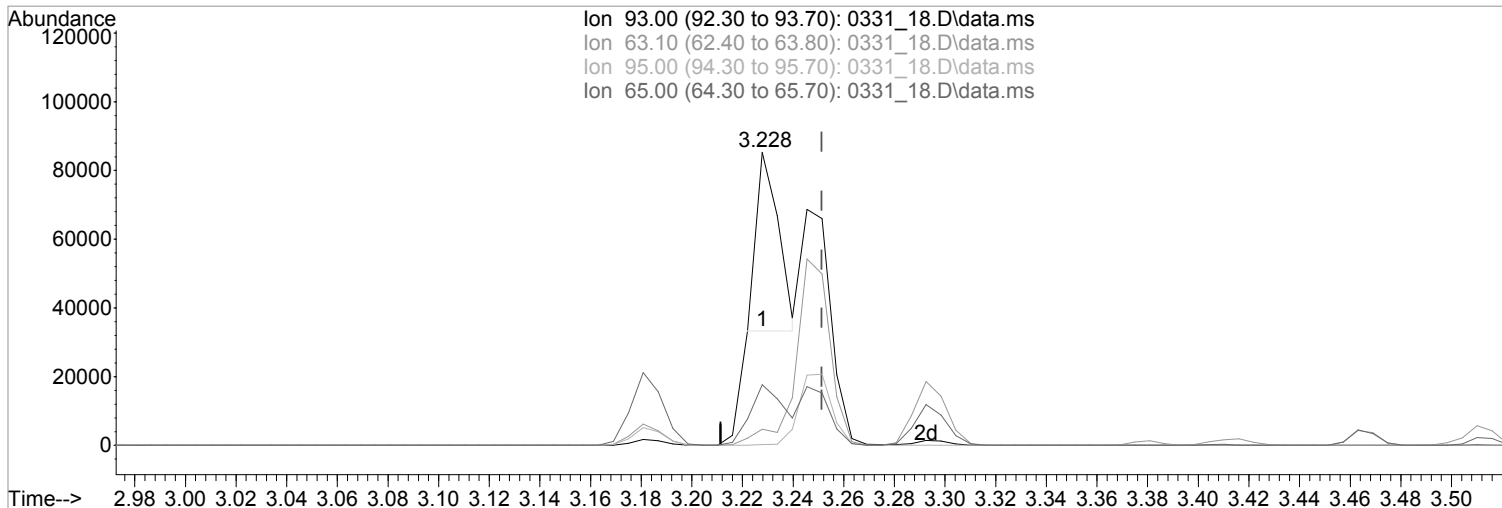
(95) Benzo(b)fluoranthene (MT)  
 11.174min (-0.006) 10381.0496709 ppb  
 Qvalue = 98  
 response 104663

Ion	Exp%	Act%
252.10	100	100
253.10	21.80	21.38
126.10	20.00	21.67
113.00	9.70	9.69

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.228min (-0.024) 5741.0786522 ppb  
 Qvalue = 37  
 response 31550

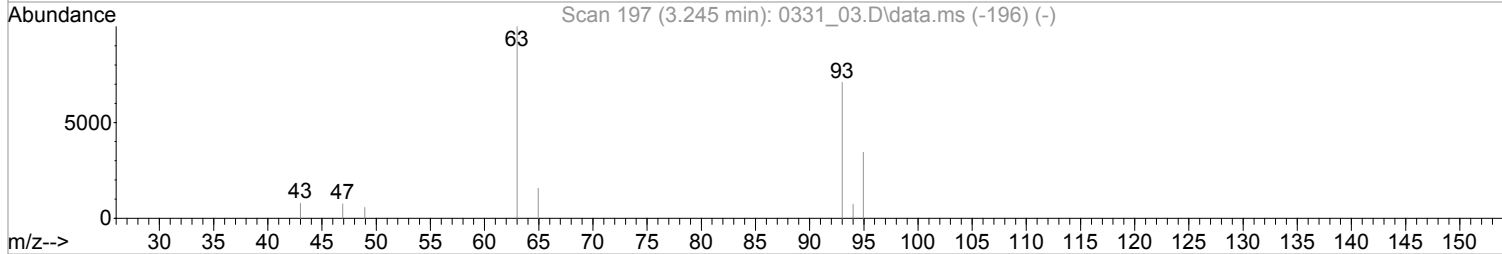
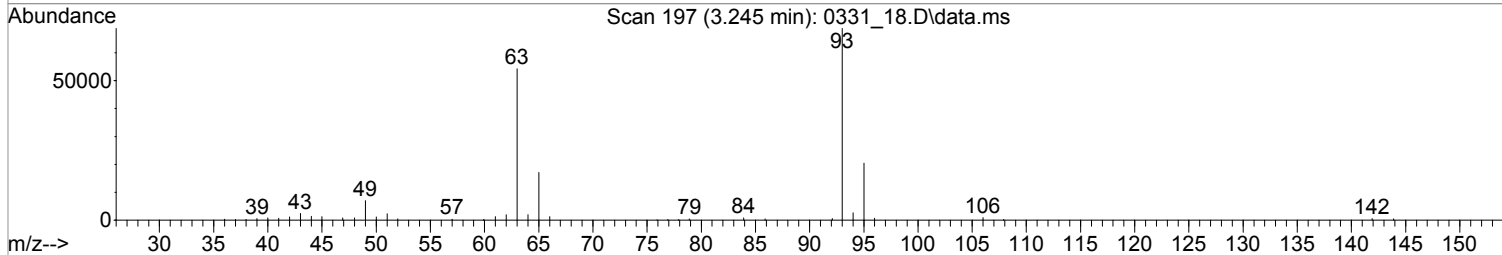
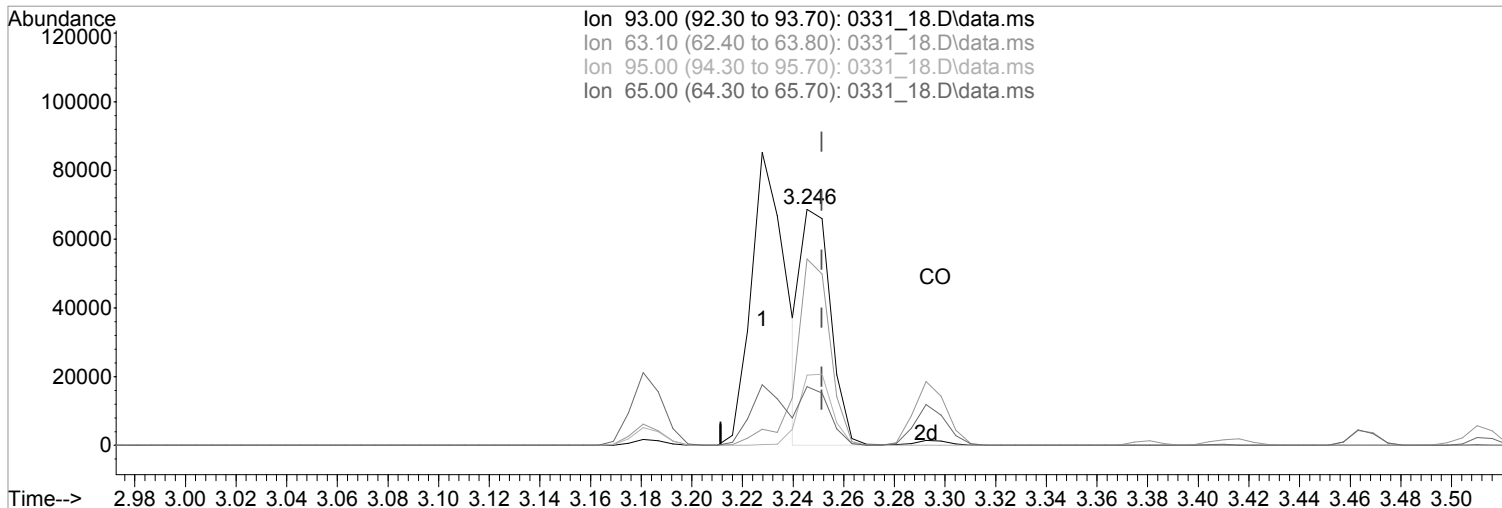
Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.01#
95.00	31.90	0.36#
65.00	23.10	19.07



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.245min (-0.006) 10136.1427628 ppb m

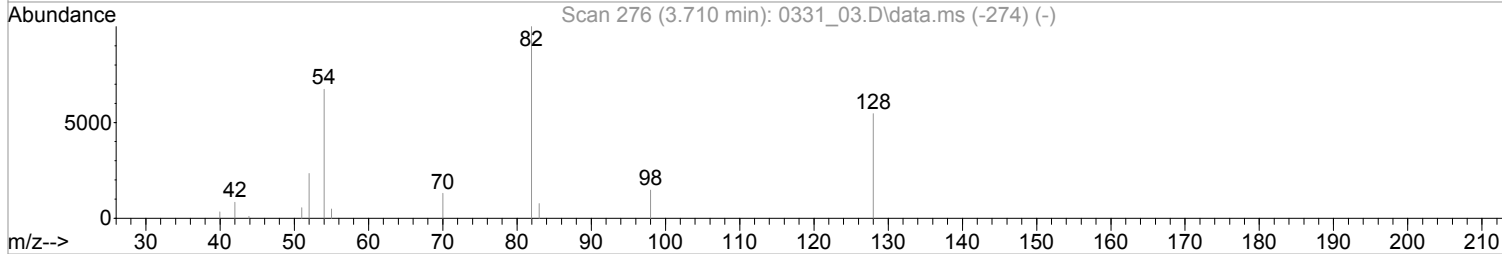
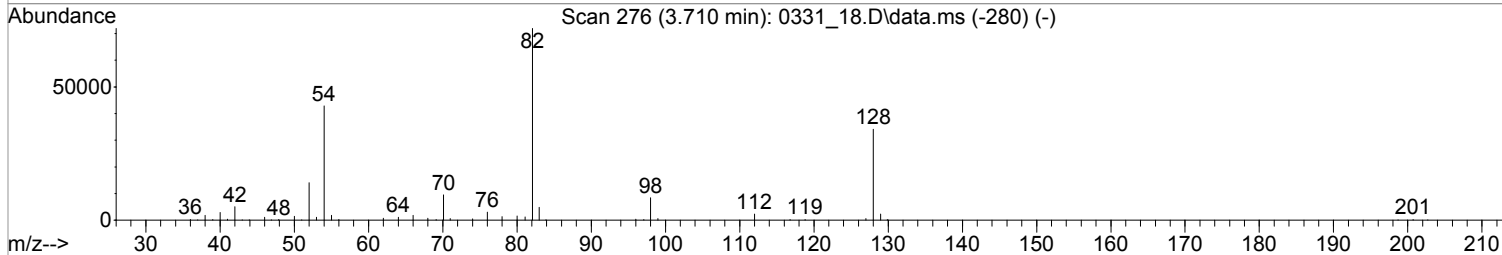
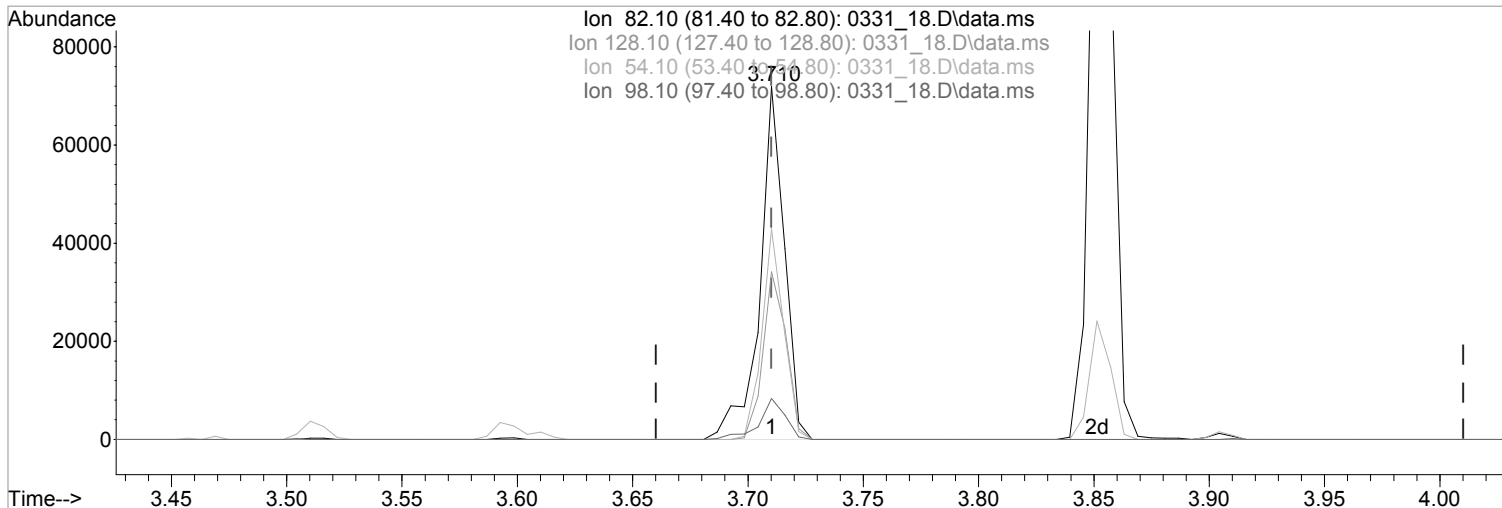
response 55703

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	78.90
95.00	31.90	29.72
65.00	23.10	24.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

(24) Nitrobenzene-d5 (S)

3.710min (-0.000) 10838.3777403 ppb

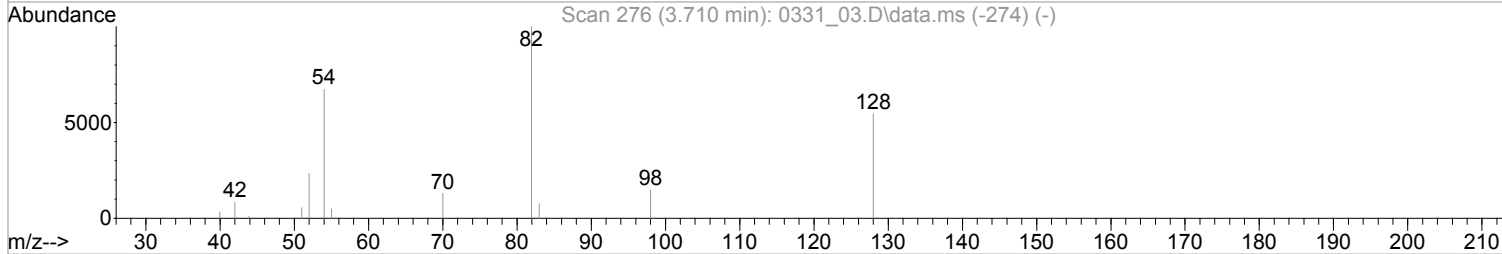
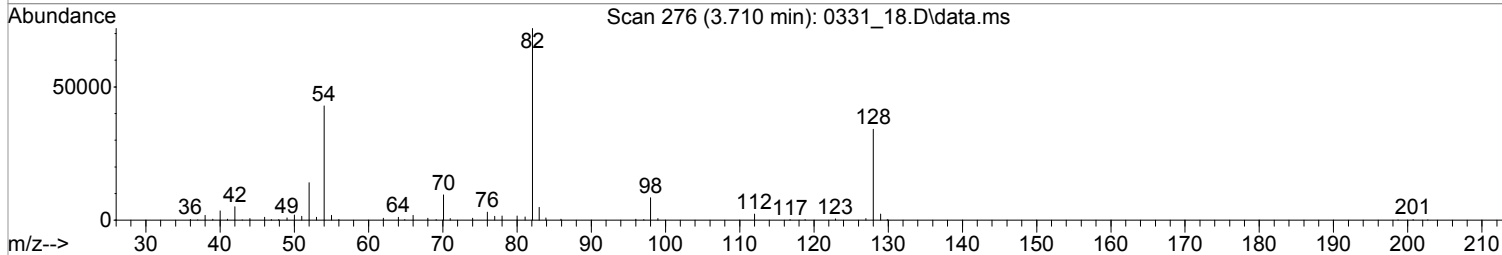
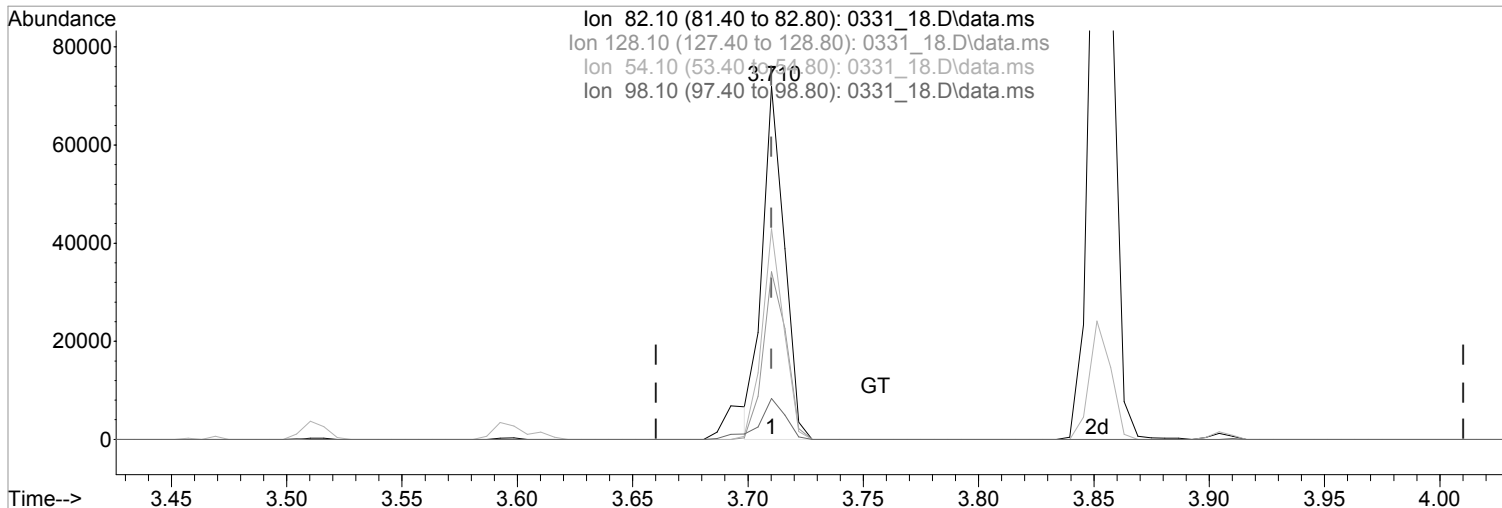
Qvalue = 99  
 response 53287

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	47.47
54.10	60.00	59.60
98.10	11.40	11.62

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_18.D  
 Acq On : 31 Mar 2022 10:44 pm  
 Operator : 3545  
 Sample : SSCV SVMS 10K PPB 22C23061 exp 6/30/22  
 Misc : SVMS CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 04 16:56:43 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0331\_18.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.710min (-0.000) 9770.3438575 ppb m

response 48036

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	47.47
54.10	60.00	59.60
98.10	11.40	11.62

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1488171	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0331_19	<b>Analysis date/time:</b>	03/31/22 23:06
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	SSCV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.079140	0.06852319		13.40		10	9.288	92.90	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\033122\  
 Data File : 0331\_19.D  
 Acq On : 31 Mar 2022 11:06 pm  
 Operator : 3545  
 Sample : SSCV TCL 10K1 PPB 22C25375 exp 5/31/22  
 Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
 ALS Vial : 19 Sample Multiplier: 1

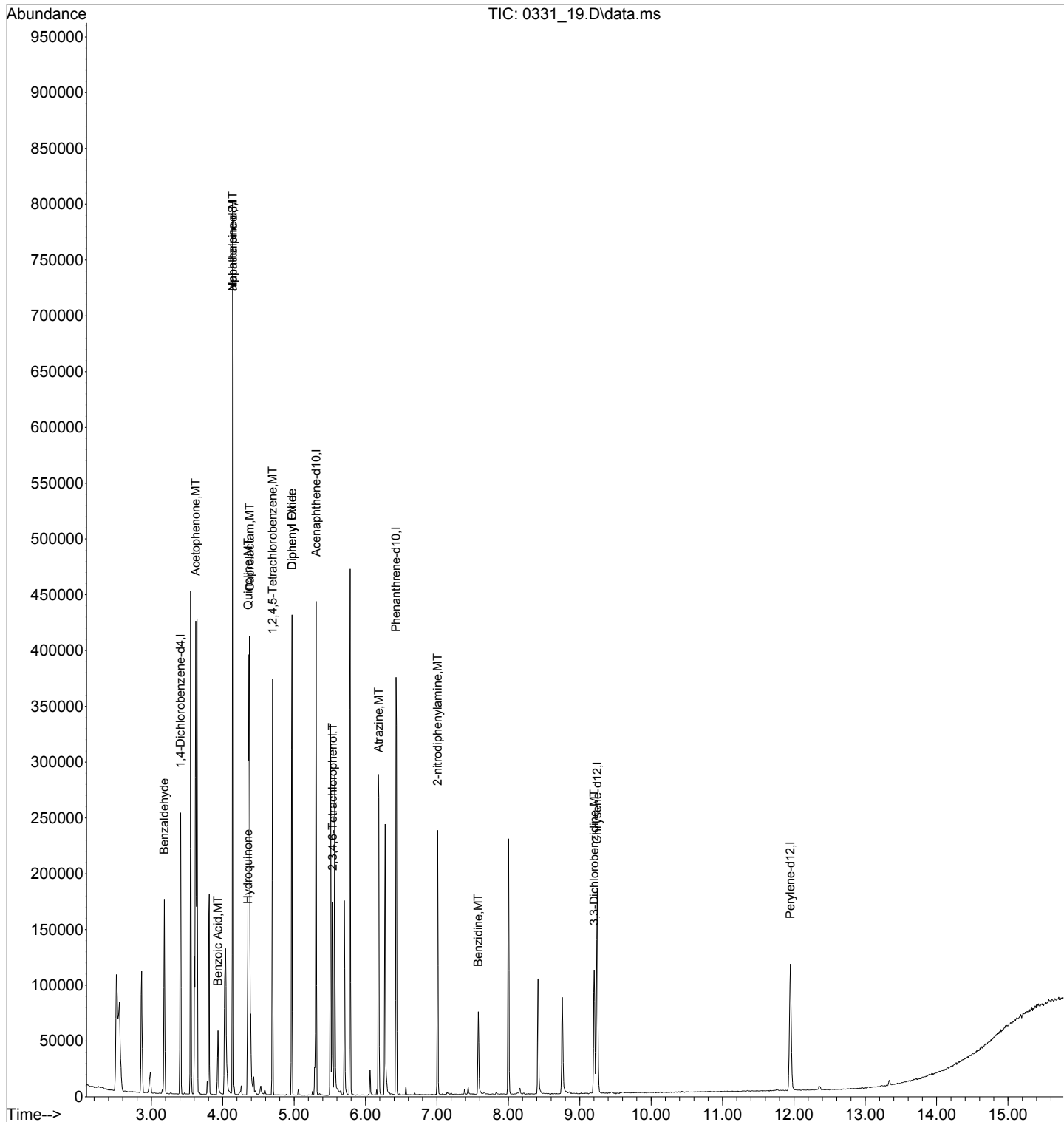
Quant Time: Apr 04 17:01:57 2022  
 Quant Method : C:\msdchem\1\methods\S824C31V.M  
 Quant Title : 8270 BNA  
 QLast Update : Mon Apr 04 16:54:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.410	152	35583	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.140	136	162059	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.310	164	73711	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.428	188	118731	8000.0000000	ppb	0.00
84) Chrysene-d12	9.245	240	80072	8000.0000000	ppb	0.00
94) Perylene-d12	11.951	264	68064	8000.0000000	ppb	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
7) Phenol-d5	0.000	99	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
24) Nitrobenzene-d5	0.000	82	0d	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb	
Spiked Amount	20000.000		Recovery	=	0.00%	
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb	
Spiked Amount	10000.000		Recovery	=	0.00%	
Target Compounds						
9) Benzaldehyde	3.181	105	31909	21445.8562524	ppb	98
22) Acetophenone	3.622	105	75382	9841.7477258	ppb	97
31) Benzoic Acid	3.934	105	13881	9287.9241188	ppb	100
33) alpha-terpineol	4.140	59	52858	10589.0958967	ppb	98
37) Hydroquinone	4.351	110	17084	4832.8177254	ppb	98
38) Quinoline	4.357	129	105645	11290.3729771	ppb	99
39) Caprolactam	4.375	113	15088	12246.5826042	ppb #	54
43) 1,2,4,5-Tetrachloroben...	4.698	216	44163	10135.7140612	ppb	98
44) Diphenyl Ether	4.969	170	66081	10119.7642454	ug/ml	99
45) Diphenyl Oxide	4.969	170	66081	10119.7642454	ug/ml	99
62) 2,3,4,6-Tetrachlorophenol	5.539	232	18260	9138.7507826	ppb	99
69) Atrazine	6.186	200	26464	9976.4469748	ppb	99
82) 2-nitrodiphenylamine	7.010	167	24172	9615.2258453	ppb	97
85) Benzidine	7.580	184	31867	14436.7066228	ppb	98
89) 3,3-Dichlorobenzidine	9.204	252	33453	9646.2468026	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\033122\  
Data File : 0331\_19.D  
Acq On : 31 Mar 2022 11:06 pm  
Operator : 3545  
Sample : SSCV TCL 10K1 PPB 22C25375 exp 5/31/22  
Misc : TCL CAL ISTD 22C25289 exp. 09/25/22  
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 04 17:01:57 2022  
Quant Method : C:\msdchem\1\methods\S824C31V.M  
Quant Title : 8270 BNA  
QLast Update : Mon Apr 04 16:54:30 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1488171	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0512_03	<b>Analysis date/time:</b>	05/12/22 05:15
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
1-METHYLNAPHTHALENE	0.610754	0.61907370		1.36	20	10	10.14	101	
2-METHYLNAPHTHALENE	0.627399	0.639766	0.40	1.97	20	10	10.20	102	
3&4-METHYL PHENOL	1.301686	1.405450	0.60	7.97	20	10	10.80	108	
ACENAPHTHENE	1.148837	1.145522	0.90	0.2890	20	10	9.971	99.70	
ACENAPHTHYLENE	1.695228	1.746414	0.90	3.02	20	10	10.30	103	
ANTHRACENE	1.006737	1.047216	0.70	4.02	20	10	10.40	104	
BENZO(A)ANTHRACENE	1.116712	1.178931	0.80	5.57	20	10	10.56	106	
BENZO(A)PYRENE	0.950358	1.018250	0.70	7.14	20	10	10.71	107	
BENZO(B)FLUORANTHENE	1.172442	1.203125	0.70	2.62	20	10	10.26	103	
BENZO(G,H,I)PERYLENE	1.026990	1.054556	0.50	2.68	20	10	10.27	103	
BENZO(K)FLUORANTHENE	1.198822	1.225966	0.70	2.26	20	10	10.23	102	
BIS(2-ETHYLHEXYL)PHTHALATE	1.014597	1.239379	0.01	22.20	20	10	12.22	122	
CARBAZOLE	0.861194	0.89391520	0.01	3.80	20	10	10.38	104	
CHRYSENE	1.179486	1.174199	0.70	0.4480	20	10	9.955	99.60	
DI-N-BUTYL PHTHALATE	1.289953	1.472457	0.01	14.10	20	10	11.41	114	
DI-N-OCTYL PHTHALATE	1.425428	1.894610	0.01	32.90	20	10	11.97	120	80 - 120
DIBENZ(A,H)ANTHRACENE	0.969471	1.008744	0.40	4.05	20	10	10.41	104	
DIBENZOFURAN	1.532971	1.534054	0.80	0.0706	20	10	10.01	100	
FLUORANTHENE	1.037530	1.067166	0.60	2.86	20	10	10.29	103	
FLUORENE	1.268965	1.283574	0.90	1.15	20	10	10.12	101	
INDENO(1,2,3-CD)PYRENE	0.864970	0.902497	0.50	4.34	20	10	10.43	104	
NAPHTHALENE	0.998617	0.99961880	0.70	0.10	20	10	10.01	100	
PENTACHLOROPHENOL	0.105171	0.08735351	0.05	16.90	20	10	8.921	89.20	80 - 120
PHENANTHRENE	1.060304	1.037353	0.70	2.16	20	10	9.784	97.80	
PHENOL	1.575372	1.659261	0.80	5.33	20	10	10.53	105	
PYRENE	1.498492	1.554032	0.60	3.71	20	10	10.37	104	
2,4,6-TRIBROMOPHENOL	0.083814	0.08654262		3.26	20	10	10.33	103	70 - 130
2-FLUOROBIPHENYL	1.270391	1.269431		0.0756	20	10	9.992	99.90	70 - 130
2-FLUOROPHENOL	1.252515	1.283376		2.46	20	10	10.25	103	70 - 130
NITROBENZENE-D5	0.304240	0.33187080		9.08	20	10	10.91	109	70 - 130
P-TERPHENYL-D14	1.107064	1.140566		3.03	20	10	10.30	103	70 - 130
PHENOL-D5	1.486088	1.584864		6.65	20	10	10.66	107	70 - 130

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

Data Path : C:\msdchem\1\data\051222\  
 Data File : 0512\_03.D  
 Acq On : 12 May 2022 5:15 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22E03609 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D28021 exp. 10/28/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 09:03:20 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	3.343	152	27485	8000.0000000	ppb	0.00
23) Naphthalene-d8	4.072	136	112815	8000.0000000	ppb	0.00
46) Acenaphthene-d10	5.231	164	59224	8000.0000000	ppb	0.00
70) Phenanthrene-d10	6.348	188	96683	8000.0000000	ppb	0.00
84) Chrysene-d12	9.113	240	68291	8000.0000000	ppb	0.00
94) Perylene-d12	11.766	264	61434	8000.0000000	ppb	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	2.678	112	44092	10246.3938913	ppb	0.00
Spiked Amount	20000.000		Recovery	=	51.23%	
7) Phenol-d5	3.113	99	54450	10664.6767856	ppb	0.00
Spiked Amount	20000.000		Recovery	=	53.32%	
24) Nitrobenzene-d5	3.643	82	46800m	10908.2067592	ppb	0.00
Spiked Amount	10000.000		Recovery	=	109.08%	
50) 2-Fluorobiphenyl	4.754	172	93976	9992.4458774	ppb	0.00
Spiked Amount	10000.000		Recovery	=	99.92%	
73) 2,4,6-Tribromophenol	5.813	330	10459	10325.5359524	ppb	0.00
Spiked Amount	20000.000		Recovery	=	51.63%	
87) p-Terphenyl-d14	7.736	244	97363	10302.6176387	ppb	0.00
Spiked Amount	10000.000		Recovery	=	103.03%	
<b>Target Compounds</b>						
2) Pyridine	2.154	79	46618	10226.7243803	ppb	96
3) N-Nitrosodimethylamine	2.137	42	23446	9770.0465909	ppb	98
5) Aniline	3.166	66	26103	11048.9951201	ppb	# 27
6) bis(2-Chloroethyl)ether	3.184	93	50754m	10920.0669627	ppb	
8) Phenol	3.119	94	57006	10532.5038035	ppb	100
10) 2-Chlorophenol	3.231	128	47710	10584.8980256	ppb	96
11) n-Decane	3.225	41	29595	10213.7998419	ppb	# 97
12) 1,3-Dichlorobenzene	3.313	146	52189	10103.0316776	ppb	98
13) 1,4-Dichlorobenzene	3.348	146	52123	10080.5809450	ppb	94
14) Benzyl Alcohol	3.401	79	33478	10139.7815474	ppb	99
15) 1,2-Dichlorobenzene	3.437	146	50329	10095.1267555	ppb	98
16) bis(2-Chloroisopropyl)...	3.472	121	17326	10063.9735436	ppb	97
17) 2,2-oxybis(1-chloropro...	3.472	121	17326	10063.9735436	ppb	97
18) 2-Methylphenol	3.448	108	44815	11054.3517382	ppb	95
19) Hexachloroethane	3.625	117	22787	10568.4938139	ppb	94
20) N-Nitrosodi-n-propylamine	3.543	70	30763	10668.9232573	ppb	99
21) 3&4-Methyl phenol	3.531	107	48286	10797.1497968	ppb	98
25) Nitrobenzene	3.654	77	47599	10976.8419055	ppb	98
26) Isophorone	3.784	82	91928	10830.4767351	ppb	99
27) 2-Nitrophenol	3.837	139	23985	11690.8682767	ppb	88
28) 2,4-Dimethylphenol	3.843	107	44845	10622.5152987	ppb	98
29) bis(2-Chloroethoxy)methane	3.901	93	57636	10106.3334978	ppb	99
30) 2,4-Dichlorophenol	3.978	162	35604	10674.7802364	ppb	96
32) 1,2,4-Trichlorobenzene	4.031	180	37861	9492.2161317	ppb	95
34) Naphthalene	4.084	128	140965	10010.0274727	ppb	99
35) 4-Chloroaniline	4.107	65	15704	10611.5716664	ppb	# 53
36) Hexachloro-1,3-butadiene	4.148	225	21266	9884.5724513	ppb	99
40) 4-Chloro-3-methylphenol	4.395	107	38401	11004.6399069	ppb	94
41) 2-Methylnaphthalene	4.519	142	90219	10197.1111175	ppb	99
42) 1-Methylnaphthalene	4.584	142	87301	10136.2282762	ppb	99
47) Hexachlorocyclopentadiene	4.613	237	21924	11348.9629315	ppb	95
48) 2,4,6-Trichlorophenol	4.695	196	23613	10675.1626317	ppb	95



Data Path : C:\msdchem\1\data\051222\  
 Data File : 0512\_03.D  
 Acq On : 12 May 2022 5:15 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22E03609 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D28021 exp. 10/28/22  
 ALS Vial : 3 Sample Multiplier: 1

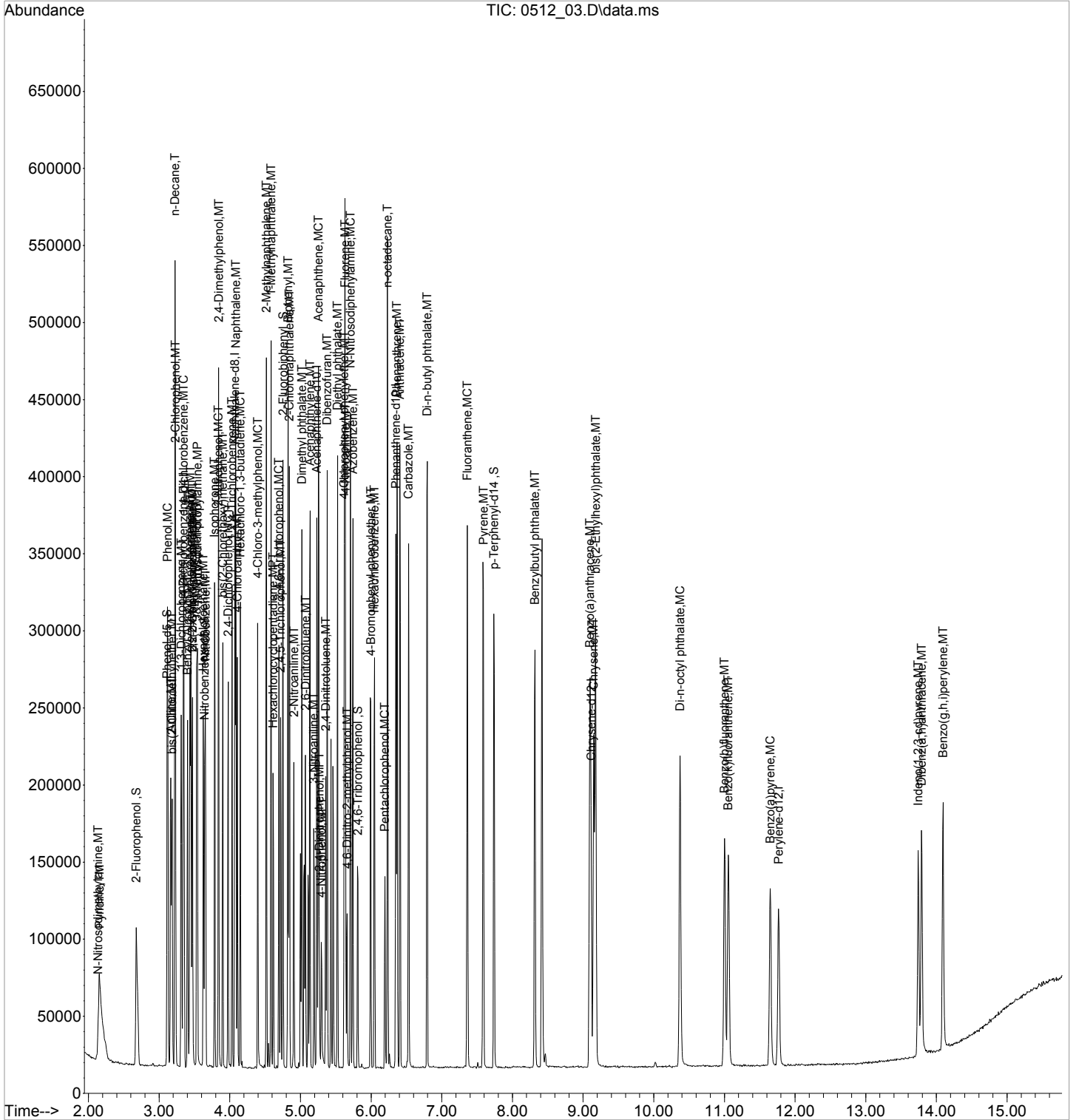
Quant Time: May 12 09:03:20 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
49) 2,4,5-Trichlorophenol	4.719	196	25264	11178.6977044	ppb		91
51) Biphenyl	4.825	154	104710	9880.8477617	ppb		98
52) 2-Chloronaphthalene	4.842	162	82936	10140.5642645	ppb		96
53) 2-Nitroaniline	4.907	138	26545	10941.8034266	ppb		96
54) Acenaphthylene	5.137	152	129287	10301.9418506	ppb		100
55) Dimethyl phthalate	5.019	163	96458	10526.0159556	ppb		93
56) 2,6-Dinitrotoluene	5.072	165	22475	11235.0651373	ppb		84
57) 3-Nitroaniline	5.190	138	20492	10727.0330965	ppb		98
58) Acenaphthene	5.254	153	84803	9971.1440203	ppb		98
59) 2,4-Dinitrophenol	5.266	184	6026	10260.2500823	ppb	#	1
60) Dibenzofuran	5.378	168	113566	10007.0645046	ppb		99
61) 2,4-Dinitrotoluene	5.360	165	27384	10934.1065686	ppb		92
63) 4-Nitrophenol	5.295	139	13537	9788.4333110	ppb	#	82
64) Fluorene	5.631	166	95023	10115.1239066	ppb		97
65) 4-Chlorophenyl-phenyle...	5.619	204	41970	9809.4727498	ppb		82
66) Diethyl phthalate	5.525	149	102893	10792.3688532	ppb		98
67) 4-Nitroaniline	5.637	138	18212	15744.8705386	ppb		94
68) Azobenzene	5.742	77	103672	10820.5858352	ppb		98
71) 4,6-Dinitro-2-methylph...	5.660	198	10852	11137.8172095	ppb		90
72) N-Nitrosodiphenylamine	5.707	169	74962	9968.7335017	ppb		100
74) 4-Bromophenyl-phenylether	5.995	248	22988	9959.8033509	ppb		88
75) Hexachlorobenzene	6.048	284	26351	9773.5821009	ppb		97
76) n-octadecane	6.231	55	20212	11218.5068970	ppb		96
77) Pentachlorophenol	6.195	266	10557	8921.1473055	ppb		95
78) Phenanthrene	6.366	178	125368	9783.5405190	ppb		98
79) Anthracene	6.407	178	126560	10402.0862733	ppb		99
80) Carbazole	6.531	167	108033	10379.9571055	ppb		99
81) Di-n-butyl phthalate	6.795	149	177952	11414.8144908	ppb		100
83) Fluoranthene	7.360	202	128971	10285.6389302	ppb		100
86) Pyrene	7.589	202	132658	10370.6414879	ppb		99
88) Benzylbutyl phthalate	8.319	149	72007	12265.8501439	ppb		98
90) Benzo(a)anthracene	9.095	228	100638	10557.1631603	ppb		100
91) Chrysene	9.148	228	100234	9955.1707725	ppb		98
92) bis(2-Ethylhexyl)phtha...	9.178	149	105798	12215.4733133	ppb		99
93) Di-n-octyl phthalate	10.372	149	161731	11973.2218647	ppb		100
95) Benzo(b)fluoranthene	11.001	252	92391	10261.7050232	ppb		98
96) Benzo(k)fluoranthene	11.054	252	94145	10226.4250363	ppb		99
97) Benzo(a)pyrene	11.648	252	78194	10714.3861335	ppb		99
98) Indeno(1,2,3-cd)pyrene	13.742	276	69305	10433.8515044	ppb		99
99) Dibenz(a,h)anthracene	13.789	278	77464	10405.1054594	ppb		97
100) Benzo(g,h,i)perylene	14.095	276	80982	10268.4174494	ppb		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\051222\  
Data File : 0512\_03.D  
Acq On : 12 May 2022 5:15 am  
Operator : 3545  
Sample : ICV SVMS 10K PPB 22E03609 exp 10/01/22  
Misc : SVMS CAL ISTD 22D28021 exp. 10/28/22  
ALS Vial : 3 Sample Multiplier: 1

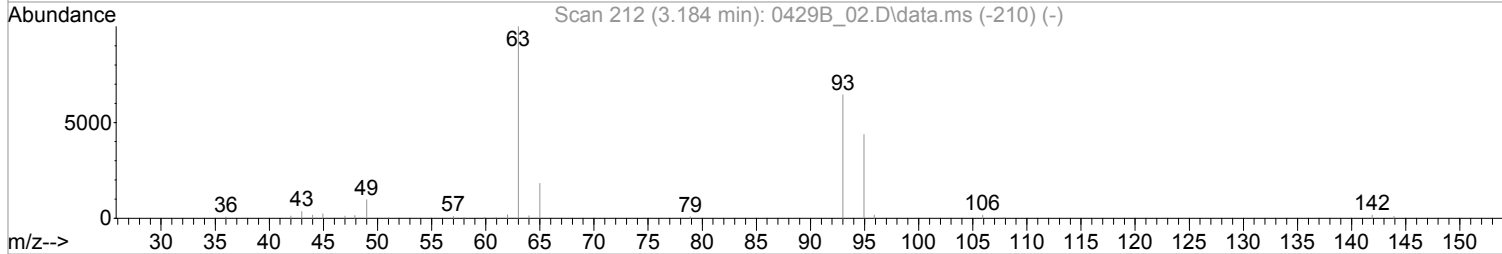
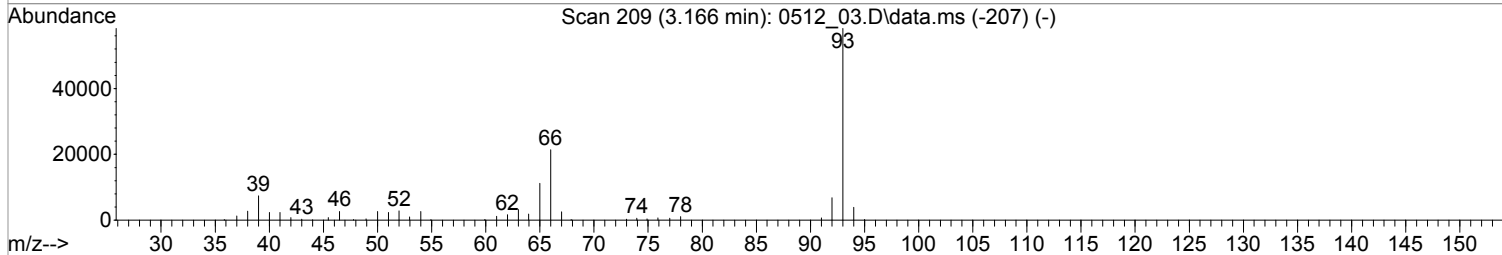
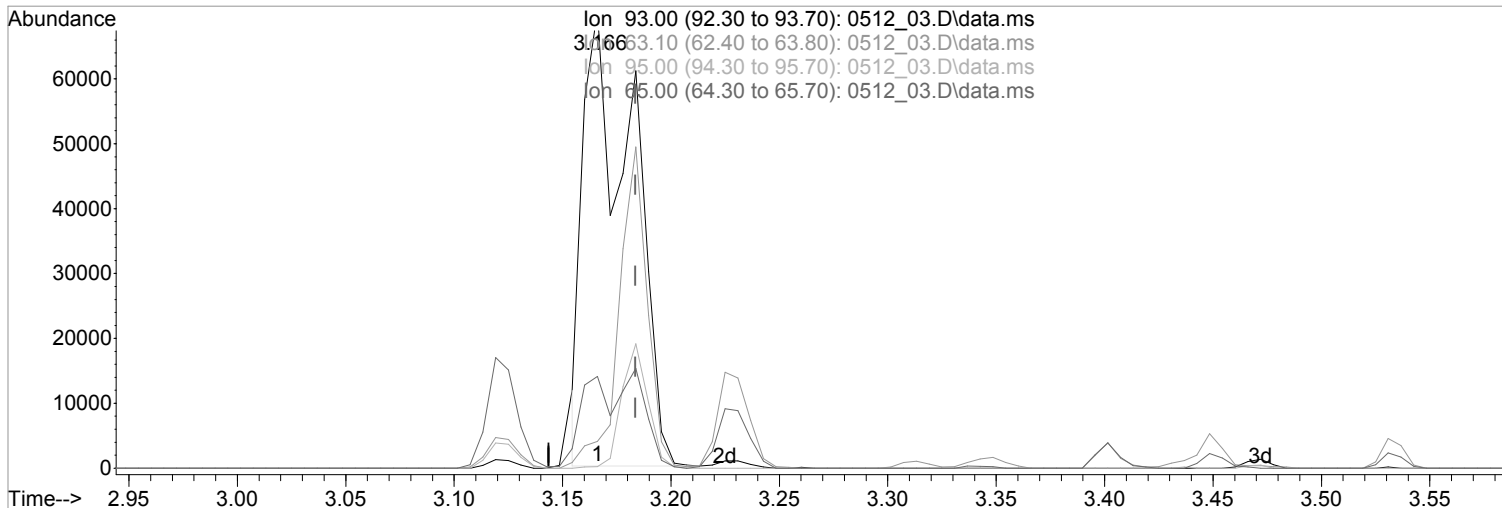
Quant Time: May 12 09:03:20 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth: BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\051222\  
 Data File : 0512\_03.D  
 Acq On : 12 May 2022 5:15 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22E03609 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D28021 exp. 10/28/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 05:46:35 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0512\_03.D\data.ms

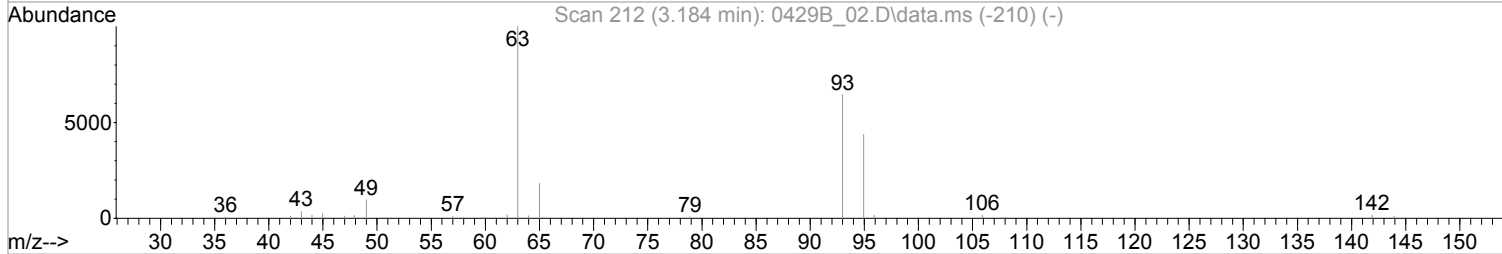
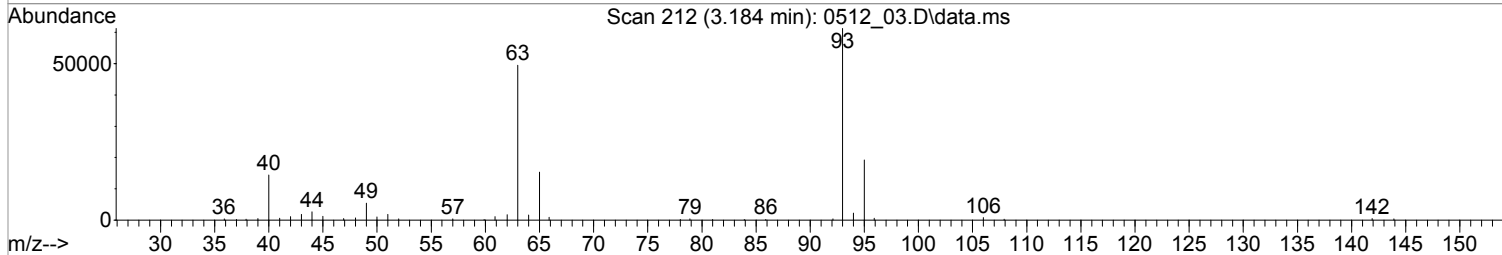
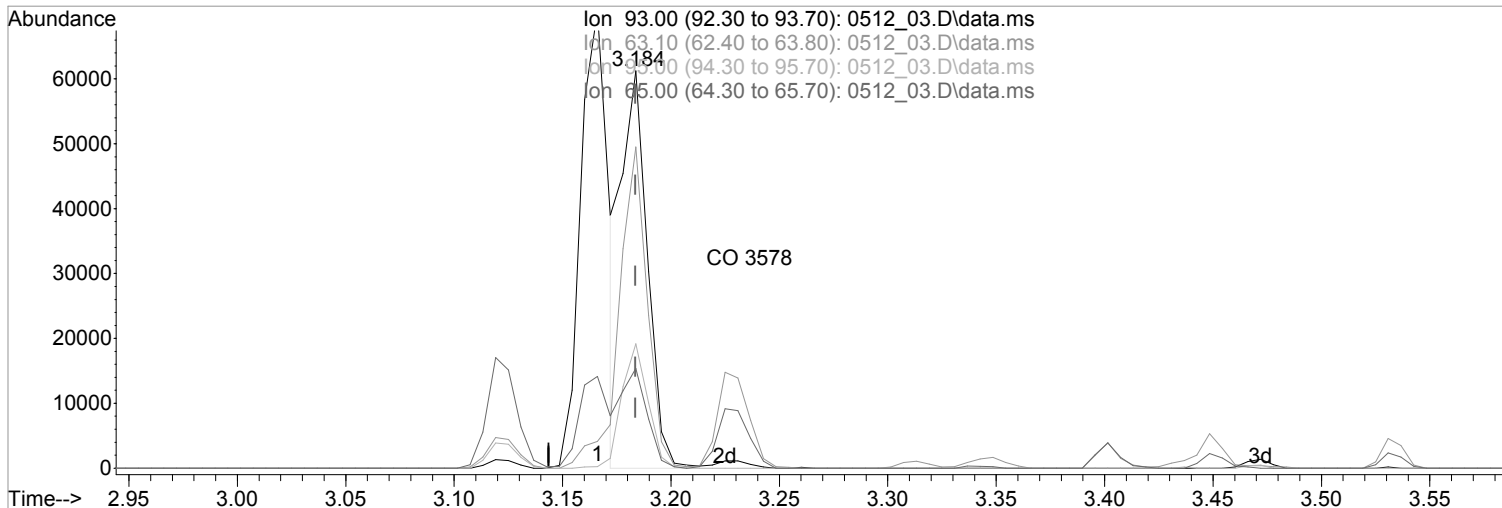
(6) bis(2-Chloroethyl)ether (MT)  
 3.166min (-0.018) 23312.8820509 ppb  
 Qvalue = 37  
 response 108353

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	5.37#
95.00	31.90	0.31#
65.00	23.10	19.90

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\051222\  
 Data File : 0512\_03.D  
 Acq On : 12 May 2022 5:15 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22E03609 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D28021 exp. 10/28/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 05:46:35 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0512\_03.D\data.ms

(6) bis(2-Chloroethyl)ether (MT)  
 3.184min (+0.000) 10920.0669627 ppb m

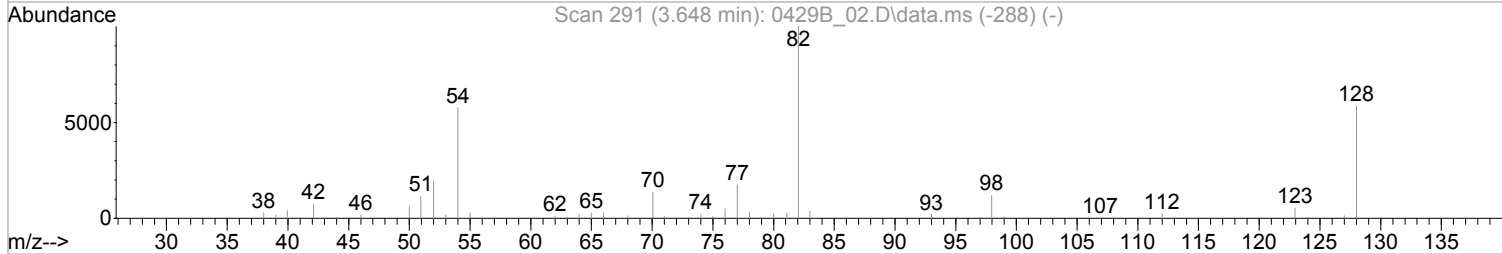
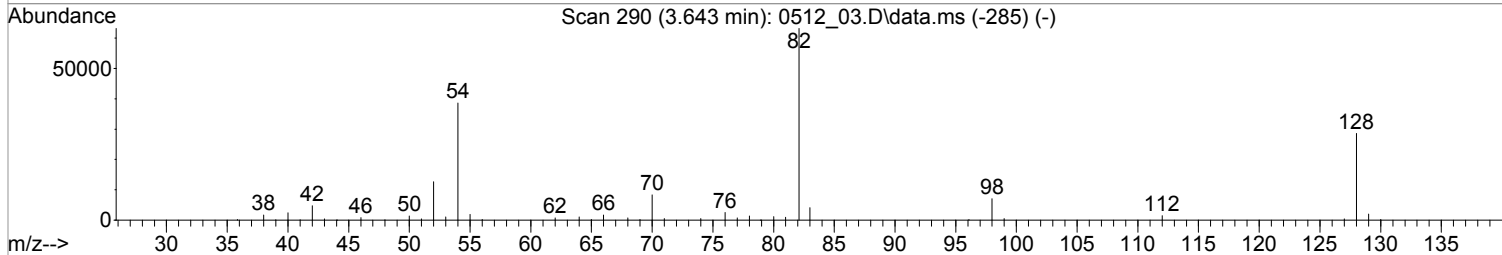
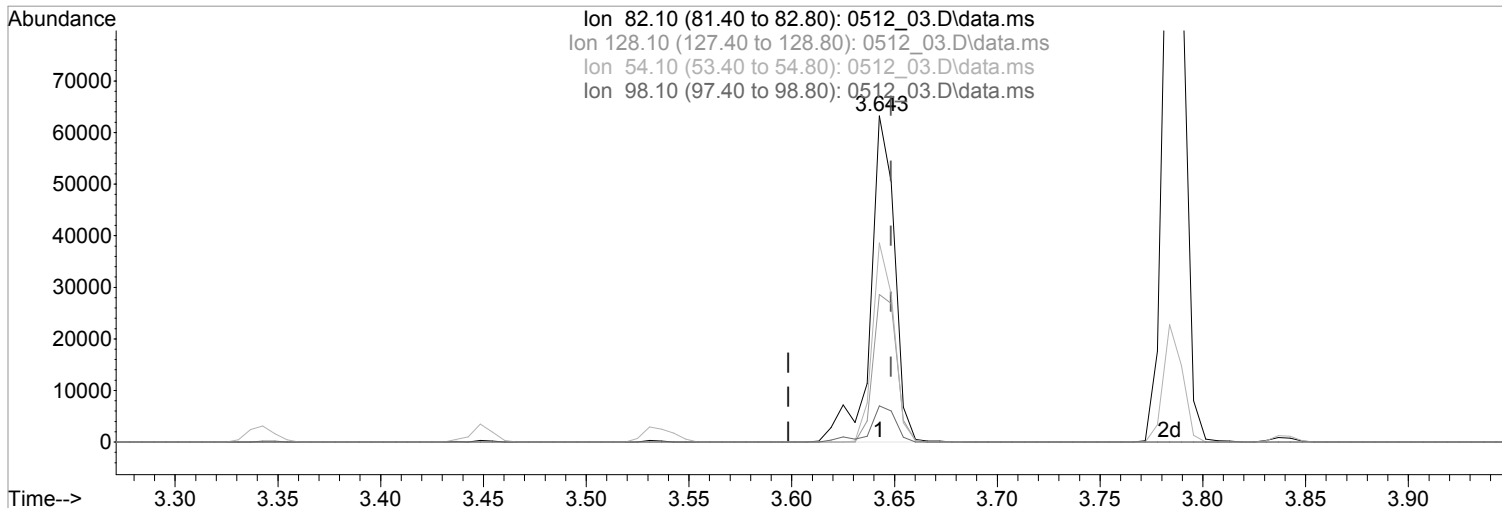
response 50754

Ion	Exp%	Act%
93.00	100	100
63.10	76.00	80.84
95.00	31.90	31.32
65.00	23.10	25.08

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\051222\  
 Data File : 0512\_03.D  
 Acq On : 12 May 2022 5:15 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22E03609 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D28021 exp. 10/28/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 05:46:35 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0512\_03.D\data.ms

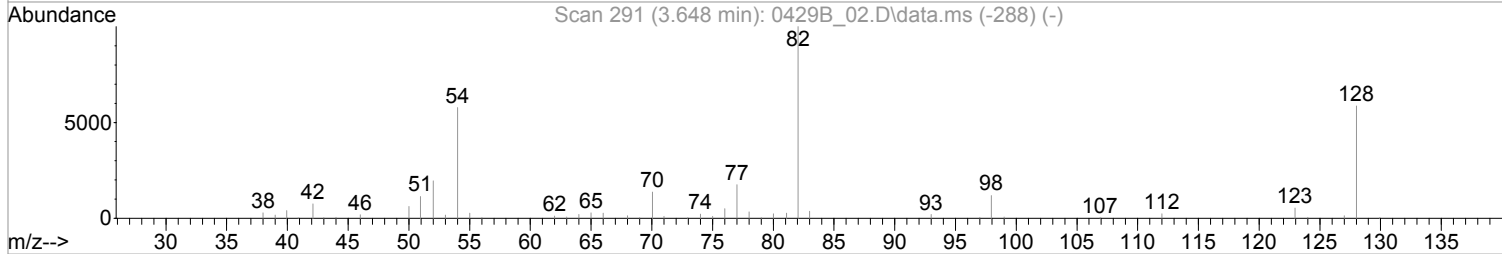
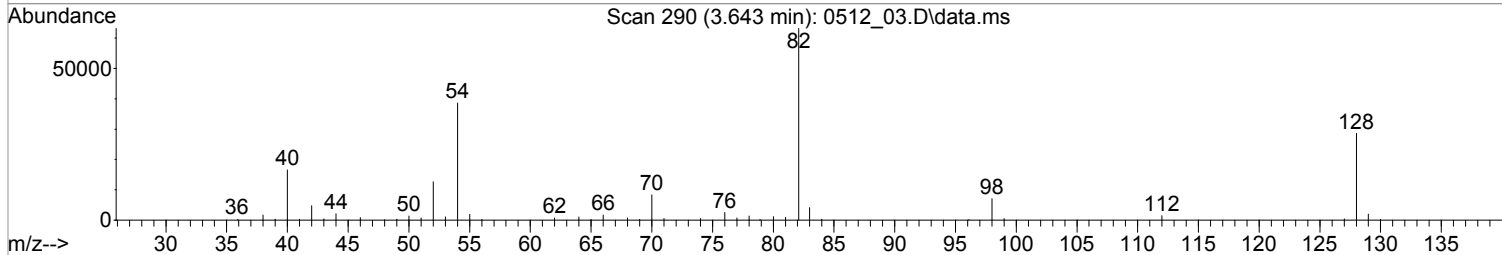
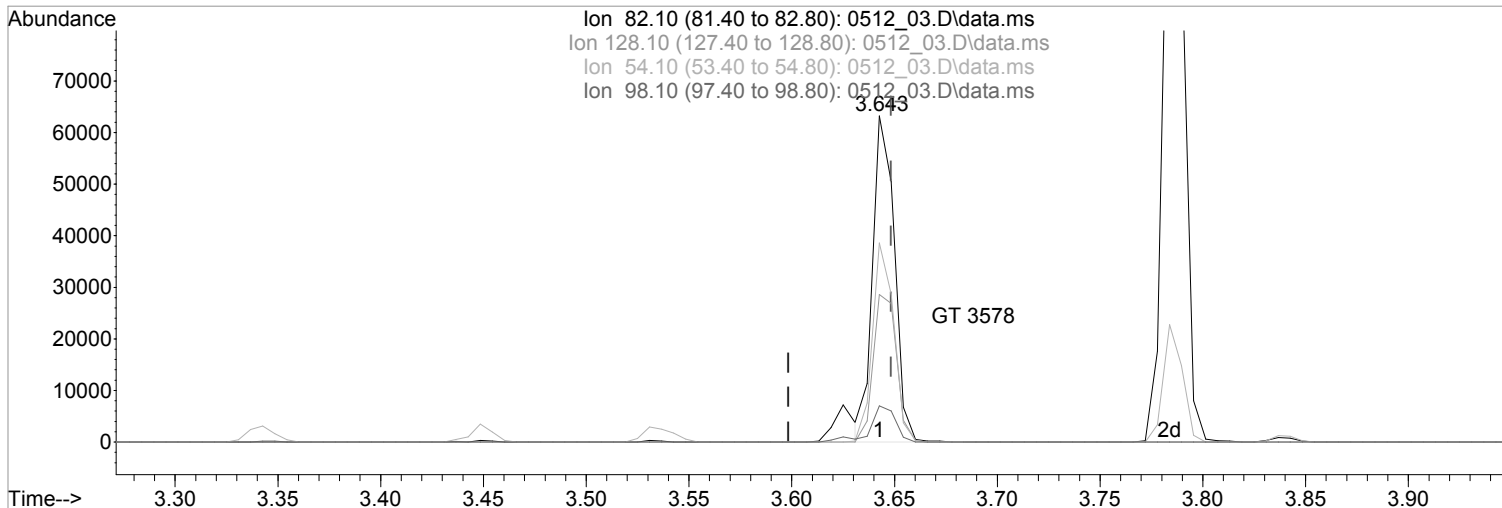
(24) Nitrobenzene-d5 (S)  
 3.643min (-0.006) 12041.9144018 ppb  
 Qvalue = 98  
 response 51664

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.23
54.10	60.00	61.08
98.10	11.40	11.14

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\051222\  
 Data File : 0512\_03.D  
 Acq On : 12 May 2022 5:15 am  
 Operator : 3545  
 Sample : ICV SVMS 10K PPB 22E03609 exp 10/01/22  
 Misc : SVMS CAL ISTD 22D28021 exp. 10/28/22  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 05:46:35 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0512\_03.D\data.ms

(24) Nitrobenzene-d5 (S)  
 3.643min (-0.006) 10908.2067592 ppb m

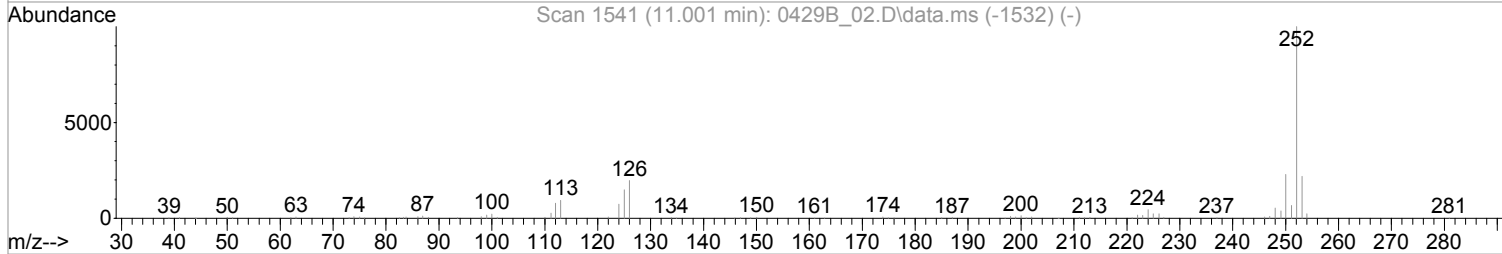
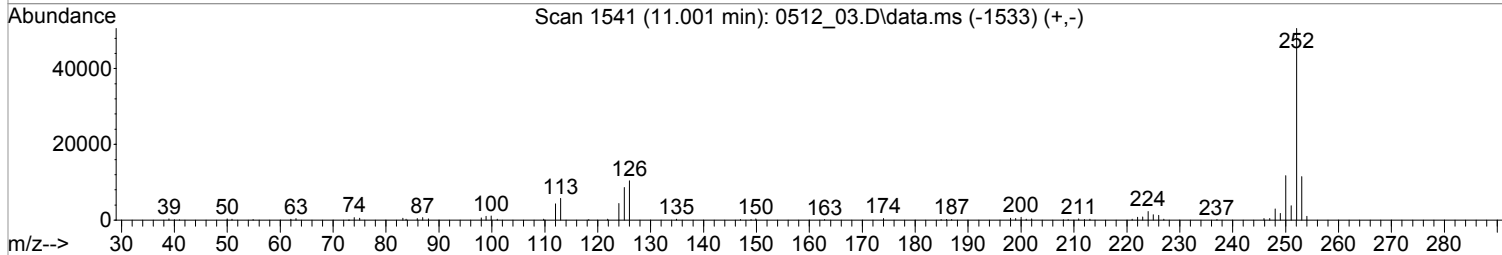
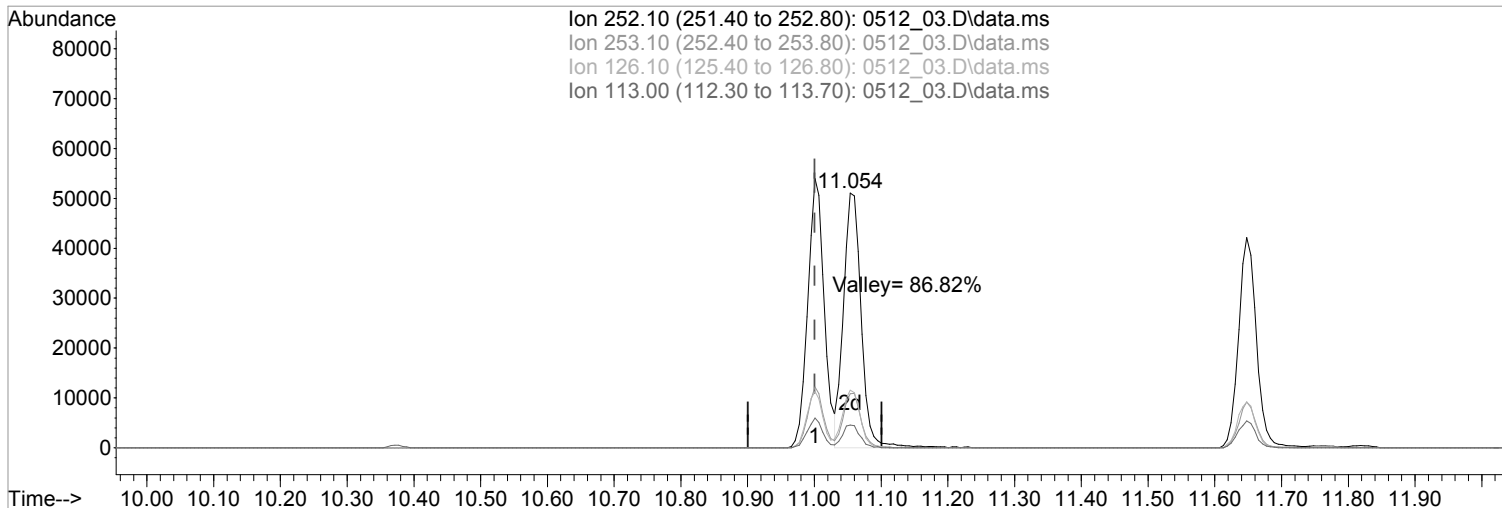
response 46800

Ion	Exp%	Act%
82.10	100	100
128.10	46.80	45.23
54.10	60.00	61.08
98.10	11.40	11.14

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\051222\  
Data File : 0512\_03.D  
Acq On : 12 May 2022 5:15 am  
Operator : 3545  
Sample : ICV SVMS 10K PPB 22E03609 exp 10/01/22  
Misc : SVMS CAL ISTD 22D28021 exp. 10/28/22  
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 05:46:35 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



TIC: 0512\_03.D\data.ms

(95) Benzo(b)fluoranthene (MT)  
11.001min (+0.000) 10261.7050232 ppb  
Qvalue = 98  
response 92391  
Ion Exp% Act%  
252.10 100 100  
253.10 21.80 22.69  
126.10 20.00 20.55  
113.00 9.70 11.28

GC/MS CONTINUING  
CALIBRATION VERIFICATION

<b>SDG:</b>	L1488171	<b>Calibration (begin) date/time:</b>	03/31/22 17:24
<b>Instrument ID:</b>	BNAMS24	<b>Calibration (end) date/time:</b>	03/31/22 22:23
<b>Lab File ID:</b>	0512_04	<b>Analysis date/time:</b>	05/12/22 05:36
<b>Analytical Method:</b>	8270E	<b>Sample ID:</b>	ICV

Analyte	Avg. RRF	RRF	Min. RRF	Diff. %	Max Diff. %	True Value mg/l	Result mg/l	Result % Rec.	Limits %
BENZOIC ACID	0.079140	0.05766377		27.10	20	10	8.138	81.40	80 - 120

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.



Data Path : C:\msdchem\1\data\051222\  
 Data File : 0512\_04.D  
 Acq On : 12 May 2022 5:36 am  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 9/10/22  
 Misc : TCL CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 4 Sample Multiplier: 1

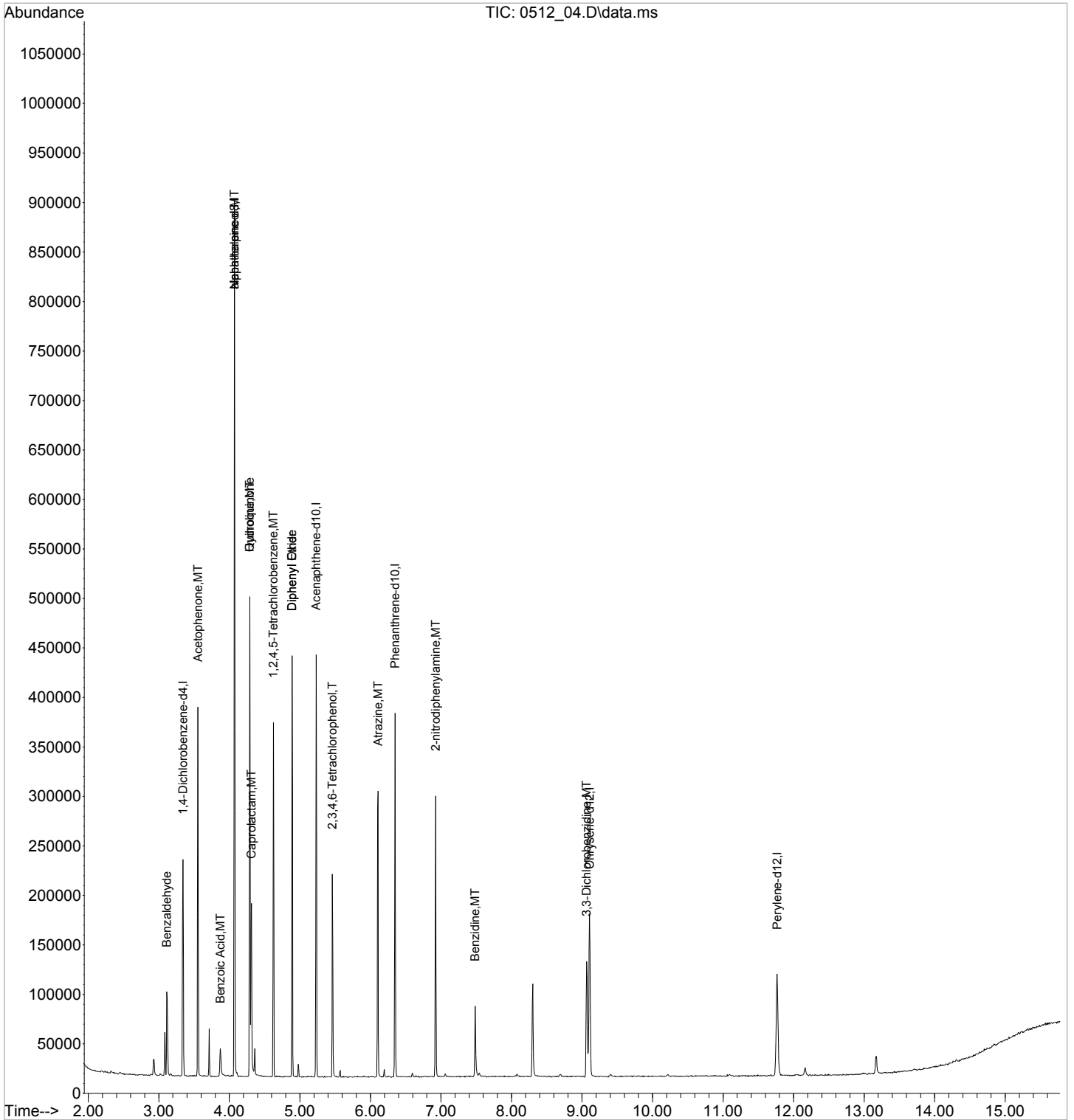
Quant Time: May 12 09:06:09 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	3.343	152	30703	8000.0000000	ppb	0.00	
23) Naphthalene-d8	4.072	136	143813	8000.0000000	ppb	0.00	
46) Acenaphthene-d10	5.231	164	63991	8000.0000000	ppb	0.00	
70) Phenanthrene-d10	6.348	188	102325	8000.0000000	ppb	0.00	
84) Chrysene-d12	9.107	240	68574	8000.0000000	ppb	0.00	
94) Perylene-d12	11.765	264	62187	8000.0000000	ppb	0.00	
System Monitoring Compounds							
4) 2-Fluorophenol	0.000	112	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
7) Phenol-d5	0.000	99	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
24) Nitrobenzene-d5	0.000	82	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
50) 2-Fluorobiphenyl	0.000	172	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.0000000	ppb		
Spiked Amount	20000.000			Recovery =	0.00%		
87) p-Terphenyl-d14	0.000	244	0	0.0000000	ppb		
Spiked Amount	10000.000			Recovery =	0.00%		
Target Compounds							
					Qvalue		
9) Benzaldehyde	3.113	105	17452	13593.6833411	ppb	99	
22) Acetophenone	3.554	105	73641	11142.5860874	ppb	98	
31) Benzoic Acid	3.872	105	10366m	8138.0427818	ppb		
33) alpha-terpineol	4.072	59	52740	11905.9290179	ppb	96	
37) Hydroquinone	4.290	110	35812m	11416.0125474	ppb		
38) Quinoline	4.290	129	93474	11257.0651120	ppb	100	
39) Caprolactam	4.313	113	14895	13623.8156116	ppb #	73	
43) 1,2,4,5-Tetrachloroben...	4.625	216	39926	10325.8685939	ppb	99	
44) Diphenyl Ether	4.889	170	62115	10719.2718940	ug/ml	98	
45) Diphenyl Oxide	4.889	170	62115	10719.2718940	ug/ml	98	
62) 2,3,4,6-Tetrachlorophenol	5.460	232	18262	10528.0467658	ppb	77	
69) Atrazine	6.107	200	25401	11030.2315985	ppb	96	
82) 2-nitrodiphenylamine	6.925	167	30536	12966.5248904	ppb	94	
85) Benzidine	7.483	184	29874	15370.9619400	ppb	97	
89) 3,3-Dichlorobenzidine	9.066	252	33116	11150.1925156	ppb	98	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\051222\  
Data File : 0512\_04.D  
Acq On : 12 May 2022 5:36 am  
Operator : 3545  
Sample : ICV TCL 10K1 PPB 22D19628 exp 9/10/22  
Misc : TCL CAL ISTD 22D16229 exp. 10/16/22  
ALS Vial : 4 Sample Multiplier: 1

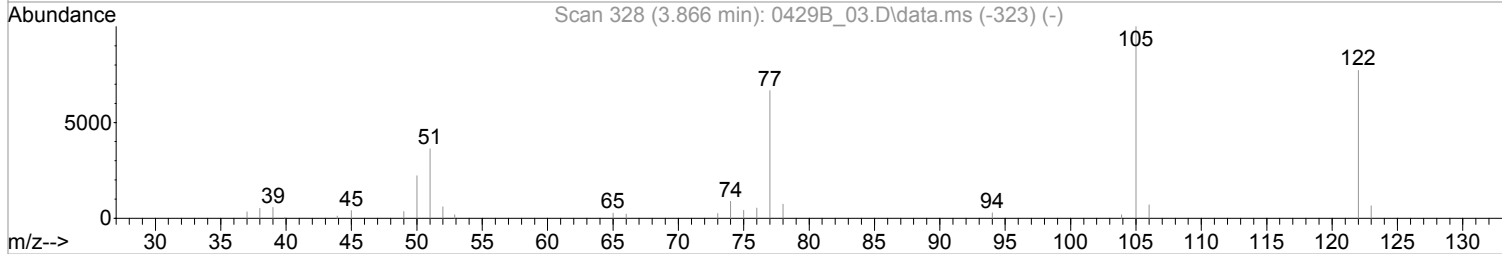
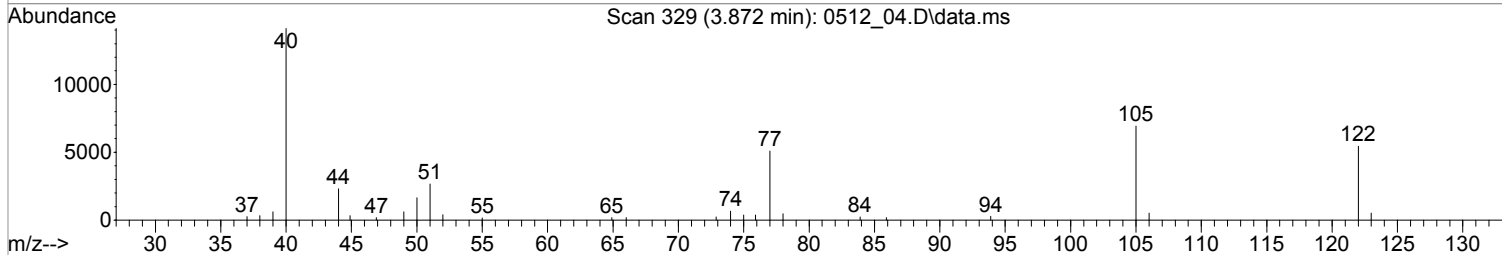
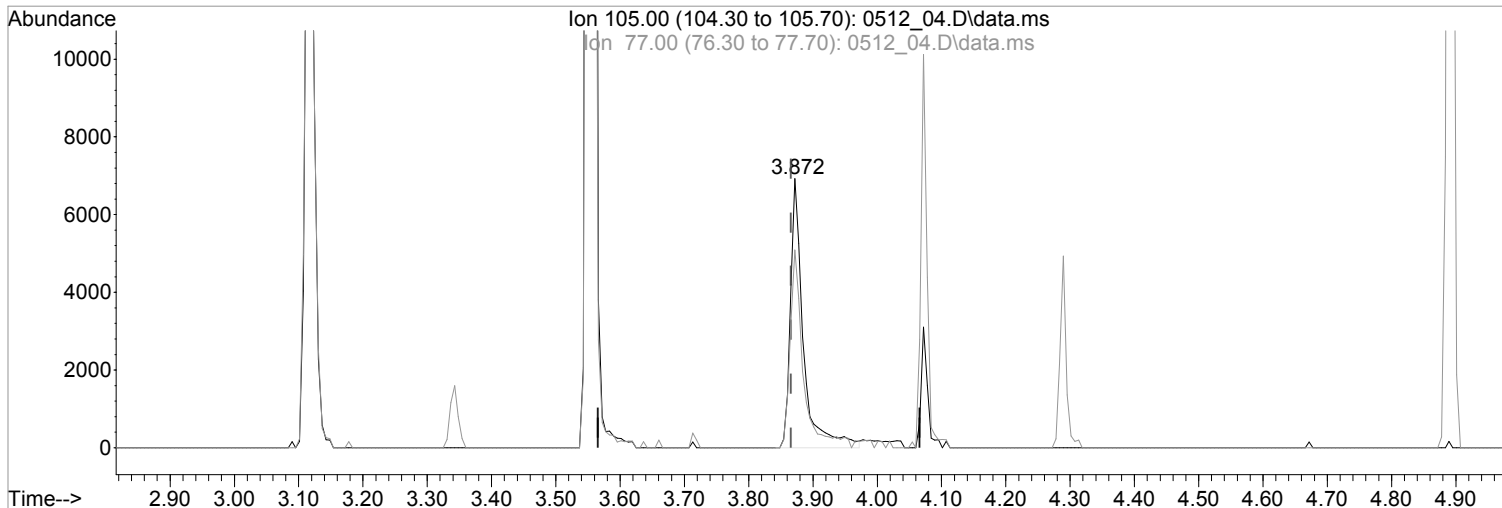
Quant Time: May 12 09:06:09 2022  
Quant Method : C:\msdchem\1\methods\S824D29BV.M  
Quant Title : 8270 BNA  
QLast Update : Fri Apr 29 19:28:33 2022  
Response via : Initial Calibration  
DataAcq Meth:BNA24PS.M



Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\051222\  
 Data File : 0512\_04.D  
 Acq On : 12 May 2022 5:36 am  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 9/10/22  
 Misc : TCL CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 12 05:54:28 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0512\_04.D\data.ms

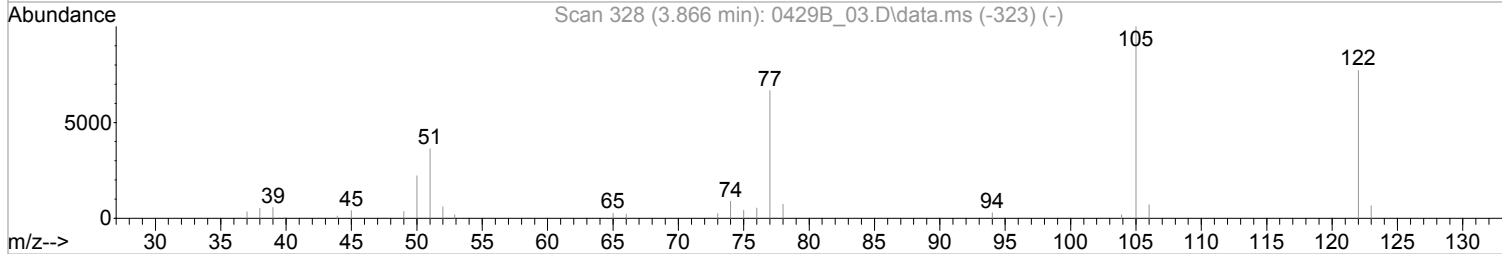
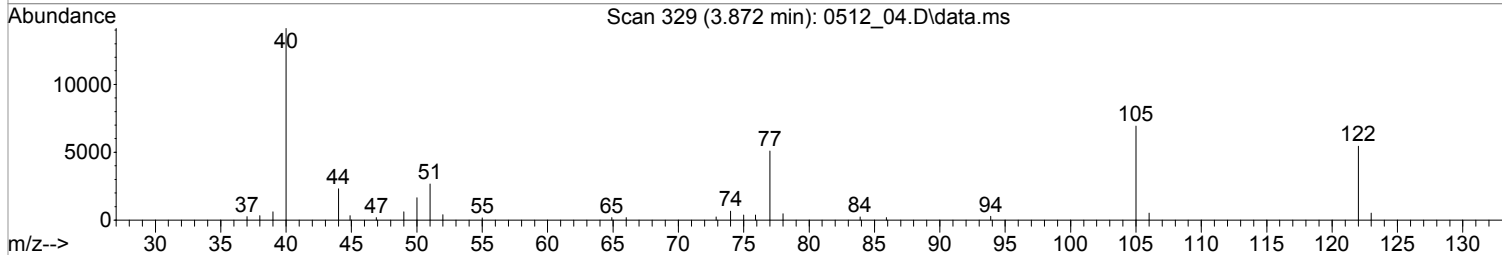
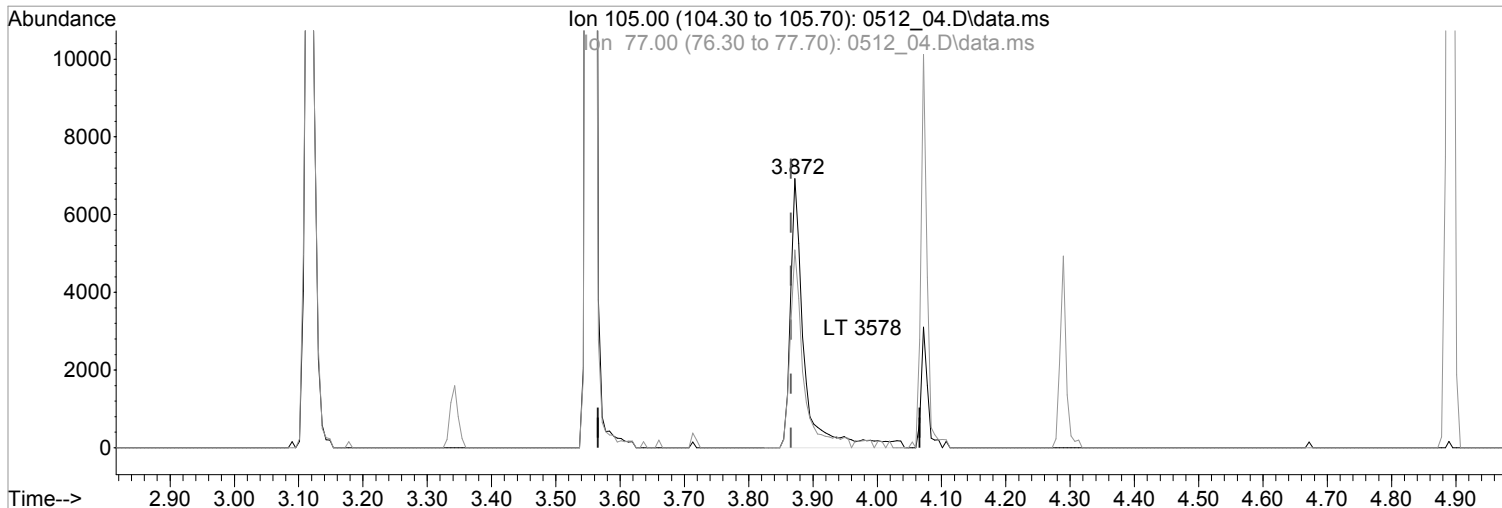
(31) Benzoic Acid (MT)  
 3.872min (+0.006) 7739.8577657 ppb  
 Qvalue = 97  
 response 9690

Ion	Exp%	Act%
105.00	100	100
77.00	73.10	75.33
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\051222\  
 Data File : 0512\_04.D  
 Acq On : 12 May 2022 5:36 am  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 9/10/22  
 Misc : TCL CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 12 05:54:28 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0512\_04.D\data.ms

(31) Benzoic Acid (MT)  
 3.872min (+0.006) 8138.0427818 ppb m

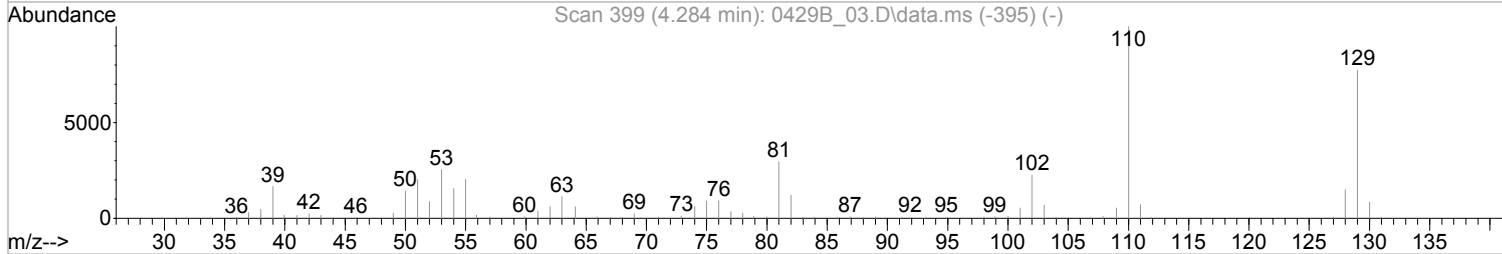
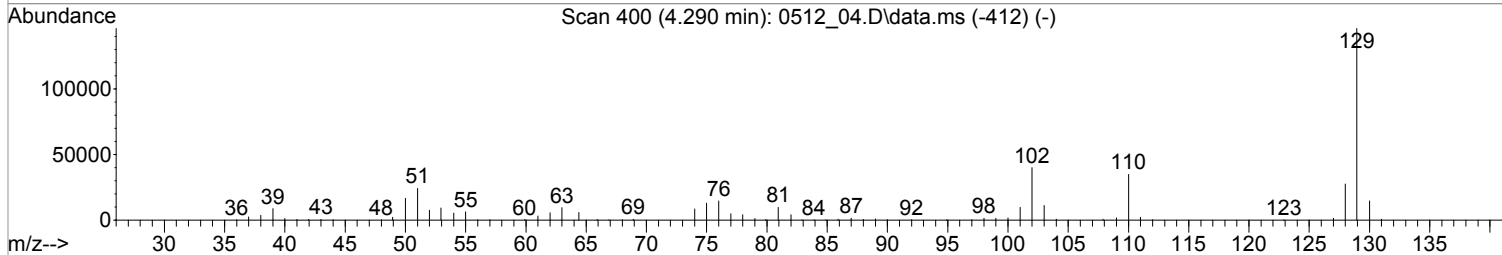
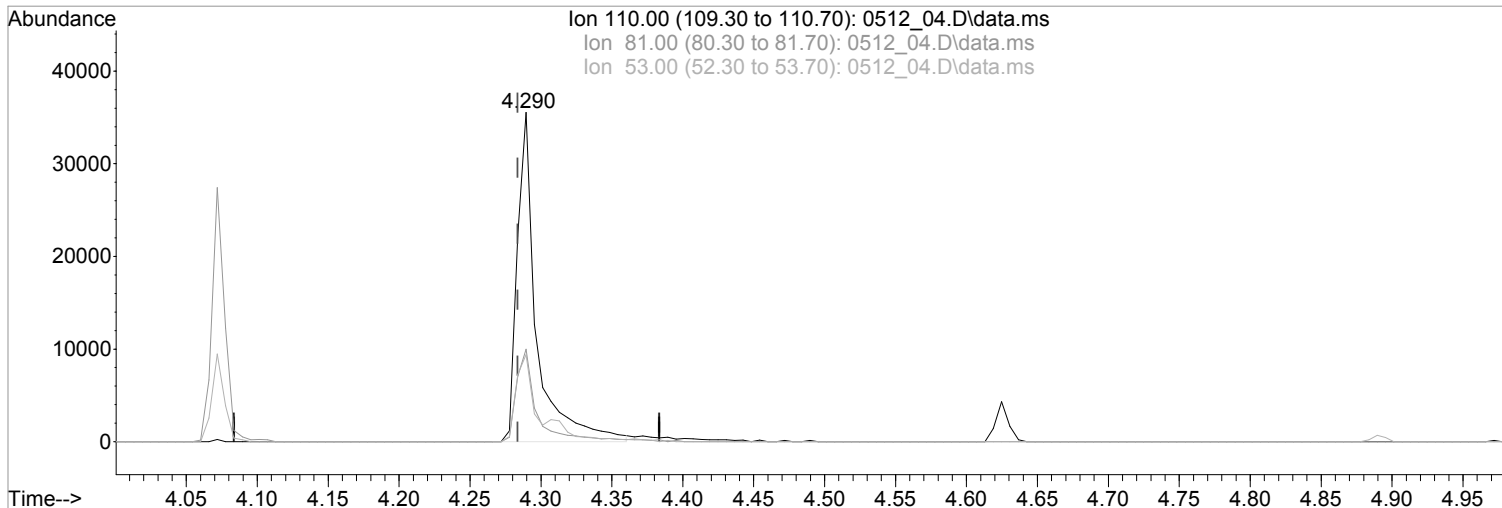
response 10366

Ion	Exp%	Act%
105.00	100	100
77.00	73.10	70.41
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\051222\  
 Data File : 0512\_04.D  
 Acq On : 12 May 2022 5:36 am  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 9/10/22  
 Misc : TCL CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 12 05:54:28 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0512\_04.D\data.ms

(37) Hydroquinone

4.290min (+0.006) 10829.7831529 ppb

Qvalue = 95

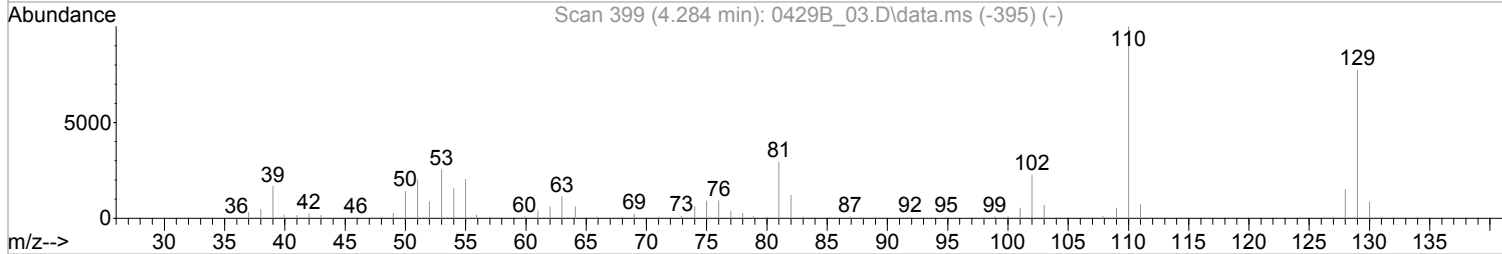
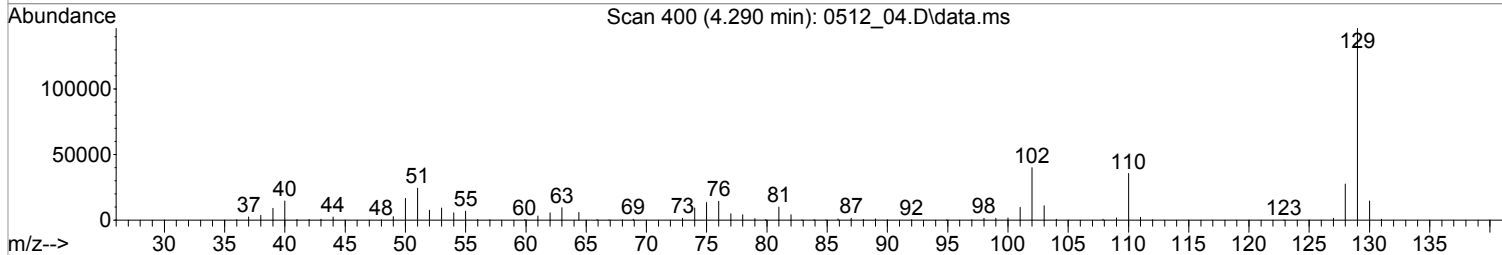
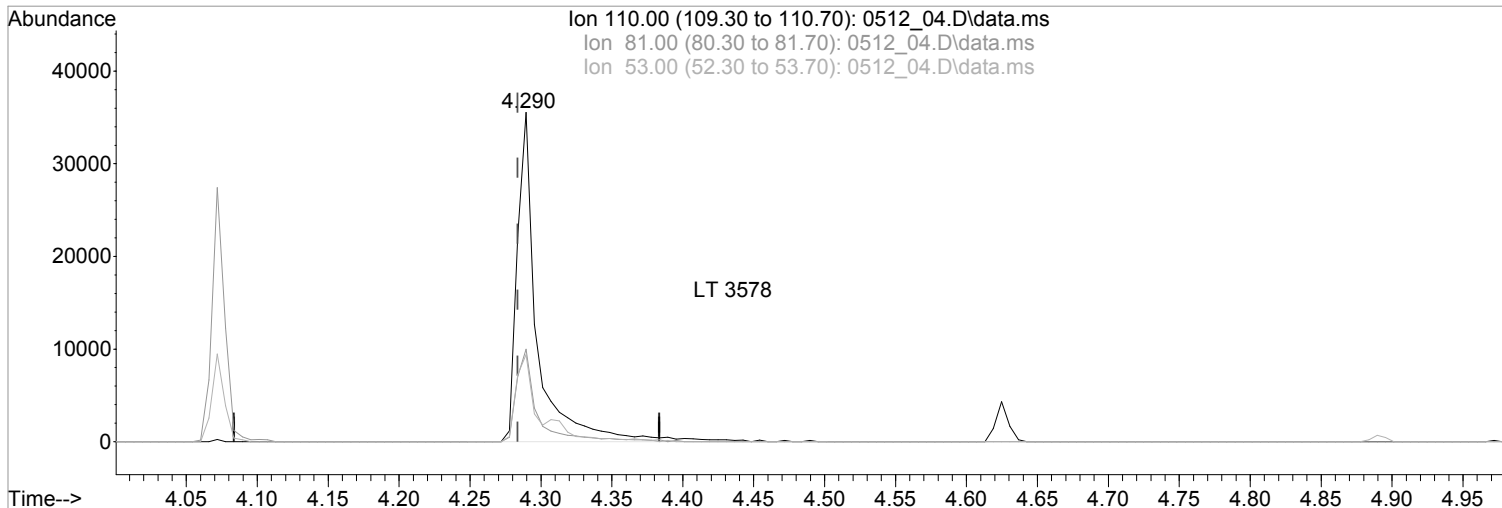
response 33973

Ion	Exp%	Act%
110.00	100	100
81.00	27.40	28.12
53.00	22.10	26.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\051222\  
 Data File : 0512\_04.D  
 Acq On : 12 May 2022 5:36 am  
 Operator : 3545  
 Sample : ICV TCL 10K1 PPB 22D19628 exp 9/10/22  
 Misc : TCL CAL ISTD 22D16229 exp. 10/16/22  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 12 05:54:28 2022  
 Quant Method : C:\msdchem\1\methods\S824D29BV.M  
 Quant Title : 8270 BNA  
 QLast Update : Fri Apr 29 19:28:33 2022  
 Response via : Initial Calibration  
 DataAcq Meth: BNA24PS.M



TIC: 0512\_04.D\data.ms

(37) Hydroquinone

4.290min (+0.006) 11416.0125474 ppb m

response 35812

Ion	Exp%	Act%
110.00	100	100
81.00	27.40	28.12
53.00	22.10	26.42
0.00	0.00	0.00

<b>SDG:</b>	L1488171	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS4	<b>Calibration Start Date:</b>	02/09/22 10:43
		<b>Calibration End Date:</b>	02/09/22 15:35

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
TUNE	BNAMS40209220209_05577847	0209_05	02/09/22 10:23		
CAL	500	0209_06	02/09/22 10:43		
CAL	1000	0209_07	02/09/22 11:04		
CAL	4000	0209_08	02/09/22 11:25		
CAL	10000	0209_09	02/09/22 11:46		
CAL	20000	0209_10	02/09/22 12:07		
CAL	30000	0209_11	02/09/22 12:27		
CAL	40000	0209_12	02/09/22 12:48		
CAL	50000	0209_13	02/09/22 13:09		
CAL	1K1	0209_14	02/09/22 13:30		
CAL	4K1	0209_15	02/09/22 13:51		
CAL	10K1	0209_16	02/09/22 14:11		
CAL	20K1	0209_17	02/09/22 14:32		
CAL	30K1	0209_18	02/09/22 14:53		
CAL	40K1	0209_19	02/09/22 15:14		
CAL	50K1	0209_20	02/09/22 15:35		
SSCV	BNAMS40209220209_21577847	0209_21	02/09/22 15:56		
SSCV	BNAMS40209220209_22577847	0209_22	02/09/22 16:16		
TUNE	BNAMS40512220512_02T-1577847	0512_02T-1	05/12/22 04:55		
ICV	BNAMS40512220512_03577847	0512_03	05/12/22 05:16		
ICV	BNAMS40512220512_04577847	0512_04	05/12/22 05:37		
LCS	R3791358-1	0512_05	05/12/22 06:09	1	WG1860981
BLANK	R3791358-2	0512_06	05/12/22 06:29	1	WG1860981
LCS	R3791359-1	0512_07	05/12/22 06:50	1	WG1861595
BLANK	R3791359-2	0512_08	05/12/22 07:11	1	WG1861595
BNSF-BG16-042722-0-10	L1488171-03	0512_17	05/12/22 10:18	1	WG1860981
L1488161-02	L1488161-02	0512_18	05/12/22 10:39	1	WG1860981
BNSF-BG14-042722-0-5.5	L1488171-01	0512_19	05/12/22 11:00	1	WG1860981
BNSF-BG17-042722-0-10	L1488171-04	0512_20	05/12/22 11:21	1	WG1860981
L1488161-04	L1488161-04	0512_21	05/12/22 11:42	1	WG1860981
OS	L1488414-03	0512_25	05/12/22 13:06		
L1488414-03	L1488414-03	0512_25	05/12/22 13:06	1	WG1861595
MS	R3791359-3	0512_26	05/12/22 13:27	1	WG1861595
MSD	R3791359-4	0512_27	05/12/22 13:47	1	WG1861595
OS	L1488161-03	0512_33	05/12/22 15:53		
L1488161-03	L1488161-03	0512_33	05/12/22 15:53	5	WG1860981
MS	R3791358-3	0512_34	05/12/22 16:14	5	WG1860981
MSD	R3791358-4	0512_35	05/12/22 16:35	5	WG1860981

<b>SDG:</b>	L1488171	<b>Analytical Method:</b>	8270E
<b>Instrument ID:</b>	BNAMS24	<b>Calibration Start Date:</b>	03/31/22 17:24
		<b>Calibration End Date:</b>	03/31/22 22:23

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
TUNE	BNAMS240331220331_02576947	0331_02	03/31/22 17:02		
CAL	500	0331_03	03/31/22 17:24		
CAL	1000	0331_04	03/31/22 17:45		
CAL	4000	0331_05	03/31/22 18:07		
CAL	10000	0331_06	03/31/22 18:28		
CAL	20000	0331_07	03/31/22 18:49		
CAL	30000	0331_08	03/31/22 19:11		
CAL	40000	0331_09	03/31/22 19:32		
CAL	50000	0331_10	03/31/22 19:53		
CAL	1K1	0331_11	03/31/22 20:15		
CAL	4K1	0331_12	03/31/22 20:36		
CAL	10K1	0331_13	03/31/22 20:58		
CAL	20K1	0331_14	03/31/22 21:19		
CAL	30K1	0331_15	03/31/22 21:40		
CAL	40K1	0331_16	03/31/22 22:02		
CAL	50K1	0331_17	03/31/22 22:23		
SSCV	BNAMS240331220331_18576947	0331_18	03/31/22 22:44		
SSCV	BNAMS240331220331_19576947	0331_19	03/31/22 23:06		
TUNE	BNAMS240512220512_02T-1576947	0512_02T-1	05/12/22 04:53		
ICV	BNAMS240512220512_03576947	0512_03	05/12/22 05:15		
ICV	BNAMS240512220512_04576947	0512_04	05/12/22 05:36		
OS	L1490679-18	0512_14	05/12/22 09:22		
L1490679-18	L1490679-18	0512_14	05/12/22 09:22	10	WG1862273
BNSF-BG15-042722-0-10	L1488171-02	0512_31	05/12/22 15:36	1	WG1860981
L1488161-01	L1488161-01	0512_32	05/12/22 15:58	1	WG1860981



## DETECTION LIMIT SUMMARY

Lab Sample IDs: L1488171-01,02,03,04  
 Matrix: Solid

Analytical Method: 8270E  
 Prep Method: 3546

Analyte	CAS	MDL	RDL
		mg/kg	mg/kg
Benzo(b)fluoranthene	205-99-2	0.006210	0.0333
Benzo(k)fluoranthene	207-08-9	0.005920	0.0333
Benzo(g,h,i)perylene	191-24-2	0.006090	0.0333
Benzo(a)pyrene	50-32-8	0.006190	0.0333
Acenaphthene	83-32-9	0.005390	0.0333
Carbazole	86-74-8	0.0103	0.3330
Chrysene	218-01-9	0.006620	0.0333
Dibenz(a,h)anthracene	53-70-3	0.009230	0.0333
Dibenzofuran	132-64-9	0.0109	0.3330
Acenaphthylene	208-96-8	0.004690	0.0333
Fluoranthene	206-44-0	0.006010	0.0333
Fluorene	86-73-7	0.005420	0.0333
Anthracene	120-12-7	0.005930	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	0.009410	0.0333
1-Methylnaphthalene	90-12-0	0.004260	0.0333
2-Methylnaphthalene	91-57-6	0.004320	0.0333
Naphthalene	91-20-3	0.008360	0.0333
Phenanthrene	85-01-8	0.006610	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	0.0422	0.3330
Di-n-butyl phthalate	84-74-2	0.0114	0.3330
Di-n-octyl phthalate	117-84-0	0.0225	0.3330
Pyrene	129-00-0	0.006480	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	0.0104	0.3330
Pentachlorophenol	87-86-5	0.008960	0.3330
Phenol	108-95-2	0.0134	0.3330
Benzoic Acid	65-85-0	0.1180	1.67
Benzo(a)anthracene	56-55-3	0.005870	0.0333

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3791358-2  
 Client Sample ID: BLANK  
 Lab File ID: 0512\_06  
 Instrument ID: BNAMS4  
 Analytical Batch: WG1860981  
 Dilution Factor: 1  
 Analytical Method: 8270E  
 Matrix: Solid  
 Total Solids (%): \_\_\_\_\_

SDG: L1488171  
 Collected Date/Time: \_\_\_\_\_  
 Received Date/Time: \_\_\_\_\_  
 Preparation Date/Time: 05/11/22 03:08  
 Analysis Date/Time: 05/12/22 06:29  
 Prep Method: 3546  
 Sample Vol Used: \_\_\_\_\_  
 Initial Wt/Vol: 15 g  
 Final Wt/Vol: 0.5 mL

Analyte	CAS	RT	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Acenaphthene	83-32-9	0	U		0.00539	0.0333
Acenaphthylene	208-96-8	0	U		0.00469	0.0333
Anthracene	120-12-7	0	U		0.00593	0.0333
Benzoic Acid	65-85-0	0	U		0.118	1.67
Benzo(a)anthracene	56-55-3	0	U		0.00587	0.0333
Benzo(b)fluoranthene	205-99-2	0	U		0.00621	0.0333
Benzo(k)fluoranthene	207-08-9	0	U		0.00592	0.0333
Benzo(g,h,i)perylene	191-24-2	0	U		0.00609	0.0333
Benzo(a)pyrene	50-32-8	0	U		0.00619	0.0333
Carbazole	86-74-8	0	U		0.0103	0.333
Chrysene	218-01-9	0	U		0.00662	0.0333
Dibenz(a,h)anthracene	53-70-3	0	U		0.00923	0.0333
Dibenzofuran	132-64-9	0	U		0.0109	0.333
Fluoranthene	206-44-0	0	U		0.00601	0.0333
Fluorene	86-73-7	0	U		0.00542	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	0	U		0.00941	0.0333
1-Methylnaphthalene	90-12-0	0	U		0.00426	0.0333
2-Methylnaphthalene	91-57-6	0	U		0.00432	0.0333
Naphthalene	91-20-3	0	U		0.00836	0.0333
Phenanthrene	85-01-8	0	U		0.00661	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	9.08	U		0.0422	0.333
Di-n-butyl phthalate	84-74-2	6.71	U		0.0114	0.333
Di-n-octyl phthalate	117-84-0	0	U		0.0225	0.333
Pyrene	129-00-0	0	U		0.00648	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	0	U		0.0104	0.333
Pentachlorophenol	87-86-5	0	U		0.00896	0.333
Phenol	108-95-2	0	U		0.0134	0.333

Data File : C:\MSDCHEM\1\DATA\051222\0512 06.D Vial: 11  
 Acq On : 12 May 2022 6:29 am Operator: 3545  
 Sample : BLANK 1x WG1860981 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 17:30 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	44998	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	173167	8000.00	ppb	0.00
46) Acenaphthene-d10	5.14	164	86904	8000.00	ppb	0.00
70) Phenanthrene-d10	6.26	188	163811	8000.00	ppb	0.00
84) Chrysene-d12	9.00	240	146910	8000.00	ppb	0.00
94) Perylene-d12	11.67	264	143602	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.60	112	91779	12551.7034611	ppb	0.02
Spiked Amount 20000.000	Range 20 - 120		Recovery =	62.76%		
7) Phenol-d5	3.04	99	108577	12371.9133411	ppb	0.00
Spiked Amount 20000.000	Range 20 - 120		Recovery =	61.86%		
24) Nitrobenzene-d5	3.56	82	47556	6472.3918456	ppb	0.00
Spiked Amount 10000.000	Range 18 - 125		Recovery =	64.72%		
50) 2-Fluorobiphenyl	4.67	172	82537	5630.0487064	ppb	0.00
Spiked Amount 10000.000	Range 28 - 120		Recovery =	56.30%		
73) 2,4,6-Tribromophenol	5.72	330	20126	10853.3495060	ppb	0.00
Spiked Amount 20000.000	Range 17 - 137		Recovery =	54.27%		
87) p-Terphenyl-d14	7.65	244	128417	6396.2455838	ppb	0.00
Spiked Amount 10000.000	Range 13 - 131		Recovery =	63.96%		

Target Compounds

Qvalue

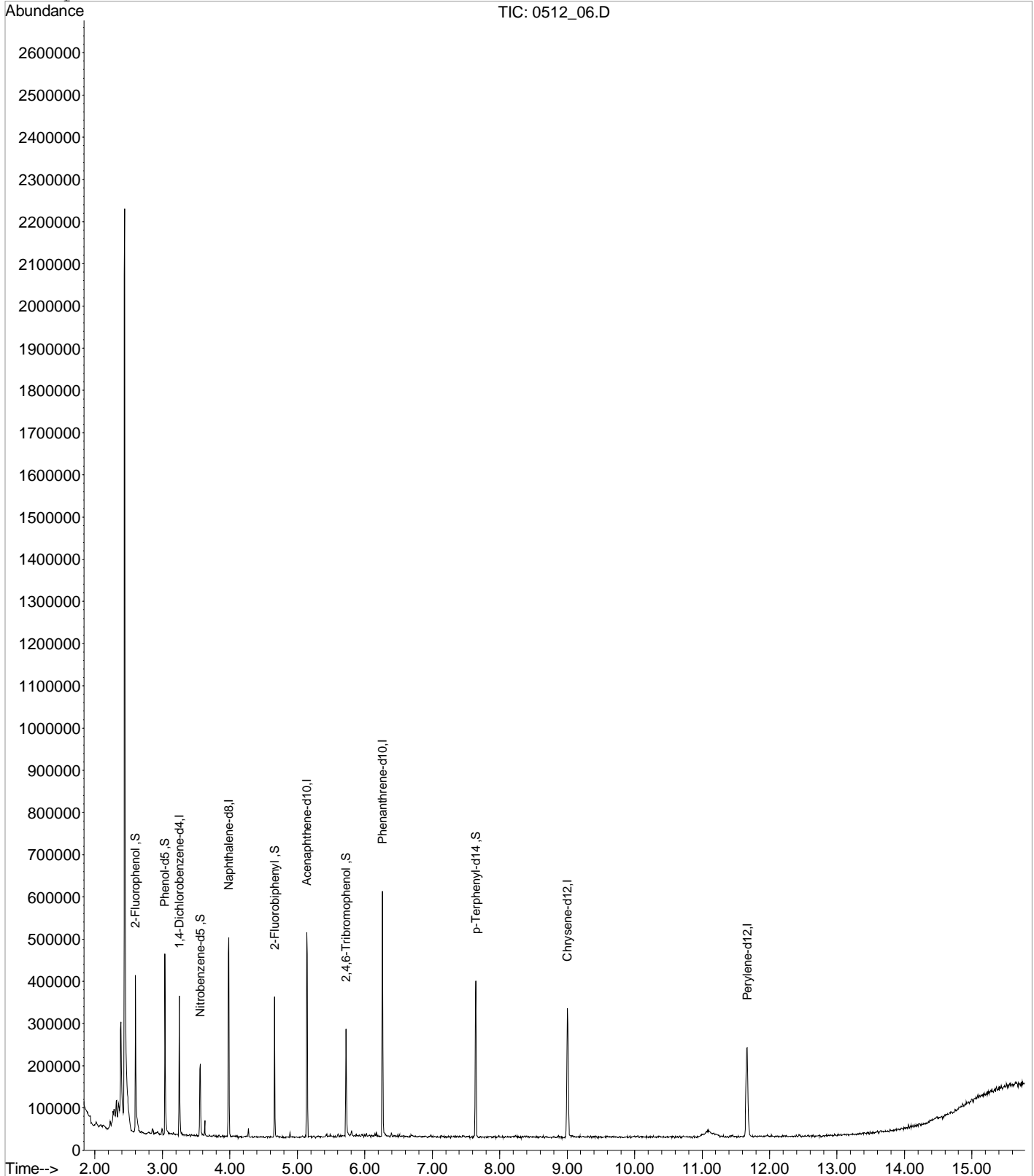
(#) = qualifier out of range (m) = manual integration  
 0512\_06.D S804E04BV.M Thu May 12 17:30:21 2022

Data File : C:\MSDCHEM\1\DATA\051222\0512 06.D  
 Acq On : 12 May 2022 6:29 am  
 Sample : BLANK 1x WG1860981  
 Misc : SOIL ISTD 22E03623 exp 11/03/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 17:30 2022

Vial: 11  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804E04BV.RES

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration



SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3791358-1  
 Client Sample ID: LCS  
 Lab File ID: 0512\_05  
 Instrument ID: BNAMS4  
 Analytical Batch: WG1860981  
 Dilution Factor: 1  
 Analytical Method: 8270E  
 Matrix: Solid  
 Total Solids (%): \_\_\_\_\_

SDG: L1488171  
 Collected Date/Time: \_\_\_\_\_  
 Received Date/Time: \_\_\_\_\_  
 Preparation Date/Time: 05/11/22 03:08  
 Analysis Date/Time: 05/12/22 06:09  
 Prep Method: 3546  
 Sample Vol Used: \_\_\_\_\_  
 Initial Wt/Vol: 15 g  
 Final Wt/Vol: 0.5 mL

Analyte	CAS	RT	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Acenaphthene	83-32-9	5.17	0.418		0.00539	0.0333
Acenaphthylene	208-96-8	5.05	0.440		0.00469	0.0333
Anthracene	120-12-7	6.32	0.419		0.00593	0.0333
Benzoic Acid	65-85-0	3.79	0.211		0.000	1.67
Benzo(a)anthracene	56-55-3	9	0.435		0.00587	0.0333
Benzo(b)fluoranthene	205-99-2	10.91	0.395		0.00621	0.0333
Benzo(k)fluoranthene	207-08-9	10.96	0.400		0.00592	0.0333
Benzo(g,h,i)perylene	191-24-2	14.04	0.434		0.00609	0.0333
Benzo(a)pyrene	50-32-8	11.56	0.433		0.00619	0.0333
Carbazole	86-74-8	6.45	0.405		0.0103	0.333
Chrysene	218-01-9	9.06	0.441		0.00662	0.0333
Dibenz(a,h)anthracene	53-70-3	13.73	0.403		0.00923	0.0333
Dibenzofuran	132-64-9	5.29	0.413		0.0109	0.333
Fluoranthene	206-44-0	7.27	0.419		0.00601	0.0333
Fluorene	86-73-7	5.54	0.414		0.00542	0.0333
Indeno(1,2,3-cd)pyrene	193-39-5	13.69	0.415		0.00941	0.0333
1-Methylnaphthalene	90-12-0	4.49	0.330		0.00426	0.0333
2-Methylnaphthalene	91-57-6	4.43	0.317		0.00432	0.0333
Naphthalene	91-20-3	4	0.323		0.00836	0.0333
Phenanthrene	85-01-8	6.29	0.414		0.00661	0.0333
Bis(2-ethylhexyl)phthalate	117-81-7	9.09	0.523		0.0422	0.333
Di-n-butyl phthalate	84-74-2	6.72	0.481		0.0114	0.333
Di-n-octyl phthalate	117-84-0	10.29	0.485		0.0225	0.333
Pyrene	129-00-0	7.50	0.425		0.00648	0.0333
3&4-Methyl Phenol	3&4-Methyl Phenol	3.46	0.459		0.0104	0.333
Pentachlorophenol	87-86-5	6.12	0.390		0.00896	0.333
Phenol	108-95-2	3.05	0.395		0.0134	0.333

Data File : C:\MSDCHEM\1\DATA\051222\0512 05.D  
 Acq On : 12 May 2022 6:09 am  
 Sample : LCS 1x WG1860981  
 Misc : SOIL ISTD 22E03623 exp 11/03/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 17:27 2022

Vial: 10  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	45677	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	213425	8000.00	ppb	0.00
46) Acenaphthene-d10	5.15	164	91874	8000.00	ppb	0.00
70) Phenanthrene-d10	6.27	188	182316	8000.00	ppb	0.00
84) Chrysene-d12	9.02	240	165152	8000.00	ppb	0.01
94) Perylene-d12	11.67	264	181936	8000.00	ppb	0.01

System Monitoring Compounds

4) 2-Fluorophenol	2.60	112	88007	11856.9286060	ppb	0.02
Spiked Amount 20000.000	Range 20	- 120	Recovery =	59.28%		
7) Phenol-d5	3.04	99	106479	11952.4967507	ppb	0.00
Spiked Amount 20000.000	Range 20	- 120	Recovery =	59.76%		
24) Nitrobenzene-d5	3.56	82	49271m	5440.8994934	ppb	0.00
Spiked Amount 10000.000	Range 18	- 125	Recovery =	54.41%		
50) 2-Fluorobiphenyl	4.67	172	93818	6053.3639297	ppb	0.00
Spiked Amount 10000.000	Range 28	- 120	Recovery =	60.53%		
73) 2,4,6-Tribromophenol	5.73	330	28122	13626.0758406	ppb	0.00
Spiked Amount 20000.000	Range 17	- 137	Recovery =	68.13%		
87) p-Terphenyl-d14	7.65	244	145374	6441.0529862	ppb	0.00
Spiked Amount 10000.000	Range 13	- 131	Recovery =	64.41%		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	1.98	79	55129	7800.2739408	ppb	88
3) N-Nitrosodimethylamine	1.97	42	56125	14795.5969753	ppb	85
5) Aniline	3.08	66	42220	9990.1626641	ppb #	41
6) bis(2-Chloroethyl)ether	3.09	93	82854m	12621.3899033	ppb	
8) Phenol	3.05	94	111330	11864.0168385	ppb	84
9) Benzaldehyde	3.03	105	36671	18050.2866452	ppb #	84
10) 2-Chlorophenol	3.14	128	86457	11507.1741346	ppb	87
11) n-Decane	3.13	41	50641	11443.1160662	ppb #	96
12) 1,3-Dichlorobenzene	3.22	146	90232	10621.5728493	ppb	95
13) 1,4-Dichlorobenzene	3.26	146	93104	10647.9600483	ppb	95
14) Benzyl Alcohol	3.32	79	66205	11393.0234142	ppb	94
15) 1,2-Dichlorobenzene	3.35	146	89022	11075.5479399	ppb	93
16) bis(2-Chloroisopropyl)ethe	3.38	121	29760	10820.0546245	ppb #	26
17) 2,2-oxybis(1-chloropropane	3.38	121	29760	10820.0546245	ppb #	26
18) 2-Methylphenol	3.37	108	85488	12591.8006619	ppb	90
19) Hexachloroethane	3.54	117	39250	12366.0270131	ppb	97
20) N-Nitrosodi-n-propylamine	3.46	70	67301	13564.7962096	ppb	92
21) 3&4-Methyl phenol	3.46	107	106160	13766.0970018	ppb	92
22) Acetophenone	3.47	105	118799	12576.5360125	ppb #	68
25) Nitrobenzene	3.57	77	100846	11389.4136795	ppb	94
26) Isophorone	3.70	82	181409	11421.1801902	ppb	100
27) 2-Nitrophenol	3.75	139	45970	10300.6530648	ppb	83
28) 2,4-Dimethylphenol	3.76	107	97945	11817.2471459	ppb	93
29) bis(2-Chlorethoxy)methane	3.82	93	110101	10841.2217341	ppb	99
30) 2,4-Dichlorophenol	3.89	162	69676	9978.9762603	ppb	87
31) Benzoic Acid	3.79	105	22126	6336.3580442	ppb	92
32) 1,2,4-Trichlorobenzene	3.95	180	80277	10271.1728650	ppb	98
33) alpha-terpineol	3.98	59	88915	13280.6585968	ppb	96
34) Naphthalene	4.00	128	263791	9705.9575030	ppb	99
35) 4-Chloroaniline	4.02	65	32117	10170.4063676	ppb #	42
36) Hexachloro-1,3-butadiene	4.06	225	46811	10978.8740647	ppb	96
37) Hydroquinone	4.22	110	8217	1300.7457699	ppb	87
38) Quinoline	4.21	129	163486	11495.3906039	ppb	98

(#) = qualifier out of range (m) = manual integration

0512\_05.D S804E04BV.M Thu May 12 17:28:33 2022

Data File : C:\MSDCHEM\1\DATA\051222\0512 05.D Vial: 10  
 Acq On : 12 May 2022 6:09 am Operator: 3545  
 Sample : LCS 1x WG1860981 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 17:27 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
39) Caprolactam	4.23	113	26800	18223.8172888	ppb		86
40) 4-Chloro-3-methylphenol	4.32	107	71328	10134.2263033	ppb		81
41) 2-Methylnaphthalene	4.43	142	168851	9534.4095407	ppb #		95
42) 1-Methylnaphthalene	4.49	142	164973	9912.5698624	ppb #		94
43) 1,2,4,5-Tetrachlorobenzene	4.54	216	75510	13218.1415444	ppb		99
44) Diphenyl Ether	4.81	170	110603	12137.1850920	ug/ml#		82
45) Diphenyl Oxide	4.81	170	110603	12137.1850920	ug/ml#		82
47) Hexachlorocyclopentadiene	4.53	237	32879	7638.4701476	ppb		93
48) 2,4,6-Trichlorophenol	4.61	196	50938	12782.9516589	ppb #		87
49) 2,4,5-Trichlorophenol	4.64	196	45251	10911.5399200	ppb		96
51) Biphenyl	4.73	154	208118	12092.8061624	ppb		99
52) 2-Chloronaphthalene	4.76	162	163247	12429.1201173	ppb		98
53) 2-Nitroaniline	4.83	138	55982	13750.2563542	ppb #		75
54) Acenaphthylene	5.05	152	270066	13217.2111001	ppb		99
55) Dimethyl phthalate	4.94	163	185509	13632.9337346	ppb		96
56) 2,6-Dinitrotoluene	4.99	165	42276	13400.1347406	ppb #		67
57) 3-Nitroaniline	5.11	138	44781	13183.3742036	ppb		90
58) Acenaphthene	5.17	153	168815	12559.1767617	ppb		95
59) 2,4-Dinitrophenol	5.19	184	8744	5346.4742380	ppb #		1
60) Dibenzofuran	5.29	168	231264	12406.1080645	ppb #		91
61) 2,4-Dinitrotoluene	5.28	165	60428	15294.9229977	ppb		83
62) 2,3,4,6-Tetrachlorophenol	5.38	232	35696	13624.6638257	ppb		97
63) 4-Nitrophenol	5.23	139	33785	12041.4089675	ppb #		65
64) Fluorene	5.54	166	187794	12419.4831111	ppb		97
65) 4-Chlorophenyl-phenylether	5.54	204	89881	12534.4406110	ppb		97
66) Diethyl phthalate	5.44	149	207946	14916.3353156	ppb		98
67) 4-Nitroaniline	5.56	138	47757	15011.1008426	ppb #		75
68) Azobenzene	5.66	77	227686	16373.0943574	ppb		92
69) Atrazine	6.03	200	59745	15902.0754565	ppb		96
71) 4,6-Dinitro-2-methylphenol	5.58	198	23461	9540.8630288	ppb		85
72) N-Nitrosodiphenylamine	5.62	169	163920	11831.9177212	ppb		99
74) 4-Bromophenyl-phenylether	5.91	248	57785	12851.7138261	ppb		97
75) Hexachlorobenzene	5.96	284	62398	12472.1371875	ppb		94
76) n-octadecane	6.15	55	37961	13608.2747276	ppb		97
77) Pentachlorophenol	6.12	266	32350	11713.3986597	ppb		98
78) Phenanthrene	6.29	178	298477	12442.9209145	ppb		99
79) Anthracene	6.32	178	305528	12583.2764951	ppb		99
80) Carbazole	6.45	167	269237	12153.3494767	ppb		98
81) Di-n-butyl phthalate	6.72	149	374267	14431.0460067	ppb		99
82) 2-nitrodiphenylamine	6.85	167	78582	17089.9876728	ppb #		100
83) Fluoranthene	7.27	202	320395	12572.7823552	ppb		99
85) Benzidine	7.40	184	102947	10536.2322901	ppb		99
86) Pyrene	7.50	202	339098	12760.7243165	ppb		99
88) Benzylbutyl phthalate	8.23	149	161782	14889.0097817	ppb		94
89) 3,3-Dichlorobenzidine	8.98	252	208835	24561.7134229	ppb		99
90) Benzo(a)anthracene	9.00	228	310442	13054.2518345	ppb		96
91) Chrysene	9.06	228	304863	13228.4084672	ppb		97
92) bis(2-Ethylhexyl)phthalate	9.09	149	235130	15710.0753273	ppb		95
93) Di-n-octyl phthalate	10.29	149	361714	14547.8745200	ppb		100
95) Benzo(b)fluoranthene	10.91	252	307311	11857.1707764	ppb		95
96) Benzo(k)fluoranthene	10.96	252	306474	12004.9597919	ppb		95
97) Benzo(a)pyrene	11.56	252	291614	12990.9194535	ppb		95
98) Indeno(1,2,3-cd)pyrene	13.69	276	274632	12452.4315327	ppb		96
99) Dibenz(a,h)anthracene	13.73	278	284203	12091.2391243	ppb		93

(#) = qualifier out of range (m) = manual integration

0512\_05.D S804E04BV.M Thu May 12 17:28:33 2022

Page 2

Data File : C:\MSDCHEM\1\DATA\051222\0512 05.D Vial: 10  
 Acq On : 12 May 2022 6:09 am Operator: 3545  
 Sample : LCS 1x WG1860981 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 17:27 2022 Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
100) Benzo(g,h,i)perylene	14.04	276	298859	13019.3374208	ppb	98

(#) = qualifier out of range (m) = manual integration  
 0512\_05.D S804E04BV.M Thu May 12 17:28:33 2022

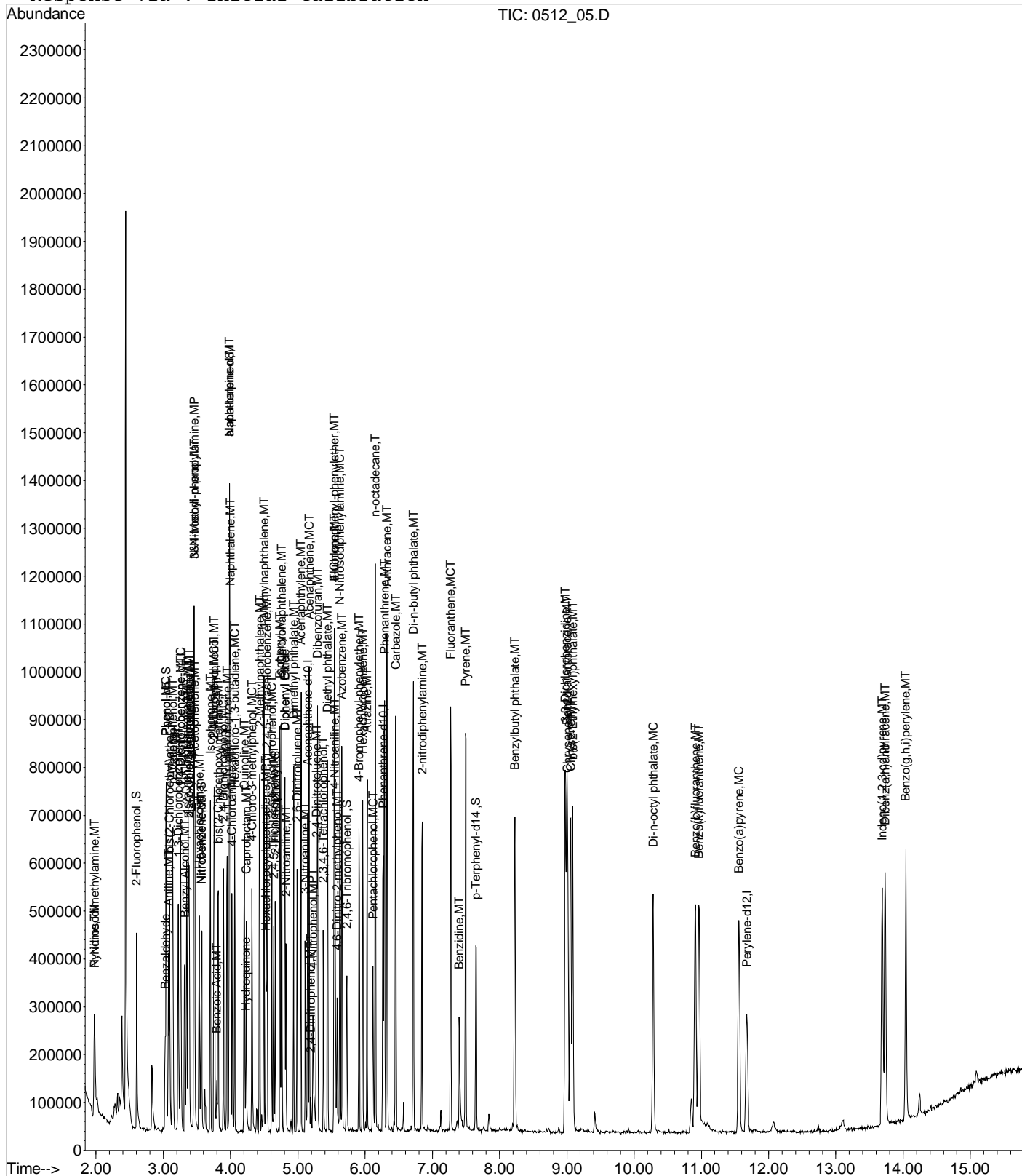


Data File : C:\MSDCHEM\1\DATA\051222\0512 05.D
Acq On : 12 May 2022 6:09 am
Sample : LCS 1x WG1860981
Misc : SOIL ISTD 22E03623 exp 11/03/22
MS Integration Params: RTEINT.P
Quant Time: May 12 17:27 2022

Vial: 10
Operator: 3545
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804E04BV.RES

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)
Title : 8270 BNA
Last Update : Thu May 05 15:59:02 2022
Response via : Initial Calibration

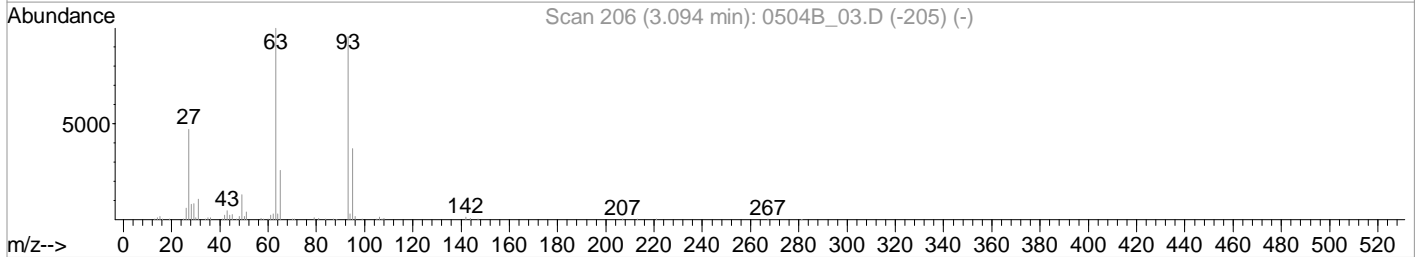
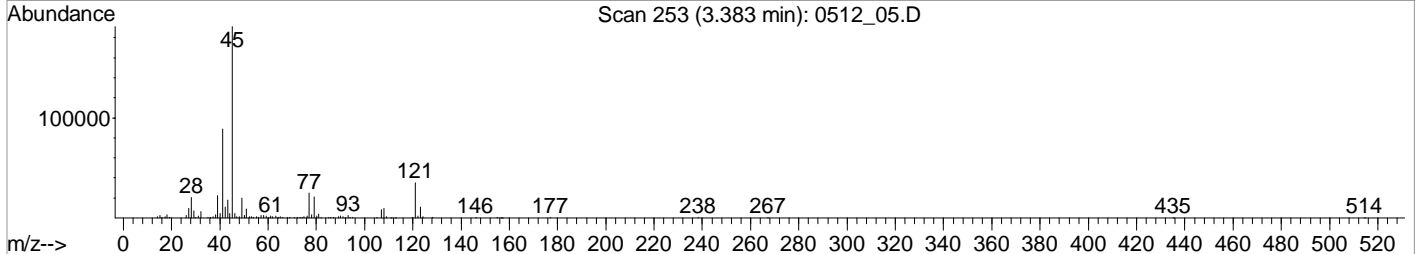
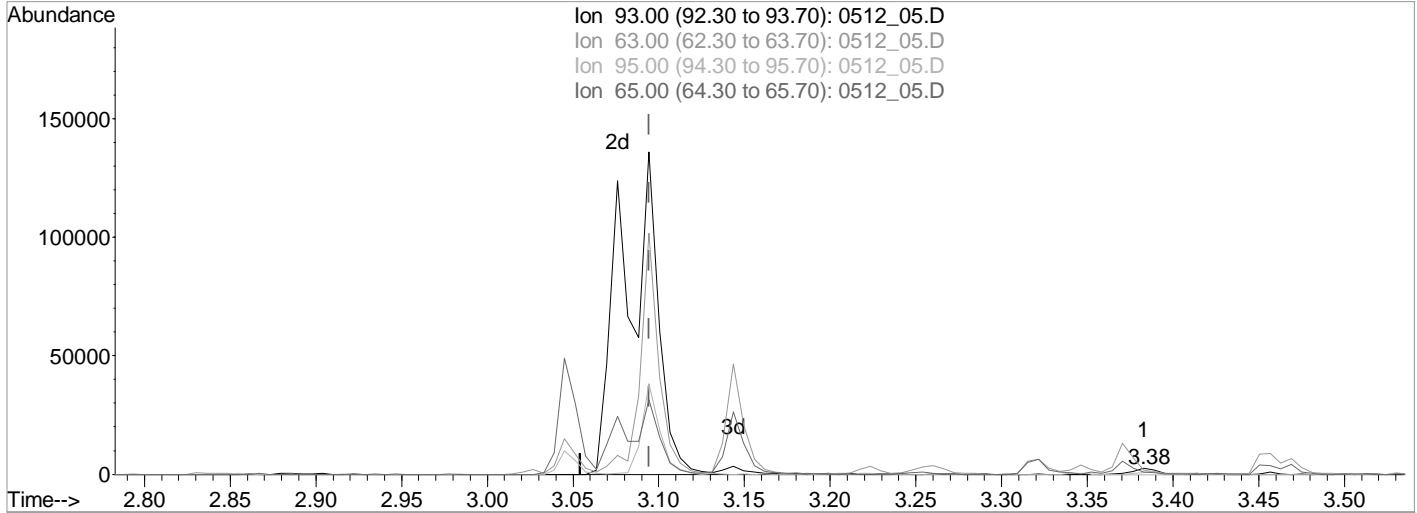


Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 05.D  
 Acq On : 12 May 2022 6:09 am  
 Sample : LCS 1x WG1860981  
 Misc : SOIL ISTD 22E03623 exp 11/03/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 8:38 2022

Vial: 10  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_05.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.38min (+0.289) 374.1295967 ppb  
 Qvalue = 86  
 response 2456

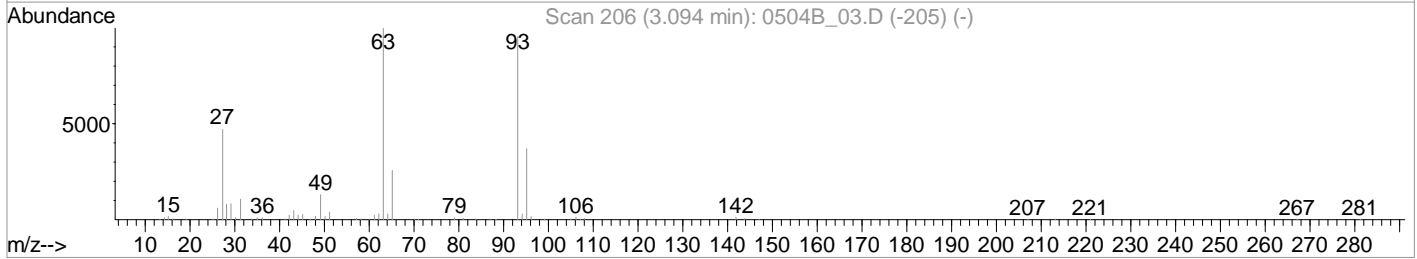
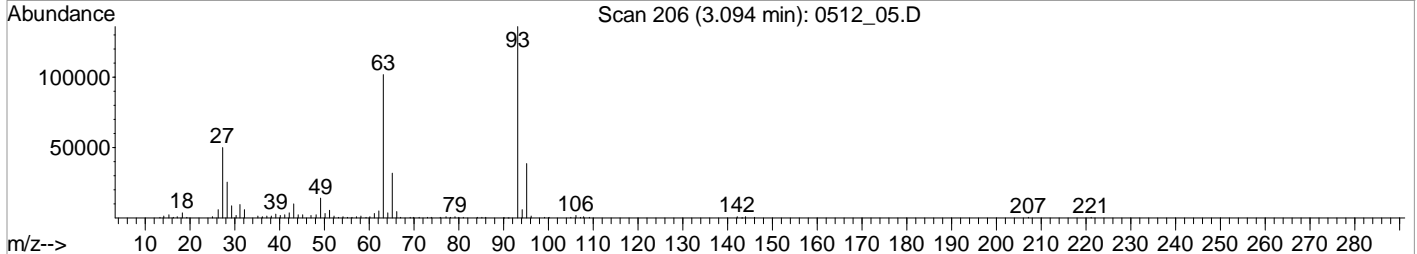
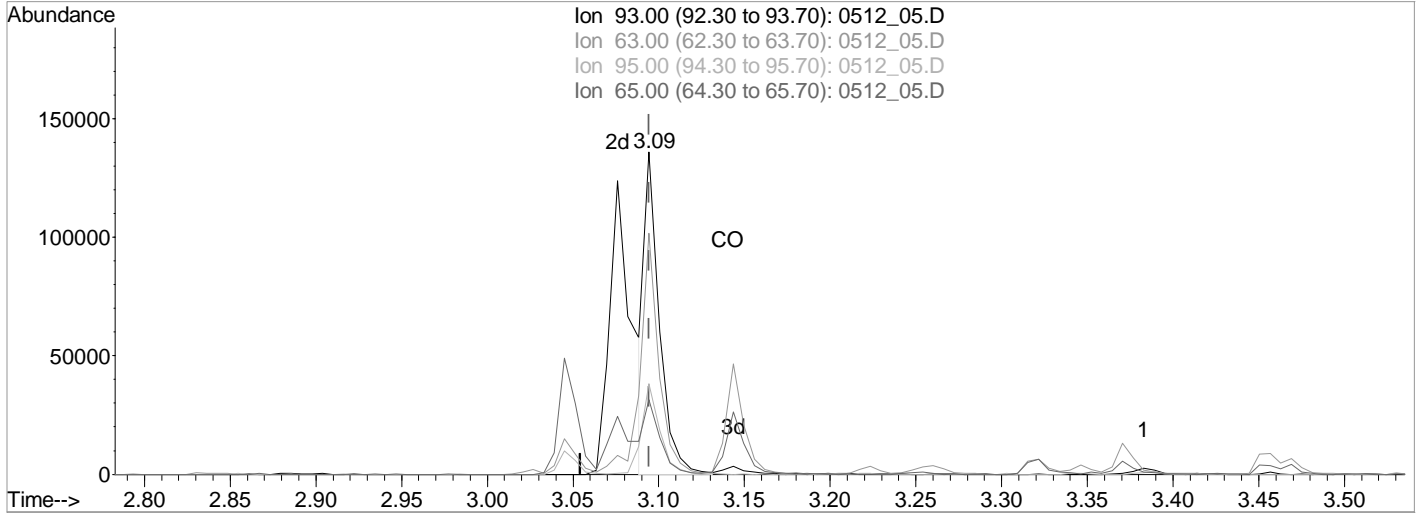
Ion	Exp%	Act%
93.00	100	100
63.00	76.20	59.60
95.00	30.20	26.17
65.00	24.00	25.60

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512\_05.D  
 Acq On : 12 May 2022 6:09 am  
 Sample : LCS 1x WG1860981  
 Misc : SOIL ISTD 22E03623 exp 11/03/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 17:26 2022

Vial: 10  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_05.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.09min (+0.000) 12621.3899033 ppb m

response 82854

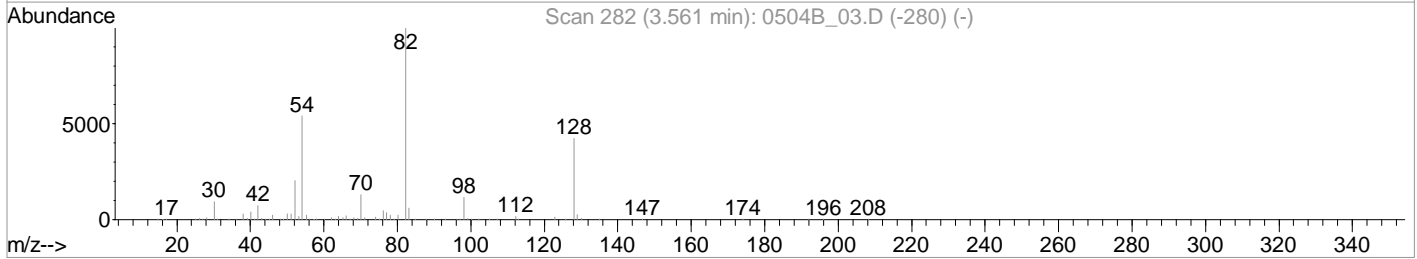
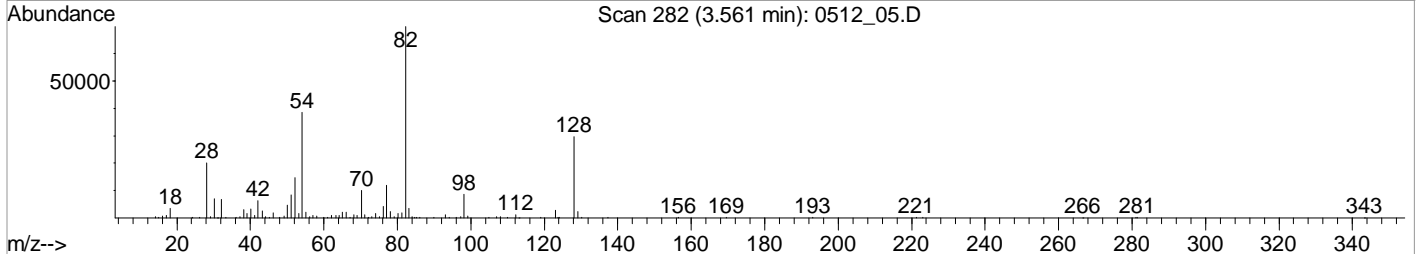
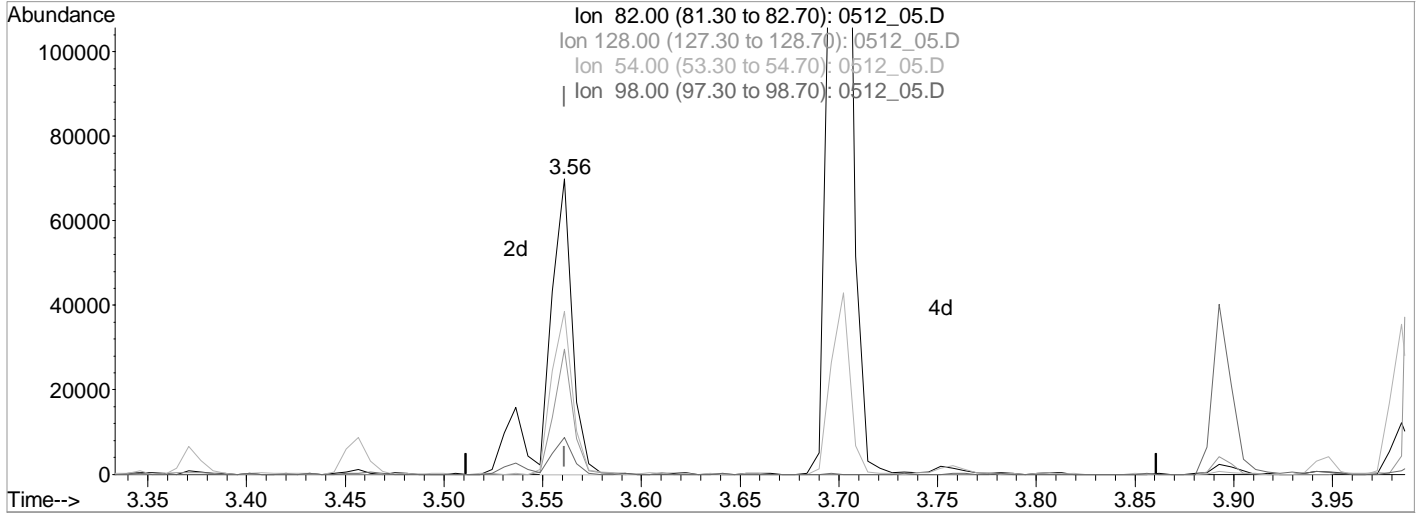
Ion	Exp%	Act%
93.00	100	100
63.00	76.20	74.76
95.00	30.20	28.19
65.00	24.00	23.23

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 05.D  
Acq On : 12 May 2022 6:09 am  
Sample : LCS 1x WG1860981  
Misc : SOIL ISTD 22E03623 exp 11/03/22  
MS Integration Params: RTEINT.P  
Quant Time: May 12 17:26 2022

Vial: 10  
Operator: 3545  
Inst : BNAMS4  
Multiplr: 1.00  
Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
Title : 8270 BNA  
Last Update : Thu May 05 15:59:02 2022  
Response via : Multiple Level Calibration



TIC: 0512\_05.D

(24) Nitrobenzene-d5 (S)  
3.56min (+0.000) 5441.8933457 ppb  
Qvalue = 94  
response 49280

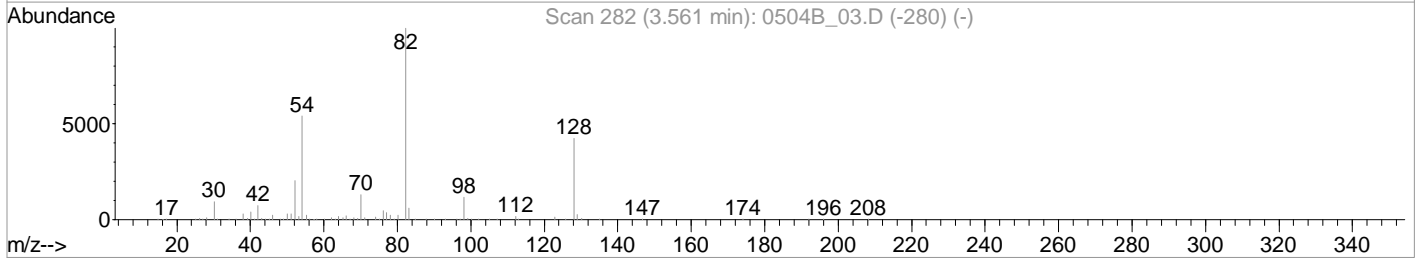
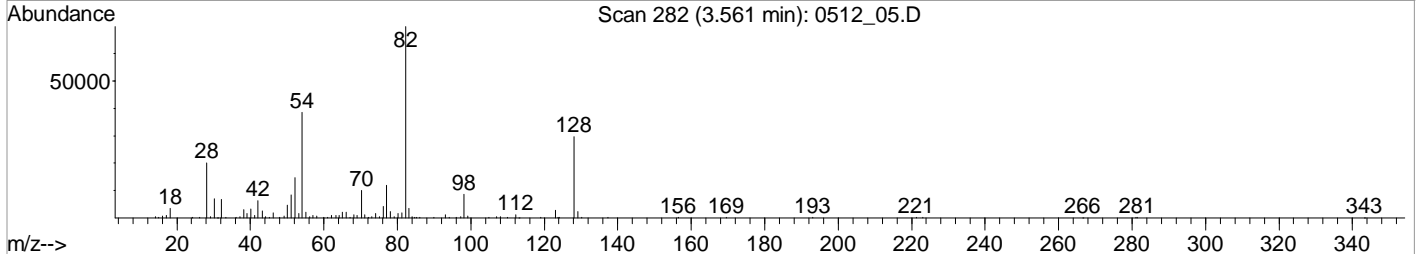
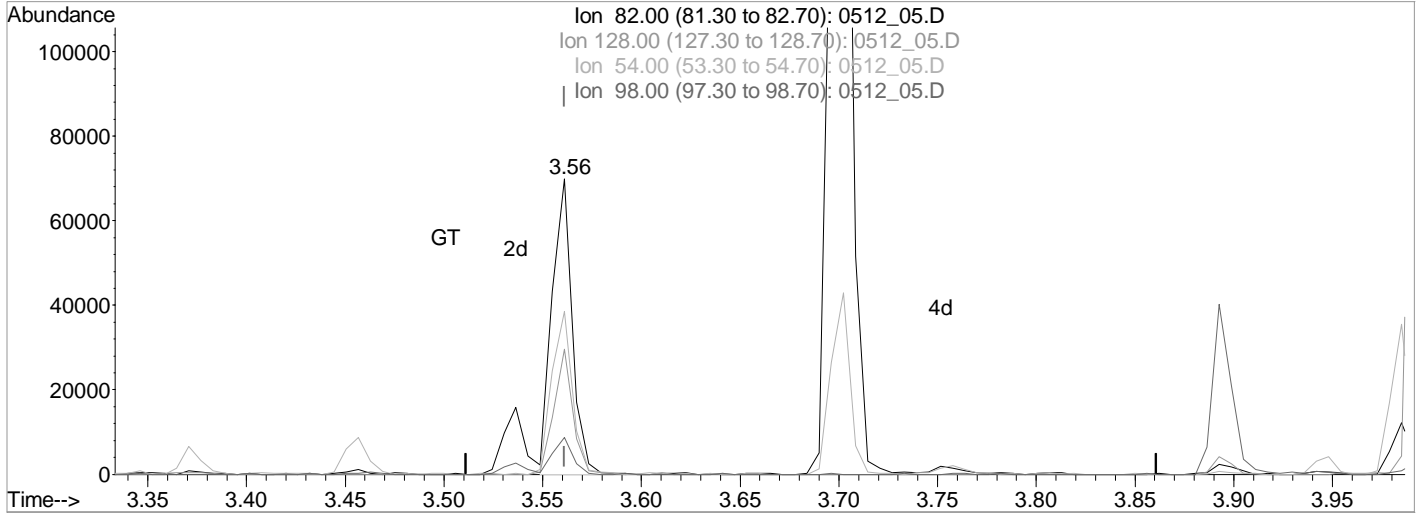
Ion	Exp%	Act%
82.00	100	100
128.00	49.30	42.09
54.00	56.90	54.93
98.00	11.80	12.47

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 05.D  
 Acq On : 12 May 2022 6:09 am  
 Sample : LCS 1x WG1860981  
 Misc : SOIL ISTD 22E03623 exp 11/03/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 12 17:27 2022

Vial: 10  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_05.D

(24) Nitrobenzene-d5 (S)  
 3.56min (+0.000) 5440.8994934 ppb m

response 49271

Ion	Exp%	Act%
82.00	100	100
128.00	49.30	42.30
54.00	56.90	55.15
98.00	11.80	12.47

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3791358-3  
**Client Sample ID:** MS  
**Lab File ID:** 0512\_34  
**Instrument ID:** BNAMS4  
**Analytical Batch:** WG1860981  
**Dilution Factor:** 5  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** 77.0

**SDG:** L1488171  
**Collected Date/Time:** 04/27/22 11:05  
**Received Date/Time:** 04/30/22 09:00  
**Preparation Date/Time:** 05/11/22 03:08  
**Analysis Date/Time:** 05/12/22 16:14  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15.65 g  
**Final Wt/Vol:** 0.5 mL

Analyte	CAS	RT	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	5.16	0.392		0.0350	0.217
Acenaphthylene	208-96-8	5.05	0.406		0.0305	0.217
Anthracene	120-12-7	6.32	0.448		0.0385	0.217
Benzoic Acid	65-85-0	3.79	1.24		0.766	10.8
Benzo(a)anthracene	56-55-3	8.99	0.448		0.0382	0.217
Benzo(b)fluoranthene	205-99-2	10.90	0.446		0.0404	0.217
Benzo(k)fluoranthene	207-08-9	10.96	0.472		0.0384	0.217
Benzo(g,h,i)perylene	191-24-2	14.03	0.428		0.0396	0.217
Benzo(a)pyrene	50-32-8	11.55	0.497		0.0402	0.217
Carbazole	86-74-8	6.45	0.449		0.0668	2.17
Chrysene	218-01-9	9.05	0.441		0.0430	0.217
Dibenz(a,h)anthracene	53-70-3	13.73	0.465		0.0600	0.217
Dibenzofuran	132-64-9	5.29	0.393		0.0707	2.17
Fluoranthene	206-44-0	7.27	0.458		0.0391	0.217
Fluorene	86-73-7	5.54	0.397		0.0352	0.217
Indeno(1,2,3-cd)pyrene	193-39-5	13.68	0.456		0.0611	0.217
1-Methylnaphthalene	90-12-0	4.49	0.374		0.0276	0.217
2-Methylnaphthalene	91-57-6	4.43	0.352		0.0280	0.217
Naphthalene	91-20-3	4	0.356		0.0543	0.217
Phenanthrene	85-01-8	6.28	0.457		0.0430	0.217
Bis(2-ethylhexyl)phthalate	117-81-7	9.08	0.546		0.274	2.17
Di-n-butyl phthalate	84-74-2	6.71	0.549		0.0740	2.17
Di-n-octyl phthalate	117-84-0	10.27	0.515		0.147	2.17
Pyrene	129-00-0	7.49	0.404		0.0421	0.217
3&4-Methyl Phenol	3&4-Methyl Phenol	3.46	0.478		0.0675	2.17
Pentachlorophenol	87-86-5	6.12	0.494		0.0581	2.17
Phenol	108-95-2	3.05	0.383		0.0870	2.17

Data File : C:\MSDCHEM\1\DATA\051222\0512 34.D  
 Acq On : 12 May 2022 4:14 pm  
 Sample : MS 5x WG1860981 L1488161-03  
 Misc : SOIL ISTD 22E03623 exp 11/03/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 14:28 2022

Vial: 39  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	48344	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	194202	8000.00	ppb	0.00
46) Acenaphthene-d10	5.14	164	97916	8000.00	ppb	0.00
70) Phenanthrene-d10	6.26	188	182794	8000.00	ppb	0.00
84) Chrysene-d12	9.01	240	183271	8000.00	ppb	0.00
94) Perylene-d12	11.66	264	181801	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.60	112	14404	1833.5514113	ppb	0.01
Spiked Amount 20000.000	Range 20 - 120		Recovery =	9.17%#		
7) Phenol-d5	3.04	99	17025	1805.6633460	ppb	0.00
Spiked Amount 20000.000	Range 20 - 120		Recovery =	9.03%#		
24) Nitrobenzene-d5	3.56	82	7691	933.3697682	ppb	0.00
Spiked Amount 10000.000	Range 18 - 125		Recovery =	9.33%#		
50) 2-Fluorobiphenyl	4.66	172	14029	849.3296602	ppb	0.00
Spiked Amount 10000.000	Range 28 - 120		Recovery =	8.49%#		
73) 2,4,6-Tribromophenol	5.72	330	4965	2399.4223408	ppb	0.00
Spiked Amount 20000.000	Range 17 - 137		Recovery =	12.00%#		
87) p-Terphenyl-d14	7.65	244	25342	1011.8149824	ppb	0.00
Spiked Amount 10000.000	Range 13 - 131		Recovery =	10.12%#		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.01	79	14835	1983.2263412	ppb #	76
3) N-Nitrosodimethylamine	1.99	42	11856	2953.0399380	ppb #	66
5) Aniline	3.08	66	7666	1713.8710254	ppb #	89
6) bis(2-Chloroethyl)ether	3.09	93	14669m	2111.2963795	ppb	
8) Phenol	3.05	94	18384m	1851.0346469	ppb	
9) Benzaldehyde	3.03	105	12422	5777.0731403	ppb #	89
10) 2-Chlorophenol	3.14	128	14814	1862.9270761	ppb	89
12) 1,3-Dichlorobenzene	3.22	146	14301	1590.5584975	ppb	87
13) 1,4-Dichlorobenzene	3.26	146	15106	1632.3096367	ppb #	83
14) Benzyl Alcohol	3.33	79	5396	877.3545488	ppb	96
15) 1,2-Dichlorobenzene	3.35	146	13723	1613.1395110	ppb	91
16) bis(2-Chloroisopropyl)ethe	3.38	121	4990	1714.1627887	ppb #	46
17) 2,2-oxybis(1-chloropropane	3.38	121	4990	1714.1627887	ppb #	46
18) 2-Methylphenol	3.37	108	18147	2525.4717412	ppb	82
19) Hexachloroethane	3.54	117	4549	1354.1334234	ppb #	82
20) N-Nitrosodi-n-propylamine	3.46	70	11750	2237.6111319	ppb	95
21) 3&4-Methyl phenol	3.46	107	18837	2307.8981789	ppb	89
22) Acetophenone	3.47	105	20013	2001.7758259	ppb #	62
25) Nitrobenzene	3.57	77	16410	2036.7740988	ppb	89
26) Isophorone	3.70	82	30440	2106.1456143	ppb	94
27) 2-Nitrophenol	3.75	139	7132	1756.2776824	ppb #	77
28) 2,4-Dimethylphenol	3.76	107	13985	1854.3346367	ppb	97
29) bis(2-Chlorethoxy)methane	3.81	93	18194	1968.8233248	ppb	89
30) 2,4-Dichlorophenol	3.89	162	11421	1797.6225293	ppb #	86
31) Benzoic Acid	3.79	105	19052	5996.1013688	ppb	79
32) 1,2,4-Trichlorobenzene	3.94	180	12556	1765.5165913	ppb	95
33) alpha-terpineol	3.98	59	14369	2358.6457402	ppb	97
34) Naphthalene	4.00	128	42435	1715.9088320	ppb	97
35) 4-Chloroaniline	4.02	65	4732	1646.7954638	ppb #	49
36) Hexachloro-1,3-butadiene	4.06	225	7212	1858.9049957	ppb	91
37) Hydroquinone	4.24	110	3751m	370.4819123	ppb	
38) Quinoline	4.21	129	27024	2088.2591300	ppb	94
39) Caprolactam	4.22	113	4697	3510.0775413	ppb #	80

(#) = qualifier out of range (m) = manual integration  
 0512\_34.D S804E04BV.M Fri May 13 14:28:57 2022

Data File : C:\MSDCHEM\1\DATA\051222\0512 34.D

Vial: 39

Acq On : 12 May 2022 4:14 pm

Operator: 3545

Sample : MS 5x WG1860981 L1488161-03

Inst : BNAMS4

Misc : SOIL ISTD 22E03623 exp 11/03/22

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: May 13 14:28 2022

Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)

Title : 8270 BNA

Last Update : Thu May 05 15:59:02 2022

Response via : Initial Calibration

DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
40) 4-Chloro-3-methylphenol	4.32	107	13616	2126.0412470	ppb		85
41) 2-Methylnaphthalene	4.43	142	27346	1696.9754794	ppb	#	91
42) 1-Methylnaphthalene	4.49	142	27327	1804.5002138	ppb		97
43) 1,2,4,5-Tetrachlorobenzene	4.54	216	11429	2198.6988663	ppb		92
44) Diphenyl Ether	4.80	170	17660	2129.7732067	ug/ml#		81
45) Diphenyl Oxide	4.80	170	17660	2129.7732067	ug/ml#		81
48) 2,4,6-Trichlorophenol	4.61	196	8582	2020.7692708	ppb	#	90
49) 2,4,5-Trichlorophenol	4.64	196	9180	2077.0143993	ppb		94
51) Biphenyl	4.73	154	34325	1871.4014221	ppb		97
52) 2-Chloronaphthalene	4.75	162	25014	1786.9700886	ppb		92
53) 2-Nitroaniline	4.82	138	9260	2134.0880464	ppb	#	68
54) Acenaphthylene	5.05	152	42722	1961.8258443	ppb		96
56) 2,6-Dinitrotoluene	4.99	165	6313	1877.5435822	ppb	#	70
57) 3-Nitroaniline	5.11	138	6256	1728.0985007	ppb		96
58) Acenaphthene	5.16	153	27104	1892.0059151	ppb		94
60) Dibenzofuran	5.29	168	37704	1897.8151749	ppb	#	86
61) 2,4-Dinitrotoluene	5.27	165	9267	2200.8335542	ppb	#	62
62) 2,3,4,6-Tetrachlorophenol	5.38	232	6411	2295.9952258	ppb		98
63) 4-Nitrophenol	5.24	139	5224	1747.0104918	ppb		92
64) Fluorene	5.54	166	30878	1916.0636550	ppb		96
65) 4-Chlorophenyl-phenylether	5.53	204	15844	2073.1983591	ppb		89
66) Diethyl phthalate	5.44	149	34541	2324.7991328	ppb		98
67) 4-Nitroaniline	5.56	138	7709	2273.5918935	ppb	#	84
68) Azobenzene	5.66	77	37303	2516.9648980	ppb		91
69) Atrazine	6.02	200	11069	2764.3917823	ppb		99
72) N-Nitrosodiphenylamine	5.62	169	28168	2027.8790804	ppb		97
74) 4-Bromophenyl-phenylether	5.91	248	9913	2198.9425468	ppb		88
75) Hexachlorobenzene	5.96	284	10441	2081.4939490	ppb		97
76) n-octadecane	6.15	55	8764	3133.5067910	ppb	#	87
77) Pentachlorophenol	6.12	266	6618	2390.0019199	ppb		94
78) Phenanthrene	6.28	178	53036	2205.1852518	ppb		97
79) Anthracene	6.32	178	52581	2159.9038135	ppb		96
80) Carbazole	6.45	167	48202	2170.1469839	ppb		97
81) Di-n-butyl phthalate	6.71	149	68927	2650.7483467	ppb		99
82) 2-nitrodiphenylamine	6.84	167	14449	3134.1466240	ppb	#	100
83) Fluoranthene	7.27	202	56615	2215.8483107	ppb		97
86) Pyrene	7.49	202	57451	1948.2190169	ppb		95
88) Benzylbutyl phthalate	8.22	149	28340	2350.3121679	ppb		96
89) 3,3-Dichlorobenzidine	8.97	252	26830	2843.5844704	ppb		96
90) Benzo(a)anthracene	8.99	228	57167	2166.2421589	ppb		97
91) Chrysene	9.05	228	54519	2131.7724573	ppb		94
92) bis(2-Ethylhexyl)phthalate	9.08	149	43835	2639.2548135	ppb		92
93) Di-n-octyl phthalate	10.27	149	68759	2492.0334526	ppb		97
95) Benzo(b)fluoranthene	10.90	252	55782	2153.8696908	ppb		93
96) Benzo(k)fluoranthene	10.96	252	58232	2282.7121688	ppb		92
97) Benzo(a)pyrene	11.55	252	53853	2400.8431948	ppb		93
98) Indeno(1,2,3-cd)pyrene	13.68	276	48522	2201.7301562	ppb		93
99) Dibenz(a,h)anthracene	13.73	278	52717	2244.4772836	ppb		92
100) Benzo(g,h,i)perylene	14.03	276	47479	2069.8862592	ppb		95

(#)= qualifier out of range (m) = manual integration

0512\_34.D S804E04BV.M Fri May 13 14:28:57 2022

Page 2

10606394

Pace Analytical - Minnesota

PROJECT:

10606394

SDG:

L1488171

DATE/TIME:

05/13/22 16:04

1190 of 1349

349 of 387

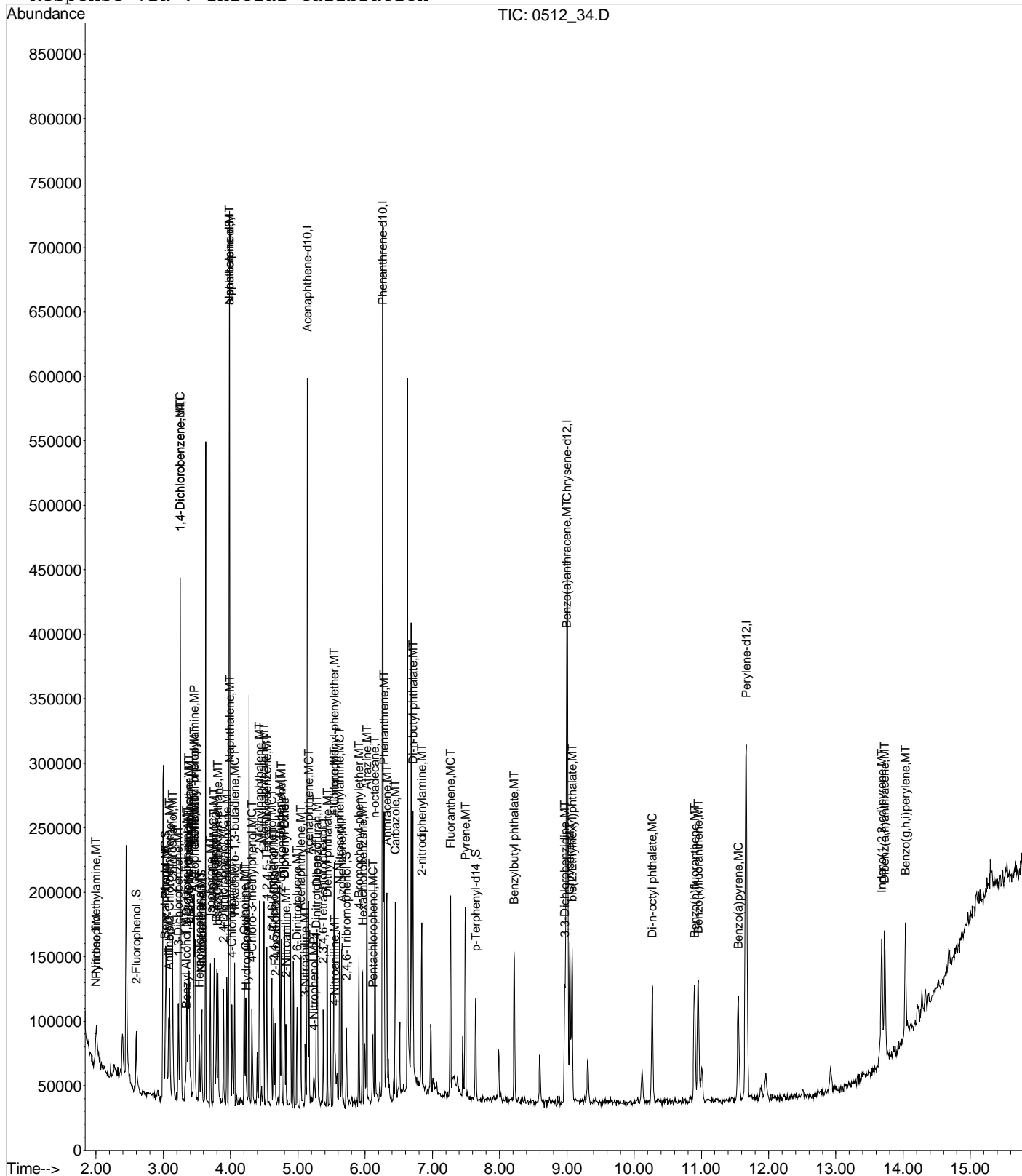


Data File : C:\MSDCHEM\1\DATA\051222\0512 34.D
Acq On : 12 May 2022 4:14 pm
Sample : MS 5x WG1860981 L1488161-03
Misc : SOIL ISTD 22E03623 exp 11/03/22
MS Integration Params: RTEINT.P
Quant Time: May 13 14:28 2022

Vial: 39
Operator: 3545
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804E04BV.RES

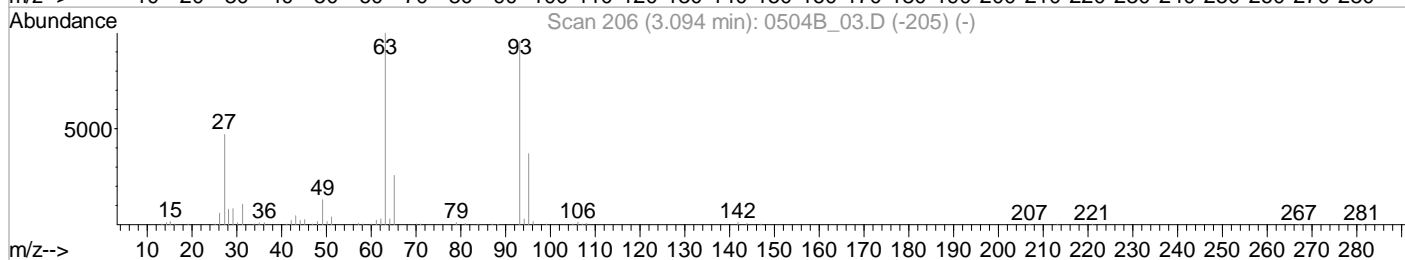
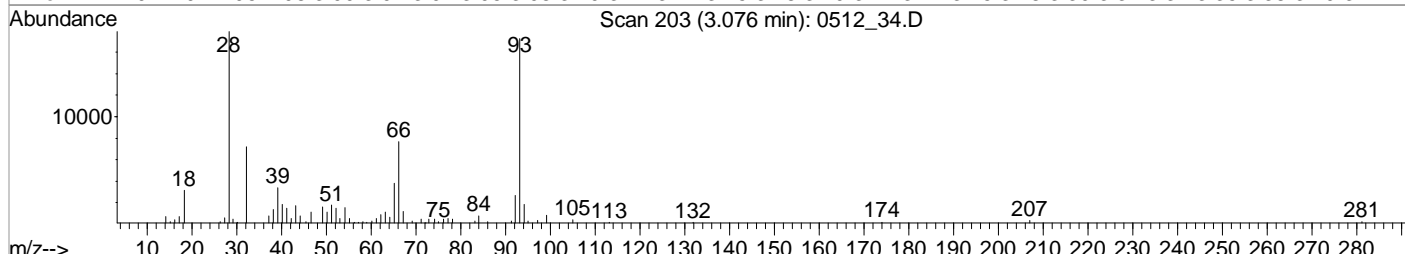
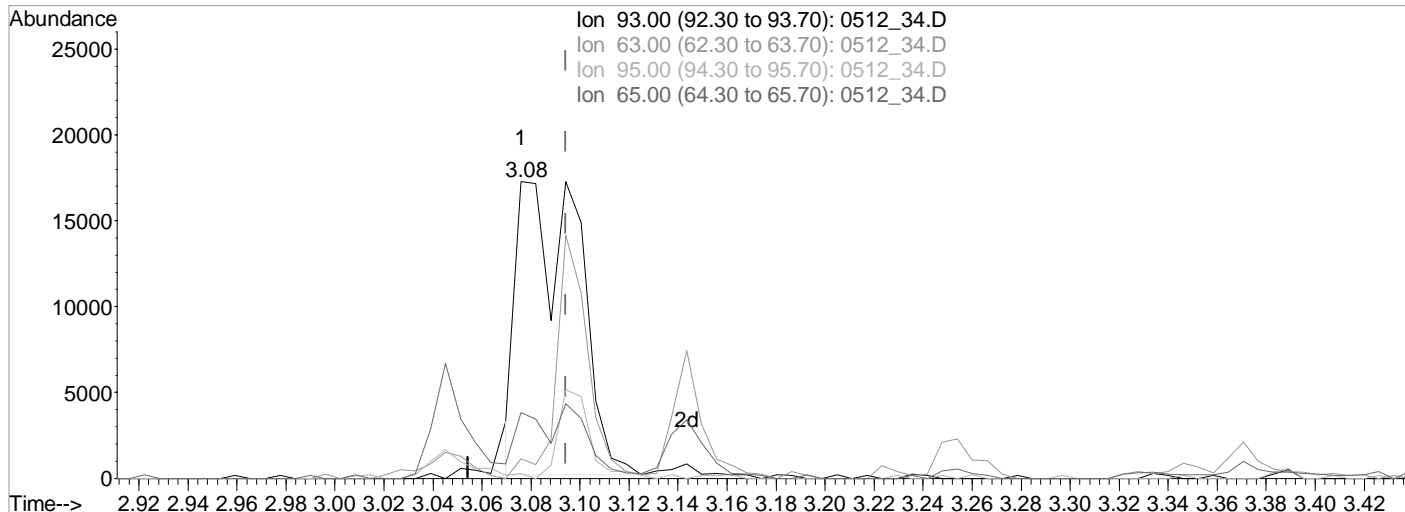
Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)
Title : 8270 BNA
Last Update : Thu May 05 15:59:02 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 34.D Vial: 39  
 Acq On : 12 May 2022 4:14 pm Operator: 3545  
 Sample : MS 5x WG1860981 L1488161-03 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 9:42 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_34.D

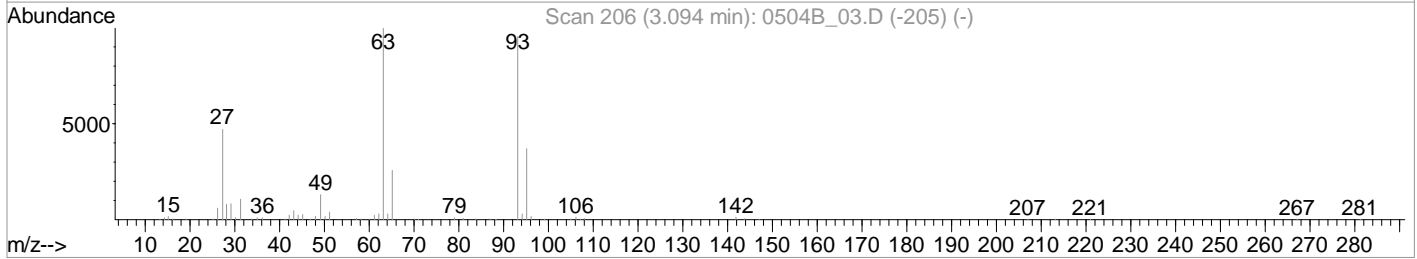
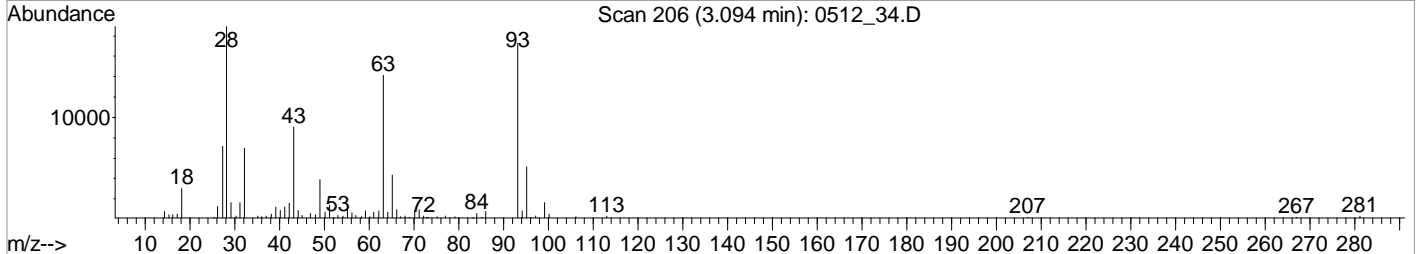
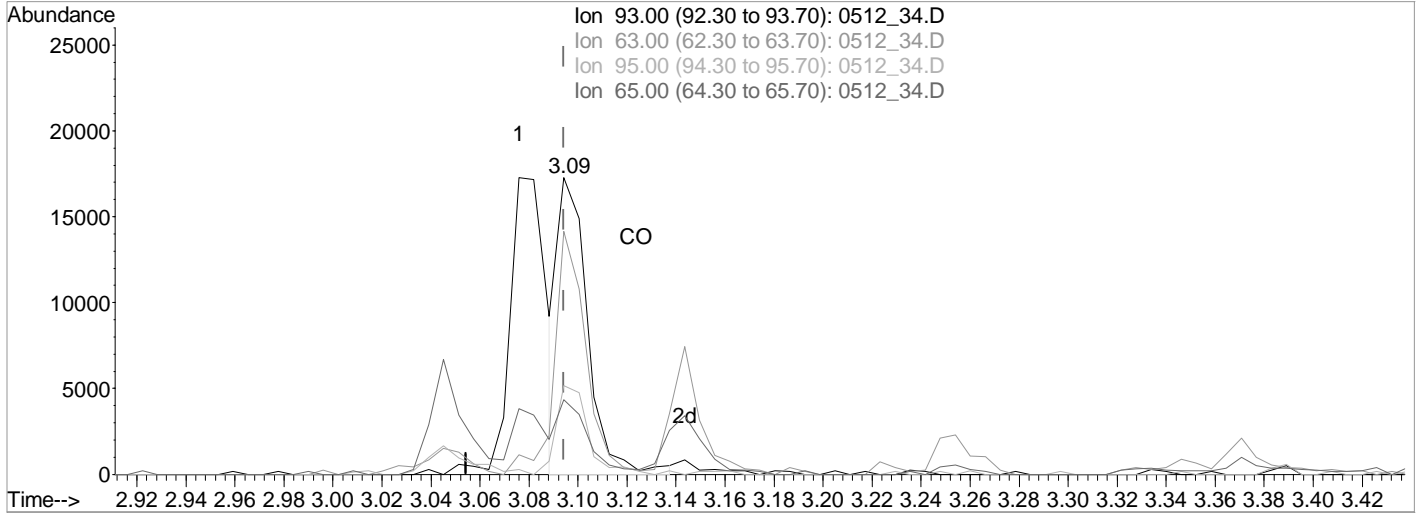
(6) bis(2-Chloroethyl)ether (MT)  
 3.08min (-0.018) 4284.6262131 ppb  
 Qvalue = 39  
 response 29769

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	6.56#
95.00	30.20	0.65#
65.00	24.00	20.68

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 34.D Vial: 39  
 Acq On : 12 May 2022 4:14 pm Operator: 3545  
 Sample : MS 5x WG1860981 L1488161-03 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 14:27 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_34.D

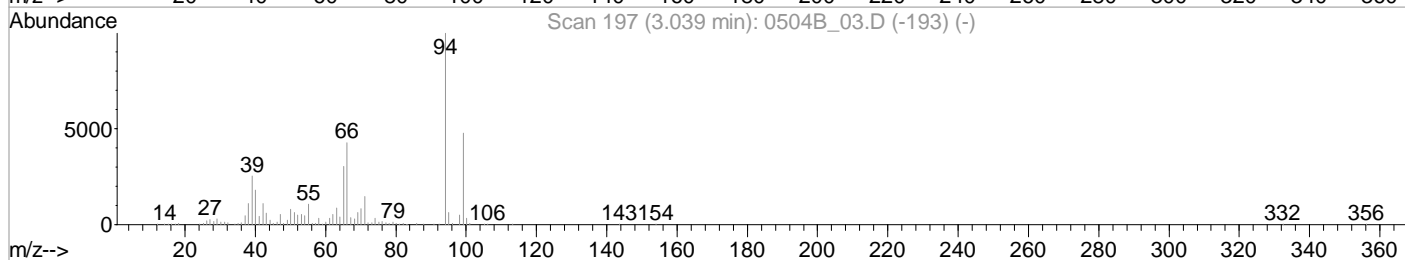
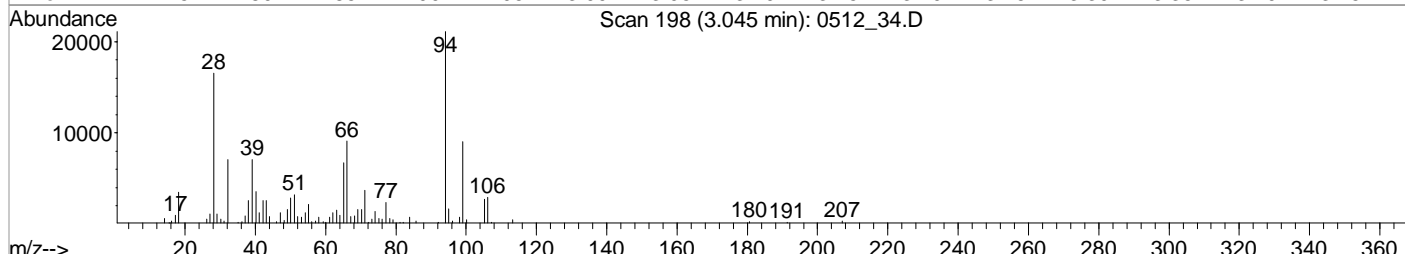
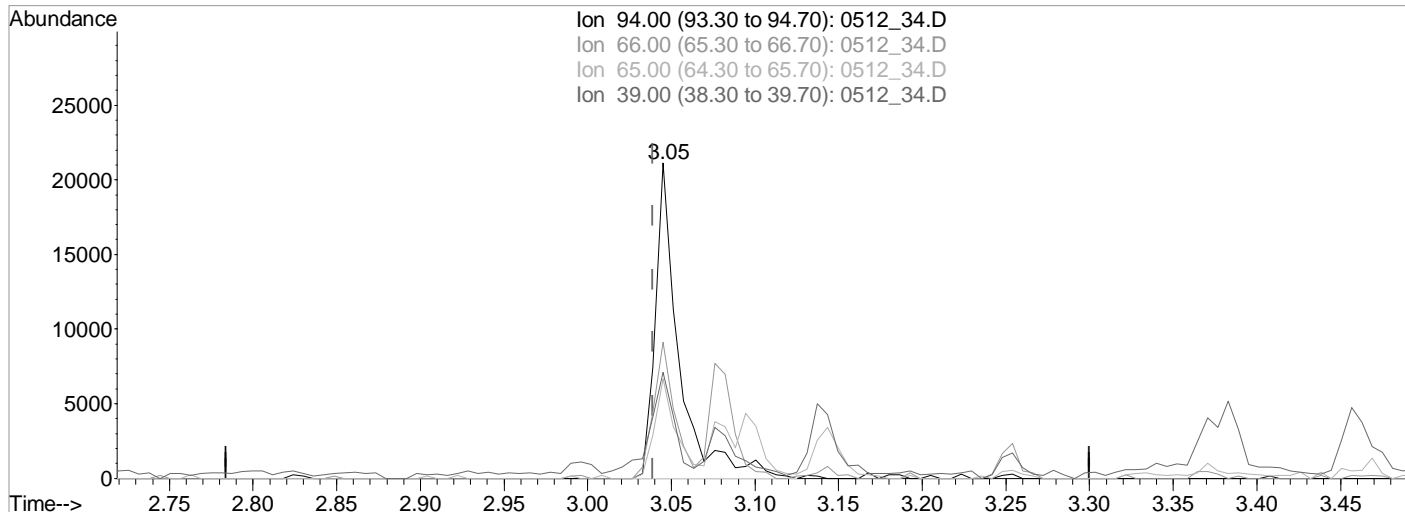
(6) bis(2-Chloroethyl)ether (MT)  
 3.09min (+0.000) 2111.2963795 ppb m

response	14669
Ion	Exp% Act%
93.00	100 100
63.00	76.20 81.91
95.00	30.20 29.86
65.00	24.00 25.20

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 34.D Vial: 39  
 Acq On : 12 May 2022 4:14 pm Operator: 3545  
 Sample : MS 5x WG1860981 L1488161-03 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 14:27 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_34.D

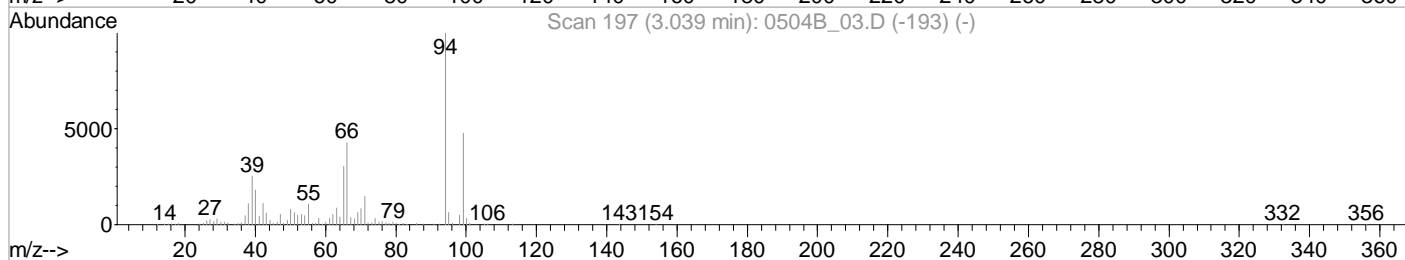
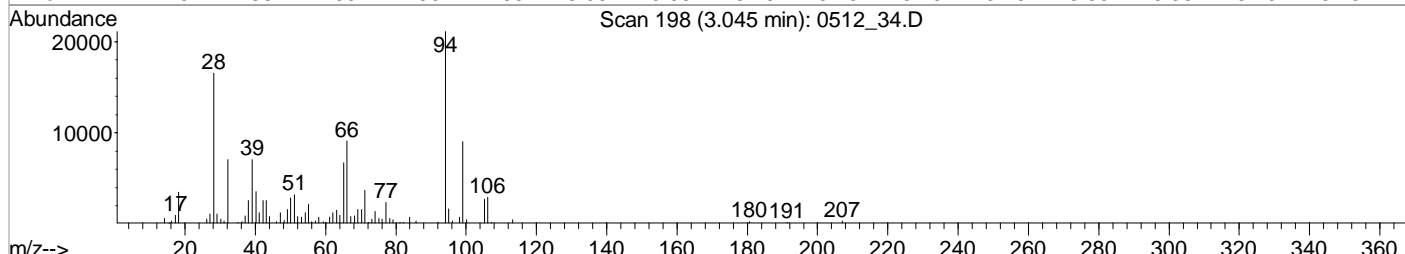
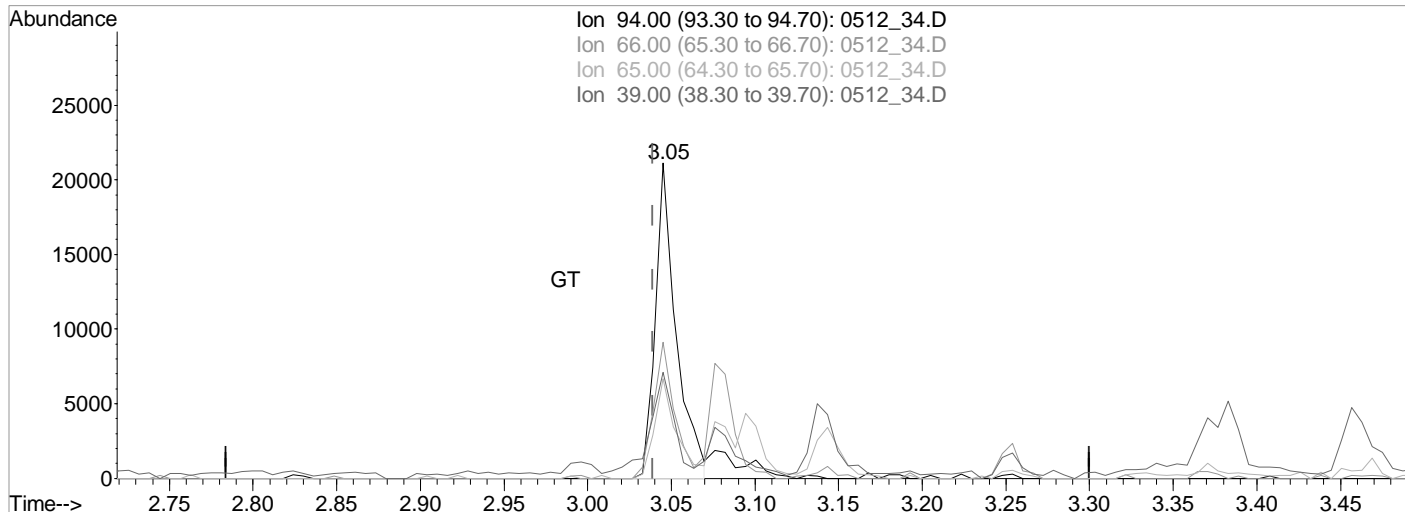
(8) Phenol (MC)  
 3.05min (+0.006) 2119.3662034 ppb  
 Qvalue = 86  
 response 21049

Ion	Exp%	Act%
94.00	100	100
66.00	34.70	43.22
65.00	27.70	31.65
39.00	22.50	31.65

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 34.D Vial: 39  
 Acq On : 12 May 2022 4:14 pm Operator: 3545  
 Sample : MS 5x WG1860981 L1488161-03 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 14:27 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_34.D

(8) Phenol (MC)  
 3.05min (+0.006) 1851.0346469 ppb m

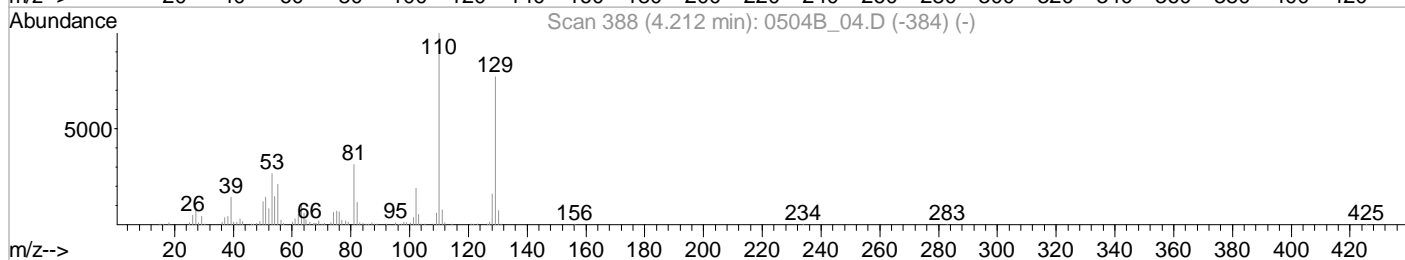
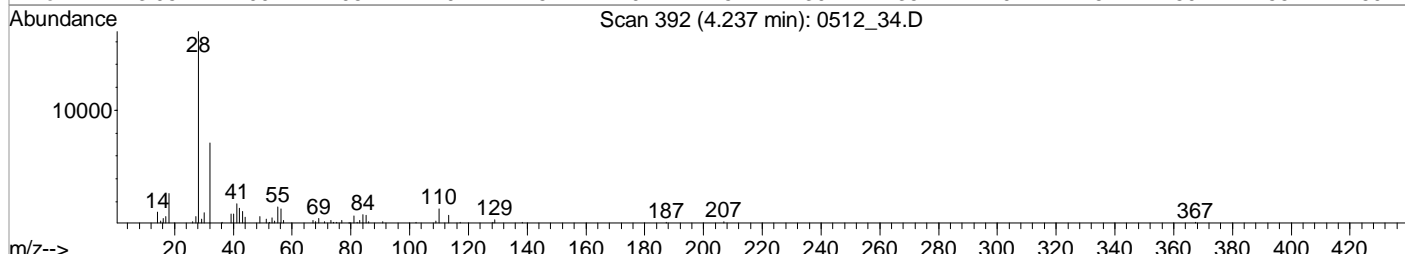
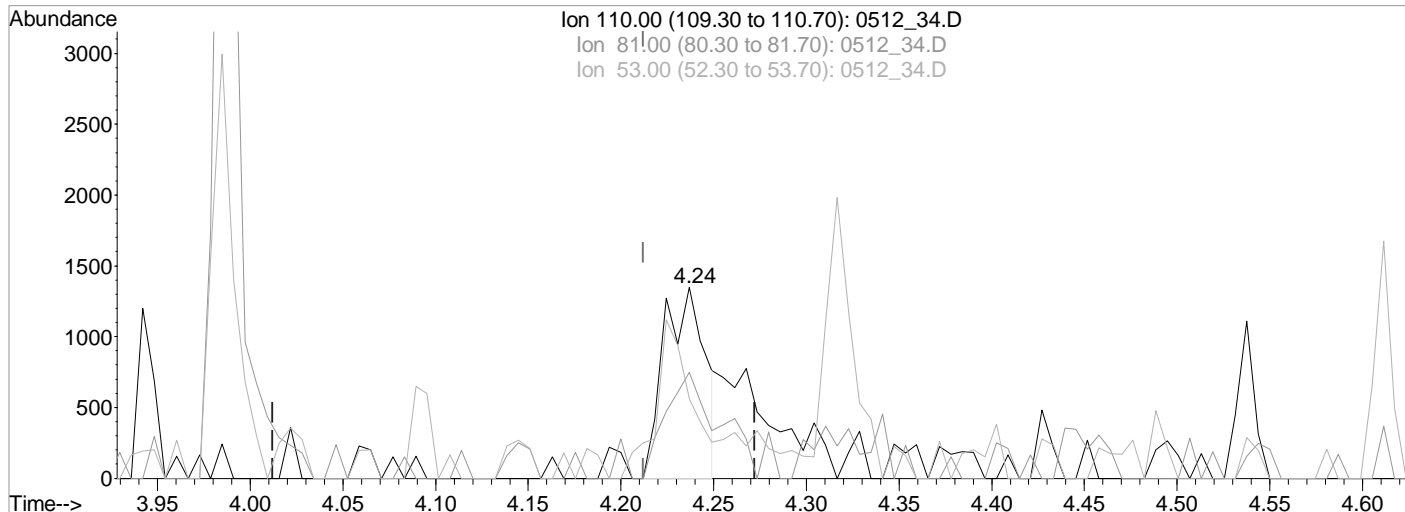
response 18384

Ion	Exp%	Act%
94.00	100	100
66.00	34.70	43.22
65.00	27.70	31.65
39.00	22.50	33.58

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 34.D Vial: 39  
 Acq On : 12 May 2022 4:14 pm Operator: 3545  
 Sample : MS 5x WG1860981 L1488161-03 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 14:27 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Single Level Calibration



TIC: 0512\_34.D

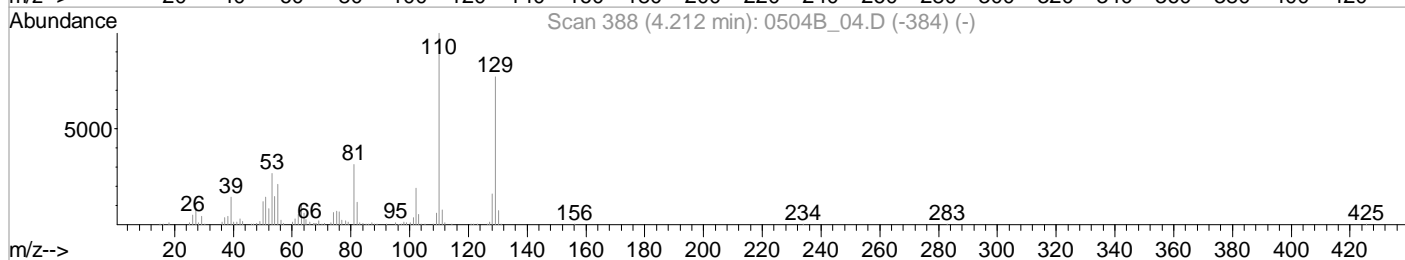
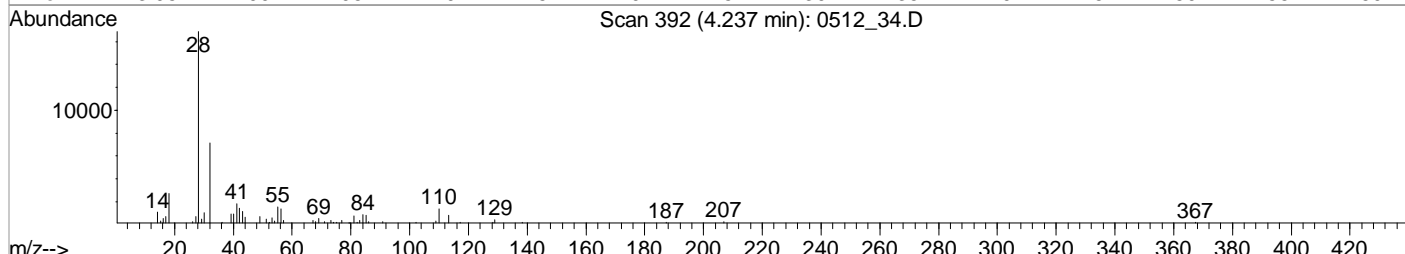
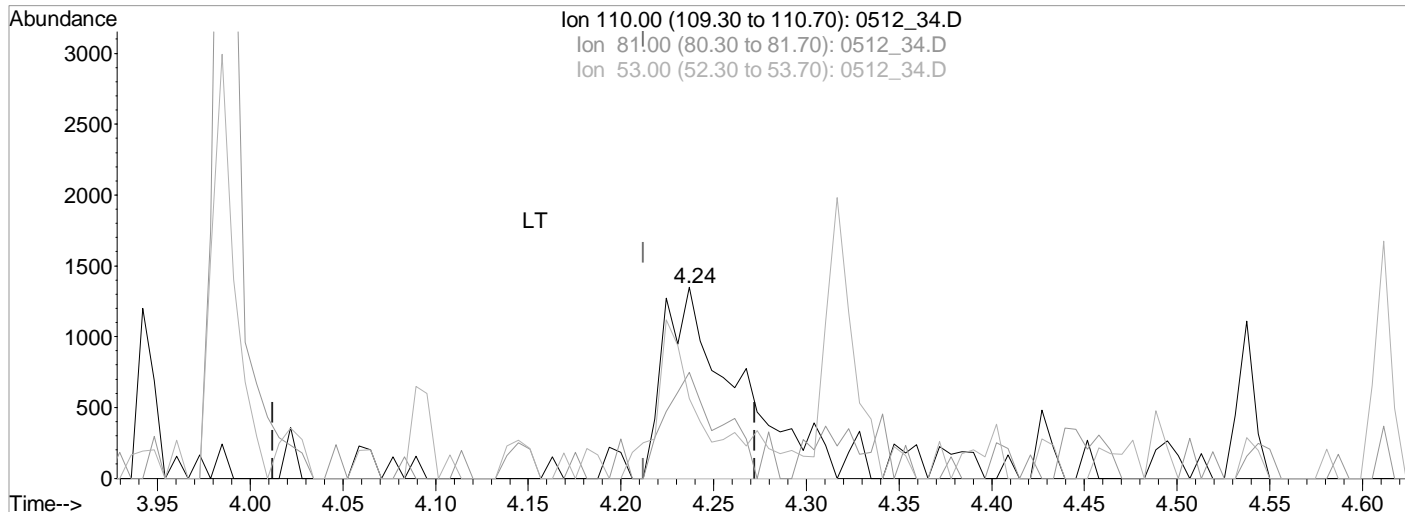
(37) Hydroquinone  
 4.24min (+0.025) -39.9834553 ppb  
 Qvalue = 72  
 response 2107

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	55.41#
53.00	25.90	23.19
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 34.D Vial: 39  
 Acq On : 12 May 2022 4:14 pm Operator: 3545  
 Sample : MS 5x WG1860981 L1488161-03 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 14:28 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Single Level Calibration



TIC: 0512\_34.D

(37) Hydroquinone  
 4.24min (+0.025) 370.4819123 ppb m

response 3751

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	55.41#
53.00	25.90	41.78
0.00	0.00	0.00

SAMPLE RESULT SUMMARY  
ORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** R3791358-4  
**Client Sample ID:** MSD  
**Lab File ID:** 0512\_35  
**Instrument ID:** BNAMS4  
**Analytical Batch:** WG1860981  
**Dilution Factor:** 5  
**Analytical Method:** 8270E  
**Matrix:** Solid  
**Total Solids (%):** 77.0

**SDG:** L1488171  
**Collected Date/Time:** 04/27/22 11:05  
**Received Date/Time:** 04/30/22 09:00  
**Preparation Date/Time:** 05/11/22 03:08  
**Analysis Date/Time:** 05/12/22 16:35  
**Prep Method:** 3546  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 15.60 g  
**Final Wt/Vol:** 0.5 mL

Analyte	CAS	RT	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg
Acenaphthene	83-32-9	5.16	0.337		0.0350	0.217
Acenaphthylene	208-96-8	5.05	0.335		0.0305	0.217
Anthracene	120-12-7	6.32	0.339		0.0385	0.217
Benzoic Acid	65-85-0	3.79	0.806	J3	0.766	10.8
Benzo(a)anthracene	56-55-3	8.99	0.353		0.0382	0.217
Benzo(b)fluoranthene	205-99-2	10.89	0.353		0.0404	0.217
Benzo(k)fluoranthene	207-08-9	10.95	0.352		0.0384	0.217
Benzo(g,h,i)perylene	191-24-2	14.03	0.345		0.0396	0.217
Benzo(a)pyrene	50-32-8	11.55	0.389		0.0402	0.217
Carbazole	86-74-8	6.45	0.322	J3	0.0668	2.17
Chrysene	218-01-9	9.05	0.347		0.0430	0.217
Dibenz(a,h)anthracene	53-70-3	13.73	0.349		0.0600	0.217
Dibenzofuran	132-64-9	5.29	0.328		0.0707	2.17
Fluoranthene	206-44-0	7.27	0.348		0.0391	0.217
Fluorene	86-73-7	5.54	0.339		0.0352	0.217
Indeno(1,2,3-cd)pyrene	193-39-5	13.68	0.336		0.0611	0.217
1-Methylnaphthalene	90-12-0	4.49	0.299		0.0276	0.217
2-Methylnaphthalene	91-57-6	4.43	0.288		0.0280	0.217
Naphthalene	91-20-3	4	0.295		0.0543	0.217
Phenanthrene	85-01-8	6.28	0.340		0.0430	0.217
Bis(2-ethylhexyl)phthalate	117-81-7	9.08	0.389	J3	0.274	2.17
Di-n-butyl phthalate	84-74-2	6.71	0.404	J3	0.0740	2.17
Di-n-octyl phthalate	117-84-0	10.27	0.382	J3	0.147	2.17
Pyrene	129-00-0	7.49	0.331		0.0421	0.217
3&4-Methyl Phenol	3&4-Methyl Phenol	3.46	0.345		0.0675	2.17
Pentachlorophenol	87-86-5	6.12	0.322	J3	0.0581	2.17
Phenol	108-95-2	3.05	0.322		0.0870	2.17



Data File : C:\MSDCHEM\1\DATA\051222\0512 35.D  
 Acq On : 12 May 2022 4:35 pm  
 Sample : MSD 5x WG1860981 L1488161-03  
 Misc : SOIL ISTD 22E03623 exp 11/03/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 14:30 2022

Vial: 40  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	3.25	152	48980	8000.00	ppb	0.00
23) Naphthalene-d8	3.98	136	195552	8000.00	ppb	0.00
46) Acenaphthene-d10	5.14	164	98142	8000.00	ppb	0.00
70) Phenanthrene-d10	6.26	188	189840	8000.00	ppb	0.00
84) Chrysene-d12	9.00	240	186844	8000.00	ppb	0.00
94) Perylene-d12	11.67	264	182436	8000.00	ppb	0.00

System Monitoring Compounds

4) 2-Fluorophenol	2.60	112	11615	1459.3282631	ppb	0.01
Spiked Amount 20000.000	Range 20 - 120		Recovery =	7.30%#		
7) Phenol-d5	3.04	99	14429	1510.4616231	ppb	0.00
Spiked Amount 20000.000	Range 20 - 120		Recovery =	7.55%#		
24) Nitrobenzene-d5	3.56	82	5792	698.0570346	ppb	0.00
Spiked Amount 10000.000	Range 18 - 125		Recovery =	6.98%#		
50) 2-Fluorobiphenyl	4.66	172	11828	714.4299474	ppb	0.00
Spiked Amount 10000.000	Range 28 - 120		Recovery =	7.14%#		
73) 2,4,6-Tribromophenol	5.72	330	3595	1672.8636767	ppb	0.00
Spiked Amount 20000.000	Range 17 - 137		Recovery =	8.36%#		
87) p-Terphenyl-d14	7.65	244	19532	764.9297082	ppb	0.00
Spiked Amount 10000.000	Range 13 - 131		Recovery =	7.65%#		

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	2.01	79	11094	1463.8503923	ppb	90
3) N-Nitrosodimethylamine	1.99	42	8388	2062.1172355	ppb #	83
5) Aniline	3.08	66	5745	1267.7194550	ppb #	24
6) bis(2-Chloroethyl)ether	3.09	93	12737m	1809.4210718	ppb	
8) Phenol	3.05	94	15574m	1547.7417838	ppb	
9) Benzaldehyde	3.03	105	8943	4105.0965145	ppb #	85
10) 2-Chlorophenol	3.14	128	11537	1431.9907335	ppb	84
12) 1,3-Dichlorobenzene	3.22	146	12206	1339.9247392	ppb	88
13) 1,4-Dichlorobenzene	3.27	146	12168	1297.7650252	ppb	90
14) Benzyl Alcohol	3.33	79	3046	488.8289188	ppb #	66
15) 1,2-Dichlorobenzene	3.35	146	12060	1399.2456761	ppb	91
16) bis(2-Chloroisopropyl)ethe	3.38	121	3686	1249.7715924	ppb #	8
17) 2,2-oxybis(1-chloropropane	3.38	121	3686	1249.7715924	ppb #	8
18) 2-Methylphenol	3.37	108	13240	1818.6513933	ppb	88
19) Hexachloroethane	3.54	117	3989	1172.0155063	ppb	90
20) N-Nitrosodi-n-propylamine	3.46	70	9004	1692.4117588	ppb	88
21) 3&4-Methyl phenol	3.46	107	13713	1658.2926780	ppb	90
22) Acetophenone	3.47	105	17009	1679.2131497	ppb #	71
25) Nitrobenzene	3.57	77	13535	1668.3377574	ppb	87
26) Isophorone	3.70	82	23438	1610.4814692	ppb	100
27) 2-Nitrophenol	3.75	139	5787	1415.2291544	ppb #	88
28) 2,4-Dimethylphenol	3.76	107	8081	1064.0993618	ppb #	89
29) bis(2-Chlorethoxy)methane	3.81	93	14692	1578.8864997	ppb	93
30) 2,4-Dichlorophenol	3.89	162	9589	1498.8532904	ppb #	86
31) Benzoic Acid	3.79	105	12377	3868.4342575	ppb	92
32) 1,2,4-Trichlorobenzene	3.94	180	10940	1527.6689593	ppb	94
33) alpha-terpineol	3.98	59	11978	1952.5938473	ppb	93
34) Naphthalene	4.00	128	35161	1411.9608578	ppb	97
35) 4-Chloroaniline	4.02	65	3837	1326.1057600	ppb #	46
36) Hexachloro-1,3-butadiene	4.06	225	6732	1723.2052931	ppb	98
37) Hydroquinone	4.23	110	2417m	33.2496975	ppb	
38) Quinoline	4.21	129	22621	1735.9531191	ppb	96
39) Caprolactam	4.22	113	3616	2683.5890329	ppb #	70

(#) = qualifier out of range (m) = manual integration

0512\_35.D S804E04BV.M Fri May 13 14:30:45 2022

Data File : C:\MSDCHEM\1\DATA\051222\0512 35.D  
 Acq On : 12 May 2022 4:35 pm  
 Sample : MSD 5x WG1860981 L1488161-03  
 Misc : SOIL ISTD 22E03623 exp 11/03/22  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 14:30 2022

Vial: 40  
 Operator: 3545  
 Inst : BNAMS4  
 Multiplr: 1.00

Quant Results File: S804E04BV.RES

Quant Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Initial Calibration  
 DataAcq Meth : BNA4PS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) 4-Chloro-3-methylphenol	4.32	107	10248	1589.1053731	ppb	88
41) 2-Methylnaphthalene	4.43	142	22423	1381.8691157	ppb #	92
42) 1-Methylnaphthalene	4.49	142	21844	1432.4800591	ppb #	96
43) 1,2,4,5-Tetrachlorobenzene	4.54	216	10757	2055.1339068	ppb	97
44) Diphenyl Ether	4.80	170	14323	1715.4105946	ug/ml#	78
45) Diphenyl Oxide	4.80	170	14323	1715.4105946	ug/ml#	78
48) 2,4,6-Trichlorophenol	4.61	196	6310	1482.3690460	ppb #	83
49) 2,4,5-Trichlorophenol	4.64	196	7371	1663.8799826	ppb	88
51) Biphenyl	4.73	154	27268	1483.2298401	ppb	97
52) 2-Chloronaphthalene	4.75	162	21330	1520.2805966	ppb	93
53) 2-Nitroaniline	4.82	138	7074	1626.5415492	ppb #	70
54) Acenaphthylene	5.05	152	35028	1604.8076148	ppb	97
56) 2,6-Dinitrotoluene	4.99	165	5592	1659.2818389	ppb	83
57) 3-Nitroaniline	5.11	138	5023	1384.3110676	ppb #	85
58) Acenaphthene	5.16	153	23233	1618.0545282	ppb	91
60) Dibenzofuran	5.29	168	31340	1573.8532669	ppb #	84
61) 2,4-Dinitrotoluene	5.28	165	7812	1851.0111291	ppb	94
62) 2,3,4,6-Tetrachlorophenol	5.38	232	4939	1764.7491831	ppb	91
63) 4-Nitrophenol	5.24	139	3129	1043.9907907	ppb #	75
64) Fluorene	5.54	166	26233	1624.0802647	ppb	99
65) 4-Chlorophenyl-phenylether	5.53	204	12478	1628.9950461	ppb	92
66) Diethyl phthalate	5.44	149	28494	1913.3865103	ppb	95
67) 4-Nitroaniline	5.56	138	6007	1767.5465410	ppb #	73
68) Azobenzene	5.66	77	29968	2017.3902530	ppb	92
69) Atrazine	6.02	200	8322	2073.5651104	ppb	95
72) N-Nitrosodiphenylamine	5.62	169	18669	1294.1401463	ppb	95
74) 4-Bromophenyl-phenylether	5.91	248	8135	1737.5629387	ppb	90
75) Hexachlorobenzene	5.96	284	8766	1682.7079031	ppb	96
76) n-octadecane	6.15	55	5530	1903.8275796	ppb #	95
77) Pentachlorophenol	6.12	266	4440	1543.9337765	ppb	90
78) Phenanthrene	6.28	178	40754	1631.6190589	ppb	99
79) Anthracene	6.32	178	41093	1625.3527456	ppb	98
80) Carbazole	6.45	167	35698	1547.5410846	ppb	95
81) Di-n-butyl phthalate	6.71	149	52335	1937.9633625	ppb	99
83) Fluoranthene	7.27	202	44311	1669.9146607	ppb	94
86) Pyrene	7.49	202	47721	1587.3193662	ppb	98
88) Benzylbutyl phthalate	8.22	149	23390	1902.7008765	ppb	94
89) 3,3-Dichlorobenzidine	8.97	252	16529	1718.3302440	ppb	94
90) Benzo(a)anthracene	8.99	228	45523	1692.0261463	ppb	95
91) Chrysene	9.05	228	43353	1662.7490737	ppb	97
92) bis(2-Ethylhexyl)phthalate	9.08	149	31644	1868.8148679	ppb	95
93) Di-n-octyl phthalate	10.27	149	51443	1828.7957205	ppb	99
95) Benzo(b)fluoranthene	10.89	252	44049	1694.9118781	ppb	97
96) Benzo(k)fluoranthene	10.95	252	43207	1687.8322728	ppb	96
97) Benzo(a)pyrene	11.55	252	42135	1871.8998906	ppb	94
98) Indeno(1,2,3-cd)pyrene	13.68	276	35635	1611.3425915	ppb	89
99) Dibenz(a,h)anthracene	13.73	278	39555	1678.2306238	ppb	94
100) Benzo(g,h,i)perylene	14.03	276	38202	1659.6508957	ppb	96

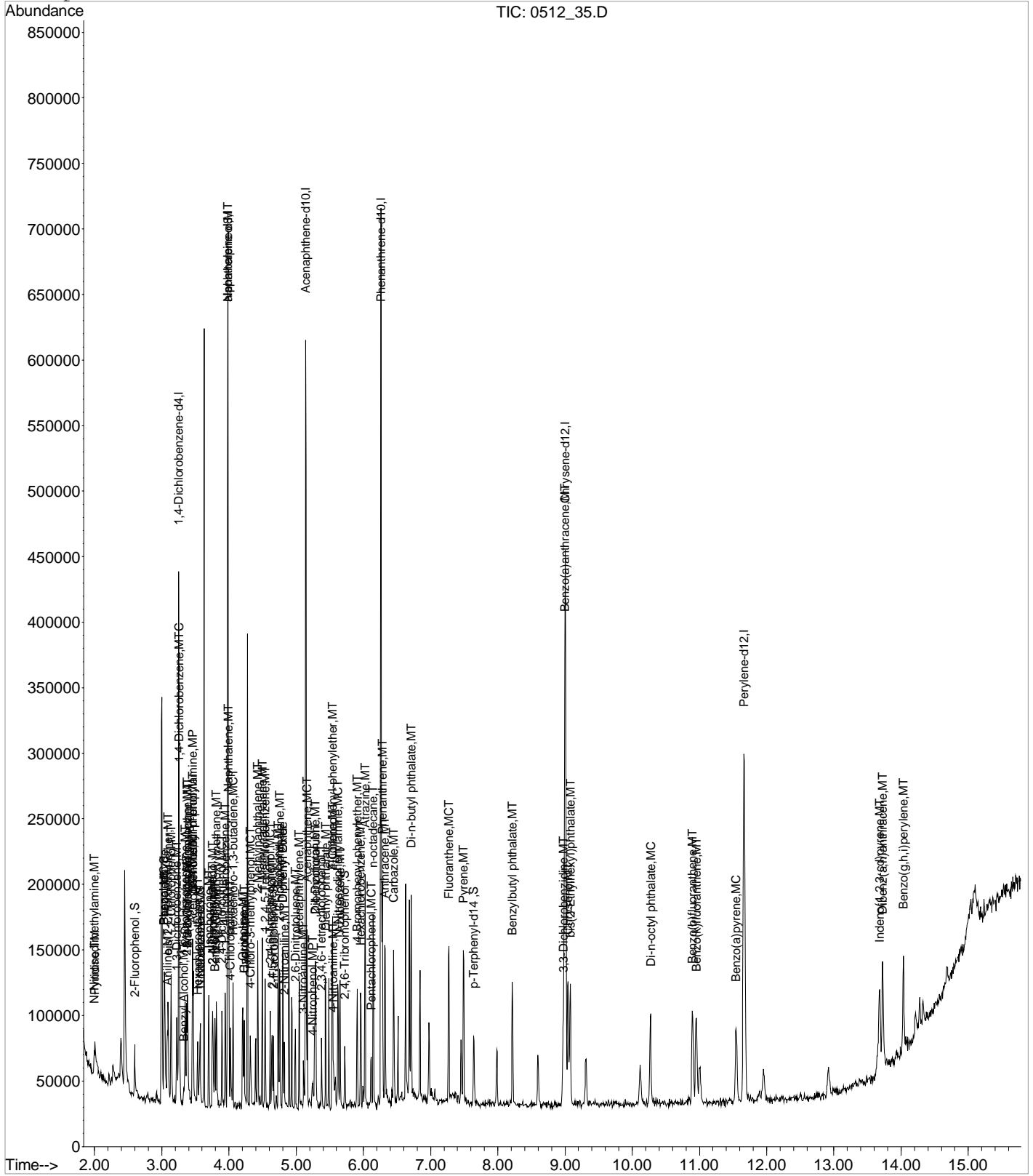
(#) = qualifier out of range (m) = manual integration  
 0512\_35.D S804E04BV.M Fri May 13 14:30:45 2022

Data File : C:\MSDCHEM\1\DATA\051222\0512 35.D
Acq On : 12 May 2022 4:35 pm
Sample : MSD 5x WG1860981 L1488161-03
Misc : SOIL ISTD 22E03623 exp 11/03/22
MS Integration Params: RTEINT.P
Quant Time: May 13 14:30 2022

Vial: 40
Operator: 3545
Inst : BNAMS4
Multiplr: 1.00

Quant Results File: S804E04BV.RES

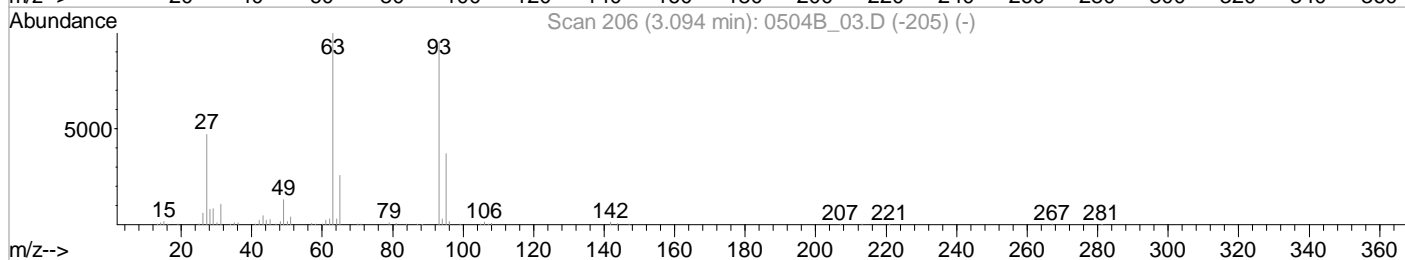
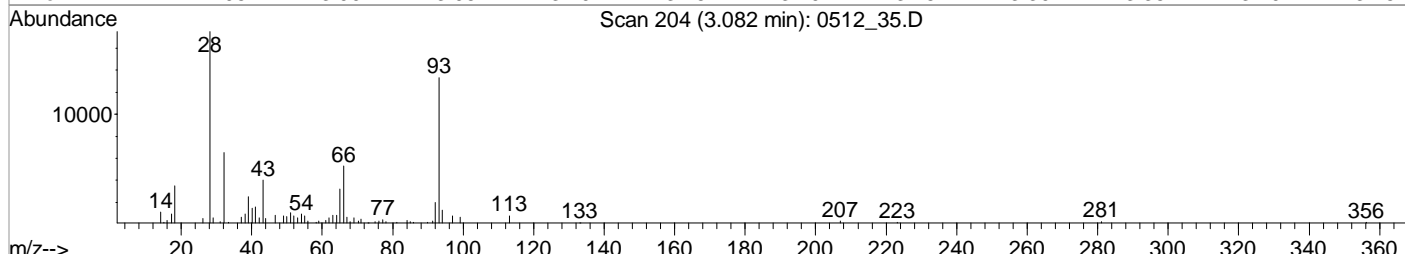
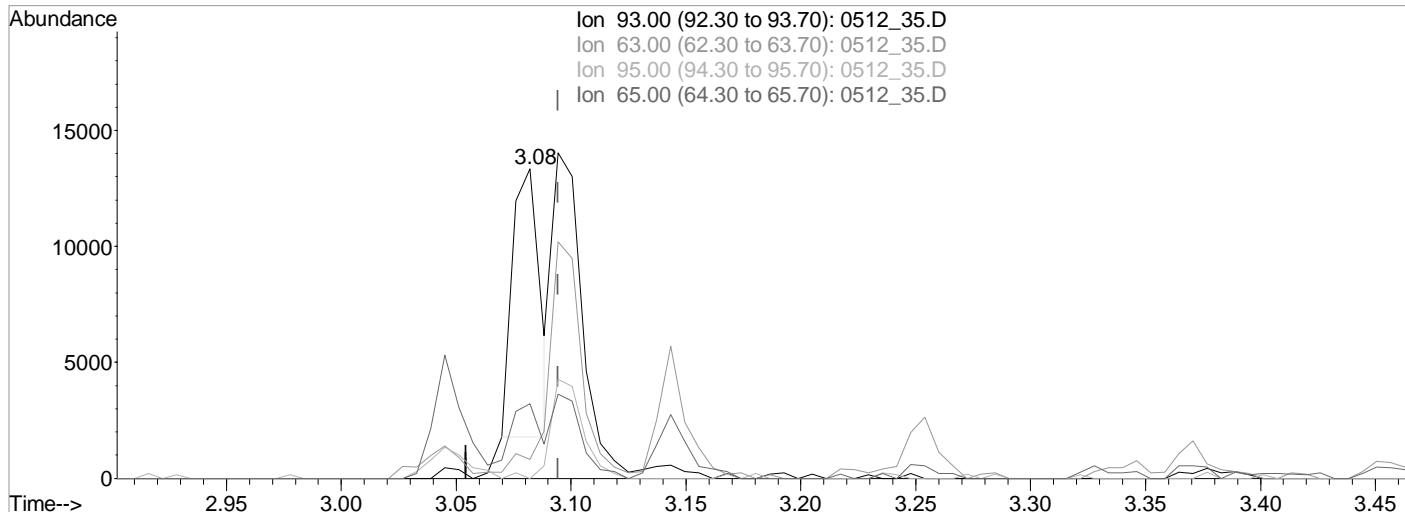
Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)
Title : 8270 BNA
Last Update : Thu May 05 15:59:02 2022
Response via : Initial Calibration



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 35.D Vial: 40  
 Acq On : 12 May 2022 4:35 pm Operator: 3545  
 Sample : MSD 5x WG1860981 L1488161-03 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 9:42 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_35.D

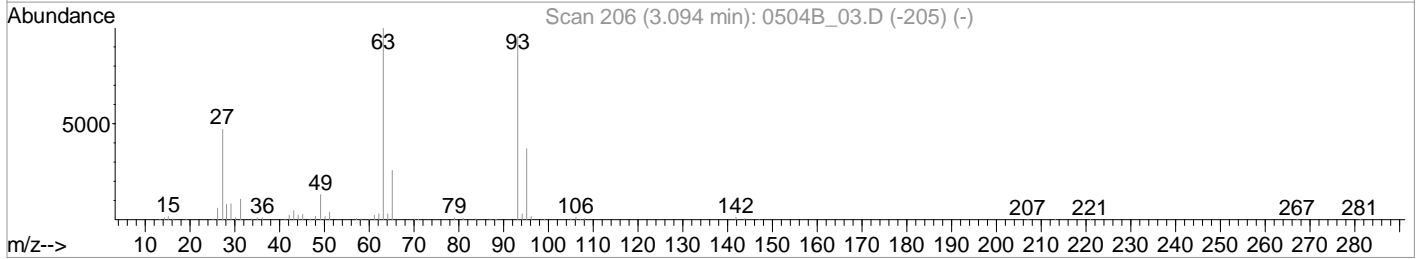
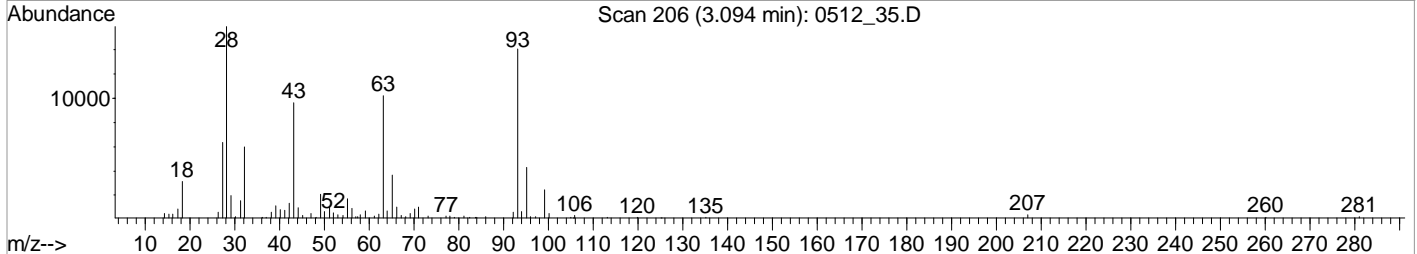
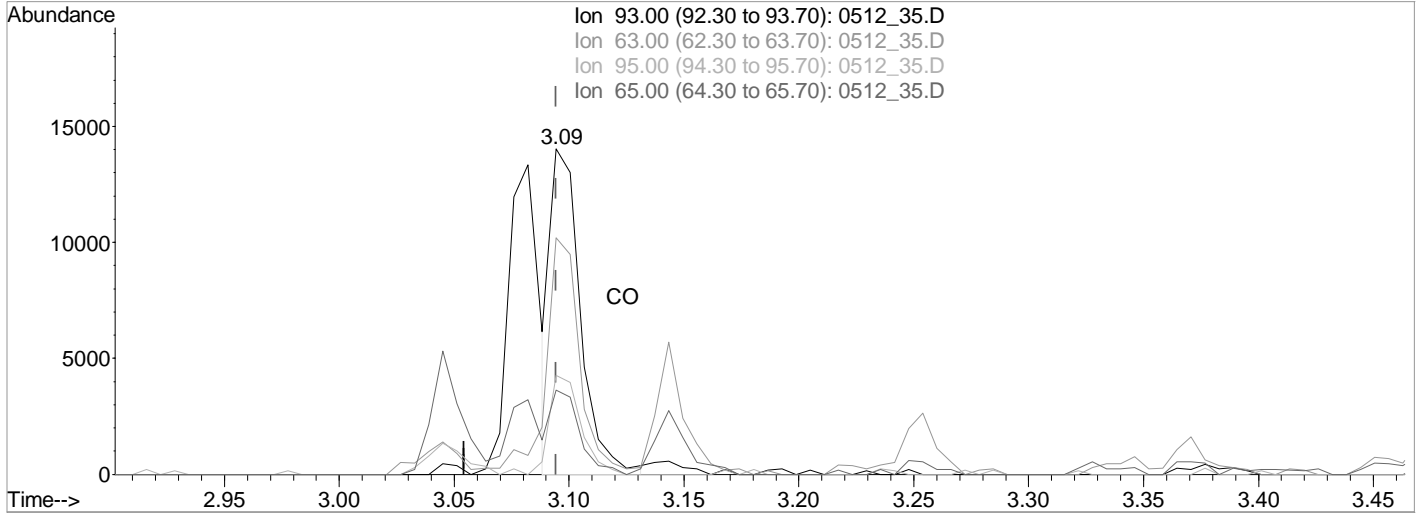
(6) bis(2-Chloroethyl)ether (MT)  
 3.08min (-0.012) 1368.3240766 ppb  
 Qvalue = 38  
 response 9632

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	4.99#
95.00	30.20	0.00#
65.00	24.00	20.90

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 35.D Vial: 40  
 Acq On : 12 May 2022 4:35 pm Operator: 3545  
 Sample : MSD 5x WG1860981 L1488161-03 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 14:29 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_35.D

(6) bis(2-Chloroethyl)ether (MT)  
 3.09min (+0.000) 1809.4210718 ppb m

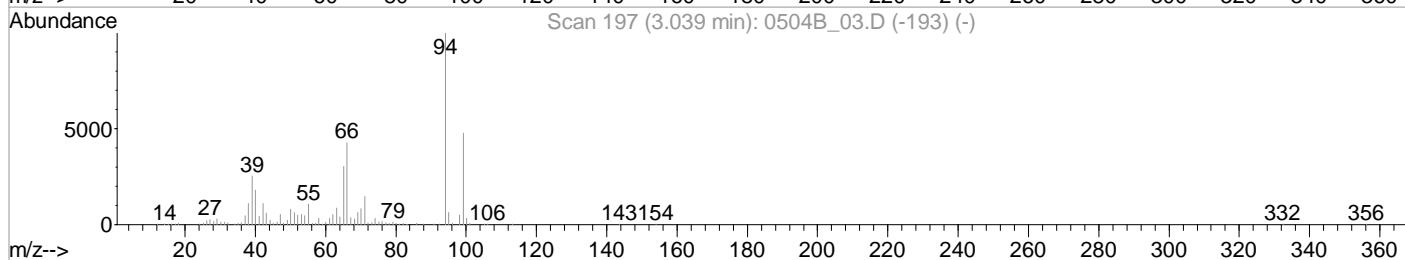
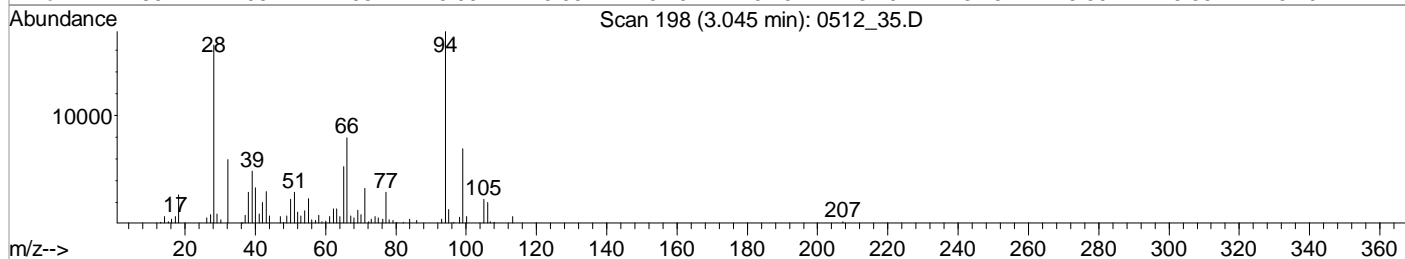
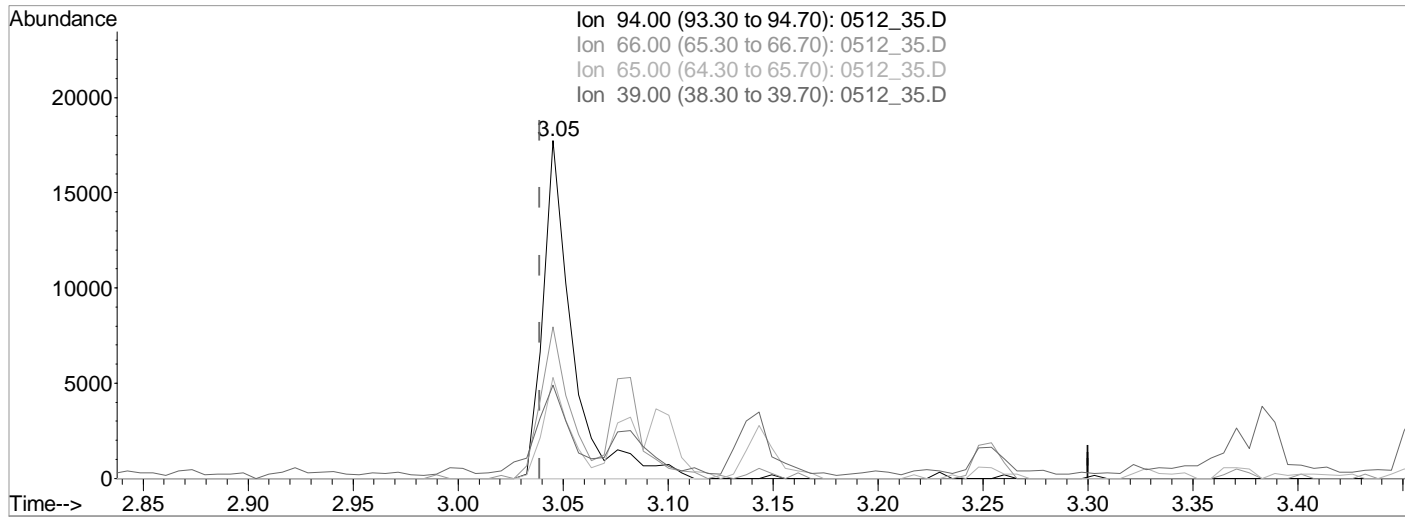
response 12737

Ion	Exp%	Act%
93.00	100	100
63.00	76.20	72.75
95.00	30.20	30.43
65.00	24.00	25.91

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 35.D Vial: 40  
 Acq On : 12 May 2022 4:35 pm Operator: 3545  
 Sample : MSD 5x WG1860981 L1488161-03 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 14:29 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_35.D

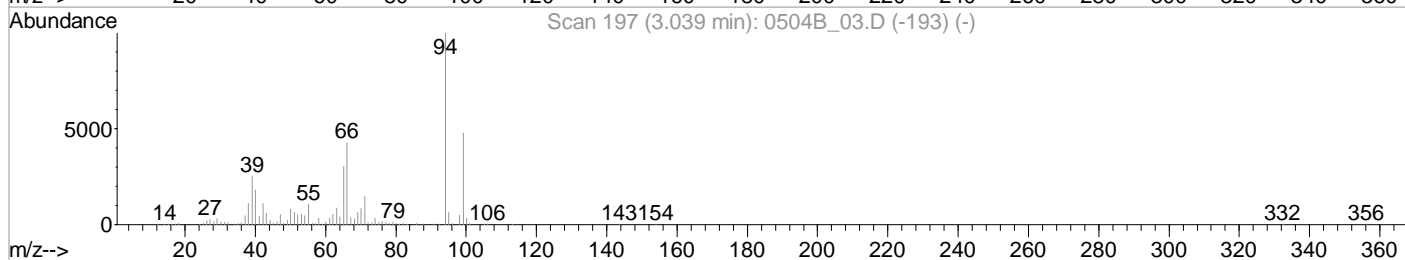
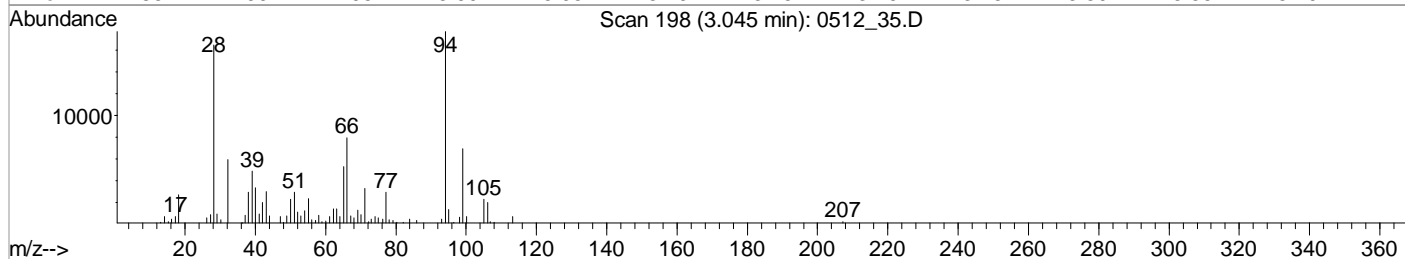
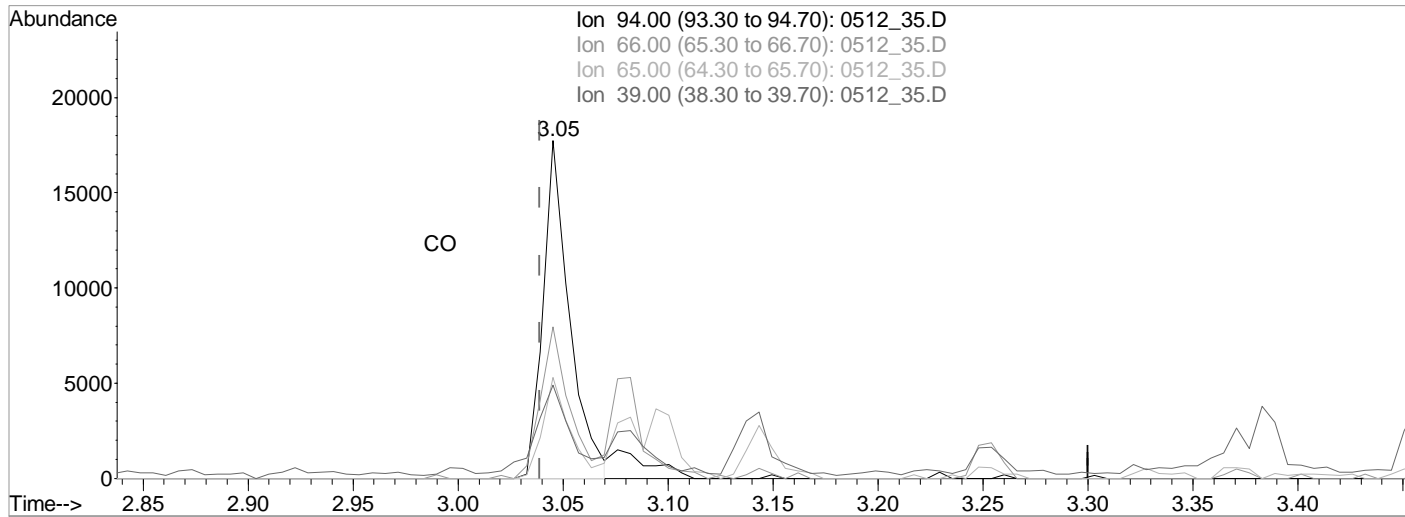
(8) Phenol (MC)  
 3.05min (+0.006) 1736.7622585 ppb  
 Qvalue = 89  
 response 17476

Ion	Exp%	Act%
94.00	100	100
66.00	34.70	44.88
65.00	27.70	29.91
39.00	22.50	26.19

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 35.D Vial: 40  
 Acq On : 12 May 2022 4:35 pm Operator: 3545  
 Sample : MSD 5x WG1860981 L1488161-03 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 14:29 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Multiple Level Calibration



TIC: 0512\_35.D

(8) Phenol (MC)  
 3.05min (+0.006) 1547.7417838 ppb m

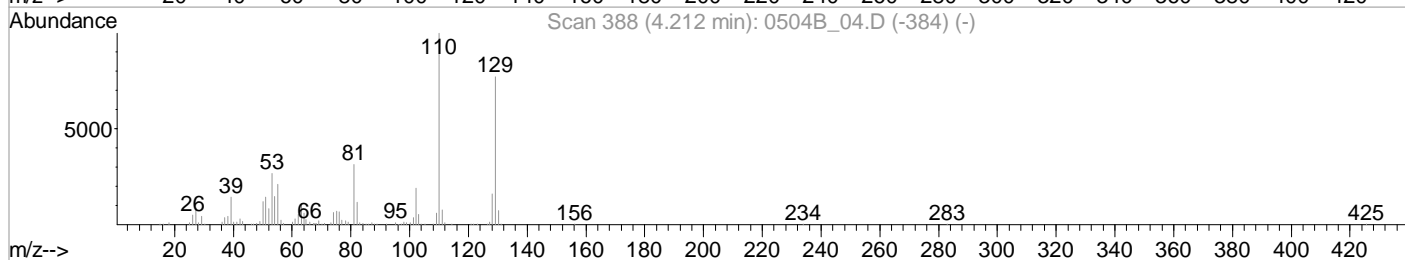
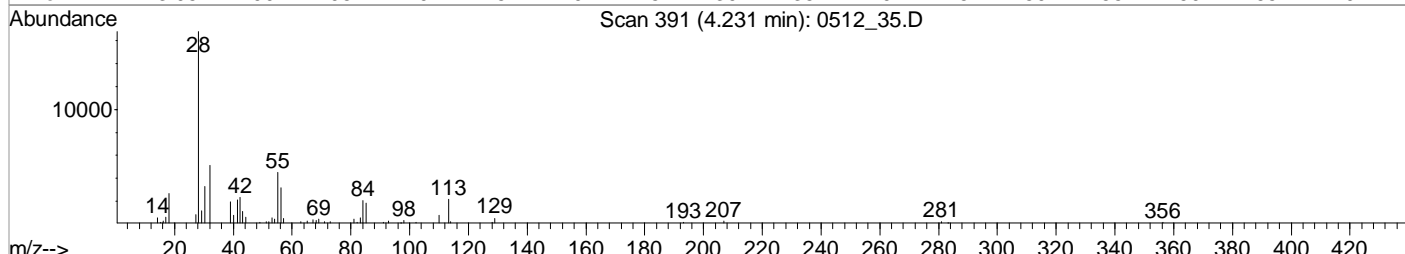
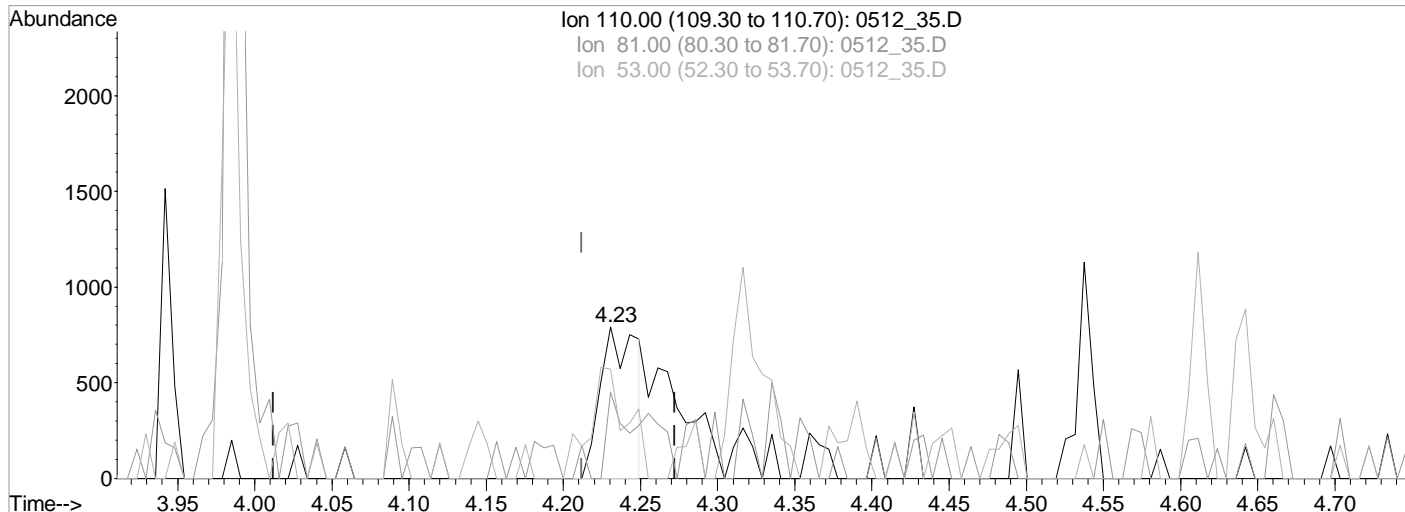
response 15574

Ion	Exp%	Act%
94.00	100	100
66.00	34.70	44.88
65.00	27.70	29.91
39.00	22.50	27.61

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 35.D Vial: 40  
 Acq On : 12 May 2022 4:35 pm Operator: 3545  
 Sample : MSD 5x WG1860981 L1488161-03 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 14:29 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Single Level Calibration



TIC: 0512\_35.D

(37) Hydroquinone  
 4.23min (+0.019) -243.4637963 ppb  
 Qvalue = 58  
 response 1301

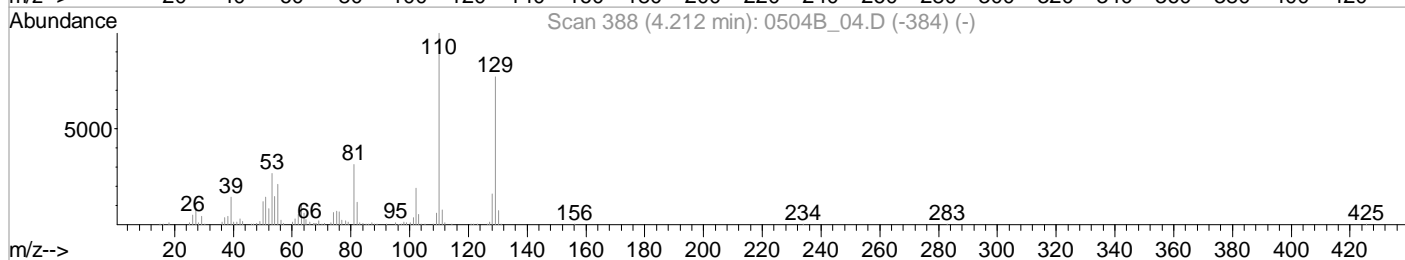
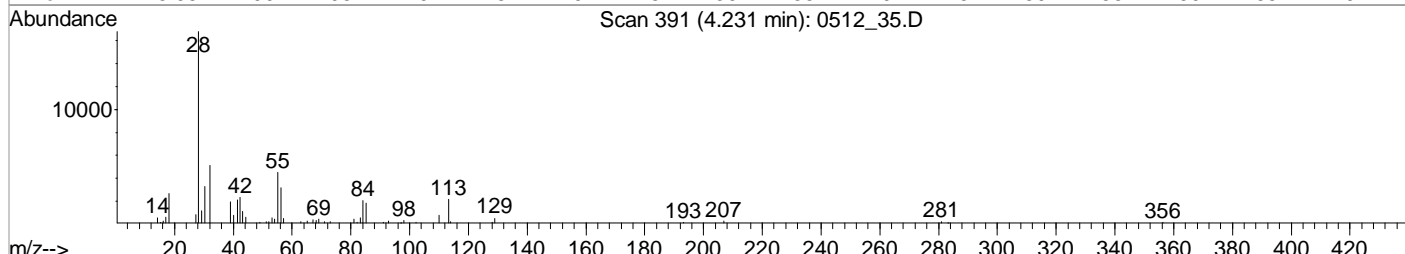
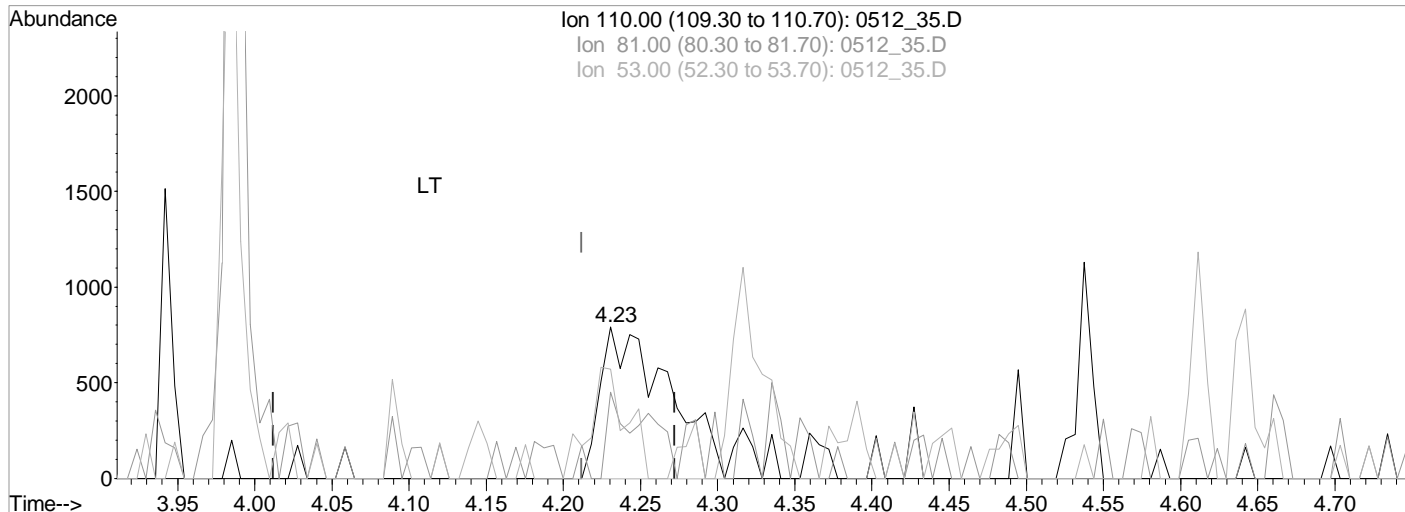
Ion	Exp%	Act%
110.00	100	100
81.00	29.80	56.89#
53.00	25.90	42.73
0.00	0.00	0.00



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051222\0512 35.D Vial: 40  
 Acq On : 12 May 2022 4:35 pm Operator: 3545  
 Sample : MSD 5x WG1860981 L1488161-03 Inst : BNAMS4  
 Misc : SOIL ISTD 22E03623 exp 11/03/22 Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: May 13 14:30 2022 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\S804E04BV.M (RTE Integrator)  
 Title : 8270 BNA  
 Last Update : Thu May 05 15:59:02 2022  
 Response via : Single Level Calibration



TIC: 0512\_35.D

(37) Hydroquinone  
 4.23min (+0.019) 33.2496975 ppb m

response 2417

Ion	Exp%	Act%
110.00	100	100
81.00	29.80	56.89#
53.00	25.90	72.19#
0.00	0.00	0.00

# BNA SS Extractions Benchsheet

Batch: WG1860981

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1487950	WG1856722	BJM688	PREPREPBAL1	06-MAY-22
L1488161	WG1856959	BJM688	PREPREPBAL4	30-APR-22
L1488171	WG1856959	BJM688	PREPREPBAL4	30-APR-22
L1488196	WG1858246	BJM688	PREPREPBAL2	04-MAY-22
L1488414	WG1858972	BJM688	PREPREPBAL2	06-MAY-22

Process Analyst: MAB3514 Transfer Analyst: MAB3514 Material Handler: MAB3514 Prep Start Date/Time: 05/11/22 03:08-03:10  
 Prep End Date/Time: 05/11/22 09:29 SOP: MTJL -0118 Method: 3546 Balance ID: EXTBAL5 Filter Lot#: 17127444

Na2SO4: 22D27809 Amt. Used: 1 Exp. Date:10/27/22 MeCL2:Acetone: 22E06032 Amt. Used: 1 Exp. Date:10/28/22  
 Surrogate: 22E03640 Amt. Used: 0.50 mL Exp. Date:08/22/22 LCS/MS Spike: 22E02407 Amt. Used: 0.50 mL Exp. Date:05/16/22  
 MeCl2: 22E04829 Amt. Used: 1 Exp. Date:11/04/22 Spike Syringe ID: 22D27753 Amt. Used: 1 Exp. Date:10/27/22  
 Surrogate Syringe ID: 22D27754 Amt. Used: 1 Exp. Date:10/27/22

Sample Number	Initial Sample Wt (g)	Solvent Volume (mL)	Final Volume (mL)	Extract Color	Box ID	Prep Factor	Prep Ratio	DL Adjustment Factor	Spike Factor	Surrogate Factor	Review Analyst	Review Date
BLANK	15	25	0.5	Colorless		0.0333	1	1	1	1	DSH3578	05/11/22 16:29:27
LCS	15	25	0.5	Yellow		0.0333	1	1	1	1	DSH3578	05/11/22 16:29:27
MS(L1488161-03)	15.65	25	0.5	Green	Sat-5	0.0319	0.958	1	1	1	DSH3578	05/11/22 16:29:27
MSD(L1488161-03)	15.60	25	0.5	Green	Sat-5	0.0321	0.964	1	1	1	DSH3578	05/11/22 16:29:27
1. L1487656-01	15.32	25	0.5	Colorless		0.0326	0.979	1	1	1	DSH3578	05/11/22 16:29:27
2. L1487950-13	15.37	25	0.5	Dark-brown	FRI 1/0506-PP1	0.0325	0.976	1	1	1	DSH3578	05/11/22 16:29:27
3. L1487950-14	15.89	25	0.5	Yellow	FRI 1/0506-PP1	0.0315	0.946	1	1	1	DSH3578	05/11/22 16:29:27
4. L1487950-15	15.74	25	0.5	Yellow	FRI 1/0506-PP1	0.0318	0.955	1	1	1	DSH3578	05/11/22 16:29:27
5. L1487950-16	15.20	25	0.5	Brown	FRI 1/0506-PP1	0.0329	0.988	1	1	1	DSH3578	05/11/22 16:29:27
6. L1487950-17	15.83	25	0.5	Yellow	FRI 1/0506-PP1	0.0316	0.949	1	1	1	DSH3578	05/11/22 16:29:27
7. L1487950-18	15.65	25	0.5	Yellow	FRI 1/0506-PP1	0.0319	0.958	1	1	1	DSH3578	05/11/22 16:29:27
8. L1487950-19	15.42	25	0.5	Dark-brown	FRI 1/0506-PP1	0.0324	0.973	1	1	1	DSH3578	05/11/22 16:29:27
9. L1487950-20	15.09	25	0.5	Colorless	FRI 1/0506-PP1	0.0331	0.994	1	1	1	DSH3578	05/11/22 16:29:27
10. L1488161-01	15.53	25	0.5	Green	Sat-5	0.0322	0.967	1	1	1	DSH3578	05/11/22 16:29:27
11. L1488161-02	15.71	25	0.5	Green	Sat-5	0.0318	0.955	1	1	1	DSH3578	05/11/22 16:29:27
12. L1488161-03	15.62	25	0.5	Green	Sat-5	0.032	0.961	1	1	1	DSH3578	05/11/22 16:29:27
13. L1488161-04	15.23	25	0.5	Dark-brown	Sat-5	0.0328	0.985	1	1	1	DSH3578	05/11/22 16:29:27
14. L1488171-01	15.49	25	0.5	Green	Sat-5	0.0323	0.97	1	1	1	DSH3578	05/11/22 16:29:27
15. L1488171-02	15.28	25	0.5	Green	Sat-5	0.0327	0.982	1	1	1	DSH3578	05/11/22 16:29:27
16. L1488171-03	15.10	25	0.5	Yellow	Sat-5	0.0331	0.994	1	1	1	DSH3578	05/11/22 16:29:27
17. L1488171-04	15.52	25	0.5	Green	Sat-5	0.0322	0.967	1	1	1	DSH3578	05/11/22 16:29:27
18. L1488196-01	15.39	25	1.0	Dark-brown	Wed01 / 0504PP02	0.065	1.95	2	1	1	DSH3578	05/11/22 16:29:27
19. L1488414-01	15.86	25	0.5	Yellow	Fri03 / 0506PP02	0.0315	0.946	1	1	1	DSH3578	05/11/22 16:29:27

Comments: #2 and #18 were Na2SO4 treated

Reviewed By: DSH3578 on 05/11/22 16:29:27

9034/9030B Wet Chemistry

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:  
BNSF-BG14-042722-0-5.5

**Lab Sample ID:** L1488171-01  
**Client Sample ID:** BNSF-BG14-042722-0-5.5  
**Lab File ID:** 31  
**Instrument ID:** MAN TITR  
**Analytical Batch:** WG1858884  
**Dilution Factor:** 1  
**Analytical Method:** 9034/9030B  
**Matrix:** Solid  
**Total Solids (%):** 62.8

**SDG:** L1488171  
**Collected Date/Time:** 04/27/22 09:00  
**Received Date/Time:** 04/30/22 09:00  
**Preparation Date/Time:** 05/02/22 16:22  
**Analysis Date/Time:** 05/04/22 19:00  
**Prep Method:** 9030B  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 8.02 g  
**Final Wt/Vol:** \_\_\_\_\_

Analyte	CAS	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Sulfide	18496-25-8	167		47.8	119

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** L1488171-02  
**Client Sample ID:** BNSF-BG15-042722-0-10  
**Lab File ID:** 32  
**Instrument ID:** MAN TITR  
**Analytical Batch:** WG1858884  
**Dilution Factor:** 1  
**Analytical Method:** 9034/9030B  
**Matrix:** Solid  
**Total Solids (%):** 70.7

**SDG:** L1488171  
**Collected Date/Time:** 04/27/22 09:25  
**Received Date/Time:** 04/30/22 09:00  
**Preparation Date/Time:** 05/02/22 16:22  
**Analysis Date/Time:** 05/04/22 19:00  
**Prep Method:** 9030B  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 10.56 g  
**Final Wt/Vol:** \_\_\_\_\_

Analyte	CAS	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Sulfide	18496-25-8	U		42.4	106

**SAMPLE RESULT SUMMARY**  
**INORGANIC ANALYSIS DATA SHEET**

**Lab Sample ID:** L1488171-03  
**Client Sample ID:** BNSF-BG16-042722-0-10  
**Lab File ID:** 33  
**Instrument ID:** MAN TITR  
**Analytical Batch:** WG1858884  
**Dilution Factor:** 1  
**Analytical Method:** 9034/9030B  
**Matrix:** Solid  
**Total Solids (%):** 77.0

**SDG:** L1488171  
**Collected Date/Time:** 04/27/22 09:45  
**Received Date/Time:** 04/30/22 09:00  
**Preparation Date/Time:** 05/02/22 16:22  
**Analysis Date/Time:** 05/04/22 19:00  
**Prep Method:** 9030B  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 12.33 g  
**Final Wt/Vol:** \_\_\_\_\_

Analyte	CAS	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Sulfide	18496-25-8	U		39.0	97.5

SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

**Lab Sample ID:** L1488171-04  
**Client Sample ID:** BNSF-BG17-042722-0-10  
**Lab File ID:** 34  
**Instrument ID:** MAN TITR  
**Analytical Batch:** WG1858884  
**Dilution Factor:** 1  
**Analytical Method:** 9034/9030B  
**Matrix:** Solid  
**Total Solids (%):** 58.1

**SDG:** L1488171  
**Collected Date/Time:** 04/27/22 10:05  
**Received Date/Time:** 04/30/22 09:00  
**Preparation Date/Time:** 05/02/22 16:22  
**Analysis Date/Time:** 05/04/22 19:00  
**Prep Method:** 9030B  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 11.11 g  
**Final Wt/Vol:** \_\_\_\_\_

Analyte	CAS	Result (dry) <i>mg/kg</i>	Qualifier	MDL (dry) <i>mg/kg</i>	RDL (dry) <i>mg/kg</i>
Sulfide	18496-25-8	U		51.6	129

**SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET**

**Lab Sample ID:** R3788164-1  
**Client Sample ID:** BLANK  
**Lab File ID:** 25  
**Instrument ID:** MAN TITR  
**Analytical Batch:** WG1858884  
**Dilution Factor:** 1  
**Analytical Method:** 9034/9030B  
**Matrix:** Solid  
**Total Solids (%):** \_\_\_\_\_

**SDG:** L1488171  
**Collected Date/Time:** \_\_\_\_\_  
**Received Date/Time:** \_\_\_\_\_  
**Preparation Date/Time:** 05/02/22 16:22  
**Analysis Date/Time:** 05/04/22 19:00  
**Prep Method:** 9030B  
**Sample Vol Used:** \_\_\_\_\_  
**Initial Wt/Vol:** 10.14 g  
**Final Wt/Vol:** \_\_\_\_\_

Analyte	CAS	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Sulfide	18496-25-8	U		30.0	75.0



SAMPLE RESULT SUMMARY  
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID: R3788164-2  
Client Sample ID: LCS  
Lab File ID: 26  
Instrument ID: MAN TITR  
Analytical Batch: WG1858884  
Dilution Factor: 1  
Analytical Method: 9034/9030B  
Matrix: Solid  
Total Solids (%): \_\_\_\_\_

SDG: L1488171  
Collected Date/Time: \_\_\_\_\_  
Received Date/Time: \_\_\_\_\_  
Preparation Date/Time: 05/02/22 16:22  
Analysis Date/Time: 05/04/22 19:00  
Prep Method: 9030B  
Sample Vol Used: \_\_\_\_\_  
Initial Wt/Vol: 10.12 g  
Final Wt/Vol: \_\_\_\_\_

Analyte	CAS	Result <i>mg/kg</i>	Qualifier	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Sulfide	18496-25-8	71.3		30.0	75.0

<b>SDG:</b>	L1488171	<b>Calibration (begin) date/time:</b>	_____
<b>Instrument ID:</b>	MAN TITR	<b>Calibration (end) date/time:</b>	_____
<b>Analytical Method:</b>	9034/9030B	<b>Analytical Run:</b>	WG1858884

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	<b>Sample ID: BLANK</b>	<b>Result</b>	<b>BLANK Qual</b>
	<b>File ID:</b>	25	
<b>Analyte</b>		mg/kg	
SULFIDE		U	

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LABORATORY CONTROL SAMPLE  
 LABORATORY CONTROL SAMPLE DUPLICATE  
 RECOVERY  
 L1488171-01,02,03,04

SAMPLE NO.:  
 R3788164-2

**LCS Sample / File ID:** R3788164-2 / 26  
**LCSD Sample / File ID:** \_\_\_\_\_  
**Instrument ID:** MAN TITR  
**Analytical Method:** 9034/9030B

**SDG:** L1488171  
**Analytical Batch:** WG1858884  
**Dilution Factor:** 1  
**Matrix:** Solid

Analyte	Spike Amount <i>mg/kg</i>	LCS Result <i>mg/kg</i>	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	RPD %	RPD Limits %
Sulfide	100	71.3		71.3		53.8 - 124		

\*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1488171-01,02,03,04  
Matrix: Solid

Analytical Method: 9034/9030B  
Prep Method: 9030B

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Analyte	CAS	Wavelength	Mass	MDL <i>mg/kg</i>	RDL <i>mg/kg</i>
Sulfide	18496-25-8			30	75

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ANALYSIS LOG

**SDG:** L1488171 **Analytical Method:** 9034/9030B  
**Instrument ID:** MAN TITR **Calibration Start Date:** \_\_\_\_\_  
**Analytical Run:** WG1858884 **Calibration End Date:** \_\_\_\_\_

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
BLANK	R3788164-1	25	05/04/22 19:00	1	WG1858884
LCS	R3788164-2	26	05/04/22 19:00	1	WG1858884
BNSF-BG15-042722-0-10	L1488171-02	32	05/04/22 19:00	1	WG1858884
BNSF-BG14-042722-0-5.5	L1488171-01	31	05/04/22 19:00	1	WG1858884
BNSF-BG16-042722-0-10	L1488171-03	33	05/04/22 19:00	1	WG1858884
BNSF-BG17-042722-0-10	L1488171-04	34	05/04/22 19:00	1	WG1858884

## SULFIDE SS WetChem Prep Benchsheet

Batch: WG1858884/WG1857572

Analyst: BMD3730 Analyst 2: NA Analyst 3: NA Prep Start Date/Time: 05/02/22 16:22 Prep End Date/Time: 05/04/22 18:20  
 Date/Time Analyzed: 05/04/22 19:00:32 SOP: 0172 Method: 9030B LCS True Value: 100 ppm Balance ID: WETBAL9 5mL Pipette Lot#: NA  
 10mL Pipette Lot#: NA 50mL Pipette Lot#: NA 250mL Container Lot#: NA

H2SO4: 22E02355 Amt. Used: 50 mL Exp. Date: 11/02/22 0.5M Zn Acetate: 22D28915 Amt. Used: 10 mL Exp. Date: 09/29/22  
 37% Formaldehyde: 22D07126 Amt. Used: 5 mL Exp. Date: 10/07/22 LCS/D Standard: 22E03578 Amt. Used: 10 mL Exp. Date: 05/05/22  
 Iodine Solution: 22E02416 Amt. Used: 15 mL Exp. Date: 11/02/22 Sodium Thiosulfate Titrant: 22E02415 Amt. Used: 1 Exp. Date: 11/02/22  
 6N HCL: 22C22767 Amt. Used: 1 Exp. Date: 09/22/22 MS/D Standard: 22E03578 Amt. Used: 10 mL Exp. Date: 05/05/22

Sample Number	Normality of I2	Vol I2 for Std. (mL)	Vol Titr for Std. (mL)	Normality of Titrant	Initial Sample Wt (g)	Volume of I2 (mL)	Volume of Titrant (mL)	Sulfide Result (mg/L)	Review Analyst	Review Date
BLANK	0.025	15	15	0.025	10.14	15.0	15.0	0	BMD3730	05/04/22 18:20:46
LCS	0.025	15	15	0.025	10.12	15.0	13.2	71.28	BMD3730	05/04/22 18:20:46
1. L1488161-01	0.025	15	15	0.025	8.90	15.0	14.5	22.514	BMD3730	05/04/22 18:20:46
2. L1488161-02	0.025	15	15	0.025	10.68	15.0	13.8	45.028	BMD3730	05/04/22 18:20:46
3. L1488161-03	0.025	15	15	0.025	13.42	15.0	14.8	5.972	BMD3730	05/04/22 18:20:46
4. L1488161-04	0.025	15	15	0.025	9.87	15.0	14.9	4.06	BMD3730	05/04/22 18:20:46
5. L1488171-01	0.025	15	15	0.025	8.02	15.0	12.9	104.935	BMD3730	05/04/22 18:20:46
6. L1488171-02	0.025	15	15	0.025	10.56	15.0	14.9	3.795	BMD3730	05/04/22 18:20:46
7. L1488171-03	0.025	15	15	0.025	12.33	15.0	15.0	0	BMD3730	05/04/22 18:20:46
8. L1488171-04	0.025	15	15	0.025	11.11	15.0	14.8	7.214	BMD3730	05/04/22 18:20:46

Comments:

Reviewed By: BMD3730 on 05/04/22 18:20:46

## 9030B WetChem Prep Benchsheet

Batch: WG1857572

SDG	PrePrep Batch	PrePrep Analyst	PrePrep Balance	PrePrep Start Time
L1487569	WG1856413	BJM688	PREPREPBAL1	29-APR-22
L1487609	WG1856523	BJM688	PREPREPBAL1	29-APR-22
L1487809	WG1856701	BJM688	PREPREPBAL1	29-APR-22
L1487964	WG1856857	BJM688	PREPREPBAL1	30-APR-22
L1488057	WG1856887	BJM688	PREPREPBAL3	30-APR-22
L1488067	WG1856887	BJM688	PREPREPBAL3	30-APR-22
L1488088	WG1856953	BJM688	PREPREPBAL4	30-APR-22
L1488126	WG1856953	BJM688	PREPREPBAL4	30-APR-22
L1488161	WG1856959	BJM688	PREPREPBAL4	30-APR-22
L1488171	WG1856959	BJM688	PREPREPBAL4	30-APR-22

Analyst: BMD3730 Analyst 2: NA Analyst 3: NA Prep Start Date/Time: 05/02/22 16:22 Prep End Date/Time: 05/04/22 18:20  
 Date/Time Analyzed: 05/04/22 19:00:32 SOP: 0172 Method: 9030B LCS True Value: 100 ppm Balance ID: WETBAL9 5mL Pipette Lot#: NA  
 10mL Pipette Lot#: NA 50mL Pipette Lot#: NA 250mL Container Lot#: NA

H2SO4: 22E02355 Amt. Used: 50 mL Exp. Date: 11/02/22 0.5M Zn Acetate: 22D28915 Amt. Used: 10 mL Exp. Date: 09/29/22  
 37% Formaldehyde: 22D07126 Amt. Used: 5 mL Exp. Date: 10/07/22 LCS/D Standard: 22E03578 Amt. Used: 10 mL Exp. Date: 05/05/22  
 Iodine Solution: 22E02416 Amt. Used: 15 mL Exp. Date: 11/02/22 Sodium Thiosulfate Titrant: 22E02415 Amt. Used: 1 Exp. Date: 11/02/22  
 6N HCL: 22C22767 Amt. Used: 1 Exp. Date: 09/22/22 MS/D Standard: 22E03578 Amt. Used: 10 mL Exp. Date: 05/05/22

Sample Number	Normality of I2	Vol I2 for Std. (mL)	Vol Titr for Std. (mL)	Normality of Titrant	Initial Sample Wt (g)	Volume of I2 (mL)	Volume of Titrant (mL)	Sulfide Result (mg/L)	Review Analyst	Review Date
BLANK	0.025	15	15	0.025	10.14	15.0	15.0	0	BMD3730	05/04/22 18:20:46
LCS	0.025	15	15	0.025	10.12	15.0	13.2	71.28	BMD3730	05/04/22 18:20:46
1. L1487569-01	0.025	15	15	0.025	10.38	15.0	15.0	0	BMD3730	05/04/22 18:20:46
2. L1487609-03	0.025	15	15	0.025	10.39	15.0	14.8	7.714	BMD3730	05/04/22 18:20:46
3. L1487809-01	0.025	15	15	0.025	10.10	15.0	15.0	0	BMD3730	05/04/22 18:20:46
4. L1487964-02	0.025	15	15	0.025	10.30	15.0	15.0	0	BMD3730	05/04/22 18:20:46
5. L1488057-01	0.025	15	15	0.025	9.93	15.0	15.0	0	BMD3730	05/04/22 18:20:46
6. L1488057-02	0.025	15	15	0.025	9.78	15.0	15.0	0	BMD3730	05/04/22 18:20:46
7. L1488067-02	0.025	15	15	0.025	9.59	15.0	15.0	0	BMD3730	05/04/22 18:20:46
8. L1488067-03	0.025	15	15	0.025	9.60	15.0	14.9	4.174	BMD3730	05/04/22 18:20:46
9. L1488088-01	0.025	15	15	0.025	13.61	15.0	15.0	0	BMD3730	05/04/22 18:20:46
10. L1488126-01	0.025	15	15	0.025	10.74	15.0	15.0	0	BMD3730	05/04/22 18:20:46
11. L1488161-01	0.025	15	15	0.025	8.90	15.0	14.5	22.514	BMD3730	05/04/22 18:20:46
12. L1488161-02	0.025	15	15	0.025	10.68	15.0	13.8	45.028	BMD3730	05/04/22 18:20:46
13. L1488161-03	0.025	15	15	0.025	13.42	15.0	14.8	5.972	BMD3730	05/04/22 18:20:46
14. L1488161-04	0.025	15	15	0.025	9.87	15.0	14.9	4.06	BMD3730	05/04/22 18:20:46
15. L1488171-01	0.025	15	15	0.025	8.02	15.0	12.9	104.935	BMD3730	05/04/22 18:20:46

Sample Number	Normality of I2	Vol I2 for Std. (mL)	Vol Titr for Std. (mL)	Normality of Titrant	Initial Sample Wt (g)	Volume of I2 (mL)	Volume of Titrant (mL)	Sulfide Result (mg/L)	Review Analyst	Review Date
16. L1488171-020	0.025	15	15	0.025	10.56	15.0	14.9	3.795	BMD3730	05/04/22 18:20:46
17. L1488171-030	0.025	15	15	0.025	12.33	15.0	15.0	0	BMD3730	05/04/22 18:20:46
18. L1488171-040	0.025	15	15	0.025	11.11	15.0	14.8	7.214	BMD3730	05/04/22 18:20:46
19. L1488173-010	0.025	15	15	0.025	10.53	15.0	15.0	0	BMD3730	05/04/22 18:20:46
20. L1488270-010	0.025	15	15	0.025	10.06	15.0	14.6	15.934	BMD3730	05/04/22 18:20:46
MS(L1488067-02)	0.025	15	15	0.025	8.26	15.0	13.2	87.331	BMD3730	05/04/22 18:20:46
MSD(L1488067-02)	0.025	15	15	0.025	9.52	15.0	13.2	75.772	BMD3730	05/04/22 18:20:46
<b>Comments:</b>									<b>Reviewed By:</b> BMD3730 on 05/04/22 18:20:46	

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

COD	Coefficient of Determination.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Mass	Mass of parameter.
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
RRF	Relative Response Factor.
RT	Retention Time.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Wavelength	Wavelength of parameter.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
NI	Manual Integration Code to indicate that the peak was not integrated at all by the computer software.
LT	Manual Integration Code to indicate that the peak in question was inappropriately integrated to an area less than what it should be (i.e., peak area was cut).
GT	Manual Integration Code to indicate that the peak in question was inappropriately integrated to an area greater than it should be (i.e., peak tailing).
BA	Manual Integration Code to indicate that the baseline had to be adjusted correctly by the analyst.
WP	Manual Integration Code to indicate that the wrong peak was chosen.
CO	Manual Integration Code to indicate that the analyst had to split two co-eluting peaks apart that were not (or could not be) separated by the computer system.
RT	Manual Integration Code to indicate that the retention time for the peak in question has shifted from the expected retention time.
INT	Manual Integration Code to indicate that there was electronic interference (i.e., noise).





# GLOSSARY OF TERMS

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Su

<sup>6</sup> Gl

<sup>7</sup> Al

<sup>8</sup> Sc

# ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



# Internal Transfer Chain of Custody

14095



Samples Pre-Logged into eCOC.

State Of Origin: WA  
Cert. Needed:  Yes  No  
Owner Received Date: 4/29/2022

Results Requested By: 5/20/2022

Workorder: 10606394 Workorder Name: D3593500

Report To		Subcontract To					Requested Analysis																								
Kongmeng Vang Pace Analytical Minnesota 1700 Elm Street Minneapolis, MN 55414 Phone (612)607-1700		Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858																													
							Preserved Containers																								
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved																									
1	BNSF-BG14-042722-0-5.5	PS	4/27/2022 09:00	10606394001	Solid	2																									
2	BNSF-BG15-042722-0-10	PS	4/27/2022 09:25	10606394002	Solid	2																									
3	BNSF-BG16-042722-0-10	PS	4/27/2022 09:45	10606394003	Solid	23																									
4	BNSF-BG17-042722-0-10	PS	4/27/2022 10:05	10606394004	Solid	21																									
5																															
Comments																															
Transfers		Released By			Date/Time		Received By			Date/Time																					
1		PACE			4/29/22 16:40		[Signature]			4/30/22		900																			
2																															
3																															
Cooler Temperature on Receipt			°C		Custody Seal Y or N			Received on Ice Y or N			Samples Intact Y or N																				

11488171  
LAB USE ONLY  
-01  
-02  
-03  
-04

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
This chain of custody is considered complete as is since this information is available in the owner laboratory.

JAAG

3.410=3.4

Sample Receipt Checklist

COC Seal Present/Intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	If Applicable
COC Signed/Accurate:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	VOA Zero Headspace: <input type="checkbox"/> Y <input type="checkbox"/> N
Bottles arrive intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Pres. Correct/Check: <input type="checkbox"/> Y <input type="checkbox"/> N
Correct bottles used:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Sufficient volume sent:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
RAP Screened @ 5 mB/hr:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	

5466 8884 5063



**Ship To:**  
 Pace National  
 12065 Lebanon Rd  
 Mt Juliet, TN 37122  
 Phone (615) 758-5858

**INTER LABORATORY WORK ORDER # 10606394**

(To be completed by sending lab)

Sending Project No:	10606394
Receiving Project No:	
Check Box for Consolidated Invoice:	<input type="checkbox"/>
Date Prepared:	04/29/22
<b>REQUESTED COMPLETION DATE:</b>	<b>5/20/2022</b>

Sending Region	IR10-Minnesota	Sending Project Mgr.	Kongmeng Yang
Receiving Region	IR850-Pace National	External Client	BNSF_Jacobs_WA
State of Sample Origin	WA	QC Deliverable	PACKAGELV4

All questions should be addressed to sending project manager.

Requested Reportable Units \_\_\_\_\_ Report Wet or Dry Weight?  Dry Weight  IRWO Lab Need to run? \_\_\_\_\_ Cert. Needed  Yes

Method Description	Container Type	Quantity of containers	WORK REQUESTED		Unit Price	Amount
			Preservative	Quantity of Samples		
Sulfides SW9030 - Pace National	JGFU		Unpreserved	4	\$22.00	\$88.00
8270 SVOC - Pace National	JGCU		Unpreserved	4	\$130.00	\$520.00
<b>TOTAL</b>						<b>\$608.00</b>

Special Requirements: Report D, QC Limits, MDLs (D), Jacobs UPRR EQEDD (1579)

Receiving Region Department	Acctg. Code	Totals from above		Revenue Allocation	
		Receiving Region (80%)	Client Services Dept. Sending Region (20%)		
Wet Chemistry	21	\$88.00	\$70.40	\$17.60	
GC/MS Semivolatiles	30	\$520.00	\$416.00	\$104.00	
* Custom Revenue Allocation		<b>TOTAL</b>	<b>\$608.00</b>	<b>\$121.60</b>	

**FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO**

Return Samples to Sending Region:  Yes  No

**DISPOSITION of FORM**

Original sent to the receiving lab - Copy kept at the sending lab.  
 When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to incorporate as needed.

*21488171*



8270 SVOC List

<i>Semi-volatile Organic Compounds and Polycyclic</i>
3,6,4-Methylphenol
Benzoic acid
Bis(2-ethylhexyl) phthalate
Carbazole
Dibenzofuran
Di-n-butyl phthalate
Di-n-octyl phthalate
Pentachlorophenol
Phenol
1-Methylnaphthalene
2-Methylnaphthalene
Acenaphthene
Acenaphthylene
Anthracene
Benz(a)anthracene
Benzo(a)pyrene
Benzo(ghi)perylene
Chrysene
Dibenz(ah)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-cd)pyrene
Naphthalene
Phenanthrene
Pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene

L1488171

# Internal Transfer Chain of Custody



Samples Pre-Logged into eCOC.

State Of Origin: WA

Cert. Needed:  Yes  No

Owner Received Date: 4/29/2022 Results Requested By: 5/20/2022

Workorder: 10606394 Workorder Name: D3593500

Report To		Subcontract To					Requested Analysis													
Kongmeng Vang Pace Analytical Minnesota 1700 Elm Street Minneapolis, MN 55414 Phone (612)607-1700		Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858																		
						JGFU Preserved Containers														
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved														
1	BNSF-BG14-042722-0-5.5	PS	4/27/2022 09:00	10606394001	Solid	0														
2	BNSF-BG15-042722-0-10	PS	4/27/2022 09:25	10606394002	Solid	0														
3	BNSF-BG16-042722-0-10	PS	4/27/2022 09:45	10606394003	Solid	0														
4	BNSF-BG17-042722-0-10	PS	4/27/2022 10:05	10606394004	Solid	1														
5																				

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44888

LAB USE ONLY

84

Transfers					Comments				
Released By	Date/Time	Received By	Date/Time		Add to existing workorder				
CSM/Pace	5/22/22 12:35	[Signature]	5/3/22 09:30						

Cooler Temperature on Receipt	°C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N
-------------------------------	----	---------------------	------------------------	-----------------------

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

5466 8884 5700

Sample Receipt Checklist

COC Seal Present/Intact:  Y  N If Applicable

COC Signed/Accurate:  Y  N VOA Zero Headspace:  Y  N

Bottles arrive intact:  Y  N Pres. Correct/Check:  Y  N

Correct bottles used:  Y  N

Sufficient volume sent:  Y  N

RAD Screen <0.5 mR/hr:  Y  N

DRAFT 3.0 to = 3.0

## ANALYTICAL REPORT

Job Number: 580-113239-1

Job Description: D3593500 10606394

For:

Pace Analytical Services, LLC

1700 Elm Street

Minneapolis, MN 55414

Attention: Kongmeng Vang



Approved for release.  
Pauline M Matlock  
Project Manager  
5/26/2022 12:51 PM

---

Pauline M Matlock, Project Manager  
5755 8th Street East, Tacoma, WA, 98424

(253)922-2310

Pauline.Matlock@et.eurofinsus.com

05/26/2022

Revision: 1

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The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager. This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

### Eurofins Seattle

5755 8th Street East, Tacoma, WA 98424

Tel (253) 922-2310 [www.EurofinsUS.com](http://www.EurofinsUS.com)



# Table of Contents

Cover Title Page . . . . .	1
Data Summaries . . . . .	4
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Client Sample Results . . . . .	7
Default Detection Limits . . . . .	8
QC Sample Results . . . . .	9
QC Association . . . . .	11
Chronicle . . . . .	13
Certification Summary . . . . .	15
Method Summary . . . . .	16
Sample Summary . . . . .	17
Reagent Traceability . . . . .	18
COAs . . . . .	19
Inorganic Sample Data . . . . .	28
General Chemistry Data . . . . .	28
Gen Chem Cover Page . . . . .	29
Gen Chem Sample Data . . . . .	30
Gen Chem QC Data . . . . .	38
Gen Chem ICV/CCV . . . . .	38
Gen Chem Blanks . . . . .	39
Gen Chem MS/MSD/PDS . . . . .	40
Gen Chem Duplicates . . . . .	42
Gen Chem LCS/LCSD . . . . .	43
Gen Chem MDL . . . . .	45



# Table of Contents

Gen Chem Preparation Log .....	50
Gen Chem Analysis Run Log .....	51
Gen Chem Prep Data .....	56
Gen Chem Raw Data .....	63
Shipping and Receiving Documents .....	83
Client Chain of Custody .....	84
Sample Receipt Checklist .....	85

# Definitions/Glossary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606394

Job ID: 580-113239-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

**Job Narrative**  
**580-113239-1**

**Comments**

No additional comments.

**Revision**

The report being provided is a revision of the original report sent on 5/16/2022. The report (revision 1) is being revised due to: Client needs TOC reported by dry weight.

**Receipt**

The samples were received on 4/30/2022 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.2° C.

**General Chemistry**

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batches 580-390330 and 580-390484 and analytical batch 580-390698 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 9060A: The method blank for analytical batch 580-390132 contained Organic Carbon above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore re-extraction and re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Detection Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606394

Job ID: 580-113239-1

## Client Sample ID: BNSF-BG14-042722-0-5.5

## Lab Sample ID: 580-113239-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	19000	B	3600	170	mg/Kg	1	☼	9060A	Total/NA
Ammonia as N	32	J F1	42	15	mg/Kg	1	☼	EPA 350.1	Soluble

## Client Sample ID: BNSF-BG15-042722-0-10

## Lab Sample ID: 580-113239-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	6500	B	2900	140	mg/Kg	1	☼	9060A	Total/NA
Ammonia as N	22	J	35	12	mg/Kg	1	☼	EPA 350.1	Soluble

## Client Sample ID: BNSF-BG16-042722-0-10

## Lab Sample ID: 580-113239-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	530	J B	2600	130	mg/Kg	1	☼	9060A	Total/NA

## Client Sample ID: BNSF-BG17-042722-0-10

## Lab Sample ID: 580-113239-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	31000	B	3700	180	mg/Kg	1	☼	9060A	Total/NA
Ammonia as N	67		45	16	mg/Kg	1	☼	EPA 350.1	Soluble

This Detection Summary does not include radiochemical test results.

Eurofins Seattle

# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606394

Job ID: 580-113239-1

**Client Sample ID: BNSF-BG14-042722-0-5.5**

**Lab Sample ID: 580-113239-1**

Date Collected: 04/27/22 09:00

Matrix: Solid

Date Received: 04/30/22 09:30

Percent Solids: 56.2

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	19000	B	3600	170	mg/Kg	☼		05/10/22 15:54	1

**General Chemistry - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	32	J F1	42	15	mg/Kg	☼	05/12/22 19:48	05/14/22 21:37	1

**Client Sample ID: BNSF-BG15-042722-0-10**

**Lab Sample ID: 580-113239-2**

Date Collected: 04/27/22 09:25

Matrix: Solid

Date Received: 04/30/22 09:30

Percent Solids: 68.6

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	6500	B	2900	140	mg/Kg	☼		05/10/22 15:50	1

**General Chemistry - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	22	J	35	12	mg/Kg	☼	05/12/22 19:48	05/14/22 21:37	1

**Client Sample ID: BNSF-BG16-042722-0-10**

**Lab Sample ID: 580-113239-3**

Date Collected: 04/27/22 09:45

Matrix: Solid

Date Received: 04/30/22 09:30

Percent Solids: 75.5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	530	J B	2600	130	mg/Kg	☼		05/10/22 15:58	1

**General Chemistry - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		32	11	mg/Kg	☼	05/12/22 19:48	05/14/22 21:37	1

**Client Sample ID: BNSF-BG17-042722-0-10**

**Lab Sample ID: 580-113239-4**

Date Collected: 04/27/22 10:05

Matrix: Solid

Date Received: 04/30/22 09:30

Percent Solids: 53.9

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	31000	B	3700	180	mg/Kg	☼		05/10/22 16:03	1

**General Chemistry - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	67		45	16	mg/Kg	☼	05/12/22 19:48	05/14/22 21:37	1

# Default Detection Limits

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606394

Job ID: 580-113239-1

## General Chemistry

Analyte	RL	MDL	Units
Total Organic Carbon - Duplicates	2000	97	mg/Kg

## General Chemistry - Soluble

Prep: Distill/Ammonia

Leach: DI Leach

Analyte	RL	MDL	Units
Ammonia as N	25	8.8	mg/Kg

# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606394

Job ID: 580-113239-1

## Method: 9060A - Organic Carbon, Total (TOC)

**Lab Sample ID: MB 580-390132/36**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	157	J	2000	97	mg/Kg			05/10/22 15:42	1

**Lab Sample ID: MB 580-390132/5**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/10/22 13:48	1

**Lab Sample ID: LCS 580-390132/37**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120

**Lab Sample ID: LCS 580-390132/6**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	118000		mg/Kg		98	80 - 120

**Lab Sample ID: LCSD 580-390132/38**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	113000		mg/Kg		94	80 - 120	2	20

**Lab Sample ID: LCSD 580-390132/7**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120	3	20

## Method: EPA 350.1 - Ammonia

**Lab Sample ID: MB 580-390330/1-B**  
**Matrix: Solid**  
**Analysis Batch: 390698**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**  
**Prep Batch: 390484**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		25	8.8	mg/Kg		05/12/22 19:48	05/14/22 21:37	1

# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606394

Job ID: 580-113239-1

## Method: EPA 350.1 - Ammonia (Continued)

**Lab Sample ID: LCS 580-390330/2-B**

**Matrix: Solid**

**Analysis Batch: 390698**

**Client Sample ID: Lab Control Sample**

**Prep Type: Soluble**

**Prep Batch: 390484**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	50.0	51.5		mg/Kg		103	90 - 110

**Lab Sample ID: 580-113239-1 MS**

**Matrix: Solid**

**Analysis Batch: 390698**

**Client Sample ID: BNSF-BG14-042722-0-5.5**

**Prep Type: Soluble**

**Prep Batch: 390484**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	32	J F1	87.0	92.6	F1	mg/Kg	☼	69	90 - 110

**Lab Sample ID: 580-113239-1 MSD**

**Matrix: Solid**

**Analysis Batch: 390698**

**Client Sample ID: BNSF-BG14-042722-0-5.5**

**Prep Type: Soluble**

**Prep Batch: 390484**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia as N	32	J F1	86.1	96.4	F1	mg/Kg	☼	74	90 - 110	4	20

**Lab Sample ID: 580-113239-1 DU**

**Matrix: Solid**

**Analysis Batch: 390698**

**Client Sample ID: BNSF-BG14-042722-0-5.5**

**Prep Type: Soluble**

**Prep Batch: 390484**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia as N	32	J F1	30.1	J	mg/Kg	☼	8	20



# QC Association Summary

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606394

Job ID: 580-113239-1

## General Chemistry

### Analysis Batch: 390132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113239-1	BNSF-BG14-042722-0-5.5	Total/NA	Solid	9060A	
580-113239-2	BNSF-BG15-042722-0-10	Total/NA	Solid	9060A	
580-113239-3	BNSF-BG16-042722-0-10	Total/NA	Solid	9060A	
580-113239-4	BNSF-BG17-042722-0-10	Total/NA	Solid	9060A	
MB 580-390132/36	Method Blank	Total/NA	Solid	9060A	
MB 580-390132/5	Method Blank	Total/NA	Solid	9060A	
LCS 580-390132/37	Lab Control Sample	Total/NA	Solid	9060A	
LCS 580-390132/6	Lab Control Sample	Total/NA	Solid	9060A	
LCSD 580-390132/38	Lab Control Sample Dup	Total/NA	Solid	9060A	
LCSD 580-390132/7	Lab Control Sample Dup	Total/NA	Solid	9060A	

### Analysis Batch: 390214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113239-1	BNSF-BG14-042722-0-5.5	Total/NA	Solid	Moisture	
580-113239-2	BNSF-BG15-042722-0-10	Total/NA	Solid	Moisture	
580-113239-3	BNSF-BG16-042722-0-10	Total/NA	Solid	Moisture	
580-113239-4	BNSF-BG17-042722-0-10	Total/NA	Solid	Moisture	

### Leach Batch: 390330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113239-1	BNSF-BG14-042722-0-5.5	Soluble	Solid	DI Leach	
580-113239-2	BNSF-BG15-042722-0-10	Soluble	Solid	DI Leach	
580-113239-3	BNSF-BG16-042722-0-10	Soluble	Solid	DI Leach	
580-113239-4	BNSF-BG17-042722-0-10	Soluble	Solid	DI Leach	
MB 580-390330/1-B	Method Blank	Soluble	Solid	DI Leach	
LCS 580-390330/2-B	Lab Control Sample	Soluble	Solid	DI Leach	
580-113239-1 MS	BNSF-BG14-042722-0-5.5	Soluble	Solid	DI Leach	
580-113239-1 MSD	BNSF-BG14-042722-0-5.5	Soluble	Solid	DI Leach	
580-113239-1 DU	BNSF-BG14-042722-0-5.5	Soluble	Solid	DI Leach	

### Prep Batch: 390484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113239-1	BNSF-BG14-042722-0-5.5	Soluble	Solid	Distill/Ammonia	390330
580-113239-2	BNSF-BG15-042722-0-10	Soluble	Solid	Distill/Ammonia	390330
580-113239-3	BNSF-BG16-042722-0-10	Soluble	Solid	Distill/Ammonia	390330
580-113239-4	BNSF-BG17-042722-0-10	Soluble	Solid	Distill/Ammonia	390330
MB 580-390330/1-B	Method Blank	Soluble	Solid	Distill/Ammonia	390330
LCS 580-390330/2-B	Lab Control Sample	Soluble	Solid	Distill/Ammonia	390330
580-113239-1 MS	BNSF-BG14-042722-0-5.5	Soluble	Solid	Distill/Ammonia	390330
580-113239-1 MSD	BNSF-BG14-042722-0-5.5	Soluble	Solid	Distill/Ammonia	390330
580-113239-1 DU	BNSF-BG14-042722-0-5.5	Soluble	Solid	Distill/Ammonia	390330

### Analysis Batch: 390698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113239-1	BNSF-BG14-042722-0-5.5	Soluble	Solid	EPA 350.1	390484
580-113239-2	BNSF-BG15-042722-0-10	Soluble	Solid	EPA 350.1	390484
580-113239-3	BNSF-BG16-042722-0-10	Soluble	Solid	EPA 350.1	390484
580-113239-4	BNSF-BG17-042722-0-10	Soluble	Solid	EPA 350.1	390484
MB 580-390330/1-B	Method Blank	Soluble	Solid	EPA 350.1	390484
LCS 580-390330/2-B	Lab Control Sample	Soluble	Solid	EPA 350.1	390484
580-113239-1 MS	BNSF-BG14-042722-0-5.5	Soluble	Solid	EPA 350.1	390484

# QC Association Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606394

Job ID: 580-113239-1

## General Chemistry (Continued)

### Analysis Batch: 390698 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-113239-1 MSD	BNSF-BG14-042722-0-5.5	Soluble	Solid	EPA 350.1	390484
580-113239-1 DU	BNSF-BG14-042722-0-5.5	Soluble	Solid	EPA 350.1	390484

# Lab Chronicle

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606394

Job ID: 580-113239-1

**Client Sample ID: BNSF-BG14-042722-0-5.5**

**Lab Sample ID: 580-113239-1**

Date Collected: 04/27/22 09:00

Matrix: Solid

Date Received: 04/30/22 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	390214	05/11/22 11:50	JSM	FGS SEA

**Client Sample ID: BNSF-BG14-042722-0-5.5**

**Lab Sample ID: 580-113239-1**

Date Collected: 04/27/22 09:00

Matrix: Solid

Date Received: 04/30/22 09:30

Percent Solids: 56.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	390132	05/10/22 15:54	N1R	FGS SEA
Soluble	Leach	DI Leach			390330	05/11/22 22:39	FCG	FGS SEA
Soluble	Prep	Distill/Ammonia			390484	05/12/22 19:48	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	390698	05/14/22 21:37	MLT	FGS SEA

**Client Sample ID: BNSF-BG15-042722-0-10**

**Lab Sample ID: 580-113239-2**

Date Collected: 04/27/22 09:25

Matrix: Solid

Date Received: 04/30/22 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	390214	05/11/22 11:50	JSM	FGS SEA

**Client Sample ID: BNSF-BG15-042722-0-10**

**Lab Sample ID: 580-113239-2**

Date Collected: 04/27/22 09:25

Matrix: Solid

Date Received: 04/30/22 09:30

Percent Solids: 68.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	390132	05/10/22 15:50	N1R	FGS SEA
Soluble	Leach	DI Leach			390330	05/11/22 22:39	FCG	FGS SEA
Soluble	Prep	Distill/Ammonia			390484	05/12/22 19:48	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	390698	05/14/22 21:37	MLT	FGS SEA

**Client Sample ID: BNSF-BG16-042722-0-10**

**Lab Sample ID: 580-113239-3**

Date Collected: 04/27/22 09:45

Matrix: Solid

Date Received: 04/30/22 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	390214	05/11/22 11:50	JSM	FGS SEA

**Client Sample ID: BNSF-BG16-042722-0-10**

**Lab Sample ID: 580-113239-3**

Date Collected: 04/27/22 09:45

Matrix: Solid

Date Received: 04/30/22 09:30

Percent Solids: 75.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	390132	05/10/22 15:58	N1R	FGS SEA
Soluble	Leach	DI Leach			390330	05/11/22 22:39	FCG	FGS SEA
Soluble	Prep	Distill/Ammonia			390484	05/12/22 19:48	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	390698	05/14/22 21:37	MLT	FGS SEA

Eurofins Seattle

# Lab Chronicle

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606394

Job ID: 580-113239-1

**Client Sample ID: BNSF-BG17-042722-0-10**

**Lab Sample ID: 580-113239-4**

**Date Collected: 04/27/22 10:05**

**Matrix: Solid**

**Date Received: 04/30/22 09:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	390214	05/11/22 11:50	JSM	FGS SEA

**Client Sample ID: BNSF-BG17-042722-0-10**

**Lab Sample ID: 580-113239-4**

**Date Collected: 04/27/22 10:05**

**Matrix: Solid**

**Date Received: 04/30/22 09:30**

**Percent Solids: 53.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	390132	05/10/22 16:03	N1R	FGS SEA
Soluble	Leach	DI Leach			390330	05/11/22 22:39	FCG	FGS SEA
Soluble	Prep	Distill/Ammonia			390484	05/12/22 19:48	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	390698	05/14/22 21:37	MLT	FGS SEA

**Laboratory References:**

FGS SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

# Accreditation/Certification Summary

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606394

Job ID: 580-113239-1

## Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2954	07-07-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9060A		Solid	Total Organic Carbon - Duplicates
EPA 350.1	Distill/Ammonia	Solid	Ammonia as N
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Oregon	NELAP	4167	07-07-22
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Solids

Washington	State	C788	07-13-22
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9060A		Solid	Total Organic Carbon - Duplicates
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

# Method Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606394

Job ID: 580-113239-1

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<b>Method</b>	<b>Method Description</b>	<b>Protocol</b>	<b>Laboratory</b>
9060A	Organic Carbon, Total (TOC)	SW846	FGS SEA
EPA 350.1	Ammonia	EPA	FGS SEA
Moisture	Percent Moisture	EPA	FGS SEA
DI Leach	Deionized Water Leaching Procedure	ASTM	FGS SEA
Distill/Ammonia	Distillation, Ammonia	None	FGS SEA

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

FGS SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

# Sample Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606394

Job ID: 580-113239-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-113239-1	BNSF-BG14-042722-0-5.5	Solid	04/27/22 09:00	04/30/22 09:30
580-113239-2	BNSF-BG15-042722-0-10	Solid	04/27/22 09:25	04/30/22 09:30
580-113239-3	BNSF-BG16-042722-0-10	Solid	04/27/22 09:45	04/30/22 09:30
580-113239-4	BNSF-BG17-042722-0-10	Solid	04/27/22 10:05	04/30/22 09:30

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REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
<b>Ammonia Std_00019</b>	06/14/23		LabChem, Lot L158-09		(Purchased Reagent)		Ammonia as N	1000 mg/L
<b>CaCO3_00004_00009</b>	07/16/25		LECO, Lot 1001		(Purchased Reagent)		TOC Result 1	120000 mg/Kg
							Total Organic Carbon - Duplicates	120000 mg/Kg
<b>CaCO3_00012</b>	03/31/23		Alfa Aesar, Lot X15E030		(Purchased Reagent)		Total Organic Carbon - Duplicates	120000 mg/Kg
<b>TOCS_LCS_00012</b>	07/26/23		ERA, Lot D108-542		(Purchased Reagent)		TOC Result 1	4300 mg/Kg
							Total Organic Carbon - Duplicates	4300 mg/Kg



Reagent

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**Ammonia Std\_00019**



### CERTIFICATE OF ANALYSIS

Description: AMMONIA (as NITROGEN) STANDARD, 1000ppm (1mL = 1mg N)

Mfg. Date: 06/14/2021

Catalog Number: LC17940

Exp. Date: 06/14/2023

Lot Number: L158-09

### ANALYTICAL SECTION

Test	Specification	Test Result
Appearance	clear, colorless solution	Pass Test
Concentration ppm N	1000ppm +/- 10ppm	995 ppm
Concentration mg N/mL	1.000 +/- 0.010 mg N/mL	0.995 mg N/mL
Traceable to NIST	Potassium Chloride	999b

**Intended Use** - Product is intended for use in manufacturing procedures and laboratory procedures and protocols.

**Storage Information** - Unless otherwise noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.

**Instructions for Handling and Use** - Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.

**Preparation** - All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.

Submitted by: Greg Albright, Chemist Supervisor



2899582  
ID: Ammonia Std\_00019  
Exp: 06/14/23 Prpd: R1K  
1000ppm Ammonia (as Nitro

*rad 6/30/21  
JSE*

*Greg Albright*

An ISO9001:2015 certified company. Registration # 0306-01

06/30/2021 7:01 PM

Form #17.13 07/28/2016

Reagent

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**CaCO3\_00004\_00009**



Version 00  
 Molecular weight 100.09  
 Quality Test / Release Date 07/31/2020  
 Molecular Formula C Ca O3  
 CAS No 471-34-1  
 Linear Formula CaCO3  
 Flash Point (°C)

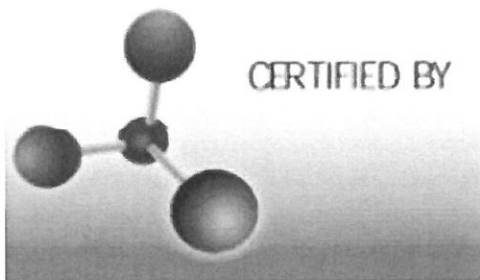
## Certificate of Analysis

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsibility of the purchaser, formulator or those performing further manufacturing to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

<b>Catalog Number</b>	42351	<b>Quality Test / Release Date</b>	07/31/2020
<b>Lot Number</b>	A0421160	<b>Suggested retest date</b>	07/31/2025
<b>Description</b>	Calcium carbonate, 99+%, ACS reagent		
<b>Country of Origin</b>	INDIA		
<b>Declaration of Origin</b>	synthetic		

<b>BSE/TSE</b>	
<b>Chemical</b>	

Result name	Specifications	Test Value
Appearance (Color)	White	White
Appearance (Form)	Crystalline powder	Crystalline powder
Titration Complexometric	>=99.0 % (on dried substance)	99.4 % (on dried substance)
Heavy metals (ICP-OES)	=<0.001 %	=<0.001 %
Insoluble matter	=<0.01 % (in dilute HCl)	0.008 % (in dilute HCl)
Chloride (Cl)	=<0.001 %	=<0.001 %
Fluoride (F)	=<0.0015 %	=<0.0015 %
Sulfate (SO4)	=<0.01 %	=<0.01 %
Ammonium (NH4)	=<0.003 %	=<0.003 %
Barium (Ba)	=<0.01 %	0.00164 %
Iron (Fe)	=<0.003 %	=<0.003 %
Magnesium (Mg)	=<0.02 %	0.010341 %
Potassium (K)	=<0.01 %	0.001048 %
Sodium (Na)	=<0.1 %	0.07061 %
Strontium (Sr)	=<0.1 %	0.007741 %



C. Wygaerts, QA Manager

Issued: 08-03-2020

Acros Organics  
 ENA23, zone1, nr 1350, Janssen Pharmaceuticlaan 3a, B-2440 Geel, Belgium  
 Tel +32 14/57.52.11 - Fax+32 14/59.34.34 Internet: <http://www.acros.com>  
 1 Reagent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329

3092515  
 ID: CaCO3\_00004\_00009  
 Exp 07/16/25 Prpd R1K Opn 03/04/22  
 CaCO3-12%TC Second Source

FCG  
 3/14/22

Reagent

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**CaCO3\_00012**

# Certificate of analysis



2450156  
 ID: CaCO3\_00012  
 Exp 03/31/23 Prpd.JKM Opn 08/14/19  
 CaCO3-12%TC Second Source

Product No.: 36337  
 Product: Calcium carbonate, ACS, low in alkalies, 99.0% min  
 Lot No.: X15E030

Test	Limits	Results
Assay	99.5 % min	99.1 %
Insoluble in dilute HCl	0.01 % max	< 0.01 %
Chloride	0.001 % max	< 0.001 %
Fluoride	0.0015 % max	< 0.0008 %
Sulfate	0.005 % max	< 0.01 %
Ammonium	0.003 % max	< 0.003 %
Barium	0.01 %	< 0.01 %
Heavy metals (as Pb)	0.001 % max	< 0.001 %
Iron	0.002 % max	< 0.003 %
Magnesium	0.01 % max	0.003 %
Potassium	0.01 % max	< 0.01 %
Sodium	0.01 % max	< 0.1 %
Strontium	0.1 % max	< 0.1 %

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**ThermoFisher**  
SCIENTIFIC

Reagent

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**TOCS\_LCS\_00012**



A Waters Company

Certified Reference Material

# ▪ Certificate of Analysis ▪

**Product:** Nutrients in Soil  
**Catalog Number:** 542  
**Lot No.** D108-542  
**Certificate Issue Date:** December 26, 2019  
**Expiration Date:** July 26, 2023  
**Revision Number:** Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #542 revision 090119.

## CERTIFICATION

Parameter	Certified Value <sup>1</sup>	Reference Value <sup>7</sup>	Uncertainty <sup>2</sup>	QC Performance Acceptance Limits <sup>3</sup>	PT Performance Acceptance Limits <sup>4</sup>
	mg/kg	mg/kg	%	mg/kg	mg/kg
Ammonia as N	853	795	5.50	523 - 1070	456 - 1130
Total Kjeldahl Nitrogen	1510	1500	12.3	976 - 2030	827 - 2180
Total Organic Carbon (TOC)	4300	4370	6.86	1580 - 7150	1530 - 7200
Total Phosphorus	911	815	10.8	422 - 1210	185 - 1440

## ANALYTICAL VERIFICATION

Parameter	Certified Value <sup>1</sup>	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery <sup>5</sup>	n	SRM Number <sup>6</sup>	Recovery
	mg/kg	mg/kg	%			%
Ammonia as N	853	795	93.3	39	-	-
Total Kjeldahl Nitrogen	1510	1500	99.7	33	-	-
Total Organic Carbon (TOC)	4300	4370	102	24	-	-
Total Phosphorus	911	815	89.4	55	-	-

REV. 10/20/20  
WSE



2735864  
 ID: TOCS\_LCS\_00012  
 Exp: 01/31/22 PpPd: R1K  
 1540-7000 mg/kg TOC



# ▪ Certificate of Analysis ▪

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:

$$U_{\text{expanded}} = k * \text{SQRT}((U_{\text{char}}^2) + (U_{\text{homogen}}^2) + (U_{\text{LTS}}^2) + (U_{\text{STS}}^2) + (U_{\text{RSS}}^2))$$

Where:

$U_{\text{expanded}}$  = Expanded uncertainty.

k = Coverage factor.

$U_{\text{char}}$  = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.

$U_{\text{homogen}}$  = Standard uncertainty of the homogeneity assessment.

$U_{\text{LTS}}$  = Standard uncertainty associated with long-term stability.

$U_{\text{STS}}$  = Standard uncertainty associated with short-term (transport) stability.

$U_{\text{RSS}}$  = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** =  $[(\% \text{ recovery ERA certified reference material}) / (\% \text{ recovery NIST SRM})] * 100$

The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

8. **Metrological Traceability.** This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

**If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to [info@eraqc.com](mailto:info@eraqc.com).**

**Certifying Officer**

**Brian Miller**

**Quality Officer**

**Matthew Seebeck**





# GENERAL CHEMISTRY

COVER PAGE  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle \_\_\_\_\_ Job Number: 580-113239-1 \_\_\_\_\_

SDG No.: \_\_\_\_\_

Project: D3593500 10606394 \_\_\_\_\_

Client Sample ID	Lab Sample ID
BNSF-BG14-042722-0-5.5	580-113239-1
BNSF-BG15-042722-0-10	580-113239-2
BNSF-BG16-042722-0-10	580-113239-3
BNSF-BG17-042722-0-10	580-113239-4

Comments:

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY

Client Sample ID: BNSF-BG14-042722-0-5.5

Lab Sample ID: 580-113239-1

Lab Name: Eurofins Seattle

Job No.: 580-113239-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/27/2022 09:00

Reporting Basis: DRY

Date Received: 04/30/2022 09:30

% Solids: 56.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Duplicates	19000	3600	170	mg/Kg		B	1	9060A

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY - SOLUBLE

Client Sample ID: BNSF-BG14-042722-0-5.5

Lab Sample ID: 580-113239-1

Lab Name: Eurofins Seattle

Job No.: 580-113239-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/27/2022 09:00

Reporting Basis: DRY

Date Received: 04/30/2022 09:30

% Solids: 56.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7664-41-7	Ammonia as N	32	42	15	mg/Kg	J	F1	1	EPA 350.1

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY

Client Sample ID: BNSF-BG15-042722-0-10

Lab Sample ID: 580-113239-2

Lab Name: Eurofins Seattle

Job No.: 580-113239-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/27/2022 09:25

Reporting Basis: DRY

Date Received: 04/30/2022 09:30

% Solids: 68.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Duplicates	6500	2900	140	mg/Kg		B	1	9060A

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY - SOLUBLE

Client Sample ID: BNSF-BG15-042722-0-10

Lab Sample ID: 580-113239-2

Lab Name: Eurofins Seattle

Job No.: 580-113239-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/27/2022 09:25

Reporting Basis: DRY

Date Received: 04/30/2022 09:30

% Solids: 68.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7664-41-7	Ammonia as N	22	35	12	mg/Kg	J		1	EPA 350.1

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY

Client Sample ID: BNSF-BG16-042722-0-10

Lab Sample ID: 580-113239-3

Lab Name: Eurofins Seattle

Job No.: 580-113239-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/27/2022 09:45

Reporting Basis: DRY

Date Received: 04/30/2022 09:30

% Solids: 75.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Duplicates	530	2600	130	mg/Kg	J	B	1	9060A



1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY - SOLUBLE

Client Sample ID: BNSF-BG16-042722-0-10

Lab Sample ID: 580-113239-3

Lab Name: Eurofins Seattle

Job No.: 580-113239-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/27/2022 09:45

Reporting Basis: DRY

Date Received: 04/30/2022 09:30

% Solids: 75.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7664-41-7	Ammonia as N	ND	32	11	mg/Kg			1	EPA 350.1

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY

Client Sample ID: BNSF-BG17-042722-0-10

Lab Sample ID: 580-113239-4

Lab Name: Eurofins Seattle

Job No.: 580-113239-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/27/2022 10:05

Reporting Basis: DRY

Date Received: 04/30/2022 09:30

% Solids: 53.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-44-0	Total Organic Carbon - Duplicates	31000	3700	180	mg/Kg		B	1	9060A

1B-IN  
 INORGANIC ANALYSIS DATA SHEET  
 GENERAL CHEMISTRY - SOLUBLE

Client Sample ID: BNSF-BG17-042722-0-10

Lab Sample ID: 580-113239-4

Lab Name: Eurofins Seattle

Job No.: 580-113239-1

SDG ID.: \_\_\_\_\_

Matrix: Solid

Date Sampled: 04/27/2022 10:05

Reporting Basis: DRY

Date Received: 04/30/2022 09:30

% Solids: 53.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7664-41-7	Ammonia as N	67	45	16	mg/Kg			1	EPA 350.1

2-IN  
 CALIBRATION QUALITY CONTROL  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113239-1  
 SDG No.: \_\_\_\_\_  
 Analyst: NlR Batch Start Date: 03/18/2022  
 Reporting Units: mg/Kg Analytical Batch No.: 390132

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	18:26	Total Organic Carbon - Duplicates	4350	4300	101	80-120		TOCS_LCS_00012
2	ICB	18:28	Total Organic Carbon - Duplicates	ND					
3	CCV	13:44	Total Organic Carbon - Duplicates	118000	120000	98	80-120		CaCO3_00004_00009
4	CCB	13:46	Total Organic Carbon - Duplicates	217				J	
13	CCV	14:19	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
14	CCB	14:21	Total Organic Carbon - Duplicates	ND					
26	CCV	15:09	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
27	CCB	15:12	Total Organic Carbon - Duplicates	193				J	
34	CCV	15:38	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
35	CCB	15:40	Total Organic Carbon - Duplicates	143				J	
44	CCV	16:12	Total Organic Carbon - Duplicates	119000	120000	99	80-120		CaCO3_00004_00009
45	CCB	16:14	Total Organic Carbon - Duplicates	151				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

3-IN  
METHOD BLANK  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle

Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 390132 Date: 05/10/2022 13:48							
9060A	MB 580-390132/5	Total Organic Carbon - Duplicates	ND		mg/Kg	2000	1
Batch ID: 390132 Date: 05/10/2022 15:42							
9060A	MB 580-390132/36	Total Organic Carbon - Duplicates	157	J	mg/Kg	2000	1
Batch ID: 390698 Date: 05/14/2022 21:37 Prep Batch: 390484 Date: 05/12/2022 19:48							
EPA 350.1	MB 580-390330/1-B	Ammonia as N	ND		mg/Kg	25	1

5-IN  
 MATRIX SPIKE SAMPLE RECOVERY  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 390698		Date: 05/14/2022 21:37	Prep Batch: 390484		Date: 05/12/2022 19:48						
EPA 350.1	580-113239-1	Ammonia as N	32	J	mg/Kg						F1
EPA 350.1	580-113239-1	Ammonia as N	92.6		mg/Kg	87.0	69	90-110			F1
	MS										

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Note - Results and Reporting Limits have been adjusted for dry weight.

5-IN  
 MATRIX SPIKE DUPLICATE SAMPLE RECOVERY  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113239-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 390698		Date: 05/14/2022 21:37	Prep Batch: 390484		Date: 05/12/2022 19:48						
EPA 350.1	580-113239-1 MSD	Ammonia as N	96.4		mg/Kg	86.1	74	90-110	4	20	F1

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Note - Results and Reporting Limits have been adjusted for dry weight.

6-IN  
DUPLICATE  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Matrix: Solid

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 390698		Date: 05/14/2022 21:37		Prep Batch: 390484		Date: 05/12/2022 19:48		
EPA 350.1	BNSF-BG14-042722-0 -5.5	580-113239-1	Ammonia as N	32	mg/Kg			J
EPA 350.1	BNSF-BG14-042722-0 -5.5	580-113239-1 DU	Ammonia as N	30.1	mg/Kg	8	20	J

Calculations are performed before rounding to avoid round-off errors in calculated results.



7A-IN  
LAB CONTROL SAMPLE  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 390132 Date: 05/10/2022 13:51											
9060A	LCS 580-390132/6	Total Organic Carbon - Duplicates	118000		mg/Kg	120000	98	80-120	3	20	
LCS Source: CaCO3_00012											
Batch ID: 390132 Date: 05/10/2022 15:45											
9060A	LCS 580-390132/37	Total Organic Carbon - Duplicates	115000		mg/Kg	120000	96	80-120	2	20	
LCS Source: CaCO3_00012											
Batch ID: 390698 Date: 05/14/2022 21:37 Prep Batch: 390484 Date: 05/12/2022 19:48											
EPA 350.1	LCS 580-390330/2- B	Ammonia as N	51.5		mg/Kg	50.0	103	90-110			
LCS Source: Ammonia Std_00019											

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN  
 LAB CONTROL SAMPLE DUPLICATE  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113239-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 390132 Date: 05/10/2022 13:54											
						LCSD Source: CaCO3_00012					
9060A	LCSD 580-390132/7	Total Organic Carbon - Duplicates	115000		mg/Kg	120000	96	80-120	3	20	
Batch ID: 390132 Date: 05/10/2022 15:48											
						LCSD Source: CaCO3_00012					
9060A	LCSD 580-390132/38	Total Organic Carbon - Duplicates	113000		mg/Kg	120000	94	80-120	2	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY - SOLUBLE

Lab Name: Eurofins Seattle Job Number: 580-113239-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC126  
Method: EPA 350.1 MDL Date: 04/21/2021 07:54  
Prep Method: Distill/Ammonia  
Leach Method: DI Leach

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Ammonia as N		25	8.78

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY - SOLUBLE

Lab Name: Eurofins Seattle Job Number: 580-113239-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC126  
Method: EPA 350.1 XMDL Date: 10/08/2019 08:54

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia as N		1	0.3512

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job Number: 580-113239-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC105  
Method: 9060A MDL Date: 07/09/2019 14:51

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Total Organic Carbon - Duplicates		2000	96.7

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job Number: 580-113239-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: TAC105  
Method: 9060A XMDL Date: 07/09/2019 14:51

Analyte	Wavelength/ Mass	XRL (mg/Kg)	XMDL (mg/Kg)
Total Organic Carbon - Duplicates		2000	96.7

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job Number: 580-113239-1  
SDG Number: \_\_\_\_\_  
Matrix: Solid Instrument ID: NOEQUIP  
Method: Moisture RL Date: 01/01/2005 13:13

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

12-IN  
PREPARATION LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle

Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Prep Method: Distill/Ammonia

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 580-390330/1-B	05/12/2022 19:48	390484		50	50
LCS 580-390330/2-B	05/12/2022 19:48	390484		50	50
580-113239-1	05/12/2022 19:48	390484		50	50
580-113239-1 DU	05/12/2022 19:48	390484		50	50
580-113239-1 MS	05/12/2022 19:48	390484		50	50
580-113239-1 MSD	05/12/2022 19:48	390484		50	50
580-113239-2	05/12/2022 19:48	390484		50	50
580-113239-3	05/12/2022 19:48	390484		50	50
580-113239-4	05/12/2022 19:48	390484		50	50



13-IN  
 ANALYSIS RUN LOG  
 GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Instrument ID: TAC126 Analysis Method: EPA 350.1

Start Date: 05/14/2022 21:37 End Date: 05/14/2022 21:37

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				N H 3																											
MB 580-390330/1-B	1	S	21:37	X																											
LCS 580-390330/2-B	1	S	21:37	X																											
580-113239-1	1	S	21:37	X																											
580-113239-1 DU	1	S	21:37	X																											
580-113239-1 MS	1	S	21:37	X																											
580-113239-1 MSD	1	S	21:37	X																											
580-113239-2	1	S	21:37	X																											
580-113239-3	1	S	21:37	X																											
580-113239-4	1	S	21:37	X																											
ZZZZZZ			21:37																												
ZZZZZZ			21:37																												
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Prep Types:  
 S = Soluble

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Instrument ID: TAC105 Analysis Method: 9060A

Start Date: 03/18/2022 18:26 End Date: 05/10/2022 17:28

Lab Sample Id	D/F	T y p e	Time	T O C D	Analytes																			
ICV 580-390132/1	1		18:26	X																				
ICB 580-390132/2	1		18:28	X																				
CCV 580-390132/3	1		13:44	X																				
CCB 580-390132/4	1		13:46	X																				
MB 580-390132/5	1	T	13:48	X																				
LCS 580-390132/6	1	T	13:51	X																				
LCSD 580-390132/7	1	T	13:54	X																				
ZZZZZZ			13:56																					
ZZZZZZ			14:01																					
ZZZZZZ			14:05																					
ZZZZZZ			14:09																					
ZZZZZZ			14:14																					
CCV 580-390132/13	1		14:19	X																				
CCB 580-390132/14	1		14:21	X																				
ZZZZZZ			14:24																					
ZZZZZZ			14:28																					
ZZZZZZ			14:32																					
ZZZZZZ			14:37																					
ZZZZZZ			14:41																					
ZZZZZZ			14:46																					
ZZZZZZ			14:50																					
ZZZZZZ			14:55																					
ZZZZZZ			15:00																					
ZZZZZZ			15:02																					
ZZZZZZ			15:04																					
CCV 580-390132/26	1		15:09	X																				
CCB 580-390132/27	1		15:12	X																				
ZZZZZZ			15:14																					
ZZZZZZ			15:18																					
ZZZZZZ			15:22																					
ZZZZZZ			15:27																					
CCV 580-390132/32			15:32																					
CCB 580-390132/33			15:34																					
CCV 580-390132/34	1		15:38	X																				
CCB 580-390132/35	1		15:40	X																				
MB 580-390132/36	1	T	15:42	X																				
LCS 580-390132/37	1	T	15:45	X																				
LCSD 580-390132/38	1	T	15:48	X																				
580-113239-2	1	T	15:50	X																				
580-113239-1	1	T	15:54	X																				

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Instrument ID: TAC105 Analysis Method: 9060A

Start Date: 03/18/2022 18:26 End Date: 05/10/2022 17:28

Lab Sample Id	D/F	Type	Time	Analytes																											
				T	O	C	D																								
580-113239-3	1	T	15:58	X																											
580-113239-4	1	T	16:03	X																											
ZZZZZZ			16:07																												
CCV 580-390132/44	1		16:12	X																											
CCB 580-390132/45	1		16:14	X																											
ZZZZZZ			16:16																												
ZZZZZZ			16:21																												
ZZZZZZ			16:25																												
ZZZZZZ			16:29																												
ZZZZZZ			16:33																												
ZZZZZZ			16:38																												
ZZZZZZ			16:42																												
ZZZZZZ			16:47																												
ZZZZZZ			16:51																												
ZZZZZZ			16:56																												
CCV 580-390132/56			17:01																												
CCB 580-390132/57			17:03																												
ZZZZZZ			17:06																												
ZZZZZZ			17:11																												
ZZZZZZ			17:13																												
ZZZZZZ			17:16																												
ZZZZZZ			17:20																												
CCV 580-390132/63			17:26																												
CCB 580-390132/64			17:28																												

Prep Types: \_\_\_\_\_  
T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/11/2022 11:50 End Date: 05/11/2022 11:53

Lab Sample Id	D/F	Type	Time	Analytes																									
				% S	M o i s t																								
ZZZZZZ			11:50																										
ZZZZZZ			11:50																										
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ZZZZZZ			11:50																										
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580-113239-1		1 T	11:50	X	X																								
580-113239-2		1 T	11:50	X	X																								
580-113239-3		1 T	11:50	X	X																								
580-113239-4		1 T	11:50	X	X																								
ZZZZZZ			11:50																										
ZZZZZZ			11:50																										
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ZZZZZZ			11:50																										

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/11/2022 11:50 End Date: 05/11/2022 11:53

Lab Sample Id	D/F	Type	Time	Analytes																											
				% S	M o i s t																										
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
ZZZZZZ			11:50																												
ZZZZZZ			11:53																												

Prep Types: \_\_\_\_\_  
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Batch Number: 390330 Batch Start Date: 05/11/22 22:39 Batch Analyst: Guerra, Fernando C

Batch Method: DI Leach Batch End Date: 05/12/22 19:46

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Ammonia Std 00019			
MB 580-390330/1		DI Leach, Distill/Ammonia, EPA 350.1		10 g	250 mL				
LCS 580-390330/2		DI Leach, Distill/Ammonia, EPA 350.1		10 g	250 mL	0.5 mL			
580-113239-A-1	BNSF-BG14-042722 -0-5.5	DI Leach, Distill/Ammonia, EPA 350.1	S	10.6859 g	250 mL				
580-113239-A-1 DU	BNSF-BG14-042722 -0-5.5	DI Leach, Distill/Ammonia, EPA 350.1	S	10.1900 g	250 mL				
580-113239-A-1 MS	BNSF-BG14-042722 -0-5.5	DI Leach, Distill/Ammonia, EPA 350.1	S	10.2211 g	250 mL	0.5 mL			
580-113239-A-1 MSD	BNSF-BG14-042722 -0-5.5	DI Leach, Distill/Ammonia, EPA 350.1	S	10.3267 g	250 mL	0.5 mL			
580-113239-A-2	BNSF-BG15-042722 -0-10	DI Leach, Distill/Ammonia, EPA 350.1	S	10.4651 g	250 mL				
580-113239-A-3	BNSF-BG16-042722 -0-10	DI Leach, Distill/Ammonia, EPA 350.1	S	10.2623 g	250 mL				
580-113239-A-4	BNSF-BG17-042722 -0-10	DI Leach, Distill/Ammonia, EPA 350.1	S	10.3170 g	250 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Batch Number: 390330 Batch Start Date: 05/11/22 22:39 Batch Analyst: Guerra, Fernando C

Batch Method: DI Leach Batch End Date: 05/12/22 19:46

Batch Notes	
Balance ID	SEA236
Blank Matrix ID	DI water
Tumble Start Time	05/12/2022 17:20
Tumble End Time	05/12/2022 19:38
Pipette/Syringe/Dispenser ID	WC 2E
Batch Comment	Weighed by FCG, Spiked by MT

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Batch Number: 390484 Batch Start Date: 05/12/22 19:48 Batch Analyst: Tanase, Michelle L

Batch Method: Distill/Ammonia Batch End Date: 05/14/22 21:36

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 580-390330/1-A		Distill/Ammonia, EPA 350.1		50 mL	50 mL				
LCS 580-390330/2-A		Distill/Ammonia, EPA 350.1		50 mL	50 mL				
580-113239-A-1-A	BNSF-BG14-042722 -0-5.5	Distill/Ammonia, EPA 350.1	S	50 mL	50 mL				
580-113239-A-1-B DU	BNSF-BG14-042722 -0-5.5	Distill/Ammonia, EPA 350.1	S	50 mL	50 mL				
580-113239-A-1-C MS	BNSF-BG14-042722 -0-5.5	Distill/Ammonia, EPA 350.1	S	50 mL	50 mL				
580-113239-A-1-D MSD	BNSF-BG14-042722 -0-5.5	Distill/Ammonia, EPA 350.1	S	50 mL	50 mL				
580-113239-A-2-A	BNSF-BG15-042722 -0-10	Distill/Ammonia, EPA 350.1	S	50 mL	50 mL				
580-113239-A-3-A	BNSF-BG16-042722 -0-10	Distill/Ammonia, EPA 350.1	S	50 mL	50 mL				
580-113239-A-4-A	BNSF-BG17-042722 -0-10	Distill/Ammonia, EPA 350.1	S	50 mL	50 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.



GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Batch Number: 390484 Batch Start Date: 05/12/22 19:48 Batch Analyst: Tanase, Michelle L

Batch Method: Distill/Ammonia Batch End Date: 05/14/22 21:36

Batch Notes	
Blank Matrix ID	DI water
pH Indicator ID	2839642
Acid used for pH adjustment	3154574
Base used for pH adjustment	3118259
Buffer Reagent ID	3139694
Boiling Chips ID	3093959
Anti Foam ID	3090171
Sulfuric Acid Reagent ID Number	3154574
Pipette/Syringe/Dispenser ID	WC 5A, WC 10E
Distillation Unit ID	AMM Dist Block 1
Distillation Start Time	2007
Distillation End Time	2140
Uncorrected Temperature	In: 209 Out: 203 Celsius

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Batch Number: 390698 Batch Start Date: 05/14/22 21:37 Batch Analyst: Tanase, Michelle L

Batch Method: EPA 350.1 Batch End Date: 05/14/22 23:53

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 580-390330/1-B		EPA 350.1		50 mL	50 mL				
LCS 580-390330/2-B		EPA 350.1		50 mL	50 mL				
580-113239-A-1-E	BNSF-BG14-042722-0-5.5	EPA 350.1	S	50 mL	50 mL				
580-113239-A-1-F DU	BNSF-BG14-042722-0-5.5	EPA 350.1	S	50 mL	50 mL				
580-113239-A-1-G MS	BNSF-BG14-042722-0-5.5	EPA 350.1	S	50 mL	50 mL				
580-113239-A-1-H MSD	BNSF-BG14-042722-0-5.5	EPA 350.1	S	50 mL	50 mL				
580-113239-A-2-B	BNSF-BG15-042722-0-10	EPA 350.1	S	50 mL	50 mL				
580-113239-A-3-B	BNSF-BG16-042722-0-10	EPA 350.1	S	50 mL	50 mL				
580-113239-A-4-B	BNSF-BG17-042722-0-10	EPA 350.1	S	50 mL	50 mL				

Batch Notes	
Sodium Nitroprusside ID	3146568
Hypochlorite ID	3155796
Sodium Phenolate ID	Phenol/nitroferricyanide:3146569
EDTA Buffer ID	3155793
Carrier Identification	DI water
Pipette/Syringe/Dispenser ID	WC 0.2D, WC 2E, WC 10E
Batch Comment	NH3: 3062042 (ICV), 3158234 (CCV)

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Batch Number: 390132 Batch Start Date: 05/10/22 15:00 Batch Analyst: Ronk, Nicholas 1

Batch Method: 9060A Batch End Date: 05/10/22 18:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	Baked Sand 00149	CaCO3 00012	CaCO3 00004 00009	TOCS_LCS 00012		
ICV 580-390132/1		9060A					# g		
CCV 580-390132/3		9060A				# g			
CCB 580-390132/4		9060A		# g					
MB 580-390132/5		9060A		# g					
LCS 580-390132/6		9060A			# g				
LCS 580-390132/7		9060A			# g				
CCV 580-390132/13		9060A				# g			
CCB 580-390132/14		9060A		# g					
CCV 580-390132/26		9060A				# g			
CCB 580-390132/27		9060A		# g					
CCV 580-390132/34		9060A				# g			
CCB 580-390132/35		9060A		# g					
MB 580-390132/36		9060A		# g					
LCS 580-390132/37		9060A			# g				
LCS 580-390132/38		9060A			# g				
CCV 580-390132/44		9060A				# g			
CCB 580-390132/45		9060A		# g					

Batch Notes	
Pipette/Syringe/Dispenser ID	SEA224

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-113239-1

SDG No.: \_\_\_\_\_

Batch Number: 390214 Batch Start Date: 05/11/22 11:50 Batch Analyst: McKell, Justin S

Batch Method: Moisture Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry	%_Moisture	%_Solid	
580-113239-A-1	BNSF-BG14-042722 -0-5.5	Moisture	T	00000.65 g	00006.73 g	00004.07 g	43.75 %	56.25 %	
580-113239-A-2	BNSF-BG15-042722 -0-10	Moisture	T	00000.69 g	00005.44 g	00003.95 g	31.368421052631 6 %	68.631578947368 4 %	
580-113239-A-3	BNSF-BG16-042722 -0-10	Moisture	T	00000.68 g	00006.15 g	00004.81 g	24.497257769652 6 %	75.502742230347 4 %	
580-113239-A-4	BNSF-BG17-042722 -0-10	Moisture	T	00000.62 g	00004.94 g	00002.95 g	46.064814814814 8 %	53.935185185185 2 %	

Batch Notes	
Balance ID	sea225
Oven ID	microwave
Date samples were placed in the oven	05/11/2022
Time samples were place in the oven	12:16
Date samples were removed from oven	05/11/2022
Time Samples were removed from oven	14:46

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Moisture

# General Chemistry Raw Data Report

Job ID: 580-113239-1

**Batch: 390698**  
**Method: EPA 350.1**

**Analyst Initials: MLT**  
**Instrument: Astoria Pacific rAPID T**

**Lab Sample ID: MB 580-390330/1-B**

**Analysis Date: May 14, 2022 21:37**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Ammonia as N	None	1	0.22	mg/L	50 mL	50 mL

**Lab Sample ID: LCS 580-390330/2-B**

**Analysis Date: May 14, 2022 21:37**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Ammonia as N	None	1	2.06	mg/L	50 mL	50 mL

**Lab Sample ID: 580-113239-A-1-E**

**Analysis Date: May 14, 2022 21:37**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Ammonia as N	None	1	0.78	mg/L	50 mL	50 mL

**Lab Sample ID: 580-113239-A-1-F DU**

**Analysis Date: May 14, 2022 21:37**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Ammonia as N	None	1	0.69	mg/L	50 mL	50 mL

**Lab Sample ID: 580-113239-A-1-G MS**

**Analysis Date: May 14, 2022 21:37**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Ammonia as N	None	1	2.13	mg/L	50 mL	50 mL

**Lab Sample ID: 580-113239-A-1-H MSD**

**Analysis Date: May 14, 2022 21:37**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Ammonia as N	None	1	2.24	mg/L	50 mL	50 mL

**Lab Sample ID: 580-113239-A-2-B**

**Analysis Date: May 14, 2022 21:37**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Ammonia as N	None	1	0.64	mg/L	50 mL	50 mL

**Lab Sample ID: 580-113239-A-3-B**

**Analysis Date: May 14, 2022 21:37**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Ammonia as N	None	1	0.28	mg/L	50 mL	50 mL

**Lab Sample ID: 580-113239-A-4-B**

**Analysis Date: May 14, 2022 21:37**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Ammonia as N	None	1	1.49	mg/L	50 mL	50 mL

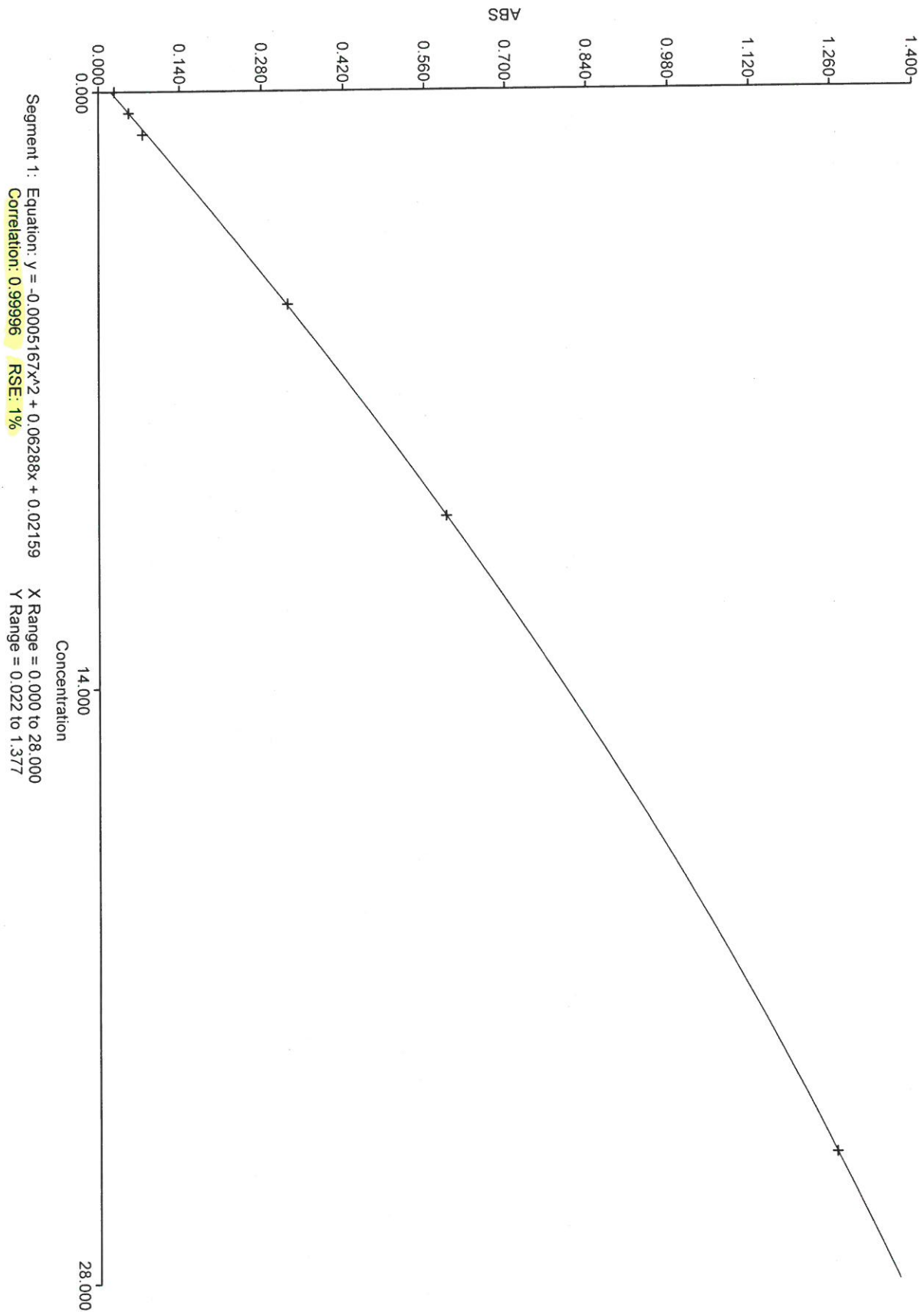
mt 5/14/22  
 Batch: 390484-390698

Sample Info				Ammonia, High Level (T023)					
Row	Cup	ID	Comment	Abs	ppm	Status	Well	Date	Time
1	C1	NH3 0.0		0.028	0.10	Crv	A02	5/12/2022	10:23:01 PM
2	C2	NH3 0.5		0.053	0.50		A03	5/12/2022	10:25:48 PM
3	C3	NH3 1.0		0.076	0.88		A04	5/12/2022	10:28:37 PM
4	C4	NH3 5.0		0.325	5.03		A05	5/12/2022	10:31:30 PM
5	C5	NH3 10.0		0.599	10.00		B02	5/12/2022	10:34:21 PM
6	C6	NH3 25.0		1.271	25.00		B03	5/12/2022	10:37:35 PM
7	CC1	CCV		0.325	5.03		B04	5/12/2022	10:40:42 PM
8	CC5	CCB		0.027	0.08		B05	5/12/2022	10:43:53 PM
9	11	ICV		0.145	2.00		C02	5/12/2022	10:47:03 PM
10	12	ICB		0.030	0.13		C03	5/12/2022	10:50:05 PM
11	13	MB		0.035	0.22		C04	5/12/2022	10:53:04 PM
12	14	LCS		0.149	2.06		C05	5/12/2022	10:56:14 PM
13	15	239-1		0.070	0.78		D02	5/12/2022	10:59:26 PM
14	16	239-1 DU		0.065	0.69		D03	5/12/2022	11:02:34 PM
15	17	239-1 MS		0.153	2.13		D04	5/12/2022	11:05:34 PM
16	18	239-1 MSD		0.160	2.24		D05	5/12/2022	11:08:36 PM
17	CC1	CCV		0.327	5.06		E02	5/12/2022	11:11:46 PM
18	CC5	CCB		0.032	0.17		E03	5/12/2022	11:14:57 PM
19	19	239-2		0.062	0.64		E04	5/12/2022	11:18:03 PM
20	20	239-3		0.039	0.28		E05	5/12/2022	11:21:06 PM
21	21	239-4		0.114	1.49		F02	5/12/2022	11:24:07 PM
22	22	240-1		0.113	1.48		F03	5/12/2022	11:27:21 PM
23	23	240-2		0.094	1.17		F04	5/12/2022	11:30:25 PM
24	24	240-3		0.041	0.31		F05	5/12/2022	11:33:28 PM
25	25	240-4		0.047	0.41		G02	5/12/2022	11:36:28 PM
<del>26</del>	<del>26</del>	<del>470-1</del>		<del>1.971</del>	<del>???</del>	<del>OS,AR</del>	<del>G03</del>	<del>5/12/2022</del>	<del>11:39:42 PM</del>
27	CC1	CCV		0.321	4.96		G04	5/12/2022	11:42:48 PM
28	CC5	CCB		0.029	0.11		G05	5/12/2022	11:45:51 PM
29	27	421-1		0.032	0.16		H02	5/12/2022	11:48:50 PM
30	28	421-3		0.034	0.19		H03	5/12/2022	11:52:01 PM
31	29	225-1-4	FCG 5/13/22	0.996	18.22		H04	5/12/2022	11:55:08 PM
<del>32</del>	<del>30</del>	<del>288-8</del>		<del>1.649</del>	<del>???</del>	<del>OS,AR</del>	<del>H05</del>	<del>5/12/2022</del>	<del>11:58:13 PM</del>
33	CC1	CCV		0.330	5.11		A02	5/13/2022	12:16:20 AM
34	CC5	CCB		0.027	0.09		A03	5/13/2022	12:19:11 AM
<del>35</del>	<del>31</del>	<del>470-1</del>	10X	<del>1.986</del>	<del>???</del>	<del>OS,AR</del>	<del>A04</del>	<del>5/13/2022</del>	<del>12:22:02 AM</del>
36	32	288-8	10X, PT	0.232	3.45		A05	5/13/2022	12:24:52 AM
37	CC1	CCV		0.328	5.08		B02	5/13/2022	12:27:43 AM
38	CC5	CCB		0.028	0.11		B03	5/13/2022	12:30:57 AM
<del>39</del>	<del>CC1</del>	<del>CCV</del>		<del>0.327</del>	<del>5.06</del>		<del>B04</del>	<del>5/13/2022</del>	<del>12:23:16 PM</del>
40	CC5	CCB		0.028	0.10		B05	5/13/2022	12:26:01 PM
41	31	470-1	10X	0.266	4.02	AE	C02	5/13/2022	12:28:50 PM
42	33	470-1	100X	0.055	0.53		C03	5/13/2022	12:31:42 PM
43	CC1	CCV		0.323	5.00		C04	5/13/2022	12:34:34 PM
44	CC5	CCB		0.021	-0.02	BR	C05	5/13/2022	12:37:46 PM

Renin at 10x

Renin at 10x

mt 5/14/22  
 Renin at 10x

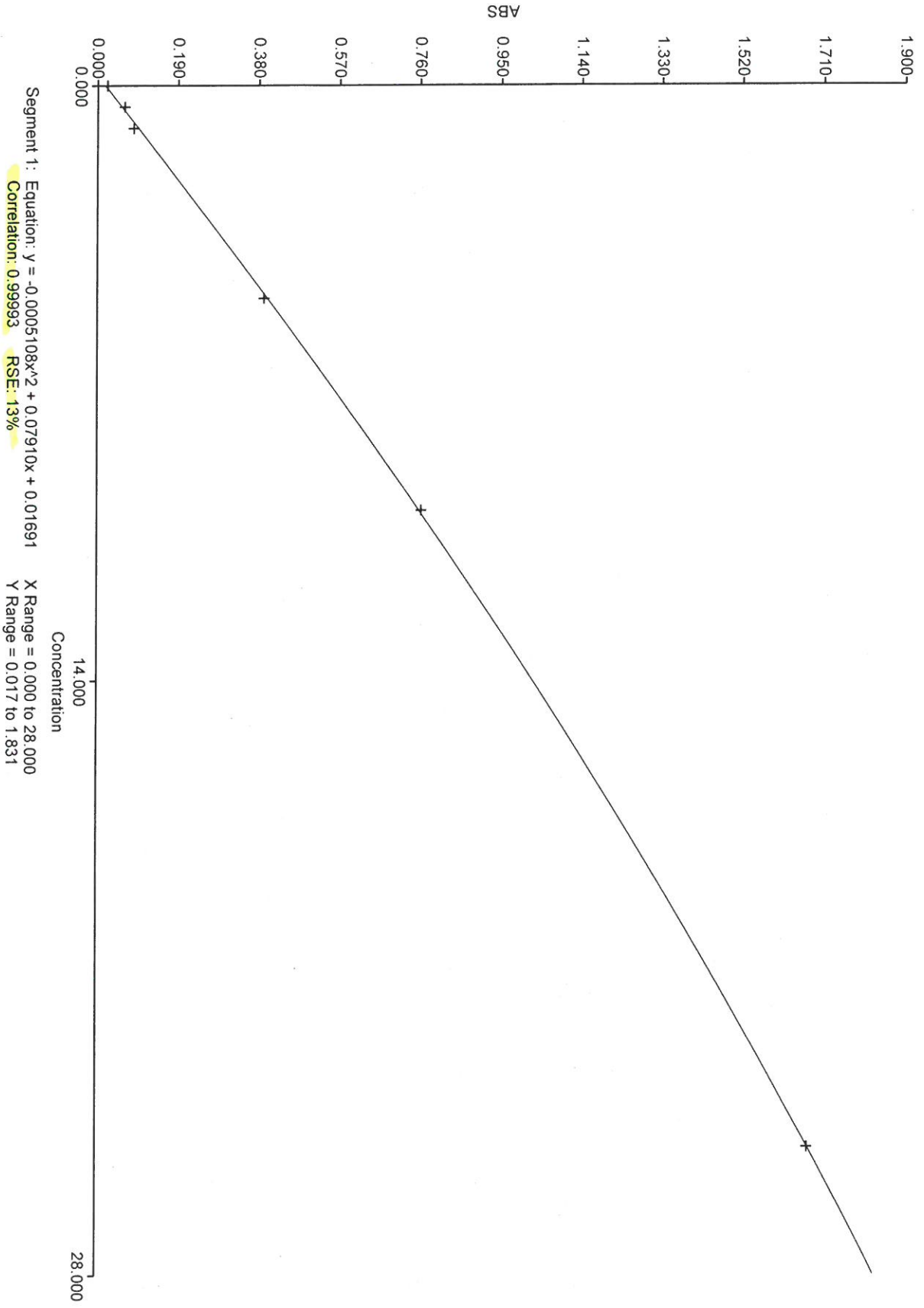


Row	Sample Info			Ammonia, High Level (T023)					
	Cup	ID	Comment	Abs	ppm	Status	Well	Date	Time
1	C1	NH3 0.0		0.022	0.07	Crv	A02	5/17/2022	3:57:40 PM
2	C2	NH3 0.5		0.063	0.59		A03	5/17/2022	4:00:26 PM
3	C3	NH3 1.0		0.085	0.86		A04	5/17/2022	4:03:15 PM
4	C4	NH3 5.0		0.392	4.90		A05	5/17/2022	4:06:08 PM
5	C5	NH3 10.0		0.763	10.09		B02	5/17/2022	4:08:59 PM
6	C6	NH3 25.0		1.674	24.99		B03	5/17/2022	4:12:31 PM
7	CC1	CCV		0.395	4.93		B04	5/17/2022	4:15:36 PM
8	CC5	CCB		0.027	0.12		B05	5/17/2022	4:18:32 PM
9	11	ICV		0.181	2.11		C02	5/17/2022	4:21:28 PM
10	12	ICB		0.032	0.19		C03	5/17/2022	4:24:18 PM
11	13	515-1	20X	0.457	5.78		C04	5/17/2022	4:27:12 PM
12	14	470-1	10X	0.335	4.13		C05	5/17/2022	4:30:14 PM
13	15	404-1 TEST		0.029	0.16		D02	5/17/2022	4:33:14 PM
14	16	404-1 W/SPIKE		0.110	1.18		D03	5/17/2022	4:36:39 PM
15	17	404-1 MS TEST		0.051	0.43		D04	5/17/2022	4:39:33 PM
16	18	404-1 MS W/SPIKE		0.160	1.83		D05	5/17/2022	4:42:34 PM
17	CC1	CCV		0.395	4.93		E02	5/17/2022	4:45:43 PM
18	CC5	CCB		0.033	0.21		E03	5/17/2022	4:49:00 PM
19	CC1	CCV		0.389	4.86		E04	5/17/2022	5:37:32 PM
20	CC5	CCB		0.020	0.04		E05	5/17/2022	5:40:19 PM
21	19	404-1 MSD w/spike		0.150	1.71		F02	5/17/2022	5:43:09 PM
22	CC1	CCV		0.398	4.97		F03	5/17/2022	5:46:05 PM
23	CC5	CCB		0.039	0.28		F04	5/17/2022	5:48:51 PM

Batch  
390696  
→ Batch  
390698  
→ Batch  
389863  
→ Batch  
389863



5/17/22



**SC632**3/15/22 TOLSON  
CAI

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
Blank	1126.0		1.0000	TA SOIL LINNEAR	3/12/2022 12:11:17 PM	-0.00000004585	A07

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
2450155	1451030		0.2506	TA SOIL LINNEAR	3/12/2022 12:14:29 PM	11.72	A08
2450155	1177768		0.2010	TA SOIL LINNEAR	3/12/2022 12:16:59 PM	11.85	A09
2450155	888162		0.1495	TA SOIL LINNEAR	3/12/2022 12:19:25 PM	12.01	A10
2450155	615185		0.1009	TA SOIL LINNEAR	3/12/2022 12:21:59 PM	12.32	A01
2450155	457663		0.0742	TA SOIL LINNEAR	3/12/2022 12:24:31 PM	12.46	A02
2450155	163681		0.0253	TA SOIL LINNEAR	3/12/2022 12:26:45 PM	13.01	A03
Average			0.1336			12.23	
Std. Deviation			0.08			0.474	
RSD			62.46			3.874	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICV 2735864	54587		0.2001	TA SOIL LINNEAR	3/15/2022 4:03:45 PM	0.5153	A01

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICB	2280.0		0.2007	TA SOIL LINNEAR	3/15/2022 4:05:56 PM	0.007354	A02

# SC632

TA SOIL LINNEAR Calibration - Read Only

CO2 Low (range: 0.000000 to 30.072000 mg)

Previous Calibration:

$$y = +1.07104x + 0.000345869$$

Date: 3/12/2022 12:27:51 PM

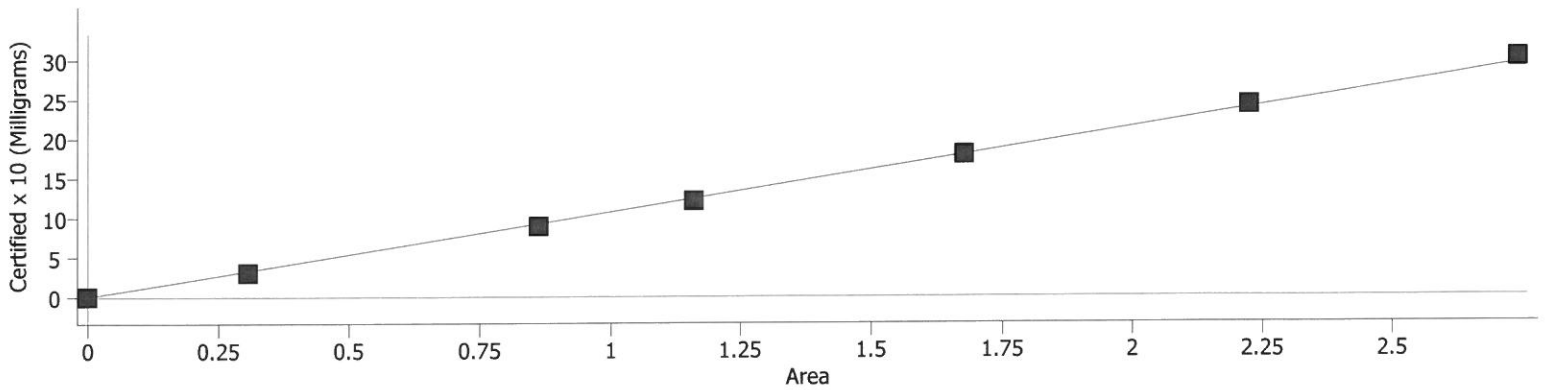
New Calibration:

$$y = +1.07104x + 0.000345869$$

Curve Type: Linear

Weighting: 1 / Certified

RMS Error: 0.0012198



Row	Standard	Drift	Mass	Certified	Calculated	Error %	Prev Err %	Peak	Peak Area	Weighting	Date	Range	Saturated
1	Blank	0	1.0000	0.0000	0.0000	100.00	100.00	6.1098	0.00032297	2.5000E+6	03/12/22 12:11 PM	Low	No
2	2450155	0	0.25060	12.000	11.715	-2.3711	-2.3711	2707.6	2.7408	0.33254	03/12/22 12:14 PM	Low	No
3	2450155	1	0.20100	12.000	11.854	-1.2201	-1.2201	2408.8	2.2242	0.41459	03/12/22 12:16 PM	Low	No
4	2450155	0	0.14950	12.000	12.014	0.11992	0.11992	2103.5	1.6767	0.55741	03/12/22 12:19 PM	Low	No
5	2450155	0	0.10090	12.000	12.323	2.6926	2.6926	1478.2	1.1606	0.82590	03/12/22 12:21 PM	Low	No
6	2450155	0	0.074200	12.000	12.459	3.8227	3.8227	1115.8	0.86280	1.1231	03/12/22 12:24 PM	Low	No
7	2450155	0	0.025300	12.000	13.010	8.4179	8.4179	493.53	0.30700	3.2938	03/12/22 12:26 PM	Low	No

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICV 2735864	46786		0.2021	TA SOIL LINNEAR	3/18/2022 6:26:29 PM	0.4352	A01

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
ICB	1514.5		0.2002	TA SOIL LINNEAR	3/18/2022 6:28:40 PM	-0.00005695	A02

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
CCV 3092515	1163109		0.2020	TA SOIL LINNEAR	5/10/2022 1:44:20 PM	11.81	A01
CCV 3092515	1182782		0.2039	TA SOIL LINNEAR	5/10/2022 2:19:43 PM	11.90	B06
CCV 3092515	1183775		0.2043	TA SOIL LINNEAR	5/10/2022 3:09:53 PM	11.89	D08
CCV 3092515	1187525		0.2046	TA SOIL LINNEAR	5/10/2022 3:32:00 PM	11.91	E08
CCV 3092515	1212574		0.2085	TA SOIL LINNEAR	5/10/2022 3:38:11 PM	11.93	A01
CCV 3092515	1175237		0.2026	TA SOIL LINNEAR	5/10/2022 4:12:15 PM	11.90	B06
CCV 3092515	1191854		0.2060	TA SOIL LINNEAR	5/10/2022 5:01:30 PM	11.87	D08
CCV 3092515	1164669		0.2017	TA SOIL LINNEAR	5/10/2022 5:26:07 PM	11.85	E08
Average			0.2042			11.88	
Std. Deviation			0.002			0.038	
RSD			1.105			0.321	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
CCB 3117971	4848.5		0.2039	TA SOIL LINNEAR	5/10/2022 1:46:35 PM	0.02172	A02
CCB 3117971	1959.2		0.2008	TA SOIL LINNEAR	5/10/2022 2:21:54 PM	-0.007536	B07
CCB 3117971	4633.5		0.2062	TA SOIL LINNEAR	5/10/2022 3:12:06 PM	0.01933	D09
CCB 3117971	3446.7		0.2035	TA SOIL LINNEAR	5/10/2022 3:34:12 PM	0.007593	E09
CCB 3117971	4130.4		0.2061	TA SOIL LINNEAR	5/10/2022 3:40:24 PM	0.01432	A02
CCB 3117971	4195.1		0.2037	TA SOIL LINNEAR	5/10/2022 4:14:26 PM	0.01514	B07
CCB 3117971	2326.4		0.2027	TA SOIL LINNEAR	5/10/2022 5:03:43 PM	-0.003741	D09

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
CCB 3117971	3398.5		0.2069	TA SOIL LINNEAR	5/10/2022 5:28:18 PM	0.006990	E09
Average			0.2042			0.009226	
Std. Deviation			0.002			0.010527	
RSD			1.006			114.1	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MB 3117971	2907.6		0.2053	TA SOIL LINNEAR	5/10/2022 1:48:46 PM	0.002128	A03
MB 3117971	4279.1		0.2074	TA SOIL LINNEAR	5/10/2022 3:42:35 PM	0.01570	A03
Average			0.2064			0.008916	
Std. Deviation			0.001			0.0095997	
RSD			0.720			107.7	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
LCS 2450156	1192167		0.2079	TA SOIL LINNEAR	5/10/2022 1:51:35 PM	11.76	A04
LCS 2450156	1154875		0.2064	TA SOIL LINNEAR	5/10/2022 3:45:12 PM	11.48	A04
Average			0.2072			11.62	
Std. Deviation			0.001			0.202	
RSD			0.512			1.740	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
LCSD 2450156	1118540		0.2003	TA SOIL LINNEAR	5/10/2022 1:54:27 PM	11.46	A05
LCSD 2450156	1117903		0.2036	TA SOIL LINNEAR	5/10/2022 3:48:04 PM	11.26	A05
Average			0.2020			11.36	
Std. Deviation			0.002			0.136	
RSD			1.155			1.196	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113025-C-12	984990		0.2086	TA SOIL LINNEAR	5/10/2022 1:56:41 PM	9.683	A06
580-113025-C-12	1047214		0.2028	TA SOIL LINNEAR	5/10/2022 1:58:52 PM	10.59	A07
Average			0.2057			10.14	
Std. Deviation			0.004			0.642	
RSD			1.994			6.333	



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113025-C-13	283938		0.2026	TA SOIL LINNEAR	5/10/2022 2:01:04 PM	2.854	A08
580-113025-C-13	397094		0.2077	TA SOIL LINNEAR	5/10/2022 2:03:15 PM	3.905	A09
Average			0.2052			3.379	
Std. Deviation			0.004			0.7426	
RSD			1.758			21.97	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113025-C-14	376733		0.2083	TA SOIL LINNEAR	5/10/2022 2:05:28 PM	3.692	A10
580-113025-C-14	365186		0.2041	TA SOIL LINNEAR	5/10/2022 2:07:43 PM	3.652	B01
Average			0.2062			3.672	
Std. Deviation			0.003			0.0285	
RSD			1.440			0.777	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113025-C-15	917648		0.2063	TA SOIL LINNEAR	5/10/2022 2:09:54 PM	9.120	B02
580-113025-C-15	736708		0.2029	TA SOIL LINNEAR	5/10/2022 2:12:05 PM	7.439	B03
Average			0.2046			8.279	
Std. Deviation			0.002			1.1886	
RSD			1.175			14.36	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
570-93645-T-1	12637		0.2037	TA SOIL LINNEAR	5/10/2022 2:14:27 PM	0.1004	B04
570-93645-T-1	16265		0.2027	TA SOIL LINNEAR	5/10/2022 2:16:52 PM	0.1377	B05
Average			0.2032			0.1190	
Std. Deviation			0.0007			0.02637	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
RSD			0.348			22.16	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113235-A-1	8779.1		0.2070	TA SOIL LINNEAR	5/10/2022 2:24:06 PM	0.06043	B08
580-113235-A-1	6406.0		0.2018	TA SOIL LINNEAR	5/10/2022 2:26:23 PM	0.03781	B09
Average			0.2044			0.04912	
Std. Deviation			0.004			0.015997	
RSD			1.799			32.57	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113021-B-3	155556		0.2082	TA SOIL LINNEAR	5/10/2022 2:28:35 PM	1.510	B10
580-113021-B-3	153936		0.2017	TA SOIL LINNEAR	5/10/2022 2:30:47 PM	1.542	C01
Average			0.2050			1.526	
Std. Deviation			0.005			0.0227	
RSD			2.243			1.489	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113021-B-6	338869		0.2037	TA SOIL LINNEAR	5/10/2022 2:32:58 PM	3.394	C02
580-113021-B-6	258380		0.2024	TA SOIL LINNEAR	5/10/2022 2:35:09 PM	2.598	C03
Average			0.2031			2.996	
Std. Deviation			0.0009			0.5628	
RSD			0.453			18.79	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113021-B-11	1287970		0.2039	TA SOIL LINNEAR	5/10/2022 2:37:20 PM	12.96	C04
580-113021-B-11	1383807		0.2075	TA SOIL LINNEAR	5/10/2022 2:39:32 PM	13.69	C05
Average			0.2057			13.32	
Std. Deviation			0.003			0.513	
RSD			1.238			3.847	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113021-C-12	741715		0.2087	TA SOIL LINNEAR	5/10/2022 2:41:45 PM	7.281	C06
580-113021-C-12	791221		0.2070	TA SOIL LINNEAR	5/10/2022 2:43:56 PM	7.833	C07
Average			0.2078			7.557	
Std. Deviation			0.001			0.3900	
RSD			0.578			5.161	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-1	7365.2		0.2081	TA SOIL LINNEAR	5/10/2022 2:46:10 PM	0.04614	C08
580-113169-D-1	4216.8		0.2081	TA SOIL LINNEAR	5/10/2022 2:48:21 PM	0.01504	C09
Average			0.2081			0.03059	
Std. Deviation			0			0.021998	
RSD			0.000			71.91	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113170-A-1	13599		0.2054	TA SOIL LINNEAR	5/10/2022 2:50:37 PM	0.1092	C10
580-113170-A-1	14918		0.2076	TA SOIL LINNEAR	5/10/2022 2:52:56 PM	0.1211	D01
Average			0.2065			0.1151	
Std. Deviation			0.002			0.00842	
RSD			0.753			7.311	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
DU 580-113170-A-1	14601		0.2087	TA SOIL LINNEAR	5/10/2022 2:55:15 PM	0.1173	D02
DU 580-113170-A-1	15487		0.2033	TA SOIL LINNEAR	5/10/2022 2:57:35 PM	0.1294	D03
Average			0.2060			0.1233	
Std. Deviation			0.004			0.00853	



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
RSD			1.854			6.918	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MS 580-113170-A-1	607336	0.1047	0.1026	TA SOIL LINNEAR	5/10/2022 3:00:08 PM	12.12	D04

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MSD 580-113170-A-1	615521	0.1064	0.1018	TA SOIL LINNEAR	5/10/2022 3:02:42 PM	12.38	D05

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-2	7540.3		0.2036	TA SOIL LINNEAR	5/10/2022 3:04:54 PM	0.04893	D06
580-113169-D-2	5511.3		0.2045	TA SOIL LINNEAR	5/10/2022 3:07:05 PM	0.02832	D07
Average			0.2041			0.03862	
Std. Deviation			0.0006			0.014578	
RSD			0.312			37.74	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-3	7628.3		0.2025	TA SOIL LINNEAR	5/10/2022 3:14:17 PM	0.05009	D10
580-113169-D-3	5932.8		0.2054	TA SOIL LINNEAR	5/10/2022 3:16:28 PM	0.03241	E01
Average			0.2040			0.04125	
Std. Deviation			0.002			0.012502	
RSD			1.005			30.31	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-4	8658.2		0.2039	TA SOIL LINNEAR	5/10/2022 3:18:26 PM	0.06013	E02

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-4	6753.0		0.2043	TA SOIL LINNEAR	5/10/2022 3:20:37 PM	0.04084	E03
Average			0.2041			0.05049	
Std. Deviation			0.0003			0.013643	
RSD			0.139			27.02	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-5	8318.6		0.2016	TA SOIL LINNEAR	5/10/2022 3:22:48 PM	0.05736	E04
580-113169-D-5	6950.7		0.2030	TA SOIL LINNEAR	5/10/2022 3:24:59 PM	0.04311	E05
Average			0.2023			0.05023	
Std. Deviation			0.0010			0.010078	
RSD			0.489			20.06	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113169-D-6	6324.8		0.2052	TA SOIL LINNEAR	5/10/2022 3:27:10 PM	0.03637	E06
580-113169-D-6	9161.4		0.2039	TA SOIL LINNEAR	5/10/2022 3:29:21 PM	0.06521	E07
Average			0.2046			0.05079	
Std. Deviation			0.0009			0.020392	
RSD			0.449			40.15	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113239-A-2	51845		0.2060	TA SOIL LINNEAR	5/10/2022 3:50:16 PM	0.4906	A06
580-113239-A-2	43413		0.2068	TA SOIL LINNEAR	5/10/2022 3:52:28 PM	0.4049	A07
Average			0.2064			0.4477	
Std. Deviation			0.0006			0.06062	
RSD			0.274			13.54	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113239-A-1	92140		0.2026	TA SOIL LINNEAR	5/10/2022 3:54:39 PM	0.9078	A08
580-113239-A-1	120712		0.2044	TA SOIL LINNEAR	5/10/2022 3:56:34 PM	1.187	A09
Average			0.2035			1.048	
Std. Deviation			0.001			0.1976	
RSD			0.625			18.86	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113239-A-3	7116.6		0.2077	TA SOIL LINNEAR	5/10/2022 3:58:45 PM	0.04377	A10
580-113239-A-3	6377.5		0.2067	TA SOIL LINNEAR	5/10/2022 4:00:57 PM	0.03663	B01
Average			0.2072			0.04020	
Std. Deviation			0.0007			0.005049	
RSD			0.341			12.56	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113239-A-4	191825		0.2077	TA SOIL LINNEAR	5/10/2022 4:03:08 PM	1.872	B02
580-113239-A-4	148950		0.2051	TA SOIL LINNEAR	5/10/2022 4:05:19 PM	1.466	B03
Average			0.2064			1.669	
Std. Deviation			0.002			0.2872	
RSD			0.891			17.20	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113238-A-1	9090.5		0.2072	TA SOIL LINNEAR	5/10/2022 4:07:30 PM	0.06347	B04
580-113238-A-1	8554.4		0.2030	TA SOIL LINNEAR	5/10/2022 4:09:41 PM	0.05935	B05
Average			0.2051			0.06141	
Std. Deviation			0.003			0.002911	
RSD			1.448			4.740	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
590-17421-A-1	67793		0.2097	TA SOIL LINNEAR	5/10/2022 4:16:41 PM	0.6383	B08

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
590-17421-A-1	60306		0.2018	TA SOIL LINNEAR	5/10/2022 4:18:52 PM	0.5870	B09
Average			0.2058			0.6127	
Std. Deviation			0.006			0.03628	
RSD			2.715			5.921	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
590-17421-A-3	74858		0.2048	TA SOIL LINNEAR	5/10/2022 4:21:03 PM	0.7245	B10
590-17421-A-3	83879		0.2021	TA SOIL LINNEAR	5/10/2022 4:23:14 PM	0.8260	C01
Average			0.2035			0.7753	
Std. Deviation			0.002			0.07175	
RSD			0.938			9.255	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113240-A-1	154941		0.2035	TA SOIL LINNEAR	5/10/2022 4:25:25 PM	1.538	C02
580-113240-A-1	154998		0.2037	TA SOIL LINNEAR	5/10/2022 4:27:24 PM	1.537	C03
Average			0.2036			1.538	
Std. Deviation			0.0001			0.0007	
RSD			0.069			0.043	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113240-A-2	103211		0.2033	TA SOIL LINNEAR	5/10/2022 4:29:35 PM	1.017	C04
580-113240-A-2	101462		0.2082	TA SOIL LINNEAR	5/10/2022 4:31:46 PM	0.9755	C05
Average			0.2058			0.9961	
Std. Deviation			0.003			0.02914	
RSD			1.684			2.925	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113240-A-3	14168		0.2015	TA SOIL LINNEAR	5/10/2022 4:33:57 PM	0.1171	C06
580-113240-A-3	15631		0.2012	TA SOIL LINNEAR	5/10/2022 4:36:08 PM	0.1322	C07
Average			0.2014			0.1246	



# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
Std. Deviation			0.0002			0.01070	
RSD			0.105			8.582	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113240-A-4	110908		0.2039	TA SOIL LINNEAR	5/10/2022 4:38:19 PM	1.091	C08
580-113240-A-4	71979		0.2085	TA SOIL LINNEAR	5/10/2022 4:40:32 PM	0.6833	C09
Average			0.2062			0.8873	
Std. Deviation			0.003			0.28850	
RSD			1.577			32.52	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113343-A-1	574650		0.2027	TA SOIL LINNEAR	5/10/2022 4:42:44 PM	5.802	C10
580-113343-A-1	634028		0.2057	TA SOIL LINNEAR	5/10/2022 4:44:55 PM	6.311	D01
Average			0.2042			6.057	
Std. Deviation			0.002			0.3599	
RSD			1.039			5.942	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113343-A-2	476966		0.2046	TA SOIL LINNEAR	5/10/2022 4:47:06 PM	4.766	D02
580-113343-A-2	384876		0.2018	TA SOIL LINNEAR	5/10/2022 4:49:18 PM	3.894	D03
Average			0.2032			4.330	
Std. Deviation			0.002			0.6167	
RSD			0.974			14.24	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113343-A-3	956057		0.2036	TA SOIL LINNEAR	5/10/2022 4:51:30 PM	9.628	D04
580-113343-A-3	665819		0.2016	TA SOIL LINNEAR	5/10/2022 4:53:45 PM	6.764	D05
Average			0.2026			8.196	
Std. Deviation			0.001			2.0257	
RSD			0.698			24.72	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113288-A-8	59834		0.2004	TA SOIL LINNEAR	5/10/2022 4:56:11 PM	0.5863	D06
580-113288-A-8	60021		0.2067	TA SOIL LINNEAR	5/10/2022 4:58:36 PM	0.5703	D07
Average			0.2036			0.5783	
Std. Deviation			0.004			0.01132	
RSD			2.189			1.957	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
DU 580-113288-A-8	62217		0.2086	TA SOIL LINNEAR	5/10/2022 5:06:07 PM	0.5867	D10
DU 580-113288-A-8	60168		0.2084	TA SOIL LINNEAR	5/10/2022 5:08:32 PM	0.5671	E01
Average			0.2085			0.5769	
Std. Deviation			0.0001			0.01390	
RSD			0.068			2.409	

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MS 580-113288-A-8	651833	0.1011	0.1034	TA SOIL LINNEAR	5/10/2022 5:11:25 PM	12.91	E02

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
MSD 580-113288-A-8	629718	0.1044	0.1021	TA SOIL LINNEAR	5/10/2022 5:13:56 PM	12.63	E03

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113275-A-1	6091.6		0.2039	TA SOIL LINNEAR	5/10/2022 5:16:12 PM	0.03425	E04
580-113275-A-1	7710.1		0.2072	TA SOIL LINNEAR	5/10/2022 5:18:33 PM	0.04977	E05
Average			0.2056			0.04201	
Std. Deviation			0.002			0.010972	
RSD			1.135			26.12	

# SC632

Name	Carbon Low Area	Description	Mass	Method	Analysis Date	Carbon %	Location
580-113275-D-2	73602		0.2041	TA SOIL LINNEAR	5/10/2022 5:20:45 PM	0.7144	E06
580-113275-D-2	73146		0.2068	TA SOIL LINNEAR	5/10/2022 5:22:56 PM	0.7005	E07
Average			0.2055			0.7074	
Std. Deviation			0.002			0.00980	
RSD			0.929			1.385	

# General Chemistry Raw Data Report

Job ID: 580-113239-1

**Batch: 390214**  
**Method: Moisture**

**Analyst Initials: JSM**  
**Instrument: NONE**

**Lab Sample ID: 580-113239-A-1**

**Analysis Date: May 11, 2022 11:50**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Solids	None	1	56.25	%
Percent Moisture	None	1	43.75	%

**Lab Sample ID: 580-113239-A-2**

**Analysis Date: May 11, 2022 11:50**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Solids	None	1	68.6315789473684	%
Percent Moisture	None	1	31.3684210526316	%

**Lab Sample ID: 580-113239-A-3**

**Analysis Date: May 11, 2022 11:50**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Solids	None	1	75.5027422303474	%
Percent Moisture	None	1	24.4972577696526	%

**Lab Sample ID: 580-113239-A-4**

**Analysis Date: May 11, 2022 11:50**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Solids	None	1	53.9351851851852	%
Percent Moisture	None	1	46.0648148148148	%



# Shipping and Receiving Documents

# Chain of Custody

PASI Minnesota Laboratory



Workorder: 10606394

Workorder Name: D3593500

Report Invoice To

Results Requested By: 5/20/2022

Subcontract to

Requested Analyte

Kongmeng Vang  
 Pace Analytical Minnesota  
 1700 Elm Street  
 Minneapolis, MN 55414  
 Phone (612)607-1700  
 Email: kongmeng.vang@pacelabs.com

P.O.  
 Eurofins Frontier Global Sciences  
 5755 8th Street East  
 Tacoma, WA 98424

State of Sample Origin: WA

JGCU

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers		LAB USE ONLY
					Unpreserved	Preserved	
1	BNSF-BG14-042722-0-5.5	4/27/2022 09:00	10606394001	Solid	1		
2	BNSF-BG15-042722-0-10	4/27/2022 09:25	10606394002	Solid	1		
3	BNSF-BG16-042722-0-10	4/27/2022 09:45	10606394003	Solid	1		
4	BNSF-BG17-042722-0-10	4/27/2022 10:05	10606394004	Solid	1		
5							

SW9060A TOC - Eurofins  
 350.1 Ammonia

Transfers	Released By	Date/Time	Received By	Date/Time	Received on Ice	Y or N	Samples Intact	Y or N
1	<i>[Signature]</i>	4/29/22 17:00	<i>[Signature]</i>	4/30/22 09:30				
2								
3								

Comments

Lvl 4 data package, Jacobs UPRR EQEDD

Cooler Temperature on Receipt °C

*Feb 15*  
*sm B*  
*Sub/used*  
*A3 0.2/0.4*



580-113239 Chain of Custody

# Login Sample Receipt Checklist

Client: Pace Analytical Services, LLC

Job Number: 580-113239-1

**Login Number: 113239**  
**List Number: 1**  
**Creator: Presley, Kim A**

**List Source: Eurofins Seattle**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

June 08, 2022

Bernice Kidd  
Jacobs Engineering  
2525 Air Park Drive  
Redding, CA 96001

RE: Project: D3593500-Revised Report  
Pace Project No.: 10606395

Dear Bernice Kidd:

Enclosed are the analytical results for sample(s) received by the laboratory on April 29, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Minneapolis

This report was revised on June 8th, 2022, to include a revised subcontract report from Eurofins.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kongmeng Vang  
kongmeng.vang@pacelabs.com  
(612)607-1700  
Project Manager

Enclosures

cc: Kris Ivarson, Jacobs  
Jennifer Ulrich, Jacobs



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
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## CERTIFICATIONS

Project: D3593500-Revised Report

Pace Project No.: 10606395

### Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414  
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab

A2LA Certification #: 2926.01\*  
Alabama Certification #: 40770  
Alaska Contaminated Sites Certification #: 17-009\*  
Alaska DW Certification #: MN00064  
Arizona Certification #: AZ0014\*  
Arkansas DW Certification #: MN00064  
Arkansas WW Certification #: 88-0680  
California Certification #: 2929  
Colorado Certification #: MN00064  
Connecticut Certification #: PH-0256  
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137  
Florida Certification #: E87605\*  
Georgia Certification #: 959  
Hawaii Certification #: MN00064  
Idaho Certification #: MN00064  
Illinois Certification #: 200011  
Indiana Certification #: C-MN-01  
Iowa Certification #: 368  
Kansas Certification #: E-10167  
Kentucky DW Certification #: 90062  
Kentucky WW Certification #: 90062  
Louisiana DEQ Certification #: AI-03086\*  
Louisiana DW Certification #: MN00064  
Maine Certification #: MN00064\*  
Maryland Certification #: 322  
Michigan Certification #: 9909  
Minnesota Certification #: 027-053-137\*  
Minnesota Dept of Ag Approval: via MN 027-053-137  
Minnesota Petrofund Registration #: 1240\*  
Mississippi Certification #: MN00064

Missouri Certification #: 10100  
Montana Certification #: CERT0092  
Nebraska Certification #: NE-OS-18-06  
Nevada Certification #: MN00064  
New Hampshire Certification #: 2081\*  
New Jersey Certification #: MN002  
New York Certification #: 11647\*  
North Carolina DW Certification #: 27700  
North Carolina WW Certification #: 530  
North Dakota Certification (A2LA) #: R-036  
North Dakota Certification (MN) #: R-036  
Ohio DW Certification #: 41244  
Ohio VAP Certification (1700) #: CL101  
Ohio VAP Certification (1800) #: CL110\*  
Oklahoma Certification #: 9507\*  
Oregon Primary Certification #: MN300001  
Oregon Secondary Certification #: MN200001\*  
Pennsylvania Certification #: 68-00563\*  
Puerto Rico Certification #: MN00064  
South Carolina Certification #: 74003001  
Tennessee Certification #: TN02818  
Texas Certification #: T104704192\*  
Utah Certification #: MN00064\*  
Vermont Certification #: VT-027053137  
Virginia Certification #: 460163\*  
Washington Certification #: C486\*  
West Virginia DEP Certification #: 382  
West Virginia DW Certification #: 9952 C  
Wisconsin Certification #: 999407970  
Wyoming UST Certification #: via A2LA 2926.01  
USDA Permit #: P330-19-00208  
\*Please Note: Applicable air certifications are denoted with an asterisk (\*).

### Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122

Alabama Certification #: 40660  
Alaska Certification #: 17-026  
Arizona Certification #: AZ0612  
Arkansas Certification #: 88-0469  
California Certification #: 2932  
Canada Certification #: 1461.01  
Colorado Certification #: TN00003  
Connecticut Certification #: PH-0197  
DOD Certification #: #1461.01  
EPA# TN00003  
Florida Certification #: E87487  
Georgia DW Certification #: 923  
Georgia Certification: NELAP  
Idaho Certification #: TN00003  
Illinois Certification #: 200008

Indiana Certification #: C-TN-01  
Iowa Certification #: 364  
Kansas Certification #: E-10277  
Kentucky UST Certification #: 16  
Kentucky Certification #: 90010  
Louisiana Certification #: AI30792  
Louisiana DW Certification #: LA180010  
Maine Certification #: TN0002  
Maryland Certification #: 324  
Massachusetts Certification #: M-TN003  
Michigan Certification #: 9958  
Minnesota Certification #: 047-999-395  
Mississippi Certification #: TN00003  
Missouri Certification #: 340  
Montana Certification #: CERT0086  
Nebraska Certification #: NE-OS-15-05

## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: D3593500-Revised Report

Pace Project No.: 10606395

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### **Pace Analytical Services National**

Nevada Certification #: TN-03-2002-34

New Hampshire Certification #: 2975

New Jersey Certification #: TN002

New Mexico DW Certification

New York Certification #: 11742

North Carolina Aquatic Toxicity Certification #: 41

North Carolina Drinking Water Certification #: 21704

North Carolina Environmental Certificate #: 375

North Dakota Certification #: R-140

Ohio VAP Certification #: CL0069

Oklahoma Certification #: 9915

Oregon Certification #: TN200002

Pennsylvania Certification #: 68-02979

Rhode Island Certification #: LAO00356

South Carolina Certification #: 84004

South Dakota Certification

Tennessee DW/Chem/Micro Certification #: 2006

Texas Certification #: T 104704245-17-14

Texas Mold Certification #: LAB0152

USDA Soil Permit #: P330-15-00234

Utah Certification #: TN00003

Vermont Dept. of Health: ID# VT-2006

Virginia Certification #: VT2006

Virginia Certification #: 460132

Washington Certification #: C847

West Virginia Certification #: 233

Wisconsin Certification #: 998093910

Wyoming UST Certification #: via A2LA 2926.01

A2LA-ISO 17025 Certification #: 1461.01

A2LA-ISO 17025 Certification #: 1461.02

AIHA-LAP/LLC EMLAP Certification #:100789

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: D3593500-Revised Report

Pace Project No.: 10606395

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10606395001	FD02-042722-0-10	Solid	04/27/22 10:10	04/29/22 08:50
10606395002	BNSF-BG18-042722-0-10	Solid	04/27/22 10:35	04/29/22 08:50
10606395003	BNSF-BG19-042722-0-10	Solid	04/27/22 11:05	04/29/22 08:50
10606395004	BNSF-SG03-042722-0-5.5	Solid	04/27/22 12:00	04/29/22 08:50

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: D3593500-Revised Report

Pace Project No.: 10606395

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10606395001	FD02-042722-0-10	NWTPH-Dx	TT2	4	PASI-M
		EPA 6020B	RJS	9	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	AGW	33	PAN
		SM 2540G	CMK	1	PAN
		EPA 9030B	BMD	1	PAN
10606395002	BNSF-BG18-042722-0-10	NWTPH-Dx	TT2	4	PASI-M
		EPA 6020B	RJS	9	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	AGW	33	PAN
		SM 2540G	CMK	1	PAN
		EPA 9030B	BMD	1	PAN
10606395003	BNSF-BG19-042722-0-10	NWTPH-Dx	TT2	4	PASI-M
		EPA 6020B	RJS	9	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	AGW	33	PAN
		SM 2540G	CMK	1	PAN
		EPA 9030B	BMD	1	PAN
10606395004	BNSF-SG03-042722-0-5.5	NWTPH-Dx	TT2	4	PASI-M
		EPA 6020B	RJS	9	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270E	AGW	33	PAN
		SM 2540G	CMK	1	PAN
		EPA 9030B	BMD	1	PAN

PAN = Pace National - Mt. Juliet

PASI-M = Pace Analytical Services - Minneapolis

### REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10606395

---

**Date:** June 08, 2022

**BNSF-BG19-042722-0-10 (Lab ID: 10606395003)**

- Semi Volatile Organic Compounds (GC/MS) by Method 8270E - Dilution due to matrix

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10606395

---

**Method:** NWTPH-Dx

**Description:** NWTPH-Dx GCS

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

4 samples were analyzed for NWTPH-Dx by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10606395

---

**Method:** EPA 6020B

**Description:** 6020B MET ICPMS

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

### General Information:

4 samples were analyzed for EPA 6020B by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3050B with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 812437

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10606046001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 4308598)
  - Lead

R1: RPD value was outside control limits.

- MSD (Lab ID: 4308599)
  - Lead

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10606395

---

**Method:** EPA 7471B

**Description:** 7471B Mercury

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

4 samples were analyzed for EPA 7471B by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 7471B with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10606395

---

**Method:** EPA 8270E

**Description:** SVOA (GC/MS) 8270E

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

### General Information:

4 samples were analyzed for EPA 8270E by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 1860981

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10606395003

R1: RPD value was outside control limits.

- MSD (Lab ID: R3791358-4)
  - Benzoic acid
  - Carbazole
  - Di-n-butylphthalate
  - Di-n-octylphthalate
  - Pentachlorophenol
  - bis(2-Ethylhexyl)phthalate

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10606395

---

**Method:** SM 2540G

**Description:** Total Solids 2540 G-2011

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

4 samples were analyzed for SM 2540G by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: D3593500-Revised Report

Pace Project No.: 10606395

---

**Method:** EPA 9030B

**Description:** Wet Chemistry 9034/9030B

**Client:** BNSF\_Jacobs\_WA

**Date:** June 08, 2022

**General Information:**

4 samples were analyzed for EPA 9030B by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606395

Sample: **FD02-042722-0-10** Lab ID: **10606395001** Collected: 04/27/22 10:10 Received: 04/29/22 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Pace Analytical Services - Minneapolis									
Diesel Fuel Range	<b>52.0</b>	mg/kg	30.7	14.2	1	04/29/22 17:05	05/11/22 10:49	68334-30-5	
Motor Oil Range	<b>273</b>	mg/kg	20.5	10.2	1	04/29/22 17:05	05/11/22 10:49		
<b>Surrogates</b>									
n-Triacontane (S)	86	%	50-150		1	04/29/22 17:05	05/11/22 10:49		
o-Terphenyl (S)	82	%	50-150		1	04/29/22 17:05	05/11/22 10:49	84-15-1	
<b>6020B MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3050B									
Pace Analytical Services - Minneapolis									
Arsenic	<b>0.53J</b>	mg/kg	0.98	0.21	1	05/03/22 17:29	05/05/22 19:27	7440-38-2	
Cadmium	ND	mg/kg	0.16	0.062	1	05/03/22 17:29	05/05/22 19:27	7440-43-9	
Chromium	<b>4.8</b>	mg/kg	3.9	0.27	1	05/03/22 17:29	05/05/22 19:27	7440-47-3	
Copper	<b>10.3</b>	mg/kg	2.0	0.47	1	05/03/22 17:29	05/05/22 19:27	7440-50-8	
Lead	<b>0.73J</b>	mg/kg	0.98	0.058	1	05/03/22 17:29	05/05/22 19:27	7439-92-1	
Nickel	<b>3.5</b>	mg/kg	0.98	0.39	1	05/03/22 17:29	05/05/22 19:27	7440-02-0	
Selenium	<b>0.20J</b>	mg/kg	0.98	0.17	1	05/03/22 17:29	05/05/22 19:27	7782-49-2	
Silver	ND	mg/kg	0.98	0.28	1	05/03/22 17:29	05/05/22 19:27	7440-22-4	
Zinc	<b>12.0</b>	mg/kg	9.8	1.8	1	05/03/22 17:29	05/05/22 19:27	7440-66-6	
<b>7471B Mercury</b>									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Minneapolis									
Mercury	ND	mg/kg	0.036	0.016	1	05/03/22 12:07	05/10/22 12:45	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>51.4</b>	%	0.10	0.10	1		04/29/22 13:03		N2
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
Acenaphthene	ND	mg/kg	0.0609	0.00985	1	05/11/22 03:10	05/12/22 15:58	83-32-9	
Acenaphthylene	ND	mg/kg	0.0609	0.00857	1	05/11/22 03:10	05/12/22 15:58	208-96-8	
Anthracene	ND	mg/kg	0.0609	0.0108	1	05/11/22 03:10	05/12/22 15:58	120-12-7	
Benzoic acid	<b>0.327J</b>	mg/kg	3.05	0.216	1	05/11/22 03:10	05/12/22 15:58	65-85-0	J
Benzo(a)anthracene	ND	mg/kg	0.0609	0.0107	1	05/11/22 03:10	05/12/22 15:58	56-55-3	
Benzo(b)fluoranthene	ND	mg/kg	0.0609	0.0113	1	05/11/22 03:10	05/12/22 15:58	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0609	0.0108	1	05/11/22 03:10	05/12/22 15:58	207-08-9	
Benzo(g,h,i)perylene	ND	mg/kg	0.0609	0.0111	1	05/11/22 03:10	05/12/22 15:58	191-24-2	
Benzo(a)pyrene	ND	mg/kg	0.0609	0.0113	1	05/11/22 03:10	05/12/22 15:58	50-32-8	
Carbazole	ND	mg/kg	0.609	0.0188	1	05/11/22 03:10	05/12/22 15:58	86-74-8	
Chrysene	ND	mg/kg	0.0609	0.0121	1	05/11/22 03:10	05/12/22 15:58	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0609	0.0169	1	05/11/22 03:10	05/12/22 15:58	53-70-3	
Dibenzofuran	ND	mg/kg	0.609	0.0199	1	05/11/22 03:10	05/12/22 15:58	132-64-9	
Fluoranthene	ND	mg/kg	0.0609	0.0110	1	05/11/22 03:10	05/12/22 15:58	206-44-0	
Fluorene	ND	mg/kg	0.0609	0.00991	1	05/11/22 03:10	05/12/22 15:58	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0609	0.0172	1	05/11/22 03:10	05/12/22 15:58	193-39-5	

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### ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606395

**Sample: FD02-042722-0-10**      **Lab ID: 10606395001**      Collected: 04/27/22 10:10      Received: 04/29/22 08:50      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E    Preparation Method: 3546									
Pace National - Mt. Juliet									
1-Methylnaphthalene	ND	mg/kg	0.0609	0.00779	1	05/11/22 03:10	05/12/22 15:58	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0609	0.00789	1	05/11/22 03:10	05/12/22 15:58	91-57-6	
Naphthalene	ND	mg/kg	0.0609	0.0153	1	05/11/22 03:10	05/12/22 15:58	91-20-3	
Phenanthrene	ND	mg/kg	0.0609	0.0121	1	05/11/22 03:10	05/12/22 15:58	85-01-8	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.609	0.0771	1	05/11/22 03:10	05/12/22 15:58	117-81-7	
Di-n-butylphthalate	ND	mg/kg	0.609	0.0208	1	05/11/22 03:10	05/12/22 15:58	84-74-2	
Di-n-octylphthalate	ND	mg/kg	0.609	0.0411	1	05/11/22 03:10	05/12/22 15:58	117-84-0	
Pyrene	ND	mg/kg	0.0609	0.0118	1	05/11/22 03:10	05/12/22 15:58	129-00-0	
3&4-Methylphenol(m&p Cresol)	<b>0.387J</b>	mg/kg	0.609	0.0190	1	05/11/22 03:10	05/12/22 15:58		J
Pentachlorophenol	ND	mg/kg	0.609	0.0164	1	05/11/22 03:10	05/12/22 15:58	87-86-5	
Phenol	<b>0.0534J</b>	mg/kg	0.609	0.0245	1	05/11/22 03:10	05/12/22 15:58	108-95-2	J
<b>Surrogates</b>									
2-Fluorophenol (S)	53.1	%	12.0-120		1	05/11/22 03:10	05/12/22 15:58	367-12-4	
Phenol-d5 (S)	50.2	%	10.0-120		1	05/11/22 03:10	05/12/22 15:58	4165-62-2	
Nitrobenzene-d5 (S)	52.8	%	10.0-122		1	05/11/22 03:10	05/12/22 15:58	4165-60-0	
2-Fluorobiphenyl (S)	50.3	%	15.0-120		1	05/11/22 03:10	05/12/22 15:58	321-60-8	
2,4,6-Tribromophenol (S)	59.9	%	10.0-127		1	05/11/22 03:10	05/12/22 15:58	118-79-6	
p-Terphenyl-d14 (S)	57.5	%	10.0-120		1	05/11/22 03:10	05/12/22 15:58	1718-51-0	
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G    Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>54.7</b>	%			1	05/04/22 11:21	05/04/22 11:39		
<b>Wet Chemistry 9034/9030B</b>									
Analytical Method: EPA 9030B    Preparation Method: 9030B									
Pace National - Mt. Juliet									
Sulfide	ND	mg/kg	137	54.8	1	05/02/22 16:22	05/04/22 19:00	18496-25-8	

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## ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606395

Sample: **BNSF-BG18-042722-0-10** Lab ID: **10606395002** Collected: 04/27/22 10:35 Received: 04/29/22 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Pace Analytical Services - Minneapolis									
Diesel Fuel Range	<b>20.6J</b>	mg/kg	27.9	12.9	1	04/29/22 17:05	05/11/22 11:12	68334-30-5	
Motor Oil Range	<b>179</b>	mg/kg	18.6	9.3	1	04/29/22 17:05	05/11/22 11:12		
<b>Surrogates</b>									
n-Triacontane (S)	131	%	50-150		1	04/29/22 17:05	05/11/22 11:12		
o-Terphenyl (S)	80	%	50-150		1	04/29/22 17:05	05/11/22 11:12	84-15-1	
<b>6020B MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3050B									
Pace Analytical Services - Minneapolis									
Arsenic	<b>0.54J</b>	mg/kg	0.86	0.19	1	05/03/22 17:29	05/05/22 19:30	7440-38-2	
Cadmium	ND	mg/kg	0.14	0.054	1	05/03/22 17:29	05/05/22 19:30	7440-43-9	
Chromium	<b>5.2</b>	mg/kg	3.4	0.24	1	05/03/22 17:29	05/05/22 19:30	7440-47-3	
Copper	<b>8.3</b>	mg/kg	1.7	0.42	1	05/03/22 17:29	05/05/22 19:30	7440-50-8	
Lead	<b>0.98</b>	mg/kg	0.86	0.051	1	05/03/22 17:29	05/05/22 19:30	7439-92-1	
Nickel	<b>3.6</b>	mg/kg	0.86	0.34	1	05/03/22 17:29	05/05/22 19:30	7440-02-0	
Selenium	<b>0.18J</b>	mg/kg	0.86	0.15	1	05/03/22 17:29	05/05/22 19:30	7782-49-2	
Silver	ND	mg/kg	0.86	0.25	1	05/03/22 17:29	05/05/22 19:30	7440-22-4	
Zinc	<b>13.6</b>	mg/kg	8.6	1.5	1	05/03/22 17:29	05/05/22 19:30	7440-66-6	
<b>7471B Mercury</b>									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Minneapolis									
Mercury	ND	mg/kg	0.035	0.015	1	05/03/22 12:07	05/10/22 12:46	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>46.4</b>	%	0.10	0.10	1		04/29/22 13:03		N2
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
Acenaphthene	ND	mg/kg	0.0565	0.00915	1	05/11/22 03:10	05/12/22 10:39	83-32-9	
Acenaphthylene	ND	mg/kg	0.0565	0.00796	1	05/11/22 03:10	05/12/22 10:39	208-96-8	
Anthracene	ND	mg/kg	0.0565	0.0101	1	05/11/22 03:10	05/12/22 10:39	120-12-7	
Benzoic acid	ND	mg/kg	2.84	0.200	1	05/11/22 03:10	05/12/22 10:39	65-85-0	
Benzo(a)anthracene	ND	mg/kg	0.0565	0.00997	1	05/11/22 03:10	05/12/22 10:39	56-55-3	
Benzo(b)fluoranthene	ND	mg/kg	0.0565	0.0105	1	05/11/22 03:10	05/12/22 10:39	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.0565	0.0101	1	05/11/22 03:10	05/12/22 10:39	207-08-9	
Benzo(g,h,i)perylene	ND	mg/kg	0.0565	0.0103	1	05/11/22 03:10	05/12/22 10:39	191-24-2	
Benzo(a)pyrene	ND	mg/kg	0.0565	0.0105	1	05/11/22 03:10	05/12/22 10:39	50-32-8	
Carbazole	ND	mg/kg	0.565	0.0175	1	05/11/22 03:10	05/12/22 10:39	86-74-8	
Chrysene	ND	mg/kg	0.0565	0.0112	1	05/11/22 03:10	05/12/22 10:39	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0565	0.0157	1	05/11/22 03:10	05/12/22 10:39	53-70-3	
Dibenzofuran	ND	mg/kg	0.565	0.0185	1	05/11/22 03:10	05/12/22 10:39	132-64-9	
Fluoranthene	ND	mg/kg	0.0565	0.0102	1	05/11/22 03:10	05/12/22 10:39	206-44-0	
Fluorene	ND	mg/kg	0.0565	0.00920	1	05/11/22 03:10	05/12/22 10:39	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.0565	0.0160	1	05/11/22 03:10	05/12/22 10:39	193-39-5	

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## ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606395

**Sample: BNSF-BG18-042722-0-10**    **Lab ID: 10606395002**    Collected: 04/27/22 10:35    Received: 04/29/22 08:50    Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E    Preparation Method: 3546									
Pace National - Mt. Juliet									
1-Methylnaphthalene	ND	mg/kg	0.0565	0.00723	1	05/11/22 03:10	05/12/22 10:39	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0565	0.00733	1	05/11/22 03:10	05/12/22 10:39	91-57-6	
Naphthalene	ND	mg/kg	0.0565	0.0142	1	05/11/22 03:10	05/12/22 10:39	91-20-3	
Phenanthrene	ND	mg/kg	0.0565	0.0112	1	05/11/22 03:10	05/12/22 10:39	85-01-8	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.565	0.0716	1	05/11/22 03:10	05/12/22 10:39	117-81-7	
Di-n-butylphthalate	ND	mg/kg	0.565	0.0194	1	05/11/22 03:10	05/12/22 10:39	84-74-2	
Di-n-octylphthalate	ND	mg/kg	0.565	0.0382	1	05/11/22 03:10	05/12/22 10:39	117-84-0	
Pyrene	ND	mg/kg	0.0565	0.0110	1	05/11/22 03:10	05/12/22 10:39	129-00-0	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.565	0.0177	1	05/11/22 03:10	05/12/22 10:39		
Pentachlorophenol	ND	mg/kg	0.565	0.0152	1	05/11/22 03:10	05/12/22 10:39	87-86-5	
Phenol	ND	mg/kg	0.565	0.0227	1	05/11/22 03:10	05/12/22 10:39	108-95-2	
<b>Surrogates</b>									
2-Fluorophenol (S)	55.7	%	12.0-120		1	05/11/22 03:10	05/12/22 10:39	367-12-4	
Phenol-d5 (S)	56.0	%	10.0-120		1	05/11/22 03:10	05/12/22 10:39	4165-62-2	
Nitrobenzene-d5 (S)	61.0	%	10.0-122		1	05/11/22 03:10	05/12/22 10:39	4165-60-0	
2-Fluorobiphenyl (S)	50.0	%	15.0-120		1	05/11/22 03:10	05/12/22 10:39	321-60-8	
2,4,6-Tribromophenol (S)	59.7	%	10.0-127		1	05/11/22 03:10	05/12/22 10:39	118-79-6	
p-Terphenyl-d14 (S)	58.8	%	10.0-120		1	05/11/22 03:10	05/12/22 10:39	1718-51-0	
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G    Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>58.9</b>	%			1	05/04/22 11:21	05/04/22 11:39		
<b>Wet Chemistry 9034/9030B</b>									
Analytical Method: EPA 9030B    Preparation Method: 9030B									
Pace National - Mt. Juliet									
Sulfide	<b>76.4J</b>	mg/kg	127	50.9	1	05/02/22 16:22	05/04/22 19:00	18496-25-8	J

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### ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606395

**Sample: BNSF-BG19-042722-0-10    Lab ID: 10606395003    Collected: 04/27/22 11:05    Received: 04/29/22 08:50    Matrix: Solid**

**Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.**

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx    Preparation Method: EPA 3550									
Pace Analytical Services - Minneapolis									
Diesel Fuel Range	<b>10.5J</b>	mg/kg	19.5	9.0	1	04/29/22 17:05	05/11/22 11:34	68334-30-5	
Motor Oil Range	<b>30.6</b>	mg/kg	13.0	6.5	1	04/29/22 17:05	05/11/22 11:34		
<b>Surrogates</b>									
n-Triacontane (S)	82	%	50-150		1	04/29/22 17:05	05/11/22 11:34		
o-Terphenyl (S)	82	%	50-150		1	04/29/22 17:05	05/11/22 11:34	84-15-1	
<b>6020B MET ICPMS</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3050B									
Pace Analytical Services - Minneapolis									
Arsenic	<b>2.5</b>	mg/kg	0.64	0.14	1	05/03/22 17:29	05/05/22 19:34	7440-38-2	
Cadmium	<b>0.11</b>	mg/kg	0.10	0.040	1	05/03/22 17:29	05/05/22 19:34	7440-43-9	
Chromium	<b>8.5</b>	mg/kg	2.6	0.18	1	05/03/22 17:29	05/05/22 19:34	7440-47-3	
Copper	<b>7.0</b>	mg/kg	1.3	0.31	1	05/03/22 17:29	05/05/22 19:34	7440-50-8	
Lead	<b>3.6</b>	mg/kg	0.64	0.038	1	05/03/22 17:29	05/05/22 19:34	7439-92-1	
Nickel	<b>9.5</b>	mg/kg	0.64	0.25	1	05/03/22 17:29	05/05/22 19:34	7440-02-0	
Selenium	<b>0.12J</b>	mg/kg	0.64	0.11	1	05/03/22 17:29	05/05/22 19:34	7782-49-2	
Silver	ND	mg/kg	0.64	0.19	1	05/03/22 17:29	05/05/22 19:34	7440-22-4	
Zinc	<b>52.3</b>	mg/kg	6.4	1.1	1	05/03/22 17:29	05/05/22 19:34	7440-66-6	
<b>7471B Mercury</b>									
Analytical Method: EPA 7471B    Preparation Method: EPA 7471B									
Pace Analytical Services - Minneapolis									
Mercury	ND	mg/kg	0.025	0.011	1	05/03/22 12:07	05/10/22 12:48	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>23.3</b>	%	0.10	0.10	1		04/29/22 13:03		N2
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E    Preparation Method: 3546									
Pace National - Mt. Juliet									
Acenaphthene	ND	mg/kg	0.217	0.0349	5	05/11/22 03:10	05/12/22 15:53	83-32-9	
Acenaphthylene	ND	mg/kg	0.217	0.0304	5	05/11/22 03:10	05/12/22 15:53	208-96-8	
Anthracene	ND	mg/kg	0.217	0.0385	5	05/11/22 03:10	05/12/22 15:53	120-12-7	
Benzoic acid	ND	mg/kg	10.8	0.766	5	05/11/22 03:10	05/12/22 15:53	65-85-0	R1
Benzo(a)anthracene	ND	mg/kg	0.217	0.0380	5	05/11/22 03:10	05/12/22 15:53	56-55-3	
Benzo(b)fluoranthene	ND	mg/kg	0.217	0.0404	5	05/11/22 03:10	05/12/22 15:53	205-99-2	
Benzo(k)fluoranthene	ND	mg/kg	0.217	0.0384	5	05/11/22 03:10	05/12/22 15:53	207-08-9	
Benzo(g,h,i)perylene	ND	mg/kg	0.217	0.0396	5	05/11/22 03:10	05/12/22 15:53	191-24-2	
Benzo(a)pyrene	ND	mg/kg	0.217	0.0401	5	05/11/22 03:10	05/12/22 15:53	50-32-8	
Carbazole	ND	mg/kg	2.17	0.0668	5	05/11/22 03:10	05/12/22 15:53	86-74-8	R1
Chrysene	ND	mg/kg	0.217	0.0430	5	05/11/22 03:10	05/12/22 15:53	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.217	0.0600	5	05/11/22 03:10	05/12/22 15:53	53-70-3	
Dibenzofuran	ND	mg/kg	2.17	0.0707	5	05/11/22 03:10	05/12/22 15:53	132-64-9	
Fluoranthene	ND	mg/kg	0.217	0.0391	5	05/11/22 03:10	05/12/22 15:53	206-44-0	
Fluorene	ND	mg/kg	0.217	0.0352	5	05/11/22 03:10	05/12/22 15:53	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.217	0.0611	5	05/11/22 03:10	05/12/22 15:53	193-39-5	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606395

**Sample: BNSF-BG19-042722-0-10**    **Lab ID: 10606395003**    Collected: 04/27/22 11:05    Received: 04/29/22 08:50    Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E    Preparation Method: 3546									
Pace National - Mt. Juliet									
1-Methylnaphthalene	ND	mg/kg	0.217	0.0276	5	05/11/22 03:10	05/12/22 15:53	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.217	0.0280	5	05/11/22 03:10	05/12/22 15:53	91-57-6	
Naphthalene	ND	mg/kg	0.217	0.0543	5	05/11/22 03:10	05/12/22 15:53	91-20-3	
Phenanthrene	ND	mg/kg	0.217	0.0430	5	05/11/22 03:10	05/12/22 15:53	85-01-8	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	2.17	0.274	5	05/11/22 03:10	05/12/22 15:53	117-81-7	R1
Di-n-butylphthalate	ND	mg/kg	2.17	0.0740	5	05/11/22 03:10	05/12/22 15:53	84-74-2	R1
Di-n-octylphthalate	ND	mg/kg	2.17	0.147	5	05/11/22 03:10	05/12/22 15:53	117-84-0	R1
Pyrene	ND	mg/kg	0.217	0.0421	5	05/11/22 03:10	05/12/22 15:53	129-00-0	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	2.17	0.0675	5	05/11/22 03:10	05/12/22 15:53		
Pentachlorophenol	ND	mg/kg	2.17	0.0581	5	05/11/22 03:10	05/12/22 15:53	87-86-5	R1
Phenol	ND	mg/kg	2.17	0.0870	5	05/11/22 03:10	05/12/22 15:53	108-95-2	
<b>Surrogates</b>									
2-Fluorophenol (S)	49.1	%	12.0-120		5	05/11/22 03:10	05/12/22 15:53	367-12-4	
Phenol-d5 (S)	44.5	%	10.0-120		5	05/11/22 03:10	05/12/22 15:53	4165-62-2	
Nitrobenzene-d5 (S)	52.5	%	10.0-122		5	05/11/22 03:10	05/12/22 15:53	4165-60-0	
2-Fluorobiphenyl (S)	44.4	%	15.0-120		5	05/11/22 03:10	05/12/22 15:53	321-60-8	
2,4,6-Tribromophenol (S)	49.5	%	10.0-127		5	05/11/22 03:10	05/12/22 15:53	118-79-6	
p-Terphenyl-d14 (S)	50.9	%	10.0-120		5	05/11/22 03:10	05/12/22 15:53	1718-51-0	
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G    Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>77.0</b>	%			1	05/04/22 11:21	05/04/22 11:39		
<b>Wet Chemistry 9034/9030B</b>									
Analytical Method: EPA 9030B    Preparation Method: 9030B									
Pace National - Mt. Juliet									
Sulfide	ND	mg/kg	97.3	38.9	1	05/02/22 16:22	05/04/22 19:00	18496-25-8	

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## ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606395

Sample: **BNSF-SG03-042722-0-5.5** Lab ID: **10606395004** Collected: 04/27/22 12:00 Received: 04/29/22 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Dx GCS</b>									
Analytical Method: NWTPH-Dx Preparation Method: EPA 3550									
Pace Analytical Services - Minneapolis									
Diesel Fuel Range	<b>21.4</b>	mg/kg	21.0	9.7	1	04/29/22 17:05	05/11/22 11:57	68334-30-5	
Motor Oil Range	<b>77.6</b>	mg/kg	14.0	7.0	1	04/29/22 17:05	05/11/22 11:57		
<b>Surrogates</b>									
n-Triacontane (S)	69	%	50-150		1	04/29/22 17:05	05/11/22 11:57		
o-Terphenyl (S)	78	%	50-150		1	04/29/22 17:05	05/11/22 11:57	84-15-1	
<b>6020B MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3050B									
Pace Analytical Services - Minneapolis									
Arsenic	<b>3.4</b>	mg/kg	0.69	0.15	1	05/03/22 17:29	05/05/22 19:38	7440-38-2	
Cadmium	<b>0.28</b>	mg/kg	0.11	0.043	1	05/03/22 17:29	05/05/22 19:38	7440-43-9	
Chromium	<b>12.9</b>	mg/kg	2.8	0.19	1	05/03/22 17:29	05/05/22 19:38	7440-47-3	
Copper	<b>18.9</b>	mg/kg	1.4	0.33	1	05/03/22 17:29	05/05/22 19:38	7440-50-8	
Lead	<b>8.8</b>	mg/kg	0.69	0.041	1	05/03/22 17:29	05/05/22 19:38	7439-92-1	
Nickel	<b>15.3</b>	mg/kg	0.69	0.27	1	05/03/22 17:29	05/05/22 19:38	7440-02-0	
Selenium	<b>0.21J</b>	mg/kg	0.69	0.12	1	05/03/22 17:29	05/05/22 19:38	7782-49-2	
Silver	ND	mg/kg	0.69	0.20	1	05/03/22 17:29	05/05/22 19:38	7440-22-4	
Zinc	<b>60.2</b>	mg/kg	6.9	1.2	1	05/03/22 17:29	05/05/22 19:38	7440-66-6	
<b>7471B Mercury</b>									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Minneapolis									
Mercury	<b>0.028</b>	mg/kg	0.028	0.012	1	05/03/22 12:07	05/10/22 12:49	7439-97-6	
<b>Dry Weight / %M by ASTM D2974</b>									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	<b>29.7</b>	%	0.10	0.10	1		04/29/22 13:03		N2
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
Acenaphthene	<b>0.0604</b>	mg/kg	0.0441	0.00714	1	05/11/22 03:10	05/12/22 11:42	83-32-9	
Acenaphthylene	ND	mg/kg	0.0441	0.00621	1	05/11/22 03:10	05/12/22 11:42	208-96-8	
Anthracene	<b>0.126</b>	mg/kg	0.0441	0.00785	1	05/11/22 03:10	05/12/22 11:42	120-12-7	
Benzoic acid	ND	mg/kg	2.21	0.156	1	05/11/22 03:10	05/12/22 11:42	65-85-0	
Benzo(a)anthracene	<b>0.384</b>	mg/kg	0.0441	0.00777	1	05/11/22 03:10	05/12/22 11:42	56-55-3	
Benzo(b)fluoranthene	<b>0.463</b>	mg/kg	0.0441	0.00822	1	05/11/22 03:10	05/12/22 11:42	205-99-2	
Benzo(k)fluoranthene	<b>0.168</b>	mg/kg	0.0441	0.00784	1	05/11/22 03:10	05/12/22 11:42	207-08-9	
Benzo(g,h,i)perylene	<b>0.236</b>	mg/kg	0.0441	0.00806	1	05/11/22 03:10	05/12/22 11:42	191-24-2	
Benzo(a)pyrene	<b>0.434</b>	mg/kg	0.0441	0.00820	1	05/11/22 03:10	05/12/22 11:42	50-32-8	
Carbazole	<b>0.0800J</b>	mg/kg	0.441	0.0136	1	05/11/22 03:10	05/12/22 11:42	86-74-8	J
Chrysene	<b>0.400</b>	mg/kg	0.0441	0.00877	1	05/11/22 03:10	05/12/22 11:42	218-01-9	
Dibenz(a,h)anthracene	<b>0.0588</b>	mg/kg	0.0441	0.0122	1	05/11/22 03:10	05/12/22 11:42	53-70-3	
Dibenzofuran	<b>0.0365J</b>	mg/kg	0.441	0.0144	1	05/11/22 03:10	05/12/22 11:42	132-64-9	J
Fluoranthene	<b>0.844</b>	mg/kg	0.0441	0.00796	1	05/11/22 03:10	05/12/22 11:42	206-44-0	
Fluorene	<b>0.0528</b>	mg/kg	0.0441	0.00718	1	05/11/22 03:10	05/12/22 11:42	86-73-7	
Indeno(1,2,3-cd)pyrene	<b>0.246</b>	mg/kg	0.0441	0.0125	1	05/11/22 03:10	05/12/22 11:42	193-39-5	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: D3593500-Revised Report

Pace Project No.: 10606395

**Sample: BNSF-SG03-042722-0-5.5 Lab ID: 10606395004** Collected: 04/27/22 12:00 Received: 04/29/22 08:50 Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270E</b>									
Analytical Method: EPA 8270E Preparation Method: 3546									
Pace National - Mt. Juliet									
1-Methylnaphthalene	<b>0.00640J</b>	mg/kg	0.0441	0.00564	1	05/11/22 03:10	05/12/22 11:42	90-12-0	J
2-Methylnaphthalene	<b>0.00871J</b>	mg/kg	0.0441	0.00572	1	05/11/22 03:10	05/12/22 11:42	91-57-6	J
Naphthalene	<b>0.0211J</b>	mg/kg	0.0441	0.0111	1	05/11/22 03:10	05/12/22 11:42	91-20-3	J
Phenanthrene	<b>0.507</b>	mg/kg	0.0441	0.00875	1	05/11/22 03:10	05/12/22 11:42	85-01-8	
bis(2-Ethylhexyl)phthalate	ND	mg/kg	0.441	0.0559	1	05/11/22 03:10	05/12/22 11:42	117-81-7	
Di-n-butylphthalate	ND	mg/kg	0.441	0.0151	1	05/11/22 03:10	05/12/22 11:42	84-74-2	
Di-n-octylphthalate	ND	mg/kg	0.441	0.0298	1	05/11/22 03:10	05/12/22 11:42	117-84-0	
Pyrene	<b>0.624</b>	mg/kg	0.0441	0.00858	1	05/11/22 03:10	05/12/22 11:42	129-00-0	
3&4-Methylphenol(m&p Cresol)	ND	mg/kg	0.441	0.0138	1	05/11/22 03:10	05/12/22 11:42		
Pentachlorophenol	ND	mg/kg	0.441	0.0119	1	05/11/22 03:10	05/12/22 11:42	87-86-5	
Phenol	ND	mg/kg	0.441	0.0177	1	05/11/22 03:10	05/12/22 11:42	108-95-2	
<b>Surrogates</b>									
2-Fluorophenol (S)	43.3	%	12.0-120		1	05/11/22 03:10	05/12/22 11:42	367-12-4	
Phenol-d5 (S)	44.4	%	10.0-120		1	05/11/22 03:10	05/12/22 11:42	4165-62-2	
Nitrobenzene-d5 (S)	47.3	%	10.0-122		1	05/11/22 03:10	05/12/22 11:42	4165-60-0	
2-Fluorobiphenyl (S)	41.5	%	15.0-120		1	05/11/22 03:10	05/12/22 11:42	321-60-8	
2,4,6-Tribromophenol (S)	47.7	%	10.0-127		1	05/11/22 03:10	05/12/22 11:42	118-79-6	
p-Terphenyl-d14 (S)	45.7	%	10.0-120		1	05/11/22 03:10	05/12/22 11:42	1718-51-0	
<b>Total Solids 2540 G-2011</b>									
Analytical Method: SM 2540G Preparation Method: SM 2540 G									
Pace National - Mt. Juliet									
Total Solids	<b>75.5</b>	%			1	05/04/22 11:21	05/04/22 11:39		
<b>Wet Chemistry 9034/9030B</b>									
Analytical Method: EPA 9030B Preparation Method: 9030B									
Pace National - Mt. Juliet									
Sulfide	ND	mg/kg	99.3	39.7	1	05/02/22 16:22	05/04/22 19:00	18496-25-8	

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606395

QC Batch:	812439	Analysis Method:	EPA 7471B
QC Batch Method:	EPA 7471B	Analysis Description:	7471B Mercury Solids
		Laboratory:	Pace Analytical Services - Minneapolis

Associated Lab Samples: 10606395001, 10606395002, 10606395003, 10606395004

METHOD BLANK: 4308604 Matrix: Solid  
Associated Lab Samples: 10606395001, 10606395002, 10606395003, 10606395004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.018	0.0080	05/10/22 12:27	

LABORATORY CONTROL SAMPLE: 4308605

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.48	0.49	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308606 4308607

Parameter	Units	10606394001		MS		MSD		% Rec		Limits	RPD	Max RPD	Qual
		Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Mercury	mg/kg	0.025J	0.81	0.79	0.86	0.81	102	100	80-120	6	20		

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606395

QC Batch: 812437 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3050B Analysis Description: 6020B Solids UPD5  
 Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10606395001, 10606395002, 10606395003, 10606395004

METHOD BLANK: 4308596 Matrix: Solid  
 Associated Lab Samples: 10606395001, 10606395002, 10606395003, 10606395004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	ND	0.47	0.10	05/05/22 18:39	
Cadmium	mg/kg	ND	0.075	0.029	05/05/22 18:39	
Chromium	mg/kg	ND	1.9	0.13	05/05/22 18:39	
Copper	mg/kg	ND	0.94	0.23	05/05/22 18:39	
Lead	mg/kg	ND	0.47	0.028	05/05/22 18:39	
Nickel	mg/kg	ND	0.47	0.19	05/05/22 18:39	
Selenium	mg/kg	ND	0.47	0.080	05/05/22 18:39	
Silver	mg/kg	ND	0.47	0.14	05/05/22 18:39	
Zinc	mg/kg	1.0J	4.7	0.84	05/05/22 18:39	

LABORATORY CONTROL SAMPLE: 4308597

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	49.2	44.3	90	80-120	
Cadmium	mg/kg	49.2	44.3	90	80-120	
Chromium	mg/kg	49.2	45.7	93	80-120	
Copper	mg/kg	49.2	46.2	94	80-120	
Lead	mg/kg	49.2	45.6	93	80-120	
Nickel	mg/kg	49.2	46.6	95	80-120	
Selenium	mg/kg	49.2	48.4	98	80-120	
Silver	mg/kg	24.6	23.6	96	80-120	
Zinc	mg/kg	49.2	45.5	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4308598 4308599

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		10606046001 Result	Spike Conc.	Spike Conc.	MS Result							MSD Result
Arsenic	mg/kg	2.1	66.3	68.1	64.4	59.1	94	84	75-125	9	20	
Cadmium	mg/kg	0.089J	66.3	68.1	62.7	57.4	94	84	75-125	9	20	
Chromium	mg/kg	8.2	66.3	68.1	73.8	67.7	99	87	75-125	9	20	
Copper	mg/kg	7.7	66.3	68.1	73.2	66.8	99	87	75-125	9	20	
Lead	mg/kg	3.6	66.3	68.1	93.2	62.6	135	87	75-125	39	20	M1,R1
Nickel	mg/kg	9.3	66.3	68.1	75.5	69.4	100	88	75-125	8	20	
Selenium	mg/kg	ND	66.3	68.1	65.1	60.9	98	89	75-125	7	20	
Silver	mg/kg	0.26J	33.2	34	33.3	30.6	100	89	75-125	8	20	
Zinc	mg/kg	32.3	66.3	68.1	97.9	89.2	99	84	75-125	9	20	

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606395

QC Batch: 812294

Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974

Analysis Description: Dry Weight / %M by ASTM D2974

Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10606395001, 10606395002, 10606395003, 10606395004

SAMPLE DUPLICATE: 4307525

Parameter	Units	10606390001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	33.2	32.1	4	30	N2

SAMPLE DUPLICATE: 4307526

Parameter	Units	10605980004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.3	9.4	0	30	N2

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report  
Pace Project No.: 10606395

QC Batch: 1860981 Analysis Method: EPA 8270E  
QC Batch Method: 3546 Analysis Description: SVOA (GC/MS) 8270E  
Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10606395001, 10606395002, 10606395003, 10606395004

METHOD BLANK: R3791358-2 Matrix: Solid  
Associated Lab Samples: 10606395001, 10606395002, 10606395003, 10606395004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	mg/kg	ND	0.0333	0.00539	05/12/22 06:29	
Acenaphthylene	mg/kg	ND	0.0333	0.00469	05/12/22 06:29	
Anthracene	mg/kg	ND	0.0333	0.00593	05/12/22 06:29	
Benzoic acid	mg/kg	ND	1.67	0.118	05/12/22 06:29	
Benzo(a)anthracene	mg/kg	ND	0.0333	0.00587	05/12/22 06:29	
Benzo(b)fluoranthene	mg/kg	ND	0.0333	0.00621	05/12/22 06:29	
Benzo(k)fluoranthene	mg/kg	ND	0.0333	0.00592	05/12/22 06:29	
Benzo(g,h,i)perylene	mg/kg	ND	0.0333	0.00609	05/12/22 06:29	
Benzo(a)pyrene	mg/kg	ND	0.0333	0.00619	05/12/22 06:29	
Carbazole	mg/kg	ND	0.333	0.0103	05/12/22 06:29	
Chrysene	mg/kg	ND	0.0333	0.00662	05/12/22 06:29	
Dibenz(a,h)anthracene	mg/kg	ND	0.0333	0.00923	05/12/22 06:29	
Dibenzofuran	mg/kg	ND	0.333	0.0109	05/12/22 06:29	
Fluoranthene	mg/kg	ND	0.0333	0.00601	05/12/22 06:29	
Fluorene	mg/kg	ND	0.0333	0.00542	05/12/22 06:29	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.0333	0.00941	05/12/22 06:29	
1-Methylnaphthalene	mg/kg	ND	0.0333	0.00426	05/12/22 06:29	
2-Methylnaphthalene	mg/kg	ND	0.0333	0.00432	05/12/22 06:29	
Naphthalene	mg/kg	ND	0.0333	0.00836	05/12/22 06:29	
Phenanthrene	mg/kg	ND	0.0333	0.00661	05/12/22 06:29	
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.333	0.0422	05/12/22 06:29	
Di-n-butylphthalate	mg/kg	ND	0.333	0.0114	05/12/22 06:29	
Di-n-octylphthalate	mg/kg	ND	0.333	0.0225	05/12/22 06:29	
Pyrene	mg/kg	ND	0.0333	0.00648	05/12/22 06:29	
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.333	0.0104	05/12/22 06:29	
Pentachlorophenol	mg/kg	ND	0.333	0.00896	05/12/22 06:29	
Phenol	mg/kg	ND	0.333	0.0134	05/12/22 06:29	
2-Fluorophenol (S)	%	62.8	12.0-120		05/12/22 06:29	
Phenol-d5 (S)	%	61.9	10.0-120		05/12/22 06:29	
Nitrobenzene-d5 (S)	%	64.9	10.0-122		05/12/22 06:29	
2-Fluorobiphenyl (S)	%	56.2	15.0-120		05/12/22 06:29	
2,4,6-Tribromophenol (S)	%	54.2	10.0-127		05/12/22 06:29	
p-Terphenyl-d14 (S)	%	64	10.0-120		05/12/22 06:29	

LABORATORY CONTROL SAMPLE: R3791358-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	mg/kg	0.666	0.418	62.8	38.0-120	
Acenaphthylene	mg/kg	0.666	0.440	66.1	40.0-120	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report  
Pace Project No.: 10606395

LABORATORY CONTROL SAMPLE: R3791358-1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Anthracene	mg/kg	0.666	0.419	62.9	42.0-120	
Benzoic acid	mg/kg	1.33	0.211	15.9	10.0-120	
Benzo(a)anthracene	mg/kg	0.666	0.435	65.3	44.0-120	
Benzo(b)fluoranthene	mg/kg	0.666	0.395	59.3	43.0-120	
Benzo(k)fluoranthene	mg/kg	0.666	0.400	60.1	44.0-120	
Benzo(g,h,i)perylene	mg/kg	0.666	0.434	65.2	43.0-120	
Benzo(a)pyrene	mg/kg	0.666	0.433	65.0	45.0-120	
Carbazole	mg/kg	0.666	0.405	60.8	48.0-120	
Chrysene	mg/kg	0.666	0.441	66.2	43.0-120	
Dibenz(a,h)anthracene	mg/kg	0.666	0.403	60.5	44.0-120	
Dibenzofuran	mg/kg	0.666	0.413	62.0	44.0-120	
Fluoranthene	mg/kg	0.666	0.419	62.9	44.0-120	
Fluorene	mg/kg	0.666	0.414	62.2	41.0-120	
Indeno(1,2,3-cd)pyrene	mg/kg	0.666	0.415	62.3	45.0-120	
1-Methylnaphthalene	mg/kg	0.666	0.330	49.5	34.0-120	
2-Methylnaphthalene	mg/kg	0.666	0.317	47.6	34.0-120	
Naphthalene	mg/kg	0.666	0.323	48.5	18.0-120	
Phenanthrene	mg/kg	0.666	0.414	62.2	42.0-120	
bis(2-Ethylhexyl)phthalate	mg/kg	0.666	0.523	78.5	41.0-120	
Di-n-butylphthalate	mg/kg	0.666	0.481	72.2	43.0-120	
Di-n-octylphthalate	mg/kg	0.666	0.485	72.8	40.0-120	
Pyrene	mg/kg	0.666	0.425	63.8	41.0-120	
3&4-Methylphenol(m&p Cresol)	mg/kg	0.666	0.459	68.9	42.0-120	
Pentachlorophenol	mg/kg	0.666	0.390	58.6	29.0-120	
Phenol	mg/kg	0.666	0.395	59.3	28.0-120	
2-Fluorophenol (S)	%			59.3	12.0-120	
Phenol-d5 (S)	%			59.8	10.0-120	
Nitrobenzene-d5 (S)	%			54.4	10.0-122	
2-Fluorobiphenyl (S)	%			60.7	15.0-120	
2,4,6-Tribromophenol (S)	%			68.2	10.0-127	
p-Terphenyl-d14 (S)	%			64.3	10.0-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3791358-3 R3791358-4

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		10606395003 Result	Spike Conc.	Spike Conc.	Conc.								
Acenaphthene	mg/kg	ND	0.828	0.833	0.392	0.337	47.3	40.5	18.0-120	14.9	32		
Acenaphthylene	mg/kg	ND	0.828	0.833	0.406	0.335	49.1	40.2	25.0-120	19.3	32		
Anthracene	mg/kg	ND	0.828	0.833	0.448	0.339	54.1	40.7	22.0-120	27.7	29		
Benzoic acid	mg/kg	ND	1.66	1.66	1.24	0.806	74.7	48.5	10.0-152	42.5	40	R1	
Benzo(a)anthracene	mg/kg	ND	0.828	0.833	0.448	0.353	54.1	42.4	25.0-120	23.7	29		
Benzo(b)fluoranthene	mg/kg	ND	0.828	0.833	0.446	0.353	53.9	42.4	19.0-122	23.4	31		
Benzo(k)fluoranthene	mg/kg	ND	0.828	0.833	0.472	0.352	57.1	42.2	23.0-120	29.3	30		
Benzo(g,h,i)perylene	mg/kg	ND	0.828	0.833	0.428	0.345	51.7	41.4	10.0-120	21.5	33		
Benzo(a)pyrene	mg/kg	ND	0.828	0.833	0.497	0.389	60.0	46.7	24.0-120	24.3	30		

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### REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: D3593500-Revised Report

Pace Project No.: 10606395

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R3791358-3												R3791358-4											
Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual										
		10606395003 Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec															
Carbazole	mg/kg	ND	0.828	0.833	0.449	0.322	54.2	38.6	31.0-120	33.0	24	R1											
Chrysene	mg/kg	ND	0.828	0.833	0.441	0.347	53.3	41.6	21.0-120	24.1	29												
Dibenz(a,h)anthracene	mg/kg	ND	0.828	0.833	0.465	0.349	56.1	41.9	10.0-120	28.4	32												
Dibenzofuran	mg/kg	ND	0.828	0.833	0.393	0.328	47.5	39.4	24.0-120	18.0	30												
Fluoranthene	mg/kg	ND	0.828	0.833	0.458	0.348	55.3	41.7	18.0-126	27.4	32												
Fluorene	mg/kg	ND	0.828	0.833	0.397	0.339	48.0	40.7	25.0-120	15.9	30												
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.828	0.833	0.456	0.336	55.0	40.3	10.0-120	30.2	32												
1-Methylnaphthalene	mg/kg	ND	0.828	0.833	0.374	0.299	45.1	35.8	10.0-120	22.4	36												
2-Methylnaphthalene	mg/kg	ND	0.828	0.833	0.352	0.288	42.5	34.6	10.0-120	19.9	37												
Naphthalene	mg/kg	ND	0.828	0.833	0.356	0.295	42.9	35.4	10.0-120	18.8	35												
Phenanthrene	mg/kg	ND	0.828	0.833	0.457	0.340	55.2	40.8	17.0-120	29.3	31												
bis(2-Ethylhexyl)phthalate	mg/kg	ND	0.828	0.833	0.546	0.389	66.0	46.7	17.0-126	33.6	30	R1											
Di-n-butylphthalate	mg/kg	ND	0.828	0.833	0.549	0.404	66.3	48.4	30.0-120	30.5	29	R1											
Di-n-octylphthalate	mg/kg	ND	0.828	0.833	0.515	0.382	62.2	45.8	21.0-123	29.8	29	R1											
Pyrene	mg/kg	ND	0.828	0.833	0.404	0.331	48.7	39.7	16.0-121	19.8	32												
3&4-Methylphenol(m&p Cresol)	mg/kg	ND	0.828	0.833	0.478	0.345	57.7	41.4	12.0-123	32.2	38												
Pentachlorophenol	mg/kg	ND	0.828	0.833	0.494	0.322	59.7	38.6	10.0-160	42.3	31	R1											
Phenol	mg/kg	ND	0.828	0.833	0.383	0.322	46.2	38.6	12.0-120	17.3	38												
2-Fluorophenol (S)	%						45.9	36.4	12.0-120														
Phenol-d5 (S)	%						45.1	37.7	10.0-120														
Nitrobenzene-d5 (S)	%						46.7	34.9	10.0-122														
2-Fluorobiphenyl (S)	%						42.3	35.8	15.0-120														
2,4,6-Tribromophenol (S)	%						60.0	41.9	10.0-127														
p-Terphenyl-d14 (S)	%						50.5	38.3	10.0-120														

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: D3593500-Revised Report

Pace Project No.: 10606395

QC Batch:	812360	Analysis Method:	NWTPH-Dx
QC Batch Method:	EPA 3550	Analysis Description:	NWTPH-Dx GCS
		Laboratory:	Pace Analytical Services - Minneapolis

Associated Lab Samples: 10606395001, 10606395002, 10606395003, 10606395004

METHOD BLANK: 4307793 Matrix: Solid

Associated Lab Samples: 10606395001, 10606395002, 10606395003, 10606395004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Diesel Fuel Range	mg/kg	ND	15.0	6.9	05/02/22 19:37	
Motor Oil Range	mg/kg	ND	10.0	5.0	05/02/22 19:37	
n-Triacontane (S)	%	91	50-150		05/02/22 19:37	
o-Terphenyl (S)	%	80	50-150		05/02/22 19:37	

LABORATORY CONTROL SAMPLE: 4307794

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Fuel Range	mg/kg	50	41.4	83	50-150	
Motor Oil Range	mg/kg	50	46.6	93	50-150	
n-Triacontane (S)	%			82	50-150	
o-Terphenyl (S)	%			84	50-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4307905 4307906

Parameter	Units	10606463001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
			Spike Conc.	Spike Conc.	MS Result	MSD Result					
Diesel Fuel Range	mg/kg	ND	49	49.2	41.2	39.4	83	79	50-150	5	30
Motor Oil Range	mg/kg	ND	49	49.2	46.9	46.9	88	88	50-150	0	30
n-Triacontane (S)	%						80	78	50-150		
o-Terphenyl (S)	%						79	73	50-150		

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**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606395

QC Batch: 1857727	Analysis Method: SM 2540G
QC Batch Method: SM 2540 G	Analysis Description: Total Solids 2540 G-2011
	Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10606395001, 10606395002, 10606395003, 10606395004

METHOD BLANK: R3788269-1 Matrix: Solid  
Associated Lab Samples: 10606395001, 10606395002, 10606395003, 10606395004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Solids	%	0.00100			05/04/22 11:39	

LABORATORY CONTROL SAMPLE: R3788269-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	%	50.0	50.0	100	85.0-115	

SAMPLE DUPLICATE: R3788269-3

Parameter	Units	L1488076-01 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	%	91.1	89.3	2.02	10	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: D3593500-Revised Report

Pace Project No.: 10606395

QC Batch: 1858884

Analysis Method: EPA 9030B

QC Batch Method: 9030B

Analysis Description: Wet Chemistry 9034/9030B

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 10606395001, 10606395002, 10606395003, 10606395004

METHOD BLANK: R3788164-1

Matrix: Solid

Associated Lab Samples: 10606395001, 10606395002, 10606395003, 10606395004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide	mg/kg	ND	75.0	30.0	05/04/22 19:00	

LABORATORY CONTROL SAMPLE: R3788164-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/kg	100	71.3	71.3	53.8-124	

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## QUALIFIERS

Project: D3593500-Revised Report

Pace Project No.: 10606395

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### SAMPLE QUALIFIERS

Sample: 10606395003

[1] Semi Volatile Organic Compounds (GC/MS) by Method 8270E - Dilution due to matrix

### ANALYTE QUALIFIERS

J Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

R1 RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: D3593500-Revised Report  
Pace Project No.: 10606395

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10606395001	FD02-042722-0-10	EPA 3550	812360	NWTPH-Dx	812833
10606395002	BNSF-BG18-042722-0-10	EPA 3550	812360	NWTPH-Dx	812833
10606395003	BNSF-BG19-042722-0-10	EPA 3550	812360	NWTPH-Dx	812833
10606395004	BNSF-SG03-042722-0-5.5	EPA 3550	812360	NWTPH-Dx	812833
10606395001	FD02-042722-0-10	EPA 3050B	812437	EPA 6020B	813004
10606395002	BNSF-BG18-042722-0-10	EPA 3050B	812437	EPA 6020B	813004
10606395003	BNSF-BG19-042722-0-10	EPA 3050B	812437	EPA 6020B	813004
10606395004	BNSF-SG03-042722-0-5.5	EPA 3050B	812437	EPA 6020B	813004
10606395001	FD02-042722-0-10	EPA 7471B	812439	EPA 7471B	813107
10606395002	BNSF-BG18-042722-0-10	EPA 7471B	812439	EPA 7471B	813107
10606395003	BNSF-BG19-042722-0-10	EPA 7471B	812439	EPA 7471B	813107
10606395004	BNSF-SG03-042722-0-5.5	EPA 7471B	812439	EPA 7471B	813107
10606395001	FD02-042722-0-10	ASTM D2974	812294		
10606395002	BNSF-BG18-042722-0-10	ASTM D2974	812294		
10606395003	BNSF-BG19-042722-0-10	ASTM D2974	812294		
10606395004	BNSF-SG03-042722-0-5.5	ASTM D2974	812294		
10606395001	FD02-042722-0-10	3546	1860981	EPA 8270E	1860981
10606395002	BNSF-BG18-042722-0-10	3546	1860981	EPA 8270E	1860981
10606395003	BNSF-BG19-042722-0-10	3546	1860981	EPA 8270E	1860981
10606395004	BNSF-SG03-042722-0-5.5	3546	1860981	EPA 8270E	1860981
10606395001	FD02-042722-0-10	SM 2540 G	1857727	SM 2540G	1857727
10606395002	BNSF-BG18-042722-0-10	SM 2540 G	1857727	SM 2540G	1857727
10606395003	BNSF-BG19-042722-0-10	SM 2540 G	1857727	SM 2540G	1857727
10606395004	BNSF-SG03-042722-0-5.5	SM 2540 G	1857727	SM 2540G	1857727
10606395001	FD02-042722-0-10	9030B	1858884	EPA 9030B	1858884
10606395002	BNSF-BG18-042722-0-10	9030B	1858884	EPA 9030B	1858884
10606395003	BNSF-BG19-042722-0-10	9030B	1858884	EPA 9030B	1858884
10606395004	BNSF-SG03-042722-0-5.5	9030B	1858884	EPA 9030B	1858884

**REPORT OF LABORATORY ANALYSIS**

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# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: **JACOBS**  
 Address: **2020 S NY 4th AVE SUITE 300 PDX 97201**  
 Report To: **KRIS IVARSON**  
 Copy To: **BERNEE KIDD**  
 Customer Project Name/Number: **D3593500**

Billing Information:  
**SEE CONTRACT**

Email To: **KRIS IVARSON@JACOBS.COM**  
**BERNEE.KIDD@JACOBS.COM**  
 Site Collection Info/Address: **BNSF WIS HRAA**  
 State: **WA** County/City: **KLICKITAT** Time-Zone Collected: **PST**

Site/Facility ID #: **BNSF WIS HRAA**  
 Purchase Order #: **SPND**  
 Turnaround Date Required: **SPND**  
 Rush:  Same Day  Next Day  3 Day  4 Day  5 Day (Expedite Charges Apply)  
 Sample Disposal:  Dispose as appropriate  Return  Archive  Hold

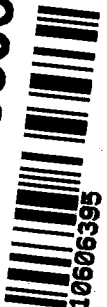
\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab		Collected (or Composite Start)		Composite End Date	Res Cl	# of Ctns
		Date	Time	Date	Time			
FPO2-042722-0-10 SL	SL	6		4/27/22	1010			6
BNSF-BG18-042722-0-10 SL	SL	6		4/27/22	1035			7
BNSF-BG19-042722-0-10 SL	SL	6		4/27/22	1105			7
BNSF-B								
BNSF-SG03-042722-0-35 SL	SL	6		4/27/22	1200			7

Customer Remarks / Special Conditions / Possible Hazards:  
 Type of Ice Used:  Wet  Blue  Dry  None  
 Packing Material Used:

Radchem sample(s) screened (<500 cpm):  Y  N  NA  
 Received by/Company: (Signature) **4/28/1500 Jacobs**  
 Received by/Company: (Signature) **4/28/1500 Jacobs**  
 Received by/Company: (Signature)

LAB USE ONLY - Affix Workorder Number or List Pace Workorder Number or  
**WO#: 10606395**



Container Preservative Type:  
**V V W W W W W W W W**

\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sulfuric acid, (5) methanol, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses	Lab Profile/Line:	Lab Sample Receipt Checklist:
Ammonia (SM4500NH3)		Custody Seals Present/Intact Y N NA
T. Sulfides (SM930)		Custody Signatures Present Y N NA
METALS (SM930)		Collector Signature Present Y N NA
PCB CONCENTRATIONS (Dioxins)		Bottles Intact Y N NA
TPH DRO + PHH		Correct Bottles Y N NA
SVCS + PHH		Sufficient Volume Y N NA
GRAIN SIZE		Samples Received on Ice Y N NA
		VOA - Headspace Acceptable Y N NA
		USDA Regulated Soils Y N NA
		Samples in Holding Time Y N NA
		Residual Chlorine Present Y N NA
		Cl Strips: Y N NA
		Sample pH Acceptable Y N NA
		pH Strips: Y N NA
		Sulfide Present Y N NA
		Lead Acetate Strips: Y N NA
		LAB USE ONLY: Lab Sample # / Comments:

Lab Sample Temperature info:  
 Temp Blank Received:  Y  N  NA  
 Therm ID#: \_\_\_\_\_  
 Cooler 1 Temp Upon Receipt: \_\_\_\_\_ °C  
 Cooler 1 Therm Corr. Factor: \_\_\_\_\_ °C  
 Cooler 1 Corrected Temp: \_\_\_\_\_ °C  
 Comments:

Lab Tracking #: **2743855**  
 Samples received via: FEDEX UPS Client Courier Pace Courier  
 Date/Time: **4/28/22**  
 Date/Time: \_\_\_\_\_  
 Date/Time: \_\_\_\_\_  
 Date/Time: \_\_\_\_\_



DC# Title: ENV-FRM-MIN4-0149 v03\_Sample Condition Upon Receipt (SCUR) - ESI

Effective Date: 04/12/2022

Sample Condition Upon Receipt - ESI Tech Specs

Client Name:

BNSF Jacobs

Project #:

WO#: 10606395

PM: KV

Due Date: 05/20/22

CLIENT: BNSF\_Jacobs

Courier:

Fed Ex UPS USPS Client Pace SpeedDee Commercial

Tracking Number: 5152 1600 5604

See Exceptions ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? Seals Intact? Biological Tissue Frozen? Temp Blank?

Packing Material: Bubble Wrap Bubble Bags None Other: Type of Ice: Wet Blue None Dry Melted

Thermometer: T1(0461) T2(1336) T3(0459) T4(0254) T5(0489) T6(0235) T7(0042)

Temp should be above freezing to 6°C Cooler Temp Read w/temp blank: 1.9 °C Average Corrected Temp (no temp blank only): °C Correction Factor: Cooler Temp Corrected w/temp blank: 1.9 °C

USDA Regulated Soil: Date/Initials of Person Examining Contents: Did samples originate in a quarantine zone within the United States: Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?

If Yes to either question, fill out a Regulated Soil Checklist (ENV-FRM-MIN4-0154) and include with SCUR/COC paperwork.

Table with 14 rows and 2 columns. Left column contains questions about custody, sampling, and analysis. Right column contains a 'COMMENTS' section with numbered lines for notes.

Table with 2 main sections: 'Temp Log' (opened time, temp, corrected temp) and 'CLIENT NOTIFICATION/RESOLUTION' (person contacted, date/time, comments/resolution).

Project Manager Review:

Date: 5/19/22

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers)

Labeled by: PF (v)

# Internal Transfer Chain of Custody



Samples Pre-Logged into eCOC.

State Of Origin: WA

Cert. Needed:  Yes  No

Owner Received Date: 4/29/2022

Results Requested By: 5/20/2022

Workorder: 10606395

Workorder Name: D3593500

Report To		Subcontract To				Requested Analysis														
Kongmeng Vang Pace Analytical Minnesota 1700 Elm Street Minneapolis, MN 55414 Phone (612)607-1700		Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858				<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>JGCU JGFU</p> <p>Preserved Containers</p> </div> <div style="width: 30%;"> <p>8270 SVOC - Pace National</p> <p>Total Sulfoxides SW9030 - Pace National</p> </div> <div style="width: 30%; text-align: right;"> <p>L1488161</p> <p>LAB USE ONLY</p> </div> </div>														
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved														
1	FD02-042722-0-10	PS	4/27/2022 10:10	10606395001	Solid	2							X	X						
2	BNSF-BG18-042722-0-10	PS	4/27/2022 10:35	10606395002	Solid	2							X	X						
3	BNSF-BG19-042722-0-10	PS	4/27/2022 11:05	10606395003	Solid	2							X	X						
4	BNSF-SG03-042722-0-5.5	PS	4/27/2022 12:00	10606395004	Solid	2							X	X						
5																				

Transfers					Comments				
Released By	Date/Time	Received By	Date/Time						
<i>[Signature]</i>	4/29/22 11:41	<i>[Signature]</i>	4/30/22 9:00						

Cooler Temperature on Receipt °C Custody Seal Y or N Received on Ice Y or N Samples Intact Y or N

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

Sample Receipt Checklist

COC Seal Present/Intact:  Y  N If Applicable

COC Signed/Accurate:  Y  N VOA Zero Headspaces:  Y  N

Bottles arrive intact:  Y  N Pres. Correct/Checks:  Y  N

Correct bottles used:  Y  N

Sufficient volume sent:  Y  N

RAD Screen < 0.5 mR/hr:  Y  N

JAA6  
3.4-24

5466 8884 5063



8270 SVOC List

*Semi-volatile Organic Compounds and Polycyclic*

3,4-Methylphenol
Benzoic acid
Bis(2-ethylhexyl) phthalate
Carbazole
Dibenzofuran
Di-n-butyl phthalate
Di-n-octyl phthalate
Pentachlorophenol
Phenol
1-Methylnaphthalene
2-Methylnaphthalene
Acenaphthene
Acenaphthylene
Anthracene
Benz(a)anthracene
Benzo(a)pyrene
Benzo(ghi)perylene
Chrysene
Dibenz(ah)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-cd)pyrene
Naphthalene
Phenanthrene
Pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene

L1488161

## ANALYTICAL REPORT

Eurofins Seattle  
5755 8th Street East  
Tacoma, WA 98424  
Tel: (253)922-2310

Laboratory Job ID: 580-113240-1  
Client Project/Site: D3593500 10606395  
Revision: 1

For:  
Pace Analytical Services, LLC  
1700 Elm Street  
Minneapolis, Minnesota 55414

Attn: Kongmeng Vang



Authorized for release by:  
5/26/2022 1:03:39 PM

Pauline Matlock, Project Manager  
(253)922-2310  
[Pauline.Matlock@et.eurofinsus.com](mailto:Pauline.Matlock@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

10606395

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions . . . . .	4
Client Sample Results . . . . .	5
QC Sample Results . . . . .	9
Chronicle . . . . .	11
Certification Summary . . . . .	13
Sample Summary . . . . .	14
Chain of Custody . . . . .	15
Receipt Checklists . . . . .	16



# Case Narrative

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606395

Job ID: 580-113240-1

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**Job ID: 580-113240-1**

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**Laboratory: Eurofins Seattle**

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**Narrative**

**Job Narrative**  
**580-113240-1**

**Comments**

No additional comments.

**Revision**

The report being provided is a revision of the original report sent on 5/16/2022. The report (revision 1) is being revised due to: Client needs TOC reported by dry weight.

**Receipt**

The samples were received on 4/30/2022 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.2° C.

**General Chemistry**

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 580-390330 and 580-390484 and analytical batch 580-390698 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 9060A: The method blank for analytical batch 580-390132 contained Organic Carbon above the method detection limit. This target analyte concentration was less than half of the reporting limit (1/2RL); therefore re-extraction and re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Definitions/Glossary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606395

Job ID: 580-113240-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count



# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606395

Job ID: 580-113240-1

**Client Sample ID: FD02-042722-0-10**

**Lab Sample ID: 580-113240-1**

Date Collected: 04/27/22 10:10

Matrix: Solid

Date Received: 04/30/22 09:45

Percent Solids: 50.6

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	30000	B	4000	190	mg/Kg	☼		05/10/22 16:25	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	50.6		0.1	0.1	%			05/11/22 11:50	1
Percent Moisture	49.4		0.1	0.1	%			05/11/22 11:50	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	72		49	17	mg/Kg	☼	05/12/22 19:48	05/14/22 21:37	1

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- 2
- 3
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- 8
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- 11

# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606395

Job ID: 580-113240-1

**Client Sample ID: BNSF-BG18-042722-0-10**

**Lab Sample ID: 580-113240-2**

Date Collected: 04/27/22 10:35

Matrix: Solid

Date Received: 04/30/22 09:45

Percent Solids: 51.4

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	19000	B	3900	190	mg/Kg	☼		05/10/22 16:29	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	51.4		0.1	0.1	%			05/11/22 11:50	1
Percent Moisture	48.6		0.1	0.1	%			05/11/22 11:50	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	56		48	17	mg/Kg	☼	05/12/22 19:48	05/14/22 21:37	1

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# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606395

Job ID: 580-113240-1

**Client Sample ID: BNSF-BG19-042722-0-10**

**Lab Sample ID: 580-113240-3**

Date Collected: 04/27/22 11:05

Matrix: Solid

Date Received: 04/30/22 09:45

Percent Solids: 78.6

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	1600	J B	2500	120	mg/Kg	☼		05/10/22 16:33	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	78.6		0.1	0.1	%			05/11/22 11:50	1
Percent Moisture	21.4		0.1	0.1	%			05/11/22 11:50	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		30	11	mg/Kg	☼	05/12/22 19:48	05/14/22 21:37	1

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# Client Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606395

Job ID: 580-113240-1

**Client Sample ID: BNSF-SG03-042722-0-5.5**

**Lab Sample ID: 580-113240-4**

Date Collected: 04/27/22 12:00

Matrix: Solid

Date Received: 04/30/22 09:45

Percent Solids: 68.3

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	13000	B	2900	140	mg/Kg	☼		05/10/22 16:38	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	68.3		0.1	0.1	%			05/11/22 11:50	1
Percent Moisture	31.7		0.1	0.1	%			05/11/22 11:50	1

## General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	14	J	35	12	mg/Kg	☼	05/12/22 19:48	05/14/22 21:37	1

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- 2
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- 8
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- 11

# QC Sample Results

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606395

Job ID: 580-113240-1

## Method: 9060A - Organic Carbon, Total (TOC)

**Lab Sample ID: MB 580-390132/36**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	157	J	2000	97	mg/Kg			05/10/22 15:42	1

**Lab Sample ID: MB 580-390132/5**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	97	mg/Kg			05/10/22 13:48	1

**Lab Sample ID: LCS 580-390132/37**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120

**Lab Sample ID: LCS 580-390132/6**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Duplicates	120000	118000		mg/Kg		98	80 - 120

**Lab Sample ID: LCSD 580-390132/38**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	113000		mg/Kg		94	80 - 120	2	20

**Lab Sample ID: LCSD 580-390132/7**  
**Matrix: Solid**  
**Analysis Batch: 390132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	120000	115000		mg/Kg		96	80 - 120	3	20

## Method: EPA 350.1 - Ammonia

**Lab Sample ID: MB 580-390330/1-B**  
**Matrix: Solid**  
**Analysis Batch: 390698**

**Client Sample ID: Method Blank**  
**Prep Type: Soluble**  
**Prep Batch: 390484**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		25	8.8	mg/Kg		05/12/22 19:48	05/14/22 21:37	1

# QC Sample Results

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606395

Job ID: 580-113240-1

## Method: EPA 350.1 - Ammonia (Continued)

Lab Sample ID: LCS 580-390330/2-B  
Matrix: Solid  
Analysis Batch: 390698

Client Sample ID: Lab Control Sample  
Prep Type: Soluble  
Prep Batch: 390484

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	50.0	51.5		mg/Kg		103	90 - 110

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- 2
- 3
- 4
- 5
- 6
- 7
- 8
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- 10
- 11



# Lab Chronicle

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606395

Job ID: 580-113240-1

**Client Sample ID: FD02-042722-0-10**

**Date Collected: 04/27/22 10:10**

**Date Received: 04/30/22 09:45**

**Lab Sample ID: 580-113240-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	390214	05/11/22 11:50	JSM	FGS SEA

**Client Sample ID: FD02-042722-0-10**

**Date Collected: 04/27/22 10:10**

**Date Received: 04/30/22 09:45**

**Lab Sample ID: 580-113240-1**

**Matrix: Solid**

**Percent Solids: 50.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	390132	05/10/22 16:25	N1R	FGS SEA
Soluble	Leach	DI Leach			390330	05/11/22 22:39	FCG	FGS SEA
Soluble	Prep	Distill/Ammonia			390484	05/12/22 19:48	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	390698	05/14/22 21:37	MLT	FGS SEA

**Client Sample ID: BNSF-BG18-042722-0-10**

**Date Collected: 04/27/22 10:35**

**Date Received: 04/30/22 09:45**

**Lab Sample ID: 580-113240-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	390214	05/11/22 11:50	JSM	FGS SEA

**Client Sample ID: BNSF-BG18-042722-0-10**

**Date Collected: 04/27/22 10:35**

**Date Received: 04/30/22 09:45**

**Lab Sample ID: 580-113240-2**

**Matrix: Solid**

**Percent Solids: 51.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	390132	05/10/22 16:29	N1R	FGS SEA
Soluble	Leach	DI Leach			390330	05/11/22 22:39	FCG	FGS SEA
Soluble	Prep	Distill/Ammonia			390484	05/12/22 19:48	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	390698	05/14/22 21:37	MLT	FGS SEA

**Client Sample ID: BNSF-BG19-042722-0-10**

**Date Collected: 04/27/22 11:05**

**Date Received: 04/30/22 09:45**

**Lab Sample ID: 580-113240-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	390214	05/11/22 11:50	JSM	FGS SEA

**Client Sample ID: BNSF-BG19-042722-0-10**

**Date Collected: 04/27/22 11:05**

**Date Received: 04/30/22 09:45**

**Lab Sample ID: 580-113240-3**

**Matrix: Solid**

**Percent Solids: 78.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	390132	05/10/22 16:33	N1R	FGS SEA
Soluble	Leach	DI Leach			390330	05/11/22 22:39	FCG	FGS SEA
Soluble	Prep	Distill/Ammonia			390484	05/12/22 19:48	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	390698	05/14/22 21:37	MLT	FGS SEA

# Lab Chronicle

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606395

Job ID: 580-113240-1

**Client Sample ID: BNSF-SG03-042722-0-5.5**

**Lab Sample ID: 580-113240-4**

**Date Collected: 04/27/22 12:00**

**Matrix: Solid**

**Date Received: 04/30/22 09:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	390214	05/11/22 11:50	JSM	FGS SEA

**Client Sample ID: BNSF-SG03-042722-0-5.5**

**Lab Sample ID: 580-113240-4**

**Date Collected: 04/27/22 12:00**

**Matrix: Solid**

**Date Received: 04/30/22 09:45**

**Percent Solids: 68.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	390132	05/10/22 16:38	N1R	FGS SEA
Soluble	Leach	DI Leach			390330	05/11/22 22:39	FCG	FGS SEA
Soluble	Prep	Distill/Ammonia			390484	05/12/22 19:48	MLT	FGS SEA
Soluble	Analysis	EPA 350.1		1	390698	05/14/22 21:37	MLT	FGS SEA

**Laboratory References:**

FGS SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

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- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Accreditation/Certification Summary

Client: Pace Analytical Services, LLC  
 Project/Site: D3593500 10606395

Job ID: 580-113240-1

## Laboratory: Eurofins Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2954	07-07-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9060A		Solid	Total Organic Carbon - Duplicates
EPA 350.1	Distill/Ammonia	Solid	Ammonia as N
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Oregon	NELAP	4167	07-07-22
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Solids

Washington	State	C788	07-13-22
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9060A		Solid	Total Organic Carbon - Duplicates
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids



# Sample Summary

Client: Pace Analytical Services, LLC  
Project/Site: D3593500 10606395

Job ID: 580-113240-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-113240-1	FD02-042722-0-10	Solid	04/27/22 10:10	04/30/22 09:45
580-113240-2	BNSF-BG18-042722-0-10	Solid	04/27/22 10:35	04/30/22 09:45
580-113240-3	BNSF-BG19-042722-0-10	Solid	04/27/22 11:05	04/30/22 09:45
580-113240-4	BNSF-SG03-042722-0-5.5	Solid	04/27/22 12:00	04/30/22 09:45

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Chain of Custody

PASI Minnesota Laboratory



Workorder: 10606395

Workorder Name: D3593500

Results Requested By: 5/20/2022

Report Invoice To

Subcontract to

Requested Analysis

Kongmeng Vang  
 Pace Analytical Minnesota  
 1700 Elm Street  
 Minneapolis, MN 55414  
 Phone (612)607-1700  
 Email: kongmeng.vang@pacelabs.com

P.O.  
 Eurofins Frontier Global Sciences  
 5755 8th Street East  
 Tacoma, WA 98424

State of Sample Origin: WA

JGCU

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers	
					Unpreserved	Preserved
1	FD02-042722-0-10	4/27/2022 10:10	10606395001	Solid	1	
2	BNSF-BG18-042722-0-10	4/27/2022 10:36	10606395002	Solid	1	
3	BNSF-BG18-042722-0-10	4/27/2022 11:05	10606395003	Solid	1	
4	BNSF-SG03-042722-0-5.5	4/27/2022 12:00	10606395004	Solid	1	

TOC SW9060A - Eurofins

350.1 Ammonia

LAB USE ONLY

Transfers	Released By	Date/Time	Received By	Date/Time
1	JC VANCE	4/27/2022 17:00		
2				
3				

Comments

Lvl 4 data package, Jacobs UPRR EQEDD

Cooler Temperature on Receipt °C

Custody Seal Y or N

Received on Ice Y or N

Samples Intact Y or N



580-113240 Chain of Custody

AS 0-2/014  
 For 15  
 SWS Butcher



# Login Sample Receipt Checklist

Client: Pace Analytical Services, LLC

Job Number: 580-113240-1

SDG Number:

**Login Number: 113240**

**List Number: 1**

**Creator: Presley, Kim A**

**List Source: Eurofins Seattle**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Date: 5/12/2022

CLIENT: Pace Analytical - Minneapolis  
Project: 10606395 D3593500  
Lab Order: S2205005

**CASE NARRATIVE**  
Report ID: S2205005001

Entire Report Reviewed by: *John M. Jacobs*  
John Jacobs, Project Manager

Samples BNSF-BG18-042722-0-10, BNSF-BG19-042722-0-10 and BNSF-SG03-042722-0-5.5 were received on May 2, 2022.

This report contains:

- Case Narrative - 2 pages
- Sample Analysis Report - 12 pages
- Data Sheets- 3 pages
- Original COC - 1 page

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Standard Methods for the Examination of Water and Wastewater, approved method versions  
 EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, online versions  
 EPA methods 40 CFR Parts 136 and 141 EPA 600/2-78-054 methods  
 NDEP Mining Methods  
 40 CFR Part 50, Appendices B, J, L, O and FEM EQL-0310-189  
 IO Compendium Methods  
 Clean Water Act Methods Update Rule for the Analysis of Effluent, current version.  
 ASTM approved and recognized standards  
 ISO approved and recognized standards  
 USDA Handbook 60  
 Soil Survey Laboratory Manual Ver 4.0  
 ASA/SSSA 9 Methods of Analysis Part 2, 1982  
 ASA/SSSA Methods of Analysis Book 5 Part 3, 1996  
 Other industry approved methods

All Quality Control parameters met the acceptance criteria defined by EPA and Pace Analytical except as indicated in this case narrative:



Date: 5/12/2022

## Definitions

RL Reporting Limit

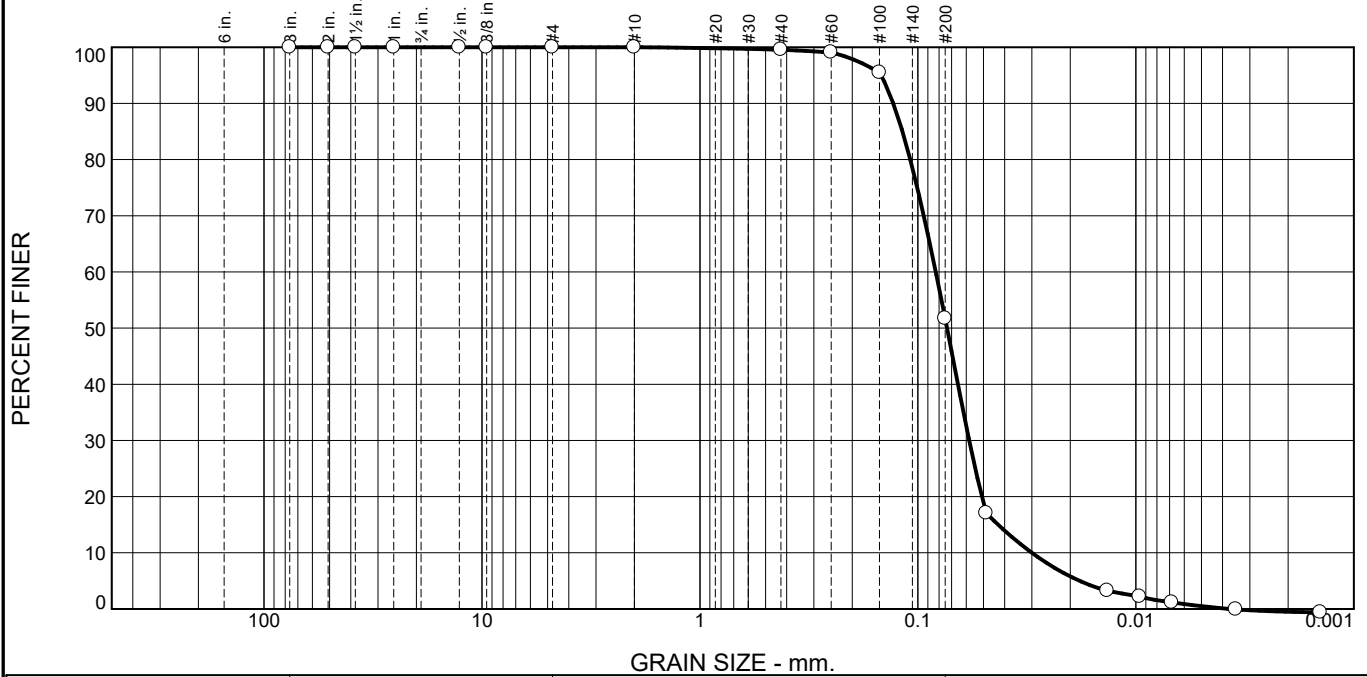
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## Qualifiers

- \* Value exceeds Maximum Contaminant Level
- A Check MSA specifications
- B Analyte detected in the associated Method Blank
- C Calculated Value
- D Report limit raised due to dilution
- E Value above quantitation range
- G Analyzed at Pace Gillette, WY laboratory
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- L Analyzed by another laboratory
- M Value exceeds Monthly Ave or MCL or is less than LCL
- ND Not Detected at the Reporting Limit
- O Outside the Range of Dilutions
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- U Analyte below method detection limit
- X Matrix Effect



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.4	47.9	51.2	0.5

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375	100.0		
#4	100.0		
#10	100.0		
#40	99.6		
#60	99.1		
#100	95.5		
#200	51.7		
0.0486 mm.	17.1		
0.0135 mm.	3.2		
0.0096 mm.	2.2		
0.0068 mm.	1.2		
0.0035 mm.			
0.0014 mm.			

\* (no specification provided)

**Material Description**

sandy silt

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= ML                      AASHTO (M 145)= A-4(0)

**Coefficients**

D<sub>90</sub>= 0.1297                      D<sub>85</sub>= 0.1178                      D<sub>60</sub>= 0.0828  
D<sub>50</sub>= 0.0735                      D<sub>30</sub>= 0.0581                      D<sub>15</sub>= 0.0428  
D<sub>10</sub>= 0.0300                      C<sub>u</sub>= 2.76                      C<sub>c</sub>= 1.36

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

---

Date Received: 5/2/2022                      Date Tested: 5/11/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: BNSF-BG18-042722-0-10                      Date Sampled: 4/27/2022  
Sample Number: S2205005-001A

<b>Pace Analytical Services, Inc.</b>	Client: Pace Analytical - Minneapolis
<b>Sheridan, Wyoming</b>	Project: 10606395 d3593500
	Project No: S2205005                      Figure

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/11/2022

**Client:** Pace Analytical - Minneapolis

**Project:** 10606395 d3593500

**Project Number:** S2205005

**Location:** BNSF-BG18-042722-0-10

**Sample Number:** S2205005-001A

**Material Description:** sandy silt

**Sample Date:** 4/27/2022 10:35

**Date Received:** 5/2/2022     **PL:** NP

**LL:** NV

**USCS Classification:** ML

**AASHTO Classification:** A-4(0)

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5/11/2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
86.57	0.00	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1.5"	0.00	0.00	100.0
		1"	0.00	0.00	100.0
		0.5"	0.00	0.00	100.0
		0.375"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#10	0.00	0.00	100.0
		#40	0.22	0.00	99.6
		#60	0.24	0.00	99.1
50.07	0.00	#100	1.79	0.00	95.5
		#200	21.93	0.00	51.7

Pace Analytical Services, Inc.

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 51.7

Weight of hydrometer sample = 50.07

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	23.0	16.5	0.0137	23.0	12.5	0.0486	17.1
15.00	20.0	9.5	3.1	0.0136	9.5	14.7	0.0135	3.2
30.00	20.0	8.5	2.1	0.0136	8.5	14.9	0.0096	2.2
60.00	20.0	7.5	1.1	0.0136	7.5	15.1	0.0068	1.2
240.00	19.0	6.5	-0.1	0.0138	6.5	15.2	0.0035	-0.1
1440.00	19.0	6.0	-0.6	0.0138	6.0	15.3	0.0014	-0.6

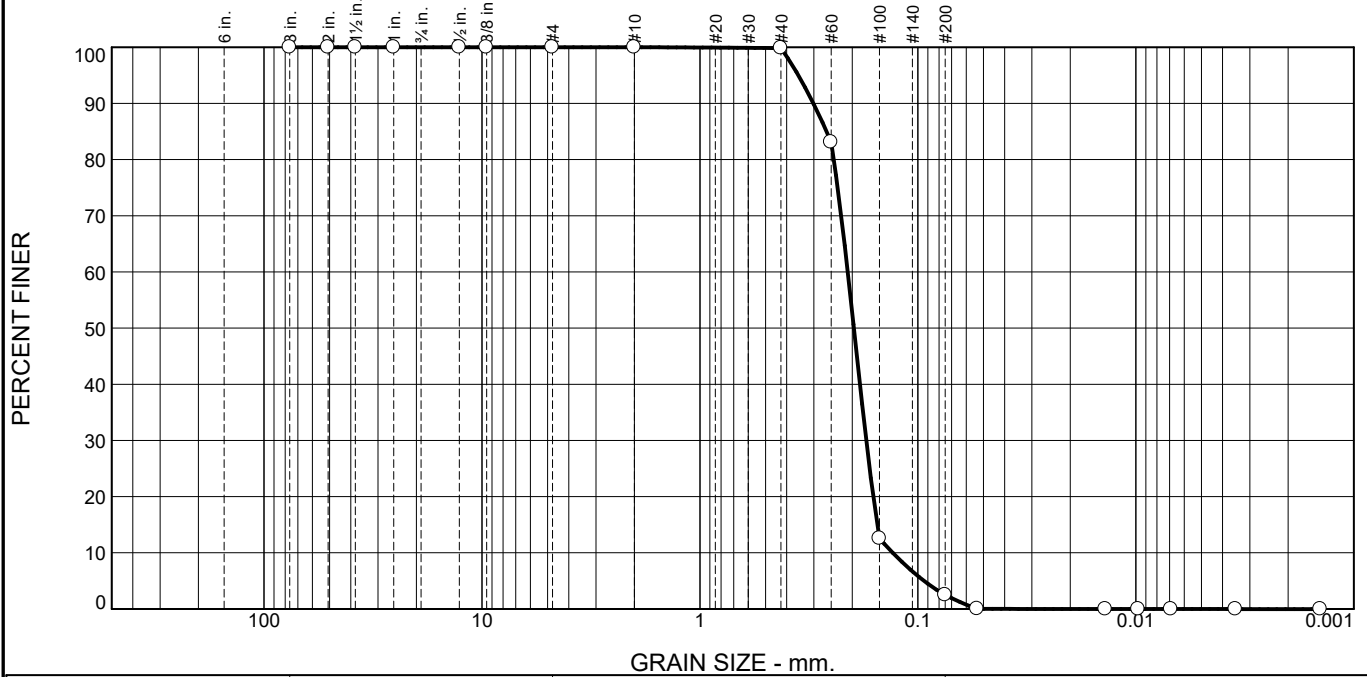
**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	0.4	47.9	48.3	51.2	0.5	51.7

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0181	0.0300	0.0428	0.0508	0.0581	0.0655	0.0735	0.0828	0.1084	0.1178	0.1297	0.1475

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.06	2.76	1.36

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.2	97.3	2.5	

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375	100.0		
#4	100.0		
#10	100.0		
#40	99.8		
#60	83.1		
#100	12.6		
#200	2.5		
0.0534 mm.	0.0		
0.0138 mm.			
0.0097 mm.			
0.0069 mm.			
0.0035 mm.			
0.0014 mm.			

\* (no specification provided)

**Material Description**

poorly graded sand

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= SP                      AASHTO (M 145)= A-3

**Coefficients**

D<sub>90</sub>= 0.3016                      D<sub>85</sub>= 0.2625                      D<sub>60</sub>= 0.2099  
D<sub>50</sub>= 0.1967                      D<sub>30</sub>= 0.1725                      D<sub>15</sub>= 0.1535  
D<sub>10</sub>= 0.1305                      C<sub>u</sub>= 1.61                      C<sub>c</sub>= 1.09

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

---

Date Received: 5/2/2022                      Date Tested: 5/11/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: BNSF-BG19-042722-0-10                      Date Sampled: 4/27/2022  
Sample Number: S2205005-002A

<b>Pace Analytical Services, Inc.</b>	Client: Pace Analytical - Minneapolis
<b>Sheridan, Wyoming</b>	Project: 10606395 d3593500
	Project No: S2205005                      Figure

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/11/2022

**Client:** Pace Analytical - Minneapolis

**Project:** 10606395 d3593500

**Project Number:** S2205005

**Location:** BNSF-BG19-042722-0-10

**Sample Number:** S2205005-002A

**Material Description:** poorly graded sand

**Sample Date:** 4/27/2022 11:05

**Date Received:** 5/2/2022      **PL:** NP

**LL:** NV

**USCS Classification:** SP

**AASHTO Classification:** A-3

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5/11/2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer		
139.14	0.00	3"	0.00	0.00	100.0		
		2"	0.00	0.00	100.0		
		1.5"	0.00	0.00	100.0		
		1"	0.00	0.00	100.0		
		0.5"	0.00	0.00	100.0		
		0.375"	0.00	0.00	100.0		
		#4	0.00	0.00	100.0		
		#10	0.00	0.00	100.0		
		70.51	0.00	#40	0.11	0.00	99.8
				#60	11.80	0.00	83.1
#100	49.74			0.00	12.6		
#200	7.10			0.00	2.5		

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 2.5

Weight of hydrometer sample =70.51

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	7.0	0.5	0.0137	7.0	15.1	0.0534	0.0
15.00	20.0	6.0	-0.4	0.0136	6.0	15.3	0.0138	0.0
30.00	20.0	6.0	-0.4	0.0136	6.0	15.3	0.0097	0.0
60.00	20.0	6.0	-0.4	0.0136	6.0	15.3	0.0069	0.0
240.00	19.0	6.0	-0.6	0.0138	6.0	15.3	0.0035	0.0
1440.00	19.0	6.0	-0.6	0.0138	6.0	15.3	0.0014	0.0

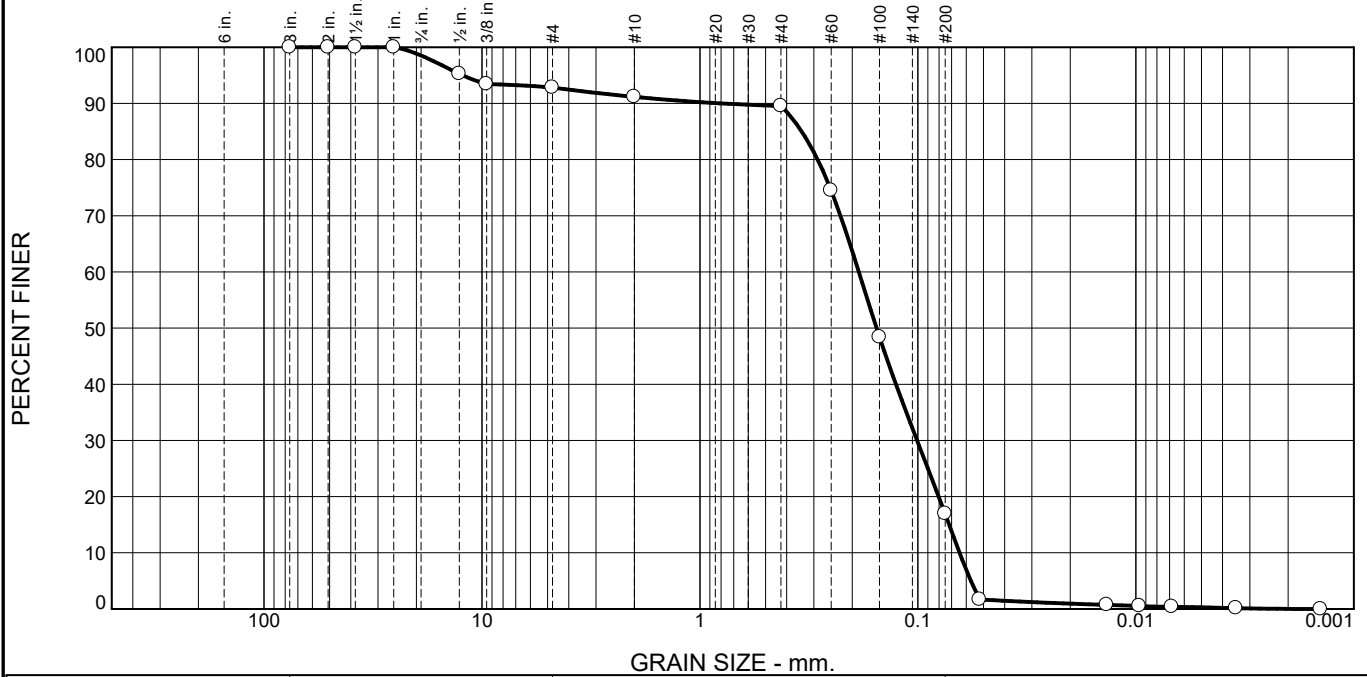
**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	0.2	97.3	97.5			2.5

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0937	0.1305	0.1535	0.1602	0.1725	0.1845	0.1967	0.2099	0.2430	0.2625	0.3016	0.3535

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.98	1.61	1.09

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	1.5	5.7	1.6	1.6	72.7	16.6	0.3

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	95.3		
0.375"	93.5		
#4	92.8		
#10	91.2		
#40	89.6		
#60	74.5		
#100	48.4		
#200	16.9		
0.0521 mm.	1.7		
0.0136 mm.	0.7		
0.0096 mm.	0.5		
0.0068 mm.	0.4		
0.0035 mm.	0.1		
0.0014 mm.			

\* (no specification provided)

**Material Description**

silty sand

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= SM                      AASHTO (M 145)= A-2-4(0)

**Coefficients**

D<sub>90</sub>= 0.7989                      D<sub>85</sub>= 0.3410                      D<sub>60</sub>= 0.1866  
 D<sub>50</sub>= 0.1547                      D<sub>30</sub>= 0.1009                      D<sub>15</sub>= 0.0719  
 D<sub>10</sub>= 0.0644                      C<sub>u</sub>= 2.90                      C<sub>c</sub>= 0.85

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
 SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

---

Date Received: 5/2/2022                      Date Tested: 5/11/2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: BNSF-SG03-042722-0-5.5                      Date Sampled: 4/27/2022  
 Sample Number: S2205005-003A

<b>Pace Analytical Services, Inc.</b>	Client: Pace Analytical - Minneapolis
<b>Sheridan, Wyoming</b>	Project: 10606395 d3593500
<b>Sheridan, Wyoming</b>	Project No: S2205005                      Figure

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/11/2022

**Client:** Pace Analytical - Minneapolis

**Project:** 10606395 d3593500

**Project Number:** S2205005

**Location:** BNSF-SG03-042722-0-5.5

**Sample Number:** S2205005-003A

**Material Description:** silty sand

**Sample Date:** 4/27/2022 12:00

**Date Received:** 5/2/2022     **PL:** NP

**LL:** NV

**USCS Classification:** SM

**AASHTO Classification:** A-2-4(0)

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5/11/2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer		
144.77	0.00	3"	0.00	0.00	100.0		
		2"	0.00	0.00	100.0		
		1.5"	0.00	0.00	100.0		
		1"	0.00	0.00	100.0		
		0.5"	6.84	0.00	95.3		
		0.375"	2.63	0.00	93.5		
		#4	0.91	0.00	92.8		
		#10	2.41	0.00	91.2		
		50.47	0.00	#40	0.89	0.00	89.6
				#60	8.34	0.00	74.5
#100	14.44			0.00	48.4		
#200	17.42			0.00	16.9		



**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 16.9

Weight of hydrometer sample =50.47

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	11.5	5.0	0.0137	11.5	14.4	0.0521	1.7
15.00	20.0	8.5	2.1	0.0136	8.5	14.9	0.0136	0.7
30.00	20.0	8.0	1.6	0.0136	8.0	15.0	0.0096	0.5
60.00	20.0	7.5	1.1	0.0136	7.5	15.1	0.0068	0.4
240.00	19.0	7.0	0.4	0.0138	7.0	15.1	0.0035	0.1
1440.00	19.0	6.5	-0.1	0.0138	6.5	15.2	0.0014	0.0

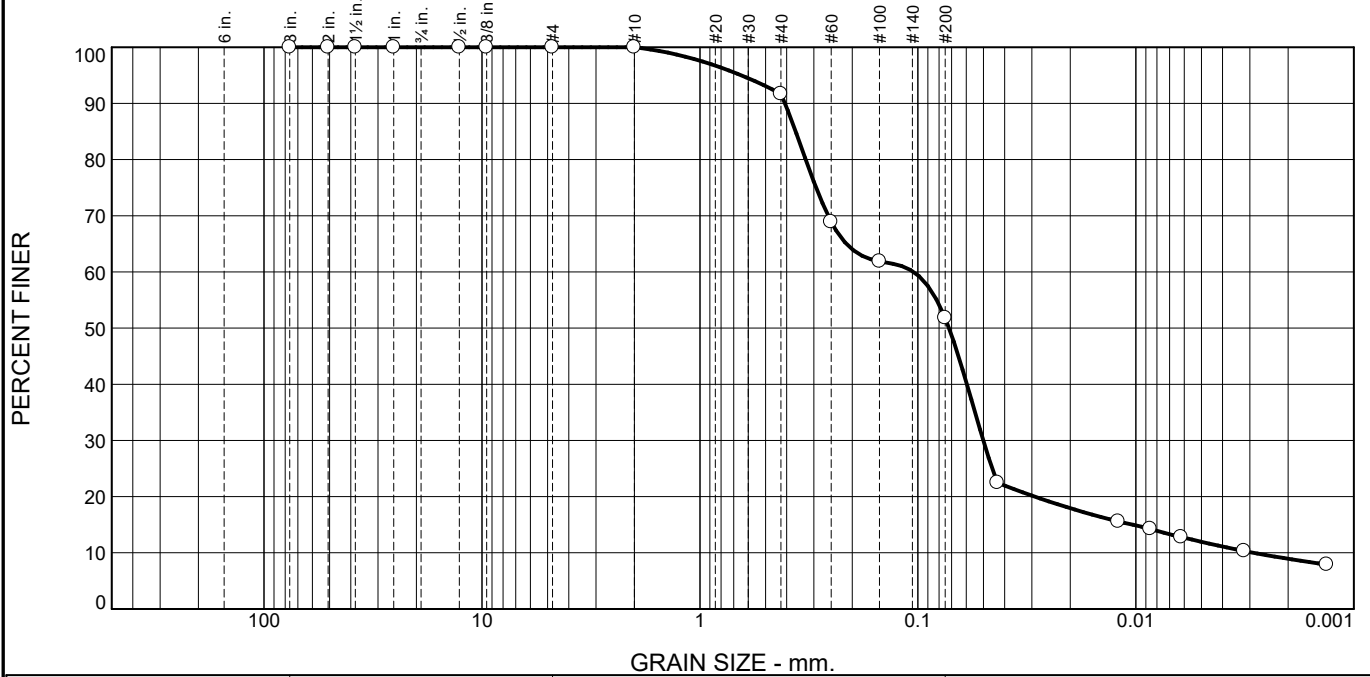
**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	1.5	5.7	7.2	1.6	1.6	72.7	75.9	16.6	0.3	16.9

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
0.0572	0.0644	0.0719	0.0803	0.1009	0.1262	0.1547	0.1866	0.2884	0.3410	0.7989	12.2557

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
1.14	2.90	0.85

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	8.3	39.9	39.8	12.0

TEST RESULTS (ASTM D 422)			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.5"	100.0		
0.375	100.0		
#4	100.0		
#10	100.0		
#40	91.7		
#60	68.9		
#100	61.9		
#200	51.8		
0.0432 mm.	22.5		
0.0120 mm.	15.6		
0.0086 mm.	14.3		
0.0062 mm.	12.8		
0.0032 mm.	10.3		
0.0013 mm.	7.9		

\* (no specification provided)

**Material Description**

sandy silt

**Atterberg Limits (ASTM D 4318)**

PL= NP                      LL= NV                      PI=

**Classification**

USCS (D 2487)= ML                      AASHTO (M 145)= A-4(0)

**Coefficients**

D<sub>90</sub>= 0.4073                      D<sub>85</sub>= 0.3638                      D<sub>60</sub>= 0.1047  
D<sub>50</sub>= 0.0719                      D<sub>30</sub>= 0.0501                      D<sub>15</sub>= 0.0103  
D<sub>10</sub>= 0.0029                      C<sub>u</sub>= 36.16                      C<sub>c</sub>= 8.29

**Remarks**

SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)  
SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

Date Received: \_\_\_\_\_ Date Tested: 5-11-2022

Tested By: Steve Holzerland

Checked By: John Jacobs

Title: Project Manager 2

Location: LCS  
Sample Number: LCS

Date Sampled:

**Pace Analytical Services, Inc.**

Client:  
Project:

**Sheridan, Wyoming**

Project No:

Figure

**GRAIN SIZE DISTRIBUTION TEST DATA**

5/11/2022

**Location:** LCS

**Sample Number:** LCS

**Material Description:** sandy silt

**PL:** NP                      **LL:** NV

**USCS Classification:** ML

**AASHTO Classification:** A-4(0)

**Grain Size Test Method:** ASTM D 422

**Testing Remarks:** SAND TRUE VALUE: 48.08 (+/-10% 52.88/43.27)

SILT TRUE VALUE: 38.73 (+/-10% 42.6/34.86)

**Tested By:** Steve Holzerland

**Test Date:** 5-11-2022

**Checked By:** John Jacobs

**Title:** Project Manager 2

**Sieve Test Data**

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer		
75.00	0.00	3"	0.00	0.00	100.0		
		2"	0.00	0.00	100.0		
		1.5"	0.00	0.00	100.0		
		1"	0.00	0.00	100.0		
		0.5"	0.00	0.00	100.0		
		0.375	0.00	0.00	100.0		
		#4	0.00	0.00	100.0		
		#10	0.00	0.00	100.0		
		75.00	0.00	#40	6.22	0.00	91.7
				#60	17.09	0.00	68.9
#100	5.27			0.00	61.9		
#200	7.55			0.00	51.8		

**Hydrometer Test Data**

Hydrometer test uses material passing #200

Percent passing #200 based upon complete sample = 51.8

Weight of hydrometer sample = 75.0

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -6.33

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation:  $L = 16.294964 - 0.164 \times R_m$

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	19.5	39.0	32.5	0.0137	39.0	9.9	0.0432	22.5
15.00	19.5	29.0	22.5	0.0137	29.0	11.5	0.0120	15.6
30.00	20.0	27.0	20.6	0.0136	27.0	11.9	0.0086	14.3
60.00	19.5	25.0	18.5	0.0137	25.0	12.2	0.0062	12.8
240.00	19.0	21.5	14.9	0.0138	21.5	12.8	0.0032	10.3
1440.00	19.0	18.0	11.4	0.0138	18.0	13.3	0.0013	7.9

Pace Analytical Services, Inc.

**Fractional Components**

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	8.3	39.9	48.2	39.8	12.0	51.8

D <sub>5</sub>	D <sub>10</sub>	D <sub>15</sub>	D <sub>20</sub>	D <sub>30</sub>	D <sub>40</sub>	D <sub>50</sub>	D <sub>60</sub>	D <sub>80</sub>	D <sub>85</sub>	D <sub>90</sub>	D <sub>95</sub>
	0.0029	0.0103	0.0291	0.0501	0.0596	0.0719	0.1047	0.3270	0.3638	0.4073	0.6461

Fineness Modulus	C <sub>u</sub>	C <sub>c</sub>
0.69	36.16	8.29

Pace Analytical Services, Inc.

# Internal Transfer Chain of Custody



Samples Pre-Logged into eCOC.

Workorder: 10606395      Worker Name: D3593500

State Of Origin: WA  
 Cert. Needed:  Yes       No  
 Owner Received Date: 4/29/2022

Results Requested By: 5/20/2022



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 Pace Analytical Minnesota  
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 Minneapolis, MN 55414  
 Phone (612)607-1700

Pace Analytical Sheridan WY  
 1673 Terra Avenue  
 Sheridan, WY 82801  
 Phone (307) 672-8945

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved	Preserved Containers	LAB USE ONLY
1	BNSF-BG18-442722-0-10	PS	4/27/2022 10:35	10606395002	Solid	1		S2205205-
2	BNSF-BG19-042722-0-10	PS	4/27/2022 11:05	10606395003	Solid	1		
3	BNSF-SG03-042722-0-5.5	PS	4/27/2022 12:00	10606395004	Solid	1		
4								
5								

Transfers	Released By	Date/Time	Received By	Date/Time	Cooler Temperature on Receipt °C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N
1	<i>[Signature]</i>	4/29/2022 17:00	Custodian Dennis	5/2/22				81501
2								
3								

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

LCS = 25g ASTM grade Sand + 50g QC lab soil

Sieve/Hydrometer

1/2" 6.84

3/8" 2.63

Sample #	Initial Wt (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)	Weight Retained (g)
5-5-22	52205005-001	86.57	139.14	144.77			
		0	0	.91			
		0	0	2.41			
		.22	.11	.89			
5-11-22		1.24	11.80	8.34			
		1.79	49.74	14.44			
		21.93	7.10	17.42			
5-5-22		50.07	70.51	50.47			
5-9-22		11.12	11.13	11.14			
Minutes		23	7	19.5			
		19.5	19.5	11.5			
		15	6	8.5			
		9.5	20	8.5			
		30	6	8			
		8.5	20	8			
		60	6	7.5			
		7.5	20	7.5			
		240	6	7			
		6.5	19	7			
5-10-22		1440	6	6.5			
		6	19	19			

③

④

③

- 1 Sod. Hex / Sod. carb. see solution prep. log copy
- 2 No. 10 Sieve (2.00 mm) W.S. Tyler Incorporated
- 3 Amerex Instruments Inc Gyromax 818 orbital shaker  
SN: A114 1010 501-40
- 4 No 200 sieve Fisher Brand SN: 2119 121 74
- 5 VWR Scientific Inc Convection oven
- 6 Geosystem Soils Test Software version 5
- 7 Ro-Tap RX-29 SN: 16763
- 8 No 4 sieve Soil Test Inc. 4.75 mm
- 9 3/8" sieve Soil Test, Inc. 9.5 mm
- 10 1/2" sieve Gilson Company 16.0 mm
11. Hydrometer: Fisher Brand / ERTCO No. 32982  
ASTM 152 H
12. Thermometer: Fisher Brand / ERTCO SN: 05169100



Solution Preparation Log

Initials	Date	Solution	Preparation				pH	Solution Lot #
			Chemical	Lot #	Amount	DI Volume		
SH	Prep: 4-6-22 Expire: 10-6-22	CEC	Ammonium Acetate	203214	711g	10L	7.30	NH4Acetate
CH	Prep: 4/10/22 Expire: 10/10/22	0.1 HCl	HCl	1820911	144.7mL 110.2mL	14L	-	0.1 HCl - 041022
SH	Prep: 4-11-22 Expire: 10-11-22	CEC	Sodium Acetate	201280	272g	2L	- 3.40	NH4Acetate
CH	Prep: 4-12-22 Expire: 10-12-22	1M KCl	KCl	10274405	260.75g	3.5L	-	1M KCl - 041222
SH	Prep: 4-13-22 Expire: 10-13-22	NH4	Sodium Acetate	4042382	198.50g	25L	-	NH4OH 22
CH	Prep: 4/13/22 Expire: 10/13/22	1M KCl	KCl	10232539	260.75g	3.5L	-	1M KCl - 041322
CH	Prep: 4/14/22 Expire: 10/14/22	0.1 HCl	Ammonium Acetate	203214	711.00g	10L	7.07	NH4Acetate
CH	Prep: 4/15/22 Expire: 10/15/22	MIXED ACID AS	HCl Sulfuric	195225 101072	17mL 144mL	2L	-	MIXED ACID 041522





# Analytical Data Package

**Prepared by:**

**Pace Analytical Services**

**Pace Project No.: 10606395**



## Organic

### GC-FID DRO

Surrogate Recovery Summary (Form 2)	1
Laboratory Control Spike/Laboratory Control Spike Duplicate Summary (Form 3)	2
Matrix Spike/Matrix Spike Duplicate Summary (Form 3)	3
Method Blank Association Summary (Form 4)	5
Analytical Results with Raw Data (Form 1)	6
Initial Calibration Summary (Form 6)	46
Raw Data for Initial Calibration Standards	52
Continuing Calibration Summary (Form 7)	362
Raw Data for Continuing Calibration Standards	370
Raw Data QC	482
Preparation Logs Raw Data	498
Instrument Run Log	500

## InOrganic

### ICPMS

Analytical Results (Form 1-IN)	512
Initial & Continuing Calibration Verification (Form 2A-IN)	516
CRDL Check Standard (Form 2B-IN)	518
Blanks (Form 3-IN)	520
Interference Check Sample (Form 4B-IN)	522
Matrix Spike Recovery (Form 5A-IN)	523
Post Digestion Spike Recovery (Form 5B-IN)	525
Duplicates (Form 6-IN)	526
Laboratory Control Spike (Form 7-IN)	527
Serial Dilution (Form 8-IN)	528
Method Detection Limits (Form 9-IN)	529
Linear Ranges (Form 11-IN)	531
Preparation Log (Form 12-IN)	532
Analysis Run Log (Form 13-IN)	533
Tune (Form 14-IN)	534
Internal Standard Relative Intensity Summary (Form 15-IN)	536
ICPMS Raw Data (Multiple Schedules/Sample)	537
Preparation Logs Raw Data	739

### Mercury

Analytical Results (Form 1-IN)	740
Initial & Continuing Calibration Verification (Form 2A-IN)	744
CRDL Check Standard (Form 2B-IN)	746
Blanks (Form 3-IN)	749
Matrix Spike Recovery (Form 5A-IN)	750
Duplicates (Form 6-IN)	752

Laboratory Control Spike (Form 7-IN) .....	753
Method Detection Limits (Form 9-IN) .....	754
Preparation Log (Form 12-IN) .....	756
Analysis Run Log (Form 13-IN) .....	757
Mercury Raw Data .....	758
Preparation Logs Raw Data .....	767
<b>Gravimetric</b>	
Analytical Results (Form 1-IN) .....	768
Duplicates (Form 6-IN) .....	772
Method Detection Limits (Form 9-IN) .....	774
Preparation Log (Form 12-IN) .....	775
Analysis Run Log (Form 13-IN) .....	776
Percent Moisture Determination Raw Data .....	777

GC-FID DRO - FORM II SVOA-1  
SOLID SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Minnesota SDG No.: 10606395 Contract: D3593500

Instrument ID: 10GCSF

LAB SAMPLE ID	SAMPLE NAME	NTCS	OTER
4307793	4307793BLANK	91	80
4307794	4307794LCS	82	84
10606395001	FD02-042722-0-10	86	82
10606395002	BNSF-BG18-042722-0-10	131	80
10606395003	BNSF-BG19-042722-0-10	82	82
10606395004	BNSF-SG03-042722-0-5.5	69	78

(NTCS) = n-Triacontane (S)

(OTER) = o-Terphenyl (S)

\* Values outside of QC Limits

QC LIMITS

(50-150)

(50-150)

GC-FID DRO - FORM III SVOA-1  
SOLID LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Minnesota

Lab Sample ID: 4307794LCS

Date Extracted: 04/29/2022

Date Analyzed (1): 05/02/2022

Instrument: 10GCSF

LCS Lot No: 358262

Lab File ID: 050222R.B\0502R0000032B.D

SDG No.: 10606395

COMPOUND	AMOUNT ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS %REC	QC LIMITS REC.
Diesel Fuel Range	50.0	41.4	83	50-150
Motor Oil Range	50.0	46.6	93	50-150

Spike Recovery: 0 out of 2 outside limits.

GC-FID DRO - FORM III SVOA-1  
SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Minnesota

Matrix Spike - Sample No: 4307905MS

Date Extracted: 04/29/2022

Date Analyzed (1): 05/02/2022

Instrument: 10GCSF

Lab File ID: 050222R.B\0502R0000034B.D

Parent Sample ID: 10606463001

SDG No.: 10606395

COMPOUND	SPIKE ADDED (mg/kg)	SAMPLE CONCENTRATION (mg/kg)	MS CONCENTRATION (mg/kg)	MS %REC	QC LIMITS REC.
Diesel Fuel Range	49.0	ND	41.2	83	50-150
Motor Oil Range	49.0	ND	46.9	88	50-150

Spike Recovery: 0 out of 2 outside limits.

GC-FID DRO - FORM III SVOA-2  
SOLID SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 10GCSF Matrix Spike Duplicate - Sample No: 4307906MSD  
 Lab File ID (2): 050222R.B\0502R0000035B.D Date Analyzed (2): 05/02/2022

COMPOUND	SPIKE ADDED (mg/kg)	MSD CONCENTRATION (mg/kg)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
Diesel Fuel Range	49.2	39.4	79	5	0-30	50-150
Motor Oil Range	49.2	46.9	88	0	0-30	50-150

RPD: 0 out of 2 outside limits.

Spike Recovery: 0 out of 2 outside limits.

GC-FID DRO - FORM IV SVOA-1  
SEMI-VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

4307793BLANK

Lab Name: Pace Analytical - Minnesota SDG No.: 10606395 Contract: D3593500

Instrument ID: 10GCSF Matrix: Solid Lab Sample ID: 4307793

Lab File ID: 050222R.B\0502R0000031B.D Date Analyzed: 05/02/2022 Time: 19:37

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
4307794LCS	4307794	050222R.B\0502R0000032B.	05/02/2022 19:46
FD02-042722-0-10	10606395001	051022F.B\0510F0000127.D	05/11/2022 10:49
BNSF-BG18-042722-0-10	10606395002	051022F.B\0510F0000129.D	05/11/2022 11:12
BNSF-BG19-042722-0-10	10606395003	051022F.B\0510F0000131.D	05/11/2022 11:34
BNSF-SG03-042722-0-5.5	10606395004	051022F.B\0510F0000133.D	05/11/2022 11:57



GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

FD02-042722-0-10

Lab Name: Pace Analytical - Minnesota Contract: D3593500  
Date Received: 04/29/2022 08:50 Matrix: Solid SDG No.: 10606395  
Date Extracted: 04/29/2022 17:05 Lab Sample ID: 10606395001  
Date Analyzed: 05/11/2022 10:49 Lab File ID: 051022F.B\0510F0000127.D  
Initial wt/vol: 10.05 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: 51.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	52.0	
	Motor Oil Range	273	

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AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000127.D  
 Lab Smp Id: 10606395001 Client Smp ID: FD02-042722-0-10  
 Inj Date : 11-MAY-2022 10:49  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 10606395001  
 Misc Info : 39248  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\051022F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 11-May-2022 12:52 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 88  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.050	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	51.447	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
\$ 2	o-Terphenyl (S)					CAS #:
2.565	2.566	-0.001	249805	41.0483	8.41	(M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.024	4.024	0.000	208863	42.9481	8.80	(M) BA
S 10	Motor Oil Range					CAS #:
3.431	- 5.300		5286782	1329.96	272	(M) RNG
S 11	Motor Oil Range SG					CAS #:
3.431	- 5.300		5286782	1330.20	273	(M) RNG
S 8	Diesel Fuel Range					CAS #:
1.240	- 3.430		1362406	253.652	52.0	(M) RNG
S 9	Diesel Fuel Range SG					CAS #:
1.240	- 3.430		1362406	253.652	52.0	(M) RNG

QC Flag Legend

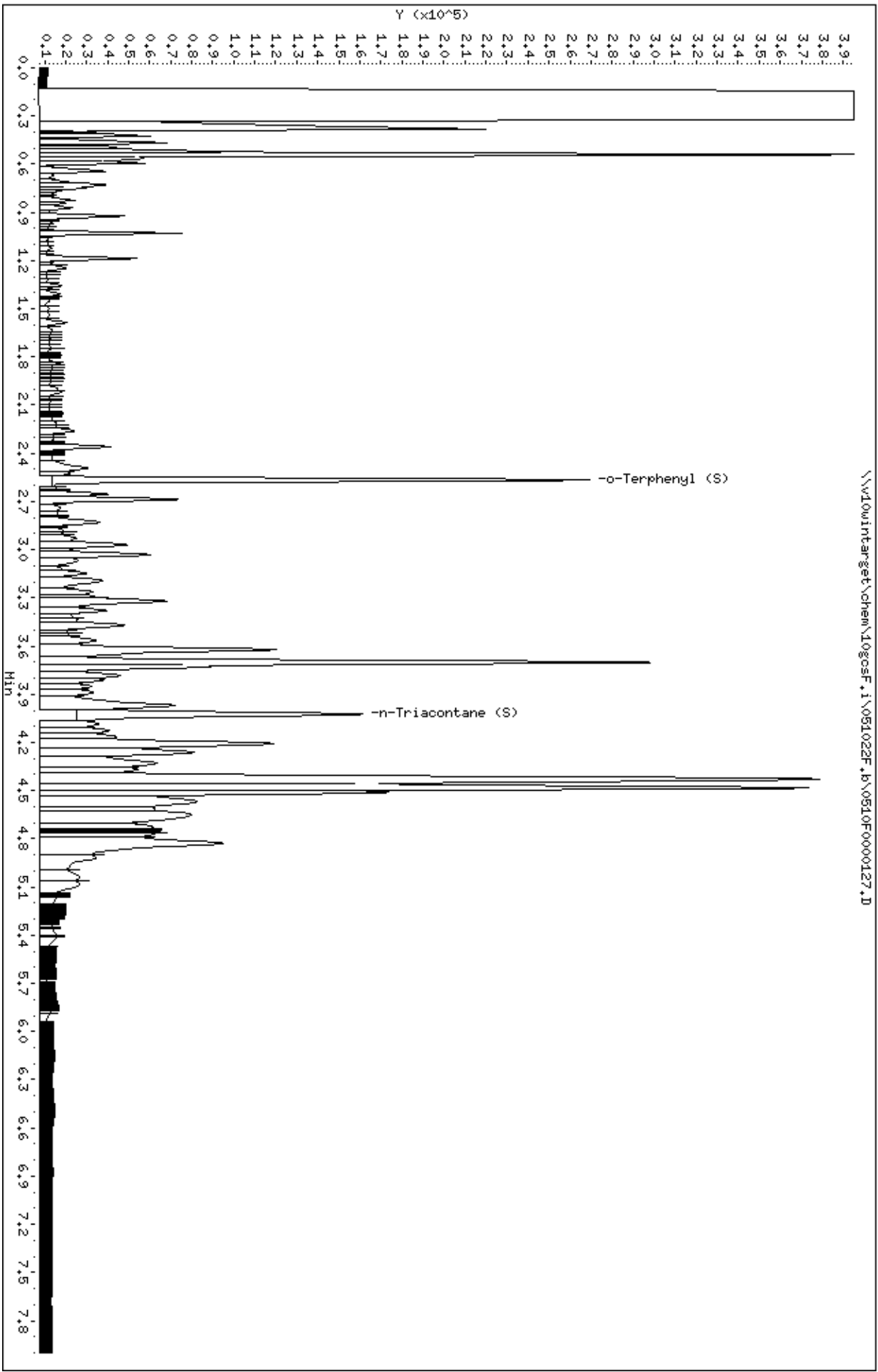
M - Compound response manually integrated.

Review Codes Legend

- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.

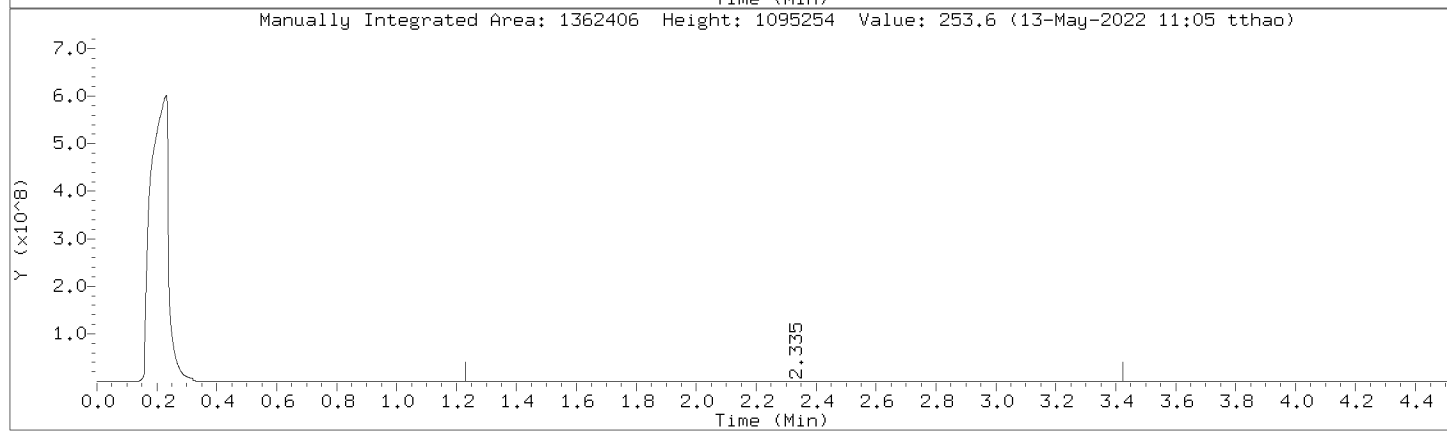
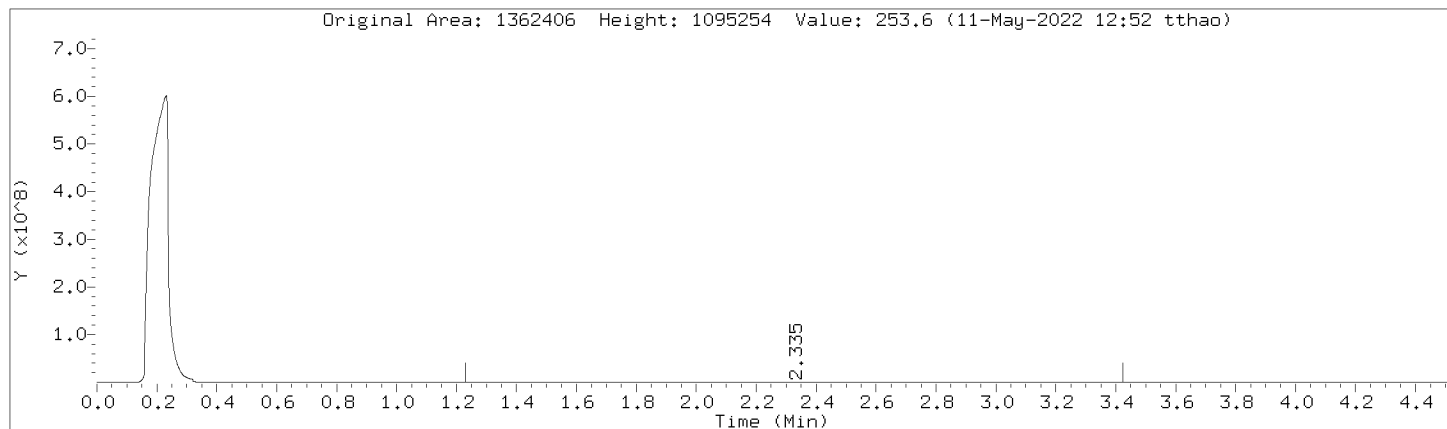
Data File: \\wlowintarget\chem\logosf.i\051022F.b\0510F0000127.D  
Date: 11-MAY-2022 10:49  
Client ID: FD02-042722-0-10  
Sample Info: 10606395001  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21390001

Instrument: logosf.i  
Operator: TT2  
Column diameter: 0.32



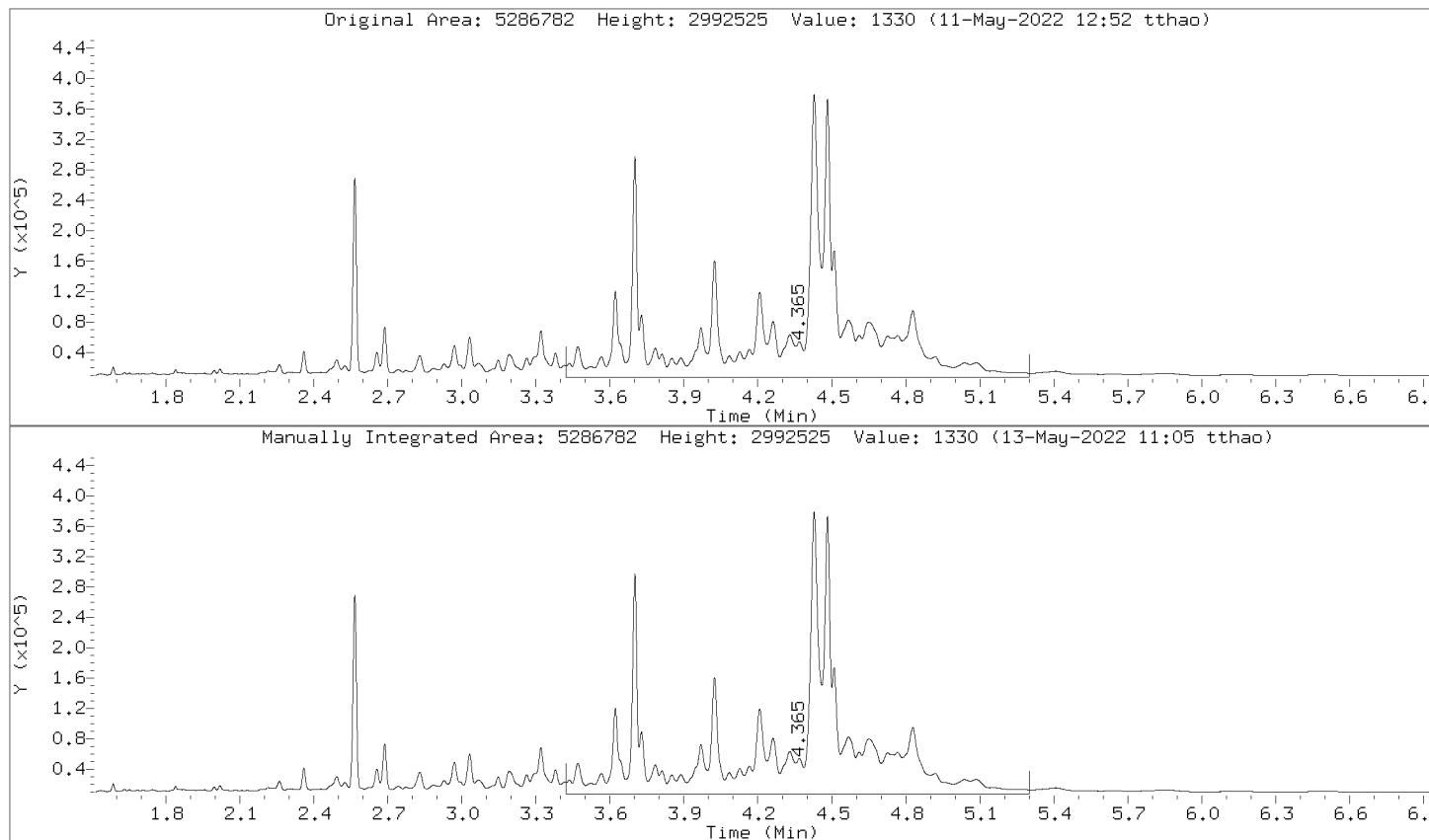
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Injection Date: 11-MAY-2022 10:49  
Instrument: 10gcsF.i  
Lab Sample ID: 10606395001

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



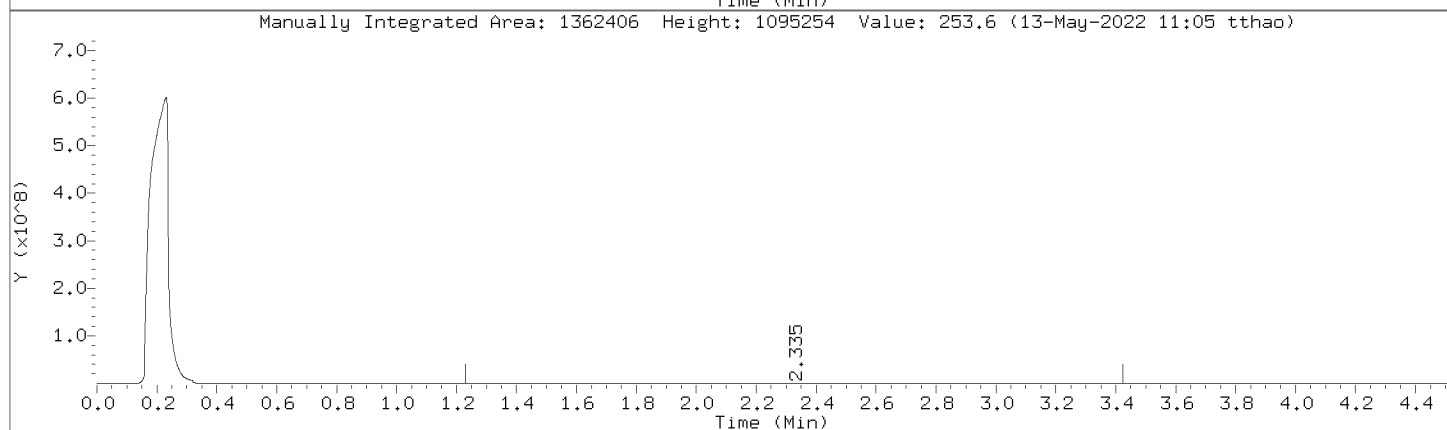
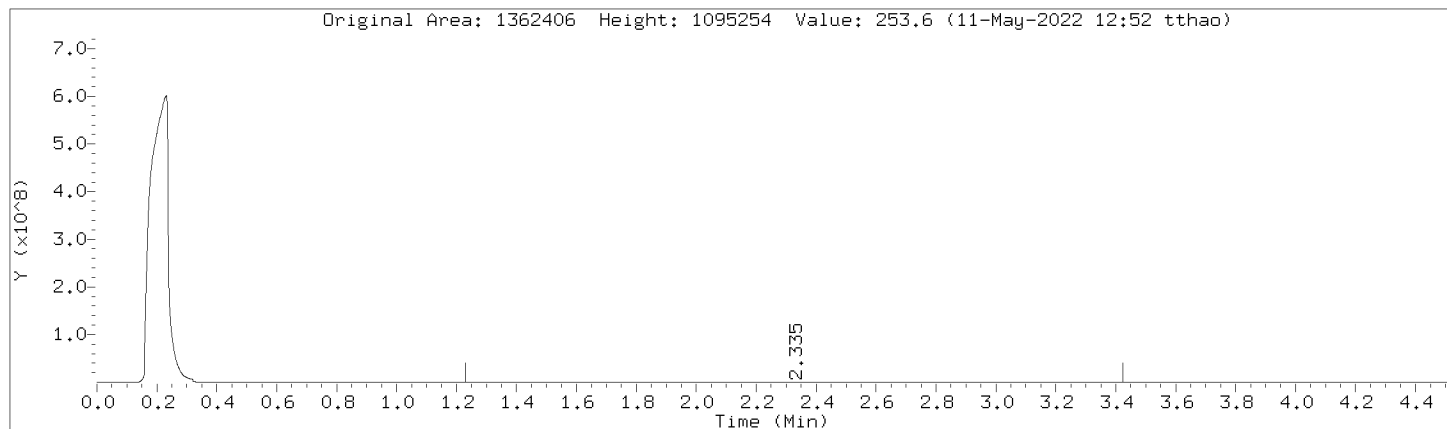
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Injection Date: 11-MAY-2022 10:49  
Instrument: 10gcsF.i  
Lab Sample ID: 10606395001

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



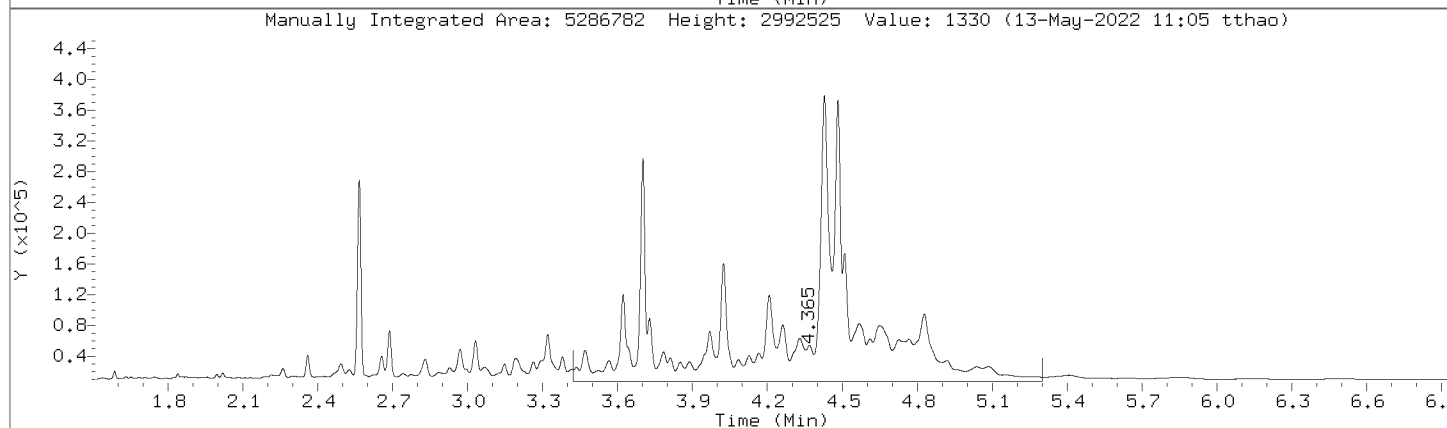
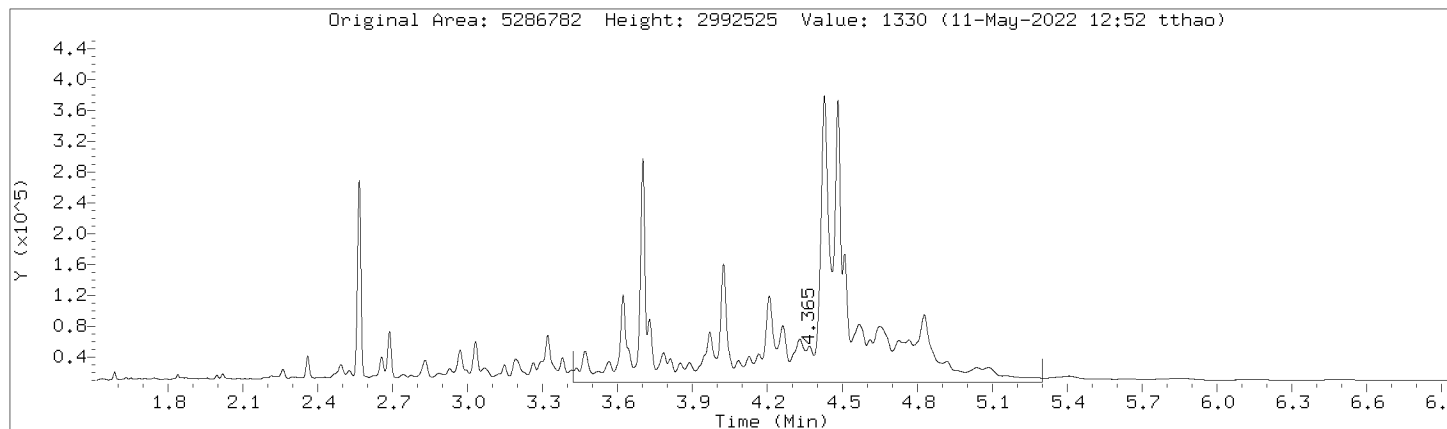
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Injection Date: 11-MAY-2022 10:49  
Instrument: 10gcsF.i  
Lab Sample ID: 10606395001

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000127.D  
Injection Date: 11-MAY-2022 10:49  
Instrument: 10gcsF.i  
Lab Sample ID: 10606395001

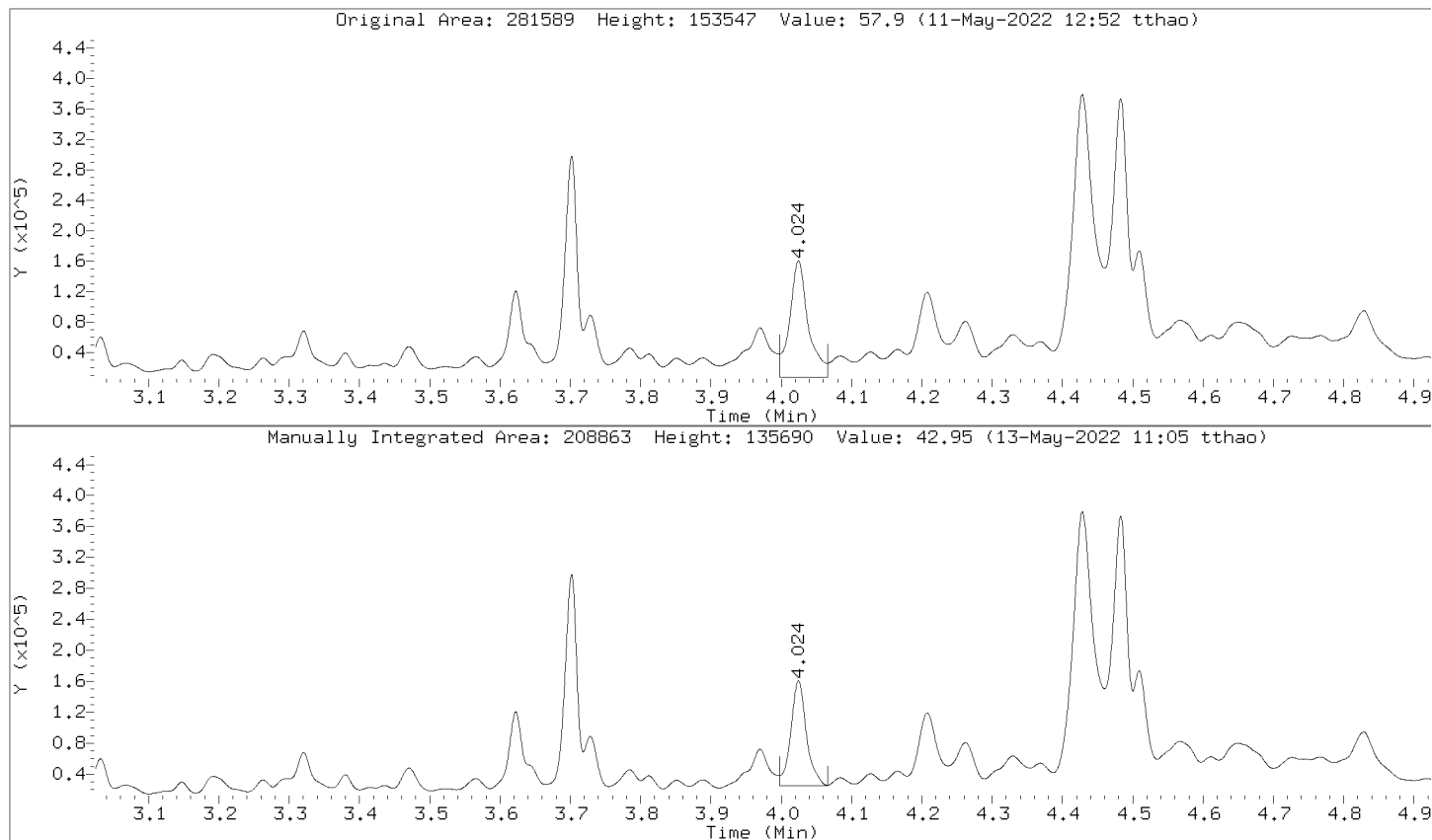
Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:





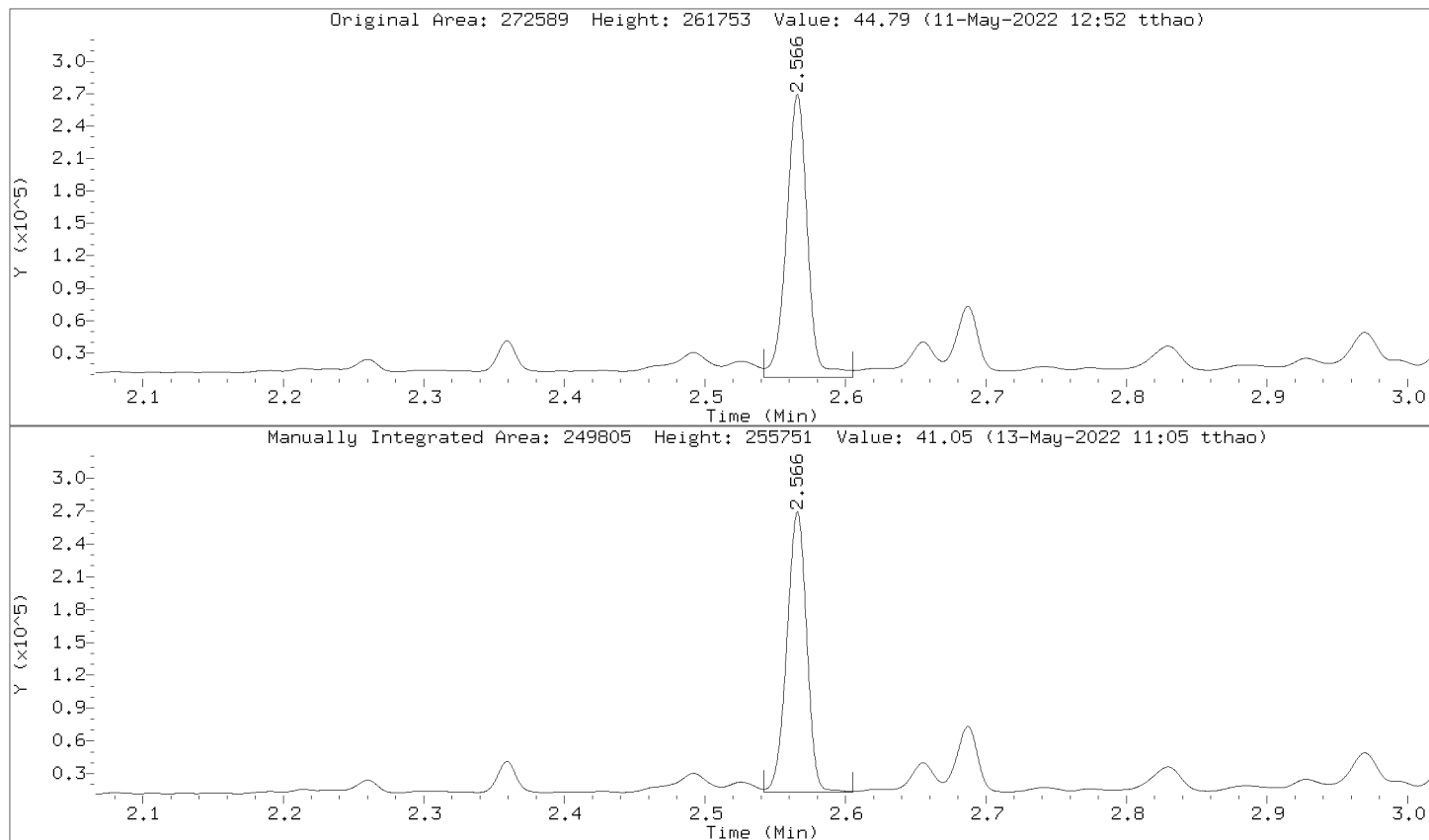
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Injection Date: 11-MAY-2022 10:49  
Instrument: 10gcsF.i  
Lab Sample ID: 10606395001

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



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 Injection Date: 11-MAY-2022 10:49  
 Instrument: 10gcsF.i  
 Lab Sample ID: 10606395001

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	1362406	1362406
Motor Oil Range	5286782	5286782
Diesel Fuel Range SG	1362406	1362406
Motor Oil Range SG	5286782	5286782
n-Triacontane (S)	281589	208863
o-Terphenyl (S)	272589	249805

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BNSF-BG18-042722-0-10

Lab Name: Pace Analytical - Minnesota Contract: D3593500  
Date Received: 04/29/2022 08:50 Matrix: Solid SDG No.: 10606395  
Date Extracted: 04/29/2022 17:05 Lab Sample ID: 10606395002  
Date Analyzed: 05/11/2022 11:12 Lab File ID: 051022F.B\0510F0000129.D  
Initial wt/vol: 10.05 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: 46.4%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	20.6	J
	Motor Oil Range	179	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000129.D  
 Lab Smp Id: 10606395002 Client Smp ID: BNSF-BG18-042722-0-  
 Inj Date : 11-MAY-2022 11:12  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 10606395002  
 Misc Info : 39248  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\051022F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 11-May-2022 12:52 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 89  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.050	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	46.422	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
\$ 2	o-Terphenyl (S)					CAS #:
2.566	2.566	0.000	243216	39.9655	7.42	(M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.023	4.024	-0.001	319597	65.7181	12.2	(M) BA
S 10	Motor Oil Range					CAS #:
3.431	- 5.300		3868642	965.298	179	(M) RNG
S 11	Motor Oil Range SG					CAS #:
3.431	- 5.300		3868642	965.604	179	(M) RNG
S 8	Diesel Fuel Range					CAS #:
1.240	- 3.430		743744	110.825	20.6	(M) RNG
S 9	Diesel Fuel Range SG					CAS #:
1.240	- 3.430		743744	110.825	20.6	(M) RNG

QC Flag Legend

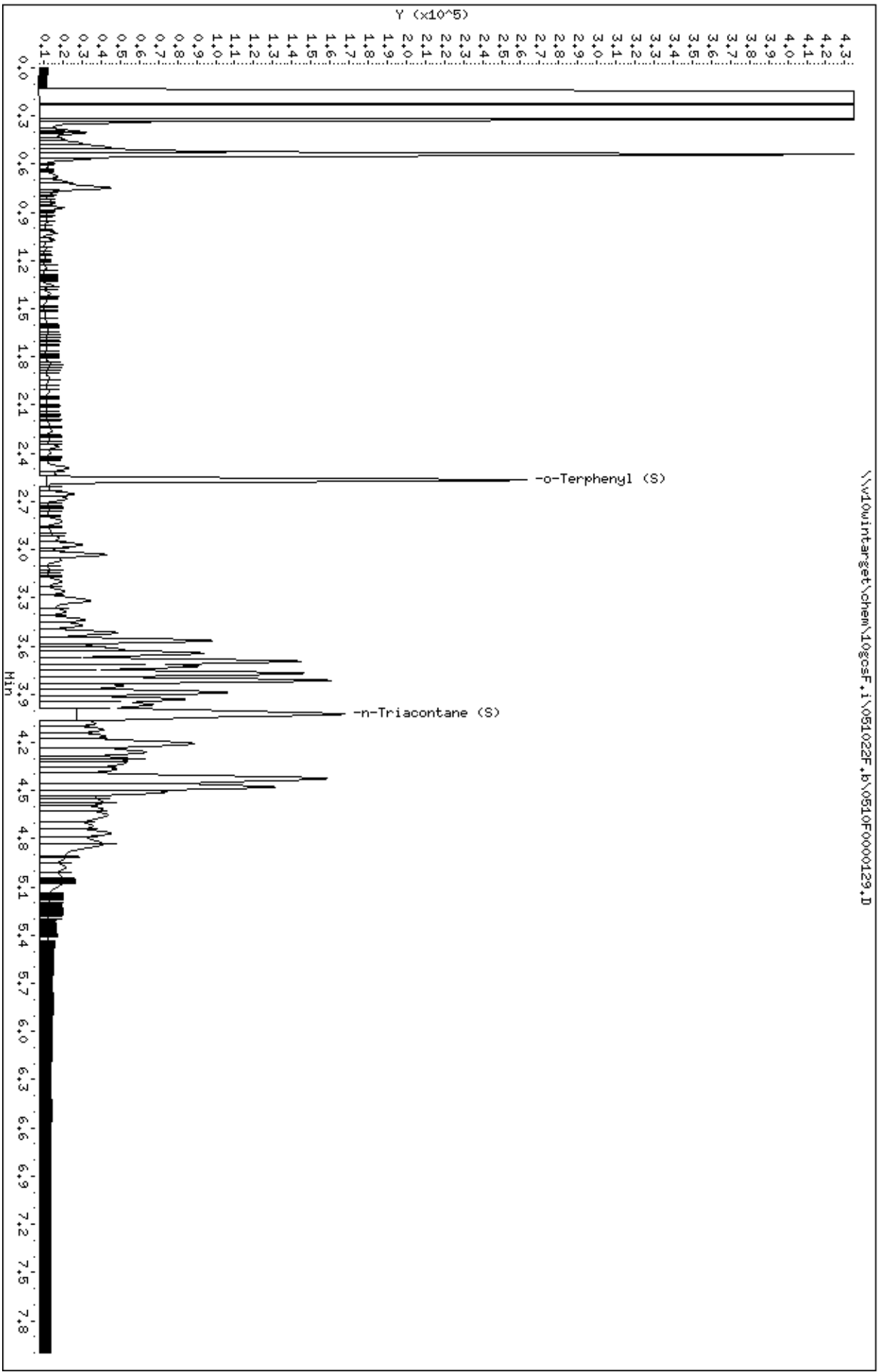
M - Compound response manually integrated.

Review Codes Legend

- BA: Indicates that the baseline had to be adjusted correctly by the analyst.
- RNG: Indicates that the analyst integrated a surrogate within the range.

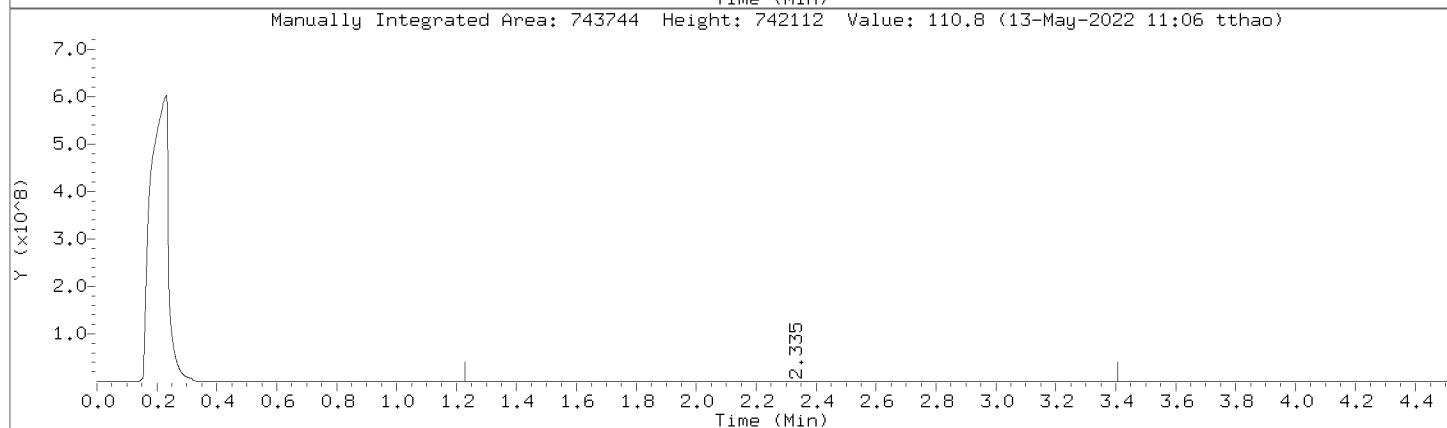
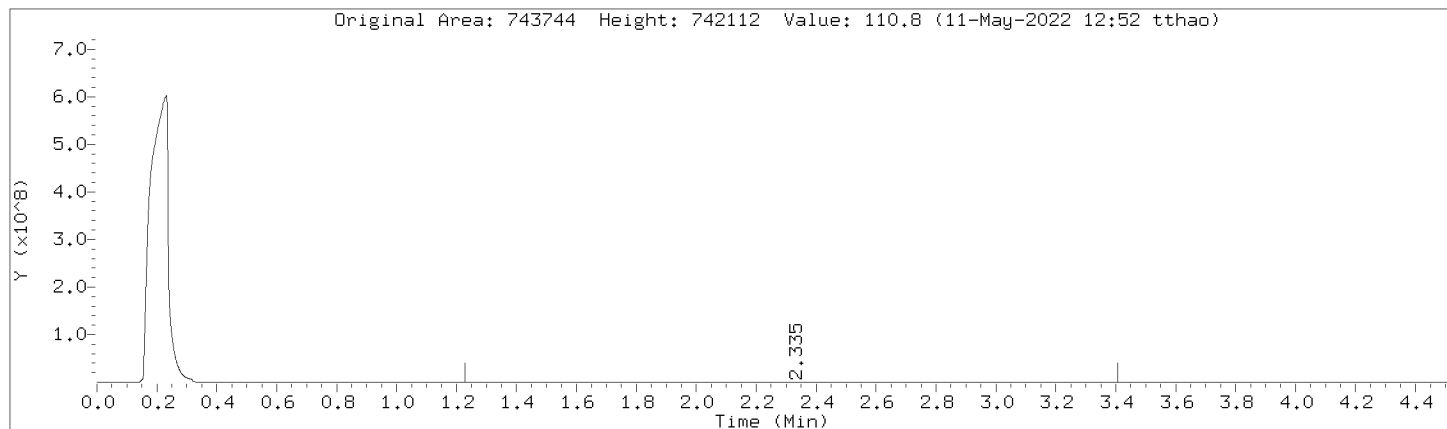
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Date: 11-MAY-2022 11:12  
Client ID: BNSF-BG18-042722-0-  
Sample Info: 10606395002  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21390001

Instrument: logosf.i  
Operator: TT2  
Column diameter: 0.32



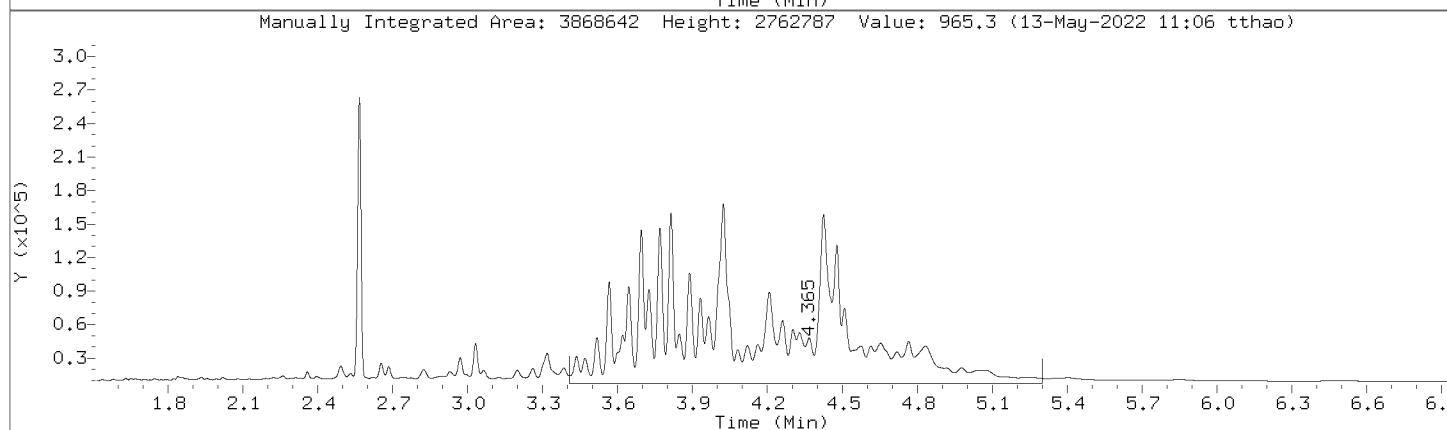
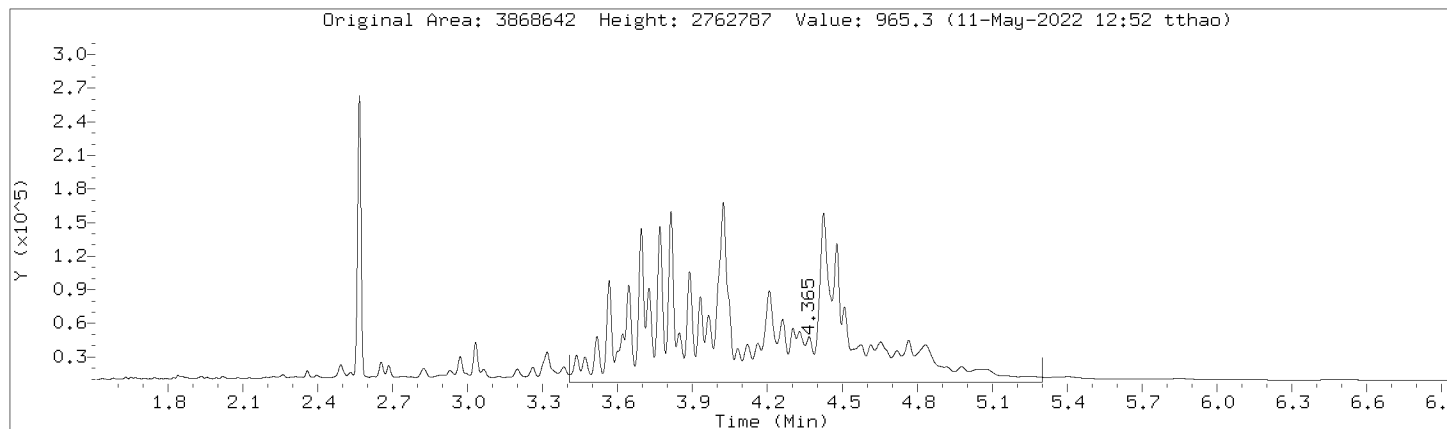
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Injection Date: 11-MAY-2022 11:12  
Instrument: 10gcsF.i  
Lab Sample ID: 10606395002

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000129.D  
Injection Date: 11-MAY-2022 11:12  
Instrument: 10gcsF.i  
Lab Sample ID: 10606395002

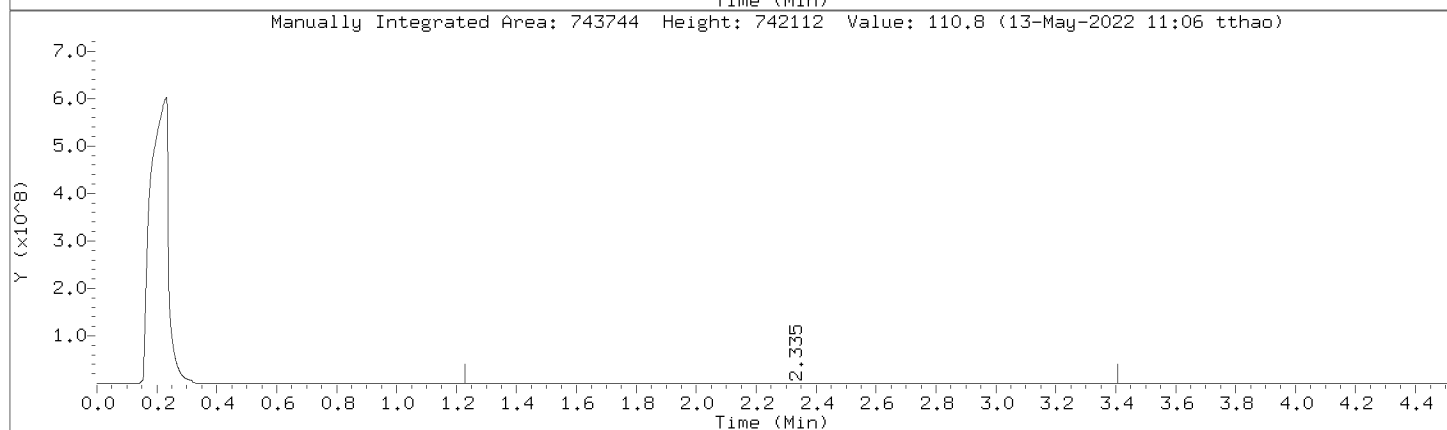
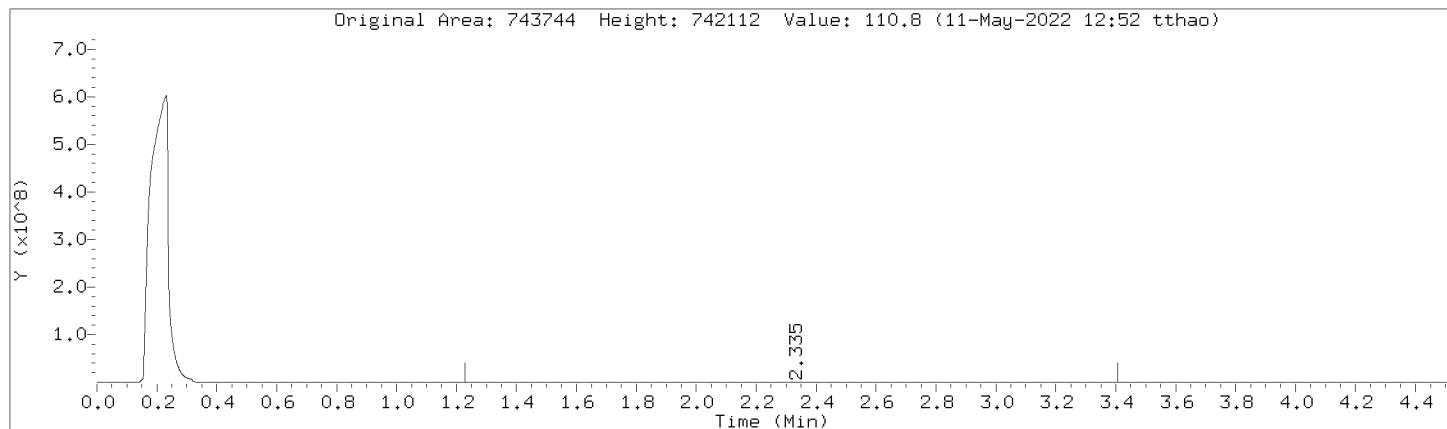
Compound: Motor Oil Range      Review Code: RNG  
CAS Number:





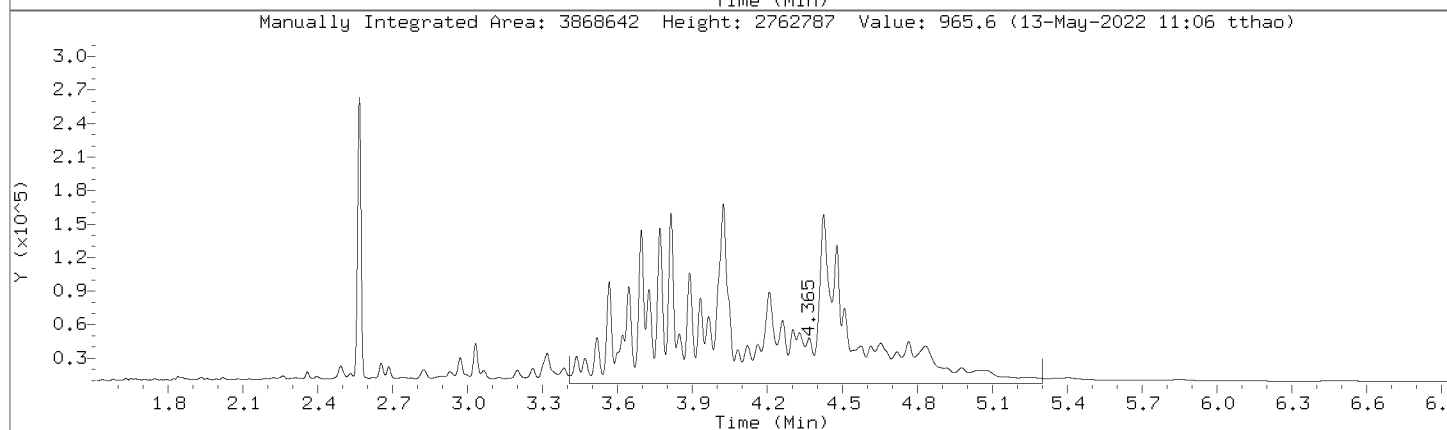
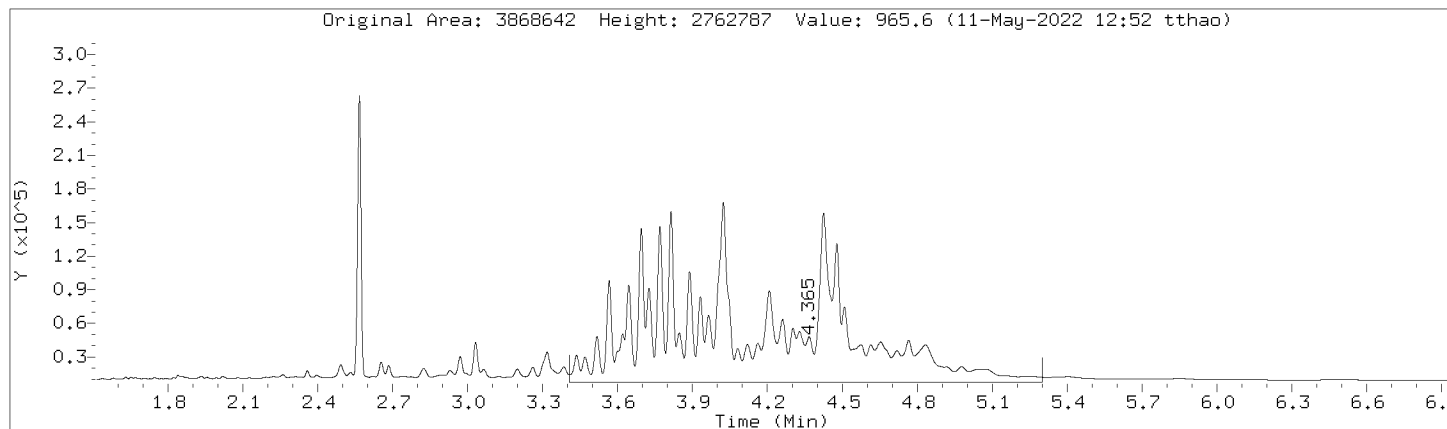
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Injection Date: 11-MAY-2022 11:12  
Instrument: 10gcsF.i  
Lab Sample ID: 10606395002

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:



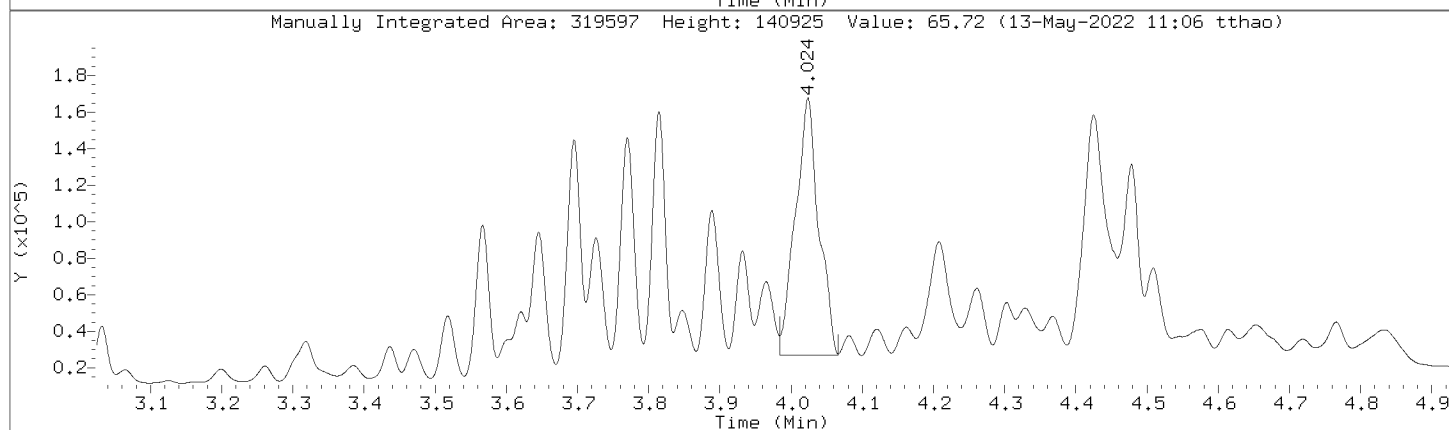
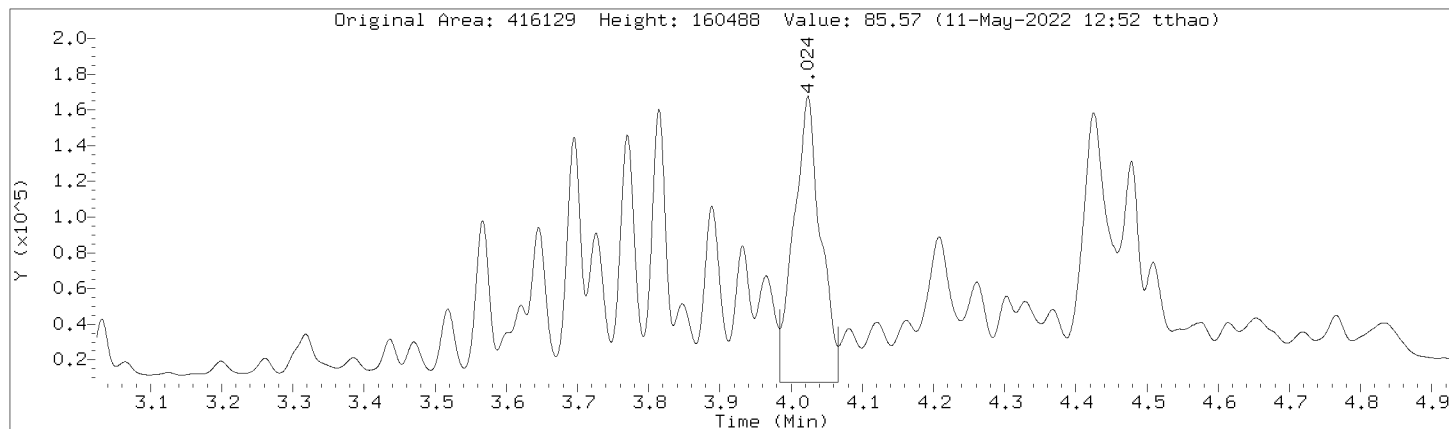
Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000129.D  
Injection Date: 11-MAY-2022 11:12  
Instrument: 10gcsF.i  
Lab Sample ID: 10606395002

Compound: Motor Oil Range SG      Review Code: RNG  
CAS Number:



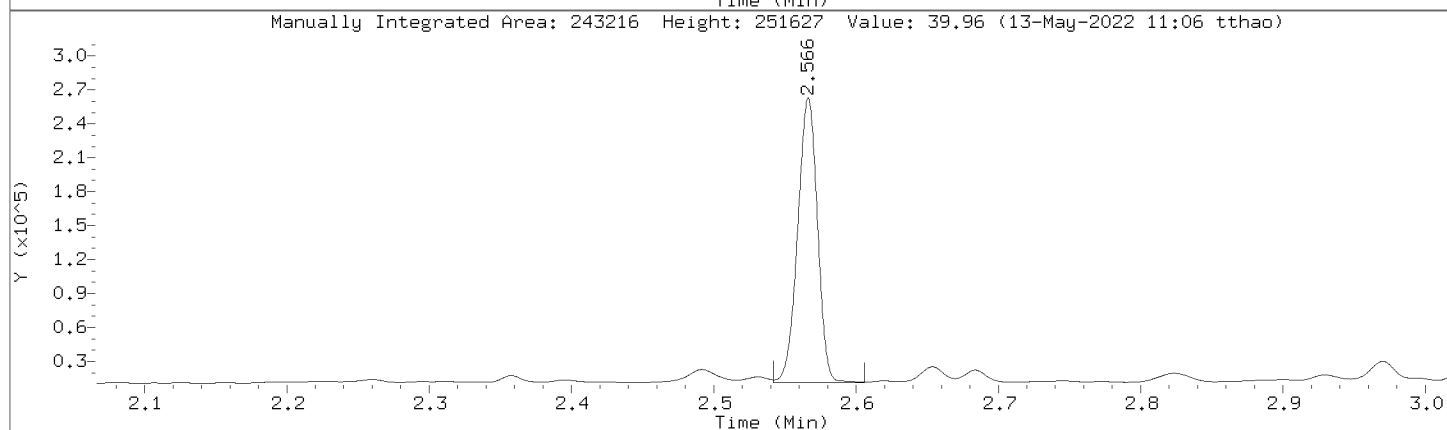
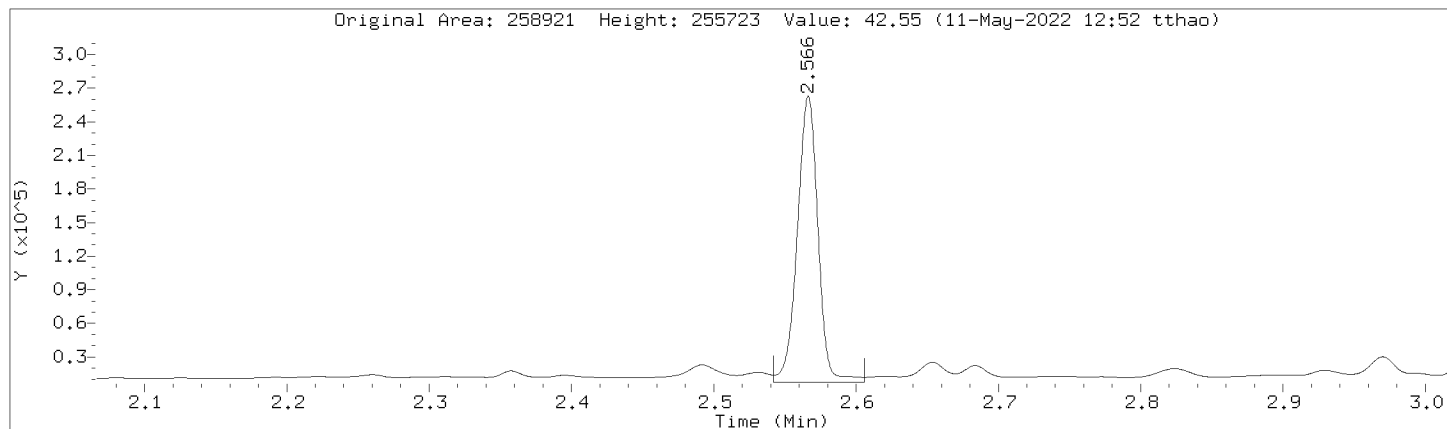
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Injection Date: 11-MAY-2022 11:12  
Instrument: 10gcsF.i  
Lab Sample ID: 10606395002

Compound: n-Triacontane (S)      Review Code: BA  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000129.D  
 Injection Date: 11-MAY-2022 11:12  
 Instrument: 10gcsF.i  
 Lab Sample ID: 10606395002

Compound: o-Terphenyl (S)      Review Code: BA  
 CAS Number:



Manually Integrated Compounds

Compound	Area (before)	Area (after)
Diesel Fuel Range	743744	743744
Motor Oil Range	3868642	3868642
Diesel Fuel Range SG	743744	743744
Motor Oil Range SG	3868642	3868642
n-Triacontane (S)	416129	319597
o-Terphenyl (S)	258921	243216

GC-FID DRO - FORM I SVOA-1  
SEMI-VOLATILE ORGANICS ANALYSIS DATA

SAMPLE NO.

BNSF-BG19-042722-0-10

Lab Name: Pace Analytical - Minnesota Contract: D3593500  
Date Received: 04/29/2022 08:50 Matrix: Solid SDG No.: 10606395  
Date Extracted: 04/29/2022 17:05 Lab Sample ID: 10606395003  
Date Analyzed: 05/11/2022 11:34 Lab File ID: 051022F.B\0510F0000131.D  
Initial wt/vol: 10.02 g Final wt/vol: 1 mL Dilution: 1 Instrument: 10GCSF Percent Moisture: 23.3%

CAS NO.	COMPOUND	CONCENTRATION UNITS: mg/kg	Q
68334-30-5	Diesel Fuel Range	10.5	J
	Motor Oil Range	30.6	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000131.D  
 Lab Smp Id: 10606395003 Client Smp ID: BNSF-BG19-042722-0-  
 Inj Date : 11-MAY-2022 11:34  
 Operator : TT2 Inst ID: 10gcsF.i  
 Smp Info : 10606395003  
 Misc Info : 39248  
 Comment : FID  
 Method : \\v10wintarget\chem\10gcsF.i\051022F.b\GCSFakNW8015-050922\_3928  
 Meth Date : 11-May-2022 12:52 tthao Quant Type: ESTD  
 Cal Date : 09-MAY-2022 17:04 Cal File: 0509F0000033.D  
 Als bottle: 90  
 Dil Factor: 1.00000  
 Integrator: Falcon Compound Sublist: NwTPH.sub  
 Target Version: RC10A Sample Matrix: SOIL  
 Processing Host: W10SVOA-TT

Concentration Formula: Amt \* DF \* Uf\*Vt/(Ws\*Vi\*(100-M)/100) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.00100	ng on column unit factor
Vt	1000.000	Volume of final extract (uL)
Ws	10.020	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	23.345	% Moisture
Cpnd Variable		Local Compound Variable

CONCENTRATIONS						
RT	EXP RT	DLT RT	RESPONSE		REVIEW CODE	
			ON-COL (ug/mL)	FINAL (mg/Kg)		
\$ 2	o-Terphenyl (S)					CAS #:
2.566	2.566	0.000	249935	41.0696	5.35	(M) BA
\$ 3	n-Triacontane (S)					CAS #:
4.023	4.024	-0.001	199223	40.9658	5.33	(M) BA
S 10	Motor Oil Range					CAS #:
3.431	- 5.300		1028083	234.882	30.6	(M) RNG
S 11	Motor Oil Range SG					CAS #:
3.431	- 5.300		1028083	235.317	30.6	(M) RNG
S 8	Diesel Fuel Range					CAS #:
1.240	- 3.430		612635	80.5567	10.5	(M) RNG
S 9	Diesel Fuel Range SG					CAS #:
1.240	- 3.430		612635	80.5567	10.5	(M) RNG

QC Flag Legend

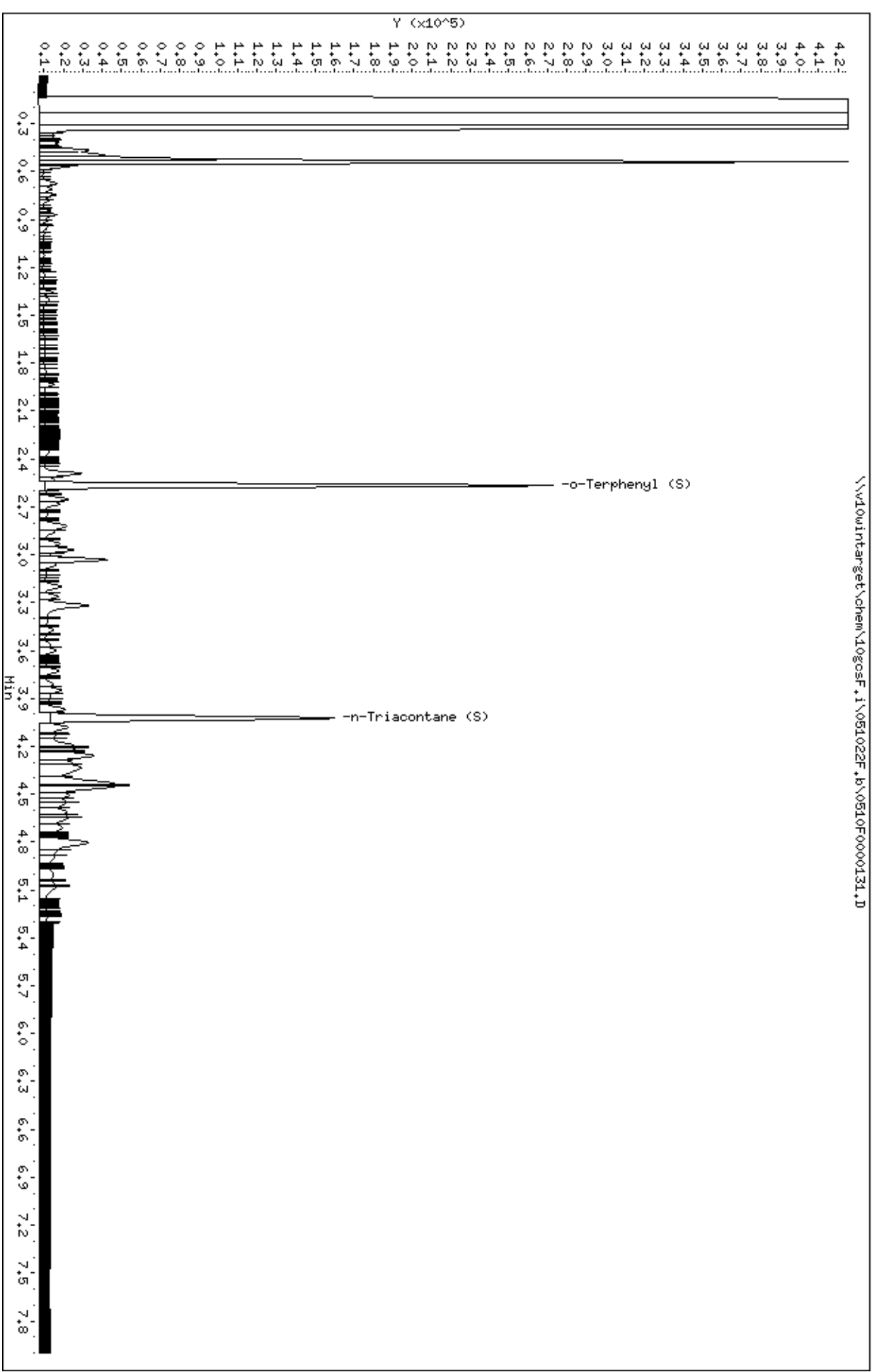
M - Compound response manually integrated.

Review Codes Legend

BA: Indicates that the baseline had to be adjusted correctly by the analyst.  
RNG: Indicates that the analyst integrated a surrogate within the range.

Data File: \\wlowintarget\chem\logosf.i\051022F.b\0510F0000131.D  
Date: 11-MAY-2022 11:34  
Client ID: BNSF-BG19-042722-0-  
Sample Info: 10606395003  
Volume Injected (uL): 1.0  
Column phase: DB-5-MS21390001

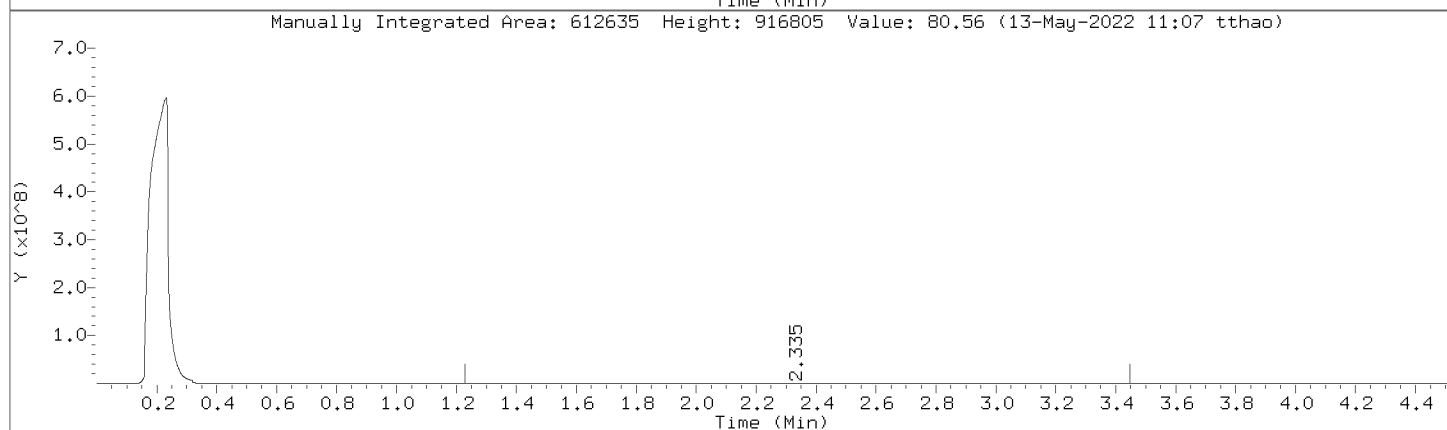
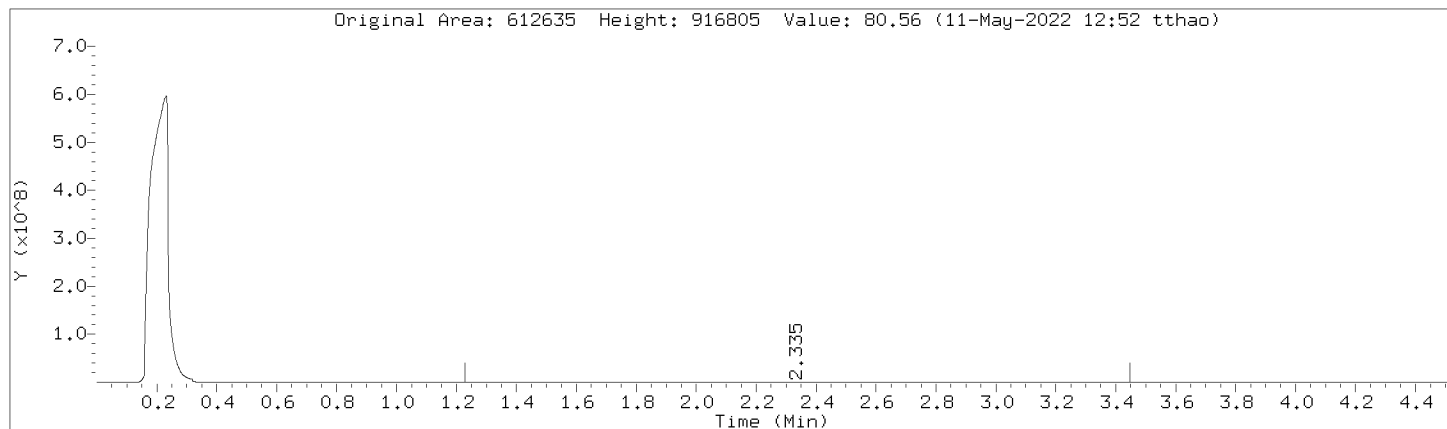
Instrument: logosf.i  
Operator: TT2  
Column diameter: 0.32





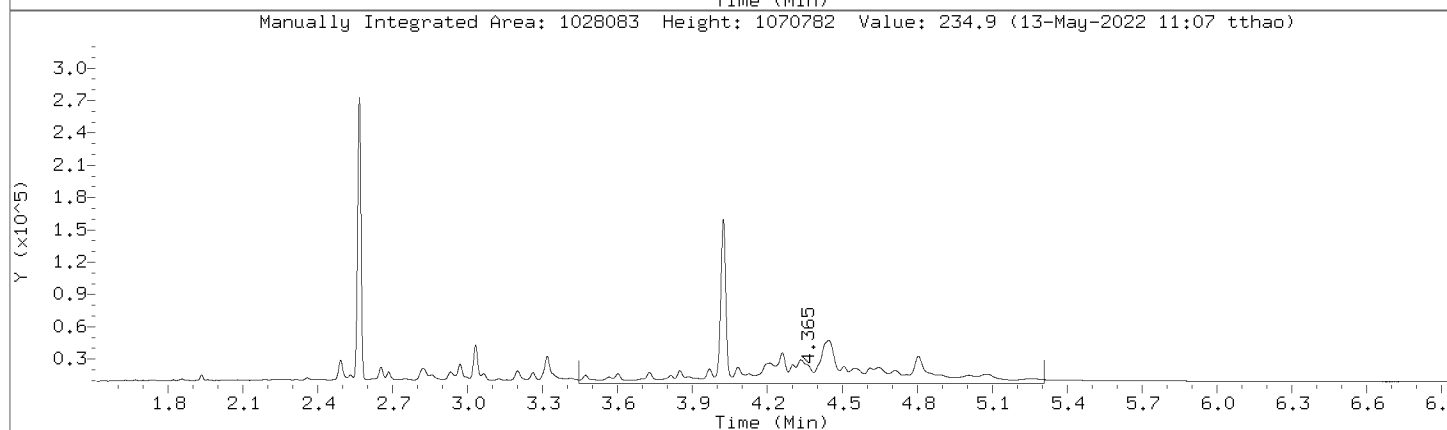
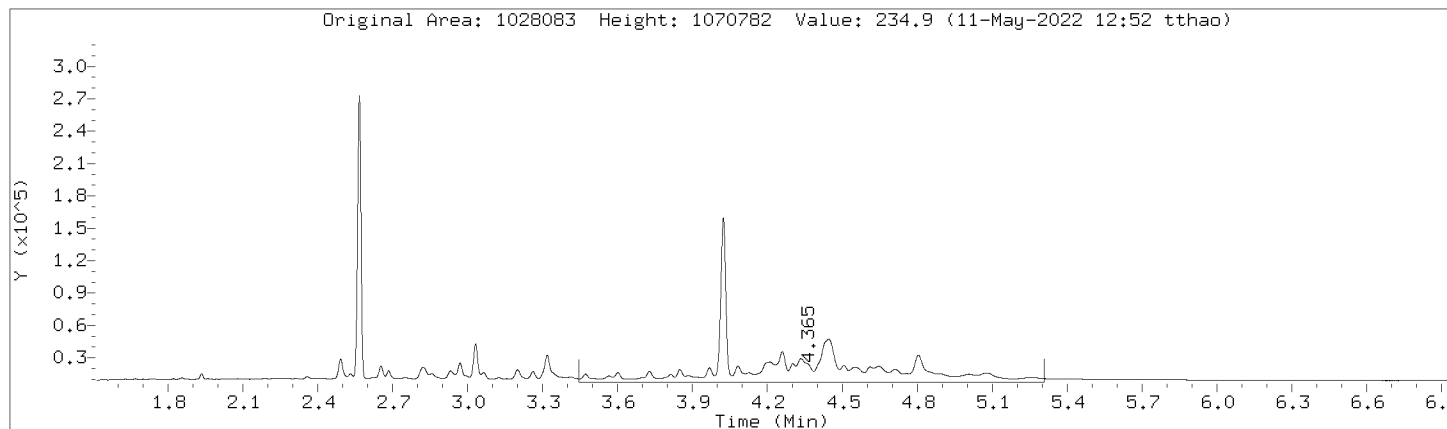
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Injection Date: 11-MAY-2022 11:34  
Instrument: 10gcsF.i  
Lab Sample ID: 10606395003

Compound: Diesel Fuel Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000131.D  
Injection Date: 11-MAY-2022 11:34  
Instrument: 10gcsF.i  
Lab Sample ID: 10606395003

Compound: Motor Oil Range      Review Code: RNG  
CAS Number:



Data File: \\v10wintarget\chem\10gcsF.i\051022F.b\0510F0000131.D  
Injection Date: 11-MAY-2022 11:34  
Instrument: 10gcsF.i  
Lab Sample ID: 10606395003

Compound: Diesel Fuel Range SG      Review Code: RNG  
CAS Number:

